1973 FORD ELECTRIC FUEL PUMP

Ford 460" Police Interceptor (1973)
Mercury 460" Police Interceptor (1973)
Montego 460" Police Interceptor (1973)
Torino 460" Police Interceptor (1973)

DESCRIPTION

Pump is located in the fuel tank and is a part of an assembly consisting of the vapor separator (redesigned to include an additional outlet for the fuel line), a rubber connector, the fuel pump, and pedestal. *NOTE — Pump is not serviced. If found to be defective, it must be replaced.*

OPERATION

During engine start, pump is powered through a special by-pass circuit. Current passes through the oil pressure switch to pump without passing through a circuit resistor,delivering full 12 volt cranking voltage to pump. When engine starts, current will pass through the circuit resistor, cutting operating voltage to approximately 8 1/2-10 volts.

TESTING & TROUBLE SHOOTING

NOTE — When making pressure and volume tests, it is necessary to have the full 12 volts delivered to the pump. Connect a jumper wire across the starter solenoid with one end attached to the by-pass circuit pigtail and other end attached ahead of the solenoid.

PRESSURE TEST

Connect a suitable pressure gauge in fuel line at carburetor with a "T" fitting so carburetor will be supplied with fuel. Hose to gauge must not be over 6" long and should have a second "T" and valve for venting and capacity test. Install a flexible hose to vent valve and place other end of hose in a suitable container. Run engine at idle, open vent valve to release air, then close valve and read fuel pump pressure. Pump pressure should be 4 psi (minimum). If pump pressure is not within specifications, and fuel lines and filter are clear, pump is defective and should be replaced.

VOLUME TEST

With end of vent valve hose in a suitable container (see Pressure Test above), and engine idling, a pint of fuel should be obtained in 20 seconds or less. If pump volume is below specifications, check for a restriction in fuel supply from tank, and for tank not venting properly.

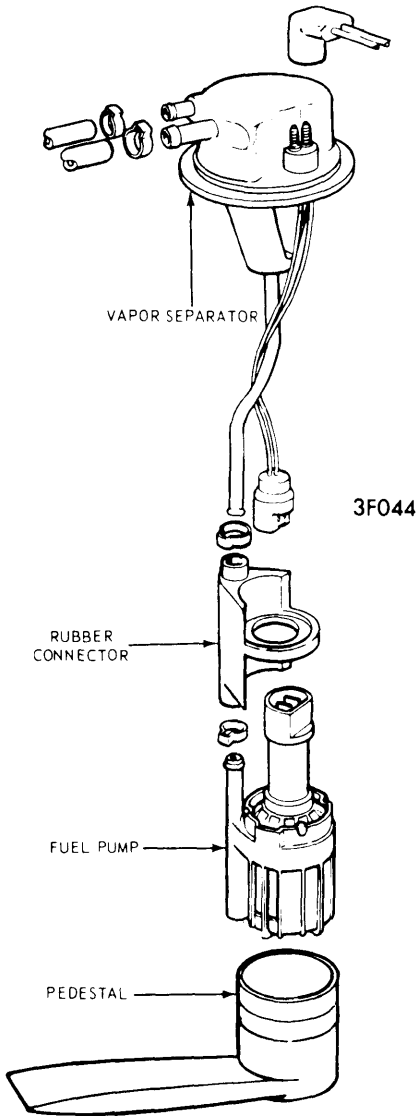
CURRENT TEST

Disconnect plug located just forward of fuel tank. Using a test light, connect one lead to the red/brown stripe wire and other lead to ground, and check for current. Using a self-powered test light or ohmeter, connect one lead to the black wire and other lead to ground.

REMOVAL & INSTALLATION

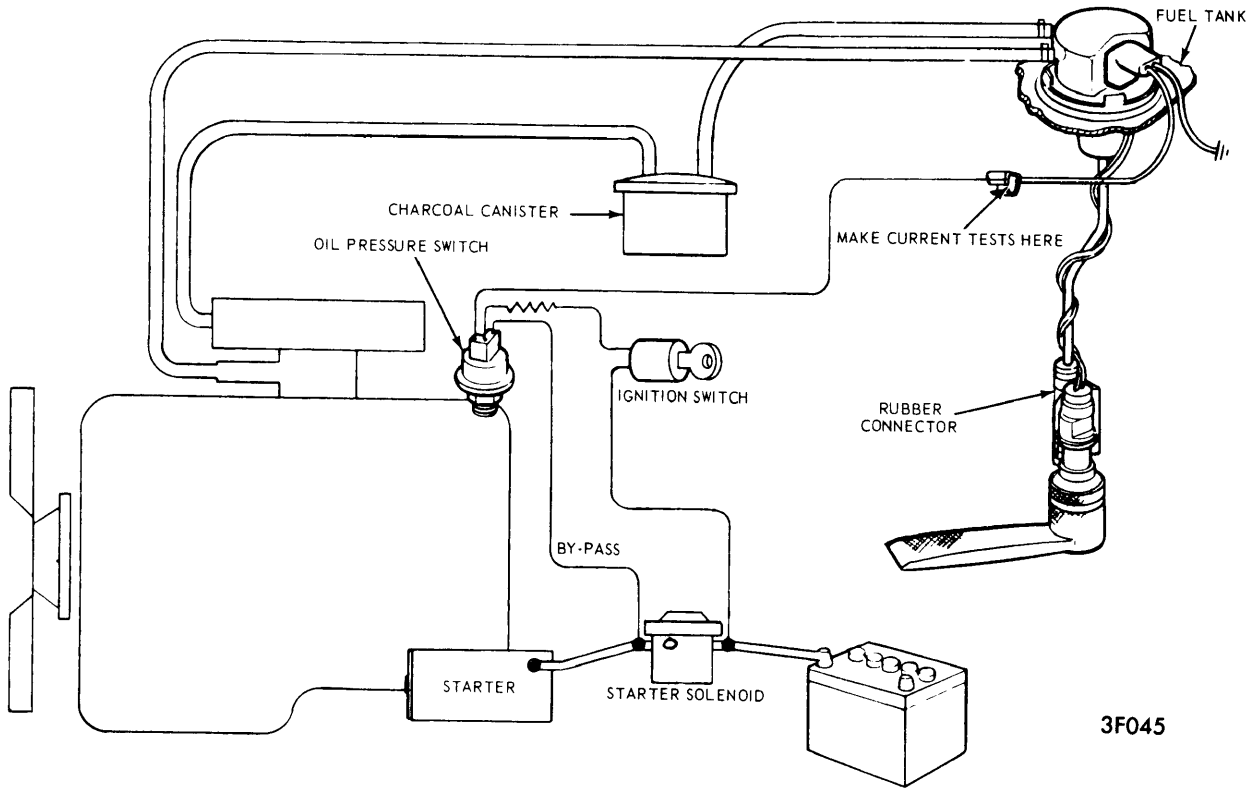
Removal – Disconnect battery, then disconnect electrical plug in front of fuel tank. Remove fuel tank straps and lower tank. Disconnect fuel line and vapor return line at vapor separator assembly, then disconnect electrical plug from top of vapor separator. Rotate locking collar until it is free of fuel tank flange and lift vapor separator and fuel pump out of tank. Disconnect the electrical connector at fuel pump, then remove clamp from vapor separator pipe-to-rubber connector and remove vapor separator from fuel pump. Remove clamp retaining pump pedestal to pump and remove pedestal.

Installation – Install pump pedestal on pump and install retaining clamp. Install rubber connector on fuel pump and install retaining clamp, then install rubber connector and fuel pump on vapor separator tube and install clamp. Connect the electrical plug at fuel pump. Install a new gasket in fuel tank flange and insert vapor separator and fuel pump assembly into tank. *CAUTION — Be sure fuel pump body is not contacting bottom of fuel tank.* Rotate locking collar in tank flange until it locks in place. Connect the electrical plug into the top of vapor separator, then connect fuel line and vapor return line to vapor separator. Raise fuel tank into position and install retaining straps. Connect the electrical plug in front of tank. Connect battery.



ELECTRIC FUEL PUMP & VAPOR SEPARATOR

1973 FORD ELECTRIC FUEL PUMP (Cont.)



ELECTRIC FUEL PUMP CIRCUIT