



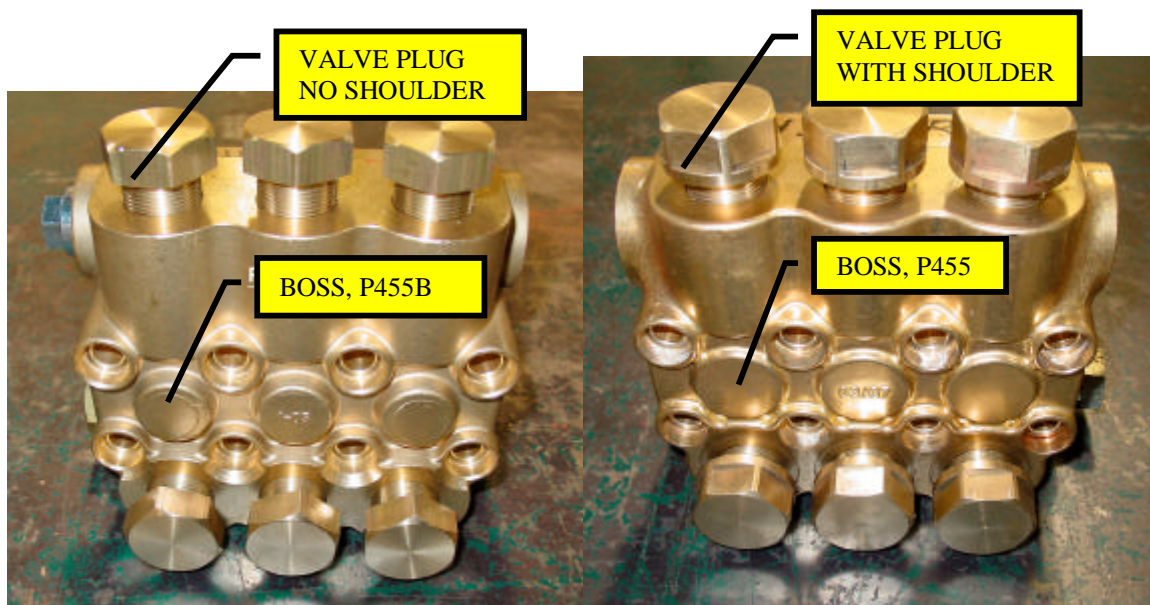
Technical Bulletin 2009-01

DATE: July 21, 2009

RE: *P455 Changes and P400 Series Oil Seal Design Changes*

Please be advised that the following is a list of changes from the old P455 pump and the new P455B pump, as well as, changes to the oil seal design of the P400 series pumps. These changes are important for Giant's Staff and Customers to understand in order to correctly diagnose and service these very similar pumps.

First, there are two physical differences between the two pumps. Those differences are the three bosses on the front of the manifold and the shape of the valve plugs. You can see from the attached pictures below that the bosses on the new P455B pump are smaller and protrude outward more than the old P455 pump. Also, both the inlet and discharge valve plugs on the new P455B pump do not have a shoulder below the hex head, as the old P455 pumps did. These changes may have started as early as April of 2008.



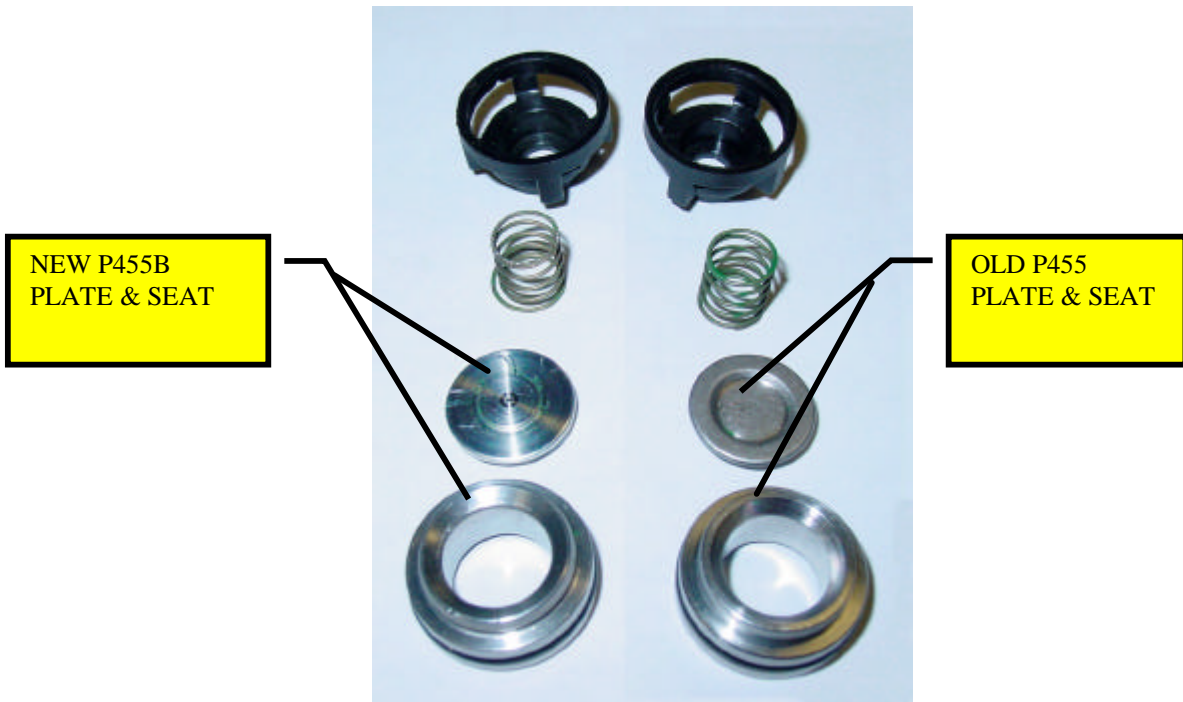
A few of the changes that are not noticeable exist inside the pump. One in particular is the difference between the valve assemblies. The cage and the spring are the same for both pumps but, as



Performance Under Pressure

900 N. Westwood Ave.; Toledo, Ohio 43607; (419) 531-4600; Fax: (419) 531-6836; www.giantpumps.com

you can see from the pictures below, the seat and plate for the new P455B (left side of picture) are flatter and wider than the old P455 (right side of picture), which are deeper and narrower.



Currently, the old valve assembly will work in the new pump, and visa versa. Soon, the old valve assembly (06810) will no longer be available and only the new valve assembly (05543) will be available for both pumps. These changes began in April of 2008 but there still may be many pumps with the old valve assembly.

Another important point concerning the valve assemblies is that the valve seats and plates cannot be used for the opposing assembly. Meaning, a P455B plate will not seal on a P455 seat. When customers order either the plate or the seat make sure they receive the one that works for their particular pump. In some cases, it may be easier to send them new valve kits if they absolutely cannot tell you which pump they have (P455 or P455B).

Other notable changes that have occurred throughout the P400 series pumps are the changes to the size of oil seals used and the seal case design. The P470 is the only pump that still uses the old oil



Performance Under Pressure

seal, seal adapter, and seal case assembly. The oil seal (05444) in the new P455B pump is larger and fit into the crankcase above the plunger bore. The new seal case (05534), presses against the oil seal to help hold the oil seal in. The oil seal (08366) for the old P455 is smaller and fits into an oil seal adapter (06772), which fits into a seal case (06443). This assembly then fits into the crankcase above the plunger bore.



All of the previously mentioned changes began in April of 2008. They are not noticeable from the outside of the pump but will make a significant difference when ordering any of the above parts for replacement.

If anybody has questions about the above information feel free to contact me at 419-531-4600 ext. 245.

Sincerely,

Daniel Losek
Engineer



Performance Under Pressure