

Circulate to: Sales Manager

anager Accounting

Service Manager Technician

Parts Manager

# Wire Harness Shunt Resistor – 25, 30/40/40 Bigfoot (4-Stroke)

# **Models Affected**

MERCURY/MARINER

1999/2000 25 Bigfoot (4-Stroke) USA 0G810810 thru 0T009782

1999/2000 30 (4-Stroke) USA 0G765392 thru 0T009461

1999/2000 40/40 Bigfoot (4-Stroke) USA 0G821985 thru 0T009770

Some engines that exhibit a mid to high speed mis-fire may require the installation of a wire harness shunt resistor. The mis-fire is caused by a combination of ignition components that prematurely activate the rev limiter function. Due to the fact that a specific combination of components is required, not every engine that exhibits the mis-fire will require the installation of the shunt resistor. It is important to inspect basic ignition and fuel related components that could cause this similar characteristic.



58132

#### 877860T1 Wire Harness Shunt Resistor

After the serial numbers listed, 2000 model year product has the wire harness shunt resistor installed during assembly. 2001 model year product has a new ECM that corrects the problem and the wire harness shunt resistor is not installed.

### **Owner Notification**

Due to the low probability of failure, a customer letter will not be issued.

#### Inspection/Test

If the engine exhibits a "miss" in the rpm range from 2000 rpm to wide open throttle (WOT), a simple test can be performed to determine if the wire harness shunt resistor will remedy that particular problem. Remove one of the crank position sensor mounting bolts. Loosen the remaining bolt and reposition the sensor to achieve an approximate flywheel to crank sensor air gap of 0.125 inch (3.18 mm). Retighten the one bolt to retain the sensor position.



- a Mounting Bolt
- **b** Mounting Bolt Removed
- c 0.125 inch (3.18 mm) Gap

Rerun the engine and determine if the miss is still present.

<u>If the miss is still present</u>: The installation of the wire harness shunt resistor will not remedy the situation. It will be necessary to troubleshoot the ignition and fuel system.

<u>If the mis-fire is not present</u>: Install the wire harness shunt resistor at the crank position sensor terminal. Install a sta-strap to retain the wire harness.

Reposition the crank position sensor, install the bolt removed, and tighten the mounting bolts. Crank position sensor mounting bolt torque - 45 lb. in. (5.1 N·m).

58140

#### WIRE HARNESS SHUNT RESISTOR - 25, 30/40/40 BIGFOOT (4-STROKE)



58137

- a Crank Position Sensor
- **b** Wire Harness Shunt Resistor
- c Sta-Strap
- d Engine Wire Harness
- e Mounting Bolt Torque 45 lb. in. (5.1 N·m)

## **Parts Required**

Qty. 1 P/N 877860T1 Wire Harness Shunt Resistor

#### Warranty

If the mis-fire occurs within one year from the date of sale, warranty will apply. Complete warranty claim listing:

- Outboard serial number
- Qty. 1 P/N 877860T1 Wire Harness Shunt Resistor
- One half (0.5) hour labor
- Warranty labor rate code NJC
- Part Code 342
- Failure Code 00