

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-09-16 **Date:** March 3, 2009

SUBJ: Landing Gear: Main Landing Gear Torque Tube

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) reminds owners and operators of the Cessna twin engine aircraft listed below of the importance of carefully inspecting the main landing gear (MLG) torque tubes per the applicable structural inspection document (SID) and making sure the landing gear are properly rigged.

Affected Cessna Aircraft Company Models: 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R, 320E, 320F, 335, 340, 340A, 401, 401A, 401B, 402, 402A, 402B, 411, 411A, 414, 421, 421A, 421B.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

Background

Recently the FAA learned of an incident involving a Cessna 401 airplane. The Cessna's right MLG collapsed on rollout following an otherwise uneventful flight. Although it was unrelated to the gear collapse, subsequent investigation revealed a fatigue crack in the MLG torque tube. Such fatigue cracks could cause failure of the torque tube and result in failure of the gear to retract.

The gear collapse was thought to be caused by a mis-rigged downlock switch. Proper landing gear rigging is critical for safe operation of the landing gear.

The August 2006 issue of AC43-16A has some very good pictures of a cracked 5045010-19 torque tube removed from a Cessna 414 with the following caption "The L/H main gear bell crank assembly (P/N 5045010-19) cracked and failed when the gear was selected to 'up'." There are many other service difficulty reports (SDRs) that show when a torque tube fails, the main gear does not retract fully and the pilot sees a discrepancy in the gear warning light system.

Recommendations

We recommend that owners and operators of the aircraft listed in the Introduction section ensure:

- their maintenance personnel review pages 9-10 of the August 2006 issue of AC43-16A (http://www.faa.gov/aircraft/safety/alerts/aviation_maintenance/media/2006/2006_08_Alert.p_df);
- 2. the pilots give feedback to the maintenance facility when a gear retraction anomaly occurs (when one main gear does not retract it is possible to see a discrepancy in the gear warning light system or a noticeable drop in climb or cruise speeds);
- 3. their torque tubes are cleaned and carefully inspected per the applicable Supplemental Inspection Document (SID); and

4. their maintenance personnel properly rig the main landing gear per the applicable maintenance manual.

For Further Information Contact

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(Optional) For Related Service Information Contact

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