

Cessna 177 Cardinal Model Guide

The Cessna 177 Cardinal is a four-seat, single-engine piston aircraft built from 1968 to 1978. Its owner's manual covers the Model 177, Cardinal and (1975 edition) Cardinal II, certificated as Model 177B under FAA Type Certificate No. A13CE. Power is a 180 hp Lycoming O-360 series engine with a constant-speed propeller.

KEY TAKEAWAYS

- Four seats, 2500 lbs gross weight, 120 lbs baggage; the 1975 manual lists 50 gal standard fuel or 61 gal long-range tanks.
- 1975 manual (Cardinal): top speed 160 mph, 150 mph at 75% power at 10,000 ft. A standard Model 177 without speed fairings is three to four mph slower.
- Takeoff is 750 ft ground run, 1400 ft over 50 ft. Landing is 600 ft roll, 1220 ft over 50 ft. Stall is 63 mph flaps up, 53 mph flaps down.
- Family-wide registry maxima, not this variant: up to 144 kt cruise, 600 nm range and 17000 ft ceiling across the 177 variants.

SPEED AND RANGE (HANDBOOK FIGURES)

1975 manual, Cardinal: 75% power at 10,000 ft gives 150 mph. Range is 735 mi (4.9 hrs) on 49 gal and 900 mi (6.0 hrs) on 60 gal, no reserve. Maximum range at 126 mph is 820 mi on 49 gal and 1005 mi on 60 gal. The 1971 manual lists lower cruise: 139 mph (Model 177) and 142 mph (Cardinal) at 8000 ft.

WEIGHTS AND VARIANTS

1975 manual approximate empty weight: 1460 lbs Model 177, 1505 lbs Cardinal, 1580 lbs Cardinal II. Useful load: 1040, 995 and 920 lbs. The 1971 manual lists 1430 and 1480 lbs empty. Variants in the registry: 177, 177A, 177B, 177RG and F177RG. Check which tank size and equipment the airframe has.

WHAT TO CHECK BEFORE BUYING

Match the manual edition to the airframe's model and year. Verify oil level, fuel drains for water, and the fuel strainer. Aftermarket 3-point shoulder harness kits are listed for the 177/177A/177V/177RG, so check what restraints are fitted.

SPECIFICATIONS

Engine Power Hp	180
Fuel Capacity Standard Gal	50
Fuel Capacity Long Range Gal	61
Propeller Diameter Inches	76

PERFORMANCE

Rate Of Climb Fpm	840
Service Ceiling Ft	14600
Takeoff Ground Run Ft	750
Takeoff Over 50ft Obstacle Ft	1400
Landing Ground Roll Ft	600
Landing Over 50ft Obstacle Ft	1220

WEIGHT & BALANCE

Max Gross Weight Lbs	2500
Max Baggage Lbs	120
Empty Weight Model 177 1975 Lbs	1460
Useful Load Model 177 1975 Lbs	1040

SAFETY NOTES

- Do not operate with less than six quarts of oil; fill to eight quarts for extended flight.
- Drain fuel from the sump and strainer before the first flight of the day and after each refueling to check for water and sediment.
- In cold weather, remove even small accumulations of frost, ice or snow from the wing, tail and control surfaces.