

## ABSTRACT

**Nur Alif Arsendo Putra**, NIT. 51145384.T, 2018 "*Analysis of effect of timing of fuel absorption on diesel generator performance at MT.dewayani*", Diploma IV Program, Tehnika, Polytechnic of Semarang Sailing Scout, Advisors I: Dwi Prasetyo, MM, M.Mar.E and Pembimbing II: Capt. Agus Hadi Purwantomo, M.Mar

Setting the fuel ignition timing is one of the most important parts in operating a diesel generator, all in size when the timing setting is too early where the fuel ignition occurs when the piston position is not in the TMA position, which will cause a fast heat engine. Then if wrong in the timing of the direction of timing setting (backwards / reverse) it will occur less optimal combustion process and cause the machine is difficult to turn on and produce a solid white beranernah exhaust gas. In this problem the feeding is recommended for the installation or timing of fuel ignition timing understand the way and method of installation, can first be seen from the code on the injection pump if the injection pump coded L then the pump rotation to the left but if the code on the pump inscribed R then the pump rotation towards the right, the difference of arrangement also lags of kinds of injection pump where there is an injection pump which in tuning shifts the pump body and adad again which use timer gear which need to be done bolt fastening on timer and adjusted.

In this thesis the research method used is the method of fishbone research is one method that improves the quality or often called the method of completion of the cause of effect, and the method of fault tree analysis is a method in which identify the risk that makes the failure.

From the results of the research can be seen the factors that cause the setting of fuel ignition timing that operate is not maksiamal among other factors installation method, timing fuel pengabutan less expert in the installation and less mengikir about the method of installation and timing pengabutan setting fuel. So the need for supervision and understanding of the timing setting of fuel ignition that can make the ship is not hampered inhibition.

Keywords: timing, fuel ignition, injection.