

BOMBARDIER CHALLENGER 350 Model Guide

The BOMBARDIER CHALLENGER 350 is a turbofan business jet. It is covered by Airplane Flight Manual BD-100-1A10 (CH 350 and CH 3500) for serial numbers 20501-20999. The manual was first issued Jun 11/2014, and the latest revision supplied is Revision 34 (Jun 14/2022). The supplied documents are mostly limitations and revision history, with no full performance tables.

KEY TAKEAWAYS

- Family-level maxima, not this variant's figures: up to 3200 nm range, 458 kt cruise, 45000 ft ceiling, 8 passengers, 18400 kg MTOW.
- Autopilot minimum engage height is 700 ft AGL in climb, en route or descent. Approach minimum use heights are 80, 160 or 200 ft AGL.
- Maximum altitude with the yaw damper off is 31,000 ft.
- Confirm the aircraft's manual is current: the latest supplied is Revision 34 (Jun 14/2022), and it applies to serials 20501-20999.

PRESSURIZATION, OXYGEN AND AIR CONDITIONING LIMITS

Maximum positive differential pressure is 9.4 psi and maximum negative is -0.5 psi. Differential must not exceed 0.1 psi on the ground during taxi, or 1.0 psi during landing. Oxygen masks are not approved above 40,000 feet cabin altitude. Do not select TRIM AIR ONLY on the ground.

FMS AND DATABASE CHECKS

The FMS is the Rockwell Collins Pro Line 21 Advance system. FMS performance, ETE/ETA and fuel data are advisory only. V-speed database must be 096-5016-001 on 20501-20663 without SB 350-34-012, and 096-5016-002 on 20664 and later. Performance database must be 096-5327-001 on 20578 and later.

MANUAL REVISION HISTORY

Revision 33 (Mar 29/2022) added the CH 3500 to the effectivity table. Revision 31 (Sep 22/2021) introduced a new landing gear selector lever and Reduced Cabin Altitude. Revision 19 (Sep 5/2018) added a new supplement for steep approaches with glidepaths from 4.5 to 5.5 degrees.

SPECIFICATIONS

Yaw Damper Off Max Altitude Ft	31000
Autopilot Min Engage Height Ft	700
Autopilot Min Use Height Visual Nonprecision Ft	200

PERFORMANCE

Family Max Range Nm	3200
Family Max Cruise Speed Kt	458
Family Max Service Ceiling Ft	45000

SAFETY NOTES

- In ALTS CAP mode the autopilot may not hold airspeed. After an engine failure in climb, airspeed may decay and crew intervention may be required.
- With database 096-5016-001, the FMS cannot calculate actual landing distance on contaminated runways. Use the CAFM or QRH instead.
- At airport pressure altitudes of 8000 ft and above, compare the FMS takeoff field length with the CAFM result. If the CAFM figure is longer, use the CAFM takeoff field length and speeds.