HONDA P145C: EVAPORATIVE EMISSION (EVAP) SYSTEM PURGE FLOW MALFUNCTION

OVERVIEW

Severity : Medium

DIY Difficulty Level : Intermediate

Repair Cost : \$150-\$200

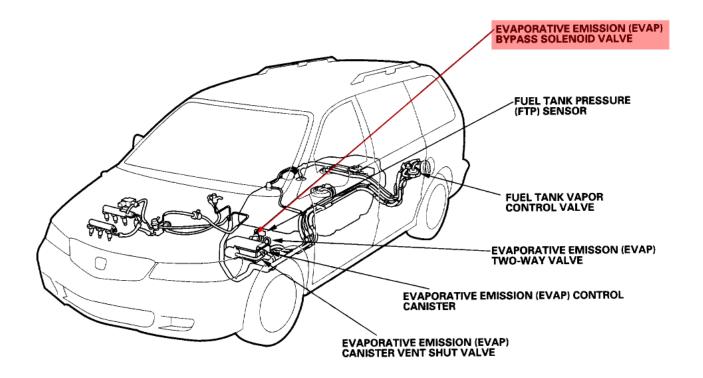
Can I Still Drive? : Yes (Short-term only)

What Does The Honda P145C Code Mean?

If you see the P145C OBD2 code on your Honda vehicle, it means that there is a problem with the EVAP (Evaporative Emission) system's ability to purge fuel vapors from the charcoal canister and route them back into the engine for combustion. This can result in a malfunction in the EVAP system purge flow.

It's essential to have some background information about the EVAP system to understand the P145C code and its implications. The EVAP system's primary function is to capture and store fuel vapors from the fuel tank, preventing their release into the atmosphere, and reducing harmful emissions. The system includes components such as the fuel tank, charcoal canister, purge valve, and other sensors and hoses.





Inside the EVAP System of a Honda – essential parts working together to reduce emissions and protect the environment. (Source: honda-tech.com)

The P145C code is triggered when the <u>fuel tank pressure sensor</u> detects that the pulses are **1.0% of the duty cycle or less for at least 31 seconds**, and the EVAP system continues to detect this problem over time. This code is commonly found in Honda vehicles such as the Honda Odyssey, Honda Civic, Honda Accord, Honda CR-V, and Honda Pilot.

Note:

While looking up the P145C code on the internet, you might find some sources defining this code as "Fuel Tank Pressure Sensor Range/Performance Problem." This definition applies to US-made Acura vehicles. In contrast, in the Japanese and some other Asian markets, the definition for this code is "Evaporative Emission (EVAP) System Purge Flow Malfunction." Nonetheless, the underlying problem remains the same despite the different definitions.

What Are The Symptoms Of The Honda P145C Code?

When the P145C code is triggered on a Honda vehicle, it may cause the following symptoms:

- Illumination of the check engine light
- Reduced fuel efficiency
- Rough idle (Honda Odyssey)



- Repeated or unexpected engine stalls at low to moderate engine speeds (Honda Pilot)
- Failure of one or more readiness monitors to initiate or complete
- Inability to pass mandatory emissions tests

In some cases, the P145C code may be accompanied by the <u>P0497</u> code. Symptoms that may be present in this case include:

- Poor idling quality or the engine may not idle at all
- Hard starting, especially when the engine is hot, which may progress into a no-start condition if not resolved promptly
- Power loss
- Gasoline odor
- Intermittent misfire-like symptoms

What Are The Potential Causes Of The Honda P145C Code?

The P145C code on a Honda vehicle can be caused by a variety of issues related to the EVAP system. Here are some potential causes to consider:

- Wiring issues, including burnt, damaged, shorted, corroded, or disconnected wiring and/or electric connectors in any circuit associated with the EVAP system
- Hose leak, blockage, or clog in the EVAP system
- Malfunctioning EVAP canister purge valve, which may be stuck open or closed
- Mechanical fault in the EVAP system
- Defective or malfunctioning fuel tank pressure sensor
- Fuel tank pressure (FTP) sensor output stuck
- ECM programming issues
- Faulty ECM

How Can You Fix The Honda P145C Code?

Diagnosing and repairing the P145C code on a Honda vehicle can be complex, and the DIY difficulty level is intermediate. The estimated repair cost for this code is typically between \$150 and \$200.

The following tools and steps are involved in fixing the P145C code on a Honda vehicle:

Tools Required

- Scan tool
- Multimeter
- Smoke machine
- EVAP system tester



Important note: Record all freeze data and on-board snapshot information before beginning the troubleshooting process and review the general troubleshooting information.

Diagnosis & Repair Process

Step 1: Use a scan tool to check for any other diagnostic trouble codes (DTCs) that may be present in addition to the P145C code. If other DTCs are found, troubleshoot them first before rechecking for P145C.

Step 2: Inspect the EVAP canister purge volume control solenoid valve and its wiring for damage or defects.

Step 3: Check the EVAP system hoses and connections for any signs of leaks, blockages, or damage.

Step 4: Examine the EVAP canister for damage or defects.

Step 5: Check the fuel tank pressure sensor for any damage or defects.

Step 6: Test the MAP sensor to ensure it is providing accurate readings to the PCM. Replace the sensor if needed.

Step 7: Use a smoke machine or EVAP system tester to detect any leaks in the EVAP system.

Step 8: Repair or replace any damaged or defective components in the EVAP system as necessary.

Step 9: Clear the code and test drive the vehicle to confirm the repair.

Fixing the P145C code on a Honda vehicle requires a thorough diagnosis of the EVAP system, which can be a complex process. While the DIY difficulty level is intermediate, it's important to have the right tools and knowledge to avoid causing further damage to the vehicle.

If you're uncomfortable performing these steps on your own, you should seek expert help from a qualified mechanic or automotive technician. They will have the expertise and experience to correctly diagnose and repair the problem.

If you found this article helpful, please share it with others who may be experiencing similar issues with their Honda. And if you have any questions or comments, feel free to leave them below. Your feedback is always appreciated!

Thank you for reading, and happy repairing!

Severity Description

The severity level of the P145C code on a Honda vehicle is considered **medium**. If left unaddressed, the problem can cause reduced fuel efficiency, rough engine performance, and other symptoms



affecting the vehicle's drivability. Additionally, the vehicle may not pass a mandatory emissions test, which could result in fines or other penalties.

While it's generally safe to drive with the P145C code for a short term only, it's not recommended to continue driving with the code for an extended period. Doing so can cause further damage to the vehicle and may result in the vehicle failing a mandatory emissions test.

Reference Sources

Here are some sources we used to gather information for this article on the P145C code in Honda vehicles:

- Honda DTC Codes for P145C Page 6.
- Testing and Inspection 2007 Honda Truck Odyssey V6-3.5L

