



Рудольф Дизель (1858-1913).

-23 февраля, 1893 года получил немецкий патент 67207 на "Рабочий процесс и способ конструирования двигателя внутреннего сгорания для машин".





1936 г.- начало выпуска легковых автомобилей (“260D”) с дизельным двигателем

1970 г. - во всем мире произведено 100 тыс дизельных автомобилей около 0,5%.

1977 г. -во всех странах мира было произведено уже 500 тысяч дизельных автомобилей

1989г. -15% из 13.7млн. автомобилей Европы

1993г. -21% из 11.4млн. автомобилей Европы

2000г. –прим $\frac{1}{4}$ всех автомобилей



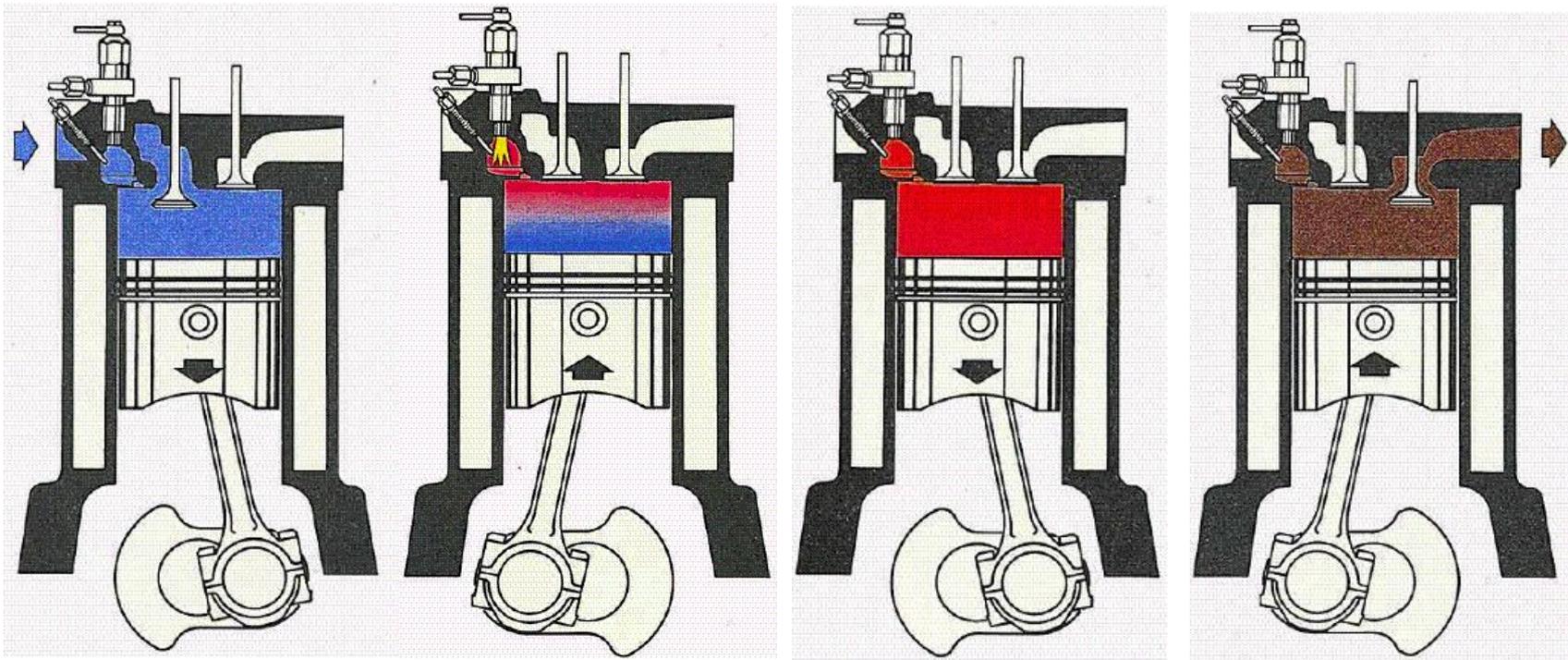
TDI 1.9 с мощностью от 90лс-110лс достигнутые удельные характеристики почти достигли GTI

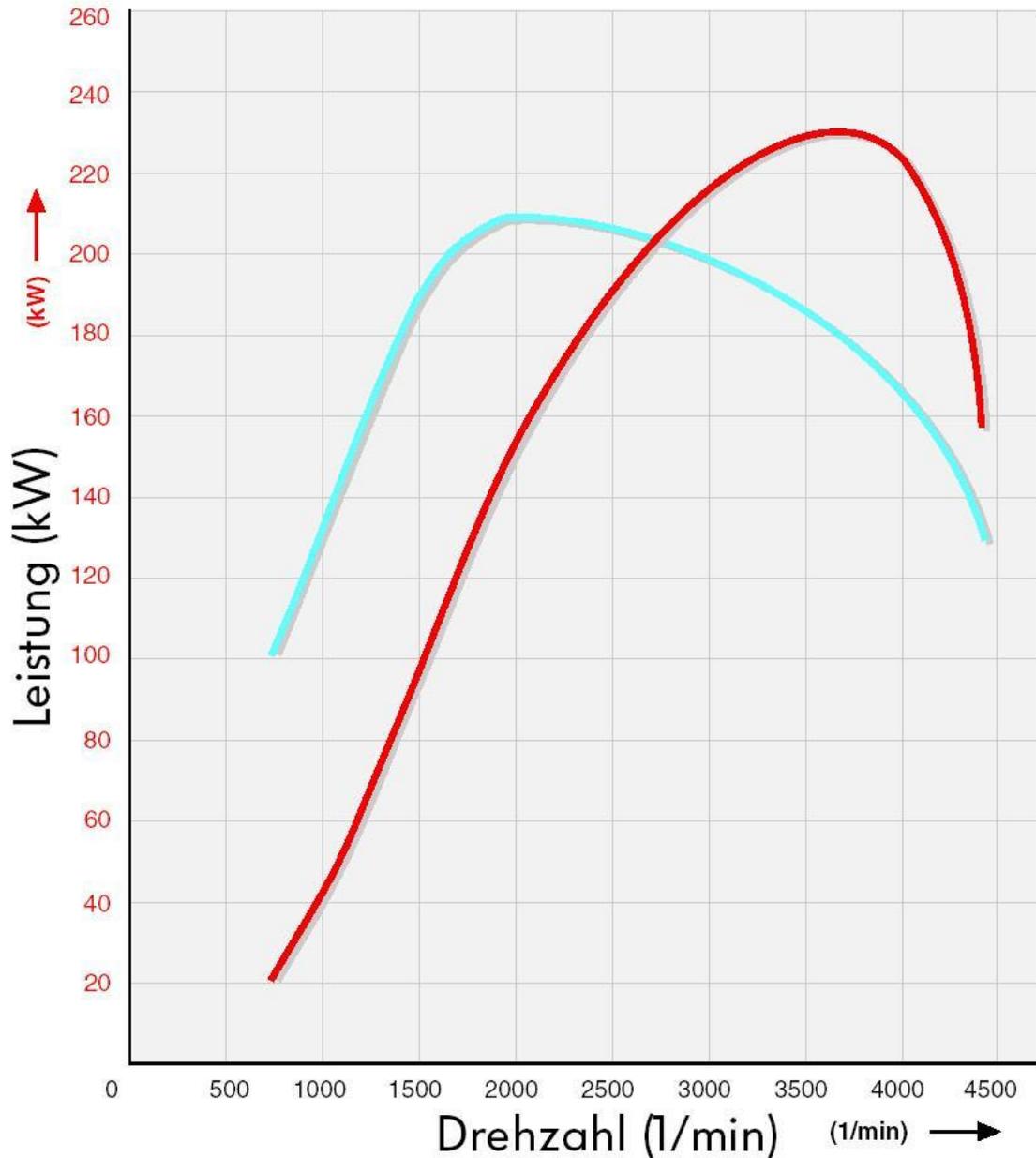
На автомобилях (Пассат, Поло, Шаран) с самыми мощными дизельными двигателями

TDI - обозначение двигателей с впрыском через насос-форсунки

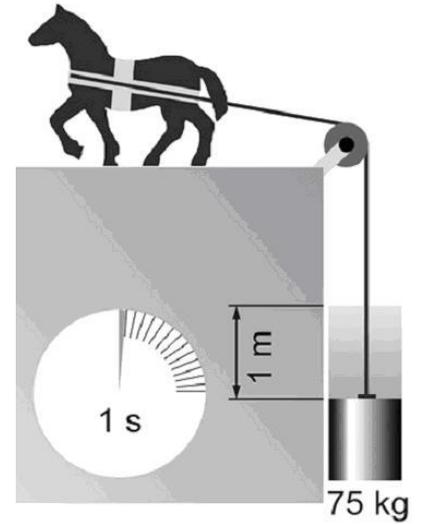
TDI -130кВт самый мощный двигатель с насос-форсунками

TDI - 3Liter LUPO –самый экологичный двигатель с системой насос-форсунка.





Drehmoment (Nm) (Nm)



$$N = 2\pi Mn$$

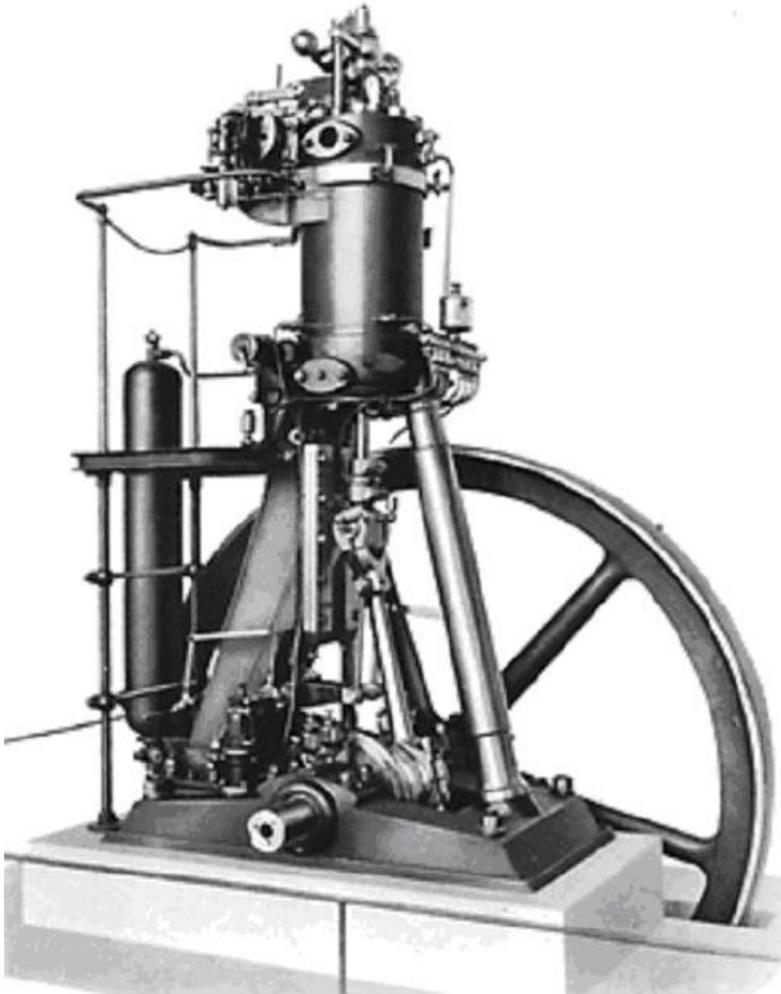
1кВт=1,35962л.с.

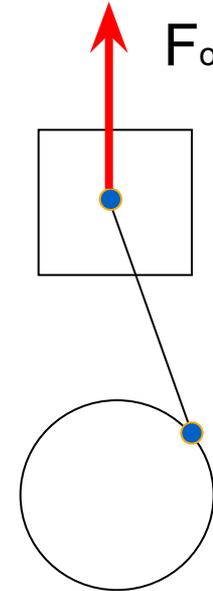
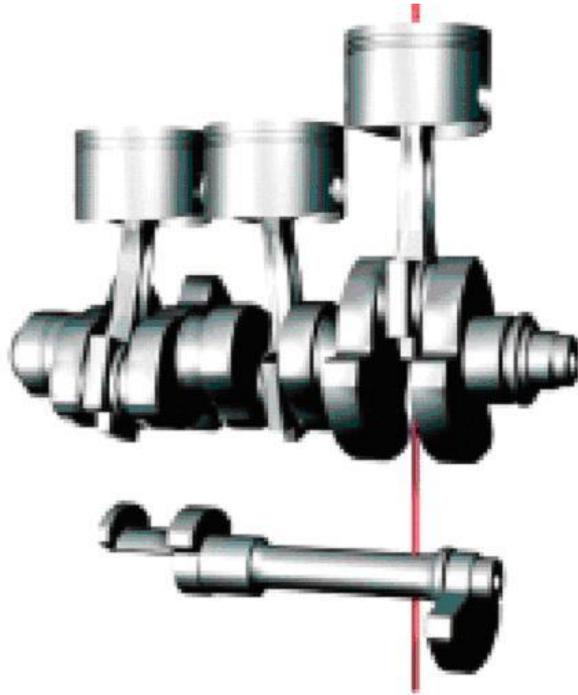
1л.

с=0,735499кВт

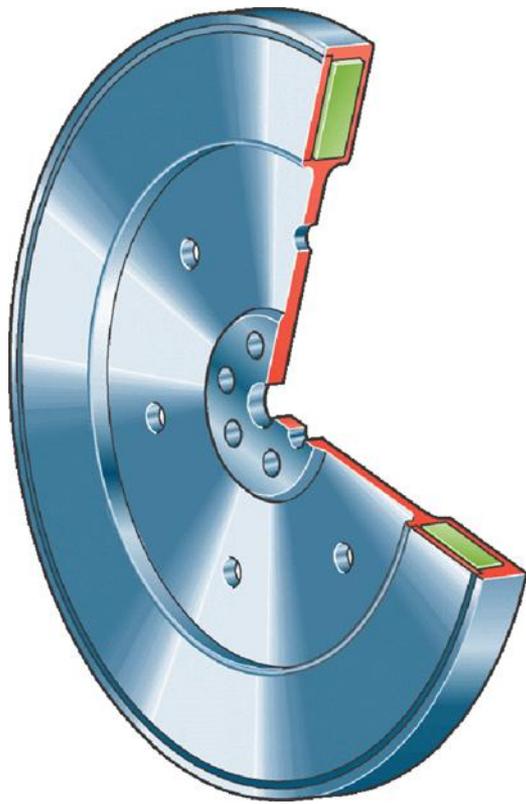


Механика

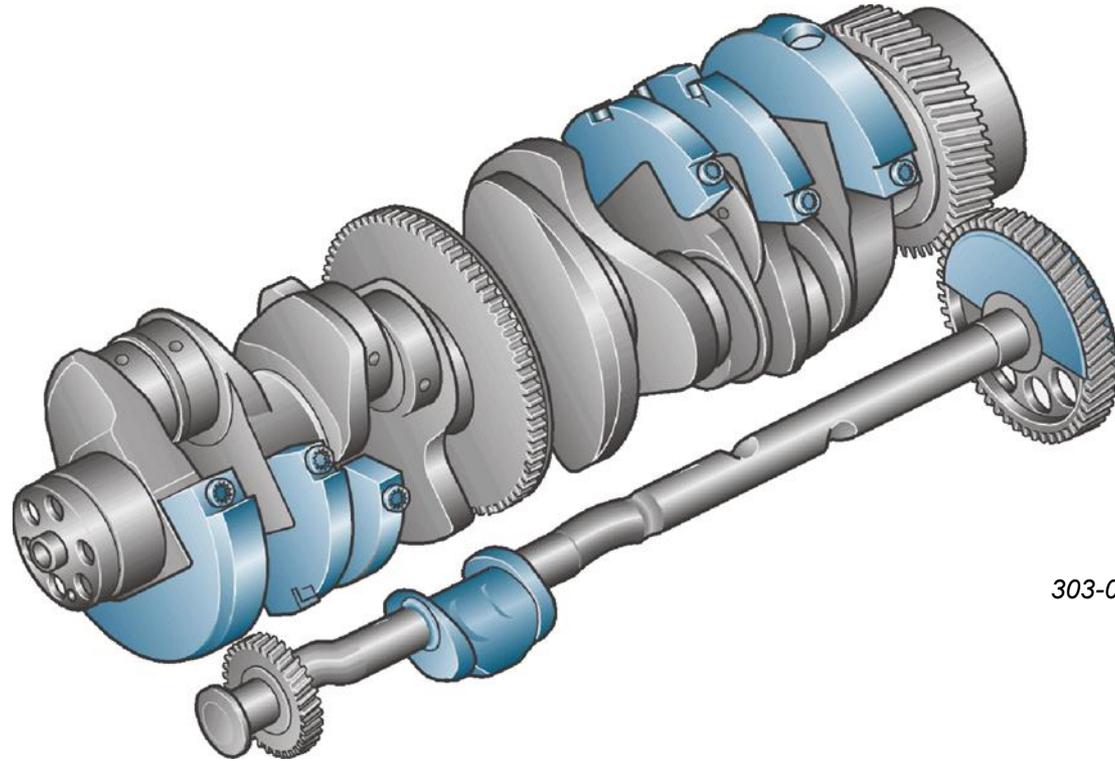




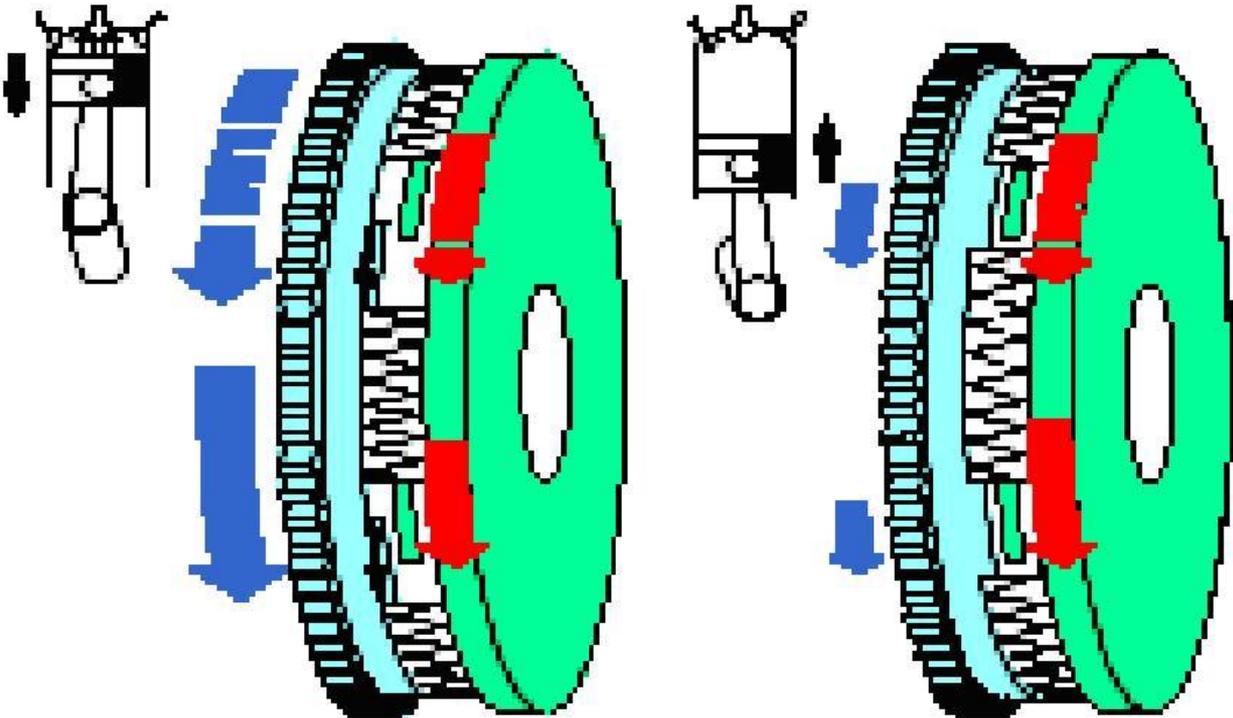
$$F_o = -m_o \cdot r \cdot \omega^2 \cdot (\cos\alpha + \lambda \cdot \cos 2\alpha + \dots)$$

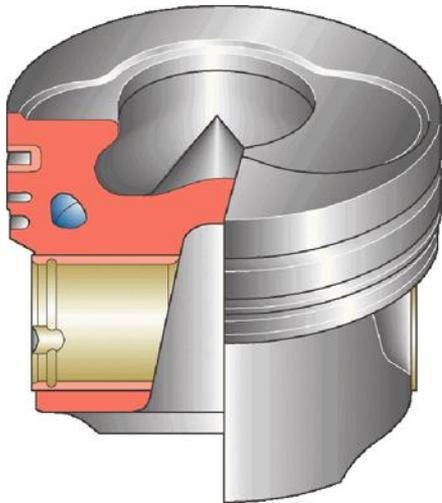


303-008

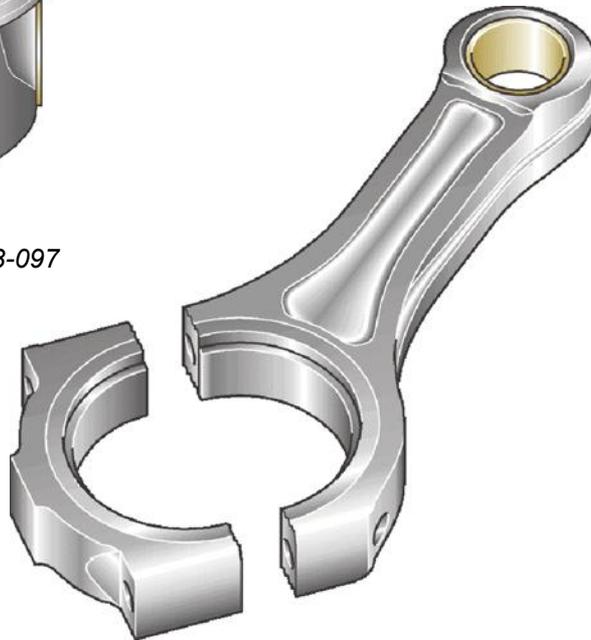


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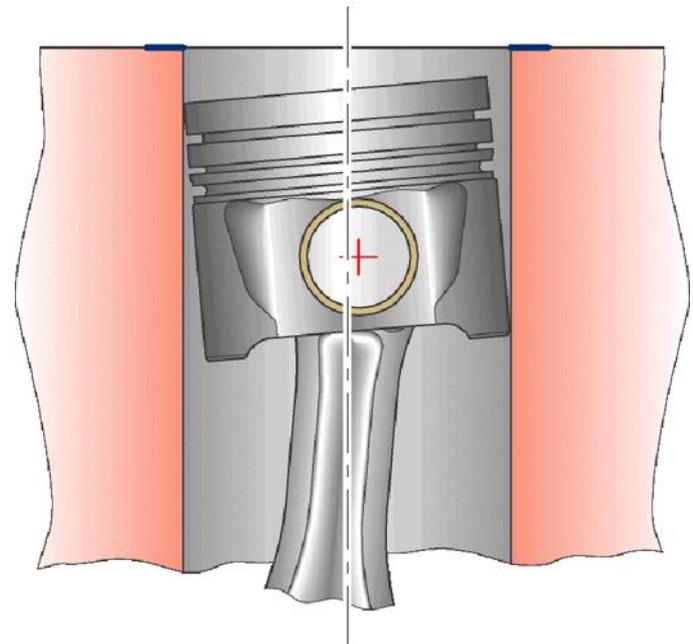




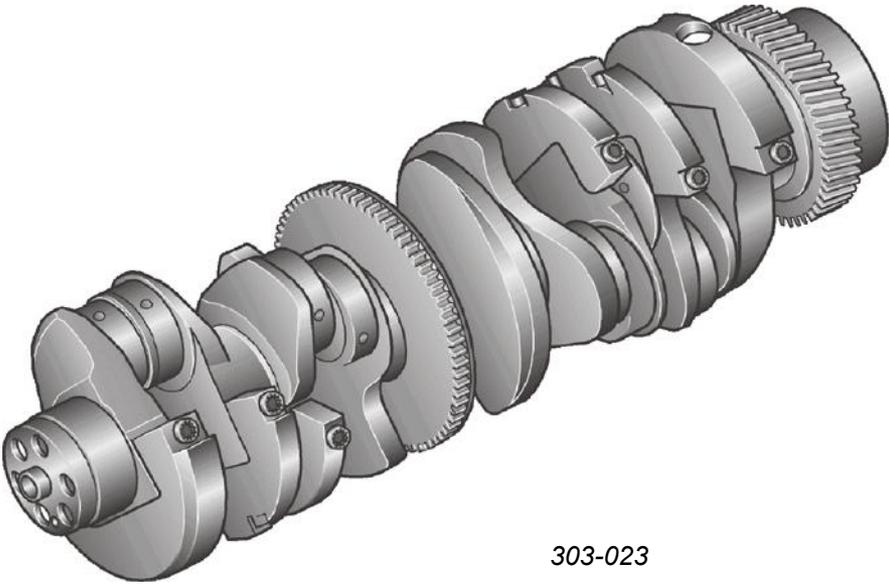
303-097



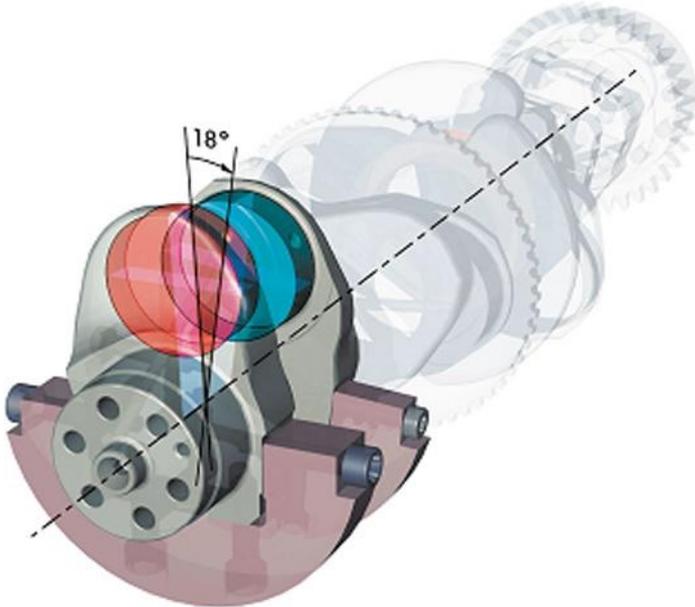
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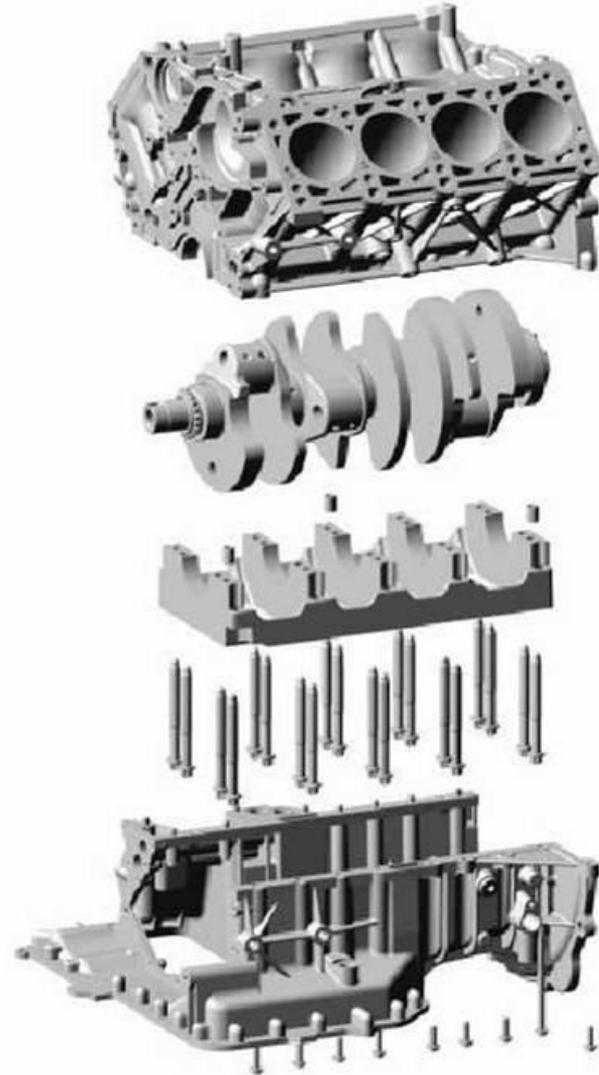
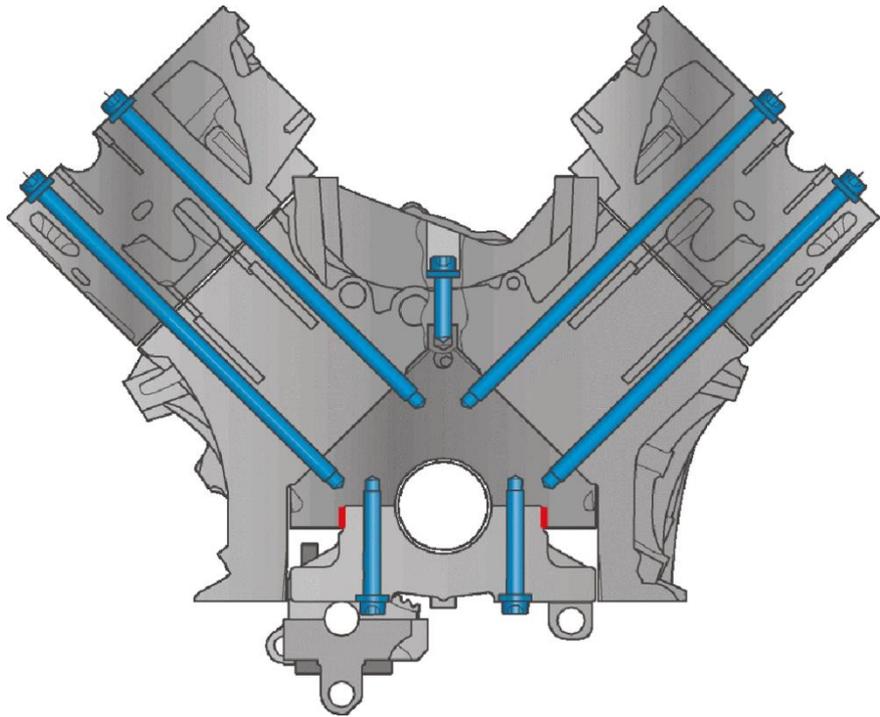
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303-023

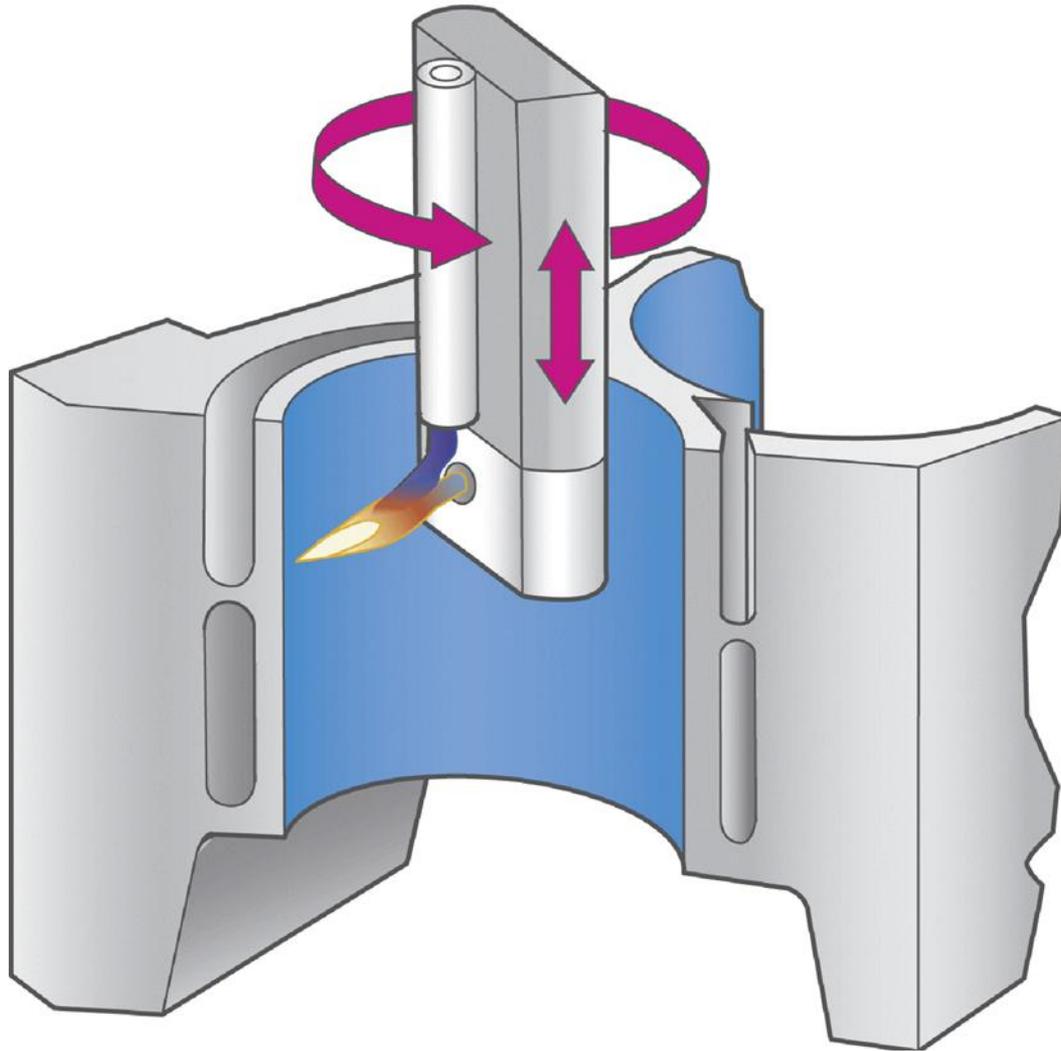


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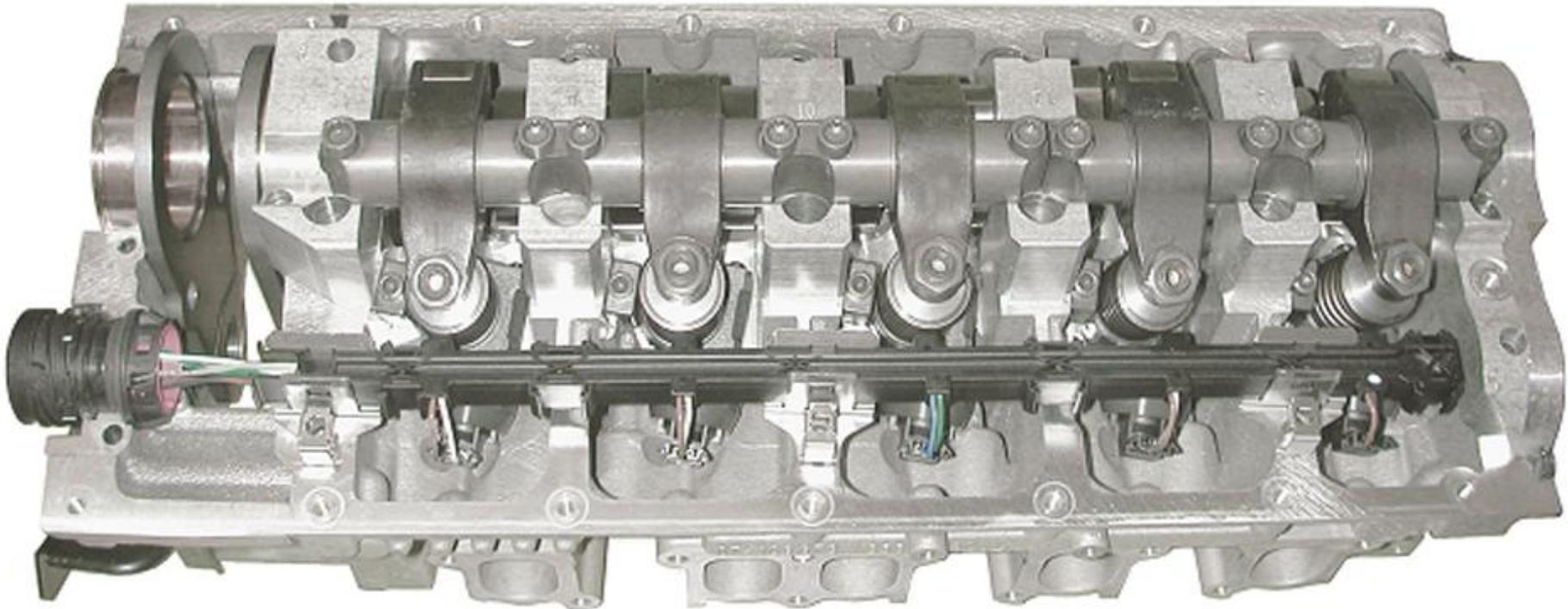


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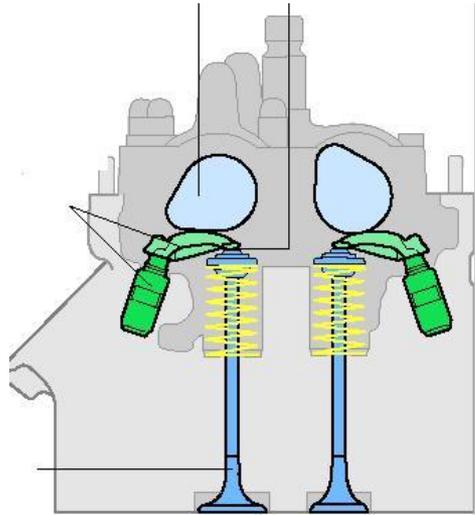


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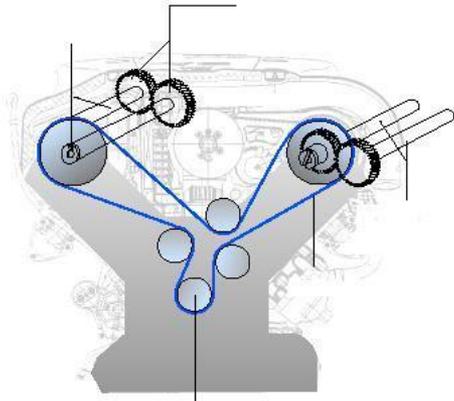


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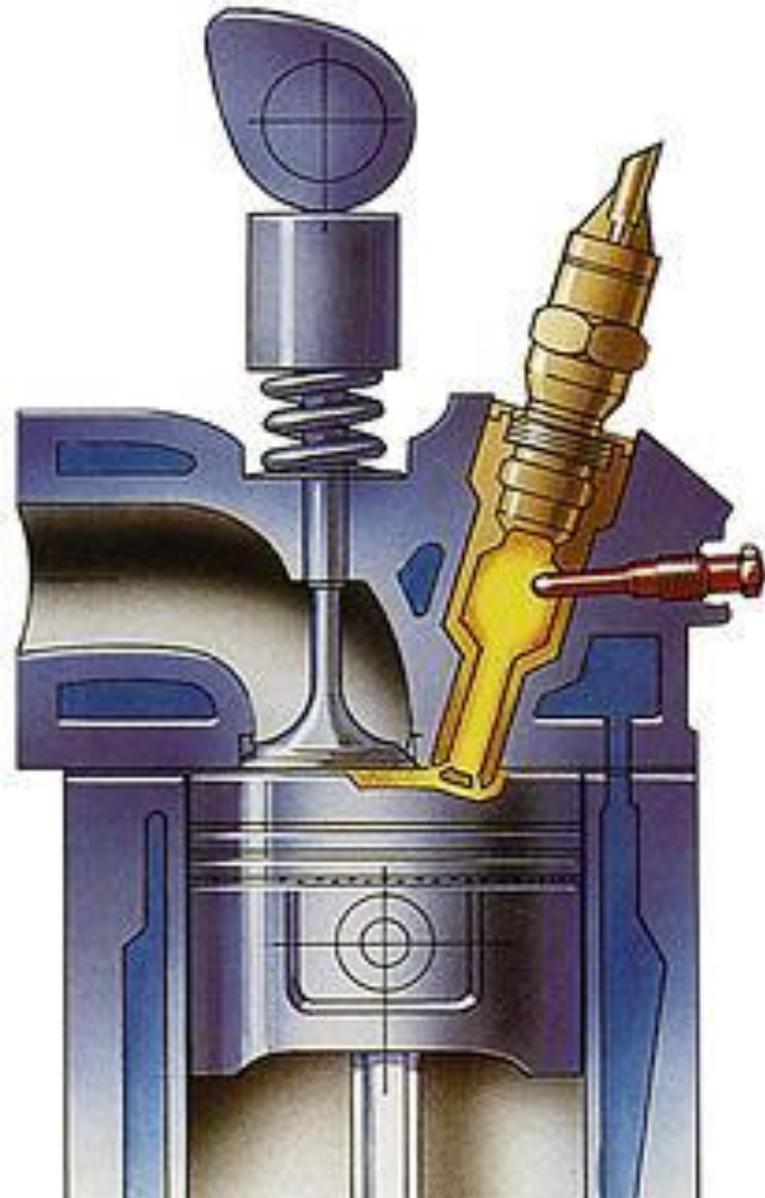
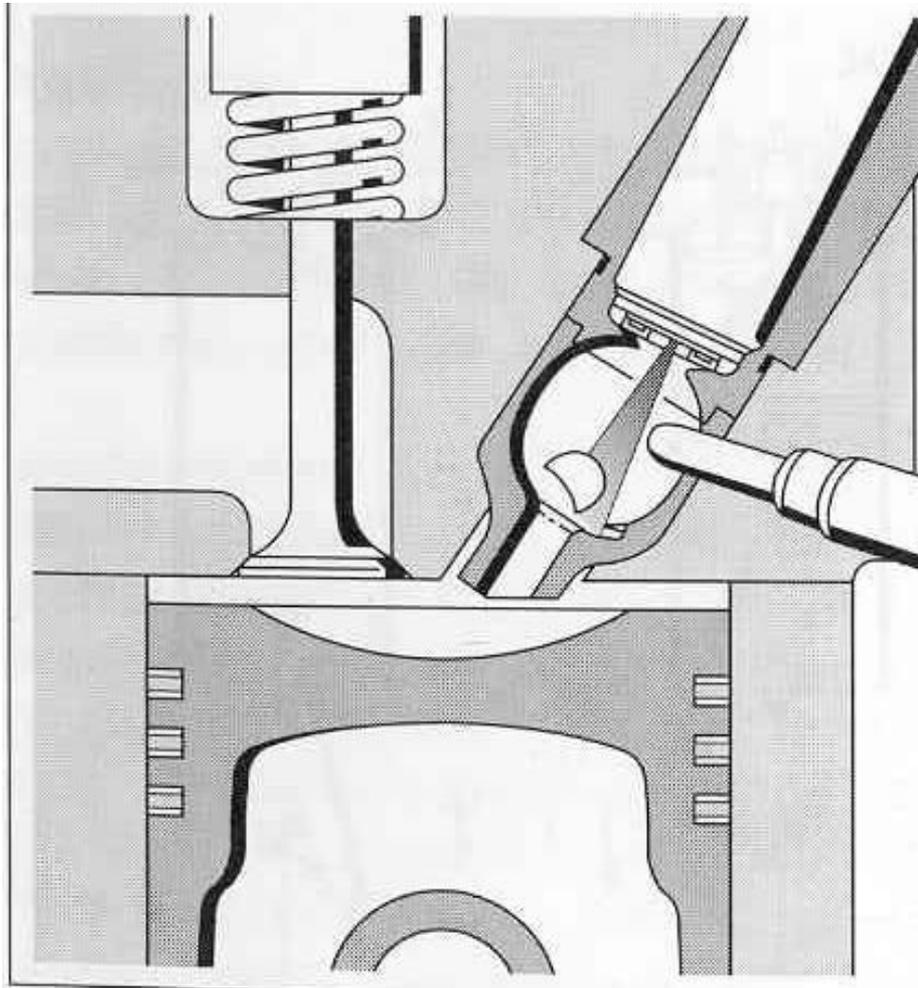


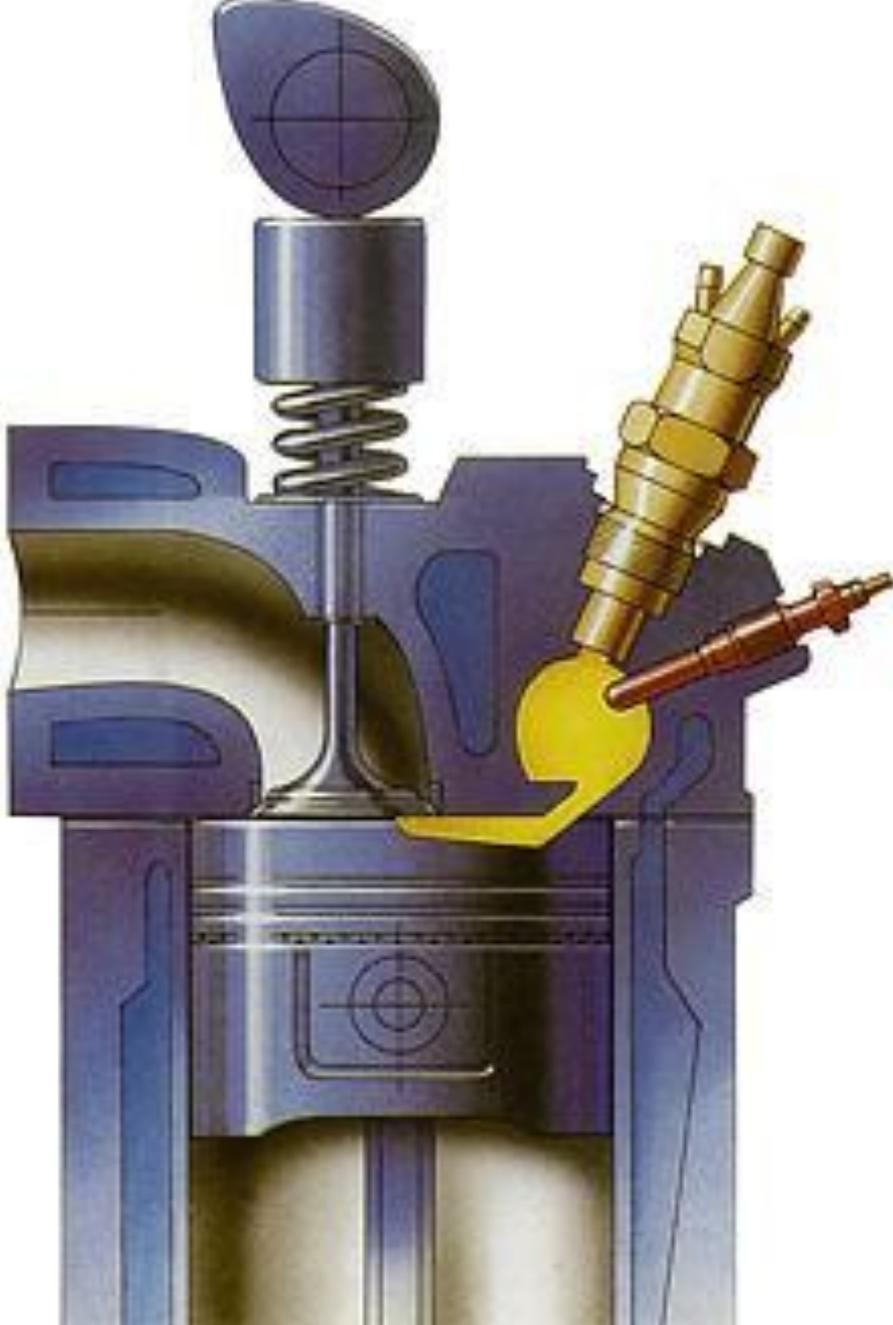


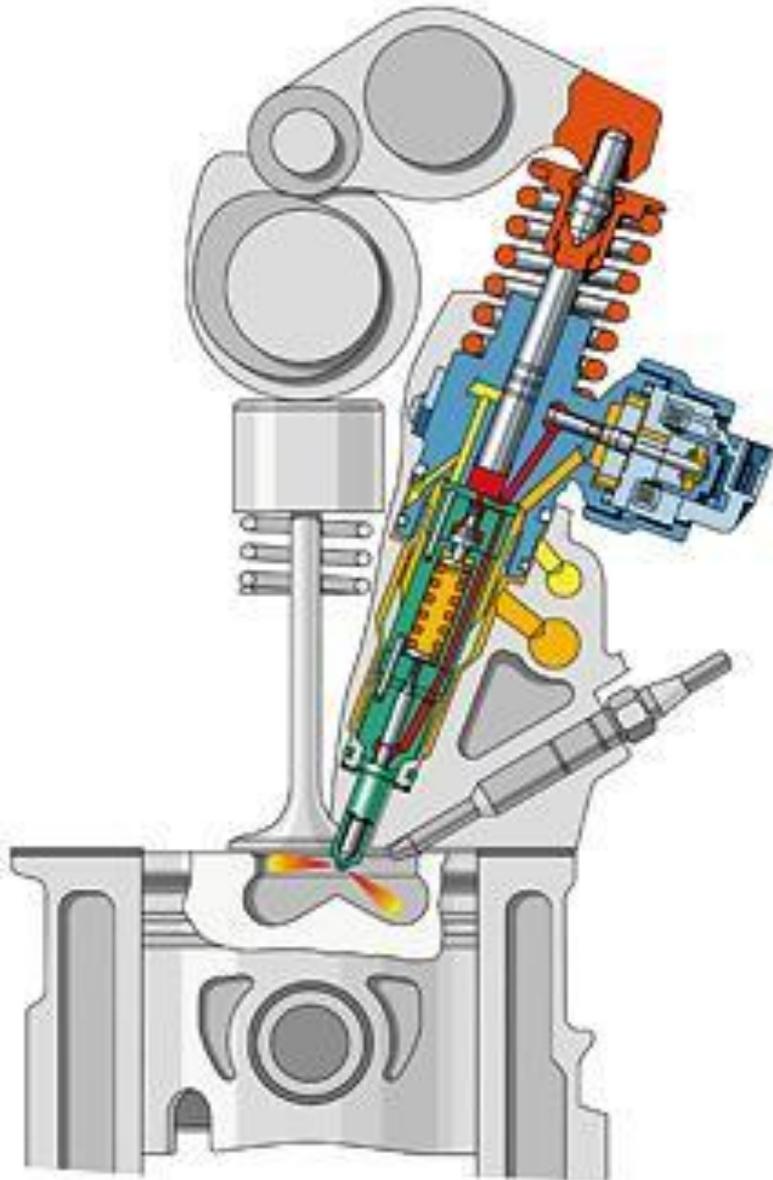
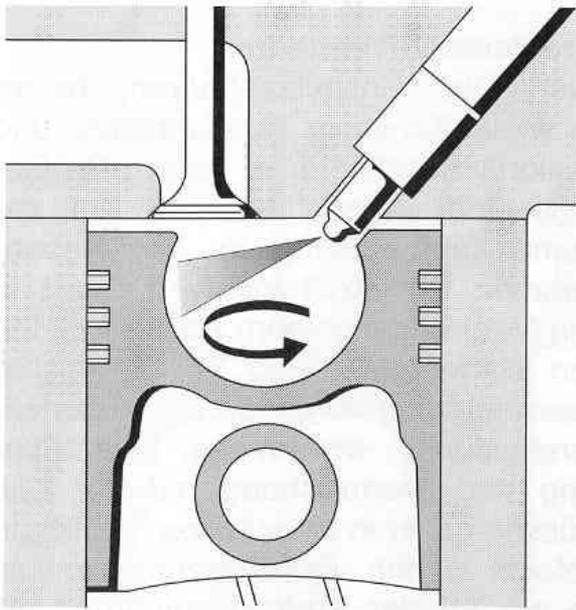
Системы расположенные в
головке блока цилиндров

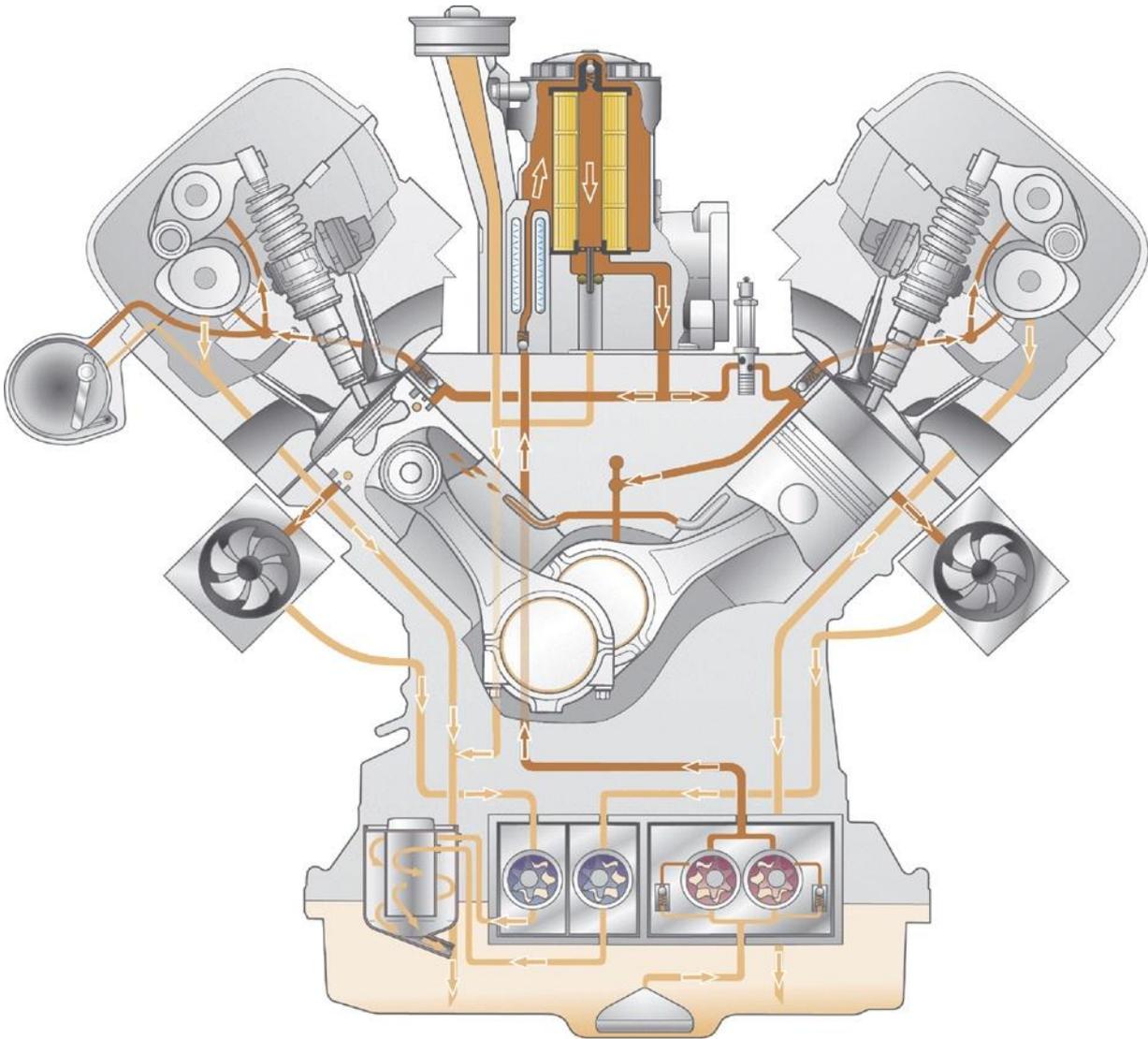


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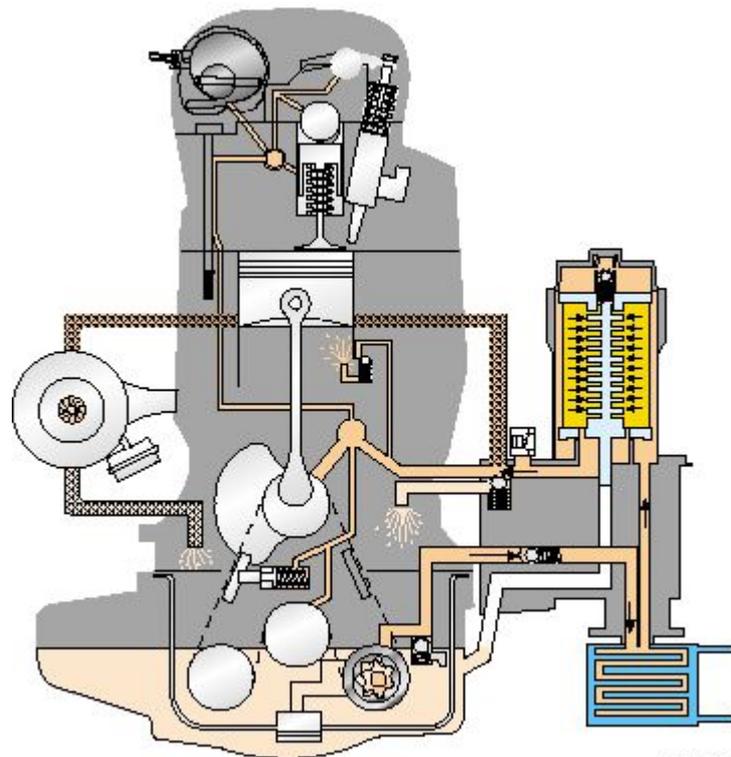
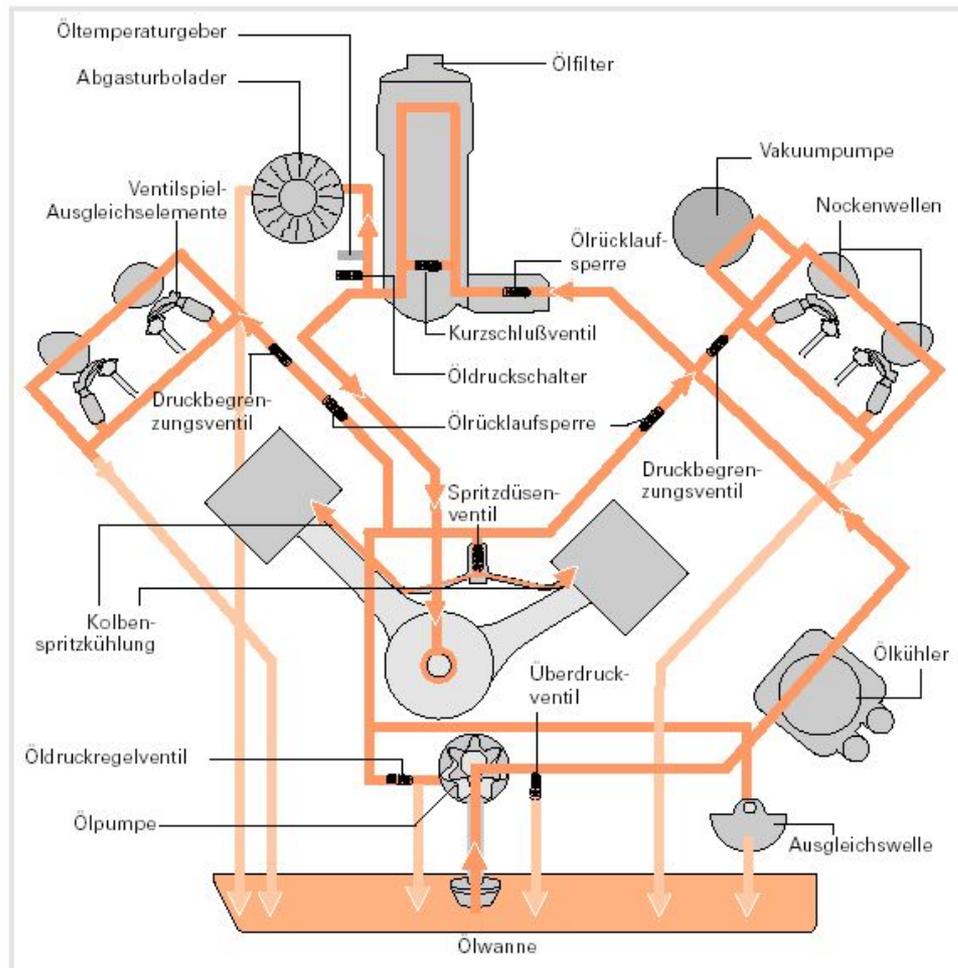


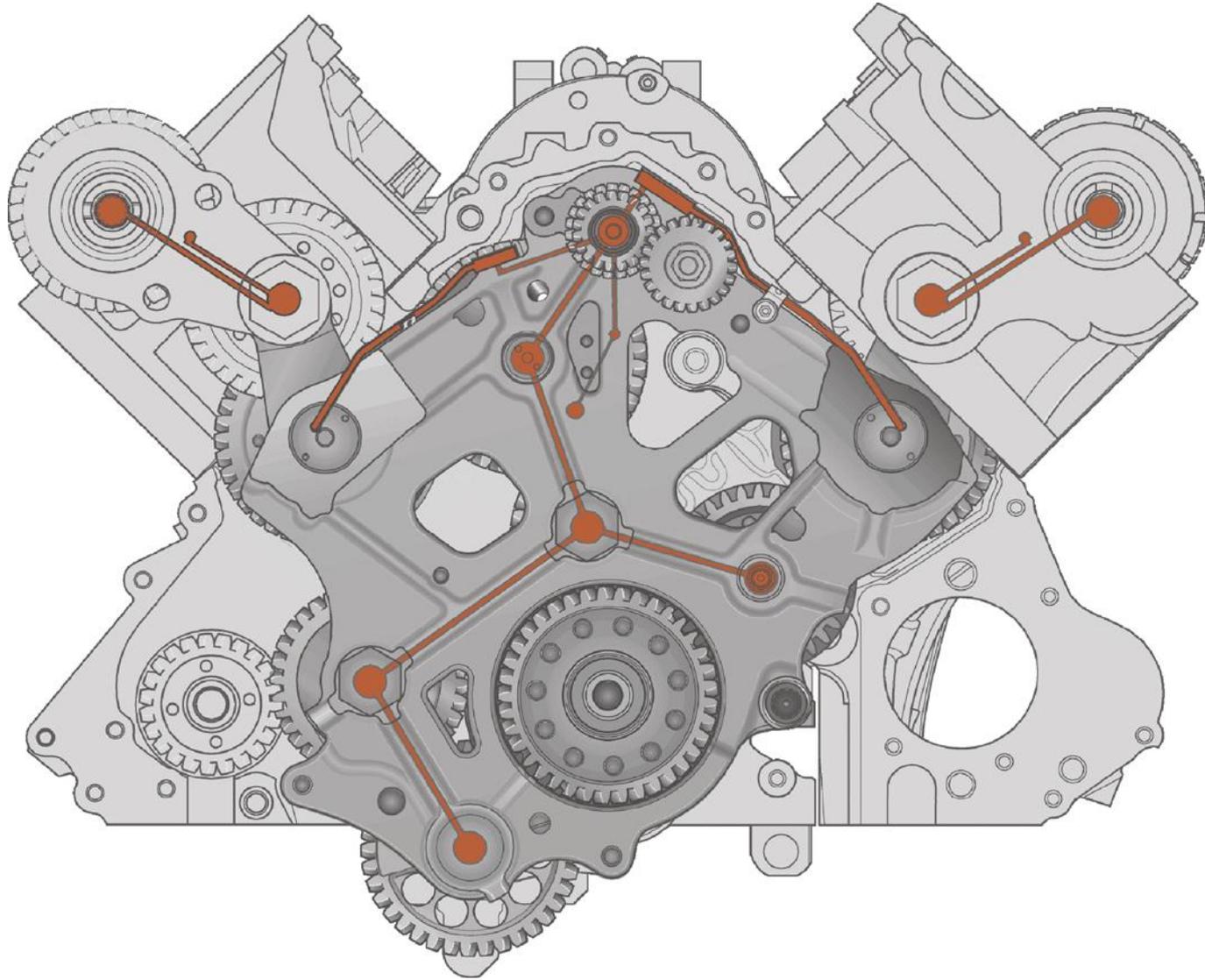


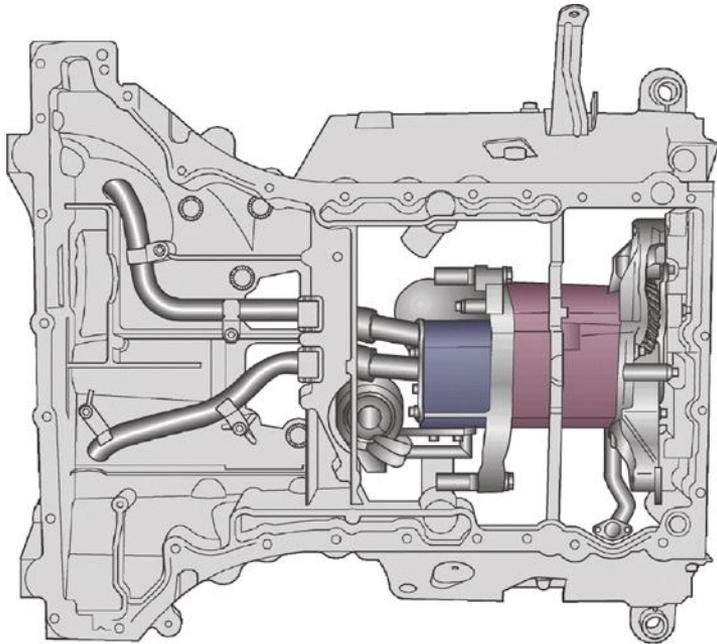


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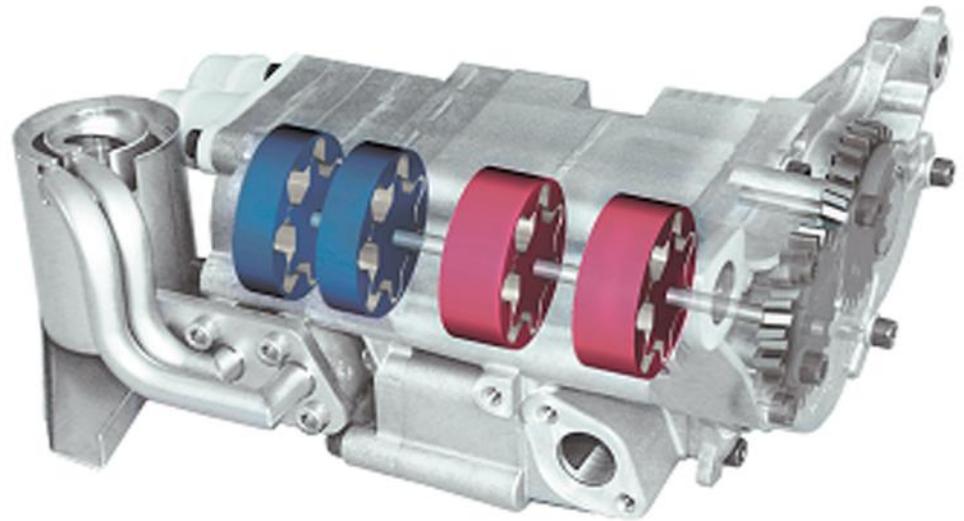




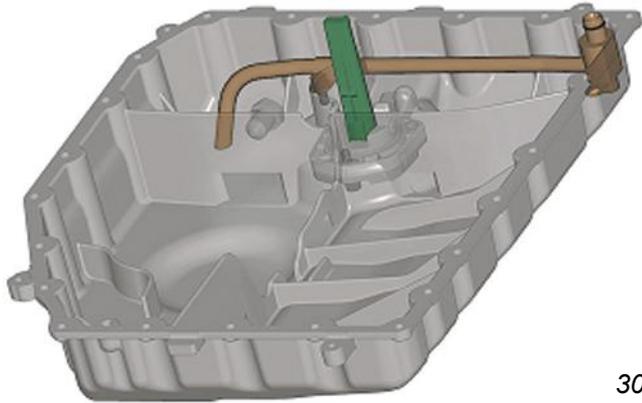




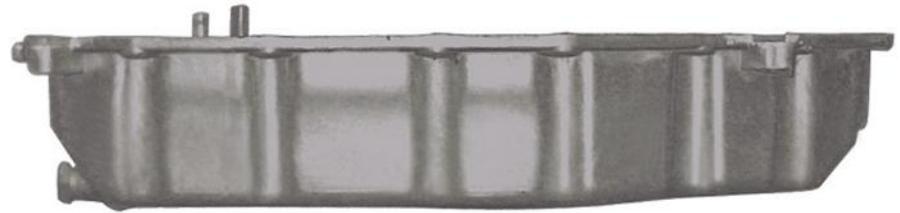
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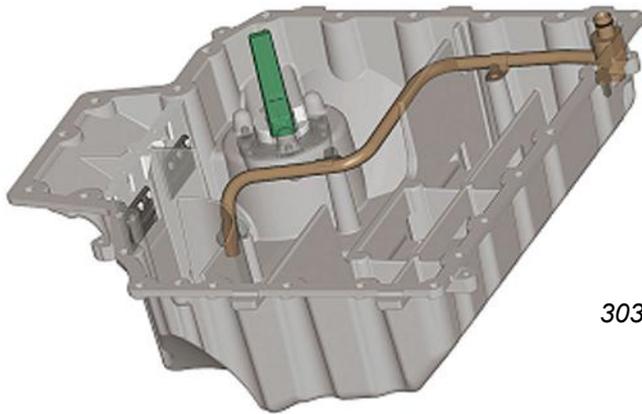
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303-079



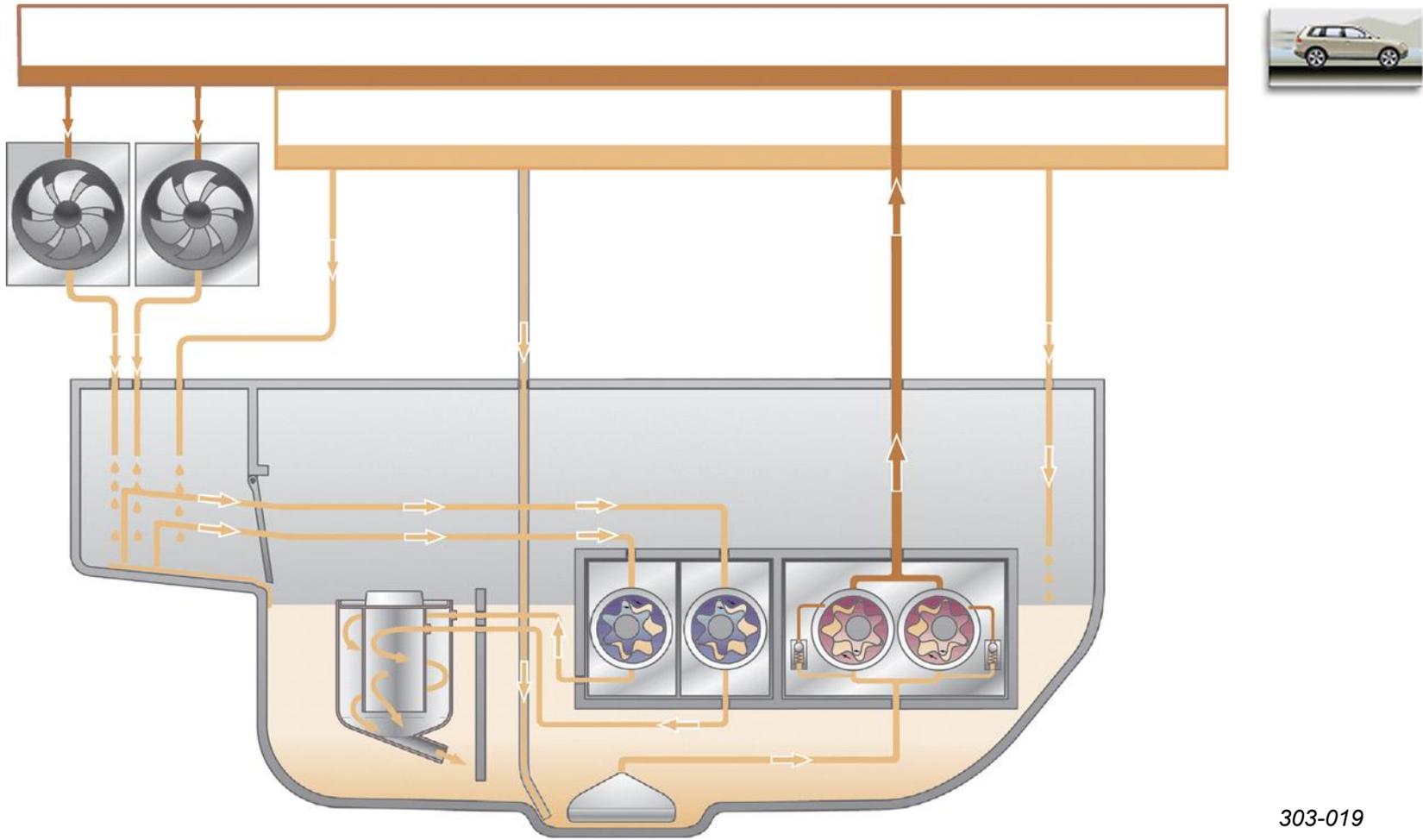
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303-080

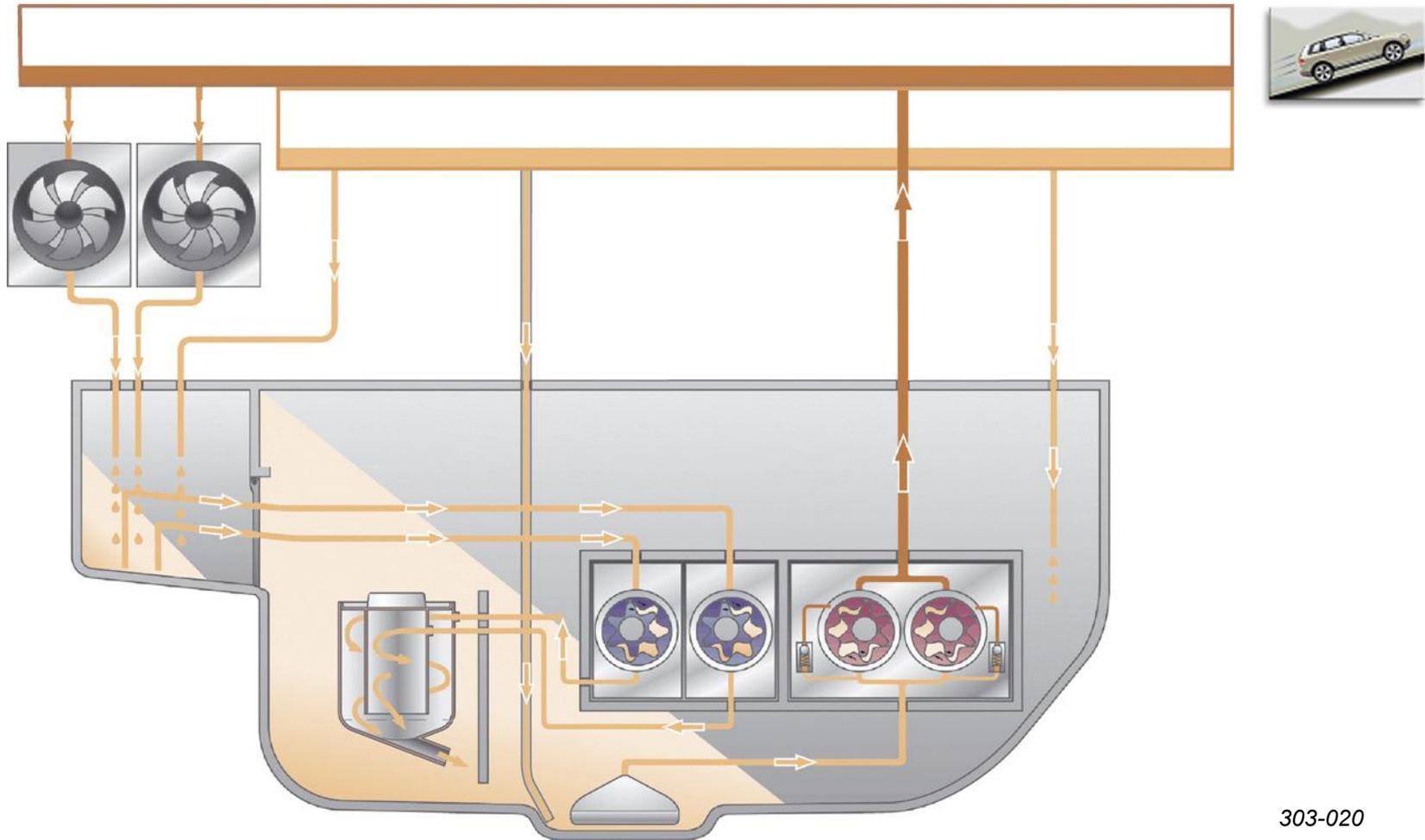


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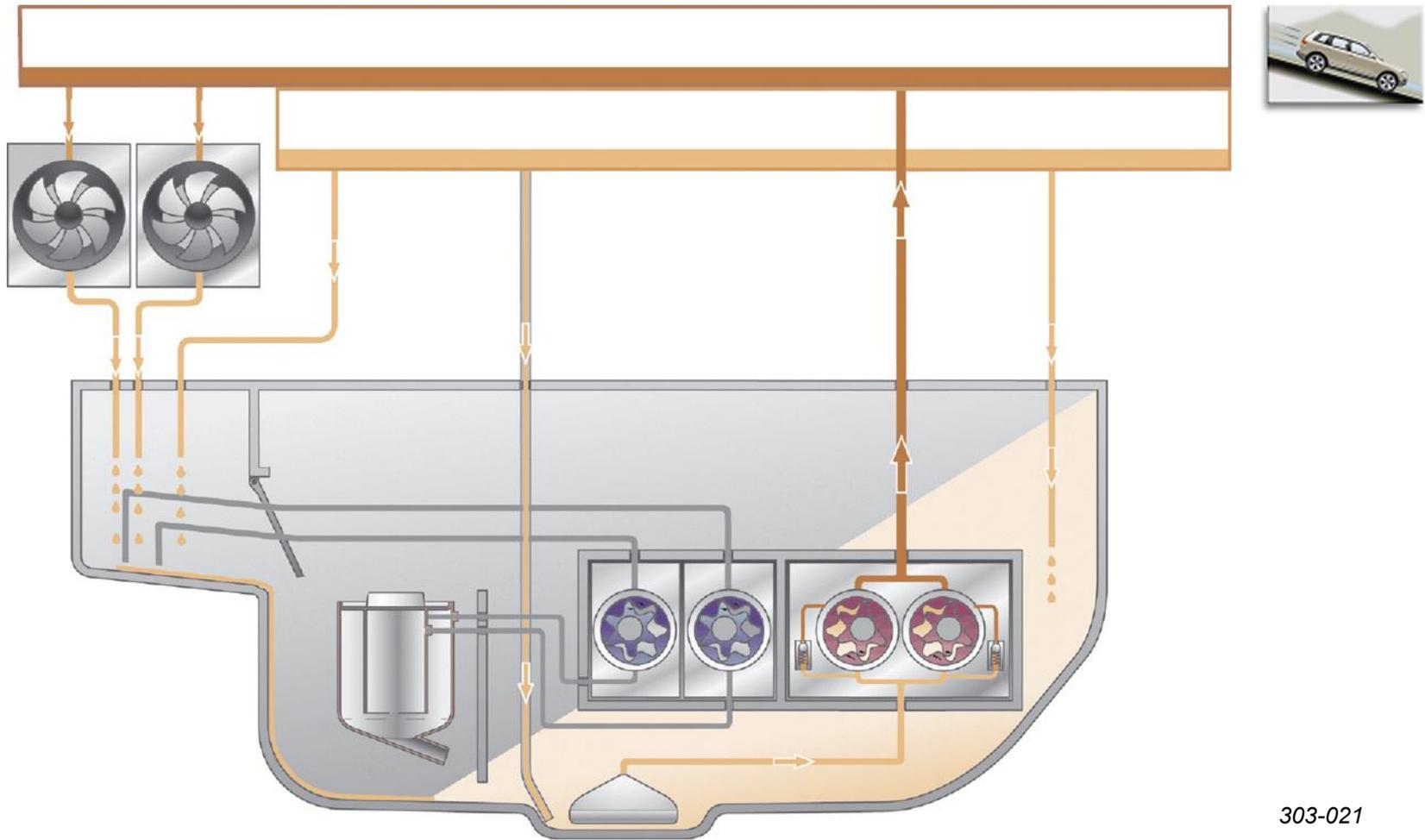
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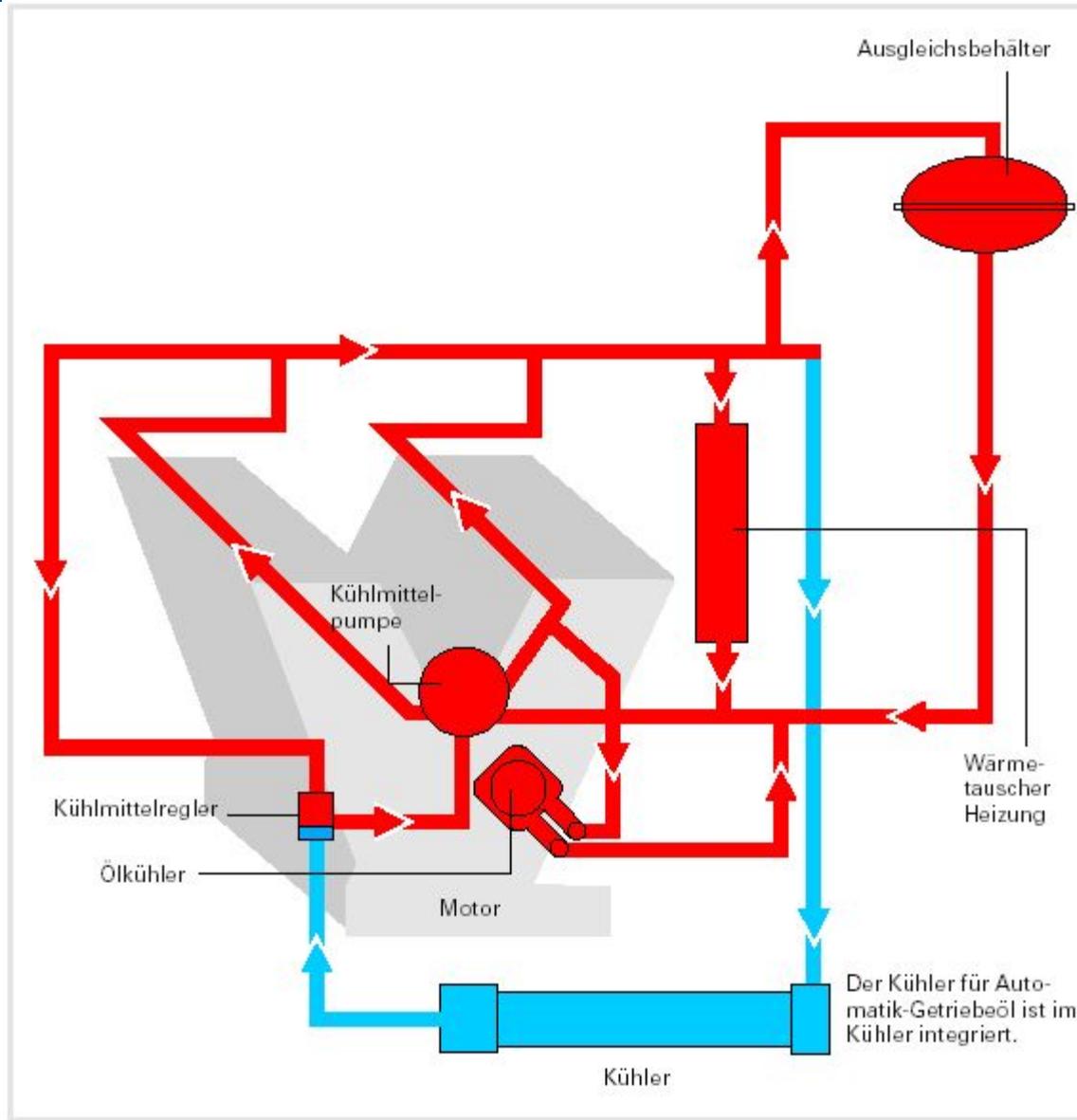


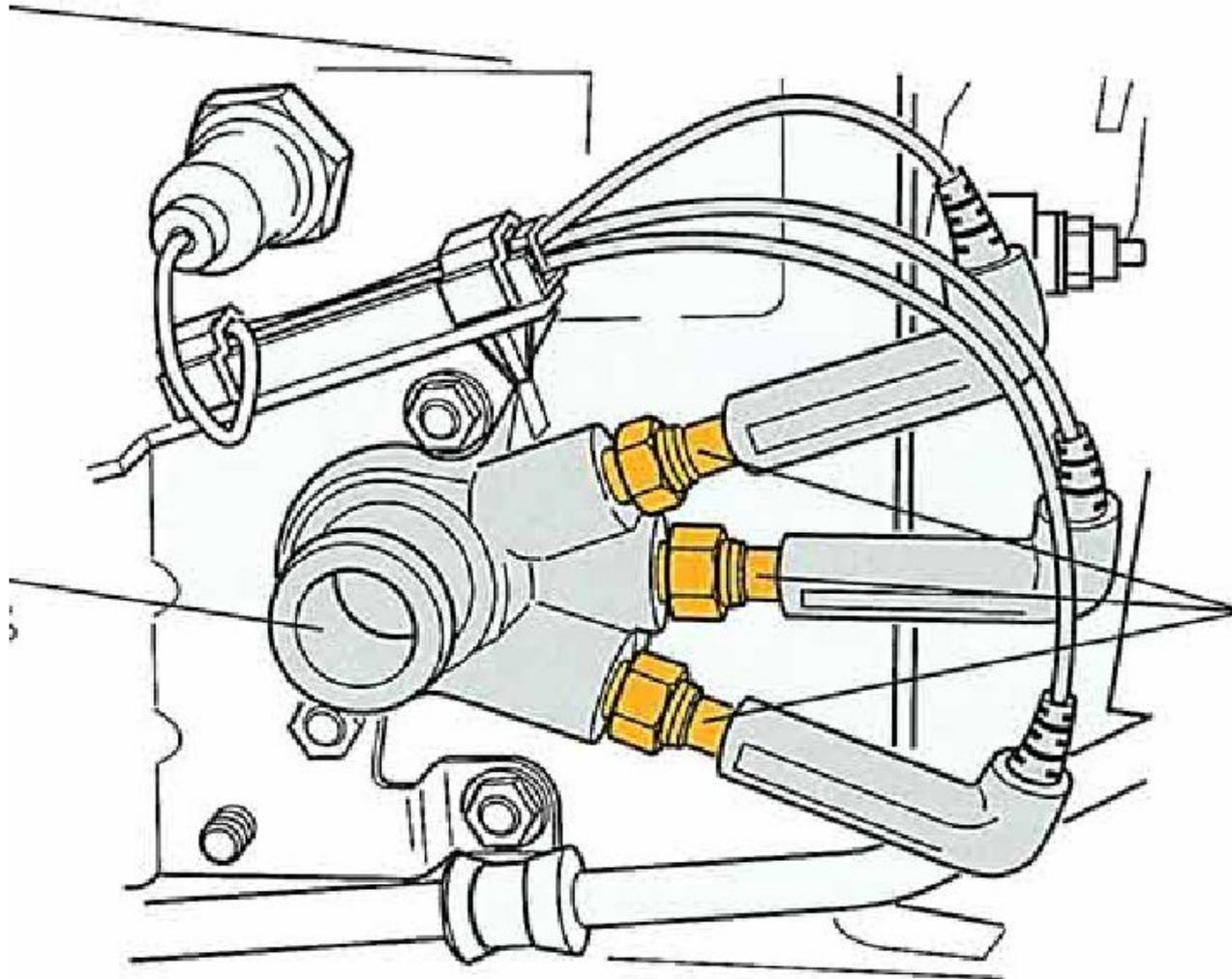
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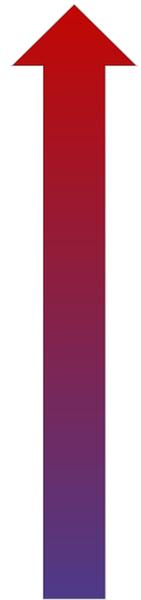


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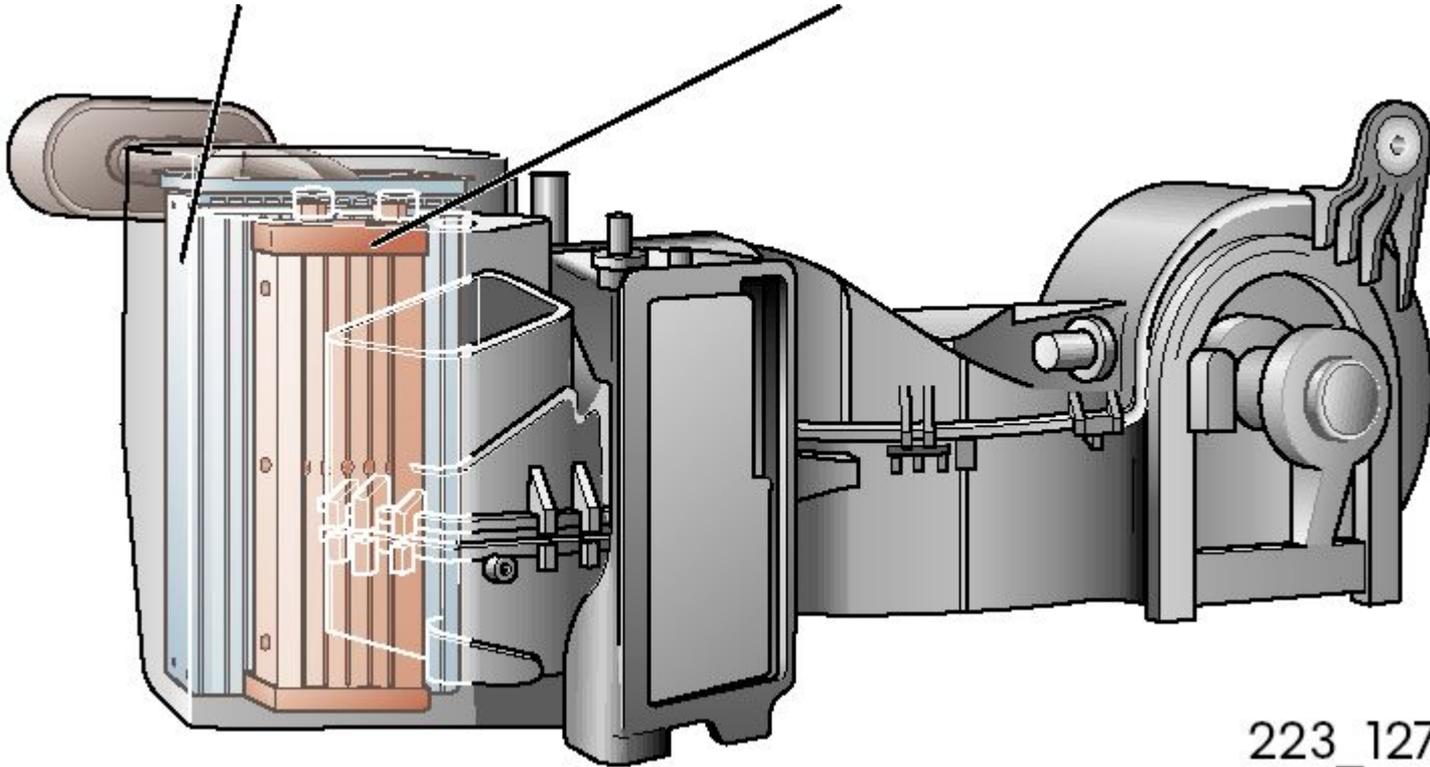


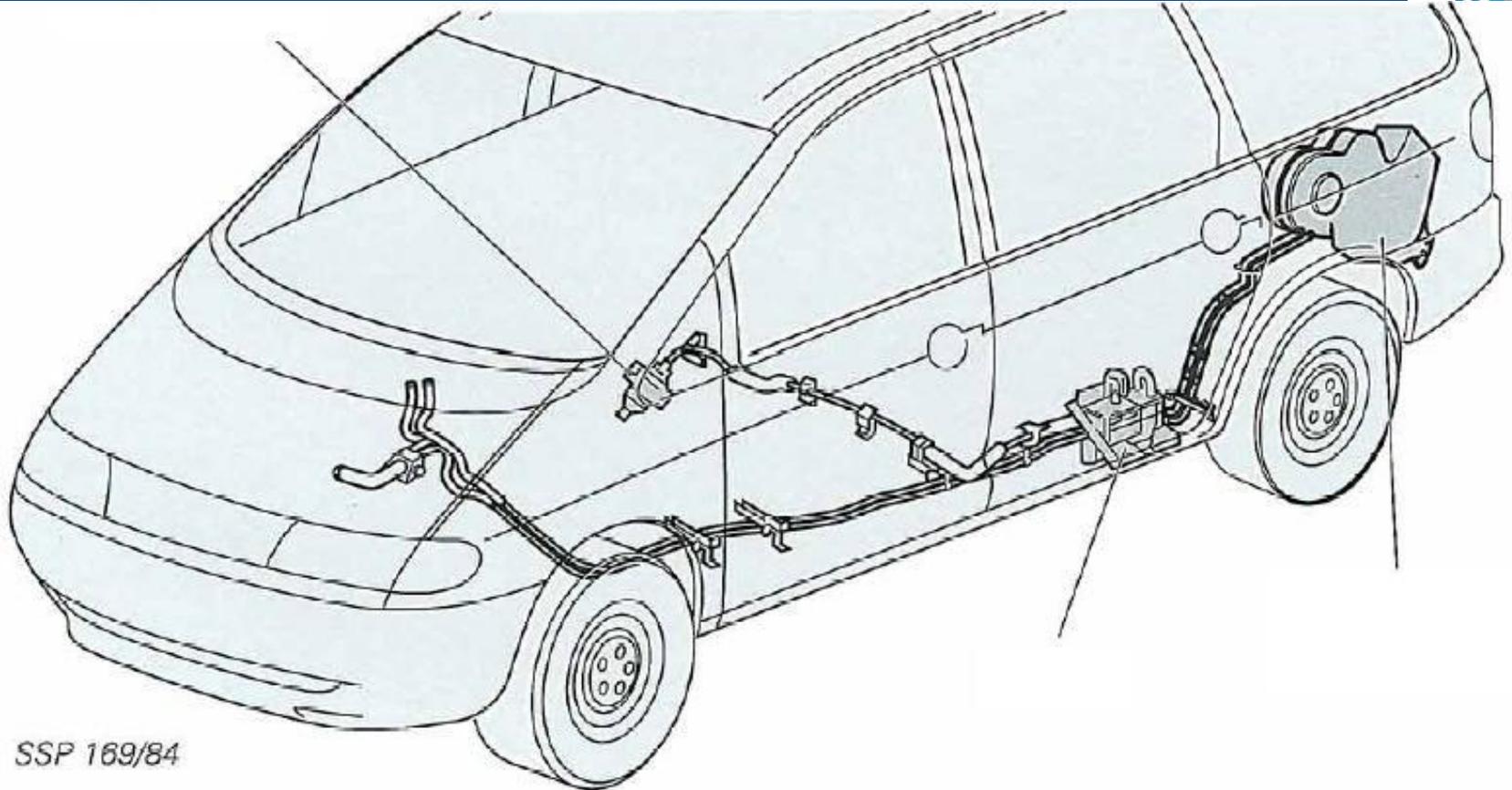


до +80°C



менее +5°C





SSP 169/84

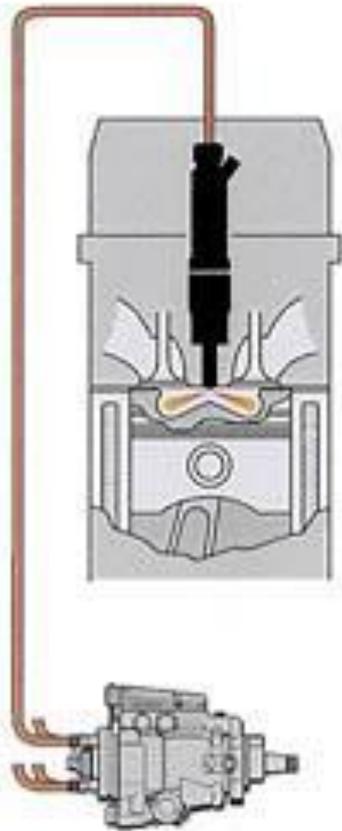
Включается при:

- температуре воздуха менее $+5^{\circ}\text{C}$
- температуре охл.жидкости менее $+75^{\circ}$
- клемме D+ генератора

Выключается при - температуре охл.жидкости более $+85^{\circ}\text{C}$

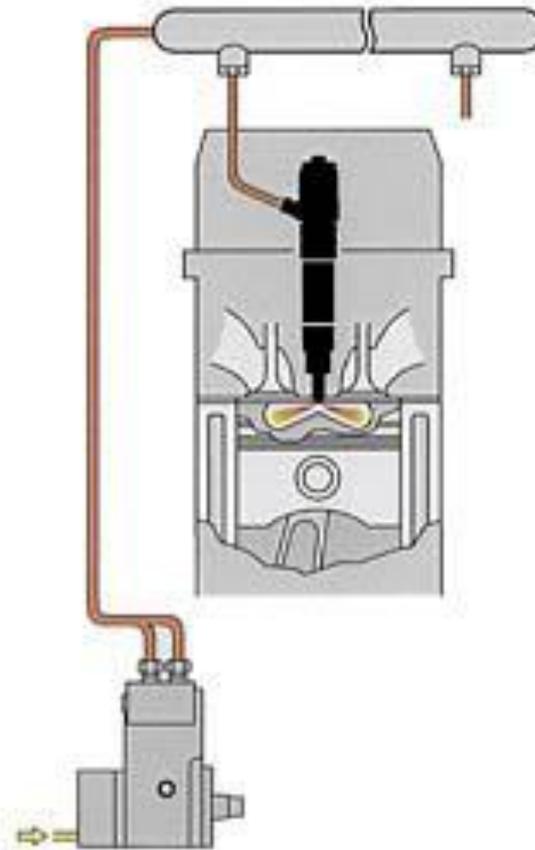


Pumpe-Leitung-Düse



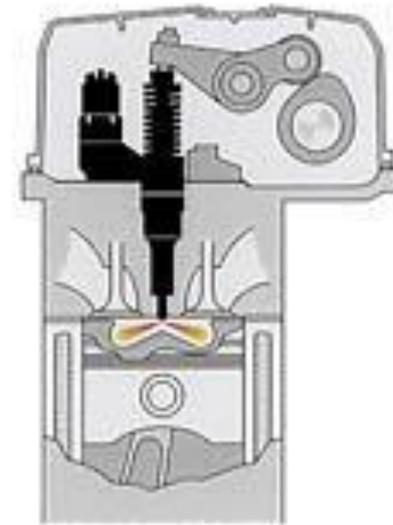
Hochdruckpumpe

Common-Rail

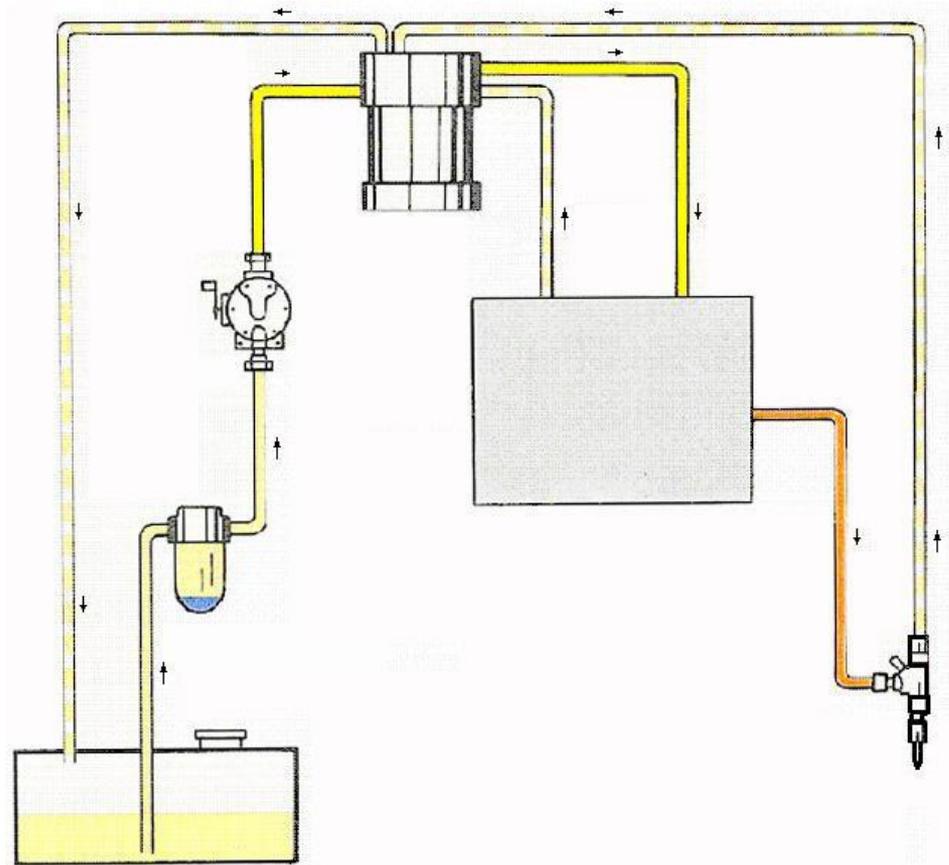


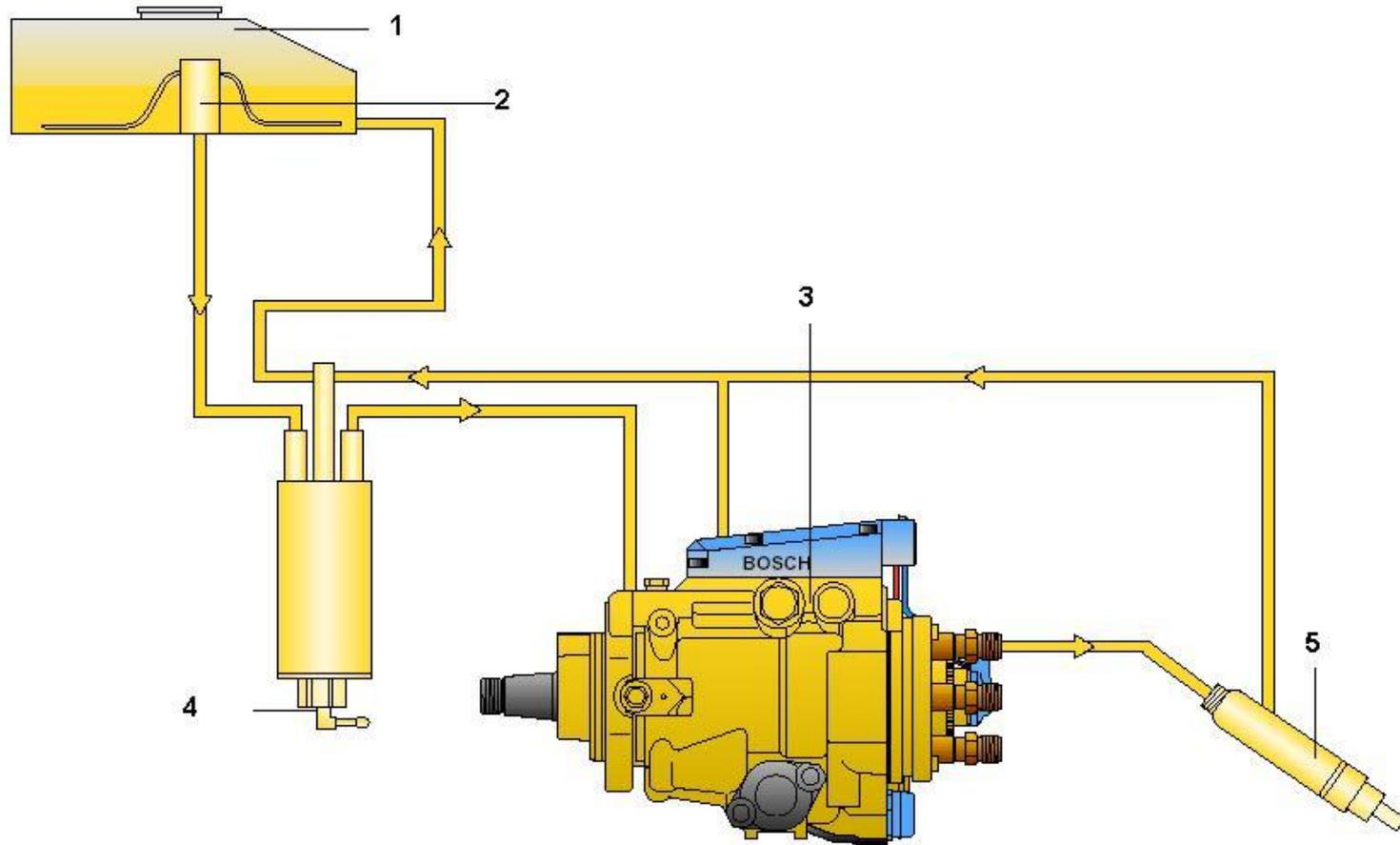
Hochdruckpumpe

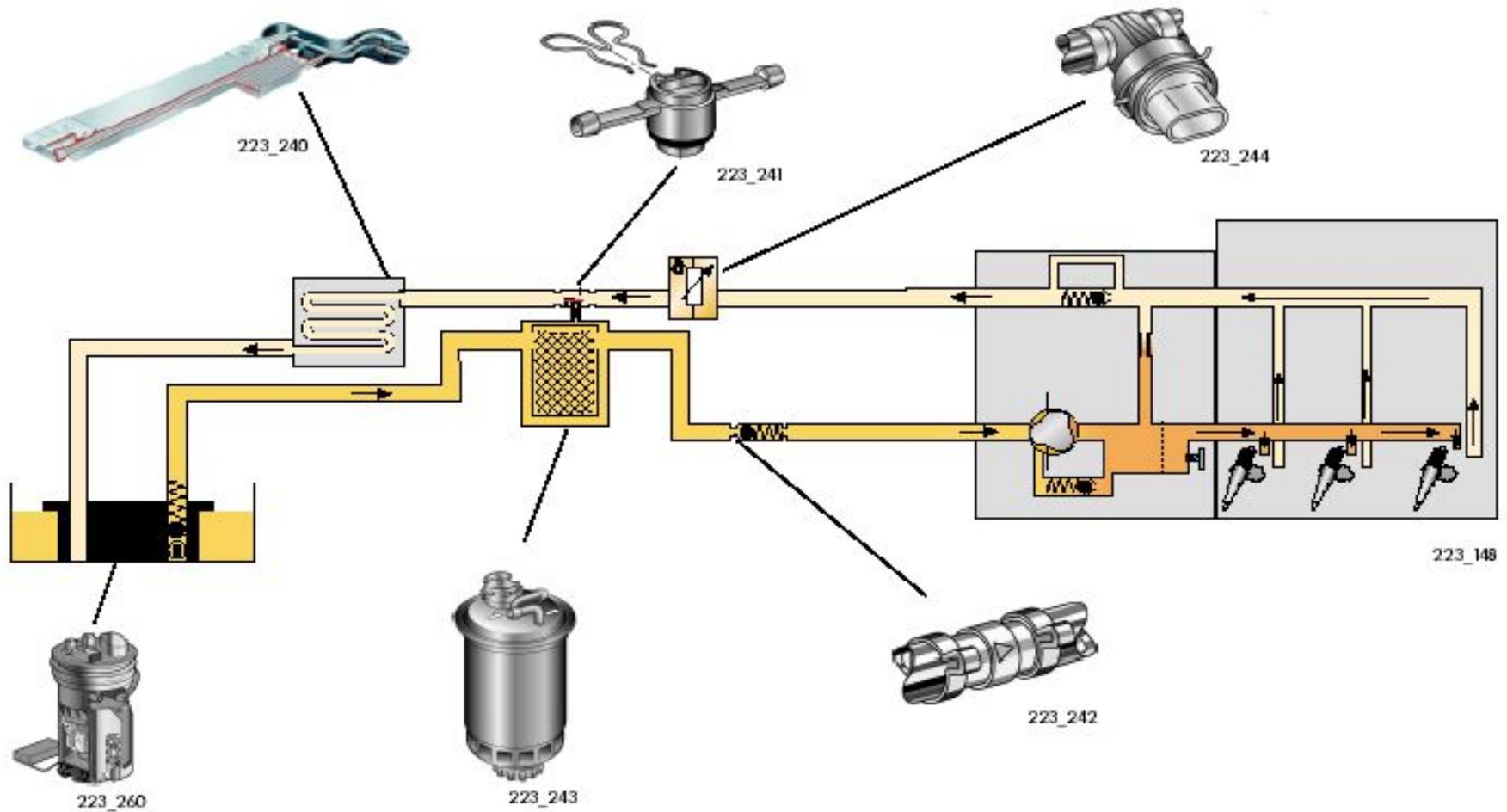
Pumpe-Düse

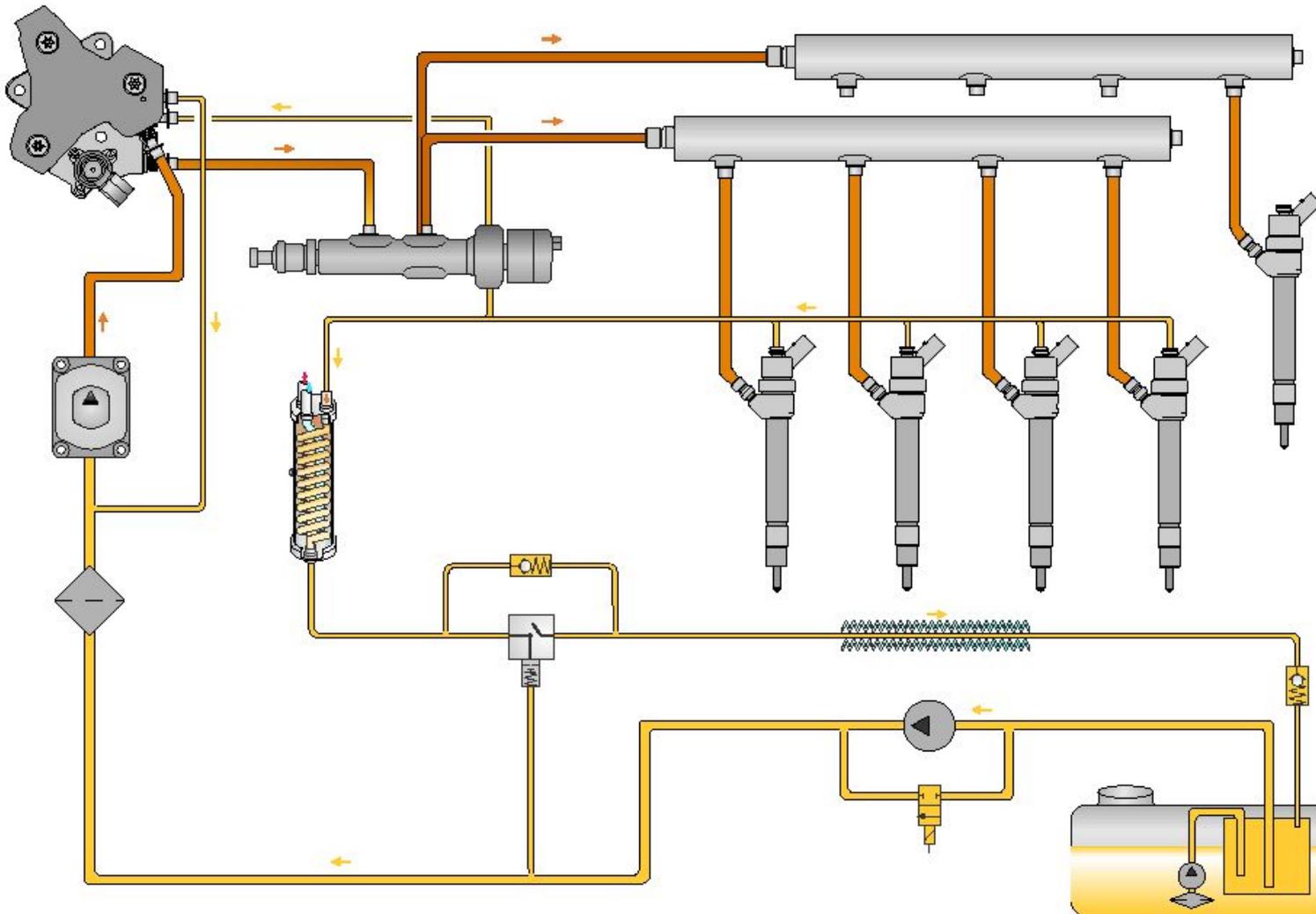


Общие принципы

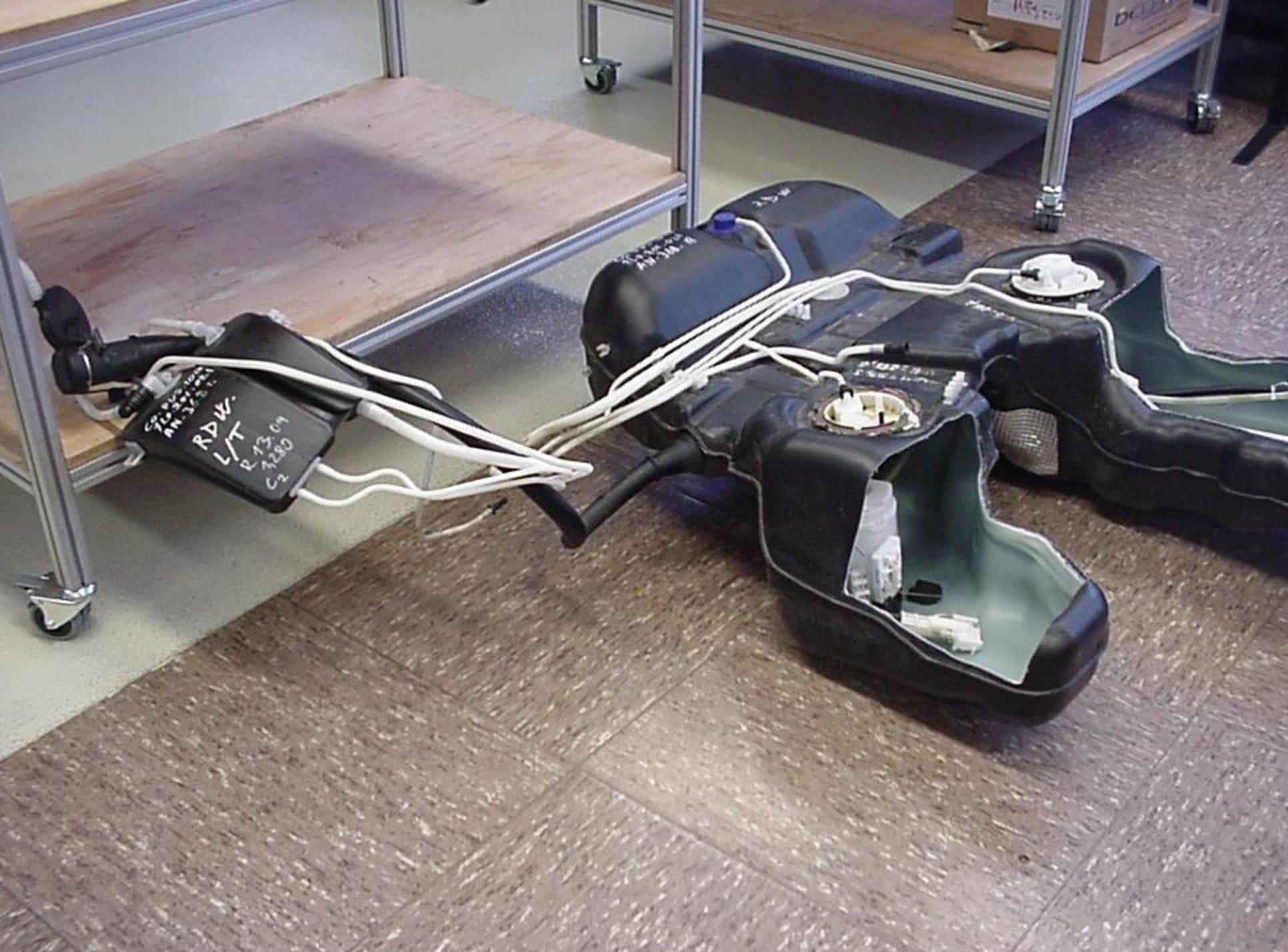




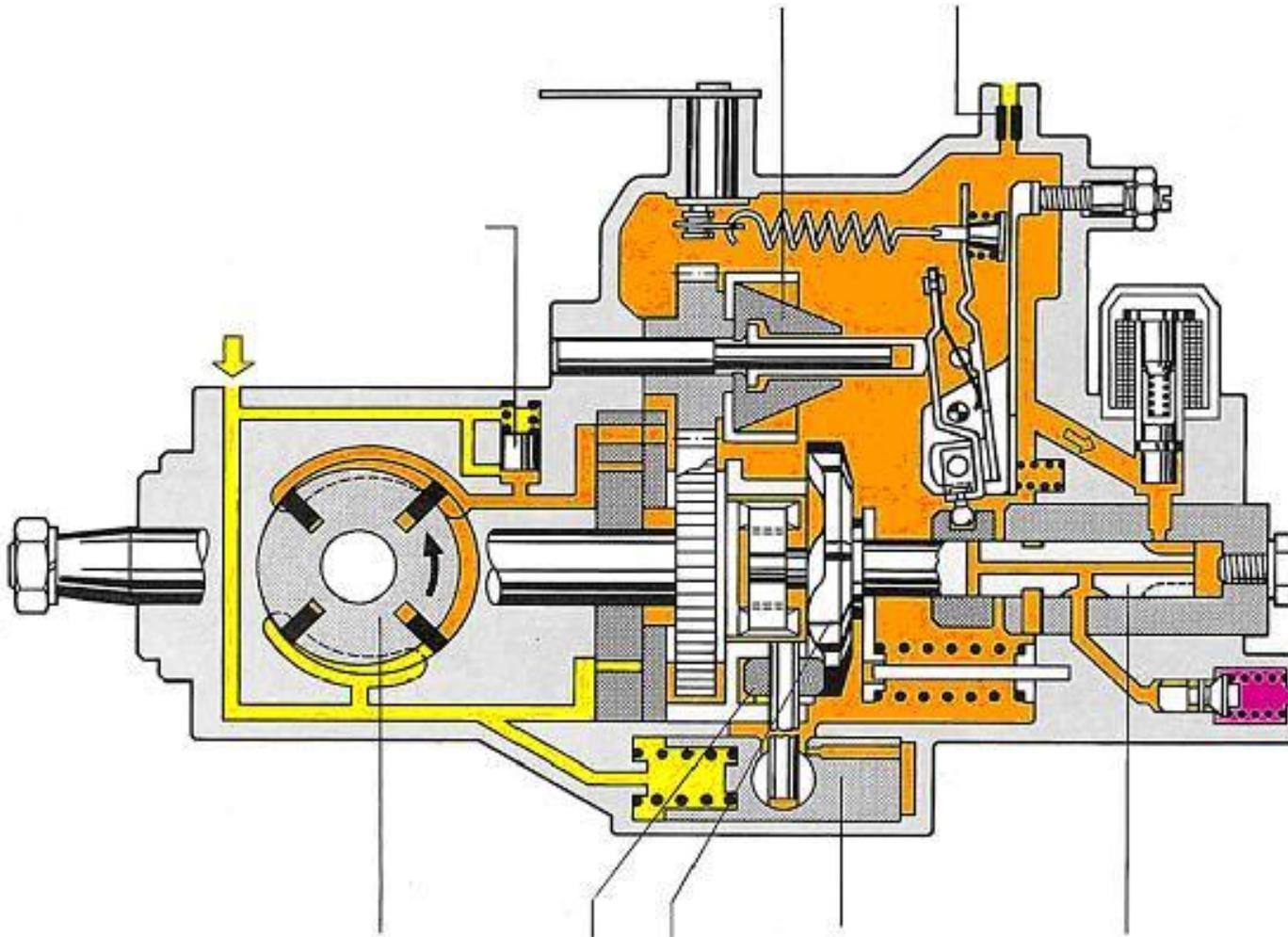


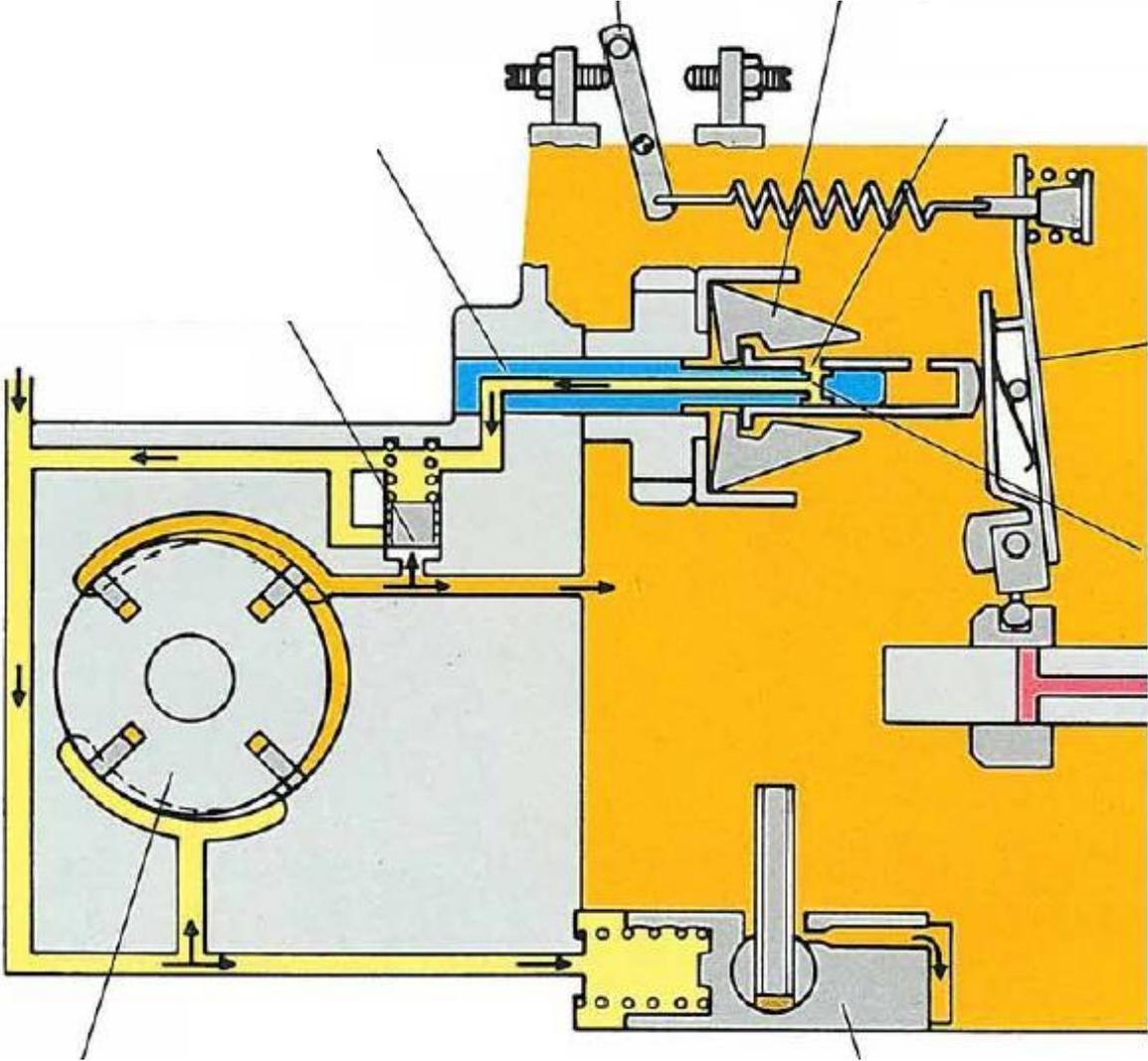


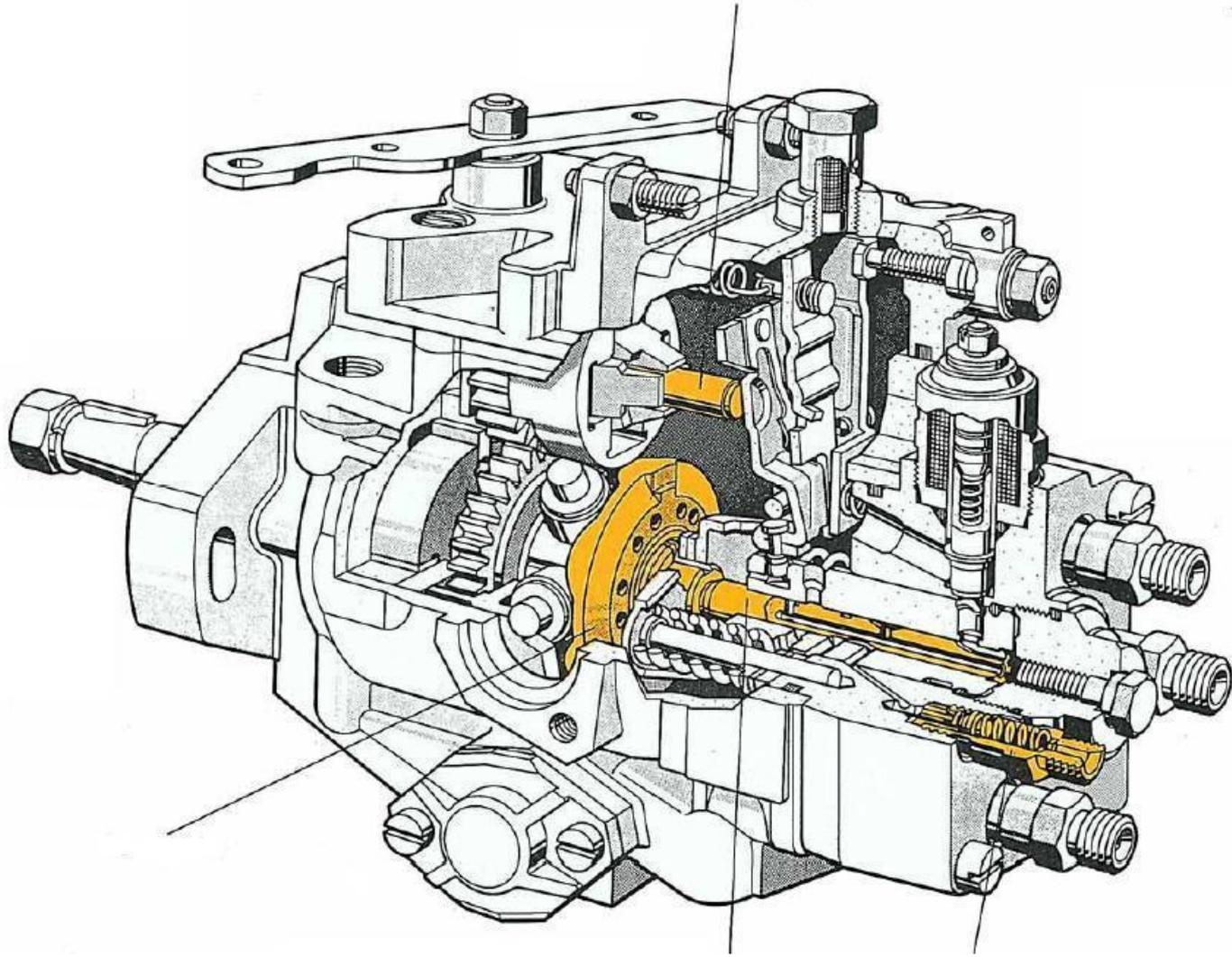
SSP227_002

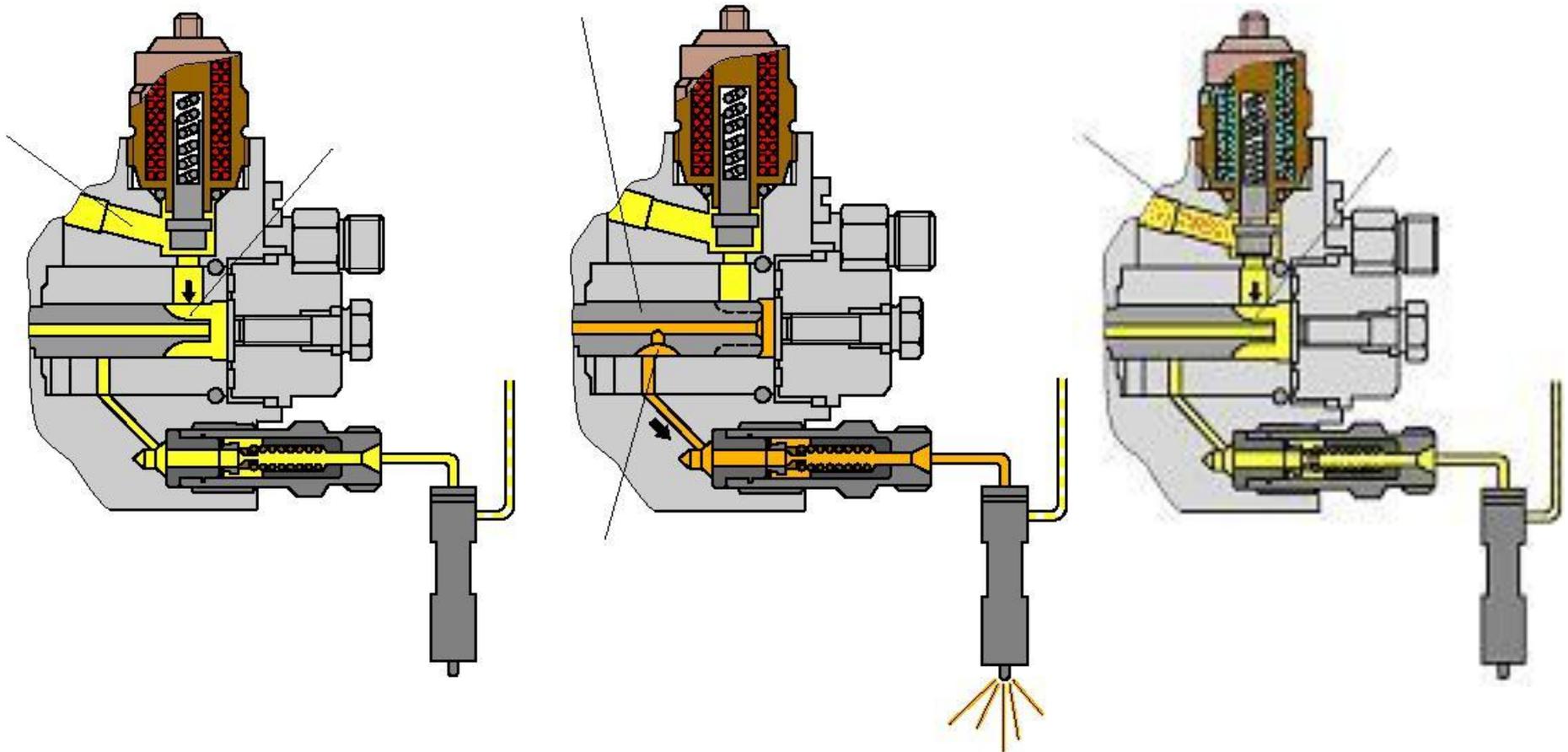


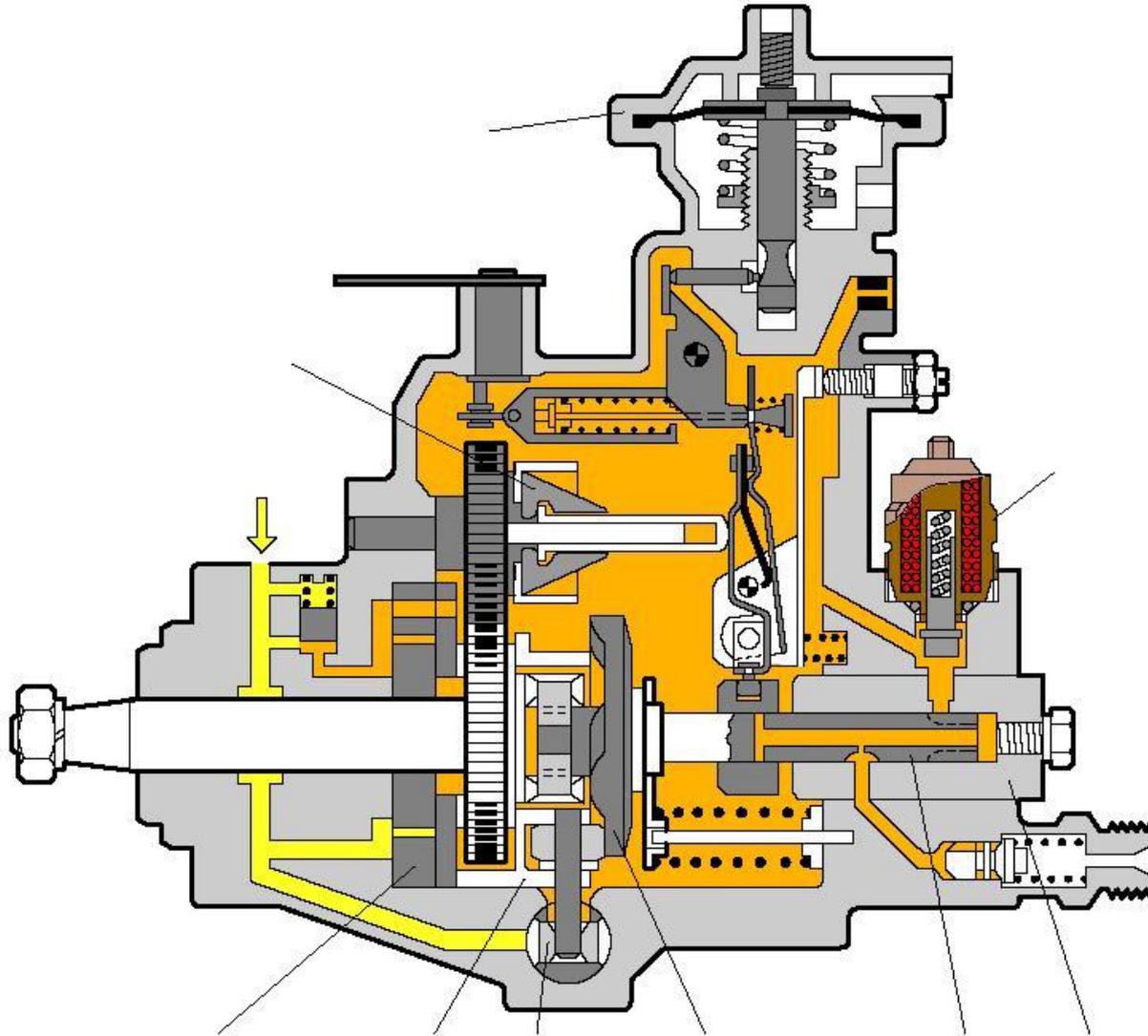
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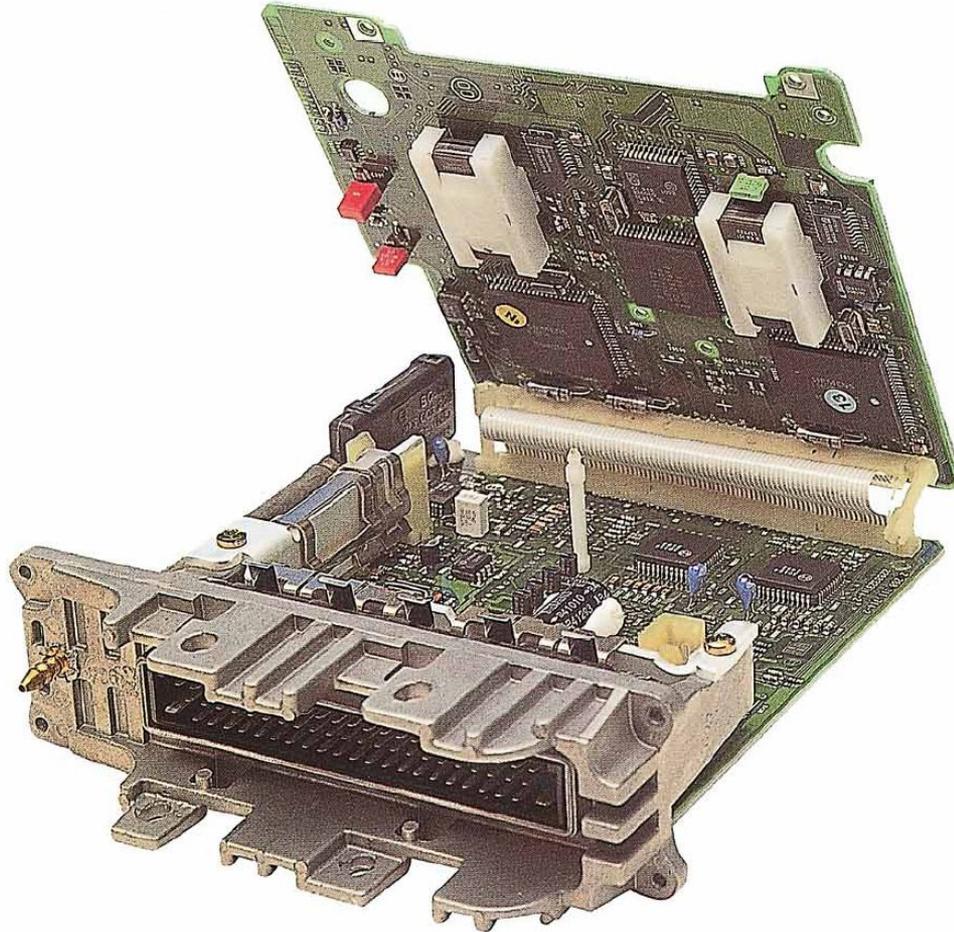






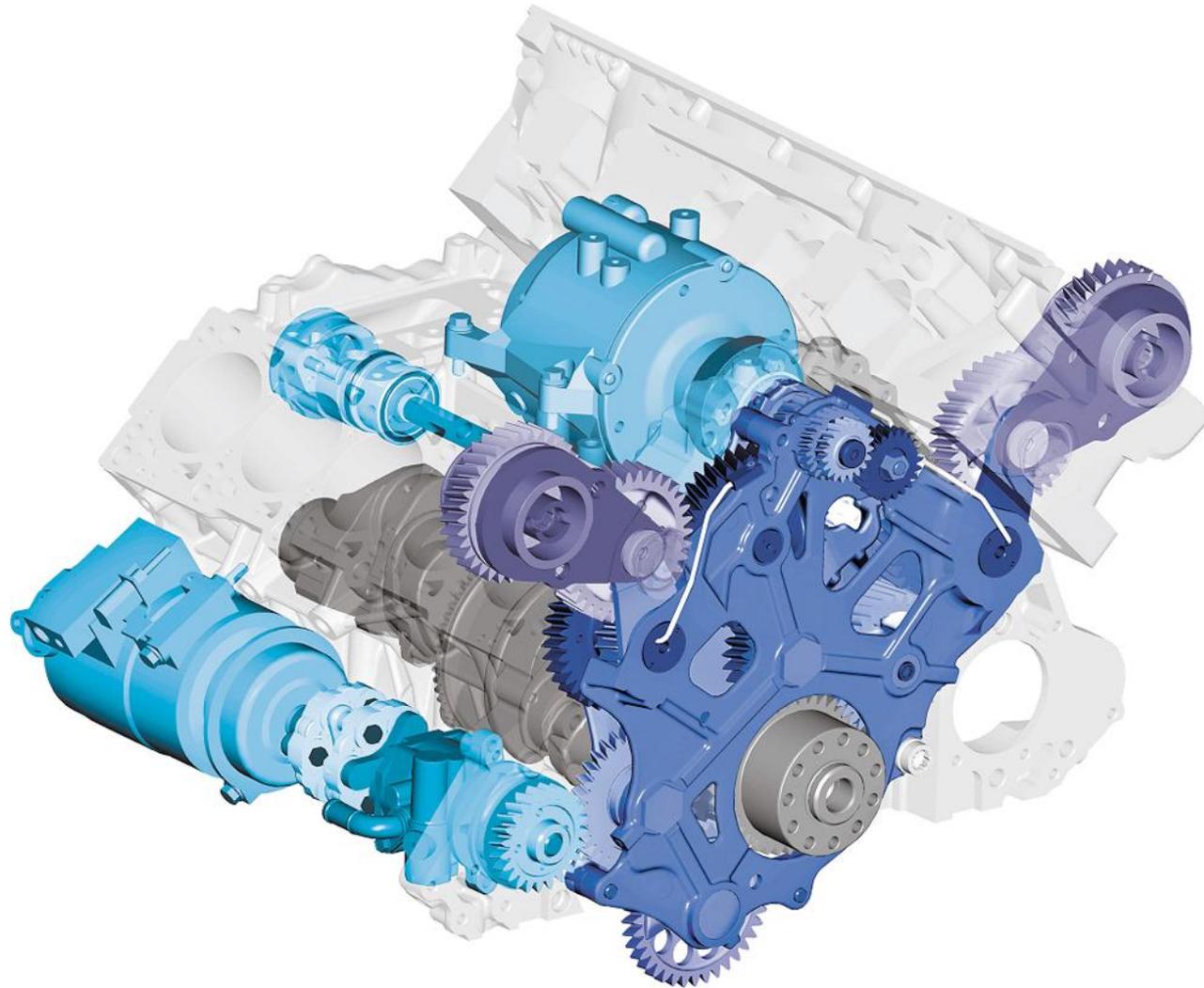


Electronic Diesel Control



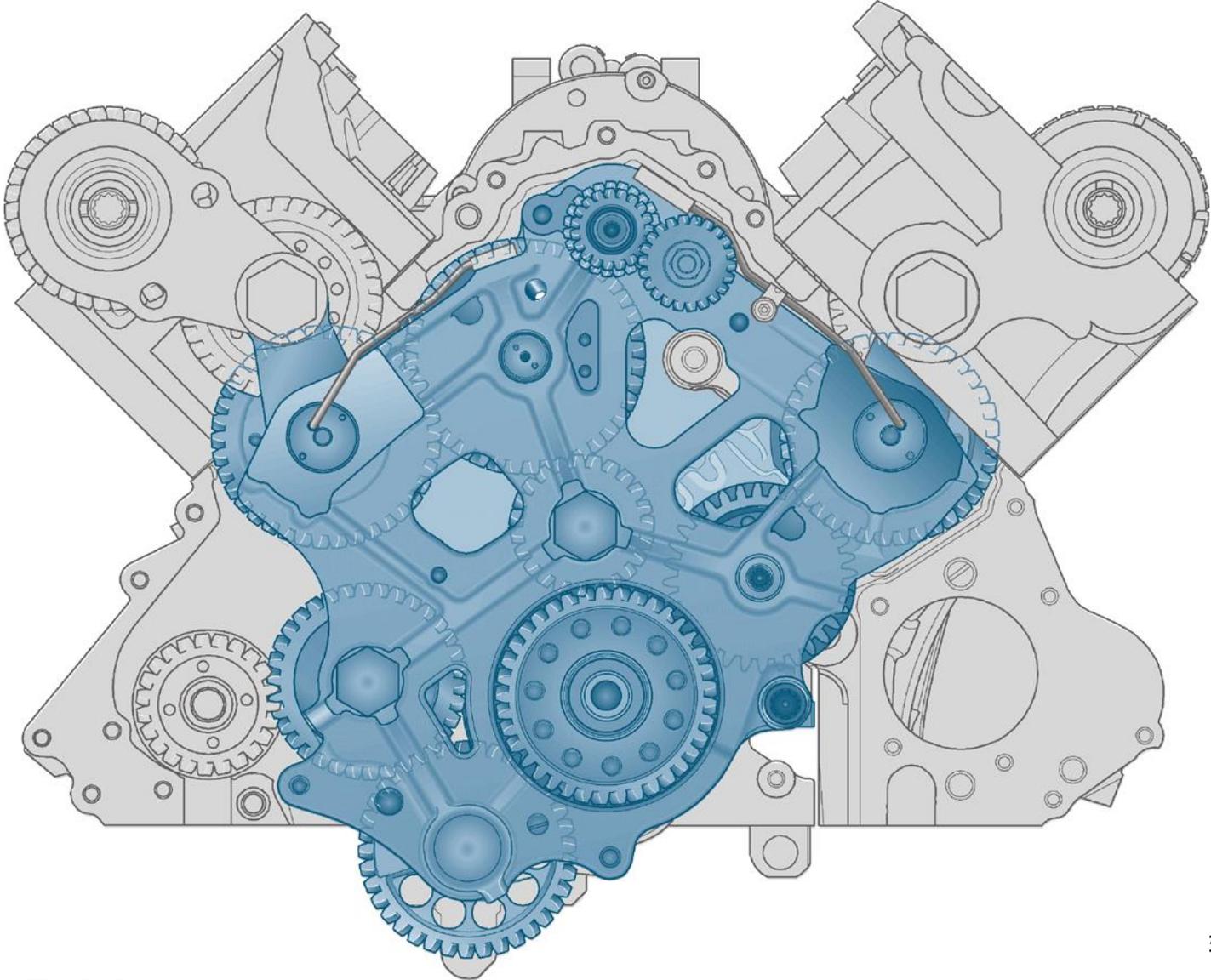






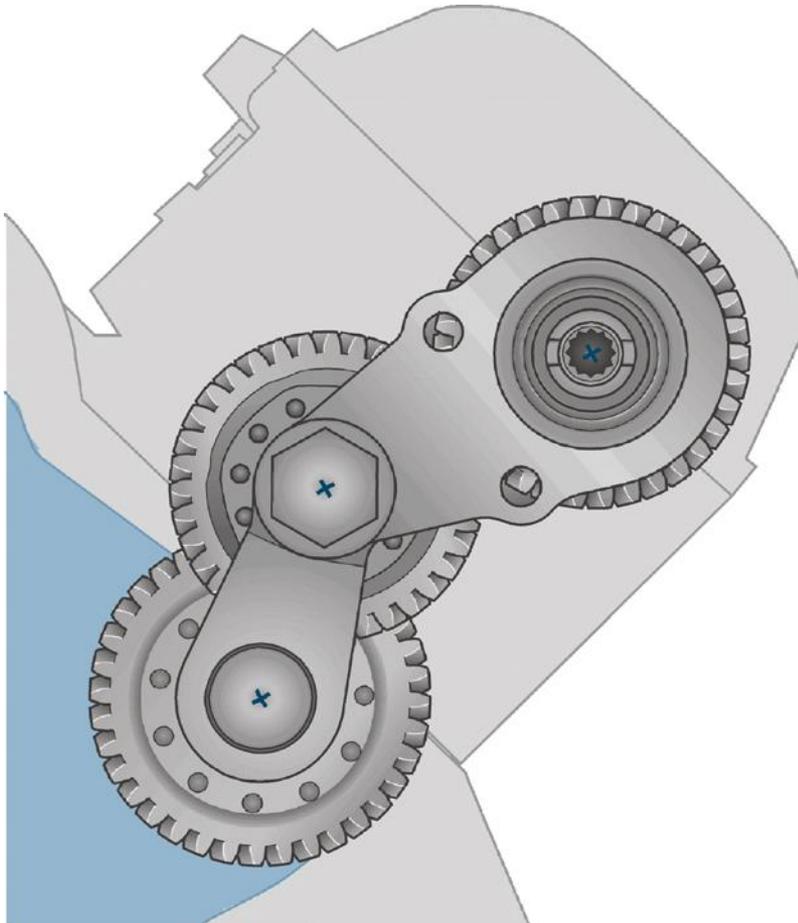
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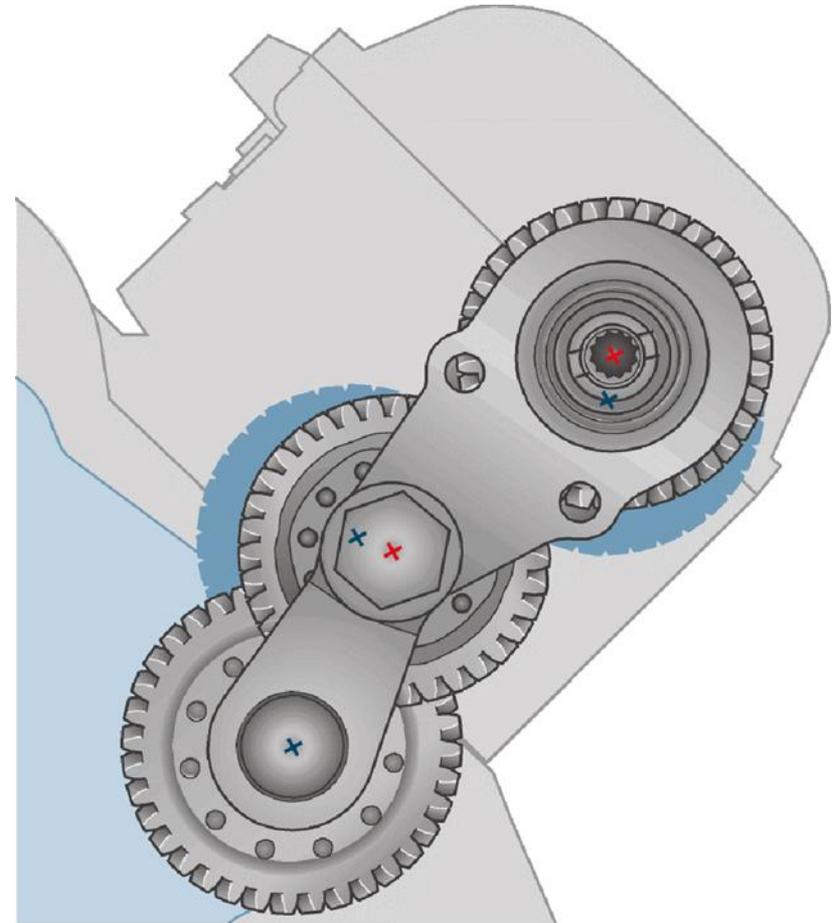


3-003

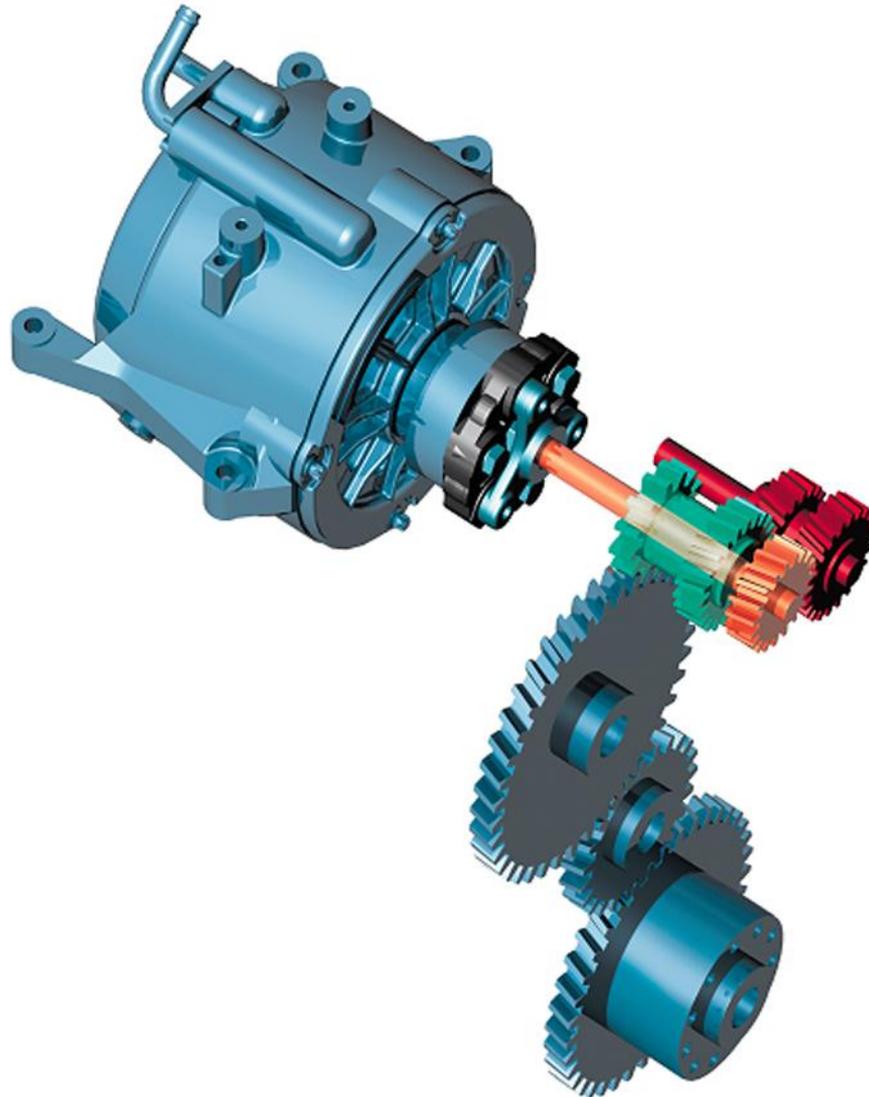




303-017a

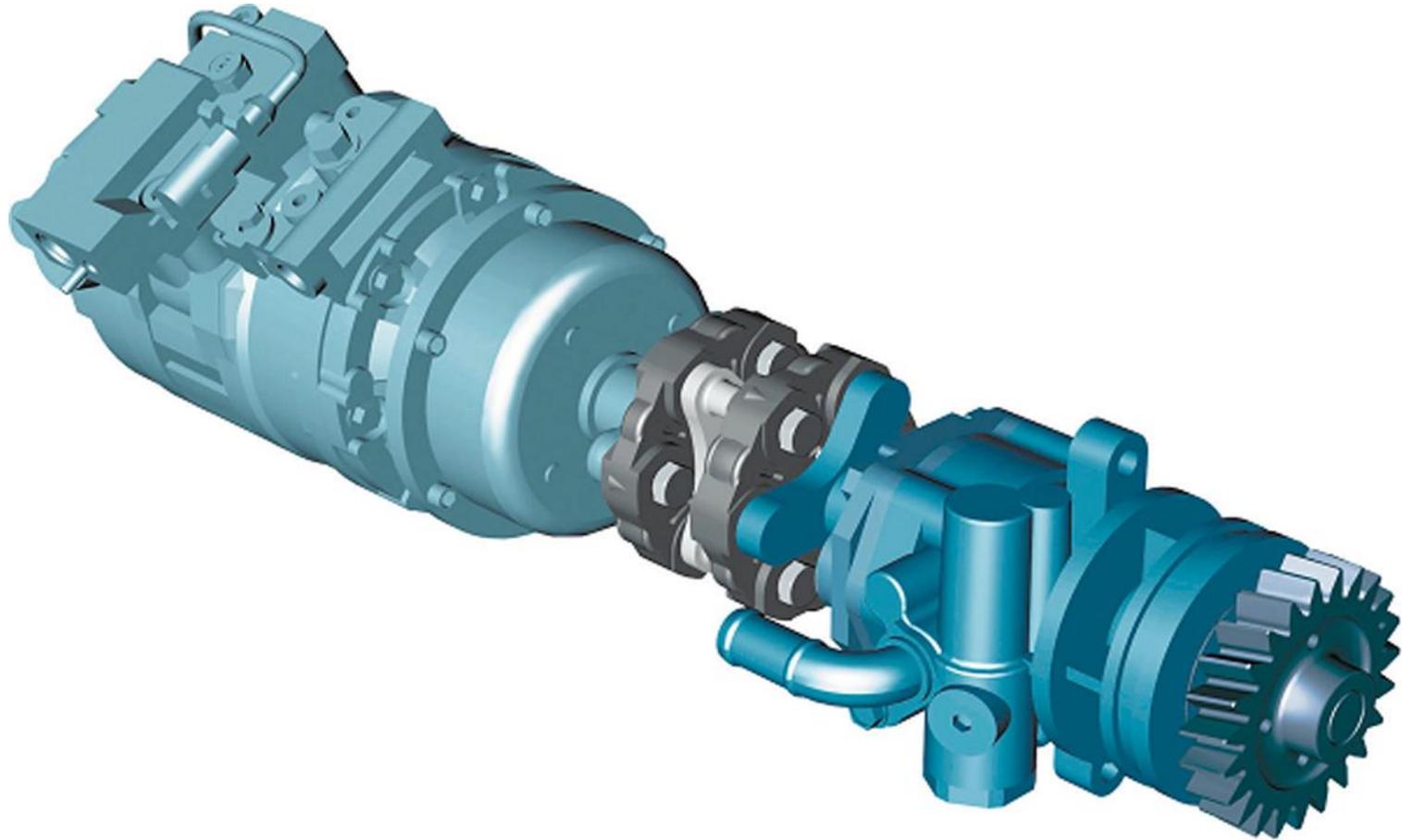


303-017b



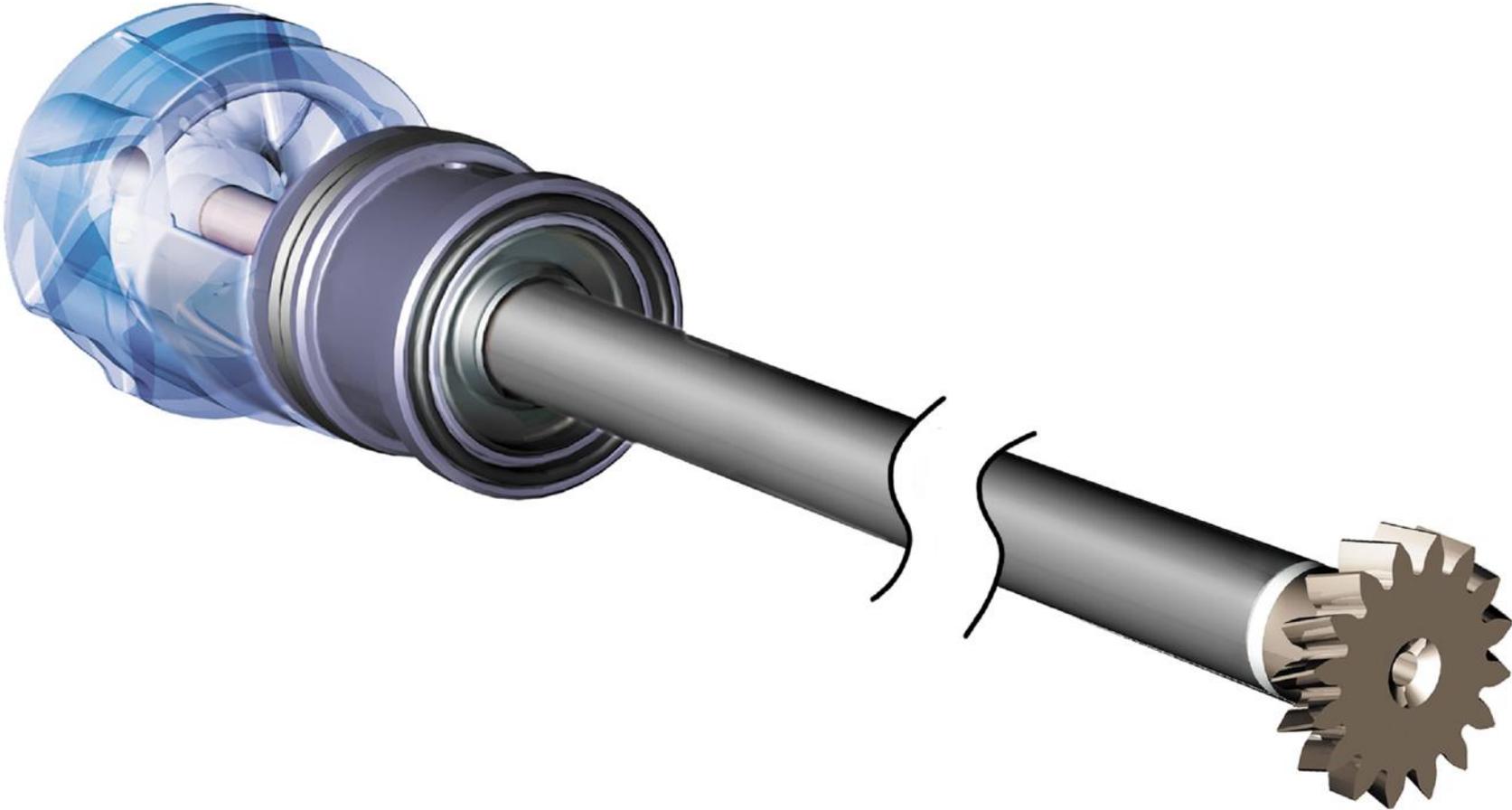
303-095





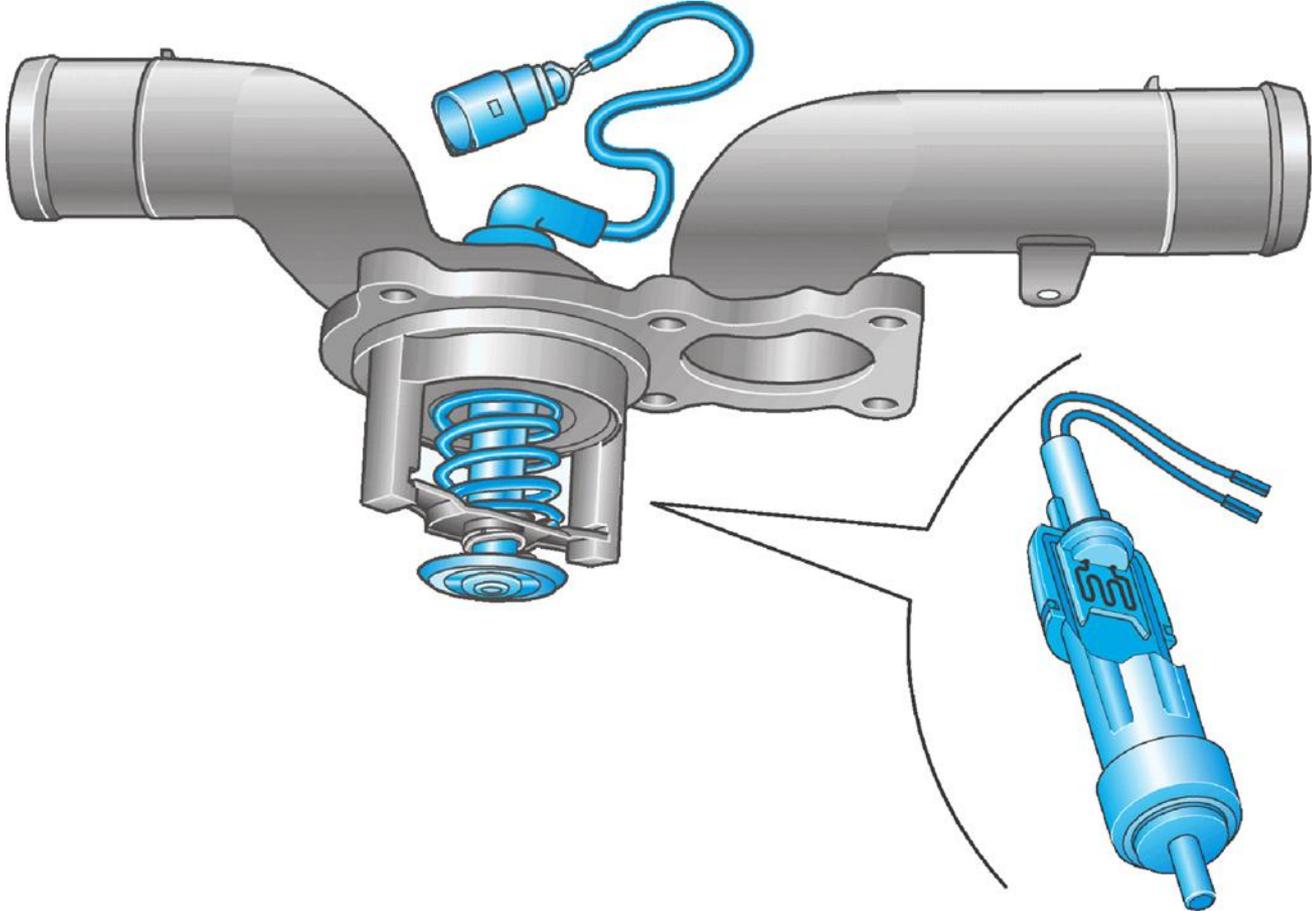
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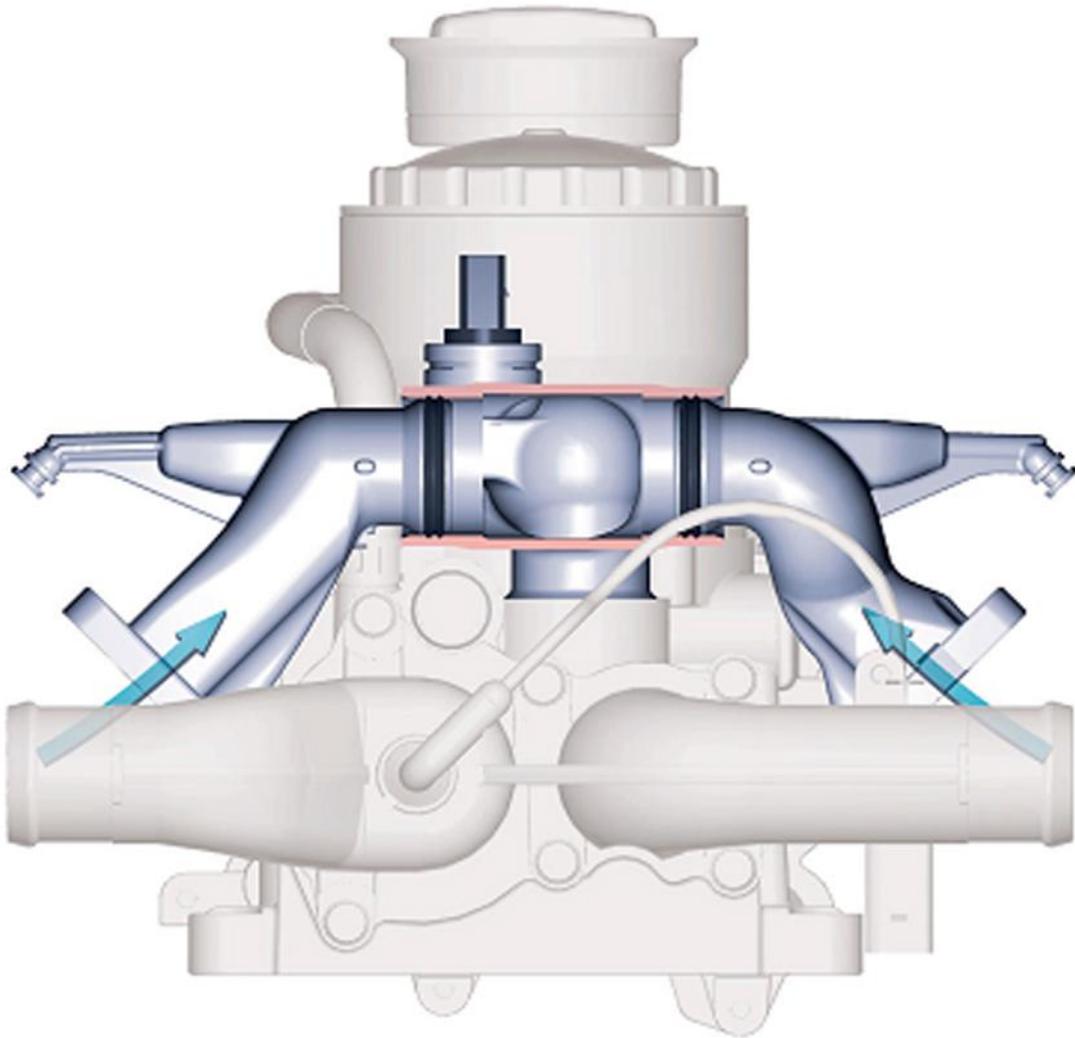
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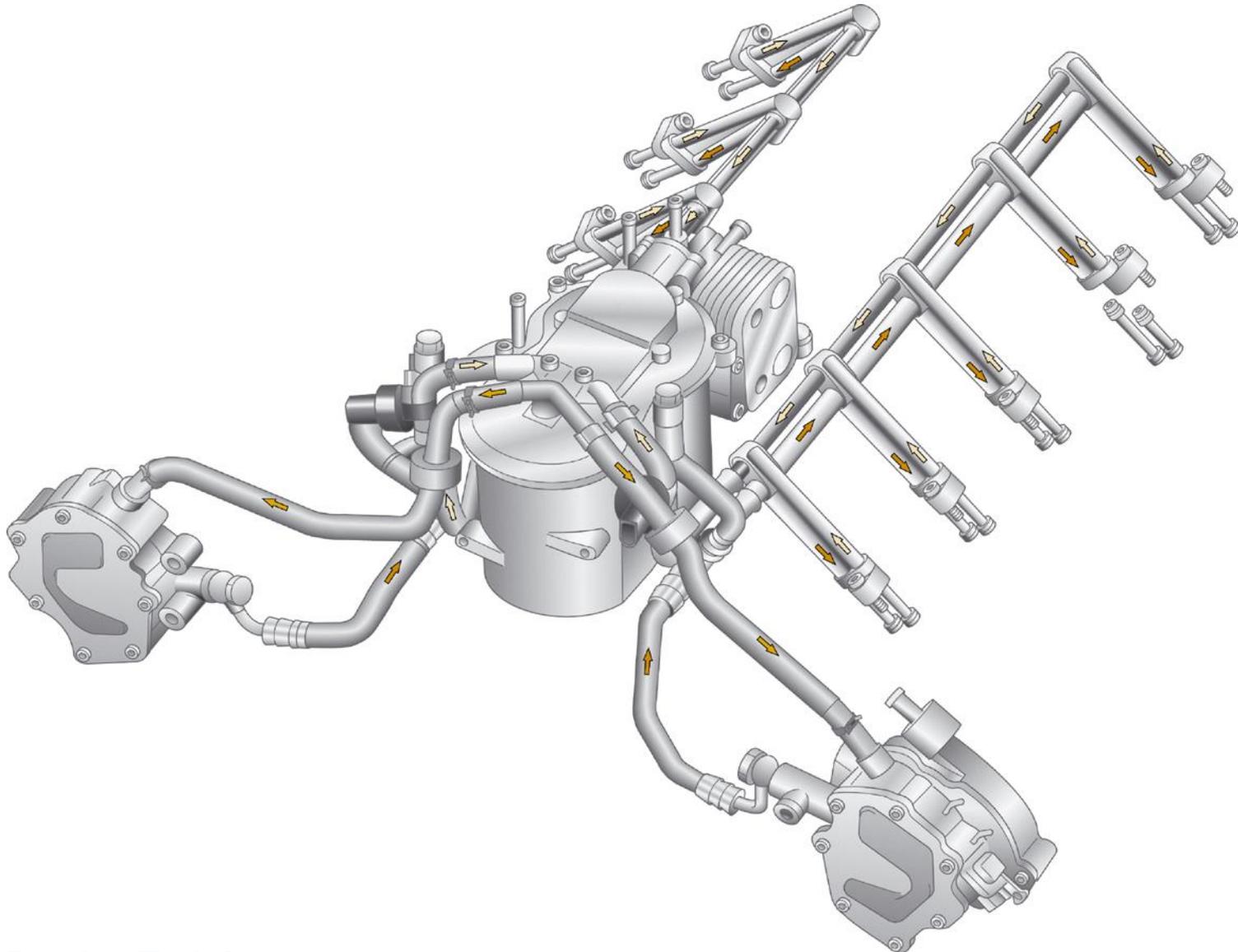
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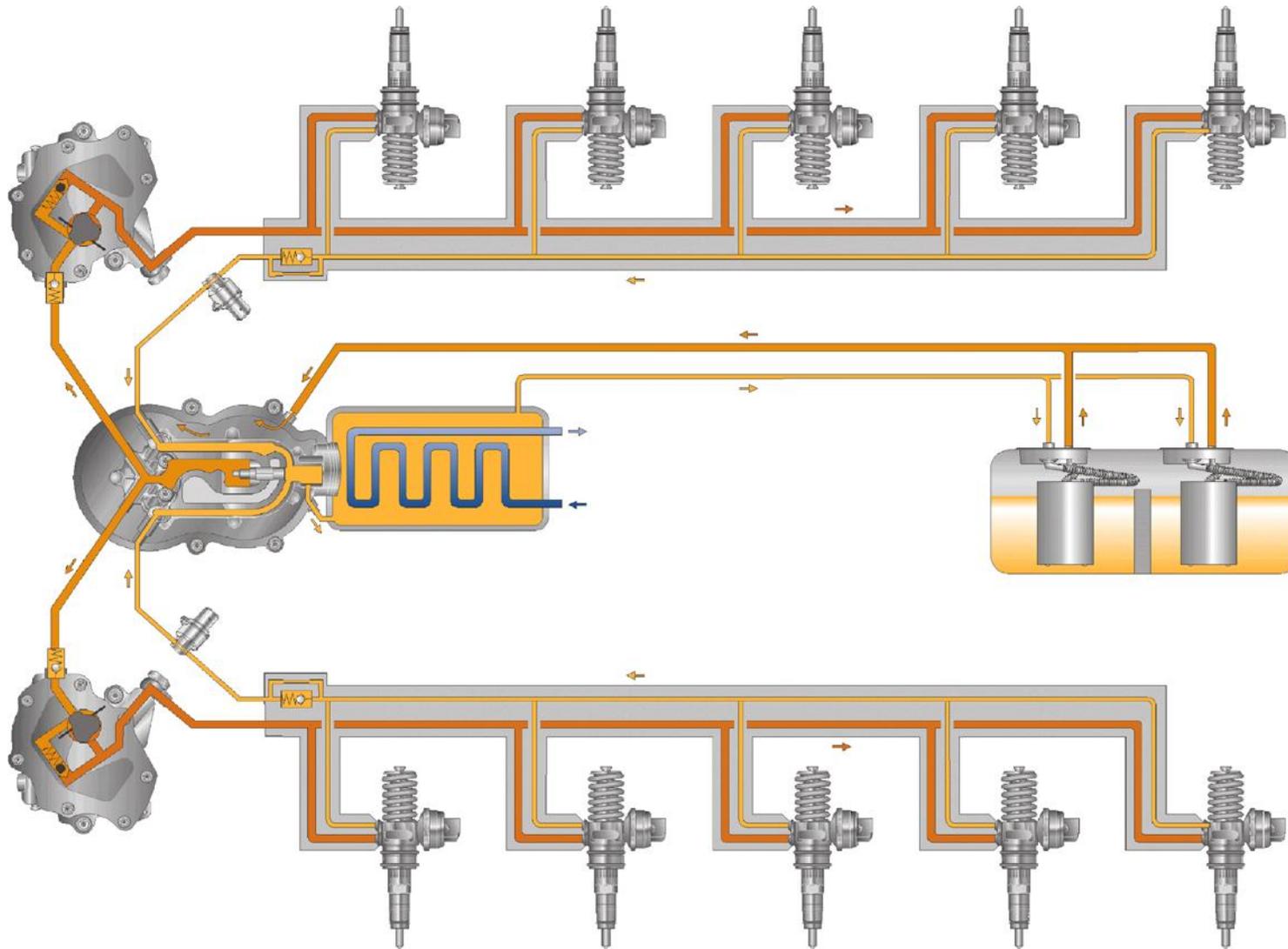
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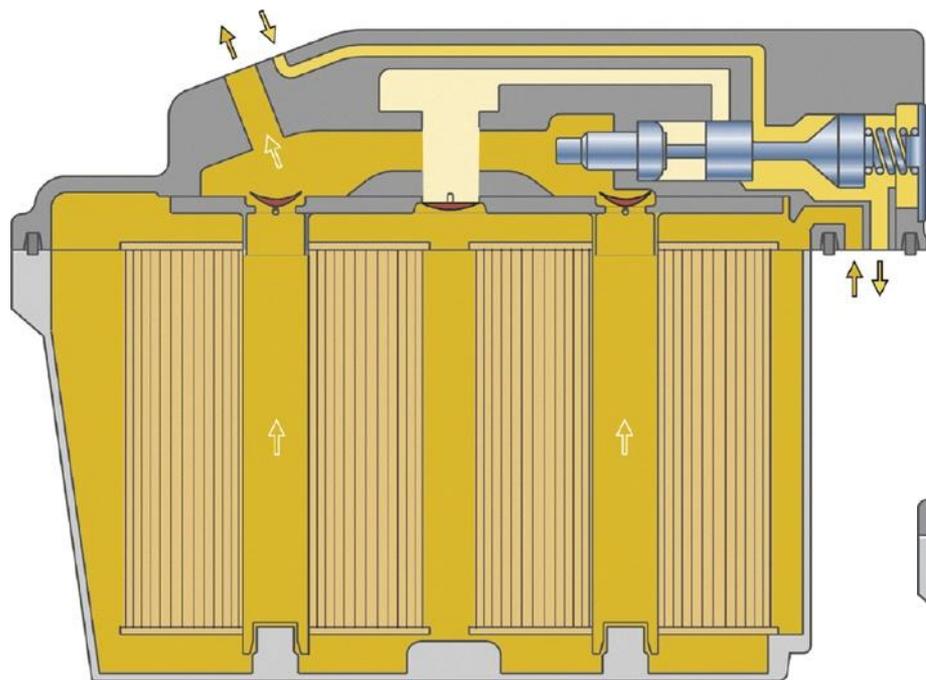
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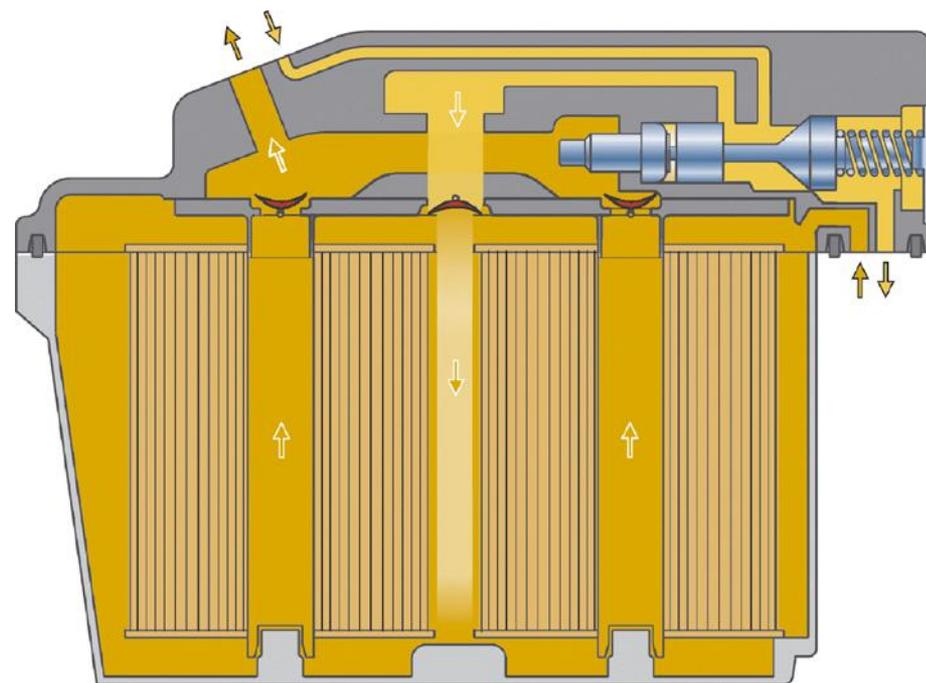


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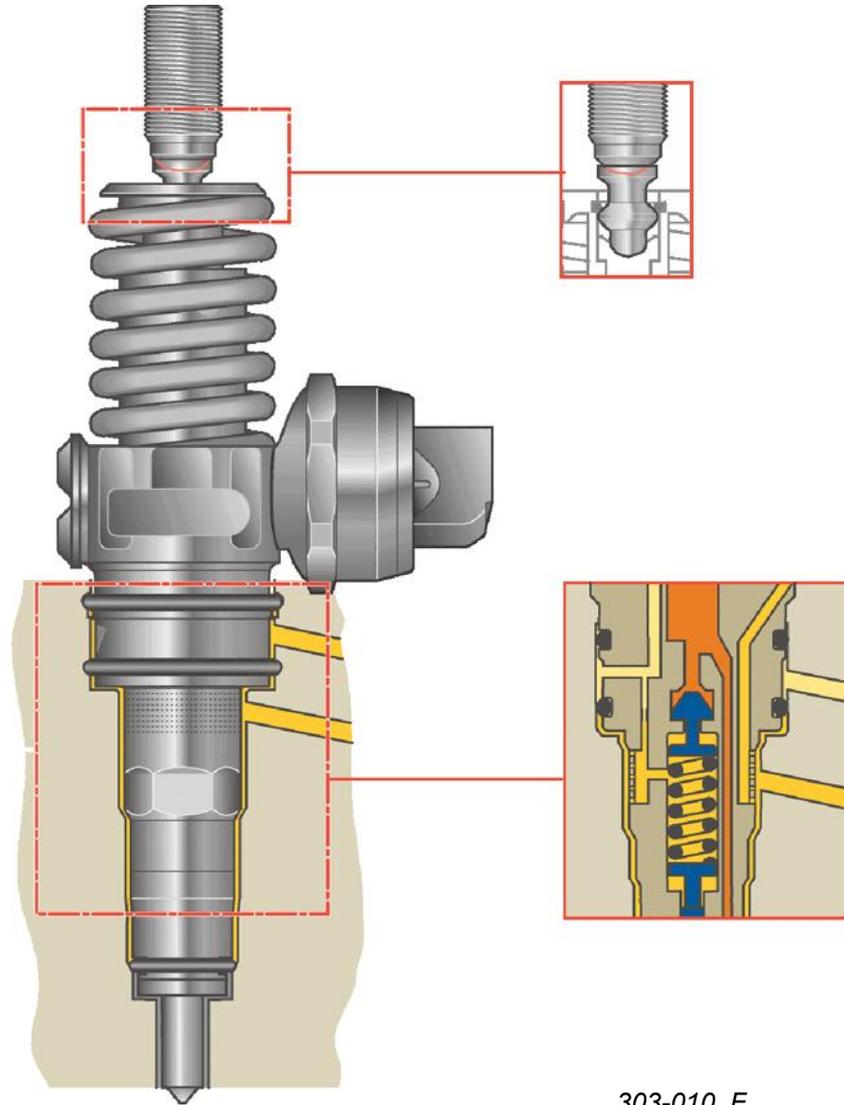




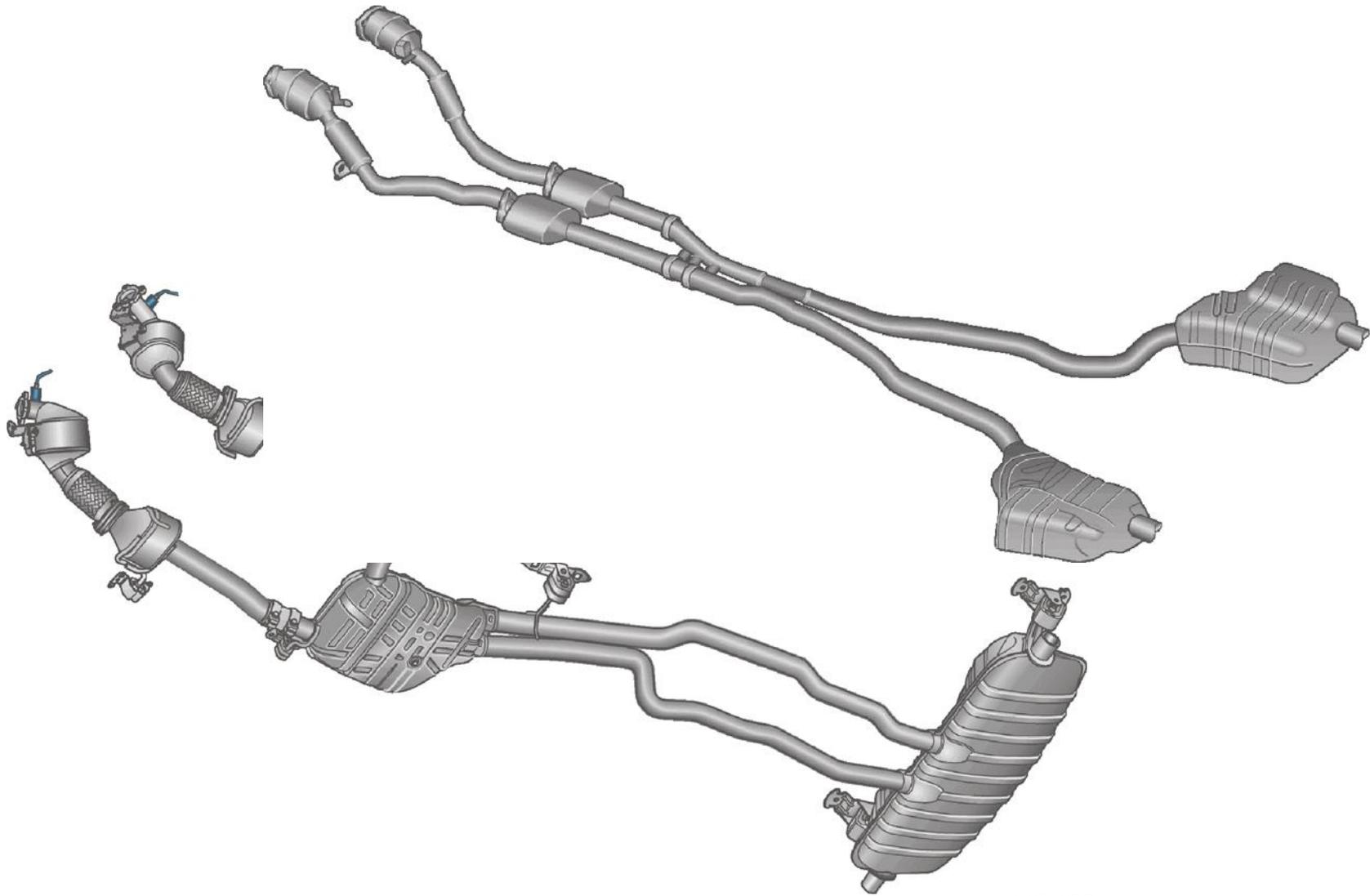
303-103



303-104



303-010_F



303-033

Mit einem Mausklick wird die Präsentation beendet

