

**Data Sheet - Cessna 172****Weights**

Aircraft Number	Empty Weight	Empty Moment	Useful Load
63366	1481.1 lbs	57777.7	918.9 lbs
51204	1482.9	57760.2	917.1 lbs
62085	1489.7	57133.0	917.2 lbs

\*All Basic Empty Weights include wheel pants, subtract 15.4 pounds during winter months when wheel pants are removed.

**Maximum Weights**

	<u>Normal</u>	<u>Utility</u>
Ramp Weight	2407 lbs.	2107 lbs.
Takeoff Weight	2400 lbs.	2100 lbs.
Landing Weight	2400 lbs.	2100 lbs.
Baggage Weight	120 lbs.	none
Area 1	120 lbs.	none
Area 2	50 lbs.	none

**Powerplant**

Engine: Lycoming O-320, 160BHP @ 2700 RPM. Four cylinders, direct drive, horizontally opposed, air cooled, carburetor-equipped.

Oil: Full 7 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 43.0 Gal.  
 Total Usable 40.0 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, and carburetor. Fuel flows by gravity from one or both tanks to the fuel selector, through a fuel strainer to the carburetor. From the carburetor, the fuel/air mixture flows to the cylinders. 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 fixed in the tricycle configuration with a steerable nosewheel. Nosewheel is steerable through a 10 degree arc each side of center. Differential braking increases the turning arc to 30 degrees each side of center. 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 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 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 charge or discharge 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 a static port on the left 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		65 KIAS
Stall in landing configuration	V <sub>so</sub>	33 KIAS
Stall in cruise configuration	V <sub>s1</sub>	44 KIAS
Rotate Speed	V <sub>r</sub>	55 KIAS
Best angle of climb	V <sub>x</sub>	60 KIAS
Best rate of climb	V <sub>y</sub>	76 KIAS
Maneuvering Speed	V <sub>a</sub>	
	1600 lbs.	82 KIAS
	2400 lbs.	99 KIAS
Flaps extended	V <sub>fe</sub>	
	0-10°	110 KIAS
	10-30°	85 KIAS
Max. Structural Cruising Speed	V <sub>no</sub>	127 KIAS
Enroute Climb Speed		75-85 KIAS
Approach Speed		60-70 KIAS
Never Exceed	V <sub>ne</sub>	158 KIAS
Demonstrated Crosswind Component		15 knots