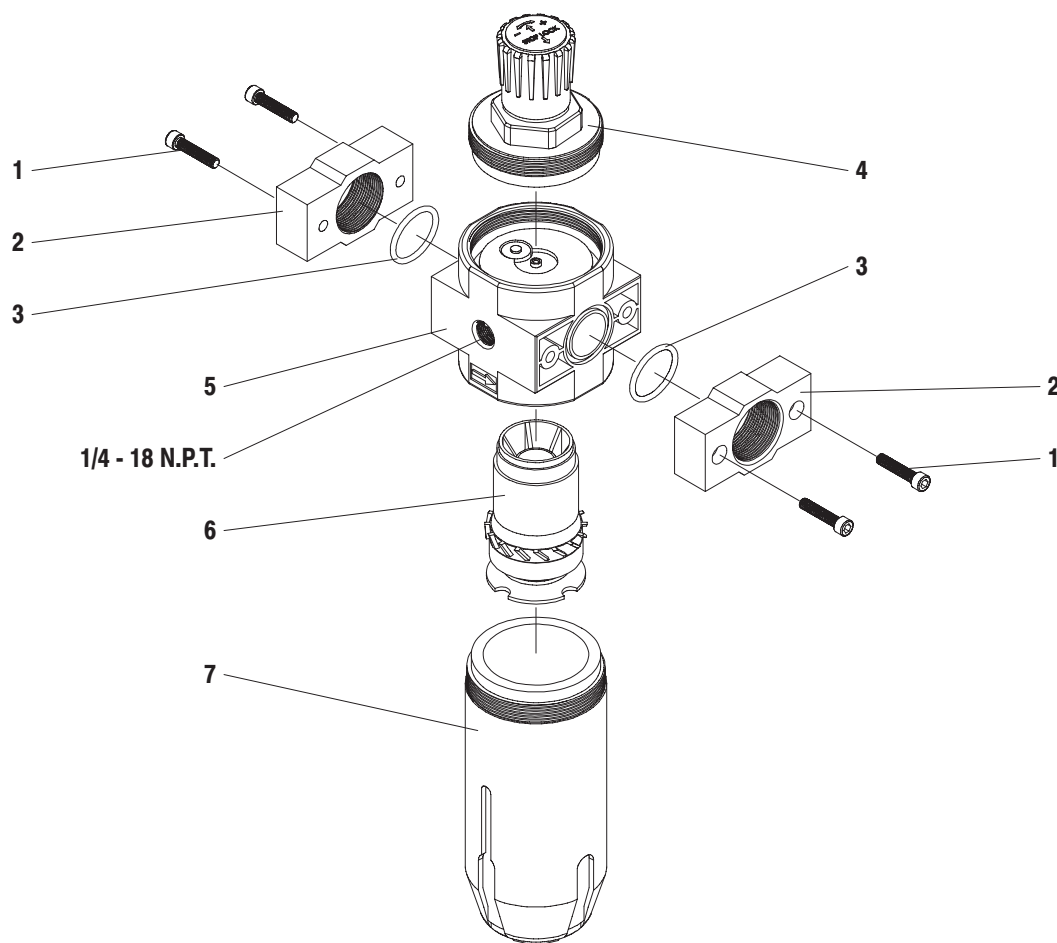


PIGGYBACK FILTER / REGULATOR MODULE

P293X1-60X

RELEASED: 11-10-04
REVISED: 1-17-05
(REV. 02)



| Item | Description (size) [includes] | Qty | Part No. |
|------|------------------------------------|-----|----------|
| 1 | Screw | (4) | N/A |
| 2 | Spacer Block | (2) | N/A |
| 3 | "O" Ring | (3) | N/A |
| 4 | Regulator Adjustment Knob Assembly | (1) | 104288 |
| 5 | Body | (1) | N/A |
| 6 | Filter Element (40 micron) | (1) | 104284 |
| | Optional Filter Element (5 micron) | (1) | 104285 |
| 7 | Filter Bowl | (1) | 104286 |
| 8 | Gauge (0 - 160 p.s.i.) | (1) | 100067 |
| 9 | Bracket | (1) | 104282 |
| 10 | Automatic Drain | (1) | 104283 |
| | | | |
| | Items included but not shown | | |

MODEL DESCRIPTION CHART

P293 X 1 - 60 X

THREAD

5 - 3/4 - 14 N.P.T.

6 - 1 - 11-1/2 N.P.T.

DRAIN OPTION

0 - None

4 - Auto Drain

OPERATING AND SAFETY PRECAUTIONS

- Use only genuine ARO replacement parts to assure compatible pressure rating and performance.
- Read carefully all warnings and safety precautions and heed the following before operating, to avoid personal injury and /or property damage.
- Be certain anyone operating this equipment has been trained to use it safely.

⚠ WARNING COMPONENT RUPTURE. DO NOT EXCEED MAXIMUM RATED OPERATING PRESSURE OF 150 p.s.i. (10.3 bar). To avoid possible damage or personal injury, DO NOT expose the unit to excessive pressure beyond the intended working range.

⚠ WARNING TEMPERATURE LIMITS. DO NOT EXCEED MAXIMUM TEMPERATURE LIMITS OF 140° F (60° C). Excessive temperature can affect non-metallic parts which may weaken them and cause failure.

⚠ WARNING USE WITH INDUSTRIAL COMPRESSED AIR SYSTEMS ONLY. DO NOT USE WITH BOTTLED GAS PRODUCTS OR FLUIDS. MISAPPLICATIONS CAN RESULT IN COMPONENT FAILURE.

⚠ WARNING DISASSEMBLY HAZARD. DO NOT DISASSEMBLE THIS UNIT WHEN IT IS UNDER PRESSURE. SHUT OFF AND RELIEVE AIR SUPPLY BEFORE ATTEMPTING SERVICE OR DISASSEMBLY PROCEDURES. Isolate the unit by closing the line valve or disconnect the supply line or hose.

⚠ WARNING BOWL REMOVAL HAZARD. THE BOWL MUST BE

FULLY THREADED INTO POSITION BEFORE EXPOSING THE UNIT TO LINE PRESSURE.

⚠ WARNING DO NOT use degreasers or solvents to clean polycarbonate bowls. Clean polycarbonate bowls with soap and water or kerosene only.

DO NOT expose polycarbonate bowls to: acetone, trichloroethane, gasoline, alcohols, ketones, esters, chlorinated hydrocarbons, toluene, synthetic lubricants, direct sunlight, impact blows, temperature outside rated range, pressure over rated range, compressor oils containing fire resistant additives such as phosphate esters or diesters. Exposure to these substances can cause crazing, cracking or rupture. Fumes of these substances, either internally or externally, can also cause failure. USE COMPATIBLE LUBRICATING OILS ONLY. Lubricating oils used with polycarbonate bowls must be compatible. Some "fire resistant" oil additives are not compatible and can cause failure of the bowls.

For use in environments where any of these chemicals may be present, consult the factory for approval prior to installation.

⚠ CAUTION THE REGULATOR GAUGE PORT SHOULD NOT BE USED AS AN AUXILIARY PRESSURE OUTLET PORT. The gauge port is intended to be used only for pressure monitoring, sensing or remote pilot. The feedback may affect the set pressure.

NOTICE Secondary pressure adjustment ranges are not minimum or maximum secondary pressure limits. Regulators can be adjusted to zero p.s.i.g. secondary pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressure outside of the specified range is not recommended.

TECHNICAL SPECIFICATIONS

MATERIALS OF CONSTRUCTION

| | |
|-------|-------------------|
| Body | Aluminum die-cast |
| Bowl | Polycarbonate |
| Seals | Nitrile |

OPERATION CONDITIONS

| | |
|----------------------------|--------------------------------------|
| Temperature Range | 14° to 140° F (-10° to 60° C) |
| Maximum Inlet Air Pressure | 150 p.s.i.g. (10.3 bar) |
| Pressure Range | 5 to 150 p.s.i.g. (0.34 to 10.3 bar) |
| Application | Industrial compressed air systems |
| Sump Capacity | 7 oz. (207 cc) |
| Filter Element | 40 micron |
| Maximum Flow Rate | 300 scfm |
| Weight | 3 lbs (1.361 kg) |

INSTALLATION

- Install filter / regulators with the air flow as indicated by the arrow on the side of the unit.
- Install filter / regulators as close as possible to the air operated equipment for best performance.
- Filter / regulators must be installed with the bowls downward for proper operation.
- Locate the filter / regulator upstream from the lubricator.
- Mount with the knob up.
- See gauge port "CAUTION".
- After a module has been installed in the air line, the adjustment knob should be turned counterclockwise until compression is released

from the pressure control spring. This prevents over pressurizing the air operated equipment when the air supply is turned on.

OPERATION

FILTER

- Monitor the sediment accumulation.
- If the pressure drop across the filter becomes excessive, empty the filter bowl, clean or replace the filter element to assure good performance.
- Clean the filter element periodically. Soak the filter bowl and clean with soap and water. Refer to warnings concerning polycarbonate bowls.

REGULATOR

- Pull knob to adjust air pressure.
- Turn clockwise to increase pressure.
- Turn counterclockwise to decrease pressure.
- Push to lock.

MAINTENANCE

FILTER

- Filters must be drained as frequently as necessary to keep the liquid level below the baffle, which could cause liquid to be carried downstream.

REGULATOR

- Once the system has been depressurized, the regulator valve can be replaced without removing the unit from the line.