

KIA · POWERTRAIN

P1795

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1795 · Kia

4WD Switch Signal Malfunction

P1795 on a Kia means the four-wheel-drive (4WD) control module is not receiving a valid signal from the 4WD switch, which is the driver-selectable knob or button that commands two-wheel-drive (2WD), automatic 4WD, or locked 4WD modes. The computer expects a specific voltage or resistance pattern from the switch circuit and flags the code when that pattern falls outside the expected range for a set period.

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

Symptoms you may notice

- The 4WD warning light or a message such as 'Check 4WD system' appears on the instrument cluster.
- The 4WD mode selector switch does not change the drive mode when turned or pressed.
- The vehicle stays in two-wheel drive even when the switch is moved to 4WD lock or auto.
- The 4WD indicator lamp flashes instead of staying lit steadily after a mode is selected.
- Often no symptoms besides the warning light, with the vehicle driving normally in two-wheel drive.

Common causes, most likely first

- Faulty 4WD selector switch, worn contacts or internal failure inside the switch assembly.
- Damaged or corroded wiring between the 4WD switch and the 4WD control module, often at a connector or through a door or floor harness.
- Blown fuse or poor ground connection that supplies the switch circuit.
- Loose or corroded connector pins at the switch or at the 4WD control module.
- Failed 4WD control module that cannot read or process the switch input.
- Aftermarket accessories or wiring tapped into the 4WD circuit causing voltage interference.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1795 is current and not a stored history code from a past event.
- 2 Check the fuse and ground for the 4WD switch circuit and inspect the switch connector for corrosion or pushed-out pins.
- 3 Back-probe the switch connector and measure the signal voltage or resistance in each switch position against the Kia service information specification.
- 4 Inspect the wiring harness between the switch and the 4WD control module for chafing, moisture intrusion, or rodent damage.
- 5 If the switch output is incorrect, replace the 4WD selector switch and clear the code.
- 6 If the switch and wiring test good, check the 4WD control module power, ground, and communication, then substitute a known-good module only after all other tests pass.
- 7 After repair, clear codes, cycle the ignition, and verify the 4WD mode changes correctly with a road test on a low-traction surface.

What the 4WD switch code really means

- A weak or failing battery or charging system can cause the 4WD control module to misread the switch signal, so always check system voltage before condemning the switch.
- The 4WD switch on many Kia models is part of a combined switch panel, and a fault in another button on that panel can corrupt the shared signal line.
- P1795 can set intermittently from a connector that only loses contact over rough roads, so a wiggle test of the harness while watching live data is more useful than a static resistance check.
- Do not replace the 4WD control module first; the switch and its wiring are far more common causes and are much cheaper to test.
- On some Kia vehicles the 4WD switch signal is shared with the instrument cluster or body control module, so a cluster or body fault can set this code without any problem in the switch itself.

Can I keep driving with P1795?

The vehicle remains safe to drive in two-wheel drive because the 4WD system simply stays disengaged, but avoid off-road use, deep snow, or slippery conditions where you rely on 4WD until the fault is repaired. If the warning light is accompanied by other transmission or stability-control warnings, have it checked promptly.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter
- Wiring diagram and connector pinout for the Kia model
- Test light or jumper wires for circuit testing
- Trim removal tools for accessing the switch panel



Reading P1795

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

Often seen with

P1796 Vehicle Speed Signal Short To Ground · **P1864** Data Bus Powertrain Missing Message From ADR Control Module · **P1794** Powertrain Control Module Battery Direct Power Circuit · **P1796** Kick Down Switch Circuit · **P1794** Powertrain Control Module Battery Direct Power Circuit · **P1796** Kick Down Switch Circuit · **P1794** Battery Or Circuit Failure · **P1794** Battery Voltage Circuit · **P1796** CAN Controller Circuit Bus Off · **P1864** Torque Converter Clutch Circuit · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/kia-p1795/>

