



Tools Required for Installation

- American Socket set
- Metric Socket set
- 1/4 inch Drive ratchet
- 1/4 inch Drive Extension (3inch)
- 3/8 inch Drive Ratchet
- 3/8 inch Drive Extension
- Bench Vise (or Large Adjustable Wrench)
- 1/2 inch Drive Break-Over Bar
- Polaris Impeller Tool
- 3/8-inch Drive Torque Wrench
- Wrench (with 1/2 inch drive adapter)
- Phillips and standard screwdrivers
- American Allen wrench set

Supplies Required for Installation

- High-Temperature waterproof grease
- Loctite 242 (Removable thread locking agent)
- Loctite 518 (Gasket eliminator) or Threebond 1211
- anti-seize compound
- 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. Disconnect all cooling, bilge, and safety spout hoses from the pump and nozzle.
3. Disconnect the trim, reverse (if applicable) and steering cable connectors on the nozzle.
4. Remove the four bolts with a socket on a 3/8-inch drive ratchet that holds the pump assembly to the intake duct.
5. Slide the nozzle and stator sections of the pump assembly out away from the hull by pulling it rearward.
6. Using a small (American) Allen wrench, remove the three bolts that mount the flow cone to the pump and remove the cone.
7. Place the pump unit in a bench vise with the impeller facing up. Clamp the rear of the impeller shaft in the jaws of the vise.
8. With the impeller nose boot or o-ring removed, place the splined end of the impeller wrench into the hub of the stock impeller. Using a 1/2 inch drive 7/8-inch socket on a 1/2 inch breakover bar, remove the stock impeller turning it in a counter-clockwise rotation.
9. Coat the impeller shaft threads with anti-seize compound or Loctite 242.
10. Screw the impeller in by hand in a clockwise rotation, making sure it glides on freely. Once the impeller has bottomed out, torque it to 90 ft.-lbs. using the impeller tool and torque wrench.
11. Once the impeller is installed, remove the pump from the vise and place it on the bench.
12. Apply a small bead of Threebond 1211 sealant around the flow cone flange on the pump. Wipe down the flow cone and O-ring and inspect for any damage. Place a thin coat of grease on the O-ring and install it and the flow cone. (Make sure the O-ring is properly seated against the pump). Use Loctite 242 on the three bolts and secure them evenly.
13. Apply a coat of high-temperature waterproof grease to the splines of the impeller. Insert the nose boot or O-ring into the impeller.
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.
15. Install the flat washers, lock washers and nuts to hold the pump in place.) We recommend using Loctite 242 on the nuts and torquing them to 24 ft.-lbs. using a cross pattern.
16. With the pump now securely in place, clean off the reduction nozzle flange on the pump housing using a rag and contact cleaner.
17. Apply a small bead of Threebond 1211 to the flange and reinstall the reduction nozzle/steering nozzle/reverse-bucket assembly. Use Loctite 242 on the four bolts and torque them to 18 ft.-lbs. In a cross pattern.
18. Reconnect the steering system control cable. (It is crucial that these cables are connected properly).
19. Re-connect all cooling, bilge, and safety spout hoses to the pump and nozzle.
20. Reconnect the battery ground cable.
21. Start the motor in the water with the seat off 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.