DASSAULT FALCON 50 Model Guide

DASSAULT FALCON 50 is a three-engine turbofan jet. The Falcon 50 family (variants 50 and 50EX) is listed at up to 12 passengers, up to 3080 nm range, up to 459 kt cruise and up to 49000 ft ceiling. These are family maxima, not figures for every aircraft. This guide uses the Maintenance Manual Chapter 5-40 airworthiness limitations, Revision 24, July 2017.

KEY TAKEAWAYS

- Limit of Validity for a standard aircraft is 40,000 flights/60,000 flying hours, whichever occurs first.
- SSIP applies from mid life (20,000 flights/30,000 flying hours), and SB F50-450 must be embodied first.
- Chapter 5-40 covers S/N 001 to 352. Aircraft with STCs, unapproved repairs, cargo or training use need an adapted program.
- The operator must keep primary structure at corrosion level 1 or better and report level 2 or 3 findings to Dassault.

LIFE-LIMITED COMPONENTS

Main landing gear legs and the nose gear leg are limited to 20000 LDG. Main gear shock absorbers are limited to 16000 LDG, and brace strut actuators to 3550 LDG. Each unpaved-runway landing counts double for the nose gear. Emergency exit doors are limited to 26718 FC, outboard airbrake center hinges to 20000 FC, and engine 1 and 3 rear attachment bolts to 1050 FH.

RECURRING MANDATORY CHECKS

Passenger door locked-indication check every 800 FH. Emergency exit unlocking tests every 24 M. Pneumatic fire detector functional tests every 5600 FH. Cabin pressurization test every 1550 FH. Fuselage structural fuel tank and wing tank inspections every 74 M. Thrust reverser door hinge fluorescent penetrant inspections every 1155 FC, starting at 28000 FC.

STRUCTURAL INSPECTION PROGRAM

Most SSIP structural tasks start at 20000 FC and repeat every 3750 or 7500 FC. They cover wing lower panels and spars, centerwing tank lower panels, stabilizer hinges, windshield frames, and frames 34 and 35. An S inspection is a supplemental airframe inspection scheduled every 3750 flights after SB F50-450.

SAFETY NOTES

- Failure to comply with Chapter 5-40 instructions leads to immediate suspension of the Airworthiness certificate.
- Regular cargo, flight training, search and rescue or scientific flying means the aircraft is not a standard aircraft. Contact Dassault for an adapted program.
- Primary structure changed by an STC, or repaired outside Dassault review, makes an aircraft non-standard. Check the records before purchase.

AI-aggregated guide for the DASSAULT FALCON 50 · sources: FALCON 50/50EX MAINTENANCE MANUAL (#101584) · generated 2026-11-25 · Reference only, not for flight. Check the original documents before relying on this guide.