



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:	Effective Date:
CF-2017-12	24 March 2017
ATA:	Type Certificate:
53	A-234

Subject:
Fuselage – Incorrect Installation of Fasteners on Rear Spar Fitting

Applicability:
Bombardier Inc. model BD-100-1A10 aeroplanes, serial numbers 20001 to 20433.

Compliance:
Before accumulating 7500 total flight cycles, unless already accomplished.

Background:
During production, it was observed that some fasteners joining the machined rear spar center fitting were installed with a gap between the fastener head and the structure, and others were installed tilted. Improperly installed fasteners could cause a premature failure of the fitting fasteners and cracking within the fitting or frame, resulting in the loss of structural integrity of the wing to fuselage attachment.
This AD mandates the removal of all fasteners at the rear spar frame lower flange splice, inspection and rework of the holes, and fastener replacement with self-aligning fasteners and self-aligning collars.

Corrective Actions:
Remove and replace the fasteners joining the machined center fitting, part number 1005340715 fuselage to wing attachment and splice fitting at fuselage station 587, to the rear spar frame lower flange splice and inspect and rework the fastener holes. Bombardier Inc. Service Bulletin (SB) 100-53-32, Basic Issue, dated 16 February 2017, or later approved revisions by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for the removal and replacement of the fasteners at the rear spar frame lower flange splice, and inspection and rework of the fastener holes.

If damage is found during the inspection, contact Bombardier for an approved repair. The repair must specifically refer to this AD and to the SB mentioned above.

If it is not possible to complete all of the instructions within the SB due to the configuration of the aircraft, contact Bombardier for approved instructions. These instructions must specifically refer to this AD and to the SB mentioned above.

Authorization:
For the Minister of Transport,
ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 10 March 2017

Contact:
Daniel Gosselin, Continuing Airworthiness, Ottawa, telephone 1-888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.