

WARNING



Read and understand these instructions, the fitting manufacturer's installation instructions, the ASTM F1807 standards and the warnings and instructions for all equipment and material being used before operating this tool to reduce the risk of property damage and/or serious personal injury.

- Do not use handle extensions (such as a piece of pipe) to increase leverage. Handle extensions can slip or come off and increase the risk of serious injury. If excessive force is required to operate the tool, check tool adjustment.
- Always wear eye protection to reduce the risk of eye injury.

If you have any questions concerning this RIDGID product:

- Contact your local RIDGID distributor.
- Visit www.RIDGID.com to find your local RIDGID contact point.
- Contact RIDGID Technical Services Department at rtctechservices@emerson.com or in the U.S. and Canada call (800) 519-3456.

Description

RIDGID ASTM F1807 Close Quarters Manual PEX Crimp Tools are designed to mechanically crimp ASTM F1807 copper crimp rings to the required dimensions for proper installation. The tool is adjustable to compensate for wear.

The Manual PEX Crimp Tool features an integrated Go-No Go gauge to inspect the crimped rings.

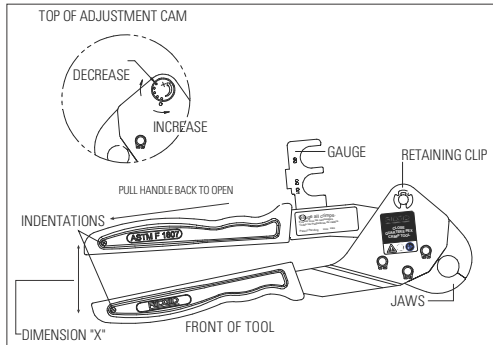


Figure 1 – ASTM F1807 Close Quarters Manual PEX Crimp Tool

NOTICE

When used properly, RIDGID ASTM F1807 Close Quarters Manual PEX Crimp tools make crimps that conform to ASTM F1807. Selection of the appropriate materials and joining methods is the responsibility of the system designer and/or installer. Before any installation is attempted, careful evaluation of the specific service environment, including chemical environment and service temperature, should be completed. Consult crimp fitting system manufacturer for selection information.

Inspection/Maintenance

1. Inspect the Manual PEX Crimp Tool before each use for excessive wear, damage or other issues that could affect safe use. Clean as needed to aid inspection and prevent handles from slipping from your grip during use. Make sure the tool is complete and properly assembled. Make sure tool markings are present and readable. Do not modify the tool. Discard and replace damaged tools.
2. Apply a light lubricating oil on the pivot points of the tool as needed. Wipe any excess oil from the tool.
3. Inspect the crimp profile of the tool daily. If rusty, dirty or if there is evidence of fitting material build up in the crimp profile, clean with metal polishing pads (or equivalent), steel wool, or a steel bristle wire brush.

Do not clean the crimping profile with aggressive abrasive materials or methods such as emery cloth, sandpaper, grinding wheels or rotary files. These may alter critical crimping profile dimensions and cause improper crimping connections that can lead to extensive property damage.

Set Up/Operation

1. Prepare the connection to be crimped per the ASTM F1807 standard and/or per the instructions for the specific brand of ASTM F1807 compliant fittings that you are installing.
2. To open the tool jaws, pull back on the movable handle. With the tool square to the barbed section of the fitting, center jaws over the crimp ring and allow to close.
3. Crimp the connection by squeezing the tool handles together until they touch. Per the ASTM F1807 standard, crimp rings should not be pressed more than once.
4. Open the tool and remove from the fitting. Inspect the connection.

Inspection of Pressed Connections

Every crimped connection must be checked with the gauge as instructed in steps 1 & 2 to insure proper tool calibration and crimped connection performance. Incorrect size connections can result in leaks.

1. Hold gauge perpendicular to the axis of the tube (see Figure 2). Try to slide the "NO-GO" slot over the crimped ring in at least two places (but not at tool parting line). If the gauge goes over the ring, the crimp is too small and should be cut out and discarded. Tool calibration should be checked as described in Crimp Tool Adjustment section. (see Figure 3 and 4). If gauge does not slide over the crimped ring proceed to step 2.
2. Hold gauge perpendicular to the axis of the tube. Try to slide the "GO" slot over the ring in at least two places (but not at tool parting line). If the gauge cannot fit over the ring the crimp is too large and should be cut out and discarded. Tool calibration should be checked as described in Crimp Tool Adjustment section. (see Figure 3 and 4). If gauge does slide over the crimped ring then the ring has been crimped to the proper dimensions.



Figure 2 – Hold gauge perpendicular to tube and slide over ring.

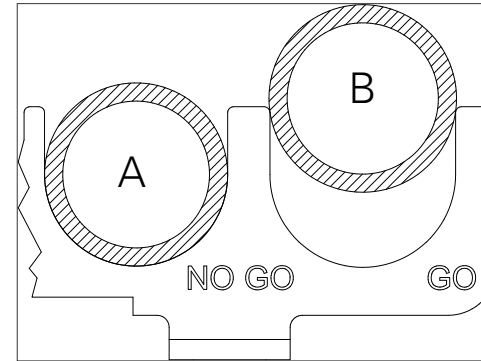


Figure 3 – Out of Tolerance Connections: A) Crimped ring fits in "NO GO" slot – ring is undersized; B) Crimped ring does not fit in "GO" slot – ring is oversized.

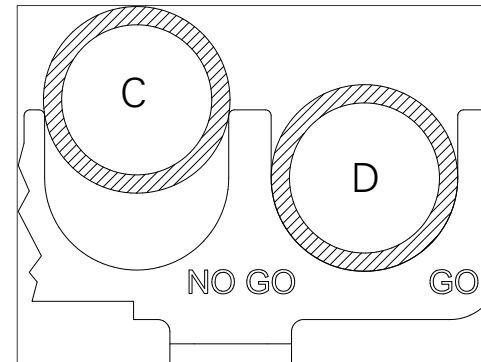


Figure 4 – Good Connections; crimped ring fits in "GO" slot C) Crimped ring does not fit in "NO GO" slot – ring is oversized; D) Crimped ring does fit in "GO" slot – ring is oversized.

3. To adjust the distance between indentations:
 - a) Remove the retaining clip from the adjustment cam on the back side of the tool.
 - b) Pull the adjustment cam up slightly and rotate it to the next locating dot.
 - i) Rotate the adjustment cam counterclockwise to increase chart dimension X.
 - ii) Rotating the adjustment cam clockwise decreases chart dimension X.
 - c) Push the adjustment cam back down to its original position, flush with the face of the tool.
 - d) Reinstall the retaining ring clip on the adjustment cam.
4. Repeat step 2 to verify the new adjustment cam location meets correct chart dimension X.
5. Make three press connections with the tool. Check the pressed connections with the gauge and recheck the distance between the indentations. If the press connections are not the correct size or the distance between the indentations is not correct, the tool is worn out and should be replaced. Incorrect tool adjustment can cause incorrect press dimensions and/or excessive tool wear.

Cat. No.	Description	Allowable Dimension X
43853	1/2" Close Quarters Manual PEX Crimp Tool	2 9/16" ± 1/4"
43858	3/4" Close Quarters Manual PEX Crimp Tool	3 1/4" ± 3/8"

3. Test and inspect system in accordance with fitting manufacturer's instructions, normal practice and local codes.

Crimp Tool Adjustment

The RIDGID ASTM F1807 Close Quarters Manual PEX Crimp Tool comes pre-adjusted from the factory and should not require any further adjustment out of the box. If the pressed connections are not the correct size (as inspected with the gauge), the tool can be adjusted.

1. Close the tool handles until the jaws touch at the tip.
2. Measure the distance between centers of the indentations at the end of handles (see Figure 1 – "Dimension X"). If the measured distance is within the allowable dimensions (X) shown in the chart below, the adjustment is correct. If not, the tool requires adjustment.