

ABSTRAK

Pesawat Cessna 172N mempunyai mesin avco lycoming. Pada mesin avco lycoming terdapat *oil pressure* sistem. *Oil pressure* terdapat garis merah bawah pada 25 psi menunjukkan oli minimum tekanan diizinkan dalam penerbangan. Busur hijau antara 60 hingga 85 psi menggambarkan kisaran tekanan oli operasi yang diinginkan. Merah garis pada 100 psi menunjukkan tekanan oli maksimum yang diizinkan pada indikator. Pelumasan pada mesin avco lycoming menggunakan pelumasan sistem basah (*wet sump*). Penelitian ini bertujuan untuk mengetahui penyebab terjadinya *low oil pressure*, upaya perbaikan *low oil pressure*, upaya pencegahan *low oil pressure*. Untuk menangani kejadian *oil pressure hose* bocor yang mengakibatkan tekanan oli rendah, yang harus dilakukan adalah troubleshooting dari *low oil supply*, *low viscosity oil*, *oil pressure relief valve*, *oil pump*, *oil filter*, *pressure or suction line*. Berdasarkan analisis penyebab terjadinya *low oil pressure* mesin avco lycoming pesawat Cessna 172N adalah kebocoran *oil pressure hose*, dengan bocornya *oil pressure hose* dilakukan pergantian komponen *oil pressure hose* tersebut, melakukan pemeriksaan (*inspection*) dan pengetesan (*engine test*). Upaya pencegahan terjadinya *low oil pressure* mesin avco lycoming adalah memastikan pasokan oli cukup yaitu 6 quarts, viskositas baik suhu tinggi maupun rendah, katup pelepas tekanan oli dapat mengatur tekanan, pompa oli dapat memompa dan mengalirkan oli, filter oli dapat menyaring kotoran dan jalur tekanan atau hisap seperti *oil pressure hose* tidak bocor.

Kata kunci: Cessna 172, tekanan oli, mesin, *troubleshooting*



ABSTRACT

The Cessna 172N has an Avco Lycoming engine. The Avco Lycoming engine there is an oil pressure system. Oil pressure has a red bottom line at 25 psi indicating the minimum oil pressure allowed in flight. The green arc between 60 and 85 psi represents the desired operating oil pressure range. The red line at 100 psi indicates the maximum allowable oil pressure on the indicator. Lubrication on avco lycoming engine uses a wet sump lubrication system (wet sump). This study aims to determine the causes of low oil pressure, efforts to improve low oil pressure, efforts to prevent low oil pressure. To deal with the occurrence of a leaking oil pressure hose that results in low oil pressure, what must be done is troubleshooting of low oil supply, low viscosity oil, oil pressure relief valve, oil pump, oil filter, pressure or suction line. Based on the analysis of the cause of the low oil pressure of the Avco Lycoming engine of the Cessna 172N aircraft, the leak of the oil pressure hose, with the leak of the oil pressure hose, the oil pressure hose component was replaced, inspected and tested (engine test). Efforts to prevent the occurrence of low oil pressure on the Avco Lycoming engine are to ensure that there is sufficient oil supply, namely 6 quarts, the viscosity of both high and low temperatures, the oil pressure relief valve can regulate the pressure, the oil pump can pump and drain the oil, the oil filter can filter dirt and pressure lines or suction like oil pressure hose does not leak.

Keywords: *Cessna 172, Oil pressure, engine, troubleshooting*

