Terms of Warranty

By buying a turbocharger in our shop you get a quality warranty for 24 months with no mileage limit. In order for the warranty to be valid, you must follow all the recommendations in the warranty card and install the turbocharger by a qualified person. Correct diagnostics, assembly in accordance with the instructions and correct operation ensures long life of the turbocharger. Below we present the general warranty conditions and necessary diagnostics for improving the vehicle.

Warranty Policy

Warranty card valid with proof of purchase. The warranty period is twenty-four (24) months from the date of sale.

The Owner has the right to claim the price reduction or withdraw from the contract, unless the Seller immediately and without any inconveniences for the Owner, changes the defective product for the product free from defects or removes this defect. This restriction does not apply if the product has already been replaced or repaired by the guarantor, or if the guarantor did not replace the product or the defect has not been removed.

Due to the nature and the specificity of the product, the warranty does not cover product failures resulting from:

- arbitrarily made by the User or other unauthorized person: repair, modification or structural changes,
- mechanical damage, thermal damage, chemical damage or intentional damage,
- damages resulting from: non-compliance with operation rules or using the product inappropriate relative to its purpose or parameters,
- inappropriate or unauthorized installation.

Warranty does not exclude, limit or suspend the buyer's rights arising from warranty regulations for defects in the sold goods. Warranty is valid only if all the orders contained in the installation instruction are executed by a qualified person and by signing it by the owner, or assembler of the component in the vehicle.

In the case of an unjustified complaint, restoring the turbocharger after the verification dismantling may be treated as a paid, non-warranty service.

⚠ ATTENTION! ⚠

Before starting the turbocharger, the fault that caused the repair or replacement must be rectified. Installation and diagnostics must be performed in a specialist workshop.

Diagnostics

Cause of exchange and the related obligatory range of activities during the assembly of turbocharger:

1. Increased radial and axial clearance of shaft & wheel (wheels rub on the housings - bearings worn out)

- clean the intake and exhaust system,
- replace the air filter cartridge,
- clean the engine crankcase and a compartment under the cover of valves,
- check the tightness of the seating of injectors mounted under the valve cover,
- clean or replace the oil pump filter,
- check the condition of the oil pump and the overflow valve,
- clean and check the condition of the oil sump - if dented, replace with a new one,
- replace the inlet and outlet oil pipes with connecting bolts,
- replace the oil filter cartridge,
- after around 1000km and during the exchange of oil, check the condition of the turbocharger.

2. Oil leakage from the turbocharger (without increase of clearance of the wheel):

- improve engine ventilation filter system,
- replace the air filter and check the efficiency of turbocharger oil drain,
- check the size of blows in engine piston system - remove the possible reasons,
- inspect and, if necessary, correct the oil level.

3. Mechanical damage caused by foreign objects (compressor wheel, turbine wheel):

- find and remove the possible reason,
- clean the intake and the exhaust systems,
- replace the air filter element.

4. Noisy work (without increased clearance of shaft & wheel):

- remove the leaking of the intake or exhaust system.

5. Problems with the proper operation of the turbocharger (issues with variable geometry / lack of power / switching to check-engine mode).

- check the components responsible for the correct control of the actuator,
- check the throughput of the catalyst / particulate filter DPF/FAP,
- check the operation of the injection system.

After finding defective turbocharger work-in case of oil leaks or noises from turbo, check possible reasons according to steps: 2 and 5 of the *Diagnostics*. If a turbocharger is found to be faulty, stop using it and contact your dealer before removing it.

Complaint will be considered immediately, no longer than in 14 days.

⚠️ ATTENTION! ⚠️

Over **90% of turbocharger complaints result from mechanical damage**.
The most common causes are:

- **a clogged diesel particulate filter,**
- **lack of proper lubrication.**

👆 Such damage will automatically result in a negative complaint decision! 👆

Below you will find examples of the most common damages and their causes.

Mechanical Damage / Grounds for Negative Decision

1. Damage by Foreign Material

Bent or chipped rotor blades or compression wheels are damage caused by a foreign object that has entered the suction or exhaust body.

Possible causes:

- nuts/bolts/stones/sand/hard element left in the air charging system,
- broken engine components,
- late air filter replacement,

- cracked connection elements or other objects that got inside the device.

What should you do?

Inspect the air intake duct and exhaust manifold for foreign objects. Find and eliminate the cause of damage. Inspect and clean the intake and exhaust systems. Replace the air filter element.

2. Oil Pressure Deficiency (Lack of Lubrication)

A longer oil pressure shortage burns and damages the bearing surface and turbocharger rotor. It also causes thermal discoloration of these components.

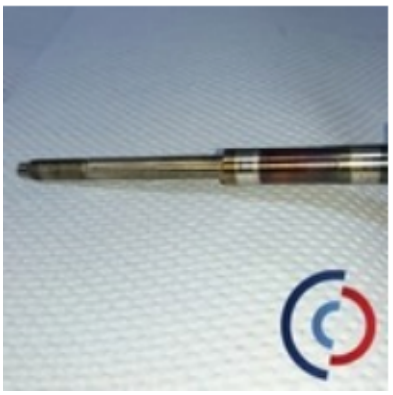
Possible causes:

- damaged oil pump,
- blocked, broken or bent turbocharger lubrication pipe,
- low level of oil in the oil pan,
- malfunctioning of the lubrication system,
- long driving of the vehicle with a large slope.

What should you do?

Check/replace the oil pump along with the relief valve. Check the lubrication system together with the hose responsible for lubricating the turbocharger. Clean and check the condition of the oil pan - replace it with a new one in case of dents.





3. Interruptions in Oil Supply

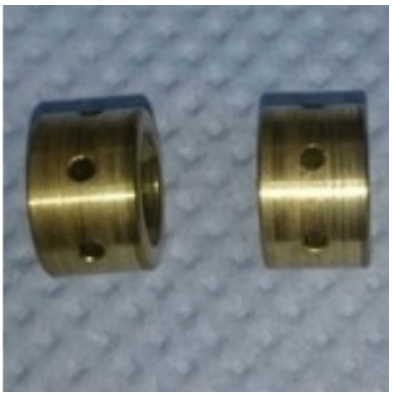
Repeated short breaks of 4-5 seconds can lead to burn-out and polishing of the bearing surface.

Possible causes:

- the consequence of incorrect oil change and oil filter (dry start of the turbocharger),
- replacement of the turbocharger without pouring it over with oil,
- the car has not been used for a long time,
- low oil pressure due to poor functioning of the lubrication system,
- improper engine start after turbocharger replacement or refurbishment,
- oil contamination (e.g. fuel or glycol).

What should you do?

Check/replace the oil pump. Check the lubrication system together with the hose responsible for lubricating the turbocharger. To avoid damage after prolonged non-use of the vehicle, start the engine for a few seconds, turn it off and repeat the operation several times in order to completely fill the pipes and the turbocharger with oil and bleed them.


4. Contaminated Oil

Dirty oil causes deep scratches on the turbocharger bearings.

Possible causes:

- blocked, damaged or low quality oil filter,
- engine wear and the possibility of damaged parts,
- oil filter overflow valve defective,
- low quality engine oil,
- engine oil not changed for too long.

What should you do?

This type of damage can be avoided through using and regularly changing high-quality oils and filters. Remember to change them regularly according to the manufacturer's instructions or even more often!

5. Damage to the Variable Geometry Mechanism

Stuck or burned blades of variable geometry are a common reason for overcharging or lack of charging of the turbocharger. Due to the oil deposit on the variable geometry, the car can enter into emergency mode and have a significant power drop.

Possible causes:

- damaged/inefficient particulate filter (DPF/FAP) or catalyst,
- damaged injectors,
- excess oil from leaking engine head, valve seals or sealing rings,
- faulty turbocharger actuator or controller,
- frequent driving in short distances at slow speeds.

What should you do?

You need to correctly diagnose the cause of damage and correct it. In 99% of cases this will be one of the above reasons. To avoid failure of the variable geometry mechanism, we advise you to check: the particulate filter, injectors and oil pressure. We recommend regular longer rides, where the mechanism has the chance to warm up and get rid of carbon deposits.



6. Overheating

Higher temperature transmitted from the exhaust body of the turbocharger to the body of the core contributes to the burning of oil and causes corrosion of the subassembly bearings. Excessive exhaust gas temperature or engine shut-down too quickly after operation causes an accumulation of carbon resulting from burning oil. The rotor sealing ring and its location (turbine shaft groove) and turbo bearing are primarily exposed to damage. The burnt oil also blocks the oil outflow, and its accumulation causes friction, which consequently bends or cracks individual parts of the unit. The engine may also ignite due to overheating.

Possible causes:

- poor quality engine oil,
- too fast engine shutdown after intense operation,
- clogged or worn out air filter,
- air and exhaust air blows,
- rarely changed engine oil,
- damaged or faulty injectors,
- defective lubrication system,
- faulty oil drainage system (incorrect venting of the engine crankcase).

7. Oil Intake

Oil from the engine, which enters the turbocharger from the suction side, most often leads to the accumulation of oil scale at the seal location of the turbocharger rotor. Accumulated burned oil causes grinding of the bearing and the rotor groove (location of the rotor sealing ring), which in consequence leads to "blowing out" of this ring.

Intake System - Engine Lungs

The intake system is responsible for supplying air to the engine (in units with direct fuel injection) or air-fuel mixture (in engines with indirect injection). Real problems arise when engine oil begins to accumulate in the intake system. Under no circumstances should it be there!

Incorrect Breather Vent

The reason for oil retention in the intake, often disregarded even by mechanics, is malfunctioning of the breather vent. The task of the breather vent is to ventilate the crankcase. Along with the air that is extracted from the box, engine oil (small amounts) is also sucked in. The problem is that after a few years of use, the oil separator located in the breather vent stops working properly and passes air into the turbocharger inlet pipe together with oil vapours. As a result, the compressor forces air and oil into the intercooler hose.

Worn-Out Piston Rings / Blows on the Engine Blow-By

The presence of oil in the intake system may also be the result of worn-out piston rings, which results in the oil being blown into the intake system. If the car's engine actually requires replacement of the rings, it is worth checking the other parts (heads). It may turn out that soon after replacing the rings you will have to disassemble the engine again to eliminate another fault.

Excessive Engine Oil

The reason for oil entering the intake system may also result from excessive oil in the engine. Workshops often pour too much engine oil, most often because of the short time they can devote to the vehicle. Before the oil drains from the motor completely, they fill it with the amount of oil recommended by the manufacturer. That's when the risk of oil appearing in the breather vent increases, which will supply it to the intake system.