Converting to Power Beyond

1. Remove the conversion plug that came pre-installed in the valve.

2. Install the power beyond sleeve (sold separately as Surplus Center Item # 9-8185-B) into the same port that you removed the conversion plug from.

Converting to Closed Center

To convert to closed center, follow the steps listed for converting to Power Beyond and then follow these additional steps.

1. Install a SAE 8 plug (sold separately as Surplus Center Item # 9-6408-8) into the Power Beyond Sleeve.

2. Adjust the pressure relief valve by loosening the lock nut and turning the set screw in a clockwise direction until it is set above the pump compensator setting. You may also turn the set screw all the way in to disable the relief valve.
OPEN CENTER
This is the standard outlet option. This option allows for conversion in the field for power beyond applications. When the spool is in neutral the inlet is unloaded to tank.

POWER BEYOND AND CLOSED CENTER:
Provides a high pressure power beyond port. This would be used if a valve is to be added downstream. The outlet must be connected to tank. With both spools in neutral the inlet is connected to power beyond port. Closed center is used in closed center systems. With both spools in neutral, the core is blocked and oil does not flow through the valve.

LOAD CHECK DESCRIPTION
The load check feature is standard on all LVR series valves. Each spool has a separate load check. The load check will prevent the fall of a cylinder as the spool is shifted. 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 that the load check has nothing to do with how well the valve will hold up a cylinder with that spool in neutral. The load check is functional only when that spool is shifted.

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.

LOADS MAY MOVE SUDDENLY WHEN VALVE SPOOLS ARE SHIFTED, EVEN WITHOUT THE PUMP RUNNING.
RELIEF PRESSURE ON ITEM 2 CAN BE ADJUSTED BY LOOSENING LOCK NUT AND TURNING SET SCREW CLOCKWISE TO INCREASE PRESSURE & COUNTERCLOCKWISE TO DECREASE PRESSURE.

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LVR VALVE PORT CONNECTION CHART

LVR SPECIFICATIONS
MAX. OPERATING PRESSURE........3000 PSI
MAX. OPERATING TEMP.............180'F
RECOMMENDED FILTRATION........10 MICRON
FLOW RATING........................14 GPM
PARALLEL CIRCUIT CONSTRUCTION

SEE MODEL NUMBER STAMPED ON END CAP.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>A WORK PORT</th>
<th>B WORK PORT</th>
<th>C WORK PORT</th>
<th>D WORK PORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVRxGBxx6</td>
<td>CYL PORT 3</td>
<td>CYL PORT 4</td>
<td>CYL PORT 2</td>
<td>CYL PORT 1</td>
</tr>
</tbody>
</table>

SHIFTING 1st SPOOL 'IN' DIRECTS OIL FLOW TO WORK PORT 'A'.
SHIFTING 2nd SPOOL 'IN' DIRECTS OIL FLOW TO WORK PORT 'C'.

JOYSTICK HANDLE OPERATION LOOKING AT HANDLE KNOB

BOOM FLOAT
BOOM LOWER
BUCKET ROLLBACK
BUCKET TIP
BOOM RAISE
BOOM LOWER