



MERCUISER SERVICE BULLETIN

Section: XII (Bulletins)

Number: 66-5/10

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Cut individual items along broken lines & paste in appropriate sections of your MerCruiser Service Manual.

- A. Charging Circuit Precautions (For P. 2 of Section 6)
- B. Radio Noise Shielding Kit - 4-&6-Cylinder Engines (For P. 21 of Section 5)
- C. MerCruiser 110-120 Ignition Coil Replacement (For P. 13 of Section 5)
- D. Carburetor "Lean" Mixture (For P. 14 of Section 1)

A. CHARGING CIRCUIT PRECAUTIONS

(For P. 2 of Alternator Section 6)

The charging circuit consists of the battery, alternator, wiring and switches and the transistor regulator. The semi-conductors used in transistor regulators are very sensitive to:

1. Incorrect battery polarity
2. Improper connections
3. Shorts
4. Grounds

Any one of the above conditions can cause excessive current to flow thru the regulator and result in instantaneous damage to the semiconductors. When working on the charging system, always observe the following precautions:

1. Always disconnect the battery ground terminal and reconnect the battery ground terminal last.
2. Never attempt to polarize the diode rectified A.C. alternator. This type of alternator never needs to be polarized.
3. Do not short across or ground any of the terminals in the electrical system. Always observe the specified checking procedure.
4. Never operate the alternator on open circuit. Make certain all connections in the circuit are secure.
5. Always make certain that the polarity of the alternator, regulator and battery are the same. Connecting any one of these units in reversed polarity can cause instant damage.
6. When connecting a charger to the system battery, remove the battery terminals from the battery, then connect negative to negative and positive to positive.

B. RADIO NOISE SHIELDING KIT - 4-&6-CYLINDER ENGINES

(For P. 21 of Ignition Section 5)

Radio Noise Shielding Kits B-38803A3 and B-38804A3 have been superseded by Radio Noise Shielding Kits B-38803A4 and B-38804A4. Kit B-38803A4 and B-38804A4 do not include the ignition coil and ballasts. When ordering Kits B-38803A4 and B-38804A4 for use on earlier model MerCruiser engines (serial numbers listed below), it also is necessary to order Coil and Ballast Kit, B-45129A1.

- B-38803A4 - MerCruiser 110 prior to Serial No. 1949902
- B-38803A4 - MerCruiser 120 prior to Serial No. 1951140
- B-38804A4 - MerCruiser 150 prior to Serial No. 1948094
- B-38804A4 - MerCruiser 140 - all engines

C. MERCUISER 110-120 IGNITION COIL REPLACEMENT

(For P. 13 of Ignition Section 5)

Some MerCruiser 110 and 120 engines incorporated ignition coil C-32193 as an alternate to the C-26433 coil which is normally used on these model engines. This was due to a temporary shortage of C-26433 coils in production. Service replacement coils will remain Part No. C-26433.

D. CARBURETOR "LEAN" MIXTURE

(For P. 14 of General Information Section 1)

We have received several reports from the field concerning "lean" operation of Inboard Marine Engines.

The problem, while new to outboard-oriented people, is familiar in the inboard engine field. The lean mixture is caused by accumulation of a deposit in the main jets of the carburetor. This deposit, sometimes hardly visible to the eye, reduces the diameter of the jet and, thus, leans out the mixture.

The deposit is formed by a chemical reaction between humid air and gasoline which is left standing in the carburetor bowl. Accumulation is spotty, and occurrence depends upon certain conditions of humidity, heat and composition of the gasoline. Accumulation time also is required, hence the deposit usually will be observed after engines have been run, then stored or left idle for some period of time.

When such deposits are found, the immediate cure is simply to clean the main jets to restore to proper bore size. Some fuels, which are sold at marine stations, incorporate anti-gumming compounds to prevent these deposits. Most do not, hence, we recommend that you and your customers use Quicksilver Solver Carburetor Conditioner, Part No. C-92-34249, to reduce deposit build-up.

Interestingly, this problem is not common in outboard motors, simply because the oil in the gasoline inhibits formation of the deposit.

If any of your MerCruiser customers experience this type of fuel problem, explain the cause and the method of treatment with Quicksilver Solver Carburetor Conditioner.

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| C-92-34249-1 | Quicksilver Solver Carburetor Conditioner, 12 Oz. Can | \$.89 List |
| C-92-34249-12 | Quicksilver Solver Carburetor Conditioner, Case of 12-12 oz. cans | 10.68 List |
| | Minimum Dealer Order: 1 Case (24 Cans) | (Regular Discount) |