Kelly Aerospace
Willoughby, OH
NC-08-005, Rev D

FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT
FOR
CESSNA 182T AND T182T
AIR CONDITIONING SYSTEM

Aircraft SN: _____

Aircraft Registration Number: _____

This supplement must be attached to the FAA approved flight manual when the Kelly Aerospace Air Conditioning system is installed in accordance with STC SA02006CH. The information contained in this document supplements or supersedes the basic manual only in those areas listed. For limitations, procedures, performance, and loading information not contained in this supplement, consult the basic FAA airplane flight manual.

TABLE OF CONTENTS **PAGE #**

for FAA-Approved _____
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DATE JUL 07 2009

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FOR
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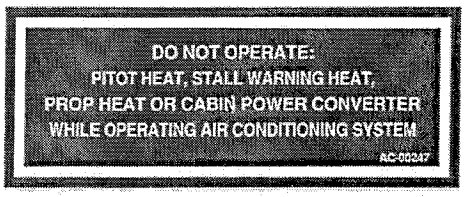
SECTION 1
GENERAL

This supplement supplies information necessary for the operation of the airplane when the optional Air Conditioning System is installed in accordance with FAA Approved Data, either STC or Original Equipment.

SECTION 2
LIMITATIONS

When the Air Conditioning system is in operation some load shedding is needed. The items that cannot be turned on while the Air Conditioning is operating are not typically needed in flight conditions where the Air Conditioning system is needed. The Propeller Heat, Pitot Heat, Stall Warning Heat and 12 Volt Cabin Power Convertor cannot be used when the air conditioning system is running. The following placard is installed in the cockpit for the pilot's reference and applies to both the 182T and T182T.



SECTION 3
EMERGENCY PROCEDURES

AIR CONDITIONING SYSTEM EMERGENCY PROCEDURES

1) If Air Conditioning fails to operate correctly or is exhibiting abnormal behavior turn the air conditioning system to the off position by pushing center button on the Climate Controller until "AC" is no longer displayed.
2) If an overload condition occurs, the air conditioning unit circuit breakers may trip. These breakers are located on the hat rack on the rear of the aircraft and should not be reset until the aircraft returns to the ground. The plastic block off panel can be removed to access these breakers. The 60 Amp breaker controls power to the compressor. The 7.5 Amp breaker controls power to the condenser fan. The 10 Amp breaker controls power to the evaporator blower.

JUL 07 2009

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SECTION 4
NORMAL PROCEDURES

AIR CONDITIONING SYSTEM NORMAL CHECKLIST

1) Prior to engine startup ensure Air Conditioning switch is in the OFF position. The Air Conditioning system will normally be off if the Avionics Bus Master is in the off position as well.
2) Follow normal procedures for engine start-up
3) To operate Air Conditioning, depress the center button AC button on the Climate Controller until "AC" is seen on the display.
4) For FAN ONLY operation use right hand selector arrows on the Climate Controller to increase or decrease fan speed. Speed Range is 1 to 5
5) For Air Conditioning use the left hand selector arrows and set the desired cabin temperature. Fans will automatically adjust speed to allow for less or more airflow

SECTION 5
PERFORMANCE

During maximum operating condition of the air conditioning system no more than 1.65 Horsepower will be pulled off the engine.

The performance change of the aircraft is negligible with the Air Conditioning System Installed. The air conditioning system can be operated at any point during the flight.

SECTION 6
LOADING INFORMATION

CESSNA 182T and T182T
The addition of the evaporator to the Hat Rack limits the baggage capacity of the hat rack to 5 pounds of baggage.

CESSNA T182T Only
The oxygen bottle has been removed from the rear empennage and moved into the baggage compartment. The baggage compartment is limited to 190 pounds maximum baggage weight. 120 pounds maximum baggage FWD of baggage door latch and 70 pounds maximum baggage AFT of baggage door latch.

No more than 30 pounds of baggage can be placed on top of the Oxygen Bottle cover.

Factory installed or aftermarket installed optional equipment is listed in the weight and balance section of this Pilots Operating Handbook, or Aircraft Flight Manual.

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SECTION 7
DESCRIPTION AND OPERATION OF THE AIRCONDITIONING SYSTEM

Description

The Air Conditioning system ducts cool dry air through the headliner and out vents near the pilot, co-pilot and passenger seats. The cool air is supplied through an evaporator mounted on the hat rack. The condenser and compressor for the system are mounted in the tail cone aft of the hat rack. A climate controller is located on the co-pilots side of the instrument panel. The climate controller is used to set fan speed and desired air temperature. Power is supplied to the system through an auxiliary bus off the primary alternator mounted on the right side of the engine.

Operation

The Air Conditioning system should be turned off during engine startup. The system can then be turned on when the aircraft is brought up to idle. The system is turned on when the avionics switch is in the on position and the AC switch is activated on the climate controller. Desired cabin temperature is set in the climate controller.

Oxygen System (Applicable to T182T Models Only)

The oxygen bottle fill port is now located in the baggage compartment. The fill port in the rear empennage is no longer operational. The fill port hole is an air intake for the air conditioning

The rear seat oxygen mask ports are now located on the oxygen bottle cover in the baggage compartment. They are no longer located in the headliner.

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