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AgustaWestland Products

SERVICE BULLETIN

N° 189-215

DATE: March 26, 2019

REV. : B-July 9, 2020

TITLE

ATA 62 –MR BLADE IMPROVEMENT

REVISION LOG

The Revision B of this Service Bulletin cancels and supersedes all the previous issues.

MR blades that have complied with at least one part of previous issues of this Service Bulletin shall not comply with corresponding parts of Revision B of this SB.

Revision B is issued to:

- Add Part IV for replacement of the existing swept tip erosion shield with a new improved one P/N 8G6210L00151. Part I, that provided instruction for installation of the old swept tip eroson shield P/N 4F6210L00651, has been deleted.
- Updated the procedure of Part II for instalation of ID plates.

Revision bars identify changes.

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I

Not Applicable.

Part II

All MR blades P/N 4F6210A00132 and P/N 8G6210A00131 not already equipped with ID plates P/N A031A001A, P/N A157A001A1 and P/N MS27253-2.

NOTE

There are different serialization types for MR blades, common to standard and heated blades.

All MR blades serialized as follows are affected by this SB:

- S/N YYYXXXX: where Y are an alphabetic code and X are progressive numbers (e.g. BAT1234).
- S/N VXXX, where X are progressive numbers (e.g. V123)
- S/N XXX, only progressive numbers (e.g. 123).

These serialization types are superseded and not used for new MR blades.

The current MR blades serialization is in the form:

- S/N AWXXX or S/N AWXXXX, where X are progressive numbers (e.g. AW123).

MR blades with current serialization are affected by this SB only if progressive numbers are smaller than the ones reported in the effectivity paragraph.

Part III

All MR blades P/N 4F6210A00132 up to S/N AW388 and MR blades P/N 8G6210A00131 up to S/N AW332.

Part IV

All MR blades P/N 4F6210A00132 up to S/N AW2370 (S/N's AW355, AW356, AW357, AW358, AW359, AW364, AW2353, AW2354, AW2356, AW2358 and AW2360 excluded) and P/N 8G6210A00131 up to S/N AW363 not already equipped with swept tip erosion shield P/N 8G6210L00151 or equivalent productive P/N 8G6210L00151AF.

B. COMPLIANCE

At first shop visit.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction on how to perform the MR blades improvements.

E. DESCRIPTION

This Service Bulletin has been issued to introduce different improvements on the MR blades. These improvements, that can be introduced only by an authorized service station or by the manufacturer, are described in the following parts:

Part I

This part is cancelled. The installation of the swept tip erosion shield P/N 4F6210L00651, pre-cured for bonding, has been replaced with installation of the improved swept tip P/N 8G6210L00151 as described in Part IV of this SB.

Part II

Installation of three ID plates near the blade root. These plates report all identification data of the blade in an easy identifiable way and can be used to record the modification applied to each blade.

Part III

Optimization of surface preparation of the metal parts to be painted to improve the surface adherence of all primers and painting products.

Part IV

Replacement of the existing swept tip erosion shield with a new one P/N 8G6210L00151.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

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

Part I: Not Applicable.

Part II: approximately 1.5 MMH.

Part III: approximately twenty-eight (28) MMH.

Part IV: approximately three and a half (3.5) MMH.

MMH are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

1) PUBLICATIONS

DATA MODULE		DESCRIPTION	PART
DM01	89-A-62-11-00-01A-664A-C	Main rotor blade - Open edge voids.	IV
DM02	89-A-62-11-01-00A-257A-C	Main rotor blade – Paint and apply marking.	II, III, IV
DM03	89-A-62-11-01-00A-37DA-C	Main rotor blade - Static balance	III, IV
DM04	89-B-11-11-00-00A-010A-A	Main rotor blade - General data	II, III, IV

2) ACRONYMS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
ID	Identification
ITEP	Illustrated Tool and Equipment Publication
LHD	Leonardo Spa Helicopters

MMH	Maintenance Man Hours
MR	Main Rotor
SB	Service Bulletin

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

AW189 Component repair and overhaul publication (CR&OP)

AW189 Illustrated Parts Data (IPD)

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

PART I

N.A.

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	A031A001A		ID Plate	1	.		189-215L1
2	A157A001A1		ID Plate	1	.		189-215L1
3	MS27253-2		ID Plate	1	.		189-215L1

PART III

N.A.

PART IV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
4	8G6210L00151AF		Swept Tip Erosion Shield	1	.		-

2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
5	CCC-C-46 Code No. 42501025	Soft lint-free cloth (C011)	AR	(1)	II, IV
6	TT-M-261 Code No. 32002675	Methyl-Ethyl-Ketone (C005)	AR	(1)	II, IV
7	Commercial	Paint CT-150 (C421)	AR	(1)	IV
8	TT-N-95-B Code No. 531055030	Aliphatic Naphtha (C059)	AR	(1)	II,IV
9	AMS-T-23397	Metallic Tape (C221)	AR	(1)	IV
10	ASTM-D-329	Acetone (C087)	AR	(1)	II, IV
11	WHMS435 Type IB Code No. 900003991	Adhesive (C487)	AR	(1)	IV
12	WHPS630 Type 24	Masking tape (C521)	AR	(1)	IV
13	AWMS08-001 class II	Primer (C534)	AR	(1)	IV
14	199-08-001 Code No. 900004351	Adhesive (C189)	AR	(1)	IV
15	Commercial	Adhesive tape 8402 (C195)	AR	(1)	IV
16	Commercial	Release film (C920)	AR	(1)	IV
17	199-05-002 Type II, Class 2 / Code No. 900004603	Adhesive EA934NA (C054) (MMM-A-132)	AR	(1)	II
18	WHPS685 TYPE 29	Filler DP410 (C523)	AR	(1)	IV
19	WHPS685 type 1	Filler DP490 (C468)	AR	(1)(2)	IV
20	WHMS435 Type IB Code No. 900003991	Adhesive EC9323 (C487)	AR	(1)(3)	II
21	Commercial	Nylon peel ply non-adhesive	AR	(1)	IV

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
22	Commercial	Abrasive paper (grit 80 - silicon carbide)	AR	(1)	II, IV
23	Commercial	Abrasive paper (grit 100 - silicon carbide)	AR	(1)	II, IV
24	Commercial	Abrasive paper (grit 120 - silicon carbide)	AR	(1)	IV
25	Commercial	Abrasive paper (grit 240 - silicon carbide)	AR	(1)	IV
26	Commercial	Abrasive paper (grit 320 - silicon carbide)	AR	(1)	IV
27	Commercial	Abrasive blast (grit 100 - aluminum oxide)	AR	(1)	III, IV
28	Commercial	Abrasive blast (grit 120 - aluminum oxide)	AR	(1)	III, IV
29	Commercial	Gauze	AR	(1)	IV

Refer also to AMDI for the consumable materials required to comply with the AMP DM referenced in the accomplishment instructions.

3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
189-215L1	1		II
8G6210L00151AF	1		IV

NOTE

(1) Item to be procured as local supply.

(2) This item can be used as alternative to filler DP410.

(3) This item can be used as alternative to adhesive EA934NA.

B. SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this Service Bulletin:

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
30	109-3101-58-2 or equivalent	Aluminum hammer (GF-36-00)	1		IV
31	109-3101-58-1 or equivalent	Steel hammer (GF-59-00)	1		IV
32	Commercial	Heat gun	1		IV
33	Commercial	Grinder	AR		IV
34	Commercial	Spatula (flexible – rounded corners)	1		IV
35	Commercial	Brush	1		IV
36	Commercial	Vacuum bag	1		IV
37	Commercial	Blasting equipment (dry/vacuum type)	1		III, IV
38	Commercial	Heating blanket (with thermocouple)	AR		IV

Refer also to ITEP for the special tools required to comply with the AMP DM referenced in the accomplishment instructions.

C. INDUSTRY SUPPORT INFORMATION

N.A.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.

b) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.

c) All lengths are in mm.

PART I

This Part has been cancelled.

PART II

CAUTION

This procedure can be performed ONLY by an authorized service station or the MR blades manufacturer.

1. With reference to Figure 4, make sure that no ID plates are installed in the highlight MR blade area.
2. In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C and with reference to Figure 4, remove the surface finish from the blade locations for the new ID plates.
3. With reference to Figure 4, install the ID plates on the MR blade as described in the following procedure:

   3.1 Prepare the bonding surfaces as described in the following steps:

   NOTE

   You must bond the ID plates to the MR blade within 72 hours from cleaning by abrasion.

   3.1.1 Lightly sand the bonding surfaces of the blade skins with abrasive paper (grit 80 - silicon carbide) or abrasive paper (grit 100 - silicon carbide), to remove the shine from the surfaces.

   3.1.2 Remove sanding residuals with a dry lint-free cloth (C011).

   3.1.3 Clean the bonding surfaces with the lint-free cloth (C011) and solvent (C005) or aliphatic naphtha (C059) or acetone (C087). Let it dry in the air for at least 30 minutes.

   3.2 Install in the indicated positions ID plate P/N A031A001A, ID plate P/N A157A001A1 and ID plate P/N MS27253-2 by means of adhesive EA934NA (C054) or adhesive EC9323 (C487).

   3.3 Mark on the new ID plates the following information:

   - Blade P/N and S/N;
   - Paint scheme P/N;
   - MFG date;
   - Inspection stamp;
   - Applied SB (if any).

NOTE

For helicopters equipped with low visibility blade kit P/N 8G6000F00211 refer to AMP DM 89-B-11-11-00-00A-010A-A for the MR blade painting scheme.

3.4 In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C, touch up paint in the new ID plate installation area where necessary.

4. Record compliance with SB189-215 Part II on the blade log card and on ID plate P/N MS27253-2.

5. Send the attached compliance form to the following mail box:

engineering.support.lhd@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART III

CAUTION

This procedure can be performed ONLY by authorized service station or MR blades manufacturer.

1. In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C, remove the surface finish from all the MR blade.
2. Perform the surface preparation of the MR blade metal parts to be painted with the blasting equipment (dry/vacuum type) operated with abrasive blast (grit 100 - aluminum oxide) at a pressure of 280 ±35 kPa (40 ±5 psi).
3. In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C, perform the surface preparation to all other surfaces of the MR blade.

NOTE

For helicopters equipped with low visibility blade kit P/N 8G6000F00211 refer to AMP (Royal Thai Army Supplement) DM 89-B-11-11-00-00A-010A-A for the MR blade painting scheme.

4. In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C, perform MR blade painting.
5. In accordance with CR&OP DM 89-A-62-11-01-00A-37DA-C, perform the static balance of the MR blade.
6. Record compliance with SB189-215 Part III on the blade log card and, if installed, on the ID plate P/N MS27253-2.
7. Send the attached compliance form to the following mail box:

   engineering.support.lhd@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART IV

CAUTION

This procedure can be performed ONLY by an authorized service station or the MR blades manufacturer.

1. In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C and with reference to Figure 1, remove the surface finish from the blade locations of the swept tip erosion shield.

CAUTION

When you remove the swept tip erosion shield, hold the MR blade in a rollover fixture and not on trestles.

2. With reference to Figure 1, remove the existing swept tip erosion shield from the MR blade as described in the following procedure:
   - 2.1 Put the MR blade on an applicable work table.
   - 2.2 Clean the whole surface of the swept tip erosion shield with a gauze moist with solvent (C005) or aliphatic naphtha (C059) and let it dry for at least 30 minutes at ambient temperature.
   - 2.3 Apply metallic tape (C221) along the boundary of the swept tip erosion shield to protect the MR blade from heat (upper side and lower side).

NOTE

Let the paint dry between layers for at least 10 minutes at ambient temperature.

   - 2.4 Apply n°2 layers of paint (C421) with a brush on the whole swept tip erosion shield as well as overlapping approx. 25 mm of the metallic tape. You must obtain a smooth surface.
   - 2.5 Let the paint dry at least 4 hours at ambient temperature.
   - 2.6 Do a visual inspection to make sure that the paint is applied equally.

CAUTION

During milling operation make sure not to damage the surfaces below. Stop immediately when the adhesive layer becomes visible as a reddish film.

NOTE

It is possible to remove the swept tip erosion shield also without separation of the leading edge. In this case, continue with next step 2.7.

2.7 Cut through the leading edge of the swept tip erosion shield with the grinder. Make sure that you do not go further than the glue line below.

NOTE

- We recommend to do the removal operation with the combined action of at least two operators, one for heating, the other for the mechanical removal.
- Do the heating and removal operations at the same time and in the same zone. This makes the removal easier and prevents damage to the composite material underneath.

2.8 Starting from the root, locally heat the swept tip erosion shield with the heat gun set at 300 - 370 °C. Keep the nozzle 30 - 40 mm away from the swept tip erosion shield surface during the whole phase of removal.

CAUTION

- Always use the spatula to break the erosion shield bonding. Use pliers only to make the lift of the removed part easier.
- Do not apply traction or peeling loads with pliers to the erosion shield. If you apply a pulling force you can damage parts of the blade skin.

NOTE

- Do not heat the parts that you have lifted before for more than necessary. This will prevent bubbles forming in the paint, which can make incorrect the inspection that follows.
- During the removal, you can use pliers only on the erosion shield areas that have been removed, while using the spatula at the same time.

2.9 When the thermochromic paint starts to change color from orange (ambient temperature color) to light green, as quickly as possible try to insert a spatula (flexible - rounded corners) again and again under the swept tip erosion shield. Remove the existing swept tip erosion shield from the MR blade.

NOTE

A dark green equal color along the length of the removed swept tip erosion shield and the absence of paint bubbles due to overheating, show that you did the removal operation at the correct temperature. Thus, the temperature on the adhesive underlying the erosion shield and the skin external plies have not reached the limit of 160 °C.

2.10 Examine fully the removed swept tip erosion shield. Make sure that the thermochromic paint has not become brown/black (signs of burning) and that there are no paint bubbles due to overheating. If you find these indications, please contact Leonardo Helicopter Customer Support in order to get further instructions.

2.11 Remove the metallic tape from the MR blade (upper side and lower side).

CAUTION

During sanding make sure to prevent damage to the blade skin. Use gradually finer abrasive paper near the skin surface.

NOTE

It is permitted to keep halos of adhesive, shown by a reddish color on the blade skin surfaces. This makes sure that the composite surfaces below are not damaged.

2.12 Remove the old adhesive layer from the swept tip erosion shield bonding area with abrasive paper (grit 120 - silicon carbide). Be careful not to damage the graphite layers of the skin underneath.

2.13 Clean the bonding surface with the lint-free cloth (C011) and the solvent (C005) or the aliphatic naphtha (C059).

2.14 Examine the blade skin and the tip erosion shield to make sure that there is no damage.

2.15 Do a tap inspection with the aluminum hammer of the blade skin, tip erosion shield and tip closing channel for possible debondings. No debondings are permitted. If you find debondings please contact Leonardo Helicopter Customer Support in order to get further instructions.

3. With reference to Figure 2, install swept tip erosion shield P/N 8G6210L00151AF on the MR blade as described in the following procedure:

3.1 To make sure that there is no interference between the erosion shield and the blade skins and/or the tip closing channel, do a "dry test" of swept tip erosion shield as described in the following steps:

3.1.1 Put the new swept tip erosion shield on the MR blade in its correct position.

3.1.2 Make sure that it is correctly engaged.

NOTE

Do not remove material from the blade spar.

3.1.3 If necessary, remove the swept tip erosion shield and adjust with abrasive paper (grit 240 – silicon carbide) or abrasive paper (grit 320 - silicon carbide) the end of the blade skins and/or the tip closing channel in order to engage the swept tip erosion shield correctly.

3.2 Apply a layer of red adhesive on upper and lower bonding area of the tip erosion shield as described in the following steps:

3.2.1 Mask the area around the bonding surface with the masking tape (C521).

3.2.2 Abrade the bonding area of the tip erosion shield with the blasting equipment (dry/vacuum type) operated with abrasive blast (grit 100 - aluminum oxide) or abrasive blast (grit 120 -aluminum oxide) at a pressure of 280 ±35 kPa (40 ±5 psi).

3.2.3 Clean the bonding surface on the tip erosion shield with the lint-free cloth and solvent (C005) or aliphatic naphtha (C059). Let the bonding surface dry for 30 minutes.

3.2.4 Apply one uniform layer of primer (C534), at ambient temperature, on the surfaces to be bonded.

3.2.5 Cure the primer at ambient temperature for 120 minutes. As an alternative cure the primer at ambient temperature for 30 minutes, then for 55 to 70 minutes at a temperature between 115 and 125 °C.

CAUTION

Always handle the MR blade with clean white dry gloves not to contaminate the bonding surfaces.

3.2.6 Apply one layer of adhesive (C189) (weight .06) on the bonding surface of the tip erosion shield.

3.2.7 Apply nylon peel ply on the adhesive layer.

3.2.8 Apply the heating blanket (with thermocouple) on the bonding area and prepare the vacuum bag. Cure the adhesive as follows:

- Temperature: 104 - 110 °C;
- Pressure: 0,6 - 0,8 kg/cm^2;
- Time: 120 minutes minimum.

3.2.9 After curing, remove the vacuum bag and the nylon peel ply.

3.2.10 If necessary, lightly sand with abrasive paper (grit 240 - silicon carbide) to remove the unwanted adhesive.

3.2.11 Remove the local masking from the tip erosion shield area.

3.3 Remove the nylon peel ply from the internal surface and put the new swept tip erosion shield in its correct position on the MR blade.

3.4 Make sure that the swept tip erosion shield is correctly engaged.

3.5 Mask the area around the swept tip erosion shield on the two sides of the blade with masking tape (C521). Keep a distance of 2 mm from all the edges.

3.6 Remove the swept tip erosion shield from the MR blade and mask the outer surface of the new swept tip erosion shield with adhesive tape (C195).

3.7 Prepare the bonding surfaces as described in the following steps:

NOTE

You must bond the swept tip erosion shield to the blade within 72 hours from cleaning by abrasion.

3.7.1 Lightly sand the bonding surfaces (upper side and lower side) of the blade skins, of the tip erosion shield and of the new swept tip erosion shield with abrasive paper (grit 80 - silicon carbide) or abrasive paper (grit 100 - silicon carbide), to remove the shine from the surface.

3.7.2 Remove sanding residuals with a dry lint-free cloth (C011).

3.7.3 Clean the bonding surfaces with the lint-free cloth (C011) and solvent (C005) or aliphatic naphtha (C059) or acetone (C087). Let it dry in the air for at least 30 minutes.

3.8 Prepare 100 grams (0,22 lb) of adhesive (C487), refer to the related manufacturer's instructions.

CAUTION

Always handle the new swept tip erosion shield and the MR blade with clean white dry gloves to prevent contamination of the bonding surfaces.

3.9 Apply one equal layer of adhesive to the inner surface of the new swept tip erosion shield and on the bonding surface of the MR blade.

3.10 Engage the swept tip erosion shield fully onto the blade rebate.

3.11 Attach the swept tip erosion shield in position with adhesive tape (C195) and remove the unwanted adhesive.

3.12 Apply one layer of nylon peel ply and one layer of release film (C920) on the swept tip erosion shield / vacuum bag area.

3.13 If you do an hot curing process apply the heating blanket (with thermocouple) on the bonding area.

3.14 Assemble a vacuum bag and apply a pressure of 0,6 - 0,8 kg/cm^2.

NOTE

When curing at room temperature, the pressure must be maintained for a minimum of 12 hours.

3.15 Let the adhesive cure at 20 ±5 °C (ambient temperature) for minimum 12 hours before blade handling and for a minimum of 5 days before blade operation. As an alternative cure the adhesive according to one of the methods that follow:

- 4 hours at 20 ±5 °C and - then 4 thru 4.5 hours at 60 ±5 °C;
- 4 hours at 20 ±5 °C and then 2 thru 2.5 hours at 80 ±5 °C.

3.16 After curing, remove the vacuum bag and other auxiliary devices from the blade.

3.17 Examine the MR blade and the swept tip erosion shield for condition and for presence of an equal adhesive squeeze-out. This makes sure that bonding is completed correctly.

3.18 If necessary, lightly sand with abrasive paper (grit 240 - silicon carbide) to remove the adhesive squeeze-out.

3.19 In accordance with CR&OP DM 89-A-62-11-00-01A-664A-C, if you find open edge voids fill them.

3.20 Do a tap inspection with the steel hammer of the swept tip erosion shield for correct bonding. No unbondings are permitted.

3.21 With reference to figure 3, caulk the edge of the swept tip erosion shield using filler (C523) or filler (C468).

NOTE

For helicopters equipped with low visibility blade kit P/N 8G6000F00211 refer to AMP DM 89-B-11-11-00-00A-010A-A for the MR blade painting scheme.

3.22 In accordance with CR&OP DM 89-A-62-11-01-00A-257A-C, paint the repaired area of MR blade.

NOTE

The new swept tip erosion shield is equivalent to a nominal 80g of additional mass in the span weight pot, therefore the minimum span weight pot mass of 362g shall be amended to 280g.

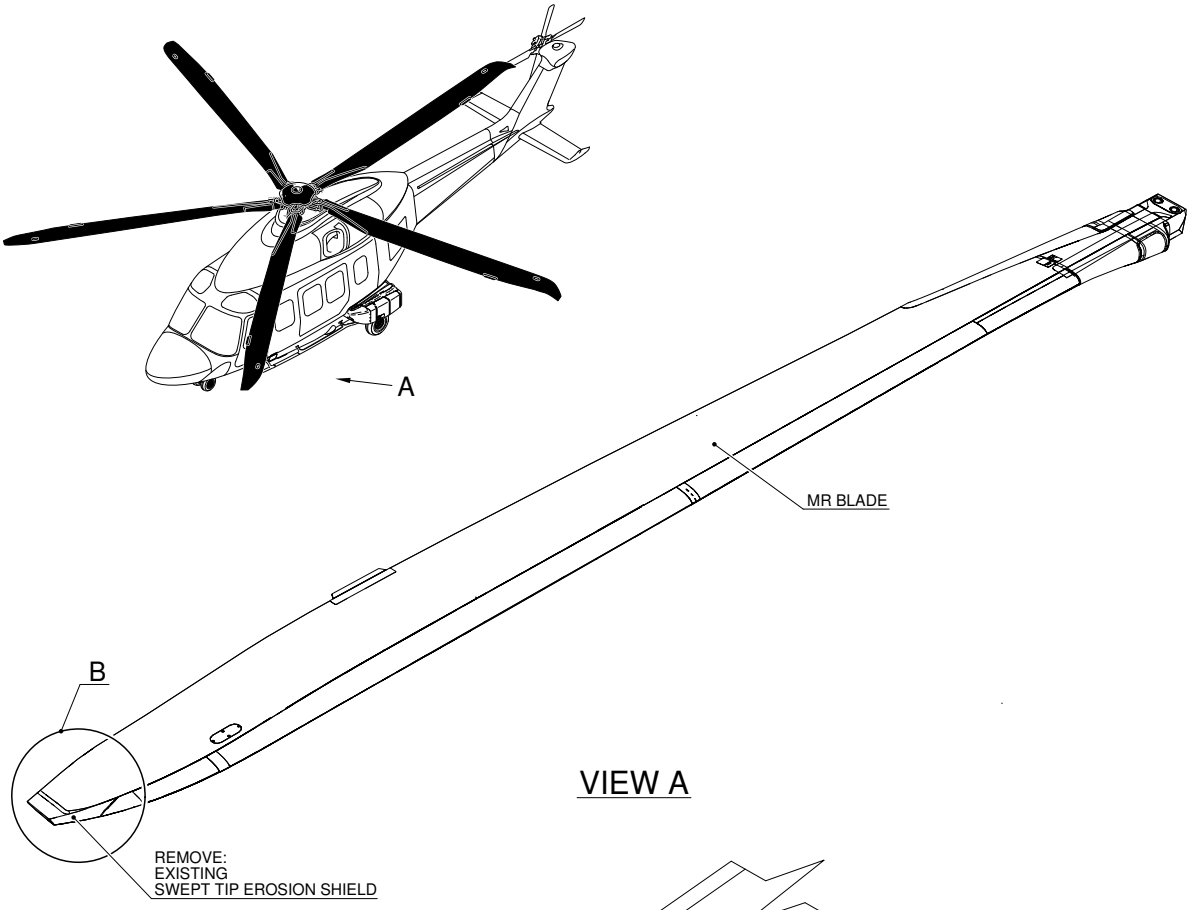
3.23 In accordance with CR&OP DM 89-A-62-11-01-00A-37DA-C, perform the static balance of the MR blade.

4. Record of swept tip P/N 8G6210L00151AF and compliance with SB189-215 Part IV on the blade log card installation and, if installed, on ID plate P/N MS27253-2.

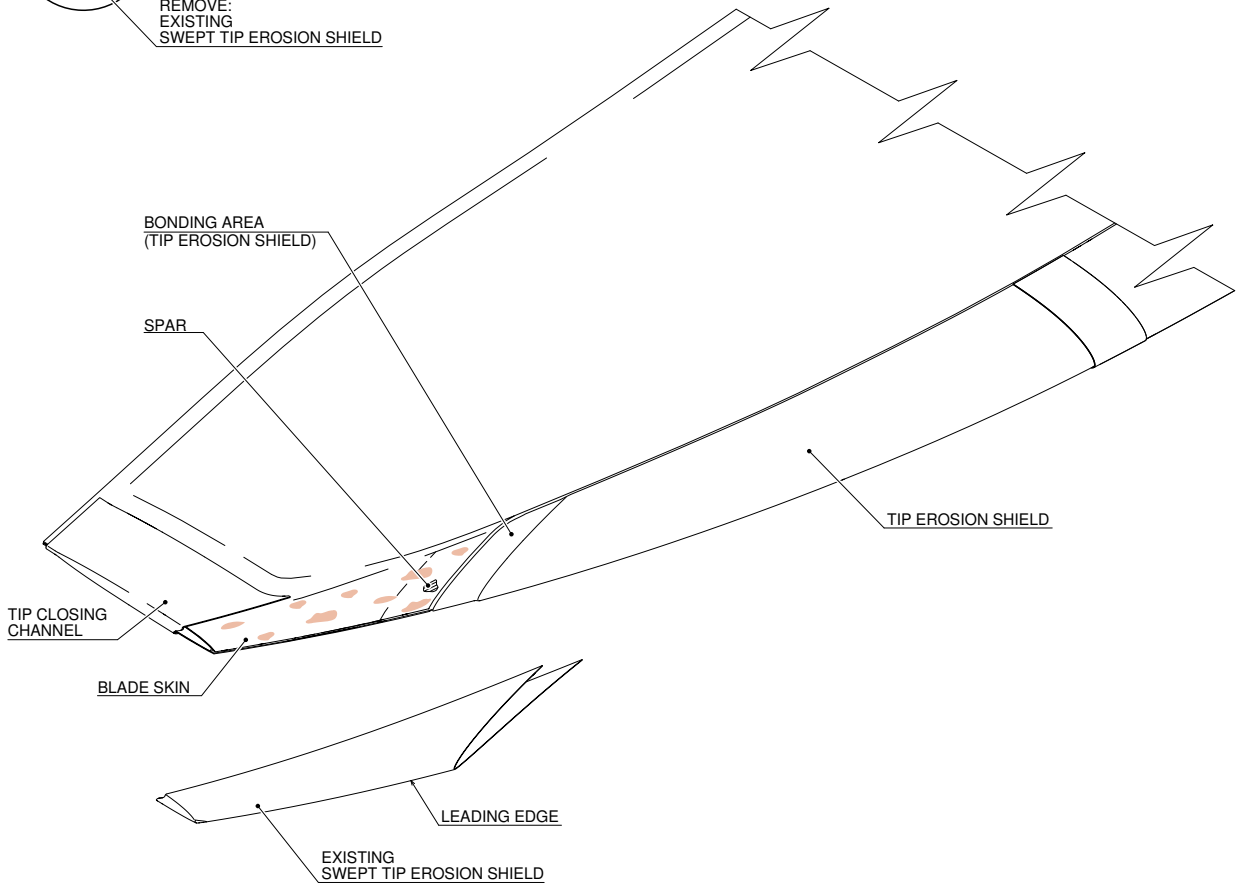
5. Send the attached compliance form to the following mail box:

engineering.support.lhd@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.



VIEW A



DETAIL B

Figure 1

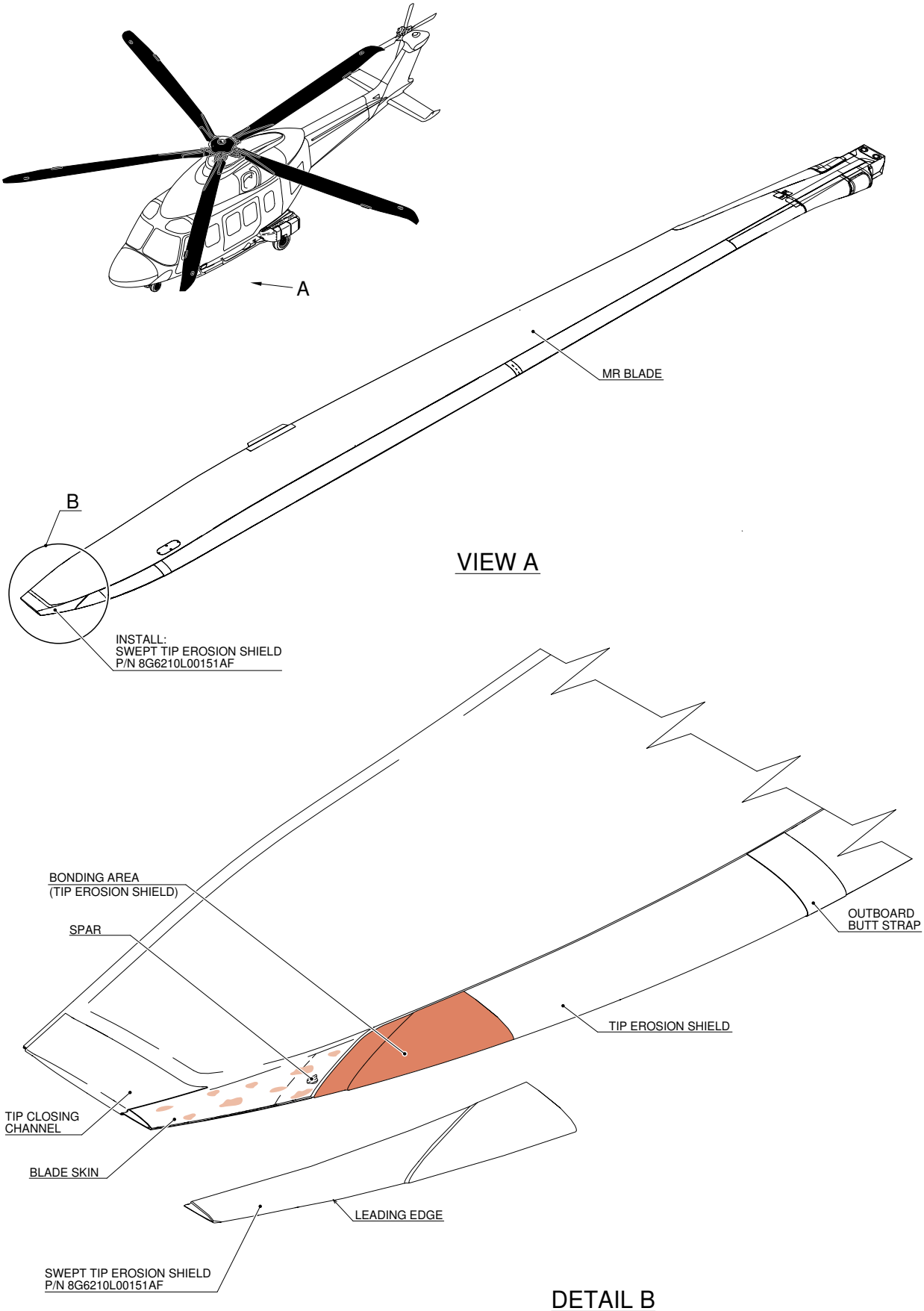

A
MR BLADE
B
VIEW A
INSTALL:
SWEPT TIP EROSION SHIELD
P/N 8G6210L00151AF
BONDING AREA
(TIP EROSION SHIELD)
SPAR
OUTBOARD
BUTT STRAP
TIP EROSION SHIELD
TIP CLOSING
CHANNEL
BLADE SKIN
LEADING EDGE
SWEPT TIP EROSION SHIELD
P/N 8G6210L00151AF
DETAIL B

Figure 2

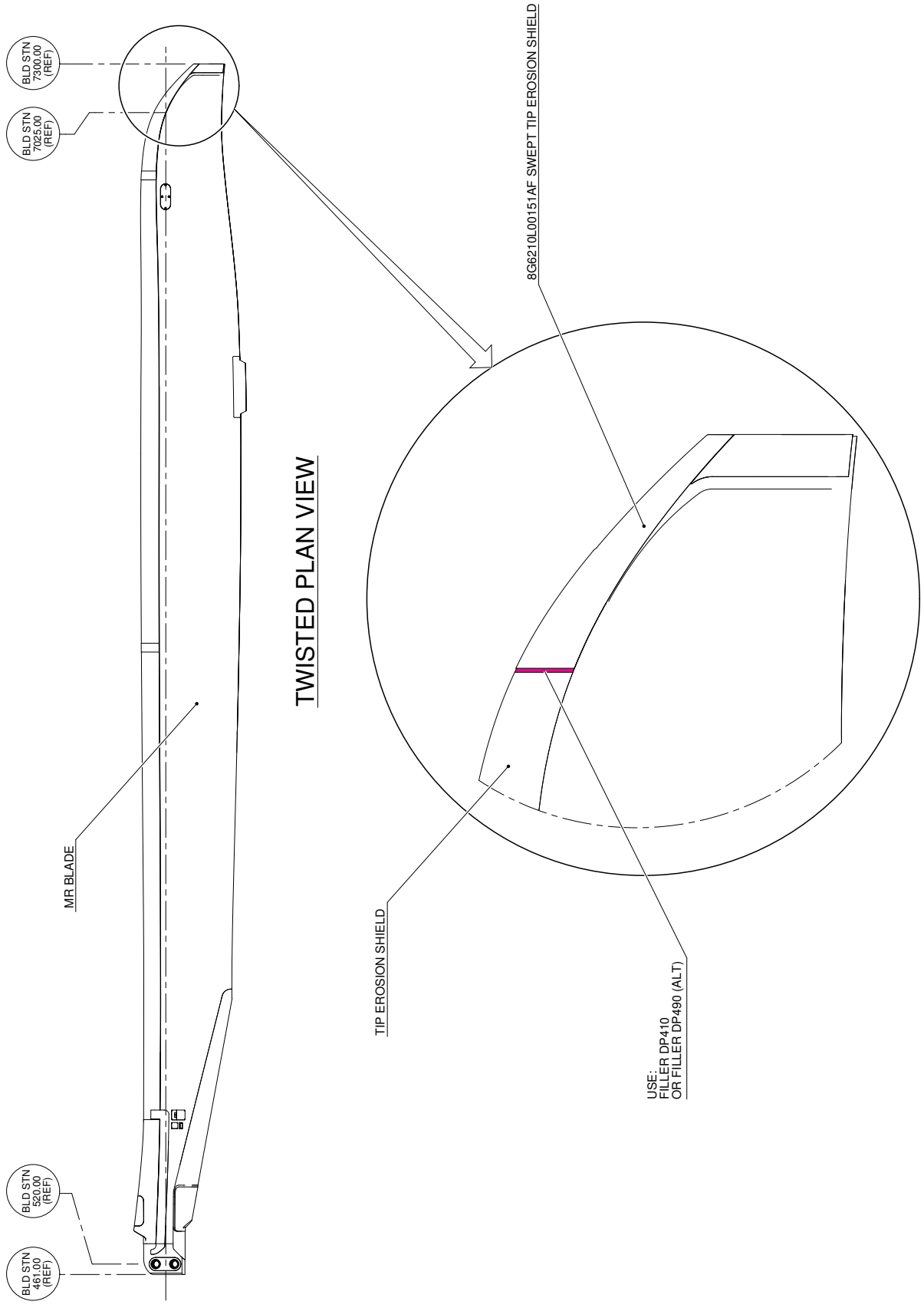

BLD STN 730.00 (REF)
BLD STN 702.5.00 (REF)
BLD STN 520.00 (REF)
BLD STN 461.00 (REF)
MR BLADE
TWISTED PLAN VIEW
8G6210L00151AF SWEPT TIP EROSION SHIELD
TIP EROSION SHIELD
USE:
FILLER DP410
OR FILLER DP490 (ALT)

Figure 3

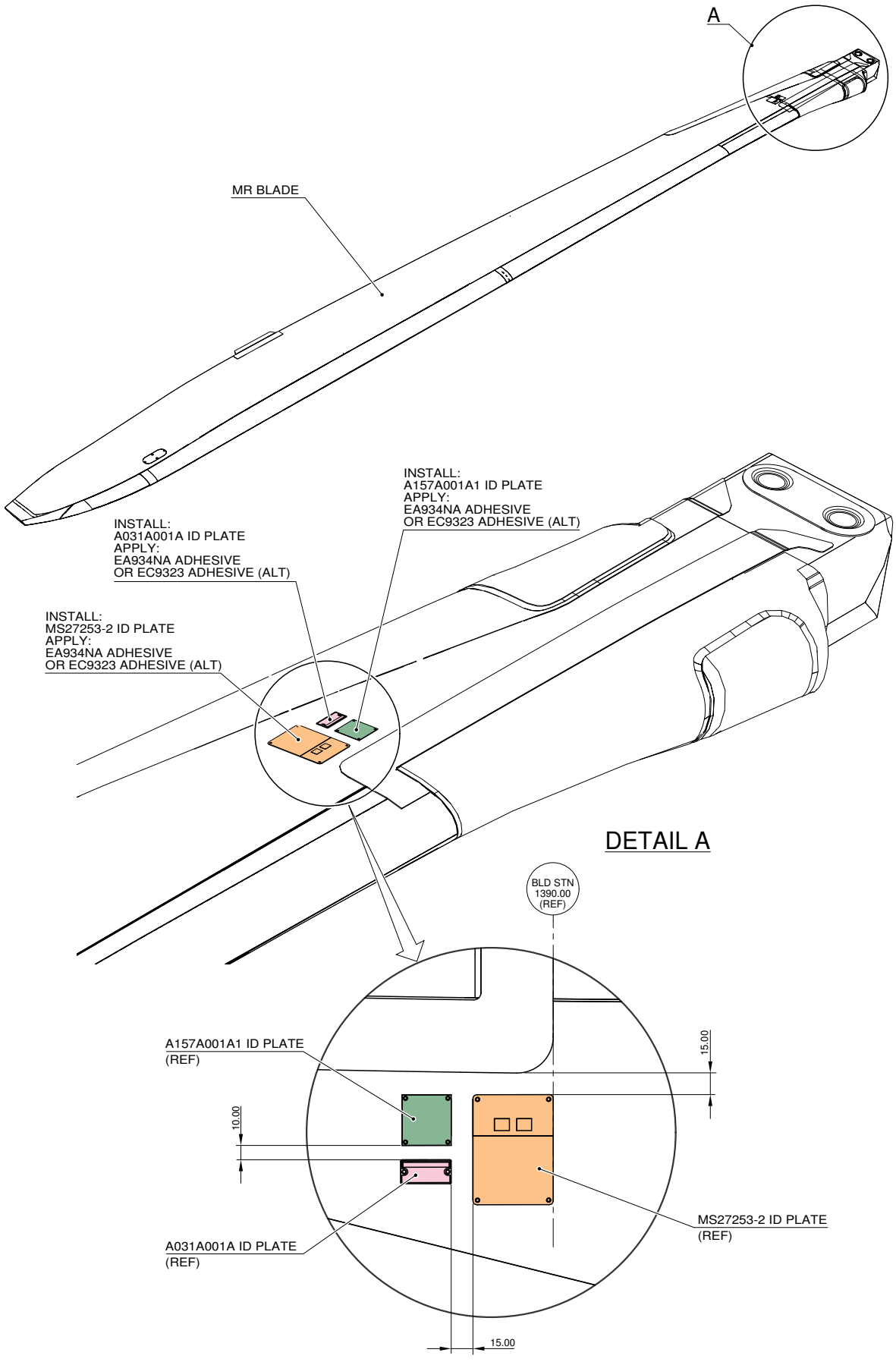

A
MR BLADE
INSTALL:
A157A001A1 ID PLATE
APPLY:
EA934NA ADHESIVE
OR EC9323 ADHESIVE (ALT)
INSTALL:
A031A001A ID PLATE
APPLY:
EA934NA ADHESIVE
OR EC9323 ADHESIVE (ALT)
INSTALL:
MS27253-2 ID PLATE
APPLY:
EA934NA ADHESIVE
OR EC9323 ADHESIVE (ALT)
DETAIL A
BLD STN
1390.00
(REF)
A157A001A1 ID PLATE
(REF)
15.00
10.00
MS27253-2 ID PLATE
(REF)
A031A001A ID PLATE
(REF)
15.00

Figure 4

LEONARDO
HELICOPTERS

AgustaWestland Products

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	**SERVICE BULLETIN 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.