Industrial Regulator Series 1800/2000 Instructions and Parts List



AMC Quality System QMI is Accredited by:



ISO 9002 Certified





General Information:

- Available Models Standard Regulator, Standard Monitor Regulator, Internal Relief Valve, Full Capacity Internal Relief Valve, Underpressure Shutoff, Overpressure Shutoff. See Table 1 and identification tag on regulator.
- Available Sizes: 1-1/2- and 2-inch screwed; 2-inch ANSI -125 Flange.
- Maximum inlet pressure, normal service (P1): Up to 125 PSIG, depending on orifice size – reference Capacity Tables found in Sales Bulletin SB8540.1
- Maximum outlet pressure, normal service (P2): Depending on range spring selection, 5 PSI = 1800 Series, 15 PSI = 2000 Series. Reference Capacity Tables found in Sales Bulletin SB8540.1

Low Pressure	High Pressure	
Outlet 3.5" w.c.	Outlet 1/2 to	
to 5 psi	15 psi*	Description
Model Number	Model Number	
1803	2003	Standard regulator
1803M	2003M	Standard monitor regulator
1813	-	Internal relief valve
1813B	-	Full capacity, internal relief valve
1823	2023	Underpressure shutoff
1833	-	Underpressure shutoff with internal relief
1833B	-	Underpressure shutoff with full capacity internal relief
1843	-	Overpressure shutoff with internal relief
1843B	-	Overpressure shutoff with full capacity internal relief
1853	-	Overpressure and underpressure shutoff with internal relief
1853B	_	Overpressure and underpressure shutoff with full capacity internal relief
1883	2083	Overpressure shutoff
1883M	2083M	Overpressure shutoff with monitor
1893	2093	Overpressure and underpressure shutoff

Table 1 – Available Regulator Models

*20 psi outlet is available on special request.

Preparation

 Install, operate, inspect and maintain the regulator as outlined in American Meter's instructions and in accordance with your company's policies and applicable federal, state and local codes and laws. Installation and service must be done by qualified personnel only.

Failure to follow these instructions may result in damage to the regulator.

2. Check installation location for suitability. It is possible that physical changes have been made to the building site since the regulator and location were originally selected.

WARNING: Do not connect the inlet of the regulator to a pressure source higher than that recommended by the manufacturer. Never connect the regulator outlet to the source of pressure. Observe the flow direction on the valve head casting.

If inlet pressure can exceed the maximum regulator outlet pressure rating, some form of overpressure protection is required to prevent possible damage to the regulator and personal injury.

- 3. Examine regulator for shipping damage.
- 4. Check regulator and piping for dirt or other foreign matter which may have accumulated during shipment or handling.
- 5. Check data plate to determine if regulator is suitable for intended service.
- 6. Suitable stop valve(s) should be installed and should be conveniently located.
- 7. Filters are available from the manufacturer for applications where pipeline contaminants are suspected to be present.
- 8. Regulators may be used at temperatures between -20°F and +150°F (-30°C and 65°C).

Installation

(The numbers in parentheses refer to Figure 1.)

- 1. Remove all shipping plugs.
- 2. Use good piping practice. Be sure piping and regulator are free of dirt, pipe dope and other debris. Apply pipe dope to male threads only.
- 3. Install regulator. Make certain it is piped up correctly with inlet pipe connection to the inlet connection and flow is in the direction as indicated by arrow located on valve head (1). The regulator may be mounted in any position. The vent should be positioned to prevent entry of water and debris. American Meter recommends that the vent face downward. By loosening three setscrews (2), the regulator body (3) may be rotated 360° in relation to the valve head. Tighten the setscrews (2).

Inside Installations – A regulator installed within a building should be located as near as practical to the point of service line entrance.

 Turn gas on very slowly. If an outlet stop valve is used, it should be opened first. Do not overload the diaphragm with a sudden surge of inlet pressure.

WARNING: *INSIDE INSTALLATION* requires a vent line of sufficient diameter to carry gas vented by the relief valve to a safe outside location, away from any opening in the building. Vent piping thread size is either 3/4, 1 or 2 inch NPT depending on model. In accordance with the American National Standard for pipe threads ANSI B2.1. Keep vent lines as short and direct as possible.

OUTSIDE INSTALLATION requires that care be taken to prevent vent opening from freezing closed or becoming blocked or permitting water to enter from any cause. Particular consideration should be given to sites where flooding, snow or freezing rain may be experienced. The vent or vent line port should point vertically downward, and overhead protection should be used where necessary.

Periodically check vent to be certain it is not obstructed.

- 5. Assure that there are no leaks and all connections are tight.
- 6. Unless otherwise specified, the 1800/2000 Regulator is preset at the factory with the diaphragm (4) horizontal and the springhorn vertical. Outlet pressure may vary with the diaphragm oriented in another position. To adjust the set pressure, perform the following:
 - (a) Turn gas off and depressurize the system.
 - (b) Install outlet pressure gauge. Remove seal plug (5).
 - (c) Turn gas on.
 - (d) Establish a low flow rate 180 to 220 SCFH.

Instructions: Industrial Regulator Series 1800/2000

- (e) Turn pressure spring adjustment screw (6) clockwise to increase outlet pressure or counterclockwise to decrease outlet pressure.
- (f) Establish the set pressure within the range limits of the pressure spring used.
- (g) To test the regulator's ability to fully shut off (lock-up), shut off all flow downstream of the regulator. At lock-up, the outlet pressure will be somewhat higher than the set pressure. However, if the pressure continues to rise after 3 seconds, the regulator must be repaired. Observe for 30 seconds.
- (h) When the set pressure has been properly adjusted, depressurize and remove gauge(s) and lines.
- (i) Replace seal plug (5).
- (j) Pressurize check all connections for leaks.

Inspection And Maintenance

WARNING: If the regulator system develops a leak or vents gas, call a qualified gas serviceman promptly.

Inspection and maintenance of the 1800/2000 regulators have been simplified for practical reasons. Repair parts are offered if maintenance of the regulator is required.

Inspection of the valve seat disc (7) and orifice valve (8) may be performed in the field. Follow the procedure described below. Care should be exercised to prevent foreign matter from entering the regulator.

Procedure for inspection and replacement of valve seat disc and/or orifice if required:

- 1. Shut off gas supply and depressurize the regulator system.
- 2. Loosen three setscrews (2) securing the regulator body (3) to the valve head (1). Slide body off of valve head.
- Visually check the seating edge of the orifice (8). If it is nicked or damaged, it should be replaced with a new orifice to provide proper shutoff. See maintenance instructions for replacing orifice, Page 4.

- 4. Inspect the surface of valve seat disc. It if is scored or uneven, replace it as outlined below.
- 5. Carefully insert the tip of a knife along the edge of the seat disc holder (9) and lift out seat disc.
- 6. Install new disc carefully insuring that it is thoroughly seated.
- 7. Remove O-Ring (10) from groove around valve head (1).
- 8. Install new O-Ring in groove around valve head and apply a light film of silicone grease.
- 9. Inspect unit for cleanliness and proper positioning of parts. Pay particular attention to proper O-Ring positioning.
- Install body to valve head. Locate vent to proper position (pointed down) and tighten valve head setscrews. Check system for leaks.
- 11. Proceed to steps 4, 5 and 6 in the installation instructions.

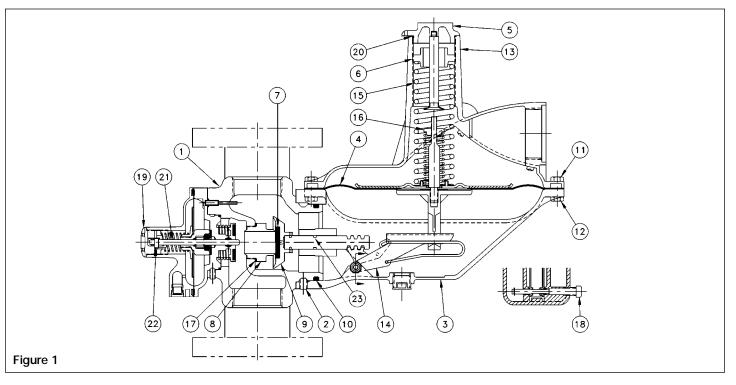
Replacing The Diaphragm – Figure 1

- 1. To replace diaphragm assembly, remove body bolts and nuts (11 & 12) and lift off regulator top (13).
- 2. Remove the pressure spring. Then remove the diaphragm stem nut, the upper diaphragm plate and diaphragm. Install the new diaphragm, the existing diaphragm plate and stem nut, being careful to align the diaphragm bolt holes with those in the body. Tighten the stem nut.

Relief Models:

Remove the pressure spring, the relief valve adjustment nut and the relief valve spring. Then remove the diaphragm assembly. Install the diaphragm assembly, the existing relief valve spring and relief valve adjusting nut. Tighten adjusting nut to approximately its original position. Align diaphragm bolt holes with holes in the body.

- 3. Place the top over the diaphragm, with the vent in the proper position and install the bolts. Take care to prevent folds in the diaphragm between the flanges. Install range spring and tighten adjusting screw. Replace seal plug.
- 4. Inspect the cleanliness and proper positioning of parts.
- 5. Proceed to Steps 4, 5, 6 and 6(a) through (j) in installation instructions.



Instructions: Industrial Regulator Series 1800/2000

Adjusting Relief Valve – Figure 1. Models 1813, 1813B, 1833, 1833B, 1843, 1843B, 1853, 1853B

CAUTION: Do not attempt to perform the following procedure while the regulator is installed for service.

- 1. Plug the inlet connection of the regulator.
- Connect an inches water column manometer or pressure gauge (depending on the range spring used) and a regulated pressure source with a needle valve on the low pressure side and an exhaust valve to a common manifold piped to the outlet of the regulator.
- 3. Adjust the regulated pressure source to about two times the desired relief valve set pressure.
- Close the exhaust valve and apply pressure through the needle valve. Adjust the needle valve so that the pressure reading on the manometer or gauge raises at 3" w.c. per 10 seconds.
- 5. After the flow rate has been established, open the exhaust valve to release the pressure in the manifold. Close the exhaust valve. The pressure at which the manometer or gauge stabilizes is the relief valve set point.
- 6. To adjust the relief set point, remove the seal plug (5) and turn the relief valve nut (16) with a screwdriver; clockwise increases, counterclockwise decreases. Unless otherwise specified, factory set points are:

Range Spring	Relief Set Point
3.5 to 6" w.c.	14" w.c. ± 1.5" w.c.
5.5 to 8" w.c.	16" w.c. ± 1.5" w.c.
8.5 to 14" w.c.	22" w.c. ± 2.0" w.c.
14.5 to 28" w.c.	1.75 psi ± 2.5" w.c.
1 to 2 psi	2.2 psi ± 4.0" w.c.
2 to 3 psi	3.7 psi ± 0.25 psi
3 to 5 psi	6.3 psi ± 0.50 psi

7. Repeat Step 5 to check new relief valve set point.

NOTE: For relief valve set points up to 100" w.c., an aspirator bulb may be substituted for the controlled pressure source and valves. Pump the bulb slowly until the manometer reads the desired set point. Pumping the bulb above the set point should cause the relief valve to crack and maintain the desired set pressure, within the limits shown above.

Replacing The Orifice – Figure 1

- 1. Shut off gas supply and depressurize the regulator system.
- 2. Loosen three setscrews (2). Slide regulator body (3) off of valve head (1). Place the regulator body aside and protect the seat disc from dirt particles.
- 3. Remove the orifice valve (8) and gasket (17) with a 1³/₄" hex socket wrench.
- 4. Carefully install new orifice and gasket and avoid nicking the orifice. Reassemble regulator body. Test for lock-up and system leaks.

CAUTION: Regulators that have an orifice size change different than shown on the data plate or seal cap must have their set pressure re-established. Mark new orifice size and set pressure on the regulator, seal cap or on its tag.

Replacing Pressure Spring – Figure 1

CAUTION: Regulators that have a pressure spring removed or replaced must have their set pressure re-established. If the pressure spring is different from that shown on the data plate or seal cap, mark spring range on the regulator, seal cap or on its tag, and cross out the old value.

- 1. Shut off gas supply and depressurize the regulator system.
- 2. Remove seal plug (5).
- 3. Unscrew pressure adjusting screw (6) with a ³/₆" screwdriver and remove the pressure adjusting screw completely.
- 4. Remove the pressure spring (15). Install new pressure spring.
- 5. Replace the pressure adjusting screw and turn adjusting screw to mid position.
- 6. Proceed to Steps 4, 5 and 6(a) through (j) in installation instructions.

Resetting The Underpressure Shutoff (UPSO) Figure 1: Models 1823, 1833, 1833B, 1853,1853B, 1893, 2023, 2093

Operation: When pressure below the main diaphragm falls below normal, the underpressure shutoff device is tripped and the spring connected to the lever assembly forces the valve against the orifice. The UPSO device must be manually reset.

Resetting: To reset, unscrew the reset shaft (18) with a wrench until it is free of the threads. Pull the shaft outward until it engages the reset mechanism. With the wrench, turn the reset shaft clockwise until the reset mechanism is engaged. Hold firmly in this position until normal pressure has entered under the diaphragm and the downstream line and operation is restored. Push reset shaft back in and tighten. **NOTE:** If the regulator is equipped with both OPSO and UPSO, and the OPSO is tripped, the UPSO will also trip. Reset procedure is to latch the OPSO first and then the UPSO.

Resetting The Overpressure Shutoff (OPSO) Figure 1: Models 1843, 1843B, 1853, 1853B, 1883, 1883M, 1893, 2083, 2083M, 2093

Operation: When the line pressure increases to the specified overpressure shutoff setting, the pressure under the shutoff diaphragm forces the diaphragm stem outward releasing the plunger. The shutoff spring forces the shutoff disc against the orifice.

When selecting a shutoff spring, a minimum differential of 14" water column between the normal operating pressures and the shutoff pressure setting should be provided.

Resetting: To reset the OPSO, shut off pressure, unscrew the seal cap (19) which opens the regulator orifice, permitting gas to flow. Pull the seal cap straight out until the overpressure shutoff device latches completely. The retighten the seal cap. (Do not trip the shutoff valve unless the seal cap is installed.)

OPSO Shutoff Springs

Spring Range PSI	Part Number	Color Code
14" to 28" w.c.	70017P075	Red - Purple
1 to 2 psi	70017P076	Red - Brown
2 to 3 psi	70017P077	Red - Black
3 to 5 psi	70017P078	Orange - Yellow
5 to 8 psi	70017P079	Orange - Green
8 to 14 psi (requires reducing ring)	70017P078	Orange - Yellow
14 to 20 psi (requires reducing ring)	70017P079	Orange - Green
Reducing Ring	72646P001	

Orifice Sizes

Regulator Connection Size (Inches)	Orifice Size (Inches)	Part Number
1-1/2 and 2	1/4	72983P010
	3/8	72983P011
	1/2	72983P012
	5/8	72983P013
	3/4	72983P014
	7/8	72983P015
	1	72983P016
	1-1/4	72983P017

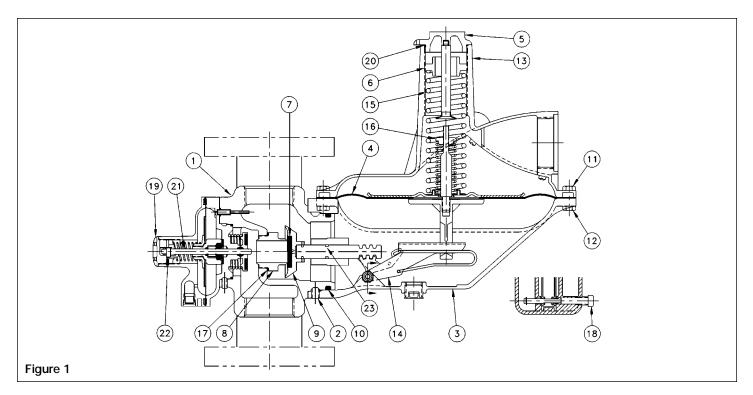
Changing And Adjusting The OPSO Pressure Spring – Figure 1:

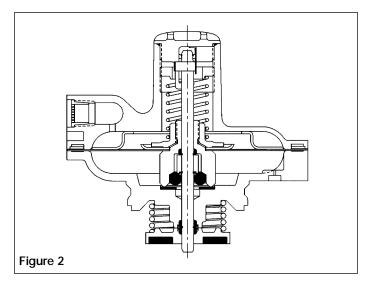
Unscrew the cap seal until it is loosely held on the shutoff shaft (21). Tilt and disengage the cap seal and spring clip (22) from the end of the shutoff shaft. (The spring clip should remain on the cap seal.) This exposes the pressure spring adjustment screw.

Remove the pressure spring adjustment screw and the pressure spring. Install a new pressure spring (see note below). Screw in the pressure spring adjustment screw until it is approximately 3/4" below the top of the spring housing.

To adjust the shutoff pressure, close the inlet to the main regulator body and slowly pressurize the outlet of the regulator, up to the desired shutoff pressure. If the OPSO mechanism trips before the desired shutoff pressure is reached, turn the adjustment screw further in, reset the OPSO and retest. If the OPSO does not trip when the desired pressure is reached, turn the adjustment screw out slowly until it does. Then reset the OPSO and check it again. Replace and retighten the cap seal making certain the spring clip on the cap seal engages the shutoff shaft.

NOTE: Series 2000 Regulators using OPSO shutoff springs with ranges of 8 to 14 PSI or 14 to 20 PSI require the use of the reducing ring shown in Figure 2. To install the reducing ring, remove the OPSO cover as described in the paragraph below. Position the reducing ring as shown and reassemble the cover.





Rotating The OPSO Cover Vent - Figure 2:

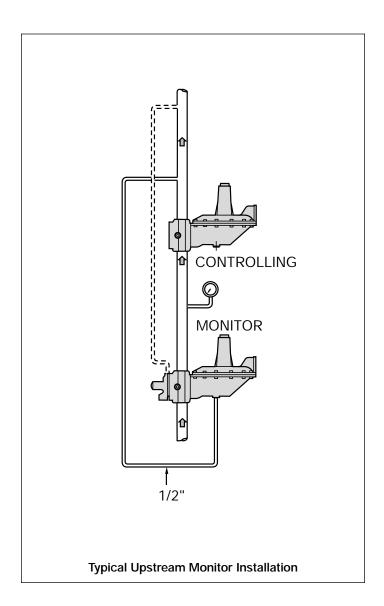
If it is necessary to rotate the OPSO vent, first remove the cap seal. Note the position of the adjustment screw and put a pencil line on the outside of the spring housing corresponding to the top of the adjustment screw. Back out the adjustment screw until it is flush with the top of the spring housing. (This releases the tension on the OPSO pressure spring.)

Remove the eight screws on the OPSO cover and carefully lift the OPSO cover so that the diaphragm remains on the bottom casting. Rotate the vent to the desired position, and align the screw holes in the top, the diaphragm and the bottom casting. Reinstall the eight screws loosely and check that the diaphragm is flat (and not crimped) between the screw holes. Tighten the eight screws, and screw in the adjustment screw to its original position. Check and adjust the shutoff pressure as described in the above paragraphs. Replace and tighten the cap seal.

Series 1800/2000 Monitor Regulators: Models 1803M, 1833M, 2003M, 2083M

A monitor regulator installation consists of a regulator with an external static connection and a regulator with an internal static connection. The regulator selected to be the monitor is set at 2" to 5" w.c. above the controlling regulator. Upstream monitoring, as shown in the sketch, is more commonly used. The external static connection should be connected at a point free of turbulence and preferably a minimum of 5 pipe diameters downstream.

NOTE: If bypass piping is included in a monitor regulator set, the control line valve must be closed before the bypass valve is opened to avoid the diaphragm from being exposed to inlet pressure.



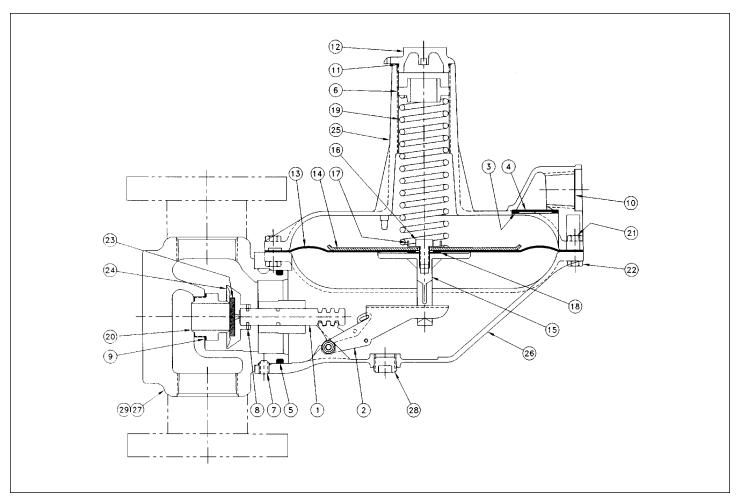
NOTE: Design improvements now enable all 1800/2000 regulator models manufactured after January 1994 to be configured as monitor regulators. The regulators can be identified by month/year code number beginning with Code No. 1-94.

1800 And 2000 Series Monitor Conversion Instructions 73909K012 – Monitor Conversion Kit

- 1. Referring to Figure 1, remove the main regulator assembly (3) from the valve head (1).
- 2. Remove seal cap (5), main spring adjusting screw (6), and main spring (15).
- 3. Remove the twelve 5/16" bolts (11) holding the regulator top to the lower diaphragm chamber.
- Remove the regulator top (13) and the diaphragm assembly (4) where it engages with the lever (14). Caution should be used not to damage the diaphragm assembly during disassembly.
- 5. Remove the lever (14) and plunger (22).
- 6. Degrease plunger and install plunger O-Ring (23).
- 7. Lubricate plunger and O-Ring assembly using O-Ring grease or all-purpose silicon grease and reinstall plunger and lever.
- 8. Install diaphragm assembly by engaging the lever into the diaphragm stem.
- 9. Position regulator top over the main diaphragm and line up three of the bolts holding the top, the main diaphragm and lower diaphragm chamber, insert three bolts. Line up and install the remaining nine. Install the twelve nuts and torque to 120 inch pounds.
- 10. Install the main spring and adjusting screw; replace the seal cap.
- 11. Remove the seat disc assembly (9) from the plunger.
- Assemble the two remaining O-Rings and the isolation plate and lubricate using O-Ring grease or all-purpose silicon grease.
- 13. Install the isolation plate around the plunger guide.
- 14. Reinstall the seat disc assembly (9).
- 15. Lubricate the inside bore of the valve head as well as the outside O-Ring with O-Ring grease or all-purpose silicon grease. Attach the regulator to the valve head and torque the three retaining screws (2) to 75 inch pounds.
- 16. Proceed to steps 4, 5 and 6(a) through (j) in installation instructions, and OPSO and UPSO resetting instructions if so required.

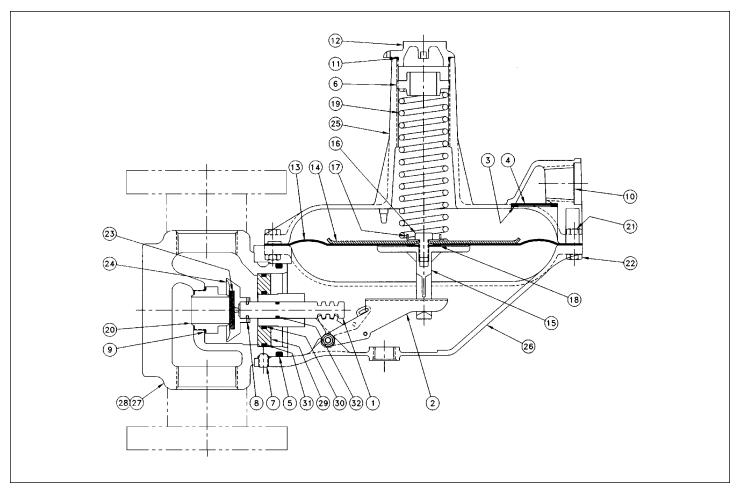
NOTE: If the regulator to be converted has an OPSO it will be necessary to change the OPSO to a monitor version with an external sensing port and pipe it as shown in the figure to the left.

American 1¹/₂" and 2" Model 1803 Industrial Regulator



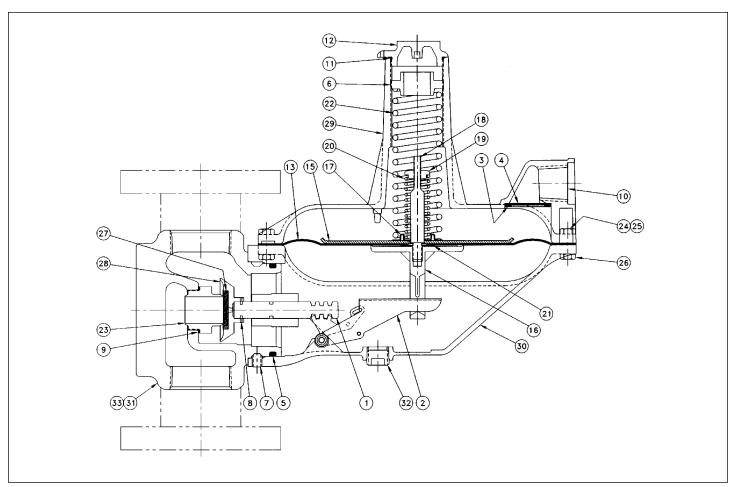
Item					n Regs uilt	ltem					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	
1	72627P001	Valve Plunger	1			23	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
2	72626G001	Lever	1			23	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
3	71876P005	Vent Flapper Retainer	1			23	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
4	72770P002	Vent Flapper	1			23	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
5	42710P161	"O" Ring, Valve Head	1			23	70041P133	Disc. Valve Seat – Viton A – 70 Duro	1		
6	73183P001	Adjustment Screw	1			23	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
7	78014P006		3			24	72624P001	Holder, Seat Disc – For Use w/2" Models			
8	72858P001	Retainer. Seat Disc Holder	1					- with 1/4" thru 7/8" Orifice Sizes (SILVER)	1		
9	70019P094	Gasket, Valve	1			24	72624P002	Holder, Seat Disc – For Use w/2" Models			
10	70400P013		1					- with 7/8" thru 1-1/4" Orifice Sizes (BLUE)	1		
11	42710P107	"O" Ring, Seal Plug	1			24	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
12	70103P001	Seal Plug	1					– All Orifice Sizes (SILVER)	1		
13	70014P143	Diaphragm	1			25	73579P011	Top, Regulator – without Seal Wire Hole (Standard)			
14	70012P052	Plate, Diaphragm						– BSP – TR Thread	1		
15	72629P005	Stem, Diaphragm	1			25	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			
16	78000P081	Screw, Diaphragm Stem	1					- NPT Thread	1		
17	72272P001	Guide, Spring	1			25	73579P012	Top, Regulator – with Seal Wire Hole			
18	13981P076	Flat Washer	1					- BSP - TR Thread	1		
19	71424P017		1			25	73579P008				
		Spring, Pressure 5.5" - 8" w.c. (ORANGE)	1					– NPT Thread	1		
19	71424P019		1			26	72628P002	Body, Regulator BSP – TR Thread	1		
19	71424P020		1			26	72628P001	Body, Regulator NPT Thread	1		
	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)	1			27	72619P066	Head, Valve - 1-1/2" x 1-1/2"			
			1					 BSP – TR Thread (Ductile Iron) 	1		
19	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1			27	72619P072	Head, Valve - 1-1/2" x 1-1/2"			
	71424P023		1					– NPT Thread (Ductile Iron)	1		
20	72983P010		1			27	72619P073				
20	72983P011	Valve – 3/8" Orifice	1					– BSP – TR Thread (Ductile Iron)	1		
20	72983P012	Valve – 1/2" Orifice	1			27	72619P074				
20			1					- NPT Thread (Ductile Iron)	1		
20	72983P014		1			27	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)			
20	72983P015	Valve – 7/8" Orifice	1			27	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		4/4/0 -
20	72983P016		1			28	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
20	72983P017		1			28	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
21	78001P032	Bolt, Body 5/16" - 24 x 1-1/8" Hex. Hd. (Standard)	12			29	11970P033	Plug, Valve Head – 1/4" NPT			1/1/94
21	78000P021	Bolt, Body 5/16" - 18 x 1.00"	12			29	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
22	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12								
22	78019P013	Nut, Body Bolt 5/16" – 18	12								





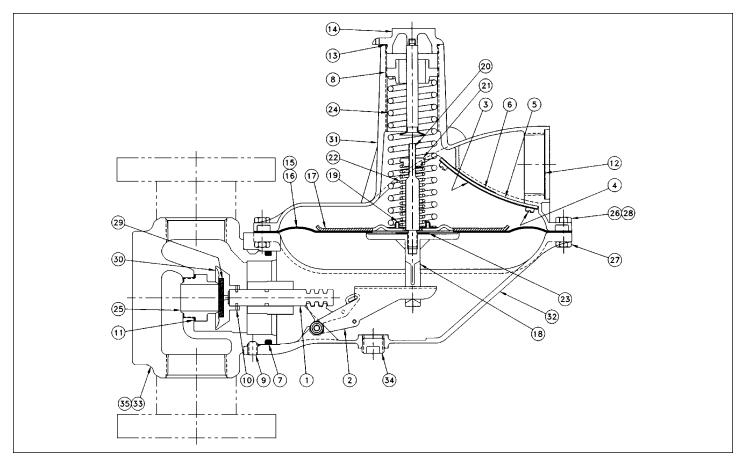
Item					n Regs uilt	Item				1	n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			23	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
2	72626G001	Lever	1			23	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
3	71876P005	Vent Flapper Retainer	1			23	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
4	72770P002	Vent Flapper	1			23	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
5	42710P161	"O" Ring, Valve Head	1			23	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
6	73183P001	Adjustment Screw	1			24	72624P001	Holder, Seat Disc – For Use w/2" Models			
7	78014P006	Setscrew, Regulator to Valve Head	3					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		
8	72858P001	Retainer, Seat Disc Holder	1			24	72624P002	Holder, Seat Disc – For Use w/2" Models			
9	70019P094	Gasket, Valve	1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		
10	70400P013	Screen, Vent	1			24	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
11	42710P107	"O" Ring, Seal Plug	1					 – All Orifice Sizes (SILVER) 	1		
12	70103P001	Seal Plug	1			25	73579P011	Top, Regulator – without Seal Wire Hole (Standard)			
13	70014P143	Diaphragm	1					– BSP – TR Thread	1		
14	70012P052	Plate, Diaphragm	1			25	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			
15	72629P005	Stem, Diaphragm	1					- NPT Thread	1		
16	78000P081	Screw, Diaphragm Stem	1			25	73579P012	Top, Regulator – with Seal Wire Hole			
17	72272P001	Guide, Spring	1					– BSP – TR Thread	1		
18		Flat Washer	1			25	73579P008	Top, Regulator – with Seal Wire Hole			
19	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)	1					- NPT Thread	1		
19		Spring, Pressure 5.5" - 8" w.c. (ORANGE)	1			26	72628P002	Body, Regulator BSP – TR Thread	1		
19		Spring, Pressure 8" - 14" w.c. (YELLOW)	1			26	72628P001	Body, Regulator NPT Thread	1		
19	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1			27	72619P066	Head, Valve – 1-1/2" x 1-1/2"			
19		Spring, Pressure 1# - 2# (ROYAL BLUE)	1					 BSP – TR Thread (Ductile Iron) 	1		
19		Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)	1			27	72619P072	Head, Valve – 1-1/2" x 1-1/2"			
19	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1					 – NPT Thread (Ductile Iron) 	1		
19			1			27	72619P073				
20		Valve – 1/4" Orifice	1					 BSP – TR Thread (Ductile Iron) 	1		
20	72983P011	Valve – 3/8" Orifice	1			27	72619P074	Head, Valve – 2" x 2"			
20	72983P012		1					 – NPT Thread (Ductile Iron) 	1		
20			1			27	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
20		Valve – 3/4" Orifice	1			27	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
20	72983P015	Valve – 7/8" Orifice	1			28	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
20			1			28	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
20	72983P017	Valve – 1-1/4" Orifice	1			29	73010P001	Plate, Isolation	1	1/1/94	
21	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			29	73010P002	Plate, Isolation	1		1/1/94
21	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			30	42710P106	"O" Ring, Isolation Plate – I.D.	1	1/1/94	
22			12			30	42710P078	"O" Ring, Isolation Plate – I.D.	1		1/1/94
22	78019P013	Nut, Body Bolt 5/16" – 18	12			31	78037P040	"O" Ring, Isolation Plate – O.D.	1		
23	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1			32	78037P048	"O" Ring, Valve Plunger	1		





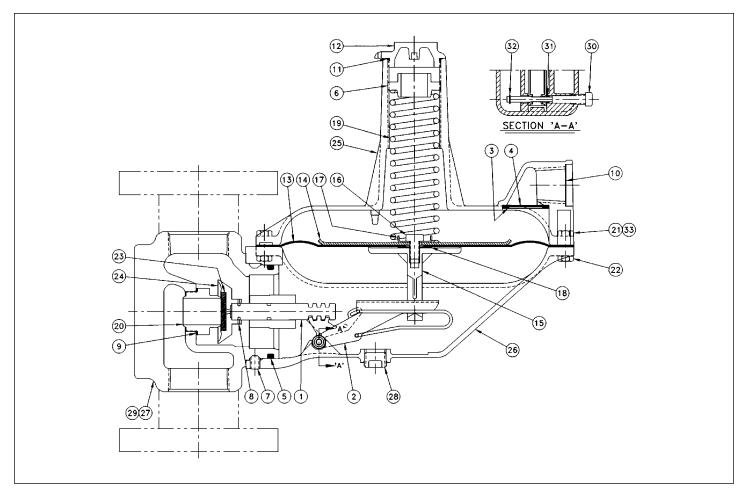
Item					n Regs uilt	Item				Bu	n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			25	78071P041	Tag, Relief Valve	1		
2	72626G001	Lever	1			26	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12		1
3	71876P005	Vent Flapper Retainer	1			26	78019P013	Nut, Body Bolt, 5/16" – 18	12		1
4	72770P002	Vent Flapper	1			27	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		1
5	42710P161	"O" Ring, Valve Head	1			27	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		1
6	73183P001	Adjustment Screw	1			27	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		1
7	78014P006	Setscrew, Valve Head	3			27	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		1
8	72858P001	Retainer, Seat Disc Holder	1			27	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		1
9	70019P094	Gasket, Valve	1			27	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		1
10	70400P013	Screen, Vent	1			28	72624P001	Holder, Seat Disc – For Use w/2" Models			1
11	42710P107	"O" Ring, Seal Plug	1					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		1
12	70103P001	Seal Plug	1			28	72624P002	Holder, Seat Disc – For Use w/2" Models			1
13	70014G002	Diaphragm Assembly Complete (Incl. Items 16-24)	1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		1
14	70014P143	Diaphragm	1			28	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			1
15	70012P052		1					 – All Orifice Sizes (SILVER) 	1		1
16	72629P005	Stem, Diaphragm	1			29	73579P011	Top, Regulator – without Seal Wire Hole (Standard)			1
17	73175P001	Spring Locator	1					– BSP – TR Thread	1		1
18		Stem, Relief Valve	1			29	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			1
19	71533P001	Nut, R.V. Spring Adjustment	1					– NPT Thread	1		1
20			1			29	73579P012	Top, Regulator – with Seal Wire Hole			1
21			1					– BSP – TR Thread	1		1
22	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)	1			29	73579P008	Top, Regulator – with Seal Wire Hole			1
22	71424P018		1					- NPT Thread	1		1
22	71424P019		1			30	72628P002	Body, Regulator BSP – TR Thread	1		1
22	71424P020		1			30	72628P001	Body, Regulator NPT Thread	1		1
22	71424P021		1			31	72619P066	Head, Valve – 1-1/2" x 1-1/2"			1
22			1					 BSP – TR Thread (Ductile Iron) 	1		1
22	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1			31	72619P072	Head, Valve – 1-1/2" x 1-1/2"			1
22	71424P023		1					 – NPT Thread (Ductile Iron) 	1		1
23	72983P010		1			31	72619P073	Head, Valve – 2" x 2"			1
23	72983P011	Valve – 3/8" Orifice	1					 BSP – TR Thread (Ductile Iron) 	1		1
23	72983P012	Valve – 1/2" Orifice	1			31	72619P074	Head, Valve – 2" x 2"			1
23	72983P013		1					 – NPT Thread (Ductile Iron) 	1		1
23	72983P014	Valve – 3/4" Orifice	1			31	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		1
23	72983P015	Valve – 7/8" Orifice	1			31	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
23	72983P016		1			32	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
23	72983P017	Valve – 1-1/4" Orifice	1			32	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
24	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			33	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
24	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			33	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94

American 1¹/₂" and 2" Model 1813B Industrial Regulator



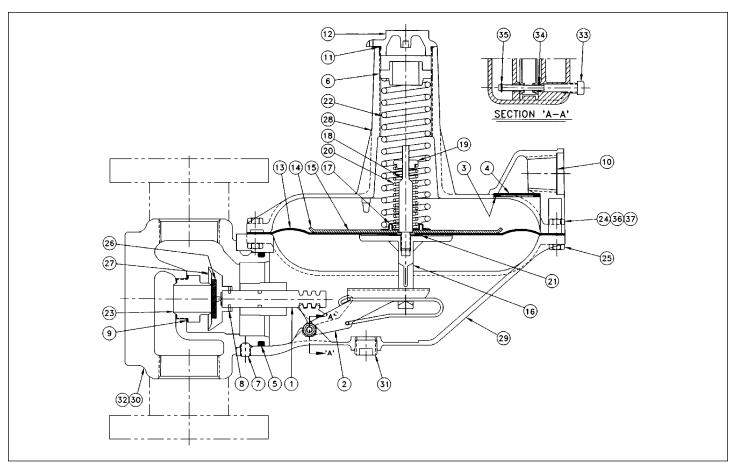
Item					n Regs uilt	Item					In Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			27	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12		
2	72626G001	Lever	1			27	78019P013		12		
3	73055P001	Vent Flapper Retainer	1			28	78071P041	Tag, Relief Valve Setting	1		
4	78008P006	Screw, Vent Flapper Retainer	4			29 29	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
5	73060P001	Vent Flapper				29 29	70041P072 70041P073	Disc, Valve Seat – Buna N – 70 Duro (Standard) Disc, Valve Seat – Buna N – 80 Duro	1		
6	73063P001	Spring, Vent Flapper	1			29 29	70041P073 70041P158		1		
7	42710P161	"O" Ring, Valve Head	1			29 29	70041P158 70041P133	Disc, Valve Seat – Viton A – 60 Duro			
8	73183P001	Adjustment Screw	1			29	70041P133 70041P135				
9 10	72858P001	Setscrew, Regulator to Valve Head Retainer, Seat Disc Holder	3			29 30	72624P001	Holder, Seat Disc – For Use w/2" Models			
10	72858P001 70019P094					30	72024F001	- with 1/4" thru 7/8" Orifice Sizes (SILVER)	1		
12	70019P094 70400P015					30	72624P002	Holder, Seat Disc – For Use w/2" Models	'		
12	42710P107	"O" Ring, Seal Plug				50	720241 002	- with 7/8" thru 1-1/4" Orifice Sizes (BLUE)	1		
14	73062G003	Seal Plug Assembly				30	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
15	70014G001					00	120211-001	- All Orifice Sizes (SILVER)	1		
16	70014P168			4/1/94		31	73053P011	Top, Regulator – without Seal Wire Hole (Standard)			
16	70014P203				4/1/94	•		– BSP – TR Thread	1		
17	73057P002	Plate, Diaphragm*			4/1/94	31	73053P007	Top, Regulator – without Seal Wire Hole (Standard)			
18	72629P005	Stem, Diaphragm*	1		4/1/94			– NPT Thread	1		
19	73175P001	Spring Locator	1			31	73053P012				
20	73058P001	Stem, Relief Valve	1					– BSP – TR Thread	1		
21	71533P001	Nut, R.V. Spring Adjustment	1			31	73053P008				
22			1					– NPT Thread	1		
23	13981P076		1			32	72628P002	Body, Regulator BSP – TR Thread	1		
24	71424P017		1			32	72628P001	Body, Regulator NPT Thread	1		
24	71424P018		1			33	72619P066				
24			1				70/400070	- BSP - TR Thread (Ductile Iron)	1		
24	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1			33	72619P072		1		
24	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)				33	70/100070	- NPT Thread (Ductile Iron)	1		
24	71424P026					33	72619P073	Head, Valve – 2" x 2" – BSP – TR Thread (Ductile Iron)	1		
24 24	71424P022 71424P023		1			33	72619P074	Head, Valve – 2" x 2"			
24 25	71424P023 72983P010					55	12017F0/4	– NPT Thread (Ductile Iron)	1		1 1
25 25						33	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)			1 1
25 25	72983P011 72983P012					33	72992P011	Head, Valve – 2" Metric Flanged (Ductile Iron)			1 1
25		Valve – 1/2 Office				34	11970P031	Plug, Body – 1/2" NPT			1/1/94
25		Valve – 3/8 Office				34	11970P032	Plug, Body – $1/2"$ BSP – TR			1/1/94
25						35	11970P033	Plug, Valve Head – 1/4" NPT			1/1/94
25		Valve – 1" Orifice				35	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
25	72983P017							.			· · · ·
26	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12								1 1
26	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12								1 1

American 1¹/₂" and 2" Model 1823 Industrial Regulator



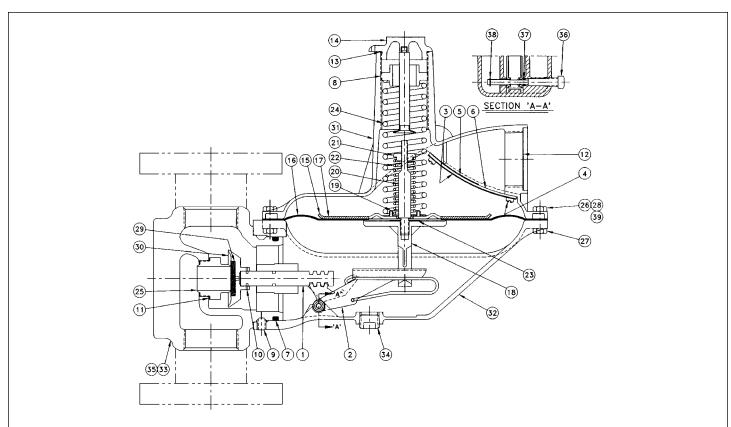
Item					n Regs uilt	Item					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			23	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
2	72626G002	Lever	1			23	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
3	71876P005	Vent Flapper Retainer	1			23	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
4	72770P002	Vent Flapper	1			23	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
5	42710P161	"O" Ring, Valve Head	1			23	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
6	73183P001	Adjustment Screw	1			24	72624P001	Holder, Seat Disc – 2" Regulator			
7	78014P006	Setscrew, Valve Head	3					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		
8	72858P001	Retainer, Seat Disc Holder	1			24	72624P002	Holder, Seat Disc – 2" Regulator			
9	70019P094		1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		
10	70400P013		1			24	72624P001	Holder, Seat Disc – 1-1/2" Regulator			
11	42710P107	"O" Ring, Seal Plug	1					– All Orifice Sizes (SILVER)	1		
12	70103P001	Seal Plug	1			25	73579P011	Top, Regulator – without Seal Wire Hole (Standard)			
13	70014P143		1					– BSP – TR Thread	1		
14	70012P052		1			25	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			
15	72629P005		1					- NPT Thread	1		
16	78000P081	Screw, Diaphragm Stem	1			25	73579P012	Top, Regulator – with Seal Wire Hole			
17	72272P001	Guide, Spring	1					– BSP – TR Thread	1		
18	13981P076		1			25	73579P008				
19	71424P017		1					- NPT Thread	1		
			1			26	72628P004	Body, Regulator BSP – TR Thread	1		
19	71424P019		1			26	72628P003	Body, Regulator NPT Thread	1		
19	71424P020		1			27	72619P066	Head, Valve - 1-1/2" x 1-1/2"			
	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)	1					 BSP – TR Thread (Ductile Iron) 	1		
	71424P026		1			27	72619P072				
19	71424P022		1					 – NPT Thread (Ductile Iron) 	1		
19	71424P023		1			27	72619P073				
20	72983P010		1					– BSP – TR Thread (Ductile Iron)	1		
20	72983P011	Valve – 3/8" Orifice	1			27	72619P074	Head, Valve – 2" x 2"			
20	72983P012		1					– NPT Thread (Ductile Iron)	1		
20	72983P013		1			27	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
20	72983P014		1			27	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
20	72983P015		1			28	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
20	72983P016		1			28	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
20	72983P017		1			29	11970P033	Plug, Valve Head – 1/4" NPT			1/1/94
21	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			29	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
21	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			30	72943G001	Drive Shaft Assembly	1		
22	78020P003		12			31	73381P001	Drive Shaft Washer			
22	78019P013	Nut, Body Bolt 5/16" – 18	12			32	78074P016	"E" Ring, Drive Shaft	1		
23	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1			33	73784P001	Instruction Tag	1		

American 1¹/₂" and 2" Model 1833 Industrial Regulator



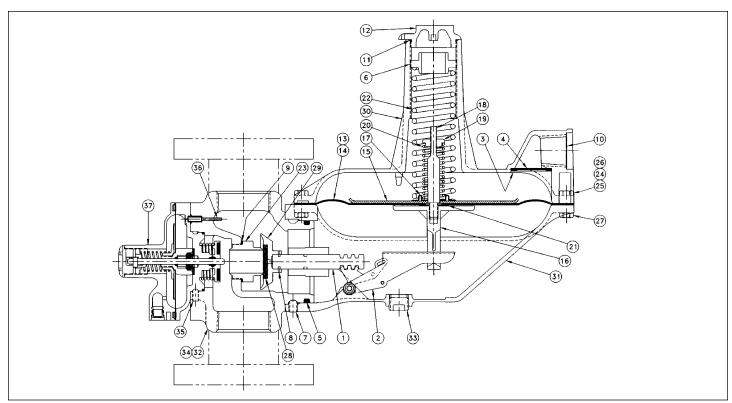
					n Regs						n Regs
Item				Bu	uilt	Item				Bu	uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			26	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
2	72626G002	Lever	1			26	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
3	71876P005	Vent Flapper Retainer	1			26	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
4	72770P002	Vent Flapper	1			26	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
5	42710P161	"O" Ring, Valve Head	1			26	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
6	73183P001	Adjustment Screw	1			26	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
7	78014P006	Setscrew, Valve Head	3			27	72624P001	Holder, Seat Disc – 2" Regulator			
8	72858P001	Retainer, Seat Disc Holder	1					- with 1/4" thru 7/8" Orifice Sizes (SILVER)	1		
9	70019P094	Gasket, Valve	1			27	72624P002	Holder, Seat Disc – 2" Regulator			
10	70400P013	Screen, Vent	1					- with 7/8" thru 1-1/4" Orifice Sizes (BLUE)	1		
11	42710P107	"O" Ring, Seal Plug	1			27	72624P001	Holder, Seat Disc – 1-1/2" Regulator			
12	70103P001	Seal Plug	1					– All Orifice Sizes (SILVER)	1		
13	70014G002	Diaphragm Assembly Complete (Incl. Items 17-23)	1			28	73579P011	Top, Regulator – without Seal Wire Hole (Standard)			
14	70014P143	Diaphragm	1					– BSP – TR Thread	1		
15	70012P052	Plate, Diaphragm	1			28	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			
16	72629P005	Stem, Diaphragm	1					- NPT Thread	1		
17	73175P001	Spring Locator	1			28	73579P012	Top, Regulator – with Seal Wire Hole			
18	73058P001	Stem, Relief Valve	1					– BSP – TR Thread	1		
19	71533P001	Nut, R.V. Spring Adjustment	1			28	73579P008	Top, Regulator – with Seal Wire Hole			
20	70017P074		1					- NPT Thread	1		
21	13981P076		1			29	72628P004	Body, Regulator BSP – TR Thread	1		
22	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)	1			29	72628P003	Body, Regulator NPT Thread	1		
	71424P018		1			30	72619P066	Head, Valve - 1-1/2" x 1-1/2"			
	71424P019		1					 BSP – TR Thread (Ductile Iron) 	1		
22	71424P020		1			30	72619P072				
	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)	1					– NPT Thread (Ductile Iron)	1		
22	71424P026	Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)	1			30	72619P073	Head, Valve – 2" x 2"			
	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1					- BSP - TR Thread (Ductile Iron)	1		
	71424P023	Spring, Pressure 3# - 5# (BLACK-GREEN)	1			30	72619P074	Head, Valve – 2" x 2"			
23	72983P010		1					- NPT Thread (Ductile Iron)	1		
23	72983P011	Valve – 3/8" Orifice	1			30	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
23	72983P012	Valve – 1/2" Orifice	1			30	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		1/1/0 :
23	72983P013		1			31	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
23	72983P014		1			31	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
23	72983P015	Valve – 7/8" Orifice	1			32	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
23	72983P016		1			32	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
23	72983P017	Valve – 1-1/4" Orifice	1			33	72943G001	Drive Shaft Assembly	1		
24	78001P032		12			34	73381P001	Drive Shaft Washer			
24	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			35	78074P016	"E" Ring, Drive Shaft			1
25 25	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12			36 36	78071P041 73784P001	Tag, Relief Valve			1
25	78019P013	Nut, Body Bolt 5/16" – 18	12			30	131842001	Instruction Tag			1





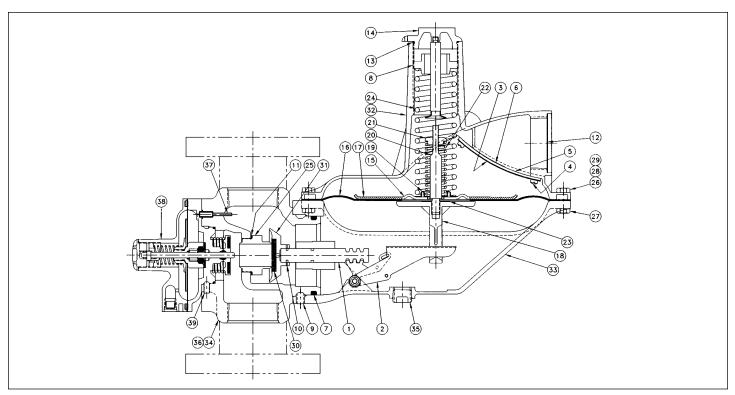
Item					Used In Regs Built								n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	Item No.	Part No.	DESCRIPTION	Qty.	Before	-		
1	72627P001	Valve Plunger	1			28 29	78071P041 70041P071	Tag, Relief Valve Setting Disc, Valve Seat – Buna N – 60 Duro	1				
2	72626G002	Lever	1			29 29	70041P071 70041P072	Disc, Valve Seat – Buna N – 60 Duro (Standard)					
3	73055P001 78008P006	Vent Flapper Retainer	1			29	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)					
4	73060P005	Screw, Vent Flapper Retainer	1			29	70041P073	Disc, Valve Seat – Bulla N – 60 Dulo					
5	73060P001 73063P001	Vent Flapper	1			29	70041P133	Disc, Valve Seat – Viton A – 00 Duro					
6 7	42710P161	Spring, Vent Flapper "O" Ring, Valve Head	1			29	70041P135	Disc, Valve Seat – Viton A – 70 Dulo					
8	73183P001	Adjustment Screw	1			30	72624P001	Holder, Seat Disc – 2" Regulator	'				
8	73183P001 78014P006		3			30	72024F001	– with 1/4" thru 7/8" Orifice Sizes (SILVER)	1				
10	72858P001	Retainer. Seat Disc Holder	3 1			30	72624P002	Holder, Seat Disc – 2" Regulator	'				
10	72038P001 70019P094	Gasket, Valve	1			50	720241 002	– with 7/8" thru 1-1/4" Orifice Sizes (BLUE)	1				
12	70019P094 70400P015		1			30	72624P001	Holder, Seat Disc – 1-1/2" Regulator	l '				
12	42710P107	"O" Ring, Seal Plug	1			50	720241 001	– All Orifice Sizes (SILVER)	1				
13	72357G003		1			31	73053P011	Top, Regulator – without Seal Wire Hole (Standard)	l '				
14	70014G001	Diaphragm Assembly Complete (Incl. Items 16-23)	1			51	/ 30331 011	- BSP - TR Thread	1				
16	700140001 70014P168	Diaphragm	1	4/1/94		31	73053P007	Top, Regulator – without Seal Wire Hole (Standard)	l '				
16	70014P108	Diaphragm	1	4/1/74	4/1/94	51	/ 30331 007	– NPT Thread	1				
17	73057P002	Plate, Diaphragm*	1		4/1/94	31	73053P012	Top, Regulator – with Seal Wire Hole	l '				
18	72629P005	Stem, Diaphragm*	1		4/1/94	51	/ 30331 012	– BSP – TR Thread	1				
19	73175P001	Spring Locator	1		4/1/74	31	73053P008	Top, Regulator – with Seal Wire Hole	'				
20	73058P001	Stem, Relief Valve	1			01		– NPT Thread	1				
20		Nut, R.V. Spring Adjustment	1			32	72628P004	Body, Regulator BSP – TR Thread					
22	70017P074	Spring, Relief Valve (BLACK-ORANGE)	1			32	72628P003	Body, Regulator NPT Thread					
23		Flat Washer	1			33	72619P066	Head, Valve – 1-1/2" x 1-1/2"	· ·				
24	71424P017		1					– BSP – TR Thread (Ductile Iron)	1				
24		Spring, Pressure 5.5" - 8" w.c. (ORANGE)	1			33	72619P072	Head, Valve - 1-1/2" x 1-1/2"					
24		Spring, Pressure 8" - 14" w.c. (YELLOW)	1					 NPT Thread (Ductile Iron) 	1				
24		Spring, Pressure 14.5" - 28" w.c. (GREEN)	1			33	72619P073						
24	71424P021		1					– BSP – TR Thread (Ductile Iron)	1				
24	71424P026		1			33	72619P074	Head, Valve – 2" x 2"					
24	71424P022		1					 – NPT Thread (Ductile Iron) 	1				
24	71424P023		1			33	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1				
25	72983P010	Valve – 1/4" Orifice	1			33	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1				
25	72983P011	Valve – 3/8" Orifice	1			34	11970P031	Plug, Body – 1/2" NPT	1		1/1/94		
25	72983P012	Valve – 1/2" Orifice	1			34	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94		
25	72983P013	Valve – 5/8" Orifice	1			35	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94		
25	72983P014	Valve – 3/4" Orifice	1			35	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94		
25	72983P015		1			36	72943G001	Drive Shaft Assembly	1				
25	72983P016		1			37	73381P001	Drive Shaft Washer	1				
25	72983P017	Valve – 1-1/4" Orifice	1			38	78074P016	"E" Ring, Drive Shaft	1				
26	78001P032	Bolt, Body 5/16" - 24 x 1-1/8" Hex. Hd. (Standard)	12			39	73784P001	Instruction Tag	1				
26	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12										
27	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12										
27	78019P013	Nut, Body Bolt 5/16" – 18	12										





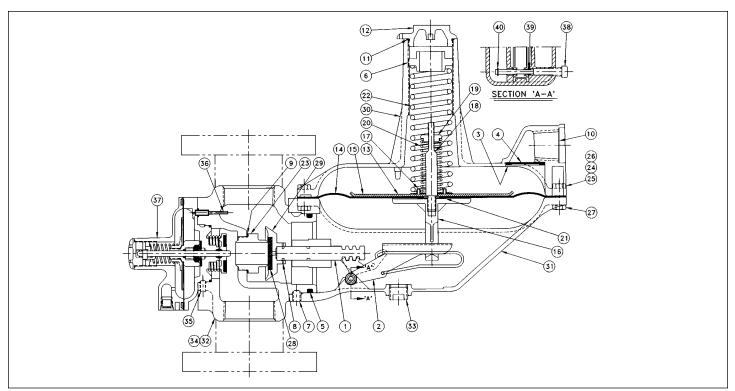
Item					n Regs uilt	Item				Used II Bu	n Regs iilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			28	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
2	72626G001	Lever	1			28	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
3	71876P005	Vent Flapper Retainer	1			29	72624P001	Holder, Seat Disc – 2" Regulator			
4	72770P002	Vent Flapper	1					- with 7/8" thru 1-1/4" Orifice Sizes (SILVER)	1		
5	42710P161	"O" Ring, Valve Head	1			29	72624P003	Holder, Seat Disc – 2" Regulator			
6	73183P001	Adjustment Screw	1					- with 1/4" thru 7/8" Orifice Sizes (RED)	1		
7	78014P006	Setscrew, Regulator to Valve Head	3			29	72624P001	Holder, Seat Disc – 1-1/2" Regulator			
8	72858P001	Retainer, Seat Disc Holder	1			20	705700011	- All Orifice Sizes (SILVER)	1		
9	70019P094	Gasket, Valve	1			30	73579P011	Top, Regulator – without Seal Wire Hole (Standard)	1		
10	70400P013	Screen, Vent	1			20	70570007	- BSP - TR Thread			
11	42710P107	"O" Ring, Seal Plug	1			30	73579P007	Top, Regulator – without Seal Wire Hole (Standard)	1		
12	70103P001	Seal Plug	1			20	725700010	– NPT Thread	1		
13	70014G002	Diaphragm Assembly Complete (Incl. Items 14-21)				30	73579P012	Top, Regulator – with Seal Wire Hole – BSP – TR Thread	1		
14	70014P143 70012P052	Diaphragm				30	73579P008	Top, Regulator – with Seal Wire Hole			
15	70012P052 72629P005	Plate, Diaphragm				30	13319P006	– NPT Thread	1		
16 17	72629P005 73175P001	Stem, Diaphragm Spring Locator				31	72628P002	Body, Regulator BSP – TR Thread			
18	73058P001	Stem, Relief Valve				31	72628P002	Body, Regulator NPT Thread			
10	71533P001	Nut, R.V. Spring Adjustment				31	72020F001 72972P032	Head, Valve – $1-1/2$ " x $1-1/2$ "	'		
20	70017P074					52	127121 032	– BSP – TR Thread (Ductile Iron)	1		
20	13981P076	Flat Washer				32	72972P033	Head, Valve – 1-1/2" x 1-1/2"	l '		
22	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)				52	127721 033	– NPT Thread (Ductile Iron)	1		
22	71424P018	Spring, Pressure 5.5" - 8" w.c. (ORANGE)				32	72972P034	Head, Valve – 2" x 2"	l .		
22	71424P019	Spring, Pressure 8" - 14" w.c. (YELLOW)				02		– BSP – TR Thread (Ductile Iron)	1		
22	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)				32	72972P035	Head, Valve - 2" x 2"			
22	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)						– NPT Thread (Ductile Iron)	1		
22	71424P026	Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)				32	72992P015	Head, Valve - 2" Class 125 Flanged (Ductile Iron)	1		
22	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1			32	72992P016	Head, Valve - 2" Metric Flanged (Ductile Iron)	1		
22	71424P023	Spring, Pressure 3# - 5# (BLACK-GREEN)	1			33	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
23	72983P010	Valve – 1/4" Orifice	1			33	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
23	72983P011	Valve – 3/8" Orifice	1			34	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
23	72983P012	Valve – 1/2" Orifice	1			34	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
23	72983P013	Valve – 5/8" Orifice	1			35	78014P007	Setscrew, OPSO	4		
23	72983P014	Valve – 3/4" Orifice	1			36	72778P004	Tube, For All 1-1/2" Models (Only)	1		
23	72983P015	Valve – 7/8" Orifice	1			36	72778P003	Tube, For All 2" Models (Only)	1		
23	72983P016	Valve – 1" Orifice	1			37	72986G029	Assembly, OPSO 14" - 28" w/Buna N Seat Disc	1		
23	72983P017	Valve – 1-1/4" Orifice	1			37	72986G030	Assembly, OPSO 1# - 2# w/Buna N Seat Disc	1		
24	73787P001	Instruction Tag	1			37	72986G031	Assembly, OPSO 2# - 3# w/Buna N Seat Disc	1		
25	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			37	72986G032	Assembly, OPSO 3# - 5# w/Buna N Seat Disc	1		
25	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			37	72986G033	Assembly, OPSO 5# - 8# w/Buna N Seat Disc	1		
26	78071P041	Tag, Relief Valve	1			37	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc	1		
27	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12			37	72986G037	Assembly, OPSO 1# - 2# w/Viton A Seat Disc	1		
27	78019P013	Nut, Body Bolt 5/16" – 18	12			37	72986G038	Assembly, OPSO 2# - 3# w/Viton A Seat Disc	1		
28	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1			37	72986G039	Assembly, OPSO 3# - 5# w/Viton A Seat Disc	1		
28	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1			37	72986G040	Assembly, OPSO 5# - 8# w/Viton A Seat Disc	1		
28	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1					See Page 22 For OPSO Parts			
28	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1								





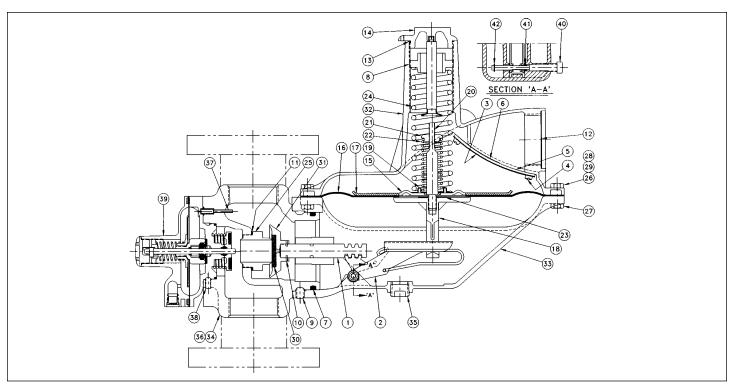
ltem					In Regs uilt	Item					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			30	70041P073	Disc, Valve Seat - Buna N - 80 Duro	1		
2	72626G001		1			30	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
3	73055P001	Vent Flapper Retainer	1			30	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
4	78008P006		4			30	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
5	73060P001	Vent Flapper	1			31	72624P001	Holder, Seat Disc – 2" Regulator			
6	73063P001	Spring, Vent Flapper	1			0.4	70/040000	- with 7/8" thru 1-1/4" Orifice Sizes (SILVER)	1		
7	42710P161	"O" Ring, Valve Head				31	72624P003	Holder, Seat Disc – 2" Regulator	1		
8	73183P001	Adjustment Screw	1			21	70/040001	- with 1/4" thru 7/8" Orifice Sizes (RED)	1		
9	78014P006		3			31	72624P001	Holder, Seat Disc – 1-1/2" Regulator	1		
10	72858P001					22	720520011	- All Orifice Sizes (SILVER)			
11	70019P094					32	73053P011	Top, Regulator – without Seal Wire Hole (Standard) – BSP – TR Thread	1		
12	70400P015					32	720520007				
13	42710P107					32	73053P007	Top, Regulator – without Seal Wire Hole (Standard) – NPT Thread	1		
14	72357G003 70014G001					32	73053P012	Top, Regulator – with Seal Wire Hole			
15	70014G001 70014P168			4/1/94		32	730339012	– BSP – TR Thread	1		
16 16	70014P168 70014P203			4/1/94	4/1/94	32	73053P008	Top, Regulator – with Seal Wire Hole	'		
10	73057P002				4/1/94	32	73033F000	– NPT Thread	1		
18	72629P005				4/1/94	33	72628P002	Body, Regulator BSP – TR Thread			
10	73175P001	Spring Locator			4/1/74	33	72628P001	Body, Regulator NPT Thread			
20	73058P001	Stem, Relief Valve				34	72972P032	Head, Valve – 1-1/2" x 1-1/2"	l '		
20	71533P001					54	/2//21/032	– BSP – TR Thread (Ductile Iron)	1		
22	70017P074					34	72972P033	Head, Valve – 1-1/2" x 1-1/2"	l .		
23	13981P076					0.	12/12/000	- NPT Thread (Ductile Iron)	1		
24	71424P017					34	72972P034	Head, Valve – 2" x 2"	· ·		
24	71424P018					• •		– BSP – TR Thread (Ductile Iron)	1		
24	71424P019					34	72972P035	Head, Valve – 2" x 2"			
24	71424P020							 NPT Thread (Ductile Iron) 	1		
24	71424P021		1			34	72992P015	Head, Valve - 2" Class 125 Flanged (Ductile Iron)	1		
24	71424P026		1			34	72992P016	Head, Valve - 2" Metric Flanged (Ductile Iron)	1		
24	71424P022		1			35	11970P031	Plug – 1/2" NPT	1		1/1/94
24	71424P023		1			35	11970P032	Plug – 1/2" BSP – TR	1		1/1/94
25	72983P010	Valve – 1/4" Orifice	1			36	11970P033	Plug – 1/4" NPT	1		1/1/94
25	72983P011	Valve – 3/8" Orifice	1			36	11970P034	Plug – 1/4" BSP – TR	1		1/1/94
25	72983P012		1			37	72778P004	Tube, Valve Head – For All 2" Models	1		
25	72983P013		1			37	72778P003	Tube, Valve Head – For All 2" Models	1		
25	72983P014		1			38	72986G029	Assembly, OPSO 14" - 28" w/Buna N Seat Disc	1		
25	72983P015		1			38	72986G030	Assembly, OPSO 1# - 2# w/Buna N Seat Disc	1		
25	72983P016		1			38	72986G031	Assembly, OPSO 2# - 3# w/Buna N Seat Disc	1		
25	72983P017		1			38	72986G032	Assembly, OPSO 3# - 5# w/Buna N Seat Disc	1		
26	78001P032		12			38	72986G033	Assembly, OPSO 5# - 8# w/Buna N Seat Disc	1		
26	78000P021		12			38	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc	1		
27	78020P003		12			38	72986G037	Assembly, OPSO 1# - 2# w/Viton A Seat Disc	1		
27	78019P013		12			38	72986G038	Assembly, OPSO 2# - 3# w/Viton A Seat Disc	1		
28	78071P041	Tag, Relief Valve Setting	1			38	72986G039	Assembly, OPSO 3# - 5# w/Viton A Seat Disc	1		
29	73784P001	Instruction Tag	1			38	72986G040	Assembly, OPSO 5# - 8# w/Viton A Seat Disc	1		
30	70041P071	Disc, Valve Seat – Buna N – 60 Duro				20	700140007	See Page 22 For OPSO Parts			
30	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1			39	78014P007	Setscrew, OPSO to Valve Head	4		





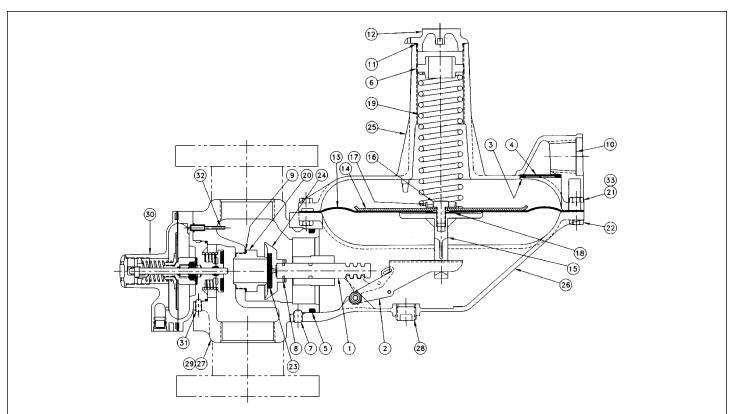
Item					n Regs uilt	Item					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1 2	72627P001 72626G002	Valve Plunger Lever	1 1 1			28 29	70041P135 72624P001	Disc, Valve Seat – Viton A – 80 Duro Holder, Seat Disc – 2" Regulator – with 7/8" thru 1-1/4" Orifice Sizes (SILVER)	1		
3 4 5	71876P005 72770P002 42710P161	Vent Flapper Retainer Vent Flapper "O" Ring, Valve Head	1			29	72624P003	Holder, Seat Disc – 2" Regulator – with 1/4" thru 7/8" Orifice Sizes (RED)			
6 7	73183P001 78014P006	Adjustment Screw Setscrew, Valve Head	1 3			29	72624P001	Holder, Seat Disc – 1-1/2" Regulator – All Orifice Sizes (SILVER)	1		
8 9	72858P001 70019P094	Retainer, Seat Disc Holder	1			30	73579P011	Top, Regulator – without Seal Wire Hole (Standard) – BSP – TR Thread			
10 11	70019P094 70400P013 42710P107	Gasket, Valve Screen, Vent "O" Ring, Seal Plug	1 1 1			30	73579P007	Top, Regulator – without Seal Wire Hole (Standard) – NPT Thread			
12 13	70103P001 70014G002	Seal Plug	1			30	73579P012	Top, Regulator – with Seal Wire Hole – BSP – TR Thread			
13 14 15	70014G002 70014P143 70012P052	Diaphragm	1			30	73579P008	Top, Regulator – with Seal Wire Hole – NPT Thread			
16	72629P005	Plate, Diaphragm Stem, Diaphragm	1			31	72628P004	Body, Regulator BSP – TR Thread	1		
17 18	73175P001 73058P001	Spring Locator Stem, Relief Valve	1			31 32	72628P003 72972P032	Body, Regulator NPT Thread Head, Valve – 1-1/2" x 1-1/2"	1		
19 20	71533P001 70017P074	Nut, R.V. Spring Adjustment Spring, Relief Valve (BLACK-ORANGE)	1			32	72972P033	– BSP – TR Thread (Ductile Iron) Head, Valve – 1-1/2" x 1-1/2"	1		
21 22	13981P076 71424P017	Flat Washer Spring, Pressure 3.5" - 6" w.c. (RED)	1			32	72972P034	– NPT Thread (Ductile Iron) Head, Valve – 2" x 2"	1		
22 22	71424P018 71424P019	Spring, Pressure 5.5" - 8" w.c. (ORÁNGE) Spring, Pressure 8" - 14" w.c. (YELLOW)	1			32	72972P035	 BSP – TR Thread (Ductile Iron) Head, Valve – 2" x 2" 	1		
22	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1			-		– NPT Thread (Ductile Iron) Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
22 22	71424P021 71424P026	Spring, Pressure 1# - 2# (ROYAL BLUE) Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)	1			32 32	72992P015 72992P016	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
22 22	71424P022 71424P023	Spring, Pressure 2# - 3# (BROWN-GREEN) Spring, Pressure 3# - 5# (BLACK-GREEN)	1			33 33	11970P031 11970P032	Plug, Body – 1/2" NPT Plug, Body – 1/2" BSP – TR	1		1/1/94 1/1/94
23	72983P010	Valve – 1/4" Orifice	1			34	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
23	72983P011		1			34	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
23	72983P012	Valve – 1/2" Orifice	1			35 36	78014P007 72778P004	Setscrew, OPSO to Valve Head	4		
23 23	72983P013 72983P014	Valve – 5/8" Orifice Valve – 3/4" Orifice	1			30 36	72778P004	Tube, For All 1-1/2" Models (Only) Tube, For All 2" Models (Only)	1		
23	72983P014 72983P015	Valve – 7/8" Orifice				37	72986G029	Assembly, OPSO 14" - 28" w/Buna N Seat Disc			
23	72983P015	Valve – 1" Orifice				37	72986G030	Assembly, OPSO 1# - 2# w/Buna N Seat Disc			
23	72983P017	Valve – 1-1/4" Orifice				37	72986G031	Assembly, OPSO 2# - 3# w/Buna N Seat Disc			
24	73786P001	Instruction Tag				37	72986G032	Assembly, OPSO 3# - 5# w/Buna N Seat Disc			
25	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			37	72986G033	Assembly, OPSO 5# - 8# w/Buna N Seat Disc	1		
25	78000P021	Bolt, Body 5/16" - 18 x 1.00"	12			37	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc	1		
26	78071P041	Tag, Relief Valve	1			37	72986G037	Assembly, OPSO 1# - 2# w/Viton A Seat Disc	1		
27	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12			37	72986G038	Assembly, OPSO 2# - 3# w/Viton A Seat Disc	1		
27	78019P013	Nut, Body Bolt 5/16" – 18	12			37	72986G039	Assembly, OPSO 3# - 5# w/Viton A Seat Disc	1		
28	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1			37	72986G040	Assembly, OPSO 5# - 8# w/Viton A Seat Disc	1		
28	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1			20	700400001	See Page 22 For OPSO Parts			
28	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1			38 39	72943G001	Drive Shaft Assembly			
28 28	70041P158 70041P133	Disc, Valve Seat – Viton A – 60 Duro Disc, Valve Seat – Viton A – 70 Duro	1			39 40	73381P001 78074P016	Washer, Drive Shaft "E" Ring, Drive Shaft	1		
20	100411133	DISC, VAIVE SEAL - VILUITA - /U DUIU				40	100/4F010				





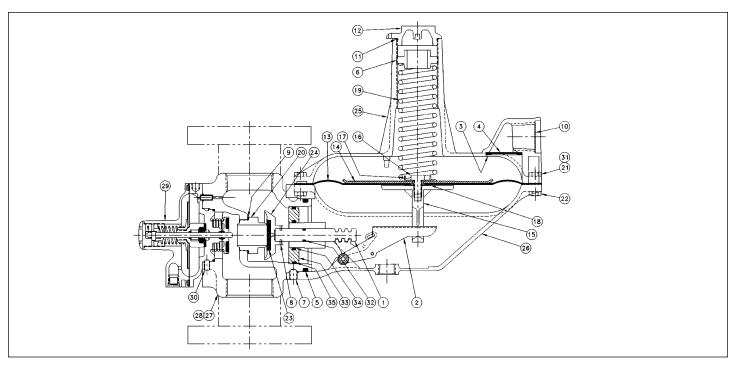
Item					in Regs uilt	Item					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before		No.	Part No.	DESCRIPTION	Qty.	Before	After
1 2 3 4 5 6 7 8	72627P001 72626G002 73055P001 78008P006 73060P001 73063P001 42710P161 73183P001	Vent Flapper Retainer Screw, Vent Flapper Retainer Vent Flapper Spring, Vent Flapper "O" Ring, Valve Head	1 1 4 1 1 1			30 30 31 31 31	70041P133 70041P135 72624P001 72624P003 72624P001	Disc, Valve Seat – Viton A – 70 Duro Disc, Valve Seat – Viton A – 80 Duro Holder, Seat Disc – 2" Regulator – with 7/8" thru 1-1/4" Orifice Sizes (SILVER) Holder, Seat Disc – 2" Regulator – with 1/4" thru 7/8" Orifice Sizes (RED) Holder, Seat Disc – 1-1/2" Regulator – All Orifice Sizes (SILVER)	1 1 1 1 1		
9 10	78014P006 72858P001	Setscrew, Valve Head Retainer, Seat Disc Holder	3			32	73053P011	Top, Regulator – without Seal Wire Hole (Standard) – BSP – TR Thread	1		
11 12	70019P094 70400P015	Screen, Vent	1			32	73053P007	Top, Regulator – without Seal Wire Hole (Standard) – NPT Thread	1		
13 14 15	42710P107 72357G003 70014G001	Seal Plug Assembly	1 1 1			32 32	73053P012 73053P008	Top, Regulator – with Seal Wire Hole – BSP – TR Thread Top, Regulator – with Seal Wire Hole	1		
16 16 17	70014P168 70014P203 73057P002	Diaphragm Diaphragm Plate, Diaphragm*	1 1 1	4/1/94	4/1/94 4/1/94	33 33	72628P004 72628P003	- NPT Thread Body, Regulator BSP – TR Thread Body, Regulator NPT Thread	1 1 1		
18 19 20 21	72629P005 73175P001 73058P001 71533P001	Spring Locator Stem, Relief Valve	1 1 1 1		4/1/94	34 34	72972P032 72972P033	Head, Valve – 1-1/2" x 1-1/2" – BSP – TR Thread (Ductile Iron) Head, Valve – 1-1/2" x 1-1/2" – NPT Thread (Ductile Iron)	1		
22 23	70017P074 13981P076	Spring, Relief Valve (BLACK-ORANGE) Flat Washer	1 1			34	72972P034	Head, Valve – 2" x 2" – BSP – TR Thread (Ductile Iron)	1		
24 24 24	71424P017 71424P018 71424P019	Spring, Pressure 5.5" - 8" w.c. (ORANGE) Spring, Pressure 8" - 14" w.c. (YELLOW)	1 1 1			34 34	72972P035 72992P015	Head, Valve – 2" x 2" – NPT Thread (Ductile Iron) Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
24 24 24	71424P020 71424P021 71424P022	Spring, Pressure 1# - 2# (ROYAL BLUE) Spring, Pressure 2# - 3# (BROWN-GREEN)	1 1 1			34 35 35	72992P016 11970P031 11970P032	Head, Valve – 2" Metric Flanged (Ductile Iron) Plug – 1/2" NPT (Body) Plug – 1/2" BSP – TR (Body)	1 1 1		1/1/94 1/1/94
24 24 25	71424P023 71424P026 72983P010	Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE) Valve – 1/4" Orifice	1 1 1			36 36 37	11970P033 11970P034 72778P004	Plug – 1/4" NPT (Valve Head) Plug – 1/4" BSP – TR (Valve Head) Tube, Valve Head – For All 2" Models	1 1 1		1/1/94 1/1/94
25 25 25	72983P011 72983P012 72983P013 72083P014	Valve – 1/2" Orifice Valve – 5/8" Orifice	1 1 1			37 38 39 39	72778P003 78014P007 72986G029	Tube, Valve Head – For All 2" Models Setscrew, OPSO Valve Head Assembly, OPSO 14" - 28" w/Buna N Seat Disc	1 4 1		
25 25 25 25	72983P014 72983P015 72983P016 72983P017	Valve – 7/8" Orifice Valve – 1" Orifice	1 1 1 1			39 39 39 39	72986G030 72986G031 72986G032 72986G033	Assembly, OPSO 1# - 2# w/Buna N Seat Disc Assembly, OPSO 2# - 3# w/Buna N Seat Disc Assembly, OPSO 3# - 5# w/Buna N Seat Disc Assembly, OPSO 5# - 8# w/Buna N Seat Disc	1 1 1		
25 26 26 27	72983P017 78001P032 78000P021 78020P003	Bolt, Body 5/16" - 24 x 1-1/8" Hex. Hd. (Standard) Bolt, Body 5/16" - 18 x 1.00"	12 12 12 12			39 39 39 39	72986G033 72986G036 72986G037 72986G038	Assembly, OPSO 1# - 28 w/buna in Seat Disc Assembly, OPSO 14" - 28" w/Viton A Seat Disc Assembly, OPSO 1# - 2# w/Viton A Seat Disc Assembly, OPSO 2# - 3# w/Viton A Seat Disc	1 1 1		
27 27 28 29	78020P003 78019P013 78071P041 73786P001		12 12 1 1			39 39 39	72986G039 72986G040	Assembly, OPSO 3# - 5# w/Vitin A Seat Disc Assembly, OPSO 5# - 5# w/Vitin A Seat Disc Assembly, OPSO 5# - 8# w/Vitin A Seat Disc See Page 22 For OPSO Parts	1		
29 30 30 30	70041P071 70041P072 70041P073	Disc, Valve Seat – Buna N – 60 Duro Disc, Valve Seat – Buna N – 70 Duro (Standard)	1			40 41 42	72943G001 73381P001 78074P016	Assembly, Drive Shaft Washer, Drive Shaft	1 1 1		
30 30	70041P073 70041P158		1			42	100/4P010	"E" Ring, Drive Shaft			





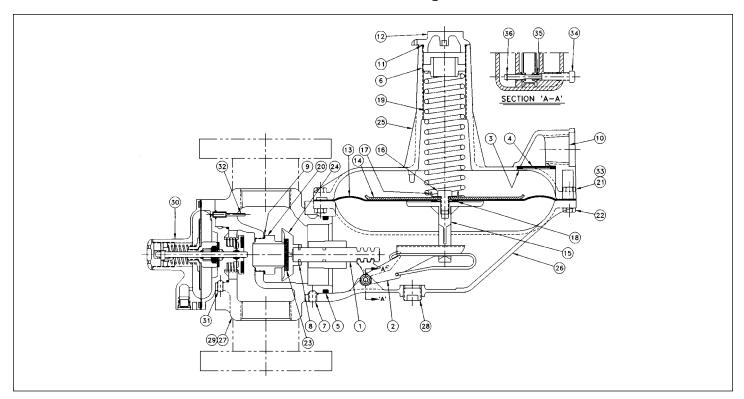
Item					n Regs uilt	Item				Used I Bu	n Regs iilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			24	72624P003	Holder, Seat Disc – 2" Regulator			
2	72626G001		1				70/040004	- with 7/8" thru 1-1/4" Orifice Sizes (RED)	1		
3	71876P005		1			24	72624P001	Holder, Seat Disc – 1-1/2" Regulator	1		
4 5	72770P002 42710P161	Vent Flapper "O" Ring, Body to Valve Head	1			25	73579P011	 All Orifice Sizes (SILVER) Top, Regulator – without Seal Wire Hole (Standard) 			
6	73183P001		1			23	733771011	– BSP – TR Thread	1		
7	78014P006		3			25	73579P007	Top, Regulator – without Seal Wire Hole (Standard)	· ·		
8	72858P001		1					– NPT Thread	1		
9	70019P094		1			25	73579P012	Top, Regulator – with Seal Wire Hole			
10	70400P013		1					– BSP – TR Thread	1		
11	42710P107		1			25	73579P008	Top, Regulator – with Seal Wire Hole			
12	70103P001	Seal Plug	1				70/000000	- NPT Thread	1		
13	70014P143		1			26	72628P002	Body, Regulator BSP – TR Thread			
14	70012P052 72629P005		1			26 27	72628P001 72972P032	Body, Regulator NPT Thread Head, Valve – 1-1/2" x 1-1/2"	1		
15 16	72629P005 78000P081		1			27	12912P032	– BSP – TR Thread (Ductile Iron)	1		
10	72272P001		1			27	72972P033	Head, Valve – $1-1/2" \times 1-1/2"$	'		
18	13981P076		1			21	127121 033	– NPT Thread (Ductile Iron)	1		
19	71424P017		1			27	72972P034	Head, Valve – 2" x 2"	'		
19	71424P018		1					– BSP – TR Thread (Ductile Iron)	1		
19	71424P019		1			27	72972P035	Head, Valve - 2" x 2"			
19	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1					 – NPT Thread (Ductile Iron) 	1		
19	71424P021		1			27	72992P015	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
19	71424P026		1			27	72992P016	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
19	71424P022		1			28	11970P031	Plug, Body – 1/2" NPT	1		1/1/94
19	71424P023		1			28	11970P032	Plug, Body – 1/2" BSP – TR	1		1/1/94
20	72983P010		1			29	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
20	72983P011		1			29	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
20	72983P012 72983P013		1			30 30	72986G029 72986G030	Assembly, OPSO 14" - 28" w/Buna N Seat Disc			
20	72983P013 72983P014		1			30	72986G030 72986G031	Assembly, OPSO 1# - 2# w/Buna N Seat Disc Assembly, OPSO 2# - 3# w/Buna N Seat Disc			
20 20	72983P014 72983P015		1			30	72986G031	Assembly, OPSO 2# - 5# W/Buna N Seat Disc Assembly, OPSO 3# - 5# W/Buna N Seat Disc			
20	72983P015		1			30	72986G033	Assembly, OPSO 5# - 8# w/Buna N Seat Disc			
20	72983P017		1			30	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc			
20	78001P032		12			30	72986G037	Assembly, OPSO 1# - 2# w/Viton A Seat Disc			
21	78000P021		12			30	72986G038	Assembly, OPSO 2# - 3# w/Viton A Seat Disc	1		
22	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12			30	72986G039	Assembly, OPSO 3# - 5# w/Viton A Seat Disc	1		
22	78019P013		12			30	72986G040	Assembly, OPSO 5# - 8# w/Viton A Seat Disc	1		
23	70041P071		1					See Page 22 For OPSO Parts			
23	70041P072		1			31	78014P007	Setscrew, OPSO Valve Head (1/2 – 20 x .50 Lg.)	4		
23	70041P073		1			32	72778P004	Tube, For All 1-1/2" Models (Only)	1		
23	70041P158		1			32	72778P003	Tube, For All 2" Models (Only)	1		
23	70041P133		1			33	73787P001	Instruction Tag	1		
23	70041P135		1								
24	72624P001	Holder, Seat Disc – 2" Regulator	1								
		 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1								





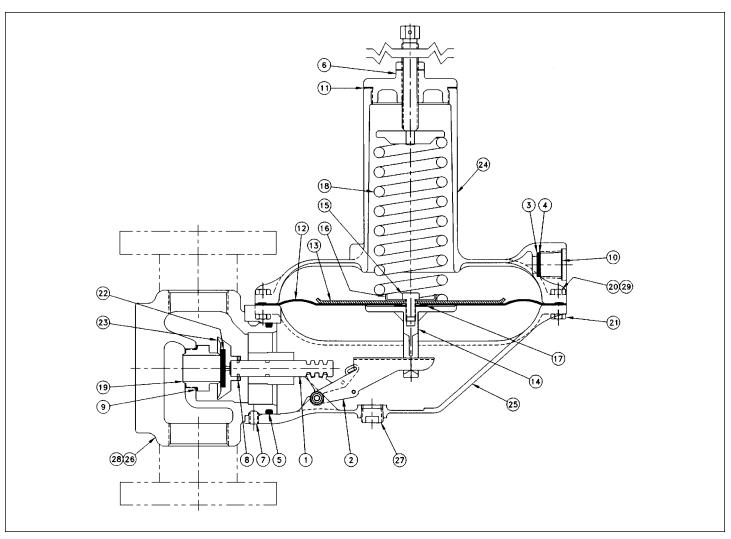
Item					n Regs uilt	Item					n Regs ıilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			25	73579P008		1		
2	72626G001	Lever	1			26	72628P002		1		
3	71876P005	Vent Flapper Retainer	1			26	72628P001	Body, Regulator NPT Thread	1		
4	72770P002	Vent Flapper	1			27	72972P032				
5	42710P161 73183P001	"O" Ring, Body to Valve Head	1 1			27	2200220022	– BSP – TR Thread (Ductile Iron) Head, Valve – 1-1/2" x 1-1/2"	1		
6 7	78014P006	Adjustment Screw Setscrew, Valve Head	3			27	72972P033	– NPT Thread (Ductile Iron)	1		
8	72858P001	Retainer, Seat Disc Holder	3 1			27	72972P034		'		
9	70019P094	Gasket, Valve	1			21	727721 034	– BSP – TR Thread (Ductile Iron)	1		
10	70400P013	Screen, Vent	1			27	72972P035	Head, Valve – 2" x 2" – NPT Thread (Ductile Iron)	li		
11	42710P107	"O" Ring, Seal Plug	1			27	72992P015	Head, Valve - 2" Class 125 Flanged (Ductile Iron)			
12	70103P001	Seal Plug	1			27	72992P016		1		
13	70014P143	Diaphragm	1			28	11970P033	Plug, Valve Head – 1/4" NPT	1		1/1/94
14	70012P052	Plate, Diaphragm	1			28	11970P034	Plug, Valve Head – 1/4" BSP – TR	1		1/1/94
15	72629P005	Stem, Diaphragm	1			29	7000/01/0	Assembly, OPSP 14" - 28" w/Buna N Seat Disc			
16	78000P081 72272P001	Screw, Diaphragm Stem	1				72986G169	- BSP - TR Thread			
17 18	13981P076	Guide, Spring Flat Washer	1			29	72986G085	– NPT Thread Assembly, OPSO 1# - 2# w/Buna N Seat Disc	1		
10	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)	1			27	72986G170		1		
19	71424P018	Spring, Pressure 5.5" - 8" w.c. (ORANGE)	1				72986G086				
19	71424P019	Spring, Pressure 8" - 14" w.c. (YELLOW)	1			29	727000000	Assembly, OPSO 2# - 3# w/Buna N Seat Disc	l .		
19	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1				72986G171	Assembly, OPSO 2# - 3# w/Buna N Seat Disc – BSP – TR Thread	1		
19	71424P021	Spring Pressure 1# - 2# (ROYAL BLUE)	1				72986G087	 NPT Thread 	1		
19	71424P026	Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)	1			29		Assembly, OPSO 3# - 5# w/Buna N Seat Disc			
19	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1				72986G172	 BSP – TR Thread 	1		
19	71424P023	Spring, Pressure 3# - 5# (BLACK-GREEN)	1				72986G088	- NPT Thread	1		
20	72983P010 72983P011	Valve – 1/4" Orifice	1 1			29	700000170	Assembly, OPSO 5# - 8# w/Buna N Seat Disc – BSP – TR Thread	1		
20 20	72983P011 72983P012	Valve – 3/8" Orifice Valve – 1/2" Orifice	1				72986G173 72986G089				
20	72983P012	Valve – 1/2 Office	1			29	12900G009	Assembly, OPSO 14" - 28" w/Viton A Seat Disc	'		
20	72983P014	Valve – 3/4" Orifice	1			27	72986G176	- BSP - TR Thread	1		
20	72983P015	Valve – 7/8" Orifice	1				72986G092	 NPT Thread 			
20	72983P016	Valve – 1" Orifice	1			29		Assembly, OPSO 1# - 2# w/Viton A Seat Disc			
20	72983P017	Valve – 1-1/4" Orifice	1				72986G177	 BSP – TR Thread 	1		
21	78001P032	Bolt, Body 5/16" - 24 x 1-1/8" Hex. Hd. (Standard)	12				72986G093	 NPT Thread 	1		
21	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			29		Assembly, OPSO 2# - 3# w/Viton A Seat Disc – BSP – TR Thread			
22	78020P003 78019P013	Nut, Body Bolt 5/16" – 24 (Standard)	12				72986G178				
22 23	78019P013 70041P071	Nut, Body Bolt 5/16" – 18 Disc, Valve Seat – Buna N – 60 Duro	12 1			29	72986G094	 NPT Thread Assembly, OPSO 3# - 5# w/Viton A Seat Disc 	1		
23	70041P071	Disc, Valve Seat – Buna N – 00 Duro (Standard)	1			27	72986G179	- BSP - TR Thread	1		
23	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1				72986G095	- NPT Thread	'		
23	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1			29	12/000070	Assembly, OPSO 5# - 8# w/Viton A Seat Disc			
23	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1				72986G180		1		
23	70041P135	Disc. Valve Seat – Viton A – 80 Duro	1				72986G096	 NPT Thread 	1		
24	72624P001	Holder, Seat Disc - For Use w/2" Models						See Page 22 For OPSO Parts	Ι.		
	70/040000	- with 1/4" thru 7/8" Orifice Sizes (SILVER)	1			30	78014P007	Setscrew, OPSO Valve Head	4		
24	72624P003	Holder, Seat Disc – For Use w/2" Models	1			31	73787P001	Instruction Tag Valve Plunger "O" Ring			
24	72624P001	 with 7/8" thru 1-1/4" Orifice Sizes (RED) Holder, Seat Disc – For Use w/1-1/2" Models 	1			32 33	42710P149 73010P001	Plate. Isolation	1	1/1/94	
24	120241001	– All Orifice Sizes (SILVER)	1			33	73010P001 73010P002	Plate, Isolation		1/1/94	1/1/94
25	73579P011	Top, Regulator – without Seal Wire Hole (Standard)	1			33	42710P106			1/1/94	1/1/74
-~ I		- BSP - TR Thread	1			34	42710P078	"O" Ring, Isolation Plate – I.D.	1	., , , , , ,	1/1/94
25	73579P007	Top, Regulator - without Seal Wire Hole (Standard)				35	42710P157	"O" Ring, Isolation Plate – O.D.	1		
		– NPT Thread	1								
25	73579P012	Top, Regulator – with Seal Wire Hole									
		- BSP - TR Thread	1								

American 1¹/₂" and 2" Model 1893 Industrial Regulator



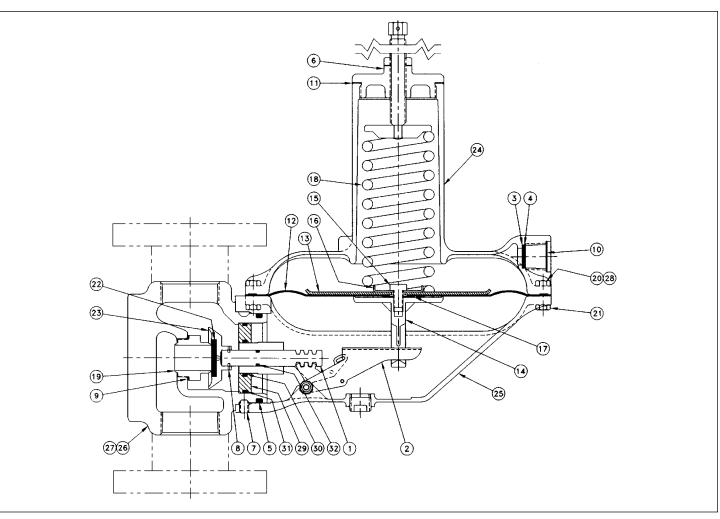
Item					n Regs uilt	Item				Used I Bu	n Regs iilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			24	72624P003	Holder, Seat Disc – For Use w/2" Models			
2	72626G002	Lever	1					 with 7/8" thru 1-1/4" Orifice Sizes (RED) 	1		
3	71876P005	Vent Flapper Retainer	1			24	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
4	72770P002	Vent Flapper	1			05	705700014	– All Orifice Sizes (SILVER)	1		
5 6	42710P161 73183P001	"O" Ring, Valve Head	1			25	73579P011	Top, Regulator – without Seal Wire Hole (Standard) – BSP – TR Thread	1		
0 7	78014P006	Adjustment Screw Setscrew, Valve Head	3			25	73579P007	Top, Regulator – without Seal Wire Hole (Standard)			
8	72858P001	Retainer. Seat Disc Holder	1			20	/35/9P00/	– NPT Thread	1		
9	70019P094	Gasket, Valve				25	73579P012	Top, Regulator – with Seal Wire Hole			
10	70400P013	Screen, Vent				20	100771012	– BSP – TR Thread	1		
11	42710P107	"O" Ring, Seal Plug				25	73579P008	Top, Regulator – with Seal Wire Hole			
12	70103P001	Seal Plug						– NPT Thread	1		
13	70014P143	Diaphragm	1			26	72628P004	Body, Regulator BSP – TR Thread	1		
14	70012P052	Plate, Diaphragm	1		new	26	72628P003	Body, Regulator NPT Thread	1		
15	72629P005	Stem, Diaphragm	1			27	72972P032	Head, Valve - 1-1/2" x 1-1/2"			
16	78000P081	Screw, Diaphragm Stem	1					 BSP – TR Thread (Ductile Iron) 	1		
17	72272P001	Guide, Spring	1		new	27	72972P033	Head, Valve – 1-1/2" x 1-1/2"			
18	13981P076	Flat Washer	1					 – NPT Thread (Ductile Iron) 	1		
19	71424P017	Spring, Pressure 3.5" - 6" w.c. (RED)	1			27	72972P034	Head, Valve – 2" x 2"			
19	71424P018	Spring, Pressure 5.5" - 8" w.c. (ORANGE)	1					 BSP – TR Thread (Ductile Iron) 	1		
19	71424P019	Spring, Pressure 8" - 14" w.c. (YELLOW)	1			27	72972P035	Head, Valve – 2" x 2"			
19	71424P020	Spring, Pressure 14.5" - 28" w.c. (GREEN)	1					– NPT Thread (Ductile Iron)	1		
19	71424P021	Spring, Pressure 1# - 2# (ROYAL BLUE)	1			27	72992P015	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
19	71424P026	Spring, Pressure 1.5# - 2.5# (BROWN-ROY. BLUE)	1			27	72992P016	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
19	71424P022	Spring, Pressure 2# - 3# (BROWN-GREEN)	1			28	11970P031	Plug, Body 1/2" NPT	1		1/1/94
19	71424P023 72983P010	Spring, Pressure 3# - 5# (BLACK-GREEN)	1			28 29	11970P032	Plug, Body 1/2" BSP – TR	1		1/1/94 1/1/94
20	72983P010 72983P011	Valve – 1/4" Orifice Valve – 3/8" Orifice					11970P033 11970P034	Plug, Valve Head 1/4" NPT	1		1/1/94
20	72983P011 72983P012	Valve – 3/8 Office Valve – 1/2" Orifice	1			29 30	72986G029	Plug, Valve Head 1/4" BSP – TR Assembly, OPSO 14" - 28" w/Buna N Seat Disc	1		1/1/94
20 20	72983P012 72983P013	Valve – 1/2 Office				30	72986G029	Assembly, OPSO 14 - 28 W/Buna N Seat Disc Assembly, OPSO 1# - 2# w/Buna N Seat Disc			
20	72983P013	Valve – 3/8" Orlfice				30	72986G030	Assembly, OPSO 1# - 2# w/Buna N Seat Disc Assembly, OPSO 2# - 3# w/Buna N Seat Disc			
20	72983P014 72983P015	Valve – 3/4 Office				30	72986G031	Assembly, OPSO 2# - 5# w/Buna N Seat Disc Assembly, OPSO 3# - 5# w/Buna N Seat Disc			
20	72983P015	Valve – 1" Orifice				30	72986G032	Assembly, OPSO 5# - 5# w/Buna N Seat Disc			
20	72983P017	Valve – 1-1/4" Orifice				30	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc			
20	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			30	72986G037	Assembly, OPSO 1# - 2# w/Viton A Seat Disc			
21	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			30	72986G038	Assembly, OPSO 2# - 3# w/Viton A Seat Disc			
22	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12			30	72986G039	Assembly, OPSO 3# - 5# w/Viton A Seat Disc			
22	78019P013	Nut, Body Bolt 5/16" – 18	12			30	72986G040	Assembly, OPSO 5# - 8# w/Viton A Seat Disc			
23	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1					See Page 22 For OPSO Parts			
23	70041P072	Disc, Valve Seat - Buna N - 70 Duro (Standard)	1			31	78014P007	Setscrew, OPSO Valve Head	4		
23	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1			32	72778P004	Tube, For All 1-1/2" Models (Only)	1		
23	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1			32	72778P003	Tube, For All 2" Models (Only)	1		
23	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1			33	73786P001	Instruction Tag	1		
23	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1			34	72943G001	Assembly Drive Shaft	1		
24	72624P001	Holder, Seat Disc – For Use w/2" Models				35	73381P001	Washer, Drive Shaft	1		
		 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1			36	78074P016	"E" Ring, Drive Shaft			





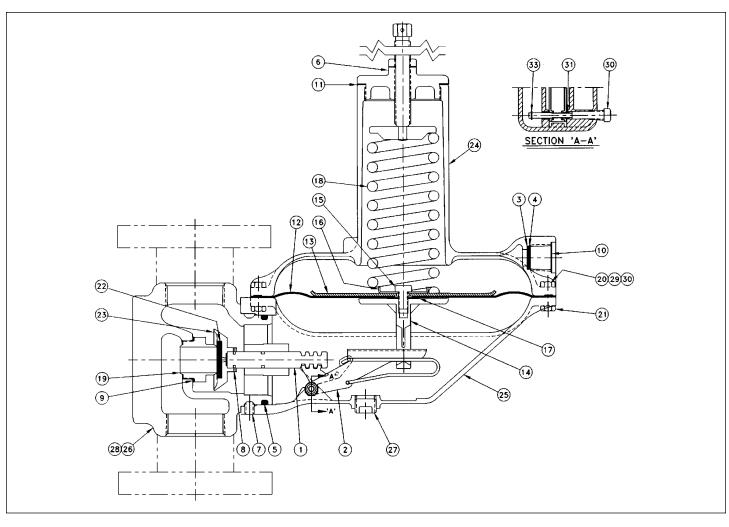
Item					n Regs uilt	Item					n Regs ıilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			21	78020P003	Nut, Body Bolt 5/16" – 24 (Standard)	12		
2	72626G001		1			21	78019P013		12		
3	78074P001		1			22	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
4	72163P001		1			22	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
5	42710P161	"O" Ring, Valve Head	1			22	70041P073		1		
6	72357G001					22	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
		 without Seal Wire Hole (Standard) 	1			22	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
6	72357G002		1			22	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
7	78014P006		3			23	72624P001	Holder, Seat Disc – For Use w/2" Models			
8	72858P001		1					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		
9	70019P094		1			23	72624P002				
10	70400P008		1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		
11	70019P087		1			23	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
12	70014P143		1					 – All Orifice Sizes (SILVER) 	1		
13	70012P052		1			24	72354P001	Top, Regulator – without Seal Wire Hole	1		
14	72629P005		1			24	72354P002	Top, Regulator – with Seal Wire Hole	1		
15	78000P081		1			25	72628P002	Body, Regulator BSP – TR Thread	1		
16	70012P051		1			25	72628P001	Body, Regulator NPT Thread	1		
17	13981P076		1			26	72619P066	Head, Valve – 1-1/2" x 1-1/2"			
18	71411P020		1					 BSP – TR Thread (Ductile Iron) 	1		
18	71411P021		1			26	72619P072				
18	71411P022		1					 – NPT Thread (Ductile Iron) 	1		
		Spring, Pressure 5# - 10# (BLACK)	1			26	72619P073				
18	71411P024		1					 BSP – TR Thread (Ductile Iron) 	1		
19	72983P010		1			26	72619P074	Head, Valve – 2" x 2"			
19	72983P011		1					 – NPT Thread (Ductile Iron) 	1		
19	72983P012		1			26	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
19	72983P013		1			26	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
19	72983P014		1			27	11970P031	Plug, Body 1/2" NPT	1		1/1/94
19	72983P015		1			27	11970P032	Plug, Body 1/2" BSP – TR	1		1/1/94
19	72983P016		1			28	11970P033		1		1/1/94
19	72983P017		1			28	11970P034	Plug, Valve Head 1/4" BSP – TR	1		1/1/94
20	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			29	78113P002	Identification Tag	1		
20	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12								





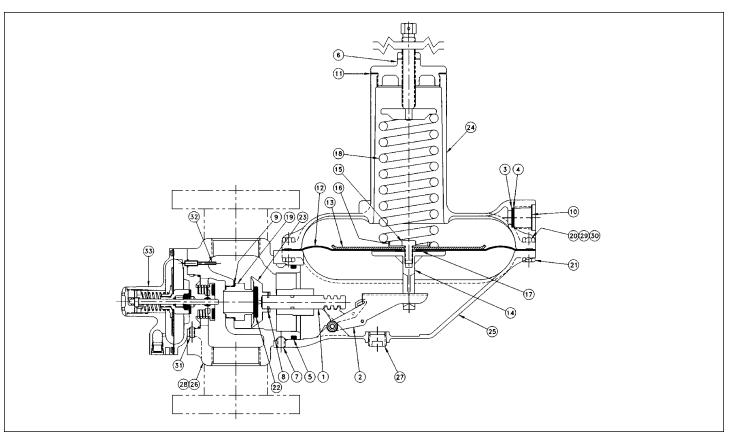
Item					n Regs uilt	Item					In Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			22	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
2	72626G001	Lever	1			22	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
3	78074P001	Vent Flapper Retainer	1			22	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
4	72163P001	Vent Flapper	1			22	70041P158	Disc, Valve Seat – Viton A – 60 Duro	1		
5	42710P161	"O" Ring, Valve Head	1			22	70041P133	Disc, Valve Seat – Viton A – 70 Duro	1		
6	72357G001					22	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
		 without Seal Wire Hole (Standard) 	1			23	72624P001	Holder, Seat Disc – For Use w/2" Models			
6	72357G002	Seal Plug Assembly – with Seal Wire Hole	1					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		
7	78014P006	Setscrew, Valve Head	3			23	72624P002	Holder, Seat Disc – For Use w/2" Models			
8		Retainer, Seat Disc Holder	1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		
9		Gasket, Valve	1			23	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
10	70400P008	Screen, Vent	1					 – All Orifice Sizes (SILVER) 	1		
11	70019P087	Gasket, Seal Plug	1			24	72354P001	Top, Regulator – without Seal Wire Hole	1		
12			1			24	72354P002	Top, Regulator – with Seal Wire Hole	1		
13	70012P052	Plate, Diaphragm	1			25	72628P002	Body, Regulator BSP – TR Thread	1		
14		Stem, Diaphragm	1			25	72628P001	Body, Regulator NPT Thread	1		
15		Screw, Diaphragm Stem	1			26	72619P066	Head, Valve – 1-1/2" x 1-1/2"			
16	70012P051	Guide, Spring	1					 BSP – TR Thread (Ductile Iron) 	1		
17			1			26	72619P072	Head, Valve – 1-1/2" x 1-1/2"			
18		Spring, Pressure 0.05# - 1# (BROWN & WHITE)	1					 – NPT Thread (Ductile Iron) 	1		
18			1			26	72619P073	Head, Valve – 2" x 2"			
18	71411P022	Spring, Pressure 2.5# - 5# (ORANGE & BLACK)	1					 BSP – TR Thread (Ductile Iron) 	1		
18	71411P023		1			26	72619P074	Head, Valve – 2" x 2"			
18		Spring, Pressure 10# - 15# (YELLOW & GREEN)	1					 – NPT Thread (Ductile Iron) 	1		
19		Valve – 1/4" Orifice	1			26	72992P011	Head, Valve – 2" Class 125 Flanged (Ductile Iron)	1		
19	72983P011	Valve – 3/8" Orifice	1			26	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
19		Valve – 1/2" Orifice	1			27	11970P033	Plug, Valve Head 1/4" NPT	1		1/1/94
19	72983P013	Valve – 5/8" Orifice	1			27	11970P034	Plug, Valve Head 1/4" BSP – TR	1		1/1/94
19		Valve – 3/4" Orifice	1			28	78113P002	Identification Tag	1		1
19		Valve – 7/8" Orifice	1			29	73010P001	Plate, Isolation	1	1/1/94	1
19		Valve – 1" Orifice	1			29	73010P002	Plate, Isolation	1		1/1/94
19			1			30	42710P106	"O" Ring, Isolation Plate I.D.	1	1/1/94	1
20	78001P032	Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			30	42710P078	"O" Ring, Isolation Plate I.D.	1		1/1/94
20		Bolt, Body 5/16" – 18 x 1.00"	12			31	42710P157	"O" Ring, Isolation Plate O.D.	1		1
21			12			32	42710P149	"O" Ring, Valve Plunger	1		
21	78019P013	Nut, Body Bolt 5/16" – 18	12								1





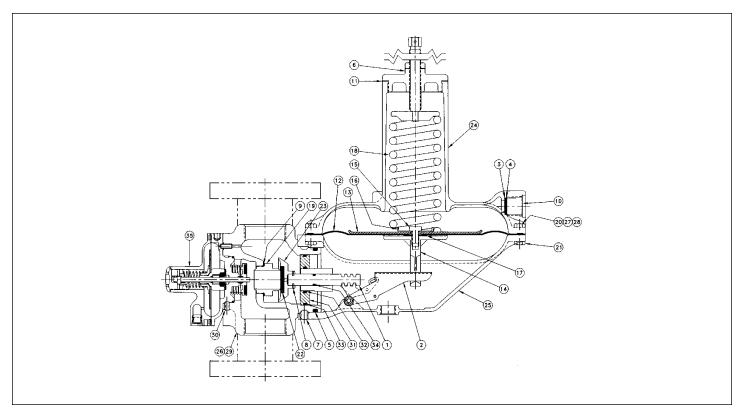
Item					n Regs uilt	Item					n Regs uilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
1	72627P001	Valve Plunger	1			22	70041P071	Disc, Valve Seat – Buna N – 60 Duro	1		
2	72626G002	Lever	1			22	70041P072	Disc, Valve Seat – Buna N – 70 Duro (Standard)	1		
3	78074P001	Vent Flapper Retainer	1			22	70041P073	Disc, Valve Seat – Buna N – 80 Duro	1		
4	72163P001	Vent Flapper	1			22	70041P158		1		
5	42710P161		1			22	70041P133		1		
6	72357G001					22	70041P135	Disc, Valve Seat – Viton A – 80 Duro	1		
		 without Seal Wire Hole (Standard) 	1			23	72624P001	Holder, Seat Disc – For Use w/2" Models			
6	72357G002	Seal Plug Assembly – with Seal Wire Hole	1					 with 1/4" thru 7/8" Orifice Sizes (SILVER) 	1		
7	78014P006		3			23	72624P002	Holder, Seat Disc – For Use w/2" Models			
8	72858P001		1					 with 7/8" thru 1-1/4" Orifice Sizes (BLUE) 	1		
9	70019P094		1			23	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models			
10	70400P008		1					 – All Orifice Sizes (SILVER) 	1		
11	70019P087	Gasket, Seal Plug	1			24	72354P001	Top, Regulator – without Seal Wire Hole	1		
12	70014P143		1			24	72354P002	Top, Regulator – with Seal Wire Hole	1		
13	70012P052		1			25	72628P004	Body, Regulator BSP – TR Thread	1		
14	72629P005	Stem, Diaphragm	1			25	72628P003	Body, Regulator NPT Thread	1		
15	78000P081		1			26	72619P066				
16	70012P051		1					 BSP – TR Thread (Ductile Iron) 	1		
17	13981P076	Flat Washer	1			26	72619P072	Head, Valve - 1-1/2" x 1-1/2"			
18		Spring, Pressure 0.05# - 1# (BROWN & WHITE)	1					 – NPT Thread (Ductile Iron) 	1		
18	71411P021		1			26	72619P073	Head, Valve – 2" x 2"			
18	71411P022		1					 BSP – TR Thread (Ductile Iron) 	1		
18	71411P023		1			26	72619P074	Head, Valve – 2" x 2"			
18	71411P024		1					 – NPT Thread (Ductile Iron) 	1		
19		Valve – 1/4" Orifice	1			26	72992P011		1		
19	72983P011		1			26	72992P012	Head, Valve – 2" Metric Flanged (Ductile Iron)	1		
19			1			27	11970P031	Plug, Body 1/2" NPT	1		1/1/94
19	72983P013		1			27	11970P032	Plug, Body 1/2" BSP – TR	1		1/1/94
19	72983P014		1			28	11970P033	Plug, Valve Head 1/4" NPT	1		1/1/94
19	72983P015		1			28	11970P034		1		1/1/94
19	72983P016		1			29	78113P002	Identification Tag	1		
19	72983P017		1			30	72943G001	Assembly, Drive Shaft	1		
20	78001P032		12			31	73381P001	Washer, Drive Shaft	1		
20	78000P021	Bolt, Body 5/16" – 18 x 1.00"	12			32	73784P001	Instruction Tag	1		ļ
21	78020P003		12			33	78074P016	"E" Ring, Drive Shaft	1		
21	78019P013	Nut, Body Bolt 5/16" – 18	12								

American 1¹/₂" and 2" Model 2083 Industrial Regulator



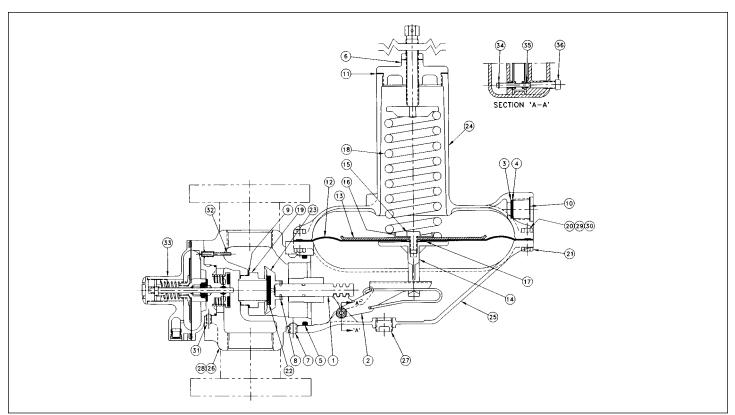
llam					n Regs uilt	li ann				n Regs uilt
Item No.	Part No.	DESCRIPTION	Qty.	Before	After	Item No.	Part No.	DESCRIPTION	Qty.	
1	72627P001	Valve Plunger	1			23	72624P002	Holder, Seat Disc – For Use w/2" Models		
2	72626G001		1				70/040004	- with 7/8" thru 1-1/4" Orifice Sizes (BLUE)	1	
3	78074P001	Vent Flapper Retainer	1			23	72624P001	Holder, Seat Disc – For Use w/1-1/2" Models – All Orifice Sizes (SILVER)	1	
4 5	72163P001 42710P161	Vent Flapper	1			24	72354P001	Top, Regulator – without Seal Wire Hole		
5 6	42/10P161 72357G001	"O" Ring Seal Plug Assembly				24	72354P001	Top, Regulator – with Seal Wire Hole		
0	723576001	– without Seal Wire Hole (Standard)	1			24	72628P002	Body, Regulator BSP – TR Thread		
6	72357G002					25	72628P001	Body, Regulator NPT Thread		
7	78014P006		3			26	72972P032	Head, Valve – 1-1/2" x 1-1/2"	1 '	
8	72858P001		1			20	12/12/ 002	– BSP – TR Thread (Ductile Iron)	1	
9	70019P094					26	72972P033	Head, Valve – 1-1/2" x 1-1/2"	· ·	
10		Screen, Vent				20	12/12/000	– NPT Thread (Ductile Iron)	1	
11	70019P087					26	72972P034	Head, Valve – 2" x 2"	· ·	
12	70014P143							- BSP - TR Thread (Ductile Iron)	1	
13	70012P052					26	72972P035	Head, Valve – 2" x 2"		
14	72629P005							 NPT Thread (Ductile Iron) 	1	
15	78000P081	Screw, Diaphragm Stem				26	72992P015	Head, Valve - 2" Class 125 Flanged (Ductile Iron)	1	
16	70012P051	Guide, Spring	1			26	72992P016	Head, Valve - 2" Metric Flanged (Ductile Iron)	1	
17	13981P076	Flat Washer	1			27	11970P031	Plug, Body 1/2" NPT	1	1/1/94
18	71411P020		1			27	11970P032	Plug, Body 1/2" BSP – TR	1	1/1/94
18	71411P021	Spring, Pressure 1# - 2.5# (PURPLE & WHITE)	1			28	11970P033	Plug, Valve Head 1/4" NPT	1	1/1/94
18	71411P022		1			28	11970P034	Plug, Valve Head 1/4" BSP – TR	1	1/1/94
18		Spring, Pressure 5# - 10# (BLACK)	1			29	78113P002	Identification Tag	1	
18	71411P024	Spring, Pressure 10# - 15# (YELLOW & GREEN)	1			30	73787P001	Instruction Tag	1	
19		Valve – 1/4" Orifice	1			31	78014P007	Setscrew, OPSO to Valve Head	4	
19		Valve – 3/8" Orifice	1			32	72778P004	Tube, For All 1-1/2" Models	1	
19		Valve – 1/2" Orifice	1			32	72778P003	Tube, For All 2" Models	1	
19		Valve – 5/8" Orifice	1			33	72986G029	Assembly, OPSO 14" - 28" w/Buna N Seat Disc	1	
19		Valve – 3/4" Orifice	1			33	72986G030	Assembly, OPSO 1# - 2# w/Buna N Seat Disc	1	
19		Valve – 7/8" Orifice	1			33	72986G031	Assembly, OPSO 2# - 3# w/Buna N Seat Disc	1	
19		Valve – 1" Orifice	1			33	72986G032	Assembly, OPSO 3# - 5# w/Buna N Seat Disc	1	
19		Valve – 1-1/4" Orifice	1			33	72986G033	Assembly, OPSO 5# - 8# w/Buna N Seat Disc	1	
20		Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard)	12			33	72986G034	Assembly, OPSO 8# - 14# w/Buna N Seat Disc	1	
20	78000P021		12			33	72986G035 72986G036	Assembly, OPSO 14# - 20# w/Buna N Seat Disc		
21		Nut, Body Bolt 5/16" – 24 (Standard)	12			33 33	72986G036	Assembly, OPSO 14" - 28" w/Viton A Seat Disc Assembly, OPSO 1# - 2# w/Viton A Seat Disc		
21		Nut, Body Bolt 5/16" – 18	12			33	72986G037 72986G038	Assembly, OPSO 1# - 2# w/viton A Seat Disc Assembly, OPSO 2# - 3# w/Viton A Seat Disc		
22	70041P071 70041P072		1			33	72986G038	Assembly, OPSO 2# - 3# w/viton A Seat Disc Assembly, OPSO 3# - 5# w/Viton A Seat Disc		
22 22		Disc, Valve Seat – Buna N – 70 Duro (Standard) Disc, Valve Seat – Buna N – 80 Duro	1			33	72986G039	Assembly, OPSO 5# - 5# W/Viton A Seat Disc		
22		Disc, Valve Seat – Bulla N – 80 Duro				33	72986G040	Assembly, OPSO 8# - 14# w/Viton A Seat Disc		
22	70041P158 70041P133					33	72986G041	Assembly, OPSO 14# - 20# w/Viton A Seat Disc		
22		Disc, Valve Seat – Viton A – 70 Duro				33	, 2,000042	See Page 22 For OPSO Parts	1 '	
22	72624P001	Holder, Seat Disc – For Use w/2" Models								
23	, 20271 001	- with 1/4" thru 7/8" Orifice Sizes (SILVER)	1							
		- with 1/4 thu 1/6 Onlice Sizes (SILVER)								

American 1¹/₂" and 2" Model 2083M Industrial Regulator



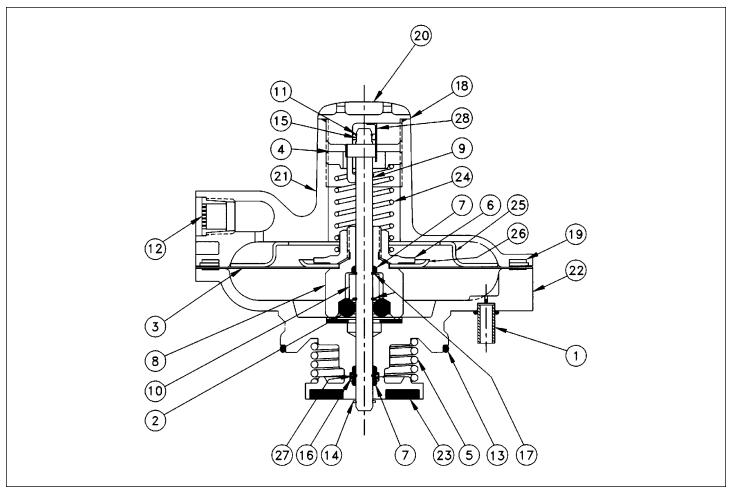
					n Regs uilt	14					In Regs uilt
Item No.	Part No.	DESCRIPTION	Qty.	Before	After	Item No.	Part No.	DESCRIPTION	Qty.	Before	
$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 18 \\ 18 \\ 18 \\ 18 \\ 18 \\ 18$	71411P021 71411P022 71411P023 71411P024 72983P010 72983P011 72983P011 72983P013 72983P014 72983P015 72983P015 72983P015 72983P017 78001P032 78000P021 78000P021 78000P021 7801P071 70041P072	Seal Pluğ Assemblý – with Seal Wire Hole Setscrew, Regulator to Valve Head Retainer, Seat Disc Holder Gasket, Valve Screen, Vent Gasket, Seal Plug Diaphragm Plate, Diaphragm Stem, Diaphragm Spring, Pressure 2.5# - 5# (DRANGE & BLACK) Spring, Pressure 2.5# - 5# (ORANGE & BLACK) Spring, Pressure 1.0# - 1.5# (YELLOW & GREEN) Valve - 1/4" Orifice Valve - 1/2" Orifice Valve - 1/8" Orifice	$\begin{array}{c}1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\$			25 26 26 27 28 29 29 29 29 29 30 31 31 32 33 34 35 35 35 35 35 35 35 35 35 35 35 35 35	72628P001 11970P033 11970P033 11970P034 78113P002 73787P001 72972P032 72972P035 72972P034 72972P035 72992P015 72992P015 72992P016 78014P007 73010P002 42710P1078 42710P178 42710P179 72986G086 72986G086 72986G087 72986G091 72986G091 72986G091 72986G092 72986G094 72986G094 72986G095 72986G096 72986G097 72986G097 72986G097	 NPT Thread Assembly, OPSO 1# - 2# w/Buna N Seat Disc NPT Thread Assembly, OPSO 2# - 3# w/Buna N Seat Disc NPT Thread Assembly, OPSO 3# - 5# w/Buna N Seat Disc NPT Thread Assembly, OPSO 5# - 8# w/Buna N Seat Disc NPT Thread Assembly, OPSO 5# - 14# w/Buna N Seat Disc NPT Thread Assembly, OPSO 14# - 20# w/Buna N Seat Disc NPT Thread Assembly, OPSO 14# - 20# w/Buna N Seat Disc NPT Thread Assembly, OPSO 14# - 20# w/Viton A Seat Disc NPT Thread Assembly, OPSO 14# - 28" w/Viton A Seat Disc NPT Thread Assembly, OPSO 1# - 2# w/Viton A Seat Disc NPT Thread Assembly, OPSO 2# - 3# w/Viton A Seat Disc NPT Thread Assembly, OPSO 2# - 3# w/Viton A Seat Disc NPT Thread Assembly, OPSO 3# - 5# w/Viton A Seat Disc 	$ \begin{array}{c} 1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\$	1/1/94 1/1/94	1/1/94 1/1/94 1/1/94 1/1/94

American 1¹/₂" and 2" Model 2093 Industrial Regulator



Item					n Regs uilt	Item					n Regs ıilt
No.	Part No.	DESCRIPTION	Qty.	Before	After	No.	Part No.	DESCRIPTION	Qty.	Before	After
No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 18 18 18 18 18 18 19 19 19 19 19 19	72627P001 72626G002 78074P001 72163P001 42710P161 72357G002 78014P006 72858P001 70019P094 70019P098 70019P098 70014P143 70012P051 70012P051 78000P081 70012P051 78000P081 70012P051 78000P081 7012P051 78000P081 7012P051 73981P076 71411P022 71411P022 71411P023 71411P024 72983P011 72983P014 72983P015	Valve Plunger Lever Vent Flapper Retainer Vent Flapper O'' Ring Seal Plug Assembly - without Seal Wire Hole (Standard) Seal Plug Assembly - with Seal Wire Hole Setscrew, Valve Head Retainer, Seat Disc Holder Gasket, Valve Screen, Vent Gasket, Seal Plug Diaphragm Plate, Diaphragm Stem, Diaphragm Stem, Diaphragm Stem, Diaphragm Screw, Diaphragm Stem,	1 1 1 1 1 1 1 1 1 1	В	uilt	No. 23 24 24 25 25 26 26 26 26 26 26 26 26 26 26	72624P001 72354P001 72354P002 72628P002 72628P002 72628P003 72972P032 72972P033 72972P034 72972P034 72972P035 72992P016 11970P033 11970P033 11970P033 11970P033 11970P033 11970P033 11970P033 7278P001 73787P001 73787P001 72778P003 727886032 72986G032 72986G032	Holder, Seat Disc – For Use w/1-1/2" Models – All Orifice Sizes (SILVER) Top, Regulator – without Seal Wire Hole Top, Regulator – with Seal Wire Hole Body, Regulator BSP – TR Thread Body, Regulator NPT Thread Head, Valve – 1-1/2" x 1-1/2" – BSP – TR Thread (Ductile Iron) Head, Valve – 1-1/2" x 1-1/2" – NPT Thread (Ductile Iron) Head, Valve – 2" x 2" – NPT Thread (Ductile Iron) Head, Valve – 2" x 2" – NPT Thread (Ductile Iron) Head, Valve – 2" Class 125 Flanged (Ductile Iron) Head, Valve – 2" Class 125 Flanged (Ductile Iron) Head, Valve – 2" Metric Flanged (Ductile Iron) Plug, Body 1/2" BSP – TR Plug, Jalve Head 1/4" NPT Plug, Valve Head 1/4" NPT Plug, Valve Head 1/4" BSP – TR Identification Tag Instruction Tag Setscrew, OPSO to Valve Head Tube, For All 2" Models Tube, For All 2" Models Tube, For All 2" Are 2" w/Buna N Seat Disc Assembly, OPSO 2# - 3# w/Buna N Seat Disc Assembly, OPSO 2# - 3# w/Buna N Seat Disc	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Bu	uilt
19 19 20 20 21 21 22 22 22 22 22 22 22 22 22 22 23 23	72983P016 72983P017 78001P032 78000P021 78020P003 78019P013 70041P071 70041P071 70041P072 70041P073 70041P133 70041P133 70041P133 70242P001 72624P002	Valve – 1-1/4" Orifice Bolt, Body 5/16" – 24 x 1-1/8" Hex. Hd. (Standard) Bolt, Body 5/16" – 18 x 1.00" Nut, Body Bolt 5/16" – 24 (Standard) Nut, Body Bolt 5/16" – 18 Disc, Valve Seat – Buna N – 60 Duro Disc, Valve Seat – Buna N – 70 Duro (Standard) Disc, Valve Seat – Buna N – 80 Duro Disc, Valve Seat – Viton A – 60 Duro Disc, Valve Seat – Viton A – 70 Duro	1 12 12 12 12 12 1 1 1 1 1 1 1 1 1 1			33 33 33 33 33 33 33 33 33 33 33 34 35 36	72986G034 72986G035 72986G036 72986G037 72986G038 72986G040 72986G040 72986G041 72986G042 72943G001 73381P001 73381P001	Assembly, OPSO 8# - 14# w/Buna N Seat Disc Assembly, OPSO 14# - 20# w/Buna N Seat Disc Assembly, OPSO 14" - 28" w/Viton A Seat Disc Assembly, OPSO 2# - 28" w/Viton A Seat Disc Assembly, OPSO 2# - 3# w/Viton A Seat Disc Assembly, OPSO 3# - 5# w/Viton A Seat Disc Assembly, OPSO 5# - 8# w/Viton A Seat Disc Assembly, OPSO 14# - 20# w/Viton A Seat Disc Assembly, Disc Assembly, Disc Assembly, Assembly, Assembly, Assembly, Assembly, Disc Assembly, Assemb			

OPSO



ltem No.	Part No.	DESCRIPTION	Qty.	ltem No.	Part No.	DESCRIPTION	Qty.
1	72653P001	Tube	1	20	72645P001	Seal Plug	1
2	78067P013	Ball	6	21	70006P007	Top, OPSO	1
3	70014P155	Diaphragm	1	22	72721G001	Body, OPSO Assembly	1
4	71824P005	Screw, Adjustment	1	22	72721G002	Body, Monitor OPSO Assembly – NPT	1
5	71421P027	Spring, Closing	1	22	72721G005	Body, Monitor OPSO Assembly – BSP – TR	1
6	72642P001	Nut, Diaphragm	1	23	72720G001	Unit, Seat Disc – Buna N – 60 Duro	1
7	42710P146	"O" Ring	2	23	72720G002	Unit, Seat Disc – Viton A – 60 Duro	1
8	72649P001	Cage, Ball	1	24	70017P075	Spring, Pressure 14" - 28" Shutoff (LT. BLUE)	1
9	72644P002	Shaft	1	24	70017P076	Spring, Pressure 1# - 2# Shutoff (RED-BROWN)	1
10	72648P001	Collar	1	24	70017P077	Spring, Pressure 2# - 3# Shutoff (PURPLE)	1
11	78074P019	Ring, Shaft Washer Retainer	1	24	70017P078	Spring, Pressure 3# - 5# Shutoff (ORANGE-YELLOW)	1
12	70034P001	Screen, Vent	1	24	70017P079	Spring, Pressure 5# - 8# Shutoff (ORANGE-GREEN)	1
13	42710P154	"O" Ring	1	24	70017P078*	Spring, Pressure 8# - 14# Shutoff (ORANGE-YELLOW)	1
14	42978P008	"E" Ring, Drive Shaft	1	24	70017P079*	Spring, Pressure 14# - 20# Shutoff (ORANGE-GREEN)	1
15	73071P001	Washer, Shaft	1	25	72646P001	Ring, Reducing	1
16	78074P014	Ring, Retainer	3	26	70012P042	Plate, Diaphragm	1
17	78074P013	Washer, "O" Ring Retainer	1	26	70012P045	Plate, Diaphragm	1
18	70019P108	Gasket, Seal Plug	1	27	72650P001	Washer, "O" Ring Retainer	1
19	78008P006	Screw, Body	8	28	73098P001	Clip, Spring	1

*To achieve these ranges, Items 25 (72646P001 and 26 (70012P045) are needed.





300 Welsh Road Building One Horsham, PA 19044-2234 U.S.A. Phone: 215/830-1800 Fax: 215/830-1890



3037 Derry Road, West Milton, Ontario L9T 2X6 Canada Phone: 905/878-2361 Fax: 905/878-5758

Website: americanmeter.com

Printed in U.S.A.

ELSTER

Core - 2000 - 08/01