

Cessna 172 Model Guide

The CESSNA 172 is a family of single-engine piston aircraft. The registry lists variants from the original 172 through the 172S and shows up to 4 passengers. Family maxima are up to 140 kt cruise, 700 nm range and 17000 ft ceiling. Most figures below are for the 172R (160 hp, fixed gear). Older and diesel-converted airplanes differ, so verify which version you are buying.

KEY TAKEAWAYS

- 172R: 160 hp Lycoming IO-360-L2A, fixed-pitch prop; 123 kt max at sea level, 122 kt cruise at 8000 ft (80% power).
- Max takeoff and landing weight is 2450 lb; baggage allowance 120 lb; fuel 56 gal total, 53 gal usable.
- Per the POH, takeoff over a 50 ft obstacle takes 1685 ft and landing over 50 ft takes 1295 ft (standard conditions).
- Engines vary by airframe: a 1956 172 had a 145 hp Continental O-300-A; some 172R/S have Thielert diesel conversions.

172R PERFORMANCE

POH range is 580 NM at 80% power at 8000 ft (4.8 h) or 687 NM at 10000 ft and 60% (6.6 h), on 53 gal usable fuel with a 45 minute reserve. Climb is 720 fpm at sea level and service ceiling is 13500 ft. Speed fairings add about 2 knots.

ENGINE VARIANTS TO KNOW

The standard 172R has a 160 hp Textron Lycoming IO-360-L2A and a 75 in fixed-pitch prop. Thielert STC airplanes (172 R and S) use a TAE 125-01 (1689 ccm) or TAE 125-02-99 (1991 ccm) diesel with FADEC, a 3-blade constant-speed prop and Jet A-1 fuel. The 1956 172 had a 145 hp Continental O-300-A.

WHAT TO CHECK WHEN BUYING

Sample all fuel drains for water and sediment and check the oil (QRH: 5 qt minimum, 8 qt maximum). Inspect tyres, nose strut and air filter. On diesel airplanes also check gearbox oil and the FADEC and backup battery tests. On older carbureted airplanes, check carb heat; the 1956 manual calls for oil changes every 25 hours.

SPECIFICATIONS

Engine Power Hp	160
Fuel Capacity Gal	56
Usable Fuel Gal	53
Propeller Diameter In	75

PERFORMANCE

Max Speed Sea Level Kts	123
Cruise Speed Kts	122
Range Nm	580
Max Range Nm	687
Climb Rate Fpm	720
Service Ceiling Ft	13500
Takeoff Ground Roll Ft	945
Landing Ground Roll Ft	550

V-SPEEDS

Vne Kts	163
Vno Kts	129
Va Kts	99
Vx Kts	60
Vy Kts	79
Best Glide Kts	65

WEIGHT & BALANCE

Max Ramp Weight Lbs	2457
Max Takeoff Weight Lbs	2450
Max Landing Weight Lbs	2450
Baggage Allowance Lbs	120

SAFETY NOTES

- Thielert diesel: if main battery and alternator both fail, the engine runs only up to 30 minutes on the FADEC backup battery.
- Thielert diesel: unapproved fuels may damage the engine and fuel system and cause engine failure.
- Older carbureted 172: carb ice can form on the ground; apply full carb heat on approach glide before reducing power.