

Design And Fabrication Of Electromagnetic Engine

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Abstract: -- The fuel is the basic requirement for internal combustion engine. Now a days, the demand for fuel has increased so need of other energy has become necessary. The main concept of this project is the zero point fuel consumption. The magnetic force principle is the basic requirement to work for electromagnetic engine. The general property of magnet (i.e.) attraction and repulsion forces is converted into mechanical work. The magnetic driven engine derives its power from magnet power and constant magnetic energy is converted into mechanical energy. The useful output is rotating motions and the application is based on electromagnetic engine which varies from different field.

I. WORKING PRINCIPLE

This is based on attraction & repulsive force of the magnet. The working of the magnetic engine greatly resembles the working of a two-stroke engine. To start, let us begin from the situation when the piston is located in the lower position. The coil is connected through the battery, the copper coil is energized to produce the magnetic field. The piston, in the side of the large power Neodymium Iron Boron magnets, the piston moves up and down. The flywheel connected through the piston link. The copper coil energized the piston moves upward and the copper coil is de-energized the piston moves downward. With the help of a limit switch and control unit, the continuous process through the piston is move to (up and down) with also rotated the flywheel. The arrangement has shown in the figure no.3.10. Electromagnetic engines working are based on the principle of interaction between the magnetic field. A permanent magnet is fixed in the piston and iron material is connected to a copper coil. So that the iron material is converted into an electromagnet when the power supply is given to it. When the piston is located in the lower position, the coil is connected through the battery. The copper coil is energized to produce the magnetic field. When the copper coil is energized the piston moves upward and the copper coil is de-energized the piston moves downward, with the help of a relay and control unit. The continuous process through the piston is move to (up and down) with also rotated the flywheel.

ADVANTAGES

- Zero point fuel consumption
- Less pollution compared to other engines
- It reduces the global warming
- Maintenance cost is low
- Harmless when compared to other engine

DISADVANTAGE

- Less durability
- Initial cost is high
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- Flexibility is low, when compared to other engines

APPLICATION

- It can be installed in all two wheelers and light vehicles.

DIAGRAM FOR FABRICATION OF ELECTROMAGNETIC ENGINE

