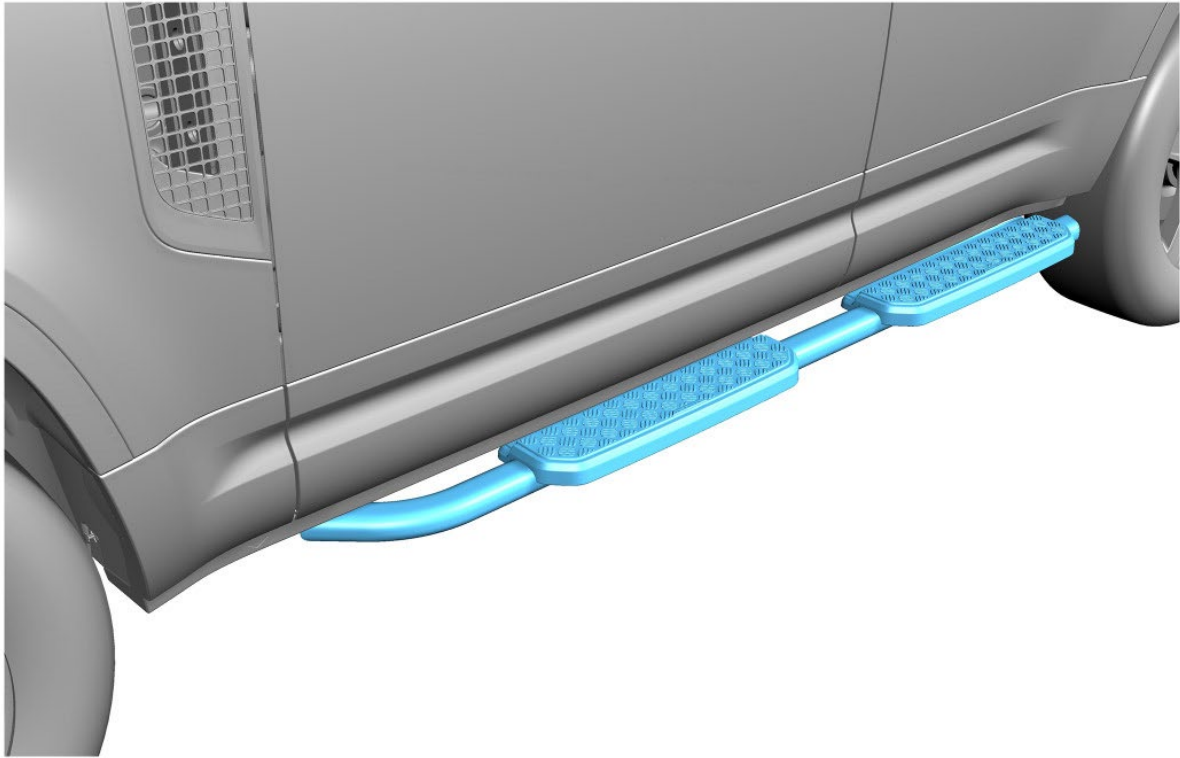


FIXED SIDE STEPS AND SIDE TUBES

WARNING

- Accessories which are not correctly installed can be dangerous. Read the instructions carefully prior to ordering and installation to make sure this accessory is applicable to your variant of vehicle. Comply with instructions at all times. If in doubt, contact your nearest approved retailer.

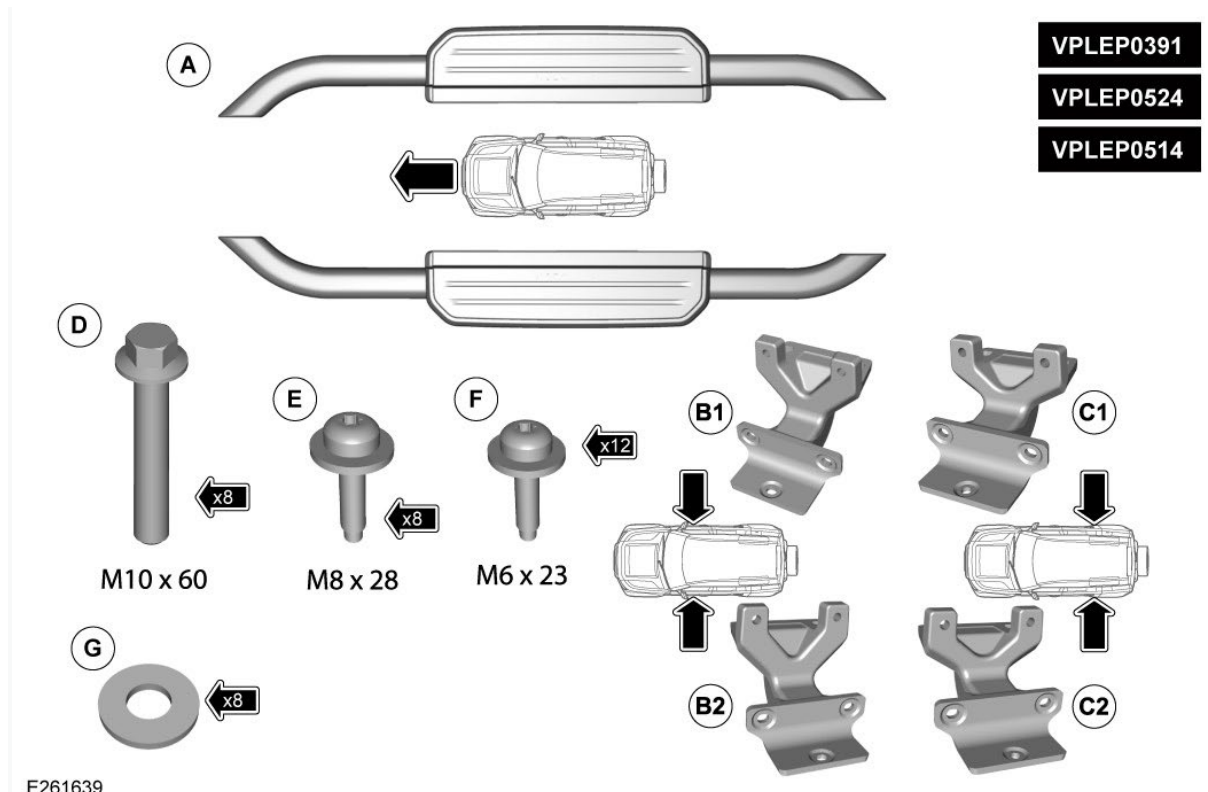


E294805

Fixed Side Steps for Defender 90 (Bill of Materials)

NOTE

- If missing, lost or damaged, replacement fixings can be ordered separately. (See table below)



Fixings

Replacement Part Numbers

(D) M10x60 Bolt

LR152410

(E) M8x28 Screw

LR135788

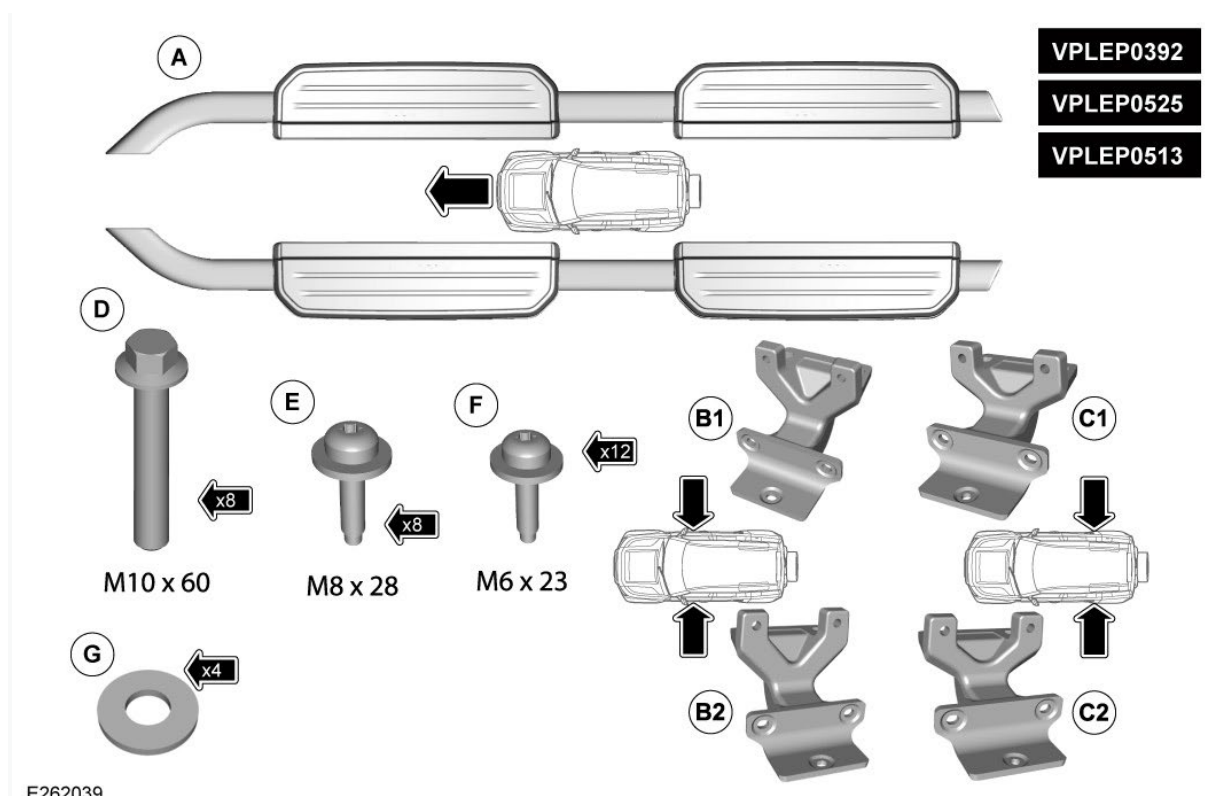
(F) M6x23 Screw

LR141748

Fixed Side Steps for Defender 110/130 (Bill of Materials)

NOTE

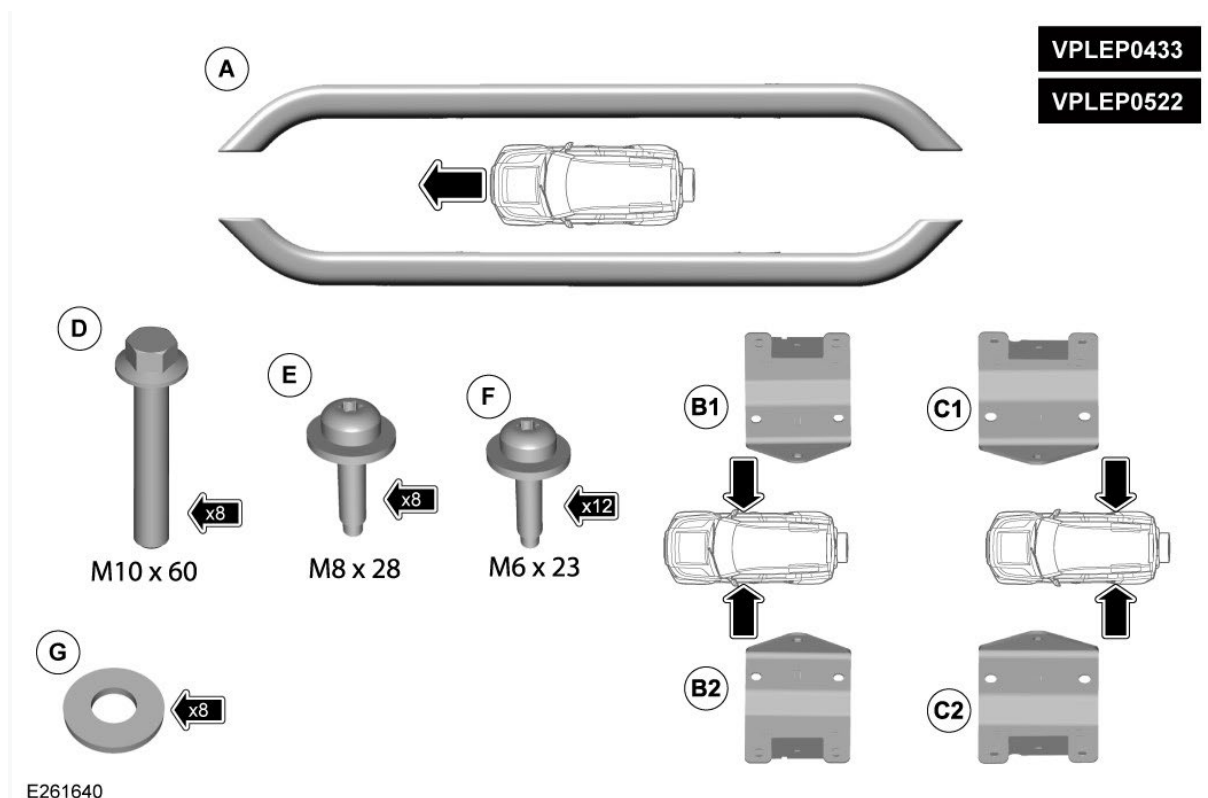
- If missing, lost or damaged, replacement fixings can be ordered separately. (See table below)



Side Tubes for Defender 90 (Bill of Materials)

NOTE

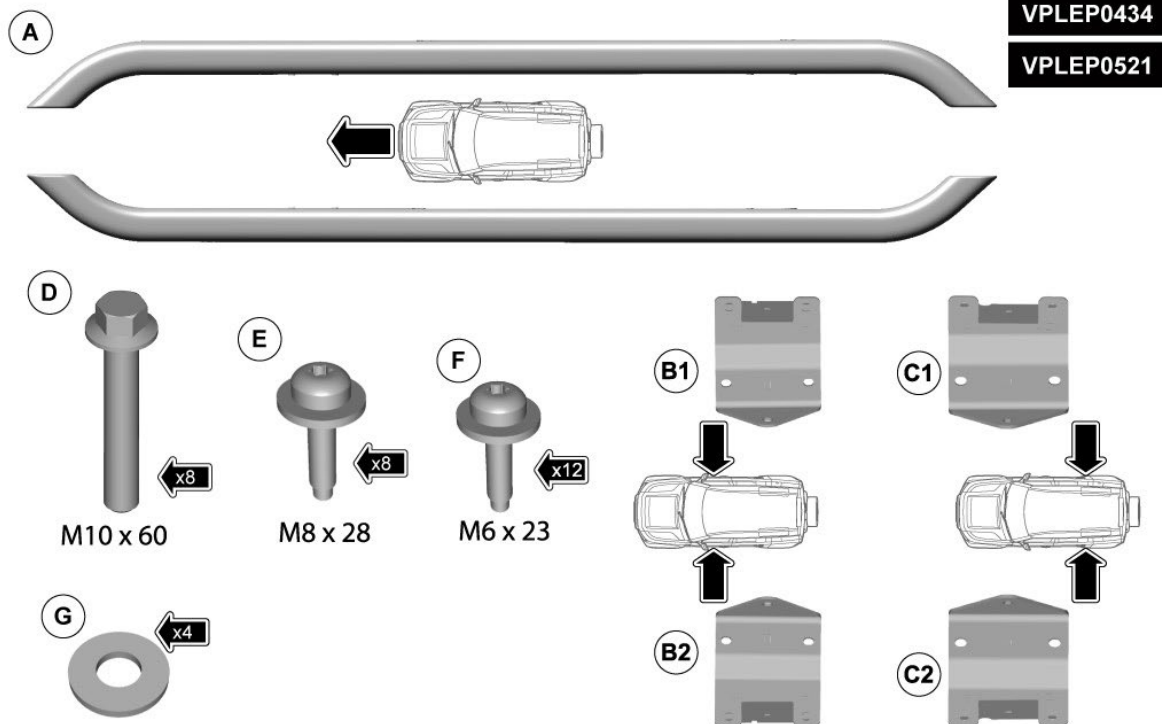
- If missing, lost or damaged, replacement fixings can be ordered separately. (See table below)



Side Tubes for Defender 110/130 (Bill of Materials)

NOTE

- If missing, lost or damaged, replacement fixings can be ordered separately. (See table below)



E261638

Fixings

Replacement Part Numbers

(D) M10x60 Bolt

LR152410

(E) M8x28 Screw

LR135788

(F) M6x23 Screw

LR141748

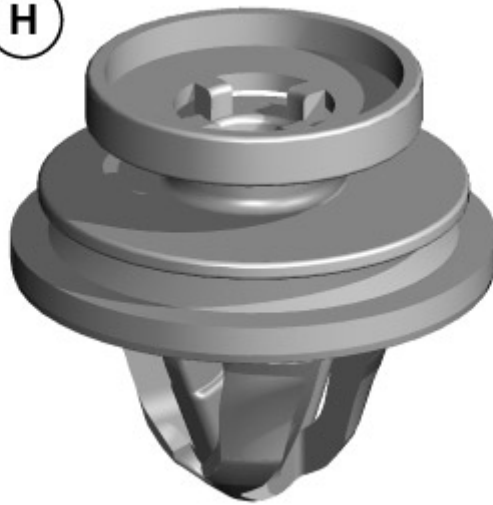
Trim Clips

NOTE

- Trim clips - LR112137 will need to be ordered as required if they are damaged during removal of the exterior body trims. The maximum quantity that may be required is x30 for both sides of the vehicle.

H

LR112137



E300462

REMOVAL INSTRUCTIONS

1

WARNING

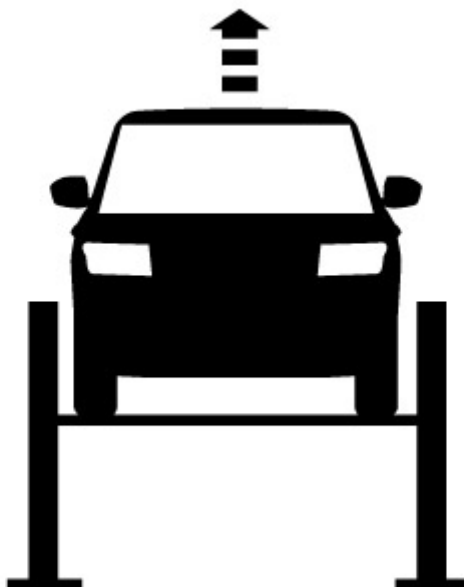
- If a suitable 4 post lift is not available then refer to the wheel changing section of the owner's handbook.

CAUTION

- Make sure to use the front and rear subframe jacking points.

NOTE

- Make sure the ramp legs are positioned so they do not obstruct the fixed side step or side tube installation location.



E300561

Raise and support the vehicle on a suitable 4 post lift. The front and rear subframe jacking points must be used. Do not use the sill jacking points. ***For additional information, please refer to the official Workshop Manual. Jacking and Lifting (100-02 Jacking and Lifting)***

- If a suitable 4 post lift is not available then refer to the wheel changing section of the Owner's Handbook.

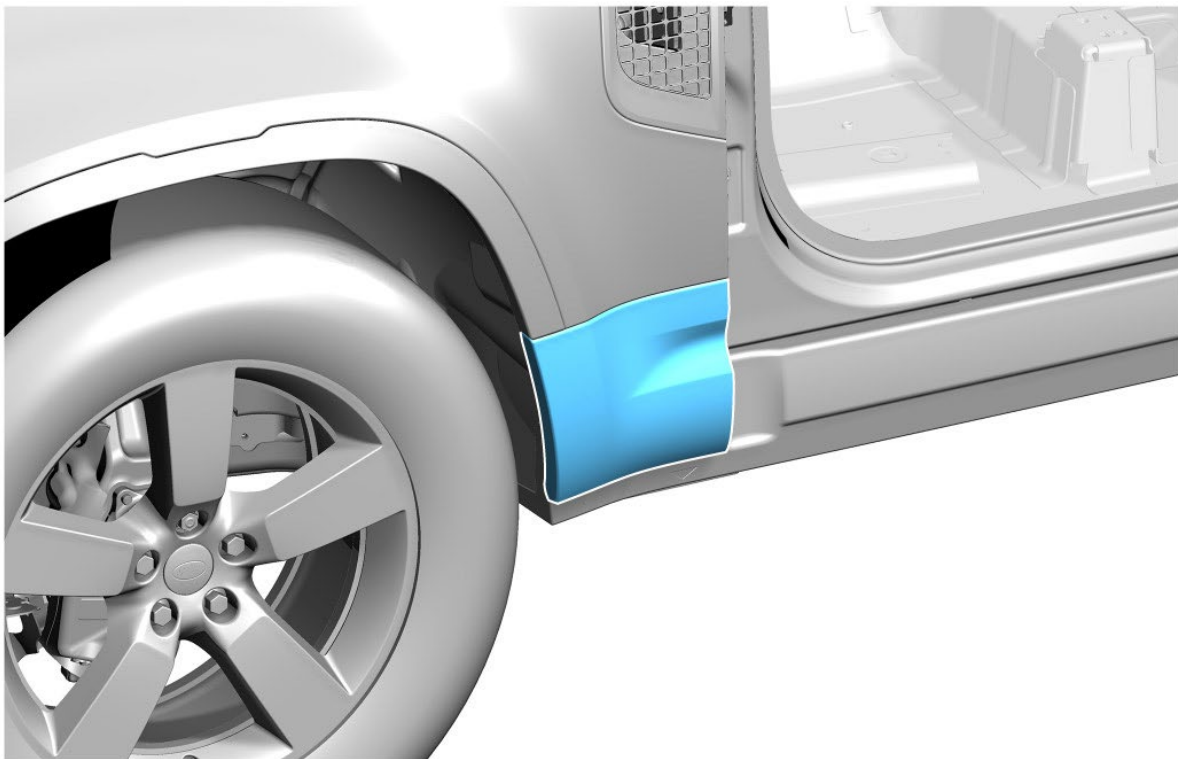
2

CAUTION

- Clips may be damaged during removal. Replace clips if they are damaged with clips (H).

NOTE

- Make sure that the x4 clips remain on the front fender moulding.
- Remove the front mudflaps if installed to the vehicle.



E300565

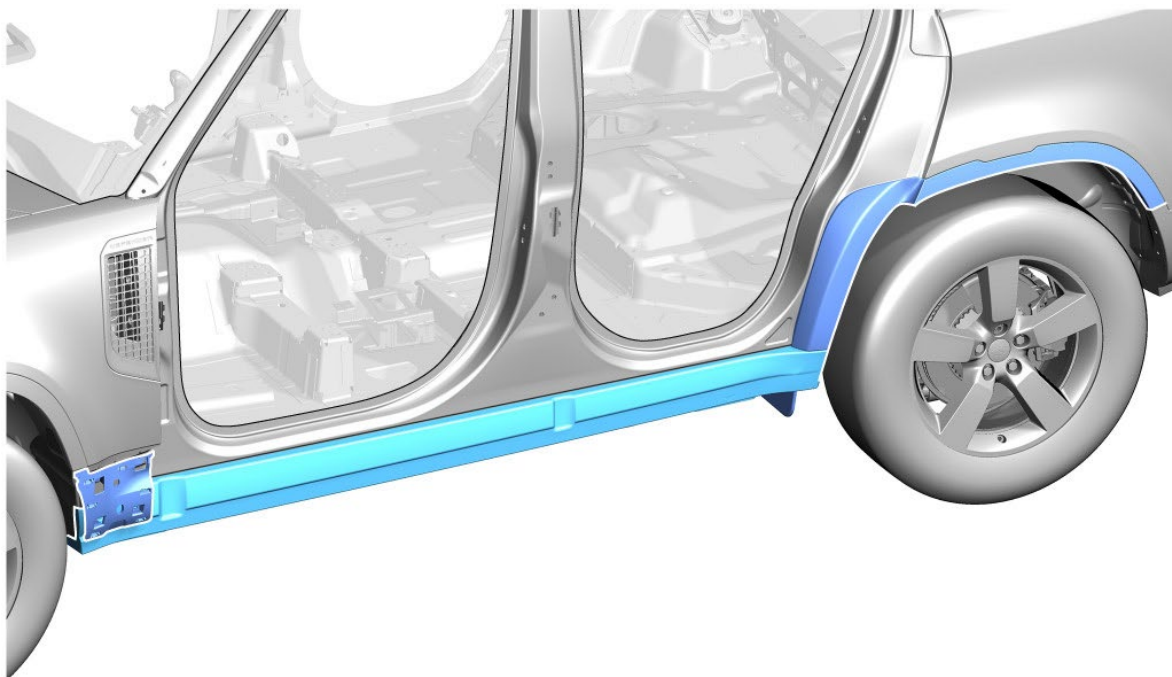
Remove front fender mountings on both sides of the vehicle.

- ***For additional information, please refer to the official Workshop Manual. Front Fender Moulding (501-08)***

3

CAUTION

- Clips may be damaged during removal. Replace clips if they are damaged with clips (H).



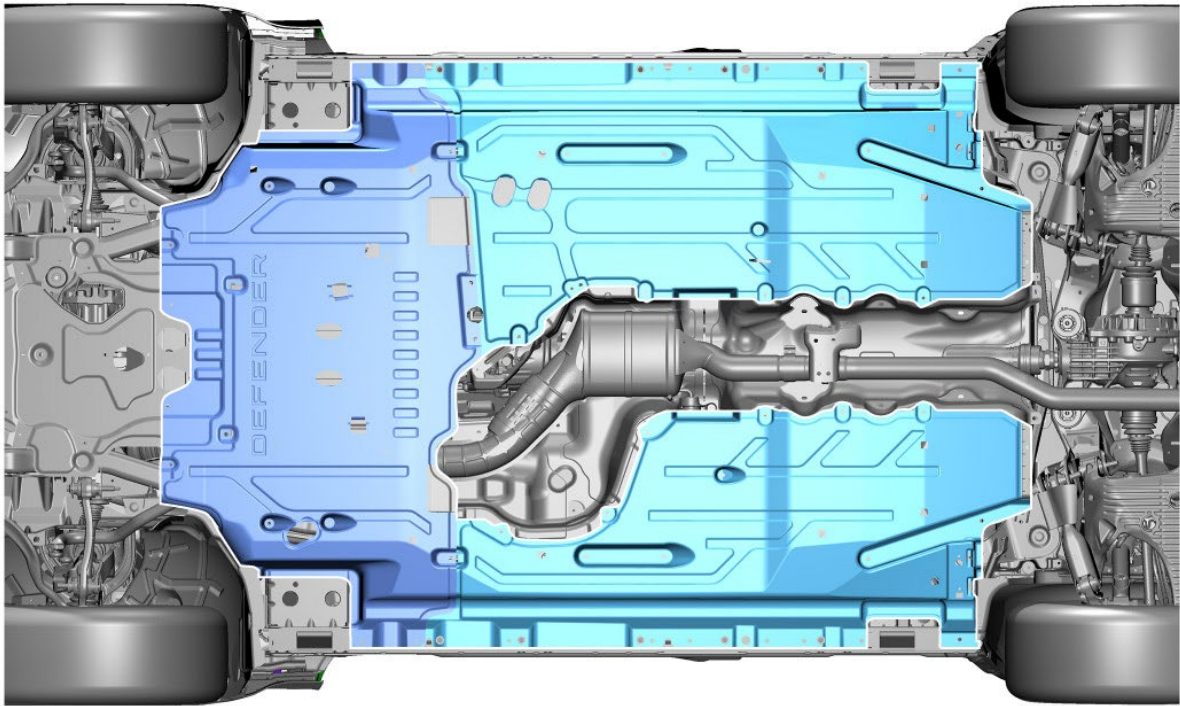
E300566

Remove rocker panel on both sides of the vehicle.

- For Defender 90 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel Moulding - 90 (501-08)***
- For Defender 110/130 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel (501-08)***

NOTE

- Defender 110/130 shown. Defender 90 has less fixings to remove on the x2 side undershields.



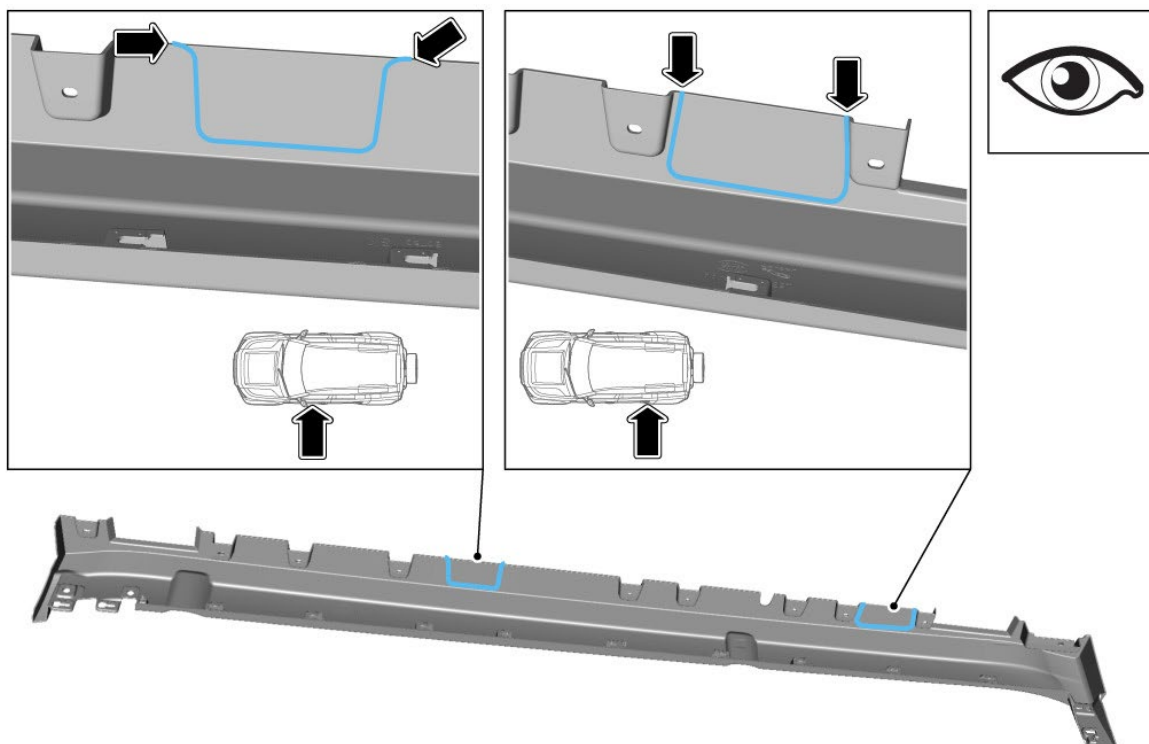
E300563

Remove transmission shield and side undershields.

- ***For additional information, please refer to the official Workshop Manual. Left Undershield (501-02)***
- ***For additional information, please refer to the official Workshop Manual. Right Undershield (501-02)***

NOTE

- Complete step for Defender 110/130.
- The cut guide lines are different for the left side rocker panel and the right side rocker panel.



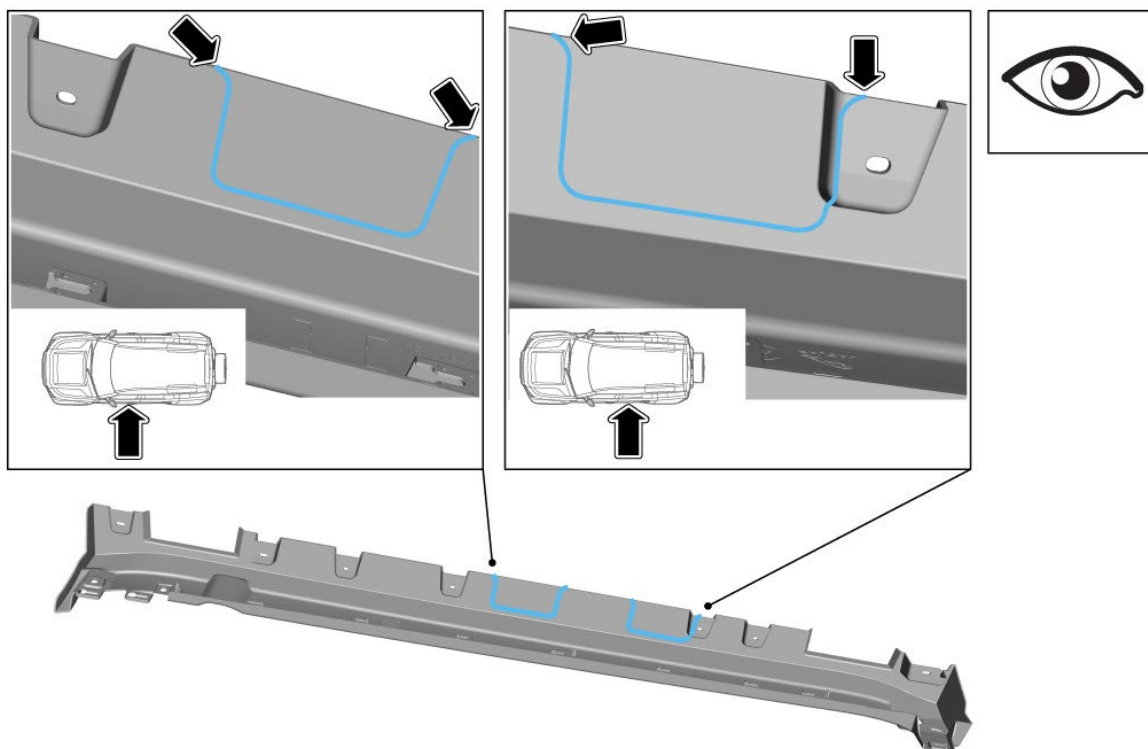
E260450

Identify the cut guide lines on the left side rocker panel.

- Paint over the cut guide lines to make the cut guide lines clearer. This will help when they are cut.

NOTE

- Complete step for Defender 90.
- The cut guide lines are different for the left side rocker panel and the right side rocker panel.



E261642

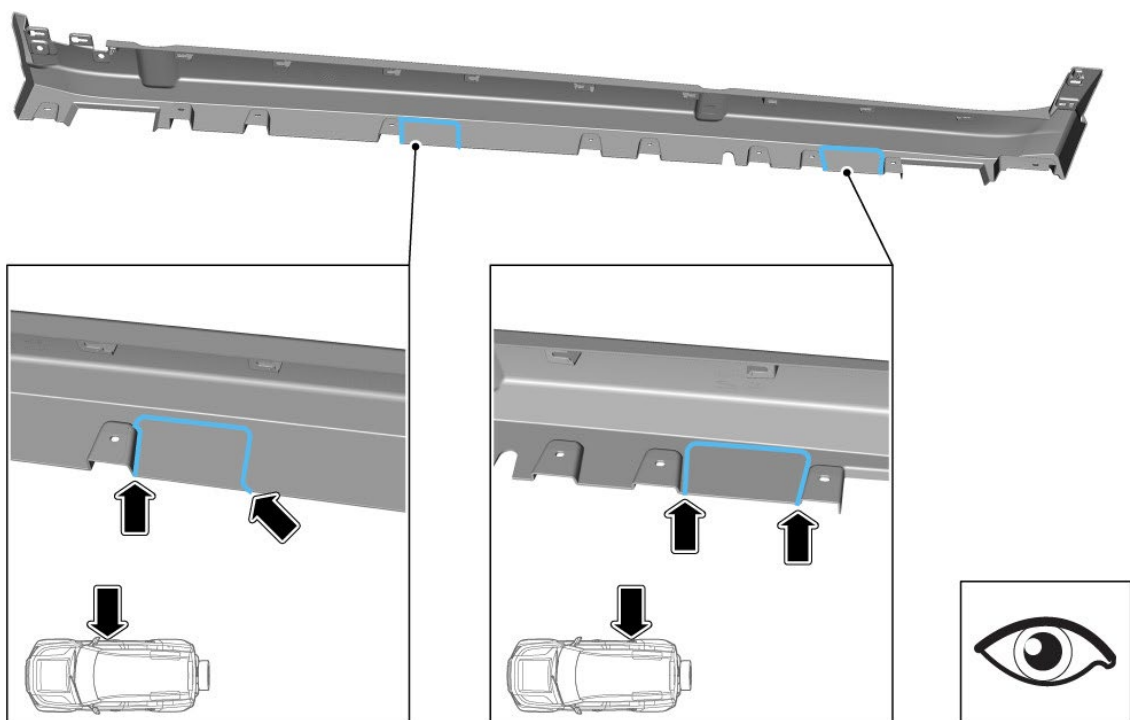
Identify the cut guide lines on the left side rocker panel.

- Paint over the cut guide lines to make the cut guide lines clearer. This will help when they are cut.

7

NOTE

- Complete step for Defender 110/130.
- The cut guide lines are different for the left side rocker panel and the right side rocker panel.



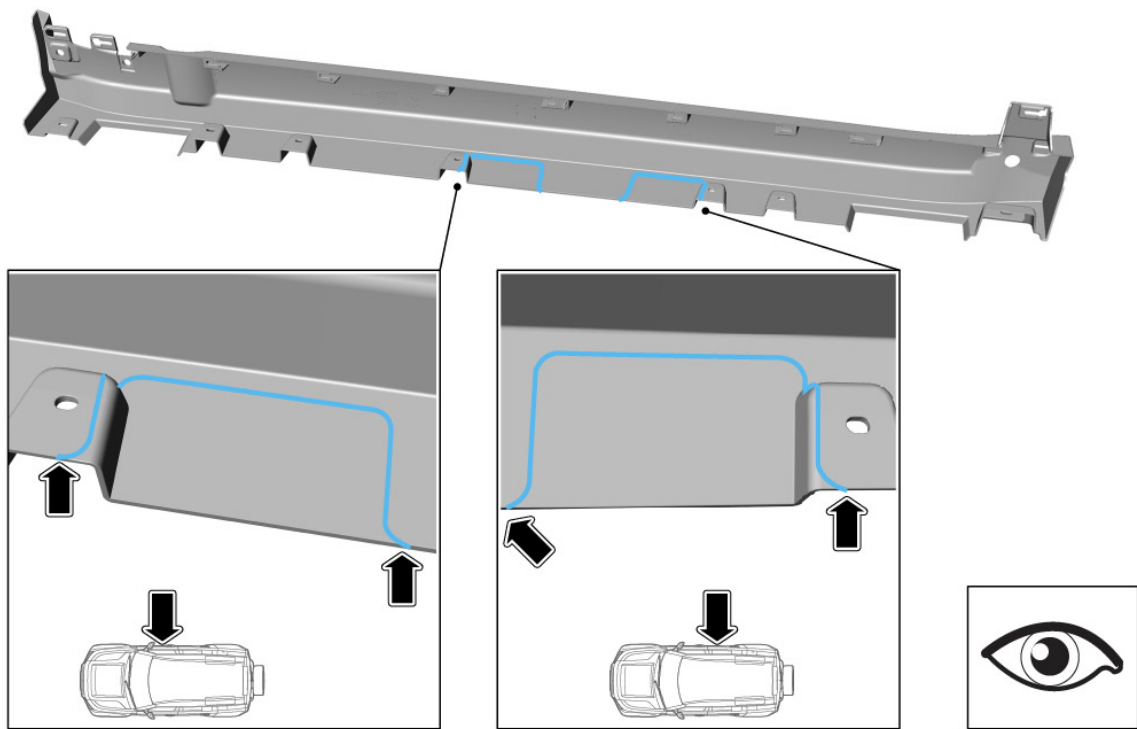
E261478

Identify the cut guide lines on the right side rocker panel.

- Paint over the cut guide lines to make the cut guide lines clearer. This will help when they are cut.

NOTE

- Complete step for Defender 90.
- The cut guide lines are different for the left side rocker panel and the right side rocker panel.



E261641

Identify the cut guide lines on the right side rocker panel.

- Paint over the cut guide lines to make the cut guide lines clearer. This will help when they are cut.

9

WARNING

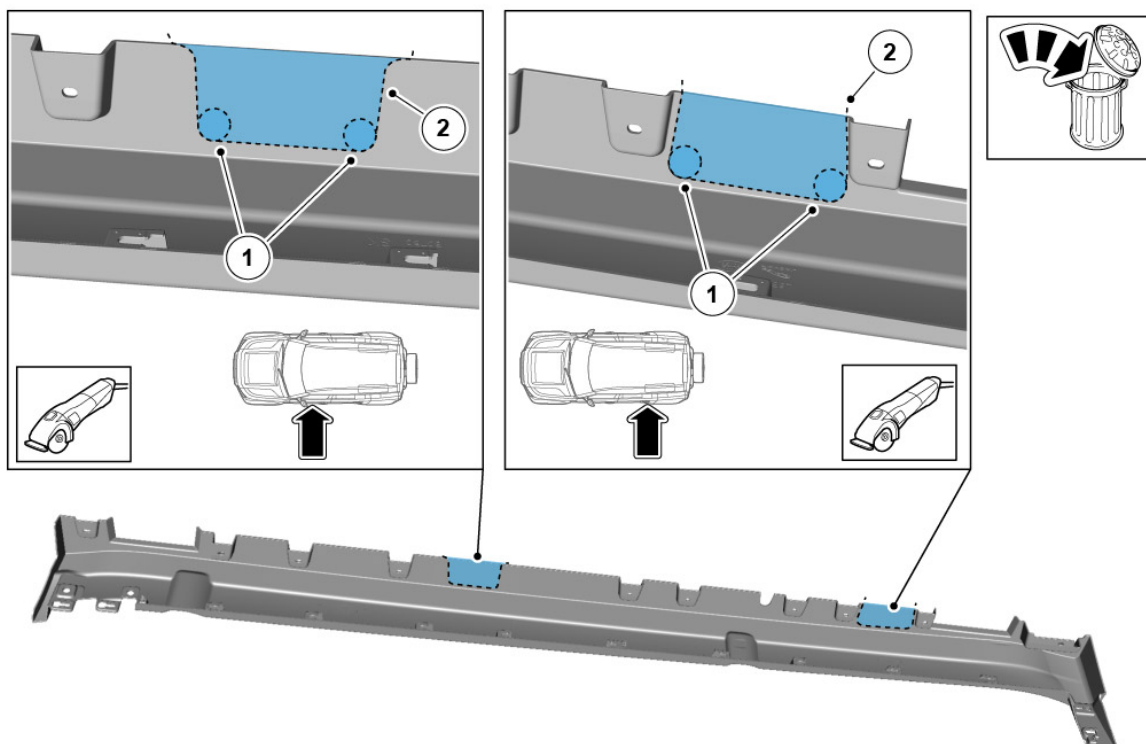
- Make sure to wear suitable personal protective equipment.

CAUTION

- Make sure to follow the cut guide lines as illustrated.

NOTE

- Defender 110/130 shown. Same process for Defender 90.



E252842

Use suitable tooling to cut the illustrated sections from the left side rocker panel. Discard the removed sections.

1. Drill holes at the illustrated locations.
2. Use the cut guide lines on the rocker panel.

10

WARNING

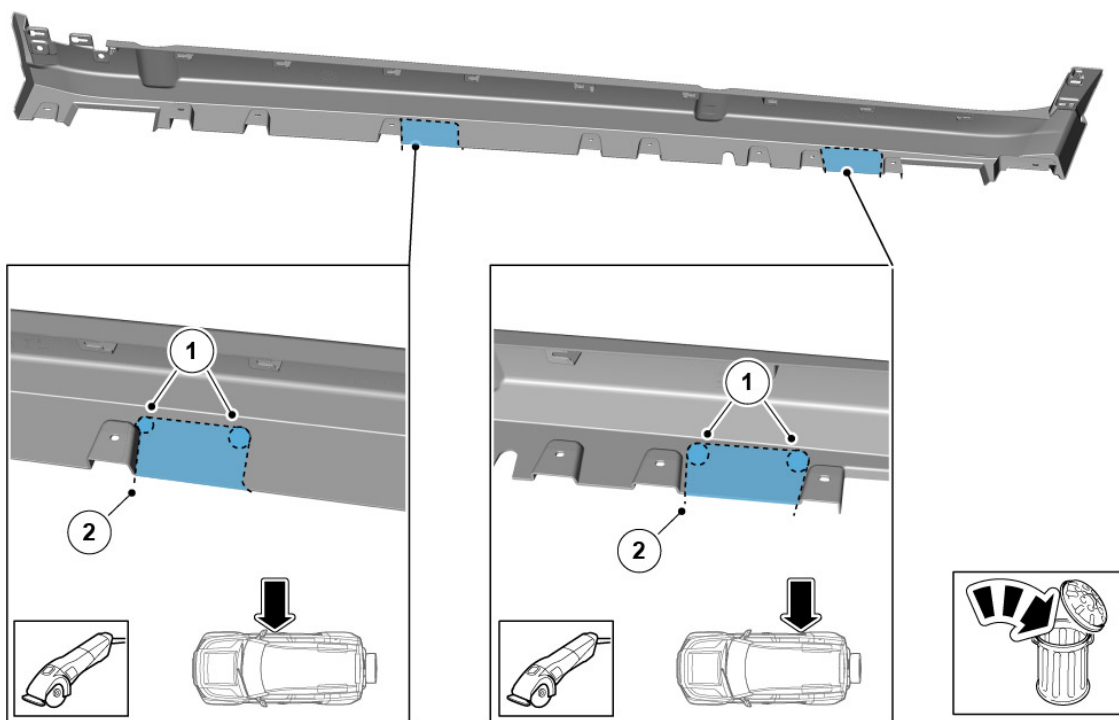
- Make sure to wear suitable personal protective equipment.

CAUTION

- Make sure to follow the cut guide lines as illustrated.

NOTE

- Defender 110/130 shown. Same process for Defender 90.



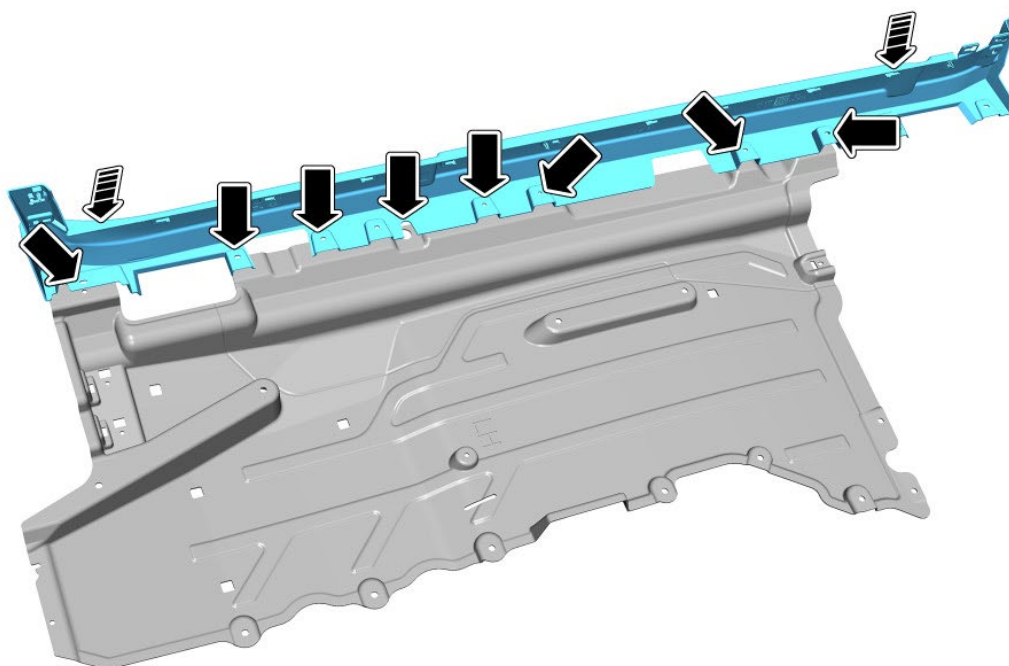
E260449

Use suitable tooling to cut the illustrated sections from the right side rocker panel. Discard the removed sections.

1. Drill holes at the illustrated locations.
2. Use the cut guide lines on the rocker panel.

NOTE

- Left side rocker panel shown. Appearance of left side rocker is different to the right side rocker panel.
- Defender 110/130 shown. Same process for Defender 90.



E261525

Position the left side rocker panel over the top of the left undershield as illustrated.

- Use the holes in the rocker panel and the undershield to make sure there is accurate alignment.

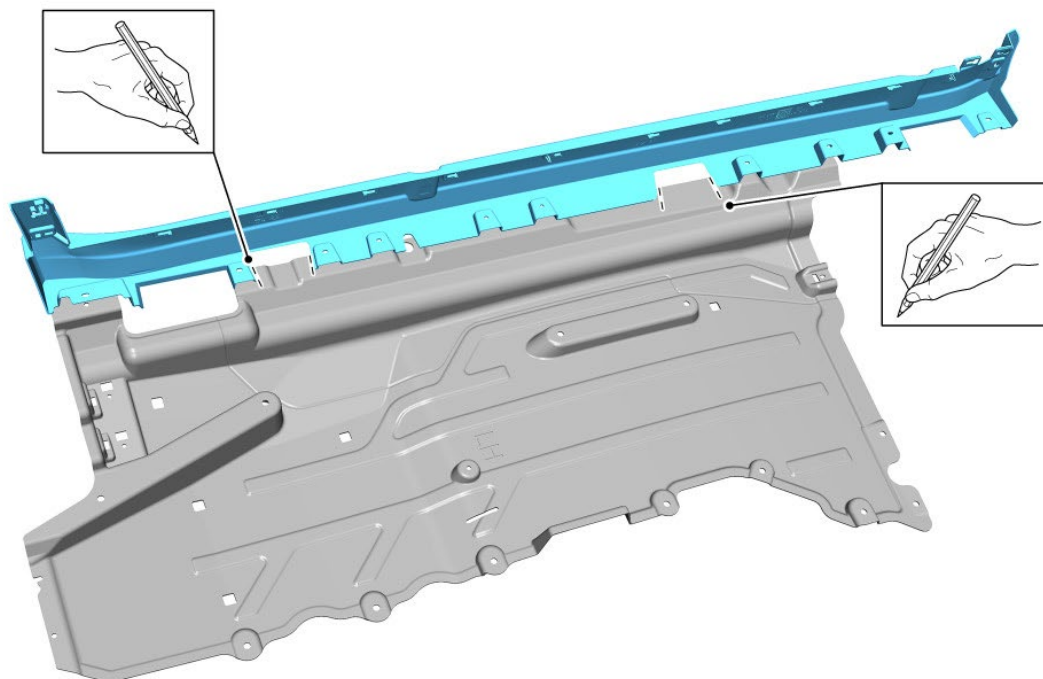
12

CAUTION

- Make sure to carefully mark the sections of the undershield that will be cut.

NOTE

- Defender 110/130 shown. Same process for Defender 90.



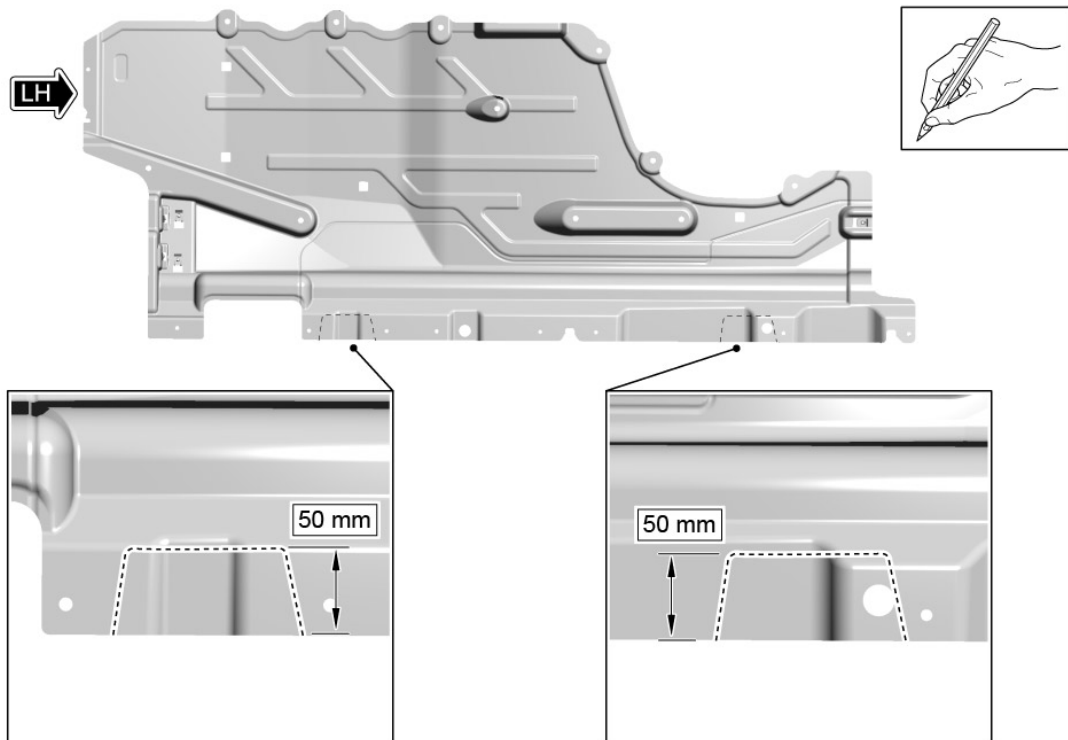
E261526

Use the left side rocker panel as a template to define the x2 sections of the left undershield that will be cut, as illustrated.

1. Make sure the holes in the rocker panel align with the matching holes in the undershield.
2. Mark the cut guide lines on the undershield using the rocker panel as a template.

NOTE

- Defender 110/130 shown. Same process for Defender 90.



E261527

Make sure the cut guide lines have a depth of 50 mm as illustrated.

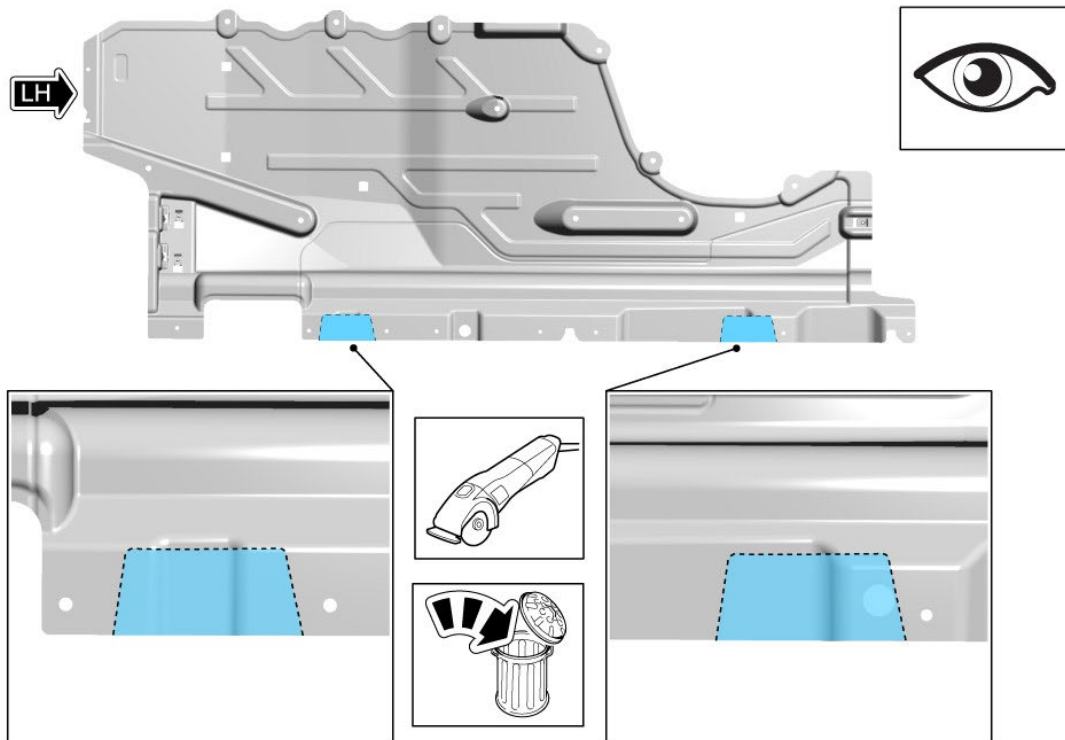
14

WARNING

- Make sure to wear suitable personal protective equipment.

NOTE

- Defender 110/130 shown. Same process for Defender 90.



E252850

Use suitable tooling to cut the illustrated sections from the left undershield. Discard the removed sections.

15

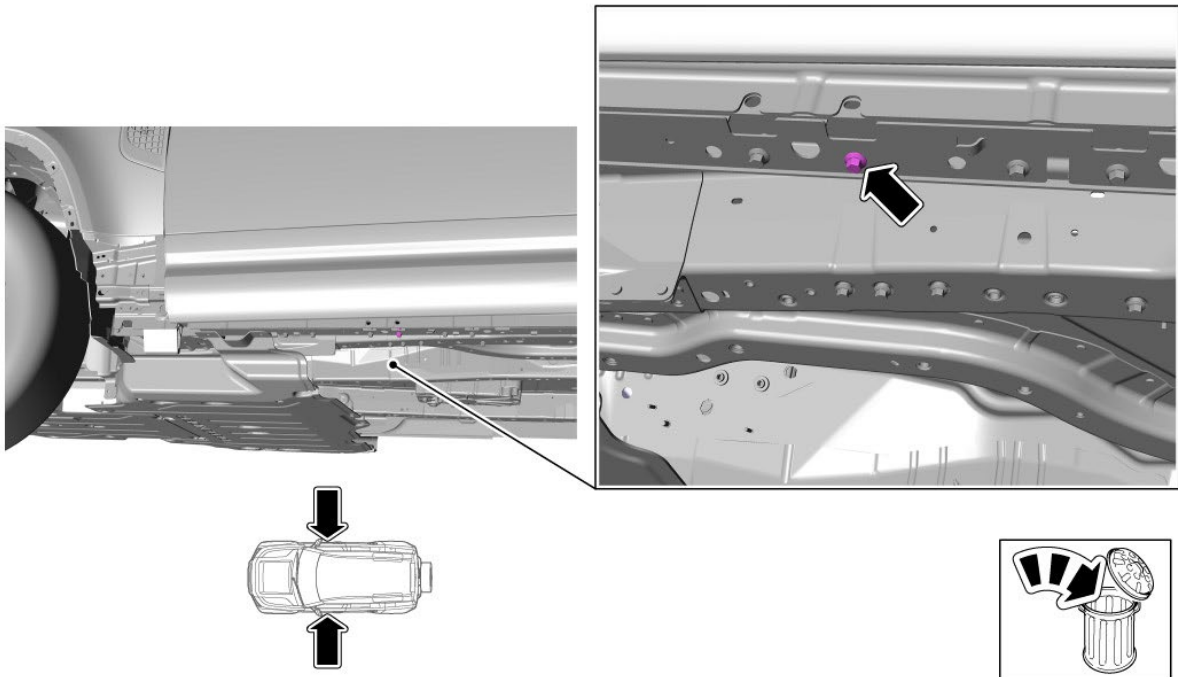
Complete 'Steps 11 to 14' for the right side undershield using the right side rocker panel as a template.

16

NOTE

- For **ROW** market vehicles only.

ROW



E260453

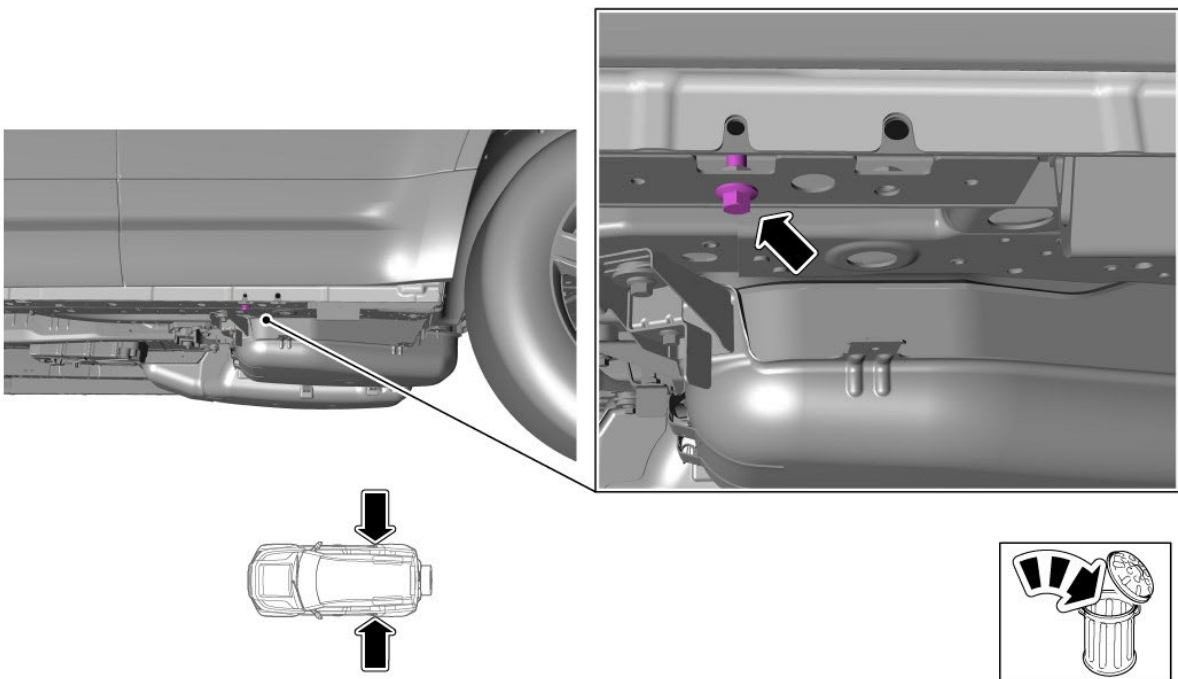
Remove and discard x1 fixing as illustrated on both sides of the vehicle.

17

NOTE

- For **ROW** market vehicles only.

ROW



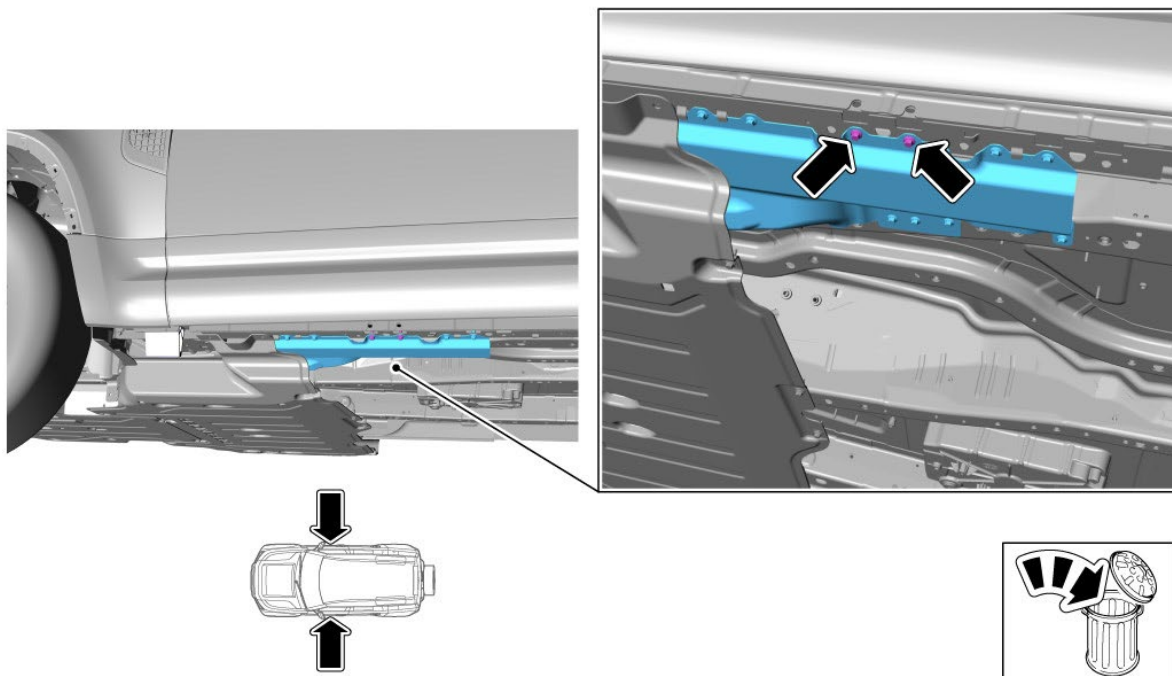
E260454

Remove and discard x1 fixing as illustrated on both sides of the vehicle.

NOTE

- For **NAS** market vehicles only.

NAS



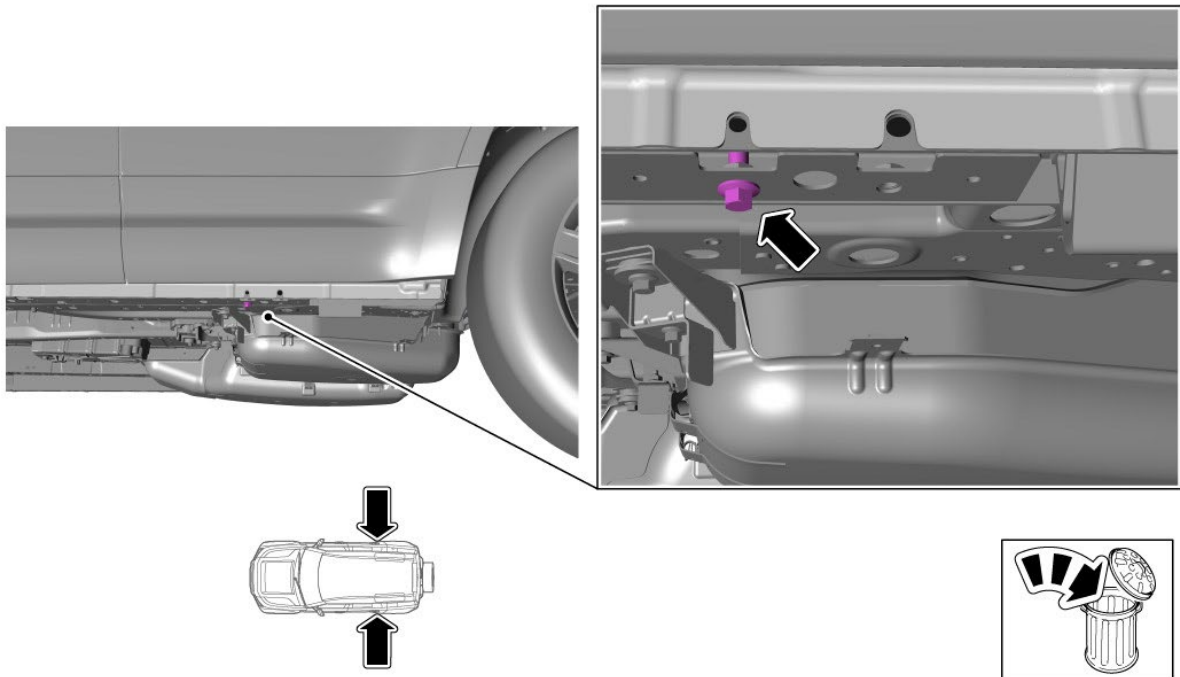
E260452

Remove and discard x2 fixing as illustrated on both sides of the vehicle.

NOTE

- For **NAS** market vehicles only.

NAS



E260455

Remove and discard x1 fixing as illustrated on both sides of the vehicle.

Fitting Instruction

1

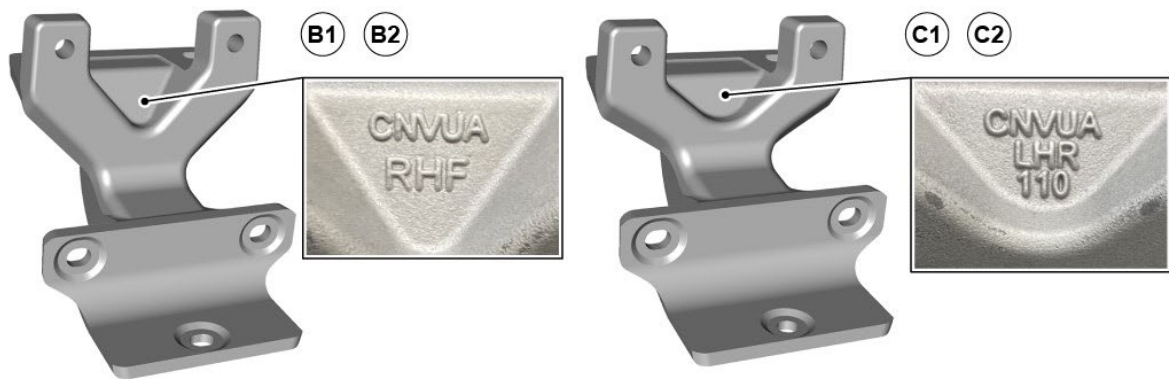
Follow the appropriate steps depending on the accessory that is being installed.

- For installation of 'Fixed Side Steps' complete 'Steps 2 to 21'.
- For installation of 'Side Tubes' complete 'Steps 22 to 42'.

2

NOTE

- Side step brackets for Defender 90 will have the text "90" on the identifier label.
- Side step brackets for Defender 110/130 will have the text "110" on the identifier label.



E261479

The side step brackets are individually labelled with the position on the vehicle they must be installed at (RHF, LHF, LHR, RHR).

- Locate the identifier label on each bracket.

3

NOTE

- Follow the appropriate steps depending on vehicle specification.

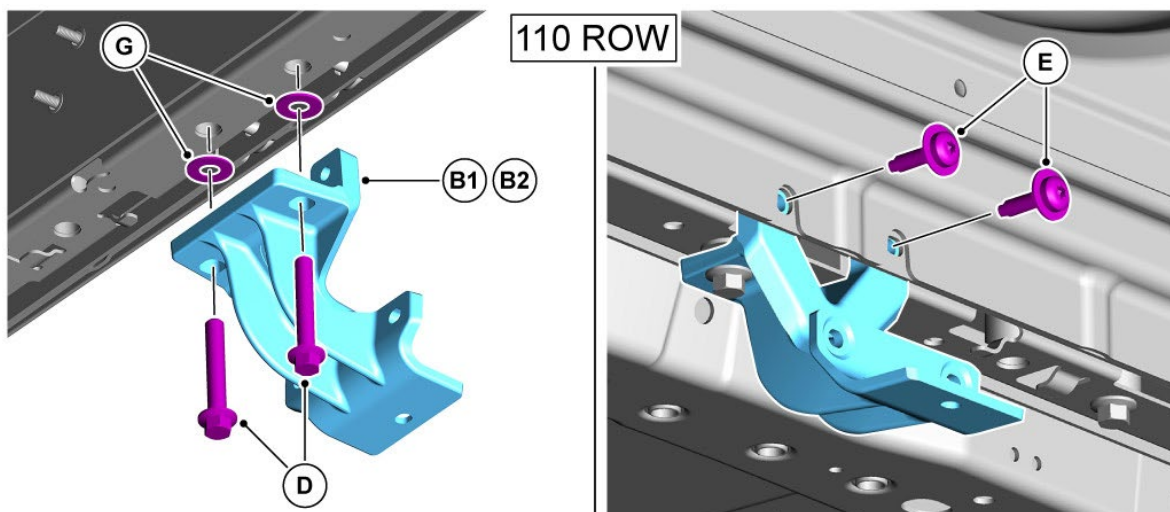
Install the side step brackets to the vehicle.

- **For Defender 110/130 complete 'Steps 4 to 6', then jump to and continue at 'Step 11'.**
- **For Defender 90 complete 'Steps 7 to 10', then continue to 'Step 11'.**

4

CAUTION

- Complete step for all Defender 110/130 markets except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHF) or (RHF) on the brackets.



E262500

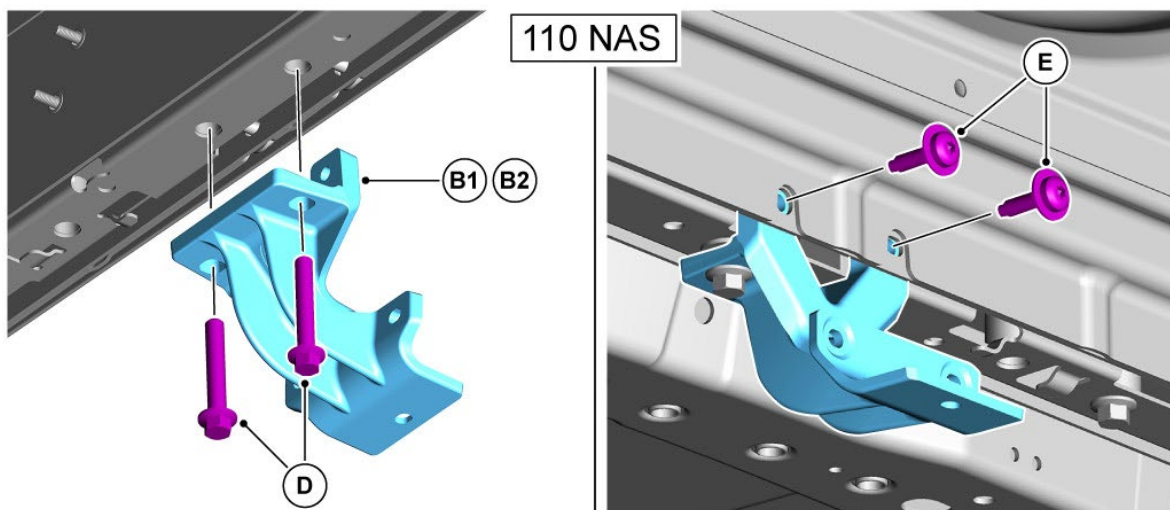
Install the 'front' side step brackets (**B1**) and (**B2**) to both sides of the vehicle.

1. Install x2 fixings (**D**) and x2 spacers (**G**), but do not fully tighten.
2. Install x2 fixings (**E**), but do not fully tighten.

5

CAUTION

- Complete this step for Defender 110/130 **NAS** market only.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHF) or (RHF) on the brackets.



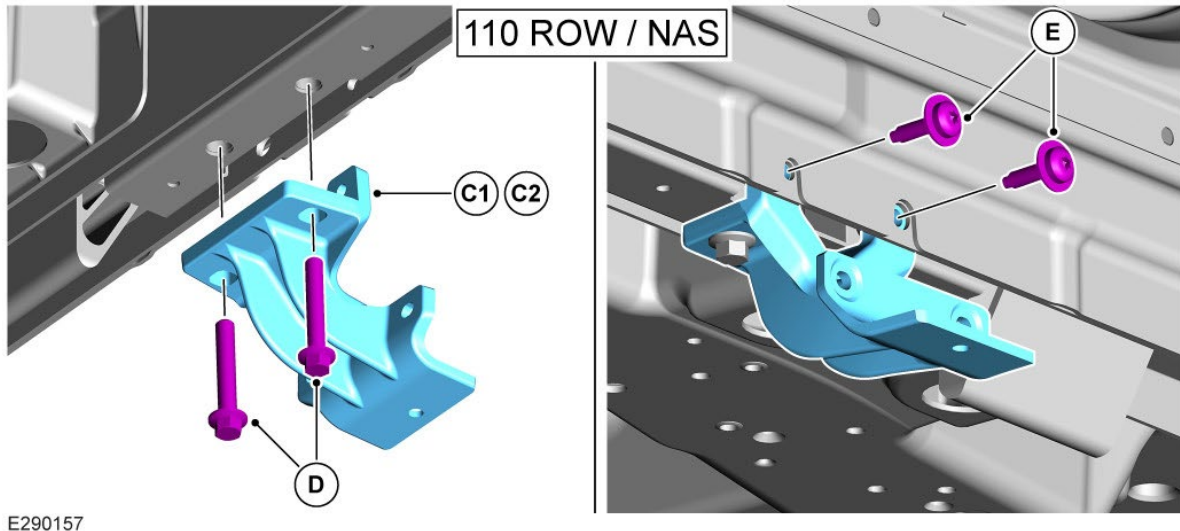
E262062

Install the 'front' side step brackets (**B1**) and (**B2**) to both sides of the vehicle.

1. Install x2 fixings (**D**), but do not fully tighten.
2. Install x2 fixings (**E**), but do not fully tighten.

CAUTION

- Complete this step for Defender 110/130.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHR) or (RHR) on the brackets.



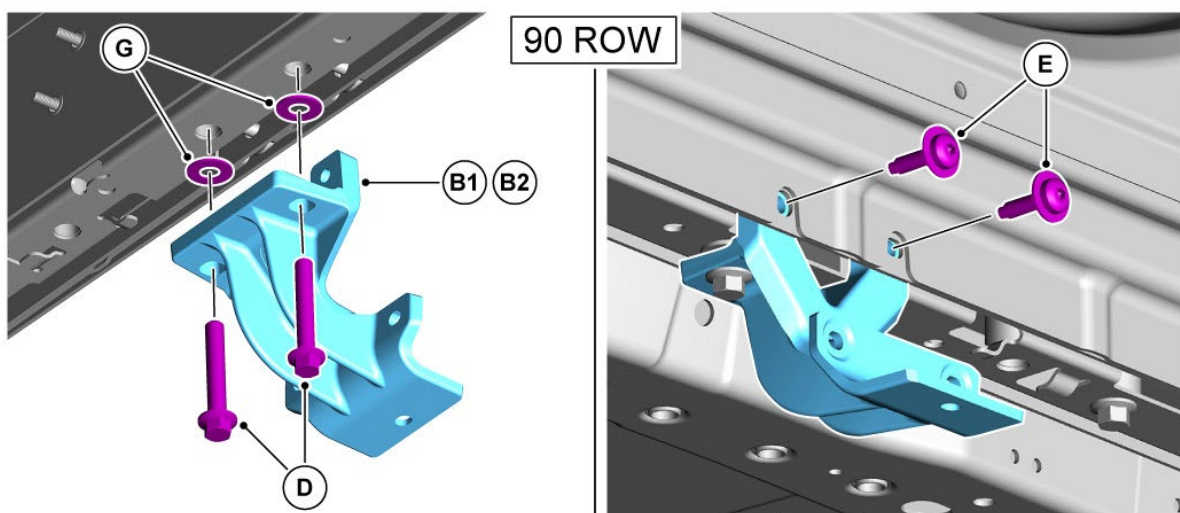
E290157

Install the 'rear' side step brackets (C1) and (C2) to both sides of the vehicle.

1. Install x2 fixings (D), but do not fully tighten.
2. Install x2 fixings (E), but do not fully tighten.

CAUTION

- Complete this step for all Defender 90 markets except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHF) or (RHF) on the brackets.



E262021

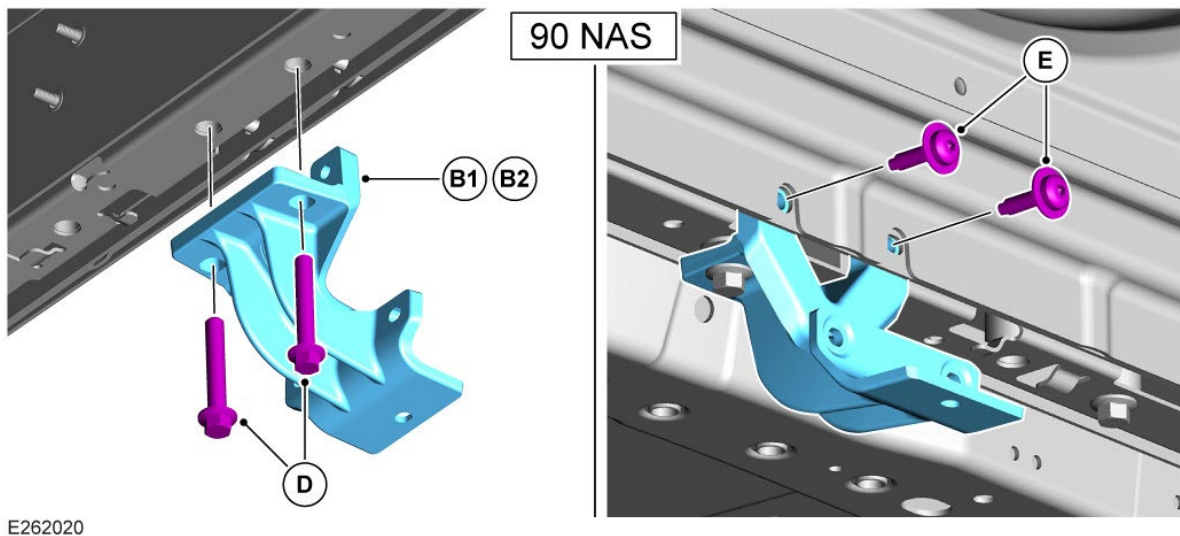
Install the 'front' side step brackets (B1) and (B2) to both sides of the vehicle.

1. Install x2 fixings **(D)** and x2 spacers **(G)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

8

CAUTION

- Complete this step for Defender 90 **NAS** market only.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHF) or (RHF) on the brackets.



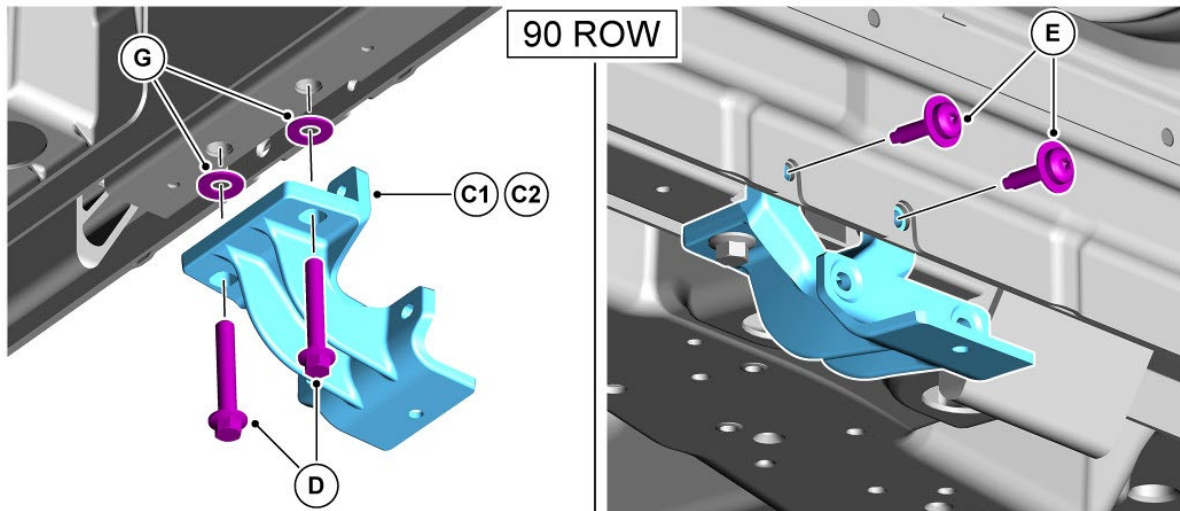
Install the '**front**' side step brackets **(B1)** and **(B2)** to both sides of the vehicle.

1. Install x2 fixings **(D)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

9

CAUTION

- Complete this step for all Defender 90 markets except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHR) or (RHR) on the brackets.



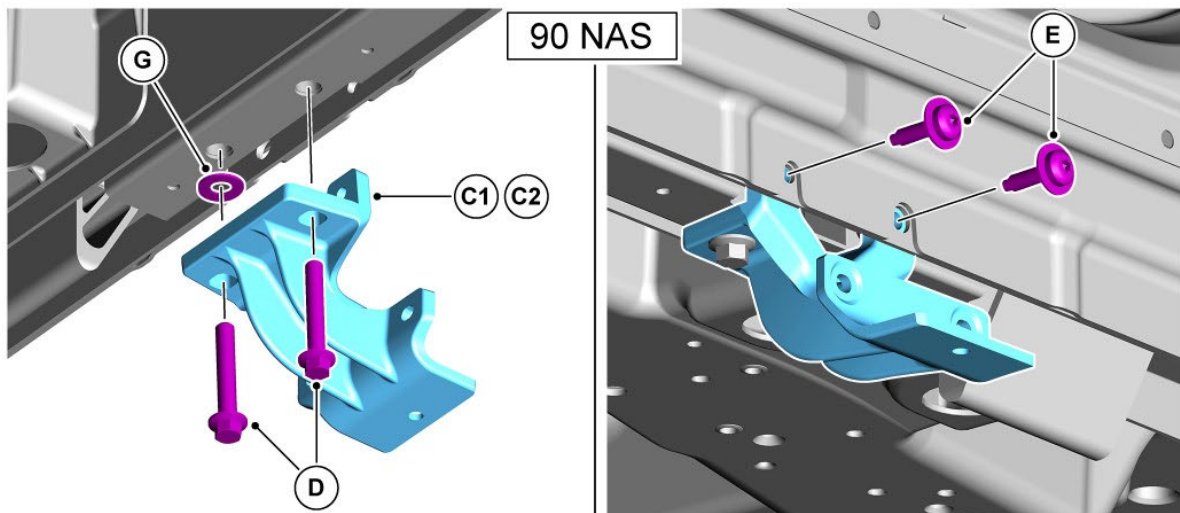
Install the 'rear' side step brackets (C1) and (C2) to both sides of the vehicle.

1. Install x2 fixings (D) and the x2 spacers (G), but do not fully tighten.
2. Install x2 fixings (E), but do not fully tighten.

10

CAUTION

- Complete this step for Defender 90 NAS market only.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (LHR) or (RHR) on the brackets.



Install the 'rear' side step brackets (C1) and (C2) to both sides of the vehicle.

1. Install, but do not fully tighten the x2 fixings (D) and x1 spacer (G).
2. Install, but do not fully tighten the x2 fixings (E).

CAUTION

- Observe the hand symbol label on the side step bars.



E262038

Locate the hand symbol label on each of the side step bars.

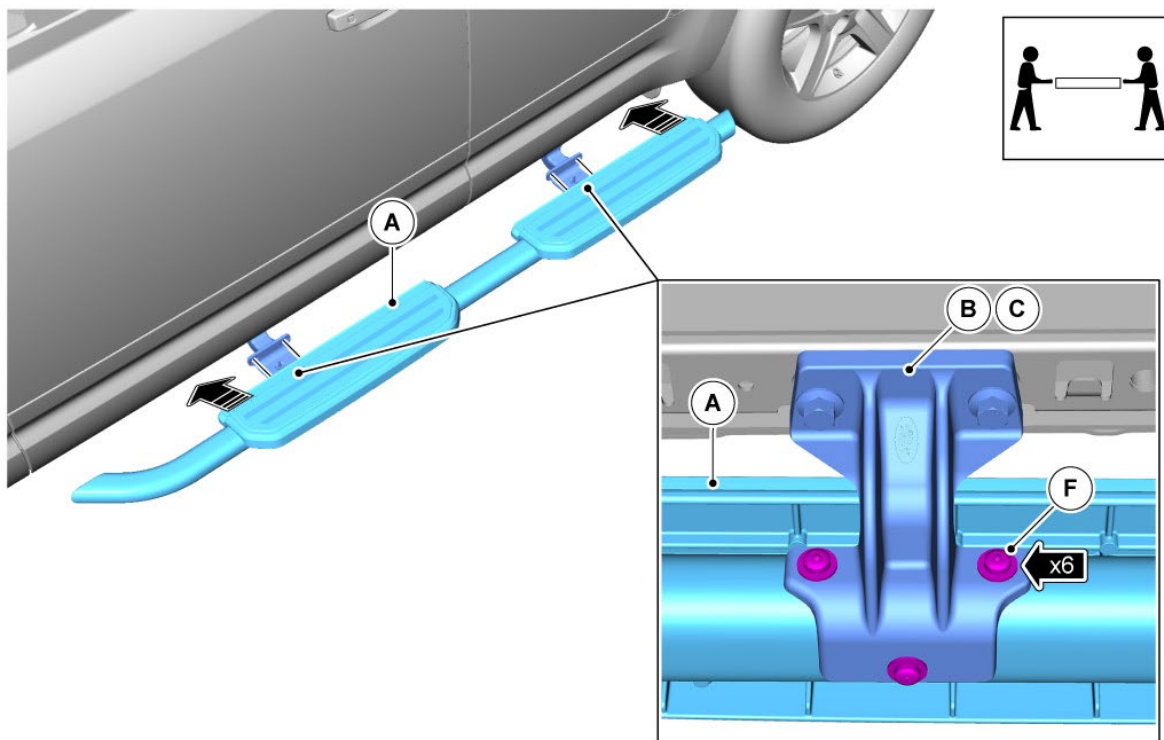
- The hand graphic points towards the front of the vehicle to help when installing the side step bars to vehicles with 90 wheelbase.

CAUTION

- The side step bar must be installed to the correct side of the vehicle.
- For Defender 90 vehicles take particular care as the handedness is not obvious. Observe the hand symbol label on the side step bars.

NOTE

- This step requires the aid of another technician.
- Defender 110/130 shown. Process is same for Defender 90.



E290158

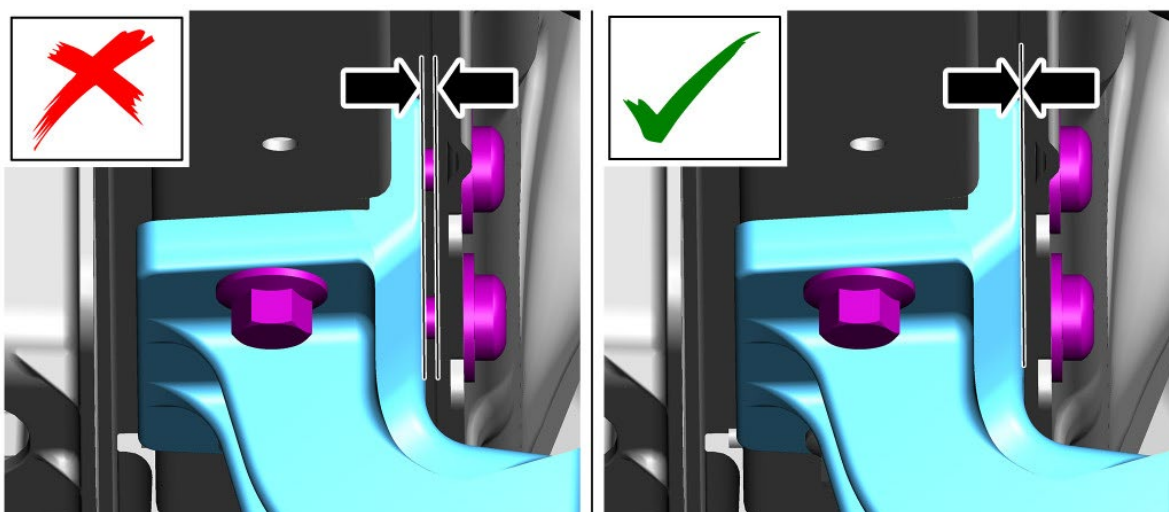
Install the side step bar **(A)** to the brackets **(B)** and **(C)** using the x6 fixings **(F)**, but do not fully tighten fixings.

- Make sure the side step bar is installed to the correct side of the vehicle. The hand graphic on the side step bar must face towards the front of the vehicle.
- Install, but do not fully tighten fixings **(F)**.

13

CAUTION

- Side step brackets may crack when fully tightened if they are not installed correctly.



E304047

Before fully tightening side step brackets, make sure there is no gap between the side step brackets and the outer vehicle sill. Then continue to the next step.

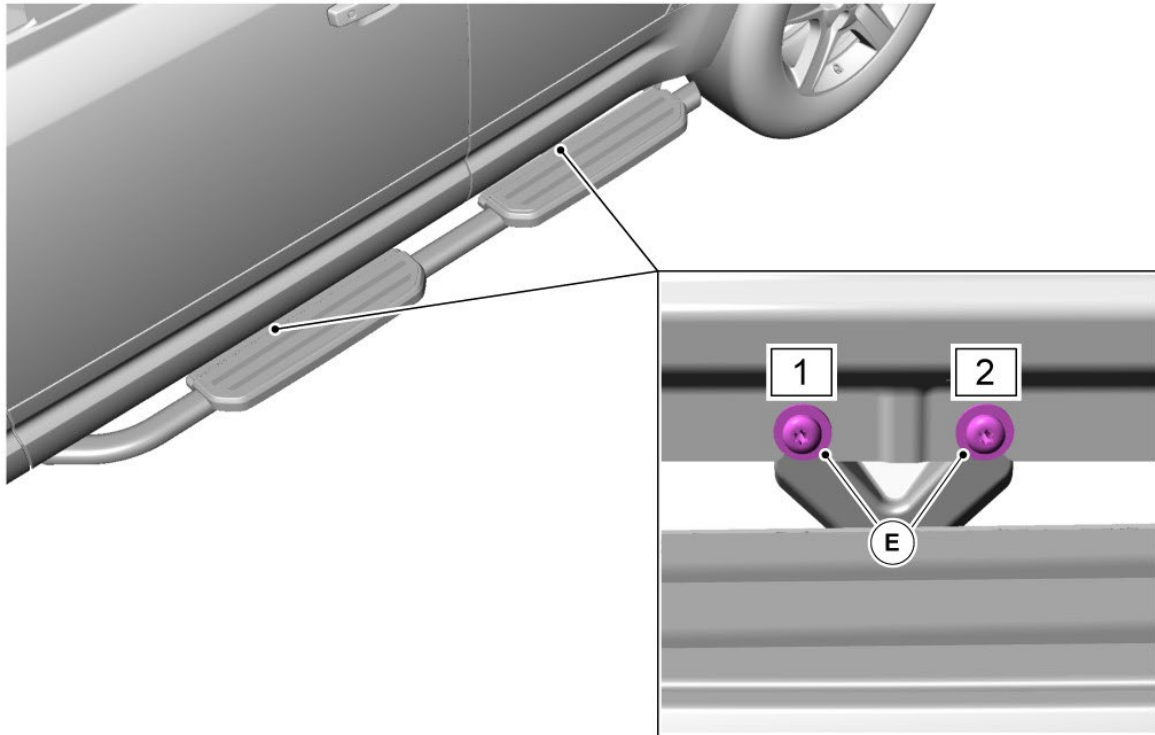
14

CAUTION

- If tighten sequence is not followed, this could result in damage to the brackets.

NOTE

- Defender 110/130 shown. Process is same for Defender 90.



E290159

Fully tighten the x4 fixings **(E)** as illustrated. Starting with the rear bracket first.

1. Rear bracket - Tighten fixing (1) first and then fixing (2). Torque: **24Nm**
2. Front bracket - Tighten fixing (1) first and then fixing (2). Torque: **24Nm**

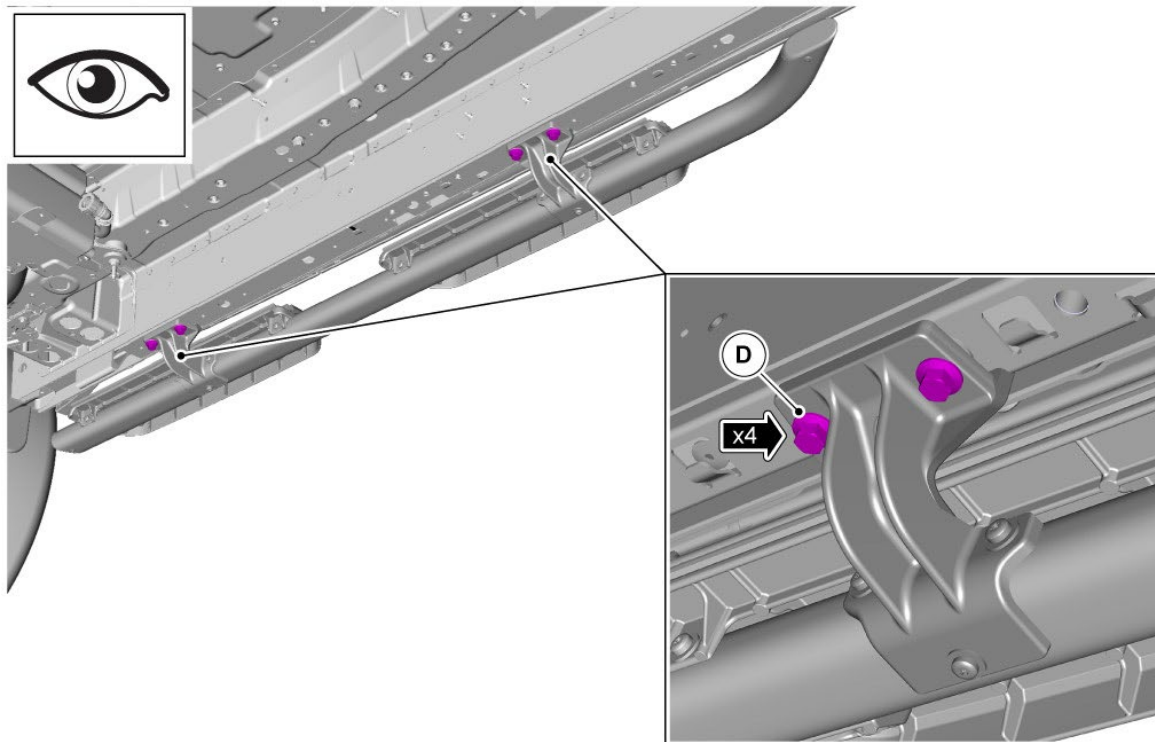
15

CAUTION

- Make sure 'Step 14' is completed. Failure to follow the tightening sequence will result in damage to the bracket.
- Do not use a impact applicator.

NOTE

- Defender 110/130 shown. Process is same for Defender 90.



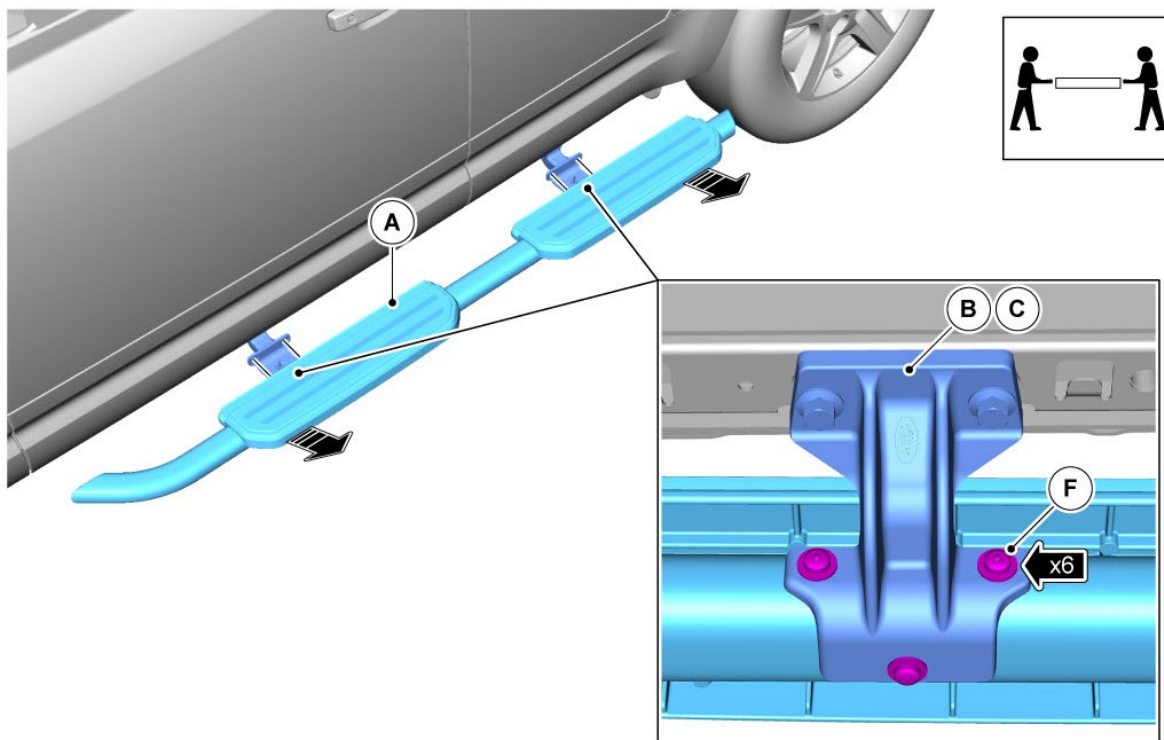
E290160

Fully tighten the x4 fixings **(D)**.

- Torque: **64Nm**

NOTE

- This step requires the aid of another technician.
- Defender 110/130 shown. Process is same for Defender 90.



E290161

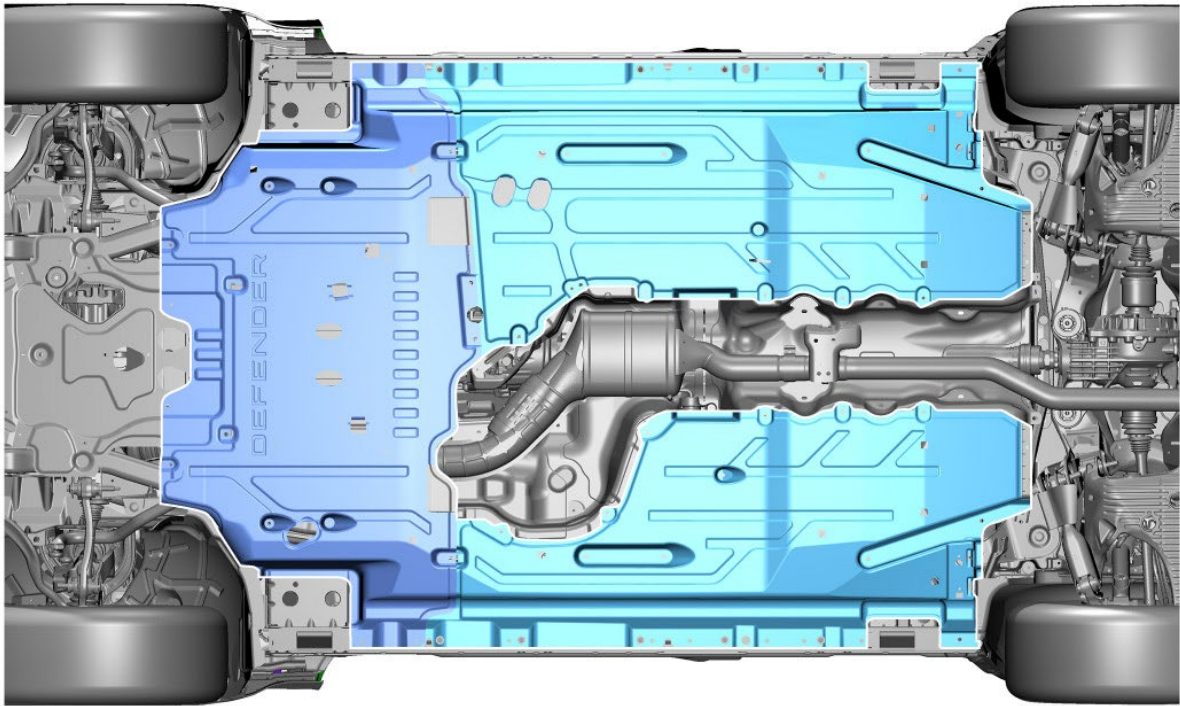
Remove fixings **(F)** and remove the side step bar **(A)**.

- The undershields and rocker panels will need to be installed before the final install of the side step bar.

17

Repeat 'Steps 13 to 16' for the right side of the vehicle.

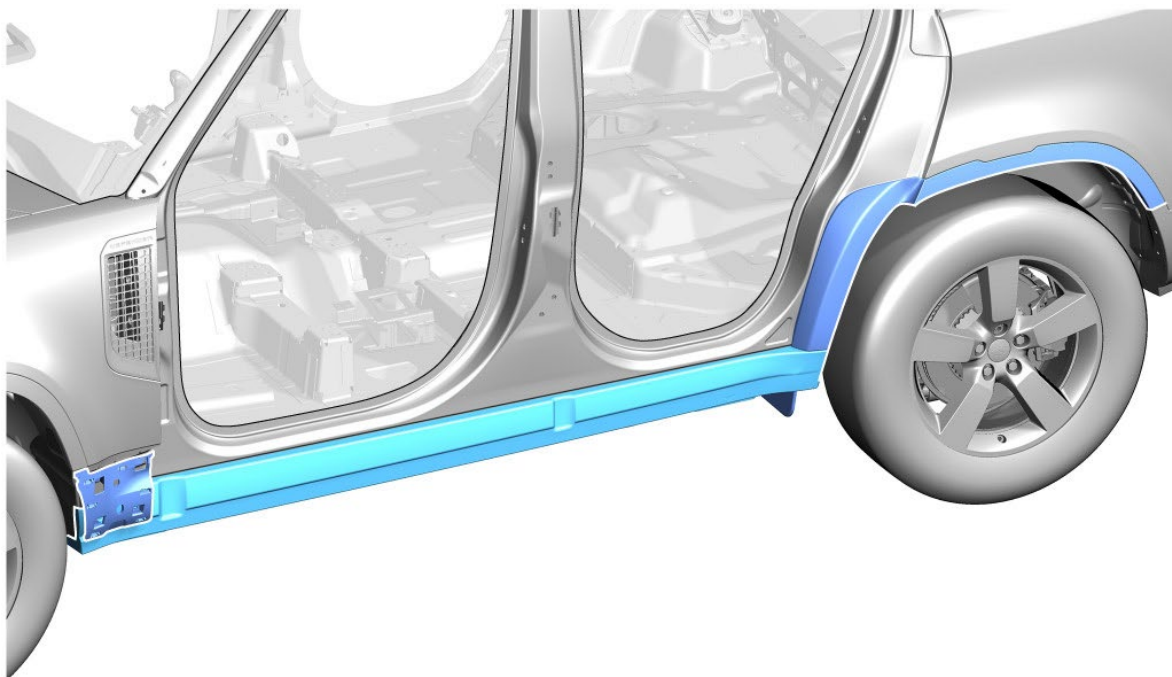
18



E300563

Install side undershields and transmission shield.

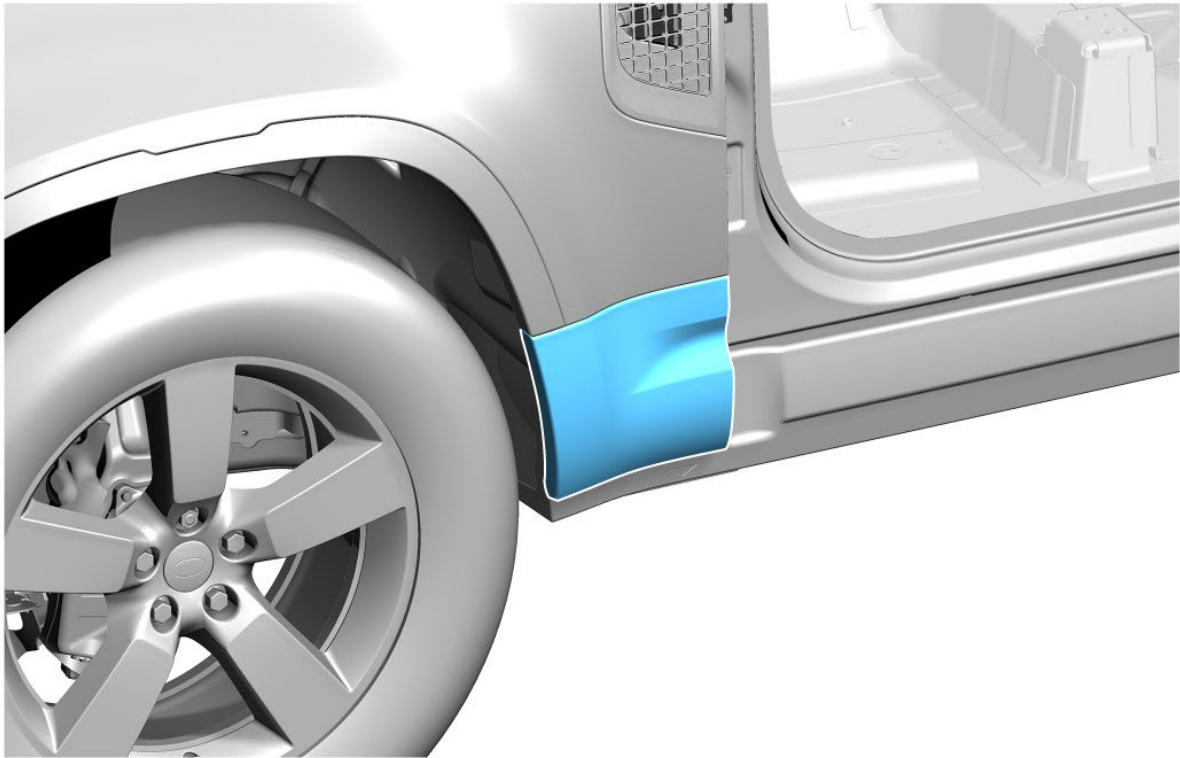
- ***For additional information, please refer to the official Workshop Manual. Left Undershield (501-02)***
- ***For additional information, please refer to the official Workshop Manual. Right Undershield (501-02)***



E300566

Install the rocker panel on both sides of the vehicle.

- For Defender 90 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel Moulding - 90 (501-08)***
- For Defender 110/130 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel (501-08)***



E300565

Install front fender mountings on both sides of the vehicle.

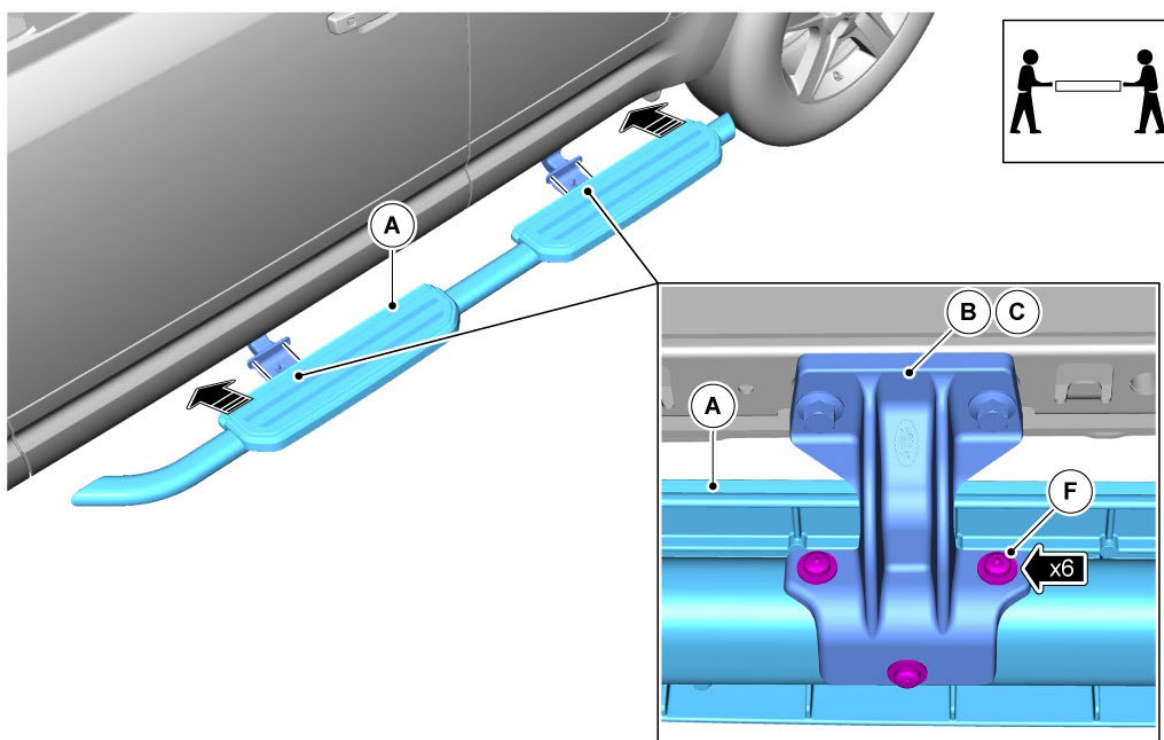
- ***For additional information, please refer to the official Workshop Manual. Front Fender Moulding (501-08)***

CAUTION

- For Defender 90 vehicles, the side step bar must be installed to the correct side of the vehicle.

NOTE

- Complete step for the installation of the fixed side steps.
- This step requires the aid of another technician.



E290158

Install the side step bar **(A)** to the brackets **(B)** and **(C)** using fixings **(F)**. Complete step on both sides of the vehicle.

- For Defender 90, make sure the side step bar is installed to the correct side of the vehicle. The hand graphic on the side step bar must face towards the front of the vehicle.
- Torque: **10Nm**

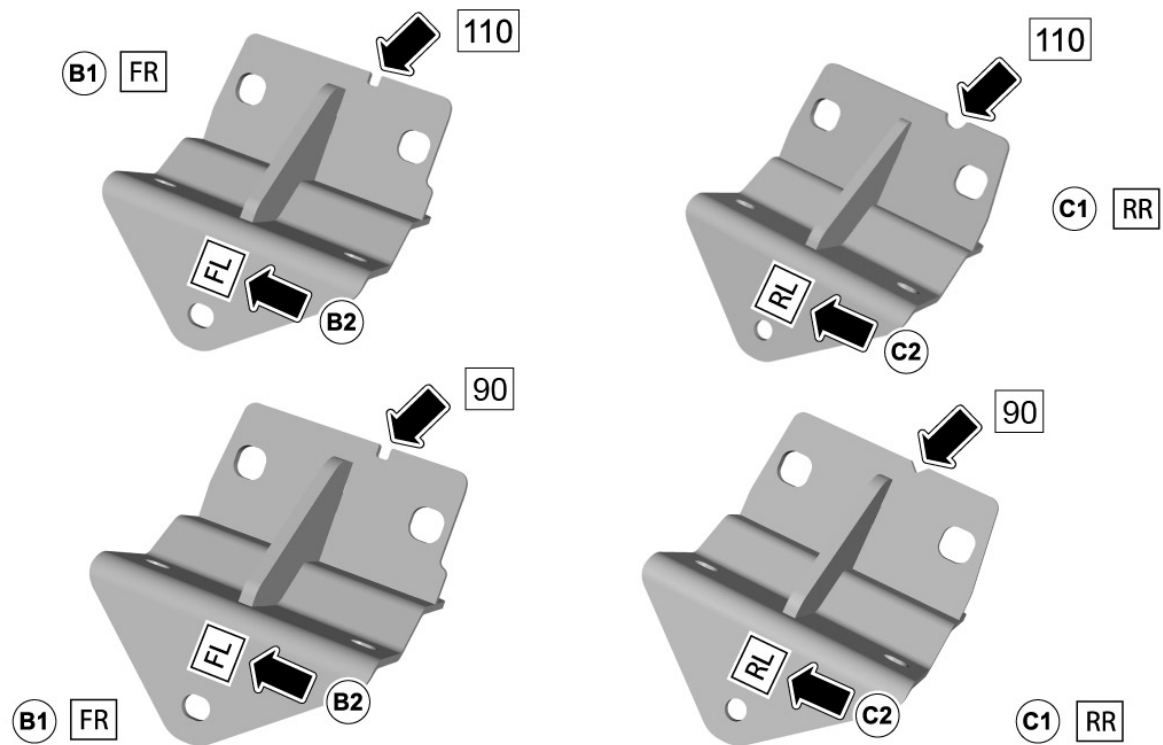
22

For installation of 'Side Tubes' complete 'Steps 23 to 42'.

23

NOTE

- Defender 110/130 front brackets have a rectangular notch and rear brackets have a oval notch.
- Defender 90 front brackets have a rectangular notch and rear brackets have a triangular notch.



E262499

The side tube brackets are individually labelled with the position on the vehicle they must be installed at (FR, FL, RR, RL).

- Locate the identifier label on each bracket.
- The appearance of the arrowed notch is different between front brackets and rear brackets. The notch appearance also varies between Defender 110/130 and 90.

24

NOTE

- Follow the appropriate steps depending on vehicle specification.

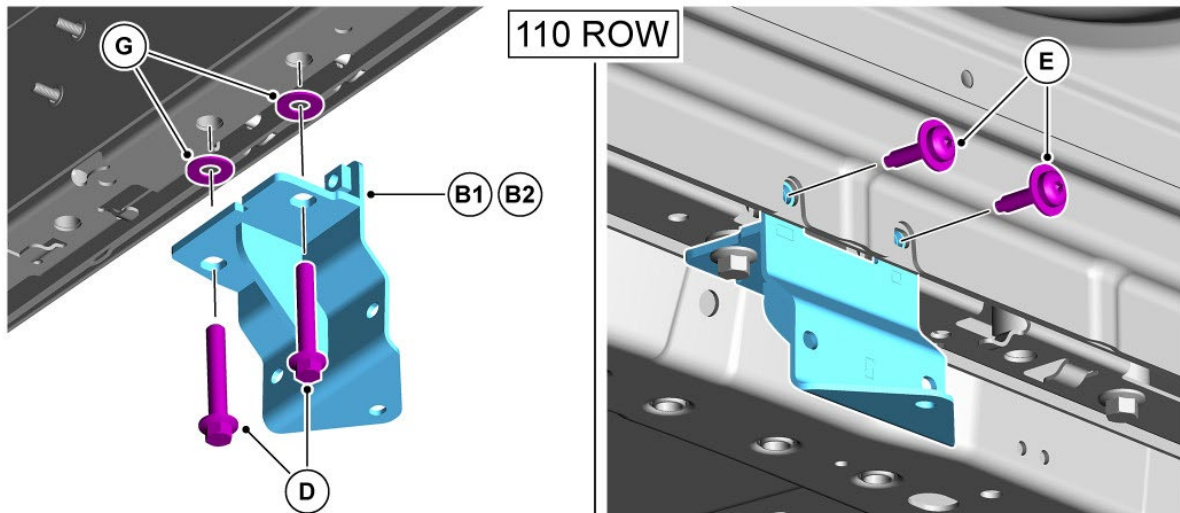
Install the side tube brackets to the vehicle.

- **For Defender 110/130 complete 'Steps 25 to 27' and then jump to and continue at 'Step 32'.**
- **For Defender 90 complete 'Steps 28 to 31' and then continue to 'Step 32'.**

25

CAUTION

- Complete step for all Defender 110/130 markets except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (FL) or (FR) on the brackets.



E290162

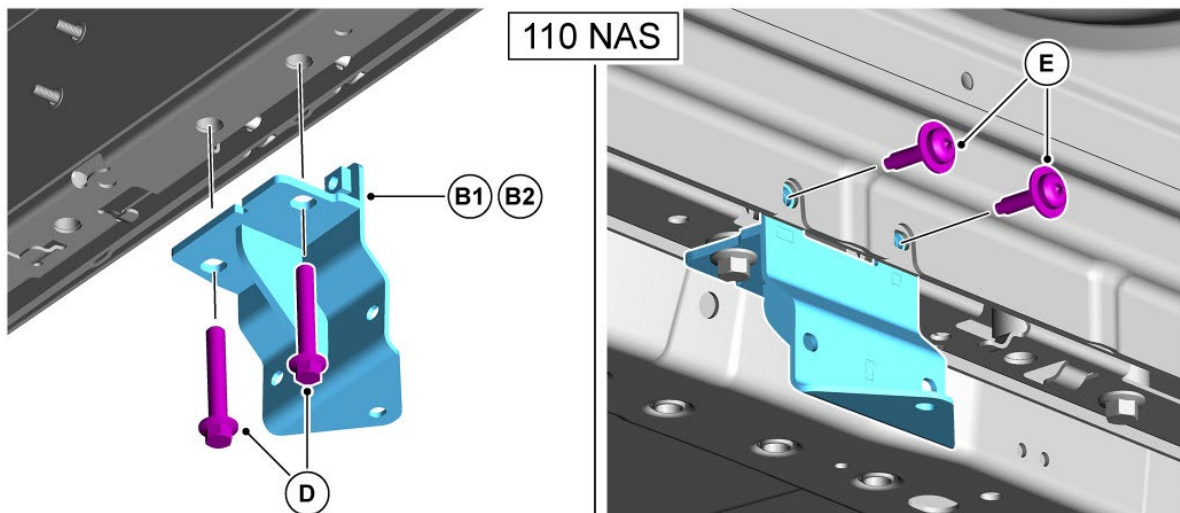
Install the 'front' side tube brackets **(B1)** and **(B2)** to both sides of the vehicle.

1. Install x2 fixings **(D)** and the x2 spacers **(G)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

26

CAUTION

- Complete this step only for Defender 110/130 **NAS** market vehicles.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (FL) or (FR) on the brackets.



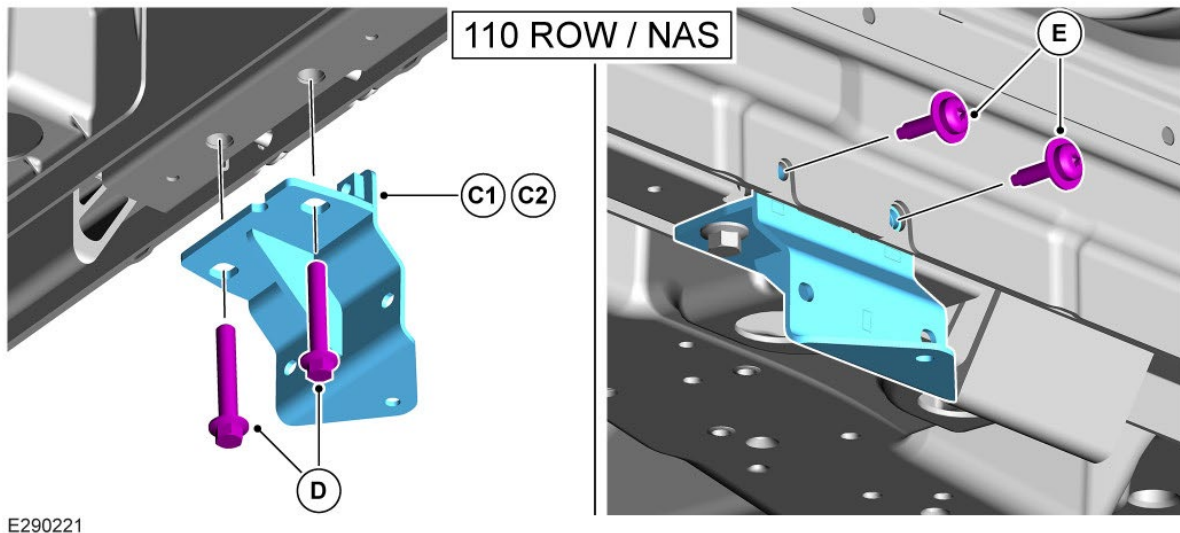
E290220

Install the 'front' side tube brackets **(B1)** and **(B2)** to both sides of the vehicle.

1. Install x2 fixings **(D)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

CAUTION

- Complete this step for Defender 110/130.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (RL) or (RR) on the brackets.



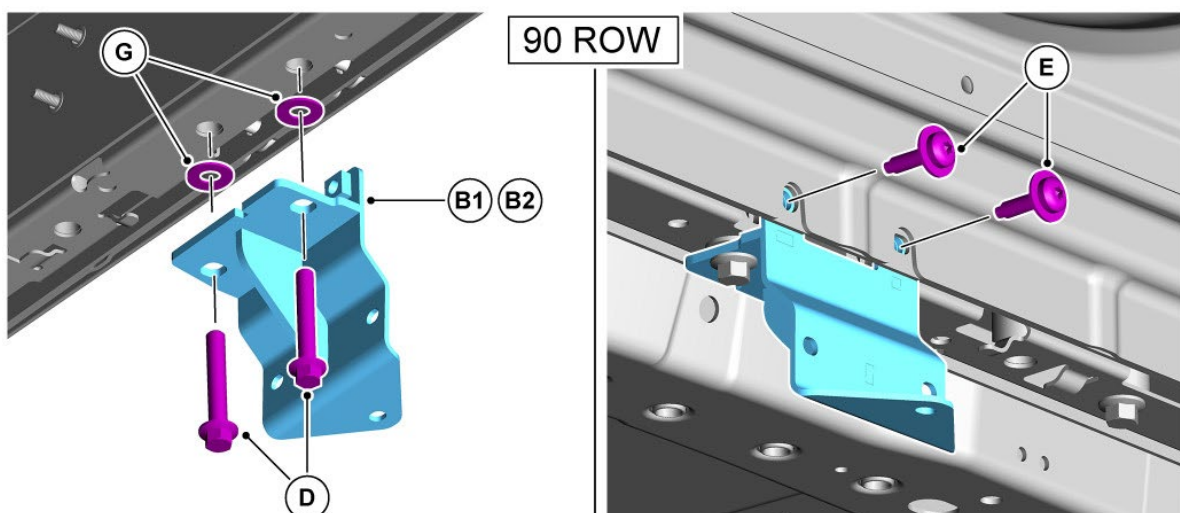
E290221

Install the 'rear' side tube brackets **(C1)** and **(C2)** to both sides of the vehicle.

1. Install x2 fixings **(D)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

CAUTION

- Complete this step for all Defender 90 markets, except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (FL) or (FR) on the brackets.



E262022

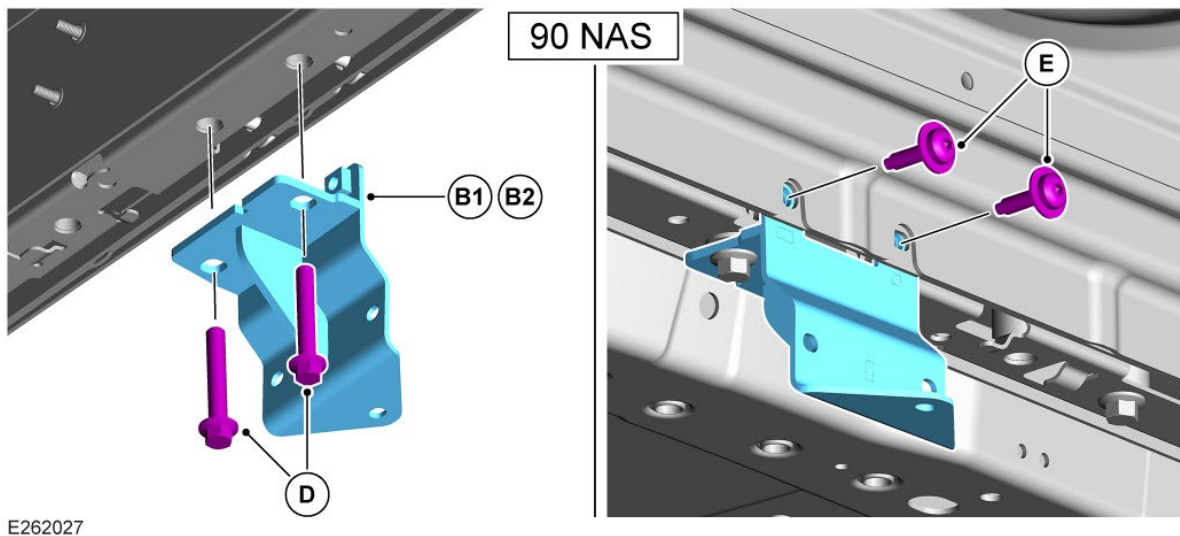
Install the 'front' side tube brackets **(B1)** and **(B2)** to both sides of the vehicle.

1. Install x2 fixings **(D)** and the x2 spacers **(G)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

29

CAUTION

- Complete this step for Defender 90 **NAS** market only.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (FL) or (FR) on the brackets.



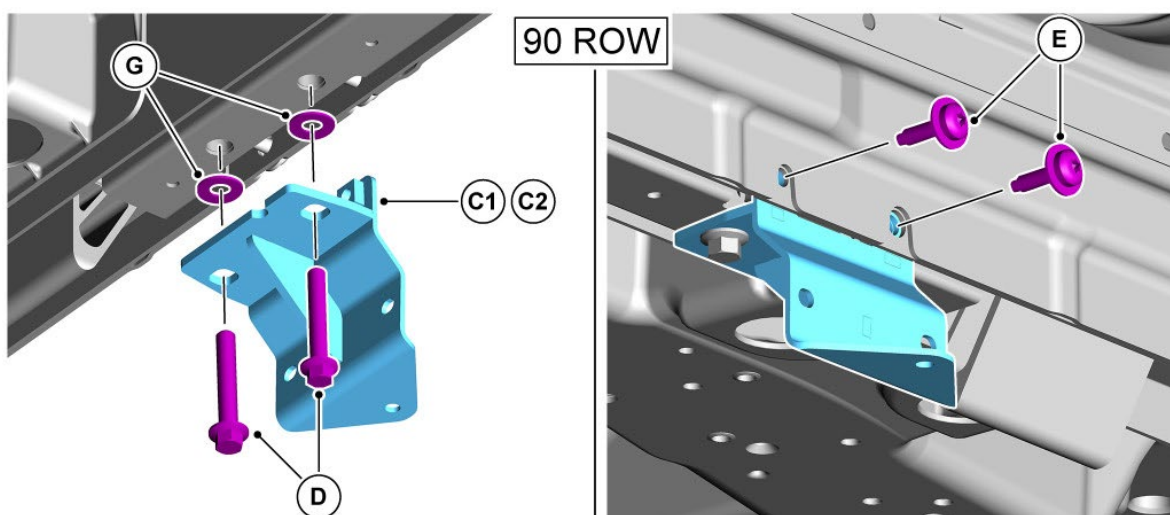
Install the '**front**' side tube brackets **(B1)** and **(B2)** to both sides of the vehicle.

1. Install x2 fixings **(D)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

30

CAUTION

- Complete this step for all Defender 90 markets except for NAS.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (RL) or (RR) on the brackets.



E290276

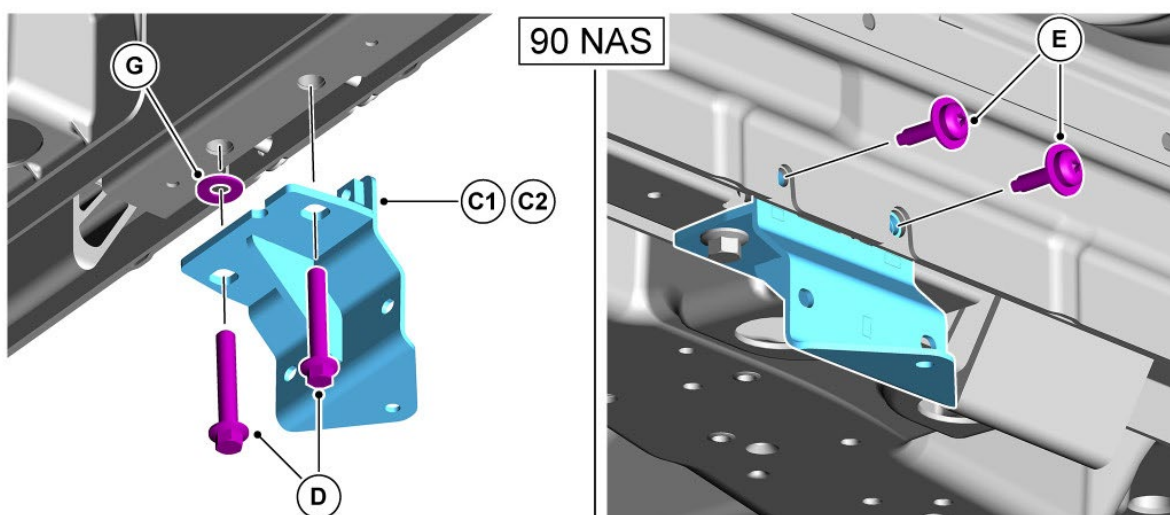
Install the 'rear' side tube brackets **(C1)** and **(C2)** to both sides of the vehicle.

1. Install x2 fixings **(D)** and x2 spacers **(G)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

31

CAUTION

- Complete this step for Defender 90 **NAS** market only.
- Make sure the brackets are installed at the correct location on the vehicle. Observe the location identifier (RL) or (RR) on the brackets.



E262028

Install the 'rear' side tube brackets **(C1)** and **(C2)** to both sides of the vehicle.

1. Install x2 fixings **(D)** and x1 spacer **(G)**, but do not fully tighten.
2. Install x2 fixings **(E)**, but do not fully tighten.

CAUTION

- Observe the hand symbol label on the side tubes.



E262038

Locate the hand symbol label on each of the side tubes.

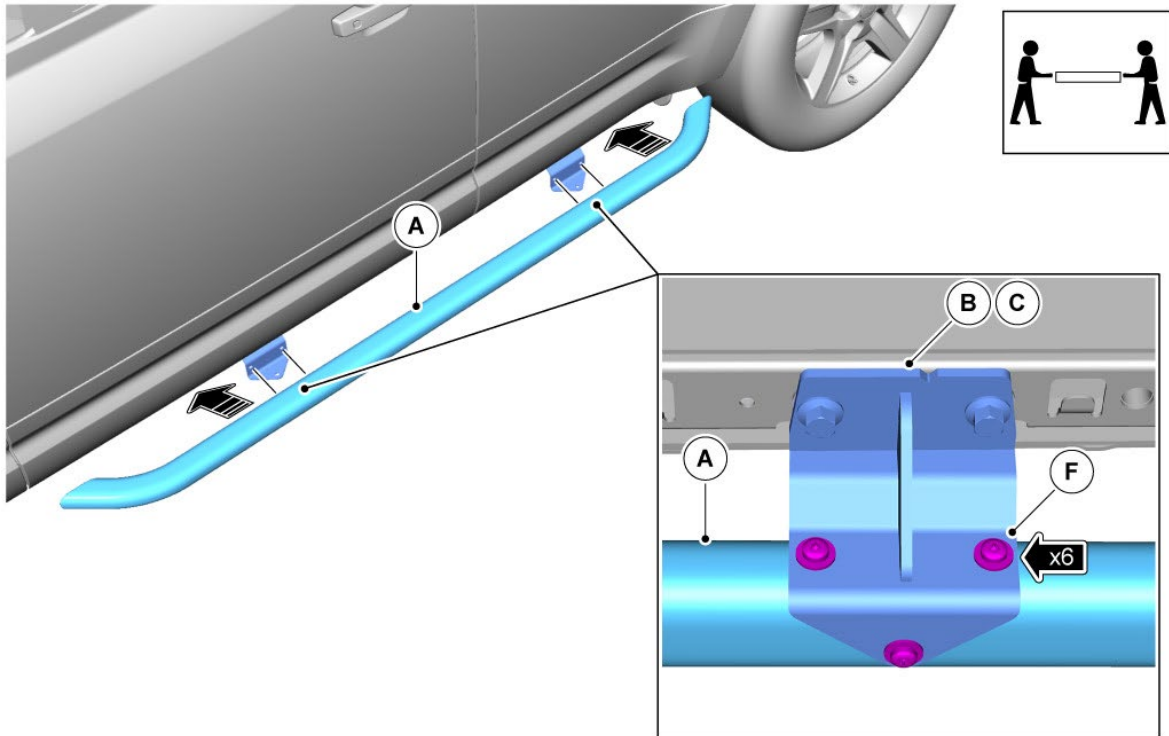
- The hand graphic points towards the front of the vehicle to help when installing the side tubes to vehicles with 90 or 110/130 wheelbase.

CAUTION

- Install, but do not fully tighten fixings **(F)**.
- The side tube must be installed to the correct side of the vehicle.
- For Defender 90 take particular care as the handedness is not obvious. Observe the hand symbol label on the side tubes.

NOTE

- This step requires the aid of another technician.
- Defender 110/130 shown. Process is same for Defender 90.



E290222

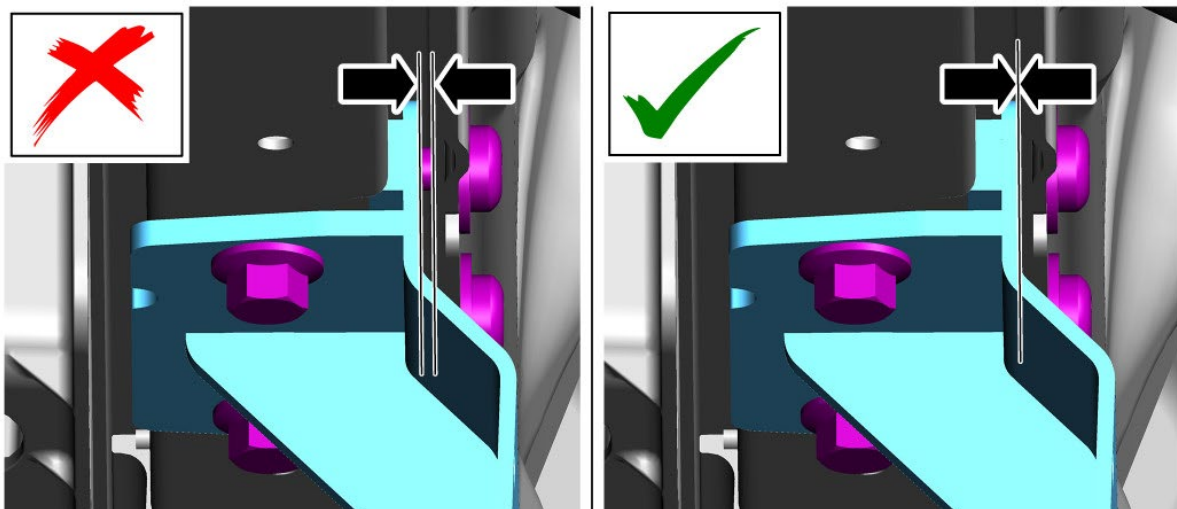
Install the side tube **(A)** to the brackets **(B)** and **(C)** using the x6 fixings **(F)**.

- Make sure the side tube is installed to the correct side of the vehicle. The hand graphic on the side tube must face towards the front of the vehicle.
- Install, but do not fully tighten fixings **(F)**.

34

CAUTION

- Side step brackets may crack when fully tightened if they are not installed correctly.



E304048

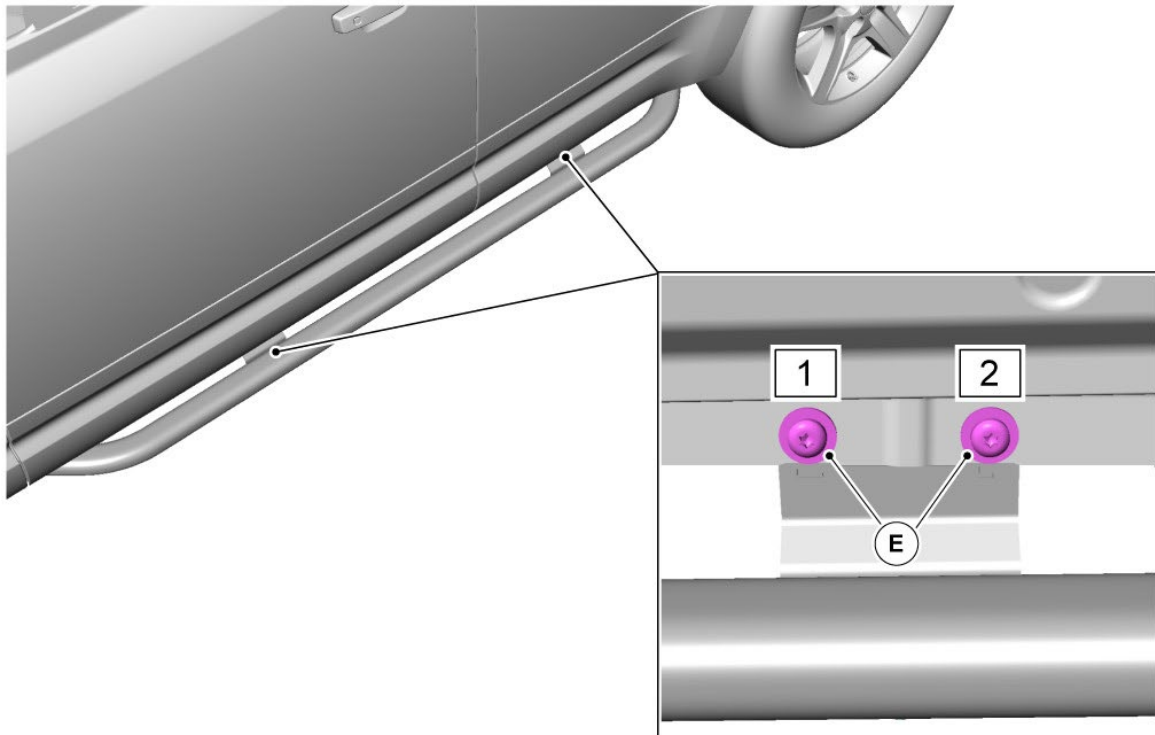
Before fully tightening side tube brackets, make sure there is no gap between the side tube brackets and the outer vehicle sill. Then continue to the next step.

CAUTION

- If tighten sequence is not followed, this could result in damage to the brackets.

NOTE

- Defender 110/130 shown. Process is same for Defender 90.



E253466

Fully tighten the x4 fixings **(E)** as illustrated. Starting with the rear bracket first.

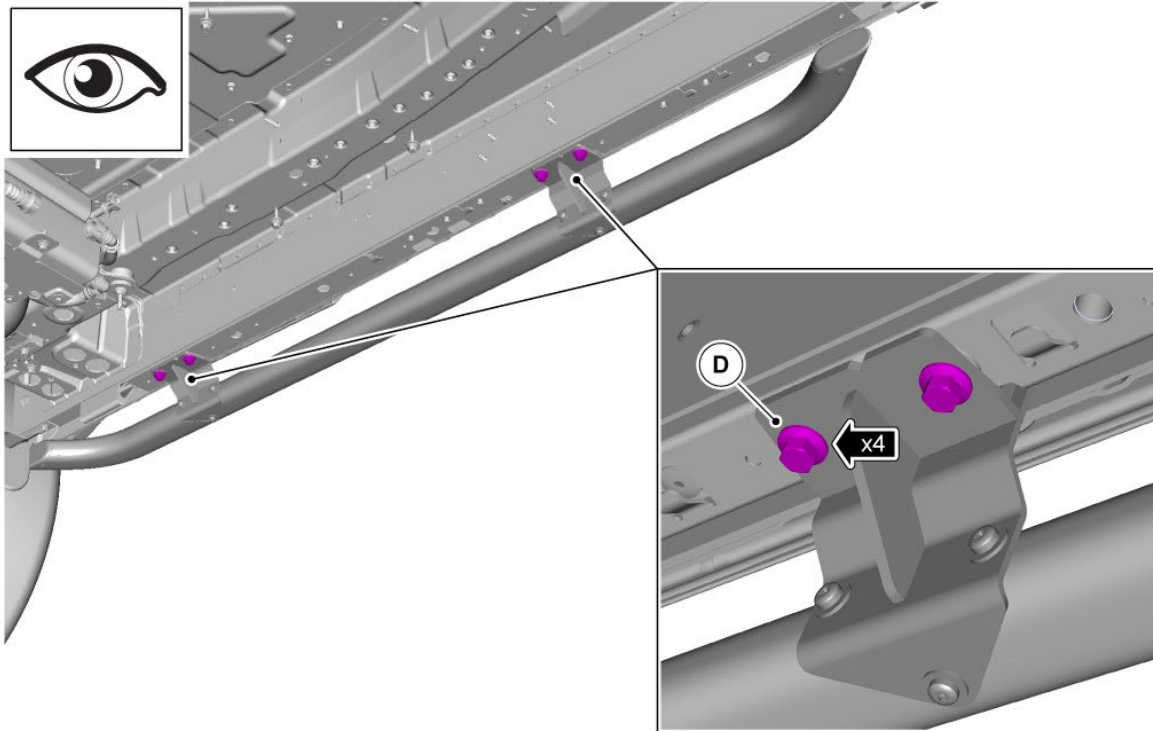
1. Rear bracket - Tighten fixing (1) first and then fixing (2). Torque: **24Nm**
2. Front bracket - Tighten fixing (1) first and then fixing (2). Torque: **24Nm**

CAUTION

- Make sure 'Step 35' is completed. Failure to follow the tightening sequence will result in damage to the bracket.
- Do not use a impact applicator.

NOTE

- Defender 110/130 shown. Process is same for Defender 90.



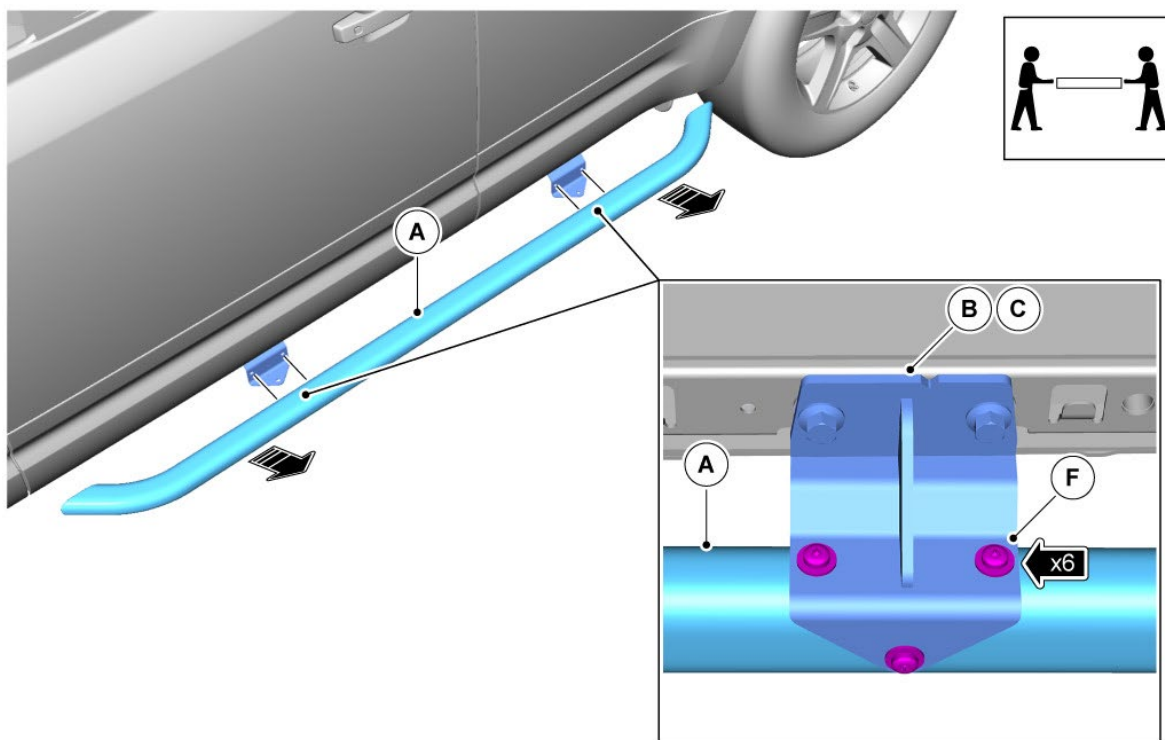
E290223

Fully tighten the x4 fixings **(D)**.

- Torque: **64Nm**

NOTE

- This step requires the aid of another technician.
- Defender 110/130 shown. Process is same for Defender 90.



E290224

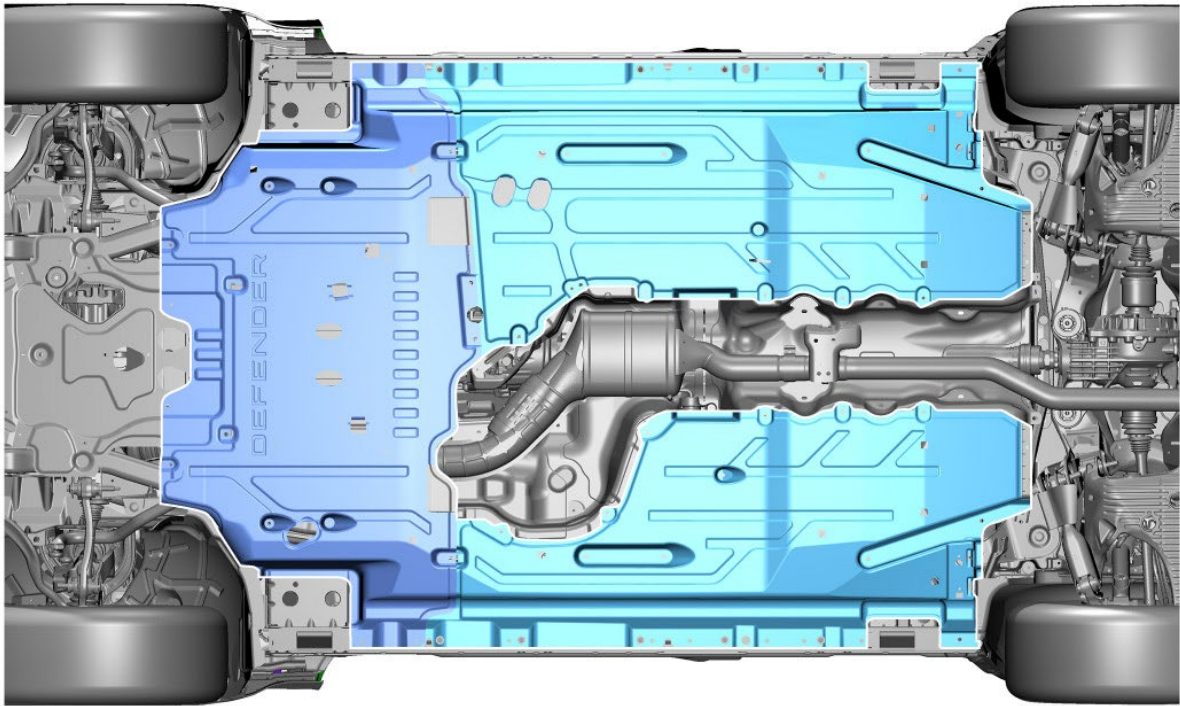
Remove fixings **(F)** and remove the side tube **(A)**.

- The undershields and rocker panels will need to be installed before the final install of the side tubes.

38

Repeat 'Steps 34 to 37' for the right side of the vehicle.

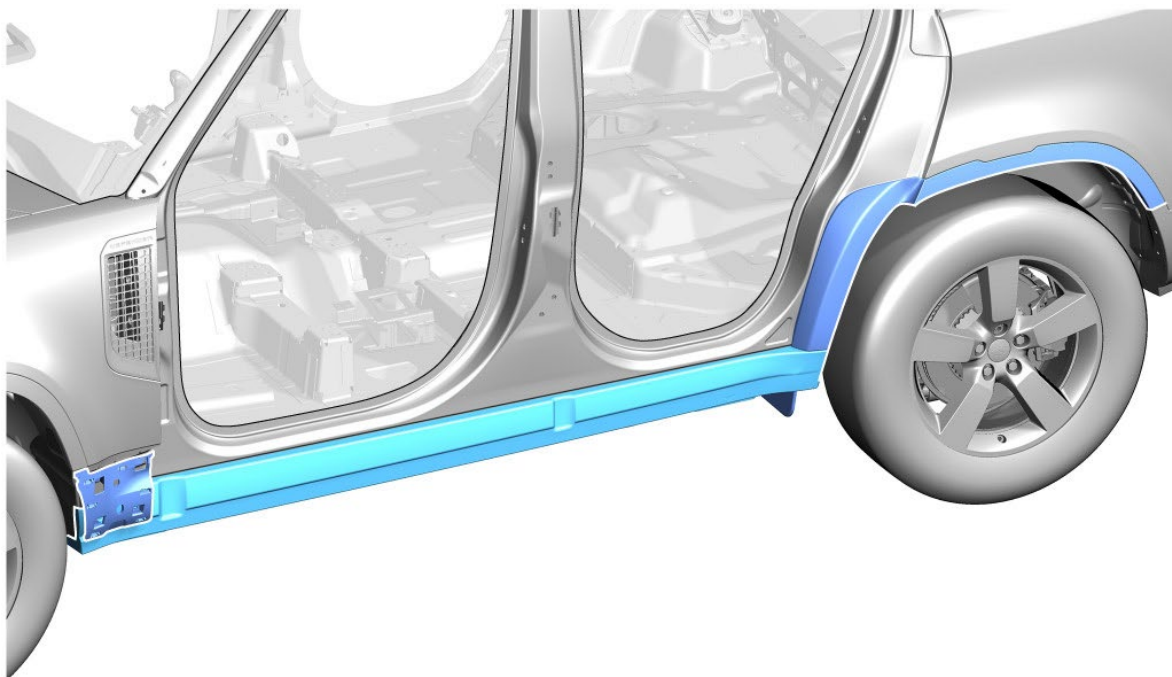
39



E300563

Install side undershields and transmission shield.

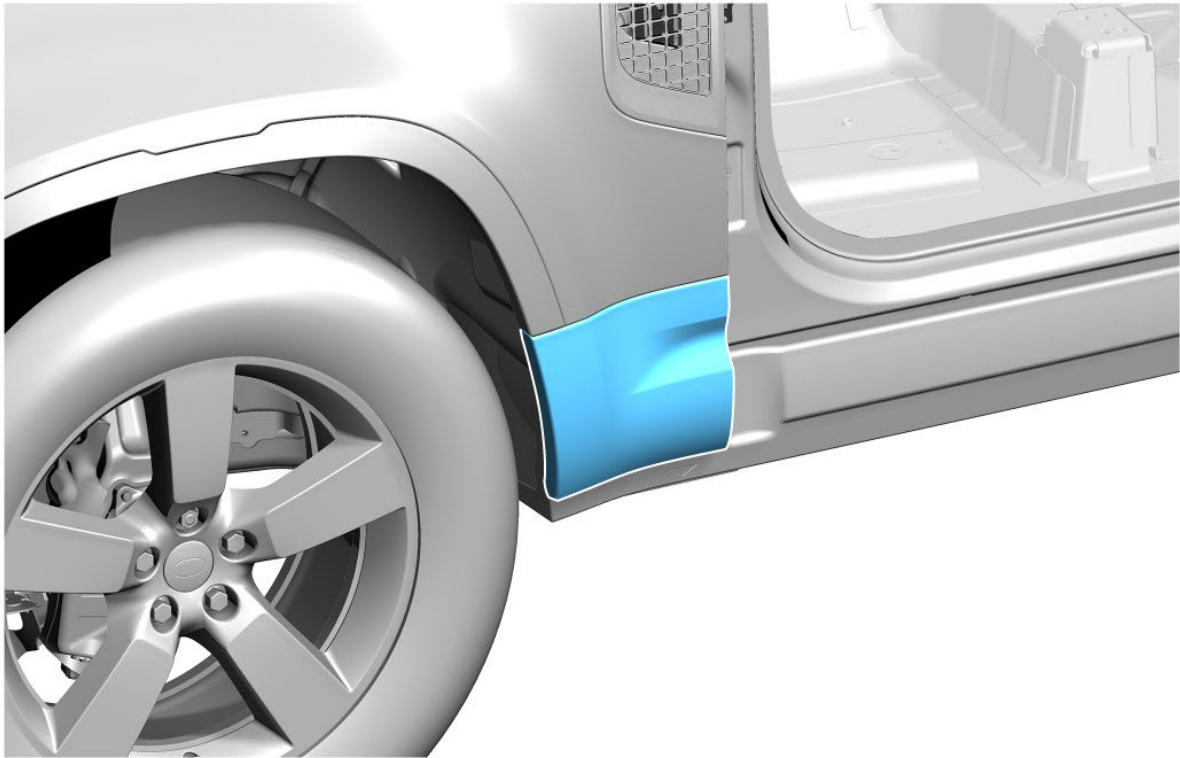
- ***For additional information, please refer to the official Workshop Manual. Left Undershield (501-02)***
- ***For additional information, please refer to the official Workshop Manual. Right Undershield (501-02)***



E300566

Install the rocker panel on both sides of the vehicle.

- For Defender 90 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel Moulding - 90 (501-08)***
- For Defender 110/130 vehicles see ***For additional information, please refer to the official Workshop Manual. Rocker Panel (501-08)***



E300565

Install front fender mountings on both sides of the vehicle.

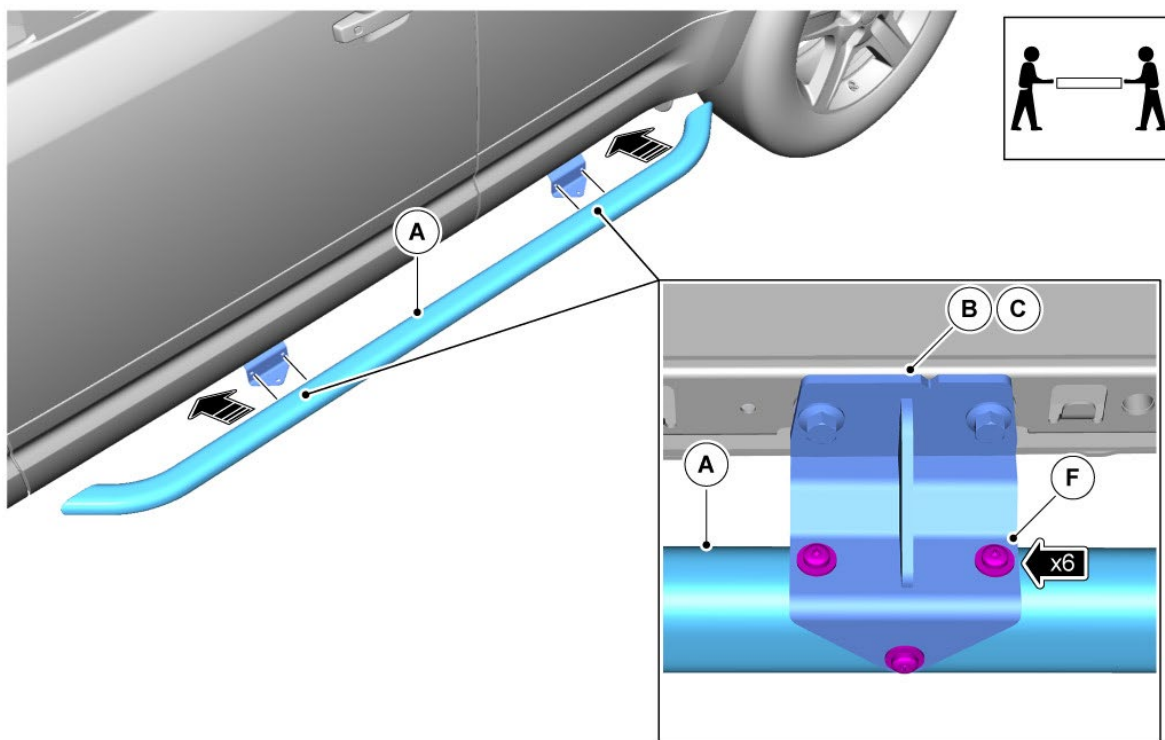
- ***For additional information, please refer to the official Workshop Manual. Front Fender Moulding (501-08)***

CAUTION

- Side tubes must be installed to the correct side of the vehicle.

NOTE

- Complete step for the installation of the side tubes.
- This step requires the aid of another technician.



E290222

Install the side tube **(A)** to the brackets **(B)** and **(C)** using fixings **(F)**. Complete step on both sides of the vehicle.

- Make sure the side tube is installed to the correct side of the vehicle. The hand graphic on the side tube must face towards the front of the vehicle.
- Torque: **10Nm**