MERCRUISER SERVICE BULLETIN

Section: XII *(Bulletins)*
Number: 65-3 10
Date : 7/23/65

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

A. ENGINE "CUT-OUT" WHEN SHIFTING - MERCRUISER IA-IB-IC with E-Z SHIFT

(For Installation Section 2)

If the engine cuts out while shifting a IA-IB-IC stern drive model with E-Z Shift, be certain that the shift cable is installed properly, according to instructions in Service Bulletin No. 65-1 of Installation Section 2.

If shift cable adjustments are made correctly, and "cut-out" condition persists, install new spring (B-24-39426) in the switch actuating arm.

B. LUBRICANT RECIRCULATING DEVICE REMOVAL TOOL

(For Page 4 of Tool Section 11)

A tool is now available (Figure 1) which removes the lubricant recirculating device in MerCruiser I E-Z Shift gear housing assemblies. Remove lubricant recirculating device by installing Sleeve Tool (C-91-39281) into grooves of sleeve (left hand thread). Thread end of Slide Hammer Puller (C-91-34569A1) into sleeve tool and tap sleeve out of gear housing.

C-91-39281	Sleeve tool	$ 2.60 Net U.S.

Figure 1.
Lubricant Recirculating Device Removal Tool (C-91-39281)

C. MERCRUISER TACHOMETER EXCHANGE SERVICE

(For Page 2 of Alternator Section 6)

We have established a tachometer exchange service for B-33234, B-33233 and B-32831 MerCruiser tachometers which are out of warranty and require repair.

Tachometers which are broken or have been submerged in salt water are not to be included in this exchange service. The exchange price is $25.00 net.

D. RECOMMENDED JET SIZES FOR MERCRUISER 60

(For Page 52 of Fuel System & Carburetion Section 7)

The recommended carburetor jets for the MerCruiser 60 follows:

0-to-5,000 Ft.	-	.059" Dia. Jet	-	Part No. 1399-1459
5,000-to-10,000 Ft.	-	.057" Dia. Jet	-	Part No. 1399-1457
10,000 Ft. & Up	-	.055" Dia. Jet	-	Part No. 1399-1655

E. MERCRUISER IA-IB-IC GEAR HOUSING ASSEMBLY

(For Page 14 of Drive Units Section 9)

E-Z Shift gear housing complete (B-1623-2511A3) and shift core wire assembly (B-38399A2) and tube support supersedes the earlier IA-IB-IC gear housing assembly complete (B-1623-2406A2). When used on earlier IA-IB-IC stern drive units WITHOUT the shift cutout switch on the inner transom plate, it will be necessary to install the shift cable core wire assembly and tube support which are included with the gear housing, to assure satisfactory operation. If this core wire and tube support are not used, the original core wire may buckle because of the different gear shift mechanism.

NOTE: Core wire assembly and tube support is installed as original equipment on late IA-IB-IC stern drive units which have the shift cut-out switch on the inner transom plate.
Complete installation instructions are included with the gear housing.

F. UNIVERSAL JOINT BELLOWS INSTALLATION

(For Page 24 of Drive Units Section 9)

When repairing MerCruiser IA-IB-IC stern drive units, install drive screws (C-10-25612) in universal joint bellows flange on both bell housing and gimbal housing. Installation of the drive screws provides a more positive means of fastening the bellows to the flanges. Later production drive units will have the drive screws already installed.

To install drive screws, position screws in flanges in approximate location shown in Figures 2 and 3. Holes can be drilled by placing a right angle drill adaptor on a drill.

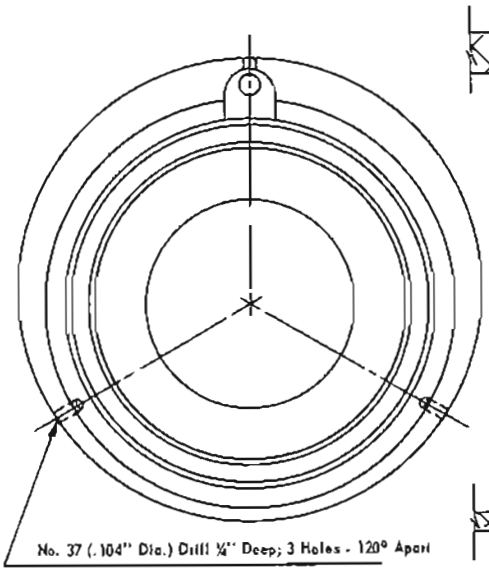

Figure 2. Position of Drive Screws in Gimbal Housing

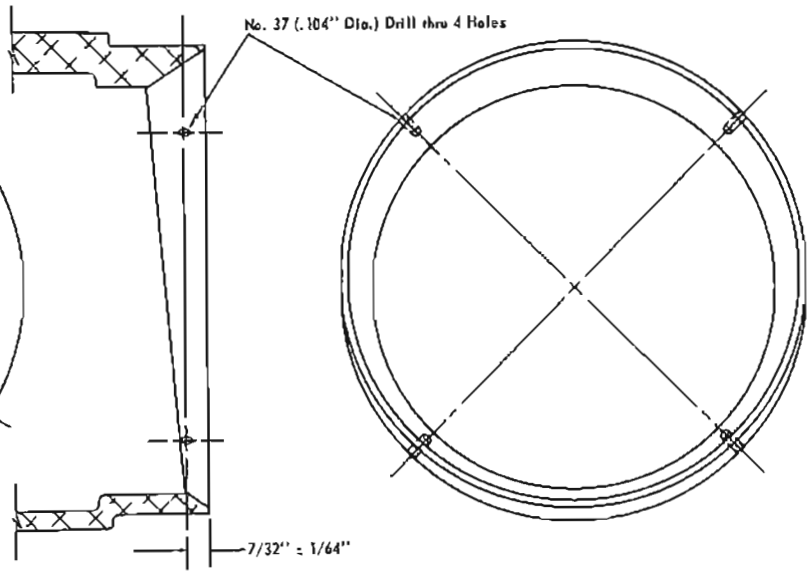

Figure 3. Position of Drive Screws in Bell Housing

It will be necessary to cement universal joint bellows when reinstalling, as follows:

1. Clean outside diameter of bellows mounting flanges of gimbal housing and bell housing with wire brush or sandpaper.
2. Apply a thin coating of Bellows Adhesive (C-92-36340) to inside diameter of each end of bellows.
3. Wipe outside diameter of bellows mounting flanges with lacquer thinner.
4. Allow adhesive to dry 5 to 10 minutes, or until no longer tacky, before installing bellows.
5. In cold weather, heat bellows to room temperature with heat lamp or large electric light bulb to make more pliable for easier installation.

Place hose clamps around bellows and flanges and tighten securely. Position clamps beyond heads of drive screws. This will prevent clamps and bellows from slipping off.

G. POWER TILT LOW PRESSURE HYDRAULIC PUMP EXCHANGE

(For Page 16 of Miscellaneous Section 10)

The low pressure hydraulic Power Tilt pump (B-34901A2) is no longer available and is superseded by the high pressure hydraulic pump conversion kit (B-36574A3).

Rather than make replacement parts available for the low pressure pump, it has been decided to exchange the low pressure pump for the high pressure pump conversion kit (B-36574A3) at a $50.00 net exchange price. This will be for pump assemblies which fail outside of the normal warranty period, and which are repairable. Those damaged beyond repair, or those, which have been submerged, are not covered by this exchange. The cost of replacement of the valve body and gear assembly alone is $39.60 plus labor.

Any high pressure hydraulic pumps, which fail within the normal 90-day warranty period, are to be replaced at no charge. DO NOT REPAIR EXCEPT AS AN EMERGENCY MEASURE. Those high pressure hydraulic pumps, which fail outside the normal warranty period, are to be repaired on a charge basis, using replacement parts. Replacement parts are listed on Page 51M in the Accessory Section of your MerCruiser Parts Manual.

H. TAPPET ADJUSTMENT - MERCRUISEROVER DIESEL MODEL

(For Pages 11-12 of MerCruiseRover Section 13)

It is of the utmost importance that tappet clearances be maintained at the correct figure; that is, .010" (0.25mm) on all valves, with engine either cold or at running temperatures. Less clearance will result in reduced power output, while greater clearance will mean noisy tappets. Tappets, therefore, must be adjusted after the first 20 hours of operation and every 100 hours thereafter.

To adjust tappets, proceed as follows: (Figure 4)

1. Turn crankshaft in direction of rotation until No. 8 valve (counting from forward end of engine) is fully open. In this position, tappet for No. 1 valve is on dwell of its cam and is in correct position for checking.
2. Check No. 1 tappet clearance with .010" (0.25mm) feeler gauge inserted between rocker and valve stem. (Figure 4)
3. If adjustment is required, loosen locknut and rotate tappet adjusting screw until correct clearance is obtained. (Figure 4)
4. Retighten locknut. Be sure that this does not change clearance.
5. Repeat procedure for remaining valves in order shown below (tappets should be set in following order):

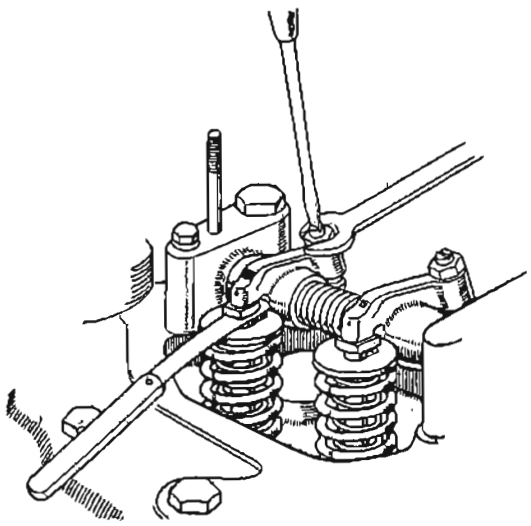

Figure 4. Adjusting Tappets

Set No. 1 tappet with No. 8 valve fully open.
Set No. 3 tappet with No. 6 valve fully open.
Set No. 5 tappet with No. 4 valve fully open.
Set No. 2 tappet with No. 7 valve fully open.

(Continued in Next Column)

Set No. 8 tappet with No. 1 valve fully open.
Set No. 6 tappet with No. 3 valve fully open.
Set No. 4 tappet with No. 5 valve fully open.
Set No. 7 tappet with No. 2 valve fully open.