

Beechcraft 35 Bonanza Model Guide

The Beechcraft 35 Bonanza is a single-engine piston airplane built from 1947 to 1982, seating 4 to 6 depending on year. The original Model 35 was approved March 25, 1947 with a Continental E-185-1 engine. Figures below come from FAA specification A-777 and apply to the early Model 35 unless noted. Later variants differ.

KEY TAKEAWAYS

- Early Model 35: Continental E-185-1, 185 hp for one minute at takeoff and 165 hp for all other operations. It needs 80 minimum grade avgas.
- Model 35 normal-category maximum weight is 2550 lbs with 4 seats and 120 lb of baggage. The A35 is listed at 2650 lbs and 270 lb of baggage.
- Never-exceed speed is 176 kt. On the Model 35, gear and flaps extended limit is 87 kt.
- Inspect the wing bolts and fittings, and the magnesium ruddervator skins, closely on any purchase.

WEIGHTS, SEATS AND FUEL

Model 35 maximum weight is 2550 lbs normal category and 2100 lbs utility category. There are 4 seats, and utility category allows no baggage. Fuel is two main tanks of 20 gal each, 17 gal usable each. An optional fuselage aux tank holds 20 gal, 19.5 usable. Oil capacity is 10 qt.

WHAT TO INSPECT BEFORE BUYING

Wing attach bolts, nuts and fittings need a corrosion check, and the drain holes must be clear. Ruddervators on the V-tail are magnesium skinned, and corroded ones generally need a full reskin. Check the records for the 100-hour inspection, which must be done at least every 12 months even if flown under 100 hours a year.

SPEED LIMITS (MODEL 35 VS A35)

Model 35: maneuvering 113 kt, maximum structural cruising 139 kt, never exceed 176 kt, flaps extended 87 kt, landing gear extended 87 kt. The A35 has the same top speeds but allows flaps at 91 kt and gear at 109 kt.

SPECIFICATIONS

Takeoff Power Hp	185
Continuous Power Hp	165
Fuel Per Main Tank Gal	20
Usable Fuel Per Main Tank Gal	17
Aux Tank Usable Fuel Gal	19.5
Max Baggage Normal Lbs	120

V-SPEEDS

Never Exceed Kts	176
Maneuvering Kts	113
Max Structural Cruising Kts	139
Flaps Extended Kts	87
Gear Extended Kts	87

WEIGHT & BALANCE

Max Weight Normal Lbs	2550
Max Weight Utility Lbs	2100
A35 Max Weight Lbs	2650
A35 Max Baggage Lbs	270

SAFETY NOTES

- Australian AD/BEECH 35/67 Amdt 6 requires a wing bolt and fitting corrosion inspection every 12 calendar months. Bolts must be retired before 20 years in service, or maintained on condition.
- Magnesium ruddervators corrode rapidly. No approved repair exists for light damage or corrosion except a complete control surface reskin.
- If a Dynon roll servo autopilot is installed, check for at least 0.25 inch clearance between the aileron balance cable and the bridle cable guard.