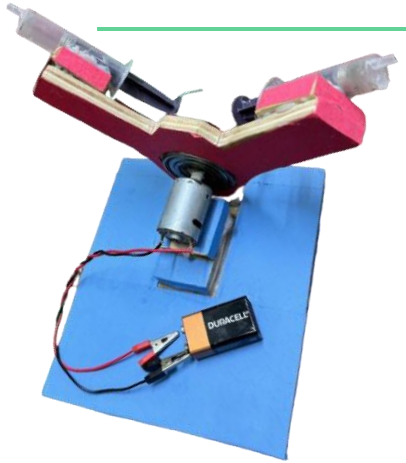
STUDY ON V-TYPE PISTON CYLINDER



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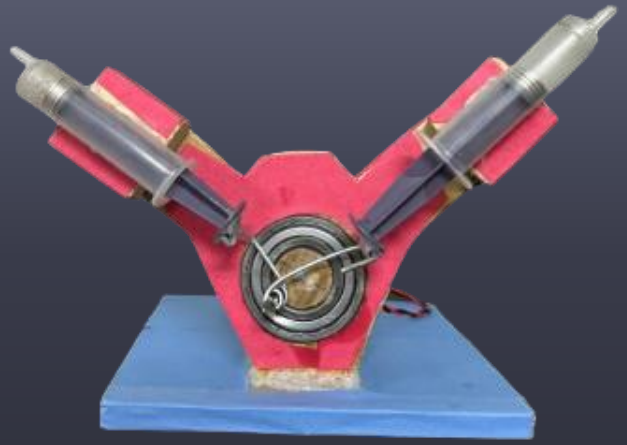
Introduction

- A V-Engine is a configuration for internal combustion energy
- The V-Type Engine has Revolutionized the automotive industry with its unique design and exceptional performance capabilities

V2 Piston Engine

- The V2 Piston Cylinder configuration refers to a setup where two cylinders are arranged in a V shape, typically at a 60°or 90°
- V2 Engines are popular in motocycles, some cars and various other applications due to their compact size and high torque
- The V2 Engine offers remarkable power and efficiency



Evolution

- The V-twin was firstly design by Gottlieb Daimler in 1889
- The first V-twin engined motorcycle was produced in 1902
- The V-2 engine has taken many forms since its original design in the 1930s including 6, 10 and 12 cylinders

Design & Configuration

- A two-Cylinder piston engine where the cylinders are arranged in a V Configuration and share a common crankshaft
- The specifics can vary depending on the manufacturer and the intended application of the engine

Work principle & Anatomy

- The V2 piston cylinder operates on the principle of internal combustion
- This motion is translated into rotational energy, powering the vehicle or machinery
- Each cylinder contains a piston connected to a crankshaft, converting linear motion into rotational energy
- It consists of Cylinders, Pistons, Crankshafts, Connecting Rod, Valves, Camshafts, Cylinder Head, Intake & Exhaust Manifolds, Oil pan and Engine Block

Materials Required:

Sl. No.	Materials	Dimension	Price
1.	Wooden plate		Nil
2.	Syringe x2	10ml	Rs. 24
3.	Neodymium Magnet	8pcs.	Rs. 400
4.	Bearing	53x17x7mm	Rs. 145
5.	Spoke	2pcs.	Rs. 20
6.	Screw/Nail Pin	1pcs.	Nil
7.	Dynamo Motor	12V	Rs. 150
8.	Hot Glue Gun stick	2 pcs.	Rs. 20
9.	Wire	15cm	Rs. 10
10.	Battery Cell	9V	Rs. 300

Tools Requirement:

- Drilling Machine
- Sawing Machine
- Mallet
- Rasp

Applications

- The V2 Engine find application in various vehicles and equipment, including;
  - Motorcycles
  - Small cars
  - Utility vehicles
  - Power equipment (e.g. generators)

Advantages

- Compact Design
- Balance
- High Performance
- Efficiency

Conclusion:

- The V-Type Engine stands as a testament to the ingenuity and innovation of automotive engineering
- With its blend of power, efficiency and versatility, it continues to drive progress in the automotive industry

THANK YOU