AIROD

DISCREPANCY REPORT

AIRCRAFT TYPE: A109E | REG. NO: 9M-BOB | DR. NO: 1507/BOB

SOURCE REFERENCE: BT's

DATE RAISED: 13.03.15 | CHECK TYPE: | WORK ORDER (JCN): LBD015BOB

DISCREPANCY | A/F HRS: ~~2940.40~~ | NO.1 ENG: ~~2940.40~~ (TSN/TSO) | NO.2 ENG: 623.70 (TSN/TSO)

BT 109EP-141 REV. A DTD 27.02.15 (MANDATORY) - TAIL ROTOR PITCH CONTROL LINK ASSY P/N. 109-0130-05-117 TO BE COMPLIED WITH ON PT II ONLY (WITHIN & NOT LATER THAN 5 PLT HRS) DUE AT 2943.70 HRS.

RAISED BY: HJ. SHAFIZAN BIN HJ. MD. SHARIFF | SIGN & STAMP: P/C T7 ASB | DATE: 13.03.15

DISPOSITION

TO CARRY OUT BT 109EP-141 REV A DTD 27.02.15 T/R PCL P/N 109-0130-05-117. IAW mm 64-31-6 PCL REMOVAL & INSTALLATION

SIGN: WK | STAMP: QAP 900 ASB | DATE: 13/3/15

MHP:	MHA:	CUST. APP. SIGNATURE:	MATERIAL COST:

CORRECTIVE ACTION

BT 109-EP-141 REV A DTD 27.02.15 CARRIED OUT. IAW mm 64-31-6 PCL REMOVAL & INSTALLATION. FOUND SATIS.

MECH	LAE/AH & DATE
A/C 873 ASB	WK QAP 900 ASB 13/3/15
	18/3/15 QAP 899 ASB

COMPONENT/ PART CHANGE

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

DUPLICATE / RII / CRITICAL TASK

WK QAP 900 ASB 13/3/15 — First Insp. Sign / Stamp / Date

QAP 899 ASB 13/3/15 — 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.

AIROD

Appendix 7.1 to
SAMO-04-027
Issue 1 Rev 0

1. Doc. Control No. LSJ-1/BOB	**DUPLICATE INSPECTION CERTIFICATE** (Inspection of Vital Points and/or Controls)	MOE 2-15-1 BCAR Chap A6-2

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.

5. DESCRIPTION (SYSTEM): ATA CHAPTER 64.

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

ASSOCIATED WITH

6. SHOP INSTRUCTIONS	7. MAINTENANCE ACTION FORM

8. Certify Duplicate Inspection has been carried out on the control and associated component from

QTY 2, PITCH CHANGE LINK ASSEMBLY

To TO TAIL ROTOR SLIDER AND BLADE ASSY

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.

1ST INSPECTOR		2ND INSPECTOR	
9. NAME: MUSTAFA	9d. AH/LAME STAMP/NO. QAP 900 ASB	10. NAME: OTHMAN	10d. AH/LAME STAMP/NO. QAP 899 ASB
9a. SIGNATURE:		10a. SIGNATURE:	
9b. DATE: 13/3/15		10b. DATE: 13.03.2015	
9c. TIME: 1100		10c. TIME: 1110	

FORM A93-737 Rev. 04 (15 March 2009)

AgustaWestland
A Finmeccanica Company

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BOLLETTINO TECNICO

N° 109EP-141

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

DATE February 27, 2015

REV. A

Compliance with this Bollettino is: **MANDATORY**

SUBJECT: TAIL ROTOR PITCH CONTROL LINK ASSY P/N 109-0130-05-117.

REASON: Perform an inspection of the subject link assy for excessive friction of the spherical bearing.

HELICOPTERS AFFECTED:

PART I^ and PART II^:

All Agusta A109E helicopters that install the tail rotor pitch control link assy P/N 109-0130-05-117 which have accumulated less than 100 (one hundred) FH since their overhaul and all tail rotor pitch control link assy P/N 109-0130-05-117 which have accumulated less than 100 (one hundred) FH since their overhaul (e.g. spherical bearing replacement) and present in stock.

NOTE

If it is not possible to determine if or when the link has been overhauled, the link is affected by this Bollettino Tecnico.

COMPLIANCE:

PART I^:

Before the next flight.

PART II^:

Within and not later than 5 (five) flight hours from the date of issuance of this Bollettino Tecnico.

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

NOTE

Tail Rotor Pitch Control links in stock shall perform point 3 of PART II^ before their installation.

DESCRIPTION:

A case of in-flight seizure of the tail rotor pitch control link assy P/N 109-0130-05-117 has been reported on an A119MkII helicopter.
The incident did not cause harm to the occupants nor damage to the helicopter.
The most probable cause of the seizure has been identified in an excessive friction of one of the spherical bearings of the link; that spherical bearing was replaced on the link during the overhaul performed few flight hours before by a Maintenance Organization.
The possibility that other overhauled links install spherical bearings with excessive friction cannot be excluded; the speed at which the link fails in such conditions is so to require an action on the in-service fleet to grant the continued airworthiness.
This Bollettino is issued in order to provide the necessary instructions to perform an inspection of the overhauled links P/N 109-0130-05-117, which have accumulated less than 100FH since their overhaul, as follows:

PART I^: Check the spherical bearings of the links installed on the helicopter for presence of corrosion and freedom of movement.

PART II^: Check the torsion value force of the spherical bearings of the links and perform a visual inspection for cracks of the stem by means of a magnifying glass. Perform, if dictated, an inspection of the stem for cracks with the liquid penetrant method.

REQUIRED MANPOWER:

The following estimated manpower hours are required for compliance with this Bollettino:

PART I^: Negligible.
PART II^: 1,5 (one and half) hours for each link assy.

WARRANTY:

Should the inspection deem that the tail rotor pitch control lever is to be replaced in accordance to the present Bollettino Tecnico, Customer will be eligible to receive replacement part on a "free of charge basis", with the exception of Consumable Materials.
Issue relevant (M)aintenance (M)alfunction (I)nformation (R)eport to your Warranty Administration Dpt., which shall provide the (R)eturn (M)aterial (A)uthorization to return removed part to AgustaWestland, as AW property.

REQUIRED MATERIALS:

PART I^:
N. A.

PART II^:
The following consumable materials are necessary for the compliance:

SPECIFICATION	DENOMINATION	Q.TY
TT-N-95 type 2	Aliphatic naphtha (cod. 531055030)	A.R.

In case the required inspection gives negative results, the following material are necessary for the compliance:

P/N	DENOMINATION	Q.TY
109-0130-05-117	TR Pitch Control Link Assy	A.R.

SPECIAL TOOLS:

Description	Part Number
Dynamometer	Local Supply
10x Magnifying Glass	Local Supply

WEIGHT AND BALANCE CHANGES:

N. A.

REFERENCES:

A109E Maintenance Manual.

PUBLICATIONS AFFECTED:

N. A.

COMPLIANCE INSTRUCTIONS:

(See figure 1).

PART I^:

1. With the links installed on the helicopter, inspect around attaching points of pitch links for evidence of corrosion in accordance with the procedures given in the A109E Maintenance Manual. In case corrosion is found, replace the link with a serviceable one with the same P/N.

2. With the links installed on the helicopter, manually verify the links rotation. The links rotation on the spherical bearings have to be possible.

3. In case, during the manual verification, a rotation resistance and/or binding has occurred, immediately perform the PART II^ of this Bollettino.

4. Record compliance with PART I^ of this Bollettino in the helicopter log book.

PART II^:

1. Prepare the helicopter on ground for a safe maintenance, disconnect any power source.

2. Remove the links from the helicopters in accordance with the procedures given in the A109E Maintenance Manual.

3. Secure the larger spherical bearing of the link in a bench vice equipped with protective false jaws.

3.1. At the other end apply a dynamometer on the spherical bearing and perform the check of the torsion value force for the spherical bearing rotation as shown in figure 1.

3.2. In the same manner perform the check of the necessary torsion value force for the smaller link spherical bearing rotation as shown in figure 1.

3.3. Check that the force torsion value is lower than 7.30 N for both the spherical bearings. In case a force torsion value above the limit is detected, even if in only one of the spherical bearings, it is necessary to replace the link with a serviceable one with the same P/N. Proceed with point 7.

3.4. In case both force torsion values are inside the limits at point 3.3., proceed with point 4.

4. Carefully clean the link stem using aliphatic naphtha or equivalent with a soft non metallic bristle brush, exercising care to protect the two spherical bearings.

5. Perform a visual inspection of the stem for cracks using a 10x magnifying glass (see figure 1 for the affected area).

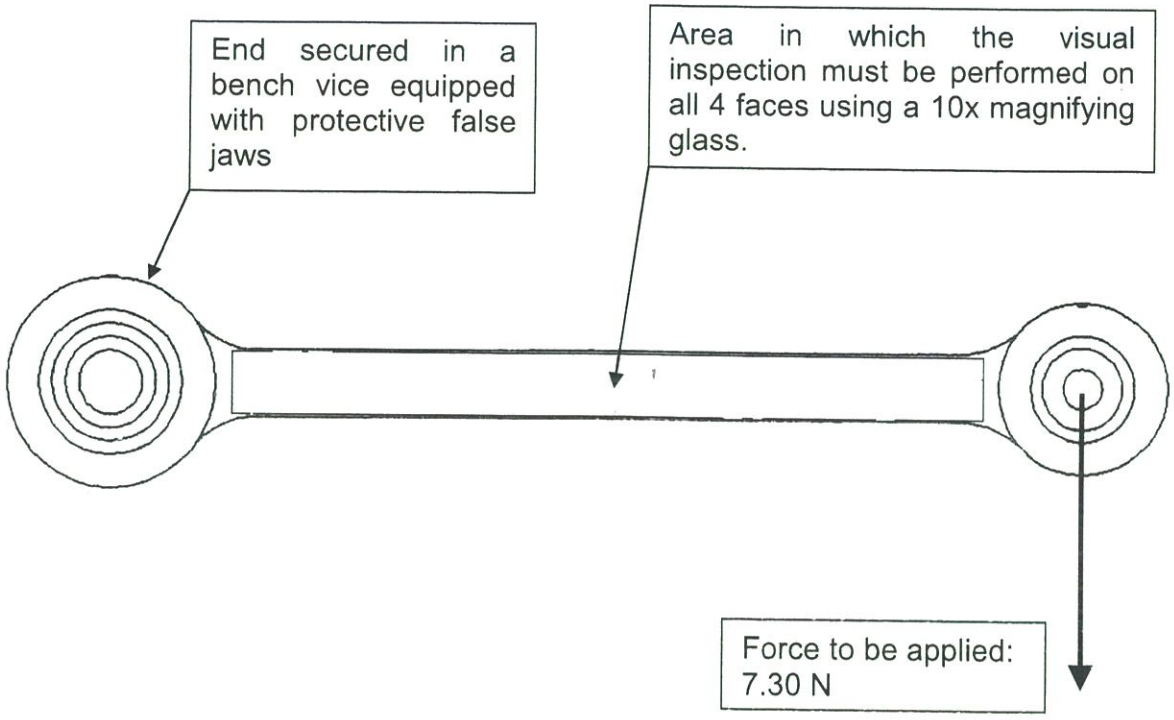
CAUTION

In case of doubt for presence of cracks, it is necessary to perform a liquid penetrant inspection of the affected area as reported in Annex 1.

6. If no cracks are found, reinstall the links on the helicopter in accordance with the procedures given in the A109E Maintenance Manual. Otherwise, replace the link with a serviceable one with the same P/N.

7. Return the helicopter in a ready to flight condition.

8. Record compliance with PART II^ of this Bollettino in the helicopter log book.



Indicative picture.
The force value must be verified on both spherical bearings.

LINK ASSY P/N 109-0130-05-117

FIGURE 1

SERVICEABLE TAG MATERIAL

AIROD SENDIRIAN BERHAD
(A SUBSIDIARY COMPANY OF AEROSPACE INDUSTRIES MALAYSIA)
Subang International Airport, Selangor, Malaysia. Telex : MA 37910

Serviceable Tag Material

PART NUMBER	NEXT INSPECTION DUE/OVER	CONDITION CODE
109-0900-15-116	07.08.15	NEW

DESCRIPTION/NOUN: ~~EMER~~. PLOAT RH FWD

SERIAL No./LOT No.	INSPECTION ACTIVITY
54-R	AGUSTA

QUANTITY	UNIT OF ISSUE	* ~~RELEASE NOTE~~/APPROVED CERTIFICATE/~~ARC NO.~~
01	EA	402613 DTD 07.08.14

REMARKS: LB2015BOB

85-601A

SERVICEABLE TAG MATERIAL

AIROD SENDIRIAN BERHAD
(A SUBSIDIARY COMPANY OF AEROSPACE INDUSTRIES MALAYSIA)
Subang International Airport, Selangor, Malaysia. Telex : MA 37910

Serviceable Tag Material

PART NUMBER	NEXT INSPECTION DUE/OVER	CONDITION CODE
109-0900-15-113	08.08.15	NEW

DESCRIPTION/NOUN: EMER. PLOAT LH AFT

SERIAL No./LOT No.	INSPECTION ACTIVITY
[illegible]	AGUSTA

SERVICEABLE TAG MATERIAL

AIROD SENDIRIAN BERHAD
(A SUBSIDIARY COMPANY OF AEROSPACE INDUSTRIES MALAYSIA)
Subang International Airport, Selangor, Malaysia. Telex : MA 37910

Serviceable Tag Material

PART NUMBER	NEXT INSPECTION DUE/OVER	CONDITION CODE
109-0900-15-115	12.05.15	NEW

DESCRIPTION/NOUN: EMER PLOAT LH FWD

SERIAL No./LOT No.	INSPECTION ACTIVITY
509-R	AGUSTA

QUANTITY	UNIT OF ISSUE	* ~~RELEASE NOTE~~/APPROVED CERTIFICATE/~~ARC NO.~~

SERVICEABLE TAG MATERIAL

AIROD SENDIRIAN BERHAD
(A SUBSIDIARY COMPANY OF AEROSPACE INDUSTRIES MALAYSIA)
Subang International Airport, Selangor, Malaysia. Telex : MA 37910

Serviceable Tag Material

PART NUMBER	NEXT INSPECTION DUE/OVER	CONDITION CODE
109-0900-15-114	28.07.15	NEW

DESCRIPTION/NOUN: ~~EMER~~. PLOAT RH AFT

SERIAL No./LOT No.	INSPECTION ACTIVITY
68-R	AGUSTA

QUANTITY	UNIT OF ISSUE	* ~~RELEASE NOTE~~/APPROVED CERTIFICATE/~~ARC NO.~~
01	EA	402630 DTD 28.07.14

REMARKS: LB2015BOB

85-601A

* DELETE AS APPROPRIATE