



## BU-3045

### MAINTENANCE INSTRUCTIONS FOR 20UV9\* SERIES MANUALLY OPERATED NEEDLE VALVES

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## 1.0 REFERENCE

- 1.1 Assembly drawings B-1536, latest revision.
- 1.2 Stem assembly drawings B-1537 and B-1538, latest revision.

## 2.0 PURPOSE

- 2.1 To establish maintenance instructions for 20UV9\* series manually operated needle valves.

## 3.0 SCOPE

- 3.1 This maintenance instruction (BU-3045) is to be used for all 20UV9\* series manually operated needle valves.

## 4.0 INSTRUCTIONS

**CAUTION: Vent all pressure from system before removing valve for maintenance.**

### 4.1 Disassembly

- 4.1.1 Remove valve from system.
- 4.1.2 Secure the valve assembly in a vise equipped with "soft jaws".
- 4.1.3 Turn the valve handle (item 8) counterclockwise until the valve stem is in the full open position.
- 4.1.4 Loosen the set screw (item 7) securing the handle to the stem. Remove the handle assembly.
- 4.1.5 Remove the slotted machine screw (item 9) and locking device (item 10) from the body (item 1).
- 4.1.6 Remove the packing gland (item 2) from the body and stem assembly by turning counterclockwise until the threads are disengaged.
- 4.1.7 Re-attach the handle and secure with the set screw. Grasping the handle carefully pull the stem with the attached packing set from the body.
- 4.1.8 Remove the set screw and handle from the stem assembly.

## 4.2 Assembly

- 4.2.1 Examine the repair kit components for damage and cleanliness.
- 4.2.2 Apply an approved lubricant (anti-galling) to the components of the stem and packing components as follows:
  - 4.2.2.1 The outside edge of the bottom washer (item 6).
  - 4.2.2.2 The external stem sleeve (item 3) threads of the stem assembly (item 3).
  - 4.2.2.3 The first three external threads of the packing gland (item 2).
- 4.2.3 Grasp the lubricated stem assembly with your fingers and insert it into the packing gland. Rotate the packing gland clockwise until the internal threads are completely engaged.
  - 4.2.3.1 Important - Rotate the packing gland clockwise until the stem threads bottom out in the packing gland.
- 4.2.4 Install the packing gland and stem/packing components into the body and tighten packing gland to approximately 45 lb-ft.
- 4.2.5 Reattach and tighten the locking device (items 9 and 10).
- 4.2.6 Reattach the handle (item 8) to the stem. Secure with set screw (item 7).
- 4.2.7 Turn handle clockwise to close valve. Loosen vise and remove refurbished valve assembly.

### General Note

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



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**RECORD OF REVISIONS**

REV NO	DESCRIPTION OF CHANGES	DATE	BY	APPR
0	Original document	15-Feb-93	RWF	BJB
1	Reformatted and updated.	10-Dec-02	DTG	DTG