

Lincoln Mark VII

Shortcut To The Fuel Pump

(Fuel Pump Access Cover)
V20080210ab

At some point, usually without warning, our fuel pump will cease to function, usually at an inopportune time. In as much as the pump is located inside the fuel tank, replacement can be most tedious. The fuel must be drained, tank dismounted and lowered to access the fuel pump. This can be done at home or by a mechanic, however, having the car towed is almost a given.

By making a simple modification to the interior of the trunk, the pump can be changed in less than 30 minutes, on the side of the road if necessary.

Following is the process for installing an access hole and cover to enable you to easily replace the pump.

Roll the trunk carpet back to expose the raised area in the passenger side of the trunk well.



Note: All measurements are taken from the TOP of the trunk well.

Measure 8" in from the vehicle passenger side and mark the floor.



Measure 13-1/2" in from the forward side of the trunk well and carefully drill a 3/8" or larger hole at the 8" mark. Make sure not to let the drill bit grab and "pull" itself through the sheet metal, damaging the tank below.



After drilling the starting hole at the 8" by 13-1/2" location, use a set of left and right cutting aviation snips or similar, and cut a spiral hole in the trunk floor approximately 4-3/4" to 5" diameter, exposing the pump mount and fuel connections.

IMPORTANT: *Do not use a hole saw or reciprocating saw to cut the hole. The fuel hoses and connectors are very close to the sheet metal trunk floor and will be damaged or severed.*



In the following photos, you can see the exposed fuel fittings. Be sure that they are exposed enough to remove the clips and slide them off of the tubes.



The clearance between the fuel connectors and the trunk floor is less than one-quarter inch. (1/4")



If you are removing the pump at this time, clean the area, remove the clips which secure the fuel connectors, and carefully slide the fuel connectors off with a twisting motion.



Remove the electrical connector and set aside.



Using a drift or a screwdriver and a hammer, tap the retaining ring counter clockwise until it is free. Gently dislodge the pump assembly. The retaining ring is shown (below) hanging free on the pump assembly.



Carefully remove the pump & strainer assembly from the fuel tank. Retainer ring is shown to the left of the pump assembly



Install the replacement fuel pump per manufacturers instructions and re-install pump assembly using a NEW “square cut” O-ring.

Re-install the fuel couplers using new retaining clips. The fuel couplers are different sizes and must be replaced on the proper tubes.

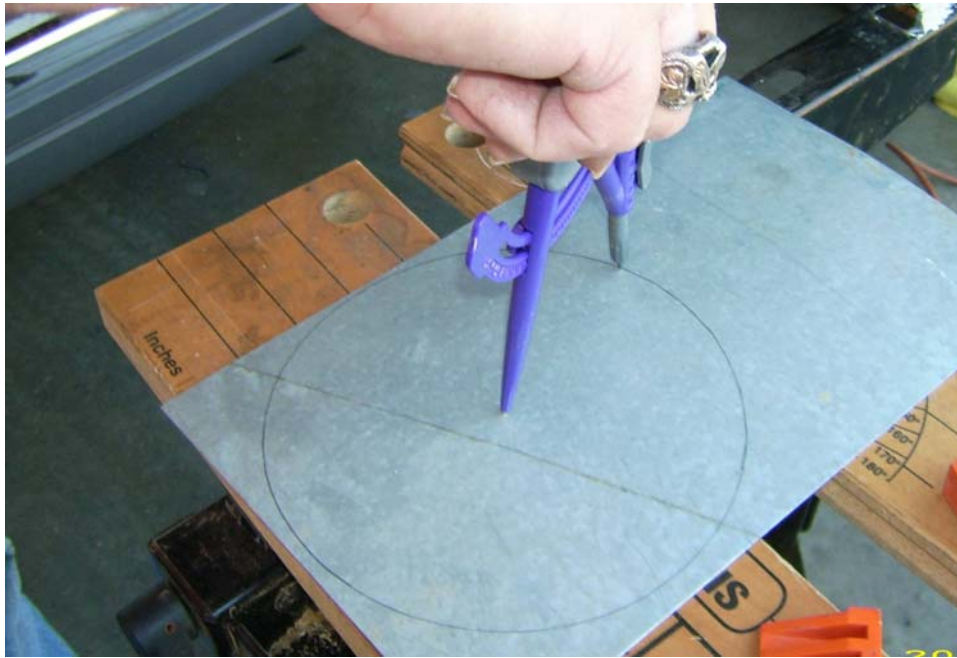
Inspect and re-install the electrical connector.

With a minimum of five gallons of fuel in the tank, turn the ignition switch on then off again to verify operation of the fuel pump. Inspect for leaks.

If no leaks are apparent, start engine and allow to it run for several minutes while inspecting for leaks. Correct as necessary, if required.

Fabrication of Cover Plate

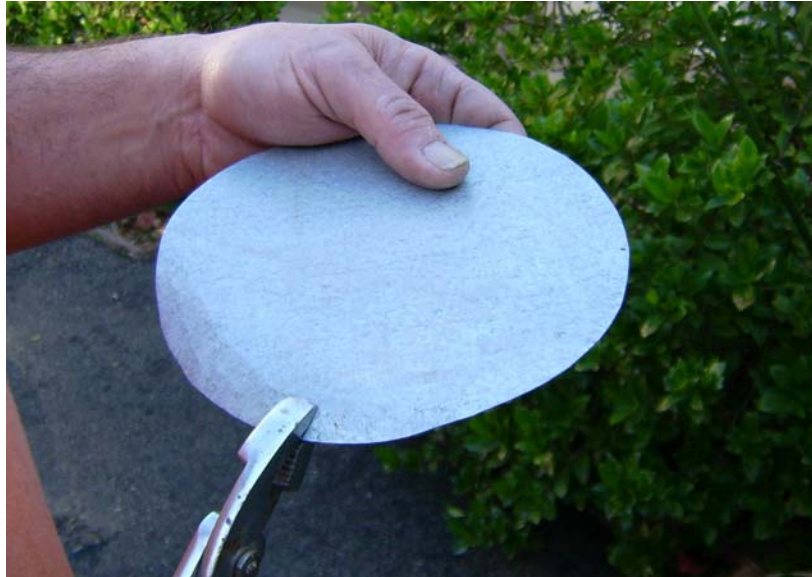
Using a piece of sheet metal of approximately 18 gauge, draw a circle 6" in diameter.



Using snips or any other method, cut the sheet metal into a disk.



Locate the disk over the access hole. Using pliers, hammers or whatever means available to you, form the cover to fit the contour of the trunk. I used pliers and a soft faced hammer.



Placing the contoured cover in place. Mark the location of the fuel connectors on the cover as to make sure that you do not drill screw holes where the screws might puncture the fuel connectors or tubes.



Punch or drill clearance holes for #6 sheet metal screws around the parameter of the cover, avoiding the fuel markings.



Place the cover over the opening. Using it as a template, carefully drill holes in the trunk floor's sheet metal, sized for #6 X ½" long sheet metal screws.

Sand, file or de-burr the cover and paint if necessary.

Using weather-strip or a sealant of your choice, encircle the opening to prevent vapors or moisture from entering the trunk. I used 3/8" wide by 3/16" thick, adhesive backed weather-strip.



Securely screw the cover to the trunk opening.

Galvanized cover. (Below)



Painted cover. (Below)



Re-install carpet.