

Service Bulletin: Steering GearBox [SGB] Installation

Steering GearBox Installation

Place motor on work stand.

Put pin in QRB to lock motor to stand.

Remove the 4 screws from the plastic upper head.

Using a utility knife or small cutting pliers, cut the heat shrink and zip tie at the connectors from around the main power leads (the red and black wires).



Note: No need to disconnect the black water tight twist connector.

Remove the 2 ½ inch head screw that secures the lower head cover to the motor shaft.

Note: Orientation of head plastics. Coiled data cable to prop side of lower unit.

While holding the shaft with one hand, pull and twist the head to remove it from the shaft. Set head with attached data cable aside.

Remove the lower head cover gasket (O-Ring) and depth adjustment collar from shaft.

Slide lower unit and shaft out of the steering box. Set aside.

With the steering box in the stowed position, remove the 6 screws attaching the three plastic lower covers to the base and remove the covers.

Note: The rear cover will remain attached via black water tight twist connector. This may be disconnected and set aside if desired.

Once the rear cover is removed, cut the zip tie holding the power leads down.

You will find a silver stainless twist connector. Untwist this connection.

Pull steering motor power leads out from under the main power conductors.

Note: Power leads can be disconnected if necessary.

Remove E-clip on one side of the stainless pivot pin and drive pin out.

Note: Pivot pin may be stubborn at times to remove. If punch and hammer doesn't work to remove the pivot pin, Call Rhodan Marine for further assistance! 941-706-4578

The steering box should now be completely disconnected from the system.



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Check pivot blocks and ensure that they are seated in their cut-out.

Install new steering motor housing and reinsert stainless pivot pin.

Secure E-clip onto stainless pivot pin.

Route steering motor power lead under the main power conductors.

Note: Reattach power leads if previously removed.

Adjust steering motor power leads so that there is an appropriate length of conductor available outside the motor box to allow steering motor to swing through its full range of tilt.

Place zip tie with mounting hole around power leads, insert screw through mounting hole and secure to base.

Note: Snug up zip tie to power leads. Cut off tag end.

Replace the three plastic lower covers on the base.

Insert the lower unit/shaft into the steering box.

Install the depth adjustment collar.

Slide lower head cover and head cover gasket onto shaft.

Carefully reinsert lower head cover gasket into groove at bottom of lower head cover.

Note: This generally requires a small tool to push with, such as a small flat-head screwdriver.

Carefully reinsert head cover bolt. Tighten bolt into the nut on opposite side to secure lower head cover in place.

Note: Screw will need to go past the main power conductors within the shaft to be reinserted into the nut. Use caution inserting the screw to make sure conductors are not damaged. 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 the main power conductors and reconnect leads.

Recover the heat shrink tubing, taking care to ensure that you do not overheat the plastic of the lower head cover. Allow to cool for two minutes.

Place zip tie around the power conductors to hold them next to one another.



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Note: The zip tie should be snug enough to keep power conductors touching one another but not so tight that it would damage the heat shrink.

Reinstall head cover.

Power up the system and verify the propeller and steering motor rotates in the correct direction.

Give the system a general wipe down and cleaning to remove any grease smudges. The process should now be complete.

INCLUDED WITH SHIPMENT:

- 2ea - E-CLIPS
- 3ea - SMALL ZIP TIES
- 2ea - PIECES OF HEAT SHRINK