

Elimination of Leakages in Hand Primer

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Abstract - This work is intended to eliminate the leakages in the hand primer and to reduce the rework of hand The main aim of project is to fulfil the customer needs this is achieved by finding root cause of the problem statement and based on the type of root cause the inspection is to be proceed and based on the inspection the assembly of hand primer is studied and suitable solution is implemented to eliminate the leakages

Index terms – Hand primer, oil, Injection pressure, nozzle, washer, O-ring, pressure gauge

1 INTRODUCTION

In this work the effects of fuel injection pressure and fuel nozzle holes are experimentally studied on performance and emission characteristics of single cylinder light duty direct injection diesel engine.

An object of the invention described herein is to provide a fuel injector requiring fewer fabricating and assembly steps than heretofore possible and eliminating the need to seal the electrical fuel injector portions, including the coil bobbin assembly and electrical contacts, from the fuel passageways.

The above described object is achieved, disadvantages of prior approaches overcome, and other objects and advantages obtained by providing the electromagnetic fuel injectoDiesel engines are the primary source of power for the light, medium and heavy duty applications and as such there can be no replacement for it in agriculture and transportation sectors. The advantages of diesel engines are high fuel efficiency, reliability and durability. In present diesel engines, fuel injection systems have designed to obtain higher injection pressure. So, it is aimed to decrease the exhaust emissions by increasing efficiency of diesel engines. When fuel injection pressure is low, fuel particle diameters will enlarge and ignition delay period during the combustion will increase. This situation leads to inefficient combustion in the engine and causes the increase in NO, CO emissions. Engine performance will be decrease since combustion process goes to a bad condition. When injection pressure increased of fuel particle diameters will become small. Since formation of mixing of fuel to air becomes better during ignition period, engine performance will be

2. LITERATURE REVIEW

SurajkumarHamane,, et.al [1]The Fuel & Oil leakage testing improvement methodology project Setup shows that the performance of the company is increased to a better level as regards to enhancement in customers (both internal and external) satisfaction, adherence of delivery schedules, development of specific methods to redesign and reorganize a process with a view to reduce or eliminate errors, defects; development of more efficient, capable, reliable and consistent manufacturing process and more better overall process performance, creation of continuous improvement and “do it right the first time” mind set.

Surajkumar T, et.al [2]From all above research papers it is clear that there is use of SCADA system for leak detection but may create false alarms when no leakage. Also, Nigeria Niger delta region, use of optical eye, holding range & flowing range of internal diameters of pipes, genetic algorithm method where leak detection based on calibration & step by step elimination method used for leak detection. No accurate & 100% leak detection method available .To compensate false alarms when there is no leak in the pipeline, Reduce the response time, Increase the accuracy of leakage location idea of Semi-Automatic setup in such a way that the leakage in the engine is tested on Assembly line conveyor before engine goes for testing in testing department. Due to this work, Productivity, Quality, Delivery, Safety & Moral of operator will be increased. Reduce overall cost of engine considering rejection cost, Labour, transportation, Diesel, oil, Rework cost.100% leak detection can be carried out.

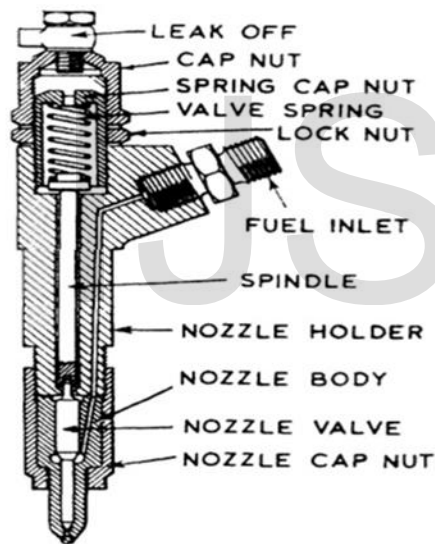
GowthamRajagopal, et.al [3] Recovery of oil from seas is a mandatory process. Even though there are a lot of recovering methods till date we should improve our methods in the path of an effective and efficient scenario. As our history reveals us the fact that most of the oil spill situations were ended with worse conditions just because of ineffective recovery methods. This maand we have to make use of the best recovery method which suits for the nature of the oil.

BhairaviDoshi, et.al [4] In general, when the booms and skimmers are ineffective in rough seas, dispersants composed of surfactants could be the best option for oil spill response. However,

for an Arctic oil spill, in-situ burning is preferable. In a cold ecosystem, prevention of an oil spill is environmentally and economically preferable to costly land remediation. The two major things of any sorbent affecting the sorption of oils are its physical characteristics and hydrophobic properties in terms of oil selectivity.

AkashMirajkar, et.al [5] Solar based disc type oil spill recovery system is easy, effective, economical and environ friendly system to tackle the global crisis of the oil spill. It has many advantages over present day technologies to clean spilled water. It can effectively clean the water surface recovering most of the oil back in usable form. The system can be automated and run on solar system making it greatly capable to survive on its own. Hence lots of human efforts are eliminated and hence oil spill recovery can get faster and efficient response can be obtained. The hazardous effects of oil spill are thus effectively reduced. Hence, solar based disc type oil spill recovery system promises to be an important tool against global crisis of oil spill.

3. EXPERIMENTAL WORK



Fuel injector assembly

Leak detection is a very important step in the production of vacuum. It is needed after the production of a vacuum vessel to check that the tightness specifications are fulfilled, during and after the assembly of these vessels to locate the possible leaks created during assembly, and finally during the installation of the vessel, to guarantee that the process can be carried out under the required pressure and gas composition conditions. Hence methods of ever-increasing sensitivities have been developed to follow the ever more stringent requirements of the industry. After a summary of the various methods used to locate leaks, the most widely used

leak detector will be presented with its different types. Some practical cases will then be reviewed in the context of accelerator operation. In the gasoline indirect fuel injector, gasoline is injected either into inlet port or inlet manifold where it is well mixed with the air before entering into the combustion chamber. In the diesel direct fuel injector, diesel is directly injected into the combustion chamber which is filled with the compressed air. The process involves injection of fuel either in the inlet port or inlet manifold through the injector. Fuel mixes with the air passing through the inlet port or inlet manifold and this mixture enters the combustion chamber.

4 CONCLUSION

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions. Authors are strongly encouraged not to call out multiple figures or tables in the conclusion—these should be referenced in the body of the paper.

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