

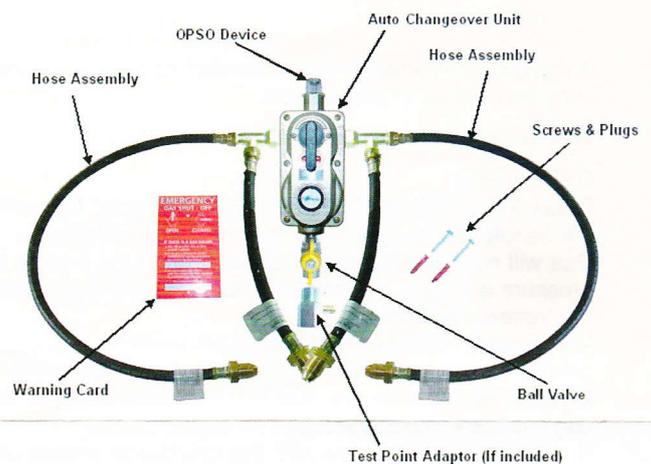
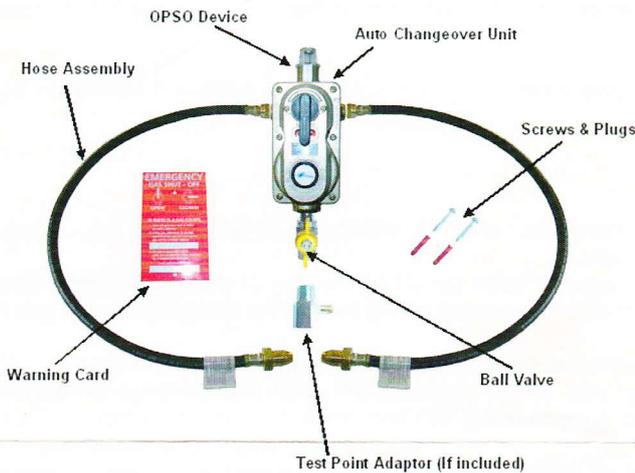


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### Assembly Installation Instructions for Model RF6030 OPSO Auto Changeover Regulator

| ASSEMBLY LIST FOR 2 CYLINDER AUTO CHANGEOVER UNIT |     |
|---|-----|
| DESCRIPTION                                       | QTY |
| M20 X UKPOL 0.5M HOSE ASSEMBLY WITH EXF           | 2   |
| AUTO CHANGEOVER WITH OPSO                         | 1   |
| SCREW FOR AUTO CHANGEOVER KIT                     | 2   |
| RAWL PLUGS & WOODSCREWS                           | 2   |
| REGULATOR SCREW                                   | 2   |
| BRACKET & SCREWS                                  | 1   |
| 1/2" BALLVALVE M/F TEE HANDLE – MALE TAPER        | 1   |
| PRESSURE TEST NIPPLE (IF INCLUDED)                | 1   |
| TEST NIPPLE ADAPTOR 1/2" (IF INCLUDED)            | 1   |
| GAS SHUT OFF PLAQUE                               | 1   |

| ASSEMBLY LIST FOR 4 CYLINDER AUTO CHANGEOVER UNIT |     |
|---|-----|
| DESCRIPTION                                       | QTY |
| M20 X UKPOL 0.5M HOSE ASSEMBLY WITH EXF           | 2   |
| AUTO CHANGEOVER WITH OPSO                         | 1   |
| M20 X UK POL 0.9M HOSE ASSEMBLY WITH EXF          | 2   |
| SCREW FOR AUTO CHANGEOVER KIT                     | 2   |
| RAWL PLUGS & WOODSCREWS                           | 2   |
| REGULATOR SCREW                                   | 2   |
| BRACKET & SCREWS                                  | 1   |
| 1/2" BALLVALVE M/F TEE HANDLE – MALE TAPER        | 1   |
| PRESSURE TEST NIPPLE (IF INCLUDED)                | 1   |
| TEST NIPPLE ADAPTOR 1/2" (IF INCLUDED)            | 1   |
| GAS SHUT OFF PLAQUE                               | 1   |



#### TECHNICAL INFORMATION

Inlet pressure:- 1-20bar  
 Outlet pressure:- 37mbar  
 Max Capacity:- 4.5kg  
 Changeover pressure:- 7psig  
 OPSO pressure:- 95mbar  
 Inlet connections: M20.1 x 1.5 parallel  
 Outlet connection:- G1/2 (1/2" BSP) female

#### INSTALLATION

- Remove all parts from the carton, place the bracket against wall in required position and mark holes through bracket – slotted hole at top.
- Drill suitable holes and fit rawl plugs with the SMALLER plug in the top POSITION.
- Attach the bracket to the underside of the regulator with the 4 screws provided.
- Apply an approved thread sealant to taper male thread on 1/2" BSP valve and screw into regulator outlet and tighten to a torque of 15Nm Torque may be exceeded so that control lever faces outwards.
- Apply P.T.F.E tape to taper male threads on 1/2" BSP Test Point Adaptor and screw into Ball valve outlet and tighten to a torque of 15Nm Torque may be exceeded so that the test point is orientated correctly.
- Screw in and tighten the SMALLER of the fixings screws (to top) so the bracket can be slipped on. Fit the unit and fit the lower screw. Fit H.P. hose assemblies to regulator using sealing washer attached to hose. Ensure correct alignment of sealing washers. Tighten adaptor nuts to a torque of 5Nm.
- Connect hose end POL's to cylinder valves (left hand threads)
- Ensure all connections are secure and the downstream pipework is complete.
- This regulator is fitted with an O.P.S.O (over pressure shut off) device. Which may need resetting before cylinder valves are turned on.
- Open all cylinder valves and outlet ball valve & check all joints for leaks using a soap solution. Note: If the OPSO trips i.e. Silver button drops down, turn off the gas and reset the OPSO. Reapply the gas gradually and if the OPSO trips or fails to reset, replace the regulator. NEVER check for leaks with a naked flame.
- If a leak is found, turn off all cylinder valves, bleed system and correct leak. Check again – repeat from 8.
- Close outlet ball valve
- On satisfactory completion of the installation the OPSO cap must be sealed with lead seal/wire provided. On completion of the downstream pipework the following regulator safety checks shall be performed:
- Check outlet pressure 37±5mbar at pressure test point.
- Ensure regulator lock-up of +15mbar max. Test the entire installation for leaks.

#### WARNING

The model RF6030 OPSO must be installed, operated and maintained in accordance with federal, state and local codes. The installation in most states must also comply with LPGA Codes of Practice.



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## Assembly Installation Instructions for Model RF6030 OPSO Auto Changeover Regulator

### Things to tell the Gas Customer

1. Point out the regulators vent to the customer, and stress that this opening must remain unobstructed at all times. Tell the customer to be sure to check the vent opening after a freezing rain, sleet storm, or snow to make sure ice has not formed in the vent. When the device is to be used outdoors, it shall be positioned or protected against direct penetration by any trickling water.
2. Show the customer the shutoff valves on the cylinders. The customer should close these valves immediately if gas can be smelled, appliance pilot lights fail to stay on or appear higher than usual, or any other abnormal situation occurs.
3. Tell the customer to call your company to service the regulator. If the regulator vents gas or a leak develops in the system, only a qualified gas serviceman should install or service the regulator.
4. Inform the user that the supply cylinder is not completely empty until the red warning flag is fully visible in the indicator window.

If the device is enclosed in unvented compartment the relief valve must be vented outdoors or adequate ventilation of the compartment must be supplied.

This unit is for propane use only.

### OPERATION

Place one of the two cylinder banks in "supply" by rotating the changeover lever (A) either way as far as it will go. The arrow will denote the "supply" service side. Open all cylinder valves slowly.

Gas will now flow from both sides through the pigtails into the model RF6030 OPSO by the way of the inlet fittings. When a pressure of 7 psig is reached beneath the RF6030 OPSO diaphragm, the closing spring in the inlet fitting will shutoff gas from the "reserve" cylinder(s).

The "Supply" side of the regulator will continue to supply gas as long as sufficient gas remains in the "supply" cylinders. When pressure in the cylinder(s) drops to about 7psig, the "reserve" side of the regulator will open and continue to regulate at 37mbar. At the time the "supply" cylinder(s) become exhausted, a red warning flag appears in the indicator window. This red flag indicates that cylinder can be made.

If a leak is smelt or detected the cylinder(s) should be turned off at the handwheel valve and your gas supplier consulted. Never sear for leaks with a naked flame. Always use soapy solution, bubbles will show up around the area of the leak. Never try to repair the leak yourself, always call a registered and qualified gas fitter.

### EXCHANGE OF CYLINDERS

Before removing the empty cylinder(s), be sure to rotate the changeover lever (a) so that it points to the other cylinder(s). Then close the valve of the empty cylinder(s) to prevent air from entering the cylinder(s) and disconnect the cylinder(s). Clean the cylinder(s) valve(s) outlet in the new cylinder(s). After the new cylinder is in place, slowly open the cylinder valve(s)

#### WARNING

Extreme care must be taken when disconnecting cylinders. The cylinder being changed must be turned off at the handwheel valve and the device switch turned to suit the cylinder in use. No naked lights or sources of ignition must be in the vicinity of the cylinder being changed

The new cylinder bank now becomes the reserve cylinder bank, and the red warning flag will not be visible at the indicator window. If only bank of cylinder are left connected, the pigtail or hose to the other cylinder must be capped to prevent leakage or contamination.

### ADJUSTMENT

Each model RF6030 OPSO changeover regulator is individually factory set the deliver 37mbar. If it becomes necessary to increase outlet pressure, remove the silver label covering the black dust cap, remove the dust cap using a slotted screwdriver, and turn the adjusting screw clockwise. Turn the adjusting screw counterclockwise to decrease the outlet pressure. A pressure gauge or water manometer is needed to determine the regulator outlet setting after adjustment. Always replace the dust cap after the adjustment is made.

#### Maintenance Warning

To avoid personal injury or equipment damage, do not attempt any maintenance or disassembly without first isolating the regulator from system pressure and relieving all internal pressure.

The life expectancy of the automatic change over devices being estimated as 3 years, it is recommended that it is changed within 3-years of the date of manufacture.

# ADVISORY SHEET



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## For RF6030 OPSO Auto Changeover Regulator

- When installing this Automatic Changeover Regulator, please ensure that the size of any fixed pipework is appropriate for the capacity of any appliance(s) in the system.
- Please also note that the following pressures apply to this changeover unit

| Gas     | Changeover regulated pressure<br>mbar |     |     |    | Appliance Supply Pressure<br>mbar |
|---------|---------------------------------------|-----|-----|----|-----------------------------------|
|         | Pd                                    | Pmg | Pmp | Po |                                   |
| Propane | 37                                    | 27  | 45  | 50 | 37                                |

Pd = nominal regulated pressure

Pmg = minimal admitted pressure

Pmp = maximal admitted pressure

Po = lockout pressure