

National Transportation Safety Board
CEN20LA005 – Airframe Examination Report

Airplane: Aero Commander 100 (N5573M)

Engine: Lycoming O-320-A2B

Date: 11/12/2020

Location: Air Salvage of Dallas, Lancaster, Texas

The airframe examination was performed by two NTSB air safety investigators (Craig Hatch and Josh Lindberg).

- The rubber fuel vent lines had been cut during the recovery from the accident site. The wing tank fuel line fittings at the wing root, had been exposed to the elements and were corroded.
- Shop air was blown through each vent line to check for obstructions. With the fuel cap removed, air was heard inside the fuel tank and a small amount of air appeared to flow out of the tank.
- The underside of each fuel cap was corroded. Both caps contained a vent hole on the underside, with the corrosion almost filling the vent hole on the right cap.
- Shop air was blown through the fuel lines at the fuselage/wing connection point. When the fuel selector was positioned to LEFT and RIGHT, air flowed freely to the carburetor fuel line. When the fuel selector was positioned to BOTH, air did not reach the carburetor fuel line.
- The fuel selector detents were hard to identify and took some manipulating to get set into position.
- The fuel selector was removed and examined.
- It was determined that the fuel selector handle or the pointer was installed 180° out of position. When the selector handle was selected to BOTH, the valve was completely closed in what should have been the OFF position. When the selector handle was selected to OFF, the valve was open in what should have been the BOTH position.
- The hole on the end of the pointer that slid over the shaft featured a round side and a flat side which helps to correctly orient the pointer during installation. The hole was worn out enough that the pointer would fit over the shaft in both directions.
- The examination could not determine if the selector handle or the pointer was installed incorrectly.



Figure 1 – View of the installed fuel selector.



Figure 2 – View of the removed fuel selector.



Figure 3 – View of the removed fuel selector.