CHANCE®

LINEMAN GRADE TOOLS™

Tools and Grounding Catalog | 2020

HUBBELL®

Tools & Grounding Catalog 2020

Indexes — Numeric & Alpha

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NOTICE: For the latest revision of our Catalog and Literature, visit our web site: *www.hubbellpowersystems.com*

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This index lists the contents of only the Chance Tool Catalog. Tool Catalog sections are listed on the previous page. These indexes can help you find details on tools to build and maintain your transmission and distribution systems.

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NOTE: Hubbell has a policy of continuous product improvement. We reserve the right to change design and specifications without notice.

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CHANCE®
Mechanical Hoists

Catalog 1100 March 2020

HUBBELL®

CHANCE®

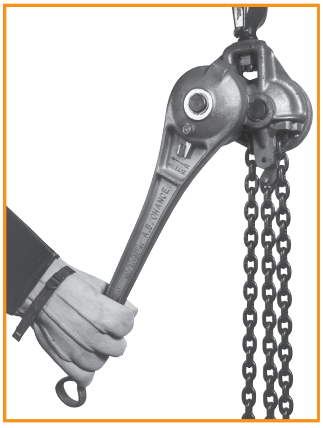
RATCHET HOISTS

User-friendly operation and construction.

Experienced operators prefer CHANCE® lever hoists for long-term, dependable performance. Light-weight for simple handing, but rugged for reliable duty, CHANCE hoists deliver features with added value for operator productivity.

Specifications

- Each unit comes with illustrated operating manual, including complete parts list
- Lifetime oil-impregnated bronze-sleeve bearings require no additional lubrication
- Pliers and screwdriver are only tools needed for maintenance
- For infrequent repairs, kit C3090349 contains minor service parts common to all ratings



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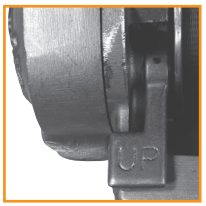

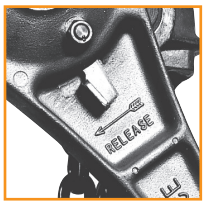

Operation

- Easy hook-up and chain release to freewheel, under no-load conditions
- Controls automatically lock when hoist is pulling load
- Two simple levers – Shift Key for up and down on top of housing, and Release Key in handle recess – are easy to switch, even wearing gloves
- Easily ratchets one or two clicks per stroke in up or down mode
- Choose quick speed, or full- or half-link rate for added accuracy
- Ratchet handle swings to either side for cramped quarters and push or pull stroke operation
- Top and bottom hooks swivel 360° for rope unwinding or stranded cable under tension

Construction

- Easy operating controls, even without removing gloves
- Proof-tested and factory operated at 150% of capacity rating
- Simple, extremely sturdy design ensures dependable service backed by 50 years of field experience and laboratory tests
- Light-weight, high-strength handle and sheave housings are heat-treated aluminum
- All working parts are fully enclosed in the housing unit for operator safety
- High-strength alloy steel chain is polished for smooth action and low wear
- Load hooks are forged steel with automatic spring-loaded latches
- Two-way handle allows for easy access and operation overhead or below chest level

Rated-Load Capacities, Tons

Hoist Selector Chart	¾	¾-1½	1	1½	2	3	4½	6
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Nylon-Strap Hoists 7 models		Page 1106	Page 1107		Page 1107			

"THE FULL LINE" OF 16 MODELS
• The ratchet hoist team to trust.

Chance ratchet hoists' seven capacity ratings are designed for a wide range of industry requirements for load-handling equipment.

Operation

- Compact and portable hoists operate easily, even in tight work spaces
- Quickly and easily perform repeated heavy lifts and pulls
- Built for years of reliable performance

Construction

- Chain hoists offer either link- or roller-style chain in seven popular ratings
- Nylon-strap models are primarily for the utility industry and a variety of load ratings
- Light-weight, yet durable – designed for rugged construction and industrial settings

RATCHET CHAIN HOISTS

¾-Ton, 1-Ton, 1 ½-Ton & 2-Ton Ratings

Link-Chain Style

A strong link to reliable performance.

Construction

- Proof-tested and factory operated at 150% of capacity rating
- Light-weight, high-strength handle and sheave housings are heat-treated aluminum
- All working parts are fully enclosed in the housing unit for operator safety
- High-strength alloy steel chain is polished for smooth action and low wear
- Load hooks are forged steel with automatic spring-loaded latches
- Two-way handle allows for easy access and operation overhead or below chest level

Operation

- Easy hook-up and chain release to freewheel, under no-load conditions
- Controls automatically lock when hoist is pulling load
- Two simple levers – Shift Key for up and down on top of housing, and Release Key in handle recess – are easy to switch, even wearing gloves
- Easily ratchets one or two clicks per stroke in up or down mode
- Choose quick speed, or full- or half-link rate for added accuracy
- Ratchet handle swings to either side for cramped quarters and push or pull stroke operation
- Top and bottom hooks swivel 360° for rope unwinding or stranded cable under tension

DO NOT:
1. **LIFT MORE THAN RATED LOAD.**
2. **OPERATE WITH TWISTED OR DAMAGED CHAIN.**
3. **USE IF DAMAGED OR MALFUNCTIONING.**
4. **LIFT PEOPLE OR LOADS OVER PEOPLE.**
5. **USE A HANDLE EXTENDER (CHEATER BAR).**
6. **OBSCURE THIS LABEL.**

DO: SEE OPERATING INSTRUCTIONS.
OPERATE AND MAINTAIN PER ANSI B30.21

Specifications

- Each unit comes with illustrated operating manual, including complete parts list
- Lifetime oil-impregnated bronze-sleeve bearings require no additional lubrication
- Pliers and screwdriver are only tools needed for maintenance
- For infrequent repairs, kit C3090349 contains minor service parts common to all ratings
- 5-1/2 ft. Standard Lift Distance
- 20-in. handle/Aluminum housing

On all models on this page, the gate-type latch pushes inward and turns to open the hooks.

¾-Ton

1-Ton

Two-way handle swings to either side (helpful when reaching overhead or below chest level to operate hoist). Rounded stop at end helps keep hand on handle.

1½-Ton

2-Ton

Catalog No.	Rating	Handle Pull at Rating	Hook-to-Hook Minimum	Weight lb.	Weight kg.
C3090438	¾-Ton	65 lb.	11 in.	14	6.3
3011S	1-Ton	90 lb.	11 in.	14	6.3
C3090439	1½-Ton	60 lb.	16 in.	22	10
4012	2-Ton	90 lb.	11 in.	28½	12.7

CHANCE®

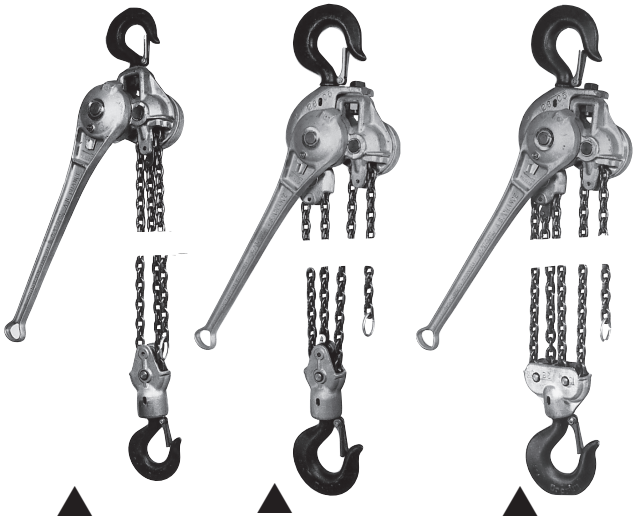
RATCHET CHAIN HOISTS

3-Ton, 4 ½-Ton & 6-Ton Ratings

Link-Chain Style

Heavy-duty performance by design.

Link-style chain offers three effective load-rating options.



3-Ton 4½-Ton 6-Ton

Each unit bears a safety-instruction label in accordance with ANSI specifications, below.

DO NOT:
1. **LIFT MORE THAN RATED LOAD.**
2. **OPERATE WITH TWISTED OR DAMAGED CHAIN.**
3. **USE IF DAMAGED OR MALFUNCTIONING.**
4. **LIFT PEOPLE OR LOADS OVER PEOPLE.**
5. **USE A HANDLE EXTENDER (CHEATER BAR).**
6. **OBSCURE THIS LABEL.**

DO: SEE OPERATING INSTRUCTIONS.
OPERATE AND MAINTAIN PER ANSI B30.21

Catalog No.	Rating	Handle Pull at Rating	Hook-to-Hook Minimum	Weight lb.	Weight kg.
C3090440	3-Ton	60 lb.	19¾ in.	30½	13.8
C3090441	4½-Ton	70 lb.	24½ in.	47	21.2
C3090442	6-Ton	70 lb.	24½ in.	50	22.5

Construction

- Proof-tested and factory operated at 150% of capacity rating
- Light-weight, high-strength handle and sheave housings are heat-treated aluminum
- All working parts are fully enclosed in the housing unit for operator safety
- High-strength alloy steel chain is polished for smooth action and low wear
- Load hooks are forged steel with automatic spring-loaded latches
- Two-way handle allows for easy access and operation overhead or below chest level

Two-way handle swings to either side (helpful when reaching overhead or below chest level to operate hoist). Rounded stop at end helps keep hand on handle.

Operation

- Easy hook-up and chain release to freewheel, under no-load conditions
- Controls automatically lock when hoist is pulling load
- Two simple levers – Shift Key for up and down on top of housing, and Release Key in handle recess – are easy to switch, even wearing gloves
- Easily ratchets one or two clicks per stroke in up or down mode
- Choose quick speed, or full- or half-link rate for added accuracy
- Ratchet handle swings to either side for cramped quarters and push or pull stroke operation
- Top and bottom hooks swivel 360° for rope unwinding or stranded cable under tension

Specifications

- Each unit comes with illustrated operating manual, including complete parts list
- Lifetime oil-impregnated bronze-sleeve bearings require no additional lubrication
- Pliers and screwdriver are only tools needed for maintenance
- For infrequent repairs, kit C3090349 contains minor service parts common to all ratings
- 5-1/2 ft. Standard Lift Distance
- 20-in. handle/Aluminum housing

RATCHET CHAIN HOISTS

¾- & 1 ½-Ton Ratings

Roller-Chain Style

The efficient way to give productivity a lift.

Roller-style (bicycle) chain offers two effective load-rating options from our link-style chain hoist line.

Construction

- Proof-tested and factory operated at 150% of capacity rating
- Light-weight, high-strength handle and sheave housings are heat-treated aluminum
- All working parts are fully enclosed in the housing unit for operator safety
- Two-way handle allows for easy access and operation overhead or below chest level

Operation

- Easy hook-up and chain release to freewheel, under no-load conditions
- Controls automatically lock when hoist is pulling load
- Two simple levers – Shift Key for up and down on top of housing, and Release Key in handle recess – are easy to switch, even wearing gloves
- Easily ratchets one or two clicks per stroke in up or down mode
- Choose quick speed, or full- or half-link rate for added accuracy
- Ratchet handle swings to either side for cramped quarters and push or pull stroke operation
- Top and bottom hooks swivel 360° for rope unwinding or stranded cable under tension

Both top and bottom hooks swivel 360° to allow for unwinding action of rope or stranded cable under tension.

Two-way handle swings to either side (helpful when reaching overhead or below chest level to operate hoist). Rounded stop at end helps keep hand on handle.

Each unit bears a safety-instruction label in accordance with ANSI specifications, below.

DO NOT:
1. **LIFT MORE THAN RATED LOAD.**
2. **OPERATE WITH TWISTED OR DAMAGED CHAIN.**
3. **USE IF DAMAGED OR MALFUNCTIONING.**
4. **LIFT PEOPLE OR LOADS OVER PEOPLE.**
5. **USE A HANDLE EXTENDER (CHEATER BAR).**
6. **OBSCURE THIS LABEL.**

DO: SEE OPERATING INSTRUCTIONS.
OPERATE AND MAINTAIN PER ANSI B30.21

Catalog No.	Rating	Handle Pull at Rating	Hook-to-Hook Minimum	Weight	
				lb.	kg.
C3090457	¾-Ton	65 lb.	13 in.	12½	5.6
C3090458	1½-Ton	60 lb.	26 in.	22	10

Specifications

- Each unit comes with illustrated operating manual, including complete parts list
- Lifetime oil-impregnated bronze-sleeve bearings require no additional lubrication
- Pliers and screwdriver are only tools needed for maintenance
- For infrequent repairs, kit C3090349 contains minor service parts common to all ratings
- 5-1/2 ft. Standard Lift Distance
- 20-in. handle/Aluminum housing

CHANCE®

Convertible Strap Hoists

One Model: ¾- & 1½-Ton Ratings

3 Styles: For Rubber-Glove & Hotstick Work

Versatile options for your toughest challenges.

Designed with special features, two hoist options offer a choice for maintenance and construction.

Construction

- For standard duty or electric-utility rubber-glove procedures, select regular style
- For hotstick operations, select hoist with handling ring on the handle
- Light-weight for easy handling, both styles are ruggedly designed for heavy-duty applications

Operation

- Adapts immediately to varying field needs
- Adds 3 feet of lift-distance capability when rigged at the lower rating
- To rig hoist for higher rating, keep load-hook sheave mounted midway on strap when it is becketed (doubled, with the end of strap secured to hoist frame)
- To convert to lower rating, secure the load hook sheave through loop in strap free end

Rubber-Glove Style
PSC3090451

Automatic spring-loaded latches on 360° swivel forged-steel hooks.

Heat-treated aluminum-alloy frame – open design for easy cleaning in mud or ice.

Interlocking pawls for sure control without brakes that can slip.

Safety-orange 30" x 1¼" Epoxiglas® insulated handle, Plastisol end cap seals out dirt.

Rigged for higher rating (above):
Rubber-Glove Style with operating rings on hooks and latches.

To change rigging, simply remove split ring from load-hook sheave. Longer reach when rigged for lower rating gives 7-foot lift distance using load-hook sheave secured at strap end.

Specifications

Single nylon-web strap rating . . . . . 4,500 lb.

Hook-to-Hook Distance:	Rigged for higher rating:	Rigged for lower rating:
Minimum	21½ in.	21½ in.
Maximum	6 ft. 7 in	9 ft.
Standard Lift Distance	3 ft.	6 ft.

Photo shows rigging for lower rating on Hotstick Style with operating rings on Hooks, latches and Handle.

Hotstick
Hooks & Handle Style
PSC3090452

• Take-up reel is easy to operate by a Grip-All clampstick.

All-Hotstick Style
PSC3090663

Both the PSC3090451 & PSC3090452 models also feature:

- **Take-up wheel with cogs for hand operation and holes for hotstick operation.**
- **Easy-access Shift and Release Keys operate by hotsticks or by hand, even with gloves.**

* ¾ – 1½ Ton Nylon-Strap Hoists

Catalog No.	Hoist Description	Weight
PSC3090451	Rubber-Glove Style	12½ lb./5.4 kg.
PSC3090452	Hotstick Hooks & Handle Style	13½ lb./6 kg.
PSC3090663	All-Hotstick Style	13½ lb./6 kg.

Accessories

Catalog No.	Description	Weight
C3060000	Storage bag for strap hoist	⅛ lb./0.05 kg.

* These hoists are not insulated live-line tools. If working on energized electrical lines, these hoists must be used with appropriate-length insulating link sticks. (see ordering information on page 1108)

Nylon-Strap Ratchet Hoists

1-Ton & 2-Ton Ratings

Handle even the toughest jobs.

Designed with special features, both 1-ton and 2-ton hoists offer a choice of two handle options for utility maintenance and construction.

Construction

- For rubber-glove work, select hoist with plastisol cap on handle end
- For operation by hot-line tools, select hoist with swivel eye on handle end
- All models have hot-stick rings on hooks and latches

Operation

- Single strap of 1-ton units reaches and lifts farther
- 2-ton units employ a sheave-mounted hook in a double-strap becket

Specifications

10,000-lb. single-strap strength rating

	1-Ton Hoist	2-Ton Hoist
Hook-to-Hook Distance:		
Minimum	27 in	27 in.
Maximum	8 ft	6 ft.
Standard Lift Distance	5 ft. 9 in	3 ft. 9 in.
Handle Length	22 in	36 in.

Safety tips from label on hoist handles:

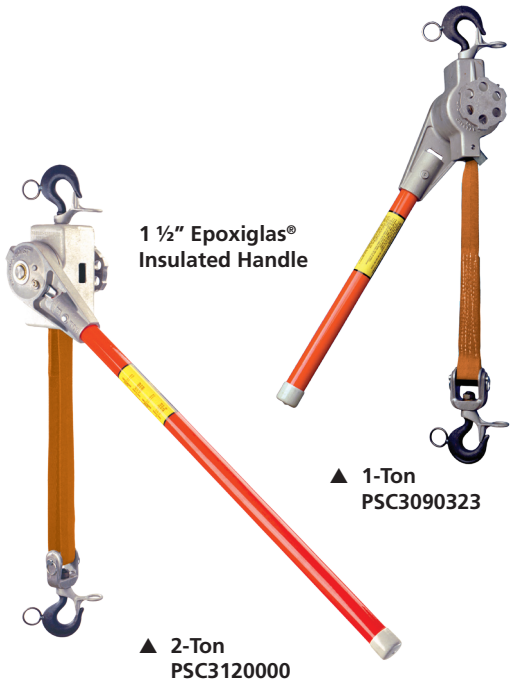
- INSURE HOOK-TO-HOOK PULL IS IN A STRAIGHT LINE AND DOES NOT EXCEED THE LOAD RATING STAMPED ON THE HANDLE.
- DO NOT PERMIT HANDLE TO SELF-RATCHET.
- DO NOT HANG, BOUNCE, OR EXCEED 200 POUNDS FORCE ON HANDLE.
- DO NOT REPLACE HANDLE WITH A LONGER HANDLE OR USE AN EXTENSION ON HANDLE.
- DO NOT USE HOIST AS A LOAD BINDER.
- CLOSE LATCHES ON SAFETY HOOKS BEFORE USING.

***1-Ton Nylon-Strap Hoists and Accessories**

Catalog No.	Description	Weight
PSC3090323	Hoist with Regular Handle	12¾ lb./5.7 kg.
PSC3090467	Hoist with Hotstick Handle	13¾ lb./6.2 kg.
C3060000	Storage Bag for either 1-Ton Hoist listed above	⅛ lb./0.05 kg.

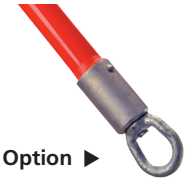
***2-Ton Nylon-Strap Hoists and Accessories**

Catalog No.	Description	Weight
PSC3120000	Hoist with Regular Handle	14½ lb./6.5 kg.
PSC3090468	Hoist with Hot-Stick Handle	15½ lb./7 kg.



▲ 1-Ton
PSC3090323

▲ 2-Ton
PSC3120000



Hot-Stick Handle Option ▶

* These hoists are not insulated live-line tools. If working on energized electrical lines, these hoists must be used with appropriate-length insulating link sticks (see ordering information on page 1108).

Epoxiglas® Crossarm Link Stick

For Deadend Applications

Quickly puts insulated link in hoist-assisted jobs:

- 1-1⁄4"-diameter Epoxiglas® pole with 21-1/2" insulating length
- Plastisol-coated 3/4"-diameter steel hook
- Hook's 5" opening fits standard 3-3/4" x 4-3/4" crossarms
- Galvanized-steel swivel eye on pole end for easy alignment
- Lifting eye on hook fitting for positioning by a hot line tool

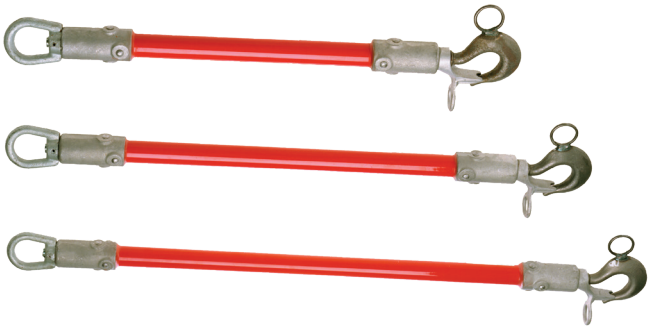
Rated working load: 1,500 lb. and 3,500 lb.

Catalog No.	Description	Color Code	Weight
PSC4004132	Crossarm Link Stick - 1500 lb	Gray Hook	7.0 lb./3.2 kg.
PSC4004372	Crossarm Link Stick - 3500 lb	Black Hook	8.0 lb./3.6 kg.

Epoxiglas® Hoist Link Sticks

Easily adapts to hot-line uses

To permit hot-line work with a nylon-strap ratchet hoist, a properly applied link stick insulates the hoist from an energized conductor.



Construction

- 1 ¼"-diameter Epoxiglas pole with a steel hook on one end
- Features butt swivel on end opposite of steel hook

Operation

- Attach the hook of the stick to a wire grip using the hotstick eye to operate hook
- Complete application by connecting nylon-strap hoist to link stick butt swivel and to pole or crossarm

Rated working load: 4,000 lb.

Catalog No.	Length between end fittings	Weight
C4001175	15" Epoxiglas	4 lb./1.8 kg.
C4002399	18" Epoxiglas	5 lb./2.25 kg.
C4002400	24" Epoxiglas	6 lb./2.7 kg.

NOTES

NOTES

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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NEVER COMPROMISE™

CHANCE®

Powered Hoists

Catalog 1150 March 2020

HUBBELL®

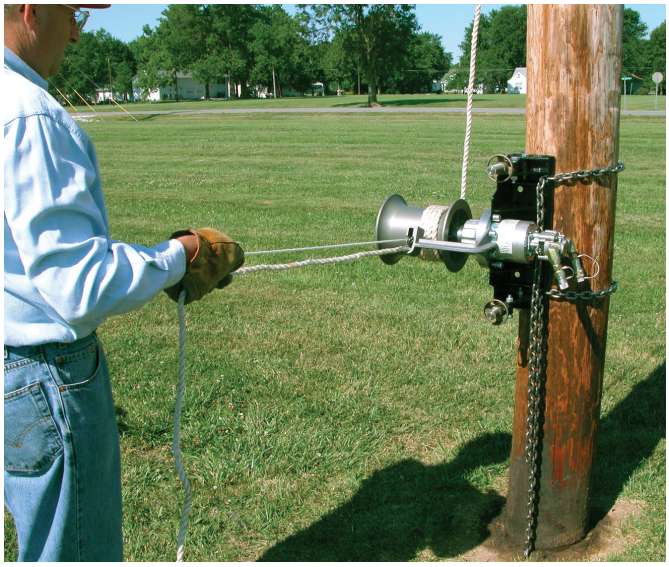
CHANCE®

Series 90 Capstan Hoists

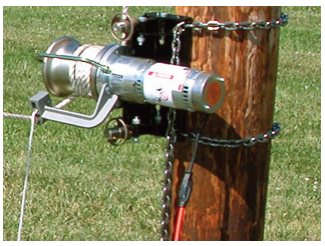
• 1,000-lb. & 3,000-lb. Load Ratings • 12V, 115V, 230V, Hydraulic, Gasoline

Powerful design for tough jobs.

Improved design features a multiple-planetary drive/back-stop clutch assembled on the center shaft of a steel gearcase with full-length internal teeth. This design handles more rugged jobs, extends service life and reduces maintenance.



Optional Rope Lock – At left: Automatically supports load when fall line is released, until operator resumes hoisting. At right: The release lanyard permits lowering or lifting load with precise control over speed and distance.



For improved load control, steel capstan drum features nickel-plated rope surface, larger radius at load-line wrap and rope hook. Position fall line so it will not pullover end of drum. If rope comes off end of drum and hook catches it, stop hoist, secure load and correct rope position on drum.

TABLE OF CONTENTS

1,000-lb. Hoists and Accessories . . . Pages 1153 - 1158
3,000-lb. Hoists and Accessories . . . Pages 1159 - 1161

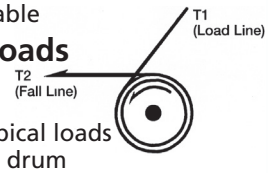
Versatile to various applications

Lightweight, powerful portable hoists move heavyweight and difficult-access tasks, including:

- Setting utility poles
- Cell tower erection
- Pulling wheeled equipment over obstacles
- Raising transformers (even over fences in back lots)
- Hoisting heavy insulators
- Stringing and tensioning conductors
- Pulling indoor and underground cable

Simple technique eases all loads

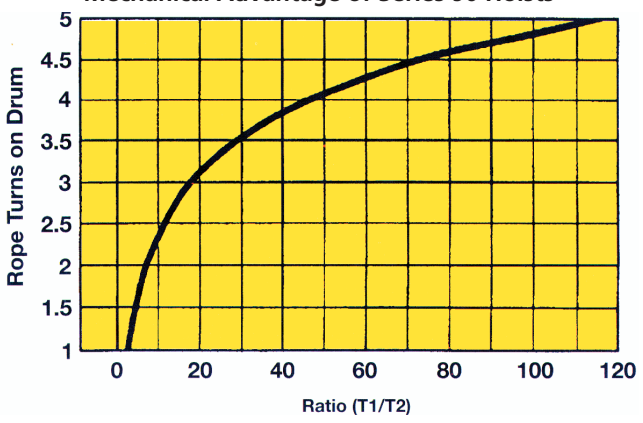
- Graph and diagram at right show capstan principle in action
- Operator effort remains low for typical loads simply by adding wraps on capstan drum
- Little effort is required, any crew member can run hoist



Example: 4 wraps of rope = 1:44 ratio.
That is, 1 lb. pull on Fall Line develops 44 lb. lift on Load Line. **Therefore, 20 lb. of pull develops 880 lb. of lift.**

- Highly-accurate controls allow loads to be moved a fraction of an inch
- Note: Always use at least as many wraps of rope on the drum to lower a load as required to lift that load

Mechanical Advantage of Series 90 Hoists



Series 90 Capstan Hoists

1,000-lb. Load Rating

Electric Drive

12-Volt DC Power Hoist

with 25' #2 Cu Cable, four Terminals, Relay, Foot Switch

Catalog No.	Weight, each
C3081172	56½ lb. (25.7 kg.)

115-Volt AC

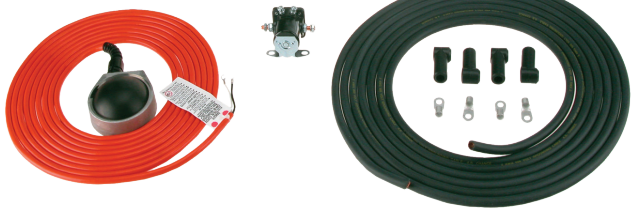
includes Power Hoist and Foot Control Switch only

C3081170	49 lb. (22.2 kg.)

230-Volt AC

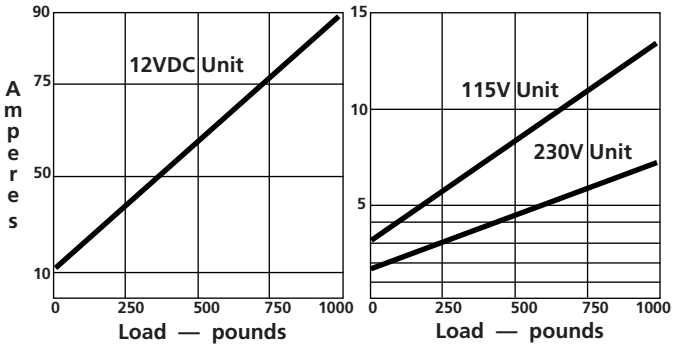
includes Power Hoist and Foot Control

C3081171	49½ lb. (22.5 kg.)



Four ⅜" mounting bolts furnished with each unit. Mounting flange provides eight ⅜" tapped holes on 5⅝" bolt circle.

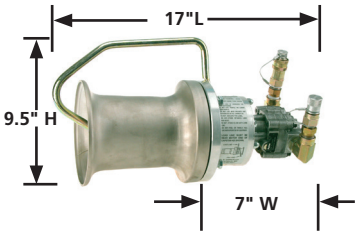
Electrical source requirements



Hydraulic Drive

includes Power Hoist only;
To order Foot Control Switch, see page 1155.

Catalog No.	Weight, each
C3081180	28½ lb. (12.9 kg.)



Hydraulic-drive hoist does not include foot control switch.

Gasoline Drive

includes Power Hoist and Foot Throttle Control only;
Recommended bracket: C3080925, see next page.

Catalog No.	Weight, each
C3081190	46 lb. (20.9 kg.)

Gasoline unit features 35 cubic-centimeter 4-cycle engine.

Series 90 Hoist	Rope Speed for 1,000 lb. load	Source Required to meet Rope Speed Rate
12-Volt DC	22 feet per minute	90 amperes motor current
115-Volt AC	40 feet per minute	14 amperes motor current
230-Volt AC	21 feet per minute	7 amperes motor current
Hydraulic	93 feet per minute	8 gal. per min. & 1,000psi
Gasoline	40 feet per minute	Engine speed: 7,000rpm

Operating speed at full rating

For continuous lift or pull at maximum rating (1,000 lb.) with a 20% duty cycle, table at left highlights information for each power-drive type:

- Rate of lift or pull (rope speed)
- Power output needed (source, minimum)

Recommended rope for capstan hoists

- Poly-Dacron or Composite Fiber Braided (consists of polyester fibers) shown in CHANCE Catalog Section 1250.

Series 90 Capstan Hoists

Options and Components for 1,000-lb.-rated hoists

All-Purpose Bracket

- For 1,000-lb. Series 90 hoists
- Includes two E3081334P chain clamps for poles, angles, and beams

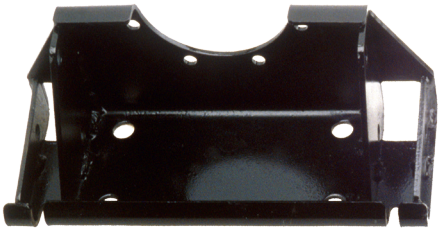
Catalog No.	Weight, each
C3081335	26.5 lb. (12 kg.)

Bolt-Down Bracket

- For 1,000-lb. Series 90 hoists
- Same as above, except does not include chain clamps

E3081321P	9 lb. (4.1 kg.)

1,000-lb. Bolt-Down Bracket E3081321P



Universal Bracket

- Recommended for gasoline 1,000-lb. hoist
- Also fits other 1,000-lb. Series 90 & earlier 750-lb. hoists
- Bolts down or uses two C4170346 Chain Clamps (below) for mounting on poles, angles and beams

C3080925	13 lb. (5.9 kg.)

Universal Bracket C3080925 Recommended for Gasoline hoist

Chain Clamp for Series 90 hoists

One per Cat. No.; for All-Purpose or Bolt-Down Brackets

E3081334P	6 lb. (2.7 kg.)

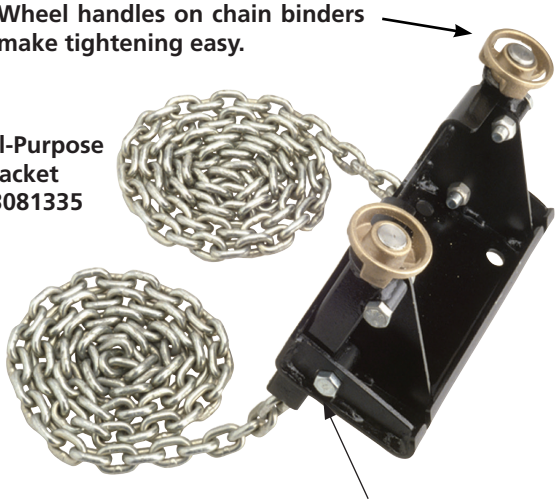
Chain Clamp for Universal Brackets only

One per Cat. No., two required for C3080925 Bracket

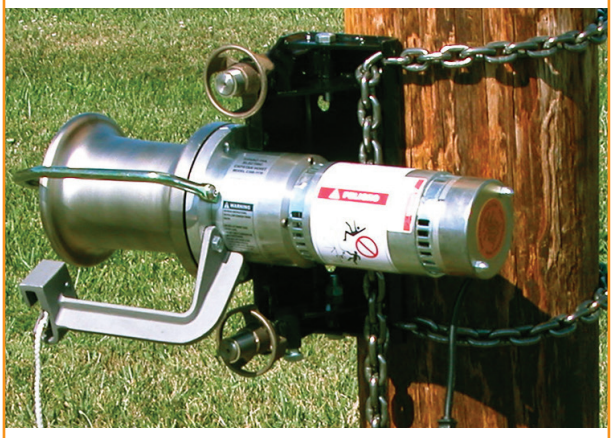
C4170346	7 1/8 lb. (3.2 kg.)

Wheel handles on chain binders make tightening easy.

All-Purpose Bracket C3081335



To fit angle steel and beams, furnished bolts pin the clamps to form a 90° attachment shoulder.



To fit poles up to 23" in diameter, chain clamps pivot to automatically adjust.

Chain Clamp E3081334P (Chains are 72" long.)

Chain Clamp C4170346 (Chains are 85" long.)

Series 90 Capstan Hoists

Options and Components (continued) for 1,000-lb.-rated hoists

Capstan Drum

- For 1,000-lb. Series 90 hoists
- Replacement, does not include mounting bolt or washer

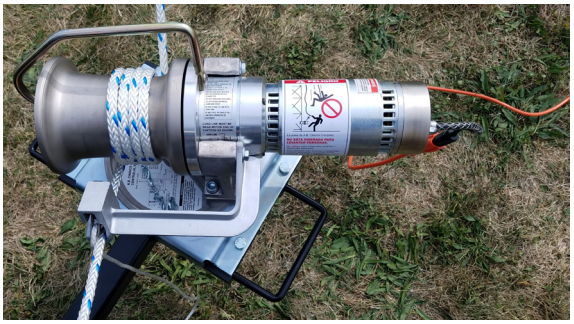
E3081327P	7 lb. (3.2 kg.)

1,000-lb.
Capstan Drum
E3081327P

Rope Lock Device for Series 90 hoists

Includes mounting bolts and washers

C3080856	2 lb. (0.9 kg.)



Rope Lock Device C3080856

- Must be ordered as a separate item.
- Includes 2 mounting bolts, washers and release lanyard.
- Accepts ½", ⅝" and ¾" rope.

Foot Controls for Series 90 hoists

for 12-Volt DC drive

C4176145	3½ lb. (1.6 kg.)

for 115- and 230-Volt AC drive

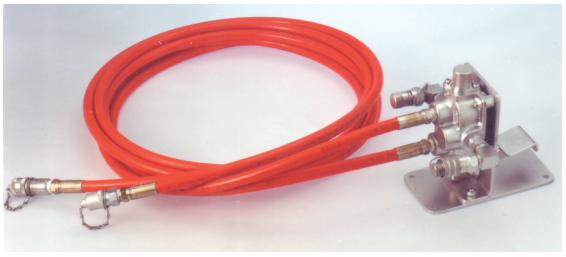
C4170337	4 lb. (1.8 kg.)
T3081515 Foot Control with Guard	8 lb. (3.6 kg.)
P3081512PK Foot Guard Kit	4 lb. (1.8 kg.)

for Hydraulic drive

C3080685	24 lb. (10.9 kg.)

C4176145

C4170337



Hydraulic
Foot Control
C3080685

Foot Guard Kit
P3081512PK

Foot Control
with Guard Kit
T3081515PK

CHANCE®

Swivel-Base Truck Mount

for 12V, 115V & Hydraulic 1,000-lb. Series 90 Capstan Hoists

Sets at angles needed for variety of jobs

- Turntable design permits proper alignment without repositioning service vehicle
- Heavy-gauge steel base bolts directly to truck body wherever convenient
- Bracket can be pinned at 15-degree interval around circular base for: stringing, tensioning, and sagging conductors; pulling in cable; hoisting equipment; setting poles; and pulling vehicles

⚠ WARNING

This is not a personnel lifting device. A label on the unit warns against lifting people or loads directly above people.

To store hoist on C-bracket, simply remove four bolts. The C-bracket also can be bolted down for fixed-angle.

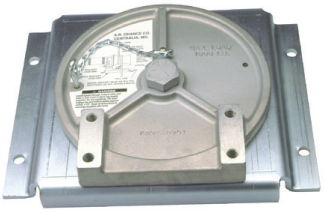
Utilize truck as portable power source

- Only 12V, 115V, 230V and Hydraulic 1,000-lb.-rated hoists are recommended for truck mounting
- See page 1153 to order

Swivel Bracket only

Catalog No.	Weight, each
C3080903	18 lb. (8.1 kg.)

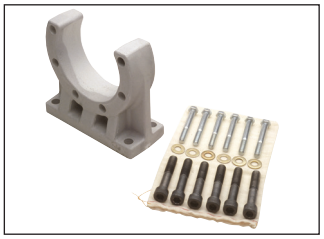
Swivel Bracket C3080903



C-Bracket only — complete with mounting bolts

C3080890	5 lb. (2.3 kg.)

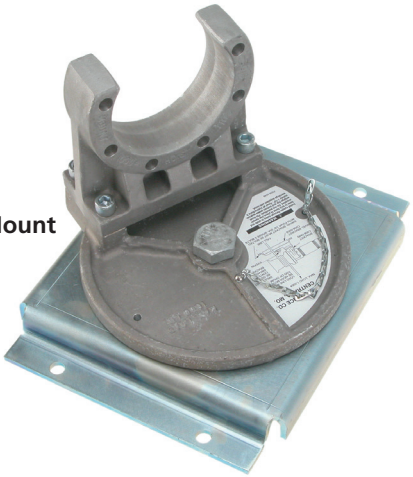
C-Bracket C3080890



Swivel Base Truck Mount
(Assembled Swivel Bracket and C-Bracket at right)

Catalog No.	Weight, each
T3081506	23 lb. (10.4 kg.)

Swivel-Base Truck Mount T3081506



Hitch-Receiver Mount for Swivel-Base Mount

for 12V, 115V, 230V & Hydraulic 1,000-lb. Series 90 Capstan Hoists

Quick and convenient, fits 2"-square towing receivers

- Faster than any other method, job-ready mount puts capstan hoist in right position for pulling, stringing, and lifting jobs
- With hoist stored on it, mount's square tube simply inserts and pins in any 2"-square receiver of a Class III or IV towing hitch

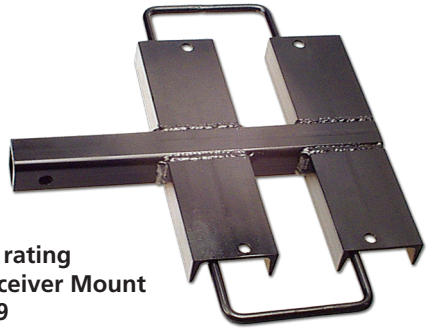
Specially designed for swivel-base mount

- T3080999 Hitch-receiver Mount features hole pattern specifically designed to fit Swivel-Base Mount T3081506 (for more details see page 1156)
- Swivel mount's turntable design permits proper alignment without repositioning service vehicle
- Swivel mount permits pinning bracket at every 15-degree interval around circular base for: stringing, tensioning, and sagging conductors; pulling in cable; hoisting equipment; setting poles; and pulling vehicles

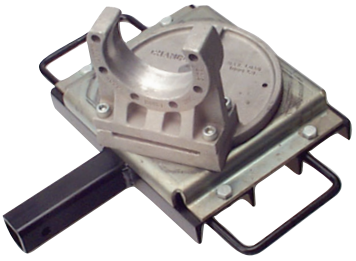
Utilize truck as portable power source

- Hitch-Receiver Mount is rated at 1,000 lb. to correspond with ratings of capstan hoists for which it is intended
- Only 12V, 115V and Hydraulic 1,000-lb.-rated hoists are recommended for truck mounting
- See page 1153 to order

Catalog No.	Description	Weight
T3080999	Hitch Mount for Capstan Hoist	21 lb. (9.5 kg.)
PSC3081563	Hitch Mount with Swivel Base	62 lb. (28.1kg.)



1,000 lb. rating Hitch-Receiver Mount T3080999 as furnished

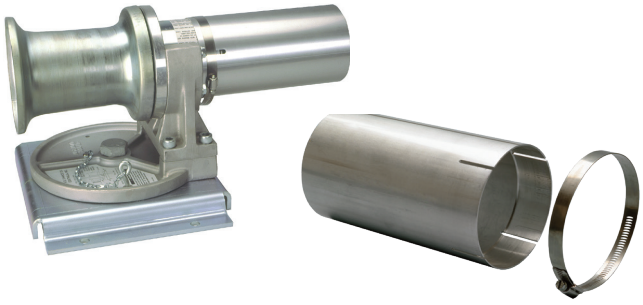


PSC3081563 (Hitch Mount Bracket T3080999 with Swivel Base T3081506)

Weather Shield for 12-Volt DC hoist only

complete with band clamp

Catalog No.	Weight, each
C3080909	1 lb. (0.5 kg.)

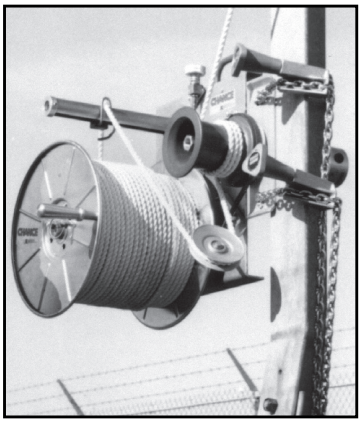


MATERIAL HANDLER SPECIAL APPLICATION

For AC, Hydraulic & Gasoline 1,000-lb. Series 90 Capstan Hoists (Order hoists on page 1153)

Application and Operation

- Portable system sets up fast where large vehicle-mounted equipment is impractical
- Lifts tools, apparatus, sets poles, and moves materials in warehouse or store yard
- Automatically takes up rope on reel and keeps line out of dirt
- Mounts to wood, concrete, or steel poles and angle-member structures with one bracket and two chain clamps
- Operator can keep all activity in view while controlling lift with tension-adjustment knob and hoist's foot control

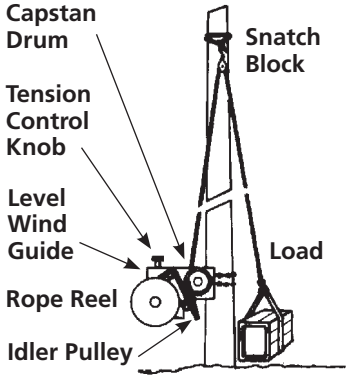


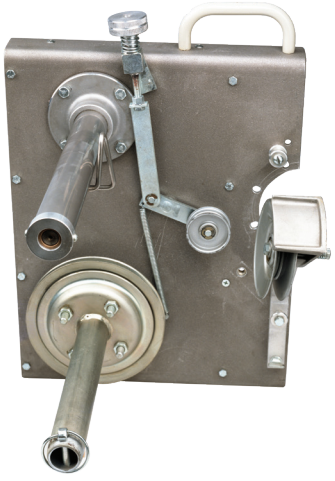
Material Handler chassis only

Catalog No.	Weight, each
C3160760	38 lb. (17.2 kg.)

Must order separately:

- **C3080925 Bracket, for poles, beams or angles (page 1154)**
- **Two C4170346 Chain Clamps (page 1155)**
- **Poly-dacron or Polyester Braided Rope (Cat. Sect. 1250)**
- **C4170343H Take-Up Reel with handle (shown above; Capacity: 600 ft. x ½" rope or 1,500 ft. x ⅜" rope; Weight: 20 lb. / 9 kg.)**

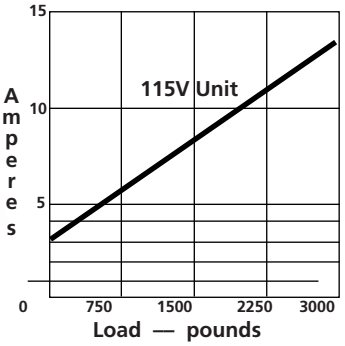




Idler arm stores simply by moving wingbolt to another hole.

Series 90 Capstan Hoists

3,000-lb. Load Rating 12V, 115V Hydraulic, Gasoline



Electrical source requirements

Electric Drive

115-Volt AC

includes Power Hoist and Foot Control Switch only

Catalog No.	Weight, each
C3081370	58 lb. (26.3 kg.)

Hydraulic Drive

includes Power Hoist only;
To order Foot Control Switch, see page 1161.

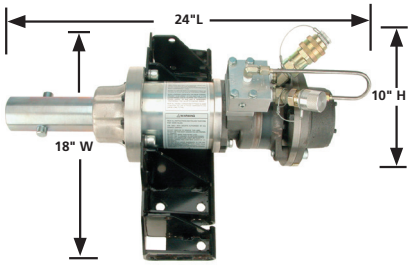
	Catalog No.	Weight
Hydraulic	C3081380	44 lb. (20 kg.)

With Bayonet for Collapsible Reel by others or Removable Capstan Drum C4170341

NOTE: Includes Power Hoist only.
To order Foot Control Switch, see page 1161.

	Catalog No.	Weight
Hydraulic Bayonet	C3080900	36 lb. (16.4 kg.)
Hydraulic Reversible	C3080940	100 lb. (45.4 kg.)

With Bayonet for Collapsible Reel by others or Removable Capstan Drum C4170341 ordered separately, page 1161.



NOTE: Includes Power Hoist and Bolt-Down Bracket.
To order Foot Control Switch, see page 1161.

Gasoline Drive

includes Power Hoist and Foot Throttle Control only
Gasoline unit features 35 cubic-centimeter 4-cycle engine.

Catalog No.	Weight, each
C3081390	58 lb. (26.3 kg.)

Components

- Four ½" mounting bolts furnished with each unit
- Mounting flange provides eight ½" tapped holes on 5-5/8 bolt circle
- Recommended rope for use with capstan hoists are Poly-Dacron or Composite Fiber Braided (consists of polyester fibers) as shown in CHANCE Catalog Section 1250

Series 90 3,000-lb. Hoist	Rope Speed for 3,000 lb. load	Source Required to meet Rope Speed Rate
115-Volt AC	12 feet per minute	14 amperes motor current
Hydraulic	30 feet per minute	8 gal. per min. & 1,000psi
Gasoline	11 feet per minute	Engine speed: 7,000rpm

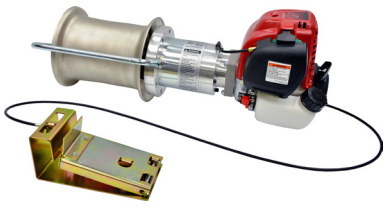
Operating speed at full rating

For continuous lift or pull at maximum rating (3,000 lb.) with a 20% duty cycle, table at left highlights information for each power-drive type:

- Rate of lift or pull (rope speed)
- Power output needed (source, minimum)

Recommended rope for capstan hoists

- Poly-Dacron or Composite Fiber Braided (consists of polyester fibers shown in CHANCE Catalog Section 1250



CHANCE®

Series 90 Capstan Hoists

Options and Components for 3,000-lb.-Rated Hoists

All-Purpose Bracket

- For 3,000-lb. Series 90 hoists
- Includes two E3081334P chain clamps for poles, angles, and beams

Catalog No.	Weight, each
C3081443	32 lb. (14.5 kg.)

To fit angle steel and beams, furnished bolts pin the clamps to form a 90° attachment shoulder.

CAPSTAN HOIST FIXED HITCH MOUNT

2,000 lb MAX Working Load

- For use with CHANCE 3,000 lb Capstan Hoists (max load 2,000 lbs) and CHANCE 1,000 lb Capstan Hoists (max load 1,000 lbs)

PSC3081578	45 lbs (20.4 kg)

Chain Clamp

for Series 90 hoists

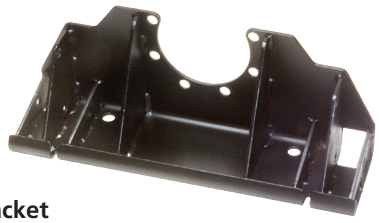
- One per Catalog No.
- Two required for All-Purpose or Bolt-Down Brackets

E3081334P	6 lb. (2.7 kg.)

Bolt-Down Bracket

- For 3,000-lb. Series 90 hoists
- Same as above, except does not include chain clamps

Catalog No.	Weight, each
E3081434P	14 lb. (6.4 kg.)



Capstan Drum

- For 3,000-lb. Series 90 hoists
- Replacement, does not include mounting bolt or washer

Catalog No.	Weight, each
E3081362P	11 lb. (5 kg.)

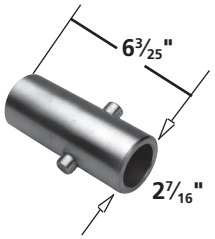
Series 90 Capstan Hoists

Options and Components (continued) for 3,000-lb.-rated hoists

Bayonet Adapter

retrofits on 3,000-lb. standard Hydraulic hoist for collapsible reel or C4170341 drum

Catalog No.	Weight, each
C3080820	5 lb. (2.2 kg.)



Bayonet Adapter C3080820

Capstan Drum

Removable for 3,000-lb. hoist w/bayonet; 8½" dia. x 8½" length; on and off w/out tools

C4170341	12 lb. (5.4 kg.)

Removable Capstan Drum C4170341

Rope Lock Device

for Series 90 hoists

Includes mounting bolts and washers

C3080856	2 lb. (0.9 kg.)

Rope Lock Device C3080856

- Must be ordered as a separate item.
- Includes 2 mounting bolts, washers and release lanyard.
- Accepts ½", ⅝" and ¾" rope.

Foot Controls

for Series 90 hoists

for 115-Volt AC drive

C4170337	4 lb. (1.8 kg.)
T3081515 Foot Control with Guard	8 lb. (3.6 kg.)
P3081512PK Foot Guard Kit	4 lb. (1.8 kg.)

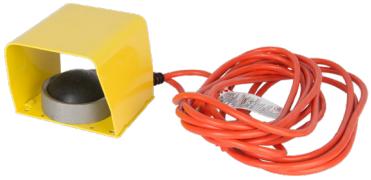
for Hydraulic drive

C3080685	24 lb. (10.9 kg.)

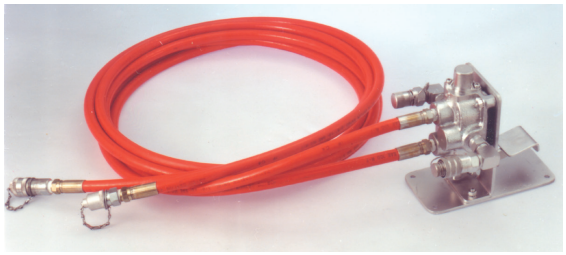
for Gasoline drive

T3080997	2 lb. (0.9 kg.)

C4170337



Foot Control with Guard Kit P3081515PK



Hydraulic Foot Control C3080685

Foot Guard Kit P3081512PK

HUBBELL®
Power Systems, Inc.

• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

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CHANCE®

Gins and Booms

Catalog 1200 March 2020

HUBBELL®

CHAIN BINDER TYPE TRANSFORMER GINS

Available in a standard-base and extended-base design, these proven Chain Binder Type Transformers Gins are versatile tools for hoisting distribution transformers and apparatus up a structure.

Features & Applications

- Standard base unit is for mounting on clear pole sections
- 5" extended-base model allows bridge mounting up to 4" x 5" crossarms
- Wheel tightener and 36" chain are part of each unit
- Standard and extended-base models feature 2000-lb. maximum ratings, including hand pull force
- 900-lb. lift load with single hoist line through a pulley on the gin and a sheave near the base of structure (lift load plus pull load equals capacity)
- Lift load can be 1,400 lbs., using 4-4 blocks
- Pole length is 26 inches

C4000090
Standard Base

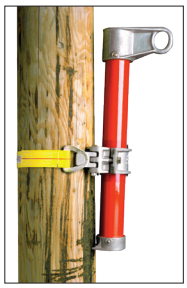
C4000315
5" Base

C4000440
Swivel Top
5" Base

STRAP-TYPE TRANSFORMER GINS

Features & Applications

- Same as Chain-Type Gins, except with a strap-type-ratchet-action mounting mechanism rather than a chain binder
- With 10,000-lb. rated tensile strength, the 2"-wide polyester strap comes in 44" length to fit most structures
- Wide handle opening on rapid-action ratchet permits easy operation, even with gloves
- Both models feature 2000-lb. maximum ratings, including load and fall-line pull



T4001937

T4001938

Safety Considerations

- A swivel-hook block should always be used in the eye of the gin and a sheave or capstan near the bottom of the structure should be used to thread handline
- Gins are not intended for applications involving side pull on the hoist line or with the lift load in a tagged-out position
- Load line should be parallel to the gin pole
- When calculating load capacities, allow 10 percent for friction in rope pulleys
- For example, using two double-sheave blocks, maximum lift load would be 1,400 lbs.; or, using a single sheave, maximum lift load would be 900 lbs.

CHAIN-BINDER GINS

Catalog No.	Description	Weight
C4000090	Standard Base Chain Gin	15 lb./6.75 kg.
C4000315	5" Extended Base Chain Gin	30 lb./9 kg.

Swivel-Top Chain Gin

- Same application as Transformer Gin, but top eye casting can be swiveled to bypass secondary lines, when necessary
- Cap is not intended to swivel while under load
- Gin has identical load ratings to gins above
- Features 48" Epoxiglas® mast and with two wheel tighteners and 36" chain units

Catalog No.	Description	Weight
C4000440	Swivel Top 5" Extended Base Chain Gin	37 lb./16.7 kg.

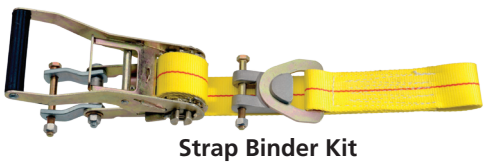
Safety Considerations

- A swivel-hook block should always be used in the eye of the gin and a sheave or capstan near the bottom of the structure should be used to thread handline
- Gins are not intended for applications involving side pull on the hoist line or with the lift load in a tagged-out position
- Load line should be parallel to the gin pole
- When calculating load capacities, allow 10 percent for friction in rope pulleys
- For example, using two double-sheave blocks, maximum lift load would be 1,400 lbs.; or, using a single sheave, maximum lift load would be 900 lbs.

STRAP-TYPE GINS

Epoxiglas® pole: 3" diameter, 26" length

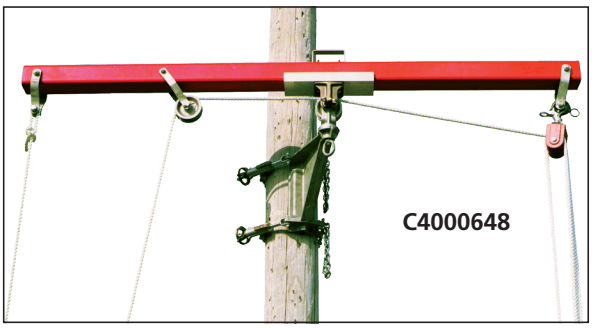
Catalog No.	Description	Weight
T4001937	Standard-Base Strap Gin	14 1/4 lb./6.4 kg.
T4001938	5" Extended-Base Strap Gin	18 1/4 lb./8.2 kg.



Strap Binder Kit

Catalog No.	Description	Weight
T4002007	D-Buckle Strap Binder only	4 1/2 lb./2 kg.

CROSSARM GIN



The gin beam can be rotated in a half circle, swinging the load away from underbuild obstructions. Rocker-action of the beam, up to 60°, controls distance of the load from the pole.

Features & Applications

- Yoke casting fits over distribution crossarms, allowing gin to be used with rope blocks
- Can also be used with rope blocks or handline to lift conductors from their insulators
- Removable cadmium-plated steel pin provides adjustment for crossarm from 3-1/2" x 4-1/2" up to 4-3/4" x 5-3/4"
- Convertible model fits up to 6" x 6" crossarm

Safety Considerations

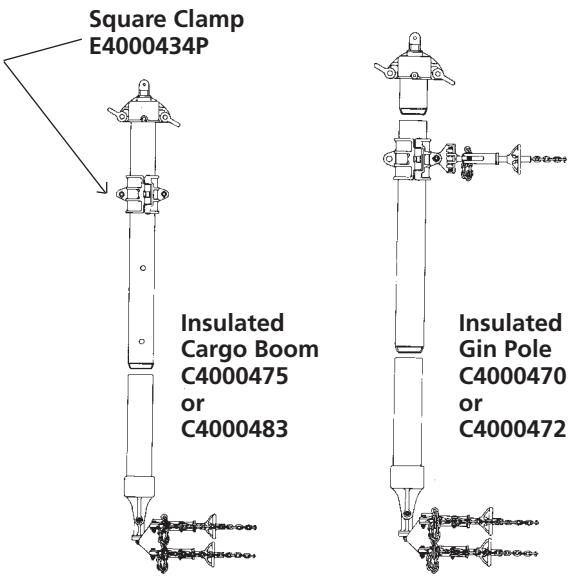
- At 30° maximum angle from vertical, 44" gin has rated working load including pull force of 750 lbs.
- 500 lb. 56" gins are not intended for side-pull applications on hoist line or load line
- Lines to be within 5° of vertical

Catalog No.	Description	Weight
H20	44" Crossarm Gin	10 lb./4.5 kg.
T4000870	56" Crossarm Gin	12 lb./5.5 kg.
T4001708	Convertible 44" Crossarm Gin	10 lb./4.5 kg.

MULTI-DUTY GIN

- Gin clamps at top of pole to lift heavy equipment
- Gin can be mounted lower on pole without changing mounting bracket to avoid obstructions
- Sturdy 4" x 4" Epoxiglas® beam gives unit a 2000 lb. load rating
- With beam removed, mounting bracket can be used by itself for hanging transformers
- Maximum rating of gin bracket is 2500 lbs.

Catalog No.	Description	Weight
C4000648	Multi-Duty Gin,Complete	70 lb./31.5 kg.
C85W	Mounting Bracket with Wheel Tightener	17 lb./7.7 kg.



INSULATED GIN POLE/CARGO BOOM

Insulated Gin Pole is equipped with three chain tighteners which can be mounted to the pole to give lifting capacities of 5,000 pounds.
• Top casting is fitted with two clevises for convenience in loading.
• Placing a pole clamp in the swivel lug allows use of wire tong for stabilizing the gin.

Insulated Cargo Boom is rated at 1,000-pound capacity.
• Center casting can be adjusted to three possible positions for guy loading the tool.
• Base mounting is hinged to permit pivoting of the tool from horizontal upward 90° to vertical and will also swivel a full 180°, depending upon the proximity to the structure.
• Casting at the top is the same as on the Insulated Gin Pole.

Cat. No.	Description	Weight
C4000470	8' Gin Pole/Chain Binders	74 lb./33.3 kg.
C4000472	12'Gin Pole/Chain Binders	90 lb./40.5 kg.
C4000475	16' Cargo Boom/Chain Binders	100 lb./45 kg.
C4000483	16' Cargo Boom/Tower Binders	96 lb/43.2 kg.

SWIVEL BOOM — HEAVY DUTY
Features & Applications

- Used on EHV to swing an insulator cradle with insulators into a structure for repair
- 1,000-lb. capacity with 4" x 4" Epoxiglas® horizontal boom, coupled with 3" round Epoxiglas mast
- Unit rigging requires a link stick and hoisting device in diagonal position
- Clamp on square boom can be adjusted to three possible positions for loading purposes
- Casting on end of boom is fitted with two clevices for convenient loading
- Available with swivel boom on pole-mounted configuration
- Also available with four tower-mounting brackets to fit towers up to 6" to 6" angle legs

C4000469

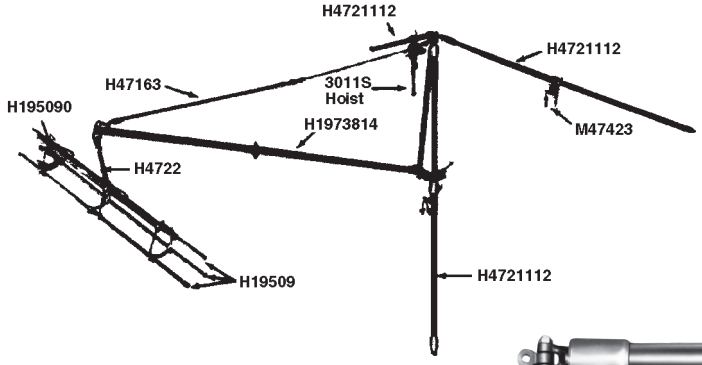
Catalog No.	Description	Weight
C4000464	16' Boom, 8' Mast, Clamps For Tower Mounting	128 lb./57.6 kg.
C4000465	18' Boom, 10' Mast, Clamps For Tower Mounting	140 lb./63 kg.
C4000469	18' Boom, 10' Mast, Chain Binders for Pole Mounting	140 lb./63 kg.

SWIVEL BOOM — MEDIUM DUTY
Features & Applications

- Used on transmission structures to lift and move an insulator cradle with insulators into a convenient work position on a structure
- 3"-round Epoxiglas® horizontal boom and vertical mast are designed for 500-lb. ratings when used in a steel-tower configuration
- 600-lb. rating for wood-pole assembly
- Insulated link stick and hoist are used in diagonal position to lift cradle full of insulators clear of deadend

For tower use, three boom support poles should be added in a tripod configuration as shown in the illustration at left below.

Catalog No.	Description	Weight
H1973814	14' Boom, 8' Mast, Clamps For Tower Mounting	70 lb./31.5 kg.
H1973H10	10' Boom, 6' Mast, Chain Binders for Pole Mounting	61 lb./27.5 kg.



BOOM SUPPORT POLE
Features & Applications

- 2-1/2" diameter Epoxiglas® poles are used to brace either heavy-duty or medium-duty Swivel Booms in tripod arrangement
- Poles are anchored to steel tower with tower-type saddles (M4742 and M47413)

H4721112

- Same tool is also used as horizontal member for trolley pole changeouts of suspension insulators

Catalog No.	Pole Diameter & Length	Overall Length	Weight
H4721112	2½" x 12'	12'9"	18.5 lb./8.3 kg.

NOTES

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NOTES

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CHANCE®

Load Handling Accessories

Catalog 1250 March 2020

HUBBELL®

POLY-DACRON ROPE

Poly-Dacron (PD) Rope is a three-strand flexible combination of synthetic fibers. Its excellent dielectric properties, and high resistance to mildew, rot and chemical damage make it an excellent handline rope.

Features & Applications

- While PD can be used on capstans, it should have one or two more wraps than manila
- PD works well in sliding hitches
- Although PD offers greater tensile strength than manila, it is recommended that natural fiber rope be replaced with same-size synthetic rope for workman handling ease
- A wider cross-section proves better for accidental transverse cutting or severe spot abrasion
- Size-for-size substitution makes it possible to benefit from the strength and economy of synthetic ropes

NOTE: While fibers are moisture absorption resistant, water can be trapped between strands as with any braided rope

Catalog No.	Description	Size	Tensile Strength, Lbs.	Max. Load, Lbs.	Approx. Wt. Per 100 Feet
M18962	Handline	3/8"	2,650	294	4 lb.
M18963	Handline	1/2"	4,200	500	8 lb.
M18964	Bull Line	5/8"	6,700	800	10.5 lb.

Standard 600 feet coils on wooden reel.

POLYPROPYLENE ROPE

Features & Applications

- Strong, lightweight and moisture-resistant
- Water accumulation on surface can be removed by shaking and wiping with absorbent cloth
- As with any rope, polypropylene should be stored in a dry place
- Polypropylene Rope should not be used in running hitches or any friction heating environments
- **Not for use on capstans**

NOTE: While Polypropylene Rope has excellent dielectric strength, water accumulation between strands is a definite hazard

Catalog No.	Description	Size	Tensile Strength, Lbs.	Max. Load, Lbs.	Approx. Wt. Per 100 Feet
†M18951	Handline	1/4"	1,130	113	1 1/4 lb.
*M18952	Handline	3/8"	2,440	244	3 lb.
*M18953	Handline	1/2"	3,780	420	5 lb.
*M18954	Stringing Line	5/8"	5,600	700	8 lb.
*M18955	Stringing Line	3/4"	7,650	1,090	10 3/4 lb.

*Standard 600 feet coils on wooden reel.
†Standard 1200 feet coils on wooden reel.

COMPOSITE FIBER BRAIDED ROPE

Features & Applications

- Made of polyester fibers plied over polyolefin fibers in each of the 12 strands
- Composite strands are braided together to create rope with excellent strength-to-weight ratio
- Low stretch, firm, round construction gives excellent gripping power on capstans

Catalog No.	Size	Tensile Strength, Lbs.	Max. Load, Lbs.	Approx. Wt. Per 100 Feet
C4000798	3/8"	3,880	775	3 1/2 lb.
C4000799	1/2"	6,700	1,340	6 1/4 lb.
C4170586	5/8"	11,600	2,320	11 lb.
C4000800	3/4"	14,500	2,900	14 lb.

Standard 600 feet coils on wooden reel.

GLASS FIBER FILLED NYLON ROPE BLOCKS

CHANCE®

Features & Applications

- Shells and sheaves are made of high dielectric, fiber-filled natural nylon
- Shaft is silicon bronze and sheave bearings are oil-impregnated bronze
- Blocks available with Polypropylene or Poly-Dacron rope for minimum stretch and long life
- For working-load considerations, blocks are rated as follows:
  - Double Sheave Blocks, max. 3,500 lb.
  - Triple Sheave Blocks, max. 3,500 lb.
- Dielectric Strength: Dielectric rating in dry weather is 30,000 Volts between bearing and mounting bolt nut
- Maximum rope size is ½"

Catalog No.	Description	Weight
C4000919	Double Block with Becket	3¼ lb.
C4000918	Triple Block without Becket	3½ lb.

C4000918

C4000919

Catalog No.	Description	Weight
C4000914	Two Double Blocks with 120' of ½" 3-Str. Polypropylene Rope	12½ lb.
C4000924	Two Double Blocks with 120' of ½" 3-Str. Polydacron Rope	16¼ lb.
C4000915	Double and Triple Blocks with 150' of ½", 3-Str. Polypropylene Rope	16 lb.
C4000925	Double and Triple Blocks with 150' of ½", 3-Str. Polydacron Rope	20½ lb.
T4001257	Two Double Blocks with 120' of ½", Composite Fiber Braided Rope	14½ lb.
T4001258	Double and Triple Blocks with 150' of ½", Composite Fiber Braided Rope	16½ lb.

HAND LINE BLOCK, SAFETY ORANGE

- **1,000 lb. working load**
- **Safety orange color**
- **Fiberglass reinforced nylon body & sheave**
- **Side-opening body design for easy rigging**

Catalog No. PSC4033478
Weight: 2¼ lb. (1.0 kg.)
Rated working load: 1,000 lb. (454 kg.)

Features & Applications

- 3"-diameter sheave accepts up to 5/8"-diameter rope
- Plated-steel swivel eye allows 360° orientation
- Plated-forged-steel hook has as it is ¾ inches throat opening, plus spring-loaded safety latch
- Side-opening design includes high-strength detent-ball pin that is easy to remove and is secured to body with a lanyard

Components available as separate items

Catalog No.	Description	Weight
PSC4033479	Lanyard and Pin Kit	1/4 lb./0.1 kg
PSC4033480	Spring Latch Kit	1/8 lb. / 0.1 kg.

SNATCH BLOCKS

C4176067 or 22301 **22302**

Features & Applications

- Lightweight, cast-aluminum housing and sheave with hinged, cotter-lock yoke and either forged-steel or steel meat hook makes for quick, easy rigging in various applications
- Hand line and block and tackle efficiency is increased with forged-steel, swivel-eye suspension ring, plus three-inch sheave operating on bronze oilite bearings
- Maximum rope size is 5/8"
- Maximum load capacity is 1,250 lbs. on 2230 Series only

Catalog No.	Description with Retainer Latch	Weight
22301	1250 lb. Block with forged steel hook	2 lb./0.9 kg.
22302	1250 lb. Block with steel meat hook	2 lb./0.9 kg.
C4176067	**2500 lb. Block with forged steel hook**	6 lb./2.7 kg.
PS400006	Ball Lok Pin Chain for 22301 or 22302	¼ lb./0.1 kg.

M1849

HAND LINE HOOK

Features & Applications

- Hook can be attached any place along the hand line by two large holes
- The long point accommodates most items to be raised and lowered at the pole
- Maximum load of hook is 500 lbs. with load seated at bottom of hook

WEBBING SLINGS

Features & Applications

- Made in high-visibility "safety yellow"
- Latex-treated for increased abrasion resistance
- Softest, most pliable of nylon webbing slings
- Standard fabrication does not include metal of any kind in body or end fittings
- Designed to handle delicate loads
- Flexible design allows for easy handling and storage
- Two basic types include 10 sizes in Endless version and one size in Return Eye style

WARNING: When selecting slings, the following must be considered:

1. Weight of load
2. Number of slings used to make lift
3. Type of hitch (vertical, choker, basket)
4. Effect of sling-to-load angle on sling capacity (see table A). Increasing the angle of the sling increases the strain. Therefore, it decreases the lifting capacity of the sling. Capacities listed are for vertical lifts
5. CHANCE slings must be considered as non-insulating

NOTE:

- All CHANCE slings are identified with a heat-imprinted sewn-on tag that includes capacities, width, style and length
- All CHANCE slings carry the required OSHA identification tags

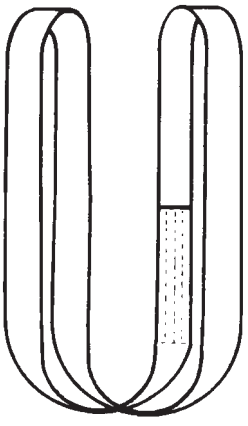
BASIC SLING TYPES

Endless

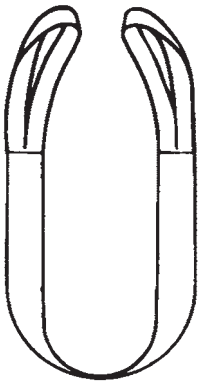
- Most versatile
- Used in vertical, basket or choker hitch, it conforms precisely to shape of load
- Provides best gripping and holding power in upright position
- Easiest to use and lasts the longest because there are no eyes to predetermine wearing points
- Endless construction permits the two parts of the sling which go around the load to spread apart and provide a "cradle" for load

Return Eye

- Designed primarily for use in choker hitch
- Works equally well for basket and vertical hitch applications
- Constructed with two widths of side-by-side webbing and held in place by third width of webbing which binds the two together
- This design results in eye openings which are in the same place as the sling body, which is best for choking as the sling body remains flat against the load



Endless



Return Eye

WEBBING SLINGS

How To Carry Two Full Buckets

- Above illustrations typify the stresses imposed on slings when legs are attached to the load at various angles
- While rated capacities are shown in this catalog, these tables were inserted primarily to show the severe reduction in capacity when a sling is operated at a wide angle
- Whenever head room permits, it is recommended that the angle with the vertical not exceed 45°
- Where head room is small and sling must be spread at an excessive angle, special care must be used in selecting a sling
- In such cases, consult your distributor or Hubbell Power Systems, Inc.

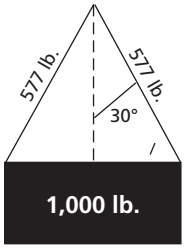
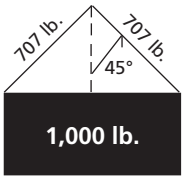
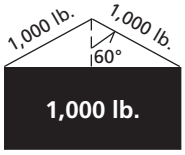


TABLE A
SLING ANGLES

Sling Angle with Vertical	Stresses per Sling Leg Per 1000 lb. Total Load
0	500
5	502
10	508
15	518
20	532
25	552
30	577
35	610
40	653
45	707
50	778
55	872
60	1000
80	2880





CHANCE WEBBING SLINGS
RATED LIFTING CAPACITIES

CATALOG NUMBER	WIDTH Inches	LENGTH Feet	MAXIMUM CAPACITIES* (LBS.) Basket	Choke	Vertical	TYPE
C4170133	2″	6′	7200	2900	3600	Return Eye (Eye length: Approx. 4")
C4170134	1″	3′	6400	2500	3200	Endless
C4170135	1″	4′	6400	2500	3200	Endless
C4170136	1″	5′	6400	2500	3200	Endless
C4170137	1″	6′	6400	2500	3200	Endless
C4170138	1″	8′	6400	2500	3200	Endless
C4170139	2″	3′	12800	5000	6400	Endless
C4170140	2″	4′	12800	5000	6400	Endless
C4170141	2″	5′	12800	5000	6400	Endless
C4170142	2″	6′	12800	5000	6400	Endless
C4170143	2″	8′	12800	5000	6400	Endless
C4170588	1″	3′	12800	5000	6400	Endless
C4170589	1¾″	5′	17200	6900	8600	Endless

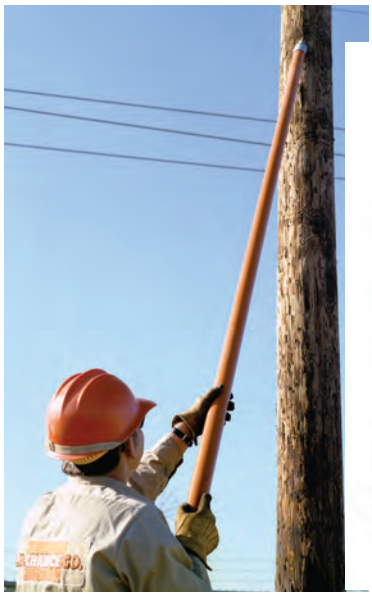
***MAXIMUM WORKING LOAD IN POUNDS - DO NOT USE SLINGS BEYOND RATED CAPACITY**

POLE HANDLING TOOLS

EPOXIGLAS® HANDLE CANT HOOK

- Replaces the conventional wood handle cant hook
- Handle is made of 2" diameter x 4' long orange EPOXIGLAS
- Hook is one-piece high carbon steel, end upset, forged and drawn to a point
- Gripper casting incorporates two sets of teeth for improved grip on all pole sizes
- Hook base casting is adjustable to set poles of varying diameters
- A hex head bolt and lockwasher hold base casting in desired position

Catalog No.	Description	Approx. Wt. Ea.
C3050008	Cant Hook	10 lb./4.5 kg.



EPOXIGLAS® PIKE POLE

- The point, secured by a spring-button lock, can be reversed to protect point and avoid damage to equipment when not in use
- Does not absorb moisture so it will not rot or warp
- Features excellent mechanical properties and is relatively lightweight

Catalog No.	Pole Diameter & Length	Approx. Weight
214PH	2" x 14'	10½ lb./4.8 kg.
216PH	2" x 16'	11¾ lb./5.3 kg.
218PH	2" x 18'	13 lb./5.9 kg.

Catalog No.	Description	Approx. Weight
024095P	Pike Pole Point Replacement	0.5 lb

CHANCE POLE TONG

- Designed to be used like giant pliers, one worker can guide a pole into place during installation
- Before this tool was developed, it took two workers with peavey sticks to do the job
- Applying pressure to keep the jaws closed, a worker controls forward, backward, side-to-side, and rotary movements of pole as it is lowered by winch or winch line on a hydraulic boom
- Not necessary to regrip the pole once jaws are firmly hooked slightly above ground level
- Fits poles from 7" to 16" in diameter

Catalog No.	Handle Length	Approx. Weight
C200T	3 ft.	17 lb./6.6 kg.

POLE WRENCH

- Two-in-one tool performs functions of a cant hook and pole tong without spiking the pole
- With positive control, it grasps poles of round or other geometric cross sections made of metal, fiber, concrete or wood
- Latex-impregnated nylon-web strap (1-3/4" x 6') rated at 7,500-lb. tensile strength, securely grips even large-diameter poles
- Rugged design also includes a 2"diameter x 4' CHANCE orange Epoxiglas® handle with plastisol butt cap, a cast-aluminum head and two forged-steel bails.

Catalog No.	Description	Weight
C3050021	Pole Wrench	6½ lb./2.9 kg.

KELLEMS PULLING GRIPS

• for Overhead Pulling
• made of high-strength galvanized-steel strand

Features & Applications

- Designed for overhead pulling
- Made of high-strength galvanized-steel strand

WARNING: When selecting slings, the following must be considered:

1. Do not run grips or swivels over bullwheels while under tension
2. Two Punch-Lok® bands should be firmly attached, approximately 1" and 2" from the grip's tail. Banding is required to ensure maximum reliability and guard against accidental release
3. **DUA-Pull type grips only:** Double-braided rope, as in 2-in-1 type, must be back-spliced for approximately 2/3 of the mesh length for best gripping results. Grip size must be selected by diameter of back splice.

⚠ WARNING

Never use wire mesh grips up to listed approximate breaking strength. Always use an appropriate safety factor when selecting grips for the working load in your application. Kellems minimum recommended factor of safety for pulling grips is five (5). Additionally, banding the tail end of the grip is recommended for maximum grip performance.

DUA-Pull® Type Grips

Features

- Highest-strength pulling grips manufactured for overhead transmission line stringing
- Work with both bare and insulated conductors, plus synthetic rope
- Two-over/two-under weave design delivers exceptional strength and gripping ability
- This is made possible by putting more steel mesh in contact with cable or rope surfaces

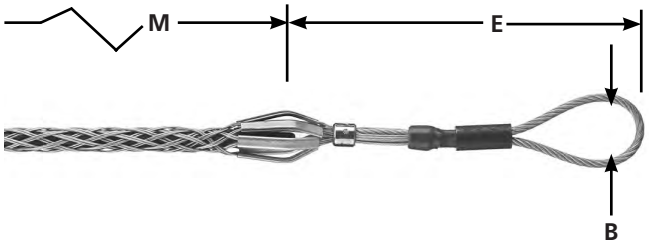
Applications

- Primarily used in overhead transmission line construction
- Designed for loads and safety considerations that require an extra high-strength grip
- Will mate with swivels and link-type connectors
- Also used for attaching pulling lines to conductors, conductors to running boards, and "double socking" for conductor-to-conductor connections
- DUA pull line accommodates ACSR, ACAR, plus, all aluminum and copper conductors
- Grips also accommodate ground wires, messenger strands, plus wire and synthetic ropes

Ordering Information

Catalog Number	Diameter Ranges (inches)		Approx. Breaking Strength	Dim. (in.)		Eye (in.)	Dia., Cable & Grip**	Color Code
	Conductor	Rope*		E	M	Dia.B		
033271037	.19 - .37	.25 - .65	6,500 lb.	10	24	0.218	.200"	Black
033271038	.38 - .62	.50 - .90	14,000 lb.	12	36	0.375	.280"	Dk. Green
033271039	.63 - .87	.75 - 1.10	20,000 lb.	13	48	0.437	.360"	Red
033271040	.88 - 1.12	1.00 - 1.50	30,600 lb.	15	60	0.500	.500"	Blue

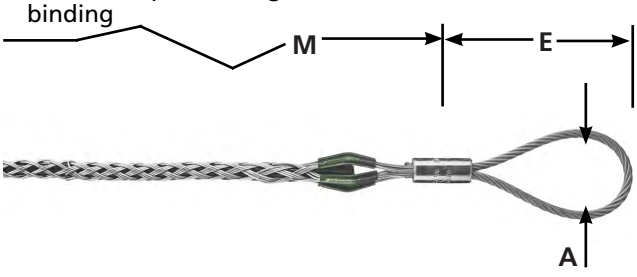
Dimension E = Eye length Dimension M = Mesh length at nominal dia.
*For rope, select smallest size grip which meets required working load.
**Add to cable or rope diameter.



Multiple-Strength Type Grips

Features

- Designed for pulling ACSR, aluminum or copper bare conductor, ground wires, messenger strands, wire rope and insulated cables
- Made of high-strength, galvanized-steel strand
- Feature a mesh construction of single, double and triple weave for firm holding power
- Endless-weave Grip end lies flat on the cable and will not snag
- Flexible Eye: Flexible, wire-rope eye will mate with a swivel and pass through blocks and sheaves without binding



Applications

- Ideal for overhead transmission and distribution line stringing for moderate loading
- An economical tool for attaching conductors to pull lines and "double socking" for conductor-to-conductor connections

Ordering Information

Catalog Number	Cable Dia. Range (inches)	Approx. Breaking Strength	Dimension (in.)		Eye (inches)	Color Code
			E	M	Dia. A	
03302044	0.25 - 0.49	6,800 lb.	9	26	1/4	Green
03302046	0.50 - 0.74	10,000 lb.	9	32	5/16	Brown
03302048	0.75 - 0.99	14,400 lb.	11	41	3/8	Light Blue
03302050	1.00 - 1.24	24,600 lb.	12	52	1/2	Gold
03302052	1.25 - 1.49	30,600 lb.	12	56	1/2	Black
03302054	1.50 - 1.74	30,600 lb.	12	60	1/2	Red

Dimension E = Eye length
Dimension M = Mesh length at nominal diameter

KELLEMS PULLING GRIPS

• for Underground Pulling

K-Type Grips

Features

- Kellems Rotating-Eye K-Type Pulling Grips are made of high-strength galvanized-steel strand
- Feature double-weave mesh for greater strength and added mesh contact with the cable
- Designed to handle longer or heavier pulling jobs
- Forged eye mates with a swivel or shackle

Applications

- Specially designed for use in the installation of underground power cables
- Also made for communication and service lines into factories, shopping centers, construction projects, and general underground electrical construction

Ordering Information

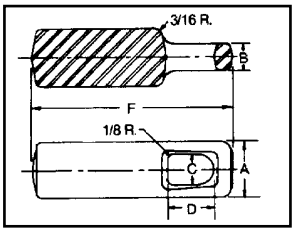
Catalog Number	Cable Diameter Range (inches)	Approximate Breaking Strength (lb.)	Dimension (in.)		Eye (inches)
			E	M	Diameter A
03301024	0.75 - 0.99	9,600	6	32	1
03301025	1.00 - 1.49	16,400	7	33	$1\frac{3}{8}$
03301026	1.50 - 1.99	16,400	7	34	$1\frac{3}{8}$
03301027	2.00 - 2.49	27,200	9	36	$1\frac{5}{8}$
03301028	2.50 - 2.99	33,000	10	38	$1\frac{7}{8}$
03301029	3.00 - 3.49	41,000	10	39	$1\frac{7}{8}$

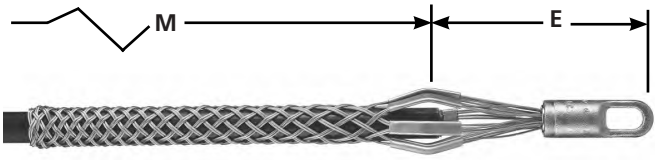
Dimension E = Eye length
Dimension M = Mesh length at nominal diameter

Rotating Eye Feature

- Equipped with a forged-steel rotating eye which can be attached to a swivel
- Durable and compact eye threads through blocks and sheaves without binding
- Rotating eye is not a swivel and will not turn while under tension
- Can turn to relieve pulling torque when tension is relaxed
- If constant swivel action is required, a swivel should be used

Eye Diameter (inches)	Rotating Eye Dimensions				
	A	B	C	D	F
1	1	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{13}{16}$	$3\frac{1}{2}$
$1\frac{3}{8}$	$1\frac{3}{8}$	$\frac{1}{2}$	$\frac{11}{16}$	1	$4\frac{1}{2}$
$1\frac{5}{8}$	$1\frac{5}{8}$	$\frac{5}{8}$	$\frac{7}{8}$	$1\frac{3}{16}$	$5\frac{5}{16}$
$1\frac{7}{8}$	$1\frac{7}{8}$	$\frac{21}{32}$	1	$1\frac{3}{8}$	$6\frac{1}{8}$



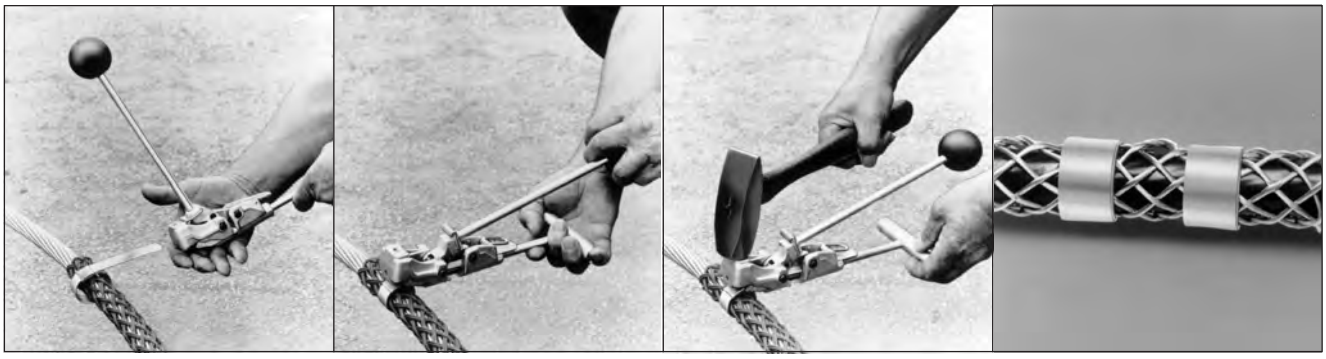


⚠ WARNING

Never use wire mesh grips up to listed approximate breaking strength. Always use an appropriate safety factor when selecting grips for the working load in your application. Kellems minimum recommended factor of safety for pulling grips is five (5). Additionally, banding the tail end of the grip is recommended for maximum grip performance.

KELLEMS PULLING GRIPS

Bands and Tools for Pulling Grips



Features & Applications

- Punch-Lok® Bands are applied over the tail of a grip to prevent mesh from being tripped or pulled loose
- Ensure full gripping action by locking mesh of tail in tight contact with cable or rope
- When tail of grip is the leading end, the bands are particularly important to prevent accidental release caused by tripping on obstructions
- A conductor-to-conductor (double socking) pulling operation is a good example of two grips connecting two conductors to form a temporary splice
- Bands should be applied to the ends of grips as illustrated herein
- It is also common to tape over the banded tail area to ensure smooth passage through sheaves

Note:

- During installation, each end of the grip should be taped down securely to the cable to ensure smooth passage with the cable and guard against accidental release
- See end bands listed below

Note:

- In all cases, two Punch-Lok Bands should be doubled, wrapped approximately 1" and 2" from the grip's tail
- Banding is required to ensure maximum reliability and guard against accidental release

®Punch-Lok is a registered trademark of Punch-Lok Co.

Punch-Lok Tools

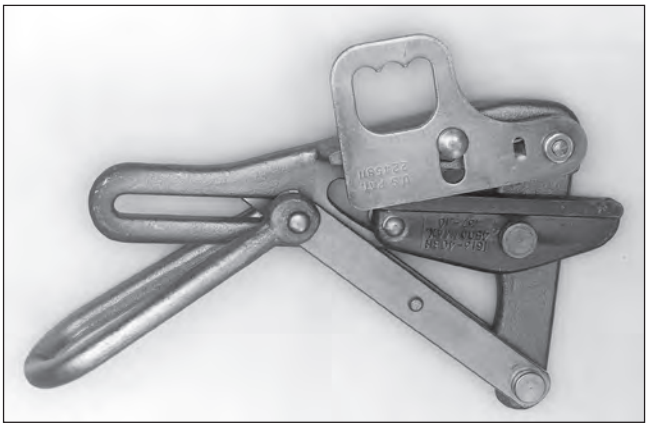
Catalog No.	Description
20320048	P-1 Heavy Duty

Punch-Lok Bands

Catalog No. (one each)	Grip Banding Range (Inches)	Band Width (Inches)	Band Inside Diameter (Inches)	Model
20320050	1/4 - 1 1/8	3/8	1 3/8	0-311
20320051	1 1/8 - 1 5/8	3/8	2	0-316
20320052	1 5/8 - 2 1/4	5/8	2 1/2	0-10
20320053	1 1/4 - 3 1/2	5/8	4	0-16
20320054	3 1/2 - 5	5/8	6	0-24

CHANCE®

Hot Line Wire Grips



Features & Applications

- Designed for use with hot line tools or regular line work
- Top ring for placing the grip on a hot line with a hot stick
- When released, the grip locks on line and will not fall off
- Holds grip firmly and prevents slipping
- Body is heat-treated steel alloy and made to rigid specifications

Jaws	Catalog No.	WIRE SIZE — AWG OR MCM Max.	WIRE SIZE — AWG OR MCM Min.	Safe Load, lb.	Weight lb./kg.
▲	T161340H	1/0 Str. (.373")	8 Sol. (.120")	4500	3/1.4
▲	T16845H	4/0 Str. (.550")	4 Str. (.218")	8000	6.3/2.8
●	T165640H	336.4 ACSR (.741")	3/0 ACSR (.530")	8000	7.8/3.5
●	T165650H	477 ACSR (.860")	397.5 ACSR (.740")	8000	7.8/3.5

▲ = for use on small bare wire and cable (solid and strand).

● = for use on bare aluminum, ACSR and copper conductor.

Wire Puller Hook

Features & Applications

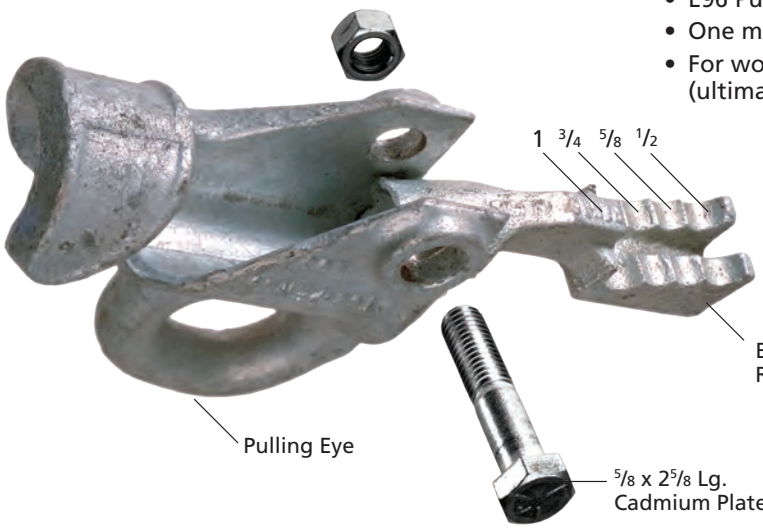
- Fits most popular porcelain or polymer deadend insulators
- For use in cutting deadends and pulling slack on automatic deadends
- Holds the insulator and deadend assembly directly iIn line with the conductor, eliminating the need to hold the insulator up with an insulator fork for inserting wire into the automatic deadend
- Can be applied by hand or with hot stick
- Has maximum rated load of 3500 lbs.

Catalog No.	Description	Weight
WPH3	Wire-Puller Hook	1½ lb./0.7 kg.

Standard Pulling Eyes

Features & Applications

- Economical resource provides a large offset eye to accommodate three-ton chain hoist hooks
- Leaves anchor eye free with plenty of clearances for attaching formed wire grips
- E95B Adapter Bushing quickly adjusts to fit 1/2", 5/8", 3/4", or 1" anchor rods
- By removing the Adapter Bushing, the E96 Pulling Eye fits 1 1/4" rods
- E96 Pulling Eye is inexpensive and easy to use
- One man can assemble and hook up in minutes
- For working loads to approximately 6,000 pounds (ultimate strength — 18,000 pounds)



Catalog No.	Weight
E96	5 lb./2.3 kg.

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

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NEVER COMPROMISE™

CHANCE®

Insulated Hand Tools

Catalog 2100 March 2020

HUBBELL®

CHANCE®

Grip-All Clampsticks

External Control Rod

- External Operating Rod Type
- Tested per OSHA & ASTM F711
- Versatile tool puts an easy-to-control "finger" on an insulated pole
- Primarily designed for installing hot-line and grounding clamps
- Also serves both overhead and underground circuits with various end fittings

Operation

- Operating mechanism (or "shotgun") incorporates a sliding hand grip that opens the hook to grasp a clamp eyescrew and retract it into tool head
- Latch must be depressed to release locked hand grip that opens the hook
- For smooth operation, investment-cast stainless-steel components include Jaw, Jaw Holder, Safety Stop, Lockbar and Latch illustrated below
- Lexan® tool head is designed for close-quarter operations
- Worker must maintain recommended work distance based solely on the Epoxiglas® pole section of the handle, as the hook and its actuator are metal parts
- Easy-care Grip-All Clampsticks do not require field stripping to clean
- All insulated parts, including the operating rod, are outside the main pole, readily accessible to wipe dry

To accept grounding clamps with long eyescrews, all Grip-All clampsticks feature 6¾ inches of head travel.

Notch in tool head aligns the clamp while the operator places it.

Single-Piece Style

†Catalog No.	Overall Length	Weight	*Storage Bag
C4030291	1¼" x 4' 9"	5¾ lb./2.6 kg.	P6434
C4030292	1¼" x 6' 8"	6½ lb./2.9 kg.	P6436
C4030293	1¼" x 8' 7"	7¼ lb./3.3 kg.	P6438
C4030294	1¼" x 10' 7"	8 lb./3.6 kg.	P64310
C4030295	1¼" x 12' 7"	8¾ lb./3.9 kg.	P64312

†For metal universal fitting, add suffix "A".
*For storage bags, see Catalog Section 2500.

Hinged Style

Ideal for troubleshooters with limited tool-storage space in their vehicles, this folding version operates with the same features as the one-piece style.

†Catalog No.	Folded	Extended	Weight	*Storage Bag
C4030296	3'4"	1¼" x 6' 9"	8 lb./3.6 kg.	P6432
C4030297	4'4"	1¼" x 8' 8"	9 lb./4.1 kg.	P6432
C4030298	5'4"	1¼" x 10' 8"	10 lb./4.5 kg.	P6433
C4030299	6'4"	1¼" x 12' 8"	10½ lb./4.7 kg.	P6435
C4030342	7'4"	1¼" x 14' 8"	11 lb./5.0 kg.	PSP6435005
C4030343	8'4"	1¼" x 16' 8"	11½ lb./5.2 kg.	PSP6435004

†For metal universal fitting, add suffix "A".
*For storage bags, see Catalog Section 2500.

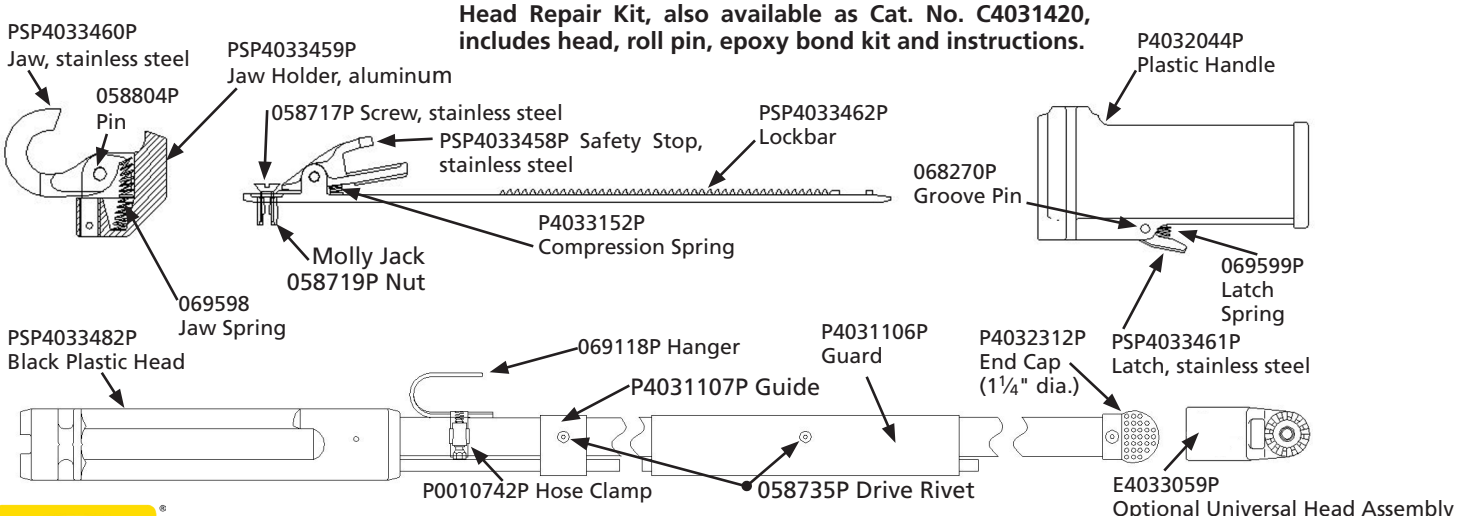
†For metal universal fitting on handle end of any Single-Piece or Hinged Grip-All, add suffix "A" to the Catalog Number.

To convert any Grip-All stick to use all Universal Tool Accessories, the M1867 Adapter secures in the clampstick hook and head housing.
*fits Chance Grip-all only

M1867

Replacement Parts for External Control Single-Piece and Hinged Grip-All Clampsticks

Head Repair Kit, also available as Cat. No. C4031420, includes head, roll pin, epoxy bond kit and instructions.

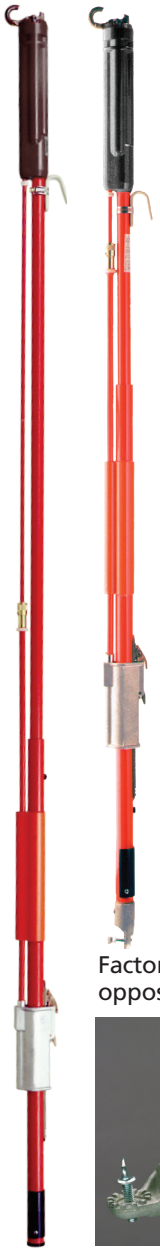


Grip-All Clampsticks, Telescoping

Tested per OSHA & ASTM F711

Features & Applications

- Tested per OSHA & ASTM F711
- Available in two sizes, each readily locks at variable working lengths
- Design features rotating coupler and an engineered positive-lock button with safety stop to keep sections from parting or hook releasing while in use
- Mechanism locks sections into a solid, rattle-free tool
- Black head makes it obvious head is not included in minimum approach distance
- Can replace several conventional clampsticks
- Allows linemen to adhere to safe-working distances and positioning needs, with fewer sticks
- Reduces the number of clampsticks required on a line truck, saving limited storage space
- Engineered interface between sections ensure tool retracts with full control
- Close fit helps keep out dirt and moisture
- Top section is made with foam-center Epoxiglas® insulated pole
- Functions of this telescoping style are identical to fixed-length style
- All controls can be easily accessed while wearing gloves
- Easy to disassemble, stick must be kept clean and dry inside to ensure long life
- T4031245 Button and Spring Replacement Kit



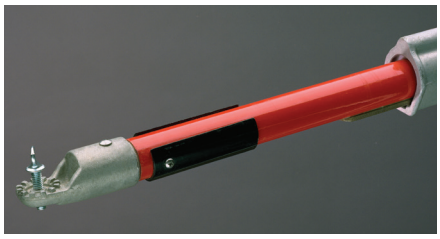
For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Catalog No.	Extended Tool can lock at each length:	Retracted Length	Storage bags	Weight
C4031035	5'6¾", 6'9½", 8'	5'2 ¾"	P6436	6 lb./2.7 kg.
C4031036	8'6¾", 10'4½", 12'2¼", 14'	8'2 ¾"	P6438	8 lb./3.6 kg.

Telescoping Style with Universal Fitting on Handle

Catalog No.	Extended Tool can lock at each length:	Retracted Length	Storage bags	Weight
C4033060	5'10½", 7'1¼", 8'3¾"	5'6½"	P6436	6 lb./2.7 kg.
C4033061	8'10½", 10'8¼", 12'6", 14'3¾"	8'6½"	P6438	8 lb./3.6 kg.

Factory-installed universal fitting on end opposite the clampstick head.



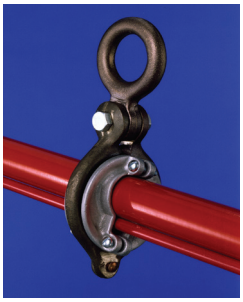
Grip-All Clampstick Assist Ring

Catalog No.	Description	Weight
E4032543P	Grip-All Assist Ring	1½ lb./0.68 kg.

*For Strain Link Sticks, see Catalog Section 2250.

Features & Applications

- Provides a suspension midpoint for any Grip-All clampstick
- Assembly permits support line to attach at smaller ring – helpful on longer sticks
- Insulated, properly-sized Strain Link Stick should be used in the handline to help maintain safe-working clearances for hotline procedures
- Assist Ring halves assemble simply by threaded fasteners
- Keyhole shape for operating rod permits clampstick to function as usual



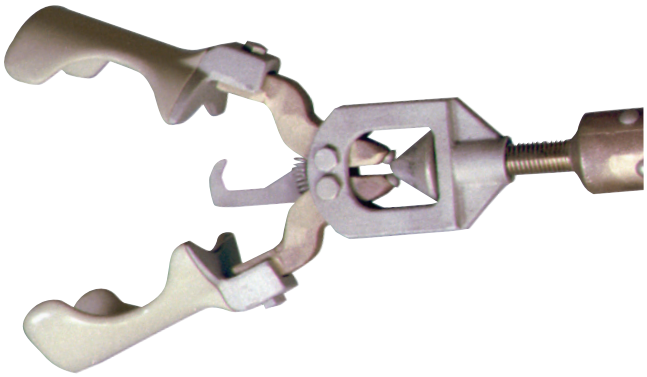
ELBOW PULLER TOOLS

Note: Grippers are not included with tools on this page. To order grippers interchangeable for 15, 25 and 35 kV, see REPLACEMENT GRIPPERS table on page 2105.

For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Features & Applications

- Tested per OSHA & ASTM F711
- Facilitate removing elbow connectors from transformer bushings and other apparatus
- Elbows can be difficult to remove when silicone grease on the interface of elbow and bushing dries out and hardens over time
- Special integral hook on tool head fits through rubber eye of elbow or metal hook of bushing cap
- Used in this manner, hook adds extra control and pulling power to grippers



IMPACT Elbow-Puller Tools

Features & Applications

- Lightweight tool uses slide-hammer mechanism to easily disengage and replace elbows
- Tool and grippers help operator to control elbow and stiff underground cable lead
- For sure, balanced grip, 5-lb. slide hammer is plastisol coated and flared at both ends
- For secure handling, both front and rear handgrip areas of pole are coated with Griptread
- Available in three lengths, tools are made of 1-1/4"-diameter orange Epoxiglas® pole
- 6′ to 8′ foot units meet OSHA requirements
- 4-1/2′ unit, labeled "For Rubber Glove Use Only", has 5"-long insulation length

Operation

To pull an elbow connector:

- Insert hook through eye on elbow
- Close down grippers on elbow by rotating pole
- Support tool with one hand on front grip behind handguard and other hand on slide hammer
- Slide hammer from front to rear anvil
- Resulting impact should release elbow with sufficient momentum to withdraw it from bushing without extended arcing

To install an elbow connector:

- Follow the same procedures for pulling, EXCEPT use slide hammer impact against front anvil to help seat the elbow

Impact Elbow Pullers
(Grippers not included. Order Grippers separately. See REPLACEMENT GRIPPERS table, page 2105.)

Catalog No.	Description	Weight
C4031822	†6-foot length	12 lb./5.4 kg.
C4031850	†8-foot length	12¼ lb./5.6 kg.
C4031851	*4½-foot length	11½ lb./5.2 kg.

*4½-foot tool labeled "For Rubber Glove Use Only."
†6- and 8-foot tools meet OSHA insulation requirements.

Storage Bags (Yellow vinyl/fabric)

P6436	Bag for 4½' or 6' tool above
P6438	Bag for 8' tool above

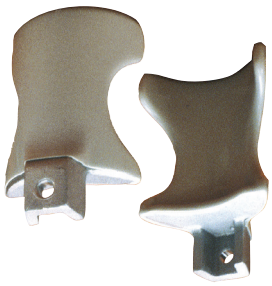
C4030814

ELBOW CONNECTOR TOOL REPLACEMENT GRIPPERS

FOR 15 kV, 25 kV and 34.5 kV ELBOWS

Features & Applications

- Provides a sure grip for installing and disconnecting elbow terminators
- Grabs the elbow and has a special integral hook that fits through the rubber eye of an elbow or the metal hook of a bushing cap
- Gives lineman complete, positive control, overcoming resistance of stiff underground cable



C4030704

ORDERING INFORMATION

REPLACEMENT GRIPPERS (Also required for Elbow Puller Tools, page 2104)

Catalog No.	Description	Weight
C4030704	15 kV Plastic-Coated Grippers	5/8 lb./.3 kg.
C4030613	25 kV Plastic-Coated Grippers	1 lb./.5 kg.
C4030614	25 kV Uncoated Grippers	5/8 lb./.3 kg.
C4030814	34.5 kV Plastic-Coated Grippers. Fits RTE 200 AMP and 600 AMP Elastimold "T" Elbow	1 lb./.5 kg.

Arc Snuffer Removal & Replacement Tools – specifically for use in Grip-All clampsticks –

C4032037

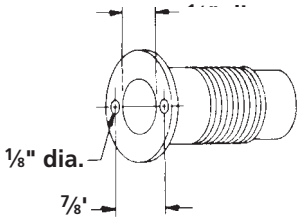
C4032036

Features & Applications

- Two hot-line tools permit easy retrieval of broken arc snuffers and installation of replacements
- Does not de-energize URD bushings
- Designed to ensure adequate electrical clearances
- Specifically for use in Grip-All clampsticks
- Integral ring on each tool retracts into clampstick
- Tool bodies are high-impact plastic with steel inserts
- Removal Tool works like bolt extractor and when inserted into a damaged arc snuffer, it permits retrieval by unscrewing the broken part
- Replacement Tool controls alignment with a spring-action center post that snaps into arc snuffer bore
- Two steel tool lugs engage holes in snuffer collar to transmit tightening torque
- Should only be used on integral screw-in snuffers, such as Cooper Power Systems P/N: 2603710a04

Tools fit many 15 & 25 kV snuffers.

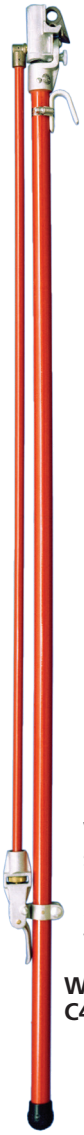
These tools fit bushing arc snuffers with dimensions given at right.

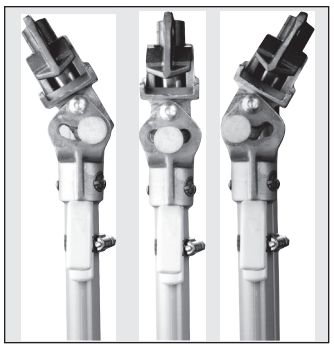


ORDERING INFORMATION

Catalog No.	Description	Weight
C4032037	Removal Tool	¼ lb./0.1 kg.
C4032036	Replacement Tool	¼ lb./0.1 kg.

WIRE-HOLDING STICKS





Head of the tool locks in three positions . . . enables lineman to handle conductor from any angle.

With handle positioned as shown in photo above, the knurled nut can be turned to adjust the gripper to the exact wire size.

Wire Holding Stick
C4033068

Features & Applications

- Tested per OSHA & ASTM F711
- Used on or around energized lines for forming, bending and positioning jumper wires
- Also used for holding conductors during splicing operations
- Gripper, with an eye for extra sticks, will handle No. 6 copper through 1590 kcmil ACSR

Operation

- Grips like locking-type pliers
- By tightening the knurled nut at control lever, wire-holding jaws can firmly grip conductor
- When doing this, tightening control lever must be in relaxed position about 1" from pole
- To secure conductor grip, push lever down to the pole
- To release conductor, simply move the control lever all the way up along the rod
- Head of tool locks in three stop positions, allowing lineman to easily position conductors
- Knurled screw handle below jaw opening adjusts head position from straight to right to left

Conductor Capacity: #6 to 1590 kcmil ACSR (0.162" to 1.5")

Catalog No.	Pole Dia. & Overall Length	Approx. Weight
C4033068	1¼" x 6'5"	6½ lb./2.7 kg.
C4033069	1¼" x 8'5"	6¾ lb./3.0 kg.
PSC4030592	1¼" x 10'5"	7½ lb./3.4 kg.
T4032992	1¼" x 11'2"	8¼ lb./3.7 kg.

For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Positive Grip Clamp Stick
HG30302

Positive Grip Clampstick

Features & Applications

- Tested per OSHA & ASTM F711
- For use on eyescrew grounding or hot line clamps
- Can be mounted on the line and tightened at up to 30° angles
- Aluminum and bronze fittings

Operation

- Install clamp by aligning locking ring with slot in housing
- Place eye of clamp in housing
- Holding locking ring and clamp in one hand, rotate pole clockwise to trap eye
- Remove clamp by engaging clamp body locking ring and rotating pole clockwise to trap eye
- Butt end is equipped with a combination tool hanger and universal head
- Extra long head for use with long eyescrew ground clamps

Catalog No.	Pole Dia. & Overall Length	Type Head	Approx. Weight
HG30302	1¼" x 8'6"	Regular Length	4 lb./1.8 kg.
HG303012	1¼" x 8'6"	Extra Long	4 lb./1.8 kg.
HG30422	Reg. Length Clampstick Head Only		1 lb./0.45 kg.
HG30425	Extra Long Clampstick Head Only		1⅛ lb./0.5 kg.

TELESCOPING DISCONNECT TOOLS

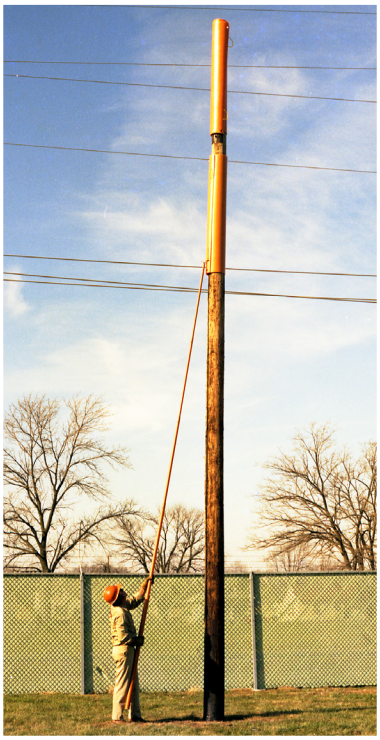
Features & Applications

- Tested per OSHA & ASTM F711
- Allow linemen to perform many routine jobs from ground level
- Universal end fitting on insulated top section accepts a wide variety of attachments
- This allows lineman to disconnect switches and replace cutout tubes
- Also allows lineman to remove pole covers, prune trees, plus other overhead tasks
- Sticks retract to approximately 5 ft. for easy truck transport (even in most cab sections)
- Heavy-duty, spring-loaded plastic buttons keep extended tool sections locked in place
- As each section extends and slightly twists, buttons also pop securely into place

Standard Versus Heavy Duty

- Both units feature same telescoping tube design
- Heavy-duty units have slightly larger tip sections: 1-1/4" versus 1-1/8"
- Each heavy-duty telescoping tube is also slightly larger
- This results in more rigidity, important for managing heavyweight maintenance tasks
- Both tip sections feature proven Chance Epoxiglas®
- This unicellular foam-core material prevents moisture trapping voids between foam and tool

Disconnect Head included with each tool.



When space is extremely limited for truck storage, a 23 ft. Telescoping Tool that compacts to 4 ft. is available as Catalog No. C4031739.

Standard Duty (1 1/16"-dia. Tip)

Catalog Number	Extended Length (Tool can be locked at each length shown)	Storage Retracted Length	Base Dia.	Number of Sections	Weight
C4031023	8 ft.	56"	1 1/4"	2	2 lb./.9 kg.
C4031017	8 - 12 ft.	57"	1 1/2"	3	2 3/4 lb./1.2 kg.
C4031018	12 - 16 ft.	59"	1 11/16"	4	4 lb./1.8 kg.
C4031019	12 1/2 - 16 1/2 - 20 ft.	61"	1 7/8"	5	5 1/4 lb./2.4 kg.
C4031020	16 1/2 - 20 1/2 - 25 ft.	63"	2 1/16"	6	7 lb./3.2 kg.
C4031021	17 1/2 - 21 1/2 - 25 1/2 - 30 ft.	65"	2 1/4"	7	8 3/4 lb./3.9 kg.
C4031022	22 - 26 - 30 1/2 - 35 ft.	67"	2 1/2"	8	11 lb./5 kg.
T4033349	22 - 28 - 34 - 40 ft.	74 1/2"	2 1/2"	8	12 lb./5.45 kg.

Compact Standard Duty (1 1/16"-dia. Tip)

T4032205	7 ft.	28"	1 7/8"	5	2 3/4 lb./1.2 kg.
C4031739	14 - 17 - 20 - 23 ft.	48"	2 1/2"	8	9 lb./4.1 kg.
T4033240	10 ft.	36"	1 11/16"	4	4 lb./1.8 kg.

Heavy Duty (1 1/4"-dia. Tip)

C4031597	8 ft.	56"	1 1/2"	2	3 lb./1.4 kg.
C4031598	8 - 12 ft.	57"	1 11/16"	3	3 3/4 lb./1.7 kg.
C4031599	12 - 16 ft.	59"	1 7/8"	4	5 lb./2.3 kg.
C4031600	12 1/2 - 16 1/2 - 20 ft.	61"	2 1/16"	5	6 1/2 lb./2.9 kg.
C4031601	16 1/2 - 20 1/2 - 25 ft.	63"	2 1/4"	6	8 1/2 lb./3.7 kg.
C4031602	17 1/2 - 21 1/2 - 25 1/2 - 30 ft.	65"	2 1/2"	7	10 1/4 lb./4.6 kg.

CHANCE®

Telescoping Tool Repair Kits

Features & Applications

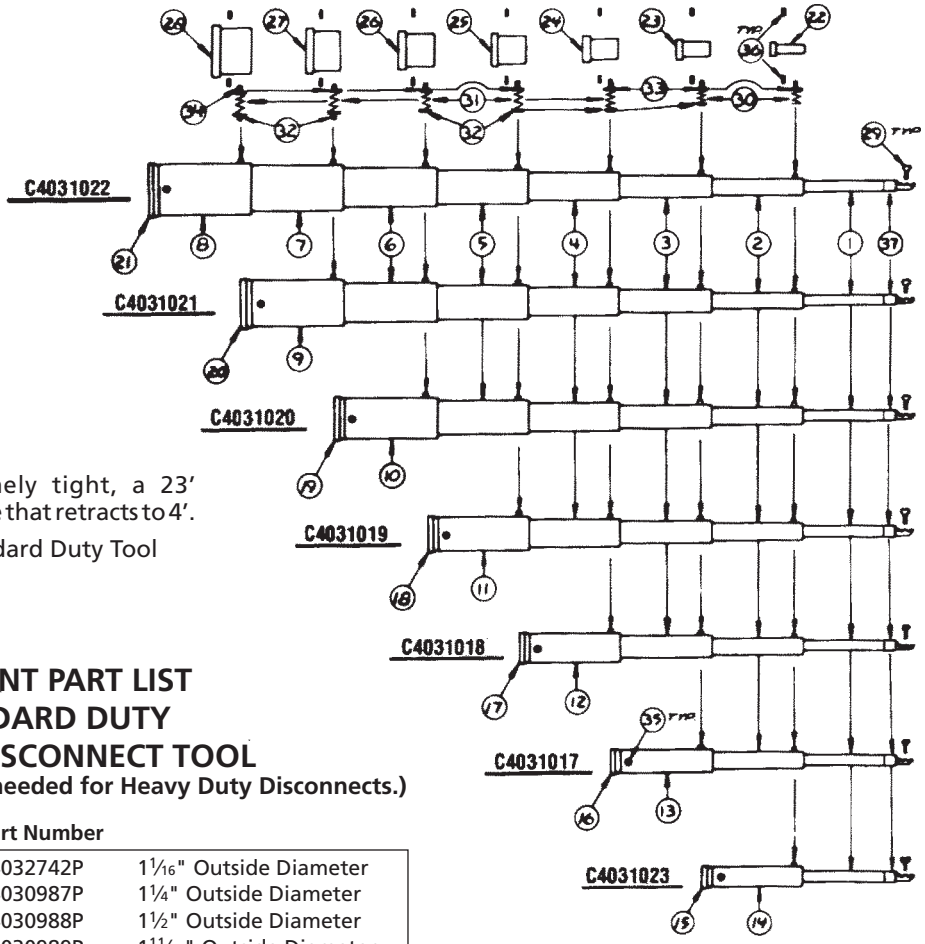
- Chance Telescoping Tools are designed and built for long life
- For necessary repairs, a complete kit is available with all buttons and springs for various stick lengths
- Refer to cross reference at right for individual kit part numbers
- For single parts, refer to the drawing and table to order correct part numbers

Standard Duty Tool Cat. No.	Heavy Duty Tool Cat. No.	**Button & Spring Kit No.**
C4031023	C4031597	**T4031245**
C4031017	C4031598	**T4031246**
C4031018	C4031599	**T4031247**
C4031019	C4031600	**T4031248**
C4031020	C4031601	**T4031249**
C4031021	C4031602	**T4031250**
C4031022	N/A	**T4031251**
C4031022EM	N/A	**T4031251**
T4032205	N/A	**T4031248**

Sticks For Small Vehicles

When storage is extremely tight, a 23' Telescoping Tool is available that retracts to 4'.

Cat. No. C4031739 — Standard Duty Tool



REPLACEMENT PART LIST FOR STANDARD DUTY TELESCOPING DISCONNECT TOOL

(Refer to factory for specific parts needed for Heavy Duty Disconnects.)

Item	Description	Part Number	
1	Pole & Ferrule	E4032742P	1 1/16" Outside Diameter
2	Tube	P4030987P	1¼" Outside Diameter
3	Tube	P4030988P	1½" Outside Diameter
4	Tube	P4030989P	1 11/16" Outside Diameter
5	Tube	P4030990P	1⅞" Outside Diameter
6	Tube	P4030991P	2 1/16" Outside Diameter
7	Tube	P4030992P	2¼" Outside Diameter
8	Base Tube	P4030999P	2½" Outside Diameter
9	Base Tube	P4030998P	2¼" Outside Diameter
10	Base Tube	P4030997P	2 1/16" Outside Diameter
11	Base Tube	P4030996P	1⅞" Outside Diameter
12	Base Tube	P4030995P	1 11/16" Outside Diameter
13	Base Tube	P4030994P	1½" Outside Diameter
14	Base Tube	P4030993P	1¼" Outside Diameter
15	Bottom Cap	P4031014P	
16	Bottom Cap	P4031013P	
17	Bottom Cap	P4031012P	
18	Bottom Cap	P4031011P	
19	Bottom Cap	P4031010P	
20	Bottom Cap	P4031009P	
21	Bottom Cap	P4031008P	

Item	Description	Part Number
22	Plug	P4031007P
23	Plug	P4031006P
24	Plug	P4031005P
25	Plug	P4031004P
26	Plug	P4031003P
27	Plug	P4031002P
28	Plug	P4031001P
29	Thumbscrew	P4030467P
30	Spring	P4032351P
31	Spring	P4032352P
32	Retainer	P4031977P
33	Button	P4033002P
34	Button	P4033001P
35	Mach. Screw	P0010309P
36	Drive Lock Pin	P0010419P
37	Universal Fitting	P4032514P

Telescoping Measuring/Disconnect Tool

• One tool does it all • English AND Metric Scales

Tested per OSHA & ASTM F711

Features & Applications

- Tested per OSHA & ASTM F711
- English and metric scales for measuring pole heights and conductor clearances from ground
- Easy-to-read scales feature large black characters on Chance orange fiberglass sections
- English scales are marked with 1' increments
- Each inch is marked in bold numbers and half inches are indicated with intermediate bars
- Removable disconnect head for operating switches and cutouts
- End fitting on insulated top section accepts other Universal Tool Accessories (Pages 2120 - 2127) for energized conductor applications, all from the ground
- Positive spring-load locking-button mechanism and plug feature prevent tool separation
- Once snapped into place, buttons securely lock into position – no unexpected tool retractions

Both scales are marked: (on the right) English feet, inches, half inches

AND

(on the left) Metric meters, decimeters, centimeters.

Operation

- To extend tool to desired length, pull out top section and rotate it until button engages in next section
- For measuring aerial distances, continue this process until tip reaches desired height
- Next, set butt of tool on ground and read scale at eye level for exact distance of tip above ground
- To retract, depress button of largest section first, then rotate it to disengage and collapse section
- Continue this process by taking each next smaller section in turn

Tool's top end section is insulated for maximum protection. There are no moisture-trapping voids between foam and tool wall because the tool wall is built around the foam.

English AND Metric Scales
feet, inches, half inches AND meters, decimeters, centimeters

Catalog Number	Number of sections	Length		Weight
		Min. (storage)	Max. (extended)	
C4031022EM	8	5' 7" (1.70m)	34' 9.3" (10.6m)	11 lb./5.0 kg.

Note: Storage Bag: P6215
Note: Button & Spring Replacement Kit T4031251

CHANCE®

Heavy-Duty Adjustable Sticks

- **Two-section telescoping tool**
- **Two sizes and three styles**

Features & Applications

- Tested per OSHA & ASTM F711
- For substations and close-clearance worksites
- Clearly marked at each 1′ extension lock
- One of these tools can replace as many as eight single-length hotsticks
- Adjustable sticks can be stored in short collapsed lengths and to avoid difficulties of maneuvering extra-long sticks through busswork structures
- Heavy-duty construction
  - o Classified as Heavy-Duty due to its large (1-1/4″-diameter) insulated top section and 1-1/2″-O.D. epoxy-reinforced fiberglass base tube
- 24″ overlap at usable-length extremes
  - o In each size, a 2′ section of Epoxiglas® foam-core top section remains inside the base section at the longest locked, usable length
  - o At the shortest locked length, insulated top section extends a full 2′ beyond base

Operation

- Easy to use, yet rugged mechanism
- High-strength plastic buttons – same as those in other Chance telescoping tools – keep tools locked at each length
- As top section is extended and twisted, lock button pops into place
- One worker can quickly adjust length with a convenient alignment dot at each 1′ setting on the insulated section that matches another dot at the top of the base section

For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Ordering Information

Disconnect-Style NEMA Head:

Catalog No.	Lockable Lengths, ft.	Collapsed	Weight
C4032600	10,11,12,13,14	8′ 2¾″	6½ lb./2.9 kg.
C4032601	12,13,14,15,16,17,18	10′ 2¾″	8 lb./3.6 kg.

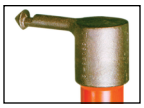
Switch-Style NEMA Head:

C4032602	10,11,12,13,14	8′ 2″	6½ lb./2.9 kg.
C4032603	12,13,14,15,16,17,18	10′ 2″	8 lb./3.6 kg.

Universal Fitting* Style:

C4032604	10,11,12,13,14	8′ 3¾″	6½ lb./2.9 kg.
C4032605	12,13,14,15,16,17,18	10′ 3¾″	8 lb./3.6 kg.

• **Universal Fitting* Style**



• **Switch-Style Head Bronze, NEMA-Standard**

• **Disconnect-Style Head Bronze, NEMA-Standard**

Extension length is clearly marked at each hole for button engagement.

‡Top section may be removed for use alone since it is essentially a single-piece hotstick of standard Epoxiglas construction with uni-cellular foam center.

***Universal disconnect head (Part No. M4455-9) must be ordered as a separate item for universal-fitting style sticks (Catalog Numbers C4032604 or C4032605).**

Trouble Shooter Kit

Tested per OSHA & ASTM F711

Features & Applications

- Includes six 4′ sections of field-proven 1-1/4″ Epoxiglas® Universal Pole that snap together
- Spring-loaded locking buttons for use at 4′, 8′, 12′, 16′, 20′ and 24′ lengths
- Butt section has end cap
- Fitting on top section with thumbscrew accepts Universal Accessories in kit

Kit Universal Accessories

- Aluminum Disconnect Head for opening and closing switches, and opening enclosed cutouts, has built-in hanger hook
- Non-Metallic Disconnect Head provides additional insulation for indoor substations where busswork and switches are in close proximity. Plastisol cap at top; 19" overall length with 15" long Epoxiglas section
- Clamp Stick Head for use with 6" long eyescrew ground clamps has locking ring with detent ball for on-off operation. Aluminum alloy
- Tree Trimmer mounted on 18" pole adds 1-1⁄2′ to reach with 3-to-1 mechanical advantage pulley and 25′ of furnished rope. Offset universal fitting on trimmer accepts pruning saw
- Pruning Saw with fine-tooth blade for smooth, non-stick action attaches directly to top pole, tree trimmer or pistol grip
- Pistol Grip Saw Handle of aluminum alloy is for use when limbs can be reached and insulation is not needed
- Storage Case of yellow heavy-duty vinyl-impregnated fabric has separate pockets for individual tools and Velcro flap closures

Kit forms compact 4′ x 9″ unit secured by two straps and plated buckles. At 24 pounds, kit easily totes by center carrying handle.

Catalog No.	Description	Weight
C4031612	**Complete Trouble Shooter Tool Kit**	24 lb./10.8 kg.

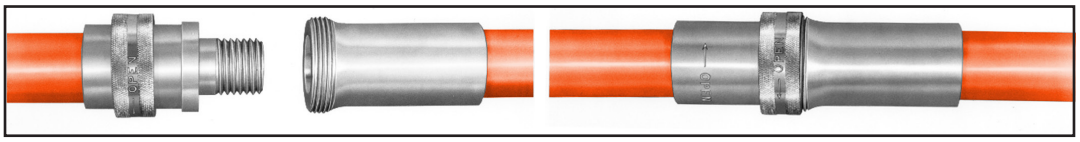
Catalog No.	Separate or Replacement Components	Weight
C4032046	Top Section Epoxiglas Pole	2¼ lb./1.0 kg.
C4032062	Mid Section Epoxiglas Pole	2¼ lb./1.0 kg.
M44559	Aluminum Disconnect Head	⅛ lb./0.06 kg.
E4031614P	Non-Metallic Disconnect Head	1¼ lb./0.6 kg.
M445529B	Clamp Stick Head	1¼ lb./0.6 kg.
H21064	Tree Trimmer	3½ lb./1.6 kg.
C4032213	Pruning Saw	½ lb./0.2 kg.
M445566	Pistol Grip Saw Handle	½ lb./0.2 kg.
P4032996	Storage Case	3¼ lb./1.5 kg.

CHANCE®

Disconnect Sticks

H304613

Tested per OSHA & ASTM F711



SPLICE FOR H3146 SERIES

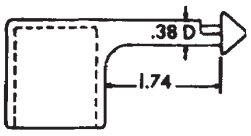
Used on Cutouts and Disconnect Switches Features & Applications

- Provide insulation for linemen in opening and closing disconnect switches and cutouts
- Also used for installing and removing open-link fuse links
- Poles are made of Epoxiglas®
- NEMA-standard heads of cast bronze
- Available in three types: switch head, disconnect head, or spliced disconnect head

Spliced Disconnect Sticks Features & Applications

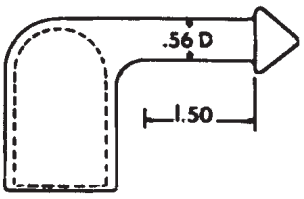
- For convenient transporting and/or when greater length is required
- Splice is strong and rigid – easy to assemble and disassemble
- Taking-down feature makes sticks easy to carry on line trucks and in tool trailers

For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.



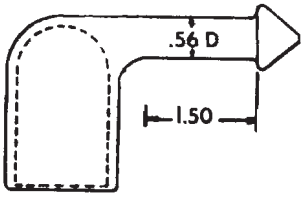
1¼" Switch Stick Head

Catalog No.	Pole Dia. & Length	Weight
H3046	Head Only	4 oz./0.11 kg.
H304611	1¼" x 4'	1¼ lb./0.6 kg.
H304612	1¼" x 6'	1½ lb./0.7 kg.
H304613	1¼" x 8'	2¼ lb./1.0 kg.
H304614	1¼" x 10'	2¾ lb./1.2 kg.
H304617	1¼" x 12'	3⅝ lb./1.6 kg.



1½" Disconnect Head

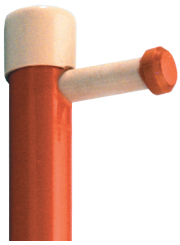
H30462	Head Only	5 oz./0.14 kg.
H304622	1½" x 6'1"	2¼ lb./1.0 kg.
H304623	1½" x 8'1"	2 13/16 lb./1.3 kg.
H304624	1½" x 10'1"	3 7/16 lb./1.5 kg.
H304615	1½" x 12'1"	4 lb./1.8 kg.
H304616	1½" x 16'1"	5 5/16 lb./2.4 kg.
H304618	1½" x 18'1"	6 lb./2.7 kg.
H304620	1½" x 20'1"	6 9/16 lb./3 kg.



1¼" Spliced Disconnect Head

	Top and Bottom	
H314612	1¼" x 6' and 1½" x 6'1"	6 lb./2.7 kg.
H314616	1¼" x 8' and 1½" x 8'1"	7½ lb./3.4 kg.
H314618	1¼" x 8' and 1½" x 10'1"	8¼ lb./3.7 kg.
H314620	1¼" x 10' and 1½" x 10'1"	9 lb./4 kg.
H314624	1¼" x 12' and 1½" x 12'1"	10½ lb./4.7 kg.

Tested per OSHA & ASTM F711



Fiberglass Head Features & Applications

- Provides additional insulation required when bus and disconnect switch spacings are confined, as in indoor substations
- See illustration at left

Catalog No.	Pole Diameter & Length	Approximate Weight
H30465	1¼" x 4'	1⅛ lb./0.5 kg.
H30466	1¼" x 6'	1⅝ lb./0.7 kg.
H30467	1¼" x 8'	2⅛ lb./1.0 kg.
H30468	1¼" x 10'	2⅝ lb./1.2 kg.
H30469	1¼" x 12'	4 lb./1.8 kg.

Sectional Disconnects and Universal Sticks

Tested per OSHA & ASTM F711

CHANCE®

Features & Applications

- Tested per OSHA & ASTM F711
- Non-conductive splices snap together for just the right job length
- Compact fittings interchange on orange Epoxiglas® insulated sections
- Easily store in limited space

Note: For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

- Rounded metal buttons and stainless-steel springs for long life
- Silicone coating and gloss finish seal out moisture
- Base cap included with top sections
- Extension Sections (Both Sizes: 4', 6', 8' and 10' lengths, with female fitting at top and male fitting at bottom)

Tree Trimmers

Standard Switch Head Disconnect

Non-Metallic Disconnect

Plastic Universal

Base Cap

Standard Disconnect

Standard Universal

1¼"- diameter Pole

CATALOG NUMBER	LENGTH	APPROX. WEIGHT
Standard Switch Head Disconnect		
C4032073	6 inches	3/4 lb./0.34 kg.
C4032053	4 feet	23/8 lb./1.07 kg.
C4032054	6 feet	25/8 lb./1.18 kg.
C4032055	8 feet	27/8 lb./1.29 kg.
Non-Metallic Disconnect Head		
C4032095	6 inches	1 lb./0.45 kg.
C4032060	6 feet	21/2 lb./1.13 kg.
C4032061	8 feet	23/4 lb./1.22 kg.
Plastic Universal Head		
C4032071	6 inches	5/8 lb./0.28 kg.
C4032046	4 feet	2 lb./0.90 kg.
C4032047	6 feet	21/4 lb./1.01 kg.
C4032048	8 feet	21/2 lb./1.13 kg.
Tree Trimmer Head		
C4032096	*2 feet	31/4 lb./1.46 kg.
C4032097	*4 feet	31/2 lb./1.57 kg.

*Length excludes trimmer head fitting.

Extension Section		
C4032062	4 feet	2 lb./0.90 kg.
C4032063	6 feet	21/4 lb./1.01 kg.
C4032064	8 feet	21/2 lb./1.13 kg.
C4032133	10 feet	23/4 lb./1.22 kg.
Base Cap		
C4032069	5 inches	1/8 lb./0.06 kg.

1½"- diameter Pole

CATALOG NUMBER	LENGTH	APPROX. WEIGHT
Standard Disconnect Head		
C4032074	6 inches	1 lb./0.45 kg.
C4032056	6 feet	3⅛ lb./1.41 kg.
C4032057	8 feet	3⅝ lb./1.63 kg.
C4032058	10 feet	4⅛ lb./1.86 kg.
Standard Universal Head		
C4032072	6 inches	1 lb./0.45 kg.
C4032049	4 feet	2⅞ lb./1.29 kg.
C4032050	6 feet	3⅜ lb./1.52 kg.
C4032051	8 feet	3⅞ lb./1.74 kg.
C4032052	10 feet	4⅛ lb./1.86 kg.
Extension Section		
C4032065	4 feet	2 lb./0.90 kg.
C4032066	6 feet	2½ lb./1.13 kg.
C4032067	8 feet	3 lb./1.35 kg.
C4032068	10 feet	3½ lb./1.57 kg.
Base Cap		
C4032070	5 inches	¼ lb./0.11 kg.

CHANCE® Epoxiglas® POWER-FUSE LIFT STICK

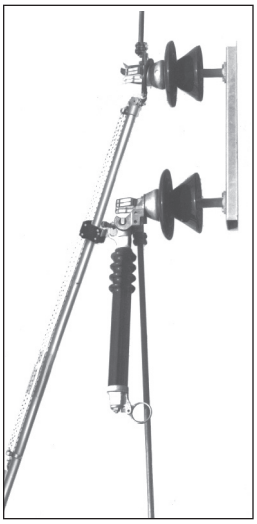
• Storage Bag Included

Features & Applications

- Tested per OSHA & ASTM F711
- Removes and installs power fuse holders up to 50 lbs.
- Unlike hookstick, operator never has to balance and lift dead weight when lifting fuse
- Epoxiglas® pole is tested to ensure insulating strength
- Operating lines are made with polypropylene rope
- Plastisol-coated carrier bands and shepherd hook attachments
- Disconnect prong is located on bottom ferrule of tool

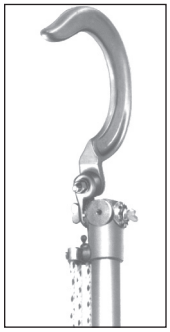
Operation

- During fuse holder removal and replacement, fuse mount supports weight of fuse holder and tool
- Ropes and pulleys for lowering and raising power fuse holder much like flag on flagpole
- Operator has complete control of fuse holder at all times
- Pole hangs free so operator can easily steady it during raising/lowering operation
- Only during the actual opening and closing of power fuse does operator support tool weight
- To remove power fuse, hook carrier prong into eye on lower inverted end of fuse holder, lift fuse holder out of contact trunnions, then lower carrier



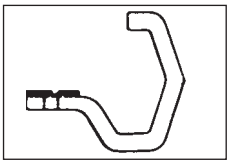
How To Remove A Power Fuse — Hook carrier prong into the eye on the inverted lower end of fuse holder. Lift the fuse holder out of the contact trunnions, then lower carrier.

M4221



M42212

M42191



M42192

⚠ WARNING

Operating lines must be kept clean and dry to avoid dangerous current flow in the rope.

How to Order — Select one of the Power Fuse Lift Sticks from Table I, based on the desired pole length.

Then, in Table II, find the applicable Power Fuse Type and select the Fuse attachment that is to be installed at the top of the Lift Stick.

Finally, in Table III, again find the applicable Power Fuse type and select the Lift Finger to be installed on the Carrier.

TABLE I — POWER-FUSE LIFT STICK

Each includes an all-weather storage bag.

Catalog No.	Diameter and Overall Length	Weight
H422114	1½" x 14'1"	10¼ lb.
H422116	1½" x 16'1"	11¼ lb.

TABLE II — POWER FUSE ATTACHMENTS

Catalog No.	For Power Fuses	Weight
M4221	S&C SM, Size 5	14 oz.
M42212	S&C SMD; West'g're BA & DBA; GE. EF-1, EF-1B & EF-2B	1⅛ lb.

TABLE III — CARRIER LIFT FINGERS

Catalog No.	For Power Fuses	Weight
M42191	West'g' BA & DBA; S&C SM, SMD, & HSO; G.E. EF-1, EF-1B & EF-2	4 oz.
M42192	S.S. HBA & BTA	7 oz.

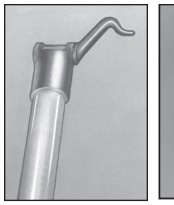
TIE STICKS

Features & Applications

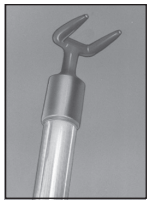
- Tested per OSHA & ASTM F711
- Made with variety of heads for versatile lineman needs
- Rotary Prong Tie Sticks quickly and easily handle looped ties
- Two-Prong Tie Sticks effectively handle hot ties with loops
- Rotary Blade Tie Sticks swivel for greater freedom of movement than fixed-blade types

Catalog No.	TIE STICKS		Overall Length	Approx. Weight
	Head	End		
H185519	Rotary Prong	Universal	8'3"	3 lb./1.4 kg.
H185520	Two-Prong	Universal	8'4"	4 lb./1.8 kg.
H185525	Rotary Prong	Rotary Blade	8'2"	3½ lb./1.6 kg.
H185526	Rotary Blade	Universal	8'3"	3¼ lb./1.5 kg.

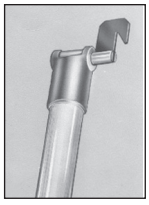
For universal tool accessories, see Pages 2120 through 2126.



Rotary Prong



Two-Prong



Rotary Blade

All Tie Sticks are mounted on 1¼" diameter Epoxiglas poles with a tie-wire assistant, hanger bracket.

H185526

ALL-ANGLE COG WRENCH

Features & Applications

- Tested per OSHA & ASTM F711
- 15 ft-lb maximum torque rating
- Controls permit operator efficiency in locating the wrench on energized hardware
- Handgrip steadies tool and holds cog housing in place while pole is rotated, turning cogs to engage wrench on the nut or bolt
- Wrench head angle in relation to handle is adjustable within a range of 140°
- Wing nuts on either side of head tightens to hold head in position during use
- Chance Epoxiglas® Hot Line Tool is 1-1/2" in diameter with 3/8" diameter fiberglass control rod
- Aluminum alloy handgrip, bronze alloy cog housing, and hardened steel gears

Catalog No.	All-Angle Cog Wrench Description	Approximate Weight
C4030184	6-foot length	7 lb./3.2 kg.
C4030185	8-foot length	7½ lb./3.4 kg.
C4030186	10-foot length	8 lb./3.6 kg.
PSC4030187	12-foot length	9 lb./4.1 kg.

½-inch square drive

C4030184

CABLE LIFT TOOL

Features & Applications

- Originally designed to move heavy electrical cables in mines
- Also serves as efficient method of moving heavy cables on the ground
- 40" long and has two ½"-diameter spiral grab hooks
- Will pick up cables up to 2" diameter by rotating the tool only quarter turn

C4031078

Align the grab hooks on both sides of cable.

Turn the tool 90° clockwise, to slip hooks under cable.

Lift the cable and move to desired position.

Catalog No.	Description	Weight
C4031078	40" Cable Lift Tool	3⅜ lb./1.5 kg.

CHANCE®

Flexible Insulated Wrenches

Features & Applications

- Tested per OSHA & ASTM F711
- 40 ft-lb torque rating
- Used for tightening nuts on hardware fittings on high-voltage lines
- Universal joint coil spring gives operator flexibility to control socket at various angles
- Spring is easily removed for lubrication
- Wrenches are made to fit any ½" square-shank socket
- All wrenches are mounted on 1-1/2"-diameter Epoxiglas® poles

Catalog Number	Description	Overall Length	Approx. Weight
H18912	w/Flexible ½" Sq. Plug and Fixed ½" Sq. Plug	6'3"	5½ lb./2.5 kg.
H18913	w/Flexible ½" Sq. Plug and Fixed ½" Sq. Plug	8'3"	6½ lb./2.9 kg.
H18915	w/Flexible ½" Sq. Plug and Univ. Head - Hole Through Ferrule for ⅝" Turning Rod	6'3"	5½ lb./2.5 kg.
H18916	w/Flexible ½" Sq. Plug and Univ. Head - Hole Through Ferrule for ⅝" Turning Rod	8'3"	6½ lb./2.9 kg.
066780	Ratchet Wrench		1½ lb./0.7 kg.

Note: For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Heavy-Duty FLEXIBLE INSULATED WRENCHES — *75 ft.-lb. torque rating*

Features & Applications

- Tested per OSHA & ASTM F711
- 75 ft-lb torque rating
- Standard square socket in lower end accepts ½" square-shank ratchet or similar hand tools
- Square shank on upper end fits any ½"-drive socket
- Mounted on 1-1/2" diameter Epoxiglas® extensions
- Used for tightening nuts on hardware fittings on high-voltage lines
- Universal joint coil spring limits flexibility, giving operator socket control at various angles
- Spring easily removes for lubrication

Catalog No.	Overall Length	Weight, each
C4032137	6 ft. 3 in.	5½ lb./2.5 kg.
C4032136	8 ft. 3 in.	6½ lb./2.9 kg.

Epoxiglas® Torque Extension Stick *for hydraulic power tools*

Features & Applications

- Tested per OSHA & ASTM F711
- 75 ft-lb torque rating
- Designed for hot-line work with hydraulic tools on bucket trucks
- 7/16" hexagonal quick-connect fitting couples with a power tool's drive socket
- Square detent-ball fitting accepts all ½'-drive wrenches
- 1-1/4" x 4' Epoxiglas® pole handguard is 6" from ferrule with hex fitting

Catalog No.	Description	Weight
T4033009	Torque Extension Stick	5 lb./2.25 kg.

HEX SOCKET SETS

Features & Applications

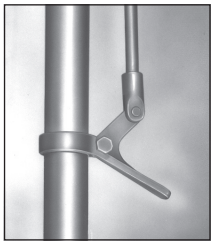
- Available in SAE and metric sizes
- Each set includes sockets to fit any ½" (12.17 mm) square-shank tool (such as the Chance All-Angle Cog Wrench and Flexible Insulated Wrench)

Tested per OSHA & ASTM F711

SAE (in.) Set Catalog No. C4031085 includes 11 deep-well 6-point sockets in sizes from 1/2" through 1⅛"	**METRIC Set Catalog No. C4031085M includes 10 deep-well 6-point sockets in sizes from 10mm through 19mm**

AMERTONGS

Fits most meters up to 3.25" width



Trigger at end of operating rod controls roller to open and close ammeter jaws.

Features & Applications

- Tested per OSHA & ASTM F711
- Can be adjusted at collar to fit an ammeter
- Plastic-coated castings securely grip while protecting the meter's finish
- Fiberglass operating rod for maximum insulation

Catalog No.	Description	Pole Dia. and Overall Length	Weight
H19686	Amertong	1¼" x 6'3"	4 lb./1.8 kg.
H19688	Amertong	1¼" x 8'3"	4½ lb./2.0 kg.
H19786	Hinged Amertong	1¼" x 6'3"	5 lb./2.3 kg.
H19788	Hinged Amertong	1¼" x 8'3"	5½ lb./2.5 kg.

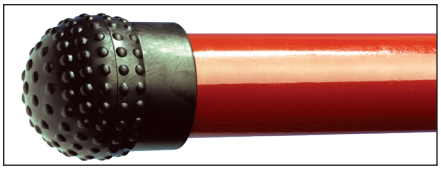
PLASTIC HEAD FOR UNIVERSAL TOOLS

Features & Applications

- Sized to retrofit over 1-1/4"-diameter Chance Epoxiglas® hot-line tools
- Available in kit form for shop installation
- For users concerned about hotsticks with metal ferrules that could draw an arc or effect a short circuit in close-clearance worksites
- Kit includes:
  - o Black plastic (glass-filled nylon ferrule with splines to accept Chance Universal Tool Accessories (Catalog pages 2120 - 2127)
  - o Thumbscrew to hold the accessory in use
  - o Two drive screws
  - o Instruction tag
- Simple procedure requires attaching ferrule to pole with Epoxiglas® Bond Kit H1917, drilling through holes and installing the drive screws

Catalog No.	Description	Weight
C4031996	Plastic Universal Head Kit: Ferrule, Thumbscrew, 2 Drive Screws, Instructions	5 oz./0/.14 kg.

HEAVY-DUTY END CAP



Catalog No.	Description
P4032312P	Heavy-Duty End Cap for 1¼" Epoxiglas pole

Features & Applications

- Designed to withstand rough working conditions
- Quickly fits on any 1-1/4"-diameter pole with Chance Epoxy Bond Kit, Catalog No. H1917
- Molded nubs on exterior, ball shape, and thick walls cushion repeated impacts of use
- Black ethylene vinyl acetate material provides optimum resistance to abrasion and cuts

THREADED HEX FITTING & UNIVERSAL POLES

Features & Applications

- Tested per OSHA & ASTM F711
- Insulating black plastic ferrule accepts threaded-stud fitting unique to Safety Line brand interchangeable tool accessories
- Made from same glass-filled nylon materials as Chance universal-tool ferrules
- Extends insulation to end of tool handle
- Ferrule may be ordered either separate for retrofit on customer poles or factory-installed on 1-1/4"-diameter Epoxiglas® poles

Catalog No.	Description	Weight
P4032252P	Plastic Hex Ferrule only	6 oz./0.17 kg.

Both Ends: Plastic Hex Ferrules Installed

C4001585	6-foot length	2¼ lb./1 kg.
C4001586	8-foot length	3 lb./1.4 kg.
C4001587	10-foot length	3¾ lb./1.7 kg.

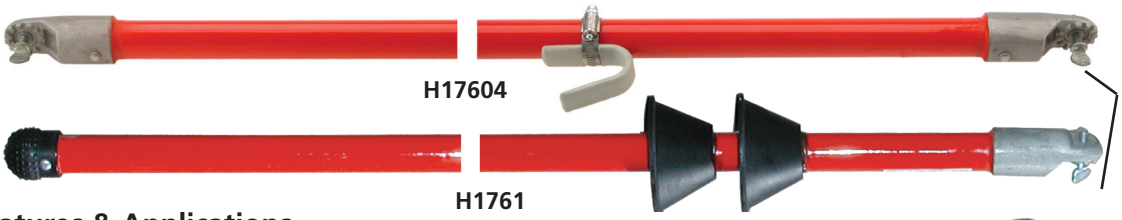
Opposite Ends: Plastic Hex and Chance Universal* Ferrules

Catalog No.	Description	Weight
C4001582	6-foot length	2¼ lb./1 kg.
C4001583	8-foot length	3 lb./1.4 kg.
C4001584	10-foot length	3¾ lb./1.7 kg.

*Thumbscrew included with Chance universal fitting.

Note: For SAFETYSHIELD™ Hot Stick Barrier to fit tools on this page, see page 2129.

Universal Poles



Features & Applications

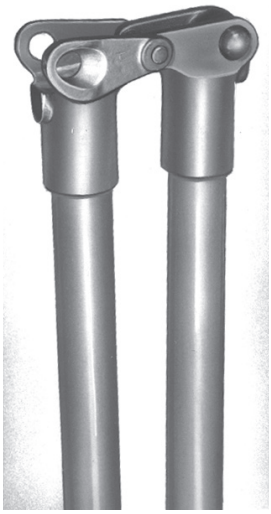
- Tested per OSHA & ASTM F711
- Designed for use as a hotstick handle for Universal Tools
- Made with Epoxiglas® and lightweight aluminum castings
- Universal Tools shown on following pages fit under the thumbscrew of the spline on the Universal Pole
- Splines allow angling the tool up to 90° depending on individual tool design
- Universal Adapter M445584 (shown on page 2123) may be added between the pole and tool to gain any angled desired

Storm Tool for Bad Weather

- A Universal Pole with special rubber insulator skirts, designed for emergency use
- Provides extra leakage distance and disrupts water paths
- Skirts break up water streams that would otherwise run down pole

Universal Fittings for Spliced Poles

- Universal fittings are threaded for use on Epoxiglas® poles with Rigid Splices
- Also see Catalog Section 2500 for Rigid Pole Splices and Epoxiglas® Blank Poles



Hinged Pole
H1770

Spliced Poles
H17602 & H17606

Catalog No.	Description	Pole Dia.	Overall Length	Weight
PST4032913	Pole with one universal head	1¼"	4'2"	1.9 lb./0.9 kg.
H1760	Pole with one universal head	1¼"	8'2"	3.4 lb./1.5 kg.
H17601	Pole with one universal head	1¼"	6'1"	2.7 lb./1.2 kg.
H17602	Rigid spliced pole with one universal head	1¼"	4'1" +4'	5.5 lb./2.5 kg.
H17603	Pole with two universal heads	1¼"	6'3"	3.1 lb./1.4 kg.
H17604	Pole with two universal heads	1¼"	8'3"	3.8 lb./1.7 kg.
H17606	Rigid spliced pole with two universal heads	1¼"	4'1" + 4'1"	5.8 lb./2.6 kg.
H176010	Pole with two universal heads	1¼"	10'3"	4.6 lb./2.1 kg.
H176012	Pole with two universal heads	1¼"	12'3"	5.3 lb./2.4 kg.
H176014	Pole with two universal heads	1¼"	14'3"	6.1 lb./2.8 kg.
PST4032914	Universal storm tool with two skirts and one universal head	1¼"	4'3"	2.2 lb./1.0 kg.
H1761	Universal storm tool with two skirts and one universal head	1¼"	8'2"	3.6 lb./1.7 kg.
H1770	Hinged pole with one universal head	1¼"	8'2"	5.4 lb./2.4 kg.
H17908	Pole with two universal head, pole hanger	1½"	8'3"	5.8 lb./2.6 kg.
H179010	Pole with two universal heads	1½"	10'3"	6.7 lb./3.0 kg.
H179012	Pole with two universal heads	1½"	12'3"	7.7 lb./3.5 kg.
H179014	Pole with two universal heads	1½"	14'3"	8.8 lb./4.0 kg.
H4455	Universal head only	1¼"	—	0.25 lb./0.11 kg.
H4455A	Universal head only	1½"	—	0.33 lb./0.15 kg.
P4030467P	Replacement Thumbscrew	—	—	—

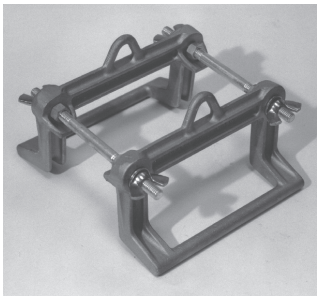
Crossarm Tool Hanger

Features & Applications

- Adjustable to crossarms in widths from 3-1/4" to 4-1/2" in width (depth of crossarm does not matter)

Catalog No.	Description	Weight
M1860	Crossarm Tool Hanger	2 lb./.9 kg.

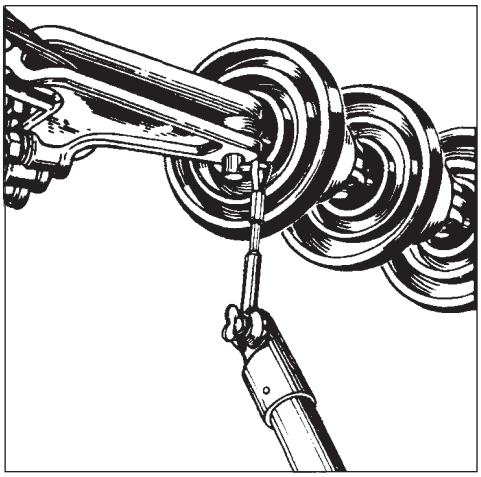
- Crossarm Tool Hanger is made of strong, lightweight aluminum alloy and cadmium-plated steel hardware



Universal Tool Kits

Features & Applications

- Over 75 individual Universal Tools to select from for various maintenance jobs
- Kits are a convenient way of ordering, with one single catalog number shipped in a single carton – one number for the complete set
- Most frequently used tools by hotstick crews were selected by Chance Hot Line Tool Demonstrators
- Although all Universal Tools shown on the following pages are still available as individual part numbers, ordering one or more of the following kits will cover most tool requirements

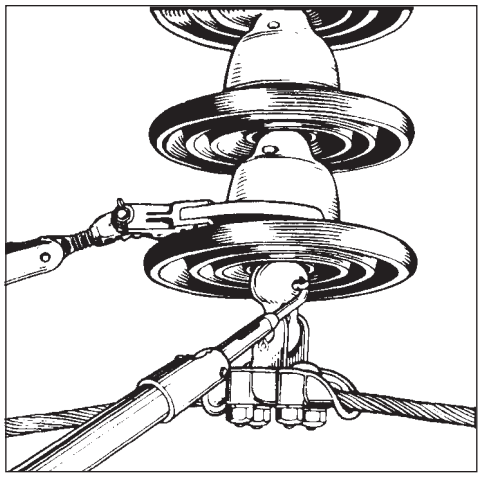


Universal Tool Kit for Clevis Type Insulators C4031112

- 10-piece kit contains the Universal Tools normally used to handle cotter keys, bolts and insulator hardware for insulator control on Clevis-tongue type suspension or deadend insulator strings.

C4031112 Kit consists of

Part No.	Description	Cat. Page Ref.
M44552	Pin Holder	2120
M445512	Cotter Key Remover	2120
M445515	Locating Pin	2120
M445538	Clear Vision Mirror	2122
M445539	Shepherd Hook	2122
M445567	Insulator Fork	2122
M445582	Cotter Key Tool	2123
M445584	Universal Adapter	2123
C4030177	All Angle Pliers	2125



Universal Tool Kit for Ball Socket Insulators C4031113

- This 7-piece kit contains those Universal Tools required to handle cotter keys, bolts and hardware on ball and socket type suspension or deadend insulator.

C4031113 Kit consists of

Part No.	Description	Cat. Page Ref.
M445512	Cotter Key Remover	2120
M445519	Cotter Key Pusher	2121
M445522	Ball Socket Adjuster	2121
M445538	Clear Vision Mirror	2122
M445567	Insulator Fork	2122
M445596	Ball Socket Cotter Key Remover	2124
C4030177	All Angle Pliers	2125

Complete Kit for Hot Stick Trailer — C4031114

- Tool trailers are usually equipped for maximum efficiency for a variety of hot stick jobs. This 21-piece kit contains the Universal Tools most frequently used with Chance Tool Trailers.

C4031114 Kit consists of

Part No.	Description	Cat. Page Ref.
M44552	Pin Holder	2120
M44555	Cutout Tool	2120
M44556	Ratchet Wrench	2120
M445512	Cotter Key Remover	2120
M445515	Locating Pin	2120
M445522	Ball Socket Adjuster	2121
M445528	Screw Driver	2121
M445538	Clear Vision Mirror	2122
M445539	Shepherd Hook	2122
M445546	Wrench Head	2122
M445567	Insulator Fork	2122
M445579	Spiral Disconnect	2123
M445582	Cotter Key Tool	2123
M445584	Universal Adapter (2 Furnished)	2123
M445596	Ball Socket Cotter Key Remover	2124
M4455102	Clevis Pin Installer	2124
M4455103	Cotter Key Tool	2125
C4030011	Knocker	2125
C4030126	Ball Socket Adjuster	2125
C4030177	All Angle Pliers	2125

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Pin Holder

For replacing pins and bolts. Bolt head fits into a slot and is held tight by spring action. Will take bolts or pins up to 5⁄8" diameter. Fits EEI and NEMA insulators.

Part No. M44552.....10 oz.

Cutout Tool

While this tool was designed for removing and replacing the doors of enclosed cutouts, its finger-like grasp makes it useful on many other jobs where a sure grip is required. Jaws open to accommodate an object 3-3⁄4 " wide. All parts that contact porcelain are plastisol covered.

Part No. M44555.....1¾ lb.

Ratchet Wrench ½"-square drive

This Ratchet Wrench is used for tightening bolts in substation equipment, hardware, transmission and distribution lines, etc.

Part No. M4455.....1¾ lb.

Disconnect

Used for opening and closing switches, opening enclosed cutouts, etc.

Aluminum:

Part No. M44559.....2 oz.

Bronze:

Part No. C4001418.....6 oz.

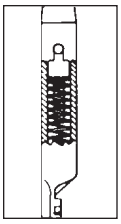
Chuck Blank (5⁄8" opening)

Screw drivers, hack saws, and other tools may be inserted in this device and secured by soldering. For wingnut tightened Chuck Blank order No. M445537.

Part No. M445510..... 4½ oz.

Snapout Cotter Key Remover

Hammer-like action makes it extremely useful in pulling out stuck cotter keys. Release of the compression spring by a quick jerk of the pole deals the cotter key a hammer blow without disengaging the eye.



Part No. M445512.....8 oz.

Locating Pin

Used as a drift pin in aligning bolt holes as an aid in bolt and pin insertions. Recommended for making hardware connections on tower transmission lines and line deadends where aligning or hardware fitting is difficult.

Part No. M445515..... 10 oz.

Folding Rule

Adaptable to many uses. Particularly suited for obtaining measurements near live conductors in congested areas.

Part No. M445516....8½ oz.

Fixed Prong Tie Stick Head

Often preferred for manipulating tie wires which have looped ends. Useful in close quarters where loose ends of tie wire must be rolled up to prevent contact with crossarm or hardware while untying.

Part No. M445517.....1 lb.

Chuck Blank (5⁄8" opening)

The Chuck Blank can be used for a variety of applications, such as inserting screw drivers, saws, etc. The wing nut tightens the installed tool.

Part No. M445537..... 5 oz.

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Cotter Key Pusher

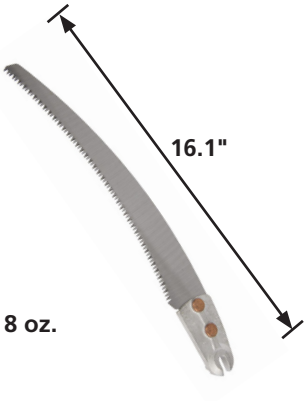
For ball and socket insulator coupling. Straight end of the tool enters the socket opening to force cotter key out. Curved end forces cotter key back into position.

Part No. M445519..... 9 oz.

Pruning Saw

These saws can be used with Chance Pistol-Grip Handle, Tree Trimmers, Universal or Telescoping Tools.

C4032213 ..... 8 oz.



Screw Driver

Ideal for a number of odd jobs where an insulated handle is needed.

Part No. M445528.....3½ oz.

Ball Socket Adjuster

Useful in controlling the adapter between clevis clamps and ball and socket insulator pins.

Part No. M445522.....9 oz.

Universal Cutout Tool

4-in-1 tool for 100 amp fuse holders and Chance Electronic Sectionalizer. Works on major brands of cutouts (ABB, Chance, S&C) for easy lift out, placement, *opening and closing operations. Holds fuse holder in inverted position, more secure method than a disconnect prong. Lightest weight of its kind (other designs can weigh nearly twice as much).

PSC4033484 ..... 4 oz.

*When opening a cutout, follow all work rules and OSHA regulations. Not for use with loadbreak cutouts.

Hack Saw

Excellent for use at various angles where a hack saw is needed near energized conductors, comes with 10 blades.

Part No. M445523..... 1 lb. 12 oz.

P4030369P..... Blade only

Clamp Stick Head

A Universal Clamp Stick Head for use with Eye Screw Grounding Clamps.

The 6" head is for long eye screw grounding clamps.

Part No. M445529B (6") .....1¼ lb.

Paint Brush

A three-inch brush for painting around live apparatus. Useful for applying conductor paint on insulator heads.

Part No. M445525.....9 oz.

Link Stick Head

Use with light conductors. The clamp will hook into a cum-a-long ring. Jaw openings range from .750 to .22. Jaws have rounded edges to prevent scarring conductors. The hook is made of heat-treated aluminum alloy. Screw is Everdur.

Part No. M445536..... 1 lb.

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Clear Vision Mirror

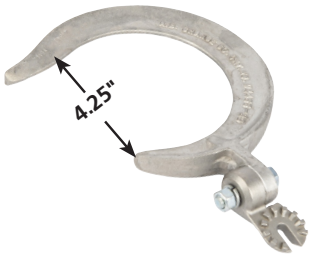
Angle adjustment enables the operator to inspect insulators, switch bases, and other equipment which is difficult to see without coming in contact with energized conductors.

Part No. M445538..... 14 oz.

Conductor Cleaning Brush

V-position of brushes gives 2-sided cleaning action. As brushes wear, they can be rotated, by loosening the anchor screws, so that unused bristles will come in contact with conductor.

Part No. M445563..... 11 oz.
Part No. M1889 With Hand Grip ..... 16 oz.
Part No. M1899 Box of 10 Replacement Brushes..... 5 lb.



Shepherd Hook

The self-aligning shepherd hook is designed for pulling and lifting insulator strings. Swivel action permits it to rotate and maintain its alignment with the insulator at all times. Heat treated aluminum alloy.

Part No. M445539.....14 oz.

Storm Tool

A universal pole extension with rubber insulator skirts. Splined fitting at top of tool receives other universal tools. Overall length 19½".

Part No. H445564 ..... 1¼ lb.

Fixed Blade Tie Stick Head

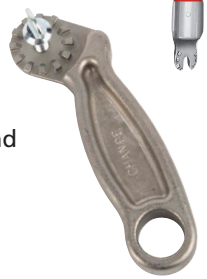
For manipulating tie wires with or without looped ends. The sharp V-notched blade gets into tight places to pry tie wires loose. The head is set at 60° angle from the pole when attached, for ease in operation.

Part No. M445540..... 8 oz.

Pistol Grip Saw Handle

Developed for use with a pruning saw when limbs are convenient and insulation is not needed. Stainless Steel.

Part No. M445566..... 8 oz.



Flexible Wrench Head ½"-square drive

Made to fit standard wrench sockets. Flexibility permits use at various angles.

Part No. M445546..... 1 lb.

Adjustable Insulator Forks

Designed to grasp 9" and 10" disk insulators used in deadend construction,will raise most pin type insulators up to 15 lb. Fiber jaws open and close by rotating screw.

Part No. M445567
Jaws adjust from 3" to 4¼" across inside center of fork..... **1 lb. 11 oz.**

No. T4031101
For polymer insulators, jaws adjust from 2¼" to 3½" **1 lb. 6 oz.**

Skinning Knife

For cutting or scraping insulation, cleaning conductors, etc., prior to making splices. Its use with a universal pole permits work near energized lines with safety.

Part No. M445550..... 7½ oz.

Rotary Prong Tie Stick Head

For placing insulator ties with looped ends. Head treated aluminum alloy body. Prong swivels freely, permitting a full turn on the tie wire without releasing contact. This minimizes the possibility of kinking or burning the wires.

Part No. M445569..... 6 oz.

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Rotary Blade Tie Stick Head

For manipulating tie wires with or without looped ends. The heat treated aluminum alloy body design permits a swivel action. Wire is wrapped or unwrapped without turning universal pole. A V-notched carbon steel blade grasps tie wire securely.

Part No. M445570..... 6 oz.

Pointed Disconnect

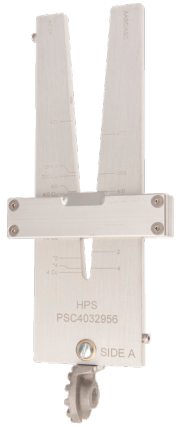
A pointed disconnect head for use on certain types of disconnect switches. Made of aluminum alloy.

Part No. M445571..... 3 oz.

Conductor Gauge

This aluminum gauge is small, compact, and light. It is used to make a quick, accurate check on the gauge of ACSR, solid or stranded copper conductors.

Range: #4 Cu. through 4/0 ACSR.
Part No. M445572..... 3 oz.



Full Range Conductor Gauge

This aluminum gauge has multiple range scales to make a quick, accurate check on the gauge of Copper, ACSR, AAAC, AASC/ASC conductors. Includes hard shell storage case.

Range:
#4 ACSR through 954 kcmil ACSR.
PSC4032956 ..... 9 oz.

Fuse Puller

The Chance Fuse Puller may be preset to any position desired and locked there by tightening the wing nut. A spring assembly also permits the tool to be preset without locking, so that it will align with the fuse during the pulling operation. The Fuse Puller is opened and closed by turning the pole. Its jaws are plastisol covered.

Part No. M445577
(½" to 1½" Fuse).....1⅞ lb.
Part No. M445578
(1½" to 2½" Fuse).....2½ lb.

Spiral Disconnect

Extremely effective in opening switches and removing and installing cutout doors on porcelain enclosed type cutouts. Also called "Pigtail" Disconnect.

Part No. M445579.....6½ oz.

Tree & Rope Hook

The Universal Tree and Rope Hook is made of aluminum alloy and is attached to a universal pole to push tree limbs out of the way of hot-stick work and to clear rope if it becomes tangled.

Part No. M445580..... 1 lb.

All-Purpose Cotter Key Tool

For pulling and replacing hump-type cotter keys. Particularly suitable for use on clevis pins and ball socket insulators. Easy guiding of cotter key provided by contoured slot and raised eye pin.

Part No. M445582.....5 oz.

Universal Adapter

When this adapter is mounted on a universal stick and any universal tool is mounted on the adapter, the tool can be set at almost any angle to the stick. Useful for working in limited access areas.

Part No. M445584.....5 oz.

Hammer

Used for many operations around energized conductors such as moving conductors, suspension clamps and other pieces of hardware requiring a forceful blow.

Part No. M445585.....1 lb.

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Ball Socket Adjuster

Used on heavy socket clevises, particularly where aluminum suspension and deadend clamps are attached to ball and socket insulators.

Part No. M445587.....10 oz.

Bolt Head Wrench

Used on heads of ¾" and ⅝" dia. bolts to keep bolt from turning as nut is being tightened. Extremely useful on rural ridge pin type construction — outer edges of wrench are tapered so that they can be wedged between flanges on channel and bolt head to keep bolt from turning.

Part No. M445588. 1 lb. 2 oz.

Ratchet Wrench

This Ratchet Wrench is for tightening square nuts on ⅝" pole line hardware, regardless of the length of the bolt running beyond it. The long socket permits wrench handles to swing past crossarm when tightening top ridge pin nut.

Part No. M445589..... 2½ lb.

Aerosol Can Holder

By pulling the rope on this tool, a prong reaches out to depress the nozzle of an aerosol can to apply G.E. Insuljel to insulators or insecticides to bee and wasp nests on poles and crossarms. Also useful for applying paint, lubricant, etc., in hard-to-reach places.

C4032270 .....12 oz.

Conductor Cleaning Brush

Semi-tubular shape allows linemen to clean 6" of entire circumference of conductor with two stick position.

Part No. M445592
1¼" Dia. Tube with Universal Fitting.....13 oz.

Part No. C4030320
1¼" Dia. Tube with clip.....6 oz.

Part No. M445593
1¼" Dia. Tube only.....5 oz.

Cotter Key Puller

This Cotter Key Puller is used to partially withdraw a ball-socket cotter key so that the insulator can be removed from another insulator hanger. This puller with its thin prong is preferred for prying out standard keys deeply set on long insulator strings.

Part No. M445596.....12 oz.

Tool for "W" Keys

This tool is used for handling the "W" shaped keys used in suspension insulators which are popular in western Europe and Japan.

Part No. M445597..... 14 oz.

Super Tester Adapter

Designed for attaching a Super Tester (H1990ST, Section 2450) to a Grip-All, a Universal Pole or a Positive-Grip Stick. With this adapter the tester can be used in any position, above or below the lineman.

Part No. M445598.....5 oz.

Clevis Pin Installer

This tool has particular application on EHV hardware and insulators where the pin must be placed in semi-recessed areas. The three-finger device is spring-loaded with cadmium-plated music wire for positive grip.

Part No. M4455102.....1 lb.

Universal Tool Accessories

— See Universal Tool KITS on Page 2119 —

Cotter Key Holder

Used to install cotter keys into semi-recessed hardware such as found on EHV, this tool will hold the keys in position for proper insertion into clevis pins. The tool will hold the key firmly, yet readily release once engagement is made

Part No. M4455103..... 1 lb.

Cotter Key Tool

Used for ball and socket insulator couplings, this tool is used to push the cotter key into position where great force is required.

Part No. C4030005..... 1¼ lb.

Plastic Insulator Tool

Plastic coating of the Chance Ball and Socket Adjuster prevents damage to Epoxilator distribution deadend insulators during lifting or rotating of the insulator. Arms of the tool are designed to fit between the skirts of the insulator.

Part No. C4030175..... 12 oz.

Cotter Key Tool

The Cotter Key Tool is a companion tool to Part No. C4030005, both designed for ball and socket type insulator couplings. C4030005 enters the socket opening to force the cotter key out while C4030006, shown here, forces the key back into position. Effectiveness of both tools is enhanced with the use of the Universal Knocker.

Part No. C4030006..... 1¼ lb.

All-Angle Pliers

Designed to grasp from any angle, and tighten by clockwise rotation of the Universal Tool handle. The jaws are held firmly in position with a wing-nut. Used as a holding device for retaining bolt heads and loose hardware, adjusting arcing horns, replacing cotter keys, etc.

Part No. C4030177..... 1½ lb.

Knocker

Designed to knock out and pull the cotter keys on fog-type insulators, the Knocker Tool is spring assisted for greater impact in restricted space and under adverse working conditions. The Knocker has a standard universal fitting one end and a Universal fitting one end and a Universal fitting with wingnut on the other end to receive various Cotter Key Tools at top of this page.

Part No. C4030011..... 10 oz.

Ball Socket Adjuster

Similar to the M445587 Chance Ball socket Adjuster, this Adjuster is designed to handle socket adapters up to 2¾ inches wide.

Part No. C4030126..... 14 oz.

Hot Rodder Tool

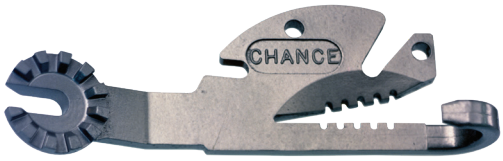
Ideal for applying line ties and other formed wire products on energized lines. The smaller unit (C4031071) is particularly adaptable to Super Top-Ties®. The loop type work end permits rotational control which is difficult with conventional tying tools.

Part No.	Dim. A.	Dim. B.	Weight
C4031071	17/32"	1¾"	12 oz.
C4030834	11/16"	3"	13 oz.

Tie Wire Claw

Features & Applications

- Hand-like hot-line tool easily and neatly applies tie wires, both factory- and field-formed
- With grip equal to pliers, securely wraps tight coils onto conductors
- Available either as a Universal Tool accessory with splined fitting or ferrule style mounted on insulated Epoxiglas® handles



Tie Wire Claw
C4031416
Universal Tool Fitting

Tie Wire Claw
C4031764 & C4031765
Epoxiglas Handle Mounted

ORDERING INFORMATION

Tool Head only

Catalog No.	Description	Weight
C4031416	Tie Wire Claw/Universal Fitting	½ lb./0.2 kg.

Epoxiglas Handle with Tool

Catalog No.	Description	Weight
C4031764	6' x 1¼" Handle/Tie Wire Claw	3 lb./1.35 kg.
C4031765	8' x 1¼" Handle/Tie Wire Claw	4½ lb./2 kg.

Tested per OSHA & ASTM F711

Utility Head

Features & Applications

- Gator-look shape makes this tool popular for many hot-line jobs
- Designed for placing/removing blocks, slings, circuit breakers, line hooks and strain breakers
- Available either as a Universal Tool accessory with splined fitting or ferrule style mounted on insulated Epoxiglas® handles

Utility Head
C4031417
Universal Tool Fitting

Utility Head
C4031766 & C4031767
Epoxiglas Handle Mounted

ORDERING INFORMATION

Tool Head only

Catalog No.	Description	Weight
C4031417	Utility Head/Universal Fitting	½ lb./0.2 kg.

Epoxiglas Handle with Tool

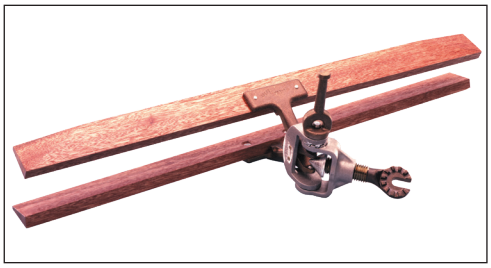
Catalog No.	Description	Weight
C4031766	6' x 1¼" Handle/Utility Head	3 lb./1.35 kg.
C4031767	8' x 1¼" Handle/Utility Head	4½ lb./2 kg.

Tested per OSHA & ASTM F711

Hot Line Applicator Tools for Rubber Line Hose & Blankets

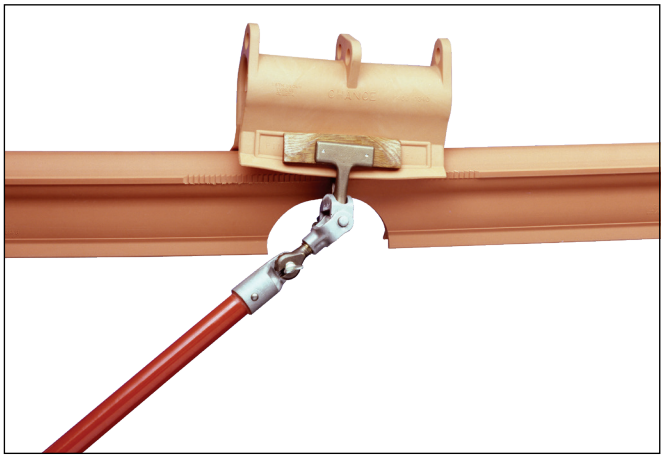
Features & Applications

- Designed to grasp the extended lip on Class 4 rubber line hose
- Also permits placement/removal of rubber cover-up blankets with insulated hotsticks
- Available in two styles to fit either clampsticks or universal hotsticks
- Each style comes in three wood blade lengths



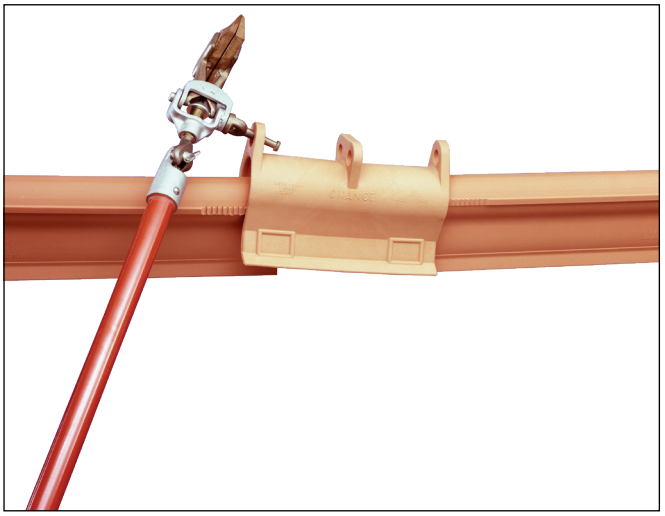
- Universal tool mounts by its fitting with thumbscrew
- Adjustable hinge feature can be set at various working angles simply by unscrewing the prong, meshing the pivot cogs and tightening the prong again.

Catalog No.	Description	Weight
C4032525	Universal Tool 6"	1.7 lb./0.8 kg.
C4032526	Universal Tool 24"	2.5 lb./1.1 kg.
C4032527	Universal Tool 36"	3.0 lb./1.4 kg.

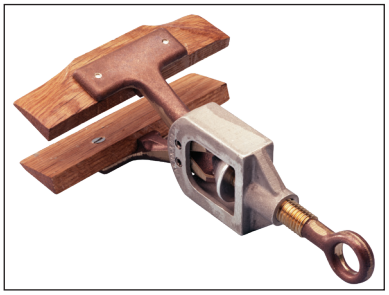


- Especially useful for hose couplers, tools with 6" blades also may be used to position rubber blankets and shorter line hose lengths

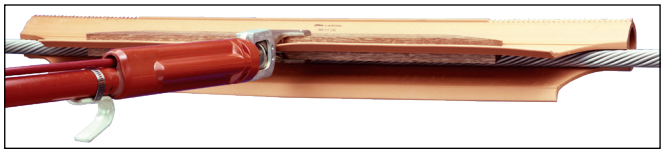
- Beveled top corner on each blade end helps insert tool between hose lips
- Notice that blades fit in flat area recessed full length on outside of one hose lip



- Prong on universal tool may be used in several techniques to remove and place line hose couplers, insulator hoods and rubber blankets



- Clampstick tool features an eyescrew similar to grounding and tap clamps



- Grip-All clampstick operates applicator tool to install Class 4 line hose with ease
- Simply rotating the stick clockwise tightens the tool's grasp on the hose lip

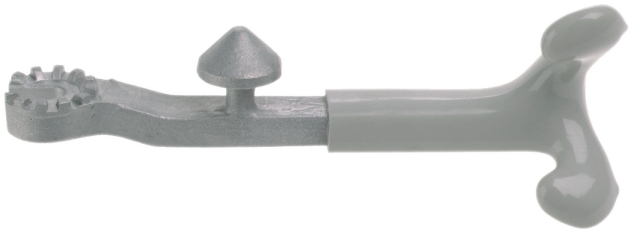
Catalog No.	Description	Weight
C4032505	Clampstick Tool 6"	1.7 lb./0.8 kg.
C4032506	Clampstick Tool 24"	2.5 lb./1.1 kg.

Fuse Grappler Tool

Features & Applications

- Helps remove and install power fuses and barriers in pad-mounted switchgear
- Specifically fits S&C Electric Company power fuses SM-4Z, SM-20, SML-4Z and SML-20
- Designed to be attached to an insulated universal tool
- Tool features aluminum casting with plastisol coating on hooks to help avoid scuffing

Casting with integral fitting is for direct attachment to universal tool handles



Ordering Information

Catalog No.	Description	Weight
C4033284	Fuse Grappler Tool	½ lb. / 0.23 kg.

SAFETYSHIELD™
Hot Stick Barrier

Features & Applications

- Mounts on 1-1/4" or 1-1/2"-daimeter live line tool in less than a minute
- Adds up to a 24"-diameter protective screen between linemen and a electrical hazard
- Used by major electric utilities, co-operatives, contractors and industrial customers in the U.S. and abroad
- Fits on clampsticks, disconnect sticks, and elbow-puller tools
- Should be mounted on the hotstick nearest the point where an electrical arc flashback may occur
- Made with a flame-retardant transparent polycarbonate protective shield
- Shield is affixed with a nylon fastener to a glass-filled nylon clamp

Tested per ASTM Standard F2522-05: Test Method for Determining the Protective Performance of a Shield Attached on Live Line Tools or on Racking Rods for Electrical Arc.

Orange protective storage case and Instructions are included with each SAFETYSHIELD™ Hot Stick Barrier.

- Available in three diameters

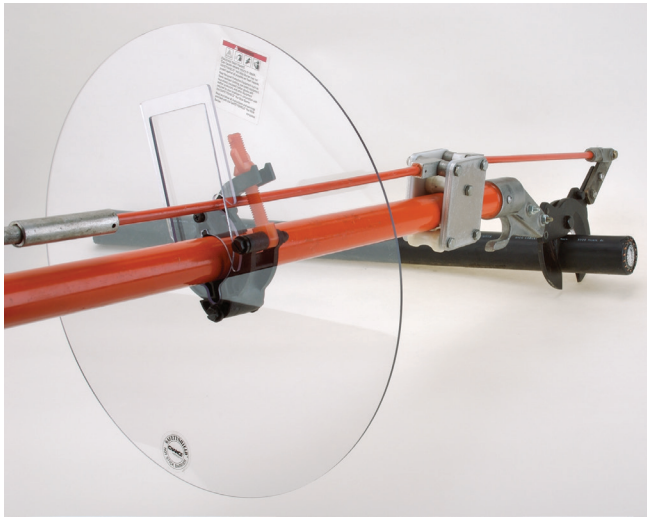
Catalog No.	Diameter	Weight
PSC4170627	16" (406.4 mm)	1 lb. 6 oz. /0.62 kg.
PSC4170628	21" (533.4 mm)	2 lb. 6 oz./1.08 kg.
PSC4170629	24" (609 mm)	2 lb. 14 oz./1.3 kg.

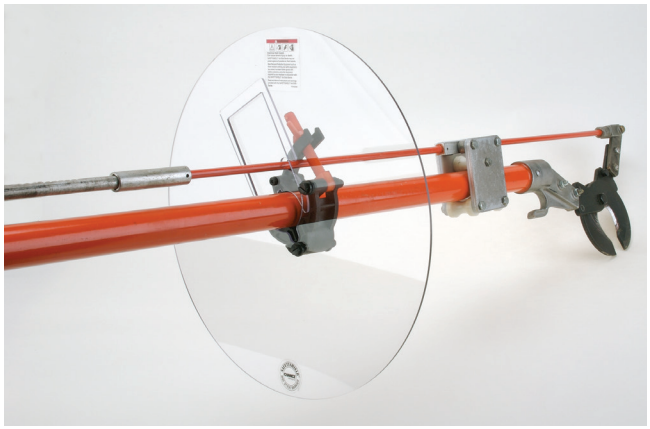
SAFETYSHIELD™
Hot Stick Barrier for Ratchet Wire Cutters†

Features & Applications

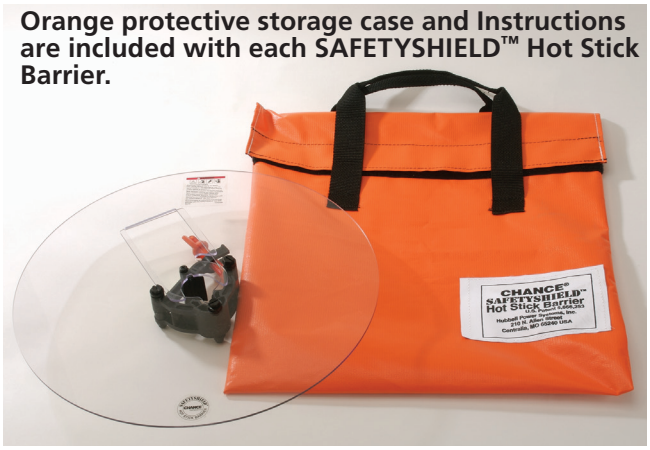
- Mounts on 1-1/4" or 1-1/2"-daimeter live line tool in less than a minute
- Adds up to a 16"-diameter protective screen between linemen and a electrical hazard
- Used by major electric utilities, co-operatives, contractors and industrial customers in the U.S. and abroad
- Fits on clampsticks, disconnect sticks, and elbow-puller tools
- Should be mounted on the hotstick nearest the point where an electrical arc flashback may occur
- Made with a flame-retardant transparent polycarbonate protective shield
- Shield is affixed with a nylon fastener to a glass-filled nylon clamp

Tested per ASTM Standard F2522-05: Test Method for Determining the Protective Performance of a Shield Attached on Live Line Tools or on Racking Rods for Electrical Arc.





Orange protective storage case and Instructions are included with each SAFETYSHIELD™ Hot Stick Barrier.

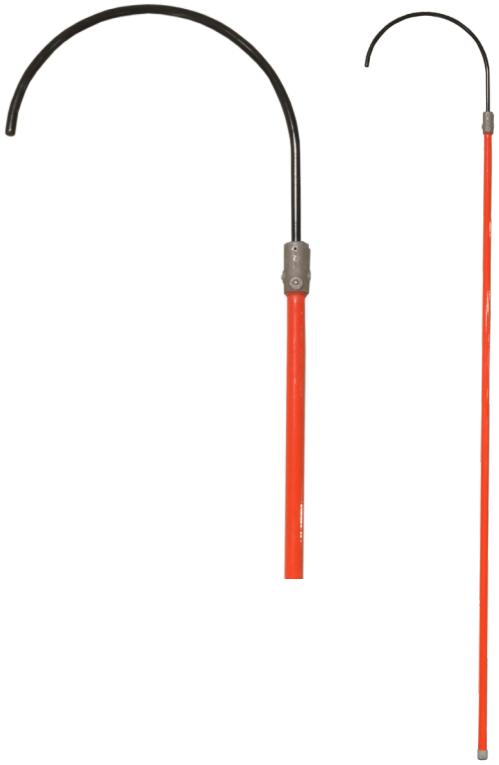


Ordering Information
SAFETYSHIELD™ Hot Stick Barrier for Ratchet Wire Cutters†

Catalog No.	Diameter	Weight
PSC4170630	16" (406.4 mm)	1 lb. 6 oz. /0.62 kg.

†See Catalog Section 2150 for these Ratchet Wire Cutters: Catalog No. C4031381, C4031382, C4031383 & C4031384.

Rescue Hook



Features & Applications

- Handle meets ASTM F711 and IEC 60855 specifications
- 3/4" high strength steel hook with 18" diameter and coated with black paint
- Hook mounted on a 1-1/4" diameter Epoxiglas® pole
- Available in 6' and 8' handle lengths

ORDERING INFORMATION

Epoxiglas Handle with Tool

Catalog No.	Description	Weight
PSC4033703	6' Rescue Hook	7.25 lb./3.29 kg.
PSC4033704	8' Rescue Hook	8.00 lb./3.63kg

Animal Catcher

Features & Applications

MUST BE USED WITH HOT STICKS — NOT FOR RUBBER GLOVE USE

- Universal attachment end for primary control
- Hot stick loop end for activation of the device
- Lightweight and compact design
- High-visibility orange storage bag

ORDERING INFORMATION

Catalog No.	Description
PSC4033614	Animal Catcher

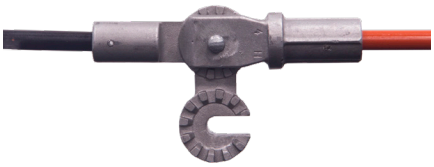
CHANCE®

Insulated Measuring Rod

FOR MEASURING SPANS AND LENGTHS ON ENERGIZED LINES

Features

- Orange and black markings to denote 10 centimeter increments up to 3 meters
- White collars to denote 50 centimeter increments
- This versatile tool may be used with rubber gloves, insulated sticks with universal adapters, or grip-all clampsticks
- Allows user to take angled measurements by adjusting universal connection
- The universal connection also reduces storage length to 1.5 meters



ORDERING INFORMATION

Catalog No.	Description	Weight
PSC4033732	3.0 Meter Measuring Rod	1.3 lbs (0.59 kg)

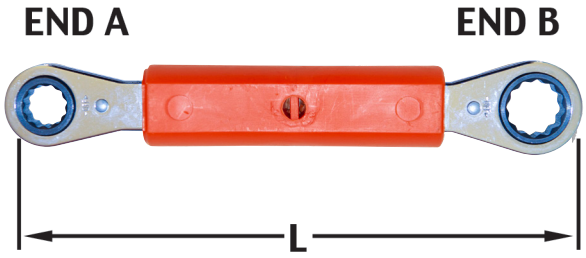
Fargo® Speed Wrenches

Features

- Design optimized for lineman use - handle separates both ends. (GP201-204 & GP216 are 1 piece style - see note)
- Specially constructed for proper and fast installation of mechanical connectors in utility distribution applications

Sturdy polypropylene handle provides protection from incidental end-to-end or energized line contact (all models except as noted).

Nine available wrench heads.



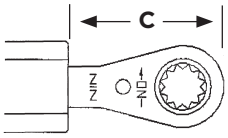


Figure 1
Ratchet

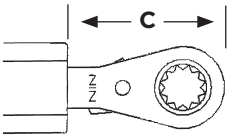


Figure 2
Rev. Ratchet

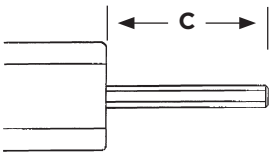


Figure 3
Allen Bar

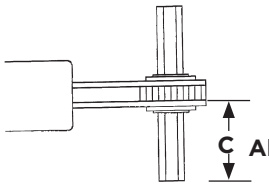


Figure 4
Allen Ratchet

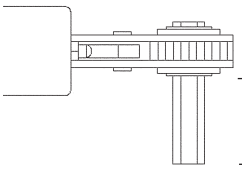


Figure 5
Rev. Allen
Ratchet

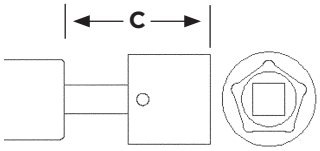


Figure 6
Penta Socket

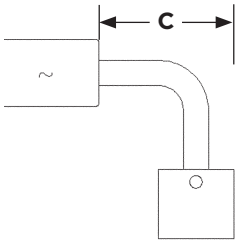


Figure 7
90° Penta Socket

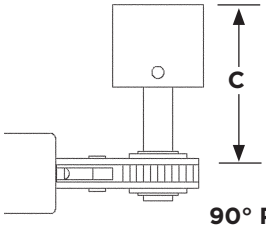


Figure 8
90° Penta Ratchet

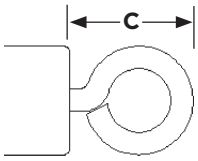


Figure 9
Eye Loop

Fargo® Speed Wrench Available Combinations								
CATALOG NUMBER	"A" END DESCRIPTION	FIGURE	C INCHES (MM)	"B" END DESCRIPTION	FIGURE	C INCHES (MM)	L APPROX. INCHES (MM)	WT. LB. (KG)
GP201*	3/8" Ratchet	1	one piece	9/16" Ratchet	1	one piece	6.75 (171.79)	0.75 (0.34)
GP203*	9/16" Ratchet	1	one piece	3/4" Ratchet	1	one piece	6.25 (159.06)	0.75 (0.34)
GP2031*	1/2" Ratchet	1	one piece	9/16" Ratchet	1	one piece	6.75 (171.79)	0.75 (0.34)
GP204*	11/16" Ratchet	1	one piece	15/16" Ratchet	1	one piece	9.25 (235.41)	0.75 (0.34)
GP216*	11/16" Ratchet	1	one piece	15/16" Ratchet	1	one piece	9.25 (235.41)	0.75 (0.34)
GP209	3/8" Allen Ratchet	4	1.21 (30.79)	Eye Loop	9	1.00 (25.45)	7.50 (190.88)	0.75 (0.34)
GP2090P	3/8" Allen Ratchet	4	1.21 (30.79)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP2090P4	3/8" Allen Ratchet	4	1.71 (43.52)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP2090P90	3/8" Allen Ratchet	4	1.21 (30.79)	90° Penta Socket	7	2.50 (63.63)	9.25 (235.41)	1.00 (0.45)
GP2091P	Penta Socket	6	1.91 (48.61)	Eye Loop	9	1.00 (25.45)	7.50 (190.88)	0.75 (0.34)
GP2091P90	90 Penta Socket	7	2.37 (60.32)	Eye Loop	9	1.00 (25.45)	8.00 (203.60)	0.75 (0.34)
GP2092M	3/8" Allen Ratchet	4	1.21 (30.79)	3/8" Allen Bar	3	1.25 (31.81)	8.00 (203.60)	0.75 (0.34)
GP2093	5/16" Allen Ratchet	4	1.46 (37.16)	Eye Loop	9	1.00 (25.45)	7.75 (197.24)	0.75 (0.34)
GP2093P	5/16" Allen Ratchet	4	1.46 (37.16)	Penta Socket	6	2.00 (50.90)	9.00 (229.05)	1.00 (0.45)
GP2093P90	5/16" Allen Ratchet	4	1.46 (37.16)	90° Penta Socket	7	2.50 (63.63)	9.25 (235.41)	1.00 (0.45)

Fargo® Speed Wrench Available Combinations								
CATALOG NUMBER	"A" END DESCRIPTION	FIGURE	C INCHES (MM)	"B" END DESCRIPTION	FIGURE	C INCHES (MM)	L APPROX. INCHES (MM)	WT. LB. (KG)
GP210	3/16" Allen Bar	3	1.25 (31.81)	Eye Loop	9	1.00 (25.45)	6.75 (171.79)	0.50 (0.23)
GP2101	1/4" Allen Bar	3	1.88 (47.85)	Eye Loop	9	1.00 (25.45)	7.38 (187.82)	0.50 (0.23)
GP211	3/8" Allen Bar	3	1.25 (31.81)	Eye Loop	9	1.00 (25.45)	6.75 (171.79)	0.50 (0.23)
GP212	5/16" Allen Bar	3	1.25 (31.81)	Eye Loop	9	1.00 (25.45)	6.75 (171.79)	0.50 (0.23)
GP221	3/8" Ratchet	1	2.25 (57.26)	9/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2210	3/8" Ratchet	1	2.25 (57.26)	7/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2212	1/2" Ratchet	1	2.25 (57.26)	9/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2213	5/16" Ratchet	1	2.00 (50.90)	3/8" Ratchet	1	2.00 (50.90)	8.50 (216.33)	0.75 (0.34)
GP2213AR	3/8" Allen Ratchet	4	1.21 (30.79)	5/16" Allen Ratchet	4	1.21 (30.79)	9.00 (229.05)	0.75 (0.34)
GP2214	3/8" Ratchet	1	2.00 (50.90)	1/2" Ratchet	1	2.00 (50.90)	8.50 (216.33)	0.75 (0.34)
GP2215P	3/8" Reversible Ratchet	2	2.25 (57.26)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP223	9/16" Ratchet	1	2.25 (57.26)	3/4" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2231	9/16" Ratchet	1	2.25 (57.26)	11/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2232	3/4" Ratchet	1	2.25 (57.26)	11/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2233	9/16" Ratchet	1	2.25 (57.26)	5/8" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2234	1/2" Ratchet	1	2.25 (57.26)	5/8" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2235	5/8" Ratchet	1	2.25 (57.26)	11/16" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2236	5/8" Ratchet	1	2.25 (57.26)	13/16" Ratchet	1	2.75 (69.99)	9.50 (241.78)	0.75 (0.34)
GP2237	5/8" Ratchet	1	2.25 (57.26)	3/4" Ratchet	1	2.25 (57.26)	9.00 (229.05)	0.75 (0.34)
GP2238	3/4" Ratchet	1	2.25 (57.26)	13/16" Ratchet	1	2.75 (69.99)	9.50 (241.78)	0.75 (0.34)
GP224	3/4" Ratchet	1	2.25 (57.26)	7/8" Ratchet	1	2.75 (69.99)	9.50 (241.78)	1.00 (0.45)
GP2240	13/16" Ratchet	1	2.75 (69.99)	7/8" Ratchet	1	2.75 (69.99)	10.00 (254.50)	1.00 (0.45)
GP2241P90	13/16" Ratchet	1	2.75 (69.99)	90° Penta Socket	7	2.50 (63.63)	9.75 (248.14)	1.00 (0.45)
GP2242	11/16" Ratchet	1	2.25 (57.26)	15/16" Ratchet	1	2.75 (69.99)	9.50 (241.78)	1.00 (0.45)
GP2243	13/16" Ratchet	1	2.75 (69.99)	15/16" Ratchet	1	2.75 (69.99)	10.00 (254.50)	1.00 (0.45)
GP2245	7/8" Ratchet	1	2.75 (69.99)	15/16" Ratchet	1	2.75 (69.99)	10.00 (254.50)	1.00 (0.45)
GP239	5/16" Rev. Allen Ratchet	5	1.00 (25.45)	5/16" Rev. Allen Ratchet	5	1.00 (25.45)	9.00 (229.05)	1.00 (0.45)
GP240	5/16" Rev. Allen Ratchet	5	1.50 (38.18)	3/8" Rev. Allen Ratchet	5	1.38 (35.12)	9.00 (229.05)	1.00 (0.45)
GP240P1	3/8" Rev. Allen Ratchet	5	1.00 (25.45)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241P	5/16" Rev. Allen Ratchet	5	1.50 (38.18)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241P1	5/16" Rev. Allen Ratchet	5	2.00 (50.90)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241P2	5/16" Rev. Allen Ratchet	5	1.00 (25.45)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241P3	5/16" Rev. Allen Ratchet	5	2.50 (63.63)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241P90	5/16" Rev. Allen Ratchet	5	1.50 (38.18)	90° Penta Socket	7	2.50 (63.63)	9.25 (235.41)	1.00 (0.45)
GP241PS58	5/16" Rev. Allen Ratchet	5	0.63 (15.91)	Penta Socket	6	2.00 (50.90)	8.75 (222.69)	1.00 (0.45)
GP241S	5/16" Rev. Allen Ratchet	5	1.50 (38.18)	Eye Loop	9	1.00 (25.45)	7.75 (197.24)	0.75 (0.34)
GP241S2	5/16" Rev. Allen Ratchet	5	1.00 (25.45)	Eye Loop	9	1.00 (25.45)	9.00 (229.00)	0.75 (0.34)
GP241S3GP	3/8" Rev. Allen Ratchet	5	1.00 (25.45)	Eye Loop	9	1.00 (25.45)	9.00 (229.00)	0.75 (0.34)
GP241S58	5/16" Rev. Allen Ratchet	5	0.63 (15.91)	Eye Loop	9	1.00 (25.45)	7.75 (197.24)	0.75 (0.34)
GP242P	5/16" Rev. Allen Ratchet	5	1.75 (44.54)	90° Penta Rev. Ratchet	8	2.75 (69.99)	9.00 (229.00)	1.00 (0.45)
GP242P1	3/8" Rev. Allen Ratchet	5	1.38 (35.12)	90° Penta Rev. Ratchet	8	2.75 (69.99)	9.00 (229.00)	1.00 (0.45)
GP242P2	5/16" Rev. Allen Ratchet	5	2.00 (50.90)	90° Penta Rev. Ratchet	8	2.75 (69.99)	9.00 (229.00)	1.00 (0.45)
GP243P	5/16" Rev. Allen Ratchet	5	1.00 (25.45)	90° Penta Socket	7	2.50 (63.63)	9.25 (235.41)	1.00 (0.45)
GP516A	5/16" Rev. Allen Ratchet	5	2.5 (63.5)	5/16" Allen Bar	3	2.36 (59.9)	9.11 (231.39)	0.50 (0.23)

The Fargo® Nut-Runner Lineman's Ratchet Wrench

Features

- Bolt-thru socket design
- 2 in 1 combination square socket (GP3458) fits nuts for both 5/8" & 3/4" machine bolts
- 3 in 1 combination square socket (GP345812 & GP345812C) fits nuts for 1/2", 5/8" & 3/4" machine bolts
- Reversible ratchet
- Heavy duty construction

Benefits

- Eliminate the need to use slower open-end wrenches.
- Quick and easy to use. No more inconvenient re-positioning.
- Ensures a dependable and long field life.

The Fargo "Nut Runner" Lineman's Ratchet Wrench provides a safe and easier way to tighten down long machine bolts. Developed to install equipment mounting bolts on utility poles, this tool makes slower, non-mechanical openend wrenches antiquated.

CATALOG NUMBER	Dimensions Inches (mm)				WT. LB. (KG)
	L	W	H	T	
GP3458	12.00	2.06	0.81	.56	2.45
	304.8	52.3	(20.6)	14.2	1.11
GP345812	12.00	2.06	.81	.56	2.53
	304.8	52.3	20.6	14.2	1.15
GP345812C	9.36	2.06	.78	1.0	1.53
	237.7	52.3	-9.8	25.4	0.69

Fargo® Pad Mount Transformer Wrench

Features

- For use with pad mount transformers
- Penta socket to open the transformer and hex wrench for miscellaneous hardware inside
- Head is pinned to prevent spreading of the side plates
- Reversible ratcheting design
- Heavy duty construction
- Torque tested to 90 lb-ft

CATALOG NUMBER	End Description		Physical Wrench Dim, IN (MM)			WT. LB. (KG)
	A	B	L	W	H	
GPHP34	3/4" Hex Socket	7/8" Security Penta Socket	8.13 (206)	1.56 (40)	7.38 (187)	1.8 (0.8)

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NEVER COMPROMISE™

CHANCE®

Cutters

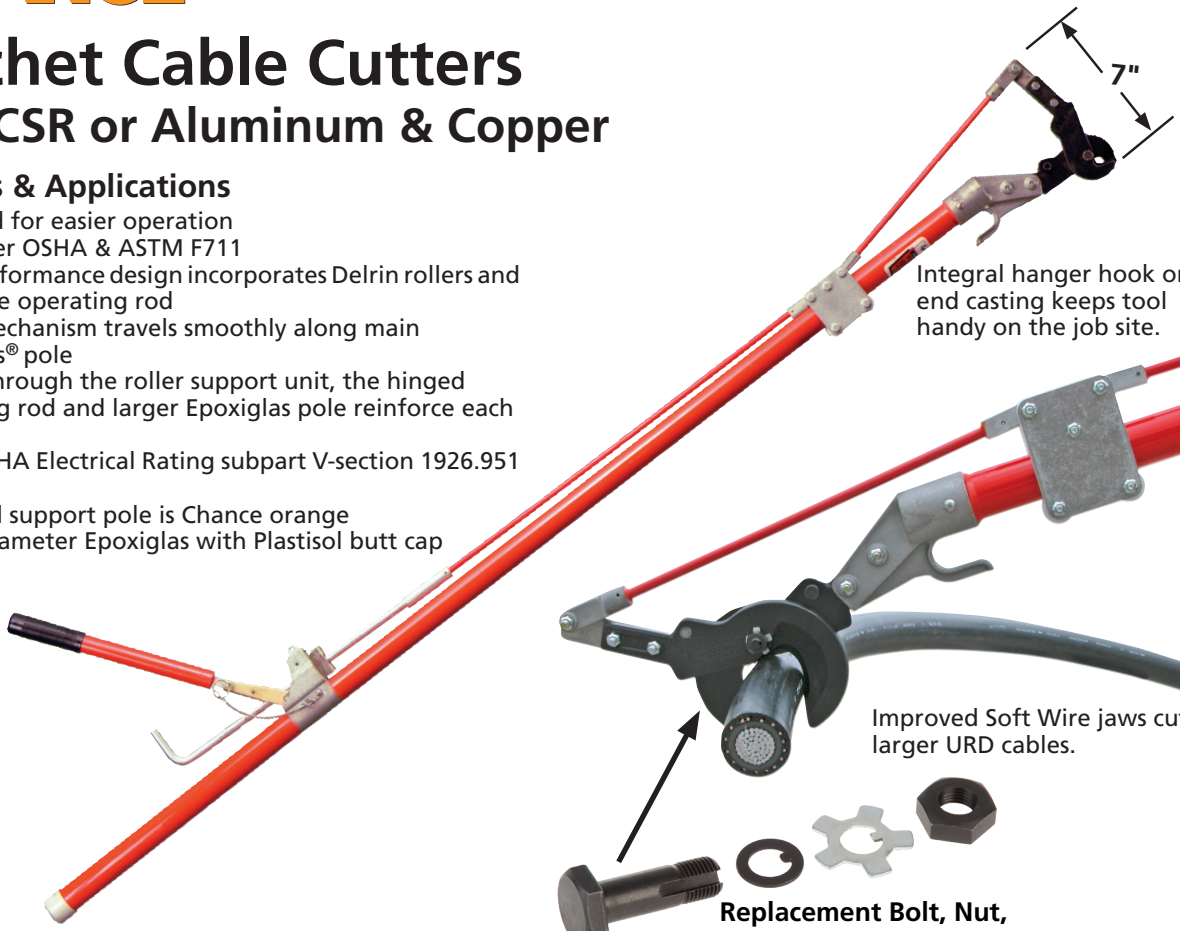
Catalog 2150 March 2020

HUBBELL®

Ratchet Cable Cutters
for ACSR or Aluminum & Copper

Features & Applications

- Designed for easier operation
- Tested per OSHA & ASTM F711
- High-performance design incorporates Delrin rollers and two-piece operating rod
- Roller mechanism travels smoothly along main Epoxiglas® pole
- Linked through the roller support unit, the hinged operating rod and larger Epoxiglas pole reinforce each other
- Meet OSHA Electrical Rating subpart V-section 1926.951 (d)
- Insulated support pole is Chance orange 1-1/2"-diameter Epoxiglas with Plastisol butt cap



Integral hanger hook on end casting keeps tool handy on the job site.

Improved Soft Wire jaws cut larger URD cables.

Replacement Bolt, Nut, Keeper & Washer Kit:
For A.A. and Cu. head PST4033720
For ACSR head PST4033708

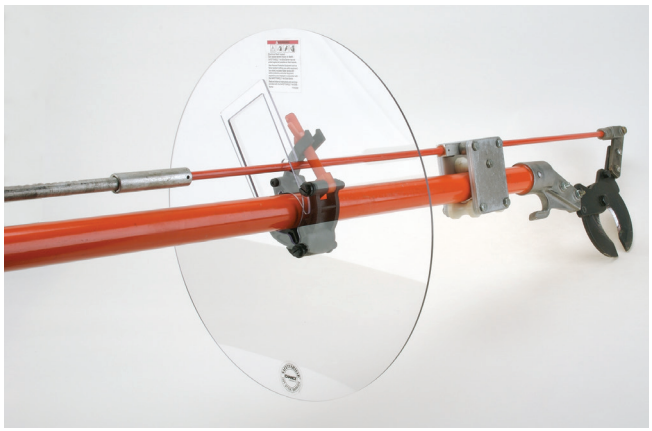
- Operating rod is 3/8"-diameter solid fiberglass rod
- Lever handle is 1"-diameter Epoxiglas with rubber cushion grip
- Four standard models offer practical 6-foot or 8-foot lengths with choice of cutter heads for soft wire or ACSR
- Shear-type steel blades cut without deforming cable
- Heads are interchangeable for field changeouts
- Soft-Wire Head cuts aluminum cable through 1000 kcmil bare (1.152") or jacketed URD (2.125") and copper through 556 kcmil (1")
- Spare cutters may be ordered separately below

Ratchet Cable Cutters

Catalog Number	Description		Weight
	Length	Head	
C4031381	6 ft.	1000 kcmil A.A. 500 kcmil Cu.	11 lb./4.95 kg.
C4031382	6 ft.	556 kcmil ACSR	11 lb./4.95 kg.
C4031383	8 ft.	1000 kcmil A.A. 500 kcmil Cu.	11½ lb./5.18 kg.
C4031384	8 ft.	556 kcmil ACSR	11½ lb./5.18 kg.

Cutter Heads Only

Catalog Number	Head Description	Weight
P4031387P	1000 kcmil A.A. 500 kcmil Cu.	2¼ lb./1 kg.
P4031388P	556 kcmil ACSR	2¼ lb./1 kg.



Ordering Information
SAFETYSHIELD™ Hot Stick Barrier for Ratchet Wire Cutters†

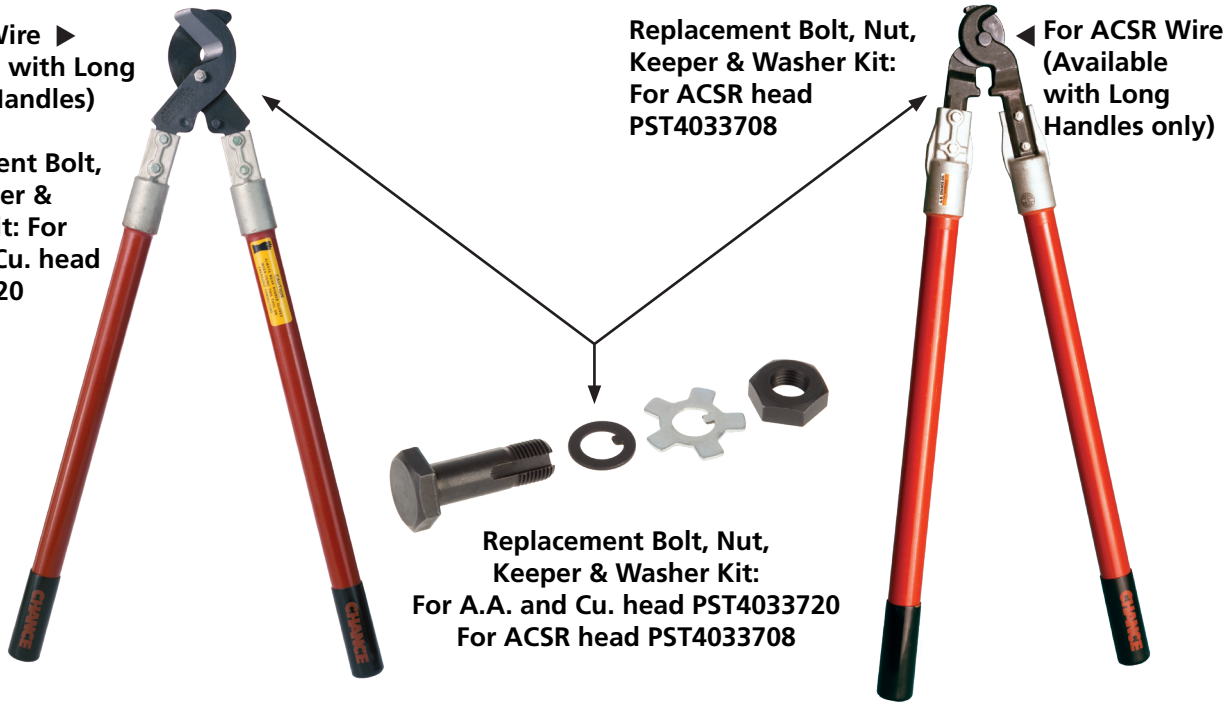
Catalog No.	Diameter	Weight
PSC4170630	16" (406.4 mm)	1 lb. 6 oz. /0.62 kg.

For more details on SAFETYSHIELD™ Hot Stick Barrier to fit tools above, see page 2130.

CONDUCTOR CUTTERS
with Insulated Handles for ACSR or Aluminum & Copper

Features & Applications

- Three standard models
- Choice of insulated long or short handles on cutters for soft wire, and insulated long handles on cutters for ASCR
- Chance orange 1½" diameter Expoxiglas® handles have black rubber cushion grips
- Shear-type blades cut without deforming cable
- Heat-treated tool-steel cutter heads are same as Chance Ratchet Cable Cutters
- Order replacement or spare cutter heads as separate items, below
- Note: ACSR head is not for use with 15½" handles
- Soft-wire head must not be used to cut ACSR as it will damage the cutting edges
- Storage bags to fit short or long cutters should be ordered as separate items, below
- Storage bags are heavy-duty yellow vinyl-impregnated nylon cloth
- Cutters are designed for energized applications
- Users must wear rubber gloves and observe all applicable working clearances when cutting energized conductors



Conductor Cutters with Insulated Handles

Catalog Number	Length		Maximum Size & Type Conductor	Weight	
	Handles	Overall		lb.	kg.
C4031421	15½"	21½"	600 MCM A.A./350 MCM Cu.	4½	2
C4031422	28½"	35"	1000 MCM A.A./500 MCM Cu.	5½	2.5
C4031423	28½"	33½"	336.4 MCM ACSR	5	2.2

Order Storage Bags and extra Cutter Heads as separate items, below.

Storage Bags Only

Catalog Number	Size	For Cutters, Catalog Numbers	Weight	
			lb.	kg.
C3060023	8" x 23"	C403-1421	½	0.2
C3060000	12" x 38"	C403-1422 or C403-1423	½	0.2

Cutter Heads Only

Catalog Number	Description		
		lb.	kg.
P4031387P	*1000 MCM A.A./ 500 MCM Cu.	2¼	1
P4031388P	†336.4 MCM ACSR	2¼	1

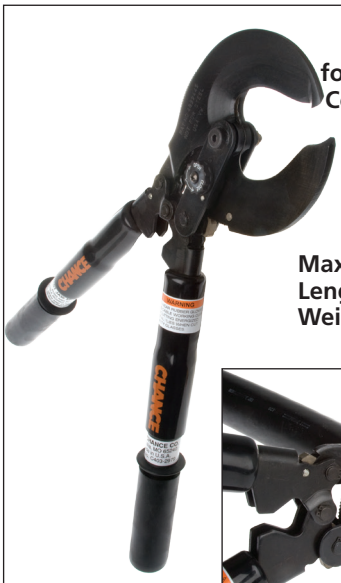
*Rating for P4031387 Head on 28½" Cutter handles. Used on 15½" Cutter handles, rating for P403-1387 Head is 600 MCM A.A./350 MCM Cu. **Do not use to cut ACSR.**

†Rating for P4031388 Head on 28½" Cutter handles. **P4031388 Head is not for use on 15½" Cutter handles to cut ACSR.**

Ratcheting Cable Cutters
for ACSR or Aluminum & Copper

Features & Applications
- Compact size gets into close quarters
- Half the size and weight of standard ratchet cutters
- Two styles of compact cutters
- Ratings match wide range of overhead and underground conductors
- For use in confined workspaces such as manholes and handholes
- Open in less than half the space required for long-handled ratcheting cutters
- Small size saves on toolbox and warehouse storage

Operation
- Single control allows easy switching of direction
- Pushing thumb slide toward head allows handle to open wider for rapid opening or closing
- Not for use when cutting – this feature nearly doubles the speed of the "soft" cutters and makes the "hard" cutters open and close about three times faster than normal



Soft Style C4032979 for only All-Aluminum or Copper up to 1000 kcmil maximum

Max. opening: 2⅜" (6.03 cm)
Length: 19½" (49.53 mm)
Weight: 4¼ lb. (1.9 kg.)

1000 kcmil URD cable

Hard Style C4032980 for ACSR up to 556 max. and Aluminum or Copper up to 750 kcmil max.

Max. opening: 2" (5.08 cm)
Length: 18" (45.72 mm)
Weight: 4⅜ lb. (2 kg.)

556 ACSR (aluminum conductor, steel reinforced)

750 kcmil URD cable

- Release the thumb slide for shorter, more powerful strokes while cutting conductor
- Easy operation, rugged construction
- Design of compact cutters is based on simple ratchet mechanism for long service life
- Simple controls and sure ratcheting action makes working with them easy
- C-type jaws are heat-treated for lasting strength and sharpness
- Stampings on the jaws indicate application limits
- Despite their small size, they are built to take punishing field conditions
- Reinforced-fiberglass handles are PVC-coated and protected by a vinyl sleeve
- Thick vinyl grips shield the handle ends and help worker keep a steady grasp
- Operating instructions are included with both cutter styles

⚠ WARNING

These cutters are not insulated hot line tools.

Ordering Information

Catalog No.	Description	Weight
C4032979	Soft Conductor Cutters	4¼ lb. (1.9 kg.)
C4032980	Hard Conductor Cutters	4⅜ lb. (2 kg.)

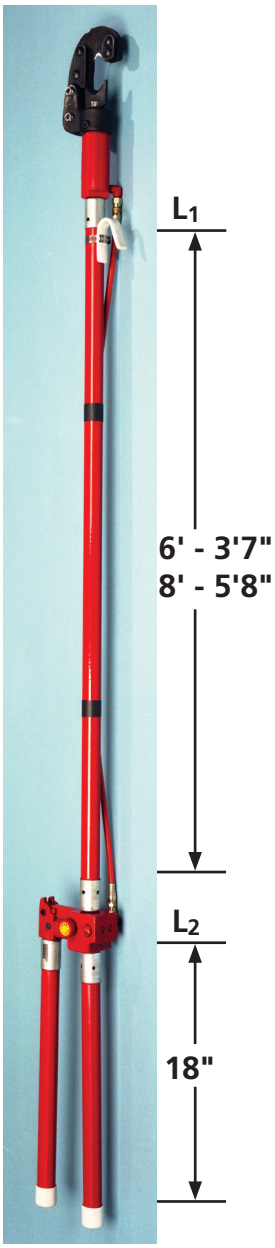
Insulated Hydraulic Cable Cutters

with guillotine-type jaw head
For #6 Solid Copper (0.162" diameter) to 954 kcmil ACSR (1.16" diameter)

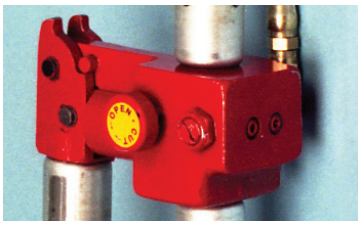
Features & Applications

- Tested per OSHA & ASTM F711
- Easy operation, powerful construction
- Single lineworker can easily cut large-gauge conductors with the power-assist of this tool's closed hydraulic system
- Operates like a hydraulic jack by simply pumping the handle
- Epoxiglas® pole, handle and hydraulic hose have been tested to 100kV per foot (ASTM F711)
- Hydraulic oil has dielectric strength of more than 25kV per ASTM D877
- Hose has minimum burst strength of 12,000 psi
- Pump provides 9,000 psi maximum pressure
- Maintenance and operating instructions are included with each tool

Hook-style jaw hangs on conductor to help position tool. Guillotine-type blades result in smooth, clean cuts.



Hydraulic ram fully retracts in the Open position. For efficient cutting, upper and lower jaw edges are sharpened.



Single control knob selects direction.
Notice: When storing tool, be sure to relieve hydraulic pressure by turning knob to the Open position.

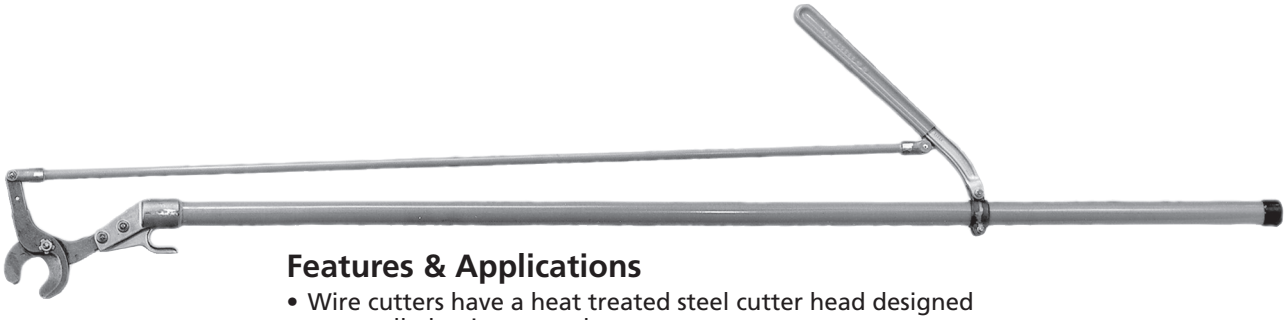
Ordering Information

Catalog No.	Description	L_1	L_2	Weight
C4032861	6-ft. Hydraulic Cutters	3'7"	18"	18¼ lb. (8.2 kg.)
C4032862	8-ft. Hydraulic Cutters	5'8"	18"	19¼ lb. (8.7 kg.)

NOTE: Epoxiglas® pole diameter is $1^1/_4$"

CHANCE®

ALUMINUM WIRE CUTTER



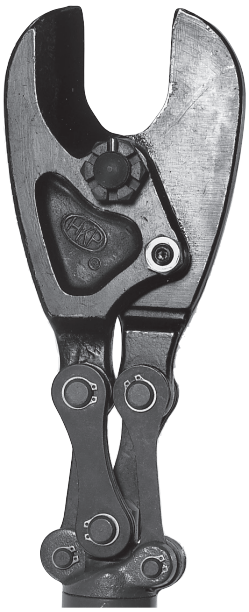
Features & Applications

- Wire cutters have a heat treated steel cutter head designed to cut all-aluminum conductors
- Aluminum head and Chance Epoxiglas® handles combine to make an insulated lightweight tool for easy handling
- A lineman's preference for cutting aluminum jumper cables, conductors or tie wires
- Do not use this tool to cut ACSR conductors

Catalog No.	Description	Pole Size Dia.	Conductor Ranges	Length	Weight
C4030689	All-Aluminum Wire Cutters	1½"	1.033.5MCM	6'	8½ lb./3.8 kg.
C4030690		1½"	1.033.5MCM	8'	10 lb./4.5 kg.

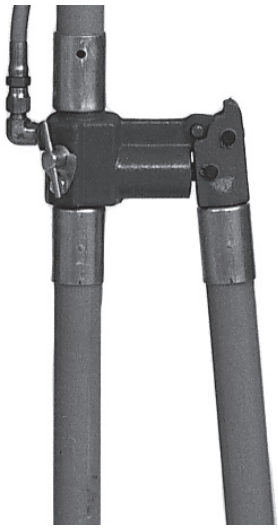
Tested per OSHA & ASTM F711

HYDRAULICALLY OPERATED CONDUCTOR CUTTER



Features & Applications

- Used to cut conductors up to 954 MCM ACSR, all-aluminum and 500 MCM copper
- Operation similar to a hydraulic jack
- Knob-handle is turned to enable lineman to operate pump handle
- When cut is completed, knob is turned in opposite direction to allow cutting head to open
- Epoxiglas pole, handle and hydraulic hose have been tested to 100 kV per foot (ASTM F711)
- Hydraulic oil has a dielectric strength of 25 + kV per ASTM D877-64
- Hose has a minimum burst strength of 12,000 PSI
- Pump provides maximum pressure of 9,000 PSI
- Features include jaws designed to cut without flattening conductor
- Jaws are adjustable to compensate for wear
- Hydraulic hose is located outside pole for easy maintenance
- Well balanced, requiring minimum effort to cut large conductors



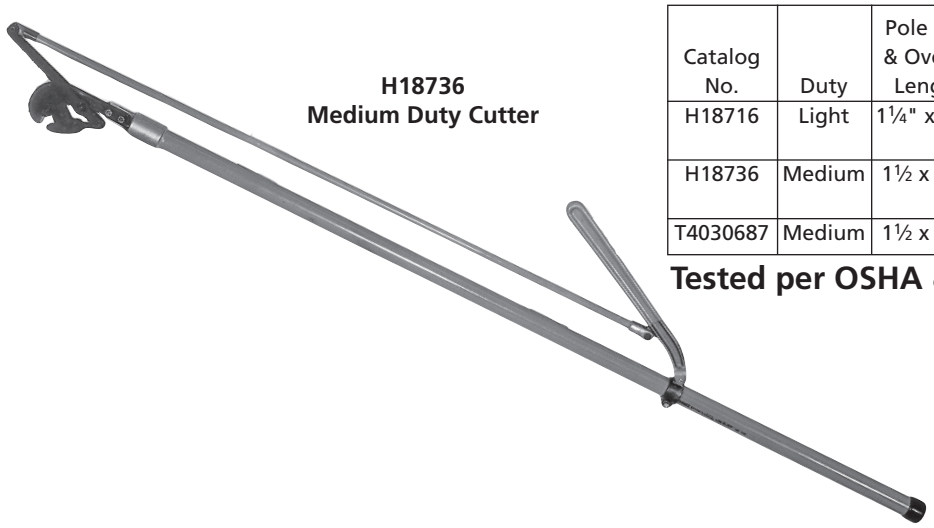
Catalog No.	Length	Pole Dia.	Range	Weight
C4030731	6'	1¼"	To 954 MCM ACSR	13 lb./5.9 kg.
C4030732	8'	1¼"	To 954 MCM ACSR	15 lb./6.8 kg.

Tested per OSHA & ASTM F711

LEVER TYPE WIRE CUTTERS

Features & Applications

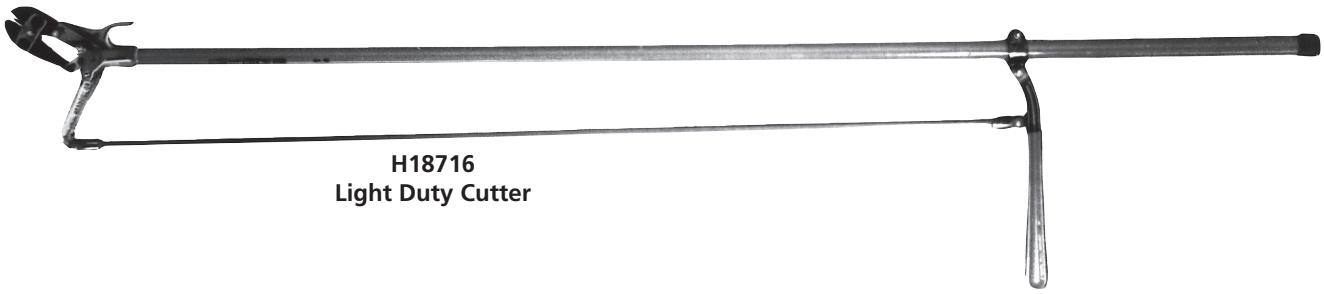
- Three different cutter heads are available for linemen to use for cutting jumper wires, live conductors and tie wires
- All cutters are assembled and mounted on chance Epoxiglas® insulated poles
- Solid fiberglass-reinforced operating rod insulates linemen from the cutter head
- Lever handle is coated with platisol
- Lever action gives linemen added mechanical force to make clean cuts up to the maximum sizes shown in the table below



H18736
Medium Duty Cutter

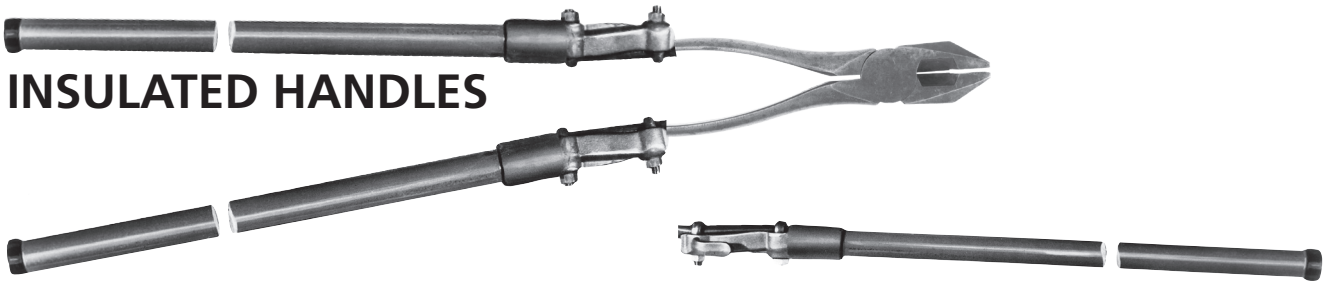
Catalog No.	Duty	Pole Size & Overall Length	Maximum Conductor Recommended	Weight
H18716	Light	1¼" x 6'6"	2/0 Solid Copper or 1/0 ACSR	6¾ lb./3.0 kg.
H18736	Medium	1½ x 6'7"	4/0 Stranded Copper or 4/0 ACSR	9¾ lb./4.4 kg.
T4030687	Medium	1½ x 8'7"		10¼ lb./4.6 kg.

Tested per OSHA & ASTM F711



H18716
Light Duty Cutter

INSULATED HANDLES



Features & Applications

- Chance Epoxiglas® 1-¼" diameter handles may be easily attached to wire cutters or other hand tools
- For use in hot line maintenance or emergency repair work
- Does not include cutters (pair of Handles only)

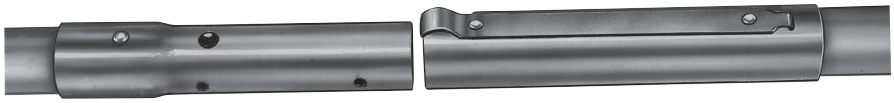
Catalog No.	Description	Overall Length	Weight
H18612	Handles Only	4'3½"	4½ lb./2.0 kg.

Tested per OSHA & ASTM F711

TREE TRIMMERS

Features & Applications

- Designed to cut up to 1½" diameter branches
- Useful around energized conductors or in hard-to-reach places
- Head features sharpened stationary and movable blades made of drop-forged steel
- Rope and pulley arrangement gives operator a mechanical advantage of 3 to 1
- Example: A 10-lb. pull on rope will exert a 30-lb. force on the cutter head lever
- Ball bearing pulleys are employed for free operation
- Rope furnished with each tree trimmer is 25' long
- Accommodates a 6' extension on the basic tool
- The 18" long Universal Tool Fitting is provided with 25' of rope
- A Universal Pruning Saw can be added to the universal fitting on the side of the head mount
- Spliced extensions fasten securely to the tool with leaf spring button lock



H21064 H2106

Tested per OSHA & ASTM F711

Catalog No.		Description	Overall Length	Approx. Weight
1½" Poles	1¼" Poles			
H2006	H2106	Epoxiglas Tree Trimmer ●	6'10"	5¼ lb./2.4 kg.
H2036	H2136	2-Splice Extension ✳	6'	3½ lb./1.6 kg.
H2038	H2138	2-Splice Extension ✳	8'	4¼ lb./1.9 kg.
H2056	H2156	1-Splice Extension ▲	6'	3¼ lb./1.5 kg.
H2058	H2158	1-Splice Extension ▲	8'	4 lb./1.8 kg.

● Supplied with Male Splice Half-One End

✳ Male/Female Splices

▲ Female Splice Half-One End

ACCESSORIES

Catalog No.	Description	Weight
H2020	Head Only for 1½" Epoxiglas Pole	1¾ lb./.8 kg.
H2120	Head Only for 1¼" Epoxiglas Pole	1¾ lb./.8 kg.
H21064	Universal Tree Trimmer, 18" Epoxiglas Pole	3½ lb./1.8 kg.
P4032283P	Blade Only for Any Head	⅞ lb./.4 kg.
C4032213	Universal Pruning Saw	½ lb./.2 kg.

NOTES

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NOTES

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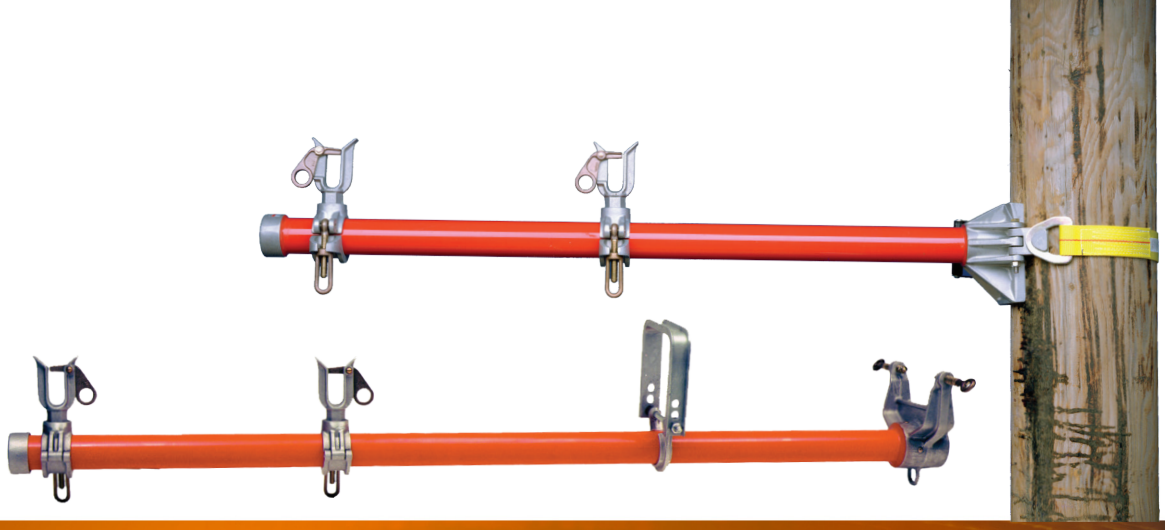


CHANCE®

Conductor Support Equipment

Catalog 2200 March 2020

HUBBELL®

CHANCE®

Wire Tong Applications

The following information is intended to assist in the selection of the proper Wire Tongs for a particular application and greatest load. Four popular application methods are shown on these pages.

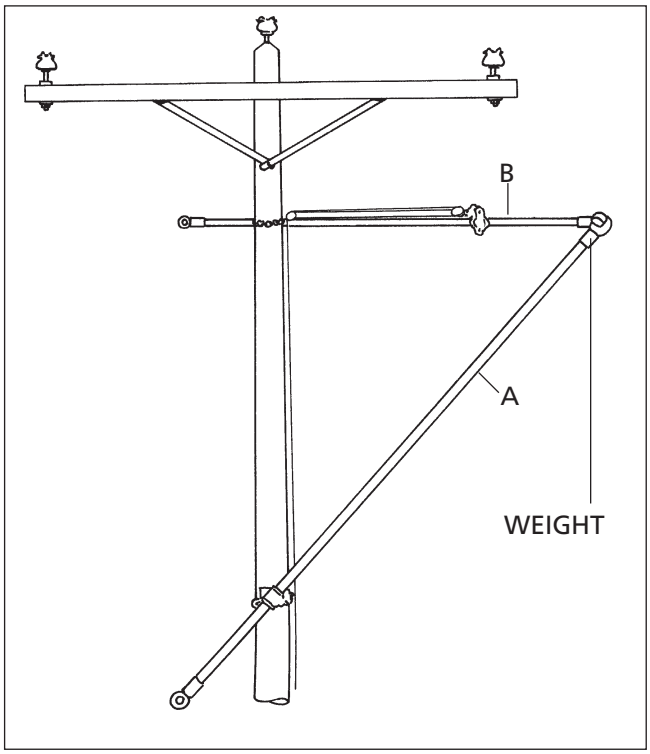


Figure 1 — Wire Tongs with saddles and wire tong blocks clamp on holding stick.

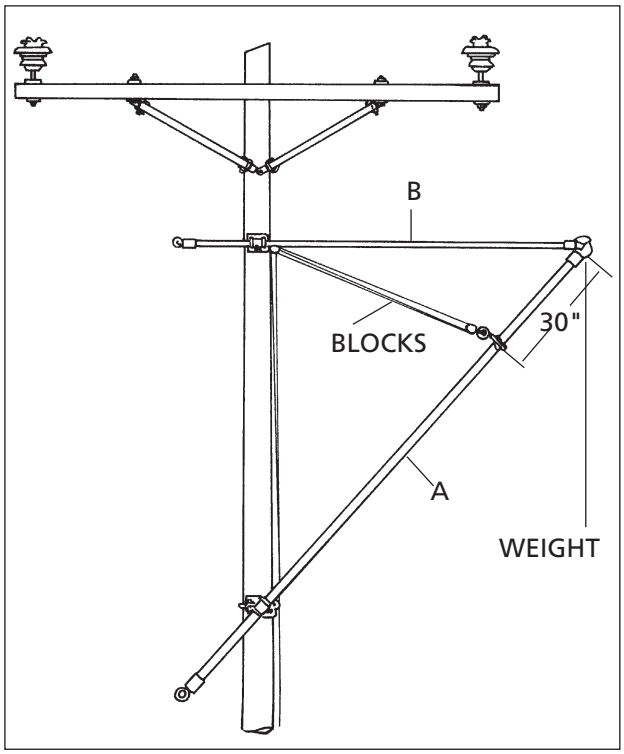


Figure 2 — Wire Tong with saddles and swivel wire tong band on lift stick.

WORKING LOADS FOR CHANCE WIRE TONGS*

Figure No.	Pole Diameter (inches) Epoxiglas A	Pole Diameter (inches) Epoxiglas B	Type Support	Maximum Working Load (lb. per Conductor)	Maximum Wire Size and Span (In Feet) (Level Ground) ACSR Size	ACSR Span	Copper Size	Copper Span
1	2 x 12	1½ x 10	Saddles	275	4/0	700	4/0	300
	2½ x 12	1½ x 10	Lever Lift	475	4/0	1200	4/0	500
2	2 x 12	1½ x 10	Saddles	275	4/0	700	4/0	300
	2½ x 12	1½ x 10	Lever Lift	475	4/0	1200	4/0	500

*Based on Tong "B" substantially horizontal. The lower the top saddle is placed below the conductor level, the greater the strain on Tong "A" and therefore the less load it can support.

NOTE:

(1) Supports
- Maximum recommended load for Saddles with extensions is 800 lbs.
- Lever Lift will exceed Wire Tong strength when load is properly applied in line with pole

(2) Working Loads
- Any elevated structure requires an analysis in determining the load
- When calculations are impractical or unnecessary, and a pole is slightly higher than neighboring poles, consider total weight of span on each side as maximum working load
- Does not apply to hilltop structures where special analysis must be made to determine load
- When working load is greater than that given in the table for a particular Wire Tong, it will be necessary to use double Wire Tongs with double-type lever lift, or use larger Wire Tong

(3) Epoxiglas® Working Loads
- Maximum working loads are based on a pole deflection of approximately one inch when used in manner shown
- Cantilever values, with a safety factor of more than two, are: 1-1/2" – 375 ft.-lb.; 2" – 900 ft.-lb.; 2-1/2" – 1500 ft.-lb.; and 3" – 2500 ft.-lb.
- Tensile strength values, with a safety factor more than two, are: 1-1/2" – 1500 lb.; 2" – 2000 lb.; 2-1/2" – 2500 lb.; and 3" – 3000 lb.

Wire Tong Applications

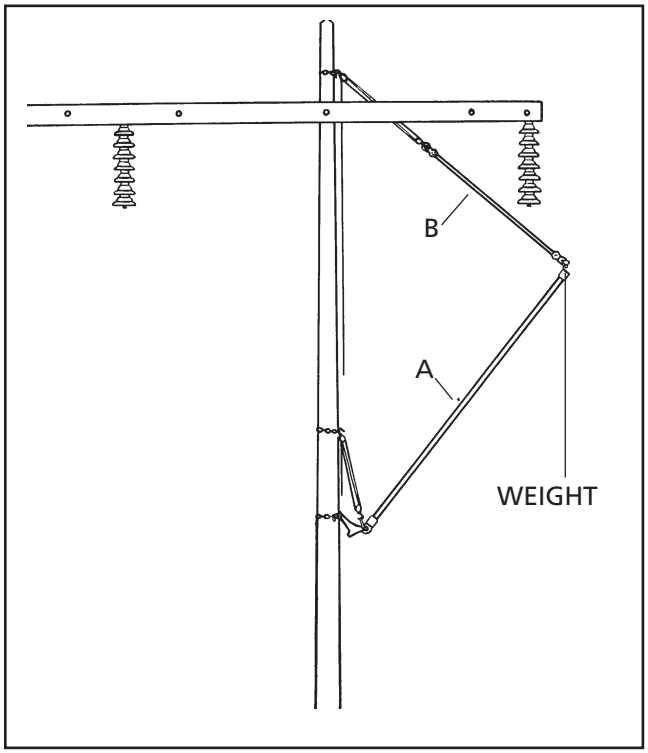


Figure 3— Wire Tongs, lever lift, link stick, and rope blocks used on heavy conductors.

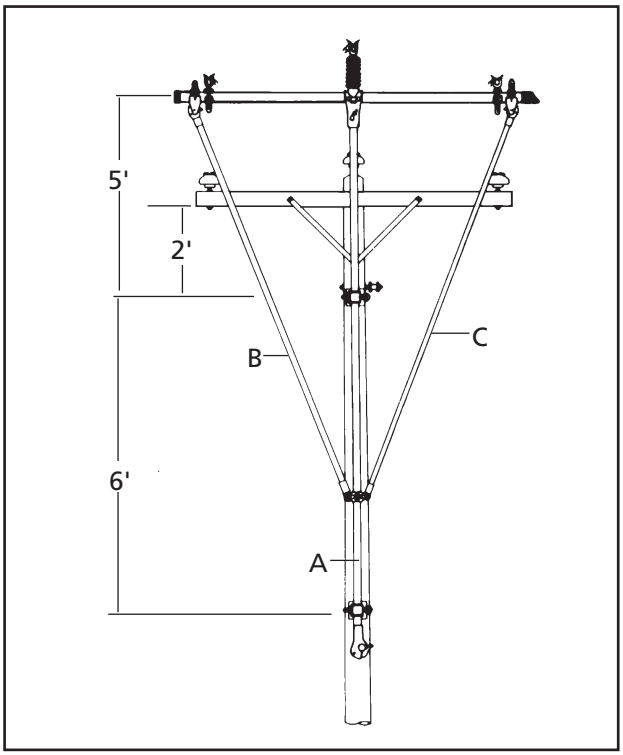


Figure 4— Three Phase Lift Set where all three wires are lifted at once.

WORKING LOADS FOR CHANCE WIRE TONGS

Figure No.	Pole Diameter (inches) Epoxiglas			Type Support	Maximum Working Load (lb. per Conductor)	Maximum Wire Size and Span (In Feet) (Level Ground)			
						ACSR		Copper	
	A	B	C			Size	Span	Size	
3	2 x 12	1½			350	4/0	850	4/0	
	2½ x 12	1½		Lever Lift	1000	397.5	1150	250	
4	2½ x 12	2 x 8	2 x 8	Saddles	225+*	4/0	550	4/0	

*With max. lift of 5' above saddle, max. unbalance of 225 lb. on one side.

NOTE:

(1) Supports
- Maximum recommended load for Saddles with extensions is 800 lbs.
- Lever Lift will exceed Wire Tong strength when load is properly applied in line with pole

(2) Working Loads
- Any elevated structure requires an analysis in determining the load
- When calculations are impractical or unnecessary, and a pole is slightly higher than neighboring poles, consider total weight of span on each side as maximum working load
- Does not apply to hilltop structures where special analysis must be made to determine load
- When working load is greater than that given in the table for a particular Wire Tong, it will be necessary to use double Wire Tongs with double-type lever lift, or use larger Wire Tong

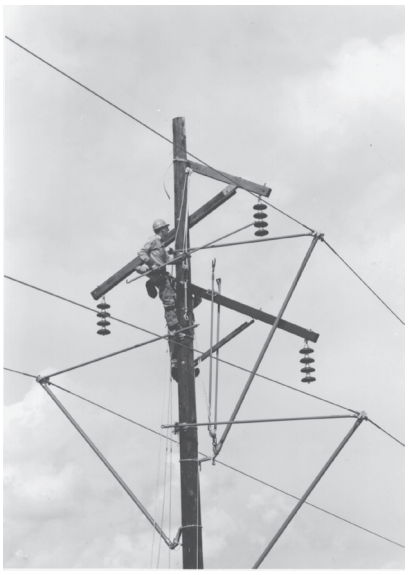
(3) Epoxiglas® Working Loads
- Maximum working loads are based on a pole deflection of approximately one inch when used in manner shown
- Cantilever values, with a safety factor of more than two, are: 1-1/2" – 375 ft.-lb.; 2" – 900 ft.-lb.; 2-1/2" – 1500 ft.-lb.; and 3" – 2500 ft.-lb.
- Tensile strength values, with a safety factor more than two, are: 1-1/2" – 1500 lb.; 2" – 2000 lb.; 2-1/2" – 2500 lb.; and 3" – 3000 lb.

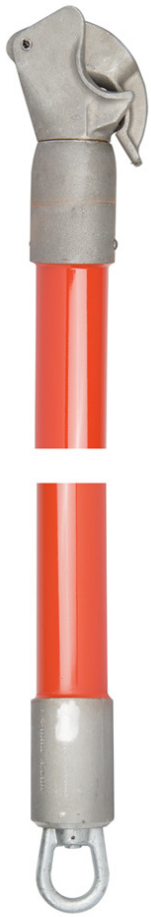
CHANCE®

Wire Tongs

Features & Applications

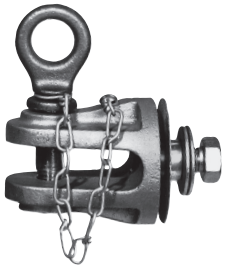
- Tested per OSHA & ASTM F711
- Designed for moving and holding conductors clear of working area
- Also used for flat crossarm and/or ridge pin-construction, on horizontal post insulator structures, and all types of suspension insulator lines
- Also used as auxiliary arm braces, and in EHV construction for brace pole or ladder positioning guides
- Whole family of clamps, attachments, saddles and lever lifts allows wire tongs to be adapted to mechanical requirements of various maintenance jobs
- Made with Epoxiglas® poles
- Castings made with heat-treated aluminum alloy, separated by bronze wear rings
- Wide-range jaws on head can be clamped tightly on conductor by turning stick from a position beyond minimum work clearances.
- Large head available on two tong sizes for extremely large conductors
- For working load, size, and application information, see pages 2202 and 2203

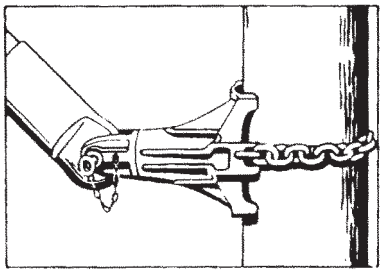




Catalog No.	Pole Dia. & Length	Overall Length	Wire Size Min.	Wire Size Max.	Approx. Weight
H46458	1½ x 8'	8' 7½"	0.16"	2.25"	7 lb./ 3.2 kg.
H464510	1½ x 10'	10' 7½"	0.16"	2.25"	8 lb./ 3.6 kg.
H46468	2" x 8'	8' 8"	0.16"	2.25"	11 lb./ 5.0 kg.
H464610	2" x 10'	10' 8"	0.16"	2.25"	12 lb./ 5.4 kg.
H464612	2" x 12'	12' 8"	0.16"	2.25"	14 lb./ 6.3 kg.
H464710	2½" x 10'	10' 8"	0.16"	2.25"	16½ lb./ 7.4 kg.
H464712	2½" x 12'	12' 8"	0.16"	2.25"	18½ lb./ 8.3 kg.
H464714	2½" x 14'	14' 8"	0.16"	2.25"	20½ lb./ 9.2 kg.
H464716	Spliced 2½" x 16'	17' 2"	0.16"	2.25"	28 lb./12.6 kg.
C4000171	3" x 12'	12' 10"	0.16"	2.25"	30 lb./13.5 kg.
C4000172	3" x 14'	14' 10"	0.16"	2.25"	35 lb./15.9 kg.
H467712	2½" x 12'	12' 10"	1.50"	2.88"	23 lb./10.4 kg.
H467714	2½" x 14'	14' 10"	1.50"	2.88"	25 lb./11.3 kg.

Wire-Tong Saddle Clevis





Features & Applications

- Used to attach butt ring of a wire tong, as a crossarm brace, to a wire tong saddle
- Allows wire tong to pivot and engage wire tong arm stirrup
- Wire tong can be attached after arm has been secured to pole

Cat. No.	Description	Weight
M474014	Wire Tong Saddle Clevis	14 oz./ 3 kg.

WIRE TONG BAND
Features & Applications

- Two screws clamp band to wire tong
- Each screw is threaded into half of the band and engages a slot in opposite half
- This permits halves of the band to be separated by a sliding action without removing screws
- Hinge ring slides on band, allowing rotation of wire tong when tong is supported by rope blocks
- For positive insulation between rope blocks and live conductors, install band at least the minimum distance for voltage class
- See table on page 2202

Cat. No.	For Pole Dia.	Weight
M17293	1 1/2"	1 1/2 lb./0.7 kg.
M1729	2"	1 5/8 lb./0.7 kg.
M17291	2 1/2"	1 3/4 lb./0.8 kg.
M17292	3"	1 7/8 lb./0.8 kg.

WIRE TONG BLOCKS CLAMP
Features & Applications

- Use where pull is in line with pole
- Secured to wire tong under tension
- Rope blocks are connected to clamp ring
- This application places pull force in line with top wire tong
- Assists in pulling heavy conductors back into position

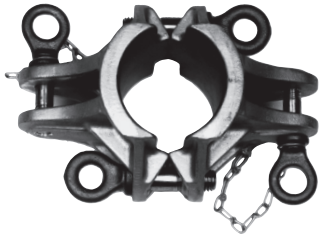
Cat. No.	For Pole Dia.	Weight
M4743	1 1/2"	2 5/8 lb./1.2 kg.
M47431	2"	2.3 lb./1.1 kg.
M47432	2 1/2"	3.0 lb./1.4 kg.

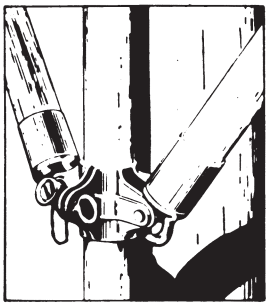
WIRE TONG SWIVEL
Features & Applications

- Designed to prevent kinking of conductor
- By attaching swivel to left tong and the holding tong hooked into the clevis attachment, there is only one tong hooked on the conductor
- Clevis pivots to allow tongs to assume correct positions
- This avoids the kinking caused by two wire tongs hooked side-by-side on a conductor

Cat. No.	For Pole Dia.	Weight
M4745	2"	1 1/2 lb./.07 kg.
M47451	2 1/2"	1 3/4 lb./.08 kg.

Wire-Tong Pole Clevis

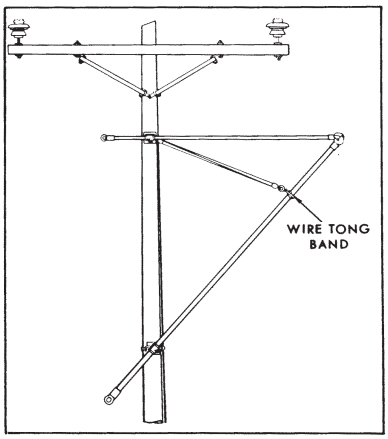


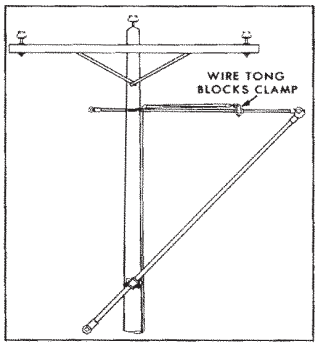


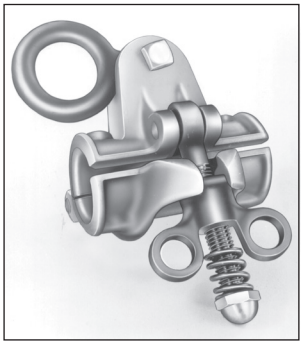
Features & Applications

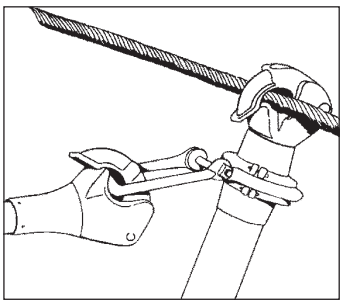
- Clamps around vertical wire tong supporting an auxiliary crossarm
- Engages butt rings of two wire tongs used as side braces

Cat. No.	Size	Weight
M17285	2 1/2"	2 1/2 lb./1.1 kg.
C4000345	3"	3 3/4 lb./1.7 kg.









CHANCE®

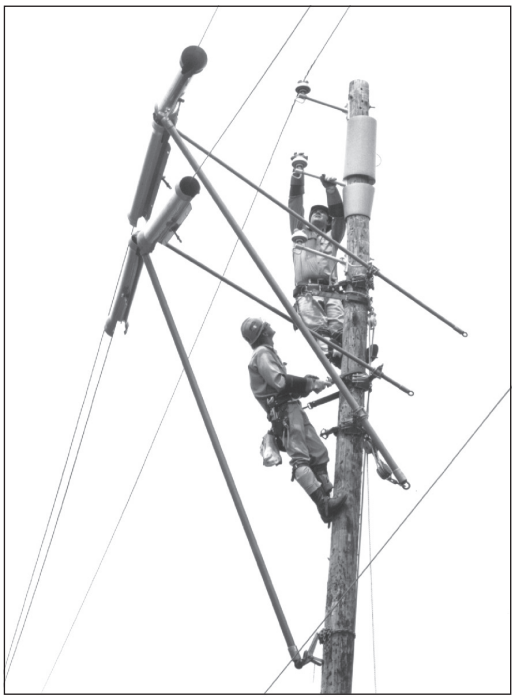
Wire-Tong Saddles

M474010W

M474018W

M47405W

M474020W



M47412
Pole Clamp

C4000073
Extension

Features & Applications

- Made of strong, yet lightweight aluminum alloy for handing ease
- Will support a maximum of 1000 lbs. (450 kg) without extension
- Has a tested working load rating of 800 lbs. (360 kg.) with extension
- Clamp is set far enough away from base to provide ample clearance for most jobs
- Can be bolted to the saddle when additional clearance is required
- Heat-treated aluminum-alloy extension is 4 inches (100 mm) long
- Wheel Type fasteners are easy to apply, hold saddle firmly in place and prevent riding down
- Wheel Tightener can fit into close places, including between crossarm braces

Catalog No.	Description	Approx. Weight
M47403W	Saddle and Tightener and 1½" (37.5mm) clamp	10 lb. 1 oz./4.56 kg.
M47404W	Saddle and Tightener and 2" (50mm) clamp	10 lb. 5 oz./4.68 kg.
M47405W	Saddle and Tightener and 2½" (62.5mm) clamp	10 lb. 9 oz./4.80 kg.
M47409W	Saddle and Tightener and 3" (75mm) clamp	10 lb. 12 oz./4.90 kg.
M474010W	Saddle and Tightener less clamp	8 lb. /3.60 kg.
M474015W	Saddle Wheel Tightener and Clevis	6 lb. 11 oz./3.03 kg.
M474016W	Saddle, Tightener, 1½" (37.5mm) clamp & extension	11 lb. 1 oz./5.01 kg.
M474017W	Saddle, Tightener, 2" (50mm) clamp & extension	11 lb. 5 oz./5.13 kg.
M474018W	Saddle, Tightener, 2½" (62.5mm) clamp & extension	11 lb. 9 oz./5.24 kg.
M474019W	Saddle, Tightener, 3" (75mm) clamp & extension	11 lb. 12 oz./5.33 kg.
M474020W	Saddle, Tightener, extension less clamp	9 lb. /4.08 kg.
C4000073	Wire Tong Saddle Extension	1 lb. /0.45 kg.
M47411	1½" (37.5mm) pole clamp only	2 lb. 1 oz./0.93 kg.
M47412	2" (50mm) pole clamp only	2 lb. 5 oz./1.04 kg.
M47413	2½" (62.5mm) pole clamp only	2 lb. 9 oz./1.20 kg.
M47415	3" (75mm) pole clamp only	2 lb. 12 oz./1.25 kg.

CHAIN TIGHTENERS & EXTENSIONS

Features & Applications

- For building wire tong holding assemblies, or for replacement
- Wheel Type fasteners are easy to apply, hold saddle firmly in place and prevent riding
- Wheel tightener has spring take-up
- Maximum workload is 2,500 lbs.
- Extension Chain increases length of Chain Tightener
- This allows Chain Tightener to be used on large-diameter poles

Catalog No.	Description	Weight
M1848W	Wheel Tightener Assembly (36" Chain)	5 3/4 lb./2.6 kg.
M1847	18" Extension Chain	1 5/8 lb./ .7 kg.
M18473	36" Extension Chain	3 lb./1.4 kg.
M18474	48" Extension Chain	4 lb./1.9 kg.
M18476	72" Extension Chain	6 lb./2.8 kg.
070358P	Wheel Tightener Only	3 1/2 lb./1.8 kg.

M1848W

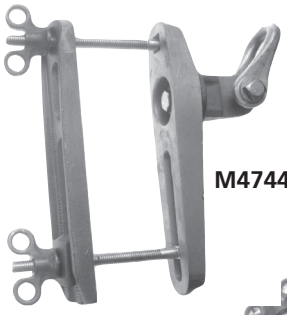
M1847

CROSSARM TYPE SADDLE

Features & Applications

- For underbuilt arms, when working space is limited or crowded with pole saddles
- Pivoting action of the saddle swivel and pole clamp attachment offers universal-joint action
- This allows movement of the wire tong in any direction and without binding
- Saddle shown does not include pole clamps, shown on page 2206
- Maximum workload is 500 lbs.

Catalog No.	Fits Crossarms	Weight
M4744	3" x 4 1/4" to 4" x 8"	6 lb./2.7 kg.



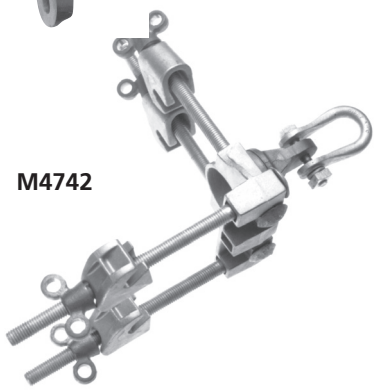
M4744

TOWER TYPE SADDLE

Features & Applications

- Used to support wire tongs or boom poles on towers
- Securely fastened to the angle-iron tower leg by four hooks tightened by wing nuts
- A clevis which bolts through the pivot lug permits rope blocks to be fastened
- This allows rope blocks to pivot with the wire tong or boom pole
- Saddle shown does not include pole clamps, shown on page 2206
- Maximum workload is 1,000 lbs.

Catalog No.	Description	Weight
M4742	Tower Saddle Less Clamp with regular hooks	11.25 lb./5.1 kg.
T4001413	Tower Saddle with small and large hooks	13.25 lb./6 kg.



M4742

WIRE TONG STIRRUP

Features & Applications

- Standard equipment with Chance Auxiliary Arms
- Stirrup may be ordered separately, for attaching Wire Tong Braces to Arm

Catalog No.	Description	Weight
C4000331	Wire Tong Stirrup	1 1/4 lb/0.55 kg.

C4000331

ROPE SNUBBING BRACKET

Features & Applications

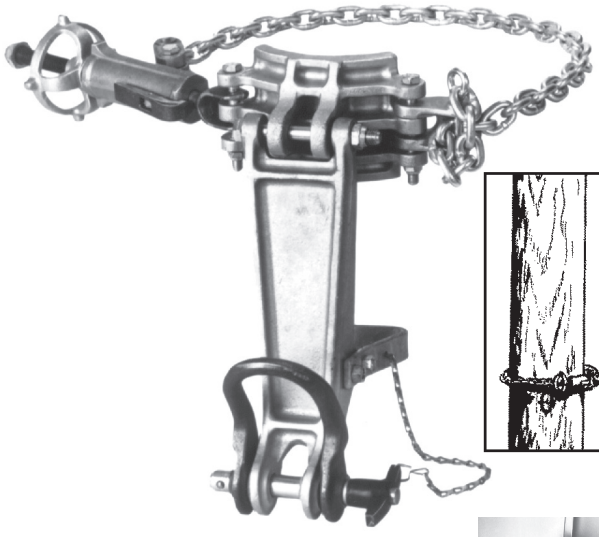
- Easily prevents line snarls
- Snubs all hand or light block lines to this bracket, mounted at the base of the pole to the six different rings
- Maximum workload is 1,000 lbs.

Catalog No.	Description	Weight
M1846W	Bracket with wheel tightener and 36" Chain	7 1/2 lb/3.4 kg.

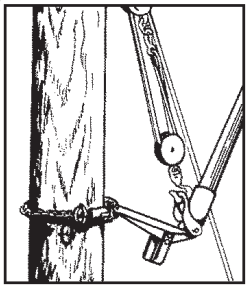
M1846W

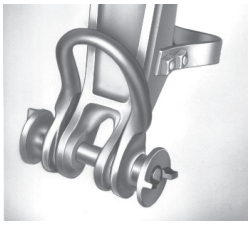
CHANCE®

Lever-Lift Wire Tong Support



M4760W

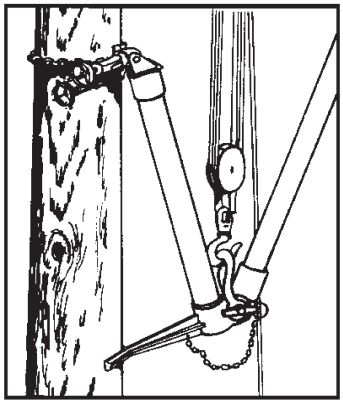




Double Type

C4001016

M47602



Aluminum Base Features & Applications

- For use where working space on pole is limited
- Also used on H-frame or heavy suspension insulator construction for raising or lowering conductors with wire tongs
- Lever Lift should be used in place of Wire Tong Saddles when loads exceed 500 lbs.
- Wire tong is attached to the Single Type by simply removing the cotter key
- Next, slide the shaft to the side, placing the butt ring of the tong into the fork
- Next, shoot the shaft through, and replace the cotter key
- For the Double Type, remove the wing nuts, slip butt rings of the two wire tongs on the shaft extensions and replace wing nuts
- High-strength aluminum alloy Lever Lifts are lightweight and easy to handle
- Provide a total conductor lift of 20¾ inches, and will support any size of wire tong
- When two Lever Lifts are required, one at each side of the pole, they can be attached at virtually the same height
- An arbor adapter is available to convert the Single Type Lever Lift to a Double Type
- Each Lever Lift is equipped with a clevis for attaching rope blocks
- The clevis, used at the end of the Lever Lift for attaching the lower rope blocks, will rotate on the same pin that holds the wire tong(s), permitting freedom of movement

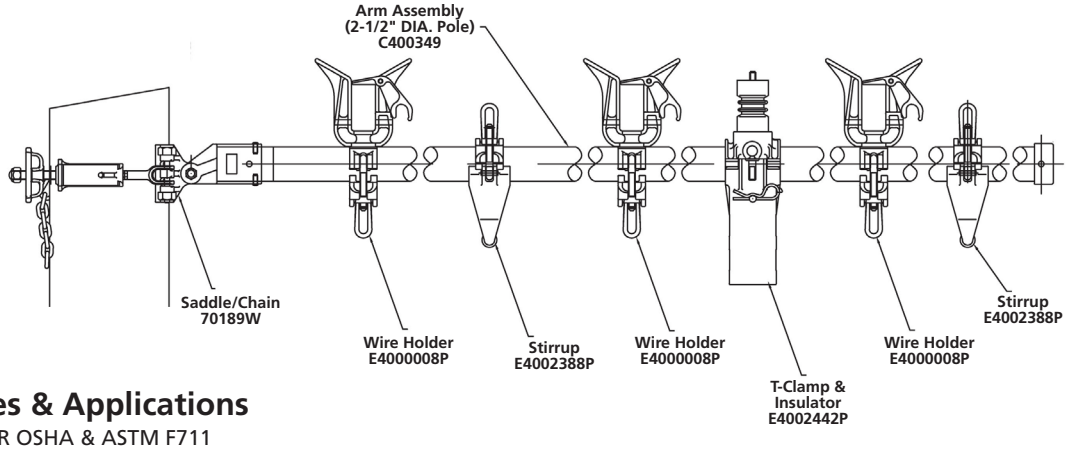
Catalog No.	Description	Working Load Per Tong	Weight
M4760W	Single Type Lever Lift	1000 lb.	14½ lb./ 6.5 kg.
M47601W	Double Type Lever Lift	750 lb.	15½ lb./ 7.0 kg.
M47602	Arbor Adapter	—	1¾ lb./ .8 kg.

Epoxiglas® Base Features & Applications

- For same applications as aluminum-base units
- Normally used on higher transmission voltages where more lifting space is required
- Has a total conductor lift of 36”
- Arbor adapter (M47602) shown above can be used to convert an Epoxiglas lever lift into a double lift for two wire tongs
- Epoxiglas member is 36" long and provides the same working load per tong as the aluminum units

Catalog No.	Description	Working Load per Tong	Weight
C4001016	Epoxiglas Lever Lift	1000 lb.	18 lb./8.1 kg.

Dual Auxiliary Arm

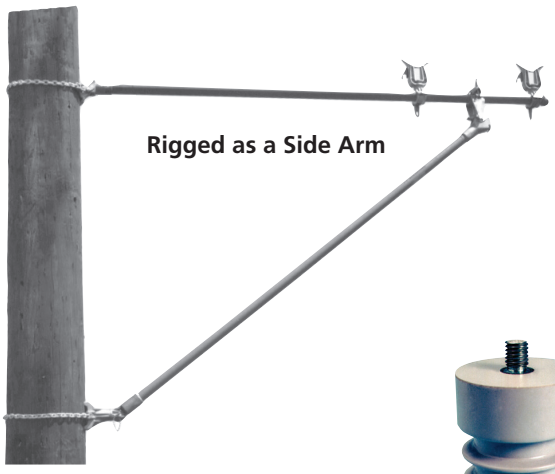


Features & Applications

TESTED PER OSHA & ASTM F711

- For use where a changeout of poles, crossarms or insulators is necessary
- Standard Chance Epoxiglas® tools are lightweight andeasily rigged
- Can be used as a side arm on regular construction, oralley arm construction
- Movable wireholders can be spaced for minimum conductor travel from the crossarm to the temporary arm
- Arm is long enough for use as a lifting arm with the use of three standard Chance Wiretongs
- When arm is to be left up overnight or during a period of possible rain, it should be wiped down with a silicone-treated cloth
- Furnished with 2 self-latching type E400008P Fork wireholders with 1.5" opening
- When lowered into wireholder, conductor trips safety latch, locking conductor into wireholder
- Latch must be swiveled with an insulated live line stick to release the conductor

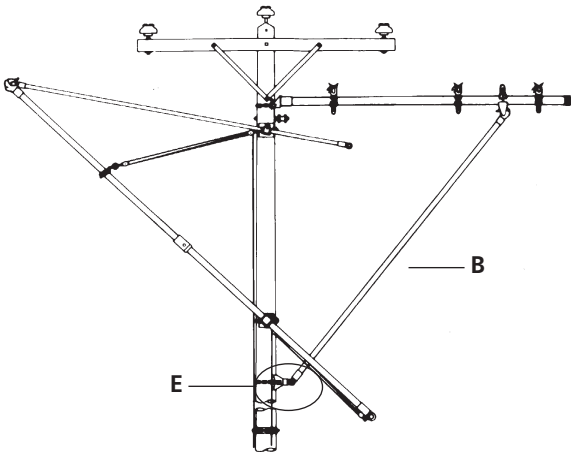
Catalog No.	Description	Weight
C4000075	Dual Auxiliary Arm, 10 ft., with Wheel Binder & 1.5" Fork Wireholder	33 lb./ 14.9 kg.



Electrical Ratings

GLOSSY, CLEAN AND DRY EPOXIGLAS®
15kV Phase to Phase
34.5kV Phase to Phase with M48057
Insulators are used on each wireholder

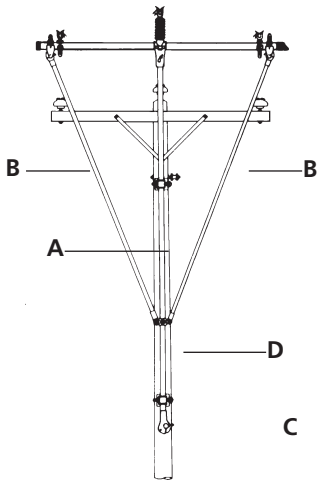
M48057



Accessory Tools Required For Side Arm Application

One **B** 2" x 8' Wire Tong H46468
One **E** Pole Type Saddle with Clevis M474015W

Plus necessary insulated hand held tools.



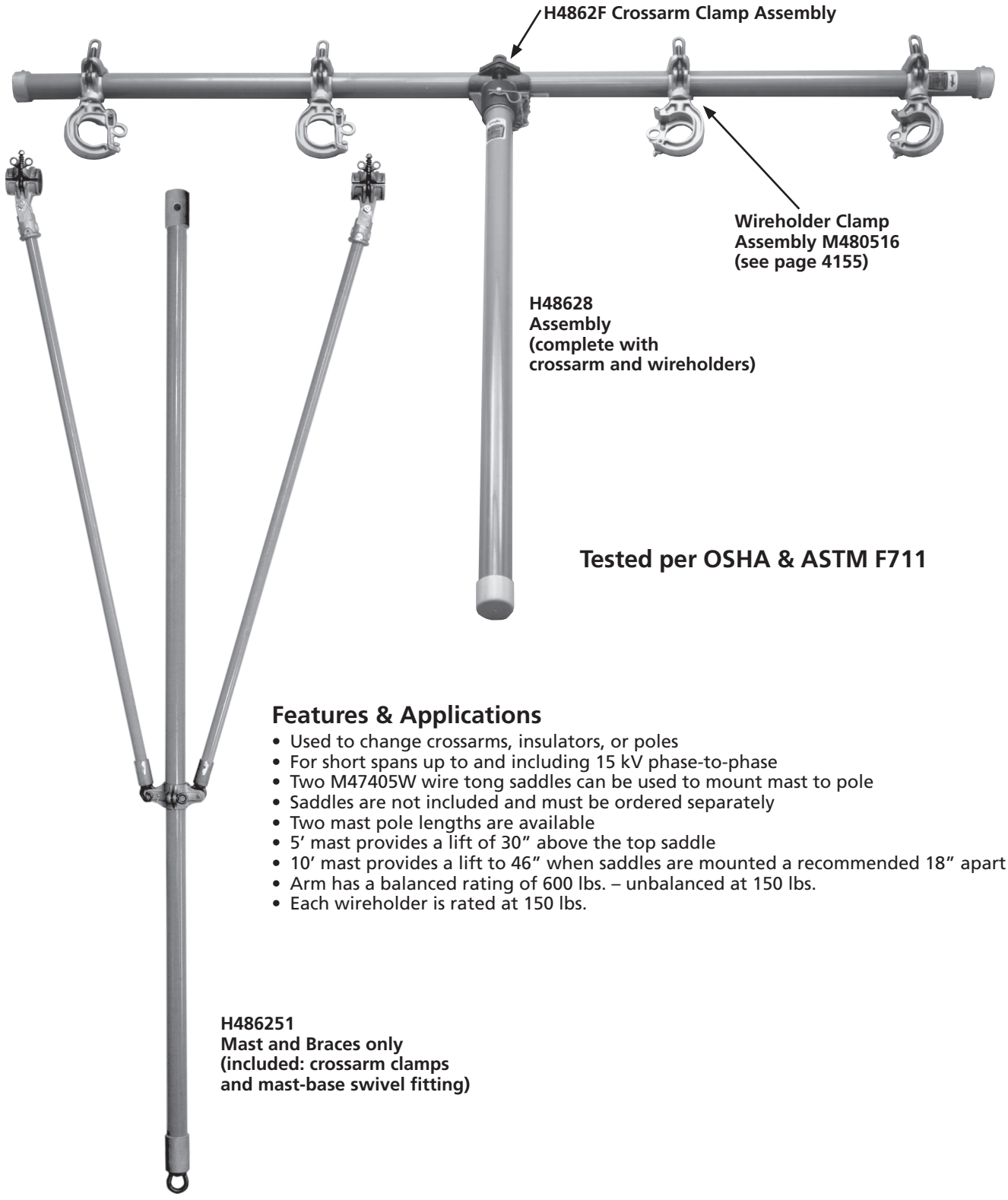
Accessory Tools Required For Lifting Arm Application

One **A** 2½" x 16' Wire Tong H464716
Two **B** 2" x 8' Wire Tong H46468
Two **C** Pole Type Saddles with Extension M474018W and 2½" Pole Clamps
One **D** 2½" Pole Clevis M17285

Plus necessary insulated hand held tools.

CHANCE®

Rubber-Glove Auxiliary Arm



Tested per OSHA & ASTM F711

Features & Applications

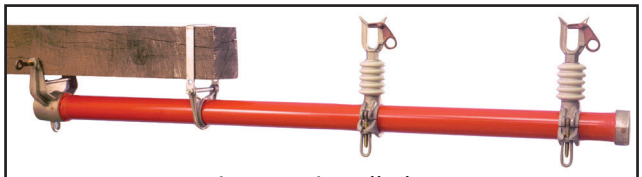
- Used to change crossarms, insulators, or poles
- For short spans up to and including 15 kV phase-to-phase
- Two M47405W wire tong saddles can be used to mount mast to pole
- Saddles are not included and must be ordered separately
- Two mast pole lengths are available
- 5′ mast provides a lift of 30″ above the top saddle
- 10′ mast provides a lift to 46″ when saddles are mounted a recommended 18″ apart
- Arm has a balanced rating of 600 lbs. – unbalanced at 150 lbs.
- Each wireholder is rated at 150 lbs.

Catalog No.	Description	Wireholders		Mast Pole Size	Crossarm Pole Size	Weight
		Qty.	Capacity			
H48628	Auxiliary Arm Assembly	4	2½" Max.	2½" x 4'11"	2½" x 8'	42 lb./18.9 kg.
H486251	Mast & Braces	None	N/A	2½" x 10'	None	37 lb./16.65 kg.

Extension Arm

Features & Applications

- Tested per OSHA & ASTM F711
- For use when reconductoring or insulator replacement is necessary
- Suspended under the crossarm by brackets to enable to conductor to be removed from the original crossarm and placed in the wireholder mounted on the Arm



Heavy Duty Extension Arm installed on crossarm, equipped with M48057 insulators on the wireholders.

Electrical Ratings

GLOSSY, CLEAN AND DRY EPOXIGLAS®
15kV Phase to Phase
34.5kV Phase to Phase with M48057
Insulators are used on each wireholder

For 34.5 kV M48057 insulator should be installed.

- Order insulators separately

M48057

Catalog No.	Epoxiglas Arm Dia. & Length	No. of Wireholders	Fits Maximum Crossarm Size	Max. Vertical Loading Per Wireholder	Weight	Replacement Eye Screw
H480060	2½" x 5'	1	3¾" x 4¾"	150 lb.	11½ lb./6.2 kg.	640062P
H480072	2½" x 6'	2	3¾" x 4¾"	150 lb.	13 lb./5.9 kg.	640062P
T4032417	2½" x 6'	2	3¾" x 4¾" & 6" x 6"	150 lb.	15 lb./6.75 kg.	P4001444P
C4001310 (Heavy Duty)	3" x 6'	2	3¾" x 4¾" & 6" x 6"	300 lb.	24 lb./ 10.9 kg.	P4001444P
H480092	2½" x 7'8"	3	3¾" x 4¾"	150 lb.	28 lb./ 12.7 kg.	640062P
H480092INS	2½" x 7'8"	3	3¾" x 4¾"	150 lb.	31 lb./ 14.1 kg.	640062P

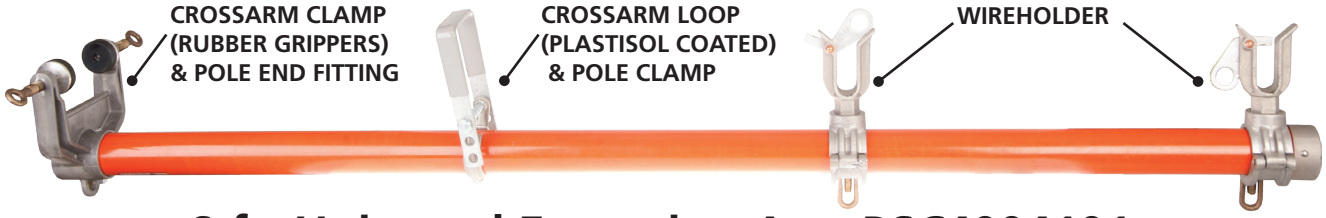
H480092

H480092INS

CHANCE®

Universal Extension Arms

- Fit composite or wood crossarms up to 3¾" x 4¾"
- Cushioned clamp and hanger loop to protect composite arms
- Grippers on clamp can be removed for wood crossarms
- Design allows removal of components for reconditioning pole
- Designed for use with rubber gloves or hot sticks



6-ft. Universal Extension Arm PSC4004101

Rubber grippers removed
for use on wood crossarms.

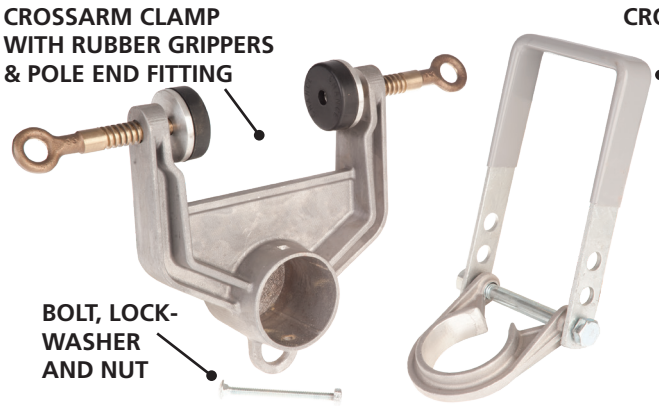
Catalog No.	Epoxiglas® Arm Dia & Length	Number of Wireholders	Fits Maximum Crossarm Size	Max. Vertical Loading per Wirehoilder
PSC4004101	2½" x 6'	2	3¾" x 4¾"	150 lb.
PSC4004102	2½" x 5'	1	3¾" x 4¾"	150 lb.

Electrical Ratings

GLOSSY, CLEAN AND DRY EPOXIGLAS®
15kV Phase to Phase
34kV Phase to Phase with M48057
Insulators are used on each wireholder

Universal Extension Arm Retrofit Kit

- Allows conversion of wood-only Extension Arms to Universal Extension Arms



Universal Extension Arm Retrofit Kit PSC4004103

Kit instructions show how to cut off the old end fitting and drill for the attachment of the new bolt-on end fitting.

Conversion permits easy removal of the Crossarm Clamp for periodic reconditioning of the pole.

Temporary Conductor Support

Crossarm Mounting
Features & Applications

- Clamps to the crossarm, adjusting to crossarms from 3¼" x 4" to 6" x 6"
- C-clamp is made of heat-treated aluminum
- Can be installed with a Grip-All clampstick
- Maximum workload is 150 lbs.

Catalog No.	Description	Weight
C4000517	Conductor Support, Crossarm	3½ lb./1.6 kg.

C4000517

For 34.5 kV or when the tool is left overnight, an M48057 insulator should be installed.

M48057

Pole Mounting
Features & Applications

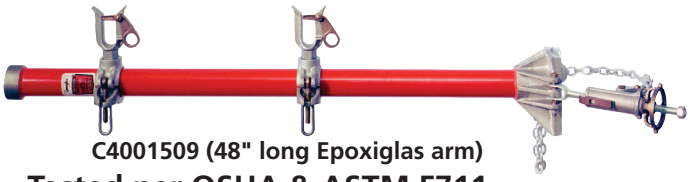
- Epoxiglas® temporary conductor support is used to hold energized distribution conductors
- For use during replacement of poles or repair/replacement of pole top and stand-off insulators
- Features wheel tightener for poles up to 14" in diameter
- M480517 fork-type, 1" wireholder is standard
- Working load: 150 lb. per wireholder
- Rated 100 lbs., Side Load, Max.

*H4809W
(30" spacing, pole to wireholder)

Tested per OSHA & ASTM F711

Catalog No.	Description	Weight
*H4809W	Single Conductor Support	20 lb./ 9 kg.
C4001509	Two Conductor Supports	22 lb./10 kg.

*200 lb. total load capacity for H4809W.



C4001509 (48" long Epoxiglas arm)

Tested per OSHA & ASTM F711

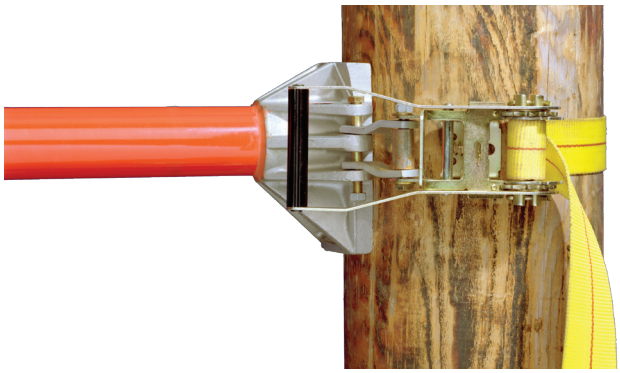
Electrical Ratings

GLOSSY, CLEAN AND DRY EPOXIGLAS®
15kV Phase to Phase
34.5kV Phase to Phase with M48057
Insulators are used on each wireholder

CHANCE®

Temporary Conductor Supports

D-Buckle Strap On Ratchet Pole Binder
• Single- & Double-Wireholder Models

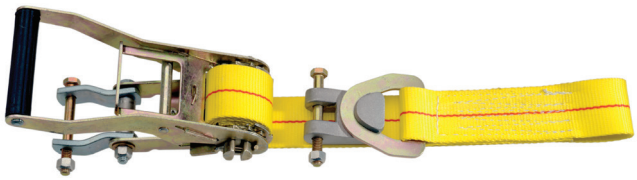


Features & Applications

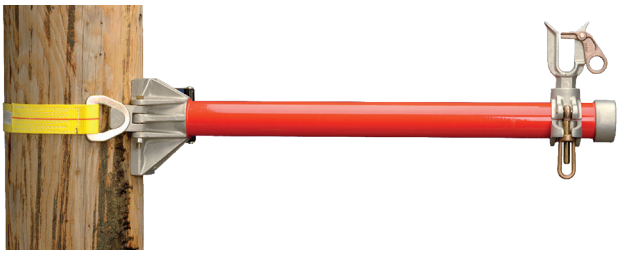
- New D-shaped buckle on the strap-free end adds speed and convenience
- Hanging a temporary conductor support involves just hooking buckle in clasp on bracket and cinching the strap with ratchet handle
- With strap-type ratchet-action mount rather than a chain binder, these supports are same as on page 2211
- Strap and ratchet assembly may be ordered alone for retrofit, below
- Polyester strap offers advantage of less stretch than nylon for this application
- With 10,000-lb. rated tensile strength, 2"-wide strap comes in 44" length to fit most structures
- Wide handle opening on rapid-action ratchet permits easy operation
- Works well even with rubber gloves and leather protectors
- Epoxiglas® temporary conductor support is used to hold energized distribution conductors
- For use during replacement of poles or repair/ replacement of pole top and stand-off insulators
- Fork-type wireholder accepts up to 1"-diameter conductor
- Working load: 150 lb. per wireholder on T4001939 only

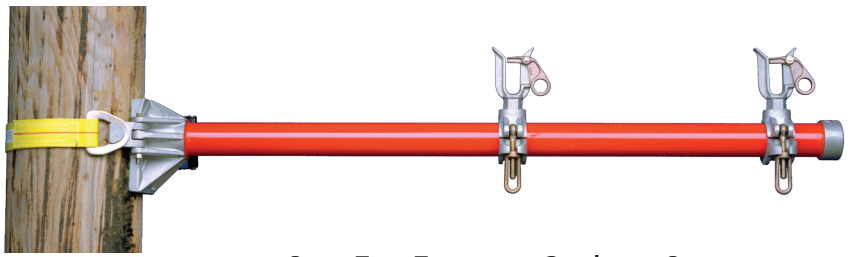
Electrical Ratings

GLOSSY, CLEAN AND DRY EPOXIGLAS®
15kV Phase to Phase
34.5kV Phase to Phase with M48057
Insulators are used on each wireholder



Strap Binder Kit T4002007





Strap-Type Temporary Conductor Supports
Epoxiglas® pole: 2½" diameter

Strap Binder Kit
complete with D-buckle and Ratchet Mechanism

Catalog No.	Description	Weight
T4002007	D-Buckle Strap Binder only	4½ lb./2 kg.

Catalog No.	Description	Weight
*T4001940	30" - One Conductor Support	14 lb./6.3 kg.
T4001939	48" - Two Conductor Supports	18 lb./8.1 kg.

*200 lb. total load capacity for T4001940.

Tested per OSHA & ASTM F711

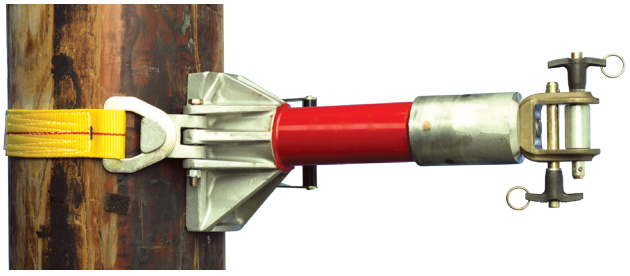
Corner Restraint Bracket Tool

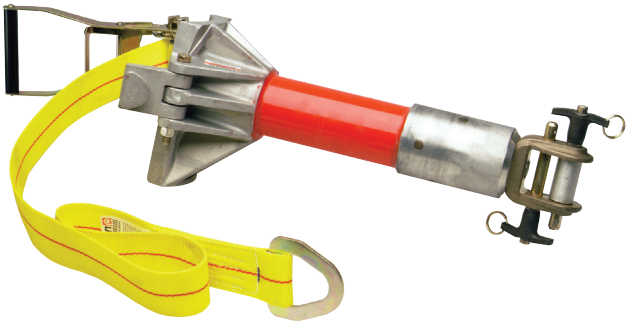
Features & Applications

- For insulator changes on running corners
- Helps isolate pole and hoist during maintenance
- D-buckle on strap quickly mounts ratchet pole binder
- Adds efficiency to energized changeout of insulators on distribution running-corner poles
- Works with strap hoist to help control each phase conductor while insulators are changed
- Helps restrain conductor while repairs are made
- Also acts as load restraint for hoist to pull conductor back in for reconnection to insulator string
- Dual-pin/single-roller set-up lets you rig the bracket for mounting on either side of pole
- So strap always rides on the roller, place roller on appropriate push-button pin
- New D-shaped buckle on the strap-free end adds speed and convenience
- Hanging a temporary conductor support involves just hooking buckle in clasp on bracket and cinching the strap with ratchet handle
- **Bracket rigged on guy side of pole:** Used where the conductor is pulled in only a short distance toward the pole
- **Bracket rigged on conductor side of pole:** Used where the conductor must be pulled in a considerable distance toward the pole

For Hot-line Procedures

- For maintenance by hotsticks or rubber-glove techniques, Corner Restraint Bracket assists in isolating strap hoist from pole, a potential ground
- Also avoids cutting a short section from a poleguard cover-up or using (and possibly damaging) a rubber blanket as a pad between strap and pole
- To insulate the strap hoist, a 12"-long link stick connects the hoist's hooks to hot-line grips on the conductor
- Poleguards and rubber cover-up are required to isolate the phase being worked from ground and other phase potentials

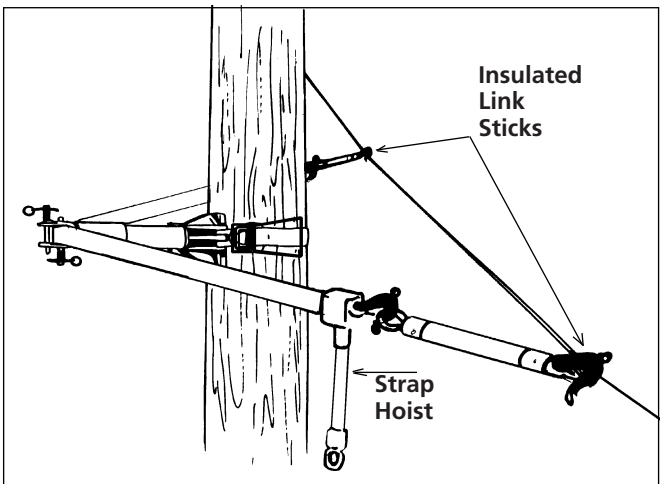




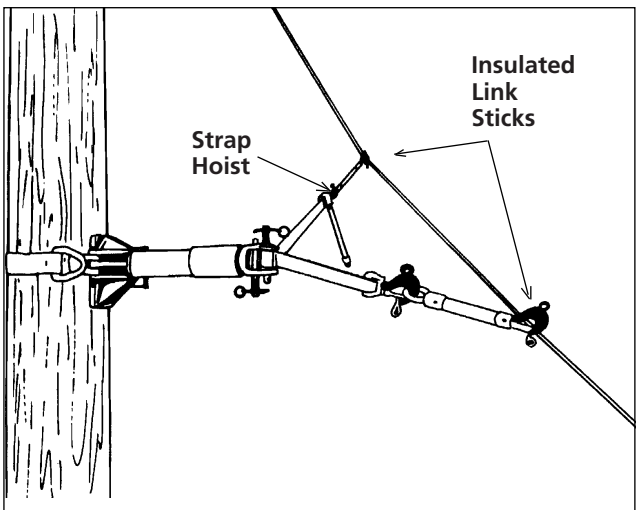
Maximum Load Rating: 2,000 lb. (900 kg.)
Epoxiglas® member: 2½" diameter, 6" clear length

Ordering Information

Catalog No.	Description	Weight
T4002272	Corner Restraint Bracket	13¾ lb. / 6.2 kg.



Bracket rigged on guy side of pole: Used where the conductor is pulled in only a short distance toward the pole.



Bracket rigged on conductor side of pole: Used where the conductor must be pulled in a considerable distance toward the pole.

CHANCE®

Hot Stick Tension Puller 34.5 kV Ø-Ø and 69 kV Ø-Ø

Specifications:	34.5 kV	69 kV
Capacity	4,000 lb.	4,000 lb.
Working range	58-70 in.	66-76 in.
Maximum take-up	12 in.	12 in.
Insulation		
Maximum	43 in.	51 in.
Minimum	31 in.	39 in.
Length	60 in.	66 in.

Features & Applications

- Equipped with rings for handling and operation with the Chance Grip-All Clampstick or with rubber gloves
- Both models have a non-swiveling hook on each end for positive hotstick operation
- Spring-loaded gate rotates 135° left or right from closed position
- Large, ratchet wrench selector lever easily accommodates hotsticks

Catalog No.	Description	Weight
C4000574	34.5 kV, Safety Hook both ends	12 lb. / 5.4 kg.
C4000575	69 kV, Safety Hook both ends	12½ lb./ 5.6 kg.

Tension Puller Hook Adapter C4000573

- Hook Adapter is a field-replacement for adding catch and hotstick eye
- Adapter is interchangeable with hooks of both Tension Pullers above

Tie Back Clamp C4000600
Conductor Range:
#4 to 397.4 kcmil ACSR

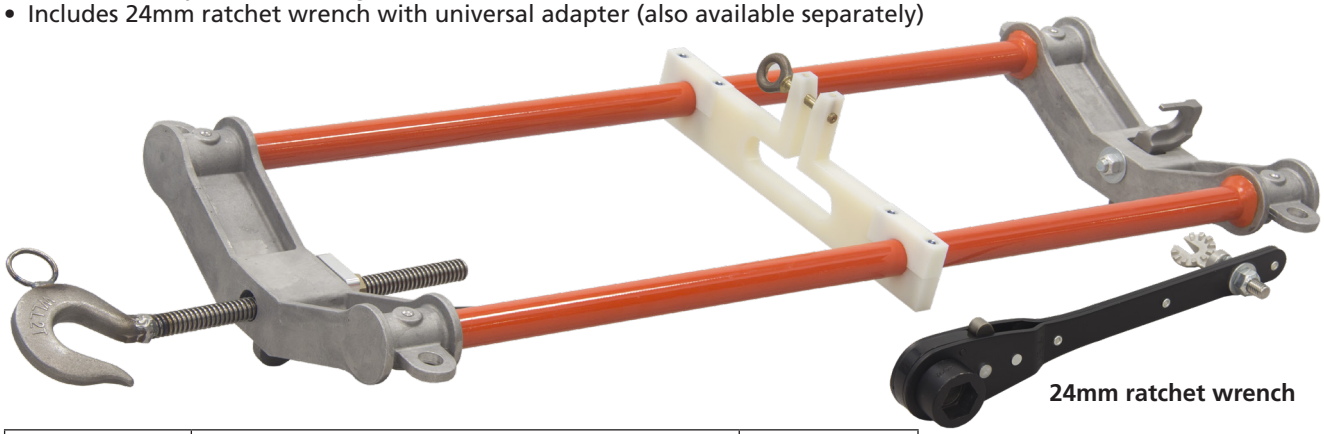
- Tie Back Clamp installs with a Grip-All clampstick
- Used with a Tension Puller to keep the tail of a conductor out of the work area by tying it back to the main line after it has been cut
- Clamp also may be used to hold a jumper on the main line while applying a compression connector

Symmetrical Tension Puller

Tension puller tool for changing out insulator strings with bells up to 10" (25.4 cm) diameter.

Features

- Takes up mechanical tension from the conductor to change the insulator string
- Made with CHANCE® Epoxiglas® poles manufactured and tested per ASTM F711 and IEC 60855
- Accommodates insulator string with hardware up to 30" (76 cm)
- Max load rating 4,000 lbs (1,779 daN)
- Removable/adjustable holding device included
- Includes 24mm ratchet wrench with universal adapter (also available separately)



24mm ratchet wrench

Catalog No.	Description	Weight
PSC4012730	Symmetrical Tension Puller w/ Ratchet Wrench	19.8 lb./9.0 kg.
PSC4012796	24mm Ratchet Wrench w/ Universal Adapter	2.4 lb./.1 kg.

Pole Protector

NEW SURFACE GUARD
for Concrete, Fiberglass, Steel Poles

PROTECTIVE COVER FOR MOUNTING CHAIN-BINDER TOOLS:
- Simple installation for quick attachment of bases for ladders, platforms, conductor supports, auxilliary arms, pole tongs, etc.
- Tough material protects pole without reducing tool's load rating
- Not for mounting capstan hoists or any application that loads chain binder in an upward direction
- Not insulating cover up equipment

Ordering Information

Catalog No.	Protector Size	Max. Pole Diameter
PSC4060624	7 in. x 4 ft.	up to 15"
PSC4060625	7 in. x 5 ft.	up to 19"
PSC4060626	7 in. x 6 ft.	up to 23"
PSC4060627	7 in. x 7 ft.	up to 27"

NOTES

NOTES

Conductor Support Equipment – 2200

210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

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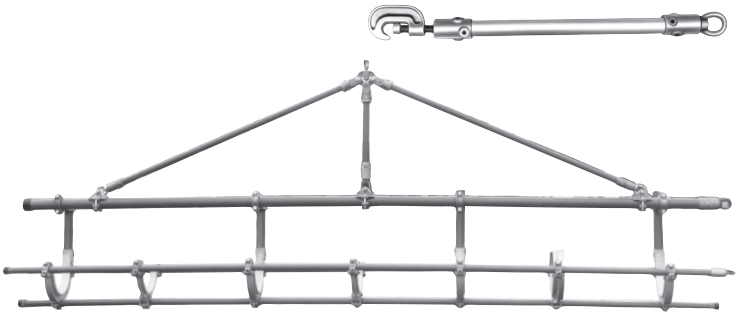


CHANCE®
Transmission Tools

Catalog 2250 March 2020

HUBBELL®

STRAIN LINK STICK

Features & Applications

- Tested per OSHA & ASTM F711
- Used as insulation between rope blocks and a hot line wire grip
- For deadend structures and running corners
- Attached to conductor close to wire tong to support conductor loads
- Supported from above by rope blocks, which are operated in unison with rope blocks attached to the wire tong
- Also used to support middle conductor on H-frame structures during insulator or crossarm changes
- Heat-treated aluminum alloy hooks and ferrules for best high-strength/lightweight ratio
- High-quality-steel butt rings for attaching rope blocks or handlines
- Butt swivel spins freely on ball-thrust bearing
- Jaw edges are rounded to prevent scarring of conductors

Catalog No.	Overall Length	Pole Dia. and Length	Jaw Opening		Max. Work Load, lb.	Approx. Wt., lb.
			Min.	Max.		
H47152	4'9"	1¼" x 4'	.22	.75	3500	3¾/1.7 kg.
C4000814	7'3"	1¼" x 6'	.22	.75	3500	5¼/2.4 kg.
C4000815	9'3"	1¼" x 8'	.22	.75	3500	6 /2.7 kg.
C4000816	11'3"	1¼" x 10'	.22	.75	3500	6¾/3.1 kg.
C4000817	13'3"	1¼" x 12'	.22	.75	3500	7½/3.4 kg.
C4000818	15'3"	1¼" x 14'	.22	.75	3500	8¼/3.7 kg.
H47161	3'3"	1½" x 2'	.44	1.06	6500	4¾/2.2 kg.
H47162	4'9"	1½" x 4'	.44	1.06	6500	5¾/2.6 kg.
H47163	6'9"	1½" x 6'	.44	1.06	6500	6¾/3.1 kg.
H47164	8'9"	1½" x 8'	.44	1.06	6500	7¾/3.6 kg.
H47165	10'9"	1½" x 10'	.44	1.06	6500	8¾/4.0 kg.
H47166	12'9"	1½" x 12'	.44	1.06	6500	9¾/4.4 kg.
H4717	5'0"	1½" x 4'	.72	1.50	6500	9⅞/4.5 kg.
H47171	7'2"	1½" x 6'	.72	1.50	6500	11⅞/5.4 kg.
H4718	5'2"	1½" x 4'	1.00	2.50	6500	11⅛/5.1 kg.
H47181	7'2"	1½" x 6'	1.00	2.50	6500	13 /5.9 kg.
H47182	9'2"	1½" x 8'	1.00	2.50	6500	15 /6.8 kg.
H47183	11'2"	1½" x 10'	1.00	2.50	6500	17 /7.7 kg.
H47184	13'2"	1½" x 12'	1.00	2.50	6500	19 /8.6 kg.

SPIRAL LINK STICK

Features & Applications

- Tested per OSHA & ASTM F711
- Replaces strain link stick when lineman cannot safely install one by hand
- A lifting eye on the head ferrule enables the lineman to guide the Spiral Link Stick to the conductor with a hotstick
- 1-1/4" Epoxiglas® pole
- Heat-treated aluminum alloy ferrule castings
- Galvanized-steel spiral hook and butt ring

Catalog No.	Overall Length	Pole Dia. and Length	Maximum Conductor Size	Max. Work Load, lb.	Approx. Wt., lb.
H4722	31"	1¼" x 15.5"	1510.5 kcmil ACSR	3500	3½/1.6 kg.
C4000812	57½"	1¼" x 42"	1510.5 kcmil ACSR	3500	4½/2.0 kg.

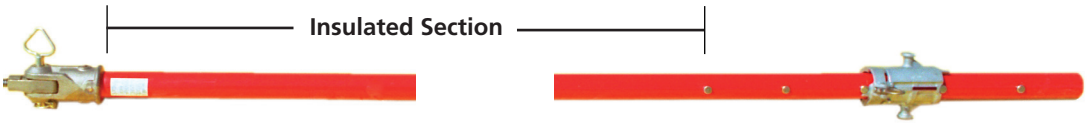
ROLLER LINK STICK

Features & Applications

- Tested per OSHA & ASTM F711
- For spreading and holding conductors at midspan when relocating poles
- Applied to conductor at pole and pulled to position by hand line on butt ring
- Handline should be secured by a temporarily installed screw anchor or other fixed object
- Also used for measuring conductor-to-ground clearance by attaching measuring tape or length of rope to butt ring
- 1-1/4" pole
- Rotating the pole closes the hook, leaving head free to roll along the conductor

Catalog No.	Overall Length	Pole Dia. and Length	Maximum Conductor Size	Max. Work Load, lb.	Approx. Wt., lb.
H47144	58"	1¼" x 4'	605 kcmil ACSR	1000	3¾/1.7 kg.
H47146	82"	1¼" x 6'	605 kcmil ACSR	1000	4¼/1.9 kg.

ADJUSTABLE STRAIN POLES



Clevis furnished with high-strength steel Through Pin E4011510 and Klik Pin P059738P. 2-in. Pole Clamp E4010138 included with each Strain Pole listed below.

12" Strain Jack E4011998 included with each Strain Pole listed below.

Features & Applications

- Tested per OSHA & ASTM F711
- For many transmission and EHV maintenance applications
- Help support conductors while insulators are removed and replaced
- Used with yoke plates and hook assemblies at the conductor
- Also used for structure ends of suspension, V-string or deadend insulator strings
- 5 stainless-steel crosspins are located at 6" intervals on the 2"-diameter Epoxiglas® poles to support hot-end trunnions or hooks
- Engaging deadend and suspension yokes at the hot end also require the adjustable, heat-treated aluminum pole clamp
- Pole clamp can be unlocked and positioned by hotsticks
- On cold end, a high-strength steel strain-jack with bronze tongue provides take-up with a ratchet wrench (see page 2257) and trunnions (page 2255)) (Wrench and trunnions must be ordered as separate items)
- Standard strain jack included with each strain pole provides 12" of adjustment
- Longer strain jacks (for 24" or 36" of take-up) and extra pole clamps also may be ordered as options below

Ordering Information

Adjustable Strain Poles

- **7,500-lb. maximum load rating (2"-diameter Epoxiglas pole)**
- **2-ft. adjustment by Pole Clamp (furnished) in 6" increments on five stainless-steel pins**
- **12"-long Strain Jack E4011998 furnished as standard**
- **Optional 24" & 36" strain jacks and extra pole clamps available below**

Catalog No.	Description	Maximum Voltage Use	Insulated Section	Overall Length	Weight
C4012144	6-ft. Strain Pole	72.5 kV	36 in. (91.44 cm)	7 ft.-8 in.	18 lb. / 8.1 kg.
C4012145	7-ft. Strain Pole	169 kV	48 in. (121.92 cm)	8 ft.-8 in.	18 3/4 lb. / 8.4 kg.
C4012146	8-ft. Strain Pole	242 kV	63 in. (160.02 cm)	9 ft.-11 in.	19 1/2 lb. / 8.8 kg.
C4012147	10-ft. Strain Pole	302 kV	84 in. (213.36 cm)	11 ft.-8 in.	20 7/8 lb. / 9.4 kg.
C4012215	12-ft. Strain Pole	362 kV	102 in. (259.8 cm)	13 ft.-2 in.	22 1/4 lb. / 10 kg.
C4012148	14-ft. Strain Pole	552 kV	135 in. (342.9 cm)	15 ft.-11 in.	23 3/4 lb. / 10.7 kg.
C4012149	18-ft. Strain Pole	765 kV	180 in. (457.2 cm)	19 ft.-8 in.	26 1/2 lb. / 11.9 kg.

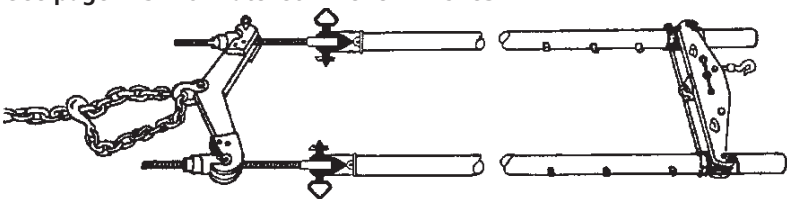
Accessories

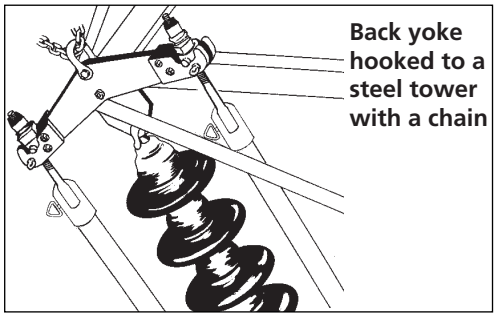
E4010138P	2" Adjustable Pole Clamp	2 lb. / 0.9 kg.
E4011998P	12"-Acme-thread Strain Jack	3 lb. / 1.4 kg.
V4010157P	24"-Acme-thread Strain Jack	4 lb. / 1.8 kg.
V4010158	36"-Acme-thread Strain Jack	6 lb. / 2.7 kg.
E4011510P	Steel Through Pin	3/8 lb. / 0.17 kg.
059738P	Klik Pin	1/16 lb. / 0.03 kg.

CHANCE®

Heavy Duty Two-Pole Strain Carriers (15,000 lb.)

See page 2257 for Ratchet Wrench M19483.

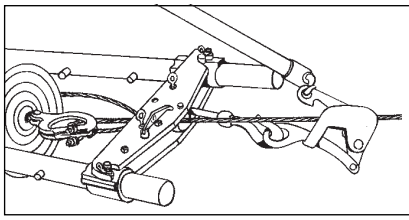




Back yoke hooked to a steel tower with a chain

Features & Applications

- Tested per OSHA & ASTM F711
- Relieve strain from an insulator string to permit removal from energized lines
- Normally used on a single string of insulators
- Also used for multiple strings where conductor-end hardware permits attachment



Front yoke hooked into a wire-grip clamp

- Available here as complete assemblies – separate components may also be ordered
- For adjustable strain poles, see page 2253
- For yokes, sockets and trunnions, see page 2255
- Yokes are fabricated from high-strength aluminum plate
- Feature a steel chain assembly for anchoring the back plate to the structure
- Conductor-end yoke includes a hook and a machined socket (C4011894)

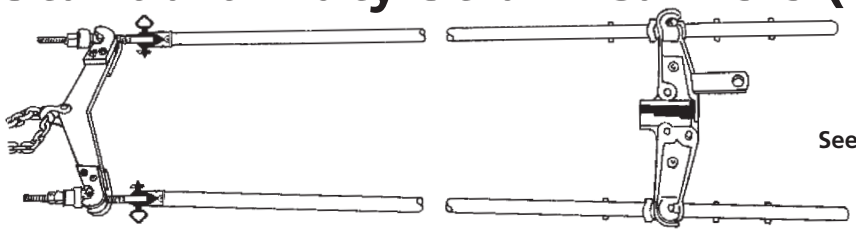
Maximum load rating for each of the strain-carrier assemblies listed below is 15,000 lb. per insulator string.

Catalog Number	Nominal Pole Length	Distance Between Yokes		Weight, each assembly
		Minimum	Maximum	
C4012174	6 ft.	49 "	81"	81 lb. / 36.45 kg.
C4012175	7 ft.	59 "	93"	83 lb. / 37.35 kg.
C4012176	8 ft.	74 "	108"	85 lb. / 38.25 kg.
C4012177	10 ft.	95 "	129"	89 lb. / 40.05 kg.
C4012216	12 ft.	113 "	147"	95 lb. / 42.27 kg.
C4012178	14 ft.	146"	180"	97 lb. / 43.65 kg.
C4012179	18ft.	191"	225"	105 lb. / 47.25 kg.

Common Features For All Units Listed

- Two 2"-dia. Epoxiglas poles
- Yokes are 26" wide on pole centers
- 2" adjustment in 6" increments on five stainless-steel pins per pole
- 12"-long Strain Jacks

Standard Duty Strain Carriers (6,500 lb.)



See page 2257 for Ratchet Wrench M19483.

Tested per OSHA & ASTM F711

Features & Applications

- Same basic use as the two-pole strain carrier
- Relieves strain while removing a single string of insulators
- Distribution strain carrier has a compression deadend yoke at the hot end
- Insulator-conductor hardware features a compression lever-type action, gripping tighter as the load increases
- Various shoes furnished with the kit fit conductors from 0.292" through 0.806" (No. 2 through 397.5 ACSR)
- Maximum load rating for each distribution strain-carrier assembly listed below is 6,500 lb. per insulator string

• Two 1¼"-diameter Epoxiglas poles • Yokes are 18" wide on pole centers
• 2-ft. adjustment in 6" increments on five stainless-steel pins per pole • 12"-long Strain Jacks

Catalog Number	Nominal Pole Length	Distance Between Yokes		Weight, each assembly
		Minimum	Maximum	
C4010411	6 ft.	47½"	81"	82 lb. / 36.9 kg.
C4010410	8 ft.	71½"	105"	92 lb. / 41.4 kg.

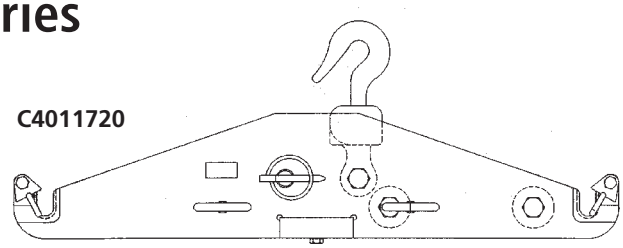
Two-Pole Strain Carrier Accessories

Two-Pole Yokes

- Can be ordered separately to make two pole strain carriers shown on Page 2254
- Yokes are fabricated of high strength (3/4"- and 1"-thick) aluminum plate
- Yokes have 26" width between center of adjustable strain poles used with them
- Maximum load ratings are 15,000 lbs. per insulator string

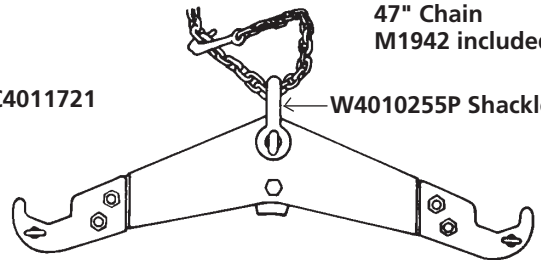
Catalog No.	Description	Weight
C4011720	Conductor End Yoke Assembly	25 lb./11.3 kg.
C4011721	Structure End Yoke Assembly	20 lb./ 9.0 kg.

C4011720



Includes hook and C4011894 Socket

C4011721



47" Chain
M1942 included

W4010255P Shackle

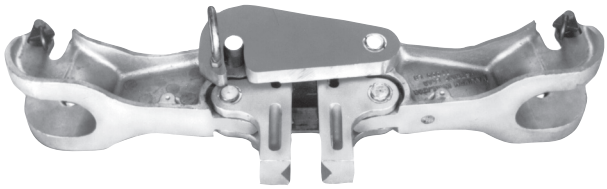
Includes steel loading chain and attachment hardware.

Deadend Compression Yoke Assembly

- Used with Two-Pole Strain Carriers, these units grip compression sleeves over the compressed area, requiring no shoulder or adapter to pull against
- Heat-treated aluminum castings
- Rated at 11,000 lbs. maximum load when used with 2" adjustable strain poles
- Designed specifically for use on extension links
- Swing up gate exposes the shoe area of the assembly to the load and must be closed before taking up tension

Catalog No.	Description	Weight
C4010095	Compression Yoke Assembly Complete with a Hot Line Extension Link for 3/4" and 1" dia. shank & 4 sets of shoes for conductor from 477to 1351 MCM ACSR	44 lb./19.8 kg.

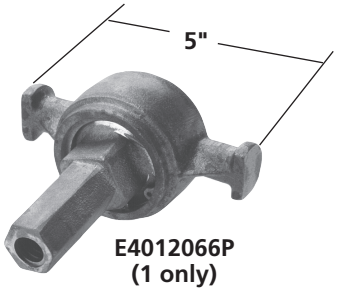
C4010095



Take-Up Trunnions

- For replacement or conversion
- Bronze-alloy and ball-thrust bearing construction for use on adjustable strain poles
- Equal the capacity of all Chance yokes and provide maximum efficiency for the lineman
- Require M19483 Ratchet

Catalog No.	Description	Weight
E4012066P	One Large Trunnion, replaces 70356	3 1/2 lb./1.6 kg.
E4012068P	One Small Trunnion, replaces E4010486	2 lb./0.9 kg.



5"

E4012066P
(1 only)

2 5/8"

E4012068P
(1 only)

Trunnion Gauge

Catalog No.	Description	Weight
T4012265	Trunnion Gauge for 3/4" Acme threads	1/2 lb./0.25 kg.

T4012265 Trunnion Gauge

Deadend Sockets

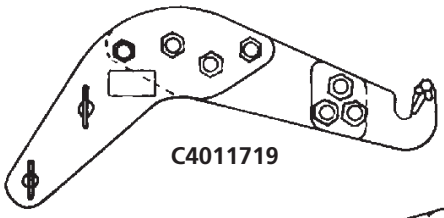
- Furnished with the Two-Pole Strain Carrier
- Use following catalog number for ordering replacement

Max. Load Rating: 15,000 lb.

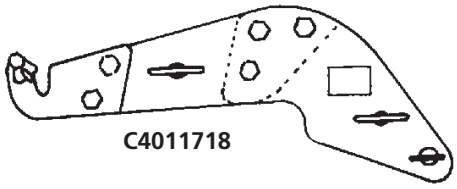
Catalog No.	Bolted Strain Clamp Max.	Conductor Range of Fittings: Maximum Copper or ACSR	Conductor Range of Fittings: Minimum Copper or ACSR	Compression Deadend Body Maximum	Approx. Weight
C4011894	For Extension Links with 7/8" Shank and 1 1/2" Collar.				

Deadend Socket

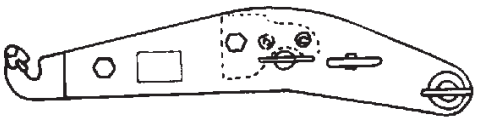
Single-Pole Strain Carrier Yokes



C4011719



C4011718

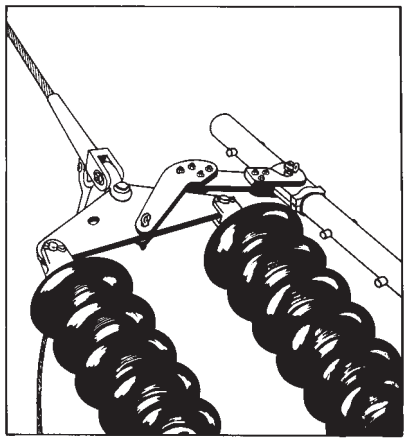


C4011717

Features & Applications

- Can be used with adjustable strain poles (see page 2253) to remove the strain from one string of multiple strings of deadend insulators
- Should be purchased in pairs to fit specific yoke plate construction
- Same yoke assemblies can be used on both the hot and cold end of the insulator string as they hook into the yoke plate hardware
- All of these yokes are rated at 15,000 lbs. maximum load per insulator string

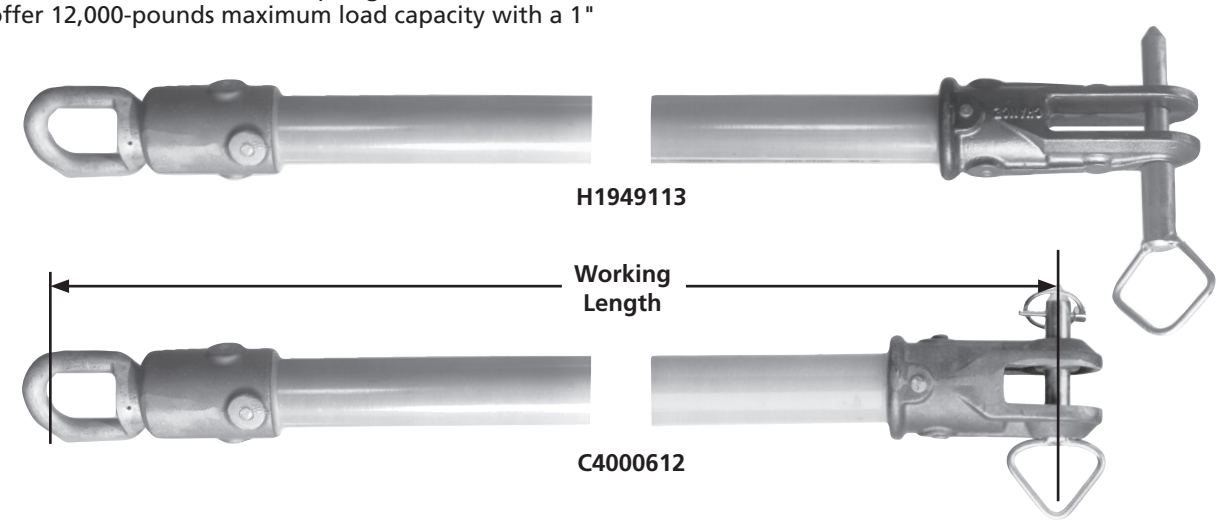
Catalog No.	Fits Yoke Plates	Weight
C4011719	Flat Plates up to 3/4" thick	25 lb./11.3 kg.
C4011718	Flat Plates up to 1" thick	25 lb./11.3 kg.
C4011717	Rectangular or Triangular plates up to 3/4" thick	25 lb./11.3 kg.



Strain Poles
For Bundle Conductor Yoke Plates

Features & Applications

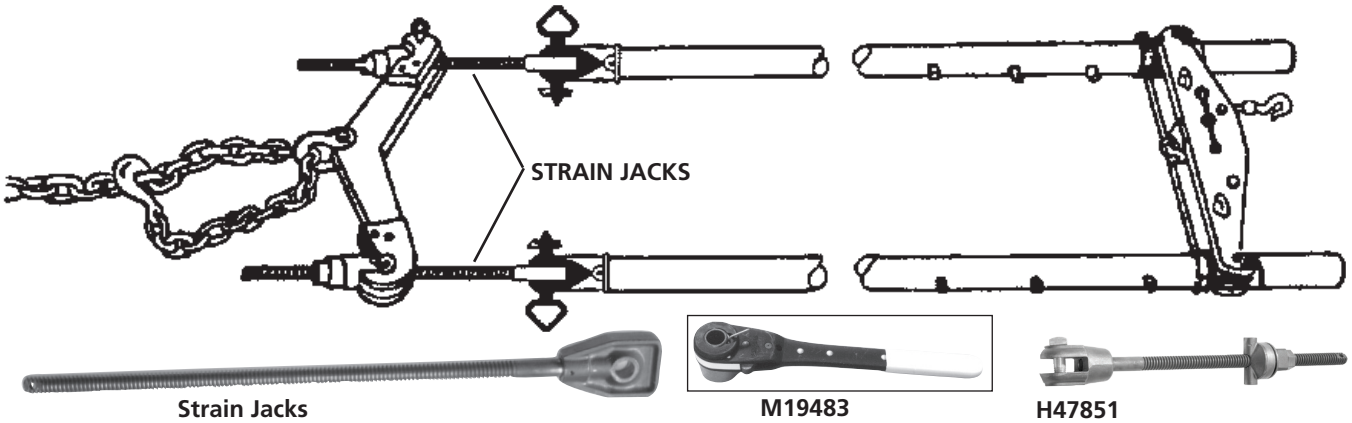
- Tested per OSHA & ASTM F711
- Accommodate a wide range of yoke plate designs and hole spacings
- Both Strain Poles, of 2"-dia. Epoxiglas® construction, offer 12,000-pounds maximum load capacity with a 1" wide clevis for aluminum conductor yoke plates
- Commonly used in deadend rigging, for "V" strings and restrained angles, poles offer two clevis lengths and overall lengths



Catalog No.	Description	Working Length*	Max. Load	Weight
H1949113	Butt Swivel, Clevis 3.35" x 1"	113"	12,000 lb.	17 lb./7.7 kg.
C4000612	Butt Swivel, Clevis 1.56" x 1"	113"	12,000 lb.	14 lb./6.3 kg.
C4000613	Butt Swivel, Clevis 1.56" x 1"	134"	12,000 lb.	15 lb./6.8 kg.
PSC4002915	Clevis, Clevis 1.56" x 1"	113"	12,000 lb.	14 lb./6.3 kg.
PSC4002916	Clevis, Clevis 1.56" x 1"	134"	12,000 lb.	15 lb./6.8 kg.

* Distance from centerline of pin to inside end of butt ring.

Strain Pole Accessories



Strain Jacks
E4011998, V4010157 & V4010158

M19483
Ratchet Wrench

H47851
Clevis, Ratchet, Screw

Catalog No.	Description	Weight
M19483	Ratchet Wrench	2.2 lb./1 kg.
E4011998P	Strain Jack (12" Long) Tongue Type	3 lb./1.4 kg.
V4010157	Strain Jack (24" Long) Tongue Type	4 lb./1.8 kg.
V4010158	Strain Jack (36" Long) Tongue Type	6 lb./2.8 kg.
H47851	Clevis Ratchet Screw 12"	5.5 lb./2.5 kg.
H47852	Strain Jack (18" Long) Clevis Type	8 lb./3.6 kg.
H47853	Strain Jack (24" Long) Clevis Type	10 lb./4.5 kg.
SPM29471	Acme Eyenut	1 lb./0.5 kg.

CHANCE®

Insulator Cradles

Tested per OSHA & ASTM F711

Features & Applications

- Tested per OSHA & ASTM F711
- Three basic types of Insulator Cradles are available for various insulator changeout requirements:
  - o Transmission Cradle is designed to be used on 69 kV to 115 kV deadend or suspension strings supported by a pair of wire tongs or link sticks
  - o EHV Trough-design Cradle is designed to be used on 345 kV to 500 kV deadend or suspension strings and in combination with insulator cradle carriers for moving the insulators (See catalog page 2259)
  - o EHV Side-Opening Cradle is designed to be used on only EHV deadend strings for removing only one string in a double, triple or quad deadend bundle (See catalog page 2260)

TRANSMISSION INSULATOR CRADLE

Features & Applications

- Used to make insulator changes by supporting the string while damaged insulators are replaced
- Also used to pivot the string so that it may be removed and lowered to the ground
- On deadends or running corners, cradles are used in conjunction with strain carriers
- In straight suspensions, they are used with various types of link sticks or adjustable strain pole assemblies
- Made with three 1-1/2" dia. Epoxiglas® poles
- Lightweight, easy to handle and adaptable to many applications
- Lugs, located at the forward end of the cradle, are used to support the insulator string with a pair of wire tongs or link sticks
- Back end of the cradle is supported by ropes tied at the structure
- Hinged in this manner, insulators may be lowered or raised to the best position for changing damaged insulators
- In some cases, cradle is supported in eyes located on the forward yoke of Two-Pole Strain Carriers
- This is performed when raising or lowering of the insulator string is unnecessary

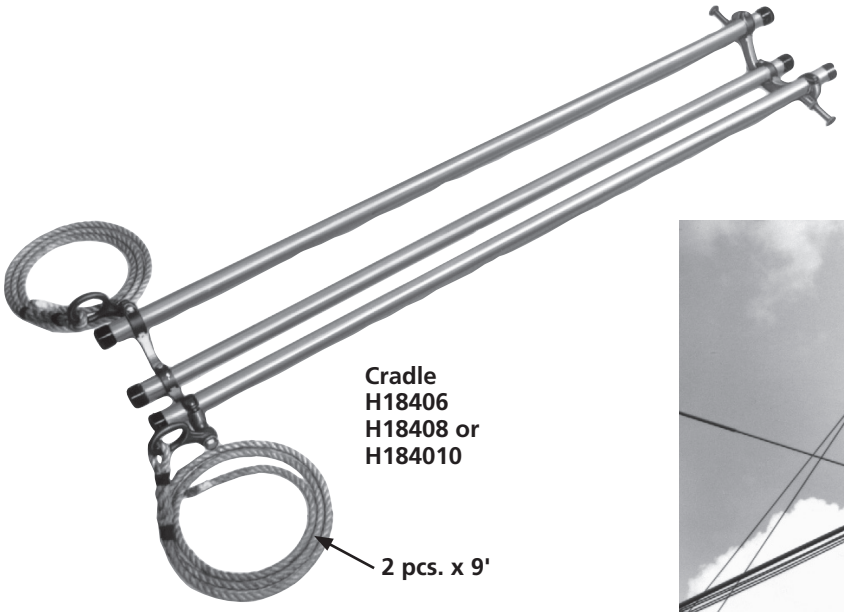


Photo at right shows the insulator cradle being raised or lowered with the use of wire tongs.

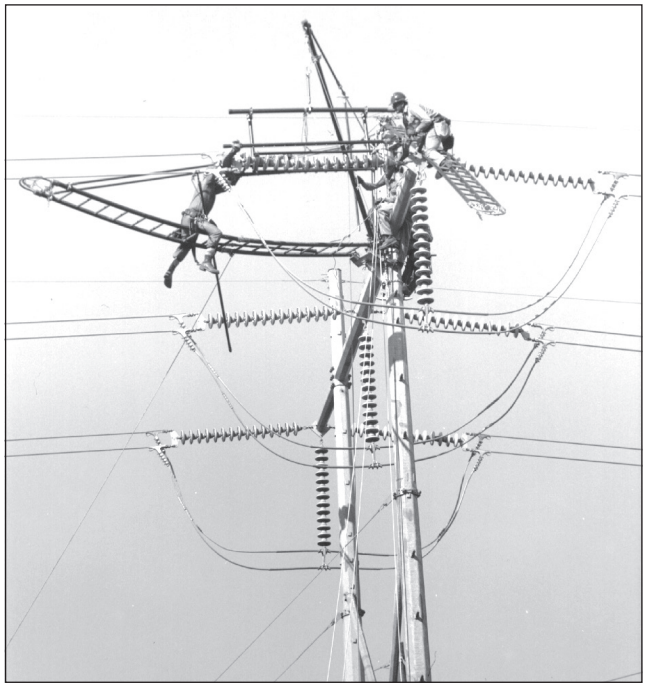
Catalog No.	Overall Length	Recommended Capacity	Approx. Weight
H18406	6-ft. (180cm)	10 10" (250mm) Insulators	19¾ lb./ 8.887 kg.
H18408	8-ft. (240cm)	14 10" (250mm) Insulators	24 lb./11.262 kg.
H184010	10-ft. (300cm)	18 10" (250mm) Insulators	27 lb./13.837 kg.

EHV Trough-Design Insulator Cradle

Bail (070184)

Hook (068922)

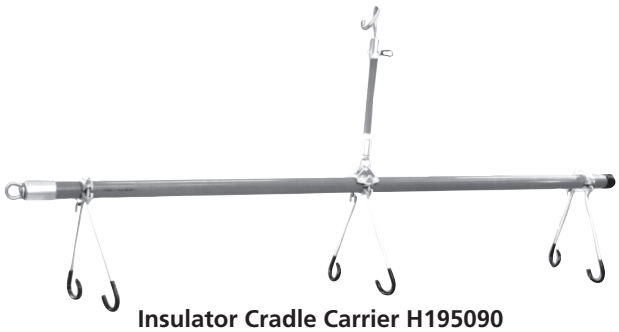
Cradle H19509 or C4010015



Features & Applications

- Tested per OSHA & ASTM F711
- For making insulator changes on lines energized up to and including 500 kV
- Also for lowering insulator strings on deadend and swinging-corner construction, and to raise the insulators on long suspension units
- Heat-treated aluminum castings, durable Epoxiglas® poles, and steel hardware Aluminum castings are lightweight for easy handling
- Deep "trough" design holds insulator string securely
- Also prevents accidental dropping of the string as the slotted insulator-retaining plate secures the top insulator of the string
- Raise or lower for easier insulator changes with a bail attached to a link stick
- Hooks are furnished for installing and removing deadend tool from insulator yokes

Catalog No.	Description	Max. 10" Insulator Capacity	Weight
H19509	9' Insulator Cradle	19	23 lb./10.45 kg.
C4010015	11'4" Insulator Cradle	25	27 lb./12.27 kg.
H195090	Insulator Cradle Carrier	—	25 lb./11kg.



Insulator Cradle Carrier H195090

Features & Applications

- Utilizes a spiral link stick as support for the three hook and clamp assemblies
- Features a 2-1/2" Epoxiglas® insulated ridgepole
- Maximum load is 500 lbs.

STATIC GROUND

Features & Applications

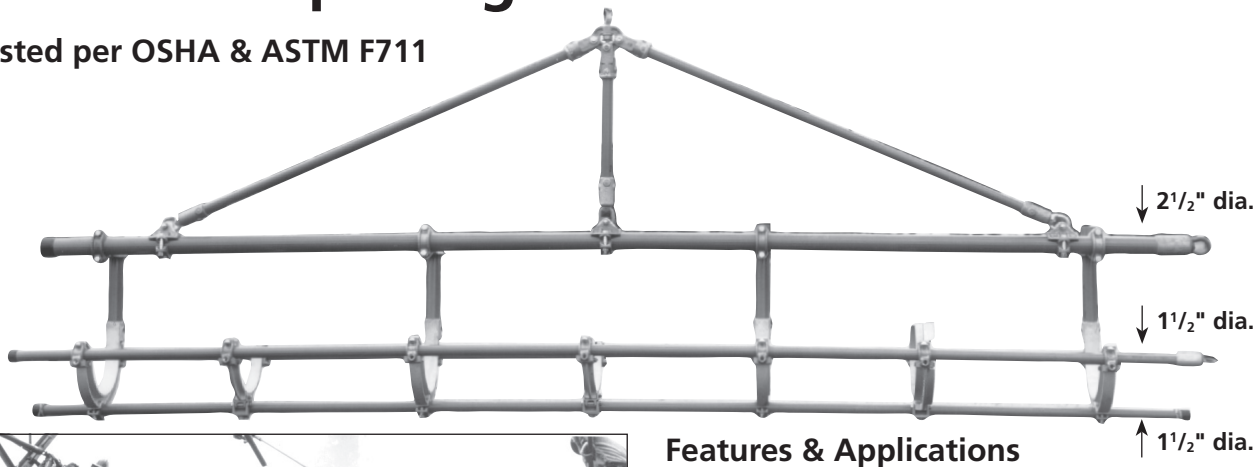
- Eliminates electrostatic charge when working insulator strings
- Drains off charge from insulator string to tower leg
- 6' of No. 2 grounding cable is attached to the Static Ground tool
- Flat face clamp at one end of the grounding cable
- Adjustable jaws fit insulator caps from 2-1/2" to 6"
- Overall length with a 1-1/4" x 19" Epoxiglas® pole, is 30"
- To ground an insulator string, attach the flat face clamp to the tower leg and the Static Ground just under the first insulator cap
- For barehand work, attach the flat face clamp to the bucket shield system and the Static Ground under the second insulator from the LIVE end

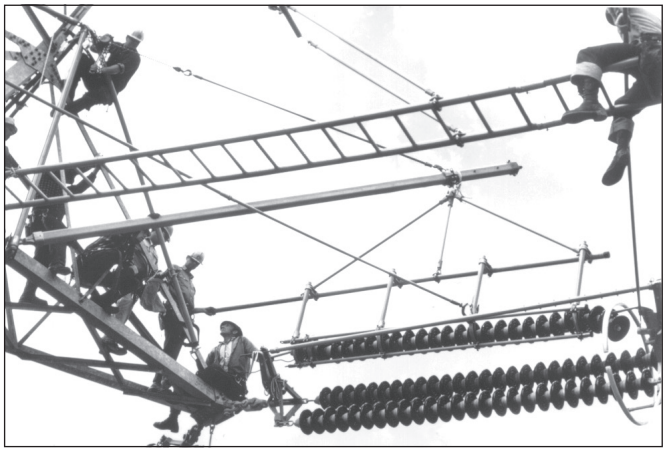
Catalog No.	Description	Approx. Wt.
HG42301	W/Eyescrew Clamp No. G33633SJ	5 lb./2.3 kg.
C6000000	W/"T" Handle Clamp No. G33634SJ	5 lb./2.3 kg.

CHANCE®

EHV Side-Opening Insulator Cradle

Tested per OSHA & ASTM F711

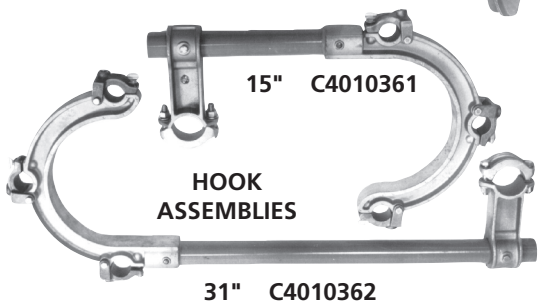




Features & Applications

- For selective removal of any one string in deadend bundles, double, triple or quad
- Eliminates the need for removing top strings in bundle access lower string
- Available in 9', 13' and 16' lengths
- Shipped complete with bridle for attaching to Swivel Boom, an Insulator Retaining Plate and either 15" or 31" Hook Assemblies
- 15" assembly for single or double deadends
- 31" Assembly for removal of bottom strings in 4-bundle deadends, and for double "V"-string assemblies
- 9' Cradle is rated 500 pounds maximum load
- 13' and 16' Cradles are rated at 1000 lbs. maximum load
- Insulator Retaining Plate is dual purpose
- One side of Insulator Retaining Plate is adaptable to 11" insulator bells and the opposite side is adaptable to 12-3/4" insulator bells

INSULATOR RETAINING PLATE C4010455



Catalog No.	Description	Weight
C4010358	9' Cradle, 15" Support Hooks	93 lb./41.9 kg.
C4010359	9' Cradle, 31" Support Hooks	97½ lb./43.9 kg.
C4010356	13' Cradle, 15" Support Hooks	119 lb./53.6 kg.
C4010357	13' Cradle, 31" Support Hooks	123½ lb./55.6 kg.
C4010354	16' Cradle, 15" Support Hooks	125 lb./56.7 kg.
C4010355	16' Cradle, 31" Support Hooks	130½ lb./58.7 kg.
C4010361	15" Support Hook, one only	10 lb./ 4.5 kg.
C4010362	31" Support Hook, one only	11½ lb./ 5.2 kg.
C4010455	Insulator Retaining Plate	7½ lb./ 3.4 kg.
C4010604	Cradle Spacer	5.88 lb. / 2.6 kg.

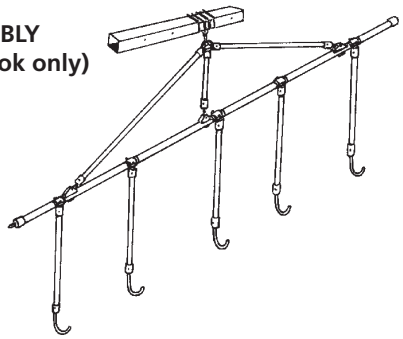
J-HOOK ASSEMBLY

Features & Applications

- For removal of deadend insulator strings
- Plastisol-covered steel hook swivels on end of a 2" x 36" Epoxiglas® pole
- Has a 2-1/2" dia. pole clamp at the top end, allowing horizontal adjustment on an Epoxiglas ridgepole to fit varying lengths of insulator strings
- Useful in removing bottom string in a 3-bundle insulator string
- Rated working load: 250 lbs. per hook

Tested per OSHA & ASTM F711

J-HOOK ASSEMBLY
C4020790 (1 hook only)

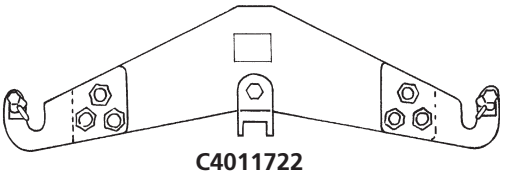


Suspension Insulator Tools

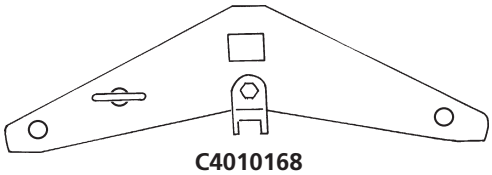
Features & Applications

- Optional tools for relieving the load on suspension insulator strings
- When same crews work on deadend and suspension structures, Adjustable Strain Poles on Page 2253 can be used as base tool for suspension insulator changeouts

SUSPENSION YOKES



C4011722

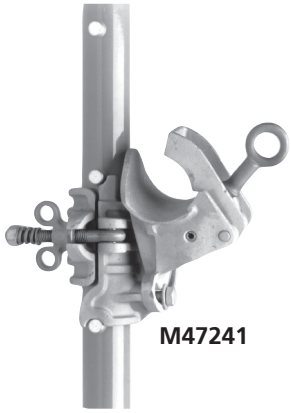


C4010168

- C4011722 yoke is used with the H2947 series adjustable strain poles on page 2253
- C4010168 yoke is used with clevis strain poles on page 2257
- Both yokes are fabricated from high strength aluminum plate
- Maximum load of 15,000 lbs. per insulator string
- Has two spring-loaded latches which engage and lock the pole clamp into position on the yoke, 26" apart center-to-center
- Provides adequate clearance for corona rings
- An eyebolt, which may be assembled on either side of the yoke, facilitates rigging
- Yoke is equipped with a swivel saddle designed to cope with the variables of suspension strings on running corners
- Saddle will rotate a full 360°
- Saddle will handle conductor yoke plates up to 1" in thickness

Catalog No.	Description	Weight
C4011722	Strain-Pole Suspension Yoke with 3½" Swivel Saddle	26 lb./11.7 kg.
C4010168	Clevis Pole Suspension Yoke with 3½" Swivel Saddle	23 lb./10.4 kg.

ADJUSTABLE HOOK ASSEMBLY



M47241

Features & Applications

- For use with adjustable strain poles shown on page 2253
- A direct method of relieving load on suspension string
- Conductor clamp has contoured seat with a trapping gripper and is operated by an eyescrew
- Conductor range is 1-1/8" to 2-1/2" dia.
- Can be positioned every 6" on the strain pole
- Hook is self-aligning within a range of 45° either side of vertical
- Maximum load is 3,500 lbs.

Catalog No.	Description	Weight
M47241	Adjustable Hook Assembly	6 lb./2.7 kg.

SUSPENSION LINK STICKS

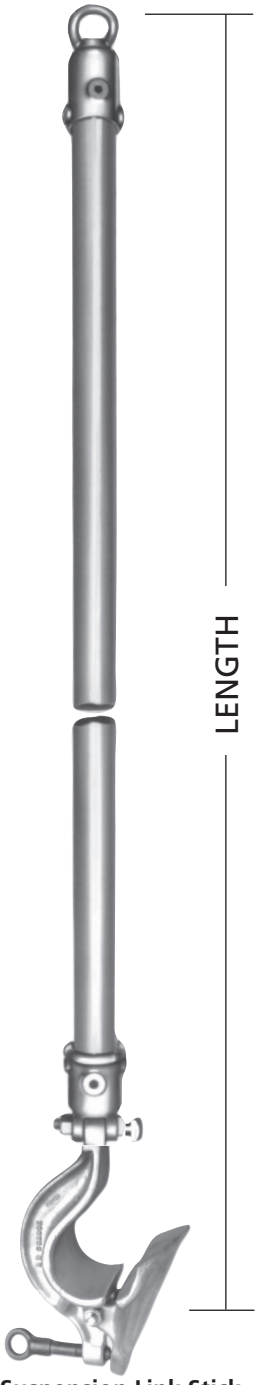
For Adjustable Strain Pole (See Page 2253) or Clevis Pole (See Page 2257)

Features & Applications

- For use on conductors from 1-1/2" to 2-1/2" dia.
- Can be used with various types of takeup devices at the structure end
- Lip of the hook, actuated by an eye screw, swivels to accommodate various conductor sizes
- Maximum load is 6,500 lbs.

Tested per OSHA & ASTM F711

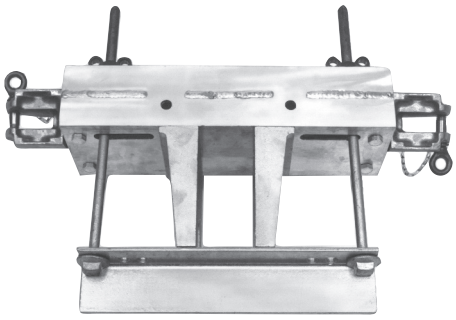
Catalog No.	Pole Dia. & Length	Weight
H472084	1½" x 84"	14 lb./6.3 kg.
H472096	1½" x 96"	16 lb./7.2 kg.
H4720114	1½" x 114"	18 lb./8.1 kg.



Suspension Link Stick

CHANCE®
STRUCTURE YOKES

NOTE: Yokes shown here use Adjustable Strain Poles and small trunnions on page 2252 through 2253.

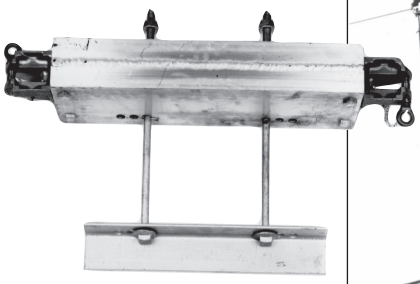


H478322

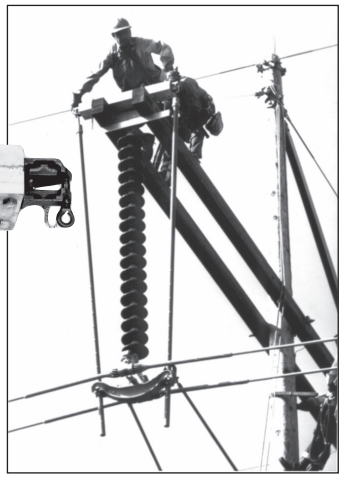
Steel Tower Yoke

- Fits over the tower arm, serving as a support for the Chance Strain Poles
- Relieve tension on suspension insulator string through the "hot end" yoke and conductor yoke plate
- Yoke legs can be adjusted to fit most tower structure configurations
- It is recommended that the design drawings of the tower arms be submitted to Hubbell Power Systems, Inc. with the Tower Yoke order for engineering evaluation
- Swivel trunnions are 26" center to center

Catalog No.	Description	Max. Load	Weight
H478322	Tower Arm Yoke	12,000 lb.	42½ lb./19.1 kg.



C4000219



Wood or H-Frame Tower Yoke

- Similar to the Steel Tower Yoke in design and application
- Two clamp bolts which secure the yoke to the double plank crossarms may be adjusted to three center-to-center positions (9", 11" and 13") to fit various arm sizes
- Vertical take-up on the crossarm is from 9" to 12"
- Swiveling trunnion brackets are located 26" center-to-center
- Longer braces are available on special orders

Catalog No.	Description	Max. Load	Weight
C4000219	H-Frame Crossarm Yoke	12,000 lb.	41 lb./18.5 kg.

C4000445

Steel Arm Yoke

- For use on the arm of a steel pole
- Mounts over a ¾"-thick end plate as shown at left
- Swivel castings in end of yoke for proper alignment of Chance Strain Poles to conductor-end yoke
- Load rating is dependent upon the angle of end plate on arm
- 45° is maximum angle allowed with a maximum load of 9,000 lbs.
- In-line loading of yoke permits a maximum load of 15,000 lbs.
- Bronze pins place the strain poles 21" apart, center-to-center
- Lifting eye is cast into the top of the yoke to assist in rigging

Catalog No.	Description	Max. Load	Weight
C4000445	Steel Arm Yoke	15,000 lb.	14¾ lb./6.6 kg.

T4000838

STEEL ARM BRACKET

The steel arm bracket is used with the C4000445 (steel arm yoke) where the steel arm is not equipped with an end plate. The bracket is made of heat treated aluminum and is complete with a wheel binder. The steel arm bracket serves the same purpose as an end plate to support the yoke assembly.

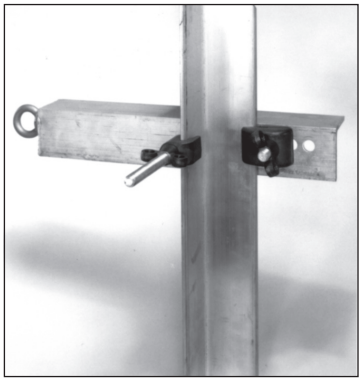
Catalog No.	Description	Max. Load	Weight
T4000838	Steel Arm Bracket	15,000 lb.	15 lb./6.8 kg.

TOWER GIN

- **All-Purpose Handline Gin**

Features & Applications

- 3' x 3" x 1/4" with an aluminum-welded end-plate securing bronze, free-swivel butt ring
- Snatch blocks hooked into butt ring keep handlines from dragging over tower structure, giving clearance to tools in transit
- Bronze mounting hooks are secured with bronze wing nuts on plated steel bolts
- Hook adjustment will fit tower angle from 1-3/4" x 1-3/4" up to 6" x 6"
- Maximum load for the gin is 500 lbs.



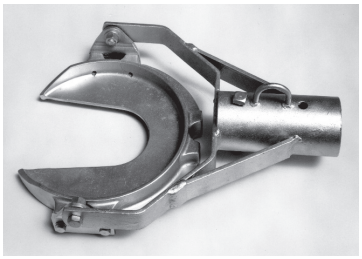
Catalog No.	Description	Length	Weight
M1979	Tower Handline Gin	21"	6¾ lb./3 kg.

TROLLEY POLE SUSPENSION INSULATOR TOOL

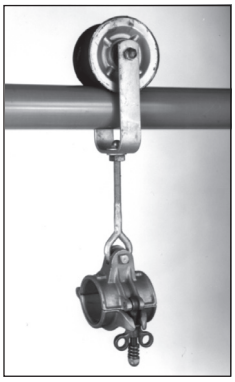
Features & Applications

- Rolls a string of suspension insulators into the structure so that damaged units can be replaced
- Can be fastened, horizontally under the tower arm, using tower type wire tong saddles
- Two types of Trolley Wheel Units are available with single (H47234) or tandem (C4000152) wheels
  - o The tandem wheel units are used on extremely long strings of insulators for better weight distribution
  - o Both trolley wheel types will roll on either a 2-1/2" or 3" Epoxiglas® pole
- Slotted Suspension Insulator Attachment bolts to end of Trolley Pole and can be fitted under the top insulator
- Entire string can be lifted by a slight down pressure on structure end of Trolley Pole
- Insulators are returned to position on Trolley Pole after necessary changeouts

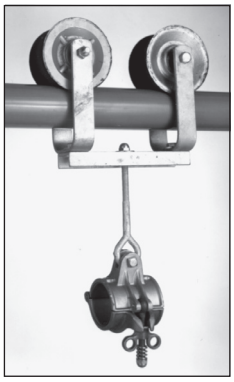
Suitable for 10½" disc insulators on one side and 10¾" disc insulators on the other



H47232



H47234



C4000152

H4721112 (Tested per OSHA & ASTM F711)

TROLLEY POLE COMPONENTS PARTS

Catalog No.	Description	Weight
H47232	Fork Suspension Tool Attachment for 2½" Pole	15½ lb./7.0 kg.
H4721112	Trolley Pole (2½" x 12')	18½ lb./8.3 kg.
H47234	Single Trolley Wheel with 2½" Pole Clamp	6 lb./2.7 kg.
C4000152	Tandem Trolley Wheel with 2½" Pole Clamp	13 lb./5.9 kg.

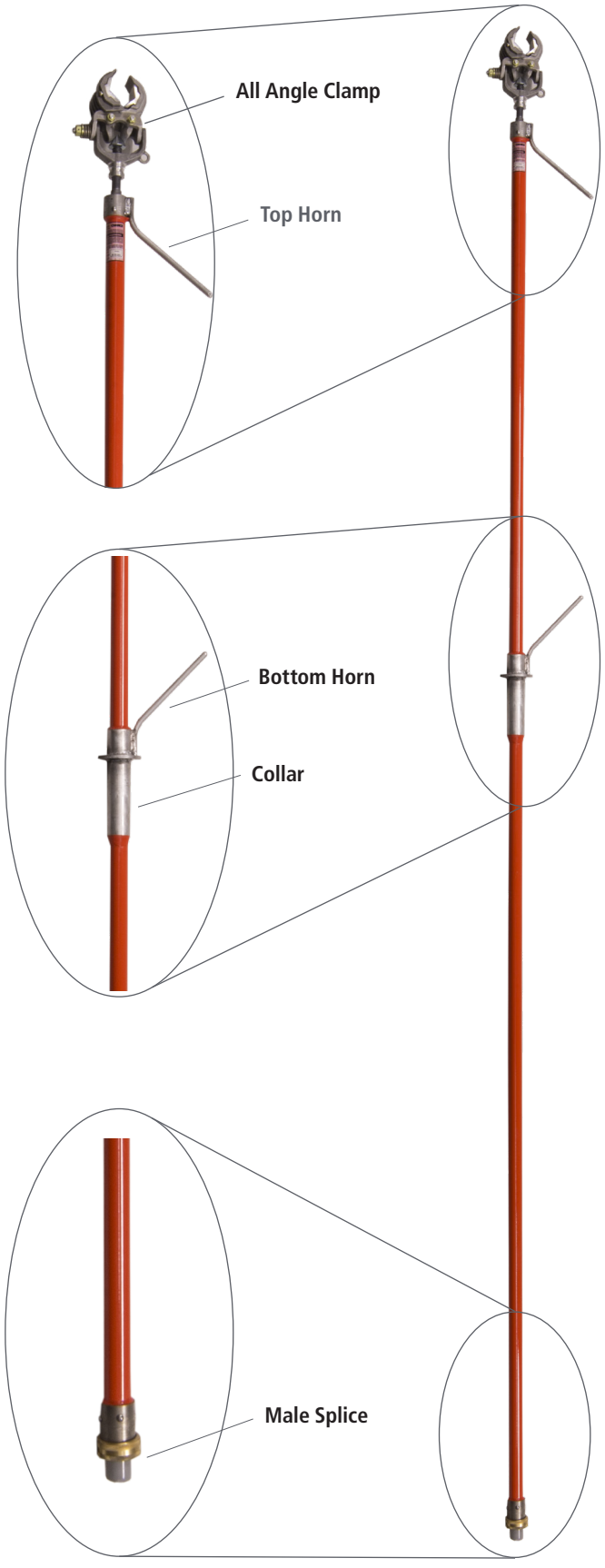
CHANCE®

CHANCE® PORTABLE PROTECTIVE AIR GAP TOOL

SOLUTION FOR MEETING NEW OSHA TRANSMISSION MINIMUM APPROACH DISTANCES

Chance® Portable Protective Air Gap Tools (PPAG) have been used for live line work for more than 40 years. PPAGs provide an OSHA and IEEE approved method for controlling transmission overvoltages, allowing for reduced minimum approach distances. The PPAG controls transmission overvoltages by providing a shorter flashover air gap between the PPAG horns.

Per OSHA Appendix B to §1910.269 an employer can reduce the minimum approach distance at the worksite by installing portable protective gaps on the system.



PPAG Features and Benefits:

- OSHA and IEEE approved method
- Simple to install
- Allows for use of shorter and lighter tools
- Visible at the worksite
- Large All-Angle Ground Clamp mounted on the top end (conductor range 0.258" - 2.88")
- Two permanent Horn Gaps fixed to the pole
- Collar on bottom horn for ground set attachment
- Rigid male splice on the bottom end for attachment of an extension pole
- 1-1/2" dia. x 12' long Epoxiglas® Pole

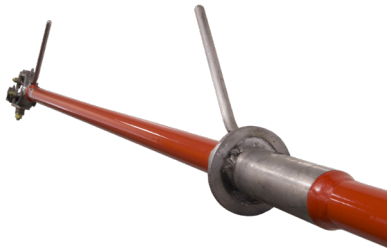
ORDERING INFORMATION

The end user must specify the gap distance based on their specific system parameters.

Refer to IEEE 516 for specifics on how to calculate the gap distance. See Section 4.8.2, Figure 3, and Annex C-1 for sample calculations

Provide your required gap distance to Hubbell Power Systems, Inc. to have a specific catalog number set up to meet your needs.

BUILD YOUR CATALOG NUMBER FOR YOUR SPECIFIC AIR GAP TOOL BELOW:

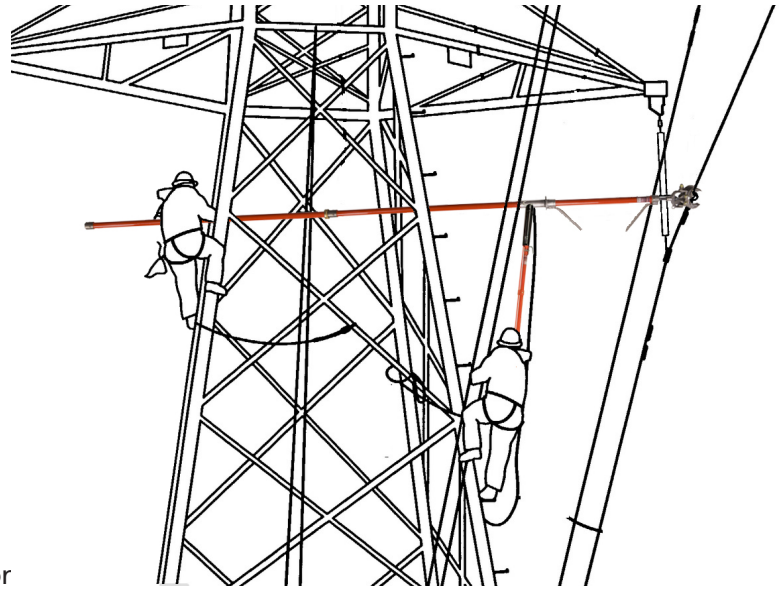
PSCPPAG	XXX	AAA	YY
	**Fixed Horn Gap Distance (inches)**	**Overall Length of Gap Tool (inches)**	**Optional Extension Pole (can also be ordered as a separate catalog number)** **00 - None** **06 - 6′ Pole** **08 - 8′ Pole** **10 - 10′ Pole** **12 - 12′ Pole**

For example:
PSCPPAG04714406 for PPAG with 47″ Gap, 144″ Overall Length, with Male Splice and 6′ Extension Pole.

ACCESSORIES

Extension Poles:
PSC4033760 Extension Pole 1-1/2″ x 6′
PSC4033761 Extension Pole 1-1/2″ x 8′
PSC4033762 Extension Pole 1-1/2″ x 10′
PSC4033763 Extension Pole 1-1/2″ x 12′

Ground Set:
G1Y220BCA1F10:
Single Phase Ground Set Lead:
20′ S6118 2/0 Yellow Jacket Cable
1 G422810SJ All-Angle Ground Clamp
1 C6002231 Flat-Face Ground Clamp
Shrouded Copper Ferrules with Shrink Tube
Factory Assembled
Other lengths and configurations available or request.



Typical application on adjacent structure, using an Extension Pole, a Grip-All, and Ground Lead down to lattice tower.

CHANCE®

Suspension Insulator Lifter Tool

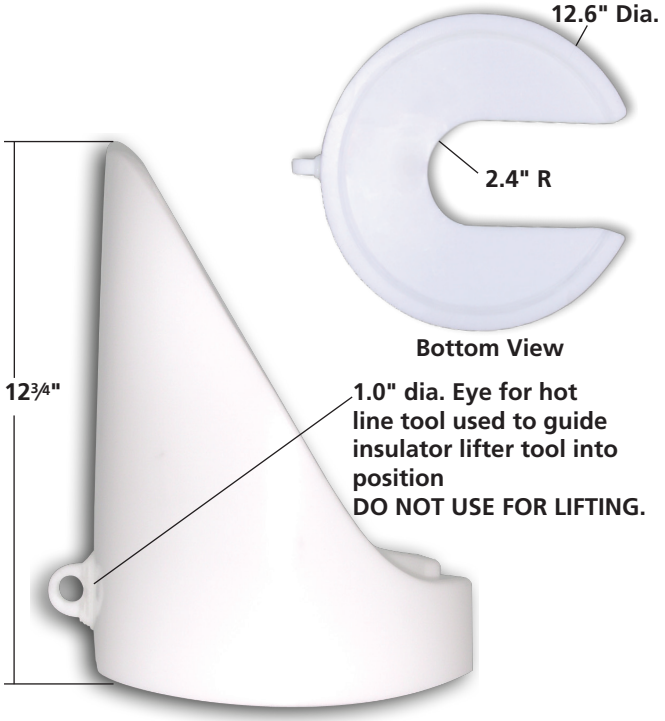
•For up to 12.5"-diameter insulators

Features & Applications

- For picking up suspension-insulator strings on electric transmission lines during live-line maintenance
- High-density polyethylene tool

TO THOSE WHO CLIMB™

*NOTE: When tying appropriate knot in load line passed through hole above, leave enough tail to encircle insulator twice and tie back onto load line. Use only a capstan hoist or winch/ hoisting equipment specifically designed for the task to raise/lower insulator strings



Ordering Information

Catalog No.	Rated Working Load	Approx. Wt.
PSC4002927	400 lb. / 181.4 kg.	13.5 lb./6.1 kg.

IMPORTANT:
1. Designed for live line work, this tool must be visually inspected and cleaned with an appropriate agent before each use
2. Do not use for construction procedures such as installing a string of insulators complete with traveler and ropes

NOTES

NOTES

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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NEVER COMPROMISE™

CHANCE®

Jumpers & Load Pickup Tools

Catalog 2300 March 2020

HUBBELL®

CHANCE®

Insulated Jumper Clamps

All Chance® Insulated Jumpers meet ASTM F 2321 Standard Specification.

Features & Applications

- Used for bypassing work areas when equipment is under repair
- Also used for upgrading lines and making temporary or emergency repairs
- Handles are tough, high-impact strength polyethylene with a wide hand guard flange

G4758
15kV

15 kV Ø-Ø Rated — 300 Amp Capacity

The G4758 series Jumper Clamp has:

- Handle length of 5-5/8" below the handguard
- Bearing type floating washer lower contact that improves gripping action and prevents conductor scoring
- Metal parts with copper alloy to improve oxidation resistance
- 300 amp continuous rating based on using 2/0 Jumper Cable on tap side

Style I per ASTM F 2321 Standard Specification

Cat. No.	Description	Main Line Range Max.	Main Line Range Min.	Jumper Cable Range Max.	Jumper Cable Range Min.	Weight
G4758	Pair* of Clamps	336.4 ACSR .721"	#6 Copper .162"	2/0	#2	2 1/4 lb./ 1.0 kg.

*Cat No. T6010003 for single clamp.

G4765
25kV

25 kV Ø-Ø Rated — 400 Amp Capacity

The G4765 series Jumper Clamp has:

- The same polyethylene material in the handle as other Chance Jumper Clamps
- Handle length below handguard is 7-1/2"

Style I per ASTM F 2321 Standard Specification

Cat. No.	Description	Main Line Range Max.	Main Line Range Min.	Jumper Cable Range Max.	Jumper Cable Range Min.	Weight
G4765	Pair* of Clamps	477 ACSR .883"	#6 Copper .162"	4/0	#2	2 3/4 lb./ 1.3 kg.

*Cat. No. T6010039 for single clamp.

G4775
35kV

35 kV Ø-Ø Rated — 400 Amp Capacity

The G4775 series Jumper Clamp has:

- A larger contact opening for use on larger conductor
- Handle length below the handguard is 8-3/8"

Style I per ASTM F 2321 Standard Specification

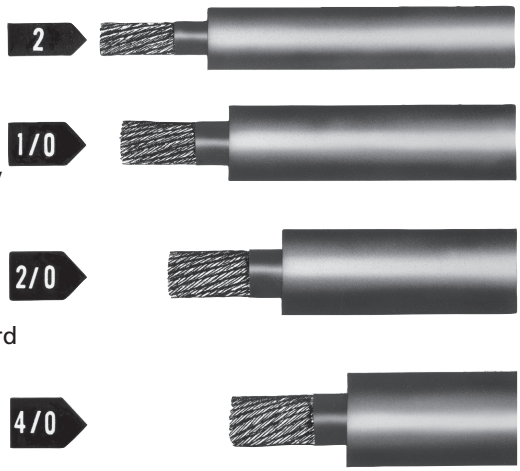
Cat. No.	Description	Main Line Range Max.	Main Line Range Min.	Jumper Cable Range Max.	Jumper Cable Range Min.	Weight
G4775	Pair* of Clamps	954 ACSR 1.165"	#6 Copper .162"	4/0	#2	3 lb./ 1.4 kg.

*Cat. No. T6010040 for single clamp.

Jumper Cable rated Ø-Ø 15 kV
with EPR Insulation/Jacket

Features & Applications

- Extremely flexible even at low temperatures
- Features insulation/jacket combination resistant to abrasion, oil, heat, moisture and ozone
- Orange/Red color of mold-cured ethylene-propylene-base coating imparts high visibility
- AWG size and voltage rating are embossed at 4-foot intervals for easy identification
- For extended service life, an extruded screen interfaces insulation and conductor
- This strand screen improves voltage-stress control by adding dielectric strength and eliminating internal corona
- Insulation and conductor screen meet and exceed ICEA-NEMA standard S-68-516
- For easy handling in adverse conditions, conductors are extra flexible alloy-coated copper-stranded rope per ASTM B-189 or B-33
- Ampacity ratings are based on 90°C conductor temperature at 40°C ambient



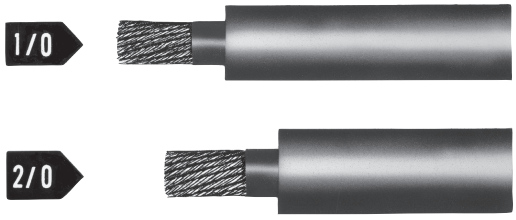
Type I per ASTM F 2321 Standard Specification

Catalog No.	Size AWG	Stranding	Approx. Cond. Diameter	Approx. Cable O.D.	Approx. Ampacity Rating, Amps	Weight Per 1000 Ft.
S10043	#2	259/No. 26	0.322"	0.779"	200	438 lb./197 kg.
S10044	1/0	413/No. 24	0.404"	0.863"	260	598 lb./269 kg.
S10045	2/0	273/No. 23	0.455"	0.914"	300	707 lb./318 kg.
S10046	4/0	437/No. 21	0.602"	1.065"	400	1047 lb./471 kg.

Jumper Cable rated Ø-Ø 25 kV and 35 kV
with EPR Insulation/Jacket

Features & Applications

- Extremely flexible even at low temperatures
- Features insulation/jacket combination resistant to abrasion, oil, heat, moisture and ozone
- Orange/Red color of mold-cured ethylene-propylene-base coating imparts high visibility
- AWG size and voltage rating are embossed at 4-foot intervals for easy identification
- For extended service life, an extruded screen interfaces insulation and conductor
- This strand screen improves voltage-stress control by adding dielectric strength and eliminating internal corona
- Insulation and conductor screen meet and exceed ICEA-NEMA standard S-68-516
- For easy handling in adverse conditions, conductors are extra flexible alloy-coated copper-stranded rope per ASTM B-189 or B-33
- Ampacity ratings are based on 90°C conductor temperature at 40°C ambient



For connectors, see page 2304.

Type I per ASTM F 2321 Standard Specification

Catalog No.	Size AWG	Stranding	Approx. Cond. Diameter	Approx. Cable O.D.	Approx. Ampacity Rating, Amps	Weight Per 1000 ft.
25 kV Cable:						
S11272	1/0	413	0.404"	1.113"	260	801 lb./ 360.5 kg.
S11273	2/0	266	0.450"	1.160"	300	913 lb./410.9 kg.

Type I per ASTM F 2321 Standard Specification

35 kV Cable:						
S11274	1/0	413	0.404"	1.287"	260	985 lb./443.3 kg.

CHANCE®

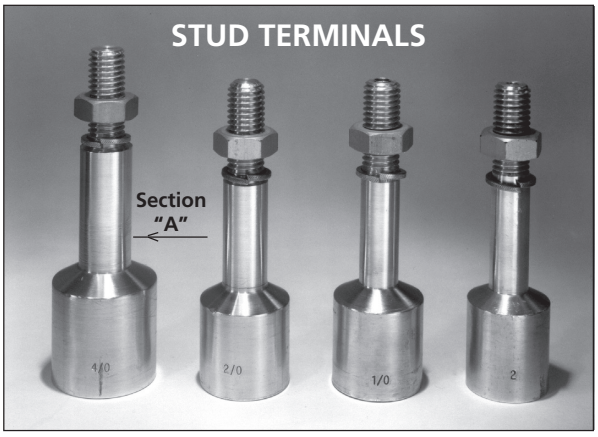
Jumper Terminals
for 15kV EPR Jumper Cable only

Features & Applications

- Shrouded terminals are for use with only grounding clamps (see Section 3000) and EPR Jumper Cable (Page 2305)
- Should only be used as temporary jumper assemblies (and should not be used with insulated jumper clamps, page 2302)
- Extra heavy-duty shroud prevents excessive cable stress at terminal connection
- To match pressure-type and threaded connectors on grounding clamps, both plug and stud terminal styles are available
- Two crimps in Section "A" with Burndy die numbers (or equivalent) below secure terminal to cable
- Anderson VERSA-CRIMP® compression tools are acceptable for making these crimped connections

PLUG TERMINALS (NO THREADS)
Type III per ASTM F 2321 Standard Specification

Cable Size	Catalog No. One Unit, Not Installed	Burndy Die No.	Weight per terminal
#2	C6010190	U243	2 oz.
1/0	C6010191	U243	
2/0	C6010192	U166-206	
4/0	C6010193	U249	



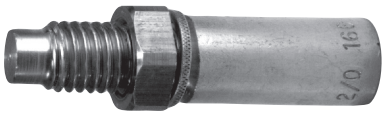
STUD TERMINALS (THREADED)
Type III per ASTM F 2321 Standard Specification

#2	C6010198	U243	3 oz.
1/0	C6010199	U243	
2/0	C6010200	U166-206	
4/0	C6010201	U249	

Jumper Clamp Connector Assemblies
for 15kV, 25kV & 35kV Jumper Cable

Features & Applications

- Copper Connector Assemblies are necessary to join cable and clamp together on Jumper Clamps or Load Pickup Tools only
- Threads are 5/8-11 NC for all connectors
- Each Catalog Number consists of a copper connector, nut and lockwasher
- Anderson VERSA-CRIMP® compression tools are acceptable for making these crimped connections



C6002598

Type VI per ASTM F 2321 Standard Specification

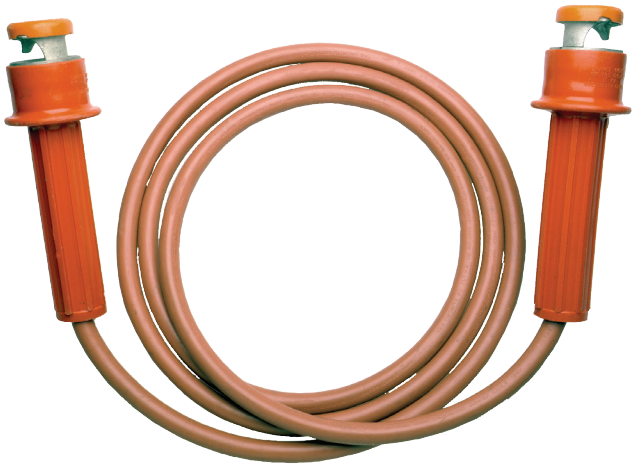
Catalog No.	Cable Size	Burndy Die No. (or equivalent)	No. of Crimps	Weight each
C6002598	No. 2	U165	2	4 oz.
C6002599	1/0	U165	2	4 oz.
C6002600	2/0	U165	2	4 oz.
C6002601	4/0	U166	2	4 oz.

Insulated Jumper Sets for 15 kV, 25kV and 35 kV

Features & Applications

- Used for bypassing work areas when equipment is under repair
- Also used for upgrading lines and making temporary or emergency repairs
- Pre-assembled for popular distribution-system voltages, 10 sets offer a choice of cable sizes
- Continuous-current ratings for sets range from 200 to 400 amperes based on cable size selected
- All sets include cable listed below
- Ampacity ratings are based on 90°C conductor temperature at 40°C ambient
- AWG size and voltage rating are embossed at 4' intervals on EPR (ethylene-propylene) insulated jacket
- Insulation and conductor screen meet and exceed ICEA-NEMA standard S-68-516
- Extra-flexible conductors are alloy-coated copper-stranded rope per ASTM B-189 or B-33

All Chance® Insulated Jumpers meet ASTM F 2321 Standard Specification.



- Jumper clamps feature "floating-washer" design and high-impact polyethylene handles with wide handguard flange

- Small 15kV clamp has 5-5/8" handle below handguard
- Large 15 kV and 25kV clamps each has 7-1/2" handle below handguard
- 35kV clamp has 8-3/8" handle below handguard
- NOTE: Adequate rubber gloves must be worn when installing or removing jumper clamps

15 kV Jumper Cable

Size, AWG	Continuous Current Rating, Amperes	Reference Cat. No.
#2	200	S10043
1/0	260	S10044
2/0	300	S10045
4/0	400	S10046

25 kV Jumper Cable

1/0	260	S11272
2/0	300	S11273

35 kV Jumper Cable

1/0	260	S11274

Ordering Information

Each set includes one 12 ft. cable assembled with two crimp connectors to two jumper clamps.

15 kV Sets
Style I, Type I, Class A
per ASTM F 2321 Standard Specification

Small-Conductor Range

Catalog No.	Cable	Weight	Main Line Range	
C6010163	#2	8 lb. / 3.6 kg.	Min.	Max.
C6010162	1/0	9 3/4 lb. / 4.4 kg.	#6 Sol. Cu. (0.162")	336.4MCM ACSR (0.721")
C6010164	2/0	11 1/4 lb. / 5 kg.		

Large-Conductor Range

C6010171	#2	8 lb. / 3.6 kg.	#6 Sol. Cu. (0.162")	477 MCM ACSR (0.883")
C6010172	1/0	9 3/4 lb. / 4.4 kg.		
C6010173	2/0	11 1/4 lb. / 5 kg.		
C6010174	4/0	15 1/4 lb. / 7 kg.		

25 kV Sets
Style I, Type I, Class A
per ASTM F 2321 Standard Specification

C6010269	1/0	10 lb. / 4.5 kg.	#6 Sol. Cu. (0.162")	477 MCM ACSR (0.883")
C6010270	2/0	11 1/2 lb. / 5.2 kg.		

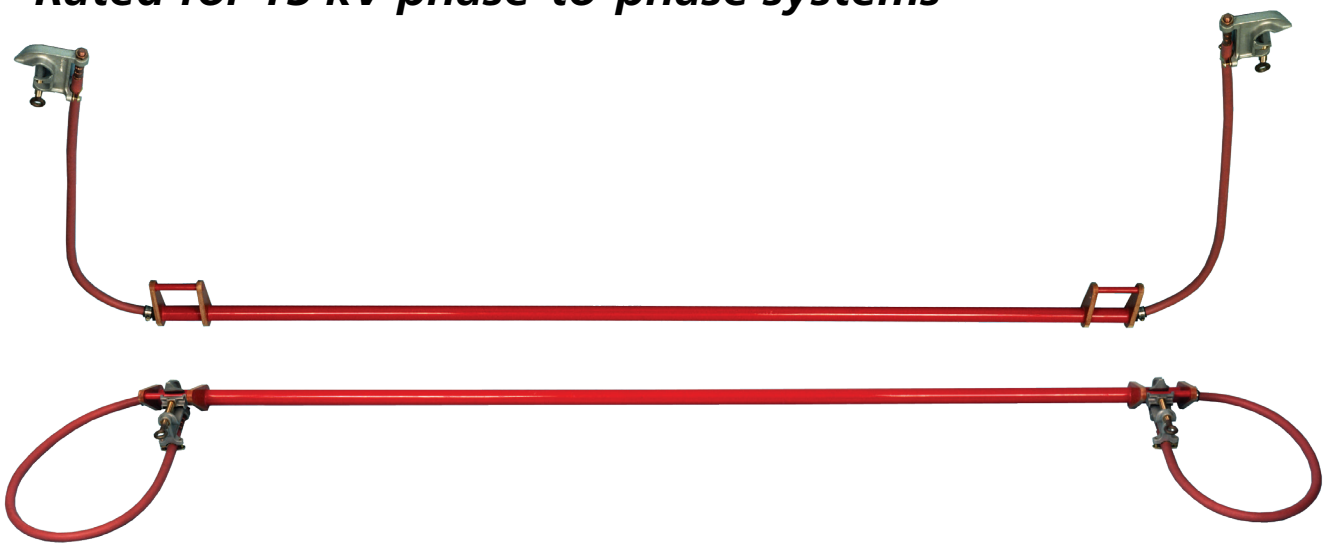
35 kV Set
Style I, Type I, Class A
per ASTM F 2321 Standard Specification

C6010271	1/0	15 1/2 lb. / 7 kg.	#6 Sol. Cu. (0.162")	954 MCM ACSR (1.165")

CHANCE®

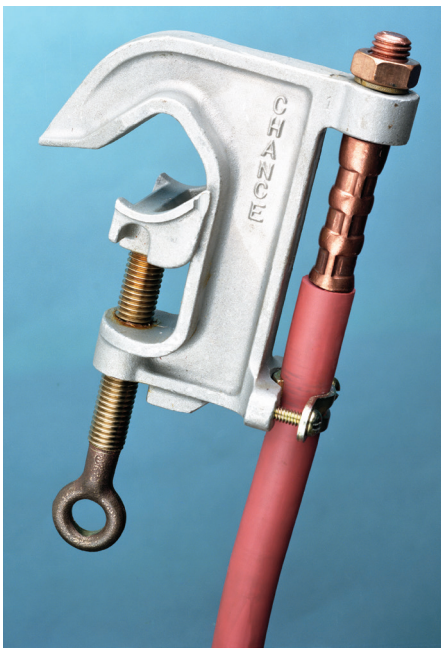
Insulated By-Pass Jumpers

• *Rated for 15 kV phase-to-phase systems*



Features & Applications

- Center support for easy application
- Available in four jumper-cable sizes
- Features mid-span orange 8'-long epoxy-resin, fiberglass-reinforced-plastic (FRP) tube
- Rigid 1-1/2"-O.D. tube serves as a support for easy handling of jumper set by rubber gloves or hot-line tools
- This makes the unit especially handy when jumpering switchgear, reclosers or cutting in double deadends
- Completely pre-assembled
- Two non-metallic hangers – one at each end of the FRP support tube
- These hangers provide for parking the by-pass clamps while moving the jumper set into or out of the work area since the 16'-long jumper cable (with EPR jacket) is secured where it exits the FRP tube, 4' of cable extend from both ends of the rigid support
- Threaded compression assemblies – each comprising a connector, nut and lockwasher, all of copper – are applied at the cable ends
- Two clamps (each a Chance C6001743) also come installed with cable strain-relief clamps to complete the by-pass jumper set



Ordering Information

Insulated Jumper Sets
Each: 16-ft. overall length (includes 8-ft. tube) with two C6001743 clamps applied on cable by copper connector assemblies

Catalog Number	Cable Size, AWG	Continuous Current Rating	Weight (lb./kg.)
C6010260	#2 – 15kV	200 amperes	27/12.15
C6010261	1/0 – 15kV	260 amperes	29/13.05
C6010262	2/0 – 15kV	300 amperes	32/14.4
C6010263	4/0 – 15kV	400 amperes	37/16.65

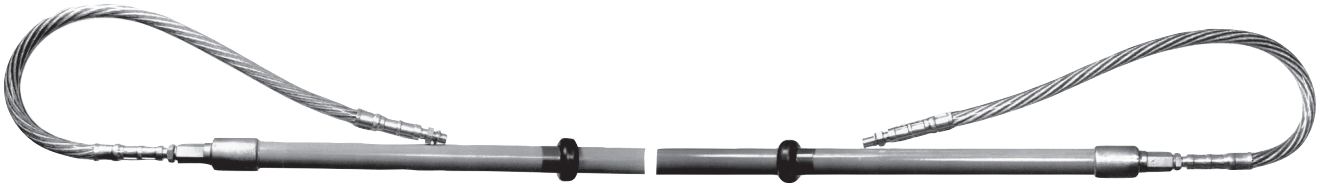
Clamp Specifications

- **Aluminum body with smooth jaws**
- **Bronze eyescrew with fine threads**

Recommended Torque	250 inch-pounds
Main Line Range:	
Minimum	#6 Solid Copper (0.162")
Maximum	1590 kcmil ACSR (1.5")
Terminal threads	5/8"-11 UNC (plus cable strain-relief clamps)

34.5 kV By-Pass Jumpers

20 kV Phase-to-Ground

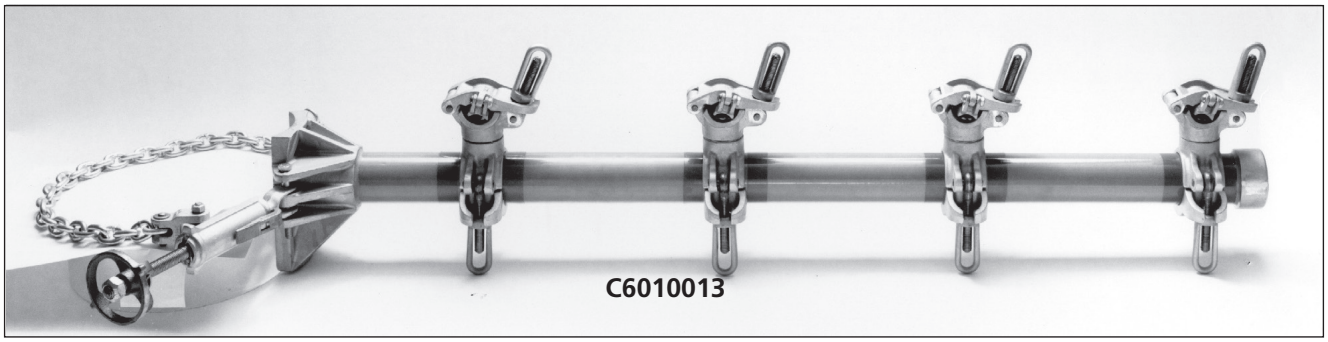


Features & Applications

- Solid aluminum rod is epoxi-sealed inside a polypropylene tube
- Tube is silicone-sealed inside a 1-1/2" Chance Hot Stick handle
- Brass couplings are threaded onto the end of the solid rod, pinned and 3' of 4/0, clear
- Jacketed grounding cable is threaded into the coupling.
- Current capacity is 400 amps

Catalog No.	Description	Approx. Wt.
C6010036	8' Epoxiglas, 14' Over-all w/ Threaded Stud Terminals	18 lb./ 8.1 kg.
C6010037	10' Epoxiglas, 16' Over-all w/ Threaded Stud Terminals	21 lb./ 9.5 kg.
C6010038	12' Epoxiglas, 18' Over-all w/ Threaded Stud Terminals	24 lb./ 10.8 kg.

JUMPER CABLE SUPPORT



C6010013

- Four swivel-action clamp assemblies with a cable diameter capacity of from 3/4" to 1-1/2" provide a non-slip grip for jumper cables
- Prevents sagging secondaries and cables touching the ground
- Each clamp is rated to carry 75 lbs.
- Epoxiglas® arm is 2-1/2" in diameter by 4' long and includes wheel tightener for pole mounting

Catalog No.	Description	Weight
C6010013	Cable Support, wheel binder	25 lb./11.3 kg.

INSULATED HANGER

- Serves as convenient parking stand for linemen installing Jumper Clamps or Grounding Clamps on lines up to 34.5 kV
- 1-1/4" x 15" Epoxiglas® pole provides the insulated section
- Bronze double stud fitting is 1/2" x 3-1/2" on each side

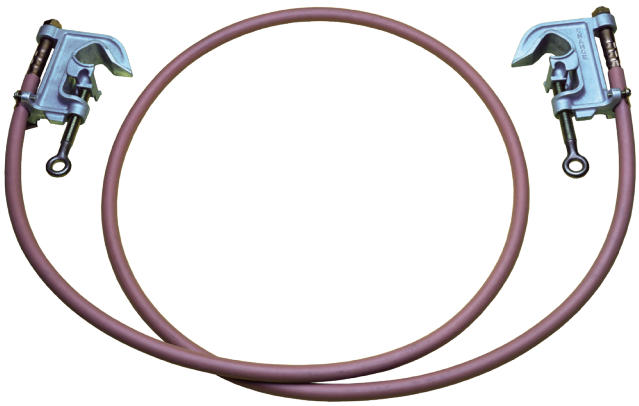
Catalog No.	Conductor Range		Weight
	Max.	Min.	
S16007	636 MCM ACSR	#8 Solid Copper	2¼ lb./1.0 kg.

CHANCE®

Insulated Jumper Sets
for 15kV hotstick applications

Features & Applications

- Meet ASTM F 2321 Standard Specification
- Eight popular sets below serve most applications
- Other clamps and cable combinations available upon request



Reference
15 kV Jumper Cable

Size, AWG	Continuous Current Rating, Amperes	Reference Cat. No.
#2	200	S10043
1/0	260	S10044
2/0	300	S10045
4/0	400	S10046

- Ampacity ratings are based on 90°C conductor temperature at 40°C ambient
- AWG size and voltage rating are embossed at 4' intervals on EPR (ethylene-propylene) insulated jacket
- Insulation and conductor screen meet and exceed ICEA-NEMA standard S-68-516
- Extra-flexible conductors are alloy-coated copper-stranded rope per ASTM B-189 or B-33
- Two C-type aluminum grounding clamps with smooth jaws and bronze eyesecrews
  - o Cat. No. C6001743 (see Catalog Section 3000)
  - o Main Line Range: #6 solid copper (0.162") through 1590kcmil ACSR (1.50")
- 15kV EPR-insulated jumper cable
  - o Choice of four sizes
  - o Choice of 12- or 15-foot length
- Two threaded copper compression ferrules
  - o Installed on cable selected
  - o Assembled to clamps

Ordering Information

Each set includes cable in length listed assembled by two crimp connectors to two clamps.

#2 Cable Sets
Style II, Type II, Class A
per ASTM F 2321 Standard Specification

Catalog No.	Cable Length	Weight
T6010281	12 feet	8 3/4 lb. / 4 kg.
T6010282	15 feet	10 lb. / 4.5 kg.

1/0 Cable Sets
Style II, Type II, Class A
per ASTM F 2321 Standard Specification

T6010283	12 feet	10 2/3 lb. / 4.8 kg.
T6010284	15 feet	12 1/2 lb. / 5.6 kg.

2/0 Cable Sets
Style II, Type II, Class A
per ASTM F 2321 Standard Specification

T6010285	12 feet	12 lb. / 5.4 kg.
T6010286	15 feet	16 lb. / 6.4 kg.

4/0 Cable Sets
Style II, Type II, Class A
per ASTM F 2321 Standard Specification

T6010287	12 feet	16 lb. / 7.3 kg.
T6010288	15 feet	19 lb. / 8.7 kg.

Load-Pickup Tool
for 15kV systems

- Electrical Ratings: Nominal 15kV 3-phase or 8.3kV single phase circuits; 250 amps continuous current
- Main Line Range: #6 Copper (0.162") minimum through 795 kcmil ACSR (1.108") maximum

Features & Applications

- Rated for loads as high as 250 amperes
- Fits #6 Copper through 795 kcmil ACSR
- Can be used to pickup loads and carry 250 Amps at 15kV
- Rubber gloves should be worn while installing
- Head has a floating washer to minimize conductor damage as jaws are installed
- Contacts are spring loaded and can be closed by pulling an insulated lanyard, putting the operator away from the tool during pickup operations
- Positive contact operation
- Tool cannot be used as a load-break tool as the operator cannot open the contacts while the tool is on the conductor
- Fiberglass rod, attached to the end of the lanyard, is used to recock the contacts
- Because it must be inserted through head of tool, lineman must remove tool from conductor before recocking
- Orange-tinted translucent Lexan® housing permits easy visual inspection
- Nylon handguard is used to keep lineman's hand away from energized area
- By simply removing two screws in handguard, the tool can be disassembled for inspection and maintenance
- All current carrying parts are copper or copper alloy and contacts are silver plated
- Recommended 15kV jumper cables for this tool are #2 and 1/0
- Recommended that Load-Pickup Tool be inspected and cleaned after 25 operations or after 90 days
- Clean all plastic parts with a soft cloth, damp with ethyl alcohol only

Closing the Contacts

Recocking The Contacts

- Contacts are opened by passing the recocking rod through head on tool and pushing plunger to fully opened position
- Operation cannot be completed when tool is connected to conductor

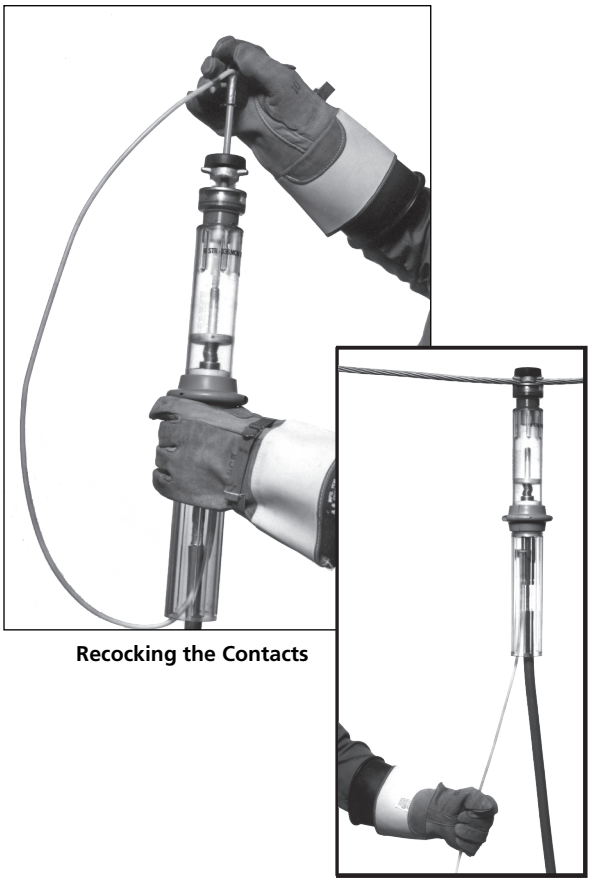
For pre-assembled Load-Pickup Tool/Jumper Cable sets, see page 2310.
For Cable and Connector Assemblies see page 2305.

Catalog Number	Description	Weight
C4031631	Load-Pickup Tool **only**	6.4 lb./2.9 kg.

CHANCE®

Load-Pickup Tool Sets

Pre-assembled for 15kV systems



Recocking the Contacts

Closing the Contacts

Features & Applications

- Rated for loads as high as 250 amperes
- Include load-pickup device, jumper clamp, 15 kV cable
- Rated to pickup and carry 250-amp loads at 15kV
- Each completely assembled set consists of Load-Pickup Tool, Jumper Clamp, 15 kV Jumper Cable and cable connectors
- Load-Pickup Tool and Jumper Clamp fit conductors from #6 Copper (0.162") through 795 ACSR kcmil (1.108")
- Four standard sets include options for 10' or 12' lengths of either #2 or 1/0 Jumper Cable
- Other pre-assembled sets are available
- These sets combine other Chance-Jumper Clamps, other sizes and lengths of Jumper Cable and appropriate connectors (Catalog pages 2302 and 2306)
- Individual components also may be ordered for customer assembly of various combinations.

Operation & Maintenance

- Load-Pickup Tool cannot be used to break loads because operator cannot open contacts while Tool is installed on conductor
- To recock contacts, operator inserts fiberglass rod through head of Tool to push plunger to fully-opened position
- Rod is supplied attached to end of operating lanyard
- Pulling this insulated lanyard closes the spring-loaded contacts
- Positive contact operation
- Bearing-type floating washers in jaws of Tool and Jumper Clamp assure secure gripping but minimal scoring of conductors during installation
- WARNING: Adequate rubber gloves must be worn when using this equipment
- Clean and inspect Load-Pickup Tool after every 25 operations or at least once every 90 days
- Clean all plastic parts with a soft cloth dampened with only ethyl alcohol
- To disassemble Tool, simply remove two screws in handguard

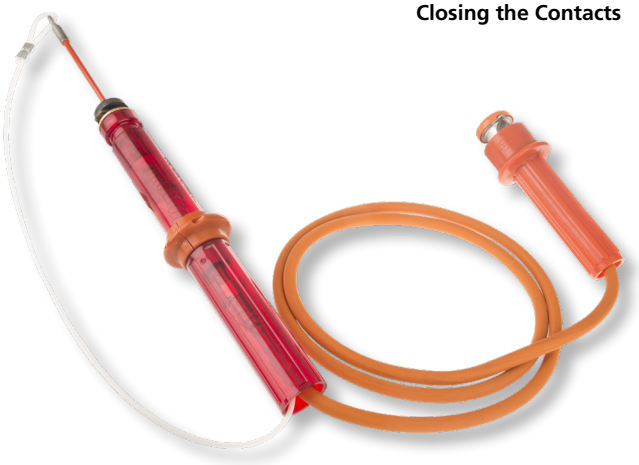
Construction Features

Load-Pickup Tool:

- o Orange-tinted translucent Lexan® housing permits easy visual inspection
- o Current-carrying parts of Copper or Copper alloy
- o Contact points are silver plated
- o Handguard of high-impact Nylon keeps hand away from energized area

Jumper Clamp:

- o Current-carrying parts of Copper alloy
- o Handles of high-impact Polyethylene
- o Wide handguard flange keeps hand away from energized area



All Units

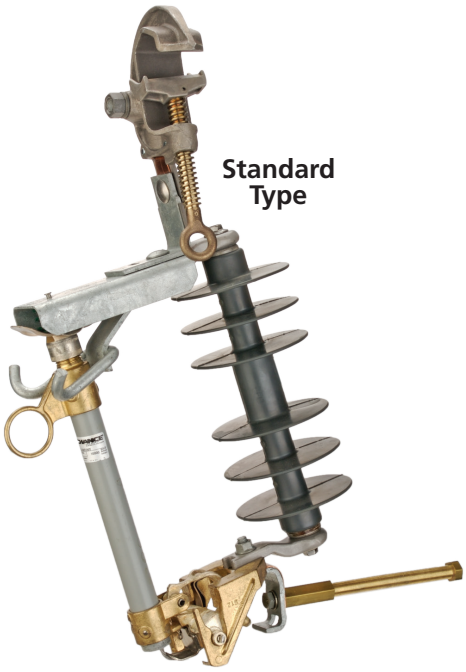
Electrical Ratings: Nominal 15kV 3-phase or 8.3kV single phase circuits.
Jumper Clamp: #6 Copper (0.162") minimum through 795 kcmil ACSR (1.108") maximum.

Catalog Number	Cable Length	15 kV Cable Size	Continuous Current	Weight (lb./kg.)
C4031557	10 ft.	#2	200 amps	17.75/8.05
C4031558	12 ft.	#2	200 amps	19.62/8.89
C4031559	10 ft.	1/0	250 amps	20.8/9.43
C4031560	12 ft.	1/0	250 amps	23.28/10.55

Temporary Cutout Tools
for 15kV and 27kV

Features & Applications

- To provide fuse protection during live-line maintenance, temporary cutout tool simply clamps onto primary conductor with a Grip-All clampstick
- Brass stud at lower end accepts clamp on temporary tap jumper
- Insulated bushing and hot parts are from Chance Type C-Polymer cutouts
- Upper contact with integral sleet shield and hooks for operation by loadbreak tool and lower trunnion of cast bronze
- Fusetube must be fitted with fuselink rated no larger than 100 amps
- Available in ratings for 15kV and 27kV systems
- Tools come with or without a pivot-lever closing device
- 250 in.-lb. torque for clamp eyescrew



Standard Type

Standard Type

Fuse Tube 100 Amps Continuous Current

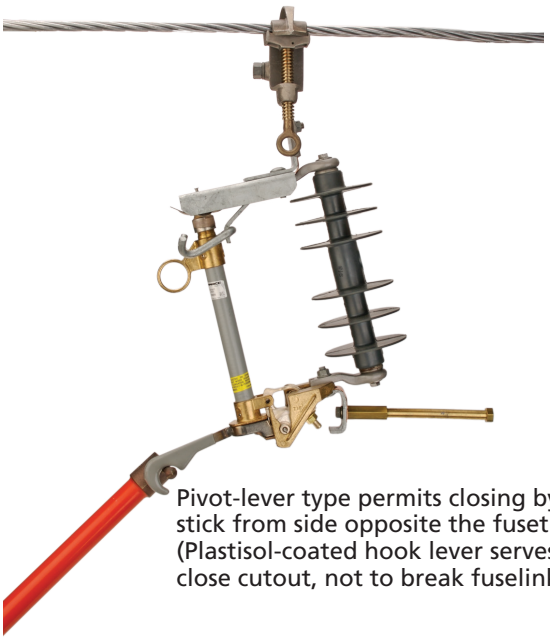
Catalog Number	REPLACES Cat. No.	System Class	Interrupt Capacity	Weight (lb/kg.)	Fuseholder Replacement
PSC6010341	C6001895	15kV	10,000 Amps	7¼ / 3.3	T710112T
PSC6010342	C6001896	27kV	8,000 Amps	10½ / 4.8	T710211T

Solid Blade 300 Amps Continuous Current

Catalog Number	REPLACES Cat. No.	System Class	Momentary Capacity	Weight (lb/kg.)	Solid Blade Replacement
PSC6010343	C6002862	15kV	12,000 Amps	8¼ / 3.7	T710133T
PSC6010344	C6002863	27kV	12,000 Amps	11½ / 5.2	T710233T

All Models include Clamp C6002275 at top with these specifications:

Main Line Range		Tap Stud
Minimum	Maximum	
#6 Sol. Cu. (0.162")	1033 kcmil ACSR (1.25")	½" diameter



Pivot-lever type permits closing by disconnect stick from side opposite the fusetube. (Plastisol-coated hook lever serves only to close cutout, not to break fuselink.)

Pivot-Lever Type

Catalog No.	REPLACES Cat. No.	System Class	Weight
PSC6010345	C6001944	15kV	8¾ lb. / 3.97 kg.
PSC6010346	C6001945	27kV	12 lb. / 5.44 kg.

CHANCE®

Temporary Load Disconnect Tools

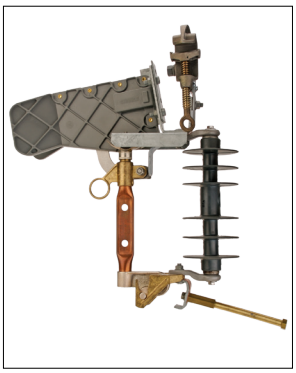
8.3/15kV & 15/27kV applications*

Features & Applications

- Available in two sizes
- Provides a temporary means of connecting and disconnecting equipment or circuits under load conditions
- Design does not have a fuse and does not provide protection for fault or overcurrent conditions
- Insulated bushing and hot parts are from Chance Type C-Polymer cutouts, including tubular-copper disconnect blade
- Arc-chute-type interrupter gives tool excellent loadbreak capability
- To interrupt load currents, device employs a stainless-steel auxiliary blade within Delrin® arc chute
- Tool simply clamps onto primary conductor with a Grip-All clampstick. Bronze stud at lower end accepts clamp on temporary tap jumper
- 250 in.-lb. torque for clamp eyescrew

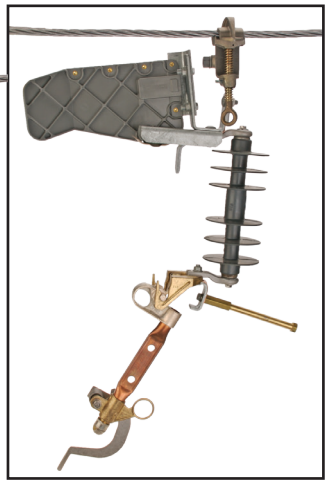
Operation

- Self-contained loadbreak device operates by simple disconnect stick
- No special or portable tools are required to operate unit
- To break current, insert a disconnect stick into operating ring and rapidly open device
- When opening, spring-loaded auxiliary blade snaps out through the arc chute to elongate, cool and extinguish the confined arc
- Loadbreaking operation is independent of the disconnect stick speed
- To provide a clearly visible break, the disconnect blade hangs in approximately a vertical position
- Unfused or unswitched loads can be disconnected by first installing this tool and a temporary bypass jumper in parallel with permanent tap connection



Temporary Load Disconnect Tools

Both models include protective carrying case and illustrated operating and maintenance instructions.



- After closing tool blade, the permanent tap can be disconnected
- The load can then be dropped or reconnected by operating blade tool
- It should never be closed into a fault or opened during a fault

Installation & Removal

- To install the tool, first remove its main blade
- Next, secure both clamps of suitable temporary jumper onto tap stud of tool's lower hinge
- Use a Grip-All clampstick to install tool onto main line conductor
- Use clampstick to secure one of the jumper clamps onto line with load to be picked up
- Use disconnect stick to place blade in lower hinge of tool
- Use disconnect stick in operating ring to close blade according to safe work procedures
- Take care when removing disconnect stick to avoid opening blade
- The equipment or circuit is now energized through the tool
- Before removing tool, first make up a permanent connection so there are two energizing paths
- Use a disconnect stick in the operating ring to open the blade according to safe work procedures and to remove blade from lower hinge of the tool
- Use a clampstick to take jumper clamp from conductor and secure it on tool stud
- Then use the clampstick to remove the tool from the main line conductor

Specifications (both models)

Max. loadbreak current: 300 amps

Max. momentary rating: †12,000 asym amps

†This is a pass-through fault-current rating only. The tool should never be opened or closed when the current exceeds the maximum continuous load current of 300 amps.

Main line range (both models)

Minimum: #6 solid copper (0.162" dia.)

Maximum: 1033 kcmil ACSR (1.25" dia.)

Tap stud: ½" diameter

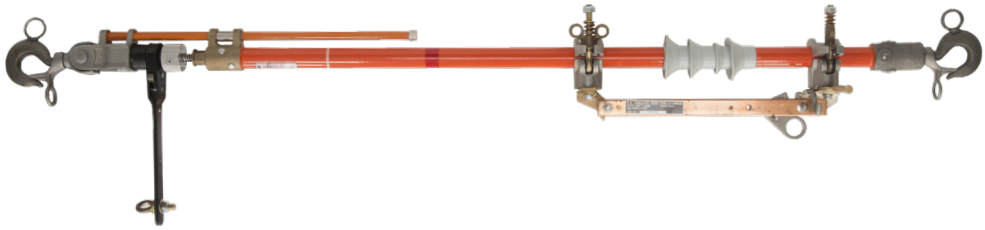
Catalog No.	REPLACES Cat. No.	Description	Disconnect Blade	Arc-Chute Assy.
PSC6010347	C6002386	*8.3/15kV Temporary Load Disconnect Tool	T730133T	E7300009P
PSC6010348	C6002387	*15/27kV Temporary Load Disconnect Tool	T730233T	

*For application on single-phase-to-neutral or three-phase solidly-grounded wye-connected circuits where recovery voltage does not exceed the max. design voltage of the device.

Tension Puller Switching Tool

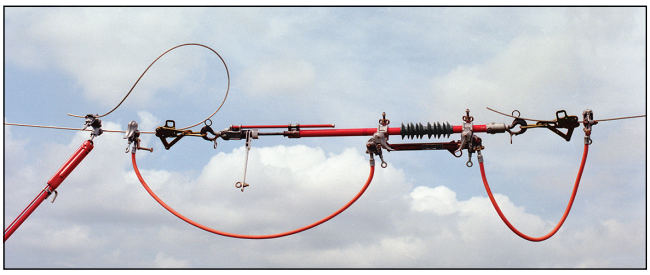
Features & Applications

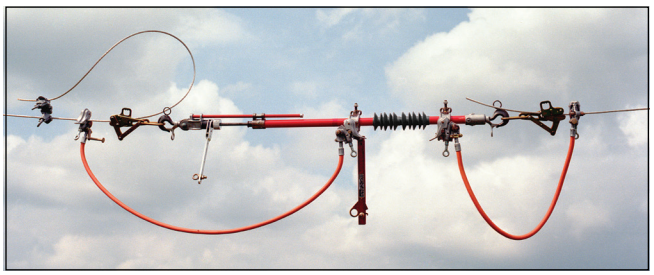
- Tested per OSHA & ASTM F711
- For line tension up to 4,000 lbs. with manual hookstick switch
- Maximum ratings: 35 kV Ø-Ø, 600 amps continuous, 150 kV BIL
- Permits a live overhead distribution line to be cut
- By bearing the mechanical load, it helps create a parallel circuit
- This averts service interruption while the cutting and related work are performed
- May be applied wherever disconnect switch is desired for temporary sectionalizing
- Tool is properly rated concerning line tension, continuous current, BIL and system voltage
- Applications that require cutting a conductor include:
  - o Deadend-structure construction
  - o Overhead switch installation on a structure
  - o In-line switch installation
- Combines two Chance products: Epoxiglas® insulated tension puller and LTD® line-tension disconnect switch
- For this special tool, weathershed skirts of a tough, lightweight polymer have been bonded to the tension puller's 1-1/2"-diameter Epoxiglas pole
- At both skirt ends, a locating pin aligns a compression clamp to secure switch hot parts to pole
- A bypass stud (1/2"-dia.) added at each end of switch accepts clamps up to 3" wide
- Rigid, H-frame copper switch blade opens to a standard 90°, or to 180° with stop pin removed
- Contact areas are silver-plated for high conductivity
- Galvanized-steel hooks are provided for use with a portable loadbreak device
- For easy opening and icebreaking, pull ring (1-1/4"-dia. eye) activates latch as a pry-lever
- Hooks on ends are fixed and do not swivel
- Safety latch on hooks has a spring-loaded gate able to rotate 135 degrees left or right from closed position
- Selector lever on ratchet wrench is extra large for easier operation by hot line tools



Installation & Operation

- Equipped with rings, tool may be handled and operated by hot-line tools or rubber-glove live-line techniques
- Illustrated instructions included with each unit give application considerations and procedures for installation, operation and maintenance
- Suspended from hot-line wire grips with the disconnect switch closed, tension puller works like a jack
- Operating the ratchet wrench brings the tool's two ends closer
- This reduces tension on the conductor between the tool's hooks
- Hot line jumpers sized to the application are installed on the conductor and the tool's bypass studs to create a parallel circuit
- Before cutting the conductor, it is securely restrained
- Once cut, its long tail is clamped back onto itself
- A properly rated portable loadbreak device may now be hung on the tool's disconnect hooks and used to open the switch
- Refer to ANSI C37.35 IEEE Guide for the Application, Installation, Operation and Maintenance of High Voltage Air Disconnecting and Load Intrerrupter Switches
- For proper installation, select from four sizes of hot-line wire grips shown on Chance catalog page 1258 and the full range of jumper equipment in this section
- To secure cut end of conductor, tie back clamp C4000600, shown on Chance catalog page 2264, fits conductors ranging from #4 to 397.4 kcmil ACSR





Operate disconnect switch with **only** a portable loadbreak tool.

Specifications

Capacity:	4,000 lb. (1,800 kg.)
Working Range:	58 to 70 in. (1,473 to 1,778 mm)
Maximum Take-up:	12 in. (305 mm)
Insulation:	
Minimum	24 in. (610 mm)
Maximum	36 in. (914 mm)
Length:	60 in. (1,524 mm)

Catalog No.	Description	Weight
C4001907	Tension Puller Switching Tool	22 lb. / 9.9 kg.

NOTES

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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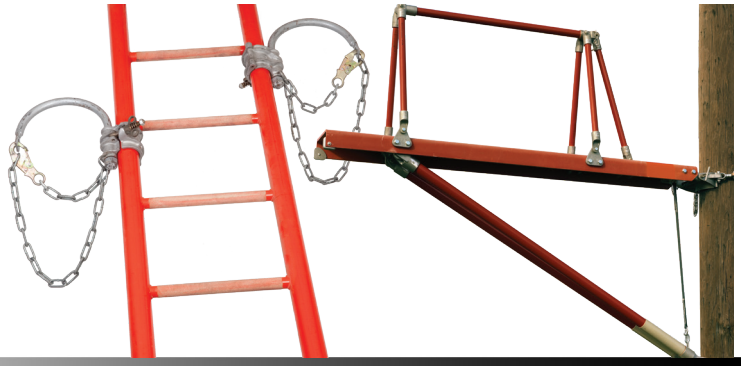


CHANCE®

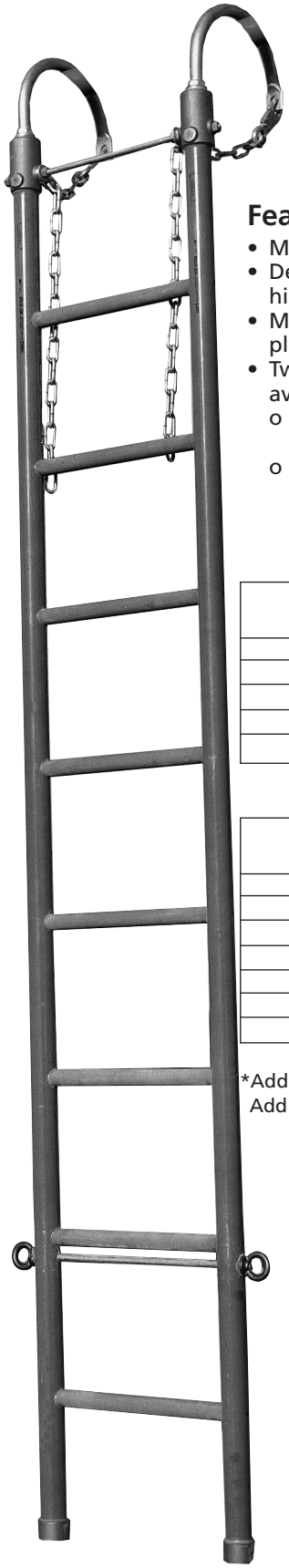
Ladders & Platforms

Catalog 2350 March 2020

HUBBELL®

CHANCE®

Epoxiglas® Swivel Hook Ladders



Features & Applications

- Meets ASTM F711 and IEC 61478 - Category 2
- Designed to effectively position linemen for high-voltage maintenance
- Make line repairs possible, even in inaccessible places
- Two basic styles of Epoxiglas Hook Ladders are available
  - o Regular Duty Ladders with 2" siderails for vertical suspension applications
  - o Heavy Duty Ladders with 2-1/2" siderails for tagged-out positions
- Hooks are formed from 1"-diameter tempered steel
- These hooks can be swiveled to best fit various angles on structure
- Ladders include 8"-dia. hooks
- 14"- or 18"-dia. hooks can be ordered for other structure applications
- Steel chains clip to hooks to assist in securing ladder to support
- Rung material for both rated ladders are 1-1/4" sand-coated Epoxiglas

REGULAR-DUTY HOOK LADDERS 2" SIDE RAILS

Catalog No. 8" Hooks*	Overall Length	Distance Between Side Rails	Weight
H49048	8'	14½"	42 lb./18.9 kg.
H490410	10'	14½"	46 lb./20.7 kg.
H490412	12'	14½"	52 lb./23.4 kg.
H490414	14'	14½"	60 lb./27.0 kg.
H490416	16'	14½"	68 lb./30.6 kg.

HEAVY-DUTY HOOK LADDERS 2½" SIDE RAILS

Catalog No. 8" Hooks*	Overall Length	Distance Between Side Rails	Weight
H49058	8'	14½"	47 lb./21.2 kg.
H490510	10'	14½"	55 lb./24.8 kg.
H490512	12'	14½"	63 lb./28.4 kg.
H490514	14'	14½"	70 lb./31.5 kg.
H490516	16'	14½"	76 lb./34.2 kg.
H490518	18'	14½"	85 lb./38.3 kg.
H490520	20'	14½"	98 lb./44.1 kg.

*Add suffix "A" to catalog number for 14" hooks.
Add suffix "B" to catalog number for 18" hooks.

Rated Working Load per Hook	
8" hook	1250 lb.
14" hook	1000 lb.
18" hook	750 lb.

NOW CERTIFIED TO IEC 61478 - CATEGORY 2

TEMPORARY INSTALLATION

Includes full line offering

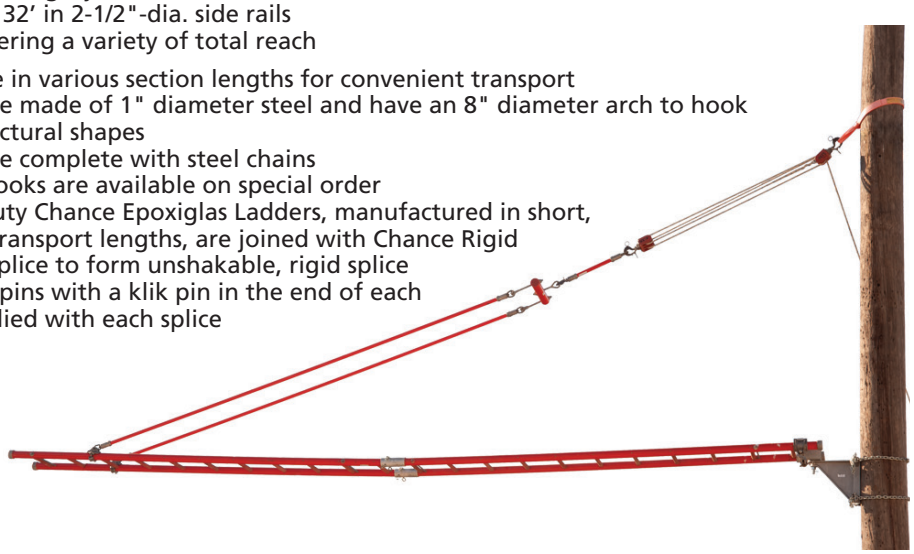
- Ladders: Swivel Hook, spliced and three-rail
- Brackets for poles and towers
- Accessories: clamps, hooks, spreader bar, swivel sticks
- Leakage-current monitor meter kits

Epoxiglas® Spliced Ladders

Features & Applications

- Meets ASTM F711 and IEC 61478 - Category 2
- Available in combinations of up to 32’ in 2-1/2"-dia. side rails
- All splices are interchangeable, offering a variety of total reach

- Available in various section lengths for convenient transport
- Hooks are made of 1" diameter steel and have an 8" diameter arch to hook over structural shapes
- Hooks are complete with steel chains
- Larger hooks are available on special order
- Heavy-duty Chance Epoxiglas Ladders, manufactured in short, easy-to-transport lengths, are joined with Chance Rigid Ladder Splice to form unshakable, rigid splice
- Two eye pins with a klik pin in the end of each are supplied with each splice



SPLICED, HEAVY-DUTY HOOK LADDERS — 2½" SIDE RAILS

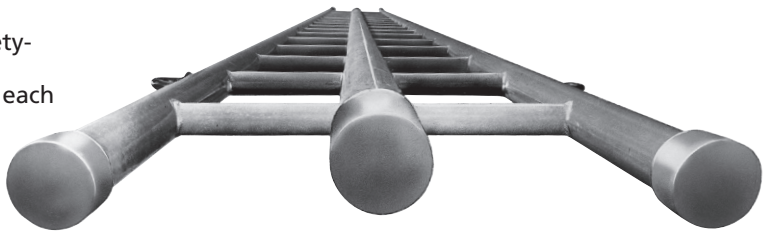
Catalog No.	Top Section Length	Weight
C4020482	10'	44 lb./19.8 kg.
C4020402	12'	48 lb./21.6 kg.
C4020404	14'	52 lb./23.4 kg.
C4020407	16'	56 lb./25.2 kg.
C4020411	20'	64 lb./28.8 kg.
T4020423	10' middle section	44 lb./19.8 kg.

Catalog No.	Bottom Section Length	Weight
C4020418	8'	28 lb./12.6 kg.
C4020421	10'	32 lb./14.4 kg.
C4020422	12'	36 lb./16.2 kg.

Three Rail Ladder

Features & Applications

- Meets ASTM F711 and IEC 61478 - Category 2
- Greater mechanical strength and less deflection enhance worker efficiency
- Designed for working in tagged-out position
- Third rail provides for a convenient, centered, safety-belt-tie
- Also divides ladder rung into natural positions for each foot placement
- Specifications include:
  - o 2-1/2" center rail, capped on both ends
  - o 2" side rails with 8" swivel hooks on top and caps on bottom end of rail
  - o 1-1/4" sanded rungs
  - o Steel tie rods top and bottom
  - o Pinned sleeves on outside rails for spliced ladders with a 15-1/2" center
- Both straight and spliced ladder units are available



Fixed-Length (non-spliced) Ladder

Catalog No.	Description	Weight
C4020119	20' Straight Ladder	100 lb./45.0 kg.

Spliced Ladders

C4020512	8' Bottom Section	43 lb./19.4 kg.
C4020513	12' Bottom Section	52 lb./23.4 kg.
C4020514	12' Top Section	62 lb./27.9 kg.

Three Ladder Yoke

Catalog No.	Description
PSC4020569	Yoke Assembly for Three Rail Ladder

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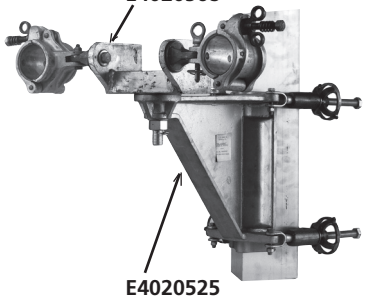
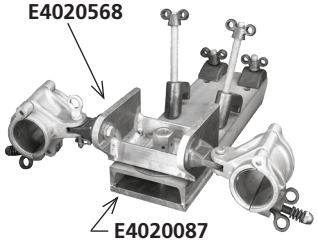
Ladder Support Attachments

E4020568



E4020525
Ladder Support Assembly for Vertical Tower Member

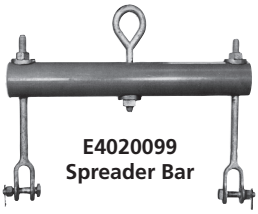
E4020568



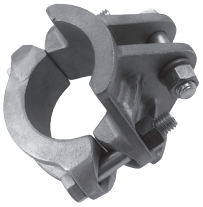
E4020087
Ladder Support Assembly for Horizontal Tower Member

E4020568

E4020526
Vertical Ladder Support Attachment for Wood Poles



E4020099 Spreader Bar

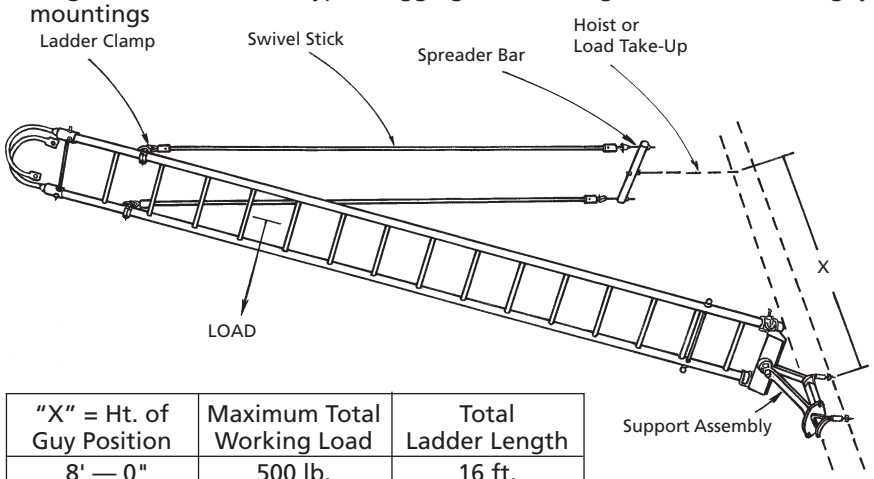


E4020138P Ladder Clamp 2-1/2"

E4020092 Double Clamp 2½" and 1½" Diameter

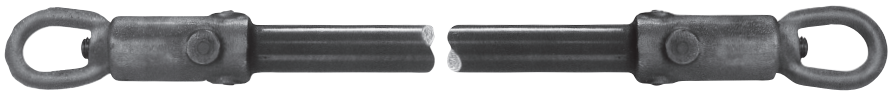
Features & Applications

- Quick, easy rigging on most types of structure
- Converts Chance Epoxiglas® ladder to a platform for live-line maintenance
- Sets are designed for steel or wood structures, vertical or horizontal
- Support the structure-end of the ladder in a tagged-out position
- Sets are designed for use on 2-1/2"-dia. side rail ladders
- Can be ordered as sets or individual components
- Diagram below shows a typical rigging and working loads with various guy mountings



"X" = Ht. of Guy Position	Maximum Total Working Load	Total Ladder Length
8' — 0"	500 lb.	16 ft.
12 — 0"	400 lb.	24 ft.
16' — 0"	300 lb.	32 ft.

Kits Consist Of Following:	C4020139 Ladder Support Kit For Vertical Attach. On Towers	C4020140 Ladder Support Kit For Horizontal Attach. On Tower	C4020155 Ladder Support Kit For Vertical Attach. On Wood or Steel Poles
E4020525 Vertical Attachment Tower	1		
E4020087 Horizontal Attachment Tower		1	
E4020526 Vertical Attachment Pole			1
E4020568 Yoke Assembly	1	1	1
E4020099 Spreader Bar	1	1	1
E4020138P Ladder Clamp 2-1/2"	2	2	2
E4020141 (Also see Swivel Stick *below)	2	2	2
E4020092 Double Clamp	1	1	1
Total Kit Weight	61.5 lb./27.7 kg.	50 lb./22.57 kg.	61.5 lb./27.7 kg.



***Swivel Sticks (1¼" dia.)**

Tested per OSHA & ASTM F711

Cat. No.	Length
*E4020141	12½ ft.
*T4020899	6 ft.
*T4020900	8 ft.
*T4020901	10 ft.

Adjustable Ladder Hook

Features & Applications

- Easily attaches in one quick operation
- Position on Epoxiglas® side rail, swing bolt around and tighten wing nut
- Made of 1"-dia. heat-treated, rust-resistant steel
- Equipped with rugged chain and chain snap for positive lock between ladder and support
- Hooks are rated at 1,000 lbs. per pair

Catalog No.*			For Side Rail Dia.	Approx. Wt., Each†
8" Hook	14" Hook	18" Hook		
H49041	H49241	—	2"	7 lb./3.2 kg.
H49051	H49251	H49451	2½"	7 lb./3.2 kg.

* Catalog No. includes one (1) Hook, Chain, and Chain Snap.

† Weights listed are for an 8" Hook; 14" Hook 8½ lb. each; and for 18" Hook 14½ lb. each.

- Adjustable hooks can be used with Epoxiglas Hook Ladders to obtain a more convenient position
- Can be attached to an Epoxiglas Service Ladder for use as a temporary hook ladder
- Adjustable Hooks are ideal for suspension use for uneven or sloping supports

Ladder Monitor Kit

Features & Applications

- Used with EHV Barehand maintenance procedure to detect microamp leakage on ladder before use
- Meter connects to ladder and takes readings as ladder is placed in contact with conductor
- It is recommended that readings be taken periodically to ensure optimum working conditions, which can be altered by a change in atmosphere
- Kit includes:
  - o A 200 micro-amp scale microammeter
  - o 3 clamps for use with three-rail ladder
  - o A cable with clips and adapter to establish contact
  - o A bracket to ground and hold the meter on the structure
  - o 2 dry cell batteries
  - o Instruction drawings for field assembly
  - o Operating instructions

Catalog No.	Description	Weight
C4020288	Ladder Monitor Kit	7.5 lb./3.4 kg.

Chance Sentinel Leakage-Current Monitor

Features & Applications

- Alerts utility-line workers of overcurrent conditions
- For aerial devices, including insulated ladders and truck booms
- Sounds an alarm if leakage current reaches a pre-set level
- Leakage setting adjusts from 1 to 1,000 microamperes in resolution increments of 0.1 microamp
- Audible warning eliminates the need to watch LCD screen current level
- Alarm sounds upon overcurrent and continues until condition is corrected
- Jack on instrument panel accepts standard 1/4" two-conductor phone plug to trigger horn or other external alarm
- Panel test terminal permits continuity check of monitor leads prior to operation
- Before each use, instrument automatically performs rapid electronic self test
- Simple operating steps are printed on the inside lid panel

Catalog No.	Description	Weight
C4070025	Chance Sentinel Kit	9 lb./4.05 kg.

- Detailed instruction sheet also comes with each unit
- Kit includes 1 coaxial cable and battery, plus 2 jumpers and 3 hose clamps for connections to two- or three-rail ladders
- Brackets on box secure to an earth-grounded structure up to 5/8" thick, such as a transmission tower

CHANCE®

Epoxiglas® Insulated Platforms

Features & Applications

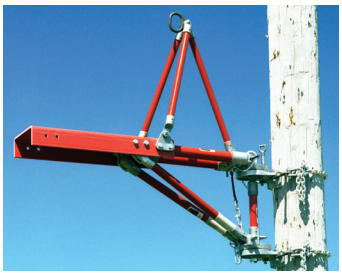
- Unique design features 12" of clear insulation
- Two 2"-dia. orange Epoxiglas poles connect the platform to the mounting bracket
- No other platforms include these insulating members
- Manufactured to the same exacting standards as Chance hot-line tools: OSHA subpart V, section 1926.951(d) and ASTM 711
- Cleaning and care of Epoxiglas components are same as for Chance hot-line tools
- Maximum load rating, all platforms: 500 lbs.

Mounting Options & Accessories

- To provide convenient workstations for rubber-glove work on energized lines, these platforms quickly secure to pole with either of two mounts:
  - o Fixed mount, for jobs that do not require frequent platform relocation, comes as part of each basic platform and includes a chain binder and wheel tightener
  - o Pivot mount, optional for easy positioning to access jobs, permits worker to swivel the mounted platform on its horizontal plane
- For belt-on/restraining guide, add optional Tripod or Railing
- For improved footing, three strips of 2" non-skid tape extend the length of the platform

4-ft. Insulated Platform

Epoxiglas Tripod and Pivot Base must be ordered as separate items.



6-ft. Insulated Platform

Epoxiglas Railing and Pivot Base each must be ordered as separate items.

Each Epoxiglas Insulated Platform listed below is 10" wide and furnished with a Fixed Pole Mount

Catalog No.	Description	Weight
C4021042	4-ft. **Insulated** Platform	49 lb./22 kg.
C4021043	6-ft. **Insulated** Platform	56 lb./25.2 kg.
C4021079	8-ft. **Insulated** Platform	60 lb./27 kg.

Standard Aerial Platforms

4-ft. Standard Aerial Platform
Epoxiglas Tripod must be ordered as separate item.

6-ft. Standard Aerial Platform
Epoxiglas Railing must be ordered as separate item.

Features & Applications

- Designed to provide a convenient workstation on an aerial structure
- Quickly mount on structure to help place linemen in correct working position

Mounting Options & Accessories

- Feature a Fixed Pole Mount for jobs that do not require frequent platform relocation
- Pivot Mounts (available below as optional accessories) allow platform to be swiveled on its horizontal plane for different positions
- For belt-on and as restraining guides for workers, Epoxiglas Tripods or Railings may be added – see page 2357
- For improved footing, three strips of 2" non-skid tape extend the length of the platform
- Bare section near mounting end helps reduce moisture accumulation
- Also provides an area between the working surface and the mount fittings that can be readily wiped clean of dirt and moisture when necessary

Maximum Load Rating, all platforms: 500 lb.

Each Standard Aerial Platform listed below is 10" wide and furnished with a Fixed Pole Mount

Catalog No.	Description	Weight
H496442W	42-in. **Standard** Platform	40 lb./18 kg.
H49644W	4-ft. **Standard** Platform	49 lb./22 kg.
H49646W	6-ft. **Standard** Platform	56 lb./25.2 kg.
H49648W	8-ft. **Standard** Platform	71 lb./32 kg.

Each Standard Aerial Platform below is 10" wide and furnished with an Epoxiglas Railing & Fixed Pole Mount

Catalog No.	Description	Weight
T4020632	10-ft. **Standard** Platform	86 lb./39.7 kg.
T4020619	12-ft. **Standard** Platform	105 lb./47.3 kg.

Platform Mounting Attachments

Fixed Pole Mount – fits all Chance platforms except Suspension model

Catalog No.	Description	Weight
M490110W	Fixed Pole Mount for Platform	9 lb./4.1 kg.

M490110W includes 30" chain binder with self-locking handwheel and one hinge pin.

Fixed Tower Mount – fits all Chance platforms except Suspension model
For attachment to tower legs 3½" x 3½" to 8" x 8"

Catalog No.	Description	Weight
M490121	Fixed Tower Mount for Platform	10 lb./4.5 kg.

M490121 for towers

Pivot Mounts for Poles – fit all Chance platforms except Utility model

Features & Applications

- Handwheel on top and interlocking teeth on two pivot plates provide simple, sure adjustment to work angle needed
- Two sizes vary in height to fit all applicable platforms as listed
- Pivot range permits 140° adjustment in increments of approximately 9° per tooth on matching plates
- Turning handle raises and lowers upper plate
- Stainless-steel guide pin keeps plates aligned
- Groove in upper plate centers on rib in base to ensure teeth engagement at every angle setting

Catalog No.	Description	Weight
C4021164	Pivot Base for 42" or 4' Platform	28¼ lb./12.7 kg.
C4021173	Pivot Base for 6' or 8' Platform	29¼ lb./13.2 kg.

Each Pivot Base includes two 30" chain binders with self-locking handwheels and one hinge pin.

Platform Tripods and Railings

Epoxiglas® construction adds belt-on capability and restraining guide for lineworkers. Note specific applications below.

Tripod Railings
– fit Insulated and Standard Aerial models as listed (for Suspension model tripod, consult factory)

Catalog No.	Description	Weight
H4964	Tripod for 4-ft. **Insulated** model only	9 lb./4.1 kg.
T4021195	Tripod for 42-in. or 4-ft. **Standard** model	9 lb./4.1 kg.

Platform Railings
– fit Insulated and Standard Aerial models as listed

Catalog No.	Description	Weight
C4021055	Railing for 4-ft. **Insulated** Platform*	13 lb./5.9 kg.
C4020023	Railing for **all** 6-ft. Chance Platforms	15 lb./6.8 kg.
C4020024	Railing for **all** 8-ft. Chance Platforms	17 lb./13.5 kg.

*except Suspension model

CHANCE®

Platform Ladder

Features & Applications

- Allows workers to stand or sit at worksite instead of kneeling on structure
- Convenient and efficient
- Proven products combine in Chance Platform Ladder: 48"-long Epoxiglas® Ladder and two 20"-long sections of 10"-wide Platform joined side-by-side constitute a bosun's chair
- Adjustable ladder hooks may be added (see Catalog page 2355)
- Platform Ladder may be suspended and tagged-off with rope, wire tongs or a combination of both in order to maneuver a worker into position
- Platform Ladder folds into a compact package for quick rigging and easy storage
- Although rated for 500-lb. loads, users must give serious consideration to capacity of the point from which it is suspended and the equipment used to suspend it
- For improved footing, three strips of 2" non-skid tape extend the length of the platform

Catalog No.	Description	Weight
C4020276	Platform Ladder, no hooks	36 lb./16.2 kg.

Epoxiglas® Service Ladders

Features & Applications

- Offer greater safety when working around energized lines
- Easier to transport – much lighter than comparable wood ladders
- Spacing between side rails and rungs meets largest central station and telephone company specifications
- Side rails of 1-1/2"-dia. Epoxiglas are plastic-covered at top for cushioning
- Rubber feet are supplied on bottom end
- Rungs are of 13/16"-dia. glass fiber

Rated for loads, 250 lbs.

Catalog No.	Overall Length	Spacing Between Side Rails	Approx. Wt., Ea.
H4903M10	10'-1"	12"	16 lb.
H4903M12	12'-1"	12"	19 lb.
H4903M8	8'-1"	12"	13 lb.

NOTES

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NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

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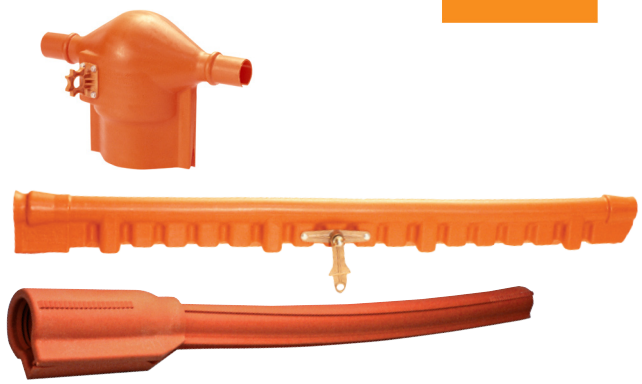


CHANCE®
Cover-Up Equipment

Catalog 2400 March 2020

HUBBELL®

CHANCE®

⚠ WARNING

Cover-up equipment, by necessity, is designed to be as universal as possible. Therefore it is possible, as examples, for (1) a tie wire to touch a potentially grounded pin or other part, (2) a person's hand to touch the conductor through an opening in the equipment, or (3) a part of a person's body or other work equipment to contact the conductor through an opening in the cover-up equipment or "in the vicinity of junctions between pieces of cover-up equipment." These possibilities, as well as other possible contacts, do exist, and the persons using this equipment must be aware of them and consider them on each and every application. Necessary precautions must be taken to prevent these contacts. Under no circumstances is CHANCE cover-up equipment intended to prevent mechanical equipment from contacting either energized or grounded surfaces.

Cover-Up Equipment

Features & Applications

- For all types of high-voltage line maintenance
- Most pieces can be installed with rubber gloves or hot stick application eyes
- Common sense rules must always be followed when using cover-up equipment, including:

1. Cover-up equipment (such as line covers, insulator covers, cutout covers, and deadend covers) is intended to prevent personnel from making accidental brush contact with energized parts or equipment. Under no conditions should personnel purposely contact the covers, except with adequate rubber gloves, and personnel must always be aware of their position in order to avoid accidental contact with the cover
2. Cover-up equipment (such as pole covers, crossarm guards, crossarm end covers, and pole top covers) is intended to help prevent accidental contact of energized tie wires or conductors with the grounded surface of the pole or crossarm
3. Cover-up equipment must be handled with care to minimize breakage and scratching, and must be kept clean. Maintenance is as important with cover-up equipment as with other hot line tools. Each cover must be thoroughly inspected before each use to ensure that it has no cracks, deep scratches, or gouges and to ensure that it is clean. Cleaning should be done with a wiping cloth, and if that does not remove all dirt, mild soap and water should be used. Polyethylene covers can be cleaned with CHANCE Moisture-Eater II solvent-cleaner (see Catalog Section 2500). Caution: Solvents must be avoided unless the user can determine that the material in the particular cover is polyethylene
4. For Temporary Use — Cover-up equipment is designed to be as light and easy to use as possible, hence it is not made from materials that can withstand extended periods of electrical stress. Therefore, CHANCE cover-up equipment must not be left installed for extended periods, especially if allowed to touch both an energized surface and a possibly grounded surface. The situation would be highly aggravated in rainy or humid weather, when the surfaces of the covers become dirty, etc. Therefore, the covers should be removed at the end of the workday, if possible

Cutout Covers 26.4kV Covered-Phase-to-Covered-Phase

Features & Applications

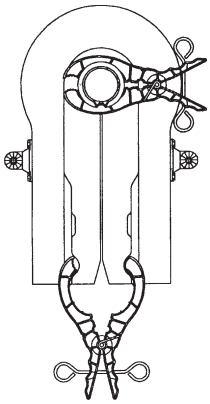
- Tested to ASTM F712 Class 3
- Protects linemen working near most open-type cutouts rated at 25kV or under
- WIll not fit over cutouts with linkbreak levers, loadbreak ears or similar devices
- Can be placed over the cutout
- Locking pin slips behind the cutout insulator, over the hanger bracket, and into hole on opposite side of cover

- Eyes on cover and locking pin allow installation with a Grip-All clampstick
- Cover is made of orange high-impact ABS plastic
- Several units can be nested together for convenience and space saving on truck
- For metal grip-all adapter cutout cover, please order PSC4060612

Catalog No.	Description	Weight
C4060009	Cutout Cover with Locking Pin	4 lb. / 1.8 kg.

Deadend Covers

26.4kV Covered-Phase-to-Covered-Phase



C4060164

Clamping pin can be used in any of three positions indicated.

Features & Applications

- Tested to ASTM F712 Class 3
- Made of orange linear polyethylene
- Fits over maximum of two 10" dia. deadend insulators
- End of cover will mate with CHANCE 25kV conductor covers or rubber line hose to extend protected area
- Measures 34"L, 11" W and 12-1/2" from conductor to unit bottom
- Split unit fits easily over the conductor and insulators
- Split unit can be tightly clamped together using large hot stick clamp pin, which is similar to those used in securing rubber blankets
- A Grip-All adapter (included) allows unit to be installed with a clampstick
- Can also be placed into position with rubber gloves and sleeves

Catalog No.	Description	Weight
C4060164	Deadend Cover	5 lb. / 2.3 kg.

Conductor and Insulator Covers

26.4kV Covered-Phase-to-Covered-Phase (for 36.6kV Covered-Phase-to-Covered-Phase conductor covers, see page 2406)

Features & Applications

- Tested to ASTM F712 Class 3
- A versatile system of covering up a variety of configurations on distribution systems
- Conductor and insulator units mate together to cover pin-type or post-type insulator construction
- Can also be used with the deadend cover, shown on page 2402
- Units cover hot parts and hardware to give linemen protection from incidental brush contact when rubber gloving or using hot sticks
- Covers will couple with major brands of rubber line hose and insulator covers of 25kV Class
- Both covers are made of high-density, bright orange polyethylene
- Conductor covers are 5′ long and are available with a Grip-All adapter for hot stick application or without adapter for rubber glove application
- Also available with 4′ Epoxiglas® handles
- Maximum conductor size: 666 kcmil ACSR
- Insulator covers are 21″ long and 8-1/2″ wide
- Available in two heights: 6″ and 9″ from conductor to cover base to fit different size insulators
- For use with Grip-All adapter for hot stick application

Catalog No.	Description	Weight
C4060181	5' Conductor Cover with 4' Epoxiglas Handle	5 lb. / 2.3 kg.
P4060184	5' Conductor Cover without Adapter or Handle	3 lb. / 1.4 kg.
C4060181GA	5' Conductor Cover with Grip-All Adapter	4 lb. / 1.8 kg.
PSC4032879	Grip-All Adapter Replacement Kit	1 lb. / 0.5 kg.
C4060182	Insulator Cover — 6" with Grip-All Adapter	3 lb. / 1.4 kg.
P4060185	Insulator Cover — 6" without Grip-All Adapter	2½ lb. / 1.1 kg.
C4060182L	Insulator Cover — 9" with Grip-All Adapter	4 lb. / 1.8 kg.
P4060186	Insulator Cover — 9" without Grip-All Adapter	3½ lb. / 1.6 kg.

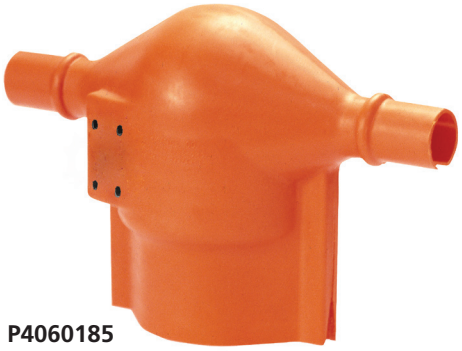
C4060181GA with Grip-All Adapter

PSC4032879
Grip-All Adapter Replacement Kit
as furnished on C4060181GA and C4060514GA Conductor Covers includes 2 Screws P0010740P and 1 each: Bracket P4060196P, Adapter C4060040, Wing Nut 055067P, Bolt 066713P.

P4060184 without Grip-All Adapter for rubber glove application

C4060181 with 4-foot Epoxiglas handle

C4060182 and C4060182L with Grip-All Adapter. For double cross-arm applications, please use catalog number PSC4060182001 with C4060182.

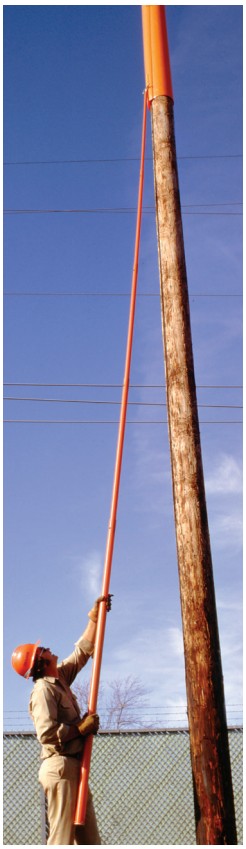


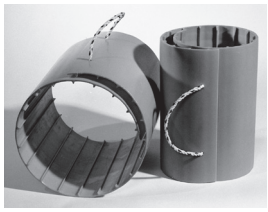
P4060185 and P4060186 without Grip-All Adapter for rubber-glove application

CHANCE®

Pole Covers

36.6kV Covered-Phase-to-Covered-Phase





Pole covers can be placed and removed easily from ground level using CHANCE telescoping tools.

Features & Applications

- Tested to ASTM F712 Class 4
- Protect personnel when raising or lowering a pole between energized lines
- Cover poles during rubber glove maintenance in confined areas
- High-dielectric linear polyethylene covers will not flash flame
- This material will have some softening without deformation at approximately 170°F, and it will resist brittleness at temperatures to -50°F
- Pole covers are ribbed to reduce cover contact with the pole, thus minimizing creosote contamination
- Nylon button on 4' and 6' lengths allows pole covers to be joined together in tandem, where longer lengths are required
- Rope handles help to easily spread the covers and snap them around the pole (Rubber gloves must be worn during this procedure)
- Prolonged contact with an energized conductor must not be allowed
- Button-Nut Kit, T4060214
- Should be used in conjunction with conductor covers when raising or lowering poles

Catalog No.	Overall Length	Weight
6" Diameter Pole Covers		
C4060550	48" overall length	6½ lb. / 3 kg.
C4060551	72" overall length	9½ lb. / 4.3 kg.
9" Diameter Pole Covers		
M49371	12" long	2½ lb. / 1.1 kg.
M49372	24" long	4 lb. / 1.8 kg.
M49374	48" long	9 lb. / 4.1 kg.
M49376	72" long	13 lb. / 5.9 kg.
12" Diameter Pole Covers		
C4060029	24" long	5½ lb. / 2.5 kg.
C4060030	48" long	11 lb. / 5.0 kg.
C4060000	72" long	16 lb. / 7.3 kg.

Rope Lock Assembly

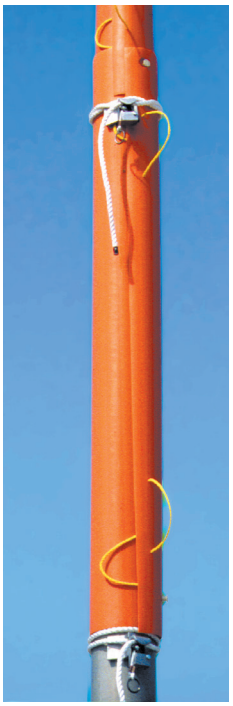
Features & Applications

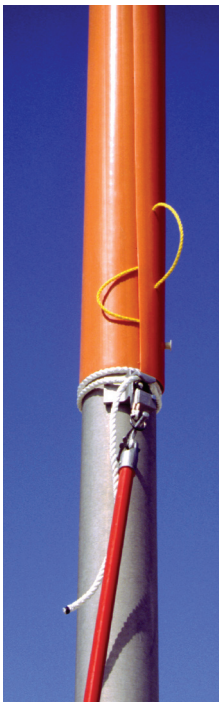
- For securing pole covers on metal, concrete, composite or wood poles
- To help keep pole covers in place, especially on smooth surfaces

C4060547
Rope Lock Assembly

- Easy to place and remove
- May be applied midway and/or as a lower support for pole covers
- For use on 6", 9" or 12" diameter pole covers
- Instructions are included with each unit for simple installation by hand and removal from ground level with a hot stick

Catalog No.	Description	Weight
C4060547	Rope Lock Assembly	1½ lb. / 0.8 kg.
C4060564	Replacement rope, ½" x 7 ft.	½ lb. / 0.3 kg.





ABS Pole Covers
36.6kV Covered-Phase-to-Covered-Phase

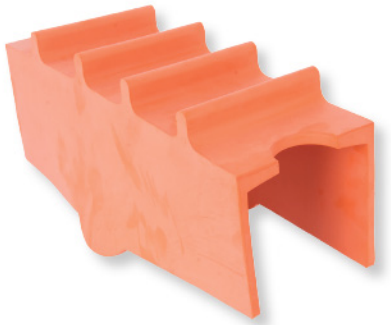
Features & Applications
- Tested to ASTM F712 Class 4
- Protection from accidental brush contact with energized components during pole removal/ installation and other line maintenance
- Made of ABS Plastic
- Covers can be joined by overlapping impressions.

Catalog No.	Overall Length	Weight
9" (22.9 cm) Diameter Pole Covers		
PSC4060699	72" (182.9 cm) long	13 lb. / 5.9 kg.
PSC4060700	48" (121.9 cm) long	11 lb. / 5.0 kg.
PSC4060701	36" (91.4 cm) long	9 lb. / 4.1 kg.
PSC4060702	24" (61.0 cm) long	6 lb. / 2.7 kg.
PSC4060703	12" (30.5 cm) long	4 lb. / 1.8 kg.
12" (30.5 cm) Diameter Pole Covers		
PSC4060704	72" (182.9 cm) long	19 lb. / 8.6 kg.
PSC4060705	48" (121.9 cm) long	13 lb. / 5.9 kg.
PSC4060706	24" (61.0 cm) long	7 lb. / 3.2 kg.
PSC4060707	12" (30.5 cm) long	4 lb. / 1.8 kg.

Flexible Stinger and Crossarm Covers

Features & Applications
- Made from Orange, Type II rubber (ozone resistant)
- Crossarm cover rated Class 2 (17kV Phase-to-Phase)
  - Maximum arm size of 4" (102mm) x 4.5" (114mm)
  - Meet or exceed ASTM D1049
  - Provides insulation to support conductors in linehose during energized maintenance
- Stinger covers rated Class 2 (17kV Phase-to-Phase)
  - Meet or exceed ASTM D1050
  - Maximum conductor diameter of 1.1" (28mm)
  - Provides the flexibility needed to use on stingers in addition to overhead lines

Catalog No.	Description	Weight
PSC4060672	Class 2 Type II Rubber Insulating Crossarm Cover	3.1 lb. / 1.4 kg.
PSC4060674	Class 2 Type II Rubber Stinger Cover 35.0" (888 mm)	3.0 lb. / 1.4 kg.
PSC4060675	Class 2 Type II Rubber Stinger Cover 15.8" (400 mm)	1.2 lb. / 0.5 kg.



PSC4060672

PSC4060675

PSC4060674

CHANCE®

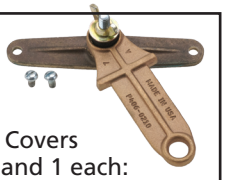
Covers for Conductor, Insulators and Deadends

• 36.6kV Covered-Phase-to-Covered-Phase
• Tested to ASTM F712

- Tested to ASTM F712 Class 4
- A versatile system of covering up a variety of configurations on distribution systems
- Conductor and insulator units mate together to cover pin-type or post-type insulator construction
- Units cover hot parts and hardware to give linemen protection from incidental brush contact when rubber gloving or using hot sticks
- Each item is fitted with an adapter for multi-position handling by Grip-All clampsticks
- These covers also couple with CHANCE 25kV covers (catalog pages 2402 and 2403), Classes 2, 3 and 4 of rubber line hose (pages 2414 and 2415), and Class 2 Temporary Conductor Cover (page 2407)
- Covers also couple with major brands of rubber insulator hoods
- All covers are high-density, bright orange polyethylene in uniform wall thickness
- Excellent dielectric/puncture strength and perform well from -50° to 170°F
- Ultra-violet stabilizers in material help inhibit degradation as a result of atmospheric exposure
- Conductor cover is 5′ long
- V-shaped cover's bottom edge makes it easy to install
- Four indented ribs along top edge for air gap between conductor and cover
- Maximum conductor size is 666 kcmil ACSR
- Insulator covers come in two heights: Either 12" or 16-1/2" tall
- Insulator Cover fits 6-1/2" to 9"-diameter pin or post insulators
- Special slits in insulator covers help locate the conductor and hardware when installing covers
- Deadend cover fits three 10"-dia. porcelain bells or polymer deadend insulators and couples with line cover
- To meet the Class 4 rating, deadend cover must be used in conjunction with a rubber insulating blanket covering the coupler to the line cover
- Failure to use a blanket to cover the coupler may result in electrical shock, severe injury or death by electrocution.

Conductor Cover C4060514GA. PSC4060514GA001 for Conductor Cover without Grip-All Adapter

PSC4032879
Grip-All Adapter Replacement Kit
as furnished on C4060181GA and C4060514GA Conductor Covers includes 2 Screws P0010740P and 1 each: Bracket P4060196P, Adapter C4060040, Wing Nut 055067P, Bolt 066713P.

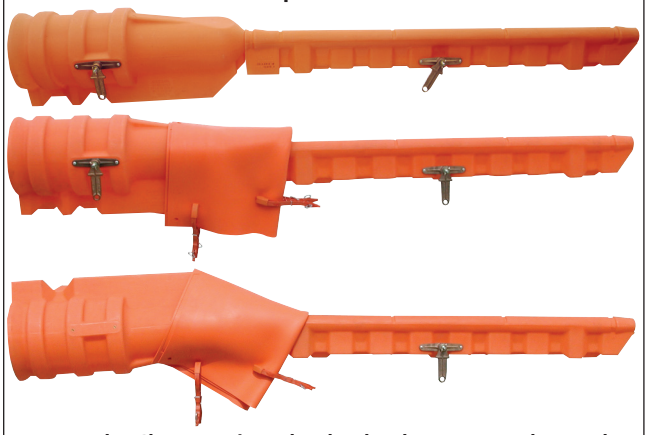


Insulator Covers C4060557 (12" height) and C4060557L (16½" height)

Deadend Cover C4060537

Insulator Cover couples with Conductor Cover using Hot Sticks or Rubber Gloves

Deadend Cover couples with Conductor Cover



To meet the Class 4 rating, the deadend cover must be used in conjunction with a rubber insulating blanket covering the coupler to the line cover. Failure to use a blanket to cover the coupler may result in electrical shock, severe injury or death by electrocution.

Catalog No.	Description	Weight
C4060514GA	5 ft. Conductor Cover	5¼ lb. / 2.4 kg.

Conductor cover is 5 feet long and includes an adapter for handling by Grip-All clampsticks.

Maximum conductor size: 666 kcmil ACSR.

C4060557	12" Insulator Cover	3 lb. / 1.4 kg.
C4060557L	16½" Insulator Cover	3½ lb. / 1.6 kg.

Insulator covers fit 6½" to 9"-diameter pin or post insulators. Each cover includes an adapter for handling by Grip-All clampsticks.

C4060537	Deadend Cover	5¼ lb. / 2.4 kg.

Deadend cover fits three 10"-diameter porcelain bells or polymer deadend insulators and includes an adapter for handling by Grip-All clampsticks.

Class 2 Temporary Conductor Cover

14.6kV Covered-Phase-to-Covered-Phase

Features & Applications

- Lightweight - 50% the weight of similar rubber hose
- Rated 8.4kV phase-to-ground
- Meets ASTM F712 Class 2
- Available in 5 or 6 ft models
- High visibility orange color
- Secure locking feature / male and female connecting ends
- Larger ID than traditional Class 2 rubber hoses (1.75 in. compared to 1.25 in.)

Catalog No.	Description	Weight
PSC4060616	5' Class 2 Conductor Cover	1.7 lb. / 0.8 kg.
PSC4060617	6' Class 2 Conductor Cover	2.0 lb. / 0.9 kg.

Cover will couple with major brands of rubber line hose and insulator covers.
(C4060182 Insulator Cover shown on page 2403)

Note: This product has a black inner layer and orange outer layer of material.

If either layer should wear such that the color from the opposite layer is visible, the product must be taken out of service immediately.

Design tested per ASTM specification F712

Keep product clean and dry, moisture and contaminants reduce the dielectric properties. Cover may be cleaned with CHANCE® Moisture Eater II (see Catalog Section 2500).

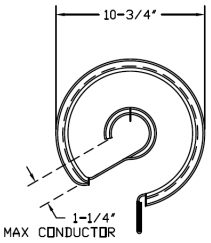
CHANCE®

Spiral Conductor Covers

72.5kV Covered-Phase-to-Covered-Phase
ASTM F712 Class 6

Features & Applications

- Provides protection for accidental brush contact during live line maintenance
- Tested per ASTM F712
- Made from tough, durable ABS Plastic
- Includes grip-all adapter for hotstick installation
- Overall length of approximately 53in. (1.3m)



Catalog No.	Description	Weight
PSC4060737GA	Class 6 72.5kV Spiral Conductor Cover	11 lb. / 5 kg.

Universal Hot Cover

Class 4 Stackable Design

Features

- Designed to cover post insulators, cable terminations, arresters and potheads
- Rated Class 4 – 36.6kV Covered-Phase-to-Covered-Phase per ASTM F712
- Designed to be stackable and take up less room
- Secure in place with included bungie cord
- Can be used with hot-sticks or rubber gloves

Catalog No.	Description	Weight
PSC4060692	Class 4 Universal Hot Cover	3.7 lb. / 1.7 kg.

Overhead Switch Barrier

Cover all three phases

The Barrier Board is designed to cover all three phases of a 12kV or 25kV horizontal disconnect switch in a substation. The Barrier Board acts as a physical barrier between the open switch and the bus. It lifts easily with shotgun sticks for proper placement. The barrier covers the lower blade portion of the disconnect switch so that work can be performed on the bottom side of the switch.

Features

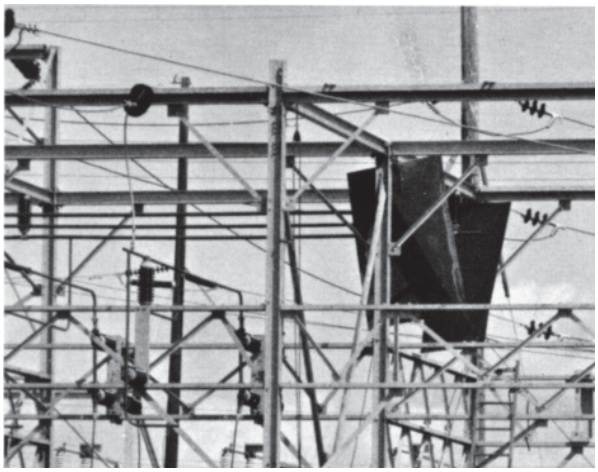
- Designed to fit 12kV or 25kV disconnect switches
- Compatible with 30" and 36" spacing
- Puncture Strength - 300 V/mil (approx .25 in thickness)
- Provided with Gripall adapters (2 positions)
- High visibility orange color
- Provided with yellow vinyl bag
- Available as individual item or 2 per kit
- Custom options available

Catalog No.	Description	Dimensions	Weight
PSC4060648	Board Barrier	84" x 19" x 5"	17 lb. / 7.7 kg.
PSC4060651	Kit (2 Barriers and Bag)	84" x 19" x 5"	35 lb. / 15.9 kg.
PSC4060650	Bag	86" with handles	1 lb. / 0.5 kg.

Substation and Underground Barriers

Features & Applications

- Same excellent quality bright-orange linear polyethylene material as used in many pieces of CHANCE cover-up equipment
- Available in 4' x 6' sheets for use in substations and as underground barriers
- Cutting smaller pieces is accomplished with any hand or power saw
- Form the sheets with a blow torch or in an oven heated to 250°F
- Although sheet becomes increasingly stiff as temperatures drop, it does not become brittle and break at -50°F
- Will not soften or deform at 170°F
- Material will not flash flame
- Puncture strength is 300 volts per mil.



Catalog No.	Description	Weight
C4060002	4 feet x 6 feet x 0.255"	30 lb. / 13.6 kg.

Insulator, Hardware, and Crossarm Covers

Pole Top Cover — 36.6kV Covered-Phase-to-Covered-Phase

- Tested to ASTM F712 Class 4
- Made of high-impact orange ABS plastic
- Helps prevent tie wires from contacting pole when tying/untying ridge construction
- Fits a pole top of up to 10" dia. with single- or double-ridge pin construction
- Maximum bolt length is 16"
- Rests on pole top, covering 10-1/2" of the pole top and 4-1/2"of ridge pin
- By using the elastic cord furnished with cover, cover-up can be butted against insulator to cover ridge pin and pole top

C4060097

Catalog No.	Description	Weight
C4060097	Pole Top Cover	2½ lb. / 1.1 kg.

Crossarm End Cover — 36.6kV Covered-Phase-to-Covered-Phase

- Tested to ASTM F712 Class 4
- Covers crossarm end to help prevent tie wires from contacting crossarm during tying/untying
- Helps prevent lineman from contacting a ground potential while in contact with conductor
- Fits over crossarm end up to 5" x 6" with either pin- or post-type insulator
- Made of ABS orange plastic
- Slots may be cut in each side to provide passage for double-arming bolts

C4060102

C4060102	Crossarm End Cover	2½ lb. / 1.1 kg.

Post Insulator Covers — 48.3kV & 26.4kV Covered-Phase-to-Covered-Phase

- Tested to ASTM F712 Class 5 and 3
- Made of high-impact orange ABS plastic
- Split on each side forms a passage for the conductor
- Bottom portion of T-shape covers the insulator skirts
- Horizontal portion covers the conductor and hardware
- Horizontal portion is flared at each end to interlock with CHANCE 36.6 or 46kV spiral conductor covers (see page 2410)
- Larger cover may be used on vertical and horizontal 46kV tie top and clamp top post insulators and Epoxirod® standoffs, pole tops and bi-unit assemblies
- Not for rubber glove installation above 34.5kV

C4060091

C4060091	48.3kV Post Insulator Cover	3½ lb. / 1.6 kg.
C4060092	26.4kV Post Insulator Cover	3 lb. / 1.4 kg.

CHANCE®

Spiral Conductor Covers

14.6/36.6kV and 48.3kV Covered-Phase-to-Covered-Phase

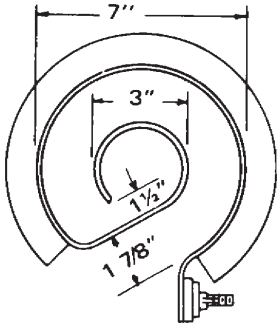
Features & Applications

- Tested to ASTM F712 Class 4 or Class 5
- Available with 4' or 6' Epoxiglas® handle for easy installation from a bucket or platform, in single units or linked together
- Easy-to-install, bright-orange conductor cover
- Extra protection with a wide air space between two thicknesses of solid insulation
- Made of tough, durable ABS plastic
- Overall length of each cover is 53”
- All units can interlock with each other to make up a chain of guards
- Eliminates the need for an insulator cover
- Each double-crossarm unit will fit over two 15kV pin-type insulators

C4060082

C4060040
Grip-All Adapter available as accessory, interchangeable with Epoxiglas handles.

15/36.6kV units are slotted to fit over 15kV insulators.



Cross Section

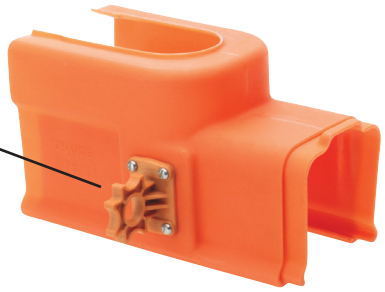
Catalog No.	Type of Fitting	Weight
48.3kV Ø-to-Ø Units		
C4060082	w/ 4' Epoxiglas handle	10½ lb. / 4.8 kg.
C40600826	w/ 6' Epoxiglas handle	11½ lb. / 5.2 kg.
C4060082GA	w/ Grip-All Adapter	9½ lb. / 4.3 kg.
14.6/36.6kV Ø-to-Ø Units for Single Crossarm		
C4060083	w/ 4' Epoxiglas handle	9½ lb. / 4.3 kg.
C40600836	w/ 6' Epoxiglas handle	10½ lb. / 4.8 kg.
C4060083GA	w/ Grip-All Adapter	8½ lb. / 3.9 kg.
14.6/36.6kV Ø-to-Ø Units for Double Crossarm		
C4060084	w/ 4' Epoxiglas handle	9 lb. / 4.1 kg.
C40600846	w/ 6' Epoxiglas handle	10 lb. / 4.5 kg.
C4060084GA	w/ Grip-All Adapter	8 lb. / 3.6 kg.

Crossarm Cover Up

Insert in place for pin insulators

Insert

Grip-All adapter permits handling with clampstick

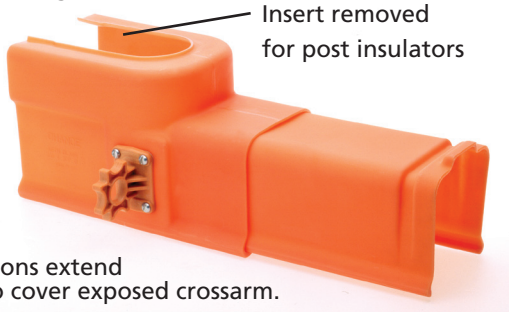


Catalog No.	Description	Weight
C4060504	Crossarm Cover Up	2¼ lb. / 1 kg.

Features & Applications

- ASTM Class 3 rated 26.4kV Covered-Phase-to-Covered-Phase
- Telescopes to fit exact length requirements
- Fits onto wood or steel crossarm sizes up to 3-3/4" x 4-3/4" for energized line work
- Two-piece design telescopes from 13.1” to 20.9”
- Allows easy adjustment to various lengths
- With removable insert in place, gives desired close fit on pin insulator construction
- For the same type fit on post insulators, the insert simply is not used
- An external hotstick adapter on the cover allows easy placement and removal by a Grip-All clampstick from most access angles

Insert removed for post insulators



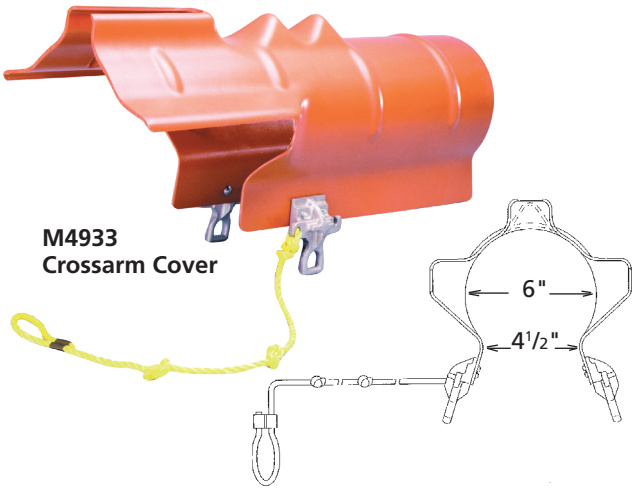
Sliding sections extend or retract to cover exposed crossarm.

Crossarm Cover

36.6kV Covered-Phase-to-Covered-Phase

Features & Applications

- Tested to ASTM F712 Class 4
- Helps prevent tie wires from contacting crossarm when tying/untying insulators
- Material used is the same high-dielectric polyethylene used for CHANCE conductor and insulator covers (shown below)
- Designed for single- or double- arm construction
- Slots provided for double-arming bolts
- Flanges above slots shield the ends of double-arming bolts



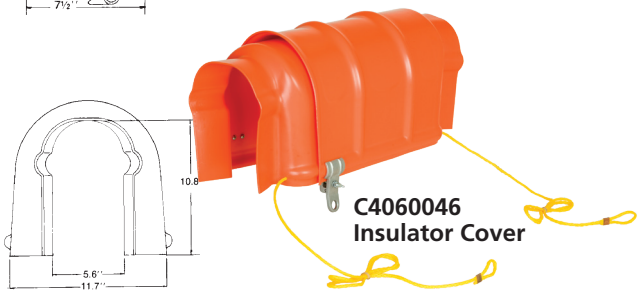
Catalog No.	Overall Length	Weight
M4933	Crossarm Cover, 24" Long	3¼ lb. / 1.5 kg.

Conductor and Insulator Covers

46kV Covered-Phase-to-Covered-Phase

Two conductor covers lock together on a 13kV line where an insulator cover is not required.

Two conductor covers lock with insulator cover on middle conductor of 34.5kV sub-transmission lines.



Features & Applications

- Made of high-dielectric polyethylene
- Wax-like surface provides natural self-cleaning action and resists effects of greases and other contaminants
- Bright-orange color gives visible warning to workers close to equipment
- Designed to help protect lineman while working close to energized conductors
- Rated Covered-Phase-to-Covered-Phase for voltages through 46kV
- Can be easily installed with a Grip-All clampstick
- Clips on and covers conductors up to 1¾" in diameter
- A positive air gap is maintained by a special hanger system inside the cover
- Conductor is locked in the hanger by a swinging latch that can be opened and closed with a hot stick
- Insulator cover is designed to be used in conjunction with two conductor covers on insulators above 13kV
- Fits over insulator and locks with a conductor cover on each end
- Polypropylene rope swings under the crossarm and hooks with a clampstick
- Helps to prevent insulator cover from dislodging due to bumping or wind gusts

Test Data

- Tested to ASTM F712
- Electrical: Tests using conductor covers in conjunction with insulator covers provided 46kV phase-to-phase protection for normal working conditions
- Temperature: Will not soften or deform at 170° F. Will not become brittle at -50° F

Catalog No.	Description	Capacity	Overall Length	Weight
M4931	Conductor Cover	Conductors through 1¾" diameter	5'	9¼ lb. / 4.2 kg.
C4060046	*Insulator Cover Set	Insulators through 10½" diameter	22" to 34"	11 lb. / 5.0 kg.

*Consists of two pieces.

CHANCE®

Rubber Insulating Blankets

Features & Applications

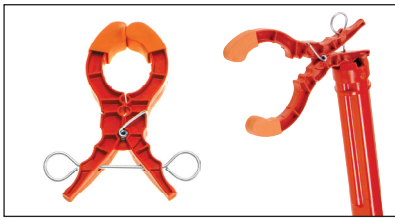
- Meet ASTM Standard Specification D1048
- Type II (ozone-resistant)
- Class 4 blankets maximum use voltage 36kV and proof tested at 40kV AC
- Class 2 blankets maximum use voltage 17kV and proof tested at 20kV AC

Performance-Designed Material

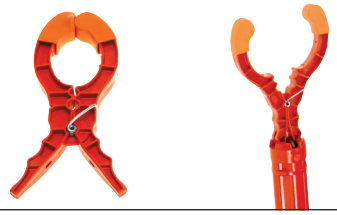
- Protect workers from accidental contact with energized components during line maintenance
- Made of ozone/corona-resistant elastomer
- Offer excellent performance properties with ASTM Standard Specification D1048
- Special formulation exhibits superior resistance to long-term aging/checking
- Will retain its high-visibility orange color

Versatile Protection, Maximum Rating

- Flexible to cover many irregular shapes
- Used with conductor covers (flexible or rigid) on deadends, apparatus, secondary racks, poletop pins and crossarms
- Blankets may be used in applications which require lower Class or type
- Designed with perimeter eyelets to accept CHANCE button C4060532 and most other buttons existing in the field
- 1.5"-diameter center hole on slotted blankets will easily fit around common hardware



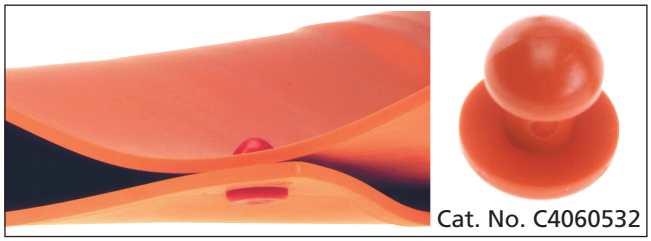
Hot Stick Clamp
Catalog No. C4060531
Eyes and special handle shape for easy placement by clampstick



Rubber Glove Clamp
Cat. No. C4060530
Special handle shape also fits clampstick for easy placement

Hot Stick Clamp
Catalog No. PSC4060676
For in-line use in grip-all clampstick

Blanket Buttons
Cat. No. C4060759/ C4060760
For use with CHANCE rubber insulating brackets



Cat. No. C4060532

Solid Blankets

Catalog No.	Description	Weight
PSC13	Class 4 22" x 22", 28 eyelets	2.7 lb. / 1.2 kg.
C4060346	Class 4 36" x 36", 6 eyelets	8¼ lb. / 3.7 kg.

Slotted Blankets

Catalog No.	Description	Weight
C4060348	Class 4 36" x 36", 28 eyelets	8¼ lb. / 3.7 kg.
PSC4060708	Class 2 22" x 22", 12 eyelets	3 lb. / 1.4 kg.
PSC4060724	Class 4 22"x22", 28 eyelets	3.2 lb. / 1.5 kg.

Accessories

Catalog No.	Description	Weight
C4060530	Clamp Pin, Rubber Glove	0.27 lb. / 0.12 kg.
C4060531	Clamp Pin, Hot Stick	0.37 lb. / 0.17 kg.
PSC4060676	In-line Clamp Pin, Hot Stick	0.7 lb. / 0.3 kg.
C4060532	Button, Rubber Blanket	⅛ lb. / 0.1 kg.
C4060759	Magnetic Blanket Button	2.4oz / 0.07kg.
C4060760	Back-To-Back Blanket Button	0.8oz / 0.02kg.
C4032998	Storage Cannister*, no handle	6 lb. / 2.7 kg.
C4032999	Storage Cannister* w/ handle	7⅝ lb. / 3.5 kg.

**For details, see Catalog Section 2500.*

Type I Rubber Insulating Blankets

Features & Applications

- Meet ASTM Standard Specification D1048
- Class 2 (17kV Ø-Ø maximum use)
- Type I (non-ozone-resistant)

Performance-Designed Material

- Protect workers from accidental contact with energized components during line maintenance
- Made of natural rubber
- Offer excellent performance properties in accordance with ASTM Standard Specification D1048
- Special formulation will retain its excellent physical properties

Versatile Protection, Maximum Rating

- Flexible to cover many irregular shapes
- Used with conductor covers (flexible or rigid) on deadends, apparatus, secondary racks, poletop pins and crossarms
- Blankets may be used in applications through 17kV phase-to-phase maximum
- Designed with perimeter eyelets to accept CHANCE button C4060532 and most other buttons existing in the field
- For details on buttons, clamp pins and storage cannisters, see page 2412

Ordering Information

- **Class 2** • **Type I**
- **Proof Tested at 20kV AC rms**
- **Maximum Use: 17kV Ø-Ø**

BLACK Solid Blankets

Catalog No.	Description	Weight
PSC4060607	Class 2 36" x 36", 6 eyelets	6¼ lb. / 2.8 kg

Flexible Rubber Cutout Covers

Features & Applications

- For use on overhead cutouts
- Conforms to ASTM D1049
- Class 2 (17kV Ø-Ø maximum use)
- Type II (ozone resistant)
- Tested at 20kV AC

Catalog No.	Description	Weight
PSC24CC	Class 2 Rubber cutout cover 24" x 15" x 3.75"	7.0 lb. / 3.2 kg.

CHANCE®

Short-Lip Flexible Line Hose

Features & Applications

- High-visibility orange color
- Choice of ratings and sizes: 17kV, Class 2, 1-1/4"-dia., 26.5kV, Class 3, 1-1/2" dia.

Low Weight, High Performance

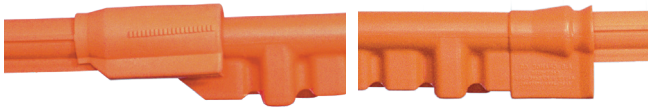
- Much lighter in weight than other flexible dielectric cover-up
- Helps protect workers from accidental brush contact with conductors
- In accordance with ASTM D1050, CHANCE ozone/corona-resistant thermoplastic elastomer offers excellent performance properties
- Does not absorb water

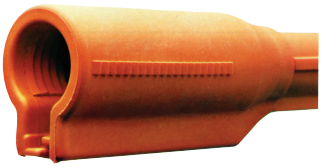
Easy To Handle And Place

- Outer lip peels back with ease to open and start onto a conductor from either end
- With a push at the other end, full length slides on as lips zip closed around conductor
- To remove each piece, open one end and strip the remainder off the conductor

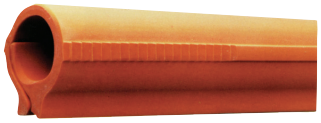
Excellent Color Retention

- Effectively retains original color
- Superior resistance to long-term ageing/checking



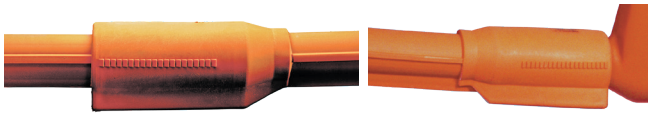


Serrated external ribs permit coupler to engage grooves inside long arm on flexible hoods made by others.



Resilient lips overlap to surround conductor.

Parallel grooves inside coupler match and grip the 20 serrations (¼" each) in outside ribs. All serrated sections measure 5" long. Coupler overlaps 6" onto plain end.



Interchangeable with other flexible cover-up brands, CHANCE Line Hose also engages CHANCE rigid-type insulator hoods, deadend covers and lineguards (rated for 25kV phase-to-phase, see Catalog Pages 2402 and 2403).

Short-Lip Line Hose — Type III – Ozone-Resistant

Meets ASTM Standard Specification D1050

ORANGE COLOR — Style A — Plain, Both Ends

Catalog No.	Length	Weight
1¼" Inside Diameter — Max. Use Ø - Ø: 17kV — Class 2, Proof Tested at 20kV AC rms		
C4060294	3 ft.	2.3 lb. / 1.0 kg.
C4060295	4½ ft.	3.4 lb. / 1.5 kg.
C4060296	6 ft.	4.6 lb. / 2.1 kg.
1½" Inside Diameter — Max. Use Ø - Ø: 26.5kV — Class 3, Proof Tested at 30kV AC rms		
C4060297	3 ft.	3.1 lb. / 1.4 kg.
C4060298	4½ ft.	4.7 lb. / 2.1 kg.
C4060299	6 ft.	6.2 lb. / 2.8 kg.

ORANGE COLOR — Style B — Coupler, One End

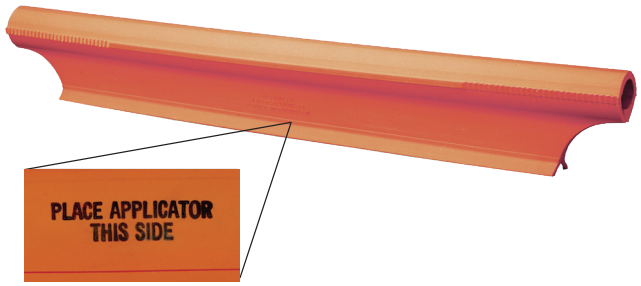
Catalog No.	Length	Weight
C4060304	3 ft.	3.2 lb. / 1.4 kg.
C4060305	4½ ft.	4.3 lb. / 2.0 kg.
C4060306	6 ft.	5.4 lb. / 2.5 kg.
C4060307	3 ft.	4.1 lb. / 1.9 kg.
C4060308	4½ ft.	5.6 lb. / 2.6 kg.
C4060309	6 ft.	7.2 lb. / 3.3 kg.

Extended-Lip Flexible Line Hose

36kV, Class 4, 1½"-diameter

Low Weight, High Performance

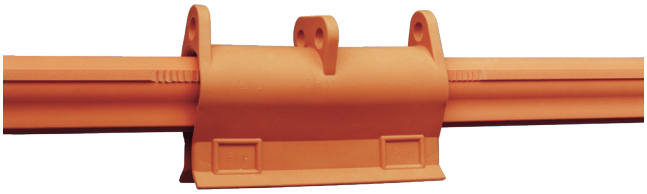
- As much as 25% lighter in weight than other Class 4 flexible cover-up
- Helps protect workers from accidental brush contact with conductors
- In accordance with ASTM D1050, CHANCE ozone/corona-resistant thermoplastic elastomer offers excellent performance properties
- Retains high-visibility orange color
- Special formulation exhibits superior resistance to long-term aging/checking
- Does not absorb water
- Dielectric cover-up system consists of a separate coupler and three hose lengths
- This permits hoses to join to cover straight runs or to flex to fit contours at bends and angles
- Shorter sections may be cut on site from standard lengths to custom-fit taps, jumpers and like wires



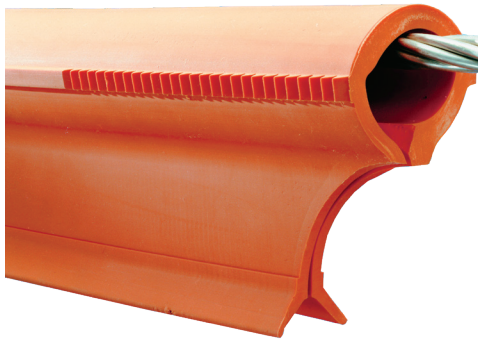
For installation by hot-line tools, design provides a flat area debossed full length to accept special applicator tools (see Catalog Section 2100).

Easy To Handle And Place

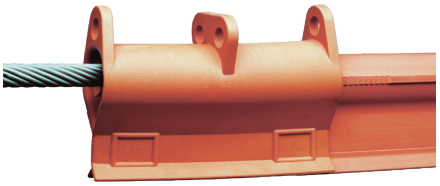
- Rubber gloves or hot-line tools may be used to apply CHANCE Class 4 Line Hose
- Lightweight, balanced material composition adds pliability
- Easy to put on, couple, relocate and remove, even when wearing leather protectors over rubber gloves
- Outer lip peels back with ease to open and start onto a conductor from either end
- With a push at the other end, full length slides on as lips zip closed around conductor
- So hose can insert into coupler, CHANCE bevel-cuts the serrations on the side ribs
- Vertical serrations resist withdrawal from the coupler
- Two or more coupled sections stay joined when drawn along on the conductor and positioned as a unit
- Rubber-like material slides readily by hand yet resists creep or slippage when placed
- To remove each piece, open one end and strip remainder off conductor



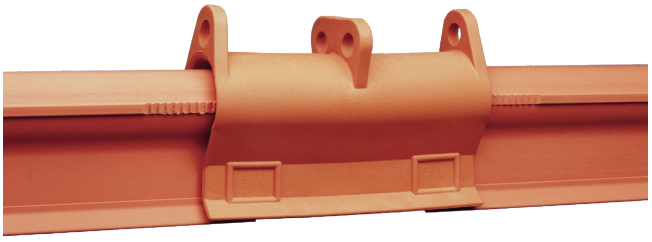
Coupler also can join sections CHANCE 1½"-diameter short-lip Class 3 hose for 26.5kV phase-to-phase maximum use.



Long lips provide flashover distance to permit use on systems through 36kV phase-to-phase.



Interchangeable with other brands of extended-lip hose, CHANCE Class 4 flexible cover-up joins with separate coupler.



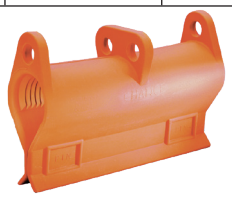
Parallel grooves inside the coupler match and grip the 28 serrations (¼" each) in Class 4 hose ribs. All serrated sections on Class 4 hose measure 7 inches long. Coupler overlaps 5¼ inches onto hose when engaged.

Ordering Information

Meets ASTM Standard Specification D1050
for Type III — Ozone Resistant
Class 4, Proof Tested at 40kV AC rms
Maximum Use, Phase-to-Phase: 36kV

Hose — Style C - Plain, Both ends — 1½" I.D.

Catalog No.	Length	Weight
C4060341	3 feet	4½ lb. / 2 kg.
C4060342	4½ feet	6¾ lb. / 3.1 kg.
C4060343	6 feet	9 lb. / 4.1 kg.



Coupler

C4060340	10½ inches	1½ lb. / 0.7 kg.

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

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CHANCE®

Instruments and Meters

Catalog 2450 March 2020

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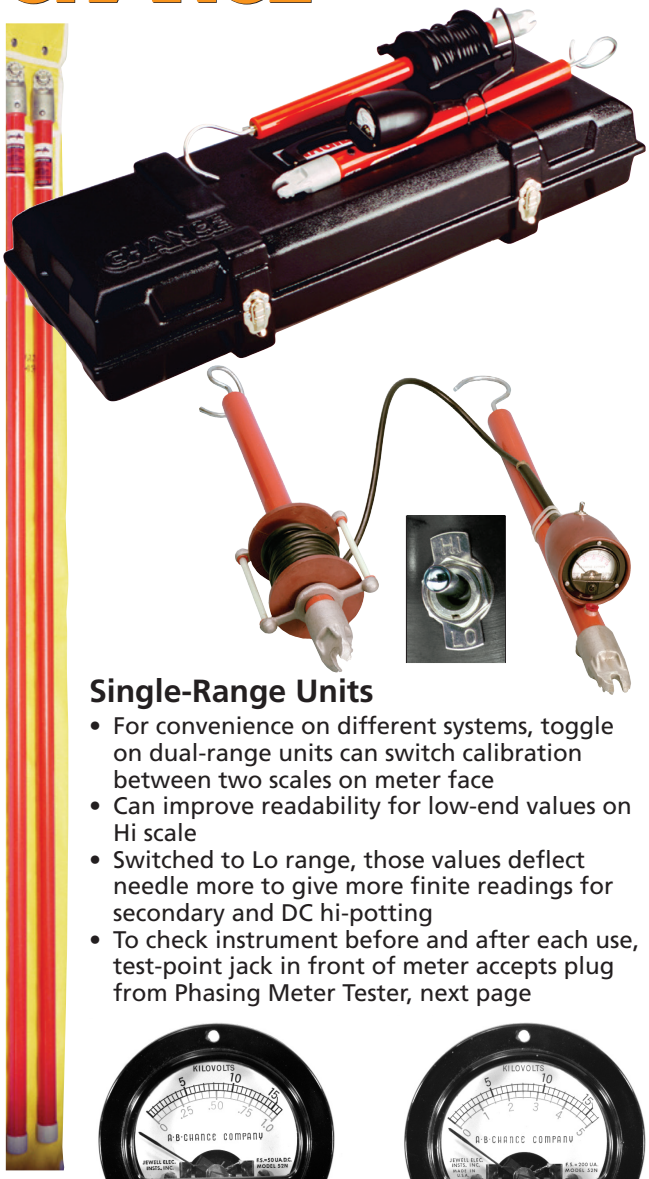


Analog Phasing Testers

• for †Distribution Circuits

Features & Applications

- Determine phase relationships and approximate voltage, line-to-line or line-to-ground
- Feature two fiberglass poles with end fittings threaded for interchangeable probes
- Probe fittings couple with a high-impedance component encased in each pole
- To complete test circuit, a 22 ft. length of insulated flexible cable stores on reel affixed to one pole and connects to voltmeter on other pole
- Simple to operate, tester poles first attach to two 6 ft. Epoxiglas® insulating universal handles (included in each kit for proper working clearances)
- Probes can be brought into contact with conductors appropriate for the meter to read phase-to-phase or phase-to-ground voltage

Single-Range Units

- For convenience on different systems, toggle on dual-range units can switch calibration between two scales on meter face
- Can improve readability for low-end values on Hi scale
- Switched to Lo range, those values deflect needle more to give more finite readings for secondary and DC hi-potting
- To check instrument before and after each use, test-point jack in front of meter accepts plug from Phasing Meter Tester, next page

Dual-Range Meters

1 & 16 kV Unit **5 & 16 kV Unit**

For URD testing, see Hi-Pot Adapters (page 2458) and Adapters for Elbows and Bushings (page 2472).

Extension Resistors, as installed

H18765

Distribution Phasing Testers

Single-Range Units

Catalog No.	Description	Weight
H1876	†16 kV Tester Kit*	27½ lb./12.4 kg.
H18761	†16 kV Tester Hook Probes, Case and Manual	23 lb./10.4 kg.
T4032261	25 kV Tester Kit*	27½ lb./12.4 kg.
H18767	40 kV Tester, Hook Probes, Case and Manual	23 lb./10.4 kg.

Dual-Range Units

T4030786	1 & †16 kV Tester Kit*	27½ lb./12.4 kg.
T4032311	5 & †16 kV Tester Kit*	27½ lb./12.4 kg.
T4032398	5 & †16 kV Tester Only	23 lb./10.4 kg.

*Each kit includes two 6' x 1-1/4"-dia. Epoxiglas® universal handles with storage bag, tester, hook probes, case and instruction manual

†To extend any CHANCE 16 kV Phasing Tester for 48 or 80 kV applications, optional Extension Resistors simply thread on in the field

Extension Resistors

H18762	Pair of Extension Resistors for up to 80 kV (32" long)	6 lb./2.7 kg.
H18764	Pair of Extension Resistors for up to 48 kV (21" long)	4 lb./1.8 kg.
P6242	Bag for 48 kV Resistors	1 lb./0.5 kg.
P6244	Bag for 80 kV Resistors	1¼ lb./0.6 kg.

Accessories

H17601	Universal Pole 1¼" x 6' — Two Needed	1¾ lb./0.7 kg.
P6436	Bag for Two Poles	1 lb./0.5 kg.
H18763	Case only for Tester	2 lb./0.9 kg.
H18766P	Pigtail Hook Probe	¼ lb./0.1 kg.
H18766S	Shepherd Hook Probe	¼ lb./0.1 kg.
H18766	Straight Probe	⅛ lb./0.1 kg.
H18765	Angle Probe	⅛ lb./0.1 kg.

Distribution Analog Phasing Tester Kit

for Overhead and Underground Systems Dual Range: 5kV & 16kV Scales

Features & Applications

- Versatile for popular distribution voltages
- Facilitates testing both underground and overhead systems
- Basic functions include identifying phases and reading line-to-line or line-to-ground voltage
- URD accessories in the Kit also permit cable-fault detection via DC hi-potting
- Consists of high-impedance components encased in two fiberglass poles with threaded end fittings for overhead probes or URD adapters
- A 22 ft.-long cable connects to voltmeter pole and stores on reel pole

Complete Kit includes:
Two 6' x 1-1/4"-dia. Epoxiglas® universal handles with storage bag, tester with instruction manual and two probes (shepherd hook and pigtail hook) in padded carrying case, plus four items below

- To detect faults on URD cable, Hi-Pot Adapter converts AC source to DC pulse
- Effective field method quickly tests new, repaired or suspect spans

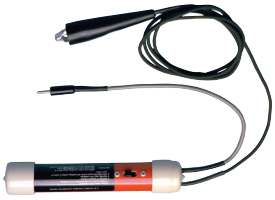
URD Accessories in Kit

One DC Hi-Pot Adapter & Instructions

C4031762

Two Bushing Adapters

T4030857

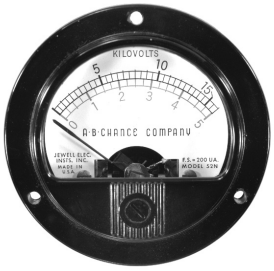


Phasing Meter Tester (with battery) in Kit

C4030838

H17601 Hotstick P6436 Bag

- To check instrument before and after use, Phasing Meter Tester lead plugs into test-point jack by meter
- Other lead clips onto each probe
- Switch on Meter Tester reverses polarity for thorough field-checking procedure
- Complete instructions included



- For convenience on different systems, toggle on meter housing can switch calibration between the two scales on meter face
- Improves readability for low-end values on the Hi (16 kV) scale
- Switched to Lo (5 kV) range, values deflect needle more to give more finite readings

Ordering Information

Catalog No.	Description	Weight
T4032557	Phasing Tester Kit with 16kV Hi-Pot Adapter, 2 URD Bushing Adapters, Phasing Meter Tester	31½ lb./14.2 kg.

CHANCE®

Digital Phasing Testers

• 16kV and 40kV models, plus 80kV extensions
• For Overhead & Underground

Display With Backlight, Hold and Sleep Modes

- Large direct-reading display
- Determine phase relationships and approximate voltage, line-to-line or line-to-ground
- Each tester consists of two fiberglass poles with end fittings threaded for interchangeable probes
- Probe fittings couple with high-impedance component encased in each pole
- To complete the test circuit, a 22 ft. length of insulated flexible cable stores on the reel affixed to one pole and connects to electronic display module on other pole
- Simple to operate, tester attaches to two 6 ft. Epoxiglas® insulating universal handles (included in each kit for proper working clearances)
- Probes can be brought into contact with conductors for tester to display phase-to-phase or phase-to-ground voltage
- Push button controls permit easy selection of options for display Backlight and Hold features
- When not in use, the unit's Sleep mode automatically conserves the battery

Large direct display with backlight and hold features

Hi-Pot & Higher Voltage Test Accessories

- For underground cable hi-pot testing
- 16 kV Kit C4033402 includes a DC Hi-Pot Adapter on page 2455
- Hi-pot testing cannot be done with the 40 kV unit
- Both the 16 kV and 40 kV Kits include underground bushing and elbow adapters
- For overhead subtransmission systems, Extension Resistors are available as accessories specific to each Digital Phasing Tester

Basic Units:

Each Basic Unit Digital Phasing Tester includes the tester unit with meter and reel poles, a pigtail hook probe, a shepherd hook probe, instruction manual and hard shell padded case.

See next page for Tester Kits.

16kV Digital Phasing Tester Basic Unit
Cat. No. C4033369 (14 lb./6.4 kg.)

40kV Digital Phasing Tester Basic Unit
Cat. No. C4033370 (14½ lb./6.6 kg.)
Hi-pot testing cannot be done with the 40kV unit.

Extension Resistors as installed for testing up to 80kV

Available as accessories, Extension Resistors simply thread onto the Digital Phasing Tester in the field.

HUBBELL

Phone: 573-682-5521 Email: hpsliterature@hubbell.com Web: hubbellpowersystems.com

Digital Phasing Testers

• For Overhead & Underground

Easy Verification Test

- To check instrument before and after use, Phasing Meter Tester lead plugs into test-point jack by meter
- Other lead clips onto each probe. Switch on Meter Tester
- Tester reverses polarity for thorough, easy field-checking procedure
- Complete instructions are included with each unit

16kV Digital Phasing Tester Kit
Cat. No. C4033402 (22½ lb./10.2 kg.)

40kV Digital Phasing Tester Kit
Cat. No. C4033403 (21½ lb./9.7 kg.)

Hi-pot testing cannot be done with the 40kV unit.

Extension Resistors for 16kV Digital Phasing Tester		
H18762	Pair of Extension Resistors for up to 80 kV (32" long)	6 lb./2.7 kg.
H18764	Pair of Extension Resistors for up to 48 kV (21" long)	4 lb./1.8 kg.
P6242	Bag for 48 kV Resistors	1 lb./0.5 kg.
P6244	Bag for H18762 80 kV Resistors	1¼ lb./0.6 kg.

Extension Resistors for 40kV Digital Phasing Tester		
C4033371	Pair of Extension Resistors for up to 80 kV (21" long)	4 lb./1.8 kg.
P6242	Bag for C4033371 80 kV Resistors	1 lb./0.5 kg.

NOTICE: Use ONLY the Extension Resistors specified for each Digital Phasing Tester as listed on this page. Extension Resistors are NOT interchangeable between 16kV and 40kV Digital Phasing Testers.

Accessories		
H18766S	Shepherd Hook Probe	¼ lb./0.1 kg.
H18766	Straight Probe	⅛ lb./0.1 kg.

CHANCE®

Digital Phasing Testers for Transmission Circuits

• Two models for up to 120 kV or 240 kV

Features & Applications

- Easily determine phase relationships
- Read approximate voltage (line-to-line or line-to-ground) on transmission circuits
- Feature two high-impedance components encapsulated in fiberglass poles, each with an end fitting threaded for interchangeable hook probes
- 22-ft.-long insulated flexible cable from voltmeter stores on reel on other pole
- Two complete kits offer a choice of voltage ranges for specific system applications
- Each kit includes a pair of 1-1⁄2"-dia. insulated handles for proper working clearances
- Individual items listed in each kit's bill of materials may be ordered separately by reference numbers given

Ordering Information

Catalog No.	Description	Weight
PSC4033465	10 - 120 kV Phasing Tester Kit:	40 lb./18.2 kg.
	(1) Instruction Manual	
	(1) PSE4033454 Phasing Tester (64" long)	22½ lb.
	(2) C4030459 Handles (96")	10 lb.
	(1) P6218 Bag for Handles (108")	3½ lb.
	(1) C4030460 Bag for Tester	3 lb.
	(1) PSE40333473 Meter Tester	1 lb.
PSC4033466	40 - 240 kV Phasing Tester Kit:	61 lb./27.7 kg.
	(1) Instruction Manual	
	(1) PSE4033455 Phasing Tester (102" long)	43½ lb.
	(2) C4030459 Handles (96")	10 lb.
	(1) P6218 Bag for Handles (108")	3½ lb.
	(1) C4030464 Bag for Tester	3 lb.
	(1) PSE40333473 Meter Tester	1 lb.

Large direct display with backlight and hold features

10 - 120 kV
Digital Phasing Tester

40 - 240 kV
Digital Phasing Tester

C4030459
96" Epoxiglas® Handles

Phasing Meter Tester

for Transmission Phasing Testers (pages 2456-2457)

PSE4033473
Phasing Meter Tester for Transmission Phasing Testers

Features & Applications

- Allows line personnel to determine, in the field, the operating condition of CHANCE instruments above
- Uses each instrument's own meter to display its operating condition
- Tester plugs into jack on instrument
- Meter readings are noted when tester's clip is contacted to each of instrument's two terminals and tester's polarity switch is in both of its positions
- Instrument is in proper working order if all four readings are within two units
- Pulling plug from jack automatically disconnects tester's battery
- 9-volt battery, furnished, usually lasts one year and is easily replaced
- Tester's durable and compact fiberglass housing will withstand abuse of field applications

Catalog No.	Description	Weight
PSE4033473	Phasing Meter Tester with leads and battery	1 lb./0.5 kg.

Analog Phasing Testers

Three kits for Transmission Circuits

Features & Applications

- Determine phase relationships
- Read approximate voltage (line-to-line or line-to-ground) on transmission circuits
- Features high-impedance components encapsulated in fiberglass poles, each with an end fitting threaded for interchangeable hook probes
- 22' long insulated flexible cable from voltmeter stores on reel on other pole
- Three complete kits offer a choice of voltage ranges for specific system applications. Each kit includes a pair of 1-1⁄4"-dia. insulated handles for proper working clearances
- Individual items listed in each kit's bill of materials may be ordered separately by reference numbers given

Ordering Information

Catalog No.	Description	Weight
C4030457	69-120 kV Phasing Tester Kit: (1) Instruction Manual (1) E4030498 Tester (62" long) (2) C4030459 Handles (96") (1) P6218 Bag for Handles (108") (1) C4030460 Bag for Tester	39 lb./17.7 kg. 22½ lb. 10 lb. 3½ lb. 3 lb.
C4030458	69-161 kV Phasing Tester Kit: (1) Instruction Manual (1) E4030499 Tester (75" long) (2) C4030459 Handles (96") (1) P6218 Bag for Handles (108") (1) C4030464 Bag for Tester	44 lb./20 kg. 27½ lb. 10 lb. 3½ lb. 3 lb.
T4032781	69-240 kV Phasing Tester Kit: (1) Instruction Manual (1) E4032780 Tester (98" long) (2) C4030459 Handles (96") (1) P6218 Bag for Handles (108") (1) C4030464 Bag for Tester	60 lb./27.2 kg. 43½ lb. 10 lb. 3½ lb. 3 lb.

C4030459
96" Epoxiglas® Handles

Analog Transmission Phasing Tester

Phasing Meter Tester

for Transmission Phasing Testers (pages 2456-2457)

Features & Applications

- Allows line personnel to determine, in the field, the operating condition of CHANCE instruments above
- Uses each instrument's own meter to display its operating condition
- Tester plugs into jack on instrument
- Meter readings are noted when tester's clip is contacted to each of instrument's two terminals and tester's polarity switch is in both of its positions
- Instrument is in proper working order if all four readings are within two units
- Pulling plug from jack automatically disconnects tester's battery
- 9-volt battery, furnished, usually lasts one year and is easily replaced
- Tester's durable and compact fiberglass housing will withstand abuse of field applications

Catalog No.	Description	Weight
PSE4033473	Tool with leads and battery	1 lb./0.5 kg.

PSE4033473

D.C. Hi-Pot URD Test Adapters

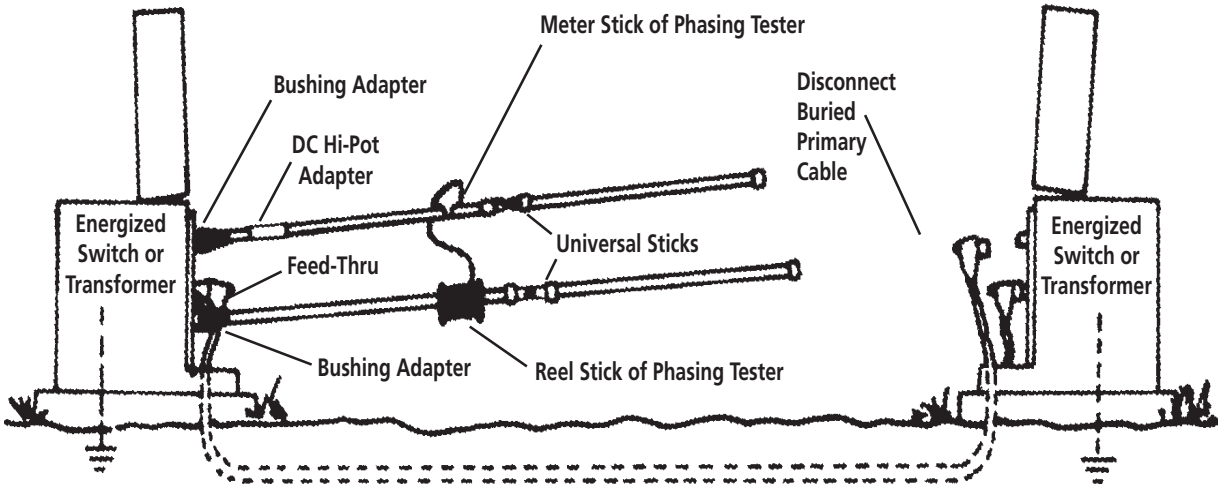
Features & Applications

- Work with CHANCE Phasing Tool H1876 (page 2452) for metered readout
- For quick, reliable fault detection on underground cables
- Two units are available for phase-to-phase system voltages up to 16 kV or 35 kV
- By converting AC source voltage to a rectified half-wave, these adapters permit testing of cables with a potential level equal to peak source voltage
- Field-effective method proves especially beneficial for:
  - o Testing new cable before initial energizing
  - o Testing repaired cable before re-energizing
  - o Testing suspect cable spans for faults
- Brass male fitting inside larger end threads onto the meter probe of phasing tool
- For testing and subsequent discharging, brass female fitting at smaller end accepts CHANCE Elbow Adapters or Bushing Adapters for 15 through 35 kV (page 2455)
- Illustrated instruction booklet is included
- Units contain high-voltage rectifiers encapsulated in CHANCE orange 1-1⁄4" and 1-1⁄2" dia. Epoxiglas® housings

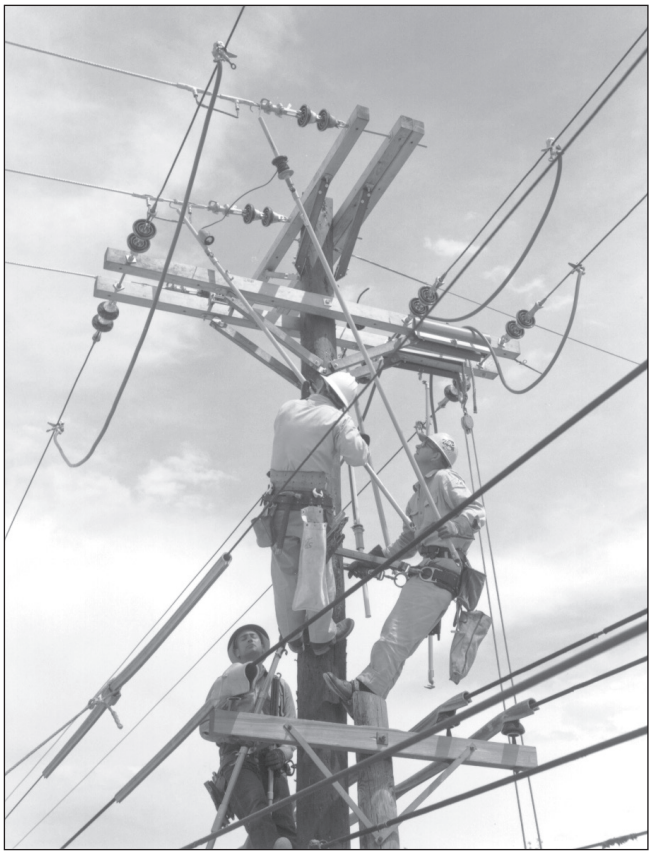
Hi-Pot Adapters measure only 13" in length for 35 kV unit, and 10" for 16 kV unit, far right.

Catalog No.	Description	Weight, each
C4031762	*16 kV Hi-Pot Adapter	1 lb. / 0.5 kg.
C4031763	*35 kV Hi-Pot Adapter	1¼ lb. / 0.6 kg.

*Maximum phase-to-phase system voltage.



Phase Rotation Tester



Features & Applications

- To determine the correct phase-rotation relationship, this portable instrument features construction similar to Phasing Tester H18761, page 2452
- An additional grounding circuit on the Phase Rotation Tester sets it apart for phase rotation testing
- Tester consists of two fiberglass poles with end fittings threaded for interchangeable probes
- Probe fittings couple with a high-impedance component encased in each pole
- 22 ft. length of insulated cable stores on reel affixed to one pole and connects to voltmeter on other pole
- Grounding terminal below the meter permits connection to a known ground for proper operation
- To check instrument before and after each use, a test-point jack in front of meter accepts the plug from Phasing Meter Tester C4030838, shown on page 2457

Application Range

- Attaches to Epoxiglas® Universal Poles of proper length for voltage being worked
- Meter displays up to 16 kV alone
- Can also read circuits through 80 kV with the thread-on Extension Resistors

Catalog No.	Description	Weight
H1879	Phase Rotation Tester, 16 kV, with Case	23 lb. / 10.4 kg.
H18762	Pair of Extension Resistors for through 80 kV, Length: 43"	6 lb. / 2.7 kg.
H18764	Pair of Extension Resistors for through 48 kV, Length: 25"	4 lb. / 1.8 kg.
H17601	Universal Pole, 1¼" x 6', Two Needed	1¾ lb. / 0.7 kg.
P6436	Bag for Two Universal Poles	1 lb. / 0.5 kg.
P6242	Bag for 48 kV Extension Resistors	1 lb. / 0.5 kg.
P6244	Bag for 80 kV Extension Resistors	1¼ lb. / 0.6 kg.
H18763	Carrying Case Only for Tester	2 lb. / 0.9 kg.

CHANCE®

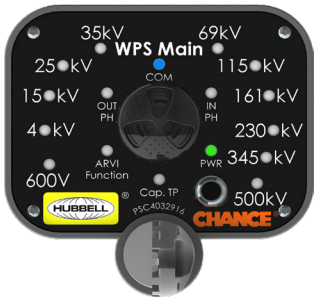
Wireless Phasing Set (WPS)

Phasing Mode Range: 480V up to 765kV

ARVI Mode Range: Cap. Test Point up to 765kV

Features & Applications

- Dual mode unit – Wireless Phasing Set (WPS) and full range Auto-Ranging Voltage Indicator (ARVI)
- WPS mode for determining phase relationship between two conductors with same nominal voltage
- ARVI mode to determine approximate voltage class of energized conductor
- Bright LEDs and audible alarm indicate in-phase or out-of-phase (WPS mode) and voltage class (ARVI mode)
- For use on 50/60Hz overhead and underground systems with proper adapters
- For use with hot sticks only



Design Features

- Wireless main and probe units have a range of approximately 300 ft
- Battery drawer does not require removal of front panel for replacement of batteries
- Requires two AA batteries for each unit
- Works with elbow and bushing adapters for URD applications

Operation

- To use in the ARVI mode, only turn on the main unit by depressing the power button. The main will go into ARVI mode when the yellow ARVI mode LED turns solid.
- To use in the WPS mode, turn on both the main and probe units by depressing the power buttons on both units. The blue comm LEDs will turn solid when the units are linked.

Optional Field Tester

- The WPS can be field tested in ARVI mode with the PSC4033582 Voltage Indicator Tester

Catalog No.	Description	Weight
PSC4032916	Wireless Phasing Set with Orange Bag	10 lb./4.5 kg.
PSC4033926	Wireless Phasing Set with Hard Case	13 lb./5.9 kg.
PSC4033811	Hard Case Only	6 lb./2.7 kg.

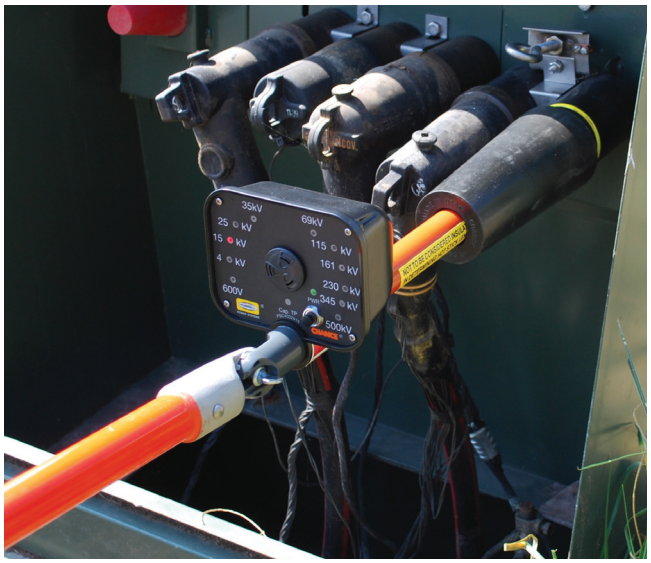
Orange Bag

Hard Case
(sold separately)

Full Range (600V – 500kV) Auto-Ranging Voltage Indicator (ARVI)

This model is capable of these three test methods:

URD Voltage Presence Test with Bushing Adapter and your feed-thru device



URD Capacitance Test with Straight Probe on Elbows with Test Points

Overhead Voltage Presence Test with Shepherd Hook Probe

CHANCE®

Full Range (600V – 500kV) Auto-Ranging Voltage Indicator (ARVI)

Complies with OSHA 1910.269 to Test for Absence of Nominal Voltage

• 600V to 500kV • For Overhead and URD Systems

Bright display lights indicate voltage class

This smart new-generation instrument makes hot-line voltage testing easier than ever. Its state-of-the-art electronics eliminate the need for a selector switch. Its automatic-ranging function quickly displays the **approximate phase-to-phase voltage class**. It provides an easy, reliable means for the operator to determine if a line is:

a) De-energized, or
b) Carrying less than normal system voltage from any source or induced voltage from an adjacent live circuit, or
c) Energized at full system voltage.

Simple to operate, the tester attaches to an Epoxiglas® insulating universal hot stick of appropriate length to maintain proper OSHA working clearances. A single push button activates the instrument, then a single light indicates either Power On (by glowing solid) or Low Battery (by blinking). With a good battery condition, the instrument performs a confirming self-test by illuminating each of the 12 indicator lights in series while emitting an **alternating audible signal**.

Then the probe can be brought into contact with the conductor. It automatically begins detecting at approximately 100V and holds the display of one of these phase-to-phase voltage classes: 600V, 4kV, 15kV, 25kV, 35kV, 69kV, 115kV, 161kV, 230kV, 345kV or 500kV. The audible signal begins as a slow beeping that becomes faster as the reading is increased.

When not in use, the unit's energy-saving Sleep mode automatically conserves the battery.

Large easy-to-read display activates each red light, one at a time, beginning at the low end and finally holds on the light for the phase-to-phase voltage class detected.

This model adapts to both overhead lines as well as URD circuits with 200 and 600 Amp elbows, including those with and without capacitance test-points. Interchangeable probes and adapters just thread into the ARVI end fitting and test point (T.P.) setting appropriate to each application. Furnished owner's manual illustrates operating details for all models.

. . . continued on next page . . .

Distribution / Transmission ARVI (Auto-Ranging Voltage Indicator) Cat. No. PSC4032915 (4½ lb./2.0 kg.)

Includes the tester unit, a shepherd hook probe, a straight probe, instruction manual and hard shell padded case.

Voltage Indicator Tester PSC4033582

MUST BE ORDERED AS A SEPARATE ITEM

Plug-in jack on Full-Range ARVI housing permits line personnel to quickly verify its operable condition with Voltage Indicator Tester (Cat. No. PSC4033582) before and after each use.

Accessories

H18766S	Shepherd Hook Probe	0.3 lb./0.1 kg.
H18766	Straight Probe	0.1 lb./0.1 kg.
T4030428	15kV only Bushing Adapter	0.5 lb./0.2 kg.
T4030856	15 - 35kV Elbow Adapter	1 lb./0.4 kg.
T4030857	15 - 35kV Bushing Adapter	1.6 lb./0.7 kg.

Distribution
Auto-Ranging Voltage Indicator (ARVI)

Complies with OSHA 1910.269 to Test for Absence of Nominal Voltage

• 600V to 69kV • For Overhead & Underground

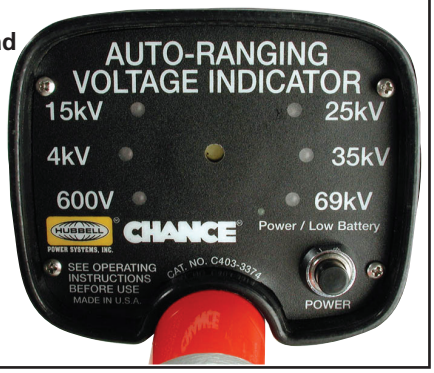
Bright Display Lights Indicate Voltage Class

- Makes hot-line voltage testing easier than ever
- State-of-the-art electronics eliminate need for selector switch
- Automatic-ranging function quickly displays approximate phase-to-phase voltage class
- Provides easy, yet reliable means for operator to determine if a line is:
  - o De-energized, or
  - o Carrying less than normal system voltage from any source or induced voltage from an adjacent live circuit, or
  - o Energized at full system voltage
- Simple-to-operate tester attaches to an Epoxiglas® insulating universal handle of appropriate length to maintain proper OSHA working clearances
- Single push button activates the instrument, then a single light indicates either Power On (by glowing solid) or Low Battery (by blinking)
- With good battery condition, instrument performs a confirming self-test
- It does this by illuminating each of the six indicator lights in series while emitting an alternating audible signal
- Then the probe can be brought into contact with the conductor
- It automatically begins detecting at approximately 480 Volts and holds display of one of these voltage classes: 600 V, 4 kV, 15 kV, 25 kV, 35 kV or 69 kV phase-to-phase
- Audible signal begins as a slow beeping, becoming faster as final reading is displayed
- When not in use, unit's energy-saving Sleep mode automatically conserves battery

Overhead & Underground Capabilities

- For overhead testing, a Shepherd Hook probe is included with the Basic ARVI (Auto-Ranging Voltage Indicator)
- For underground testing, Elbow Adapter T4030856 and Bushing Adapter T4030857 are included
- They simply thread onto the ARVI in the field to check for voltage at switch bushings or elbows on cables, using a feed-thru device

Large easy-to-read display activates each red light, one at a time, beginning at the low end and finally holds on the light for the phase-to-phase voltage class detected.



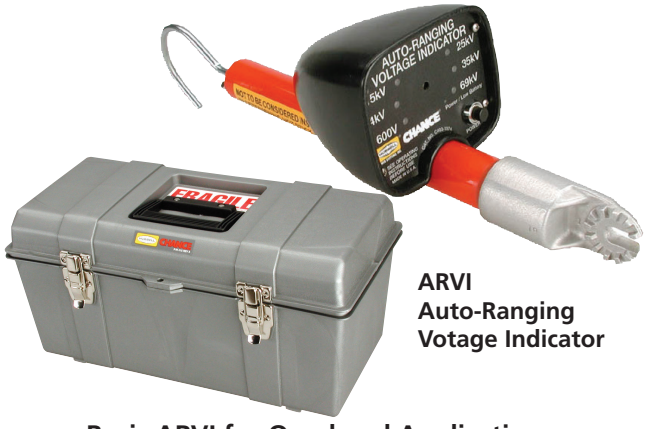
ARVI Auto-Ranging Voltage Indicator

Elbow Adapter T4030856 for 15, 25, 35kV

Voltage Indicator Tester C4033409

Bushing Adapter T4030857 for 15, 25, 35kV

ARVI Kit for Overhead and Underground
Catalog No. T4033418 (16¼ lb./7.4 kg.)
Includes the tester unit, shepherd hook probe, elbow adapter, bushing adapter, voltage indicator tester, instruction manual and hard shell padded case.



ARVI Auto-Ranging Votage Indicator

Basic ARVI for Overhead Applications
Catalog No. C4033374 (5½ lb./2.5 kg.)
Includes the tester unit, a shepherd hook probe, instruction manual and hard shell padded case.

Accessories

H18766S	Shepherd Hook Probe	¼ lb. / 0.1 kg.
H18766	Straight Probe	⅛ lb. / 0.1 kg.

CHANCE®

Transmission Auto-Ranging Voltage Indicator (ARVI)

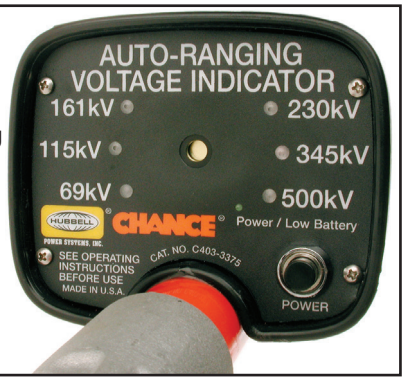
Complies with OSHA 1910.269 to Test for Absence of Nominal Voltage

• 69kV to 500kV • For Overhead Conductors

Bright Display Lights Indicate Voltage Class

- Makes hot-line voltage testing easier than ever
- State-of-the-art electronics eliminate need for selector switch
- Automatic-ranging function quickly displays approximate phase-to-phase voltage class
- Provides easy, yet reliable means for operator to determine if a line is:
  - o De-energized, or
  - o Carrying less than normal system voltage from any source or induced voltage from an adjacent live circuit, or
  - o Energized at full system voltage
- Simple-to-operate tester attaches to an Epoxiglas® insulating universal handle of appropriate length to maintain proper OSHA working clearances
- Single push button activates the instrument, then a single light indicates either Power On (by glowing solid) or Low Battery (by blinking)
- With good battery condition, instrument performs a confirming self-test
- It does this by illuminating each of the six indicator lights in series while emitting an alternating audible signal
- Then the probe can be brought into contact with the conductor
- It automatically begins detecting at approximately 69 kV and holds display of one of voltage classes: 69 kV, 115 kV, 161 kV, 230 kV, 345 kV or 500 kV phase-to-phase

Large easy-to-read display activates each red light, one at a time, beginning at the low end and finally holds on the light for the phase-to-phase voltage class detected.



- Audible signal begins as a slow beeping, becoming faster as final reading is displayed
- When not in use, unit's energy-saving Sleep mode automatically conserves battery

Transmission ARVI (Auto-Ranging Voltage Indicator) Cat. No. C4033375 (5½ lb./2.5 kg.)

Includes the tester unit, a shepherd hook probe, instruction manual and hard shell padded case.

Voltage Indicator Tester C4033431

MUST BE ORDERED AS A SEPARATE ITEM

Plug-in jack on Tester meter housing permits line personnel to quickly verify its operating condition with a Voltage Indicator Tester (Cat. No. C4033431) before and after each use.

Accessories

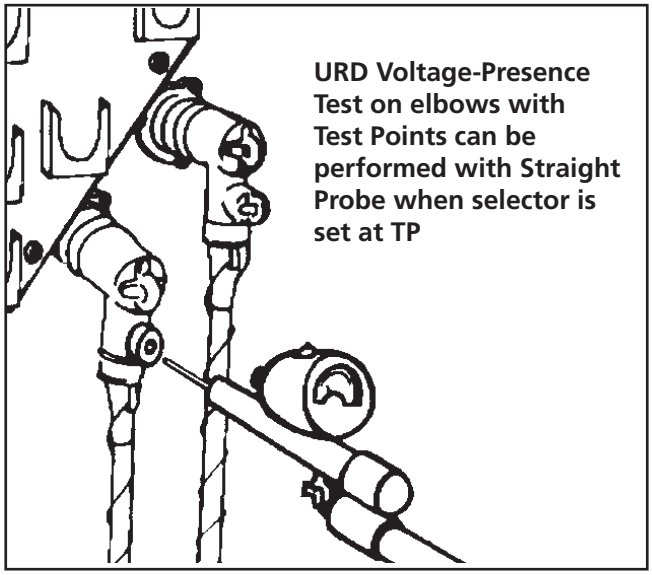
H18766S	Shepherd Hook Probe	¼ lb. / 0.1 kg.
H18766	Straight Probe	⅛ lb. / 0.1 kg.

Multi-Range Voltage Detector

Lighted-dial model for systems through 40 kV

Light Switch

Overhead Voltage-Presence Test with Hook Probe



URD Voltage-Presence Test on elbows with Test Points can be performed with Straight Probe when selector is set at TP

Accessories

H18766S	Shepherd Hook Probe	¼ lb. / 0.1 kg.
H18766	Straight Probe	⅛ lb. / 0.1 kg.

Easier-To-Read, illuminated Dial

- The lighted-dial option sets this unit apart from standard features on Multi-Range Voltage Detector (MRVD) C4030979, shown on next page
- A long-life bulb, powered by included internal battery, gives a glow to the meter face so scale is easy to read in most conditions
- To conserve the battery, a special switch locks the light off when not in use
- Spring-loaded toggle must be pulled up to move it over the stop between its on and off positions
- This helps keep switch from being flipped on accidentally while unit is not in use

Standard Features

- Confirms a line is de-energized prior to performing maintenance
- A field intensity meter, it is calibrated to read approximate phase-to-phase voltage when connected to any phase conductor
- Responds to magnitude of field gradient between its end probe and floating electrode (at the universal hotstick-attachment fitting)
- If the universal fitting is close to a ground, another phase or another voltage source, reading should be high
- If it's close to a jumper or equipment of the same phase, the reading should be low
- Gives metered readout capable of distinguishing actual line voltage from static or feedover from an adjacent line
- Numerical readings can be compared with numerical rather than subjective judgments associated with "fuzz sticking" or "glow-detecting"
- Since it is not a voltmeter, no specific accuracy is claimed by the manufacturer or can be assumed by the user

Operation

- Must be mounted on proper length hotstick for the voltage class involved
- Complete instructions are furnished with easy, illustrated step-by-step procedures
- Internal circuit and push button permit check before and after each use to confirm operational condition of instrument and battery

Includes:

- **Straight probe for URD elbows with test points**
- **Hook probe for overhead uses**
- **Instructions and storage case**

Catalog No.	Scale	Weight
T4033228	1 - 40 kV	5½ lb. / 2.5 kg.

CHANCE®

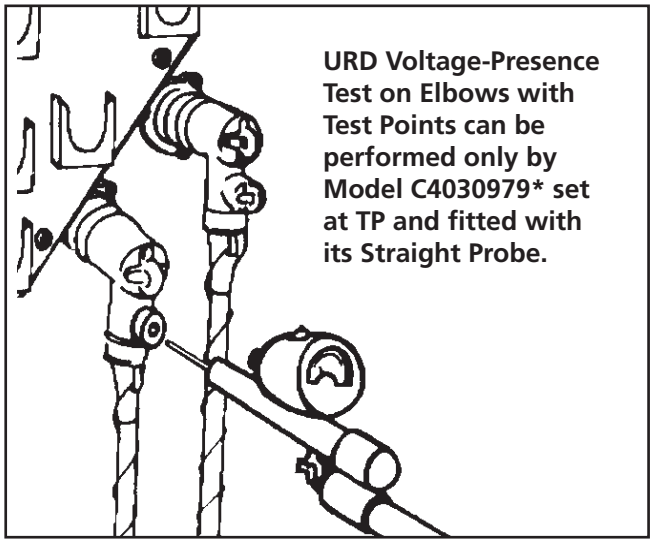
Multi-Range Voltage Detectors

for Overhead Systems to 600 kV and URD Elbow Test Points*

Overhead Voltage-Presence Test can be performed by all models.

Switch on C4030979* includes Test Point.

C4030979*



URD Voltage-Presence Test on Elbows with Test Points can be performed only by Model C4030979* set at TP and fitted with its Straight Probe.

Design Features

- Confirms a line is de-energized prior to performing maintenance
- A field intensity meter, it is calibrated to read approximate phase-to-phase voltage when connected to any phase conductor
- Responds to magnitude of field gradient between its end probe and floating electrode (at the universal hotstick-attachment fitting)
- If the universal fitting is close to a ground, another phase or another voltage source, reading should be high
- If it's close to a jumper or equipment of the same phase, the reading should be low
- Gives metered readout capable of distinguishing actual line voltage from static or feedover from an adjacent line
- Numerical readings can be compared with numerical rather than subjective judgments associated with "fuzz sticking" or "glow-detecting"
- Since it is not a voltmeter, no specific accuracy is claimed by the manufacturer or can be assumed by the user

Operation

- Must be mounted on proper length hotstick for the voltage class involved
- Complete instructions are furnished with easy, illustrated step-by-step procedures
- Internal circuit and push button permit check before and after each use to confirm operational condition of instrument and battery

C4031029 or C4031140

Ordering Information

Distribution and Transmission Multi-Range Voltage Detectors

Catalog No.	Scales	Weight
C4030979*	1 - 40 kV	5½ lb./2.5 kg.
C4031029	16 - 161 kV	5½ lb./2.5 kg.
C4031140	69 - 600 kV	5½ lb./2.5 kg.

*For testing URD elbows with test points, only model C4030979 on this page includes straight probe and "TP" setting on selector switch (as well as hook probe for overhead uses).

For other URD models and Accessories, see next page.

Multi-Range Voltage Detectors

for Overhead & URD Systems to 40 kV

Features & Applications

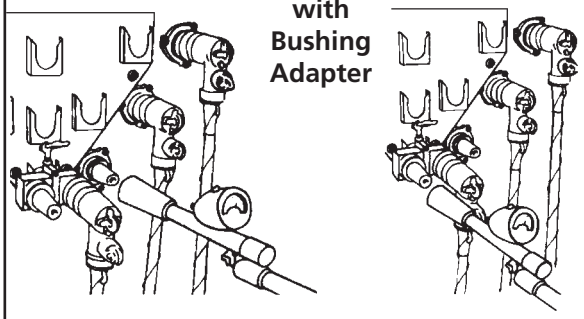
- Test both overhead and underground distribution systems
- For systems in voltage classes from 5 through 40 kV
- Provide easy, yet reliable means for operator to determine if a line is:
  - o De-energized, or
  - o Carrying less than normal system voltage from any source or induced voltage from an adjacent live circuit, or
  - o Energized at full system voltage
- Adapt to both overhead lines as well as URD circuits with 200 and 600 Amp loadbreak elbows including those with and without capacitive test points
- Interchangeable probes and adapters thread into the MRVD end fitting and the selector switch dials to the voltage range or test point (T.P.) setting appropriate to each application
- Furnished owner's manual illustrates operating details for all models.

T4032271
for Overhead and for URD Loadbreak Elbows

This model is capable of these three tests:

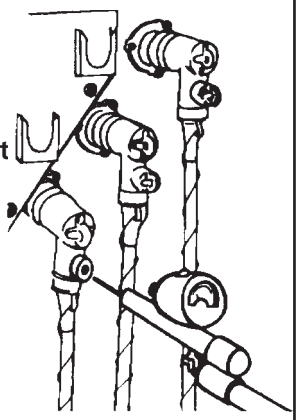
Overhead Test

URD Voltage Presence Test

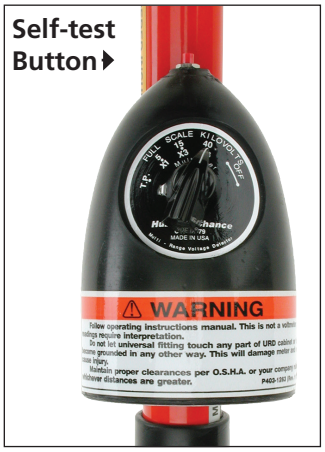


and
your feed-thru device*

URD Voltage Presence Test



Elbow Adapter also furnished to complete test when not using a feed-thru bushing device.



Ordering Information

5-15-25-40 kV Multi-Range Voltage Detector with TP Setting for Test Point on URD Elbows

Catalog No.	Description	Weight
T4032271	MRVD, Hook & Straight Probes, Elbows & Bushing Adapters, Case	6 lb. / 2.7 kg.

Accessories

H18766S	Shepherd Hook Probe	¼ lb. / 0.1 kg.
H18766	Straight Probe	⅛ lb. / 0.1 kg.

CHANCE®

Multi-Range Voltage Indicator (MRVI)

Capacitive Test Point up to 80kV phase-to-phase – Bluetooth connectivity for mobile device

CHANCE® Lineman Grade Tools™ introduces the Transmission Multi-Range Voltage Indicator (TMRVI), used to determine if power lines are at rated voltage, have induced voltage or are de-energized. Must be used with properly selected universal hot stick, even with rubber gloves.

Features & Applications

- Visible and audible voltage indicator with range from Capacitive Test Point up to 80kV Phase-to-Phase
- Bluetooth Connectivity to view MRVI display live on a mobile device
- Mobile app displays the meter face and approximate phase-to-phase and phase-to-ground voltages
- Large, easy-to-read dial face and brightly illuminated pointer indicate the approximate phase-to-phase and phase-to-ground voltage
- Can be used on overhead and underground lines with proper adapters

Design Features

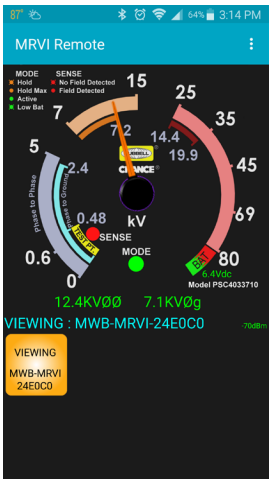
- New battery drawer does not require removal of front panel for replacement of batteries
- Requires four AA batteries
- Comes with storage bag designed with snaphook for suspending from belt or in storage
- Lightweight
- Works with elbow and bushing adapters for URD applications

Operation

- To turn on the meter, press the power switch until the meter lights turn on and audible tone is heard
- The needle will fully deflect to show the condition of the batteries
- The needle will then go back to the zero and the sense light will blink indicating the MRVI is ready to take a reading
- Hold mode can also be selected by depressing the power button twice in quick succession
- Optional mobile app can be downloaded from the Google Play or Apple iTunes store

Optional Field Tester

- The proximity voltage indicator can be field tested with the Voltage Indicator Tester PSC4033582



Mobile Device Display

Catalog No.	Application	Weight
PSC4033710	Multi-Range Voltage Indicator and Bag	1.3 lb./0.6 kg.
PSC4033925	Multi-Range Voltage Indicator and Hard Case	1.3 lb./0.6 kg.

Snaphook on each bag

- For suspending from belt or in storage
- Leather reinforced tab is stitched to the back of each bag

Super Tester Voltage Detector

• *Dual Range* • *Audible & Visible Indicators*

Features & Applications

- Lights blink and alarm sounds when placed in electrostatic field above trigger threshold
- Five flashing red lights alert the operator
- High-pitched tones also signal nearby personnel of present voltage that could be dangerous when applying temporary grounds or performing maintenance
- Can be used to check overhead lines, in substations and around switchgear
- Simply slips over the head of a standard 1-1⁄4"-diameter disconnect stick
- May be used on a CHANCE Grip-All clampstick, universal, telescoping or positive-grip hot line stick fitted with a special adapter (see table below)

Design Features

- Handy three-way switch permits selection of either the 1 - 100 kV or the 100 - 800 kV range for circuit being tested
- Turns off unit to save the battery when not in use
- 9-Volt alkaline battery readily installs by removing two knurl-head screws and sliding off the instrument cover
- Test button checks both the battery and the tester
- Depressing button activates signal circuits, sounding the tone and lighting the alarm lamps if the battery is good and unit operable
- Comes with instructions packed in lined, reinforced case with carrying handle

Operation

- Turn on tester with selector switch for voltage range required
- Check battery and unit by pushing "Test" button
- If tone volume is not clear or indicator lights are not bright, replace battery and recheck
- Mount tester on proper hot line tool
- For maximum-strength signals, place the tester within following minimum proximity to the circuit being tested

Phase-to-Phase versus Response Distance

kV	(1 - 100kV Range) Distance - inches	(100 - 800kV Range) Distance - inches
2.0	0	
13.8	4	
25.0	12	
34.5	19	1
69	39	3
115	7	
161	10	
230	20	
345	26	
525	44	

WARNING: Instrument damaged by touching 33kV or higher.

Note: Super Tester will not detect any voltage on cable with metallic sheath or semiconductive coating. Super Tester does not discriminate between induced and line voltage types. Device signals in the presence of either and the operator must determine which type before following utility safety working practices for engaging energized conductors.

Ordering Information

Catalog No.	Description	Weight
H1990ST	Super Tester, battery, plastic case	4¾ lb. / 2.1 kg.
M445598 (Catalog Section 2100)	Super Tester Adapter for Grip-All, Universal, Telescoping or Positive-Grip hot line tools	5 oz. / 0.1 kg.

M445598 Adapter fits into Super Tester either way so you can use it on a Grip-All clampstick or on a splined fitting of Universal, Telescoping or Positive-Grip hot line sticks.

CHANCE®

Proximity Voltage Indicator (PVI)

600V to 500kV - Audible & Visible Indicators

Features & Applications

- Bright display lights and audible alarm indicate voltage class without need to directly contact the conductor
- The class displayed is the approximate phase-to-phase voltage class
- Used to determine if power lines are at rated voltage, have induced voltage or are de-energized
- Designed as a non-contact Voltage Indicator
- Must be used with properly selected universal hot stick, even with rubber gloves
- Designed to be held 6 to 18 inches away from conductor being tested for presence of voltage
- Advanced feature allows user to temporarily disable range indications for voltages below the user selected range

Design Features

- New battery drawer does not require removal of front panel for replacement of batteries
- Requires two AA batteries
- Comes with storage bag designed with snaphook for suspending from belt or in storage
- Lightweight, 1.25lbs versus the 4.75lbs of the Super Tester

Operation

- To turn on the meter, press the power switch until the audible tone is heard
- Each LED will light up individually from the lowest to highest and then the alarm
- Bring the indicator within 6 to 18 inches of the line to be measured
- Below 480 volts, the indicator may need to be 6 inches or less away from the line
- Once an electrical field is detected, the range indications will increase as you approach the conductor
- As the voltage field intensity increases, the Proximity "SENSE" LED, Range LED and audible alarm will flash and beep faster

Optional Field Tester

- The proximity voltage indicator can be field tested with the Voltage Indicator Tester PSC4033582

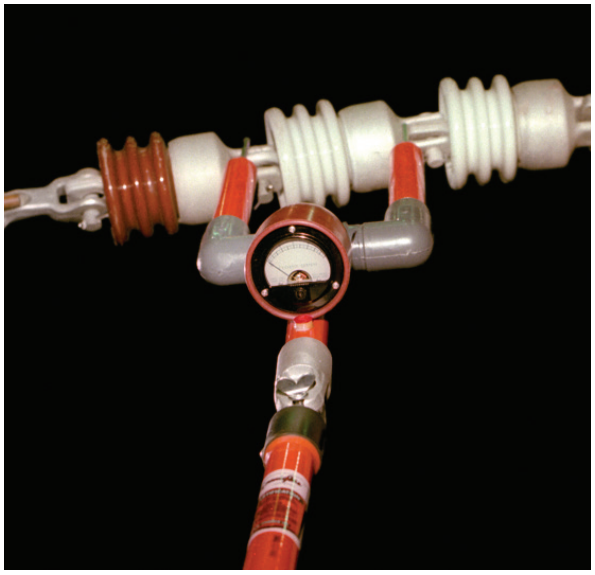
Catalog No.	Application	Weight
PSC4033737	Proximity Voltage Indicator and Bag	1.3 lb. / 0.6 kg.

Snaphook on each bag

- For suspending from belt or in storage
- Leather reinforced tab is stitched to the back of each bag

Energized Insulator Testers

for Distribution and Transmission Systems



Transmission Tester
C4032299

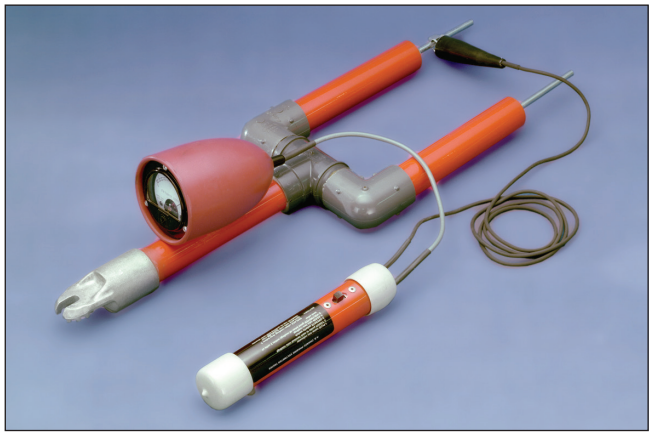
Distribution Tester
C4032298

Operation

- Sensitive voltmeter measures difference in potential across each insulator in a suspect string
- Comparative readings from satisfactory strings in same operating situation quickly indicate the state of every insulator in the string being tested
- Meter places minimal load on the phase as it requires only a small leakage current to make a reading
- Two straight steel probes threaded into the tester forks simply contact the metal fittings on both ends of each insulator at the same time
- Mounted on a 1-1⁄4"-dia. Epoxiglas® pole with a universal fitting
- Before each use the tester should be attached to the proper length hot stick for the system voltage involved
- Distribution model's scale reads up to 11 kV
- Transmission model's scale reads a maximum of 16 kV

Applications

- Without interrupting service, one of these testers quickly can check the condition of each insulator in a string
- Greatly reduces maintenance costs
- Only insulators identified as damaged require replacements
- No need to change entire strings
- Available in two models
- Testers serve specific applications:
  - o Deadend insulators on distribution systems through 35 kV
  - o Suspension insulators on 44 kV through 500 kV transmission systems



Plug-in jack on Insulator Tester meter housing permits line personnel to quickly verify its operable condition with a Phasing Voltmeter Tester (Cat. No. C4030838) before and after each use.

Energized Insulator Testers
(each includes instrument, two straight probes, operating instructions and metal carrying case)

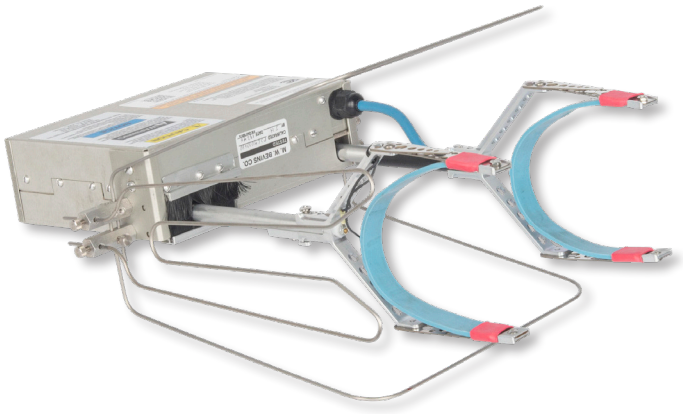
Catalog No.	System Applications	Weight
C4032298	Distribution (thru 35 kV)	4 lb./1.8 kg.
C4032299	Transmission (44 thru 500 kV)	5 lb./2.3 kg.

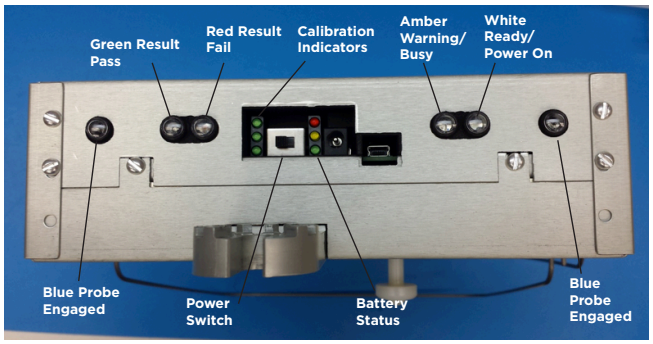
*Carrying case weighs additional 10¼ lb. (4.6 kg.)

CHANCE®

Polymer Insulator Tester

For Transmission Suspension Insulators





Operation

- Measures electrical integrity of polymer insulator
- Compares data from known good insulator or from calibration samples provided
- Can be used on energized line or de-energized
- Rechargeable battery
- Self contained power supply. Does not rely on E - field to operate.
- Must be used with appropriate length Epoxiglas® pole with universal fitting
- Easy to interpret Go/No Go lights and audible tones
- Data can be viewed and downloaded to Wi-Fi enabled device
- Adjustable probe spacing to fit most suspension and post.
- Rugged carrying case

Applications

- Can be used to collect data on energized line without interrupting service
- Use to test insulators before installation for added security
- Used on transmission suspension and post insulators 69kV and above up to 4" in diameter

Kit includes; Tester, Battery charger, Adapter cables, Calibration samples, Holder and Users Manual

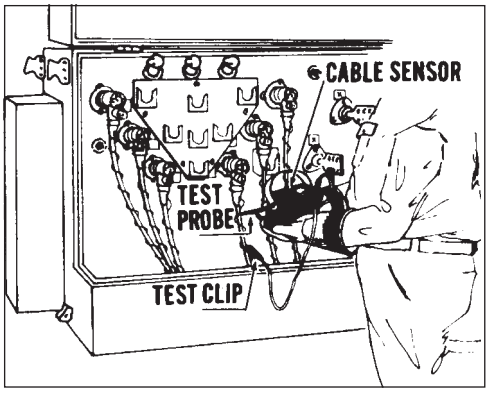
Catalog No.	Application	Weight
PSC4033680	Transmission Insulator Tester 69kV thru 500kV	4.2 lb./1.9 kg.

Energized Cable Sensor

Features & Applications

- Allows lineman to determine whether URD cable is energized or de-energized
- Amplifier is designed to give a meter reading
- This occurs when small AC voltage between the semi-conductive sheath and the concentric neutral of the energized URD cable is applied to test probe
- Amplifier is housed in a rugged thermoplastic case

- Self-test contact point is located on top of amplifier housing
- Check meter operation and battery condition by touching test probe to test point



- Sensor checks energized condition on concentric-neutral cable below an elbow without test points (as above)
- At cable mid-span (left), hose clamps bridge all strands of concentric neutral at the test location
- Sensor's neutral lead clips to one of the hose clamps
- Tip on probe lead contacts semi-conductive cable sheath to test voltage

Catalog No.	Description	Weight
C4030803	URD Cable Sensor, two leads, two hose clamps, two 9-volt batteries and instructions	5 lb. / 2.3 kg.

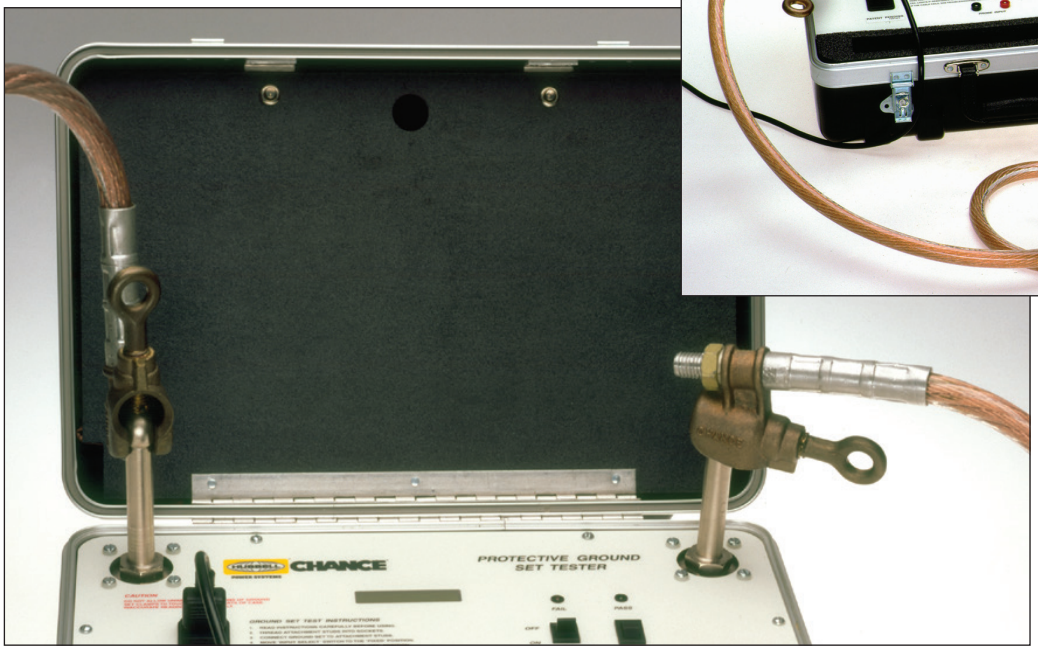
CHANCE®

Protective-Grounding-Set Tester

- **Meets ASTM Standard F 2249**
- **Offers easy, accurate diagnostics**

Self-Contained, Portable Convenience

- Used to check resistance in protective grounding sets
- 120 VAC and 230 VAC models available
- Applies Direct Current across the test specimen
- Seven-minute video, included with each unit, shows how to use tester
- Instruction manual includes procedure details
- All components store in tester's integral carrying case



Simple, One-Button Testing

- Digital display shows the resistance measured in milliohm
- Compare measured resistance against the acceptable resistance levels specified in ASTM F2249
- Resistance displayed with ±1% accuracy, from 1 micro-ohm to 6.5 ohms

Troubleshooting Mode

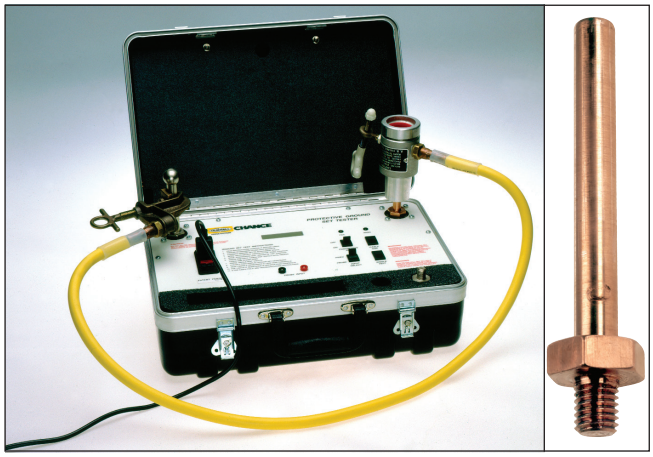
- If a ground set does not pass initial test, Tester can help isolate problems
- High-resistance source can often be remedied by simple repairs to cable set
- Retesting then can quickly verify the effects of repairs
- For troubleshooting mode, test probes are furnished to plug into the Tester
- A switch activates them instead of ball-stud terminals
- Probes are used to test across each contact interface in ground set
- Results display in milliohms, just as in the first test mode

Optional Terminals For Special Ground Sets

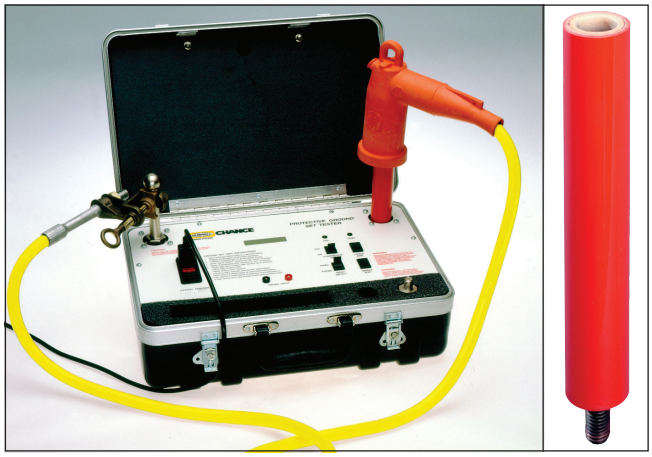
- Standard ball-stud terminals accept most types of ground clamps, including CHANCE ball-socket clamps.
- To test special-application grounding sets for underground-distribution transformers or switchgear, two optional adapters shown on next page are available as separate items

Protective-Grounding-Set Tester (continued)

- For easy, accurate diagnostics
- Meets ASTM Standard F 2249



Optional Straight Stud Terminal T4033159 for testing grounded-parking-stand temporary grounding sets.



Optional Elbow Adapter C4033449 (15 & 25kV) for testing temporary grounding sets fitted with a grounding elbow. PSC4032947, 35kV, Elbow Adapter.

Included with each Protective-Grounding-Set Tester:

- Self-contained carry case
- 2 ball-stud terminals
- DVD demonstration video
- 2 troubleshooting probes
- Self-test cable

Catalog No.	Description	Weight
C4033220	115/120-Volt Protective Ground-Set Tester	17 lb. / 7.7 kg.
PSC4033220003	230-Volt Protective Ground-Set Tester	17 lb. / 7.7 kg.

Complete Protective Ground-Set Tester Catalog No. C4033220

Optional Adapters:

T4033159	Straight Stud Terminal for 15 and 25 kV	¾ lb. / 0.3 kg.
C4033449	15/25kV Elbow Adapter for .50" Probe	1 lb. / 0.5 kg.
PSC4032947	35kV Elbow Adapter for .50" Probe	1¼ lb. / 0.6 kg.
PSC4033796	35kV Elbow Adapter for .75" Probe	1¼ lb. / 0.6 kg.
PST6003541	Busbar Clamp Adapter	3 lb. / 1.4 kg.

Replacement Part:

P4033120	Replacement Ball Studs	⅓ lb. / 0.2 kg.

Busbar Clamp Adapter
Catalog No. PST6003541

Replacement Ball Stud
Catalog No. P4033120

CHANCE®

LoadLooker Ammeter

- **Models for Distribution, Transmission and Substation uses**
- **Hold feature for easy hotstick use**

User-Friendly Electronic-Loop Design

- Electronically closes loop
- No more manipulating a hinged or clamp-type inductive pick-up
- Unique U-shape jaw senses amperage present between tines
- Open-end design for checking component loads not accessible by other hot-line ammeters

Live-Line-Ready Hotstick Mount

- Standard fitting mounts on your insulated hotsticks
- Fits the same as any other universal tool
- Your hot-line crews can begin using it immediately

. . . continued on next page . . .

Wide Jaw

Narrow Jaw

LoadLooker Ammeter

Simple Push button Operation, Direct-Reading Accuracy

- Push it once to turn on LoadLooker
- Push it a second time and LoadLooker will display the word HOLD
- Will continue to display the next reading it "sees" until you push the button to clear
- This lets you bring it down from the line to eye level to read it
- After five idle minutes, unit will turn itself off
- You can also manually turn it off by keeping the button depressed for five seconds
- Operator's Manual and storage case are included

Rugged, Application-Specific Design

- Materials and construction are designed for field-condition rigors
- Typical applications include:
  - o Identifying load imbalances
  - o Verifying accuracy of current transformers
  - o Determining load to select properly sized jumpers
  - o Measuring load before opening switches

General Specifications

LCD 3½-digit display of Amps, Hold, Low Battery

Battery 9 volt alkaline (included)

Accuracy ±1% +2 Digits

Frequency 50 or 60 Hertz

Operating Temperature -30° to 60° C (-22° to 140° F)

Display Range Automatic Ranging:

0 - 99.9 Amperes, in 0.1-Amp increments.
100 - 1999 Amperes, in 1.0-Amp increments.
2000-5000 Amperes, in 0.1kA Amp increments.

Operators Manual and Case included

Ordering Information

60 Hertz unit, Case and Operators Manual

Catalog No.	Max. Voltage (Ø-Ø)	Max. Current	Reading Type	Jaw Size	Weight
MEAMP11RW	Up to 69 kV	Up to 2,000 amps	True RMS	3.86"	3.1 lb. / 1.4 kg.
MEAMP21RW	Up to 400kV	Up to 2,000 amps	True RMS	3.86"	3.1 lb. / 1.4 kg.
MEAMP32RN	Up to 500kV	Up to 5,000 amps	True RMS	2.50"	3.1 lb. / 1.4 kg.

50 Hertz unit, Case and Operators Manual

MEAMP32RN2	Up to 500kV	Up to 5,000 amps	True RMS	2.50"	3.1 lb. / 1.4 kg.

Replacement Case

Catalog No.	Description	Weight
C4002561	Hard Case for LoadLooker Ammeter	2.5 lb. / 1.1 kg.

CHANCE®

Wet/Dry Hot Stick Tester

for easy, portable compliance with industry standards

Controls & Meter for All Requirements

- Simple to operate, portable unit
- Makes easy work of testing insulated live-line tools
- Wet and dry modes selected by a toggle switch
- Follows procedures specified by ASTM, IEEE and OSHA
- Graduated meter gives precise readout of each tool's leakage current

Portable Operating Ease

- For testing any length fiberglass-reinforced plastic (FRP) hot stick up to 3" in dia.

- For spot checks at field jobsites or periodic diagnostics in workshop
- Full-scale test setups for both Wet (75 kV-per-foot) and Dry (100 kV-per-foot)
- Compact, self-contained unit easily carried and operated by one person
- In Setup procedure before each use, a zeroing knob is used to set meter to zero without a tool in the tester
- Furnished Check Bar serves as self-check to ensure tester is functional
- Included video demonstrates "how-to" basics for Setup, Dry and Wet tests
- Owners Manual must be read and understood before operating tester

Quantitative Test Results

- When placed on tool, displays any increase in leakage current due to hotstick
- Gives immediate indication of stick's true leakage condition, independent of stray currents (through the air, internal to testers, etc.) zeroed out in advance
- Detects leakage currents due to surface contamination, internal moisture and such internal conductive materials as carbon tracks

Ordering Information

Included with each Tester:

- **Check bar**
- **Owners operating instruction manual**
- **Demonstration video**
- **Carrying case**

Catalog No.	Wet/Dry Hot Stick Tester	Weight
C4033178	115-volt model	20 lb. / 9.0 kg.
C4033179	*230-volt model	20 lb. / 9.0 kg.

*Power-source cord does not include plug on 230-volt model

Ladder Monitor Kit
for EHV Microamp Measurement on Barehand Equipment

Features & Applications

- Used with EHV Barehand maintenance to detect microamp leakage on a ladder
- Meter is connected to ladder and takes readings when ladder is in contact with conductor
- Recommended that readings be taken periodically to ensure optimal working conditions which could be altered by change in atmosphere
- Kit includes:
  - o 200 micro-amp scale microammeter
  - o Three clamps to effect use on a three-rail ladder
  - o Cable with clips and adapter to establish contact
  - o Bracket to ground and hold meter on structure
  - o Two dry cell batteries
  - o Instruction drawings for field assembly
  - o Operating instructions

Catalog No.	Description	Weight
C4020288	Ladder Monitor Kit	7.5 lb. / 3.4 kg.

CHANCE Sentinel Leakage-Current Monitor

- Alerts utility-line workers of overcurrent conditions
- For such aerial devices as insulated ladders and truck booms
- Sounds an alarm if leakage current reaches a pre-set level
- Leakage setting adjusts from 1 to 1,000 microamperes in resolution increments of 0.1 microamp
- Audible warning eliminates need to watch the actual current level, continuously displayed on digital LCD screen
- Alarm sounds immediately upon overcurrent and continues until the condition is corrected
- Instrument panel jack accepts a standard 1⁄4" two-conductor phone plug to also trigger a truck horn or other external alarm
- Panel test terminal permits a simple continuity check of the monitor leads prior to each operation
- Before use, instrument automatically performs a rapid electronic self-test
- Simple operating steps are printed on inside lid panel
- Detailed instruction sheet included
- Kit includes one coaxial cable and battery, two jumpers and three hose clamps for connections to two- or three-rail ladders
- Brackets on box secure to an earth-grounded structure up to 5⁄8" thick such as a transmission tower

Catalog No.	Description	Weight
C4070025	CHANCE Sentinel Kit	9 lb. / 4.1 kg.

CHANCE®

Truck Boom Leakage-Current Monitor

- Mounts on truck body and hardwires into truck's 12-Volt system, which eliminates battery changeout
- Sounds an alarm if leakage current reaches a pre-set level
- Alerts utility-line workers of overcurrent conditions on truck booms
- Leakage setting adjusts from 1 to 1,000 microamperes in resolution increments of 0.1 microamp
- Audible warning eliminates need to watch the actual current level, continuously displayed on digital LCD screen
- Alarm sounds immediately upon overcurrent and continues until the condition is corrected
- Instrument panel jack accepts a standard 1⁄4" two-conductor phone plug to also trigger a truck horn or other external alarm
- Panel test terminal permits a simple continuity check of the monitor leads prior to each operation
- Before use, instrument automatically performs a rapid electronic self-test
- Simple operating steps are printed on the inside lid panel
- Detailed instruction sheet included

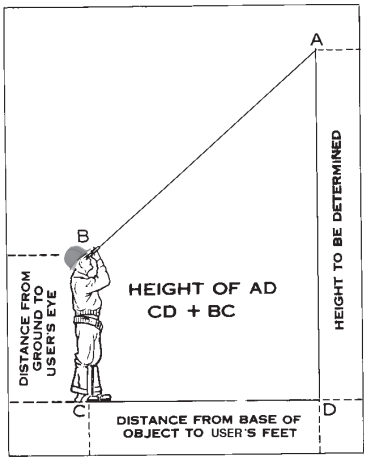
Catalog No.	Decription	Weight
T4070327	Boom Monitor Kit (12 Volt)	14 lb. / 6.4 kg.

Mounting studs on steel box bond directly to truck body.

CHANCE Teleheight

Features & Applications

- Quickly and accurately figures pole, tree, or building heights or conductor clearance
- Easy to operate – only take a few minutes to learn
- Diagram shows how it works
- Sight point A and move backward or forward until the bubble centers on the hair line, which is point C
- Measure distance from C to D and add distance BC to find correct height
- Leather case (2-1⁄4" x 4-1⁄4") has belt loop



Catalog No.	Description	Weight
CW	Teleheight Complete w/Leather Case	1 1⁄4 lb. / 0.6 kg.

Notes

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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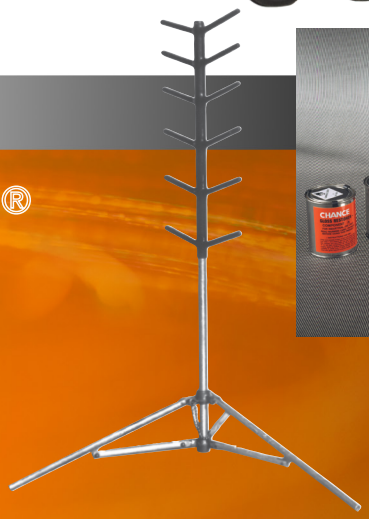


CHANCE®

Tool Repair & Storage

Catalog 2500 March 2020

HUBBELL®

CHANCE®

Care, Storage and Repair of Epoxiglas® Tools

Features & Applications

- Chance introduced Epoxiglas® in 1957
- The result of a three-year research and development program
- Epoxiglas® consists of thousands of epoxy resin-impregnated glass fibers
- Fibers are wound around and laid lengthwise over a unicellular plastic foam core
- Foam core consists of millions of individual cells
- Cells contain a low boiling inert material which inhibits moisture absorption and condensation
- Unicellular foam is bonded to reinforced walls to obtain a foam integrity that cannot be matched by other tool manufacturing methods
- Electrical and mechanical advantages of Epoxiglas® Hot Line Tools have been verified by their acceptance for stringent requirements of hot line maintenance

Care of Expoxiglas® Hot Line Tools

- Proper care will result in longer tool life, safety and crew confidence
- Keeping hot line tools dry is a key factor in their care
- They should never be laid directly on the ground
- Keep in truck or a tool trailer until ready for use
- Place on a tool rack near the groundman when ready for use
- A clean dry tarpaulin should be spread to prevent tools from contacting ground
- Most line crews have groundman wipe hot stick clean
- This is performed with a silicone impregnated Chance Hot Stick Wiping Cloth immediately before it is sent up the structure for use on energized lines

Cleaning a pole with Chance Moisture Eater II

Cleaning Epoxiglas® Hot Line Tools

- Clean and regloss after approximately 10 wipedowns with Moisture Eater II
- Clean and regloss when contaminated by moisture-bearing and conductive materials
- Use Chance cleaner-solvent, Moisture Eater II
- Cleaner can be applied with a non-abrasive cloth
- For heavy contamination, use abrasive cleaning pads
- If gloss finish of pole has been removed, it can be returned to factory conditions by coating with Chance Gloss Restorer
- This forms a clear, tough coating to prevent future contamination

Repairing Small Ruptures

- Surface ruptures in Epoxiglas should be repaired as soon as discovered
- Repairs can be made by removing damaged fibers, cleaning the void with Chance Moisture Eater II and applying Chance Epoxiglas Bond
- After patch has set, refinish pole (after 24-hour cure time) with Epoxiglas® Gloss Restorer and it is ready for use

Protecting Tools during Transportation

- Containers or bags should be used to prevent damage to surfaces of individual tools
- Tools should be mounted on racks in trucks or trailers
- Racks should be well padded and hold tools firmly in order to prevent damage

Epoxiglas® Cleaning Kit

Features & Applications

- Essential for care and maintenance of Epoxiglas® tools
- Also cleans insulated boom sections of aerial lift trucks
- Helps to ensure maximum life of Epoxiglas products
- Do not use on Gel-Coat or painted boom surfaces

4 Parts Of The Kit

1. Moisture Eater II — This cleaner should be used on contaminated Epoxiglas during general tool maintenance and in preparation for reglossing a tool's surface. Moisture Eater removes moisture and a wide variety of contaminants such as dirt, tar, grease, tree sap, light metal rubbings and old surface coatings without harming the Epoxiglas material
2. Abrasive Cleaning Pads — These pads are used in conjunction with Moisture Eater II to remove contamination that clings to the tool or contamination ground into scars and scuffs in the tools surface. Gloss restorer must be applied after using these pads since cleaning with Moisture Eater II will remove the glossy finish on the tool as well as contamination. The pads may also be used on metal parts to remove oxides and surface corrosion
3. Gloss Restorer Kit — This kit consists of two parts. When mixed and applied to the surface of a cleaned Epoxiglas tool they combine to form a clear, tough coating that replaces the original gloss and protects against contamination and moisture

4. Hot Stick Wiping Cloths — Silicone impregnated cloths are used to wipe down mildly contaminated Epoxiglas, removing dust and dirt, and depositing a thin protective film on the surface of the tool. They give an added measure of protection when used after recoating with gloss restorer

Catalog No.		Description
C4002364		Moisture Eater II Cleaner, 1 gal./4.23 liters
C4002365		Epoxiglas Cleaning Kit*
The above kit consists of the following items: (Each may also be ordered separately.)		
C4002364	**1**	Moisture Eater II Cleaner, 1 gal./4.23 liters
C4001166	**2**	Abrasive Cleaning Pads (box of 20)
C4001520	**3**	Gloss Restorer Kit
M1904	**4**	Hot Stick Wiping Cloth (*2 in Kit above)

Moisture Eater II Cleaner-Solvent

for hot-line tools, line hose and blankets

Features & Applications

- Strong solvent for water and conductive contaminants
- Safe to Earth's ozone layer – free of chlorinated hydrocarbons
- More economical, easier to work with due to lower evaporation rate
- Pleasant, orange scent from citrus-based biodegradable component

Less Waste

- Contains no water and absorbs water in its presence
- Removes twice as much water as the original Moisture Eater
- Minimizes chemical waste
- Unique formula of Moisture Eater II gives it a much lower evaporation rate than original formula and other hot-line tool cleaners

Environment-Friendly Advantages

- New formula consists of two solvents:
  - o One for oils, waxes and silicone-type contamination
  - o One for moisture contamination
- This combination is ideally suited for cleaning hot-line tools
- A by-product of citrus fruit, one component is biodegradable; the other component protects it from decomposing until used
- Reformulation eliminates chlorinated solvents harmful to Earth's ozone layer
- For more technical details, refer to Material Safety Data Sheet ABC/C56

Available in 1-gallon jug as Catalog No. C4002364 (also comes in Epoxiglas Cleaning Kit).

CHANCE®

Moisture Eater II Wipes

for hot-line tools, rubber line hose & blankets

Features & Applications

- Economical, individual packets encourage daily use

Helps utilities stay in compliance with OSHA 29 CFR 1910.269(j)

Packaged For Convenience

- Small pocket-sized packets
- For cleaning of insulated hot-line tools, line hose and rubber blankets
- Zip open a foil packet and pull out the pre-moistened, lint-free towel
- Each wipe is saturated with a half ounce of orange-scented Moisture Eater II solvent

- Hanger box holds 50 wipes – handy for crew bays, trailers, and trucks
- Sealed wipes mean no more rags to store or try to keep clean in the field
- No more jugs to stow, big spills, evaporation losses or wasteful excesses

Workable, Environment-Friendly Formula

- Eliminates waste while thoroughly clean tools
- Much lower evaporation rate than other hot-line tool cleaners
- Contains no water and absorbs water in its presence
- Does not contain chlorinated solvents harmful to the Earth's ozone layer
- New formula consists of two solvents:
  - o One for oils, waxes and silicone-type contamination
  - o One for moisture contamination
- This combination is ideally suited for cleaning hot-line tools
- A by-product of citrus fruit, one component is biodegradable; the other component protects it from decomposing until used
- Reformulation eliminates chlorinated solvents harmful to Earth's ozone layer
- For more technical details, refer to Material Safety Data Sheet ABC/C56

Line hose and rubber blankets clean up easily with Moisture Eater II wipes.

Ordering Information

Catalog No.	Description	Weight
C4002538	Moisture Eater II Wipes (1 box of 50 packets)	2.7 lb. (1.2 kg.)

Silicone Wipes for hot-line tools

Features & Applications

- Economical, individual packets encourage daily use
- Packaged for easy access on the jobsite
- Easy way to encourage daily cleaning
- Helps utilities stay in compliance with OSHA 29 CFR 1910.269(j)

Simple and convenient:

- ***Easy-open***
- ***Single-use***
- ***Disposable***

Quick & Easy Extra Protection

- Small pocket-sized packets
- Encourage frequent care of insulated hot-line tools
- Hanger box holds 50 wipes – handy for crew bays, trailers, and trucks
- Sealed wipes mean no more rags to store or try to keep clean in the field
- Zip open a foil packet and pull out the pre-moistened, lint-free towel
- Silicone-saturated 8 x 10" lint-free towel easily cleans hotsticks
- Contain same silicone as Hot Stick Wiping Cloths in Chance Epoxiglas® Cleaning Kit
- Using cloths or Silicone Wipes on fiberglass tools removes dust
- Thin, protective coat helps resist accumulation of dirt and contaminants
- The last step in everyday clean-and-wipe routine
- Replaces protective film that cleaners such as Moisture Eater II remove
- Also preserves tool surfaces
- Used after Chance Gloss Restorer, sealed and disposable wipes ensure a clean application of a preservative layer on new surfaces

Ordering Information

Catalog Number	Description	Weight
C4002568	Silicone Wipes, one box of 50 packets	1.8 lb. (0.8 kg.)

Silicone Lubricant

for flexible line hose and general applications

Features & Applications

- Makes line hose easy to put on and slide into place
- Silicone material also serves as a multi-purpose lubricant
- Handy 10 oz. size aerosol package provides convenient applicator to coat all interior line hose surfaces
- Simply spread open the hose near one end and direct the can nozzle's wide spray pattern inside, working down the hose to its other end
- Soft, clean cloth may be used to wipe silicone on large surfaces
- May be used in place of petroleum-based lubricants
- Surfaces to be coated should be clean and dry
- For more technical details, refer to Material Safety Data sheet ABC/C40

Catalog No.	Description	Can Contents
C4002320	Silicone Aerosol Lubricant	10 oz./284 gm.

Dielectric Compound No. 7

Dielectric Compound No. 7, a silicone base material, is made for use with load break disconnects and other electrical connecting and terminating devices.

Cat. No. C4170287..... 2 oz. Tube

CHANCE®

Wet/Dry Hot Stick Tester

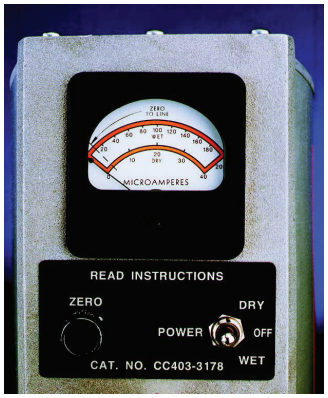
for easy, portable compliance with industry standards

New Controls & Meter for All Requirements

- Simple to operate, portable unit
- Makes easy work of testing insulated live-line tools
- Wet and dry modes selected by a toggle switch
- Follows procedures specified by ASTM, IEEE and OSHA
- Graduated meter gives precise readout of each tool's leakage current

Portable Operating Ease

- For testing any length fiberglass-reinforced plastic (FRP) hot stick up to 3" in dia.



- For spot checks at field jobsites or periodic diagnostics in workshop
- Full-scale test setups for both Wet (75 kV-per-foot) and Dry (100 kV-per-foot)
- Compact, self-contained unit easily carried and operated by one person
- In Setup procedure before each use, a zeroing knob is used to set meter to zero without a tool in the tester
- Furnished Check Bar serves as self-check to ensure tester is functional
- Included video demonstrates "how-to" basics for Setup, Dry and Wet tests
- Owners M°°anual must be read and understood before operating tester

Quantitative Test Results

- When placed on tool, displays any increase in leakage current due to hotstick
- Gives immediate indication of stick's true leakage condition, independent of stray currents (through the air, internal to testers, etc.) zeroed out in advance
- Detects leakage currents due to surface contamination, internal moisture and such internal conductive materials as carbon tracks

Ordering Information

Included with each Tester:

- **Check bar**
- **Owners operating instruction manual**
- **Demonstration video**
- **Carrying case**

Catalog No.	Wet/Dry Hot Stick Tester	Weight
C4033178	115-volt model	20 lb./9.0 kg.
C4033179	*230-volt model	20 lb./9.0 kg.

*Power-source cord does not include plug on 230-volt model

HUBBELL®
Phone: 573-682-5521 Email: hpsliterature@hubbell.com Web: hubbellpowersystems.com

Epoxiglas® Bond Patching Kit

- Can be used to:
  - o Repair small surface ruptures on Epoxiglas Hot Sticks
  - o Install new ferrules on Epoxiglas poles
  - o Assist in replacing rungs on Epoxiglas Ladders
- Includes 4 pouches. Each pouch contains separated packets of hardener and resin that once mixed yeld 1.5 ounces.
- Mixing stick is included – can also be used for applying repair bond
- Epoxiglas Bond contains the same orange color as used in Epoxiglas poles
- Small surface ruptures can be repaired by removing damaged fibers, cleaning void with Moisture Eater II cleaner-solvent and applying Epoxiglas Bond

Cat. No.	Description	Weight
H1917	Epoxiglas Bond Patching Kit	.5 lb./.23 kg.

H1917

Epoxy Sand Kit

- All the necessary ingredients to replace sand finish on one 10' ladder
- Includes Epoxy resin, curing agent, pint of sand, and stirring blade
- Also includes instruction sheet for mixing

Cat. No.	Description	Weight
H1921	Epoxy Sand Kit	4 lb./1.8 kg.

H1921

Epoxiglas® Plug Kit

- Features high-strength, low-shrink material
- Includes same ingredients as used in Chance factory "plugging processes"
- Chemical adjustment prevents kit from "scumming" over in transit or storage

Cat. No.	Description	Approx. Weight
C4000730	Epoxiglas Plug Kit	6 lb./2.7 kg.

C4000730

Tool Lubricant

- Non-flammable, non-toxic, non-corrosive material
- Gives hoists and tools lubrication needed for top working condition
- Coats moving parts with a durable film
- Prevents tools from binding and galling
- Handy plastic squeeze bottle for easy application

Cat. No.	Description	Approx. Weight
M1909	Chance Tool Lubricant	4 oz./.1 kg.

M1909

C4002335

Dry Film Tool Lubricant

- For all bearing surfaces, sliding and threaded, of Chance Hot Line Tools, Construction Tools and Pole Line Hardware
- Dry film blend of solid lubricants
- Basic ingredient is Molybdenum Disulfide
- Applied as any aerosol-packaged spray material
- Air dries and bonds to tool surface almost instantly

Cat. No.	Description	Weight
C4002335	Dry Film Lubricant	12 oz.

CHANCE®

Epoxiglas® Blank Poles

Features & Applications

- Tested per OSHA & ASTM F711
- Available for field repairs in a number of sizes
- Extreme caution must be taken in tool reassembly:
  - o Follow detailed instructions available from Hubbell Power Systems, Inc
  - o Contact your Chance territory manager for details
  - o Failure to properly attach metal ferrules and splices to these poles or to use proper materials for rivets, internal plugs, adhesives or procedures may result in premature or below rating breakage
- Designed by Chance engineers for use in hot line tool applications
- Materials include glass fibers, epoxy resin, and unicellular plastic foam
- In finished form, unicellular plastic foam acts as a core
- Specially treated glass fibers are placed circumferentially and longitudinally after being coated with a specially formulated epoxy resin and oven-cured
- Because Epoxiglas Poles are moisture-absorption resistant, heated trailers and drying room are not required
- Only the reasonable care normally afforded hot line tools is necessary to maintain sound insulation level
- The color selection for Epoxiglas is Omaha orange:
  - o This color is highly visible in usage areas
  - o Color is actually present throughout the material, not just a surface finish

Cat. No.	Dia.	Length	Weight
H4539	1¼"	3'11"	1.3 lb./.6 kg.
H45391	1¼"	5'11"	2.0 lb./.9 kg.
H45392	1¼"	7'11"	2.7 lb./1.2 kg.
H45393	1¼"	9'11"	3.3 lb./1.5 kg.
H45394	1¼"	11'11"	4.0 lb./1.8 kg.
H45401	1½"	5'11"	2.9 lb./1.3 kg.

Cat. No.	Dia.	Length	Weight
H45402	1½"	7'11"	3.9 lb./1.8 kg.
H45403	1½"	9'11"	4.8 lb./2.2 kg.
H45404	1½"	11'11"	5.8 lb./2.6 kg.
H45405	1½"	13'11"	6.8 lb./3.1 kg.
H45406	1½"	15'11"	7.8 lb./3.5 kg.
H45413	2"	9'11"	8.7 lb./3.9 kg.

Cat. No.	Dia.	Length	Weight
H45414	2"	11'11"	10.4 lb./4.7 kg.
H4542	2½"	5'11"	7.4 lb./3.3 kg.
H45421	2½"	7'11"	9.9 lb./4.5 kg.
H45422	2½"	9'11"	12.4 lb./5.6 kg.
H45423	2½"	11'11"	14.9 lb./6.7 kg.
H45424	2½"	13'11"	17.4 lb./7.8 kg.

End Caps

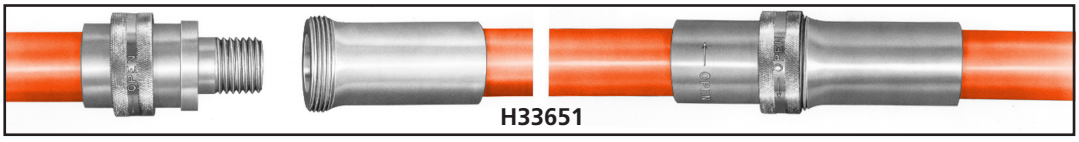
Heavy Duty Cap

For more information on end caps, see Catalog Section 2100.

Catalog No.	Description
P4032312P	Heavy-Duty End Cap for 1¼" Epoxiglas pole
056394P	Plastisol End Cap for 1¼" Epoxiglas pole
056395P	Plastisol End Cap for 1½" Epoxiglas pole
069326P	Plastisol End Cap for 2" Epoxiglas pole
069214P	Plastisol End Cap for 2½" Epoxiglas pole

Plastisol Cap

Rigid Pole Splices



H33651

Features & Applications

- Recommended for all load conditions-tensile, compressive, or deflection
- Make a rigid connection that is stronger than the pole
- Use of heat-treated aluminum alloy for the ferrule makes splices lightweight
- Also keeps spliced poles well balanced
- Counter-threaded stainless steel collar locks threaded poles together
- Available for assembly on Epoxiglas blank poles (above)
- Shortens Epoxiglas tools for storage or to couple with spliced tools (page 2118)
- Also see page 2118 for Universal Fittings for Spliced Poles

Cat. No.	Description
H33651	Rigid Splice for 1¼" Pole
H33652	Rigid Splice for 1½" Pole
H33653	Rigid Splice for (1½ to 1¼")

Hand Guards

Features & Applications

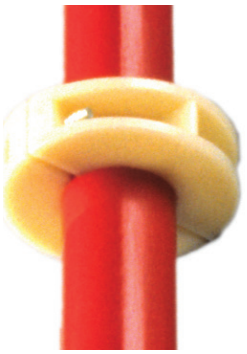
- Maintain minimum clearances between hand and working end of hot line tool
- Always refer to OSHA regulations and utility work clearance procedures

Hand Tool* Guard spacing below tool head

Voltage kV/phase	Minimum Insulation
15	2'1"
34.5	2'4"
69	3'
115	3'2"
161	4'
230	5'3"
345	8'6"
500	11'3"
765	14'11"

* These spacings apply to hand tools. Other tools may permit reduced spacings. Always refer to OSHA regulations and your utility work clearance procedures.

Flexible Rubber



Natural Nylon

Catalog No.	Hand Guard Description	Weight
M30021	Flexible rubber for 1½" dia. pole	4 oz./.1 kg.
C4030799	Natural nylon fits 1¼" dia. pole	2 oz./.06 kg.
C4030800	Natural nylon fits only 1¼" Grip-All	2 oz./.06 kg.

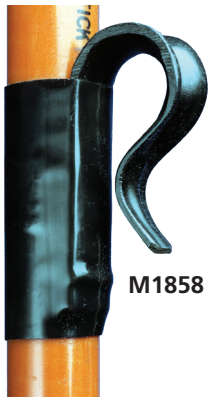
Tool Hangers

Features & Applications

- Engage conductors up to 556.5 kcmil ACSR
- H17605 Pole Hanger was designed for 1-1/4" or 1-1/2" dia. Epoxiglas® poles
- Includes a black Nylon-filled plastic hook and steel hose clamp for easy attachment
- M1858 Pole Hangers attach to 1-1/4" and 1-1/2" Epoxiglas poles by heat-shrink plastic tubing
- Includes a Polyethylene hook, shrink tubing, tape and installation instructions

Catalog No.	Description	Weight
H17605	Nylon-filled Plastic Hook & Steel Clamp	7 oz./.3 kg.
M1858	Polyethylene Hanger for 1¼" Pole	7 oz./.3 kg.

H17605



M1858

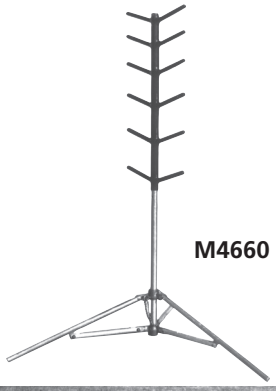
Hot Line Tool Rack

Features & Applications

- Eliminates need for rolls of canvas or other ground covering devices
- Compact, collapsible racks take up little space on line truck or in trailer
- Abrasion-resistant plastisol coating over arms and center mast protects tools
- All metal parts below plastisol are galvanized or bronze for corrosion resistance
- Folding tripod-like legs can be locked in fully opened or fully closed position
- An eye pin, secured by a bead chain, is used to lock legs in position
- Each pair of Tool Racks will support up to 12 tools as there are 12 arms to a rack
- Poles of 3" dia. will easily fit on the arms

Catalog No.	Description	No. of Tools Accommodated	Weight
M4660	1 Tool Rack*	12	10 lb.

* These are normally used in pairs: Quantities of two M4660 should be specified.



M4660

CHANCE®

Tarps & Storage Bags for Hot Line Tools

Description	Catalog No.
10 ft. x 10 ft. Tarpaulin	**T3060025**
12 ft. x 12 ft. Tarpaulin	**T3060014**

Features & Applications

- All-Purpose Tarps in same yellow heavy-duty vinyl-impregnated fabric are available in the two sizes at right
- To select the right bag, first locate tool catalog number and specify bag catalog number listed in adjacent column
- Chance waterproof storage bags help guard against contaminants and abrasion
- Help maintain the insulating properties of hotline tools
- Yellow heavy-duty vinyl-impregnated fabric lasts for years of rugged service
- Snaps, Velcro® closures and custom-tailored pockets fit appropriate tools listed below and on facing page

ALL-ANGLE COG WRENCHES

Tool Cat No.	Bag Cat. No	Dimensions
C4030184	**P6216**	8' L x 7.5" W
C4030185	**P6218**	9' L x 7.5" W
C4030186	**P62110**	11' L x 7.5" W

AMERTONGS

Tool Cat No.	Bag Cat. No	Dimensions
H19686	**P6216**	8' L x 7.5" W
H19688	**P6218**	9' L x 7.5" W
H19786	**P6406**	6'11" L x 11" W
H19788	**P6408**	8'11" L x 11" W

CABLE CUTTERS
Lever-Type

Tool Cat No.	Bag Cat. No	Dimensions
H1876, H18736	**P6406**	6'11 L: x 11" W
T4030687	**P6408**	8'11 L: x 11" W

Hydraulic

Tool Cat No.	Bag Cat. No	Dimensions
C4030731 & C4032861	**T3060007**	7' L: x 6" W
C4030732 & C4032862	**T3060008**	9' L: x 6" W

Ratchet

C4031381	**T3060028**	6'9" L x 11" W
C4031382	**T3060028**	6'9" L x 11" W
C4031383	**T3060029**	8'9" L x 11" W
C4031384	**T3060029**	8'9" L x 11" W
C4031421	**C3060023**	2'11" L x 10" W
C4031422,C4031423	**C3060000**	3'2" L x 12" W

DISCONNECT STICKS
Fixed and Spliced

Tool Cat No.	Bag Cat. No	Dimensions
H30465, H304611	**P6434**	5' L x 6.6" W
H30466, H304612, H304622	**P6436**	6'10" L x 6.6" W
H30467, H304613, H304623	**P6438**	8'10" L x 6.6" W
H30468, H304614, H304624	**P64310**	10'10" L x 6.6" W
H30469, H304615, H304617	**P64312**	12'10" L x 6.6" W
H304616, H304618, H304620	**N/A**	
H314612	**P6215**	5'10" L x 7.5" W
H314616, H314618	**P6218**	9' L x 7.5" W
H314620	**P62110**	11' L x 7.5" W
H314624	**P62112**	13' L x 7.5" W

FLEXIBLE INSULATED WRENCHES

Tool Cat No.	Bag Cat. No	Dimensions
H18912, H18915, H18917	**P6436**	6'10" L x 6.6" W
H18913, H18916, H18918	**P6438**	8'10" L x 6.6" W

GRIP-ALL CLAMPSTICKS

Tool Cat No.	Bag Cat. No	Dimensions
C4030291	**P6434**	5' L x 6.6" W
C4030292, C4031035	**P6436**	6'10" L x 6.6" W
C4030293, C4031036	**P6438**	8'10" L x 6.6" W
C4030294	**P64310**	10'10" L x 6.6" W
C4030295	**P64312**	12'10" L x 6.6" W
C4030296, C4030297	**P6432**	4'7" L x 9"
C4030298	**P6433**	5'8" L x 9"
C4030299	**P6435**	6'8" L x 9"
C4030342	**PSP6435005**	7'8" L x 9"
C4030343	**PSP6435004**	8'8" L x 9"

HOIST, NYLON RATCHET

Tool Cat No.	Bag Cat. No	Dimensions
PSC3090323	C3060000	38" L x 12" W

PLATFORM (Roll Bag)

Tool Cat No.	Bag Cat. No	Dimensions
H49646W	P610	4'11" L x 3'7" W

POSITIVE-GRIP CLAMPSTICKS

Tool Cat No.	Bag Cat. No	Dimensions
HG30302, HG303012	P64310	10'10" L x 6.6" W

ROLLER LINK STICKS

Tool Cat No.	Bag Cat. No	Dimensions
H47144	P6436	6'10" L x 6.6" W
H47145	P6438	8'10" L x 6.6" W

STRAIN LINK STICKS

Tool Cat No.	Bag Cat. No	Dimensions
C4000812	P6436	6'10" L x 6.6" W
C4000814	P6438	8'10" L x 6.6" W
C4000815	P64310	10'10" L x 6.6" W
C4000816	P64312	12'10" L x 6.6" W
C4000817	P64314	14'10" L x 6.6" W
C4000818	N/A	
H47161	P6434	5' L x 6.6" W
H47162, H4717	P6215	5'10" L x 7.5" W
H47163, H47171, H47181	P6218	9' L x 7.5" W
H47164, H47182	P62110	11' L x 7.5" W
H47165, H47183	P62112	13' L x 7.5" W
H47166, H47184	P62114	15' L x 7.5" W
H4718	P6216	8' L x 7.5" W

STRAIN POLES

Tool Cat No.	Bag Cat. No	Dimensions
H1949113, C4012146	P62110	11' L x 7.5" W
C4000612, C4000613	P62112	13' L x 7.5" W
C4012147	N/A	
C4012148	P62114	15' L x 7.5" W
C4012149	N/A	

TELESCOPING DISCONNECT STICKS

Tool Cat No.	Bag Cat. No	Dimensions
C4031017, C4031018, C4031019, C4031598, C4031599, C4031600	P6213	5'4" L x 7.5" W
C4031020, C4031021, C4031022, C4031022EM, C4031601, C4031602	P6215	5'10" L x 7.5" W
C4031023, C4031597, C4031739	P6434	5' L x 6.6" W
T4032205	C4032813	2'10" L x 7.5" W
T4033349	P6216	8' L x 7.5" W

TIE STICKS

Tool Cat No.	Bag Cat. No	Dimensions
H185519, H185520 H185525, H185526	P6438	8'10" L x 6" W

TRANSFORMER GIN

Tool Cat No.	Bag Cat. No	Dimensions
C4000090	P644	2'10" L x 15" W

TREE TRIMMERS & EXTENSIONS

Tool Cat No.	Bag Cat. No	Dimensions
H2006, H2106	P6218	9' L x 7.5" W
H2036, H2056, H2136, H2156	P6436	6'10" L x 6.6" W
H2038, H2058, H2138, H2158	P6438	8'10" L x 6" W

UNIVERSAL POLES

Tool Cat No.	Bag Cat. No	Dimensions
H1760, H17604, H1761, H1770, H17908	P6438	8'10" L x 6.6" W
H17601, H17603	P6436	6'10" L x 6.6" W
H17602, H17606	P6434	5' L x 6.6" W
H176010, H179010	P64310	10'10" L x 6.6" W
H176012, H179012	P64312	12'10" L x 6.6" W
H176014, H179014	P64314	14'10" L x 6.6" W

WIRE HOLDING STICKS

Tool Cat No.	Bag Cat. No	Dimensions
C4033068	P6436	6'10" L x 6.6" W
C4033069	P6438	8'10" L x 6.6" W

WIRE TONGS

Tool Cat No.	Bag Cat. No	Dimensions
H46458, H46468	P6218	9' L x 7.5" W
H464510, H464610, H464710	P62110	11' L x 7.5" W
H464612, H464712, C4000171, H467712	P62112	13' L x 7.5" W
H464714, H467714, C4000172, T4001252	P62114	15' L x 7.5" W
H464716	P6218 (2 each)	9' L x 7.5" W

CHANCE®

Tool and Rubber-Glove Protective Bags and Buckets

Features & Applications

- Made of double vinyl laminated open weave nylon cloth
- Lightweight and durable with nylon stitching throughout
- Standard color of all synthetic material is easy-to-see, bright yellow

LINEMAN'S TOOL BAG

Features & Applications

- 22" L x 11" W x 11" D
- Plywood bottom covered inside and out with metal skids on bottom of bag
- Has full separating heavy duty zipper and heavy webbing handles around bag
- Full 4" pocket on inside

C4170147

GLOVE BAG

Features & Applications

- 18" L x 8" W
- One piece front and back, bar-tacked at all corners
- Leather-reinforced inside and out for snap
- Double-nylon stitched
- Gusset has 4" top tapering to 2" bottom

C4170148

C4170151

LINE HOSE BAG

Features & Applications

- 48" L x 7" Dia.
- 3"-wide plastic top ring
- Molded plastic bottom with 2" cuff
- 3/8" rope handle

COMBINATION GLOVE AND SLEEVE BAG

Features & Applications

- 18" L x 8" W
- Separate storage for rubber gloves and sleeves
- Single flap, double-nylon stitching
- Reinforced inside and out for snap

C4170150

TOOL BUCKET

Features & Applications

- 12" dia. x 15" D
- Molded plastic bottom with 2-1/2" tapered molded flange up sides
- Top has molded plastic ring, ½" polypropylene rope handle
- Standard 4" x 8" inside pocket

C4170144

TOOL BUCKET

Features & Applications

- 7" dia. x 10" D
- For steel tower work
- Molded plastic top and bottom
- 3/8"Chemline rope handle

C4170146

SLEEVE BAG

Features & Applications

- 27" L x 12" Top – 7" Bottom
- For flat storage of rubber sleeves
- Bar-tacked corners, snap fasteners, and double-nylon stitching

C4170149

Cat. No.	Description	Weights
C4170144	Tool Bucket (15" Deep)	2 lb. 8 oz.
C4170146	Tool Bucket (10" Deep)	12 oz.
C4170147	Lineman's Tool Bag	3 lb.
C4170148	Glove Bag	8 oz.
C4170149	Sleeve Bag	10 oz.
C4170150	Glove & Sleeve Bag	10 oz.
C4170151	Line Hose Bag	2 lb.

For Hot Stick Storage Bags, see Catalog Page 2510.

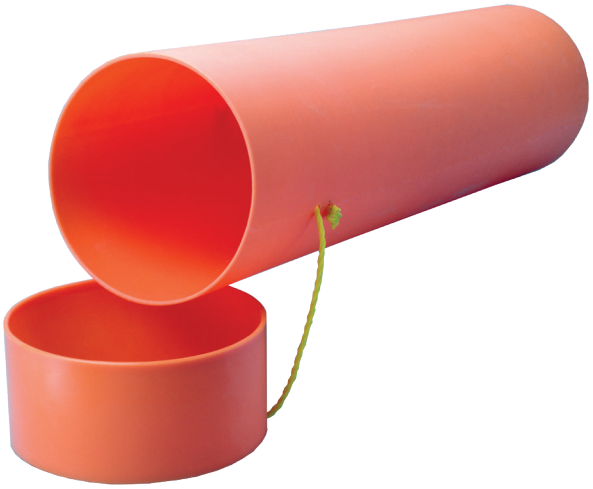
CHANCE®

Storage Canisters for Rubber Insulating Blankets

Features & Applications

- Proper storage extends blanket life
- Provides easy access in service
- Long-lasting construction
- For physical and contamination protection, canisters are lightweight yet durable and stow easily on service vehicles and in warehouses
- Cylindrical shape promotes proper treatment – rubber blankets should never be folded, creased or compressed when stored
- Rolling blankets before inserting helps keep them ready for service
- Blankets nested inside each other may be inserted or withdrawn one at a time
- Bright orange color
- High-impact-resistant high-density polyethylene for tough, rust-free resilience
- Polypropylene rope keeps tight-fitting cap secured to canister

C4032999 has a molded handle and is 10" in diameter.



C4032998 does not have a handle and is 7" in diameter.

Storage Canisters for Rubber Insulating Blankets

Catalog No.	Description	Weight
C4032998	No handle, 7" dia., 37" long	6 lb./2.7 kg.
C4032999	With handle, 10" dia., 37" long	7⅝ lb./3.43 kg.

Walk-in Tool Trailers

. . . Continued on next page . . .

Your new Walk-In Tool Trailer will provide a convenient way to store, transport and care for your Hot Line Tool sets.

Standard lengths of 16 and 20 feet offer headroom of 6 feet-6 inches.A 7,000-lb. gross vehicle weight rating gives the trailer ample capacity for your job requirements.

Standard Equipment

CHECKLIST

Interior Tool Storage

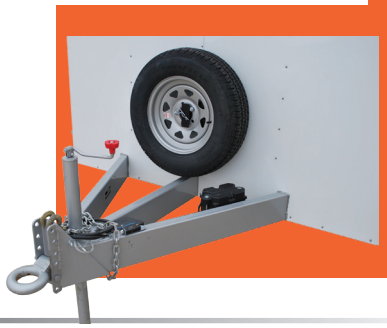
- √ Full Length storage bins on both sides and across front
- √ Overhead rack and thumbscrews for 30 universal tools (Left side)
- √ Two full-height center racks
- √ Ladder channel on floor between center racks

Exterior and Towing

- √ Breakaway braking system
- √ Spare tire with mounting bracket
- √ Adjustable height pintle eye hitch
- √ Fold-up hand crank tongue jack
- √ Two safety chains

Standard features include:

- Corrosion-resistant aluminum exterior
- Tandem axles • Electric Brakes
- Dual rear doors • One curb-side door
- Tongue mounted spare tire
- Center Interior racking for tool storage
- White exterior finish
- 7-way 12V Trailer End Connector



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Optional Equipment

CHECKLIST

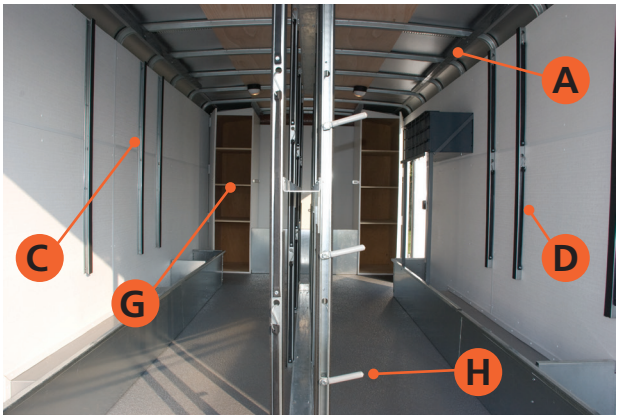
Optional features available
In addition to the Standard features and equipment, Walk-In Trailers can be custom ordered with the Options listed below.

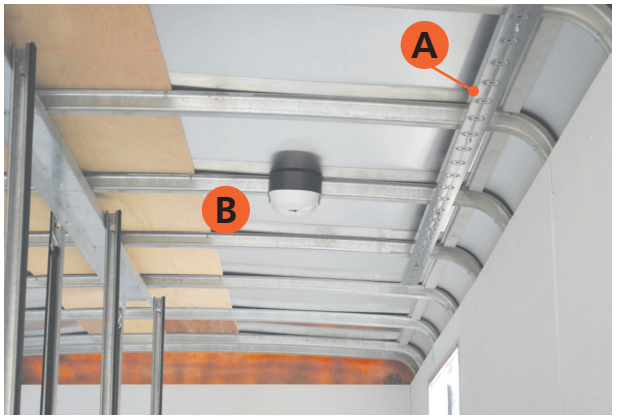
Please check the boxes on these two pages to select Options or just get in touch with us to help.

Interior Tool Storage OPTIONS

- ☐ A. Second overhead rack and thumbscrews for 30 universal Tools (Right side)
- B. 12Vdc interior lights with two wall switches, select only one option:
  ☐ 1 pair of lights ☐ 2 pairs of lights ☐ 3 pairs of lights
- ☐ C. Wall mounted tool rack with 24 supports and eight elastic tiedowns (Left Side)
- ☐ D. Wall mounted tool rack with 24 supports and eight elastic tiedowns (Right Side)
- ☐ E. Second interior ladder rack
- ☐ F. 110/220 Vac “dry room” heater
- ☐ G. 2 vertical cabinets with 4 shelves each, installed in front of trailer
- ☐ H. Rhino Lining protective flooring
- ☐ I. One additional support stud kit (10 per box) for side or center tool racks

Catalog Number T4002528 (not shown)





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Walk-in Tool Trailers

. . . Continued on next page . . .

Optional Equipment

CHECKLIST

Exterior and Towing OPTIONS

- ☐ J. 12 Vdc Power Tongue Jack
- ☐ K. Rear Skid Plate
- ☐ L. Rear Mounted Bumper 6”
- ☐ M. Rear Mounted Step Bumper 10” (not shown)
- ☐ N. 2 5⁄16” Ball Type Hitch (not shown)
- ☐ O. Rear Ramp Door (not available with rear bumper)
- ☐ P. 10,000-lb. GVWR [two 5,000-lb. axles] (not shown)
- ☐ Q. 12,000-lb. GVWR [two 6,000-lb. axles] (not shown)
- ☐ R. 14,000-lb. GVWR [two 7,000-lb. axles] (not shown)
- ☐ S. Flipped axles add 4 extra inches of ground clearance (not shown)

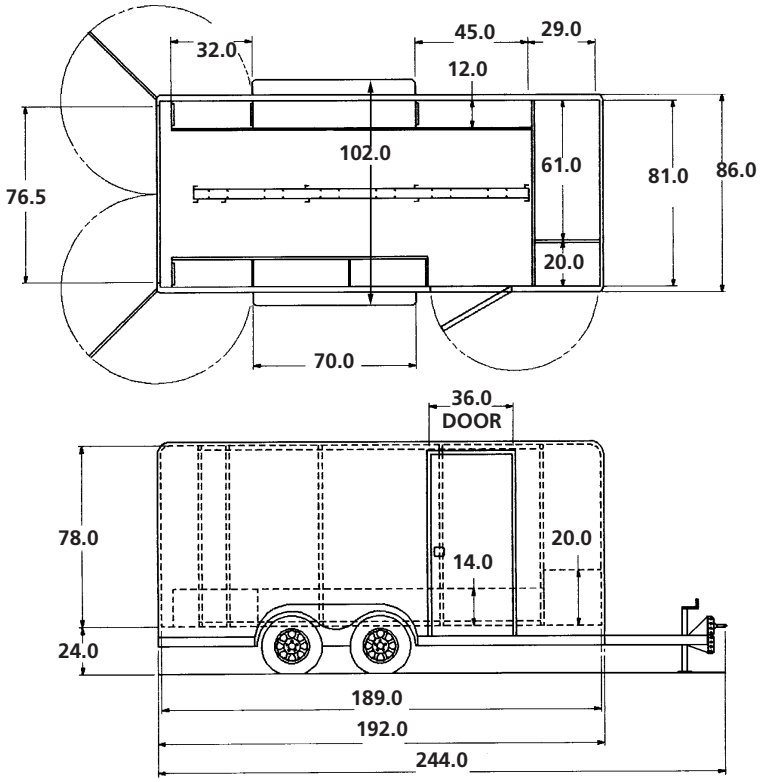
Optional features available

In addition to the Standard features and equipment, Walk-In Trailers can be custom ordered with the Options listed below.

Please check the boxes on these two pages to select Options or just get in touch with us to help.

CHANCE® Walk-in Tool Trailers

☐ 16-ft. (body-length) Trailer

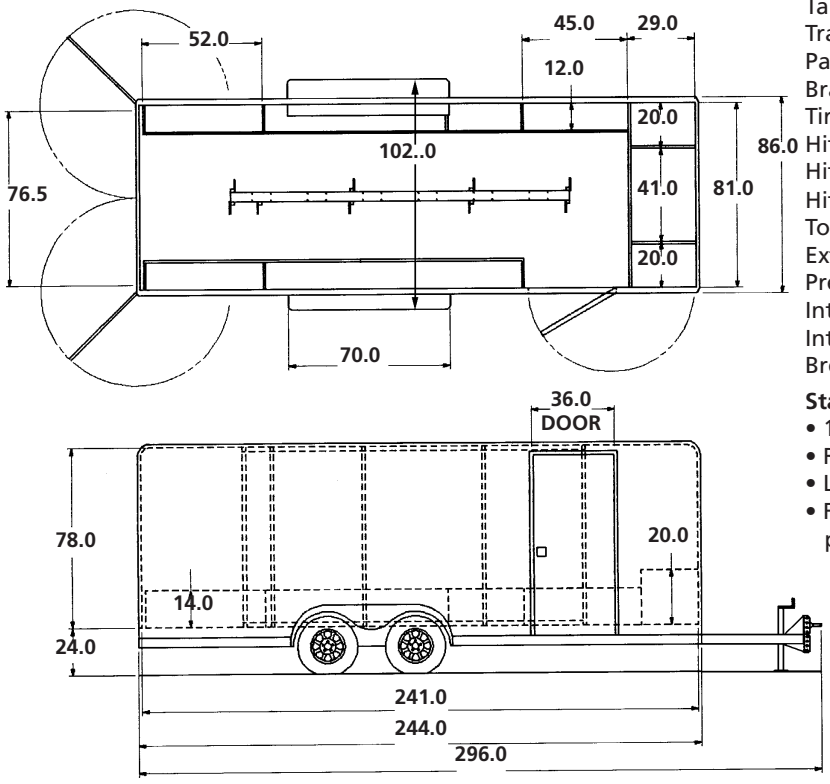


Trailer gross vehicle weight .....7,000 lb.
Tandem axles .....3,500 lb. capacity, each
Trailer curb weight, empty .....2,270 lb.
Payload capacity.....4,730 lb.
Brakes..... Electric, all four wheels
Tires..... 15", load range C
Hitch weight, empty .....210 lb.
Hitch with safety chains...3" pintle or 2 5/16" ball
Hitch height..... Adjustable, 19" through 27"
Tongue jack ..... Manual crank with sand pad
Exterior lights and reflectors
Prefinished (white) aluminum skin 0.30" gauge
Interior floor..... Plywood
Interior walls are vinyl coated white.
Breakaway system & battery (meets DOT)

Standard Storage Provisions

- 14"-deep bins (both sides), 20"-deep front bins
- Rack for 30 universal tools (left, overhead)
- Ladder-rack channel (center, on floor)
- Full-height tool racks (center-mounted), 150 plastic-coated supports & 29 elastic tiedowns

☐ 20-ft. (body-length) Trailer



Trailer gross vehicle weight ..... 7,000 lb.
Tandem axles ..... 3,500 lb. capacity, each
Trailer curb weight, empty ..... 2,770 lb.
Payload capacity..... 4,230 lb.
Brakes..... Electric, all four wheels
Tires..... 15", load range C
Hitch weight, empty ..... 250 lb.
Hitch with safety chains... 3" pintle or 2 5/16" ball
Hitch height.....Adjustable, 19" through 27"
Tongue jack .....Manual crank with sand pad
Exterior lights and reflectors
Prefinished (white) aluminum skin ..0.30" gauge
Interior floor.....Plywood
Interior walls are vinyl coated white.
Breakaway system & battery (meets DOT)

Standard Storage Provisions

- 14"-deep bins (both sides), 20"-deep front bins
- Rack for 30 universal tools (left, overhead)
- Ladder rack channel (center, floor)
- Full-height tool racks (center-mounted), 150 plastic-coated supports & 29 elastic tiedowns

Fiberglass Pop-Up Tool Trailers

. . . Continued on next page . . .

Your new Fiberglass Pop-Up Hot Line Tool Trailer will provide a convenient way to store, transport and care for your Hot Line Tool sets.

The overall length of the trailer is 23 feet. The interior space of the trailer is 17 feet 2 inches with storage for Hot Line Tools up to 14 feet 7 inches.

A 12,000-lb. gross vehicle weight rating gives the trailer ample capacity for your job requirements.

Standard Equipment

CHECKLIST

Interior Tool Storage

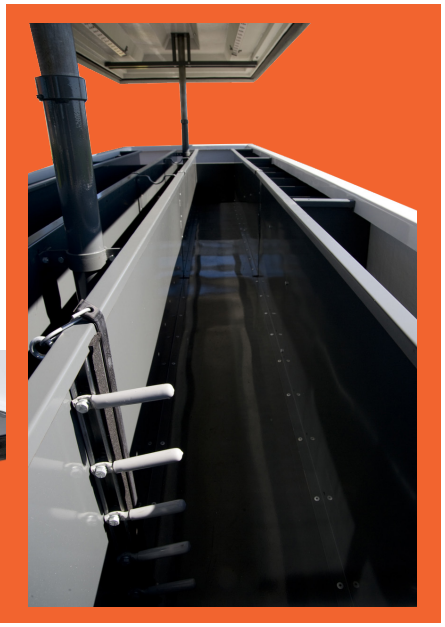
- √ 12 hot line tool compartments
- √ 155 adjustable plastic-covered tool supports
- √ 20 elastic tie-down straps
- √ 1 channel rack for 30 Universal Tool accessories (right side)

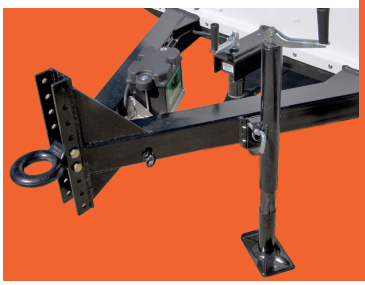
Exterior and Towing

- √ Breakaway braking system
- √ Spare tire with mounting bracket
- √ Adjustable height pintle eye hitch
- √ Fold-up hand crank tongue jack with castor wheel
- √ Two safety chains

Standard features include:

- Tandem axles • Electric Brakes
- White exterior finish
- Four 8.00 x 14.5 tires
- Rectangular-tube steel rear bumper
- Manual crank for lid open/close device
- Step-up brackets, front and rear, both sides





Fiberglass Pop-Up Tool Trailers . . . Continued on next page . . .

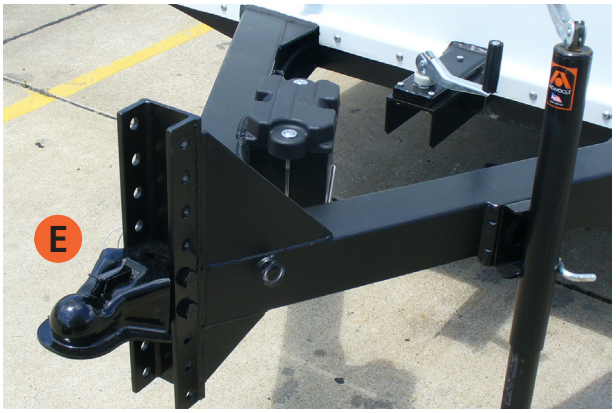
Optional Equipment CHECKLIST

In addition to the Standard features and equipment, Fiberglass Pop-Up Hot Line Tool Trailers can be custom ordered with the Options listed below.

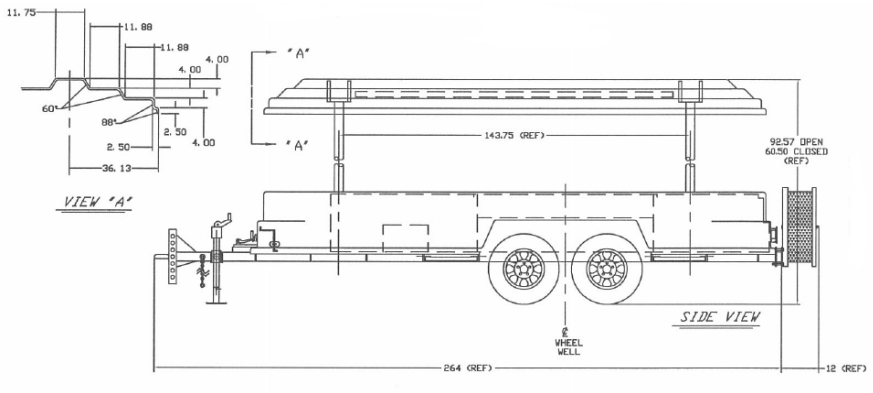
Please check the boxes on this page to select Options or just get in touch with us to help.

Interior Tool Storage OPTIONS

- ☐ **A.** 110/220 Vac "dry room" heater
- ☐ **B.** Additional channel rack for 30 Universal Tool accessories
- ☐ **C.** Ladder-rack brackets (plastisol coated) mounted on lid
  - ☐ 1 pair (right side)
  - ☐ 2 pairs
- ☐ D. Electric motor for lid open/close device (not shown)
- ☐ E. 2 5/16" ball socket type hitch, adjustable height



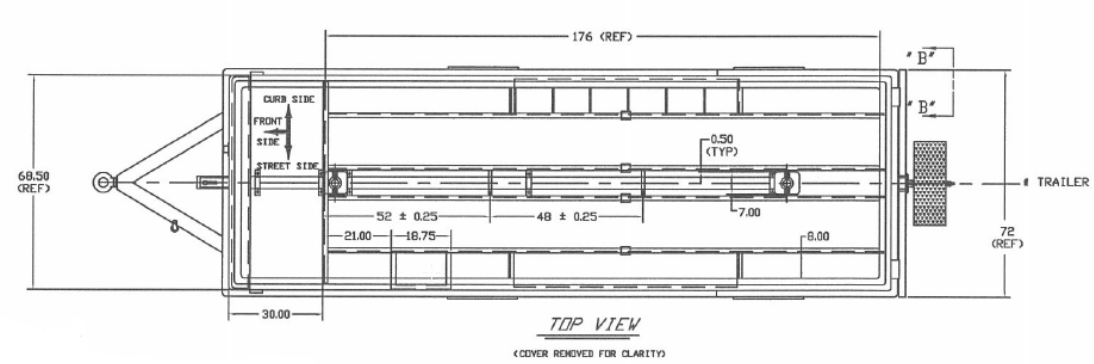
Fiberglass Pop-Up Tool Trailers



Trailer gross vehicle weight.....12,000 lb.
Tandem axles.....6,000 lb. capacity, each
Trailer curb weight, empty.....2,920 lb.
Payload capacity.....9,180 lb.
Brakes..... Electric, all four wheels
Tires..... Four 8.00 x 14.5 tires, 3100 lb. ea.
Hitch with safety chains..3" pintle or 2 5/16" ball
Hitch height....Adjustable, 15 ½" through 29 ½"
Tongue jack .....Manual crank
Low profile lightweight fiberglass body and lid
Breakaway system and battery (meets DOT)

Standard Storage Provisions

- 12 hot line tool compartments
- 155 adjustable plastic-covered tool supports
- 20 elastic tie-down straps
- 1 channel rack for 30 Universal Tool Accessories (right side)



NOTES

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NEVER COMPROMISE™

CHANCE®

Lineman's Accessories

Catalog 2550 March 2020

HUBBELL®

CHANCE®

Conductive Suit

EHV Barehand Conductive Suit puts the lineman on the job . . .

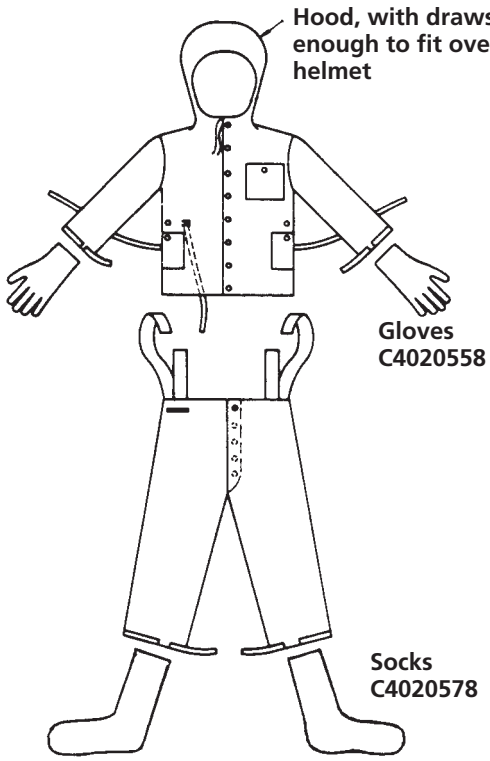
Features & Applications

- Allows linemen to get closer to their work
- Clothing is bonded to conductor, placing the lineman within the field of electricity
- Allows him to work with his hand on the conductor hardware
- Transmission line maintenance efficiency and effectiveness are advanced without endangering lineman and without interrupting customer service.
- For work on voltages through 765 kV
- Two-piece conductive suit is made of a blend of Nomex aramid flame resistant fiber and microscopic stainless steel fiber
- Zepel finish is applied to repel water
- Analysis and tests show the material:
  - o Is extremely strong and tear resistant
  - o Meets or exceeds IEC 60895 Specification for conductive clothing
  - o Does not degrade with time or number of washings
- Overcast stitching on major seams for integrity, durability and resistance to fraying
- Tails and appendages are attached by separate panels with multiple square and "x" stitches for integrity
- Velcro pads are located on strong nylon webbing suspender harness and cuffs of jacket and pants to provide rapid versatile fitting
- Corrosion-resistant snap fittings on jacket and pants make it easy to suit up
- Large hood, with drawstring, fits over any standard helmet

Conductive Suit

Features & Applications

- Suit of trousers and jacket in sizes Medium, Large and Extra Large
- See ordering information below



- View inside the jacket shows grounding strap of jacket and pants tied together
- This prevents the electrical separation of the jacket from the pants

Ordering Information

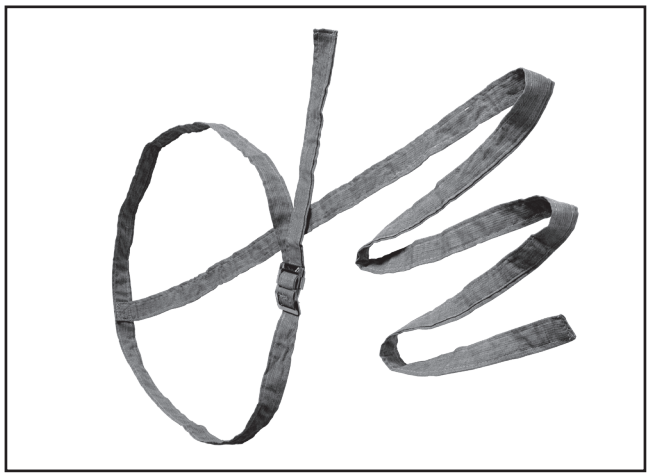
Catalog No.	Description	Weight
C4020533	Conductive Suit — medium	2 lb./.9 kg.
C4020534	Conductive Suit — large	2 lb./.9 kg.
C4020535	Conductive Suit — extra large	2 lb./.9 kg.
C4020558	Conductive Gloves (pair)	1/2 lb./.2 kg.
C4020578	Conductive Socks (pair)	1/3 lb./.2 kg.

Static Belt

Features & Applications

- Worn by linemen working on EHV structures
- Serves as a continuous ground to minimize static discomfort while working near energized lines
- Made of same material as Chance Conductive Suits
- Should be buckled snugly around the waist, next to bare skin
- Has a 6′ lead that can be attached to the steel structure

Cat. No.	Description	Weight
T4020694	Static Belt	2 oz.



T4020694

CHANCE®

Conductive Boots

Features & Applications

- 8" leather conductive boot
- Offers linemen both comfort and protection
- Meets all ANSI Specifications for conductive footwear
- Has a leg harness with a black conductive sole
- A wire molded into the rubber leads up the back with the conductive rubber strap covering to a conductive snap fitting at the top of the boot
- An additional conductive boot strap is secured through a snap fitting from boot to conductive suit or to leg strap
- This connection again, has a wire built into a nylon and conductive rubber strap

Weight per pair: 6½ lb./2.9 kg.

Mechanical Features

- Boot upper is made of top quality, high oil content leather
- Water resistant
- Flexible and durable
- Finely-crafted stitching and brown finish
- Meets ANSI Class 75 steel toe footwear specifications (75 lb. crush strength)
- Has a flexible full stainless steel inner sole, 400 lb. test
- Heel counter is molded into the sole to prevent its pulling away
- Welt is neoprene, not rubber or leather, to resist cracking
- Sole is vulcanized under 20,000 pounds of pressure to the welt, not to upper
- Makes the sole more flexible and helps prevent it from separating from upper
- Tempered steel shank is built-in for proper arch support

Electrical Features

- Meets ANSI Specifications Z41 for safety-toe footwear
- Manufactured to specification of less than 10,000 ohms from leg strap to boot heel
- 100% inspection/testing conducted on each boot as part of manufacturing process

Catalog No.*	Size (EEE widths)
C4170623	6
C4170624	7
C4170122	8
C4170123	9
C4170124	10
C4170125	11
C4170126	12
C4170625	13
C4170626	14

* Leg harness straps are included

Linemen's Holsters

PS111HLS
(Tools not included)

PSC111HLDS
(Tools not included)

Features & Applications

- Manufactured by Bashlin, maker of only premium holsters for tool belts
- Feature double backs which are reinforced for extra wear
- Left handed holsters are available at no extra cost
- Add an "LH" to the part number when ordering

No. PS111HLS For pliers, rule, screwdriver, *Channellock®, knife or wrench Ship Wt: 1.25 lb (0.57 kg)

No. PSC111HLDS For pliers, rule, screwdriver, *Channellock®, ratchet driver, knife or wrench Ship Wt: 1.50 lb (0.68 kg)

*Registered trademark of Channellock, Inc.

Do not use groundmen's or electrician's holsters on linemen's tool belts.

Ordering Bashlin Tool Belts

Sizing

- Proper sizing of lineman's tool belt is critical
- Improperly sized belt is uncomfortable and may cause an accident or injury
- Bashlin tools belts are measured by the "D" size
- This is the distance between the heels of the D-rings
- All linemen's tool belts must be ordered according to the "D" size

Sizing

- Locate the point where the heel of the "D" ring should rest
- As the photo illustrates, this is approximately 4" down from top of hip bone
- Begin to measure from this point
- Measure around buttocks to same point on opposite side
- When a properly sized tool belt is worn, D-rings will point nearly straight ahead
- Tongue adjustment will also be in center holes as shown in Photo 3
- To properly size Padded Rest-A-Back tool belts, add 2" to your standard "D" measurement

BELT ADJUSTMENT IN INCHES - PER ASTM F887

D Size, inches	Minimum, inches	Center Hole	Maximum, inches	Tool Loops
D18	32	36	40	3
D19	33	37	41	3
D20	34	38	42	3
D21	36	40	44	4
D22	37	41	45	4
D23	38	42	46	4
D24	40	44	48	4
D25	41	45	49	4
D26	42	46	50	4
D27	44	48	52	4
D28	45	49	53	4

⚠ WARNING

Never carry wire, tools, or anything other than the "positioning" strap in the D-rings of a tool belt. Foreign objects carried in the D-rings may cause the snap to malfunction, and accidental disengagement to occur.

⚠ WARNING

Falls can cause serious injury or death.

CHANCE®

Linemen's Tool Belts

All linemen's tool belts must be ordered according to "D" size.
Example: PSC1511ND18 **See how and table on Page 2555.**

The Floridian

- Superior design and performance
- The industry standard
- Combines padded, contour cushion section with flares for the shifting D-rings and a 5-1/2" back
- Gives excellent support and climbing comfort
- A practical, economical belt

No. PS88DXX Ship Wt: 6.50 lb (2.95 kg)

The Wrangler

- A practical favorite
- 5" cushion section
- Nylon back
- 6-ply tongue and buckle section
- Lightweight, with standard comfort
- Bashlin's S-shaped D-rings
- All-leather cushion

No. PSC1511NDXX Ship Wt: 5.25 lb (2.38 kg)

The Nylon Deluxe

- Familiar design in a shifting "D" nylon belt
- Neoprene-impregnated nylon back
- Light, durable and flexible in extreme temperature ranges
- Comfortable 5" leather cushion section
- Tongue and buckle is 6-ply nylon
- Tool loops are leather

No. PS160NDXX Ship Wt: 6.00 lb (2.72 kg)

Rest-A-Back

- Bashlin's Back Support Tool Belts help relieve strain and fatigue
- Use chart to determine proper size
- To properly size Padded Rest-A-Back tool belts, add 2" to your standard "D" measurement
- See Page 2555

No. PS88BDXX Ship Wt: 8.50 lb (3.83 kg)

Belt Size	Upper Tongue Adjustment	Belt Size	Upper Tongue Adjustment
D18	29-36"	D24	35-42"
D19	30-37"	D25	36-43"
D20	31-38"	D26	37-44"
D21	32-39"	D27	38-45"
D22	33-40"	D28	39-46"
D23	34-41"	D29	40-47"
		D30	41-48"

Pole Straps

Features & Applications

- Bashlin's 50 Series and 78 Series pole straps are offered here
- "L" style snaphook has lengthy field history
- It has a lock on the back to be released prior to opening the gate

⚠ WARNING

Always visually confirm the strap is on the D-ring with the gate closed and locked before allowing the strap to support your body weight. Do not just listen for the "click".

50 Series
Features & Applications

- 6-ply 1-3/4" neoprene coated nylon material
- Uses a tongue buckle adjustment

Length	Catalog No.	Ship Wt
5' 6"	PS51N2HL	3.75 lb (1.7 kg)
6'	PS52N2HL	3.75 lb (1.7 kg)
6' 6"	PS53N2HL	4.00 lb (1.8 kg)
7'	PS54N2HL	4.00 lb (1.8 kg)

50 Series

⚠ WARNING

The 50 series straps have red wear indicators in the center to help determine when it is time to replace them. When you see red it is time to remove the strap from service.

78 Series
Features & Applications

- Bashlin's pliable latigo leather straps feature a nylon insert
- Stitching is deeply imbedded in the leather for longer wear

Length	Catalog No.	Ship Wt
5' 6"	PSC78X2HL	4.25 lb (1.9 kg)
6'	PSC78A2HL	4.25 lb (1.9 kg)
6' 6"	PSC78B2HL	4.50 lb (2.0 kg)
7'	PSC78C2HL	5.00 lb (2.3 kg)

78 Series

⚠ WARNING

Double action locking snaphooks reduce, but do not eliminate, the possibility of accidental disengagement. Caution and proper work methods including keeping the Snap/D ring area free from foreign objects must be practiced at all times. Disabling the gate locks may cause accidents, injury or death.

CHANCE®

Full Body Harnesses

⚠ WARNING

1. The user must be properly trained prior to using Bashlin products.

2. Use the proper product for the job.

3. Inspect the harness before each use.

4. Wear the harness tight. It must be tight enough that the buckles hold the material properly and will not disengage accidentally. If the harness is loose, the material can hook on items in the work area, or in the worst case will not perform properly in the event of an arrested fall.

5. Check the buckles, and tighten the straps each time before going aloft.

6. Store the harness properly in a storage bag for longer wear.

⚠ CAUTION

Connection to the front loop of the PS683XAP harness can be made with carabiners or by looping web or rope through the eye. Snaphooks that may cut the material are not to be used.

Features & Applications

- Bashlin harnesses are normally made from 10,000 lb. test woven nylon web
- Webbing is in contrasting colors (usually orange on the torso and black on the legs) for easier donning
- Meet or exceed all appropriate ANSI, ASTM, and OSHA requirements
- Hardware features a corrosion-resistant coating
- Splices are lock stitched with nylon thread of a contrasting color for easy inspection
- Each standard harness is tagged per ANSI/ASTM requirements with labels shown

⚠ CAUTION

Bashlin harnesses must be sized and adjusted properly to function properly.

Sizing

- Bashlin harness is sized according to torso of the individual
- This involves measuring height and chest, then finding correct size on chart, according to harness style
- Height is first consideration
- Move to larger size if chest measurement is too large for corresponding height
- If chest measurement is too small for corresponding height, choose size dictated by height

PS683XAP Climbing Harness

Features & Applications

- "X"-style harness is available with the 656CM tool belt
- Belt can be easily removed from harness when not needed
- Features front attachment point for work positioning on ladders or rescue
- Please state size, and belt "D" size

No. PS683XAP_ _ Climbing Harness with a 3" nylon loop for lanyard in back Ship Wt: 8 lb (3.65 kg)

Size	Height	Chest
"S" Small	5'4" - 5'7"	34" - 36"
"M" Medium	5'8" - 5'11"	36" - 40"
"L" Large	6' - 6'3"	42" - 44"
"XL" Extra Large	6'4" - 6'6"	46" - 48"
"2X" Double Extra Large	6'6"+	48" - 52"
"3X" Triple Extra Large	6'6"+	52"+

Example: PS683XAPL (= Large)

Fall Arrest Lanyard

Features & Applications

- Bashlin shock-absorbing 2000 Series lanyards are recommended for most fall arrest applications
- Include an integral polyester core that absorbs forces as it expands
- 1" tubular nylon web with polyester shock absorbing core, 1-6650 snaphook and a loop end

⚠ WARNING

Limiting the lanyard length to 6' will not ensure a free fall of 6' or less. The lanyard length, anchor point and work location together will determine the free fall distance.

⚠ CAUTION

Lanyards may be connected to D-Rings on harnesses with web/rope loops, and properly dimensioned carabiners or snaphooks. 3" nylon loop back attachments require web/rope loops or properly dimensioned carabiners. Snaphooks are not to be used with such attachment points.

PS28056HL

No. PS28056HL Shock absorbing lanyard
Ship Wt: 1.5 lb (0.68 kg)

⚠ CAUTION

The maximum and standard length for Bashlin 2000 Series fall arrest lanyard is 6 feet. This is to aid the user in compliance with OSHA's maximum 6 feet free fall for personal fall arrest systems.

Pole Climbers

Features & Applications

- Bashlin pole climbers meet ASTM - F887 requirements
- Include #2 gaff guard and #5 gaff gauge standard
- Nylon straps are standard on Bashlin climbers

BD14 Series

- Bashlin's aluminum alloy offset climber
- Features a replaceable, forged steel gaff
- Lightweight climber reduces fatigue and adds climbing comfort
- Comparable steel climbers weigh 30% more

Number	Description	Ship Wt:
PSBD141N	Bottom straps attached	4.25 lb (1.93 kg)
PSBD142N	Bottom straps attached, and top straps	4.75 lb (2.15 kg)
PSBD143N	Bottom straps attached, top straps and #110D pads	5.25 lb (2.38 kg)
PSBD144N	Bottom straps attached, top straps and #130D pads	5.50 lb (2.49 kg)
PSBD145N	Bottom straps attached, top straps and #140DS pads	5.75 lb (2.61 kg)

BD16B Series

- Rugged, steel alloy adjustable climber
- Features replaceable gaff, offset design, roomy ankle area, and triangular strap ring

PSBD16B1N	Bottom straps attached	5.50 lb (2.49 kg)
PSBD16B2N	Bottom straps attached, and top straps	6.00 lb (2.72 kg)
PSBD16B3N	Bottom straps attached, top straps and #110D pads	6.50 lb (2.95 kg)
PSBD16B4N	Bottom straps attached, top straps and #130D pads	6.75 lb (3.06 kg)
PSBD16B5N	Bottom straps attached, top straps and #140DS pads	7.00 lb (3.18 kg)

⚠ WARNING

Climbers are to be used by trained personnel only.

ALUMINUM
PSBD14 SERIES

STEEL
PSBD16B SERIES

Climber Pads, Straps

PS105 Series Pads
Features & Applications

- The original "spur-stay" climber pad
- Designed to reduce kick-back and twisting of shank
- Insert holds climber for comfort and better gaff penetration
- An excellent choice for the lineman who occasionally climbs
- Available with a straight or angled metal section

Straight	Use on	Angled	Use on	Ship Wt:
PS105A	PSBD16	PS105AC	PSBD16	1.5 lb (0.68 kg)
PS105B	PSBD14	PS105BC	PSBD14	1.5 lb (0.68 kg)

PS105BC

PSC130D

PSC130D Pad
Features & Applications

- L-shaped design
- Light padding for added comfort

No. PSC130D (padded) Ship Wt: 0.7 lb (0.32 kg)

Climber Straps
Features & Applications

- Bashlin nylon climber straps are durable, pliable, and comfortable
- Double riveted and feature a protective buckle shield

Number	Description	Ship Wt:
PSC85N	Top straps - $1^{1}/_{16}$" x 24"	0.6 lb (0.27 kg)
PS86N	One piece lower straps - $1^{1}/_{16}$" x 28"	0.6 lb (0.27 kg)
PS87N	Two piece lower straps - $1^{1}/_{16}$" x 28" (original style, to be used on the tri-angular ring of Bashlin climbers. Must be assembled.)	0.7 lb (0.27 kg)
PSC89N	Two piece lower straps with split ring - $1^{1}/_{16}$" x 28"	0.7 lb (0.27 kg)

PSC85N

PS86N

PS87N

PSC89N

NOTES

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Recommended Hot Line Tools Lists

Catalog 2600 March 2020

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15kV Hot Stick Work only

Recommended Hot Line Tools List **Page 1 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	4	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	6	C4002320	Silicone spray	2500
13	2	PSC3090467	Nylon hoist	1100
14	2	C4001175	Hoist link stick	1100
15	1	T4001938	Transformer gin	1200
16	1	T4001708	Crossarm gin	1200
17	600'	C4000799	Composite braided rope	1250
18	1	T4001265	Fid & pusher	NS
19	2	22302	Snatch block, 1,000# capacity	1250
20	2	M1849	Hand line hook	1250
21	2	T4001258	Nylon blocks w/150' composite braid rope	NS
22	2	C4170589	Nylon sling 5' DT	NS
23	2	C4170139	Nylon sling 1¾" x 3'	1250
24	2	C4170140	Nylon sling 1¾" x 4'	1250
25	2	C4170141	Nylon sling 1¾" x 5'	1250
26	1	C3050008	Cant hook	1250
27	2	T161340H	Wire grip	1250
28	2	T16845H	Wire grip	1250
29	2	T165640H	Wire grip	1250
30	2	T165650H	Wire grip	1250
31	2	WPH3	Wire puller hook	1250
32	2	C4030293	Grip-all clampstick	2102
33	2	C4033068	Wire holding stick	2106
34	1	C4031022EM	Telescoping measuring disconnect	2109
35	2	H185525	Tie stick	2116
36	1	C4030185	All angle cog wrench	2116
37	1	T4033009	Torque extension stick for hydraulic powered tools	2117
38	1	C4031085	Socket set	2117
39	2	H17604	Universal pole	2119
40	2	M1860	Crossarm tool hanger	2119
41	1	C4031114	Universal tool kit	2120
42	1	M44559	Disconnect head	2121
43	1	M445519	Cotter key pusher	2122
44	1	M445523	Hack saw	2122
45	6	P4030369P	Hack saw blade	2122
46	1	C4032213	Pruning saw	2121
47	1	M445529B	Clamp stick head	2122
48	1	M445550	Skinning knife	2123

15kV Hot Stick Work only

Recommended Hot Line Tools List **Page 2 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
49	1	M445563	Cleaning brush	2100
50	1	M1899	Cleaning brush replacements	2100
51	1	T4031101	Adjustable insulator fork	2100
52	1	M445585	Hammer	2100
53	1	M445587	Ball socket adjuster	2100
54	1	C4030834	Hot Rodder, large	2100
55	1	C4031071	Hot Rodder, small	2100
56	1	C4032861	Hydraulic cutters	2150
57	1	H18716	Light duty cutters	2150
58	1	H21064	Tree trimmer	2150
59	2	H46458	Wire tong 1½" x 8'	2200
60	2	H464510	Wire tong 1½" x 10'	2200
61	4	H464712	Wire tong 2½" x 12'	2200
62	1	H464716	Wire tong 2½" x 16'	2200
63	4	M47403W	Wire tong saddle 1½"	2200
64	4	M47405W	Wire tong saddle 2½"	2200
65	3	C4000073	Wire tong saddle extension	2200
66	1	M17285	Wire tong pole clevis	2200
67	3	M4743	Wire tong block clamp	2200
68	2	M1846W	Rope snubbing bracket	2200
69	4	M18474	Extension chain	2200
70	2	M4744	Crossarm type saddle	2200
71	3	M4760W	Lever lift	2200
72	2	M47602	Arbor adapter	2200
73	1	C4001016	Epoxiglas® lever lift	2200
74	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 instead of standard M480517	2200
75	2	C4000517	Crossarm conductor support	2200
76	1	T4002272	Corner restraint bracket	2200
77	3	H47144	Roller link stick	2250
78	3	J1541502	Insulated jumper set	2300
79	3	S16007	Insulated hanger	2300
80	3	PSC6010341	Temporary cutout tool	2300
81	8	C4060181GA	Conductor cover	2400
82	4	C4060182	Insulator cover	2400
83	4	M49371	Pole cover 9" x 1'	2400
84	4	M49372	Pole cover 9" x 2'	2400
85	3	M49376	Pole cover 9" x 6'	2400
86	2	C4060097	Pole top cover	2400
87	2	C4060102	Crossarm end cover	2400
88	2	M4933	Crossarm guard	2400
89	6	C4060084GA	Spiral cover	2400
90	12	C4060305	Flexible line hose	2400
91	1	H1876	Phasing tester	2450
92	1	C4033374	Digital voltage indicator	2450
93	1	T6000641	Ground set	3000
94	1	T6000865	Grounding set storage bag	3000
95	1	C4170151	Line hose bag	2500
96	2	C4032999	Blanket canister	2500
97	4	C4060346	Blanket, solid	2400
98	4	C4060348	Blanket, slotted	2400
99	24	C4060531	Hot stick blanket pins	2400

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15kV Rubber Glove Work from an Insulated Platform Board

Recommended Hot Line Tools List **Page 1 of 1**

Item	Qty.	Catalog No.	Description	Catalog Section
1	2	C4021042	Epoxiglas® insulated platform 4'	2350
2	2	C4021055	Railing for 4' platform	2350
3	2	C4021164	Pivot for 4' platform	2350
4	1	C4002365	Cleaning kit	2500
5	12	M1904	Wiping cloth	2500
6	2	C4002335	Dry film lubricant	2500
7	2	M4660	Tool racks	2500
8	1	T3060025	Tarp	2500
9	1	C4170151	Line hose bag	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	2	C4032999	Blanket canister	2500
13	6	C4002320	Silicone spray	2500
14	4	C4060346	Blanket, solid	2400
15	4	C4060348	Blanket, slotted	2400
16	24	C4060530	Blanket pin	2400
17	2	PSC3090323	Nylon hoist	1100
18	2	C4001175	Hoist link stick	1100
19	1	T4001938	Transformer gin	1200
20	1	T4001708	Crossarm gin	1200
21	300'	C4000799	Composite braided rope ½"	1250
22	1	T4001265	Fid & pusher	NS
23	2	22302	Snatch block	2250
24	2	C4170139	Nylon sling	1250
25	2	C4170140	Nylon sling	1250
26	2	T161340H	Wire grip	1250
27	2	T16845H	Wire grip	1250
28	2	T165640H	Wire grip	1250
29	2	C4030293	Grip All clampstick	2120
30	1	C4033068	Wire holding stick	2100
31	1	C4032980	Ratchet cable cutter	2150
32	2	M47405W	Wire tong saddles	2200
33	13	M48057	Insulators	2200
34	1	H48628	Rubber glove arm	2200
35	1	H480060	Extension arm	2200
36	1	H480072	Extension arm	2200
37	2	C4000517	Temporary crossarm conductor support	2200
38	2	T4001939	Pole mounted conductor support	2200
39	1	T4002272	Corner restraint bracket	2200
40	3	H47144	Roller link stick	2250
41	3	J1541522	Insulated jumper set 15'	2300
42	3	S16007	Insulated hanger	2300
43	3	C4031631	Load pick up tool	2300
44	3	C4001907	Tension puller switching tool	2300
45	3	C4000600	Tie back clamp	2250
46	12	P4060185	Insulator hood	2400
47	24	C4060305	Flexible line hose	2400
48	2	M4933	Crossarm guard	2400
49	2	C4060102	Crossarm end guard	2400
50	2	M49371	Pole cover 9" x 1'	2400
51	2	M49372	Pole cover 9" x 2'	2400
52	2	M49376	Pole cover 9" x 6'	2400
53	2	C4060097	Pole top cover	2400
54	1	H1876	Phasing tester set	2450

15kV Hot Stick Work & Rubber Glove Work

Recommended Hot Line Tools List **Page 1 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	4	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	6	C4002320	Silicone spray	2500
13	2	PSC3090467	Nylon hoist	2500
14	2	C4001175	Hoist link stick	1100
15	1	T4001938	Transformer gin	1100
16	1	T4001708	Crossarm gin	1200
17	600'	C4000799	Composite braided rope	1200
18	1	T4001265	Fid & pusher	1250
19	2	22302	Snatch block, 1,000# capacity	NS
20	2	M1849	Hand line hook	1250
21	2	T4001258	Nylon blocks w/150' composite braid rope	1250
22	2	C4170589	Nylon sling 5' DT	1250
23	2	C4170139	Nylon sling 1¾" x 3'	NS
24	2	C4170140	Nylon sling 1¾" x 4'	1250
25	2	C4170141	Nylon sling 1¾" x 5'	1250
26	1	C3050008	Cant hook	1250
27	2	T161340H	Wire grip	1250
28	2	T16845H	Wire grip	1250
29	2	T165640H	Wire grip	1250
30	2	T165650H	Wire grip	1250
31	2	WPH3	Wire puller hook	1250
32	2	C4030293	Grip-all clampstick	1250
33	2	C4033068	Wire holding stick	2100
34	1	C4031022EM	Telescoping measuring disconnect	2100
35	2	H185525	Tie stick	2100
36	1	C4030185	All angle cog wrench	2100
37	1	T4033009	Torque extension stick for hydraulic powered tools	2100
38	1	C4031085	Socket set	2100
39	2	H17604	Universal pole	2100
40	2	M1860	Crossarm tool hanger	2100
41	1	C4031114	Universal tool kit	2100
42	1	M44559	Disconnect head	2100
43	1	M445519	Cotter key pusher	2100
44	1	M445523	Hack saw	2100
45	6	P4030369P	Hack saw blade	2100
46	1	C4032213	Pruning saw	2100
47	1	M445529B	Clamp stick head	2100
48	1	M445550	Skinning knife	2100
49	1	M445563	Cleaning brush	2100
50	1	M1899	Cleaning brush replacements	2100
51	1	T4031101	Adjustable insulator fork	2100
52	1	M445585	Hammer	2100
53	1	M445587	Ball socket adjuster	2100
54	1	C4030834	Hot Rodder, large	2100

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15kV Hot Stick Work & Rubber Glove Work

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
55	1	C4031071	Hot Rodder, small	2100
56	1	C4032861	Hydraulic cutters	2150
57	1	H18716	Light duty cutters	2150
58	1	H21064	Tree trimmer	2150
59	2	H46458	Wire tong 1½" x 8'	2200
60	2	H464510	Wire tong 1½" x 10'	2200
61	4	H464712	Wire tong 2½" x 12'	2200
62	1	H464716	Wire tong 2½" x 16'	2200
63	4	M47403W	Wire tong saddle 1½"	2200
64	4	M47405W	Wire tong saddle 2½"	2200
65	3	C4000073	Wire tong saddle extension	2200
66	1	M17285	Wire tong pole clevis	2200
67	3	M4743	Wire tong block clamp	2200
68	2	M1846W	Rope snubbing bracket	2200
69	4	M18474	Extension chain	2200
70	2	M4744	Crossarm type saddle	2200
71	3	M4760W	Lever lift	2200
72	2	M47602	Arbor adapter	2200
73	1	C4001016	Epoxiglas® lever lift	2200
74	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 wireholders	NS
75	2	C4000517	Crossarm conductor support	2200
76	1	T4002272	Corner restraint bracket	2200
77	3	H47144	Roller link stick	2250
78	3	J1541511	Insulated jumper set 15'	2300
79	3	S16007	Insulated hanger	2300
80	3	PSC6010341	Temporary cutout tool	2300
81	8	C4060181GA	Conductor cover	2400
82	4	C4060182	Insulator cover	2400
83	4	M49371	Pole cover 9" x 1'	2400
84	4	M49372	Pole cover 9" x 2'	2400
85	3	M49376	Pole cover 9" x 6'	2400
86	2	C4060097	Pole top cover	2400
87	2	C4060102	Crossarm end cover	2400
88	2	M4933	Crossarm guard	2400
89	6	C4060084GA	Spiral cover	2400
90	12	C4060305	Flexible line hose	2400
91	1	H1876	Phasing tester	2450
92	1	C4033374	Auto-ranging voltage indicator	2450
93	6	C6001734	Ground clamp	3000
94	1	T6000641	Ground set	3000
95	1	T6000865	Grounding set storage bag	3000
96	1	C4170151	Line hose bag	2500
97	1	C4032980	Ratchet hand cutters	2150
98	1	H48628	Rubber glove auxiliary arm	2200
99	4	M48057	Insulators for item #100	2200
100	3	C4031631	Load pick up tool	2310
101	1	C4021164	Platform pivot for 4'	2357
102	1	C4021173	Platform pivot for 6'	2357
103	1	C4021055	Railing for 4'	2357
104	1	C4020023	Railing for 6'	2357
105	1	C4021042	Insulated 4' platform	2356
106	1	C4021043	Insulated 6' platform	2356
107	12	C4060305	Flexible line hose	2408
108	2	C4032999	Blanket canister	2513
109	4	C4060346	Blankets, solid	2409
110	4	C4060348	Blankets, slotted	2409
111	24	C4060530	Hot stick blanket pins	2409
112	6	C4002320	Silicone Spray	2513

15kV Hot Stick, Rubber Glove & Underground Work

Recommended Hot Line Tools List **Page 1 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	4	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	6	C4002320	Silicone spray	2500
13	2	PSC3090467	Nylon hoist	1100
14	2	C4001175	Hoist link stick	1100
15	1	T4001938	Transformer gin	1200
16	1	T4001708	Crossarm gin	1200
17	600'	C4000799	Composite braided rope	1250
18	1	T4001265	Fid & pusher	NS
19	2	22302	Snatch block, 1,000# capacity	1250
20	2	M1849	Hand line hook	1250
21	2	T4001258	Nylon blocks w/150' composite braid rope	1250
22	2	C4170589	Nylon sling 5' DT	NS
23	2	C4170139	Nylon sling 1¾" x 3'	1250
24	2	C4170140	Nylon sling 1¾" x 4'	1250
25	2	C4170141	Nylon sling 1¾" x 5'	1250
26	1	C3050008	Cant hook	1250
27	2	T161340H	Wire grip	1250
28	2	T16845H	Wire grip	1250
29	2	T165640H	Wire grip	1250
30	2	T165650H	Wire grip	1250
31	2	WPH3	Wire puller hook	1250
32	2	C4030293	Grip-all clampstick	2100
33	2	C4033068	Wire holding stick	2100
34	1	C4031022EM	Telescoping measuring disconnect	2100
35	2	H185525	Tie stick	2100
36	1	C4030185	All angle cog wrench	2100
37	1	T4033009	Torque extension stick for hydraulic powered tools	2100
38	1	C4031085	Socket set	2100
39	2	H17604	Universal pole	2100
40	2	M1860	Crossarm tool hanger	2100
41	1	C4031114	Universal tool kit	2100
42	1	M44559	Disconnect head	2100
43	1	M445519	Cotter key pusher	2100
44	1	M445523	Hack saw	2100
45	6	P4030369P	Hack saw blade	2100
46	1	C4032213	Pruning saw	2100
47	1	M445529B	Clamp stick head	2100
48	1	M445550	Skinning knife	2100
49	1	M445563	Cleaning brush	2100
50	1	M1899	Cleaning brush replacements	2100
51	1	T4031101	Adjustable insulator fork	2100
52	1	M445585	Hammer	2100
53	1	M445587	Ball socket adjuster	2100
54	1	C4030834	Hot Rodder, large	2100
55	1	C4031071	Hot Rodder, small	2100
56	1	C4032861	Hydraulic cutters	2100
57	1	H18716	Light duty cutters	2100
58	1	H21064	Tree trimmer	2100
59	2	H46458	Wire tong 1½" x 8'	2200
60	2	H464510	Wire tong 1½" x 10'	2200

15kV Hot Stick, Rubber Glove & Underground Work

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
61	4	H464712	Wire tong 2½" x 12'	2200
62	1	H464716	Wire tong 2½" x 16'	2200
63	4	M47403W	Wire tong saddle 1½"	2200
64	4	M47405W	Wire tong saddle 2½"	2200
65	3	C4000073	Wire tong saddle extension	2200
66	1	M17285	Wire tong pole clevis	2200
67	3	M4743	Wire tong block clamp	2200
68	2	M1846W	Rope snubbing bracket	2200
69	4	M18474	Extension chain	2200
70	2	M4744	Crossarm type saddle	2200
71	3	M4760W	Lever lift	2200
72	2	M47602	Arbor adapter	2200
73	1	C4001016	Epoxiglas® lever lift	2200
74	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 wireholders	N/S
75	2	C4000517	Crossarm conductor support	2200
76	1	T4002272	Corner restraint bracket	2200
77	3	H47144	Roller link stick	2250
78	3	J1541511	Insulated jumper set (15 ft.)	2300
79	3	S16007	Insulated hanger	2300
80	3	PSC6010341	Temporary cutout tool	2300
81	8	C4060181GA	Conductor cover	2400
82	4	C4060182	Insulator cover	2400
83	4	M49371	Pole cover 9" x 1'	2400
84	4	M49372	Pole cover 9" x 2'	2400
85	3	M49376	Pole cover 9" x 6'	2400
86	2	C4060097	Pole top cover	2400
87	2	C4060102	Crossarm end cover	2400
88	2	M4933	Crossarm guard	2400
89	6	C4060084GA	Spiral cover	2400
90	12	C4060305	Flexible line hose	2400
91	1	H1876	Phasing tester	2450
92	1	C4033374	Auto-ranging voltage indicator	2450
93	1	T6000641	Ground set	3010
94	1	T6000865	Grounding set storage bag	3000
95	1	C4170151	Line hose bag	2500
96	1	C4032980	Ratchet hand cutters	2150
97	1	H48628	Rubber glove auxiliary arm	2200
98	4	M48057	Insulators for item #100	2200
99	3	C4031631	Load pick up tool	2300
100	1	C4021164	Platform pivot for 4'	2350
102	1	C4021173	Platform pivot for 6'	2350
103	1	C4021055	Railing for 4'	2350
104	1	C4020023	Railing for 6'	2350
105	1	C4021042	Insulated 4' platform	2350
106	1	C4021043	Insulated 6' platform	2350
107	12	C4060305	Flexible line hose	2400
108	2	C4032999	Blanket canister	2500
109	4	C4060346	Solid blankets	2400
110	4	C4060348	Slotted blankets	2400
111	24	C4060531	Hot stick blanket pins	2400
112	2	C4031822	Elbow puller	2100
113	2	C4030704	Grippers 15 kV	2100
114	1	C4031762	D.C. Hipot adapter	2450
115	2	T4030428	Bushing adapter	2450
116	1	T4030602	Elbow adapter	2450
117	1	C4030803	Energized cable sensor	2450
118	1	C4030547	Line/Fault Locator	2450
119	1	T6002233	Penetrator clamp with ground set	3000
120	2	C6000759	Temporary underground ground set	3000
121	2	T6003091	Grounded parking stand	3000
122	2	C6000729	Grounding elbow	3000
123	2	T6000865	Storage bag for items #122-123-124	3000

25kV Rubber Glove Work from an Insulated Platform Board

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	2	C4021043	Epoxiglas® insulated platform 4'	2350
2	2	C4020023	Railing for 6' platform	2350
3	2	C4021173	Pivot for 6' platform	2350
4	1	C4002365	Cleaning kit	2500
5	12	M1904	Wiping cloth	2500
6	2	C4002335	Dry film lubricant	2500
7	2	M4660	Tool racks	2500
8	1	T3060025	Tarp	2500
9	1	C4170151	Line hose bag	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	2	C4032999	Blanket canister	2500
13	6	C4002320	Silicone spray	2500
14	4	C4060346	Blanket, solid	2400
15	4	C4060348	Blanket, slotted	2400
16	24	C4060530	Blanket pin	2400
17	2	PSC3090323	Nylon hoist	1100
18	2	C4002399	Hoist link stick	1100
19	1	T4001938	Transformer gin	1200
20	1	T4001708	Crossarm gin	1200
21	300'	C4000799	Composite braided rope ½"	1250
22	1	T4001265	Fid & pusher	NS
23	2	22302	Snatch block	2250
24	2	C4170139	Nylon sling	1250
25	2	C4170140	Nylon sling	1250
26	2	T161340H	Wire grip	1250
27	2	T16845H	Wire grip	1250
28	2	T165640H	Wire grip	1250
29	2	C4030293	Grip All clampstick	2100
30	1	C4033068	Wire holding stick	2100
31	1	C4032980	Ratchet cable cutter	2150
32	2	M47405W	Wire tong saddles	2200
33	13	M48057	Insulators	2200
34	1	H48628	Rubber glove arm	2200
35	1	H480060	Extension arm	2200
36	1	H480072	Extension arm	2200
37	2	C4000517	Temporary crossarm conductor support	2200
38	2	T4001939	Pole mounted conductor support	2200
39	1	T4002272	Corner restraint bracket	2200
40	3	H47144	Roller link stick	2250
41	3	J2521522	Insulated jumper set 25kV 15' long	NS
42	3	S16007	Insulated hanger	2300
43	3	C4001907	Tension puller switching tool	2300
44	3	C4000600	Tie back clamp	2250
45	3	P4060185	Insulator hood	2400
46	12	C4060308	Flexible line hose	2400
47	24	M4933	Crossarm guard	2400
48	2	C4060102	Crossarm end guard	2400
49	2	M49371	Pole cover 9" x 1'	2400
50	2	M49372	Pole cover 9" x 2'	2400
51	2	M49376	Pole cover 9" x 6'	2400
52	2	C4060097	Pole top cover	2400
53	1	T4032261	Phasing tester set	2450

25kV Rubber Glove Work from an Insulated Bucket Truck

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	C4002365	Cleaning kit	2500
2	12	M1904	Wiping cloth	2500
3	2	C4002335	Dry film lubricant	2500
4	2	M4660	Tool racks	2500
5	1	T3060025	Tarp	2500
6	1	C4170151	Line hose bag	2500
7	1	C4170144	Tool bucket large	2500
8	1	C4170146	Tool bucket small	2500
9	2	C4032999	Blanket canister	2500
10	4	C4060346	Blanket, solid	2400
11	4	C4060348	Blanket, slotted	2400
12	24	C4060530	Blanket pin	2400
13	6	C4002320	Silicone lubricant	2500
14	2	PSC3090451	Nylon hoist ¾ + 1½ ton	1100
15	2	C4001175	Hoist link stick	1100
16	1	T4001938	Transformer gin	1200
17	1	T4001708	Crossarm gin	1200
18	300'	C4000799	Composite braided rope ½"	1250
19	1	T4001265	Fid & pusher	NS
20	2	22302	Snatch block	1250
21	2	M1849	Hand line hook	1250
22	2	C4170589	Nylon sling 1¾" x 5' DT	NS
23	2	C4170139	Nylon sling 1¾" x 3'	1250
24	2	C4170140	Nylon sling 1¾" x 4'	1250
25	2	C4170141	Nylon sling 1¾" x 5'	1250
26	2	T161340H	Wire grip	1250
27	2	T16845H	Wire grip	1250
28	2	T165640H	Wire grip	1250
29	2	C4030293	Grip All clampstick	2100
30	1	C4033068	Wire holding stick	2100
31	1	C4032980	Ratchet cable cutter	2150
32	2	M47405W	Wire tong saddle	2200
33	1	H48628	Rubber glove auxiliary arm	2200
34	1	H480060	Extension arm	2200
35	1	H480072	Extension arm	2200
36	2	C4000517	Crossarm conductor support	2200
37	1	T4001939	Temporary conductor support	2200
38	11	M48057	Insulators	2200
39	1	T4002272	Corner restraint bracket	2200
40	3	H47144	Roller link stick	2250
41	3	J2521522	Insulated jumper set 25kV – 15' long	NS
42	3	S16007	Insulated hanger	2300
43	3	PSC6010342	Temporary cutout	2300
44	2	M49371	Pole cover 9" x 1'	2400
45	2	M49372	Pole cover 9" x 2'	2400
46	2	M49376	Pole cover 9" x 6'	2400
47	2	C4060097	Pole top cover	2400
48	2	C4060102	Crossarm end guard	2400
49	2	M4933	Crossarm guard	2400
50	15	C4060305	Flexible line hose 20kV	2400
51	15	C4060308	Flexible line hose 30kV	2400
52	12	P4060185	Insulator hood	2400
53	1	T4032261	Phasing tester set	2450

35kV Rubber Glove Work from an Insulated Platform Board

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	2	C4021042	Epoxiglas® insulated platform 4'	2350
2	2	C4021055	Railing for 4' platform	2350
3	2	C4021164	Pivot for 4' platform	2350
4	1	C4002365	Cleaning kit	2500
5	12	M1904	Wiping cloth	2500
6	2	C4002335	Dry film lubricant	2500
7	2	M4660	Tool racks	2500
8	1	T3060025	Tarp	2500
9	1	C4170151	Line hose bag	2500
10	1	C4170144	Tool bucket large	2500
11	1	C4170146	Tool bucket small	2500
12	2	C4032999	Blanket canister	2500
13	6	C4002320	Silicone spray	2500
14	4	C4060346	Blanket, solid	2400
15	4	C4060348	Blanket, slotted	2400
16	24	C4060530	Blanket pin	2400
17	2	PSC3090323	Nylon hoist	1100
18	2	C4002399	Hoist link stick	1100
19	1	T4001938	Transformer gin	1200
20	1	T4001708	Crossarm gin	1200
21	300'	C4000799	Composite braided rope ½"	1250
22	1	T4001265	Fid & pusher	NS
23	2	22302	Snatch block	2250
24	2	C4170139	Nylon sling	1250
25	2	C4170140	Nylon sling	1250
26	2	T161340H	Wire grip	1250
27	2	T16845H	Wire grip	1250
28	2	T165640H	Wire grip	1250
29	2	C4030293	Grip All clampstick	2100
30	1	C4033068	Wire holding stick	2100
31	1	C4032980	Ratchet cable cutter	2150
32	2	M47405W	Wire tong saddle	2200
33	13	M48057	Insulators	2200
34	1	H48628	Rubber glove arm	2200
35	1	H480060	Extension arm	2200
36	1	H480072	Extension arm	2200
37	2	C4000517	Temporary crossarm conductor support	2200
38	2	T4001939	Pole mounted conductor support	2200
39	1	T4002272	Corner restraint bracket	2200
40	3	H47144	Roller link stick	2250
41	3	J3511533	Insulated jumper set 15'	2300
42	3	S16007	Insulated hanger	2300
43	3	C4000574	Tension puller	2250
44	3	C4000600	Tie back clamp	2250
45	12	C4060557	Insulator hood	2400
46	24	C4060342	Flexible line hose	2400
47	2	M4933	Crossarm guard	2400
48	2	C4060102	Crossarm end guard	2400
49	2	M49371	Pole cover 9" x 1'	2400
50	2	M49372	Pole cover 9" x 2'	2400
51	2	M49376	Pole cover 9" x 6'	2400
52	2	C4060097	Pole top cover	2400
53	12	C4060340	Coupler	2400
54	1	H1876	Phasing tester set	2450
55	1	H18764	Extension resistors	2450

CHANCE®

15, 25 & 35kV Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	6	C4002320	Silicone spray	2500
12	1	C4170144	Tool bucket large	2500
13	1	C4170146	Tool bucket small	2500
14	2	C4032999	Blanket canister	2500
15	2	PSC3090467	Nylon hoist	1100
16	2	C4001175	Hoist link stick 12"	1100
17	2	C4002399	Hoist link stick 18"	1100
18	1	T4001938	Transformer gin	1200
19	1	T4001708	Crossarm gin	1200
20	600'	C4000799	Composite braided rope ½"	1250
21	1	T4001265	Fid & pusher	NS
22	2	T4001258	Nylon blocks w/150' composite braid rope	1250
23	2	22302	Snatch block, 1,000# capacity	1250
24	2	M1849	Hand line hook	1250
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	2	C4170139	Nylon sling 3' x 1¾"	1250
27	2	C4170140	Nylon sling 4' x 1¾"	1250
28	2	C4170141	Nylon sling 5' x 1¾"	1250
29	1	C3050008	Cant hook	1250
30	2	WPH3	Wire puller hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	2	C4033068	Wire holding stick	2100
37	1	C4031022EM	Telescoping measuring disconnect	2100
38	2	H185525	Tie stick	2100
39	1	C4030185	All angle cog wrench	2100
40	1	T4033009	Torque extension stick for hydraulic powered tools	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole	2100
43	2	M1860	Crossarm tool hanger	2100
44	1	C4031114	Universal tool kit	2100
45	1	M44559	Disconnect head	2100
46	1	M445523	Hack saw	2100
47	6	P4030369P	Hack saw blade	2100
48	1	C4032213	Pruning saw	2100
49	1	M445529B	Clampstick head	2100
50	1	M445550	Skinning knife	2100
51	1	M445563	Cleaning brush	2100
52	1	M1889	Cleaning brush replacements	2100
53	1	T4031101	Adjustable insulator fork	2100

15, 25 & 35kV Hot Stick Work only

Recommended Hot Line Tools List **Page 2 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
54	1	C4030175	Plastic insulator tool	2100
55	1	C4030834	Hot Rodder, large	2100
56	1	C4031071	Hot Rodder, small	2100
57	1	C4031416	Tie wire claw	2100
58	1	C4031417	Utility head	2100
59	1	C4032861	Hydraulic cutters	2150
60	1	H18716	Hot cutter light duty	2150
61	1	H21064	Tree trimmer	2150
62	2	H46458	Wire tong 1½" x 8'	2200
63	2	H464510	Wire tong 1½" x 10'	2200
64	4	H464712	Wire tong 2½" x 12'	2200
65	1	H464716	Wire tong 2½" x 16'	2200
66	4	M47403W	Wire tong saddle 1½"	2200
67	4	M47405W	Wire tong saddle 2½"	2200
68	4	C4000073	Saddle extension	2200
69	4	M4743	Wire tong block clamp	2200
70	1	M17285	Wire tong pole clevis	2200
71	4	M18474	Extension chain	2200
72	2	M1846W	Rope snubbing bracket	2200
73	3	M4760W	Lever lift	2200
74	1	C6001016	Epoxiglas® lever lift	2200
75	2	M47602	Arbor adapter	2200
76	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 roller wire holders	N/S
77	2	C4000517	Temporary crossarm support	2200
78	2	M48057	Insulator	2200
79	1	T4002272	Corner restraint bracket	2200
80	3	H47144	Roller link stick	2250
81	2	C4000574	Hot stick tension puller	2250
82	3	J1541502	Insulated jumper set (15 ft.)	N/S
83	3	J3511502	Insulated jumper set (15 ft.)	N/S
84	3	S16007	Insulated hanger	2300
85	3	C4031631	Load pick up tool	2300
86	3	PSC6010342	Temporary cutout	2300
87	12	C4060181GA	Conductor cover	2400
88	6	C4060182	Insulator cover	2400
89	4	M49371	Pole cover 9" x 1'	2400
90	4	M49372	Pole cover 9" x 2'	2400
91	3	M49376	Pole cover 9" x 6'	2400
92	2	C4060097	Pole top cover	2400
93	2	C4060102	Crossarm end cover	2400
94	2	M4933	Crossarm guard	2400
95	12	C4060084GA	Spiral cover	2400
96	6	C4060046	Insulator cover	2400
97	12	C4060305	Flexible cover	2400
98	1	H18761	Phasing tester	2450
99	1	H18764	Extension resistors	2450
100	1	C4033374	Auto-ranging voltage indicator	2450
101	1	T6000641	Ground set	3000
102	1	T6000865	Storage bag for ground set	3000
103	4	C4060346	Blanket, solid	2400
104	4	C4060348	Blanket, slotted	2400
105	24	C4060531	Hot stick blanket pin	2400

15, 25 & 35kV Hot Stick & Rubber Glove Work

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	6	C4002320	Silicone spray	2500
12	1	C4170144	Tool bucket large	2500
13	1	C4170146	Tool bucket small	2500
14	2	C4032999	Blanket canister	2500
15	2	PSC3090467	Nylon hoist	1100
16	2	C4001175	Hoist link stick 12"	1100
17	2	C4002399	Hoist link stick 18"	1100
18	1	T4001938	Transformer gin	1200
19	1	T4001708	Crossarm gin	1200
20	600'	C4000799	Composite braided rope ½"	1250
21	1	T4001265	Fid & pusher	NS
22	2	T4001258	Nylon blocks w/150' composite braid rope	1250
23	2	22302	Snatch block, 1,000# capacity	1250
24	2	M1849	Hand line hook	1250
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	2	C4170139	Nylon sling 3' x 1¾"	1250
27	2	C4170140	Nylon sling 4' x 1¾"	1250
28	2	C4170141	Nylon sling 5' x 1¾"	1250
29	1	C3050008	Cant hook	1250
30	2	WPH3	Wire puller hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	2	C4033068	Wire holding stick	2100
37	1	C4031022EM	Telescoping measuring disconnect	2100
38	2	H185525	Tie stick	2100
39	1	C4030185	All angle cog wrench	2100
40	1	T4033009	Torque extension stick for hydraulic powered tools	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole	2100
43	2	M1860	Crossarm tool hanger	2100
44	1	C4031114	Universal tool kit	2100
45	1	M44559	Disconnect head	2100
46	1	M445523	Hack saw	2100
47	6	P4030369P	Hack saw blade	2100
48	1	C4032213	Pruning saw	2100
49	1	M445529B	Clampstick head	2100
50	1	M445550	Skinning knife	2100
51	1	M445563	Cleaning brush	2100
52	1	M1889	Cleaning brush replacements	2100
53	1	T4031101	Adjustable insulator fork	2100
54	1	C4030175	Plastic insulator tool	2100
55	1	C4030834	Hot Rodder, large	2100
56	1	C4031071	Hot Rodder, small	2100
57	1	C4031416	Tie wire claw	2100
58	1	C4031417	Utility head	2100
59	1	C4032861	Hydraulic cutters	2150
60	1	H18716	Hot cutter light duty	2150

15, 25 & 35kV Hot Stick & Rubber Glove Work

Recommended Hot Line Tools List **Page 2 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
61	1	H21064	Tree trimmer	2150
62	2	H46458	Wire tong 1½" x 8'	2200
63	2	H464510	Wire tong 1½" x 10'	2200
64	4	H464712	Wire tong 2½" x 12'	2200
65	1	H464716	Wire tong 2½" x 16'	2200
66	4	M47403W	Wire tong saddle 1½"	2200
67	4	M47405W	Wire tong saddle 2½"	2200
68	4	C4000073	Saddle extension	2200
69	4	M4743	Wire tong block clamp	2200
70	1	M17285	Wire tong pole clevis	2200
71	4	M18474	Extension chain	2200
72	2	M1846W	Rope snubbing bracket	2200
73	3	M4760W	Lever lift	2200
74	1	C4001016	Epoxiglas® lever lift	2200
75	2	M47602	Arbor adapter	2200
76	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 roller wire holders	N/S
77	2	C4000517	Temporary crossarm support	2200
78	2	M48057	Insulator	220
79	1	T4002272	Corner restraint bracket	2200
80	3	H47144	Roller link stick	2250
81	2	C4000574	Hot stick tension puller	2250
82	3	J1541522	Jumper set 15kV (15 ft.)	NS
83	3	J3511533	Jumper set 35kV (15 ft.)	NS
84	3	S16007	Insulated hanger	2300
85	3	C4031631	Load pick up tool	2300
86	3	PSC6010342	Temporary cutout	2300
87	12	C4060181GA	Conductor cover	2400
88	6	C4060182	Insulator cover	2400
89	4	M49371	Pole cover 9" x 1'	2400
90	4	M49372	Pole cover 9" x 2'	2400
91	3	M49376	Pole cover 9" x 6'	2400
92	2	C4060097	Pole top cover	2400
93	2	C4060102	Crossarm end cover	2400
94	2	M4933	Crossarm guard	2400
95	12	C4060084GA	Spiral cover	2400
96	6	C4060046	Insulator cover	2400
97	12	C4060305	Flexible cover	2400
98	1	H18761	Phasing tester	2450
99	1	H18764	Extension resistors	2450
100	1	C4033374	Auto-ranging voltage indicator	2450
101	12	C6001734	Ground clamp	3000
102	1	T6000641	Ground set	3000
103	1	T6000865	Storage bag for ground set	3000
104	4	C4060346	Blanket, solid	2400
105	4	C4060348	Blanket, slotted	2400
106	24	C4060530	Hot stick blanket pin	2400
107	1	C4032980	Ratchet hand cutters	2150
108	1	H48628	Rubber glove auxiliary arm	2200
109	4	M48057	Insulator	2200
110	1	C4021042	Insulated 4' platform	2350
111	1	C4021043	Insulated 6' platform	2350
112	1	C4021055	Railing for 4' platform	2350
113	1	C4020023	Railing for 6' platform	2350
114	1	C4021164	Pivot for 4' platform	2350
115	1	C4021173	Pivot for 6' platform	2350
116	12	C4060308	Flexible line hose 30kV	2400
117	12	C4060342	Extended lip flexible line hose	2400
118	6	C4060340	Coupler	2400
119	1	C4032505	Hot line applicator tool	2100
120	1	C4032506	Hot line applicator tool	2100
121	1	C4032507	Hot line applicator tool	2100

15, 25 & 35kV Hot Stick, Rubber Glove & Underground Work

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	6	C4002320	Silicone spray	2500
12	1	C4170144	Tool bucket, large	2500
13	1	C4170146	Tool bucket, small	2500
14	2	C4032999	Blanket canister	2500
15	2	PSC3090467	Nylon hoist	1100
16	2	C4001175	Hoist link stick 12"	1100
17	2	C4002399	Hoist link stick 18"	1100
18	1	T4001938	Transformer gin	1200
19	1	T4001708	Crossarm gin	1200
20	600'	C4000799	Composite braided rope ½"	1250
21	1	T4001265	Fid & pusher ½"	NS
22	2	T4001258	Nylon blocks w/150' composite braid rope	1250
23	2	22302	Snatch block, 1,000# capacity	1250
24	2	M1849	Hand line hook	1250
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	2	C4170139	Nylon sling 3' x 1¾"	1250
27	2	C4170140	Nylon sling 4' x 1¾"	1250
28	2	C4170141	Nylon sling 5' x 1¾"	1250
29	1	C3050008	Cant hook	1250
30	2	WPH3	Wire puller hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	2	C4033068	Wire holding stick	2100
37	1	C4031022EM	Telescoping measuring disconnect	2100
38	2	H185525	Tie stick	2100
39	1	C4030185	All angle cog wrench	2100
40	1	T4033009	Torque extension stick for hydraulic powered tools	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole	2100
43	2	M1860	Crossarm tool hanger	2100
44	1	C4031114	Universal tool kit	2100
45	1	M44559	Disconnect head	2100
46	1	M445523	Hack saw	2100
47	6	P4030369P	Hack saw blade	2100
48	1	C4032213	Pruning saw	2100
49	1	M445529B	Clampstick head	2100
50	1	M445550	Skinning knife	2100
51	1	M445563	Cleaning brush	2100
52	1	M1889	Cleaning brush replacements	2100
53	1	T4031101	Adjustable insulator fork	2100
54	1	C4030175	Plastic insulator tool	2100
55	1	C4030834	Hot Rodder, large	2100
56	1	C4031071	Hot Rodder, small	2100
57	1	C4031416	Tie wire claw	2100
58	1	C4031417	Utility head	2100
59	1	C4032861	Hydraulic cutters	2150
60	1	H18716	Hot cutter light duty	2150
61	1	H21064	Tree trimmer	2150
62	2	H46458	Wire tong 1½" x 8'	2200
63	2	H464510	Wire tong 1½" x 10'	2200
64	4	H464712	Wire tong 2½" x 12'	2200
65	1	H464716	Wire tong 2½" x 16'	2200
66	4	M47403W	Wire tong saddle 1½"	2200

15, 25 & 35kV Hot Stick, Rubber Glove & Underground Work

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
67	4	M47405W	Wire tong saddle 2½"	2200
68	4	C4000073	Saddle extension	2200
69	4	M4743	Wire tong block clamp	2200
70	1	M17285	Wire tong pole clevis	2200
71	4	M18474	Extension chain	2200
72	2	M1846W	Rope snubbing bracket	2200
73	3	M4760W	Lever lift	2200
74	1	C4001016	Epoxiglas® lever lift	2200
75	2	M47602	Arbor adapter	2200
76	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 roller wire holders	N/S
77	2	C4000517	Temporary crossarm support	2200
78	2	M48057	Insulators	2200
79	1	T4002272	Corner restraint bracket	2200
80	3	H47144	Roller link stick	2250
81	2	C4000574	Hot stick tension puller	2250
82	3	J1541522	Jumper set 15kV (15 ft.)	NS
83	3	J3511522	Jumper set 35kV (15 ft.)	NS
84	3	S16007	Insulated hanger	2300
85	3	C4031631	Load pick up tool	2300
86	3	PSC6010342	Temporary cutout	2300
87	12	C4060181GA	Conductor cover	2400
88	6	C4060182	Insulator cover	2400
89	4	M49371	Pole cover 9" x 1'	2400
90	4	M49372	Pole cover 9" x 2'	2400
91	3	M49376	Pole cover 9" x 6'	2400
92	2	C4060097	Pole top cover	2400
93	2	C4060102	Crossarm end cover	2400
94	2	M4933	Crossarm guard	2400
95	12	C4060084GA	Spiral cover	2400
96	6	C4060046	Insulator cover	2400
97	12	C4060305	Flexible cover 20kV	2400
98	1	H18761	Phasing tester	2450
99	1	H18764	Extension resistors	2450
100	1	C4033374	Auto-ranging voltage indicator	2450
101	12	C6001734	Ground clamp	3000
102	1	T6000641	Ground set	3000
103	1	T6000865	Storage bag for ground set	3000
104	4	C4060346	Blanket, solid	2400
105	4	C4060348	Blanket, slotted	2400
106	24	C4060530	Hot stick blanket pin	2400
107	1	C4032980	Ratchet hand cutters	2150
108	1	H48628	Rubber glove auxiliary arm	2200
109	4	M48057	Insulator	2200
110	1	C4021042	Insulated 4' platform	2350
111	1	C4021043	Insulated 6' platform	2350
112	1	C4021055	Railing for 4' platform	2350
113	1	C4020023	Railing for 6' platform	2350
114	1	C4021164	Pivot for 4' platform	2350
115	1	C4021173	Pivot for 6' platform	2350
116	12	C4060308	Flexible line hose 30kV	2400
117	12	C4060342	Extended lip flexible line hose	2400
118	6	C4060340	Coupler	2400
119	1	C4032505	Hot line applicator tool	2100
120	1	C4032506	Hot line applicator tool	2100
121	1	C4032507	Hot line applicator tool	2100
122	1	C4031762	DC Hipot adapter	2450
123	1	C4031763	DC Hipot adapter	2450
124	1	T4030602	Elbow adapter 15kV	2450
125	2	T4030428	Bushing adapter 15kV	2450
126	2	T4030857	Bushing adapter 15-25-35kV	2450
127	1	T4030856	Elbow adapter 15-25-35kV	2450
128	1	C4030803	Energized cable sensor	2450
129	1	C4030547	Line/Fault locator	2450
130	1	T6002233	Penetrator clamp & ground set	3000
131	3	C6000729	Underground distribution ground set 15kV	3000
132	3	T6002131	Underground distribution ground set 25kV	3000
133	3	C6001927	Underground distribution ground set 35kV	3000
134	3	T6003091	Grounded parking stand 15kV	3000
135	3	T6003092	Grounded parking stand 25kV	3000

15 thru 69kV, 477kcmil & smaller, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	6	C4002320	Silicone spray	2500
12	1	C4170144	Tool bucket, large	2500
13	1	C4170146	Tool bucket, small	2500
14	2	C4032999	Blanket canister	2500
15	2	PSC3090467	Nylon hoist	1100
16	2	C4001175	Hoist link stick 12"	1100
17	2	C4002399	Hoist link stick 18"	1100
18	1	T4001938	Transformer gin	1200
19	1	T4001708	Crossarm gin	1200
20	600'	C4000799	Composite braided rope ½"	1250
21	1	T4001265	Fid & pusher ½"	NS
22	2	T4001258	Nylon blocks w/150' composite braid rope	1250
23	2	22302	Snatch block, 1,000# capacity	1250
24	2	M1849	Hand line hook	1250
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	2	C4170139	Nylon sling 3' x 1¾"	1250
27	2	C4170140	Nylon sling 4' x 1¾"	1250
28	2	C4170141	Nylon sling 5' x 1¾"	1250
29	1	C3050008	Cant hook	1250
30	2	WPH3	Wire puller hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	2	C4033068	Wire holding stick	2100
37	1	C4031022EM	Telescoping measuring disconnect	2100
38	2	H185525	Tie stick	2100
39	1	C4030185	All angle cog wrench	2100
40	1	T4033009	Torque extension stick for hydraulic powered tools	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole	2100
43	2	M1860	Crossarm tool hanger	2100
44	1	C4031114	Universal tool kit	2100
45	1	M44559	Disconnect head	2100
46	1	M445523	Hack saw	2100
47	6	P4030369P	Hack saw blade	2100
48	1	C4032213	Pruning saw	2100
49	1	M445529B	Clampstick head	2100
50	1	M445550	Skinning knife	2100
51	1	M445563	Cleaning brush	2100
52	1	M1889	Cleaning brush replacements	2100
53	1	T4031101	Adjustable insulator fork	2100
54	1	C4030175	Plastic insulator tool	2100

15 thru 69kV, 477kcmil & smaller, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
55	1	C4030834	Hot Rodder, large	2100
56	1	C4031071	Hot Rodder, small	2100
57	1	C4031416	Tie wire claw	2100
58	1	C4031417	Utility head	2100
59	1	C4032861	Hydraulic cutters	2100
60	1	H18716	Hot cutter light duty	2100
61	1	H21064	Tree trimmer	2100
62	2	H46458	Wire tong 1½" x 8'	2200
63	2	H464510	Wire tong 1½" x 10'	2200
64	4	H464712	Wire tong 2½" x 12'	2200
65	1	H464716	Wire tong 2½" x 16'	2200
66	4	M47403W	Wire tong saddle 1½"	2200
67	4	M47405W	Wire tong saddle 2½"	2200
68	4	C4000073	Saddle extension	2200
69	4	M4743	Wire tong block clamp	2200
70	1	M17285	Wire tong pole clevis	2200
71	6	M18474	Extension chain	2200
72	2	M1846W	Rope snubbing bracket	2200
73	3	M4760W	Lever lift	2200
74	1	C6001016	Epoxiglas® lever lift	2200
75	2	M47602	Arbor adapter	2200
76	1	PSC4000075002	Dual auxiliary arm with four M48057 insulators and four C4000268 roller wire holders	NS
77	2	C4000517	Temporary crossarm support	2200
78	2	M48057	Insulators	2200
79	1	T4002272	Corner restraint bracket	2200
80	3	H47144	Roller wire holder	2250
81	2	H47152	Link stick	2250
82	1	C4010410	Distribution strain carrier	2250
83	1	M1942	Steel chain	2250
84	2	M19483	Ratchet wrench	2250
85	1	H18408	Insulator cradle	2250
86	1	C6000000	Static ground	2250
87	3	J1541522	Jumper set 15kV (15 ft.)	NS
88	3	J3511522	Jumper set 35kV (15 ft.)	NS
89	3	PSC6010342	Temporary cutout	2300
90	1	C4021079	Insulated platform 8'	2350
91	1	C4021173	Platform pivot	2350
92	1	C4020024	Platform railing for 8'	2350
93	12	C4060181GA	Conductor cover	2400
94	6	C4060182	Insulator cover	2400
95	4	M49371	Pole cover 9" x 1'	2400
96	4	M49372	Pole cover 9" x 2'	2400
97	3	M49376	Pole cover 9" x 6'	2400
98	2	C4060097	Pole top cover	2400
99	3	C4060092	Post insulator cover	2400
100	2	C4060102	Crossarm end cover	2405
101	2	M4933	Crossarm guard	2400
102	12	C4060084GA	Spiral cover	2400
103	3	C4060046	Insulator cover	2400
104	12	C4060305	Flexible line hose	2400
105	4	C4060346	Blanket, solid	2400
106	4	C4060348	Blanket, slotted	2400
107	24	C4060530	Hot stick blanket pin	2400
108	1	H18761	Phasing set	2450
109	1	H18762	Extension resistors	2450
110	1	C4033374	Auto-ranging voltage indicator	2450
111	12	C6001734	Ground clamp	3000
112	1	T6000641	Ground set	3000
113	1	T6000865	Bag for ground set	3000

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Recommended Hot Line Tools List **Page 1 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	1	C4170144	Tool bucket, large	2500
12	1	C4170146	Tool bucket, small	2500
13	2	PSC3090467	Nylon hoist	1100
14	1	C3081190	Gasoline capstan, 1,000# capacity	1150
15	1	C3080925	Universal bracket	1150
16	2	C4170346	Chain clamp	1150
17	1	C3080856	Rope lock device	1150
18	1200'	C4000799	Composite braid rope	1250
19	1	T4001265	Fid & pusher ½"	NS
20	4	T4001258	Nylon blocks w/150' composite braid rope	1250
21	4	22302	Snatch block, 1,000# capacity	1250
22	2	C4176067	Snatch block, 2,500# capacity	1250
23	4	M1849	Hand line hook	1250
24	2	C4170588	Nylon sling 3' x 1" DT	NS
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	4	C4170139	Nylon sling 3' x 1¾"	1250
27	4	C4170140	Nylon sling 4' x 1¾"	1250
28	4	C4170141	Nylon sling 5' x 1¾"	1250
29	4	C4170142	Nylon sling 6' x 1¾"	1250
30	1	C3050008	Cant hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	1	C4033068	Wire holding stick 6'	2100
37	1	C4033069	Wire holding stick 8'	2100
38	1	C4031022EM	Telescoping measuring stick	2100
39	2	H185525	Tie stick	2100
40	1	C4030186	All angle cog wrench	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole 1¼" x 8'	2100
43	1	H176010	Universal pole 1¼" x 10'	2100
44	2	M1860	Tool hanger	2100
45	1	C4031114	Universal tool kit	2100
46	1	M445519	Cotter key pusher	2100
47	1	M445523	Hack saw	2100
48	6	P4030369P	Hack saw blade	2100

69kV, 477kcmil & smaller - No Underbuild, Hot Stick Work only

Recommended Hot Line Tools List **Page 2 of 2**

Item	Qty.	Catalog No.	Description	Catalog Section
49	1	C4032213	Pruning saw	2100
50	1	T4031101	Adjustable insulator fork	2100
51	1	M445585	Hammer	2100
52	1	M445587	Ball socket adjuster	2100
53	1	C4030834	Hot Rodder tool	2100
54	1	C4030126P	Ball socket adjuster plastisol coated	NS
55	1	C4030175	Plastic insulator tool	2100
56	1	C4032861	Hydraulic cutters	2100
57	1	H18716	Wire cutters light duty	2100
58	2	H46458	Wire tong 1½" x 8'	2200
59	2	H464510	Wire tong 1½" x 10'	2200
60	4	H464712	Wire tong 2½" x 12'	2200
61	2	H464716	Wire tong 2½" x 16'	2200
62	4	M47403W	Wire tong saddle 1½"	2200
63	4	M47405W	Wire tong saddle 2½"	2200
64	4	C4000073	Saddle extension	2200
65	4	M4743	Wire tong block clamp	2200
66	4	M18474	Extension chain	2200
67	1	M1846W	Rope snubbing bracket	2200
68	6	M4760W	Lever lift	2200
69	2	C4001016	Epoxiglas® Lever lift	2200
70	3	M47602	Arbor adapter	2200
71	1	T4002272	Corner restraint bracket	2200
72	2	H47152	Link stick 1¼" x 4'	2250
73	3	H47144	Roller link stick	2250
74	1	C4010410	Distribution strain carrier	2250
75	2	M19483	Ratchet wrench	2250
76	1	H18408	Insulator cradle	2250
77	2	C6000000	Static ground	2250
78	1	C4033374	Auto-ranging voltage indicator	2450
79	1	C4021079	Insulated platform 8'	2350
80	1	C4020024	Platform railing	2350
81	1	C4021173	Platform pivot	2350
82	2	M49371	Pole cover 9" x 1'	2400
83	2	M49372	Pole cover 9" x 2'	2400
84	2	C4060102	Crossarm end guard	2400
85	2	M4933	Crossarm guard	2400

69kV, 477kcmil & smaller - with Underbuild, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.		Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	1	C4170144	Tool bucket, large	2500
12	1	C4170146	Tool bucket, small	2500
13	2	PSC3090467	Nylon hoist	1100
14	1	C3081190	Gasoline capstan, 1,000# capacity	1150
15	1	C3080925	Universal bracket	1150
16	2	C4170346	Chain clamp	1150
17	1	C3080856	Rope lock device	1150
18	1200'	C4000799	Composite braid rope	1250
19	1	T4001265	Fid & pusher	NS
20	4	T4001258	Nylon blocks w/150' composite braid rope	1250
21	4	22302	Snatch block, 1,000# capacity	1250
22	2	C4176067	Snatch block, 2,500# capacity	1250
23	4	M1849	Hand line hook	1250
24	2	C4170588	Nylon sling 3' x 1" DT	NS
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	4	C4170139	Nylon sling 3' x 1¾"	1250
27	4	C4170140	Nylon sling 4' x 1¾"	1250
28	4	C4170141	Nylon sling 5' x 1¾"	1250
29	4	C4170142	Nylon sling 6' x 1¾"	1250
30	1	C3050008	Cant hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	1	C4033068	Wire holding stick 6'	2100
37	1	C4033069	Wire holding stick 8'	2100
38	1	C4031022EM	Telescoping measuring stick	2100
39	2	H185525	Tie stick	2100
40	1	C4030186	All angle cog wrench	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole 1¼" x 8'	2100
43	1	H176010	Universal pole 1¼" x 10'	2100
44	2	M1860	Tool hanger	2100
45	1	C4031114	Universal tool kit	2100
46	1	M445519	Cotter key pusher	2100

69kV, 477kcmil & smaller - with Underbuild, Hot Stick Work only

Item	Qty.	Catalog No.	Description	Catalog Section
47	1	M445523	Hack saw	2100
48	6	P4030369P	Hack saw blade	2100
49	1	C4032213	Pruning saw	2100
50	1	T4031101	Adjustable insulator fork	2100
51	1	M445585	Hammer	2100
52	1	M445587	Ball socket adjuster	2100
53	1	C4030834	Hot Rodder tool	2100
54	1	C4030126P	Ball socket adjuster plastisol coated	NS
55	1	C4030175	Plastic insulator tool	2100
56	1	C4032861	Hydraulic cutters	2150
57	1	H18716	Wire cutters light duty	2150
58	2	H46458	Wire tong 1½" x 8'	2200
59	2	H464510	Wire tong 1½" x 10'	2200
60	4	H464712	Wire tong 2½" x 12'	2200
61	2	H464716	Wire tong 2½" x 16'	2200
62	4	M47403W	Wire tong saddle 1½"	2200
63	4	M47405W	Wire tong saddle 2½"	2200
64	4	C4000073	Wire tong saddle extension	2200
65	4	M4743	Wire tong block clamp	2200
66	4	M18474	Extension chain	2200
67	2	M1846W	Rope snubbing bracket	2200
68	3	M4760W	Lever lift	2200
69	1	C4001016	Epoxiglas® Lever lift	2200
70	2	M47602	Arbor adapter	2200
71	1	T4002272	Corner restraint bracket	2200
72	2	H47152	Link stick 1¼" x 4'	2250
73	3	H47144	Roller link stick	2250
74	1	C4010410	Distribution strain carrier	2250
75	2	M19483	Ratchet wrench	2250
76	1	H18408	Insulator cradle	2250
77	2	C6000000	Static ground	2250
78	1	C4033374	Auto-ranging voltage indicator	2450
79	1	C4021079	Insulated platform 8'	2350
80	1	C4020024	Platform railing	2350
81	1	C4021173	Platform pivot	2350
82	2	M49371	Pole cover 9" x 1'	2400
83	2	M49372	Pole cover 9" x 2'	2400
84	2	C4060102	Crossarm end guard	2400
85	2	M4933	Crossarm guard	2400
86	12	C4060181GA	Conductor cover	2400
87	6	C4020182	Insulator cover	2400
88	12	C4060084GA	Conductor cover spiral	2400
89	3	C4060046	Insulator cover	2400
90	2	C4032999	Blanket canister	2500
91	4	C4060346	Blanket	2400
92	4	C4060348	Slotted blanket	2400
93	24	C4060531	Hot stick blanket pin	2400

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Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	1	C4170144	Tool bucket, large	2500
12	1	C4170146	Tool bucket, small	2500
13	2	PSC3090467	Nylon hoist	1100
14	1	C3081190	Gasoline capstan, 1,000# capacity	1150
15	1	C3080925	Universal bracket	1150
16	2	C4170346	Chain clamp	1150
17	1	C3080856	Rope lock device	1150
18	1200'	C4000799	Composite braid rope	1250
19	1	T4001265	Fid & pusher	NS
20	4	T4001258	Nylon blocks w/150' composite braid rope	1250
21	4	22302	Snatch block, 1,000# capacity	1250
22	2	C4176067	Snatch block, 2,500# capacity	1250
23	4	M1849	Hand line hook	1250
24	2	C4170588	Nylon sling 3' x 1" DT	NS
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	4	C4170139	Nylon sling 3' x 1¾"	1250
27	4	C4170140	Nylon sling 4' x 1¾"	1250
28	4	C4170141	Nylon sling 5' x 1¾"	1250
29	4	C4170142	Nylon sling 6' x 1¾"	1250
30	1	C3050008	Cant hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	1	C4033068	Wire holding stick 6'	2100
37	1	C4033069	Wire holding stick 8'	2100
38	1	C4031022EM	Telescoping measuring stick	2100
39	2	H185525	Tie stick	2100
40	1	C4030186	All angle cog wrench	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole 1¼" x 8'	2100
43	1	H176010	Universal pole 1¼" x 10'	2100
44	2	M1860	Tool hanger	2100
45	1	C4031114	Universal tool kit	2100
46	1	M445519	Cotter key pusher	2100

69 thru 161kV, 477kcmil & smaller - No Underbuild, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
47	1	M445523	Hack saw	2100
48	6	P4030369P	Hack saw blade	2100
49	1	C4032213	Pruning saw	2100
50	1	T4031101	Adjustable insulator fork	2100
51	1	M445585	Hammer	2100
52	1	M445587	Ball socket adjuster	2100
53	1	C4030834	Hot Rodder tool	2100
54	1	C4030126P	Ball socket adjuster plastisol coated	NS
55	1	C4030175	Plastic insulator tool	2100
56	1	C4032861	Hydraulic cutters	2100
57	1	H18716	Wire cutters light duty	2100
58	2	H46458	Wire tong 1½" x 8'	2200
59	2	H464510	Wire tong 1½" x 10'	2200
60	4	H464712	Wire tong 2½" x 12'	2200
61	2	H464716	Wire tong 2½" x 16'	2200
62	4	M47403W	Wire tong saddle 1½"	2200
63	4	M47405W	Wire tong saddle 2½"	2200
64	4	C4000073	Wire tong saddle extension	2200
65	4	M4743	Wire tong block clamp	2200
66	4	M18474	Extension chain	2200
67	2	M1846W	Rope snubbing bracket	2200
68	3	M4760W	Lever lift	2200
69	1	C4001016	Epoxiglas® Lever lift	2200
70	2	M47602	Arbor adapter	2200
71	1	T4002272	Corner restraint bracket	2200
72	2	H47152	Link stick 1¼" x 4'	2250
73	3	H47144	Roller link stick	2250
74	1	C4010410	Distribution strain carrier	2250
75	2	M19483	Ratchet wrench	2250
76	1	H18408	Insulator cradle	2250
77	2	C6000000	Static ground	2250
78	1	C4033375	Auto-ranging voltage indicator	2450
79	1	C4021079	Insulated platform 8'	2350
80	1	C4020024	Platform railing	2350
81	1	C4021173	Platform pivot	2350
82	2	M49371	Pole cover 9" x 1'	2400
83	2	M49372	Pole cover 9" x 2'	2400
84	2	C4060102	Crossarm end guard	2400
85	2	M4933	Crossarm guard	2400
86	4	H4718	Link stick 1½" x 4'	2250
87	2	C4012144	Adjustable strain pole	2250
88	1	C4011721	Cold end yoke	2250
89	1	E4012068P	Small extended trunnion	2250
90	3	H45403002	Pole 1½"-diameter x 10' with butt swivel on end and plastisol cap on other	NS
91	2	M47241	Adjustable hook assembly	2250
92	1	H47232	Fork suspension tool attachment	2250
93	1	H47234	Trolley wheel	2250

CHANCE®

69 – 161kV, 477kcmil & smaller - with Underbuild, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
1	1	PSC4050299XXX	Tool trailer walk in type with side door on curb side. See Cat. Section 2500 for details.	2500
2	1	C4002365	Cleaning kit	2500
3	12	M1904	Wiping cloth	2500
4	1	C4033178	Hot stick tester	2500
5	1	H1917	Bond patching kit	2500
6	2	C4002335	Dry film lubricant	2500
7	5	H17605	Tool hanger	2500
8	2	M4660	Tool rack	2500
9	1	T3060025	Tarp	2500
10	1	C4170151	Line hose bag	2500
11	1	C4170144	Tool bucket, large	2500
12	1	C4170146	Tool bucket, small	2500
13	2	PSC3090467	Nylon hoist	1100
14	1	C3081190	Gasoline capstan, 1,000# capacity	1150
15	1	C3080925	Universal bracket	1150
16	2	C4170346	Chain clamp	1150
17	1	C3080856	Rope lock device	1150
18	1200'	C4000799	Composite braid rope	1250
19	1	T4001265	Fid & pusher	NS
20	4	T4001258	Nylon blocks w/150' composite braid rope	1250
21	4	22302	Snatch block, 1,000# capacity	1250
22	2	C4176067	Snatch block, 2,500# capacity	1250
23	4	M1849	Hand line hook	1250
24	2	C4170588	Nylon sling 3' x 1" DT	NS
25	2	C4170589	Nylon sling 5' x 1¾" DT	NS
26	4	C4170139	Nylon sling 3' x 1¾"	1250
27	4	C4170140	Nylon sling 4' x 1¾"	1250
28	4	C4170141	Nylon sling 5' x 1¾"	1250
29	4	C4170142	Nylon sling 6' x 1¾"	1250
30	1	C3050008	Cant hook	1250
31	2	T161340H	Wire grip	1250
32	2	T16845H	Wire grip	1250
33	2	T165640H	Wire grip	1250
34	2	T165650H	Wire grip	1250
35	2	C4030293	Grip-all clampstick	2100
36	1	C4033068	Wire holding stick 6'	2100
37	1	C4033069	Wire holding stick 8'	2100
38	1	C4031022EM	Telescoping measuring stick	2100
39	2	H185525	Tie stick	2100
40	1	C4030186	All angle cog wrench	2100
41	1	C4031085	Socket set	2100
42	2	H17604	Universal pole 1¼" x 8'	2100
43	1	H176010	Universal pole 1¼" x 10'	2100
44	2	M1860	Tool hanger	2100
45	1	C4031114	Universal tool kit	2100
46	1	M445519	Cotter key pusher	2100
47	1	M445523	Hack saw	2100
48	6	P4030369P	Hack saw blade	2100
49	1	C4032213	Pruning saw	2100
50	1	T4031101	Adjustable insulator fork	2100

69 – 161kV, 477kcmil & smaller - with Underbuild, Hot Stick Work only

Recommended Hot Line Tools List

Item	Qty.	Catalog No.	Description	Catalog Section
51	1	M445585	Hammer	2100
52	1	M445587	Ball socket adjuster	2100
53	1	C4030834	Hot Rodder tool	2100
54	1	C4030126P	Ball socket adjuster plastisol coated	NS
55	1	C4030175	Plastic insulator tool	2100
56	1	C4032861	Hydraulic cutters	2100
57	1	H18716	Wire cutters light duty	2100
58	2	H46458	Wire tong 1½" x 8'	2200
59	2	H464510	Wire tong 1½" x 10'	2200
60	4	H464712	Wire tong 2½" x 12'	2200
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62	4	M47403W	Wire tong saddle 1½"	2200
63	4	M47405W	Wire tong saddle 2½"	2200
64	4	C4000073	Wire tong saddle extension	2200
65	4	M4743	Wire tong block clamp	2200
66	4	M18474	Extension chain	2200
67	2	M1846W	Rope snubbing bracket	2200
68	3	M4760W	Lever lift	2200
69	1	C4001016	Epoxiglas® Lever lift	2200
70	2	M47602	Arbor adapter	2200
71	1	T4002272	Corner restraint bracket	2200
72	2	H47152	Link stick 1¼" x 4'	2250
73	3	H47144	Roller link stick	2250
74	1	C4010410	Distribution strain carrier	2250
75	2	M19483	Ratchet wrench	2250
76	1	H18408	Insulator cradle	2250
77	2	C6000000	Static ground	2250
78	1	C4033375	Auto-ranging voltage indicator	2450
79	1	C4021079	Insulated platform 8'	2350
80	1	C4020024	Platform railing	2350
81	1	C4021173	Platform pivot	2350
82	2	M49371	Pole cover 9" x 1'	2400
83	2	M49372	Pole cover 9" x 2'	2400
84	2	C4060102	Crossarm end guard	2400
85	2	M4933	Crossarm guard	2400
86	4	H4718	Link stick 1½" x 4'	2250
87	2	C4012144	Adjustable strain pole	2250
88	1	C4011721	Cold end yoke	2250
89	2	E4012068P	Small extended trunnion	2250
90	3	PSH45403002	Blank pole to be 1½" x 10' with butt swivel on end and plastisol cap on other	NS
91	2	M47241	Adjustable hook assembly	2250
92	1	H47232	Fork suspension tool attachment	2250
93	1	H47234	Trolley wheel	2250
94	12	C4060181GA	Conductor cover	2400
95	6	C4060182	Insulator cover	2400
96	12	C4060084GA	Spiral conductor cover	2400
97	3	C4060046	Insulator cover	2400
98	2	C4032999	Blanket canister	2500
99	4	C4060346	Blanket, solid	2400
100	4	C4060348	Blanket, slotted	2400
101	24	C4060530	Hot stick blanket pin	2400

NOTES

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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NEVER COMPROMISE™

CHANCE®

Rubber Insulating Gloves

Catalog 2650 March 2020

HUBBELL®

CHANCE®

Lineman grade gloves

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From the name you trust and the brand you depend on: Chance Lineman Grade Gloves

Chance natural rubber insulating gloves are available in several ASTM voltage classes and a full range of sizes. Manufactured for your ultimate protection and comfort, Chance Lineman Grade Gloves deliver the innovation and dependability you demand.

TO THOSE WHO CLIMB™

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Chance® Rubber Insulating Gloves

Green & Made With Environmentally-Responsible Processes

Aqueous Dip Process

- Water-based method avoids Volatile Organic Compounds (VOCs)
- VOCs are flammable and harmful to the environment
- Aqueous Process helps rubber products retain elasticity, flexibility and great insulation inherent to natural rubber

Biomass Boilers

- Steam for Chance® rubber glove production is generated by Biomass boilers
- No oil or natural gas is burned in the process
- Process burns environmentally friendly byproducts from palm oil industry
- This bio-fuel makes the boiler emissions effectively carbon neutral

Waste Water High-Tech Treatment

- State-of-the-art water treatment system
- Makes all waste water used in glove-making process safe for reuse or discharge

ISO 14001 Certified For Environmental Management

- Designed for high achievement and low impact on environment
- Manufacturing plant in Malaysia that produces Chance rubber gloves has earned ISO 14001 certification
- Plant also won environmental-responsibility award from Malaysian government

Superior Quality Assurance

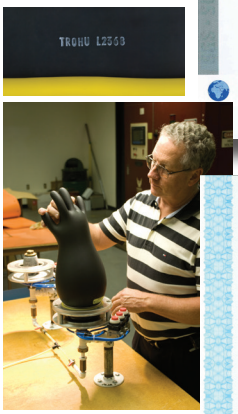
Critical Measures Taken To Ensure Worker Safety

Top-Quality Assurance

- Chance rubber gloves are manufactured in an ISO 9001-certified facility
- Industry-leading technological innovations
- Promotes product safety
- Reduces environmental impact

100% Visually & Electrically Tested

- Every pair of gloves is visually inspected inside and outside
- Electrically proof tested for 3 minutes per ASTM D120



Full Product Traceability

- Every glove is marked with electrical-testing/born-on date
- Includes lot code on outside of glove
- Safety stamp on inside of glove
- These three markings indicate manufacturing location and process

Certified Chemical & Physical Laboratory

- Rubber compounds and finished gloves are closely analyzed and inspected
- This is completed using the ISO 17025 certified laboratory in the factory

Quality Assurance Inspections

- QA visual and electrical checks are performed on all gloves
- Every glove shipment is inspected at our distribution center in Centralia, Missouri

CHANCE®

Rubber Glove Inspection Tips

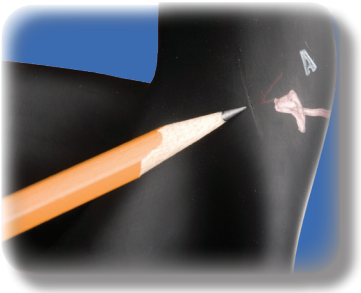
Do!

- Follow company work procedures and safety rules
- Inspect gloves daily for damage
- Wear proper leather protectors over rubber gloves
- Wash gloves with mild soap and rinse thoroughly with water
- Let gloves air dry at room temperature or less than 120° F (49° C)
- Store gloves in a protective bag

Don't!

- Wear jewelry or sharp objects when using rubber gloves
- Wear damaged gloves
- Store gloves inside out, folded, or ways causing stretching or compression
- Store gloves near sources of UV, Ozone or heat
- Allow gloves to contact petroleum-based products (oil, gas, solvent, hand creams)

- Checking or cracks due to UV or ozone



- Splits, cuts or holes from snags and punctures

- Grooves worn due to rope burns or heat exposure

Reduce Hand Fatigue
with Chance® Rubber Gloves

Straight fingers relative to palm help prevent fatigue of tendons in back of hands

Oval-shaped fingers help provide "No-Dead-Spots" feel & better dexterity

Natural rubber formula provides excellent flexibility & electrical insulation

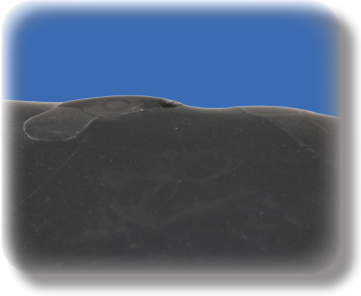
Straight wrist in natural rest position helps avoid fatiguing forearms & hands

Wide cuff for improved comfort & air-flow

ASTM label assures every glove has been made & tested to ASTM D120

- Weak creases resulting from being left too long inside out or folded

- Electrical puncture



- "Blooms" or "swells" from chemicals, oils

HUBBELL®

Phone: 573-682-5521 Email: hpsliterature@hubbell.com Web: hubbellpowersystems.com

Perform daily and periodic tests

Manual Inflation:
per ASTM F 1236

1 Grasp glove

2 Stretch to seal closed

3 Press and roll tightly

4 Twirl glove, rotating on rolled ends

5 Entrap air by holding in one hand

See industry reference: ASTM F1236 Standard Guide for Visual Inspection of Electrical Protective Rubber Products

Mechanical Inflators

ASTM F 1236 maximum inflation limits:

- Type I 2 times normal size
- Type II 1¼ times normal size

6 Hold close to ear, squeeze to add pressure, listen and feel for pinhole leaks

7 Turn glove inside out and repeat process

CHANCE®

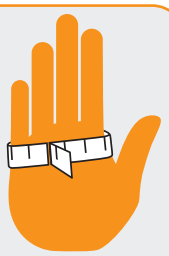
Lineman grade gloves™

General Reference

From the name you trust and the brand you depend on: Chance Lineman Grade Gloves

- Insulating gloves should be used by properly trained personnel
- Comply with ASTM D120 standards for rubber insulating gloves for each voltage rating
- Table below summarizes rubber insulating gloves ratings and labels per ASTM

Selecting the right size for you



- Selecting the right size ensures a comfortable wear without sacrificing dexterity
- Allow approximately an additional 0.5" if liners will be used

We're *taking responsibility…*

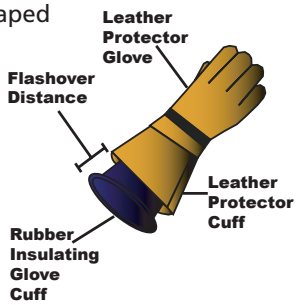
- Gloves are manufactured using environmentally conscious processes
- Processes make the most efficient use of raw materials and natural resources
- When workers wear our gloves they are also helping limit VOC and CO2 emissions

Class	Max. Use Voltage AC / DC	Proof Test Voltage AC / DC	Label Color
00* *Gloves only	500 / 750	2,500 / 10,000	Beige
0	1,000 / 1,500	5,000 / 20,000	Red
1	7,500 / 11,250	10,000 / 40,000	White
2	17,000 / 25,500	20,000 / 50,000	Yellow
3	26,500 / 39,750	30,000 / 60,000	Green
4	36,000 / 54,000	40,000 / 70,000	Orange

Leather Protector Considerations

- Must meet ASTM specification F696
- Should always be worn over rubber insulating gloves
- This prevents mechanical damage to the rubber gloves, except for those conditions detailed in ASTM F496
- Protector must be properly sized and shaped to avoid deformation or damage
- Minimum distances between gauntlet and cuff are listed in the table shown

For more details on leather protectors or rubber gloves, please refer to ASTM D120, F496 and F696.



CLEARANCE TABLE FOR LEATHER PROTECTORS PER ASTM F496

Glove Class	Minimum Distance Between Protectors and Rubber Gloves	
	in.	mm
00, 0	1/2	13
1	1	25
2	2	51
3	3	76
4	4	102

Lineman grade gloves™

Straight Cuff - ASTM Class 00, 0

Features & Applications

- The ultimate source of protection expected from the Chance name
- Offers a new level of comfort and flexibility
- Constructed for high dielectric and physical strength
- Exceed ASTM D120
- Available in straight cuff lengths of 11" and 14"
- Type I Chance Gloves come in red, yellow, black or black-yellow

Ergonomic innovation. Superior products. Timely solutions.

Just a few of the reasons the industry turns to Hubbell Power Systems and the Chance brand.

Color: BLACK UNDER YELLOW	Class 0
Size	14"
7	PSC014BY7
8	PSC014BY8
8.5	PSC014BY8H
9	PSC014BY9
9.5	PSC014BY9H
10	PSC014BY10
10.5	PSC014BY10H
11	PSC014BY11
12	PSC014BY12

Color: RED	Class 00	Class 0	
Size	11"	11"	14"
7	PSC0011R7	PSC011R7	PSC014R7
8	PSC0011R8	PSC011R8	PSC014R8
8.5	PSC0011R8H	PSC011R8H	PSC014R8H
9	PSC0011R9	PSC011R9	PSC014R9
9.5	PSC0011R9H	PSC011R9H	PSC014R9H
10	PSC0011R10	PSC011R10	PSC014R10
10.5	PSC0011R10H	PSC011R10H	PSC014R10H
11	PSC0011R11	PSC011R11	PSC014R11
12	PSC0011R12	PSC011R12	PSC014R12

Color: YELLOW	Class 00		Class 0	
Size	11"	14"	11"	14"
7	PSC0011Y7	PSC0014Y7	PSC011Y7	PSC014Y7
8	PSC0011Y8	PSC0014Y8	PSC011Y8	PSC014Y8
8.5	PSC0011Y8H	PSC0014Y8H	PSC011Y8H	PSC014Y8H
9	PSC0011Y9	PSC0014Y9	PSC011Y9	PSC014Y9
9.5	PSC0011Y9H	PSC0014Y9H	PSC011Y9H	PSC014Y9H
10	PSC0011Y10	PSC0014Y10	PSC011Y10	PSC014Y10
10.5	PSC0011Y10H	PSC0014Y10H	PSC014Y10H	PSC014Y10H
11	PSC0011Y11	PSC0014Y11	PSC011Y11	PSC014Y11
12	PSC0011Y12	PSC0014Y12	PSC011Y12	PSC014Y12

Color: BLACK	Class 00		Class 0	
Size	11"	14"	11"	14"
7	PSC0011B7	PSC0014B7	PSC011B7	PSC014B7
8	PSC0011B8	PSC0014B8	PSC011B8	PSC014B8
8.5	PSC0011B8H	PSC0014B8H	PSC011B8H	PSC014B8H
9	PSC0011B9	PSC0014B9	PSC011B9	PSC014B9
9.5	PSC0011B9H	PSC0014B9H	PSC011B9H	PSC014B9H
10	PSC0011B10	PSC0014B10	PSC011B10	PSC014B10
10.5	PSC0011B10H	PSC0014B10H	PSC011B10H	PSC014B10H
11	PSC0011B11	PSC0014B11	PSC011B11	PSC014B11
12	PSC0011B12	PSC0014B12	PSC011B12	PSC014B12

CHANCE®

Lineman grade gloves™

Straight Cuff - ASTM Class 1, 2, 3, 4

From the name you trust and the brand you depend on:
Chance Lineman Grade Gloves

Features & Applications

- The ultimate source of protection expected from the Chance name
- Offers a new level of comfort and flexibility
- Constructed for high dielectric and physical strength
- Exceed ASTM D120
- Available in straight cuff lengths of 14", 16" and 18"
- Type I Chance Gloves come in black or two contrasting colors

Ergonomic innovation. Superior products. Timely solutions.

Just a few of the reasons the industry turns to Hubbell Power Systems and the Chance brand.

Color Black

	Class 1		Class 2		-		-		
Size	14"	16"	14"	16"					
8	PSC114B8	PSC116B8	PSC214B8	PSC216B8	-	-	-	-	-
8.5	PSC114B8H	PSC116B8H	PSC214B8H	PSC216B8H	-	-	-	-	-
9	PSC114B9	PSC116B9	PSC214B9	PSC216B9	-	-	-	-	-
9.5	PSC114B9H	PSC116B9H	PSC214B9H	PSC216B9H	-	-	-	-	-
10	PSC114B10	PSC116B10	PSC214B10	PSC216B10	-	-	-	-	-
10.5	PSC114B10H	PSC116B10H	PSC214B10H	PSC216B10H		-	-	-	-
11	PSC114B11	PSC116B11	PSC214B11	PSC216B11	-	-	-	-	-
12	PSC114B12	PSC116B12	PSC214B12	PSC216B12	-	-	-	-	-

Color Red under Black

	Class 1		Class 2			Class 3		Class 4	
Size	14"	16"	14"	16"	18"	16	18"	16"	18"
8	PSC114RB8	PSC116RB8	PSC214RB8	PSC216RB8	PSC218RB8	PSC316RB8	PSC318RB8	-	-
8.5	PSC114RB8H	PSC116RB8H	PSC214RB8H	PSC216RB8H	PSC218RB8H	PSC316RB8H	PSC318RB8H	-	-
9	PSC114RB9	PSC116RB9	PSC214RB9	PSC216RB9	PSC218RB9	PSC316RB9	PSC318RB9	PSC416RB9	PSC418RB9
9.5	PSC114RB9H	PSC116RB9H	PSC214RB9H	PSC216RB9H	PSC218RB9H	PSC316RB9H	PSC318RB9H	PSC416RB9H	PSC418RB9H
10	PSC114RB10	PSC116RB10	PSC214RB10	PSC216RB10	PSC218RB10	PSC316RB10	PSC318RB10	PSC416RB10	PSC418RB10
10.5	PSC114RB10H	PSC116RB10H	PSC214RB10H	PSC216RB10H	PSC218RB10H	PSC316RB10H	PSC318RB10H	PSC416RB10H	PSC418RB10H
11	PSC114RB11	PSC116RB11	PSC214RB11	PSC216RB11	PSC218RB11	PSC316RB11	PSC318RB11	PSC416RB11	PSC418RB11
12	PSC114RB12	PSC116RB12	PSC214RB12	PSC216RB12	PSC218RB12	PSC316RB12	PSC318RB12	PSC416RB12	PSC418RB12

Color Yellow under Black

	Class 1		Class 2			Class 3		Class 4	
Size	14"	16"	14"	16"	18"	16"	18"	16"	18"
8	PSC114YB8	PSC116YB8	PSC214YB8	PSC216YB8	PSC218YB8	PSC316YB8	PSC318YB8	-	-
8.5	PSC114YB8H	PSC116YB8H	PSC214YB8H	PSC216YB8H	PSC218YB8H	PSC316YB8H	PSC318YB8H	-	-
9	PSC114YB9	PSC116YB9	PSC214YB9	PSC216YB9	PSC218YB9	PSC316YB9	PSC318YB9	PSC416YB9	PSC418YB9
9.5	PSC114YB9H	PSC116YB9H	PSC214YB9H	PSC216YB9H	PSC218YB9H	PSC316YB9H	PSC318YB9H	PSC416YB9H	PSC418YB9H
10	PSC114YB10	PSC116YB10	PSC214YB10	PSC216YB10	PSC218YB10	PSC316YB10	PSC318YB10	PSC416YB10	PSC418YB10
10.5	PSC114YB10H	PSC116YB10H	PSC214YB10H	PSC216YB10H	PSC218YB10H	PSC316YB10H	PSC318YB10H	PSC416YB10H	PSC418YB10H
11	PSC114YB11	PSC116YB11	PSC214YB11	PSC216YB11	PSC218YB11	PSC316YB11	PSC318YB11	PSC416YB11	PSC418YB11
12	PSC114YB12	PSC116YB12	PSC214YB12	PSC216YB12	PSC218YB12	PSC316YB12	PSC318YB12	PSC416YB12	PSC418YB12

Lineman grade gloves™

Bell Cuff - ASTM Class 1, 2, 3, 4

From the name you trust and the brand you depend on:
Chance Lineman Grade Gloves

Features & Applications

- The ultimate source of protection expected from the Chance name
- Offers a new level of comfort and flexibility
- Constructed for high dielectric and physical strength
- Exceed ASTM D120
- Available in bell cuff lengths of 14", 16" and 18"
- Type I Chance Gloves come in two contrasting colors

Ergonomic innovation. Superior products. Timely solutions.

Just a few of the reasons the industry turns to Hubbell Power Systems and the Chance brand.

Color Red under Black

	Class 1		Class 2			Class 3		Class 4	
Size	14"	16"	14"	16"	18"	16"	18"	16"	18"
9	PSC114BCRB9	PSC116BCRB9	PSC214BCRB9	PSC216BCRB9	PSC218BCRB9	PSC316BCRB9	PSC318BCRB9	PSC416BCRB9	PSC418BCRB9
9.5	PSC114BCRB9H	PSC116BCRB9H	PSC214BCRB9H	PSC216BCRB9H	PSC218BCRB9H	PSC316BCRB9H	PSC318BCRB9H	PSC416BCRB9H	PSC418BCRB9H
10	PSC114BCRB10	PSC116BCRB10	PSC214BCRB10	PSC216BCRB10	PSC218BCRB10	PSC316BCRB10	PSC318BCRB10	PSC416BCRB10	PSC418BCRB10
10.5	PSC114BCRB10H	PSC116BCRB10H	PSC214BCRB10H	PSC216BCRB10H	PSC218BCRB10H	PSC316BCRB10H	PSC318BCRB10H	PSC416BCRB10H	PSC418BCRB10H
11	PSC114BCRB11	PSC116BCRB11	PSC214BCRB11	PSC216BCRB11	PSC218BCRB11	PSC316BCRB11	PSC318BCRB11	PSC416BCRB11	PSC418BCRB11
12	PSC114BCRB12	PSC116BCRB12	PSC214BCRB12	PSC216BCRB12	PSC218BCRB12	PSC316BCRB12	PSC318BCRB12	PSC416BCRB12	PSC418BCRB12

Color Yellow under Black

	Class 1		Class 2			Class 3		Class 4	
Size	14"	16"	14"	16"	18"	16"	18"	16"	18"
9	PSC114BCYB9	PSC116BCYB9	PSC214BCYB9	PSC216BCYB9	PSC218BCYB9	PSC316BCYB9	PSC318BCYB9	PSC416BCYB9	PSC418BCYB9
9.5	PSC114BCYB9H	PSC116BCYB9H	PSC214BCYB9H	PSC216BCYB9H	PSC218BCYB9H	PSC316BCYB9H	PSC318BCYB9H	PSC416BCYB9H	PSC418BCYB9H
10	PSC114BCYB10	PSC116BCYB10	PSC214BCYB10	PSC216BCYB10	PSC218BCYB10	PSC316BCYB10	PSC318BCYB10	PSC416BCYB10	PSC418BCYB10
10.5	PSC114BCYB10H	PSC116BCYB10H	PSC214BCYB10H	PSC216BCYB10H	PSC218BCYB10H	PSC316BCYB10H	PSC318BCYB10H	PSC416BCYB10H	PSC418BCYB10H
11	PSC114BCYB11	PSC116BCYB11	PSC214BCYB11	PSC216BCYB11	PSC218BCYB11	PSC316BCYB11	PSC318BCYB11	PSC416BCYB11	PSC418BCYB11
12	PSC114BCYB12	PSC116BCYB12	PSC214BCYB12	PSC216BCYB12	PSC218BCYB12	PSC316BCYB12	PSC318BCYB12	PSC416BCYB12	PSC418BCYB12

CHANCE®

Lineman grade gloves™

Contour Cuff - ASTM Class 2, 3, 4

From the name you trust and the brand you depend on: Chance Lineman Grade Gloves

Features & Applications

- The ultimate source of protection expected from the Chance name
- Offers a new level of comfort and flexibility
- Constructed for high dielectric and physical strength
- Exceed ASTM D120
- Available in contour cuff length of 18"
- Type I Chance Gloves come in two contrasting colors

Ergonomic innovation. Superior products. Timely solutions.

Just a few of the reasons the industry turns to Hubbell Power Systems and the Chance brand.

Color Red under Black

	Class 2	Class 3	Class 4
Size	18"	18"	18"
8	PSC218CRB8		
8.5	PSC218CRB8H		
9	PSC218CRB9	PSC318CRB9	PSC418CRB9
9.5	PSC218CRB9H	PSC318CRB9H	PSC418CRB9H
10	PSC218CRB10	PSC318CRB10	PSC418CRB10
10.5	PSC218CRB10H	PSC318CRB10H	PSC418CRB10H
11	PSC218CRB11	PSC318CRB11	PSC418CRB11
12	PSC218CRB12	PSC318CRB12	PSC418CRB12

Color Yellow under Black

	Class 2	Class 3	Class 4
Size	18"	18"	18"
8	PSC218CYB8		
8.5	PSC218CYB8H		
9	PSC218CYB9	PSC318CYB9	PSC418CYB9
9.5	PSC218CYB9H	PSC318CYB9H	PSC418CYB9H
10	PSC218CYB10	PSC318CYB10	PSC418CYB10
10.5	PSC218CYB10H	PSC318CYB10H	PSC418CYB10H
11	PSC218CYB11	PSC318CYB11	PSC418CYB11
12	PSC218CYB12	PSC318CYB12	PSC418CYB12

Leather Protector Gloves

- Crafted to fit properly over all industry-standard rubber insulating gloves
- Full compliance with ASTM F696 *Standard Specification for Leather Protectors for Rubber Insulating Gloves and Mittens*

Low-Voltage Leather Protectors

- Goatskin – soft, flexible, strong
- Nylon strap with non-metallic buckle

Size	Catalog No.	
	10-inch Length	*13-inch Length
7	PSCGLP10GN7	PSCGLP13GN7
8 - 8½	PSCGLP10GN8	PSCGLP13GN8
9 - 9½	PSCGLP10GN9	PSCGLP13GN9
10 - 10½	PSCGLP10GN10	PSCGLP13GN10
11	PSCGLP10GN11	PSCGLP13GN11
12	PSCGLP10GN12	PSCGLP13GN12

*13" have high-visibility polymeric/leather cuff

PSCGLP10GN9

PSCGLP13GN10

High-Voltage Leather Protectors

- Cowhide – durable and flexible
- Hi-visibility polymeric/leather cuff
- Nylon strap with non-metallic buckle

Size	Catalog No.	
	12-inch Length	14-inch Length
8 - 8½	PSCGLP12CN8	PSCGLP14CN8
9 - 9½	PSCGLP12CN9	PSCGLP14CN9
10 - 10½	PSCGLP12CN10	PSCGLP14CN10
11	PSCGLP12CN11	PSCGLP14CN11
12	PSCGLP12CN12	PSCGLP14CN12
	15-inch Length	*16-inch Length
8 - 8½	PSCGLP15CN8	PSCGLP16CN8
9 - 9½	PSCGLP15CN9	PSCGLP16CN9
10 - 10½	PSCGLP15CN10	PSCGLP16CN10
11	PSCGLP15CN11	PSCGLP16CN11
12	PSCGLP15CN12	PSCGLP16CN12

*16" fit straight and contour-cuff rubber gloves

CLEARANCE TABLE FOR LEATHER PROTECTORS PER ASTM F496

Glove Class	Minimum Distance Between Protectors and Rubber Gloves	
	in.	mm
00, 0	1/2	13
1	1	25
2	2	51
3	3	76
4	4	102

PSCGLP15CN9

PSCGLP16CN9

Glove Liners

- 100% cotton for warmth and comfort under rubber insulating gloves
- One size to fit most
- Two weight/length choices
- Reversible to fit either hand

PSCGLLWCLU
Lightweight
Wrist length
10" Length

PSCGLLECMU
Medium Duty
Extended cuff
12" Length

CHANCE®

Canvas Storage Bags

- **Durable cotton canvas with self-hemmed seams**
- **Snap-button closures**
- **Brass grommet drain holes on the bottom to aid ventilation and drying**

Snaphook on each bag

- For suspending from belt or in storage
- Leather reinforced tab is stitched to the back of each bag

Canvas SLEEVE BAG

- 30" L x 13" Top
- For flat storage of rubber sleeves
- Specially designed for extra-curved sleeves
- Velcro® strap inside at top to hang sleeves in place

PSCGLB30CCS

Canvas Low Voltage GLOVE BAG

- 12" L x 7" Top
- For 11" low voltage gloves

PSCGLB12CCG

Canvas High Voltage GLOVE BAG

- 18" L x 8" Top
- For flat storage of rubber gloves

PSCGLB18CCG

Rubber Glove Powder

- 5oz bottle
- Case size 48 bottles
- Easy storage
- Facilitates glove donning and removal

PSC4060745

GLOVE BAG
Features & Applications

- 18" L x 8" Top
- One-piece front and back, bar-tacked at all corners
- Double-nylon stitching, Velcro flap fasteners
- Gusset has 4-inch top tapering to 2-inch bottom
- Gloves not included

C4170148

Snaphook on each bag

- For suspending from belt or in storage
- Leather reinforced tab is stitched to the back of each bag

SLEEVE BAG
Features & Applications

- 27" L x 12" Top – 7" Bottom
- For flat storage of rubber sleeves
- Bar-tacked corners
- Velcro flap fasteners
- Double-nylon stitching
- Sleeves not included

C4170149

COMBINATION
GLOVE and SLEEVE BAG
Features & Applications

- 18" L x 8" Top
- Separate storage for rubber gloves and sleeves
- Single flap, double nylon stitching, Velcro fasteners
- Gloves and Sleeves not included

C4170150

NOTES

NOTES

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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NEVER COMPROMISE™

CHANCE®

Grounding Equipment

Catalog 3000 March 2020

Grounding Equipment – 3000

HUBBELL®

CHANCE® Temporary Grounding Equipment

Safe Working Practices

There are many reasons for temporary grounding to protect personnel working on de-energized circuits, including:

1. Induced voltage from adjacent energized lines
2. Fault-current feedover from adjacent lines
3. Lightning strikes anywhere on the circuit
4. Switching-equipment malfunction or human error
5. Accident-initiated contact with adjacent lines
6. Backfeed from solar panels or incorrectly wired generators

Since any one of the above could result in re-energizing the circuit, most utilities treat these potential dangers as ever-present and impose strict temporary-grounding work rules. Their crews' experience often voices these watchwords for the wise to heed:
"If you can't see both ends, it's hot" and "If it isn't grounded, it isn't dead."

Vital Procedure Recommendations

Step One: Testing

- With a test instrument, confirm the circuit to be worked has been de-energized intentionally before ground sets are applied

Step Two: Cleaning

- For a good connection, scrub oxides and contaminants from conductor, buswork or lattice contact points
- CHANCE universal wire brushes make this easy

Step Three: Connecting

- CHANCE insulated Grip-All clampsticks are the proper tools to apply grounding clamps
- Various clampstick lengths and styles are available in Catalog Section 2100, "Insulated Hand Tools"

To indicate energized conditions on overhead lines, (from left) CHANCE Auto Ranging Voltage Indicator, Multi-Range Voltage Indicator and Multi-Range Voltage Detector. At far right, Energized Cable Sensor performs the same function on URD cable with an exposed concentric neutral and elbows without test points.
See Catalog Section 2450, "Instruments and Meters," for details and ordering information.

Safety Reviews

- Equipotential grounding is recommended for personal protection
- Temporary grounding practices should be reviewed on a regular basis and after system changes
- These basics should be included on a review checklist:
  1. Clamp designs specific to each application
  2. Adequacy of grounding equipment to handle maximum potential fault current (see table on page 3002) and minimum slack lengths
  3. How construction affects placement of grounds
  4. Work procedures outlined above
  5. Inspect and test each grounding set

CHANCE Grounding-Set Tester

- Ideal for testing grounding sets
- Checks the resistance in a protective ground set
- Can help locate problems often remedied by simple repairs
- How-to video is included with the tester
- See Catalog Section 2450, "Instruments and Meters," for details and ordering information

F855 -19

TABLE 1 Protective Ground Cable, Ferrule, Clamp and Assembly Ratings for Symmetrical Current

	Grounding Clamp Torque Strength, min				Short Circuit Properties [A]							
	Yield [B]		Ultimate		Withstand Rating, Symmetrical kA RMS, 60 Hz			Ultimage Rating Capacity [C D], Symmetrical kA RMS, 60 Hz				
Grade	lbf-in.	n-m	lbf-in.	n-m	15 cycles (250 ms)	30 cycles (500 ms)	Copper Cable Size	15 cycles (250 ms)	30 cycles (500 ms)	60 cycles (1 s)	Maximum Copper Test Cable Size	Continuous Current Rating A RMS, 60 Hz
1	280	32	330	37	14	10	#2	18	13	9	2/0	200
2	280	32	330	37	21	15	1/0	29	21	14	4/0	250
3	280	32	330	37	27	20	2/0	37	26	18	4/0	300
4	330	37	400	45	34	25	3/0	47	33	23	250 kcmil	350
5	330	37	400	45	43	30	4/0	59	42	29	250 kcmil	400
6	330	37	400	45	54	39	250 kcmil or 2 2/0	70	49	35	350 kcmil	450
7	330	37	400	45	74	54	350 kcmil or 2 4/0	98	69	48	550 kcmil	550

[A] Withstand and ultimate short circuit properties are based on performance with surges not exceeding 20% asymmetry factor (see 9.1 and 12.3.4.2).
[B] Yield shall mean no permanent deformation such that the clamp cannot be reused throughout its entire range of application.
[C] Ultimate rating represents a symmetrical current which the assembly or individual components shall carry for the specified time.
[D] Ultimate values are based upon application of Onderdonk's equation to 98% of nominal circular mil area allowed by Specifications B172 and B173.

TABLE 2 Ultimate Assembly Rating for High *X/R* Ratio Applications

High Asymmetrical Test Requirements *X/R* = 30 Cycle Current Peak Values (kA) Rating X 2.69					
Grade Size	Rating Rated Current (kA)	1st	15th	Test Duration (cycles)	1^2t (Mega amps^2-s)
1H	15	41	23	15	74
2H	25	68	38	15	208
3H	31	84	46	15	312
4H	39	105	58	15	501
5H	47	127	70	15	728
6H	55	148	82	15	997
7H	68	183	101	15	1523

NOTE 1 – The above current values are based on electromechanical test values.
NOTE 2 – Assemblies that have been subjected to these shall not be re-used.
NOTE 3 – For use with currents exceeding 20% asymmetry factor.
NOTE 4 – See X4.7.2 for additional information.
NOTE 5 – Alternate testing circuits are available for laboratories that cannot achieve the above requirements. See Appendix X4 for details.

Selecting grounding clamps and cable

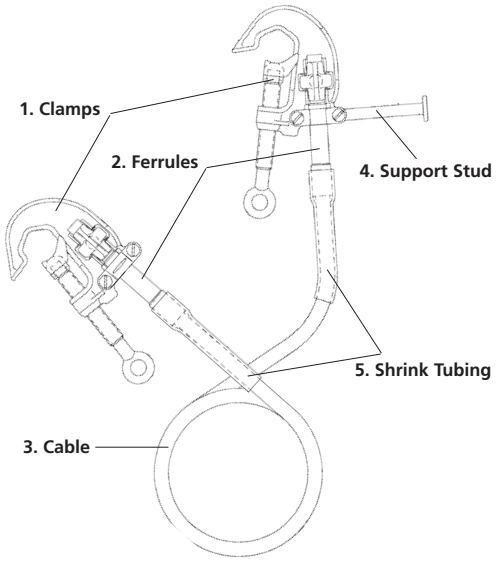
The CHANCE grounding line comprises both ready-made sets and separate components for your specific needs. Among the options and criteria to consider:

- Functional fit—Sizes of the clamp types in this section appear in ascending order of maximum-main-line size. By design, many clamps serve a wide size range for their conductor type (cable, bus or tower)
- Adequate capacity—Published ratings for both clamps and cable must withstand maximum-potential system fault-current magnitude and full-time duration. Test reports are available on request
- Coordinated connectors—Terminal (either pressure-type or threaded-type) selected for clamps dictates the cable ferrule type (either plain or threaded) to match
- On-site handling—Application clearances and fit (for overhead conductors and ground wires, transmission tower shapes, URD apparatus or substation buswork) affect clamp and cable dimensions

How to order a Grounding Set

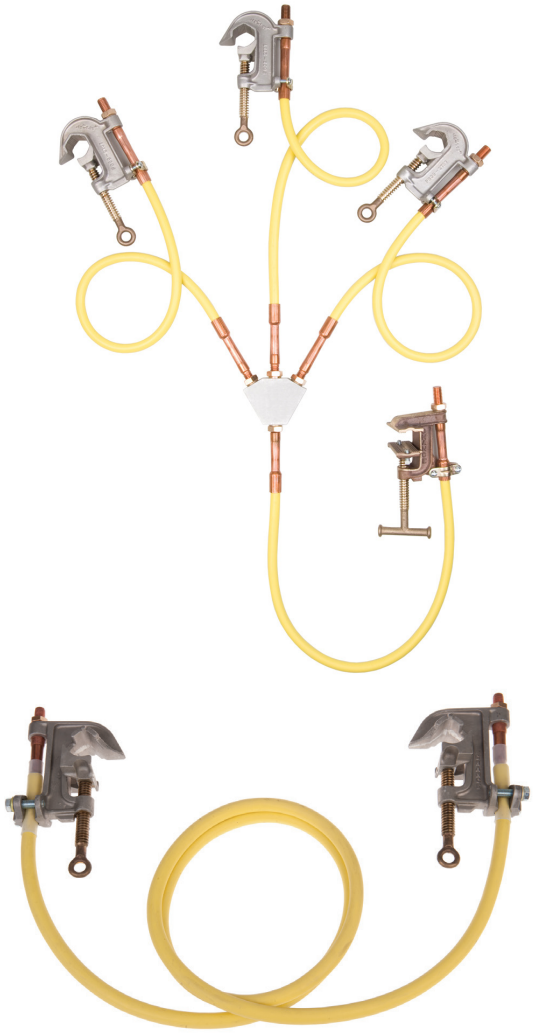
In addition to the specifying criteria above, each part of a grounding set requires certain choices:

1. Clamps
   - ASTM designations for Type, Class and Grade given for clamps shown in this section
2. Ferrules
   - Copper, tin-plated copper or aluminum
   - Plain or threaded
3. Cable
   - Length required to reach application distances
   - ASTM Type I with black or yellow elastomer jackets for temperatures from -40°F (-40°C) through +194°F (+90°C)
   - ASTM Type III with clear thermoplastic jacket for temperatures from +14°F (-10°C) through +140°F (+60°C) should be used only in well-ventilated areas
4. Support Stud
   - This option recommended on only one clamp to help control lifting the set to the first clamp attachment point
   - Support studs are not designed to handle fault current unless otherwise noted.
5. Shrink Tubing
   - This translucent option recommended for stress relief and inspection of cable strands between ferrule and jacket.



Installation information

- Several training aids available on request
- CHANCE videos and technical manuals provide details on proper installation
- Consult your CHANCE representative for any additional assistance



C-Type Grounding Clamps

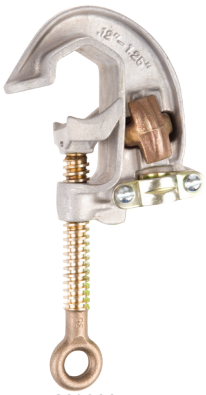
T6000465
Bronze body, Smooth jaws, Bronze eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule or T6000466, Drilled for 5/8-11 UNC threaded ferrule

T6000790
Bronze body, Smooth jaws, Bronze T-handle/eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule

C6002271
Bronze body, Smooth jaws, Bronze eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule

C6001959
Bronze body, Smooth jaws, Bronze T-handle/eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule

C6001754
Aluminum body, Smooth jaws, Bronze eyescrew with Acme threads, Tapped for 5/8-11 UNC threaded ferrule



C6002275
Aluminum body, Smooth jaws, Bronze eyescrew with Acme threads, Bronze pressure-type terminals

C6002276
Aluminum body, Serrated jaws, Bronze eyescrew with Acme threads, Bronze pressure-type terminals

T6002708
Aluminum body, Serrated jaws, Bronze eyescrew with Acme threads, Tapped for 5/8-11 UNC threaded ferrule

C6001743
Aluminum body, Smooth jaws, Bronze eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule

Catalog Number	C6001959 T6000465 T6000466 T6000790	C6002271	C6001754	C6002275	C6002276	T6002708	C6001743
ELECTRICAL RATINGS							
Continuous Current (AMPS)	250	400	350	400	400	400	400
Fault Current - 15 Cycles (AMPS)	21,000	43,000	27,000	43,000	43,000	43,000	43,000
Fault Current - 30 Cycles (AMPS)	15,000	30,000	20,000	30,000	30,000	30,000	30,000
MECHANICAL RATINGS							
Recommended Torque (in.-lb.)	200	250	250	250	250	250	250
Main Line Range - Max.	477 kcmil ACSR (0.814")	1033 kcmil ACSR (1.25")	750 kcmil Str. Cu. 636 kcmil ACSR (0.998")	1033 kcmil ACSR (1.25")	1033 kcmil ACSR (1.25")	1033 kcmil ACSR (1.25")	1000 kcmil Cu. 1590 kcmil ACSR (1.50")
Main Line Range - Min.	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#8 Sol. Cu. (0.128")	#8 Sol. Cu. (0.128")	#8 Sol. Cu. (0.128")	#8 Sol. Cu. (0.128")	#6 Sol. Cu. (0.162")
Jumper Range - Max.	1/0 Grd. Cable	4/0 Grd. Cable	2/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	1 1/2 lb. / 0.7 kg.	2 lb. / 0.9 kg.	1 lb. / 0.5 kg.	1 1/4 lb. / 0.6 kg.	1 1/4 lb. / 0.6 kg.	1 1/4 lb. / 0.6 kg.	1 1/2 lb. / 0.7 kg.
ASTM Designation	Type I Class A Grade 2	Type I Class A Grade 5	Type I Class A Grade 3	Type I Class A Grade 5	Type I Class B Grade 5	Type I Class B Grade 5	Type I Class A Grade 5
IEC Ratings							
Jaws	Smooth	Smooth	Smooth	Smooth	Serrated	Serrated	Smooth
Ferrule	Threaded	Threaded	Threaded	Plain Plug	Plain Plug	Threaded	Threaded

CHANCE®

C-Type Grounding Clamps

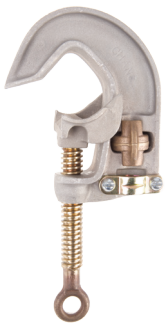
C6002281
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads
Bronze pressure-type terminal

C6002255
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule
***Unshrouded Ferrules Only**

C6002282
Aluminum body,
Serrated jaws,
Bronze eyescrew
with Acme threads
Bronze pressure-type terminal

C6002256
Aluminum body,
Serrated jaws, Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule
or PSC6003412,
Drilled for 5/8-11 UNC threaded ferrule
***Unshrouded Ferrules Only**

C6000386
***Mounted Clamp**
Aluminum body,
Serrated jaws,
Bronze eyescrew
with Acme threads,
Bronze pressure-type terminal



G36051
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Bronze pressure-type terminal

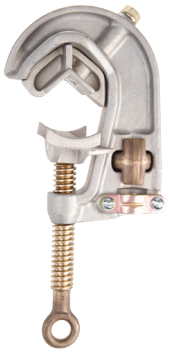
T6003203
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule
***Unshrouded Ferrules Only**

T6000658
Aluminum body, Smooth jaws,
Bronze eyescrew with Acme threads,
Drilled for 5/8-11 UNC threaded ferrule
or T6000311 Tapped for 5/8-11 UNC threaded ferrule

Catalog Number	C6002281	C6002255	C6002282	C6002256 (threaded) PSC6003412 (drilled)	*C6000386	G36051	T6003203	T6000658 (drilled) T6003011 (threaded)
ELECTRICAL RATINGS								
Continuous Current (amps)	400	400	400	400	400	400	400	400
Fault Current - 15 Cycles (amps)	43,000	47,000 High X/R	43,000	47,000 High X/R	43,000	43,000	43,000	55,000 High X/R
Fault Current - 30 Cycles (amps)	30,000		30,000		30,000	30,000	30,000	
MECHANICAL RATINGS								
Recommended Torque (in.-lb.)	250	250	250	250	250	250	250	250
Main Line Range - Max.	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus	2" O.D. Bus
Main Line Range - Min.	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")
Jumper Range - Max.	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	2 lb. / 0.9 kg.	1¾ lb./0.8 kg.	2 lb. / 0.9 kg.	1¾ lb./0.8 kg.	*	1¾ lb./0.8 kg.	1¾ lb./0.8 kg.	1¾ lb./0.8 kg.
ASTM Designation	Type I Class A Grade 5	Type I Class A Grade 5H	Type I Class B Grade 5	Type I Class B Grade 5H	Type II Class B Grade 5	Type I Class A Grade 5	Type I Class A Grade 5	Type I Class A Grade 6H
IEC Ratings		35 kA		35 kA				
Jaws	Smooth	Smooth	Serrated	Serrated	Serrated	Smooth	Smooth	Smooth
Ferrule	Plain Plug	Threaded *Unshrouded Only	Plain Plug	Threaded *Unshrouded Only	Plain Plug	Plain Plug	Threaded	Threaded

***C6000386 has 1-1/4" x 6' Epoxiglas® Pole and total weight of 3¾ lb. (1.7 kg.).**

C-Type Grounding Clamps

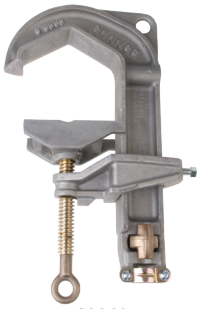


G33672
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Bronze pressure-type threads

C6001733
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule
***Unshrouded Ferrules Only**

C6000375
Aluminum body,
Serrated jaws,
Bronze eyescrew
with Acme threads,
Dual drilled for 5/8-11 UNC threaded ferrule

Bus-Bar Grounding Clamps:

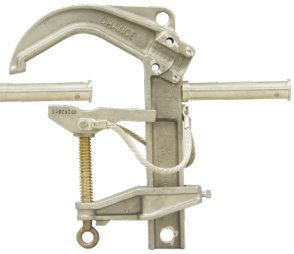


G3369
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Bronze pressure-type
terminal

C6000337
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
Bronze pressure-type
terminal

T6000819
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
rated stud

T6000844
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
rated stud



PSCT6000844001
Aluminum body,
Smooth jaws,
Bronze eyescrew
with Acme threads,
rated stud

Catalog Number	G33672	C6001733	C6000375	G3369	C6000337	T6000819 (8.5" x .75" stud)	T6000844 (8.5"x1" stud)	PSCT6000844001 (6"x1.25" stud)
ELECTRICAL RATINGS								
Continuous Current (AMPS)	400	400	400	400	400	400	400	400
Fault Current - 15 Cycles (AMPS)	43,000	43,000	†70,000	43,000	43,000/ 54,000†	47,000 High X/R	47,000 High X/R	68,000 High X/R
Fault Current - 30 Cycles (AMPS)	30,000	30,000	†50,000	30,000	30,000/ 39,000†			
MECHANICAL RATINGS								
Recommended Torque (in.-lb.)	250	250	300	300	300	300	300	300
Main Line Range - Max.	2-1/2" O.D. Bus	2-1/2" O.D. Bus	3" O.D. Bus	4" x 4" Square 4.5" O.D. Bus	6-5/8" O.D. Bus	4" x 4" Square 4.5" OD Bus	6-5/8" O.D. Bus	6-5/8" O.D. Bus
Main Line Range - Min.	#4 Str. Cu. (0.232")	#4 Str. Cu. (0.232")	0.50" O.D. Bus	4/0 Str. Cu. (0.500")	3-1/2" O.D. Bus	4/0 Str. Cu (0.500")	3-1/2" O.D. Bus	3-1/2" O.D. Bus
Jumper Range - Max.	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	No Cable, uses Rated Stud	No Cable, uses Rated Stud	No Cable, uses Rated Stud
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable			
Weight Each	2 3/8 lb. / 1.1 kg.	2 3/8 lb. /1.1 kg.	3 lb. / 1.4 kg.	5 1/4 lb. / 2.4 kg.	6 lb. / 2.7 kg.	5 lb. / 2.3 kg.	7.6 lb/3.5 kg.	7.8 lb/3.5 kg.
ASTM Designation	Type I Class A Grade 5	Type I Class A Grade 5	Type I Class B Grade 7†	Type I Class A Grade 5	Type I Class A Grade 5/ Grade 6†	Type I Class A Grade 5H	Type I Class B Grade 5H	Type I Class B Grade 7H
IEC Rating (15 cycles)	35 kA	35 kA	35 kA					
Jaws	Smooth	Smooth	Serrated	Smooth	Smooth	Smooth	Smooth	Smooth
Ferrule	Plain Plug	Threaded	Threaded	Plain Plug	Plain Plug	Rated Stud	Rated Stud	Rated Stud

†Rating with twin-grounding cables.

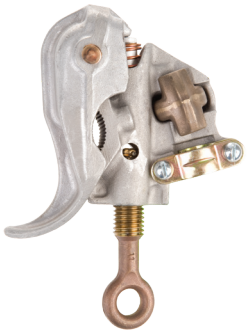
CHANCE®

Snap-On (Duckbill-type) Grounding Clamps

G18102
Aluminum body,
Bronze upper jaw,
Smooth jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal

G36221
Aluminum body,
Smooth jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal

HG37061
***Mounted Clamp**
Aluminum body,
Smooth jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal



T6000806
Aluminum body,
Serrated jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal

Catalog Number	G18102	G36221	*HG37061	T6000806
ELECTRICAL RATINGS				
Continuous Current (AMPS)	300	400	400	400
Fault Current - 15 Cycles (AMPS)	27,000	43,000	34,000	43,000
Fault Current - 30 Cycles (AMPS)	20,000	30,000	25,000	30,000
MECHANICAL RATINGS				
Recommended Torque (in.-lb.)	230	250	300	300
Main Line Range - Max.	250 kcmil Str. Cu. 4/0 ACSR (0.574″)	566 kcmil Cu. 900 kcmil ACSR (1.162″)	566 kcmil Cu. 900 kcmil ACSR (1.162″)	1590 kcmil ACSR (1.625″)
Main Line Range - Min.	#6 Sol. Cu. (0.162″)	#6 Sol. Cu. (0.162″)	#6 Sol. Cu. (0.162″)	0.5″
Jumper Range - Max.	2/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	1½ lb. / 0.6 kg.	1½ lb. / 0.6 kg.	*	1¾ lb. / 0.8 kg.
ASTM Designation	Type I Class A Grade 3	Type I Class A Grade 5	Type II Class A Grade 4	Type I Class B Grade 5
IEC Rating (15 cycles)		35 kA		
Jaws	Smooth	Smooth	Smooth	Serrated
Ferrule	Plain Plug	Plain Plug	Plain Plug	Plain Plug

***HG37061 has 1¼" x 6' Epoxiglas® Pole and total weight of 3½ lb. (1.6 kg.).**

Snap-On (Duckbill-type) Grounding Clamps

C6001734
Aluminum body,
Smooth jaws,
Bronze eyescrew
with fine threads,
Tapped for 5/8-11 UNC threaded ferrule

C6000198
***Mounted Clamp**
Aluminum body,
Serrated jaws,
Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule

C6000197
Aluminum body,
Serrated jaws,
Bronze eyescrew
with Acme threads,
Tapped for 5/8-11 UNC threaded ferrule

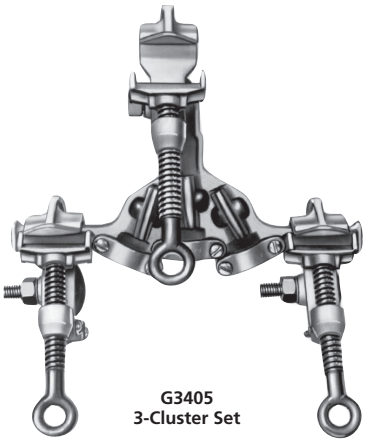
C6001757
Aluminum body,
Smooth jaws,
Bronze eyescrew
with fine threads,
Tapped for 5/8-11 UNC threaded ferrule

C6000434
Aluminum body,
Serrated jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal

Catalog Number	C6001734	*C6000198	C6000197	C6001757	C6000434
ELECTRICAL RATINGS					
Continuous Current (AMPS)	400	400	400	400	400
Fault Current - 15 Cycles (AMPS)	31,000 High X/R / 43,000	43,000	47,000 High X/R	43,000	43,000
Fault Current - 30 Cycles (AMPS)	30,000	30,000		30,000	30,000
MECHANICAL RATINGS					
Recommended Torque (in.-lb.)	250	250	250	250	250
Main Line Range - Max.	566 kcmil Cu. 900 kcmil ACSR (1.162")	700 kcmil Cu. 1113 kcmil ACSR (1.293")	700 kcmil Cu. 1113 kcmil ACSR (1.293")	2.5"	700 kcmil Cu. 1113 kcmil ACSR (1.293")
Main Line Range - Min.	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	#6 Sol. Cu. (0.162")	0.75"	#6 Sol. Cu. (0.162")
Jumper Range - Max.	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	1½ lb. / 0.7 kg.	*	1½ lb. / 0.7 kg.	2¼ lb. / 1.0 kg.	1½ lb. / 0.7 kg.
ASTM Designation	Type I Class A Grade 3H/Grade 5	Type II Class B Grade 5	Type I Class B Grade 5H	Type I Class A Grade 5	Type I Class B Grade 5
IEC Rating (15 cycles)	35 kA		35 kA		
Jaws	Smooth	Serrated	Serrated	Smooth	Serrated
Ferrule	Threaded	Threaded	Threaded	Threaded	Plan Plug

***C6000198 has 1¼" x 6' Epoxiglas® Pole and total weight of 3½ lb. (1.6 kg.).**

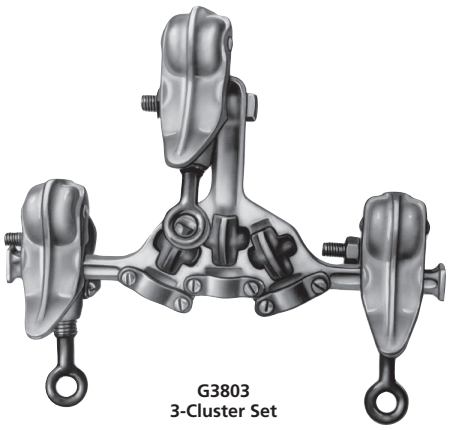
Cluster Grounding Clamps



G3405
3-Cluster Set

with C-Type Aluminum-body clamps,

Smooth jaws, Bronze eyescrews with Acme threads, and 3-phase Aluminum cluster bar with Bronze Pressure-type terminals



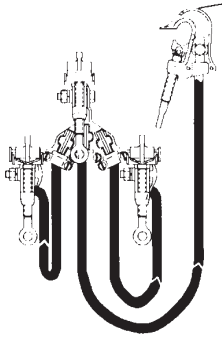
G3803
3-Cluster Set

with Snap-On (Duckbill-type) Aluminum-body clamps,

Smooth jaws, Bronze eyescrews with fine threads, and 3-phase Aluminum cluster bar with Bronze Pressure-type terminals

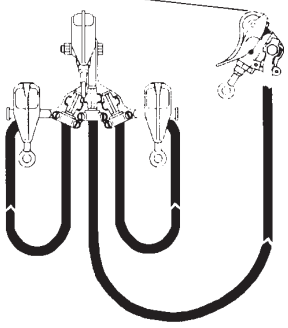
Important Note:
Cluster Sets are furnished as shown above. The center clamp is bolted to the cluster bar.

Typical fourth ground clamp (not included in 3-Cluster Set, must be ordered as separate item)



These drawings illustrate how Cluster Sets are to be connected, with **grounding cable and a fourth clamp which must be ordered separately.**

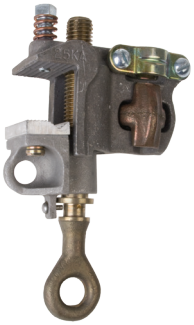
For cable and ferrules, see page 3021.



Catalog Number	G3405	G3803
ELECTRICAL RATINGS		
Continuous Current (AMPS)	350	400
Fault Current - 15 Cycles (AMPS)	27,000	34,000
Fault Current - 30 Cycles (AMPS)	20,000	25,000
MECHANICAL RATINGS		
Recommended Torque (in.-lb.)	250	250
Main Line Range - Max.	400 kcmil Str. Cu. 636 kcmil ACSR (.998")	566 kcmil Cu. 900 kcmil ACSR (1.162")
Main Line Range - Min.	#8 Sol. Cu. (0.12")	#6 Sol. Cu. (0.162")
Jumper Range - Max.	2/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable
Weight Each	4½ lb. / 2 kg.	6⅝ lb. / 3 kg.
ASTM Designation	Type I Class A Grade 3	Type I Class A Grade 4
Jaws	Smooth	Smooth
Ferrule	Plain Plug	Plain Plug

Tower & Flat-Face Grounding Clamps

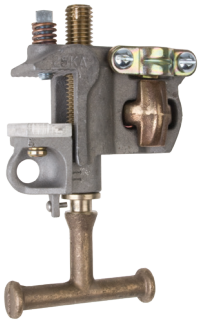
C6002232
Bronze body, Serrated jaws, Bronze eyescrew with Acme threads, Drilled for 5/8-11 UNC threaded ferrule or T6003196, Tapped for 5/8-11 UNC threaded ferrule or PST6003485 for Fine Thread Eyescrew version



G33633SJ
Aluminum body, Serrated jaws, Bronze eyescrew with fine threads, Bronze pressure-type terminal

C6001735
Aluminum body, Serrated jaws, Bronze eyescrew with fine threads, Tapped for 5/8-11 UNC threaded ferrule

C6002231
Bronze body, Serrated jaws, Bronze T-handle with Acme threads, Drilled for 5/8-11 UNC threaded ferrule or T6003195, Tapped for 5/8-11 UNC threaded ferrule or T6003009, with Fine Threads T-Handle version



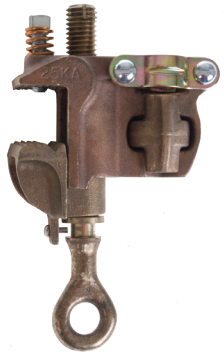
G33634SJ
Aluminum body, Serrated jaws, Bronze T-handle with fine threads, Bronze pressure-type terminal

T6001798
Aluminum body, Serrated jaws, Bronze T-handle with Acme threads, Tapped for 5/8-11 UNC threaded ferrule

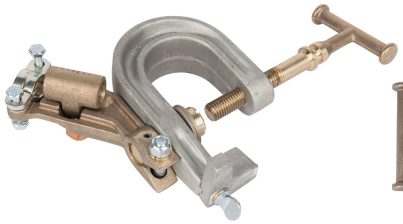
Catalog Number	C6002232	G33633SJ	C6001735	C6002231	G33634SJ	T6001798
ELECTRICAL RATINGS						
Continuous Current (AMPS)	400	400	400	400	400	400
Fault Current - 15 Cycles (AMPS)	43,000	27,000	27,000	43,000	27,000	27,000
Fault Current - 30 Cycles (AMPS)	30,000	20,000	20,000	30,000	20,000	20,000
MECHANICAL RATINGS						
Recommended Torque (in.-lb.)	250	250	250	250	250	250
Main Line Range - Max.	1½" Angles 1½" Flat	1½" Angles 1½" Flat	1½" Angles 1½" Flat	1½" Angles 1½" Flat	1½" Angles 1½" Flat	1½" Angles 1½" Flat
Main Line Range - Min.	⅛"	⅛"	⅛"	⅛"	⅛"	⅛"
Jumper Range - Max.	4/0 Grd. Cable w/Threaded Stud	2/0 Grd. Cable w/Plain Plug	2/0 Grd. Cable w/Threaded Stud	4/0 Grd. Cable w/Threaded Stud	2/0 Grd. Cable w/Plain Plug	2/0 Grd. Cable w/Threaded Stud
Jumper Range - Min.	#2 Grd. Cable w/Threaded Stud	#2 Grd. Cable w/Plain Plug	#2 Grd. Cable w/Threaded Stud	#2 Grd. Cable w/Threaded Stud	#2 Grd. Cable w/Plain Plug	#2 Grd. Cable w/Threaded Stud
Weight Each	2 lb. / 0.9 kg.	1⅝ lb. / 0.7 kg.	1½ lb. / 0.7 kg.	2 lb. / 0.9 kg.	1⅝ lb. / 0.7 kg.	1½ lb. / 0.7 kg.
ASTM Designation	Type I Class B Grade 5	Type I Class B Grade 3	Type I Class B Grade 3	Type III Class B Grade 5	Type III Class B Grade 3	Type III Class B Grade 3
IEC Rating (15 Cycles)						
Jaws	Serrated	Serrated	Serrated	Serrated	Serrated	Serrated
Ferrule	Threaded	Plain Plug	Threaded	Threaded	Plain Plug	Threaded

CHANCE®

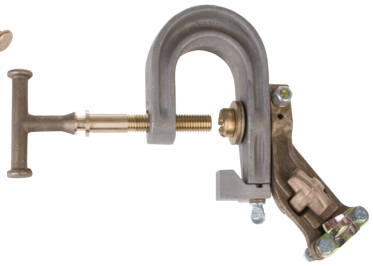
Tower & Flat-Face Grounding Clamps



G33631
Bronze body,
Serrated jaws,
Bronze eyescrew
with fine threads,
Bronze pressure-type terminal

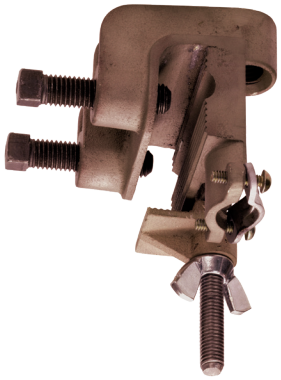


C6003598
Aluminum body and retainer,
Bronze scrubber-type contact pads,
Bronze T-handle
with fine threads,
Tapped for 5⁄8-11 UNC
threaded ferrule



C6000085
Aluminum body and retainer,
Bronze scrubber-type contact pads,
Bronze T-handle
with fine threads,
Bronze pressure-type terminal
(Eyescrew version T6003090)

G33632
Bronze body,
Serrated jaws,
Bronze T-handle
with fine threads,
Bronze pressure-type terminal



C6001783
Bronze body,
Serrated jaws and retainers,
Tapped for 5⁄8-11 UNC threaded ferrule

PSC6003635
Aluminum body
Serrated jaws
Tapped for 5/8-11 UNC threaded ferrule

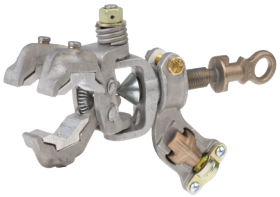
PSC6003636
Aluminum body
Serrated jaws
Tapped for 5/8-11 UNC threaded ferrule

Catalog Number	G33631	C6003598	C6000085	G33632	C6001783	PSC6003635	PSC6003636
ELECTRICAL RATINGS							
Continuous Current (AMPS)	400	400	400	400	400	400	400
Fault Current - 15 Cycles (AMPS)	27,000	47,000 High X/R	43,000	27,000	47,000 High X/R	47,000 High X/R	47,000 High X/R
Fault Current - 30 Cycles (AMPS)	20,000		30,000	20,000			
MECHANICAL RATINGS							
Recommended Torque (in.-lb.)	250	250	250	250	300	250 (set screws finger tight)	250 (set screws finger tight)
Main Line Range - Max.	1½" Angles 1½" Flat	4" Structural Angles	4" Structural Angles	1½" Angles 1½" Flat	¾" x 5"Angles or Flats ⅝" Rod	1-1/2" Angles 1-1/2" Flat	1-1/2" Angles 1-1/2" Flat
Main Line Range - Min.	⅛"	2" Structural Angles	2" Structural Angles	⅛"	⅛"	⅛"	⅛"
Jumper Range - Max.	2/0 Grd. Cable w/Plain Plug	4/0	4/0 Grd. Cable w/Plain Plug	2/0 Grd. Cable w/Plain Plug	4/0 Grd. Cable w/Threaded Stud	4/0	4/0
Jumper Range - Min.	#2 Grd. Cable w/Plain Plug	#2	#2 Grd. Cable w/Plain Plug	#2 Grd. Cable w/Plain Plug	#2 Grd. Cable w/Threaded Stud	#2 Grd. Cable	#2 Grd. Cable
Weight Each	2½ lb. / 1.1 kg.	3¾ lb. / 1.7 kg.	3¾ lb. / 1.7 kg.	2½ lb. / 1.1 kg.	5 lb. / 2.3 kg.	2⅝ lb. / 1.2 kg.	2⅝ lb. / 1.2 kg.
ASTM Designation	Type I Class B Grade 3	Type III Class B Grade 5H	Type III Class B Grade 5	Type III Class B Grade 3	Type III Class B Grade 5H	Type III Class B Grade 5H	Type I Class B Grade 5H
IEC Rating (15 cycles)							
Jaws	Serrated	Serrated	Serrated	Serrated	Serrated	Serrated	Serrated
Ferrule	Plain Plug	Threaded	Plain Plug	Plain Plug	Threaded	Threaded	Threaded

All-Angle Grounding Clamps

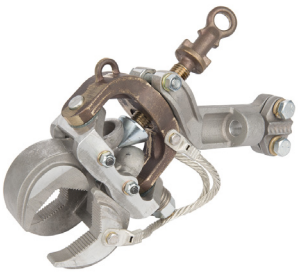
Aluminum Bodies with Serrated Jaws

For installation ease, jaws pivot 75° left or right.



G42291SJ
***Pressure Terminal**

†HG42296SJ
***Bronze Pressure Terminal**
(Clamp same as G42291SJ)



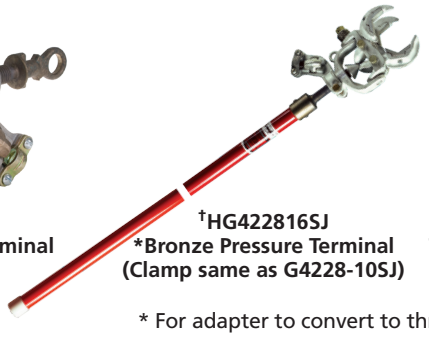
PSC6003499
Threaded Terminal

* For adapter to convert to threaded terminal, see Page 3023.

Catalog Number	G42291SJ	†HG42296SJ	PSC6003499
ELECTRICAL RATINGS			
Continuous Current (AMPS)	400	400	400
Fault Current - 15 Cycles (AMPS)	43,000	43,000	47,000 High X/R
Fault Current - 30 Cycles (AMPS)	30,000	30,000	
MECHANICAL RATINGS			
Recommended Torque (in.-lb.)	250	250	480
Main Line Range - Max.	954 kcmil ACSR (1.196")	954 kcmil ACSR (1.196")	2.88"
Main Line Range - Min.	#2 Cu. (.258")	#2 Cu. (.258")	0.258"
Jumper Range - Max.	4/0 Grd. Cable	4/0 Grd. Cable	4/0
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	2 lb. / 0.9 kg.	4¼ lb. / 1.9 kg.	8.0 lb. / 3.6 kg.
ASTM Designation	Type I Class B Grade 5	Type II Class B Grade 5	Type I Class B Grade 5H
Ferrule	Plain Plug	Plain Plug	Threaded

†Mounted Clamps supplied with 1¼" x 6' Epoxiglas® Pole.

G422810SJ
***Bronze Pressure Terminal**



†HG422816SJ
***Bronze Pressure Terminal**
(Clamp same as G4228-10SJ)

T6001693
Tapped for ⅝-11 UNC threaded ferrule
(Two single serrated jaws, for pothead and bus applications)

C6001732
Tapped for ⅝-11 UNC threaded ferrule

* For adapter to convert to threaded terminal, see Page 3023.

Catalog Number	G422810SJ	†HG422816SJ	T6001693	C6001732
ELECTRICAL RATINGS				
Continuous Current (AMPS)	400	400	400	400
Fault Current - 15 Cycles (AMPS)	43,000	43,000	43,000	43,000
Fault Current - 30 Cycles (AMPS)	30,000	30,000	30,000	30,000
MECHANICAL RATINGS				
Recommended Torque (in.-lb.)	250	250	250	250
Main Line Range - Max.	2.88"	2.88"	2.88"	2.88"
Main Line Range - Min.	#2 Cu. (.258")	#2 Cu. (.258")	#2 Cu. (.258")	#2 Cu. (.258")
Jumper Range - Max.	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable	4/0 Grd. Cable
Jumper Range - Min.	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable	#2 Grd. Cable
Weight Each	3¼ lb. / 1.5 kg.	5¼ lb. / 2.4 kg.	3¼ lb. / 1.5 kg.	3¼ lb. / 1.5 kg.
ASTM Designation	Type I Class B Grade 5	Type II Class B Grade 5	Type I Class B Grade 5	Type I Class B Grade 5
IEC Rating (15 cycles)				35 kA
Jaws	Serrated	Serrated	Serrated	Serrated
Ferrule	Plain Plug	Plain Plug	Threaded	Threaded

†Mounted Clamps supplied with 1¼" x 6' Epoxiglas® Pole.

CHANCE®

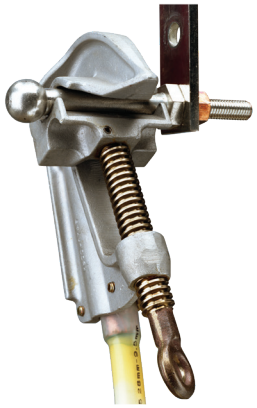
Apparatus Grounding Clamps

Ball-and-socket design for multiple uses

- For restricted-space applications and as a truck-grounding system, this compact design delivers a high-current rating usually associated with only large clamps
- Applies to a wide range of switching equipment, including:
  - o Industrial metalclad gear
  - o Substations – indoors and out
  - o Distribution – overhead and underground
- For trucks, a *ball stud permanently mounts on each body
- For three-phase livefront set, see page 3017
- Two clamp styles and three ball stud lengths adapt to many applications
- Clamp bodies, eyescrews and *ball studs are bronze alloy
- Tin-plated ball studs have nominal 1"-diameter ball and stud to fit NEMA terminal pads
- Lockwasher and nut are silicone bronze
- ASTM Designation of Type I, Class A, Grade 5 for any of these clamps is met if associated grounding-cable sets are fitted with 5⁄8" copper ferrules and 4/0 cable as on page 3021
- IEC Rating at 15 cycles of 35 kA for C6002100 and T6002320

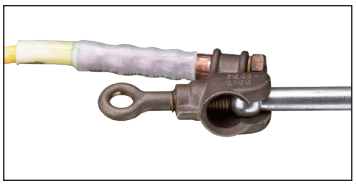
Fault Current Ratings 43,000 Amps — 15 cycles
30,000 Amps — 30 cycles

Recommended Installing Torques:
Eyescrew 250 inch-pounds ***Ball Stud** 300 inch-pounds



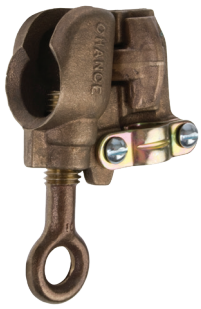
Long stud shank accepts most types of grounding clamps

Socket clamps provide multi-angle attachment of grounds



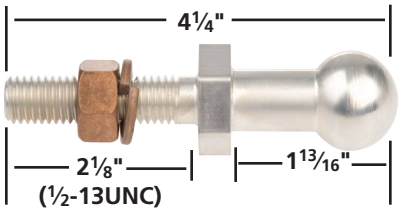
Clamp C6002100
Drilled for 5⁄8-11 UNC threaded ferrule
or
Clamp C6002101
Tapped for 5⁄8-11 UNC threaded ferrule
for threaded stud ferrule on #2 to 4/0 grounding cable

Clamp T6002320
Tapped for 5⁄8-11 UNC threaded ferrule
for threaded stud ferrule on #2 to 4/0 grounding cable
Please use unshrouded ferrule only on 4/0 cable.

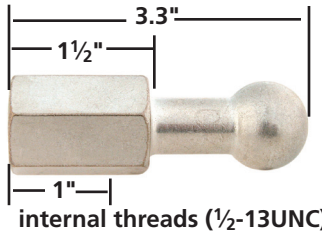


Clamp C6002300 with pressure terminal
for plain-plug ferrule on #2 to 4/0 grounding cable

Weight, each clamp on this page: 1 lb. / 0.5 kg.

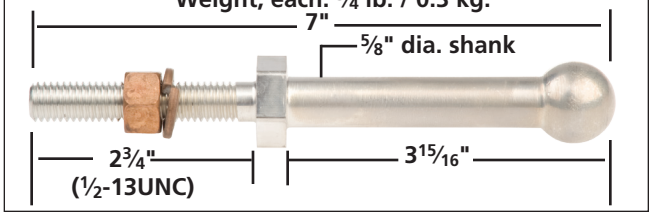


***Standard Ball Stud C6002102**
5⁄8" dia. shank
Weight, each: ½ lb. / 0.2 kg.



***Female-Thread Ball Stud T6002867**
5⁄8" dia. shank
Weight, each: ½ lb. / 0.2 kg.

***Long Ball Stud T6002364** **3" nominal shank length**
Weight, each: ¾ lb. / 0.3 kg.



*Ball studs do not interchange with system on page 3016.

Grounding Stud Cover – fits onto 1" ball studs of Apparatus Grounding Clamps above

Features & Applications

- Made with same material as CHANCE line hose
- Nonconductive cover may help prevent flashover on ball studs installed in enclosed switchgear, switchyards or substations
- Cover is not intended for personnel protection and should not be considered as insulative cover-up equipment
- Resilient ozone/corona-resistant thermo-plastic elastomer does not absorb water
- Special formulation resists aging/checking and retains high-visibility orange color
- Snap-fit keeps cover in place

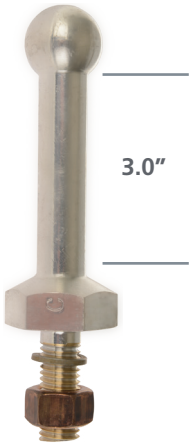
Catalog No.	Description	Weight
C4060416	Grounding Stud Cover	1 oz. / 28 g.

- 5⁄8"-I.D. loop at top permits hot-line tools to "pop" it on and off
- CHANCE silicone lubricant C4002320 or C4170287 may ease installation and removal
- Not an insulated Cover

5H BALL STUD / HEX STUD GROUNDING

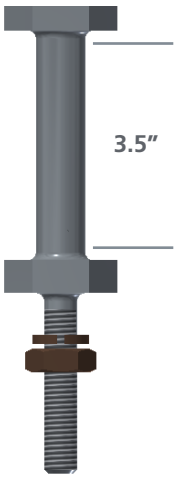
Designed and Tested to meet requirements of ASTM F855 Table 2
Ultimate Assembly Rating for High X/R Ratio Applications

Short Ball Stud
30 mm Ball, 3/4” dia. shaft
5/8-11 UNC Threads
Cat.No. PSC6003491



Long Ball Stud
30 mm Ball, 3/4” dia. shaft
5/8-11 UNC Threads
Cat. No. PSC6003492

Short Ball Stud
30 mm Ball, 3/4” dia. shaft
5/8-11 UNC Female Threads
Cat. No. PSC6003493



Hex Head Stud
3/4” dia. x 3-1/2” Shaft
1/2-13 UNC Threads
Cat. No. PSC6003639

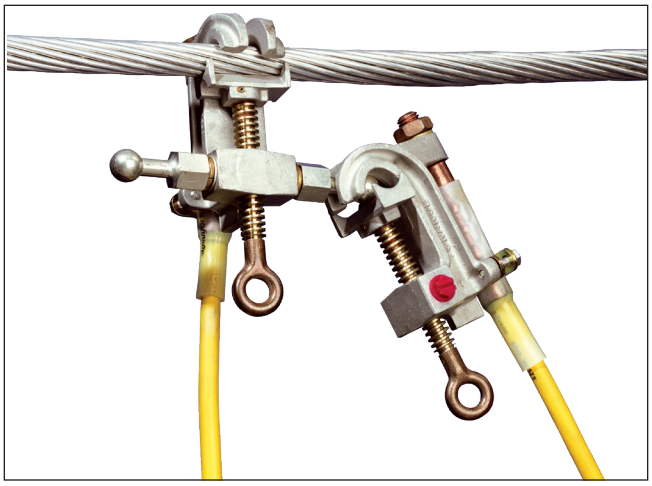
Ball Stud Ground Clamp
accepts 30 mm Ball Studs
Cat. No. PSC6003494

Short Ball Stud Cover
Cat. No. PSC4060615
Not an insulated cover

4 Hole NEMA Pad Adapter with
permanent short Ball Stud
Cat. No. PSC6003510

CHANCE®

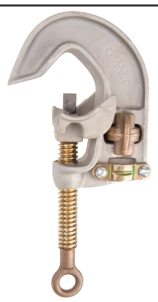
Three-Way Grounding Clamp for ball stud, conductors, busbars



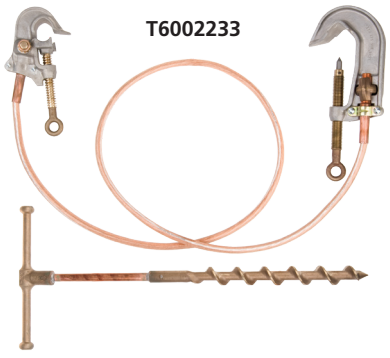
Features & Applications

- By supporting other clamps in three-phase sets, ball studs reduce installation labor
- This can contribute to safety and minimize the number of clamp connections per conductor in an overhead grounding scheme
- Ball studs mount without furnished washers in holes of lower clamp boss
- The tapped holes ship with plastic plugs
- Clamp terminal is tapped for 5⁄8"-11 UNC threaded-stud ferrules on grounding cable from #2 through 4/0
- Versatile clamp serves such temporary-grounding uses as:
  - o A truck-grounding system
  - o On industrial metalclad switchgear
  - o Substation buswork, indoors and out
  - o Overhead, underground and substation switches
  - o Three-phase ground sets with special, multi-angle

C6001625



C6001626



T6002233

T6001922

- Compact design delivers high-current rating associated with large clamps
- For grounding trucks or other equipment, ball stud permanently mounts on each body with furnished lockwasher, flat washer and nut
- Removable stud has recessed-hex end fitting for through-mounting versatility
- Clamp body is aluminum
- Acme-threaded eyescrew and ball stud are bronze alloy
- Tin-plated ball stud has 20mm (0.8") diameter ball, 7⁄8"-hex fitting and 1-1⁄2"-long 1⁄2"-13 threads to fit NEMA terminal pads
- ASTM Designation of Type I, Class A, Grade 5 is met if associated grounding-cable sets are fitted with copper ferrules as on page 3021
- IEC rating at 15 cycles of 35 kA

Clamp Main Line Range

- Bare Conductors from #8 Sol. Cu. through 636 ACSR
- Ball Stud 20mm (0.788") only

Fault current ratings: 43,000 amps — 15 cycles
30,000 amps — 30 cycles

Recommended Installing Torques:
Eyescrew 250 inch-pounds **Ball Stud** 300 inch-pounds

Catalog No.	Description	Weight, each
C6002316	Three-Way Clamp Body only	1½ lb./0.7 kg.
C6002317	*20mm (0.788") diameter Ball Stud with flat washer, lockwasher and nut	⅜ lb. / 0.2 kg.

*Ball stud does not interchange with system on page 3014.

Penetrator clamps and sets for underground cable

Features & Applications

- To be used to confirm URD cable is de energized prior to cutting. After Circuit has been grounded at the Pad Mounted Switch, the ground set with the penetrator clamp may be used as a last check to confirm the cable that will be worked on is de energized.
- Cable with jacket over concentric neutral, special clamps help ensure contact with center conductor
- Chisel-point clamp main-line capacity is 1-1⁄2"
- Spike-point clamp main-line capacity is 2-1⁄2"
- Screw-type copper-clad ground rod in sets indicated is 24" long for easy handling
- Helix (spiral) and handle are bronze
- Each set includes:
  - o 6-ft. of #2 copper clear-jacket ground cable and ferrules
  - o A penetrator clamp (choice of hardened-steel 1⁄2"-wide chisel or conical spike)
  - o C-type grounding clamp

Catalog No.	Description	Weight, each
C6001626	Chisel Clamp **only**	1¾ lb. / 0.8 kg.
P6001623P	Replacement Chisel Point	2 oz. / 0.1 kg.
T6002234	Chisel Set **with** Ground Rod	9¾ lb. / 4.4 kg.
C6001625	Chisel Set **without** Ground Rod	4½ lb. / 2 kg.
T6001922	Spiked Clamp **only**	1¾ lb. / 0.8 kg.
P6001969P	Replacement Spike Point	2 oz. / 0.1 kg.
T6002233	Spiked Set **with** Ground Rod	8 lb. / 3.6 kg.

Underground Distribution Grounding Sets

Grounded Parking Bushing Sets for Single-Phase Switches & Transformers

- Set includes a loadbreak bushing and bronze ground clamp T6000466 connected by a 4' yellow 1/0 cable
- Tin-plated copper connector joins cable to bushing
- Threaded copper ferrule connects the cable to the clamp
- Fault current rating for each set: 10,000 amps for 10 cycles per IEEE 386

Catalog No.	*Application	Weight, each
T6003091	15kV	8 lb. / 3.6 kg.
T6003092	25 & 35kV small interface	9 lb. / 4.1 kg.

Grounding Elbow Sets for Single- or Three-Phase Switches & Transformers

- Set includes:
  - o Yellow-jacketed elbow for the voltage-class indicated below
  - o Six feet of 1/0 copper grounding cable with yellow jacket
  - o Bronze ground clamp T6000466
- Fault current rating for each set: 10,000 amps for 10 cycles per IEEE 386

C6000729	15kV set	4 lb. / 1.8 kg.
T6002131	25kV set	6 lb. / 2.7 kg.
PSC6003709	35kV Small interface set	6 lb. / 2.7 kg.
C6001927	35kV large interface set	8 lb. / 3.6 kg.

Three-Phase Grounding Elbow Sets for Switches & Transformers

- Each of these sets consists of:
  - o A three-way terminal block assembly
  - o Three 6' lengths of 1/0 copper ground cable with yellow jacket
  - o A bronze ground clamp T6000466
  - o Three yellow elbows
- Fault current rating for each set: 10,000 amps for 10 cycles per IEEE 386

C6003102	15kV set	14.5 lb. / 6.6 kg.
C6003103	25kV set	15 lb. / 6.8 kg.
PSC6003710	35kV small interface set	15 lb. / 6.8 kg.
PSC6003103003	35kV large interface set	16 lb. / 7.3 kg.

Replacement Parts: Grounding Elbow ONLY

215GEHSG	15kV - elbow only	1.9 lb./0.9 kg.
225GEHSG	25 & 35kV small interface - elbow only	2.0 lb./0.9 kg.
236GEHSG	35kV large interface - elbow only	4.0 lb./1.8 kg.

All Copper Connector ONLY

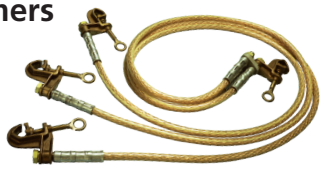
200LUGC6	for 1/0 Grounding Cable	1.8 oz. / 51 g.
200LUGC7	for 2/0 Grounding Cable	1.8 oz. / 51 g.

Elbow Probes ONLY

215LBP	15kV Probe	5.3 oz. / 150 g.
225LBP	25kV Probe	7.0 oz. / 198 g.
235LBP	35kV Small Interface Probe	1.1 lb. / 0.5 kg.
236LBP	35kV Large Interface Probe	1.1 lb. / 0.5 kg.

Temporary Grounding Sets for Live-Front Switches and Transformers

C6000758	C-Clamp Set	15 lb. / 6.8 kg.



C6000758
ASTM Type I,
Class A, Grade 2

Fault current ratings: 21,000 amps for 15 cycles or 15,000 amps for 30 cycles
C-clamps are Cat. No. T6000466.

- Each C-Clamp set includes:
  - o A three-way aluminum terminal block
  - o Four bronze ground clamps
  - o Three 6' lengths of 1/0 copper clear-jacket ground cable with threaded-stud ferrules

T6002246	Ball Socket Set	16.5 lb. / 7.5 kg.

T6002246
ASTM Type I,
Class A, Grade 3

Fault current ratings: 27,000 amps for 15 cycles or 20,000 amps for 30 cycles

- Each Ball Stud set includes:
  - o A three-way copper terminal block
  - o Four bronze ground clamps
  - o Three 6' lengths of 2/0 copper clear-jacket ground cable with threaded-stud ferrules

T6002375	Flat-Face Clamp Set	15.5 lb. / 7 kg.

T6002375
ASTM Type III,
Class B, Grade 2

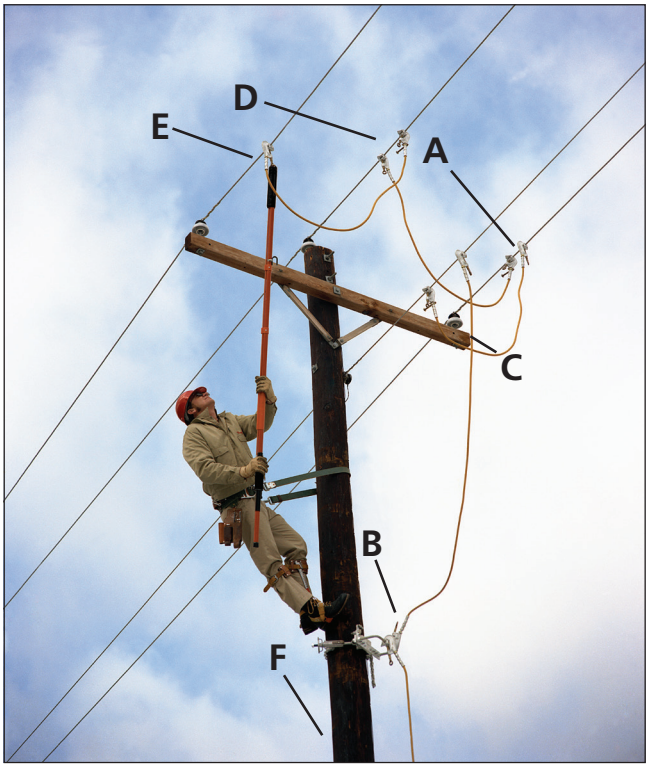
Fault current ratings: 21,000 amps for 15 cycles
or 15,000 amps for 30 cycles

Each set Includes:

- A four-way bronze terminal block
- One 6' and three 4' lengths of 1/0 copper clear-jacket ground cable with shrouded plain-plug copper ferrules
- Three aluminum ground clamps with bronze eyescrews (G33633SJ)
- One with bronze T-handle (G33634SJ)

For storage bag T6000865, see page 3023.

CHANCE®



CHANCE grounding clamps, ferrules and cable meet ASTM F 855.
(Standard cable jacket is clear. Yellow-jacket cable, shown, is available upon request.)

C6002276

Main Line Range

Maximum	1033 kcmil ACSR (1.25")
Minimum	#8 Solid Copper (0.128")

G3626

G3370

T6001549

Overhead Distribution Grounding Sets with Pressure-Type Terminals

Features & Applications

- These complete sets of ground clamps, cable and accessories
- All equipment needed for many types of distribution structures in easy-to-use kits Ferrules are factory crimped to the grounding cable
- Each kit comes with C6002276 clamps
- Can be used on conductors ranging from #8 to 1033 kcmil ACSR

These kits were designed for use on the following types of structures:

7.2/12.5 kV.....A1 through C24
14.4/24.9 kV.....VA1 through VC9-3
46 kV.....TP1 through TP5
69 kV.....TS1 through TS3-2

The tables below list the components **completely assembled** in each of the Distribution Grounding Sets.

#2 Grounding Cable Set* (44 lb./20 kg.)
Catalog No. T6000641 consists of:

Item	Description	Quantity	Information
A	Serrated jaw, "C" Clamp Cat. No. C6002276	10	For Plain Plug ferrules
B	Ground Cluster Support	1	Cat. No. T6001549
C	#2 Clear-Jacket Copper Ground Cable - Cat. No. S6449 (Other cable jackets available)	60 ft.	3 Cables 6 ft. long 1 Cable 12 ft. long 1 Cable 30 ft. long
D	#2 Plain Plug Ferrules	10	Cat. No. C6002626
E	Clamp Support Stud	3	Cat. No. G3626
F	Screw Ground Rod	1	Cat. No. G3370

1/0 Grounding Cable Set* (58 lb./26 kg.)
Catalog No. T6003094 consists of:

Item	Description	Quantity	Information
A	Serrated jaw, "C" Clamp Cat. No. C6002276	10	For Plain Plug ferrules
B	Ground Cluster Support	1	Cat. No. T6001549
C	1/0 Clear-Jacket Copper Ground Cable - Cat. No. S7568 (Other cable jackets available)	60 ft.	3 Cables 6 ft. long 1 Cable 12 ft. long 1 Cable 30 ft. long
D	1/0 Plain Plug Ferrules	10	Cat. No. C6002627
E	Clamp Support Stud	3	Cat. No. G3626
F	Screw Ground Rod	1	Cat. No. G3370

2/0 Grounding Cable Set* (60 lb./27 kg.)
Catalog No. T6003095 consists of:

Item	Description	Quantity	Information
A	Serrated jaw, "C" Clamp Cat. No. C6002276	10	For Plain Plug ferrules
B	Ground Cluster Support	1	Cat. No. T6001549
C	2/0 Clear-Jacket Copper Ground Cable - Cat. No. S6450 (Other cable jackets available)	60 ft.	3 Cables 6 ft. long 1 Cable 12 ft. long 1 Cable 30 ft. long
D	2/0 Plain Plug Ferrules	10	Cat. No. C6002628
E	Clamp Support Stud	3	Cat. No. G3626
F	Screw Ground Rod	1	Cat. No. G3370

4/0 Grounding Cable Set* (77 lb./35 kg.)
Catalog No. T6003096 consists of:

Item	Description	Quantity	Information
A	Serrated jaw, "C" Clamp Cat. No. C6002276	10	For Plain Plug ferrules
B	Ground Cluster Support	1	Cat. No. T6001549
C	4/0 Clear-Jacket Copper Ground Cable - Cat. No. S6451 (Other cable jackets available)	60 ft.	3 Cables 6 ft. long 1 Cable 12 ft. long 1 Cable 30 ft. long
D	4/0 Plain Plug Ferrules	10	Cat. No. C6002629
E	Clamp Support Stud	3	Cat. No. G3626
F	Screw Ground Rod	1	Cat. No. G3370

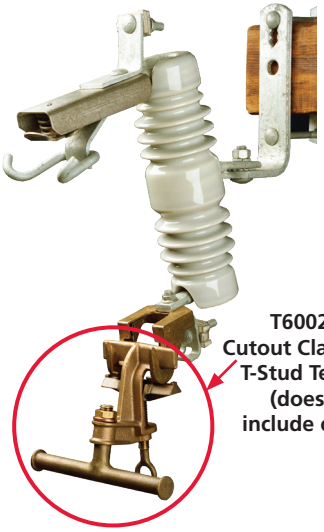
For storage bag T6000865, see page 3023.

Cutout Grounding Clamps

Features & Applications

- Bronze clamp used to ground bottom hinge contact on cutouts used on distribution riser poles or where grounding is required
- Fits these cutouts:
  - o CHANCE F2, F3, and C Cutouts
  - o Westinghouse LDX, Southern States B-80
  - o Southern States Series 63
  - o Joslyn; S&C Type SX
  - o McGraw-Edison LMO, and GE Durabute
- Clamp can be installed with or without grounding cable
- Serves as a warning and helps avoid accidental closing of cutout
- Clamp's drilled terminal accepts threaded-stud cable ferrules
- Also accepts threaded L-Stud and T-Stud Terminals (3/4" diameter bronze) for use with conventional ground-clamp cable sets
- Fault Current rating: 20,000 amps for 30 cycles

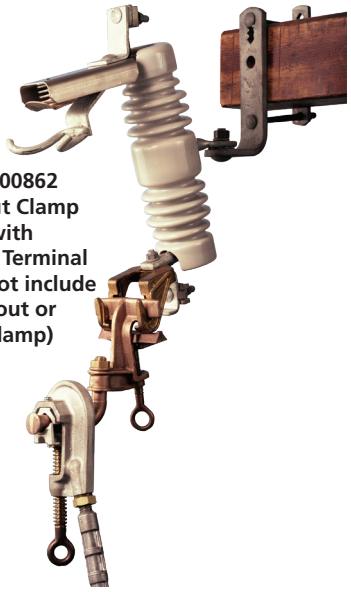
Catalog No.	Description	Weight, each
C6000785	Cutout Clamp	2.2 lb. / 1 kg.
T6002408	T-Stud Terminal	1.4 lb. / 0.6 kg.
C6000841	L-Stud Terminal	1 lb. / 0.5 kg.
T6002567	Cutout Clamp with T-Stud Terminal	3.4 lb. / 1.5 kg.
C6000862	Cutout Clamp with L-Stud Terminal	3.8 lb. / 1.7 kg.



T6002567
Cutout Clamp with T-Stud Terminal (does not include cutout)

C6000785
(does not include cutout)

T6002408
T-Stud Terminal



C6000862
Cutout Clamp with L-Stud Terminal (does not include cutout or C-clamp)

Switch Blade Grounding Clamps

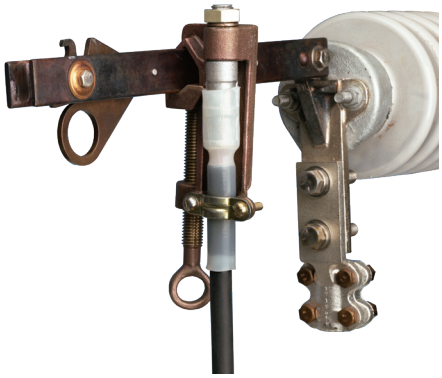
Features & Applications

- Attaches temporary ground to open switch during de-energized maintenance
- Helps keep ground lead away from energized switch jaw
- Shaped to fit blades of CHANCE Type M3 Disconnect switches
- Drilled terminal accepts threaded-stud ferrules on grounding cable from #2 through 4/0
- Also accepts threaded L-Stud Terminal (3/4" diameter bronze) for use with conventional ground-clamp cable sets

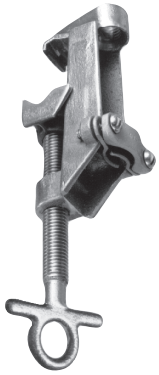
ASTM Designation: Type I, Class A, Grade 5
Fault Current ratings: 30,000 amps for 30 cycles
43,000 amps for 15 cycles
with L-Stud Terminal: 20,000 amps for 30 cycles
Recommended torque: 250 inch pounds
Main Line Range: 3/4" x 1/8" flat through 2 1/2" x 1/4" flat

Catalog No.	Description	Weight, each
C6002145	Plain eyescrew Switch Clamp	3 1/2 lb. / 1.6 kg.
C6002146	T-handle/eyescrew Clamp	3 1/2 lb. / 1.6 kg.
C6000841	L-Stud Terminal only	1 lb. / 0.5 kg.

C6000841
L-Stud Terminal



C6002145
Plain Eyescrew



C6002146
T-handle/eyescrew

CHANCE® Substation Grounding Sets

with Pressure-Type Terminals

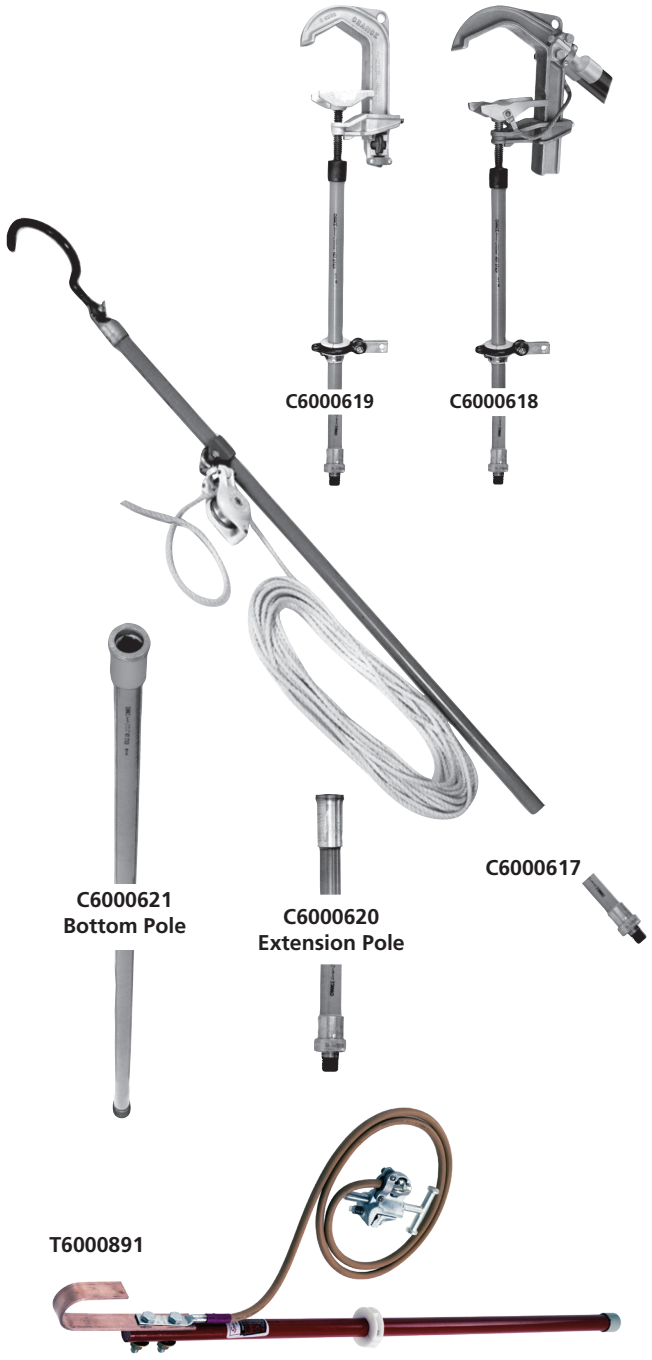
Features & Applications

- For grounding substation bus when de-energized for maintenance
- Makes workmen's job safer and easier
- Large capacity bus clamps are available in mounted versions
- Reaches any manageable height
- Increases worker's lifting capabilities
- Plastisol coated, Shepherd Hook Lift Stick, with block and rope assembly
- Reduces capacity clamps on overhead bus
- Two sizes of mounted clamps are available:
  - o C6000618 has 6-5⁄8" bus capacity, utilizing a C6000337 ground clamp mounted on 1-1⁄4" x 9 ft. Epoxiglas® Pole
  - o C6000619 has 4" bus capacity, utilizing a G3369 ground clamp mounted on 1-1⁄4" x 8'10" Epoxiglas® Pole
- Cables, ferrules and small grounding clamps should be ordered separately

Accessories

C6000617 — Lift Hook Assembly, 1¼" x 8'8" Epoxiglas® pole, includes block and rope assembly.
C6000620 — 1¼" x 12' Extension Pole (middle section).
C6000621 — 1¼" x 8' Bottom Pole.

Catalog Number	C6000618	C6000619
ELECTRICAL RATINGS		
Continuous Current (AMPS)	400	400
Fault Current - 15 Cycles (AMPS)	43,000	43,000
Fault Current - 30 Cycles (AMPS)	30,000	30,000
MECHANICAL RATINGS		
Recommended Torque (in.-lb.)	250	250
Main Line Range - Max.	6⅝" Angles	4½" Angles
Main Line Range - Min.	4½" Round Bus	1/0 Str. Copper (0.368")
Jumper Range - Max.	4/0 Grd. Cable w/Plain Plug	4/0 Grd. Cable w/Plain Plug
Jumper Range - Min.	#2 Grd. Cable w/Plain Plug	#2 Grd. Cable w/Plain Plug
Weight Each	10 lb./4.5 kg.	9¼ lb./4.2 kg.
ASTM Designation	Type II Class A Grade 5	Type II Class A Grade 5



Electro-Static Precipitator Grounding Tool Set

Simple Safety Procedures

- Drains off static charges that remain on collector plates after electrostatic-precipitator pollution-control equipment is de-energized
- When electrical system of precipitator is de-energized:
  - o First, secure the tool's grounding clamp to a known ground
  - o Next, use insulated handle to bring the Copper hook in contact with the precipitator collector plates
  - o Contact hook hangs from collector plates (with the grounding clamp still attached to ground) while service is performed on precipitator
  - o When maintenance is completed, use insulated handle to remove contact hook from collector plates
  - o Finally, remove the ground clamp before re-energizing the precipitator

- Epoxiglas® handle (42" x 1-1⁄4") meets OSHA electrical requirements
- Gives operator sufficient added reach needed to make contacts
- Contact hook of 98%-conductive Copper is double-bolted to handle
- T-handle aluminum grounding clamp with serrated flat-face jaw ensures proper bonding
- Jaws open to 1-1⁄2" for attachment to grounded structural angles, flats or rods
- Extra-flexible (1638 strands) Copper grounding cable, 7 ft., with clear jacket fitted with copper terminal at each end gives high current-carrying capability

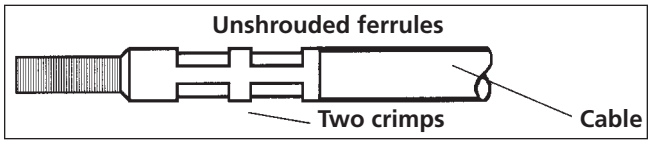
Catalog No.	Description	Weight, each
T6000891	Electrostatic Grounding Set	7 lb. / 3.2 kg.

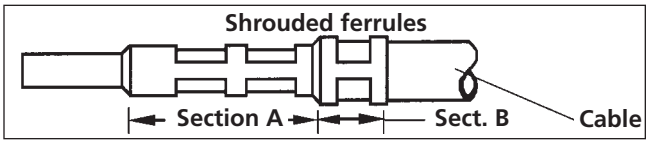
Grounding Ferrules

Selection Criteria

- Shrouded ferrules overlap onto the grounding cable jacket for stress relief to the terminal. Two crimps secure the ferrule against the bare strands and one crimp applies on the jacket
- Unshrouded ferrules are available with shrink tubing that overlaps the bare cable conductor and jacket for stress relief
- Available either factory-installed in pairs on any cable length specified or as separate individual units, the ferrules install simply with a hydraulic crimping tool.

See ordering tables for crimping-die sizes applicable.





Copper ferrules

Plain-plug type for pressure-type grounding-clamp terminals

Shrouded plain copper ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent		Cable Size, AWG
	Sect. A	Sect. B	
C6002630	U165	U166	#2
C6002631	U165	U168	"1/0"
C6002632	U165	U-L	"2/0"
C6002633	U166	U-L	"4/0"

Unshrouded plain copper ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent	Cable Size, AWG
C6002614	U165	#2
C6002615	U165	"1/0"
C6002616	U165	"2/0"
C6002617	U166	"4/0"

Threaded-stud type for tapped or drilled grounding-clamp terminals

Shrouded threaded copper ferrules

C6002622	U165	U166	#2
C6002623	U165	U168	"1/0"
C6002624	U165	U-L	"2/0"
C6002625	U166	U-L	"4/0"

Unshrouded threaded copper ferrules

C6002606	U165	#2
C6002607	U165	"1/0"
C6002608	U165	"2/0"
C6002609	U166	"4/0"

Tin-Plated Copper ferrules

Plain-plug type for pressure-type grounding-clamp terminals

Shrouded plain tin-plated copper ferrules

C6003119	U165	U166	#2
C6003120	U165	U168	"1/0"
C6003121	U165	U-L	"2/0"
C6003122	U166	U-L	"4/0"

Unshrouded plain tin-plated copper ferrules

C6003111	U165	#2
C6003112	U165	"1/0"
C6003113	U165	"2/0"
C6003114	U166	"4/0"

Threaded-stud type for tapped or drilled grounding-clamp terminals

Shrouded threaded tin-plated copper ferrules

C6003115	U165	U166	#2
C6003116	U165	U168	"1/0"
C6003117	U165	U-L	"2/0"
C6003118	U166	U-L	"4/0"

Unshrouded threaded tin-plated copper ferrules

C6003107	U165	#2
C6003108	U165	"1/0"
C6003109	U165	"2/0"
C6003110	U166	"4/0"

†Anderson die-less VERSA-CRIMP™ compression tools require no dies and are capable of making these crimped connections. If using another crimp tool brand, contact that manufacturer for Burndy die equivalents.

Copper Grounding Cable

- Extra-flexible for handling ease yet strong and tough for long wear
- Jacketing is smooth, abrasion, weather and oil resistant
- In accordance with applicable ASTM Specifications, marked with AWG size approximately every 4 feet
- Yellow and black jackets are T-prene rubber compound with -20°F recommended low temperature
- Clear jackets (which allow visual inspection of strand conditions) are ultraviolet-inhibited Poly Vinyl Chloride (PVC)
- Recommended low temperature for PVC-jacketed cable is 0°F
- Extra-flexible cables, because of their extra-fine strands
- Require termination ferrules when used with ground clamps

Either aluminum or copper ferrules may be used with copper cable.

Catalog Number	Size AWG	Strands*	Diameter (Inches)	Approx. O.D. (Inches)	Approx. Wt. (lb./1,000 ft.)
Yellow-Jacket Copper Cable					
S6116	#2	665	0.32	0.55	280
S6117	"1/0"	1045	0.41	0.66	425
S6118	"2/0"	1330	0.47	0.73	520
S6119	"4/0"	2109	0.59	0.87	760
Clear-Jacket Copper Cable					
S6449	#2	665	0.344	0.53	289
S7568	"1/0"	1050	0.445	0.63	520
S6450	"2/0"	1323	0.487	0.70	546
S6451	"4/0"	2107	0.616	0.84	841
Black-Jacket Copper Cable					
S3713	#2	665	0.32	0.55	280
S3715	"1/0"	1045	0.41	0.66	425
S3712	"2/0"	1330	0.47	0.73	510
S3714	"4/0"	2109	0.59	0.87	760

**Varies with manufacturer.*

Aluminum ferrules

Plain-plug type for pressure-type grounding-clamp terminals

Shrouded plain aluminum ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent		Cable Size, AWG
	Sect. A	Sect. B	
C6002626	U165	U166	#2
C6002627	U165	U168	1/0
C6002628	U165	U-L	2/0
C6002629	U249	U-L	4/0

- Visual inspection of cable condition through clear heat-shrink tube determines breakage or corrosion that otherwise requires continuity test
- Factory-assembled units expose 1⁄2" of cable strands at junction point

Unshrouded plain aluminum ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent	Cable Size, AWG
C6002610	U165	#2
C6002611	U165	1/0
C6002612	U165	2/0
C6002613	U249	4/0

Shrink tubing for plain ferrules Features & Applications

- Clear heat-shrink tubes limit corrosion
- Excludes moisture
- Stress-relief for cable jacket and ferrule-to-stranding connection

Part No.	Lengths
P6001593P	5"
P6001982P	7"
P6002069P	9"

†Anderson die-less VERSA-CRIMP® compression tools require no dies and are capable of making these crimped connections. If using another crimp tool brand, contact that manufacturer for Burndy die equivalents.

Threaded-stud type for tapped or drilled grounding-clamp terminals

Shrouded threaded aluminum ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent		Cable Size, AWG
	Sect. A	Sect. B	
C6002618	U165	U166	#2
C6002619	U165	U168	1/0
C6002620	U165	U-L	2/0
C6002621	U249	U-L	4/0

Unshrouded threaded aluminum ferrules

1 unit each, not installed Catalog No.	Burndy Die No.† or equivalent	Cable Size, AWG
C6002602	U165	#2
C6002603	U165	1/0
C6002604	U165	2/0
C6002605	U249	4/0

Shrink tubing for threaded ferrules Features & Applications

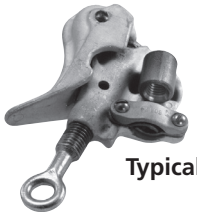
- Clear heat-shrink tubes limit corrosion
- Excludes moisture
- Stress-relief for cable jacket and ferrule-to-stranding connection

Part No.	Lengths
P6001593P	5"
P6001982P	7"
P6002069P	9"

†Anderson die-less VERSA-CRIMP® compression tools require no dies and are capable of making these crimped connections. If using another crimp tool brand, contact that manufacturer for Burndy die equivalents.

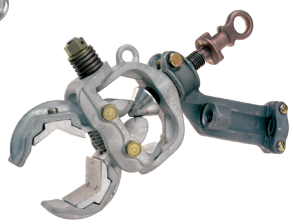
Conversion Terminals

C6001584



Typical Application

C6001700



Typical Application

Features & Applications

- Threaded-terminal adapters for pressure-type grounding-clamp terminals
- Simply retrofit bolt-on adapters to convert clamps with pressure-type terminals to accept 5⁄8-11 UNC threaded ferrules

Catalog Number	Clamp Applications
C6001584 "eyebolt" style, includes shakeproof washer and nut	C Type, Snap-On, Flat-Face
C6001700 includes steel retainer straps for cable	All-Angle Clamps

Storage Bag for Temporary Grounding Clamps-and-Cable Sets

Features & Applications

- Easy-to-see, bright-yellow protective bag
- Made of double vinyl-laminated open-weave nylon cloth
- Lightweight and durable with nylon stitching throughout
- Full-separating closure constructed with heavy-duty snaps
- Heavy webbing handles
- 18" L x 12" W x 15" D

Catalog No.	Description	Weight
T6000865	Grounding Storage Bag	3 lb. / 1.4 kg.

G3626

G3627

Support Studs

Features & Applications

- Can be installed on most Ground Clamps
- Replaces restraining strap immediately below terminal
- Serves as a mechanical parking stand for a second clamp
- Helps prevent "parked" clamp from making contact with conductor or ground
- Particularly beneficial in three-phase grounding applications
- Not tested and rated for fault current

Catalog No.	Description	Size of Stud	Weight
G3626	Stud for Rear Mount	7⁄16" x 2½"	½ lb. / .2 kg.
G3627	Stud for Side Mount	7⁄16" x 3"	¾ lb. / .3 kg.

Dielectric Compound No. 7

Dielectric Compound No. 7, a silicone base material, is made for use with load break disconnects and other electrical connecting and terminating devices.

Cat. No. C4170287..... 2 oz. Tube

CHANCE®

Cable Splice

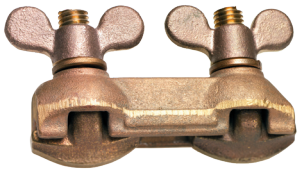
for cables with plain-plug ferrules

Features & Applications

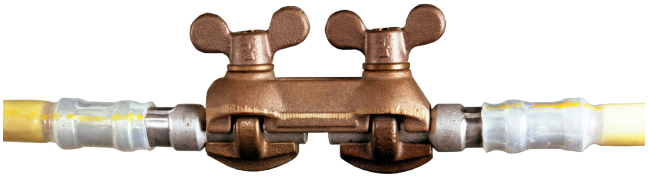
- Use for splicing grounding cable when extensions are required
- Thumb screw makes attachment easy

Splice fits #2 through 4/0 grounding cable with plain ferrules

Catalog No.	Description	Weight
T6000252	Grounding Cable Splice	1½ lb. / 0.7 kg.



T6000252



Terminal Blocks, 4-Way

for cables with plain-plug ferrules and threaded ferrules

Features & Applications

- Attach ground leads from grounding clamps to a common ground
- Accommodates 4/0 grounding cables

Catalog No.	Description	Weight
G47541	4-Way Terminal Blocks for Plain Plug Ferrules	2 lb. / 0.9 kg.
T6001964	4-Way Terminal Blocks for Threaded Ferrules ASTM Grade 5H	1 lb. / 0.5 kg.

G47541
for four plain plug ferrules

T6001964
for four ⅝-11 UNC threaded ferrules

Cluster Bars

Catalog No.	Description	Weight	ASTM Grade
C6000152	Cluster Bar, 11", w/ Pressure Terminal, 36" Chain	11.2 lb. / 5.1 kg.	5
C6000152A	Penetrating Cluster Bar, 11", w/ Pressure Terminal, 36" Chain, Pole-Penetrating Screw	11.5 lb. / 5.2 kg.	
C6000152AR	Penetrating Cluster Bar, 11", w/ Pressure Terminal, Retrofit Kit	0.3 lb. / 0.1 kg.	
PSC6003628	5H Rated Cluster Bar, 5/8" dia. x 11", 36" Chain	10.7 lb. / 4.9 kg.	5H
PSC6003628A	5H Rated Penetrating Cluster Bar, 5/8" dia. x 11", 36" Chain, Pole-Penetrating Screw	11 lb. / 5 kg.	
PST6003466	6H Rated Cluster Bar, 1" dia. x 11", 36" Chain	13.9 lb. / 6.3 kg.	6H
PST6003466A	6H Rated Penetrating Cluster Bar, 1" dia. x 11", 36" Chain, Pole-Penetrating Screw	14.2 lb. / 6.4 kg.	
T6001549	Cluster Bar w/ 5/8" dia. x 6" Bar, 36" Chain	7.2 lb. / 3.3 kg.	5
T6001549A	Penetrating Cluster Bar, 5/8" dia x 6" Bar, 36" Chain	8 lb. / 3.6 kg.	
T6001549AR	Penetrating Cluster Bar, 5/8" dia. x 6", Retrofit Kit	0.8 lb. / 0.4 kg.	
T6001737	Tower-Mount Cluster Bar	9 lb. / 4.1 kg.	

Note: Custom chain lengths available upon request

PSC6003628

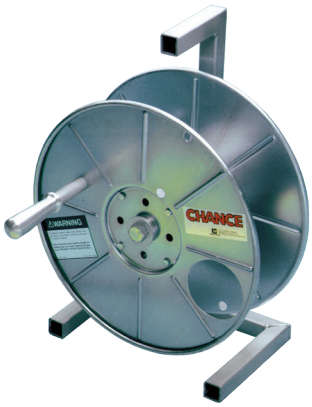
Penetrating Retro Kit (C6000152AR) is circled and is included with PSC6003628A

T6001549

Penetrating Retro Kit (T6001549AR) is circled and is included with T6001549A

T6001737

Storage Reel for Grounding Cable



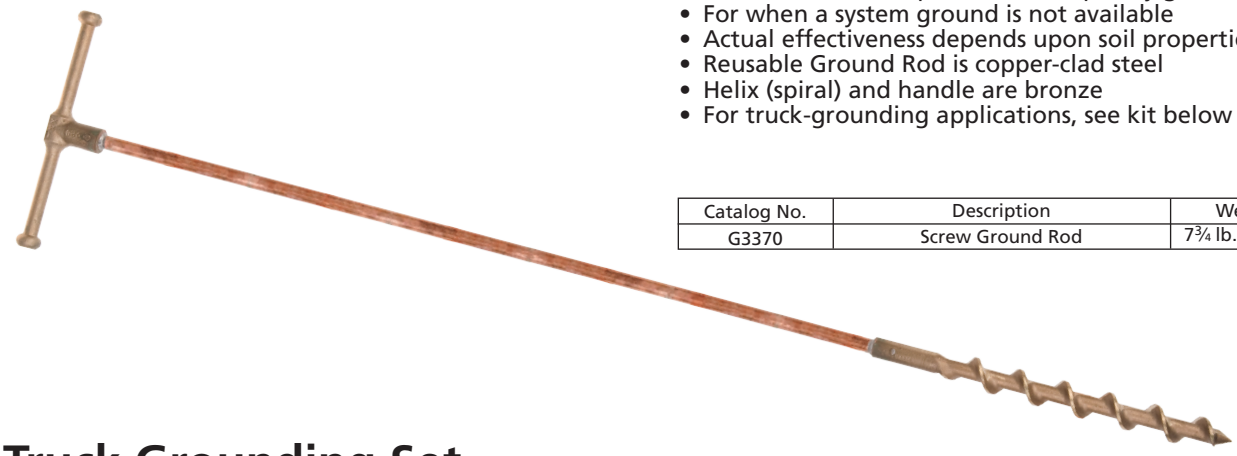
Cable Size	Reel Capacity
#2	225 ft.
1/0	185 ft.
2/0	145 ft.
4/0	100 ft.

Catalog No.	Description	Weight
C4176086	Portable Cable Reel	18 lb. / 8 kg.

Features & Applications

- Hole in outer flange for cable to feed through
- Rewind handle has galvanized-pipe extension for temporarily parking clamps
- Portable reel quickly pays-out/takes-up,
- Helps keep ground sets clean and neat, ready for use
- Handles are comfortable, turned aluminum
- Lightweight unit can be carried to remote sites
- Tubular-steel frame can be U-bolted to deck of truck
- Galvanized drum has ribbed flanges to resist flexing and beaded rims to eliminate sharp edges
- Reel is for storage only
- Cable and clamps should be removed completely from reel before use
- Failure to do so could result in a dangerous voltage drop and violent mechanical reactions
- A label on the unit gives this warning

Temporary Ground Rod

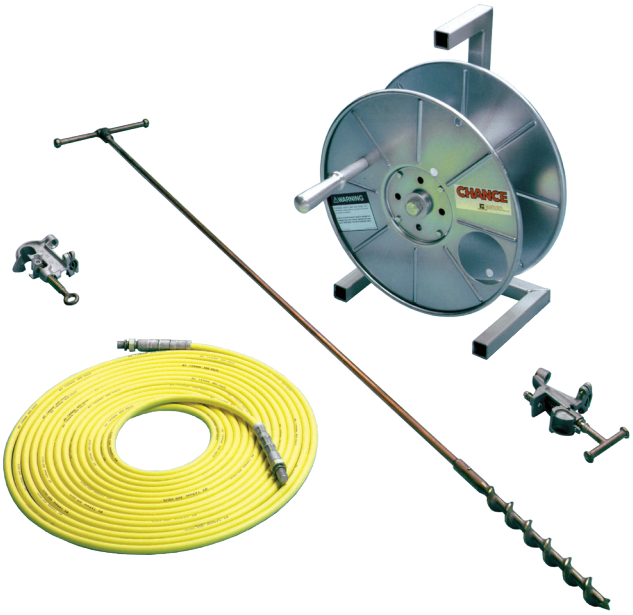


Features & Applications

- Screw Ground Rod provides a temporary ground
- For when a system ground is not available
- Actual effectiveness depends upon soil properties
- Reusable Ground Rod is copper-clad steel
- Helix (spiral) and handle are bronze
- For truck-grounding applications, see kit below

Catalog No.	Description	Weight
G3370	Screw Ground Rod	7¾ lb. / 3.5 kg.

Truck Grounding Set



Features & Applications

- Provides means to drain off capacitance or static charges
- For winch trucks and aerial devices
- Flat -face clamp is for secure attachment to the truck bed at an area cleaned for electrical contact
- C-type clamp is for secure attachment to ground rod
- This grounding method should not be considered adequate protection to personnel against conductor contact
- For truck-grounding with ball/socket-clamp, see page 3103

Truck Grounding Set
Catalog No. T6001971
(total weight 35 lb./16 kg.)
consists of:

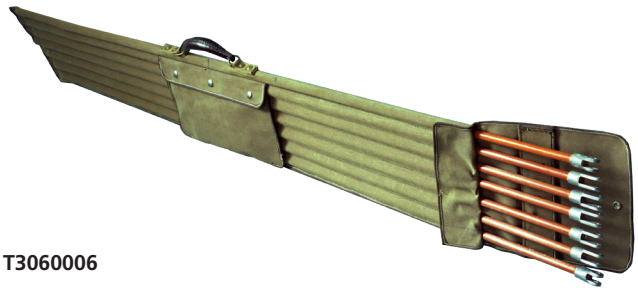
Component	Qty.	Description
Screw Ground Rod	1	Cat. No. G3370, see above
Flat Face Ground Clamp	1	Cat. No. T6001798, see page 3011
C-Type Ground Clamp	1	Cat. No. C6001754, see page 3005
#2 Copper Grounding Cable	50 ft.	Cat. No. S6116, see page 3021
*Shrouded Alum. Ferrules	2	Cat. No. C6002618, see page 3022
Storage Reel	1	Cat. No. C4176086, see above

*Threaded ferrules are factory-installed on ends of cable.

CHANCE®

Truck Safety Barricade

Catalog No.	Description	Weight
T3060006	Truck Safety Barricade	21 lb. / 9.5 kg.



T3060006

Features & Applications

- Keeps workers and onlookers away from truck when it is being used in proximity to energized conductors
- Six rods, made of bright orange Epoxirod®, provide a 6-foot air space around the entire perimeter of the truck
- Safety barricade also includes six pieces of 3-inch long steel tubing (to be welded to truck by the customer)
- Tubing holds barricade rods, 150 feet of yellow rope and a canvas storage bag
- Entire kit requires less storage than traffic cones and can be quickly installed and removed at each job site

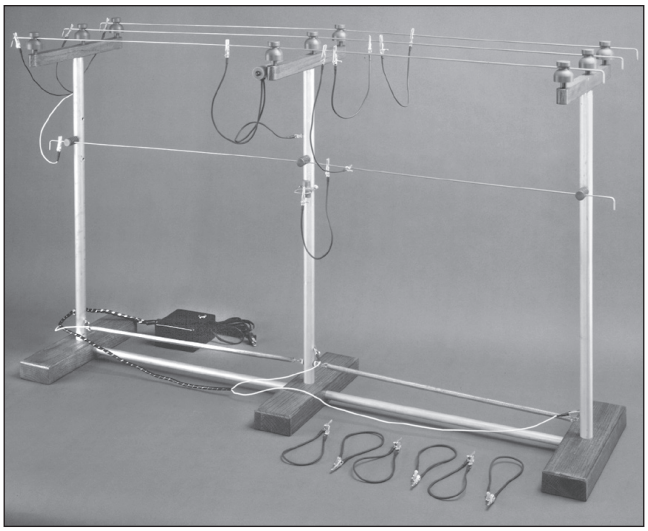
Grounding Simulator Kit

Features & Applications

- Demonstrates principles for temporary grounding practices
- Portable instructional aid provides working model of three-phase system circuit
- Powered by a step-down transformer
- Plugs into a 110-volt 60-cycle household source
- Special light/buzzer unit simulates lineworker in maintenance on de-energized line
- Insulated wires with alligator clip at each end serve as grounding cable and clamp sets (10 included)
- Miniature grounding cluster bar is included for pole mounting

Durable & Accurate

- Durable, aluminum pipe poles
- Wood crossarms
- Electrically correct, aluminum poles effect the conductivity which should be assumed for actual poles
- Leads from the poles and neutral connect to ground side on source (transformer)



Modular design quickly sets up and takes down for storage in rugged transport case.

Operation

- To quickly test any proposed configuration, depress transformer foot switch to energize a fault on the system
- If the light glows and the buzzer sounds on the "worker," this indicates the grounding system in place fails to provide protection
- If no such signals occur, the scheme of grounding connections does create a protective zone of equalized potential at the worksite

Ordering Information

Catalog No.	Description	Weight
C6001950	Grounding Simulator Kit Dimensions: 33"H x 55" W x 15"D	23 lb. / 10.4 kg.

Standard (Orange) Equi-Mat® Personal Protective Ground Grid

Features & Applications

- Complies with OSHA 1910.269 for equipotential requirements near vehicles, underground gear, overhead switches and in substations
- Meets ASTM F2715 Standard

Portable, lightweight, high performance

- An easy way to help establish an equipotential zone for a lineworker
- For standing on during various energized and de-energized work practices
- Properly applied, it accomplishes compliance with Occupational Safety and Health Administration (OSHA) 1910.269:
  - o "Equipotential zone. Temporary protective grounds shall be placed at such locations and arranged in such a manner that the employer can demonstrate will prevent each employee from being exposed to hazardous differences in electric potential."
- Can be taken anywhere needed, is simple to use, maintain and store
- Consists of a high-ampacity tinned-copper-braid cable sewn in a grid pattern onto a vinyl/polyester fabric
- Cable terminals permit connecting mat's grid in series with an electrical ground and subject system component or vehicle
- Simply rinsing with water comprises all the care the mat requires
- Mat may be folded and stored in a tool bag to help keep it clean and protected
- Complete instructions are included with each unit

. . . continued on the next page . . .

Basic Equi-Mat® Personal Protective Ground Grid
Each Basic Unit includes a Long Ball Stud and illustrated instructions.

Catalog No.	Size	Weight
Single 1/4" Perimeter Braid		
PSC6003080* (Bucket)	24" x 24"	5 lb. / 2.3 kg.
C6002850	58" x 58"	8 lb. / 3.6 kg.
C6002851	58" x 120"	13 lb. / 5.9 kg.
C6002852	120" x 120"	20 lb. / 9.1 kg.

*For use in bottom of personnel bucket of lift truck.

Pre-Packaged Kits

Each Pre-Packaged Kit includes Ground Grid (size below with Long Ball Stud and illustrated instructions) plus Ground Set T6002841 and Storage Bag C4170147.

Kit Catalog No.	Equi-Mat® Personal Protective Ground Grid Size	Weight per Kit
C6002989	58" x 58"	19 lb. / 8.6 kg.
C6002990	58" x 120"	27 lb. / 12.2 kg.
C6002991	120" x 120"	30 lb. / 13.6 kg.

Accessory Items

Long Ball Stud T6002364
included with each Basic Equi-Mat® Personal Protective Ground Grid (Catalog page 3014)

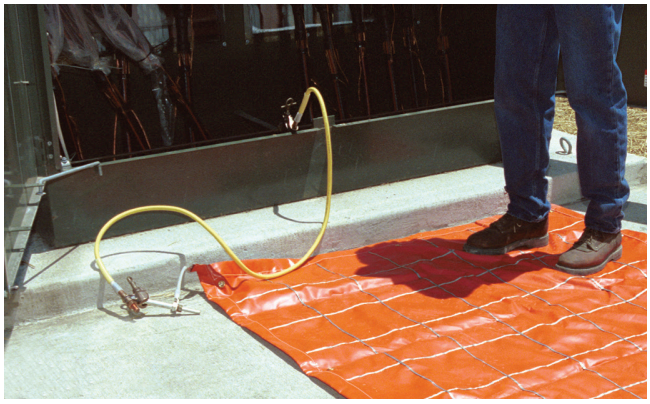
Ground Set T6002841 included with Kits only
Consists of 6 ft. long #2 cable with ferrules applied,
Ball Socket clamp (C6002100)
and C-Type clamp (T6000465)

Storage Bag C4170147
included with Kits only
Catalog pages 2512-13

CHANCE®

Standard (Orange) EQUI-MAT®
Personal Protective Ground Grid

Features & Applications
- Complies with OSHA 1910.269
- For equipotential requirements near vehicles, underground gear, overhead switches and in substations



Applications
Padmounted Transformers and Switches
- Complies with OSHA 1910.269
- Protects workers operating and maintaining padmounted transformers and switchgear
- Proper use of EQUI-MAT Personal Protective Ground Grid in these applications creates an equipotential zone
- This is the same as a cluster bar (chain binder) does in overhead grounding practices

Bottom of Personnel Bucket on Lift Truck
- Use only 24" x 24" Catalog No. PSC6003080

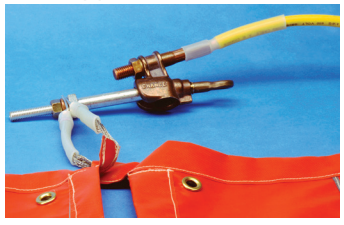
Mechanical Equipment (Vehicles, etc.) Grounding
- Provides compliance with OSHA 1910.269
- Protects workers around mechanical equipment which could become energized, such as utility vehicles and portable generators
- For proper application, EQUI-MAT Personal Protective Ground Grids are attached to the vehicle (for example) at locations where workers could contact the vehicle
- This extends the equipotential area around the vehicle

Overhead Distribution and Transmission Switches
- EQUI-MAT Personal Protective Ground Grid can help eliminate step and touch potential
- Connect it to the handle of an overhead switch and stand on it when opening or closing the switch

Line Apparatus Work
- Similar uses for installing, maintaining or operating regulators, reclosers, capacitor banks

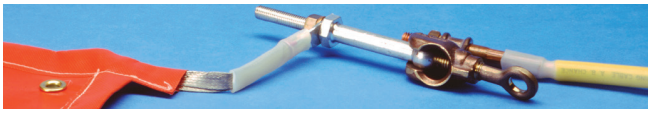
Suspect Substation Grids
- If station ground mat integrity is questionable, apply the EQUI-MAT Personal Protective Ground Grid

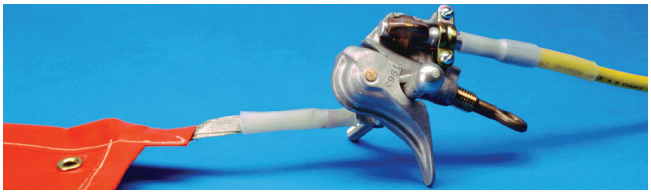
Simple to join multiples for larger areas
- Cascading (or joining together) two or more mats is easy
- Connecting tab and hardware furnished with each mat
- Connected in series, the conductive grids become one
- For larger area, place lug connector tabs of two adjacent mats on the supplied bolt or threaded shank of a ball stud and secure with supplied washer and nut

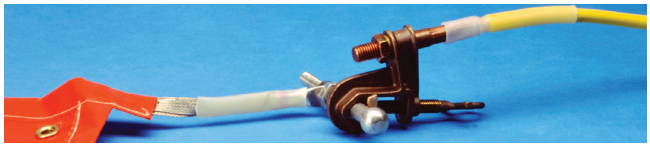


(Left) To join mats, conductive grids simply connect at tabs with bolt, washer and nut included with each mat. Tabs have shrink tube for stress relief. (Right) Ball stud can join mats and connect to ground set clamps.

Long ball stud accepts various grounding clamps as shown below and at right: Ball/Socket, C Type and Duckbill.







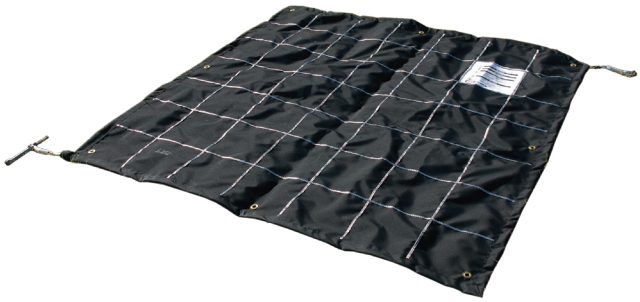
Slip-Resistant (Black) EQUI-MAT® Personal Protective Ground Grid

Features & Applications

- Complies with OSHA 1910.269 for equipotential requirements near vehicles, underground gear, overhead switches and in substations
- Meets ASTM F2715 Standard

Portable, lightweight, high performance

- An easy way to help establish an equipotential zone for a lineworker
- For standing on during various energized and de-energized work practices
- Properly applied, it accomplishes compliance with Occupational Safety and Health Administration (OSHA) 1910.269:
  - o "Equipotential zone. Temporary protective grounds shall be placed at such locations and arranged in such a manner that the employer can demonstrate will prevent each employee from being exposed to hazardous differences in electric potential."
- Can be taken anywhere needed, is simple to use, maintain and store
- Consists of a high-ampacity tinned-copper-braid cable sewn in a grid pattern onto a vinyl/polyester fabric
- Cable terminals permit connecting mat's grid in series with an electrical ground and subject system component or vehicle
- Simply rinsing with water comprises all the care the mat requires
- Mat may be folded and stored in a tool bag to help keep it clean and protected
- Complete instructions are included with each unit



Slip-Resistant material

- For rain, snow and ice conditions
- Napped surface offers superior footing
- For dry conditions, consider the Standard (Orange) EQUI-MAT® Personal Protective Ground Grid, available in the same sizes and kits

. . . continued on the next page . . .

Slip-Resistant EQUI-MAT® Personal Protective Ground Grid Each Unit includes Ground Grid, Long Ball Stud and illustrated instructions

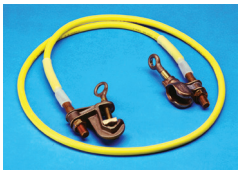
Catalog No.	Size	Weight
Single ¼" Perimeter Braid		
PSC6003345	58" x 58"	8 lb. / 3.6 kg.
PSC6003346	58" x 120"	13 lb. / 5.9 kg.
PSC6003347	120" x 120"	20 lb. / 9.1 kg.

Pre-Packaged *Slip-Resistant* EQUI-MAT® Kits Each Kit includes Ground Grid (size below with Long Ball Stud and illustrated instructions) plus Ground Set T6002841 and Storage Bag C4170147

Kit Catalog No.	EQUI-MAT® Personal Protective Ground Grid Size	Weight per Kit
PSC6003348	58" x 58"	19 lb. / 8.6 kg.
PSC6003349	58" x 120"	27 lb. / 12.2 kg.
PSC6003350	120" x 120"	30 lb. / 13.6 kg.

Accessories

Long Ball Stud T6002364 included with each Basic EQUI-MAT® Personal Protective Ground Grid (Catalog page 3014)



Ground Set T6002841 included with Kits only
Consists of 6 ft. long #2 cable with ferrules applied, Ball Socket clamp (C6002100) and C-Type clamp (T6000465)

Storage Bag C4170147 included with Kits only
Catalog pages 2512-13

CHANCE®

Slip-Resistant (Black) EQUI-MAT® Personal Protective Ground Grid

Features & Applications

- Complies with OSHA 1910.269 for equipotential requirements near vehicles, underground gear, overhead switches and in substations

Padmounted Transformers and Switches

- Complies with OSHA 1910.269
- Protects workers operating and maintaining pad-mounted transformers and switchgear
- Proper use of EQUI-MAT Personal Protective Ground Grid in these applications creates an equipotential zone
- This is the same as a cluster bar (chain binder) does in overhead grounding practices

Mechanical Equipment (Vehicles, etc.) Grounding

- Provides compliance with OSHA 1910.269
- Protects workers around mechanical equipment which could become energized, such as utility vehicles and portable generators
- For proper application, EQUI-MAT Personal Protective Ground Grids are attached to the vehicle (for example) at locations where workers could contact the vehicle
- This extends the equipotential area around the vehicle

Overhead Distribution and Transmission Switches

- EQUI-MAT Personal Protective Ground Grid can help eliminate step and touch potential
- Connect it to the handle of an overhead switch and stand on it when opening or closing the switch

Line Apparatus Work

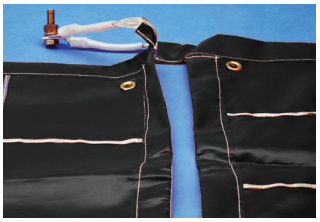
- Similar uses for installing, maintaining or operating regulators, reclosers, capacitor banks

Suspect Substation Grids

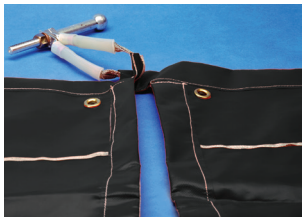
- If station ground mat integrity is questionable, apply the EQUI-MAT Personal Protective Ground Grid

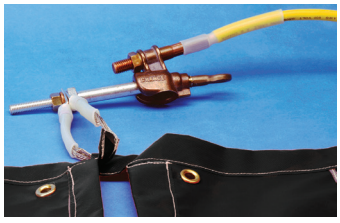
Simple to join multiples for larger areas

- Cascading (or joining together) two or more mats is easy
- Connecting tab and hardware furnished with each mat
- Connected in series, the conductive grids become one
- For larger area, place lug connector tabs of two adjacent mats on the supplied bolt or threaded shank of a ball stud and secure with supplied washer and nut

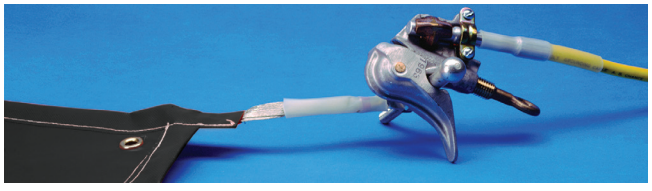


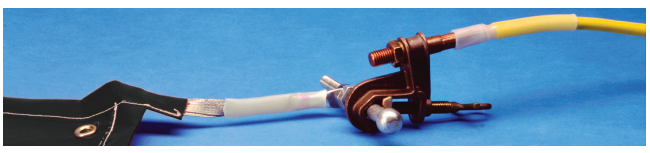
(Left) To join mats, conductive grids simply connect at tabs with bolt, washer and nut included with each mat. Tabs have shrink tube for stress relief. (Right) Ball stud can join mats and connect to ground set clamps.





Long ball stud accepts various grounding clamps as shown below and at right: Ball/Socket, C Type and Duckbill.





Rotating Ground Adapters for Reels

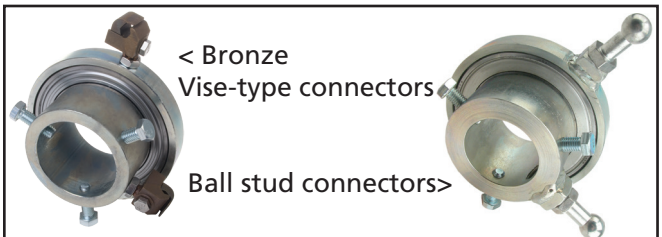
Tested and Meets ASTM F855 Standard

Applications

- Provide system protection while conductor is pulled from reels for stringing operations By design, the system adds conductor grounding but does not replace other grounding practices
- This includes items such as Equi-Mat® personal protective ground grids (CHANCE Catalog Section 3000)
- System serves as intended path to ground for static discharge and accidental energizing from downed lines, equipment contact, adjacent conductors and lightning

Installation

- Rotating Ground Adapter slides on reel mandrel and three locking bolts secure it
- Outer collar contact connects to the end of the conductor from inside the reel
- Adapter's inner collar contact connects to a permanent or screw-in ground rod (not included, see CHANCE Catalog Section 3000)



GR253X **GR43BS2**

Rotating Ground Adapters

PST6003438

Single Reel Grounding Set

Rotating Ground Adapters for Reels
Ordering Information

Catalog No.	ASTM Grade: Fault Rating	Pipe Dia. Maximum	Connector Type	Connector Range	Weight
Rotating Grounding Adapters					
GR253X	ASTM Grade 1: 14kA @ 15 cycles 10kA @30 cycles	3-3/16"	Bronze Vise Type	3 Sol. to 4/0 Str.	9.8 lb. / 4.4 kg.
GR43BS2	ASTM Grade 5: 43kA @15 cycles 30kA @30 cycles	2-11/16"	Two 1"-diameter Ball Studs	See Ball Stud Clamp in CHANCE Cat. Section 3000	12.8 lb. / 5.8 kg.
Single Reel Grounding Set			**Assembled Bill of Materials**		
PST6003438	Grade 3: 27kA @15 cycles 20kA @30 cycles (Ratings for this set are limited to those for the 2/0 grounding cable.)	2-11/16"	4 ea. C6001754 C-type ground clamps, 2 ea. T6002320 ball stud ground clamps, 1 ea. GR43BS2 rotating ground adapter, 6 ea. Ferrules (aluminum), 6 ea. Shrink tubes, 63 ft. S6118 yellow neoprene 2/0 cable (1 @ 50 ft., 1 @ 10 ft., 1 @ 3 ft.)		53.8 lb. / 24.4 kg.

HUBBELL®
Power Systems, Inc.
• 210 N. Allen St. • Centralia, MO 65240 • (573) 682-5521

NOTICE: For the latest revision of our Catalog and Literature, click here or visit our web site: *www.hubbellpowersystems.com*

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NEVER COMPROMISE™

CHANCE®

Truck Accessories

Catalog 4150 March 2020

HUBBELL®

Three-Phase Boom Lifts

- **Jib-mounted**
- **Winch-driven**
- **Constant-load monitor**
- **1,200-lb. rating**

Features & Applications

- Hot-line tool set enables a material-handler boom truck to lift single- or three-phase system conductors
- Operator remains in bucket, positioned to perform such routine jobs as replacing insulators, crossarms or poles
- Each complete unit includes:
  - o 10' Vertical orange Epoxiglas® mast (4" x 4")
  - o 10' Horizontal gray Epoxirod® support arm (2-1/2" dia.) with four Heavy-Duty Roller-type Wireholders for conventional crossarm construction
  - o 6' Horizontal gray Epoxirod support arm (2-1/2" dia.) with one additional Wireholder for center mast for armless construction
  - o Storage bags for all components above
- Wireholders latch easily from bucket with hookstick
- 12" Epoxirod link insulates each latch-release lanyard
- For crossarm construction: 10’ arm attaches at mast top
- Fourth wireholder furnished for crossarm-mounted neutral, not shown
- For armless construction: 6’ arm attaches at proper level on series of mounting holes on mast

Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 1200 lb.

Rated working load (per wire holder):

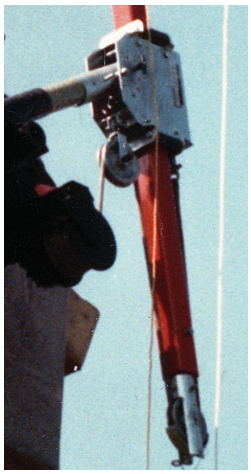
- Vertical: 300 lb.
- Side Load: 100 lb.

Electrical Ratings:

GLOSSY, CLEAN AND DRY Epoxiglas®
15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
34kV Phase to Phase (20 Inch Min. Wireholder Spacing and
M4805-7 Insulators are used on each wireholder)

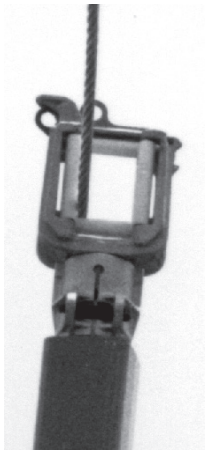
Wireholders latch easily from bucket with hookstick. 12" Epoxirod link insulates each latch-release lanyard.

For armless construction, shorter crossarm mounts midway with single wireholder at top of mast. Notice, too, that center wireholder may be used alone for single-phase lifts.

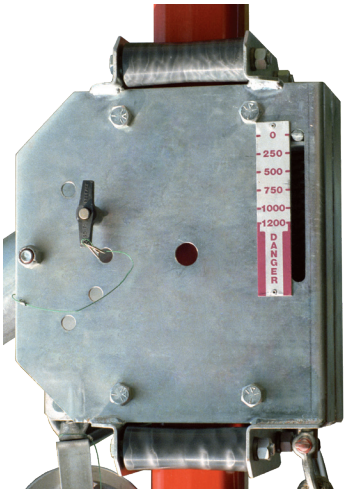


Winch line connects to mast base to raise conductors and provide working clearances for operator.

Boom adapter can pin at various angles. Built-in scale continuously monitors load uplift. Nylon rollers ensure smooth mast travel. Jib Sleeve, available separately and in custom sizes.



Center wireholder, used alone, permits single-phase lifts.



A scale on each side of monitor displays constant readout of load uplift for easy visibility from both buckets.

Sleeve for square jib fits other brands of material handler vehicles. Notice, too, that center wireholder may be used alone for single-phase lifts.

See the next page for Ordering Information.

CHANCE®

Three-Phase Boom Lifts

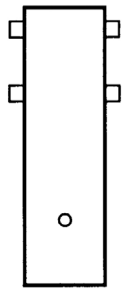
Complete Units

Features & Applications

- Each complete unit includes a jib sleeve in size listed in addition to:
  - o 10' Vertical orange Epoxiglas® mast (4" x 4")
  - o 10' Horizontal gray Epoxirod® support arm (2-1/2" dia.) with four Heavy-Duty Roller-type Wireholders for conventional crossarm construction
  - o 6' Horizontal gray Epoxirod support arm (2-1/2" dia.) with one additional Wireholder for center mast for armless construction
  - o Weight of each complete set: 225 lb. / 102 kg

Catalog No.	Truck Application	Sleeve Adapter
C4002719	No Jib Sleeves included. See below for correct size.	Jib sleeve separate
PST4004201	Altec: 4" x 4" square jib	PST4003111
C4001664	Altec: 4"- diameter round jib	E4001678
C4001709	Teco or Holan: 4" x 4" square jib	E4001689
PST4004433	Terex/Hi-Ranger: 4" x 4" square jib with 1" - diameter pin	PST4003111002

Jib Sleeves ONLY

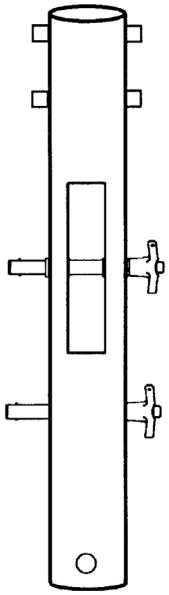


Altec®
PST4003111

Teco/Holan
E4001689

Terex/Hi-Ranger
PST4003111002

Posi-Plus
PST4004220



Altec®
E4001678

Jib Adapters – Material Handlers

Catalog No.	Jib Application	Weight
PST4003111	Altec: 4" x 4" square fits AM55	20 lb./9.09 kg
E4001678	Altec: 4"- diameter round	20 lb./9.09 kg.
E4001689	Teco or Holan: 4" x 4" square	20 lb./9.09 kg.
PST4003111002	Terex/Hi-Ranger: 4" x 4" square jib with 1" diameter pin	20 lb./9.09 kg.
PST4004220	Posi-Plus: 3-¾" x 4-¾"	20 lb./9.09 kg.

For other sizes, consult factory.

Altec® E4001678

C4001664: Altec®: 4"- diameter round jib with E4001678 Sleeve Adapter

Mechanical Ratings:

Max. Total Load:

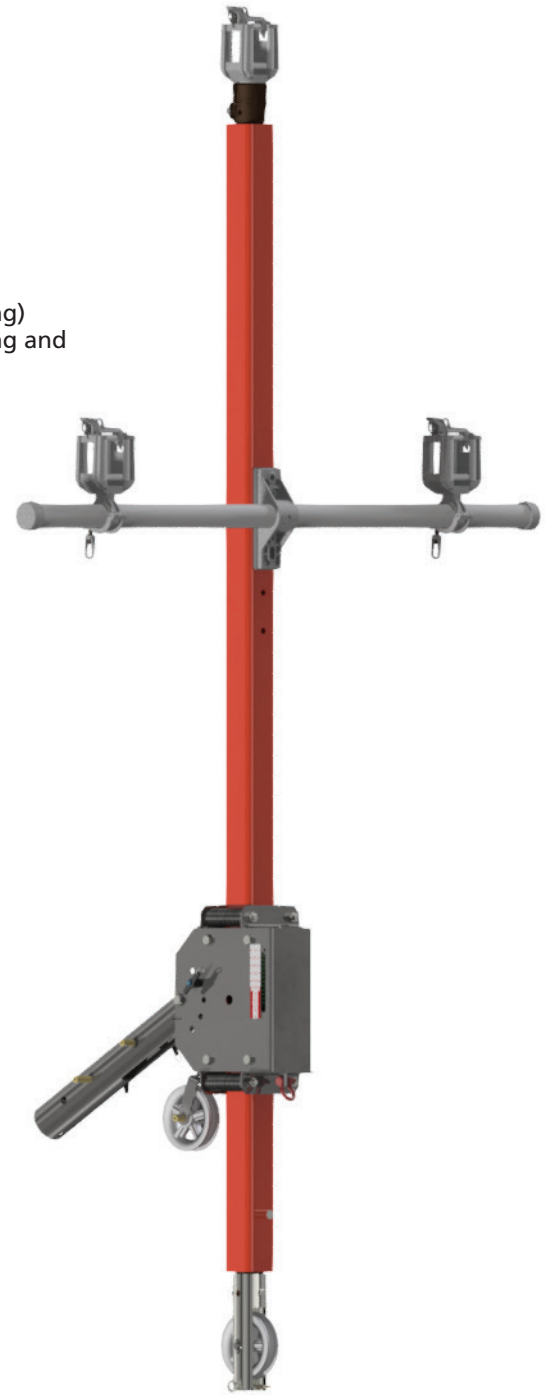
- Balanced Vertical Load: 1200 lb.

Rated working load (per wire holder):

- Vertical: 300 lb.
- Side Load: 100 lb.

Electrical Ratings:

GLOSSY, CLEAN AND DRY Epoxiglas®
15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)



CHANCE®

Boom Mounted Auxiliary Arm - Square Mast

Features & Applications

- 4" x 4" mast is fitted with quick mounting assembly
- Assembly attaches to booms from 5-7/8" x 7-3/8" to 12" x 12", both square and rectangular
- Working end of mast will accept several accessories such as:
  - o Epoxiglas® Auxiliary Arm
  - o Single lifting wire holder
  - o Sheave for gin work
- Auxiliary Arm may be swiveled to and locked into any desired position
- Single lifting wire holder may also be swiveled to maintain conductor alignment
- Gin sheave will not swivel and is pinned stationary to keep the plane of the sheave in the vertical position at all times
- For use above 15kV, add M48057 insulator to each wireholder; see Page 4158

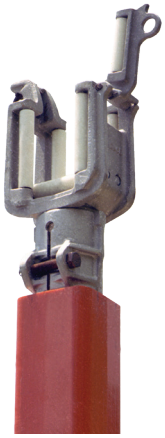
Mechanical Ratings:

Max. Total Load:

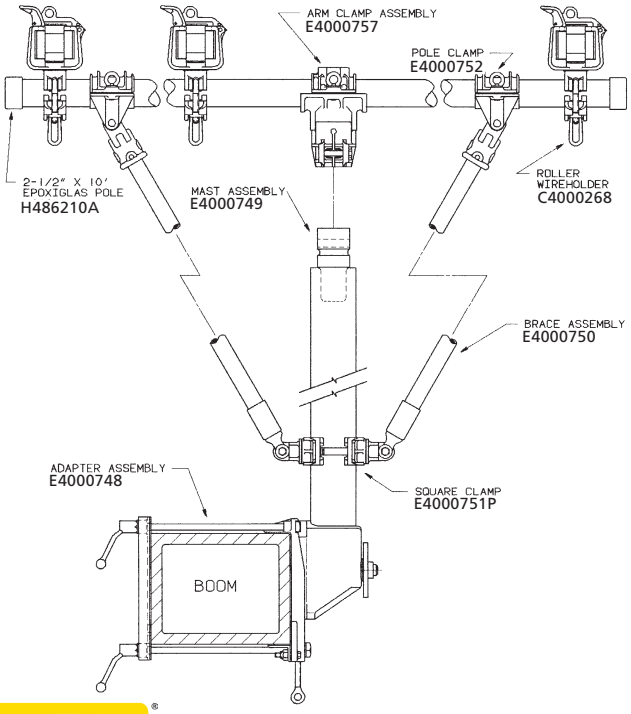
- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

Rated working load (per wire holder):

- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.



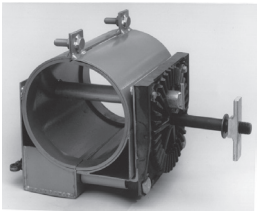
C4000747 Wireholder



Catalog No.	Description	Weight
C4000744	Mast Assy., 10' Arm & Braces for Booms 5 7/8" x 7 3/8" to 12" x 12"	130 lb./ 58.5 kg.
C4000745	Mast Assembly without Arm	90 lb./ 41 kg.
C4000746	Rope Sheave Assembly	8 lb./ 3.6 kg.
C4000747	Single Wire Holder	13 lb./ 5.9 kg.
C4001469	9"-dia. Boom Adapter (Altec)	40 lb./ 18 kg.
C4001877	8"-dia. Boom Adapter (Altec)	40 lb./ 18 kg.

Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)



OPTIONAL ADAPTER for Round Booms, see pages 4164 & 4165

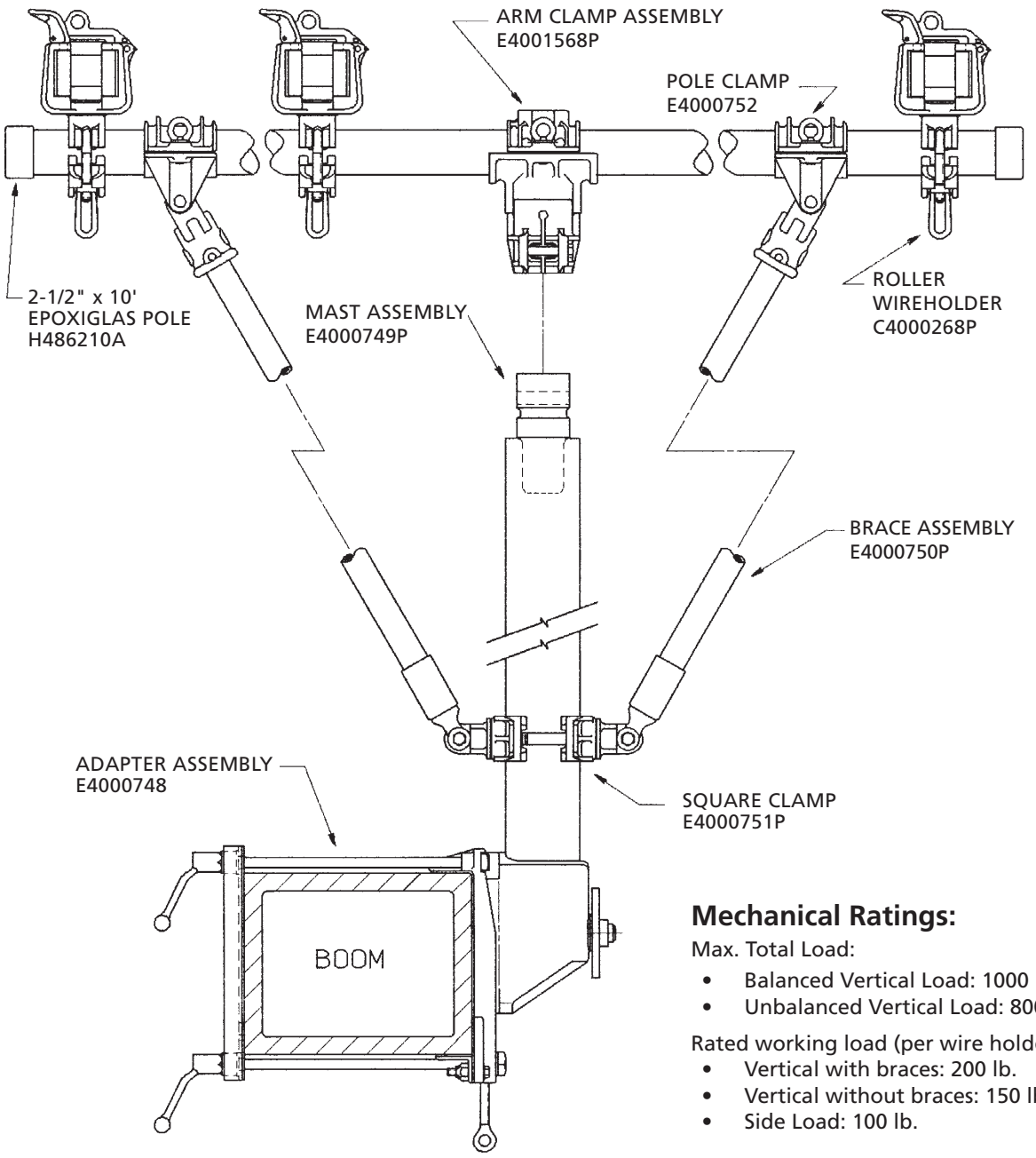
The single lifting wire holder may be rotated for alignment with the conductor.

C4000746 Sheave
The sheave will take a ¾-inch diameter rope.

For three phase applications. The auxiliary arm may be rotated to align the wire holders with the conductors, then locked in position.

Easy mounting with our two intermeshing castings with single pivot stud.

C4000744: Three-Phase Boom Assembly
(for Square Booms 5" x 7" to 12" x 12") with Orange Epoxiglas® Crossarm



Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

Rated working load (per wire holder):

- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.

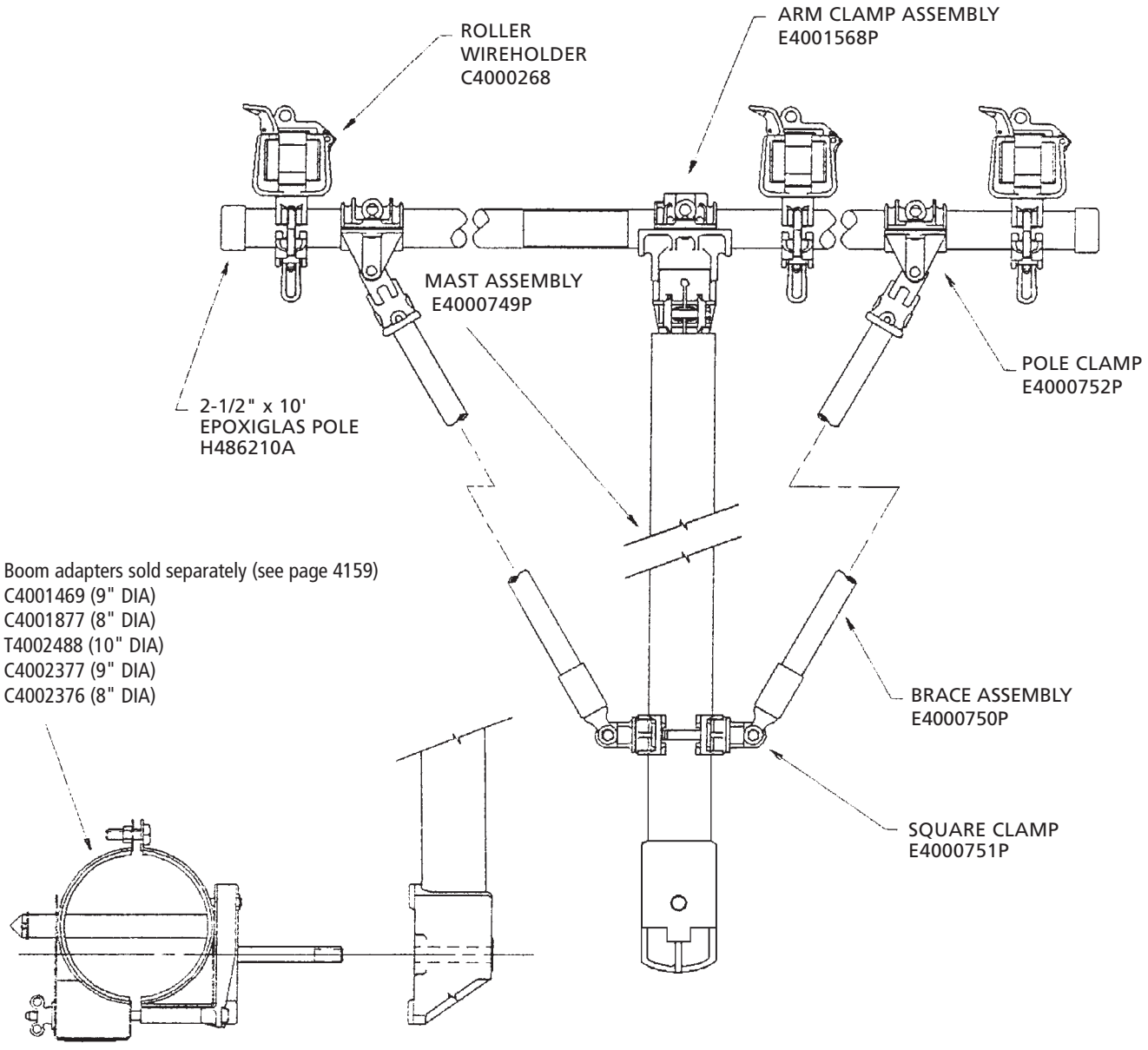
Electrical Ratings:

GLOSSY, CLEAN AND DRY Epoxiglas®
15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

CHANCE®

T4001753: Three-Phase Boom Assemblies for Altec® trucks

without Boom Adapter
with Orange Epoxiglas® Crossarm



Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

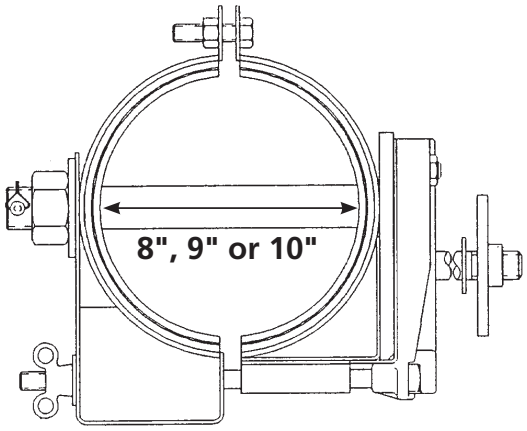
Rated working load (per wire holder):

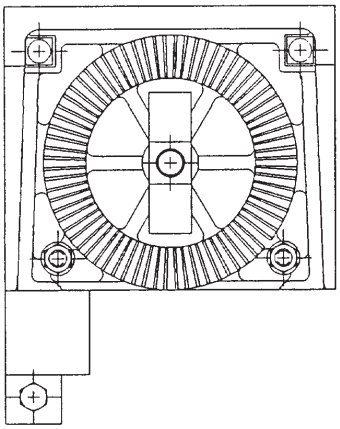
- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.

Boom Adapters for Altec® trucks

with 8" slide pad on reinforcement collar
(for 4" x 4" mast in T4001753 Three-Phase Boom Assembly)

T4002486 for 10"-diameter booms
C4002377 for 9"-diameter booms
C4002376 for 8"-diameter booms

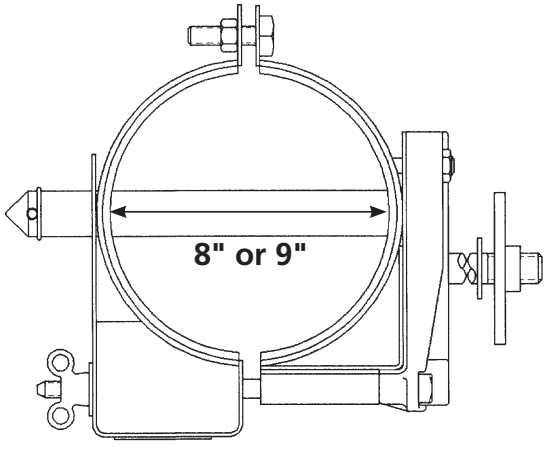


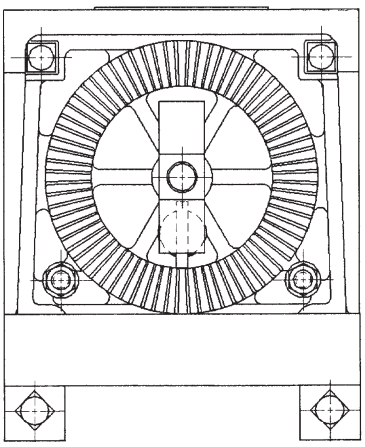


Boom Adapters for Altec® trucks

(for 4" x 4" mast in T4001753 Three-Phase Boom Assembly)

C4001469 for 9"-diameter booms
C4001877 for 8"-diameter booms





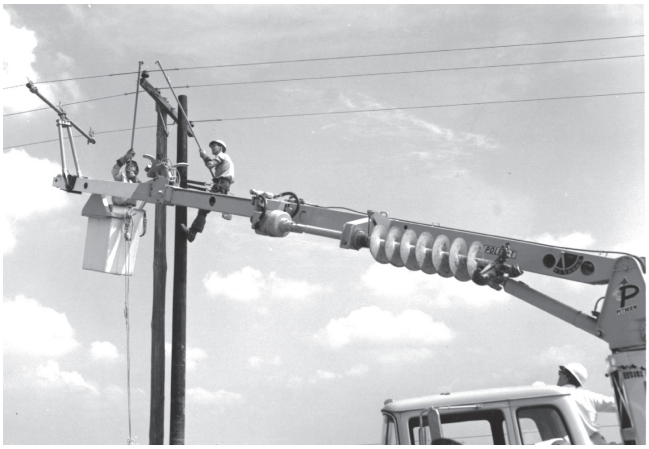
CHANCE®

Boom Auxiliary Arm

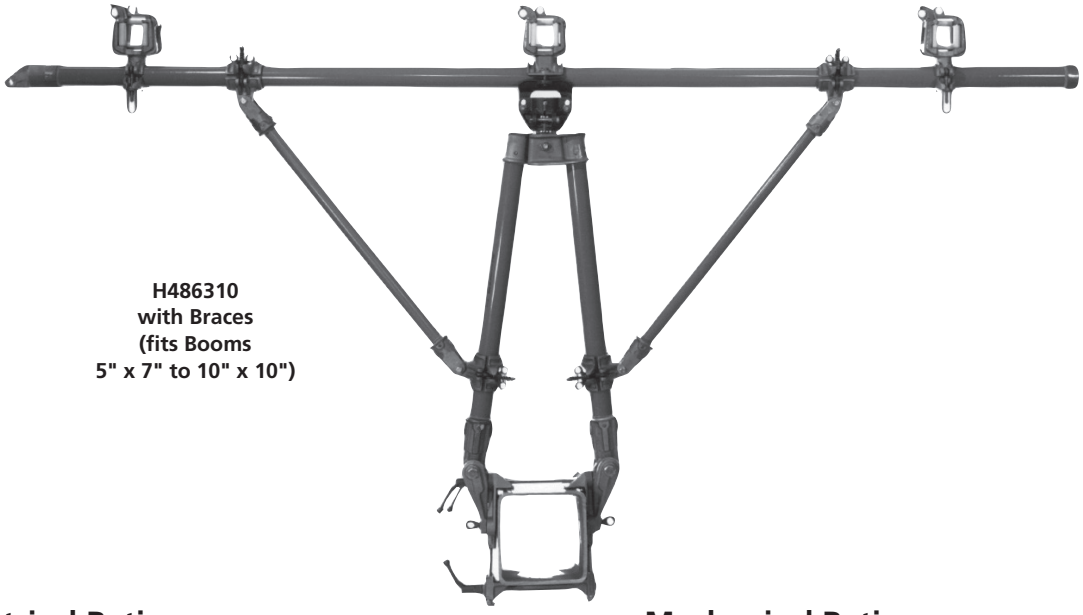
Features & Applications

- Consists of a boom mast and arm of Epoxiglas® construction
- For mounting on insulated boom
- For use on light construction when handling multiple conductors
- Two-legged mast can be mounted on square or rectangular shaped booms designed to handle 2,000 lbs. or more

Catalog Number	Description	Weight
H486310	Complete 10' Assembly with braces	120 lb. / 54.0 kg.
H48633	Bipod-Arm clamp only	12½ lb. / 5.6 kg.
H48634	Arm Brace Assembly only	8¾ lb. / 3.9 kg.
H4863	4' Bipod Mast only with boom clamps	64 lb. / 28.8 kg.
C4000351	2½" x 10' Horizontal Arm	13 lb. / 10.35 kg.



OPTIONAL ADAPTERS for Round Booms (as on Altec® trucks), see Catalog Page 4161



H486310 with Braces (fits Booms 5" x 7" to 10" x 10")

Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

Mechanical Ratings:

Max. Total Load:

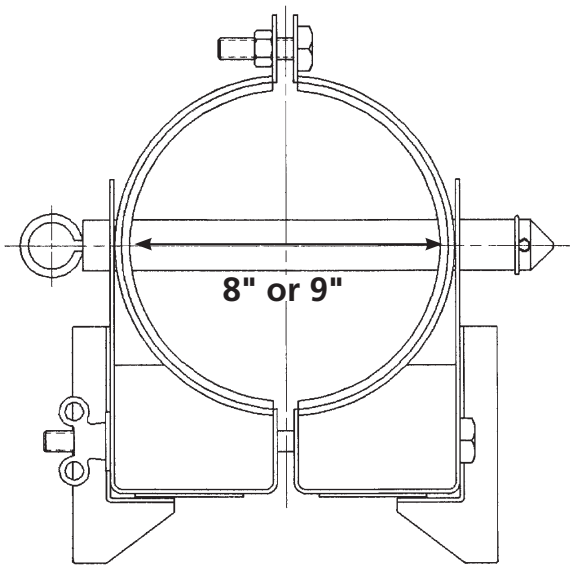
- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

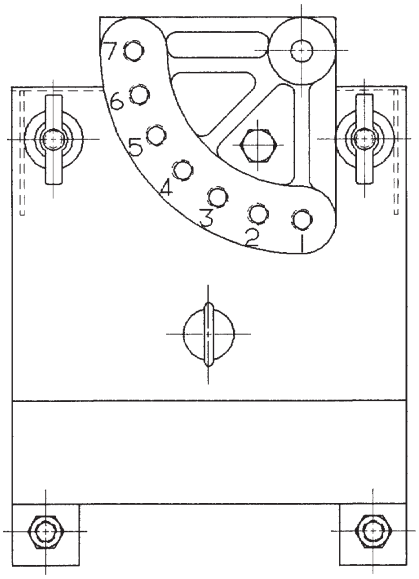
Rated working load (per wire holder):

- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.

Boom Adapters for Altec® trucks
(for use with Bi-Pod assembly in H486310 Three-Phase Arm)

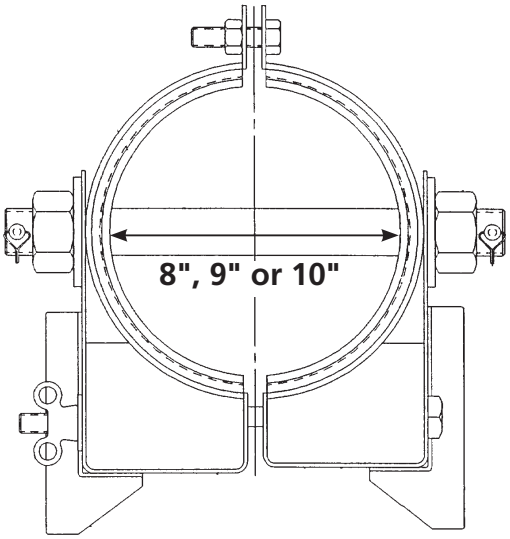
C4001467 for 9"-diameter booms
C4001878 for 8"-diameter booms

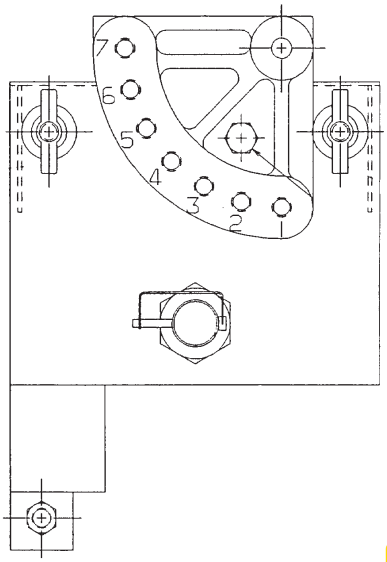




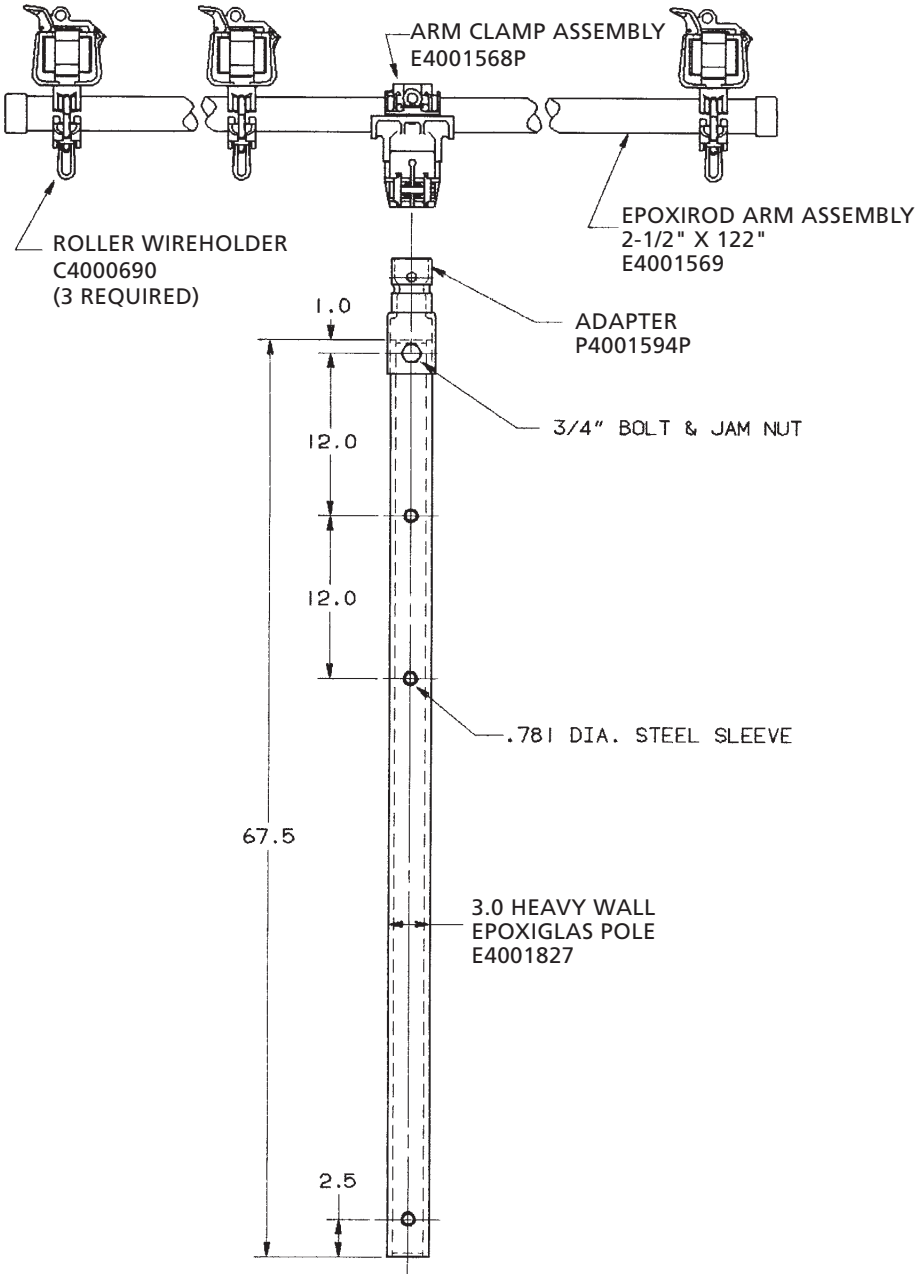
Boom Adapters for Altec® trucks
with 8" slide pad on reinforcement collar
(for use with Bi-Pod assembly in H486310 Three-Phase Arm)

T4002486BI for 10"-diameter booms
C4002393 for 9"-diameter booms
C4002392 for 8"-diameter booms





T4001824: Auxiliary Arm for Altec® trucks
with 3"-diameter mast and Gray Epoxirod® Crossarm



Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 450 lb.

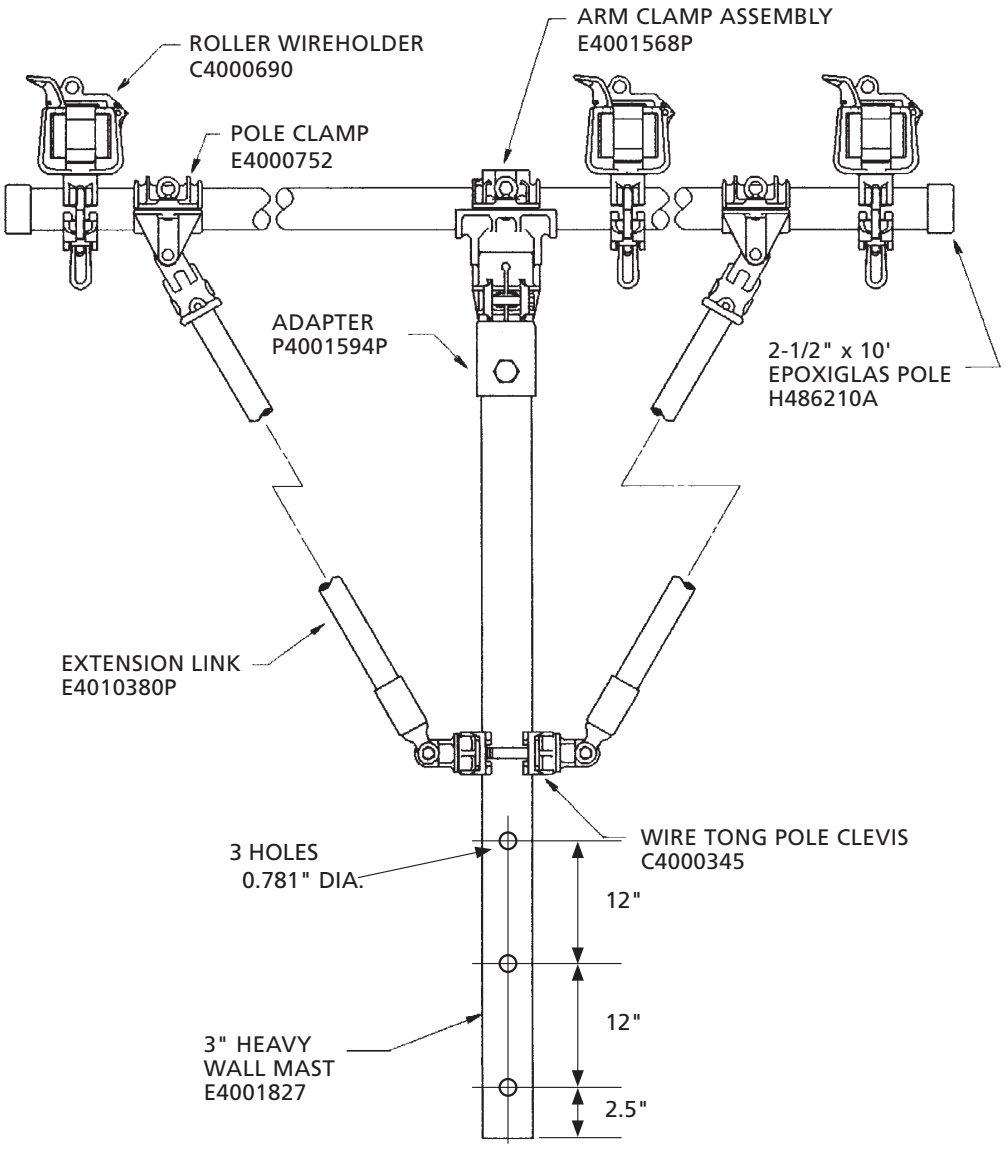
Rated working load (per wire holder):

- Vertical: 150 lb.
- Side Load: 100 lb.

Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

T4001854: Auxiliary Arm for Altec® trucks
with 3"-diameter mast & braces and Orange Epoxiglas® Crossarm



Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

Rated working load (per wire holder):

- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.

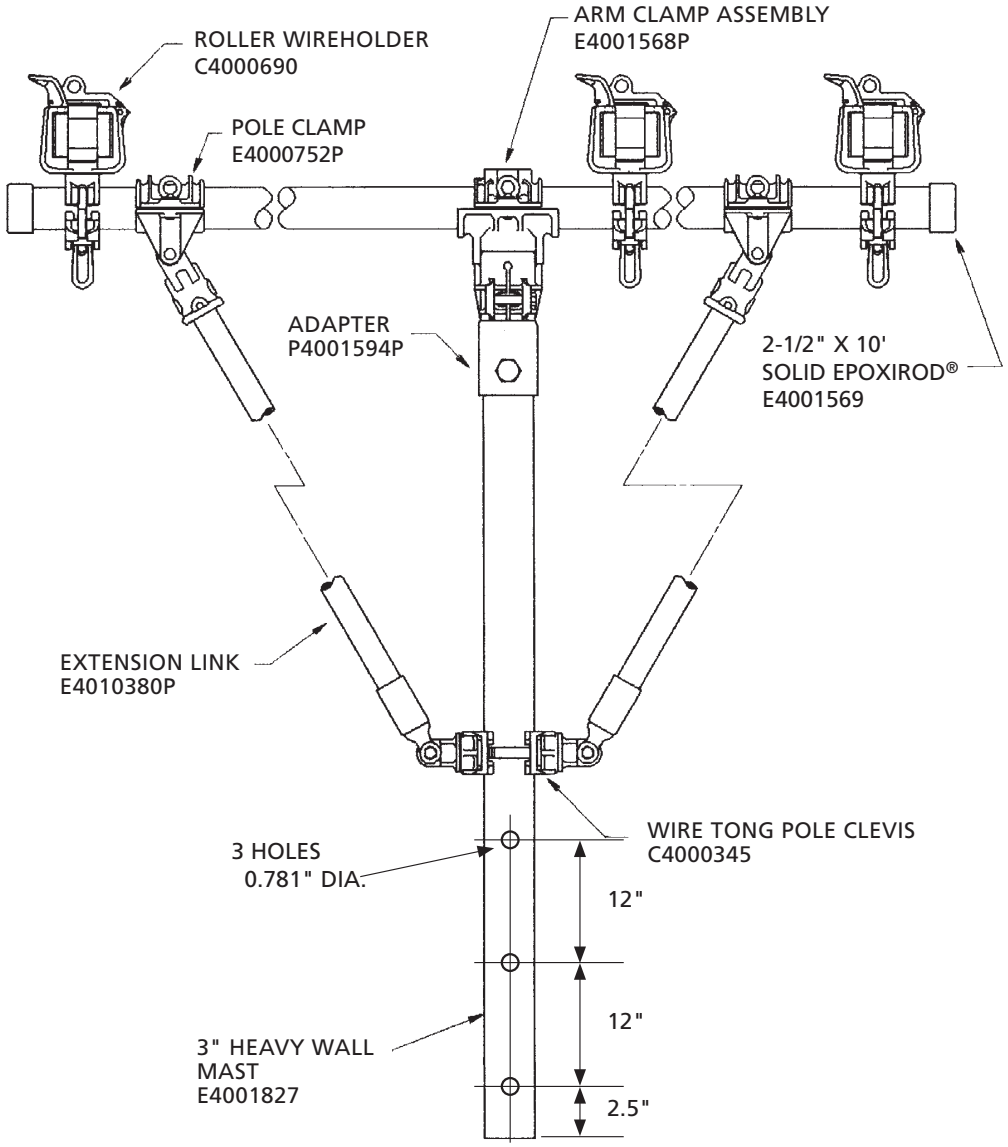
Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

CHANCE®

T4001855: Auxiliary Arm for Altec® trucks

with 3"-diameter mast & braces and Gray Epoxirod® Crossarm



Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 1000 lb.
- Unbalanced Vertical Load: 800 lb.

Rated working load (per wire holder):

- Vertical with braces: 200 lb.
- Vertical without braces: 150 lb.
- Side Load: 100 lb.

Electrical Ratings:

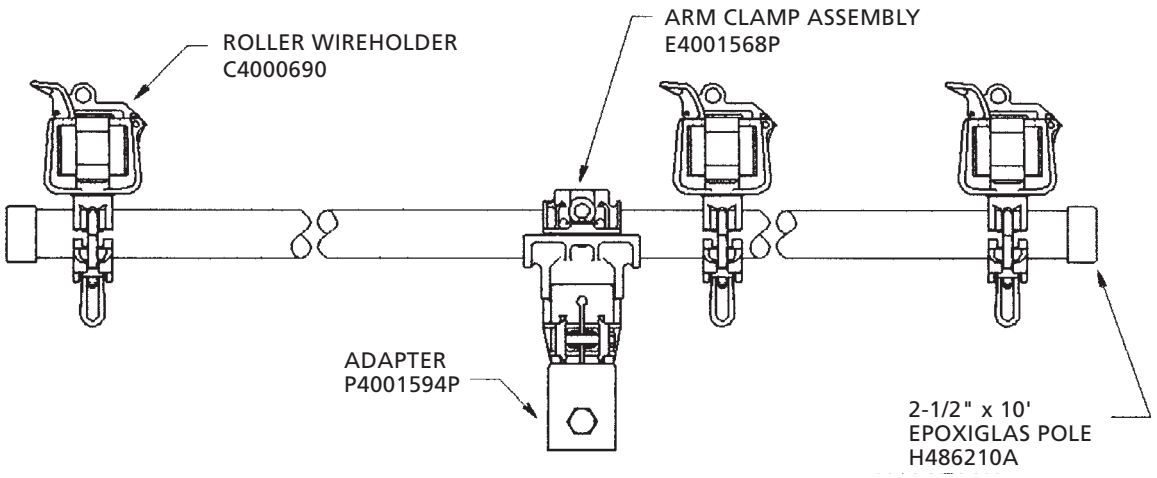
- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

Auxiliary Arm

with Jib Adapter for 3"-diameter mast
No Braces Required

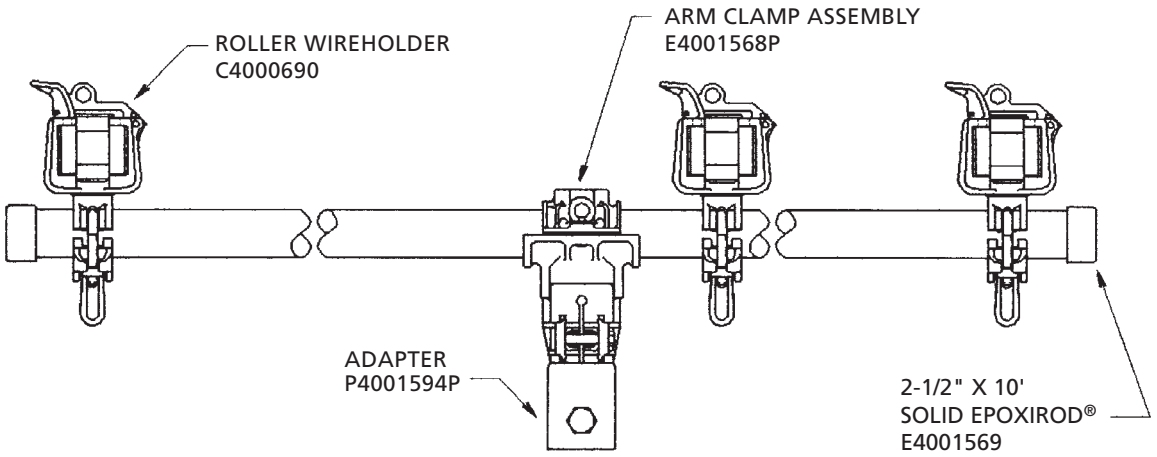
T4001856

with orange Epoxiglas® pole as in T4001854 Auxiliary Arm for Altec® trucks



T4001857

with gray solid Epoxirod® as in T4001855 Auxiliary Arm for Altec® trucks



Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 450 lb.

Rated working load (per wire holder):

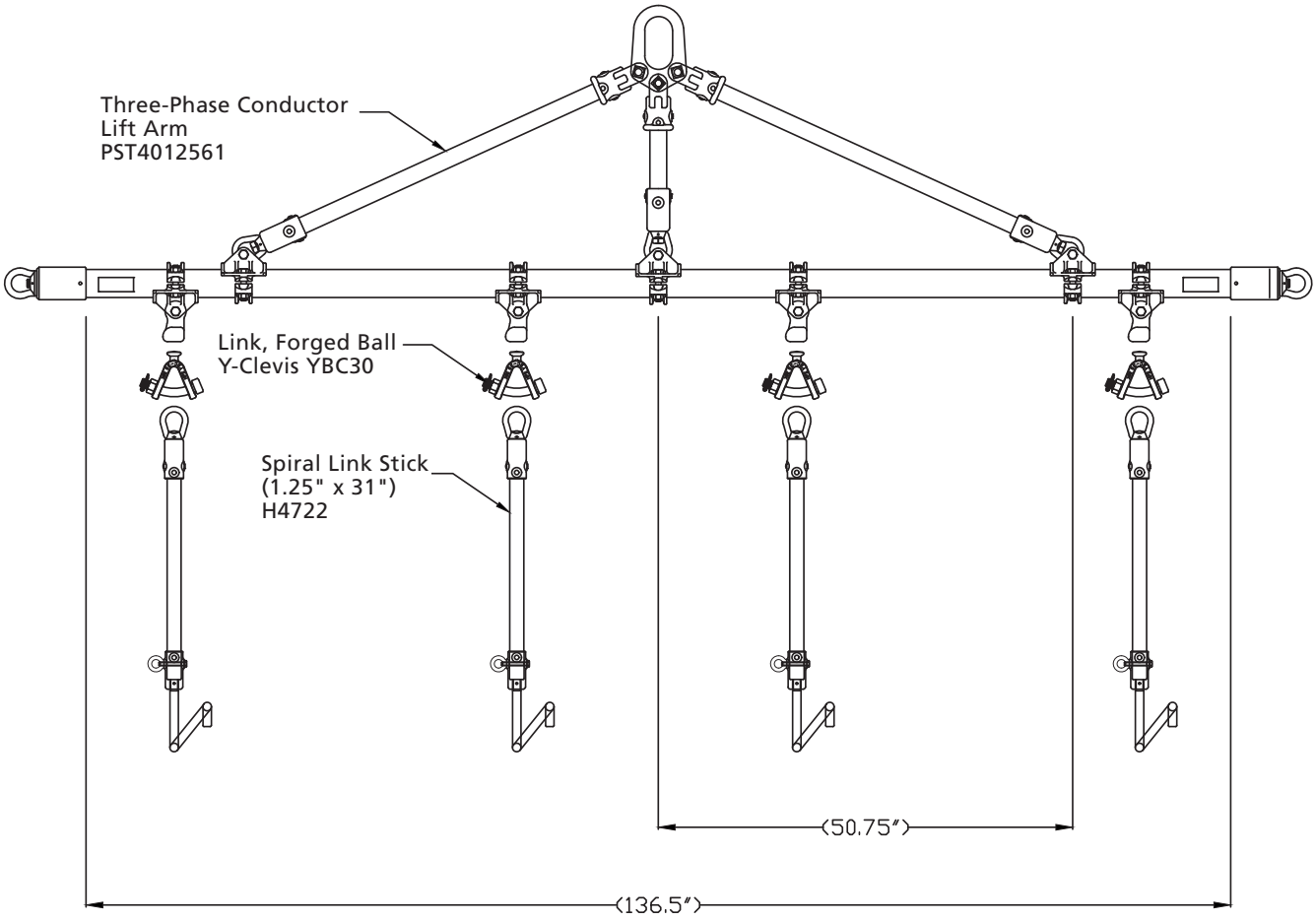
- Vertical: 150 lb.
- Side Load: 100 lb.

Electrical Ratings:

- GLOSSY, CLEAN AND DRY Epoxiglas®
- 15kV Phase to Phase (20 Inch Min. Wireholder Spacing)
- 34kV Phase to Phase (20 Inch Min. Wireholder Spacing and M4805-7 Insulators are used on each wireholder)

CHANCE®

PST4012561: Three-Phase Conductor Lift Arm



Typical complete set up shown above:
PST4012561 - Three-Phase Conductor Lift Arm
YBC30 - Link, Forged Ball Y-Clevis
H4722 - Spiral Link Stick (1.25" x 31")

Features & Applications:

- Used to lift aerial lines
- Up to 4 lifting positions to accommodate various line configurations
- Cross arm is 2.5" diameter and 12.5' long
- Can be used with various styles and lengths of link sticks
- See Page 1108 and 2252

Mechanical Ratings:

Max. Total Load:

- Balanced Vertical Load: 3600 lb.

Rated working load:

- Rated working load per position with 3 supports 1,200 lb.
- Rated working load per position with 4 supports 900 lb.

Jib Extension with Wireholder
3"-diameter round Epoxiglas® Insulation

Roller Wireholder C4000747

Roller Wireholder C4001669

Round Jib Adapter P4001594P

3"-diameter Epoxiglas® Jib Extension T4001525

Jib Extension with Wireholder
4" x 4" square Epoxiglas® Insulation

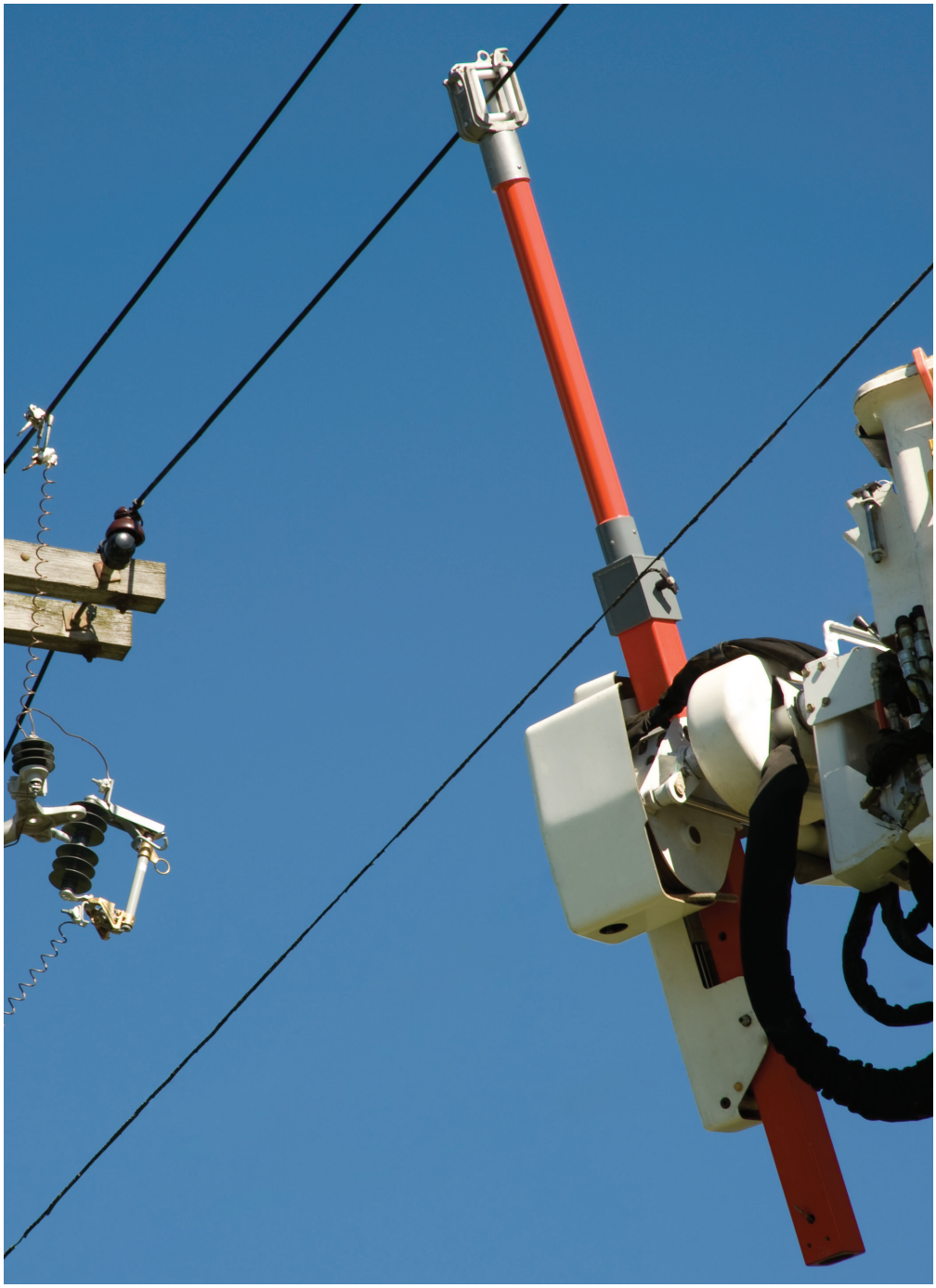
Roller
Wireholder
C4000747

Square Jib
Adapter
P4002536P

Roller
Wireholder
PST4002856

4" x 4" Epoxiglas®
Jib Extension
PST4002748

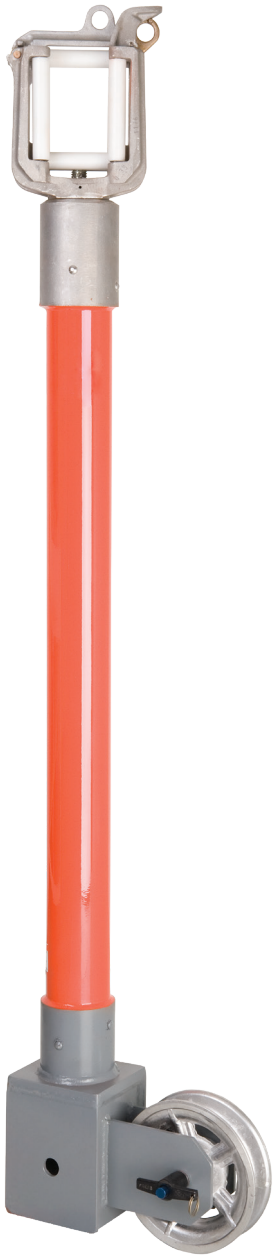
PST4002818: Jib Extension with Wireholder 3"-diameter round Epoxiglas® Insulation



3"-diameter Epoxiglas® Jib Extension with Wireholder PST4002818

CHANCE®

PST4003059: Jib Extension with Sheave and Wireholder 3"-diameter round Epoxiglas® Insulation



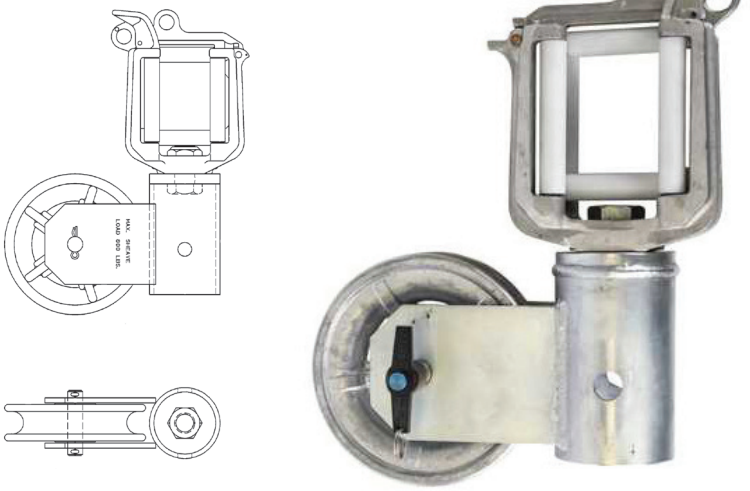
3"-diameter Epoxiglas® Jib Extension with Wireholder & Sheave PST4003059

Combination Swivel Wireholder/Sheave for Altec® trucks*

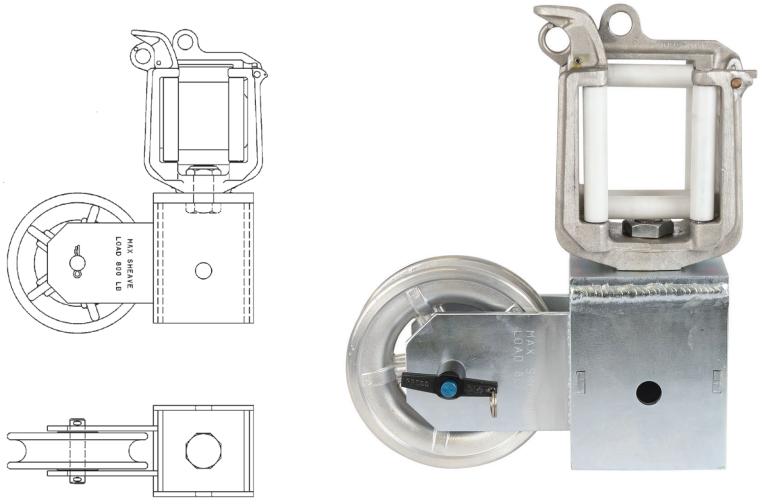
WARNING: ELECTRIC SHOCK HAZARD. Winch rope can conduct electricity from this device to metal parts on the bucket support. Can cause electrocution death or severe injury. Always remove winch rope from this device when the wireholder is used to support an energized conductor.

Features & Applications

- Eliminates changeovers from Wireholder (for picking up a phase conductor) to Rope Sheave (for lifting items)
- Each combination unit attaches directly to jib
- Rated Working Load:
  Wireholder - 300 lbs.
  Sheave - 800 lbs.
- Both units feature a Large Swivel-Type Roller Wireholder with 2-½" x 3-3⁄8" opening and a 7"-dia. Sheave to accept up to 3⁄4"-dia. rope



for Altec® trucks* with 3" diameter jib
Cat. No. T4002529 (23 lb. / 10.43 kg.)
T-handle ball lock pin sold separately - PSP4004319P



for Altec® trucks* with 4" x 4" square jib
Cat. No. T4002530 (23 lb. / 10.43 kg.)
T-handle ball lock pin sold separately - P4002450P

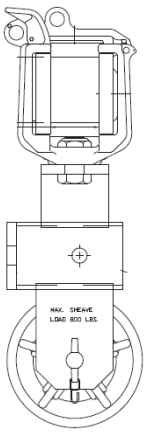
*To fit other brands of trucks, contact Hubbell Power Systems with detailed specifications.

CHANCE®

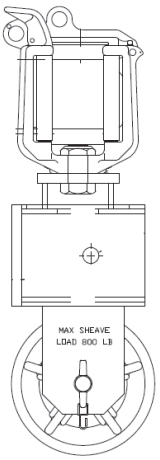
Combination Swivel Wireholder/Sheave
for horizontal applications

Features & Applications

- For use with jib or material handler in a horizontal position.
- Eliminates changeovers from
- Wireholder (for picking up a phase conductor) to Rope Sheave (for lifting items)
- Each combination unit attaches directly to jib
- Rated Working Load:
  Wireholder - 300 lbs.
  Sheave - 800 lbs.
- Both units feature a Large Swivel-Type Roller Wireholder with 2-½" x 3-3⁄8" opening and a 7"-dia. Sheave to accept up to ¾"-dia. rope



for Altec® trucks* with 3" diameter jib
Cat. No. PST4004386
(23 lb. / 10.43 kg.)
T-handle ball lock pin sold separately - PSP4004319P

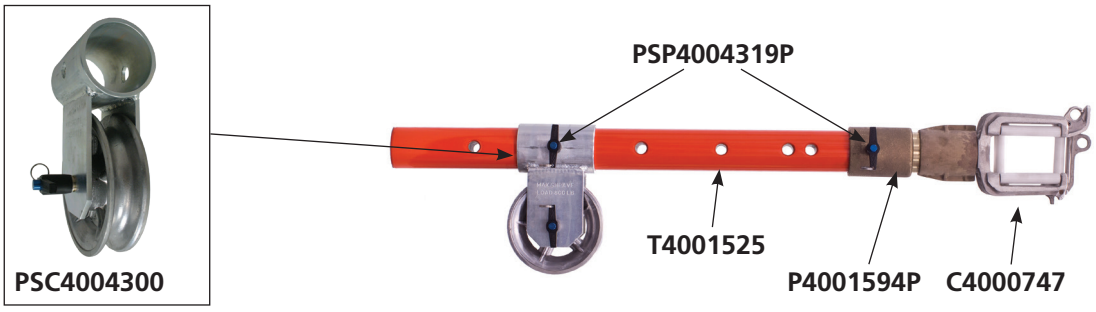


for Altec® trucks* with 4" x 4" square jib
Cat. No. PST4004383
(23 lb. / 10.43 kg.)
T-handle ball lock pin sold separately - P4002450P

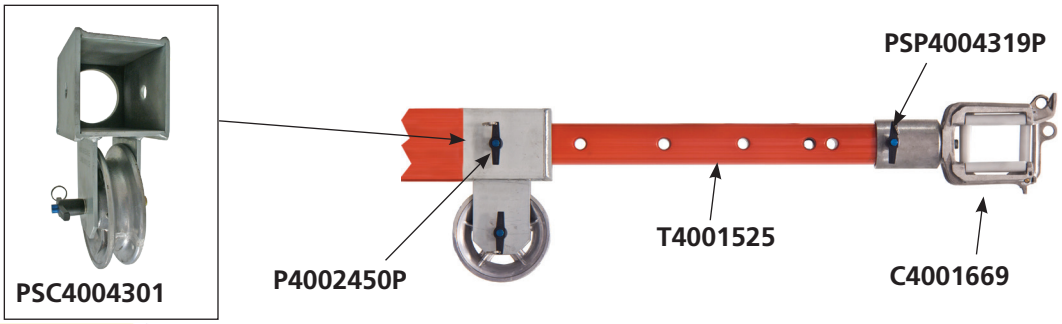
Sheave Adapters

Provides insulation between the sheave roller adapter and the single phase wire holder (with proper accessories shown).

Catalog No.	Description	Weight lbs / kg
PSC4004300	Sheave Adapter for 3" round jib	16 lb. / 7.3 kg



Catalog No.	Description	Weight lbs / kg
PSC4004301	Sheave Adapter for 4" x 4" jib	16 lb. / 7.3 kg

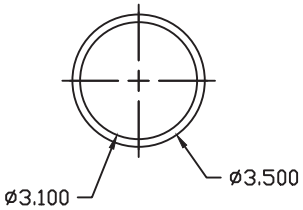


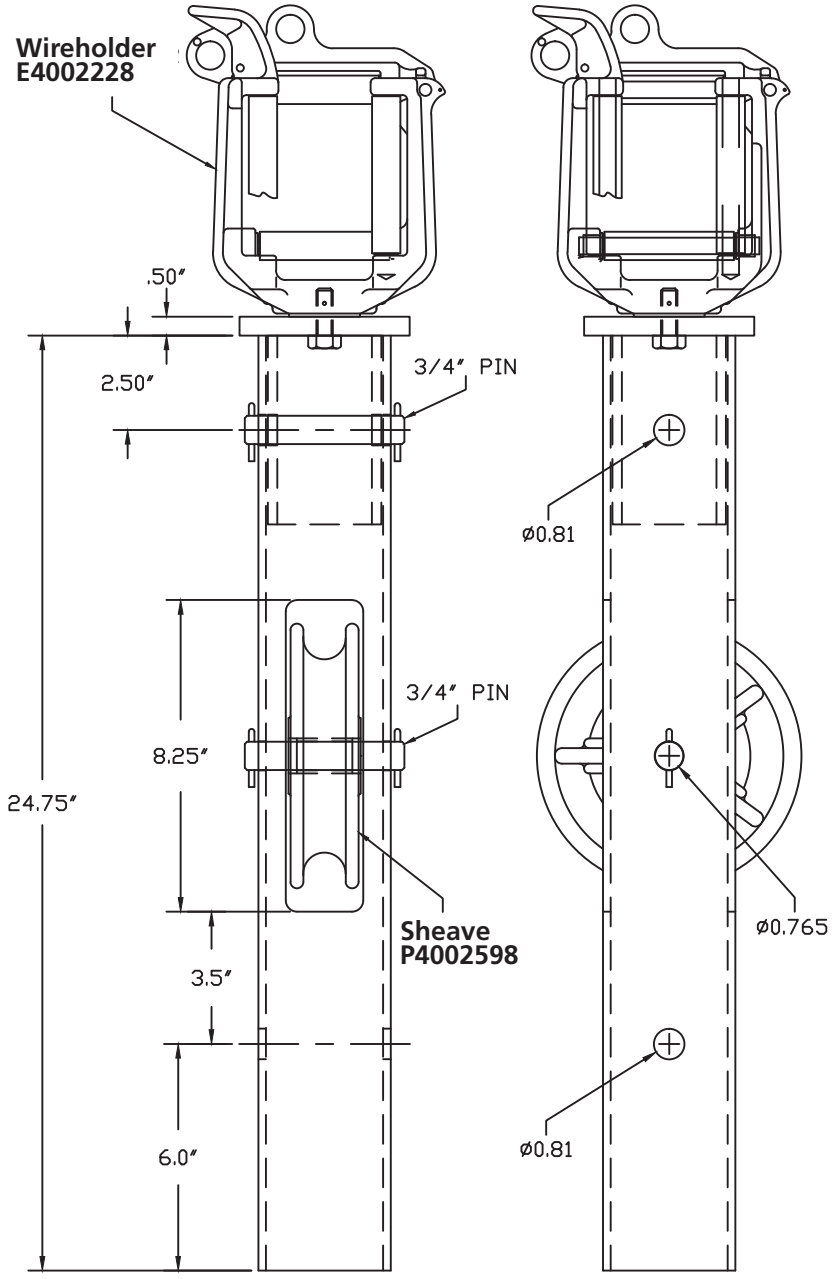
PSC4004373: Combination Swivel Wireholder/Sheave
for upper mounted winch line

Features & Applications

- For use with jib or material handler in a horizontal position.
- Eliminates changeovers from Wireholder (for picking up a phase conductor) to Rope Sheave (for lifting items)
- Each combination unit attaches directly to jib
- Rated Working Load:
  Wireholder - 300 lbs.
  Sheave - 800 lbs.
- Both units feature a Large Swivel-Type Roller Wireholder with 2-½" x 3-⅜" opening and a 7"-dia. Sheave to accept up to ¾"-dia. rope

T-handle ball lock pin sold separately - PSP4004319P



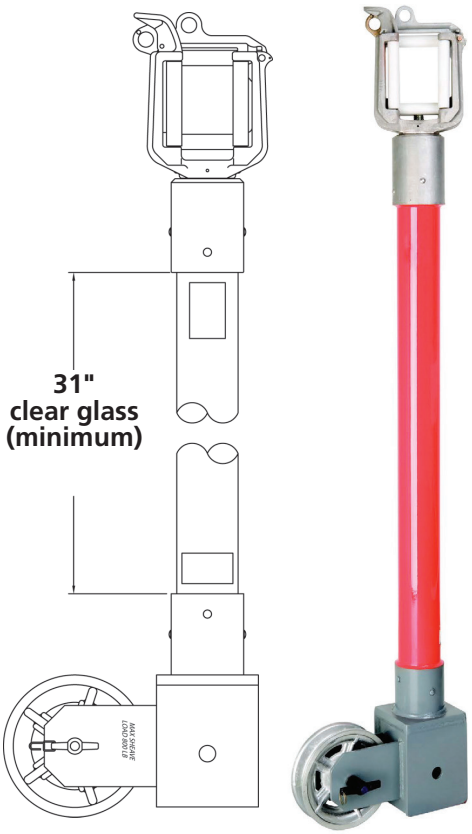


CHANCE®

Combination Swivel Wireholder/Sheave Jib Extension for Altec® trucks*

Features & Applications

- Eliminates changeovers from Wireholder (for picking up a phase conductor) to Rope Sheave (for lifting items)
- Includes 3"-dia. heavy-wall jib
- Rated Working Load:
  Wireholder - 300 lbs.
  Sheave - 800 lbs.
- Features a Large Swivel-Type Roller Wireholder with 2-½" x 3-⅜" opening and a 7"-dia. Sheave to accept up to ¾"-dia. rope



for Altec® trucks* with 4" x 4" square jib
Cat. No. PST4003059
39 lb. / 17.7 kg.)

*To fit other brands of trucks, contact Hubbell Power Systems with detailed specifications. For custom lengths, consult factory.

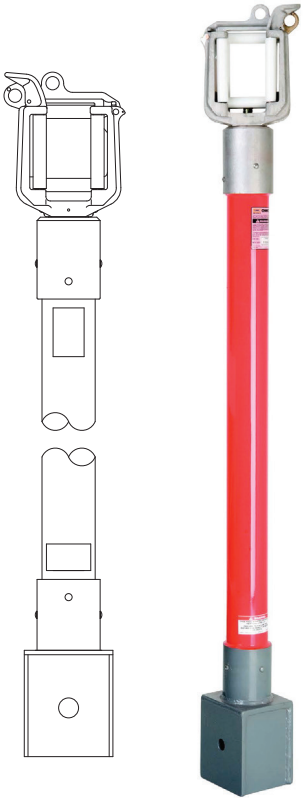
Swivel Wireholder Jib Extensions for Telelect trucks*

Features & Applications

- Feature a Large Swivel-Type Roller Wireholder with 2-½" x 3-⅜" opening mounted on 3" dia. orange Epoxiglas® jib extension
- Tested per ASTM F711 and OSHA

ORDERING INFORMATION

Catalog No.	Fits Jib Size	Weight
PST4002818	4" x 4"	28 lb. / 12.72 kg.
PST4002819	$3\frac{3}{8}$" x 5"	29 lb. / 13.2 kg.
PST4002820	3" Round	27 lb. / 12.3 kg.
PST4002821	$4\frac{1}{2}$" Round	28 lb. / 12.72 kg.



3" Heavy Wall Epoxiglas® Pole with 31" of clear glass (minimum).

Jib Extension Rated Working Load: 300 lb.

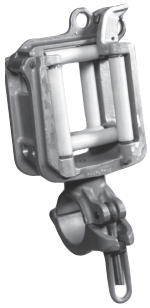
*To fit other brands of trucks, contact Hubbell Power Systems with detailed specifications. For custom lengths, consult factory.

Auxiliary Arm Attachments

- Roller Wireholder — Seven Delrin plastic rollers offer protection to conductors while raising the conductor above the work area. Accommodates conductors up to and including 1-1/2 inches in dia. The gate is held closed by a spring-loaded latch which must be manually opened
- Insulators— Epoxy based, available as separate items or can be added to existing auxiliary arm wireholders to upgrade for 34.5 kV use

M48057

C4001669 for 3" dia. Jib

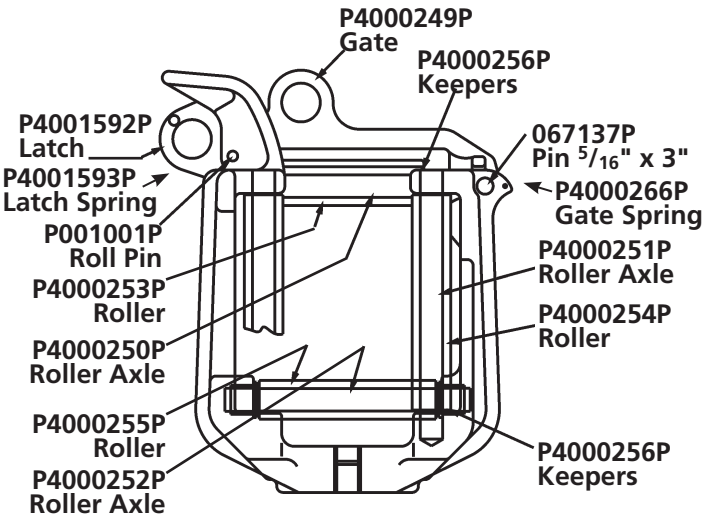


For 2 ½" Arm C4000690 with 2 ½" opening C4000268 with 2" opening

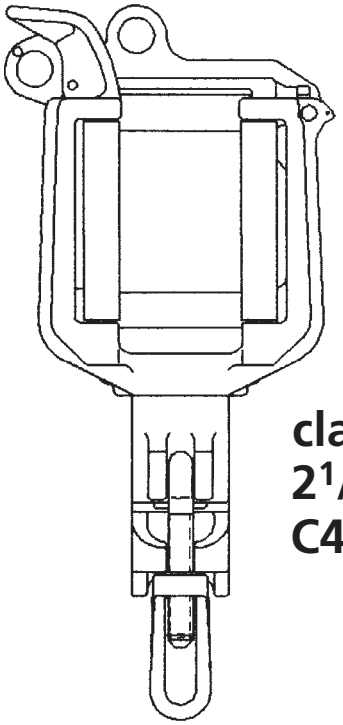
Catalog No.	Description	Wireholder Type	Adapter	Weight
C4000270	Small Wireholder Only	Small Roller 2" Opening	None	3 lb. / 1.4 kg.
C4000268	Small wireholder with Clamp for 2.5" Arm	Small Roller 2" Opening	Clamp for 2.5" Arm	4.4 lb. / 2 kg.
C4000269	Small Wireholder with Clamp and Insulator	Small Roller 2" Opening	Clamp for 2.5" Arm and M48057 Insulator	6 lb. / 2.7 kg.
C4000691	Large Wireholder Only	Large Roller 2.5" Opening	None	4.5 lb. / 2 kg.
C4000690	Large wireholder with Clamp for 2.5" Arm	Large Roller 2.5" Opening	Clamp for 2.5" Arm	4.5 lb. / 2 kg.
PSC4002937	Large wireholder with Clamp for 3" Arm	Large Roller 2.5" Opening	Clamp for 3" Arm	1 lb. / 0.5 kg.
C4000747	Large wireholder with Swivel Ferrule	Large Roller 2.5" Opening	Swivel Ferrule	8 lb. / 3.6 kg.
C4001669	Large Wireholder for 3" Diameter Jib	Large Roller 2.5" Opening	Ferrule for 3" Diameter Jib	6 lb. / 2.7 kg.
M48061	Heavy Duty Wireholder Only	Heavy Duty Roller Wireholder 2.43" Opening	None	24 lb. / 10.9 kg.
T4001931	Small Roller Wireholder with Hi-Ranger Adapter	Small Roller 2" Opening	Hi-Ranger 4 1/8" x 4 1/8"	14 lb. / 6.4 kg.
PST4001945	Small Roller Wireholder with Holan Adapter	Small Roller 2" Opening	Holan 3 1/8" x 3 1/8"	10.5 lb. / 4.8 kg.
T4001941	Small Roller Wireholder for Telelect Jib	Small Roller 2" Opening	Telelec Jib 3.19" Dia.	9.1 lb. / 4.1 kg.
PST4002856	Large wireholder with Ferrule for 4" x4"	Large Roller 2.5" Opening	4.06" x 4.06"	18 lb. / 8.2 kg.
T4001929	Large Roller Wireholder with Hi-Ranger Adapter	Large Roller 2.5" Opening	Hi-Ranger 4 1/8" x 4 1/8"	24 lb. / 10.9 kg.
PST4001926	Large Roller Wireholder with Holan Adapter	Large Roller 2.5" Opening	Holan 3 1/8" x 3 1/8"	12 lb. / 5.4 kg.
T4001942	Large Roller Wireholder for Telelect Jib	Large Roller 2.5" Opening	Telelec Jib 3.19" Dia.	9 lb. / 4.1 kg.
T4001930	Heavy-Duty Roller Wireholder with Hi-Ranger Adapter	Heavy Duty Roller Wireholder 2.43" Opening	Hi-Ranger 4 1/8" x 4 1/8"	41 lb. / 18.6 kg.
T4001912	Heavy-Duty Wireholder with Holan Adapter	Heavy Duty Roller Wireholder 2.43" Opening	Holan 3 1/8" x 3 1/8"	31.5 lb. / 14.3 kg.
T4001943	Heavy-Duty Wireholder for Telelect Jib	Heavy Duty Roller Wireholder 2.43" Opening	Telelec Jib 3.19" Dia.	25 lb. / 11.3 kg.

Small Roller Wireholder

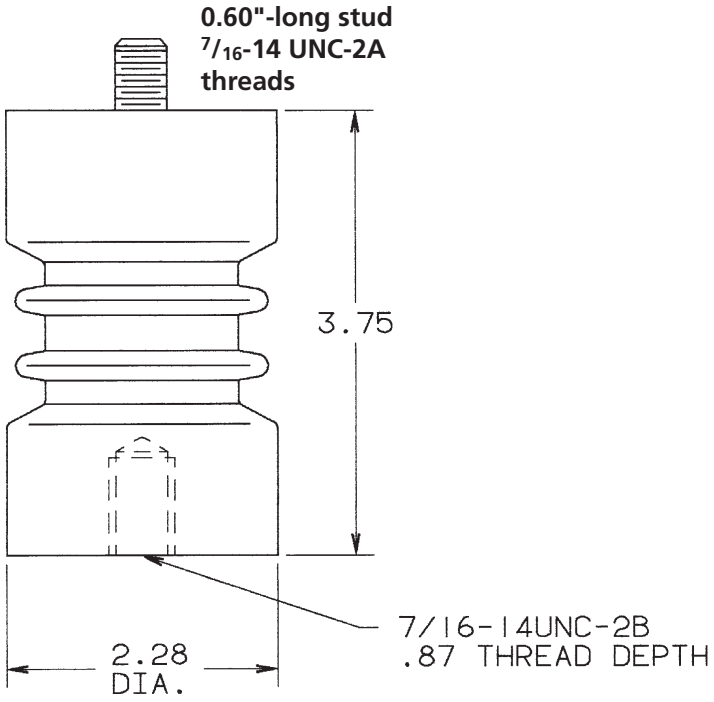
2" opening



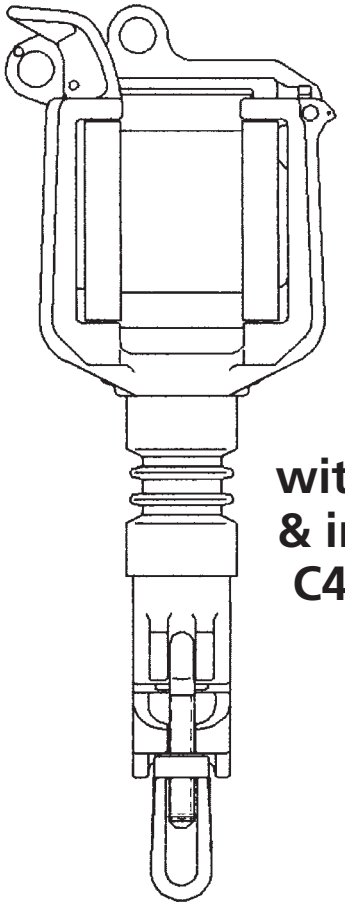
Wireholder only
C4000270



with clamp for 2 1/2" arm
C4000268

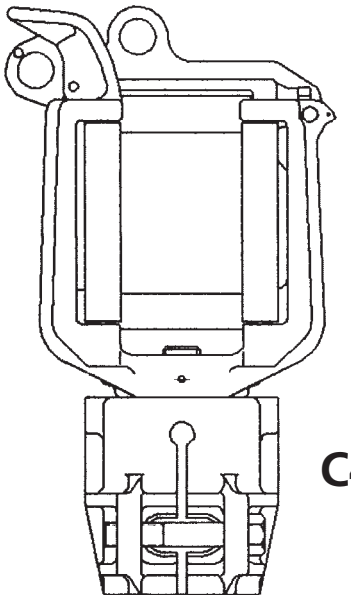


Epoxy insulator
M48057

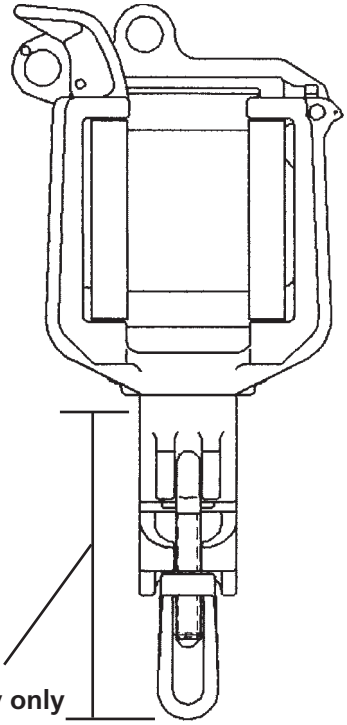


with clamp & insulator
C4000269

Large Roller Wireholder
2 1/2" opening

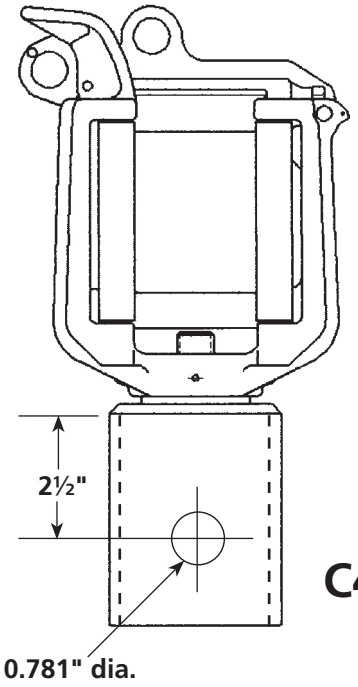


with Swivel Ferrule C4000747

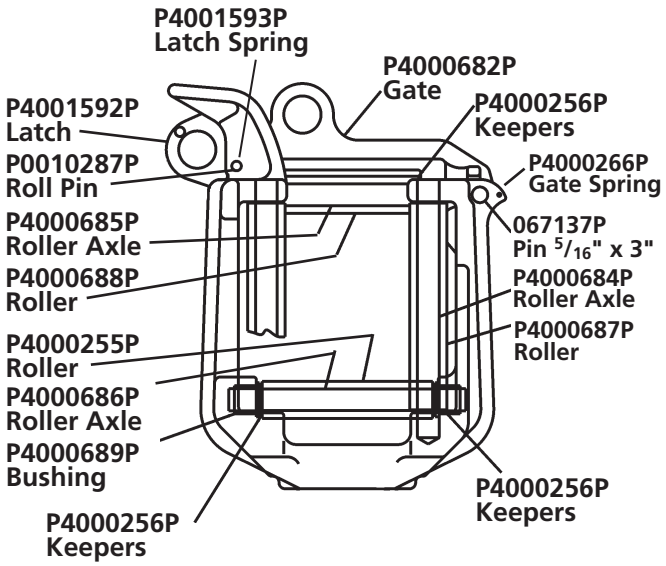


with clamp for 2 1/2" arm C4000690

with clamp for 3" arm PSC4002937



for 3"-dia. Jib C4001669

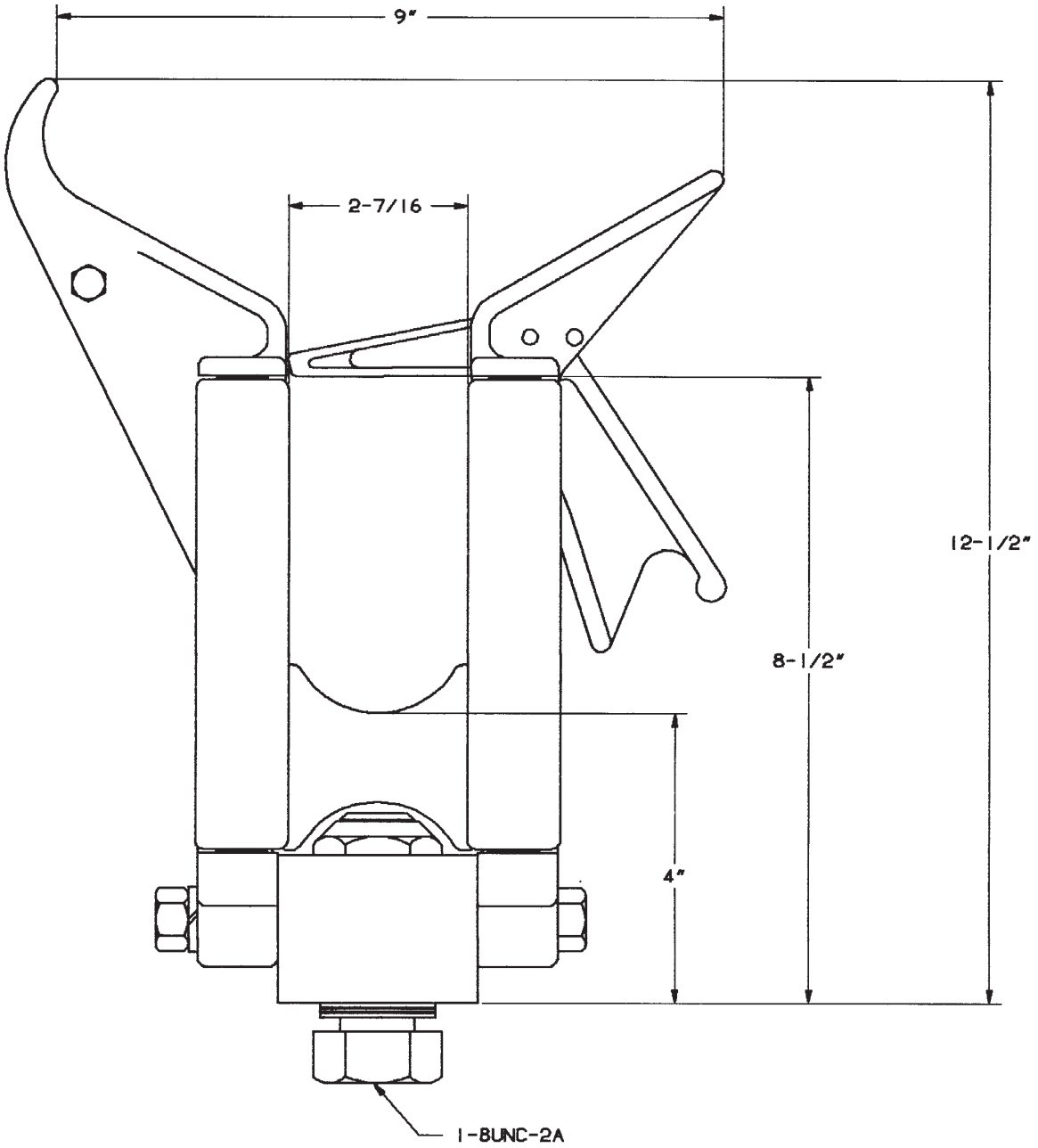


Wireholder only C4000691

M48061: Heavy-Duty Roller Wireholder

Mechanical Ratings:

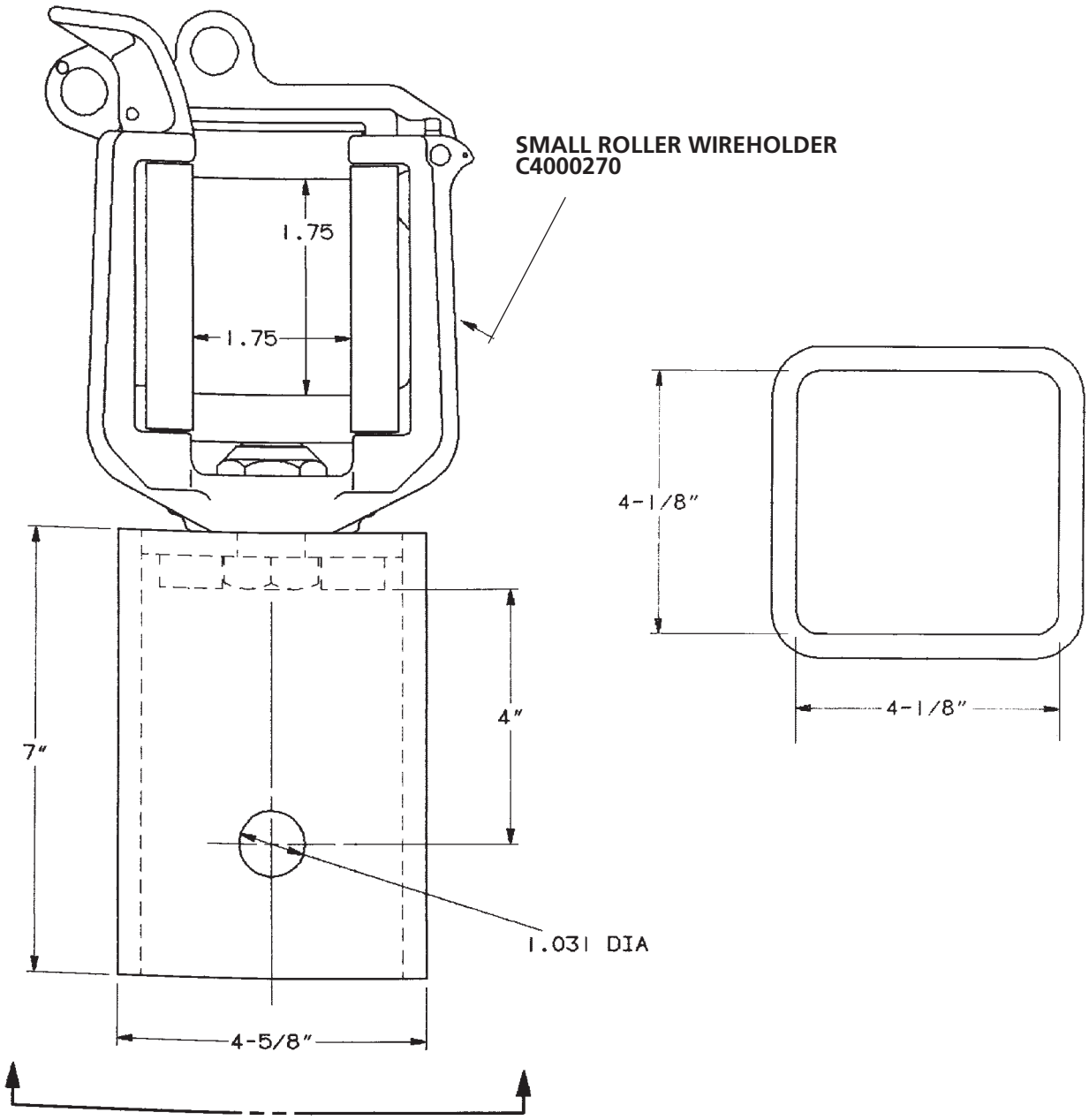
- Vertical Load: 2000 lb.
- Side Load: 500 lb.



T4001931: Small Roller Wireholder with Hi-Ranger Adapter

Mechanical Ratings:

- Vertical Load: 300 lb.
- Side Load: 100 lb.

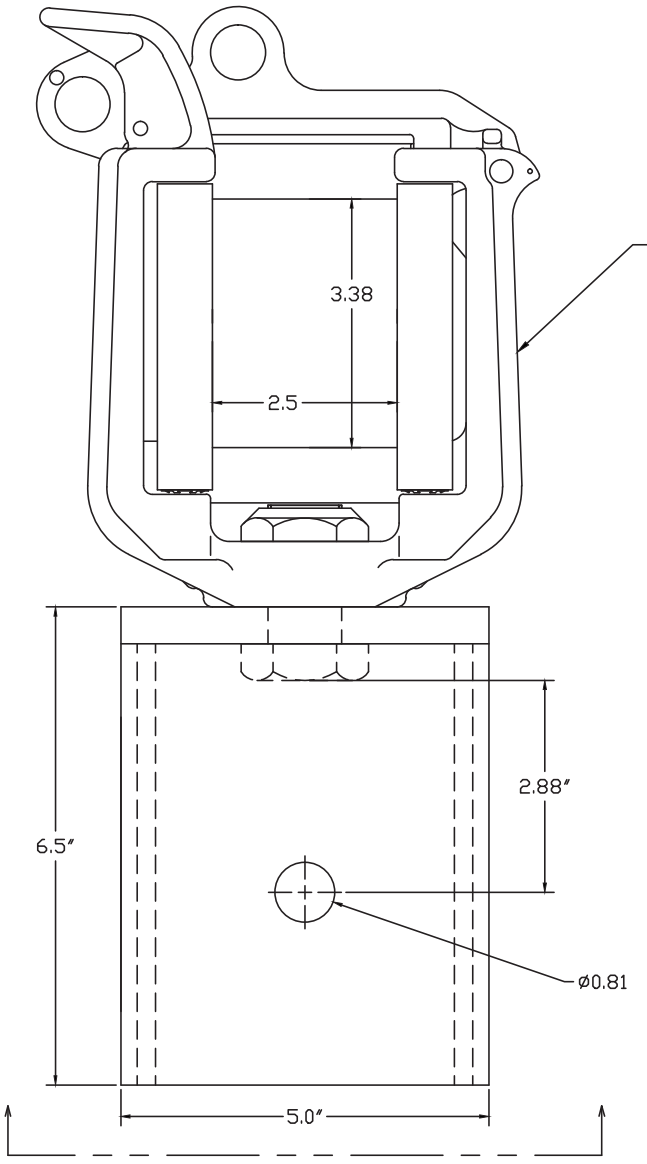


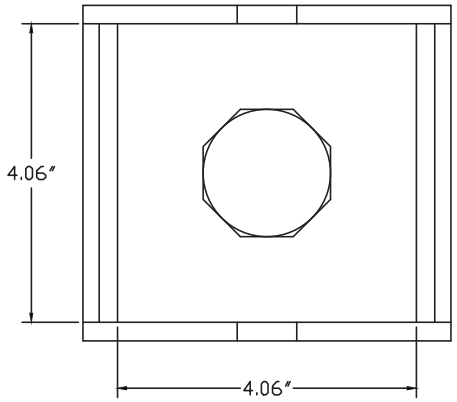
PST4002856: Large Roller Wireholder with Altec® Adapter

Mechanical Ratings:

- Vertical Load: 500 lb.
- Side Load: 100 lb.

PST4002856

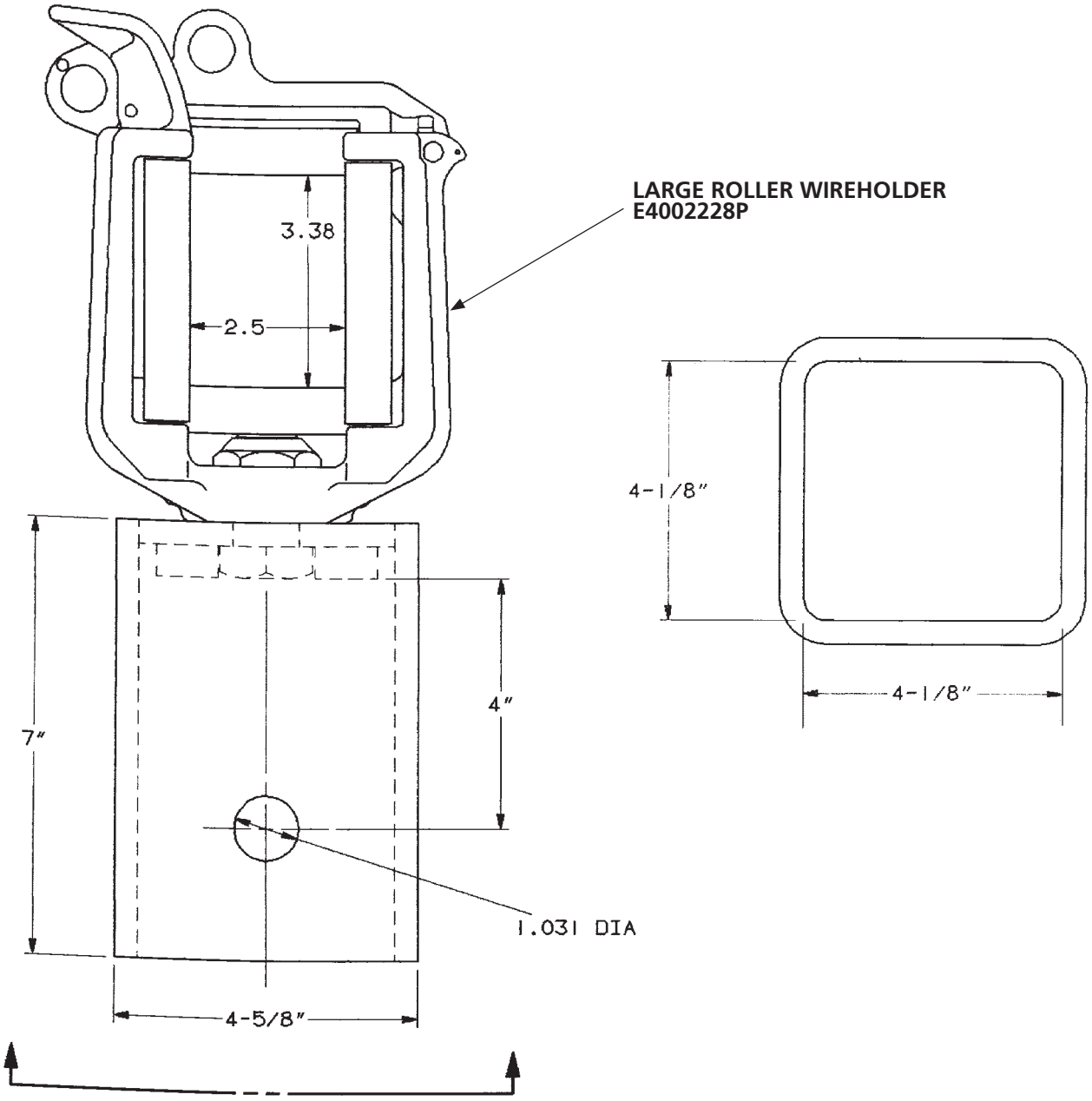




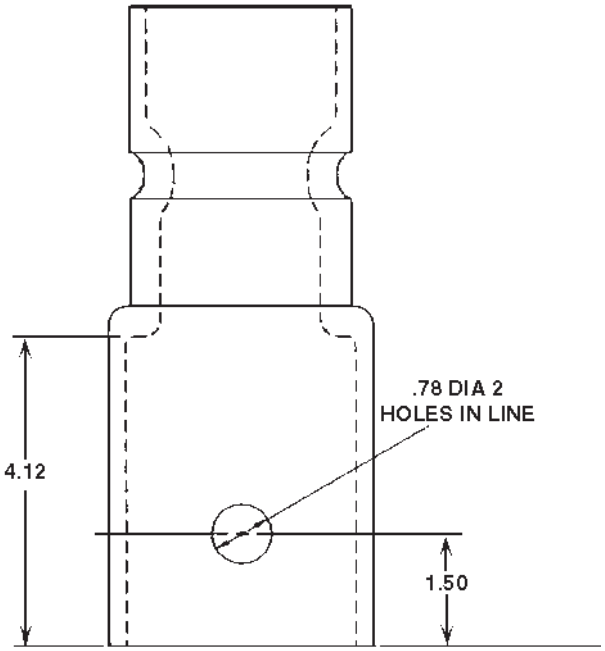
T4001929: Large Roller Wireholder with Hi-Ranger Adapter

Mechanical Ratings:

- Vertical Load: 500 lb.
- Side Load: 100 lb.

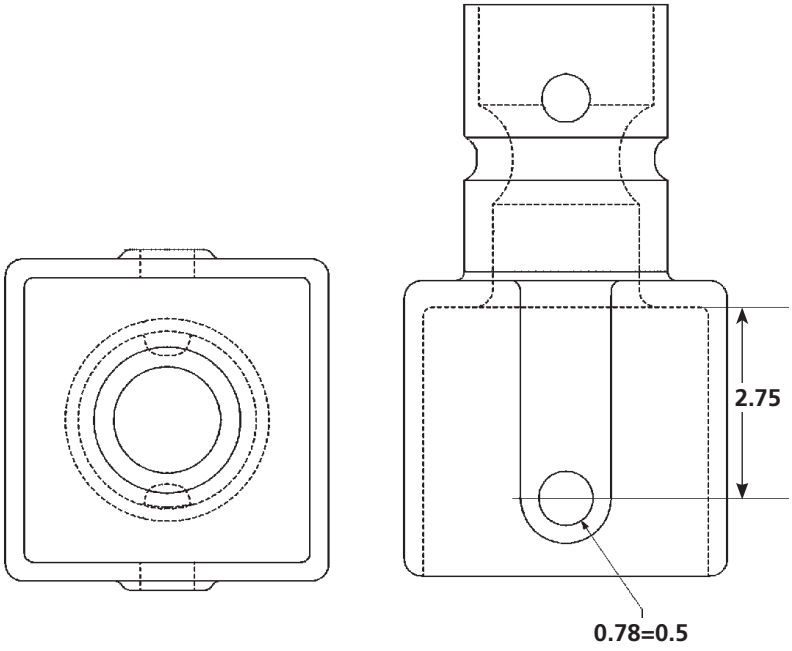


P4001594P: Altec® Jib Adapter: 3" Round



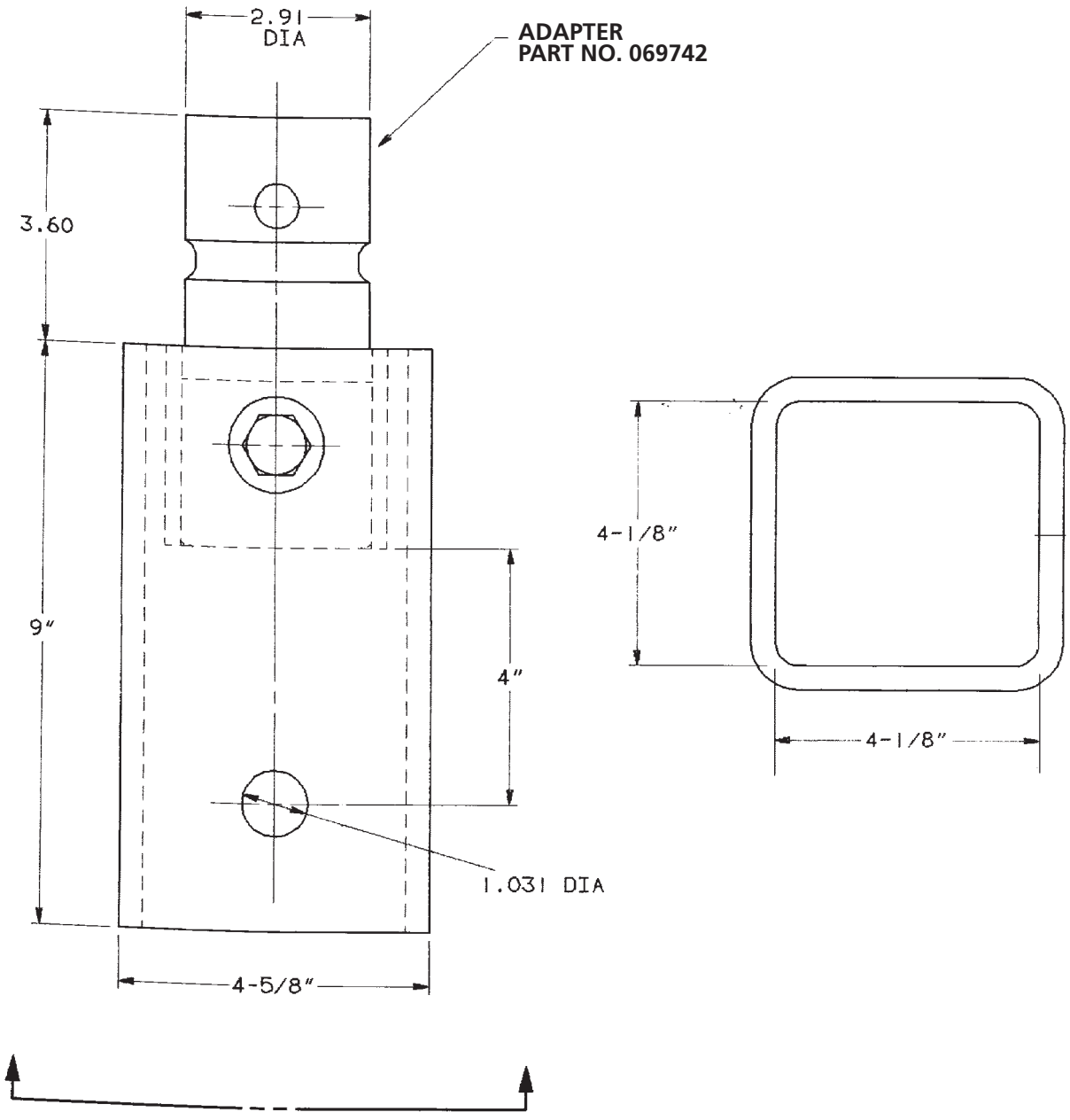
P4001594P

P4002536P: Altec® Jib Adapter: 4" x 4" Square



P4002536P

T4001932: Hi-Ranger Jib Adapter

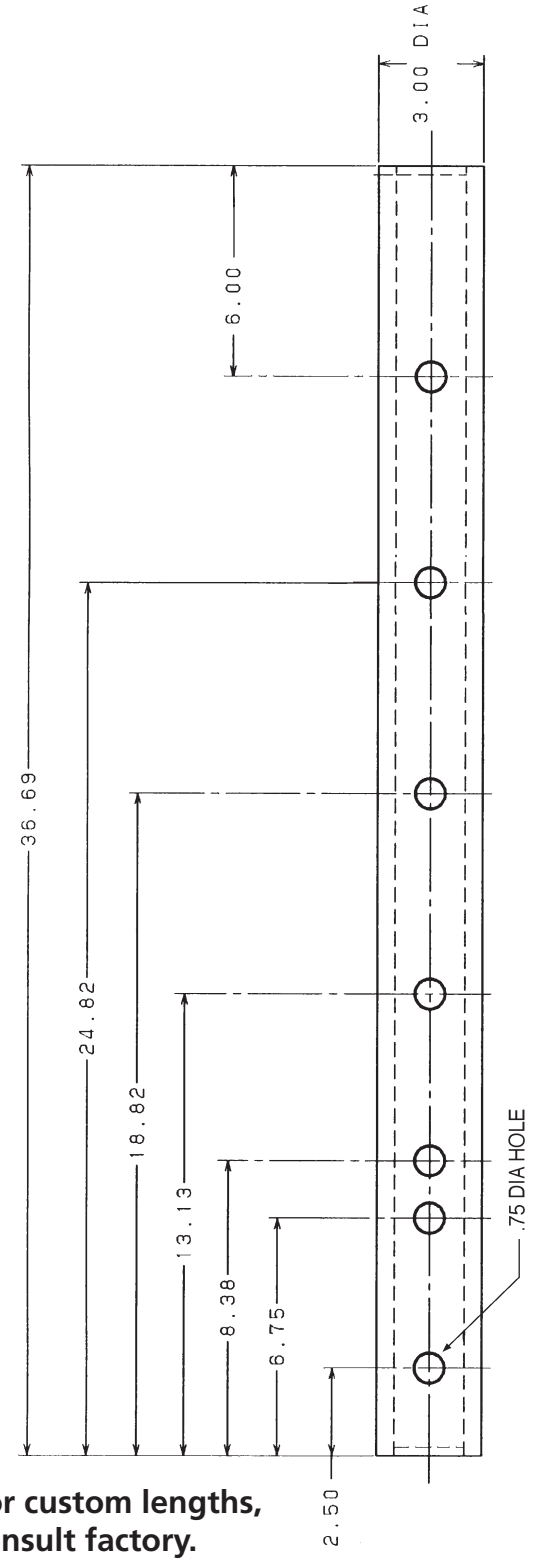


FOR USE WITH CHANCE

T4001856	Support Arm
T4001857	Support Arm
C4000746	Rope Sheave Assembly
C4000747	Large Roller Wireholder

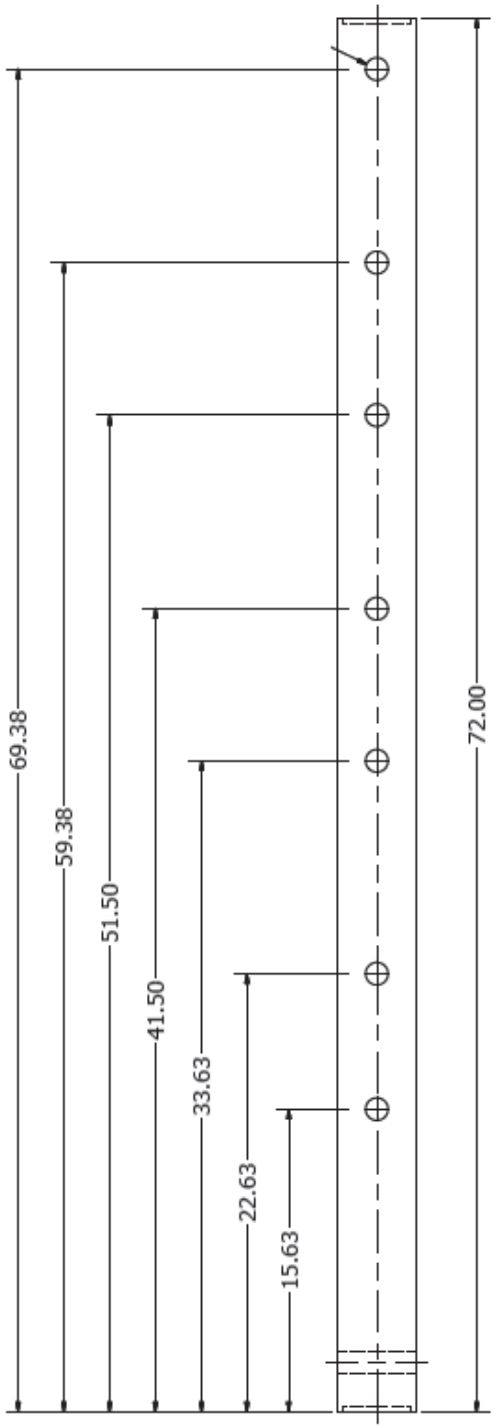
T4001525: 3"-diameter Insulated Jib for Altec® trucks
Rated Working Load: 1,000 lb.

Tool Bag PSC4032902 sold separately. (7-1/2" x 42")



For custom lengths, consult factory.

PST4002748: 4" x 4" x 6' Insulated Jib for Altec® trucks
Rated Working Load: 800 lb.



For custom lengths, consult factory.

CHANCE®

T6001971: Truck Grounding Set

Features & Applications

- Drains off capacitance or static charges from winch trucks and aerial devices
- This grounding method should not be considered adequate protection for personnel against conductor contact

Screw Ground Rod

(Catalog No. G3370)
When installed, 6' copper-clad rod develops less resistance than straight ground rods. Helix (spiral section), T-handle and wingnut are bronze for high conductivity

Flat Face Ground Clamp

(Catalog No. T6001798)
For secure attachment to the truck bed at an area cleaned for electrical contact, clamp features bronze T-handle, aluminum body and serrated jaws with range for 1/8" to 1-1/2" angles or flats. Ratings: 400 amps continuous current; 25,000 amps fault current for 15 cycles and 30 cycles

C-Type Ground Clamp

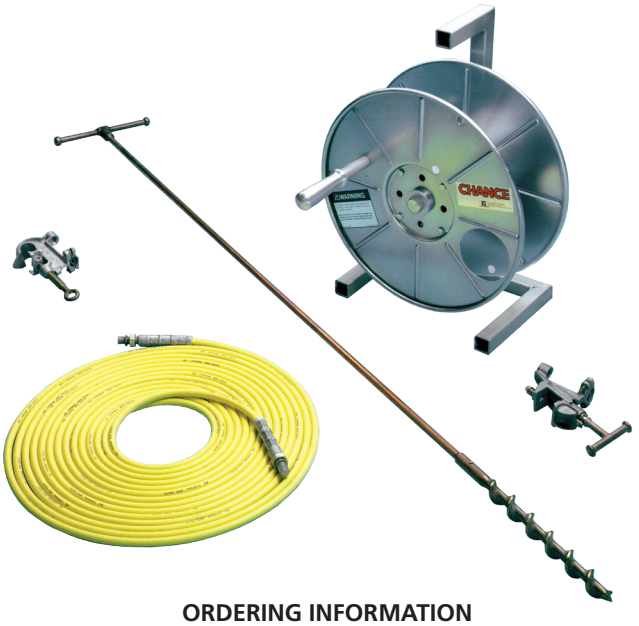
(Catalog No. C6001754)
For connection to vertical shaft of ground rod, clamp features smooth jaws and bronze eyescrew. Ratings: 350 amps continuous current; 28,000 amps fault current for 15 cycles and 20,000 amps fault current for 30 cycles

Grounding Cable and Ferrules

(Catalog No. S6116 & C6002618)
For easy handling, extra-flexible #2 copper cable features fine stranding and tough yellow T-prene rubber compound jacket for all-temperature uses down to -20°F. Cable length is 50 feet. Two shrouded aluminum ferrules come factory-installed on the cable to secure the threaded studs in the clamp terminals

Storage Reel

(Catalog No. C4176086)
To help keep ground set clean and ready for use, reel features tubular-steel frame which can be bolted to deck. Reel is for storage only. Cable and clamps must be removed completely from reel before use. Failure to do so could result in a dangerous voltage drop and violent mechanical reactions. A label on the unit gives this warning.



ORDERING INFORMATION

Catalog No.	Description	Weight
T6001971	Truck Grounding Set	35 lb./15.75 kg.

T3060006: Truck Visual Barrier

T3060006

Features & Applications

- Alerts workers and onlookers to stay away from truck when it is being used in proximity to energized conductors
- Six rods, made of bright-orange Epoxirod®, provide a 6' air space around the entire perimeter of truck
- Kit also includes:
  - Six pieces of 3" long steel tubing (to be welded to truck by the customer) to hold the barricade rods
  - 150 feet of yellow rope
  - Canvas storage bag
- Entire kit requires less storage than traffic cones
- Can be quickly installed and removed at each job site

Catalog No.	Description	Weight
T3060006	Truck Visual Barrier	21 lb./9.5 kg.

Swivel-Base Truck Mount

for 12V, 115V, 230V & Hydraulic 1,000-lb. Series 90 Capstan Hoists

NOTE: For Hitch-Receiver Mount, see Catalog Section 1150

For transport, hoist can remain mounted.

Sets At Angles Needed For A Variety Of Jobs

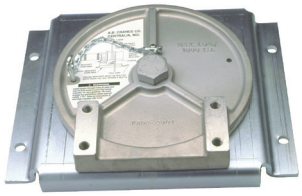
- Turntable design permits proper alignment without repositioning service vehicle
- Heavy-gauge steel base bolts direct to truck body
- Bracket can be pinned at every 15° interval around circular base for:
  - o Stringing
  - o Tensioning
  - o Sagging conductors
  - o Pulling in cable
  - o Hoisting equipment
  - o Setting poles
  - o Pulling vehicles
- To remove hoist and bracket from swivel base, simply remove four bolts
- C-bracket also can be bolted down for fixed-angle

⚠ WARNING

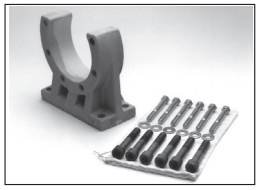
This is not a personnel lifting device. A label on the unit warns against lifting people or loads directly above people.

Utilize truck as portable power source

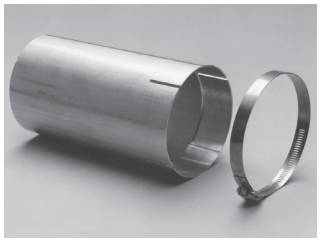
- Only 12V, 115V, 230V and Hydraulic 1,000-lb.-rated hoists are recommended for truck mounting
- See page 1153 to order

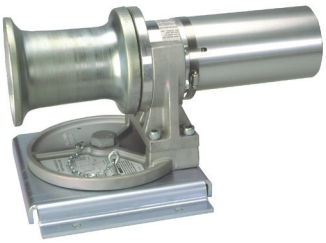


Swivel Bracket C3080903



C-Bracket C3080890





Swivel Bracket only

Catalog No.	Weight, each
C3080903	18 lb. (8.1 kg.)

C-Bracket only — complete with mounting bolts

C3080890	5 lb. (2.25 kg.)

Weather Shield for 12-Volt DC hoist only — complete with band clamp

C3080909	1 lb. (0.45 kg.)

HUBBELL®
Power Systems, Inc.

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March 2020

Catalog 4150

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Power Systems, Inc.

CHANCE® Tools and Grounding Catalog | 2020

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Hubbell Power Systems (HPS) manufactures a wide variety of transmission, distribution, substation, OEM and telecommunications products used by utilities. HPS products are also used in the civil construction, transportation, gas and water industries. Our product line includes construction and switching products, tools, insulators, arresters, pole line hardware, cable accessories, test equipment, transformer bushings and polymer precast enclosures and equipment pads.

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