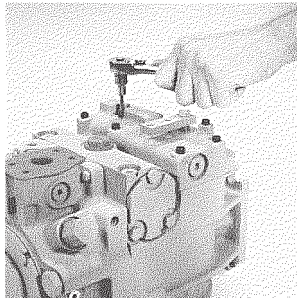
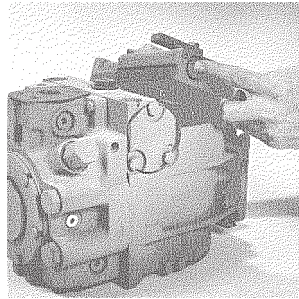


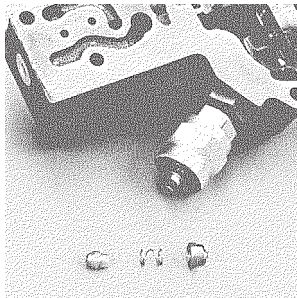
## Displacement Control Kits



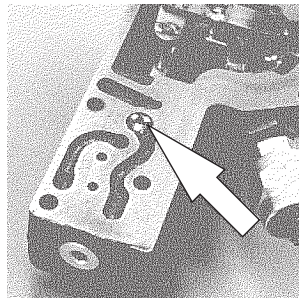
**Fig. 1 - Remove Mounting Screws**



**Fig. 2 - Remove Control**



**Fig. 3 - Orifice Check Valve Components**



**Fig. 4 - Orifice Check Valve Installed**

### Removing and Installing Displacement Control (MDC, HDC, EDC)

Thoroughly clean external surfaces of pump prior to removal of control.

Using a 5 mm internal hex wrench, remove the six (6) control mounting screws. Remove the original control and gasket from housing.

#### CAUTION

**Protect exposed surfaces and cavities from damage and foreign material.**

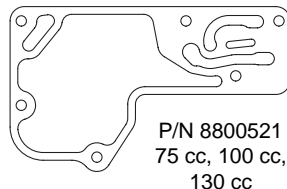
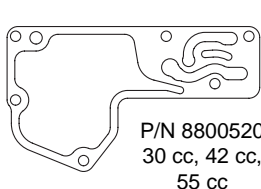
The orifice check valve is located in the inner surface of the control assembly. Remove the spring retainer and spring from the orifice check valve cavity of the original control and then remove the orifice check valve.

**NOTE:** Certain controls may have orifices installed in the servo feed and drain passages of the control. If such orifices are present, they must also be transferred to the replacement control.

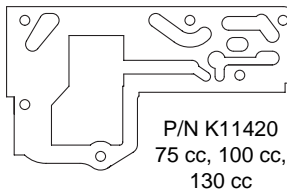
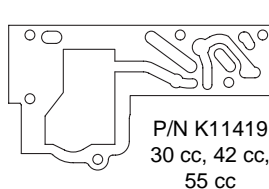
Install the orifice check valve in the cavity of the replacement control and then install the spring and spring retainer to hold the orifice check valve in position.

In preparation for installing the replacement control, place a new gasket on the housing.

Later production hydraulic displacement controls (HDCs) use a different gasket from earlier production HDCs, manual displacement controls (MDCs) and electric displacement controls (EDCs). Refer to the accompanying illustrations for identification.



**Fig. 5 - Gaskets for MDCs, EDCs, and Earlier Production HDCs**

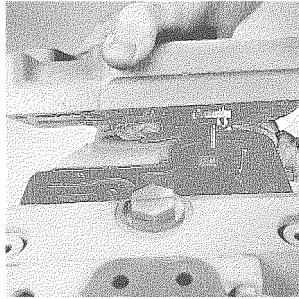


**Fig. 6 - Gaskets for Later Production HDCs**

#### WARNING

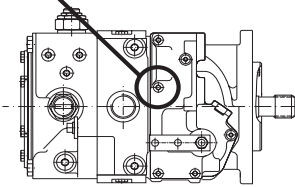
**Failure to use the appropriate gasket may result in uncontrolled pump displacement.**

Check that the control orifice check valve, spring, and retainer are in their proper position in the replacement control.

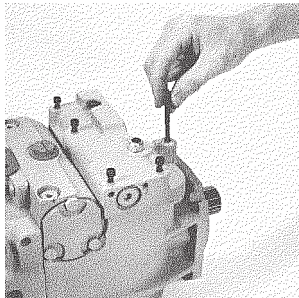


**Fig. 7 - Assemble Control to Linkage**

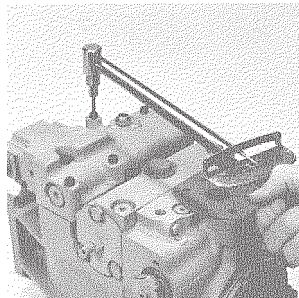
For 042 frame size pumps, the sealing washer must be installed under the head of this screw.



**Fig. 8 - Location of Sealing Washer for 042 Pumps**



**Fig. 9 - Install Control Screws**



**Fig. 10 - Torque Mounting Screws**

Engage the pin on the control linkage in the mating hole in the link attached to the swashplate. Set control into position.

Feel for pin engagement by tipping the control before installing the mounting screws. The control will not tip more than  $\pm 10^\circ$  if the pin is properly engaged.

**WARNING**

**Uncontrollable vehicle or load movement will occur upon start-up if control is installed without engagement of control feedback link pin into swashplate link.**

In case of non-engagement remove the control and repeat the above procedure.

Position the control against the pump housing, align the gasket, and install the screws.

NOTE: For 042 pumps, the rear / center control mounting screw installs into a "thru" hole, and has a sealing washer installed under its head.

Torque the screws to 12 ft.lbsf. (16 Nm).

NOTE: When reinstalling the Manual Displacement Control linkage, the control shaft nut should be torqued to 100 in.lbsf. (11.3 Nm) MAXIMUM. If a Manual Displacement Control equipped with a neutral start switch is being replaced, check the operation of the switch and adjust if necessary.

**WARNING**

**Vehicle or load movement can result from improperly adjusted control neutral. Follow Service Manual procedure for adjusting "neutral" after start-up.**

**Always disable vehicle (wheels raised off the ground, work function disconnected, etc.) to prevent movement upon start-up.**