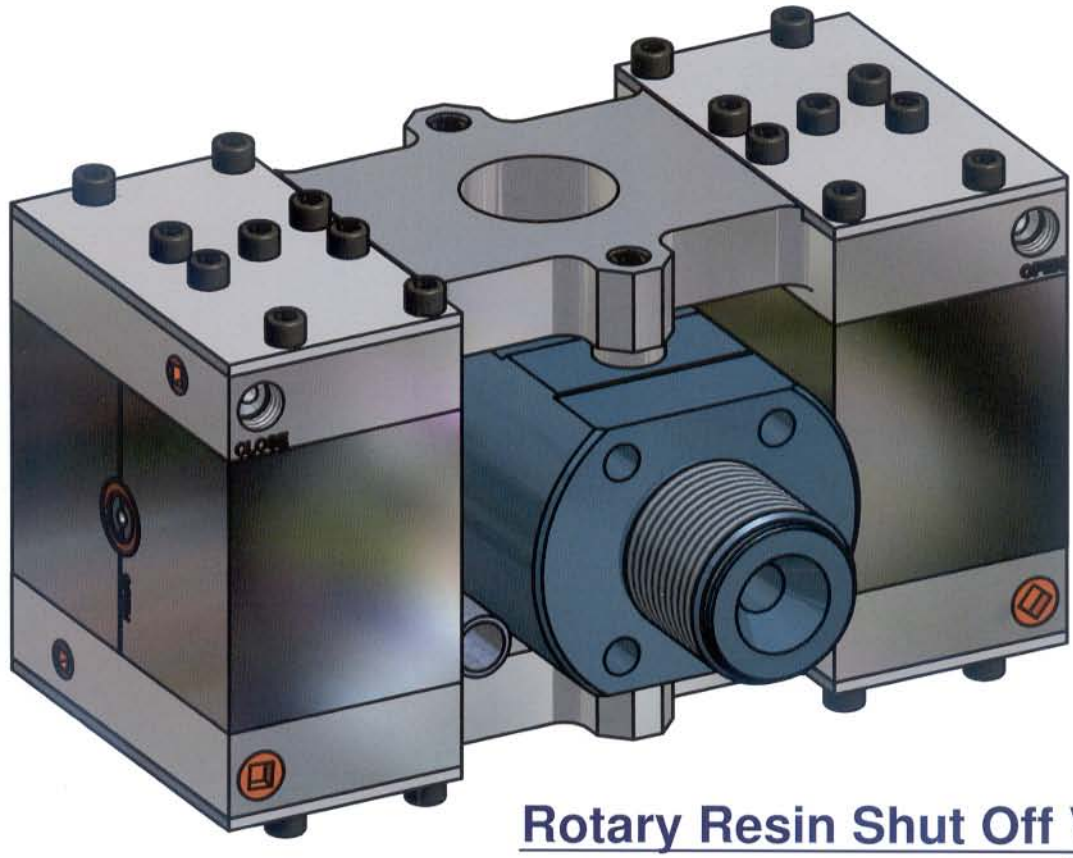
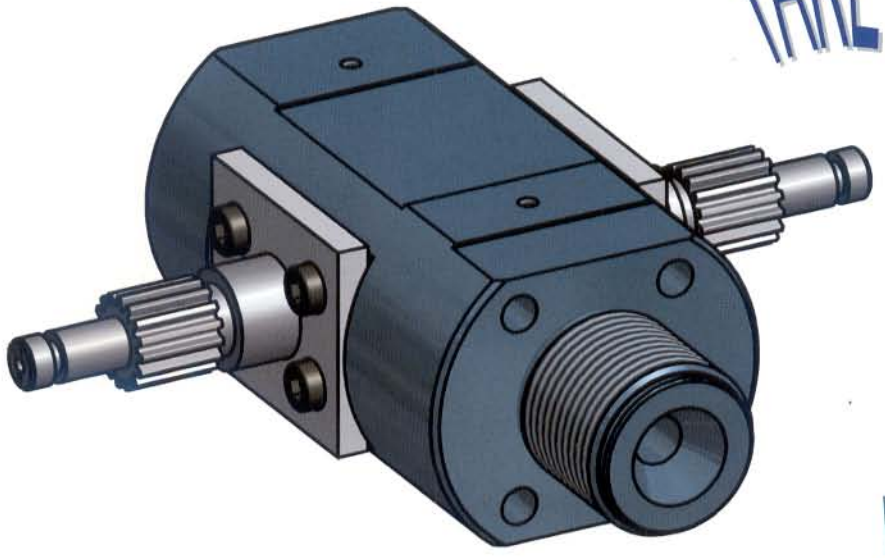
JD ENTERPRISES, INC.



Rotary Resin Shut Off Valve-III

PAT. NO. 5,494,254

TAKE A REVOLUTIONARY TURN

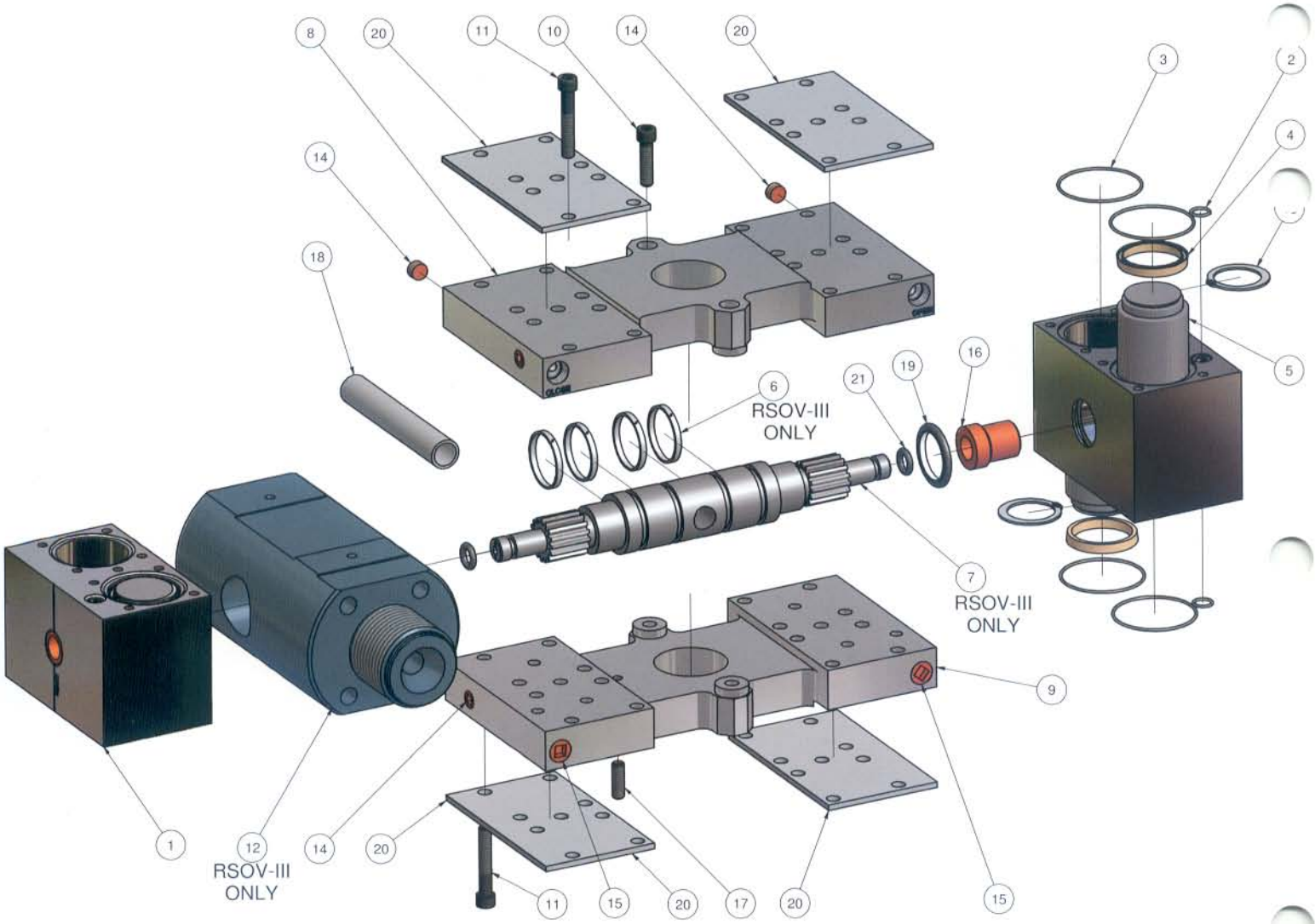


Rotary Resin Shut Off Valve-IV

PAT. PEND.

JD ENTERPRISES, INC.

Rotary Resin Shut Off Valve-III



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	rsov-det01	Cylinder Block	2
2	rsov-det02	Seal-Manifold	4
3	rsov-det03	Seal-Cyl Block	8
4	rsov-det04	Seal-Piston (U-Cup)	8
5	rsov-det05	Piston	4
6	rsov-det07	Seal-Pinion	4
7	rsov-det08	Pinion	1
8	rsov-det09U	Upper Manifold	1
9	rsov-det09L	Lower Manifold	1
10	rsov-det13	1/4-20 X 1 SHCS	4
11	rsov-det14	1/4-20 x 1-1/2 SHCS	36
12	rsov-det16	Nozzle Body	1
13	rsov-det18	Spring Retaining Ring	8
14	Plug 1/8 NPT	Plug 1/8 NPT	8
15	Plug 1/4 NPT	Plug 1/4 NPT	2
16	rsov-det23	Bushing	2
17	rsov-det25	1/4-20 Flat Pt Set Scr	1
18	rsov-det26	Conduit	1
19	rsov-det29	Seal-Housing	2
20	rsov-det35	Manifold Washer	4
21	rsov-det36	Quad Ring	2

SEAL KITS		Includes	
PART NO.	DESCRIPTION	ITEM	QTY
rsov-sk01	Piston Seal Kit	4	8
rsov-sk02	Manifold Seal Kit	2	4
		3	8
rsov-sk03	Pinion Seal Kit-III	6	4
rsov-sk04	Housing Seal Kit-III	19	2
rsov-sk05	Quad Ring Kit	21	2
rsov-sk07	Complete Seal Kit-III	All Seals	1 Valve

Rotary Resin Shut Off Valve-III

The Economical Solution

for

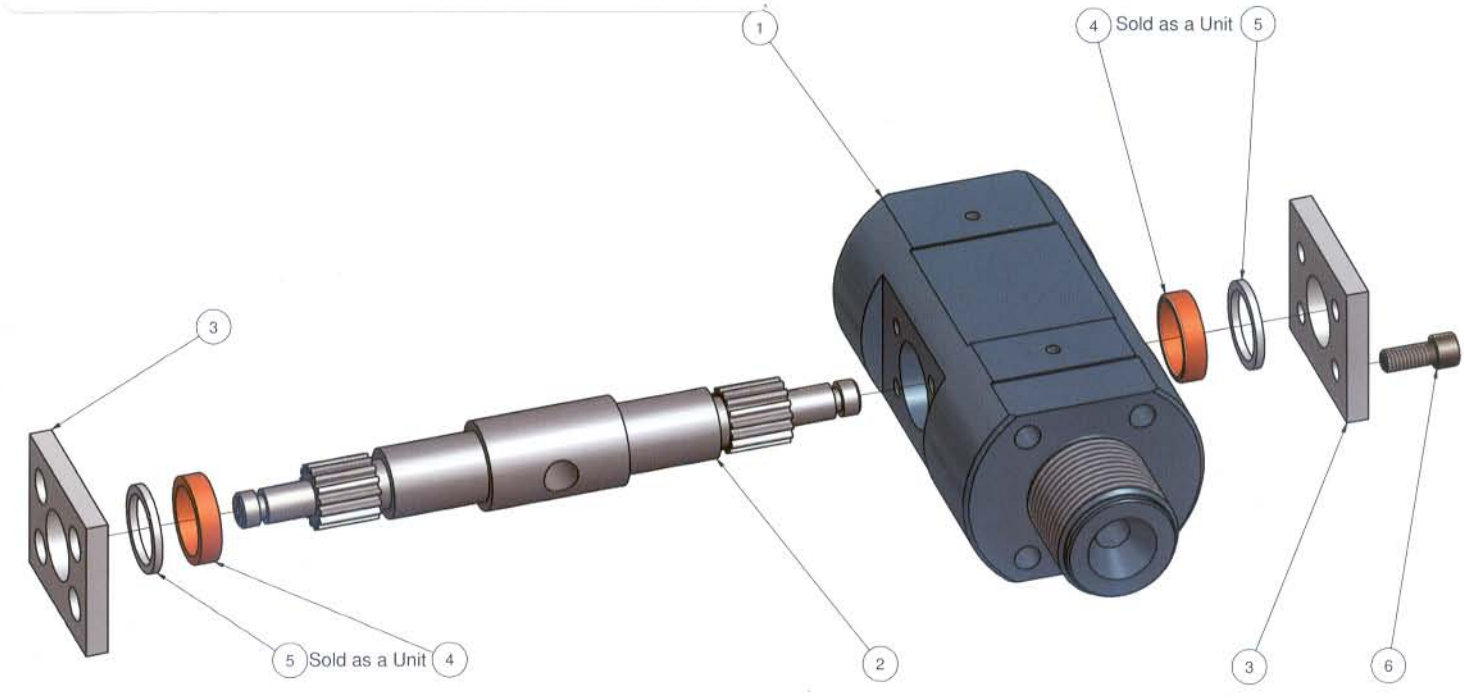
Gas Assist

UP TO 800 °F CONTINUOUS

ENTERPRISES, INC.

Rotary Resin Shut Off Valve-IV

RSOV-IV is the same unit as RSOV-III
with modifications as shown below:
Modified: Body (Item 1), Pinion (Item 2)
Added: Side Plates (Item 3), Seals (Items 4 & 5)



Parts List			
ITEM	PART NO.	DESCRIPTION	QTY
1	rsov-det37	Nozzle Body-IV	1
2	rsov-det38	Pinion-IV	1
3	rsov-det39	Retainer Plate	2
4	rsov-det40	Seal-Pinion-IV	2
5	rsov-det41	Backup	2
6	rsov-det42	5/16-18 X 3/4 SHCS	8

Rotary Resin Shut Off Valve-IV
Gas Assist
or
Conventional
UP TO 600°F CONTINUOUS

SEAL KITS		Includes	
PART NO.	DESCRIPTION	ITEM	QTY
rsov-sk06	Pinion Seal Kit-IV	4	2
		5	2
rsov-sk08	Complete Seal Kit-IV Includes Complete Seal Kit-III & Pinion Seal Kit-IV (Less Pinion Seal Kit-III)	All Seals	1 Valve

JDL ENTERPRISES, INC.

36425 Maas Drive
Sterling Heights, MI 48312
toll free (800) 790-7321
phone (586) 977-8863
fax (586) 977-9166
WWW.JDLENT.COM

Rotary Resin Shut Off Valves-III & IV

DESCRIPTION:

The **JDL** Rotary Resin Shut Off Valve installs easily between the injection barrel and nozzle. The standard model has a 1-3/4"-8 male threaded end to engage in the barrel and a 1-3/4"-8 female thread on the opposite end to accept the nozzle. Other threads are available upon request. Minimum swing clearance of 12" is required.

The valve body is 3.5" in diameter and accepts four 3/8" dia. X 6" heater rods with a 1/4-28 thermocouple hole. The valve operates on hydraulic power at 500 PSI maximum and its unique push-push design results in 86.9 foot-lbs. torque at pressure. The latest technology in high temperature seals is used for top performance over the life of the valve. The **Rotary Resin Shut Off Valve-III** withstands temperatures of 800°F continuous for **GAS ASSIST** applications. The **Rotary Resin Shut Off Valve-IV** withstands temperatures of 600°F continuous for **GAS ASSIST** or **CONVENTIONAL** applications.

Both models have an internal manifold and do not require external piping. One inlet port and one outlet port are required. Manifolds have sized orifices that allow hydraulic fluid to circulate back to the tank and help cool the cylinders. The body is heat-isolated by using free air between it and the manifold plates. Seal kits and parts are available off the shelf.

REQUIREMENTS: (Items Not Supplied)

1) Hydraulic power unit capable of providing 2 GPM flow and set at 500 PSI maximum.
2) Hydraulic hoses rated at 1000 PSI with fittings for 1/4-18 NPT ports.
3) Hydraulic 4-way spring return solenoid-operated control valve.

INSTALLATION:

Connect the pressurized hose from the hydraulic power unit's open position port to the control valve's open position port. Install the heater rods and nozzle. Screw the Rotary Resin Shut Off Valve into the barrel. Connect two hoses from the 4-way solenoid control valve to the respective "OPEN" and "CLOSE" ports on the Rotary Resin Shut Off Valve. Wire the control valve's solenoid. Attach and wire the thermocouple and heater rods.

Heat these zones until the temperature required is stabilized.

Operate the valve until air bleeding is complete.

Test for hydraulic leaks. If satisfactory, proceed with injection and processing.

OPERATION for GAS ASSIST:

The **TIMING** of the Rotary Resin Shut Off Valve and **INJECTION** of the resin **MUST BE SYNCHRONIZED** using the following procedure.

1) COMPLETE RESIN INJECTION
2) CLOSE VALVE
3) INJECT GAS

THE ROTARY VALVE-III SHOULD NOT BE USED WITH CONVENTIONAL MOLDING.