

LOG SPLITTER DETENT CONTROL VALVE

INSTRUCTION MANUAL

SAFETY

Pressure Release Detent

This feature provides a pressure release detent for the spool "out" position. When the spool is manually placed in the detent position, oil is directed to the "B" work port (the port away from the handle). When the pressure in the "B" port reaches a preset level the detent will release and the spool will center. The factory setting is 800psi. The detent release pressure is adjustable by loosening the nut (Part No.23) and turning the adjusting screw(Part No.24). Turning the adjusting screw clockwise will increase the detent release pressure and counter-clockwise will decrease the detent release pressure. If the detent release pressure is set too high the spool will not center, if the pressure is set too low the detent will not hold. If cap screw (Parts No.6) becomes loose detent will not function properly.

Relief Valve

An adjustable ball spring relief valve is standard on all Detent Control valves. The standard factory setting is 2,500 PSI @ 3 gpm and 120°F. Other setting can be specified. The relief pressure is adjusted by removing acorn nut (Parts No.30), and turning the adjusting screw (Part No 28). Turning the adjusting screw clockwise will increase the pressure and counter-clockwise will decrease the pressure (a pressure gauge must be installed in the inlet line whenever the relief pressure is adjusted). Do not backout adjusting screw to the point it falls out.

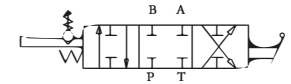
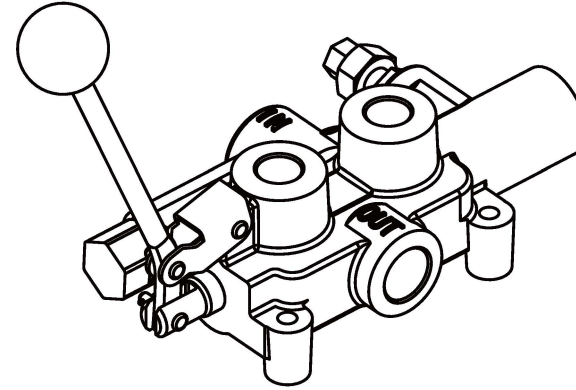
IMPROPER MOUNTING: Always use the proper size fittings. Hook up "in" & "out" as noted on the valve body. Do not over torque pipe fittings. (Use liquid pipe sealant only) Mounting surfaces should be flat and care should be used when tightening mounting bolts. Over-tightened bolts can cause spool bind and casting breakage.

WARNING:

- DO NOT Use Teflon Tape, use Liquid Pipe sealant only
- Valve lever (spool) may "stick" (not center) under certain conditions allowing the hydraulic equipment to continue to operate and could cause serious injury, death or equipment failure.
- Make sure all bolts are tightened and torqued to the recommended specification. Bent or broken parts should not be used. Replace immediately. Always use exact replacements. Always protect valve spool from paint overspray.
- Faulty quick disconnects can cause high back pressures and sticking spools. Check quick disconnects periodically to make sure they are functioning properly. If valve spool does not center or appears to stick, do not use!
- Cracked ports are not covered under warranty.

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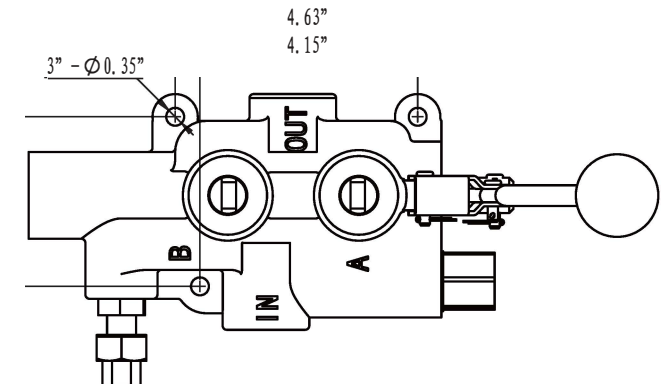
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SPECIFICATIONS

MAXIMUM TANK PRESSURE	500 PSI
MAXIMUM OPERATING PRESSURE	2,750 PSI
MAXIMUM OPERATING TEMPERATURE	180°F
MAXIMUM FLOW RATING	25 GPM
RECOMENDED SYSTEM FILTRATION	10 MICRON

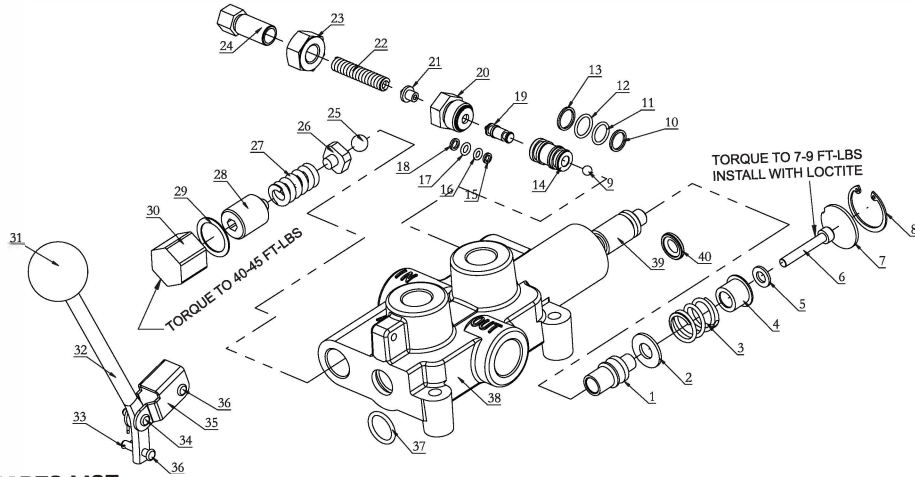
- I/O Ports: 3/4" NPT; 3/4" BSP; #10SAE; #12SAE available
- Working Ports: 1/2" NPT; 1/2" BSP; #8SAE; #10SAE available
- Relief valve adjustable to 3,625 PSI, preset at 2,500 PSI@ 3 GPM and 120°F
Detent release pressure adjustable from 700~2,400 PSI, preset at 700-800 PSI
- Automatically kicks back to neutral when cylinder completes stroke
- Built-in relief valve ports
- Handle could be installed in "up" or "down" position
- Ideal for log splitter building



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EXPLOSION DIAGRAM



PARTS LIST

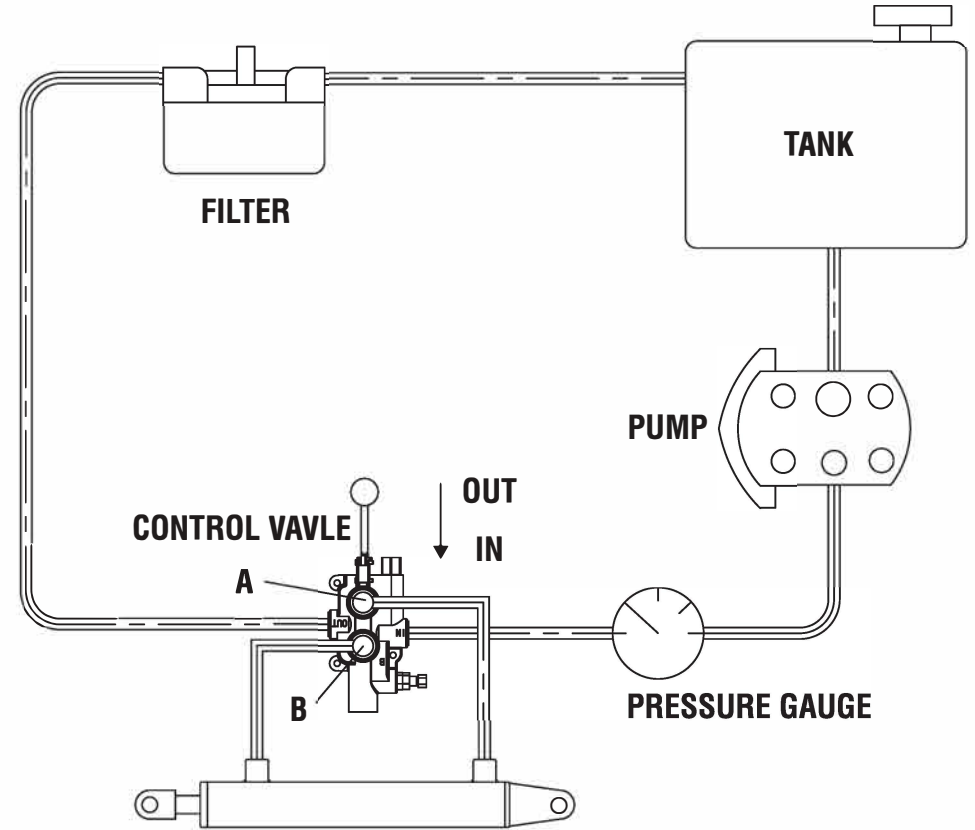
Part No.	Q'ty	Description	Part No.	Q'ty	Description
1	1	Spool Sleeve	25	1	Steel Ball
2	1	Washer	26	1	Adapter
3	1	Spring	27	1	Spring
4	1	Stop Cup	28	1	Adjusting Screw
5	1	Washer	29	1	Washer
6	1	Cap Screw	30	1	Acorn Nut
7	1	Spacer	31	1	Handle Ball
8	1	Back-up Washer	32	1	Handle Rod
9	1	Steel Ball	33	1	Pin and Clip
10	1	Back-up Washer	34	1	Pin and Clip
11	1	O-Ring	35	1	Connecting Board
12	1	O-Ring	36	1	Pin and Clip
13	1	Back-up Washer	37	1	O-Ring
14	1	Piston Sleeve	38	1	Valve Body
15	1	Back-up Washer	39	1	Valve Spool
16	1	O-Ring	40	1	U-Cup
17	1	O-Ring			
18	1	Back-up Washer			
19	1	Piston			
20	1	Screw			
21	1	Spring Adapter			
22	1	Spring			
23	1	Nut			
24	1	Adjusting Screw			

Spool kit, Pressure release detent, Relief Kit, Handle Kit. They do not sold separately.

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HYDRAULIC CIRCUIT



INSTALLATIONS

The valve is mounted so the handle is on the cylinder base end as shown. Push handle IN, cylinder extends to split log. Pull hand out, cylinder retract. When the cylinder retracts completely, handle kick back to neutral automatically. The kick-out pressure preset at 800psi.

THE OIL FLOW WHICH STROKES THE CYLINDER IN THE LOGSPLITTING DIRECTION MUST COME FROM THE VALVE PORT CLOSEST TO THE HANDLE-("A" PORT). "A" port should always be plumbed to the base of the cylinder. Oil is supplied to this port by shifting the valve spool IN as noted in the above installations.