

Penguin Pumps have make two design change for the P Series pumps to offer increased value for the customer.

A new impeller sleeve o-ring (item 8V) has been added for all pumps ½ HP and larger. The purpose is to seal the threaded area of the impeller to the motor shaft. Replacement impeller includes the o-ring. No interchangeability issues.

Penguin Pumps has modified the P Series vertical immersion pump to incorporate a new impeller attachment design. This new design uses a secondary bolt and nut to hold the impeller onto the shaft. The design will prevent the impeller from unthreading from the shaft in the case of the motor being run with the wrong rotation.

Background – Penguin P Series impellers are threaded on to the end of the motor’s shaft. The impeller thread would tighten if the motor were rotated in the correct direction – however, if the motor were run in reverse rotation, the impeller would unthread and probably run into the suction head causing damage. Warning labels on the motor alerting to this problem were not followed at all times causing broken parts and upset customers. Reverse rotation of the motor is of issue with three phase motors.

This new design will be indicated with the letter K on the end of the material code letter. The following is a list of pumps that will be affected:

P-1/2AK-HP	P-1/2BK-HP	P-1/2CK-HP
P-3/4AK-HP	P-3/4BK-HP	P-3/4CK-HP
P-1AK	P-1BK	P-1CK
P-1 1/2AK	P-1 1/2BK	P-1 1/2CK
P-2AK	P-2BK	P-2CK

The smaller pumps with the barrel impeller have not been a damage issue with reverse rotation and will not be changed at this time. Pumps of this size with titanium shaft options will not be changed at this time. IE P-1AKT is not available.

What is being changed – The motor’s shaft now has an internal thread. The impeller nut with SS stud will be installed after the impeller is installed. The nut will be sealed to the impeller with an o-ring. The o-ring will be the same elastomers material as the head o-ring. CPVC nuts will be used with CPVC impellers with the standard o-ring being EPDM. Polypro and PVDF impellers will use a PVDF nut with Viton being the standard o-ring.

Interchangeability – The new “K” design can only be used if the motor has the internal thread. Most motor’s built by the manufacturer after July 2007 would incorporate the internal thread. The non-K design impeller will interchange with the current or the new K design (however will continue to unthread during reverse rotation). All other body parts remain unchanged.

Impeller part numbers ending with the letters AK, BK or CK will indicate the new design.

The impeller nut will include the o-ring. The part numbers for the impeller nut would be as follows:

P-100-14AKE	P-100-14AKV
P-100-14CKE	P-100-14CKV

Starting in March, our inventory will start reflecting this improved “K” design. Pumps are immediately available from the factory today with this new design. We do ask that you indicate your desire for this new design by adding the letter K to the end of the model number as we have indicated above.

Bulletins and instruction manuals are being updated to reflect this new design.

