



AIROD

DISCREPANCY REPORT

AIRCRAFT TYPE: 109E REG. NO: 9M-1308 DR. NO: 1239/BOB

SOURCE REFERENCE: BT10SEP-125

DATE RAISED: 2/12/12 CHECK TYPE: BT WORK ORDER (JCN): LB002808

DISCREPANCY	AVF HRS	NO. 1 ENG	(TSN/ISO)	NO. 2 ENG	(TSN/ISO)
	2666.90 2667.60	2666.90 2667.60		350.90	

MANDATORY BT10SEP-125 DTD 19 DEC 2012, SUBJ: INSPECTION OF THE REMAINING BOJ P/N 109-8131-09-1 TO BE EVALUATED FOR APPLICABILITY.

RAISED BY: Apikah Sumish SIGN & STAMP: DATE: 2/12/12.

DISPOSITION
 CMT EVALUATION OF BT10SEP-125 FOR ITS APPLICABILITY BASE ON THE MENTIONED BOJ P/N 109-8131-09-1

SIGN: STAMP: ED887 DATE: 2/12/12

MHP:	MHA:	CUST. APP. SIGNATURE:	MATERIAL COST:
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CORRECTIVE ACTION	MECH	LA/IAH & DATE
EVALUATION CONDUCTED AND FOUND NOT APPLICABLE BY BOJ P/N FITTED. THIS BOJ IS ONLY FITTED ON TAIL ROTOR BLADE INSTALLATION WITH METAL BLADE (PRE-BT10SEP-47). PRESENTLY FITTED BOJ P/N ^{ENG} 709-0160-47-101 IS 709-0160-47-101 (POST BT10SEP-47). FOUND SET.	-	ED887 2/12/12

COMPONENT / PART CHANGE

PART NO.	DESCRIPTION	S/NO. ON	S/NO. OFF	QTY	BATCH NO.
NIL					

DUPLICATE / RII / CRITICAL TASK

First Insp. Sign / Stamp / Date _____ Second Insp. Sign / Stamp / Date _____

The work recorded above has been carried out in accordance with the requirements of the MCAR for the time being in force and in that respect, the aircraft / equipment is considered fit for release to service.



TRANSLATION OF
BOLLETTINO TECNICO

The technical content of this document is approved
under the authority of DOA nr EASA.21J.005.

N° 109EP-125

DATE December 19, 2012

REV.

Compliance with
this bulletin is:

MANDATORY

SUBJECT: INSPECTION OF THE RETAINING BOLT P/N 109-8131-09-1.

REASON: Perform a "one-time" liquid penetrant inspection and a periodic inspection of the retaining bolt P/N 109-8131-09-1 of the tail rotor hub assy to verify the presence of cracks.

HELICOPTERS AFFECTED:

PART I[^]:

All the AgustaWestland A109E helicopters that install a retaining bolt P/N 109-8131-09-1 with more than 400 flight hours.

PART II[^]:

All the retaining bolts P/N 109-8131-09-1 installed on the helicopter or in stock.

COMPLIANCE:

PART I[^]:

Within the next 100 helicopter flight hours from receipt of this Bollettino or not later than March 31, 2013, whichever comes first.

PART II[^]:

In conjunction with each "200 flight hours helicopter inspection" or each 6 months, whichever comes first.

DESCRIPTION:

Two cases of cracks of the retaining bolts P/N 109-8131-09-1 were reported on A109 series helicopters. The investigation identified the reason of the cracks in the corrosion of the retaining bolts P/N 109-8131-09-1. This Bollettino provides the instructions to perform:

- A "one-time" liquid penetrant inspection to verify the presence of cracks on the retaining bolts P/N 109-8131-09-1 (PART I[^]);
- A periodic or calendar inspection (PART II[^]);

An appropriate entry should be made in the aircraft log book upon accomplishment.
If ownership of aircraft has changed, please, forward to new owner.

REQUIRED MANPOWER:

Compliance with this Bollettino, requires:

- PART I[^]
- PART II[^]

2 (Two hours) manpower hours;
1 (One hour) manpower hour.

WARRANTY:

Within the calendar terms mentioned at point "Compliance", the parts required to apply the present Bollettino shall be supplied on a free of charge basis by Agusta upon request, except for consumable materials.

Upon application of this Bollettino, Customers are requested to submit to Agusta Warranty Administration the Technical Bulletin Compliance form attached to this Bollettino duly completed in all its parts.

REQUIRED MATERIALS:

The following materials are required for compliance with this Bollettino:

<u>P/N</u>	<u>DENOMINATION</u>	<u>Q.TY</u>	<u>NOTE</u>
109-8131-09-1	Retaining bolt	1	(1)(2)
MS24665-289	Cotter pin	1	(1)(2)

Additional materials are described in Annex A.

NOTE:

- (1) Material required only in case of replacement.
- (2) The tail rotor hub assy is equipped with two retaining bolts and two cotter pins.

SPECIAL TOOLS:

N.A.

WEIGHT AND BALANCE CHANGES:

N.A.

REFERENCES:

- Pertinent A109E Illustrated Parts Catalog;
- A109E Maintenance Planning Manual;
- A109E Maintenance Manual;
- Annex A.

PUBLICATIONS AFFECTED:

A109E Maintenance Planning Manual.

COMPLIANCE INSTRUCTIONS:

PART I^A:

NOTE

Unless otherwise specified retain all parts that will be removed in following operations. Replace damaged hardware.

1. Prepare the helicopter on ground for a safe maintenance, disconnect any power supply.
2. With reference to the procedures given in the A109E Maintenance Manual, remove and discard the cotter pin and remove the nut, the washers and the retaining bolt P/N 109-8131-09-1.
3. Perform the inspection on the retaining bolt P/N 109-8131-09-1 for condition, corrosion and nicks in agreement with the A109E Maintenance Manual. Presence of any damage, even if minor, and/or removal of cadmium plating in the central part of the bolt, interested by the strap retention, is cause for bolt replacement.
4. If the result of the above inspection has not revealed any cracks, perform the liquid penetrant inspection in accordance with Annex A. Presence of any cracks is cause for bolt replacement.
5. Install the retaining bolt P/N 109-8131-09-1, the washers, the nut and the new cotter pin P/N MS24665-289, in accordance with procedures given in the A109E Maintenance Manual.

NOTE

The result of the inspection on the retaining bolt P/N 109-8131-09-1 must be communicated to AgustaWestland Company at the following address:

A109 Customer Support Engineering
(aw109.mbx@agustawestland.com)

6. Return the helicopter to a ready to flight condition.
7. Record compliance with this Bollettino in the helicopter log book.

PART II^:

NOTE

Unless otherwise specified retain all parts that will be removed in following operations. Replace damaged hardware.

1. Prepare the helicopter on ground for a safe maintenance, disconnect any power supply.
2. With reference to the procedures given in the A109E Maintenance Manual, remove and discard the cotter pin and remove the nut, the washers and the retaining bolt P/N 109-8131-09-1.
3. Perform the inspection on the retaining bolt P/N 109-8131-09-1 for condition, corrosion and nicks in agreement with the A109E Maintenance Manual. Presence of any damage, even if minor, and/or removal of cadmium plating in the central part of the bolt, interested by the strap retention, is cause for bolt replacement.
4. Install the retaining bolt P/N 109-8131-09-1, the washers, the nut and the new cotter pin P/N MS24665-289, in accordance with procedures given in the A109E Maintenance Manual.

NOTE

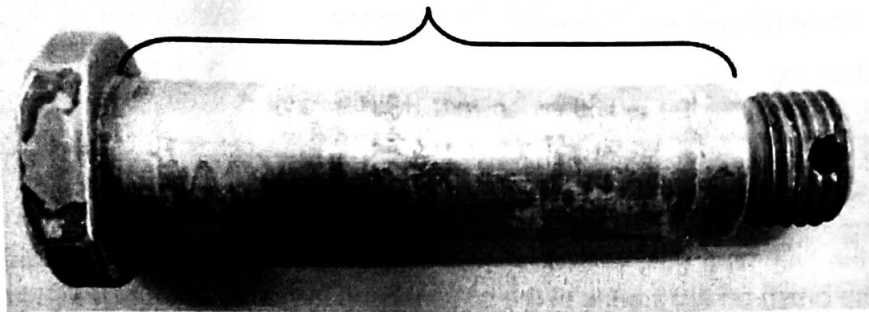
The result of the inspection on the retaining bolt P/N 109-8131-09-1 must be communicated to AgustaWestland Company at the following address:

A109 Customer Support Engineering
(aw109.mbx@agustawestland.com)

5. Return the helicopter to a ready to flight condition.
6. Record compliance with this Bollettino in the helicopter log book.

ANNEX A

1.0	SCOPE
	This procedure defines the requirements for liquid penetrant inspection of the shank of the bolt P/N 109-8131-09-1 (see figure) for the detection of possible crack propagating along the circumferential direction.



2.0	MATERIALS/CONSUMABLES
	<p>For this inspection, the following equipment and consumables shall be available:</p> <ul style="list-style-type: none">• liquid penetrant Type 1, Method C, sensitivity level 3, Class 2 solvent and non-aqueous form "d" developer to be purchased from any vendor approved within QPL-AMS2644,• a dark room where the part to be inspected can be in an ambient of 20 lux maximum illuminance• a black light lamp suitable to irradiate the surface of the part with a minimum of 1.200 $\mu\text{W}/\text{cm}^2$,• clean dry gauze,• a luxmeter to measure the illuminance in lux and a radiometer to evaluate the irradiance in $\mu\text{W}/\text{cm}^2$,• a clean and dry brush for the application of the penetrant.

3.0	INSPECTION
	<p>Note The part under inspection shall not have been previously inspected using a sensitivity higher than that indicated or a type 2 penetrant.</p>
3.1	Part preparation
	<p>The whole surface of the part under inspection (see figure) shall be clean, dry and free of grit or scale residue which may interfere with the inspection. The cleaning shall be performed by means of vigorous and repeated scrubbing with gauze soaked by the indicated solvent. Mechanical means such as sand blasting, plastic media or plastic pads wire brushes is prohibited.</p>
3.2	Penetrant application
	<p>After the complete evaporation of the cleaning solvent, the liquid penetrant shall be applied with the brush on the surface of the bolt verifying its complete coverage under the black light.</p>
3.3	Excess removal
	<p>After a minimum of 30 minutes of dwell time, in the first instance the excess of penetrant shall be removed by means of a clean and dry gauze and afterwards dampening the gauze with the solvent. It must be verified under the black light the complete removal of background fluorescence.</p> <p>Note The use of gauze soaked with the solvent or the direct pouring of the solvent on the part is prohibited.</p>
3.4	Development
	<p>The developer can shall be shaken vigorously in order to homogenize its content; the developer shall then be applied to the surface of the part and left for a minimum of 20 minutes prior to viewing the part under black light using the dark room.</p>
3.5	Viewing and evaluation
	<p>Any fluorescent indication observed on the surface of the part shall be assessed to determine whether it is relevant or not. Use the "wipe off" technique on each indication and re-apply the developer.</p> <p>If the indication initially disappears and does not re-appear after 5 minutes, it can be considered non-relevant; the part shall be carefully cleaned removing any inspection residual and released to service.</p> <p>If the indication reappears, this indication is confirmed to be relevant and the part must be scrapped.</p>
4.0	PERSONNEL
	<p>The inspections performed according to this standard shall be carried out by personnel qualified in accordance with EN4179 or NAS410 international standards.</p>



AgustaWestland
A Finmeccanica Company

Prego spedire a questo indirizzo:
Please send to the following address:

AGUSTAWESTLAND S.p.A.
CUSTOMER SUPPORT & SERVICES - ITALY
PRODUCT SUPPORT ENGINEERING DPT.
Via del Gregge, 100
21015 Lonate Pozzolo (VA) - ITALY
Tel.: +39 0331 664905
Fax: +39 0331 664684

MODULO APPLICAZIONE BOLLETTINO TECNICO
TECHNICAL BULLETIN COMPLIANCE FORM

Data:
Date:

Numero:
Number:

Revisione:
Revision:

Denominazione Cliente ed Indirizzo:
Customer Name and Address:

Telefono:
Telephone:

Fax:

Data Applicazione B.T.:
B.T. Compliance Date:

Modello Elicottero Helicopter Model	S/N	Matricola Tail Number	Ore Totali Total Hours	Ore D.U.R. T.S.O.

Note:
Remarks:

Informazioni:
Information:

Al fine di gestire le varianti alla configurazione base, in relazione all'emissione del Bollettino Tecnico, preghiamo di voler compilare il presente modulo in tutte le sue parti e spedito all'indirizzo sopra indicato. Si ringrazia per la gentile collaborazione data.

We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address. We thank you beforehand for the information given.