

J125 3/4" and 1" Commissioning Instructions

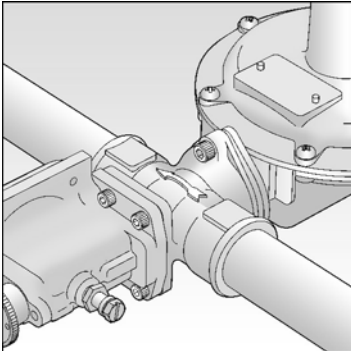


Fig. 1

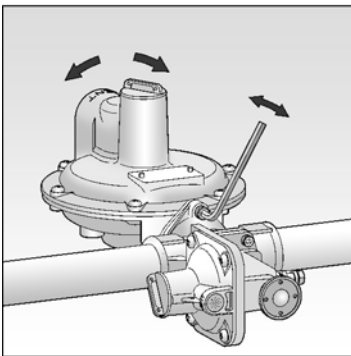


Fig. 2

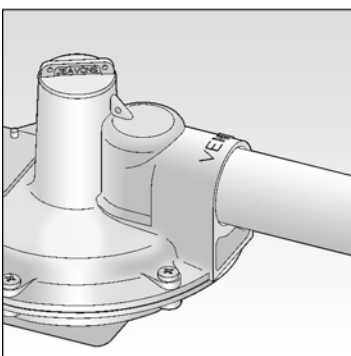


Fig. 3

INSTALLATION CONDITIONS

Body pressure range: 0 - 8.6 Bar

Temperature range: -20°C to +70 °C

OPERATING INSTRUCTIONS

- Ensure that this product is suitable for the chosen application.
- Installation, adjustment and maintenance by authorised, trained personnel only.
- When being fitted to an appliance, refer to the appliance manufacturers instructions.
- For units not fitted with OPSS, ensure that the installation provides adequate protection to prevent over pressurisation.
- Traffic, wind and earthquake loadings should be considered when specifying the installation.
- The unit should be protected from the decomposition of unstable fluids.

Warning! Incorrect installation, adjustment, modification, operation and maintenance may cause injury or damage. Read the instructions before use. This control must be installed in accordance with the rules in force.

FITTING REGULATOR INTO PIPEWORK

1. The unit should not be installed in a corrosive environment.
2. The ambient temperature (surface temperature) should be within the limits stated on the regulator catalogue.
3. Check the maximum allowable pressure on the regulator nameplate against the installation specification.
4. Remove the protection plugs from inlet and outlet ports.
5. Ensure that installation pipework is thoroughly clean.
6. The direction of gas flow must be the same as the arrows on the regulator body. See Fig. 1.
7. Install the regulator into pipework using jointing compound approved to national standards.
8. In order to fit the regulator into confined spaces it may be necessary to rotate the diaphragm case. This is achieved by slacking off the two cap screws, rotating the diaphragm case, and then re-tightening the cap screws evenly. See Fig. 2.
9. For units with no OPSS fitted it is advised that a slam shut device is fitted to protect downstream equipment.

INSTALLATION OF VENT LINE.

1. Remove clip and vent screen from regulator top cover.
2. Connect the vent line (1"), using a jointing compound approved to national standards, and lead to atmosphere in accordance with national standards. Ensure that no water can penetrate vent pipeline. See Fig. 3.
3. If the regulator is fitted with an internal relief valve, ensure that the vent line is of sufficient diameter to carry gas vented by the relief valve to a safe outside location. Reference to any national standard.

FOR PRE-SET UNITS ONLY.

1. Turn off downstream valves.
2. Slowly turn on inlet supply.
3. If safety shut-off device is not fitted, go to instruction 6.
4. If safety shut-off device is fitted unscrew reset spindle end cap and firmly pull. Hold in this position until the outlet pipework is fully pressurized, then release reset spindle end cap gently. See Fig. 4.

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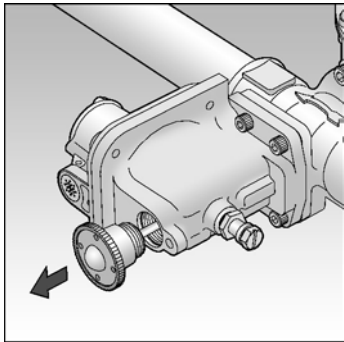


Fig. 4

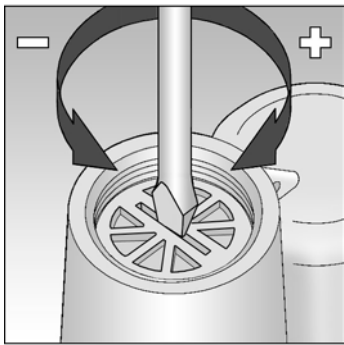


Fig. 5

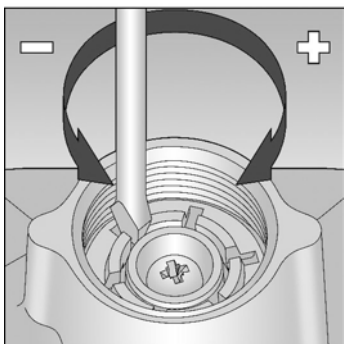


Fig. 6

5. Re-screw reset spindle end cap into body, ensuring not to jam reset spindle.
6. Commission downstream appliances.

WARNING: DO NOT UNDER ANY CIRCUMSTANCES WEDGE OPEN SAFETY SHUT-OFF RESET END CAP AS THIS WILL NOT ALLOW THE SAFETY DEVICE(S) TO FUNCTION IN ADVERSE PRESSURE CONDITIONS.

SETTING THE REGULATOR & SAFETY SHUT OFF DEVICE PRESSURES.

OPSS = Over Pressure Safety Shut-off.

UPSS = Under Pressure Safety Shut-off.

1. Turn off inlet and outlet valve(s).
2. Remove top cap from regulator cover.
3. Insert a flat blade screwdriver into slot in top spring holder.
4. Turn anticlockwise (-) to reduce loading on regulator spring to minimum. See Fig. 5 (If no safety devices are fitted go to instruction 12).
5. Remove top cap from safety shut-off device cover (If UPSS only go to instruction 8).
6. Insert a flat bladed screwdriver into one of the partial slots on the OPSS spring holder. See Fig. 6.
7. Turn clockwise (+) to increase loading on OPSS spring to maximum.
8. If UPSS fitted, insert a pozidriv screw driver (No.2 point) into UPSS adjusting screw in bottom spring holder. See Fig. 7.
9. Turn anticlockwise (-) to reduce loading on UPSS spring, making sure screw head does not protrude from the bottom spring holder.
10. Slowly open inlet valve(s).
11. If safety device fitted, re-cock by unscrewing reset spindle end cap and pulling firmly. Hold in this position until the outlet pipework is fully pressurised, then release reset spindle end cap gently. Re-screw reset spindle end cap into body. See Fig. 4.
12. Turn regulator adjustment screw clockwise (+) to increase the loading on the spring until the required outlet pressure, plus approximately 1"wg (2.5mbar) is obtained. (This is an allowance for the regulator being set with zero flowrate).

If UPSS only go to instruction 20, if no safety device go to instruction 27.

13. Block vent valve opening to prevent relief valve from operating.
14. Apply external pressure source to a suitable point on the outlet pipework. Increase pressure to that required for OPSS trip-off.

Note: If pressure test point on underside of slam shut unit is used as external source point, care must be taken to ensure pressures are equalised across restricted orifice within test point.

15. Slowly turn OPSS spring holder anticlockwise (-) until OPSS device trips off. See Fig. 6.
16. Reduce external pressure source to level set in instruction 14.

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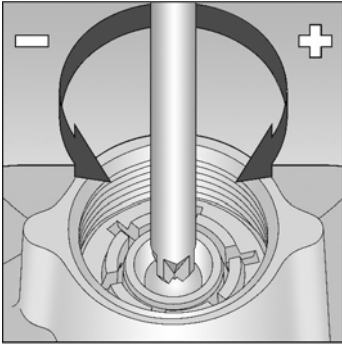


Fig. 7

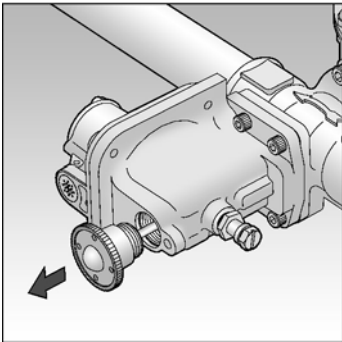


Fig. 8

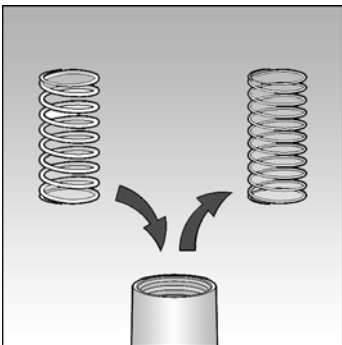


Fig. 9

17. Re-cock OPSS device by unscrewing reset spindle end cap and firmly pull. Hold in this position until the outlet pipework is fully pressurized, then release reset spindle end cap gently. Re-screw reset spindle end cap into body. See Fig. 8.
 18. Slowly increase external pressure to check for OPSS trip-off. Trim adjustment if necessary and repeat instructions 16 - 18.
 19. Remove external pressure source.
- NOTE: OPSS device is now set.

20. Close inlet valves.
21. Reduce inlet pressure to approximately 140mbar (2 PSI).
22. Reduce outlet pressure by introducing a slow controlled bleed until the required UPSS trip-off pressure is obtained and close bleed.
23. Slowly turn UPSS adjusting screw clockwise (+) until UPSS device trips off. See Fig. 7.
24. Slowly open inlet valve to regain inlet pressure up to approximately 2 PSI (140mbar), then close inlet valve.
25. Re-cock UPSS device by unscrewing reset spindle end cap and firmly pull. Hold in this position until the outlet pipework is fully pressurized, then release reset spindle end cap gently. Re-screw reset spindle end cap into body. See Fig. 8.
26. Slowly reduce outlet pressure to check for UPSS trip-off. Trim adjustment if necessary and repeat instructions 24 - 26.

NOTE: UPSS device is now set.

27. Commission installations.
28. Trim the regulator outlet pressure if necessary once normal flow rates have been achieved.
29. Unblock vent opening.
30. Replace all top caps (seal if necessary).

WARNING: DO NOT UNDER ANY CIRCUMSTANCES WEDGE OPEN SAFETY SHUT-OFF RESET END CAP AS THIS WILL NOT ALLOW THE SAFETY DEVICE(S) TO FUNCTION IN ADVERSE PRESSURE CONDITIONS.

IF THE REQUIRED REGULATOR OUTLET PRESSURE CANNOT BE ACHIEVED WITH THE SPRING FITTED

1. Remove top cap from regulator cover.
2. Choose a loading spring from catalogue that will give the required outlet pressure range.
3. Fully unscrew and remove the spring holder, See Fig. 10.
4. Remove spring and replace with new one. See Fig. 9.
5. Screw spring holder back in place, ensuring regulator spring is located in recess in underside of holder.
6. Adjust the outlet pressure as described previously.
7. Replace the top cap (seal if necessary).

NOTE: Outlet pressure is now set.

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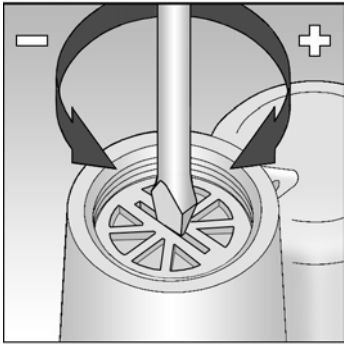


Fig. 10

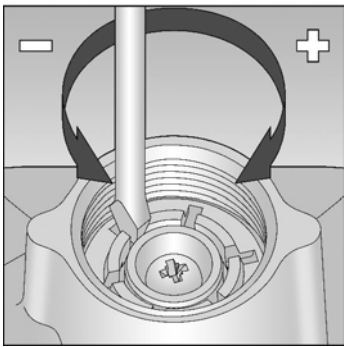


Fig. 11

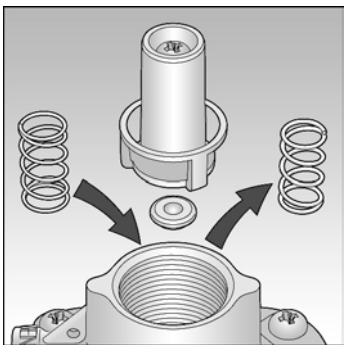


Fig. 12

IF THE REQUIRED TRIP-OFF PRESSURES CANNOT BE ACHIEVED WITH THE SPRINGS FITTED

A) OPSS spring

1. Remove top cap from the safety shut-off device cover.
2. Choose an OPSS spring from the catalogue that will give the required pressure range.
3. Fully unscrew and remove top spring holder. See Fig. 11.
4. Remove spring and replace with new one. See Fig. 9.
5. Screw spring holder back in place, ensuring that castellated spigot is uppermost in chimney. See Fig. 11.
6. Adjust the trip-off pressure as described previously.
7. Replace the top cap (seal if necessary).

NOTE: OPSS pressure is now set

B) UPSS spring.

1. Remove top cap from the safety shut-off device cover.
2. Choose an UPSS spring from the catalogue that will give the required pressure range.
3. Fully unscrew and remove top spring holder. See Fig. 11.
4. Remove OPSS spring (or spacer tube if UPSS only). Remove bottom spring holder and UPSS top spring holder.
5. Remove UPSS spring and replace with new one. See Fig. 12.
7. Replace UPSS spring holder, ensuring that spigot locates in UPSS spring.
8. Replace bottom spring holder locating three webs into slots in bottom of cover, ensuring not to disturb UPSS spring and UPSS spring holder.
9. Replace OPSS spring (or spacer tube if UPSS only).
10. Screw top spring holder back in place, ensuring that castellated spigot is uppermost in chimney. See Fig. 11. (If UPSS only ensure that spacer tube is firmly clamped).
11. Adjust the trip-off pressure as described previously.
12. Replace the top cap (seal if necessary).

NOTE: UPSS pressure is now set.

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