



MERCRUISER SERVICE BULLETIN

Section: XII (Service
Bulletins)
Number: 20 65-01
Date : 1/5/65

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

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|---|--|
| A. Exhaust Tube Replacement - MerCr. I-IA-IB-IC | E. Shift Cable Attachment - MerCr. IC |
| B. Winter Storage - Engines & Stern Drives | F. Special Fuel Tanks - Cautions |
| C. Water Metering Housing - V-8 Engines | G. Replacement Manifold Body - 110 & 140 |
| D. MerCruiser 190 and 225 Distributor | H. Control Cable Measurements |
| | I. Hot Start Problem - MerCruiser 150 |

A. EXHAUST TUBE REPLACEMENT - MERCRUISER I-IA-IB-IC

(For P. 26 of Drive Unit Section IX. This Information Supersedes Item "C" in MerCruiser Service Bulletin No. 1, Section XII, Dated 10/10/62.)

Inspect the exhaust tube (B-32-32787) at least once each year and replace if tube has cracks or shows other signs of deterioration. Testing and field operations have produced excellent results which indicate that automatic annual replacement of exhaust tube is not required.

B. WINTER STORAGE - MERCRUISER ENGINES

(For P. 16 of General Information Section I)

MerCruiser Engines: When draining engine's cooling system, it is necessary that bow of boat be higher than stern on those boats which have engines with drain plugs in rear. On boats, whose engines have drain plugs in the front of the engine, the bow of the boat must be tilted down, or water may remain trapped in cylinder block and exhaust manifold. It also is advisable to insert a short piece of wire in drain holes to be sure that sand, silt or other foreign material are not partially blocking drain hole. If engine is not completely drained, trapped water may freeze and cause severe damage to engine. If freeze damage is suspected, or if water is detected in combustion chambers or crankcase oil, check inner water jacket cover of manifold for possible cracks, as well as cylinder head and cylinder head gasket and cylinder block. If manifold is not completely drained, trapped water can freeze and crack inner water jacket cover without visible external damage.

Stern Drive Units: Do not store stern drive units in the tilt-up position. The bellows may become "set" and result in premature failure when unit is returned to service in the spring.

C. WATER METERING HOUSING - V-8 ENGINES (Add on P. 68 of Engine, Mechanical Section VII.)

The water pressure relief valve has been replaced by a 7/8" (22.225mm) orifice in the water metering housing (B-32904 or B-32905). Discard the water pressure relief valve when installing this new style water metering housing.

NOTE: Either B-32904 or B-32905 new style water metering housing is completely interchangeable with early style water metering housing, provided the water pressure relief valve is removed.

D. MERCRUISER 190 and 225 DISTRIBUTOR

(For P. 15 of Engine, Tuneup Section III)

Later model 190 and 225 engines (Code No. F07245D and above) have a new distributor (B-38807) which can be identified by a metal strap (stamped "1111076") which is attached to the base of the distributor. Because of a change in the centrifugal spark advance, the engine timing with the new distributor must be set at 8° BTDC rather than 12° BTDC. This new distributor can be back-fitted on earlier engines; however, it will be necessary to retime engine at 8° BTDC. MerCruiser 225 engine serial numbers start with 1821906.

E. SHIFT CABLE ATTACHMENT - MERCUISER IC

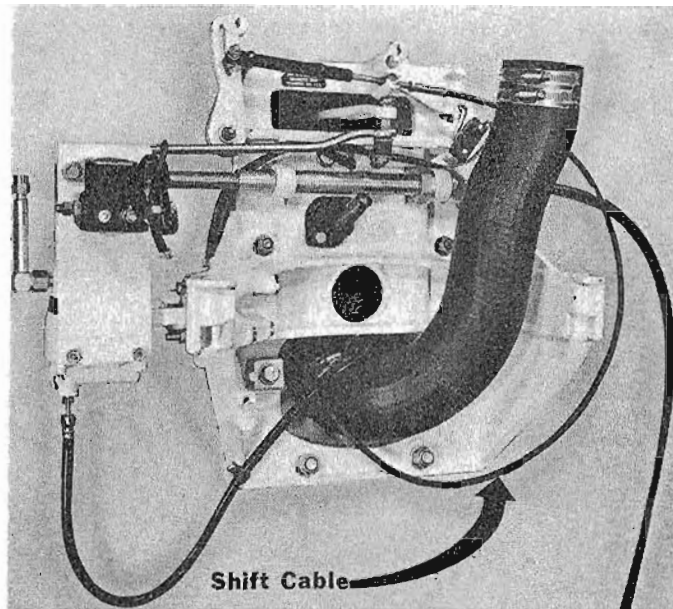
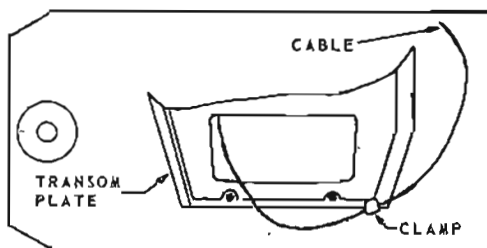
(For P. 6 of Installation Section II)

Some MerCruiser IC Stern Drive Units were shipped with an incorrect shift cable warning tag attached to the transom plate assembly. (Figure 1) Later MerCruiser IC shift cables are protected with a spiral protective shield and it is not necessary to clamp the shift cable to the inner transom plate. Disregard the red warning tag. (Figure 1) and follow instructions in MerCruiser IA-IB-IC "Installation Manual". Route shift cable as shown in Figure 2.

Figure 1. Red Warning Tag



Figure 2. Shift Cable Routing



F. SPECIAL FUEL TANKS - CAUTIONS

(Add to P. 4 of Fuel System & Carburetion Section VII)

We again caution dealers of the dangers involved when using special fuel tanks with MerCruiser Stern Drive Packages (and larger outboard motors).

In many cases of engine malfunction with fiber glass fuel tanks, we have found that wax, used in the construction of these tanks, was dissolved by the fuel and lodged in the fuel filters. This is practically impossible to detect and, although the filters appear to be in perfect condition, the fuel flow is restricted and results in a lean-out condition that can be corrected only by replacing the filter elements.

In other types of fiber glass fuel tanks, minute particles of fiber glass remain in the tank after construction, with subsequent clogging of fuel filters.

We have found also that, in many cases of engine malfunction with "built-in" or special fuel tanks, the fuel pickup in these tanks was unsuitable to handle the fuel requirements to the engines. Various other adverse findings were:

1. Fuel pickup has too small a screen or filter over the end.
2. Poor joints or connections caused air leaks into fuel system.
3. Absence of large openings at reasonable location prevents proper fuel pickup installation.
4. Some types of galvanized tanks cause flaking of plating with subsequent clogging of fuel pickup and filters.
5. Tanks which have been spray painted on the inside experience flaking which clogs the pickup and filters.

We, therefore, caution against installation of built-in or special tanks not approved by the Kiekhaefer Corporation for use with MerCruisers or outboards.

G. REPLACEMENT MANIFOLD BODY - MERCUISER 110 and 140

(For P. 3 of Miscellaneous Section X)

MerCruiser 110

The early style manifold body (B-32679) is no longer available and is superseded by the late style manifold body assembly (B-35138A5). When used on MerCruiser 110 engines (Serial No. 1564843 and below), it will be necessary to order a manifold body water outlet elbow (B-38273) and water outlet elbow gasket (B-27-35150). Body has 5/16" (not 1/4") cap screws.

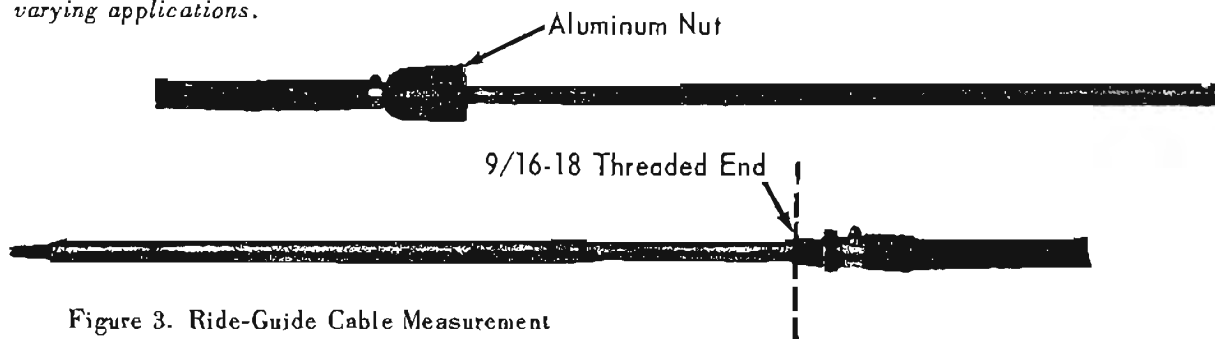
MerCruiser 140

The early style manifold body (B-33084) is no longer available and is superseded by the late style manifold body assembly (B-35155A3). When used on MerCruiser I engines (Serial No. 1566118 and below), it will be necessary to order a manifold body water outlet elbow (B-38273) and water outlet elbow gasket (B-27-35150). Body has 5/16" (not 1/4") cap screws.

H. CONTROL CABLE MEASUREMENTS (For P. 7 of Installation Section II)

In order to clarify the measurement of Ride-Guide and remote control cables, Ride-Guide cables are measured from the large aluminum nut to the 9/16-18 threaded end (Figure 3), while remote control cables are measured from the end of one cable tube to the end of the other, not to include the inner wire. (Figure 4)

NOTE: When measuring boats for control cable installation, an extra length should be allowed for unusual cable routing. It is impossible to arrive at a universal formula for cable lengths because of varying applications.



I. HOT START PROBLEM - MERCUISER '150'

(For P. 6-thru-12 of Engine, Tuneup Section III)

If difficult starting is experienced or prolonged cranking is required to restart engine after it reaches normal temperature, the problem can be corrected as follows:

1. Adjust idle mixture slightly richer.
2. Set idle speed at 600 RPM.
3. Check and correct any air leaks between intake manifold and manifold body.
4. Advise customer to actuate (raise and lower) neutral warm-up lever several times on remote control before operating starter. This induces fuel into carburetor the same as depressing gas pedal on automobile.