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Lancair's 360 turbo has over 150 hours of flight testing and the performance numbers are impressive. The engine has a critical altitude of 18,000 ft. and maintains 75% power through 24,000 ft. Cruising at 27" manifold, 2200 RPM and 10.5 gph, the airplane trues out at 230 kts. at 18,000 ft and 240 kts. at 24,000 ft.

We selected the Lycoming IO-360 F1A engine which is suitable for turbocharging and developed the turbo kit with an automatically controlled wastegate. A new exhaust system and turbo mounts were developed in house and will be included in the turbo kit.

This airplane is built primarily of carbon fiber which saves approximately 30 lbs. in weight. As in the Lancair IV, E-glass will be used for the vertical fin, rudder and wing tips due to radio frequency interference in carbon.

A Tip from LancairAvionics:

Very important but often overlooked, is a procedure that must be performed before aircraft is flown in order to avoid erroneous readings. This is the "swinging" or "magnetic compensation" of the compass. This should be done after the initial installation of an instrument panel or after any avionics changes to an existing panel. Common sources of magnetic interference are turn coordinators, engine gauges, electric motors or any high current sources. Nonferrous hardware must also be avoided.

Often, apparent problems with directional gyros are actually due to erroneous compass indications. The following is a simplified procedure for swinging a compass:

- 1. Using a nonferrous screwdriver, make sure the compensator is nulled by lining up detents on compensator screws and compensator body. Do not turn compensator screws too far in either direction or you will strip the threads.
- 2. Using a compass rose or a sight compass, line the aircraft up to dead North. With strobe light, beacons and all radios on, run the engine up to 2000 rpm to simulate flying conditions.
- 3. Use N/S screw to set compass to North.
- 4. Set directional gyro to North.
- 5. Go East using compass rose or directional gyro as a standard and turn E/W screw to set compass to East.
- 6. Go to South and check compass reading. Adjust N/S screw to take out 1/2 of error.
- 7. Go to West and check compass reading. Adjust E/W screw to take 1/2 of error.
- 8. Check and record all readings.

Gross Weight Increase for Lancair 320/360

Gross Weight:

A 100 lb. gross weight increase is approved with the following conditions:

* Existing CG limits must be maintained and increased stall speed should be verified and noted in Pilot's Operating Handbook.

Allowable G Limits:

- * $1685 \times 8.8 / 1785 / 2 = +4.1 \text{ (use 4.0)}$
- * at 1790 lbs. gross weight are: +4.0 / -2.0

Landing Load Restrictions:

- * Maximum allowable landing weight is 1685 lbs.
- * (This requires a fuel weight reduction of 100 lbs. or 16.5 U.S. gallons.)

Main Gear Overcenter Links:

* In addition, the revised main gear overcenter link assemblies (GM003-3-A or B) must be installed. These come standard with all kits delivered after 10/93.

UpcomingAirshows- Lancair will be attending these airshows; however, not all of the aircraft will be at every show. If you wish to see a particular plane, call ahead to confirm it will be there.

May 16-17	West Coast Expo, Pomona, CA	Sept. 17-20	Reno Air Races, Reno, NV
May 22-24	Watsonville Fly-in, Watsonville, CA	Sept. 25-27	Golden West, Castle Apt., Merced, CA
June 27-28	Rocky Mtn. Fly-in, Longmont, CA	Oct. 8-11	Copperstate, Mesa, AZ
July 8-12	Arlington Fly-in, Arlington, WA	Oct. 15-18	Southwest Fly-in, Abilene, TX
July 29-Aug 4	Oshkosh Air Show, Oshkosh, WI	Oct. 19-21	NBAA, Las Vegas, NV
Sept 4-6	Lancair Fly-in, Redmond, OR	Oct. 23-25	AOPA, Palm Springs, CA