

**Wheels:** The following e-mail came from Donnie. “I read your article on intermittent starting problems and it sounds very similar to what my 92 Blazer (S-10) is doing. We take trips and I pull a trailer with 2 Sea-Doos on it. When we stop and I shut the truck off, it will not start back up. I have to let it sit for 45 minutes or so and then it is fine. Sometimes I may have only driven it an hour or little more and it will do this. When it first did it, I thought it was the fuel pump that went out. I noticed that when I turn the key the fuel pump does not pressurize. When it starts, I can always hear the fuel pump when I turn the key (when I’m listening for it). Since it is doing this, do you think it might be the computer? This problem drives me crazy and anything you can do to help me out is greatly appreciated. By the way, it has an electronic dash so I can’t observe the tach when I crank it when it does not start.”

**Halderman:** The fuel pump relay is the most likely fault. The computer controls the relay that supplies electricity to the electric fuel pump located inside the fuel tank. There is a backup built into the system. If the relay fails, the engine will still be able to start but will require extended engine cranking. The backup system uses the oil pressure sending unit to supply electrical power to the fuel pump if the relay fails. The oil pressure relay must have 4 psi of oil pressure before allowing the fuel pump to operate. When the engine is cold, the engine oil is thick and the engine can achieve 4 psi of oil pressure easily. However, when the engine is warm, the oil becomes thinner and it requires a longer crank time before oil pressure builds up high enough to close the contacts inside the oil pressure switch.

**Wheels:** Can Donnie do anything himself or does he have to take it to a professional?

**Halderman:** If Donnie is mechanically inclined, he can check out whether or not the problem is the relay. The fuel pump relay is a small black plastic unit attached to the bulkhead under the hood near the power brake vacuum booster. If the truck is equipped with air conditioning, there is another relay for the air conditioning next to the fuel pump relay. Both of these relays are identical and even share the same part number. Try switching the relays. It does not matter which relay is which but the air conditioning relay has one or two green wires whereas the fuel pump relay does not have any green wires connected. The wiring simply unplugs from the relay and the relay is clipped to the bulkhead. If proper engine starting is achieved after switching the relays, then purchase a new relay to properly repair your truck. If the engine still does not start correctly, then consult with a professional service technician. The technician can check for proper fuel pressure and fuel pump current draw or the possibility of another problem.

**Wheels:** Is there anything else Donnie could do?

**Halderman:** Yes. Donnie should replace the fuel filter, especially if it has never been replaced. A partially clogged fuel filter could cause the fuel pump to draw too much current which could be contributing to the fuel pump relay problem.

