

# MERERUISER SERVICE

Section: XII (Bulletins)

Number: 67-866-27

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

A. Relocating Hydraulic Hoses (Sec. 11)

B. Installing Hydraulic Hoses (Sec. 11)

C. Tilt Up Release Lever (Sec. 1)

D. Exhaust Elbow Screws Torque (Sec. 11)

E. Harness Clamp (Section 11)

F. Front Mount Corrosion (Sec. 11)
G. Hydraulic Pump Replacement (Sec. 11)

H. Hydraulic Pump Assemblies (Sec. 11)

1. Drive Unit Turn Buckle (Sec. 11)

J. Till Switch Connection (For C-90-46072)

K. MerCruiser Drive Unit Lube (Sec. 1)

#### A. RELOCATING HYDRAULIC HOSES -

MerCruiser 120 and 160 with Power Trim

(For P. 5E of Installation Section II)

When hydraulic pump mounting bracket B-46306Al is required on MerCruiser 120 or 160 Stern Drive Units with Power Trim, it will be necessary to reposition the hydraulic hoses. Remove hose clamp from lower left hand corner of inner transom plate and rework the end of the hose from a 90° angle to a 45° angle. (Figure 1) Current production MerCruiser 120 and 160 units have longer (22" 56cm hoses installed.

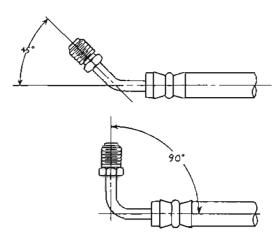


Figure 1. Hose Angles

# B. INSTALLING HYDRAULIC HOSES - MERCRUISER POWER TRIM (For P. 10E, Section 11)

When making installations or performing repairs on MerCruiser Units equipped with Power Trim, use caution so that up-and-down hydraulic hoses are not reversed. When operating Power Trim for the first time, push the down switch first, then, if the drive unit comes up, the hydraulic hoses are reversed on the valve housing assembly at the pump base. Switch hoses to correct this condition. This precaution will prevent breakage of the reverse lock valve assembly cover.

DO NOT overlighten hydraulic line fittings, or threads will be stripped out of till cylinders or pump hoses. Fittings should be "snugged up" until no leaking occurs at the fitting.

#### C. TILT UP RELEASE LEVER ELIMINATED - MerCruiser 120 & 160 (For P. 2, Section 1)

Current production MerCruiser 120 and 160 Stern Drive Units no longer incorporate the "Tilt Up Release" lever feature on the port side of the bell housing assembly, since these are not required with Power Trim or Power Tilt. To tilt these models up manually, place control handle in forward position, push down on the reverse lock hooks to release from tilt angle pin and lift up on drive unit.

## D. EXHAUST ELBOW SCREWS TORQUE CHANCE - MerCruiser 120 & 160 (For P. 10A, Section 11)

A change has been made in the torque value of the exhaust elbow screws on the MerCruiser 120 and 160. Disregard the 30-35 ft .lbs . (4.14-4.83mkg) torque in the Installation Manual. The new recommended torque value on the three screws for the cast aluminum exhaust elbow is now 20-25 ft. lbs. (2.76-3.45mkg).

# E. HYDRAULIC PUMP HARNESS QUICK DISCONNECT CLAMP- MerCruiser & Outboard

(For Installation Section 11)

A clamp is now available to prevent the harness from becoming disconnected during rough wa' operation and to prevent moisture from entering the receptacle. Place clamp (B-54-46770) over end of harness connector and plug connector onto receptacle of pump harness. Install 8-32 screw thru clamp, install nut and tighten securely.

B-54-46770

Clamp

## F. FRONT MOUNT CORROSION - V-8 Engines (For P. 3B of Installation Section 11)

If front mounting bracket (B-35837A1) for MerCruiser 190-225 engine models should corrode through at the water pump to engine block base because of electrolytic action in salt water areas, cut away the corroded area for clearance and install the east fron spacer kit.

23-46774A1

Spacer Kit

# G. HYDRAULIC PUMP REPLACEMENT - MerCruiser (For P. 5E, Section 11)

Inspection and tests of hydraulic pumps B-36574A4, which are being returned for warranty consideration, have shown that the pump assembly itself checks to specifications with no malfunction.

It is recommended that, in the future, if a hydraulic tilt does not function properly, the dealer make the necessary checks and tests outlined in the MerCruiser Service Manual to determine whether the pump itself is defective, whether the hydraulic tilt arms are defective or whether the system has been properly bled and filled with clean fluid.

Often, by operating the unit several times in the up-and-down positions (if possible), the particle of dirt, which may be restricting the pump operation, will be cleared.

Any hydraulic pumps, which are found to check to specifications upon return to the factory will be rejected and returned to the dealer.

## H. HYDRAULIC PUMP ASSEMBLIES 1967 - MerCruiser 160-120-80 & 60

(For P. 5E, Section 11)

Complete Hydraulic Pump Assemblies with Valve Body Assembly		Control Valve Body Assembly Only	
B-45060A5	Power Tilt MerCruiser 120 & 160	B-45382A1	Power Tilt MerCruiser 120 & 160
B-45060A3	Power Trim MerCruiser 120 & 160	B-45764A2	Power Trim MerCruiser 120 & 160
B-45060A2	Power Tilt MerCruiser 60 & 80	B-45382A1	Power Tilt MerCruiser 60 & 80
A-45060A1	Outboard Power Trim	A-45197A2	Outboard Power Ti.a.
Hydraulic Pump Assembly Only			

#### Hydraulic Pump Assembly Unly

C-45060A7 Hydraulic Pump Assembly - Outboard & MerCruiser (Less Control Valve Body Assy.)

# 1. DRIVE UNIT TURN BUCKLE ASSEMBLY - MerCruiser 120 & 160 (For P. 5E, Section 11)

Turn buckle assemblies, which are used for holding up drive units while trailering, are no longer furnished with the drive units. If a customer desires the turn buckle, it may be purchased as an accessory.

B-32657A2 Turn Buckle - All MerCruiser I-IA-IB-IC (White Units), \$10.25 except MerCruiser I20 and 160

B-32657A3 Turn Buckle - MerCruiser 120 and 160 (Black Units)

### J. TILT SWITCH CONNECTION - MerCruiser 120 and 160

(For Installation Manual C-90-46072)

The leads for the tilt switch to the engine harness do not correspond to the wiring diagram (Figure 12 of the Installation Manual) for MerCruiser 120 and 160 models with Power Tilt.

It is necessary to connect the brown-white lead from the wiring harness to the brown lead from the interlock switch and the brown lead from the wiring harness to the black lead from the tilt switch. As long as the quick-disconnect plugs can be inserted into the tilt switch, it will in no way affect the operation of the tilt switch. Wiring harnesses on future production MerCruiser engines will be changed to correspond with the wiring schematic.

#### K. MERCRUISER DRIVE UNIT LUBRICATION

(For P. 6 of General Information Section 1)

The "Delivery and Inspection Certificate" requirements must be completed prior to delivery of the MerCruiser Stern Drive equipped boat to the customer.

One of the important requirements is a check of the upper and lower gear housing assemblies. Be sure to check the gear lubricant before delivery. Fill as necessary, using Quicksilver Extra-Duty Lubricant (C-92-32641 or C-92-34421).

The lubricant level may be down slightly. This occurs when air pockets are relieved when unit is tilted during shipment. While there is a sufficient amount of lubrication for safe operation, it is desirable to have the units filled completely prior to delivery.