RD-4100 ONE SPOOL VALVE

NOTE:
FEATURES MAY VARY WITH
MODEL NO. CONSULT CATALOG

CLOSED CENTER PLUG OPTION D
This option provides for closed center operation. This is typically used with a variable displacement pressure compensated pump or in a system with an unloading valve. When the spools are in neutral the inlet port is blocked. The power beyond plugs can be used for closed center conversion by plugging the power beyond port. PLEASE NOTE it may be necessary to increase relief pressure above pump compensator setting.

POWER BEYOND PLUG WITH #8 SAE OPTION C
This option provides a high pressure power beyond port. This would be used if a valve is to be added downstream. PLEASE NOTE the outlet must be connected to tank. When spools are in neutral the inlet is connected to power beyond port.

3 WAY SPOOLS OPTION 'A'
Have the 'A work port' plugged. Connect 'B work port' to cylinder.

LOAD CHECK:
The load check feature is standard on the RD-4100 series valves. Each spool has a separate load check. The load check will prevent the fall of a cylinder as the spool is shifted. It also prevents the backflow of oil from the work port to the inlet. The pump must build up enough pressure to overcome the pressure on the work port caused by the weight of the load before the cylinder can move. PLEASE NOTE: The load check has nothing to do with how well the valve will hold up a cylinder with the spool in neutral. The load check is functional only when the spool is shifted.

RD-4100 KITS AND CARTRIDGES

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>660541001</td>
<td>RD-4100 SEAL KIT</td>
</tr>
<tr>
<td>660155015</td>
<td>LOAD CHECK KIT</td>
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<tr>
<td>660589003</td>
<td>POWER BEYOND SEAL KIT</td>
</tr>
<tr>
<td>660180011</td>
<td>STANDARD HANDLE KIT (HANDLE, KNOB &amp; PINS)</td>
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<tr>
<td>660180005</td>
<td>COMPLETE HANDLE KIT</td>
</tr>
<tr>
<td>660180031</td>
<td>PIN KIT</td>
</tr>
<tr>
<td>660180032</td>
<td>HANDLE BRACKET</td>
</tr>
<tr>
<td>660180001</td>
<td>SPRING CENTER KIT</td>
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<tr>
<td>660180002</td>
<td>3 POSITION DETENT KIT</td>
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<tr>
<td>660180003</td>
<td>FRICTION DETENT KIT</td>
</tr>
<tr>
<td>660180051</td>
<td>SPRING CENTER W/ FLOAT DETENT KIT (REPAIR ONLY)</td>
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<tr>
<td>200400030</td>
<td>CONVERSION PLUG (OPTION B)</td>
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<tr>
<td>660280001</td>
<td>#8 SAE POWER BEYOND PLUG (OPTION C)</td>
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<tr>
<td>660280002</td>
<td>CLOSED CENTER CONVERSION PLUG (OPTION D)</td>
</tr>
<tr>
<td>660280004</td>
<td>NO-RELIEF PLUG (OPTION 1)</td>
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<tr>
<td>660280011</td>
<td>ADJUSTABLE RELIEF CARTRIDGE, 500-1500 PSI (OPTION 4)</td>
</tr>
<tr>
<td>660280009</td>
<td>ADJUSTABLE RELIEF CARTRIDGE, 1500-3000 PSI (OPTION 5)</td>
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</tbody>
</table>

RELIEF:
STANDARD SETTING, OPTION 5: 2000 PSI.
STANDARD SETTING, OPTION 4: 1000 PSI.
TO ADJUST RELIEF: Loosen jam nut and turn set screw clockwise to increase and/or counter-clockwise to decrease pressure. A pressure gauge must be installed in the inlet line whenever the relief pressure is adjusted.

WARNING OVERPRESSURE MAY CAUSE SUDDEN AND UNEXPECTED FAILURE OF A COMPONENT IN THE HYDRAULIC SYSTEM RESULTING IN SERIOUS PERSONAL INJURY. ALWAYS USE A GAUGE WHEN ADJUSTING A RELIEF VALVE.
EXAMPLE RD4100 HYDRAULIC CIRCUIT
WITH OPTIONAL POWER BEYOND

FILTERED FILLER BREATHER
IN RESERVOIR
WIRE STRAINER ASSY

SUCTION LINE

OIL RESERVOIR

10 MICRON RETURN LINE FILTER ASSY

PRESSURE RELIEF VALVE
PLEASE NOTE THIS RELIEF IS OPTIONAL AND
CANNOT BE SET HIGHER THAN THE RELIEF
IN THE RD4100, BUT CAN BE SET LOWER.

RD412BASA281 SINGLE SPOOL VALVE,
PLEASE NOTE THIS VALVE IS STANDARD OPEN
CENTER AND DOES NOT USE OPTIONAL POWER
BEYOND PORT. THE OPTIONAL SIDE OUTLET
PORT IS USED AND TOP OUTLET IS PLUGGED.

PUMP

PRESSURE LINE
PRESSURE GAUGE

PRESSURE LINE

RD412BASA52DC1
PLEASE NOTE VALVE
HAS OPTIONAL POWER BEYOND

PRESSURE RELIEF VALVE
PLEASE NOTE THIS RELIEF LIMITS
THE MAX PUMP PRESSURE IN THE
CIRCUIT.

SPOOL IN DIRECTS OIL FLOW TO
WORK PORT CLOSEST TO HANDLE.

RD4100 SPECIFICATIONS:
MAXIMUM OPERATING PRESSURE...........3000 PSI
MAXIMUM OPERATING TEMP......................180°F
RECOMMENDED SYSTEM FILTRATION..10 MICRON
FLOW RATING........................................15 GPM

REV 1; 5/26/00 | REV B, ECN-21623 1/25/12