

Why do turbochargers fail?

Recommendations to avoid the most common problems

1. PROBLEMS WITH LUBRICATION

Reasons

- Inadequate maintenance of the vehicle.
- Lack of filter and oil level inspection.
- Using the wrong oil (of lower quality than recommended by the manufacturer).
- Incorrect operation of the oil pump.
- Failure to follow the installation procedure suitable for 1.6Hdi engines.

Consequences

- Blue-white smoke.
- Excessive oil consumption.
- Possible engine overload.

How to avoid this

- Follow the vehicle inspection schedule recommended by the manufacturer.
- Change the filter and the lubrication pipes when replacing the turbocharger.
- Check the oil flow and pressure when replacing the turbocharger.



2. OIL CONTAMINATION

Reasons

- Inadequate maintenance of the vehicle.
- Worn oil filter, which does not fulfill its function.
- Contamination build-up in the engine's oil sump.

Consequences

- Excessive oil consumption.
- Blue-white smoke.
- Possible engine overload.

How to avoid this

- Follow the vehicle inspection schedule recommended by the manufacturer.
- Change oil filter when replacing the turbocharger.
- Clean the oil tanks in the engine's oil sump.



3. INGRESS OF FOREIGN BODIES INTO THE TURBOCHARGER

Ingress through the inlet

Reasons

- Dirty or old air filter.
- Residue of the previous turbocharger (nut, axle and aluminum pieces).
- Parts lost or forgotten during the installation (screws, washers, etc.).
- Other residue (parts of the flow meter, air filter etc.)

Consequences

- Whistling noise.
- Loss of power.
- Turbocharger imbalance.

How to avoid this

- Inspect the oil filter regularly.
- Thoroughly inspect the air inlet hose.



Ingress through the outlet

Reasons

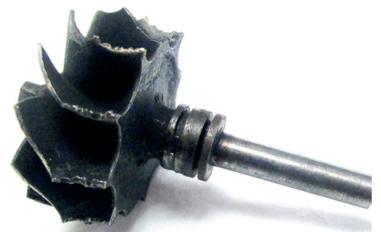
- Ingress of residue from the engine along with the exhaust fumes.

Consequences

- Turbocharger imbalance and resulting failure.
- Blocked geometry and loss of power.

How to avoid this

- Regularly inspect the exhaust manifold.
- Clean the EGR valve and the intake manifold.
- Regularly inspect the exhaust system gaskets (broken, damaged).



4. IMPROPERLY SET EXHAUST SYSTEM GASKETS

Reasons

- Incorrect setting of the turbocharger exhaust system gaskets.

Consequences

- Loss of power.
- Whistling noise.
- Turbocharger imbalance and resulting failure.

How to avoid this

- Check the correct placement of the turbocharger exhaust system gaskets

