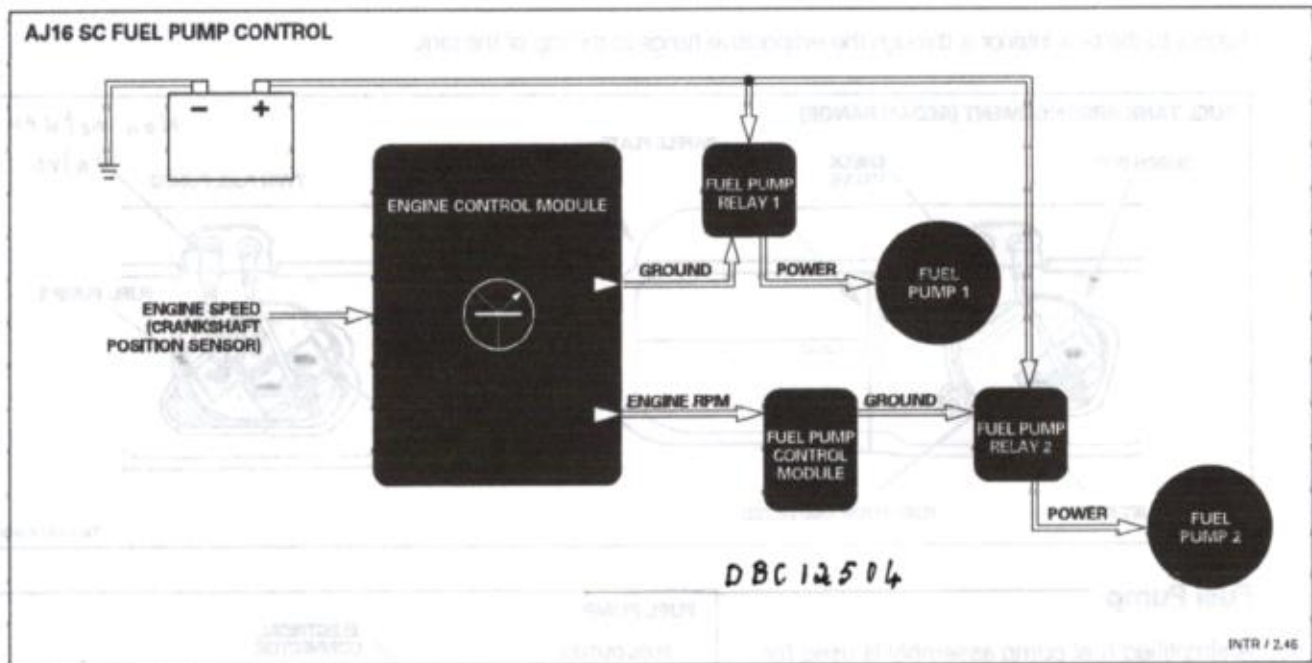


AJ16 Supercharged Fuel Delivery

Twin in-tank fuel pumps provide fuel pressure from the sealed fuel tank to the fuel rail. Fuel tank ventilation is controlled by the evaporative emission control system (EVAP). A fuel pressure regulator maintains fuel pressure for the injectors and allows excess fuel to return to the fuel tank.

The two AJ16 SC fuel pumps are controlled separately. The ECM provides a ground for the fuel pump relay 1 when the ignition is switched on and maintains the ground based on an engine speed signal. The relay for fuel pump 2 receives its ground from the fuel pump control module. The pump control module switches the fuel pump relay 2 ground according to engine speed to provide the additional fuel required for high speed operation. The inertia switch will interrupt battery feed to the ECM in case of vehicle impact, which will disconnect the relay grounds.



Fuel Pump Control: Twin Fuel Pumps

Supercharged engines use twin fuel pumps to ensure adequate fuel supply under high engine loads. Fuel pump 1 operates as described for the single pump installation. Fuel pump 2 is controlled via a fuel pump control module and operates only in the higher engine speed range. The fuel pump control module receives an engine speed input from the ECM and switches on fuel pump 2 at 4000 rpm and off at 3200 rpm.