# PIT <br> Probe Insertion Tools 

Warning! This tool should not be used on live electrical circuits. It is not protected against electrical shock! Always use OSHA/ANSI/CE or other industry approved eye protection when using tools. This tool is not to be used for purposes other than intended. Read carefully and understand instructions before using this tool.

Note: These tools have been specifically designed for the installation and removal of $\mathbf{1 5}$ to 35 KV Load Break Probes.


PIT 1T
U.S. Patent 5,605,082

## FEATURES AND BENEFITS

- For 15 to 35 KV Load Break Elbows
- Allows for quick and easy insertion of the probe inside the elbow
- Prevents load break probe breakage and contamination
- Reduces cross threading
- Preset torque of $125 \mathrm{in}-\mathrm{lb}$
-Allows for quick removal by reversing the tightening action
- Multiple drive systems:
- Adjustable T-Bar handle
$-3 / 8$ " $(9.5 \mathrm{~mm})$ square socket drive
- 1" ( 25.4 mm ) hexagon for wrench
-13/16" ( 20.64 mm ) penta-socket wrench

Fig. 1

## OPERATING INSTRUCTIONS




Step 1. (Fig. 2) Assemble the T-Bar handle (A) into the tool body and secure by tightening screw (B).
Step 2. Insert the probe into the tool by depressing the spring loaded lever (C), this will allow the probe to enter the tool cavity. Align the probe hole with the tool lever pin and insert the probe until the probe hole and pin are in alignment. Release the spring loaded lever (C) as in (Fig. 3). Be careful not to dirty or damage the arc-quenching material on the probe.

Step 3. Holding the tool with the probe locked in place, insert the probe into the load break elbow and slowly rotate the tool clockwise to thread the probe into the crimp connector inside the elbow.
Step 4. Continue to rotate the tool and tighten until the clutch ratcheting is felt. An audible snapping will be heard, along with the ratcheting of the tool. This will indicate the torque value of $125 \mathrm{in}-\mathrm{lb}$ has been reached.
Step 5. Depress the spring loaded lever (C) and carefully remove the tool from the probe.
TO REMOVE THE PROBE - Follow Steps 1-3; In Step 3, rotate counter-clockwise to unthread the probe.
For Additional Leverage

- The T-Bar handle can be repositioned by loosening screw (B) and sliding the T-Bar handle to the groove(s) provided.
- A $3 / 8$ " $(9.53 \mathrm{~mm})$ drive opening (D) at the top of the tool is also provided for using a $3 / 8 "(9.53 \mathrm{~mm})$ socket wrench as leverage.
- 1" $(25.4 \mathrm{~mm})$ hexagon (F) for a fixed or adjustable wrench.
- A $13 / 16$ " ( 20.64 mm ) pentagon ( E ) is provided for using a penta-socket wrench.


## Calibration

Tool torque can be checked by placing a $3 / 8^{\prime \prime}(9.53 \mathrm{~mm})$ torque wrench into the $3 / 8 "(9.53 \mathrm{~mm})$ drive opening (D).

## FEATURES AND BENEFITS

PIT 2


- For 35 KV Cooper Power Systems Load Break Probe
- Prevents probe arc follower contamination
- Prevents probe arc follower breakage
- Provides a tight connection and reduces cross threading
- 1 " hexagon on the end of the tool as tool drive system


## OPERATING INSTRUCTIONS



Fig. 5

Step 1. Insert the probe into the tool by depressing the spring loaded lever (G), this will allow the probe to enter the tool cavity. Align the probe hole with the tool lever pin and insert the probe until the probe hole and pin are in alignment and release the spring loaded lever (G) as in (Fig. 5). Be careful not to dirty or damage the arc-quenching material on the probe.
Step 2. Holding the tool with the probe locked in place, insert the probe into the load-break elbow as in (Fig. 6) and slowly rotate the tool clockwise to thread the probe onto the crimp connector inside the elbow.
Step 3. Continue to rotate the tool and tighten securely by hand wrench or torque wrench. See table below for drive variations.
Step 4. Refer to manufacturer's specifications for torque values.
Step 5. Depress the spring loaded lever (C) and carefully remove the tool from the probe.
TO REMOVE THE PROBE - Follow Steps 1-3; In Step 3, rotate counter-clockwise to unthread the probe.

Fig. 4

TOOL SELECTION CHART

| Model Number | Rating Drive | Torque <br> Limiting |  |
| :---: | :---: | :--- | :---: |
| PIT-1T | $15-35 \mathrm{KV}$ | $3 / 8 "(9.53 \mathrm{~mm})$ Square Drive, 1" $(25.4 \mathrm{~mm})$ Hexagon, <br> T-Bar Handle, 7/8 Penta Drive | Yes |
| PIT-2 | 35 KV Cooper | $1^{\prime \prime}(25.4 \mathrm{~mm})$ Hexagon | No |

WARRANTY: RIPLEY warrants its products against defective materials and workmanship for a period of one year from date of shipment from the RIPLEY factory provided the product is utilized in accordance with instructions and specified ratings.

