Suraj Sharma

- Roll No. – 1913910340 41
- Topic Name : Operations of Four Stroke Engine
- Mob. No. - 7985874900

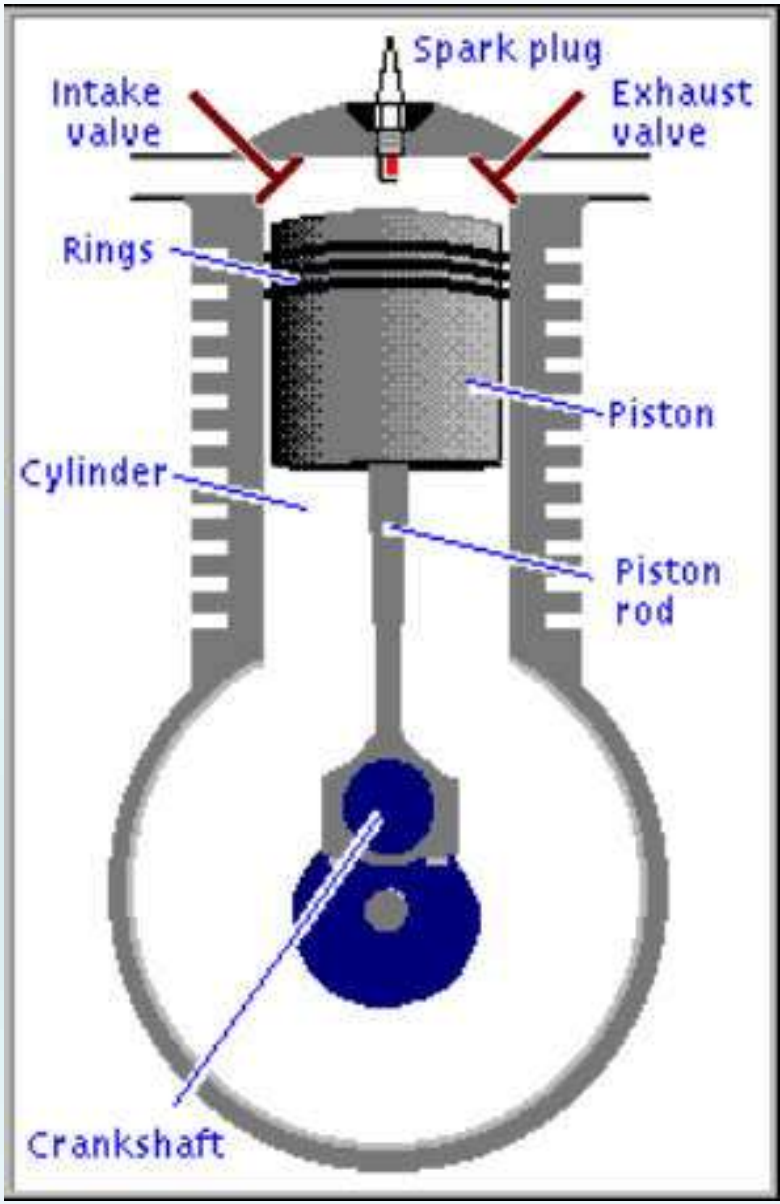
9.01 Four Stroke Cycle and Engine Types

MTPs:

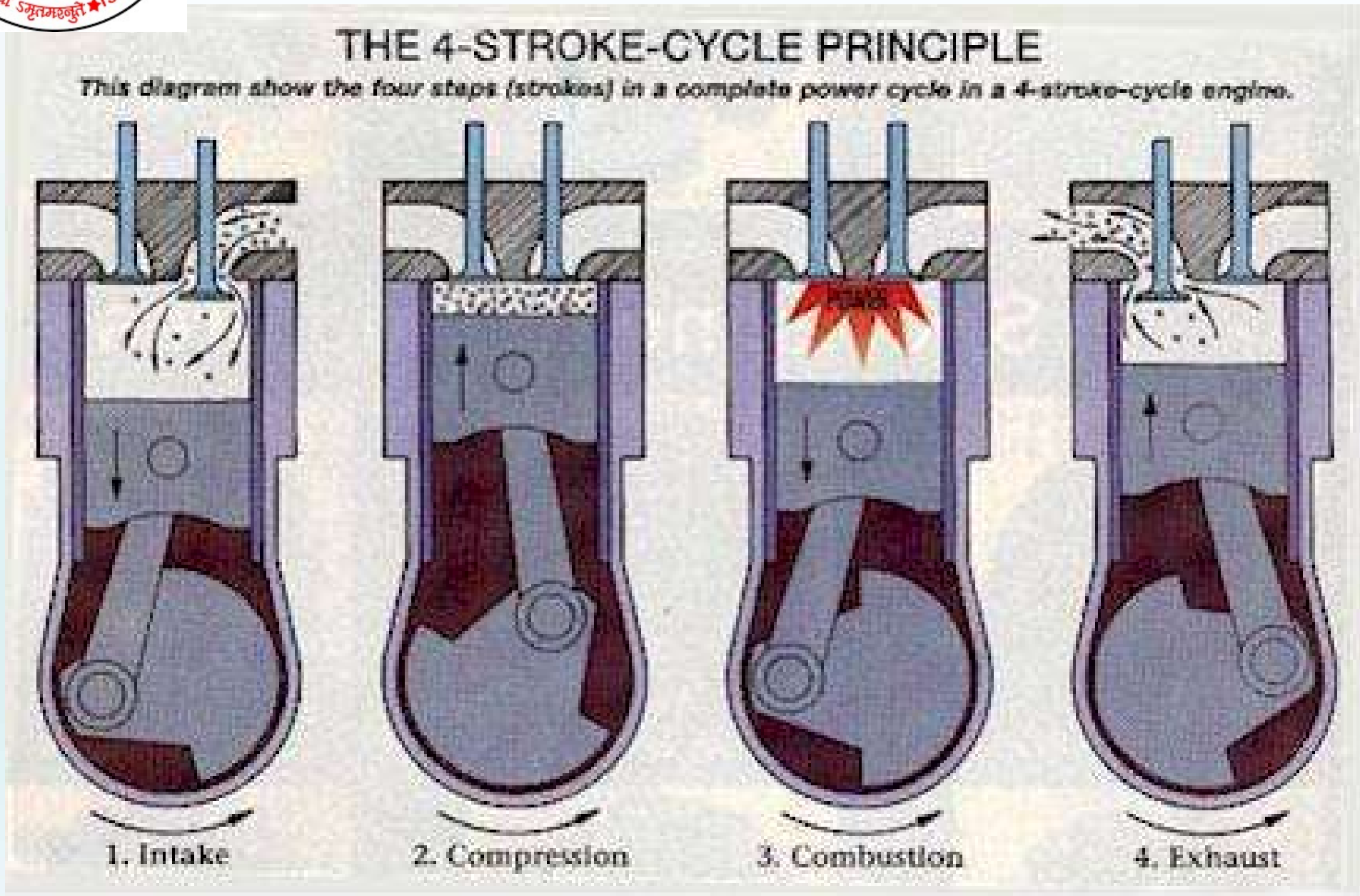
- Parts of the Cylinder
- 4 Stroke Cycle
- Types of Combustion Engines

Parts of the Cylinder

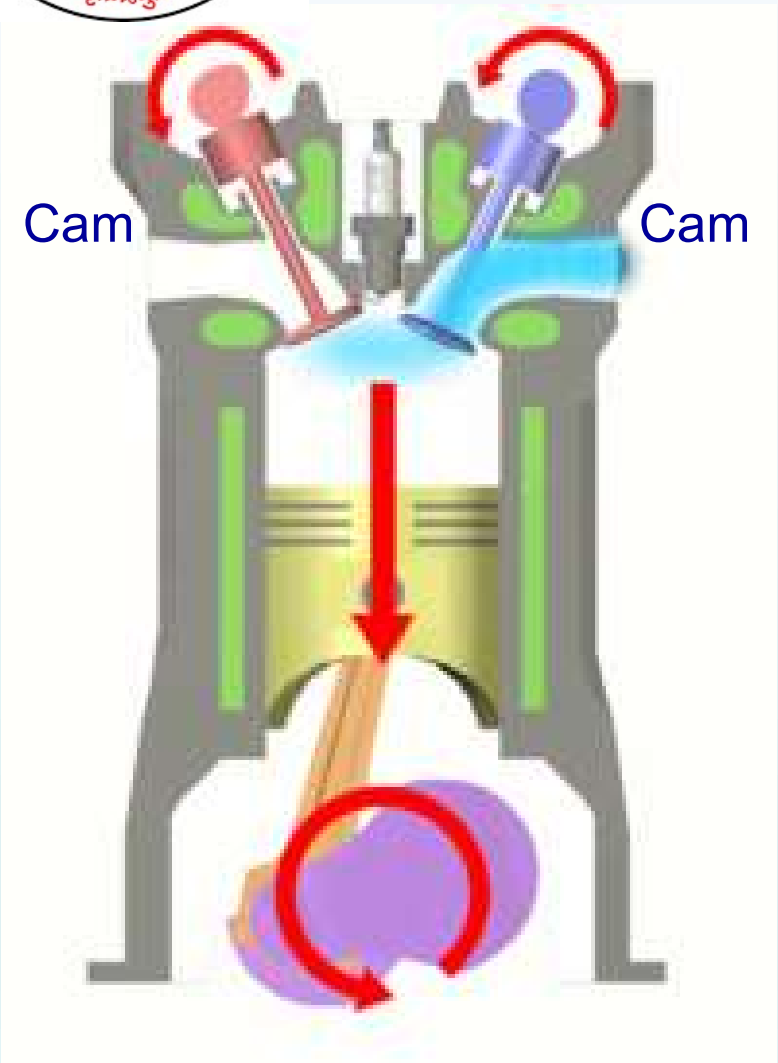
- Piston: moves up and down
- Bore: hole for piston
- Spark Plug(s): ignites fuel
- Valves: intake and exhaust
- Piston Rod: moves crankshaft
- Crank Shaft: rotates prop
- Sump: contains oil at bottom
- Cam: opens / closes valves



4 Stroke Cycle



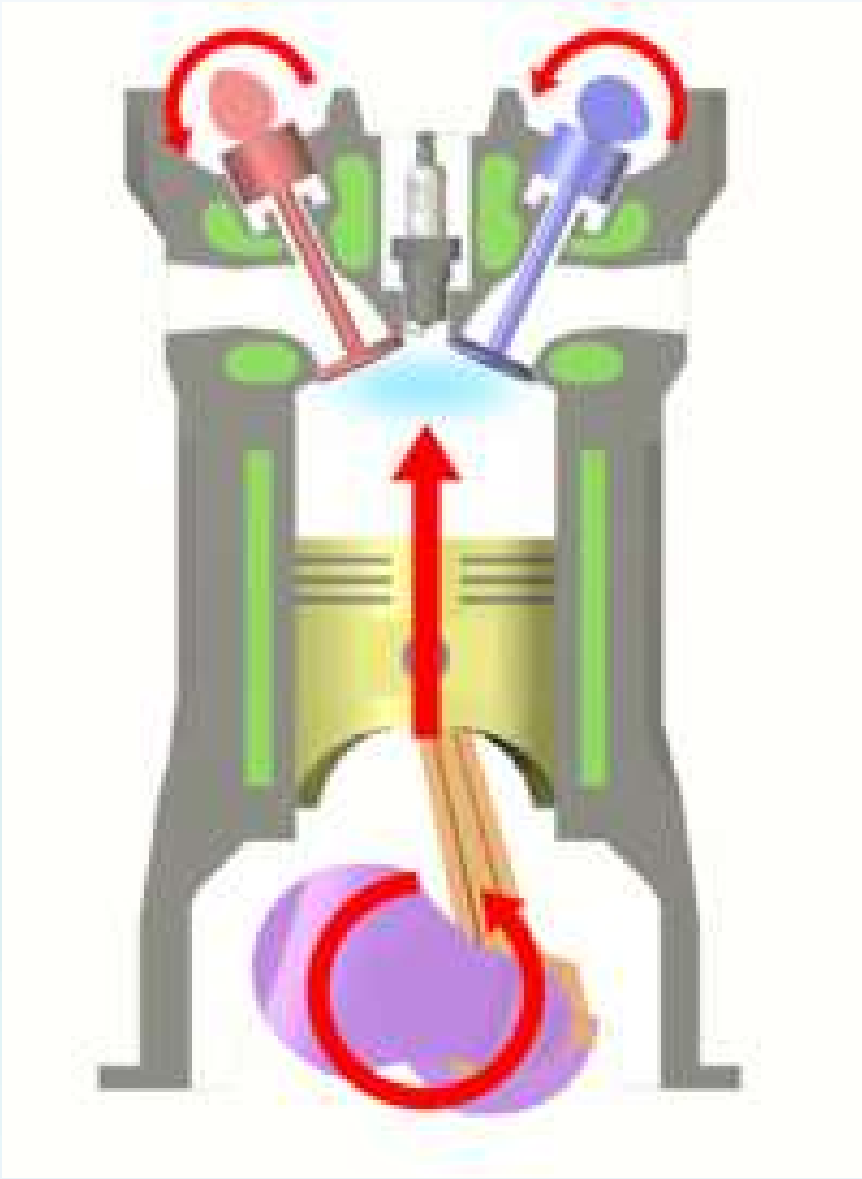
Induction (Suck)



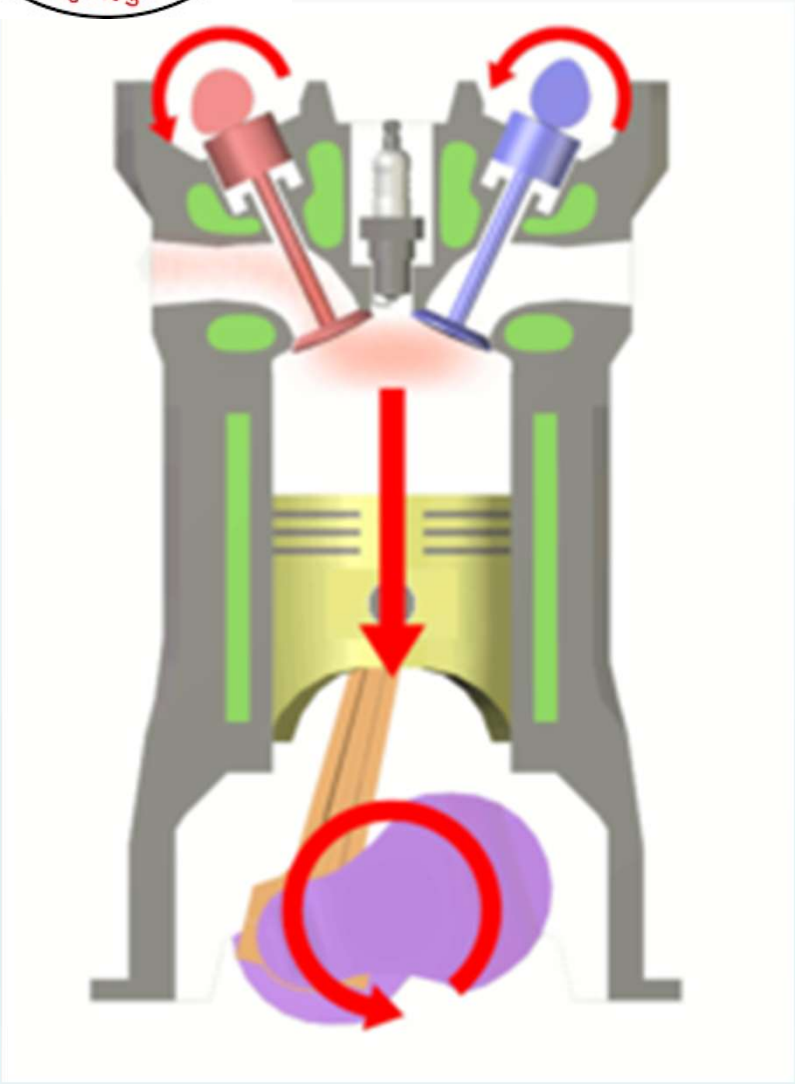
- Cam pushes down Intake Valve
- Piston forced down by moving Crankshaft
- Down-moving piston sucks air/fuel mixture through intake valve

Compression (Squeeze)

- Both valves closed
- Piston forced upwards by moving crankshaft
- Up-moving piston compresses air/fuel mixture



Power (Bang)



- Both valves closed
- Spark plug ignites fuel air mixture
- Piston forced down by expanding gasses
- Down-moving piston pushes connecting rod which rotates crankshaft

Exhaust (Blow)

- Cam pushes exhaust valve open
- Piston forced upwards by moving crankshaft
- Up-moving piston pushes exhaust gasses out