

VM3COP50.13 Tom Thumb QA

Required test equipment:

Snoop
Digital manometer
Tom Thumb QA test sheet
Precision valve isolation cover

Quality Checks: Tom Thumb

Do not carry out QA checks on Tom Thumbs until at least 1 hour after testing – this allows Oxygen-Compatible thread-lock, applied during testing, to be totally dry.

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

- 1) Check the Tom Thumb for damage i.e. scratches to plastics, poor chroming, etc.
- 2) Set the adjustable valve to minimum (fully counter clockwise).
- 3) Connect the inlet to the oxygen supply at a pressure of 4 bar.
- 4) Connect the digital manometer (on 0-100.0 mbar range) with T piece adapter to the Tom Thumb outlet.
- 5) Set the flow of oxygen to 10 lpm.
- 6) Check all mechanical connections between parts for leaks; use Snoop fluid and check for bubbling.
- 7) Check for minimum pressure out: Cover the T piece adapter port. Check the TT pressure gauge is less than 8.0 cmH₂O. Check that the digital manometer reading is less than 7.8mbar. Record the Tom Thumb pressure gauge value on the Tom Thumb Calibration / Test & QA Sheet.
- 8) Test the adjustable valve: Set the adjustable valve control to maximum. Using the precision valve isolation cover, cover the holes in the precision valve. Using your thumb, cover the T piece adapter port. Ensure a reading of 42.1±1 mbar on the digital manometer and record on the Tom Thumb Calibration / Test & QA Sheet.
- 9) Check for TT pressure gauge sticking: Release and cover the T piece adapter port several times, ensuring that TT pressure gauge returns to 43±1 cmH₂O. Remove the precision valve isolation cover.
- 10) Test the precision valve: Using fingers and thumb, cover the holes in the adjustable valve and the T piece adapter port. Using the digital manometer, ensure that the Tom Thumb precision valve releases at 44.1±1mbar. The pressure gauge should read 45±1 cmH₂O. Record the manometer value on the Tom Thumb Calibration / Test & QA Sheet.

- 11) TT pressure gauge accuracy check: Cover the T piece adapter port and increase the flow of gas to achieve a displayed reading of 30 cmH₂O on the TT pressure gauge. Ensure a reading of 29.4±1 mbar of the Precision Valve Reading on the digital manometer and record.
- 12) Turn the flowmeter and adjustable valve to minimum. Disconnect from oxygen supply and disconnect the digital manometer.
- 13) Clean the Tom Thumb with isopropyl alcohol.
- 14) Ensure the appropriate labels have been fitted and the Instructions for Use card is attached. Complete stock sheets and file. Ensure the unit is booked onto the computerised stock system.