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SERVICE BULLETIN

N° **139-522**

**OPTIONAL**

DATE: September 30, 2024

REV. : /

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**TITLE**

**ATA 95 - INSTALLATION OF COCKPIT AND CABIN PASSENGER FLOOR BALLISTIC PROTECTIONS**

**REVISION LOG**

First Issue

# 1. PLANNING INFORMATION

## A. EFFECTIVITY

AW139 helicopters S/N 31761 and 31753.

## B. COMPLIANCE

At Customer's option.

## C. CONCURRENT REQUIREMENTS

N.A.

## D. REASON

To provide all necessary instructions on how to perform the installation of the kit cockpit floor ballistic protection P/N 4G9580F00311, kit cockpit door ballistic protection P/N 4G9580F00411 and kit cabin passenger floor ballistic protection P/N 4G9580F00911.

LH issued this SB for the following reason:

Helicopter Reliability/Maintainability	
Product Improvement	
Obsolescence	
Customization	✓
Product/Capability Enhancement	

## E. DESCRIPTION

This Service Bulletin provides the necessary procedures to perform:

- Cockpit floor provision P/N 3G5311A24711 (PART I) and cockpit floor ballistic protection installation P/N 3G9580A03211 (PART II) for kit cockpit floor ballistic protection P/N 4G9580F00311.
- Ballistic protection cockpit door provision P/N 3G5311A25111 (PART III), cockpit ballistic protection fixed parts installation P/N 3G9580A03111 (PART IV) and removable parts installation P/N 3G9580A03011 (PART V) for kit cockpit door ballistic protection P/N 4G9580F00411.
- Cabin floor provision P/N 3G5311A32011 and ballistic protection fixed parts installation P/N 3G9580A04711 (PART VI) and ballistic protection removable

parts installation P/N 3G9580A04611 (PART VII) for kit cabin passenger floor ballistic protection P/N 4G9580F00911.

## 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 LH 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 seven hundred (700) MMH are deemed necessary. MMH are based on hands-on time and can change with personnel and facilities available. MMH are not comprehensive of the overall hours necessary to get access to work areas and to remove all the equipment that interferes with the application of the prescribed instructions.

## H. WEIGHT AND BALANCE

### PART I

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		0.4
LONGITUDINAL BALANCE	2292	916.8
LATERAL BALANCE	-11	-4.4

### PART II

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		11.1
LONGITUDINAL BALANCE	2596.5	28891.3
LATERAL BALANCE	15.4	171.4

**PART III**

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		2.1
LONGITUDINAL BALANCE	2549.5	5310.6
LATERAL BALANCE	39	81.2

**PART IV**

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		1.3
LONGITUDINAL BALANCE	2809.8	3554.4
LATERAL BALANCE	260	328.9

**PART V**

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		29.2
LONGITUDINAL BALANCE	2721.6	79416.3
LATERAL BALANCE	0.2	5.8

**PART VI**

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		11.1
LONGITUDINAL BALANCE	4403.2	48919.6
LATERAL BALANCE	N.A.	N.A.

**PART VII**

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		72.9
LONGITUDINAL BALANCE	4455.5	324667.8
LATERAL BALANCE	-0.1	-7.3

**I. REFERENCES**

**I.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.	All

## **I.2 ACRONYMS & ABBREVIATIONS**

AMMC Aircraft & Mission Management Computer

MMH Maintenance Man Hours

## **I.3 ANNEX**

Annex A Installation and use of drilling tool P/N 3G5310H68511A003A LH and  
P/N 3G5310H68611A003A RH.

## **J. PUBLICATIONS AFFECTED**

N.A.

## **K. SOFTWARE ACCOMPLISHMENT SUMMARY**

N.A.

## 2. MATERIAL INFORMATION

### A. REQUIRED MATERIALS

#### A.1 PARTS

##### PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	4G9580F00311		KIT COCKPIT FLOOR BALLISTIC PROTECTION	REF	.		-
2	3G5311A24711		COCKPIT FLOOR PROVISION FOR BALLISTIC PROTECTION	REF	..		-
3	3G5306P36111		PILOT FOOTBOARD RETRO-MOD	REF	...		-
4	SL10414-4-4A		Insert	4	....		139-502L1
5	3G5306P36211		COPILOT FOOTBOARD RETRO-MOD	REF	...		-
6	SL10414-4-4A		Insert	4	....		139-502L1
7	3G5310A65511		PILOT FLOOR STRUCTURAL PROVISION	REF	...		-
8	NAS1835A4		Insert	4	....		139-502L1
9	3G5310A65711		COPILOT FLOOR STRUCTURAL PROVISION	REF	...		-
10	NAS1835A4		Insert	3	....		139-502L1
11	NAS1835A4		Insert	7	...		139-502L1

##### PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
12	4G9580F00311		KIT COCKPIT FLOOR BALLISTIC PROTECTION	REF	.		-
13	3G9580A03211		COCKPIT FLOOR BALLISTIC PROTECTION INSTALLATION	REF	..		-
14	3G9580V05151		Pilot lateral floor protection	1	...		139-502L2
15	3G9580V05251		Copilot lateral floor protection	1	...		139-502L2
16	3G9580V05351		Pilot under seat protection	1	...		139-502L2
17	3G9580V05451		Copilot under seat protection	1	...		139-502L2
18	3G9580V05551		Pilot FWD protection	1	...		139-502L2
19	3G9580V05651		Copilot FWD protection	1	...		139-502L2
20	AN525-416R18		Screw	23	...		139-502L2

##### PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
21	4G9580F00411		KIT COCKPIT DOOR BALLISTIC PROTECTION	REF	.		-
22	3G5311A25111		BALLISTIC PROTECTION COCKPIT DOOR PROVISION	REF	..		-
23	3G5310A68511		PILOT COCKPIT STRUCTURAL VARIANT	REF	...		-
24	3G5330A28451		Shim	1	....		139-502L3
25	999-0065-05-95		Washer	2	....		139-502L3
26	999-5000-30-118		Insert	2	....		139-502L3
27	MS21069L3		Nutplate	2	....		139-502L3

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#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
<b>57</b>	<b>3G5310A68611</b>		<b>COPILOT COCKPIT STRUCT VARIA</b>	<b>REF</b>	...		-
28	3G5330A28451		Shim	1	....		139-502L3
29	999-0065-05-95		Washer	2	....		139-502L3
30	999-5000-30-118		Insert	2	....		139-502L3
31	MS21069L3		Nutplate	2	....		139-502L3
<b>32</b>	<b>3G5311A27811</b>		<b>DOOR PROVISION FOR BALLISTIC PROTECTION</b>	<b>REF</b>	...		-
33	A407A3C2		Nutplate	2	....		139-502L3
<b>34</b>	<b>3G5320P01011</b>		<b>COCKPIT LINER RETROMODIFICATION</b>	<b>REF</b>	...		-
35	A407A3C2P		Nutplate	8	....		139-502L3
36	AN525-10R7		Screw	8	....		139-502L3
37	3G5320A13851		Pilot cover LH	1	....		139-502L3
38	3G5320A13951		Pilot cover RH	1	....		139-502L3
39	3G5320A14053		Cover LH	1	....		139-502L3
40	3G5320A14153		Cover RH	1	....		139-502L3

#### **PART IV**

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
<b>41</b>	<b>4G9580F00411</b>		<b>KIT COCKPIT DOOR BALLISTIC PROTECTION</b>	<b>REF</b>	.		-
<b>42</b>	<b>3G9580A03111</b>		<b>COCKPIT BALLISTIC PROT FIXED PARTS</b>	<b>REF</b>	.		-
43	3G5320A13651		Pilot lower support	1	..		139-522L1
44	3G5320A13751		Copilot lower support	1	..		139-522L1
45	3G5320A14251		Upper cover LH	1	..		139-522L1
46	3G5320A14351		Upper cover RH	1	..		139-522L1
47	3G5320A14651		Lower cover LH	1	..		139-522L1
48	3G5320A14751		Lower cover RH	1	..		139-522L1
49	3G5330A28531		Support LH assy	1	..		139-522L1
50	3G5330A28631		Support RH assy	1	..		139-522L1
51	3G5330A28731		Upper support LH	1	..		139-522L1
52	3G5330A28831		Upper support RH	1	..		139-522L1
53	3G6700A04631		Lower collar assy	1	..		139-522L1
54	3G6700A04731		Gaiter assy	1	..		139-522L1
55	3G9580A02231		Junction assy	2	..		139-522L1
56	3G9580A02351		Special bushing	2	..		139-522L1
57	3G9580A02451		Special washer	2	..		139-522L1
58	3G9580A02551		Peeling shim	2	..		139-522L1
59	A297A04TW03		Rivet blind	8	..		139-522L1
60	AN3-5A		Bolt	4	..		139-522L1
61	AN525-10R9		Screw machine	6	..		139-522L1
62	MS21225-6		Nut	2	..		139-522L1
63	MS24665-174		Pin	2	..		139-522L1
64	MS27039-1-07		Screw machine	7	..		139-522L1
65	NAS1149D0332K		Washer	11	..		139-522L1
66	NAS1149D0632K		Washer	2	..		139-522L1
67	NAS1149DN832K		Washer	16	..		139-522L1
68	NAS1802-08-9		Screw	16	..		139-522L1

### PART V

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
69	4G9580F00411		KIT COCKPIT DOOR BALLISTIC PROTECTION	REF	.		-
70	3G9580A03011		COCKPIT BALLISTIC PROT REMOVABLE PARTS	REF	.		-
71	3G9580A00451		Lateral block	2	..		139-502L5
72	3G9580A02631		Block assy	4	..		139-502L5
73	3G9580A03331		Door ballistic protection assy LH	1	..		139-502L5
74	3G9580A03431		Door ballistic protection assy RH	1	..		139-502L5
75	3G9580A03551		Spacer	2	..		139-502L5
76	3G9580A03651		Spacer	2	..		139-502L5
77	3G9580A03751		Spacer	2	..		139-502L5
78	3G9580V03651		Ballistic plate	2	..		139-502L5
79	AN3-10		Bolt	4	..		139-502L5
80	AN525-10R14		Screw	2	..		139-502L5
81	AN525-10R20		Screw	2	..		139-502L5
82	AN525-10R22		Screw	2	..		139-502L5
83	MS21225-3		Nut	4	..		139-502L5
84	MS24665-132		Pin	4	..		139-502L5
85	NAS1149D0332K		Washer	8	..		139-502L5

### PART VI

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
86	4G9580F00911		KIT CABIN PAX BALLISTIC PROT VIP DELUX	REF	.		-
87	3G5311A32011		BALISTIC PROTECTION STRUCTURAL PROVISION	REF	.		-
88	NAS1832-3-4		Insert	16	..		139-522L2
89	3G9580A04711		BALLISTIC PROTECTION FIXED PARTS	REF	.		-
90	3G9580V03251		Ballistic plate	2	.		139-522L2
91	3G9580V07551		Ballistic plate	2	.		139-522L2
92	3G9580V07651		Ballistic plate	4	.		139-522L2
93	AN525-10R9		Screw	333	.		139-522L2
94	AN525-416R9		Screw	8	.		139-522L2
95	MS24694-S101		Screw	150	.		139-522L2

### PART VII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
96	4G9580F00911		KIT CABIN PAX BALLISTIC PROT VIP DELUX	REF	.		-
97	3G9580A04611		BALLISTIC PROTECTION INSTALLATION	REF	.		-
98	3G2500P00711		DOORSTEP RETRO MOD	REF	..		-
99	3G2500A06631		Doorstep LH assy	1	...		139-522L3
100	3G2500A06731		Doorstep RH assy	1	...		139-522L3
101	MS24694-C64		Screw	16	...		139-522L3
102	3G9580V01451		Ballistic protection	1	..		139-522L3
103	3G9580V02651		Ballistic protection	1	..		139-522L3
104	3G9580V05851		Ballistic protection	1	..		139-522L3
105	3G9580V05951		Ballistic protection	1	..		139-522L3



#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
106	3G9580V06851		Ballistic protection	1	..		139-522L3
107	3G9580V06951		Ballistic protection	1	..		139-522L3
108	3G9580V07051		Ballistic protection	1	..		139-522L3
109	3G9580V07151		Ballistic protection	1	..		139-522L3
110	AN525-10R11		Screw	18	..		139-522L3
111	AN525-10R18		Screw	26	..		139-522L3
112	NAS1351C4H16		Screw	4	..		139-522L3

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

## A.2 CONSUMABLES

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

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
113	Code No. 900004603	Adhesive EA934NA (C054)	AR	(1)	I,III, VI
114	Code No. 900000581	Adhesive EA9309.3NA (C021)	AR	(1)	III
115	Code No. 900001596	Sealant Proseal 890 (C153)	AR	(1)	III

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

## A.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
139-502L1	1	(2)	Part I
139-502L2	1	(2)	Part II
139-502L3	1	(2)	Part III
139-522L1	1		Part IV
139-502L5	1	(2)	Part V
139-522L2	1		Part VI
139-522L3	1		Part VII

## NOTES

- (1) To be procured as local supply.
- (2) The technical content of this Part of the Service Bulletin has already been defined according to relevant logistic P/N of SB 139-502.

## B. SPECIAL TOOLS

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
116	3G5310H68511A003A	Positioning and drilling gig LH	1		III
117	3G5310H68611A003A	Positioning and drilling gig RH	1		III

## 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) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.
- c) After drilling, remove all swarf and sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.
- d) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.
- e) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
- f) Exposed thread surface and nut must be protect using a layer of tectyl according to MIL-C-16173 grade I.
- g) All lengths are in mm.

#### **PART I**

1. In accordance with 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. Gain access to the area affected by the installation and perform the cockpit floor provision P/N 3G5311A24711 as described in the following procedure:
  - 2.1 Perform the co-pilot footboard retro modification P/N 3G5306P36211 as described in the following procedure:
    - 2.1.1 With reference to Figure 2 View A, temporarily position the co-pilot footboard protection P/N 3G9580V05651 on the footboard LH assy P/N 3G5331A01531 in its installation position.
    - 2.1.2 Countermark the position of the n°4 holes to drill on the on the footboard LH assy.

- 2.1.3 With reference to Figure 2 Section B-B, drill n°4 holes Ø19.5 thru upper skin and core in the previously countermarked positions and install n°4 inserts P/N SL10414-4-4A by means of adhesive EA934NA.
- 2.1.4 Remark the co-pilot footboard into P/N 3G5306P36211.
- 2.2 Perform the pilot footboard retro modification P/N 3G5306P36111 as described in the following procedure:
  - 2.2.1 With reference to Figure 3 View C, temporarily position the pilot footboard protection P/N 3G9580V05551 on the footboard RH assy P/N 3G5331A01431 in its installation position.
  - 2.2.2 Countermark the position of the n°4 holes to drill on the on the footboard RH assy.
  - 2.2.3 With reference to Figure 3 Section D-D, drill n°4 holes Ø19.5 thru upper skin and core in the previously countermarked positions and install n°4 inserts P/N SL10414-4-4A by means of adhesive EA934NA.
  - 2.2.4 Remark the co-pilot footboard into P/N 3G5306P36111.
- 2.3 Perform the co-pilot floor structural provision P/N 3G5310P65711 as described in the following procedure:
  - 2.3.1 With reference to Figure 4 View E, temporarily position the co-pilot lateral floor protection P/N 3G9580V05251 on the co-pilot floor panel in its installation position.
  - 2.3.2 Countermark the position of the n°4 holes to drill on the co-pilot floor panel.
  - 2.3.3 With reference to Figure 4 Section F-F, drill n°3 holes Ø19.05÷19.2 thru upper skin and core in the previously countermarked positions and install n°3 inserts P/N NAS1935A4 by means of adhesive EA934NA.
- 2.4 Perform the pilot floor structural provision P/N 3G5310P65511 as described in the following procedure:
  - 2.4.1 With reference to Figure 5 View G, temporarily position the pilot lateral floor protection P/N 3G9580V05151 on the pilot floor panel in its installation position.
  - 2.4.2 Countermark the position of the n°4 holes to drill on the pilot floor panel.
  - 2.4.3 With reference to Figure 4 Section H-H, drill n°4 holes Ø19.05÷19.2 thru upper skin and core in the previously countermarked positions and install n°4 inserts P/N NAS1935A4 by means of adhesive EA934NA.
- 2.5 With reference to Figure 6 View L, temporarily position the co-pilot under seat protection P/N 3G9580V05451 on the co-pilot floor panel in its installation position.
- 2.6 Countermark the position of the n°4 holes to drill on the co-pilot floor panel.

- 2.7 With reference to Figure 6 Section M-M, drill n°4 holes  $\varnothing 19.05 \pm 19.2$  thru upper skin and core in the previously countermarked positions and install n°4 inserts P/N NAS1935A4 by means of adhesive EA934NA.
- 2.8 With reference to Figure 7 View N, temporarily position the pilot under seat protection P/N 3G9580V05351 on the pilot floor panel coordinating the installation position with the indicated insert.
- 2.9 Countermark the position of the n°3 holes to drill on the pilot floor panel.
- 2.10 With reference to Figure 7 Section P-P, drill n°3 holes  $\varnothing 19.05 \pm 19.2$  thru upper skin and core in the previously countermarked positions and install n°3 inserts P/N NAS1935A4 by means of adhesive EA934NA.
3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
4. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the "Service - Technical Bulletin Application".

As an alternative, send the attached compliance form to the following mail box:

[engineering.support.lhd@leonardo.com](mailto:engineering.support.lhd@leonardo.com)

and (for North, Central and South America) also to:

[AWPC.Engineering.Support@leonardocompany.us](mailto:AWPC.Engineering.Support@leonardocompany.us)

## **PART II**

1. In accordance with 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. Gain access to the area affected by the installation and perform the cockpit floor ballistic protection installation P/N 3G9580A03211 as described in the following procedure:
  - 2.1 With reference to Figure 8 LH isoview, install the co-pilot footboard protection P/N 3G9580V05651 by means of N°4 screws P/N AN525-416R18.
  - 2.2 With reference to Figure 8 LH isoview, install the co-pilot lateral floor protection P/N 3G9580V05251 by means of N°4 screws P/N AN525-416R18.
  - 2.3 With reference to Figure 8 LH isoview, install the co-pilot under seat protection P/N 3G9580V05451 by means of N°4 screws P/N AN525-416R18.
  - 2.4 With reference to Figure 8 RH isoview, install the pilot footboard protection P/N 3G9580V05551 by means of N°4 screws P/N AN525-416R18.
  - 2.5 With reference to Figure 8 RH isoview, install the pilot lateral floor protection P/N 3G9580V05151 by means of N°4 screws P/N AN525-416R18.
  - 2.6 With reference to Figure 8 RH isoview, remove existing screw on the floor and install the pilot under seat protection P/N 3G9580V05351 by means of N°4 screws P/N AN525-416R18.
3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
4. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the "Service - Technical Bulletin Application".

As an alternative, send the attached compliance form to the following mail box:

[engineering.support.lhd@leonardo.com](mailto:engineering.support.lhd@leonardo.com)

and (for North, Central and South America) also to:

[AWPC.Engineering.Support@leonardocompany.us](mailto:AWPC.Engineering.Support@leonardocompany.us)

### **PART III**

1. In accordance with 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. Gain access to the area affected by the installation and perform the Ballistic protection cockpit door provision P/N 3G5311A25111 as described in the following procedure:
  - 2.1 Perform the door provision for ballistic protection P/N 3G5311A27811 as described in the following procedure:
    - 2.1.1 With reference to Figure 11, remove the indicated screws and temporarily install ballistic plate P/N 3G9580V03651, a spacer P/N 3G9580A03551 and a spacer P/N 3G9580A03751 by means of a screw P/N AN525-10R20 and a screw P/N AN525-10R20.
    - 2.1.2 With reference to Figure 11, countermark the indicated hole position on existing door cover assy LH P/N 3G5211A05952.
    - 2.1.3 With reference to Figure 11, remove the door cover assy LH P/N 3G5211A05952; store the hardware for later re-use.
    - 2.1.4 With reference to Figure 11, drill hole holes  $\varnothing 6.35 \pm 6.48$  thru door cover assy LH P/N 3G5211A05952 in the previously countermarked position.
    - 2.1.5 With reference to Figure 11, install a nutplate P/N A407A3C2 by means of adhesive EA9309.3NA.
    - 2.1.6 Re-install the cover assy on the door by means of the existing hardware.
    - 2.1.7 Perform the steps 2.1.1 thru 2.1.6 for the door cover assy RH P/N 3G5211A06052.
  - 2.2 Perform co-pilot cockpit structural variant P/N 3G5310A68611 as described in the following procedure:
    - 2.2.1 With reference to Figure 12 Detail A, remove the existing gaiter assy P/N 3G6700A02531 and collar P/N 3G6700A03431 from the cockpit. Store the hardware for later re-use.
    - 2.2.2 With reference to Figure 12 Detail A, remove the indicated LH cover P/N 3G5320A09233 from the cockpit.
    - 2.2.3 With reference to Figure 11 View A STEP 1 drill hole  $\varnothing 19.5$  thru co-pilot lower support P/N 3G5320A13652 in the indicated position.
    - 2.2.4 With reference to Figure 11 STEP 2, install a special bushing P/N 3G9580A02351 by means of n°4 rivets P/N A297A04TW03.
    - 2.2.5 With reference to Figure 11 STEP 3, install a junction assy P/N 3G9580A02231 by means of a special washer P/N 3G9580A02451, a washer P/N NAS1149D0632K and a nut P/N MS21225-6.

- 2.2.6 With reference to Figure 11 View A STEP 3 and STEP 4, rotate the junction assy as shown then secure the nut by means of cotter pin P/N MS24665-174.
- 2.2.7 With reference to Figure 11 View A STEP 3 and STEP 4, drill n°4 holes Ø4.8 in the indicated positions, coordinating with the holes on the removed cover P/N 3G5320A09233 and holes on cockpit structure.
- 2.2.8 With reference to Figure 12 Detail C, install n°2 nutplates P/N MS21069L3 in the indicated positions by means of n°4 rivets P/N MS20426AD3.
- 2.2.9 With reference to Figure 12 Detail A drill n°2 holes Ø4.8 thru co-pilot lower support P/N 3G5320A13652, coordinating with hole positions on structure.
- 2.2.10 With reference to Figure 12 Detail, temporarily install the co-pilot lower support P/N 3G5320A13652 by means of n°7 screws P/N MS27039-1-07 and n°7 washers P/N as1149D0332K.
- 2.2.11 With reference to Figure 13 Detail EA, temporarily install the door ballistic protection assy LH P/N 3G9580A03331 by means of fast pin P/N NAS1336S2S11.
- 2.2.12 With reference to Figure 16 View H, remove the pilot door cover LH from the cockpit.
- 2.2.13 With reference to Figure 17 View M, remove the upper cover STA3120 from the cockpit.
- 2.2.14 With reference to Figure 14 Detail EB, temporarily position the upper support LH P/N 3G5330A28731 and relevant shim P/N 3G9580A02551 in the final installation position; countermark the n°2 hole positions on canopy structure.
- 2.2.15 Remove the door ballistic protection assy LH P/N 3G9580A03331 and relevant fast pin P/N NAS1336S2S11.
- 2.2.16 With reference to Figure 14 Detail F and Section FA-FA, drill n° 2 holes Ø9.50÷9.60 thru external skin and core of canopy and install a plate P/N 3G5330A28451 by means of n°2 inserts P/N 999-5000-30-118 and washers P/N 999-0065-05-65; use adhesive EA934NA for inserts installation.
- 2.2.17 Seal the plate and inserts with sealant Proseal 890.
- 2.2.18 With reference to Figure 14 Detail EB, temporarily install the upper support LH P/N 3G5330A28731 and relevant shim P/N 3G9580A02551

by means of n°2 bolts P/N AN3-5A and n°2 washers P/N NAS1149D0332K.

- 2.3 Perform pilot cockpit structural variant P/N 3G5310A68511 as described in the following procedure:
  - 2.3.1 With reference to Figure 12 Detail A, remove the indicated LH cover P/N 3G5320A09133 from the cockpit.
  - 2.3.2 With reference to Figure 11 View A STEP 1 drill hole Ø19.5 thru pilot lower support P/N 3G5320A13672 in the indicated position.
  - 2.3.3 With reference to Figure 11 STEP 2, install a special bushing P/N 3G9580A02351 by means of n°4 rivets P/N A297A04TW03.
  - 2.3.4 With reference to Figure 11 STEP 3, install a junction assy P/N 3G9580A02231 by means of a special washer P/N 3G9580A02451, a washer P/N NAS1149D0632K and a nut P/N MS21225-6.
  - 2.3.5 With reference to Figure 11 View A STEP 3 and STEP 4, rotate the junction assy as shown then secure the nut by means of cotter pin P/N MS24665-174.
  - 2.3.6 With reference to Figure 11 View A STEP 3 and STEP 4, drill n°4 holes Ø4.8 in the indicated positions, coordinating with the holes on the removed cover P/N 3G5320A09233 and holes on cockpit structure.
  - 2.3.7 With reference to Figure 12 Detail D, install n°2 nutplates P/N MS21069L3 in the indicated positions by means of n°4 rivets P/N MS20426AD3.
  - 2.3.8 With reference to Figure 12 Detail B drill n°2 holes Ø4.8 thru pilot lower support P/N 3G5320A13752, coordinating with hole positions on structure.
  - 2.3.9 With reference to Figure 12 Detail, temporarily install the pilot lower support P/N 3G5320A13752 by means of n°7 screws P/N MS27039-1-07 and n°7 washers P/N as1149D0332K.
  - 2.3.10 With reference to Figure 13 Detail EA, temporarily install the door ballistic protection assy RH P/N 3G9580A03431 by means of fast pin P/N NAS1336S2S11.
  - 2.3.11 With reference to Figure 16 View H, remove the pilot door cover RH from the cockpit.
  - 2.3.12 With reference to Figure 17 View M, remove the upper cover STA3120 from the cockpit.
  - 2.3.13 With reference to Figure 14 Detail EB, temporarily position the upper support RH P/N 3G5330A28831 and relevant shim P/N 3G9580A02551



- in the final installation position; countermark the n°2 hole positions on canopy structure.
- 2.3.14 Remove the door ballistic protection assy RH P/N 3G9580A03431 and relevant fast pin P/N NAS1336S2S11.
  - 2.3.15 With reference to Figure 14 Detail F and Section FA-FA, drill n° 2 holes  $\varnothing 9.50 \div 9.60$  thru external skin and core of canopy and install a plate P/N 3G5330A28451 by means of n°2 inserts P/N 999-5000-30-118 and washers P/N 999-0065-05-65; use adhesive EA934NA for inserts installation.
  - 2.3.16 Seal the plate and inserts with sealant Proseal 890.
- 2.4 Perform the cockpit liner retromod P/N3G5320P01011 on LH side as described in the following procedure:
- 2.4.1 With reference to Figure 14 Detail EB, temporarily install the upper support LH P/N 3G5330A28731 and relevant shim P/N 3G9580A02551 by means of n°2 bolts P/N AN3-5A and n°2 washers P/N NAS1149D0332K.
  - 2.4.2 With reference to Figure 13 Detail EA, temporarily install the door ballistic protection assy LH P/N 3G9580A03331 by means of fast pin P/N NAS1336S2S11.
  - 2.4.3 With reference to Figure 15 Detail EC (STEP 6), temporarily install the lateral block P/N 3G9580A00451 on the support assy LH P/N 3G5330A28531 by means of n°2 bolts P/N AN3-10, n°4 washers P/N NAS1149D0332K and n°2 nut P/N MS21225-3.
  - 2.4.4 With reference to Figure 15 Detail EC (STEP 7), temporarily position the support assy LH P/N 3G5330A28531 in its installation position in the canopy assy (WL 1715.0).
  - 2.4.5 With reference to Figure 15 Detail G, ensure the door latch assy correctly engages the lateral block then countermark on the canopy the position of n°8 installation holes from the support assy LH P/N 3G5330A28531.
  - 2.4.6 Remove the door ballistic protection assy LH P/N 3G9580A03331 and relevant fast pin P/N NAS1336S2S11.
  - 2.4.7 With reference to Figure 15 Details GA and GB, drill n°8 holes  $\varnothing 4.52 \div 4.65$  thru the canopy.
  - 2.4.8 With reference to Figure 15 Details GA and GB, temporarily install the support assy LH P/N 3G5330A28531 by means of n°8 screws P/N NAS1802-08-9 and n°8 washers P/N NAS1149DN816K.

- 2.4.9 With reference to Figure 16 Detail EC (STEP 9), remove the lateral block P/N 3G9580A00451 and relevant hardware from the support assy LH P/N 3G5330A28531.

**NOTE**

Perform Steps 2.4.10 thru 2.4.22 only to rework liners already installed on the helicopter.

- 2.4.10 With reference to Figure 16 Detail EC (STEP 9), temporarily install the LH upper and lower covers P/N 3G5320A14251 and P/N 3G5320A14651 on the support assy LH P/N 3G5330A28531.
- 2.4.11 With reference to Figure 16 View H, perform indicated cut-out thru the pilot door cover LH; coordinate the cut-out position with the installed support assy LH P/N 3G5330A28531.
- 2.4.12 With reference to Figure 16 View L and Detail J, drill n°2 holes Ø5.0 thru pilot door cover LH in the indicated position coordinating with the holes on pilot cover LH P/N 3G5320A28531.
- 2.4.13 With reference to Figure 16 View L, bond n°2 nutplates P/N A407A3C2P on pilot door cover LH by means of EA9309.3NA adhesive.
- 2.4.14 With reference to Figure 16 View K, drill n°4 holes Ø4.52÷4.65 on pilot door cover LH coordinating with the holes on canopy.
- 2.4.15 With reference to Figure 17 Views M and N, perform the indicated cut-out on the cover STA 3120.
- 2.4.16 With reference to Figure 17 Detail NA, drill an hole Ø5.0 thru cover STA 3120 and bond a nutplate P/N A407A3C2P by means of EA9309.3NA adhesive.
- 2.4.17 With reference to Figure 17 View M, perform the indicated cut-out on the existing upper pilot cover.
- 2.4.18 With reference to Figure 17 Detail MA, drill an hole Ø5.0 thru upper pilot cover and bond a nutplate P/N A407A3C2P by means of EA9309.3NA adhesive.
- 2.4.19 With reference to Figure 16 View H, re-install the pilot door cover RH in the cockpit.
- 2.4.20 With reference to Figure 17 View M, re-install the upper cover STA3120 in the cockpit.

### NOTE

Perform the following steps 2.4.21 thru 2.4.28 only if Part IV of this Service Bulletin is not intended to be embodied immediately after Part III.

- 2.4.21 With reference to Figure 14 Detail EB, remove the upper support LH P/N 3G5330A28731, the shim P/N 3G9580A02551, n°2 bolts P/N AN3-5A and n°2 washers P/N NAS1149D0332K temporarily installed.
  - 2.4.22 With reference to Figure 16 Detail EC (STEP 9), remove the LH upper and lower covers P/N 3G5320A14251 and P/N 3G5320A14651 from the support assy LH P/N 3G5330A28531.
  - 2.4.23 With reference to Figure 15 Details GA and GB, remove the support assy LH P/N 3G5330A28531, n°8 screws P/N NAS1802-08-9 and n°8 washers P/N NAS1149DN816K temporarily installed.
  - 2.4.24 With reference to Figure 16 Detail J, install the pilot cover LH P/N 3G5330A13851 by means of n°2 screws P/N AN525-10R7.
  - 2.4.25 With reference to Figure 17 Detail P, install the cover LH P/N 3G5330A14053 by means of n°2 screws P/N AN525-10R7.
  - 2.4.26 With reference to Figure 12 Detail A, remove the existing gaiter assy P/N 3G6700A02531 and collar P/N 3G6700A03431 from the cockpit. Store the hardware for later re-use.
  - 2.4.27 With reference to Figure 11 View A STEP 1, remove co-pilot lower support P/N 3G5320A13652 temporarily installed.
  - 2.4.28 With reference to Figure 12 Detail A, re-install the LH cover P/N 3G5320A09233 by means of existing hardware.
- 2.5 Repeat the step 2.4 to perform the cockpit liner retromod P/N3G5320P01011 on RH side.
- 3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
  - 4. Return the helicopter to flight configuration and record for compliance with Part III of this Service Bulletin on the helicopter logbook.
  - 5. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the "Service - Technical Bulletin Application".

As an alternative, send the attached compliance form to the following mail box:

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## **PART IV**

1. In accordance with 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. Perform the cockpit ballistic protection fixed parts installation P/N 3G9580A03111 as described in the following procedure:
  - 2.1 With reference to Figure 12 Detail A, remove the existing gaiter assy P/N 3G6700A02531 and collar P/N 3G6700A03431 from the cockpit.
  - 2.2 With reference to Figure 12 Detail A, remove the indicated LH cover P/N 3G5320A09233 from the cockpit.
  - 2.3 With reference to Figure 12 Detail A, install the co-pilot lower support P/N 3G5320A13652 by means of n°7 screws P/N MS27039-1-07 and n°7 washers P/N as1149D0332K.
  - 2.4 With reference to Figure 12 Detail A, install the new gaiter assy P/N 3G6700A04731 and collar P/N 3G6700A04631 by means of existing hardware.
  - 2.5 With reference to Figure 14 Detail EB, remove the cover LH P/N 3G5330A14053 and install the upper support LH P/N 3G5330A28731 and relevant shim P/N 3G9580A02551 by means of n°2 bolts P/N AN3-5A and n°2 washers P/N NAS1149D0332K.
  - 2.6 With reference to Figure 15 Details GA and GB, remove the pilot cover LH P/N 3G5330A13851 and install the support assy LH P/N 3G5330A28531 by means of n°8 screws P/N NAS1802-08-9 and n°8 washers P/N NAS1149DN816K.
  - 2.7 With reference to Figure 12 Detail B, remove the indicated RH cover P/N 3G5320A09133 from the cockpit.
  - 2.8 With reference to Figure 12 Detail B, install the pilot lower support P/N 3G5320A13652 by means of n°7 screws P/N MS27039-1-07 and n°7 washers P/N as1149D0332K.
  - 2.9 With reference to Figure 14 Detail EB, remove the cover RH P/N 3G5330A14153 and install the upper support RH P/N 3G5330A28831 and relevant shim P/N 3G9580A02551 by means of n°2 bolts P/N AN3-5A and n°2 washers P/N NAS1149D0332K.
  - 2.10 With reference to Figure 15 Details GA and GB, remove the pilot cover RH P/N 3G5330A13951 and install the support assy RH P/N 3G5330A28631 by means of n°8 screws P/N NAS1802-08-9 and n°8 washers P/N NAS1149DN816K.
3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).

4. Return the helicopter to flight configuration and record for compliance with Part IV of this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the "Service - Technical Bulletin Application".

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## **PART V**

1. In accordance with 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. Perform the cockpit ballistic protection removable parts installation P/N 3G9580A03011 on LH side as described in the following procedure:
  - 2.1 With reference to Figure 18 Detail A, install n°2 block assy P/N 3G9580A02631 in the indicated position by means of existing hardware.
  - 2.2 With reference to Figure 18 Detail BC, install the lateral block P/N 3G9580A00451 on the support assy LH P/N 3G5330A28531 by means of n°2 bolts P/N AN3-10, n°4 washers P/N NAS1149D0332K and n°2 nut P/N MS21225-3; lock the nuts by means of n°2 cotter pins P/N MS24665-132.
  - 2.3 With reference to Figure 18 Details BA and BD, install the ballistic protection assy LH P/N 3G9580A03331 by means of fast pin P/N NAS1336S2S11.
  - 2.4 With reference to Figure 18 Detail BD, if necessary to assure correct latch engagement into lateral block adjust the door rod-end height rotating the indicated nut. Lock the nut by means of lockwire.
  - 2.5 With reference to Figure 19 Detail CA, remove the indicated screws and install ballistic plate P/N 3G9580V03651, a spacer P/N 3G9580A03551, a spacer P/N 3G9580A03651 and a spacer P/N 3G9580A03751 by means of a screw P/N AN525-10R20, P/N AN525-10R140 and a screw P/N AN525-10R20.
3. Repeat step 2 again to perform the cockpit ballistic protection removable parts installation P/N 3G9580A03011 on RH side.
4. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
5. Return the helicopter to flight configuration and record for compliance with Part V of this Service Bulletin on the helicopter logbook.
6. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the “Service - Technical Bulletin Application”.

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## **PART VI**

1. In accordance with 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. Gain access to the area affected by the installation and perform the cabin floor provision P/N 3G5311A32011 as described in the following procedure:
  - 2.1 With reference to Figure 21 Detail A, temporarily position all the following ballistic protections on the floor:
    - 3G9580V01451
    - 3G9580V02651
    - 3G9580V05851
    - 3G9580V05951
    - 3G9580V06851
    - 3G9580V06951
    - 3G9580V07051
    - 3G9580V07151
  - 2.2 With reference to Figure 21 Detail A and View C, countermark the indicated n°16 hole positions on relevant floor panels.
  - 2.3 With reference to Figure 21 View C and Section B-B, drill n°16 holes Ø14.25±14.38 in the countermarked positions and install n°16 inserts P/N NAS1832-3-4 by means of EA934NA adhesive.
  - 2.4 Remove all the ballistic protection temporarily positioned from the cabin.
3. Perform the ballistic protection fixed parts installation P/N 3G9580A04711 as described in the following procedure:
  - 3.1 With reference to Figure 22 Detail B, replace the n°333 screws P/N MS27039-1-09 securing the floor panels with n°333 screws P/N AN525-10R9.
  - 3.2 With reference to Figure 22 Detail B, remove the indicated n°2 seat-tracks P/N 3G5330A21952 and relevant hardware; re-install the n°2 seat-tracks and relevant n°2 ballistic plates P/N 3G9580V03251 by means of n°34 screws P/N MS24694-S101.
  - 3.3 With reference to Figure 22 Detail B, remove the indicated n°4 seat-tracks P/N 3G5330A00451 and relevant hardware; re-install the n°4 seat-tracks and relevant n°4 ballistic plates P/N 3G9580V07651 by means of n°52 screws P/N MS24694-S101.
  - 3.4 With reference to Figure 22 Detail B, remove the indicated n°2 seat-tracks P/N 3G5330A00251 and relevant hardware; re-install the n°2 seat-tracks and

relevant n°4 ballistic plates P/N 3G9580V07551 by means of n°20 screws P/N MS24694-S101.

- 3.5 With reference to Figure 22 Detail B, replace the indicated n°8 screws with n°8 screw AN525-416R9.
4. Return the helicopter to flight configuration and record for compliance with Part VI of this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the "Service - Technical Bulletin Application".

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## **PART VII**

1. In accordance with 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. Perform the ballistic protection installation P/N 3G9580A04611 as described in the following procedure:
  - 2.1 With reference to Figure 24 Detail D, remove the RH doorstep assy P/N 3G2500A05031 from the helicopter.
  - 2.2 With reference to Figure 24 Detail D, remove the LH doorstep assy P/N 3G2500A05131 from the helicopter.
  - 2.3 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06951 by means of n°2 screws P/N AN525-10R16.
  - 2.4 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06851 by means of n°2 screws P/N AN525-10R16.
  - 2.5 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01451 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
  - 2.6 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V02651 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
  - 2.7 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V05951 by means of n°4 screws P/N AN525-10R16, n°2 screws P/N AN525-10R18 and n°2 screws P/N NAS1351C4H16.
  - 2.8 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V05851 by means of n°4 screws P/N AN525-10R16, n°2 screws P/N AN525-10R18 and n°2 screws P/N NAS1351C4H16.
  - 2.9 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V07151 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R12 and n°4 screws P/N AN525-10R11.
  - 2.10 With reference to Figure 23 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V07051 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R12 and n°4 screws

P/N AN525-10R11.

- 2.11 With reference to Figure 24 Detail D and section E-E, install the LH doorstep assy P/N 3G2500A06731 by means of n°3 screws P/N MS24694-C64 and n°2 existing screws P/N MS24694-C50.
- 2.12 With reference to Figure 24 Detail D and section E-E, install the FWD RH doorstep assy P/N 3G2500A06631 by means of n°6 screws P/N MS24694-C64 and n°5 existing screws P/N MS24694-C50.
3. Return the helicopter to flight configuration and record for compliance with Part VII of this Service Bulletin on the helicopter logbook.
4. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the “Service - Technical Bulletin Application”.

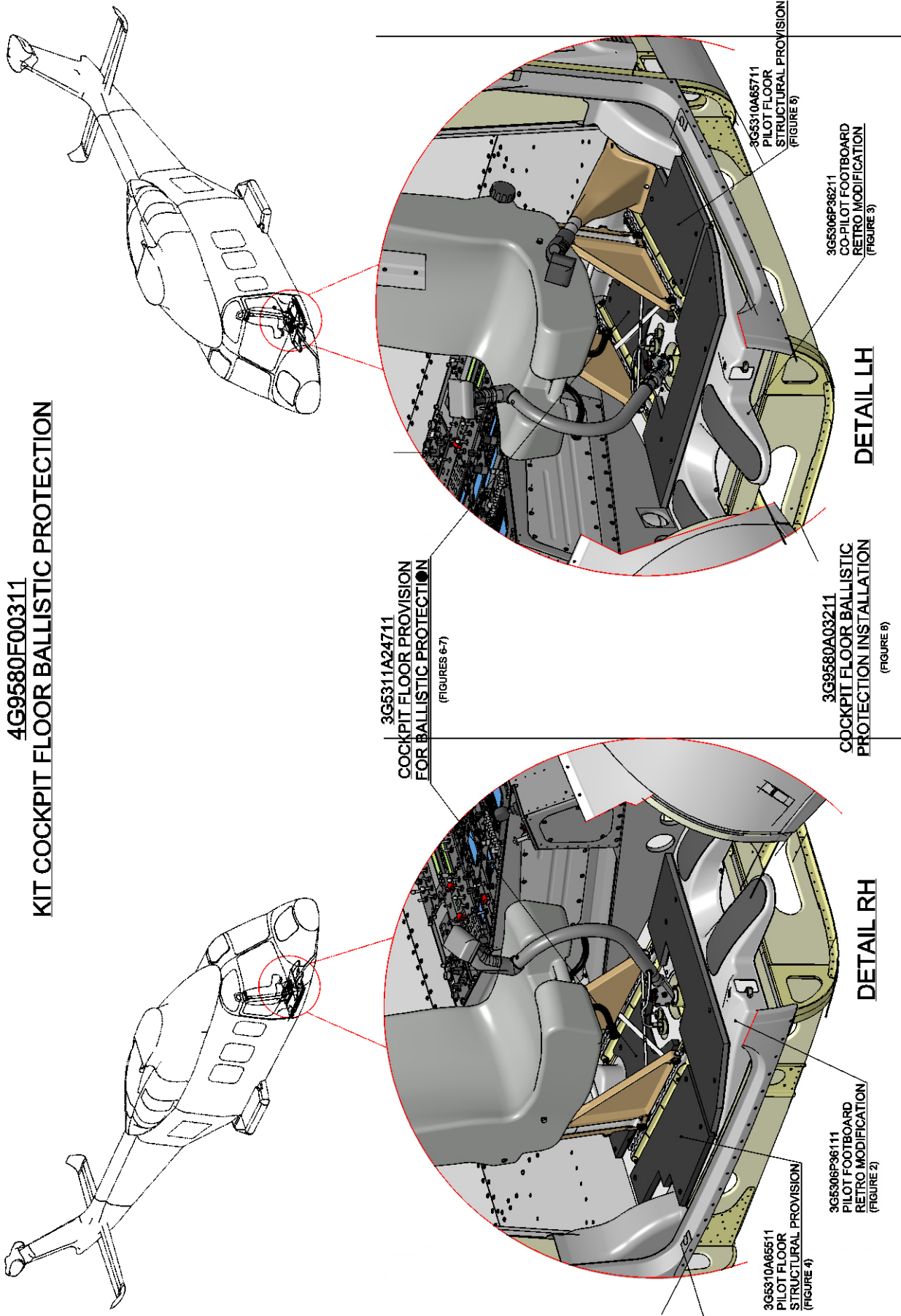
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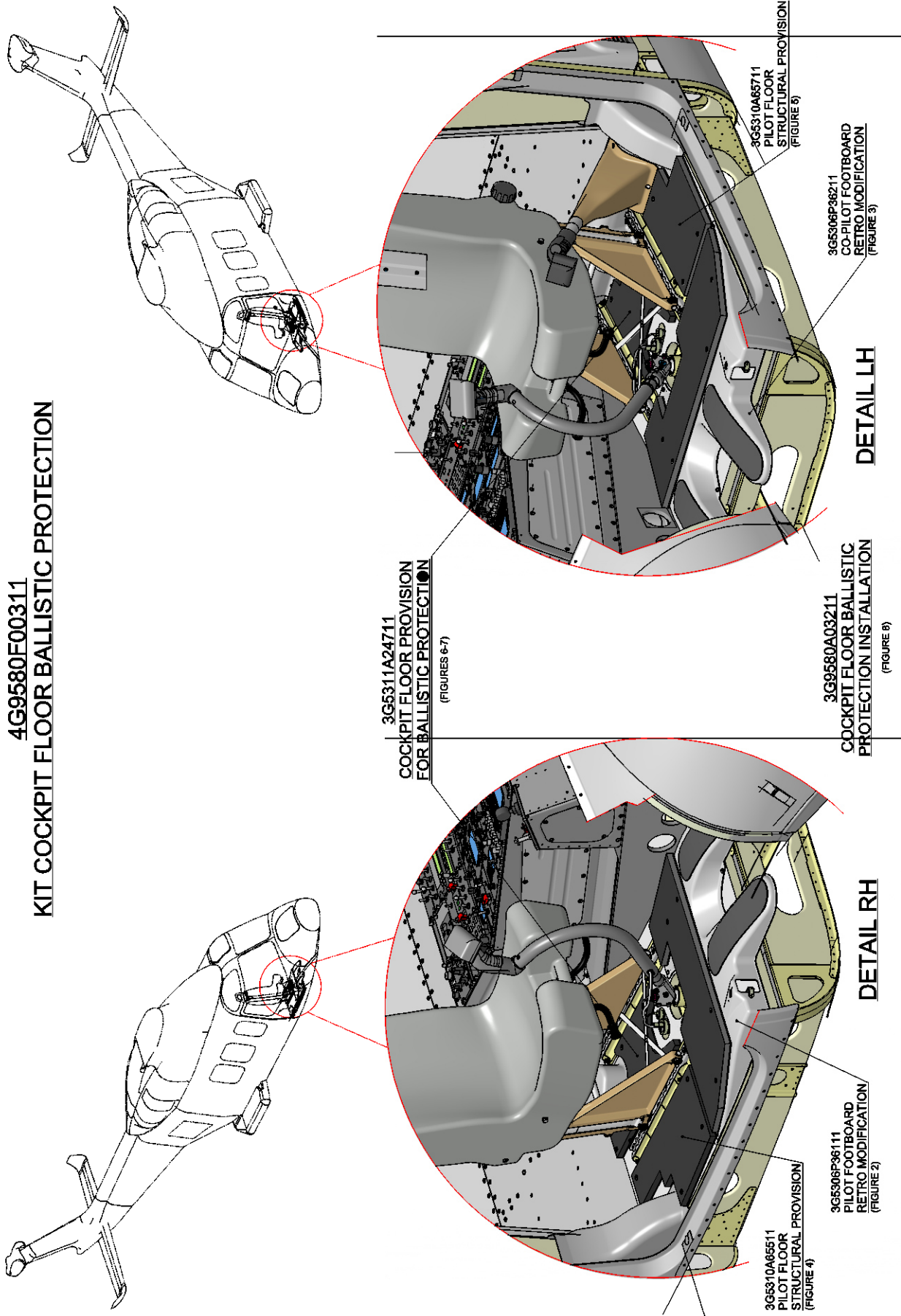
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**4G9580E00311**  
**KIT COCKPIT FLOOR BALLISTIC PROTECTION**



**Figure 1**

**4G9580F00311**  
**KIT COCKPIT FLOOR BALLISTIC PROTECTION**



**Figure 2**

S.B. N°139-522 OPTIONAL  
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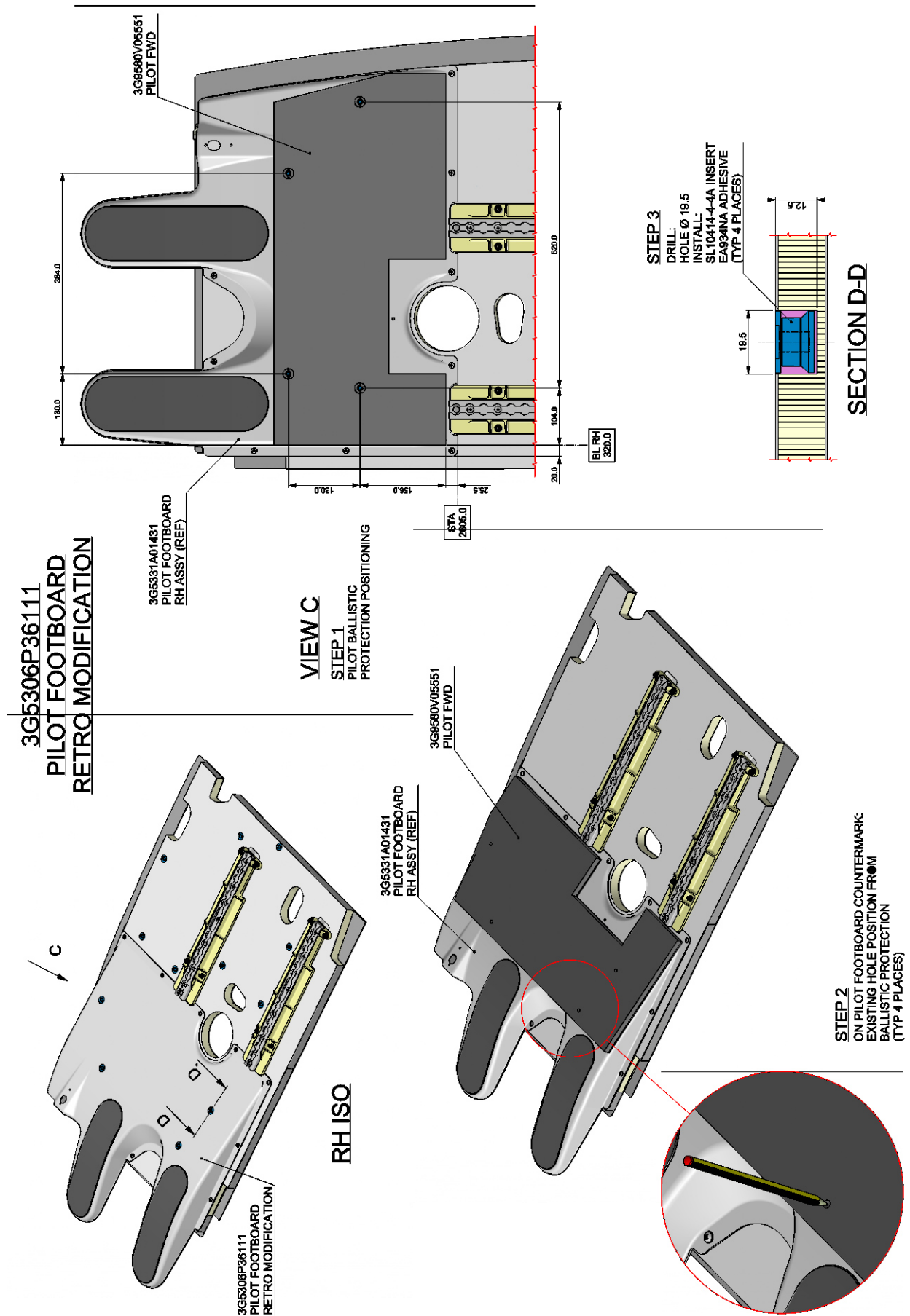
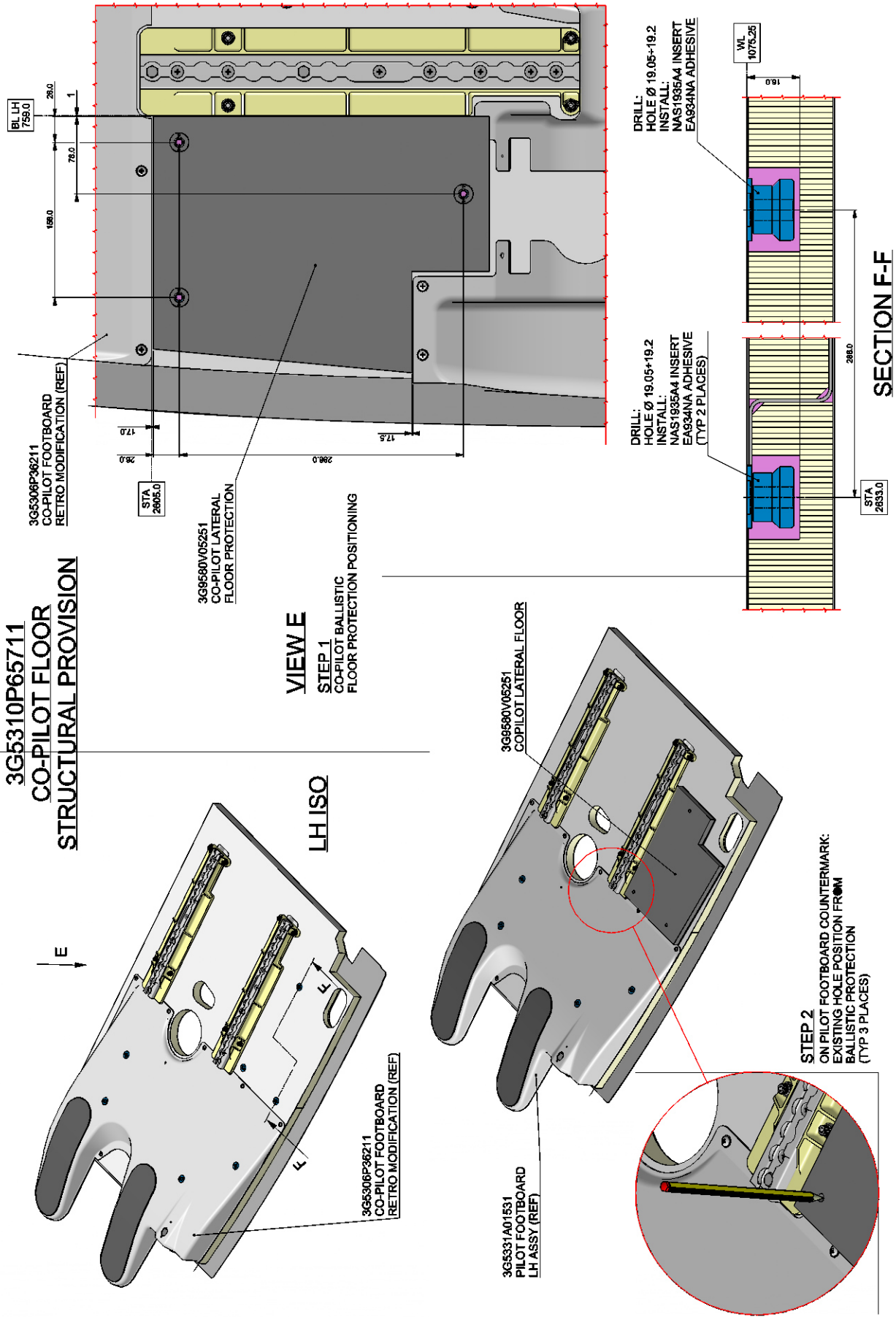


Figure 3

**3G5310P65711  
CO-PILOT FLOOR  
STRUCTURAL PROVISION**



**Figure 4**

S.B. N°139-522 OPTIONAL  
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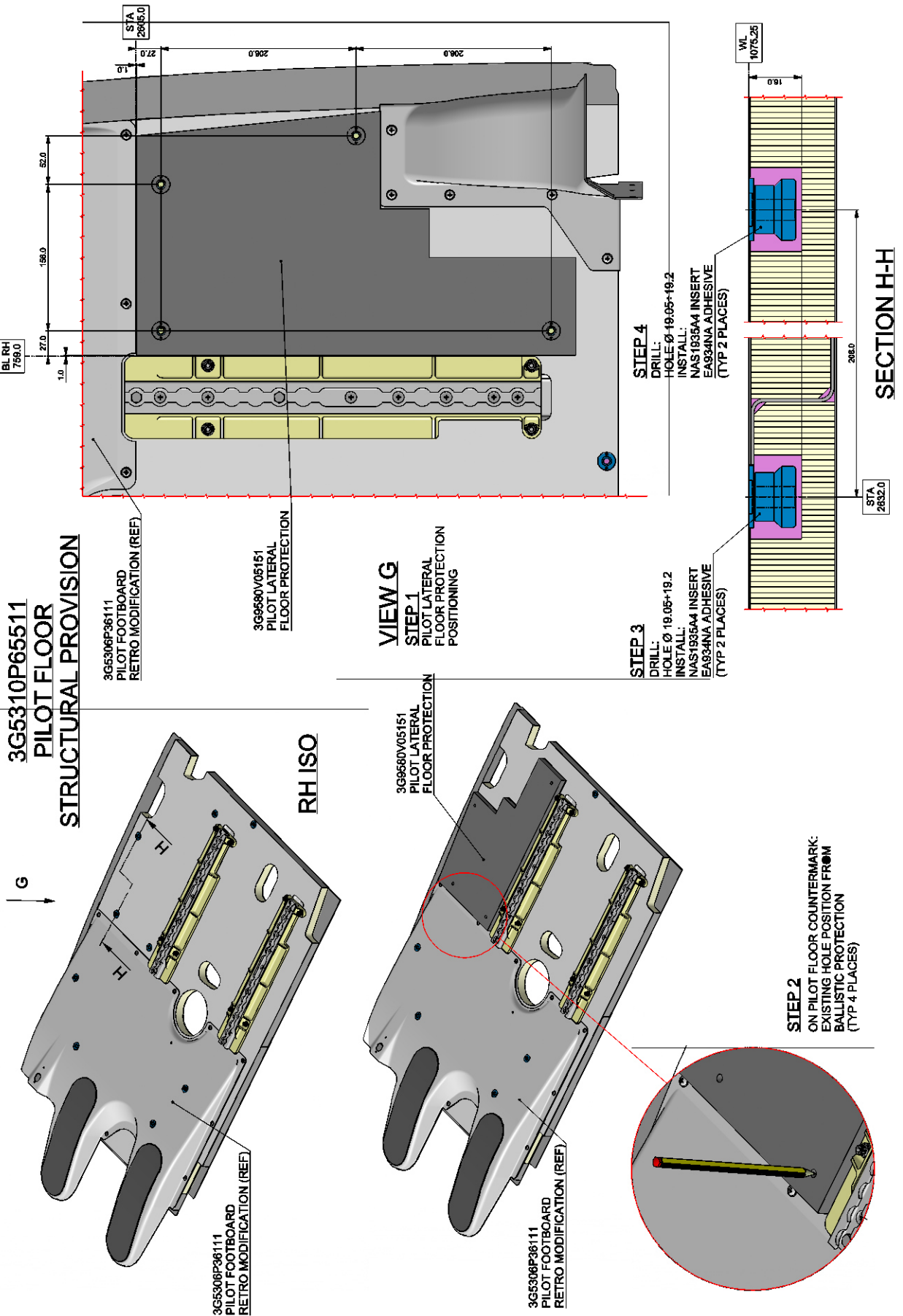


Figure 5

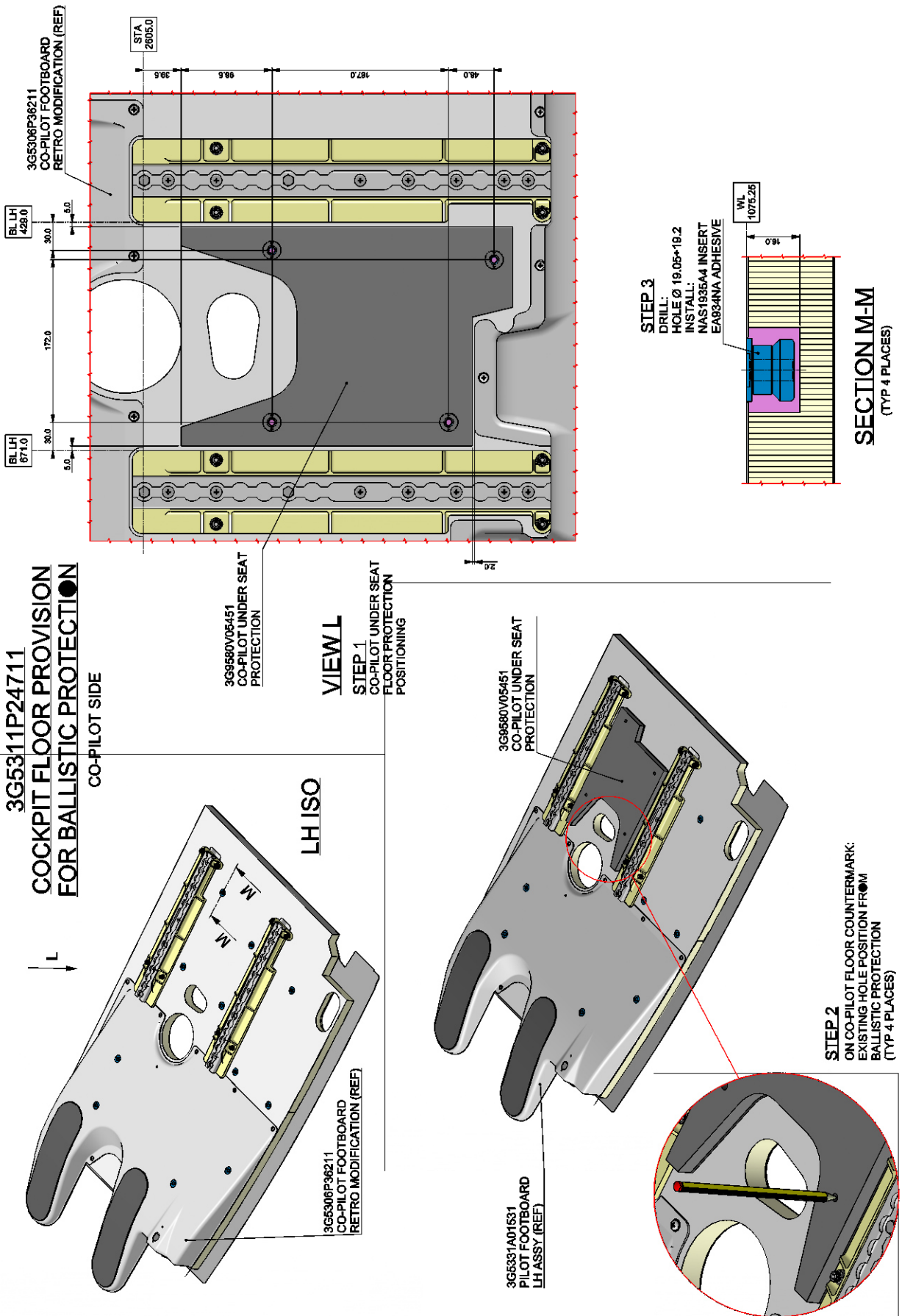


Figure 6

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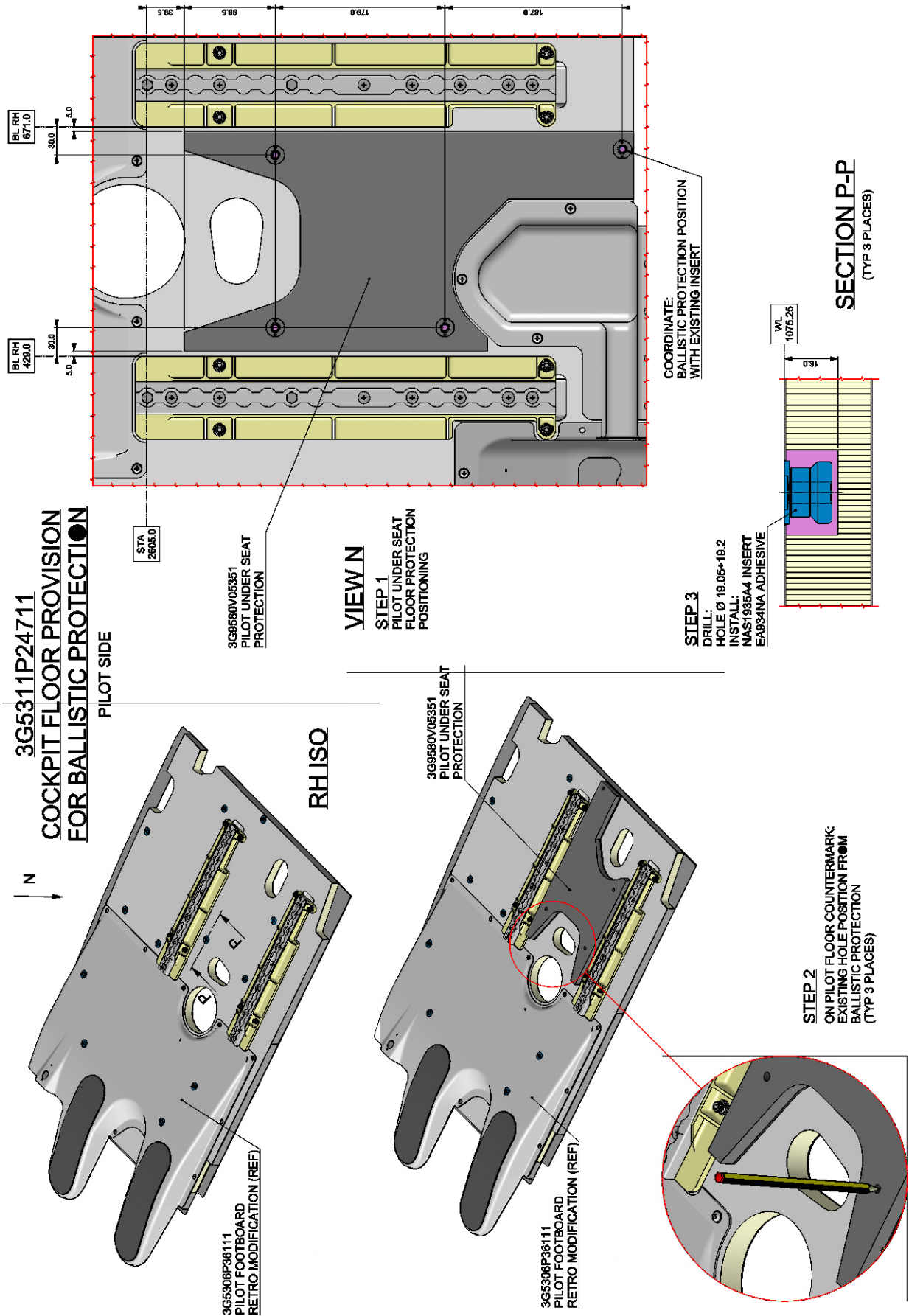
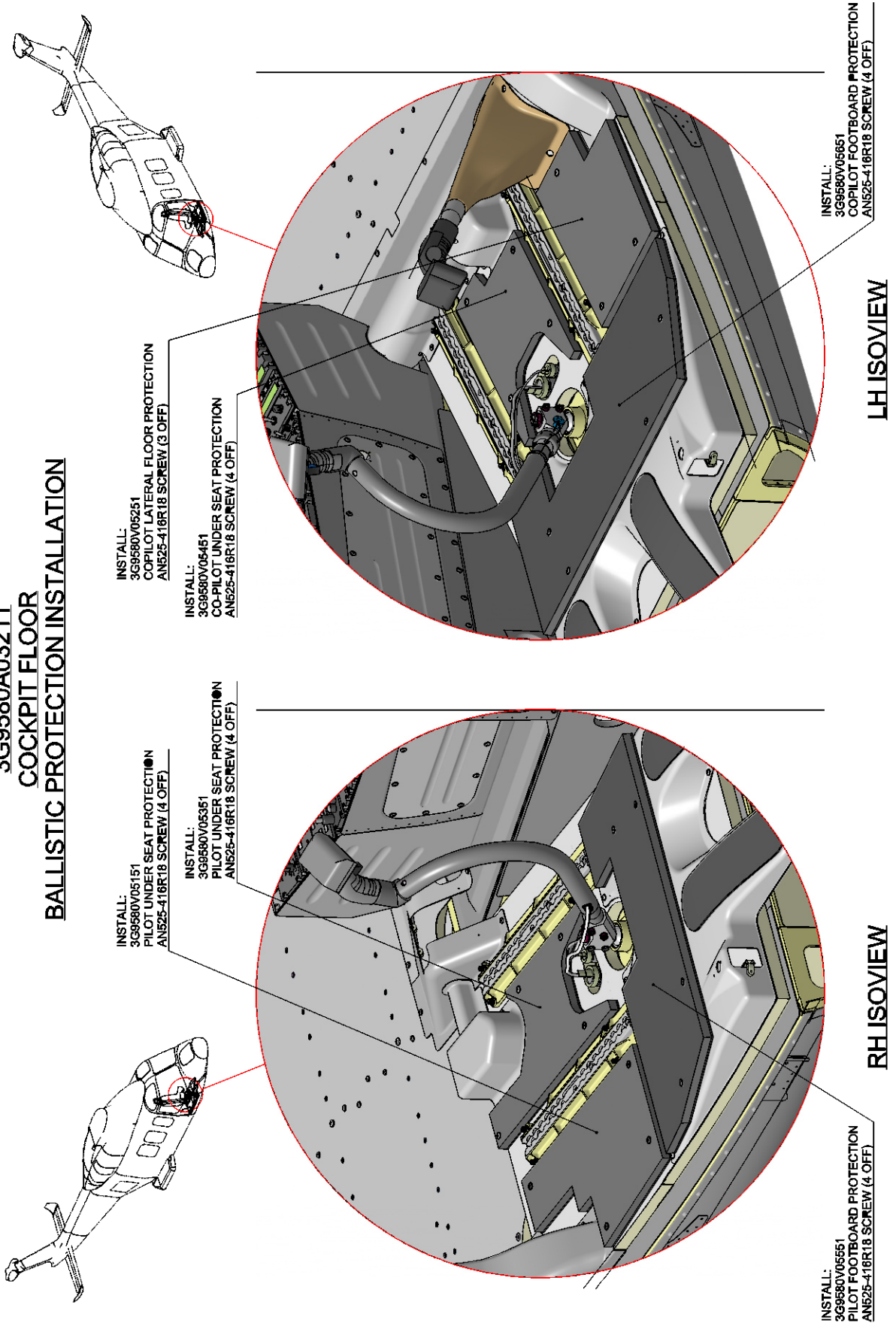


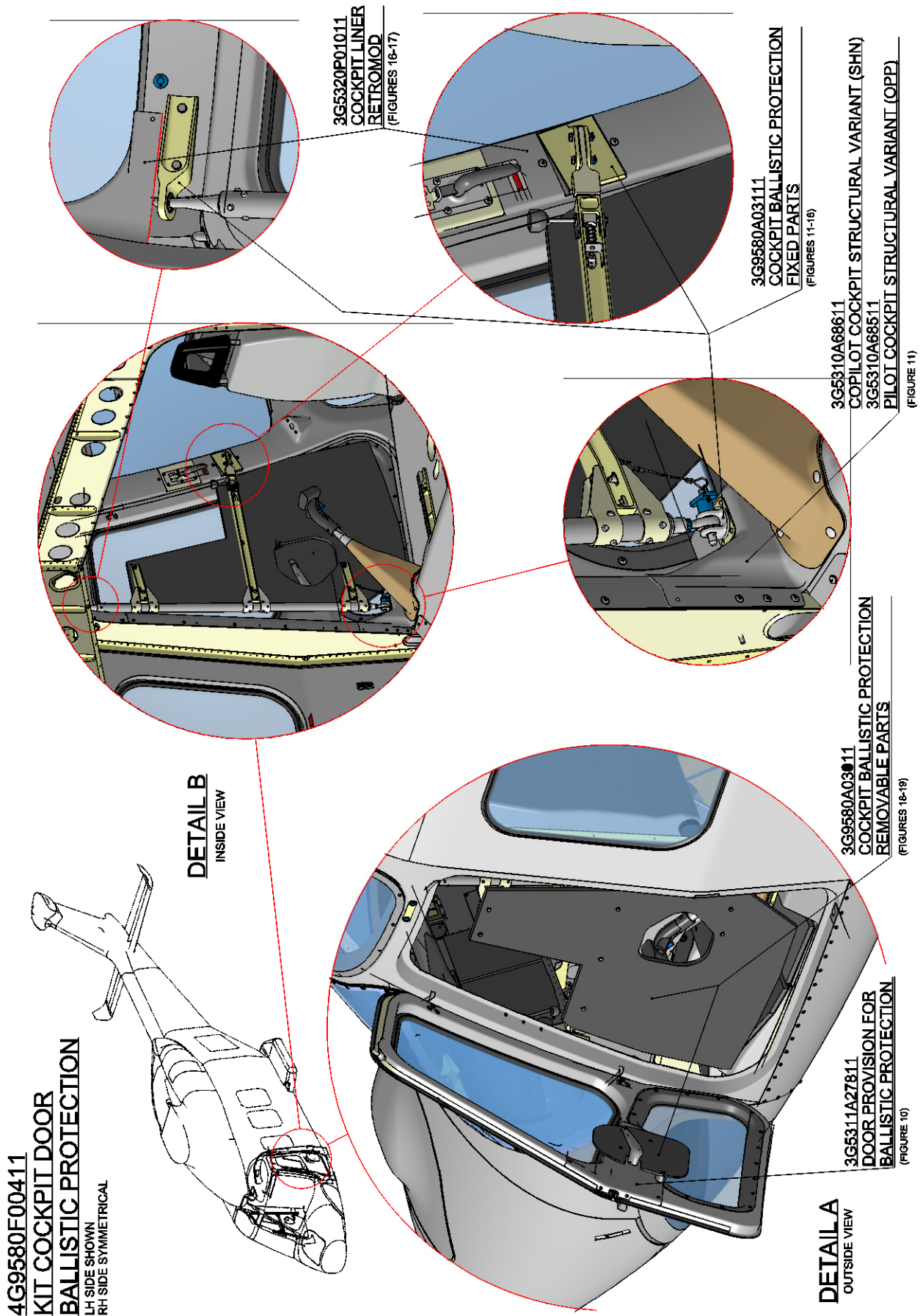
Figure 7

**3G9580A03211  
COCKPIT FLOOR  
BALLISTIC PROTECTION INSTALLATION**



**Figure 8**

S.B. N°139-522 OPTIONAL  
DATE: September 30, 2024  
REVISION: /

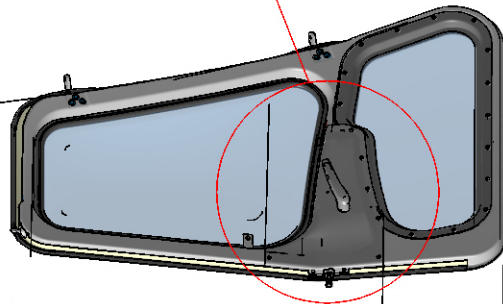


**Figure 9**

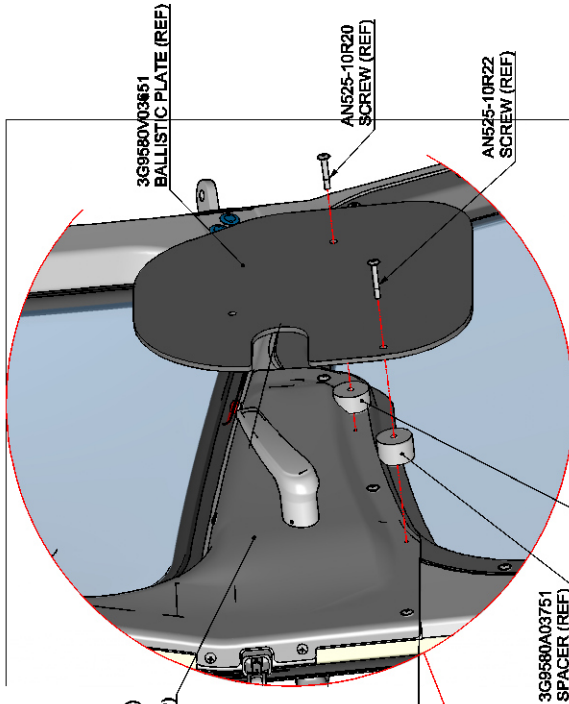
**3G5311A27811**  
**DOOR PROVISION FOR**  
**BALLISTIC PROTECTION**

LH SIDE SHOWN  
RH SIDE SYMMETRICAL

3G5211A05952  
COVER LH (SHN)  
3G5211A06052  
COVER RH (OPP)



**LH DOOR ASSY**



3G9580A03651  
BALLISTIC PLATE (REF)

AN525-10R20  
SCREW (REF)

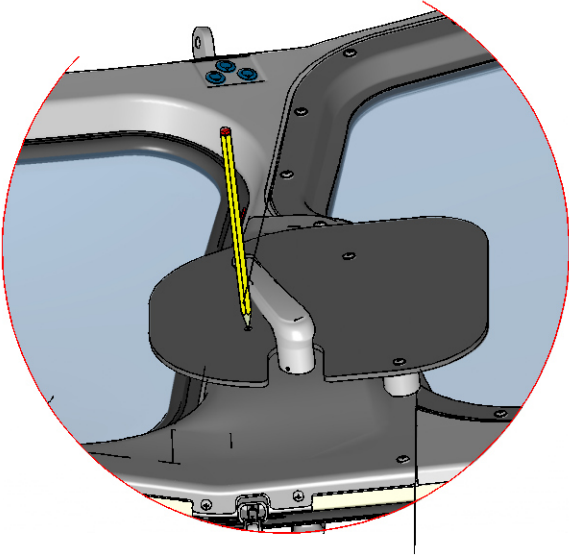
AN525-10R22  
SCREW (REF)

3G9580A03751  
SPACER (REF)

3G9580A03551  
SPACER (REF)

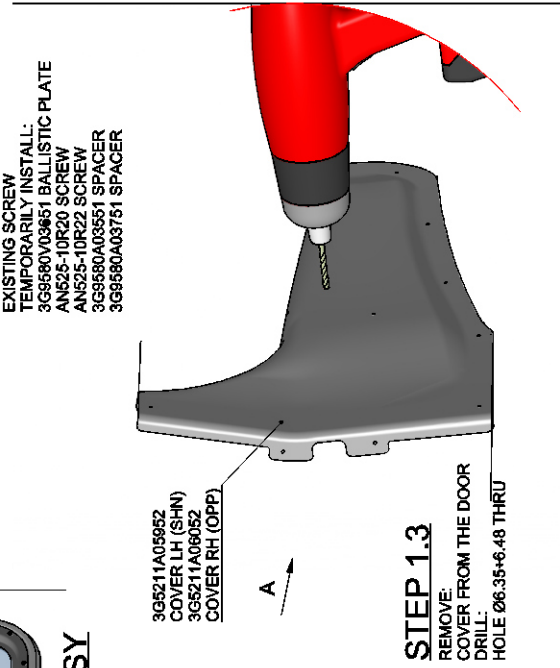
**STEP 1.1**

REMOVE:  
EXISTING SCREW  
TEMPORARILY INSTALL:  
3G9580A03651 BALLISTIC PLATE  
AN525-10R20 SCREW  
AN525-10R22 SCREW  
3G9580A03551 SPACER  
3G9580A03751 SPACER



**STEP 1.2**

COUNTERMARK:  
HOLE POSITION  
ON COVER ASSY  
REMOVE:  
BALLISTIC PLATE AND  
RELEVANT HARDWARE  
PREVIOUSLY INSTALLED

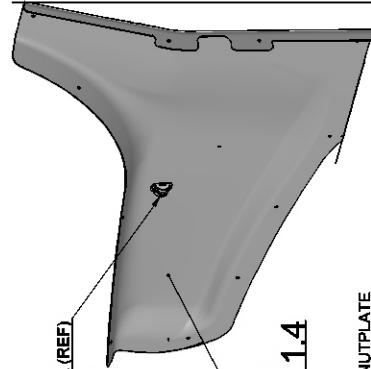


3G5211A05952  
COVER LH (SHN)  
3G5211A06052  
COVER RH (OPP)

A

**STEP 1.3**

REMOVE:  
COVER FROM THE DOOR  
DRILL:  
HOLE Ø6.35±0.48 THRU



A407A3C2  
NUTPLATE (REF)

3G5211A05952  
COVER LH (SHN)  
3G5211A06052  
COVER RH (OPP)

**STEP 1.4**

INSTALL:  
A407A3C2 NUTPLATE  
USE:  
EA9309-3NA ADHESIVE

Figure 10

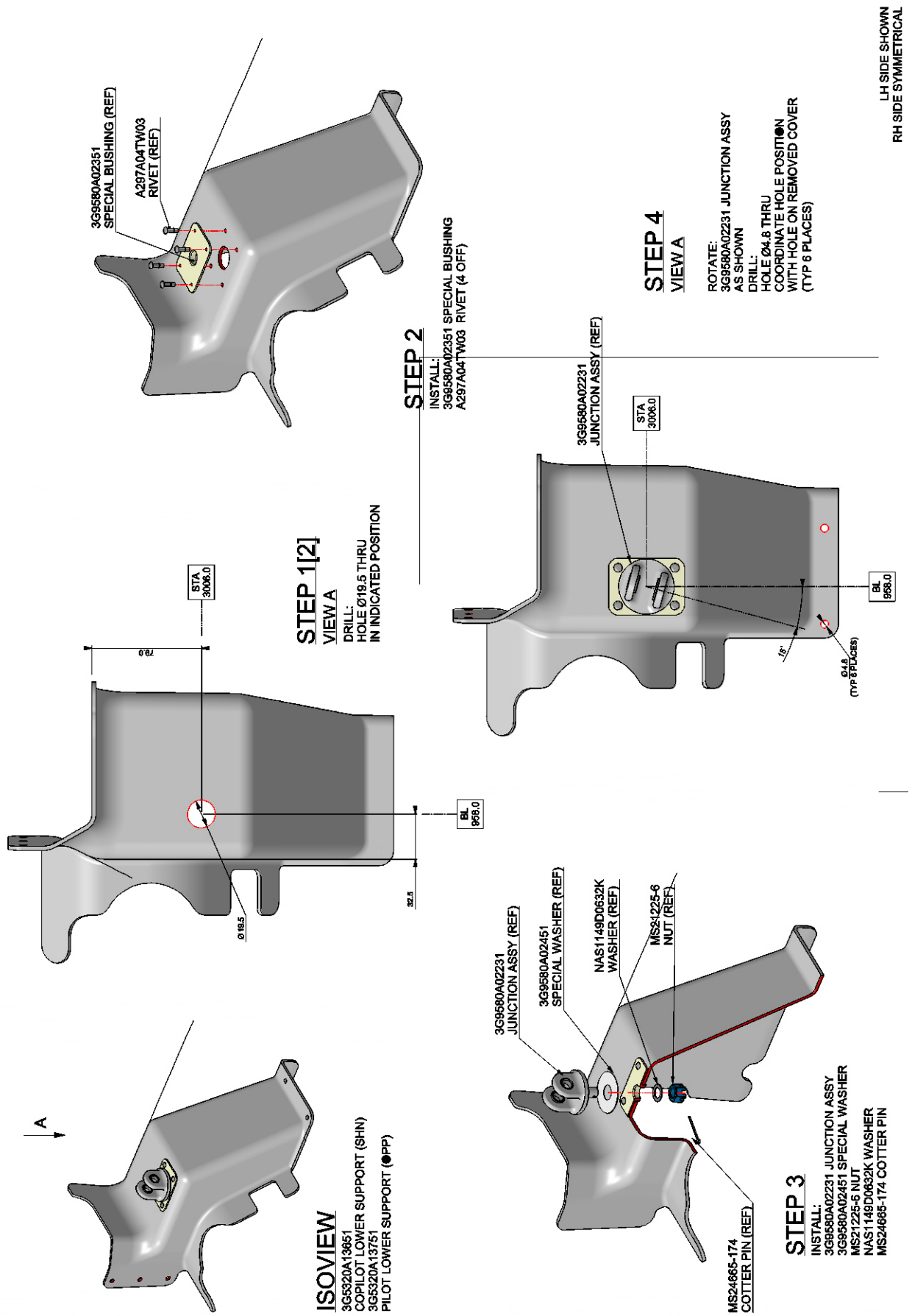


Figure 11

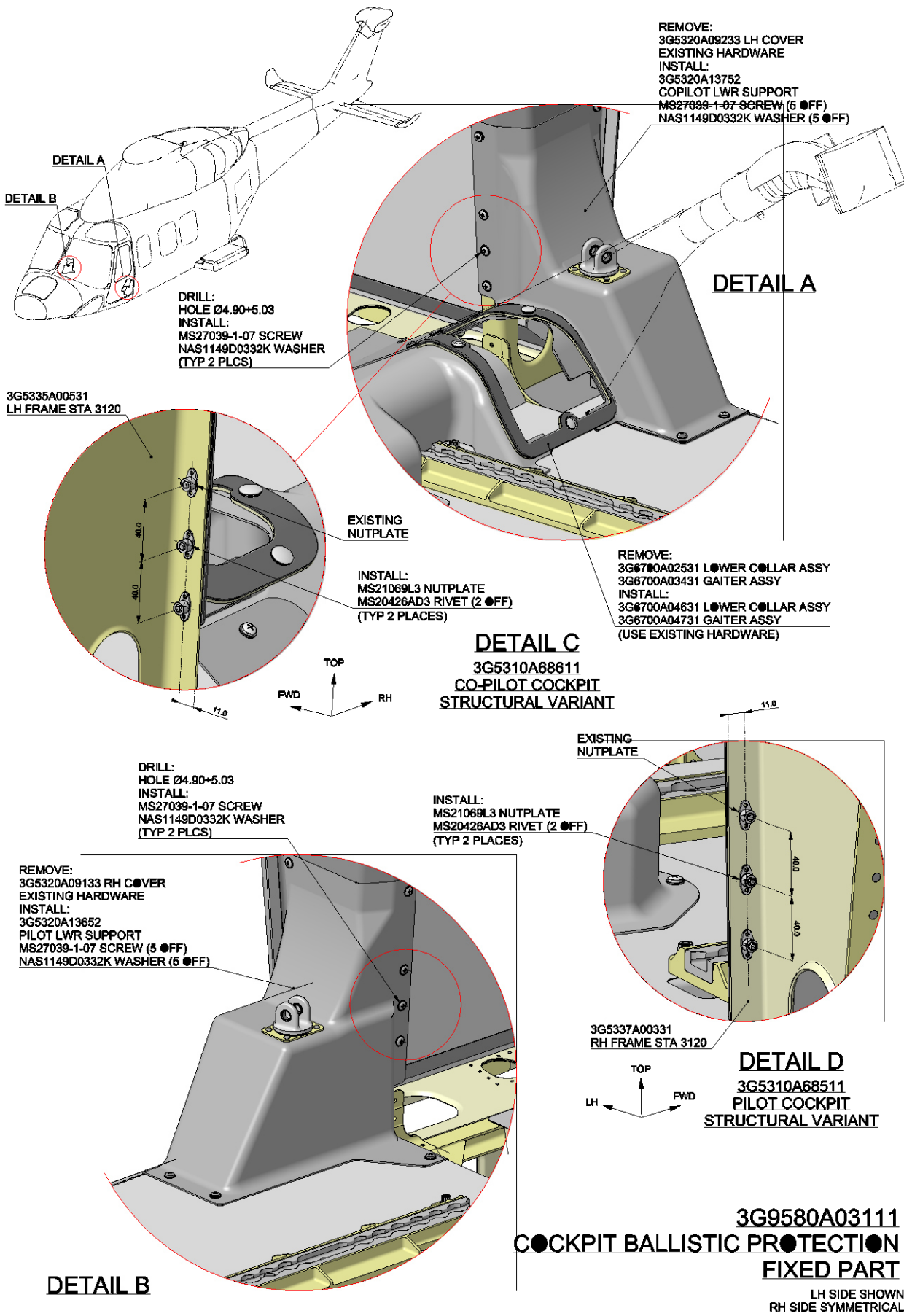
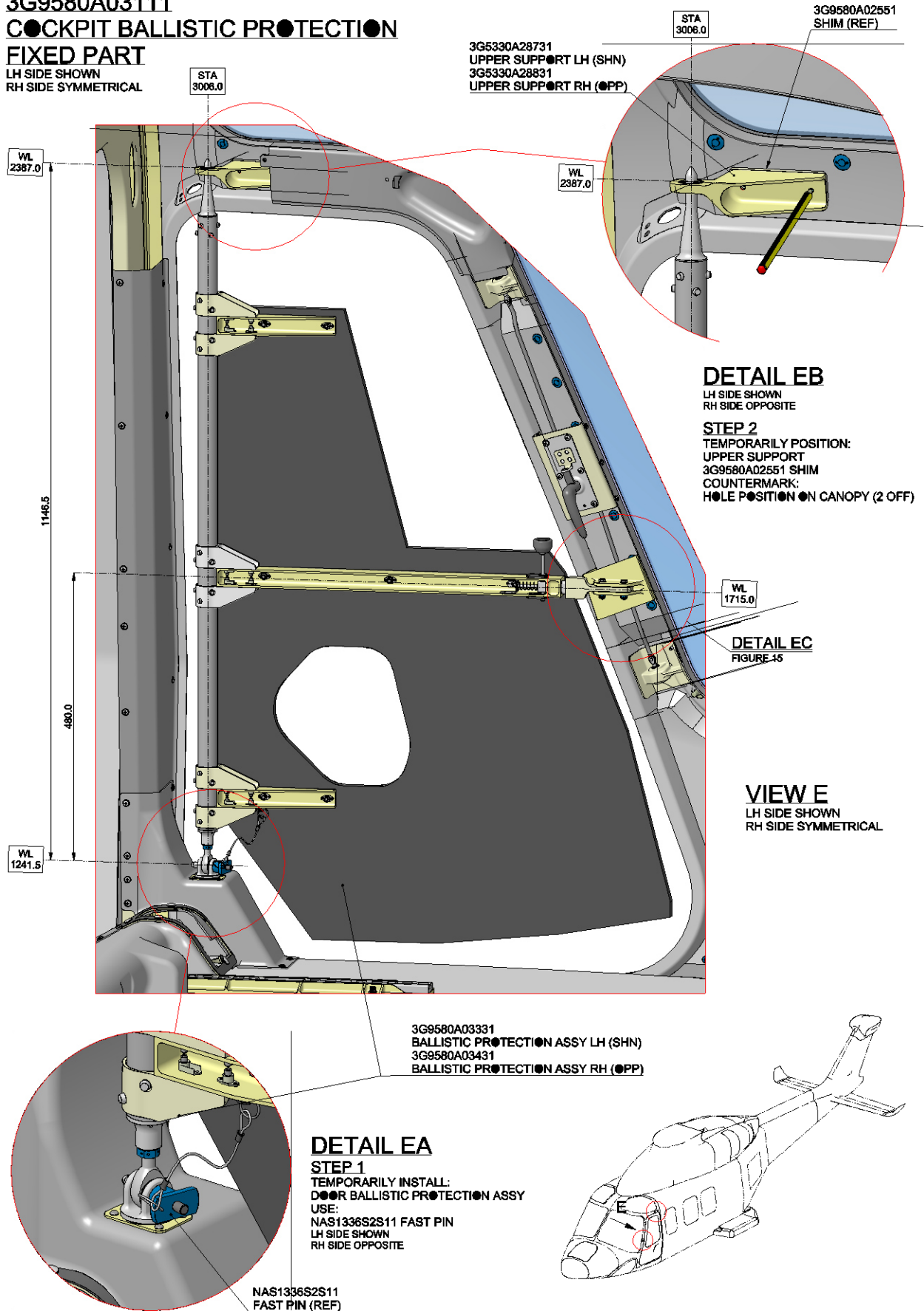


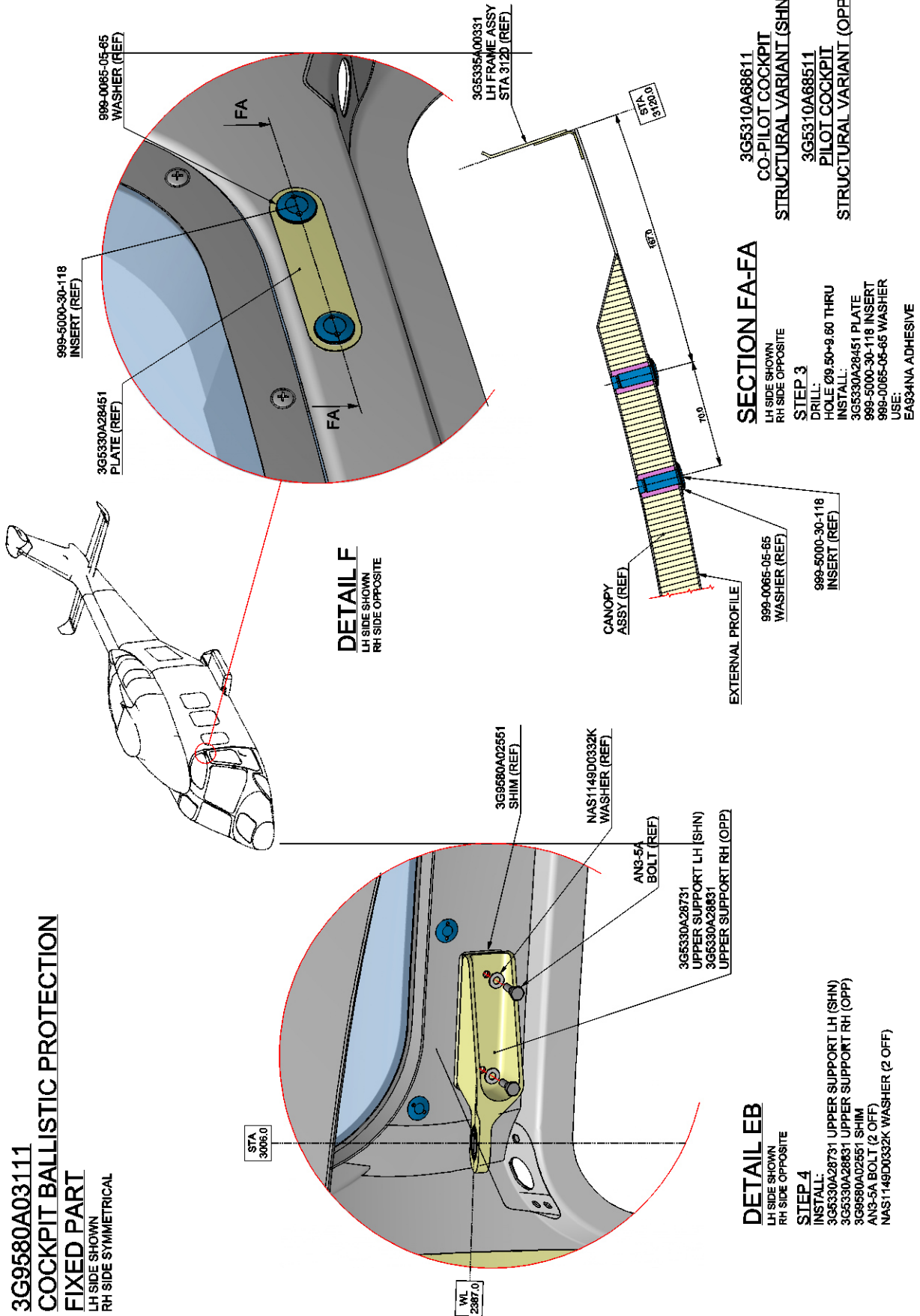
Figure 12

**3G9580A03111**  
**COCKPIT BALLISTIC PROTECTION**  
**FIXED PART**  
LH SIDE SHOWN  
RH SIDE SYMMETRICAL



**Figure 13**

**3G9580A03111**  
**COCKPIT BALLISTIC PROTECTION**  
**FIXED PART**  
LH SIDE SHOWN  
RH SIDE SYMMETRICAL



**DETAIL F**  
LH SIDE SHOWN  
RH SIDE OPPOSITE

**SECTION FA-FA**

LH SIDE SHOWN  
RH SIDE OPPOSITE  
**STEP 3**  
DRILL:  
HOLE Ø9.50x9.60 THRU  
INSTALL:  
3G5330A28451 PLATE  
999-5000-30-118 INSERT  
999-0065-05-65 WASHER  
USE:  
EA934NA ADHESIVE

3G5310A68611  
**CO-PILOT COCKPIT**  
**STRUCTURAL VARIANT (SHN)**  
3G5310A68511  
**PILOT COCKPIT**  
**STRUCTURAL VARIANT (OPP)**

**DETAIL EB**

LH SIDE SHOWN  
RH SIDE OPPOSITE  
**STEP 4**  
INSTALL:  
3G5330A28731 UPPER SUPPORT LH (SHN)  
3G5330A28831 UPPER SUPPORT RH (OPP)  
3G9580A02551 SHIM  
AN3-5A BOLT (2 OFF)  
NAS1149D032K WASHER (2 OFF)

Figure 14



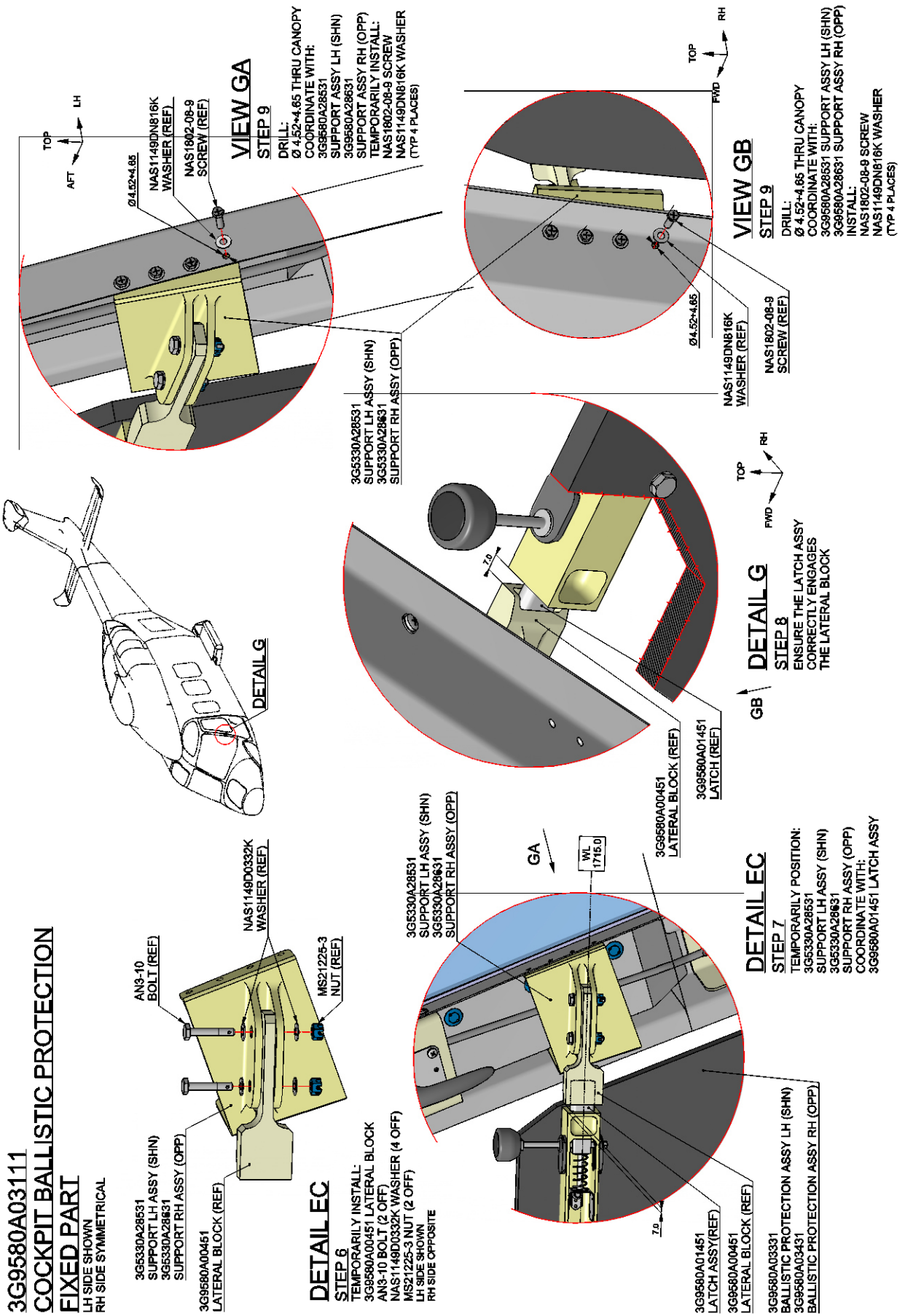


Figure 15

**3G9580A03111 COCKPIT BALLISTIC PROTECTION  
FIXED PART**

3G5320A14251  
LH UPPER COVER (SHN)  
3G5320A14351  
RH UPPER COVER (OPP)

3G5330A28531  
SUPPORT LH ASSY (SHN)  
3G5330A28631  
SUPPORT RH ASSY (OPP)

**DETAIL EC**

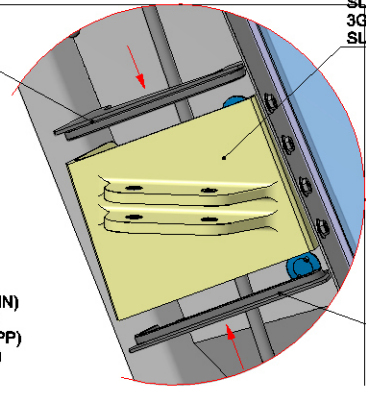
**STEP 9**

**REMOVE:**

3G9580A00451 LATERAL BLOCK  
AN3-10 BOLT (2 OFF)  
NAS1149D0332K WASHER (4 OFF)  
MS21225-3 NUT (2 OFF)

**INSTALL:**

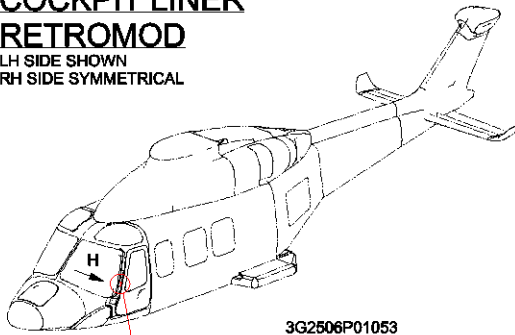
3G5320A14251 LH UPPER COVER (SHN)  
3G5320A14651 LH LWR COVER (SHN)  
3G5320A14351 RH UPPER COVER (OPP)  
3G5320A14751 RH LWR COVER (OPP)



3G5320A14651  
LH LWR COVER (SHN)  
3G5320A14751  
RH LWR COVER (OPP)

**3G5320P01011  
COCKPIT LINER  
RETROMOD**

LH SIDE SHOWN  
RH SIDE SYMMETRICAL



3G2506P01053  
PILOT COVER DOOR LH (SHN)  
3G2506P01054  
PILOT COVER DOOR RH (OPP)

3G2506P01053  
PILOT COVER DOOR LH (SHN)  
3G2506P01054  
PILOT COVER DOOR RH (OPP)

A407A3C2P  
NUTPLATE (REF)

CUT-OUT

**VIEW L**

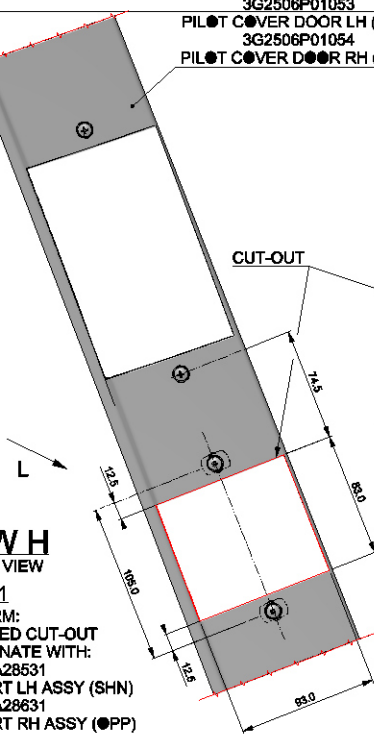
**STEP 2**

DRILL:  
HOLE Ø 5.0 THRU COVER  
INSTALL:  
A407A3C2P NUTPLATE  
USE:  
EA9309.3NA ADHESIVE  
(TYP 2 PLACES)

**VIEW H  
LH SIDE VIEW**

**STEP 1**

PERFORM:  
INDICATED CUT-OUT  
COORDINATE WITH:  
3G5330A28531  
SUPPORT LH ASSY (SHN)  
3G5330A28631  
SUPPORT RH ASSY (OPP)



3G5330A28531  
SUPPORT LH ASSY (SHN)  
3G5330A28631  
SUPPORT RH ASSY (OPP)

**VIEW K**

**STEP 3**

DRILL:  
HOLE Ø 4.52±4.65 THRU COVER  
COORDINATE WITH:  
EXISTING HOLES  
INSTALL:  
NAS1802-08-9 SCREW (4 OFF)  
NAS1149DN816K WASHER (4 OFF)  
REMARK COVER TO:  
3G2506P01053  
PILOT COVER DOOR LH (SHN)  
3G2506P01054  
PILOT COVER DOOR RH (OPP)

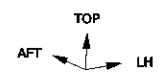
**DETAIL J**

**STEP 4**

INSTALL:  
3G5320A13851  
PILOT COVER LH (SHN)  
3G5320A13951  
PILOT COVER RH (OPP)  
AN525-10R7 SCREW (2 OFF)  
(ONLY WHEN FIXED PARTS  
ARE NOT INSTALLED)

AN525-10R7  
SCREW (REF)

3G5320A13851  
PILOT COVER LH  
3G5320A13951  
PILOT COVER RH



NAS1802-08-9  
SCREW (REF)

NAS1149DN816K  
WASHER (REF)

Ø4.52±4.65

**Figure 16**

S.B. N°139-522 OPTIONAL  
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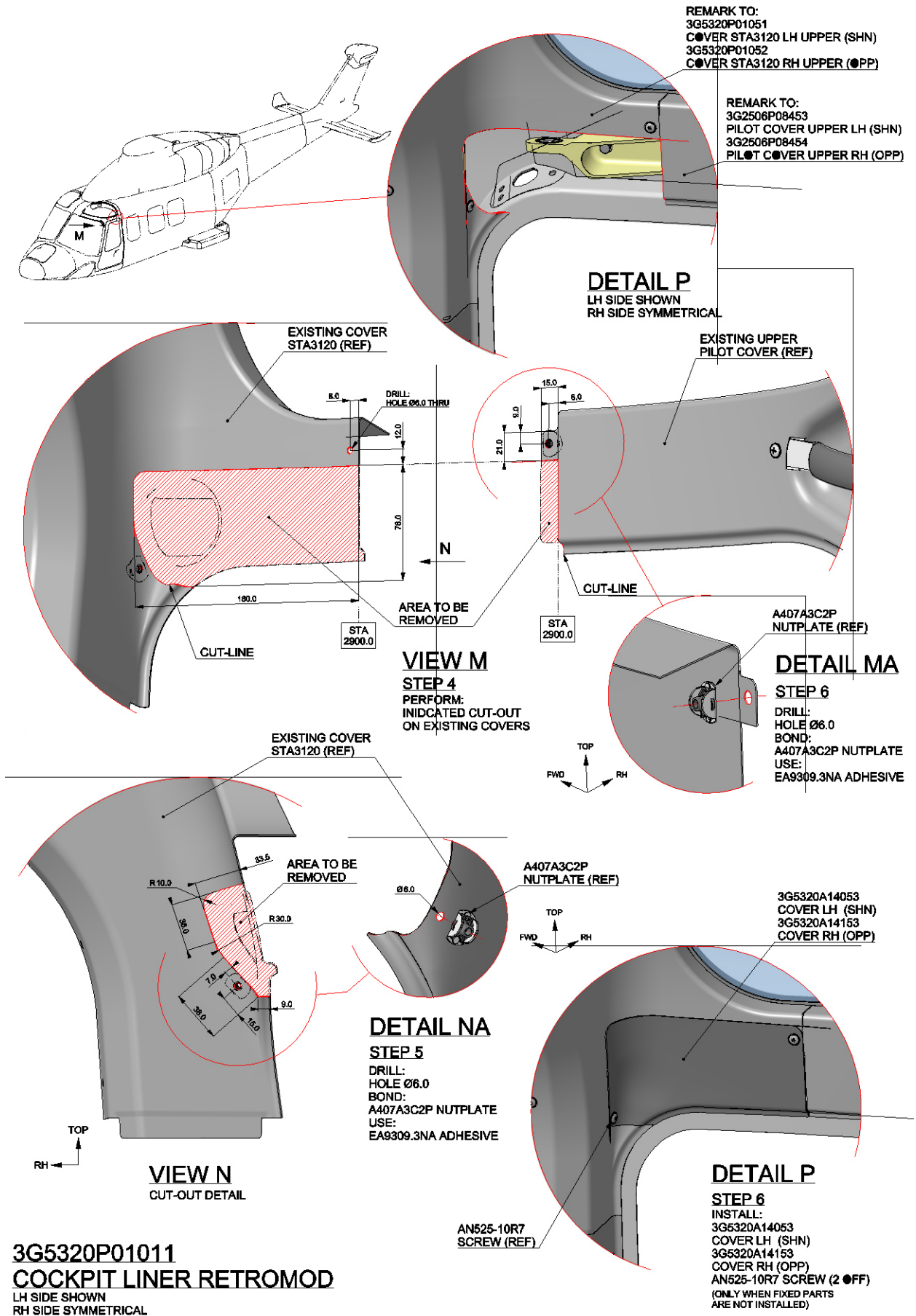


Figure 17

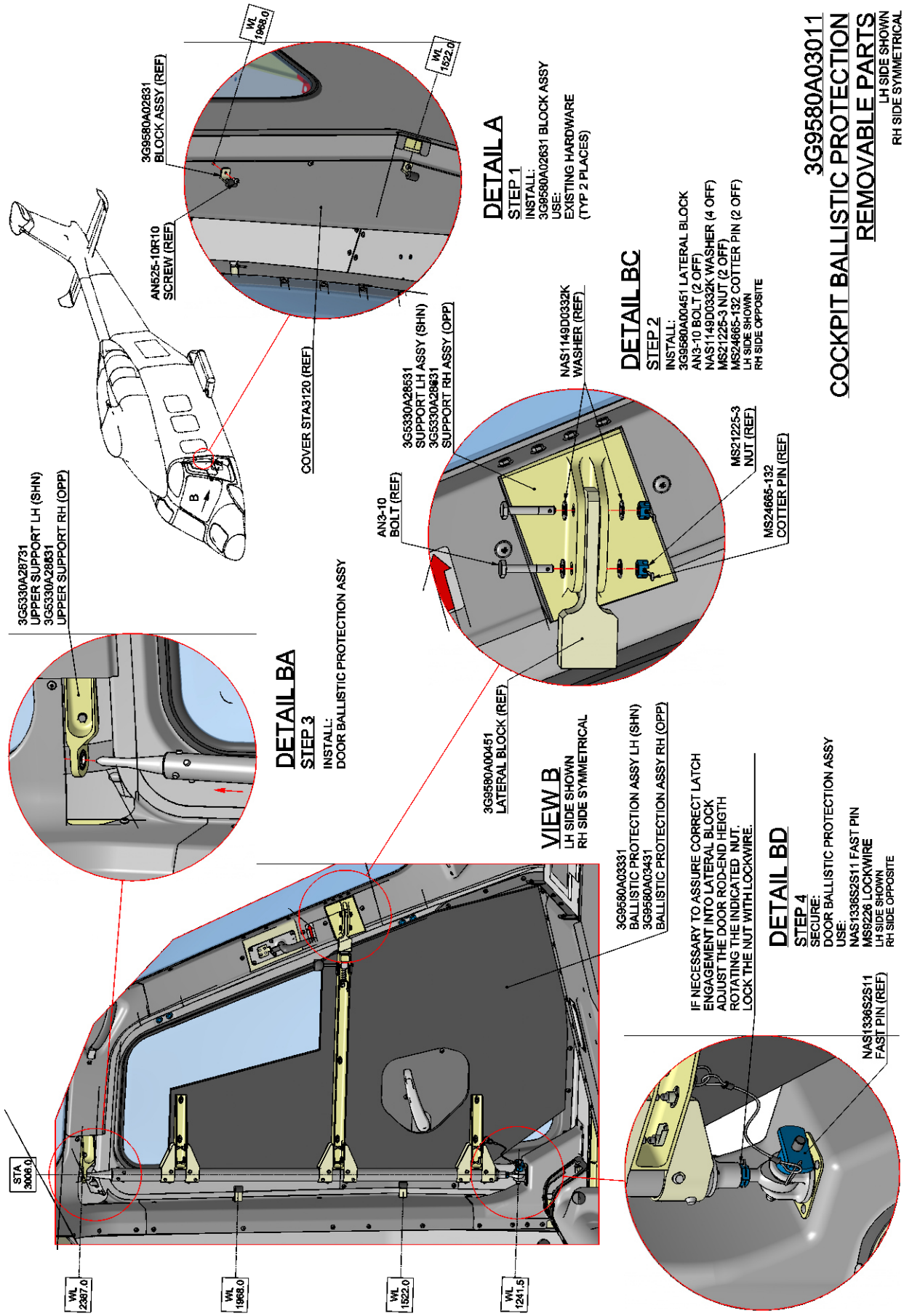
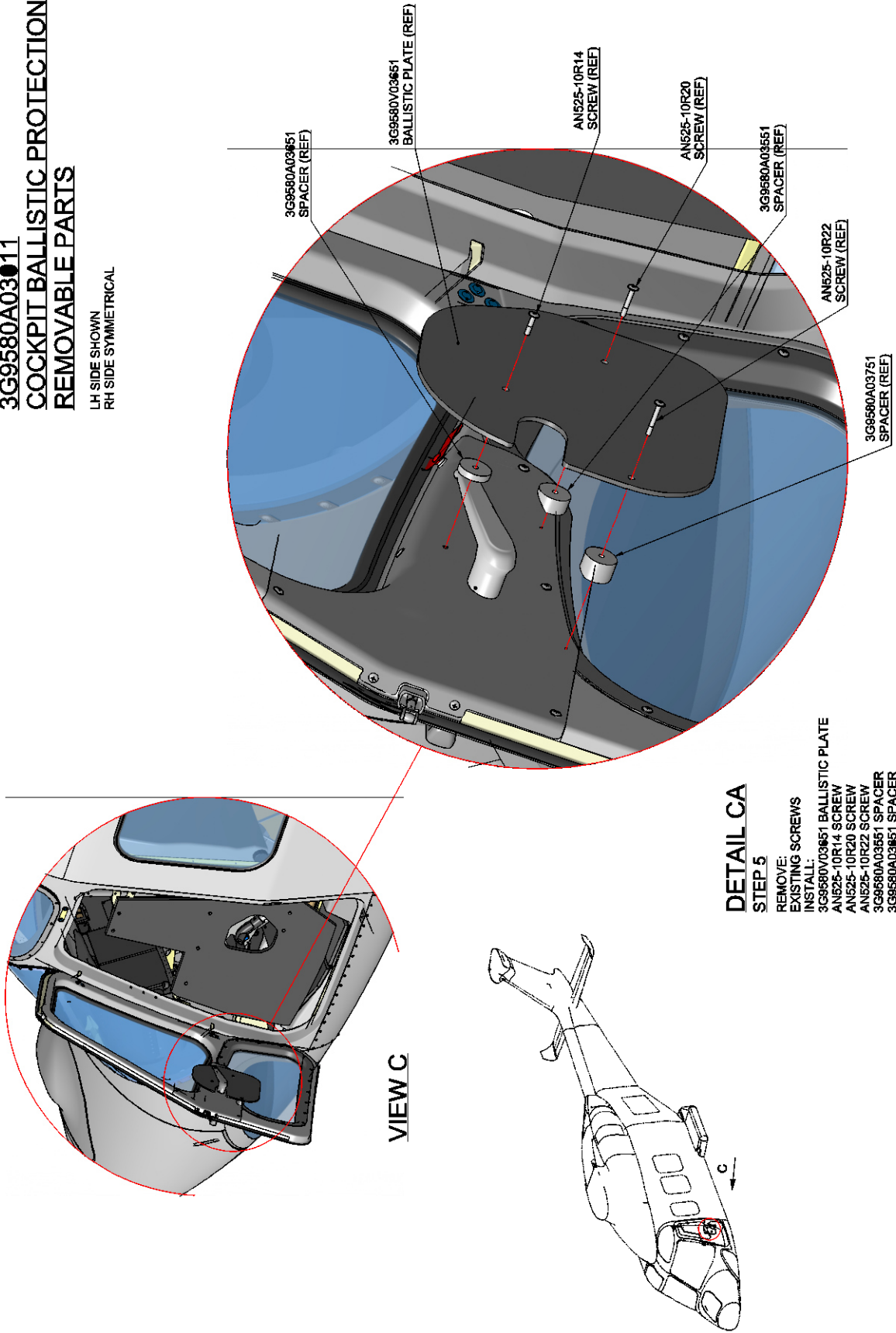


Figure 18

**3G9580A03011**  
**COCKPIT BALLISTIC PROTECTION**  
**REMOVABLE PARTS**

LH SIDE SHOWN  
RH SIDE SYMMETRICAL



**DETAIL CA**

**STEP 5**

REMOVE:  
EXISTING SCREWS

INSTALL:

3G9580V03051 BALLISTIC PLATE

AN525-10R14 SCREW

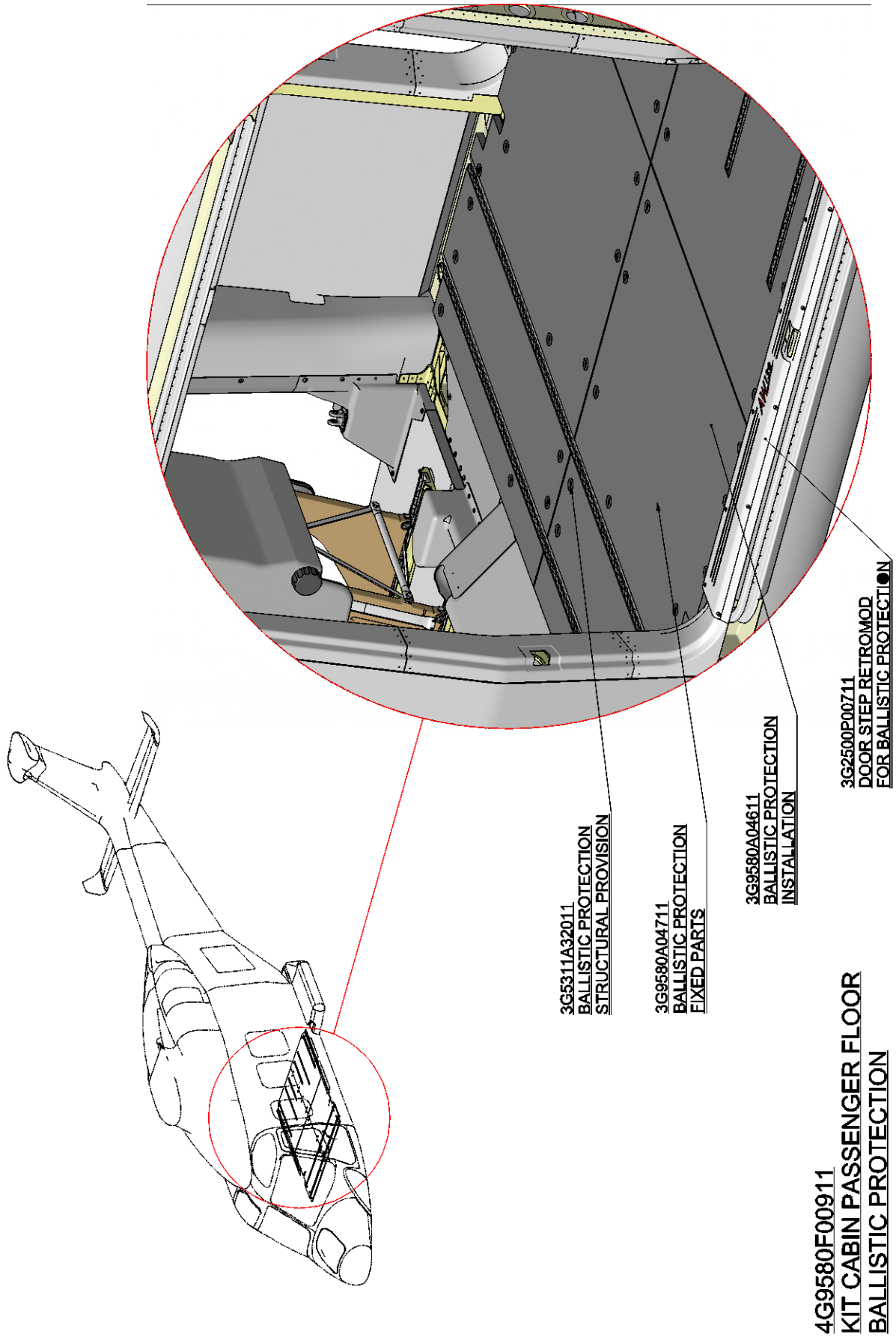
AN525-10R20 SCREW

AN525-10R22 SCREW

3G9580A03051 SPACER

3G9580A03751 SPACER

**Figure 19**



**Figure 20**

S.B. N°139-522 OPTIONAL  
DATE: September 30, 2024  
REVISION: /

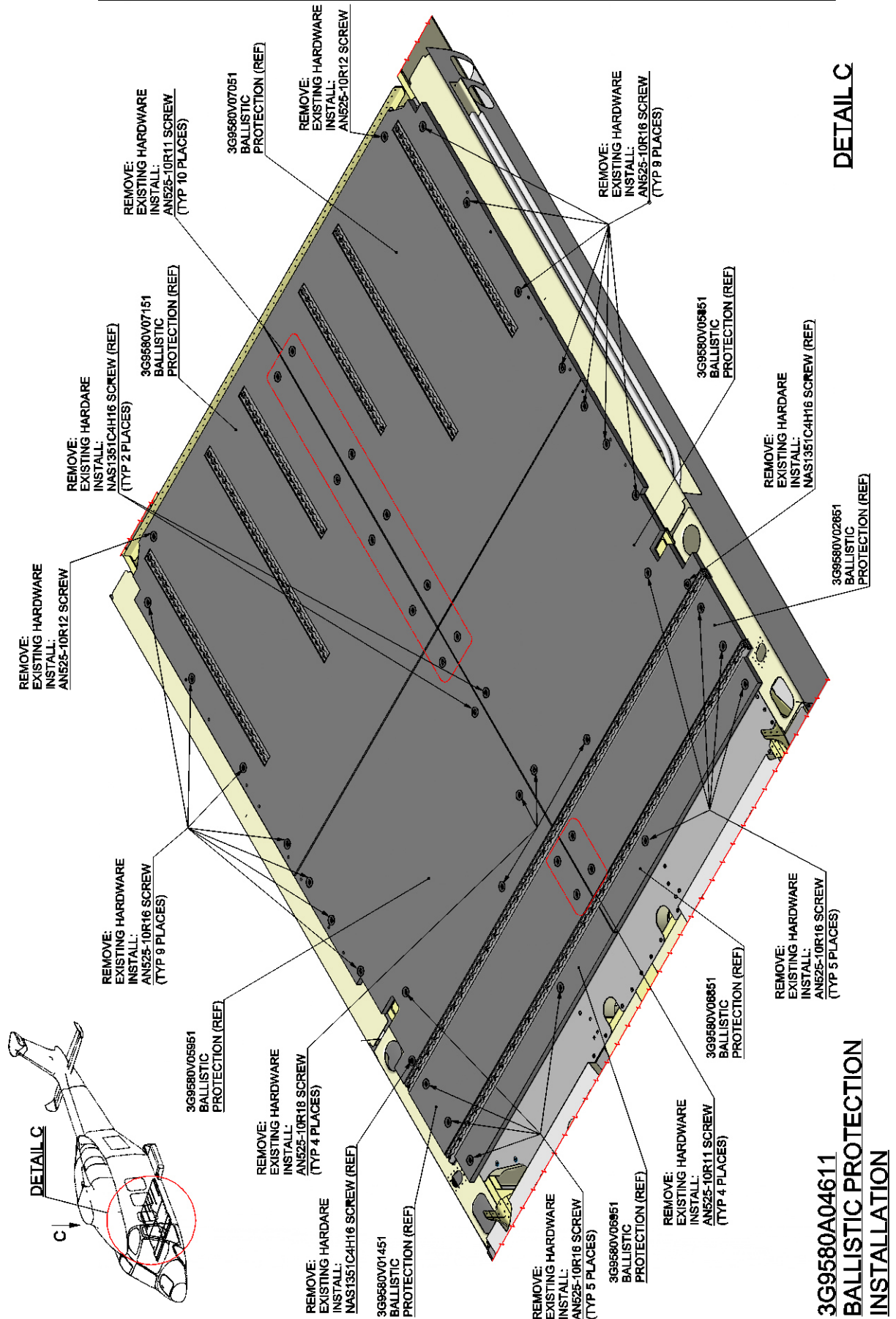


Figure 21

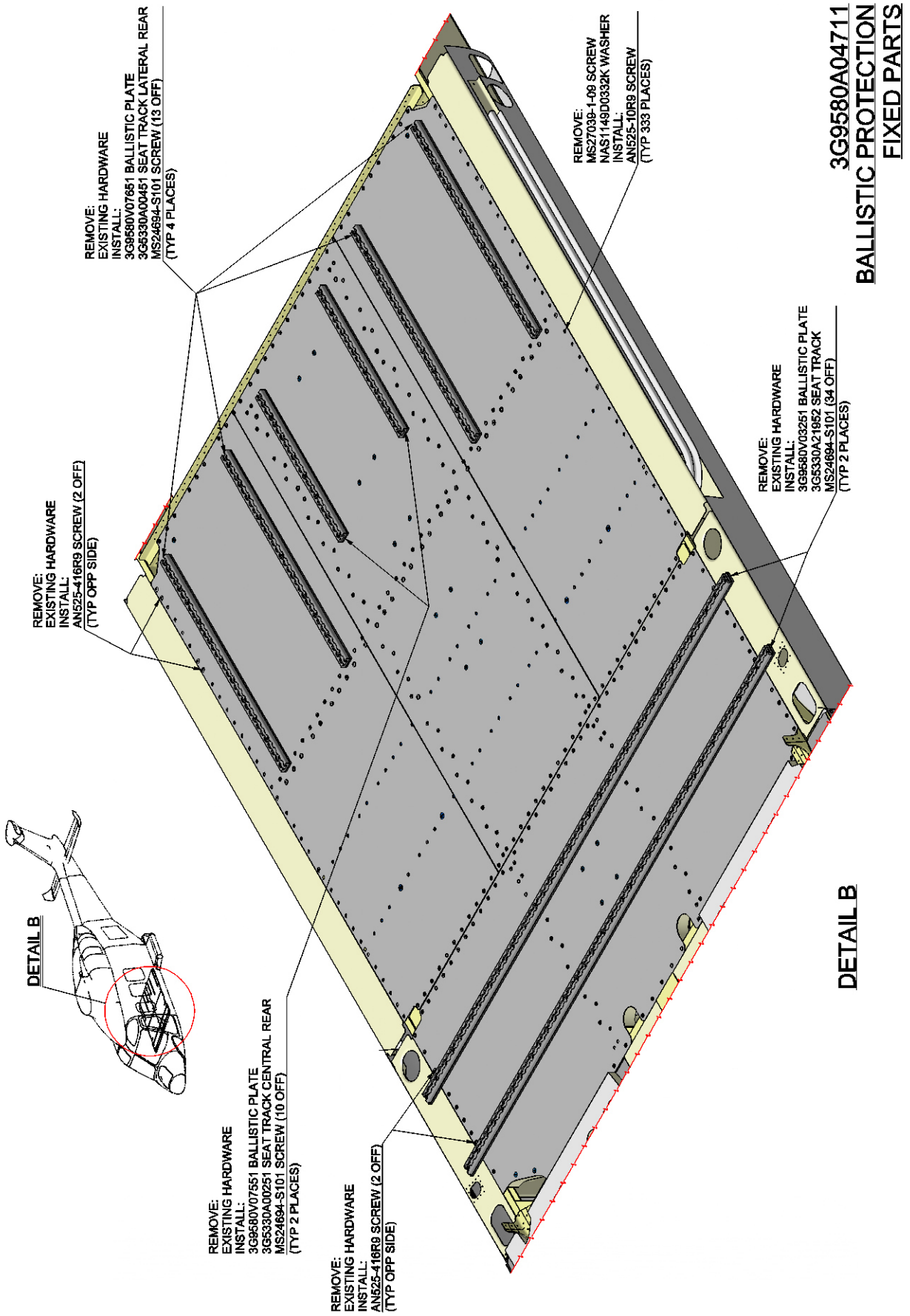


Figure 22

S.B. N°139-522 OPTIONAL  
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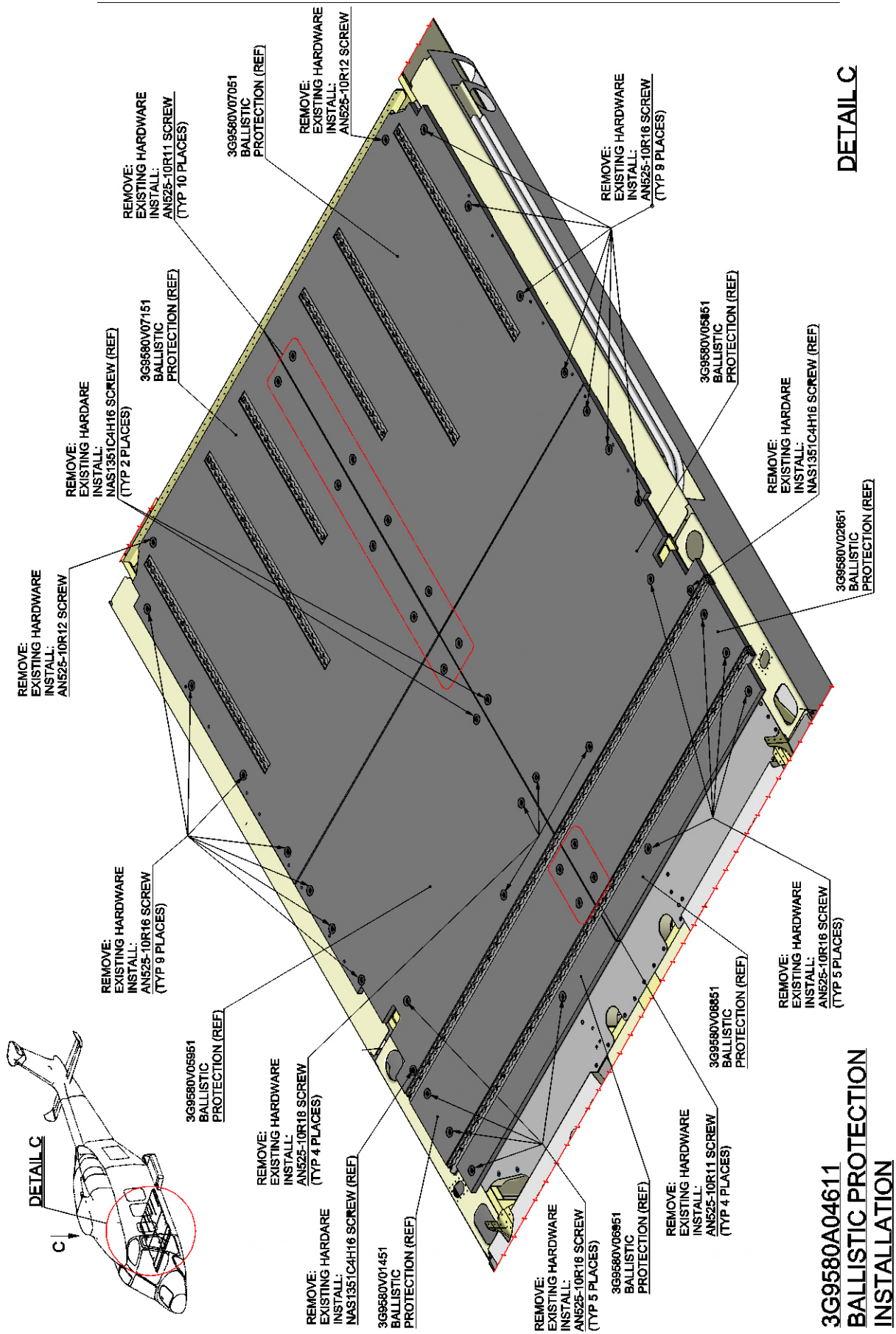
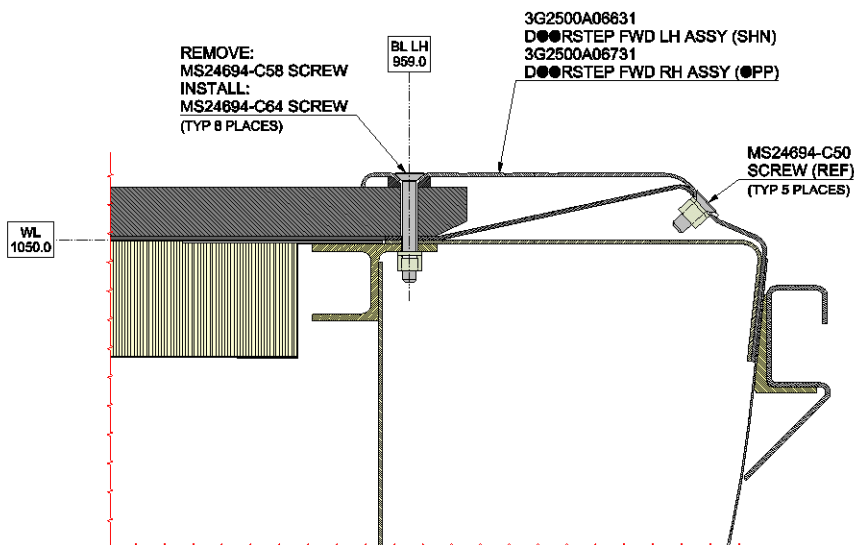
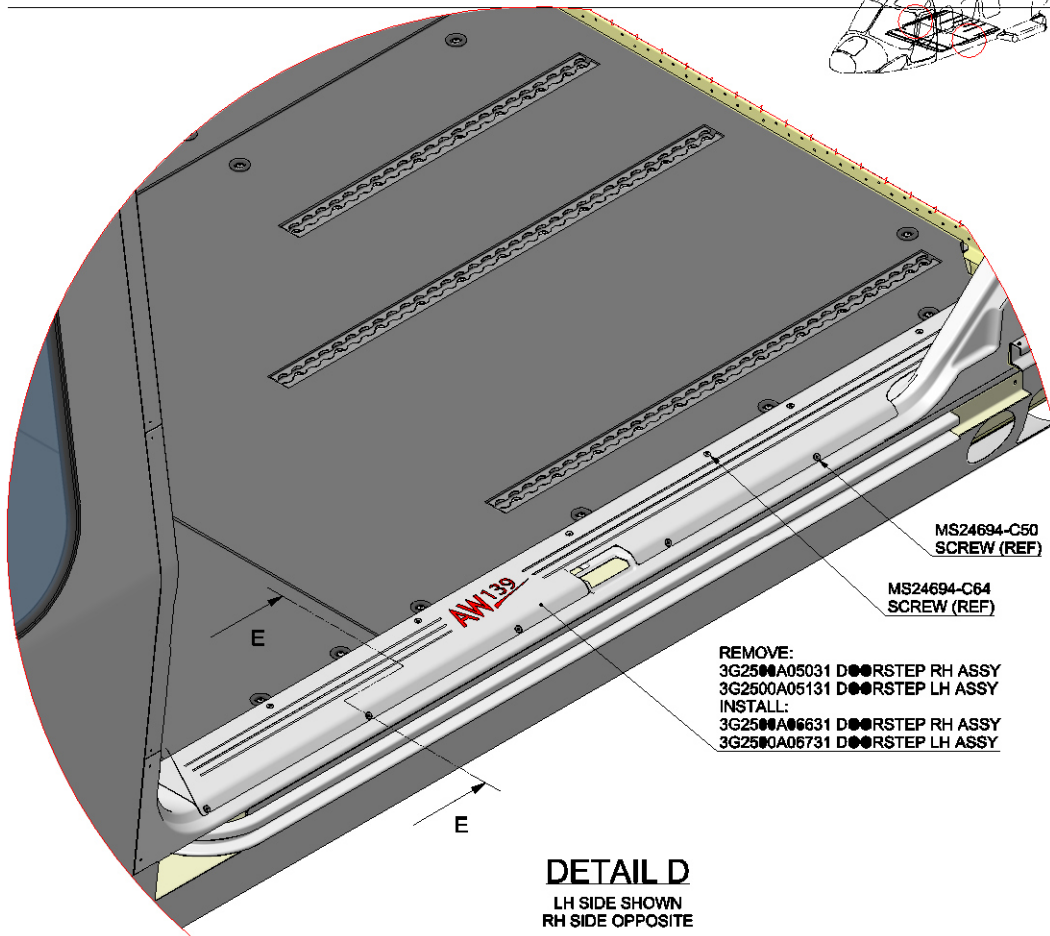
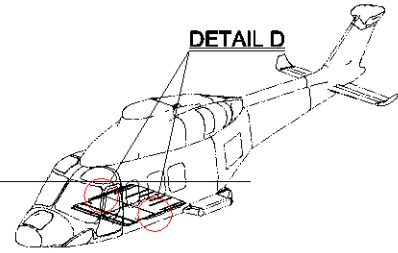


Figure 23

**3G2500P00711**  
**DOORSTEP RETRO-MOD**  
**FOR BALLISTIC PROTECTION**



**Figure 24**

S.B. N°139-522 OPTIONAL  
DATE: September 30, 2024  
REVISION: /

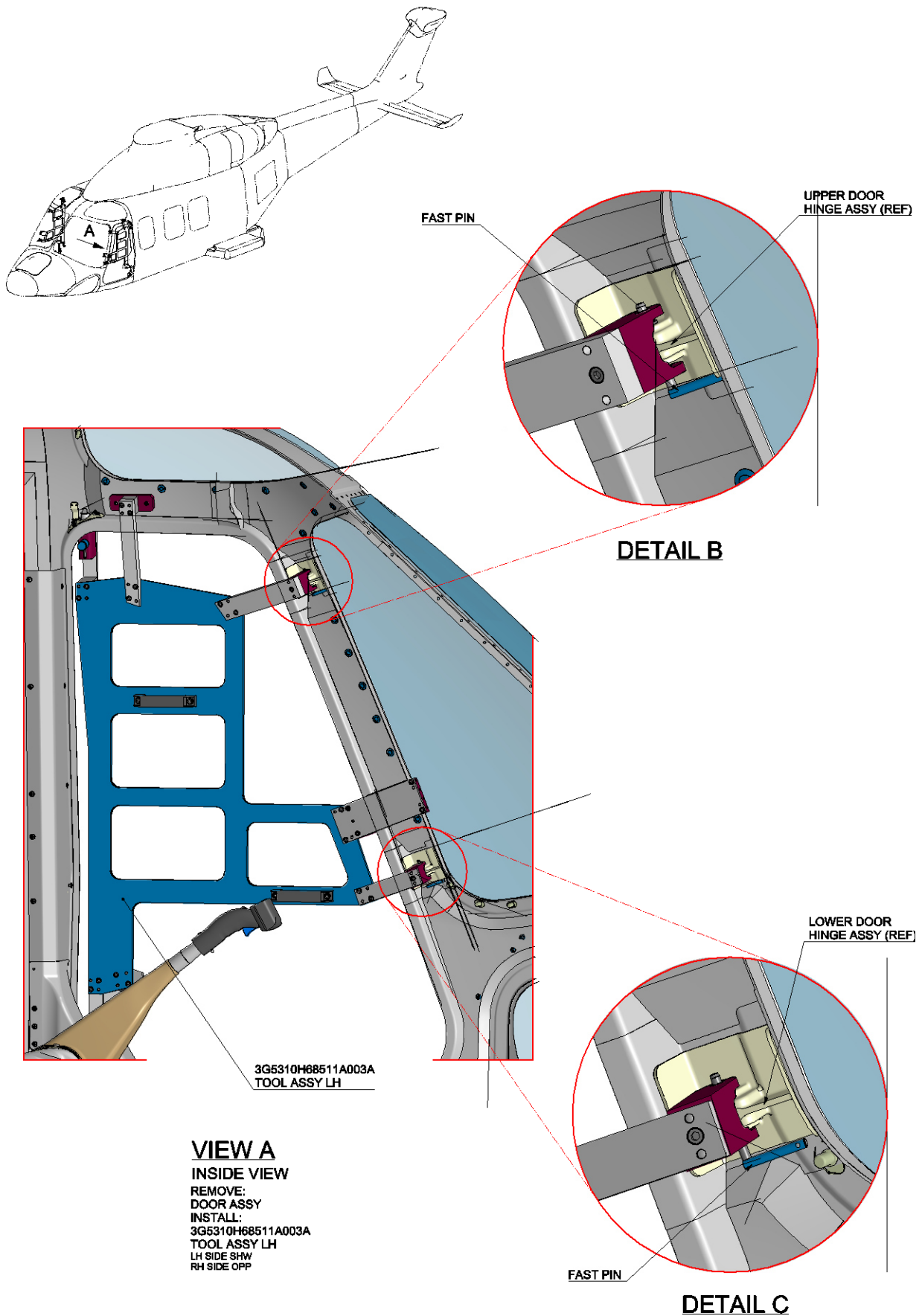
# ANNEX A

**INSTALLATION AND USE OF DRILLING TOOL**

**P/N 3G5310H68511A003A LH AND RH.**

1. In accordance with DM 39-X-52-11-01-00A-520A-K remove the LH door from the helicopter.
2. With reference to Figure A1 Details B and C secure the drilling tool P/N 3G5310H68511A003A LH to the LH door hinges by means of tool fast pins.
3. With reference to Figure A2 Details D and E lock the drilling tool P/N 3G5310H68511A003A LH to the upper and lower door provisions by means of tool hardware.
4. With reference to Figure A2 Detail F1 drill n°4 holes Ø2.5 thru canopy assy by means of drilling gig guide holes.
5. With reference to Figure A2 Detail F2 drill n°4 holes Ø2.5 thru canopy assy by means of drilling gig guide holes.
6. With reference to Figure 3 Detail G drill hole Ø4.1 thru co-pilot lower support assy P/N 3G5320A13752 by means of drilling gig guide hole.
7. With reference to Figure 3 Detail G drill n°4 holes Ø2.5 thru co-pilot lower support assy P/N 3G5320A13752 by means of drilling gig guide holes.
8. With reference to Figure 3 Detail H drill n°2 holes Ø4.1 thru canopy assy by means of drilling gig guide holes.
9. Remove the drilling gig from the cockpit.
10. In accordance with DM 39-X-52-11-01-00A-720A-K re-install the LH door on the helicopter.
11. In accordance with DM 39-X-52-11-01-00A-520A-K remove the RH door from the helicopter.
12. With reference to Figure A1 Details B and C secure the drilling tool P/N 3G5310H68511A003A RH to the RH door hinges by means of tool fast pins.
13. With reference to Figure A2 Details D and E lock the drilling tool P/N 3G5310H68511A003A RH to the upper and lower door provisions by means of tool hardware.
14. With reference to Figure A2 Detail F1 drill n°4 holes Ø2.5 thru canopy assy by means of drilling gig guide holes.
15. With reference to Figure A2 Detail F2 drill n°4 holes Ø2.5 thru canopy assy by means of drilling gig guide holes.
16. With reference to Figure 3 Detail G drill hole Ø4.1 thru pilot lower support assy P/N 3G5320A13652 by means of drilling gig guide hole.
17. With reference to Figure 3 Detail G drill n°4 holes Ø2.5 thru pilot lower support assy P/N 3G5320A13652 by means of drilling gig guide holes.
18. With reference to Figure 3 Detail H drill n°2 holes Ø4.1 thru canopy assy by means of drilling gig guide holes.

19. Remove the drilling gig from the helicopter.
20. In accordance with DM 39-X-52-11-01-00A-720A-K re-install the RH door on the helicopter.



**Figure A3**

S.B. N°139-522 OPTIONAL  
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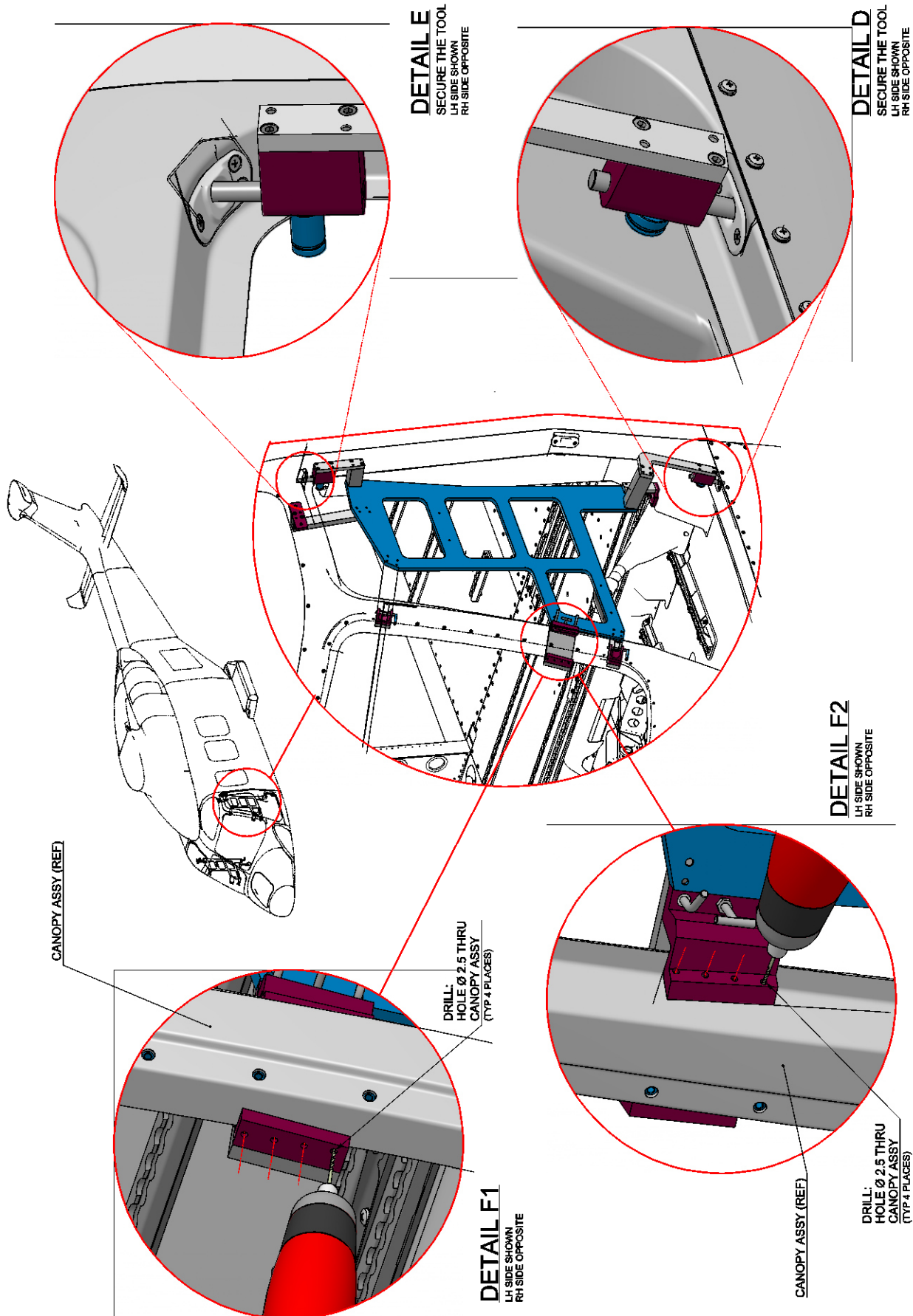
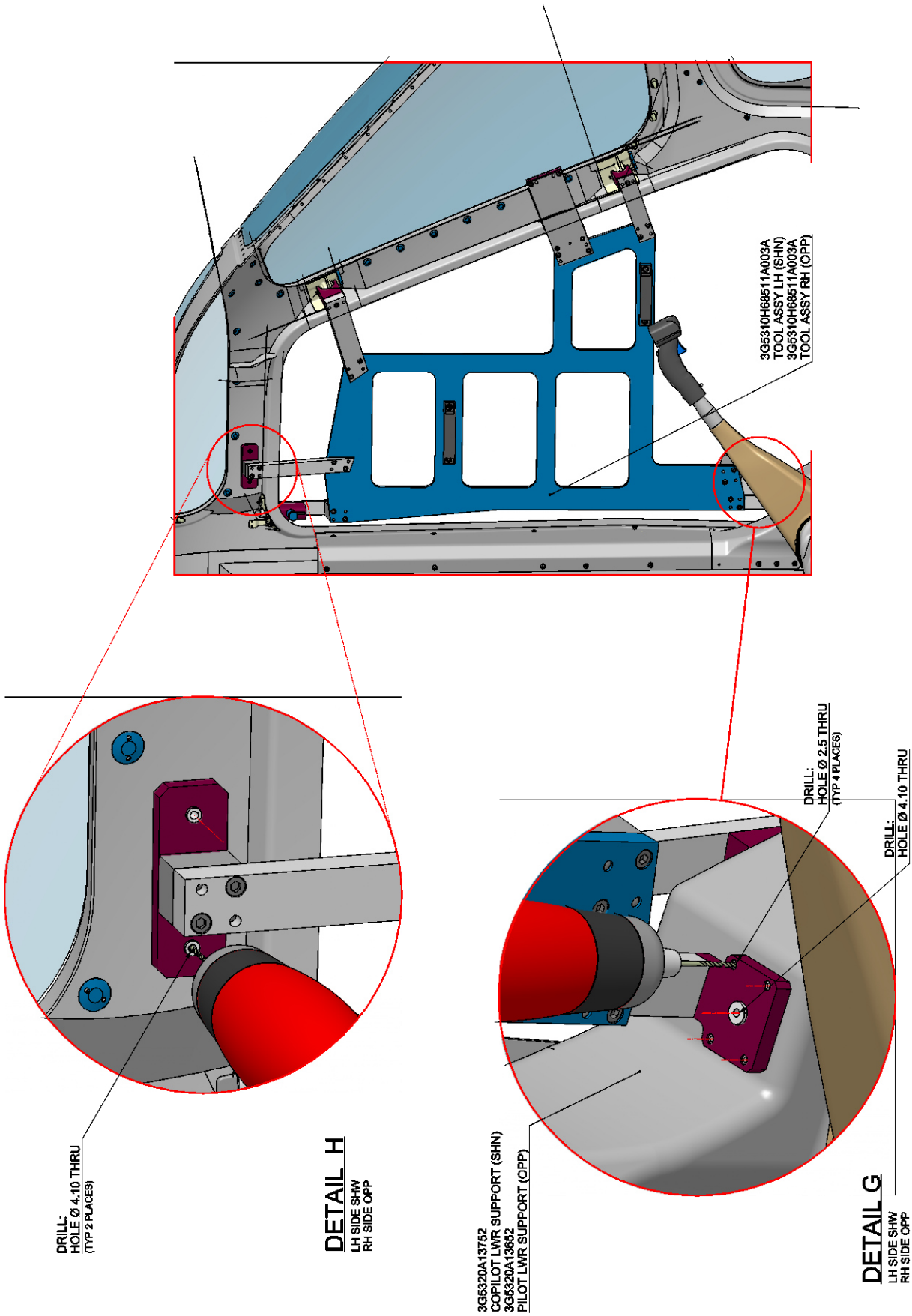


Figure A2



**Figure A3**

S.B. N°139-522 OPTIONAL  
DATE: September 30, 2024  
REVISION: /



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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.