



適航指令發布單
Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-09-012	發布日期 Date issued	2019/9/23												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9001 through 9879 and 9998 and serial numbers 60001 and subsequent.														
主旨摘要	Landing Gear - Trailing Arm Assembly Axle Bore Corrosion														
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <table border="0" style="width: 100%;"><tr><td><input type="checkbox"/> FAA</td><td><input type="checkbox"/> Germany LBA</td></tr><tr><td><input type="checkbox"/> EASA</td><td><input type="checkbox"/> CAA-NL</td></tr><tr><td><input type="checkbox"/> Brazil</td><td><input type="checkbox"/> UK CAA</td></tr><tr><td><input checked="" type="checkbox"/> Transport Canada Civil Aviation</td><td><input type="checkbox"/> Japan CAB</td></tr><tr><td><input type="checkbox"/> DGAC</td><td><input type="checkbox"/> CAA of Israel</td></tr><tr><td></td><td><input type="checkbox"/> Other _____</td></tr></table>			<input type="checkbox"/> FAA	<input type="checkbox"/> Germany LBA	<input type="checkbox"/> EASA	<input type="checkbox"/> CAA-NL	<input type="checkbox"/> Brazil	<input type="checkbox"/> UK CAA	<input checked="" type="checkbox"/> Transport Canada Civil Aviation	<input type="checkbox"/> Japan CAB	<input type="checkbox"/> DGAC	<input type="checkbox"/> CAA of Israel		<input type="checkbox"/> Other _____
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	<input type="checkbox"/> Other _____														
	設計國 AD 編號 Original AD number	CF-2019-33													
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)														
備註 Note	None														
<p>註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw</p> <p>Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw</p>															



AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.

Number:

CF-2019-33

Effective Date:

27 September 2019

ATA:

32

Type Certificate:

A-177

Subject:

Landing Gear – Trailing Arm Assembly Axle Bore Corrosion

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9001 through 9879 and 9998 and serial numbers 60001 and subsequent.

Compliance:

As indicated below, unless already accomplished.

Background:

Four main landing gear (MLG) trailing arm assemblies were found with compromised paint finish and/or corrosion on the axle bore inner diameters. An investigation concluded that the root cause was improper removal of contaminants during manufacturing. The affected trailing arm assemblies have the potential for improper adhesion between the anti-corrosion layers, which could lead to corrosion on the inner diameter of the MLG trailing arm assembly axle bore. This condition, if not corrected, could lead to MLG collapse.

Initially, this AD requires an inspection to determine if affected MLG trailing arm assemblies are installed. If an affected MLG trailing arm assembly is installed, to mitigate the risk of MLG collapse, affected MLG trailing arm assemblies are required to undergo a first and second inspection to detect surface finish discrepancies on the inner diameter of the MLG trailing arm assembly axle bore, reworking as required to correct any surface finish discrepancies discovered on the inner diameter of the MLG trailing arm assembly axle bore. The requirement to conduct a first and/or second inspection is terminated by the replacement of the paint and primer on the axle bore inner diameters of the affected MLG trailing arm assemblies or by the replacement of affected MLG trailing arm assemblies with conforming units. This AD also prohibits the installation of any affected, non-conforming MLG trailing arm assembly as a replacement part on BD-700-1A10 and BD-700-1A11 aeroplanes.

Corrective Actions:

Note: For the purpose of this AD, an affected MLG trailing arm assembly is a MLG trailing arm assembly of part number (P/N) 21410-107 with a serial number listed in Appendix 4 Table 1 of the Bombardier (BA) Service Bulletins (SBs) referenced in Table A below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part I – Applicable to BD-700-1A10 and BD-700-1A11 Aeroplanes, Serial Numbers 9001 through 9879 and 9998 – Inspection of MLG Trailing Arm Assembly P/N and Serial Number

Within 7 months from the effective date of this AD, inspect for installation of affected MLG trailing arm assemblies, in accordance with Part A of the Accomplishment Instructions of the applicable BA Service Bulletin (SB) referenced in Table A below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part II – Applicable to BD-700-1A10 and BD-700-1A11 Aeroplanes, Serial Numbers 9001 through 9879 and 9998 – First Inspection of the MLG Trailing Arm Assembly Surface Finish

Before the applicable “1st Inspection Due by Date (MM/DD/YY)” listed for each affected MLG trailing arm assembly serial number in Appendix 4 Table 1 of the applicable BA SB referenced in Table A below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, for each affected MLG trailing arm assembly, inspect for surface finish discrepancies on the inner diameter of the affected MLG trailing arm assembly axle bore and rework as required, in accordance with Part B of the Accomplishment Instructions of the applicable, above-mentioned BA SB.

For aeroplanes with no affected MLG trailing arm assemblies installed, Part II of this AD is not required.

For aeroplanes that have satisfied the requirements of Part IV of this AD on all affected MLG trailing arm assemblies, Part II of this AD is not required.

Part III – Applicable to BD-700-1A10 and BD-700-1A11 Aeroplanes, Serial Numbers 9001 through 9879 and 9998 – Second Inspection of the MLG Trailing Arm Assembly Surface Finish

Within 33 months from the completion of the first inspection in Part II of this AD, for each affected MLG trailing arm assembly, inspect for surface finish discrepancies on the inner diameter of the affected MLG trailing arm assembly axle bore and rework as required, in accordance with Part C of the Accomplishment Instructions of the applicable BA SB referenced in Table A below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

For aeroplanes with no affected MLG trailing arm assemblies installed, Part III of this AD is not required.

For aeroplanes that have satisfied the requirements of Part IV of this AD on all affected MLG trailing arm assemblies, Part III of this AD is not required.

Part IV – Applicable to BD-700-1A10 and BD-700-1A11 Aeroplanes, Serial Numbers 9001 through 9879 and 9998 – Primer and Paint Replacement on the MLG Trailing Arm Assembly Axle Bore Inner Diameter

Within 120 months of MLG trailing arm assembly entry into service, for each affected MLG trailing arm assembly, replace the primer and paint and apply the corrosion preventive compound on the inner diameter of the affected MLG trailing arm assembly axle bore, in accordance with Part D of the Accomplishment Instructions of the applicable BA SB referenced in Table A below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

For aeroplanes with no affected MLG trailing arm assemblies installed, Part IV of this AD is not required.

Completion of Part IV of this AD on all affected MLG trailing arm assemblies terminates the requirements of Part II and Part III of this AD.

Part V – Applicable to BD-700-1A10 and BD-700-1A11 Aeroplanes, Serial Numbers 9001 through 9879 and 9998 and Serial Numbers 60001 and Subsequent – Parts Installation Prohibition

As of the effective date of this AD, it is prohibited for anyone to allow the installation of an affected MLG trailing arm assembly as a replacement part on BD-700-1A10 and BD-700-1A11 aeroplanes, unless that affected MLG trailing arm assembly is marked “SB700-32-041ABC” on its modification plate and near its P/N.

Table A: SB References

Aeroplane Model	BA SB
BD-700-1A10	SB 700-32-039 Basic Issue, dated 3 May 2019
BD-700-1A10	SB 700-32-6016 Basic Issue, dated 3 May 2019
BD-700-1A11	SB 700-1A11-32-026 Basic Issue, dated 3 May 2019
BD-700-1A11	SB 700-32-5016 Basic Issue, dated 3 May 2019

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 13 September 2019

Contact:

Hilary Ross, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.