



BU-3145

**MAINTENANCE INSTRUCTIONS FOR 20UV9*-DAH
HYDRAULICALLY OPERATED NEEDLE VALVE**

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE NUMBER</u>
1.0	Reference	2
2.0	Purpose	2
3.0	Scope	2
4.0	Instructions	2-3
5.0	Record of Revision	4

1.0 REFERENCE

- 1.1 Assembly Drawing C-2070, latest revision.
- 1.2 BU-3146 - Maintenance instructions for DAH and DAH2 hydraulic actuators.

2.0 PURPOSE

- 2.1 To establish maintenance instructions for 20UV9*-DAH hydraulic operated needle valves.

3.0 SCOPE

- 3.1 This maintenance instruction (BU-1345) is to be used for all 20UV9*-DAH valves.

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 hex socket cap screws (item 14) that hold the valve body (item 2) and bottom mounting plate (item 13) together.
- 4.1.3 Loosen hex jam nut (item 11) and rotate actuator and bottom plate subassembly counterclockwise until coupling (item 10) disengages from the upper stem (item 4).
- 4.1.4 Remove actuator and bottom plate subassembly from valve body (item 1). Refer to BU-3146 for instructions on the maintenance of the actuator assembly.
- 4.1.5 Place an appropriate open-ended wrench on the flats of the packing gland (item 3). Turn open-ended wrench counterclockwise until the gland is loosened. Pull packing gland with from upper stem from body (item 2).
- 4.1.6 Remove hex nut (item 11) from upper stem. Lift packing gland from stem.
- 4.1.7 Drive out the stem assembly dowel pin (item 6) connecting the upper stem (item 4) to the lower stem (item 5).
- 4.1.8 Remove top packing washer (item 7), packing (item 8), and bottom washer (item 9) from lower stem (item 5).

4.2 ASSEMBLY

- 4.2.1 The assembly technician shall, as a minimum, check all repair kit components for the cleanliness and damage such as nicks, dents or scratches.
- 4.2.2 The assembly technician shall lubricate selected components of the valve assembly with an approved lubricant as follows:
 - 4.2.2.1 The lower stem (item 5) shank in the area of the packing.
 - 4.2.2.2 The external threads of the packing gland (item 3).
- 4.2.3 Slip the bottom washer (item 9), packing (item 8) and top packing washer (item 7) over shank of lower stem (item 5).
- 4.2.4 Engage the upper stem (item 4) with the shank of the lower stem (item 5). Align the "pre-drilled" holes and carefully press the dowel pin (item 6) into the pre-drilled holes to secure the upper and lower stem sections.
- 4.2.5 Place the packing gland (item 3) over the upper stem. Thread into body and tighten to approximately 50 lb-ft. Thread hex nut (item 11) to shoulder on the upper stem.
- 4.2.6 Grasping the actuator and plate assembly, carefully align and engage the upper stem with the coupling (item 10). Rotate the actuator and bottom plate sub-assembly clockwise until the bottom plate (item 13) contacts the body.
- 4.2.7 Install and tighten the hex socket cap screws (item 14) that hold the bottom plate (item 13) to the body (item 1).
- 4.2.8 Tighten the hex jam nut (item 11) against coupling (item 10).

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

RECORD OF REVISION

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