

- A. Tachometer and Synchronizer Requirements on New Thunderbolt IV Ignition System - MIE 230/260/340
- B. Voltage Regulator Replacement - MCM 80/90

CIRCULATE TO:  
SERVICE MANAGER  
PARTS MANAGER  
MECHANICS

## A. TACHOMETER AND SYNCHRONIZER REQUIREMENTS ON NEW THUNDERBOLT IV IGNITION SYSTEM - MIE 230/260/340

The new ignition system (Thunderbolt IV) used on the above models can use either Quicksilver Tachometer 79-87178A1 or 79-90767A1. On dual engine installations, any synchronizer that monitors ignition impulses at the negative ( ) terminal of the ignition coil will operate properly.

## B. VOLTAGE REGULATOR REPLACEMENT - MCM 80/90

Voltage Regulator (Part No. 46011A1) is No Longer Available (N.L.A.) from Mercury Marine for the MCM 80/90 Engines. A voltage regulator from the MCM 470 (air-cooled system) can be installed quite easily. Order the following:

- (1) 45559 Terminal Block
- (1) 75220 Voltage Regulator (MCM 470)
- (2) 10-62568 Screws
- (1) 84-79147A1 Connector & Harness (Used on Power Trim Pump)

Installation of new voltage regulator (Figure 1):

1. Disconnect battery leads from battery.
2. Plug connector and harness into engine wiring harness connector.
3. Connect Red/Purple lead (84-79147A1) to Red lead (75220) at terminal block (45559) using screw (10-62568).
4. Connect Light Blue/White lead (84-79147A1) to White/Black Lead (75220) at terminal block using second screw.
5. Connect Green/White lead (84-79147A1) to new voltage regulator mounting flange. Install bolt through Green/White lead terminal then through regulator to engine.

**IMPORTANT: Make sure this lead and new regulator have a good ground. Failure to do this will not allow new regulator to function.**

6. Mount new regulator and terminal block to mounting plate using the appropriate attaching screws. New mounting holes may have to be drilled.
7. Make sure all connects are tight and reconnect battery leads to battery.

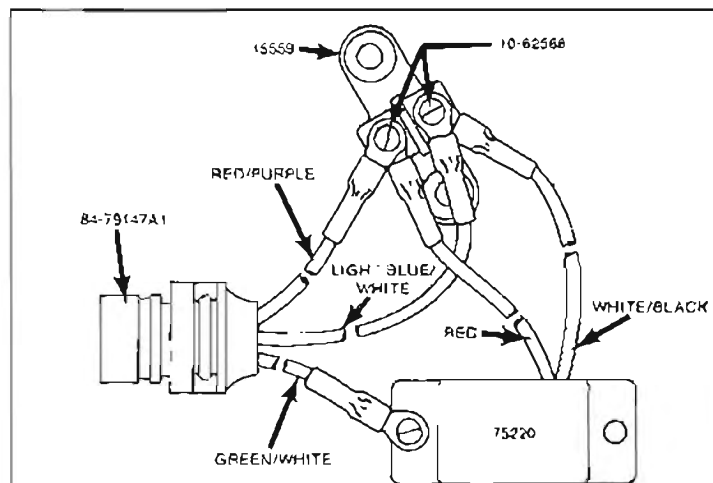


Figure 1. New Voltage Regulator Installation