



# service bulletin

No. 93-13

## Voltage Regulator Failures - 135 thru 200

Mariner and Mercury

1992 and 1993 135 thru 200

S/N 0D082000 thru 0D254352

The models listed have experienced a higher than normal number of voltage regulator failures. The cause has been found to be overheating of the regulator. This occurs when using a high amount of current and/or outboard operation in warm waters.

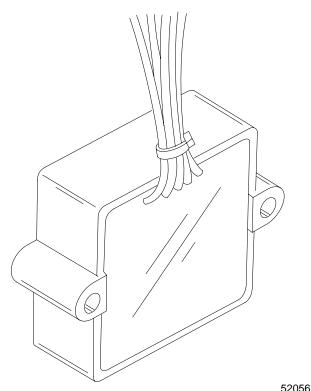
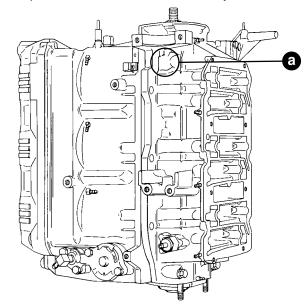


Figure 1. Voltage Regulator

### IMPROVED EXHAUST PLATE:

Outboards starting with serial number 0D254353 and above and replacement powerheads with date code 1/23/93 and later (Figure 2) have an improvement to the exhaust plate to prevent the regulator from overheating. The improvement involves machining the voltage regulator mounting area to allow the regulator to fully contact the exhaust plate and allow the heat to dissipate faster and more efficiently.



a - Date Code 1/23/93 and Later. Figure 2. Date Code Location

#### **CORRECTION:**

Models listed should have an adaptor p/n 824715 installed under both voltage regulators. The adaptor will allow the voltage regulator to fully contact the exhaust plate and dissipate the heat quicker.

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#### PARTS REQUIRED:

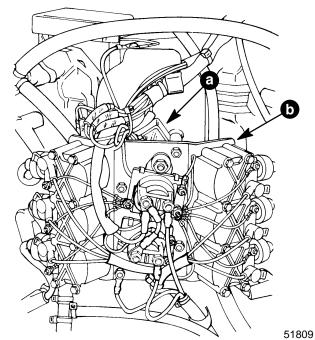
Qty. 2 p/n 824715 adaptor.

Dielectric grease.

#### INSTALLATION:

Installation of the adaptors requires:

- removal of the ignition plate at the rear of the motor (Figure 3).

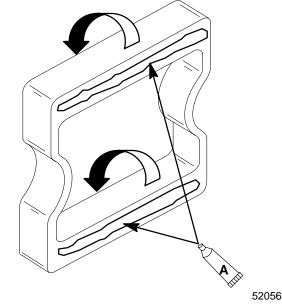


a - Voltage Regulator.

b - Ignition Plate.

Figure 3. Voltage Regulator Location

- applying silicone dielectric grease p/n 92-823506--1 on both sides of the heavy contact rails (Figure 4.)



a - Apply Dielectric Grease p/n 92-823506--1 on both Sides. **Figure 4. Adaptor P/N 824715** 

- installing the adaptors against the exhaust plate.

- reassembling the voltage regulators and the ignition plate.

#### WARRANTY:

Installing the adaptors on the models listed will be covered by warranty up to two (2) years from the date of sale.

Complete a warranty claim listing:

Outboard serial number. Qty. 2 p/n 824715 adaptor. One half (0.5) hour labor. Warranty labor rate code OE 30 Failure code 330 00