

⚠ WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

Introduction

Follow these instructions when installing, operating, or servicing the product.

YOU have selected a quality product, and we appreciate it... To be assured of maximum performance and satisfaction please read these instructions before installing this product.

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**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

Installation Instructions For Dial Regulators

1. **DO NOT** install the unit until you have read this entire product information sheet.
2. **EXCEPT** as otherwise specified by manufacturer, this product is specifically designed for compressed air service, and use with any other fluid (liquid or gas) is a misapplication. For example, use with or injection of certain hazardous liquids or gases in the system (such as alcohol or liquid petroleum gas) could be harmful to unit or result in a combustible condition or hazardous external leakage. Manufacturer's warranties are void in the event of misapplication and manufacturer assumes no responsibility for any resulting loss. Maximum pressure rating is 300 psig (21 bar). Temperature range is 32°F to 150°F (0°C to 65.5°C).
3. **INSTALL** upstream of and as close as possible to where regulated air is needed.
4. **INSTALL** with air flow in direction of arrow on casting.
5. **DO NOT** restrict the air flow with undersize piping or fittings, unless maximum air flow is not needed.
6. **INSTALL** regulator in any rotational position.

7. **GAUGE PORTS** may be used for installing gauge or they may be used as additional regulated air outlet ports. Plug all unused ports.
8. **PANEL MOUNTING** requires a 2-11/16" (69 mm) diameter hole, and 4 7/32" (5.5 mm) screw holes. Unit can be mounted on material up to 1-1/4" (32 mm) thick.
9. **INSTALLATION** of a 5-micron rated filter upstream of regulator is recommended.
10. **TO REGULATE AIR** turn adjustment knob clockwise to raise the regulated air pressure and counterclockwise to lower the regulated air pressure.

Maintenance Instructions For Dial Regulators

1. **BEFORE SERVICING THIS UNIT, READ THIS ENTIRE PRODUCT INFORMATION SHEET AND TURN OFF AIR SUPPLY AND VENT BOTH SIDES OF REGULATOR.**

Lubrication Of Dial Regulators

1. **FOR TROUBLE-FREE OPERATION**, proper lubrication of the Dial regulator is essential.
2. **WHEN ANY** of the following symptoms occur, lubricate regulator with Parker O-ring Lube. (See note) If Parker O-ring Lube is not available, use a heavy grease such as Lubriplate, Magnalube, or Molykote, however, these lubricants "wash out" much sooner than Parker O-ring Lube. **NOTE:** Never use oil as a lubricant.
 - A. Excessive relief venting .
 - B. Inability to attain high secondary pressure.
 - C. Erratic secondary pressures.
 - D. Excessive hysteresis (a retardation of desired effect: in this case because of the lack of lubrication).
3. Refer to "Figure A" on page 2 for steps 1 thru 10.
 1. Remove bottom plug (1), main valve spring (2), main valve (3), pilot valve spring (4), and pilot valve (5).
 2. Clean main valve molded rubber seat (Do not lubricate).
 3. Clean and lubricate bottom plug seal, main valve seal and pilot valve seal.

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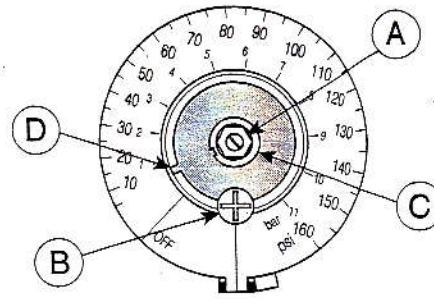
FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.

4. Reassemble unit.
5. If problem is not remedied, lubricate remaining seals. (See steps 6 thru 10)
6. Remove black retaining knob (15), clear plastic knob (16), retaining ring (6), and pull bonnet assembly (7) from unit.
7. Remove upper piston (8), upper piston cup (9), lower piston (10), needle valve (11), and needle valve spring (12).
8. Clean and lightly lubricate inside of body.
9. Clean and lubricate upper piston seal, upper piston cup seal, lower piston seal, needle valve seal and main valve slide seal (13).
10. Reassemble unit. If symptoms still exist, contact manufacturer.



- A Calibration Screw
- B Dial Screw
- C Adjustment Coupling
- D Tip

IMPORTANT NOTE: As with any new product, everyone seems to have an urge to see how it works. All Dial regulators have been factory - calibrated. Any "tinkering" with calibration settings easily can throw the unit out of calibration. For example, removing dial screw "B" and rotating "C" in either direction so that tip "D" passes the dial screw "B" will throw unit out of calibration .

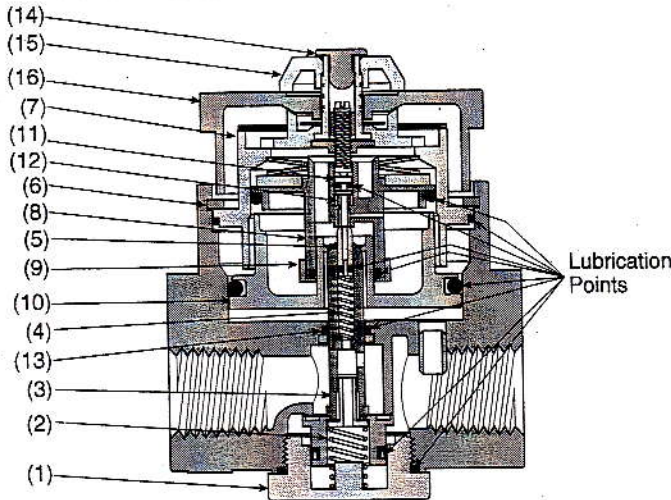


Figure A

Recalibration Of Dial Regulators

1. **DO NOT ATTEMPT TO CALIBRATE UNIT UNTIL ALL EIGHT SEALS HAVE BEEN PROPERLY LUBRICATED.**
2. **TO RECALIBRATE DIAL REGULATOR:**
 - A. **INSTALL** regulator on air line with at least 110 psig (7,5 bar) air pressure at the inlet port .
 - B. **INSTALL** an air pressure gauge to one of the gauge ports. Plug remaining gauge port with plug (supplied).
 - C. **REMOVE** lock button (Figure A, Item 14) from unit.
 - D. **TURN** adjusting knob to 100 psi (7 bar) setting.
 - E. **CHECK** the gauge for 100 psig (7 bar) reading. If gauge reads other than 100 psig (7 bar) adjust screw "A" (Fig. B) with a screw driver while holding adjusting knob on 100 psi (7 bar) setting. If more than one-half turn of screw "A" is required to achieve 100 psig (7 bar), see "G" below.
 - F. **TO CHECK CALIBRATION ADJUSTMENT:** when dial and gauge are reading the same (100 psig \pm 2 psig; 7 bar \pm 0,14 bar), turn adjusting knob to 20 psi (1,4 bar). Unit is calibrated when gauge reads 20 psig \pm 5 psig (1,4 bar \pm 0,34). (The \pm 2 psig and \pm 5 psig are accepted tolerances of the most commonly used gauges.)
 - G. **DO NOT** adjust screw "A" more than one-half turn when calibrating unit. If unit has been properly lubricated and more than one-half turn is required to calibrate it, additional problems with unit are involved and unit should be returned to the vendor.

Nominal Body Size	Kits	Part Number	
2.95 (67,3)	Adjustment Dial Knob	RRP-16-024-80	
	O-ring Repair Kit	GRP-95-260-80	
	Piston and Bonnet Repair Kit	RRP-95-765-80	
	Spring, Regulation, Belleville Washer 2-40 psig	RRP-95-906-80	
	Spring, Regulation, Belleville Washer 3-60 psig	RRP-95-907-80	
	Spring, Regulation, Belleville Washer 5-160 psig	RRP-95-905-80	
	Tamper Resistant Kit	RRP-95-585-80	
	Valve, Pilot with O-ring and Valve Spring	RRP-96-934-80	
	3.20 (81,2)	Adjustment Dial Knob	RRP-16-024-80
		O-ring Repair Kit	GRP-95-260-80
Piston bottom and O-Ring Seal		RRP-95-192-80	
Piston and Bonnet Repair Kit		RRP-95-766-80	
Spring, Regulation, Belleville Washer 2-40 psig		RRP-95-906-80	
Spring, Regulation, Belleville Washer 3-60 psig		RRP-95-907-80	
Spring, Regulation, Belleville Washer 5-160 psig		RRP-95-905-80	
Tamper Resistant Kit		RRP-95-585-80	
Valve, Main with U-Cup Seal		RRP-95-151-80	
Valve, Pilot with O-ring and Valve Spring		RRP-96-934-80	
4.40 (111,8)	Adjustment Dial Knob	RRP-16-024-80	
	O-ring Repair Kit	GRP-95-261-80	
	Piston bottom and O-Ring Seal	RRP-95-192-80	
	Piston and Bonnet Repair Kit	RRP-95-766-80	
	Spring, Regulation, Belleville Washer 2-40 psig	RRP-95-906-80	
	Spring, Regulation, Belleville Washer 3-60 psig	RRP-95-907-80	
	Spring, Regulation, Belleville Washer 5-160 psig	RRP-95-905-80	
	Tamper Resistant Kit	RRP-95-585-80	
	Valve, Main with U-Cup Seal	RRP-95-152-80	
	Valve, Pilot with O-ring and Valve Spring	RRP-96-935-80	
5.30 (134,6)	Adjustment Dial Knob	RRP-16-024-80	
	O-ring Repair Kit	GRP-95-262-80	
	Piston bottom and O-Ring Seal	RRP-95-192-80	
	Piston and Bonnet Repair Kit	RRP-95-766-80	
	Spring, Regulation, Belleville Washer 2-40 psig	RRP-95-906-80	
	Spring, Regulation, Belleville Washer 3-60 psig	RRP-95-907-80	
	Spring, Regulation, Belleville Washer 5-160 psig	RRP-95-905-80	
	Spring, Main Valve	RRP-95-024-80	
	Tamper Resistant Kit	RRP-95-585-80	
	Valve, Main with U-Cup Seal	RRP-95-153-80	
Valve, Pilot with O-ring and Valve Spring	RRP-96-935-80		