



BU-3135

OPERATION AND MAINTENANCE INSTRUCTIONS FOR 6MMJ46V MICROMETERING 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 Applicable Assembly Drawing B-3564, latest revision

2.0 PURPOSE

- 2.1 To establish maintenance instructions for 6MMJ46V Micrometering Valve.

3.0 SCOPE

- 3.1 This maintenance instruction (BU-3135) is to be used for all 6MMJ46V Micrometering Valves.

4.0 INSTRUCTIONS

4.1 Setup:

- 4.1.1 The valve is not set for minimum flow conditions at the factory. The user must determine the minimum flow for his/her application and position the collar (item 16) and index the sleeve (item 15) accordingly.

- 4.1.1.1 The collar can be rotated after loosening the set screw (item 12).

- 4.1.1.2 The sleeve can be re-positioned and indexed after loosening the set screw (item 11).

- 4.1.1.3 Position the handle (item 10) to rest on the sleeve.

4.2 Operation:

- 4.2.1 The micro-metering valve is designed to provide precise control of fluids and gases at very low flow rates. Metering is achieved with a 40 pitch thread on the stem retracting a 4 degree tapered stem tip through a .062" diameter seat.

- 4.2.2 Each rotation of the valve handle equals .025" of linear stroke. The graduated sleeve provides incremental and repeatable settings of .001" of linear stroke.

- 4.2.3 The micro-metering valve is not to be used as a "shutoff" valve.

4.0 INSTRUCTIONS (continued):

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

4.3 Disassembly

- 4.3.1 Remove valve from system.
- 4.3.2 Secure the valve assembly in a vise equipped with "soft jaws".
- 4.3.3 Turn the valve handle counterclockwise until the valve stem is in the full open position.
- 4.3.4 Loosen the set screw securing the handle, collar and sleeve to the stem (item 2). Lift and remove each component.
- 4.3.5 Remove the slotted machine screw (item 9) and locking device (item 8) from the body (item 1).
- 4.3.6 Loosen and remove the packing gland (item 3) and stem from the valve body.
- 4.3.7 Remove the packing gland from the stem by turning counterclockwise until the threads are disengaged.
- 4.3.8 Using a packing puller, carefully remove the top packing washer (item 4), packing (items 5 and 6) and bottom washer (item 7) from the body.

Caution: *Do not scratch the walls of the stuffing box.*

4.4 **Assembly:**

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

CAUTION: All damaged components are to be replaced.

- 4.4.2 Apply an approved lubricant (anti-galling) to the components of the stem and packing components as follows:

4.4.2.1 The outside edge of the bottom washer (item 7).

4.4.2.2 The external threads of the stem (item 2).

4.4.2.3 The first three external threads of the packing gland (item 3).

- 4.4.3 Grasp the lubricated stem with your fingers and insert it into the packing gland. Rotate the packing gland clockwise until the internal threads are completely engaged.

4.4.3.1 Important - Rotate the packing gland clockwise until the stem threads bottom out in the packing gland.

- 4.4.4 Install the packing gland and stem/packing components into the body. Tighten packing gland to approximately 45 lb-ft.

- 4.4.5 Reattach and tighten the locking device.

- 4.4.6 Reattach the collar, sleeve and handle to the stem. Refer to the set-up instructions outlined in para. 4.1.1.

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

- 4.4.7 Loosen vise and remove refurbished valve assembly.

General Note:

Butech Pressure Systems recommends that the user pressure test refurbished valves before returning the valves to service.



BU-3135
January 16, 2001
Revision 0
Page 5 of 5

RECORD OF REVISIONS

REV NO	DESCRIPTION OF CHANGES	DATE	BY	APPR
0	Original document	16-Jan-01	DTG	DTG