# LAND ROVER

# **NEW DEFENDER**

# WINCH MOUNTING KIT

# VPLEP0427 / VPLEP0489 / VPLEP0428 / VPLEB0437 / LR137889 /

# VPLEP0431

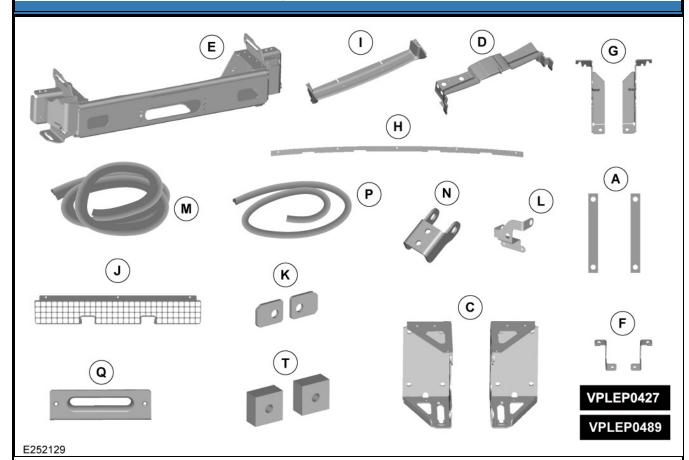
# FITTING INSTRUCTION

# WARNING

Accessories which are not correctly installed can be dangerous. Read the instructions carefully prior to installation. Comply with instructions at all times. If in doubt, contact your nearest approved retailer.

### **CAUTION**

Installation of Winch Mounting Kit VPLEP0427 to Plug-in Hybrid Electric Vehicle (PHEV) vehicles will require the sounder link harness which is only available as part of VPLEP0426 Remote Electric Winch kit.

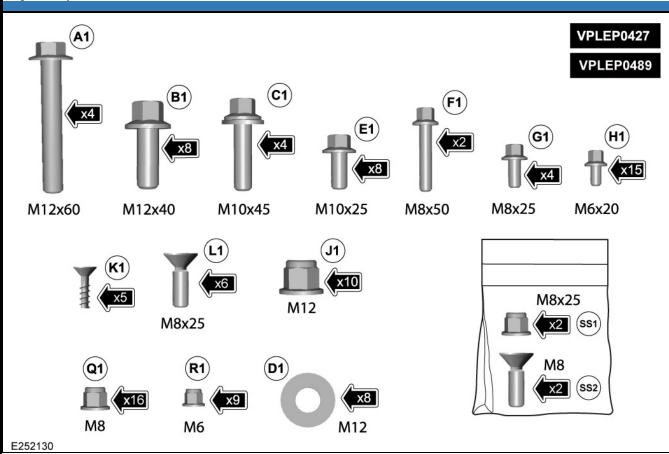




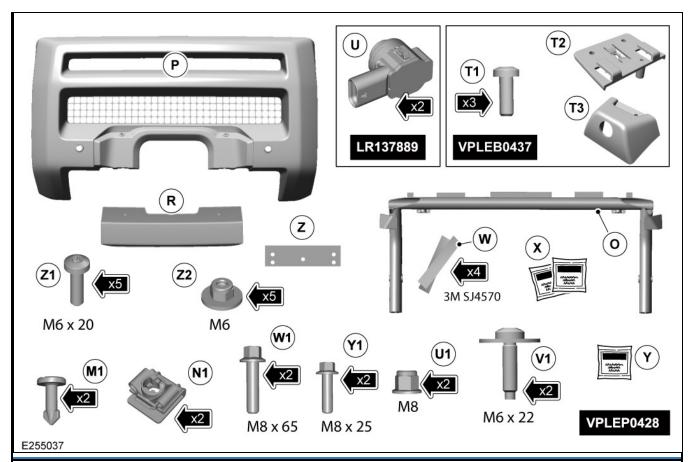
Fixings for winch mounting kit:= VPLEP0427 / VPLEP0489

NOTE

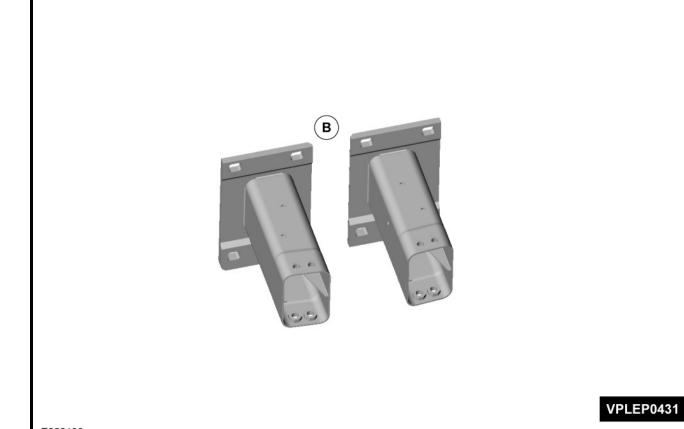
2x Q1 and 2x L1 from (VPLEP0427) will need to be discarded as these are replaced by SS1 and SS2 to be used in Step 11 only.



Winch cover kits:= VPLEP0428 / VPLEB0437 / LR137889



Crush cans:= VPLEP0431



# Defender-X bumper parts:= VPLEB0443 / LR129440

### NOTE

For Defender-X only vehicles the following parts are required to be ordered separately. Both parts comes in primer and need to be painted Narvik Black.



E256718

# REMOVAL INSTRUCTIONS

For vehicles installed with coil suspension only.

Replace the front coil springs.

For additional information, please refer to the official Workshop Manual. Shock Absorber and Spring Assembly - [+] Coil Suspension (204-01 Front Suspension)

6 Cyl 90 L8BM-5B302-AA VPLEI0604.

6 Cyl 110 L8BM-5B302-BA VPLEI0605.

4 Cyl 90 L8B2-5C314-KA LR140233.

4 Cyl 110 L8B2-5C314-EA LR140355.

Disconnect the vehicle start-up battery.

For additional information, please refer to the official Workshop Manual. Startup Battery Disconnect and Connect (414-00 Battery and Charging System - General Information)

### **CAUTION**

Retain all the fixings.

### NOTE

Do not remove fog lamps if present.

Remove the front bumper. Remove the front armature and cooling module protection bar (or undersheild bracket if installed). Remove hood latch panel. Do not disassemble.

For additional information, please refer to the official Workshop Manual. Front Bumper (501-19 Bumpers)

For additional information, please refer to the official Workshop Manual. Front Armature (501-19 Bumpers)

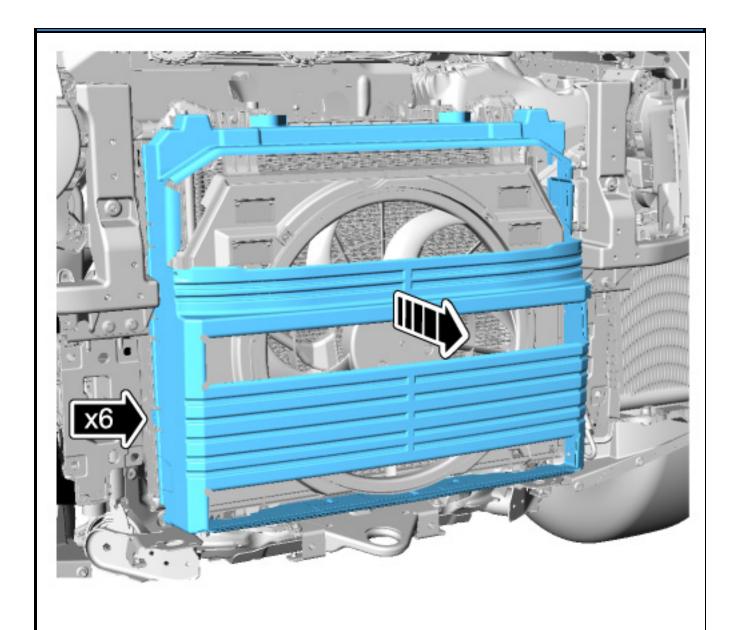
For additional information, please refer to the official Workshop Manual. Hood Latch Panel (501-02 Front End Body Panels)



### NOTE

For vehicles equipped with active grille.

Discard the lower cooling shroud / active grille. Tape up the vehicle harness active vane plug.



E256798

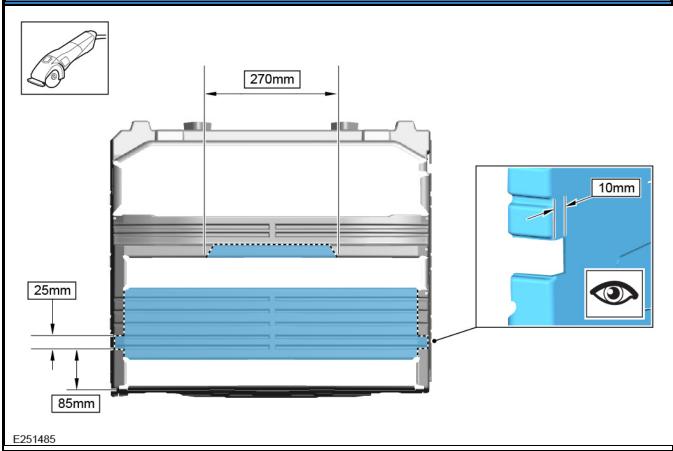
Release (x6) clips and remove the radiator air duct from the vehicle.

### WARNING

Make sure to wear suitable personal protective equipment.

# **CAUTION**

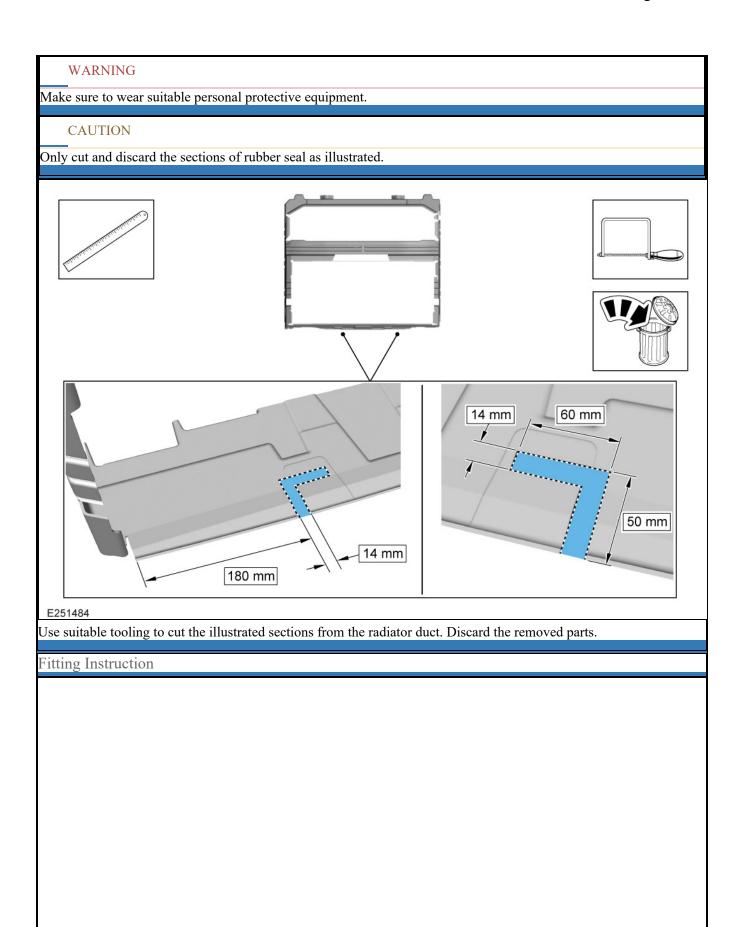
Only cut and discard the sections of rubber seal as illustrated.

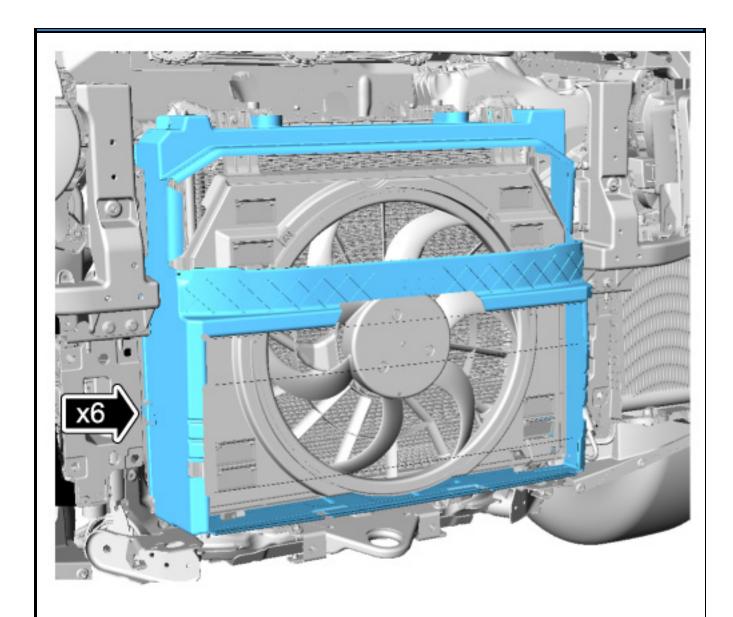


### NOTE

Image looking from front of part.

Use suitable tooling to cut the illustrated sections from the radiator air duct. Discard the removed parts.



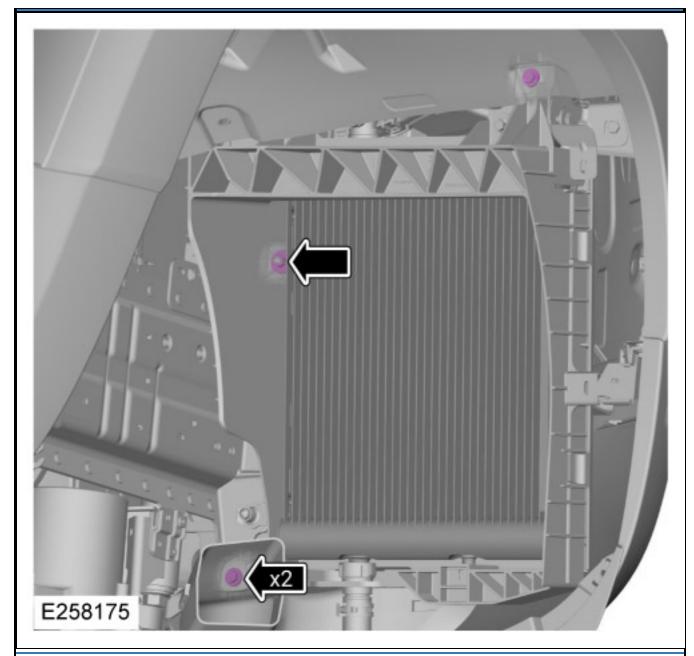


# E256799

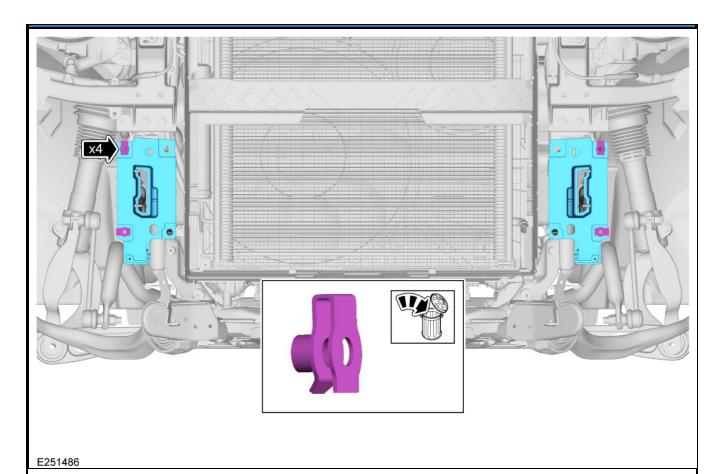
### NOTE

For vehicles installed with pusher fan, unplug and route harness from the fan inside the ducting. The harness will be secured to the winch cradle.

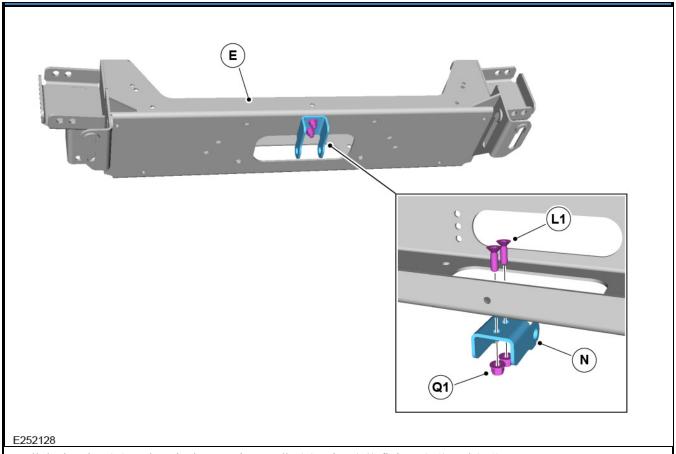
Install the radiator air duct using (x6) retaining clips.



Reposition the auxiliary radiator(s) if present to gain access to the rear of the crush can mountings.

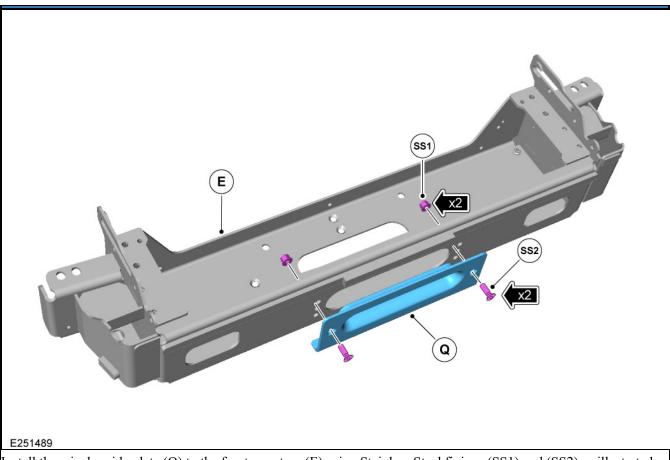


Remove and discard (x4) fixings as illustrated.

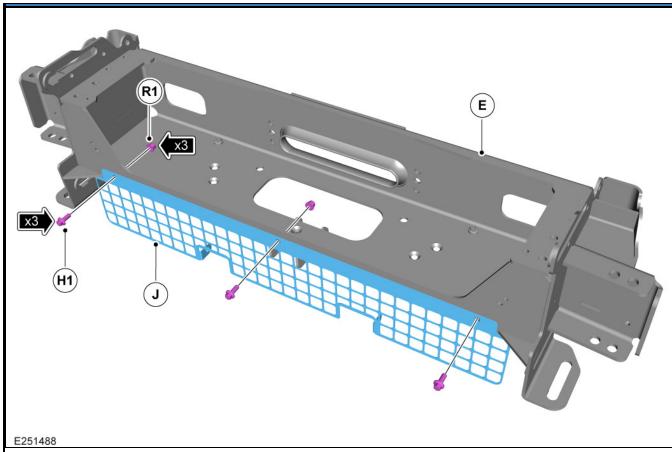


Install the bracket (N) to the winch mounting cradle (E) using (x2) fixings (L1) and (Q1).

Torque: 30 Nm

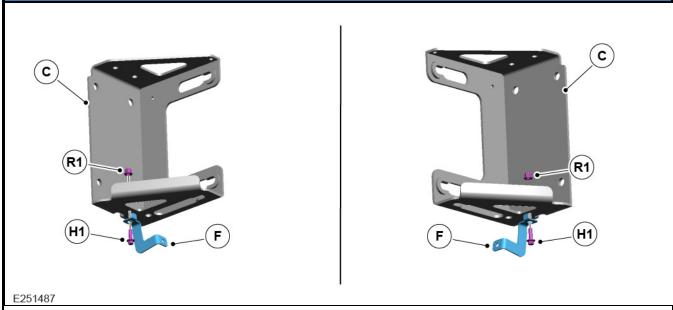


Install the winch guide plate (Q) to the front armature (E) using Stainless Steel fixings (SS1) and (SS2) as illustrated. Torque: **22 Nm** 



Install the grille (J) to the winch mounting cradle (E) using the fixings (H1) and (R1) as illustrated.

Torque: 10 Nm

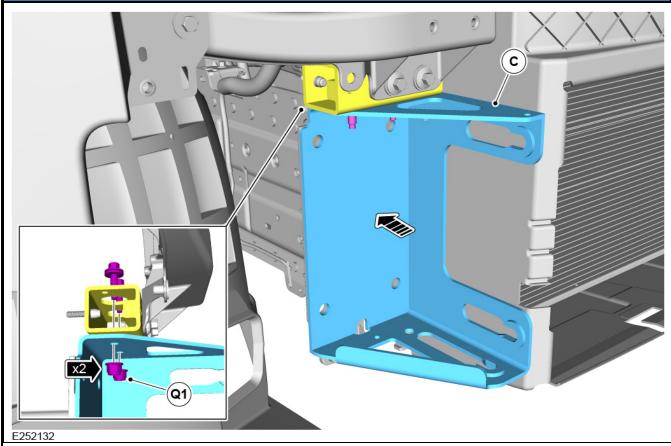


### NOTE

For vehicles without a front undershield installed.

Install the brackets (F) to the winch mounting cradle brackets (C) using the bolts (H1) and the nuts (R1).

Install, but do not fully tighten the bolts.



### NOTE

This step must be completed on both sides of the vehicle.

Install the winch mounting cradle brackets (C) to the vehicle using (x2) fixings (Q1) and the (x2) bolts retained during the front armature removal. Repeat step on both sides of the vehicle.

# Install, but do not fully tighten the bolts.

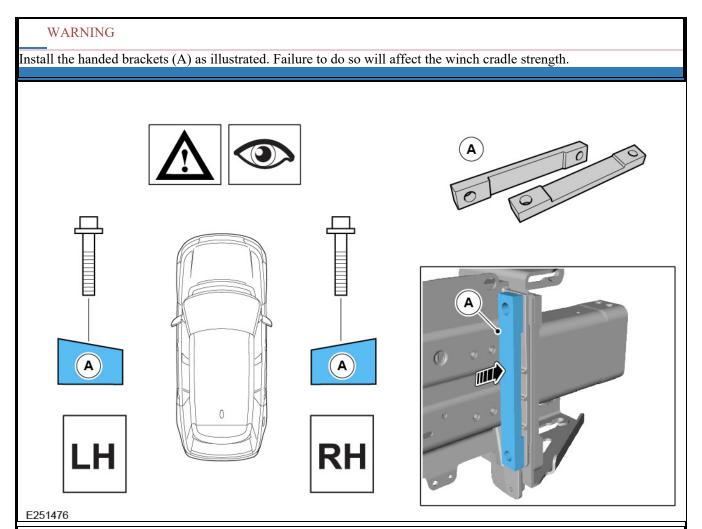
NOTE

E259139

This step must be completed on both sides of the vehicle.

VPLEP0431

Noting the correct orientation install the new crush cans (B). Position with the inside fixings (C1) and additional washers (D1).

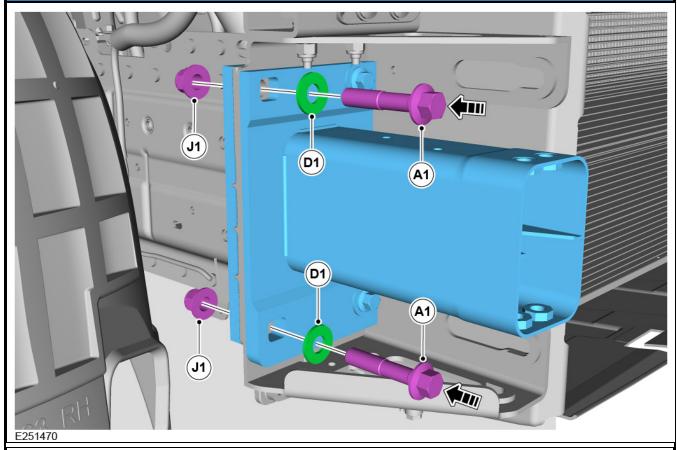


### NOTE

This step must be completed on both sides of the vehicle.

Noting the correct orientation position the brackets (A) as illustrated.

Install, but do not fully tighten the bolts.

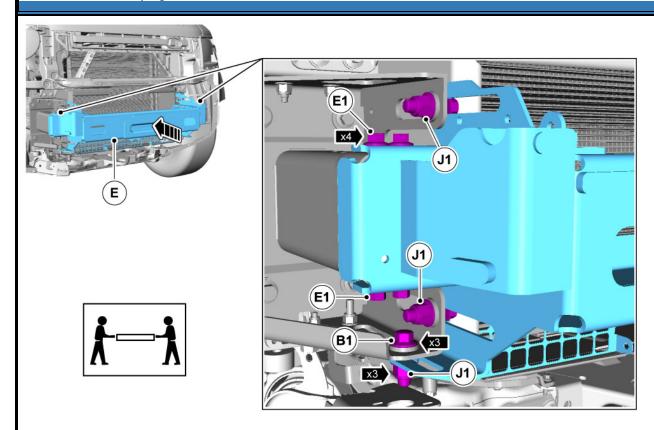


### NOTE

This step must be completed on both sides of the vehicle.

Install the outside fixings (A1) and washers (D1) and the nuts (J1) to secure the crush can and brackets.

Install, but do not fully tighten the bolts.



### E256800

# NOTE

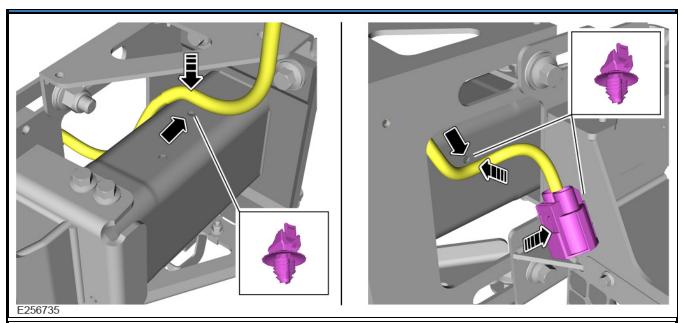
This step requires the aid of another technician.

This procedure must be completed on both sides.

Install the winch cradle.

Install but do not fully tighten (x4) fixings) (E1).

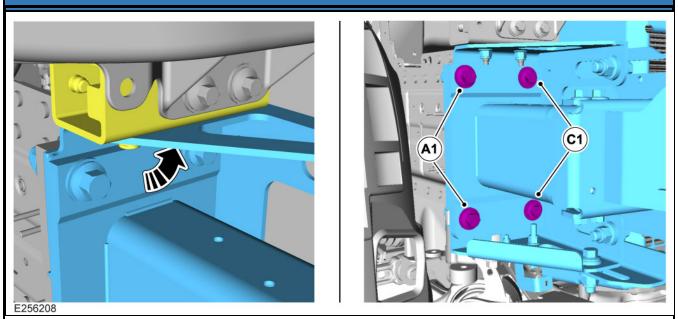
Install but do not fully tighten (x3) fixings (B1) and (J1).



### NOTE

This step is applicable only to vehicles installed with front pusher fan.

Attach pusher fan vehicle harness to the highlighted clamp points on the crush can and rear of the winch cradle.



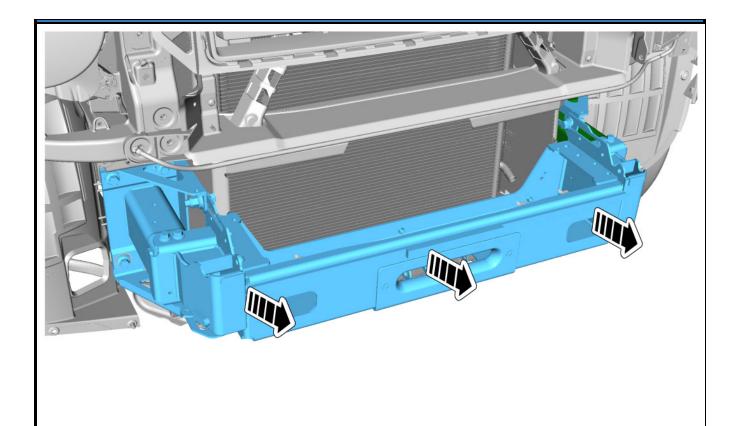
### NOTE

This step must be completed on both sides of the vehicle.

Raise the cradle and crush cans against the square support brackets and fully tighten the 4 bolts as illustrated.

Fighten (x2) fixings (C1). Torque: 55 Nm

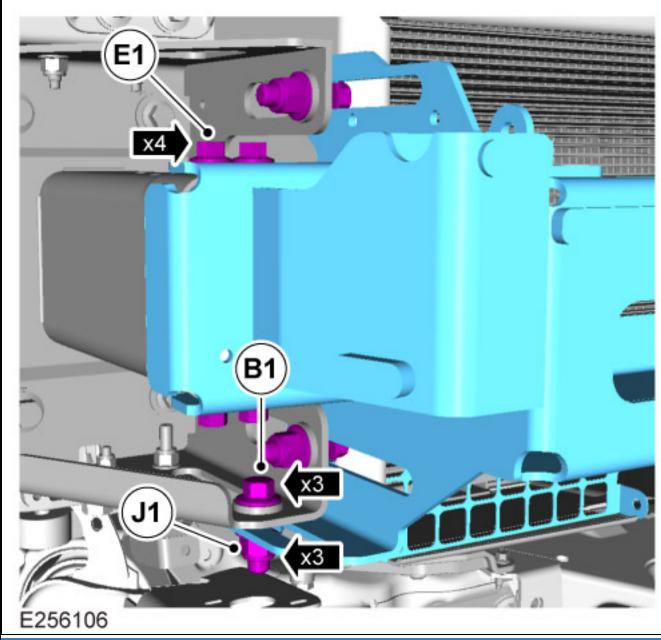
Fighten (x2) fixings (A1). Torque: 110 Nm



E256104

Move the winch mounting cradle to the furthest forward position.

M12 torque is critical for cradle impact deflection.



NOTE

This step must be completed on both sides of the vehicle.

Fully tighten the fixings.

Γighten (x6) fixings (J1) and (B1). Torque: 55 Nm

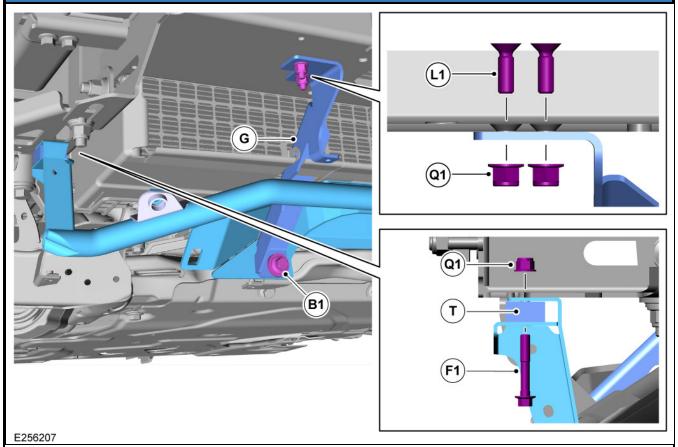
Fighten (x8) fixings (E1). Torque: 55 Nm

Air duct lip seal should be in front of the grille.

Complete this step only for vehicles equipped WITH a front undershield (VPLEP0436).

Spacer (K) NOT used.

Install, but do not fully tighten the bolts (B1) and (L1) for the cradle leg (G).



# NOTE

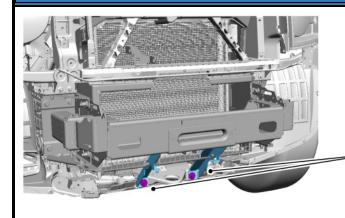
This step must be completed on both sides of the vehicle.

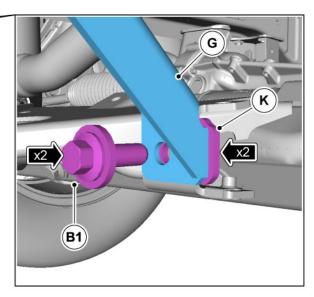
Install the spacer blocks (T) using the fixings (F1) and (Q1). The protection bar is to be installed at the same time as the cradle legs (G). Install, but do not fully tighten the bolts (B1) and (L1) for the cradle legs (G).

Tighten (x2) fixings (F1). Torque: **30 Nm** 

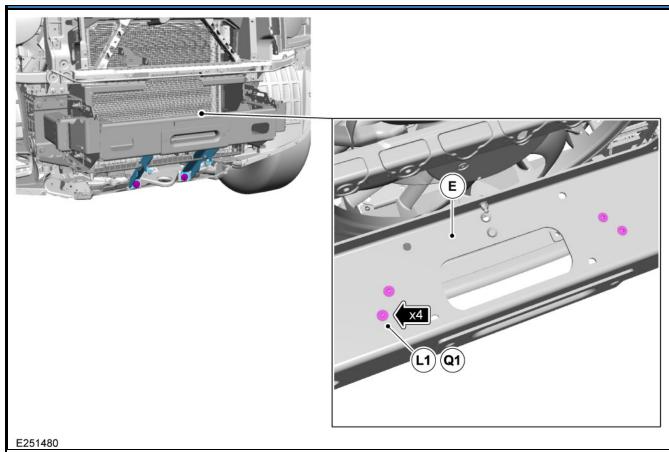
Complete this step only for vehicles WITHOUT an undershield.

Install, but do not fully tighten the 2 bolts.



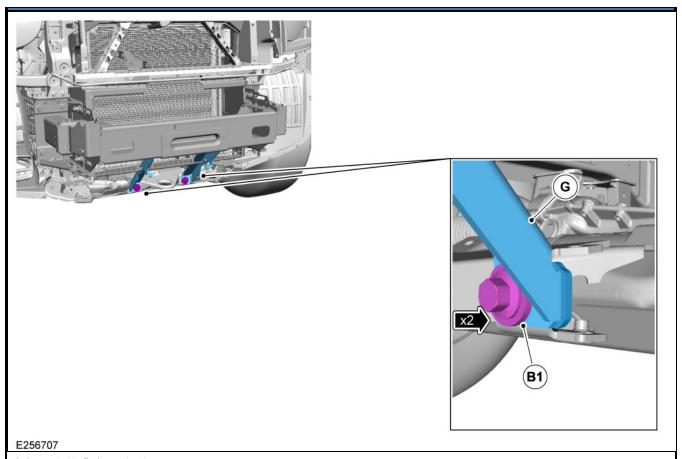


Install a spacer (K) to the lower part of each of the legs (G) using fixings (B1). Install, but do not fully tighten (x2) fixings (B1).

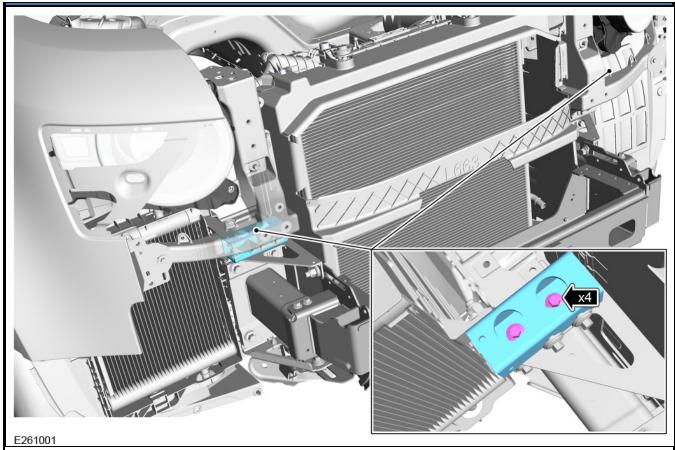


Secure the upper part of each of the legs (G) to the winch mounting cradle using (x4) fixings (L1) and (Q1).

Torque: 30 Nm

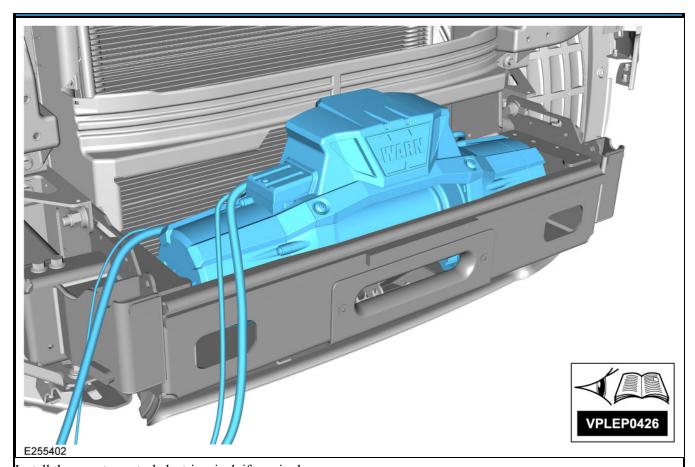


Tighten (x2) fixings (B1). Torque: **110 Nm** 



Tighten (x4) fixings.

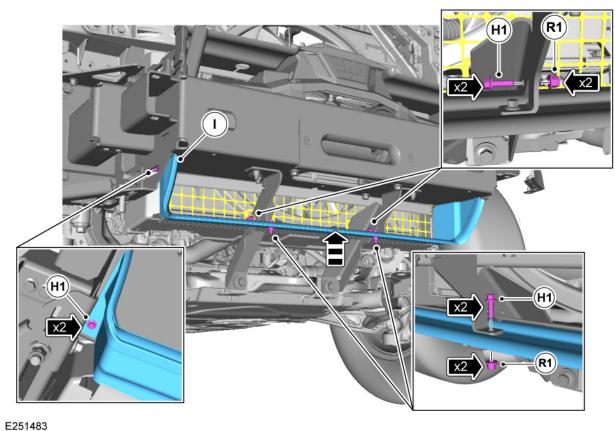
Torque: 30 Nm



Install the remote control electric winch if required.

For additional information, please refer to the official Workshop Manual. Remote Control Electric Winch - Hardware part number: VPLEP0426 (102-03 Exterior)

Air duct lip seal should be outside of the winch lower air duct.

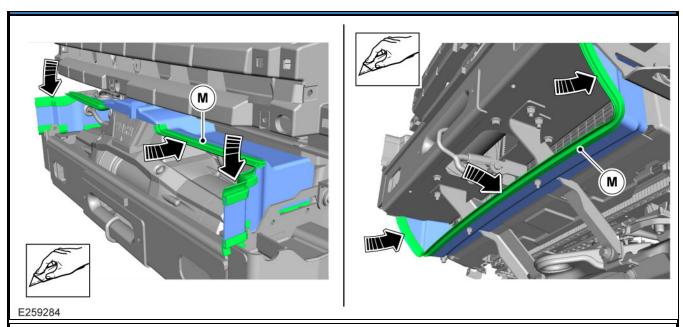


L231403

Install the lower winch air duct (I).

Install (x6) fixings (H1) and (x4) fixings (R1).

Γorque: 4 Nm



NOTE

Make sure the lip seals are straight with no distortion on the lip edges.

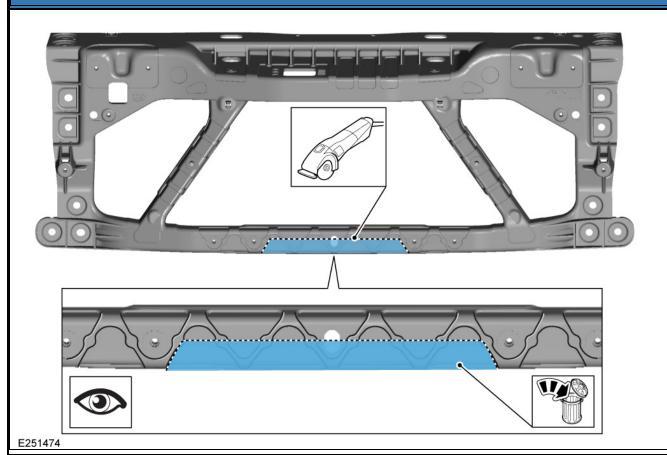
Trim and instal the lip seal (M) to the upper and the lower ducting as illustrated.

# WARNING

Make sure to wear suitable personal protective equipment.

# **CAUTION**

Only cut and discard the section of the hood latch panel as illustrated.



### NOTE

Image looking from front of part.

Use suitable tooling to cut the illustrated section of the hood latch panel. Discard the removed parts.

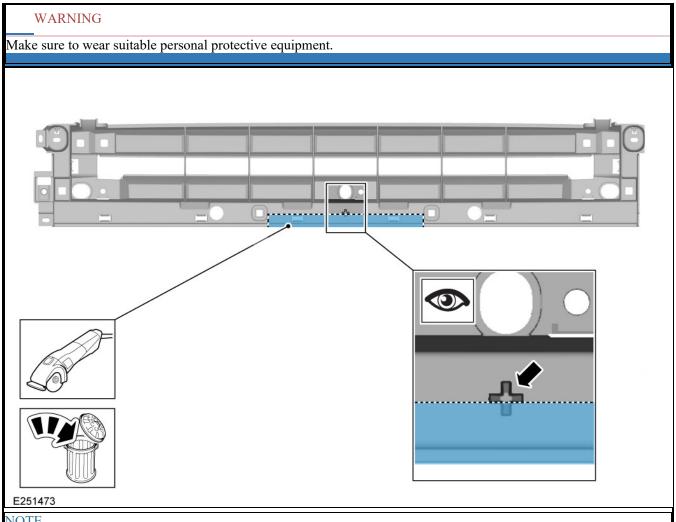


Image looking from rear of part.

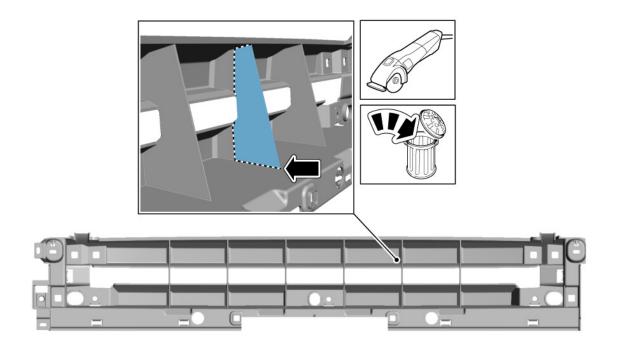
Use suitable tooling to cut the illustrated section from the front bumper support bracket. Discard the removed section.

### WARNING

Make sure to wear suitable personal protective equipment.

# CAUTION

For vehicles equipped with a plug-in hybrid electric vehicle pedestrian speaker.



### E256789

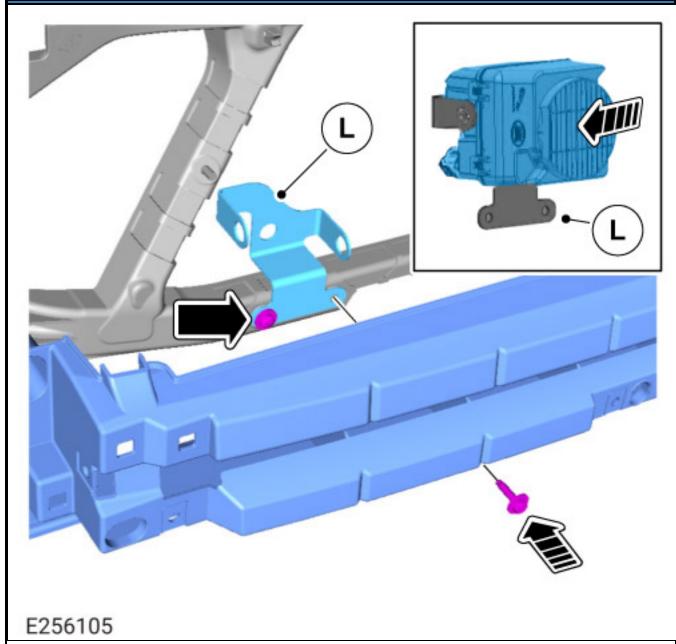
### NOTE

Image looking from rear of part.

Use suitable tooling to cut the illustrated section from the front bumper support bracket. Discard the removed section.

Install the hood latch panel.

For additional information, please refer to the official Workshop Manual. Hood Latch Panel (501-02 Front End Body Panels)



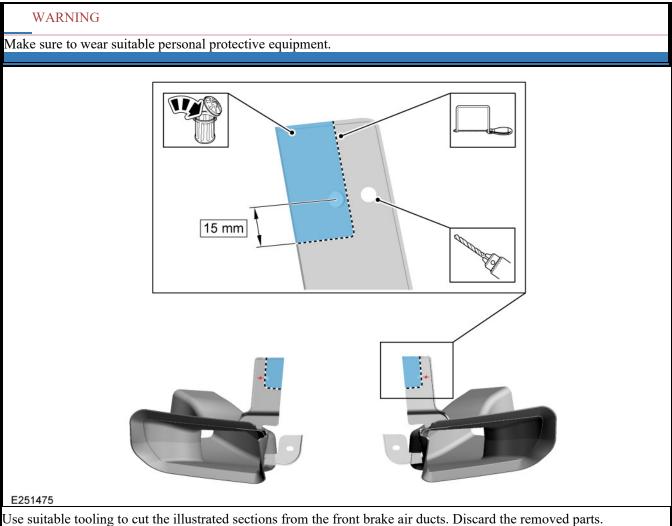
### NOTE

For vehicles equipped with a plug-in hybrid electric vehicle pedestrian speaker.

Install the plug-in hybrid electric vehicle speaker bracket (L) and the modified front bumper support bracket to the hood latch panel using the retained fixings.

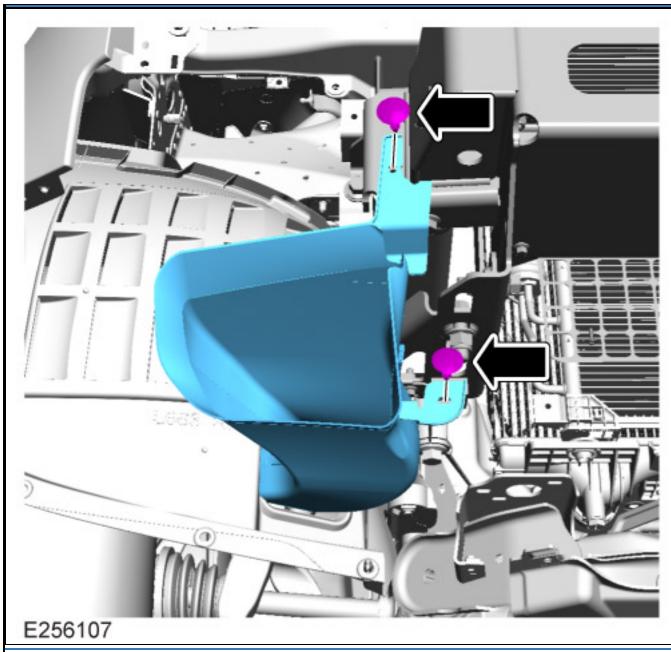
Install the speaker into the speaker bracket (L).

Connect the link lead (S) and secure with clip (Z) from the remote control electric winch kit (VPLEP0426).

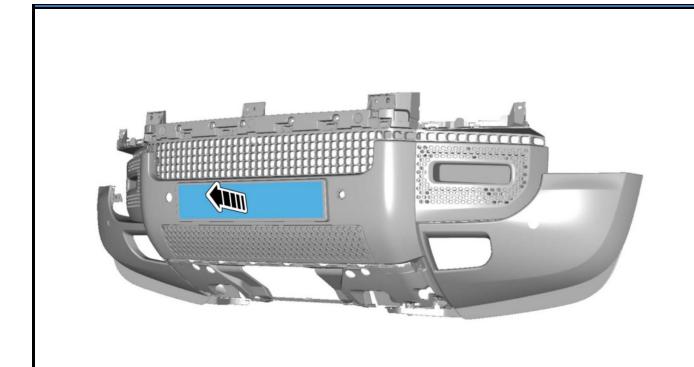


Use suitable tooling to cut the illustrated sections from the front brake air ducts. Discard the removed parts. Drill a hole as illustrated on both of the front brake air ducts.

7 mm drill bit



Install the front brake cooling ducts on both sides of the vehicle.

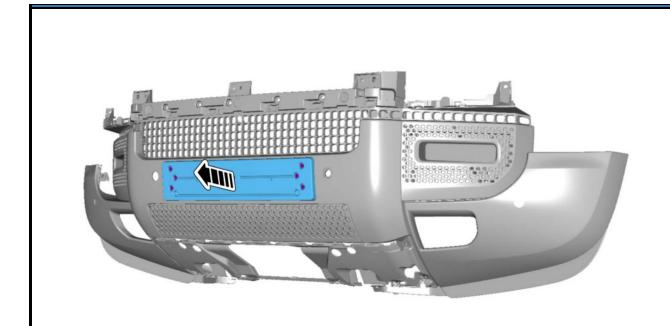


E255251

#### NOTE

Retain the license plate and the license plate fixings.

Remove the license plate and the license plate fixings.



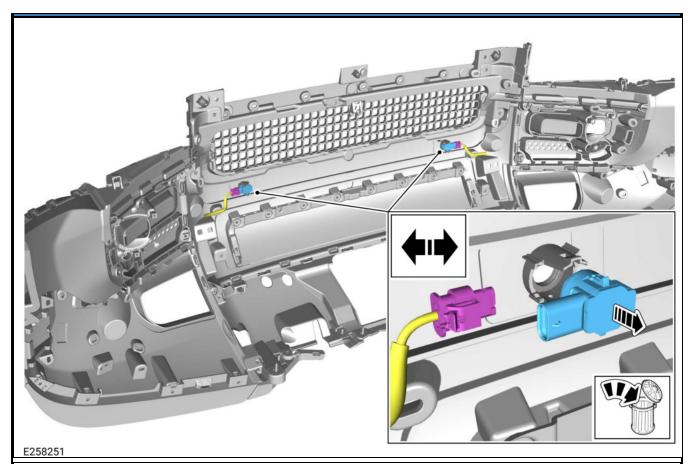


E255250

#### NOTE

Retain the license plate plinth and the license plate plinth fixings.

Remove the license plate plinth if installed.

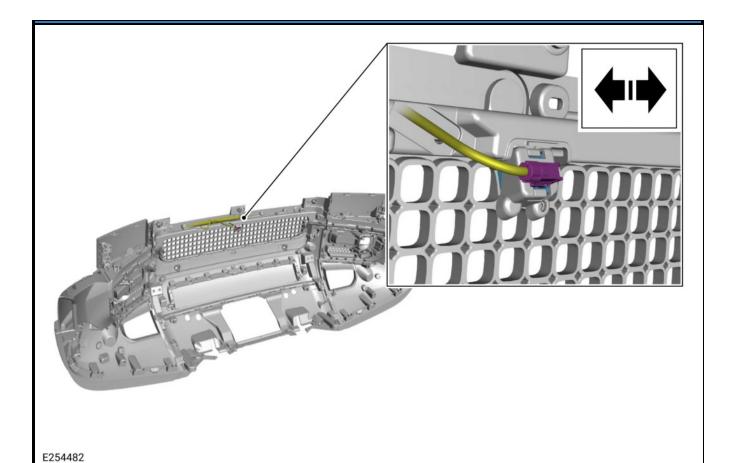


The 2 removed parking aid sensors will be replaced with 2 black parking aid sensors (LR137889) that get installed to the winch cover.

Remove and discard the 2 parking aid sensors from the front bumper.

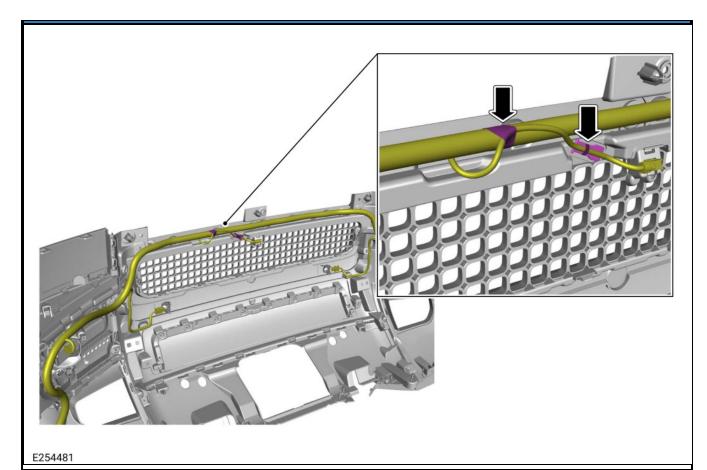
Disconnect the parking aid sensor harness from the parking aid sensor.

Remove the parking aid sensor from the front bumper.



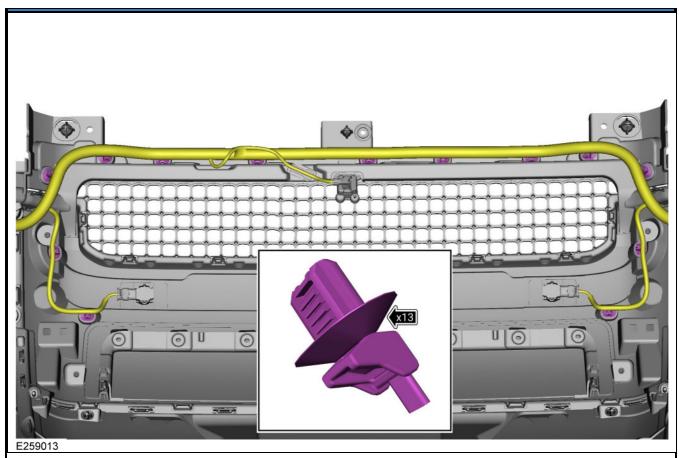
Vehicles equipped with a front proximity camera.

Disconnect the front proximity camera.

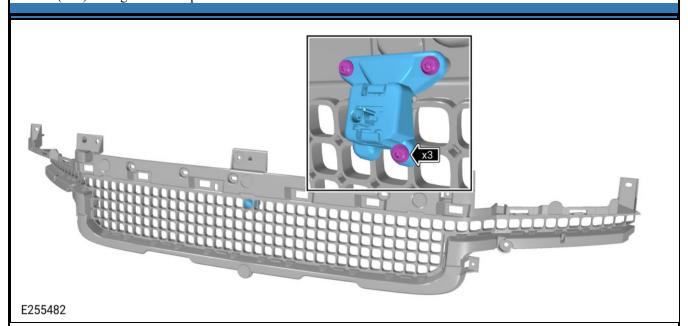


Vehicles equipped with a front proximity camera.

Remove the arrowed tape and the arrowed clip securing the camera harness to the front wiring harness.

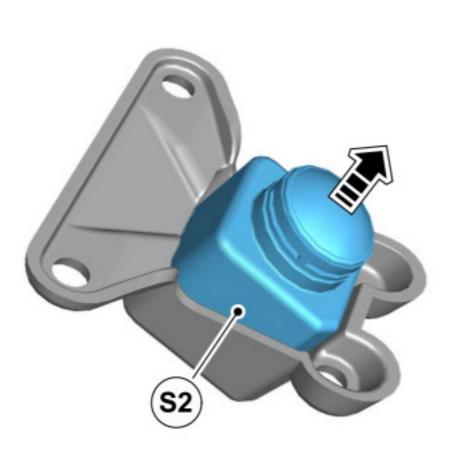


Release (x14) wiring harness clips.



Remove the camera housing and the camera from the front bumper grille part.

Remove (x3) fixings.



# E254483

Remove the front proximity camera from the camera housing.

Remove the front proximity camera from the camera housing. Retain the front proximity camera (S2).

Discard the camera housing.

## **CAUTION**

For Defender-X only vehicles the pre-cut front bumper protector (VPLEB0443) must be ordered for use with the winch mounting kit.

#### NOTE

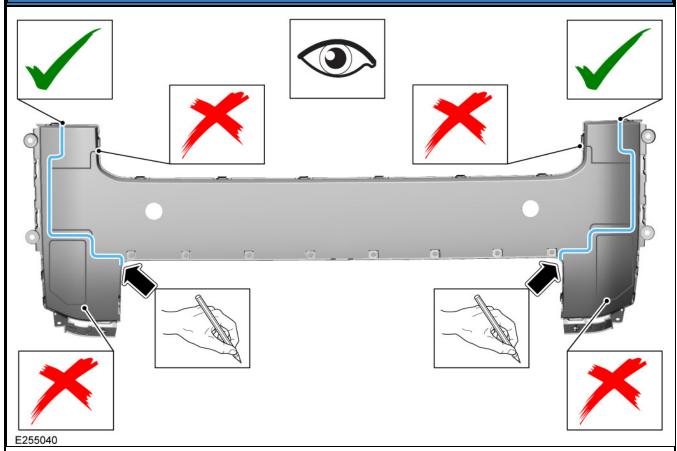
Front bumper protector (VPLEB0443) comes in primer and needs to be painted 'Narvik Black'.

For Defender-X vehicles only, do not complete steps 41 to 42. Continue from step 43.

Do not discard the old front bumper protector that was removed from the vehicle. The front bumper protector (VPLEB0443) will be installed instead.

# **CAUTION**

There are multiple cut guide lines on the front bumper lower cover. There is a risk of irreversible damage to the part if the correct cut guide lines are not followed.



# NOTE

Image looking from rear of part.

Identify and mark the correct cut guide lines on the rear of the front bumper lower cover.

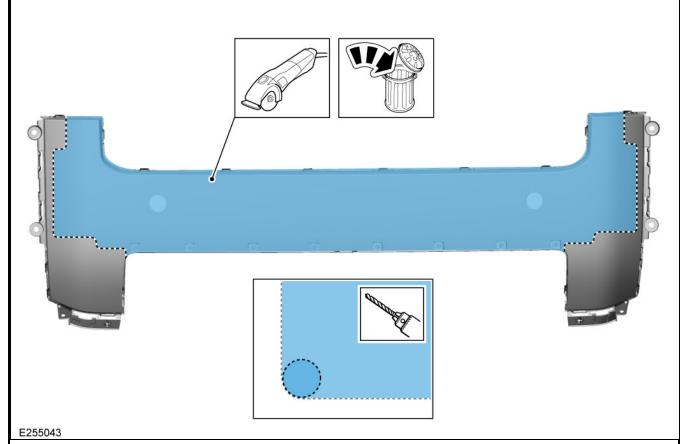
## **WARNING**

Make sure to wear suitable personal protective equipment.

# **CAUTION**

There are multiple cut guide lines on the surface of the part. Make sure the correct cut guide lines are followed as illustrated.

If the vehicle has a satin wrap then this must be removed from the front bumper lower cover.



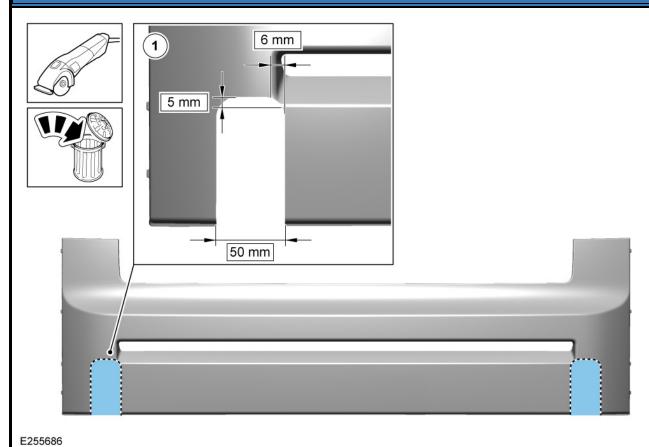
Use suitable tooling to cut the illustrated section from the front bumper lower cover. Discard the removed section.

Use the cut guide lines on the front bumper lower cover.

Use a drill to make corner radiuses along the cut line.

## WARNING

Make sure to wear suitable personal protective equipment.



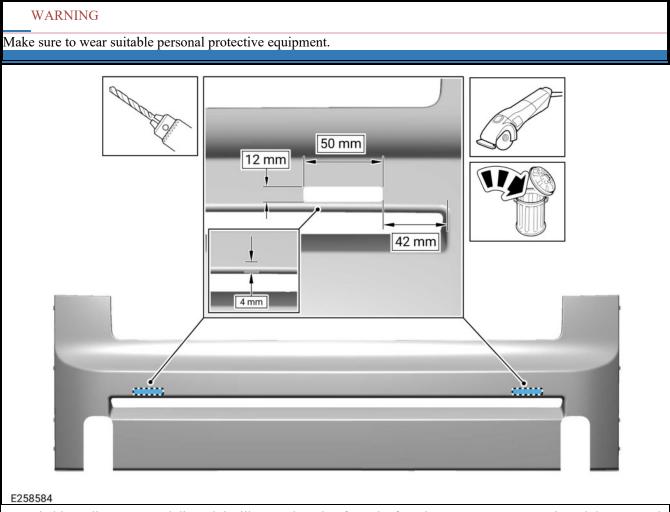
# NOTE

Image looking from front of part.

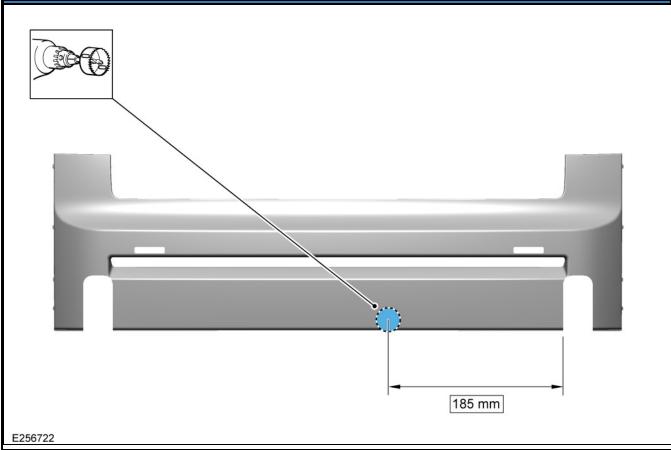
Use suitable tooling to cut the illustrated section from the front bumper upper cover. Discard the removed section.

Using the dimensions provided cut and discard the highlighted sections.

For vehicles equipped with a front proximity camera, cut and discard the highlighted section using a 40 mm hole cutter.



Use suitable tooling to cut and discard the illustrated section from the front bumper upper cover. Discard the removed section.



For vehicles installed with front proximity camera.

Using a suitable cutting tool cut a hole for the front camera cable routing.

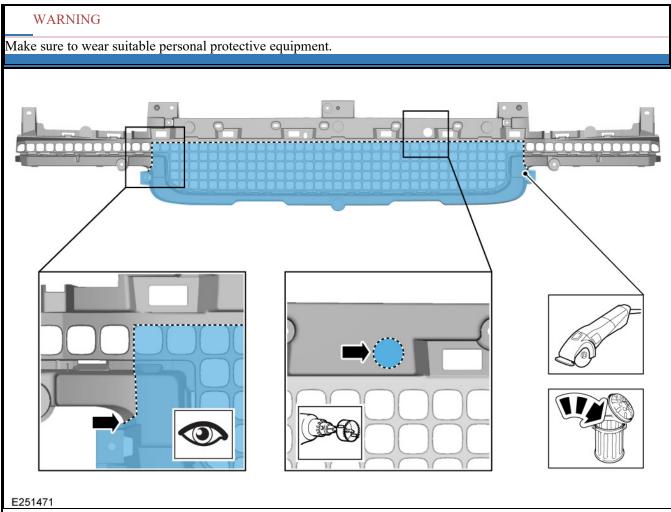


Image looking from front of part.

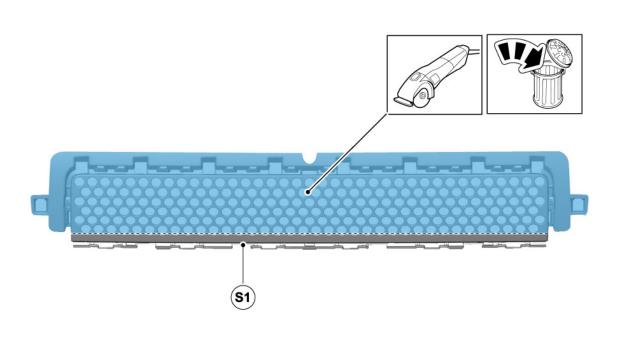
Use suitable tooling to cut the illustrated section from the upper bumper grille. Discard the removed section.

## WARNING

Make sure to wear suitable personal protective equipment.

# **CAUTION**

For Defender-X only vehicles the lower bumper grille (LR129440) must be ordered. Discard the lower bumper grille that was removed from the vehicle.



# E252135

#### NOTE

Lower bumper grille (LR129440) comes in primer and needs to be painted 'Narvik Black'.

Image looking from front of part.

Using a suitable tool cut the illustrated section from the lower bumper grille. Discard the removed section.

Retain part of the lower bumper grille (S1).

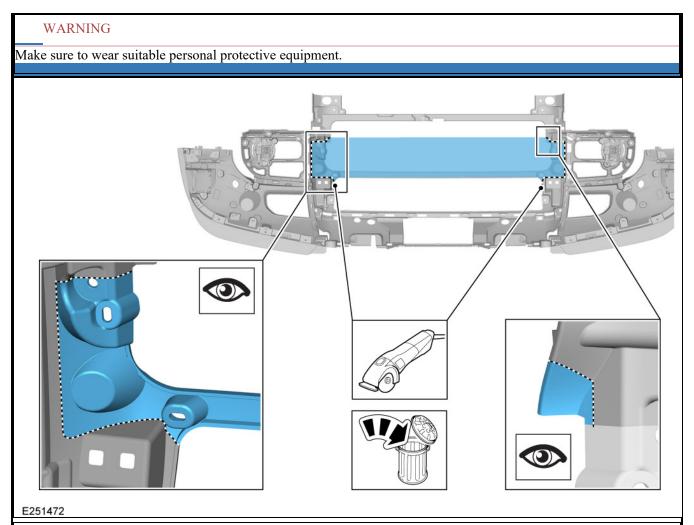
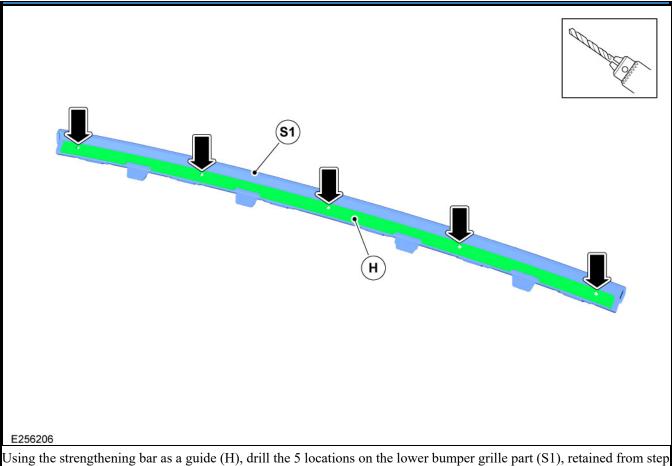
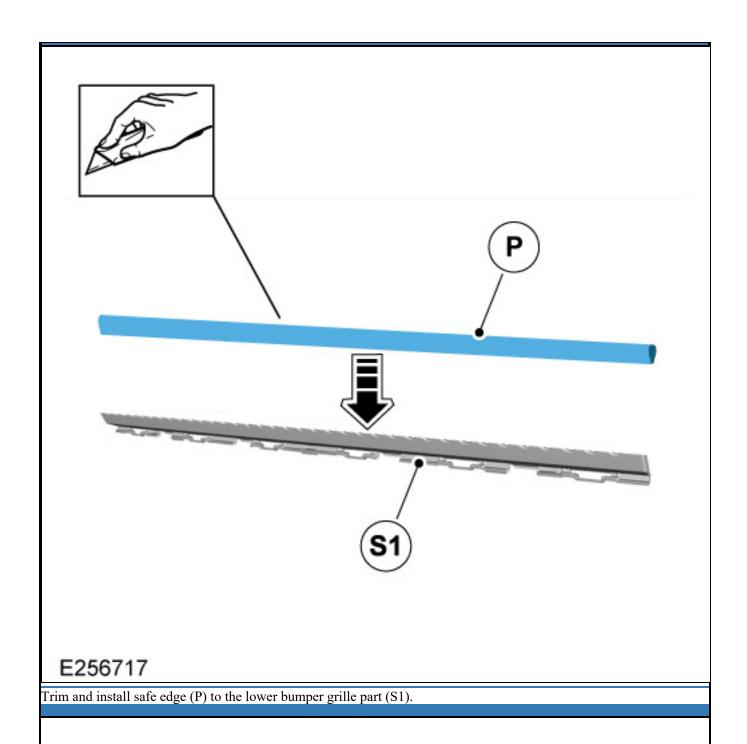


Image looking from rear of part.

Use suitable tooling to cut the illustrated section from the front bumper carrier. Discard the removed section.



Using the strengthening bar as a guide (H), drill the 5 locations on the lower bumper grille part (S1), retained from step 51. Countersink the holes for the screws (K1).



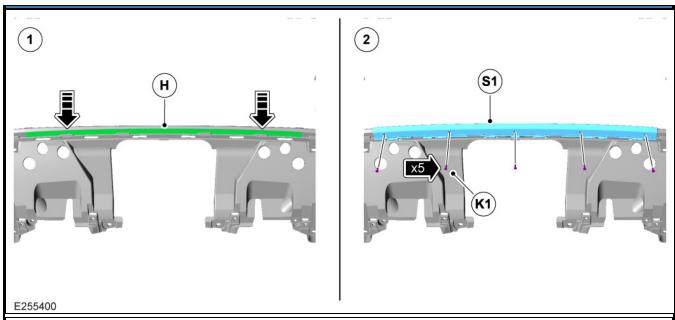
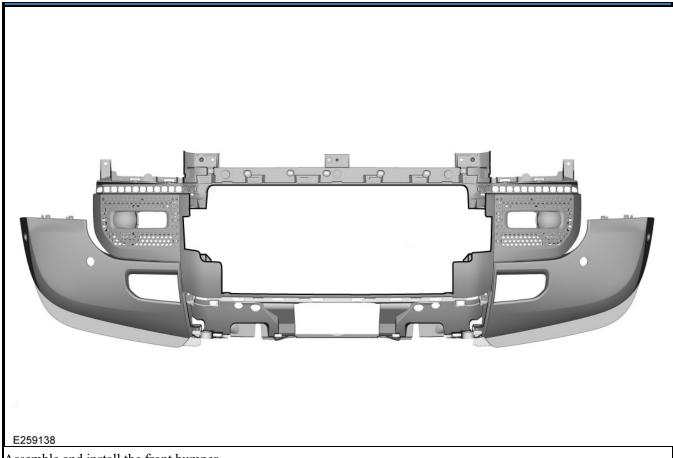


Image looking from underneath part.

Install the strengthening bar (H) to the front bumper carrier.

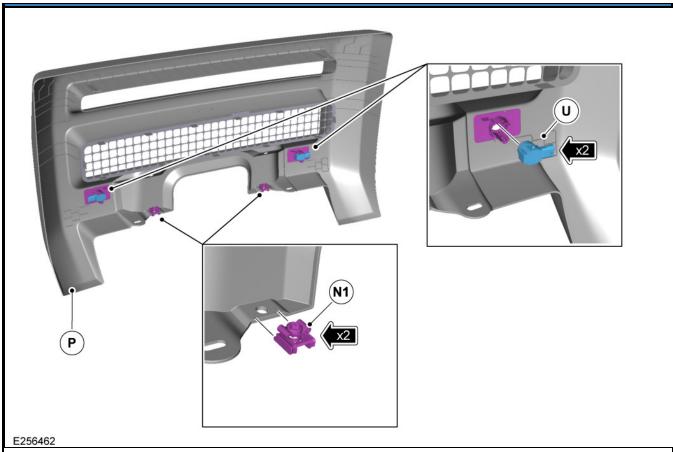
Locate the strengthening bar (H) to the front bumper carrier.

Install the lower bumper grille (S1) over the strengthening bar (H) using the 5 screws (K1).

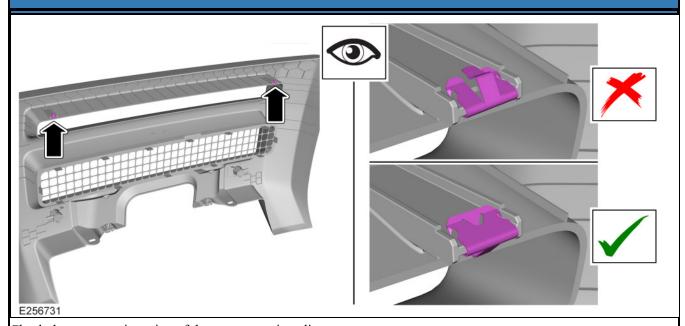


Assemble and install the front bumper.

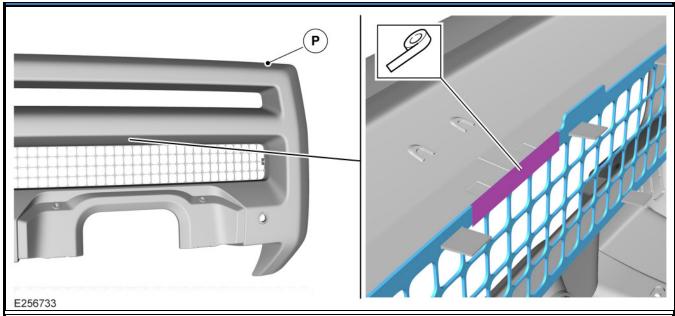
For additional information, please refer to the official Workshop Manual. Front Bumper (501-19 Bumpers)



Install the 2 black parking aid sensors (U) to the parking aid sensor brackets that are part of the winch cover (P). Install the 2 tow eye cover retaining clips (N1).



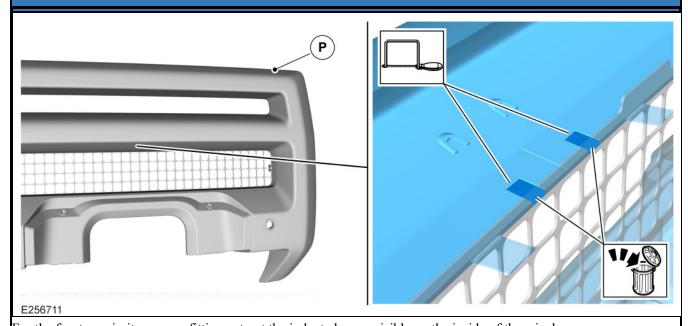
Check the correct orientation of the cover securing clips.



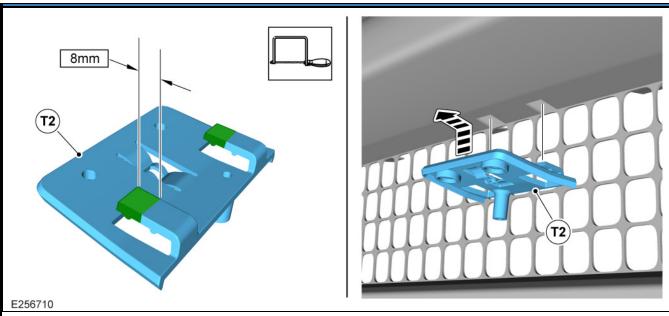
For vehicles equipped with the front proximity camera follow steps 56 to 59.

If the front proximity camera will be installed then the camera mounting kit (VPLEB0437) must be ordered.

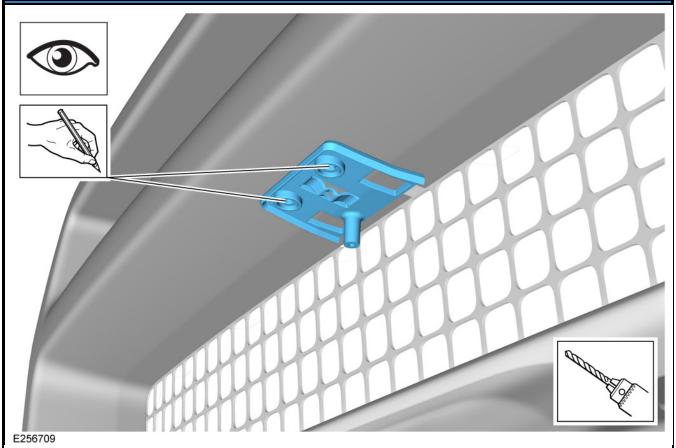
Apply tape in the area shown to protect the grille section when cutting part P in next step.



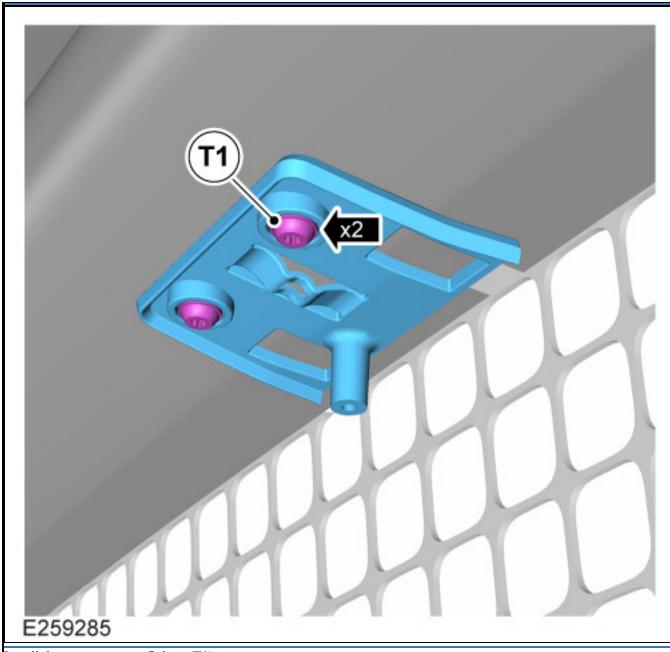
For the front proximity camera fitting cut out the indented areas visible on the inside of the winch cover.



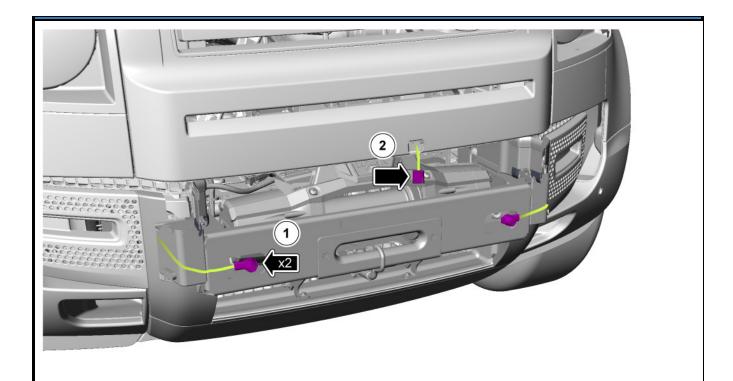
Cut 8 mm from the camera mount (T2) tabs. Install the mount to the winch cover through the cut outs. Make sure to move fully forward.



Mark and drill 2 holes in the winch cover using the camera mount (T2) as a guide.



Install the camera mount fixings (T1).

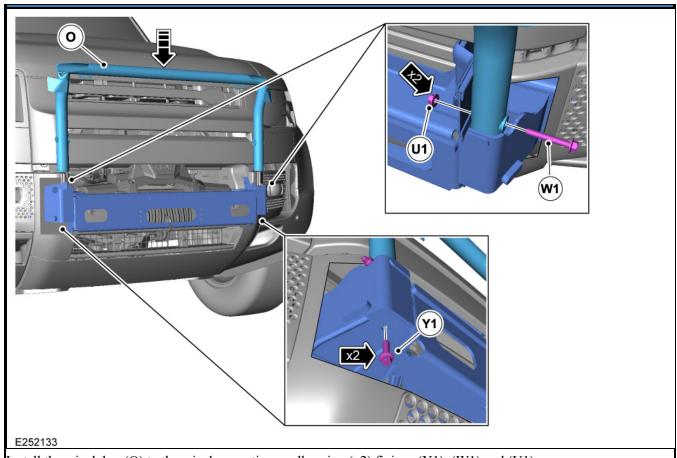


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Locate the 2 front inner parking aid sensor electrical connectors.

Parking aid sensor electrical connectors.

If installed, locate the front proximity camera electrical connector.

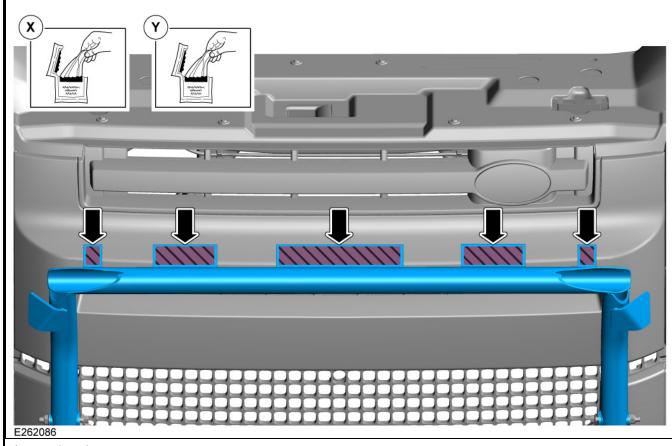


Install the winch bar (O) to the winch mounting cradle using (x2) fixings (Y1), (W1) and (U1).

Torque: 24 Nm

# **CAUTION**

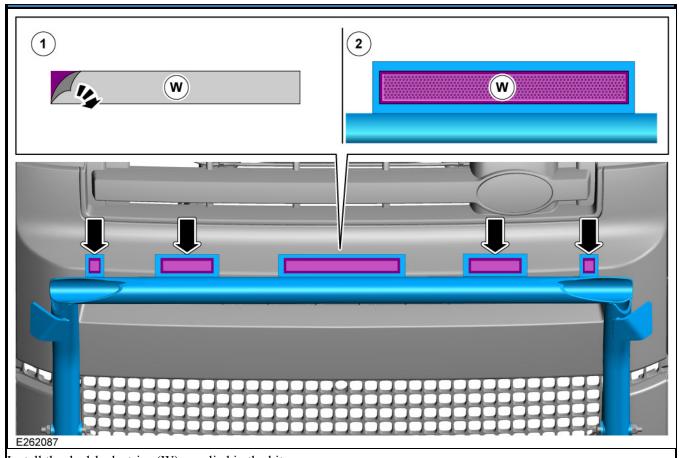
Allow to dry for a minimum of 2 minutes between steps 1 and 2.



Clean and apply promoter.

Using the cleaner (X) supplied in the kit, clean the illustrated areas.

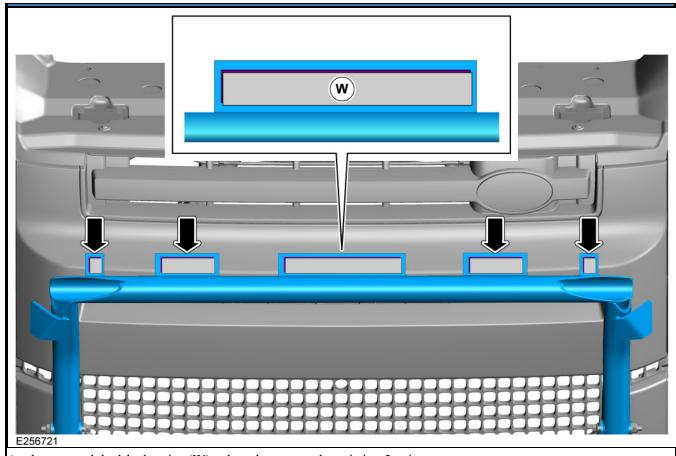
Using the adhesion promoter (Y) supplied in the kit, wipe the illustrated areas.



Install the dual-lock strips (W) supplied in the kit.

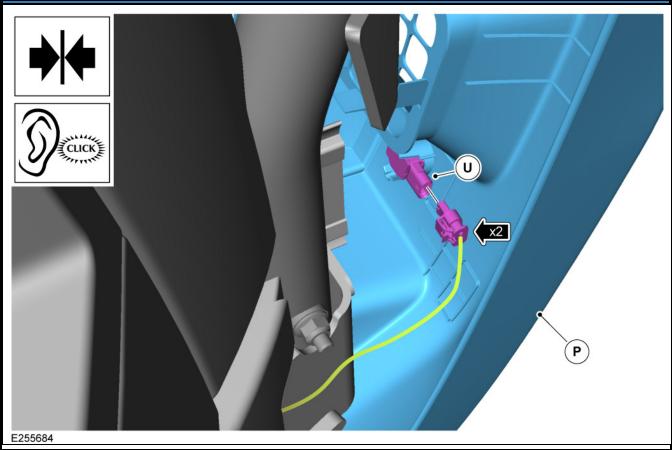
Cut the dual-lock strips (W) to size and peel off the backing from the 5 pieces you have cut.

Apply the cut dual-lock strips (W) to each of the 5 winch bar brackets.



Apply a second dual-lock strips (W) velcro down onto the existing 5 strips.

Position the winch cover (P) close to the front of the vehicle.



This step requires the aid of another technician.

The winch cover (P) must be positioned close to the front of the vehicle to allow the parking aid sensor harnesses to be connected.

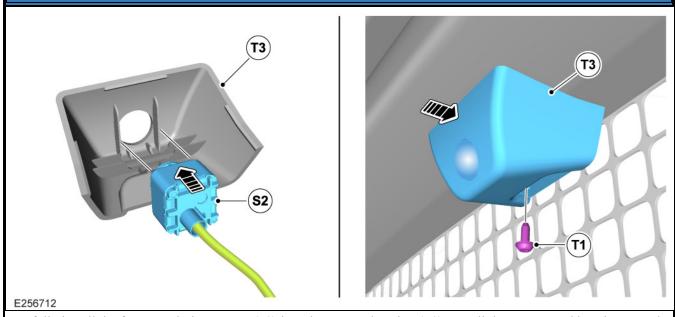
Connect the parking aid sensor harness to the parking aid sensor (U) in the winch cover (P). Complete step on both sides of the winch Cover.

Attach the front proximity camera (S2) to the camera harness.

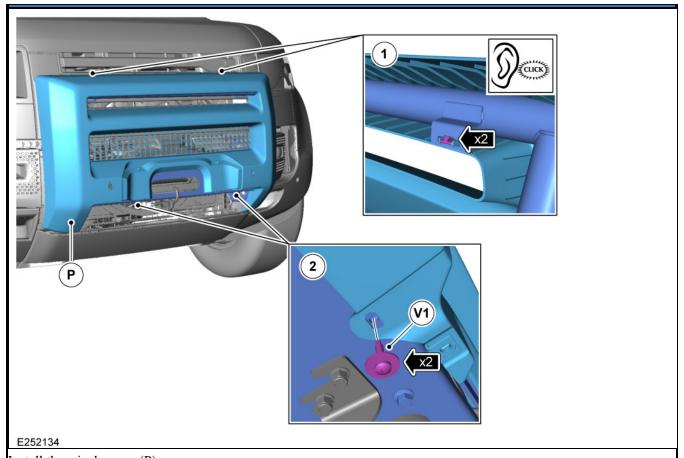
The front proximity camera harness will already have been fed through the grille part of the front bumper.

# **CAUTION**

Take care when handling the camera. Avoid touching the camera lens.



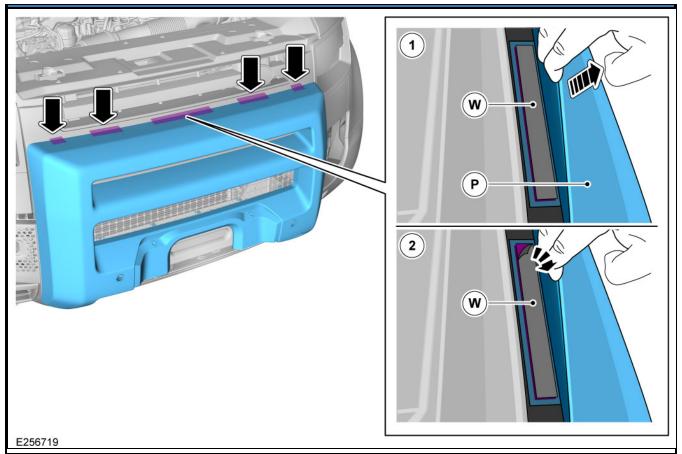
Carefully install the front proximity camera (S2) into the camera housing (T3). Install the camera and housing onto the previously installed bracket (T2). Secure the camera housing to the camera bracket using the screw (T1).



Install the winch cover (P).

Engage (x2) retaining clips.

Install (x2) fixings (T1). Torque: 6 Nm



Make sure winch cover (P) is clean.

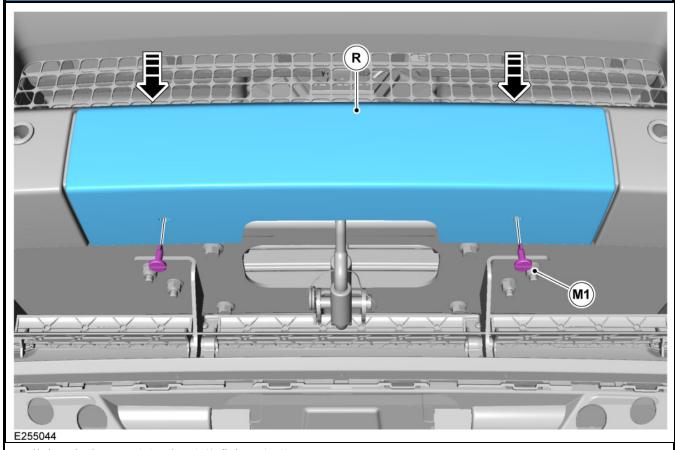
Using the dual-lock strips to secure winch cover (P) to winch bar (O)

Pull up the trailing edge of the winch cover (P) to reveal the dual-lock strips (W) underneath

Peel off the backing from the 5 pieces of dual-lock strips (W) and let the winch cover move back to its natural state. Push down on the winch cover surface for 15 seconds to make sure a good adhesive bond.

# **CAUTION**

Make sure the pins are located correctly along the top edge of the lower winch cover.



Install the winch cover (R) using (x2) fixings (M1).

## **CAUTION**

Make sure the license plate plinth is installed correctly and is not distorted.

## **NOTE**

Complete step only if required.

For China market vehicles do not complete this step. Proceed to step 75.

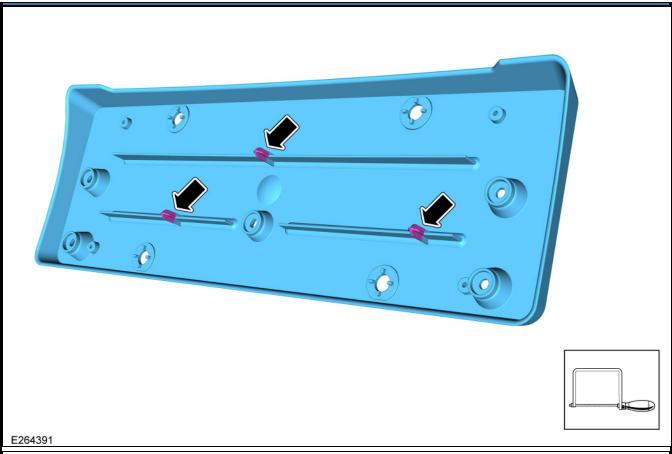
Install the license plate plinth.

Install the license plate to the license plate plinth.

#### NOTE

Complete step only for China market vehicles.

Complete steps 76 to 79 if installing the license plate plinth to China market vehicles.



Complete step only for China market vehicles.

Remove the 3 location pins from the license plate plinth as illustrated.

# NOTE

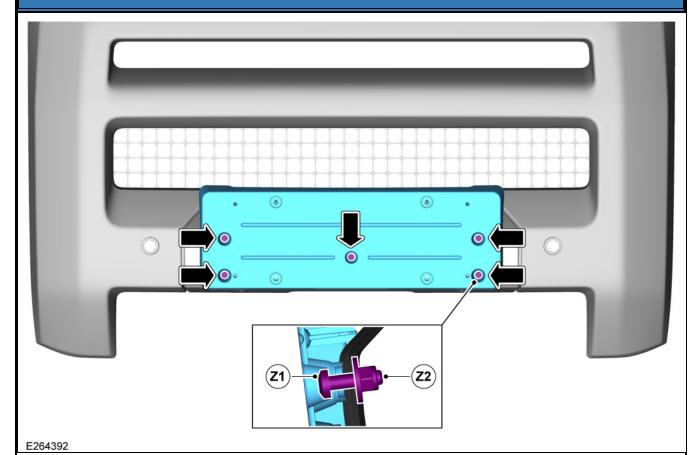
Complete step only for China market vehicles.

Attach the supplied template (Z) against the winch cover and secure in position using tape.

## **CAUTION**

Make sure the license plate plinth is installed correctly and is not distorted.

The China license plate plinth must be installed rotated 180 degrees.



# NOTE

Complete step only for China market vehicles.

Install the China license plate plinth to the winch cover as illustrated.

Drill 5 holes in the winch cover at the locations defined by the template. 6mm drill bit.

Remove the template.

Locate the license plate plinth, rotated 180 degrees, against the winch cover. Make sure all the holes in the license plate plinth align with the holes in the winch cover.

Install the license plate plinth to the winch cover using (x5) fixings (Z1) and (Z2).

Install the license plate to the license plate plinth.