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Exhaust gas cooler leaking: important installation notes

To avoid leaks and damage, a number of points must be observed when installing exhaust gas coolers.

Exhaust gas coolers are installed in many modern engines. Their task is to cool the hot exhaust gases before they are returned to the cylinders. As a rule, exhaust gas coolers have at least four connections: two each for the inlet and outlet of the coolant and the exhaust gases.

Things to bear in mind during assembly

When installing exhaust gas coolers with flexible pipes, special care must be taken to ensure that they aren't under tension. Depending on the vehicle and application, the assembly screws of the exhaust gas cooler and the exhaust pipes must be tightened in a specific sequence in order to prevent leaks.

When space is limited, it's particularly important to make sure that the flexible pipe isn't bent or kinked when the exhaust gas cooler is installed on the engine. Excessive stress during fitting can crack the flexible pipe. This often happens unnoticed during repair work and is only detected during subsequent operation, leading to complaints.



Figure 1: EGR cooler with cracked flexible pipe

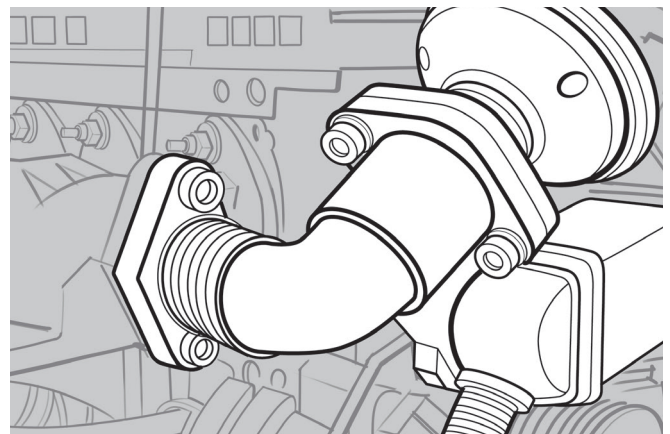


Figure 2: When tightening the screws, it's essential to ensure that the pipes are not under tension.

Important!

Always use new seals for installation. When tightening the assembly screws, be sure to observe the correct sequence and torques as well as other manufacturer-specific instructions and specifications. Since you have to open the cooling system when replacing the exhaust gas cooler, which can allow air into the circuit, the system must be bled thoroughly after the repair. Otherwise, local overheating, malfunctions, or damage may occur.