A REVIEW ON PERFORMANCE AND EMISSIONS CHARACTERISTIC OF LPG FUELLED SI ENGINE

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ABSTRACT

The research on alternative fuels has become essential due to depletion of petroleum products and the rate at which earth atmosphere get polluted. Natural gas had long been introduced to the market where application of cleanliness is emphasized. Liquefied petroleum gas (LPG) is one of the members of natural gases and has been declared as the cleaner fuel. LPG is increasingly chosen as the preferred burning fuel for all types of vehicles due to its advantageous fuel properties. LPG has high octane number and can be used at higher compression ratio. The HC and CO found to be less for LPG as compared to conventional fuel for SI engine. The present study is a review of LPG as an alternative fuel for SI engine and its effect on performance and emissions. The factor like compression ratio and ignition timing that affect on efficiency and emission was considered for study. The most of work found in the literature devoted to predict the performance and emission characteristic of LPG fuelled engine at lower compression ratio and little study was found on NOx emission.

KEYWORDS: LPG, Spark Ignition Engines, Dual Fuel Engine, Combustion Characteristics, Performance Characteristics and Emissions