RD-2500 TYPICAL

NOTE:
FEATURES MAY VARY WITH
MODEL NO., CONSULT CATALOG

RELIEF VALVE:
An adjustable ball spring relief valve is standard on all RD-2500 valves.
The standard factory setting is 1500 psi @ 12 gpm and 120°F.
Other settings can be specified.
The relief pressure is adjusted by removing acorn nut, and turning the
adjusting screw. Turning the adjusting screw clockwise will increase
the pressure and counterclockwise will decrease the pressure (a pressure
gauge must be installed in the inlet line whenever the relief pressure is
adjusted). Do not back out adjusting screw to the point it falls out.

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.

LOAD CHECK:
The load check feature is standard on most RD-2500 series valves.
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.

OPEN CENTER TO CLOSED CENTER CONVERSION
RD-2575 MODELS ONLY

THIS FEATURES ALLOWS AN OTHERWISE OPEN CENTER VALVE TO
BE CONVERTED TO CLOSED CENTER OPERATION. AS SHOWN
AT RIGHT, A 3/8-NPTF PIPE PLUG IS INSTALLED IN
THE BOTTOM OF THE OUTLET PORT TO BLOCK OPEN CENTER
PASSAGE, A PIPE THREAD SEALANT SHOULD BE USED.
THIS FEATURE IS STANDARD ON ALL VALVES WITH 3/4-NPTF
INLET AND OUTLET PORTS. THE PIPE PLUG IS INCLUDED
WITHSE THESE MODELS. DISCARD THE PIPE PLUG IF THE VALVE
IS USED ON AN OPEN CENTER APPLICATION. PLEASE NOTE, IT MAY
BE NECESSARY TO ADJUST RELIEF VALVE PRESSURE WHEN A
PRESSURE COMPENSATED PUMP IS USED.

RD-2500 KITS AND CARTRIDGES

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>660525001</td>
<td>RD-2500 SEAL KIT</td>
</tr>
<tr>
<td>660125001</td>
<td>3 POSITION DETENT KIT</td>
</tr>
<tr>
<td>660125004</td>
<td>RELIEF KIT</td>
</tr>
<tr>
<td>660150015</td>
<td>LOAD CHECK KIT</td>
</tr>
<tr>
<td>660125002</td>
<td>SPRING CENTER KIT</td>
</tr>
<tr>
<td>660150001</td>
<td>COMPLETE HANDLE KIT</td>
</tr>
</tbody>
</table>

672100001 SHEET 1/2
EXAMPLE RD-2500 HYDRAULIC CIRCUIT

NOTE: THREAD SEALANT—USE OF A QUALITY NON-TEFLON THREAD SEALANT IS RECOMMENDED FOR TAPERED PIPE THREADS. (USE OF TEFLOM TAPE IS NOT RECOMMENDED.)

 PRESSURE RELIEF VALVE, THIS LIMITS THE MAXIMUM PRESSURE IN CIRCUIT.
RD-2575-T4-ESA1 PLEASE NOTE THIS VALVE IS STANDARD OPEN CENTER
SPool IN DIRECTS OIL FLOW TO WORK PORT CLOSEST TO HANDLE.

RETURN LINE

VALVE OUTLET PLEASE NOTE THIS PORT MUST GO TO RESERVOIR

VALVE INLET

PRESSURE GAUGE

PRESSURE LINE

IN RESERVOIR WIRE STRAINER ASSY

SUCTION LINE

FILTERED FILLER BREATHER

OIL RESERVOIR

10 MICRON RETURN LINE FILTER ASSY

PUMP

RD-2500 SPECIFICATIONS:
MAXIMUM OPERATING PRESSURE..............3000 PSI
MAXIMUM TANK PRESSURE..............150 PSI
MAXIMUM OPERATING TEMP..............180°F
RECOMMENDED SYSTEM FILTRATION........10 MICRON FLOW RATING..............20 GPM

EXAMPLE 3 WAY SPOOL CIRCUIT, SPOOL OPTION T3.
NOTE: PLUGGED PORT CANNOT BE USED
INSTALL HANDLE AS SHOWN

EXAMPLE MOTOR SPOOL CIRCUIT, SPOOL OPTION M4, WHEN THE SPOOL IS IN NEUTRAL MOTOR WILL FREE WHEEL TO A STOP.