

ABSTRACT

Excavator, which is classified as heavy equipment of machinery, has been used extensively in mining industry. It makes this equipment is being utilized for more than 19 hours a day to help mine production higher. It insists excavator to work over 90% of its availability. In this research, an observation to excavator EX 2500 - 6 (tag number 165) in KIDECO JAYA AGUNG site. Hydraulic Oil Overheating caused its operation fails. To observe and to find its solution has become and appoint it to be my final thesis.

Hydraulic Oil Overheating is a condition where temperature of oil hydraulic over than its maximum. It can cause damage to hydraulic system because quality of oil hydraulic decreases. First thing to do to repair excavator is by analyzing it. Oil cooler system in excavator is analyzed by measuring components attached on it. This measurement shows that failure in cooler system caused the overheating.

Analyzing is conducted by detaching cooler system, further observation shows that there is a clogging that was initiated by rips of hose and slug. The solution to this problem is by replacing broken hose and cooler device. This research suggest that Oil Cooler System maintenance has to be planned in order to minimize Hydraulic Oil Overheating.

Keywords : excavator, overheating, oil cooler