

	AIRWORTHINESS DIRECTIVE No F-2003-434		Distribution: B	Issue date: December 10, 2003	Page: 1/3
	This Airworthiness Directive is published by the DGAC: ☒ on behalf of EASA, the Primary Airworthiness Authority for the affected product ☐ 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 text.</i>	
Direction générale de l'aviation civile France 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: 2000-257-149, cancelled by its revision 1			
Person in charge of airworthiness: AIRBUS		Type(s): A319, A320 and A321 aircraft			
Type certificate(s) No. 180 TCDS No. 180					
ATA chapter(s): 32, 52	Subject: Main landing gear - Door actuator fitting inspection				

1. EFFECTIVITY:

AIRBUS A319, A320 and A321 aircraft, all certified models, all serial numbers equipped with main landing gear door fittings assembly PN D52880224 00/001 or D52880235 00/001.

Note: No action is requested by this Airworthiness Directive (AD) for aircraft, that have received AIRBUS Modification 24903 or 25372 in production, or AIRBUS Service Bulletin (SB) A320-52-1073 at original issue or Revision 1, 2, 3, 4 in-service, on which no landing gear door has been replaced.

2. REASONS:

On one A320 aircraft, the crew was unable to close one of the main landing gear doors, due to the rupture of the actuator fitting at the actuator attachment area on the door side. The MLG door being only attached to the aircraft by the 2 hinge fittings could, under certain conditions, detach from the aircraft and could cause damage to the aircraft, and/or hazard to persons or property on the ground.

AD 1999-243-133 R1, dealing with the same subject, requested to inspect the main landing gear door actuator fitting for cracks and to check the grain direction on a batch of aircraft.

AD 2000-257-149, which replaced AD 1999-243-133 cancelled, requested to inspect the lower part of the main landing gear door actuator fitting.

Additional investigation revealed that cracks could also appear on the nerve area, in the upper part of main landing gear door actuator fitting in the area of the hinge.

AD 2000-257-149 is replaced by this AD which mandates the additional inspection described in SB A320-52-1096 R1.

	AIRWORTHINESS DIRECTIVE No F-2003-434	Distribution: B	Issue date: December 10, 2003	Page: 2/3
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3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

3.1. For aircraft equipped with the fitting PN D52880224 00/001 that were installed at the time of delivery on the following main landing gear doors:

- left main landing doors SN: 1206 through 1237, 1239 through 1247 and 1249 through 1251
- right main landing doors SN: 1208 through 1239, 1241 through 1249 and 1251

Within 500 flight hours from the last inspection required by the SB A320-52A1086 R1 mandated by AD 2000-257-149, perform the HFEC (High Frequency Eddy Current) inspection in accordance with the instructions of SB A320-52A1086 R1.

3.1.1. If no crack is detected, either:

3.1.1.1. Perform the LFEC (Low Frequency Eddy Current) inspection to determine the grain direction of the raw material of the actuator fitting in accordance with the instructions of SB A320-52A1086 R1:

- If the grain direction of the raw material of the fitting is correct then refer to paragraph 3.2.

- If not, refer to actions requested by the paragraph 3.1.1.2. or 3.1.1.3.

or

3.1.1.2. Repeat the HFEC inspection at intervals not exceeding 500 flight hours from the inspection defined in paragraph 3.1, in accordance with the instructions given in the SB A320-52A1086 R1. If a crack is detected, perform the actions requested by paragraph 3.1.2. of this AD.

or

3.1.1.3. Perform the SB A320-52-1073 R4. The conformity to this AD is then demonstrated and no further action is required.

3.1.2 If crack is detected, perform the SB A320-52-1073 R4 within the threshold provided by the SB A320-52A1086 R1. The conformity to this AD is then demonstrated and no further action is required.

3.2. For all aircraft:

Within 400 flight cycles from the effective date of this AD, or before accumulating 9000 flight cycles, whichever occurs later, perform an HFEC inspection in both hinge area and nerve area in accordance with the instructions of SB A320-52-1096 R1.

3.2.1. If no crack is detected, either:

3.2.1.1. Repeat the inspection at intervals not exceeding 800 flight cycles from the first inspection in accordance with the instructions of SB A320-52-1096 R1. If a crack is detected, perform the actions requested by paragraph 3.2.2. of this AD.

or

3.2.1.2. Perform the SB A320-52-1073 R4. The conformity to this AD is then demonstrated and no further action is required.

	AIRWORTHINESS DIRECTIVE No F-2003-434	Distribution: B	Issue date: December 10, 2003	Page: 3/3
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3.2.2. If a crack is detected on the hinge area or on the nerve area, perform the SB A320-52-1073 R4 within the threshold provided by the SB A320-52-1096 R1.

If cracks are detected on both hinge area and nerve area, replace the fitting within the threshold provided by the SB A320-52-1096 R1.

As soon as SB A320-52-1073 R4 is applied, the conformity to this AD is demonstrated and no further action is required.

4. REFERENCE PUBLICATIONS:

AIRBUS Service Bulletin A320-52A1086 Revision 1
AIRBUS Service Bulletin A320-52-1096 Revision 1
AIRBUS Service Bulletin A320-52-1073 Revision 4
(any further approved revision is acceptable).

5. EFFECTIVE DATE:

December 20, 2003

6. REMARK:

For questions concerning the technical contents of this AD's requirements, contact:

AIRBUS – Office of Airworthiness - EAS - Fax 33 5 61 93 44 51

7. APPROVAL:

This AD is approved under EASA reference No 1436 dated December 02, 2003.