



CIVIL AVIATION AUTHORITY
CZECH REPUBLIC
Airworthiness Division

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AIRWORTHINESS DIRECTIVE

Number: CAA-AD-057/2004

Date of issue: June 24, 2004

ATR

ATR 42

AIRCRAFT - MAIN LANDING GEAR - INSPECTION OF SIDE BRACE

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 not incorporating suffix - 8 (ATR modification 8346 -Service Bulletin (SB) MESSIER-DOWTY 631-32-176) and equipped with upper arm PN D56778-10.

Effective date: Upon receipt.

Compliance: Required as indicated F-2004-078.

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 233320922, fax: 420 220562270. This AD has been issued in accordance with F-2004-078, which is approved under EASA reference No. 2004-5871.

Ing. Pavel MATOUŠEK
Director

AIRWORTHINESS DIRECTIVE No F-2004-078	Issue date: June 09, 2004	
This Airworthiness Directive is published by the DGAC : on behalf of EASA, the Primary Airworthiness Authority for the affected product.		
Corresponding foreign Airworthiness Directive(s): Not applicable	Airworthiness Directive(s) replaced: None	
Person in charge of airworthiness: ATR	Type(s): ATR 42 aircraft	
Type certificate(s) No. 176 TCDS No 176		
ATA chapter: 32	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 not incorporating suffix - 8 (ATR modification 8346 -Service Bulletin (SB) MESSIER-DOWTY 631-32-176) and equipped with upper arm PN D56778-10.

Note: This Airworthiness Directive (AD) is not applicable to aircraft fitted with side braces PN D22710000-7, serial numbers 566 to 581 included, which are inspected in accordance with the instructions of SB MESSIER-DOWTY 631-32-176, rendered mandatory by AD F-2004-006.

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.

The identification plate torn down and the protection stripped 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. This is covered by ATR Modification No 8346 and MESSIER-DOWTY SB No 631-32-176.

The actions mandated by the present AD are intended to prevent a possible rupture of MLG side brace, which could lead to the involved 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 repetitive inspection of the side brace in accordance with MESSIER-DOWTY SB No 631-32-181.
- 3.2. At the next overhaul, replace the side braces PN D22710000 not incorporating suffix - 8 and equipped with upper arm PN D56778-10 by modified side braces PN D22710000-8, as per MESSIER-DOWTY SB No 631-32-176 at revision 1.

This replacement cancels the repetitive inspection required in chapter 3.1.

4. REFERENCE PUBLICATIONS:

MESSIER-DOWTY Service Bulletin No 631-32-181.
MESSIER-DOWTY Service Bulletin No 631-32-176 revision 1.
(Any further approved revision of these SB's is acceptable).

5- EFFECTIVE DATE:

June 19, 2004.

6. REMARK:

For questions concerning the technical contents of this AD's requirements, contact: ATR - Yves OTTOGALI - Fax: 33 5 62 21 67 18.

7. APPROVAL:

This AD is approved under EASA reference No 2004-5871 dated June 02, 2004.