



# Service Letter

Subject:

Airbus EC130 Air Conditioner Blower Motor Connector Upgrade.

Date:

Feb 9, 2016

**Applicability:** 

Airbus Helicopter model EC130 Equipped with the Air Comm

Corporation EC130-202-1 thru -8 air conditioner system

Reference:

ACC Service Bulletin SB EC130-6204

#### Discussion:

This Service Letter describes the actions necessary to change the connectors on the air conditioning aft evaporator blower motor regarding the potential issue described in the referenced service bulletin. Note that per SB EC130-6204 it is only necessary to change connectors showing indications of an overheated condition although the instructions in this letter provide the information to change all potentially affected connectors.

# Approval:

The resultant alteration described in this document has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.

# Weight & Balance:

There is no change in weight and/or balance due to this alteration.

# **Revision History:**

Revision	Issue Date	Inserted By	Approved	Description of Changes	
N/C	Nov 11, 2014	JMB	MJK	Initial Release	
Α	Feb 9, 2016	JMB		Installation instruct pg 2: corrected crimp tool p/n & description	



### **Bill of Materials:**

Aft Evaporator parts to be replaced:

Item	Part Number	Description	Quantity
1	03-09-1032	Receptacle (3 pin on main harness)	1
2	02-09-1103	Socket (in item 1 receptacle)	3
3	03-09-2032	Plug (mates w/ item 1 receptacle)	1
4	02-09-2103	Pin (in item 3 plug)	3
5	03-09-2022	Plug (2 pin blower harness)	1
6	02-09-2100	Pin (in item 5 plug)	2
7	03-09-1022	Receptacle (mates w/ item 5 plug)	1
8	02-09-1104	Socket (in item 7 receptacle)	2

### **Rework Instructions, Aft Evaporator:**

#### Removal:

### **CAUTION**

Disconnect the aircraft battery and external power prior to starting work.

- 1. Access the aft evaporator assembly, located on the forward transmission deck right side.
- 2. Locate the 3 pin connector near the resistors on the evaporator (see Figure 1) and mark the white wires "Red" and "Black" as appropriate per figure 2. It may be necessary to remove a portion of the heat shrink covering on the harness.
- 3. Cut the wires on the back side of the 4 connectors (2 connector sets) shown in Figure 1. Remove minimal wire length. Remove and discard the connectors w/pins & sockets.

### Installation:

Install pins, sockets, plugs, and receptacles onto free ends of wires.

Crimp Molex pins using Molex Corporation Tool #0638111000 (Available thru Molex USA 1-800-786-6539) or equivalent wire terminal crimping tool for Molex 1189,1190 series terminals (2.36mm / .093" dia).

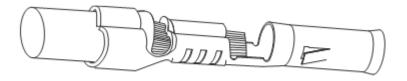
The Conductor Crimp should not have excessive extrusions (flashing)

The insulation crimp (strain relief) should grip the insulation without cutting through it.



Wearing leather work gloves, perform non-destructive pull test. Wire should not dislodge from conductor crimp under normal hand pressure. (Approx 10lbs.)

Finished crimp should resemble drawing below.



## **Post-rework Inspection**

After completing 10 flight hours re-inspect the connectors to verify the integrity of the crimps.



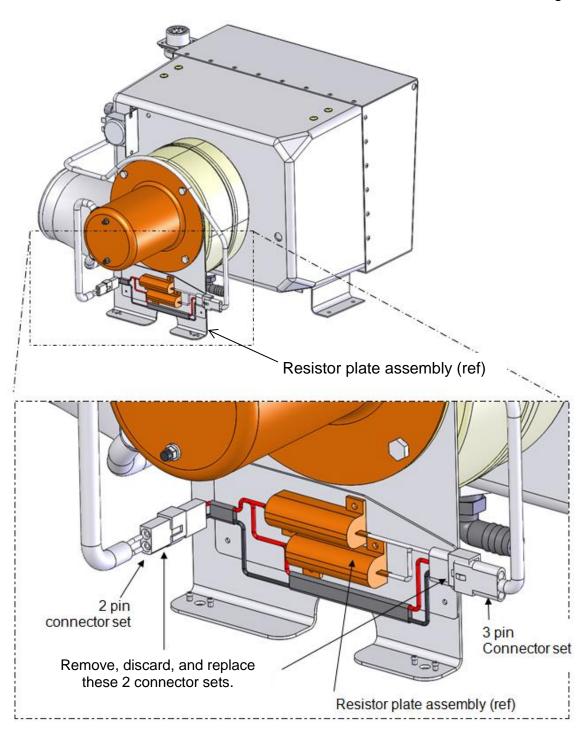


Figure 1 Aft Evaporator Assembly EC130-6204-1,-2

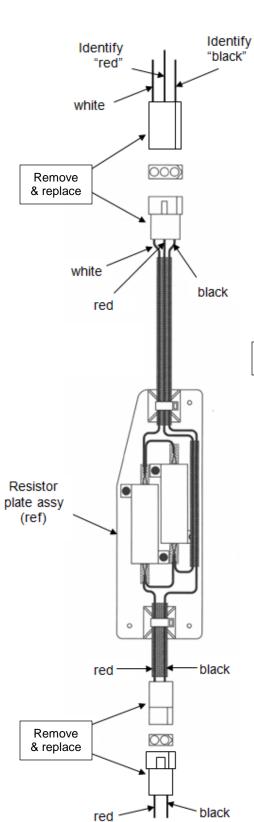


Figure 2 Resistor Plate Assembly