



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) with ADs.

Number:

CF-2025-02

Effective Date:

28 January 2025

ATA:

35

Type Certificate:

A-177

Subject:

Oxygen – Therapeutic Oxygen Hoses – Inadequate clearance from Electrical Harness

Applicability:

Bombardier Inc. model BD-700-1A10 aeroplanes, serial numbers 9002 through 9005, 9008 through 9014, 9016 through 9019, 9022 through 9026, 9028 through 9031, 9033, 9035, 9036, 9039 through 9051, 9053 through 9055, 9057 through 9080, 9083 through 9106, 9108 through 9122, 9124 through 9126, 9128, 9129, 9133, 9134, 9136 through 9139, 9141 through 9148, 9150, 9151, 9153, 9159, 9162, 9163, 9165, 9167, 9169, 9171, 9175, 9179, 9181, 9183 through 9185, 9187, 9189, 9191, 9193, 9194, 9196, 9197, 9199, 9200, 9202, 9203, 9205, 9208, 9210, 9213, 9215, 9218, 9220, 9223, 9225, 9230, 9232, 9234 through 9238, 9240, 9242, 9244, 9247, 9248, 9250, 9252 through 9254, 9256, 9258, 9262, 9264, 9268, 9270, 9272, 9274, 9276 through 9278, 9280, 9281, 9283, 9284, 9286, 9290 through 9292, 9294, 9296, 9297, 9300, 9303, 9304, 9306, 9309, 9312 through 9314, 9317, 9320, 9322, 9323, 9326, 9329, 9331 through 9333, 9335, 9336, 9338, 9339, 9341, 9344, 9348, 9349, 9351, 9352, 9354, 9360, 9362, 9364, 9367 through 9369, 9371, 9374, 9375, 9377, 9378, 9380, 9381, 9384, 9385, 9387, 9388, 9390, 9391, 9393, 9394, 9396, 9397, 9399, 9402, 9406, 9407, 9409, 9410, 9413, 9415, 9416, 9419, 9420, 9422, 9423, 9426, 9428, 9429, 9432, 9433, 9435 through 9441, 9443, 9444, 9447, 9448, 9450 through 9452, 9455, 9456, 9460, 9463, 9464, 9466, 9467, 9470, 9472, 9473, 9475, 9478, 9479, 9481, 9482, 9484, 9485, 9488, 9490, 9491, 9496, 9499, 9500, 9502, 9503, 9505, 9507, 9509 through 9512, 9514, 9518, 9519, 9521 through 9524, 9527, 9529, 9530, 9532, 9533, 9535, 9537, 9538, 9540, 9541, 9543, 9545, 9546, 9548, 9551, 9553, 9554, 9556, 9557, 9561, 9562, 9567, 9568, 9570, 9572 through 9574, 9577, 9579, 9580, 9582, 9583, 9585, 9587, 9590, 9591, 9593, 9598, 9599, 9601, 9603, 9604, 9606, 9607, 9609, 9611, 9612, 9615, 9617, 9619, 9622, 9624, 9626, 9628, 9630 through 9632, 9635, 9637, 9638, 9640, 9641, 9643, 9645, 9648, 9649, 9651, 9652, 9657, 9659, 9661, 9662, 9665, 9667, 9669, 9670, 9672, 9677, 9680, 9682, 9684, 9686, 9688, 9689, 9691, 9694, 9695, 9697, 9698, 9700 through 9703, 9705, 9706, 9709, 9711, 9712, 9716, 9718, 9721, 9723 through 9726, 9728 through 9731, 9733, 9735, 9738 through 9742, 9744 through 9748, 9750 through 9754, 9756 through 9767, 9770 through 9776, 9779, 9781, 9783, 9784, 9788, 9789, 9791 through 9793, 9795 through 9797, 9799, 9800, 9802, 9804 through 9806, 9808, 9809, 9811, 9812, 9814 through 9818, 9820 through 9824, 9826 through 9833, 9835 through 9839, 9841 through 9845, 9847 through 9851, 9853, 9856, 9858 through 9861, 9863 through 9867, 9870, 9872, 9873, 9875 through 9878, 60001 through 60006, 60008 through 60012, 60014, 60016 through 60021, 60023 through 60026, 60028, 60029, 60031, 60033, 60034, 60036 through 60039, 60044, 60046, 60048 through 60051, 60053 through 60055, 60057, 60058, 60060 through 60063, 60068, 60069, 60071, 60072, 60074, 60075, and 60077 through 60079.

Compliance:

Within 10 years from the effective date of this AD, unless already accomplished.

Background:

Bombardier Inc. (BA) has discovered that clearance between therapeutic oxygen hoses and electrical harnesses may be non-compliant to design requirements, and that positive separation mechanisms and appropriate protective barriers may not have been installed in accordance with applicable installation standards. Instances of hard fouling have been observed on the production line, which could result in damage to the electrical harness and subsequent latent failure of the firewall hydraulic shutoff valve, leading to the inability to control a power plant fire in the presence of a hydraulic fluid leak.

To address this unsafe condition, this AD mandates the inspection of the therapeutic oxygen hoses and electrical harnesses for damage and clearance, and as applicable, to replace or repair damaged parts, maximize clearance, install protection, and perform testing, to meet installation specifications.

Corrective Actions:

For the purpose of this AD, the following definition applies:

Applicable BA SB: Bombardier Service Bulletin (SB) for the corresponding aeroplane model and marketing designation as identified in Table 1, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

- A. Perform a detailed inspection of the therapeutic oxygen hoses and electrical harnesses for damage and clearance, and as applicable, before further flight, replace or repair damaged components, maximize the clearance between the hose and the harness, and install appropriate protection to meet installation requirements, in accordance with Section 2B of the Accomplishment Instructions of the applicable BA SB.
- B. During accomplishment of Paragraph A of this AD, if any parts are replaced or repaired, perform testing to ensure the system is operational in accordance with Section 2C of the Accomplishment Instructions of the applicable BA SB.

Table 1

Model	Marketing Designation	SB	SB Issue	SB Date
BD-700-1A10	Global Express & Global XRS	700-35-016	Basic	12 June, 2024
BD-700-1A10	Global 6000	700-35-6006	Basic	12 June, 2024
BD-700-1A10	Global 6500	700-35-6503	Basic	12 June, 2024

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 14 January 2025

Contact:

William Humphries, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.