

BOMBARDIER Learjet 45 XR Model Guide

The BOMBARDIER Learjet 45 XR is a twin-turbofan business jet. The registry data covers the whole Learjet 45 family, which is listed at up to 3700 nm range, 434 kt cruise, 10 passengers and a 51000 ft ceiling. Those are family maxima, not confirmed figures for this variant. The documents supplied are maintenance status reports for two airframes and a flight checklist, so this guide focuses on upkeep and handling.

KEY TAKEAWAYS

- Family-level registry maxima: 3700 nm range, 434 kt cruise, 51000 ft ceiling, up to 10 passengers. They are not variant-specific.
- The maintenance program uses Phase A (300 hr), B (600 hr), C (1200 hr) and D (2400 hr) checks, plus 4800 and 9600 hour inspections.
- Both sample airframes use TFE731-20BR engines and an RE100 APU, each with its own hourly inspection schedule.
- Compare each airframe's hours, landings and check dates against these intervals before you buy.

MAINTENANCE PROGRAM

Both status reports show the same structure. Phase A checks are every 300 hours or 12 months. Phase B is every 600 hours or 24 months. Phase C is every 1200 hours or 48 months. Phase D is every 2400 hours or 96 months. There are also 4800 and 9600 hour inspections. The N316CJ report lists a major landing gear inspection at 10,000 landings. Ask where the airframe stands against each interval.

ENGINES, APU AND EXAMPLE AIRFRAMES

The sample aircraft use Honeywell TFE731-20BR engines and an RE100 APU. Engine routine inspections run at 150-250, 500-650, 500-850, 1000-1300 and 1500-1650 hours. Serial 45-359 (N316CJ) showed 5,274.8 hrs and 3,272 landings on 30-Apr-2024. Serial 45-267 (N219JL) showed 4932.3 hrs and 3714 landings on 17-Jul-2020. Check the engine and APU times and records on any aircraft you consider.

CHECKLIST SPEEDS AND HANDLING

The supplied checklist gives V1 120, VR 130 and V2 140 KIAS, with rotation at 10-15 degrees nose up. Flaps come up at 200 KIAS. Below 10000 ft the speed limit is 250 KIAS. Approach speeds step from 200 to 180 to 155 to 145 KIAS, and landing speed is 135 KIAS. Reverse thrust is cancelled at 60 kts. The checklist also lists the climb at 250 KIAS and 1800 fpm.

PERFORMANCE

Climb Speed Kts	250
Climb Rate Fpm	1800
Max Speed Below 10000 Ft Kts	250
Flap Retract Speed Kts	200
Landing Speed Kts	135

V-SPEEDS

V1 Kts	120
Vr Kts	130
V2 Kts	140
Final Approach Speed Kts	145

SAFETY NOTES

- The checklist contains simulator-style keystroke prompts. Do not treat its speeds as approved data; confirm them in the approved flight manual.
- The N316CJ report lists inspections after bird strike, hard landing, lightning strike and overweight landing. Ask whether any have occurred on the aircraft.
- Check airworthiness directive and service bulletin status. N316CJ shows bulletin 45-78-9 complied with on both engines.