

GENERIC · POWERTRAIN

P0937

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0937

Hydraulic Oil Temperature Sensor Circuit

P0937 indicates that the transmission control module (TCM) has detected an abnormal signal from the hydraulic oil temperature sensor circuit, which monitors the temperature of the transmission fluid. The computer compares the sensor's voltage or resistance to expected values and sets this code when the reading falls outside the valid range or the circuit is open or shorted.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Transmission

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Harsh or delayed transmission shifts as the TCM may default to a fail-safe strategy
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Incorrect temperature gauge reading on the instrument cluster, if equipped
- Poor fuel economy or altered shift feel due to incorrect temperature data

Common causes, most likely first

- 1 Faulty hydraulic oil temperature sensor (internal transmission fluid temperature sensor)
- 2 Damaged or corroded wiring harness or connector at the sensor or TCM
- 3 Open or short circuit in the sensor signal or ground circuit
- 4 Transmission fluid contamination or degradation affecting sensor operation
- 5 Failed transmission control module (TCM) or internal circuit fault
- 6 Loose or improperly seated sensor in the valve body

How to diagnose and fix it

- 1 Use an OBD-II scanner to retrieve the code and check for related transmission codes
- 2 Inspect the sensor wiring and connectors for damage, corrosion, or loose pins
- 3 Measure the sensor's resistance or voltage and compare to manufacturer specifications
- 4 Check transmission fluid level and condition; service if contaminated
- 5 Test the sensor circuit for continuity and shorts to ground or power
- 6 Replace the hydraulic oil temperature sensor if faulty
- 7 If the sensor and wiring are good, diagnose or reprogram the TCM as needed



Sensor circuit faults often misdiagnosed

- A P0937 code is frequently caused by a chafed wire in the transmission harness rather than a failed sensor, so always inspect the loom near hot or moving components.
- Some vehicles use the same sensor for multiple functions, and a fault can cause the TCM to substitute a default temperature value, leading to shift quality complaints without any other codes.
- Transmission fluid that is overfilled or contaminated can cause the sensor to read incorrectly, so fluid condition should be checked before condemning the sensor.
- In certain models, the hydraulic oil temperature sensor is integrated into the valve body harness, requiring replacement of the entire harness assembly rather than just the sensor.
- Intermittent P0937 codes can be set by a poor ground connection at the transmission case, which is often overlooked during diagnosis.

Can I keep driving with P0937?

If the vehicle drives normally and the only symptom is the warning light, you can continue driving to a repair shop, but avoid heavy loads or aggressive driving. If the transmission enters limp mode or shifts harshly, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Vehicle-specific service information for sensor specifications
- Socket set and basic hand tools
- Transmission fluid level dipstick or scan tool for fluid level check

Reading P0937

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

Often seen with

P0710 Transmission Fluid Temperature Sensor Circuit Malfunction · **P0711** Transmission Fluid Temperature Sensor 'A' Circuit Range/Perf · **P0712** Transmission Fluid Temperature Sensor 'A' Circuit Low · **P0713** Transmission Fluid Temperature Sensor 'A' Circuit High · **P0936** Hydraulic Pressure Sensor Circuit Intermittent



See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0937/>

