



P1745 · Jaguar

Pressure Regulator 1

P1745 on a Jaguar indicates that the Transmission Control Module (TCM) has detected an electrical fault in the pressure regulator valve circuit, often the solenoid that controls line pressure inside the automatic gearbox. The computer monitors the circuit for open, short, or out-of-range resistance and sets this code when the signal does not match expected values.

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

Symptoms you may notice

- Harsh or delayed gear shifts, especially when engaging drive or reverse
- Transmission stuck in a single gear or failsafe mode
- Illuminated check engine light or transmission warning message on the dash
- Slipping gears or a flare in engine speed during acceleration
- Often no symptoms besides the warning light, with normal driving behavior

Common causes, most likely first

- 1 Faulty pressure regulator solenoid (open or shorted coil)
- 2 Damaged or corroded wiring harness to the solenoid
- 3 Poor electrical connection at the solenoid or TCM connector
- 4 Internal transmission valve body wear or debris blocking the regulator valve
- 5 TCM software glitch or internal fault
- 6 Low transmission fluid level or degraded fluid causing pressure irregularities

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top up or replace if contaminated
- 2 Inspect the solenoid wiring harness for chafing, corrosion, or loose connectors
- 3 Measure resistance of the pressure regulator solenoid and compare to specification
- 4 Perform a voltage drop test on the solenoid circuit under load
- 5 Replace the pressure regulator solenoid if resistance is out of range
- 6 Repair or replace damaged wiring or connectors as needed
- 7 Clear the code and perform a transmission adaptation reset and road test



Before replacing the pressure regulator solenoid

- A low or dirty transmission fluid can mimic a failed pressure regulator by causing erratic pressure readings, so always verify fluid condition first.
- The solenoid circuit often fails at the connector pins due to water ingress, not the solenoid itself, so inspect the plug before condemning the part.
- On some Jaguar models, a software update for the TCM addresses false P1745 triggers without any hardware fault.
- A sticking valve body spool can cause the same pressure deviation as an electrical solenoid failure, requiring valve body inspection or replacement.
- After replacing the solenoid, a transmission adaptation reset is essential; otherwise the TCM may continue to set the code due to learned values.

Can I keep driving with P1745?

You can usually drive the car to a workshop if the transmission still shifts reasonably and the warning light is steady, but avoid heavy acceleration or towing. If the gearbox enters limp mode or shifts become severely harsh, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scanner with Jaguar-specific software
- Digital multimeter
- Transmission fluid level dipstick or scan tool for fluid temperature
- Socket set and Torx bits for valve body access
- Wiring diagram for the transmission circuit

Reading P1745

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

Often seen with

P1746 Transmission Control Unit Relay Malfunction · **P1747** Transmission Control Unit Relay Open Short To Ground · **P1746** Electronic Pressure Control Solenoid Circuit Open · **P1747** Electronic Pressure Control Solenoid Circuit · **P1746** Pressure Regulator 2 · **P1747** Pressure Regulator 3 · **P1746** Electronic Pressure Control Solenoid A Open Circuit · **P1747** Electronic Pressure Control Solenoid A Short Circuit · **P1746** Transmission Control Module Output Stage · **P1747** CAN Bus Monitoring · **P0730** Incorrect Gear Ratio · **P0740** Torque Converter Clutch Circuit Malfunction · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1745/>

