



Stopping at Nothing to Get You Stopped

MATCO mfg
2361 S 1560 West
Woods Cross, UT 84087
801-335-0582
801-335-0581 (F)
www.matcomfg.com

IMPORTANT NOTES ON REBUILDING MATCO mfg PARK BRAKE VALVES

DO NOT attempt to remove the cam shaft before removing the internal components of the valve. The internal components are removed by carefully removing the adapter fittings at the end of the valve. The poppets, springs, and pins can then be removed. The cam shaft can then be removed by releasing the snapping and sliding the shaft out of the body. The pins (and body PVS-B body halves in the case of the PVPV-D) should be marked and returned to the same side of the valve for proper operation

INSTALLING O-RINGS ON PV CAM SHAFT

This rebuild kit may be used for the PVPV-1 or the PVPV-D. The PVPV-1 uses 3 o-rings on the cam shaft and the PVPV-D uses 4.

When rebuilding the PVPV-1 cam shaft for the PVPV-1 park brake valve, the valve body should be inspected to be sure the internal bore ports are smooth and burr free. After the o-rings have been replaced on the camshaft, they should be lubricated with petroleum grease or hydraulic fluid. The cam must be carefully installed so that the o-rings are not damaged as the o-ring pass over the cross holes in the valve body. Slow gentle pressure with some rotation will be helpful. No evidence of rubber debris is acceptable from the installation or the valve will have leakage issues. After assembly, verify the lever can be rotated 360 degrees. If not, shorten springs MSCLC-026BC-03M one coil at a time until 360 degree rotation is achieved.

When rebuilding the PVPV-D cam shaft, the installation is done so that the o-rings do not pass over the cross holes in the body and greatly reduces the chance for o-ring damage during rebuild. With the cam removed from the body and stripped of the old o-rings, start by removing the lever from the cam. Note the orientation of the cam alignment reference mark with the lever when removing. With the lever removed, install the first o-ring in the slot closest to the lever boss and insert into the proper body half. The cam can be pushed through the body enough to expose the next o-ring slot on the cam but not so far as to cause the installed o-ring to travel past the bore hole in the body. Install the second and third o-rings. The second body half can now be slid on to the shaft in a similar manor as done with the first. This will allow the last o-ring slot to be exposed while not causing any of the installed o-ring to travel past the ports in the bodies. This procedure is very important to prevent damage to the o-rings and the valve has been specially designed to take advantage of this method. The snap ring may now be installed on the shaft. Noting the proper lever orientation as recorded during disassembly, the lever can be reinstalled and the screw installed with 30-40 in-lbs of torque. When installing the adapter fitting back in the valve bodies, each body half should be supported with a 3/4 inch wrench. **DO NOT** allow the torque from tightening the adapter fitting to be reacted by the cam shaft.

When new or rebuilt valves are completed at the factory, the valve function is confirmed by hydraulic test. The release position of the valve is also verified (both side release at the same approximate lever position).

The inlet and outlet threads on the valve are 1/8 NPT. A suitable thread sealant, like LOCTITE 567 must be used to issue leak free operation at the attach fittings.