



U041D

Invalid Data Received From Rocker Arm Control Module B

U041D is a network communication code indicating that a control module on the vehicle's Controller Area Network (CAN) bus received invalid or corrupted data from the Rocker Arm Control Module B. The computer detected a message from that module that failed its internal checksum or contained out-of-range values, so it flagged the data as untrustworthy rather than treating it as a valid signal.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Invalid data received from a module

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message with no other obvious change in vehicle behavior.
- Rough engine idle or hesitation if the rocker arm control module is responsible for variable valve timing or cylinder deactivation.
- Reduced engine power or a limp-home mode triggered by the powertrain control module when it cannot trust the rocker arm data.
- Intermittent misfire codes or poor fuel economy if the module's invalid data affects valve lift or cylinder activation strategy.
- Other communication-related warning lights, such as stability control or transmission messages, if the fault lies on a shared CAN bus segment.

Common causes, most likely first

- 1 A failing Rocker Arm Control Module B itself, often due to internal circuit board faults or heat damage.
- 2 Corroded, loose, or damaged wiring and connectors between the rocker arm control module and the CAN bus.
- 3 A weak or failing vehicle battery or charging system that causes voltage drops and corrupts module data.
- 4 Water intrusion or oil contamination at the module connector, leading to intermittent signal integrity problems.
- 5 A software or calibration issue in the rocker arm control module that requires a reflash or update.
- 6 CAN bus termination resistor faults or a shorted bus segment that distorts messages from the rocker arm module.



How to diagnose and fix it

- 1 Perform a full battery and charging system test, including a load test and voltage drop checks, because low voltage is a common cause of invalid data codes.
- 2 Inspect the Rocker Arm Control Module B connector and harness for corrosion, loose pins, chafing, or oil intrusion, and clean or repair as needed.
- 3 Use a scan tool to check for other communication codes on the same CAN bus and to verify whether the rocker arm module is communicating at all.
- 4 Check the CAN bus resistance at the diagnostic link connector to confirm proper termination and rule out a bus wiring fault.
- 5 If wiring and power are good, substitute a known-good Rocker Arm Control Module B or perform a module swap test to confirm the fault follows the module.
- 6 After repair, clear the code and perform a relearn or calibration procedure if the service information requires it for the rocker arm control module.
- 7 Road test the vehicle through several drive cycles to confirm the code does not return and that rocker arm control functionality is restored.

What the Rocker Arm Module Data Really Means

- U041D is often set by a momentary voltage dip during cranking or a weak battery, so the module itself may be perfectly healthy and only the power supply needs attention.
- A single invalid data message can be stored as a history code without any current drivability complaint, so always check whether the code is current or history before condemning parts.
- The Rocker Arm Control Module B is sometimes part of a variable valve timing or cylinder deactivation system, and a mechanical fault in that system can cause the module to send data the powertrain control module rejects.
- Corrosion at a connector that looks dry from the outside can still cause intermittent invalid data, so wiggle tests and voltage drop measurements on the signal wires are more reliable than a visual inspection alone.
- This code can be set by a failing CAN bus transceiver inside another module on the same network, so do not assume the rocker arm module is the source until bus integrity is confirmed.

Can I keep driving with U041D?

The vehicle is generally safe to drive short distances to a repair facility, but avoid heavy acceleration or towing because invalid rocker arm data can affect valve timing and engine performance. If the engine runs rough, misfires, or enters limp mode, stop driving and have the vehicle towed to prevent catalytic converter damage.



Tools that help

- OBD-II scan tool with CAN bus communication capability
- Digital multimeter with voltage and resistance measurement
- Battery load tester and charging system tester
- Wiring diagram and service information for the specific vehicle
- Terminal pick and contact cleaner for connector repair
- Oscilloscope for CAN bus signal analysis (optional but helpful)

Reading U041D

U Network: communication between the vehicle's control modules.

0 Generic (SAE) code: it means the same thing on every OBD-II vehicle.

4 Invalid data received from a module.

1D The exact fault within that area.

Often seen with

P0010 'A' Camshaft Position Actuator Circuit (Bank 1) · **P3400** Cylinder Deactivation System (Bank 1) · **U0100** Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U0415** Invalid Data Received From Anti-Lock Brake System Control Mo

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u041d/>

