# *ABSTRACT*

**Fanie Dwi Nur Cahyo,** 2017, NIT : 49124511.T "*Identifikasi penyebab dan pengaruh pengabutan injektor yang buruk terhadap pembakaran mesin induk di MV. Angela dengan metode Fishbone dan FTA (Fault Tree Analysis)",* skripsi Program Studies Teknika, Program Diploma IV, Merchant Marine Polytechnic Semarang, Supervisor I: Heri Sularno, MH, M.Mar.E, Supervisor II: Capt. Eko Murdiyanto, M.Pd, M.Mar

The injector is a device that spray fuel in the form of scattering-the scattering of very fine into an air that is being compressed (compressed) in the combustion chamber cylinder engine, which compressed air has a high enough temperature. Scattering (spraying) of fuel into the air at high temperature causes the fuel to evaporate and form a gas and then fuel into the gas and be burned. Fuel combustion will lead to high heat will have a great deal of pressure energy.

Given the importance of the performance of the injector that directly impact the combustion in the cylinder will affect the performance of diesel engine injectors are required to work optimally in spraying of fuel into the cylinder. In this case the author using fishbone and fault tree analysis to identify issues or factors that can result in poor performance in the injector spray of fuel.

From this analysis produced some of the factors affecting the performance of the injector in spraying of fuel into the engine cylinders. These factors are the quality and condition of fuel, spare parts used and the condition of injector used. Efforts to do that is to maintain the condition and quality of fuels, the use of original spare parts and avoid the use of spare parts reconditioning results and check the condition of the injector by taking diagram indicator on the main engine regularly.

**Key word**: injector, spraying, methods of fishbone, fault tree analysis