

### Service Bulletin

**Service Bulletin:** SB EC145-702; Eurocopter EC145 Air Conditioner Condenser Upgrade.

**Subject:** Up-grade of existing condenser installation, Aircraft S/N 9089.

**Date:** 30, November 2006, Rev N/C

**Applicability:** Eurocopter Helicopter model BK117-C2, S/N 9089

**Reference:**

1. FAA / STC # SR00565DE, Eurocopter Helicopter EC145 Air Conditioning System.
2. EC145-200 General Arrangement Drawing.
3. EC145-702 Condenser Installation Drawing.
4. EC145-7002-1 Condenser Assembly Drawing.

**Compliance:** Mandatory, within 50 hours of receipt of this bulletin.

**I. Discussion:**

Operators in the field have noted cracking to the deck surfaces adjacent to the air conditioner condenser mounting points.

**II. Approval:**

Technical aspects of this Service Bulletin are FAA / DER approved.

**III. Purpose:**

The purpose of this bulletin is to incorporate condenser isolators and to add reinforcement to the condenser support structure.

**IV. Bill of Materials:**

**Parts to be Removed:**

Item	Part Number	Description	Quantity
1	EC145-7000-1	Assy - Condenser	1
2	EC145-7010-14	Support	1
3	EC145-7010-22	Support	1
4	EC145-7010-15	Doubler	2
5	AN3-4A	Bolt	4
6	NAS1149F0332	Washer	4
7	AN364-1032	Nut	4
8	804-297	Receiver Drier	1

**Parts to be Installed:**

Item	Part Number	Description	Quantity
1	EC145-7002-1	Assy - Condenser	1
2	EC145-7010-14	Support	1
3	EC145-7010-15	Doubler	3
4	EC145-7010-22	Support	1
5	EC145-7016-2	Bracket	2
6	EC145-7016-3	Support Tube	1
7	EC145-7016-4	Support Tube	1
8	EC145-7016-5	Shim	1
9	EC145-7016-6	Bracket	1
10	EC145-7016-7	Channel	1
11	EC145-7016-8	Angle	1
12	MS20470AD4-3	Rivet	16
13	MS20470AD4-4	Rivet	12
14	MS21042L3	Nut	6
15	MS21042L08	Nut	12
16	MS27039-0809	Screw	12
17	NAS1149FN832P	Washer	24
18	NAS1149F0363P	Washer	10
19	MS27039-1-08	Screw	4
	804-297	Receiver Drier	1
	440-840	#6 O-ring	2

Please contact the Air Comm Corporation Service Department to obtain these parts at no charge.

Phone 303-440-4075, Fax 303-440-6355, E-Mail [info@aircommcorp.com](mailto:info@aircommcorp.com)

**V. Accomplishment Instructions:**

**CAUTION**

It is recommended that the battery and external power be disconnected before starting work.

**NOTE**

It will be necessary to discharge the refrigerant from the air conditioner system to accomplish this Service Bulletin. Please refer to the EC145-200M-1 Instructions for Continued Airworthiness, Chapter 5 Servicing.

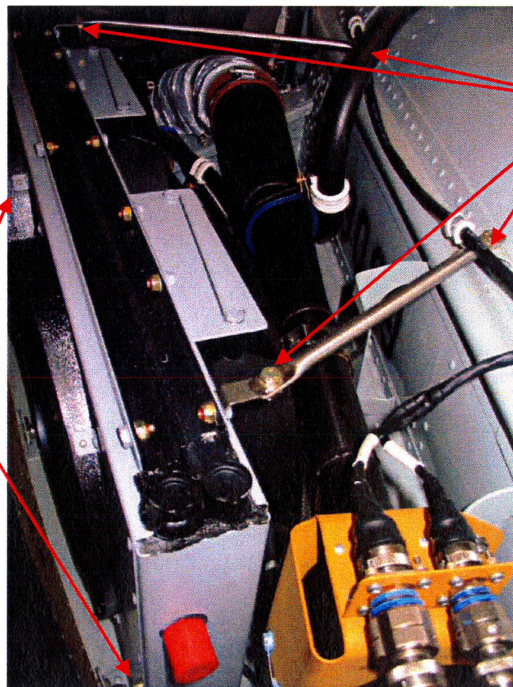
**NOTE**

Any repairs or alterations to the airframe or its components not specifically covered in this document or specified in the ACC / FAA approved documents listed on page 1, shall revert to *AC43-13 Standard Practices*, and or the *EC145 Structural Repair Manual* to complete the necessary removal and replacement of the condenser.

**Removal:**

1. Discharge / Recover refrigerant form the air conditioner system.
2. Disconnect the Molex connector to the EC145-7000-1 Condenser Blowers.
3. Remove the EC145-7000-1 Condenser Assy., EC145-7010-14 & EC145-7010-22 Supports from the tail boom connecting points and the top of the condenser assembly. See Figure 1-1.

Remove the EC145-7000-1 Condenser assembly from the aircraft, by removing the existing Bolts, Nuts, and Washers from the condenser support brackets at the base of the condenser assembly.



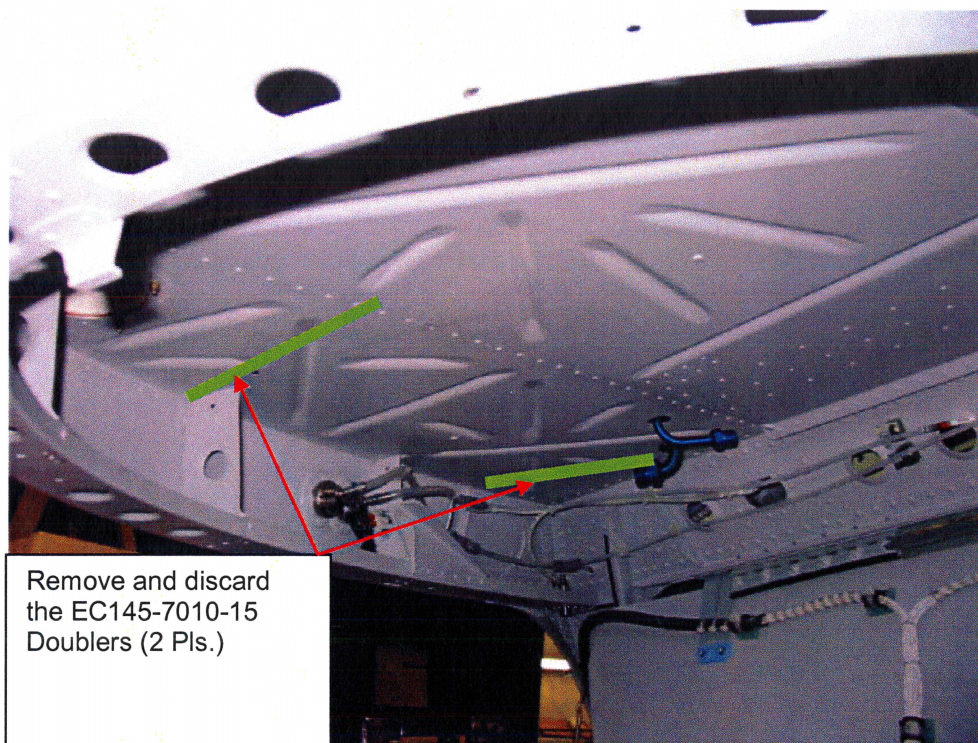
Remove and discard the attaching hardware, and supports.

**Figure 1-1**

View looking down and forward

Removal continued:

4. Remove, and discard the EC145-7010-15 Doubler (2 Pls.) mounted to the deck below the air conditioner condenser. See figure 1-2.



**Figure 1-2**

View looking up at the bottom of the condenser mounting deck.

**Installation:**

1. Install the new Condenser Assembly I/A/W Air Comm Corporation Drawing EC145-702.
2. Service the air conditioner system with R134a refrigerant. Please refer to the EC145-200M-1 Instructions for Continued Airworthiness, Chapter 5 Servicing.

**Weight and Balance:**

The weight change for this modification is negligible, and therefore no change to the aircraft weight and balance is required.