Approximately 24,354 units (20%) of Indonesian fishing vessels were 5 GT – 10 GT size, majority using Stationary diesel engine outboard type as prime mover. Stationary diesel engine was used to stir propellers through a porous. Stationary diesel engine should be leaned approximately 5°-40° to make propellers blade positioned under water, those conditions resulting in an imperfect lubricating system. In order to solve lubricating problems, modification Stationary diesel engine lubricating system is required. But scheduling problems vary widely in terms of their optimization criteria.

The objective of this study is to determine the number and time interval of maintenance in two overhaul ranges, optimizing fishing vessel revenue and determining reliability index for inboard and outboard Stationary diesel engine types. Using fishing vessel operational data from January 2006 until July 2008.

Result shows that the outboard modification vessel type has the highest reliability index, followed by inboard type and outboard unmodified type. After optimizing average revenue for two-year overhaul maintenance intervals, there was a significant increase.