## **ABSTRACT**

**Didik Prayogo Utama**, 2018, NIT: 50134994.T, "Analysis Of The Cause Of The Broken Piston Ring Cylinder no. 6 in MV. Hijau Segar with SWOT method ", thesis Teknika Study Program, Diploma IV Program, Polytechnic of Semarang Sailing Scout, Advisor I: Drs. Darjono, M.Eng. Advisor II: Adi Oktavianto, S.T., MM.

The main engine is a machine installation consisting of various support systems and serves to generate the thrust of the ship so that the ship can move forward or backward, MAK M601C type mother machine has 6 cylinders, the problem on the piston ring cylinder No. 6 can disrupt the operating system ship, because it is necessary to make improvements in doing.

Considering the importance of the parent machine on the ship, it is necessary the right method to solve the problem of damage to the piston and piston ring using SWOT method (Strengths, Weakness, Opportunities, Treathment) is a pattern or target structure that support each other and complement toward the goal thorough. In preparation for planning, in order to select and set strategies and targets so that compiled programs and projects are effective and efficient

From the result of the discussion it can be concluded that the factors causing the piston ring break, the cylinder oil lubrication system is not optimal, the remaining combustion in the cylinder goes into the groove and the lack of maintenance from the parent machine. This affects the turbulence of compression pressure causing failure start, not maximal combustion and power from the parent machine decreased. The effort is done is to check the cylinder oil system, do the cleaning on the piston, piston groove, piston ring and do maintenance on schedule.

Keywords: Main Engine, SWOT method, Piston ring