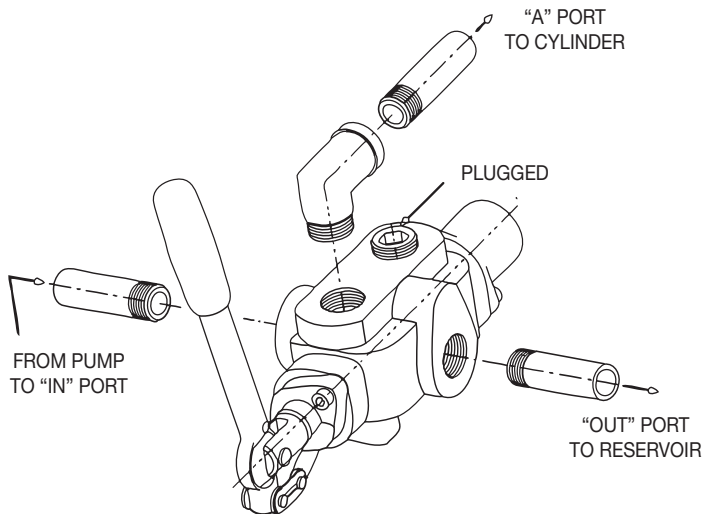
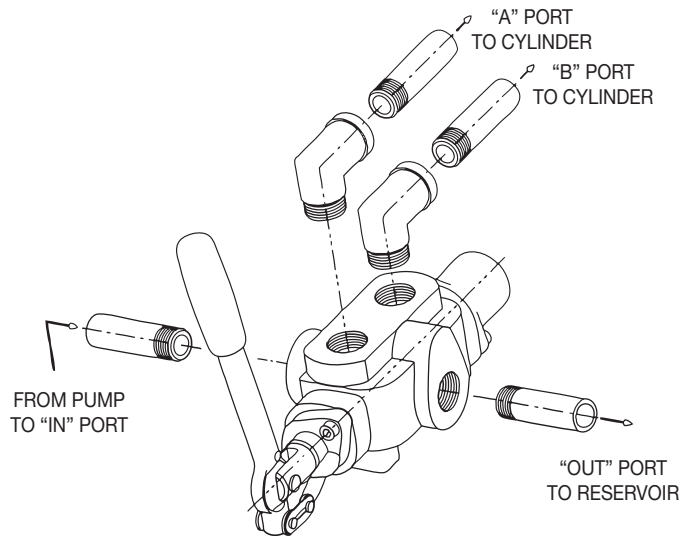


“CVAC” SERIES CLOSED-CENTER DIRECTIONAL CONTROL VALVE



MODEL CVAC-100

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



MODEL CVAC-200

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

SINGLE ACTING USE (MODEL CVAC-100) & DOUBLE ACTING USE (MODEL CVAC-200)

! 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.

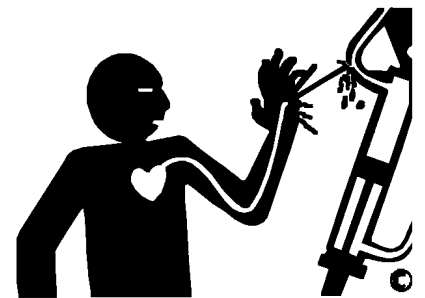
! DANGER: LOAD LIFTING – CVA valves do not contain load check valves and therefore should not be used in lifting applications unless some other means of holding the load is made where property damage or personal injury could result.

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

! WARNING: If the valve spool binds and will not become free – ***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 and relieve hydraulic pressure before loosening fittings.

“CVAC” SERIES CLOSED-CENTER DIRECTIONAL CONTROL VALVE



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 on the following sheet.
2. Mount valve using four 3/8”-16NC tapped holes in the base of valve.



WARNING: Mounting valve to uneven mounting plate may cause 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 damage. If control lever binds at both ends of movement **DISCONTINUE USE AND CONSULT 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 THE FACTORY.**
4. **VALVES CANNOT BE MOUNTED IN SERIES:** Valve models CVAC-100, CVAC-200 have all ports blocked in center position.
5. **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:
 - (1) Remove all parts from both ends of valve.
 - (2) Push valve spool out of valve body and remove seal retainer, back-up washer, and O-ring seal at each end of valve body.
 - (3) Turn valve spool end-for-end and replace in valve body.
 - (4) Install O-ring seal, back-up washer, and seal retainer in end of valve body.
 - (5) Reassemble per pictorial of valve and parts list.

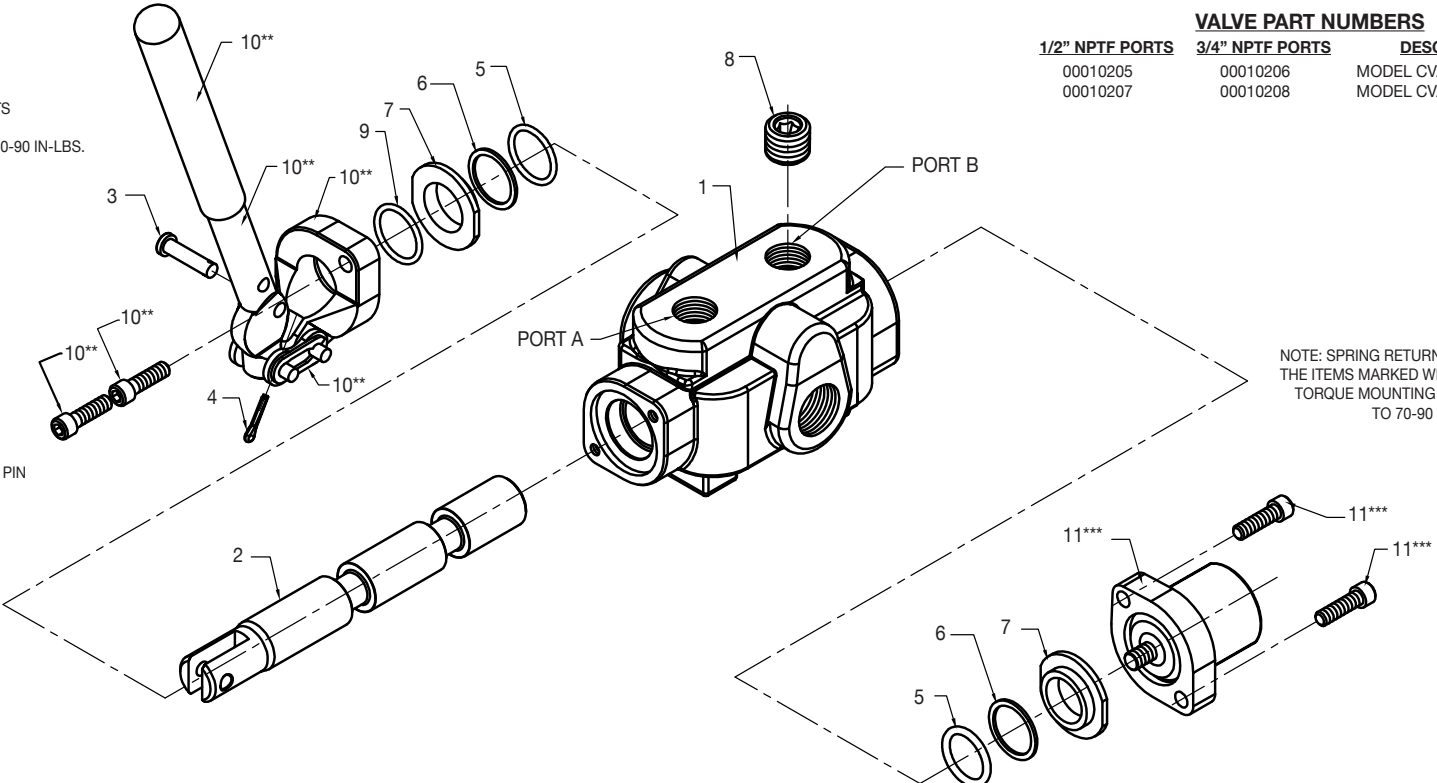
INSTRUCTIONS FOR REPLACING THE VALVE SPOOL SEALS

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.

NOTE: CONTROL LEVER ASSEMBLY CONSISTS OF THE ITEMS MARKED WITH ** TORQUE MOUNTING SCREWS (ITEM 10) TO 70-90 IN-LBS.

VALVE PART NUMBERS

1/2" NPTF PORTS	3/4" NPTF PORTS	DESCRIPTION
00010205	00010206	MODEL CVAC-100 (3-WAY)
00010207	00010208	MODEL CVAC-200 (4-WAY)



NOTE: SEPARATE EARS ON COTTER PIN (ITEM 4) AFTER INSTALLING

NOTE: SPRING RETURN KIT CONSISTS OF THE ITEMS MARKED WITH *** TORQUE MOUNTING SCREWS (ITEM 11) TO 70-90 IN-LBS.

ITEM NO.	PART NO.	NAME	QTY.
1	0C000699	CONTROL VALVE BODY (1/2" NPTF CYLINDER PORTS) NOT SOLD SEPARATELY	1
	0C000715	CONTROL VALVE BODY (3/4" NPTF CYLINDER PORTS)..... NOT SOLD SEPARATELY	1
2	0B003448	VALVE SPOOL NOT SOLD SEPARATELY	1
3	00080409	CLEVIS PIN, 1/4" DIA. x 1.00" LG.	1
4	00080414	COTTER PIN, 3/32" DIA. x 0.50 LG.	1
5	00080311	O-RING, 7/8" I.D. x 1-1/16" O.D.	2
6	00082131	BACK-UP RING, 7/8" I.D. x 1-1/16" O.D.	2
7	0A004912	SEAL RETAINER	2
8	00080649	1/2" NPTF PIPE PLUG, HEX. SOC. (CVAC-100)	1
	00080650	3/4" NPTF PIPE PLUG, HEX. SOC. (CVAC-100)	1

ITEM NO.	PART NO.	NAME	QTY.
9	00080311	O-RING 7/8" I.D. x 1-1/16" O.D. (OPTIONAL).....	1
10	0A002851	CONTROL LEVER ASSEMBLY	1
		CONSISTS OF:	
		0B005146 HANDLE	1
		0A002900 GRIP.....	1
		00082832 CHAIN LINK.....	1
		26264B CONTROL LEVER BRACKET AND SCREWS.....	1
11	36656B	SPRING RETURN KIT W/SCREWS.....	1
-	0A000487	SEAL KIT (CONTAINS ALL SEALS USED IN VALVE)	