

## ABSTRACT

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Injector is a device used for inject the fuel into the cylinders at the right time at the end of the compression stroke. While the fuel pump is a device used for transfer fuel to the injectors, and provide pressure on the injector. Formulation of the problem in this study is whether the lack of maintenance on the injector can result the damage of fuel injector, If viscosity can effect againts inject fuel damage and whether the fuel pump plunger worn out effect the fuel injector.

The method used by the author is the Fault Tree Analysis method to identify the problem of damage the fuel injector. The result is the risks of their damage fuel inject is the inhibition of the work of main engine and injector pressure drop. Discussion of the problem is to carry out the maintenance plan on the injectors, checking on fuel and maintenance on the fuel pump.

The conclusion of this study to prevent damage to the fuel injector is to perform routine maintenance on the injector conformed to rest hour and retrieval pmax hours each month to determine the condition of the injector, a check on the viscosity of fuel and routine maintenance on the fuel pump.

**Keywords :** *Injector*, damage, method *Fault Tree Analysis*.