

ALERT



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AgustaWestland Products

BOLLETTINO TECNICO

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

N° **139-392**

DATE September 23, 2014

REV. **A** - February 14, 2017

Compliance with
this bulletin is:

MANDATORY

SUBJECT

MAIN ROTOR (MR) SCISSOR LEVER BEARING P/N 3G6230V00654

REASON

Introduce repetitive inspections until installation of new MR scissor lever bearing
P/N 3G6230V00655.

HELICOPTERS AFFECTED

Part I/Part III: all AB139/AW139 helicopters installing MR scissor lever bearing P/N
3G6230V00654.

Part II: all AB139/AW139 helicopters installing MR scissor lever bearing P/N
3G6230V00654 and not installing special nut P/N 3G6230A06851.

NOTE

New scissor lever bearing P/N 3G6230V00655,
introduced in lieu of the scissor lever bearing P/N
3G6230V00654, subject of this BT, is identified by a
dedicated logcard.

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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COMPLIANCE

Part I: within five (5) flight hours or one (1) week from receipt of this Bollettino Tecnico, whichever comes first, and then after the last flight of each day or before the first flight of each day.

Part II: within one hundred (100) flight hours or one (1) month from the original issue date of this Bollettino Tecnico whichever came first.

Part III: within one (1) year from receipt of this Bollettino Tecnico.

DESCRIPTION

This Bollettino Tecnico introduces a special nut as a containing element in case of lower scissor bearing dislodging providing additional safety to the installation. This represents a further follow-up action in addition to those already fielded to address the early failures in service due to a quality issue with the lower scissor spherical bearing liner. An interim inspection program is also introduced to monitor the behavior of the spherical bearings in service.

Present revision A specifies that the repetitive inspection is applicable to the MR scissor lever bearing P/N 3G6230V00654 only, since the MR rotating scissors P/N 3G6230A00733, reported in the first issue of BT, is no more present in last delivered aircraft configuration as an assembly, while its components are still present as part of the main rotating controls installation.

Moreover, following an occurrence reported on an helicopter already installing special nut P/N 3G6230A06851, a reduced inspection interval is prescribed for the inspection required by part I, whose terminating action has been identified as the replacement of the scissor lever bearing P/N 3G6230V00654 with new one P/N 3G6230V00655.

REQUIRED MANPOWER

To comply with this Bollettino Tecnico the following Maintenance Man-Hours (MMH) are deemed necessary:

Part I: one (1) MMH;

Part II: one (1) MMH;

Part III: three (3) MMH.

Man-hours are based on hands-on time and may vary with personnel and facilities available.

WARRANTY

Owners/Operators who comply with the instructions of this Bollettino Tecnico no later than the applicable date in the “Compliance” section will be eligible to receive **REQUIRED MATERIALS on free of charge basis, except for Consumable Materials and Special Tools.**

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

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

REQUIRED MATERIALS

The following materials, necessary to accomplish this Bollettino Tecnico, can be requested to Leonardo Helicopters (LHD):

PART II

<u>P/N</u>	<u>DESCRIPTION</u>	<u>Q.TY</u>	<u>NOTE</u>
3G6230A06851	Special nut	2	
NAS1149C0863R	Washer, flat	2	Local supply
MS24665-302	Pin, cotter	2	Local supply

PART III

<u>P/N</u>	<u>DESCRIPTION</u>	<u>Q.TY</u>	<u>NOTE</u>
3G6230V00655	MR scissor lever bearing	2	(4)
MS24665-302	Pin, cotter	2	(4) Local supply
MS24665-374	Pin, cotter	2	(4) Local supply

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Moreover the following consumable materials, or equivalent, are necessary to accomplish Part II of this Bollettino Tecnico:

<u>Spec./AW Code number</u>	<u>DESCRIPTION</u>	<u>Q.TY</u>	<u>NOTE</u>
MIL-PRF-16173E INT AMD 1, gr 2 cod. 999999999000000191	Corrosion inhibitor (C002)	AR	Local supply

Refer to AMDI for the consumable materials necessary to comply with the AMP data modules referenced in this Bollettino Tecnico.

SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this Bollettino Tecnico:

<u>P/N</u>	<u>DESCRIPTION</u>	<u>Q.TY</u>	<u>NOTE</u>
RMGE-DS-06-2010-LH	Platform (GG-01-00)	AR	(1)
RMGE-DS-06-2010-RH	Platform (GG-02-00)	AR	(1)
Local supply	Magnifying glass	AR	(2)
Local supply	Hand torch	AR	(2)
3G6205G26631	Wrench, special nut removal/installation	AR	(3)

NOTES:

- (1) Refer to Illustrated Tools and Equipment Publication (ITEP) for this special tool and also for other special tools required to comply with the AMP data modules referenced in this Bollettino Tecnico.
- (2) Required to comply only with Part I of this Bollettino Tecnico.
- (3) Required to comply only with Part II of this Bollettino Tecnico.
- (4) Quantity is intended to replace both the MR scissor lever bearings.

WEIGHT AND BALANCE CHANGES

N.A.

REFERENCES

- ✓ AW139 Aircraft Maintenance Data Information (AMDI)
- ✓ AW139 Aircraft Maintenance Publication (AMP)
- ✓ AW139 Illustrated Tools and Equipment Publication (ITEP)

PUBLICATIONS AFFECTED

N.A.

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COMPLIANCE INSTRUCTIONS

Part I

1. Prepare the helicopter for a safe ground maintenance. Disconnect the battery and all the electrical power sources and/or the external power supply. Refer to AMP, see DM n° 39-A-00-20-00-00A-120A-A.
2. Put the platforms (GG-01-00) and (GG-02-00), or approved alternatives, adjacent to the left and to the right side of the fuselage, respectively.
3. Open access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
4. With reference to Figure 1, get access to the MR area and perform a general visual inspection of the MR rotating scissors, using a magnifying glass and a hand torch, paying particular attention to the spherical bearings.
 - 4.1. If the scissor lever bearing is free to move out of its seat (an example of effects of scissor lever bearing dislodging is shown in figure 9), perform the following steps:
 - 4.1.1. Remove the rotating scissors. Refer to AMP, see DM n° 39-C-62-31-02-00A-520A-A.
 - 4.1.2. Remove the scissors attachment flange. Refer to AMP, see DM n° 39-A-62-22-15-00A-520A-A.
 - 4.1.3. Discard all the rotating scissors attaching hardware you have removed at steps 4.1.1 and 4.1.2. Use new hardware at following steps 4.1.4 and 4.1.5.
 - 4.1.4. Install a new scissors attachment flange P/N 3G6220A00633. Refer to AMP, see DM n° 39-A-62-22-15-00A-720A-A.
 - 4.1.5. Install new rotating scissors fitting the new scissor lever bearing P/N 3G6230V00655. Refer to AMP, see DM n° 39-C-62-31-02-00A-720A-A.

- 4.1.6. Record for compliance with part III of this Bollettino Tecnico on the helicopter logbook.
- 4.1.7. Send the attached compliance form to the following email box: CSE.AW139.AW@leonardocompany.com. As an alternative, gain access to My Communications section on Leonardo AW Customer Portal and compile the “Technical Bulletin Application Communication”
- 4.1.8. Go to step 6.
- 4.2. If you find damage (a typical damage is shown in figures 4 thru 8) on the scissor lever bearing, perform following steps:
 - 4.2.1. Replace it with a new one P/N 3G6230V00655. Refer to AMP, see DM n° 39-C-62-31-02-00A-921A-B.
 - 4.2.2. If both scissors install the lever bearing P/N 3G6230V00655, record for compliance with part III of this Bollettino Tecnico on the helicopter logbook, send the attached compliance form according to step 4.1.7 and go to step 6.
5. With reference to Figure 1, perform an operational check for play and wear of the lower half scissors spherical bearing P/N 3G6230V00654 (refer to section A-A), paying particular attention to the bearing staking condition; to do this, manually move the lower half scissor along the axis of the spherical bearing.
 - 5.1. If no unusual play and/or wear is detected, no further action is required. Go to step 6.
 - 5.2. If unusual play and/or wear is detected, perform a detailed inspection for condition, damage and play of the MR rotating scissors according to steps 9 through 12.9 of AMP DM n° 39-C-62-31-00-00A-31AC-A.
 - 5.2.1. If play is within limits, no further action is required. Go to step 6.
 - 5.2.2. If play is beyond limits or wear is detected, perform following steps:

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5.2.2.1. Replace the scissor lever bearing with a new one P/N 3G6230V00655. Refer to AMP, see DM n° 39-C-62-31-02-00A-921A-B.

5.2.2.2. If both scissors install the lever bearing P/N 3G6230V00655, record for compliance with part III of this Bollettino Tecnico on the helicopter logbook and send the attached compliance form according to step 4.1.7.

6. Close access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
7. Remove the platforms from left and right sides of the fuselage.
8. Return the helicopter to flight configuration.

Part II

1. Prepare the helicopter for a safe ground maintenance. Disconnect the battery and all the electrical power sources and/or the external power supply. Refer to AMP, see DM n° 39-A-00-20-00-00A-120A-A.
2. Put the platform (GG-01-00), or an approved alternative, adjacent to the left side of the fuselage.
3. Open access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
4. With reference to figure 2, get access to the MR rotating scissors area.
5. With reference to figure 3, replace the lower half scissor existing nut as follows:
 - 5.1. Remove and discard the cotter pin P/N MS24665-302.
 - 5.2. Remove and discard the nut P/N MS17825-8.
 - 5.3. Remove from the scissor retaining bolt the lower half scissor, washers P/N NAS1149C0832R and scissor washer P/N 3G6230A04552. Retain scissor washer P/N 3G6230A04552 for re-use.

WARNING

THIS INSTALLATION INCLUDES VITAL POINTS (VP). YOU MUST OBEY THE LOCAL REGULATIONS APPLICABLE TO THE VITAL POINTS.

CAUTION

Make sure that the chamfered side of the scissor washer P/N 3G6230A04552 points to the spherical bearing in the lower half scissor.

- 5.4. Install the lower half scissor on the scissor retaining bolt using new washer P/N NAS1149C0863R and scissor washer P/N 3G6230A04552.
- 5.5. Install the new special nut P/N 3G6230A06851.
- 5.6. Apply the wrench P/N 3G6205G26631 to the special nut.

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- 5.7. Torque the special nut to 61.0 thru 73.2 N m (539.9 thru 647.9 lbf in) with the wrench P/N 3G6205G26631.
- 5.8. Secure the special nut to the retaining bolt with a new cotter pin P/N MS24665-302.
- 5.9. Apply the corrosion inhibitor (C002) to the cotter pin and the special nut.
6. Repeat step 5 to replace the other lower half scissor nut.
7. Close the access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
8. Remove the platform from the left side of the fuselage.
9. Return the helicopter to flight configuration and record for compliance with Part II of this Bollettino Tecnico on the helicopter logbook.
10. Send the attached compliance form to the following email box: CSE.AW139.AW@leonardocompany.com. As an alternative, gain access to My Communications section on Leonardo AW Customer Portal and compile the "Technical Bulletin Application Communication".

Part III

1. Prepare the helicopter for a safe ground maintenance. Disconnect the battery and all the electrical power sources and/or the external power supply. Refer to AMP, see DM n° 39-A-00-20-00-00A-120A-A.
2. Put the platform (GG-01-00), or an approved alternative, adjacent to the left side of the fuselage.
3. Open access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
4. Replace all the MR scissor lever bearings P/N 3G6230V00654 with new MR scissor lever bearings P/N 3G6230V00655. Refer to AMP, see DM n° 39-C-62-31-02-00A-921A-B.
5. Close the access door 473AL. Refer to AMP, see DM n° 39-A-06-41-00-00A-010A-A.
6. Remove the platform from the left side of the fuselage.
7. Return the helicopter to flight configuration and record for compliance with Part III of this Bollettino Tecnico on the helicopter logbook.
8. Send the attached compliance form to the following email box: CSE.AW139.AW@leonardocompany.com. As an alternative, gain access to My Communications section on Leonardo AW Customer Portal and compile the “Technical Bulletin Application Communication”.

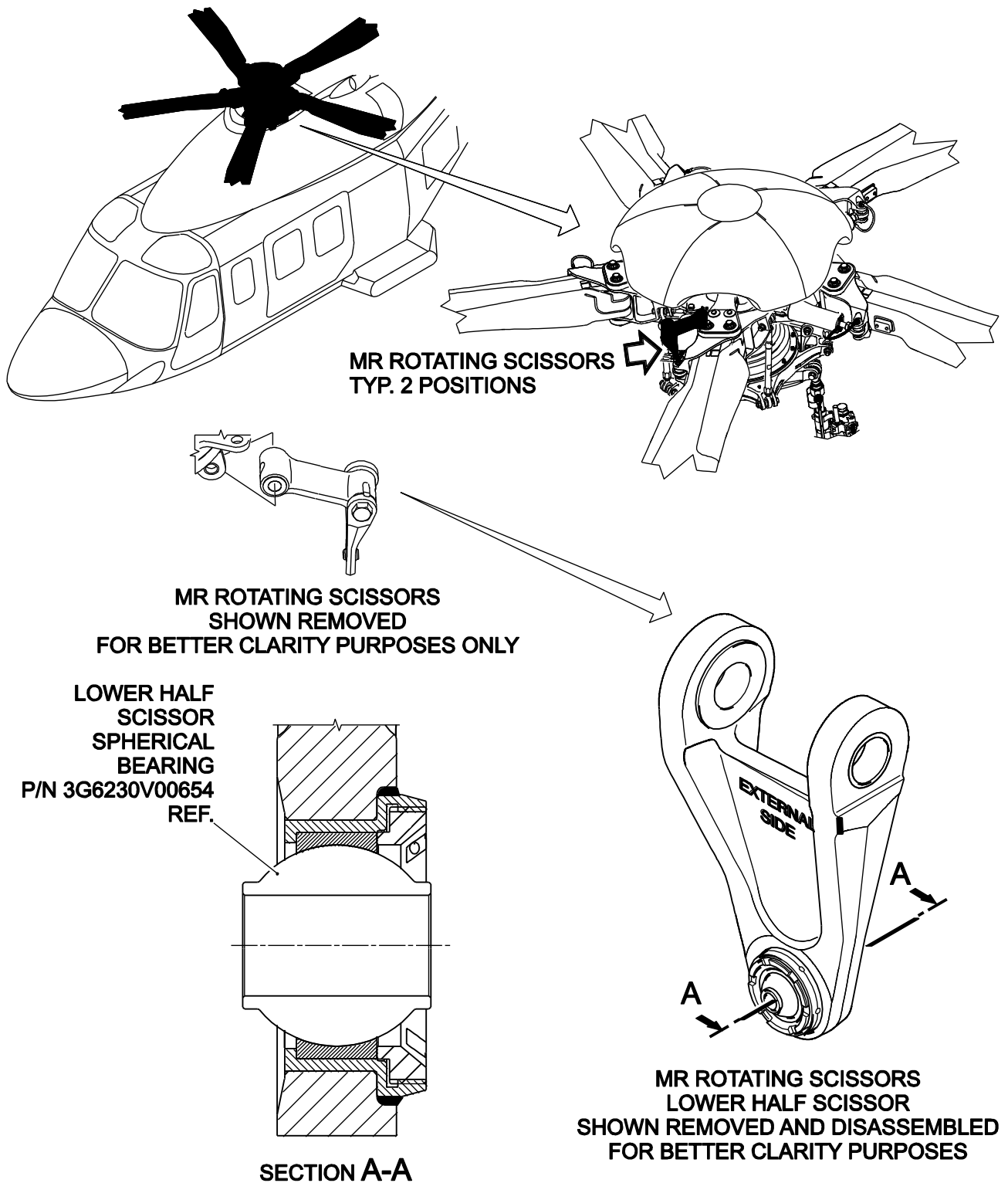


Figure 1

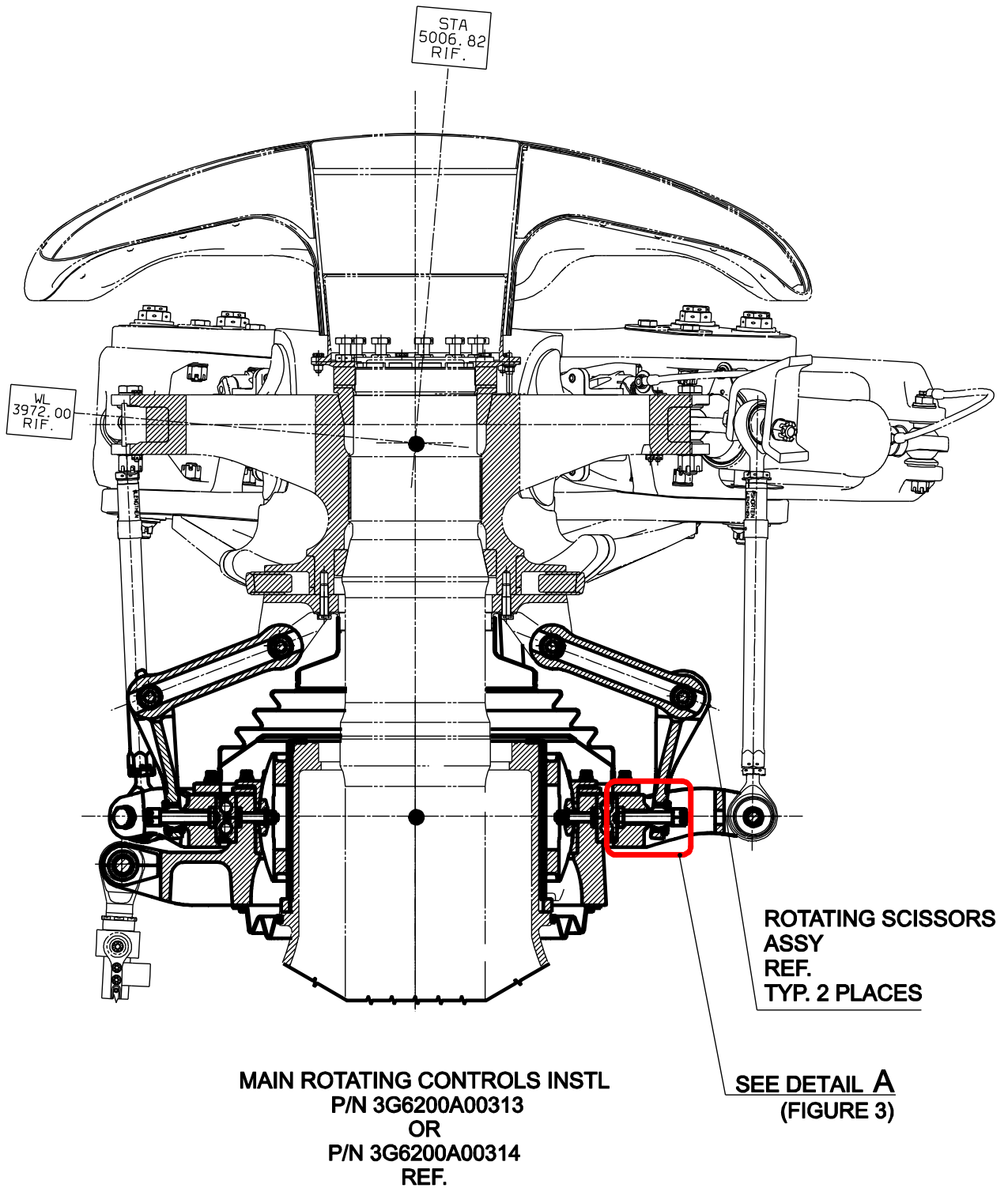
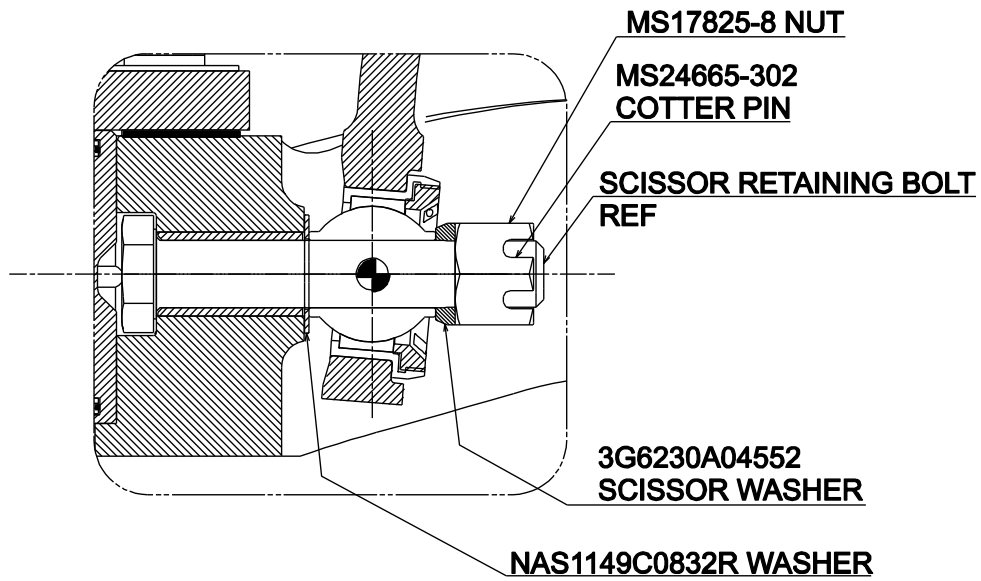


Figure 2

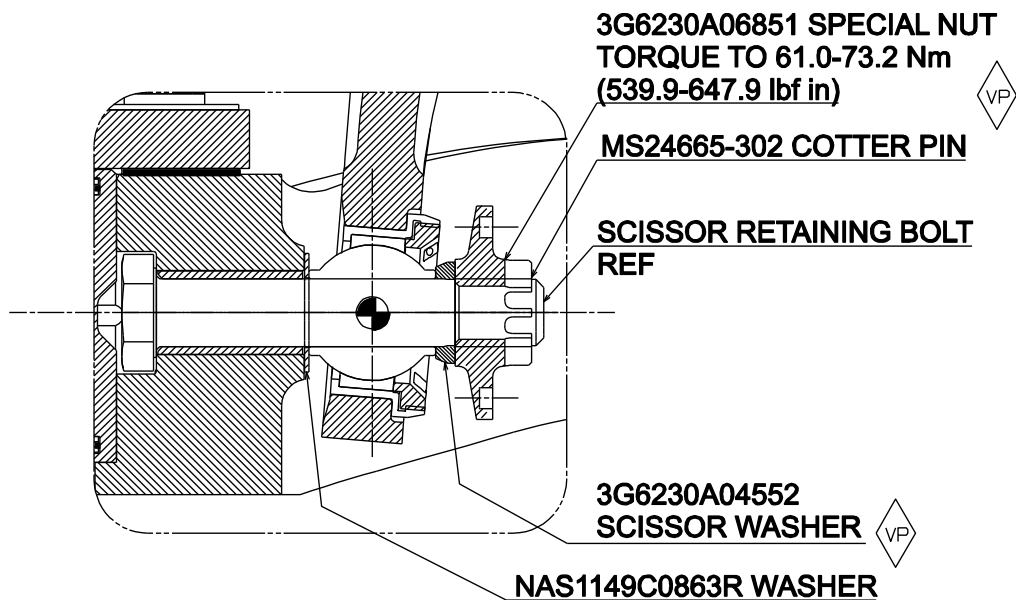
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REMOVE:



DETAIL A
TYP. 2 PLACES

ADD:



DETAIL A
TYP. 2 PLACES

Figure 3



Figure 4



Figure 5



Figure 6

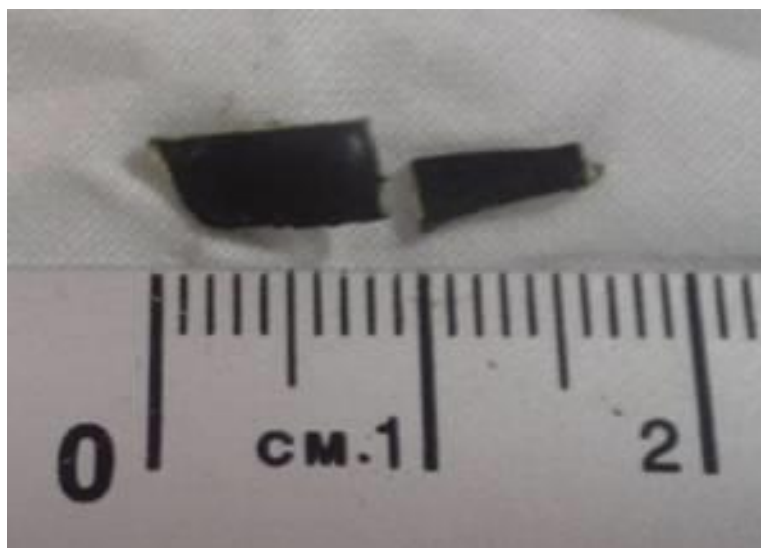
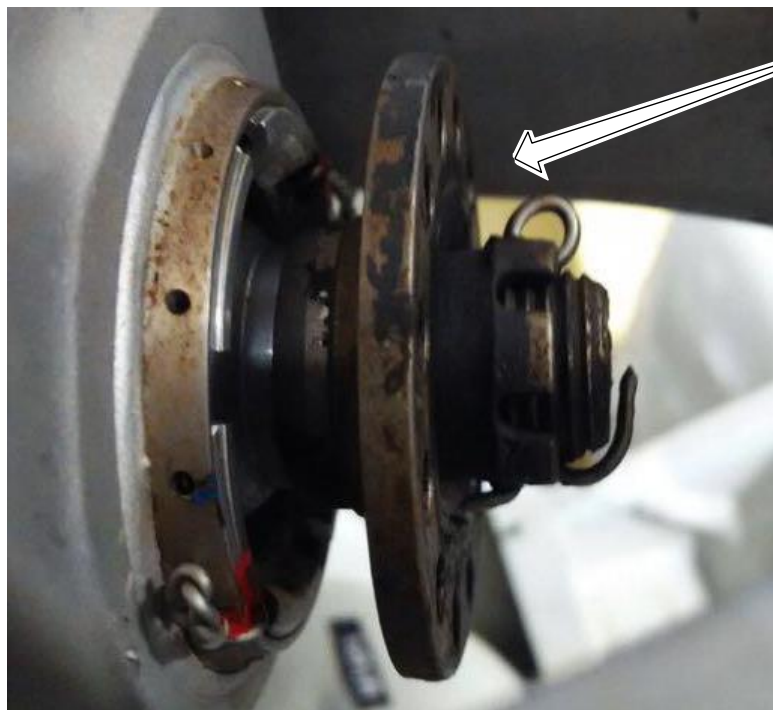


Figure 7



Figure 8



**LOWER HALF SCISSOR
3G6230A06851 SPECIAL NUT
CORRECT INSTALLATION**

**3G6230A06851 SPECIAL NUT
POSITION
AFTER
SCISSOR LEVER BEARING
DISLODGING**



Figure 9

Please send to the following address: LEONARDO S.p.A. CUSTOMER SUPPORT & SERVICES - ITALY PRODUCT SUPPORT ENGINEERING & LICENSES DEPT. Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	BOLLETTINO TECNICO COMPLIANCE FORM	Date:
Number:		
Revision:		

Customer Name and Address:	Telephone:
	Fax:
	B.T. Compliance Date:

Helicopter Model	S/N	Total Number	Total Hours	T.S.O.

Remarks:

Information:

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 or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.