

NUMBER: 80-6

DATE: 1/31/80

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CIRCULATE TO:  
SERVICE MANAGER  
PARTS MANAGER  
MECHANICS

## A. USE of FORMULA 50-D OIL in OLDER MERCURY OUTBOARDS

*(Attach Service Bulletin Sticker on P. IOE-3 in Your C-90-74041 Service Manual.)*

Formula 50-D oil can be recommended (at a 50:1 mixture) for use in earlier model Mercury Outboards regardless of year of manufacture. Formula 50-D also can be used in other brand outboards (at a 50:1 mixture), provided that the manufacturer recommends use of a 50:1 mixture.

## B. STARTER REWIND REPLACEMENT KIT - Merc 40M-50M

*(Attach Service Bulletin Sticker on P. 4A-2 in Your C-90-74041 Service Manual.)*

Mercury Marine now has a kit to update the manual rewind starter assembly on previous year model Merc 40M and 50M outboards. This kit converts the 3-pawl starter to the single-pawl starter, as used on 1980 models. When major service work on earlier rewind starters is required, it is recommended to upgrade the assembly, using this kit.

**A-91936A1      Manual Rewind Starter Kit**

## C. VAPOR LOCK ELIMINATION - Merc 40-70

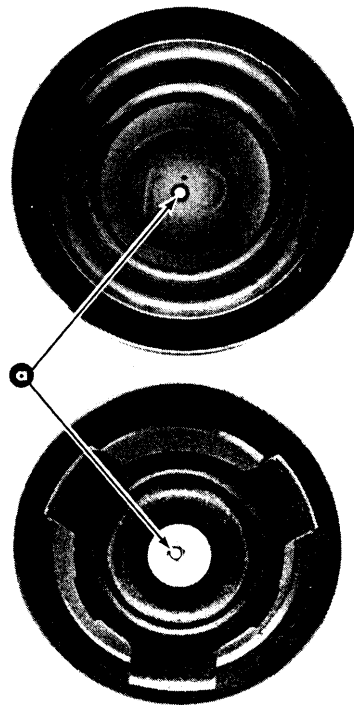
*(Attach Service Bulletin Sticker on P. 5A-4 in Your C-90-74041 Service Manual.)*

Occasional complaints are heard from customers regarding fuel vapor locking of Merc 40 and 70 outboards during very hot weather. This usually causes the engine to die on acceleration after it has been run and then shut down for a short time. To eliminate this problem, drill a .031" dia. (No. 68 drill) hole in the center of both fuel pump check valves. (Figure 1) If you do not choose to drill the holes, the check valves can be replaced with new check valves (Part No. C-21-92346A3).

**C-21-92346A3      Check Valve Kit**

a - .031"(1/32"or .787mm) Hole Drilled in Check Valve

**Figure 1. Hole in Check Valve**



(OVER)

#### D. CLEANING GEAR HOUSING SPEEDOMETER PICKUP

Attach Service Bulletin Sticker on Section 5B Index Page in Your C-90-86133 V-6 and C-9086134 Maxi Service Manuals.)

The speedometer pickup hole in the gear housing occasionally will plug up with foreign material. Following is the recommended procedure for removing that material.

Using a 6" (15.2cm) long precision aircraft extension drill of .086" (2.18mm) diameter maximum (No. 44), drill out material to the following depths, dependent upon model:

Model	Gear Housing No.	Depth
40 HP thru 70 HP	A-1643-7406	1.10" $\begin{matrix} +.00" \\ -.06" \end{matrix}$ (27.94mm $\begin{matrix} +0.00mm \\ -1.52mm \end{matrix}$ )
80 HP thru 140 HP	A-1655-7333	2.25" $\begin{matrix} +.00" \\ -.06" \end{matrix}$ (57.15mm $\begin{matrix} +0.00mm \\ -1.52mm \end{matrix}$ )
150 HP thru 225 HP	A-1647-7350	1.70" $\begin{matrix} +.00" \\ -.06" \end{matrix}$ (43.18mm $\begin{matrix} +0.00mm \\ -1.52mm \end{matrix}$ )
300 HP	A-1659-7605	2.43" $\begin{matrix} +.00" \\ -.06" \end{matrix}$ (61.72mm $\begin{matrix} +0.00mm \\ -1.52mm \end{matrix}$ )

The depth of the hole is critical and should be noted as such. Should a person drill too deep, the gear housing will be damaged.