

Keith

AIRPLANE FLIGHT MANUAL SUPPLEMENT FOR CESSNA MODEL 182S, T, T182T
CR-182-9



KEITH PRODUCTS, L.P.

CERTIFICATION REPORT NO. CR-182-9

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR CESSNA MODEL 182S, T, T182T

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. ST09494SC.

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:

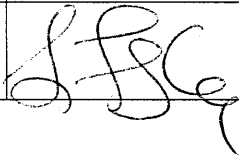

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Fort Worth, TX 76193-0190

FAA APPROVED: August 30, 2005
REVISION: E

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LOG OF REVISIONS				
REV.	PAGE NO.	DESCRIPTION	FAA APPROVAL BY/FOR	DATE
NC	1 thru 5	Original Release	S. Frances Cox	9/9/98
A	1 1 1 thru 6 5	Removed FAA project number Added STC number Added "Revision Date" to footer Added paragraph 7) to Section 4 - Air Conditioning	Not Issued	Superseded by Rev B
B	5 6 1 thru 6	Added Electrical Malfunction Procedures to Section 3. Corrected paragraph 7) now "The...", was "the...". Updated to Rev B all pages. Deleted "REVISION DATE"	S.FRANCES COX	3/6/00
C	1 thru 6	Added Model 182T to Document	Mark A. Flora for S. Frances Cox	1/31/02
D	1 thru 6	Added Model T182T to Document Revised Section 4, item 7 to include proper load shedding for T182T model. Added pictorial representation of Air Conditioning Switch Panel to Section 4.0.	S. Frances Cox	6/25/02
E	3	Revised placard location: now "Any available location on instrument panel in clear view of pilot." was "Above flight instruments."		8-30-2005

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FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT
FOR
CESSNA MODEL 182S, T, T182TSECTION 1

GENERAL

DESCRIPTIVE DATA

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

- An engine driven compressor.
- A condenser assembly mounted in the tail section area.
- An evaporator assembly mounted in the baggage compartment area.
- Air distribution ducting mounted on the cabin floor.
- Refrigerant hoses routed from the engine compartment, along the cabin floor, and aft to the tail section.
- Control switches mounted on the instrument panel, with associated wiring running aft with existing wiring bundle.
- 3-position switch (FAN-OFF-AC) for selecting function.
- Fan control knob - selects variable blower speed.
- Temp Cont Knob - varies temperature setting.
- Indicator light - Blue light indicates compressor operation.

SECTION 2

LIMITATIONS

PLACARDS

(1)

TURN AIR CONDITIONER OFF FOR T/O AND LANDING

Location: Any available location on instrument panel in clear view of the pilot.

(2)

**100 POUNDS MAXIMUM
BAGGAGE FORWARD OF BAGGAGE DOOR
LATCH
AND
80 POUNDS MAXIMUM
BAGGAGE AFT OF BAGGAGE DOOR LATCH
MAXIMUM 180 POUNDS COMBINED
FOR ADDITIONAL LOADING INSTRUCTIONS
SEE WEIGHT AND BALANCE DATA**

Location: Interior side of baggage compartment door.

(3)

**AIR
CONDITIONING**

Location: Above air conditioning system circuit breaker.

SECTION 3**EMERGENCY PROCEDURES****ENGINE FAILURES:**

Engine Failure Immediately After Take-off
Air Conditioning OFF

Engine Failure In Flight
Air Conditioning OFF

FIRES:

Engine Fire In Flight
Air Conditioning OFF

Electrical Fire In Flight
Air Conditioning OFF

Cabin Fire

Air Conditioning OFF

ELECTRICAL SUPPLY POWER SYSTEMS MALFUNCTIONS**Ammeter Shows Excessive Rate of Charge
(Full Scale Deflection)**

Air Conditioning OFF

**Low Voltage Annunciator Illuminates During Flight
(Ammeter Indicates Discharge)**

Air Conditioning OFF

ICING

Air Conditioning OFF

AIR CONDITIONING

In the event of an air conditioning/fan system failure or malfunction, the system should be de-activated as follows:

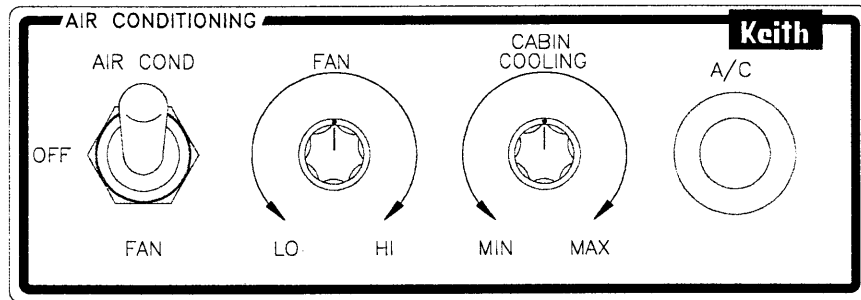
- 1) Left hand selector switch OFF

SECTION 4**NORMAL PROCEDURES****AIR CONDITIONING**

Air conditioning may be operated with the engine operating and the aircraft electrical system providing 28 VDC to the main buss. To operate the system proceed as follows:

- 1) Turn on air conditioning system by placing left-hand control switch in the AIR COND position.
- 2) For maximum cooling, place the FAN control knob in the HI position, place the CABIN COOLING control knob in the MAX position, and close cabin and baggage doors.
- 3) Turn off air conditioning system by placing left-hand control switch in the OFF position.
- 4) Airflow may be varied by rotating the FAN control knob between the LO and HI positions.
- 5) Cabin air cooling may be varied by rotating the CABIN COOLING control knob between the MIN and MAX positions.

- 6) Cabin air may be recirculated without the air conditioning system operating by placing the left hand control switch in the FAN position.
- 7) **For aircraft equipped with a 60A alternator:** The air conditioning system will automatically load shed when either pitot heat or taxi light is turned on during system operation.
For aircraft equipped with a 95A alternator with propeller de-ice: The air conditioning system will automatically load shed when propeller de-ice is turned on during system operation.



AIR CONDITIONING SWITCH PANEL
(Located anywhere on the instrument panel within reach of the pilot)

SECTION 5

PERFORMANCE

No Change.

SECTION 6

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.