

PIPER PA-25-235 Pawnee Model Guide

The PIPER PA-25-235 Pawnee is a single-engine piston aircraft in the PA-25 family (PA-25, PA-25-235, PA-25-260). The supplied bulletins name aerial application and towing as its operations. The documents give no variant-specific specs. Family-level figures reach up to 235 nm range, 91 kt cruise and 13000 ft ceiling. Buyers should focus on airframe age, wing spar condition and stabilizer supports.

KEY TAKEAWAYS

- Wing front spar fatigue cracks have caused wing detachments on PA-25 aircraft. The Rev 2 bulletin makes inspection mandatory for Piper-built aircraft.
- Aircraft 50 years old or older must treat the spar bulletin as mandatory, whatever their operation. Most PA-25s are about 55 years old or more.
- Horizontal stabilizer supports can corrode and crack. Bulletin 25/53/03 covers all PA-25-235 serial numbers with 1500 or more flight hours.
- Ask for leading edge replacement history. Non-original edges and extra drilled holes are linked to spar cracks.

WING FRONT SPAR

Bulletin 25-57-11 Rev 2 (marked DRAFT) cites spar fatigue cracks that start at holes or screw threads, tied to poor leading edge changes. It calls for a borescope inspection through six covers per half-wing, then a one-time eddy-current test. Repeat annually for aerial application, every 2 years for towing. More holes than the original design, or any crack, means spar replacement.

HORIZONTAL STABILIZER SUPPORTS

Bulletin 25/53/03 (May 10/06, mandatory) found severe corrosion and cracks in the front and rear stabilizer supports, on aircraft with about 2000 flight hours on average. Add a detailed visual check at the next 50 F.H. inspection and repeat every 100 F.H. Shake each stabilizer up and down to check for play. The definitive fix replaces both supports with a kit, about 10 working hours.

PRE-PURCHASE CHECKS

Check the logbooks for the entries these bulletins require, including borescope results and any recorded drill marks. Confirm whether the leading edges were ever changed and who built the aircraft: Piper, Chincul, Laviasa or FADEA. Unknown leading edge history is treated as mandatory compliance.

SAFETY NOTES

- If spar cracks or extra holes are found, ground the aircraft. Do not continue flight operations.
- Making new holes in the spar flanges is not acceptable. Use new screws of the original type and size.
- Excess play or unusual noise when shaking the stabilizers can indicate support failure.