

INSTRUCTIONS FOR INSTALLATION, OPERATION and MAINTENANCE

CHANCE TYPE LTD/ALTD DISTRIBUTION SWITCHGEAR

GENERAL

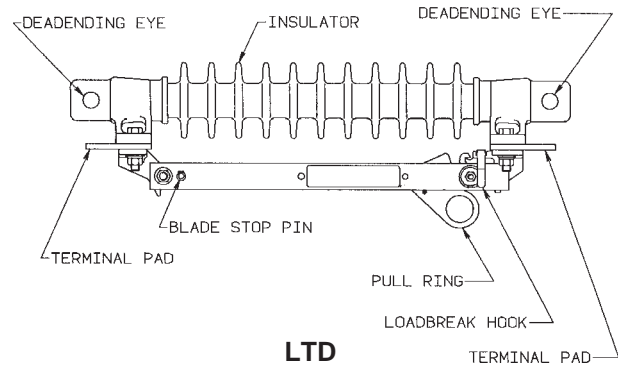
⚠ CAUTION

Read and understand these instructions before installation or operation of this equipment. Competent personnel who understand proper safety procedures must select, install, and service this equipment. This instruction guide is written for such personnel. This guide is not a substitute for adequate training and experience in safety procedures for this type of equipment.

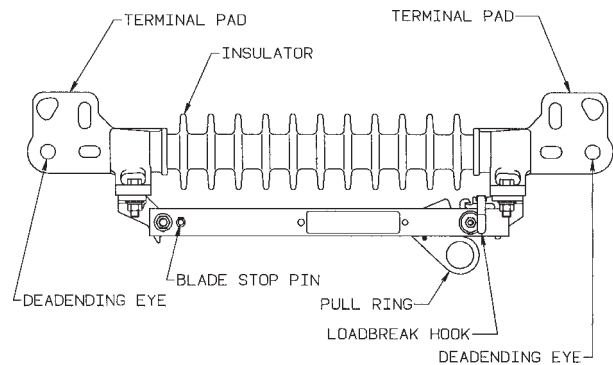
The Chance Line Tension Disconnect LTD® switches are single-phase hookstick operated for manual switching of overhead lines on an electrical distribution system through 38kV. Switches are offered in both 150 and 200kV BIL and are rated for 600 amperes continuous current. The LTD/ALTD may be applied wherever a disconnect switch is desirable for line sectionalizing and is installed directly into the line.

Select a properly rated LTD/ALTD switch for each installation with consideration to continuous current, BIL, and rated voltage. Should there be any concern on the use of this switch as rated, consult your supervisor before installation.

Inspect the switch for damage or missing parts. If damage from rough handling is evident, immediately file a claim with the transportation company.



LTD
Figure 1



ALTD
Figure 2

These instructions do not claim to cover all details or variations in equipment, nor to provide for all possible conditions to be met with concerning installation, operation, or maintenance of this equipment. If further information is desired or if particular problems are encountered which are not sufficiently covered in this guide, contact A. B. Chance Company.

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



POWER SYSTEMS, INC.

CHANCE®

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INSTALLATION

The LTD/ALTD switch is supplied with a blade stop pin. Determine, before raising the switch for mounting, which opening angle is desired. Standard blade opening is 90° and is 180° with the stop-pin removed.

Deadend conductors to the switch deadending eyes as shown in **Figures 3 and 4**.

Wire brush connector mounting surfaces, terminal pads and electrical conductors and apply a coating of oxidation inhibitor such as Chance z.l.n. (100 or 200) to the connector surfaces and the conductor. Tighten connector hardware to the manufacturer's recommendations.

⚠ CAUTION

Deadend only to the pull-off hole on the ALTD. Deadending to any of the other holes may result in damage to the switch.

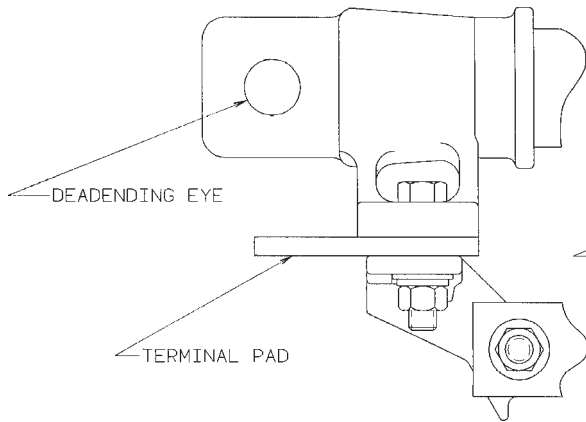


Figure 3
LTD

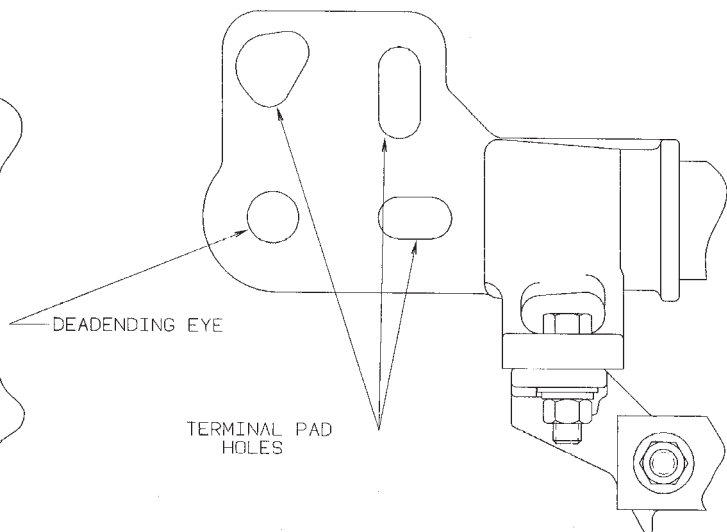


Figure 4
ALTD

OPERATION

⚠ CAUTION

Only qualified personnel should operate a disconnect switch. Such personnel should wear appropriate protective equipment such as rubber gloves, hard hat, safety glasses, etc., in accordance with established utility and safety practices.

To close the LTD/ALTD disconnect switch, place the hookstick in the pull ring on the blade and rotate the blade to an intermediate position as shown in **Figure 5**. Look away from the switch. Quickly and firmly drive the switch blade to the closed position. Carefully remove the hookstick from the pull ring to avoid opening the switch.

The LTD/ALTD switch is properly closed when the blade hook is fully engaged with the latch portion of the blade stop as shown in **Figure 6**.

To open the LTD/ALTD disconnect switch, place the hookstick in the pull ring as shown in **Figure 7**.

Look away from the switch. Quickly and firmly pull down and towards the hinge end of the switch at about a 45° angle. Once the switch blade is open, complete the blade travel to its stop position. Carefully remove the hookstick from the pull ring.

⚠ WARNING

Do not attempt to open a disconnect switch to interrupt load current. An arc started by opening a disconnect switch under load could cause injury to personnel or damage to equipment.

All Chance LTD/ALTD disconnect switches include loadbreak hooks for use with a loadbreak tool. To open the switch under load, use only an approved loadbreak tool or device designed for use with switches. Follow the instructions provided with such tools.

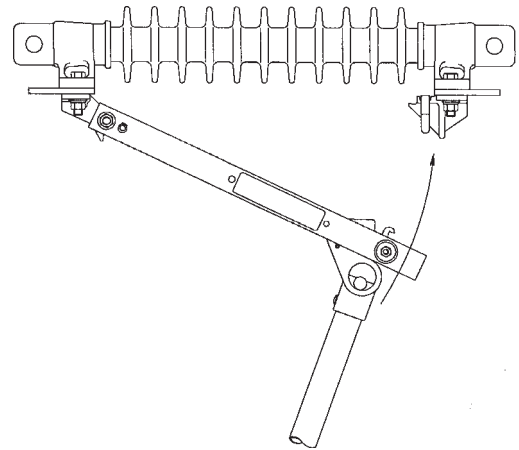


Figure 5

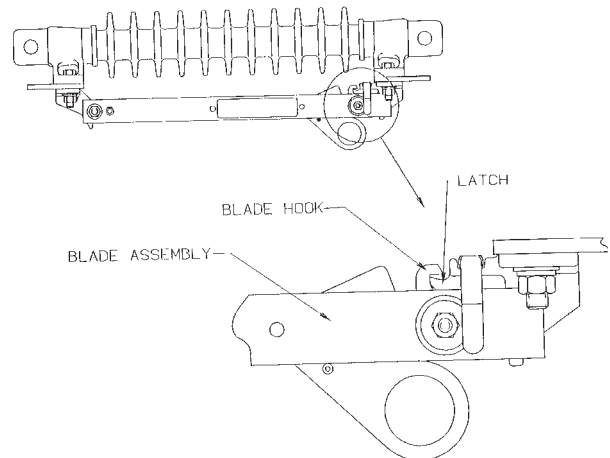


Figure 6

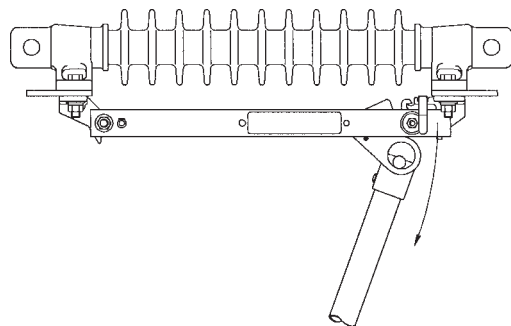


Figure 7

MAINTENANCE

The Chance LTD/ALTD disconnect switch should require low maintenance. Following a program of periodic inspection and maintenance will prolong the life of the LTD/ALTD switch.

- Operate the switch periodically to clean contact surfaces and to free moving parts.
- Check for burned or pitted contacts and replace if necessary.
- Check hinge bolt for looseness. If loose, torque to 30 in-lb for starting point, then adjust as required to obtain 12 to 15 lb. of pull (using a spring scale hooked in pull ring - pull perpendicular to blade) to move blade to open position after disengaging contact.
- Inspect all blade rivets for tightness and replace blade if loose.
- Inspect bolted connections and tighten as recommended by the connector manufacturer.
- Replace switch if insulator is broken or cracked. Clean or replace if heavily contaminated.

For additional recommendations, refer to ANSI C37.35 "IEEE Guide for the Application, Installation, Operation, and Maintenance of High Voltage Air Disconnecting and Load Interrupter Switches."

