

***The Malfunctioning Fuel Filler Door Mystery***  
by ***Monte Dunten***

Mystery solved. I'm sure I'm not unique in the fact that I don't like to be stumped by things that appear to be simple and that is how I considered my nonfunctioning fuel door. I could have waited a few more days and asked the tech at the Tech Seminar where the fuse is but I was sure if I was persistent I could find it and be a little more knowledgeable about one more aspect in the operation of my PMC.

After pouring over many, many pages in my workshop manuals I discovered the circuitry from power source to solenoid spread across 6 separate pages plus 1 additional information page in two different workshop manuals. In the process I found the ID plate on the fuseboard door is misleading at best and Steve Apter is correct about the fuel door circuit sharing the blower fuse (actually it's called the Fan and Compressor Fuse but is where he described) because it doesn't have its own fuse but Brian [Vogel] is also correct when he stated "(he) wonders if there could be a relay involved somewhere". The Fan and Compressor Fuse supplies power to terminal C2 (via a yellow wire) of the Fan and Compressor Relay (relay 1, the left most relay of the three lined up below the right-hand fan motor as shown in figure 88 on page 136 of the owners handbook). When the ignition key is "off", power flows from C2 through the relay's normally closed internal switch to terminal C3, which supplies power to the Refuel button on the dash via the brown/green wire and pressing the Refuel button will open the fuel door. When the ignition key is "on" the relay coil is energized and the relay's internal switch supplies power from C2 to C1 and C3 is disconnected so power is no longer supplied to the fuel door circuit and pressing the Refuel button will not open the fuel door.

So now you know how it's supposed to work; however, in my case relay 1 had been changed out at some point in the car's life and the brn/grn wire was not connected to C3 leaving the entire fuel door circuit powerless.

Thanks again for everyone's input.

Monte