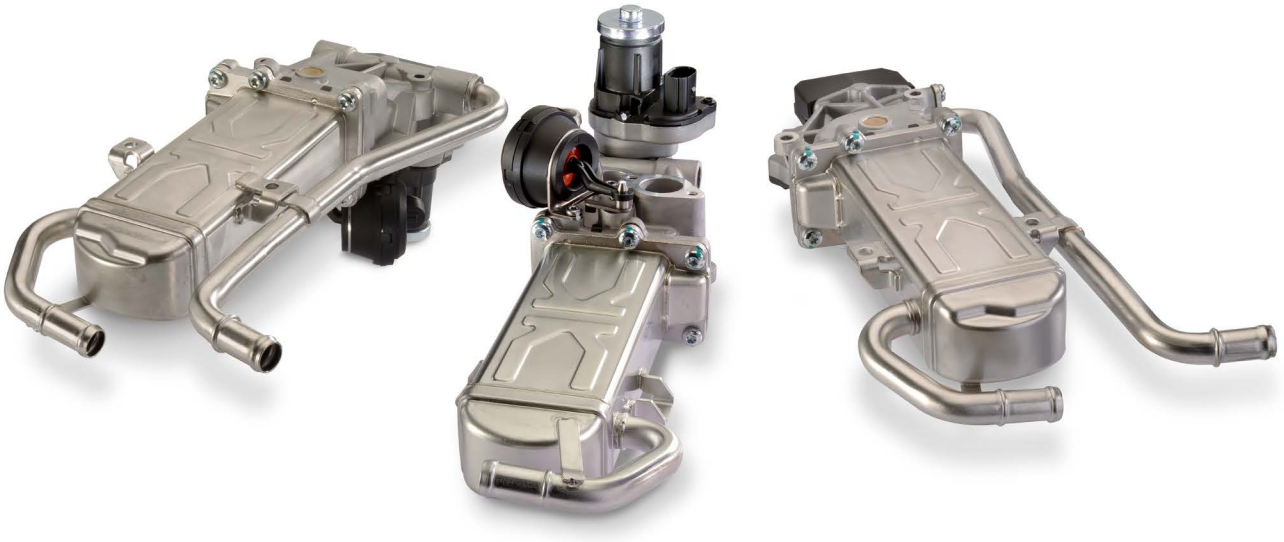
PIERBURG

PRODUCT INFORMATION

OPTIMISED EGR COOLER MODULES

FOR OVER 8 MILLION AUDI, SEAT, ŠKODA AND VW VEHICLES



Motorservice has optimised these cooler modules and modified them in line with the harsh operating conditions in the exhaust tract.

- The optimised geometry effectively prevents the formation of soot deposits on the valve guide.
- An optimised coating has been incorporated, significantly reducing the build-up of particulates.
- More resistant materials have been used.

All of these measures improve the durability of the cooler modules in the vehicle.

Ref. no.*	Pierburg no.	Vehicle fleet worldwide
03L 131 512 AP / AT/BJ/CF/CH/DQ/N	**7.09720.00.0**	Approx. 6,900,000
03L 131 512 AN/AS/BH/CE/CG/DP/M	**7.09720.01.0**	Approx. 950,000
03P 131 512 B/C/D/E	**7.09720.02.0**	Approx. 400,000

All content including pictures and diagrams is subject to change. For assignment and replacement, refer to the current catalogues or systems based on TecAlliance.
* The reference numbers given are for comparison purposes only and must not be used on invoices to the consumer.

BACKGROUND INFORMATION

EGR VALVES AND EGR COOLERS – FAILURE DUE TO SOOTING

Generally speaking, EGR valves and EGR coolers are susceptible to carbon deposits or sticking, in particular on diesel vehicles. The high soot content in the exhaust gas from diesel engines promotes the build-up of deposits.

THIS LEADS TO THE FOLLOWING

- The movement of the EGR valve is stiff.
- The EGR valve is stuck or does not open or close fully.
- Deposits reduce the opening cross-sections, which in turn reduces the throughput.

POTENTIAL COMPLAINTS

- Irregular idling
- Jerking
- Lack of power
- Engine goes into limp home function
- During checks in the repair shop, “Malfunction EGR valve” is identified in the diagnostics.

POSSIBLE CAUSES

Unusually high deposits can have several causes:

- Increased return rates following a software update by the vehicle manufacturer
- Extremely oily intake or charge air
- Poor, unclean combustion
- Errors in the engine management
- Errors in the injection
- Frequent short-distance drives

Possible causes of extremely oily intake or charge air include the following, for example:

- Malfunctions in the crankcase ventilation (e.g. oil separator, engine exhaust valve)
- Increased blow-by[1)] gas emission through increased wear on pistons and cylinders
- Malfunctions on the turbocharger (e.g. worn bearings, blocked oil return line)
- Maintenance intervals exceeded (inadequate oil change and oil filter replacement)
- Use of engine oil grades not suitable for the application
- Engine oil level too high
- Worn valve stem seals or guides, resulting in increased oil transfer into the inlet port

REMEDY

- Ensure that the errors listed under “Possible causes” do not apply or have been remedied.
- Avoid frequent short-distance drives (in particular in the cold season).

[1)] Blow-by: Leakage gas quantity that enters the crankcase past the piston rings during normal combustion. The crankcase ventilation guides these gases back to the engine for combustion.