Data Sheet - Cessna 172RG

Weights

Aircraft Number	Empty Weight	Empty Moment	Useful Load
9584B	1692.5 lb.	64803.0	965.0 lb.
6330V	1697.7 lb.	64209.8	960.3

Maximum Weights

Ramp Weight	2658 lb.
Takeoff Weight	2650 lb.
Landing Weight	2650 lb.
Baggage Weight	200 lb.
Area 1	200 lb.
Area 2	50 lb.

Powerplant

Engine: Lycoming O-360, 180BHP @ 2700 RPM. Four cylinders, direct drive, horizontally opposed, air cooled, carburetor-equipped.

Oil:	Full	8 qt.
	Min. for Local Flight	6 qt.
	Min. for X-Country	7 qt.
	Grade and Type	Summer - 100W50 wt.
		Winter - 65W30 wt.

Fuel System

Fuel:	Approved Grades	100LL (blue), 100 (green)
	Total Fuel	66.0 Gal.
	Total Usable	62.0 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, manual primer, engine driven fuel pump, auxiliary electric fuel pump, and carburetor. Fuel flows by gravity from one or both tanks, through a fuel strainer to the auxiliary pump and engine driven pump to the carburetor. From the carburetor, the fuel/air mixture flows to the cylinders. The auxiliary fuel pump should be used whenever fuel pressure falls below .5 psi. The fuel selector should be in the BOTH position for takeoff, climb, descent, landing, and maneuvers that involve prolonged slips or 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 a retractable tricycle type with a steerable nosewheel. Shock absorption is accomplished through tubular spring steel main gear struts and an air/oil nose gear strut. Nose wheel steering will turn the nose wheel through a 15 degree arc each side of center. Differential braking will increase the turning arc up to 30 degrees each side of center. Each main gear is equipped with a hydraulically actuated disc type brake. When the gear lever is moved up or down, it creates a pressure change which electrically activates the hydraulic power pack which then hydraulically raises or lowers the gear. The gear is held in the UP position by hydraulic pressure and in the DOWN position by mechanical locks. A squat switch on the nose gear prevents inadvertent raising of the gear while on the ground. A hand operated hydraulic pump is provided for manual extension of the landing gear in the event of a hydraulic power pack failure. A gear warning horn sounds when the one or all of the gear are not locked down and the manifold pressure drops below 12 inches or flaps are extended beyond 20 degrees. A green gear light indicates all three gear are down and locked. An amber light indicates that all of the gear are up and locked. No lights illuminated indicates gear in transition.

Tire Inflation: Mains 40-50 psi.
Nose 60-68 psi.

Electrical System

Alternator - 28 volt, 60 ampere
Battery- 24 volt

System Description: Power is supplied to most general electrical items through the primary bus. All avionics are powered by the avionics bus. The two busses are tied together through the avionics power switch, which also functions as a circuit breaker for the avionics bus. The ammeter is connected to the battery and shows whether the battery is charging or discharging.

Pitot-Static System

System Description: The system is standard with a heated pitot head under the left wing and static ports on both sides of the nose cowling. The alternate static source is located on the panel below the throttle and supplies static pressure from inside the cockpit.

Speeds

BEST GLIDE SPEED	2350 lbs.		73 KIAS
	1850 lbs.		61 KIAS
Stall in landing configuration		Vso	42 KIAS
Stall in cruise configuration		Vs1	50 KIAS
Rotate Speed		Vr	55 KIAS
Best angle of climb		Vx	67 KIAS (GEAR UP)
		Vx	63 KIAS (GEAR DOWN)
Best rate of climb		Vy	84 KIAS
Maneuvering Speed		Va	
	2650 lb.		106 KIAS
	1850 lb.		89 KIAS
Flaps extended		Vfe	
	0-10°		130 KIAS
	10-30°		100 KIAS
Max. Landing Gear Operating Speed		Vlo	140 KIAS
Max. Landing Gear Extended Speed		Vle	164 KIAS
Max. Structural Cruising Speed		Vno	145 KIAS
Enroute Climb Speed			85-95 KIAS
Approach Speed			60-70 KIAS
Never Exceed		Vne	164 KIAS

Demonstrated Crosswind Component 15 KTS