TESUCO®

TECHNICAL SUPPLIES COMPANY

GAS REGULATORS

OPERATING INSTRUCTIONS

QUALITY GAS EQUIPMENT

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EQUIPMENT SPECIFICATIONS & ASSEMBLY

Tesuco® regulators have been stringently designed and tested to meet all relevant Australian Standards, particularly AS 4267. Gas cutting and welding equipment should never be supplied directly from compressed gas cylinders. Tesuco® regulators are designed to be connected to the cylinders to control the pressure of gas supplied to the downstream equipment. All regulators (except set pressure and LPG regulators) are fitted with two pressure gauges to allow monitoring of the cylinder contents and the delivery pressure to the application.

Although accidents rarely occur as a direct result of regulator failure, care must be taken as the potential hazards are severe. This is particularly true of oxygen, where ignition and explosions are possible under adverse conditions. The following recommendations should be observed to ensure continued safe operation.

a) Regulators should only be used with the gas and maximum pressure for which they are designed and labelled, see AS 4267.

b) Never test a regulator for leaks with a naked flame, always use an appropriate leak test solution, like Tesuco® Gas Control (Part No. OTLDS).

c) Never use an LPG regulator for Acetylene as the maximum safe working pressure of 150 kPa may be exceeded.

d) Regulators with damaged pressure gauges, inlet or outlet connections should never be used. Inlet and outlet connections should never be changed from those fitted by the manufacturer.

e) Do not use oil or grease on any regulator. Do not handle regulators with rags, gloves or other materials that are contaminated with oil or grease.

f) Keep regulators clean. Where possible, use the plastic protective covers on both the inlet and outlet connections when not in use.

g) Never use a regulator that is leaking gas or showing signs of excessive pressure build up on the outlet pressure gauge when the downstream equipment has been turned off. An increase in pressure over 30% above the flowing pressure of the regulator is considered excessive and the regulator should be repaired or replaced.

h) To avoid damage to the regulator, the pressure adjusting knob must be wound out fully, in an anti-clockwise direction, before slowly opening the valve of the cylinder. Ensure cylinder valves are clean and free of contamination prior to connecting the regulator. Ensure regulator is firmly attached to cylinders before opening.

i) Do not stand in front of a regulator when subjecting it to high pressure.

j) All regulators are date stamped and should be replaced after 5 years in operation as detailed in AS 4839.

k) Flashback Arrestors must be fitted to both regulators in an Oxygen / Fuel Gas System before use as detailed in AS 4839.

l) Attach the regulator to the cylinder. Fit flashback arrestors to oxygen and fuel gas regulator outlet and then attach all downstream equipment. Set the pressure needed for the application while the gases are flowing to ensure the correct delivery pressure is set – Turn off the flow and the regulator pressure will increase slightly higher than the working pressure needed – this is standard.

m) When not using the regulator, turn the cylinder to the off / closed position and depressurized the regulator by opening the downstream control valves – Once all pressure gauges are at zero, turn the control knob anticlockwise to release the control pressure.

SAFETY TIPS

- Keep the equipment free from oil and / or grease.
- Make sure that work areas are free of combustible materials, flammable liquids and heat sources.
- Working areas should be well ventilated.

FAULT FINDING

- Check equipment on a regular basis for any evidence of damage and for leak tightness.
- Never use regulators with broken or damaged gauges, inlet or outlet connections.
- Gauges that do not return to zero or give inconsistent readings should be replaced.
- Never use shifting spanners for tightening regulator connections; they round nuts and allow the application of too much torque, which may damage sealing surfaces and "O" Rings.
- Do not intentionally drop or handle equipment roughly as this may cause damage to threads, gauges and stems or compromise the integrity of the build materials.
- Never stamp names or numbers onto regulators, this may lead to internal distortions or compromise the integrity of build materials and may be hazardous.
- No repairs are to be carried out by the operator. If you believe that repairs are required, return your regulator to the place of purchase or contact Tesuco®.

GENERAL SAFETY

- Always treat equipment and cylinders with care.
- Cylinders should always be restrained.
- Never allow equipment to come in contact with oil or grease.
- Pre-set regulators are set and tested during the manufacturing process. Never tamper with the settings of pre-set regulators; doing so will void any warranty.
- Pressure relief valves, if fitted, are pre-set when manufactured. Do not attempt to adjust relief valves as it is dangerous and will void any warranty.
- Warranties will be cancelled if, upon investigation, it is found that the equipment has been tampered with or repairs have been attempted to be carried out by an unauthorised person.

WARRANTY INFORMATION

- All Tesuco® regulators in this range are covered by a limited 5 year warranty.
- This warranty covers defects in manufacture.
- Misuse, mistreatment, tampering or repairs attempted to be carried out by an unauthorised person will void the warranty.
- Please contact your supplier or Tesuco® immediately, if you believe that your regulator is not performing correctly.

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The information contained herein is provided to assist the operator in the safe use of a Tesuco® Gas Regulator. However, the ultimate responsibility for the safe use of this and any attached equipment lies solely with the operator, including any requirements of associated Australian Standards.

Certified System
Quality
ISO 9001

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