P0736: REVERSE INCORRECT GEAR RATIO

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$200-$500**
Can I Still Drive?	:	No

What Does The P0736 Code Mean?

Modern vehicles equipped with automatic transmissions / transaxles use a torque converter between the engine and transmission to increase the engine torque output and drive the rear wheels.

This code can show up in vehicles with an automatic transmission when there is a problem shifting into reverse gear, or while driving in reverse. The automatic transmission changes the output direction to move the vehicle in reverse and is most often controlled manually through hydraulic pressure even on computer controlled transmissions.

The Engine Control Module (ECM), Powertrain Control Module (PCM) or Transmission Control Module (TCM) uses input from various sensors to verify the correct operation of the transmission and its components.

Engine speed is often calculated against the transmission speed sensor to determine gear ratio and torque converter slip. If the calculation does not match the desired value, the Diagnostic Trouble Code is set and the Check Engine Lamp is illuminated. Incorrect ratio codes typically require an advanced mechanical ability and diagnostic tools.

Note: This code is similar to P0730, P0731, P0732, P0733, P0734 and P0735. If there are other transmission codes, repair those problems first before proceeding with an incorrect gear ratio code.

What Are The Symptoms Of The P0736 Code?

Symptoms of a P0736 trouble code may include:

- Check Engine Light illuminated (Malfunction indicator lamp)
- Delayed shift or not shifting into reverse gear
- Transmission slipping

What Are The Potential Causes Of The P0736 Code?

Causes of this DTC may include:

- Low or dirty transmission fluid
- Mechanical failure inside transmission
- Internal blockage inside transmission main control
- Faulty Shift solenoid
- Faulty transmission control module

How Can You Fix The P0736 Code?

Always be sure to check fluid level and condition before proceeding with further diagnosis. Improper fluid level or dirty fluid can may cause shifting issues that affect multiple gears. If only one incorrect ratio code is being displayed, test drive the vehicle to determine if the gear is actually working.

The transmission internal clutches and bands are usually controlled by a solenoid or using fluid pressure. If there is an electrical issue with a shift solenoid, a code specific to that fault should also be displayed. Correct the electrical issue before proceeding further.

Blocked fluid passage inside the transmission can also cause the vehicle to not shift into reverse gear, if there are multiple incorrect ratio codes but the transmission performs as expected, there could be a mechanical issue with the torque converter, transmission main control, or pressure problems.

If there are multiple incorrect ratio codes and shift issues, but not all are displayed the fault may be a mechanical issue internal to the transmission, or a fluid pressure / blocked passage in the main control.

A shift solenoid that controls multiple gears can also be at fault if there is an internal blockage or fluid pressure problem. If there is an electrical problem with the solenoid that controls the gears, a code should be displayed specific to the solenoid at fault.

Reverse gear in the transmission is typically not controlled by a solenoid, it is fully hydraulic. If the transmission will not shift into reverse gear, there is most likely a mechanical or pressure problem

causing the issue.

It may be necessary to use an advanced diagnostics scan tool to determine which gear is being commanded by the transmission, and to determine if the engine speed matches with the calculated output speed from the transmission sensor.

Advanced knowledge of transmission operation and overhaul is often required to repair this type of malfunction. Consult the factory service manual for vehicle specific diagnostic procedures.

Reference Sources

P0736 Reverse Incorrect Gear Ratio, OBD-Codes.