



# DISCREPANCY REPORT

1513.


AIRCRAFT TYPE: A109E REG. NO: 9m-BOB DR. NO: 1513 / BOB

SOURCE REFERENCE: BTS

DATE RAISED: 2/4/15 CHECK TYPE: WORK ORDER (JCN): B2015BOB


DISCREPANCY	A/F HRS	NO.1 ENG	(TSN/TSO)	NO.2 ENG	(TSN/TSO)
	<u>2948.00</u>	<u>2948.00</u>		<u>2948.00</u>	

BT109EP-143 DTD 25 MARCH 2015 - TAIL ROTOR DRIVE SHAFT P/N: 109-8412-02-01 AND 03.

RAISED BY: AKASH SHARMA SIGN & STAMP:  DATE: 2/4/15

**DISPOSITION**




BT 109EP-143 DTD 25 MARCH 2015, TAIL ROTOR DRIVE SHAFT P/N 109-8412-02-01 AND 03. TO BE COMPLY.

SIGN: WE STAMP:  DATE: 2/4/15

MHP:	MHA:	CUST. APP. SIGNATURE:	MATERIAL COST:
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**CORRECTIVE ACTION**


BT 109EP 143 DTD 25 MARCH 2015, TAIL ROTOR DRIVE SHAFT P/N 109-8412-02-1 AND -3 INSPECTION CARRIED OUT, COMPLYED AND NIL CRACK FOUND. SATISFACTORY.

MECH	LAE/AH & DATE
	<u>WE</u>  <u>2/4/15</u> <u>Shahid</u>  <u>2/04/15</u>


**COMPONENT/ PART CHANGE**

PART NO.	DESCRIPTION	S/NO. ON	S/NO. OFF	QTY.	BATCH NO.
<u>NIL</u>					

**DUPLICATE / RII / CRITICAL TASK**

N/A WE  2/4/15

First Insp. Sign / Stamp / Date

N/A Shahid  2/4/15

Second Insp. Sign / Stamp / Date

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



1. Doc. Control No. 1513-1/bob	<b>DUPLICATE INSPECTION CERTIFICATE</b> (Inspection of Vital Points and/or Controls)	MOE 2-15-1  BCAR Chap A6-2
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**DUPLICATE INSPECTION:**

All licensed engineers or Company Approval Holders shall ensure that Duplicate Inspection is performed iaw MOE 2-15-1 on the aircraft and engine control systems and vital points as specified by the relevant airworthiness authority, before a Certificate of Release to Service for an aircraft or engine is issued. Duplicate Inspections ensure that the system affected by maintenance have been assembled and adjusted and locking devices made safe iaw the approved procedures and that the controls and components have free movement and correct sense throughout the specified operating range.

2. ACFT MODEL: A109E	3. SERIAL NO: 11212	4. JCN: LB2015 BOB
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5. DESCRIPTION (SYSTEM):  
ATA CHAPTER 65

**WARNING:**

Duplicate Inspections shall be accomplished by authorized personnel with valid/current certification iaw MOE 3-4 (as revised).

**ASSOCIATED WITH**

6. <u>SHOP INSTRUCTIONS</u>	7. <u>MAINTENANCE ACTION FORM</u>
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8. Certify Duplicate Inspection has been carried out on the control and associated component from  
TAIL ROTOR DRIVE SHAFT MIDDLE AND LONG SECTION  
ASSY  
 To THOMAS COUPLING, HANGER ASSEMBLIES AND TAIL BOOM  
ATTACHMENTS

for correct assembly, locking and full, free and correct directional movement.

Duplicate Inspection recorded herein carried out as per MOE 2-15-1 & BCAR Section 'A', Chapter A6-2, Paragraph 10.

1 <sup>ST</sup> INSPECTOR		2 <sup>ND</sup> INSPECTOR	
9. NAME: MUSTAFA	9d. AH/LAME STAMP/NO.  QAP 900 ASB	10. NAME: OFFMAN	10d. AH/LAME STAMP/NO.  QAP 899 ASB
9a. SIGNATURE: 		10a. SIGNATURE: 	
9b. DATE: 2/4/15		10b. DATE: 2/4/15	
9c. TIME: 1100		10c. TIME: 1130	



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**BOLLETTINO TECNICO**

**N° 109EP-143**

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

**DATE** March 25th, 2015

**REV.**

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Compliance with  
this bulletin is:

**MANDATORY**

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**SUBJECT:** TAIL ROTOR DRIVE SHAFT P/N 109-8412-02-1 and -3.

**REASON:** Provide the necessary instructions to inspect the tail rotor drive shaft  
assy P/N 109-8412-02-1 and -3 for cracks.

**HELICOPTERS AFFECTED:**

All the AgustaWestland A109E helicopters.

**COMPLIANCE:**

Within and not later than 50 flight hours or 3 months after the date of  
issuance of this Bollettino Tecnico.

**DESCRIPTION:**

During a scheduled servicing on an A109S three cracks have been found  
on the tail rotor drive shaft assy P/N 109-8412-02-1.

Cracks are not related to fatigue failure of the shaft subject to the design  
loads.

As a precautionary measure AgustaWestland has issued this Bollettino  
Tecnico to prescribe a "one time" tail rotor drive shaft inspection for  
cracks within the time allowed in the "COMPLIANCE" paragraph.

**REQUIRED MANPOWER:**

An estimated 9 manpower hours are required for compliance with this  
Bollettino.

**WARRANTY:**

Owners/Operators who comply with the instructions of this Bulletin, no  
later than the applicable date in the "Compliance section" will be eligible  
to receive REQUIRED MATERIALS on free of charge basis.

NOTE: Customers who fail to comply with the instructions in this bulletin  
before the compliance date are not eligible for the aforementioned  
special policy.

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

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Please Issue relevant M.M.I.R. form ( (M)aintenance (M)alfuction (I)nformation (R)eport ) to your Warranty Administration Dpt.

**REQUIRED MATERIALS:**

The following materials may be required to apply this Bollettino if the prescribed inspection gives negative results:

<u>P/N</u>	<u>DENOMINATION</u>	<u>Q.TY</u>
109-8412-02-1	TR drive shaft assy	A.R.
109-8412-02-3	TR drive shaft assy	A.R.

The following consumable material is required to apply this Bollettino:

<u>SPECIFICATION</u>	<u>DENOMINATION</u>	<u>Q.TY</u>
TT-N-95	Aliphatic Naphtha	A.R.
Ty 2	(Code.531055030)	
MIL-C-16173D	Corrosion inhibitor	A.R.
Grade 2 CL 2	(Code 999999999000000194)	

**SPECIAL TOOLS:**

Magnifying glass 5X

**WEIGHT AND BALANCE CHANGES:**

N.A.

**REFERENCES:**

A 109 E Maintenance Manual

**PUBLICATIONS AFFECTED:**

N.A.

**COMPLIANCE INSTRUCTIONS:**

1. Prepare the helicopter on ground for a safe maintenance and disconnect any power supply, in accordance with the instructions given in the A 109 E Maintenance Manual.
2. Gain access to the tail rotor drive shaft opening all the necessary doors and panels in accordance with the instructions given in the A 109 E Maintenance Manual.
3. Remove both tail rotor drive shaft assemblies P/N 109-8412-02-1 and -3 in accordance with the instructions given in the A 109 E Maintenance Manual.
4. Perform the inspection of the tail rotor drive shafts for cracks as follows:
  - 4.1. Clean the components of the tail rotor drive shaft installation with the clean Cloth and the Aliphatic naphtha.

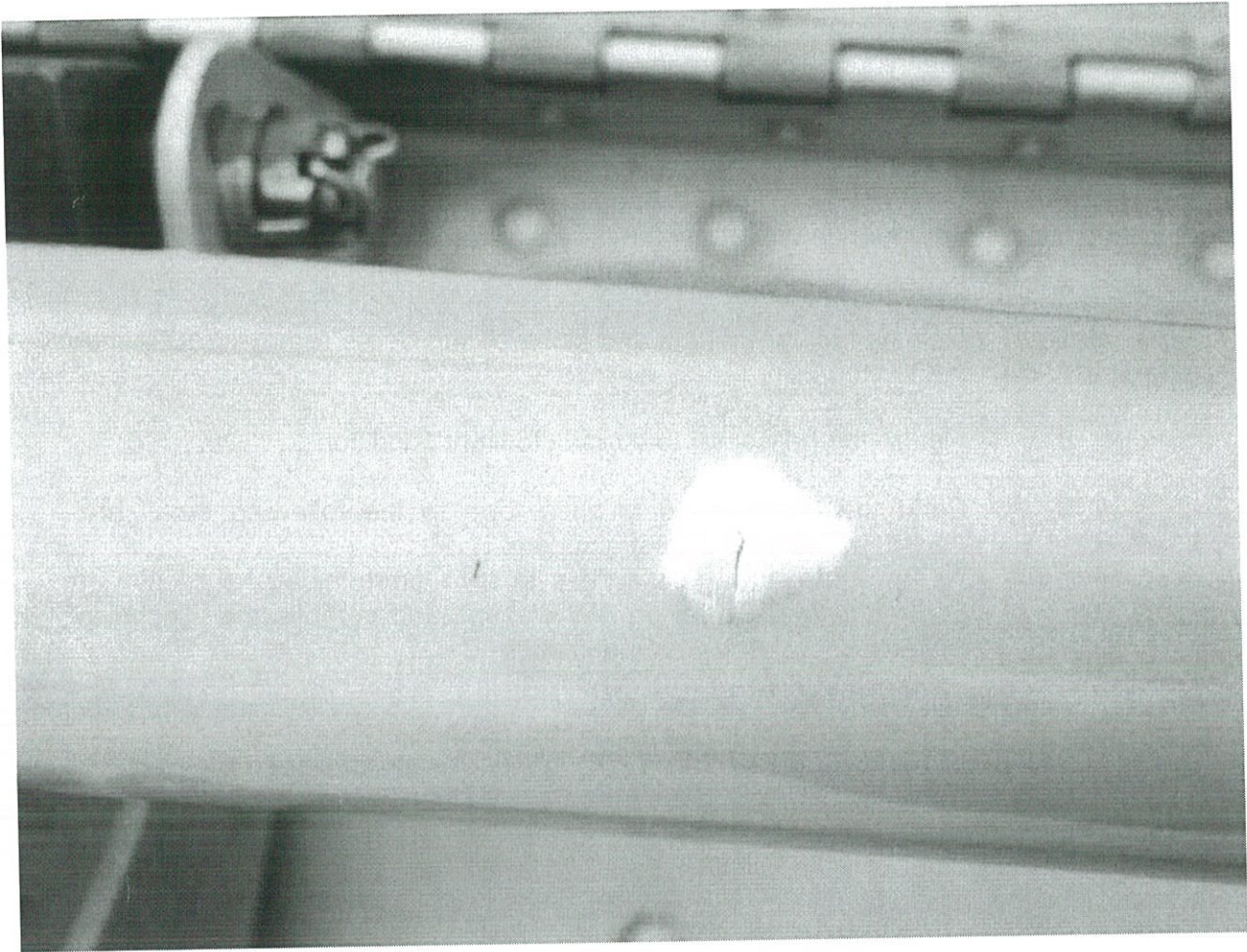
- 4.2. Dry with filtered compressed air.

**CAUTION**

Apply the Corrosion inhibitor to the tail rotor drive shaft components if you do not do the inspection immediately after their removal and cleaning.

- 4.3. Examine the external surface of the Tail rotor shaft P/N 109-8412-02-1 and -3 for cracks with the help of the Magnifying glass 5X and a source of light.
5. If no cracks are found reinstall the TR drive shaft in accordance with the instructions given in the A 109 E Maintenance Manual and go to step 7.
6. If cracks are found replace the TR drive shaft assy P/N 109-8412-02-1 and/or -3 (depending of inspection results) with a new one in accordance with the instructions given in the A 109 E Maintenance Manual.
7. Reinstall all the panels and close all the doors removed or opened in the step 2.
8. Return the helicopter to a ready to flight condition.
9. Send the attached compliance form to the following email box: [Aw109.mbx@agustawestland.com](mailto:Aw109.mbx@agustawestland.com).  
As an alternative, gain access to My Communications section on Leonardo Web Portal on AW website and compile the "Technical Bulletin Application Communication."





**FIGURE 1**  
**(Crack Example)**



# AgustaWestland

A Finmeccanica Company

Prego spedire a questo indirizzo: Please send to the following address:		<b>MODULO APPLICAZIONE BOLLETTINO TECNICO</b> TECHNICAL BULLETIN COMPLIANCE FORM			Data: Date:
<b>AGUSTAWESTLAND s.p.A.</b> 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		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 spedirlo 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.					