

FIGURE 6. Mark 25E Wiring Diagram (Positive Ground)

- A: Negative (-) battery cable, battery thru starter solenoid
- B: Terminal, open
- C: Choke solenoid lead, blue

- D: Positive (+) battery cable, battery to starter motor
- E: Starter solenoid lead, yellow
- F: Ignition switch lead, red

Ground: Green lead to breaker assembly

## **ELECTRIC STARTING**

## A. Description

The smooth operating MercElectric starter is optional on late model Mercury outboards of higher horsepower. Motors equipped with MercElectric starting are distinguished by the letter "E" following the model number; e.g. Merc 400E, Mark 58AEL, Mark 75E, Mark 25E.

The electric starter system is a 12 volt type especially designed for outboard use. It is as simple and dependable as the starting system on your automobile. There are no adjustments to make.

## B. Circuits

The MercElectric system on 4 and 6 cylinder motors consists of 4 circuits; on 2 cylinder motors, 3 circuits. (Figures 4 and 6) The generator circuit is not present on 2 cylinder models. The four circuits follow:

Generator Circuit (4 and 6 Cylinder Only): Within the flywheel are permanent magnets and a wound stator. The alternating current generated in the stator windings passes to the rectifier. This, in turn, produces direct current (DC) from the alternating current (AC). Negative side of rectifier is grounded; positive side goes to

internal harness plug. Through the plug, the current passes on to the ignition switch in the control box and from there to the battery on the negative side. The positive side of the battery is connected through connector to ground of the engine.

Starter Circuit: The starter circuit consists of a 12 volt motor and starter engaging mechanism. A starter solenoid prevents the full starting current from passing through the ignition switch.

Choke Circuit: To operate choke, key must be in the ON (middle) or STARTING (right) position. While using electric choke, manual choke must be in down position; however, manual choke can be operated at all times if necessary.

Magneto Circuit: The engine is stopped by grounding the magneto, not by choking the engine. This is accomplished by turning key to OFF (left) position.

## C. Starting and Stopping

For starting and stopping procedure with electric starter, refer to charts in Section I, General Information.

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