

Data Sheet- Cessna 172R

Weights

Aircraft Number	Empty Weight	Empty Moment	Useful Load
2382R	1685.2 lbs.	65,905.4	764.8 lbs.

Maximum Weights

	Normal	Utility
Ramp Weight	2457 lbs.	2107
lbs		
Takeoff Weight	2450 lbs.	2100 lbs
Landing Weight	2450 lbs.	2100 lbs
Baggage Weight	120 lbs.	empty
Area 1	120 lbs.	empty
Area 2	50 lbs.	empty

Powerplant

Engine: Textron Lycoming IO-360, 160 BHP @ 2400 RPM. 4 Cylinders, Direct Drive, horizontally opposed, air cooled, fuel injected.

Oil: Full	8 qts.
Min for local flight	6 qts.
Min for x-country	7 qts.
Grade and type	Summer-100W50
	Winter- 65W30

Fuel System

Fuel: Approved Grades	100LL(blue), 100(green)
Total Fuel	56 gal.
Total Usable Fuel	53 gal.

System Description: The airplane is equipped with a standard fuel system consisting of two vented fuel tanks, a fuel tank selector valve, fuel strainer, and auxiliary fuel pump. Fuel flows by gravity from one or both tanks to the fuel selector, through a fuel strainer to the injector manifold. From the injector, the fuel flows to the cylinders and is mixed with air at the intake port. The fuel selector should be in the BOTH position for takeoff, climb, descent, landing, and maneuvers that involve prolonged slips and skids. Operation from either the LEFT or RIGHT position is reserved for level cruising flight only.

Landing Gear and Brakes

System Description: Landing gear is fixed in the tricycle configuration with a steerable nosewheel. Nosewheel is steerable and differential braking allows for a tighter turn radius. Nose strut is an air-oil type shock. Each main gear is equipped with a hydraulically activated single disk brake on the inboard side of each wheel.

Tire Inflation: Mains 28 PSI
Nose 34 PSI

Electrical System

Alternator- 28 volt, 60 ampere
Battery- 24 volt

System description: Power is supplied to most general electrical items through a split primary bus bar, with an essential bus wired between the two primaries to provide power for the master switch and annunciator circuits. Each primary bus bar is also connected to an avionics bus bar via a single avionics power switch. The avionics power switch should be turned off prior to starting the engine to prevent harmful transient voltages from damaging the avionics equipment. The ammeter shows a discharge or a charge on the battery and should remain at or near the zero indication after a brief charging period.

Pitot-Static System

System description: The system is standard with a heated pitot head under the left wing and two static ports on either side of the nose cowling. The alternate static source is located on the panel above the throttle and supplies static pressure from inside the cockpit.

Speeds

BEST GLIDE SPEED	65 KIAS
Stall in landing configuration	V _{so} 33 KIAS
Stall in cruise configuration	V _{s1} 44 KIAS
Rotation speed	V _r 55 KIAS
Best angle of climb speed	V _x 60 KIAS
Best rate of climb speed	V _y 76 KIAS
Maneuvering speed	V _a
	2450 lbs. 99 KIAS
	2100 lbs. 92 KIAS
	1600 lbs 82 KIAS
Flaps extended	V _{fe}
	0-10° 110 KIAS
	10-30° 85 KIAS

Lafayette Aviation Inc.
172R

Cessna

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Max. structural cruising speed	Vno	129 KIAS
Enroute climb speed		70-85 KIAS
Approach Speed		60-70 KIAS
Never exceed speed	Vne	163 KIAS
Demonstrated Crosswind Component		15 KTS