

# MODIFICATION OF MAGNET OPERATED ENGINE

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**Abstract** – IC engine is measure and fundamental bit of an auto which wears down the glow essentialness made by a blend of fuel. Today advancement measure wears down the non-sustainable power sources just and fabricates the no of engine or vehicles on road moreover contributing the augmentations in the rate of fuel usage worldwide and inside couple of years the oil subsidiary a going to wiped out, we have move for another choice for normal IC engine .as a result of this immense use of IC engine sullyng is in like manner extends which is responsible for various prosperity related issue for us.

The rule purpose of this work is to consider the diverse research done in past to supplant the fuel working IC engine by the appealing controlled Engine. Alluring controlled Engine is totally tackle the power gave by battery and likewise saves the fuel and reduces fuel use rate and it doesn't produces any pollution or no dangerous gases are release in the atmosphere. Produces proficient power essentialness.

It manages the essential standard of alluring interest and stuns that same shaft of magnet shock each other and reverse post of magnet pull in each other.

**Keywords:** Magnetic Operated Engine

## 1.1 INTRODUCTION

IC Engine, outstanding amongst other advancements of mankind, is a champion among the most basic parts for the duration of our life today. It's most key application being in autos, prepares, and planes. Our lifestyle today can't exist without a way to deal with commutate.

IC engines make usage of fuel and diesel. The masses are in the rising example; this infers progressively the amount of individuals, dynamically the essential of autos to drive.

Reliably there are around 50 million autos being created wherever all through the world, this condition is to a great degree upsetting.

With this rising being utilized of oil based commodities, there develops a need to change to elective wellsprings of fuel, to drive our engines. Nevertheless, the test is to make machines which have essentially higher efficiencies than what we make use today. The most adaptable kind of imperativeness that is by and large used is control. Electric motors are supplanting existing IC engines rapidly. In any case, the limit of energy holds an inconvenience, as a

considerable measure of essentialness can't be secured. This asks for our machines to have higher efficiencies, eating up lesser imperativeness and making more yield. With this rising need of changing to elective forces, and elective wellsprings of essentialness, fascination shows an astonishing spot in the current circumstance. The progression the appealing stun barrel engine insinuates the structure where the chamber joined with an interminable magnet is being pushed by an electromagnet, and again being pulled in. The reacting development of the chamber is changed over into turning development by the partner post and torque.

## 1.2 PROBLEM DEFINATION

The present system the oil based good sources are fast depleting and their start are causes overall environmental issues. Disregarding the way that pollution is controlled in start engine NOx gas level is extended which prompts hurt in ozone layer and moreover by using diverse advancement like Exhaust Gas Recirculation (EGR) to addition of CO2 in condition a broad temperature help happens. Since the usage of non-sustainable power source rate is extended well ordered at the season of 2050 the nearness of non-sustainable power source diminishments and prompts fuel lack. From the graph we can derive that there is higher CO2 and NOx spread for Diesel and CNG create engines and lesser for Hybrid electric compose engine. Where proficiency required is higher for Hybrid electric other than CNG and Diesel engine.

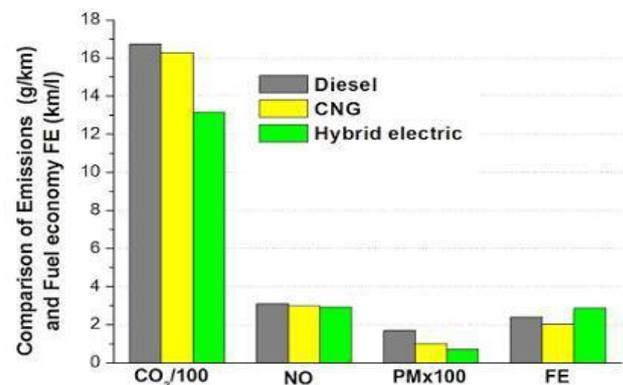


Fig:- Comparison of emission and fuel economy

### 1.2.1 Cost of operate

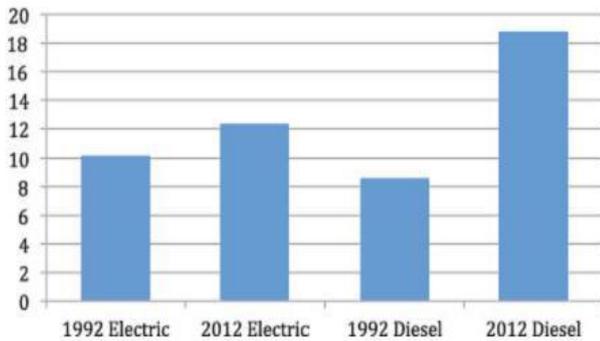


Fig:- Cost of operating Diesel engine and Electric engine.

From above graphical examinations the real issues are

1. To decrease contamination
2. To spare ordinary assets
3. To dodge exorbitant components

### 1.3 METHODOLOGY

1. Problem Definition
2. Necessity
3. Problem Statement
4. Process Planning and Study
5. Material choice
6. Design Calculation
7. Manufacturing
8. Implementation

### 1.4 SOLUTIONS

1. Solar worked motor
2. Load on motor can be fluctuated
3. Magnetic fueled motor
4. Steam fueled motor

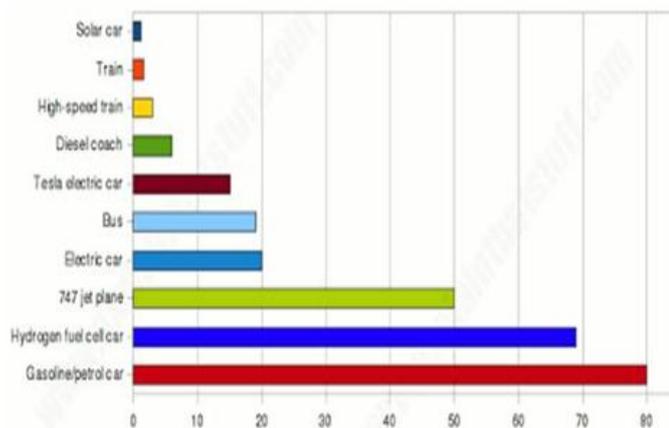


Fig:- Energy used (kWh) to carry one person 100 km

From this chart we get the sensible idea with respect to the measure of imperativeness used by diff parameters for same partition of 100 Km and get the relative data for each parameter From this we watched that electric vehicle or appealing vehicle has the perfect power usage By the courses of action open and relationship from the above graphs we wear down alluring filled engine i.e. Electric make engine, in view of following reasons

1. Very low working expense
2. Energy contribution for same yield contrast with other motor is ideal
3. Harmful gases discharge is low

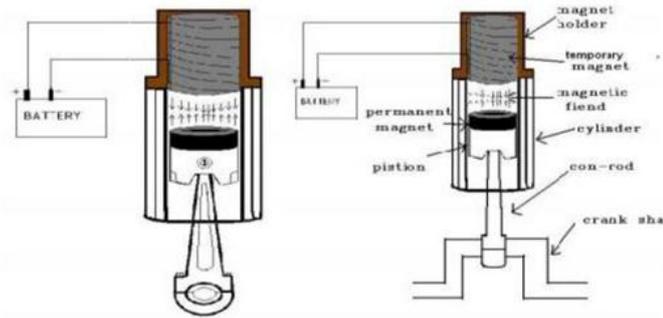
### 1.5 PRINCIPLE AND WORKING OF MAGNETIC POWERED ENGINE

#### 1.5.1 Principle:-

Appealing engine manages the rule of alluring stun between same posts of the two unmistakable magnets. Exactly when tent amount posts of two magnets communicate with each other they will repeal each other with equal and converse power. This ponder of abhorrence is used as a piece of this engine to make development. The Electromagnet which is put at the most noteworthy purpose of the assembly of the engine repels the enduring magnet put at the place of chamber in IC Engine such a way, to the point that the appealing force conveyed by the electromagnet spurns immutable magnet. Chamber i.e. enduring magnet is related with the torque shaft through interfacing post.

1.5.2 Working  
The working of the electromagnetic motor depends on the standard of attraction. A magnet has two shafts a north post and a south post. Attraction is a class of physical marvel that incorporates powers applied by magnets on different magnets. By rule of attraction, when like shafts of a magnet is united they repulse far from each other. At the point when not at all like posts are brought close to each other they pull in. This is same for the instance of an electromagnet and a changeless magnet as well. So the thought is to change the cylinder head and chamber head into magnets with the goal that power can be produced between them.

This working of the electromagnetic motor depends on fascination and awful power of the magnet. The motor significantly takes after the working of a two-stroke motor. To begin, let us start from the circumstance, when cylinder is situated in the lower position. The loop is associated through the battery, the copper curl is invigorated to create the attractive field the cylinder in side of the expansive power Neodymium Iron Boron magnets, the cylinder moved upper and lower the fly wheel associated through the cylinder connect the copper loop stimulated the cylinder move upward and copper loop is de-empowered the cylinder move to descending. With the assistance of hand-off and control unit. The consistent procedure through cylinder is move to (here and there) with likewise pivoted the fly wheel.



**Fig:- Magnetic Piston operated Engine**

Strategy has showed up in the figure Electromagnetic engines working rely upon the control of coordinated effort between the appealing field Permanent magnet is settled in the barrel and iron material is related with copper twist. With the objective that the iron material is changed over into electromagnet when the power supply is given to it. Exactly when barrel is arranged in the lower position, the twist is related through the battery. The copper twist is stimulated to convey the appealing field.

Right when the copper twist enabled the barrel move upward and copper circle is de-animated the chamber move to diving, with the help of exchange and control unit. The consistent method through chamber is move to (all over) with furthermore turned the fly wheel.

### 1.6 ADVANTAGES

1. Reducing contamination from one source, rather than the large number of vehicles out and about.
2. There is no compelling reason to fabricate a cooling framework, fuel tank, Ignition Systems or silencers.
3. The mechanical outline of the motor is straightforward
4. Low make and support costs and also simple upkeep.
5. Life time of the magnet is high, so it can keep running for a long stretch.
6. No combusting happens inside the motor. Which lessen the assessment of warmth and dangerous gases from the motor?
7. Reduces an unnatural weather change.

### 1.7 CONCLUSION

Since the petroleum product rate is lessening step by step we have portrayed a progressive motor which require not be independently fabricated, but rather existing motors can be effectively adjusted to work along these lines. The proposed motor is a basic and magnificent method to run the electric vehicle in a very effective way.

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