

OPERATOR'S MANUAL

INCLUDING: INSTALLATION & OPERATION

SSV2XX-()-()

RELEASED: 4-18-01

REVISED: 2-20-02

(REV. C)

SOFT START VALVES



READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

TECHNICAL SPECIFICATIONS

MATERIALS OF CONSTRUCTION

Body: Aluminum.
Needle: Brass.
Guide: Brass.
Sleeve: Brass.
Piston: Brass.
Poppet: Brass.
Cap: Aluminum.
Cover Plate: Aluminum.
All "O" Rings: Nitrile.
Gasket: Cork Rubber.

OPERATION CONDITIONS

Temperature Range: 0° to 180° F (-18° to 82°C).
Inlet Air Pressure: 45 - 145 p.s.i.g. (3.1 - 10 bar).
Application: Industrial compressed air systems.
Full Flow: Air flow is at 100 p.s.i.g. (6.9 bar) inlet and 90 p.s.i.g. (6.2 bar) outlet.

1/4" - 85 scfm
3/8" - 130 scfm
1/2" - 150 scfm

Valve opens to full flow at approximately 60% of supply pressure.

Exhaust Flow: 70 scfm (without silencer)

OPERATING AND SAFETY PRECAUTIONS

- Use only genuine ARO replacement parts to assure compatible pressure rating and performance.
- Read carefully all warnings and safety precautions and heed the following before operating, to avoid personal injury and / or property damage.
- Be certain anyone operating this equipment has been trained to use it safely.

⚠ WARNING COMPONENT RUPTURE. DO NOT EXCEED MAXIMUM RATED OPERATING PRESSURE OF 145 p.s.i. (10 bar). To avoid possible damage or personal injury, DO NOT expose the unit to excessive pressure beyond the intended working range.

⚠ WARNING TEMPERATURE LIMITS. DO NOT EXCEED MAXIMUM TEMPERATURE LIMITS OF 180° F (82° C). Excessive temperature can affect non-metallic parts which may weaken them and cause failure.

⚠ WARNING USE WITH INDUSTRIAL COMPRESSED AIR

SYSTEMS ONLY. DO NOT USE WITH BOTTLED GAS PRODUCTS OR FLUIDS. MISAPPLICATIONS CAN RESULT IN COMPONENT FAILURE.

⚠ WARNING DISASSEMBLY HAZARD. DO NOT DISASSEMBLE THIS UNIT WHEN IT IS UNDER PRESSURE. SHUT OFF AND RELIEVE AIR SUPPLY BEFORE ATTEMPTING SERVICE OR DISASSEMBLY PROCEDURES. Isolate the unit by closing the line valve or disconnect the supply line or hose.

- **CAUTION:** THE GAUGE PORT SHOULD NOT BE USED AS AN AUXILIARY PRESSURE OUTLET PORT. The gauge port is intended to be used only for pressure monitoring, sensing or remote pilot. The feedback may affect the operation of the valve.

⚠ WARNING Due to misuse, wear, or malfunction this device should not be used where failure could result in personal injury or damage to equipment.

INSTALLATION

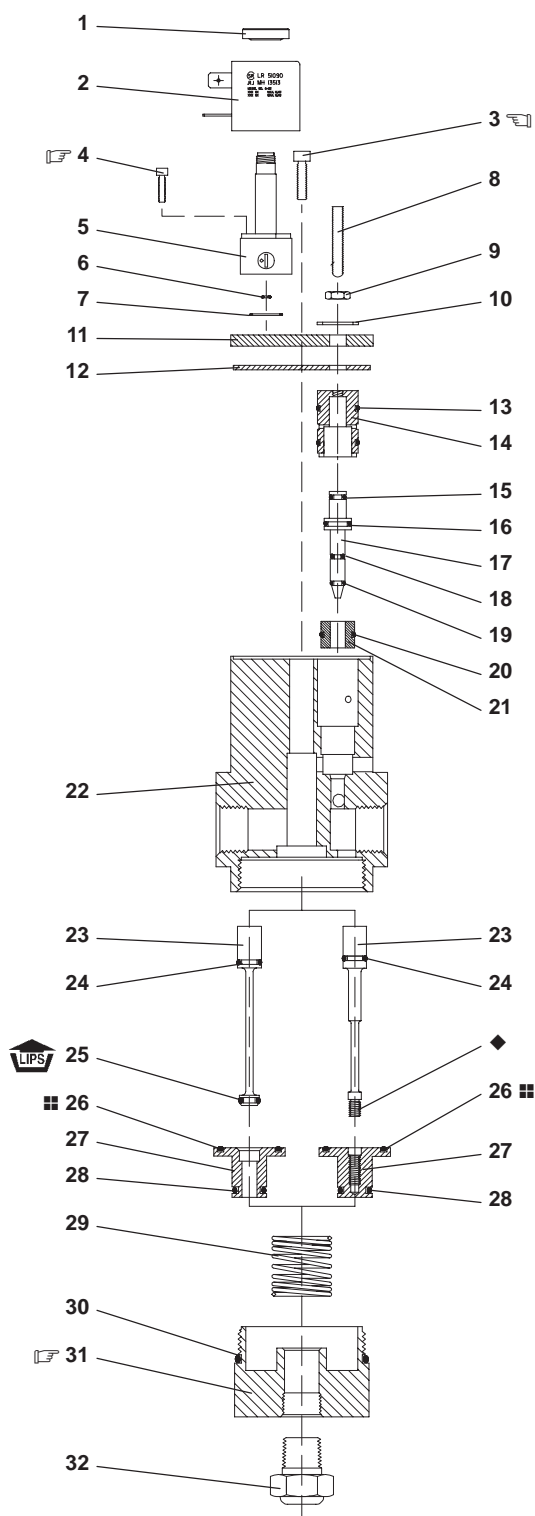
- Install valves with the air flow as indicated by the arrow on the side of the unit.
- Valves may be installed with the exhaust located either upward or downward.
- Locate the valve downstream from the filter, regulator, and lubricator for best performance.
- Silencer or equivalent restriction must be installed to ensure proper exhaust function (SSV2()3- only).
- Inlet pressure must drop below 30 p.s.i. for main valve to close (SSV2()2- only).

OPERATION

- Turn adjustment screw clockwise to increase fill time.
- Turn adjustment screw counter clockwise to decrease fill time.
- Adjustment screw may be removed for quickest fill time. NOTE: Valve will not function with adjustment screw screwed in tight.
- To ensure proper function, armature assembly must be off before pressure is removed from unit.



PARTS LIST



TORQUE REQUIREMENTS

NOTE: DO NOT OVERTIGHTEN FASTENERS

(3) Screw 18 - 22 in. lbs (2.03 - 2.49 Nm)

(4) Screw 13 - 17 in. lbs (1.47 - 1.92 Nm)

(31) Cap 25 - 50 in. lbs (2.82 - 5.65 Nm)

LUBRICATION / SEALANTS

☆ Apply Parker O-lube Grease to all "O" rings & mating parts.

◆ Apply Loctite 680 to threads (only SSV2()2-).

■ (26) "O" Ring secure using Loctite 380.

ITEM	DESCRIPTION (Size in inches)	Qty	Part No.
1	Coil Nut (model SSV2()2- & SSV2()3- only)	(1)	119380
2	Coil (models SSV2()2- & SSV2()3- only)		
	(-120-A models only)	(1)	116218-33
	(-240-A models only)	(1)	116218-35
	(-024-A & -012-D models only)	(1)	116218-38
	(-024-D models only)	(1)	116218-39
3	Screw (models SSV2()2- & SSV2()3- only)	(4)	Y195-65-C
4	Screw (models SSV2()2- & SSV2()3- only)	(2)	96728910
5	Armature (SSV2()2- & SSV2()3- only)	(1)	114102
6	"O" Ring (SSV2()2- & SSV2()3- only)	(1)	114103
7	"O" Ring (SSV2()2- & SSV2()3- only)	(1)	114104
8	Set Screw	(1)	114614
9	Nut	(1)	Y22-110-C
10	Snap Ring (models SSV2()1 only)	(1)	Y147-68
11	Coverplate (SSV2()2- & SSV2()3- only)	(1)	114608
12	Gasket (models SSV2()2- & SSV2()3- only)	(1)	114609
13	"O" Ring (model SSV2()1)	(1)	Y325-15
	(models SSV2()2- & SSV2()3-)	(2)	Y325-15
14	Sleeve	(1)	114606
15	"O" Ring	(1)	Y325-8
16	"O" Ring (SSV2()2- & SSV2()3- only)	(1)	Y325-12
17	Needle	(1)	114605
18	"O" Ring	(1)	Y325-7
19	"O" Ring	(1)	Y325-5
20	"O" Ring	(1)	Y325-13
21	Guide	(1)	114607
22	Body		
	(SSV221) (1/4 - 18 P.T.F.-SAE Short)	(1)	114611-1
	(SSV231) (3/8 - 18 P.T.F.-SAE Short)	(1)	114611-2
	(SSV241) (1/2 - 14 P.T.F.-SAE Short)	(1)	114611-3
	(SSV222- & SSV223-) (1/4 - 18 P.T.F.-SAE Short)	(1)	114601-1
	(SSV232- & SSV233-) (3/8 - 18 P.T.F.-SAE Short)	(1)	114601-2
23	Piston (models SSV2()2- only)	(1)	114643
	(models SSV2()3- only)	(1)	114604
24	"O" Ring (SSV2()2- & SSV2()3- only)	(1)	Y325-11
25	"U" Cup (models SSV2()3- only)	(1)	114330
26	"O" Ring	(1)	Y325-118
27	Poppet (models SSV2()1 & SSV2()2-)	(1)	114612
	(models SSV2()3- only)	(1)	114603
28	"O" Ring	(1)	Y325-111
29	Spring (models SSV2()1 only) (Green)	(1)	114613
	(model SSV2()2- & SSV2()3- only)	(1)	114610
30	"O" Ring	(1)	Y325-136
31	Cap	(1)	114602
32	Vent (models SSV2()3- only)	(1)	20311-3
33	Pipe Plug Assembly (not shown)	(2)	100084
34	Connector (SSV2()2- & SSV2()3- only)	(1)	CSN