

**PI 2163**

For technical personnel only!

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# PRODUCT INFORMATION

## ADDITIVE PUMPS FOR CITROËN / PEUGEOT

Motorservice is expanding its product range and introducing additive pumps for the fuel additive Eolys to the aftermarket.

This special additive is added to the fuel in the fuel tanks of vehicles from the PSA group (e.g. Peugeot or Citroën). The additive reduces the ignition temperature of the soot particles in the diesel particulate filter (DPF). This means that the DPF can be regenerated in urban traffic instead of only under the operating conditions of an interurban journey. You can find further information on the principle of operation on the back page.

The additive pumps are robust components.

Experience shows that they can be damaged in two ways:

- the connection piece can be broken off while the additive bag is being changed.
- in vehicles that often drive off-road, such as building site vehicles, the pump can be damaged if the bottom of vehicle makes contact with the ground.



Item no.	Ref. no.*	Manufacturer	Vehicle applications
7.10716.00.0	1525HP, 1525LK	Citroën	Berlingo, C4 Cactus / Picasso / Grand Picasso, C-Elysee
		Peugeot	207, 208, Partner, 2008
7.10716.01.0	1525JW, 1525LH	Citroën	C3 Picasso, C4, C4 Coupé
		Peugeot	307, 308, 3008
7.10716.03.0	1525KV	Citroën	C2, C3, DS3
		Peugeot	1007

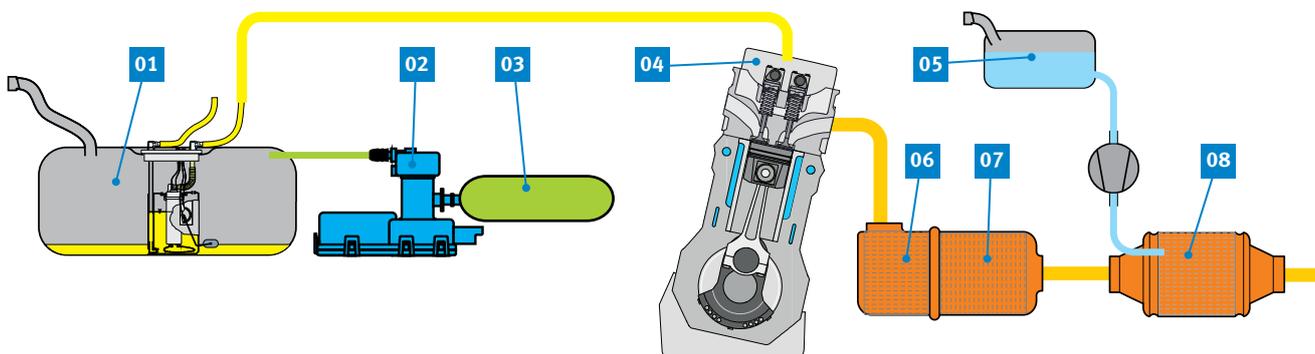
All content including pictures and diagrams is subject to change. For assignment and replacement, refer to the current catalogues or systems based on TecAlliance.

\* The reference numbers given are for comparison purposes only and must not be used on invoices to the consumer.





## BACKGROUND INFORMATION



System overview (schematic)

### FUNCTIONALITY OF THE DIESEL PARTICULATE FILTER (DPF)

Combustion in the vehicle creates soot. As the soot particles are harmful to the environment, they are collected in the diesel particulate filter (DPF). After approx. 400–800 km, depending on driving style, the diesel particulate filter is full and must be regenerated.

The soot is burnt to achieve this regeneration.

The exhaust gas temperature (approx. 150–250°C) alone is not sufficient for this. Temperatures of 550–600°C are required for this purpose.

Therefore, after the actual combustion in the combustion chamber, additional fuel is injected. This fuel is ignited by the hot catalytic converter and burns, producing heat dissipation.

The resulting unburnt hydrocarbons are eliminated by the oxidation catalytic converter.

### HOW EOLYS WORKS

The high temperatures required for regeneration of the DPF are only reached under certain driving conditions (longer periods at full throttle).

The additive Eolys reduces the carbon's self-ignition temperature. As a result, the particulates burn at temperatures as low as 450°C, which can be attained in urban traffic. Regeneration takes two to four minutes. The driver usually does not notice the process taking place.

The amount of fuel filled is measured during each refuelling process. Controlled by the control unit, the additive pump adds the appropriate amount of Eolys.

### DIFFERENCES TO ADBLUE

AdBlue, on the other hand, is a mixture of urea and demineralised water.

After injection into the exhaust tract, the urea evaporates into gaseous ammonia. With the help of ammonia, the harmful nitrogen oxides in the SCR (selective catalytic reduction) catalytic converter are converted into harmless nitrogen and water vapour in several parallel reactions.

- 01 Fuel tank
- 02 Additive pump
- 03 Receptacle / bag for additive
- 04 Diesel engine
- 05 AdBlue tank
- 06 Oxidation catalytic converter
- 07 Diesel particulate filter
- 08 SCR catalytic converter



### NOTE

There are different types of additives. The colour of the ring on the additive container cap indicates the type of additive (see vehicle service documents). Additives with different colour codes must not be mixed.