GENERIC · POWERTRAIN

P0A13

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A13

DC/DC Converter Enable Circuit High

P0A13 indicates that the powertrain control module has commanded the DC/DC converter to enable, but the enable circuit is reading a voltage higher than expected, suggesting a short to voltage or an open return path. The computer detects this when the enable signal line stays high even when the converter should be off, or when the voltage exceeds the normal command threshold.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Often no symptoms besides the warning light
- Reduced or absent 12-volt accessory power if the converter is disabled
- Battery warning light or charging system message on the dash
- Electrical accessories such as lights or radio may flicker or fail
- Vehicle may enter a reduced power mode or fail to start in some cases

Common causes, most likely first

1. Short to voltage on the enable circuit wiring between the control module and the DC/DC converter
2. Faulty DC/DC converter internal short causing the enable line to be pulled high
3. Open or high-resistance ground connection at the converter or control module
4. Damaged or corroded connector pins at the converter or control module
5. Failed control module driver for the enable circuit
6. Aftermarket accessories improperly wired into the enable circuit
7. Water intrusion or physical damage to the wiring harness

How to diagnose and fix it

1. Connect a scan tool and verify P0A13 is current, then check for related codes in other modules
2. Inspect the enable circuit wiring and connectors for signs of chafing, corrosion, or loose pins
3. Measure voltage on the enable circuit at the converter with the key on and engine off, comparing to the commanded state
4. Disconnect the converter and check if the high voltage remains on the enable wire, indicating a wiring short versus a faulty converter
5. Check the ground circuit for the converter and control module using a voltage drop test
6. If wiring and grounds are good, substitute a known-good converter or control module to isolate the fault
7. Repair or replace the faulty component and clear codes, then verify the enable circuit operates correctly under all conditions

Enable circuit high is not always a bad converter

- A short to voltage on the enable wire often comes from a pinched harness near the converter or a poorly installed aftermarket accessory tapping into the circuit.
- The code can set intermittently due to a loose ground that only acts up under vibration or temperature changes, so a wiggle test of the harness is essential.
- Some vehicles use a shared enable signal for multiple components, so a fault in another module on the same circuit can trigger P0A13 without any issue in the converter itself.
- A failed control module driver can hold the enable line high even when the converter is disconnected, so always verify the command side before condemning the converter.
- Clearing the code without repairing the root cause often leads to a comeback because the high voltage condition will reappear as soon as the enable command is sent.

Can I keep driving with P0A13?

If the only symptom is a warning light and the vehicle drives normally, you can drive short distances to a repair shop, but avoid relying on the vehicle for long trips. If the 12-volt system is not charging or accessories are failing, stop driving and have the vehicle towed to prevent a no-start or safety hazard.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with voltage and resistance measurement
- Wiring diagram for the specific vehicle
- Back probe pins or breakout box
- Test light or load tester

Reading P0A13

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
A	Hybrid propulsion.
13	The exact fault within that area.

Often seen with

P0A10 DC/DC Converter Status Circuit High Input · **P0A11** DC/DC Converter Enable Circuit/Open · **P0A12** DC/DC Converter Enable Circuit Low · **P0A14** Engine Mount Control Circuit/Open · **P0A15** Engine Mount Control Circuit Low

See it working

Watch the animated explainer **How Push-Button Start Works: Keyless Ignition** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: https://www.autoveteran.tech/dtc-codes/p0a13/