

**Keith**AIRPLANE FLIGHT MANUAL SUPPLEMENT FOR  
LEARJET MODEL 55 CR-56-9**Keith****KEITH PRODUCTS, INC.****AIRPLANE FLIGHT MANUAL SUPPLEMENT  
FOR LEARJET MODEL 55**


S/N: \_\_\_\_\_

REG: \_\_\_\_\_

**WITH KEITH PRODUCTS, INC. AIR  
CONDITIONING SYSTEM**

This supplement shall be attached to the applicable FAA approved flight manual when a Keith Products refrigerant R134a air conditioning system is installed in accordance with STC No. ST09485SC.

The information contained herein supplements the basic manual only in those areas listed herein. For limitations, procedures, performance, and weight and balance information not contained in this supplement, consult the basic flight manual.

**APPROVED:**  
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**LOG OF REVISIONS**

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AIRPLANE FLIGHT MANUAL SUPPLEMENT  
FOR  
LEARJET MODEL 55

**GENERAL**

**DESCRIPTIVE DATA**

The air conditioning system is electrically powered and consists of the following components:

- A motor-driven compressor mounted on a beam assembly in the tailcone.
- A condenser mounted in the tail section area.
- An evaporator assembly mounted forward of the aft pressure bulkhead.
- An evaporator assembly mounted under the floor below the co-pilot's seat.
- An evaporator blower mounted under the floor below the pilot's seat.
- Air distribution ducting routed between Frames 11 and 12 along the RH side of the aircraft, and forward from the fwd evaporator to two outlets mounted on the center console.
- Refrigerant hoses routed from the tailcone to hard lines through the aft pressure bulkhead, and hoses to the aft evaporator and under the floor to the forward evaporator.

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Control switches mounted on the instrument panel, with associated wiring running aft with existing wiring bundle.

**SECTION 1****LIMITATIONS**

No Change.

**SECTION 2****NORMAL PROCEDURES****AIR CONDITIONING**

The air conditioning system utilizes R-134a refrigerant, and has upgraded evaporators and blowers for both the cockpit and cabin. Air conditioning may be operated with ground power or an engine generator operating, and the aircraft electrical system providing 28 VDC. This system replaces the factory-installed Freon system, and operates identically except for the following changes:

Cabin fan control is variable, controlled by a rheostat mounted on the copilot's sidepanel.

**AUX HEAT**

The AUX HT elements have been relocated from inside the aft evaporator to a housing mounted on the aft pressure bulkhead to the starboard side of

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the aft evaporator blower. Power to operate the auxiliary heater must be supplied by an engine generator or GPU. Air is drawn across the heater by the evaporator blower. Heat is provided to the cabin flood ducts as in the original installation, however, the blower now operates only at fixed high speed.

The auxiliary cabin heater is inoperative when the CAB AIR Switch is ON. However, the blower will continue to run at full speed as long as AUX HT switch, either HIGH or LOW, is selected. Therefore, the system is only available during ground operation.

The AUX HT system provides heat to the cabin only.

### SECTION 3                      EMERGENCY PROCEDURES

No Change.

### SECTION 4                      ABNORMAL PROCEDURES

No Change.

### SECTION 5                      PERFORMANCE

No Change.

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## WEIGHT AND BALANCE

No change to the original weight and balance limits. See the Aircraft Weight and Balance Data, located in the Airplane Flight Manual. It includes the air conditioning system and new empty weight, C.G. and moment.

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