
SERVICE BULLETIN

N° 139-663

DATE: July 6, 2021

REV. : /

TITLE

ATA 30 - WIPER BLADE SPRAY NOZZLE REPLACEMENT

REVISION LOG

First Issue

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

1. PLANNING INFORMATION

A. EFFECTIVITY

All AW139 helicopters:

- equipped with kit windshield washing P/N 4G3040F00116 or
- already compliant with SB 139-506 (P/N 3G3040P00511 or P/N 3G3040P00611) at the issue date of this SB

that have installed wiper blade spray nozzle P/N 3G3040V01151 up to S/N 19090 included.

All wiper blade assy LH P/N 3G3040A02931 and/or RH P/N 3G3040A03031 equipped with wiper blade spray nozzle P/N 3G3040V01151 up to S/N 19090 included kept in stock.

All wiper blade spray nozzle P/N 3G3040V01151 up to S/N 19090 included kept in stock.

B. COMPLIANCE

Within and not later than one hundred and fifty (150) flight hours or six (6) months, whichever occurs first after the issue of this Service Bulletin.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to prescribe the replacement of the affected wiper blade spray nozzles P/N 3G3040V01151.

E. DESCRIPTION

During investigations on the windshield washing, it has been discovered that wiper blade spray nozzles P/N 3G3040V01151 up to S/N 19090 resulted not within design requirements. Incomplete welding between the manifold and the two tubes attached, could result in improper functioning of the component. A new welding procedure based on laser-technology has been successfully applied to wiper blade spray nozzles P/N 3G3040V01151. The improved methodology offers higher quality standards, therefore, all components manufactured with the previous welding method have to be replaced.

This Service Bulletin has been issued with the purpose to prescribe the replacement of the affected wiper blade spray nozzles P/N 3G3040V01151 up to S/N 19090 with a new one.

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 half (1/2) MMH are deemed necessary.

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

Following Data Modules refer to AMP:

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM01 39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	-

2) ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required

DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IPD	Illustrated Part Data
ITEP	Illustrated tool and equipment publication
LH	Left Hand
LHD	Leonardo Helicopters Division
MMH	Maintenance Man Hours
N.A.	Not Applicable
P/N	Part Number
SB	Service Bulletin
S/N	Serial Number

3) ANNEX

Annex A Aerosystems Service Bulletin SB-85-479-001.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	3G3040V01151		Wiper blade spray nozzle	1	.	(1)	-
2	A629A04HS	AW001CK04HS	Strap, Tiedown	1	.	(1) (2)	-

Refer also to IPD for the spares materials required to comply with the AMP DMs referenced in the accomplishment instructions.

2) CONSUMABLES

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

3) LOGISTIC MATRIX

N.A.

NOTES

- (1) This P/N has to be ordered as many times as are the items affected by this SB.
Maximum 2 per helicopter plus any affected component kept in stock.
- (2) Tie-wrap AW001CK04HS may be used as alternative to strap P/N A629A04HS.

B. SPECIAL TOOLS

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

C. INDUSTRY SUPPORT INFORMATION

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

Consumables, Special Tools, and materials required by AMP DM recalled in this SB are not included in the aforementioned policy.

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

Please Issue relevant MMIR form to your Warranty Administration Dpt.

NOTE: Filling the form in Figure 2 with the evidence of Serial Number to scrap is mandatory; in case the MMIR is not accompanied by this document, it will be rejected.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

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.

NOTE

Skip Steps 1 and 2 for affected wiper blade spray nozzles P/N 3G3040V01151 kept in stock.

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. With reference to Figure 1, gain access to the wiper blades area of the helicopter.
3. With reference to Figure 1 and the example pictures in SB-85-479-001 in Annex A (page 7 of 7), check the serial number of each wiper blade spray nozzle(s) P/N 3G3040V01151. If the serial number is included in the effectivity of this Service Bulletin, take a picture of the component with visual evidence of the serial number and note the required information in the table of Figure 2. Discard and locally scrap the affected component(s).

NOTE

Perform the following step only if the serial number of wiper blade spray nozzle(s) is included in the effectivity.

4. With reference to Figure 1 and in accordance with Aerosystems Service Bulletin SB-85-479-001 in Annex A, perform the replacement of the affected wiper blade spray nozzle(s) installed on the wiper blade assy LH P/N 3G3040A02931 and/or RH P/N 3G3040A03031.

NOTE

Skip following Step 5 for affected wiper blade spray nozzles P/N 3G3040V01151 kept in stock.

5. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
6. Send the attached compliance form, the report in Figure 2 and pictures to the following mail box:

engineering.support.lhd@leonardocompany.com

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

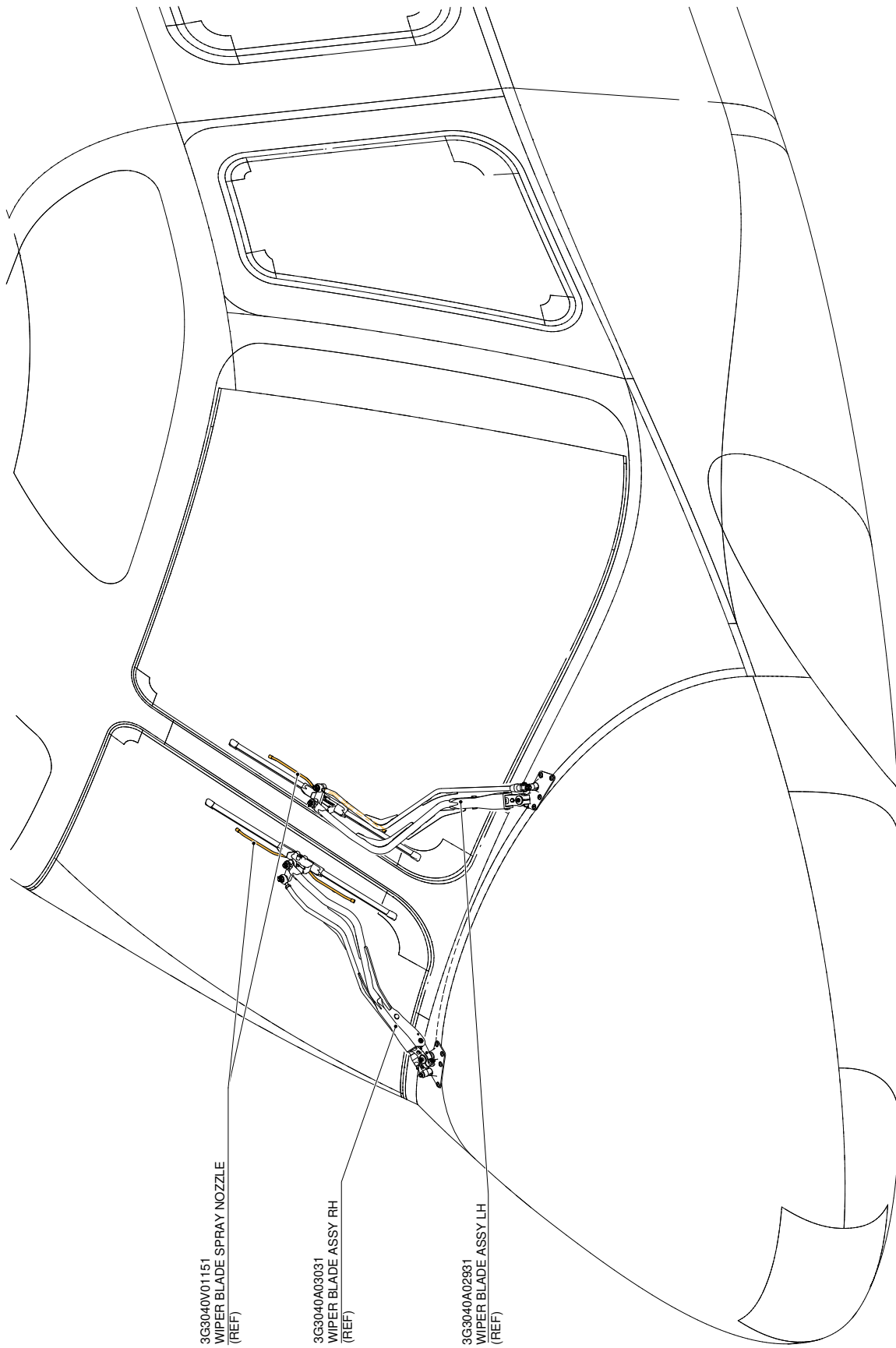


Figure 1

S.B. N°139-663
DATE: July 6, 2021
REVISION: /

<u>SB 139-663</u>	
Helicopter S/N	
FH	
Date	
Wiper Blade Spray Nozzle P/N 3G3040V01151, S/N(s) affected by this SB, installed on the helicopter or in stock	

Please, also attach picture(s) of the item(s) affected, displaying the serial number(s).

Figure 2

ANNEX A

AEROSYSTEMS SERVICE BULLETIN SB-85-479-001

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SERVICE BULLETIN
SB-85-479-001 First Issue
January 28, 2021

REPLACEMENT OF AW139 WIPER BLADE SPRAY NOZZLE
PN 3G3040V01151

AEROSYSTEMS S.r.l.
Precision Aerospace Components
Via San Gottardo 4, 21021 Angera (VA) Italy

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SUBJECT:

Replacement of Wiper Blade Spray Nozzle PN 3G3040V01151 (PN 85-479) installed on AW139 Wiper Blades PN 3G3040V01251 (PN 85-469A).

REASON:

Possible failure of the wiper blade spray nozzle PN 3G3040V01151 due to poor welding quality. Replace the Wiper Blade Spray Nozzle PN 3G3040V01151 with a new Wiper Blade Spray Nozzle PN 3G3040V01151 in order to prevent possible nozzle welding failure.

HELICOPTERS AFFECTED:

Wiper Blade Spray Nozzles PN 3G3040V01151, installed on helicopter AW139 and/or on stock, up to S/N 19090 (included)*.

DESCRIPTION:

It has been notified that some AW139 wiper blade spray nozzles PN 3G3040V01151 have shown failures in service. The investigation has identified the reason in incomplete welding between the manifold and the two tubes attached, that may bring to the detachment of the latest.

This service bulletin provides the necessary instructions to replace the Wiper Blade Spray Nozzles PN 3G3040V01151 (installed on Wiper Blades PN 3G3040V01251 –PN 85-469A) with a new one.

REQUIRED MANPOWER:

For the removal, replacement and installation of the Wiper Blade Spray Nozzles PN 3G3040V01151 it is estimated 30' Minutes manpower.

REQUIRED MATERIALS:

The following materials are necessary for compliance with this Bulletin:

Part Number	Denomination	Qty
85-479	Wiper Blade Spray Nozzle	1
85-145-02	Circlip	1
A629A04HS	Strap, Tiedown	1

Note 1: PN 85-479 and 85-145-02 are part of LH PN 3G3040V01151 and are supplied by Aerosystems.

Note 2: PN A629A04HS is an international "Standard Commercial Item" and is not supplied by Aerosystems

SPECIAL TOOLS:

No special tools are required.

WEIGHT AND BALANCE CHANGES:

None.

COMPLIANCE TIME:

Refer to the compliance time indicated in the relevant LH bulletin.

ASSOCIATED COSTS:

The replacement of the defective parts is made under warranty, it is free of charge.

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COMPLIANCE INSTRUCTIONS:

- 1) Prepare the helicopter for a safe maintenance, disconnect any power supply, refer to AMP for applicable procedures.
- 2) Remove the rubber tube (1) connected to the Wiper Blade Spray Nozzles (2) PN 3G3040V01151 (Ref. Fig. 2)
- 3) Remove the Circlip (3) PN 85-142-02 by lifting the circlip tongue with a flat-headed screwdriver (Ref. Fig. 3 and 4).
- 4) Detach the Wiper Blade Spray Nozzles (2) PN 3G3040V01151 from the wiper blade (4) (ref. fig 1).

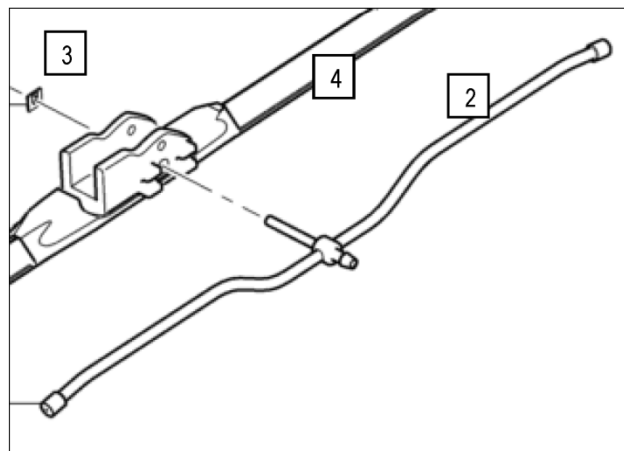


Figure 1

- 5) Replace the Wiper Blade Spray Nozzle PN 3G3040V01151 with a new one, install the new Circlip (3) in place as showed in Figure 3 and 4 and connect the water distribution hose (1) to the proper fitting, fixing it by means of a tiedown (5) PN A629A04HS (ref. fig 5)

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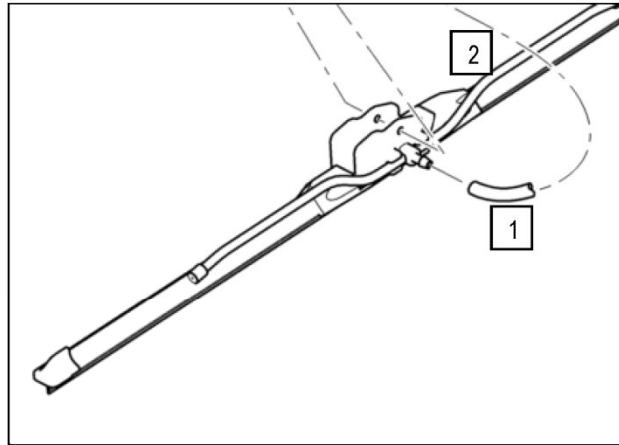


Figure 2

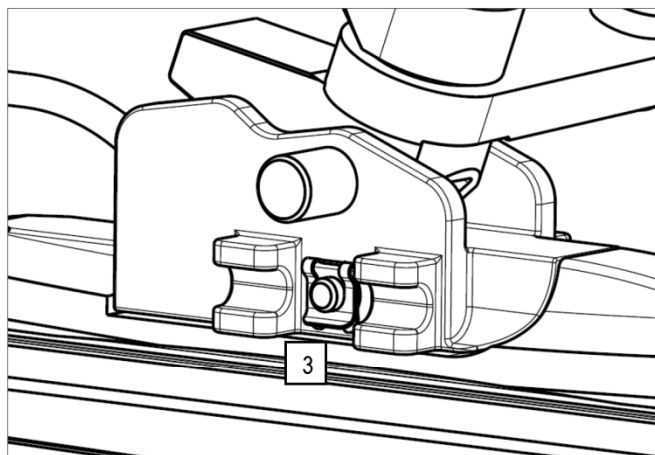


Figure 3

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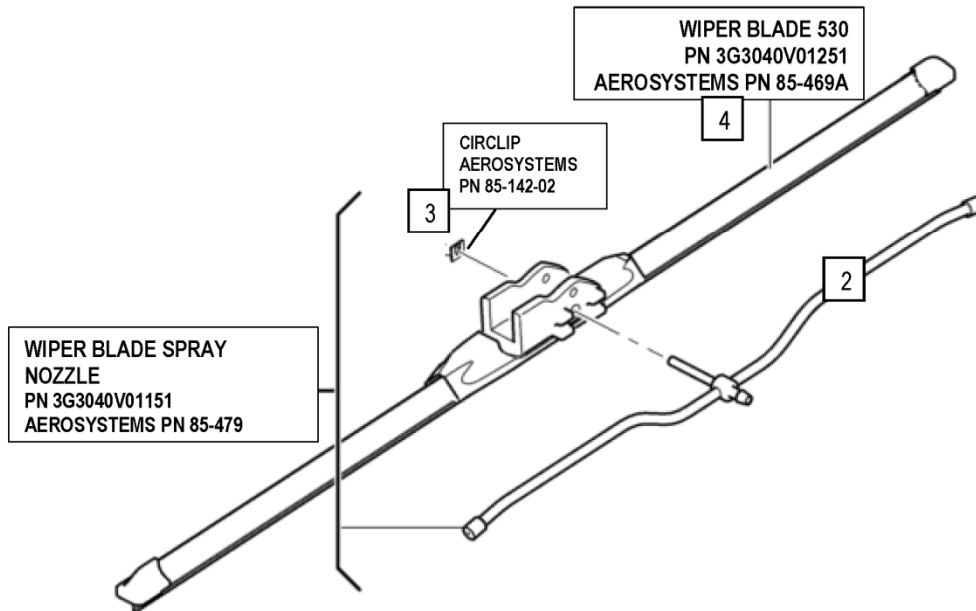


Figure 4

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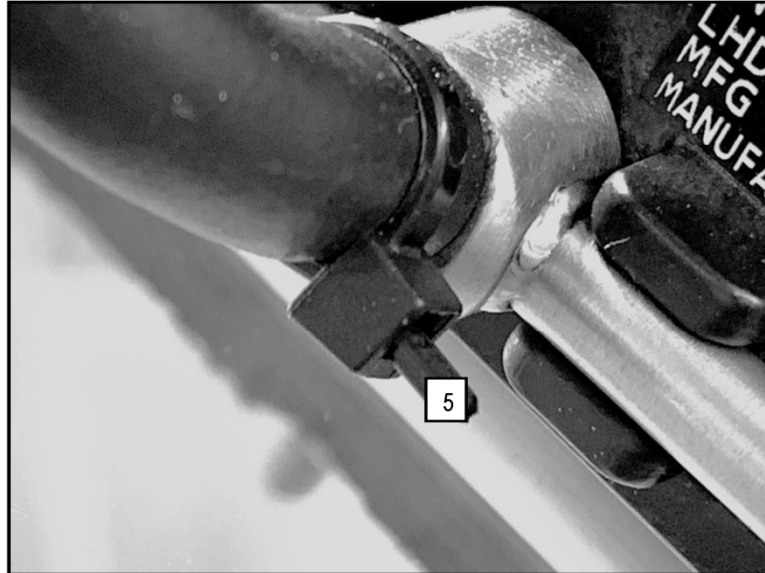
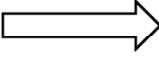
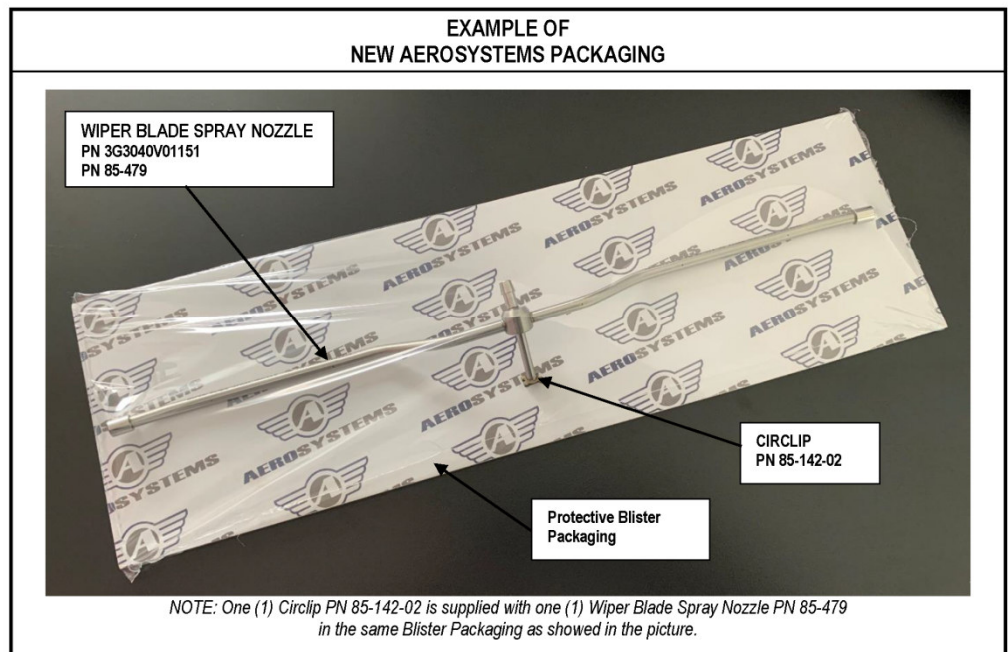
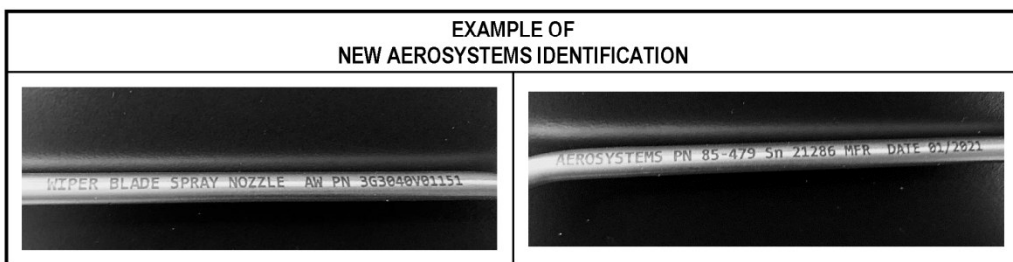
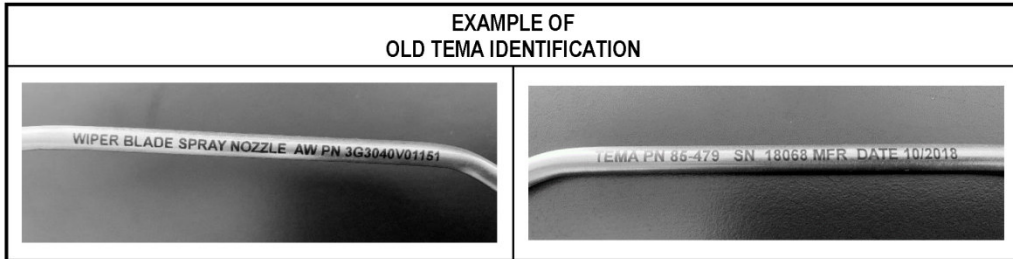


Figure 5

<p>WIPER BLADE SPRAY NOZZLE PN 3G3040V01151</p> <p>Manufacturer TEMA: A3848</p> <p>PN: 85-479 <u>S/N: up to 19090 (included)</u></p>	To be replaced with: 	<p>WIPER BLADE SPRAY NOZZLE PN 3G3040V01151</p> <p>Manufacturer AEROSYSTEMS: AR971</p> <p>PN: 85-479 <u>S/N: starting from 19091</u></p>
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Please send to the following address:		SERVICE BULLETIN COMPLIANCE FORM			Date:
LEONARDO S.p.A. CUSTOMER SUPPORT & SERVICES - ITALY		Number:			
PRODUCT SUPPORT ENGINEERING & LICENSES DEPT. Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988		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 our 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.					