

AIR COMM CORPORATION  
3300 AIRPORT ROAD  
BOULDER, COLORADO 80301

Log of Pages

CTA APPROVED  
SUPPLEMENT

BELL HELICOPTERS  
  
MODEL 206A, 206B  
250-C20, C20B, C20J Engines

MODEL 206A, 206B  
FLIGHT MANUAL

CABIN AIR CONDITIONING SYSTEM

BRAZILIAN  
FLIGHT MANUAL SUPPLEMENT  
FOR  
AIR CONDITIONING SYSTEM

206EC-200

CTA APPROVED

The information contained in this document is CTA approved material, which must be carried in the basic Flight Manual, for those rotorcraft which have been modified by installation of the Brazilian Approved Cabin Air Conditioning System in accordance with Air Comm Corporation STC No. SH2750MN.

The information in this document supplements or supercedes the basic manual only in the items contained herein. For Limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Flight Manual.

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CABIN AIR CONDITIONING SYSTEM

INTRODUCTION

The cabin air conditioning system is a vapor cycle type which consists of an engine driven compressor, a condenser, and multiple evaporators.

The function of the compressor is to pump refrigerant throughout the system circuit.

The function of the condenser is to remove heat energy from the refrigerant by forcing outside air across the condenser heat exchanger.

The function of the evaporators is to remove heat and moisture from the cabin, by forcing cabin air across the evaporator heat exchangers.

The system controls consist of a switch which can be positioned to AC, BLOWER, or OFF. In the AC mode, the complete cooling system is activated. In the BLOWER mode, only the evaporator blowers are operating as a means of cabin air circulation.

A HI/LO blower speed switch is located adjacent to the AC, BLOWER, OFF switch for air-flow adjustment.

Window defogging can be accomplished by simultaneous operation of the air conditioner and the cabin heater. For this case the performance degradation of both the heater and air conditioner is additive.

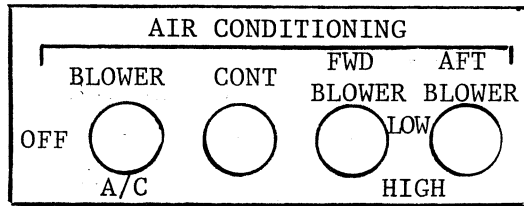
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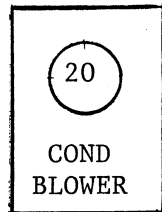
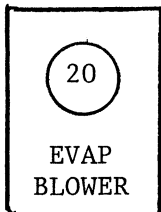
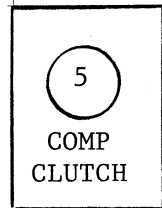
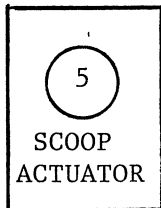
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CABIN AIR CONDITIONING SYSTEM

SECTION 1 OPERATING LIMITATIONS

PLACARDS AND MARKINGS



Located in overhead console

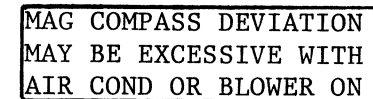


Circuit breaker labels located on lower surface of top panel of baggage compartment, adjacent to circuit breakers.

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SECTION 1 (cont'd) OPERATING LIMITATIONS

PLACARDS AND MARKINGS



Locate on top of compass support bracket.

SECTION 2 NORMAL PROCEDURES  
PREFLIGHT CHECK (EXTERIOR)

- Compressor - check security.
- Compressor drive belt - check tension general condition.
- Condenser - check security.

ENGINE PRESTART CHECK  
A/C Switch - OFF

BEFORE TAKEOFF  
A/C ON as desired.  
Select HI/LO blower as desired.

IN FLIGHT OPERATIONS  
A/C ON as desired.  
Select HI/LO blower as desired.

DESCENT AND LANDINGS  
A/C ON as desired.  
Select HI/LO blower as desired.

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SECTION 3                      EMERGENCY PROCEDURES

Operate air conditioner switch to - OFF,  
for any of the following emergencies:

Engine Failure  
Engine Overtemperature  
Fuel Control and/or Governor Failure  
Insufficient Power

SECTION 4                      MALFUNCTION PROCEDURES

Lack of cooling may be an indication of  
loss of refrigerant. If outlet air is not  
cool, turn A/C to OFF, or to BLOWER to  
preclude damage to the compressor.

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SECTION 5                      PERFORMANCE DATA

When the A/C is operating, the  
performance data in the basic flight  
manual should be reduced as shown below:

Rate of Climb - Reduce FM data by 78 Ft/min.

Hover Ceiling - Add 64 lbs to the actual  
A/C weight and read the  
reduced hover ceiling  
from the FM data.  
Extrapolate curves if  
operating at the aircraft  
maximum gross weight.