

Week 7: Lecture 1

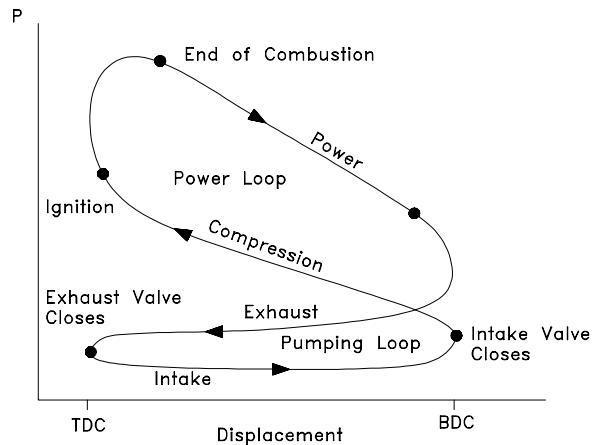
IC Engines

1. spark ignition:

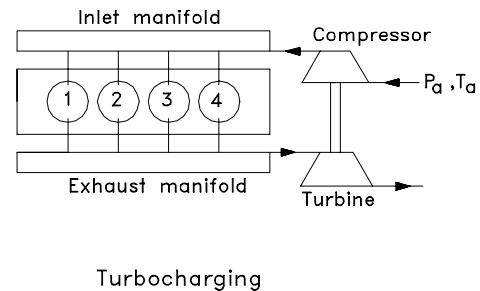
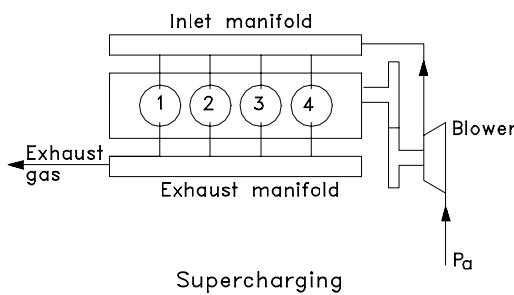
- a mixture of fuel and air is ignited by a spark plug
- applications requiring power to about 225 kW (300 HP)
- relatively light and low in cost

2. compression ignition engine:

- air is compressed to a high enough pressure and temperature that combustion occurs when the fuel is injected
- applications where fuel economy and relatively large amounts of power are required



Power Enhancements:



1. Supercharging:

- compressor is run directly from the engine shaft

2. Turbocharging:

- compressor is run by the exhaust gases
- more efficient than a supercharger