

Warranty terms

All direct-fit catalytic converters and diesel particulate filters come with an extended warranty of 2 years from the time of purchase (additional to the legal warranty).

When the product does not meet the requirements within 2 years after it is bought it is immediately replaced or repaired by Topcats after going through the warranty process.

The customer has the right to terminate the agreement with Topcats after the product has been repaired or replaced and still does not appear fulfill the agreement.

The installation instructions as supplied should always be strictly followed.

Catalytic Converter

The Catalytic Converter ought to last for a minimum of 100,000 km (62,137 miles). If that is not the case, the actual cause is mainly on account of:

- **External damage.**
- **Blockage or pollution.**
- **Oil/Anti-freeze pollution.**
- **Overheating.**
- **Noise generation.**

Should the above problems arise, the warranty does not cover a new Catalytic Converter!
Rectify the cause before fitting a new catalytic converter! If you fail to rectify the cause first, the new catalytic converter may also break.

Read more about this under headline A. More information about catalytic converters.

Diesel particulate filter (DPF)

In a properly functioning engine the DPF has a life of between 80,000 and 140,000 miles. A DPF is only a temporary storage for particulate matter, a ceramic element that is only function is to capture soot.

The chance of a manufacturing error in a DPF is negligible. In most cases, the minimum checklist is not followed prior to the replacement of the original(or previous) part.

- **Only when the entire chain is working to factory specifications, the particulate filter will perform as required.**

A regeneration which is not equal to the original factory sequence, will cause the filter to fill with soot within a few hours.

When replacement is not don in accordance to the minimum checklist the warranty will not cover a new DPF.

Read more about this under heading B. More information about particulate filters.

A. More info catalytic converters

External damage.

The ceramic material in the catalytic converter is made from lightweight, thin-walled and breakable material. It is protected by an isolating layer that keeps the material in place and, to a certain degree, provides protection against external damage. However, if the Catalytic Converter is hit by speed bumps or large stones in the road, cracks can potentially form in the catalytic converter's ceramic material. Poor assembly or a broken exhaust system can also cause the ceramic material to break.

The use of exhaust assembly compound for the catalytic converter can also cause the ceramic material to break. Once this compound has hardened, small fragments can break off and be blown into the ceramic material. This occurs with such a force that the ceramic material is damaged and can ultimately even break.

Blockage or pollution.

Blocked or polluted catalytic converters are caused by the use of the incorrect fuel in the car. The use of leaded fuel or lead replacement fuel causes the ceramic material to become blocked and this no longer works. The same applies when fuel additives are used that are unsuitable for systems fitted with a catalytic converter.

Oil/anti-freeze pollution.

When Oil or Anti-freeze finds its way into the exhaust system, this can block the air flow because a heavy layer of soot is deposited in the catalytic converter against the ceramic plates. This soot deposit causes 2 problems.

First of all, it prevents the catalytic converter from filtering out harmful soot particles from the exhaust gases and secondly the heavy soot deposit causes the core to become blocked, which results in the air flow becoming blocked. This causes higher counter-pressure and the hot exhaust gases find their way into the engine; this disrupts the combustion process in the engine, meaning this also no longer functions optimally, which results in loss of output and overheating of the engine. Potential causes of this are leaking gaskets, worn sealing rings or other damaged parts in the engine.

Overheating.

When excess fuel finds its way into the exhaust system, this will still ignite when it reaches the catalytic converter. This will cause the catalytic converter to overheat and will combust the precious metals on the ceramic material, which will result in the catalytic converter no longer functioning. In the worst case, the ceramic material can even melt, which would block the catalytic converter.

Potential causes of this are an incorrect fuel ratio, incorrect tuning of the engine, corroded spark plugs, broken Lambda probes or incorrectly functioning injectors.

Noise generation.

A catalytic converter should not be considered to be a silencer, although it does have soundproofing qualities. Noise nuisance can be caused by excess fuel in the catalytic converter. The excess fuel will be ignited in the catalytic converter which can result in a whistling noise. A catalytic converter can even start to rattle. The cause is the combustion of the insulating protective layer around the ceramic material. Because of this, the ceramic material will be loose in the steel casing, which will make a rattling noise.

A. More info particulate filters (DPF)

Each diesel particulate filter (DPF) is a ceramic element that is only functions is to capture soot

The collected soot in the DPF has to be burned. For this combustion (the so called regeneration) the engine management (with or without an OBD system) is responsible. When the engine managements finds al parameters correct regeneration will occur.

When the particle filter (DPF) doesn't regenerate, or when the regeneration is discontinued, it fills with black carbon particles. Depending on the overall condition of the engine, the filter can be filled with soot within a few hours in a way that regenerations isn't possible anymore.

In the worst case, the total inside of the filter is melted.

In a properly functioning engine the DPF has a life of between 80,000 and 140,000 miles. After each regeneration a small residue remains behind. This residual product which stays behind in the filter, known as ash, can only be removed by use of special machinery. This cleaning must take place separate from the vehicle.

Some cars have a so-called ash counter. This part of the engine counts the number of regenerations and determines when the filter needs to be replaced .

Improper functioning of engine management can cause of many short unnecessary regenerations to occur. This ash counter is rapidly rising to high registration numbers to the level at which the filter must be cleaned. It is therefore possible that nothing is wrong with the filter , while the OBD system indicates that the filter needs to be replaced .

When the checklist is not followed accordingly ,the installation of a new or cleaned DPF system has no use.

The regeneration, which is activated by the engine management of the vehicle, cleans the filter by burning the soot out.

Even the smallest error in the complete combustion chain increases the amount of soot.

A regeneration which is not equal to the original factory sequence , will cause the filter to be filled with soot within a few hours.

Minimum Checklist

- New oil
- New oil filter
- New air filter
- Injector testing
- Compression test
- Starter and battery test
- Check or replace glow plugs
- Check enginemanagement
- Check additive level , type, quality
- Check oil
- Check motor coolant consumption
- Check (head) gasket leakage
- View function and / or the regeneration frequency
- Check the quality and capacity of the (pre) catalyst
- Check all sensors (Lambda 's)
- Check EGR valve

Only when the entire chain is working to factory specifications, the particulate filter will perform as required.