

INSTRUCTIONS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CHANCE TENSION PULLER SWITCHING TOOL

GENERAL

⚠ CAUTION

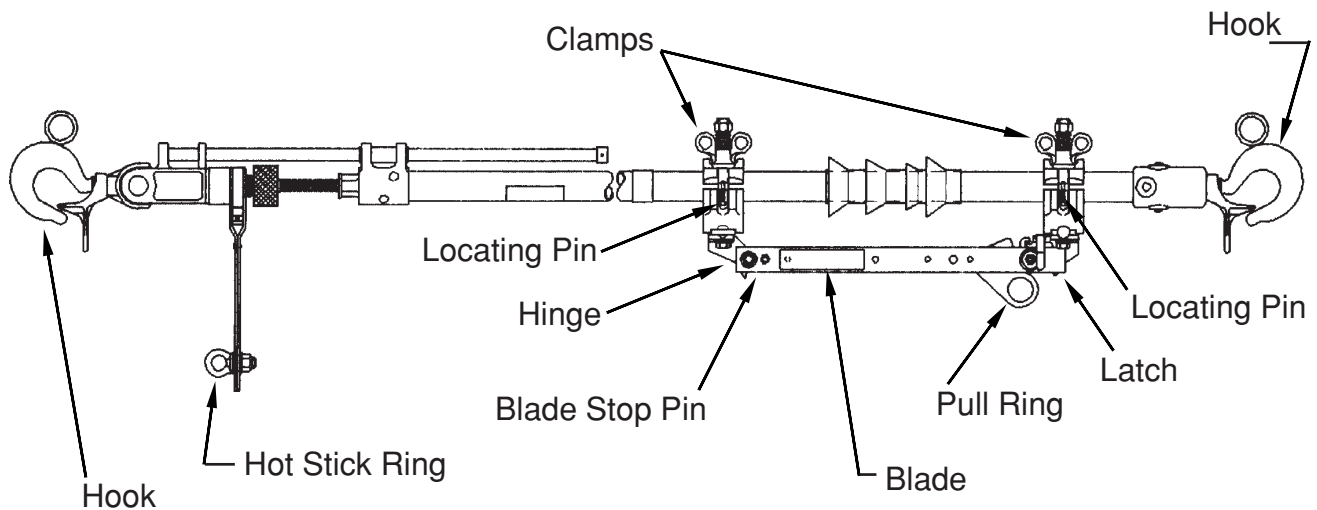
Read and understand these instructions before installation or operation of this equipment. Competent personnel who understand proper safety procedures must select, install, and service this equipment. This instruction guide is written for such personnel. This guide is not a substitute for adequate training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

The Chance Tension Puller Switch is a single-phase hookstick operated for manual switching of overhead lines on an electrical distribution system through 35kV. This tool may be applied wherever a

disconnect switch is desirable for temporary line sectionalizing and is installed into the line by using the appropriate size wire grips installed through the hooks at each end of this tool.

Verify that tension puller switching tool is properly rated for each installation with consideration to line tension (Max. 4,000 lbs.), continuous current (600 amps), BIL (150 kV), and rated voltage (35kV line-to-line). Should there be any concern on the use of this tool 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.



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.



CHANCE

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

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INSTALLATION

Verify that switch is properly clamped onto pole of tension puller, with head of locating pins engaging hole in each pole-clamp base.

The tension puller 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.

Operate the switch blade to insure proper alignment and that switch blade is fully closed.

Install the appropriate size wire grips onto the conductor on each side of section to be cut or repaired.

Install hooks of the tension puller switching tool into the eyes of the wire grips. NOTE: Maximum tensile strength of tool is 4,000 pounds.

Apply appropriately rated jumper sets between the conductor and the by-pass studs on the switch.

Using the tension puller portion of tool, operate

OPERATION OF SWITCH

To close the switch, place the hookstick in the pull ring on the blade and rotate the blade to an intermediate position. Look away from the switch. Quickly and firmly drive the switch blade to closed position. Carefully remove the hookstick from the pull ring to avoid opening the switch.

The switch is properly closed when the blade hook is fully engaged with the latch portion of the blade stop.

To open the switch, place the hookstick in the pull ring.

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.

The Chance Tension Puller Switching Tool includes loadbreak hooks for use with a loadbreak tool. To

MAINTENANCE

The Chance Tension Puller Switching Tool should require low maintenance. Following a program of periodic inspection and maintenance will prolong the life of the tool.

- All surfaces of this tool must be kept clean and dry at all times. Clean with Moisture Eater cleaning solvent. Failure to keep this tool clean and dry or follow these instructions may result in serious injury.
- Operate the switch periodically to clean contact surfaces and to free moving parts.
- Check for burned or pitted contacts and replace if necessary.

handle to obtain proper slack in conductor between wire grips.

After extra care has been taken to confirm that switch is properly closed, jumpers are properly applied, and the wire grips will hold the conductor, the conductor can be cut and properly secured. Do not cut conductor unless switch blade is closed.

The switch can now be opened.

WARNING

Do not open an energized switch without using an approved loadbreak tool or device designed for use with switches. Follow the manufacturer's instructions provided with such tools. Even with switch open, conductor must still be treated as energized.

WARNING

Before releasing Tension Puller, be certain that newly installed item can carry mechanical load and electrical load.

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.

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. Open with only approved loadbreak tool or device designed for use with switches.

- Check hinge bolt for looseness. If loose, torque to 30 in.-lbs. for a starting point, then adjust as required to obtain 12 to 15 lbs. 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.

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*.