



This document contains the recommended procedures to refurbish a Hawkeye Industries Inc.

Requirements

Ensure the Tubing Drain has been activated, either through normal operation, or via the Hawkeye Mechanical Activation tool.

Contents

- A.) Inspect Drain
- B.) Install Refurbishment Kit
- C.) Reassemble & Pressure Test

Tools

- ▶ 1/8" Allen Key
- ▶ Solvent / Cleaning Solution
- ▶ O-Ring Pick
- ▶ Grease (Castrol MP or eq.)

Parts Required

QTY	Part
▶ 1	Tubing Drain Refurb. Kit for your size of Tubing Drain

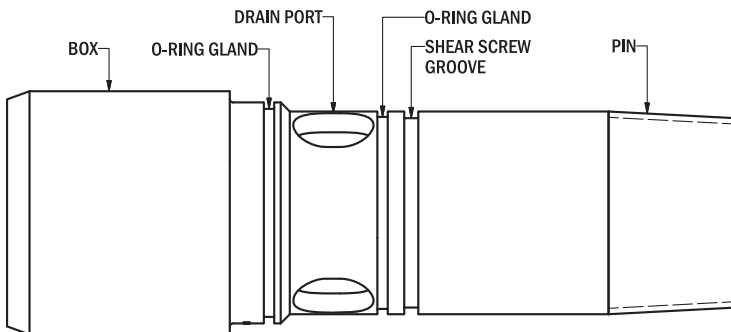


Figure 1

A.) Inspect Drain

Consult Figure 1 for drain terminology

- 1.) Remove and discard old o-rings.
- 2.) Clear the OD of the body and ID of the sleeve of any remaining shear screw fragments.
- 3.) Clean the drain body and sleeve thoroughly prior to inspection.
- 4.) Inspect and gauge the Male (Pin), Female (Box) EUE threads on the body as well as the 1/4 UNC threads on the sleeve for damage, and chase if necessary.
- 5.) Inspect the areas highlighted on the tubing drain body (see Figure 2).

Note any deformation, gouging or damage to the o-ring glands (the two grooves directly adjacent the drain port) and the shear screw groove.

Minor damage to the shear screw groove, such as burrs at shear locations, can be repaired with some light filing. Care must be taken not to fillet or chamfer any of the groove edges.

- 6.) Inspect the sealing surfaces of the tubing drain sleeve (see Figure 3).

If there are gouges or other marks that would compromise the seal, the sleeve should not be reused.

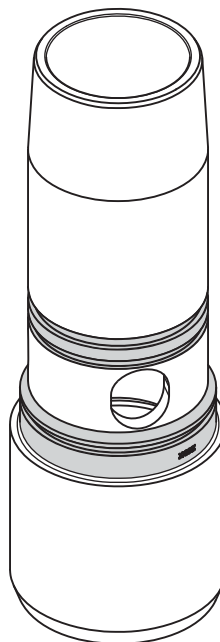


Figure 2

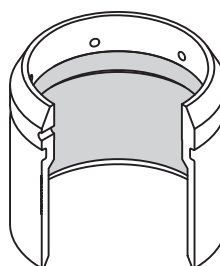


Figure 3

B.) Install Refurbishment Kit

- 1.) Remove o-rings from Refurbishment Kit package. Note: the o-rings are different sizes, and are not interchangeable.
- 2.) Install the larger o-ring in the gland nearest the Box-end of the tubing drain.
- 3.) Install the smaller o-ring in the gland on the other side of the drain ports.

DO NOT INSTALL THE O-RING IN THE SHEAR SCREW GROOVE.

See Figure 4 for proper o-ring placement.

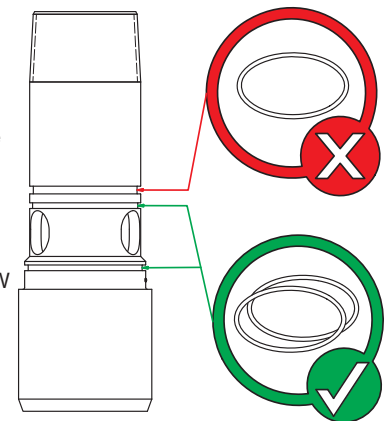


Figure 4

C.) Reassemble

- 1.) Lubricate the o-rings using Castrol MP grease. However any o-ring lubricant suitable for use on fluorocarbon (FKM) seals will be acceptable.
- 2.) Slide the tubing drain sleeve over the body, with the shear screw holes toward the pin end of the drain (see Figure 5).
- 3.) Press the sleeve into place. There should be no gap between the sleeve and the shoulder of the tubing drain body (see Figure 6).
- 4.) Install the shear screws in the sleeve in an alternating star-type pattern using minimal hand-tight torque. Do not over-tighten. See Figure 7.
- 5.) Hydro test the drain up to 50% of activation pressure to test for leaks.

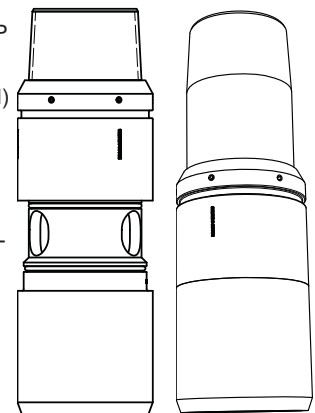


Figure 5 & 6

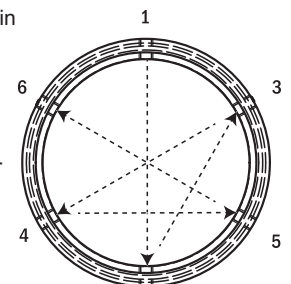


Figure 7