

PUMP Brief

Hydraulic Pump Division

PC-0026

P2/P3-145 15 Design

The P2/P3-145 pump has been upgraded for improved reliability. The servo cover to housing interface, link piston to servo piston interface, and the P3 impeller retention method have been modified to increase the life of our pumps. Since the design

number is not included in the pump ordering code, there are no order code changes for the complete pump.

Current orders are being shipped in the -15 design. The design number is identified on the nameplate. There are no pricing changes associated with this design upgrade.

P2-145-0212-01N or P2-145-0212-01V -15 design servo cover and volume stop parts will not be able to be used on a -13 design pump. Once -13 design stock is depleted, these parts will no longer be available.

Link Piston to Servo Piston Engagement

The link piston to servo piston engagement has been changed from a coarse thread to a fine thread engagement. The fine thread has more threads per inch giving it a larger holding force. To service, both the servo piston and link piston need to be of the same design. Service kits are available with both parts included.

Model code example: P2145R00C1C32 TC 20N70S1A1U Note that when servicing the link piston or servo piston of a P2/P3-145 pump that has a torque control, the user needs to know

Servo Cover to Housing Interface

The servo cover is the part of the pump where the displacement adjustment is located (See Figure 1). The O-ring groove was relocated to the servo cover from its current location on the housing (See Figure 2). This sealing design is more robust than the current design.

Service Information

-15 design servo cover and volume screw will only be available in a max volume kit.

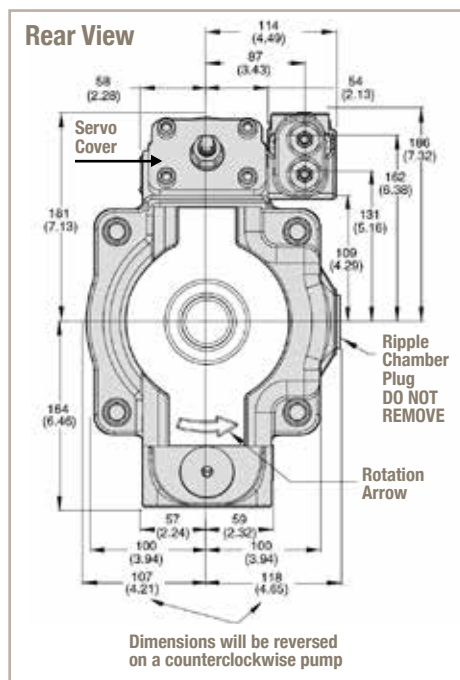


Figure 1

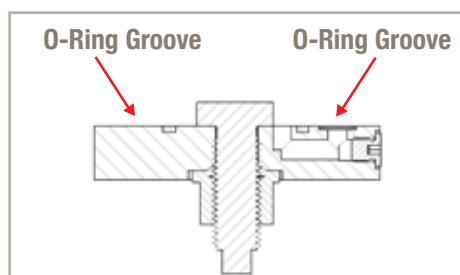
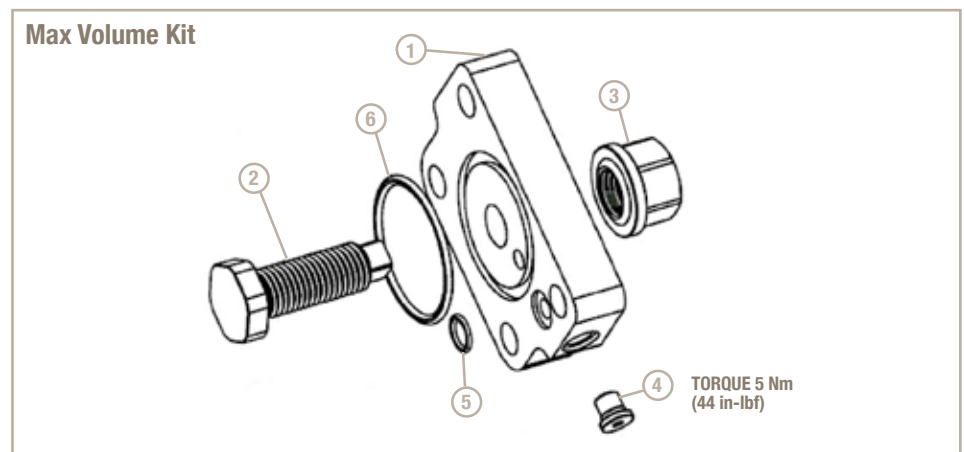


Figure 2



the torque control adjustment range identified by the pump model code to select the proper service kit. If the pump has a TC, TD, TF, or TM control, then the kit is P-N P2-145-0229-20. For any other control code, the kit to select is P2-145-0229-19.

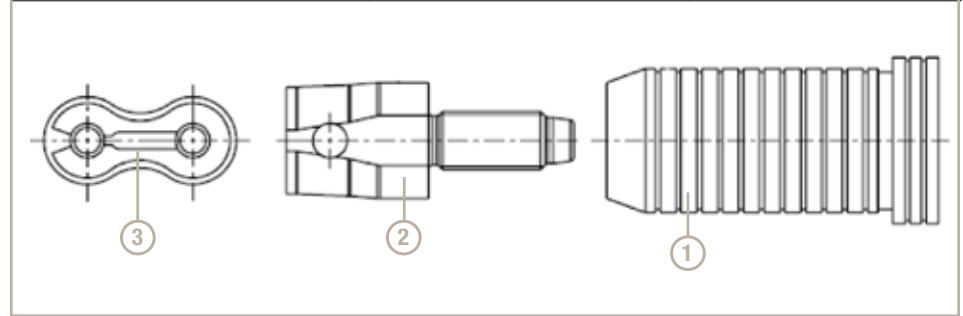
P3-145 Barrel Impeller Retention

The P3-145 impeller to barrel retention method has been upgraded to provide better reliability (See Figure 3). There are screws that hold the impeller into position.

Service Information

When servicing the barrel of an earlier design P3-145, the complete barrel S/A needs to be ordered because the barrel and impeller must be changed together. The rotating group and barrel S/A part numbers are shown in chart.

Pump Control Code	-15 Design Service Kit	Description
See Below	Servo/Link Piston Kit	
PA, RA, LA, LB, TA, TB, TE, TL	P2-145-0229-19	Link Piston, 20% - 60% Adjustment
TC, TD, TF, TM	P2-145-0229-20	Link Piston, 40% - 90% Adjustment



-13 design parts are no longer available. Use service kit for -15 design for previous designs

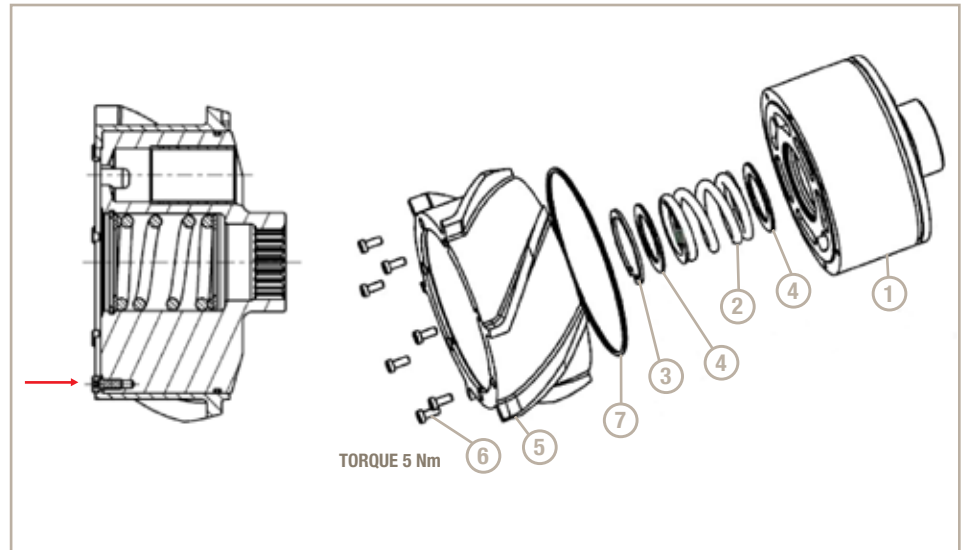


Figure 3

Model Code	Barrel S/A	Rotating Group
P2145 CW	P2-145-0222-08	P2-145-0227-07
P2145 CCW	P2-145-0222-08	P2-145-0227-08
P3145 CW	P2-145-0222-06	P2-145-0227-09
P3145 CCW	P2-145-0222-07	P2-145-0227-10

New -15 design service drawings P2-145-0411 (P2) and P2-145-0412 (P3) are available online at www.phpump.com

