

#### REPLACEMENT PARTS LIST

Item	Order	Order Qty.	<b>5</b>	
No.	Part No.	Per Ass'y.	Description	
1	P001-1102	2	Screw-Handguard	
2	E403-1157	2	Handguard Half	
3			Order as Parts	
4	P403-1167	1	Spring	
5	C403-1632	1	Contact Rod Assembly	
6	056702	1	Screw-Latch	
7	P056674	1	Lockwasher	
8	P403-1163	1	Latch Spring	
9	P001-0221	1	Spacer	
10	P001-0273	1	Set Screw	
11	056692	1	Locknut	
12	P601-0021	1	Lockwasher	
13	E403-1628	1	Head Assembly	
14	E403-1165	1	Handle Assembly	
*15	P403-1626	1	Bushing	
16	P001-1046	2	Retaining Ring	
17	C403-1633	1	Lower Contact Housing	
18	E403-1164	1	Lanyard Assembly	

<sup>\*</sup> Bushing must be installed with slot on end shown.

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



# **Operating Instructions**

# for **CHANCE**® Load Pick-Up Tool

## **NOTICE**

The information contained in this instruction sheet has been compiled as a result of review of the product, its intended application and use considerations. However, no instructions can anticipate all of the variations which may be encountered by all users. Therefore, it is imperative that basic safe work practices and good judgment are employed when using this or any other tool. Should additional information and details be desired or specific situations arise which are not covered adequately for the user's purpose contact A. B. Chance Co.

The A. B. Chance load pickup tool is designed and intended for temporary connecting or transferring load current between two conductors only and should not be left permanently installed. It is not designed to be used to interrupt or break load currents.

# **WARNING**

This tool has both a maximum load current pickup and continuous rating of 250 amps at 15 kV phase-to-phase, or 15 kV phase-to-ground. Never exceed 15 kV across the open contacts.

# **WARNING**

To use the jumper set at full rating of 15 kV  $\emptyset$  -  $\emptyset$  and 15 kV  $\emptyset$ -ground, jumper cable rated at 25 kV must be used. If 15 kV cable is used, the jumper set rating is 15 kV  $\emptyset$ - $\emptyset$  and 8.3 kV  $\emptyset$ -ground .

This tool contains and depends on insulating materials for safe operation; therefore, it must be kept clean, dry and free of contamination. The operator should conduct a brief visual examination of the tool prior to installation for each operation. If any contamination or moisture is detected in the housing tube, the tool should be disassembled and properly cleaned and dried prior to use. Normal maintenance of disassembly, inspection, and cleaning should be conducted approximately every 25 operations or 90 days, whichever comes first. This tool must be treated as an energized line tool at all times.

## **WARNING**

The user of this tool must wear appropriately rated rubber gloves and personal protective equipment to guard against electrical shock and electrocution and follow safe work practices.

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#### **OPERATION INSTRUCTIONS**

Wear appropriate rubber gloves and personal protective equipment. Follow safe work practices. Thoroughly wire-brush the contact area on conductors.

- A. Before attaching load pickup tool or jumper clamp, open contacts by passing the orange colored push rod through the slot opening in head cap and push contact rod down approximately 3 inches until a click is heard. If properly latched the contact rod will remain in the open position. This must be verified by visual inspection through the clear housing tube.
- B. Install jumper clamp on the line to be energized.
- C. Install load pickup tool on energized line and tighten, keeping hands below lower hand guard. To pick up the load, exert a steady pull on the lanyard until the spring-loaded contact rod is released and closes the contacts.

**NOTE:** Do not open the contacts after removal of the tool until ready to use the tool again. This will reduce strain on the operating rod spring.

## TO INSTALL CABLE IN TOOL

- A. Release tool to "closed" position by pulling lanyard.
- B. Remove two slotted head screws (item 1) from hand guard.
- C. Remove two hand guard halves (item 2) from tool housing by pulling straight out. This will disengage the two brass pins that are molded into the hand guards.
- D. Pull on lanyard to remove contact/latch assembly (item 3).
- E. Remove spring (item 4) and contact rod (item 5) from tool.
- F. Remove insulation from cable equal to depth of hole in ferrule. Apply a good contact aid, such as Chance ZLN 100 Cat. No. M1920-3, to the bare cable. Install ferrule on bare cable end and crimp (see table). Make first crimp  $\frac{7}{8}$ " from center of crimp to cable end of ferrule. Make the second crimp 90° to the first crimp and  $\frac{9}{16}$ " from the ferrule end. The third crimp should be 90° to the second crimp and in line with the first crimp,  $\frac{1}{4}$ " from the ferrule end. Remove any excess contact aid from ferrule and cable.
- G. Assemble locknut (item 11) and lockwasher (item 12) to ferrule as shown. Tighten ferrule into contact/latch assembly (item 4) and tighten set screw (item 10) securely.
- H. To reassemble tool install spring (item 4) and contact rod (item 5) in contact/latch assembly (item 3) by pushing firmly on contact rod until it latches in contact/latch assembly.
- Install cable/latch assembly into main tool housing taking care to line up slot in white plastic sleeve on contact/latch assembly with the holes in tool housing. Install two lower handguard halves (item 2) ensuring that the attachment pins engage the holes in the tool.
- J. Install the two captivation screws (item 1) in handguard. The tool is now ready for use.

## **CLEANING AND INSPECTION**

Recommended interval: 25 operations or 90 days.

- A. Disassemble tool. (See steps A thru E above).
- B. Unscrew and remove head. Upper contacts can now be seen in the bottom of head. Clean contact fingers and inspect for worn or damaged spot. Clean conductor contact surfaces with a wire brush.
- C. Inspect lower contacts in end of contact/latch assembly (item 3) clean contact fingers and inspect similar to upper contacts.
- D. Inspect contact rod (item 5) for pitting and roughness. Remove any roughness with fine emery cloth. Inspect latch area on contact rod. If worn, replace contact rod.
- E. Remove screw (item 6), lockwasher (item 7), latch spring (item 8), and spacer (item 9). Inspect end of latch spring for wear or burrs. Correct or replace latch spring as needed.
- F. Apply a coating of "Conductolube" contact grease to contact fingers of upper and lower contacts.
- G. Clean all plastic parts inside and out with a soft cloth damp with ethyl alcohol only!
- H. Reassemble tool (steps H thru J above).

NOTE: "Conductolube" is available from: Cool-Amp Conducto-Lube Co. Lake Oswego, Oregon 97035

## **CONNECTOR INSTALLING DIE CHART\***

Chance				
Connector	Burndy No.	Kearney No.	Nico Press	No. of
Size	(Hydraulic Tool)	(Hydraulic Tool)	No. 88	Crimps
4/0	U166	840	H-5	3
2/0	U165	5⁄8-1	G-3	3
1/0	U165	9/16	F-6	3
2	U165	9/16	F-6	3

<sup>\*</sup> Cross reference shown is listed for Chance compression connectors listed above, and is not intended as a blanket interchangeability chart.

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