

EMISSION CONTROL

COMPONENTS FOR EMISSION CONTROL FROM
PIERBURG – FOR CLEAN AIR AND THE ENVIRONMENT

OUR **HEART** BEATS FOR YOUR ENGINE.

EMISSION CONTROL

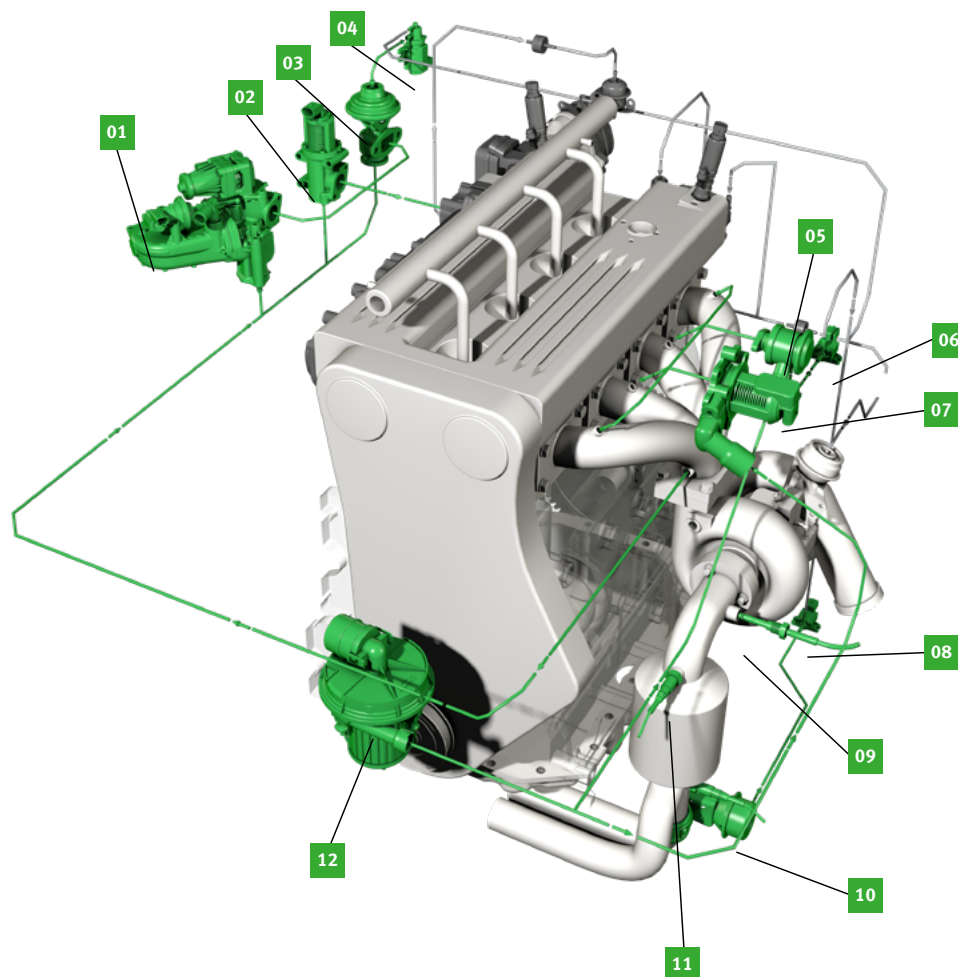
Product	Art. no	OE number	Manufacturer	Vehicle
Exhaust temperature sensor	7.11020.14.0	31431047, 30713642, 31370465	Volvo	C30, C70, S40, S60, S80, V50, V60, V70, XC60, XC70
	7.11020.07.0	045 906 088 G, 045 906 088 C, 03G 906 088 AB	Seat, Skoda, Volkswagen	Cordoba, Ibiza, Fabia, Roomster, Polo
	7.08369.95.0	04L 906 088 DA	Mercedes-Benz	A-Klasse (W176), B-Klasse (W246), C-Klasse (W204), CLA (C117), E-Klasse (W207), GLA (X156), GLC (X253), GL / GLE / ML (X166)
	7.08369.79.0	04L 906 088 B	Audi, Seat, Skoda, Volkswagen	A3, Golf VII, Leon, Octavia III, Karoq
	7.08369.81.0	04L 906 088 HT, 04L 906 088, 04L 906 088 AE, 04L 906 088 DQ	Audi, Seat, Skoda, Volkswagen	A3, Q2, Q3, TT, Touran, Sharan, Golf VII, Tiguan, Arteon, Beetle, Jetta, Passat, T-Roc, Leon, Tarraco, Alahambra, Ateca, Karoq, Kodiaq, Superb III, Octavia III
	7.08369.82.0	04L 906 088 E	Audi, Seat, Skoda, Volkswagen	A3, Golf VII, Leon, Octavia III, Karoq
	7.08369.88.0	A 001 905 29 00, A 000 905 90 04	Mercedes-Benz	S-Klasse (W221), C-Klasse (W205, C205, S205, A205)
	7.08369.90.0	A 001 905 07 00, A 000 905 65 04	Mercedes-Benz	C-Klasse (W204, C204, S204), CLS (C218, X218), E-Klasse Cabriolet (A207, C207, W212, S212), GLE / M-Klasse (W166), SLK / SLK (R172), SPRINTER (909)
	7.08369.92.0	03L 906 088 FB, 03L 906 088 JN	Volkswagen	Multivan, Transporter
	7.08369.93.0	03L 906 088 DC, 03L 906 088 JL	Volkswagen	Multivan, Transporter, Crafter
EGR coolers	7.04931.04.0	5801668925	Iveco	Daily VI Pritsche / Kasten, Daily Line Bus, Daily Citys Bus, Daily Tourys Bus
	7.05483.25.0	GK2Q-9U438-AG	Ford	Transit, Tourneo, Ranger
EGR valves	7.04999.34.0	04L131512BN, 04L131512CF, 04L131512CG, 04L131512T, 04L131512TX, 65.08152-6000, 65.08152-6002, 65.08152-6003	Volkswagen, MAN	Crafter, Transporter, Campmobil
	7.24809.87.0	55578264	Opel	Zafira C, Antara, Insignia B, Cascada
	7.07794.22.0	JX6Q-9D475-AC, 2342011, JX6Q-9D475-AB, 2327797, JX6Q9D475AA, 2191075	Ford	Ecosport, Tourneo Connect, Transit Connect
	7.07794.23.0	98 130 642 80, 98 298 700 80, 3553616	Citroen, Opel, Peugeot	Berlingo, C4, Grandland X, C5, 508 SW, Jumpy, Combo, Vivaro, Corsa F
	7.05838.08.0	8576810	BMW	116d, 216d, 520d, 520dx, 520d ed, 550dx, 725d, 750dx, x1 16d, x2 16d, x3, x4, x6, x7
	7.07549.09.0	73504376, 7350405, 71797454	Fiat, Alfa Romeo	Tipo, 500X, Giulietta
Secondary air valves	7.01510.94.0	06L 131 097 B	Audi, Volkswagen	A6, A7, Q5, Q7, Q8, Touareg

EMISSION CONTROL

50 % FEWER POLLUTANTS BEFORE REACHING THE CATALYTIC CONVERTER

Tried and tested millions of times all over the world – up to 50 % of the pollutants in exhaust gases are rendered harmless before they reach the catalytic converter through exhaust gas recirculation and secondary air systems. The components are now largely monitored by the on-board diagnostics (OBD) system.

There's a reason why Pierburg is represented as the OEM in a large number of modern vehicles with EGR valves and EGR coolers. The corrosion and temperature-resistant materials used in the Pierburg products guarantee lasting function under the harshest conditions, e.g. aggressive exhaust gas condensate, temperatures up to 700°C and pressures up to 3 bar.



PRODUCT RANGE

- 01 EGR cooler module
- 02 EGR valve (electrical)
- 03 EGR valve (pneumatic)
- 04 Pressure transducer for controlling pneumatic EGR valves
- 05 Secondary air valve (pneumatic)
- 06 Switchover valve for controlling pneumatic secondary air valves
- 07 Secondary air valve (electrical)
- 08 Switchover valve for controlling the exhaust gas flap
- 09 Exhaust temperature sensor
- 10 Exhaust gas flap
- 11 Lambda sensor
- 12 Secondary air pump



EGR COOLERS

In order to keep up with the increasingly strict emissions regulations, exhaust gas recirculation systems are required.

Cooled exhaust gas reduces the peak combustion temperature. This significantly reduces the amount of nitrogen oxides. Additionally, cooled gases are denser than warmer ones. This means that at the same boost pressure, a larger volume of gas fits into one cylinder filling. This produces a “leaner” combustion which also improves fuel consumption and particulate emissions.



EGR VALVES

Nowadays all modern diesel engines must be fitted with EGR systems in order to comply with exhaust gas regulations.

Exhaust gas is removed immediately after the cylinder and mixed with the intake air. This means that less oxygen reaches the cylinder, which results in a lower combustion temperature. As a result, the amount of nitrogen oxides in the exhaust gas can be reduced by up to 50 %. In petrol engines, this can also reduce carbon dioxide emissions and fuel consumption.



EXHAUST GAS FLAPS

Exhaust gas flaps are an important element in modern engines for emission control and increased comfort. They direct the exhaust gas into different exhaust tracts depending on the operating state.

Fields of application for areas close to the engine:

- DeNO_x catalytic converters
- Low-pressure exhaust gas recirculation
- HC absorbers

Motorservice's product range encompasses pneumatic and electrical exhaust gas flaps as well as exhaust gas flaps for motorcycles. All flaps are designed for extreme gas temperatures from –40°C to +950°C and a durability of over 1,000,000 switching cycles.



Pierburg has been developing these systems since the 70s up to present day, and have therefore made a significant contribution to the current state of the art.



LAMBDA SENSORS

Lambda sensors measure the residual oxygen in the exhaust gas. This produces a lambda value, which the engine management system uses to regulate the mixture composition for the most optimal combustion possible.

Lambda sensors are the most important element in engine management systems in terms of ensuring perfect engine running with low emissions.

High operating temperatures and aggressive exhaust gas place high demands on lambda sensors. You should therefore choose specialist products for emission control.



EXHAUST GAS TEMPERATURE SENSORS

Exhaust gas temperature sensors monitor the hot exhaust gas flow and protect components from overheating. Typical applications include protecting components which are sensitive to temperatures, such as turbochargers and all forms of catalytic converters, monitoring the free-burning process of the diesel particulate filter, controlling the optimal temperature range for catalytic converters and measuring the EGR exhaust gas temperature as part of on-board diagnostics (OBD). In the event of critical overheating, the control unit responds with suitable measures to reduce the temperature, e.g. through reduced performance (limp home function).



Motorservice covers around 1,700 vehicle types with 114 exhaust gas temperature sensors.

SECONDARY AIR VALVES

The secondary air valves are located between the secondary air pump and the exhaust manifold. The secondary air valve performs multiple tasks:

- The non-return function stops exhaust gas, condensate or pressure peaks in the exhaust tract from causing damage to the secondary air pump.
- The shut-off function ensures that secondary air is only routed to the exhaust manifold in the cold start phase.

IN MOTORSERVICE'S EXTENSIVE PRODUCT PORTFOLIO ARE THREE DIFFERENT TYPES OF PIERBURG SECONDARY AIR VALVES:



ELECTRICAL

Electrical secondary air valves have shorter opening and closing times and are more resistant against sticking due to soot or dirt.



PNEUMATIC

Pneumatic secondary air valves have proven their worth over decades. They need to be actuated by a switchover valve.



PRESSURE-CONTROLLED

This type of secondary air valve opens due to pressure from the secondary air pump.

HEADQUARTERS:

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