LANCAIR IV Model Guide

LANCAIR IV is listed as a single-engine piston aircraft from Lancair. The inputs contain no LANCAIR IV performance, weight or speed data. The only document is a Lancair Legacy construction manual chapter on miscellaneous systems: pitot-static, ELT, Stormscope, transponder antenna and autopilot. Use it as a build-quality checklist, not a LANCAIR IV spec sheet.

KEY TAKEAWAYS

- The sources give no LANCAIR IV specs, speeds or weights. Get them from the seller and the aircraft's own paperwork.
- The source is a Legacy manual. Pitot-static, ELT, Stormscope, transponder antenna and autopilot are optional items, not included with the kit.
- Check autopilot pitch servo geometry: the actuator arm must be vertical when the elevator is at zero degrees.
- Dual static ports are recommended, and the static line should be drained at its lowest point regularly.

PITOT-STATIC SYSTEM AND STATIC PORTS

The manual places each static port in the unidirectional carbon fiber, at the lower edge of the belt. It is 83 3/8" back from the firewall joggle and bonded with epoxy/flox. The line is angled slightly up so water drains out through the port, and a small hump in the line also stops water collecting. The airspeed pressure switch ports are labelled P and S. For the gear retract test it suggests setting the switch to 90 KIAS.

ELT, STORMSCOPE AND TRANSPONDER ANTENNA

The ARTEX ELT-200 is recommended. It goes under the right floorboard, as far right as possible, with an external antenna for best performance. The Stormscope antenna position must be found by skin mapping with the engine and avionics powered, and it needs at least 2' x 2' of copper mesh inside the fuselage as a ground plane. The transponder antenna sits on the belly pan. Kits from FB 148 have recessed joggles for it, and earlier kits need an alternative process.

AUTOPILOT (TRU-TRAK) INSTALLATION

The roll servo installs under the pilot's seat and the pitch servo ties into the elevator pushrod. The neutral pitch pushrod measures 9-3/4" between bearing centers, and the roll pushrod measures 18-1/2" center to center. Pushrod holes act as witness holes: a thin wire should not enter them. Watch for binding between the roll pushrod and the center control tube; extra washers between the bearings are the suggested fix.

SAFETY NOTES

- Autopilot pitch servo: with the elevator at zero degrees the actuator arm must be vertical, or an over-center condition could lock up the system.
- Stormscope will not work if its antenna is placed incorrectly, so check that skin mapping was done on any installed unit.
- Drain the static system at its lowest point regularly; the manual suggests fitting a drain there.

AI-aggregated guide for the LANCAIR IV · sources: Chapter 24: Miscellaneous Systems (#100994) · generated 2026-10-18 · Reference only, not for flight. Check the original documents before relying on this guide.