

Piper PA-28 Cherokee 140 Model Guide

The Piper PA-28 Cherokee 140 is a four-seat, single-engine piston aircraft built from 1964 to 1977. It has a Lycoming O-320-E2A engine rated 150 hp at 2700 rpm (140 hp at 2450 rpm) and burns 80/87 minimum octane fuel. At 2150 lb gross it cruises about 121 mph at 75% power at sea level and carries 36 gal of standard fuel.

KEY TAKEAWAYS

- Four seats, 2150 lb maximum weight, 1230 lb standard empty weight, 920 lb useful load, 200 lb baggage limit (140B handbook).
- Cruise is about 121 mph at 75% power, burning 8.4 gph. Standard fuel is 36 gal (34 usable); the maximum is 50 gal (48 usable).
- Early serials 28-20000 to 28-20939 were licensed at 1950 lb unless modified. Confirm the gross weight of the airplane you view.
- Check the main gear torque links under AD 72-08-06, and ask for complete maintenance records.

PERFORMANCE AT 2150 LB GROSS

Handbook figures for the 140B at sea level: takeoff run 800 ft, 1700 ft over a 50 ft obstacle, best climb speed 85 mph, climb 660 ft/min. Service ceiling is 14,300 ft, top speed 139 mph, stall with flaps down 55 mph, landing roll 535 ft. Figures assume a standard airplane and conditions.

WEIGHT, FUEL AND LOADING

Standard empty weight is 1230 lb, useful load 920 lb, and baggage is limited to 200 lb. Standard fuel is 36 gal, and the maximum is 50 gal. The 140B handbook allows 340 lb in the baggage area only when family seats and safety belts are installed. Oil capacity is 8 qts. Work out a real weight and balance for every trip.

WHAT TO CHECK WHEN BUYING

Look for the main landing gear torque link crack inspection under AD 72-08-06, which repeats at intervals not to exceed 500 hours. Check shock strut inflation, tires, brakes and alternator belt tension. Look for fuel or oil leaks, and test the engine for wear. Confirm the airframe weight limit and the complete maintenance history.

SPECIFICATIONS

Engine Rated Power Hp	150
Fuel Capacity Standard Gal	36
Fuel Capacity Maximum Gal	50
Wing Span Ft	30
Wing Area Sq Ft	160
Length Ft	23.3
Height Ft	7.3
Max Baggage Lbs	200

PERFORMANCE

Takeoff Ground Roll Ft	800
Takeoff Over 50ft Obstacle Ft	1700
Rate Of Climb Fpm	660
Service Ceiling Ft	14300
Absolute Ceiling Ft	16800
Landing Roll Ft	535
Fuel Burn 75 Percent Power Gph	8.4
Fuel Burn 50 Percent Power Gph	5.6

WEIGHT & BALANCE

Max Takeoff Weight Lbs	2150
Empty Weight Standard Lbs	1230
Useful Load Standard Lbs	920
Max Baggage Lbs	200

SAFETY NOTES

- AD 72-08-06 applies to PA-28-140 serials 28-20000 and up: inspect the main gear torque links for cracks and replace any cracked links before further flight.
- A 2009 AAIB report found incomplete maintenance records on a PA-28-140 and no evidence of a mechanical defect. Verify that required maintenance is documented.
- A 2017 AAIB report: a PA-28-140 took off at 2,576 lb against a 2,150 lb limit and failed to climb. Camshaft wear may have cut power by 5-8%.