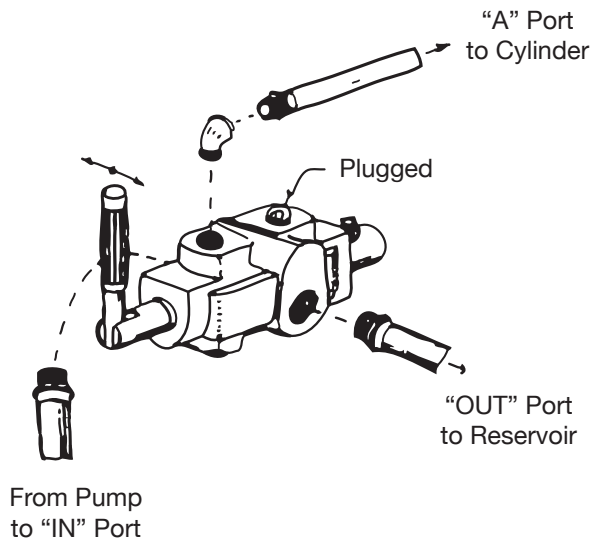
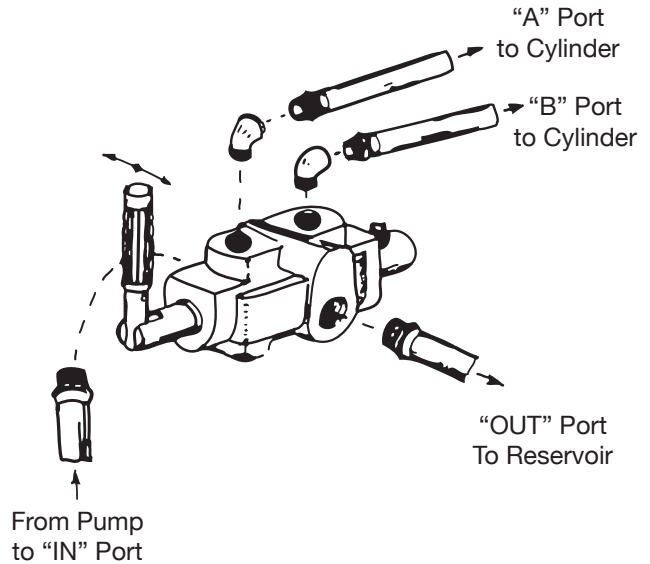


# “CVRC-100” AND “CVRC-200” SERIES CONTROL VALVES



## MODEL CVRC-100 Single Acting Use

3-way control valve designed to operate a one-way hydraulic circuit from a single hydraulic source.



## MODEL CVRC-200 Double Acting Use

4-way control valve designed to operate a two-way hydraulic circuit from a single hydraulic source.



**WARNING:** If the valve will not hold in detent – discontinue use at once. Return valve for repair. Serious injury could result.



**WARNING: CONTAMINATION** – Energy strongly recommends the use of a hydraulic filter in your system to reduce the risk of malfunction due to contamination. The clearances between the valve spool and body are very small and contamination may bind the spool.



**DANGER: LOAD LIFTING** – CVR valves do not contain load check valves and therefore should not be used in lifting application unless some other means of holding the load is made where property damage or personal injury could result.



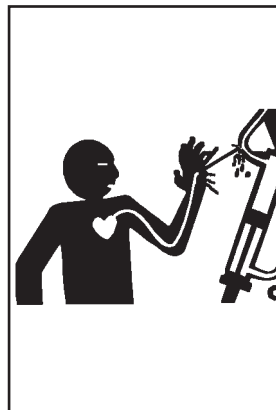
**WARNING:** Do not modify any parts of this valve. **SERIOUS INJURY COULD RESULT IF VALVE FUNCTION IS ALTERED.**



**WARNING:** If the valve spool binds or will not rotate freely **DISCONTINUE USE.**



**WARNING:** Do not use these valves on applications where property damage or personal injury may result. There are no check valves to prevent load dropping while changing spool positions or to prevent slow drift of a cylinder or motor.



## ! WARNING

### DO NOT GO NEAR LEAKS

- High pressure oil easily punctures skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help. Immediate surgery is required to remove oil.
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.

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FORM 21306X (Rev. 7/11)

## **INSTALLATION**

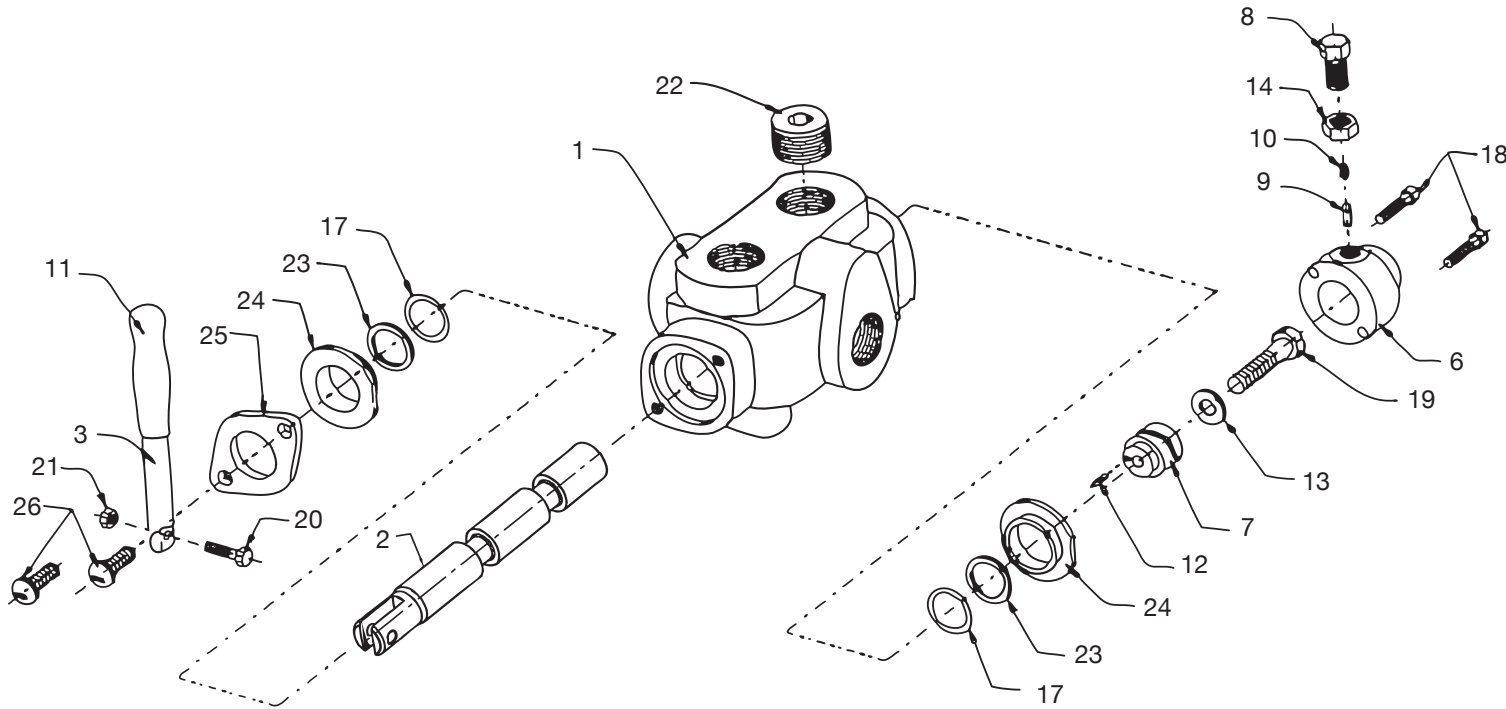


**WARNING** – Before installing product, read and understand all warnings, safety labels and instructions. Failure to do so could result in **SERIOUS INJURY!**

1. Install control lever as shown in drawing.
2. Mount valve using 3/8”-16NC tapped holes in the base of valve. **CAUTION:** Mounting valve to uneven mounting plate may cause the valve body to distort and the valve spool to bind. Move the control lever during the tightening procedure to assure that the valve spool does not lock or bind as a result of the tightening. Exerting heavy pressure on the control lever should be avoided as it may cause valve damage. **IF THE VALVE SPOOL BINDS IN ANY WAY, DISCONTINUE USE AND CALL FACTORY.**
3. Make port connections as shown in drawing. (NOTE: We do not recommend the use of Teflon tape because of potential contamination to the hydraulic system.) **CAUTION:** Excess tightening of the port fittings may cause the valve body to distort and the valve spool to bind. Move the control lever during the tightening procedure to assure the valve spool does not lock or bind as a result of the tightening. **IF THE VALVE SPOOL BINDS IN ANY WAY, DISCONTINUE USE AND CALL FACTORY.**
4. CONTROL LEVER LOCATION: The control valve is designed so that the lever may be located on the opposite end of the valve if desired. To do this, proceed as follows:
  - (a) Remove all parts from both ends of valve.
  - (b) Push valve spool out of valve body and remove seal retainer, back-up washer, and O-ring seal at each end of valve body.
  - (c) Turn valve spool end-for-end and replace in valve body.
  - (d) Install O-ring seal, back-up washer, and seal retainer in end of valve body.
  - (5) Reassemble per pictorial of valve and parts list.

## **INSTRUCTIONS FOR REPLACING THE VALVE SPOOL SEALS**

1. Remove all parts from both ends of valve.
2. Remove valve spool from valve body and remove seal retainer, back-up washer, O-ring seal at each end of valve body.
3. Replace valve spool into housing.
4. Install new O-ring seal, back-up washer, and original seal retainer in each end of valve body.
5. Reassemble per pictorial of valve and parts list.



**Model CVRC-100**  
**3-Way Valve Part Numbers**

00010217 (1/2" NPTF Ports)  
 00010218 (3/4" NPTF Ports)

**Model CVRC-200**  
**4-Way Valve Part Numbers**

00010219 (1/2" NPTF Ports)  
 00010220 (3/4" NPTF Ports)

ITEM NO.	PART NO.	NAME	QTY.
1	0C000699	Control Valve Body (1/2" NPTF Cylinder Ports).....	1
	0C000715	Control Valve Body (3/4" NPTF Cylinder Ports).....	1
2	0B003462	Valve Spool (for Model CVRC-100 & CVRC-200).....	1
3	0A002935	Control Lever.....	1
6	0A005011	Cam Cover.....	1
7	0A002856	Detent Cam.....	1
8	0A005010	Index Body.....	1
9	0A002858	Index Pin.....	1
10	0A000076	Spring.....	2
11	15725A	Grip.....	1
12	00080440	Spring, Pin.....	1
13	00081530	Lock Washer.....	1
14	00080280	Hex Jam Nut.....	1
17	00080311	O-Ring.....	2

ITEM NO.	PART NO.	NAME	QTY.
18	24002A	Hex. Soc. Cap Screw.....	2
19	00080788	Hex. Hd. Cap Screw.....	1
20	00080778	Hex. Hd. Cap Screw.....	1
21	22123A	Nut Centerlock.....	1
22	00080649	1/2" NPT Pipe Plug, Steel Hex. Countersunk (Models CVRC-100).....	1
	00080650	3/4" NPT Pipe Plug, Steel Hex. Countersunk (Models CVRC-100).....	1
23	00082131	Back-up Washer.....	2
24	0A004912	Seal Retainer.....	2
25	0A002651	Retaining Plate.....	1
26	22292A	Hex Socket Cap Screw.....	2