



SAIB: CE-11-37
Date: May 31, 2011

SUBJ: Engine Oil: Oil Filter Interference

This is information only. Recommendations aren't mandatory.

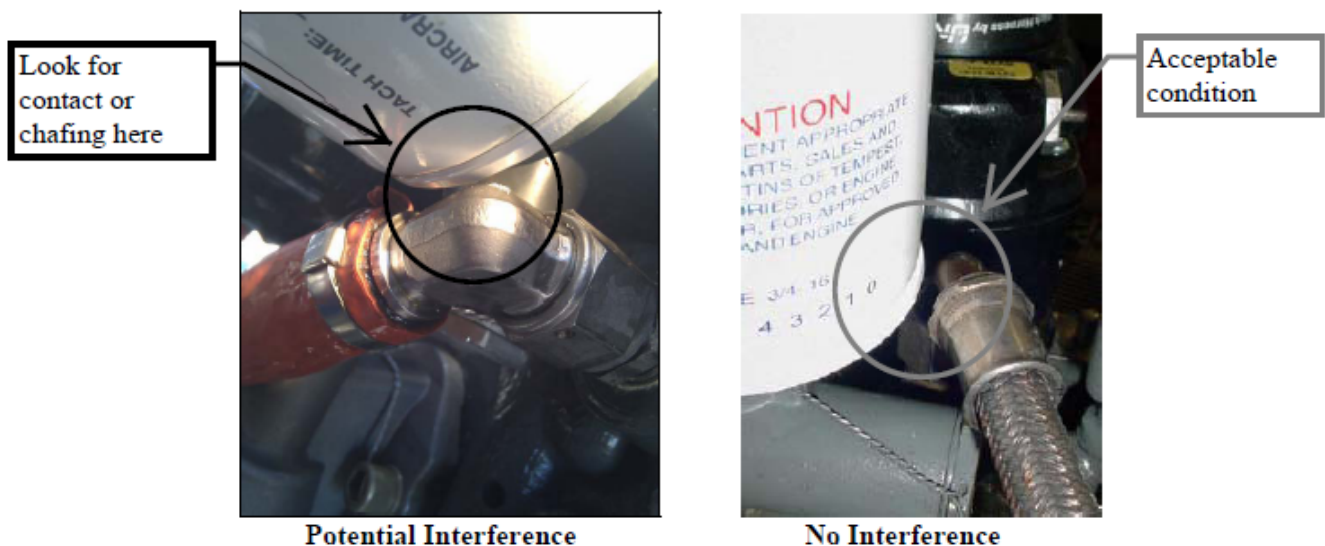
Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators and maintenance personnel of an airworthiness concern for **Piper PA-44-180 with Lycoming engine models O-360-A1H6, LO-360-A1H6 and Cessna 172R and S with Lycoming engine model IO-360-L2A installed**, other engines and aircraft models may also be affected.

At this time, this airworthiness concern has not been determined to be an unsafe condition that would warrant AD action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

Two Malfunction or Defect reports were filed indicating interference between the oil cooler hose fittings on the pressure outlet to the oil cooler and the rolled metal lip on the oil filter. Interference during installation of the oil filter could lead to an improperly installed oil filter. Such interference could result in loss of oil, loss of oil pressure and other related problems. This interference is not related to any one brand of filter. Interference could result from using after market or PMA components with features or dimensions that differ from the OEM components as shown in the LH photo below. The interference could also be the result of a combination of any oil filter and oil cooler hose assembly fittings and how they are oriented when installed. See pictures below of two different installations – one with the larger, forged hose end fitting and potential interference; the other with the smaller, tube type hose end fitting with no interference.



Recommendations

The FAA recommends that owners, operators and maintenance personnel do the following on these aircraft and engines at the next opportunity, but not later than the next oil change:

- Check to see if interference exists or could exist between the oil filter housing and the oil cooler hose assembly.
- If interference is found, reposition the oil cooler hose assembly in accordance with manufacturer's data by qualified maintenance personnel to ensure clearance is present and no interference exists prior to further flight. Lacking any manufacturer's clearance data, the FAA recommends that a minimum of 0.125" clearance exist between an installed oil filter and the closest feature of the oil cooler hose or related oil cooler hose fittings.
- Correct all unsatisfactory conditions found during inspection prior to further flight.
- File a Malfunction or Defect Report or Service Difficulty Report (SDR). The SDR system is available at <http://av-info.faa.gov/sdrx/>.

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