

Section 1. Swedish Manufactured Aeronautical Products

**AIRWORTHINESS**

**DIRECTIVE No:** 1-061

**AIRCRAFT TYPE:** SAAB SF 340A and SAAB 340B.

**SERIAL No:s**

**AFFECTED:** SAAB SF340-004 through -159. SAAB 340B-160 through -346.

**SUBJECT:** Main Landing Gear retract actuator bracket retaining bolt failures.

**BACKGROUND:** Some extension and retraction problems on the Main Landing Gear have been experienced by Operators as a result of loose retract actuator brackets on the MLG Shock Struts.

These were caused by the sheering at the head of one of the two bracket retaining bolts.

Laboratory investigations have shown that the reason for fracture of the retaining bolt have been fatigue or hydrogen embrittlement (corrosion). There have also been some cases where it was found that the retaining bolt for the bonding strap had not been installed with a proper amount of washers. This can reduce pre-tension of the bolt and allow the bracket to move and apply excessive load on the retaining bolts. This has resulted in fatigue fracture of the Retract Actuator Bracket Retaining Bolt.

A loose retract actuator bracket can interfere with the main landing gear shock strut trunnion support and extension or retraction of the landing gear can be jeopardized.

Operators also frequently find the MLG or NLG bonding straps broken. Investigations have shown that the bonding straps are not required.

**REFERENCE**

**DOCUMENTS:** Saab Aircraft AB Service Bulletin SAAB 340-32-094 dated 29 October, 1993.

**ACTIONS:** Perform actions described in Saab Aircraft AB Service Bulletin SAAB 340-32-094 dated 29 October, 1993 or later revision.

The actions contained in this directive and reference document(s) have been classified as mandatory for aircraft on Swedish register.

**COMPLIANCE  
TIME:**

1. Short term action to be performed within 600 landings after effective date of this SAD.
2. Long term action to be performed at overhaul of Main Landing Gears.

**EFFECTIVE  
DATE:**

15 November 1993

**LUFTFARTSVERKET  
Flight Safety Department**

**LFS: 1993:33**