

**Service Bulletin**

**Service Bulletin:** SB EC135-8010; Eurocopter EC135 Air Conditioner Aft Evaporator Wiring Harness Blower Motor Connector Upgrade.

**Subject:** Aft Evaporator Wiring Harness Blower Motor Connector Upgrade.

**Date:** 25, November 2009

**Applicability:** Eurocopter Helicopter model EC135 Equipped with the Air Comm Corporation EC135-200 & EC135-202 Air Conditioning System for kit serial numbers EC135-002 thru EC135-092. Kit serial number EC135-093 and subsequent do not require application of this service bulletin.

**Reference:**

1. FAA / STC # SR00565DE, Eurocopter Helicopter EC135 Air Conditioning System.
2. General Arrangement Installation Dwg. EC135-200 & 202
3. Electrical Installation Dwg. EC135-800 & 802
4. Aft Evaporator Assembly Dwg. EC135-6844
5. Wiring Harness Aft Evaporator Blower EC135-8010

**Compliance:** Mandatory within the next 100 hours of operation.

**I. Discussion:**

Field reports have indicated that the aft evaporator blower motor connections have overheated during the operation of the air conditioner system. The items included in this bulletin are designed to prevent the occurrence of this problem.

**II. Approval:**

Technical aspects of this Service Bulletin is based on approved ACC drawings & data.

| Revision | Issue Date | Inserted By | Description of Changes                     |
|----------|------------|-------------|--|
| A        | 3/28/12    | RL          | Added kit serial numbers for Applicability |
|          |            |             |  |

### III. Purpose:

This bulletin is intended to provide the necessary instructions, electrical components, and hardware to upgrade the aft evaporator blower motor wiring connections to prevent overheating.

### IV. Bill of Materials:

#### Parts to be removed:

| Item | Part Number  | Description  | Quantity |
|------|--------------|--------------|----------|
| 1    | EC135-8010-3 | Wire Harness | 1        |
| 2    | 03-09-1032   | Plug         | 1        |
| 3    | 03-09-2022   | Receptacle   | 1        |
| 4    | 02-09-1104   | Socket       | 3        |
| 5    | 02-09-2103   | Pin          | 2        |

#### Parts to be installed:

| Item | Part Number  | Description  | Quantity |
|------|--------------|--------------|----------|
| 1    | EC135-8010-4 | Wire Harness | 1        |
| 2    | 03-12-1036   | Plug         | 1        |
| 3    | 03-12-2026   | Receptacle   | 1        |
| 4    | 18-12-1602   | Socket       | 3        |
| 5    | 18-12-2602   | Pin          | 2        |
| 6    | TSE-12-01    | Connector    | 5        |

These parts can be obtained free of charge from the Air Comm Corporation Service Department. Please contact us at: Phone 303-440-4075, Fax 303-440-6355, or E-mail [service@aircommcorp.com](mailto:service@aircommcorp.com)

### V. Accomplishment Instructions:

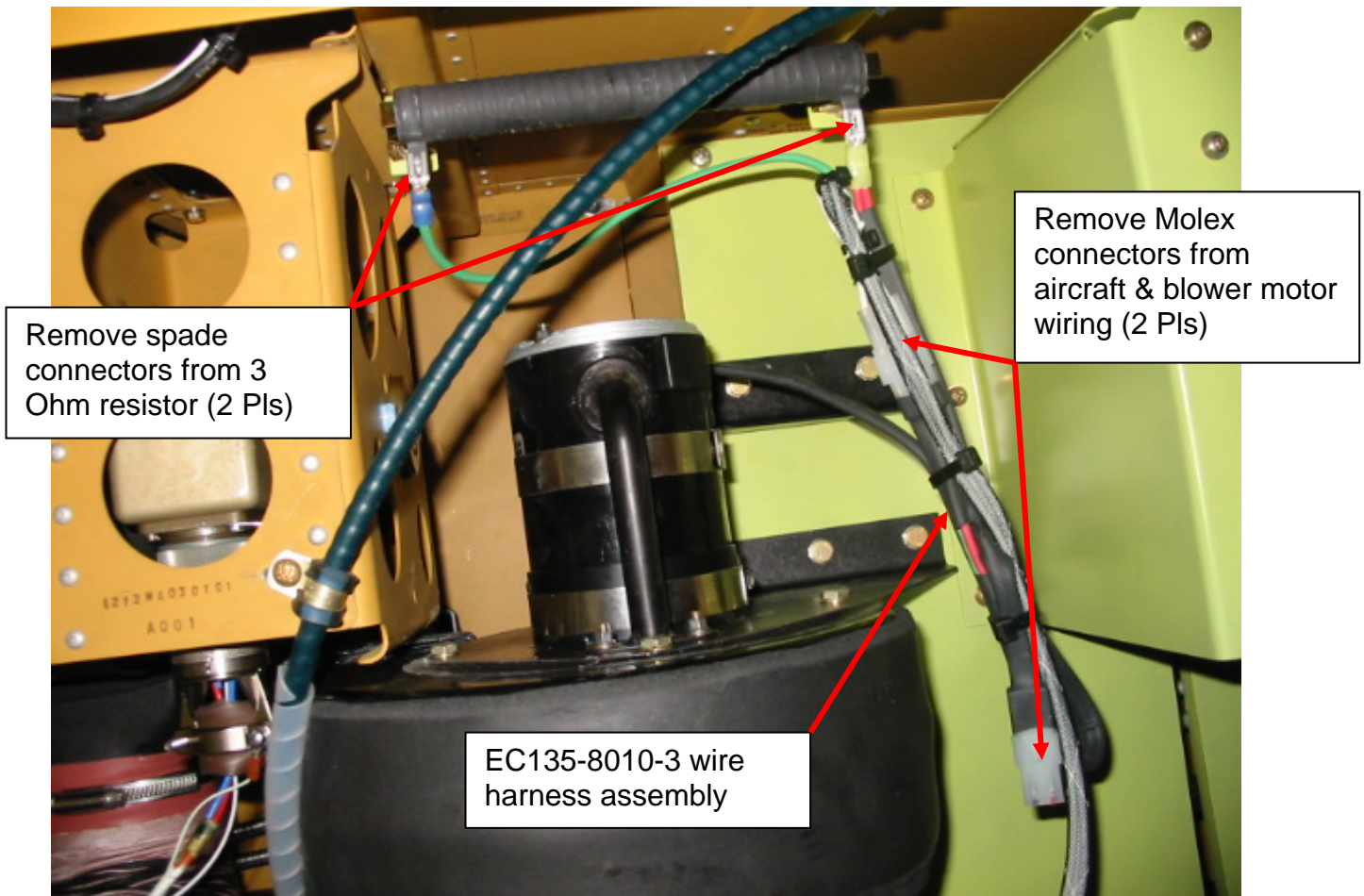
#### Removal:

#### **CAUTION**

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

1. Access the aft evaporator blower assembly & wire harness, located in the avionics bay in the aircraft belly, just aft of the forward cross tube.
2. Disconnect the spade connector ends of the EC135-8010-3 wire harness from the 3 Ohm/100 Watt resistor located on the aft bulk head in this compartment. (figure 1-1)
3. Disconnect the Molex connector ends of the EC135-8010-3 wire harness from the aft evaporator blower motor & aircraft wiring connections, and discard the -3 wire harness assembly. (figure 1-1)

4. Remove and discard the Molex connector plug (P/N 03-09-1032) & sockets (P/N 02-09-1104) from the aircraft wiring. (figure 1-1)
5. Remove and discard the Molex receptacle (P/N 03-09-2022) & pins (P/N 02-09-2103) from the aft blower motor wiring (figure 1-1)



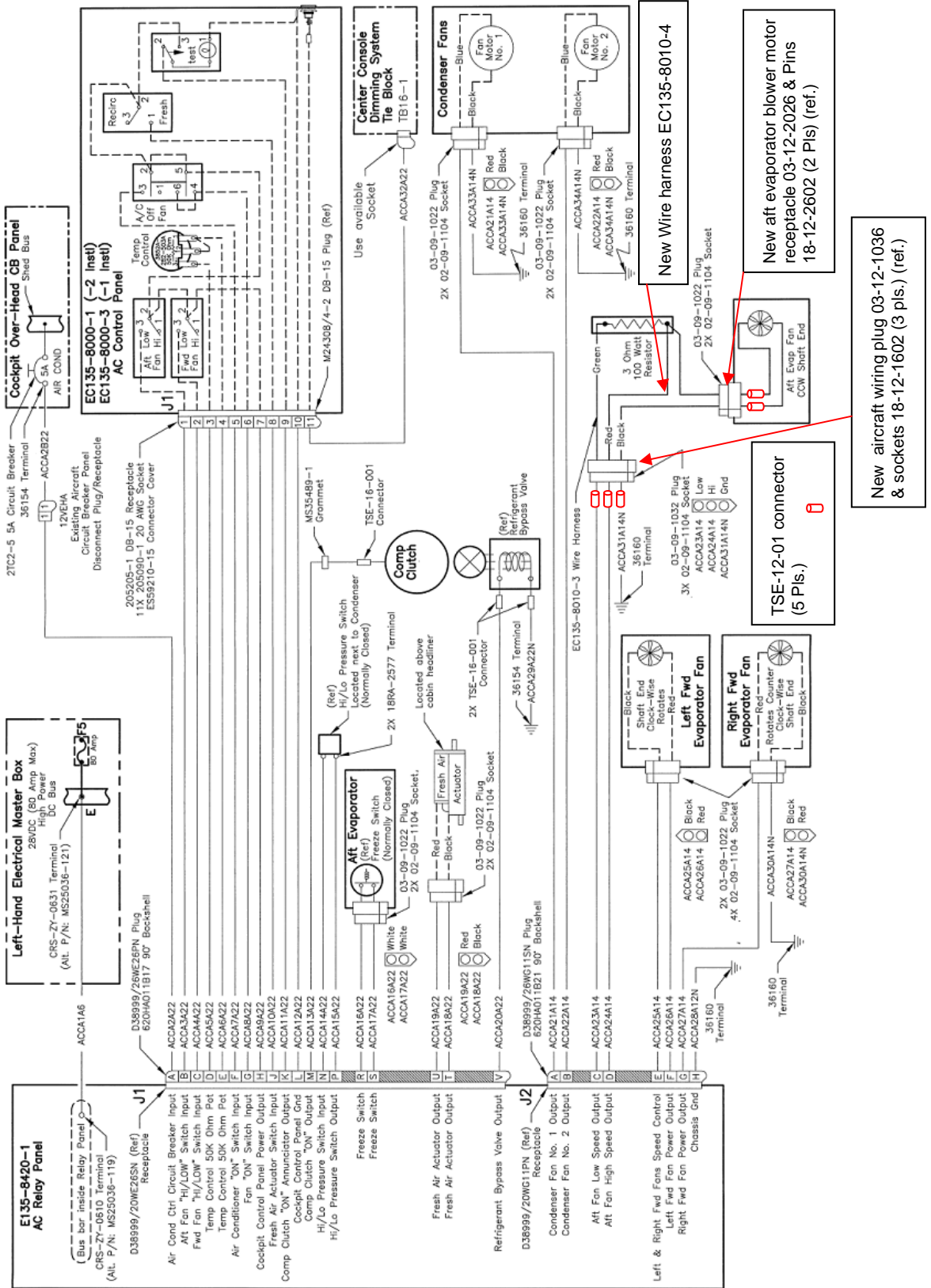
(Figure 1-1 View looking up at the aft evaporator blower & wire harness)

#### Installation:

1. Install EC135-8010-4 Wire harness to existing 3 Ohm/100 watt resistor as shown in (figure 1-2).
2. Install TSE-12-01 Connectors to wires ACCA23A14, ACCA24A14, ACCA31A14N, and both of the leads to the aft evaporator blower motor. (figure 1-2)

**Weight and Balance:**

Installation of these parts is negligible and no adjustment to the weight and balance of the aircraft is necessary.



(Figure 1-2 Electrical Schematic)