
SERVICE BULLETIN

N° 139-502

DATE: November 17, 2021

REV. : /

TITLE

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

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

AW139 helicopter S/N 31706.

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, kit cabin passenger floor ballistic protection P/N 4G9580F00711, kit cabin passenger floor ballistic protection P/N 4G9580F00811 and the emergency release mechanism installation P/N 3G5206P00111.

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 3G5311A20011, ballistic protection fixed parts installation P/N 3G9580A04111 (PART VI) and ballistic protection removable parts installation P/N 3G9580A04011 (PART VII) for kit cabin passenger floor ballistic protection P/N 4G9580F00711.
- Cabin floor provision P/N 3G5311A20011, ballistic protection fixed parts installation P/N 3G9580A04311 (PART VIII) and ballistic protection removable parts installation P/N 3G9580A04211 (PART IX) for kit cabin passenger floor ballistic protection P/N 4G9580F00811.
- Emergency release mechanism installation P/N 3G5206P00111 (PART X)

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 seven-hundred (700) MMH are deemed necessary.

Maintenance-Man-Hours are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

PART I

| WEIGHT (Kg) | | 0.4 |
|----------------------|----------|---------------|
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2623 | 1049.2 |
| LATERAL BALANCE | -11 | -4.4 |

PART II

| WEIGHT (Kg) | | 11.1 |
|----------------------|----------|---------------|
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2536 | 28149.6 |
| LATERAL BALANCE | -15 | -166.5 |

PART III

| WEIGHT (Kg) | | 2 |
|----------------------|----------|---------------|
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2853 | 5706 |
| LATERAL BALANCE | 39 | 78 |

PART IV

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 1.06 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2708.45 | 2870.96 |
| LATERAL BALANCE | 455.98 | 483.34 |

PART V

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 23.8 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2732 | 65021.6 |
| LATERAL BALANCE | 0 | 0 |

PART VI

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 41.7 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 4469.71 | 186387 |
| LATERAL BALANCE | 0.24 | 9.9 |

PART VII

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 72.2 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 4476 | 323167.2 |
| LATERAL BALANCE | -1 | -72.2 |

PART VIII

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 44 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 4445.42 | 195598.4 |
| LATERAL BALANCE | 0.59 | 25.8 |

PART IX

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 73 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 4462 | 325726 |
| LATERAL BALANCE | 0 | 0 |

PART X

| | | |
|-----------------------------|-----------------|----------------------|
| WEIGHT (Kg) | | 0.6 |
| | ARM (mm) | MOMENT (Kgmm) |
| LONGITUDINAL BALANCE | 2396 | 1437.6 |
| LATERAL BALANCE | 0 | 0 |

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. | All |
| DM02 39-X-52-11-01-00A-520A-K | Left/Right cockpit door - Remove procedure | X |
| DM03 39-X-52-11-01-00A-720A-K | Left/Right cockpit door - Install procedure | X |

2) ACRONYMS

| | |
|------|-----------------------|
| CTRL | Control |
| FWD | Forward |
| LWR | Lower |
| MMH | Maintenance Man Hours |
| SB | Service Bulletin |
| WL | Water Level |

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

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 | .... |  | - |
| 5 | 3G5306P36211 | | COPILOT FOOTBOARD RETRO-MOD | REF | ... | | - |
| 6 | SL10414-4-4A | | Insert | 4 | .... |  | - |
| 7 | 3G5310A65511 | | PILOT FLOOR STRUCTURAL PROVISION | REF | ... | | - |
| 8 | NAS1835A4 | | Insert | 4 | .... |  | - |
| 9 | 3G5310A65711 | | COPILOT FLOOR STRUCTURAL PROVISION | REF | ... | | - |
| 10 | NAS1835A4 | | Insert | 3 | .... |  | - |
| 11 | NAS1835A4 | | Insert | 7 | ... | | - |

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 | ... | | - |
| 15 | 3G9580V05251 | | Copilot lateral floor protection | 1 | ... | | - |
| 16 | 3G9580V05351 | | Pilot under seat protection | 1 | ... | | - |
| 17 | 3G9580V05451 | | Copilot under seat protection | 1 | ... | | - |
| 18 | 3G9580V05551 | | Pilot FWD protection | 1 | ... | | - |
| 19 | 3G9580V05651 | | Copilot FWD protection | 1 | ... | | - |
| 20 | AN525-416R18 | | Screw | 23 | ... | | - |

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 | .... |  | - |
| 25 | 999-0065-05-95 | | Washer | 2 | .... |  | - |
| 26 | 999-5000-30-118 | | Insert | 2 | .... |  | - |
| 27 | MS21069L3 | | Nut plate | 2 | .... |  | - |

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

PART IV

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|-----------|---------------------|-----------------|---|------------|-----|------|---------|
| 41 | 4G9580F00411 | | KIT COCKPIT DOOR BALLISTIC PROTECTION | REF | . | | - |
| 42 | 3G9580P00211 | | COCKPIT BALLISTIC PROTECTION RETRO MOD | REF | .. | | - |
| 43 | 3G5320A13651 | | Pilot lower support | 1 | ... | | - |
| 44 | 3G5320A13751 | | Copilot lower support | 1 | ... | | - |
| 45 | 3G9580A03111 | | COCKPIT BALLISTIC PROT FIXED PARTS | REF | .. | | - |
| 46 | 3G5320A14251 | | Upper cover LH | 1 | ... | | - |
| 47 | 3G5320A14351 | | Upper cover RH | 1 | ... | | - |
| 48 | 3G5320A14651 | | Lower cover LH | 1 | ... | | - |
| 49 | 3G5320A14751 | | Lower cover RH | 1 | ... | | - |
| 50 | 3G5330A28531 | | Support LH assy | 1 | ... | | - |
| 51 | 3G5330A28631 | | Support RH assy | 1 | ... | | - |
| 52 | 3G5330A28731 | | Upper support LH | 1 | ... | | - |
| 53 | 3G5330A28831 | | Upper support RH | 1 | ... | | - |
| 54 | 3G6700A04631 | | Lower collar assy | 1 | ... | | - |
| 55 | 3G6700A04731 | | Gaiter assy | 1 | ... | | - |
| 56 | 3G9580A02231 | | Junction assy | 2 | ... | | - |
| 57 | 3G9580A02351 | | Special bushing | 2 | ... | | - |
| 58 | 3G9580A02451 | | Special washer | 2 | ... | | - |
| 59 | 3G9580A02551 | | Peeling shim | 2 | ... | | - |
| 60 | A297A04TW03 | | Rivet blind | 8 | ... | | - |
| 61 | AN3-5A | | Bolt | 4 | ... | | - |
| 62 | AN525-10R9 | | Screw machine | 6 | ... | | - |
| 63 | MS21225-6 | | Nut | 2 | ... | | - |
| 64 | MS24665-174 | | Pin | 2 | ... | | - |
| 65 | MS27039-1-07 | | Screw machine | 7 | ... | | - |
| 66 | NAS1149D0332K | | Washer | 11 | ... | | - |
| 67 | NAS1149D0632K | | Washer | 2 | ... | | - |
| 68 | NAS1149DN832K | | Washer | 16 | ... | | - |
| 69 | NAS1802-08-9 | | Screw | 16 | .. | | - |

PART V

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|----|---------------|-----------------|---|------|-----|------|---------|
| 70 | 4G9580F00411 | | KIT COCKPIT DOOR BALLISTIC PROTECTION | REF | . | | - |
| 71 | 3G9580A03011 | | COCKPIT BALLISTIC PROT REMOVABLE PARTS | REF | .. | | - |
| 72 | 3G9580A00451 | | Lateral block | 2 | ... | | - |
| 73 | 3G9580A02631 | | Block assy | 4 | ... | | - |
| 74 | 3G9580A03331 | | Door ballistic protection assy LH | 1 | ... | | - |
| 75 | 3G9580A03431 | | Door ballistic protection assy RH | 1 | ... | | - |
| 76 | 3G9580A03551 | | Spacer | 2 | ... | | - |
| 77 | 3G9580A03651 | | Spacer | 2 | ... | | - |
| 78 | 3G9580A03751 | | Spacer | 2 | ... | | - |
| 79 | 3G9580V03651 | | Ballistic plate | 2 | ... | | - |
| 80 | AN3-10 | | Bolt | 4 | ... | | - |
| 81 | AN525-10R14 | | Screw | 2 | ... | | - |
| 82 | AN525-10R20 | | Screw | 2 | ... | | - |
| 83 | AN525-10R22 | | Screw | 2 | ... | | - |
| 84 | MS21225-3 | | Nut | 4 | ... | | - |
| 85 | MS24665-132 | | Pin | 4 | ... | | - |
| 86 | NAS1149D0332K | | Washer | 8 | ... | | - |

PART VI

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|----|--------------|-----------------|---|------|-----|------|---------|
| 87 | 4G9580F00711 | | KIT CABIN PAX BALLISTIC PROT VIP DELUX | REF | . | | - |
| 88 | 3G5311A20011 | | BALISTIC PROTECTION STRUCTURAL PROVISION | REF | .. | | - |
| 89 | NAS1832-3-4 | | Insert | 20 | ... | | - |
| 90 | 3G9580A04111 | | BALLISTIC PROTECTION FIXED PARTS | REF | .. | | - |
| 91 | 3G9580V02751 | | Ballistic plate | 4 | ... | | - |
| 92 | 3G9580V02951 | | Ballistic plate | 2 | ... | | - |
| 93 | 3G9580V03251 | | Ballistic plate | 2 | ... | | - |
| 94 | 3G9580V07451 | | Ballistic plate | 4 | ... | | - |
| 95 | MS24694-S101 | | Screw | 228 | ... | | - |
| 96 | MS24694-S103 | | Screw | 4 | ... | | - |
| 97 | MS24694-S104 | | Screw | 4 | ... | | - |
| 98 | AN525-10R9 | | Screw | 333 | ... | | - |

PART VII

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|-----|--------------|-----------------|---|------|------|------|---------|
| 99 | 4G9580F00711 | | KIT CABIN PAX BALLISTIC PROT VIP DELUX | REF | . | | - |
| 100 | 3G9580A04011 | | BALLISTIC PROTECTION INSTALLATION | REF | .. | | - |
| 101 | 3G2500P00711 | | DOORSTEP RETRO MOD | REF | ... | | - |
| 102 | 3G2500A06631 | | Doorstep LH assy | 1 | .... |  | - |
| 103 | 3G2500A06731 | | Doorstep RH assy | 1 | .... |  | - |
| 104 | MS24694-C64 | | Screw | 16 | .... |  | - |
| 105 | 3G9580V01051 | | Ballistic protection | 1 | ... | | - |
| 106 | 3G9580V01551 | | Ballistic protection | 1 | ... | | - |

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|-----|--------------|-----------------|----------------------|------|-----|------|---------|
| 107 | 3G9580V06051 | | Ballistic protection | 1 | ... | | - |
| 108 | 3G9580V06151 | | Ballistic protection | 1 | ... | | - |
| 109 | 3G9580V06251 | | Ballistic protection | 1 | ... | | - |
| 110 | 3G9580V06351 | | Ballistic protection | 1 | ... | | - |
| 111 | 3G9580V06451 | | Ballistic protection | 1 | ... | | - |
| 112 | 3G9580V06551 | | Ballistic protection | 1 | ... | | - |
| 113 | 3G9580V06651 | | Ballistic protection | 1 | ... | | - |
| 114 | 3G9580V06751 | | Ballistic protection | 1 | ... | | - |
| 115 | AN525-10R11 | | Screw | 20 | ... | | - |
| 116 | AN525-10R12 | | Screw | 2 | ... | | - |
| 117 | AN525-10R16 | | Screw | 28 | ... | | - |
| 118 | AN525-10R18 | | Screw | 4 | ... | | - |
| 119 | NAS1351C4H16 | | Screw | 2 | ... | | - |

PART VIII

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|------------|---------------------|-----------------|---|------------|-----|------|---------|
| 120 | 4G9580F00811 | | KIT CABIN PAX BALLISTIC PROT 12 PAX | REF | . | | - |
| 121 | 3G5311A20011 | | BALISTIC PROTECTION STRUCTURAL PROVISION | REF | .. | | - |
| 122 | NAS1832-3-4 | | Insert | 20 | ... | | - |
| 123 | 3G9580A04311 | | BALLISTIC PROTECTION FIXED PARTS | REF | .. | | - |
| 124 | 3G9580V03251 | | Ballistic plate | 6 | ... | | - |
| 125 | MS24694-S101 | | Screw | 192 | ... | | - |
| 126 | AN525-10R9 | | Screw | 333 | ... | | - |

PART IX

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|------------|---------------------|-----------------|--|------------|------|------|---------|
| 127 | 4G9580F00811 | | KIT CABIN PAX BALLISTIC PROT 12 PAX | REF | . | | - |
| 128 | 3G9580A04211 | | BALLISTIC PROTECTION INSTALLATION | REF | .. | | - |
| 129 | 3G2500P00811 | | DOORSTEP RETRO MOD | REF | ... | | - |
| 130 | 3G2500A06431 | | Doorstep assy LH | 1 | .... |  | - |
| 131 | 3G2500A06531 | | Doorstep assy RH | 1 | .... |  | - |
| 132 | MS24694-C64 | | Screw | 18 | .... |  | - |
| 133 | 3G9580V01051 | | Ballistic protection | 1 | ... | | - |
| 134 | 3G9580V01151 | | Ballistic protection | 1 | ... | | - |
| 135 | 3G9580V01451 | | Ballistic protection | 1 | ... | | - |
| 136 | 3G9580V01551 | | Ballistic protection | 1 | ... | | - |
| 137 | 3G9580V01651 | | Ballistic protection | 1 | ... | | - |
| 138 | 3G9580V01751 | | Ballistic protection | 1 | ... | | - |
| 139 | 3G9580V02651 | | Ballistic protection | 1 | ... | | - |
| 140 | 3G9580V03051 | | Ballistic protection | 1 | ... | | - |
| 141 | 3G9580V06651 | | Ballistic protection | 1 | ... | | - |
| 142 | 3G9580V06751 | | Ballistic protection | 1 | ... | | - |
| 143 | 3G9580V06851 | | Ballistic protection | 1 | ... | | - |
| 144 | 3G9580V06951 | | Ballistic protection | 1 | ... | | - |
| 145 | 3G9580V07251 | | Ballistic protection | 1 | ... | | - |
| 146 | 3G9580V07351 | | Ballistic protection | 1 | ... | | - |
| 147 | AN525-10R11 | | Screw | 20 | ... | | - |

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|-----|--------------|-----------------|-------------|------|-----|------|---------|
| 148 | AN525-10R12 | | Screw | 2 | ... | | - |
| 149 | AN525-10R16 | | Screw | 28 | ... | | - |
| 150 | AN525-10R18 | | Screw | 4 | ... | | - |
| 151 | NAS1351C4H16 | | Screw | 2 | ... | | - |

PART X

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|------------|---------------------|--------------------|---|------------|----------|------|----------|
| 152 | 3G5206P00111 | | EMERGENCY RELEASE MECHANISM INSTALLATION | REF | . | | - |
| 153 | 3G5211A13451 | | Lever | 2 | .. | | - |
| 154 | 109-0323-04-1 | | Pin | 2 | .. | | - |
| 155 | 109-0323-05-1 | | Support assy | 2 | .. | | - |
| 156 | 109-0323-27-3 | 109-0323-27-101M01 | Handle lh pilot | 1 | .. | | - |
| 157 | 109-0323-27-4 | 109-0323-27-102 | Handle ay | 1 | .. | | - |
| 158 | 109-0855-65-101 | | Saddle assy | 2 | .. | | - |
| 159 | 3G5206P00131 | 109-0855-66-101 | Cover assy,lh | 1 | .. | | - |
| 160 | 3G5206P00132 | 109-0855-66-102 | Cover assy,rh | 1 | .. | | - |
| 161 | 3G2580A51451 | 3G2580A51451A1 | Cover | 2 | .. | | - |
| 162 | A246A001-1 | | Decal | 2 | .. | | - |
| 163 | MS24693-S6 | | Screw | 2 | .. | | - |
| 164 | 3G5206P00251 | | Support right | 1 | .. | | - |
| 165 | 3G5206P00351 | | Support left | 1 | .. | | - |
| 166 | 3G5206P00431 | | Lower connecting link assy | 2 | .. | | - |
| 167 | 3G5206P00531 | | Upper connecting link assy | 2 | .. | | - |
| 168 | 3G5206P00651 | | Pin lower | 2 | .. | | - |
| 169 | 3G5206P00751 | | Pin upper | 2 | .. | | - |
| 170 | 999-0050-21-413 | AW003BR06-350C | Bearing, sleeve flanged | 2 | .. | | - |
| 171 | MS16624-1056 | | Ring | 4 | .. | | - |
| 172 | MS20392-2C9 | | Pin | 8 | .. | | - |
| 173 | MS21069L3 | | Nut, self-locking plate | 12 | .. | | - |
| 174 | MS21075L04N | | Nut, self-locking plate | 2 | .. | | - |
| 175 | MS21075L08 | MS21075L08N | Nut, self-locking plate | 12 | .. | | - |
| 176 | MS24665-86 | | Pin, cotter | 8 | .. | | - |
| 177 | MS24693-272 | MS24693-S272 | Screw | 4 | .. | | - |
| 178 | MS27039-0808 | | Screw | 12 | .. | | - |
| 179 | MS27039-1-07 | | Screw | 12 | .. | | - |
| 180 | MS9048-072 | NAS561C3-11 | Pin, spring | 2 | .. | | - |
| 181 | NAS1097AD3-7 | | Rivet | 0,1 kg | .. | | - |
| 182 | NAS620-10L | | Washer | 8 | .. | | - |
| 183 | NAS620-8 | | Washer | 12 | .. | | - |

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

2) CONSUMABLES

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

| # | SPEC./LHD CODE NUMBER | DESCRIPTION | Q.TY | NOTE | PART |
|-----|-----------------------|----------------------------|------|------|-----------------|
| 184 | Code No. 900004603 | Adhesive EA934NA (C054) | AR | (1) | I,III, VI, VIII |
| 185 | Code No. 900000581 | Adhesive EA9309.3NA (C021) | AR | (1) | III |
| 186 | Code No. 900001596 | Sealant Proseal 890 (C153) | AR | (1) | III |

| # | SPEC./LHD CODE NUMBER | DESCRIPTION | Q.TY | NOTE | PART |
|---|---------------------------|---------------------------|----------|------|------|
| | Commercial | Aluminum plate thk 1.6 mm | 60x30 mm | (1) | X |
| | 199-05-002 Type I Class 2 | Adhesive | AR | (1) | X |

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

3) LOGISTIC MATRIX

N.A.

NOTE

(1) Item to be procured as local supply.

B. SPECIAL TOOLS

| # | P/N | DESCRIPTION | Q.TY | NOTE | PART |
|-----|-------------------|---------------------------------|------|------|------|
| 187 | 3G5310H68511A003A | Positioning and drilling jig LH | 1 | | III |
| 188 | 3G5310H68611A003A | Positioning and drilling jig RH | 1 | | III |

C. INDUSTRY SUPPORT INFORMATION

Customization.

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. 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 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. 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

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 10, 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 10, countermark the indicated hole position on existing door cover assy LH P/N 3G5211A05952.
 - 2.1.3 With reference to Figure 10, remove the door cover assy LH P/N 3G5211A05952; store the hardware for later re-use.
 - 2.1.4 With reference to Figure 10, 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 10, 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 3G5320A13651 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 3G5320A13651, coordinating with hole positions on structure.
- 2.2.10 With reference to Figure 12 Detail, temporarily install the co-pilot lower support P/N 3G5320A13651 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 13 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 3G5320A13751, coordinating with hole positions on structure.
 - 2.3.9 With reference to Figure 12 Detail, temporarily install the pilot lower support P/N 3G5320A13751 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 13 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 $\varnothing 4.52 \pm 4.65$ 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.
- 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 $\varnothing 5.0$ 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 $\varnothing 4.52 \pm 4.65$ 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 $\varnothing 5.0$ 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 $\varnothing 5.0$ 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 3G5320A13651 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. 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

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 3G5320A13651 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 3G5320A13651 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. 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 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. 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 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 3G5311A20011 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:
 - 3G9580V01051
 - 3G9580V01551
 - 3G9580V06051
 - 3G9580V06151
 - 3G9580V06251
 - 3G9580V06351
 - 3G9580V06451
 - 3G9580V06551
 - 3G9580V06651
 - 3G9580V06751
 - 2.2 With reference to Figure 21 Detail A and View C, countermark the indicated n°20 hole positions on relevant floor panels.
 - 2.3 With reference to Figure 21 View C and Section B-B, drill n°20 holes Ø14.25÷14.38 in the countermarked positions and install n°20 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 3G9580A04111 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 3G5330A13952 and relevant hardware; re-install the n°2 seat-tracks and relevant n°2 ballistic plates P/N 3G9580V02951 by means of n°8 screws P/N MS24694-S101.
 - 3.3 With reference to Figure 22 Detail B, remove the indicated n°4 seat-tracks P/N 3G5330A38652 and relevant hardware; re-install the n°4 seat-tracks and relevant n°4 ballistic plates P/N 3G9580V02751 by means of n°32 screws

P/N MS24694-S101 and n°4 screws P/N P/N MS24694-S104.

- 3.4 With reference to Figure 22 Detail B, remove the indicated n°4 seat-tracks P/N 3G5330A02052 and relevant hardware; re-install the n°4 seat-tracks and relevant n°4 ballistic plates P/N 3G9580V07451 by means of n°32 screws P/N MS24694-S101 and n°4 screws P/N P/N MS24694-S104.
- 3.5 With reference to Figure 22 Detail B, remove the indicated n°2 seat-tracks P/N 3G5330A21953 and relevant hardware; re-install the n°2 seat-tracks and relevant n°2 ballistic plates P/N 3G9580V03251 by means of n°64 screws P/N MS24694-S101 and n°4 screws P/N P/N MS24694-S103.
4. Return the helicopter to flight configuration and record for compliance with Part VI of this Service Bulletin on the helicopter logbook.
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 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 3G9580A04011 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 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06051 by means of n°4 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.4 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06151 by means of n°4 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.5 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06251 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R18, a screw P/N NAS1351C4H16 and n°3 screws P/N AN525-10R11.
 - 2.6 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06351 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R18, a screw P/N NAS1351C4H16 and n°3 screws P/N AN525-10R11.
 - 2.7 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06451 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R18 and n°3 screws P/N AN525-10R11.
 - 2.8 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01051 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.9 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01551 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.10 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06651 by means of a screw P/N AN525-10R16 and a screw P/N AN525-10R12.

- 2.11 With reference to Figure 24 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06751 by means of a screw P/N AN525-10R16 and a screw P/N AN525-10R12.
- 2.12 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.
- 2.13 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. 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 VIII

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 3G5311A20011 as described in the following procedure:
 - 2.1 With reference to Figure 26 Detail A, temporarily position all the following ballistic protections on the floor:
 - 3G9580V01051
 - 3G9580V01151
 - 3G9580V01451
 - 3G9580V01551
 - 3G9580V01651
 - 3G9580V01751
 - 3G9580V02651
 - 3G9580V03051
 - 3G9580V06651
 - 3G9580V06751
 - 3G9580V06851
 - 3G9580V06951
 - 3G9580V07251
 - 3G9580V07351
 - 2.2 With reference to Figure 26 Detail A and View C, countermark the indicated n°20 hole positions on relevant floor panels.
 - 2.3 With reference to Figure 26 View C and Section B-B, drill n°20 holes Ø14.25÷14.38 in the countermarked positions and install n°20 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 3G9580A04311 as described in the following procedure:
 - 3.1 With reference to Figure 27 Detail B, replace the n°292 screws P/N MS27039-1-09 securing the floor panels with n°292 screws P/N AN525-10R9.
 - 3.2 With reference to Figure 27 Detail B, remove the existing hardware and install n°8 screws P/N AN524-416R9.
 - 3.3 With reference to Figure 27 Detail B, remove the indicated n°2 seat-tracks

P/N 3G5330A21953 and relevant hardware; re-install the n°2 seat-tracks and relevant n°2 ballistic plates P/N 3G9580V03251 by means of n°64 screws P/N MS24694-S101 and n°4 screws P/N P/N MS24694-S104.

- 3.4 With reference to Figure 27 Detail B, remove the indicated n°4 seat-tracks P/N 3G5330A21953 and relevant hardware; re-install the n°4 seat-tracks and relevant n°2 ballistic plates P/N 3G9580V03251 by means of n°128 screws P/N MS24694-S101 and n°8 screws P/N P/N MS24694-S103.
4. Return the helicopter to flight configuration and record for compliance with Part VIII of this Service Bulletin on the helicopter logbook.
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 IX

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 3G9580A04011 as described in the following procedure:
 - 2.1 With reference to Figure 29 Detail D, remove the RH doorstep assy P/N 3G2500A05031 from the helicopter.
 - 2.2 With reference to Figure 29 Detail D, remove the LH doorstep assy P/N 3G2500A05131 from the helicopter.
 - 2.3 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06851 by means of n°2 screws P/N AN525-10R16.
 - 2.4 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06951 by means of n°2 screws P/N AN525-10R16.
 - 2.5 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01451 by means of n°4 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.6 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V02651 by means of n°4 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
 - 2.7 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V07251 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R18, a screw P/N NAS1351C4H16 and n°3 screws P/N AN525-10R11.
 - 2.8 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V07351 by means of n°4 screws P/N AN525-10R16, a screw P/N AN525-10R18, a screw P/N NAS1351C4H16 and n°3 screws P/N AN525-10R11.
 - 2.9 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01151 by means of n°2 screws P/N AN525-10R16, a screw P/N AN525-10R18 and n°2 screws P/N AN525-10R11.
 - 2.10 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V03051 by means of n°2 screws P/N AN525-10R16, a screw P/N AN525-10R18 and n°2 screws

P/N AN525-10R11.

- 2.11 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01751 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
- 2.12 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01651 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
- 2.13 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01551 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
- 2.14 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V01051 by means of n°2 screws P/N AN525-10R16 and n°2 screws P/N AN525-10R11.
- 2.15 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06651 by means of a screw P/N AN525-10R16 and a screw P/N AN525-10R12.
- 2.16 With reference to Figure 28 Detail C, remove the existing hardware and install the ballistic protection P/N 3G9580V06751 by means of a screw P/N AN525-10R16 and a screw P/N AN525-10R12.

NOTE

**If necessary, it is possible to drill the ballistic protection
in correspondence with doorstep assy fixing points.**

- 2.17 With reference to Figure 24 Detail D and section E-E, install the LH doorstep assy P/N 3G2500A06531 by means of n°3 screws P/N MS24694-C64 and n°2 existing screws P/N MS24694-C50.
- 2.18 With reference to Figure 24 Detail D and section E-E, install the FWD RH doorstep assy P/N 3G2500A06431 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 IX of this Service Bulletin on the helicopter logbook.
4. 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 X

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. With reference to Figures 30 thru 33, perform the emergency release mechanism installation P/N 3G5206P00111 as described in the following procedure:
 - 2.1 In accordance with AMP DM 39-X-52-11-01-00A-520A-K remove the left cockpit door.
 - 2.2 With reference to Figure 30 Section B-B and Section C-C, perform the indicated cutout on the canopy structure.
 - 2.3 With reference to Figure 30 Section B-B and Section D-D, perform the indicated cutout on the canopy structure.
 - 2.4 With reference to Figure 30 Section B-B, seal around the performed cutouts by means of adhesive 199-05-002 Type II Class 2 as indicated.
 - 2.5 With reference to Schematic Section B-B and C-C, apply n°2 layers of aramid cloth HexForce 20914 7 1200 by means of adhesive 199-05-002 Type I Class 2.
 - 2.6 With reference to Schematic Section B-B and D-D, apply n°2 layers of aramid cloth HexForce 20914 7 1200 by means of adhesive 199-05-002 Type I Class 2.
 - 2.7 With reference to Figure 32 Detail D, install the saddle assy P/N 109-0855-65-101 on the cover assy LH retromod P/N 3G5206P00131 by means of n°4 rivets P/N NAS1097AD3-7.
 - 2.8 With reference to Figure 32 Section E-E, drill the hole $\varnothing 3.68 \div 3.81$ thru the support LH P/N 3G5206P00351 according to the holes on the cover P/N 3G2580A51451 and the cover assy LH retromod P/N 3G5206P00131.
 - 2.9 With reference to Figure 32 Section E-E, install the nut plate P/N MS21075L04N on the support LH P/N 3G5206P00351 by means of n°2 rivets P/N NAS1097AD3-7.
 - 2.10 With reference to Figure 32 View C, install n°6 nut plates P/N MS21069L3 on the support LH P/N 3G5206P00351 by means of n°12 rivets P/N MS20426AD3-7, according to the holes on the cover assy LH retromod P/N 3G5206P00131.
 - 2.11 With reference to Figure 32 Section B-B, temporarily locate the bracket P/N 109-0323-05-1 on the support LH P/N 3G5206P00351 and countermark n°2 holes.
 - 2.12 With reference to Figure 32 Section B-B, drill n°2 countersunk 100° holes $\varnothing 7.79$ thru the support LH P/N 3G5206P00351 in the previously countermarked positions.

NOTE

Install aluminium shims (dimension 30x15 mm, thickness 1,6 mm each) between the support and the bracket. Bond the shims by means of adhesive 199-05-002 Type I Class 2.

- 2.13 With reference to Figure 32 Section B-B, install the bracket P/N 109-0323-05-1 with the relevant retaining ring P/N MS16624-1056 on the support LH P/N 3G5206P00351 by means of n°2 screws P/N MS24693-S272.
- 2.14 With reference to Figure 32 View C and Section B-B, install the cover assy LH retromod P/N 3G5206P00131 with the relevant retaining ring P/N MS16624-1056 on the support LH P/N 3G5206P00351 by means of n°6 screws P/N MS27039-1-07.
- 2.15 With reference to Figure 32 Section B-B, put the handle LH P/N 109-0323-27-3, the pin P/N 109-0323-04-1 and the lever P/N 3G5211A13451 in their correct installation position.
- 2.16 With reference to Figure 32 View C, install the upper connecting link assy P/N 3G5206P00531 on the lever P/N 3G5211A13451 by means of the pin P/N MS20392-2C9, the washer P/N NAS620-10L and the cotter pin P/N MS24665-86.
- 2.17 With reference to Figure 32 View C, repeat step 2.4.16 to install the lower connecting link assy P/N 3G5206P00431.
- 2.18 With reference to Figure 32 Section B-B, drill the hole $\varnothing 2.39 \pm 2.46$ and fix the handle LH P/N 109-0323-27-3 by means of the spring pin P/N MS9048-072.
- 2.19 With reference to Figure 31 Detail A1, remove n°2 bolts P/N AN4-14A, n°2 nuts P/N MS17825-4, n°2 cotter pins P/N MS24665-5 and the bearing sleeve P/N 999-0050-06-405 from the upper left hinge assy P/N 3G5322A00131 and the lower left hinge assy P/N 3G5322A00331.
- 2.20 With reference to Figure 31 Detail A1, install the upper connecting link assy P/N 3G5206P00531 on the upper hinge assy by means of the upper pin P/N 3G5206P00751, the pin P/N MS20392-2C9 and the washer P/N NAS620-10L.
- 2.21 With reference to Figure 31 Detail A1, safety the pin P/N MS20392-2C9 by means of the cotter pin P/N MS24665-86.
- 2.22 With reference to Figure 31 Detail A2, install the lower connecting link assy P/N 3G5206P00431 on the lower hinge assy by means of the bushing P/N 999-0050-21-413, the lower pin P/N 3G5206P00651, the pin P/N MS20392-2C9 and the washer P/N NAS620-10L.
- 2.23 With reference to Figure 33 Detail A2, safety the pin P/N MS20392-2C9 by

- means of the cotter pin P/N MS24665-86.
- 2.24 With reference to Figure 33 Detail A and Figure 32 Section B-B, put the support LH 3G5206P00351 and the pilot cover door LH previously removed in the correct installation position and countermark n°6 holes on the canopy and n°3 holes on the pilot cover door LH.
 - 2.25 With reference to Figure 32 Section B-B, drill n°6 holes Ø4.90-5.03 thru the canopy and n°6 holes Ø5.28-5.44 thru the support LH 3G5206P00351.
 - 2.26 With reference to Figure 33 Detail A, drill n°3 holes Ø4.90-5.03 thru the pilot cover door LH P/N 3G5320A06131.
 - 2.27 With reference to Figure 32 Section B-B, install n°6 nut plates P/N MS21075L08 on the support LH 3G5206P00351 by means of n°12 rivets P/N MS20426AD3.
 - 2.28 With reference to Figure 32 Section B-B, install the support LH 3G5206P00351 on the canopy by means of n°6 screws P/N MS27039-0808 and n°6 washers P/N NAS620-8.
 - 2.29 In accordance with AMP DM 39-X-52-11-01-00A-720A-K install the left cockpit door.
 - 2.30 With reference to Figure 30 thru 33, repeat the steps from 2.1 thru 2.29 for the RH side.
3. Return the helicopter to flight configuration and record for compliance with Part X of this Service Bulletin on the helicopter logbook.
 4. 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”.

4G9580F00311
KIT COCKPIT FLOOR BALLISTIC PROTECTION

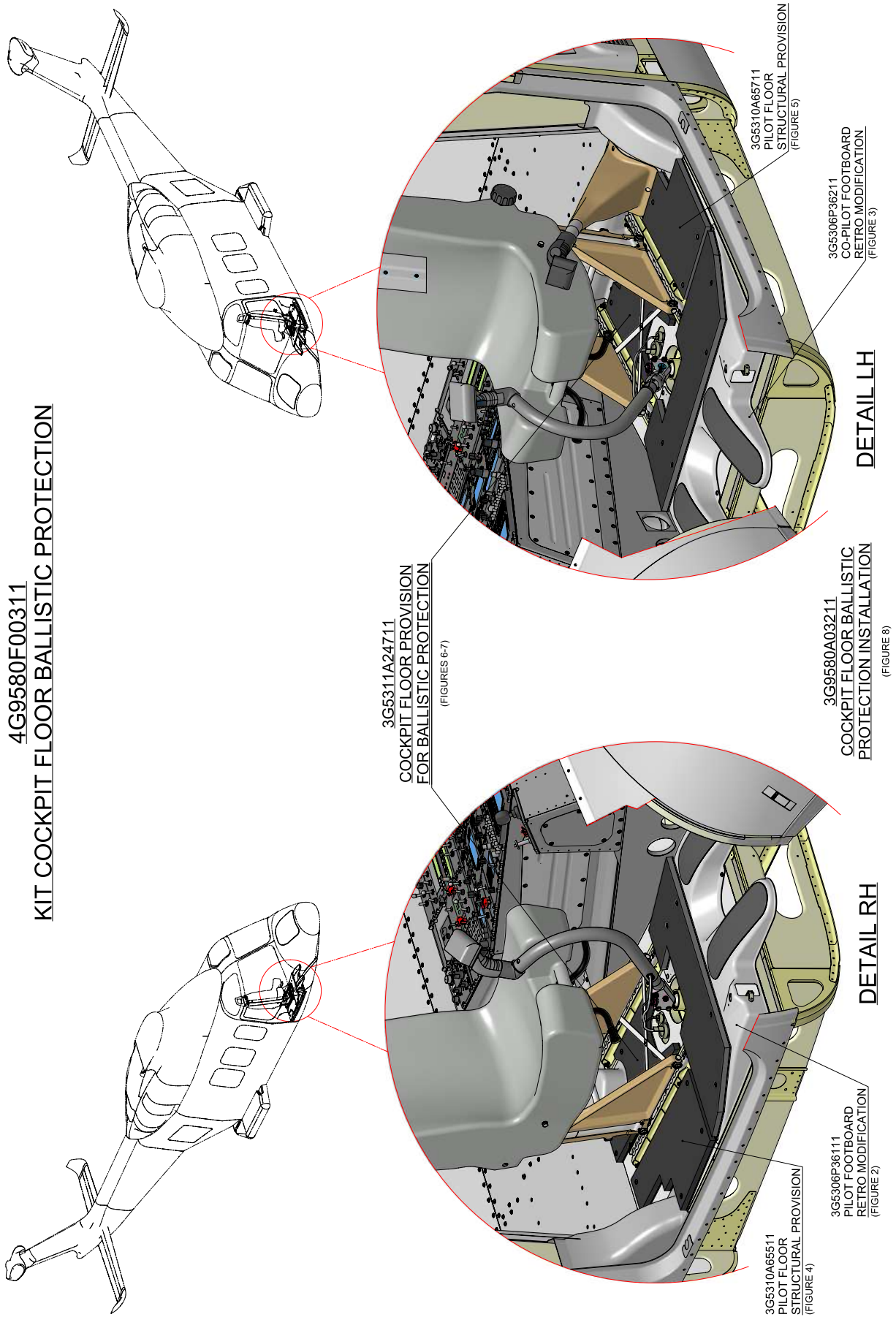


Figure 1

**3G5306P36211
CO-PILOT FOOTBOARD
RETRO MODIFICATION**

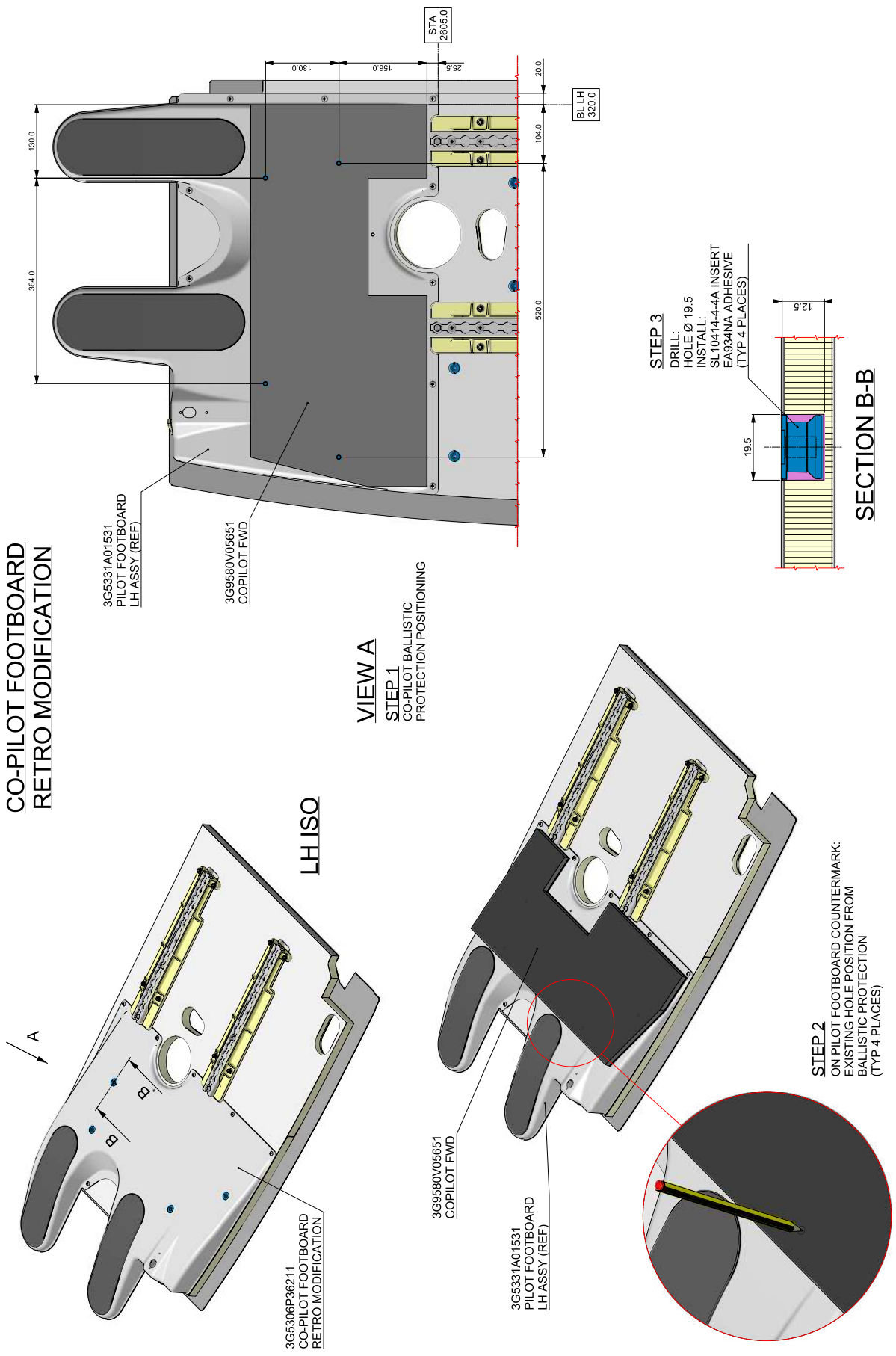


Figure 2

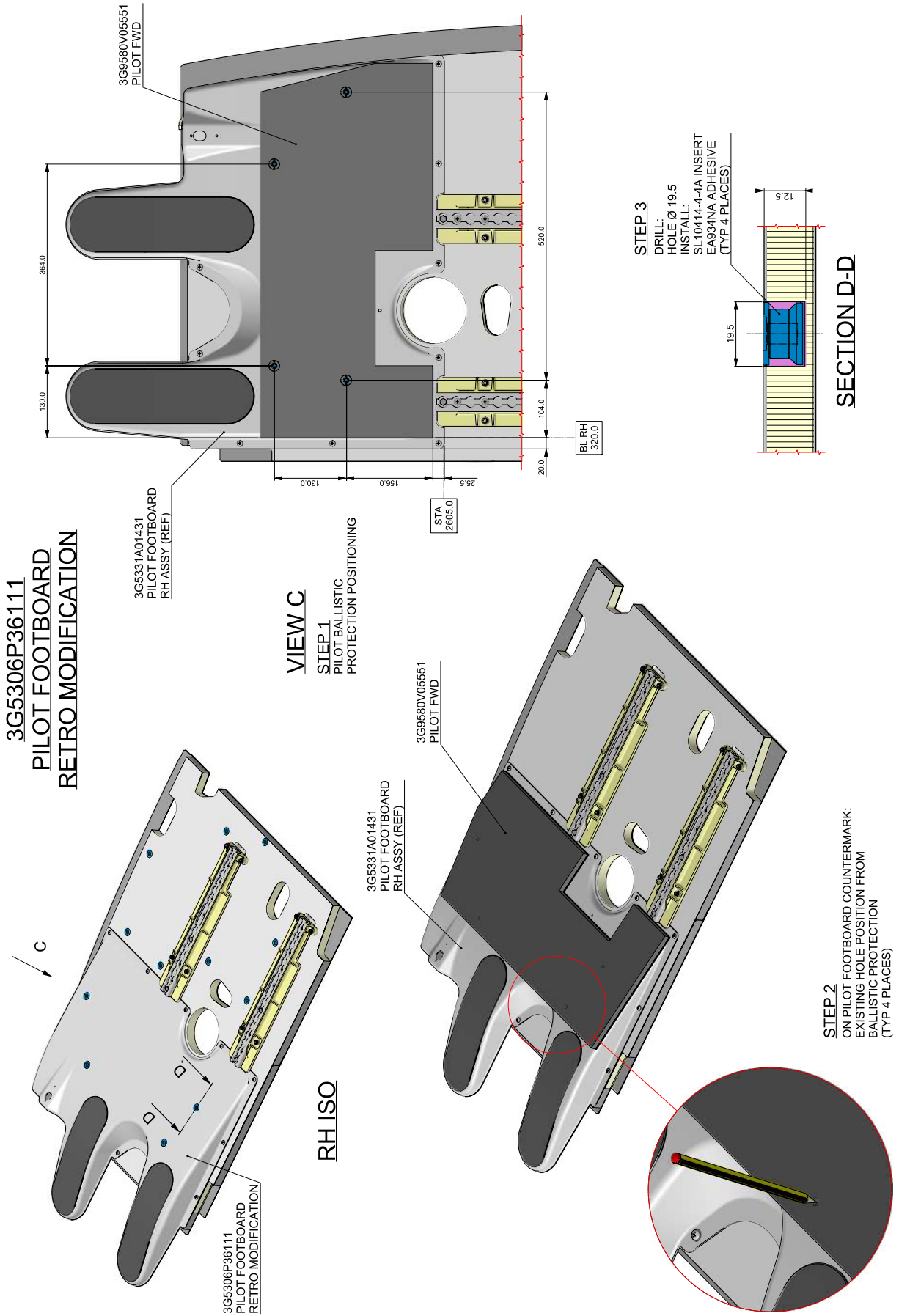


Figure 3

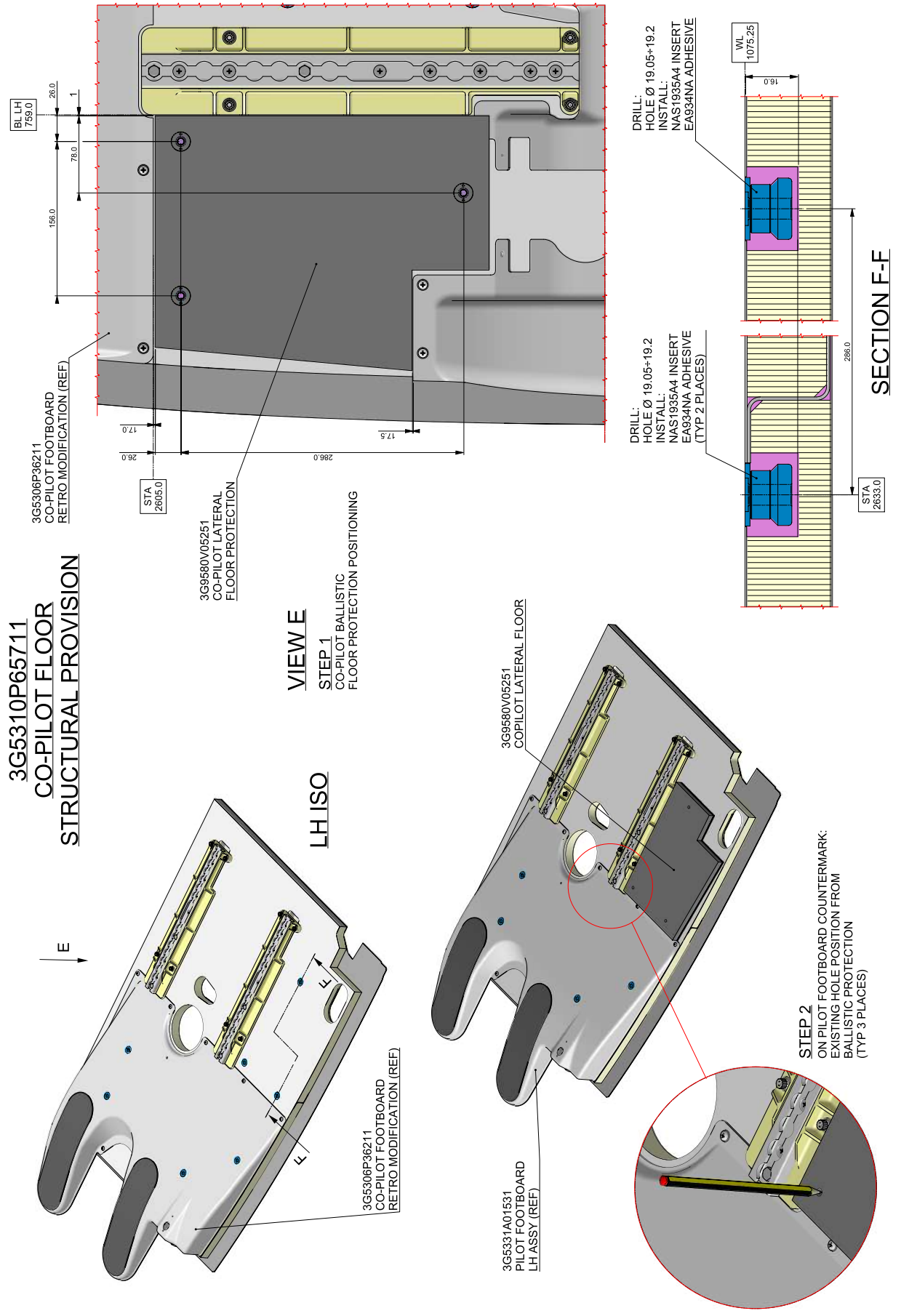


Figure 4

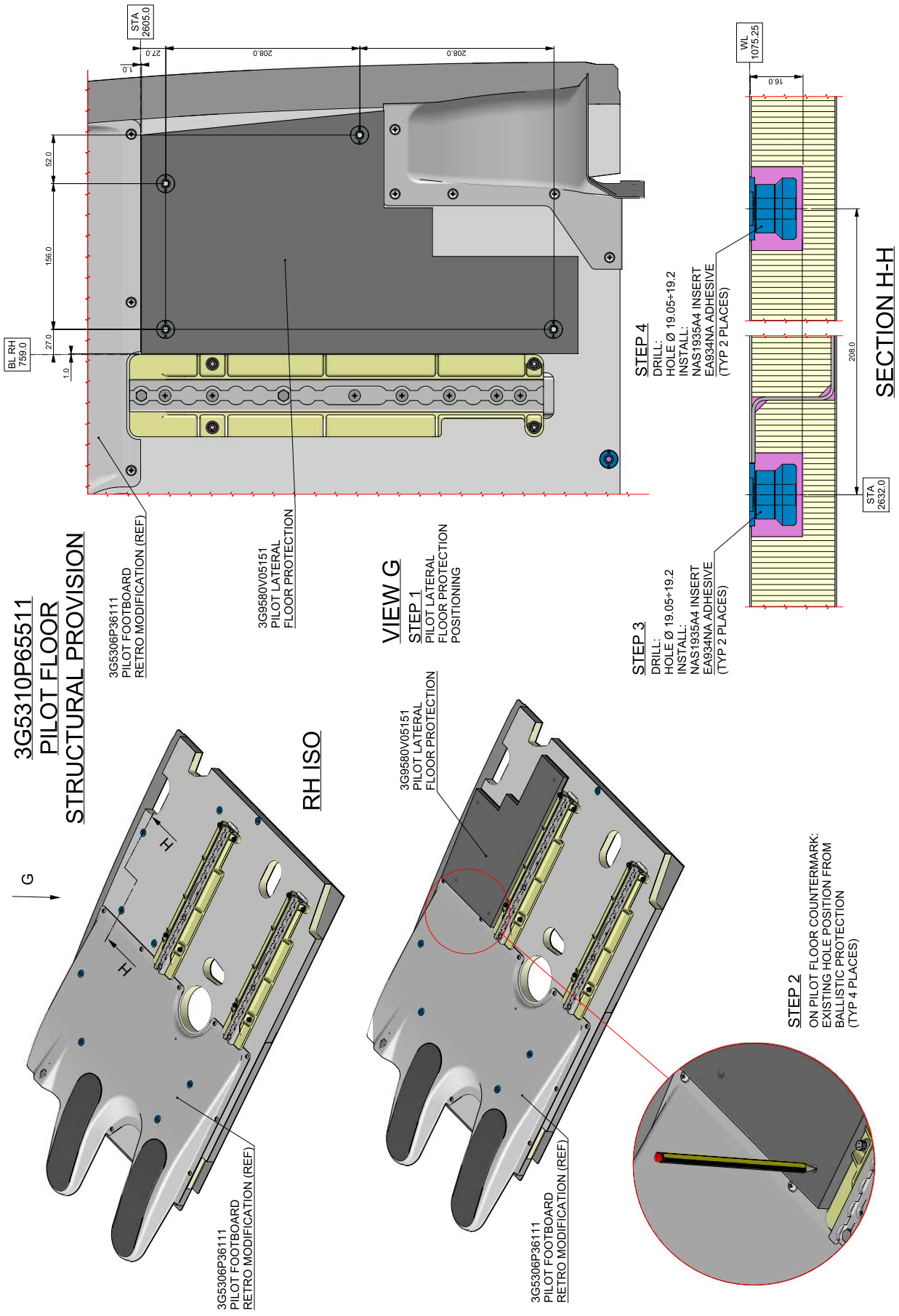


Figure 5

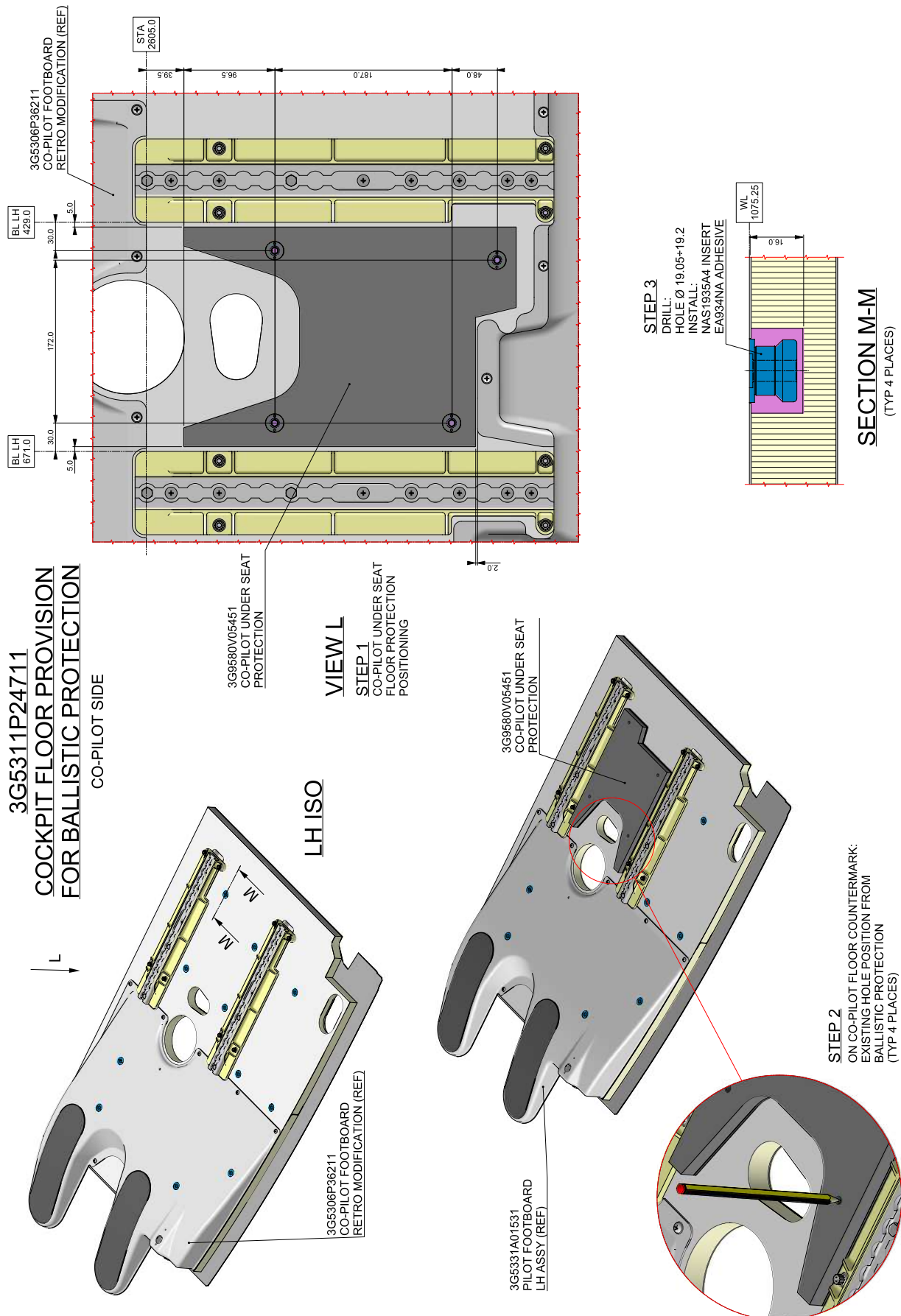


Figure 6

**3G9580A03211
COCKPIT FLOOR
BALLISTIC PROTECTION INSTALLATION**

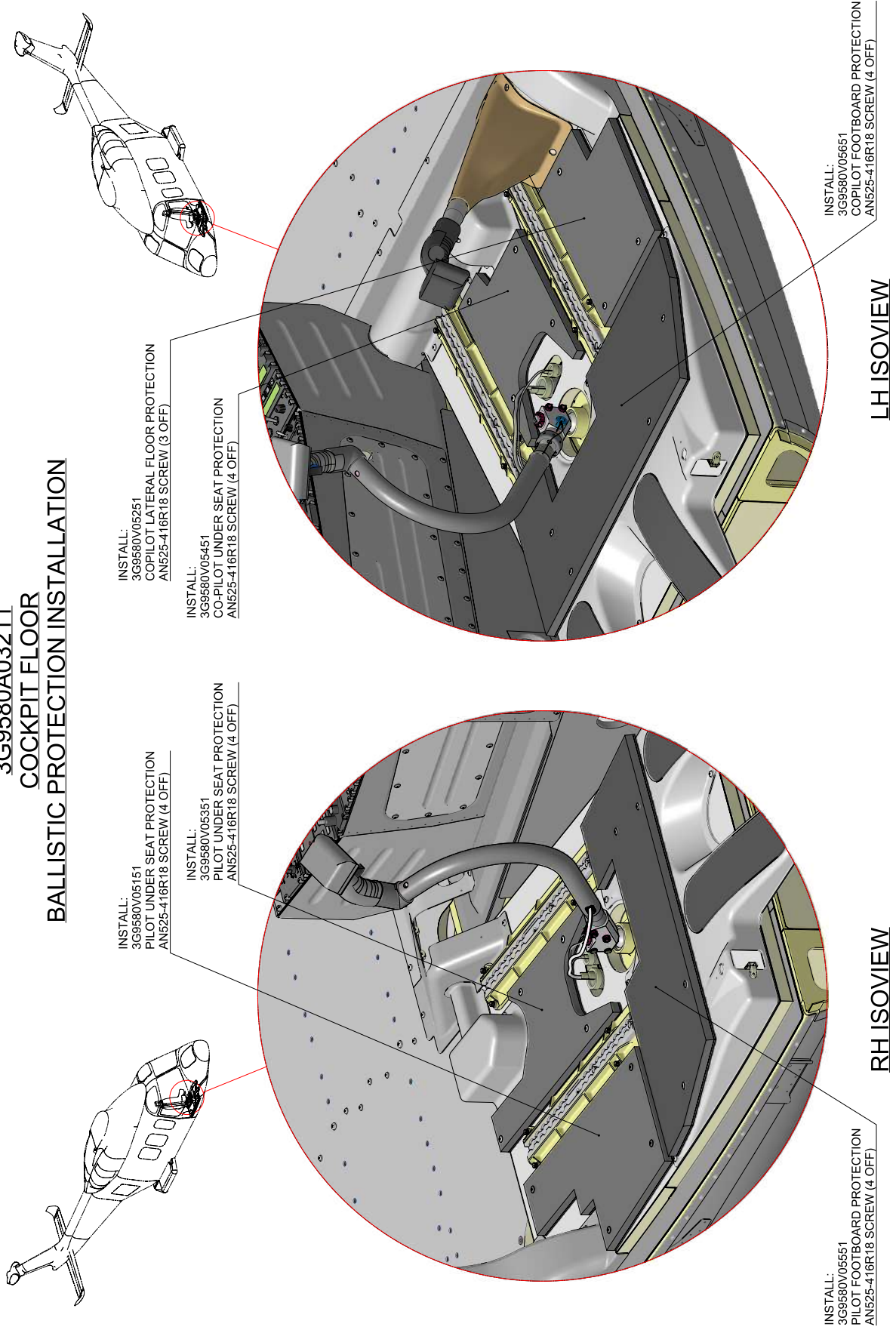
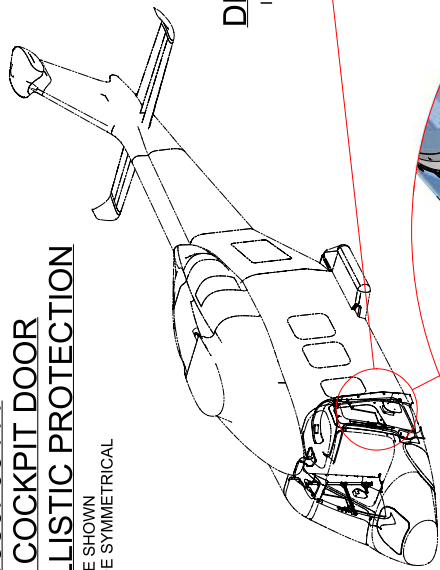
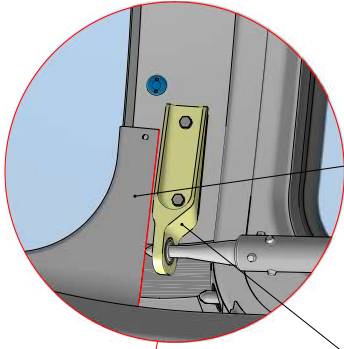
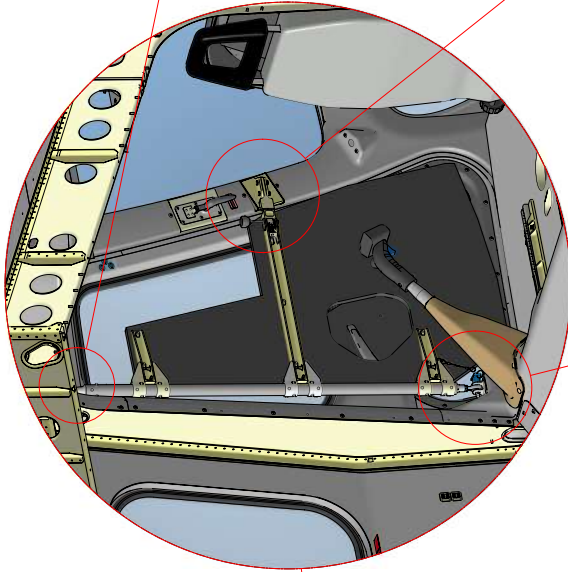


Figure 8

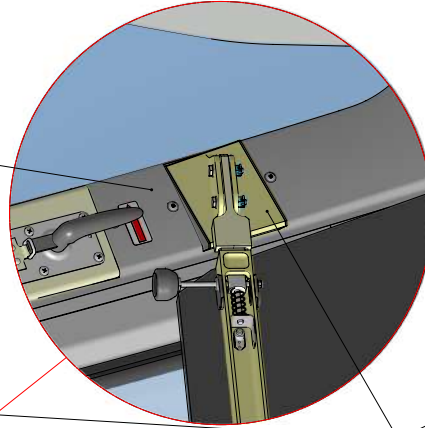
4G9580F00411
KIT COCKPIT DOOR
BALLISTIC PROTECTION
LH SIDE SHOWN
RH SIDE SYMMETRICAL



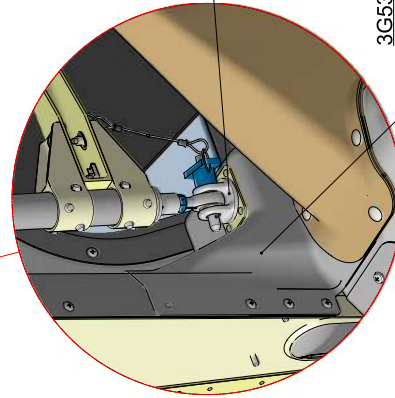
DETAIL B
INSIDE VIEW



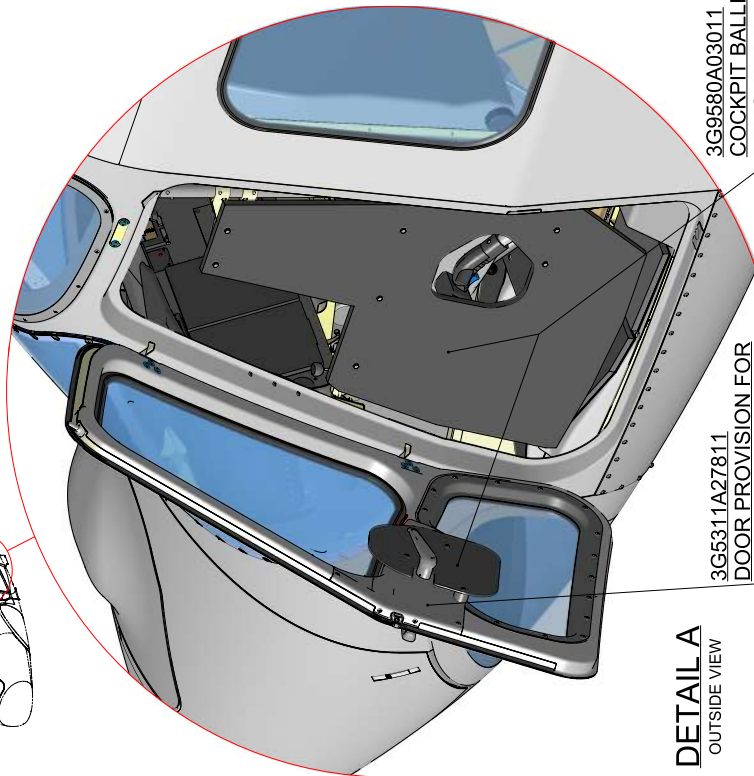
3G5320P01011
COCKPIT LINER
RETROMOD
(FIGURES 16-17)



3G9580A03111
COCKPIT BALLISTIC PROTECTION
FIXED PARTS
(FIGURES 11-16)



3G5310A88611
COPILOT COCKPIT STRUCTURAL VARIANT (SHN)
3G5310A88511
PILOT COCKPIT STRUCTURAL VARIANT (OPP)
(FIGURE 11)



DETAIL A
OUTSIDE VIEW

3G5311A27811
DOOR PROVISION FOR
BALLISTIC PROTECTION
(FIGURE 10)

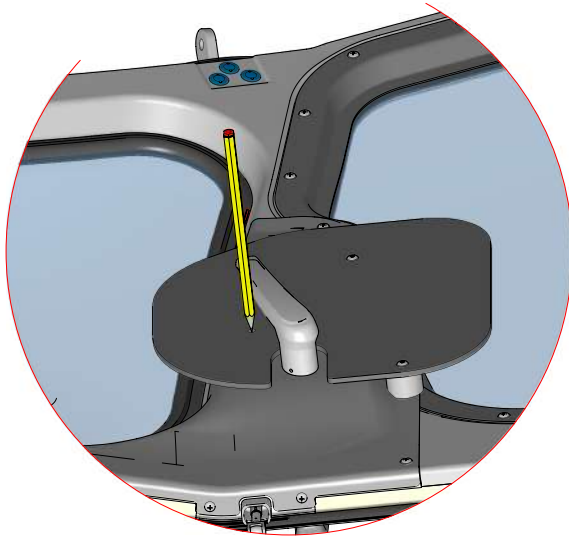
3G9580A03011
COCKPIT BALLISTIC PROTECTION
REMOVABLE PARTS
(FIGURES 18-19)

Figure 9

3G5311A27811

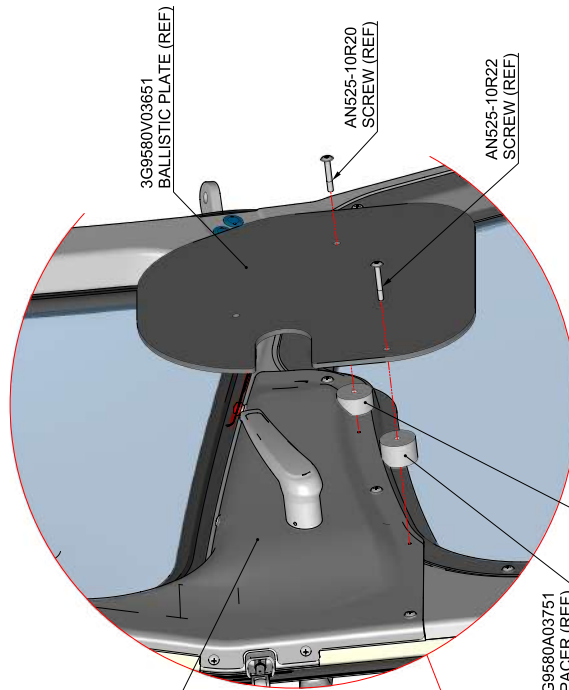
DOOR PROVISION FOR BALLISTIC PROTECTION

LH SIDE SHOWN
RH SIDE SYMMETRICAL



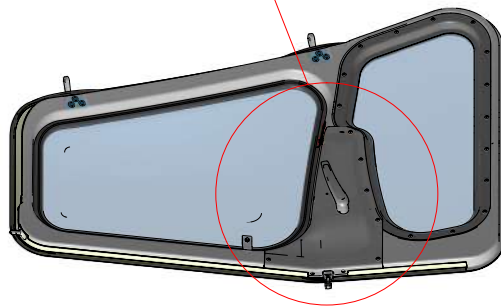
STEP 1.2

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



STEP 1.1

REMOVE:
EXISTING SCREW
TEMPORARILY INSTALL:
3G9580V03651 BALLISTIC PLATE
AN625-10R20 SCREW
AN625-10R22 SCREW
3G9580A03551 SPACER
3G9580A03751 SPACER



LH DOOR ASSY

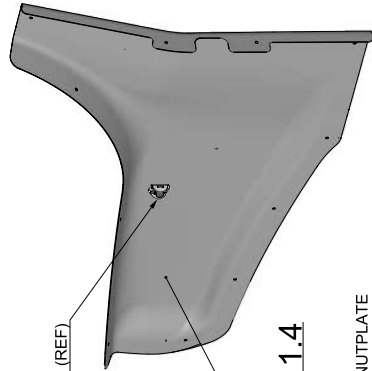
3G5211A05952
COVER LH (SHN)
3G5211A06052
COVER RH (OPP)

3G9580A03751
SPACER (REF)
3G9580A03551
SPACER (REF)

3G9580V03651
BALLISTIC PLATE (REF)

AN625-10R20
SCREW (REF)

AN625-10R22
SCREW (REF)



STEP 1.4

VIEW A
INSTALL:
A407A3C2 NUTPLATE
USE:
EA9309.3NA ADHESIVE

A407A3C2
NUTPLATE (REF)
3G5211A05952
COVER LH (SHN)
3G5211A06052
COVER RH (OPP)



STEP 1.3

REMOVE:
COVER FROM THE DOOR
DRILL:
HOLE Ø6.35*±6.48 THRU

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

Figure 10

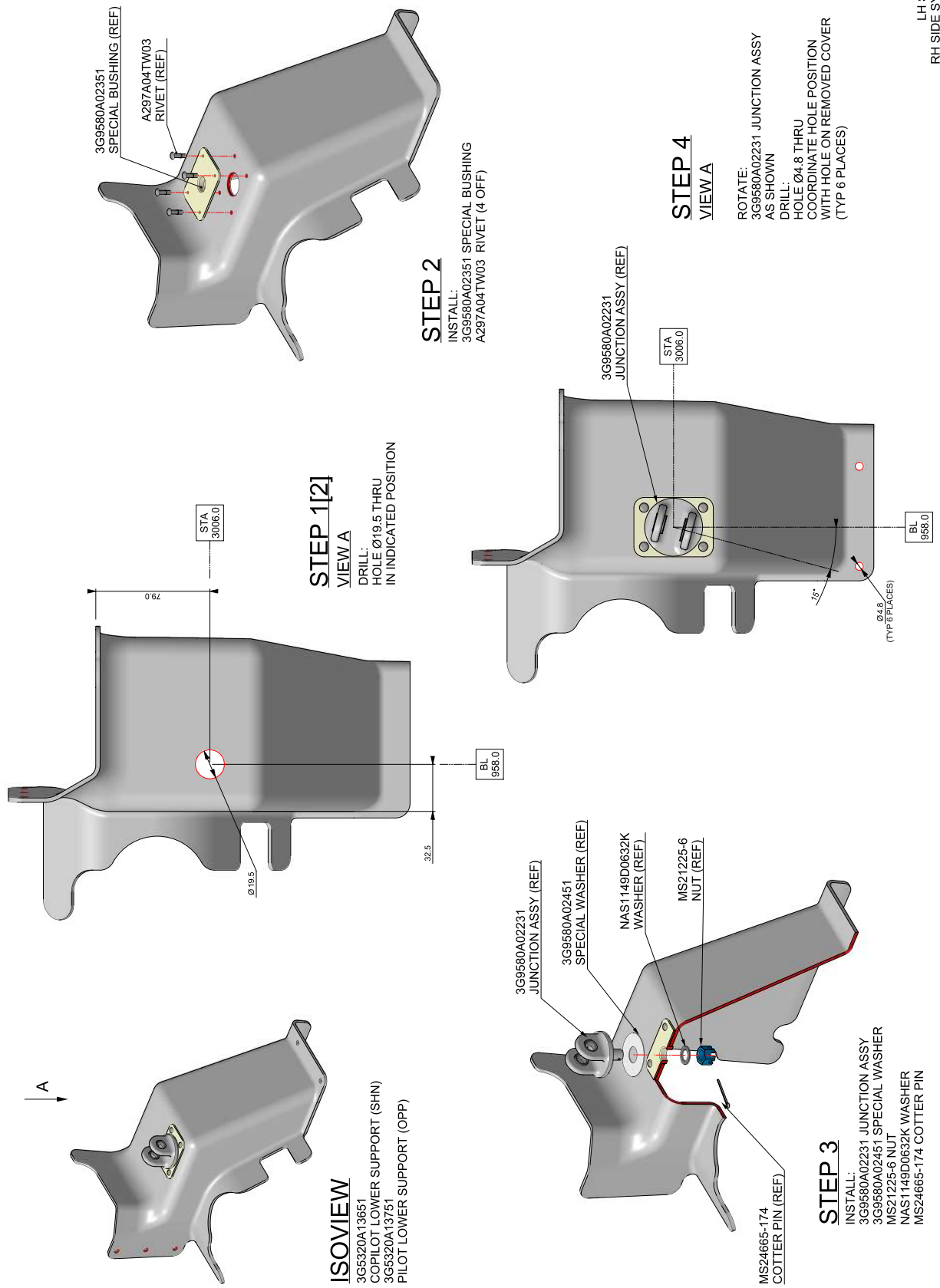


Figure 11

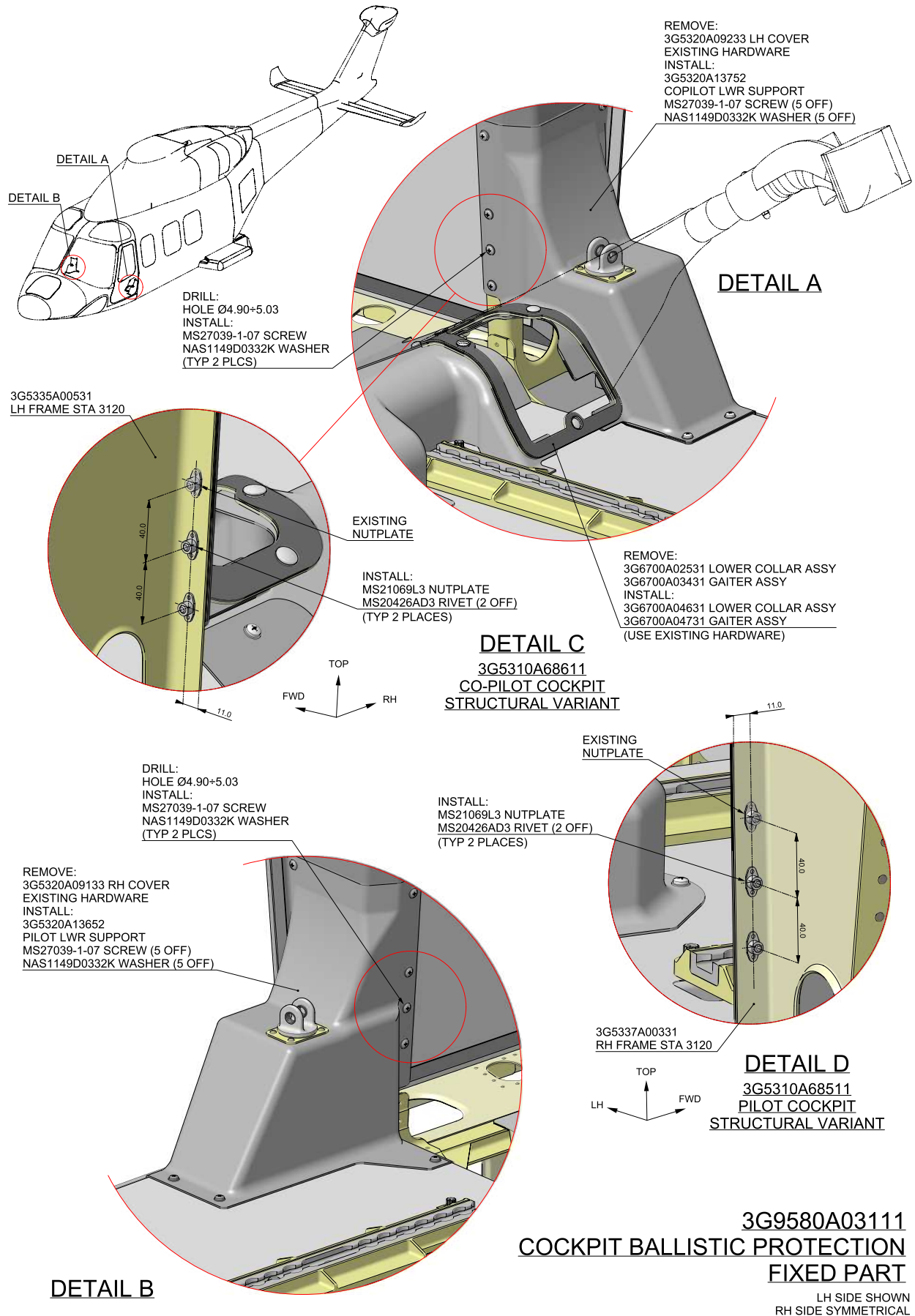


Figure 12

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

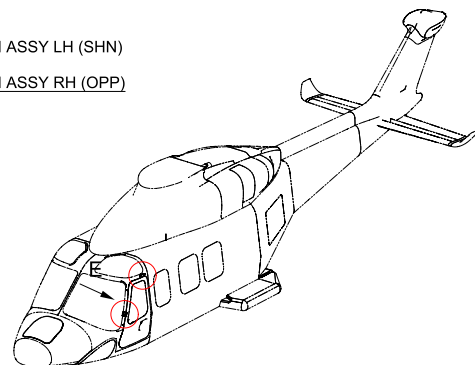
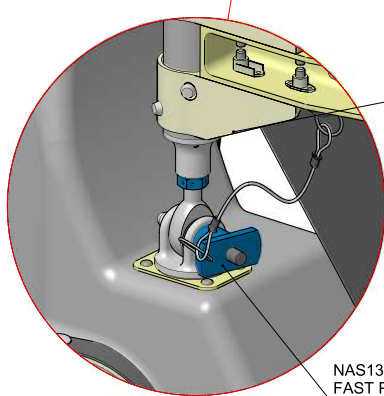
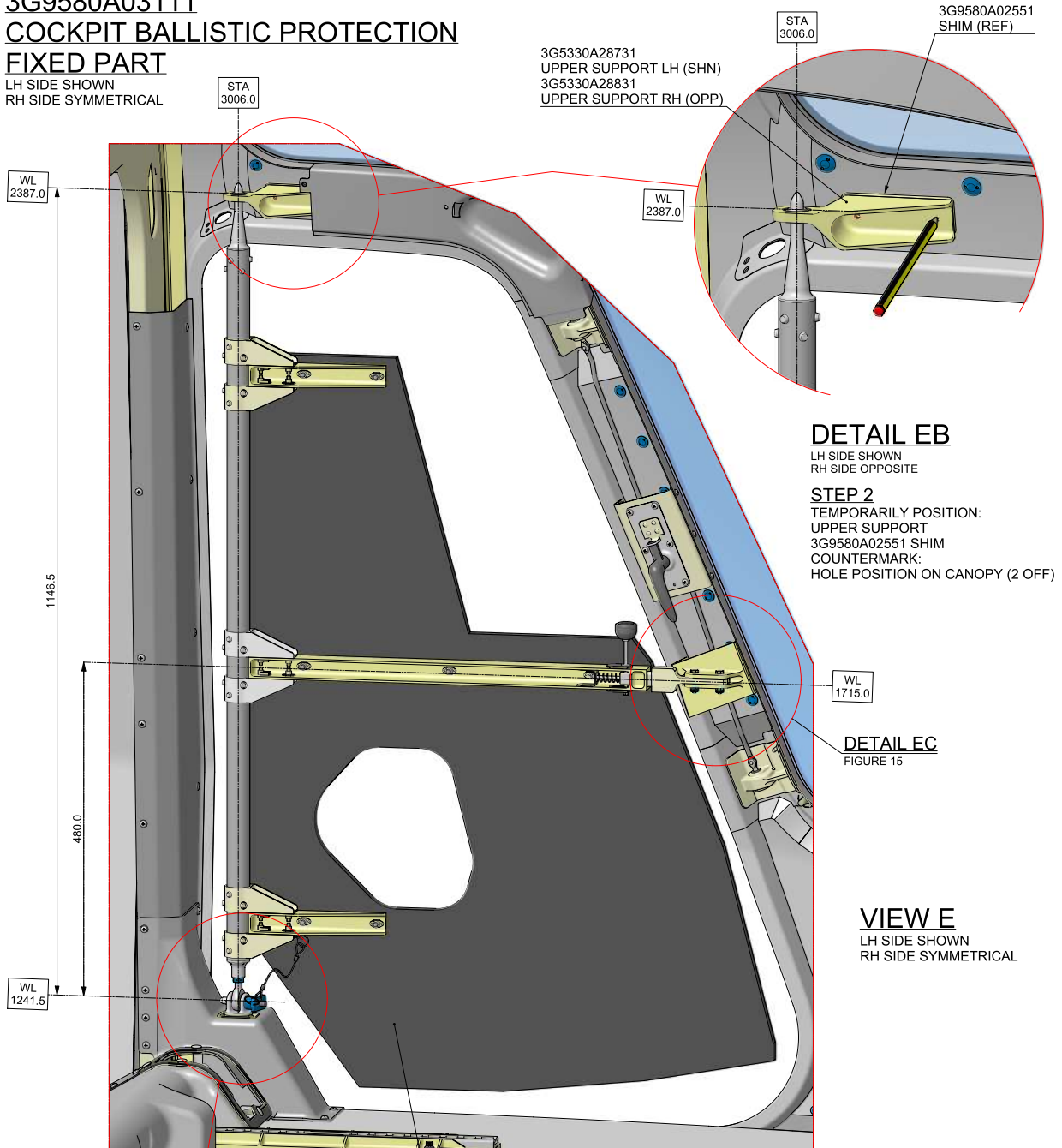


Figure 13

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

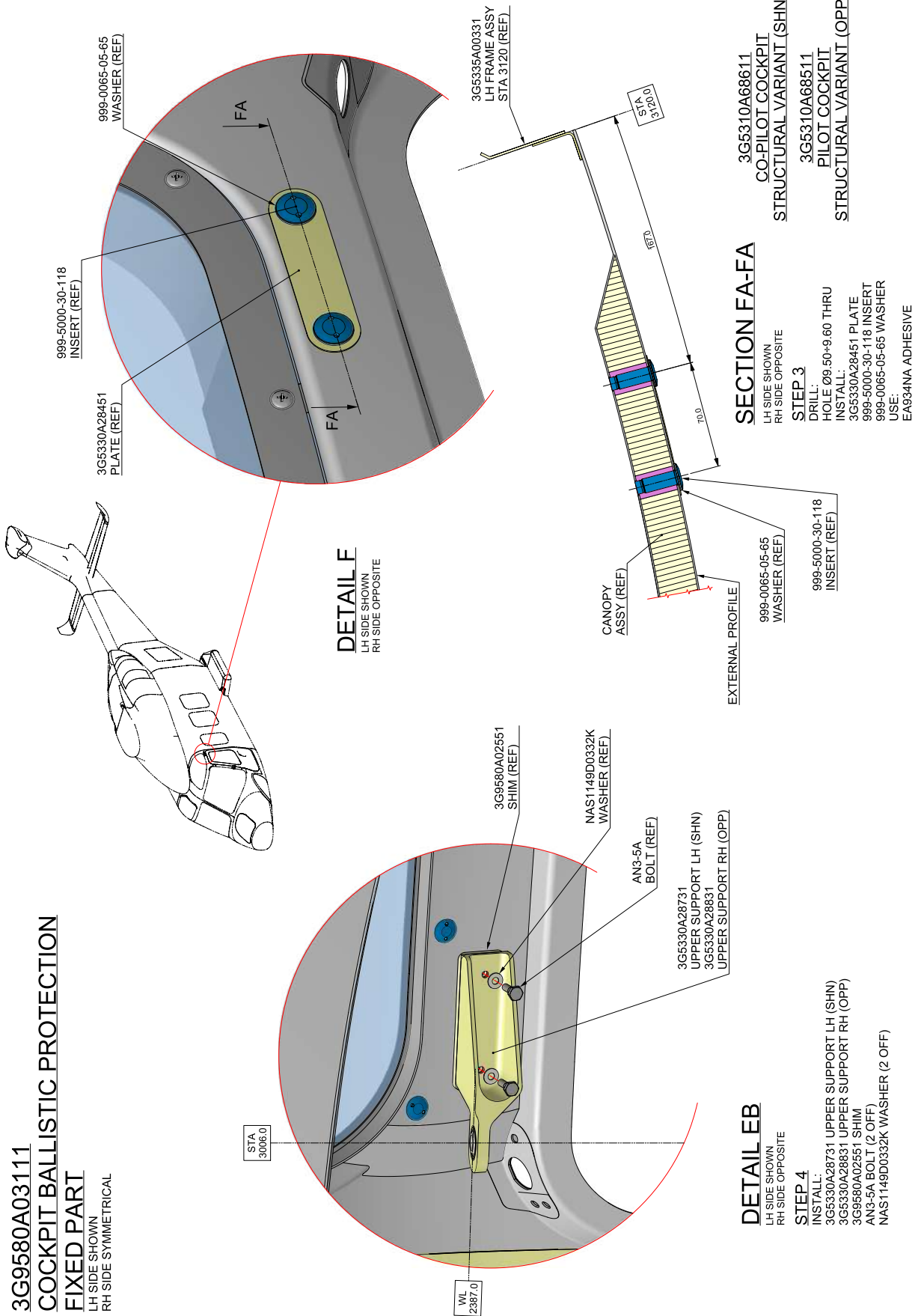


Figure 14

3G9580A03111 COCKPIT BALLISTIC PROTECTION FIXED PART

DETAIL EC

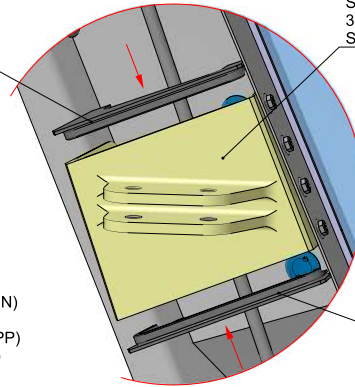
STEP 9

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)

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

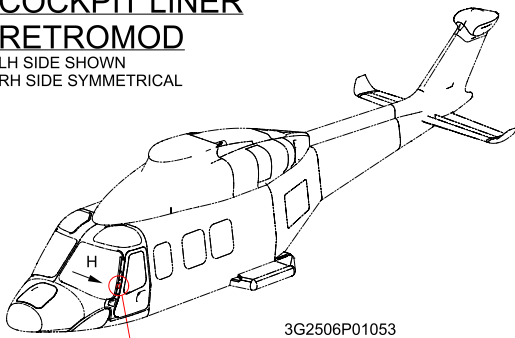
3G5330A28531
 SUPPORT LH ASSY (SHN)
 3G5330A28631
 SUPPORT RH ASSY (OPP)

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



3G5320P01011 COCKPIT LINER RETROMOD

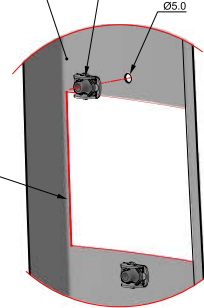
LH SIDE SHOWN
 RH SIDE SYMMETRICAL



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)

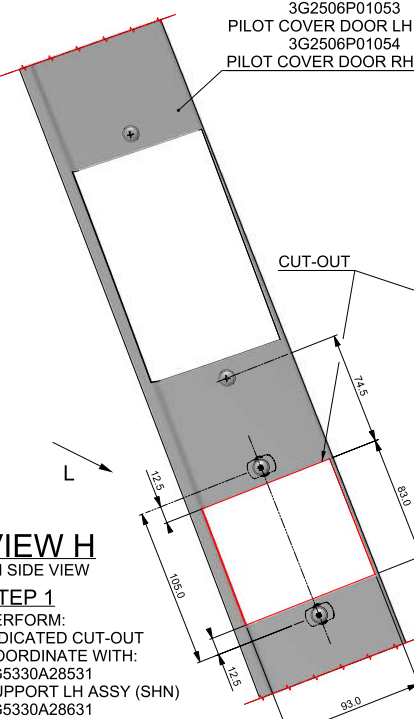


VIEW L STEP 2

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)



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)

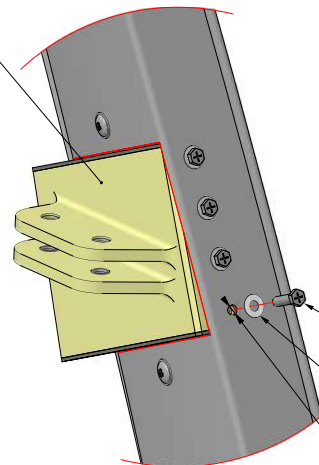
3G5330A28531
 SUPPORT LH ASSY (SHN)
 3G5330A28631
 SUPPORT RH ASSY (OPP)

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)

3G5320A13851
 PILOT COVER LH
 3G5320A13951
 PILOT COVER RH

AN525-10R7
 SCREW (REF)



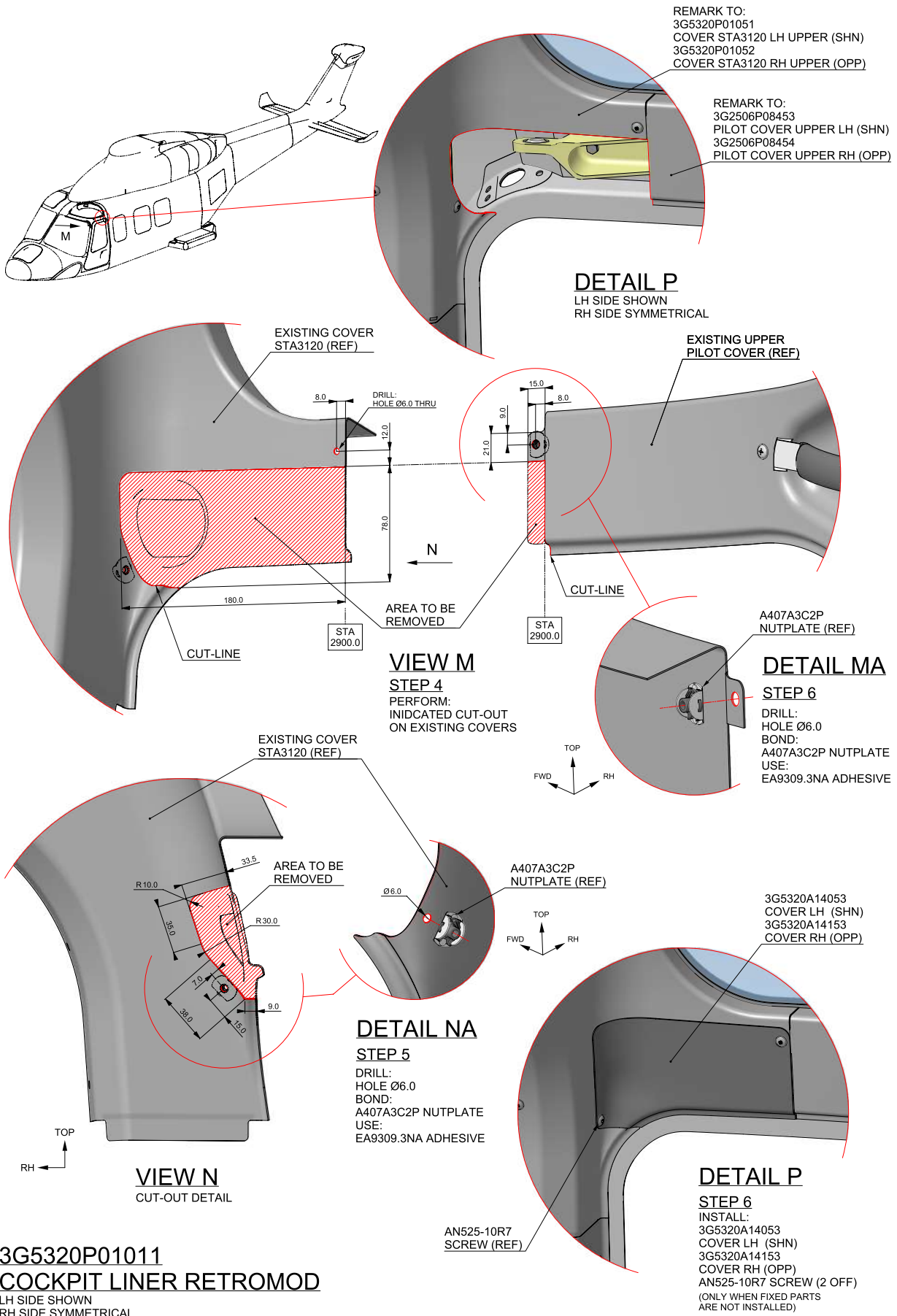
TOP
 AFT
 LH

NAS1802-08-9
 SCREW (REF)

NAS1149DN816K
 WASHER (REF)

Ø4.52+4.65

Figure 16



3G5320P01011
COCKPIT LINER RETROMOD
LH SIDE SHOWN
RH SIDE SYMMETRICAL

Figure 17

S.B. N°139-502
DATE: November 17, 2021
REVISION: /

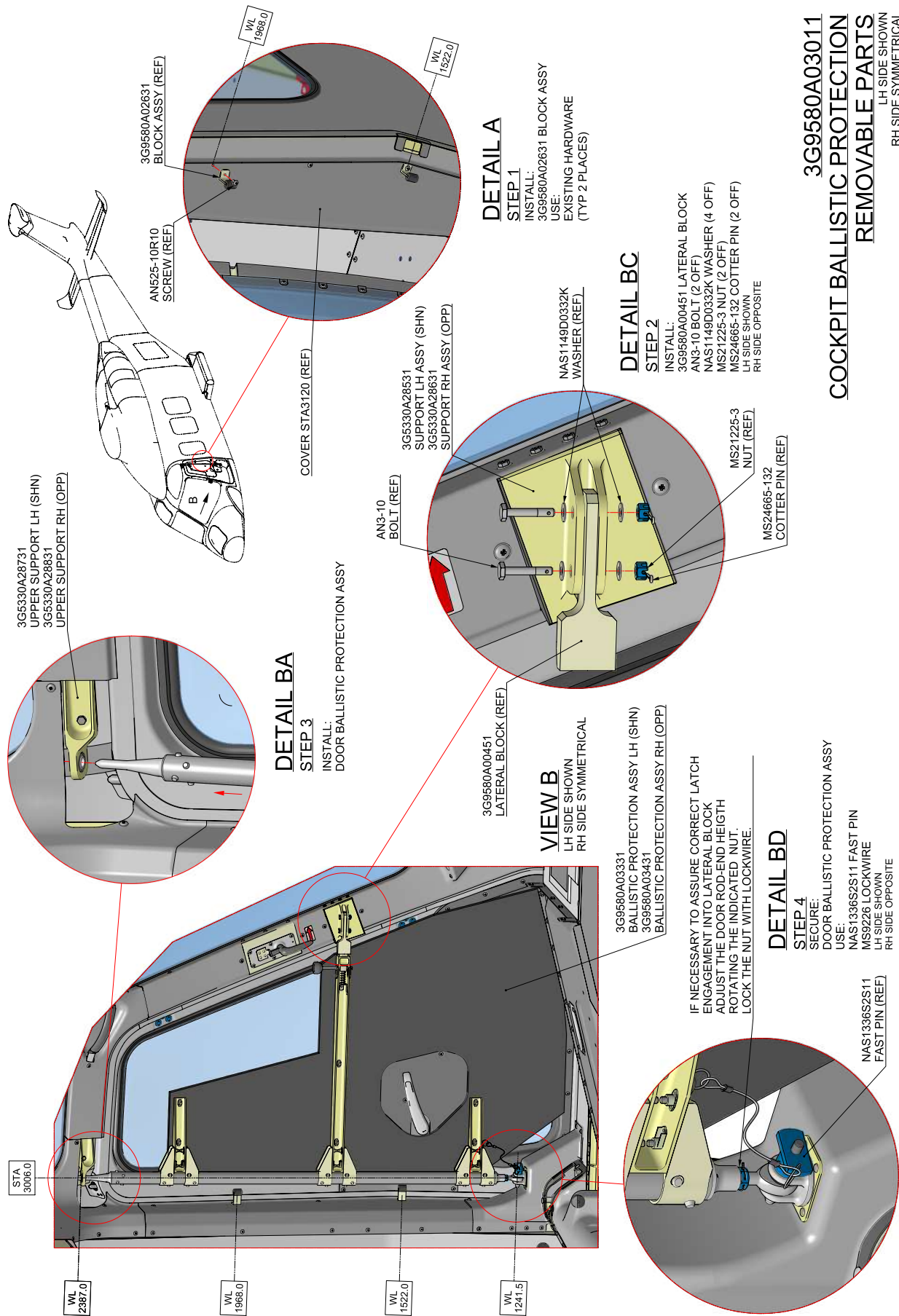
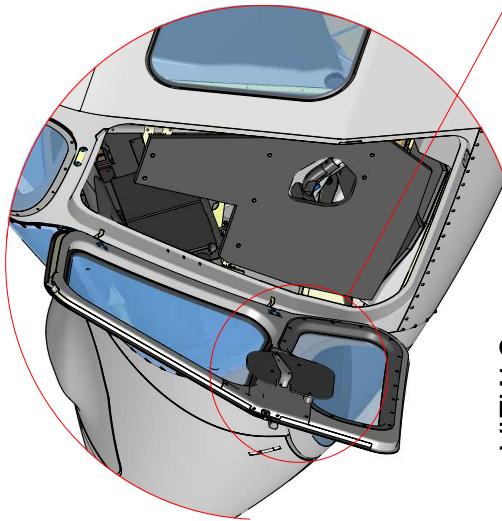


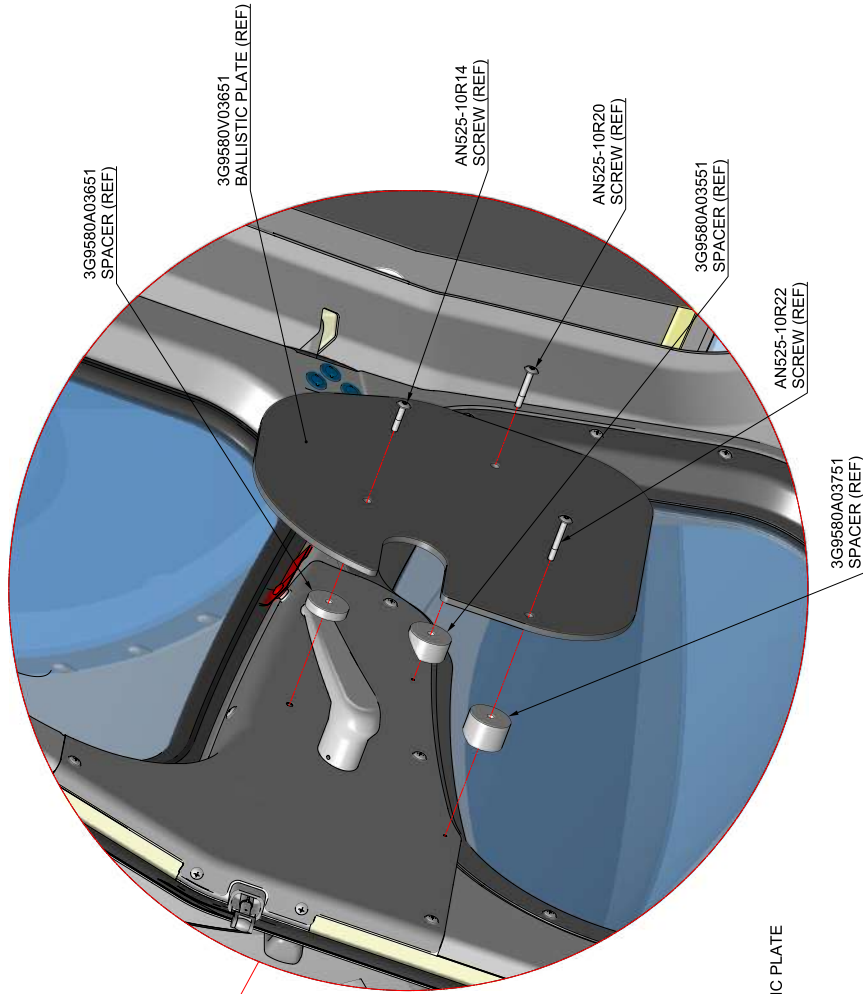
Figure 18

3G9580A03011
COCKPIT BALLISTIC PROTECTION
REMOVABLE PARTS

LH SIDE SHOWN
RH SIDE SYMMETRICAL



VIEW C



DETAIL CA

STEP 5

- REMOVE:
EXISTING SCREWS
- INSTALL:
3G9580V03651 BALLISTIC PLATE
AN525-10R14 SCREW
AN525-10R20 SCREW
AN525-10R22 SCREW
3G9580A03751 SPACER
3G9580A03651 SPACER

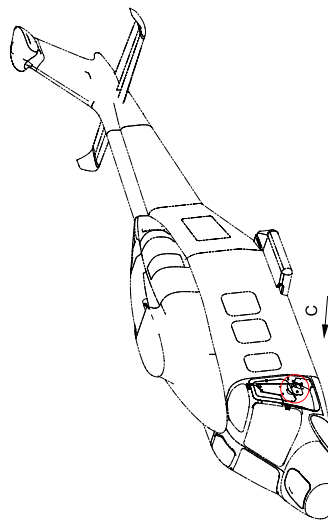


Figure 19

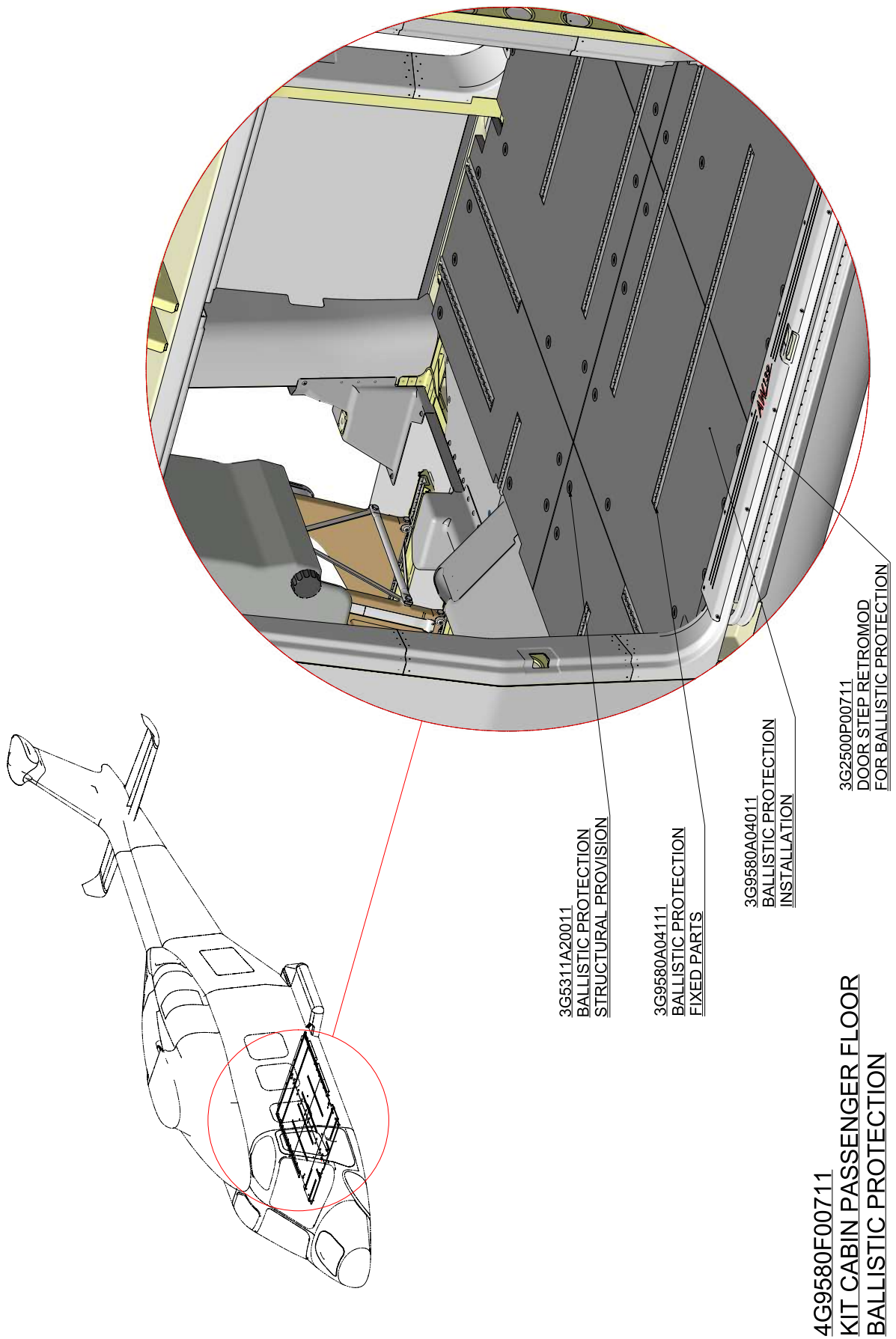
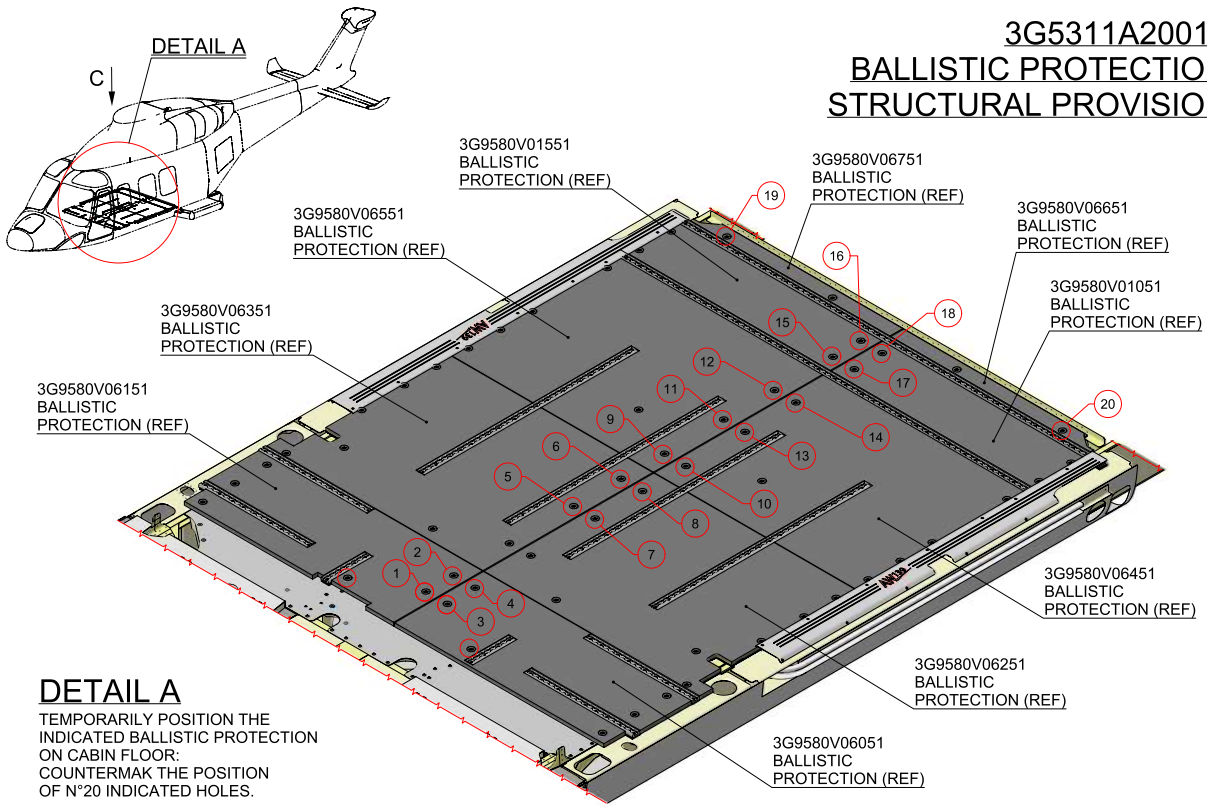


Figure 20

**3G5311A20011
BALLISTIC PROTECTION
STRUCTURAL PROVISION**



DETAIL A

TEMPORARILY POSITION THE INDICATED BALLISTIC PROTECTION ON CABIN FLOOR: COUNTERMACK THE POSITION OF N°20 INDICATED HOLES.

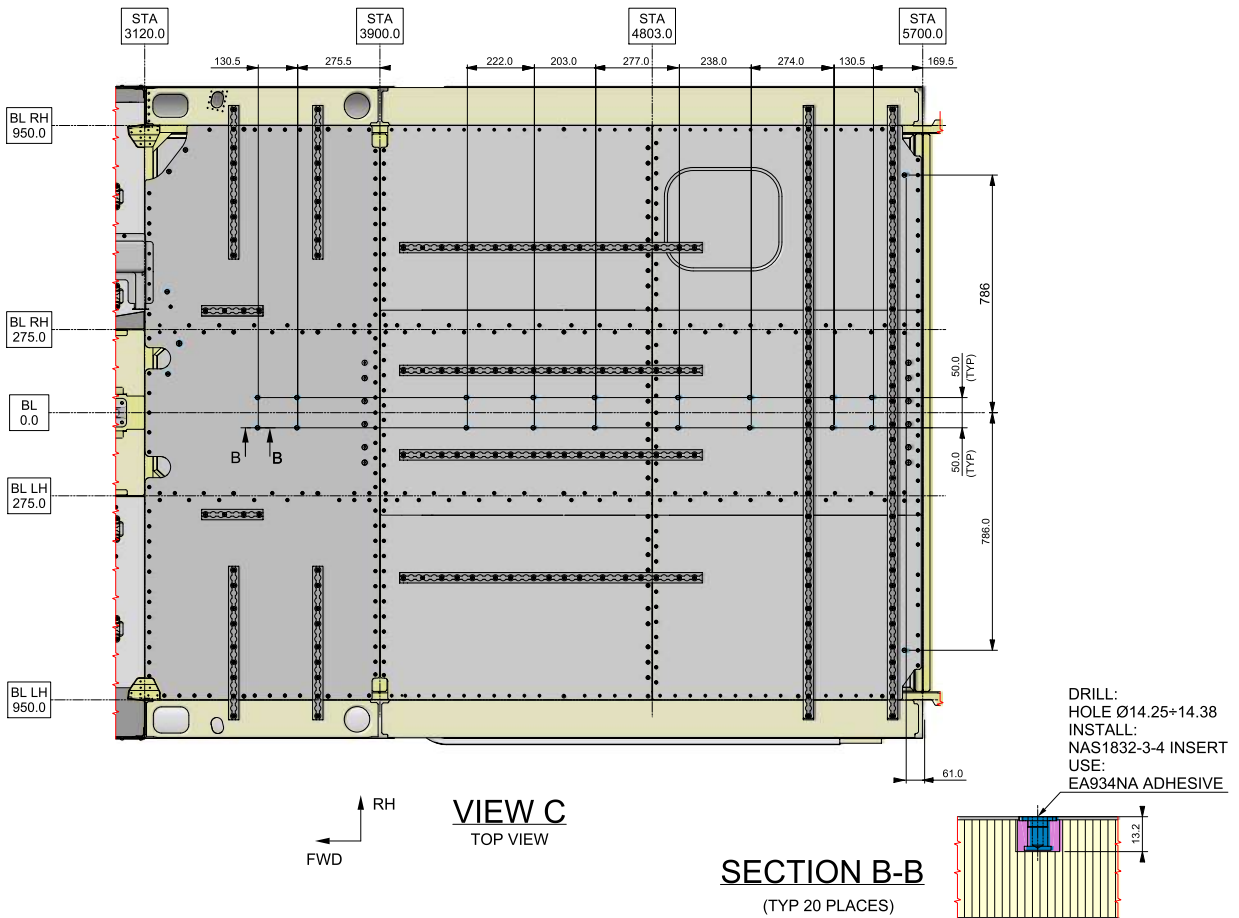


Figure 21

S.B. N°139-502
DATE: November 17, 2021
REVISION: /

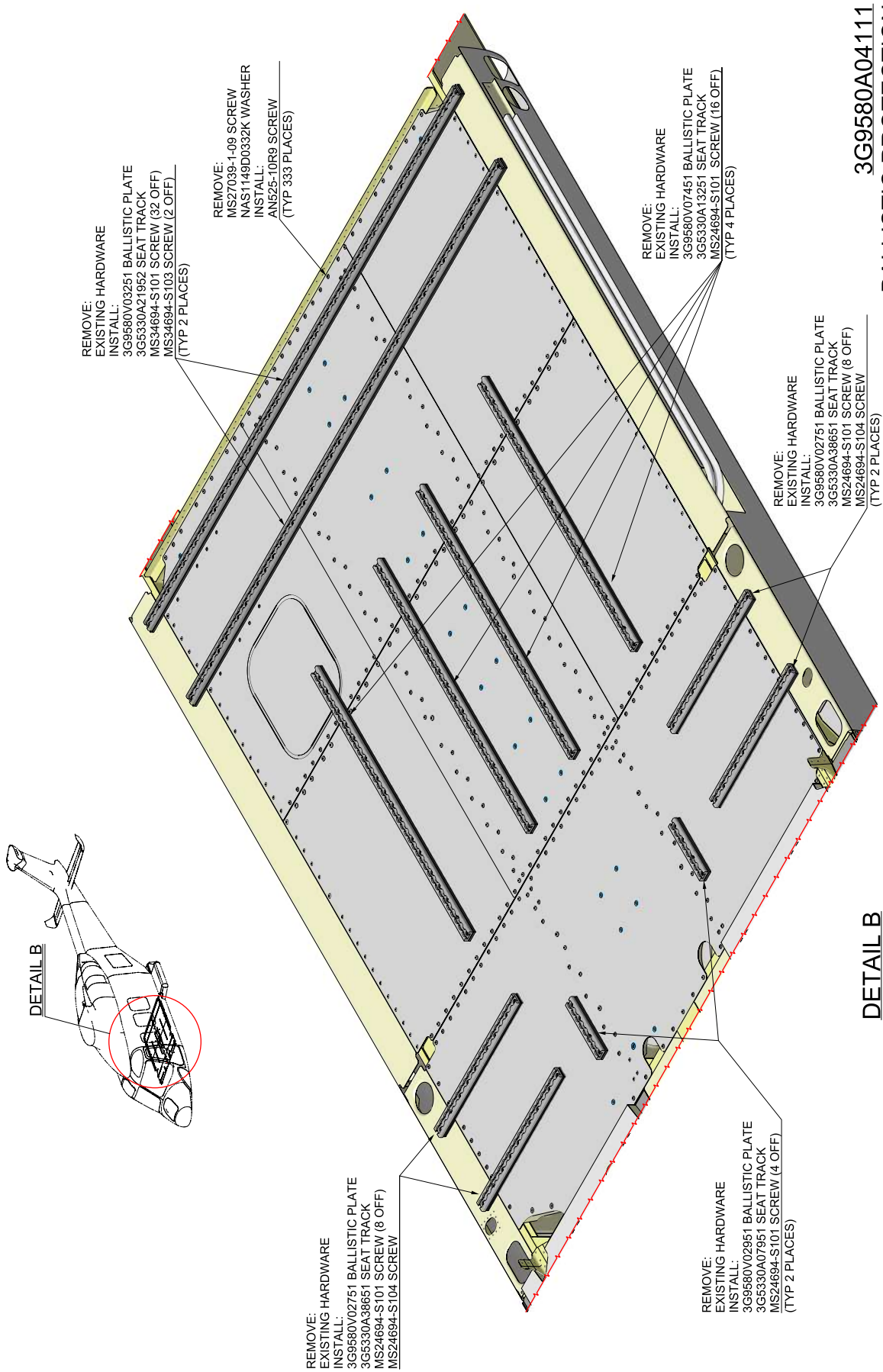
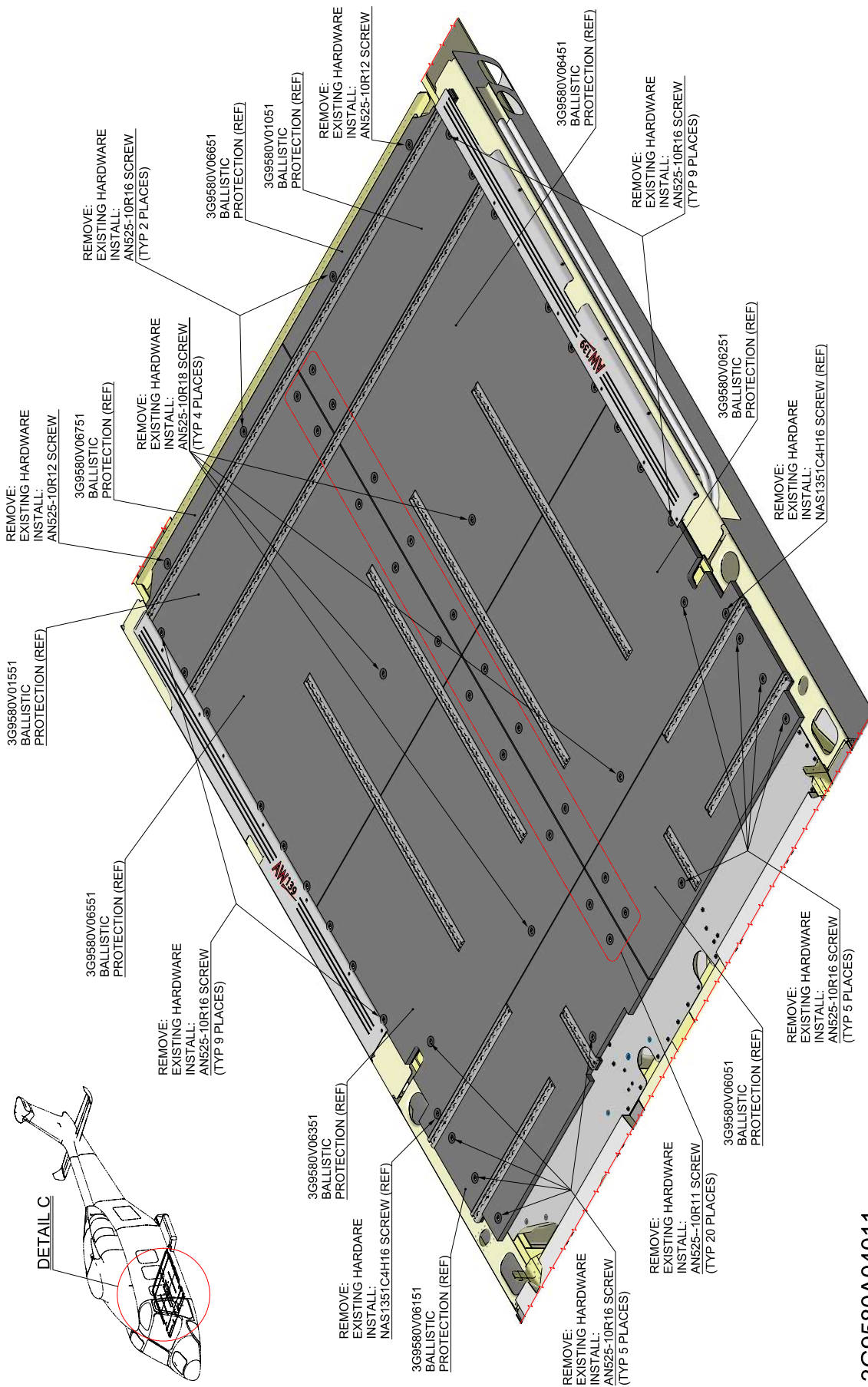


Figure 22



DETAIL C

**3G9580A04011
BALLISTIC PROTECTION
INSTALLATION**

Figure 23

S.B. N°139-502
DATE: November 17, 2021
REVISION: /

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

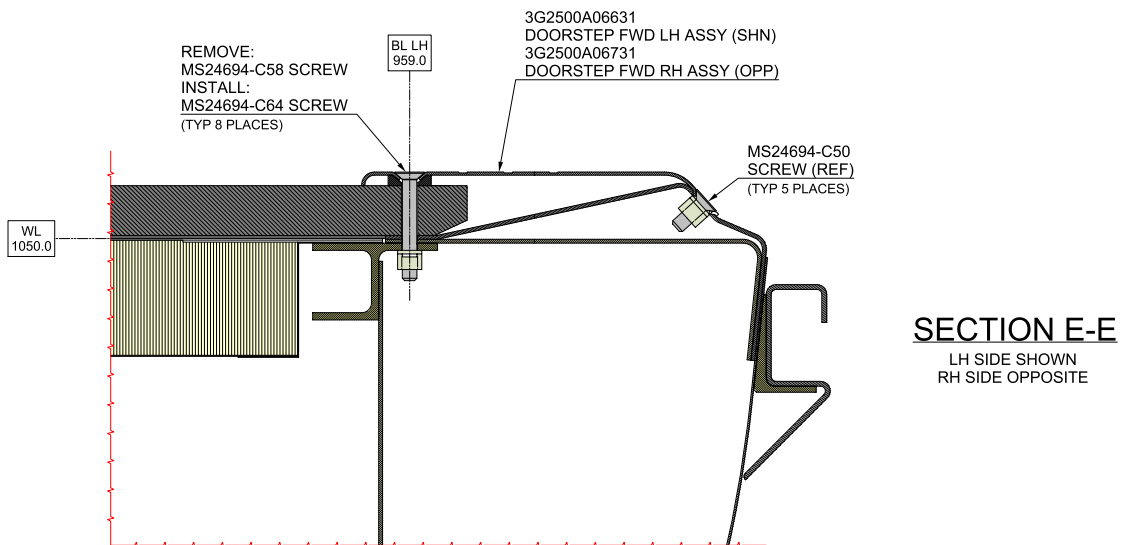
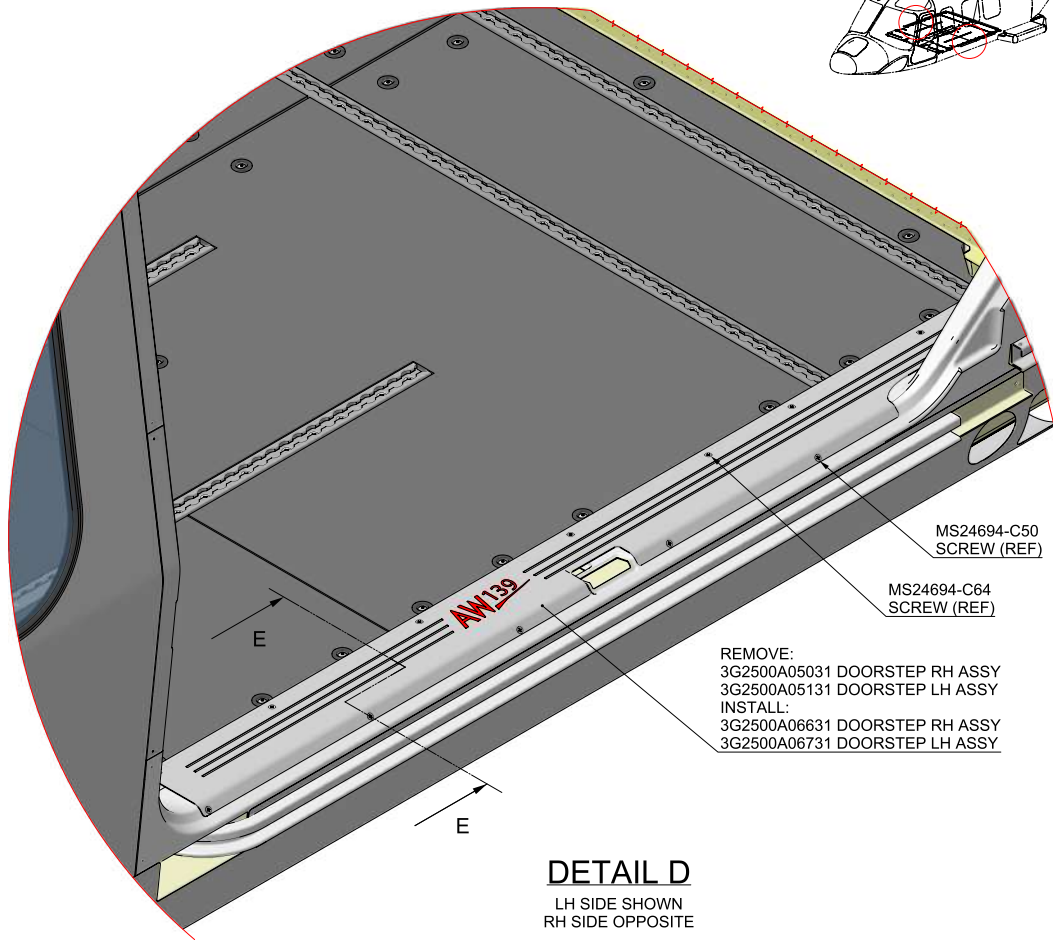
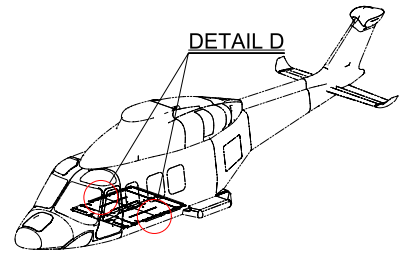


Figure 24

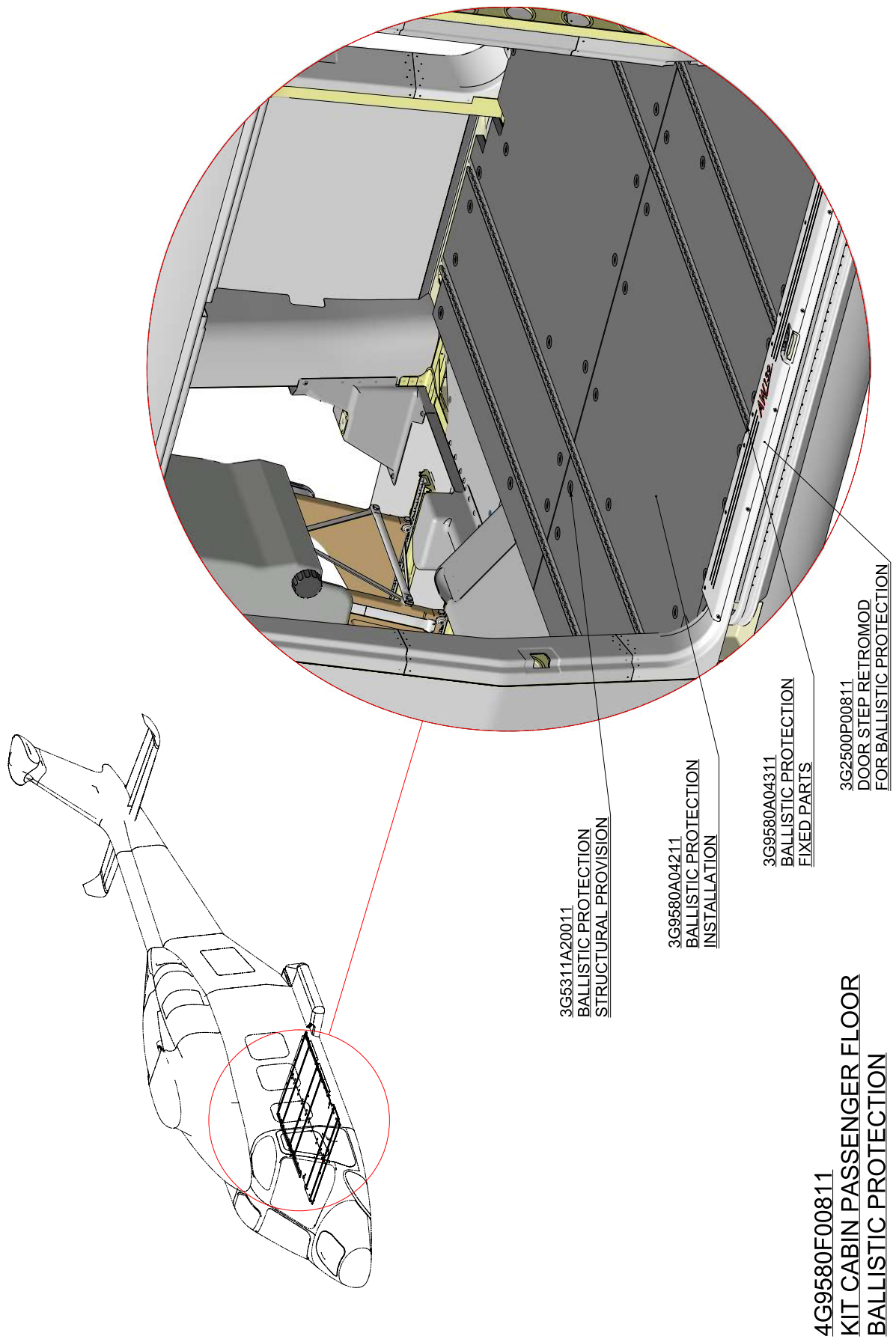


Figure 25

3G5311A20011
BALLISTIC PROTECTION
STRUCTURAL PROVISION

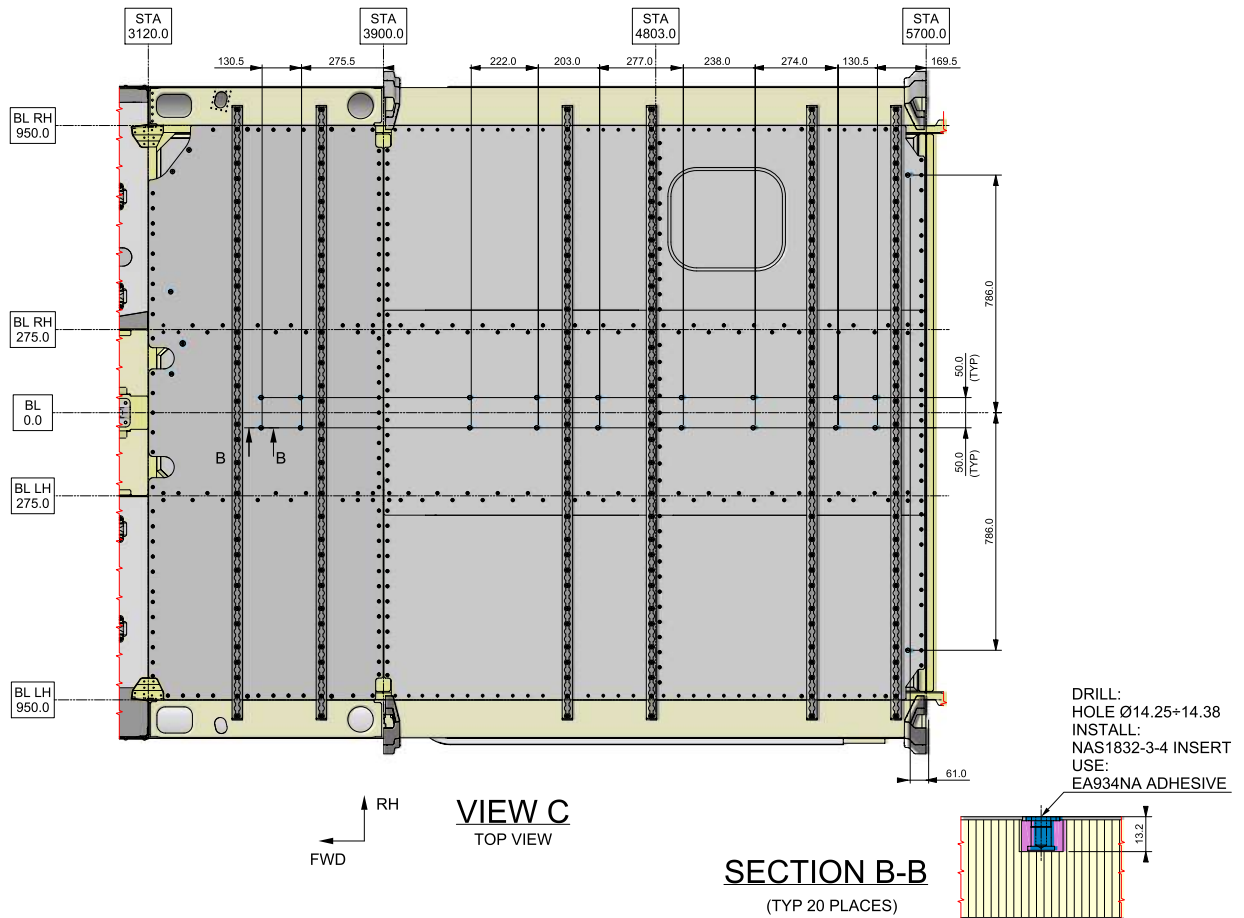
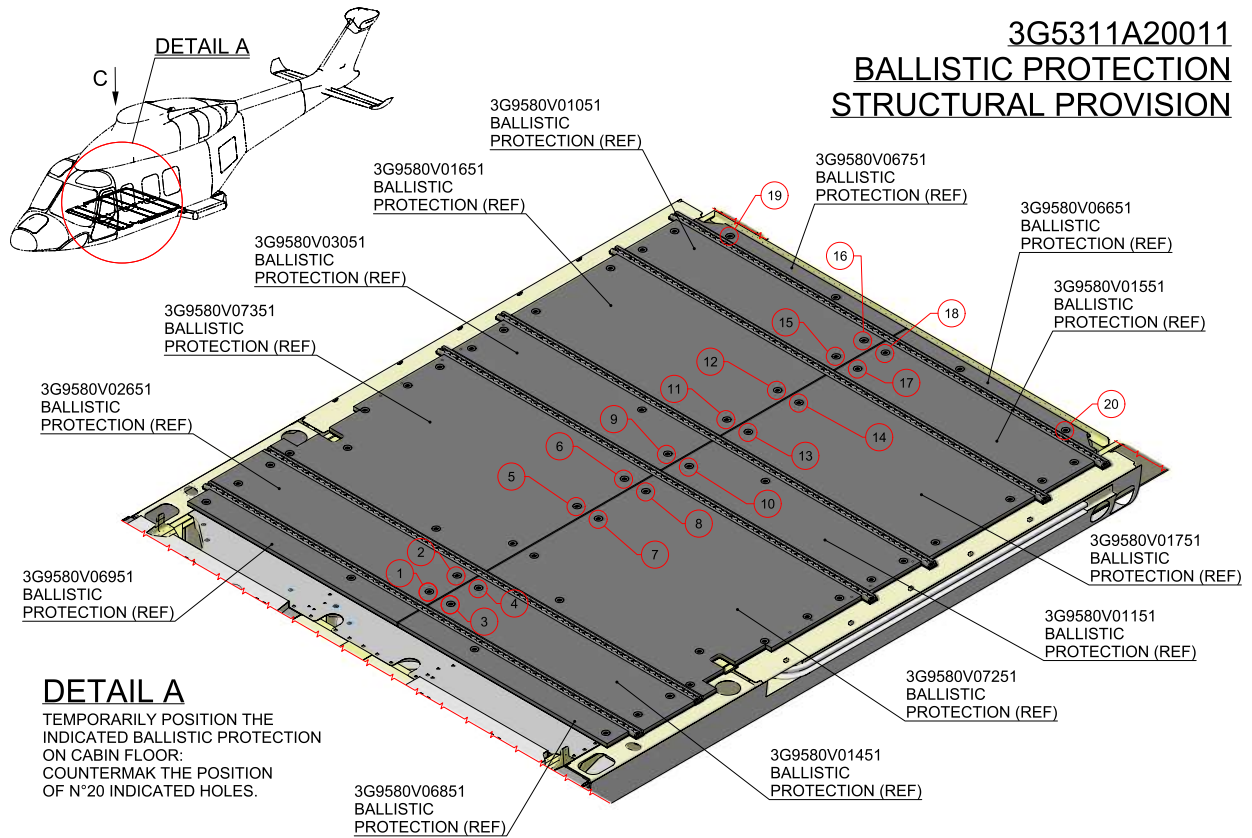
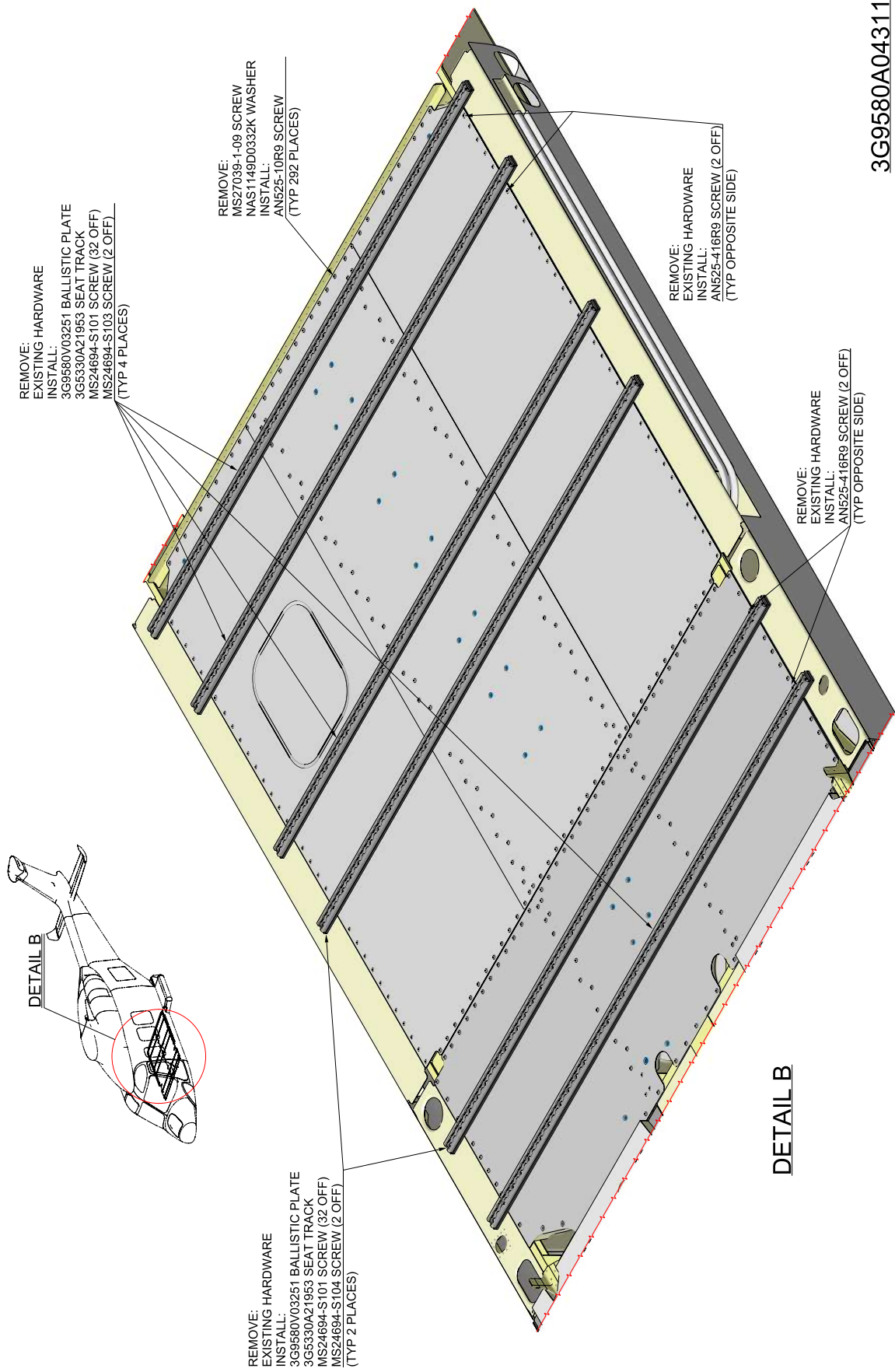


Figure 26



3G9580A04311
BALLISTIC PROTECTION
FIXED PARTS

Figure 27

S.B. N°139-502
DATE: November 17, 2021
REVISION: /

3G2500P00811
DOORSTEP RETRO-MOD
FOR BALLISTIC PROTECTION

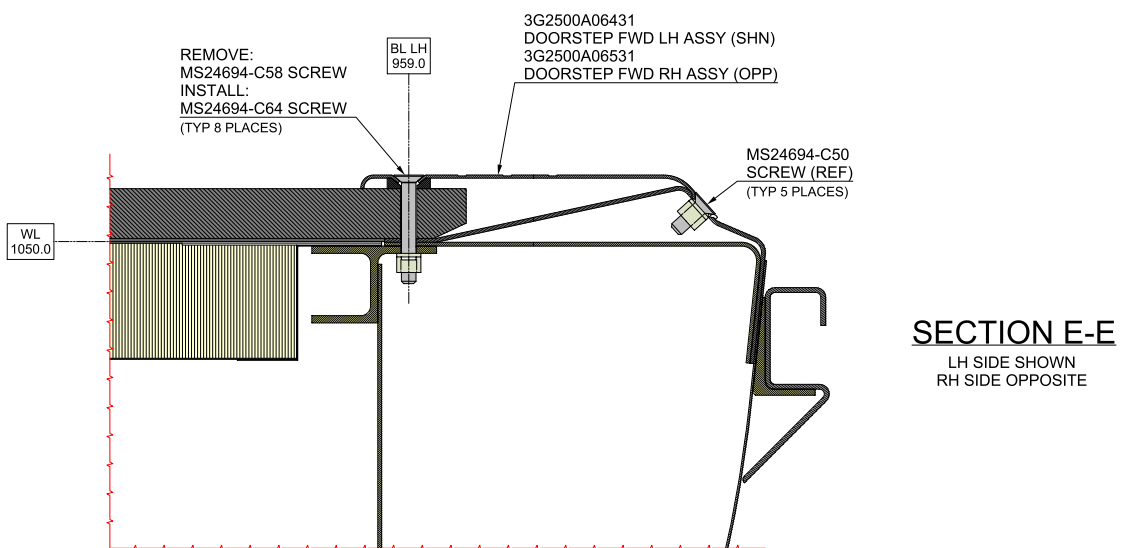
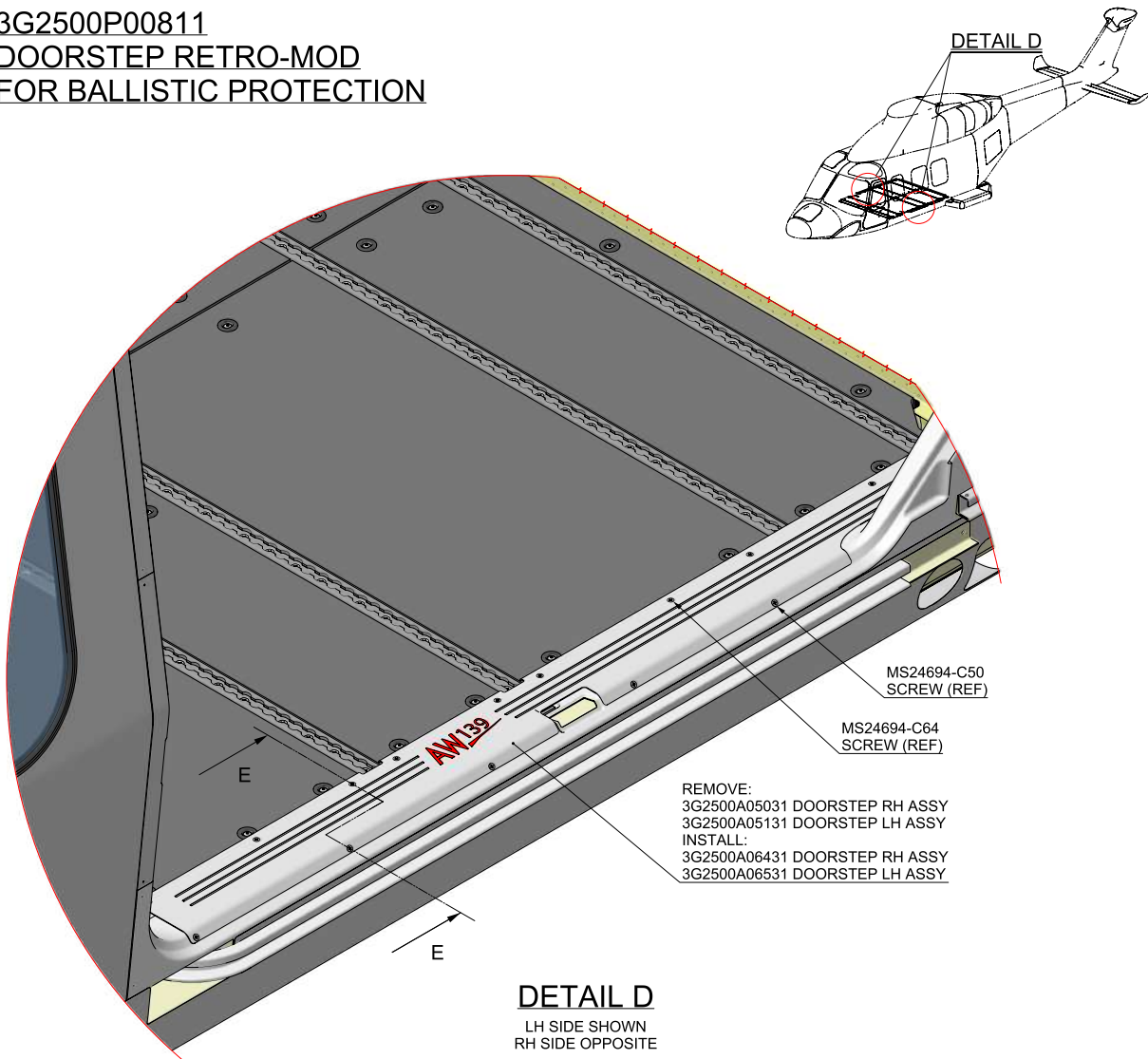


Figure 29

CANOPY EMERGENCY MECHANISM REWORK
3G5320P00911

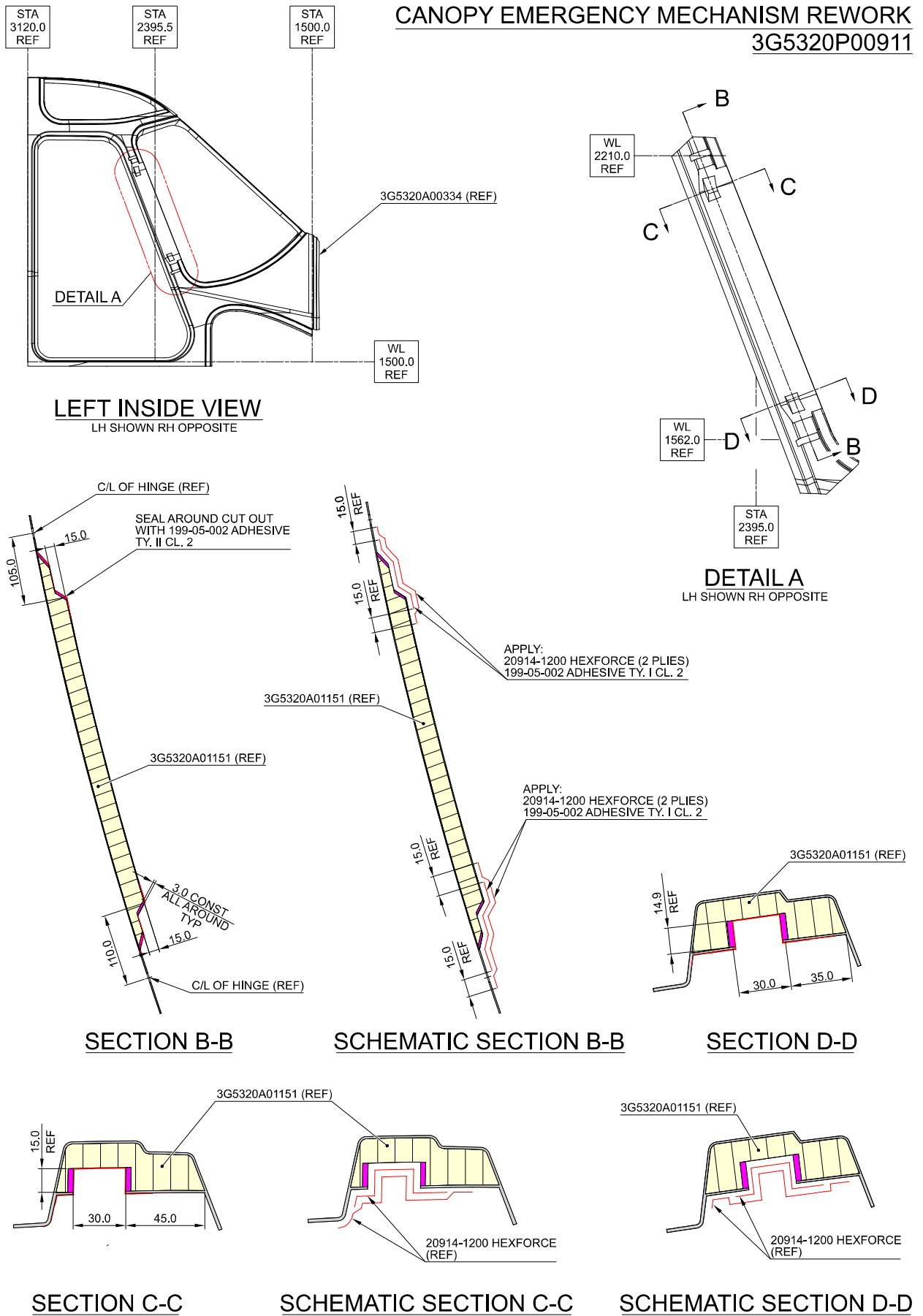


Figure 30

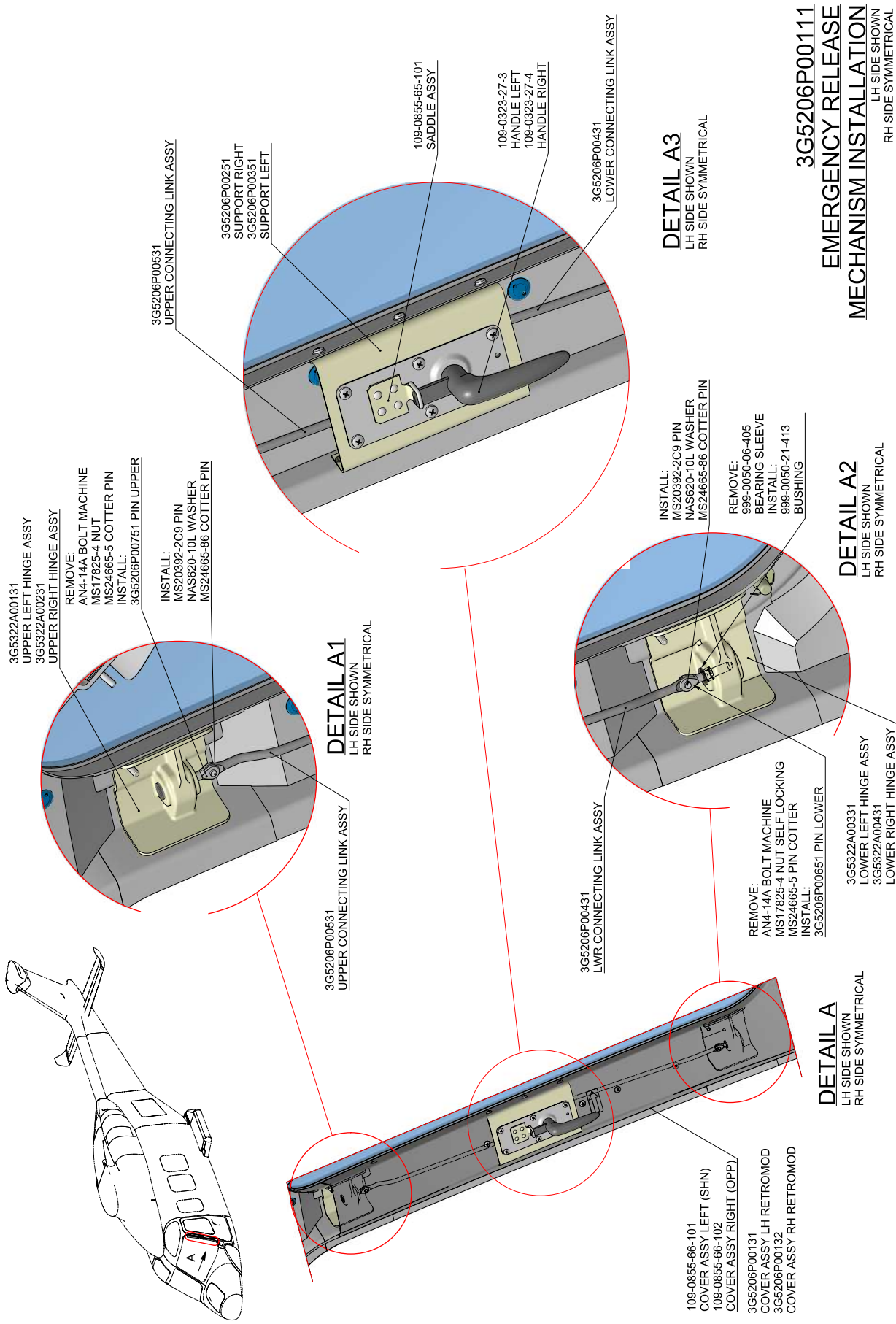


Figure 31

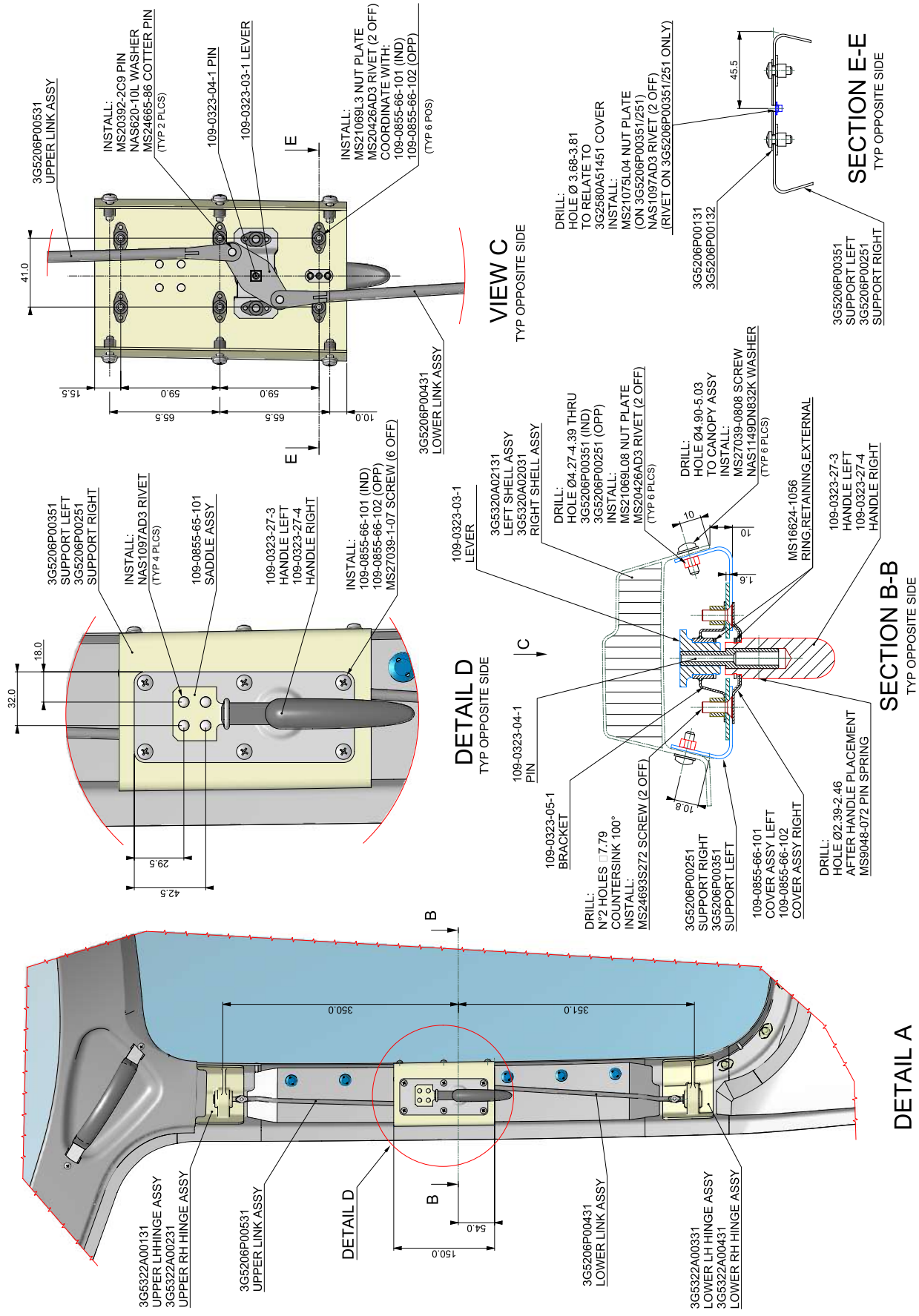


Figure 32

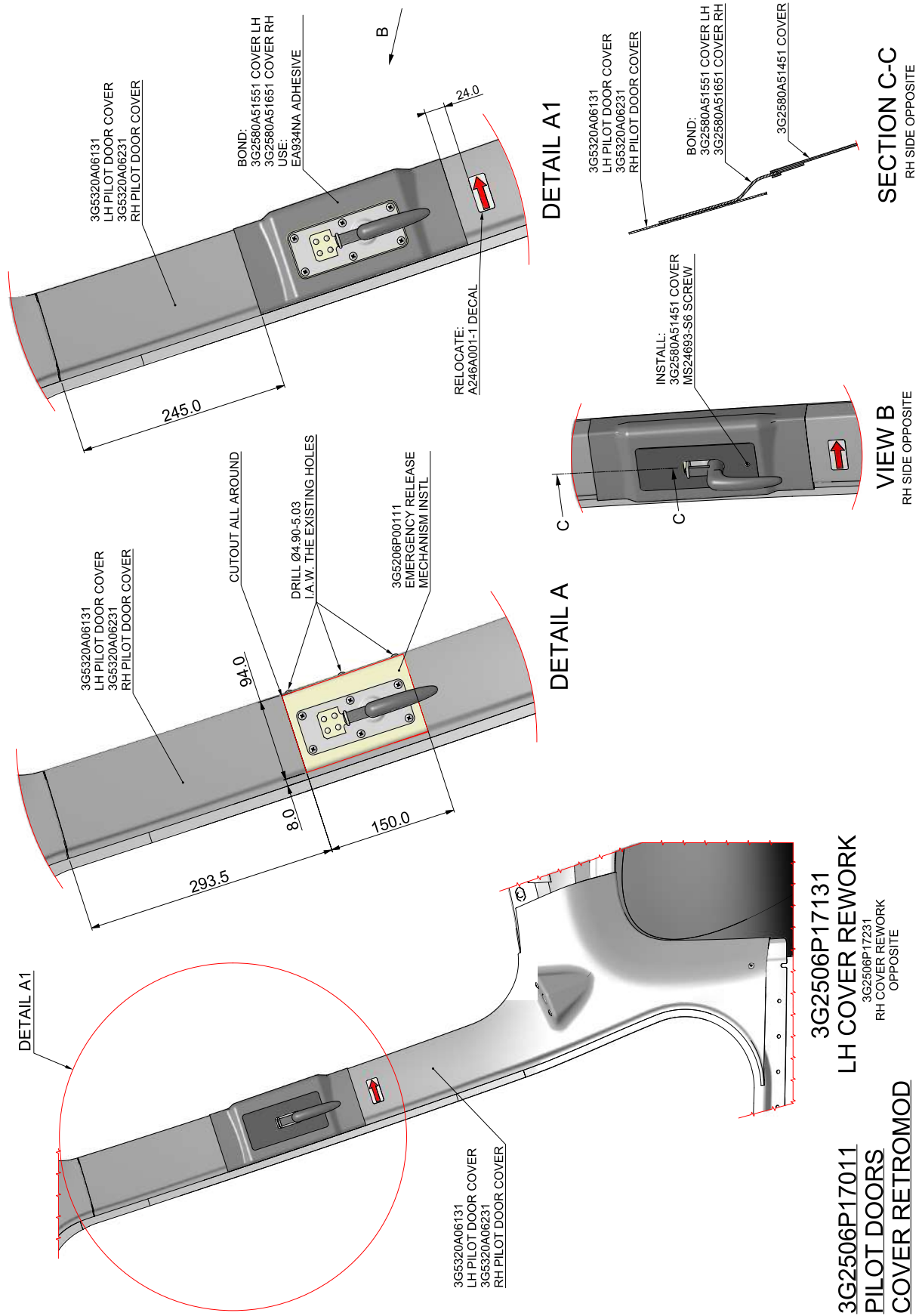


Figure 33

