

## Reliability Analysis of a Fuel Supply System in Automobile Engine

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**Abstract :** The present paper deals with the analysis of a fuel supply system in an automobile engine of a four wheeler which is having both the option of fuel i.e. PETROL and CNG. Since CNG is cheaper than petrol so the priority is given to consume CNG as compared to petrol. An automatic switch is used to start petrol supply at the time of failure of CNG supply. Using regenerative point technique with Markov renewal process, the reliability characteristics which are useful to system designers are obtained.

**Keywords :** reliability, redundancy, repair time, transition, probability, regenerative points, markov renewal, process

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