

GENERIC · POWERTRAIN

P0897

OBD-II TROUBLE CODE

P0897

Transmission Fluid Deteriorated

P0897 indicates that the transmission control module has calculated the automatic transmission fluid has degraded beyond its useful service life based on its internal deterioration model. The computer does not directly measure fluid chemistry; it infers wear from accumulated heat cycles, mileage, and operating conditions, then illuminates the warning light when the fluid is due for replacement.

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

Symptoms you may notice

- Illumination of the transmission warning light or check engine light, often with no other symptoms besides the warning light
- Harsh or delayed gear shifts as the fluid's friction properties degrade
- Slight slipping or shuddering during acceleration or torque converter lockup
- Poor fuel economy caused by less efficient torque transfer
- In some vehicles, the transmission may enter limp mode or restrict certain gears

Common causes, most likely first

- 1 Transmission fluid that has genuinely reached the end of its service life due to normal heat cycling and mileage
- 2 Severe operating conditions such as frequent towing, heavy loads, or stop-and-go traffic that accelerate fluid degradation
- 3 A faulty transmission fluid temperature sensor that reports excessively high temperatures, causing the deterioration counter to advance prematurely
- 4 Software calibration issues in the transmission control module that miscalculate the fluid life index
- 5 Low fluid level or a fluid leak that causes overheating and accelerated breakdown
- 6 Use of incorrect or non-approved transmission fluid that degrades faster than the specified fluid
- 7 A stuck or restricted transmission cooler that raises operating temperatures and speeds fluid aging



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission codes or pending faults
- 2 Inspect the transmission fluid level, color, and smell; dark or burnt fluid confirms genuine deterioration
- 3 Check for fluid leaks and inspect the transmission cooler and lines for restrictions
- 4 Use a scan tool to read transmission fluid temperature data and compare it to actual conditions to rule out a faulty sensor
- 5 Perform a transmission fluid and filter change using the manufacturer-approved fluid, then reset the fluid life counter with a scan tool
- 6 If the code returns immediately after reset, diagnose the transmission control module software and update or replace it as needed
- 7 Clear the code and road test the vehicle through several drive cycles to confirm the warning does not return

Why the fluid life counter is not always right

- The deterioration counter is an algorithm, not a sensor, so it can be advanced by a faulty temperature sensor or a software glitch even when the fluid itself is still serviceable.
- Many drivers ignore this code because the vehicle drives normally, but continued driving on degraded fluid can lead to valve body wear and costly internal damage.
- A fluid change alone will not clear the code on most vehicles; the adaptive fluid life counter must be reset with a scan tool after the service.
- Some manufacturers set this code based on time and mileage rather than actual fluid condition, so a low-mileage vehicle driven gently can still trigger it.
- Replacing the transmission fluid with the wrong specification can cause shift quality problems and may re-trigger the code even sooner.

Can I keep driving with P0897?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or prolonged driving because degraded fluid can accelerate internal wear. Schedule a fluid service as soon as possible and do not ignore the warning for weeks.

Tools that help

- OBD-II scan tool with transmission module access
- Fluid pump or funnel for filling the transmission
- Drain pan and wrench set
- Infrared thermometer to verify fluid temperature
- Factory service information for fluid level and reset procedure



Reading P0897

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

Often seen with

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 · **P0714** Transmission Fluid Temperature Sensor 'A' Circuit Intermittent · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off

See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0897/>

