

FUEL TANK CONSTRUCTION AND LOCATION

LOCATION

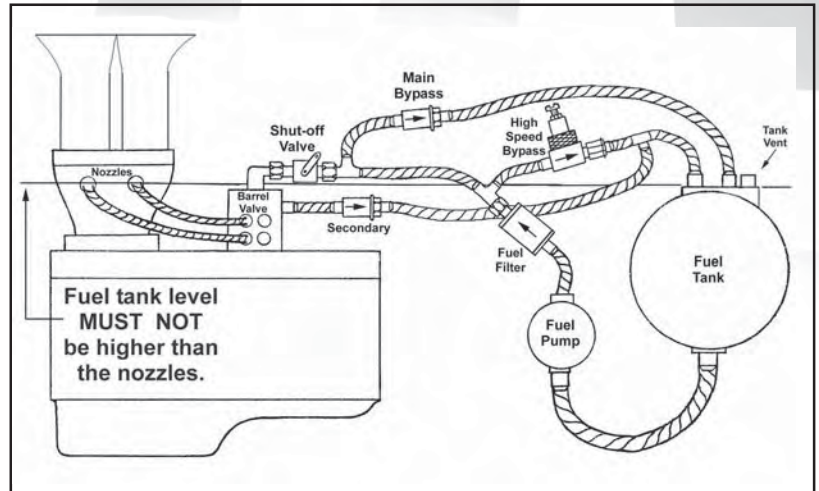
When mounting the fuel tank for a mechanical fuel injection system, DO NOT locate the maximum fuel level in the tank above the nozzles. This is to prevent the fuel from draining into the engine if the fuel shut-off valve is left open.... this is not a problem in an EFI system as the injectors shut off tight when the engine is not running.

FILTER BETWEEN TANK AND PUMP

We strongly encourage **CAUTION** when using any filter on the inlet side of any pump. A filter can restrict the flow if the pump has to suck the fuel through the filter, the vacuum it has to pull to do it lowers the fuel's boiling point and may cause inlet cavitation. It is always best to strain the fuel when putting it into the tank and use a Kinsler filter between the pump and the barrel valve. If you want to use a filter before the pump, have a Kinsler technician spec a proper Kinsler Monster Mesh filter.

SHUT-OFF VALVE

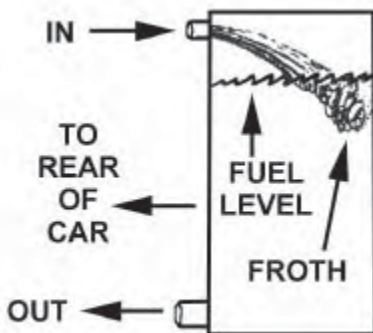
NEVER shut off the flow to the pump above idle speed; it may cause damage, since the fuel lubricates the pump. If a shut-off is installed to give access to a pump inlet filter, make sure the inside diameter of the shut-off valve and any adapter fittings have the proper inside diameter. See Page #102 for minimum inlet hose sizes.



FUEL TANK CONSTRUCTION :

DESIGN #1

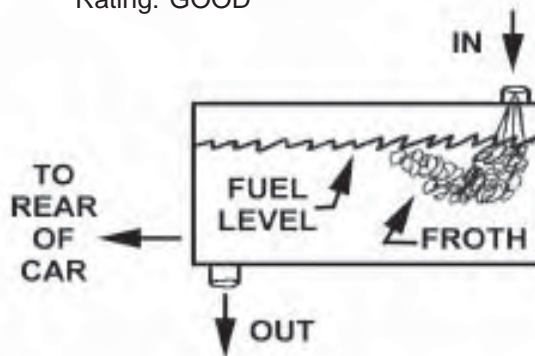
Rating: EXCELLENT



The return fuel shoots across the tank, causing minimum frothing. Deep construction minimizes slosh due to car movement; insures clear fuel at the outlet. Outlet to the rear is best; to the side is OK.

DESIGN #2

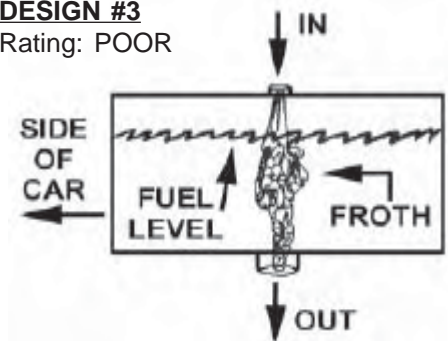
Rating: GOOD



This design shoots the return fuel directly down into the tank, but the froth comes back to the surface before reaching the outlet. It is preferred to place the outlet toward the rear of the car; can be sideways.

DESIGN #3

Rating: POOR



It is preferred to install this type of tank sideways in the vehicle. This design is poor since the return fuel shoots directly into the fuel, froths up, and the froth is easily sucked out the outlet directly below. Early Moon tanks were constructed like this.

FIX FOR DESIGN #3: MAKES #2 BETTER



Make a slit in the side of the tank. Slide a .050" to .125" thick plate into the slit so it extends 1" below and 1" to all sides of the fitting. Weld in place. The incoming force of the fuel will be dissipated against the plate.

FUEL CELLS AND/OR BLADDERS

Due to the design of these types of fuel tanks, it may not be possible to install any baffles. The best thing to do is to fill the tank with a fuel compatible foam baffle material.

CAUTION - The foam MUST be compatible with the fuel and additives that may be used. If the foam breaks down, it will clog the fuel system. Even if the manufacturer states that the foam is compatible, put a piece of it in a sample of the FUEL BEING USED and TEST IT !!!

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