

Piper PA-28 Cherokee 180 Model Guide

The Piper PA-28 Cherokee 180 is a four-seat, single-engine piston airplane built from 1963 to 1975. The 1972-73 owner's handbook lists a Lycoming O-360-A4A engine rated 180 hp at 2700 rpm, a 2450 lb gross weight, 48 gal usable fuel and a 148 mph top speed. Figures differ by serial number and handbook edition.

KEY TAKEAWAYS

- Four seats, 180 hp Lycoming O-360-A4A, 2450 lb gross, 1066 lb standard useful load (varies per airplane), 200 lb baggage limit.
- Handbook figures: 148 mph top speed, 141 mph optimum cruise, 725 fpm climb, 720 ft takeoff ground run, 1625 ft over a 50 ft obstacle.
- Earlier Cherokee 180 handbooks show 2400 lb gross and 50 gal fuel. Check the manual for the serial number you are buying.
- Approved for normal and utility categories only. Spins are prohibited, and no aerobatics are approved in the normal category.

LOADING AND WEIGHTS

Maximum weight is 2450 lb in the normal category and 1950 lb in the utility category. Standard empty weight is 1384 lb and useful load 1066 lb, but the handbook says weight varies with each aircraft, so use that airplane's own weight and balance. Baggage is limited to 200 lb (24 cu ft, 20 x 22 in door). Fuel is 48 gal usable, 100/130 minimum octane. Utility category allows no baggage or aft passengers.

PERFORMANCE AND SPEEDS

The 1972-73 handbook lists a 720 ft ground run, 1625 ft over 50 ft, 725 fpm climb at 85 mph, a 14,150 ft service ceiling and a 635 ft landing roll. Cruise range is 686 mi at 75% power. Stall speed is 61 mph flaps down and 68 mph flaps up. Never-exceed speed is 171 mph, maneuvering 127 mph, flaps extended 115 mph.

WHAT TO CHECK WHEN BUYING

Confirm the airplane's serial number matches the manual, since the handbooks differ. Check that the weight and balance and equipment list are current. On the preflight, owner checklists call for draining the fuel sumps and strainer and checking the alternator belt, tires at 24 psi, and oil level (6-8 qt). Main gear struts should show about 4.5 in and the nose strut about 3.25 in.

SPECIFICATIONS

Engine Horsepower Hp	180
Max Takeoff Weight Lbs	2450
Empty Weight Lbs	1384
Useful Load Lbs	1066
Fuel Capacity Usable Gal	48
Max Baggage Lbs	200
Wing Span Ft	32
Length Ft	24

PERFORMANCE

Takeoff Ground Run Ft	720
Takeoff Over 50ft Obstacle Ft	1625
Rate Of Climb Fpm	725
Service Ceiling Ft	14150
Top Speed Mph	148
Optimum Cruise Speed Mph	141
Cruising Range Mi	686
Landing Roll Ft	635

V-SPEEDS

Never Exceed Mph	171
Max Structural Cruise Mph	140
Maneuvering Mph	127
Flaps Extended Mph	115
Best Rate Of Climb Mph	85
Stall Flaps Down Mph	61
Stall Flaps Up Mph	68

WEIGHT & BALANCE

Max Gross Weight Lbs	2450
Utility Category Max Weight Lbs	1950
Max Baggage Lbs	200
Empty Weight Lbs	1384
Useful Load Lbs	1066
Aft Cg Limit Inches	93

SAFETY NOTES

- Spins are prohibited in both categories. No acrobatic maneuvers are approved in the normal category, and no inverted maneuvers are approved.
- Owner checklists warn that the stall warning is inoperative with the master switch off, and that the electric fuel pump must be ON for takeoff and landing.
- Do not take off with snow, ice or frost on the wing and tail surfaces.