

MERCURY OUTBOARDS

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MECHANIC of outstanding

CIRCULATE TO: SERVICE MGR.

PARTS MGR.

MECHANICS

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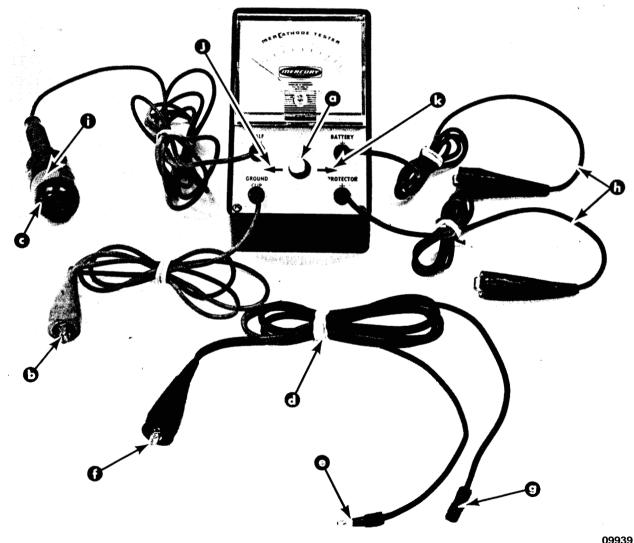
MERCATHODE TESTER (C-91-46802A1) REVISED/SIMPLIFIED OPERATION INSTRUCTIONS

(Attach Service Bulletin Sticker to P. 7D-12 of Your Service Manual.)

Following are MerCathode System component test instructions for <u>Outboard and Stern Drive</u> applications.

System Test

- **1.** Place test switch ("a" in Figure 1) in direction of the RED arrow.
- 2. Place ground lead ("b") of Tester on engine or negative (·) battery terminal.



a - Test Switch

b - Ground Lead

c - Reference Electrode

d - Adaptor

e · Male Lead

f - Adaptor Clip

g · Adaptor Lead

h - Black Leads i -Screen j - Red Arrow k - Black Arrow

Figure 1. MerCathode Tester (C-91-46802A1)

3. Immerse Tester's reference electrode ("c") in the water. If meter reads between 0.9 and 1.05 volts on top (red) scale, the drive is cathodically protected and all components are OK.

Wiring Check

If above reading (between 0.9 and **1.05** volts on RED scale) is not satisfactory, check for an open connector or a broken wire.

Reference Electrode Test

- 1. If wiring is OK, plug male lead ("e") of 3-terminal lead adaptor ("d", furnished with Tester) into female plug on MerCathode System reference electrode (with instrument still grounded).
- 2. Press adaptor clip ("f") into screen ("i") of Tester's reference electrode ("c"). A meter reading between **0.4** and **1.05** volts on the RED scale confirms that the MerCathode System reference electrode is intact and operative.

Anode Test

- 1. Remove the MerCathode System reference electrode lead from the adaptor male lead ("e") and connect the MerCathode System anode lead into adaptor lead "g".
- 2. Press adaptor clip ("f") into screen ("i") of Tester reference electrode "c" to obtain a reading between 0.8 and 2.0 volts on RED scale. Such a reading indicates that the anode is OK and retains its platinum surface.

Controller Test

If wiring, reference electrode, anode and battery of MerCathode System are OK, and its terminals are connected properly, but the system does not function properly, return the controller to your dealer for replacement.

NOTE: The Tester's black scale ("k") and 2 black leads ("h") are used only to read the anode current in milliamperes. These leads are not necessary for testing the MerCathode System and can be cut off to simplify the Tester.

MerCruiser Inboard and V-Drive Installations

- 1. Place test switch ("a" in Figure 1) in direction of the RED arrow.
- 2. Disconnect anode (male plug) from MerCathode System controller.
- 3. Connect Tester's ground lead ("b") to engine or to the negative (-) battery terminal.
- **4.** Immerse Tester's reference electrode ("c") in the water. Note reading on RED scale of meter.
- **5.** Reconnect the anode (male plug) to the controller. If reading increases 0.2 or more on the RED scale, the System is operating correctly. If reading does not increase by 0.2 or more, check for open connector or a broken wire.
- **6.** If wiring is OK, perform "Reference Electrode Test", "Anode Test" and "Controller Test", preceding.