

Service Kit

**FAA-DER APPROVED**

**Service Kit Instructions SK-S-6019EC-1-2**

- Title:** Spares Replacement of Forward Evaporator Blower Motor.
- Applicability:** Eurocopter Model EC135 and EC145 equipped with Air Comm Corporation Air Conditioning Systems.
- Date:** September 12, 2008
- Compliance:** This is a spares replacement change.
- Background:** This kit provides for the replacement of any existing ES61062-1 evaporator blower motor with an alternate ES61064-1 motor. The ES61064-1 motor has been the standard blower motor for the last two years and has an excellent service record.

This change is required because the original motor is no longer available.

**Bill of Materials:**

**Items to be removed**

Item	Part Number	Description	QTY.
1	ES61060-2 or ES61062-1	Motor	1
2	AN525-8R10	Screw	4
3	CT4B	Tywraps	3

**Items to be installed**

Item	Part Number	Description	QTY.
1.	ES61064-10	Motor	1
2.	S-6019EC-1	Adapter Assembly	1
3.	MS21042L3	Nut	6
4.	NAS1149F0332P	Washer	6
5.	MS24693-S273	Screw	4
6.	02-09-2103	Pin	2
7.	CT4B	Tywraps	3

Contact Air Comm Corp Service Department for parts listed above.  
Phone # 303-440-4075 Fax # 303-440-6355 or info@aircommcorp.com

**CAUTION**

Disconnect Battery and External Power from aircraft before starting work.

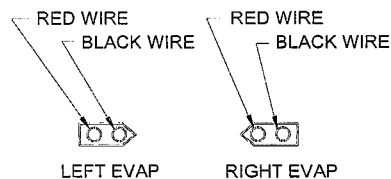
**Replacement of Forward Evaporator Blower Motor**

1. Remove existing CT4B Tywraps (3 each) from evaporator assembly to free motor wiring.
2. De-pin connector and retain for later installation.
3. Disconnect existing Molex connector from forward evaporator wiring harness.
4. Remove Four Screws securing the motor/blower wheel assembly to the evaporator enclosure.
5. Loosen retaining set screw and remove blower wheel from motor shaft. Retain blower wheel.

**NOTE**

It may be necessary to apply heat to the set screw of the blower wheel to separate the two parts.

6. Install existing blower wheel on new motor. Press the blower wheel onto the motor shaft until it stops against motor. Back blower wheel away to achieve a .030"-.040" clearance between blower wheel and new motor. Apply one drop of low strength Loctite to set screw and tighten against flat portion of motor shaft to lock wheel in place. (Figure 1.0)
7. Install S-6019EC-1 Adapter Assembly onto evaporator assembly using 4 each MS24693-S273 Screws. (Figure 2.0)
8. Install S-61064-1 motor/blower wheel assembly into evaporator enclosure using 6 each NAS1149F0332P washers and 6 each MS21042L3 nuts (Figure 2.0). Care should be taken to orient new electrical leads with existing wires to aid in final attachment to evaporator housing.
9. Crimp new Molex 02-09-2103 pins onto motor wires and insert pins into plug as shown below.



10. Attach motor wiring to existing tywrap mounts located on evaporator enclosure using 3 ea. CTB4 tywraps.
11. Connect existing evaporator wiring harness to new motor wiring.

**NOTE**

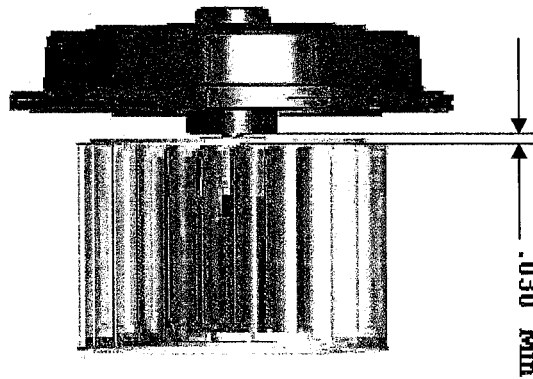
Due to the proximity of the flight controls care should be taken to ensure all electrical connections are properly insulated and secured.

12. After connecting new motor to the existing wiring harness, perform an electrical check to ensure both evaporator blowers are running in the proper direction. Observe blower wheel rotation from blower outlet. Blower wheel should rotate toward blower outlet.
13. Return the Air Conditioner to service.

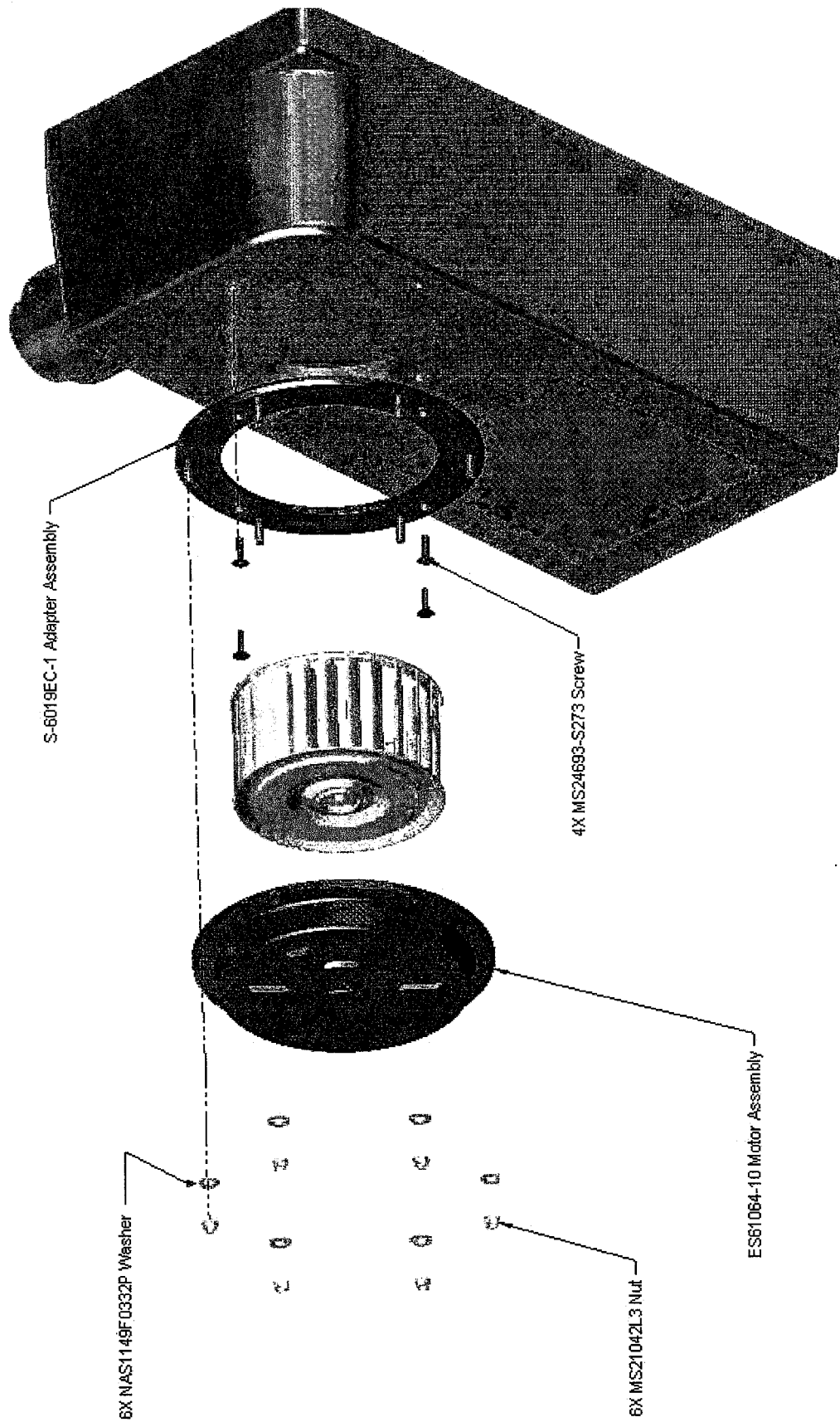
**NOTE**

If radio noise is noticed after installation of this Service Kit,  
RF Filters may be installed using Service Kit  
SK-S-6019EC-1-6.

Install existing blower wheel on new motor.  
Press the blower wheel onto the motor shaft  
until it stops against motor. Back blower wheel  
away to achieve a .030"-.040" clearance  
between blower wheel and new motor. Apply  
one drop of low strength Loctite to set screw  
and tighten against flat portion of motor shaft to



**Figure 1.0 Blower Wheel / Motor Assy**



**Figure 2.0 Blower Motor / Wheel Evaporator installation**