

CESSNA 172M Model Guide

The CESSNA 172M is a single-engine piston four-seat trainer and tourer. The documents describe a 180 HP Lycoming O-360 with a fixed-pitch propeller and a 2550 lb maximum takeoff weight. The two source documents are a supplemental flight manual for the STC that allows 2550 lb and a flight school's checklist for its 1972 airframes.

KEY TAKEAWAYS

- CESSNA 172M: 180 HP Lycoming O-360, 38 gal usable fuel, 2550 lb max takeoff weight in normal category.
- The 2550 lb gross weight and the 180 HP engine are documented as STC and ATS modifications. Confirm the paperwork for the airplane you are buying.
- Baggage limit is 108 lb, and any aux fuel carried in the baggage area counts toward it.
- Max crosswind is 14 kt. Stall speeds are 64 mph clean and 56 mph with flaps down.

WEIGHT, FUEL AND LOADING

Normal category max takeoff and landing weight is 2550 lb. Utility category is 2000 lb. Main fuel is 38 gal usable (42 gal total). Baggage is limited to 108 lb. Forward CG limit is 35 inches aft of datum at 1950 lb or less, moving to 41.0 inches at 2550 lb. Aft limit is 47.3 inches.

PAPERWORK AND MODIFICATIONS TO VERIFY

The supplemental manual applies only with STC SA2196CE, which raises gross weight to 2550 lb and limits flap travel to 30 degrees. It covers serial numbers 17260759 to 17265684. The airplane must first have the ATS SA4428SW 180 HP O-360 and fixed-pitch propeller installed. At 2550 lb it needs 6-ply or heavier tires. Tire pressure is 45 psi nose and 38 psi main.

PERFORMANCE AND WHAT TO INSPECT

Fuel burn at 2000 ft, standard temperature and 2500 RPM is about 9.6 gph at 72 BHP (not FAA approved). Short-field landing at 2550 lb, sea level and 20C takes 585 ft ground roll and 1350 ft over a 50 ft obstacle. The checklist covers fuel sumps, strainer, oil (6-8 qt), nose strut, tires and mag drop (175 RPM max).

SPECIFICATIONS

Engine Hp	180
Fuel Capacity Gal	38
Max Takeoff Weight Lbs	2550
Utility Takeoff Weight Lbs	2000
Baggage Allowance Lbs	108
Propeller Diameter Inches	76

PERFORMANCE

Max Crosswind Kts	14
Cruise Fuel Burn Gph 2500rpm 2000ft	9.6
Landing Ground Roll Sea Level 20c Ft	585
Landing Over 50ft Sea Level 20c Ft	1350
Max Glide Speed Mph	78

V-SPEEDS

Vso Mph	56
Vs1 Mph	64
Vx Mph	71
Vy Mph	84
Va Mph	112
Vfe Mph	100
Vno Mph	145
Vne Mph	182

WEIGHT & BALANCE

Max Takeoff Weight Lbs	2550
Max Landing Weight Lbs	2550
Utility Weight Lbs	2000
Baggage Allowance Lbs	108
Forward Cg Limit Light Inches	35
Forward Cg Limit Max Weight Inches	41
Aft Cg Limit Inches	47.3

SAFETY NOTES

- Landing with flaps up needs 10 mph more approach speed and about 35% more distance.
- Mag drop over 175 RPM at runup means do not fly. Try the cleaning run, and abort the flight if it does not clear.
- Improper leaning greatly reduces endurance. Check fuel quantity by dipstick and sump sampling.