



Tools Required for Installation

- Drive Ratchet (3/8-inch) and extension (12-inch)
- Diagonal/dike cutters
- Sockets (10mm, 12mm and 14mm)
- Yamaha driveshaft holder
- Impeller tool to fit the brand of impeller, for non-hex nose impellers
- Bench vise or two crescent wrenches (12-inch) or end wrenches
- Phillips and standard screwdrivers

Supplies Required for Installation

- Contact Cleaner
- Shop rags
- Grease, or anti-seize compound

Instructions

1. Secure the craft on a stand or trailer and disconnect the ground cable from your battery.
2. Remove the ride plate using a 12mm socket (Not required on all craft).
3. Disconnect all cooling, bilge, and safety spout hoses from the pump and nozzle.
4. Disconnect the trim (if applicable) and steering cable connectors on the nozzle.
5. Using the ratchet, extension, and 14mm socket, remove the two 10mm bolts that fasten the reduction nozzle to the hull.
6. Remove the four 6mm bolts with the 10mm socket that holds the pump assembly. (If the craft has shims, remember to replace them in the same position during re-assembly)
7. Slide the nozzle and stator sections of the pump assembly and driveshaft out of the hull. (You can also remove the two forward mounted 10mm bolts that hold the wear-ring section to the hull, but it is not usually necessary, and you risk not seating it back to the hull during re-installation.) We recommend simply removing the stator and nozzle assembly.
8. Some impellers have a hex nose to engage a crescent wrench to, if not, slide an impeller tool (it should have been provided with the impeller) over the driveshaft all the way to the impeller.
9. Install the Yamaha driveshaft holder onto the splines at the end of the driveshaft.
10. Clamp the driveshaft holder into a vise. If you do not have a vise, place a 12-inch wrench on the driveshaft holder. Use the other crescent or end wrench on the nut portion of the impeller, or over the impeller tool installed into the nose of the impeller.
11. Yamaha uses left-hand threads. Turn the impeller clockwise to remove the old impeller, and counter-clockwise for re-installation.
12. Apply grease or an anti-seize compound to the threads and slide the new impeller over the shaft and turn counter-clockwise to tighten.
13. Tighten the impeller to approximately 45-ft. lbs. Simply hand-tightening or snugging the impeller can allow the impeller to release and damage, but will also torque the impeller to the extreme, making it very difficult to remove in the future.
14. Re-install the pump assembly fitted with the new impeller. Remember to use silicone around all water fittings during re-assembly to assure a watertight seal and also grease both ends of the driveshaft. If you did remove the wear-ring also, make sure you do not pinch the rubber gasket that seals the ring to the intake duct. An even, tight seal is important.
15. Reconnect the steering system and trim control cables. (It is crucial that these cables are connected correctly).
16. Re-connect all cooling, bilge, and safety spout hoses to the pump and nozzle.
17. Reconnect the battery ground cable.
18. Start the motor in the water to make sure that you do not have any leaks. Also, check the bypass fitting at the rear of the craft to make sure the cooling system is working, and the steering system works properly.