



**BU-3146**

**MAINTENANCE INSTRUCTIONS FOR DAH  
AND DAH2 HYDRAULIC ACTUATORS**

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## 1.0 REFERENCE

- 1.1 Valve actuator assembly drawings C-1868 and B-1384.

## 2.0 PURPOSE

- 2.1 To establish maintenance instructions when replacing "T" rings in hydraulic actuators.

## 3.0 SCOPE

- 3.1 This maintenance instruction (BU-3146) is to be used for all DAH and DAH2 actuators.

## 4.0 INSTRUCTIONS

Caution: Vent all pressure from system and actuator before removing valve for maintenance.

### 4.1 Disassembly

- 4.1.1 Remove valve from system and place in a vise equipped with "soft jaws".
- 4.1.2 Loosen and remove the hex socket set screws that hold the valve body and bottom mounting plate together.
- 4.1.3 Loosen hex jam nut and rotate actuator and bottom plate subassembly counterclockwise until coupling disengages from the valve upper stem. Remove the valve from the actuator and plate subassembly. Remove coupling.
- 4.1.4 Remove the actuator from the top plate by loosening and removing the (3) hex socket cap screws.
- 4.1.5 Remove the hex socket cap screws (item 13) that hold the plate (item 5) to the housing (item 1)
- 4.1.6 Using a spanner wrench, loosen and remove the cover (item 2). Use a packing puller to remove the "O" ring (item 8) from the cover. Be careful not to scratch the surface of the cover "O" ring groove.
- 4.1.7 Gently tap the piston (item 3) out the housing using a rubber mallet. Use a packing puller to remove the "T" ring (item 6) from the piston. Be careful not to scratch the surface of the piston "T" ring groove.



- 4.1.8 Use a packing puller to pull the lower "T" ring (item 7) from the housing. Be careful not to scratch the surface of the housing "T" ring groove.
- 4.1.9 Gently tap out the bronze bearing (item 10) from the housing using a plastic rod or wooden dowel.
- 4.1.10 Check all "T" ring grooves and sealing surfaces for damage

## 4.2 Assembly

General Note: Lightly grease all replacement "O" rings and "T" rings and piston shaft before reassembling actuator.

- 4.2.1 Insert "T" ring assembly (item 7) into the recess at the bottom of the housing (item 1).
- 4.2.2 Install the bronze bushing (item 10) into the recess at the bottom of the housing. Tap flush with raised land at bottom of housing.
- 4.2.3 Install "T" ring (item 6) on piston (item 3). Align piston with housing. Press piston into the cylinder bore.
- 4.2.4 Install "O" ring (item 8) onto cover (item 2). Place cover on housing and tighten with spanner wrench.
- 4.2.5 Replace plate (item 5) and tighten hex socket set screws (item 13).
- 4.2.6 Reattach the actuator to the top plate with the (3) hex socket cap screws.
- 4.2.7 Reattach the coupling
- 4.2.8 Grasping the actuator and plate assembly, carefully align and engage the upper stem with the coupling. Rotate the actuator and plate assembly clockwise until the bottom plate contacts the body.
- 4.2.9 Tighten the jam nut against the coupling. The valve assembly is ready to be returned to service.

General Note: *Butech Pressure systems recommends that refurbished valves be pressure tested before being returned to service.*



**RECORD OF REVISION**

REV NO	DESCRIPTION OF CHANGE	DATE	BY	APPR
0	Original document	4/17/02	DTG	DTG