

PIPER PA-28-180 Model Guide

PIPER PA-28-180 is a four-seat, fixed-gear, single-engine piston Cherokee/Archer powered by a 180 hp Lycoming O-360. The supplied manuals cover several versions: a 1972 Cherokee, the Cherokee 180 E and the Archer (manual issued July 1973). Figures differ by serial number. The wider PA-28 family reaches up to 910 nm range and 172 kt cruise, but those are family maxima, not figures for this model.

KEY TAKEAWAYS

- Four-seat cabin, 180 hp Lycoming O-360-A4A, 50 US gal fuel in two 25-gal wing tanks, fixed tricycle gear.
- Archer manual: 2450 lb gross, 1404 lb empty, 1046 lb useful. Cherokee 180 E: 2400 lb gross, 1310 lb empty, 1090 lb useful.
- Published takeoff: 720 ft ground run, 1625 ft over a 50-ft obstacle (25° flaps, sea level); best climb 85 mph, 725 fpm.
- Piper Service Bulletin 1304 mandates a one-time wing spar corrosion inspection within 100 hours. Confirm it was done.

VERSIONS AND WHAT THEY CARRY

The documents cover the 1972 Cherokee 180, the Cherokee 180 E and the Archer, so check which one you are buying. Gross weight is 2450 lb on the Archer and 2400 lb on the 180 E. The 180 E lists 200 lb maximum baggage. Seating is four, with a rear baggage area reached from inside or through an outside door.

AIRFRAME AND SYSTEMS

The airframe is all aluminium alloy, with an all-moving stabilator, manual flaps (10, 25 and 40 degrees) and 6.00 x 6 tires. The fuel system has two 25-gal tanks (24 gal usable each), individual quick drains and an auxiliary electric pump. The pump goes on for takeoff, landing and tank changes. Nose strut extension is 3.25 inches and main strut extension is 4.50 inches.

SPEEDS AND WHAT TO VERIFY

Checklist speeds: best rate 85 mph (74 kt), best angle 74 mph (64 kt), best glide 80 mph (70 kt). Stall is 59 kt clean and 53 kt with full flaps. Vne is 171 mph and Vfe is 115 mph. The checklist shows two different maneuvering speeds (127 and 134 mph). Use the aircraft's own approved flight manual.

SPECIFICATIONS

Engine Power Hp	180
Fuel Capacity Gal	50
Max Baggage Lbs	200
Wing Span Ft	30
Length Ft	23.5
Height Ft	7.3

PERFORMANCE

Takeoff Ground Run Ft	720
Takeoff Over 50ft Ft	1625
Rate Of Climb Fpm	725
Service Ceiling Ft	13000
Landing Roll Ft	600
Landing Over 50ft Ft	1150

V-SPEEDS

Best Rate Of Climb Kts	74
Best Angle Of Climb Kts	64
Best Glide Kts	70
Stall Clean Kts	59
Stall Full Flaps Kts	53

WEIGHT & BALANCE

Max Takeoff Weight Lbs	2450
Empty Weight Lbs	1404
Useful Load Lbs	1046

SAFETY NOTES

- Quick-drain both fuel tanks and the strainer to check for water before each flight; run the electric fuel pump for takeoff and landing.
- The approved Airplane Flight Manual overrides the Pilot's Operating Manual or handbook if they differ.
- Service Bulletin 1304 covers PA-28-180 wing spar corrosion. Check for the lower wing access panels (kit P/N 765-106V) and for inspection records.