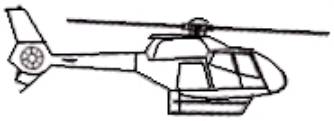


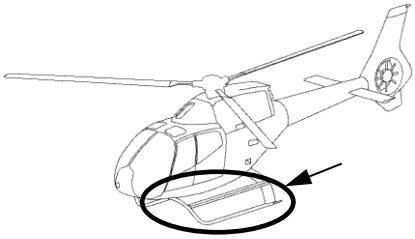
No. EC120-32-013

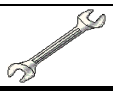
Civil version(s): B

SERVICE BULLETIN

CORRECTIVE MEASURE

LANDING GEAR - Main landing gear
Better protection against corrosion on the landing gear



For the attention of


Revision No.	Date of issue
Revision 0	2024-05-22

Summary:

The objective of this Service Bulletin is to make the corrosion protection of the landing gear better. This includes the changes that follow:
- New rivets, rear stops and spacers that are more resistant to corrosion
- New skid caps and drainage holes for better drainage of water
- Sealing compound is added on important areas of the landing gear assembly.

Compliance:

Airbus Helicopters recommends that you comply with this Service Bulletin.

1. PLANNING INFORMATION

CAUTION

MAKE SURE THAT THE MODIFICATIONS RELATED TO THIS SERVICE BULLETIN AGREE WITH THE HELICOPTER CONFIGURATION AT THIS TIME. IF THE MODIFICATIONS DO NOT AGREE WITH THE HELICOPTER CONFIGURATION:
- PREPARE THE NECESSARY ADAPTATION WORK.
- GET THE APPROVAL BY THE APPLICABLE LOCAL AIR TRANSPORT AUTHORITIES.
- COMPLY WITH THE AIRWORTHINESS REQUIREMENTS.
THIS SERVICE BULLETIN IS WRITTEN FOR THE INITIAL HELICOPTER CONFIGURATION SPECIFIED IN THE INDIVIDUAL INSPECTION LOG BOOK. IT INCLUDES ONLY THE POST-DELIVERY CONFIGURATION CHANGES THAT ARE KNOWN AND APPROVED BY AIRBUS HELICOPTERS.

1. EFFECTIVITY

1.A.1. Helicopters/installed equipment or parts

Helicopters that satisfy all of the conditions that follow:
- Installed with the landing gear assembly with the reference: C321A2601051
- Have not completed this Service Bulletin.

NOTE 1

The landing gear assembly reference: C321A2601051 is usually identified with two more alphabets at the end of the reference (for example, "C321A2601051AA").

1.A.2. Non-installed equipment or parts

PRE SB Footstep assembly reference: C321A2210101.

PRE SB Footstep assembly reference: C321A2211101.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Airbus Helicopters received reports of corrosion on landing gears. In these reports, corrosion was found in different areas of the landing gear during their scheduled maintenance inspections. The areas include:
- The front and the rear junctions of the crossbeams and the skids
- The junctions of the footsteps and their related front and rear clamps
- The internal surface of the skid tubes and their related wear-resistant plates.

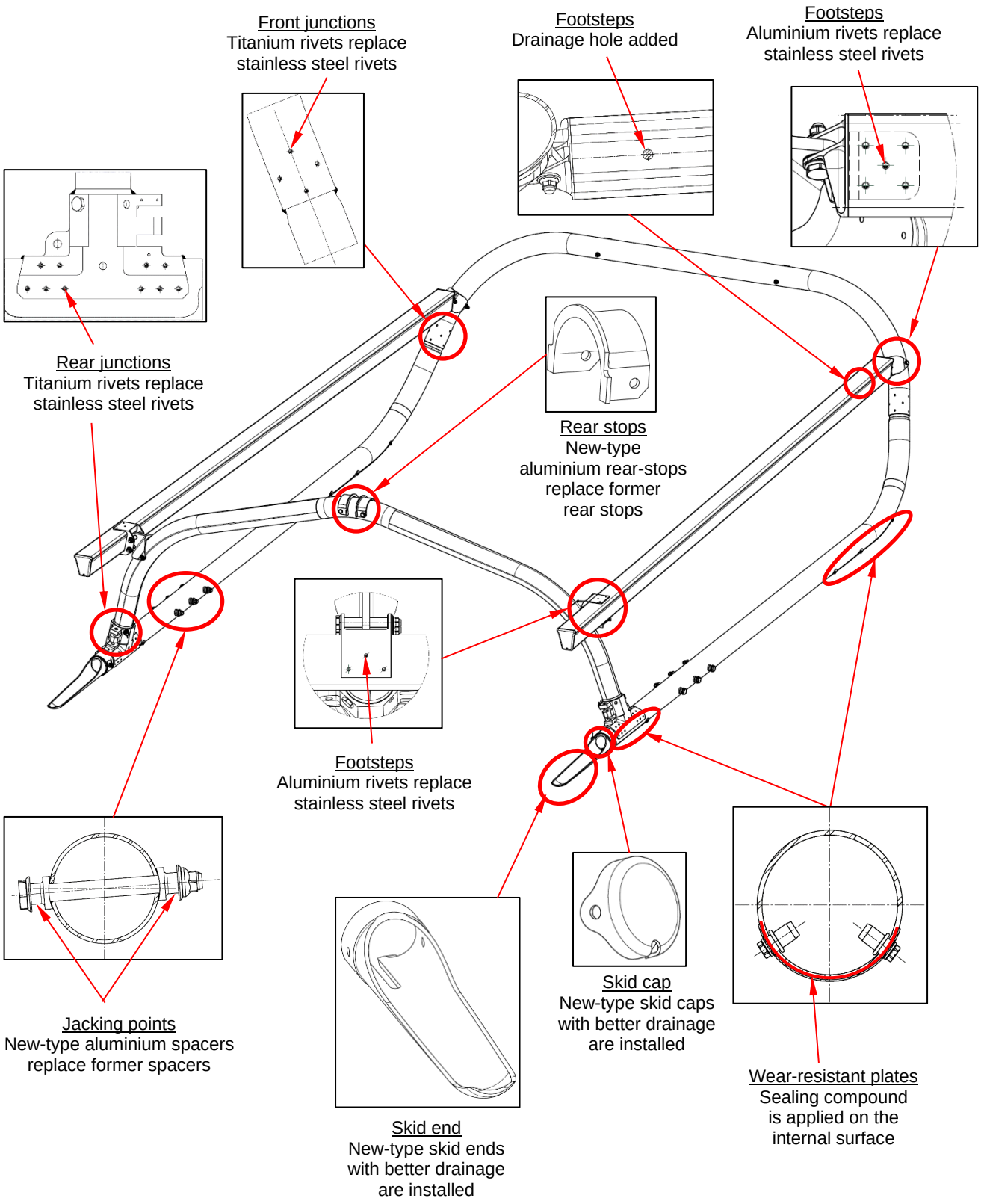
There are also reports of water and dirt particles collected in the footstep tubes, the skid tubes and the skid ends. This makes it conducive for corrosion to occur. Corrosion of the landing gear assembly can cause its structure to weaken.

As a corrective measure, Airbus Helicopters introduces this Service Bulletin to make the corrosion protection of the landing gear assembly better. The changes to the landing gear assembly are given below:
- Titanium rivets replaces the stainless steel rivets on the front and rear junctions. The titanium rivets are more resistant to corrosion.
- Aluminum rivets replace the stainless steel rivets on the footsteps. The aluminum rivets are more resistant to corrosion.
- New drainage holes are added to the footsteps for better drainage.
- New rear stops replace the former rear stops. The new rear stops are made from a different aluminum alloy that are more resistant to corrosion.
- New spacers replace the former spacers on the jacking points. The new spacers are made from a different aluminum alloy that are more resistant to corrosion.
- New skid caps replace the former skid caps. The new skid caps have better drainage of water.
- Corrosion protection compound is applied on the mating surfaces at the front and the rear crossbeams, the crossbeam foots and the skids.
- Sealing compound is applied on the internal surface of the wear-resistant plates and the mating surfaces at the skid ends.
- Sealing compound is applied on the hardware that follow:
  . The shanks and the heads of the screws
  . The washers
  . The nuts.

- A bead of sealing compound is applied along the edges of the mating surfaces between the components that follow:
  . The front crossbeam and the skids
  . The rear crossbeam and the crossbeam foots
  . The crossbeam foots and the skids
  . The footsteps and their related front and rear clamps.

No. EC120-32-013

Primary changes to the corrosion protection of the landing gear



1.D. DESCRIPTION

This Service Bulletin includes the work steps that follow:
- The removal and the installation of the landing gear
- The changes to the corrosion protection of the front and the rear junctions:
  . The inspection of the front and the rear junctions rivets
  . The increase in diameter of the rivet holes where loose rivets are found
  . The replacement of the rivets on the front and rear junctions.

- The changes to the corrosion protection of the footsteps:
  . A drainage hole is added on each footstep.
  . The replacement of the rivets on the footsteps.

- The removal and the installation of the jacking points
- The removal and the installation of the forward and the rear stops
- The removal and the installation of the skid ends and their related skid caps
- Sealing compound and corrosion protection compound are applied on the applicable hardware
- The installation of a new identification plate on the front crossbeam.

1.E. COMPLIANCE

1.E.1. Compliance at H/C manufacturer level

Not applicable.

1.E.2. Compliance in service

Helicopters/installed equipment or parts:

It is the operator who does the work on the helicopter.

Airbus Helicopters recommends that you comply with paragraph 3. (but this is not applicable to paragraph 3.B.4.) during one of the next maintenance inspections aligned to your operational availabilities/constraints.

Non-installed equipment or parts:

It is the operator who does the work on non-installed equipment.

Before you install the footstep assemblies identified in paragraph 1.A.2., do a check of the stock and do the modification when applicable as given in paragraph 3.B.4.

It is the operator who makes the decision on the level of stock related to the compliance with this Service Bulletin.

1.F. APPROVAL

The technical content of this document is approved under the authority of the Design Organization Approval ref. EASA. 21J.700. For helicopters operated outside the terrain regulated by the EASA, the application of this document is subject to validation provided by the responsible aviation authority of the state of registry.

1.G. MANPOWER

Airbus Helicopters recommends that the personnel who will do this Service Bulletin have these qualifications:

Qualification: - 4 Mechanical Technicians
- 1 Airframe Technician.

NOTE 2

Only one Mechanical Technician is necessary to remove and install the landing gear. Three more Mechanical Technicians are necessary to lift the helicopter to remove the landing gear.

Specialists: 1 Painter.

The man-hours are an estimate given for information only and for a standard helicopter configuration.

Estimated Man-hours: - 6 hours for the Mechanical Technicians
- 3 hours for the Airframe Technician
- 0.5 hours for the Painter.

The helicopter downtime is an estimate given for information only and for a standard helicopter configuration.

The estimate of the helicopter downtime is one and a half day (this does not include the time necessary for curing and drying of the consumables used).

1.H. WEIGHT AND BALANCE

Weight: +0.130 kg
Longitudinal moment: +0.426 m.kg

After you complete the work, record the new weight and moment in your applicable document.

1.I. POWER CONSUMPTION

This Service Bulletin has no effect on the electrical load analysis.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

These documents are necessary to comply with this Service Bulletin:

AMM: 32-12-00, 4-1: Removal/Installation - Landing Gear
AMM: 32-12-00, 4-2: Assembly/Disassembly - Landing Gear
AMM: 32-12-00, 8-1: Repair - Landing Gear

IN: 3481-I-00: The Marketplace: an AirbusWorld eOrdering service
IN: 3785-I-00: Introduction of the digital Service Bulletin reporting service SB Insight

MTC: 20-02-04-401: Installation of rivets - Pitch and edge distance - Riveting
MTC: 20-02-05-404: Assembly by screws and nuts - Joining
MTC: 20-02-06-404: Safetying with cotter pins - Safetying and locking assemblies
MTC: 20-02-07-101: Electric bonding: General - Electrical bonding
MTC: 20-02-07-403: Use of AERODUR 43022 varnish - Electrical bonding
MTC: 20-02-07-407: Use of conductive paste CHO-LUB E117 - Electrical bonding
MTC: 20-03-01-102: General repair instructions unriveting principle - General repair instructions
MTC: 20-03-02-405: Installation of blind bolts ASN-A 0026 - ASN-A 0027 and 0363 - General rivet replacement principles
MTC: 20-03-02-406: Installation of “CHERRY-MAX” ASNA 0077 and 0078 rivets - General rivet replacement principles
MTC: 20-04-04-403: Touch-up of the Alodine 1200 protection (Bonderite M-CR 1200) - Surface treatment before painting
MTC: 20-04-05-402: Application of primer EPOXY P05-P20 - Paint and primer application procedure
MTC: 20-04-05-447: Use of abrasion-resistant Topcoat 23 T 3 - Paint and primer application procedure
MTC: 20-05-01-222: Application of PR 1771 B2 sealant - General sealing procedures
MTC: 20-05-01-223: Application of PR 1776 B2 / 1776 S - General sealing procedures
MTC: 20-05-01-227: Application of jointing compound CA 1010 - General sealing procedures
MTC: 20-05-01-401: Use of THIXOFLEX and SLG products - General sealing procedures
MTC: 20-06-01-101: General rules for bonding with adhesives - Bonding with adhesives
MTC: 20-07-01-201: Handling of helicopters in a hangar and in a prepared area - Handling
MTC: 20-07-02-201: Helicopter parked in a repair shop - Safety instructions
MTC: 20-07-03-408: Appearance checks on an aircraft after inspection or repair - Technical instructions
MTC: 20-08-05-102: Rules in force applicable for repair and maintenance of aircraft - General rules applicable to aircraft
MTC: 20-08-05-103: Monitoring of parts in operation - Marking - Service life customization - General rules applicable to aircraft
MTC: 20-08-05-106: Recommendations for visual inspections - Human factors approach - General rules applicable to aircraft
MTC: 20-08-05-107: Recommendations for technical requests - General rules applicable to aircraft
MTC: 20-09-00-103: Use of inhibiting product ARDROX AV 30 (CM 526) - Storage and preservation
MTC: 20-09-02-901: Preservation and packing methods of airborne equipment - Preservation

SPN: 3703-P-00: Foreign Object Damage prevention

1.L. OTHER AFFECTED PUBLICATIONS

CAUTION

TO COMPLY WITH THIS SERVICE BULLETIN, THE OPERATOR MUST MAKE SURE THAT ALL THE MAINTENANCE DOCUMENTS NECESSARY FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF THEY ARE NOT AVAILABLE, THE OPERATOR MUST CONTACT AIRBUS HELICOPTERS TO GET THESE DOCUMENTS.

Publications to be updated:

The changes to Instructions for Continued Airworthiness (ICA) which are required as a result of this SB will be incorporated in the next Normal Revision. Refer to DN.008.0025 until the information is available in the published technical documentation.

Airbus Helicopters will update the Aircraft Maintenance Manual (AMM) in relation to the modification.

You will receive the documents to which you subscribe.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Interchangeability:

You can use POST SB components to replace PRE SB components. But you cannot use PRE SB components to replace POST SB components.

Mixability:

You must not use PRE SB and POST SB components together.

2. EQUIPMENT OR PARTS INFORMATION

2.A. EQUIPMENT OR PARTS: PRICE - AVAILABILITY - PROCUREMENT

Price

For information about the price of modification kits and/or components, or for aid, contact the Airbus Helicopters Network Sales and Customer Relations Department.

Availability

Contact the Sales and Customer Relations Department to know the delivery lead times.

Procurement

Send an order for the necessary quantities to the Airbus Helicopters Network Sales and Customer Relations Department:

Airbus Helicopters
Etablissement de Marignane
Direction Ventes et Relations Client
13725 MARIGNANE CEDEX
FRANCE

In the purchase order, write the information that follows:
- The mode of transport
- The destination
- The serial numbers of the helicopters to change.

2.B. LOGISTIC INFORMATION

Not applicable.

2.C. EQUIPMENT OR PARTS REQUIRED PER HELICOPTER/COMPONENT

Kits to be ordered for one helicopter or one assembly:

Key Word	Qty	New Reference	Item	Former Reference →	Instruction
LG corrosion resistant kit, which includes:		**C120A080260071**			
Spacer	12	C321A1006203	1	C321A1006201 or C321A1006202	*Put into storage*
Rear stop	2	C321A2115204	2	C321A2115202 or C321A2115203	*Put into storage*
Skid	2	C321A2505204	3	C321A2505202 or C321A2505203	*Put into storage*
Skid blank	2	C321A2509203	4	C321A2509201 or C321A2509202	*Put into storage*
Bolt	16	22125BC050016L	5	22125BC050015L	*Discard*
Bolt	6	22201BC120102L	6	22201BE120102L	*Discard*
Washer	16	23112AG050LE	7	23111AG050LE	*Discard*
Washer	10	23112AG080LE	8	23111AG080LE	*Discard*
Washer	6	23112AG100LE	9	23111AG100LE	*Discard*
Washer	12	984427DG12D	10		
Blind rivet	6	ASNA0077A503	11	ASNA0077E503	*Discard*
Blind rivet	14	ASNA0078A402	12	ASNA0078E402	*Discard*
Blind rivet	14	ASNA0078A503	13	ASNA0078E503	*Discard*
Blind rivet	6	ASNA0078A504	14	ASNA0078E504	*Discard*
Self-locking hex nut	8	ASN52320BH080N	15		
Self-locking hex nut	6	ASN52320BH100N	16		
Self-locking hex nut	6	ASN52320BH120N	17		
Split pin	2	EN2367-18028	19		

Equipment or parts to be ordered separately:

Refer to the Work Cards and Tasks used in this Service Bulletin, and the table below:

Key Word	Qty	New Reference	Item	Former Reference →	Instruction
Indicator plate	1	ECS2033.M10	18		
Split pin	2	EN2367-18028	19		
Blind rivet	68	ASNA0363T0XXX	20	ASNA0027SB0604	*Discard*

NOTE 1

The rivets (20) are composed of possibly different rivet sizes. The different rivet sizes are identified by different part numbers. "XXX" can be a combination of "603", "604", "803" and "804".

NOTE 2

Paragraphs 3.B.2.f.2. and 3.B.2.h.2. gives the procedure to know the correct rivet size for the rivets (20).

Consumables to be ordered separately:

Refer to the Work Cards and the Tasks used in this Service Bulletin, and the table below:

Key Word	Qty	Reference	CM	Item
Paint	1 kg	DHN1028P85-1610	CM 4140	21
Sealing compound	1 tube	ECS2068.10	CM 6240	22
Varnish	1 can	ECS2228.10	CM 514	23
Conductive paste	1 can	ECS2241.20	CM 132	24
Sealing compound	1 tube	ECS2254.10	CM 6268	25
Protection	1 can	ECS2287.10	CM 526	26
Sealant	1 tube	ECS2339-60	CM 6068	27
Interposition sealant	1 tube	ECS7009	CM 518	28

NOTE 3

You can use the sealing compound reference: Mastinox 6856K as an alternative to the interposition sealant (28). But this sealing compound reference: Mastinox 6856K is not approved for installation in all of the European zone at this time.

You can send an order for the consumables from the AirbusWorld Marketplace through e-ordering (IN 3481-I-00). If you cannot get access to e-ordering, please contact your Logistic Focal Point.

Special tools:

Refer to the table below:

Key Word	Qty	Reference or equivalent	Item
Screw-type fastener	68	Commercially available	zz

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- Comply with the instructions for assembly by screws and nuts. Refer to Work Card 20-02-05-404 (MTC).
- Comply with the instructions to safety with cotter pins. Refer to Work Card 20-02-06-404 (MTC).
- Comply with the general instructions for electrical bonding. Refer to Work Card 20-02-07-101 (MTC).
- Comply with the instructions to move helicopters in a hangar and in a prepared area. Refer to Work Card 20-07-01-201 (MTC).
- Comply with the instructions on helicopters parked in a repair shop. Refer to Work Card 20-07-02-201 (MTC).
- Comply with the instructions applicable with the rules in force applicable for repair and maintenance of aircraft. Refer to Work Card 20-08-05-102 (MTC).
- Comply with the recommendations for technical requests. Refer to Work Card 20-08-05-107 (MTC).

3.B. WORK STEPS

CAUTION

MAKE SURE THAT YOU PREVENT ALL POSSIBLE FOREIGN OBJECT DAMAGE (FOD). REFER TO SAFETY PROMOTION NOTICE (SPN) NO. 3703-P-00.

3.B.1. Preliminary steps

- Park the helicopter in a maintenance hangar.
- Disconnect all electrical power sources.
- Install the applicable access means.

3.B.2. Procedure

3.B.2.a. Removal of the footsteps (Figure 1)

- Remove the landing gear (a) (DETAIL A). Refer to paragraph F.2. of Task 32-12-00, 4-1 (AMM).
- Keep the components that follow:
  . The footstep bars (b) (DETAIL A)
  . The front brackets (c) (DETAIL B and SECTION D-D)
  . The rear brackets (d) (DETAIL C and SECTION E-E)
  . The screws (e), (f), (g) and (h) (SECTIONS D-D, E-E and F-F)
  . The washers (j), (k), (m), (n), (o), (p) (SECTIONS D-D, E-E and F-F)
  . The washers (bh), if applicable (SECTION F-F)
  . The spacers (bj) (SECTION F-F).

- Discard the washers (q) and the nuts (r) (SECTIONS D-D, E-E and F-F).

NOTE 1

The washers (m) and (q) are installed together on the front brackets (c). The washers (o) and (q) are installed together on the rear brackets (d). The washer (q) is thicker than the washer (m) or (o) (SECTIONS D-D and E-E).

3.B.2.b. Removal of the stops (Figure 3)

3.B.2.b.1. Removal of the rear stops (Figure 3)

- From the rear crossbeam (s), remove the components that follow (DETAIL A):
  . The screws (t) (SECTIONS C-C and D-D)
  . The self-locking nuts (u) (SECTIONS C-C and D-D)
  . The washers (v) (SECTIONS C-C and D-D)
  . The bonding braid (w) (SECTION C-C).

- Remove the rear stops (x) from the rear crossbeam (s) (SECTIONS C-C and D-D).
- Keep the screws (t) and the bonding braid (w) (SECTIONS C-C and D-D).
- Discard the self-locking nuts (u) and the washers (v) (SECTIONS C-C and D-D).
- Put the rear stops (x) into storage (SECTIONS C-C and D-D). Refer to Work Card 20-09-02-901 (MTC).

3.B.2.b.2. Removal of the forward stops (Figure 3)

- From the front crossbeam (y), remove the components that follow (DETAIL A):
  . The screws (t) (SECTIONS E-E and F-F)
  . The self-locking nuts (u) (SECTIONS E-E and F-F)
  . The washers (v) (SECTIONS E-E and F-F)
  . The bonding braid (w) (SECTION F-F).

- Remove the forward stops (z) from the front crossbeam (y) (SECTIONS E-E and F-F).
- Keep the screws (t), the bonding braid (w) and the forward stops (z) (SECTIONS E-E and F-F).
- Discard the self-locking nuts (u) and the washers (v) (SECTIONS E-E and F-F).

3.B.2.c. Removal of the wear-resistant plates (Figures 3, 4 and 5)

Only the procedure for the left side of the landing gear is given (Figure 3, DETAIL A). Do the same procedure for the right side.

3.B.2.c.1. Removal of the front wear-resistant plate (Figure 3, SECTION G-G)

- Remove the front wear-resistant plate (ab). Refer to paragraphs D.1.b. and D.1.c. of Task 32-12-00, 8-1 (AMM).
- Keep the front wear-resistant plate (ab).
- Discard the screws (ac) and the washers (ad).

3.B.2.c.2. Removal of the rear wear-resistant plate (Figure 4 and Figure 5)

- Remove the rear wear-resistant plate (ae) (Figure 5, SECTIONS B-B and D-D). Refer to paragraphs D.2.b. to D.2.g. of Task 32-12-00, 8-1 (AMM).
- Keep the components that follow:
  . The rear wear-resistant plate (ae)
  . The bolt (af) (Figure 5, SECTION B-B)
  . The nut (ag) (Figure 5, SECTION B-B)
  . The washer (ah) (Figure 5, SECTION B-B).

- Discard the screws (aj), the washers (ak) and the split pin (am) (Figure 5, SECTIONS B-B and D-D).
- Remove the skid end (an) and the skid blank (ao) (Figure 4, DETAIL B and Figure 5, SECTION C-C).
- Put the skid end (an) and the skid blank (ao) into storage. Refer to Work Card 20-09-02-901 (MTC).

3.B.2.d. Removal of the jacking points (Figure 3)

Only the procedure for the left side of the landing gear (a) is given (DETAIL A). Do the same procedure for the right side.

- Remove the spacers (ap) from the jacking points (A) (DETAIL A and SECTION H-H). Refer to paragraphs D.3.a. and D.3.b. of Task 32-12-00, 8-1 (AMM).
- Discard the screws (aq), the nuts (ar) and the washers (as) (SECTION H-H).
- Keep the washers (at) (SECTION H-H).
- Put the spacers (ap) into storage (SECTION H-H). Refer to Work Card 20-09-02-901 (MTC).

3.B.2.e. Inspection of the passivated stainless-steel rivets on the front and the rear junctions (Figure 4)

- Do a visual inspection of all the 68 passivated stainless-steel rivets (au) on the landing gear (a) (DETAILS A, C, E and G). Refer to Work Card 20-08-05-106 (MTC).
- Put marks on the rivet holes (D) where loose rivets are found at the front junctions (B) (DETAIL G).
- Put marks on the rivet holes (E) where loose rivets are found at the rear junctions (C) (DETAILS C and E).

3.B.2.f. Installation of the anodized titanium rivets on the rear junctions (Figure 4)

Only the procedure for the left side of the landing gear is given. Do the same procedure for the right side.

3.B.2.f.1. Removal of the passivated stainless steel rivets (Figure 4)

- Remove the 22 passivated stainless-steel rivets (au) from the crossbeam foots (av) (DETAILS C and E). Refer to Work Card 20-03-01-102 (MTC).
- Remove the crossbeam foots (av) from the skid tubes (aw) (DETAILS C and E).
- Remove the rivet tails from the skid tubes (aw).
- Deburr and clean all the rivet holes (E) (DETAILS C and E).
- Install the crossbeam foots (av) on the skid tubes (aw) (DETAILS C and E) with the screw-type fasteners (zz) (not shown).
- For each rivet hole (E) with a mark (refer to paragraph 3.B.2.e.), increase its diameter (DETAILS C and E):
  . Remove the screw-type fastener (zz) at the rivet hole (E) (not shown).
  . Increase the diameter of the rivet hole (E) to a diameter between 6.6 mm and 6.68 mm (DETAILS C and E).
  . Install the screw-type fastener (zz) in the rivet hole (E) (not shown).

3.B.2.f.2. Selection of the anodized titanium rivet size (Figure 4)

Select the rivets (20) to install in each rivet hole (E), one at a time (DETAILS C and E):
- Remove the screw-type fastener (zz) before each measurement (not shown).
- Measure the grip length (F) and the diameter (G) of the rivet hole (E) (SECTION D-D).
- Install the screw-type fastener (zz) after each measurement (not shown).
- Refer to the table below to know the size of the rivet (20) to install in the rivet hole (E) (SECTION D-D).

Grip length (F)	Diameter (G)	
	G < 6.6 mm	6.6 mm ≤ G ≤ 6.68 mm
3.96 mm < F < 5.59 mm	Use the rivet (20) with “0603” at the end of the reference.	Use the rivet (20) with “0803” at the end of the reference.
5.56 mm < F < 7.16 mm	Use the rivet (20) with “0604” at the end of the reference.	Use the rivet (20) with “0804” at the end of the reference.

- For other measurements not given in the table above, select an applicable rivet size. Refer to Work Card 20-02-04-401 (MTC).

3.B.2.f.3. Installation of the anodized titanium rivets (Figure 4)

- Remove the crossbeam foots (av) from the skid tubes (aw) (DETAILS C and E).
- Refer to Work Card 20-02-07-407 (MTC). Apply a layer of conductive paste (24) on the mating surfaces between the components that follow:
  . The crossbeam foots (av) (SECTION D-D)
  . The skid tubes (aw) (SECTION D-D).

- Install the crossbeam foots (av) on the skid tubes (aw) (DETAILS C and E) with the screw-type fasteners (zz) (not shown).
- Install 44 rivets (20) in the rivet holes (E) (DETAILS C and E, and SECTION D-D). Refer to Work Card 20-03-02-405 (MTC):
  . Remove the screw-type fastener (zz) before each installation of the rivet (20) (not shown).
  . Apply the sealing compound (22) on the rivet (20) (SECTION D-D). Refer to Work Card 20-05-01-223 (MTC).

- Do a touch-up on the 44 rivets (20) with the paint (21) (SECTION D-D). Refer to Work Card 20-04-05-447 (MTC).
- Refer to Work Card 20-05-01-222 (MTC). Apply a bead of sealant (27) along the edges of the mating surfaces between the components that follow:
  . The crossbeam foots (av) (DETAIL C)
  . The skid tubes (aw) (DETAIL C).

3.B.2.g. Corrosion protection of the rear crossbeam (Figure 4 and Figure 5)

- Remove the rear crossbeam (s) from the landing gear (a) (Figure 4, DETAIL A). Refer to Task 32-12-00, 4-2 (AMM).
- Keep the screws (ax), the nuts (ay) and the washers (az) (Figure 4, SECTION F-F).
- Discard the split pins (ba) (Figure 4, SECTION F-F).
- Apply the interposition sealant (28) on the shank of the screws (ax) (Figure 4, SECTION F-F). Refer to Work Card 20-05-01-227 (MTC).
- When you install the rear crossbeam (s) in the next step, use the components that follow (Figure 4, SECTION F-F):
  . The screws (ax) (Figure 4, SECTION F-F)
  . The nuts (ay) (Figure 4, SECTION F-F)
  . The washers (az) (Figure 4, SECTION F-F)
  . The split pins (19) (Figure 4, SECTION F-F).

- Install the rear crossbeam (s) in the crossbeam foots (av) (Figure 4, DETAIL C and SECTION F-F). Refer to the principle of paragraph E.2.b. of Task 32-12-00, 4-2 (AMM):
  . Do not apply the anti-corrosion agent CM 518 on the rear crossbeam (s) and the skid tubes (aw) (Figure 4, DETAIL C).
  . Refer to Work Card 20-04-04-403 (MTC). Apply a layer of coating compound on the areas that follow:
    .. The external surfaces (K) of the rear crossbeam (s) (Figure 5, DETAIL E)
    .. The internal surface (L) of the crossbeam foots (av) (Figure 5, DETAIL E).

  . Apply surface protection on the external surfaces (K) of the rear crossbeam (s) (Figure 5, DETAIL E):
    .. Apply a layer of epoxy primer P05. Refer to Work Card 20-04-05-402 (MTC).
    .. Then apply a layer of epoxy primer P20. Refer to Work Card 20-04-05-402 (MTC).

  . Apply surface protection on the internal surface (L) of the crossbeam foots (av) (Figure 5, DETAIL E):
    .. Apply a layer of epoxy primer P05. Refer to Work Card 20-04-05-402 (MTC).
    .. Then apply a layer of epoxy primer P20. Refer to Work Card 20-04-05-402 (MTC).

  . Apply a layer of protection (26) on the internal surface (L) (Figure 5, DETAIL E). Refer to Work Card 20-09-00-103 (MTC).

. Refer to Work Card 20-02-07-407 (MTC). Apply a layer of conductive paste (24) on the mating surfaces between the components that follow:
.. The rear crossbeam (s) (Figure 4, SECTION F-F)
.. The crossbeam foots (av) (Figure 4, SECTION F-F).

. Refer to Work Card 20-05-01-222 (MTC). Apply a bead of sealant (27) along the edges of the mating surfaces between the components that follow:
.. The rear crossbeam (s) (Figure 4, DETAIL C)
.. The crossbeam foots (av) (Figure 4, DETAIL C).

. Do not install the skids (3) (Figure 5, SECTION C-C).

NOTE 2

The skids (3) are installed in paragraph 3.B.2.i.1.

- Apply the sealing compound (22) on the screws (ax), the nuts (ay) and the washers (az) (Figure 4, SECTION F-F). Refer to Work Card 20-05-01-223 (MTC).

3.B.2.h. Installation of the anodized titanium rivets on the front junctions (Figures 4 and 5)

3.B.2.h.1. Removal of the passivated stainless steel rivets (Figure 4)

- Remove the front crossbeam (y) from the landing gear (a) (DETAIL A). Refer to Task 32-12-00, 4-2 (AMM).
- Remove the rivet tails from the skid tubes (aw) (DETAIL G).
- Deburr and clean all the rivet holes (D) (DETAIL G).
- Install the front crossbeam (y) on the skid tubes (aw) (DETAIL G) with the screw-type fasteners (zz) (not shown).
- For each rivet hole (D) with a mark (refer to paragraph 3.B.2.e.), increase its diameter (DETAIL G):
  . Remove the screw-type fastener (zz) at the rivet hole (D) (not shown).
  . Increase the diameter of the rivet hole (D) to a diameter between 6.6 mm and 6.68 mm (DETAIL G).
  . Install the screw-type fastener (zz) in the rivet hole (D) (not shown).

3.B.2.h.2. Selection of the anodized titanium rivet size (Figure 4)

Select the rivets (20) to install in each rivet hole (D), one at a time (DETAIL G):
- Remove the screw-type fastener (zz) before each measurement (not shown).
- Measure the grip length (H) and the diameter (J) of the rivet hole (D) (SECTION H-H).
- Install the screw-type fastener (zz) after each measurement (not shown).
- Refer to the table below to know the size of the rivet (20) to install in the rivet hole (D) (SECTION H-H).

Grip length (H)	Diameter (J)	
	J < 6.6 mm	6.6 mm ≤ J ≤ 6.68 mm
5.56 mm < H < 7.16 mm	Use the rivet (20) with “0604” at the end of the reference.	Use the rivet (20) with “0804” at the end of the reference.

- For other measurements not given in the table above, select an applicable rivet size. Refer to Work Card 20-02-04-401 (MTC).

3.B.2.h.3. Installation of the anodized titanium rivets (Figure 4 and Figure 5)

- Remove the front crossbeam (y) from the skid tubes (aw) (Figure 4, DETAIL G).
- Refer to Work Card 20-04-04-403 (MTC) and apply a layer of coating compound on the surfaces that follow:
  . The external surfaces (M) and (P) of the skid tubes (aw) (Figure 5, DETAIL F)
  . The internal surfaces (N) and (Q) of the front crossbeam (y) (Figure 5, DETAIL F).

- Apply protection on the external surface (P) of the skid tubes (aw) (Figure 5, DETAIL F):
  . Apply a layer of epoxy primer P05. Refer to Work Card 20-04-05-402 (MTC).
  . Then apply a layer of epoxy primer P20. Refer to Work Card 20-04-05-402 (MTC).

- Apply protection on the internal surface (Q) of the front crossbeam (y) (Figure 5, DETAIL F):
  . Apply a layer of epoxy primer P05. Refer to Work Card 20-04-05-402 (MTC).
  . Then apply a layer of epoxy primer P20. Refer to Work Card 20-04-05-402 (MTC).

- Apply a layer of protection (26) on the internal surfaces (N) and (Q) of the front crossbeam (y) (Figure 5, DETAIL F). Refer to Work Card 20-09-00-103 (MTC).
- Refer to Work Card 20-02-07-407 (MTC). Apply a layer of conductive paste (24) on the mating surfaces between the components that follow:
  . The front crossbeam (y) (Figure 4, SECTION H-H)
  . The skid tubes (aw) (Figure 4, SECTION H-H).

- Install the front crossbeam (y) on the skid tubes (aw) (Figure 4, DETAIL G) with the screw-type fasteners (zz) (not shown).
- Refer to Work Card 20-03-02-405 (MTC) and install 24 rivets (20) in the rivet holes (D) (Figure 4, DETAIL G and SECTION H-H):
  . Remove the screw-type fastener (zz) before each installation of the rivet (20) (not shown).
  . Apply the sealing compound (22) on each rivet (20) (Figure 4, SECTION H-H). Refer to Work Card 20-05-01-223 (MTC).

- Do a touch-up on the rivets (20) with the paint (21) (Figure 4, SECTION H-H). Refer to Work Card 20-04-05-447 (MTC).
- Refer to Work Card 20-05-01-222 (MTC). Apply a bead of sealant (27) along the edges of the mating surfaces between the components that follow:
  . The front crossbeam (y) (Figure 4, DETAIL G and SECTION H-H)
  . The skid tubes (aw) (Figure 4, DETAIL G and SECTION H-H).

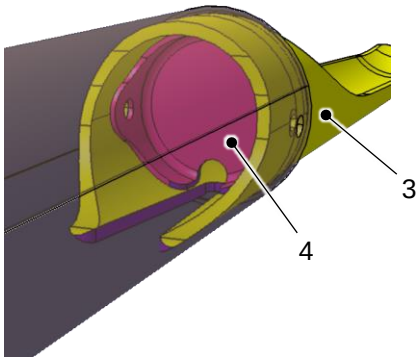
3.B.2.i. Installation of the skids ends and the wear-resistant plates (Figure 5)

Only the procedure for the left side of the landing gear is given. Do the same procedure for the right side.

3.B.2.i.1. Installation of the skid end and the rear wear-resistant plate (Figure 5)

- Refer to Work Card 20-05-01-401 (MTC). Apply a layer of sealing compound (25) on the mating surfaces between the components that follow:
  . The skid (3) (SECTION C-C)
  . The skid blank (4) (SECTION C-C).

- Align the skid blank (4) in the skid (3). Refer to the illustration below.



- Apply a layer of protection (26) on the internal surface (R) of the skid tube (aw) (DETAIL E). Refer to Work Card 20-09-00-103 (MTC).
- Apply a layer of sealing compound (25) on the internal surface of the rear wear-resistant plate (ae) (SECTIONS B-B and D-D). Refer to Work Card 20-05-01-401 (MTC).
- Apply the interposition sealant (28) on the shank of the bolts (af) and (5) (SECTIONS B-B and D-D). Refer to Work Card 20-05-01-227 (MTC).
- Install the skid (3), the skid blank (4) and the rear wear-resistant plate (ae) on the skid tubes (aw) (SECTIONS B-B, C-C and D-D). Use the components that follow:
  . The bolts (af) and (5) (SECTIONS B-B and D-D)
  . The nut (ag) (SECTION B-B)
  . The washers (ah) and (7) (point the chamfered side of the washer (7) to the head of the bolt (5)) (SECTIONS B-B and D-D)
  . The split pin (19) (SECTION B-B).

- Refer to Work Card 20-05-01-223 (MTC) and apply the sealing compound (22) on the components that follow (SECTIONS B-B and D-D):
  . The bolts (af) and (5) (SECTIONS B-B and D-D)
  . The nut (ag) (SECTION B-B)
  . The washers (ah) and (7) (SECTIONS B-B and D-D).

3.B.2.i.2. Installation of the front wear-resistant plate (Figure 3, SECTION G-G)

- Apply a layer of sealing compound (25) on the internal surface of the front wear-resistant plate (ab). Refer to Work Card 20-05-01-401 (MTC).
- Apply the interposition sealant (28) on the shank of the bolts (5). Refer to Work Card 20-05-01-227 (MTC).
- Install the front wear-resistant plate (ab) on the skid tubes (aw) with the bolts (5) and the washers (7) (point the chamfered side of the washer (7) to the head of the bolt (5)).
- Apply the sealing compound (22) on the bolts (5) and the washers (7). Refer to Work Card 20-05-01-223 (MTC).

3.B.2.j. Installation of the jacking points (Figure 3)

Only the procedure for the left side of the landing gear (a) is given (DETAIL A). Do the same procedure for the right side.

- Apply the interposition sealant (28) on the shank of the bolts (6) (SECTION H-H). Refer to Work Card 20-05-01-227 (MTC).
- Install the components that follow:
  . The spacers (1) (SECTION H-H)
  . The bolts (6) (SECTION H-H)
  . The self-locking nuts (17) (SECTION H-H)
  . The washers (at) and (10) (SECTION H-H).

- Torque the self-locking nuts (17) to tighten (SECTION H-H). Then add a quarter turn to tighten.
- Refer to Work Card 20-05-01-223 (MTC) and apply the sealing compound (22) on the components that follow:
  . The spacers (1) (SECTION H-H)
  . The bolts (6) (SECTION H-H)
  . The self-locking nuts (17) (SECTION H-H)
  . The washers (at) and (10) (SECTION H-H).

3.B.2.k. Installation of the stops (Figure 3)

3.B.2.k.1. Installation of the rear stops (Figure 3)

- Apply the interposition sealant (28) on the shank of the screws (t) (SECTIONS C-C and D-D). Refer to Work Card 20-05-01-227 (MTC).
- Install the rear stops (2) on the rear crossbeam (s) with the components that follow (SECTIONS C-C and D-D):
  . The screws (t) (SECTIONS C-C and D-D)
  . The bonding braid (w) (SECTION C-C)
  . The washers (8) (point the chamfered side of the washer (8) to the head of the screw (t)) (SECTIONS C-C and D-D)
  . The self-locking nuts (15) (SECTIONS C-C and D-D).

- Refer to Work Card 20-05-01-223 (MTC) and apply the sealing compound (22) on the components that follow:
  . The screws (t) (SECTIONS C-C and D-D)
  . The lug (bk) of the bonding braid (w) (SECTION C-C)
  . The washers (8) (SECTIONS C-C and D-D)
  . The self-locking nuts (15) (SECTIONS C-C and D-D).

3.B.2.k.2. Installation of the forward stops (Figure 3)

- Apply the interposition sealant (28) on the shank of the screws (t) (SECTIONS E-E and F-F). Refer to Work Card 20-05-01-227 (MTC).
- Install the forward stops (z) on the front crossbeam (y) with the components that follow (SECTIONS E-E and F-F):
  . The screws (t) (SECTIONS E-E and F-F)
  . The bonding braid (w) (SECTION F-F)
  . The washers (8) (point the chamfered side of the washer (8) to the head of the screw (t)) (SECTIONS E-E and F-F)
  . The self-locking nuts (15) (SECTIONS E-E and F-F).

- Refer to Work Card 20-05-01-223 (MTC) and apply the sealing compound (22) on the components that follow:
  . The screws (t) (SECTIONS E-E and F-F)
  . The lug (bk) of the bonding braid (w) (SECTION F-F)
  . The forward stops (z) (SECTIONS E-E and F-F)
  . The washers (8) (SECTIONS E-E and F-F)
  . The self-locking nuts (15) (SECTIONS E-E and F-F).

3.B.2.l. Installation of the landing gear (Figure 1, DETAIL A)

Install the landing gear (a) on the helicopter. Refer to paragraph F.3 of Task 32-12-00, 4-1 (AMM).

3.B.2.m. Installation of the footsteps on the landing gear (Figures 1 and 2)

Only the procedure for the left side of the landing gear (a) is given (Figure 1, DETAIL A). Do the same procedure for the right side.

3.B.2.m.1. Modification of the footstep bar for drainage (Figure 1, DETAIL G)

- Drill a hole (S) on the footstep bar (b) to a diameter of 9 mm.
- Deburr and clean the area.
- Apply a layer of coating compound on the hole (S). Refer to Work Card 20-04-04-403 (MTC).
- Apply epoxy primer P05 on the hole (S). Refer to Work Card 20-04-05-402 (MTC).

3.B.2.m.2. Replacement of rivets on the footstep bar (Figure 2)

Refer to Work Card 20-03-02-406 (MTC) when you install the rivets (11), (12), (13) and (14) in this paragraph (DETAILS B, C, D, E, F and G).

NOTE 3

The rivet length is a theoretical value. Airbus Helicopters refers to the standard design definition to calculate this value. It is possible that there are differences between the standard design definition and the current helicopter configuration. The Work Card (MTC) and/or the specification standard of the rivets helps you to calculate the correct rivet length. You can use a rivet that is different from the rivets given in this Service Bulletin if your rivet has the correct calculated rivet length.

- Replace the 7 rivets on the forward fitting (bd), one at a time (DETAILS B and C):
  . Remove the stainless steel rivet (bc) from the forward fitting (bd) (DETAILS B and C). Refer to Work Card 20-03-01-102 (MTC).
  . Deburr and clean the rivet hole (U) (DETAILS B and C).
  . Apply the sealant (27) on the rivet (13) (DETAILS B and C).
  . Install the rivet (13) on the forward fitting (bd) (DETAILS B and C).

- Refer to the same procedure above. Install the 3 rivets (11) and the 3 rivets (14) on the rear fitting (be) (DETAILS D and E).
- Remove the 7 stainless steel rivets (bc) from the blanking cap (bf) (DETAILS F and G). Refer to Work Card 20-03-01-102 (MTC).
- Remove the blanking cap (bf) from the footstep bar (b) (DETAILS F and G).
- Remove the rivet tails from the footstep bar (b).
- Deburr and clean the rivet holes (U) (DETAILS F and G).
- Install the blanking cap (bf) on the footstep bar (b) (DETAILS F and G):
  . Apply the sealant (27) on the 7 rivets (12) (DETAILS F and G).
  . Install the 7 rivets (12) on the blanking cap (bf) (DETAILS F and G).

- Do a touch-up of the rivets (11), (12), (13) and (14) with the paint (21) (DETAILS B, C, D, E, F and G). Refer to Work Card 20-04-05-447 (MTC).
- Refer to Work Card 20-05-01-222 (MTC). Apply a bead of sealant (27) along the edges of the mating surfaces between the components that follow:
  . The forward fitting (bd) and the footstep bar (b) (DETAILS B and C)
  . The rear fitting (be) and the footstep bar (b) (DETAILS D and E)
  . The blanking cap (bf) and the footstep bar (b) (DETAILS F and G).

- Give new identification to the assembled footstep bar (b). Refer to paragraph 3.C.

3.B.2.m.3. Installation of the footsteps (Figure 1)

- Apply the interposition sealant (28) on the shank of the screws (e), (f), (g) and (h) (SECTIONS D-D, E-E and F-F). Refer to Work Card 20-05-01-227 (MTC).
- Install the footstep bars (b) on the landing gear (a) (DETAIL A). Refer to the principle of paragraph F.5. of Task 32-12-00, 4-1 (AMM):
  . Install the rear brackets (d) on the rear crossbeam (s) with the components that follow (DETAIL C):
  .. The screws (g) (SECTION E-E)
  .. The washers (n), (o) and (8) (point the chamfered side of the washer (8) to the head of the screw (g)) (SECTION E-E)
  .. The self-locking nuts (15) (SECTION E-E).

  . Install the front brackets (c) on the front crossbeam (y) with the components that follow (DETAIL B):
  .. The screws (e) (SECTION D-D)
  .. The washers (j), (m) and (8) (point the chamfered side of the washer (8) to the head of the screw (e)) (SECTION D-D)
  .. The self-locking nuts (15) (SECTION D-D).

  . Install the footstep bars (b) on the front brackets (c) with the components that follow (DETAIL B):
  .. The screws (f) (SECTION D-D)
  .. The washers (k) and (9) (point the chamfered side of the washer (9) to the head of the screw (f)) (SECTION D-D)
  .. The self-locking nuts (16) (SECTION D-D).

  . Install the footstep bars (b) on the rear brackets (d) with the components that follow (DETAIL C):
  .. The screws (h) (SECTION F-F)
  .. The washers (p) and (9) (point the chamfered side of the washer (9) to the head of the screw (h)) (SECTION F-F)
  .. The washers (bh), if applicable (SECTION F-F)
  .. The spacers (bj) (SECTION F-F)
  .. The self-locking nuts (16) (SECTION F-F).

- Refer to Work Card 20-05-01-223 (MTC) and apply the sealing compound (22) on the components that follow (SECTIONS D-D, E-E and F-F):
  . The screws (e), (f), (g) and (h) (SECTIONS D-D, E-E and F-F)
  . The washers (p), (n), (8) and (9) (SECTIONS D-D, E-E and F-F)
  . The washers (bh), if applicable (SECTION F-F)
  . The self-locking nuts (15) and (16) (SECTIONS D-D, E-E and F-F).

3.B.2.n. Marking of the landing gear (Figure 3, DETAIL J)

- Write “C321A2601051 + SB 32-013” on the indicator plate (18). Refer to Work Card 20-08-05-103 (MTC).
- Prepare the surface of the front crossbeam (y). Refer to Work Card 20-06-01-101 (MTC).
- Bond the indicator plate (18) next to the indicator plate (bg) on the front crossbeam (y).
- Apply a layer of varnish (23) on the indicator plate (18). Refer to Work Card 20-02-07-403 (MTC).

3.B.3. Final steps

- Remove all the tools, the materials and the equipment from your work area.
- Clean the work area and the helicopter. Refer to Work Card 20-07-03-408 (MTC).
- Remove the access means.
- Connect the electrical power sources.
- Put the helicopter in flight condition.

3.B.4. Work steps for non-installed equipment or parts

Stock retrofitting

Do the modification of the LH and RH footstep assemblies given in paragraph 1.A.2. Refer to paragraph 3.B.2.m.1. and 3.B.2.m.2.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

- Record the full compliance with this Service Bulletin, with the revision number, in the helicopter documents.

- Record the full compliance with this Service Bulletin (see IN 3785-I-00 for instructions):
  QR code or hypertext link

NOTE 4

The recording of compliance with Service Bulletins in the SB Insight tool does not replace the recording in the helicopter documents.

SB EC120 32-013

Identification of modifications on equipment or parts:

Refer to Work Card 20-08-05-103 (MTC) and give new identification to the parts/assemblies that follow:

Key Word	Former Reference	New Reference	Service Bulletin No.	Marking Type
Footstep assembly	C321A2210101	C321A2210101 + SB 32-013	SB 32-013	Indelible ink
Footstep assembly	C321A2211101	C321A2211101 + SB 32-013	SB 32-013	Indelible ink

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Operating instructions:

Not applicable.

Maintenance instructions:

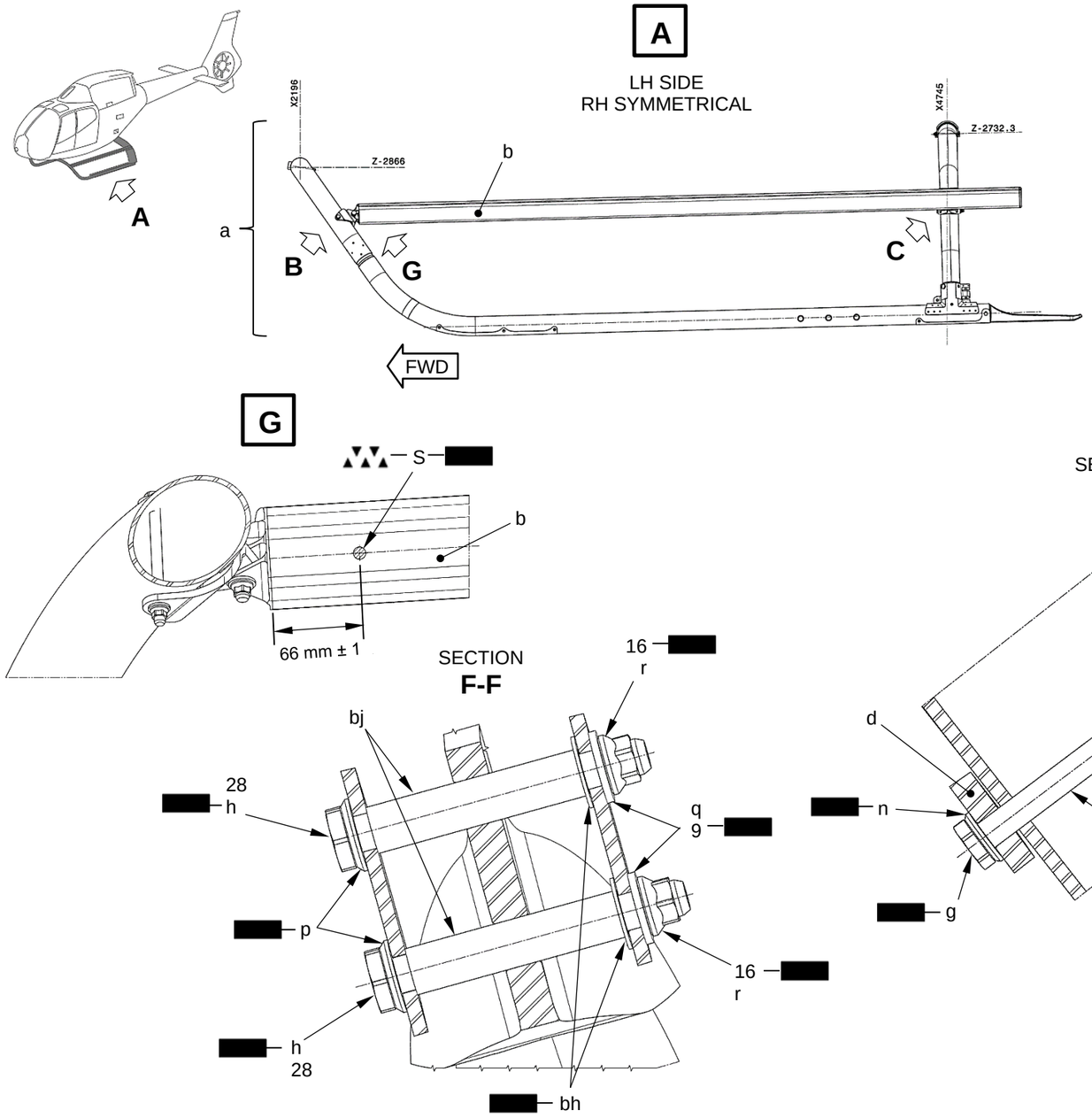
Unscheduled

Refer to paragraph 3.B.2.i.1. of this Service Bulletin when you install the components that follow:
- The skids (3) (Figure 5, SECTION C-C)
- The skid blanks (4) (Figure 5, SECTION C-C)
- The rear wear-resistant plates (ae) (Figure 5, SECTION C-C).

Refer to paragraph 3.B.2.i.2. of this Service Bulletin when you install the front wear-resistant plates (ab) (Figure 3, SECTION G-G).

Airbus Helicopters will add these instructions to the Aircraft Maintenance Manual (AMM) during one of the next revisions. After the addition of these instructions to the Aircraft Maintenance Manual (AMM), refer to this manual.

No. EC120-32-013



Back to paragraph 3.B.2.a.
Back to paragraph 3.B.2.l.
Back to paragraph 3.B.2.m.1.
Back to paragraph 3.B.2.m.3.

Figure 1

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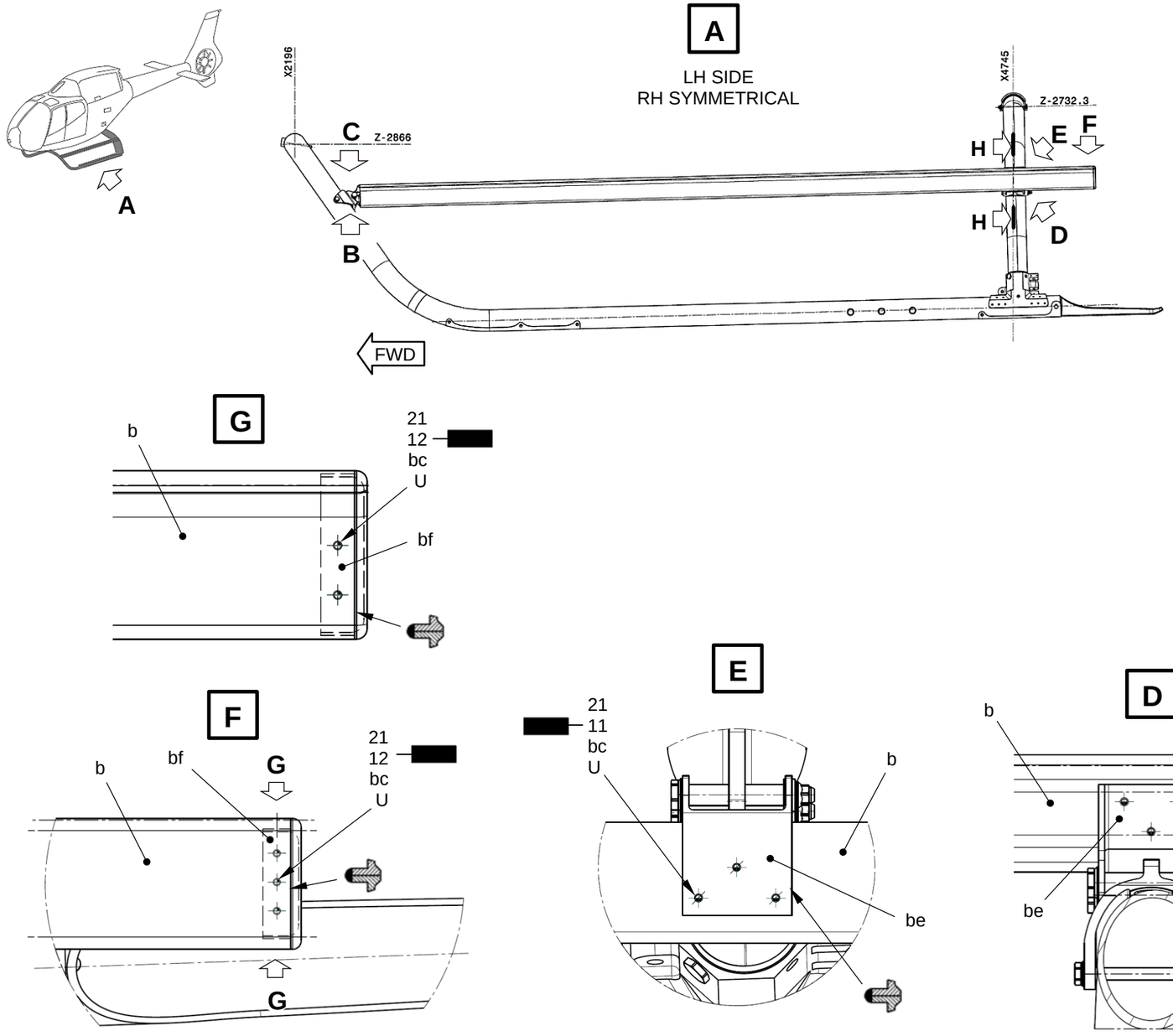

Back to paragraph 3.B.2.m.2.

Figure 2

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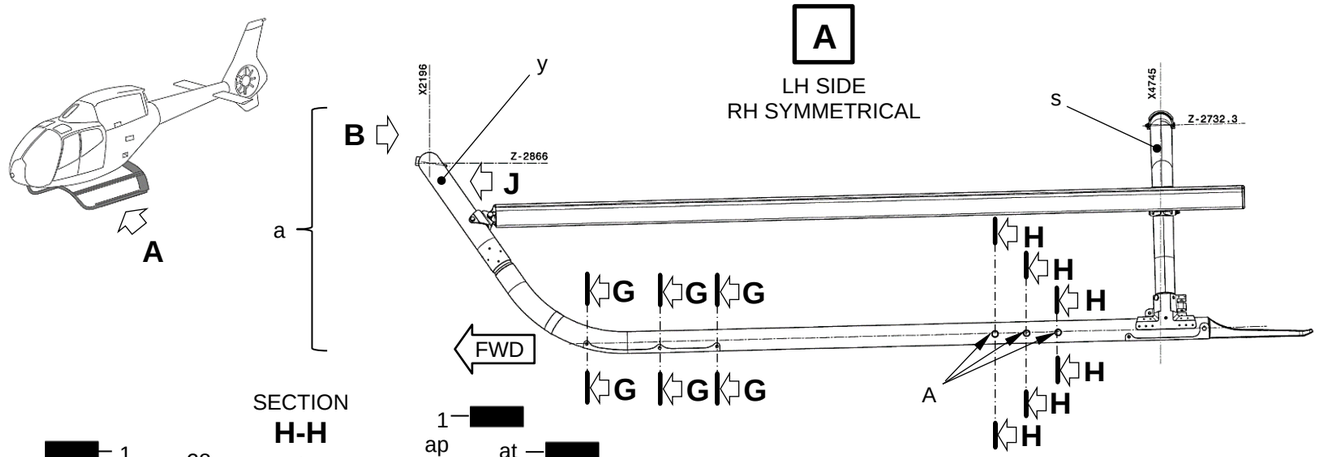

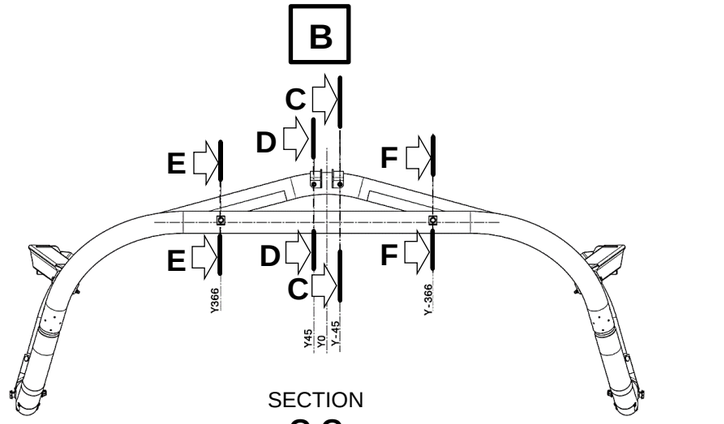

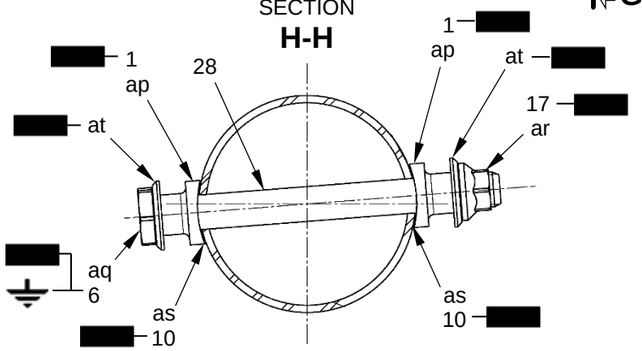

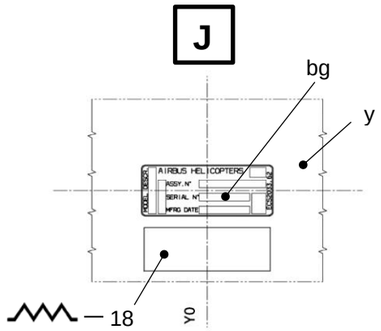

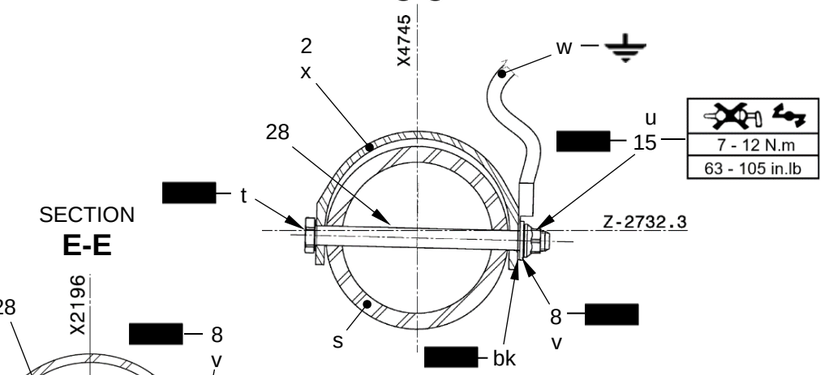

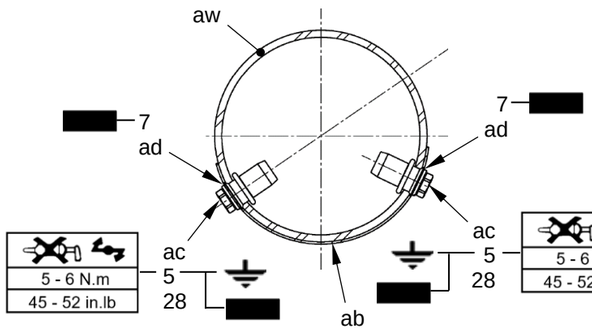

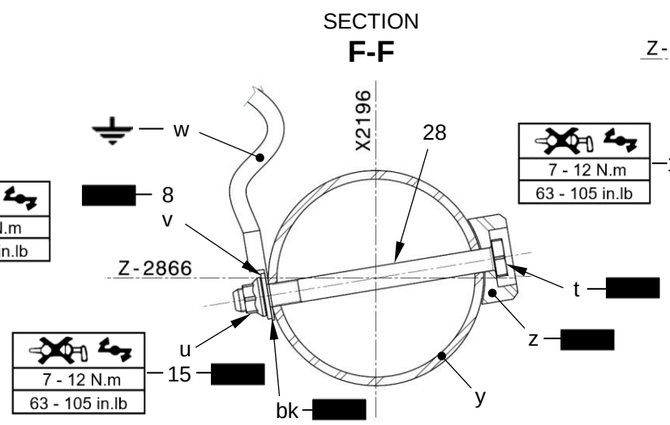

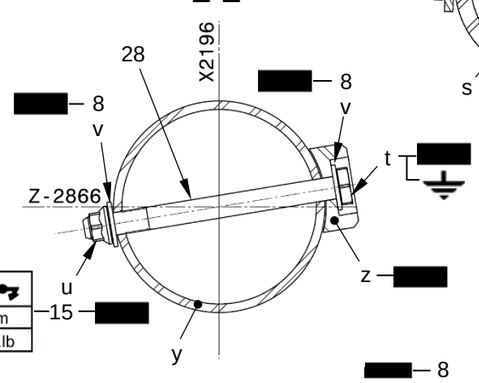

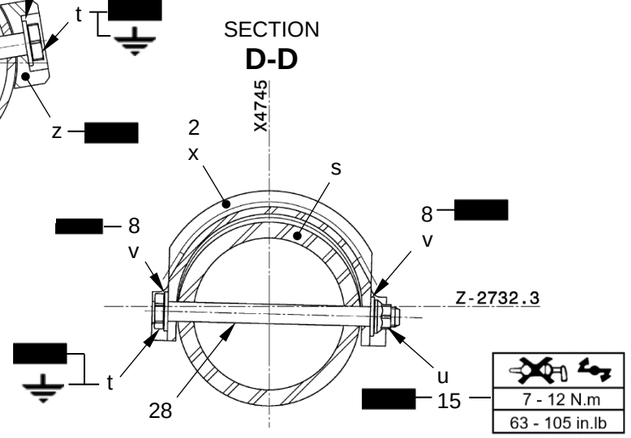

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Back to paragraph 3.B.2.c.
Back to paragraph 3.B.2.c.1.
Back to paragraph 3.B.2.d.
Back to paragraph 3.B.2.i.2.
Back to paragraph 3.B.2.j.
Back to paragraph 3.B.2.k.1.
Back to paragraph 3.B.2.k.2.
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Back to paragraph 3.D.

Figure 3

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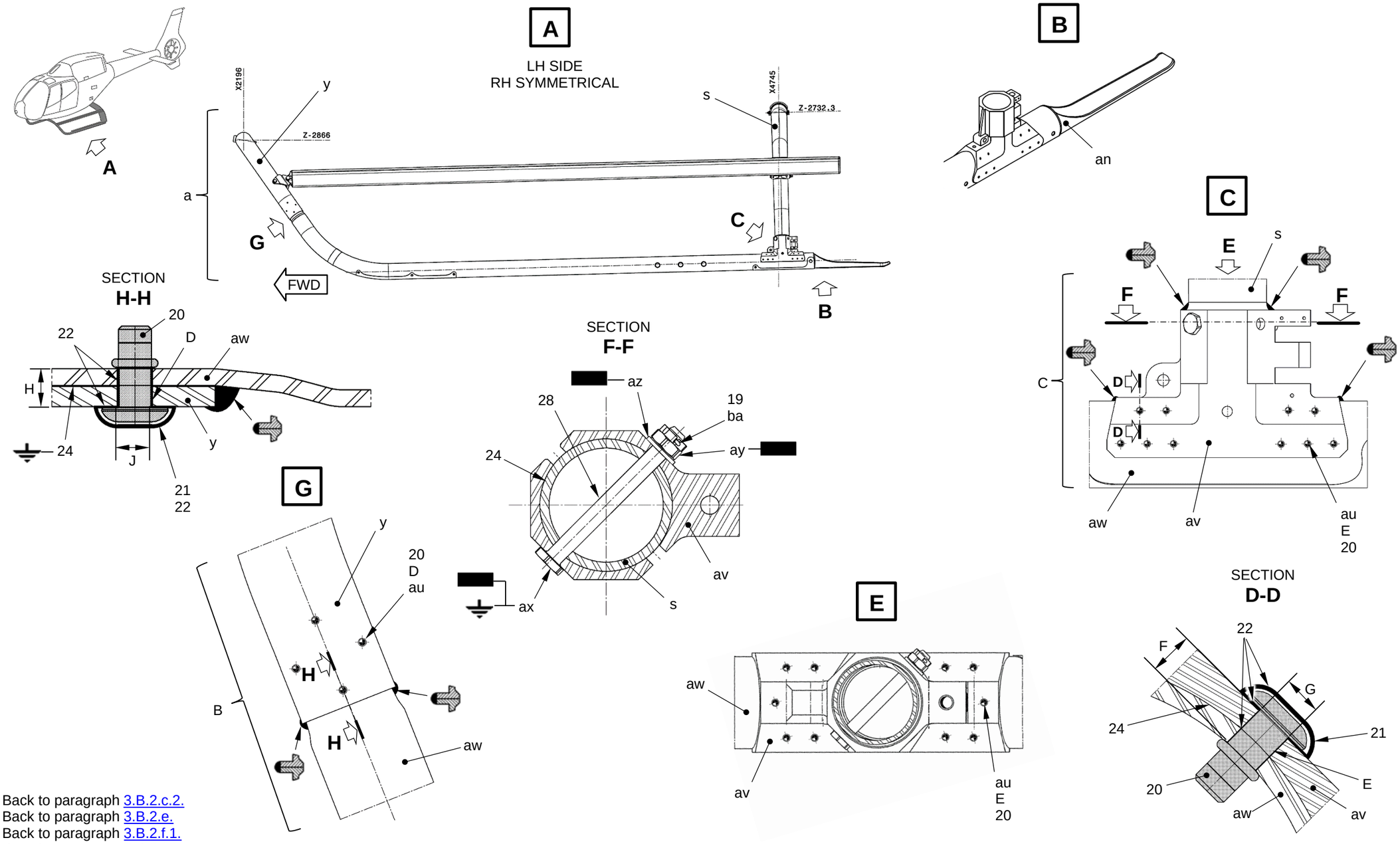

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Back to paragraph 3.B.2.f.3.
Back to paragraph 3.B.2.g.
Back to paragraph 3.B.2.h.1.
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Back to paragraph 3.B.2.h.3.

Figure 4

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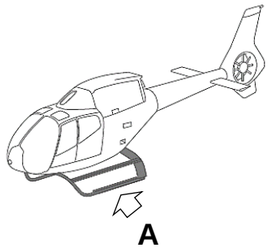

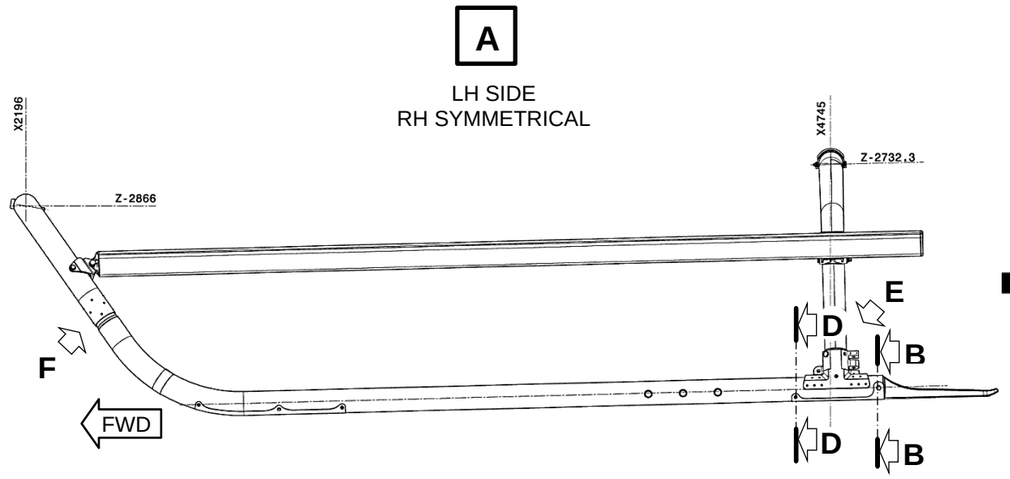

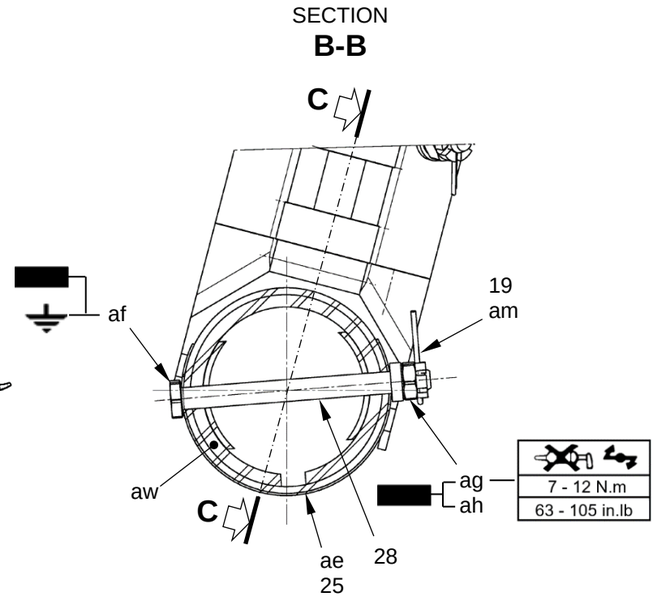

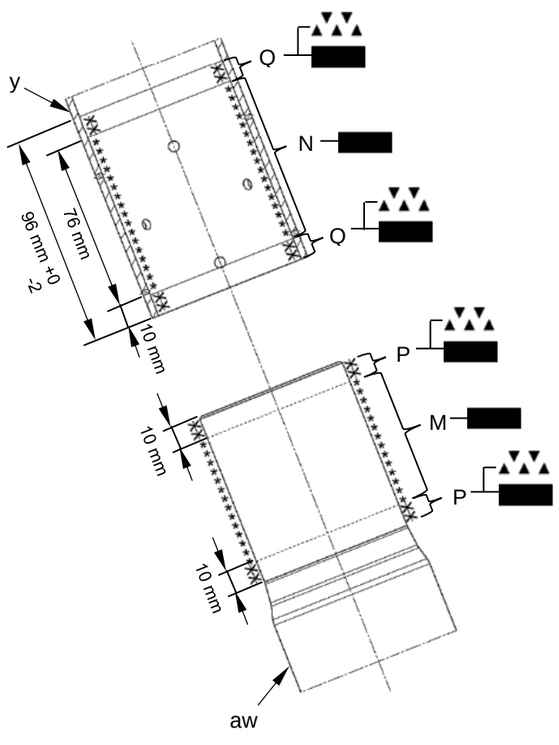

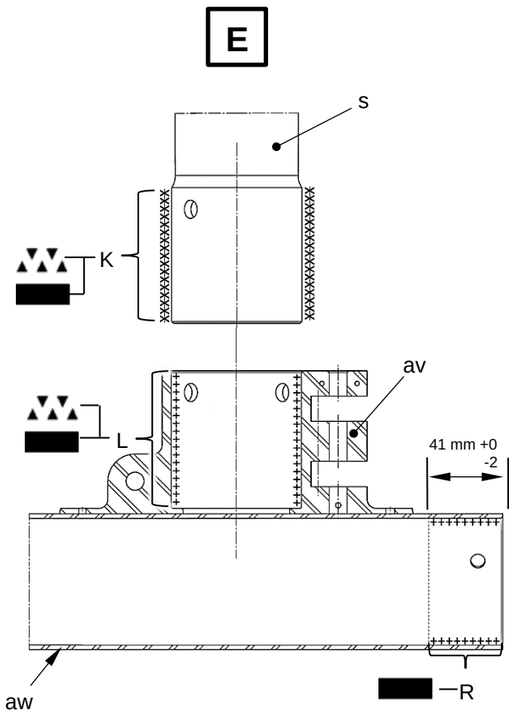

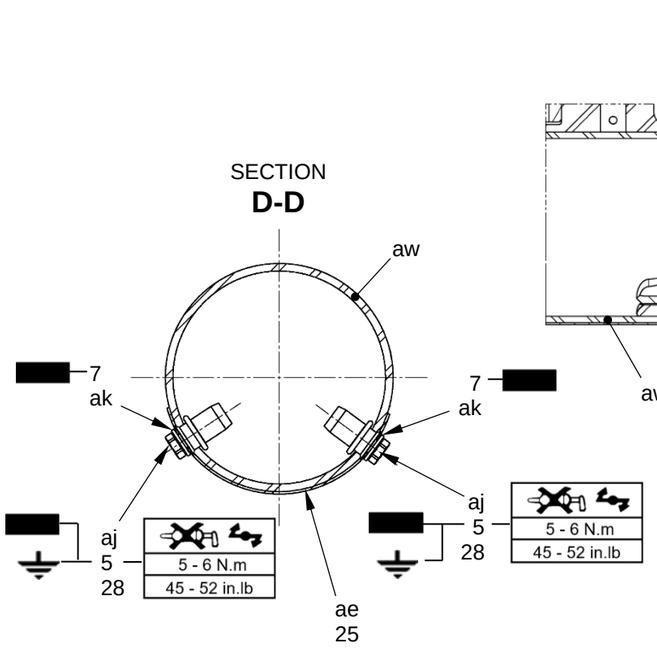

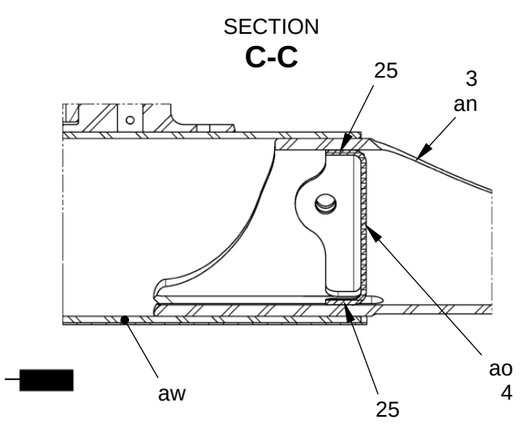

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Back to paragraph 3.B.2.g.
Back to paragraph 3.B.2.h.3.
Back to paragraph 3.B.2.i.1.
Back to paragraph 3.D.

Figure 5