

# SERVICE AND OPERATING MANUAL **I**" Filter/Regulator **I**" Lubricator

## Filter/Regulator

INSTALLATION: Before installing, blow out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads. Use pipe compound or tape sparingly to male threads only. Install filter-regulator in pipe line so that air will flow in direction of arrow stamped on body. Install as near as possible to equipment serviced. Filter-regulator must be installed with bowl in a vertical position.

ADJUSTMENT: To unlock adjustment, push knob fully down (in). Turn knob clockwise to increase pressure and counter-clockwise to lower pressure. With relieving-type regulators, the reduced pressure follows adjustment of the screw. To lock adjustment, simply pull knob fully up. If tamperproof adjustment is required, remove knob completely.

MAINTENANCE - CLEANING: To clean, it is not necessary to remove regulator from line. To maintain maximum filtering efficiency and to avoid excessive pressure drop, the filter must be kept clean. Turn drain valve clockwise to remove liquid accumulation before it reaches level of lower baffle. A visible coating of dirt or condensate on filter element or excessive pressure drop indicates cleaning is necessary. If the air supply is kept clean, the regulator should provide long periods of uninterrupted service. Erratic operation or loss of regulation is usually due to dirt in the disc area. To clean, shut off air line pressure and disassemble the filter-regulator. When reassembling, make sure the disc stem fits into center hole of piston assembly.

# Lubricator

INSTALLATION: Before installing, blow out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads. Use pipe compound or tape sparingly to male threads only. Install lubricator with bowl vertical in pipe line so that air will flow in direction indicated by arrow on lubricator body. Install as near as possible to equipment to be lubricated. To assure trouble-free performance, a filter should be installed upstream from the lubricator. A combination insert (part number 020-052-008) may be used to mount the lubricator directly to the filter/regulator. Remove the insert pins and inserts from the filter/regulator discharge and lubricator inlet. Install the combination insert between filter/regulator and lubricator. Be sure o-rings are in place and lubricated. The combination insert should be seated firmly prior to installation of pins.

LUBRICANT: For average conditions, the use of a high quality SAE #10 (S.U.V. 150-200 SEC @ 100°F/38°C) non-detergent oil is recommended.

NOTE: The oil and its container must be clean. Dirt will clog the lubricator, making shut-down and cleaning necessary.

**FILLING:** Lubricators can be filled while under pressure and without shutting down equipment. Slowly remove either fill plug and fill to within ¼"/6.4mm of top of bowl using correct oil.

**OPERATION:** The dial set knob is factory set. When turned to zero (0) no oil is delivered to the venturi for atomization and equipment is not being lubricated. Turn on the air to start flow and set knob to obtain the desired drops per minute, visible through the sight glass. As a start, one drop per minute is suggested, correct lubrication being a matter of experience and demand. Clockwise rotation of knob decreases oil feed rate. To check lubrication, hold a thumbnail or a mirror near the equipment exhaust. A heavy film indicates over-lubrication and the drops per minute should be reduced by turning knob clockwise to a lower setting.

**MAINTENANCE:** If both air and oil are kept clean and the oil level never allowed below end of tube in the bowl, the lubricator should provide long periods of unattended service. Cessation of oil dripping through the sight glass, regardless of knob adjustment is an indication that cleaning is necessary.

**CLEANING:** To clean, it is not necessary to remove lubricator from the line. Depressurize and disassemble. In most instances cleaning is needed only in the oil metering area. Pull off the adjusting knob and unscrew sight dome assembly, remove inner drip spout and clean with household soap. METAL BOWLS WITH SIGHT GLASSES AND SIGHT DOME MUST BE CLEANED WITH HOUSEHOLD SOAP ONLY.

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### 🛕 WARNING 🕰

The polycarbonate plastic material used to manufacture the plastic bowls and the sight dome on lubricators may be attacked by certain chemicals. DO NOT use these units on systems with air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. These oils carry over into the air lines and will chemically attack or possibly rupture the bowl and lubricator sight dome. DO NOT expose these units to materials such as carbon tetrachloride, trichlorethylene, acetone, paint thinner, cleaning fluids, or other harmful materials. These will cause the plastic to craze and/ or rupture. For use in environments where any of these chemicals may be present, consult the factory for approval prior to installation.

## WARNING

Clean metal bowl and sight glass only with household soap. Do not use denatured alcohol to clean.

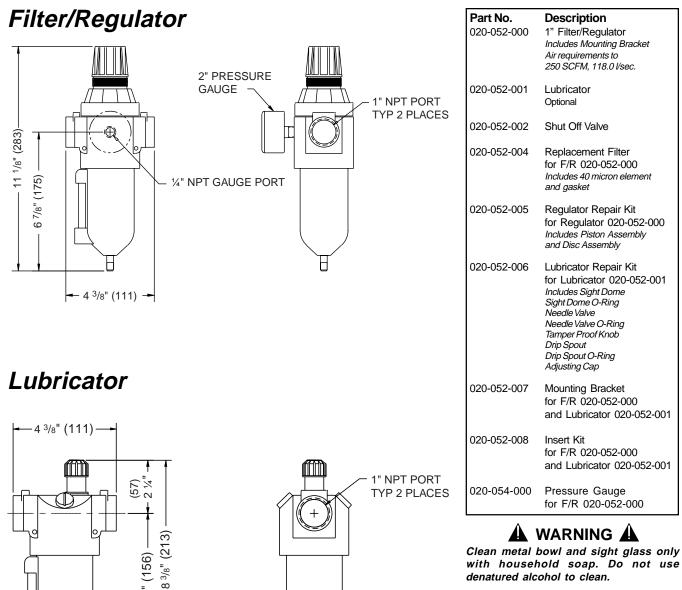
#### Filter/Regulator & Lubricator

BOWL	MAX PRESS.	MAX TEMP
PLASTIC	150 psi	120°F
	10.3 bar	49°C

#### A Note About Air Valve Lubrication

The SandPIPER pump's pilot valve and main air valve assemblies are designed to operate WITHOUT lubrication. This is the preferred mode of operation. There may be instances of personal preference, or poor quality air supplies when lubrication of the compressed air supply is required. The pump air system will operate with properly lubricated compressed air supplies.

It is important to remember to inspect the sleeve and spool set routinely. It should move back and forth freely. This is most important when the air supply is lubricated. If a lubricator is used. oil accumulation will, over time, collect any debris from the compressed air. This can prevent the pump from operating properly.



Clean metal bowl and sight glass only with household soap. Do not use denatured alcohol to clean.

<sup>1/8</sup>" (156)

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+-1/8" (3.2) inches (millimeters)