

EMBRAER EMB-500 Phenom 100 Model Guide

The EMBRAER EMB-500 Phenom 100 is a twin-engine turboprop jet from Embraer. The supplied data has no range, speed, weight or seat figures for this model, so check those against the aircraft's flight manual. This guide uses one aircraft's maintenance history report and one Embraer service bulletin, so it focuses on what to inspect before buying.

KEY TAKEAWAYS

- The example aircraft has two Pratt & Whitney Canada PW617F-E engines, installed 18-JUN-2010.
- The example S/N 50000186 had 455.6 hours and 320 landings as of 30-Nov-2015, with certification dated 03-AUG-2010.
- Embraer alert SB 500-27-A026 covers missing trim tab cotter pins. Confirm it is done on any aircraft in its serial list.
- Ask for the full CAMP-style history. It tracks service bulletins, ADs and maintenance packages.

MAINTENANCE PROGRAM TO VERIFY

The history report lists packages at 600 FH/12 MO, 1200 FH/24 MO, 1800 FH/36 MO, 3000 FH/48 MO, 4800 FH/72 MO, 6000 FH/96 MO and 12000 FH/120 MOS. On the example aircraft the 12-month package was last done 12-AUG-2015 and the 24-month package on 08-AUG-2014. Check that every package due for the aircraft's age and hours is signed off.

SERVICE BULLETIN AND AD HISTORY

The example record tracks bulletins on cable guard pins, a maximum zero fuel weight increase, ground spoiler/speed brake with a new hydraulic system, and a water separator. It also tracks certification-basis reconfigurations between EASA, ANAC, FAA and TCCA. FAA AD 2010-23-16 (flow control shutoff valve replacement) is logged as done 10-APR-2015. Compare a candidate aircraft's record to this and look for gaps.

TRIM TAB ALERT BULLETIN

SB 500-27-A026 Rev 01 (06/Oct/2017) has Embraer inspect the aileron, rudder and elevator trim tabs for missing cotter pins. Embraer recommends compliance within 50 flight hours. Inspection is estimated at 1.0 man-hour. Parts are free, and labor is compensated at an Embraer-authorized service center. It applies to listed serials, including 50000246 and 50000380.

SAFETY NOTES

- SB 500-27-A026 says a missing trim tab cotter pin could cause total loss of trim tab connection, flutter and possible loss of airplane control.
- Confirm service bulletin 500-27-A026 was inspected or complied with, in writing, if the aircraft's serial number is in its effectivity list.