P0317: ROUGH ROAD HARDWARE NOT PRESENT		
	OVERVIEW	
:	Medium	
:	Intermediate	
:	\$200-\$300	
:	Yes	
	:	

## What Does The P0317 Code Mean?

A P0317 trouble code belongs to the category of codes that include ignition system codes. The reason for that is that many times, the "rough road hardware" is actually an interpretation from sensors that have basically detected that the engine's crankshaft moves in an unexpected manner.

The system of sensors and the vehicle's PCM, or powertrain control module, can indicate rough terrain conditions. For example, the engine speed can be erratic when the vehicle is driven over really rough road or off-road conditions. This can cause the PCM to see it as an engine fault such as a misfire.

Some vehicles may have a road sensor, an accelerometer, or some may use a ABS wheel sensors and the Electronic Brake Control Module (EBCM) to help determine rough road conditions.

Regardless of the exact system used in your vehicle, if you get this trouble code, it means the PCM has detected a rough road condition that requires attention. Typically this code is only set after the readings are the same after multiple drives.

# What Are The Symptoms Of The P0317 Code?

Most trouble codes trigger the check engine light (or MIL malfunction indicator light). For this P0317 DTC, the light is not illuminated. You may, however, have other warning lamps illuminated (traction control, ABS, etc.) or even have some engine misfires or rough running.



### What Are The Potential Causes Of The P0317 Code?

Potential causes for this code to set are:

- Faulty rough road sensor (if equipped)
- Wiring / electrical fault related to sensors
- · Control unit needs initialization of new road sensor
- Other possible causes

#### **How Can You Fix The P0317 Code?**

A good first step is to check for technical service bulletins (TSBs) that may apply to your year/make/model. If the issue is a known issue there may exist a bulletin to help with diagnosis and repair specific to your exact problem. That can save you time and money.

You should obtain a vehicle specific repair guide to help determine the exact type of rough road system your vehicle uses.

If you have other misfire, ABS, or other related codes, generally you should fix them first before proceeding to fix a P0317. Still, record all freeze frame data as it may be useful in all diagnosis.

If you have an accelerometer sensor on your vehicle, check the condition of the sensor, wiring, and connectors for any problems. Repair as required.

Then, use a digital volt ohm meter (DVOM) to check the continuity, resistance and other electrical aspects according to manufacturers specification.

If possible, use an advanced scan tool to drive the vehicle over rough roads and monitor the sensor readings from appropriate sensors on the vehicle to determine if you can duplicate the issue to help narrow down where the problem lies.

## **Reference Sources**

P0317: Rough Road Hardware Not Present, OBD-Codes.

