



MAK 3031- Internal Combustion Engines

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Sub-Division

Internal Combustion Engine Laboratory

Stoichiometry calculation

$$C_8H_{18} = 12 \cdot 8 + 18 \cdot 1 = 114 \text{ kg}$$

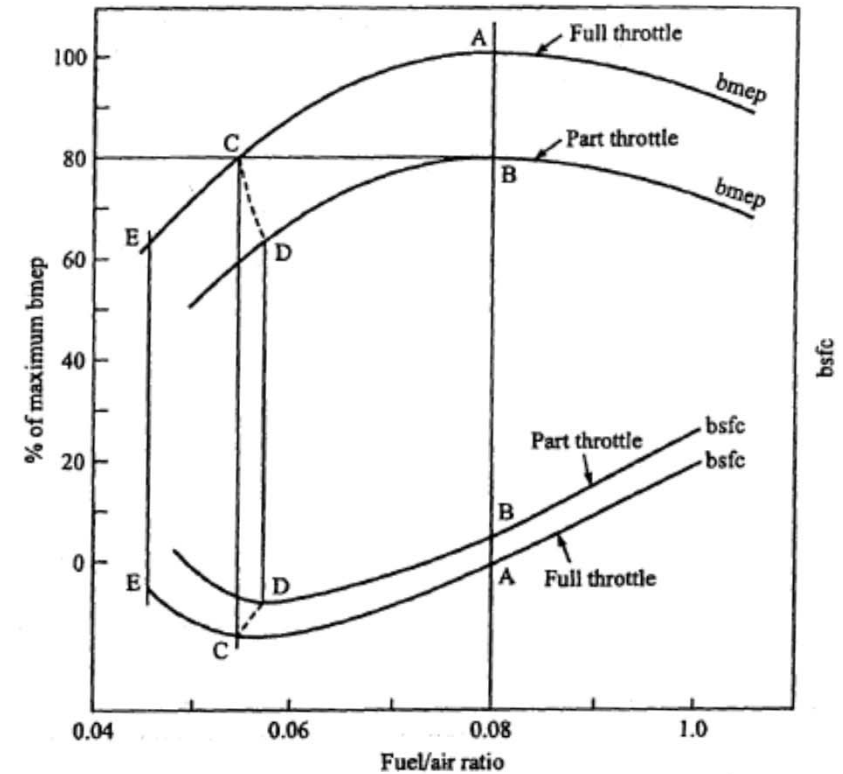
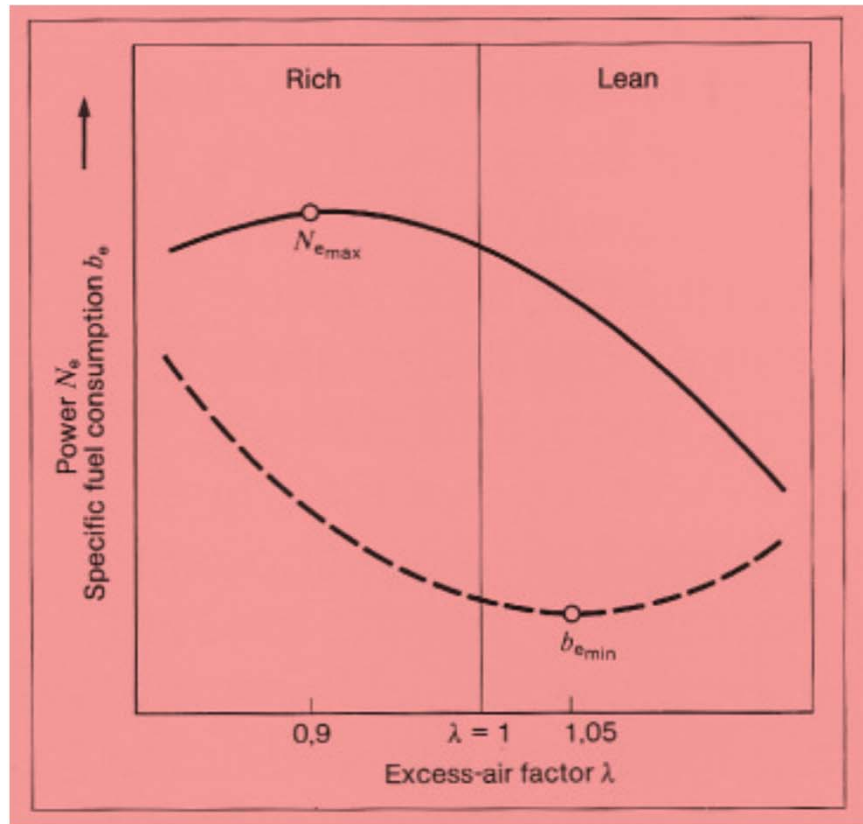
$$\text{Req. Air} = (n + m/4) \cdot (O_2 + 3.76N_2) \text{ kg}$$

$$\text{Req. Air} = (8 + 18/4) \cdot (O_2 + 3.76N_2) \text{ kg}$$

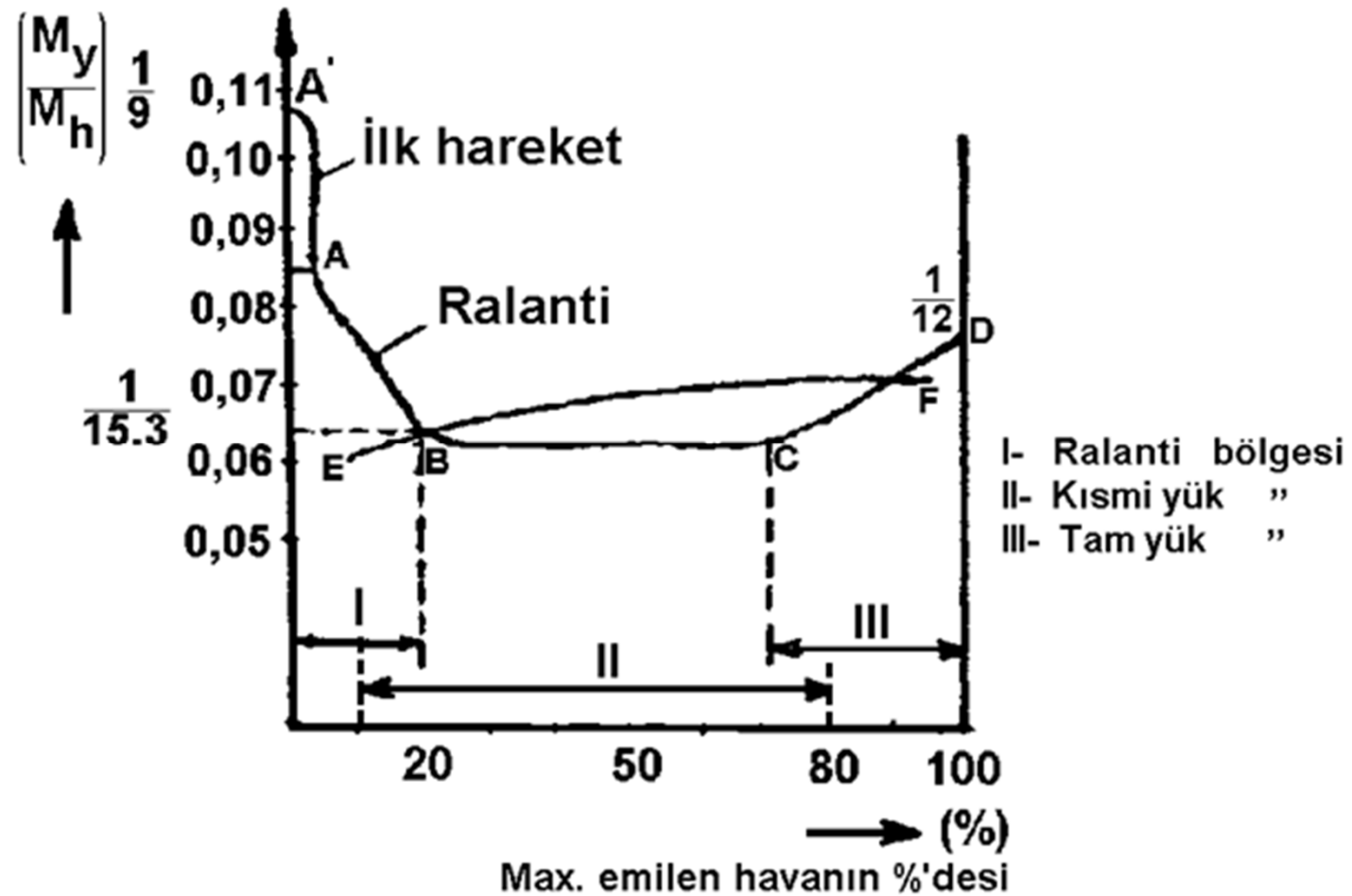
$$\text{Req. Air} = (12.5) \cdot (32 + 3.76 \cdot 28) = 1716 \text{ kg}$$

$$\text{AFR} = 114/1716 = 1/15.05$$

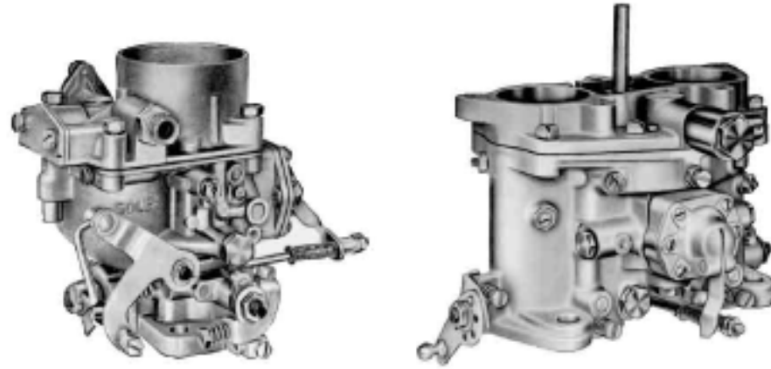
Week-13/ Fuel systems



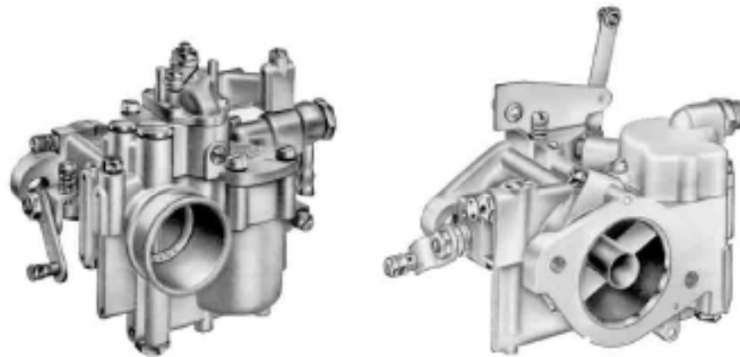
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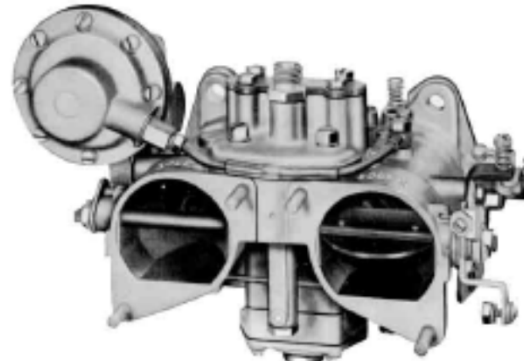


Type 32 PAATl [Dual-port Downdraught Carburetor] Type 40 P11-4 [Dual-port Downdraught Carburetor]



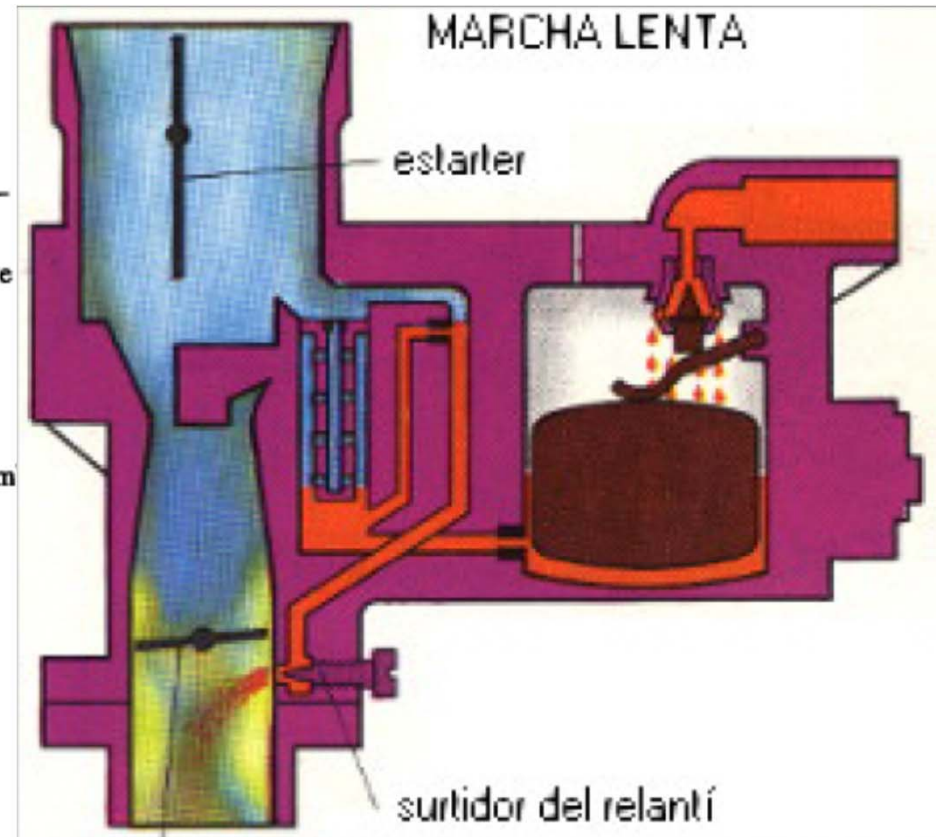
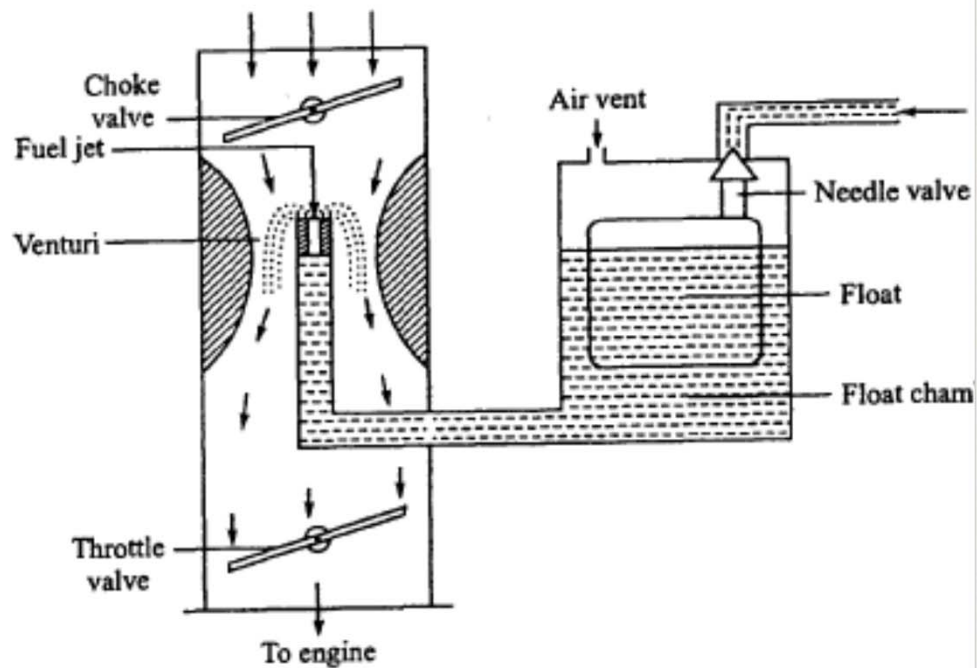
Type 32 HR [Horizontal Carburetor]

Type 44 HR [Horizontal Carburetor]

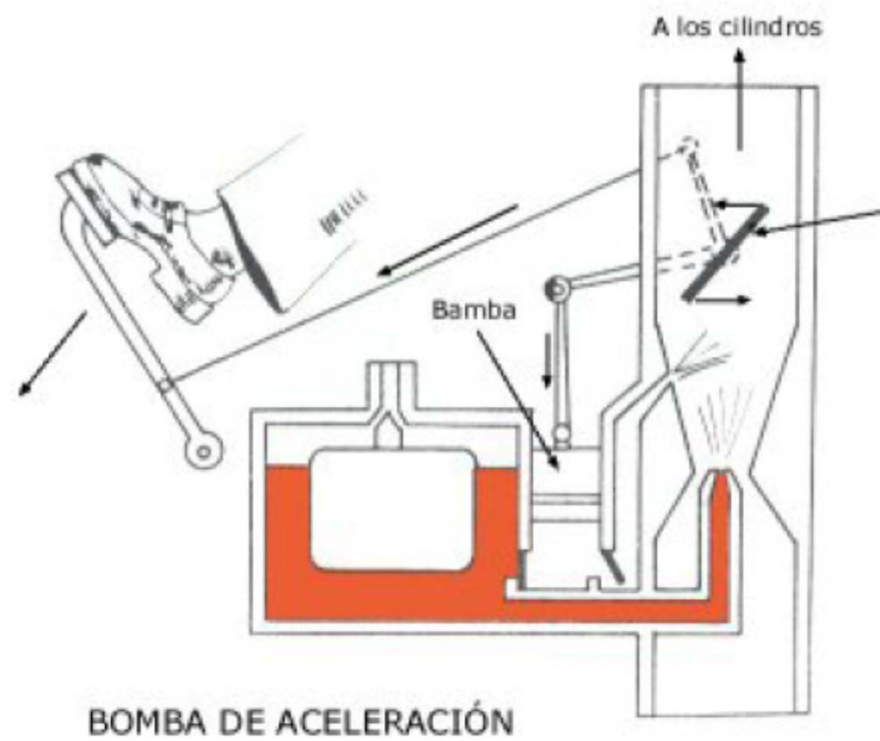


Type 44 PHH [Horizontal Compound Carburetor]

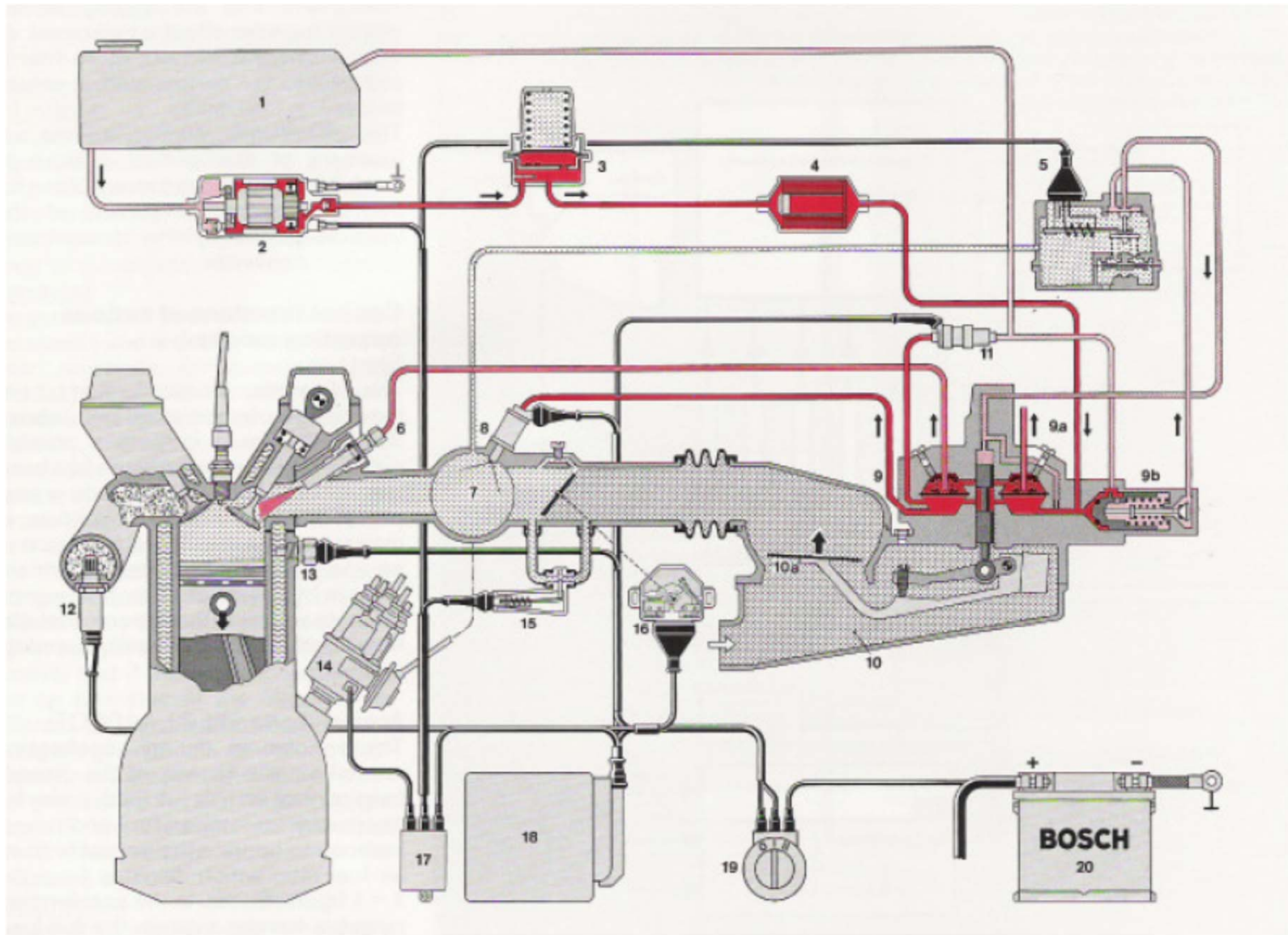
Week-13/ Fuel systems



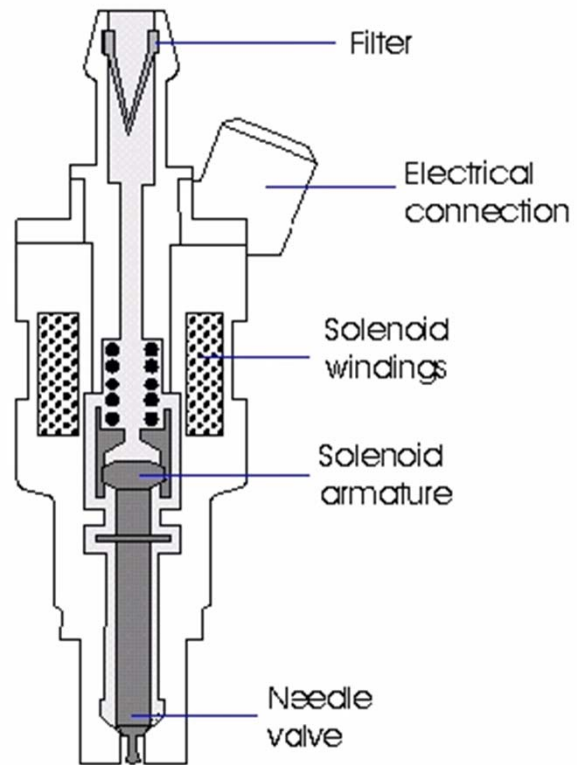
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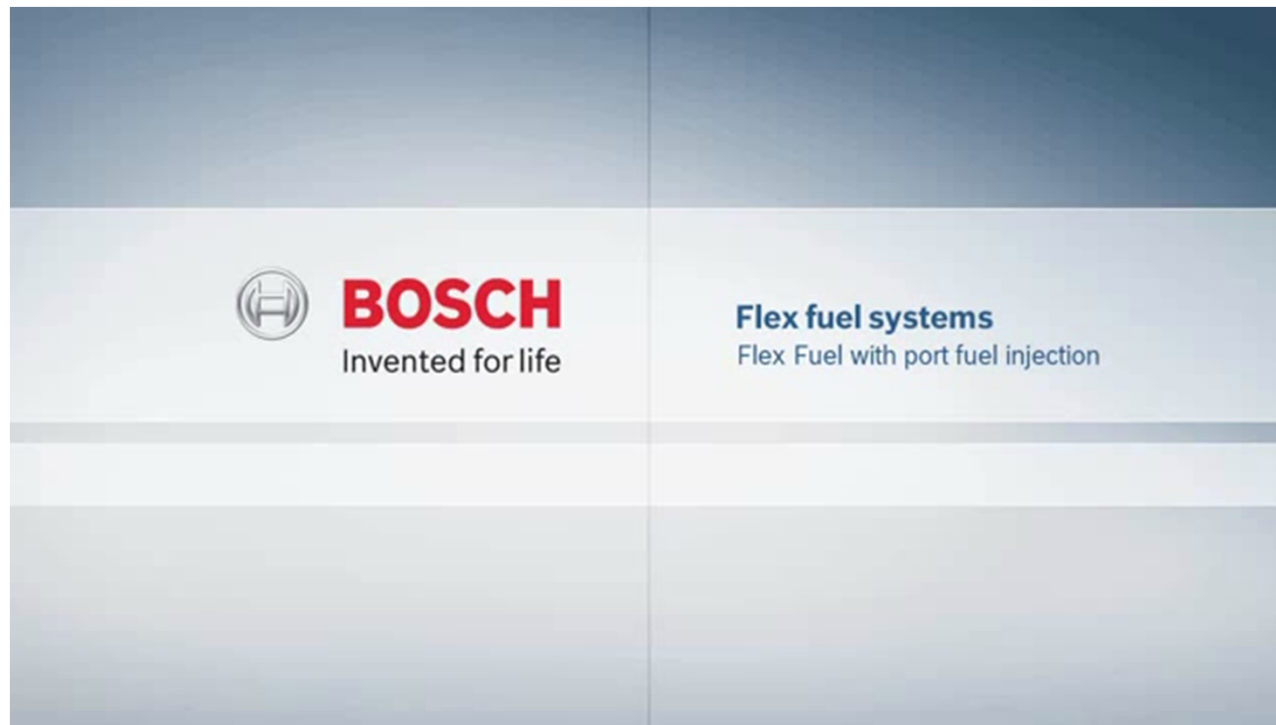
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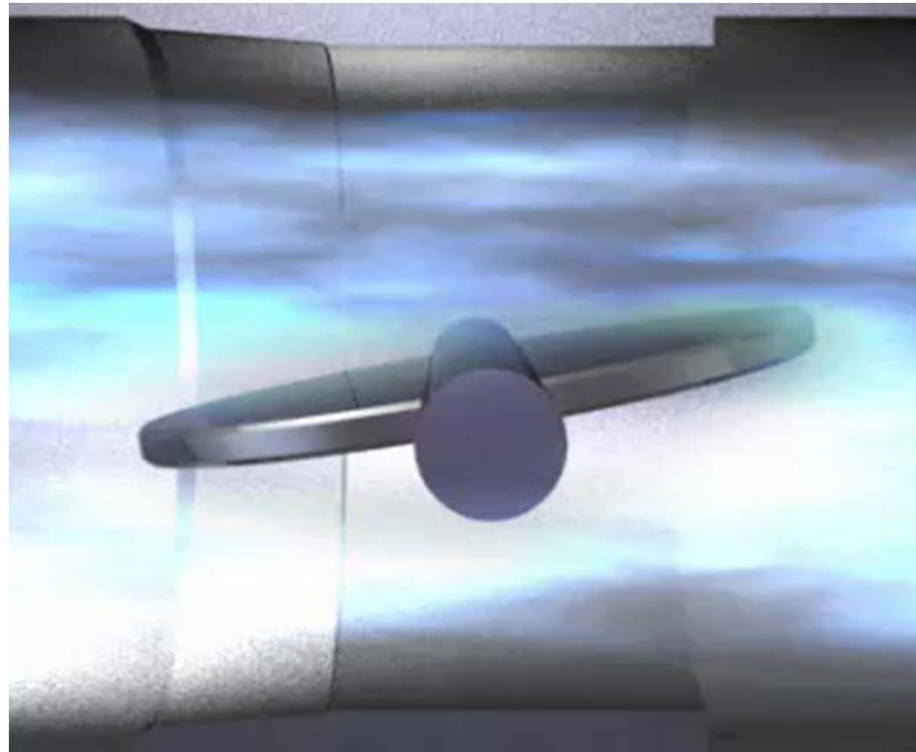
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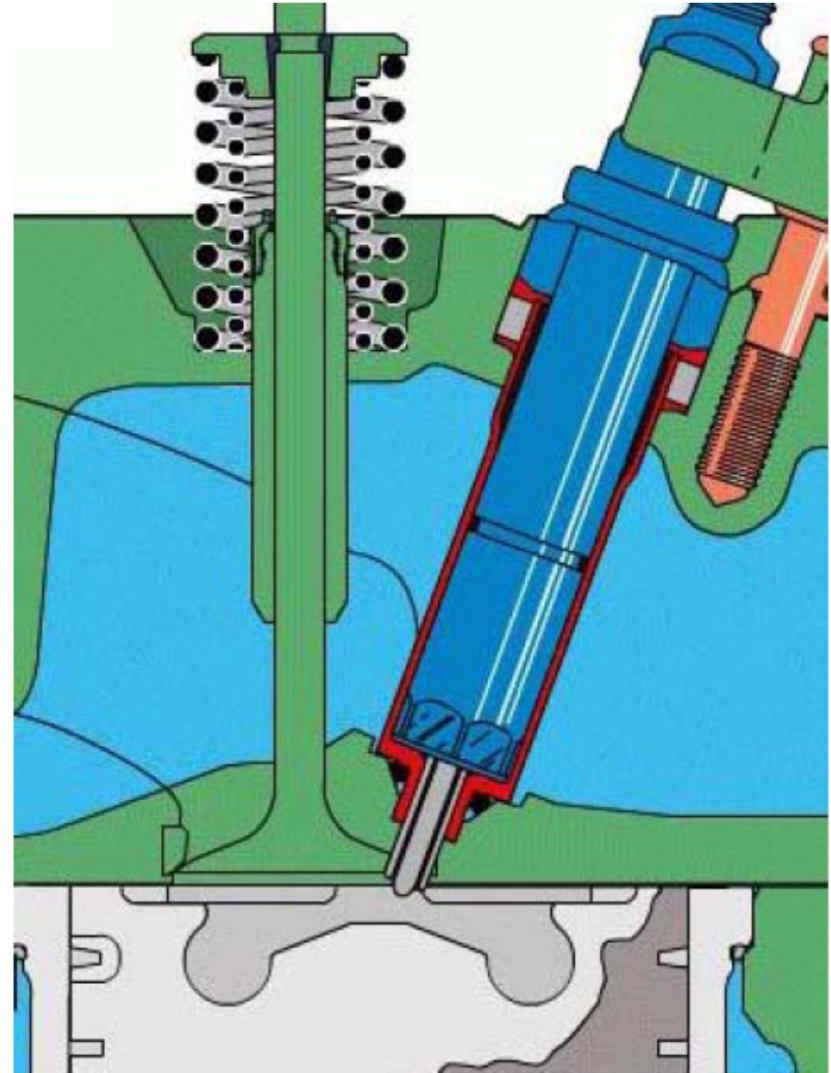
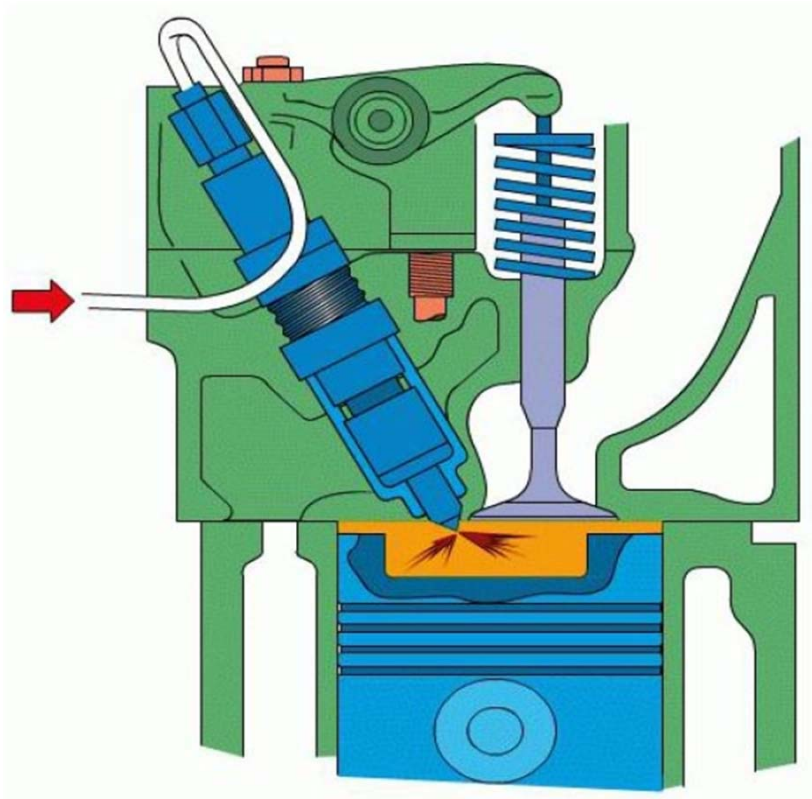
Week-13/ Fuel systems



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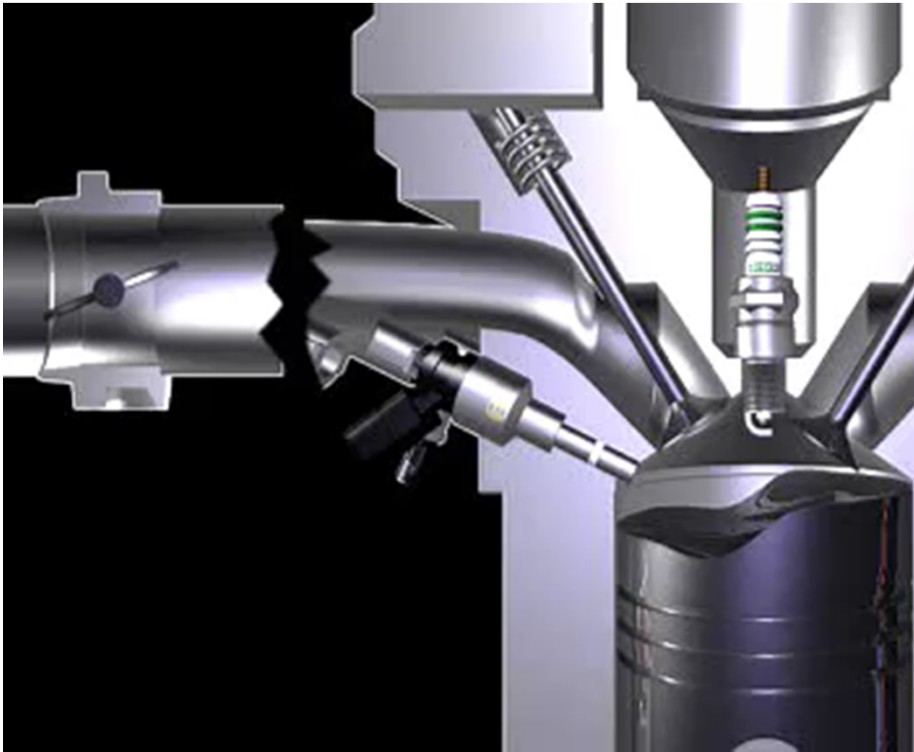
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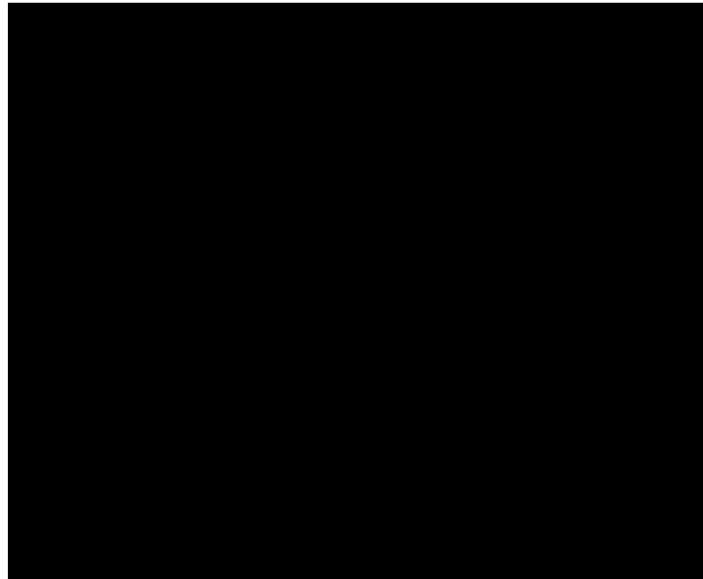
Week-13/ Fuel systems



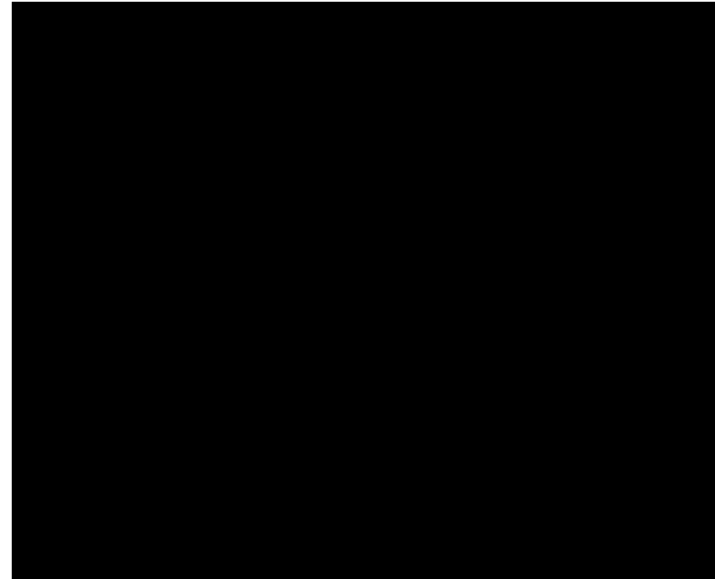
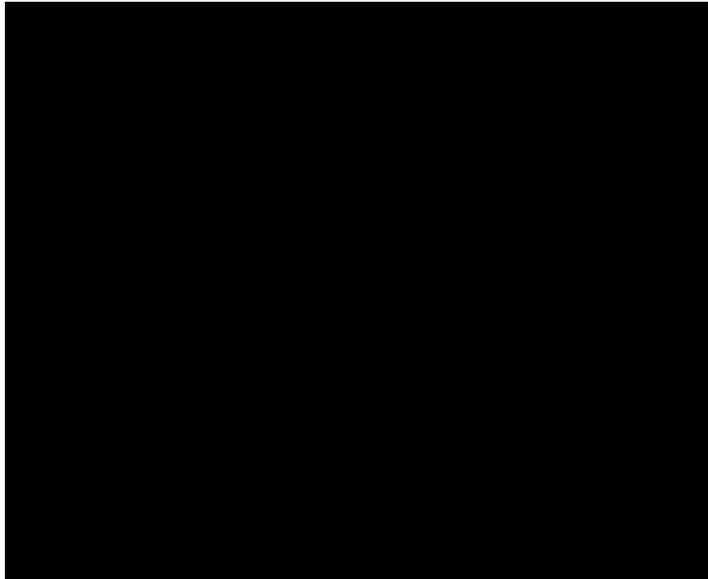
Week-13/ Fuel systems



Week-13/ Engine Sub-systems



Week-13/ Engine Sub-systems



Week-13/ Engine Sub-systems

