Directions for Disassembly:

Materials needed:

Marine or Bearing Grease	WD-40
RTV Sealant (Gasket Maker)	Cloth or Rag



- 1. Working on a flat surface, position the system with the prop facing upward and the powerhead (engine) resting on the tank.
- 2. You need to unscrew the black knob holding the adjustment clamp for the tiller arm and controls and move the arm off to the side. (note the position of the arm and adjuster)
 - * Take a picture if you need to.



3. Unbolt the 4 engine bolts loosening as you go, and then fully removing them.



- 4. You will slide the motor away from the clutch housing and rest it on the clutch so it doesn't wobble around.
- 5. With the engine removed, you need to remove the 2 bolts on the lower part of the housing and slide the clutch housing completely off. If the driveshaft slides out with it you can easily pull it apart and slide it back in.
- 6. I would check for any water in the drive tube now that it is separated and spray with a WD-40. Regreasing the driveshaft is a good idea since it was exposed to salt water most likely. You can pull it out, clean it, grease the shaft and splines, and place this back in. You can rotate this while you place this back in and it will seat in the gearbox. Be careful since there is gear oil in the gearbox, you do not want to that running out.
- 7. Now you will want to grease the inside bearing of the clutch housing and splines.



- 8. You now can slide this back over the drive tube seating the splines and replacing the 2 bolts and washers from the other housing. Make sure you use the same alignment hole and snug up the bolts. Do not overtighten these bolts. Aluminum is not as hard as stainless steel and will strip if forced too hard.
- 9. Rotate the clutch bell and not from the prop to ensure a smooth rotation. Rotating from the prop causes the driveshaft to move upward and a tighter gear mesh will seem like it is binding when it is not.
- 10. Place your engine back in place and start all 4 bolts including the bolt for the kill switch line.
- 11. What I have done to remedy water getting in under the engine cowling is to use RTV sealant between the engine and clutch housing.



- 12. Before you snug up the engine leave about 3-5mm space and add a bead of RTV sealant around the surface of the where the clutch housing meets the engine block. Think of this as a gasket to keep any dripping water from entering.
- 13. Snug up the bolts and wipe any excessive sealant off. Let it dry for a few hours.
- 14. Attach the tiller arm adjuster and arm.
- 15. Finally, you want to add a bit of grease at the lower mounting circlip area.



- 16. Wipe down with WD-40 and you are complete with the part change.
- 17. It is always good to check all bolts periodically to make sure they are snug and none are loose or in need of tightening. Vibration or striking an underwater object can loosen bolts over time.

Here is a YouTube video from my channel that explains how to clean the system if you have water intrusion on the external surfaces.

https://youtu.be/zyLj3b1yl0c