

Beechcraft A36TC Bonanza Model Guide

The Beechcraft A36TC Bonanza is a single-engine piston airplane built from 1979 to 1981, with 4 to 6 seats. It belongs to the Model 36 family. Across all variants, the registry lists up to 6 passengers, up to 195 kt cruise and up to 1000 nm range. Those are family maximums, not A36TC figures. The documents supplied here are an autopilot supplement and maintenance references, not a full handbook.

KEY TAKEAWAYS

- Built 1979 to 1981 as a single-engine piston with 4 to 6 seats. The family registry shows up to 6 passengers and a 25000 ft service ceiling.
- With the Garmin GFC 500 autopilot, engagement speed is 75 KIAS minimum and 195 KIAS maximum at or below 16,000 ft MSL.
- Above 16,000 ft MSL, the A36TC autopilot maximum engagement speed becomes VNE minus 10 KIAS, because VNE is reduced at altitude.
- Maintenance manual P/N 36-590001-9A23 covers the A36TC. The cover date is 1980, with revisions up to 2005.

AUTOPILOT LIMITS (GFC 500 SUPPLEMENT)

The GFC 500 supplement applies to the A36TC. The pilot must sit in the left seat with the belt fastened. The autopilot and yaw damper are not for takeoff or landing. Disengage below 800 ft AGL, or below 200 ft AGL on approach. It is approved for Category 1 precision and non-precision approaches only. The preflight test must pass before use.

MAINTENANCE MANUAL AND RECORDS

The listed manual covers the V35B, F33A, F33C, A36, A36TC and B36TC and runs to 742 pages. Topics include inspection periods, pilot preventive maintenance, landing gear manual extension, the induction system icing, oxygen and fuel systems, and weight and balance with the equipment list. Ask for the full manual and current revision with the airplane.

ELECTRICAL SYSTEM ACCESS

In the A36 example, the battery box and electrical power sit on the right-hand firewall, and the engine compartment is easy to reach. The fuse block shows 24+ volts straight from the battery. A maintenance-charger plug is logged as a minor alteration. Your A36TC may differ, so confirm the layout and any logbook entry.

SPECIFICATIONS

Autopilot Max Fuel Imbalance Gal	15
Autopilot Disengage Height Approach Ft	200
Autopilot Disengage Height Other Ft	800

V-SPEEDS

Autopilot Min Engagement Speed Kts	75
Autopilot Max Engagement Speed Kts	195

SAFETY NOTES

- Pitch trim runaway: grip the wheel, hold AP DISC / TRIM INT, expect high elevator forces, pull the autopilot breaker, then release the button.
- Do not use the autopilot or yaw damper during takeoff and landing. Do not overpower the autopilot in flight, because out-of-trim forces result.
- Pulling the autopilot breaker also disables the yaw damper and ESP. Maximum fuel imbalance with the autopilot engaged is 15 gallons.