Water Pump Replacement for BF5A Outboard Motors

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 “F” (Forward) position.

Remove the extension grommet from the extension case, and then loosen the 6 x 16 mm bolt on the shift rod joint. This will release shift rod B that is attached to the gear case.

Using a 10 mm wrench, remove the two 6 x 45 mm hex bolts and washers from the gear case. Separate the gear case from the extension case.

Using a 10 mm wrench, remove the four 6 x 28 mm bolts, washers, and distance collars attaching the water pump.

Gently pry the pump housing and remove it from the gear case housing. Check the pump impeller and cover for wear or cracks.

<table>
<thead>
<tr>
<th>TYPE KIT</th>
<th>CONTENTS</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Service kit</td>
<td>Impeller, gasket (2), water seal</td>
<td>06192-ZV1-C00</td>
</tr>
<tr>
<td>2 - Rebuild kit</td>
<td>Housing, bolt (4), washer (4), distance collar (4), impeller, cover, gasket (2), water tube seal ring</td>
<td>06193-ZV1-000</td>
</tr>
</tbody>
</table>

Use the service kit [1] if only the impeller is worn.
Use the rebuild kit [2] if the housing and/or the impeller cover are worn.
Start reassembling the pump by applying marine grease to the inner surface of the pump housing and the water tube seal ring.

> Install the impeller by turning it counterclockwise into the pump housing as viewed from the bottom.

**Do not rotate the impeller in the clockwise direction.**

Insert the new water tube seal ring, gasket, cover, and gasket into the impeller housing.

Slide the water pump assembly over the shaft, making sure to align the flat surface of the impeller with the pinion shaft and key.

Install the four bolts, washers, and collars, and torque the 6 x 28 mm bolts to 8 ft•lb (11 N•m) in a crisis-cross pattern to make sure the housing seats correctly.

Apply marine grease to the pinion shaft splines. Make sure the two roller pins are in place and install the gear case assembly into the motor.

If needed, turn the propshaft clockwise to align the pinion shaft splines. This will rotate the impeller clockwise (as viewed from the top).

With the shift lever in the “F” (Forward) position, slide the shift rod into the shift rod joint and tighten the 6 x 16 mm hex bolt, as shown on previous page. Install the extension grommet.

Install and torque the two gear case 6 x 45 mm bolts to 8 ft•lb (11 N•m).

Make sure that the shift lever moves smoothly into all positions while rotating the propshaft.