

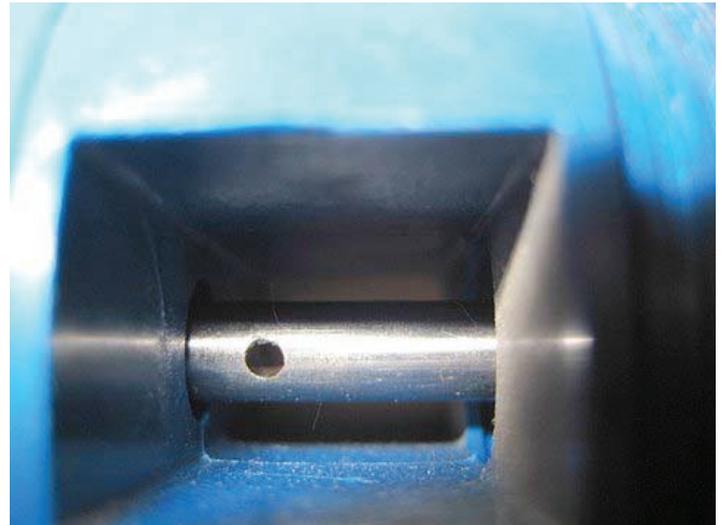


PFM/PFP/PFV Vapor Seal and Bearing Replacement Instructions

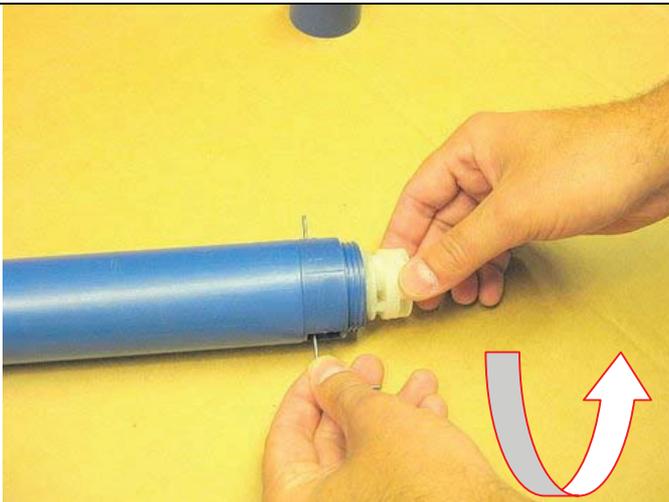
Disassembling the pump



Remove the impeller housing cover by turning it clockwise.



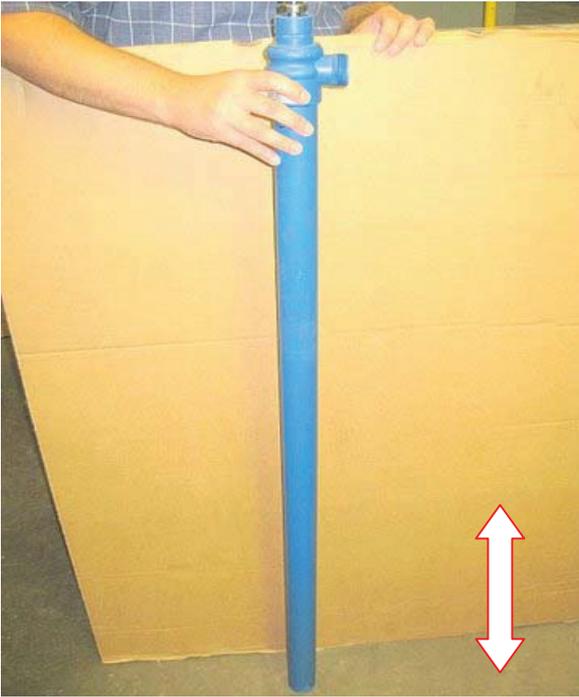
Spin the impeller until the hole in the bottom of shaft can be seen through the square slot in the impeller housing.



Insert a 3/32" pin into the hole in the shaft.
Holding the pin, remove the impeller from the shaft by turning counterclockwise.



Once the impeller is removed, the bottom portion of the shaft will be exposed.



Lightly tap the bottom of the shaft on the ground.

This will partially push the bearing from the pump head.

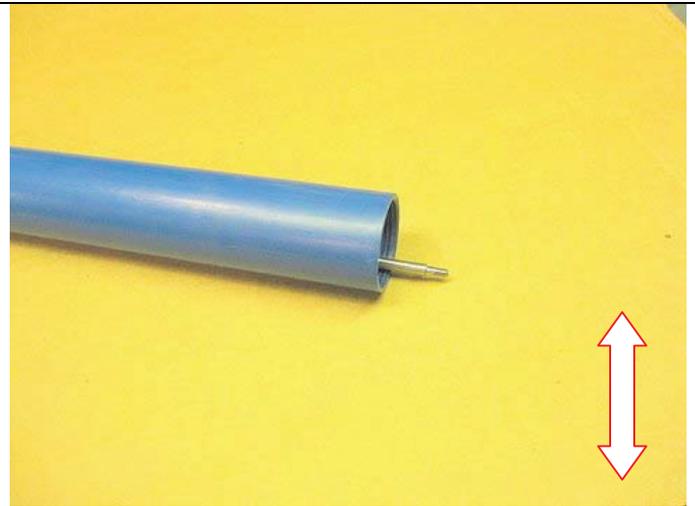


Picture showing bearing assembly partially removed from pump head.



Remove the impeller housing by turning it clockwise.

The lower inner tube and center bearing will likely come out when removing housing.



Again, lightly tap the bottom of the shaft on the ground the completely remove the bearing assembly from the pump head.



Picture illustrating bearing completely removed from pump head.



Picture illustrating shaft with bearing assembly, impeller housing with lower inner tube and center bearing removed from pump tube.



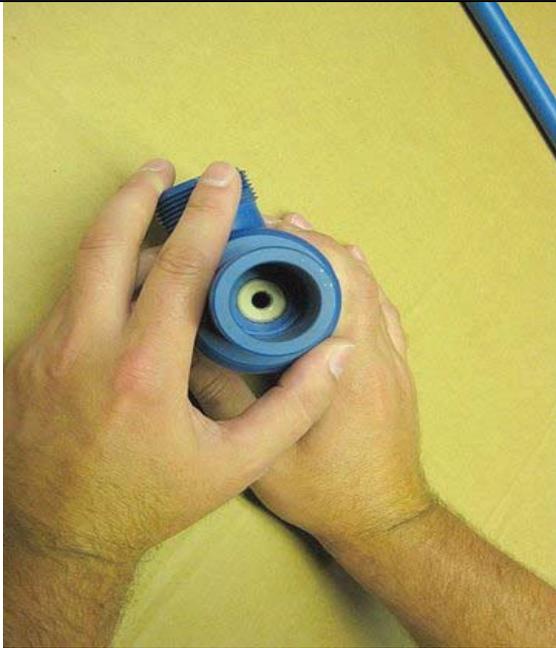
Place pump head in a vise and remove the intake tube by unthreading clockwise.

Remove upper inner tube from head.



Picture illustrates pump completely disassembled.

Replacing vapor seal



Top view of pump head.
Vapor seal seen in center.



Bottom view of pump head.

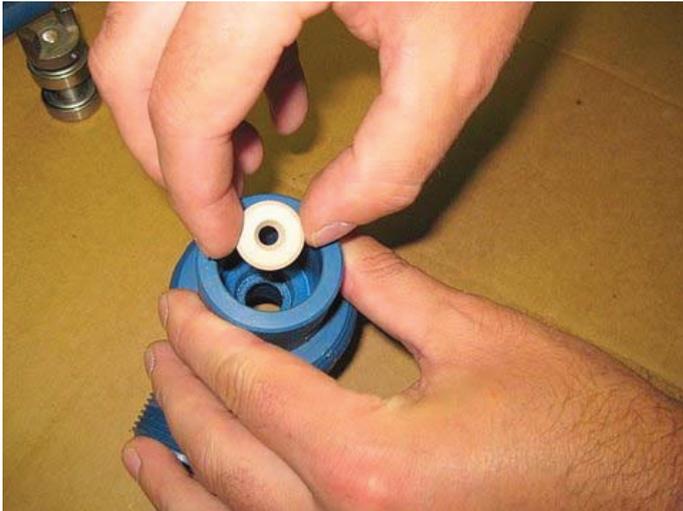
Using any type of rod (0.375" maximum diameter),
tap old vapor seal out of seat from bottom of head.



Top view of new seal (tapered side)



Bottom view (grooved side)

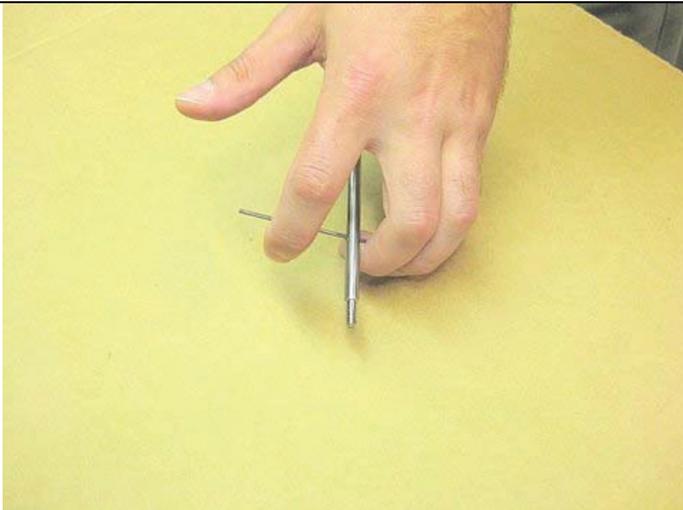


Install new vapor seal with tapered side up.

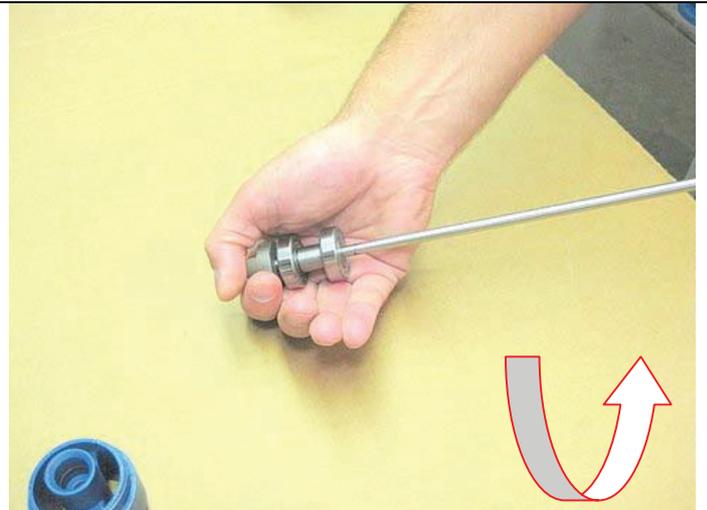


Using no larger than a 3/4" diameter rod, tap seal until fully seated in counter bore.

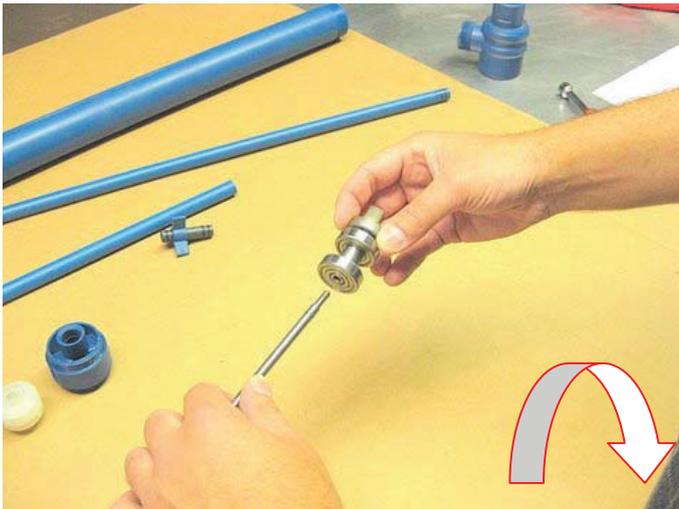
Replacing bearing assembly



Insert a 3/32" pin into the hole in the bottom of shaft.



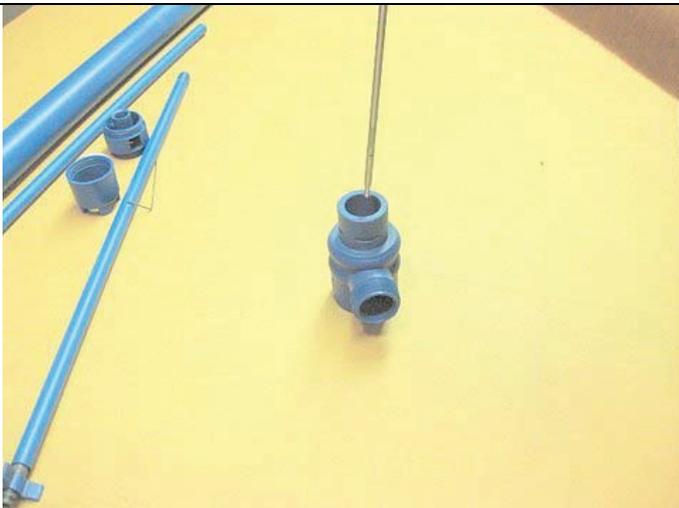
While holding bearing assembly with one hand and the other end with pin, unscrew shaft from bearing assembly (turn counterclockwise).



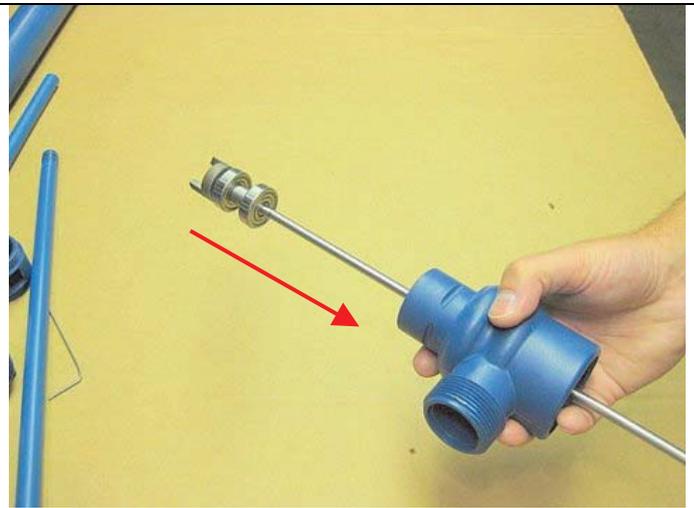
Simply thread shaft onto new bearing assembly (turn clockwise).

Note: Hole in shaft should be opposite from bearing.

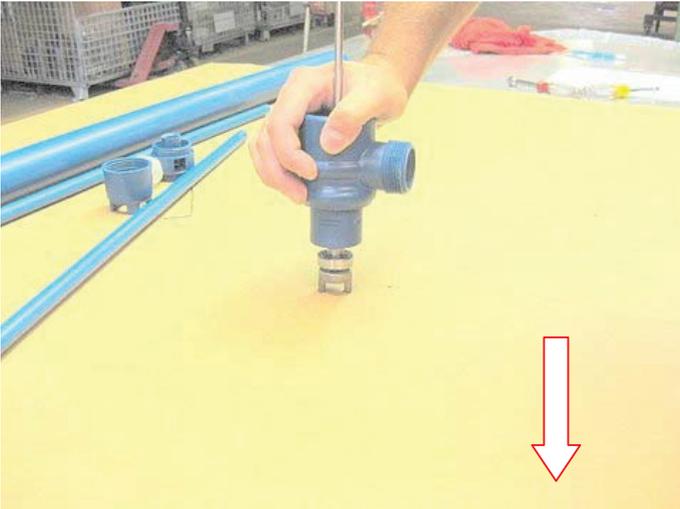
Reassembling the pump



Shaft/bearing assembly must be carefully inserted through the center of the vapor seal.



Carefully pull the shaft straight through the vapor seal until the bearings begin to enter the pump head.

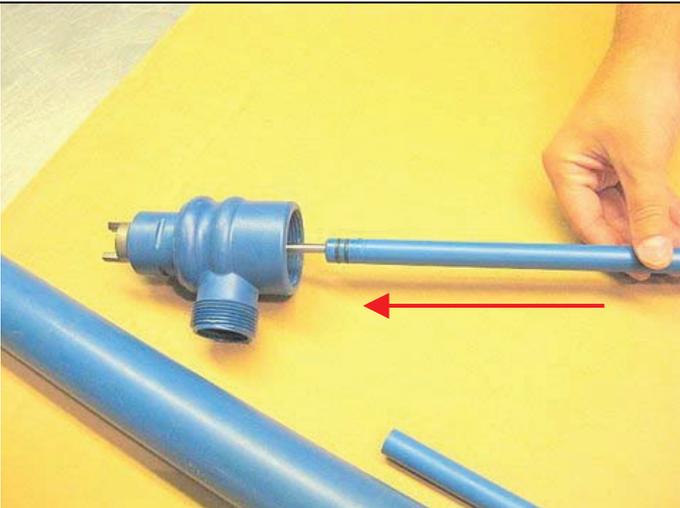


Carefully turn the shaft and head upside down and press the bearing assembly into the head.

This should press in by hand rather easily.



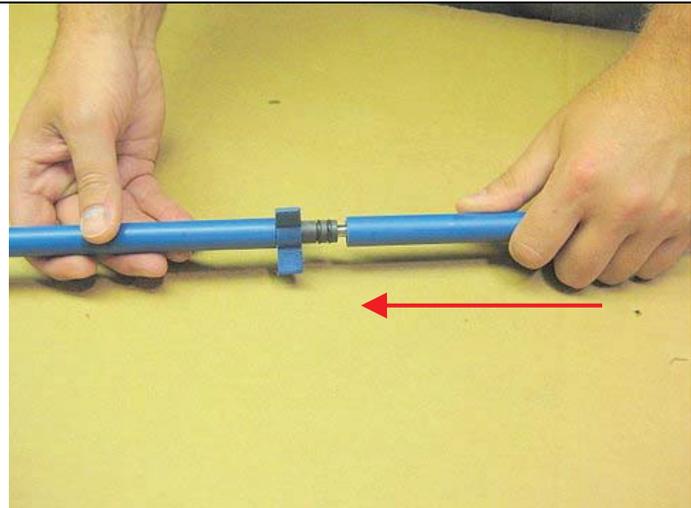
! Special attention should be given not to bend the shaft.



Using a lubricant (such as Vaseline) lubricate the o-rings on the inner upper tube and center bearing.

Slide the upper inner tube up the shaft and press the tube into the head.

You should feel the two o-rings snap into place.

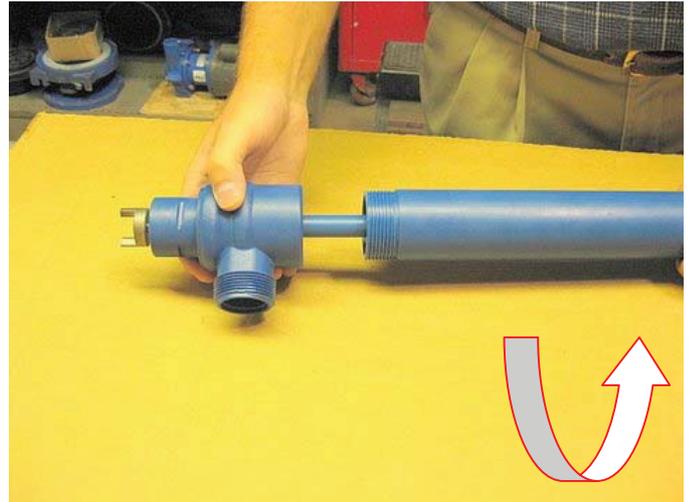


Slide the lower inner tube up the shaft and press onto the adjacent side of the center bearing.

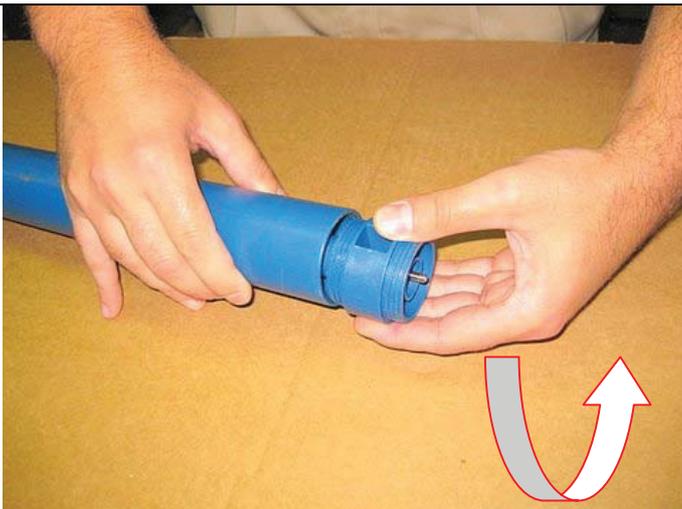


Insert outer tube over shaft assembly.

The outer tube will want to "hang up" on the guide bearing.



Slide outer tube all the way to the head and tighten (turn counterclockwise)



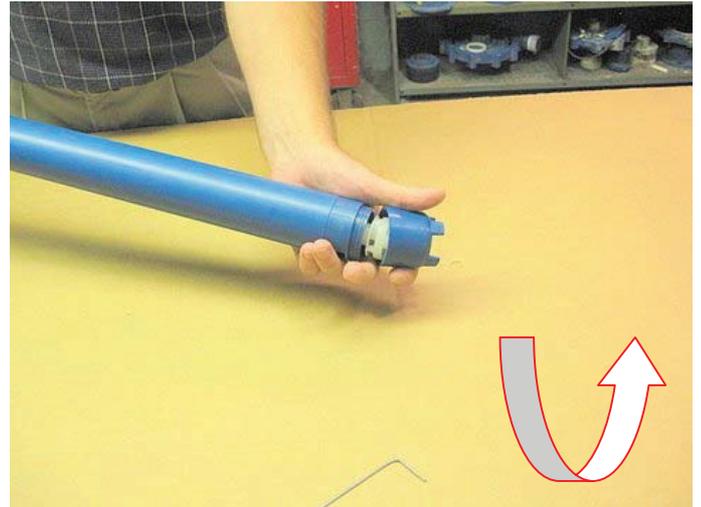
Reinstall the impeller housing cover by turning counterclockwise



To install the impeller you will need to hold the pumps coupling...



and with your other hand screw the impeller onto the pumps shaft (turn clockwise).



Install impeller housing cover (turn counterclockwise).

Pump coupling/shaft should turn freely.

Questions? Contact FTI Technical Service department at 1-800-888-3743 or by e-mail at techservice@finishthompson.com



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