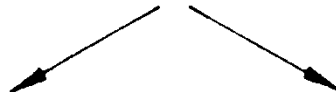


Operating force

Gas force

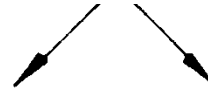
Mass force



Noise generation

Part w/o  
clearance

Part with  
clearance



Noise contribution

Direct  
combustion noise

Indirect  
combustion noise

Mechanical  
noise



Excitation cause

Alternating force

Impacts / Force steps