# 50-879150A85 STARTER MOTOR KIT 75/90/115 EFI, 80/100 EU EFI FOURSTROKE

IMPORTANT: This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar Mercury Marine products, have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to those installing or operating the product.

*NOTE:* After completing installation, place these instructions with the product for the owner's future use.

## **Components Contained in Kit**



41588

Ref.	Qty.	Description	Part Number
а	1	Starter motor assembly	879345T77
b	1	Cable assembly	84-93388A8
с	4	Bolt (M8 x 45 hex flange)	10-885526 45
d	4	Washer	12-43430
е	2	Hose clip	54-8M0040205
f	2	Nylon push-in screw	10-8M0037204
g	1	J-clamp	54-814634
h	2	Oetiker clamp (15.7 mm)	54-888988-015
i	1	Hose	32-8M0040122

## **Starter Removal**

### **WARNING**

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected engine starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing engine or drive components.

- 1. Disconnect the battery cables from the battery.
- 2. Slide the red protection boot off of the starter power cable. Remove the positive (+) cable from the starter solenoid. Retain the nut and lockwasher.
- 3. Disconnect the yellow/red wire bullet connector.
- 4. Bend/straighten the two J-clips securing the crankcase ventilation hose to gain access to the mounting bolts.



- a Red protection boot
- **b** J-clips securing the crankcase ventilation hose (2)
- c Yellow/red exciter wire
- 5. Remove the four bolts securing the starter mounting brackets. Remove the starter. Discard the bolts and J-clips.
- 6. Remove the Oetiker clamps securing the water hose to the cylinder block and fuel supply module.

7. Remove the water hose and discard.



**c** - Water hose

## **Starter Installation**

*NOTE:* If the mounting bushings are not installed in the starter housing, refer to **Mounting Bushing Installation**.

1. Assemble one of the mounting bolts with the metal J-clip and a washer.

**NOTE:** The metal J-clip is assembled on top of the washer on the lower right starter mount.

- 2. Install the new starter onto the cylinder block.
- 3. Secure the starter with the new M8 x 45 bolts and washers. Tighten the bolts to the specified torque.
- 4. Install the 15.7 mm Oetiker clamps onto the new water hose ends and install the hose onto the fittings on the powerhead and fuel supply module.
- 5. Secure the water hose with the J-clip and plastic clip. Allow sufficient clearance between the hose and the lower left starter mounting bolt.
- 6. Crimp the two hose clamps securing the water hose.

IMPORTANT: Use only tool 91-803146T (or Snap-On equivalent YA3080) to crimp the full circle hose clamp. Using a different tool could result in a crimp that is too loose or too tight. Do not use a screw type hose clamp, it may damage the hose.



#### STARTER MOTOR KIT

Hose Clamp Tool Kit	91-803146A04
5819	Aids in the installation of high pressure (Oetiker ®) hose clamps. Clamp Tool (91-803146T)



a - Starter

- **b** Washer and bolt (M8 x 45) (4)
- c J-clip
- d Plastic clip
- e Water hose
- f Oetiker clamp (15.7 mm) (2)

Description	Nm	lb-in.	lb-ft
Starter mounting bolts (M8 x 45)	21	185	

- 7. Remove the bolt securing the negative (–) battery cable to the cylinder block.
- 8. Apply Loctite 242 Threadlocker to the bolt threads.
- 9. Route the starter ground cable as shown.
- 10. Clean the cylinder block ground and cable connections.
- 11. Secure the starter ground cable and the negative (–) battery cable to the cylinder block with the bolt. Tighten the bolt to the specified torque. Apply Liquid Neoprene to the bolt and cable ends.
- 12. Install the two plastic hose clips onto the crankcase ventilation hose.
- 13. Secure the two clips to the starter with the nylon push-in screws.
- 14. Connect the yellow/red wire bullet connector.
- 15. Install the positive (+) cable to the starter solenoid. Secure the cable with the retained nut and lockwasher. Tighten the nut to the specified torque.
- 16. Apply Liquid Neoprene to the starter solenoid wire terminals.

17. Allow the Liquid Neoprene to dry and slide the red protection boot over the starter solenoid positive (+) cable connection.



Tube Ref No.	Description	Where Used	Part No.
66	Loctite 242 Threadlocker	Ground cable bolt	92-809821

Tube Ref No.	Description	Where Used	Part No.
25 0	Liquid Neoprene	Starter solenoid wire terminals, ground cable end, negative battery cable end and ground bolt	92- 25711 3

## **Mounting Bushing Installation**

Lubricate the rubber mounts with water and install into the starter housing.



c - Starter housing

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