



REPAIR GUIDANCE: BX1200 & BX650 IMPELLER REPLACEMENT

Referring to the Exploded Views of the BX1200 or BX650 (Pages 5 & 6) and to the photo pages that follow, use the procedure shown below. **Important: When ordering, specify pump and impeller material of construction (CPVC is gray in color; polypropylene is white; PVDF/Kynar is also white but weighs considerably more than polypro and will sink in water). Shaft thread size is 1/4 inch for CPVC and stainless-steel pumps and 3/8 inch for polypropylene and PVDF/Kynar.**

DISASSEMBLY

See Fig. 1 for Suggested Tools and Fig. 2 for Parts Identification.

1. Spin blue Drip Cover counterclockwise to remove from top of Motor.
2. Stand Pump upside down on table, so that Motor is supporting pump. *Suggestion: To make a motor stand to support the pump, drill a 1-inch-diameter (25-mm-diameter) hole in a piece of wood 3-1/2 x 3-1/2 x 2 inches thick (89 mm x 89 mm x 50 mm thick), as shown in Fig. 1.*

If you have a stainless-steel Flo King pump, skip Step 3 below and see special instructions on Page 3.

3. Use a flathead screwdriver to carefully pry out Flow Plate. See Figs. 3 and 4. Note: On CPVC pumps, Flow Plate is lightly attached using CPVC cement. On polypropylene and PVDF/Kynar pumps, Flow Plate is lightly spot-welded. Both should pop out fairly easily, but try not to break! In general, if you don't have the special Flow-Plate Removal Tool (available from Flo King, Fig. 1) it is a good idea to have a backup Flow Plate available in case one breaks.
4. Use needlenose pliers to grip Shaft between Spacers that separate Motor from Pump/Motor Base (Fig. 5). While still gripping Shaft with pliers, use other hand to remove Impeller by turning Impeller **CLOCKWISE** (left-hand threads). Important: This is the opposite direction normally used to loosen a threaded part. Remove Impeller (Fig. 6). *Note: To better grip Shaft, use special needlenose pliers with NOTCHES, available from Flo King (Fig. 1).*

REASSEMBLY

1. Use needlenose pliers to grip Shaft between Spacers that separate Motor from Pump/Motor Base (Fig. 7). While still gripping Shaft with pliers, install Impeller by turning Impeller **COUNTERCLOCKWISE** (left-hand threads). Important: This is the opposite direction normally used to tighten a threaded part.
2. As shown in Fig. 8, use a lightweight hammer to tap Flow Plate into original position. *(Stainless-steel pumps do not have Flow Plate.)* Then plug pump into electrical outlet and test. *(Note: If pump rattles, Shaft may need to be balanced!)* If pump runs smoothly and does not rattle, turn pump off. Then (Fig. 9) use a couple drops of CPVC cement to hold CPVC Flow Plate in place and allow to dry overnight. Or, if polypropylene or PVDF/Kynar, position Flow Plate in place and lightly spot weld. Tip: For a simple spot weld, use a long metal object like an ice pick, as shown in Fig. 10. Torch one end of ice pick for a few seconds and then touch hot end to polypro or PVDF/Kynar Flow Plate to "spot weld" onto pump (Fig. 11).



BX1200 & BX650 IMPELLER REPLACEMENT (continued)

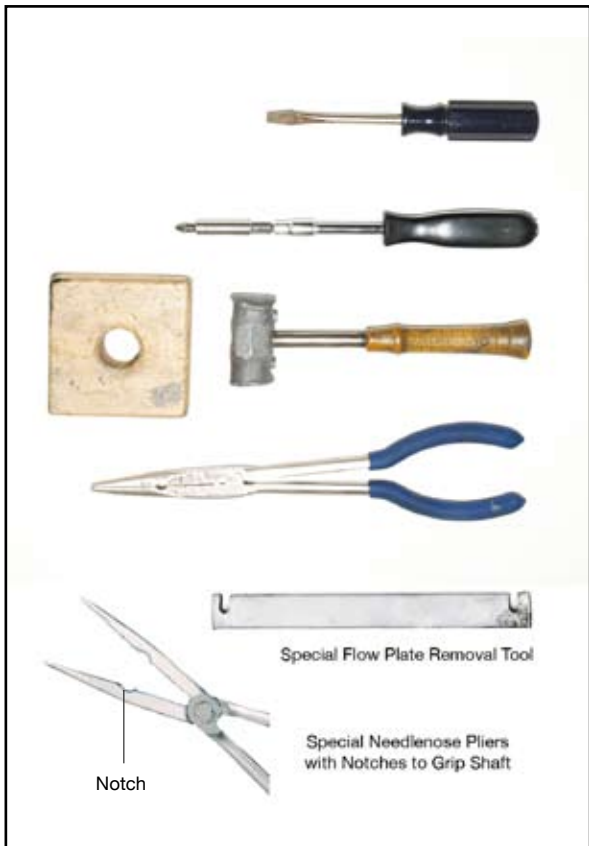


Fig. 1 – Suggested tools.



Fig. 2 – Parts identification.



Fig. 3 – Pry out Flow Plate. Be careful not to break!



Fig. 4 – Remove Flow Plate and put aside for reassembly later.

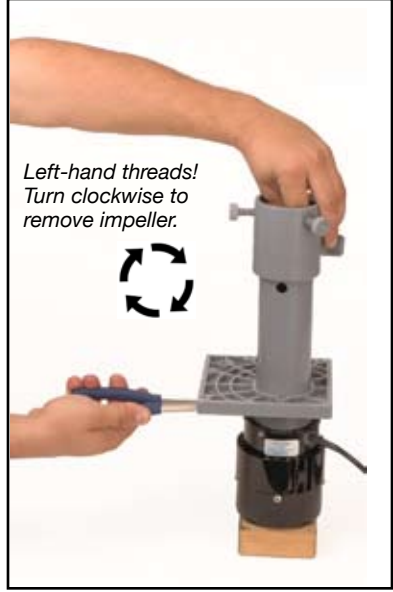


Fig. 5 – Grip shaft with pliers. Turn impeller clockwise with hand.



BX1200 & BX650 IMPELLER REPLACEMENT (continued)



Fig. 6—Remove Impeller from shaft.



Left-hand threads!
Turn counterclockwise
to tighten impeller.

Fig. 7—To reinstall, use needle-nose pliers to hold Shaft. Turn Impeller counterclockwise to tighten.



Fig. 8—Reinstall Flow Plate by lightly tapping with hammer. Then turn pump on to make sure it operates properly.

STAINLESS STEEL BX1200: SPECIAL INSTRUCTIONS

The stainless steel BX1200 differs a little from those made of plastic, so some slightly different instructions apply.

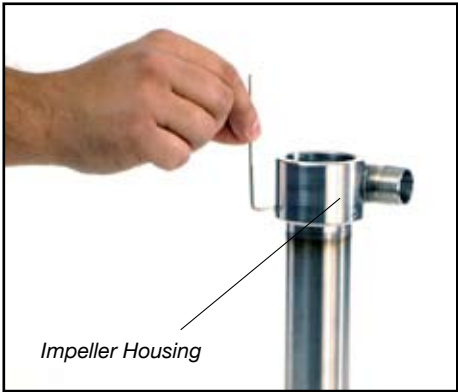
After removing the Drip Cover, stand pump upside down on table.

Use a 3/32-inch Allen wrench to loosen the three 10-32 set screws on the Impeller Housing. Then twist and turn the Impeller Housing to remove it. It may be necessary to tap the Impeller Housing with a rubber mallet.

Now go back to Page 1 and proceed with Disassembly Step 4.

Note that the stainless-steel unit does not have a Flow Plate like other BX1200s.

When reassembling, note that placement of Super Slinger is different on stainless-steel model (see photo at right) than on plastic models (Page 4).





BX1200 & BX650 IMPELLER REPLACEMENT (continued)



◀ To Secure CPVC Flow Plate

Fig. 9—If pump runs smoothly, secure Flow Plate. If you have a CPVC pump (gray in color), use syringe to apply a few drops of CPVC cement around top of Flow Plate. Allow to dry overnight before using pump.

▼ To Secure Polypropylene or PVDF (Kynar) Flow Plate



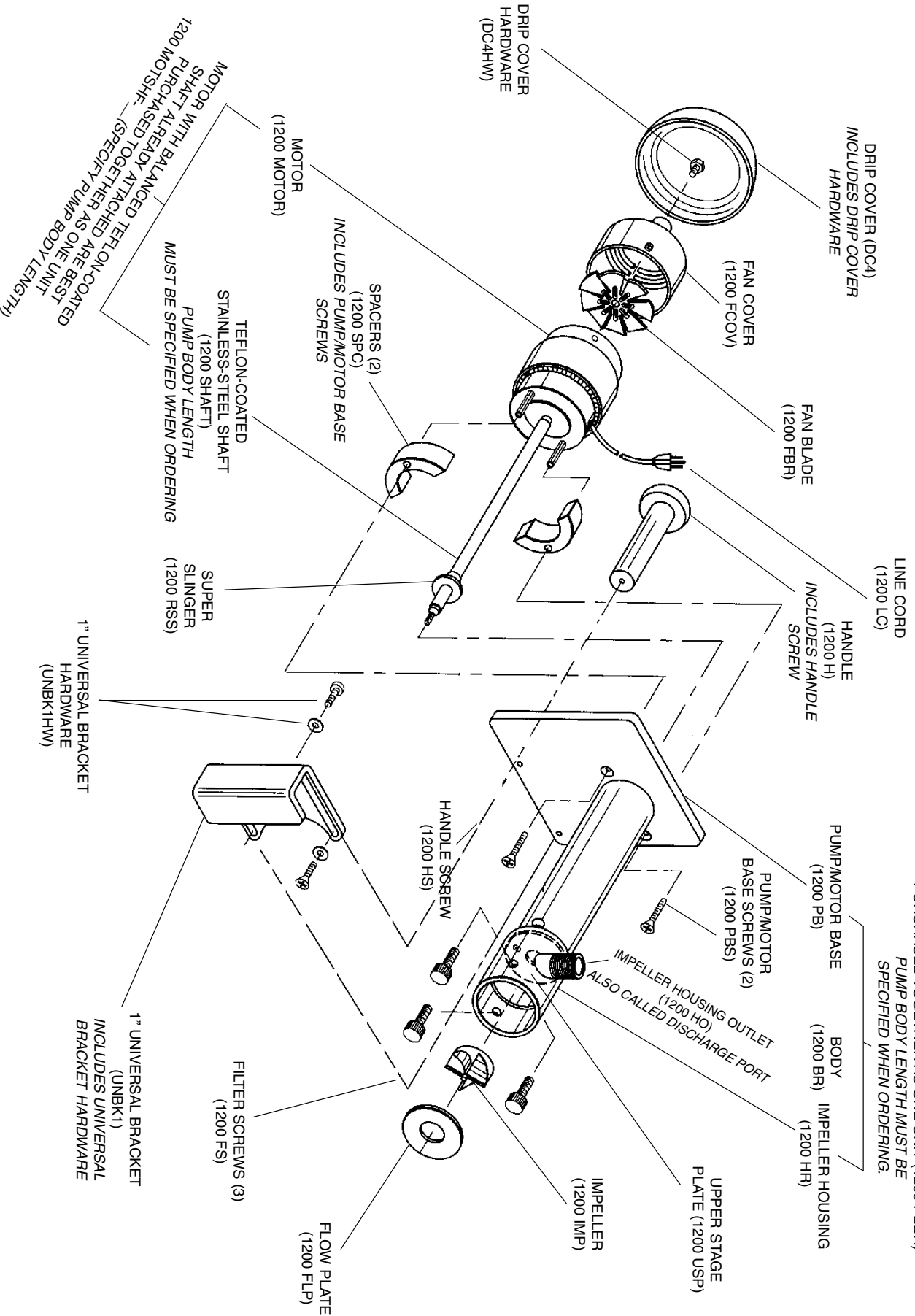
Fig. 10—Use torch to heat one end of ice pick or similar metal object.



Fig. 11—Touch hot end of object to three locations shown above. This will "weld" Flow Plate onto pump body.

FLO KING BX1200 EXPLODED VIEW

FOR FIELD REPAIRS, PUMP/MOTOR BASE, BODY & IMPELLER HOUSING ARE PURCHASED TOGETHER AS ONE UNIT (1200 PBBH) PUMP BODY LENGTH MUST BE SPECIFIED WHEN ORDERING.



FLO KING BX650 EXPLODED VIEW

FOR FIELD REPAIRS, PUMP/MOTOR BASE, BODY & IMPELLER HOUSING ARE PURCHASED TOGETHER AS ONE UNIT (650 PBBH) PUMP BODY LENGTH MUST BE SPECIFIED WHEN ORDERING.

