	AIRWORTHINESS DIRECTIVE No F-2004-006		Distribution: B	Issue date: January 07, 2004	Page : 1/2
	Direction générale de l'aviation civile France This Airworthiness Directive is published by the DGAC: <input checked="" type="checkbox"/> on behalf of EASA, the Primary Airworthiness Authority for the affected product. <input type="checkbox"/> as the Registration Airworthiness Authority for the affected aircraft..			<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
GSAC publication	No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.				
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) D22710000-7, 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 brn 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.

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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:
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7. APPROVAL:

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