FINE CONTROLS (UK) LTD

Fine Controls have been supplying process controls & instrumentation equipment since 1994, & now serves an ever expanding customer base, both in the UK & globally.

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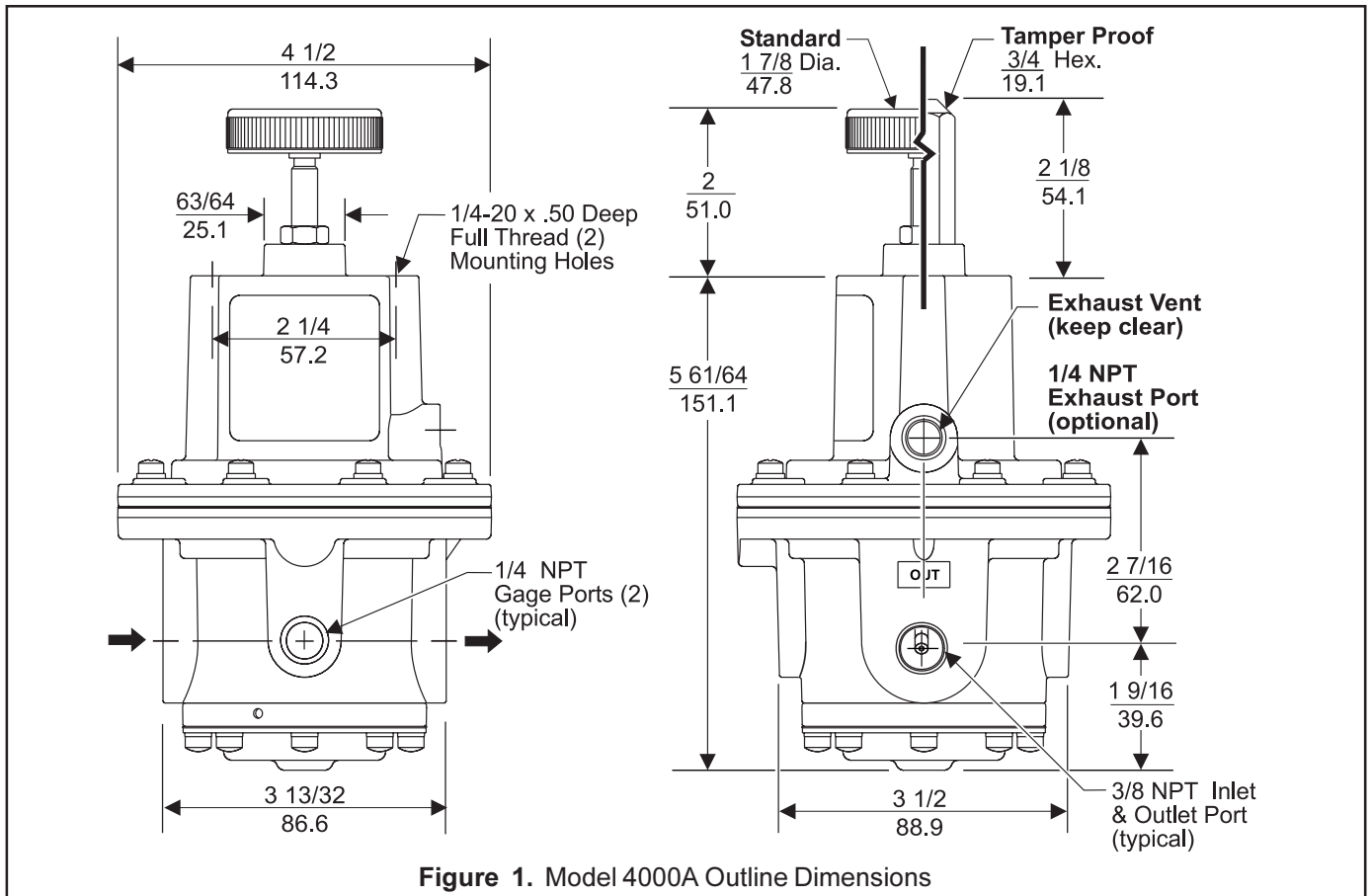# FAIRCHILD MODEL 4000A
PNEUMATIC PRECISION REGULATOR
Installation, Operation and Maintenance Instructions

Figure 1. Model 4000A Outline Dimensions

INSTALLATION

Use the two 1/4-20 tapped holes in the Bonnet to panel mount the Model 4000A. You can mount the regulator in any position without affecting its operation.

Clean all pipelines to remove dirt and scale before installation.

Apply a minimum amount of pipe compound to the male threads of the fitting only. **Do Not use teflon tape as a sealant.** Start with the third thread back and work away from the end of the fitting to avoid contaminating the regulator. Install the regulator in the air line.

The Inlet and Outlet ports are labeled "In" and "Out". Tighten all connections securely. Avoid undersized fittings that will limit the flow through the regulator. For more information, see Figure 1.

NOTES: Oil free air must be applied to the regulator. Use a filter to remove dirt and entrained liquid in the air line ahead of the regulator. If an air line lubricator is used, it MUST be located downstream of the regulator to avoid interference with performance.

OPERATION

The Model 4000A is a high-flow, non-bleeding regulator that precisely controls a set pressure.

Before you place the regulator into service for the first time, turn the Regulator Knob counterclockwise to relieve the tension on the Range Spring. To operate the regulator, slowly turn the knob in a clockwise direction until it reaches the required set pressure. For more information, see Figure 1.

To clean the Model 4000A, use the following steps:

1. Shut off system pressure to the regulator to prevent air from escaping. It is not necessary to remove the regulator from the air line.

2. Remove the four Screws and Washers (between ports) from the bottom of the unit. For more information, see Figure 2.

3. Remove the Inner Valve Assembly. For more information, see Figure 2.

4. Wash the Inner Valve Assembly with a solvent. Exercise care to prevent damage to diaphragms and valve facings. **Avoid solvents such as acetone, carbon tetrachloride and trichlorethylene.**

5. Replace the assembly carefully. Ensure that the Vent in the exterior part of the Inner Valve Assembly and the Exhaust Vent in the Bonnet are clear. For more information, see Figure 2.

Troubleshooting

Problem	Source	Solution
Leakage	Bonnet Screws	Tighten the Bonnet Screws.
High Bleed	• Relief Valve • Supply Valve • Supply Seat	• If contaminated, clean the source and Body.
	• Diaphragm Assembly	• If damaged, install the service kit.

NOTE: If the standard maintenance procedure does not correct the problem, install the appropriate service kit.

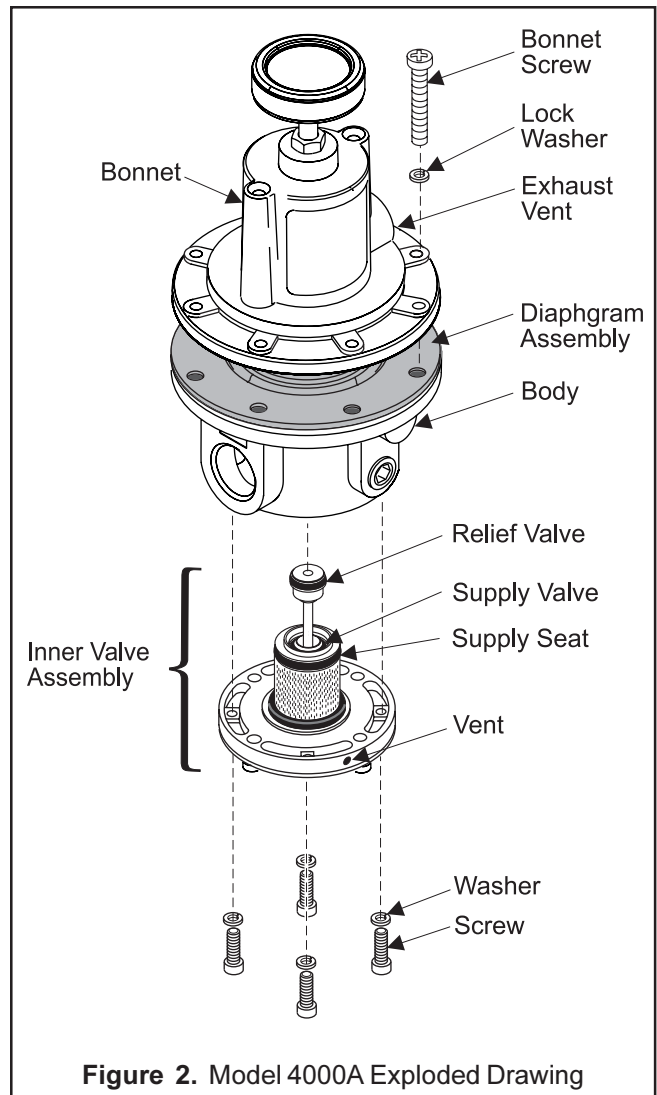| Standard	Pressure Ranges
• 19550-1	• 0.5-10 and 0.5-30 psig
• 19550-2	• 1-60 and 2-150 psig
• 19550-3	• 5-250 psig
• 19550-4	• 0.5-10 psig and 0.5-30 psig (Viton)
• 19550-5	• 1-60 and 2-150 psig (Viton)

Figure 2. Model 4000A Exploded Drawing

LEGAL NOTICE:

The information set forth in the foregoing Installation, Operation and Maintenance Instructions shall not be modified or amended in any respect without prior written consent of Fairchild Industrial Products Company. In addition, the information set forth herein shall be furnished with each product sold incorporating Fairchild's unit as a component thereof.