

PUMP**EXPERTISE**

**OIL, WATER AND VACUUM PUMPS
FROM A SINGLE SOURCE**

OUR **HEART** BEATS FOR YOUR ENGINE.



MOTORSERVICE
RHEINMETALL AUTOMOTIVE

PUMP EXPERTISE

Product	Article number	OE number	Manufacturer	Engine
Variable water pumps	7.10942.00.0	04L 121 011 L/P/N	VAG	EA288 - 1.6 & 2.0 TDI EU6
	7.10942.03.0	04B 121 011 D/DX/G		EA288 - 1.4 TDI EU6
	7.07152.50.0	03F 121 004 A/B/D/E/F		EA211 - 1.2 TSI EU6
	7.05466.04.0	55578243+S2	Opel/Vauxhall	2.0 Diesel EU6
Electrical water pumps (CWA 150)	7.09578.00.0	4KE 965 567 B	Audi	E-Motor: EASA/EA WA
Electrical water pumps (CWA 400)	7.05833.50.0	270 200 04 07	Mercedes-Benz	M274 - 2.0 Gasoline EU6
Water circulating pumps	7.10102.09.0	2123327 / GN1Z 8K621 A	Ford	1.0 EcoBoost EU6
	7.10103.05.0	52148814 / K68366456AA	FCA	1.6 & 2.0 Multijet Diesel EU6
	7.10102.10.0	LR094347	Jaguar/Landrover	PT204 - 2.0 Gasoline EU5 / EU6
Fuel-/Vacuum pumps	7.02551.12.0	03G 145 209 D	VAG	2.0 TDI
	7.02551.20.0	038 145 209 Q		1.9 TDI
	7.02551.24.0	038 145 209 P		1.9 TDI
Vacuum pumps	7.02551.18.0	11 66 7 622 380	BMW	2.0 16V
	7.02551.19.0	11 66 7 640 279		2.0 16V
	7.02551.21.0	A651 230 06 65	Mercedes-Benz	OM651
Oil pumps	7.07919.19.0	03G 115 105 H	VAG	EA288 - 1.6 & 2.0 TDI
	7.07919.27.0	15 00 036 01R	Renault/Nissan / GM	M9T - 2.0 Diesel EU4
	7.07919.28.0	15 00 053 92R		M9R - 2.3 Diesel EU4
Variable oil pumps	7.07919.33.0	V764737680	PSA/Opel/Mini	EP6, N16/ N18, 1.6 TPH - Gasoline
	7.07381.19.0	15 00 078 94R / A 699 180 00 00	Renault/Mercedes-Benz / Nissan	M9T/OM699 - 2.3 Diesel EU6
	7.07381.16.0	2389433 / JX6G 6600 CA	Ford	1.5 EcoBoost EU6
	7.07919.15.0	1614411380 / 2012650	PSA/Ford	DV5 / DV6 - 1.5 & 1.6 Diesel EU6
Dual oil pumps	7.07919.24.0	11 41 7 574 529	BMW	N62B44A - V8 Gasoline
	7.07919.25.0	11 41 7 561 429	BMW	N62B48A - V8 Gasoline
	7.07919.26.0	11 41 7 561 428	BMW	N62B48B - V8 Gasoline
Electrical oil pumps	7.06623.47.0	31 36 047 54R	Renault	Hydraulic transmission DB35



OIL PUMPS

PERFECTED OIL SUPPLY

Pierburg develops and supplies oil pumps to all leading engine manufacturers and owns numerous patents. Building on this know-how, Motorservice offers pumps for a multitude of passenger car and utility vehicle applications. Make the most of this experience at a fair cost-benefit ratio.



UNREGULATED OIL PUMPS

Oil pumps ensure that engine parts are supplied with a sufficient quantity of lubricating oil. For sufficient cooling and lubrication, the total oil volume must be pumped 4 to 6 times per minute through the engine.

Moreover, the oil pump design must ensure that the lubricating points are supplied with fresh oil as fast as possible after cold starting, and the flow rate is always adequate even at low engine speeds.



VARIABLE OIL PUMPS

To reduce CO₂ emissions, Pierburg has developed variable oil pumps. With oil-hydraulic tasks, which are in part new, such as hydraulic valve clearance and camshaft compensation, piston cooling and many more, modern engines in the lower engine speed range require disproportionately large oil volumetric flows.

The delivery rate of the variable oil pumps can be adapted flexibly to the required oil volumetric flow, depending on the temperature, speed and load state of the engine. They help to deliver the oil when required, and thus save fuel.



TANDEM PUMPS VACUUM/OIL

In tandem pumps, supply pumps for different media are combined on a common axle. While the single-vane vacuum pump generates the vacuum for the brake booster, the connected oil pump takes over either the function of the main oil pump or draws in excess oil from the cylinder head as an oil suction pump.



WATER PUMPS

COOLING FOR A LONG ENGINE LIFE

The electrical coolant pumps from Pierburg guarantee demand-based engine cooling, reduce the power requirements and cut frictional losses, fuel consumption and pollutant emissions. Pierburg also produces over 7 million mechanical water pumps as original equipment each year. The pumps are characterised by high-quality components.



MECHANICAL WATER PUMPS

The cooling liquid of the water pump absorbs the heat from the engine block and cylinder head and releases it into the ambient air through the cooler. Depending on their design, mechanical water pumps are located either externally on the engine in their own pump housing or are flanged directly on the crankcase and are driven by a V-belt, toothed belt or the engine directly.



ELECTRICAL WATER PUMPS

Electrical water pumps make a significant contribution to emission control on modern engine designs.

A delivery rate that is not dependent on the engine speed enables demand-based cooling. This reduces the power requirements whilst also cutting down on frictional loss, fuel consumption and pollutant emissions.



WATER CIRCULATING PUMPS

Water circulating pumps are used where cooling or heating functions need to be performed independently of the coolant circuit. In independent heating systems, water circulating pumps are used for quickly heating the passenger compartment, for example.



VACUUM PUMPS

RELIABLE VACUUM FOR A LARGE NUMBER OF CONTROL ELEMENTS

The precision pumps from Pierburg produce the required vacuum for the brake booster, controlling the functions of the central locking system, air conditioning, automatic transmission unit, emission control systems and other control elements.



MECHANICAL VACUUM PUMPS

Mechanical vacuum pumps can be driven by means of cams, tappets, chains, belts, or cam discs. Pumps that move a piston or diaphragm back and forth and generate a vacuum are well established in the field.

A newer development is vane pumps with a rotary drive. Here, a rotor with one or more vanes forms compartments, the size of which varies during the work cycle.



ELECTRICAL VACUUM PUMPS

Electric vacuum pumps can be switched on independently of the vehicle engine, and on demand. This saves fuel and reduces emissions.

In hybrid vehicles, electric vacuum pumps maintain brake boosters when the combustion engine is switched off.



TANDEM PUMPS FUEL/VACUUM

In „tandem pumps“, vacuum pumps are combined with other supply pumps on a common axle. In the fuel/vacuum combination, they fulfil the functions of mechanical vacuum pumps and are also used for fuel feed.



TANDEM PUMPS, OIL/VACUUM

While the single-vane pump generates the vacuum for the brake booster, the connected G-rotor oil pump draws in excess oil from the cylinder head and conveys it back to the crankcase sump.

HEADQUARTERS:

MS Motorservice International GmbH

Wilhelm-Maybach-Straße 14–18

74196 Neuenstadt, Germany

www.ms-motorservice.com

www.ms-motorservice.com

© MS Motorservice International GmbH – FL 1913-02 – EN – 01/21 (012021)