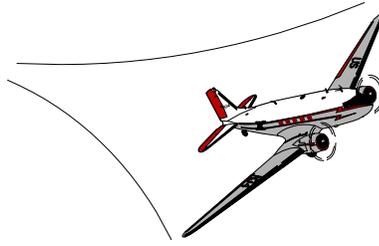


SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

CE-04-91
September 24, 2004

www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to advise you, owners and operators of **Piper PA-18 Series airplanes**, of a possible landing gear interference problem with Parts Manufacturer Approval (PMA) parts installed.

Background

We have received reports of evidence of the landing gear rear drag strut coming into contact with the rear lift strut bolt. The reports indicate that the problem may exist when Piper original parts and/or PMA'd parts from different manufacturers are intermixed. No evidence has been noted when original Piper parts are used exclusively.

The length specification of the PMA'd rear lift strut bolt is 0.984 - 1.031 inches. The OEM bolt specification is 0.960 - 0.990 inches. The extra bolt length has created interference with the rear drag strut during high gear deflections based upon field reports. The PMA'd bolt head is marked with an "X" or the part number "U-13241".

The PMA'd hydrosorb has approximately 0.500-inch additional travel over the Piper original part. This may also lead to interference with rear drag strut. The additional travel allows for a 14.25 inches maximum axle deflection without the bungees installed. The PMA'd hydrosorb is identified as part number U487-588-1.

Recommendation

We recommend that you review maintenance records to verify if PMA landing gear parts have been installed. If PMA parts have been installed, you should conduct a visual inspection of the rear drag strut for evidence of contact with the rear lift strut bolt. Evidence would include scraping or gouging marks or imprints of the bolt on the rear drag strut. If damage is found, a properly certificated mechanic should replace any damage parts and check for interference after replacement is complete.

We also recommend that maintenance personnel conduct a visual inspection of the affected area at each 100-hour and/or annual inspection interval. Inspection should include a check for distortion or damage of the lower rear lift strut attach fuselage fitting if evidence of interference is detected.

To check for interference of landing gear components, remove landing gear bungees and swing the landing gear through its full range of travel. Verify that landing gear components do not interfere with structure or each other. Reinstall bungees and check gear for proper operation. This operation is complex and should be accomplished only by a properly certificated mechanic or repair facility, as special tooling is required to remove and install the bungees.

We do not recommend any modification of a PMA'd part to address interference problems. The lower lift strut bolt may be reversed in some installations to gain additional clearance between the bolt and the landing gear.

For Further Information Contact

Barry Ballenger, Aerospace Engineer, FAA, Continued Operational Safety Branch (ACE-113), Small Airplane Directorate, 901 Locust Street, Room 301, Kansas City, Missouri, 64106; phone: (816) 329-4152; fax: (816) 329-4090; email: barry.ballenger@faa.gov