

Stock fuel filler location

Posted by Gary_44 - 01 Jul 2009 09:28

12.4 Fuel Filler Neck

Fuel filler restrictor must remain in the stock location. The steel spring loaded flapper door may be removed.

I'm considering installing a fuel cell. I'm wondering why we need the stock fuel filler in place? What performance advantage could be gained by someone who had otherwise?

I could see if refuelling mid race was involved.

Could any filler be allowed as long as it was a set diameter and gravity fill only?

Re:Stock fuel filler location

Posted by spec944#74 - 10 Jul 2009 03:37

Joe, just out of curiosity, are you saying you guys knowingly put in a rule allowing fuel cells with the intent that it wouldn't change the requirement for the stock filler neck to be retained? I also wonder if a car with a fuel cell would be compliant if the stock filler neck was retained but not connected to the fuel cell or used to fuel the car. I really don't see anything in the rules that would prohibit that.

Re:Stock fuel filler location

Posted by Gary_44 - 10 Jul 2009 04:32

We'd have to fabricate a bulkhead to enclose the filler and vent tubes, like this:

www.jrmock.com/image-folder/fuel-cell/Final-Plumbing-1.jpg

(I hope these folks don't mind linking their How-to page.)

While this is a nice job, first I'd be concerned about the more points of failure it creates in order to adapt to the stock filler(rubber hose adapters, clamps, welding, etc) and about how the filler tube dips before dumping into the tank causing gas to pool there. It just seems like it defeats some of the purpose of having a cell.

I just wanted to simplify install by using no filler neck, just a flat cap on top of the cell, covered by a latched metal filler door accessed through the rear hatch and just vent externally instead of back into the filler neck. It seems like this would be safer than stock, especially in a rollover since there are check valves to keep fuel contained. But it sounds like that would not meet the CCR requirement of a "solid metal bulkhead";

Re:Stock fuel filler location

Posted by Sterling Doc - 10 Jul 2009 07:41

I think it may be hard to improve on the safety of the stock tank on a 944. I have seen a 944 flattened to the C-pillars without leaking fuel (fatal accident for the driver of the car that hit the 944). I have also seen a few cars with fuel cells have fires d/t improper installation of the fuel cell/lines. Granted this was installer error, but is easy to do. The 944's have safe tank designs, and are hard to put fuel cells in without compromising their OEM steel bulkhead between the tank & driver. I'm sure it can be done, but much more easily screwed up than done better.

Re:Stock fuel filler location

Posted by joepaluch - 10 Jul 2009 07:41

spec944#74 wrote:

Joe, just out of curiosity, are you saying you guys knowingly put in a rule allowing fuel cells with the intent that it wouldn't change the requirement for the stock filler neck to be retained? I also wonder if a car with a fuel cell would be compliant if the stock filler neck was retained but not connected to the fuel cell or used to fuel the car. I really don't see anything in the rules that would prohibit that.

Steve this installation uses the stock filler neck.