

Piper PA-28 Warrior II Model Guide

The Piper PA-28 Warrior II (PA-28-161) is a four-seat, single-engine piston airplane, first built in 1977 according to the library record. It has a 160 hp Lycoming O-320, a fixed-pitch propeller, a 2440 lb maximum takeoff weight and 48 gallons of usable fuel. This guide draws on the 1982 handbook and club checklists.

KEY TAKEAWAYS

- Lycoming O-320-D2A or D3G, 160 hp at 2700 rpm, fixed-pitch propeller. Avgas only (100 green or 100LL blue).
- Max takeoff weight is 2440 lb (normal category), with a 200 lb baggage limit. Work out weight and balance before filling all four seats and the tanks.
- Club checklist figures: cruise about 108 KIAS at 9.4 GPH (70% power, 3000 ft). Vy is 79 and Vne is 160 knots.
- The performance charts supplied cover the PA-28-151 Cherokee Warrior, not the 161. Use 161 handbook data for planning.

ENGINE AND FUEL

The Lycoming O-320 is a four-cylinder, direct-drive, air-cooled engine of 319.8 cubic inches with 8.5:1 compression. Oil capacity is 8 quarts. Fuel capacity is 50 gallons, of which 48 are usable. Minimum octane is 80, with 100 green or 100LL blue as the alternate grade. The propeller is a 2-blade Sensenich, fixed pitch, 74 inches maximum diameter.

WEIGHTS AND LOADING

Normal category: max takeoff 2440 lb, ramp 2447 lb, landing 2440 lb. Utility category: takeoff and landing 2020 lb, ramp 2027 lb. Baggage compartment limit is 200 lb in normal category and 0 lb in utility. Wing loading is 14.4 lb per sq ft and power loading is 15.3 lb per hp. Check the individual airplane's empty weight and equipment list.

WHAT TO CHECK ON A PRE-BUY

Club checklists call for these checks: main gear oleo extension of 4-6 inches and nose 3-6 inches; alternator belt tension; fuel sumps and strainer drained with no drips; all three pitot holes clear; magneto drop no more than 175 rpm with 50 rpm difference; carb heat rpm drop; and vacuum reading 4.9-5.1. Confirm that the handbook is current.

SPECIFICATIONS

Engine Power Hp	160
Max Takeoff Weight Lbs	2440
Max Ramp Weight Lbs	2447
Max Landing Weight Lbs	2440
Max Utility Takeoff Weight Lbs	2020
Max Baggage Weight Lbs	200
Fuel Capacity Gal	50
Usable Fuel Gal	48

PERFORMANCE

Cruise Speed Kts	108
Cruise Fuel Flow Gph	9.4
Climb Speed Kts	87
Best Glide Speed Kts	73
Max Demonstrated Crosswind Kts	17

V-SPEEDS

Rotation Speed Kts	55
Best Angle Climb Vx Kts	63
Best Rate Climb Vy Kts	79
Stall Speed Clean Kts	50
Stall Speed Landing Kts	44
Max Flap Extended Vfe Kts	103
Max Structural Cruise Vno Kts	126
Never Exceed Vne Kts	160

SAFETY NOTES

- Checklists from clubs are not authoritative. Use the handbook for the specific airplane and keep it current.
- Engine failure: best glide is 73 kts, about 1 NM per 550 ft of altitude. Carb heat is part of the run-up and the roughness checks.
- Max demonstrated crosswind is 17 kts. The owner is responsible for airworthiness and for staying within the limits.