

P0692: COOLING FAN 1 RELAY CONTROL CIRCUIT HIGH

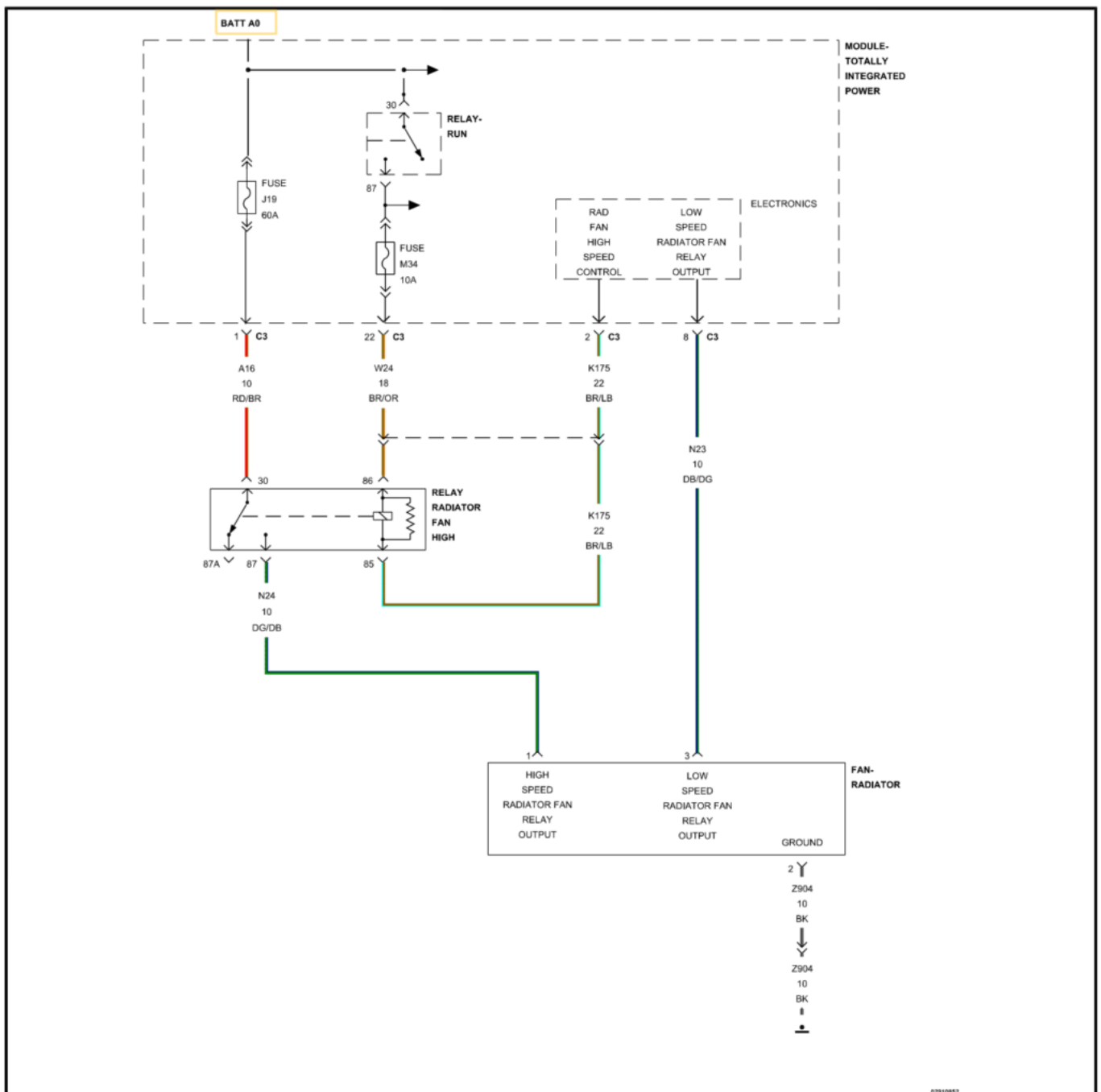
OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$50-\$200
Can I Still Drive?	:	Yes

What Does The P0692 Code Mean?

The fans that are used to cool the engines radiator are run by electric motors. These motors are turned on and off by the powertrain control module (PCM) according to the readings from the engine coolant temperature sensor (ECT). In other words when the ECT reaches a predetermined temperature the PCM turns the fans on. Then when the ECT cools to a predetermined temperature the PCM turns the fans off.

The PCM controls the cooling fans by sending a ground signal to the cooling fan relay. The voltage on the signal circuit is high, around battery voltage, when not commanded on (not grounded). The opposite is true when commanded on (grounded), the voltage is somewhere near zero. DTC P0692 is set when the PCM senses that the voltage remains high when the cooling fans are commanded on.



P0692 wiring diagram

What Are The Symptoms Of The P0692 Code?

Symptoms of a P0692 code may include:

- Engine overheating
- Check engine light on

What Are The Potential Causes Of The P0692 Code?

Potential causes for this code to set are:

- Faulty cooling fan relay
- Blown cooling fan fuse
- Faulty PCM (rarely)

How Can You Fix The P0692 Code?

In my experience a faulty cooling fan relay is the most common cause of this DTC. A simple way of checking the relay is locate it and visually check for other relays that are identical to it, and then switch the two relays. Clear the codes and run the vehicle. If the code does not return then replace the relay. If it does return then suspect a possible PCM issue.

Note: Be absolutely sure that the relay you are switching is identical in every way. Installing the incorrect relay could do damage to the PCM. Nissan in particular has relays that appear to be the same other than color and will plug into the same socket but are different and will damage the PCM.

Severity Description

The possibility of the engine overheating due to non-operational cooling fans is very probable so caution should be used if driving the vehicle when the conditions to set this DTC are present. It should be repaired as soon as possible.

Reference Sources

[Diagnostic Trouble Code \(DTC\) Guide for P0692](#) - Ominitek Advanced Technologies, pages 135-136.