



Check Valve Repair Instructions Pneumatic Chucks Models BP & BT

The two check valve assemblies in the models BP & BT chucks require no routine maintenance; however, in normal operating conditions they do require an annual rebuild primarily to replace the flat rubber seal. Depending on the condition of the compressed air, the presence of moisture, certain compressor lubricating oils and contaminants, more frequent rebuild may be required.

The rebuild procedure should take only 30 minutes per chuck. A photograph of the rebuild kit (PN 12300110 for one valve), extraction tool (PN 12300106), and a crosssection drawing of the valve assembly are shown at the bottom of the next page.

- 1 Remove the two valve assemblies from the chuck using an 8mm allen wrench and screwdriver. If the cap unscrews from the valve body see step 1a.
 - a) If the cap has unscrewed from the valve body and the body is down inside the chuck, use the valve body extraction tool included with the seal kit. The tool is approx. 3.5” long and has a threaded end to screw into the body. Screw this tool into the body and pull the valve body out.
- 2 After removing both valves from the chuck, remove the four “O” rings from the OD of the valve body and discard. If the cap did not unscrew from the body go to step 2a.
 - a) The factory normally secures the cap to the body with a drop or two of Loctite™ blue thread locker. This allows the cap and body to be removed from the chuck as one assembly. To remove the cap from the body you will need two 2”x4” wood blocks about 6” long and a piece of 100-150 grit emery cloth. Wrap the emery cloth around the body, grit side in against the valve and clamp in a bench vise between the two wood blocks. Don’t be afraid to clamp down to the point of deforming the wood blocks. You should be able to unscrew the cap from the body with the 8mm allen wrench and a 12” cheater bar. A sharp hammer blow on the wrench should break the Loctite™ loose. If the body rotates in the blocks, try clamping a little harder. The pistons inside the body will prevent the body from permanently distorting. In extreme cases you



might need to heat the valve cap with a propane torch to break the Loctite™.

- 3 Remove the spring and small piston from the cap end of the body. If the piston is tight tap the valve body on a block of wood.
- 4 Remove the snap ring from the opposite end of the body. Tap the body on a wooden block to remove the plug in the end.
- 5 Remove the next snap ring and repeat step 4 to remove the piston from that end.
- 6 Discard all “O” rings, springs, and the piston with the flat seal. The kit includes a new piston with flat seal bonded to the end. Do not attempt to remove the flat seal.
- 7 Reverse the procedure to assemble the valve with the new “O” rings, spring, etc. See diagram below for proper orientation of the components. A little Parker lubricant (PN 11139000) on all O-rings is recommended to insure proper assembly and operation.
- 8 Be sure both snap rings are properly seated in their groove.
- 9 With all internal parts in place, screw the cap into the body. (If you have purchased the extraction tool, we recommend not re-Loctiting the threads.) Be sure the end of the spring is in the small relief in the bore of the cap. You may have to place the valve back in the vise with the wooden blocks to screw the cap tight.
- 10 Install the four “O” rings on the OD of the body, lubricate and install the valve assemblies back into the chuck.
- 11 Pressure test chuck following the instructions in the ATS manual.

