ABSTRACT

MODIFICATION OF CIRCLE COOLING SYSTEM BY ADDING (OIL COOLER) WITH VARIATIONS OF OIL PUMP ON OIL VISCOSITY ON OIL CYLINDER MOTORCYCLE MOTORCYCLE

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This study aims to accelerate the process of optimizing engine cooling with an oil cooler on a motorcycle to find out the oil viscosity especially for riders with long distances in a short time and motorists who like to ride like to use high RPM and can maintain friction between components because oil viscosity does not change dramatically.

In a motorcycle engine there is oil that functions as a lubricant that lubricates all the components that rub against each other, the general public thinks that the main function of oil is only as a lubricant even though at times it is important that oil functions as a rust protector, cleaner, and overall coolant which makes the engine work optimally and makes friction between components smoother.

With the addition of an oil cooler it is proven to reduce oil pressure. This can be seen on the conventional oil pump oil temprature from an electric oil pump lower than an engine without an oil cooler, the lowest temperature value is found in the addition of a mechanical pump oil cooler which reaches the value of RPM 2000 41.83ºC, RPM 4000 48.23ºC, RPM 6000 62 .7ºC.

Keywords; Modification of the cooling system, oil viscosity