

BEECHCRAFT P35 Model Guide

The BEECHCRAFT P35 is a single-engine piston Bonanza in the Model 35 V-tail family (variants run from the 35 to the V35B). The family tops out at up to 5 passengers, 148 kt cruise, 480 nm range and a 17000 ft ceiling. Those are family maxima, not P35 figures. The documents here cover a tip-tank STC, control rigging and an autopilot bulletin.

KEY TAKEAWAYS

- The tip-tank STC (20 gal per tank) allows 3325 lb max takeoff weight. Utility category applies at 3125 lb or less with the tanks empty.
- With the STC, add 15% to takeoff and landing distances and cut rate of climb 6%. Cut range 6% and endurance 10% before counting tip fuel.
- Family maxima (up to 5 passengers, 148 kt, 480 nm) cover the whole Model 35 line, not the P35 alone.
- Check any Dynon autopilot: a January 2025 bulletin requires a P35-specific pitch servo kit for earlier installs.

WEIGHTS, CG AND LIMITS (TIP-TANK STC)

Per the STC supplement for N35/P35 (s/n D-6562 through D-7309, except D-7140): max ramp 3335 lb, takeoff 3325 lb, landing 3325 lb. Forward CG is 77.0 in to 2800 lb, then moves to 82.1 in at 3325 lb. Aft CG is 84.7 in, or 85.7 in below 3125 lb. Maneuvering speed is 123 kt CAS.

TIP TANK USE AND CHECKS

Two 20 gal tip tanks transfer fuel to the mains by electric pump at about 15 gph. Start transfer with both mains at least 1/2 full, in level flight only, and watch for main tank overflow. Drain each tip tank daily before first flight and check the filler caps. Takeoff is prohibited with more than 1/4 tip fuel difference.

WHAT TO CHECK WHEN BUYING

The ABS guide for V-tail Model 35s covers the differential control mechanism, pitch trim actuator, nose-down trim for descent, flap actuator leaks, aileron rod ends and magnesium surface corrosion. Confirm lubrication is kept up. Check the autopilot against the Dynon bulletin. The parts catalog shows different main gear and brake options by serial number, so match parts to the airframe.

SPECIFICATIONS

Tip Tank Capacity Each Gal	20
Tip Tank Transfer Rate Gph	15

V-SPEEDS

Maneuvering Speed Kts	123
Max Turbulent Air Penetration Kts	123

WEIGHT & BALANCE

Max Ramp Weight Lbs	3335
Max Takeoff Weight Lbs	3325
Max Landing Weight Lbs	3325
Utility Category Max Weight Lbs	3125
Forward Cg Limit At Max Weight Inches	82.1
Forward Cg Limit At 2800 Lbs Or Less Inches	77
Aft Cg Limit Inches	84.7
Aft Cg Limit Below 3125 Lbs Inches	85.7

SAFETY NOTES

- With the STC, spins and acrobatic maneuvers are prohibited when above 3125 lb or with fuel in the tip tanks. Load factor limits are 3.8G flaps up and 2.0G flaps down.
- If tip tank gauges differ by more than 1/2 tank, land with flaps up.
- The ABS guide says Beechcraft manuals take precedence, so use the Maintenance or Shop Manual for the specific serial number when rigging controls.