
AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/SF340/108 Amdt 1 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

SAAB SF340 Series Aeroplanes**AD/SF340/108
Amdt 2****Hydraulic System Accumulators****9/2009**

Applicability: SAAB AB, SAAB Aerosystems (formerly SAAB Aircraft AB) SF340A and 340B aircraft, which have hydraulic accumulators Part Number (P/N) 08 8423 001 1 or P/N 08 8423 030 1 installed, except accumulators with serial numbers as listed in SAAB Service Bulletin (SB) 340-29-023 dated 10 June 2008 or revision 1 dated 3 April 2009.

Requirement: 1. Replace hydraulic accumulators P/N 08 8423 001 1 and P/N 08 8423 030 1 (except those with serial numbers as listed in SAAB SB 340-29-023) with a new or modified accumulator in accordance with SAAB SB 340-29-023 or later approved revision.

Replacement of a hydraulic accumulator having P/N 08 8423 001 1 or P/N 08 8423 030 1 in accordance with the instructions of SAAB SB-340-29-024 Revision 01 is an acceptable method to comply with the Requirement 1 of this AD.

2. Do not install a hydraulic accumulator with P/N 08 8423 001 1 or P/N 08 8423 030 1 on any aircraft, except those with serial numbers as listed in SAAB SB 340-29-023 or later approved revision.

Note: EASA AD 2008-0146R1 dated 16 April 2009 refers.

Compliance: For Requirement 1 - Remains unchanged as detailed in the original issue of this AD as:

For accumulators having a manufacturing date of June 2000 or earlier - Within 24 months after 25 September 2008 (the effective date of the original issue of this AD).

For accumulators having a manufacturing date of July 2000 or later - Within 10 years from the manufacturing date or within 24 months after 25 September 2008, whichever occurs later.

For Requirement 2 - After 15 August 2010.

This Amendment becomes effective on 27 August 2009.

SAAB SF340 Series Aeroplanes

AD/SF340/108 Amdt 2 (continued)

Background: Two cases of main hydraulic accumulator failure have been reported, one of which was caused by corrosion. Investigation has shown that a severe failure can occur to any of the four hydraulic accumulators which are installed in the hydraulic compartment. Either one of the two end parts on the accumulator may depart from the pressure vessel due to corrosion. This condition, if not corrected, is likely to degrade the functionality of the hydraulic system, possibly resulting in degradation or total loss of control of the landing gear, flap actuation and brakes.

A severe failure during flight may even result in debris penetrating and exiting the fuselage outer skin. When such a failure occurs while the aircraft is on the ground, as in the two reported cases, this may cause severe damage to the fuselage and result in injuries to persons nearby.

To address and correct the unsafe condition, a modified hydraulic accumulator has been developed, which is sealed between the barrel and the screw cap and between the screw cap and the end cap.

For the reasons described above, this AD requires the replacement of the affected hydraulic accumulators P/N 08 8423 001 1 and P/N 08 8423 030 1, as identified in SAAB SB 340-29-023, with a modified hydraulic accumulator.

Since the original issue of this AD, one more case of main hydraulic accumulator failure has been reported, which occurred in flight during final approach. The aeroplane was able to land safely and there were no injuries reported on the aeroplane or on the ground.

This amendment corrects the compliance date from 15 September 2008 to 25 September 2008 with no change to the requirements.



James Coyne
Delegate of the Civil Aviation Safety Authority

15 July 2009