MERCRUISER SERVICE BULLETIN

Section: XII *(Bulletins)*
Number: 68-14-09
Date : 5/16/68

Cut individual items along broken lines and attach in appropriate sections of your Service Manual.

A. MerCruiser Transom Angles *(For Section II)*
B. Fuel Filter Kit *(For Section VII)*
C. Cylinder Blocks - Freeze Cracks *(P. 16, Section I)*
D. MerCruiser II 1.33:1 Drive Reverse Locks *(P. 51, Sec. IX)*

A. MERCRUISER TRANSOM ANGLES

(For Installation Section II)

Ideal MerCruiser 60-80, 120-160 and MerCruiser III drive transom angle is 13° (range of 10° to 16° permissible).

Ideal MerCruiser II drive transom angle is 12°, with a degree range of 8° to 20° permissible.

Transom angles above or below those specified will complicate engine and drive installation and can affect boat performance by limiting tilt and trim operation.

B. FUEL FILTER KIT

(For Fuel System & Carburetion Section VII)

Fuel Filter Kit C-35-52456A1 is specially designed for use with all MerCruisers. The filter is a real aid in preventing engine malfunction which is caused by dirt and water accumulation in fuel systems, particularly in boats that do not have a primary fuel filter in the fuel tank.

Only one kit is required for single or dual installation, and installation is easy. To service, just replace the throw-away container as you would an engine oil filter.

A Fuel Filter Kit (C-35-52456A2) also is available for outboard installations to be used in conjunction with Fuel Filter Kit C-35-52456A1.

C-35-52456A1	MerCruiser Fuel Filter Kit
C-35-52456A2	Outboard Fuel Filter Kit

C. CYLINDER BLOCKS - FREEZE CRACKS

(For P. 16 of General Information Section I)

Damaged cylinder blocks, which suffer horizontal cracks when water freezes in the block, cannot be honored under the warranty policy. These freeze cracks are caused by failure to drain the cylinder block and exhaust manifold for winter storage in anticipation of freezing weather.

Four and 6-cylinder blocks crack on the port side of the engine, just below the core plugs or along the upper edge below the cylinder head.

Eight-cylinder blocks usually crack in the area near the hydraulic lifters or below the intake manifold in the valley of the block. If water is found in the crankcase, remove the intake manifold to check these areas for freeze cracks.

D. MERCRUISER II 1.33:1 DRIVE REVERSE HOOKS

(For P. 51 of Drive Units Section IX)

1. If a MerCruiser II drive (1.33:1) fails to hold when shifted into reverse it may be due to worn reverse hooks and worn or bent tilt pins which can cause malfunction of the reverse hook assembly. When replacing reverse hooks, check the following items which are also described on Pages 50 and 53 in Section IX of the MerCruiser Service Manual.

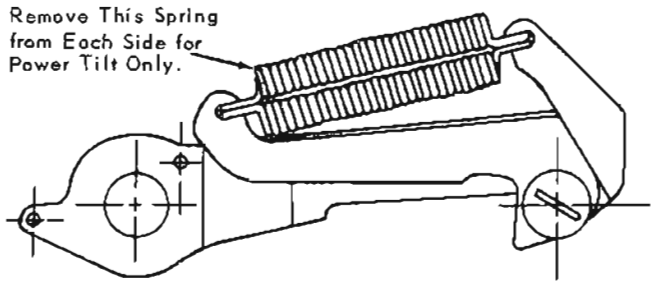

Figure 1. Reverse hook Assembly Spring

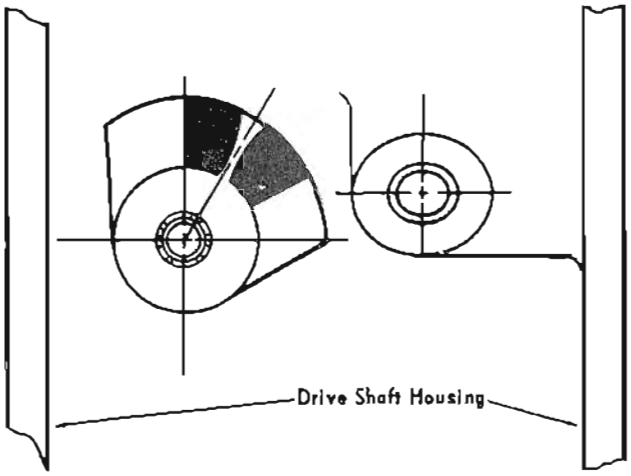

Figure 2. Cam Position - Forward Gear, Left Hand Rotation

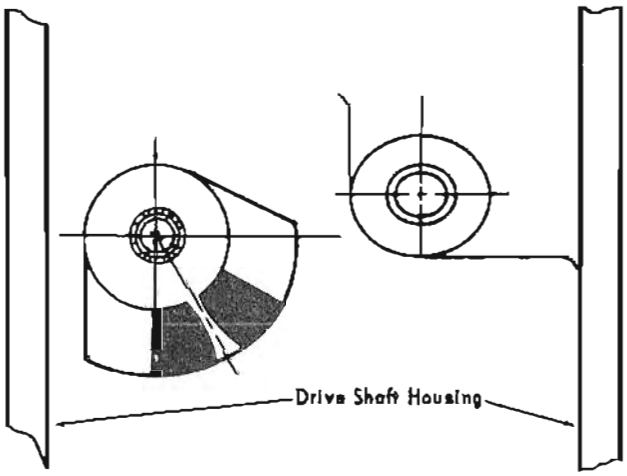

Figure 3. Cam Position - Forward Gear, Right Hand Rotation

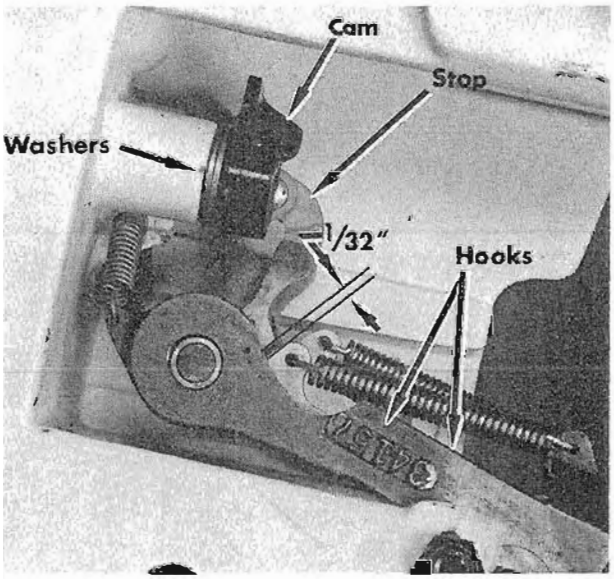

Figure 4. Cam Position

CHECK:

a. Proper amount of springs on the reverse hook assembly. (Figure 1)
b. Reverse lock cam positioned properly for drive rotation. (Figures 2 and 3)
c. Reverse lock cam shimmed to correct clearance. (Figure 4)
d. Unit and control cables adjusted to specifications.

2. Reverse hook (B-38382) material has been improved to resist wear at the tilt pin area. The new hook is charcoal black with chrome plating at the hook end.