

Piper PA-34 Seneca III Model Guide

The Piper PA-34 Seneca III is a twin-engine piston light aircraft built from 1981 to 1995 (PA-34-220T), listed with 4 to 7 seats. Its turbocharged Continental engines give 220 hp each for takeoff and 200 hp continuous. A 1985 owner report calls the Seneca line relatively inexpensive to build and operate, easy to fly, and flexible to load.

KEY TAKEAWAYS

- Max takeoff weight is 4,750 lb, up from 4,570 lb in the Seneca II. The zero-fuel limit rose from 4,000 lb to 4,470 lb.
- Takeoff power of 220 hp per engine (40 inches, 2,800 rpm) is limited to five minutes. Max continuous is 200 hp at 2,600 rpm.
- A typical IFR-equipped aircraft can reportedly carry six 170-lb passengers, 200 lb of baggage and fuel for a two-hour flight plus reserves.
- A change to a vacuum pneumatic system roughly doubled pump time between failures, from about 400 hours to 700-800 hours, according to Piper.

WHAT CHANGED FROM THE SENECA II

The Seneca III went into production in 1981. The nose gear and spar carry-through structure were strengthened, which raised the weight limits and loading flexibility. The instrument panel was reorganized and switches moved to the bottom of the panel, away from water leaking in at the storm window. Takeoff power is 220 hp per engine.

ENGINES AND EQUIPMENT

The Seneca III uses Continental TSIO-360-KB series turbocharged six-cylinder engines. Later aircraft (1985 models) added inertia reel shoulder harnesses for all forward-facing seats and an electric flap system. Baggage limits are 100 lb in the nose and 100 lb behind the rear seats.

PREFLIGHT AND PRE-BUY CHECKS

The PA-34-220T handbook calls for these checks: oil quantity of six to eight quarts, with the dipstick seated; propellers for nicks or leaks; spinner for cracks; cowl flaps open and secure. Also drain the two wing tank drains and the gascolator. Nose strut should show 1.2 +/- .25 inches under static load. Confirm the handbook matches the airplane's serial number and revision status.

SPECIFICATIONS

Takeoff Power Hp	220
Max Continuous Power Hp	200
Takeoff Manifold Pressure Inches	40
Max Continuous Manifold Pressure Inches	40
Baggage Nose Lbs	100
Baggage Aft Lbs	100

WEIGHT & BALANCE

Max Takeoff Weight Lbs	4750
Max Zero Fuel Weight Lbs	4470
Max Ramp Weight Lbs	4773
Baggage Nose Lbs	100
Baggage Aft Lbs	100

SAFETY NOTES

- Single-engine climb and ceiling figures for the Seneca III are not in the sources. Earlier models were weak on one engine (190 fpm in the 1972 original, 225 fpm in the Seneca II). Verify in the POH.
- Respect the 4,470 lb zero-fuel limit and the five-minute takeoff power limit. A handbook is valid only for the airplane named on its title page.