P064B: PTO CONTROL MODULE

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$150-$500**
Can I Still Drive?	:	No

What Does The P064B Code Mean?

A stored code P064B means that the powertrain control module (PCM) has detected a malfunction in the power take off (PTO) control module.

The PTO control module is responsible for initiating various PTO functions. These may include activation of specified lighting, increasing engine RPM (when the PTO is engaged), as well as disengagement of drive wheels (using the transfer case) In most cases, the PTO controller is integrated into the PCM but it may also be a stand-alone module.

The PTO is a feature that is included on many hydraulically operated service vehicles such as wreckers and dump body trucks. It allows a large hydraulic pump to be driven using power from the engine. With the vehicle parked and the engine at idle, a transfer case on the transmission output shaft permits the drive wheels to be disengaged and the pump to be engaged via an auxiliary drive shaft.

This system is fairly durable and provides an abundance of power for heavy duty functions such as lifting another vehicle (wrecker) or dumping heavy materials (dump body). There are many specialized applications that use a PTO system besides just wreckers and dump trucks.

Each time the ignition is turned on and the PCM is energized, multiple controller self-tests are performed. By performing controller self-tests, the PCM can monitor serial data that is carried over the controller area network (CAN) to ensure that on-board controllers are interfacing properly.

If a problem is detected in monitoring the PTO control module, a code P064B will be stored and a malfunction indicator lamp (MIL) may be illuminated.

What Are The Symptoms Of The P064B Code?

Symptoms of a P064B trouble code may include:

- Inoperative PTO
- Slow and laborious engine starting
- Engine stall at start-up
- Engine drivability issues
- Other stored codes

What Are The Potential Causes Of The P064B Code?

Causes for this code may include:

- Faulty PTO controller or PCM
- Open PTO control module voltage supply circuit
- PCM programming error
- Open or shorted PTO control circuit

How Can You Fix The P064B Code?

A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of reliable vehicle information will be required to diagnose a code P064B.

Consult your vehicle information source for technical service bulletins (TSB) that replicate the code stored, vehicle (year, make, model, and engine), and symptoms exhibited. If you find the appropriate TSB, it may yield helpful diagnostic information.

Begin by connecting the scanner to the vehicle diagnostic port and retrieving all stored codes and freeze frame data. You will want to write this information down, just in case the code proves to be an intermittent one. After recording all pertinent information, clear the codes and test drive the vehicle (if possible) until the code is reset or the PCM enters readiness mode.

If the PCM enters readiness mode, the code is intermittent and will be more difficult to diagnose. The condition, which caused the P064B to be stored, may need to worsen before an accurate diagnosis can be reached. If the code is reset, continue with your diagnosis.

Use your source of vehicle information to obtain connector face views, connector pin-out charts, component locators, wiring diagrams, and diagnostic flow charts related to the code and vehicle in question.

Check to see if there is battery voltage on the PTO control circuit by using the appropriate wiring diagram and your DVOM. If not check system fuses and relays and replace defective parts as required.

If there is no voltage (and/or ground) on the PTO control circuit (and all fuses and relays appear to be functioning properly) an inspection of controller related wiring and harnesses is in order. You will also want to check chassis and engine ground junctions. Use your vehicle information source to obtain ground locations for related circuits.

If there is voltage (and ground) present on the PTO control circuit, inspect system controllers for signs of water, heat, or collision damage. Any controller that is damaged (particularly by water) should be considered defective.

If controller power and ground circuits are intact, suspect a defective controller or a controller programming error. Controller replacement will require reprogramming.

- Test controller ground integrity by connecting the negative test lead of the DVOM to ground and the positive test lead to battery voltage

Severity Description

For the sake of safety, PTO control module codes should be taken seriously. A stored code P064B could result in lack of PTO function and may present serious safety hazards.

Reference Sources

P064B PTO Control Module, OBD-Codes.