MERCRUISER
SERVICE
BULLETIN

Section: XII (Service Bulletins)
Number: 65-704
Date : 3/10/65

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

A. INCORRECT INDICATED OIL LEVEL -- MERCRUISER MARINE 110-120 AND 150 ENGINES

(For Page 12 of General Information Section I)

MerCruiser Marine 110-120 Engines

The oil gauge tube on MerCruiser Marine 110-120 engines should protrude exactly 2-5/16" (58.738mm) from cylinder block, as shown in Figure 1. If the oil gauge tube has been driven into the cylinder block too far, the oil level indicated on the dipstick will be incorrect. This could be dangerous, because, although the dipstick may indicate that the crankcase is full, it actually may be 1½ to 2 quarts (1.420 to 1.893 liters) low.

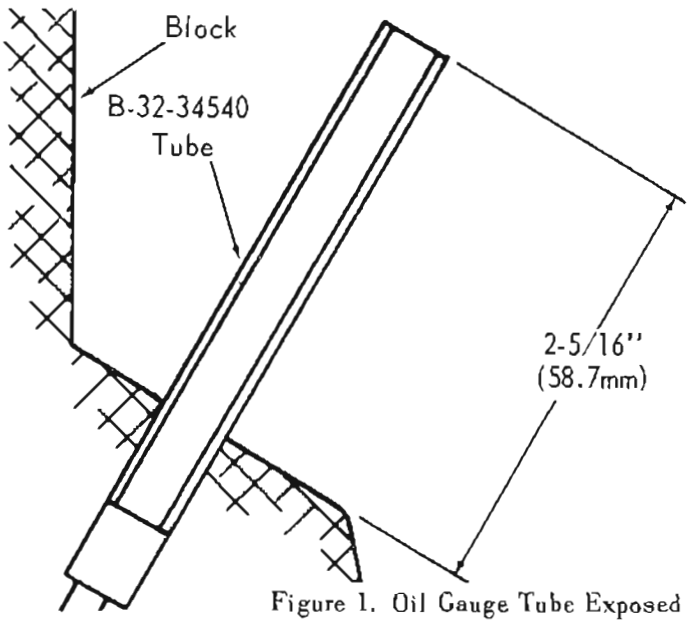

Figure 1. Oil Gauge Tube Exposed

MerCruiser Marine 150 Engine

Early Type: MerCruiser Marine 150 engines, which have oil reservoir located at center of oil pan (Figure 2), must use oil gauge tube B-32-36573 and oil dipstick B-35350 and oil pan B-36407.
Late Type: MerCruiser Marine 150 engines, with oil reservoir located at the rear of the oil pan (Figure 3), must use oil gauge tube B-32-38952 and oil dipstick B-38953 and oil pan B-38454.

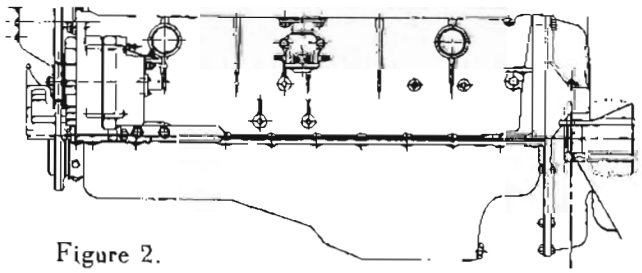

Figure 2.
Early Type - Oil Reservoir - MerCruiser "150"

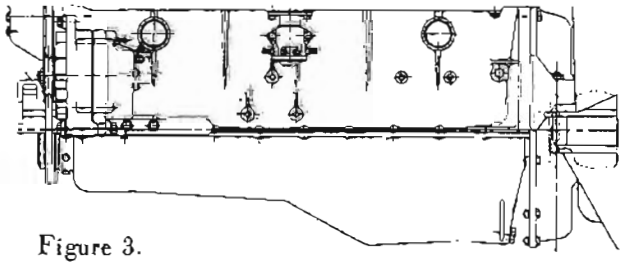

Figure 3.
Late Type - Oil Reservoir - MerCruiser "150"

B. MERCRUISER 140 & 150 CARBURETOR FLOODING

(For Page 17 of Fuel System and Carburetion Section VII)

A carburetor conversion kit (B-1397-2610) is available now for MerCruiser 140 & 150 carburetors to eliminate flooding during prolonged idle. This kit also is effective in preventing rough idle, which is caused by fuel splashing or by carburetor float bounce when boat runs in rough seas.

The conversion kit contains a new spring-loaded viton inlet needle and seat, float and lever assembly, all necessary gaskets and instructions. A special identification tag is included and should be attached to the carburetor so that it can be identified correctly for future service work.

B-1397-2610 Carburetor Conversion Kit $ 5.95 U.S.

C. MERCRUISER IA-IB-IC WITH E-Z SHIFT

Installation of Support Tube on Shift Cable Ass'y B-35187A4 or Inner Core Wire B-38399A2

(For Page 28 of Drive Unit Section IX)

After end of shift cable has been connected to drive unit, install the support tube on the end of the shift cable as follows:

1. Place unit in full forward position.
2. Cut core wire to extend 1-3/8" (34.925mm), as shown in Figure 4.
3. Slide support tube over core wire so that 1/2" (12.700mm) of core wire is shown.
4. Secure support tube to core wire by crimping.
5. Slide cable end guide over end of cable with cable anchor end in place.
6. Insert 2 screws and tighten to 20 to 25 in. lbs. (3.55 to 4.44 kg/cm).

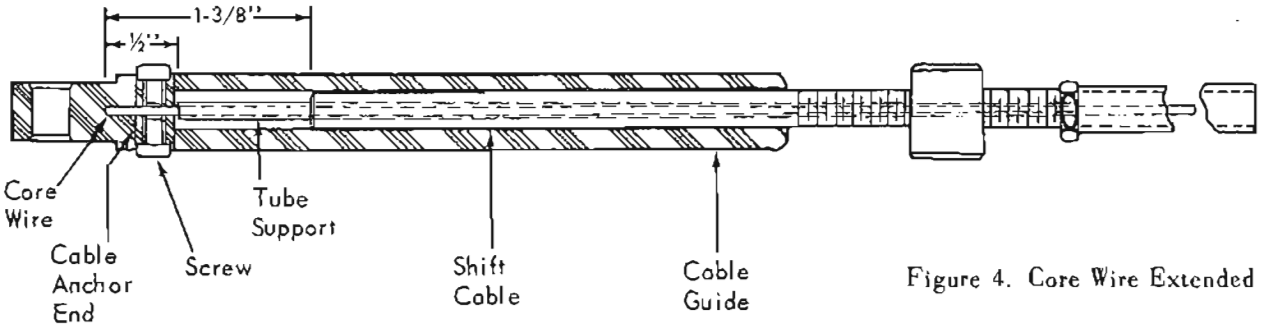

Figure 4. Core Wire Extended

D. MERCRUISER IA-IB-IC - POWER TILT, HYDRAULIC HOSE

(For Page 5 of Installation Section II) (Supersedes Previous Hydraulic Hose Information.)

To eliminate the possibility of the engine coupling damaging the hydraulic line, the line now is routed around the outside of the exhaust hose (Figure 5) rather than across the top of the exhaust hose (Figure 6), as was previously done.

On new installations or when replacing the hydraulic line, it is suggested that the line be routed as shown in Figure 5. To accomplish this, it will be necessary to loosen the hydraulic coupling at the transom and reposition as shown. The hydraulic line connector at the hydraulic pump will have to be bent 90° to allow sufficient slack for the hydraulic line.

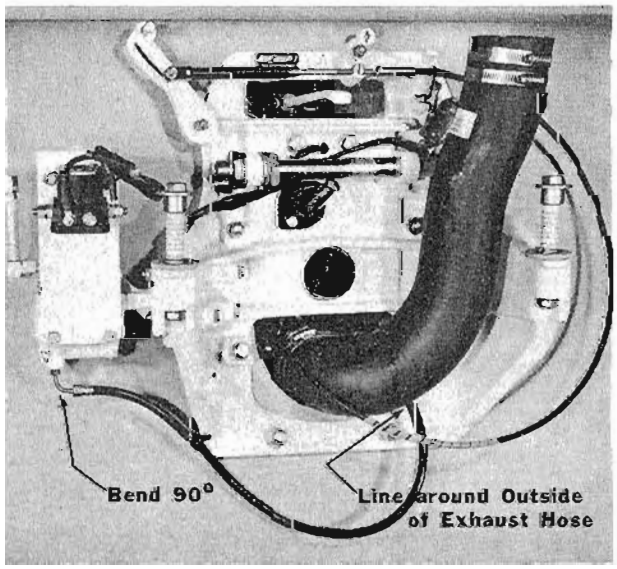

Figure 5. Late Routing of Hydraulic Line

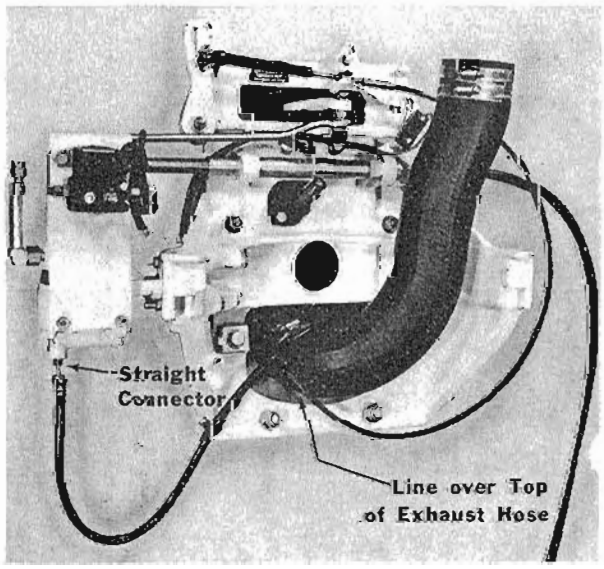

Figure 6. Early Routing of Hydraulic Line

E. DESIGN CHANGE - CONSOLE AND PANEL MOUNTED MERCONTROL *(For Installation Section II)*

Console (C-3565IA1), Panel Starboard (C-36077A1) & Panel Port (C-36077A2)

Control shaft assemblies in console and panel mounted MerControls now are held in place by a screw recessed into the shoulder of the throttle cam. Set screw locks into a recess in control shaft. Previous models had control shaft assembly held in place with a screw and washer located on side opposite control handle.

When installing control handle on early style control, caution must be taken to hold control shaft assembly in from opposite side. If control shaft assembly is not held in place, control handle will push control shaft out, and control handle will not fit on serration properly. This may cause handle to loosen in a short time. If control handle continues to become loose on early style control, the control shaft and throttle cam can be replaced by the current style which is held in place by the set screw.

Also, if control handle is not fully engaged on serrated control shaft, the neutral button cannot be depressed to allow disengagement of shift control. This, in turn, would not allow acceleration of engine while in neutral gear.

Repair procedure of current style is same as previous models, except that set screw must be loosened to remove control shaft assembly from throttle cam.

F. MOUNTING HEAT EXCHANGER - MERCRUISEROVER DIESEL

(For Page 20 of Diesel Engine, Mechanical Section XIII)

If leakage is found to occur between water outlet housing and thermostat housing on the MerCruiseRover diesel engine, shims must be placed between mounting bracket and heat exchanger. (Figure 7) When installing shims, use following procedure:

1. Tighten 3 screws (Figure 8) which hold water outlet housing to thermostat housing.
2. Shim with washers (C-12-26825), as required, between mounting bracket and heat exchanger (Figure 7) until screw holes in water outlet housing are aligned with threaded holes in heat exchanger.
3. After correct shimming has been achieved, tighten 4 heat exchanger to mounting bracket screws.
4. Install 2 screws (Figure 8) and lockwashers between water outlet housing and heat exchanger and tighten securely.

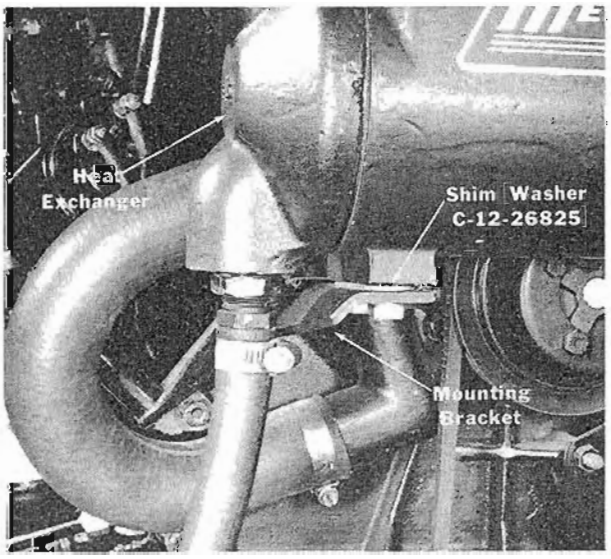

Figure 7. Installing Shims

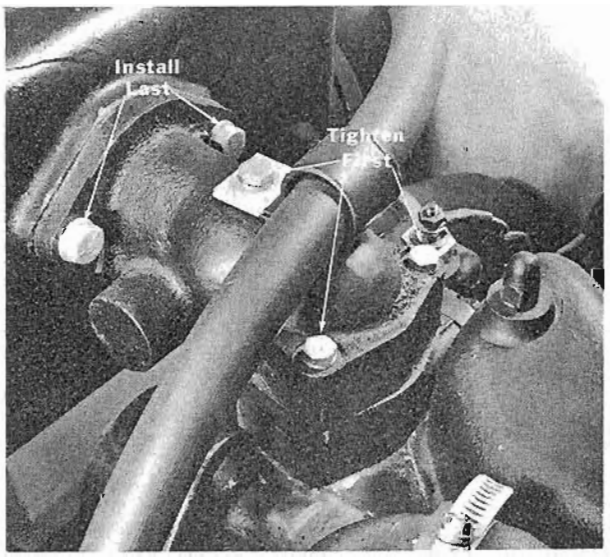

Figure 8. Water Outlet Housing