

Piper PA-25 Pawnee Model Guide

The Piper PA-25 Pawnee is a single-seat, single-engine piston agricultural aircraft built from 1959 to 1981. The Pawnee D handbook lists a 2900 lb gross weight, a 1200 lb hopper load and Lycoming O-540 engines of 235 or 260 hp. Check the exact variant, the wing and lift-strut history, and the exhaust before buying.

KEY TAKEAWAYS

- Single seat. Gross weight is 2900 lbs, with a 1200 lb hopper load in the handbook figures.
- Engines are 541.5 cubic inch Lycoming O-540s: 235 hp (80/87 fuel) or 260 hp (100/130 fuel).
- Wing lift struts, the wing forward spar attach fitting and the exhaust all carry recurring inspection requirements.
- Take-off weight and carburettor icing featured in two Australian fatal Pawnee accident reports.

VARIANTS AND ENGINES

The Pawnee D handbook lists three versions. The PA-25-235 has a Lycoming O-540-B2C5 (235 hp at 2575 rpm, 80/87 minimum octane). The PA-25-260 comes in fixed-pitch (O-540-G2A5) and constant-speed (O-540-G1A5) forms, both 260 hp at 2700 rpm on 100/130 fuel. Confirm which one you are buying.

PERFORMANCE (HANDBOOK, GROSS WEIGHT, SEA LEVEL)

For the 235 hp airplane in clean configuration: take-off run 785 ft, 1350 ft over a 50 ft barrier, climb 700 ft/min, top speed 124 mph, cruise 114 mph at 75% power burning 14 gph (best-power mixture). Stall is 61 mph at max gross with flaps down. Landing roll is 850 ft at 1700 lbs. Duster and sprayer configurations are slower.

WHAT TO CHECK BEFORE BUYING

Ask for logbook proof of the wing lift strut inspection and any replacement with sealed struts (Service Bulletin 528D). Ask for the wing forward spar fuselage attach fitting inspection (AD 95-12-01) and the exhaust inspections. If the wing has the STC SA501SW metal skin conversion, check the spar cap inspection for cracks.

SPECIFICATIONS

Engine Power Hp	235
Max Takeoff Weight Lbs	2900
Hopper Load Lbs	1200
Fuel Capacity Gal	38.5
Usable Fuel Gal	36
Wing Span Ft	36.2
Length Ft	24.7
Height Ft	7.2

PERFORMANCE

Takeoff Run Clean Ft	785
Takeoff Over 50ft Clean Ft	1350
Rate Of Climb Clean Fpm	700
Fuel Burn 75pct Best Power Gph	14
Landing Roll Ft	850

V-SPEEDS

Vne Kts	135
Vno Kts	108
Va Kts	104
Vfe Kts	95

SAFETY NOTES

- Service Bulletin 528D covers lift strut corrosion: inspect before next flight and every 12 months, or replace with new sealed struts. Struts that fail the inspection must be replaced.
- AD 95-12-01 requires dye penetrant and ultrasonic inspection of the wing forward spar fuselage attach fitting every 24 months. The cluster may instead be replaced every 5 years.
- ATSB reports on two fatal Pawnee accidents cite take-off or flight above safe weight and possible carburettor ice. Check weight and conditions.