

Reims-Cessna F177RG Cardinal Model Guide

The Reims-Cessna F177RG Cardinal is a four-seat, single-engine piston airplane with retractable gear, listed in the library as built 1971-1978. It has a 200 hp Lycoming IO-360-A1B6D fuel-injected engine and a constant-speed propeller. The Cardinal RG owner's manual, which also covers the F177RG, lists 2,800 lbs gross weight, 171 mph cruise at 75% power and 61 gallons of fuel.

KEY TAKEAWAYS

- Four seats, 200 hp fuel-injected Lycoming IO-360-A1B6D, retractable gear; the manual lists 2,800 lbs gross weight.
- Manual figures: 180 mph top speed at sea level, 171 mph at 75% power at 7000 ft, 925 fpm climb, 17,100 ft service ceiling.
- Check the main gear actuator rod end: a 1979 service letter urged replacing the old type, and a failure caused a gear-up landing.
- Useful load is about 1,120 lbs on the Cardinal RG, with up to 120 lbs of baggage. Check the actual aircraft's weight records.

PERFORMANCE (MANUAL FIGURES, CARDINAL RG)

Top speed is 180 mph at sea level. Cruise is 171 mph at 75% power at 7000 ft, with a range of 945 mi (5.6 hrs) on 60 gallons with no reserve. Take-off ground run is 890 ft, or 1585 ft over a 50-ft obstacle. Landing ground roll is 730 ft, or 1350 ft over 50 ft. Stall speed with power off is 66 mph flaps up and 57 mph flaps down.

WEIGHTS AND LOADING

The manual lists 2,800 lbs gross weight and approximate empty weights of 1,680 lbs (Cardinal RG) and 1,750 lbs (Cardinal RG II). Useful load is 1,120 lbs and 1,050 lbs respectively. Baggage is limited to 120 lbs. Total fuel is 61 gallons. Verify the empty weight and balance of the specific aircraft you are buying.

WHAT TO CHECK BEFORE BUYING

Confirm the main gear actuator rod end was replaced with the higher-strength part from the 1979 service letter. Check the landing gear system and emergency hand pump. Check fuel drains for water. Look for any shoulder harness retrofit under STC SA2067NM, which lists the F177RG. For the 177 family, the registry shows up to 144 kt cruise and up to 600 nm range, but those are family maxima, not this model's figures.

SPECIFICATIONS

Engine Power Hp	200
Fuel Capacity Gal	61
Propeller Diameter Inches	78

PERFORMANCE

Rate Of Climb Fpm	925
Service Ceiling Ft	17100
Takeoff Ground Run Ft	890
Takeoff Over 50ft Obstacle Ft	1585
Landing Ground Roll Ft	730
Landing Over 50ft Obstacle Ft	1350

WEIGHT & BALANCE

Max Gross Weight Lbs	2800
Empty Weight Lbs	1680
Useful Load Lbs	1120
Max Baggage Lbs	120

SAFETY NOTES

- Service letter SE79-37 (6 Aug 1979) covers F177RG serials F177RG0001 to F177RG0177 and recommends replacing the old main gear actuator rod end.
- An old-type rod end failed on an F177RG, leaving the main gear unlocked and forcing a belly landing. The higher-strength part has no reported failures.
- Do not operate with less than six quarts of oil (fill to eight for extended flight). Drain fuel sumps before the first flight of the day and after each refuelling.