



Operation and Maintenance Manual

5 µm Filter Regulator



Additional Languages.



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Dear Customer,

Congratulations on the purchase of your new Jun-Air® compressor system which includes a 5 µm Filter Regulator. The intended purpose of this part is to provide clean air at the desired pressure from the air compressor system.



WARNING



PLEASE READ THIS MANUAL COMPLETELY BEFORE INSTALLING AND USING THIS PRODUCT. SAVE THIS MANUAL FOR FUTURE REFERENCE AND KEEP IN THE VICINITY OF THE PRODUCT.

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SAFETY

Please note that pictures and figures referenced in the text can be found throughout the manual.

Important - read this first!

Please read the following information and operating instructions included with this product before use. This information is for your safety and it is important that you follow these instructions. It will also help prevent damage to the product. Failure to operate in accordance with the instructions or using unauthorized Jun-Air® spare parts could cause damage to the unit and/or serious injury.

! WARNING:

- Disposal of non-metallic materials must be carried out in an approved manner. Burning may generate toxic fumes.
- For use in compressed air systems only.
- Not to be used where pressures and temperatures can exceed those listed in the Technical Data and Specifications section.
- Downstream equipment that could malfunction or be damaged by pressure in excess of the regulated pressure must be protected by a pressure relief device.
- This device must satisfy the system requirements for pressure setting and flow capacity and be installed between the regulator and downstream equipment.
- Where pressure gauge inaccuracies may be hazardous to personnel or property, they should be checked or calibrated before installation and regularly during use.

INSTALLATION

Before installation, the operating conditions (temperature, pressure, etc.) must be checked for conformity as specified in the Technical Data and Specifications section.

The unit should be mounted securely in an accessible and visible location upstream from lubricators and near components being served. Strain on pipe work and fittings should be avoided and directional flow arrows observed. With cyclic demand systems the filter regulator should be installed upstream of directional control valves. Airline piping should be the same size as unit ports with airflow in the direction of the arrow.

A pressure gauge may be connected to the appropriate R_c 1/8 port after removing the plug and should have a range exceeding the maximum proposed outlet setting.

OPERATION

Adjustment

With the regulator adjustment completely backed off, the air supply can be turned on. The adjusting knob can be rotated clockwise to increase the spring load and the pressure increase observed on the gauge. Minor adjustments after setting changes can be avoided by always approaching the desired setting from a lower level. When a lower setting is required, firstly reduce to a lower level and secondly increase to the desired setting.

Decreasing the pressure setting on a relieving type regulator will cause air to exhaust through the bonnet vent hole.

The non-rising adjusting knob includes a locking feature; push knob in after setting to lock and prevent adjustment. To release, pull knob out.

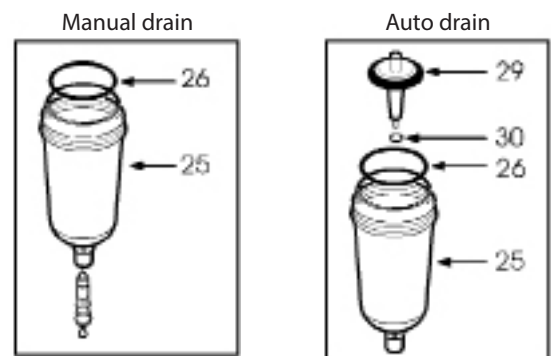
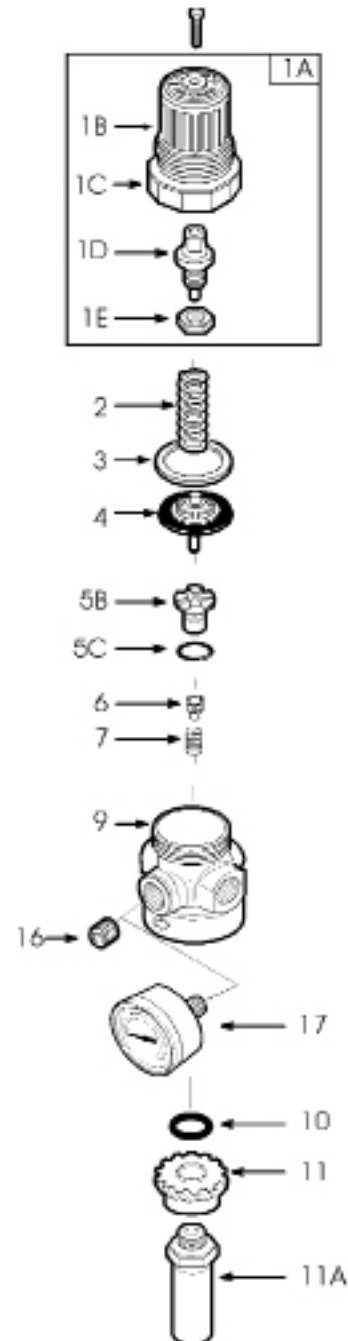
Auto-drain units should have a 4 mm bore flexible tube pushed in the M5 quick-coupler on the bottom of the bowl to pipe away expelled condensate.

Avoid restricting the drain pipe. Manual drain units must be drained before the contaminant level reaches the element. Should this occur then liquid contaminant will be carried downstream.

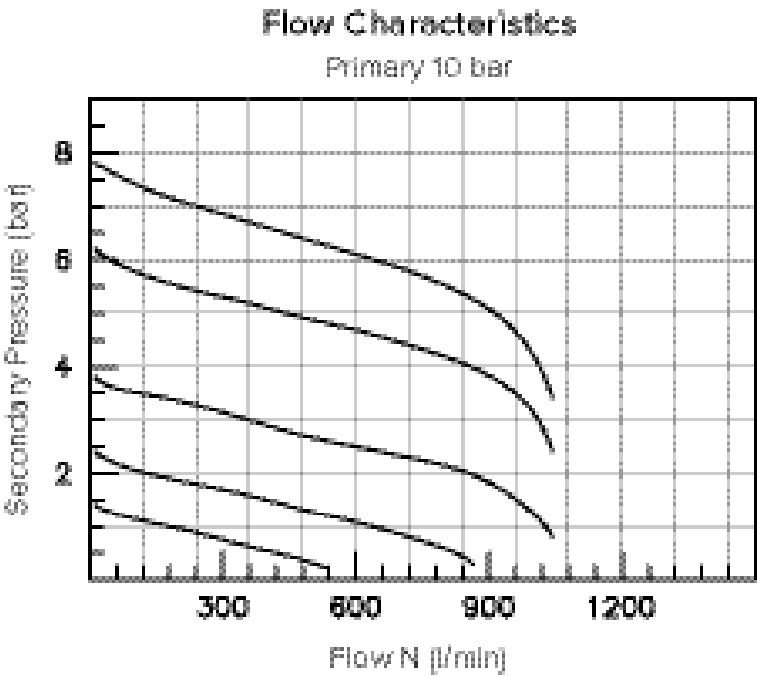
MAINTENANCE

Air service equipment should be initially maintained annually. Use, quality of air and condition at examination may indicate adjustment of the maintenance interval.

- Before attempting to service any unit, shut-off the air supply and exhaust the system completely.
- Unscrew the filter bowl (25) counter-clockwise and remove with o-ring (26).
- Unscrew the element (11a) and remove complete with louver (11) and gasket (10).
- The bowl should be cleaned using soapy water ONLY. (solvents, etc. can damage or destroy seals, etc.)
- Bowls should be inspected for signs of mechanical damage or corrosion.
- Partial cleaning of the filter element is possible by washing the element in soapy water and blowing out thoroughly with compressed air. Replacement by a clean element is recommended.
- To disassemble the regulator section turn the adjusting knob (1b) counter-clockwise to relieve compression on the adjusting spring (2).
- The bonnet assembly (1a) can be removed by unscrewing and enables removal of the adjusting spring (2), slip ring (3) and diaphragm (4).
- Unscrew the valve seat (5b) and remove with o-ring (5c).
- Valve (6) and spring (7) may then be removed.
- Inspect all components for damage, foreign matter and cleanliness and reassemble using service replacement parts where necessary.
- During reassembly, all o-rings, gaskets and where applicable, the lip of the auto-drain valve, should be lightly smeared with BPLS2 Energrease (or similar) and the diaphragm valve pin checked for free movement in the valve seat.
- The manual drain should be drained weekly and the filter element changed annually.
- The regulator should be assembled in the vertical position.
- Tighten the valve seat (5b) to 0.4 to 0.7 Nm, the element (11a) and bowl (25) to 0.5 to 1.0 Nm and the bonnet (1a) to 7 to 8 Nm.



PERFORMANCE CURVE



PARTS AND ACCESSORIES

When ordering spare parts, please quote model number and kit or part description. For further information, contact your local Jun-Air® distributor.

Part No.	Part Description
4071030	5µm filter regulator
4071035	5µm filter regulator w/gauge
4071040	5µm filter regulator w/automatic drain
4071045	5µm filter regulator w/automatic drain and gauge

Service Kit

Part No.	Part Description
4071230	Service kit: (3, 4, 5B, 5C, 6, 7, 10, 11A, 26) 5µm

TECHNICAL DATA AND SPECIFICATIONS

Port Sizes	Standard: G1/4 to ISO 1179
Accepts	ISO 228 (BS 2779) Parallel or ISO 7 (BS 21) Taper Connectors
Maximum Inlet Pressure	17 bar
Maximum Outlet Pressure	10 bar
Operating Temperature	-20°C* to +65°C
Drain	Auto or Manual

*Consult our Technical Service for use below +2°C. Ice formation may cause malfunction or damage.

Note: The automatic drain operates when a rapid change of flow occurs (differential pressure).

Materials of Construction

Body	Zinc Alloy
Bowls	Zinc Alloy
Elastomers	Viton Rubber
Elements	Sintered Plastic

Materials used are not hazardous to health when used within specified conditions.

WARRANTY

Warranty Policy

For warranty details, please refer to the "General Conditions of Sale."

For more warranty information, visit gastmfg.com/warranty.

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