

ABSTRACT

PT Krakatau Jasa Logistik is a company engaged in logistics services and one of them is internal handling for *customers*. Vehicle load lugger 03 is *internal handling* in the company that is used for 24 hours. Therefore, vehicles are required to meet the needs of consumers in the form of carrying *raw materials* in consumer companies. At pt Krakatau Jasa Logistik company has implemented *preventive maintenance* and *corrective maintenance*, but the maintenance activities have not been optimal and cause high cost expenditures. Therefore, this study applies *reliability and risk centered maintenance* (RRCM) methods. The purpose in this maintenance is to know the proposed design of *maintenance*, maintenance interval time, and total maintenance costs. In determining critical components in vehicles, this study used *the Risk Priority Number* method and obtained four critical components, namely hose, tire, valve controller, and hydraulic jack. By using the RRCM method obtained *proposed maintenance task* and total maintenance costs. Based on data collection and processing, provisions are obtained 5 *proposed maintenance tasks* with 2 (two) *scheduled on condition task* and 3 (three) *scheduled discard task*. For *scheduled on condition task* on the controller valve component is carried out a scale check for 56 weeks and a scale check on the hose component for 3 weeks. For *scheduled discard task* on tire change components are done once every 2 weeks, hose component changes as much as once every 10 weeks, and hydraulic jack components as much as once every 25 weeks. The total cost of maintenance of the proposal was obtained at Rp206,024,342 has a difference of Rp60,857,470 from the value of *the company's* existing maintenance costs. A comparison of the total existing maintenance costs and the proposal is obtained that the company can save maintenance costs by 23%.

Keywords — Maintenance, Reliability and Risk Centered Maintenance, Proposed Maintenance Task, Maintenance Cost