# OUTBOARDS Service bulletin

#### **NUMBER: 84-6**

## Merc 18XD and 25XD Potential Hard Starting Problem

CIRCULATE TO: SERVICE MANAGER O PARTS MANAGER O MECHANICS O "Place in a Service Bulletin Binder"

#### Merc 18XD

United States	Serial number 6443973 thru 6496215
Canada	Serial number 7209533 thru 7212627

#### Merc 25XD

United States	Serial number 6453343 thru 6500642
Canada	Serial number 7209933 thru 7214372

Mercury Marine has determined that the possibility exists of a hard starting problem with some 1984 Merc 18XD and 1984 Merc 25XD models within the above serial number range.

The problem occurs only if the carburetor has a marginal length primer diaphragm assembly. If the primer diaphragm assembly is too short it does not unseat the primer check ball, and the injection primer and fuel enrichment system are inoperative. Thus, the engine may not start or may be difficult to start.

#### **IMPORTANT:**

1. Only carburetors date coded December 1983 and prior may have the marginal length primer diaphragm assembly. The date code is stamped on the upper flange next to the model number (Figure 1). The last two digits indicate the year.

Example: 11/83 indicates November 1983



- 2. All carburetors date coded January 1984 and later (1/84,2/84,3/84) will have a <u>black</u> primer diaphragm assembly of the correct length and do not require rework. In addition, the new replacement primer diaphragm assembly is <u>white</u> for easy identification. Thus, any carburetor with a white primer diaphragm assembly does not require rework. The white stem of the primer diaphragm assembly can be seen (port side of carburetor) when cowl is removed.
- 3. XD models (within the specified serial number range) that have been inspected and corrected at the factory will have the engine <u>carton</u> identified by a letter "C" in red ink, after the serial number. In addition, the carburetor will have a letter "X" in white paint on the starboard side.

Mercury Outboard has a firm commitment to *easy* starting XD models and is taking the following action:

- 1. Owners of these models, whose outboards are properly registered (warranty registration card), will receive a letter (copy at end of bulletin) as notification of a <u>potential</u> hard starting problem.
- 2. Dealers should <u>immediately</u> contact their customers, who purchased these engines, and schedule them accordingly for replacement of the primer diaphragm assembly.
- 3. Order one primer diaphragm assembly (1395-9289) for immediate rework of each of the XD models you have sold or have new in stock, (within the specified serial number range). This kit consists of a white primer diaphragm assembly and primer cover gasket.

Credit for the primer diaphragm assembly and .5 hours labor per outboard will be issued upon return of the original primer diaphragm assembly and warranty claim to your regional service center. You may list more than one unit on each warranty claim provided that you list **all** the serial numbers.

#### 1395-9289 Primer diaphragm assembly

### **Primer Diaphragm Assembly Replacement**

- 1. Remove front latch (a) and rear latch (b). (8mm socket)
- 2. Disconnect "Tell-Tale" hose (c).
- 3. Remove starboard bottom cowl (d) from engine.



4. Remove fuel filter (a) from mount and remove rewind starter housing (b) and dashpot (c) from engine. (10mm socket)



5. Remove 2 screws that secure primer/choke linkage (a) to carburetor. (8mm socket) Lift linkage from carburetor and move linkage to the side.



- 6. Remove **4** screws (a) and disassemble primer system, as shown. (#1Phillips screwdriver)
- 7. Replace primer diaphragm and gasket with new primer diaphragm and gasket and reassemble in same order, as shown.

**NOTE:** Position **cover so hole**; on side of **cover**, **is**facing away **from** carburetor.





8. Reinstall primer/choke linkage on carburetor, as shown.







- 9. Reinstall bottom cowl and cowl latches on engine.
- 10. Reconnect "tell-tale" hose to fitting in bottom cowl.
- **11.** Reinstall rewind starter housing and dashpot on engine.
- 12. Reinstall fuel filter.



#### **NEUTRAL RPM ADJUSTMENT**

- 1. Start engine.
- 2. With engine in Neutral position primer knob (a) in the middle detent position.
- 3. Adjust ratchet (b) to obtain 1400 to 1700 RPM.

