

ABSTRACT

Johan David Setiyo Putro, 2018, NIT: 50135029.T, "*Identification of Causes of Broken Piston Ring In Cylinder No. 7 In MT. Pungut*", Diploma IV Program, Semarang Polytechnic of Sciences, Advisor (I) F. Pambudi Widiatmaka, S.T., M.T. (II) Capt. Ali Imran Ritonga, M. M., M.Mar.

The main engine is a machine installation consisting of various support systems and functions to generate propulsion against the ship so that the ship can move forward or backward, the parent machine with type HITHACI B & W / 7L45 GCF has 7 cylinders, the problem on piston ring cylinder no. 7 can disrupt the ship operating system, because it needs improvement.

This research used qualitative descriptive method with SWOT for determine the priority problem. Problems taken are about the broken piston rings main engine that influential on the performance of the parent machine Then determined the formulation of the problem to determine what factors that cause the occurrence of fractures in the piston ring main engine, what is the impact of damage to the main engine piston rings, and what priorities are being done to prevent broken piston rings on the main engine.

From the results of the discussion obtained are the factors that cause damage to the piston ring, the temperature of the piston grouping with the exit temperature of the LO cooler 55-60 ° C. Treatment and checking is not done according to opening hours, broken piston rings on the pressure on the combustion chamber decreased from 60 bar to 45 bar, in the form is not perfect, The way is being done is the fermentation of routine retailers against cooling, piston ring replacement. broken with a new one. Checking pistons and piston rings is done according to working hours.

Keywords : Main engine, piston, piston ring