Data Sheet- Cessna 172SP

Weights

Aircraft Number	Empty Weight	Empty Moment	Useful Load
N35063	1676.2 lbs	67,731	881.8 lbs

Maximum Weights	Normal	Utility
Ramp Weight	2558 lbs	2208 lbs
Takeoff Weight	2550 lbs	2200 lbs
Landing Weight	2550 lbs	2200 lbs
Baggage Weight	120 lbs.	empty
Area 1	120 lbs	empty
Area 2	50 lbs	empty

Powerplant

Engine: Textron Lycoming IO-360, 180 BHP @ 2700 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 38 PSI
Nose 45 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	**68 KIAS**	
Stall in landing configuration	Vso	40 KIAS
Stall in cruise configuration	Vs1	48 KIAS
Rotation speed	Vr	55 KIAS
Best angle of climb speed	Vx	62 KIAS
Best rate of climb speed	Vy	74 KIAS
Maneuvering speed	Va	
	2550 lbs.	105 KIAS
	2200 lbs.	98 KIAS
	1900 lbs	90 KIAS
Flaps extended	Vfe	
	0-10°	110 KIAS
	10-30°	85 KIAS

Max. structural cruising speed	Vno	129 KIAS
Enroute climb speed		75-85 KIAS
Approach Speed		60-70 KIAS
Never exceed speed	Vne	163 KIAS
Demonstrated Crosswind Component		15 knots