



CIVIL AVIATION AUTHORITY
CZECH REPUBLIC
Airworthiness Division
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AIRWORTHINESS DIRECTIVE

Number: CAA-AD-013/2004

Date of issue: January 19, 2004

ATR

ATR 42

AIRCRAFT - MAIN LANDING GEAR - SIDE BRACE - INSPECTION

Applicability: ATR 42-200, -300 and -320 aircraft models, all serial numbers, whose main landing gears (MLG) are fitted with side braces Part Number (PN) D22710000-7, equipped with upper arm PN D56778-10, serial numbers (SN) MN 566 to MN 581 included.

Effective date: Upon receipt.

Compliance: Required as indicated DGAC AD F-2004-006.

Remarks: The compliance of this AD must be recorded in Aircraft Logbook, where applicable the requirements of this AD must be integrated into Aircraft Technical Documentation. Address inquiries concerning this AD to: Civil Aviation Authority, Airworthiness Division, Ruzyně Airport, 160 08 Prague 6, Czech Republic, tel.: 420 2 33320922, fax: 420 2 20562270.

Ing. Pavel MATOUŠEK
Director

DGAC AD No.: F-2004-006

ATR 42 aircraft

Subject: Landing gear - Main landing gear - Side brace

1. EFFECTIVITY:

ATR 42-200, -300 and -320 aircraft models, all serial numbers, whose main landing gears (MLG) are fitted with side braces Part Number (PN) D22710000-7, equipped with upper arm PN D56778-10, serial numbers (SN) MN 566 to MN 581 included.

2. REASONS:

An ATR operator experienced during taxiing, a right (RH) MLG unlock warning activation. During investigation, the RH upper MLG side brace was found cracked. The expertise of the failed side brace revealed that a crack propagation occurred from a corrosion pit on the surface under the identification plate location.

Analysis revealed that identification plate was located in a high stressed area and its accidental torn down could damage the protective treatment resulting in possible crack initiation.

In addition, the side brace manufacturing investigation stated that a batch of 16 parts, manufactured until February 1995, had to be considered as suspect due to non-adequate storage procedure used.

Conjunction of all causes, identification plate torn down, protection stripped and corrosion introduced during production could lead to a development of corrosion and then to a crack initiation on a safe life part.

Regarding the identification plate location, ATR and MESSIER-DOWTY developed an improvement consisting in relocating the plate in a less stressed area. This is covered by ATR Modification No 8346 and MESSIER-DOWTY Service Bulletin (SB) No 631-32-176.

The actions mandated by the present Airworthiness Directive (AD) are intended to prevent possible rupture of MLG side brace for the suspected batch, which could lead to the MLG collapse.

3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

The following measures are rendered mandatory from the effective date of this AD.

3.1. Within the next 500 Flight Hours (FH) and at the latest before 2 months, perform the visual inspection of the identification plate to check that its bonding and its condition are correct, as per MESSIER-DOWTY SB No 631-32-175.

If the plate is found torn down or unstuck, within the next 25 FH, remove the side brace upper arm and replace it with another one in airworthy condition.

3.2. Repeat the inspection defined in paragraph 3.1. each 500 FH or at the latest each 2 months.

3.3. At the next overhaul, replace the involved side braces PN D22710000-7 equipped with upper arm PN D56778-10, SN MN 566 to MN 581 included, by modified side braces PN D22710000-8, as per MESSIER-DOWTY SB No 631-32-176.

This replacement cancels the repetitive inspection required in chapter 3.1.

4. REFERENCE PUBLICATION:

MESSIER-DOWTY Service Bulletin No 631-32-175.

MESSIER-DOWTY Service Bulletin No 631-32-176.

5. EFFECTIVE DATE:

January 17, 2004.

6. REMARKS:

For questions concerning the technical contents of this AD's requirements, contact:
ATR - Yves OTTOGALI - Fax: 33 5 62216718

7. APPROVAL:

This AD is approved under EASA reference No 2112 dated December 25, 2003.