Service Manual 102-008
Ejection Valve

IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING, OR SERVICING THIS EQUIPMENT

SERVICE KITS

Use only Ingersoll-Rand replacement parts to insure compatibility and longest life.
Valve Repair Kit: 102-008RK

⚠ WARNING
DO NOT OPERATE VALVE WITH MATERIAL PRESSURES ABOVE RECOMMENDED MAXIMUM OF 2000PSI (136 BAR) MATERIAL
70PSI AIR PRESSURE REQ. 100PSI MAXIMUM

SPECIFICATIONS

Material Output	0-.75 Cubic Inch (12cc)
Air Inlet Port Size	1/8in. NPT
Material Inlet Port Size	1/4in. NPT
Material Outlet Port Size	1/4 in.NPT

MAINTENANCE SCHEDULE

MONTHLY:
Check for material Blow-by and leakage.
EVERY SHUTDOWN:
Depressurize the Valve

OPERATION

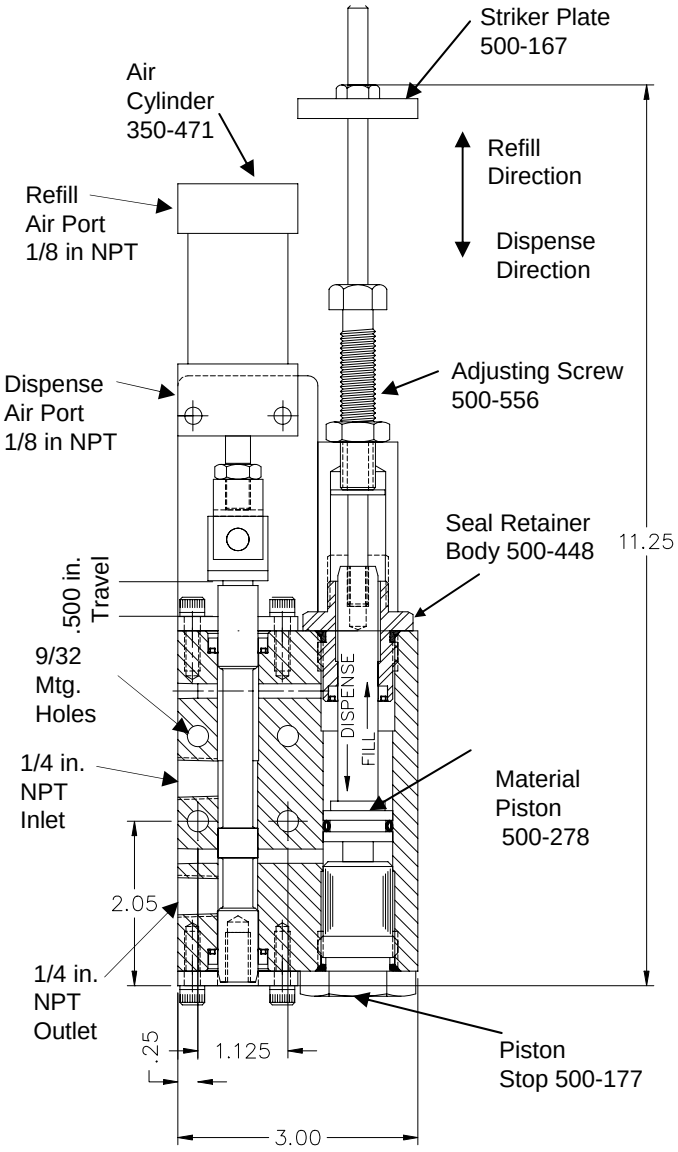
When the air cylinder is retracted the valve is in the Filled State:

The Outlet port is blocked and inlet pressure is directed so that there is equal pressure on both sides of the material piston. The material piston will move until it is stopped by the adjusting screw.

When the air cylinder is extended the valve is in the Dispense State:

The inlet pressure is directed to the Rod side of the Material piston. The Outlet Port is open and allows material flow from the blind side of the material piston until the material piston is stopped by the Material Piston Stop.

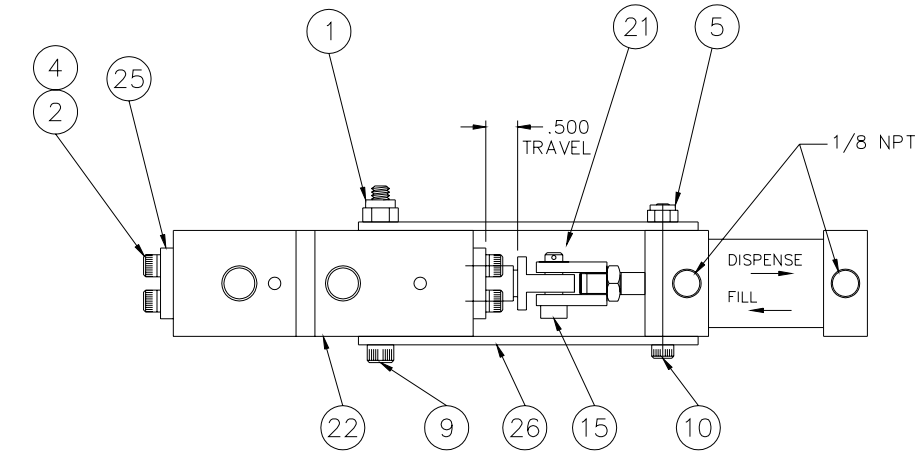
Adjust the Material Output by turning the Adjustment screw. In for less material. Out for more material.

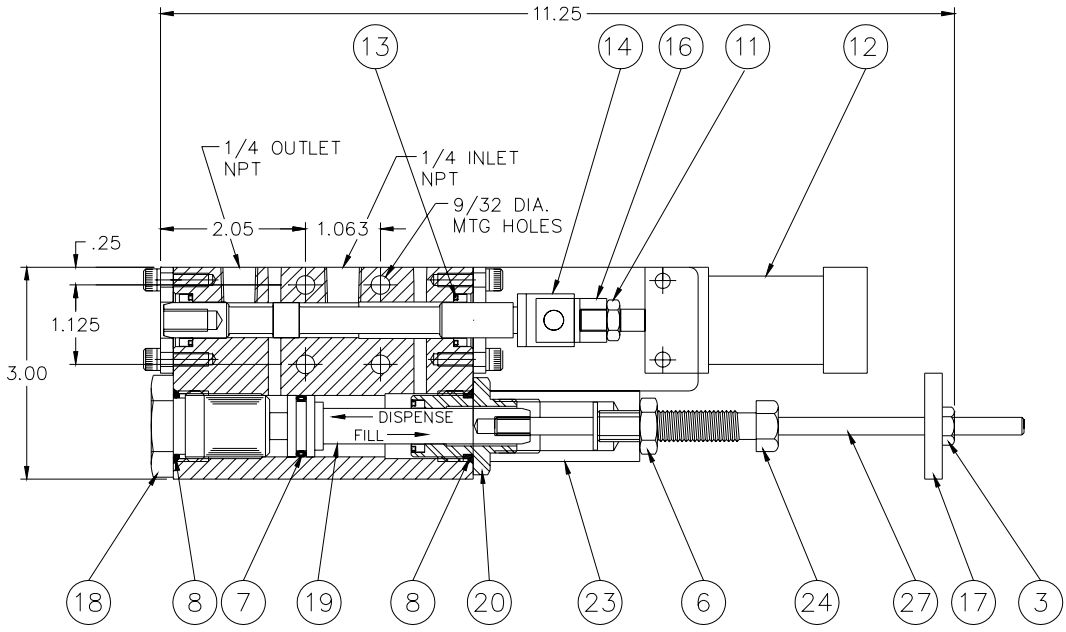


REPLACEMENT PROCEDURE

⚠ WARNING Depressurize the Valve before disconnecting any hoses. Always exhaust all Material and Air pressure before disconnecting any hoses or valves.

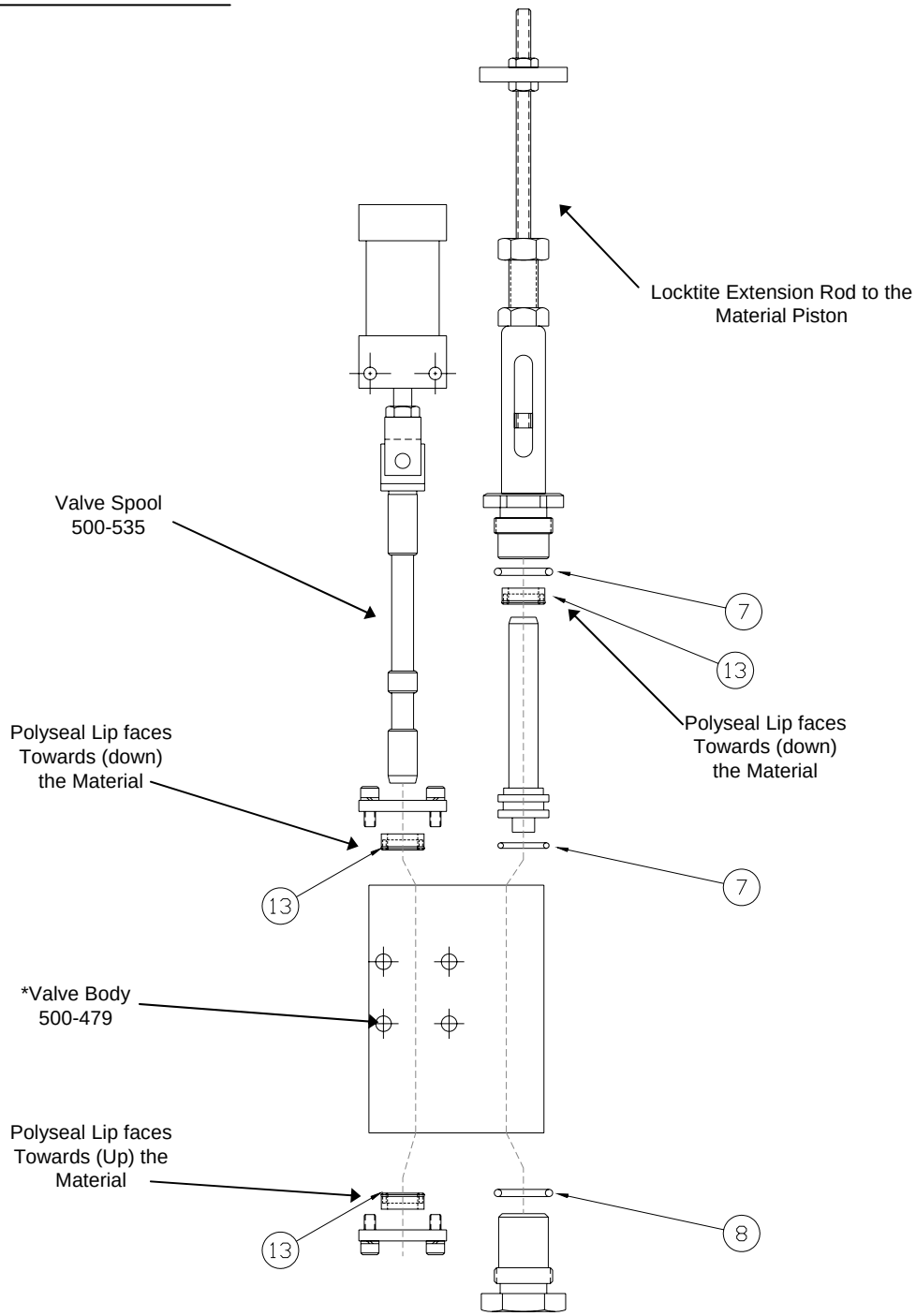
1. Remove Fluid and Pneumatic connections.
2. Unbolt the Valve from the fixture.
3. Install new Fluid and Pneumatic Connections and tighten.
4. Bolt valve to fixture.
5. Supply material and air pressure to the Valve.
6. Operate the Valve to bleed the air.





*14	1	500-535	VALE SPOOL	*Valve Body and Spool only available as part # 300-995			
13	2	350-835	POLY SEAL	27	1	500-561	EXTENSION ROD
12	1	350-471	AIR CYLINDER	26	2	500-537	MOUNTING PLATE
11	1	350-462	LOCK NUT	25	2	500-476	SEAL PLATE
10	2	350-448	SHCS	24	1	500-556	ADJUSTING SCREW
9	2	350-581	SHCS	23	1	500-504	CAGE
8	2	350-446	O'RING	*22	1	*500-479	VALVE BODY
7	1	350-445	O'RING	21	1	363-042	COTTER PIN
6	1	350-100	HEX JAM NUT ½-20	20	1	500-448	SEAL RETAINER
5	2	350-145	HEX NUT NULOCK #10-24	19	1	500-278	MATERIAL PISTON
4	4	361-904	LOCK WASHER #10	18	1	500-177	STOP
3	2	350-288	JAM NUT ¼-20	17	1	500-167	STRIKER PLATE
2	4	350-858	SHCS #10-32 X .38in.	16	1	500-068	CLEVIS
1	2	360-211	HEX NUT NYLOCK	15	1	363-043	CLEVIS PIN
DET.	**QTY.**	**PART No.**	**Description**	**DET.**	**QTY.**	**PART No.**	**Description**

102-008RK Repair Kit



* Valve Body and Spool only available as part # 300-995			
13	3	350-835	POLYPAK SEAL LUB 1/2" x 3/4" x ¼" (BLACK)
8	2	350-446	O'-RING 3/4" x 1" x 1/8" (BROWN)
7	1	350-445	O'-RING 11/16" x 7/8" x 3/32" (BROWN)
DET.	**QTY.**	**PART No.**	**Description**

REBUILDING INSTRUCTIONS:

⚠ WARNING HAZARDOUS PRESSURE: REMOVE ALL AIR AND MATERIAL SUPPLY PRESSURES BEFORE WORKING ON THIS VALVE.

Disassembly:

1. Remove the Striker Plate (17) by unscrewing the 1/4-20 hex nut (3) from the Extension Rod (27).
2. Unscrew the Cage (23) and Adjusting Screw (24) from the Seal Retainer (20).
3. Unscrew the Seal Retainer (20) from the Valve Body (22) and pull the Seal Retainer (20), Material Piston (19) and Extension rod (27) assembly from the Valve Body (22).

NOTE: The Extension Rod and Material Piston are Locktited.

4. The Seal Retainer (20) can be removed from the Material Piston (19).
5. Remove the Piston Stop (18) by unscrewing it.
6. Remove the Cotter Pin (21)
7. Remove the Clevis Pin (15).
8. Unscrew the Two #1/4-20 SHCS (9) that hold the Air Cylinder (12) to the Body (22).
   a. Remove the Air Cylinder (12).
9. Remove the four Screws (2) that hold on the two Seal Plates (25).
10. The Spool can then be removed from the body

NOTE: BE VERY CAREFULL NOT TO DAMAGE OR MIX UP SPOOLS. (SPOOLS ARE MATCHED TO BODIES)

11. Remove all O'Rings and Seals and Polyseals from the assemblies and inspect the parts for damage.

Assembly.

1. Install the O-ring (8) on the Material Piston Stop(18). Lubricate and tighten into the Valve Body (22).
2. Install both Polyseals (13) into the Valve Body (22) bores and lubricate. Polyseal lips face inwards towards the Valve Body.
3. Bolt the Seal Plates (25) to the Valve Body (22) using four SHCS (2) and leave them 1/2 turn loose.
4. Push the Spool (14)into its bore being very careful not to damage the Polyseal.
5. Tighten the Seal Plate Screws (2) and verify that the Valve Spool (14)does not rub against the Valve Body. If it does reposition Seal Plates (25) and tighten.
6. Install the two Mounting bolts (9) that hold the Air Cylinder (12) on the Body and tighten.
7. Install the Clevis pin (15) through the Clevis (16) and Spool (14).
8. Install the Cotter Pin (21) through the Clevis Pin (15) and bend the one of the legs.
9. Verify that the Spools travel is .500 in. if not adjust.
10. Install the O'Ring (8) onto the Seal Retainer (20) and lubricate.
11. Install the Polyseal (13) Heal first into the bore of the Seal Retainer (20) and lubricate..
12. Install the O'Ring (7) on the Material Piston (19) and lubricate.
13. Push the Material Piston (19) into the Retainer (20) being very careful not the damage the Polyseal.
14. Place the Material Piston (19) in a vice with Brass Jaws.
    a. Locktite the Threaded end of the Material Piston (19) and Extension Rod (27) and tighten.
15. Install the Material Piston/Retainer assembly into the Valve Body and tighten the Seal Retainer.
16. Install the Cage (23) and Adjusting Screw (24) assembly and tighten.
17. Install the Striker Plate (17) by threading it on the Extension Rod (27) and tighten the Jam Nut (3)..

The Adjustment Screw may require adjustment to dispenses the correct volume.

