AIR TRACTOR AT-502B Model Guide

AIR TRACTOR AT-502B is a single-engine agricultural aircraft (hopper and spray system) in Air Tractor's 502 family, alongside the AT-502 and AT-502A. Family registry data lists a turboprop class, up to 2 occupants and up to 4300 kg max takeoff weight. The library row says piston, but the service documents mention turbine oil and a Hartzell propeller. Confirm the engine on the airframe you are buying.

KEY TAKEAWAYS

- Family data (AT-502, 502A, 502B) shows up to 430 nm range, 136 kt cruise and a 13000 ft ceiling. These are family maximums, not AT-502B figures.
- Sources give no AT-502B weights, V-speeds or fuel capacity. Get them from the aircraft's own manual and records.
- The library row says piston, but the registry says turboprop. Check which engine is fitted.
- Many service letters exist for the 502 family. Check each one by serial number and confirm it was done.

MAINTENANCE AND LUBRICATION

The AT-502A/502B/504 lubrication schedule has daily, 100-hour and annual items. Daily greasing of the tailwheel fittings applies if you operate in rice. For row crops, do it weekly. Every 100 hours the tailwheel is dismantled and greased, and the propeller is greased to the Hartzell manual. The document is reference only, so use the original Air Tractor manual.

ANNUAL ITEMS TO VERIFY

At each annual, the starter/generator splines are cleaned and greased with high-temperature moly grease. The one exception is a wet-spline engine. The document warns that careless reinstallation can damage the internal seal and leak oil from the drain. Drive pad bolts on an engine-driven air conditioner compressor take only 50 in-lb of torque.

SERVICE LETTER HISTORY

The Snow Engineering service letter index covers the 502A and 502B among other models. Topics include wing spar cap and wing centersplice life limits, wing fatigue management, landing gear service life, aft fuselage longeron failures, corrosion inspection, fuel contamination and fuel imbalance. Ask which letters apply to the serial number and see proof of compliance.

PERFORMANCE

Family Max Range Nm	430
Family Max Cruise Speed Kt	136
Family Max Service Ceiling Ft	13000

SAFETY NOTES

- Not every service letter applies to every serial number. Compare the index against the airframe serial and its logbooks.
- Look closely at wing spar cap, wing centersplice, landing gear and aft fuselage longeron letters, since these are life-limit and failure topics.
- Lubrication and service documents are references only. Follow the original Air Tractor manual for scheduled inspections.

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