

NUMBER: 81-12

DATE: 5/7/81

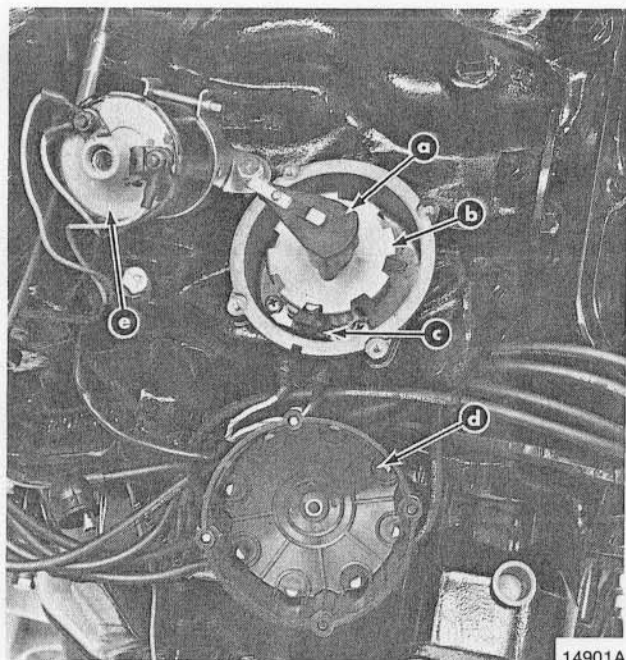
- A. Troubleshooting Thunderbolt IV Ignition System - MIE 230/260/340
- B. MerCruiser Option Code: MIE 470/230/260/340
- C. Alternator and Circuit Breaker - MIE 230/260/340
- D. Carburetor Silencer Air Intake Hose - MIE 470/230/260/340 (Figure 4)

CIRCULATE TO:  
SERVICE MANAGER  
PARTS MANAGER  
MECHANICS

## A. TROUBLESHOOTING THUNDERBOLT IV IGNITION SYSTEM - MIE 230/260/340

The ignition system on the MIE 230/260/340 is a relatively simple system. It consists of four components and a 12-volt source to operate it. The four components are: ignition coil, ignition amplifier, ignition sensor and sensor wheel (Figure 1 and 2).

To troubleshoot the ignition system all that is needed is a voltmeter and Spark Gap Tester (C-91-63998A1 Min. Quantity @ 6).



14901A

a - Rotor  
b - Sensor Wheel  
c - Ignition Sensor  
d - Distributor Cap  
e - Ignition Coil

**Figure 1. Distributor Components and Ignition Coil**



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a - Ignition Amplifier

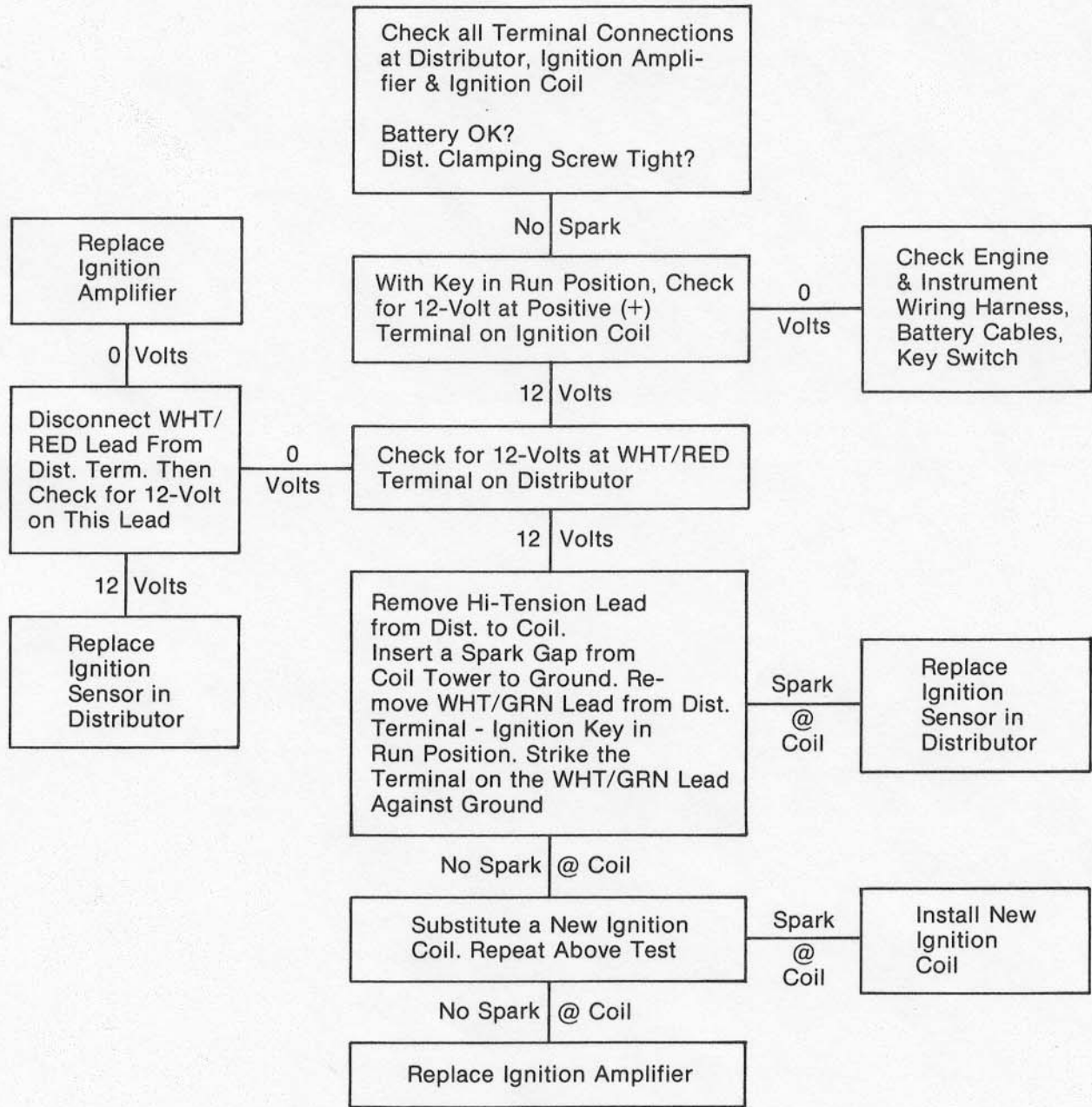
**Figure 2. Ignition Amplifier**

**SAFETY WARNING:** Before testing ignition system, operate bilge blower for at least 5 minutes to remove any explosive fumes from engine compartment. If boat is not equipped with a bilge blower, open engine hatch.

Distributor Complete  
(L.H. or R.H. Rotation)  
Ignition Amplifier  
Ignition Coil  
Ignition Sensor  
Sensor Wheel  
Cap  
Rotor

Part No. 90747A3  
Part No. 390-7804A1  
Part No. 392-7803  
Part No. 87-91019A2  
Part No. 90574  
Part No. 90746A1  
Part No. 90576A2

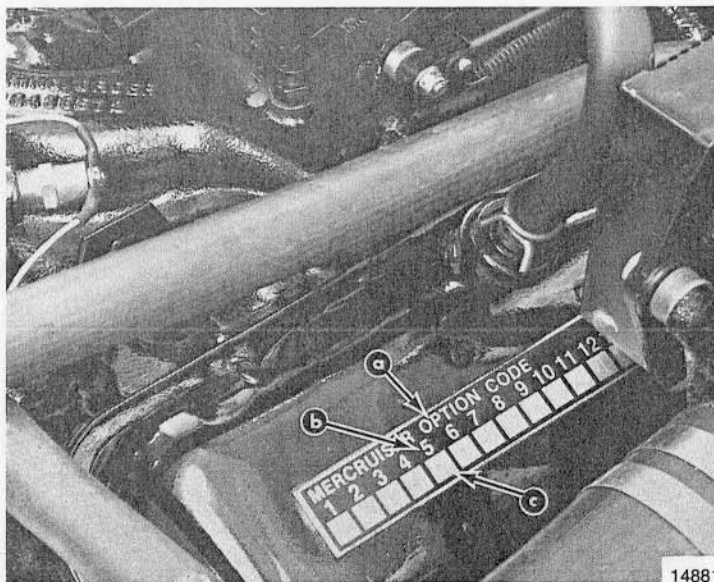
# Thunderbolt IV Ignition System



**B. MERCUISER OPTION CODE: MIE 470/230/260/340**

On MerCruiser Inboard Engine models listed above, an option code decal is placed on a rocker arm cover. (Figure 3) Under each number i.e., 1, 2, 3, etc. is a block. In each of these blocks, a number may or may not be stamped. These stamped numbers indicate what options the boat company ordered with that particular engine. During final assembly, each different option is installed on that engine. (Example: Block under 5 - Stamped 1 = Standard Cooling; Stamped 2 = Closed Cooling System).

These option code numbers would not be used when ordering Quicksilver Parts and Accessories.



- a - Option Code Decal
- b - Option Code Block Number
- c - Stamped Number

**Figure 3. MerCruiser Option Code Decal**

**C. ALTERNATOR AND CIRCUIT BREAKER - MIE 230/260/340**

The engine models listed above use a 55 amp Alternator and a 60 amp Circuit Breaker. If these parts have to be replaced, use the part numbers listed below.

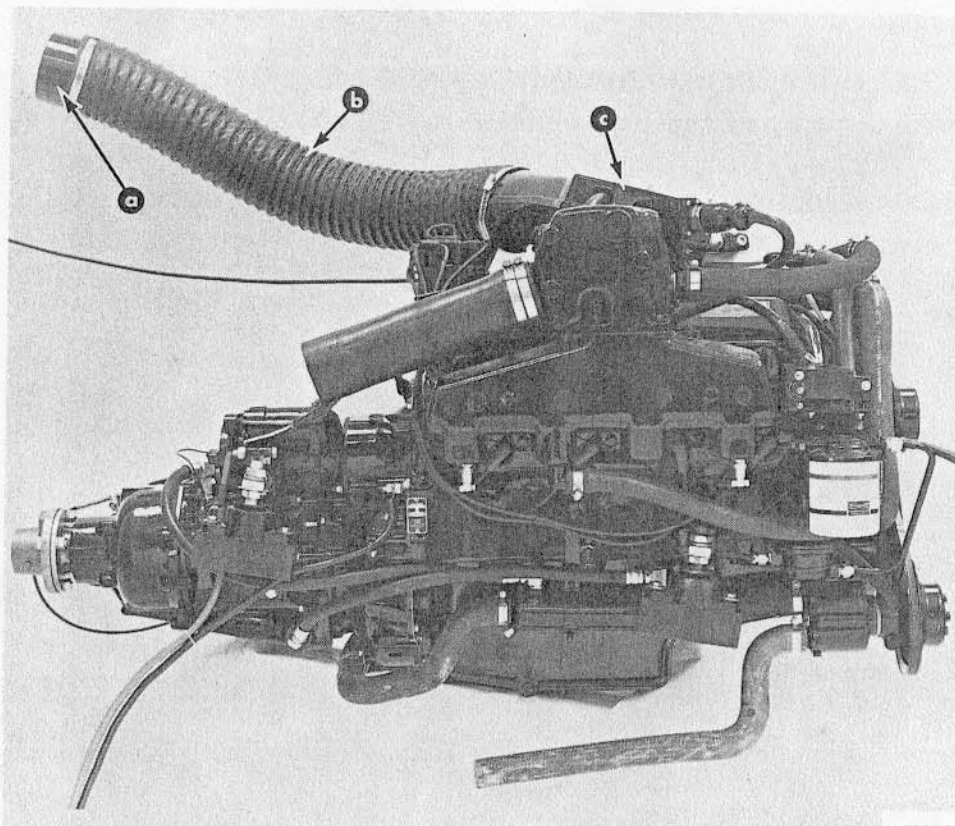
55 Amp Alternator (Birotational)	92497
60 Amp Circuit Breaker	88-93582

**D. CARBURETOR SILENCER AIR INTAKE HOSE - MIE 470/230/260/340 (Figure 4)**

On the model engines above, the Air Intake Hose (attached to Carburetor Silencer) **MUST BE POSITIONED** so that inlet is a minimum of 12" (30.5cm) above bottom of bilge (to prevent it from picking up water) and in an area where it will not pick up debris.

**DO NOT** place inlet in storage bins on side of boat, as small articles placed in bins may get sucked into inlet, or to outside of boat which may allow water vapor/mist/splash from being sucked into inlet.

**TO PREVENT** Air Intake Hose from moving out of position (after servicing engine) during operation, hose **MUST BE FASTENED** to boat with clamp(s).



14905A

a - Air Intake Hose Inlet    b - Air Intake Hose    c - Carburetor Air Silencer

**Figure 4. Carburetor Silencer Air Intake Hose**

**CAUTION: Improper installation of air intake hose may cause water or debris to be drawn into engine thru intake manifold. This could cause serious internal damage to engine, which will not be covered by MerCruiser Warranty.**