

MERERUISER SERVICE BUILTIN

Section: || (Installation)

Number: 66-3/08

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

- A. MerCraiser IA-B-C Drive Installations
- B. Importance of Fuel Tank Locations
- C. Irregular Boat Transom
- D. Electric Fuel Gauge Installation
- E. MerCruiser "O" Installation
- F. MerCruiser Engine Coupling Failure

A. MERCRUISER IA-B-C DRIVE INSTALLATIONS

(For P. 2A of Installation Section 11)

Present MerCruiser IA-B-C drive units have two neoprene "O" rings on the universal shaft at the transom support bearing surface. This change was made to eliminate any possible noise between the universal shaft and support bearing.

We want you to be aware that IA-B-C drive units with "O" rings, consequently, will require more effort to install. When installing the drive unit, it is recommended that a thin coat of Anti-Corrosion Grease (C-92-45134A1) be applied to the "O" ring surfaces to ease installation.

B. IMPORTANCE OF FUEL TANK LOCATION

(For PP 25A-23B-9C-8D of Installation Section II)

The location of the fuel tank in a MerCruiser-equipped boat is selected by the boat manufacturer or by the dealer who makes the installation, since boat design and riding qualities are prime factors in this selection. At no time should a fuel tank be installed in a position where the fuel level is above the carburetor itself when the boat is at rest. If the tank is located above the carburetor, gravity feed could cause carburetor flooding.

Under these conditions, rocking or jostling of the boat, while moored, may result in the unseating of the inlet needle valve and cause the carburetor to flood. This will allow raw fuel to enter the manifold combustion chamber and seep past the piston rings, thus diluting the crankcase oil. If this condition exists, it can be corrected only by relocating the fuel tank so that the fuel level in the tank is below the carburetor bowl when the boat is at rest.

C. IRREGULAR BOAT TRANSOMS

(For PP IA, IB & IC of Installation Section II)

Boats, which have irregular transoms, will complicate MerCruiser installations. If difficulty is experienced when installing a stern drive unit, the following should be checked:

- 1. Transom not parallel (thicker on the bottom than on the top).
- 2. Irregular transom surface which causes transom plates to be tipped to one side.
- 3. Transom thickness not within recommendations.

Care should be taken to follow the outline of the transom drilling fixture or template. Failure to do so could cause water leaks around transom assemblies.

D. ELECTRIC FUEL GAUGE INSTALLATION

(For P. 10E of Installation Section II)

MerCruiser I & II - When installing an electric fuel gauge on a fuel tank to be used in conjunction with a MerCruiser I or II, it is recommended that the source of current be taken from the white terminal of the water temperature gauge.

MerCruiser "60" - When installing an electric fuel gauge for a MerCruiser "60" installation, it is recommended that the source of current be taken from the white terminal on the ignition switch.

E. MERCRUISER "O" INSTALLATION

(For P. 2C of Installation Section II)

When installing a MerCruiser "60" engine, care should be used while lining-up the engine with the inner transom plate. Rocking the engine from side-to-side, while attempting alignment, can damage the water tube and/or seal located in the inner transom plate. If this seal is damaged, water will leak around the inner transom plate, and replacement of the seal will require removing the engine and cover assembly.

F. MERCRUISER ENGINE COUPLING FAILURE

(For Installation Section II)

Inspection of engine coupling assemblies returned from the field has indicated the following causes:

- 1. Failure of engine coupling assembly spline and/or universal splined shaft indicates lack of sufficient lubrication at time of installation.
- 2. Hub bond, which shears or pulls loose from the hub center, indicates engine-drive misalignment because of one or more of the following:
 - a) Improper engine alignment to drive. Alignment tool C-91-32555 not used or not adjusted properly.
 - b) Improper front engine support or support frame too weak.
 - c) Transom not to recommended thickness -- causing transom flexing.
 - d) Transom not parallel with recommended thickness.
 - e) Transom flexing caused by improper transom support.
 - f) Large fiber washer not installed on rear mounting brackets.
 - g) Improper installation of special split lockwasher on rear mounting bracket.

Failure of engine coupling assemblies due to any of the above will void warranty of the part.