

Cessna 172K Skyhawk Model Guide

The CESSNA 172K Skyhawk is a single-engine, high-wing piston aircraft. Its handbook lists a 150 hp Lycoming O-320-E2D engine and a 2300 lbs gross weight, with a fixed-pitch propeller. An accident report lists 4 occupants for a 172K. This guide uses the 172K owner's manual, a 172K checklist and a 172K accident report.

KEY TAKEAWAYS

- Handbook gross weight is 2300 lbs for takeoff and landing, with 120 lbs of baggage allowed.
- Power is a Lycoming O-320-E2D rated at 150 hp at 2700 RPM, running on 80/87 minimum grade avgas.
- Fuel is 42 gal total (38 usable) in standard tanks, or 52 gal total (48 usable) with long-range tanks.
- An accident report on a 172K found water in the fuel system caused engine failure. Check the fuel drains and fuel history.

HANDBOOK PERFORMANCE AT 2300 LBS

Top speed at sea level is 139-140 mph. Cruise at 75% power at 9000 ft is 131-132 mph. Rate of climb at sea level is 645 fpm and service ceiling is 13,100 ft. Takeoff ground run is 865 ft (1525 ft over a 50-foot obstacle). Landing roll is 520 ft (1250 ft over 50 ft). Range is about 615-620 miles on 38 gal with no reserve.

WHAT TO CHECK WHEN BUYING

Look at the fuel quick drain valves at each wing and the nose, the fuel caps and vents, and the carburetor air filter. Check the nose strut and tire, and propeller nicks, which the manual says should be dressed out promptly. Compare engine time with the overhaul interval: the accident aircraft's engine showed 2,246 hours since new against 2,400 hours between overhaul. Confirm the weight and balance data sheet and FAA-337 changes are in the aircraft file.

OPERATING LIMITS AND SERVICING

Oil capacity is 8 qts. The manual says do not operate on less than 6 qts and fill to 7 qts for flights under 3 hours. Tachometer red line is 2700 RPM and oil pressure red line is 25 psi minimum, 100 psi maximum. An annual inspection is required, and 100-hour inspections if flown for hire. Utility category weight is 2000 lbs with the rear seat and baggage compartment empty.

SPECIFICATIONS

Engine Power Hp	150
Propeller Diameter Inches	76
Fuel Total Standard Gal	42
Fuel Usable Standard Gal	38
Fuel Total Long Range Gal	52
Fuel Usable Long Range Gal	48
Baggage Capacity Lbs	120

PERFORMANCE

Rate Of Climb Sea Level Fpm	645
Service Ceiling Ft	13100
Takeoff Ground Run Ft	865
Takeoff Over 50ft Obstacle Ft	1525
Landing Roll Ft	520
Landing Over 50ft Obstacle Ft	1250

V-SPEEDS

Vso Kts	43
Vs1 Kts	50
Vr Kts	55
Vx Kts	60
Vy Kts	70
Vfe Kts	87
Va Kts	106
Vno Kts	122

WEIGHT & BALANCE

Max Takeoff Weight Lbs	2300
Max Landing Weight Lbs	2300
Utility Category Weight Lbs	2000
Baggage Capacity Lbs	120
Fuel Weight Per Gal Lbs	6

SAFETY NOTES

- An accident report on a CESSNA 172K attributed a total power loss to water in the fuel system. Drain every fuel sump before the first flight of the day.
- Utility category (2000 lbs): the baggage compartment and rear seat must not be occupied, and only the listed maneuvers are approved.
- The optional carburetor air temperature gauge shows an icing range of -15° to 5°C (yellow arc). The checklist calls for carb heat on as required during descent.