

FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT
FOR
Beechcraft Bonanza A36, A36TC, B36TC & G36
AIR CONDITIONING SYSTEM

Aircraft SN: _____

Aircraft Registration Number: _____

This supplement must be attached to the FAA approved flight manual and be carried in the airplane at all times when the Kelly Aerospace Air Conditioning system is installed in accordance with **STC SA04342CH**.

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.

_____ *for*
Manager, Southwest Flight Test Section, AIR-713
Federal Aviation Administration
Ft. Worth, TX

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LOG OF REVISIONS

REV.	PAGES	DESCRIPTION	FAA-APPROVED	DATE
A	1-7	INITIAL RELEASE	E. Kinney Mgr., AIR-713	9/11/18
B	7, 8	Added A1235 Climate Controller to Section 4 and Section 7	<i>For</i> Mgr., AIR-713	

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SECTION 1

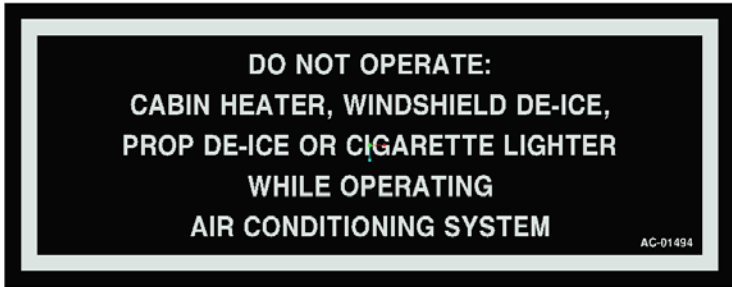
GENERAL

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

The cabin heater, windshield deice, prop deice and cigarette lighter cannot be used when the air conditioning system is running in all other aircraft. The following placard is installed in the cockpit for the pilot's reference.



SECTION 3

EMERGENCY PROCEDURES

In the Event of an Alternator or other Electrical Failure:

1. 3 Amp AIR COND. Circuit Breaker**OFF**
2. Inspect and perform required maintenance after the flight.

SECTION 4

NORMAL PROCEDURES

When the Air Conditioning system is in operation some load shedding is needed. The items that cannot be turned on (Section 2 Limitations) while the Air Conditioning is operating are not typically needed in flight conditions where the Air Conditioning system is needed.



CB-2 Climate Controller

AIR CONDITIONING SYSTEM NORMAL CHECKLIST CB-2 CONTROLLER

Prior to Engine Start

1. Ensure Air Conditioning is OFF by verifying that there is nothing displayed on the CB-2 climate controller LCD screen.
2. Follow normal procedures for engine start-up.

Air Conditioning AC Mode

1. Press the lower right button on the CB-2 Climate Controller, the display will first show the logo and software version; then it will show temperature set point, fan speed bar graph, and mode display.
2. Press the bottom left button and toggle between modes with the middle right button.
3. After selecting AC mode, either press the bottom right button to enter or wait 3 seconds and the display will return to the main screen. The snow flake symbol in the bottom center of the display will indicate Air Conditioning mode

Air Conditioning Fan Only Mode

1. Press the bottom left button and toggle between modes with the middle right button.
2. After selecting fan mode, either press the bottom right button to enter or wait 3 seconds and the display will return to the main screen.

To Control Fan Speed

1. Press the middle left button to bring up the fan speed screen.
2. Toggle the fan speed up or down using the middle and upper right buttons. Speed Range is 1 to 3.
3. After selecting desired fan speed press the bottom right button to enter or wait 3 seconds and the display will return to the main screen. The fan speed bar graph on the right side of the screen will show selected fan speed. Fan speed can be controlled in both AC and Fan Only modes.

Changing Temperature Set Point

1. Press the top or middle right buttons to adjust the temperature set point up or down.
2. The set point temperature will be displayed with an SP indication. The CB-2 display will default to the temperature set point.

To Display Cabin Temperature

1. Press and release the bottom right button, the cabin temperature will be displayed with a TEMP indication. After a few seconds the temperature set point will be displayed again.

To Turn Air Conditioning System Off

1. Press and hold lower right button.

NORMAL PROCEDURES (continued)



A1235 Climate Controller

AIR CONDITIONING SYSTEM NORMAL CHECKLIST A1235 CONTROLLER

Climate Controller Power-On Self Check

1. Climate controller initiates a self-check at power-on. A fault is indicated by the red "FAIL" illuminated. Normal operation defaults to FAN Mode with a fan speed of "0".

Prior to Engine Start

1. Ensure Air Conditioning is OFF by verifying that the "AC" light is not illuminated; press the "FAN ▼" until the display shows a fan speed of "0".
2. Follow normal procedures for engine start-up.

Air Conditioning AC Mode

1. Cabin fresh air Vent knob turned to "OFF" position.
2. Push the AC button to toggle operating modes between "FAN" and "AC".
3. Select "AC".
4. Adjust desired temperature using "TEMP" buttons. Evaporator fan speed will adjust automatically based on set temperature and actual temperature indicated.

Air Conditioning Fan Only Mode

1. Ensure the "AC" light is not illuminated; otherwise press the AC button to toggle operating modes between "FAN" and "AC".
2. Select "FAN"
3. Adjust desired fan speed using "FAN" buttons. Speed Range is "0" to "5".

Air Conditioning Fault

1. Red "FAIL" light illuminated indicates a fault has occurred.
2. Select "FAN" Mode.

Before Engine Shut-Down

1. Turn off Air Conditioner by pressing the AC button. "FAN" should be illuminated.

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SECTION 5

PERFORMANCE

No changes.

SECTION 6

LOADING INFORMATION

The addition of the Air Conditioning System has been accounted for/included in the aircraft's basic empty weight and center of gravity. The Standard Aircraft Loading and CG envelope remain unchanged. Proper weight and balance calculations must be performed prior to flight to insure aircraft is properly loaded and within operating limitations.

SECTION 7

DESCRIPTION AND OPERATION OF THE AIR CONDITIONING SYSTEM

Description

The Air Conditioning system ducts cool dry air through an evaporator mounted behind the aft baggage area. The condenser and compressor for the system are mounted in the tail cone. 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 the main bus..

The electrical wiring for the air conditioning system is protected by 4 circuit breakers. A 3 amp circuit breaker labeled AIR COND is located in the main circuit breaker panel next to the pilot; this circuit breaker controls power to the climate controller and will also disable the entire system. A 60 amp circuit breaker, a 15 amp circuit breaker and a 7.5 amp circuit breaker are located in the rear of the aircraft and are not resettable in flight. These circuit breakers control the compressor, evaporator fan and condenser fan.

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. Operating the Air Conditioning System with the engine at idle for extended periods of time may cause the bus voltage to drop below 24 VDC. Maintain appropriate engine RPM to avoid prolonged discharge of battery while air conditioning is in use. The system is turned on when the master switch is in the on position and the lower right switch is activated on the CB2 climate controller or when the "AC" button is pressed on the A1235 climate controller. Desired cabin temperature is set in the climate controller.

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