mercruiser STERNDRIVES & INBOARDS

service bulletin

TO: SERVICE MANAGER ☐ TECHNICIANS ☐
PARTS MANAGER ☐

No. 98-4

Electric Fuel Pump Check Valve Sticking

Models

1998 MCM 4.3L, 4.3LH, 5.0L or 5.7L Carbureted Sterndrive Engines: S/N 0L000001-0L048853.

1998 MIE 5.7L Carbureted Ski or Inboard Engines: S/N 0L000001-0L005635.

All MCM V6, V8 EFI or MPI Sterndrive Engines: With Cool Fuel system with an electric fuel pump.

All MIE V8 EFI or MPI Ski or Inboard Engines: With Cool Fuel system with an electric fuel pump.

Situation

Since July 1997, the EPA in the USA has required an increase of detergent (dispersant) to gasoline being used in the USA. This detergent is meant to help clean fuel injectors and intake valves on automotive engines in vehicles. This detergent additive to the fuel will not normally cause any problems to the fuel system if it stays mixed in the fuel. As the gasoline evaporates, it will leave this additive in the fuel system. Now this detergent additive becomes ‘sticky’ and it can cause the check valve in the electric fuel pump to stick closed. Usually, the electric fuel pump will run but will not pump fuel.

Correction for EFI or MPI Models

Verify that the fuel pump is operating by touching it to ‘feel’ if the pump is running or not. If the pump is running, remove the spin-on fuel filter that is on the engine. Fill it with fresh fuel and reinstall it on the engine. Try to start the engine. If the engine starts, the check valve has been loosened by the fuel pump’s pressure.

If the engine does not start, use an outboard fuel tank and fuel line with a primer bulb. Connect this outboard fuel line to the inlet side of the engine’s spin-on fuel filter. Squeeze the primer bulb. This should free up the check valve and allow the pump to start pumping fuel to allow the engine to start. The fuel pump’s check valve should not stick again if it does not have to sit a long time allowing the fuel to evaporate from the fuel pump again.

P/N 807949A 1 Replacement Fuel Pump for EFI and MPI Engines.

Correction for Carbureted Models

Verify that the fuel pump is operating by touching it to ‘feel’ if the pump is running or not. If the pump is running but does not pump fuel, look at the part number that is on the fuel pump.

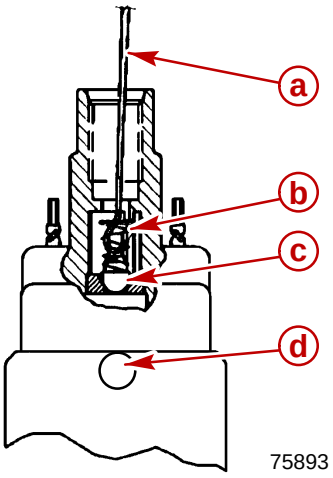
P/N 861394: Order a new fuel pump.

P/N 861155: Remove the fuel pump from the engine. Remove the brass fitting from the top (outlet) end of the pump. Using a small ‘J’ hook device, pull spring out of the pump. Turn pump upside down and shake the pump until check valve falls out. Refer to drawing for spring and valve location. Reinstall brass fitting. Install the pump on the engine.

Place a white paint dot on the fuel pump near the brass fitting so it is visible to the next dealer that services this engine.

P/N 861155-1: There is no check valve in this fuel pump to stick. The problem is in another place.

P/N 861155A 3: Replacement Fuel Pump for Carbureted Engines.



a - ‘J’ Hook Tool.
b - Check Valve Spring.
c - Check Valve.
d - Place White Paint Dot Here.