

### 0310031 TT490-5 / 0310033 TT490-5 (1m & 3m hoses).

VM3/COP/50.01

Date: 13-Jul-04. Revision date: 5-Aug-15. Issue: 1.

Important: Use only Oxygen-compatible 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.

Tools required.	7/8 A/F spanner
	5/8 A/F spanner
	12mm spanner
	3mm Allen key
	5mm Allen key
	Pick

Parts list			
Qty	Description	Part No.	
1	Flowmeter (Oxygen) 0-15 lpm		0320060
1	Pressure gauge		0330193
1	Body block		0330201
1	Flowmeter bolt		0330205
1	15mm outlet		0330209
1	Precision valve		0330210
1	Adjustable valve		0330211
1	Gauge seal (Diamond copper		0330212
	washer)		
1	Thick O ring – 3/32 section		0330213
6	Thin O ring – 1/16 section		0330214
1	Right angle adaptor		0330219
2	Blanking bolt		0330296
1	Spacer block		0330191
1	Rail clamp		0330190
4	M4x10mm hex drive bolts		0330216
	PTFE tape		11-0374
1	Inlet hose	1m	0330217
			or
		3m	0330218
1	· · · · · · · · · · · · · · · · · · ·		0390010
1			0390015
1	Address label		0390016
1	Serial no. label	1m	0390031
			or
		3m	0390033



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 Clean the surface of the body block with isopropyl alcohol. Clean the threads of the body block, using the pick tool, to remove residual swarf.



2) Affix Tom Thumb label onto the front face of the block.



3) Affix the part/serial number label to the rear face of the block.



 Insert gauge seal (diamond copper washer) into the single threaded hole on the front face of body block.



5) Screw the pressure gauge in the single threaded hole on the front face of the body block. The gauge should appear straight in comparison to the block and not able to be removed without the aid of tools. Use 5/8 AF spanner to tighten.





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6) Line the thread of the right angle adapter with two complete layers of PTFE tape.



7) Screw the right angle adapter into the rear of the flow meter and tighten using the 12mm spanner. Ensure that the adapter is vertical.



8) Push a thin O ring onto the flowmeter bolt.



9) Push a thick O ring over the top thread of inserted flowmeter bolt.





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10) Screw the flowmeter onto the inserted flowmeter bolt ensuring the flowmeter is straight in comparison to the body block. Use the 5/8 AF spanner to tighten.



11) Place a thin O ring over the thread of the precision valve.



12) Screw into the centre bottom threaded hole. Use 7/8 AF spanner to tighten.



13) Place a thin O ring over the thread of a blanking bolts.





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14) Screw the blanking bolt into the left hand end hole of the body block.
Use a 5mm Allen key to tighten.



15) Screw into the right hand threaded hole on the bottom face of the body block. Use a 5mm Allen key to tighten.



16) Place a thin O ring over the thread of the adjustable valve.



17) Screw the adjustable valve into the remaining threaded hole in the top face of the body block. Use the 7/8 AF spanner to tighten.





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18) Place a thin O ring over the threaded end of the 15mm outlet



19) Screw the 15mm outlet into the threaded hole in the right face of the body block. Use 5/8 AF spanner to tighten



20) Attach the spacer block to the body block using 2x M4x10mm hex drive bolts. Use a 3mm Allen key to tighten.





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21) Attach rail clamp to the spacer block using 2x M4x10mm hex drive bolts. Use a 3mm Allen key to tighten.



22) Set the adjustable valve to minimum and attach the valve label.



23) Attach the address label to the underside of the pressure gauge.





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24) The finished unit is now ready for testing and calibration.

