

HONDA · POWERTRAIN

P1753

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1753 · Honda

TCM A/T ECT Sensor Circuit Fault

P1753 on Honda vehicles means the Transmission Control Module (TCM) has detected an abnormal signal from the automatic transmission fluid temperature sensor, which Honda calls the A/T ECT sensor. The TCM expects a specific voltage range that changes with fluid temperature, and the circuit is reporting a value outside that expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Honda specific	Medium	Intermediate	Transmission

Symptoms you may notice

- Illuminated Check Engine Light or Transmission Warning Light, often with no other symptoms
- Harsh or delayed shifting when the transmission is cold, because the TCM substitutes a default temperature value
- Torque converter clutch may not engage normally until the fluid warms up
- Transmission may stay in a single gear or enter limp mode in severe cases
- Inaccurate or erratic temperature reading on a scan tool data stream

Common causes, most likely first

- 1 Faulty A/T ECT sensor (transmission fluid temperature sensor) inside the transmission
- 2 Damaged or corroded wiring harness between the sensor and the TCM
- 3 Loose or contaminated sensor connector pins
- 4 Open or shorted sensor circuit due to chafed wiring near the transmission case
- 5 Failed TCM driver circuit for the sensor input
- 6 Low or severely degraded automatic transmission fluid affecting sensor response

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P1753, then clear the code and verify it returns
- 2 Inspect the A/T ECT sensor connector and harness for corrosion, looseness, or chafing
- 3 Measure sensor resistance at the connector and compare to the Honda temperature-resistance chart
- 4 Backprobe the sensor signal wire at the TCM and check voltage while wiggling the harness
- 5 Check for continuity and short-to-ground on both sensor wires from the sensor to the TCM
- 6 Replace the A/T ECT sensor if resistance is out of specification or the signal is erratic
- 7 If wiring and sensor test good, test the TCM input circuit and replace the TCM only as a last resort



What Honda techs check before replacing the sensor

- A common misdiagnosis is replacing the A/T ECT sensor when the real fault is a chafed wire near the transmission mount or a corroded connector pin that only acts up when hot or wet.
- Honda TCMs often set P1753 when the sensor circuit is intermittently open, so a resistance check with a cold transmission can pass while the fault appears only after the fluid reaches operating temperature.
- The A/T ECT sensor shares its ground or signal path with other transmission sensors on some Honda models, so a fault in a related circuit can trigger P1753 without the sensor itself being bad.
- After replacing the sensor or repairing wiring, the TCM may need a relearn or a short drive cycle before the code stays cleared, and clearing codes without checking freeze-frame data can send you chasing the wrong part.
- Low transmission fluid or fluid contaminated with coolant or debris can skew the temperature sensor reading and set P1753 even when the sensor and wiring are electrically perfect.

Can I keep driving with P1753?

You can usually drive short distances at moderate speeds, but avoid heavy towing or aggressive driving because the TCM may use a default fluid temperature and shift harshly. If the transmission enters limp mode or slips, stop driving and have it diagnosed promptly.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with backprobe pins
- Honda service information with the A/T ECT sensor resistance chart
- Wire terminal pick and contact cleaner
- Jack and jack stands or ramps for under-vehicle access

Reading P1753

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Honda): its meaning depends on the make.
7	Transmission.
53	The exact fault within that area.

Often seen with

P1751 Power Supply Voltage High · **P1751** A/T Control Relay · **P1751** Transmission Shift Solenoid A Mechanical Fault · **P1751** Shift Solenoid A Performance · **P1751** Secondary Pressure Solenoid Open Circuit · **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



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/honda-p1753/>

