

Piper PA-32R Saratoga Model Guide

The Piper PA-32R Saratoga is a single-engine piston, retractable-gear aircraft built from 1980 to 2009, with 6 to 7 seats. This guide draws on a Turbo SP checklist, handbook performance pages, an emergency procedures sheet, a 1980 Turbo SP sales listing, a Piper service bulletin and a CASA wing-spar directive. Many figures therefore apply to the SP and Turbo SP (PA-32R-301 and 301T).

KEY TAKEAWAYS

- Built 1980 to 2009 with 6 to 7 seats and retractable gear. The sales-listing example is a Turbo SP with a Lycoming TIO-540-S1AD engine.
- Turbo SP checklist: 65% power gives 155 kts at 12,000 ft and 162 kts at 16,000 ft, burning about 18 GPH.
- Piper Service Bulletin 811A (ammeter replacement) lists the PA-32R-301 SP. Confirm compliance in the logbooks.
- The CASA wing-spar AD requires PA-32R-301 models to retire or inspect the lower wing joint before 13700 hours.

PERFORMANCE AND HANDLING

Turbo SP checklist: rotate at 70-75 KIAS, Vy 92 KIAS, Vx 70 KIAS over an obstacle. Stall is 62 KIAS flaps up and 58 KIAS full flaps. Final approach is 80 KIAS. Suggested minimum runway is 3,500 feet. Handbook example (PA-32-301, 3480 lbs, 1200 ft, 16°C, 10 kt headwind): 2150 ft over a 50 ft barrier with a 3-blade prop, 2275 ft with a 2-blade.

ENGINE AND OPERATING LIMITS

Turbo SP checklist: takeoff at 2600 RPM with 30-34 inches MP (36 max). In climb, watch for 1,600°F EGT and 400°F CHT maximums. In cruise, keep CHT under 380°F and oil under 220°F. The emergency sheet says keep propeller speed below 2700 RPM in an overspeed.

WHAT TO CHECK WHEN BUYING

Check logbooks for Service Bulletin 811A: the ammeter must have a white dot on its face, or be replaced (part 763-053). Confirm the wing-spar AD status. The 1980 Turbo SP listing shows 4,810 hours, an engine with 1,135 hours since overhaul against an 1,800-hour TBO, and a propeller overhauled in 2020. The listing says buyers must verify these details.

SPECIFICATIONS

Seats Min	6
Seats Max	7
Engine Model	Lycoming TIO-540-S1AD (Turbo SP listing example)

PERFORMANCE

Cruise Speed 12000ft Kts	155
Cruise Speed 14000ft Kts	158
Cruise Speed 16000ft Kts	162
Fuel Burn 65pct Gph	18
Fuel Burn 75pct Gph	19.5
Min Runway Ft	3500
Climb Rate Example Fpm	620

V-SPEEDS

Best Climb Vy Kts	92
Best Angle Vx Kts	70
Stall Flaps Up Kts	62
Stall Flaps Full Kts	58
Gear Down Below Kts	132
Flaps Extend Below Kts	110
Best Glide Kts	83
Final Approach Kts	80

WEIGHT & BALANCE

Chart Gross Weight Lbs	3600
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SAFETY NOTES

- Engine failure in flight: hold at least 83 KIAS, switch tanks, electric fuel pump ON, mixture RICH, alternate air OPEN. If power is not restored, prepare for a power-off landing.
- If the alternator fails, the battery is the only power. A depleted battery means the gear must be lowered by emergency extension, and flaps and gear lights are inoperative.
- Wing main spar fatigue is a known concern. CASA requires retirement or inspection of the lower wing joint, so verify the compliance records.