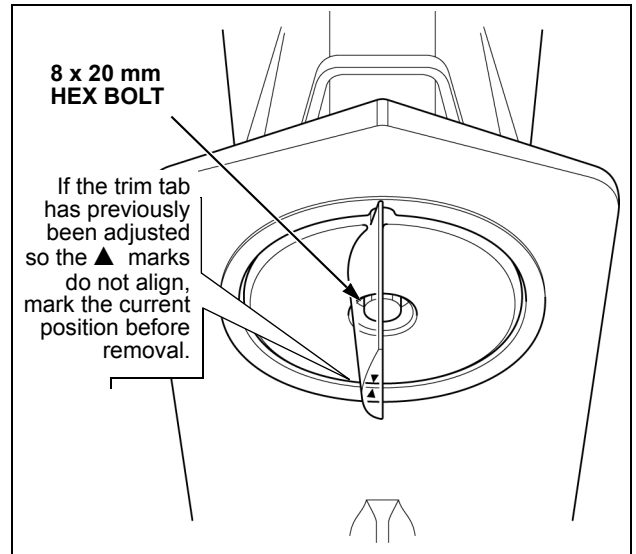


## Water Pump Replacement for BF60A Outboard Motor

This procedure is for the standard BF60A. The power thrust model BFP60A has a different pump configuration.

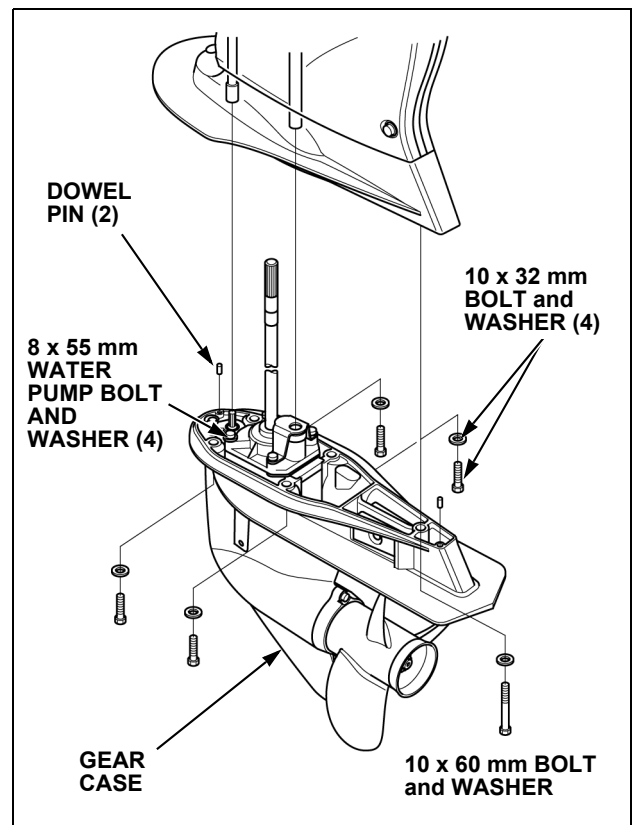
Prior to removing the gear case, make sure the outboard motor is secure on an engine stand or transom of a boat that is out of the water. Tilt the outboard motor up to the highest position and place the shift lever in the "N" (neutral) position.

With a 12 mm wrench, remove the trim tab 8 x 20 mm hex bolt and washer to gain access to the 10 x 60 mm bolt.



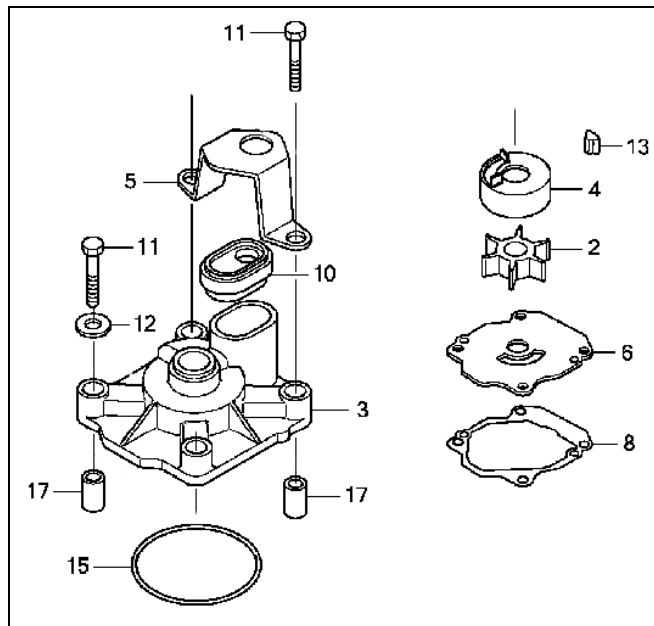
Remove the 10 x 60 mm bolt and washer, four 10 x 32 mm bolts and washers, and remove the gear case assembly. The vertical shaft will stay connected to the gear case, so remove the gear case without twisting, and then place the unit on a workbench.

With a 12 mm wrench, remove the four water pump 8 x 55 mm bolts and washers.



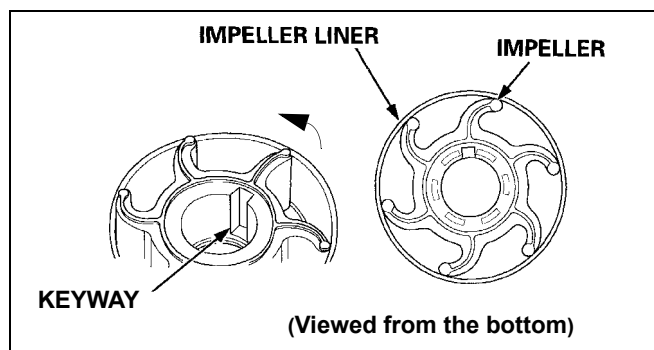
Clean all parts and check the impeller, liner, and cover for wear or cracks.

TYPE KIT	CONTENTS	PART NUMBER
Service kit	Order individual parts as needed	—
Rebuild kit	2- Impeller 3- Housing 4- Liner 5- Holder 6- Cover 8- Gasket 10- Seal 11- Bolt (4) 12- Washer (2) 13- Key 15- O-Ring 17- Collar (4)	06193-ZZ3-000

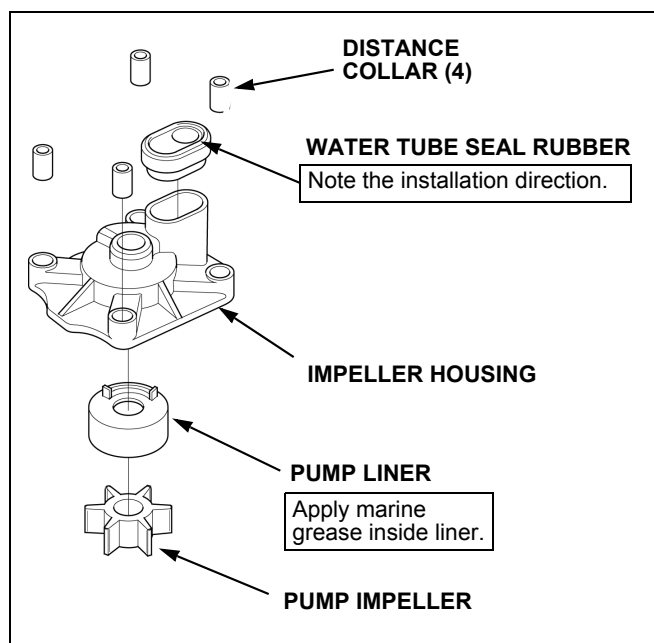


Start reassembling the pump by applying marine grease to the inner surface of the impeller liner and the water tube seal rubber.

Install the impeller by turning it counterclockwise into the impeller liner. Make sure the open end of the keyway is visible and will face out when installed in the pump.



Insert the water tube seal rubber and four distance collars into the impeller housing. Install the pump liner/impeller into the housing.

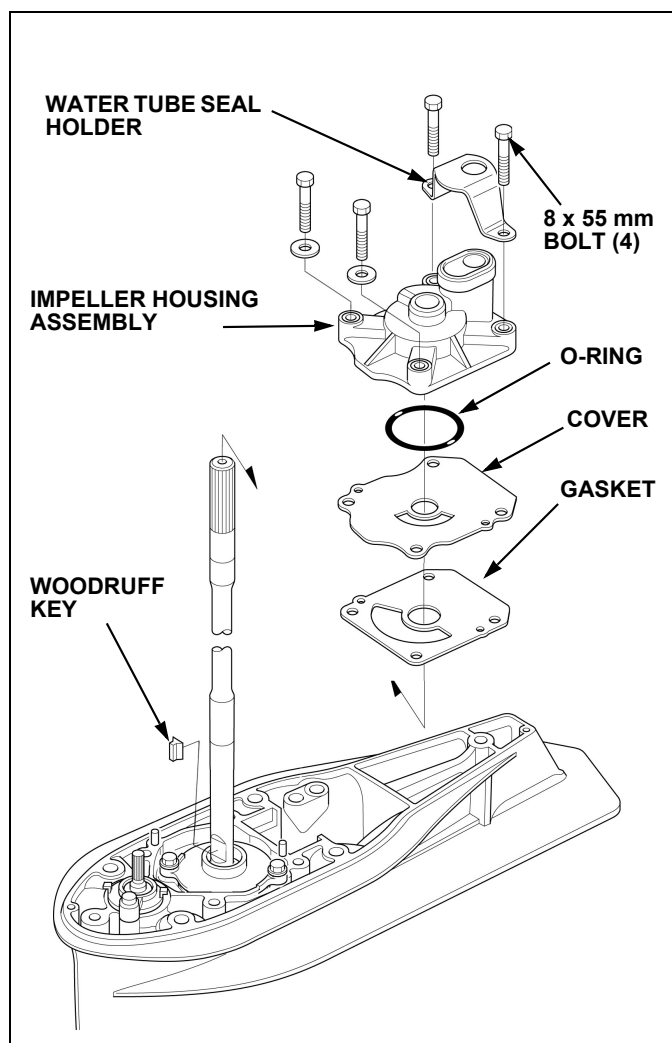


Slide the pump gasket and cover over the shaft aligning the holes with the pump base.

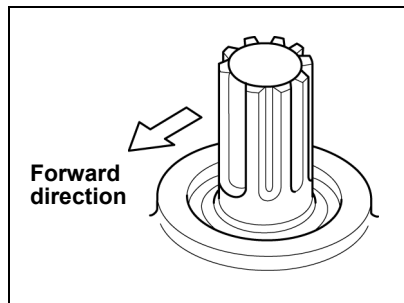
Place a small amount of marine grease on the Woodruff key and insert it onto the flat surface of the vertical shaft.

Install a new greased O-ring in the impeller housing and slide the assembly over the shaft, making sure to align the Woodruff key with the impeller keyway.

Install the four distance collars and 8 x 55 mm bolts, water tube seal holder, and two washers, and torque to **15 ft•lb (20 N•m)** in a crisscross pattern to make sure the housing seats correctly.



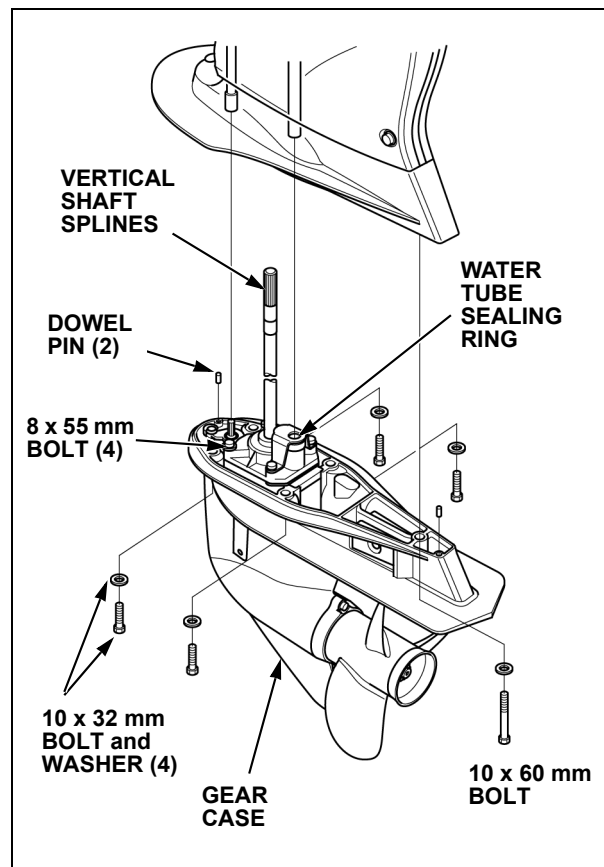
Check that the shift rod in the gear case is in the "N" (Neutral) position. The cutout in the shift rod spline will be in the forward direction as shown below.



Apply marine grease to the water tube seal ring, vertical shaft splines, and two dowel pins.

Install the gear case assembly into the motor. Start threading the 10 x 60 mm and four 10 x 32 mm bolts and washers to hold the gear case in place.

Torque the 10 mm gear case bolts to **25 ft•lb (34 N•m)**.



Install the trim tab by aligning the "▲"marks (or marks previously made) on the trim tab and gear case assembly.

Torque the 8 mm hex bolt to **15.5 ft•lb (21.5 N•m)**.

