Intercooler is an important component in diesel motor function to regulate temperature balance and also increase the quality of air entering in combustion chamber, at intercooler happened process of heat transfer between cold temperature from seawater in and out at normal intercooler with hot temperature from sea water in and out at normal intercooler with hot temperature from air which decreases through the intercooler.

Research method that writer use in preparation of this thesis is descriptive qualitative research method. In this case the authors use the SWOT method as a data analysis technique to analyze the problems that exist in the intercooler, what factors that cause not normal intercooler and what efforts are made to overcome the factors of the problem by identifying various factors systematically against strengths, weaknesses, opportunities, and threats from the environment to formulate the strategy to be taken.

Based on the results of research that has been done by the writer on the ship can be concluded that the intercooler is not normally caused by several factors, namely 1) the side of the clogged water pipes caused by the amount of mud that participates with the sea water, some mud left behind in the pipe and from small clumps in the cooler, the mud clump will reduce the cooling water capacity that should be acceptable to the intercooler, it must be carried out by bribing or pushing out the clogging objects by using the cane through the pipe holes to the end of the other pipe. 2) To overcome these factors can be done by checking at the time the machine is dead and intercooler cleaning periodically a maximum of 3 months, and efforts that can be done to improve intercooler performance is to apply the system PMS (Planned Maintenance System) for the implementation of scheduled maintenance and repair of machinery.

Keywords: pipes, intercooler, SWOT