

## COMPANY OPERATING PROCEDURE.

# 03302111 Tom Thumb Adjustable Valve Assembly.

VM3/COP/50.05

Date: 9-May-03. Revision date: 30-Sep-19. Issue: 3.

<u>Important</u>: Use only Fomblin grease during assembly of Tom Thumbs. Do not use or allow organic greases to enter the Tom Thumb. Ensure all parts are clean before assembly.

Check all products used in production or service are within their lifespan / use by date.

Equipment required. Small self-adjusting screwdriver, custom tool for fit of collar.

Parts list.		
Qty.	Description.	Part No.
3	Side screws	0330234
1	Adjustable valve body	0330229
1	Adjustable valve screw	0330230
1	Collar	0330232
1	Internal stop	0330231
1	Centre screw	0330233
1	Spring	0330223
1	Seating	0330225
1	Valve seat	0330227
1	Fomblin grease	0330220

#### Assembly.

1. Lightly grease the thread of the base of the adjustable valve screw.



2. Screw on the adjustable valve internal stop, <sup>3</sup>/<sub>4</sub> down the base thread.



3. Screw in the adjustable valve collar into the threaded end of the valve body until just visible through the closest end of the slot in the body.



# COMPANY OPERATING PROCEDURE.

# 03302111 Tom Thumb Adjustable Valve Assembly.

VM3/COP/50.05

Date: 9-May-03. Revision date: 30-Sep-19. Issue: 3.





4. Insert the valve base & internal stop in the adjustable valve body & collar.



5. Screw in the side screws in to the adjustable valve body.





6. Gradually turn the adjustable valve screw until the threaded hole in the internal stop is visible through the slot in the body. Fix in place with a centre screw, fully flush with the body.







7. Insert the valve spring into the body, over the adjustable valve screw.



## COMPANY OPERATING PROCEDURE.

## 03302111 Tom Thumb Adjustable Valve Assembly.

#### VM3/COP/50.05

Date: 9-May-03. Revision date: 30-Sep-19. Issue: 3.





8. Lightly grease the spindle of the valve seat and insert through the spring. Ensure that the spindle engages with the hole in the adjustable valve screw.





9. Screw on the adjustable valve seating.





- 10. Ensure the unit is clean prior to assembly with the Tom Thumb.
- 11. Screw the valve into the test rig and set the adjustment valve control to minimum, connect the Manometer to the 15mm outlet.
- 12. Connect the O2 hose to a gas supply at 4bar, set the flow to the prescribed level (5Lpm, 10Lpm, 15Lpm accordingly).
- 13. Check that the minimum pressure (on the Manometer) is less than 8cmH2O.
- 14. Set the adjustable valve control to maximum, alter the adjustable valve collar until a reading of 43 47 cmH2O is achieved (on the Manometer). At this stage it is preferable to try and achieve a mid range reading.
- 15. Slightly unscrew the valve body and apply Oxygen-compatible threadlock to the exposed threads. Retighten the valve, Switch off the O2 supply, Turn the valve control to minimum, and remove from the test block and store.