



## **BELT SELECTION FOR FLO KING BXL2500 AND BXL5000: OLD-STYLE OR NEW-STYLE BELTS?**

To provide longer-lasting service on the BXL2500 and BXL5000, there was a change from aluminum to stainless steel pulleys in December 2002. When the pulleys were changed, the belts were also changed. Therefore, old-style units use old-style belts and new-style units use new-style belts. These belts are not interchangeable.

### **Old-Style Belt for BXL2500 and BXL5000**

There are two ways to determine whether your pump needs an old-style belt:

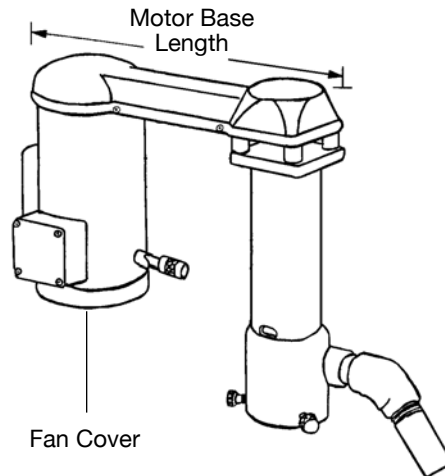
1. Check Flo King serial number on silver sticker on motor. If serial number consists of all numbers (no letters), this is an old-style unit and needs an old-style belt.
2. If Fan Cover on motor is painted blue (not black), unit needs old-style belt.

### **New-Style Belt for BXL2500**

1. A serial number that begins with the letter "L" signifies a BXL2500 with new-style belt.
2. A Fan Cover painted black (rather than blue) also signifies need for new-style belt.
3. Also check length of BXL2500 Motor Base. Standard length is 12" and requires the 12" belt. The Long Motor Base is 15" and needs 15" belt.

### **New-Style Belt for BXL5000**

1. A serial number that begins with the letter "X" signifies a BXL5000 with new-style belt.
2. A Fan Cover painted black (rather than blue) also indicates need for new-style belt.





## BELT REPLACEMENT FOR THE FLO KING LOW-PROFILE BXL2500 & BXL5000

For Visual Guidance, refer to Pages 3-5 and to  
Exploded-View Illustrations (BXL2500, page 9, and BXL5000, page 10)

**Figure 1: Removal of Swiveling Impeller Housing.** Use needlenose pliers to pull and remove white Teflon strap from Impeller Housing. Next, loosen Swivel Housing Lock Screw and twist off Impeller Housing. (*Note: It may be necessary to gently strike Impeller Housing with rubber mallet if solution chemistry has caused Impeller Housing to stick to Pump Body.*)

**Removal of Belt Drive Cover (see Exploded View Illustration).** Loosen ten 8-32 screws on top of Belt Drive Cover. Next, use flathead screwdriver or other suitable tool to break entire silicone seal between underside of Belt Drive Cover and Motor Base. Gently remove Belt Drive Cover. (*Caution: Belt Drive Cover is made of flexible plastic; remove carefully to avoid breakage.*)

**Figure 2: Removal of Impeller.** Use flathead screwdriver or other suitable tool to hold Shaft Pulley firmly in place while using hand to unscrew Impeller in counterclockwise direction.

**Figure 3: Labeling of Spacers & Pump Base.** *Caution: Each spacer must be reinstalled in the same location to prevent misalignment of the shaft during reassembly.* To remember the four Spacer locations, use a felt-tip pen to number each Spacer and corresponding Pump Base Location 1, 2, 3 and 4.

**Figure 4: Removal of Pump Body/Pump Base Assembly.** Remove Pump Body/Pump Base Hardware, which consists of four 1/4-20 flathead stainless-steel screws, 1-3/4" long. Then remove Pump Body/Pump Base assembly.

**Figures 5 and 6: Removal of Heel/Shaft Assembly.** Use 5/32" Allen wrench to remove three 10-24 screws on Heel. Then gently strike underside of Heel with rubber mallet to break caulk seal. Remove Heel/Shaft assembly.

**Figure 7: Loosen Heel Screw.** Loosen Heel screw with 5/32" Allen wrench.

**Figures 8, 9 and 10: Removal of Shaft Bearing Assembly from Heel:** A Machine Press (also called a Shop Press) is strongly recommended for removal of the Shaft Bearing Assembly and also to reinsert the Shaft Bearing Assembly into the Heel. Before using Machine Press, make sure to protect Shaft Threads from damage using a 16-mm socket with 3/8-inch drive or something similar (see Fig. 9).

**Figure 11: Insert New Belt onto Heel:** Make sure Belt is fully seated in groove inside Heel.

**Figures 12-13. Install Shaft Bearing Assembly:** Use Machine Press to install Shaft Bearing Assembly into Heel. Then tighten Heel Screw (Fig. 7) with 5/32" Allen wrench).



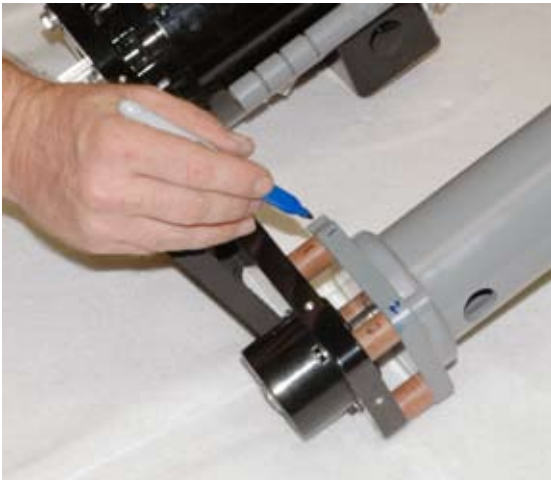
## BELT REPLACEMENT (continued)



1. Remove Teflon Strap from Impeller Housing.



2. Remove Impeller.



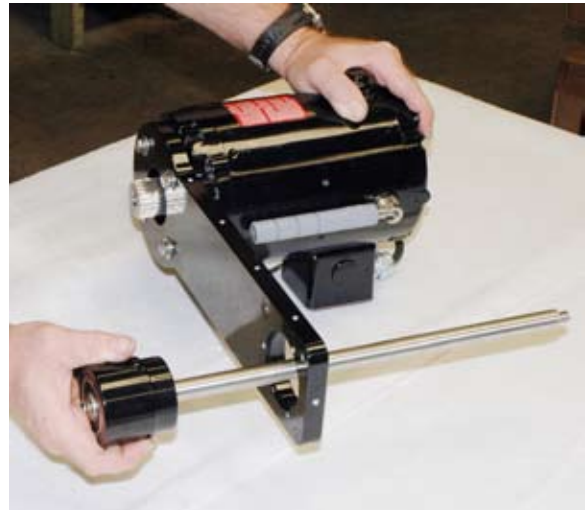
3. Mark location of Spacers on Pump Base.



4. Remove Pump Body/Pump Base assembly.



5. (Above) Use mallet to break seal around Heel.



6. (Right) Remove Shaft Bearing Assembly from Heel.



## BELT REPLACEMENT (continued)



7. Loosen Heel screw with 5/32" Allen wrench.

8. Before using a machine press to remove Shaft Bearing Assembly from Heel, make sure to protect threads on Shaft using a 16-mm socket with 3/8" drive, or something similar.



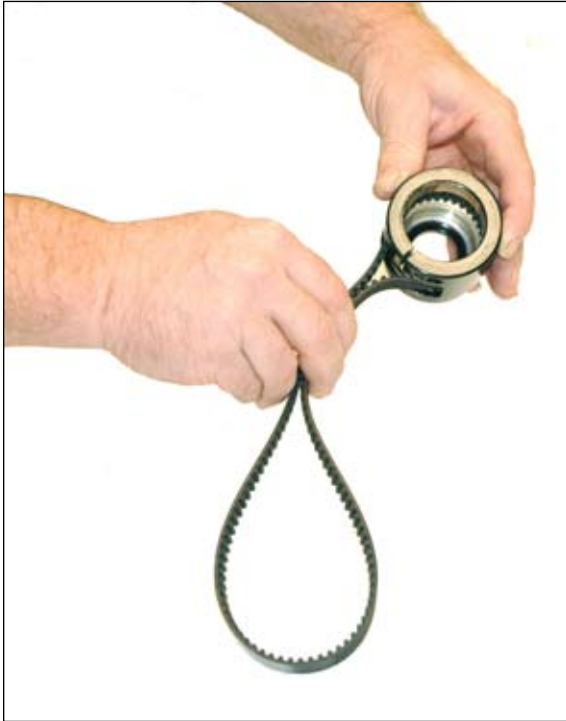
9. Remove Shaft Bearing Assembly from Heel with machine press.



10. View of Shaft Bearing Assembly separated from Heel.



## BELT REPLACEMENT (continued)



11. Insert new Belt into Heel. Make sure Belt is fully seated in groove inside Heel.



12. Insert Shaft Bearing Assembly into Heel.



13. Use Machine Press to complete installation of Shaft Bearing Assembly into Heel.



## REASSEMBLY OF BXL2500 & BXL5000 AFTER BELT REPLACEMENT

For Visual Guidance, refer to Pages 7-8 and  
To Exploded-View Illustrations ( Pages 9 and 10).

### Remove Fan Cover and Fan Blade from Motor.

**Figure 14: Heel, Shaft & Belt Assembly.** This is the replacement assembly that you will install.

**Figure 15: Alignment of Groove on Heel.** Make sure that groove (split) on Heel is aligned with center screw on Motor Base assembly, as shown. Failure to do so will result in belt misalignment and rubbing of belt on side wall of Heel. Then tighten Heel Screw (see Fig. 7) with 5/32" Allen wrench.

**Figure 16: Install Belt on Pulley** Stretch Belt over one side of Motor Pulley. Slowly turn Motor Pulley so that teeth of Belt engage onto Motor Pulley one at a time. Belt should fit over pulleys with moderate tension.

**Figure 17: Sealing & Installation of Belt Drive Cover.** Apply 100% silicone sealant to underside area of Belt Drive Cover that, when installed, will contact Motor Base. Press Belt Drive Cover into place while silicone is still wet. Then install 8-32 screws to secure Belt Drive Cover to Motor Base.

**Figure 18: Seal Heel.** Apply 100% silicone sealant to underside of Heel where Heel meets Motor Base assembly. Use finger to smooth silicone sealant if necessary.

**Figure 19: Install Pump Body/Pump Base Assembly.** First, make sure Spacers are in correct position by matching numbers on Spacers with corresponding numbers on Pump Base. (You should have made these numbers using a felt-tip pen during the Disassembly Stage—see Page 3, Fig. 3). Now install Pump Body/Pump Base assembly (see Page 3, Fig. 4). Tighten four 1/4-20 flathead stainless-steel screws to secure Pump Base and Spacers to Motor Base.

**Figure 20: Install Super Slinger & Impeller Washer.** Press cone-shaped Super Slinger onto Shaft threads. Next, push Impeller Washer over Shaft threads. Impeller Washer fits tightly.

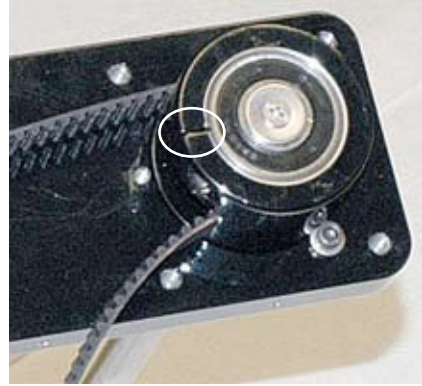
**Figure 21: Install Impeller.** While holding Fan Blade end of Shaft with vice grips, turn Impeller clockwise by hand until snug (do not use tools to tighten Impeller). Next, reinstall Swiveling Impeller Housing (see Page 3, Figure 1) and secure by re-inserting Teflon Strap.



## REASSEMBLY (continued)



14. Heel/Shaft/Belt assembly.\*



15. Groove (circled) must point toward center screw.



16. Slowly "walk" belt onto motor pulley.



17. Apply silicone sealant to Belt Drive Cover.



18. Apply silicone sealant around underside of Heel.



19. Make sure Spacers are in correct numerical position (refer to Fig. 3), then install Pump Body/ Pump Base assembly.

\* To order this assembly, note that the following parts are required: Heel; Shaft with Shaft Pulley & Bearings; Belt; Teflon Super Slinger; and Teflon Impeller Washer.



## REASSEMBLY (continued)



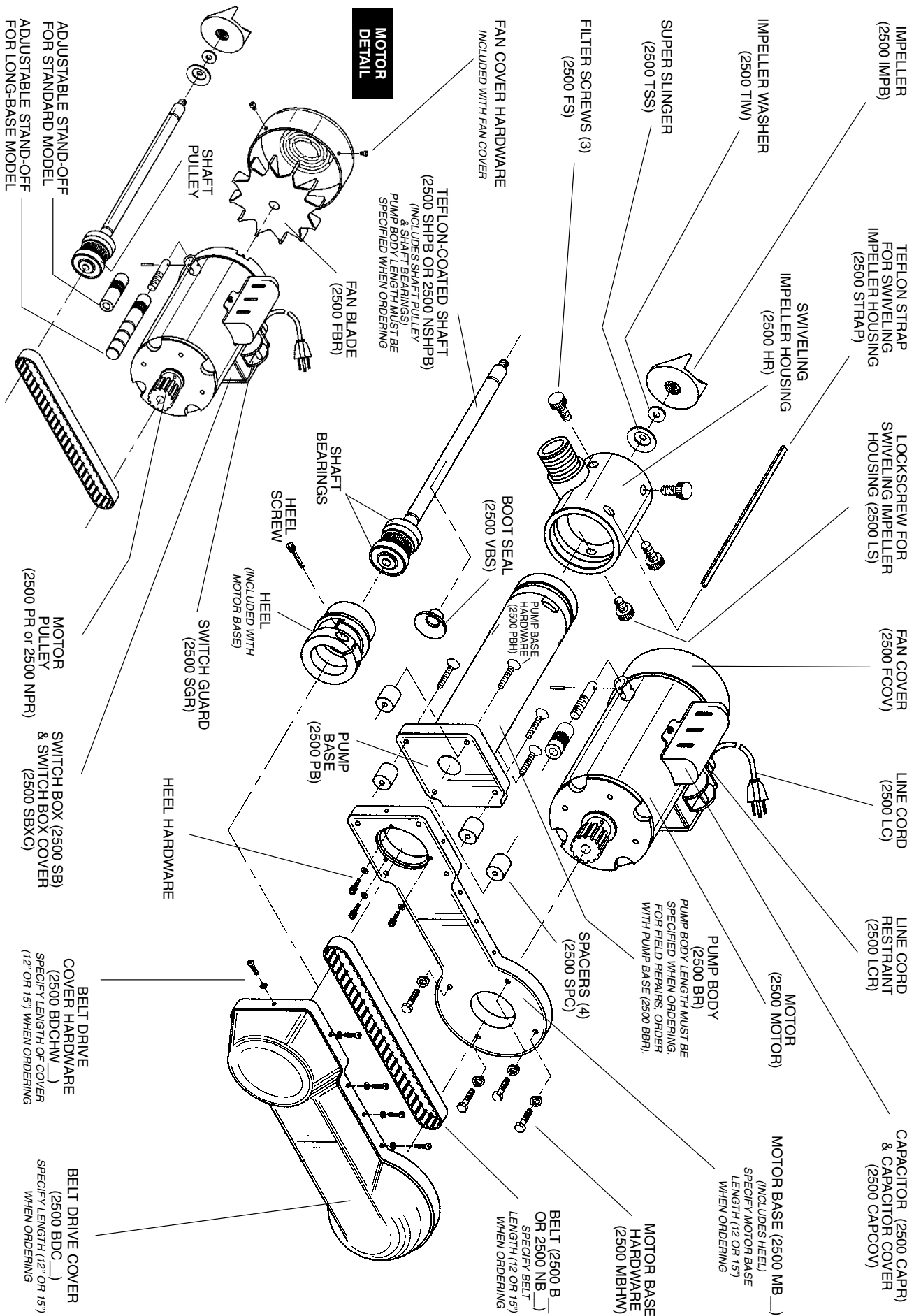
20. Install Impeller Washer (in hand) over Super Slinger.



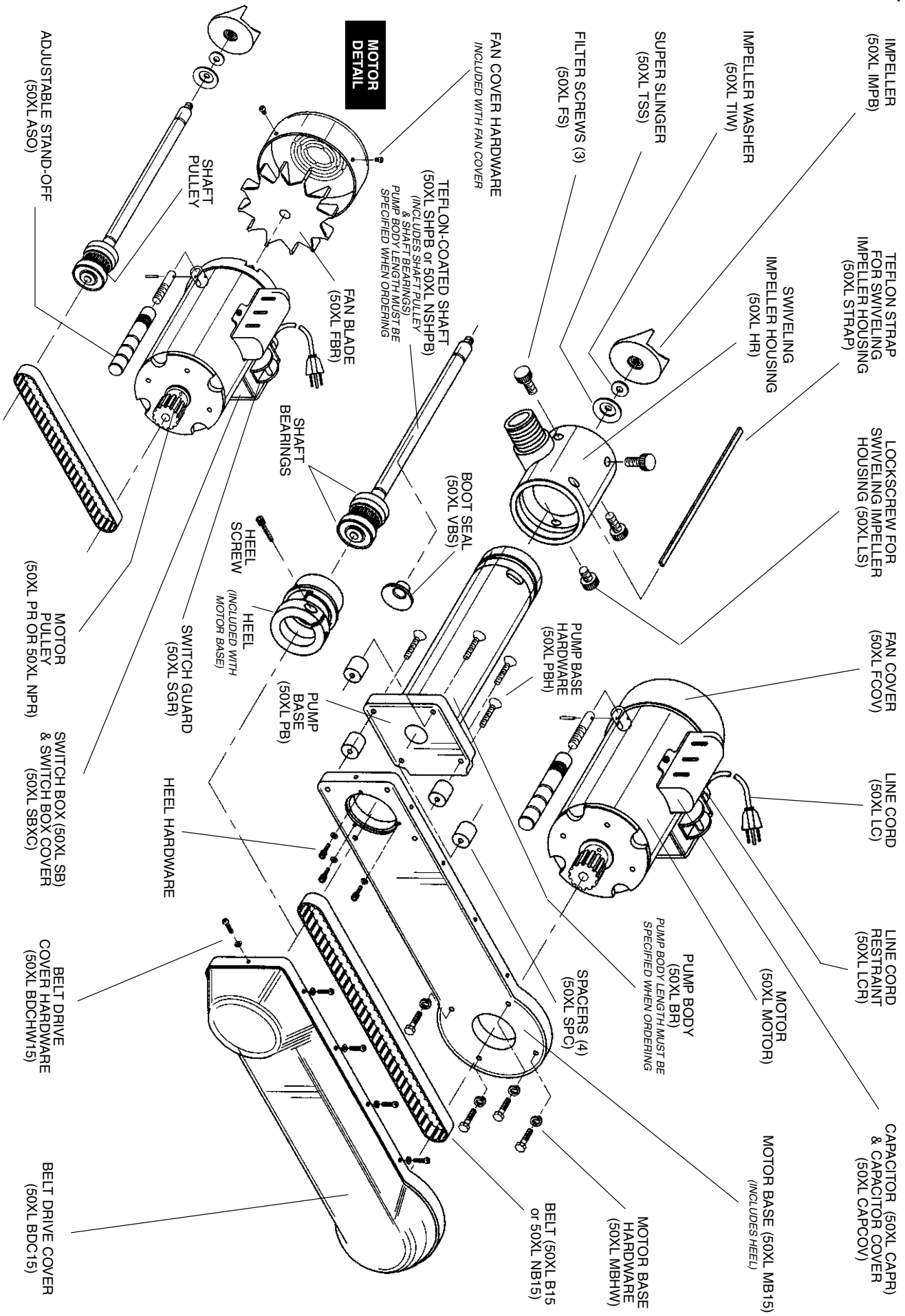
21. While holding Fan Blade end of shaft with vice grips, tighten impeller by hand.



# FLO KING BXL2500 EXPLODED VIEW



# FLO KING BXL5000 EXPLODED VIEW



IMPELLER (50XL IMPB)  
 TEFLON STRAP FOR SWWELING IMPELLER HOUSING (50XL STRAP)  
 LOCKSCREW FOR SWWELING IMPELLER HOUSING (50XL LS)  
 FAN COVER (50XL FCOV)  
 LINE CORD (50XL LC)  
 LINE CORD RESTRAINT (50XL LCR)  
 CAPACITOR (50XL CAPR) & CAPACITOR COVER (50XL CAPCOV)

IMPELLER WASHER (50XL TIW)  
 SWWELING IMPELLER HOUSING (50XL HR)  
 SUPER SLINGER (50XL TSS)  
 FILTER SCREWS (3) (50XL FS)  
 PUMP BASE HARDWARE (50XL PBH)  
 MOTOR (50XL MOTOR)  
 MOTOR BASE (50XL MB15) (INCLUDES HEEL)

FAN COVER HARDWARE (INCLUDED WITH FAN COVER)  
 TEFLON-COATED SHAFT (50XL SHPB or 50XL NSHPB) (INCLUDES SHAFT PULLEY & SHAFT BEARINGS) ST BE PUMP BODY LENGTH MUST BE SPECIFIED WHEN ORDERING  
 BOOT SEAL (50XL VBS)  
 PUMP BODY (50XL BR) (PUMP BODY LENGTH MUST BE SPECIFIED WHEN ORDERING)  
 SPACERS (4) (50XL SPC)  
 BELT (50XL B15 or 50XL NB15)  
 MOTOR BASE HARDWARE (50XL MBHW)

**MOTOR DETAIL**  
 SHAFT PULLEY  
 FAN BLADE (50XL FBR)  
 SHAFT BEARINGS  
 HEEL SCREW (INCLUDED WITH MOTOR BASE)  
 HEEL (50XL PB)  
 PUMP BASE (50XL PB)

ADJUSTABLE STAND-OFF (50XL ASO)  
 MOTOR PULLEY (50XL PR OR 50XL NPR)  
 SWITCH GUARD (50XL SGR)  
 HEEL HARDWARE  
 BELT DRIVE COVER HARDWARE (50XL BDC15)

SWITCH BOX (50XL SB) & SWITCH BOX COVER (50XL SBXC)  
 BELT DRIVE COVER HARDWARE (50XL BDC15)