

GENERIC · POWERTRAIN

P026A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P026A

Charge Air Cooler Efficiency Below Threshold

P026A means the powertrain control module (PCM) has calculated that the charge air cooler (CAC) is not removing enough heat from the compressed intake air, so the air entering the engine is hotter than the model expects. The PCM compares the temperature drop across the cooler against a threshold derived from ambient temperature, boost pressure, and airflow, and it sets the code when the measured efficiency stays below that limit.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode under sustained boost, especially during towing or climbing
- Poor fuel economy and sluggish acceleration because hot intake air is less dense
- Black smoke or rich-running behavior on diesel engines due to lower oxygen density
- Elevated intake air temperature readings on a scan tool compared with ambient temperature
- On some vehicles, a message in the driver information center about reduced engine power

Common causes, most likely first

- 1 Leaking or disconnected charge air cooler piping, boots, or clamps allowing boost pressure to escape before the cooler
- 2 Plugged, bent, or internally collapsed charge air cooler fins or core passages
- 3 Failed or stuck-open charge air cooler bypass valve or associated vacuum/electronic actuator
- 4 Faulty intake air temperature sensor or charge air temperature sensor giving skewed readings
- 5 Restricted airflow across the cooler from a missing or damaged air deflector, fan shroud, or debris-packed fins
- 6 Wiring or connector damage to the intake air temperature sensor circuit causing intermittent high resistance
- 7 Extreme underhood heat soak from a failed cooling fan or low coolant level affecting the cooler's ability to shed heat



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P026A, paying attention to intake air temperature, ambient temperature, boost pressure, and calculated load at the time of the fault
- 2 Visually inspect the entire charge air cooler circuit for loose clamps, cracked boots, oil residue from boost leaks, and physical damage to the cooler core
- 3 Perform a boost leak test by pressurizing the intake tract and listening or using soapy water for bubbles at the cooler and its connections
- 4 Compare intake air temperature sensor readings against ambient temperature after a cold soak and during a road test to confirm sensor accuracy
- 5 Check the charge air cooler bypass valve or actuator for proper operation and verify vacuum or electrical control signals
- 6 Clean debris from the cooler fins and confirm that air deflectors, seals, and fan shrouds are present and correctly positioned
- 7 If all external checks pass, perform a pressure drop test across the cooler core or use a thermal camera to identify cold spots indicating internal blockage

Charge air cooler faults that mimic sensor failures

- A boost leak at the charge air cooler often sets P026A without any boost pressure code because the leak is small enough to stay within the PCM's boost control authority but large enough to reduce cooling efficiency.
- Technicians frequently replace the intake air temperature sensor when the real problem is oil-soaked or collapsed cooler fins that no longer transfer heat, so always verify sensor readings against ambient temperature before condemning the sensor.
- On vehicles with an active grille shutter, a stuck shutter can reduce airflow through the charge air cooler and set P026A even though the cooler itself is mechanically sound.
- The PCM's efficiency model assumes a clean cooler core, so a cooler that is externally packed with mud, leaves, or road debris can fail the test without any internal restriction or boost leak.
- P026A can be set by a failing charge air cooler bypass valve that stays open, allowing hot compressed air to bypass the cooler entirely under conditions where the PCM expects full cooling.

Can I keep driving with P026A?

You can usually drive the vehicle to a repair shop, but avoid heavy throttle, sustained high-speed driving, and towing until the fault is repaired because hot intake air raises combustion temperatures and can damage pistons or turbochargers over time.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Boost leak tester or smoke machine
- Infrared thermometer or thermal camera
- Basic hand tools for hose clamps and intake piping
- Digital multimeter for sensor circuit testing

Reading P026A

- P** Powertrain: engine, transmission and emissions.
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- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
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- 2** Fuel and air metering (injector circuits).
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- 6A** The exact fault within that area.

Often seen with

P00B7 Engine Coolant Flow Low/Performance · **P0112** Intake Air Temperature Circuit Low Input · **P0113** Intake Air Temperature Circuit High Input · **P0234** Engine Overboost Condition · **P0299** Turbo/Supercharger Underboost

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p026a/>

