

P0632: ODOMETER NOT PROGRAMMED – ECM/PCM

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Advanced
Repair Cost	:	\$100-\$600
Can I Still Drive?	:	No

What Does The P0632 Code Mean?

When a code P0632 is stored, it means that the engine control module (ECM) or powertrain control module (PCM) has detected an incorrect or non-existent odometer (mileage) reading.

Since the inception of OBD-II diagnostic systems, a method of recording vehicle mileage has been programmed into each ECM/PCM. Other controllers (including the instrument panel control – IPC – module) may also be programmed to record mileage but a federal mandate demands that the ECM/PCM is programmed as such.

The primary reason for government and auto industry insistence that the ECM/PCM be programmed to record mileage is to prevent odometer tampering. System controllers cannot be swapped between vehicles without being programmed with the correct vehicle mileage.

If controllers could be randomly swapped between vehicles, odometer readings would be far less accurate if not totally unreliable. When an ECM/PCM is replaced, it must be programmed with the vehicle's odometer reading and VIN (among other things).

If the ECM/PCM fails to find or recognize an acceptable odometer reading, a code P0632 will be stored and a malfunction indicator lamp (MIL) may be illuminated. The ECM/PCM searches for the odometer reading and compares it with the IPC odometer figure each time the key is turned on and the self-test function is energized.

What Are The Symptoms Of The P0632 Code?

Symptoms of a P0632 trouble code may include:

- No (or intermittent) odometer display
- Incorrect odometer display
- Erratic speedometer operation
- Vehicle security system may be activated
- Other diagnostic codes will likely be stored

What Are The Potential Causes Of The P0632 Code?

Causes for this code may include:

- ECM/PCM programming error
- ECM/PCM swapped between vehicles and/or replaced without being properly programmed
- ECM/PCM failure
- IPC programming error
- Instrument panel cluster replacement without proper reprogramming

How Can You Fix The P0632 Code?

Unlike most other stored codes, the P0632 is usually related to controller failure or some type of a controller programming error. Due to the delicate nature of certain parameters which must be programmed into the related controllers (VIN and mileage), access to reprogramming equipment must be limited to qualified personnel.

Without the means to reprogram the controller in question, making a successful repair will be very difficult (if not impossible).

You will need a diagnostic scanner and a reliable source of vehicle information to arrive at a reasonable diagnosis of a code P0632. Use the vehicle information source to search for applicable technical service bulletins (TSB). If you locate a TSB that matches the vehicle make and model, symptoms exhibited, and the code stored, it will help to point you in the right direction.

Step 1

I would connect the diagnostic scanner to the vehicle diagnostic port and read the odometer as it is perceived by the ECM/PCM and the IPC. Compare the mileage on the diagnostic scanner to the odometer reading in the IPC and on the instrument panel cluster.

If these figures are not consistent, suspect that a mileage recording component (IPC controller or instrument cluster) has been replaced without proper reprogramming.

Step 2

IF the mileage is not displayed in the scanner, suspect that the ECM/PCM has been replaced without programming it to match the vehicle. If this is not the case, you may suspect ECM/PCM failure or a programming error.

In some cases, reprogrammed, aftermarket, replacement controllers and instrument panel clusters may be purchased. If this is possible, you will need to provide the parts vendor with the mileage and VIN of the vehicle, as well as any other pertinent data.

Unfortunately, there is no fool proof method for testing the odometer output signal or the controllers. Nevertheless, it is relatively safe to assume that barring any controller replacement without proper programming, some type of controller failure has occurred.

Replacement of any mileage recording component or controller will require system reprogramming

Severity Description

A stored code P0632 should be categorized as severe, particularly if you are not familiar with the history of the vehicle in question. Odometer inconsistencies may result in serious vehicle registration problems.

Reference Sources

[P0632 Odometer Not Programmed – ECM/PCM](#), OBD-Codes.