



# MERCROISER SERVICE BULLETIN

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Testing MerCathode Anti-Corrosion System

## Testing MerCathode Anti-Corrosion System

### A. INSTALLATION - IMPORTANT: Test MerCathode System after Completing Installation.

A newly-installed MerCathode system must be checked with a MerCathode Tester (C-91-46802A1) to assure that the system is functioning and giving proper corrosion protection. It also is recommended that the system be checked periodically.

A dealer or individual with a MerCathode Tester and accompanying instructions will be able to measure, test and monitor the MerCathode System performance.

### B. TEST METER INSTRUCTION "CHECK LIST"

A brief "Test Meter Instructions Check List" now is attached to the back side of the MerCathode Tester. If a test meter in your stock does not have this check list attached, cut out the sample (Figure 1) and attach to the back of the test meter with Bellows Cement (C-92-36340-1).

### C. USING MERCATHODE TESTER TO DETERMINE WATER ELECTRICAL CONDUCTIVITY

1. The graph (Figure 2) is based on a battery voltage of 12.6 volts. If a dry battery or a wet battery is used, be certain that it is fully charged and delivering the specified voltage. Do not use the battery in a boat while the engine is running or while the battery is being charged.
2. Connect the negative (-) side of the battery to an old propeller or housing, then place in water.
3. Connect a 50-ohm resistor, with a power rating of at least 2 watts, to the positive

#### TEST METER INSTRUCTIONS

#### CHECK LIST

##### SYSTEM CHECK

1. Place the switch in direction of red arrow - "Ground Clip" to engine - Suspend "Half Cell" in water. Meter to read between 0.8 and 1.05 on red scale.
2. Disconnect reference electrode from MerCathode PROTECTOR and wait about a minute. If reading on red scale increases, system is o.k. - no further tests are necessary.

##### REFERENCE ELECTRODE AND ANODE CHECK

1. Disconnect both anode and reference electrode. Plug adapter into reference electrode lead and press adapter lead clip against the screen of the "Half Cell". Meter to read between 0.5 and 1.05 on red scale.
2. Plug adapter into the anode lead and press the adapter lead clip against the screen of the "Half Cell". Meter to read between 0.8 and 2.0 on red scale.

##### PROTECTOR CHECK

1. Remove MerCathode PROTECTOR lead from positive battery terminal and connect it to tester lead labeled "PROTECTOR +". Connect tester lead labeled "BATTERY +" to positive battery terminal. Disconnect both anode and reference electrode from PROTECTOR. Place the switch in direction of black arrow. Meter to read between 3 and 15 on black scale.
2. Connect short (A) and (R) leads of PROTECTOR to adapter lead and ground adapter lead to engine. Meter to read between 120 and 200 on black scale.

(OVER)

Figure 1. Check List

(+) side of the battery. (Figure 3) If this test is performed with no series resistor, the protective fuse within the MerCathode Tester may be blown, due to excessive current.

*NOTE: Purchase resistor locally or order Part No. C-47892 from Kiekkhaefer Mercury franchised dealer.*

