



BU-3109

MAINTENANCE INSTRUCTIONS FOR SFPV81 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



BU-3109
January 28, 2000
Revision 0
Page 2 of 4

1.0 REFERENCE

- 1.1 Applicable Assembly Drawing B-1668, revision 2
- 1.2 Stem Assembly Drawing B-1537, latest revision

2.0 PURPOSE

- 2.1 To establish maintenance instructions for SFPV81 needle valves.

3.0 SCOPE

- 3.1 This maintenance instruction (BU-3109) is to be used for all SFPV81 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 Remove the hex socket set screw (item 7) securing the handle to the stem.
- 4.1.5 Remove valve handle from stem assembly (item 3).
- 4.1.6 Remove the slotted machine screw (item 9) and locking device (item 10) from the body (item 1).
- 4.1.7 Loosen and remove the packing gland (item 2) and stem assembly from the valve body.
- 4.1.8 Grasp the stem assembly and packing gland with your fingers and carefully remove both items from the valve body.



- 4.1.8.1 Remove the packing gland from the stem assembly by turning counterclockwise until the threads are disengaged.

NOTE: When stem assembly is removed from body and disengaged from packing gland; the packing (item 5), bottom washer (item 6) and top packing washer (item 4) will be attached to the stem assembly.

4.2 ASSEMBLY

- 4.2.1 Examine the repair kit components for damage and cleanliness.

CAUTION: All damaged components are to be replaced.

- 4.2.2 Apply an approved lubricant (anti-galling) to the components of the stem assembly (sub-assembly) as follows:
 - 4.2.2.1 The outside diameter of the bottom washer (item 6).
 - 4.2.2.2 The external threads of the stem sleeve (item 3) of the stem assembly (item 3).
 - 4.2.2.3 The first three internal 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 assembly into the body and tighten to 85 lb-ft.
- 4.2.5 Reattach and tighten the locking device.
- 4.2.6 Reattach the handle to the stem sleeve.

CAUTION: Align the handle with the machined flats on the stem sleeve before tightening.

- 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.



BU-3109
January 28, 2000
Revision 0
Page 4 of 4

RECORD OF REVISIONS

REV NO	DESCRIPTION OF CHANGES	DATE	BY	APPR
0	Original document	28-Jan-00	DTG	DTG