

# SEI06™ & SEI16™

## Installation & Removal Guide

### Tools Needed:

#### Sockets

- 5/8" socket
- 9/16" socket (for older models)

#### Wrenches

- 5/8" wrench
- 9/16" wrench

#### Sealers/ Lubricants

- Grease (multi-purpose marine)
- Gear lube
- Gear lube pump

#### Miscellaneous

- Ratchet
- 6" socket extension
- Large flat blade screwdriver
- Alignment tool (optional)

#### Disclaimer

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# SE106™ & SE116™ Installation & Removal Guide

## STEP 1



**1.1** Put the boat into forward gear. Trim the stern drive down.

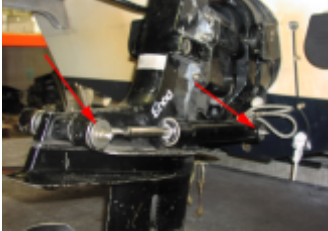


**1.2** Place a suitable container under the bottom drain plug. Remove the bottom drain plug.



**1.3** Remove the upper plug. This will help it drain faster. Replace both plugs after it has drained.

## STEP 2



**2.1** Remove two of the trim cylinder nuts from either the port or the star-board side. You will need a 5/8" wrench or socket for the newer drives, and a 9/16" for the older ones. The SE116 drive uses e-clips and small washers. Use a small flat-head screw-driver to remove the e-clips.



**2.2** Pry carefully with a large flathead screwdriver between the upper housing and the trim cylinder. Pry on the side that still has the nuts on it. The pins should come out with the cylinder. It will help if you pick up on the back of the stern drive a little. If the pins do not want to move, they may be seized in the housing. You may have to replace the pins.



**2.3** Remove the six 5/8" nuts that hold the stern drive to the bell housing.



**2.4** Once all the nuts are off you should be able to pull the stern drive straight back. If it is not moving you can place the handle of a large screwdriver between the upper case and the gimble ring and push on the back of the stern drive to pop it loose.

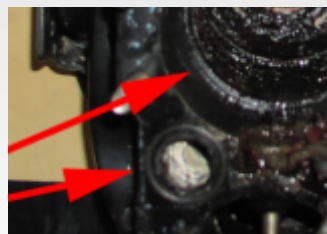
## STEP 3



**3.1** Rotate the gimble bearing by hand. If it feels smooth it should be okay. If it is rough at all it should be replaced.



**3.2** Check engine alignment with the engine alignment tool. If you do not own a tool, you can take it to a repair shop to get it checked.



**3.3** Clean off any old gaskets and o-rings that are on the bell housing. Install the new gaskets and o-rings on the bell housing.

**3.4** Install the new o-rings onto the driveshaft. Install the big one first, and then the two small ones.

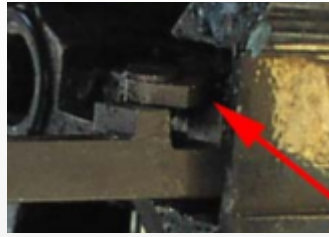
**STEP 3 (cont'd on next page)**

# SE106™ & SE116™ Installation & Removal Guide

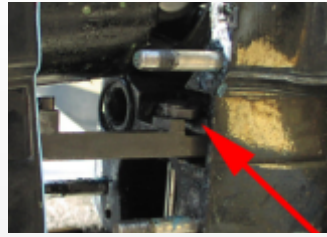
## STEP 3 (cont'd)



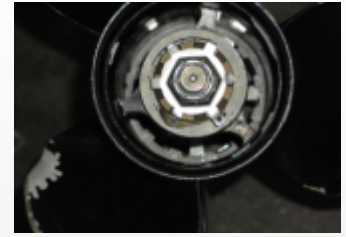
**3.5** Put the stern drive into forward gear. To do that simply turn the brass shift shaft clockwise, while turning the propshaft counterclockwise



**3.6** Also make sure that the roller is engaged in the shift slide.



**3.7** As you bring the stern drive into position, make sure that the shift slide stays engaged to the roller and goes into the upper housing straight. It may be easier with 2 people.

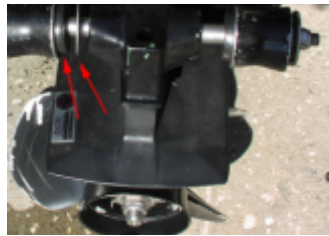


**3.8** You may need to rotate the propshaft counterclockwise as you push the stern drive on. It will aid in lining up the splines. It is best if you have the prop installed, it will give you something to grab onto. Now install the washers and nuts that hold the stern drive on. Also torque the propnut to 50 ft. lbs. Don't forget to bend the tab on the tab washer.

## STEP 4



**4.1** Take your trim cylinder with the trim pins attached and guide them through the holes on the gimble housing and the stern drive.



**4.2** Install the washers and inside bushings on the pins.

**4.3** Install the trim cylinder and the remaining bushings, washers, and nuts.

**4.4 WITH THE ENGINE NOT RUNNING**, check the shift operation. Put the drive in neutral. You should be able to spin the prop either direction by hand. Now put it in forward and you should not be able to turn the prop counterclockwise. It should make a clicking sound when you turn it clockwise. Now put it in reverse. You should not be able to turn it clockwise, and it should make a clicking sound when you turn it counter clockwise.

## STEP 5

**5.1** Remove both oil plugs and gaskets from the stern drive. Put the gaskets on the plugs so you can keep track of them. Insert the pump into the quart bottle. Insert the fitting on the pump into the drain plug hole on the bottom.

**5.2** Pump the oil until it comes out the drain plug hole in the upper. Now install the top plug with the gasket and torque it to 30-50 inch lbs. Now you can remove the pump from the lower drain hole and quickly install the lower drain plug with the gasket. Torque the lower plug to 30-50 inch lbs.

On the SE116 drive you will need to refer to the tag on the upper unit for details concerning the oil passage for the gear lube monitor bottle. You can also find it at [www.sterndrive.cc/oilpassage.pdf](http://www.sterndrive.cc/oilpassage.pdf)

