



Tools Required for Installation

- 8mm Socket (1/4-inch drive)
- 10mm Socket (1/4-inch drive) 1/4 inch Drive ratchet
- 1/4 inch Drive Extension
- (3inch) 10mm Combination Wrench
- 13mm Socket (3/8-inch drive) 17mm Socket
- 3/8 inch Drive Ratchet
- 3/8 inch Drive Extension
- (8inch) Bench Vise (or Large Adjustable Wrench) 1/2 inch Drive Break-Over Bar
- 13/16-inch Socket (1/2-inch Drive)
- Kawasaki Impeller spline Tool 3/16-inch Allen Wrench
- 3/8-inch Drive Torque Wrench (with 1/2 inch drive adapter)

Supplies Required for Installation

- Contact Cleaner
- Shop Rags
- High-Temperature Waterproof Grease
- Loctite 242 (Removable thread locking agent)
- Loctite 518 (gasket eliminator) or Threebond 1211 anti-seize Compound

Instructions

1. Disconnect the ground cable from your craft's battery. Use a 10mm socket and a 1/4 inch drive ratchet to do so.
2. Remove the pump's intake grate from under the hull.
3. Remove the ride plate from under the craft's hull, exposing the pump.
4. Disconnect all cooling, bilge, and safety spout hoses from the pump and nozzle.
5. Disconnect the trim, reverse (if applicable) and steering cable connectors on the nozzle.
6. Using a 13mm socket on an eight-inch extension with a 3/8 inch drive ratchet, remove the four 8mm bolts that mount the reduction nozzle to the pump housing. This will allow you to remove the reduction nozzle, steering nozzle and reverse gate assembly.
7. Remove the pump housing from the bulkhead/jet-pump support. Use a 3/8 inch drive ratchet, a 17mm socket, and an eight-inch extension to remove the four 10mm nuts that hold it in place.
8. With the four pump bolts removed, slide the pump housing out by pulling it rearward and down.
9. Using an 8mm socket on a 1/4 inch drive ratchet, remove the three 5mm bolts that mount the flow cone to the pump and remove the cone.
10. 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.
11. With the impeller nose boot removed, place the splined end of the impeller wrench into the hub of the stock impeller.
12. Using a 1 inch drive 13/16-inch socket on a 1 inch breakover bar, remove the stock impeller turning counter-clockwise.
13. Wipe the pump housing out with a rag and contact cleaner, and visually inspect it for any damage. Then coat the impeller shaft threads with anti-seize compound or Loctite 242.
14. Install the new impeller. 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.
15. Once the impeller is installed, remove the pump from the vise and place it on the bench.
16. 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.
17. Apply a coat of high-temperature waterproof grease to the splines of the impeller. Insert the nose boot or O-ring into the impeller.
18. Inspect the rubber pump ring gasket for damage, and replace if necessary. (On 650 and older models, you will need to apply a thin coat of non-hardening silicone to the pump ring and around the arms of the intake duct upon installation).
19. Install the pump to the hull. Remember to use silicone around all water fittings during re-assembly to assure a water-tight seal.
20. Install the flat washers, lockwashers 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.
21. With the pump now securely in place, clean off the reduction nozzle flange on the pump housing using a rag and contact cleaner. 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.
22. Reconnect the steering system control cable. (It is crucial that these cables are connected correctly).
23. Reconnect the battery ground cable.
24. 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.

