

WILKERSON®

Richland, MI 49083

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Installation & Service Instructions
83-722-000

Regulator Model R09
With Variations and Accessories

ISSUED: April, 2006

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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.

INSTALLATION

1. Refer to the above **WARNING** before installing regulator.
2. Make sure that system piping and regulator are the same pipe size. Avoid using fittings, couplings, etc. that restrict airflow.
3. Install unit as near as possible to regulated air application.
4. Position unit so air flows in direction indicated by arrow on the top or bottom of regulator body.
5. Regulator may be installed with adjusting knob located in the up or down position only.
6. Panel mount regulators require a 1-1/4" (31,7 mm) diameter hole and are mountable on panels up to 1/8" (3,2 mm) thick. To panel mount regulator or install using L-Type (wall mount) bracket, snap off adjusting knob by rotating the panel nut counterclockwise allowing the mechanical advantage of the screw thread to lift the knob off. Fit bonnet threads into panel or bracket hole. Replace panel nut and tighten. Replace adjusting knob by snapping back onto regulator bonnet.

OPERATION

1. **NOTE: Maximum pressure rating is 300 psig (20,7 bar). Maximum temperature is 175°F (79,4°C).**
2. To adjust regulator pull up on adjusting knob.
3. Before turning on supply air pressure, turn the adjusting knob counterclockwise until there is no load on the regulating main spring.
4. To set the downstream pressure turn on the supply air pressure and then turn the adjusting knob clockwise until the desired secondary pressure is reached. Push the adjusting knob down to lock knob in place.
5. When making a change in pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting first reduce to some pressure point less than that desired and then increase to the desired pressure.

MAINTENANCE

1. Given normal operating conditions this unit will be trouble-free. For long service life, occasionally disassemble and clean body, diaphragm, valve and valve seat. **Service unit at least every six months.**
2. TO REPLACE OR SERVICE VALVE ASSEMBLY:
 - a. Depressurize unit.
 - b. Turn adjusting knob counterclockwise to relieve compression on spring.
 - c. Insert flat head screw driver into bottom plug slot and slowly rotate counterclockwise.
 - d. Remove bottom plug and bottom valve spring. Valve assembly can now be removed for cleaning or replacement. When replacing valve assembly lightly lubricate valve O-ring with teflon based grease.
 - e. Reinsert valve assembly and bottom spring. Align bottom plug so that tabs match body slots and arrow points in the direction of air flow.
 - f. Before returning to service, insure that all seals have been reinstalled or replaced.
 - g. Insert flat head screwdriver into bottom plug slot, lightly press downward and slowly rotate clockwise to securely lock bottom plug in place.
3. TO REPLACE OR SERVICE DIAPHRAGM ASSEMBLY:
 - a. Depressurize unit.
 - b. Turn adjusting knob counterclockwise to relieve compression on spring.
 - c. Remove bonnet from body by turning counterclockwise.
 - d. Remove main spring.

- e. Remove diaphragm assembly to clean or replace.
 - f. Reinstall diaphragm assembly with spring rest in the up position.
 - g. Place main spring on spring rest.
 - h. Align bonnet assembly into body. Turn bonnet clockwise and tighten to 5 lb/ft (6-8 N-m).
 - i. Slowly pressurize unit to assume proper seating of all components.
4. IF UNIT WILL NOT REGULATE TO DESIRED PRESSURE OR IF DOWNSTREAM PRESSURE BECOMES EXCESSIVE, disassemble, clean and check valve O-ring, valve stem and valve seat for wear or damage. Replace worn or damaged parts with original manufacturer's service parts.

ACCESSORIES

T-Type Bracket	GPA-96-737
C-Type Bracket	GPA-97-010
L-Type Bracket	GRP-96-739
Joiner Set	GPA-96-738
Piping Adapter Set, 1/8" NPT	GPA-97-018
Piping Adapter Set, 1/4" NPT	GPA-97-019
Piping Adapter Set, 3/8" NPT	GPA-97-020
Piping Adapter Set, G 1/8	GPA-97-066
Piping Adapter Set, G 1/4	GPA-97-067
Piping Adapter Set, G 3/8	GPA-97-065
Piping Adapter Set w/T-Bracket, 1/8" NPT	GPA-97-025
Piping Adapter Set w/T-Bracket, 1/4" NPT	GPA-97-026
Piping Adapter Set w/T-Bracket, 3/8" NPT	GPA-97-027
Piping Adapter Set w/T-Bracket, G 1/8	GPA-97-068
Piping Adapter Set w/T-Bracket, G 1/4	GPA-97-069
Piping Adapter Set w/T-Bracket, G 3/8	GPA-97-070
Panel Mount Nut (Aluminum)	RPA-96-733
Panel Mount Nut (Plastic)	RPA-96-734
Tamper Resistant Kit	RPA-96-735
Safety Lockout Valve, 1/8" NPT	V08-01-0000
Safety Lockout Valve, 1/4" NPT	V08-02-0000
Safety Lockout Valve, G 1/8	V08-C1-0000
Safety Lockout Valve, G 1/4	V08-C2-0000
Diverter Block, 1/8" NPT	N08-01-0000
Diverter Block, 1/4" NPT	N08-02-0000
Diverter Block, G 1/8	N08-C1-0000
Diverter Block, G 1/4	N08-C2-0000
Diverter Block (w/check) 1/8" NPT	N08-01-C000
Diverter Block (w/check) 1/4" NPT	N08-02-C000
Diverter Block (w/check) G 1/8	N08-C1-C000
Diverter Block (w/check) G 1/4	N08-C2-C000

WARNING

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

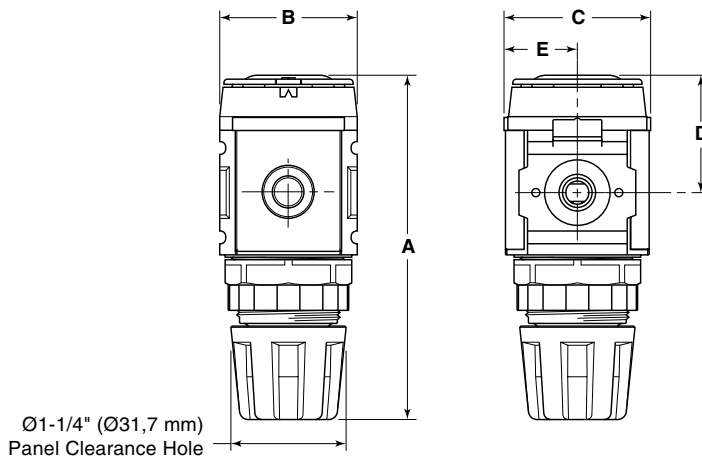
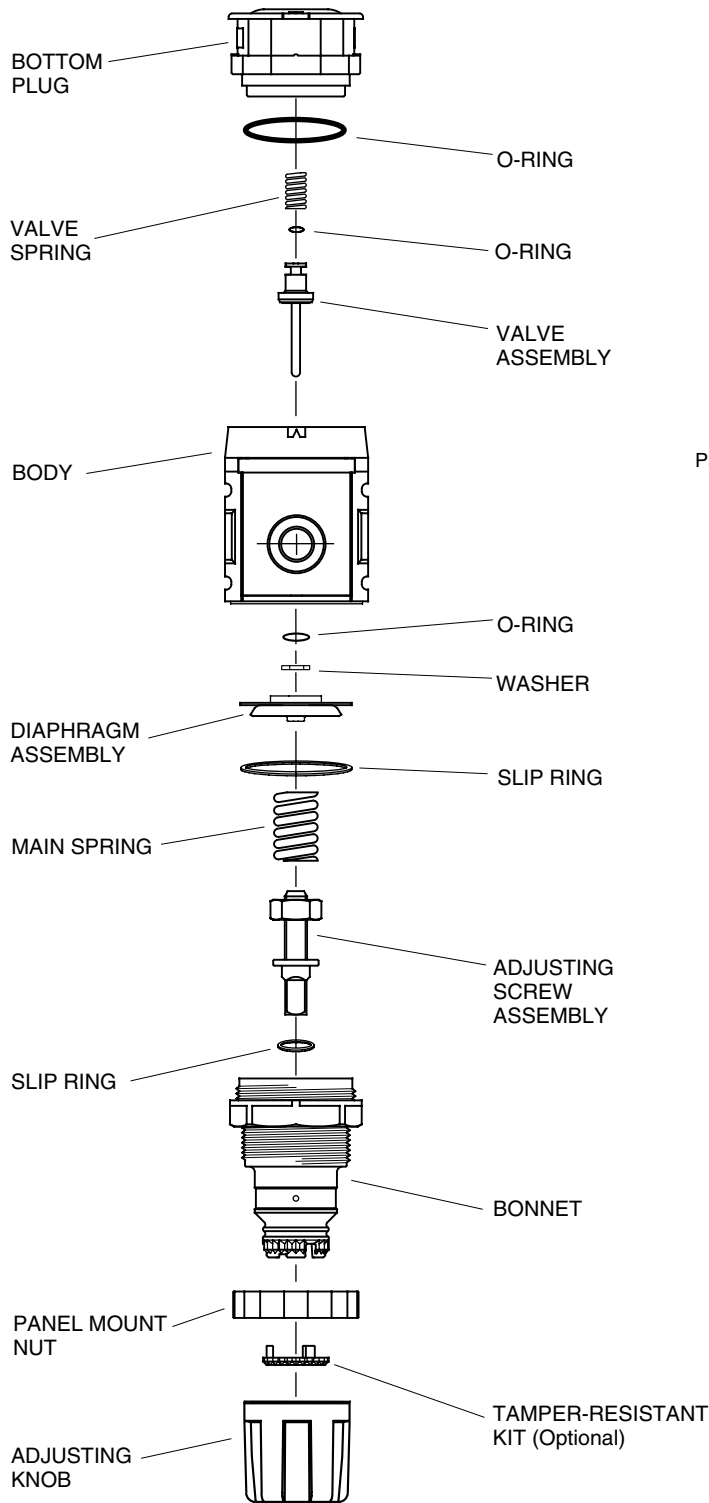
WARNING

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.



Dimensions without Gauge

Model	A	B	C	D	E	
R09	3.94	1.58	1.58	1.34	0.79	INCHES millimeters
	100.1	40.0	40.0	34.0	20.0	

Round Accessory Gauge Kits 0-30 PSIG (0-2 bar) K4515N18030	Round Accessory Gauge Kits 0-60 PSIG (0-4 bar) K4515N18060	Round Accessory Gauge Kits 0-160 PSIG (0-11 bar) K4515N18160
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REPAIR KITS AND REPLACEMENT PARTS								
R09	Bottom Plug O-Ring GRP-96-710	Main spring 0-125 psig (0-9 bar) range GRP-96-717	Main spring 0-60 psig (0-4 bar) range GRP-96-718	Main spring 0-30 psig (0-2 bar) range GRP-95-111	Diaphragm Assembly (Relieving) GRP-96-725	Diaphragm Assembly (Non-Relieving) GRP-96-726	Valve Assembly RRP-96-727	Bottom Valve Spring RRP-96-728