



Service Bulletin: Lower Unit/Shaft Replacement

Lower Unit/Shaft Replacement Instructions:

Place motor on work stand

Remove four screws holding upper head cover and remove cover

Using a utility knife or small cutting pliers cut heat shrink at connectors for motor power leads and disconnect leads, one red and one black wire.

Note: it is not necessary to disturb the data leads for this procedure.

Remove screw that connects lower head cover to motor shaft and remove lower cover.

Remove lower head cover gasket and depth adjustment collar from shaft.

Slide lower unit/shaft out of the steering box.

Once shaft and Lower unit are out of steering box, check steering box for any damage as well as stripped steering gear.

Insert new shaft and lower unit.

Install depth adjustment collar.

If RAM mount present, place on shaft.

Put on rubber O-ring gasket.

Put on head sleeve.

Carefully with a small screwdriver, push O-ring into head sleeve.

Slide lower head cover up the shaft and carefully reinsert screw.

Note: screw will need to go past main power conductors within the shaft, so use caution when inserting screw to make sure conductors are not damaged.

Tighten screw to secure lower head cover in place.

Note: it is mandatory to tighten this screw until the head does not “wobble” on the shaft. Failure to do so can result in faulty sensor readings and poor system performance.

Slide short lengths of heat shrink tubing over main power conductors and reconnect leads.



Rhodan Marine Systems of Florida

Service Bulletin: Lower Unit/Shaft Replacement

Recover heat shrink tubing, taking care to ensure that you do not overheat the plastic of the lower head cover. A heat shield can be used to protect the plastic, although if you are using a hot air gun this step can generally be completed without the heat shield if a bit of caution is used.

Place zip tie wrap around (snug but not overly tight) around power conductors to hold them close together

Reinstall head cover.

Power up system and verify correct propeller direction of rotation and proper centering when off button is pressed.

Take mental note the direction of the head cover should be opposite of the nose cone on the lower unit.