

PATS Faults

If a PATS fault is detected, the security indicator LED will flash for 60 seconds at 4 Hz with a 50% duty cycle. At the end of this period, the LED will flash a two digit flash code, repeated 10 times. As a general rule, flash codes numbered 15 or less will prevent engine cranking while codes numbered 16 and above result in the engine cranking but not starting (fuel pump and fuel injection disabled).

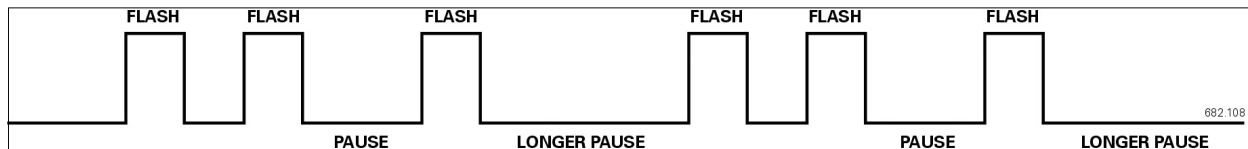


Fig. 185 Flash Code 21

Engine fails to crank

If the engine fails to crank, ensure that the gear selector is in P or N. If OK, verify the condition of the starter relay and circuits. Move the ignition key to III (START) to apply voltage to the starter relay coil. Refer to the applicable Electrical Guide and check the following:

- Starter relay condition
- Starter relay battery power supply circuit
- Starter relay coil supply circuit from the ignition switch, fuse, range sensor P, N switch
- Starter relay coil ground circuit to the instrument pack and the instrument pack ground

Flash Codes

Each digit of the two digit code is represented by a series of flashes followed by a slight pause. A longer pause indicates the end of the code. For example, flash code 21 is represented by: flash flash (pause) flash (longer pause)...repeat.

Engine cranks but will not start

In this case, the PATS has read a valid key code and has enabled the starter relay. However the PCM has disabled the fuel pump and fuel injection. If the PCM or the instrument pack has been replaced, ensure that module configuration has been carried out using WDS. If configuration has been carried out, refer to the applicable Electrical Guide and check the following:

- Fuel pump control circuit between the PCM and the RECM
- Fuel pump relay supply and control circuits
- RECM to fuel pump drive circuits
- Fuel injector ignition switched power supply circuit