

GENERIC · NETWORK

U3562

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3562

Cathode Bypass Valve

U3562 is a manufacturer-specific network code indicating that a control module has detected a fault in the circuit for the cathode bypass valve, which is used in some fuel cell or advanced emission control systems to manage hydrogen ion flow. The computer monitors the valve's electrical circuit and sets this code when the commanded state does not match the feedback signal, often due to an open, short, or performance issue.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Intermediate	Network communication

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light, especially if the valve is not critical to immediate operation
- Reduced efficiency of the fuel cell or emission control system, potentially leading to decreased power or increased emissions
- Rough idle or hesitation if the valve affects mixture control
- In rare cases, the vehicle may enter limp mode to protect the system

Common causes, most likely first

- 1 Faulty cathode bypass valve solenoid or actuator
- 2 Damaged or corroded wiring harness or connector at the valve
- 3 Open or short circuit in the valve control circuit
- 4 Failed control module driver for the valve circuit
- 5 Contamination or mechanical binding of the valve internals
- 6 Poor electrical ground connection for the valve circuit

How to diagnose and fix it

- 1 Perform a visual inspection of the valve, connector, and wiring for obvious damage or corrosion
- 2 Use a scan tool to command the valve on and off and listen for actuation, verifying mechanical operation
- 3 Measure resistance of the valve solenoid and compare to manufacturer specifications
- 4 Check for voltage and ground signals at the valve connector with a multimeter while commanding the valve
- 5 Inspect the wiring harness for continuity and shorts between the control module and valve
- 6 If electrical tests pass, remove and inspect the valve for contamination or mechanical failure
- 7 Replace the valve or repair wiring as needed, then clear codes and verify the repair with a test drive



Cathode bypass valve circuit checks

- A common oversight is assuming the valve itself is defective when the real problem is a chafed wire hidden inside the loom, so always perform a continuity and short-to-ground test on the circuit.
- The code can be set by a momentary glitch in the feedback signal, so check for intermittent connections by wiggle-testing the harness while monitoring live data.
- On some vehicles, a weak battery or charging system fault can cause spurious network codes, so verify battery voltage and ground integrity before condemning the valve.
- The cathode bypass valve is part of a complex subsystem; related codes in other modules (such as fuel cell or hybrid controllers) may be stored and should be diagnosed together.
- Replacing the valve without checking the control module's driver circuit can lead to repeat failures if the module is intermittently shorting the control wire.

Can I keep driving with U3562?

You can generally drive the vehicle with this code set, but avoid aggressive acceleration or heavy loads because the fault may impair emission control or fuel cell performance. Schedule a diagnosis soon to prevent potential secondary damage.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Hand tools for connector and component access

Reading U3562

U	Network: communication between the vehicle's control modules.
3	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Network communication.
62	The exact fault within that area.

Often seen with

P0171 System Too Lean (Bank 1) · **P0442** EVAP System Leak Detected (Small) · **P0455** EVAP System Leak Detected (Large) · **U3561** Cathode Bypass Valve Control Circuit · **U3563** Cathode Bypass Valve Position Sensor Circuit



See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3562/>

