

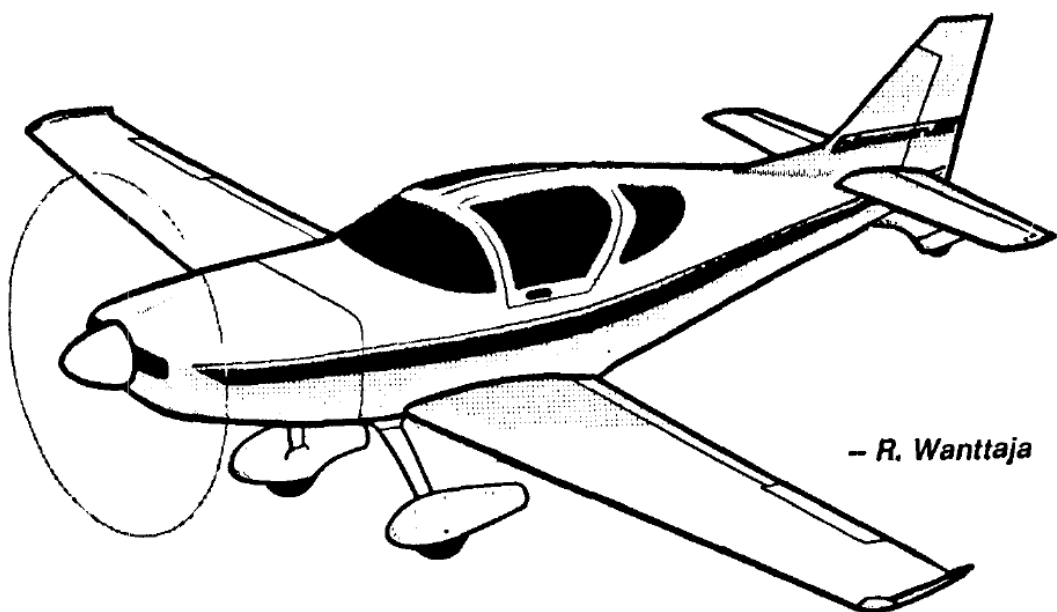
NTSB Investigation: ERA23LA063

Excerpts, Pilot Operating Handbook

Glasair Super II-S TD, Model SH-2

GLASAIR SUPER II-S TD

Model SH-2



– R. Wanttaja

OWNER'S MANUAL

Serial # _____

P/N 632-0121-103

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GLASAIR SUPER II-S TD

2-14.5 Fuel Valve Placard

WARNING:

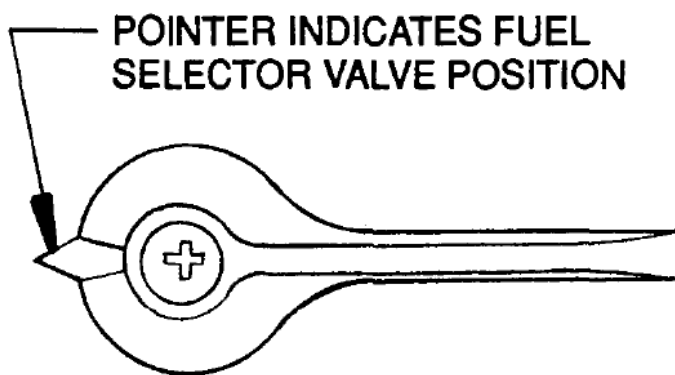


FIGURE (2-1)

Install a placard in the aircraft to show that the small pointer on the fuel selector valve handle, not the handle itself, indicates the chosen fuel tank. This will help eliminate the possibility of a fuel starvation incident that could occur if a pilot who is not familiar with the airplane uses the handle as the pointer. A suggested placard is shown in FIGURE (2-1).

WARNING

Make sure that the fuel selector valve engages the detent for the desired tank. If the valve is positioned between detents, fuel will feed from the header tank. When the header tank is empty, the engine will pull air from the tank and quit from fuel starvation. Also, make sure that the fuel selector valve cannot inadvertently be bumped out of position during flight.

GLASAIR SUPER II-S TD

3-3 ENGINE FAILURE

3-3.1 General

The Lycoming aircraft engine is very reliable and the probability of a catastrophic engine failure without some type of advance warning is quite low. Early indications of an engine failure are lowering oil pressure, increasing oil temperature, high cylinder head temperatures, excessive mechanical noise, lowering fuel pressure, and so on. Pilot induced failures, on the other hand, are far more common: carburetor ice, mixture set too lean, fuel starvation, etc. Keep these in mind if an engine problem or failure should arise.

3-3.2 Engine Failure on Takeoff

If the engine fails after the aircraft has left the ground on takeoff, lower the nose to maintain flying speed. If there is not sufficient prepared landing area remaining in front of the aircraft, prepare to land straight ahead. Small turns may be made to avoid obstacles. Only if enough altitude and airspeed are available, can a 180° turn be made to return to the airfield. You are much more likely to survive an emergency straight ahead ditching of the plane than a stall and spin resulting from a steep, slow turn back to the field.

Due to the high wing loading, the engine-out sink rate will be high. Consequently, time to locate a suitable ditching site will be limited. Always maintain adequate flying speed.

EMERGENCY PROCEDURES

Only if there is time and you have maintained control of the aircraft should you attempt to restart the engine. Check for adequate fuel pressure and switch on the electric fuel pump. Make sure the mixture control is in the full rich position. Check the fuel quantity and move the fuel selector valve to the fullest tank. Make sure the magneto switch is in the "BOTH" position.

3-3.3 Engine Failure in Flight

In the event of an engine failure during flight, maintain best glide speed (121 mph) and prepare for a forced landing. Quickly check that fuel pressure is adequate, that the mixture is full rich, that the fuel valve is on, that there is adequate fuel in the tanks, and that the mags are both on. Switch to the header tank if it is full of fuel. If time permits, and one of the above conditions is the problem, attempt a restart after the problem is resolved.

Engine roughness may be caused by a bad magneto, induction problems, improper leaning, plug fouling, fuel starvation, carburetor icing, water in the fuel, etc. If you encounter engine roughness or power loss in flight, check all engine gauges to verify that the pressures and temperatures fall within the allowable ranges. Also, check the mixture setting, fuel tank selection, carb heat, magnetos, etc. If none of these items alleviates the problem, make a precautionary landing at the next airport and troubleshoot the problem.