



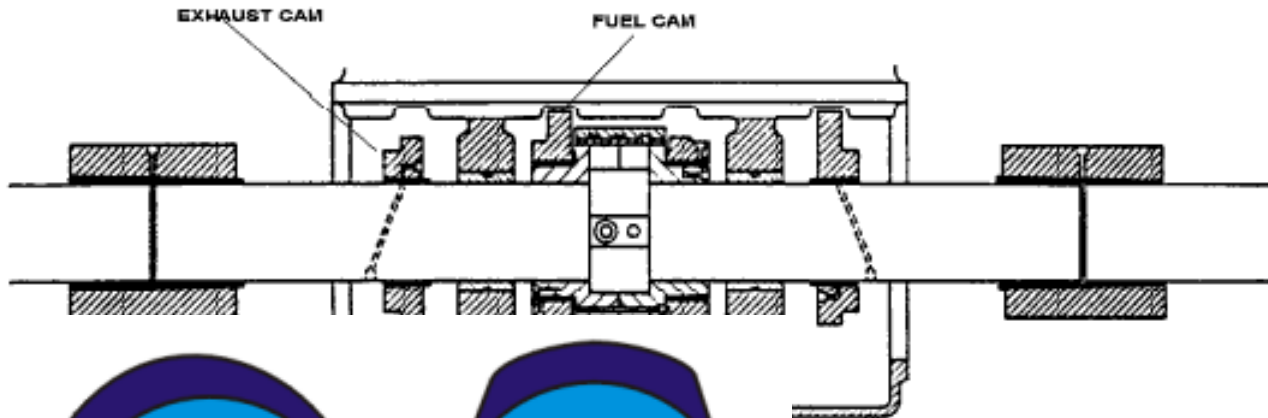
BRODSKI ENERGETSKI SUSTAVI

Sustav goriva, uputnog
zraka, podmazivanja...

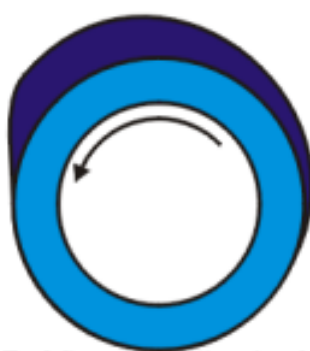
Bregasta

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Damping
Pin



B:

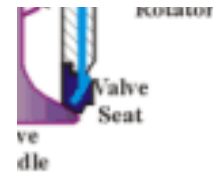


Fuel Cam for unidirectional medium speed engine. The cam has fast lift for injection and a slow return to avoid shock loading

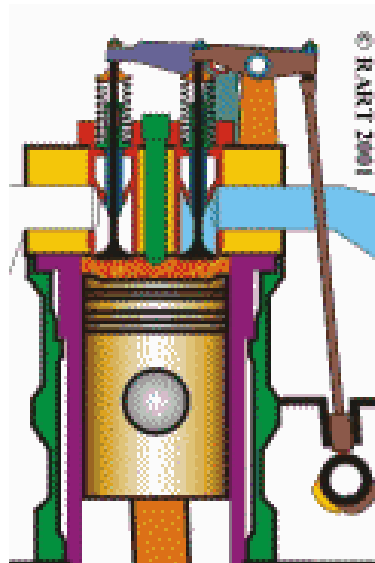


Inlet or exhaust valve cam for unidirectional medium speed engine. The cam has to open and close the valve smartly without shock loading

3 SERVOMOTOR



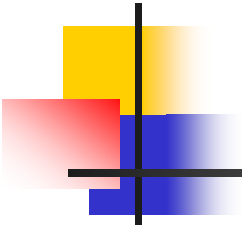
Usis/ispuh – 'klackalica'



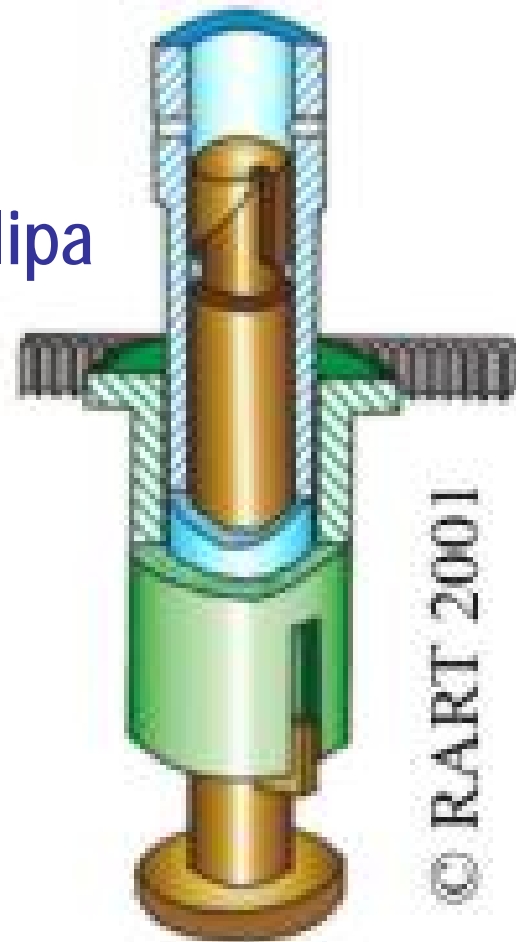
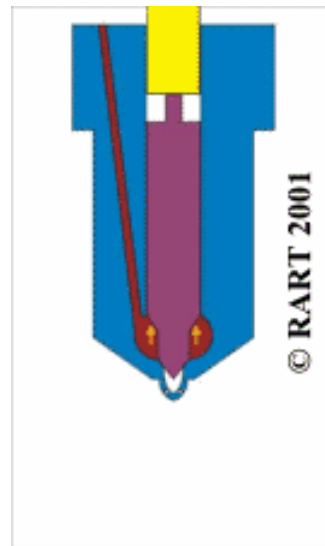
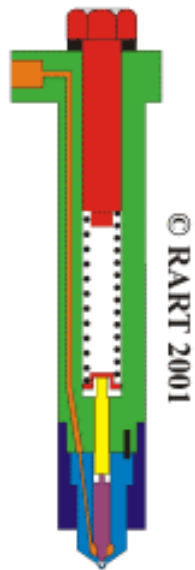


Ubrizgavanje goriva

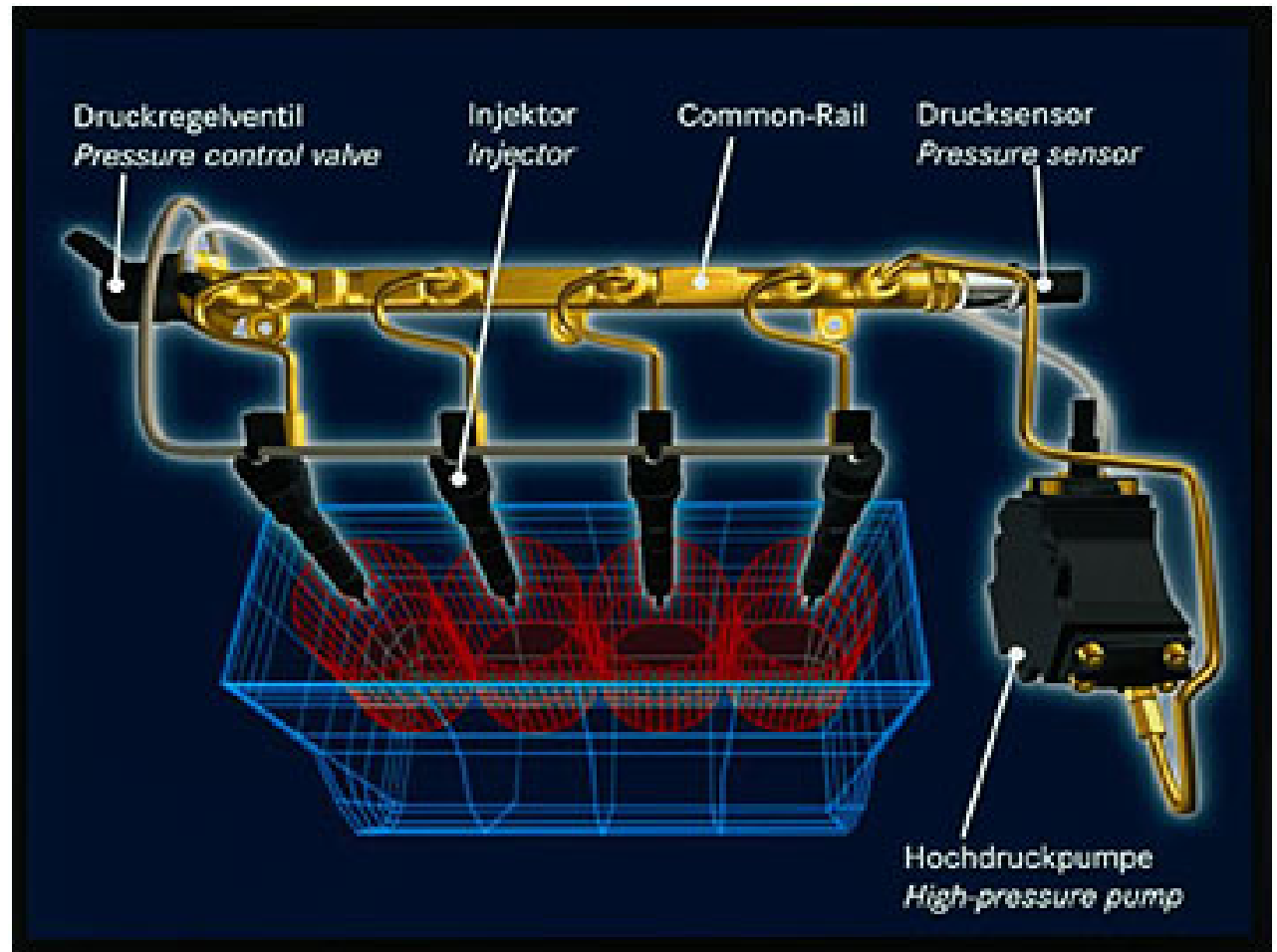
- visokotlačni sustav
- direktno ubrizgavanje
- vrtložne ili pretkomore
- klipne pumpe
 - sa zakretnim klipom, VIT
 - s preljevnim ventilom
- ventili (rasprskачi)
- "common rail" sustav



Regulacija dobave goriva: zakretanjem klipa



'Common rail'

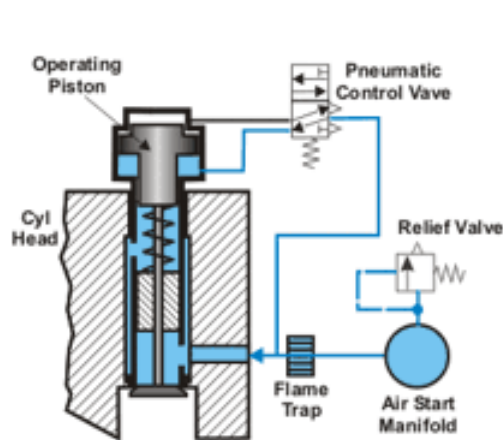




Podmazivanje

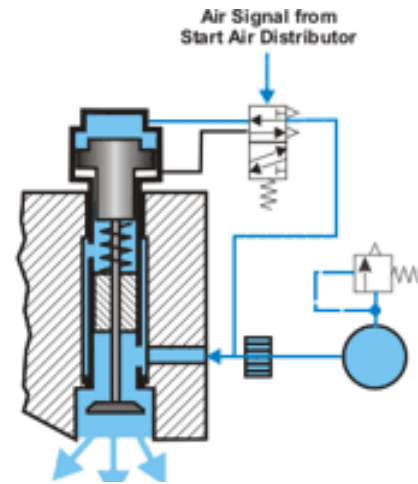
- manji motori privješene zupčaste p.
- veće snage – vijčane elektromotorne
- podmazivanje cilindara
 - “bućkanjem”, prskanjem
 - tlačno, lubrikatori
- eksplozija uljnih para! (indikator)

Otvaranje uputnog ventila



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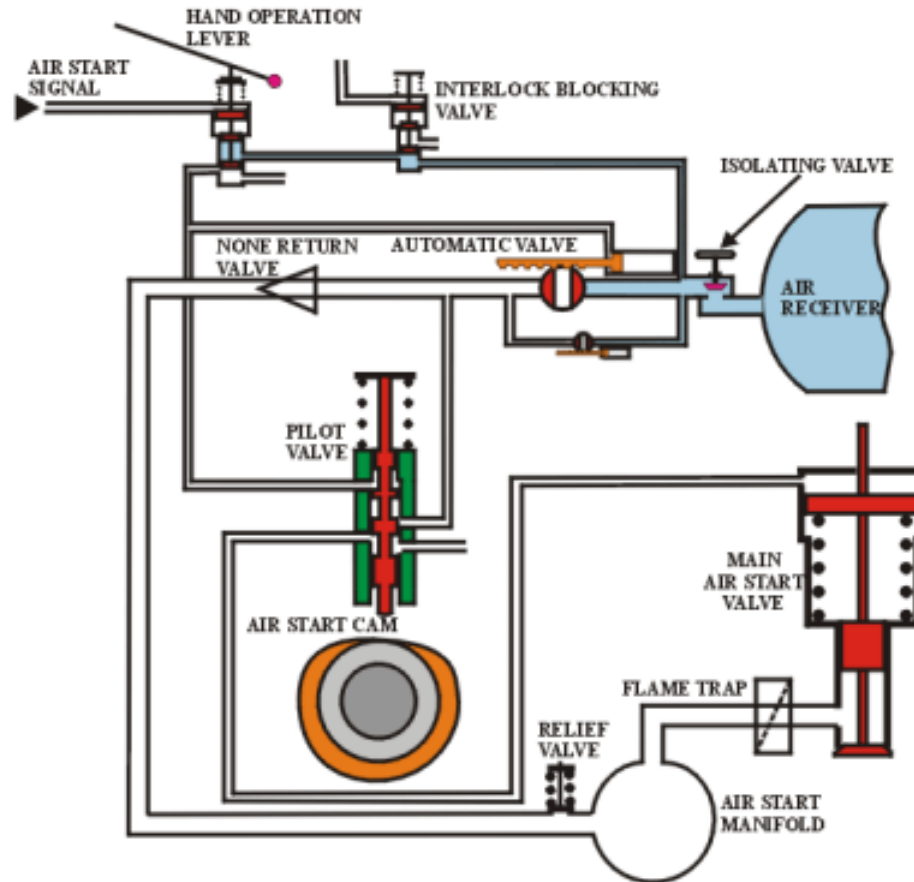
UPUTNI VENTIL
ZATVOREN



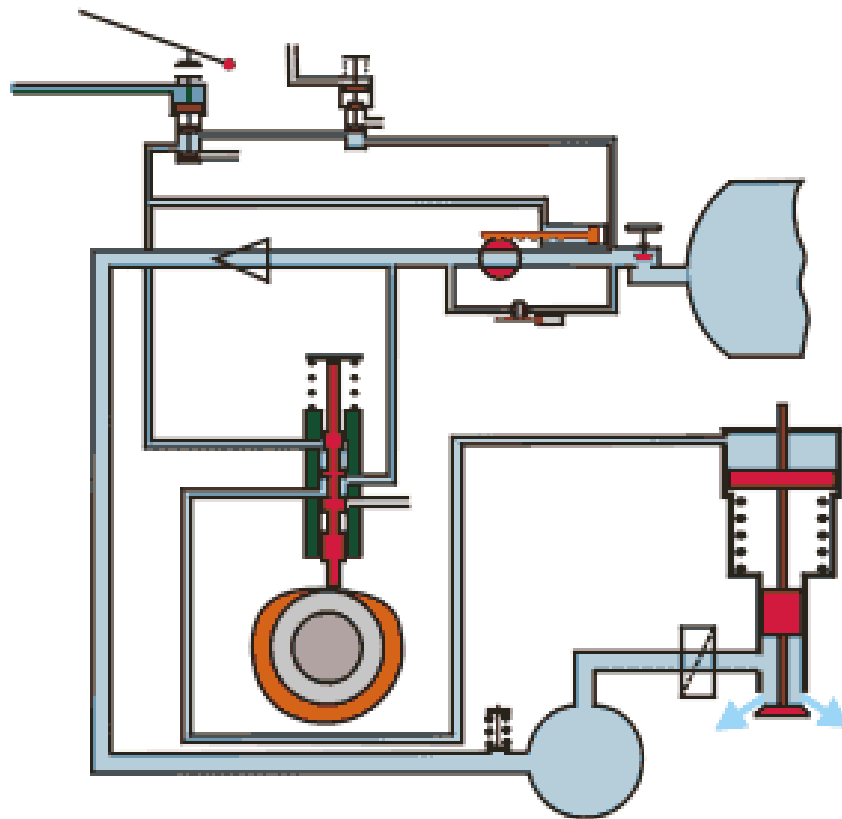
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UPUTNI VENTIL
OTVOREN

Uputni (startni) zrak

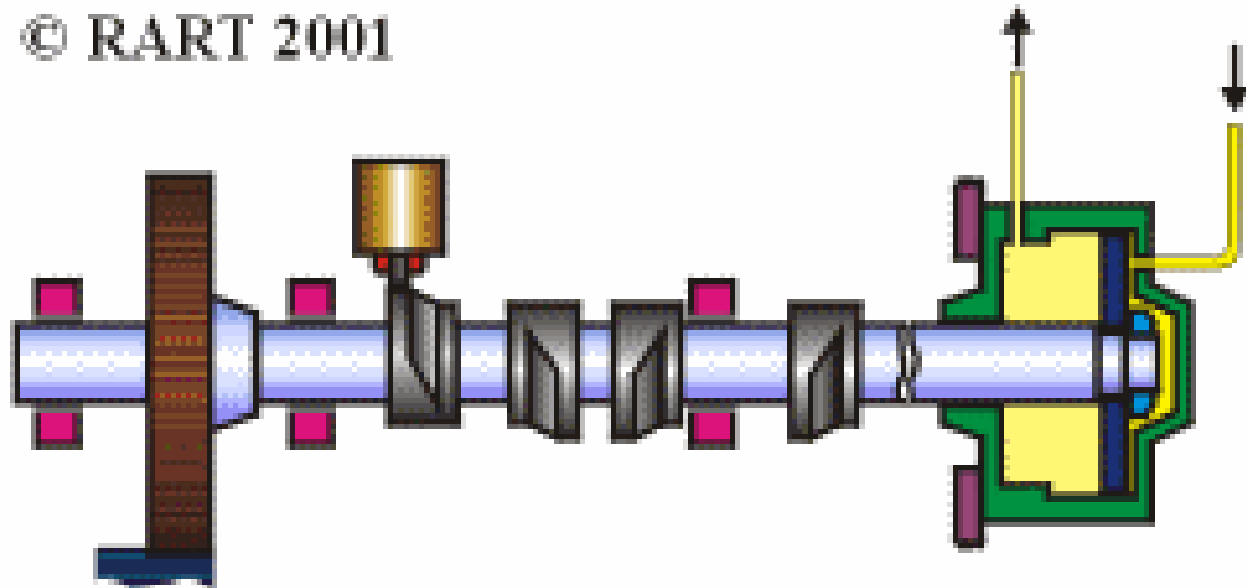


Upućivanje



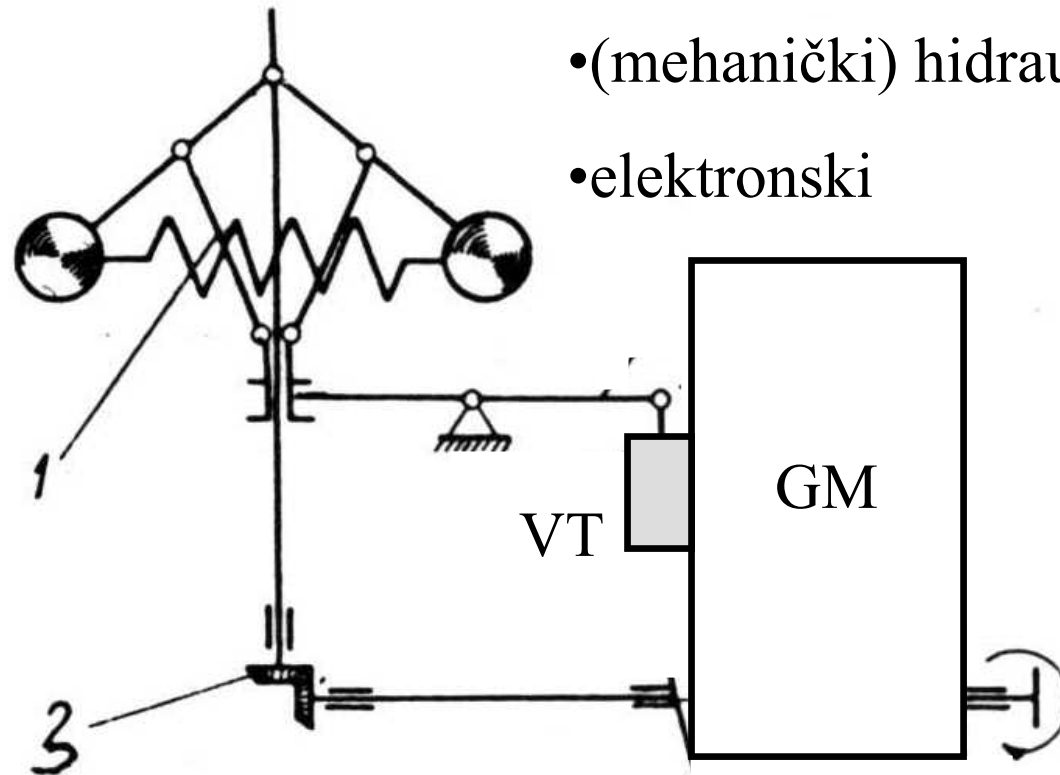
Prekretanje motora

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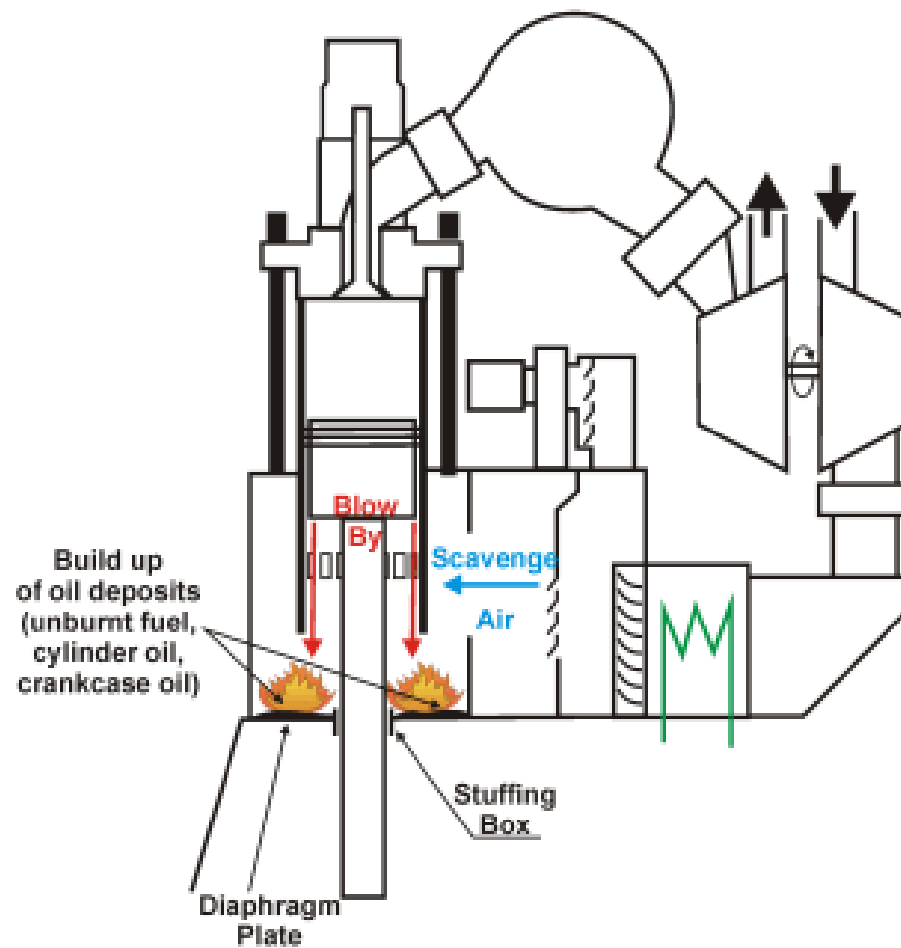


Regulator

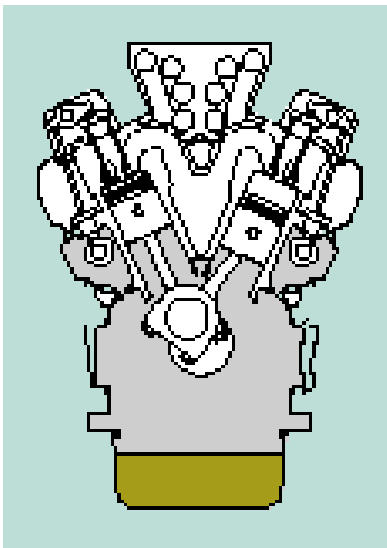
- regulator broja okretaja
- “Woodward”
- (mehanički) hidraulički
- elektronski



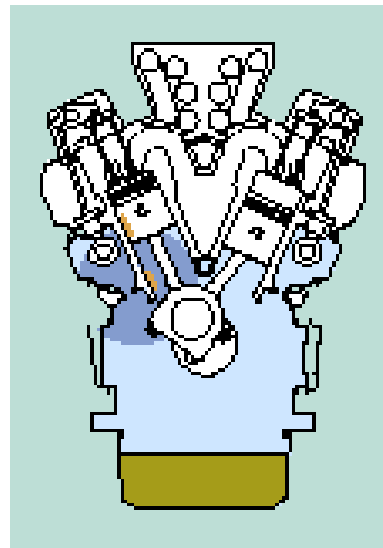
Požar u isp. prostoru



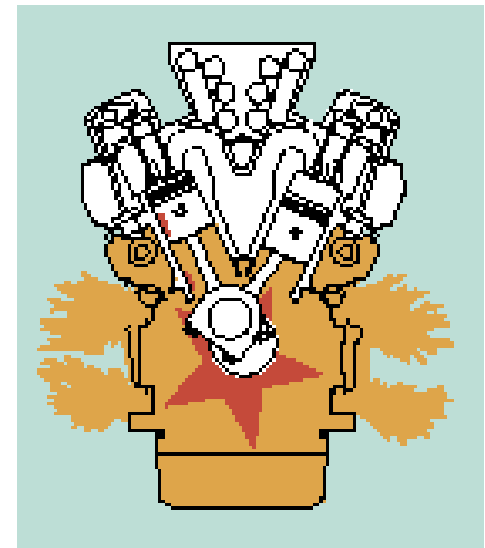
Uljne pare



An unprotected engine – no Oil Mist Detector

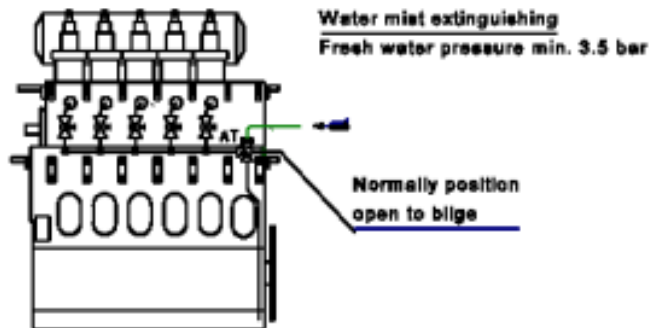
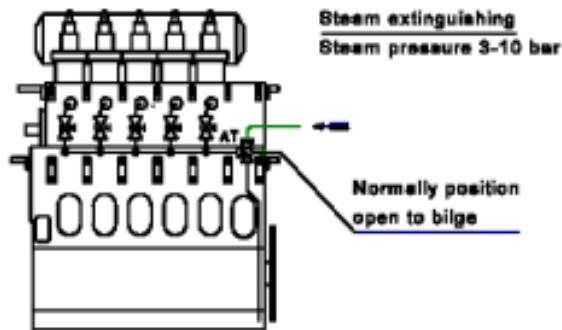


Build-up of oil mist due to 'hotspot' being undetected

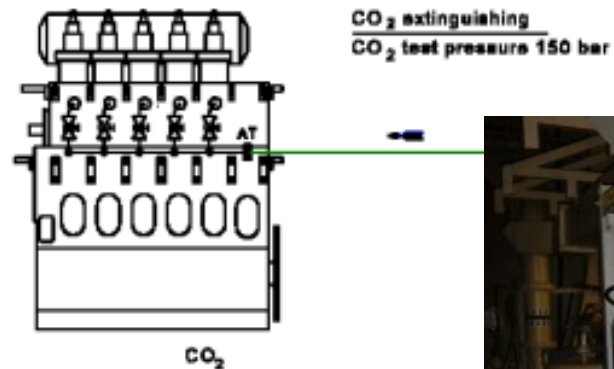


The possible result – ignition of oil mist causing a crankcase explosion

Gašenje



To prevent the fire from spreading to the next cylinder(s), the ball-valve of the neighbouring cylinder(s) should be opened in the event of fire in one cylinder



At least two bottles ought to be installed. In most cases, one bottle should be sufficient to extinguish fire in three cylinders, while two or more bottles would be required to extinguish fire in all cylinders

