



P1624 · Kia

TCM To PCM MIL Request Signal Circuit Fault

P1624 on a Kia means the Transmission Control Module (TCM) has sent a request to the Powertrain Control Module (PCM) to illuminate the Malfunction Indicator Lamp (MIL), but the PCM did not receive that request over the communication circuit. The PCM sets this code when it detects a missing or invalid signal on the dedicated TCM-to-PCM MIL request line, often due to a wiring fault or a TCM that is not communicating.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Kia specific	Medium	Professional	Computer and output circuits

Symptoms you may notice

- The check engine light (MIL) is illuminated on the dashboard.
- The transmission may shift harshly or enter limp mode with reduced power.
- The gear position indicator may flash or show incorrect gear selection.
- The vehicle may hesitate or stall when coming to a stop.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Open or shorted wire in the TCM-to-PCM MIL request circuit (most common).
- 2 Corroded or loose connector pins at the TCM or PCM harness.
- 3 Faulty TCM that fails to send the MIL request signal.
- 4 Faulty PCM that cannot receive or process the signal.
- 5 Poor ground connection for the TCM or PCM causing communication errors.
- 6 Aftermarket electrical accessories tapped into the communication circuit.



How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data to confirm P1624 is active.
- 2 Inspect the TCM and PCM connectors for corrosion, bent pins, or loose terminals and clean or repair as needed.
- 3 Check the continuity and resistance of the MIL request wire between the TCM and PCM, looking for opens or shorts to ground or power.
- 4 Verify the TCM and PCM grounds are clean and tight, and perform a voltage drop test on the ground circuit.
- 5 If wiring and grounds are good, substitute a known-good TCM and retest to see if the code clears.
- 6 If the code persists with a known-good TCM, test or replace the PCM as the last step.
- 7 Clear codes and perform a road test to confirm the MIL request circuit operates correctly.

Before you replace the TCM or PCM

- A loose or corroded connector at the TCM is a far more common cause of P1624 than a failed module, so always inspect and clean terminals before condemning parts.
This code can be set by a weak battery or charging system that causes voltage drops, so test the battery and alternator first.
- Aftermarket alarms or remote starters tapped into the CAN bus or communication wires often disrupt the MIL request signal and set P1624.
- The MIL request circuit is a dedicated wire on many Kia models, not part of the high-speed CAN bus, so a generic OBD-II scan may not show live data for it.
If the TCM has been recently replaced or reprogrammed, a missing configuration or software mismatch can trigger P1624 even with perfect wiring.

Can I keep driving with P1624?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because the transmission may enter limp mode without warning. If the transmission is shifting harshly or the vehicle stalls, stop driving and have it towed to prevent further damage.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter with continuity and voltage drop functions
- Wiring diagram for the specific Kia model
- Terminal pick and electrical contact cleaner
- Test light or logic probe



Reading P1624

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Kia): its meaning depends on the make.
- 6** Computer and output circuits.
- 24** The exact fault within that area.

Often seen with

P1625 CAN Bus Unplausible Message From Transmission Control · **P1625** Check Engine MIL · **P1625** PCM System Reset / TCM Flash Checksum Fault · **P1625** Voltage to Vehicle Load Control Module Fan Circuit Not Detec · **P1625** Pedal Position Sensor Potentiometer Supply Channel 2 Electri · **P0600** Serial Communication Link Malfunction · **P0606** PCM Processor Fault · **P0700** Transmission Control System Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/kia-p1624/>

