

Service Letter

FAA-DER APPROVED

Service Letter: No. 316

Subject: Replacement of Forward Evaporator Blower Wheel & Motor Assy.

Date: 25 June 1996
1 April 2003 Rev A

Applicability: Bell Helicopter Models 206 Series & 407

Reference:

1. F.A.A./S.T.C. # SH2750NM, Bell 206 series Air Conditioning System.
F.A.A./S.T.C. # SR0022DE, Bell 407 Air Conditioning System.
2. Evaporator Assy. Forward Drawing Numbers
S-600EC- (-7) L/H SINGLE, (-8) R/H SINGLE, (-9) L/H DUAL, &
(-10) R/H DUAL. (206 Series)

S-6006- (-1) L/H DUAL, (-2) R/H DUAL, (-3) L/H SINGLE, &
(-4) R/H SINGLE. (407)

Compliance: Optional, at the discretion of the operator.

Background: Air Comm Corporation maintains a program to refine, upgrade, and assist in the upkeep of it's product line. It has come to our attention that from time to time, the replacement of the forward evaporator blower wheel or motor has become necessary. This document provides the necessary instructions for the replacement of the forward evaporator blower wheel and motor.

Purpose: To enable operators of Bell 407 & 206 series helicopters to change the forward evaporator blower wheel & motor in the field.

Bill of Materials:

Qty.	Part Number	Description
1	ES61062-1	Motor, 24 VDC (filtered)
1	ES73100-5	Blower Wheel R/H Evaporator
1	ES73100-6	Blower Wheel L/H Evaporator

CAUTION

Disconnect Battery and External Power from aircraft before starting work!

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Ans'd.....

Replacement of forward evaporator blower wheel and motor.

1. Cut electrical wires half way between motor housing and evaporator enclosure assy. (see page 4 of 4)
2. Remove the four (4) blower motor mounting screws from the outer ring of the motor housing.
3. Remove blower motor & wheel assy. from evaporator blower housing assembly.
4. Remove CAT ducting form blower outlet.
5. Install new blower motor / wheel assembly.

CAUTION

Do Not handle blower motor wheel assembly!
Handling of the blower wheel may cause damage, resulting in blower vibration.

6. Using the blower outlet for access, carefully rotate the blower wheel by hand. Checking for any interference or rubbing of the blower wheel. Areas (A) the "venturi ring", and (B) the "Blower Housing" (See page 4 of 4) are the most likely areas of interference.

NOTE

If blower wheel rubbing exist, the following procedure is required.

- A. Loosen the four (4) blower mounting screws, adjust the blower motor & wheel assy. radially to achieve a location which eliminates the interference.
- B. If rubbing occurs at area (A) the "venturi ring", loosen the set screw and reposition the blower wheel on the motor shaft. Be sure to re-tighten the set screw after you have adjusted the blower wheel.
- C. If rubbing occurs at area (B) the "blower housing", and this condition can not be resolved by adjusting the location of the blower motor or wheel assy.. Then the edges of the blower housing may require filing to achieve clearance.

CAUTION

Interference of the blower wheel will result in failure of the motor!

7. Splice the blower electrical wires together, using butt connectors and wrap with electricians tape.
Note: R/H evaporator: black wire is +
L/H evaporator: black wire is -

8. Apply electrical power to the blower motor, and recheck for wheel interference. Observe rotation of the wheel thru the duct outlet. Proper rotation will have the vanes of the blower "scooping" the air towards the blower outlet.

WARNING

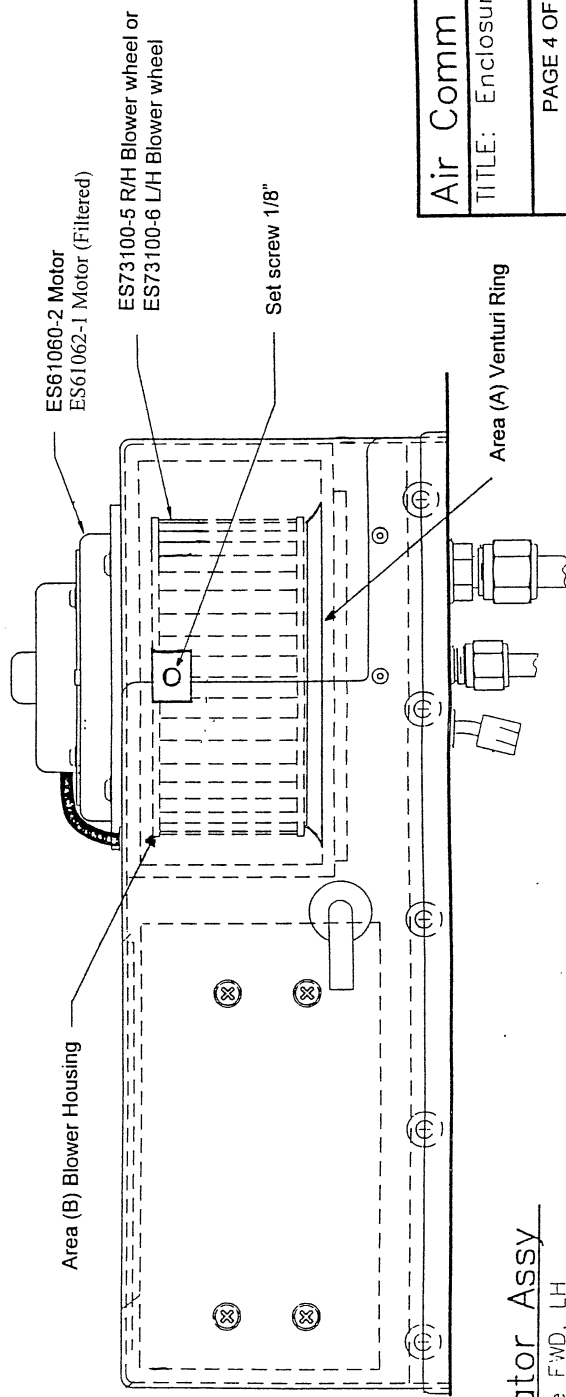
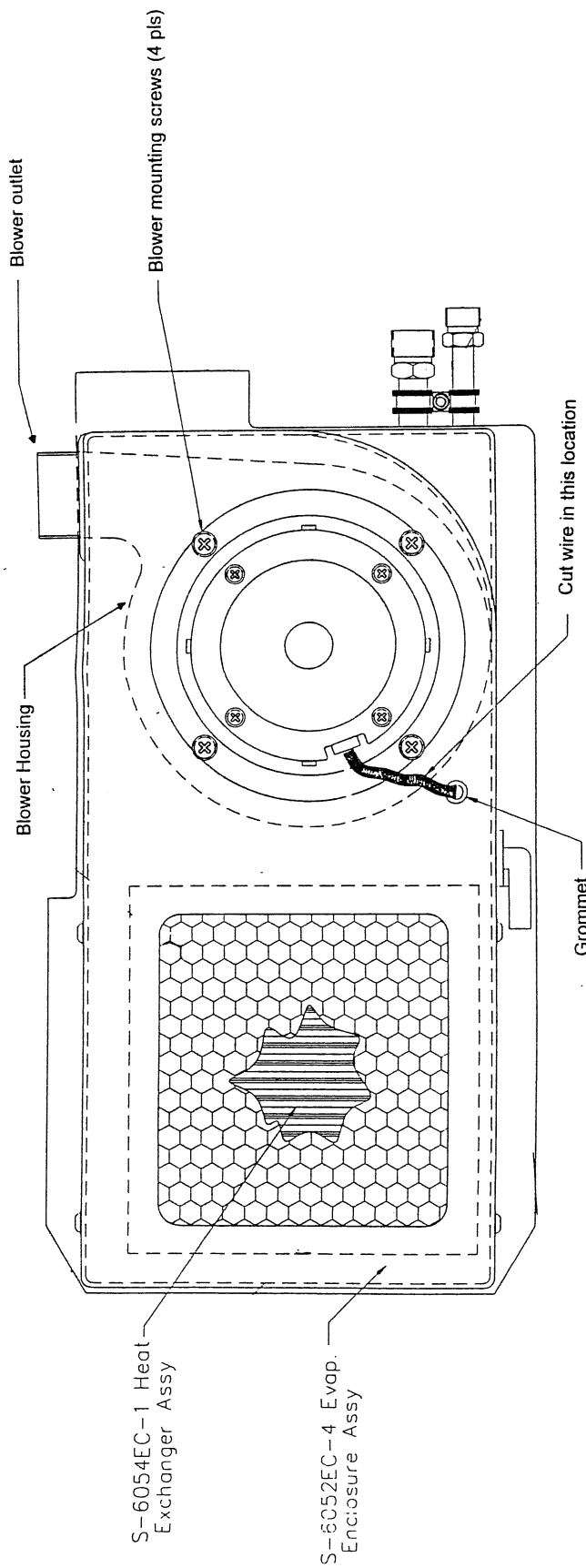
Be sure to wear safety glasses when observing the blower wheel!

CAUTION

Improper blower wheel rotation will cause blower vibration.

9. Reconnect CAT ducting to blower outlet, and recheck the system operation.

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Evaporator Assy
Single FWD, LH

Air Comm Corporation

TITLE: Enclosure Assy-Evap

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