

REPLACEMENT : INNER SILL ASSEMBLY

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

CAUTION : The number of spot welds necessary for the assembly of a new part must be identical to the number of spot welds fixing the original part.

1. Additional operations

Release the wiring harnesses.

Protect the interior of the passenger compartment.

Replace ⓘ : Sill web ⓘ .

2. Identification of replacement parts

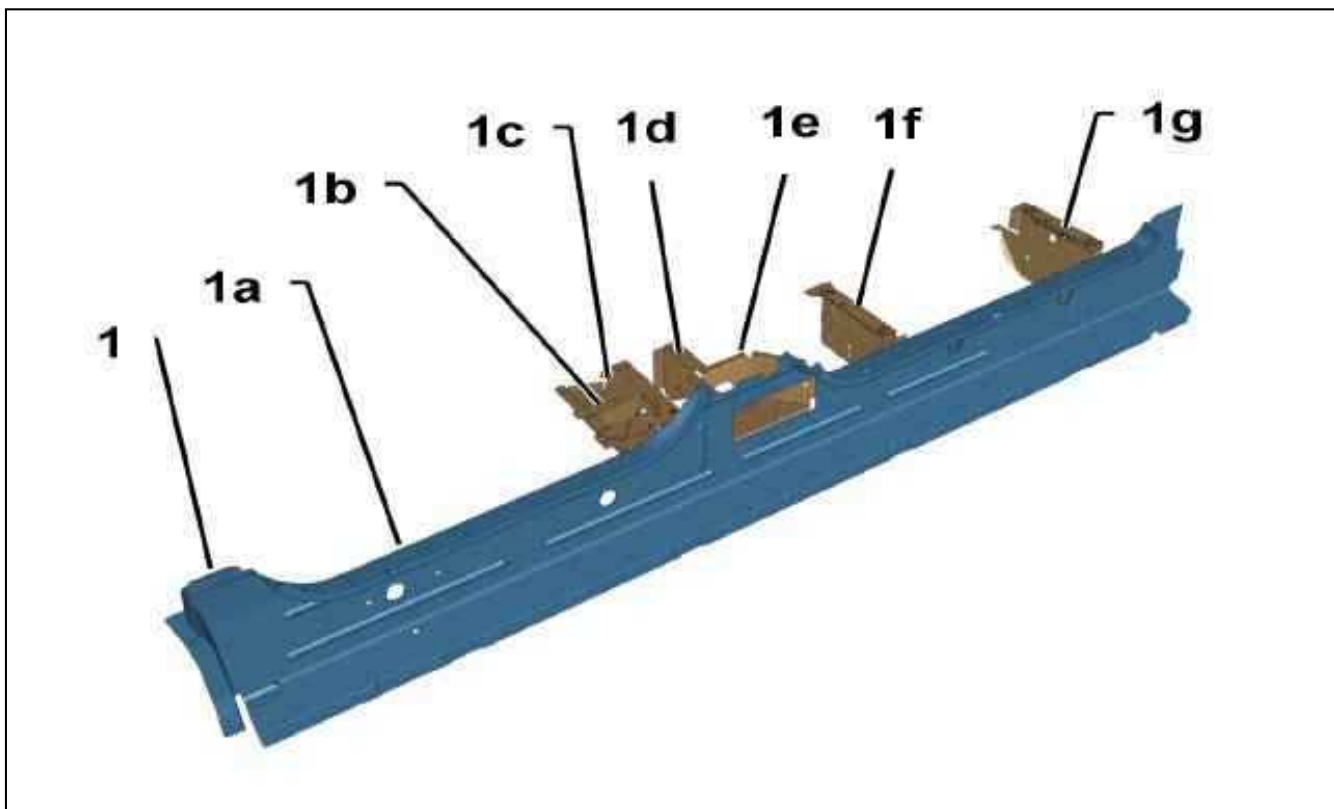


Figure : C4CP2N7D

Reference	Designation	Thickness	Nature/classification
-----------	-------------	-----------	-----------------------

(1)	Inner sill assembly		
(1a)	Inner sill	1,17 mm	HLE (**)
(1b)	Brake pipe support	1,17 mm	ADX (*)
(1c)	Seat base mounting outer strengthener	1,17 mm	HLE (**)
(1d)	Sliding door exterior half-casing support	1,17 mm	ADX (*)
(1e)	Sliding side door lower rail inner half-unit	0,77 mm	HLE (**)
(1f)	Front seat base cross member end piece	1,17 mm	ADX (*)
(1g)	Intermediate seat crossmember end piece	1,47 mm	ADX (*)
(*) ADX : soft steel- (**) HLE : high-strength steel			

3. Cutting out

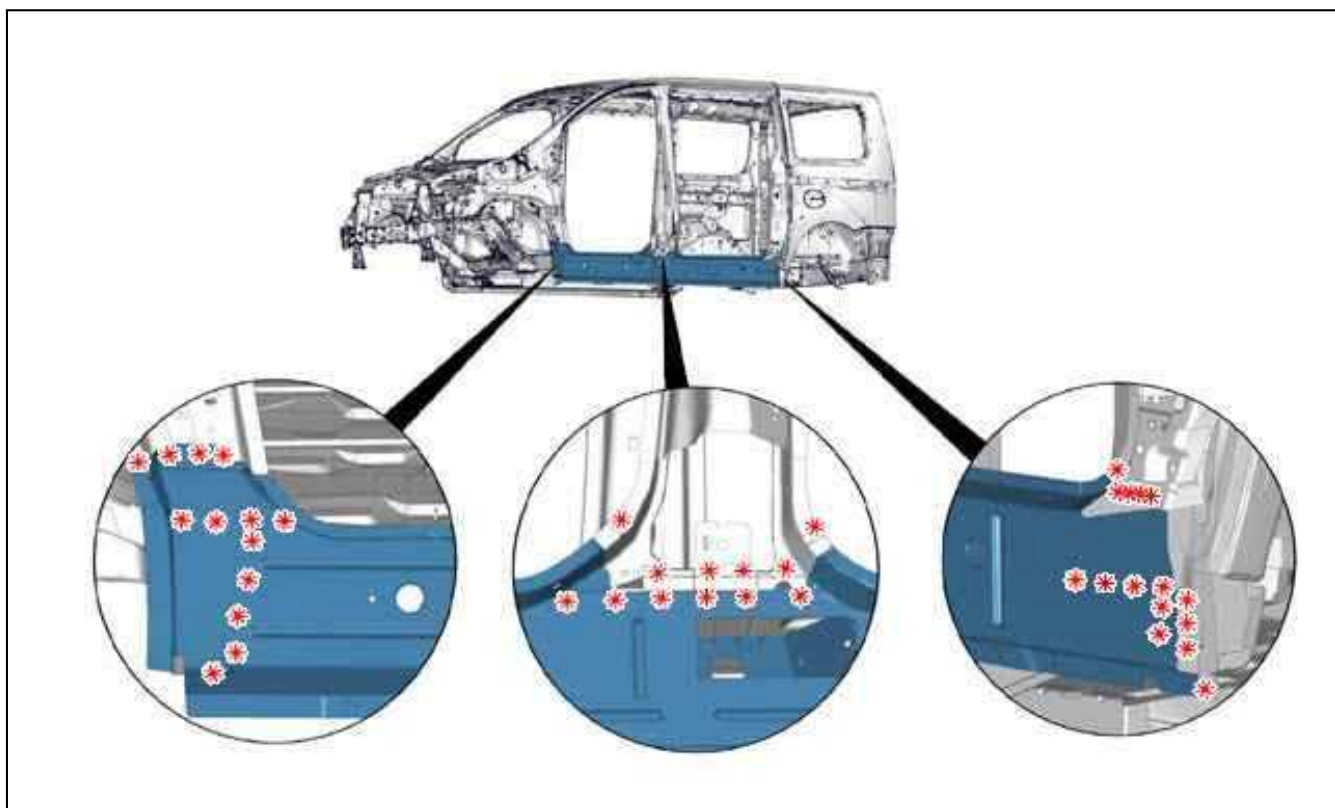


Figure : C4CP2N8D

Cut out the spot welds .

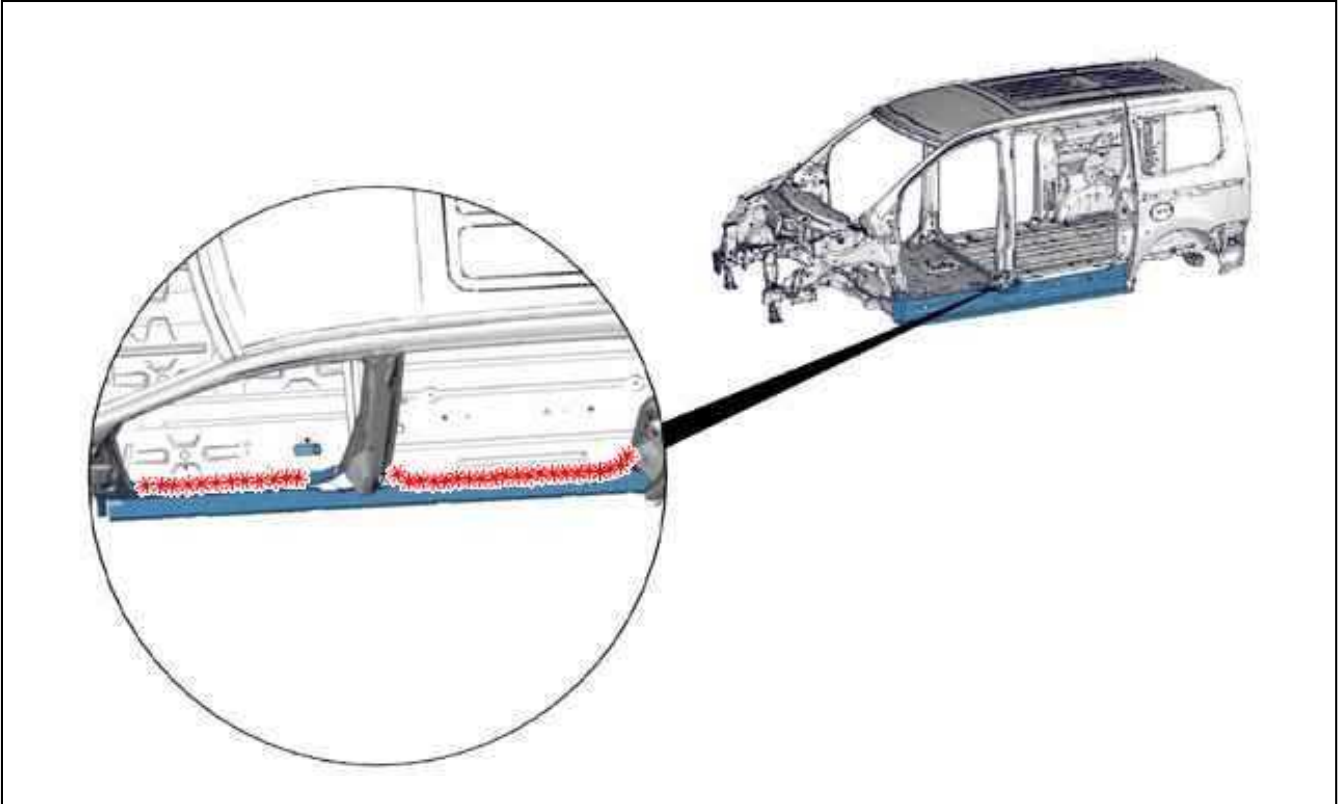


Figure : C4CP2N9D

Cut out the spot welds .

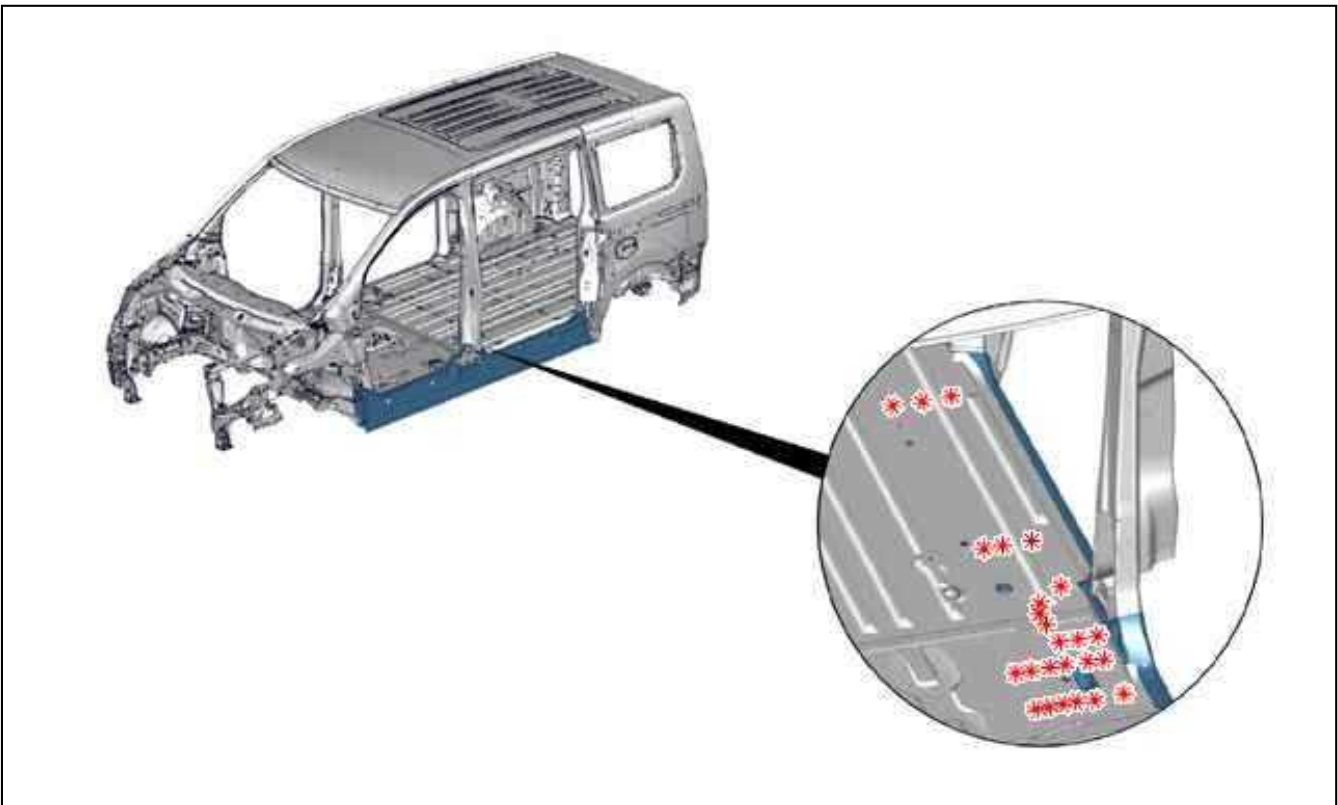


Figure : C4CP2NAD

Cut out the spot welds ; Using a mill of Ø 8 mm.

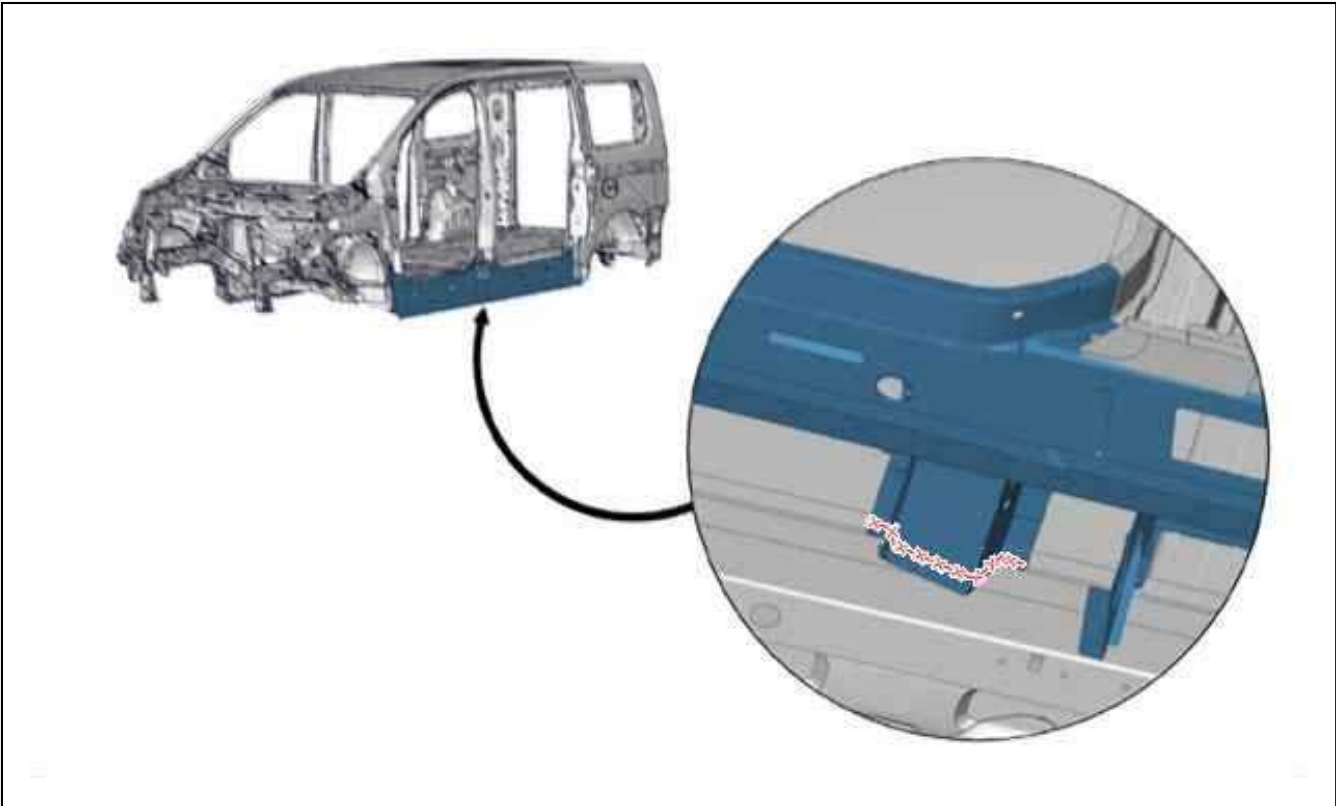


Figure : C4CP2NBD

Mark then cut.
Remove the sill part assembly core.

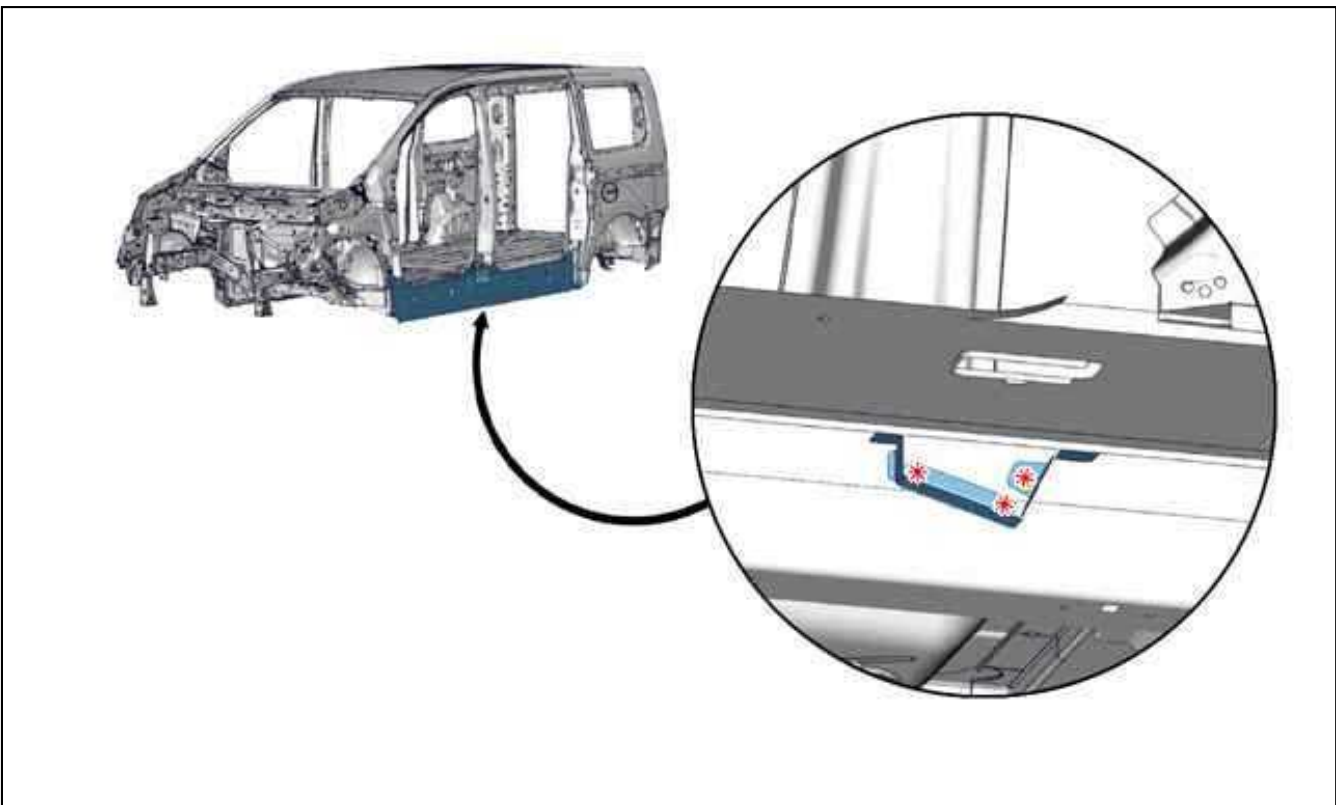


Figure : C4CP2NCD

Cut out the spot welds .

Remove the sill assembly core .

4. Bodywork cleaning and preparation

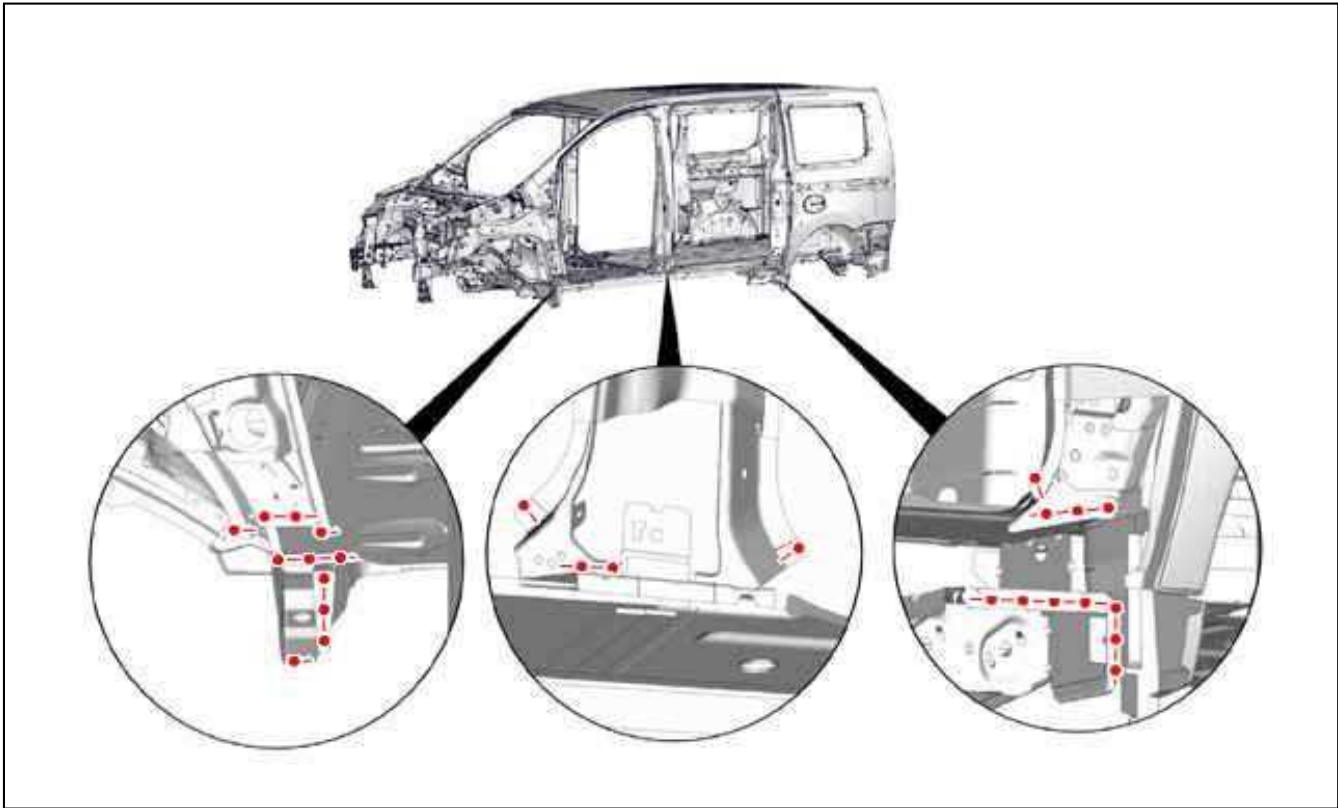


Figure : C4CP2NDD

Prepare the mating edges and protect them using a weldable primer .

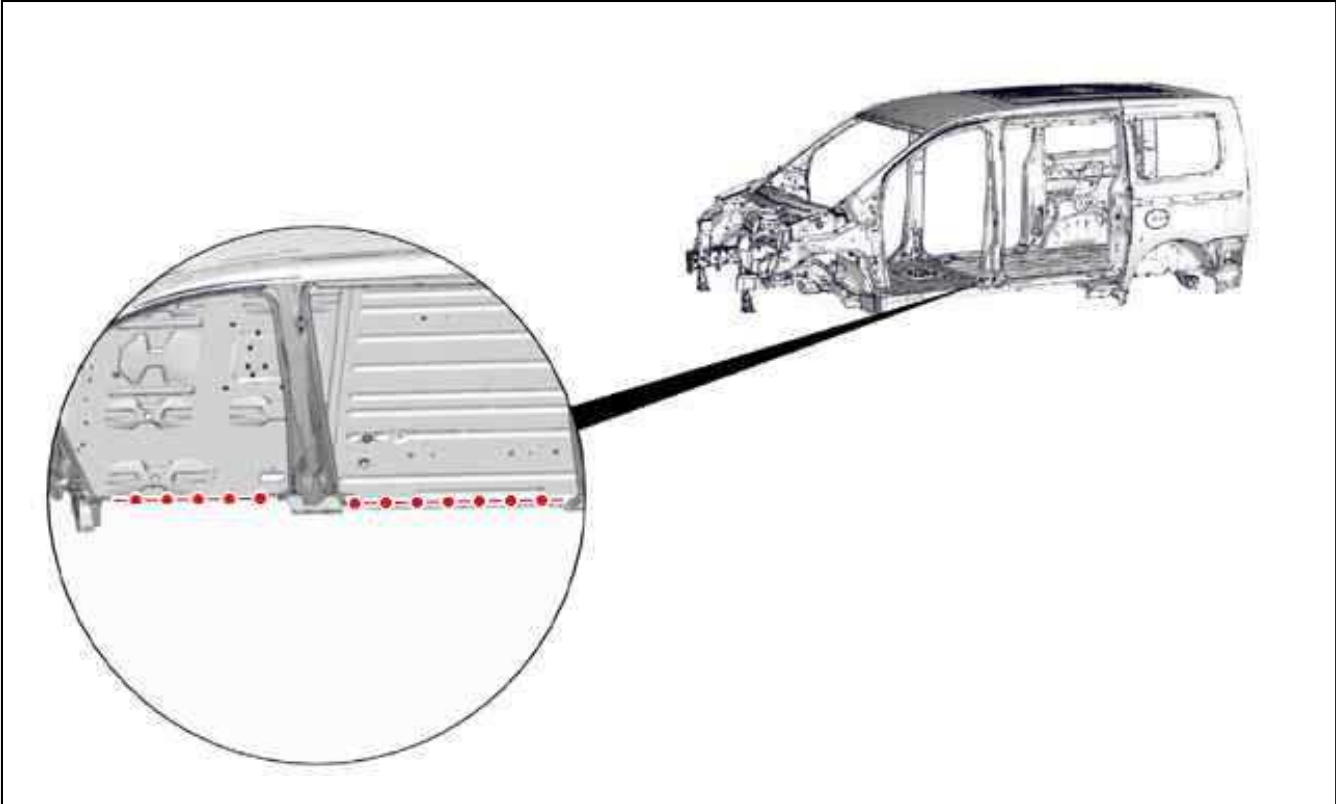


Figure : C4CP2NED

Prepare the mating edges and protect them using a weldable primer .

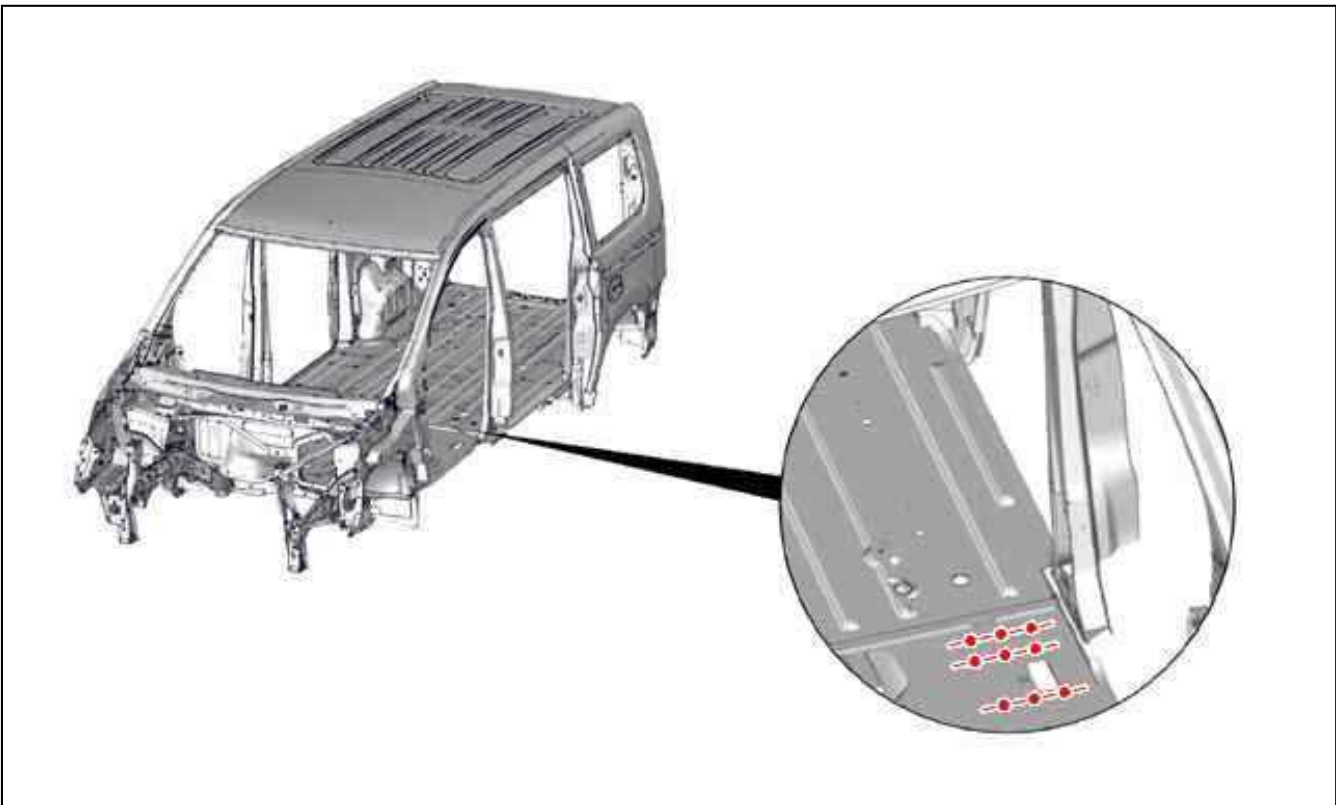


Figure : C4CP2NFD

Prepare the mating edges and protect them using a weldable primer .

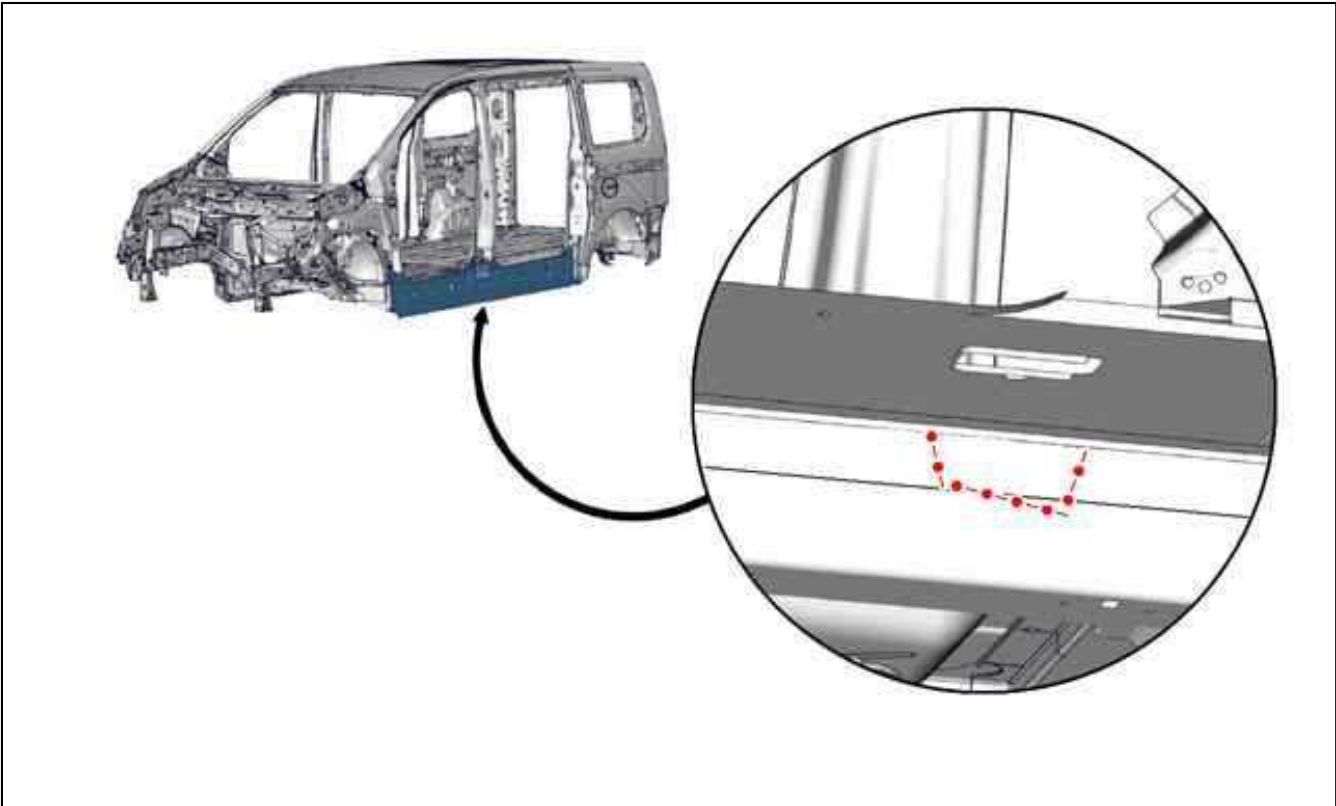


Figure : C4CP2NGD

Prepare the mating edges and protect them using a weldable primer .

5. Adjustment

Position the inner sill assembly .
Check the fits and clearances.

6. Welding

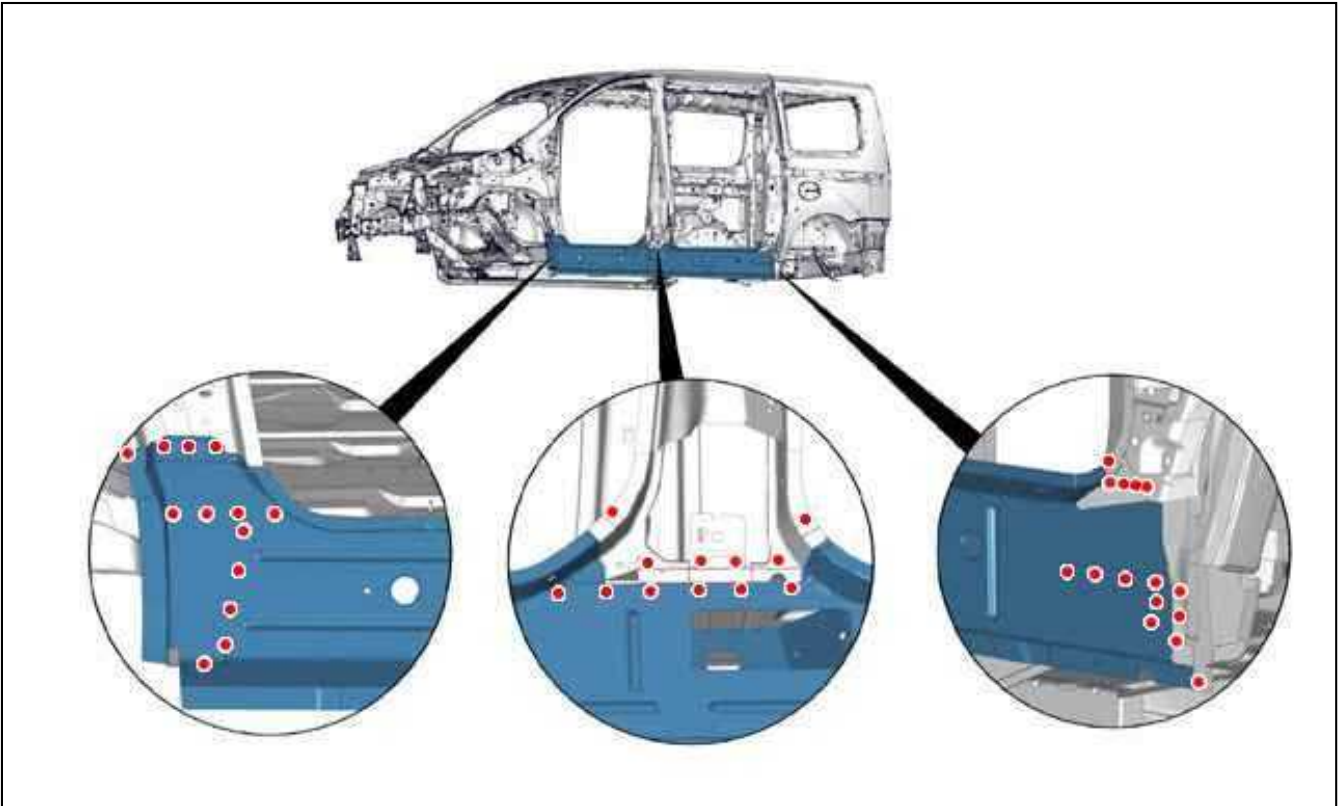


Figure : C4CP2NHD

Electric spot welding.

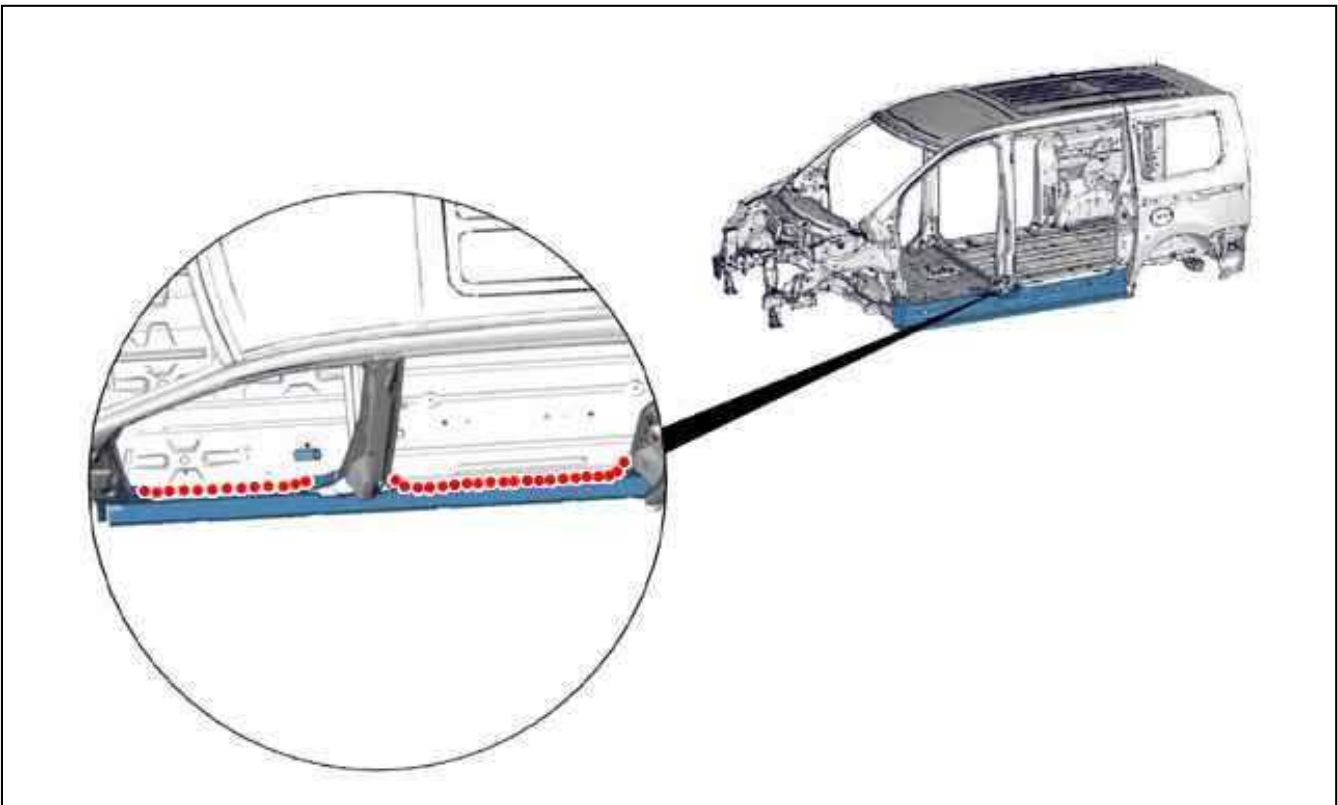


Figure : C4CP2NJD

Electric spot welding.

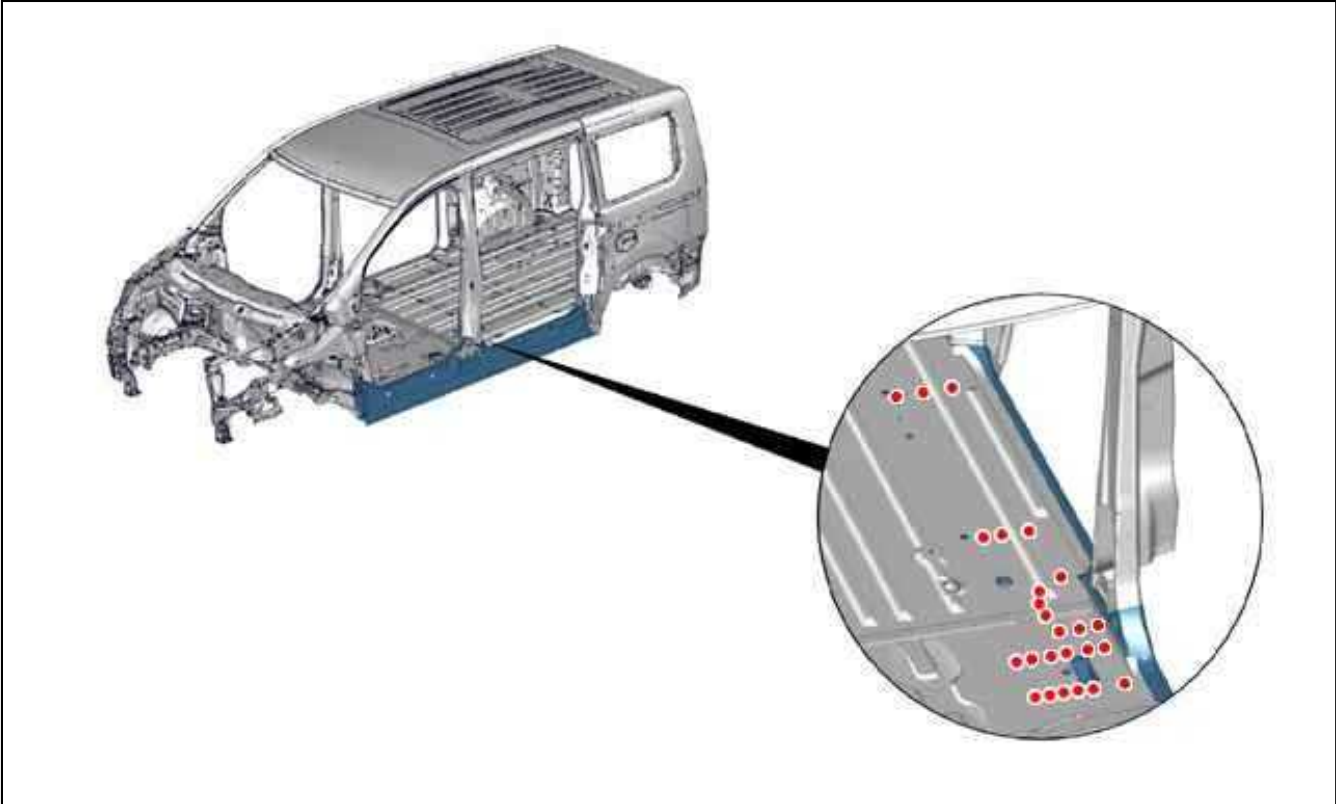


Figure : C4CP2NKD

Weld with MAG plug welds.

Grind the MAG plug welds.

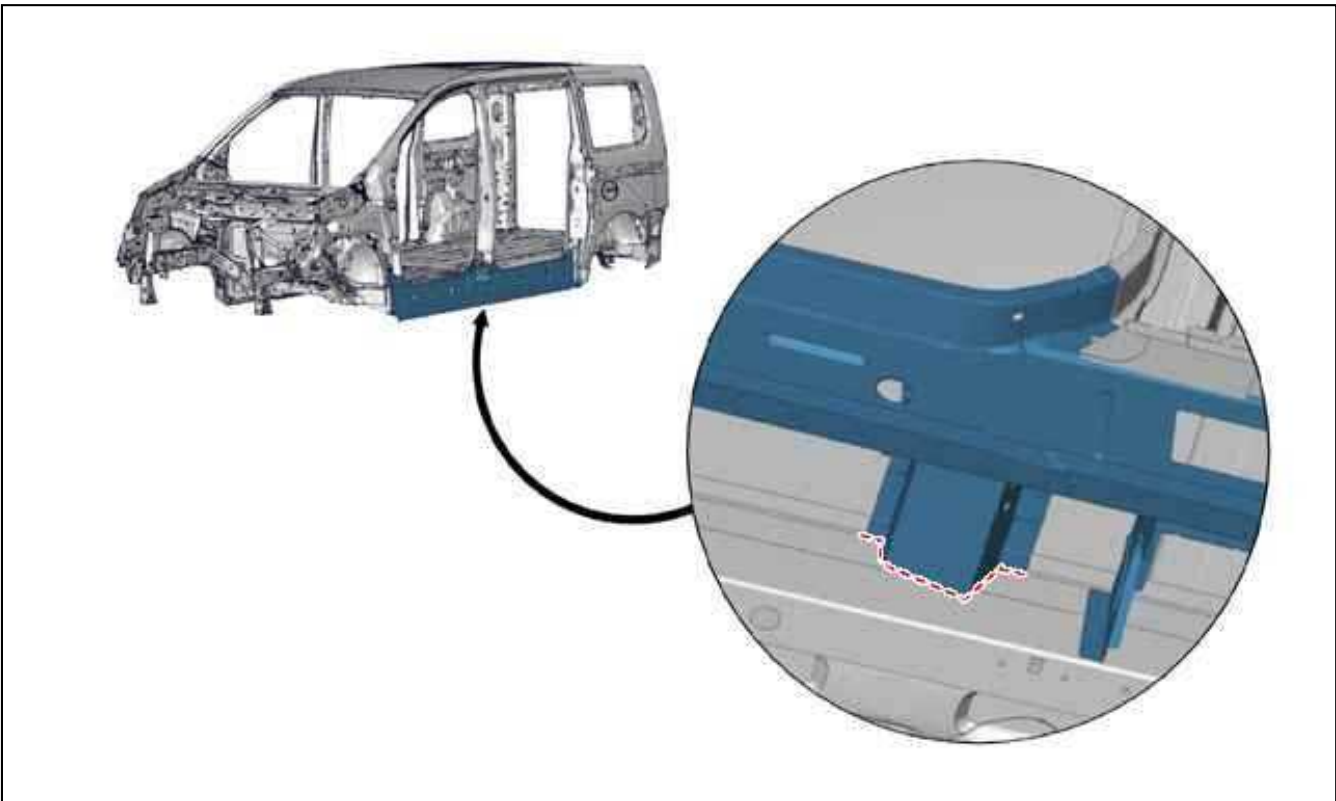


Figure : C4CP2NLD

MAG weld with beads in succession.

7. Sealing protection

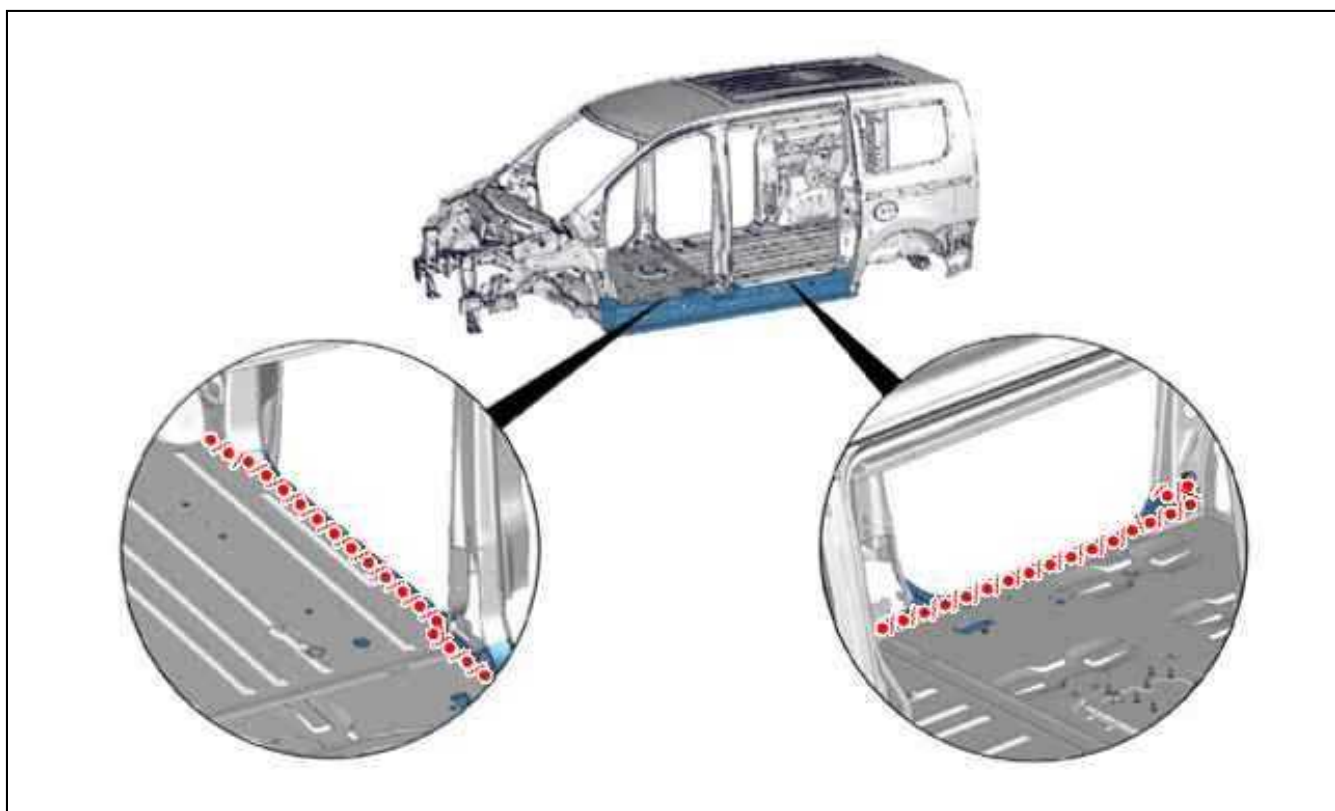


Figure : C4CP2NMD

Apply a phosphate-print layer to the zones laid bare.

Apply a sealing mastic of type "A1".

Spray liquid wax into the hollow sections "C5".

8. Reinitialisation

Carry out the additional operations.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ.

REPLACEMENT : FRONT PILLAR ASSEMBLY(PARTIAL)

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

1. Additional operations

Disconnect the battery.

Remove - refit :

- The front bumper
- The scuttle grille
- Headlamp
- The front wing
- The bonnet
- The front door
- The fascia
- The windscreen

Detrim-retrim :

- The bulkhead
- The front floor panel (partly)

Release the wiring harnesses.

Protect the interior of the passenger compartment.

Replace: **Passenger compartment side front strengthener** ⓘ .

2. Information

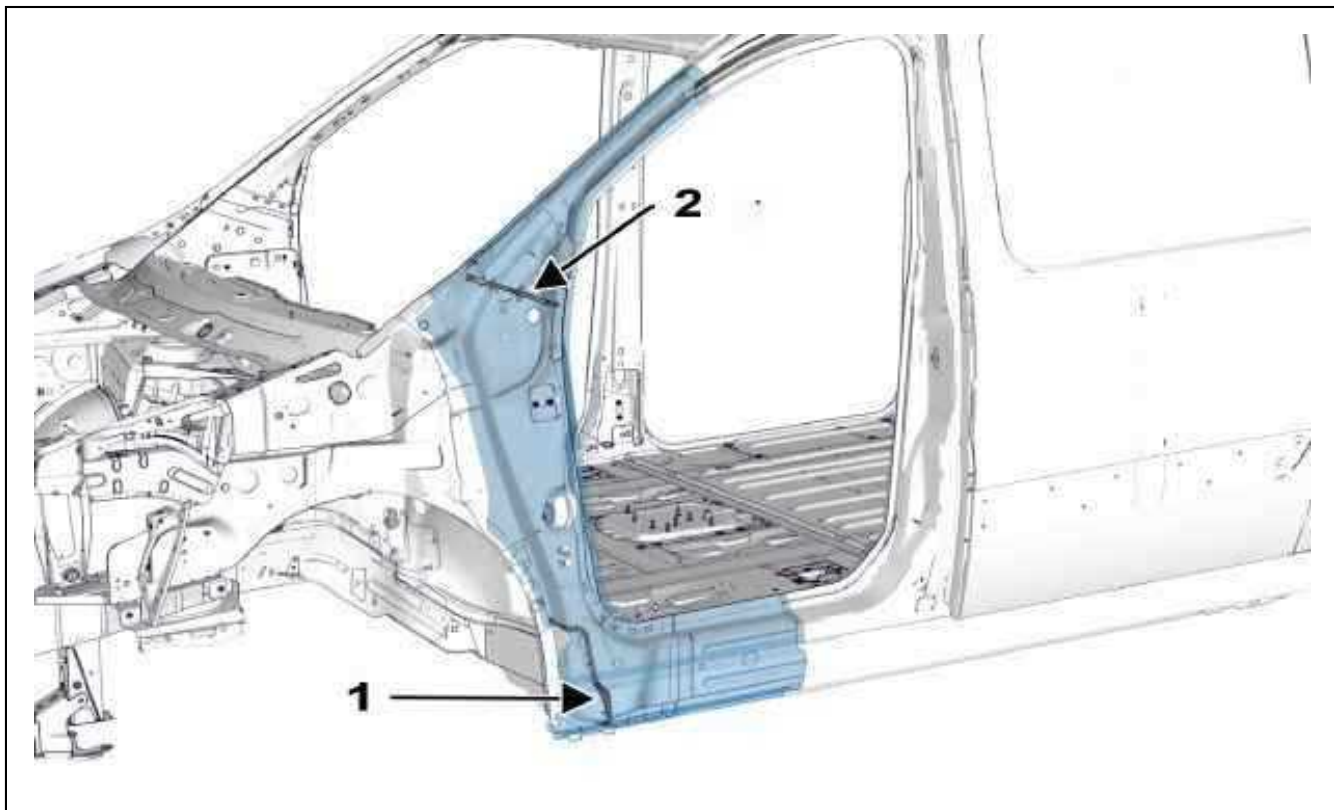


Figure : C4CM02CD

Reference	Designation
(1)	Front pillar lower strengthener expanding insert
(2)	Front pillar upper strengthener exterior expanding insert

Cut-away possibilities on the body side ⓘ .

CAUTION : To avoid damaging the expanding inserts, cutting zones near an expanding insert must be applied at a safety distance of more than 30 mm.

3. Identification of the replacement parts

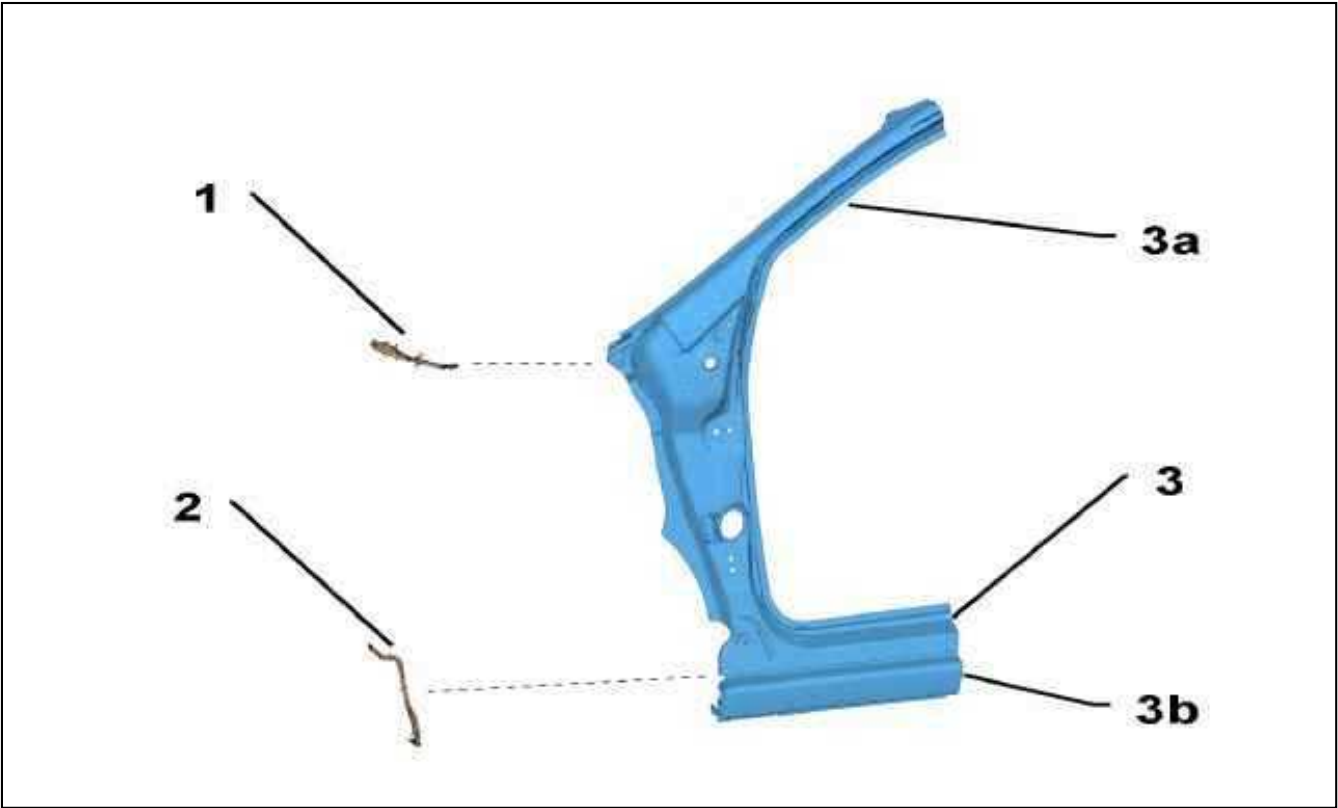


Figure : C4CM02DD

Reference	Designation
(1)	Front pillar upper strengthener exterior expanding insert
(2)	Front pillar lower strengthener expanding insert

Reference	Designation	Thickness (mm)	Nature/classification
(3)	Front pillar assembly		
(3a)	Body side front part	0,97	ADX (*)
(3b)	Outer sill	0,97	ADX (*)
(*) ADX : soft steel			

4. Replacement part preparation

cardiagn.com

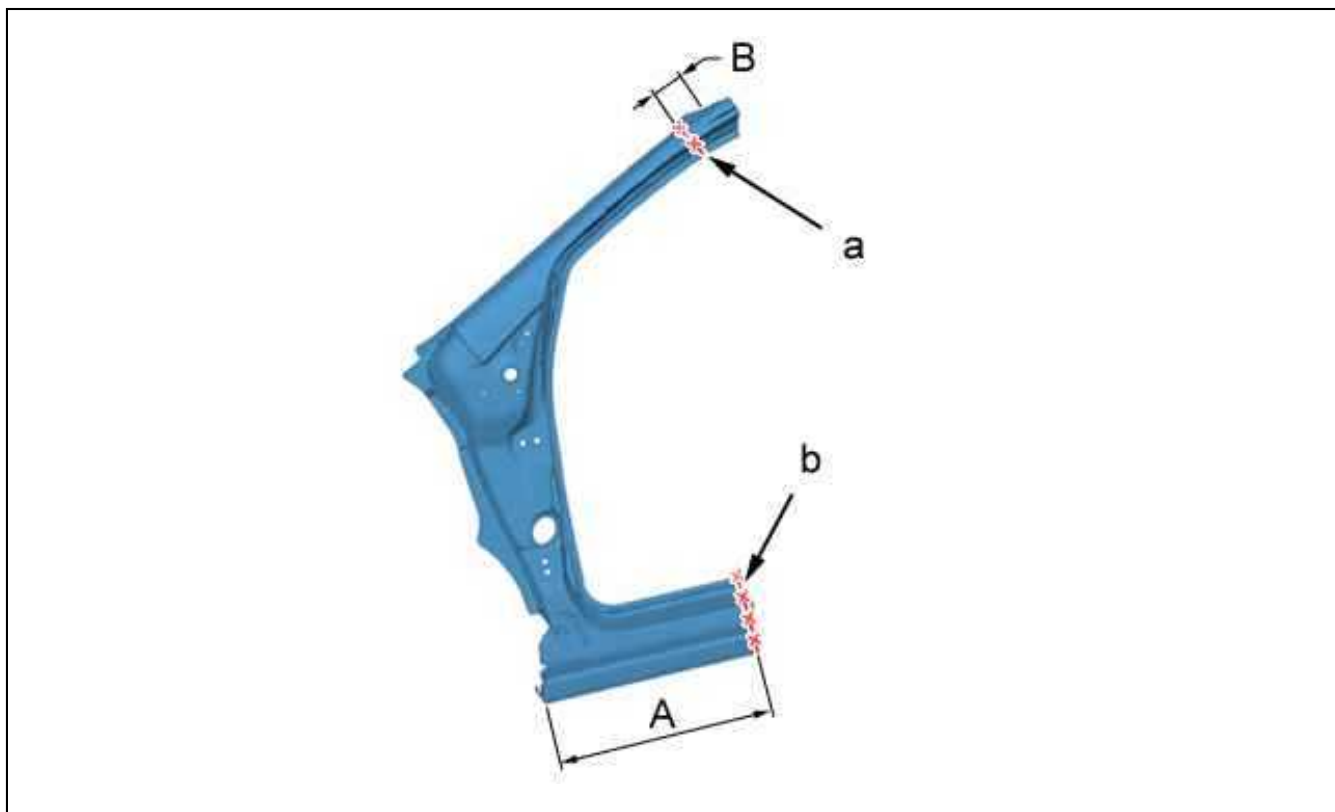


Figure : C4CM02ED

Mark then cut(as "a", "b") (Final cuts).

N.B. : The cutting lines "a","b" are indicated as an example only ⓘ . The dimensions vary depending on the different cases of replacement of the front pillar. The safety distances near the inflating inserts alone remain valid.

Prepare the mating edges and protect them using a weldable primer .



Figure : C4CM02FD

Drill 6,5 mm holes for later plug welding.

Prepare the mating edges and protect them using a weldable primer .

5. Cutting out

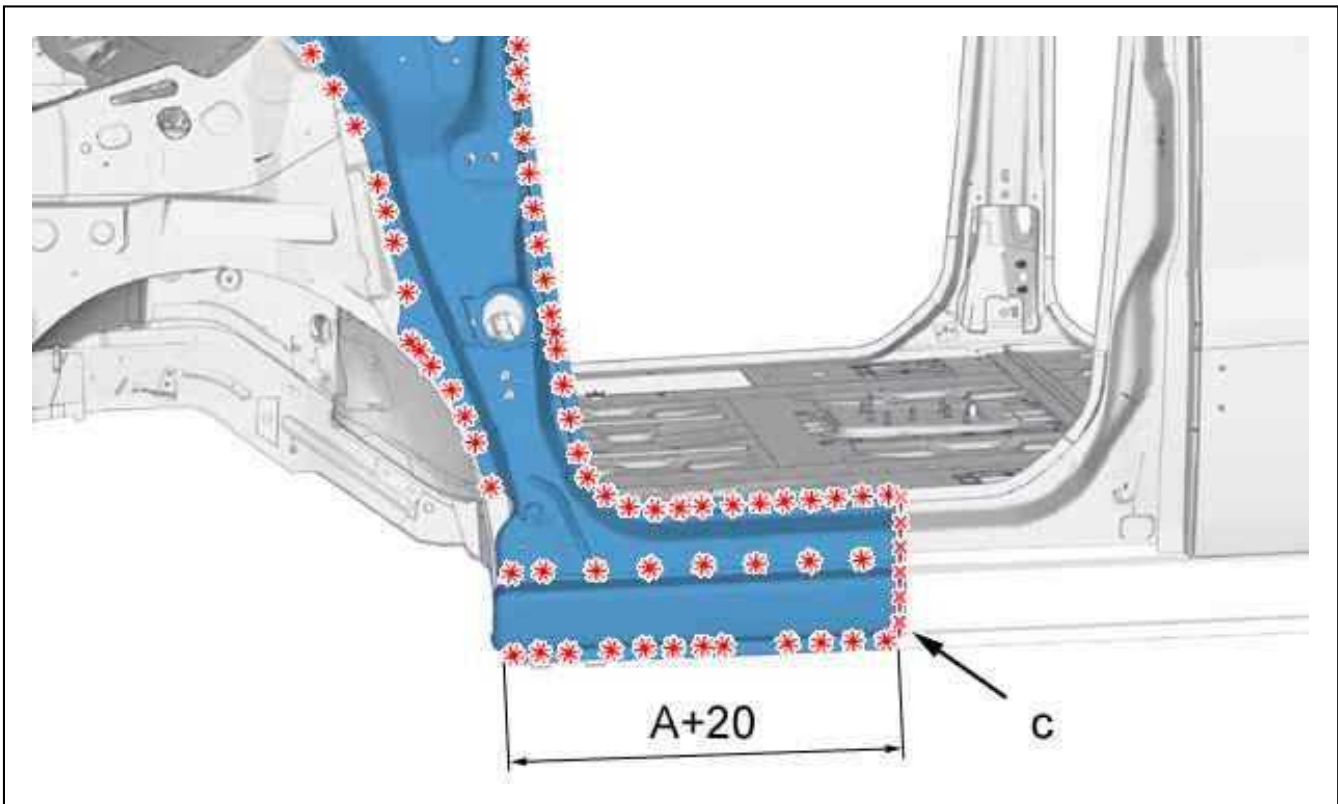


Figure : C4CM02GD

Cut out the spot welds .
Mark then cut (as "c") (temporary cuttings).

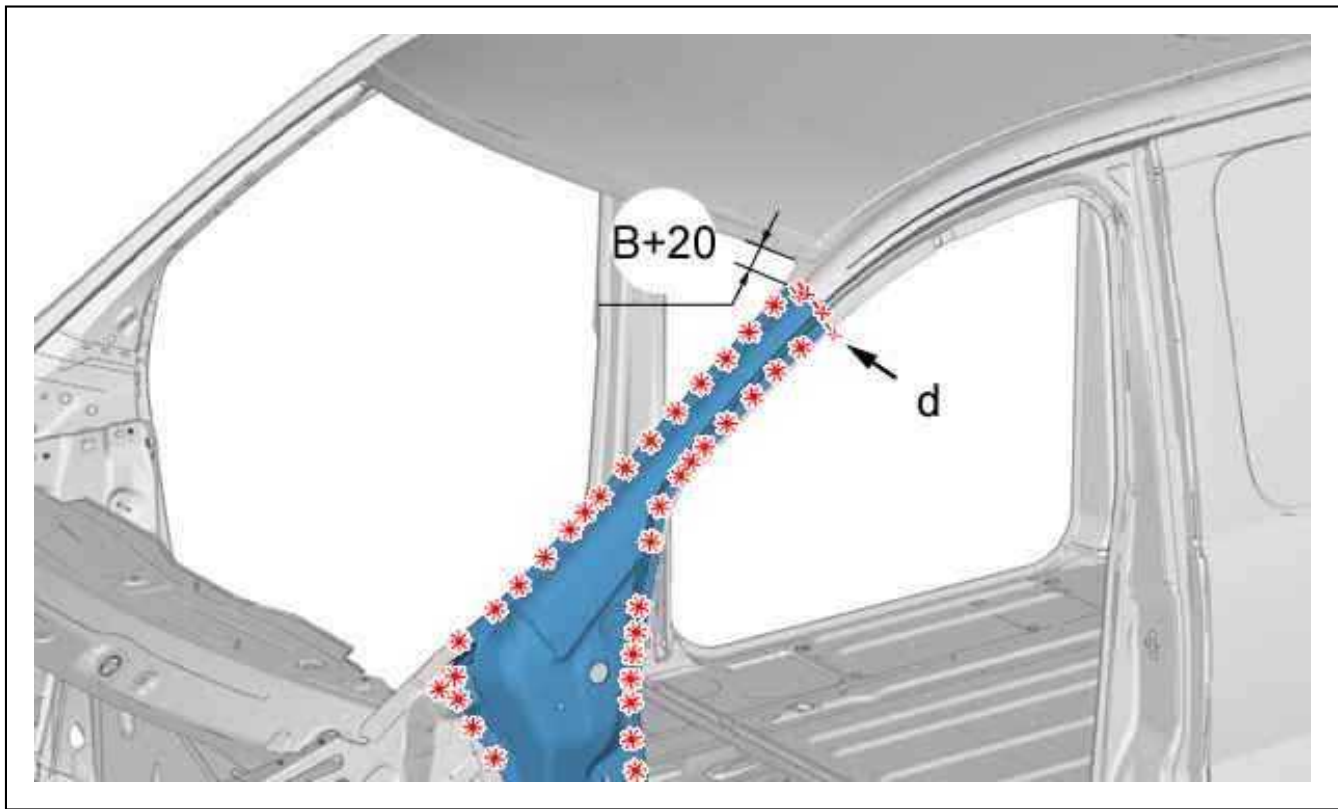


Figure : C4CM02HD

Cut out the spot welds .
Mark then cut(as "d") (temporary cuttings).
Remove the front pillar .

6. Bodywork cleaning and preparation

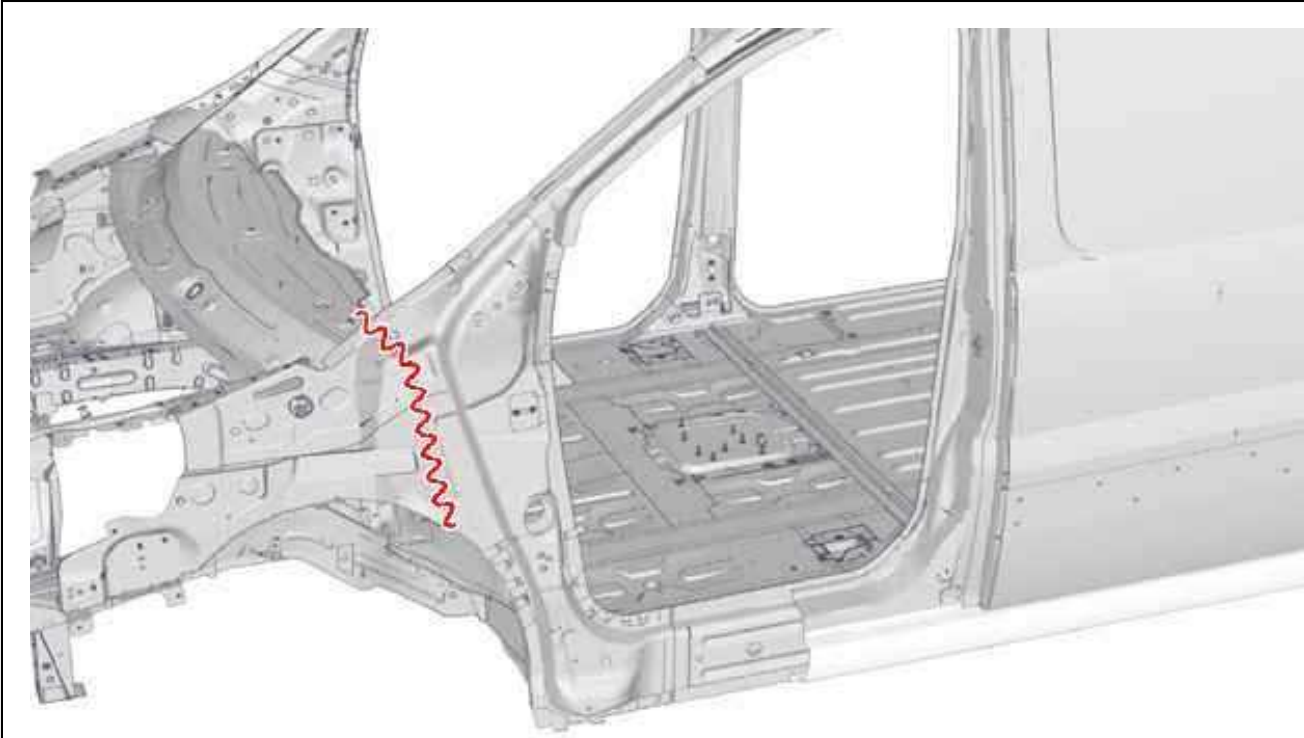


Figure : C4CM02JD

Prepare the mating edges and protect them using a weldable primer .
Apply a filling adhesive "A2".

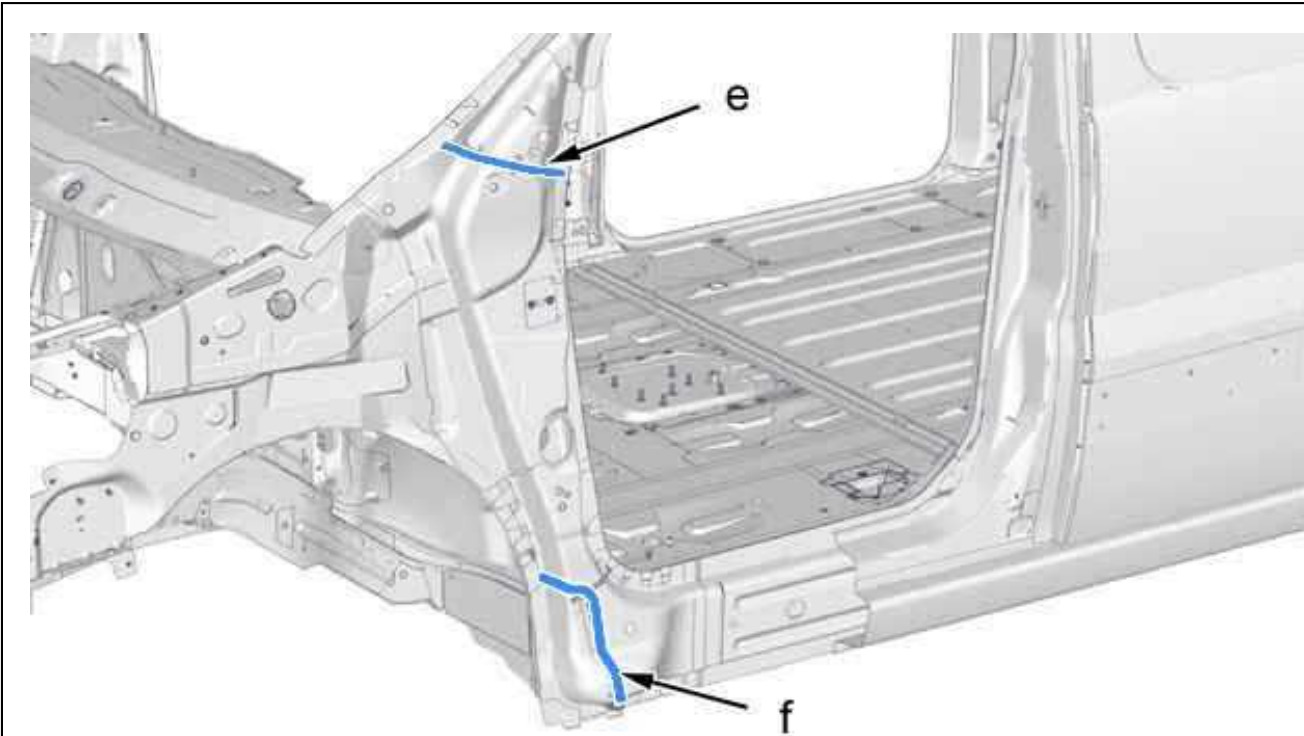


Figure : C4CM02KD

Fit the inflating insert ⓘ .

7. Adjustment

Position: The front pillar assembly.

Check the fit.

Adjust the cut lines(as "e", "f") (final cuts).

8. Welding

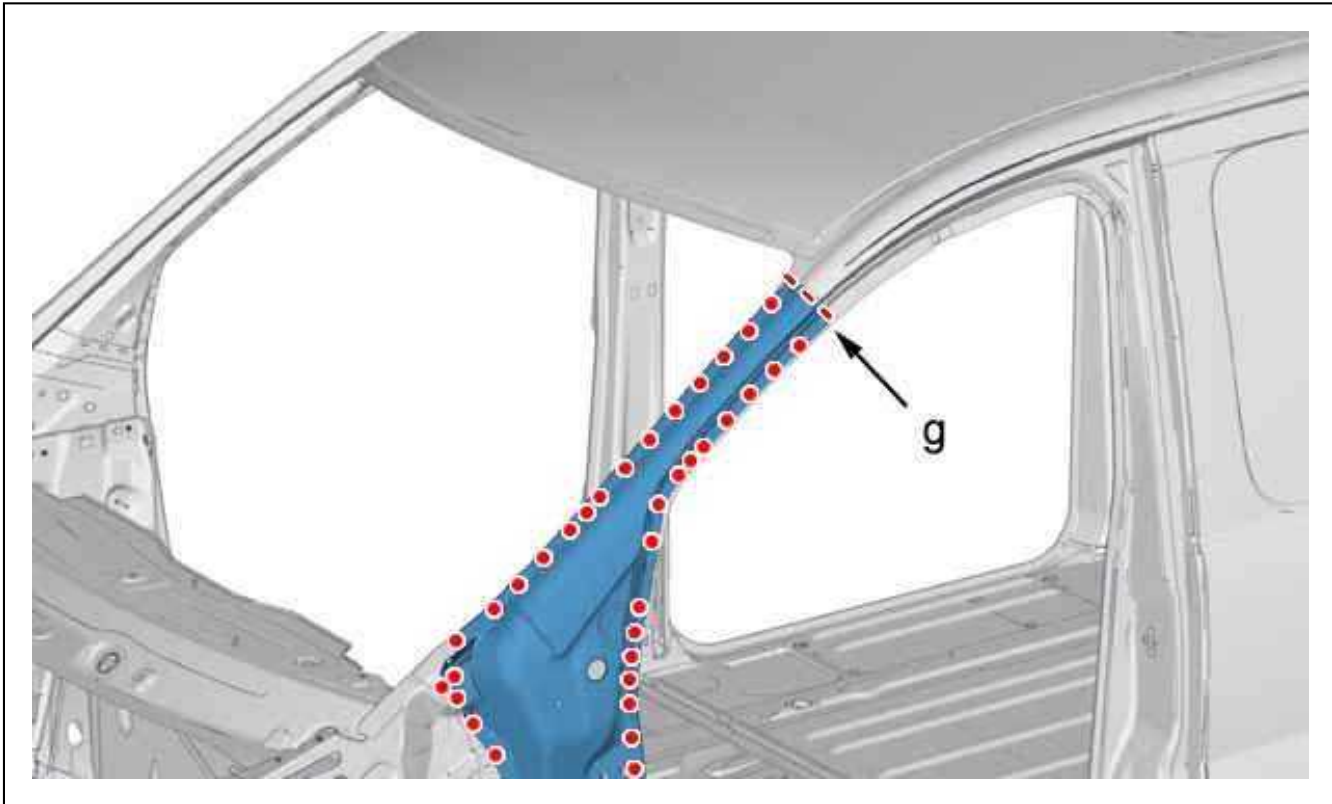


Figure : C4CM02LD

MAG weld with beads in succession(as "g").

Grind the MAG weld beads.

Weld with electric spot welds  .

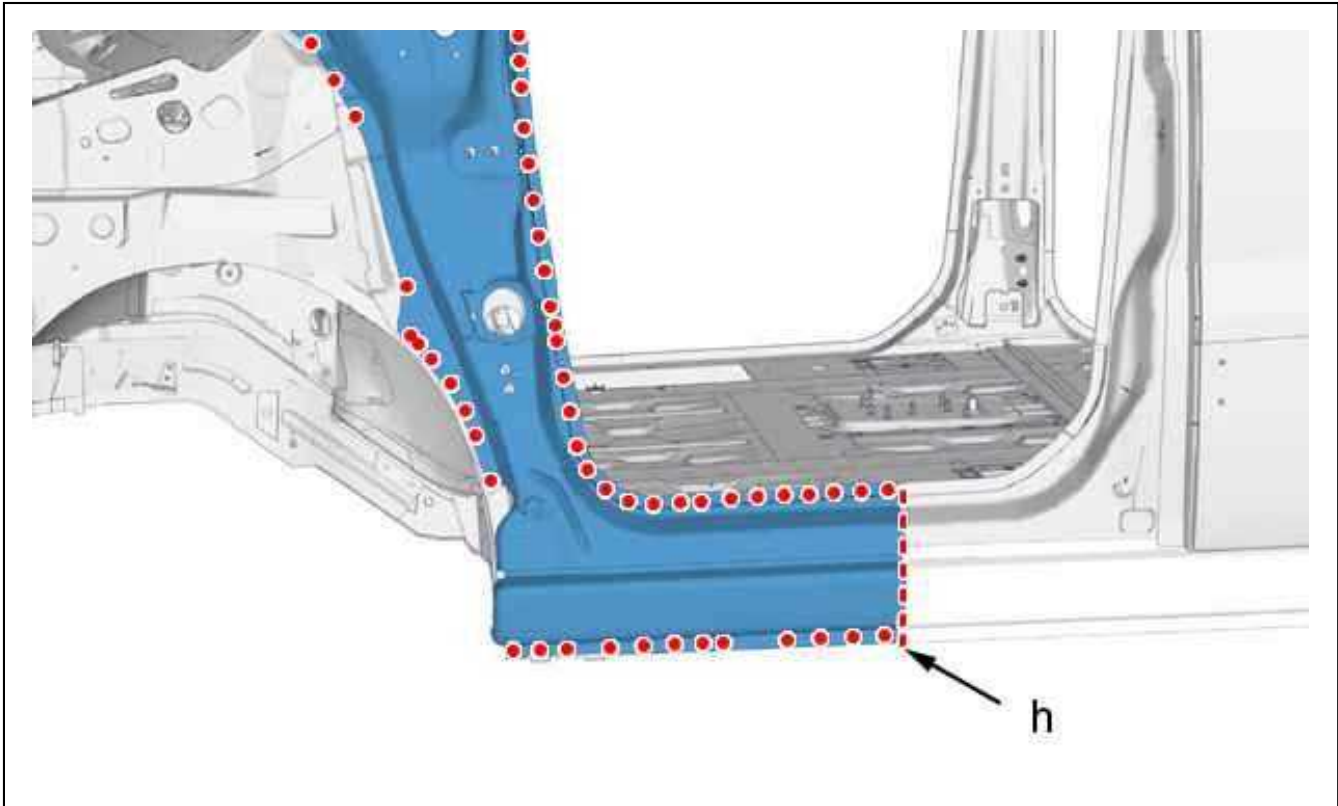


Figure : C4CM02MD

MAG weld with beads in succession(as "h").

Grind the MAG weld beads.

Weld with electric spot welds .

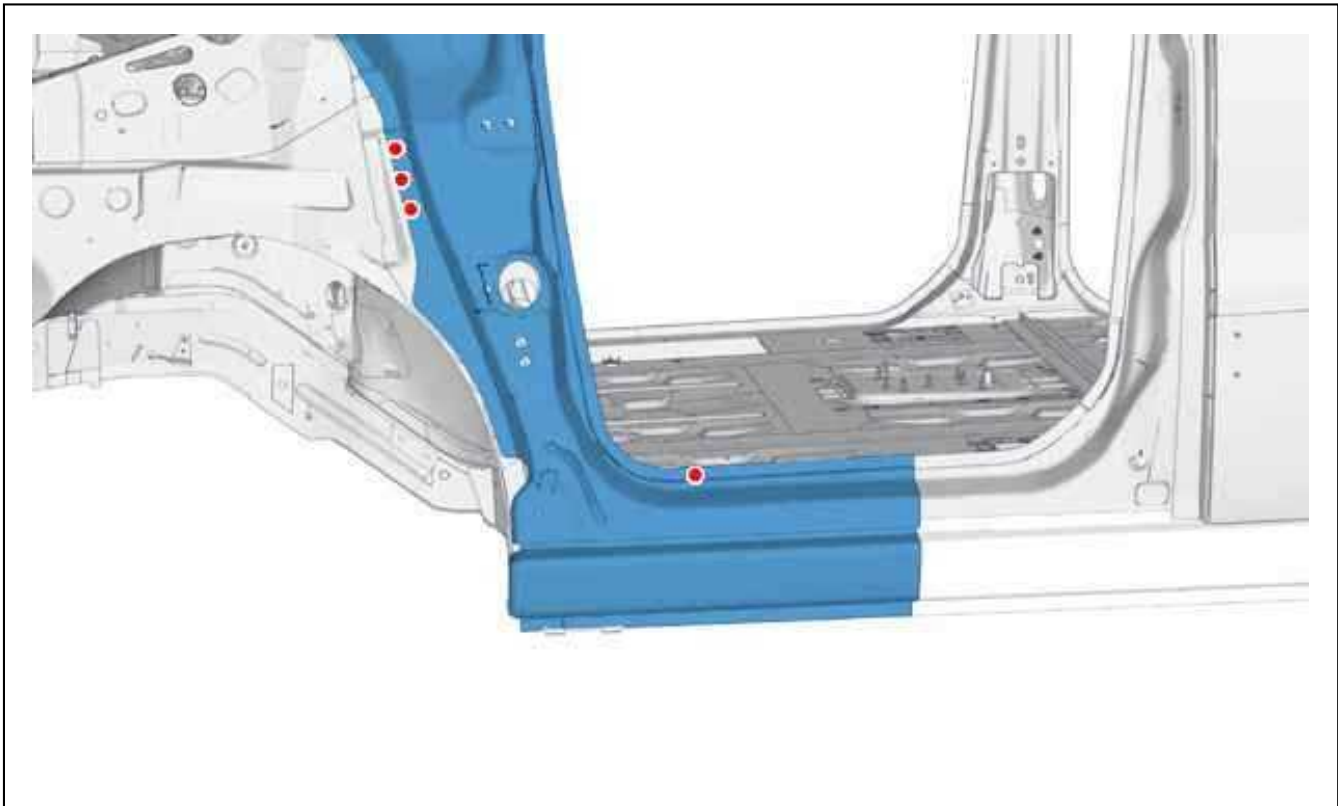


Figure : C4CM02ND

Weld with MAG plug welds.
Grind the MAG plug welds.

9. Sealing protection

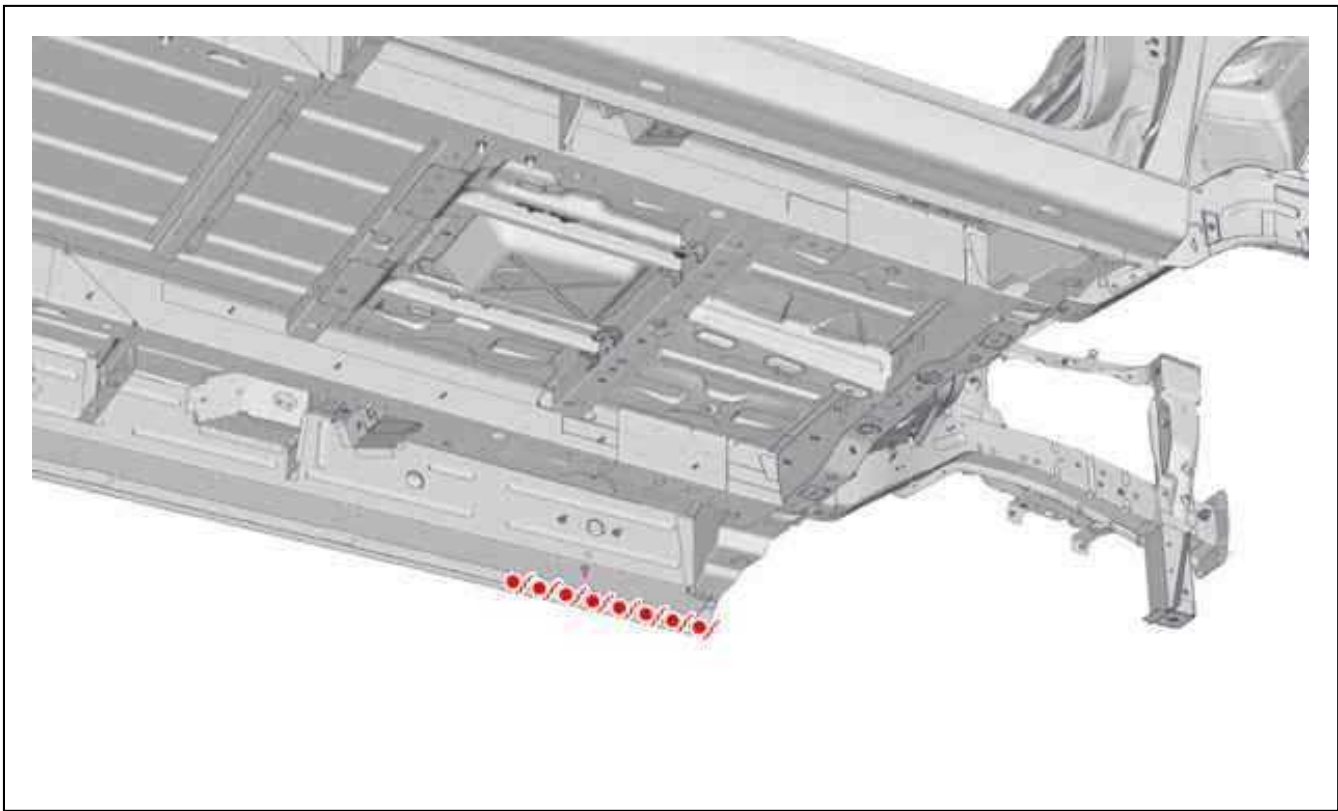


Figure : C4CM02PD

Apply a phosphate-print layer on the zone laid bare.
Apply a sealing mastic of type "A1".

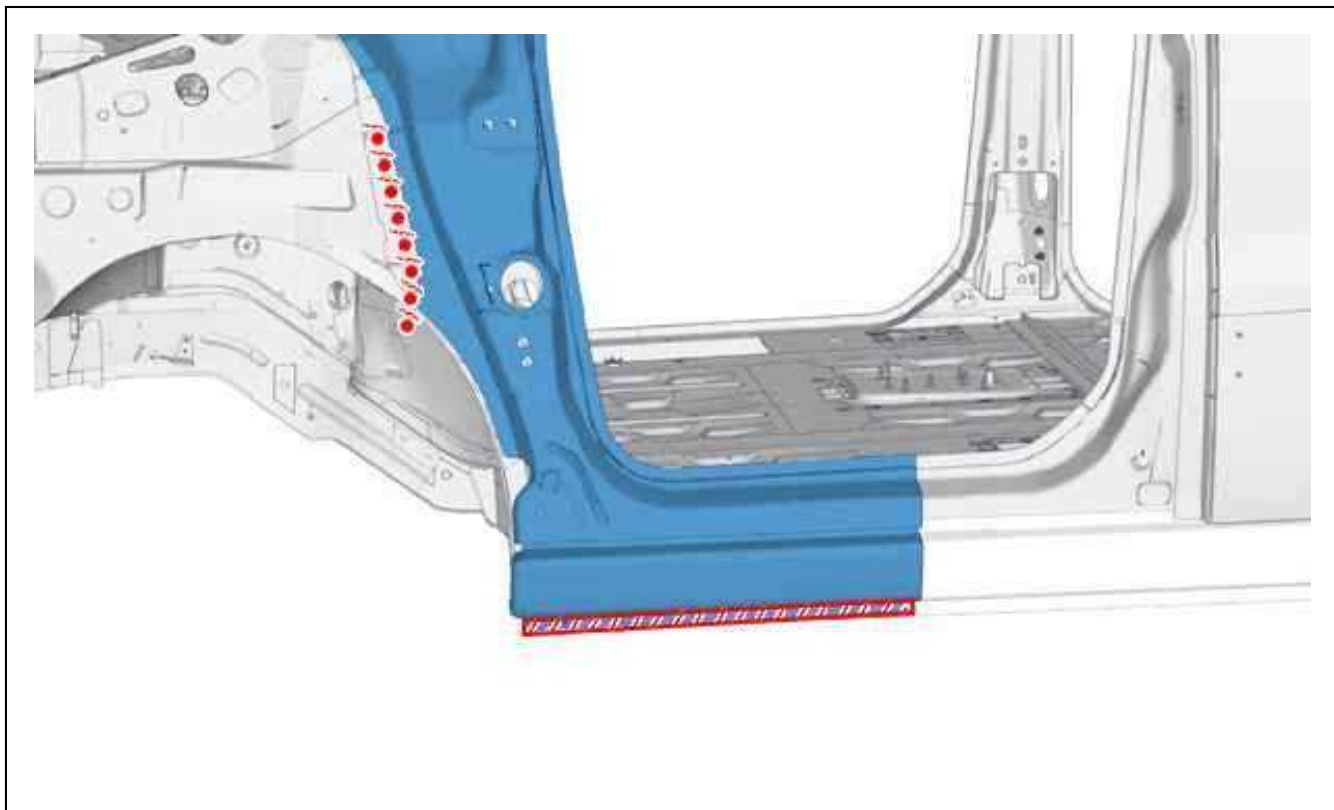


Figure : C4CM02QD

Apply a sealing mastic of type "A1".

Paint then spray into the hollow sections, product index C5, in the repair zone.

Apply an anti-chip layer (type "C4").

10. Reinitialisation

Carry out the additional operations.

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ.

REPLACEMENT : PART A POST ASSEMBLY(LOWER PART)

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

1. Additional operations

Disconnect the battery.

Remove-refit the following components :

- Front bumper
- Headlamp
- Front wing
- Front door
- Dashboard (partial)

Detrim-trim the following components :

- The bulkhead
- The front floor panel (partly)

Release the wiring harnesses.

Protect the interior of the passenger compartment.

2. Information

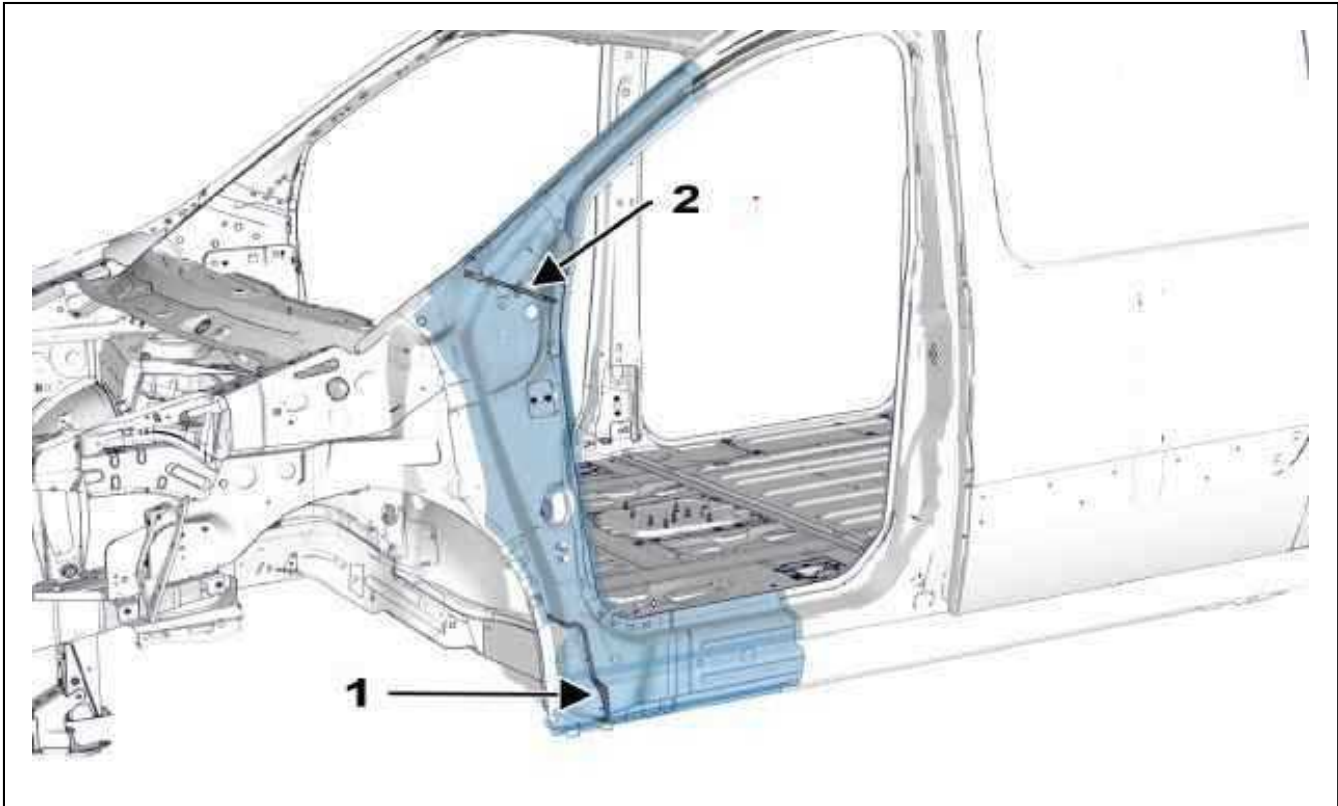


Figure : C4CM0BTD

Reference	Designation
(1)	Front pillar lower strengthener expanding insert
(2)	Front pillar upper strengthener exterior expanding insert

Cut-away possibilities on the body side  .

CAUTION : To avoid damaging the inflating inserts, the cutting zones close to an inflating insert must be executed with a safety distance of more than 30 mm.

3. Identification of replacement parts

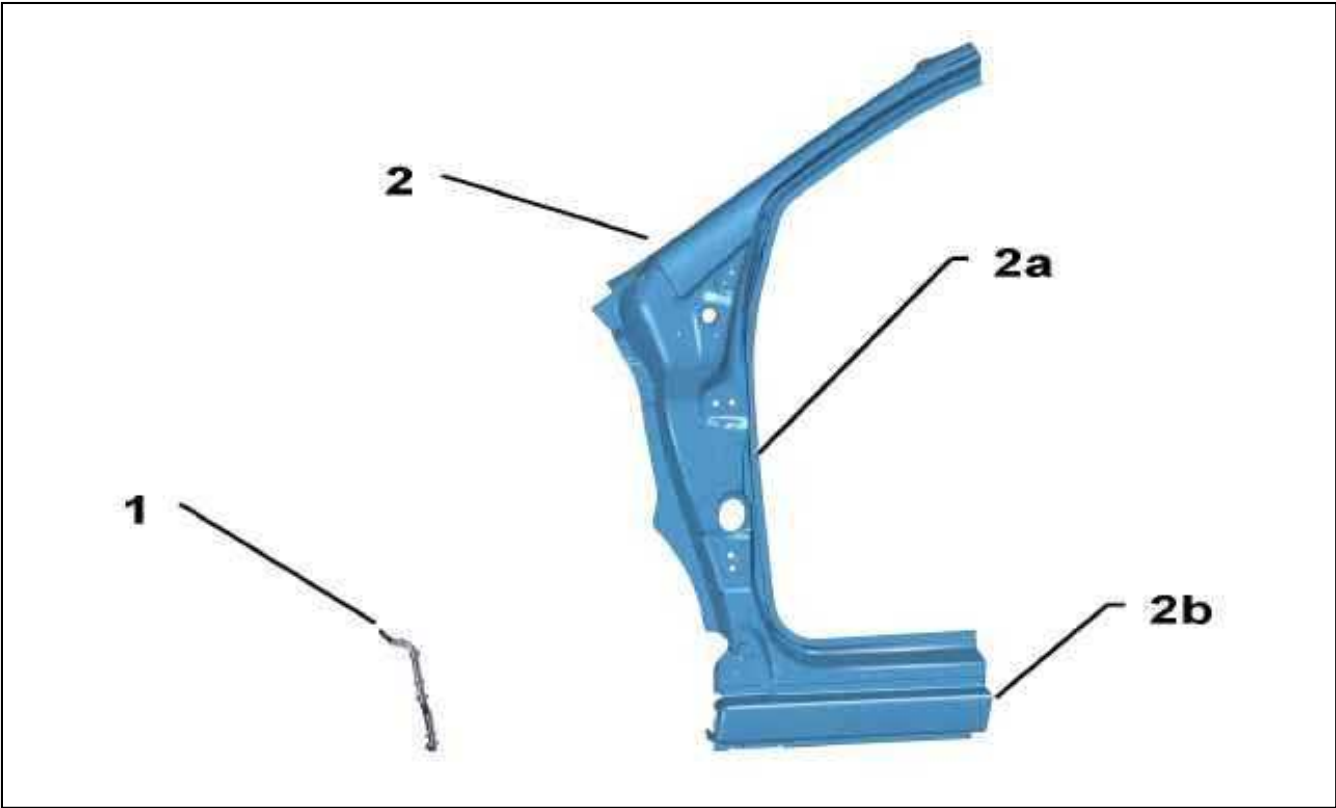


Figure : C4CM0BUD

Reference	Designation	Thickness (mm)	Nature/classification
(1)	Front pillar lower strengthener expanding insert	-	-
(2)	Front pillar assembly	-	-
(2a)	Body side front part	0,97	ADX (*)
(2b)	Outer sill	0,97	ADX (*)
(*)ADX : soft steel			

4. Replacement part preparation

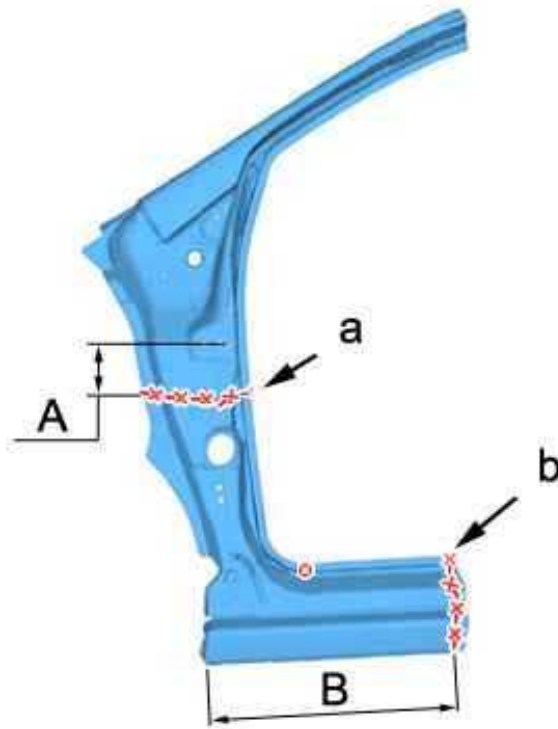


Figure : C4CM0BVD

Mark, then cut(as "a", "b") (final cuts).

Drill 6,5 mm holes for later plug welding.

Prepare the mating edges and protect them using a weldable primer .

5. Cutting out

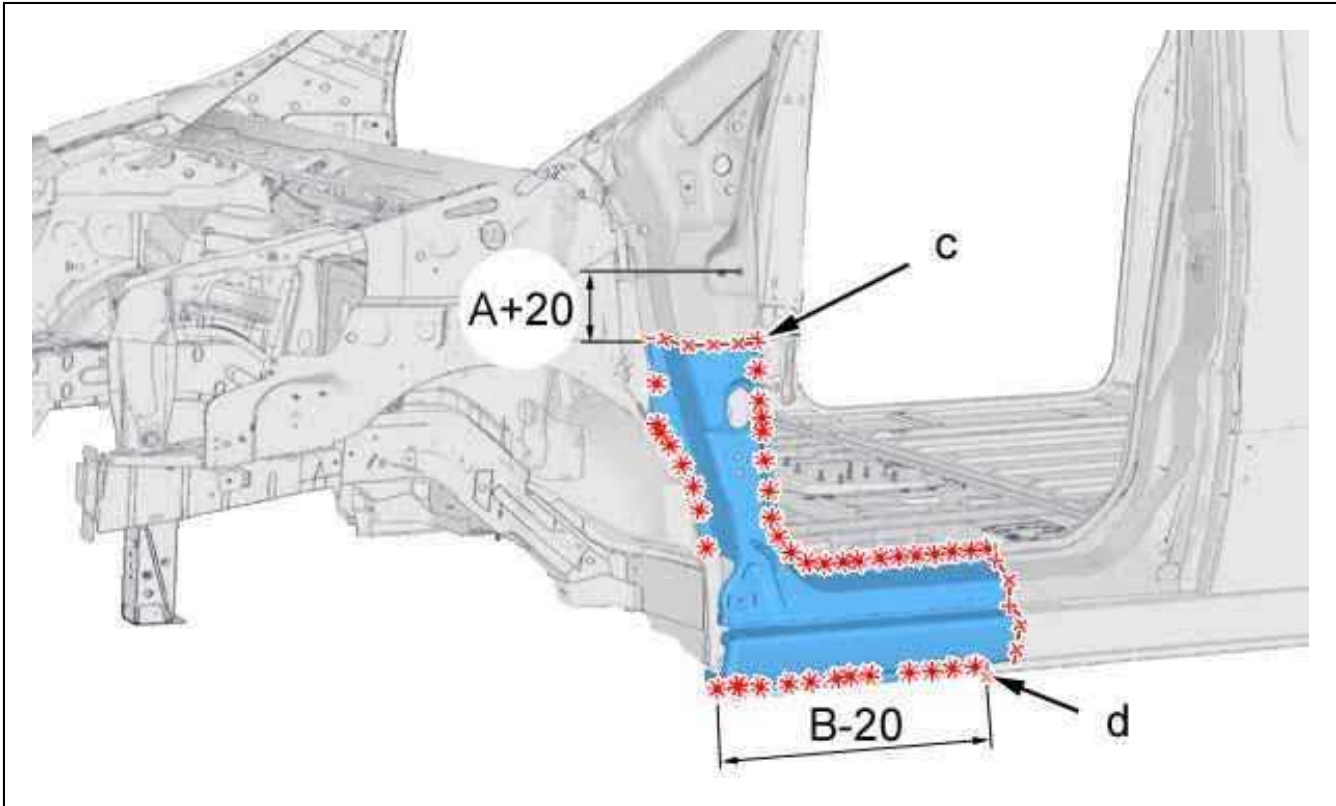


Figure : C4CM0BWD

Cut out the spot welds .

Mark, then cut(as "c", "d") (temporary cuttings).

Remove : Front pillar lower strengthener expanding insert .

6. Bodywork cleaning and preparation

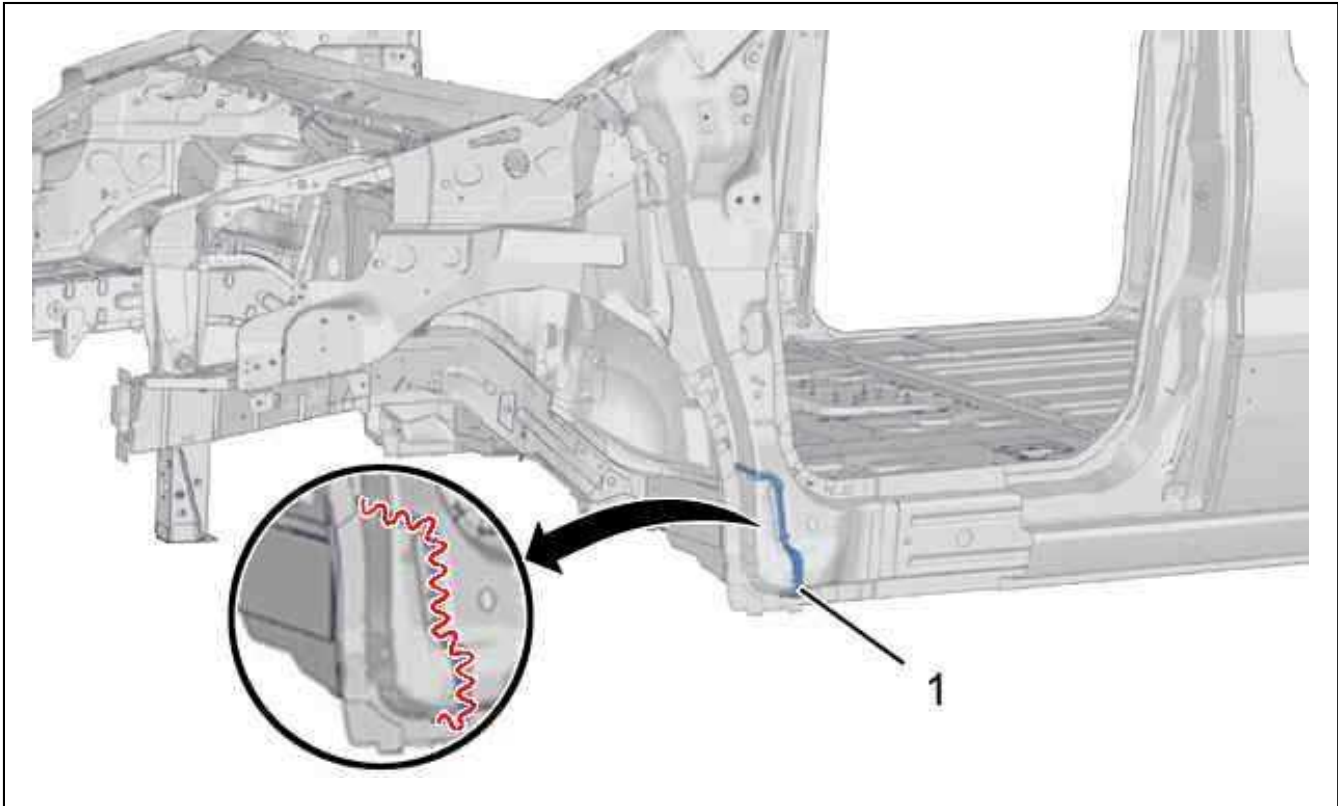


Figure : C4CM0BXD

Prepare the mating edges and protect them using a weldable primer .

Fit : Front pillar lower strengthener expanding insert .

Apply a filling adhesive "A2".

7. Adjustment

Fit the following components :

- The front pillar assembly
- Front pillar lower strengthener expanding insert

Check the fit.

Adjust the cut lines (final cuts).

8. Welding

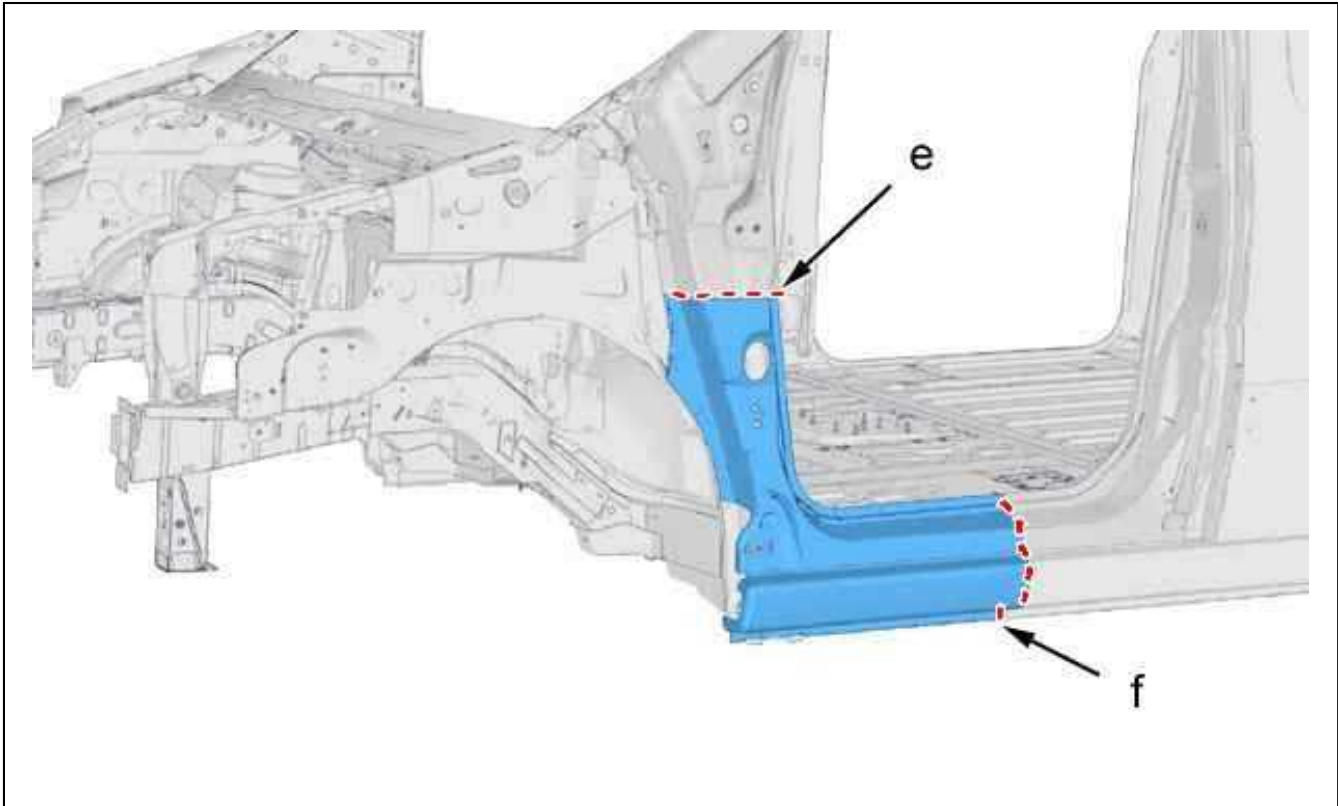


Figure : C4CM0BYD

MAG weld with beads in succession(as "f", "g").

Grind the MAG weld beads.

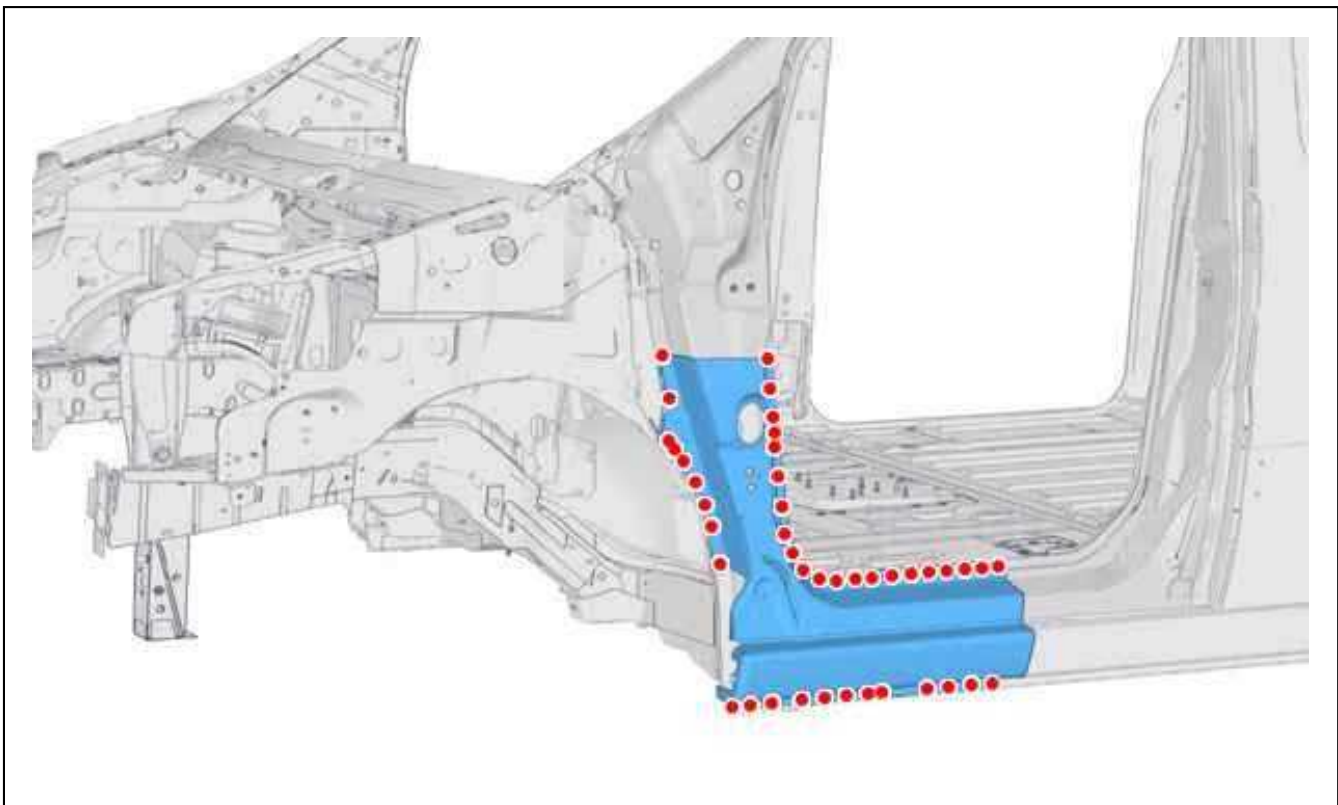


Figure : C4CM0BZD

Resistance welding parameter ⓘ (Front structure).

Weld with MAG plug welds.
Grind the MAG plug welds.

9. Sealing protection

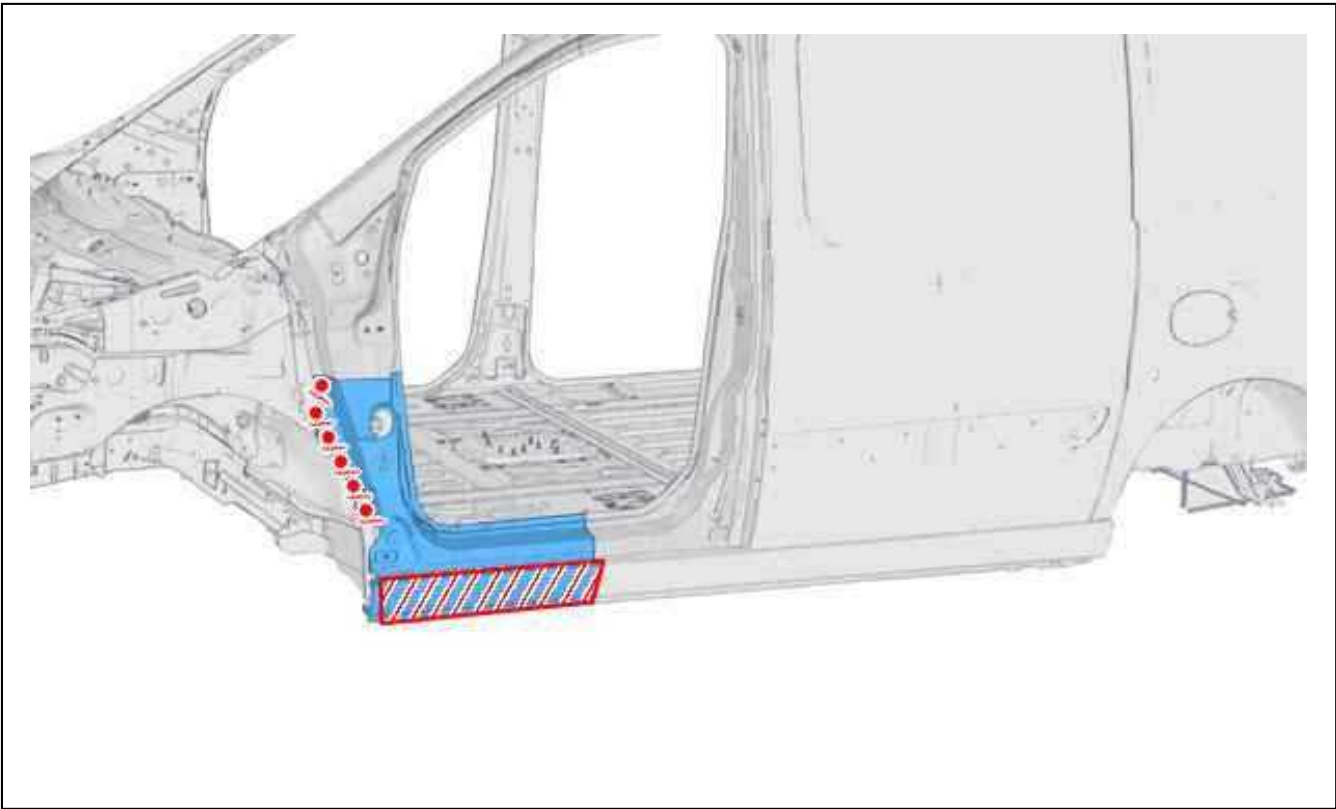


Figure : C4CM0C0D

Apply a phosphate-print layer on the zone laid bare.

Apply a sealing mastic of type "A1".

Apply an anti-chip protection index "C4" on the panel pre-coated with phosphate print or cataphoresis; Identification :

Anti-chip protection ⓘ.

Paint then spray into the hollow sections, product index C5, in the repair zone.

10. Reinitialisation

Carry out the additional operations.

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ.

REPLACEMENT : OUTER SILL SECTION UNDER FRONT DOOR

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic re-zincing process .

CAUTION : The number of spot welds necessary for the assembly of a new part must be identical to the number of spot welds fixing the original part.

1. Additional operations

Disconnect the battery.

Remove-refit the following components :

- Front door
- Front seat

Detrim-retrim : The rear floor carpet (partly).

Protect the interior of the passenger compartment.

Release the wiring harnesses.

2. Information

Respect the following requirements ⓘ : Cut-away possibilities on the body side ⓘ .

3. Identification of replacement parts

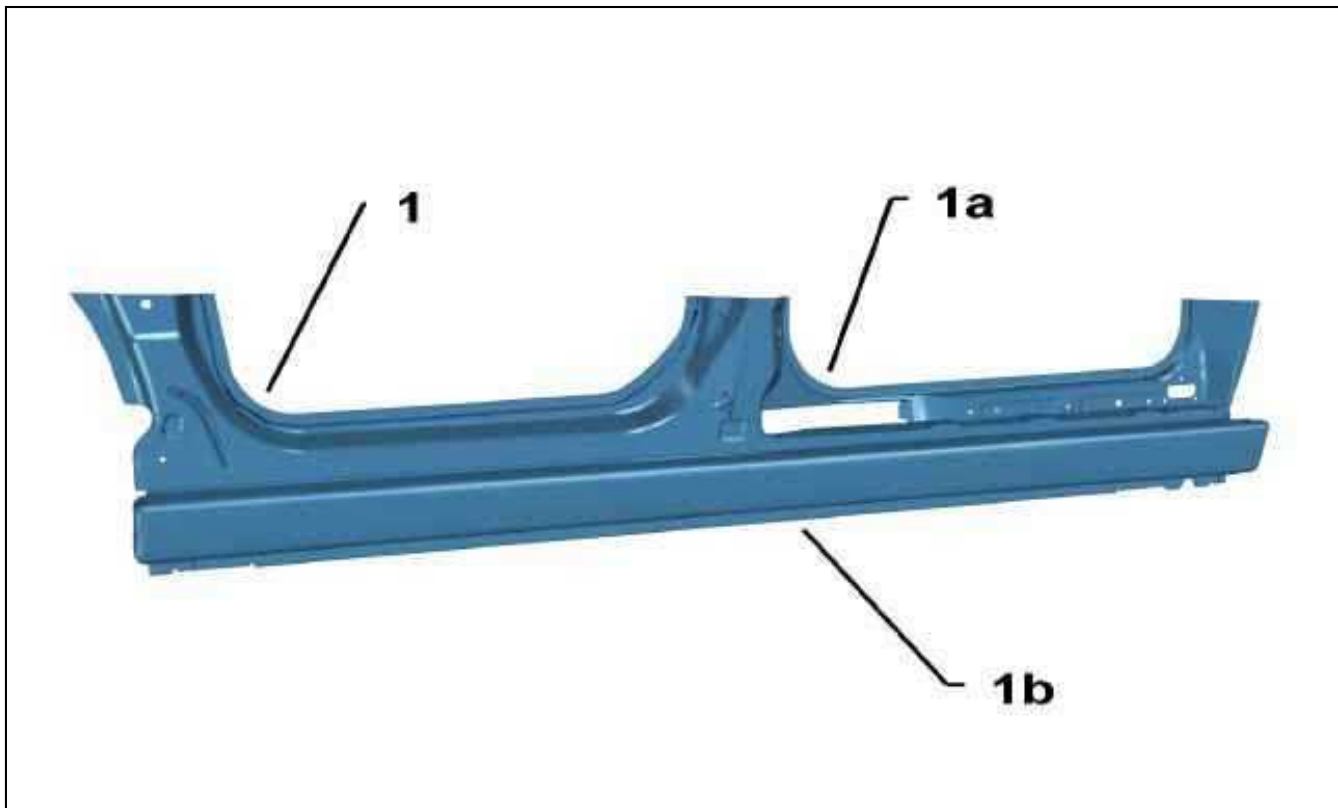


Figure : C4CP2KUD

Reference	Designation	Thickness	Nature/classification
(1)	Outer longeron assembly, left hand side	-	-
(1a)	Passenger compartment, left hand side	0,97 mm	ADX (*)
(1b)	LH outer longeron	0,97 mm	ADX (*)

(*) ADX = Mild steel.

4. Replacement part preparation

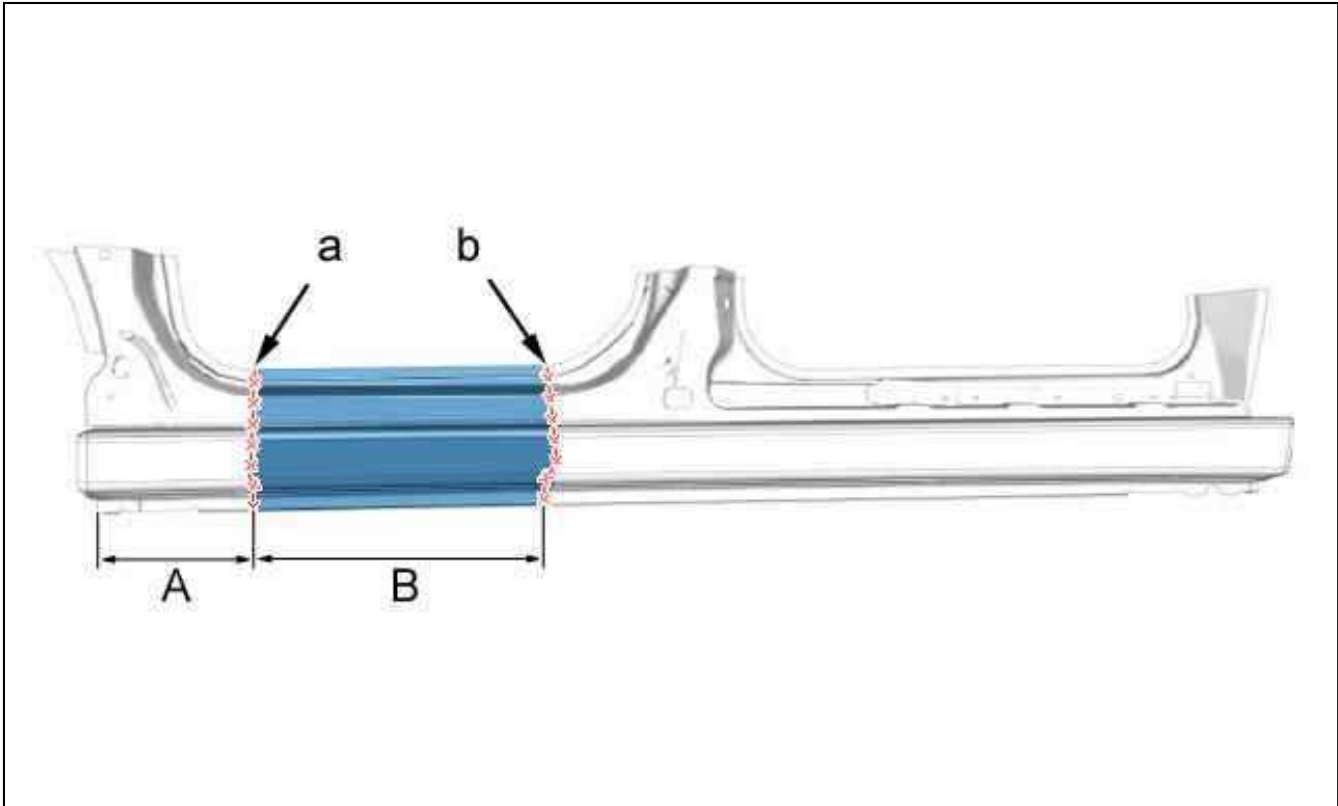


Figure : C4CP2KVD

"A" = 270 mm .

"B" = 490 mm .

Mark then cut (at "a", "b") (final cutting).

Prepare the mating edges and protect them using a weldable primer .

5. Cutting out

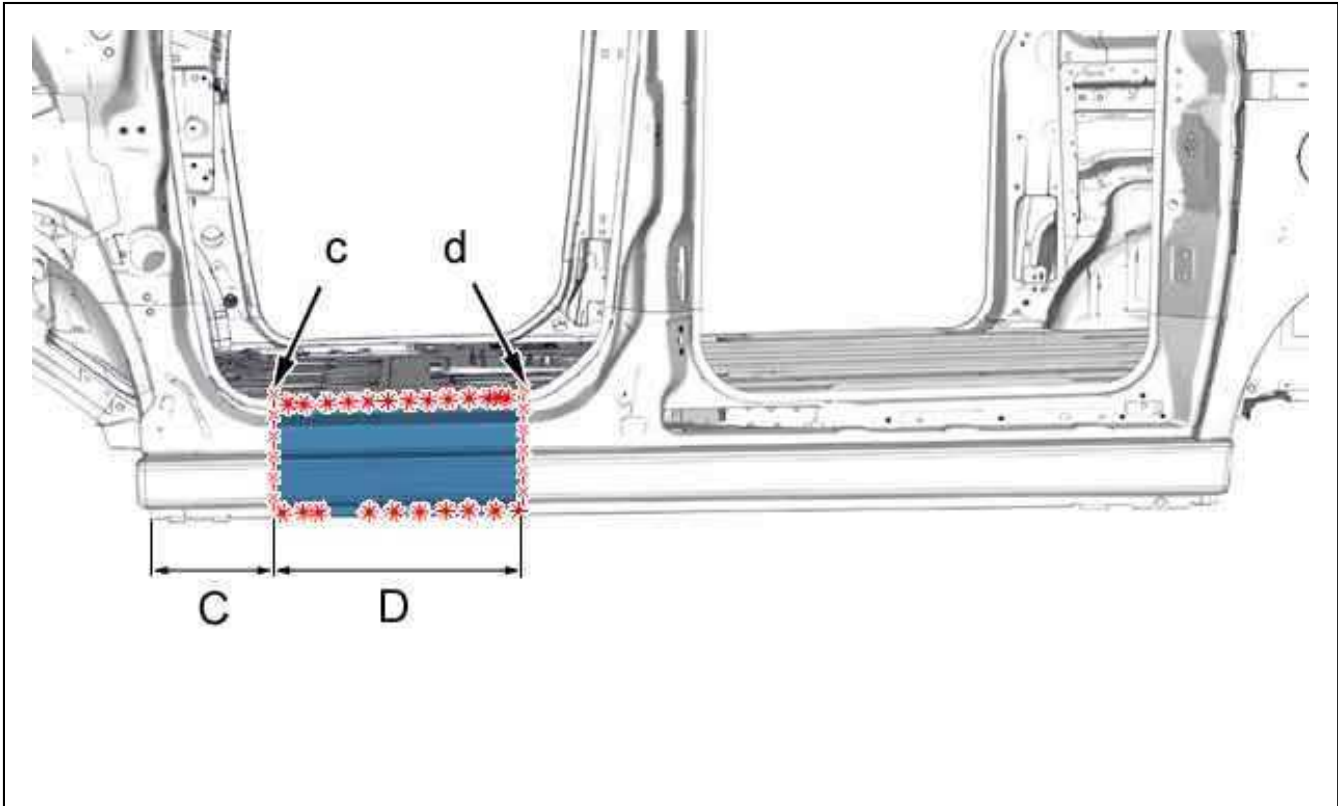


Figure : C4CP2KWD

"C" = 290 mm .

"D" = 450 mm .

Mark out dimensions "C" and "D".

Mark then cut (at "c", "d").

Cut out the spot welds .

Remove the exterior longeron section underneath the door .

6. Bodywork cleaning and preparation

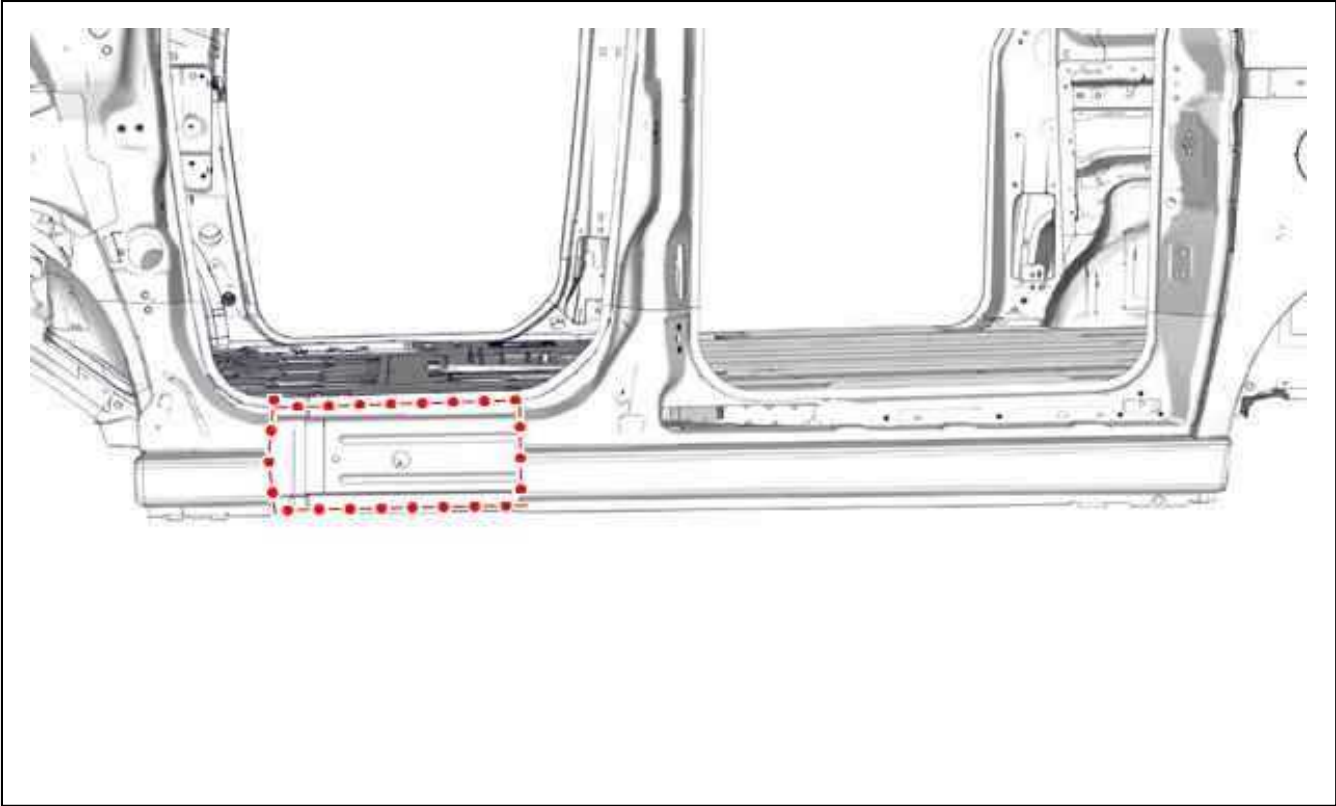


Figure : C4CP2KXD

Prepare the mating edges and protect them using a weldable primer .

7. Adjustment

Clean up the cuts (final cutting).

8. Welding

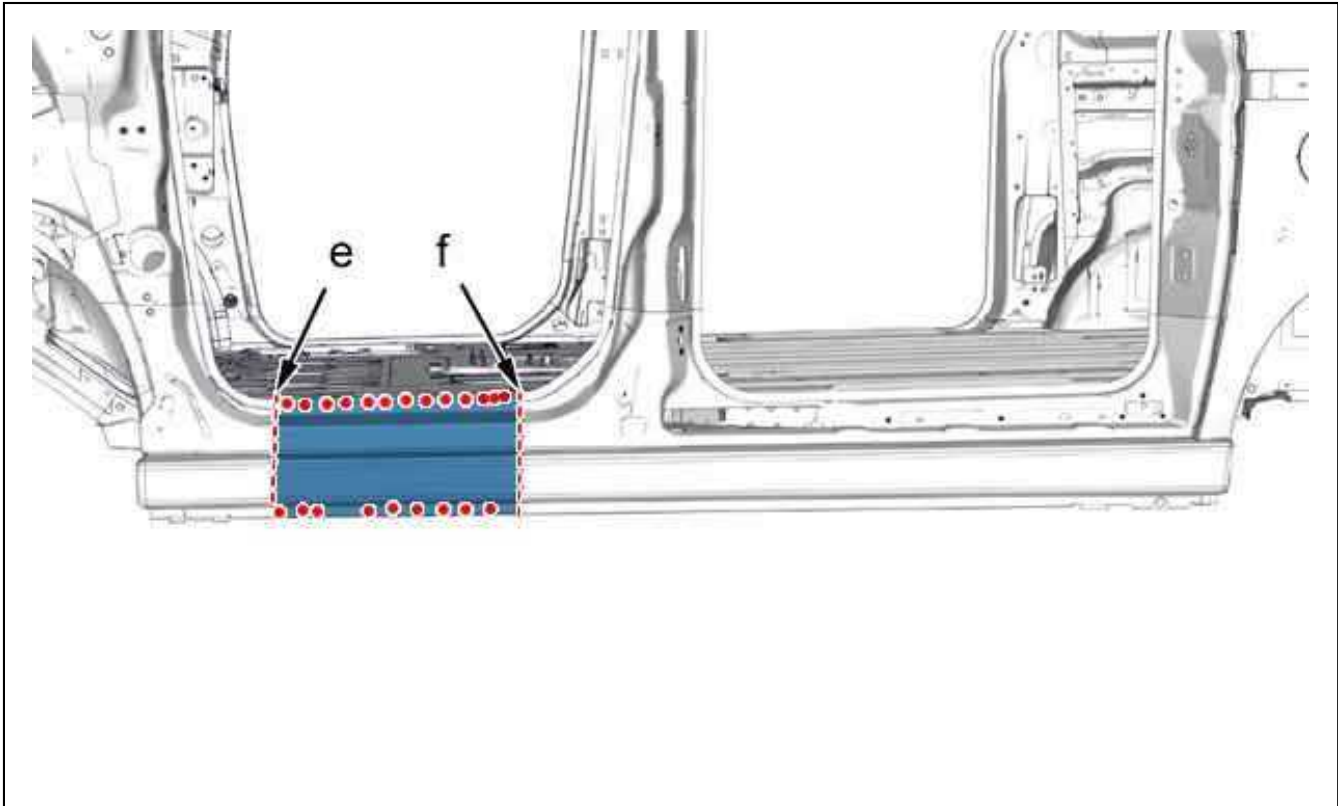


Figure : C4CP2KYD

Weld with electric spot welds.

MAG weld with beads in succession (at "e", "f").

Grind the MAG weld beads.

9. Sealing protection

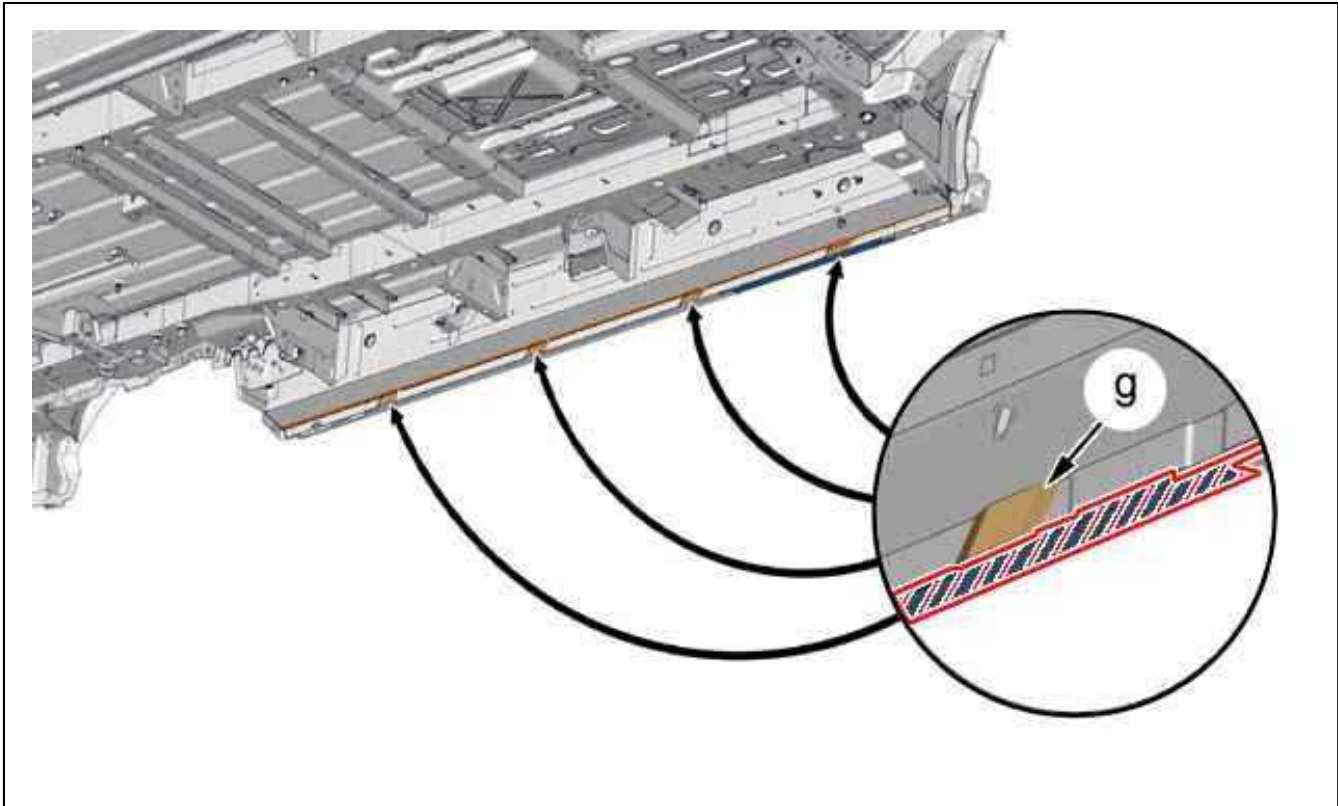


Figure : C4CP2KZD

Apply a phosphate-print layer on the zone laid bare.

Apply an anti-chip layer (indice C4) ⓘ.

N.B. : Do not obstruct the drain holes in the inner sill on each side (at "g").

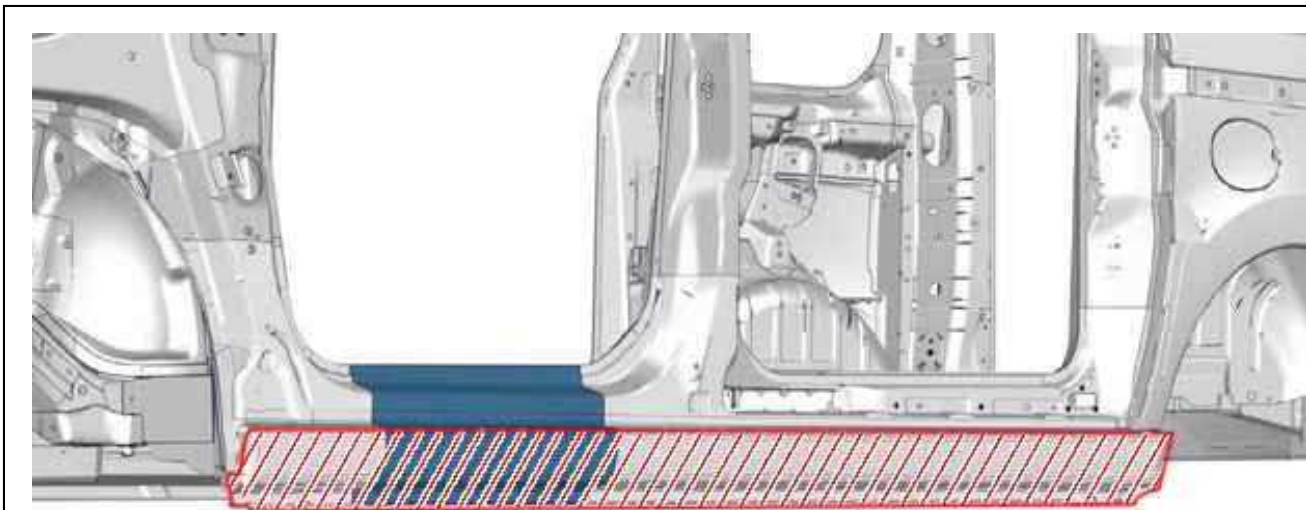


Figure : C4CP2L0D

Apply a phosphate-print layer on the zone laid bare.

Apply an anti-chip layer (indice C4) .

Paint then spray into the hollow sections, product index C5, in the repair zone.

10. Reinitialisation

Carry out the additional operations.

CAUTION : Operations to be carried out following reconnection of the battery .

REPLACEMENT : OUTER SILL ASSEMBLY

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic re-zincing process .

CAUTION : The number of spot welds necessary for the assembly of a new part must be identical to the number of spot welds fixing the original part.

1. Additional operations

Disconnect the battery.

Remove-refit the following components :

- Front mud flaps
- Rear mud guard
- Front wing
- Front door
- Side door
- Sliding side door rail
- Front seat

Strip - retrim the front floor.

Release the wiring harnesses.

Protect the interior of the passenger compartment.

2. Information

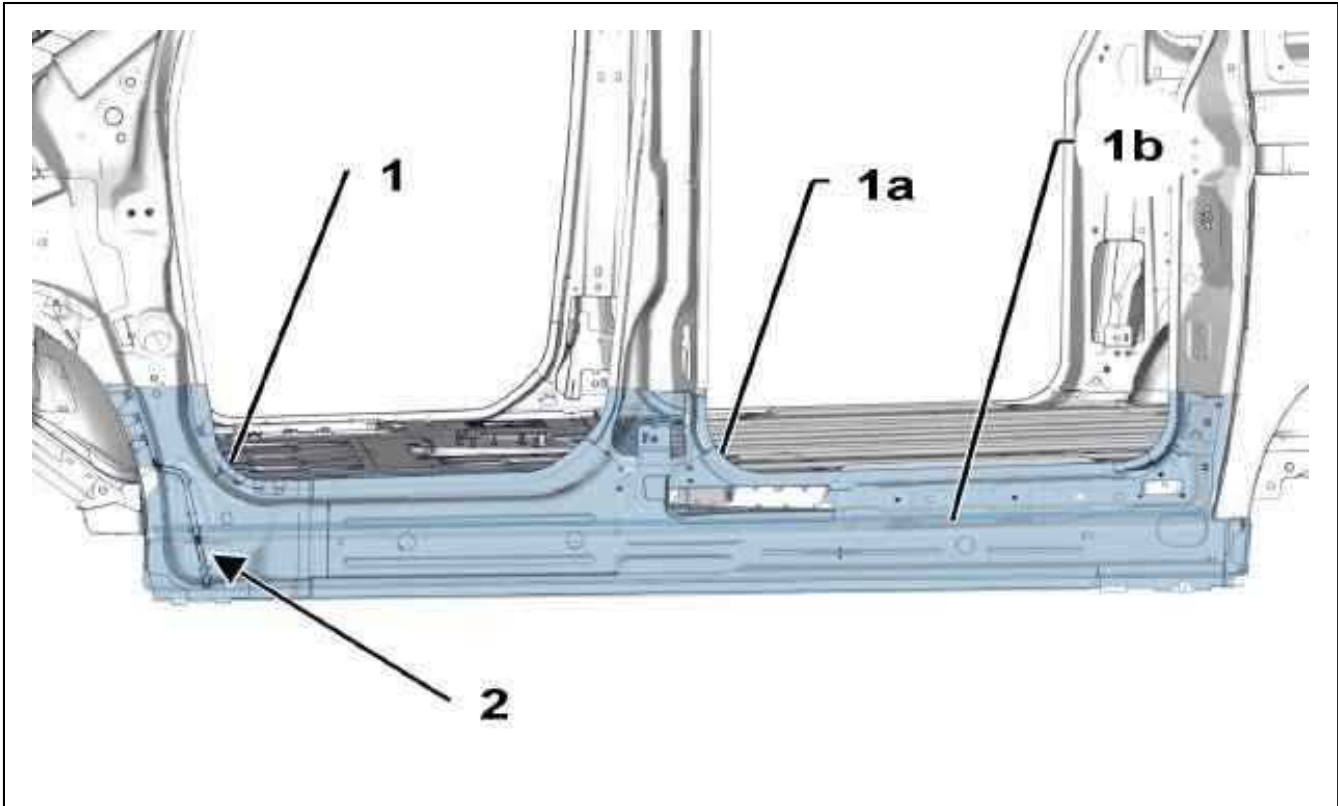


Figure : C4CP2KHD

CAUTION : To prevent damage to the structural inserts, the cutting zones near to a structural insert must leave a safety margin of more than 30 mm.

3. Identification of replacement parts

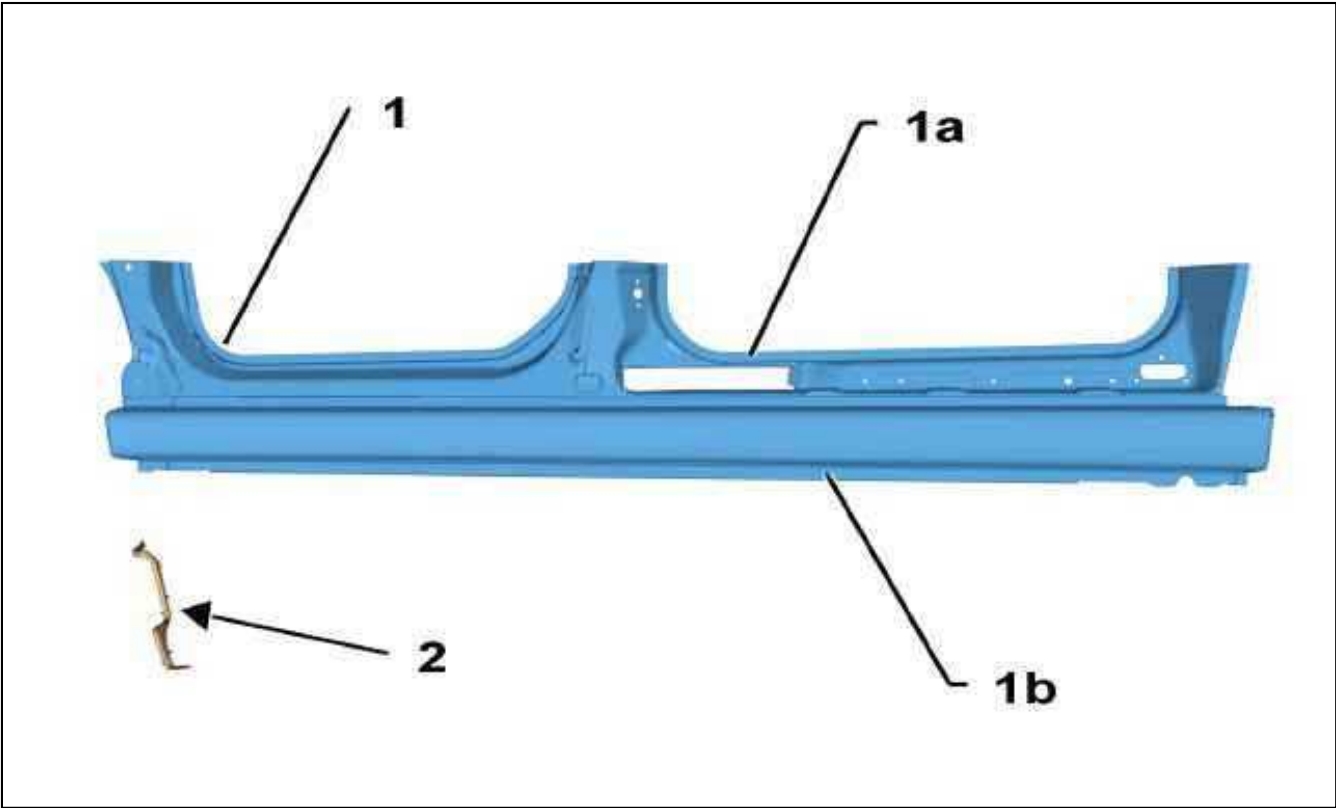


Figure : C4CP2KJD

Reference	Designation	Thickness	Nature/classification
(1)	Outer longeron assembly, left hand side	-	-
(1a)	Partial left-hand passenger compartment side	0.97 mm	ADX (*)
(1b)	LH outer longeron	0.97 mm	ADX (*)
(2)	Front pillar interior strengthener exterior expanding insert	-	-

(*) ADX : soft steel.

4. Replacement part preparation

cardiagn.com

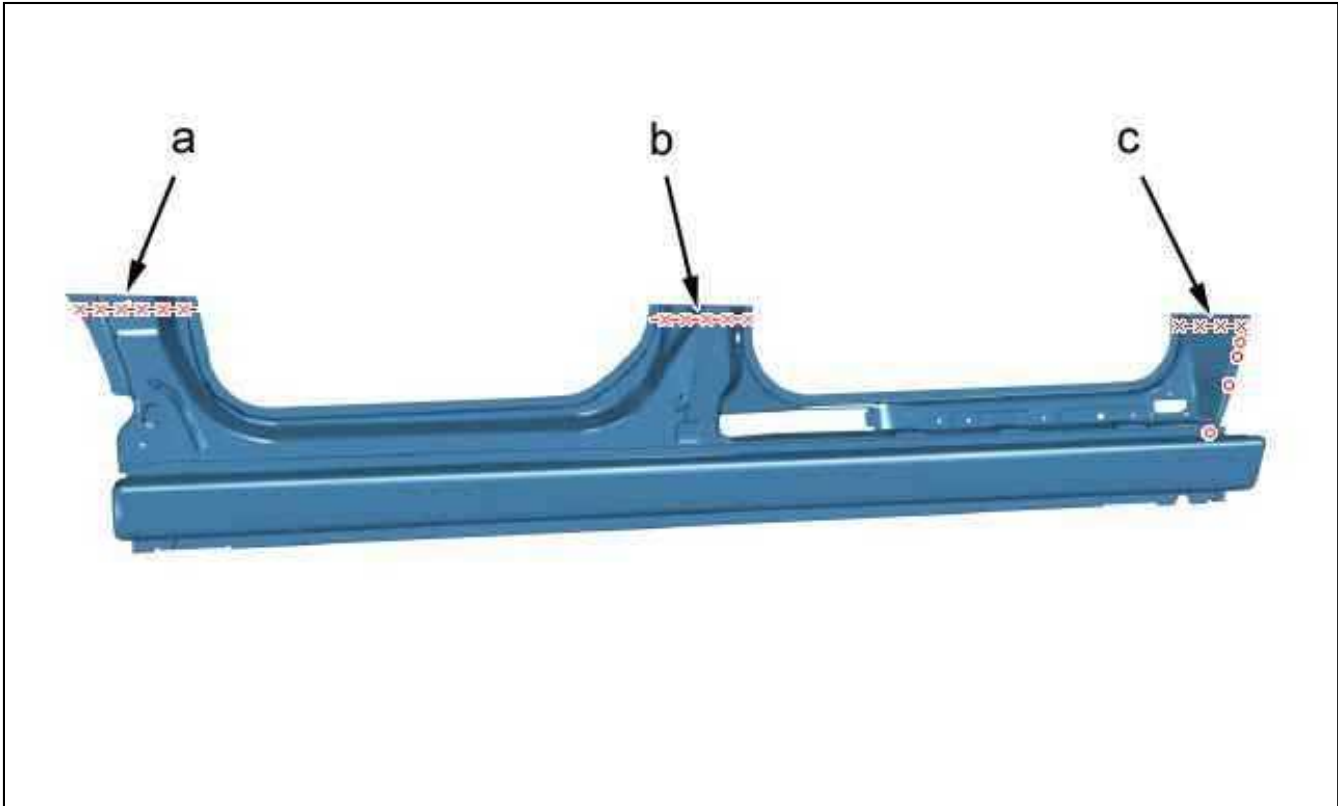


Figure : C4CP2KKD

Mark then cut (at "a", "b", "c") (Final cut).

Drill 6,5 mm holes for later plug welding.

Prepare the mating edges and protect them using a weldable primer .

5. Cutting out

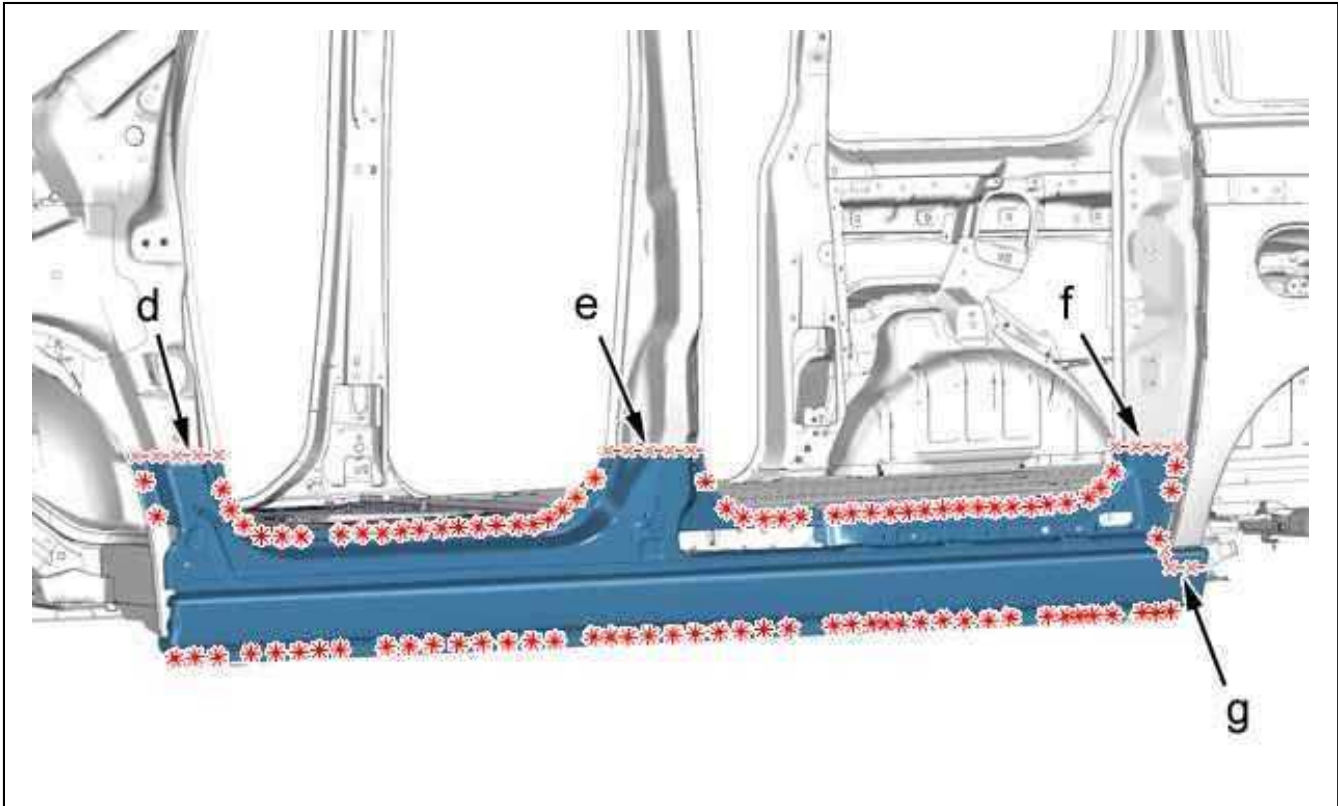


Figure : C4CP2KLD

Cut out the spot welds .

Mark then cut (at "d", "e", "f") (Provisional cut).

When making the cut "d", take care not to cut the front pillar strengthener.

Mark then cut (at "g").

Remove the partial exterior chassis member assembly.

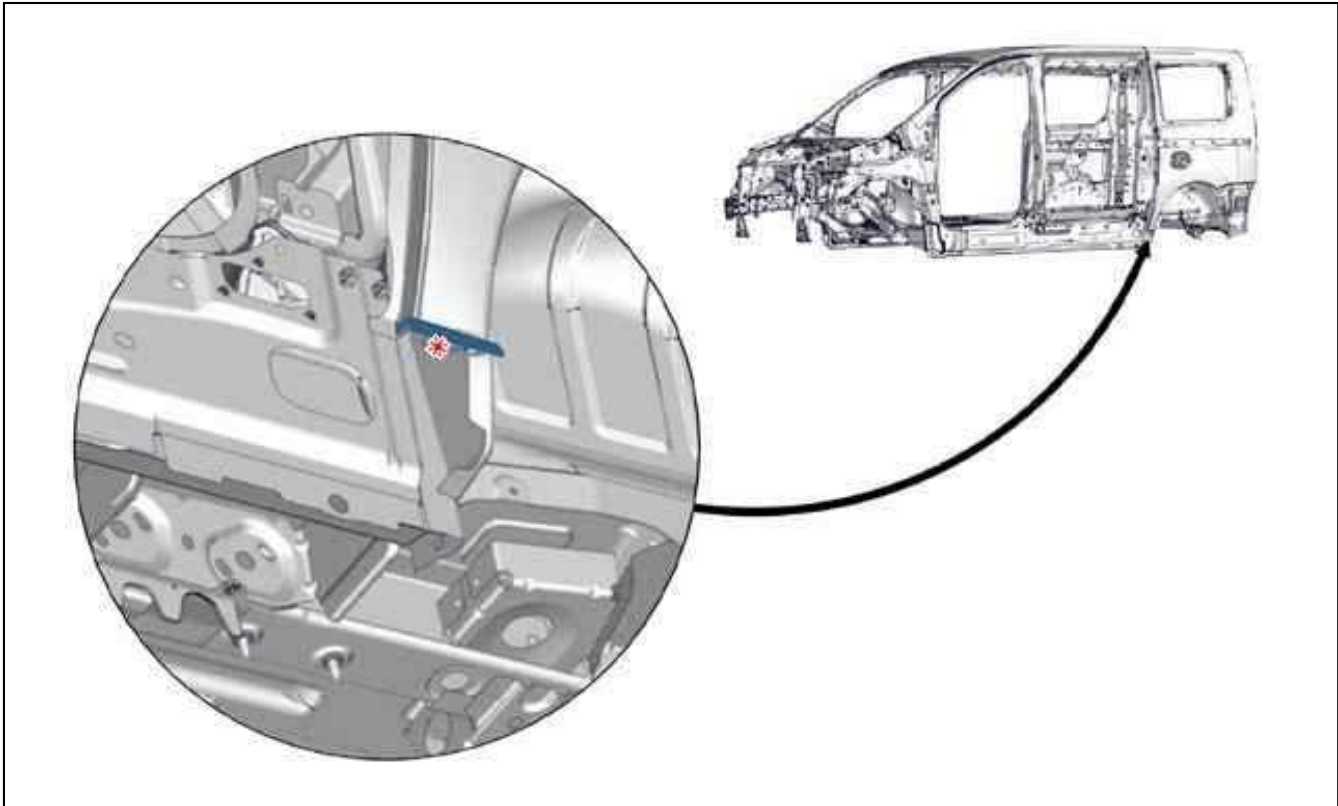


Figure : C4CP2KMD

Cut out the spot weld .
Remove the remainder of the exterior chassis member assembly.

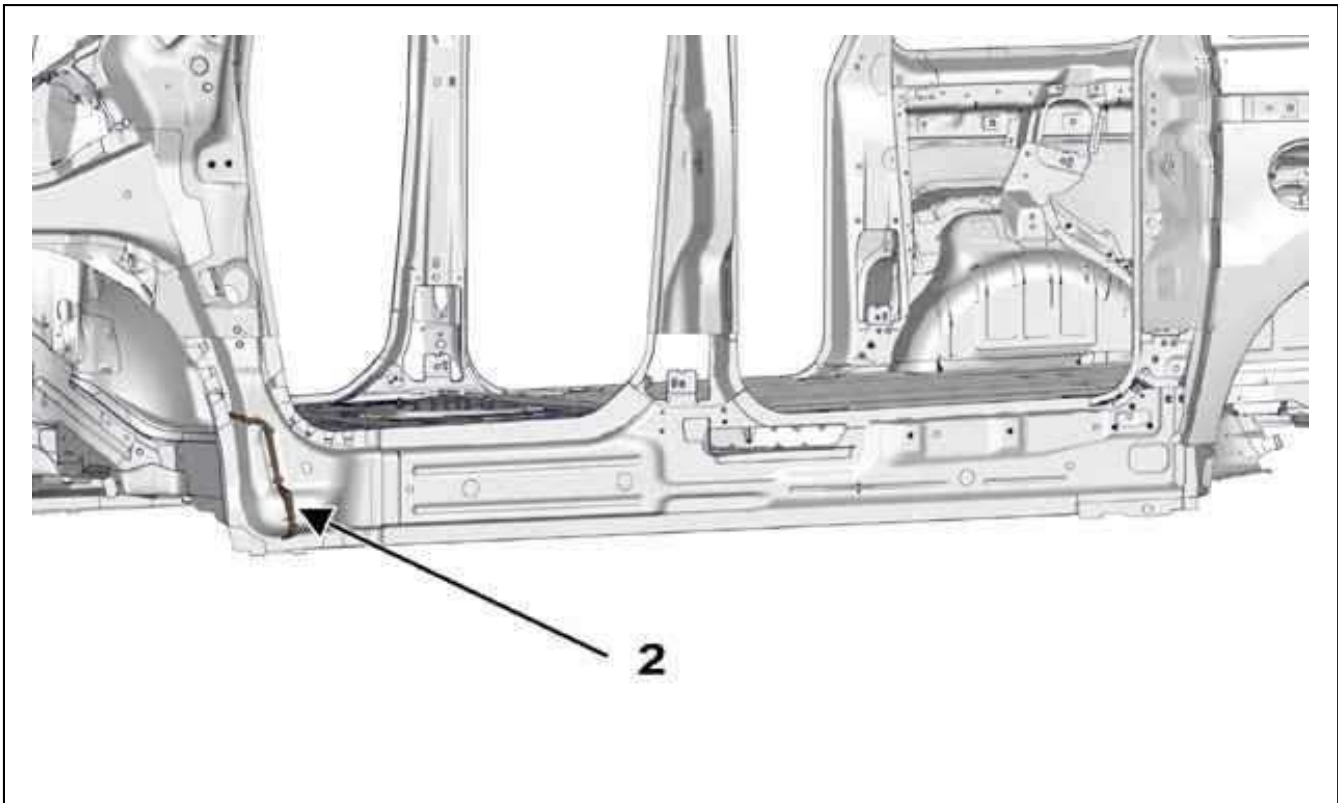


Figure : C4CP2KND

Remove the front pillar interior strengthener exterior expanding insert (2).

6. Bodywork cleaning and preparation

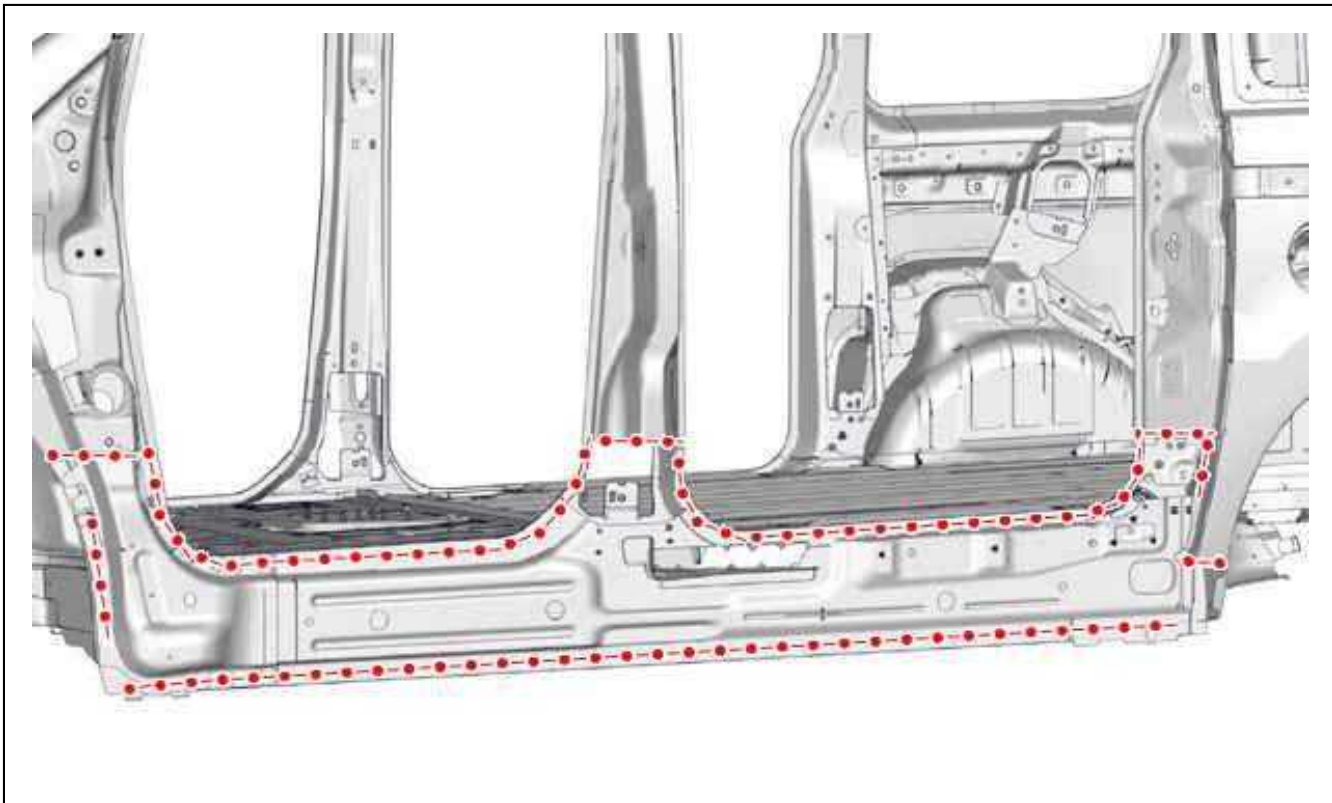


Figure : C4CP2KPD

Prepare the mating edges and protect them using a weldable primer .

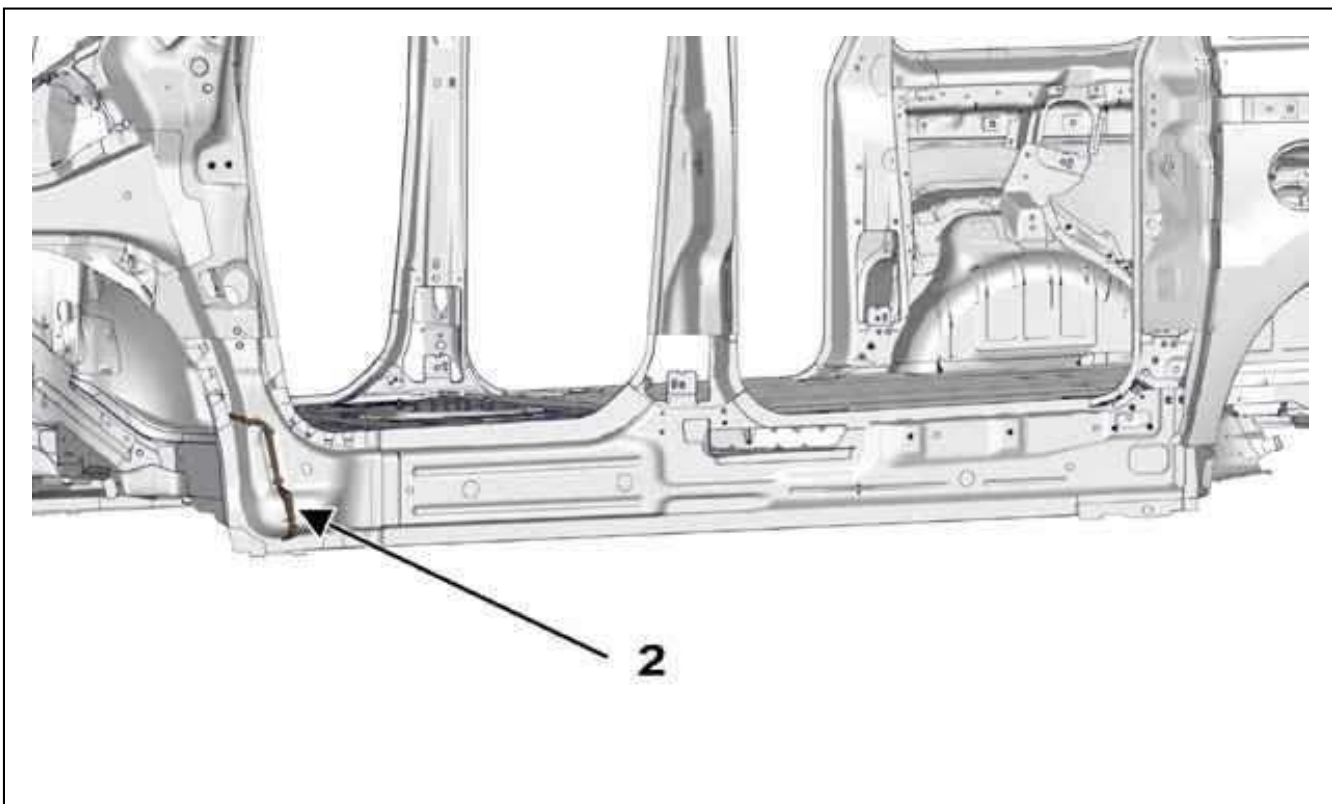


Figure : C4CP2KND

Fit the front pillar interior strengthener exterior expanding insert (2).

To respect the following sealing functions :

- Acoustic
- Water
- Dust

Seal the expanding inserts .

7. Adjustment

Fit the outer sill assembly.

Check the fit.

Clean up the cuts (Final cuts).

8. Welding

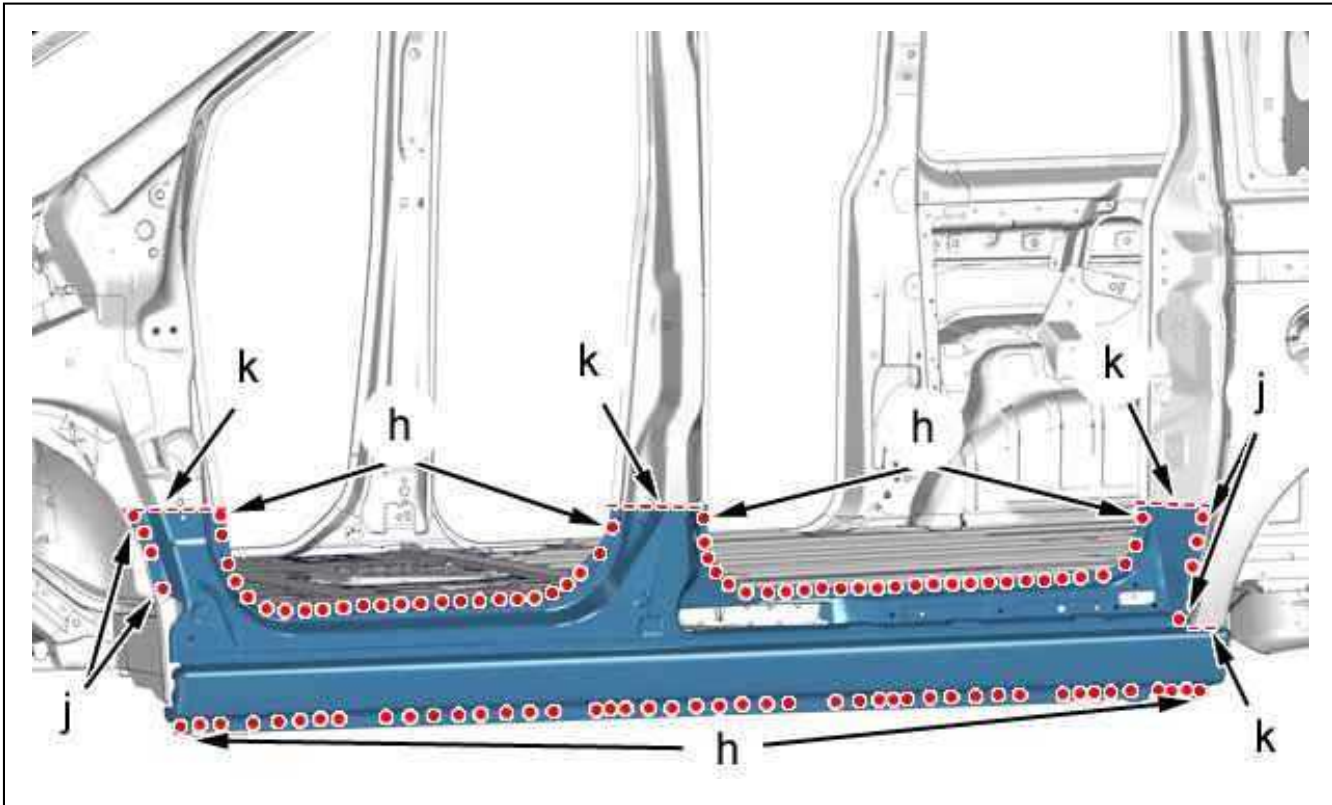


Figure : C4CP2KQD

Weld with electric spot welds (at "h").

Weld with MAG plug welds (at "j").

Grind the MAG plug welds.

MAG weld with beads in succession (at "k").

Grind the MAG weld beads.

9. Sealing protection

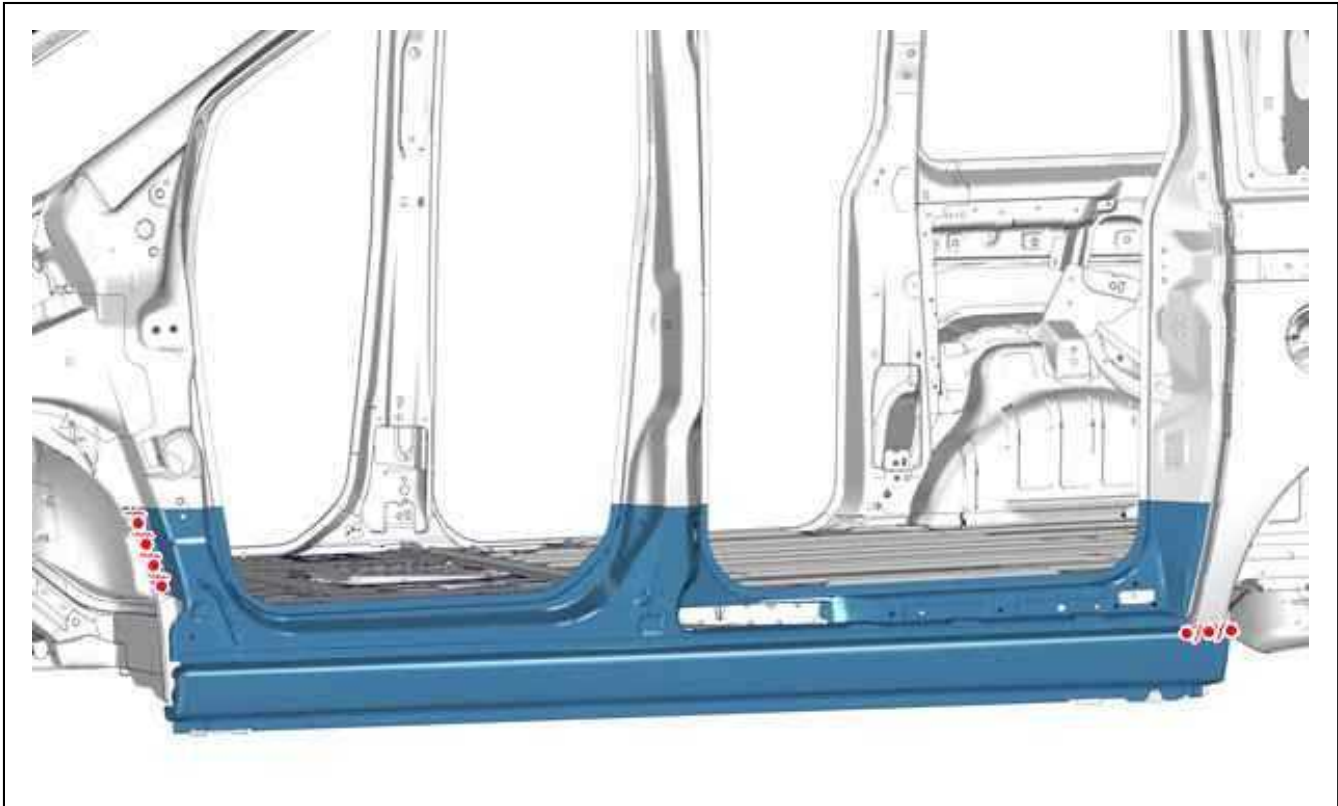


Figure : C4CP2KRD

Apply a phosphate-print layer to the zones laid bare.
Apply a sealing mastic (index "A1").

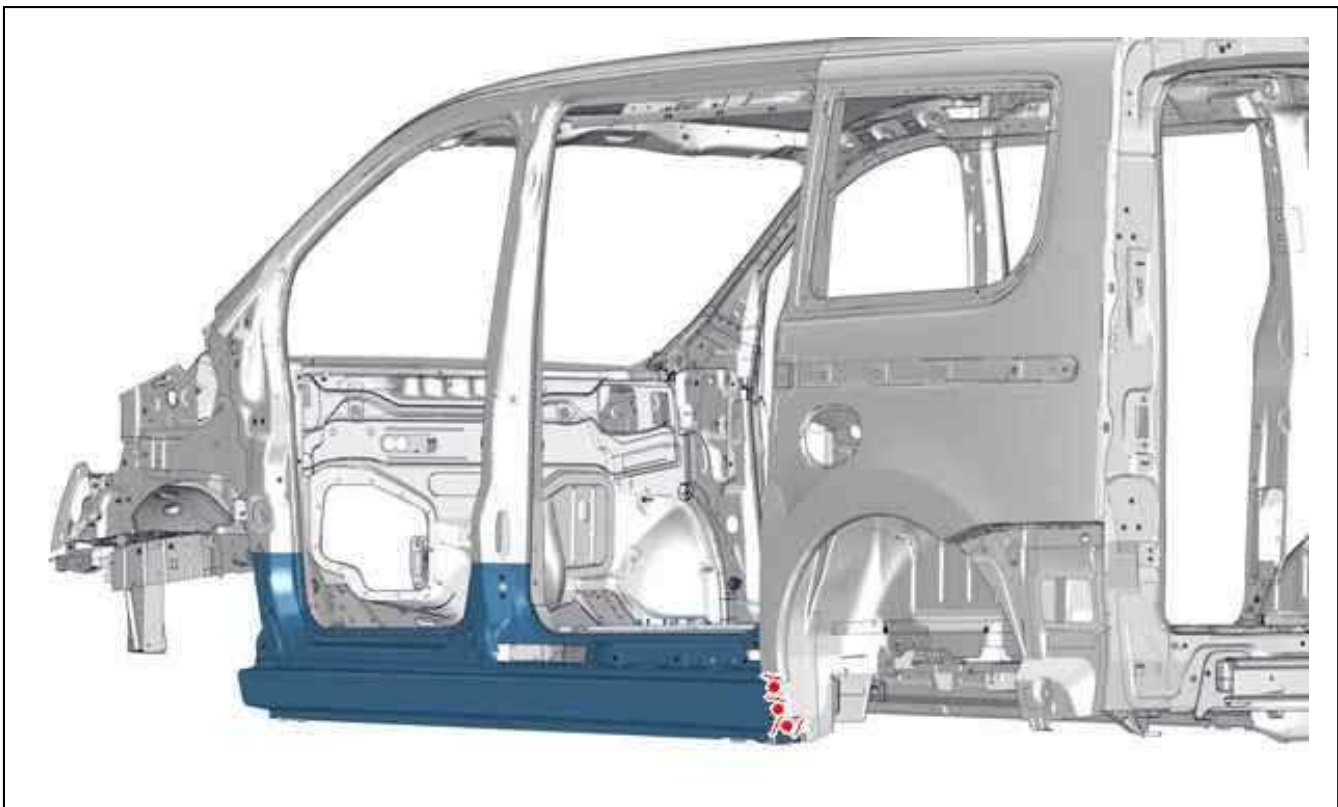


Figure : C4CP2KSD

Apply a phosphate-print layer to the zones laid bare.

Apply a sealing mastic (index "A1").

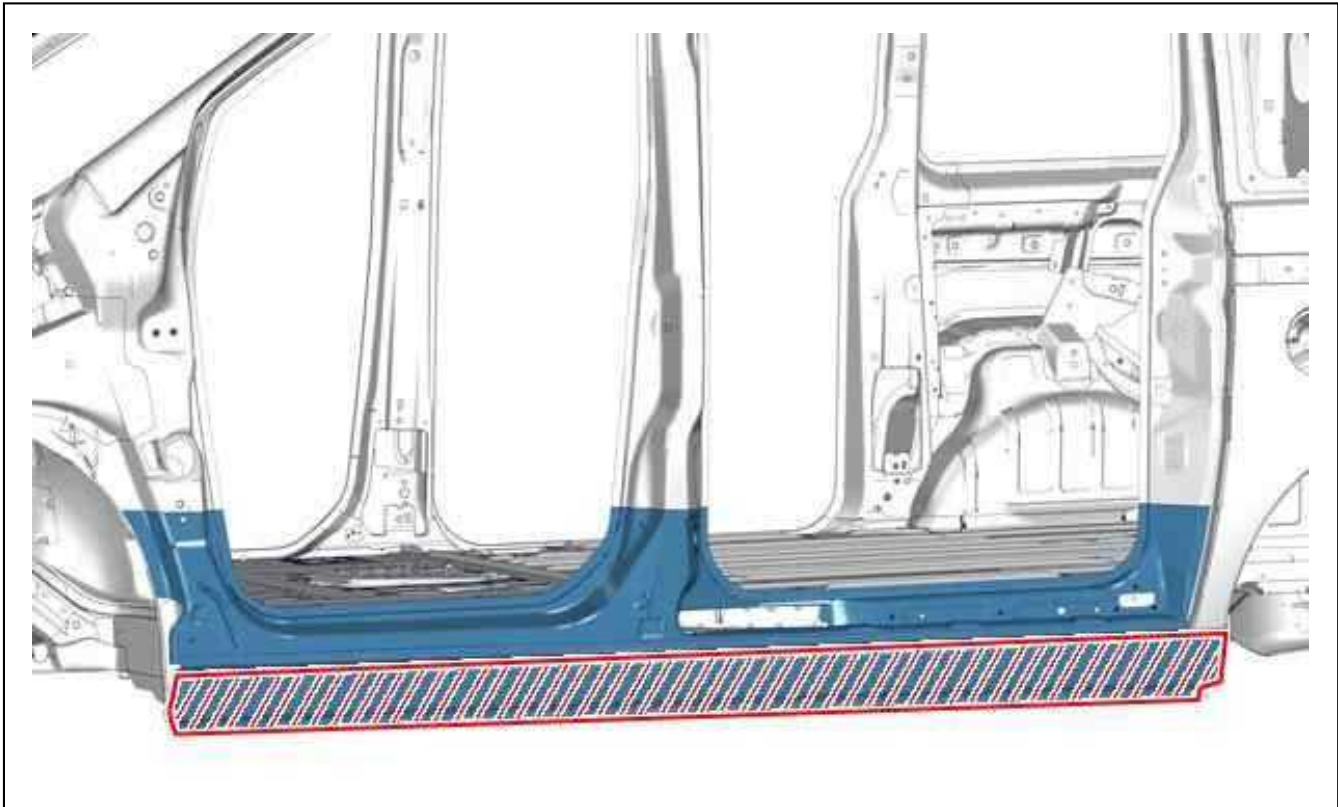


Figure : C4CP2KTD

Apply a phosphate-print layer to the zones laid bare.

Apply an anti-chip layer  (index "C4").

Paint then spray into the hollow sections, product index C5, in the repair zone.

10. Reinitialisation

Carry out the additional operations.

CAUTION : Operations to be carried out following reconnection of the battery  .

REPLACEMENT : SILL WEB ASSEMBLY

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

1. Additional operations

Disconnect the battery.

Release the wiring harnesses.

Protect the interior of the passenger compartment.

Replace the outer sill assembly ⓘ .

2. Identification of replacement parts

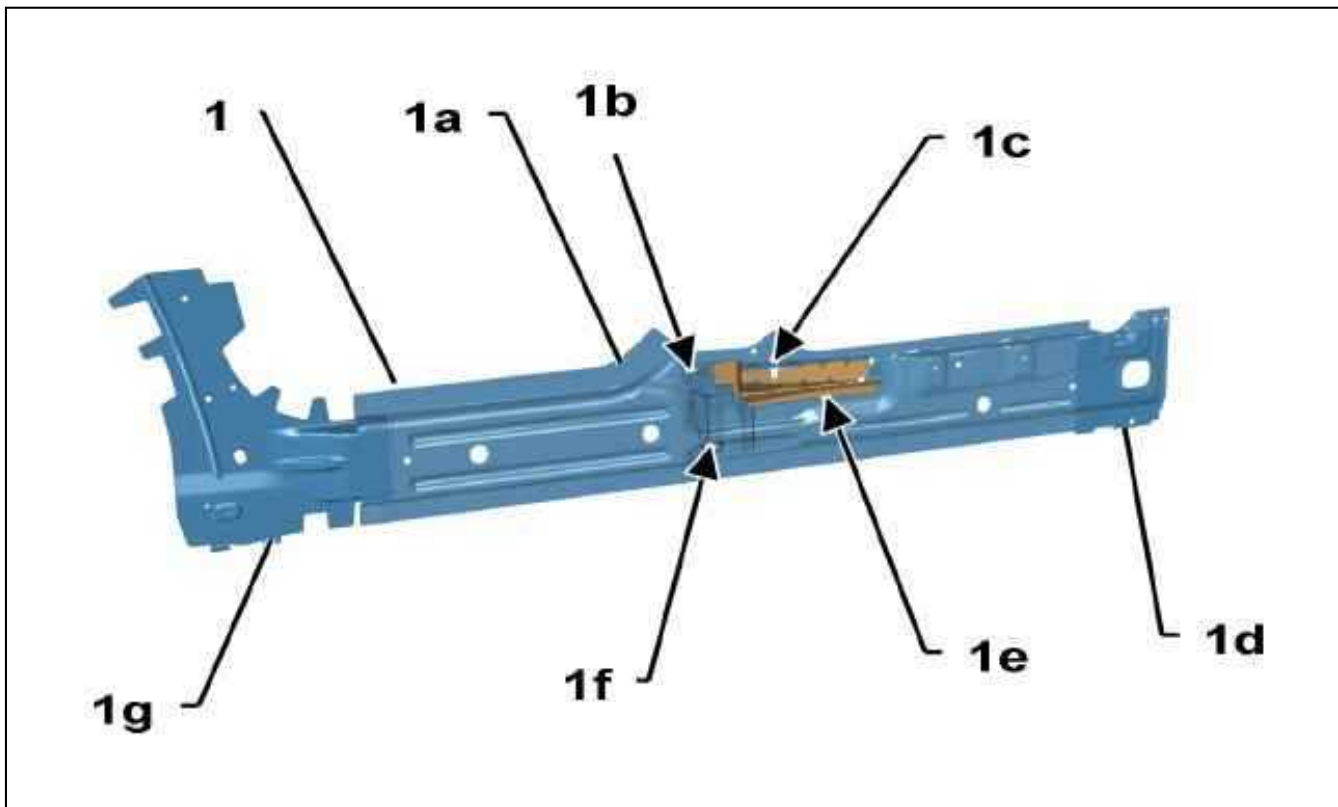


Figure : C4CP2L1D

Reference	Designation	Thickness (mm)	Nature/classification
(1)	Sill web assembly	-	-

(1a)	Sill web	1,17	ADX (*)
(1b)	Sliding door lower rail upper half-casing	1,47	ADX (*)
(1c)	Sliding door lower rail lower half-casing	1,47	ADX (*)
(1d)	Rear jack rest	2,15	HLE (*)
(1e)	Sliding door exterior half-casing support	0,77	ADX (*)
(1f)	Sliding door rail half-casing strengthener	1,47	ADX (*)
(1g)	Front jack rest	1,76	ADX (*)

(*) ADX : Mild steel - (*) HLE : High strength steel.

3. Preparation of the replacement parts

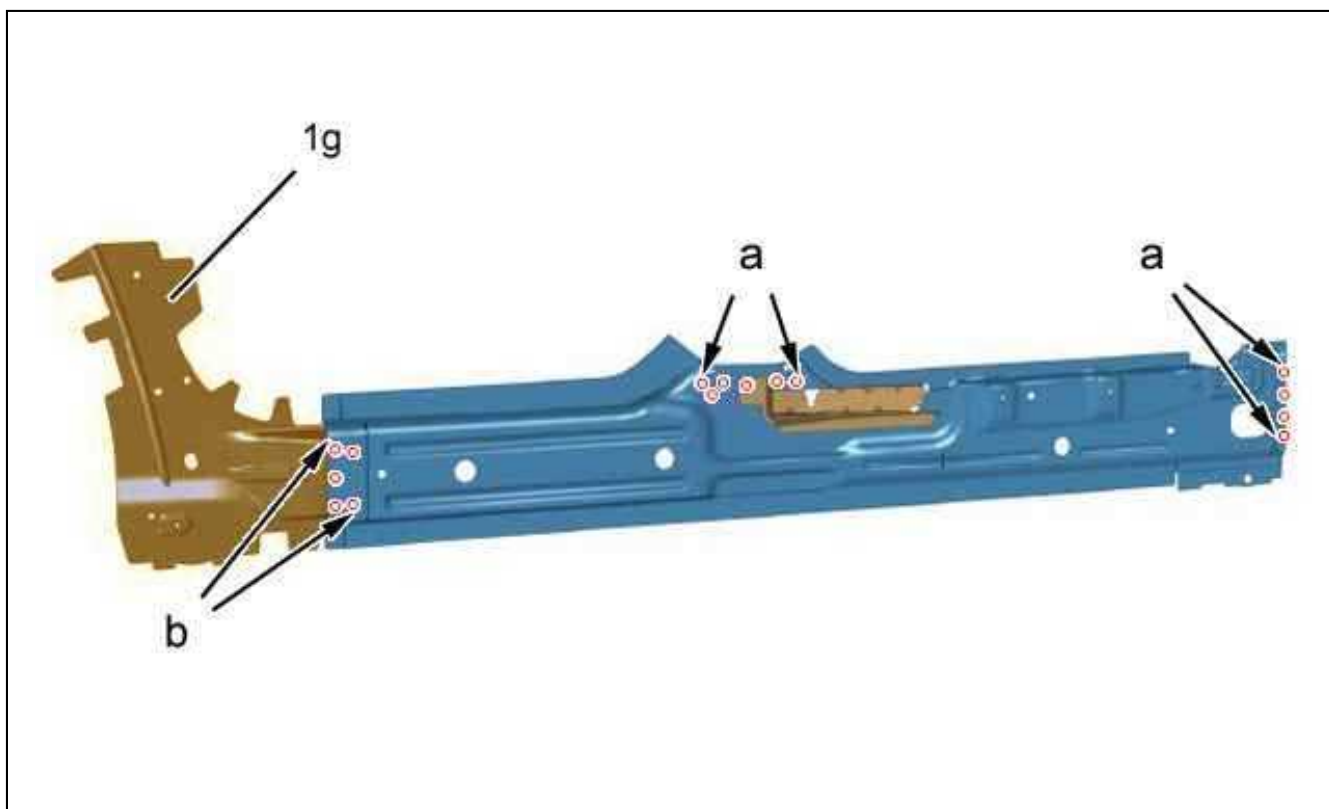


Figure : C4CP2L2D

Drill 10 mm holes for later plug welding (at "a", "b").

N.B. : Remove the front jack rest (1g).

Prepare the mating edges and protect them using a weldable primer .

4. Cutting out

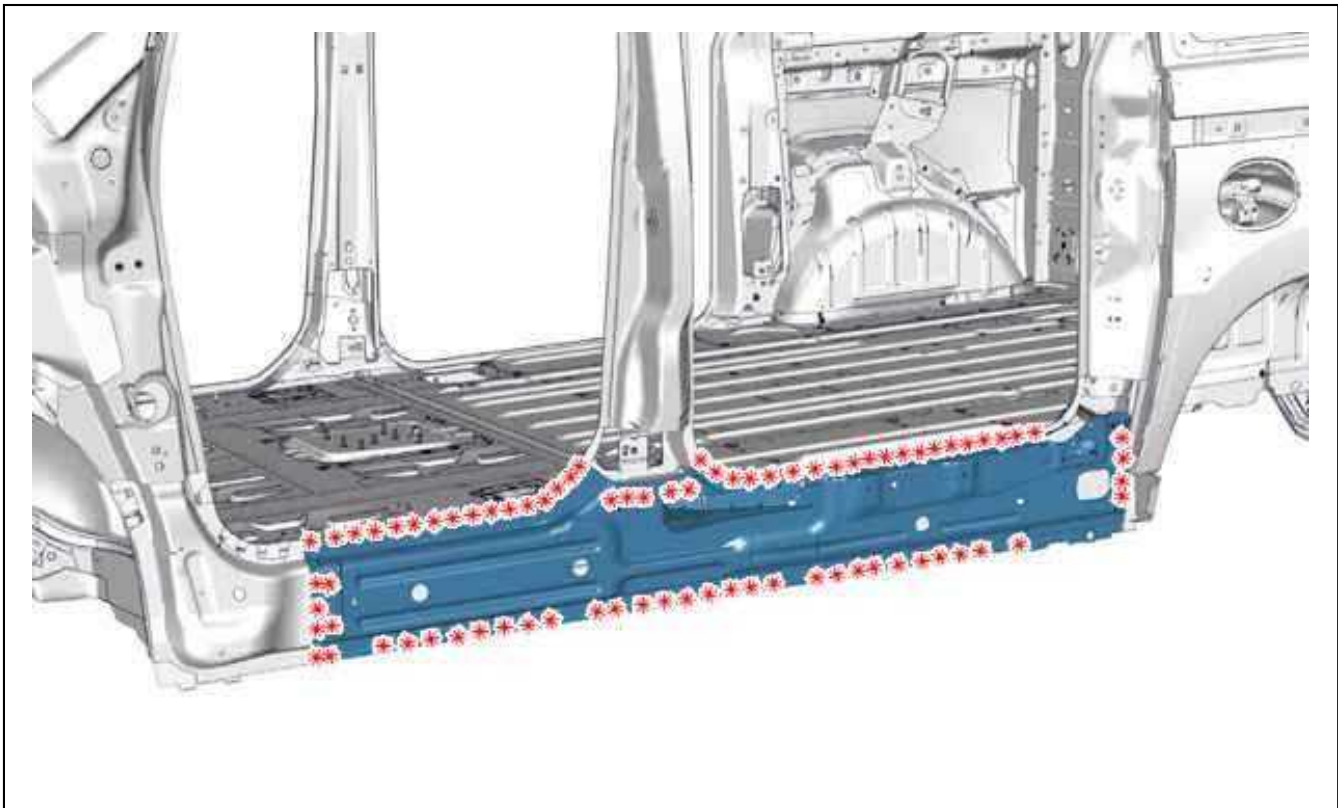


Figure : C4CP2L3D

Cut out the spot welds .

Remove the sill assembly core .

5. Bodywork cleaning and preparation

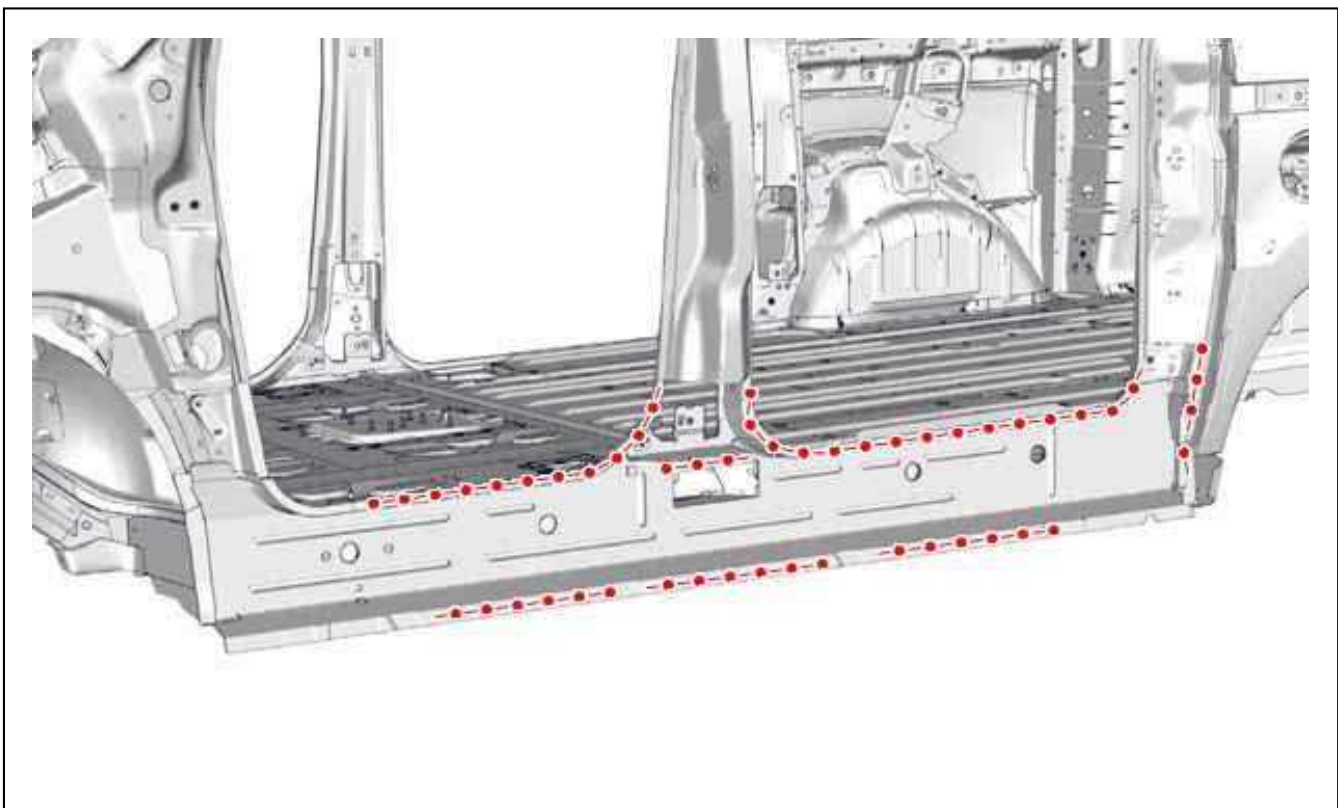


Figure : C4CP2L4D

Prepare the mating edges and protect them using a weldable primer .

6. Adjustment

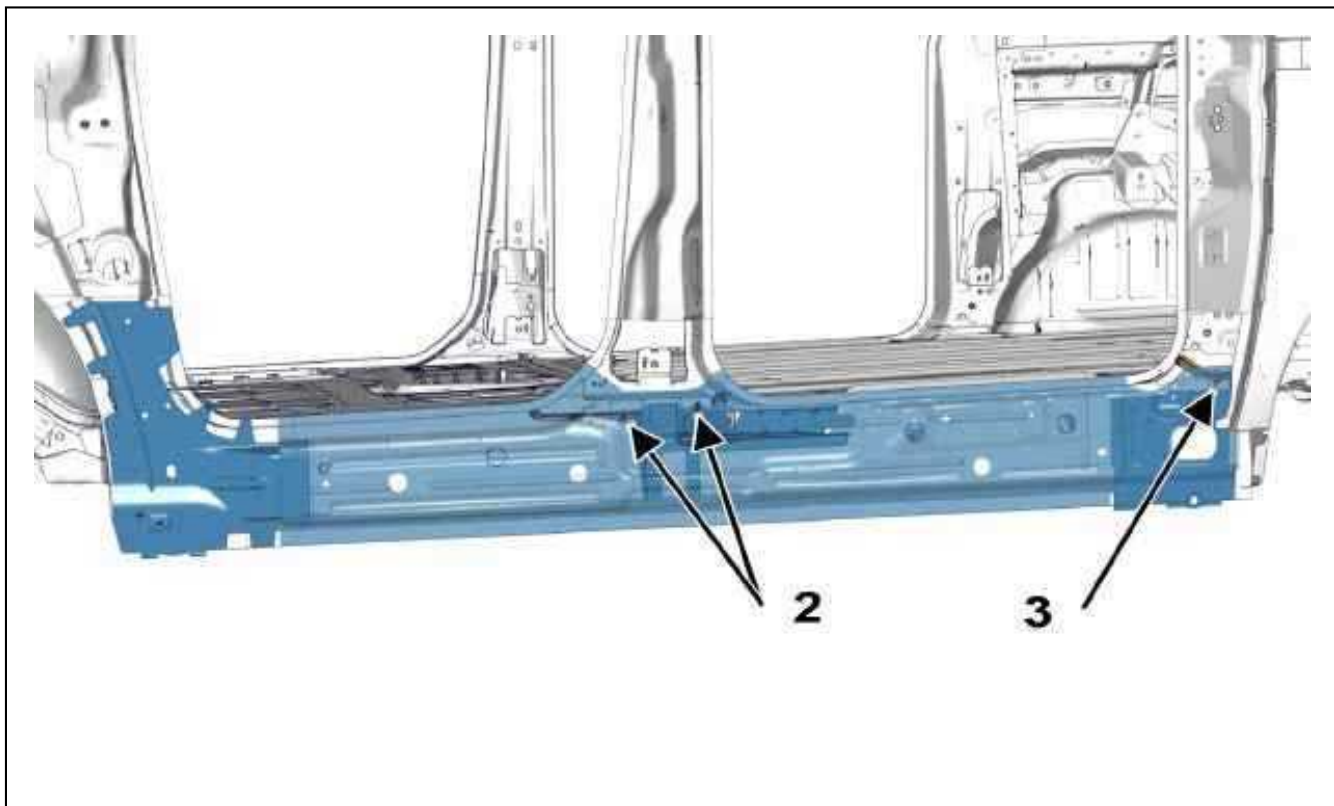


Figure : C4CP2L5D

Clip the inserts (2), (3).

Fit the outer sill assembly.

Check the fit.

Remove the outer sill assembly .

7. Welding

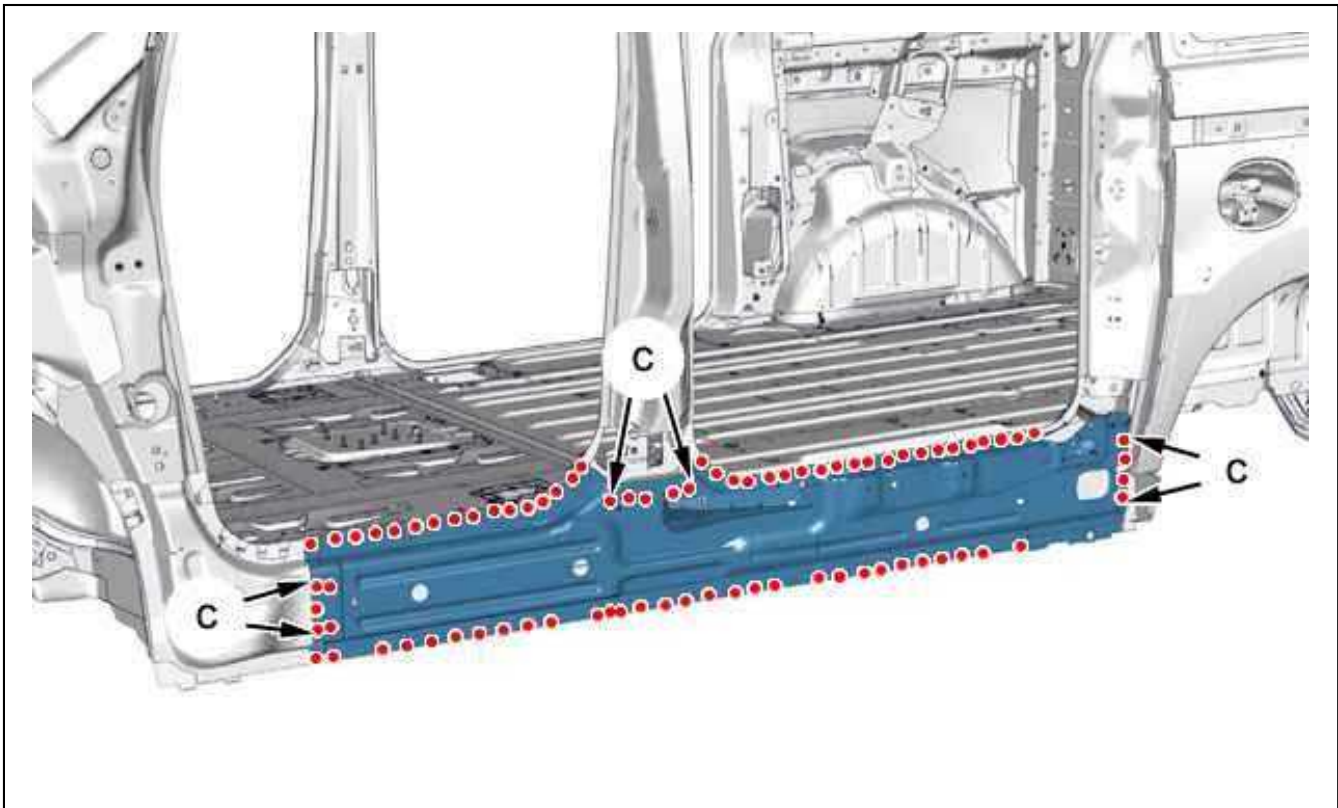


Figure : C4CP2L6D

Weld with electric spot welds ⓘ.

Weld with MAG plug welds (at "c").

8. Protection

Apply a phosphate-print layer to the zones laid bare.

Spray liquid wax into the hollow sections ⓘ (index C5 ⓘ).

9. Reinitialisation

Carry out the additional operations.

Operations to be carried out following reconnection of the battery ⓘ.

REPLACEMENT : FRONT JACK REST

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic re-zincing process .

CAUTION : The number of spot welds necessary for the assembly of a new part must be identical to the number of spot welds fixing the original part.

1. Additional operations

Disconnect the battery.

Replace: Door pillar stiffener ⓘ .

Release the wiring harnesses.

Protect the interior of the passenger compartment.

2. Identification of the replacement parts

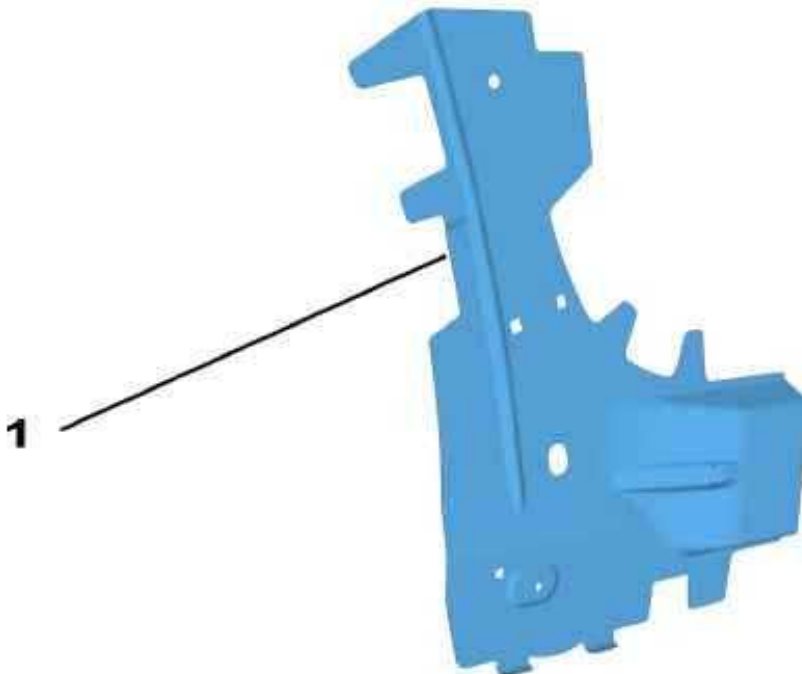


Figure : C4CM01SD

Reference	Designation	Thickness	Nature/classification
(1)	Front jack rest	1,76 mm	HLE (*)
(*)HLE : high-strength steel			

3. Cutting out

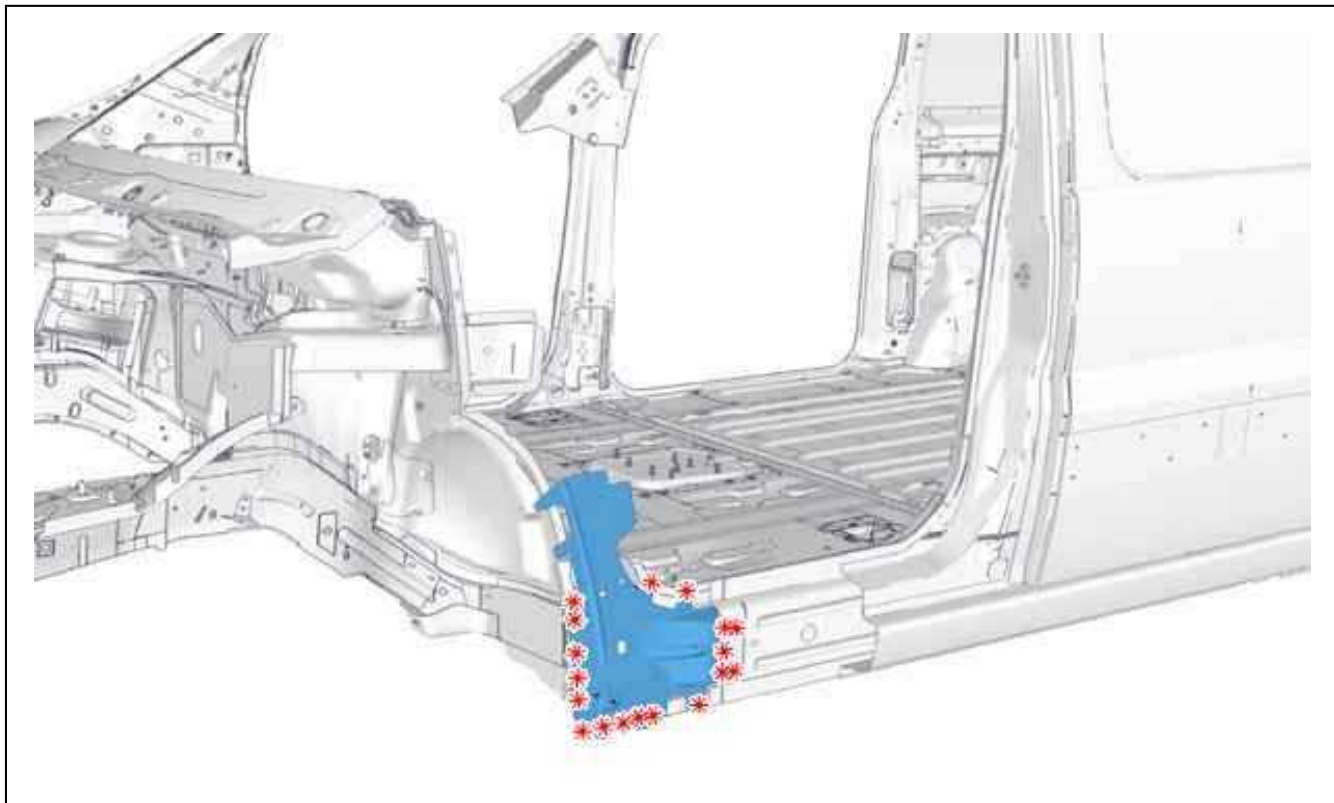


Figure : C4CM01TD

Cut out the spot welds .
Remove : Front jack rest .

4. Bodywork cleaning and preparation

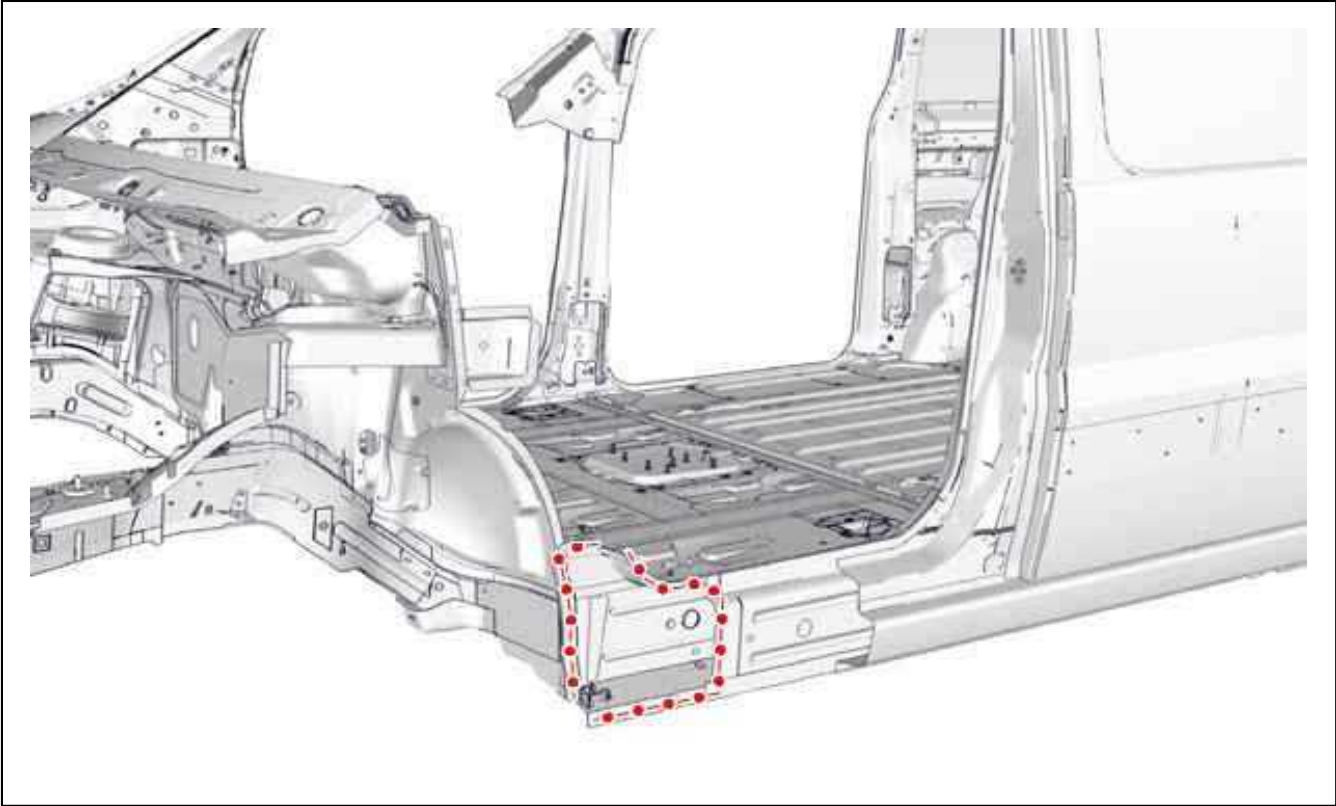


Figure : C4CM01UD

Create a seal on the periphery of the inflating insert using an index "A1" sealing product.
Prepare the mating edges and protect them using a weldable primer .

5. Adjustment

Position : Front jack rest .
Check the fit.

6. Welding

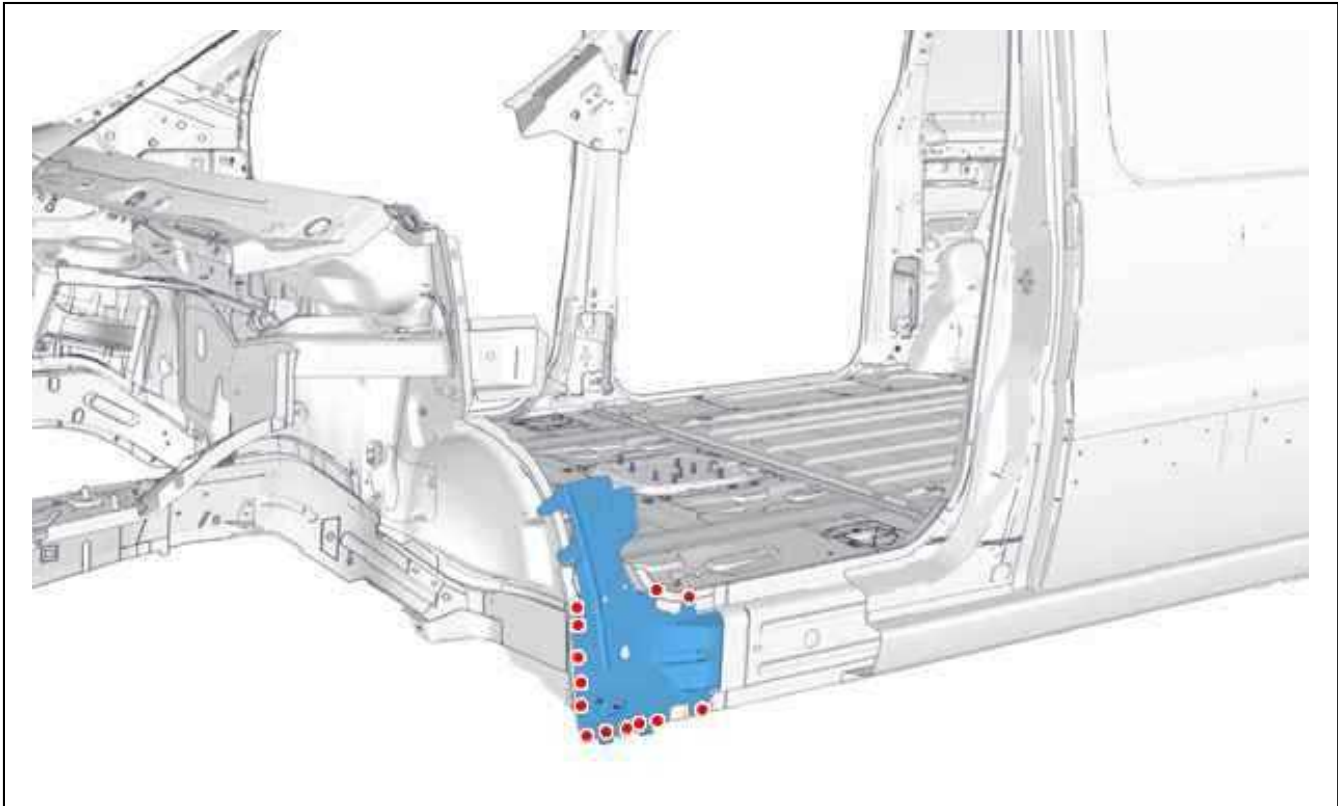


Figure : C4CM01VD

Weld with electric spot welds.

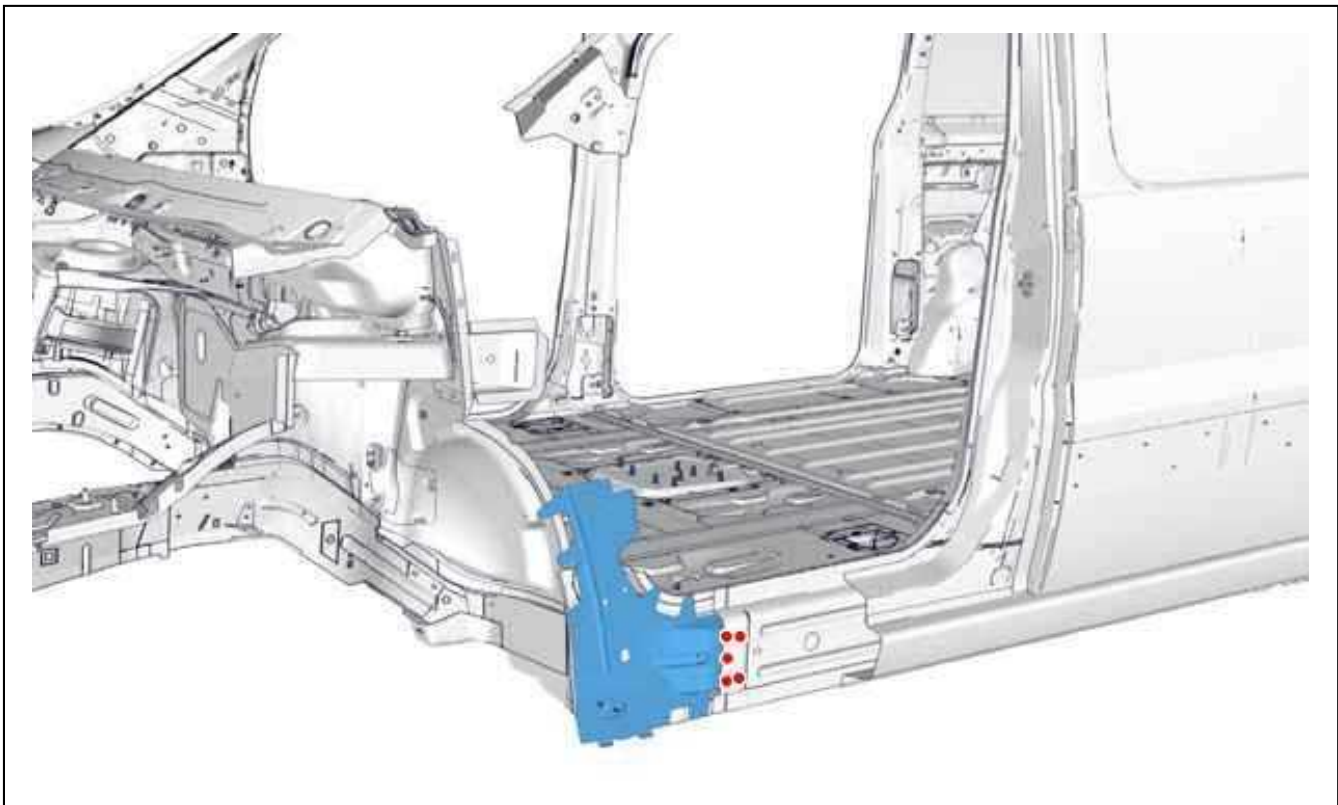


Figure : C4CM01WD

Weld with MAG plug welds.
Grind the MAG plug welds.

7. Sealing protection

Apply a phosphate-print layer on the zone laid bare.

Paint then spray into the hollow sections, product index C5, in the repair zone.

8. Reinitialisation

Carry out the additional operations.

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ .

REPLACEMENT : DOOR PILLAR STIFFENER

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

1. Additional operations

Disconnect the battery.

Replacement : **Front pillar assembly** ⓘ .

Release the wiring harnesses.

2. Recommended consumables

Lint-free cloth.

Degreasing product : Type "J1".

1 cartridge of index "B10" structural insert adhesive.

3. Identification of replacement parts

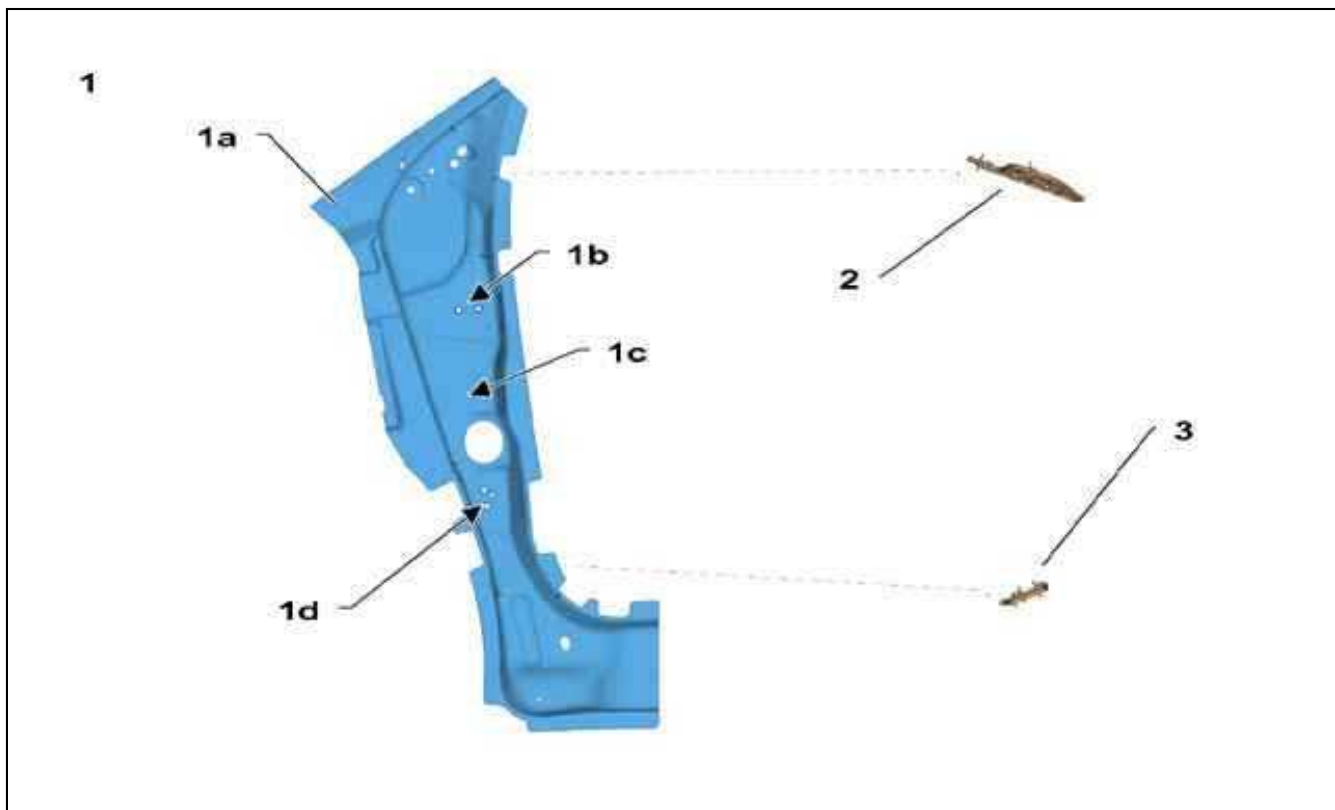


Figure : C4CM01GD

Reference	Designation	Thickness (mm)	Nature/classification
(1)	A post strengthener assembly	-	-
(1a)	Door pillar stiffener	1,76	HLE (**)
(1b)	Front pillar hinge upper stiffener	1,47	HLE (**)
(1c)	Door stop fixing strengthener	1,95	THLE (***)
(1d)	Front pillar hinge lower reinforcement	1,47	ADX (*)
(2)	Lower expanding insert of the upper A post strengthener	-	-
(3)	Front jack support exterior upper expanding insert	-	-
(*) ADX : soft steel (**) HLE : high-strength steel (***)THLE: very high-strength steel			

4. Replacement part preparation



Figure : C4CM01HD

Mark then drill to Ø 8 mm for later plug welding.
Prepare the mating edges and protect them using a weldable primer .



Figure : C4CM01JD

Thoroughly degrease the areas for bonding.

Wipe with a clean cloth.

Apply an index "B10" structural insert adhesive.

Fit the inflating insert .

5. Cutting out

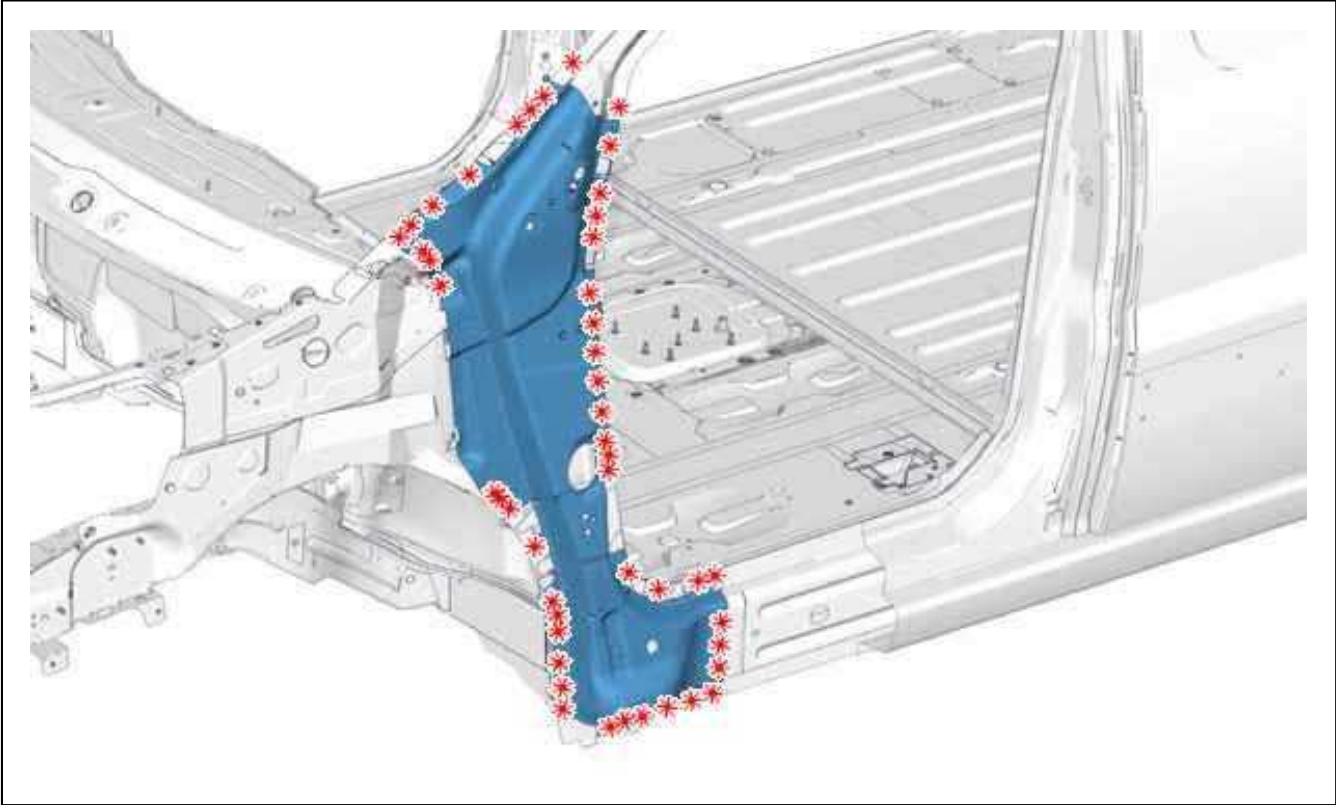


Figure : C4CM01KD

Cut out the spot welds .

Remove the A post strengthener assembly.

6. Bodywork cleaning and preparation

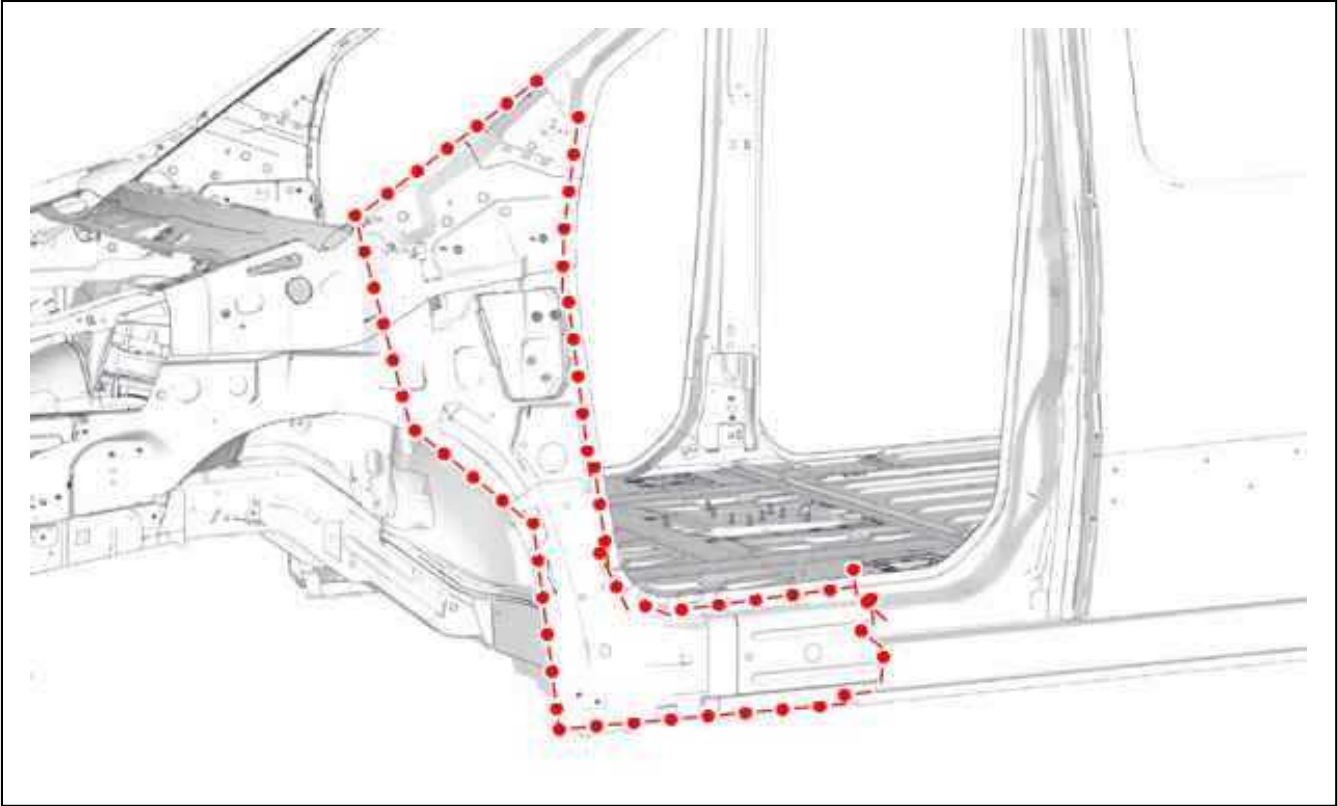


Figure : C4CM01LD

Prepare the mating edges and protect them using a weldable primer .

7. Adjustment



Figure : C4CM01MD

Fit : **The insert**  .

Apply a filling adhesive "A2".

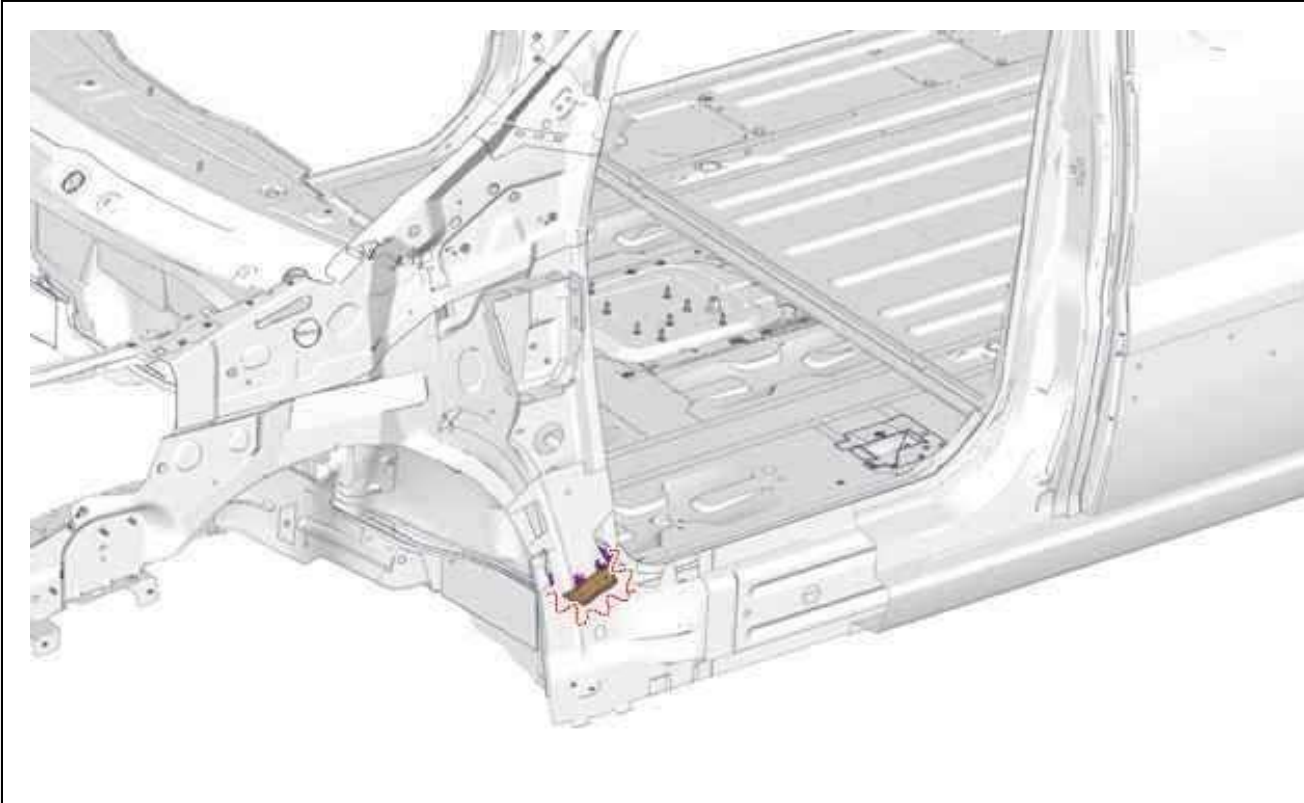


Figure : C4CM01ND

Position the inflating insert  .

Apply a filling adhesive "A2".

Position the A post strengthener.

Check the position of the A post strengthener.

8. Welding

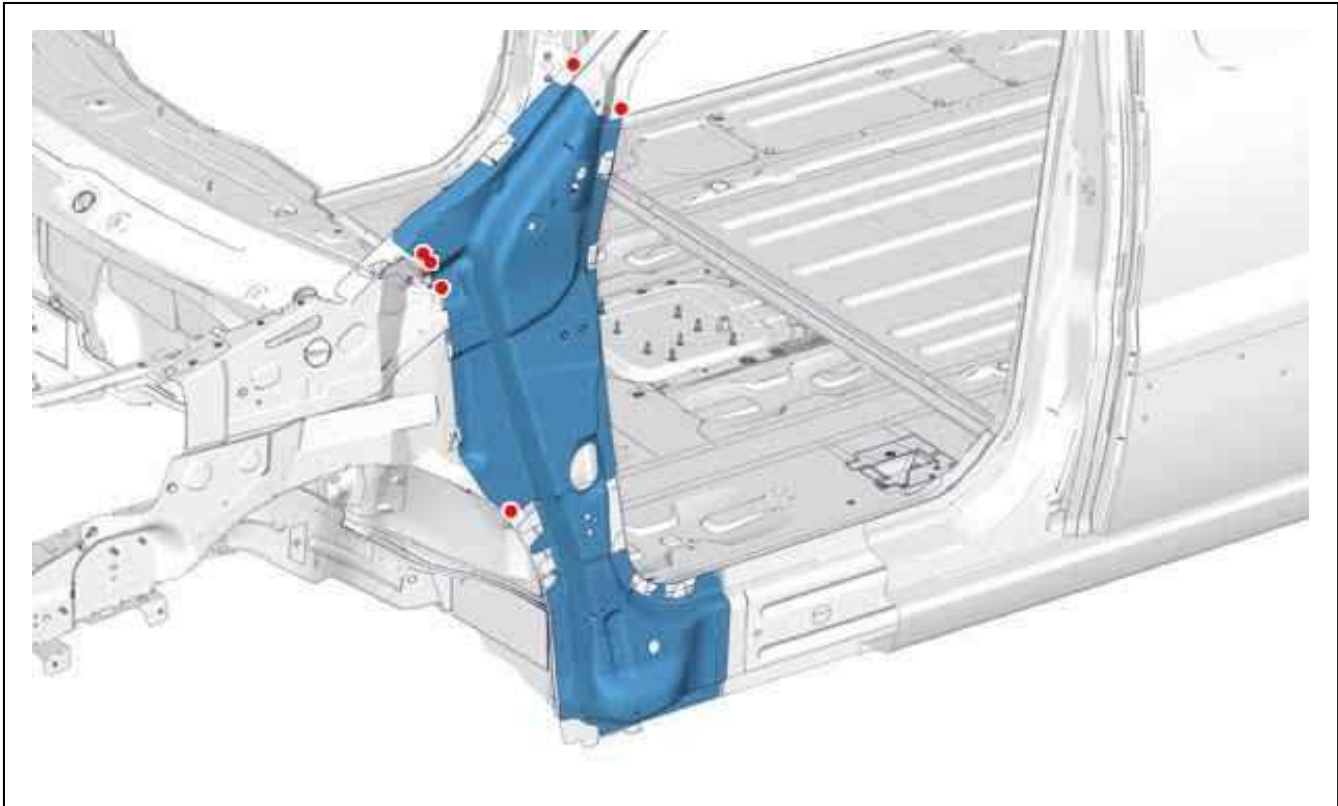


Figure : C4CM01PD

Weld with MAG plug welds.

Grind the MAG plug welds.

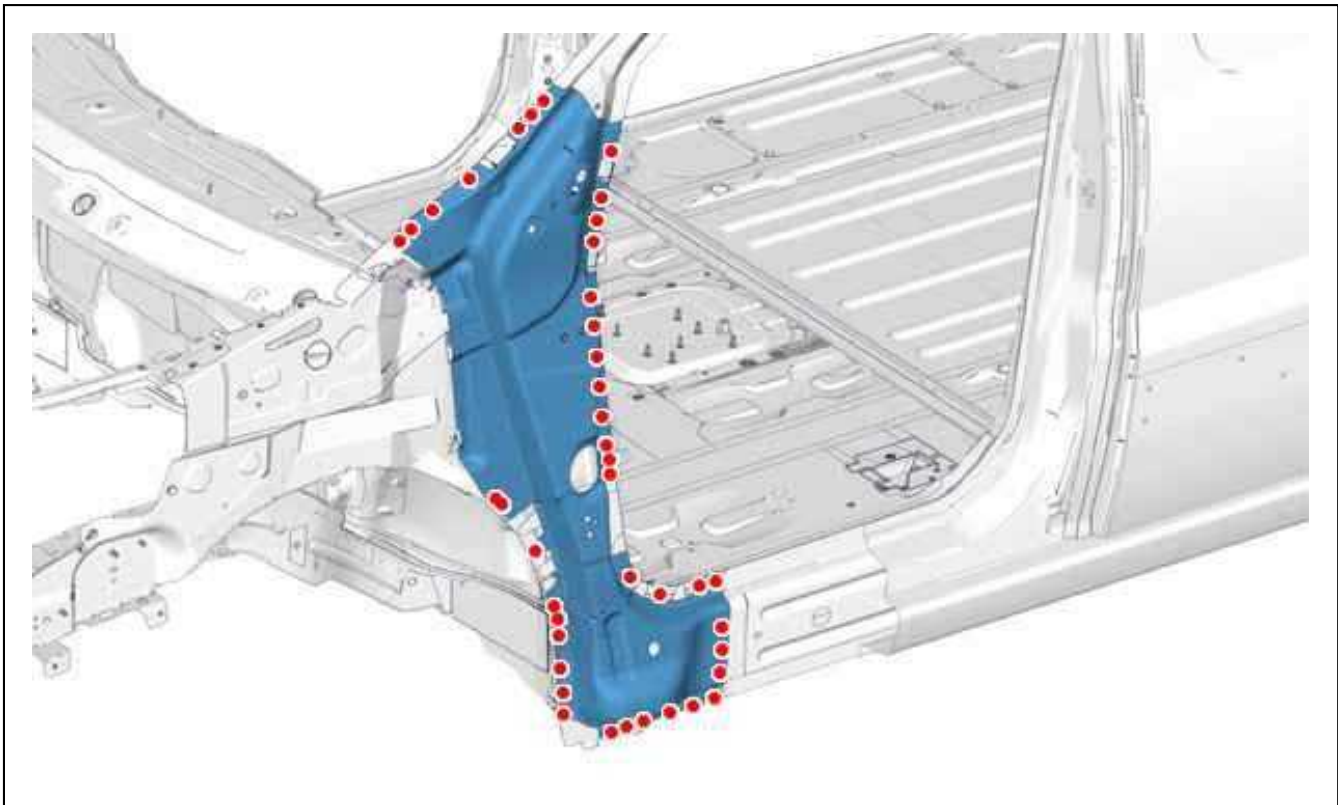


Figure : C4CM01QD

Weld with electric spot welds ⓘ .

9. Sealing protection

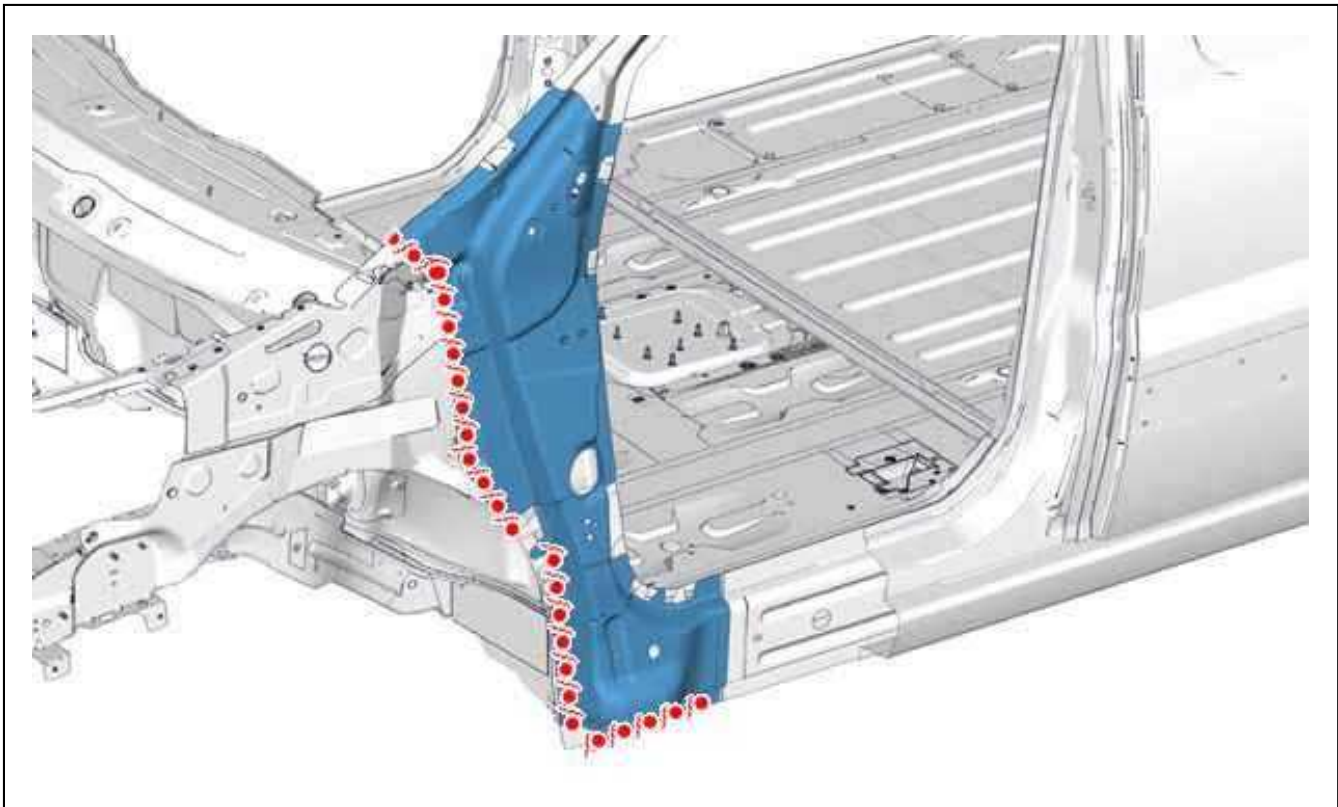


Figure : C4CM01RD

Apply a phosphate-print layer on the zone laid bare.

Apply a sealing mastic of type "A1".

Paint then spray into the hollow sections, product index C5, in the repair zone.

10. Reinitialisation

Carry out the additional operations.

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery .

REPLACEMENT : CENTRE PILLAR

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ : 2 or 4 post lift, workshop jack or customer's jack ⓘ .

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

1. Additional operations

Disconnect the battery.

Remove-refit the following components :

- The front door
- The side sliding door
- Front seat
- 2nd row of seats (According to equipment)

Strip/retrim the floor (Partially)(according to equipment).

Release the wiring harnesses.

Protect the interior of the passenger compartment.

2. Identification of the replacement parts

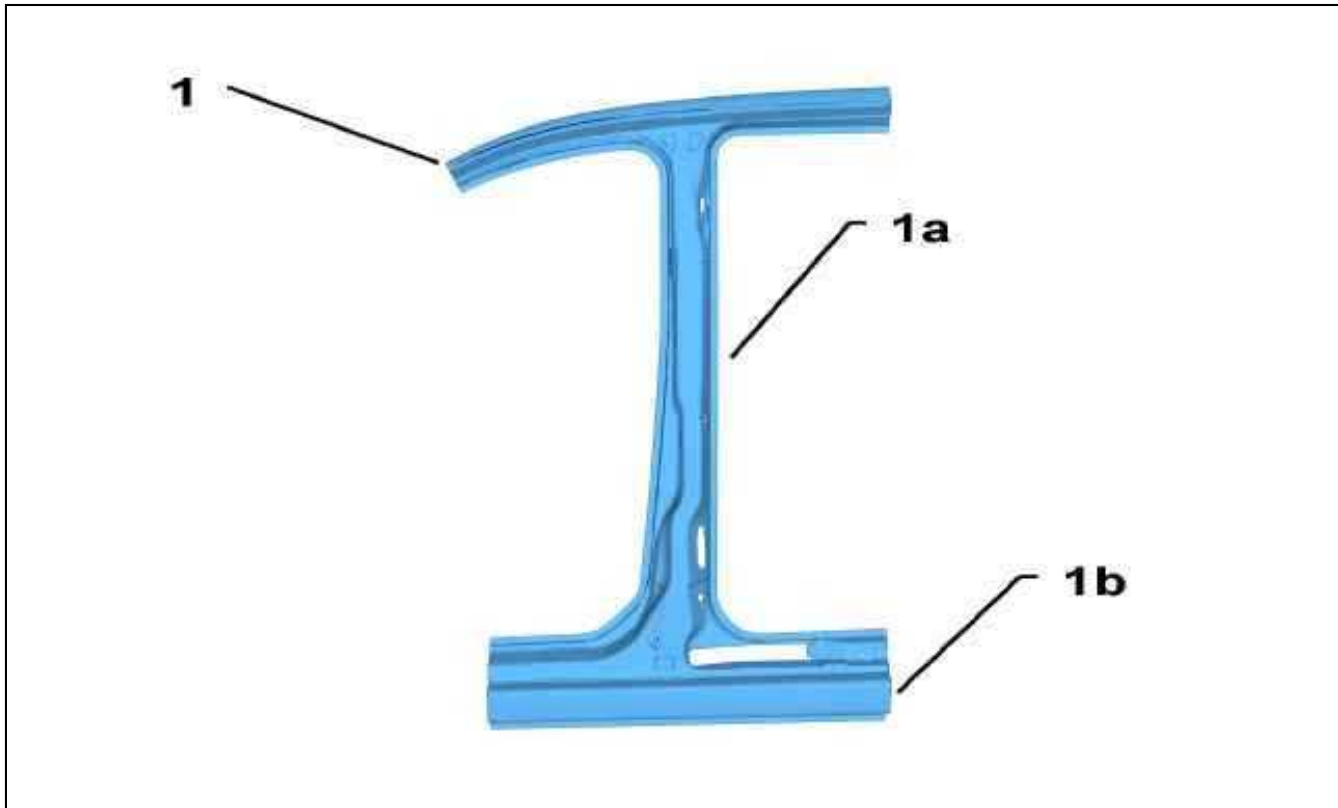


Figure : C4CM01XD

Reference	Designation	Thickness (mm)	Nature/classification
(1)	Centre pillar assembly	-	-
(1a)	Centre pillar	0,97	ADX (*)
(1b)	Outer sill	0,97	ADX (*)
(*)ADX : soft steel			

3. Cutting out

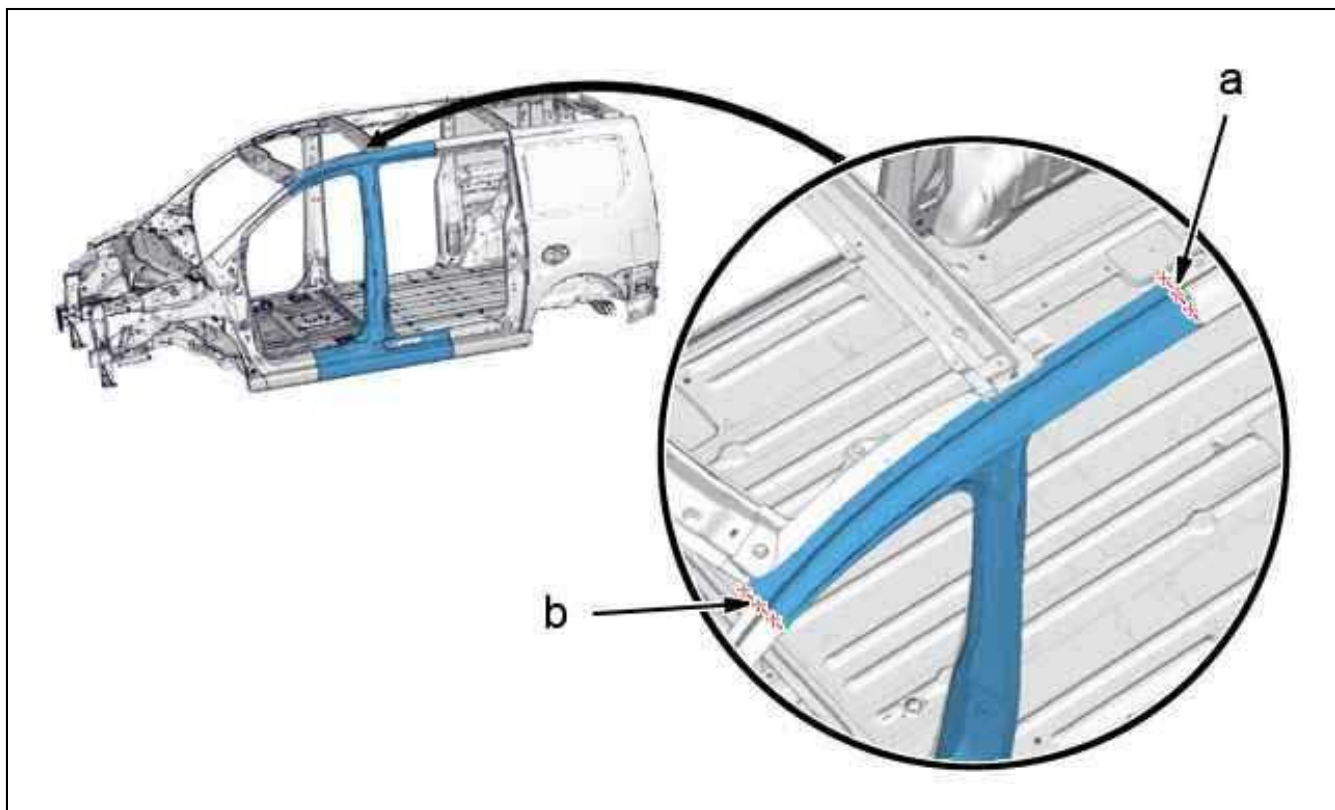


Figure : C4CM01YD

Mark, then cut (as "a", "b").

Cut-away possibilities on the body side ⓘ.

N.B. : The cutting lines "a", "b" are indicated as an example only. The cutting lines may vary according to the different cases of replacement of the front pillar . Observe the safety distances near the expanding inserts.

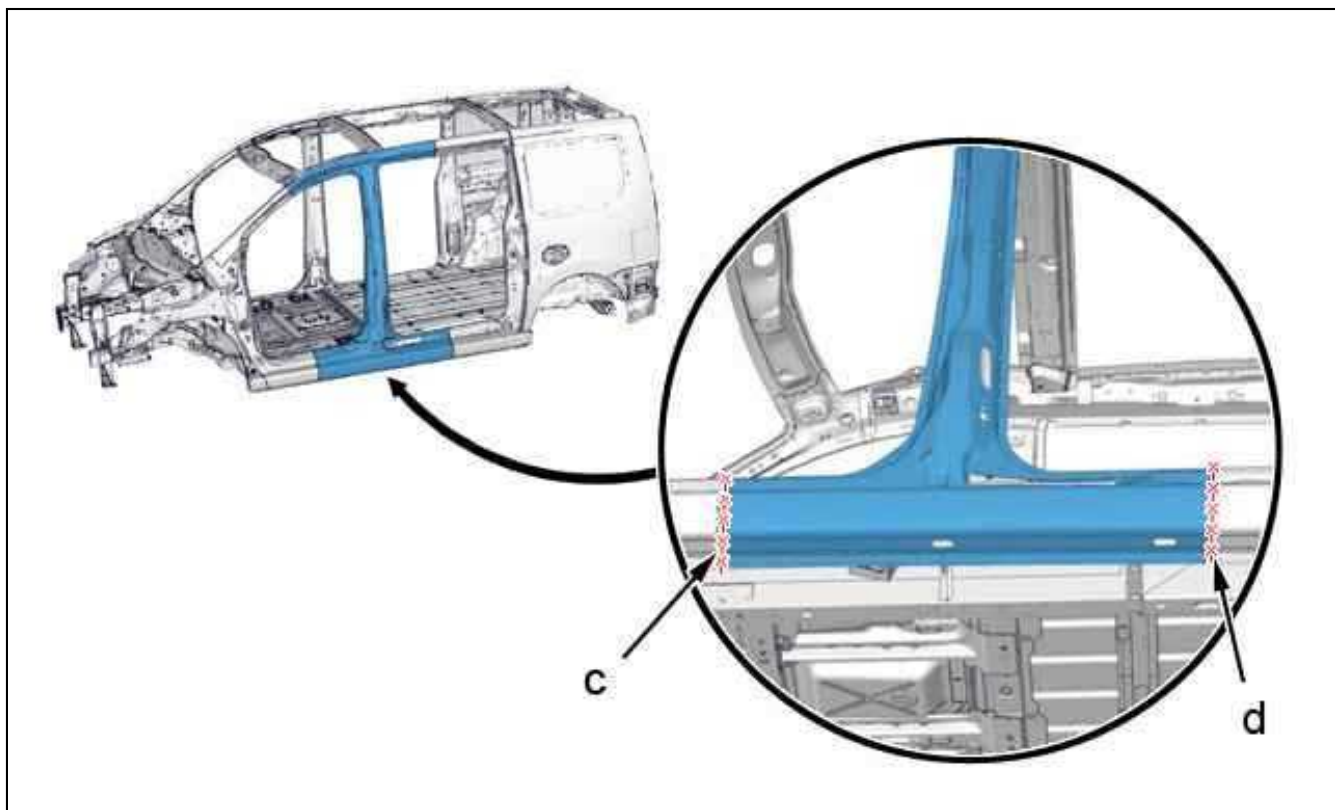


Figure : C4CM01ZD

Mark, then cut (as en "c", "d").

Cut-away possibilities on the body side ⓘ.

N.B. : The cutting lines "a", "b" are indicated as an example only. The cutting lines may vary according to the differen cases of replacement of the front pillar . Observe the safety distances near the expanding inserts.

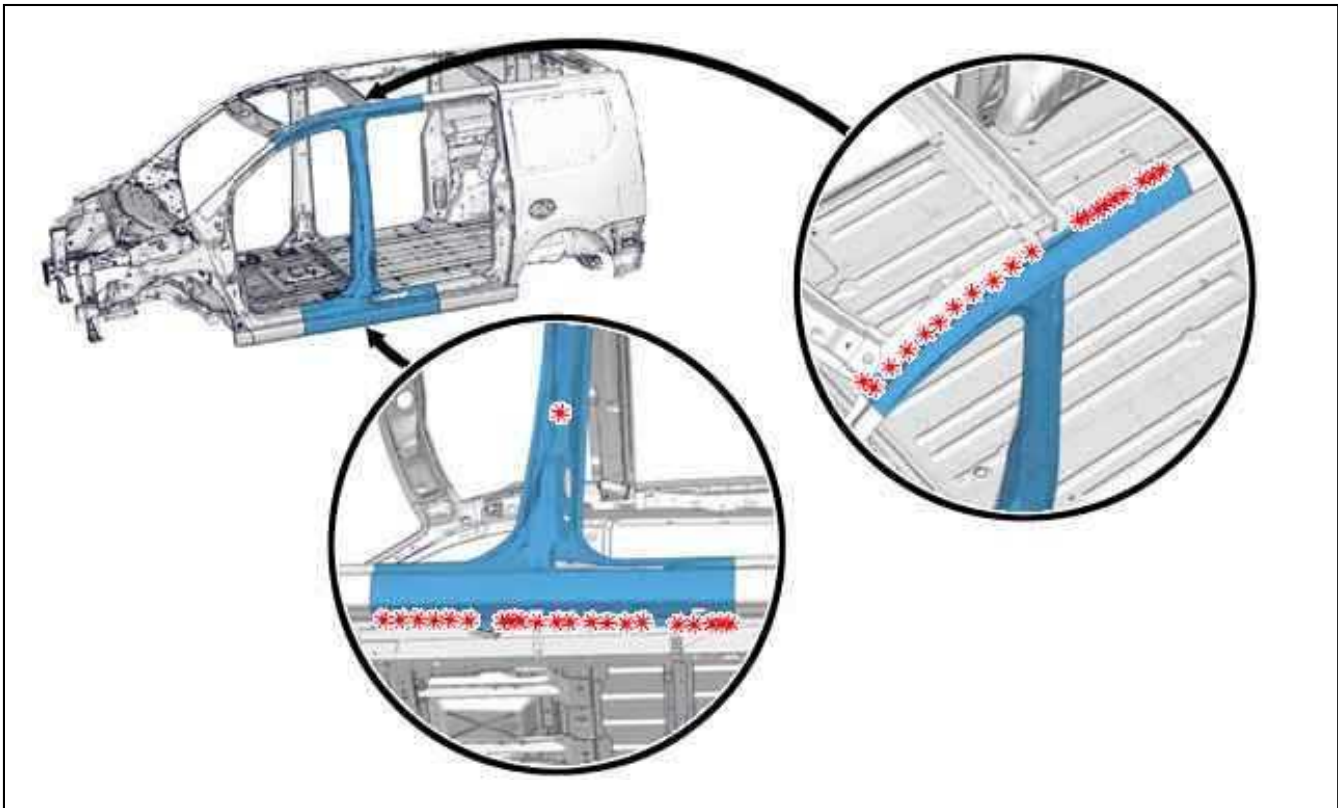


Figure : C4CM020D

Cut out the spot welds .

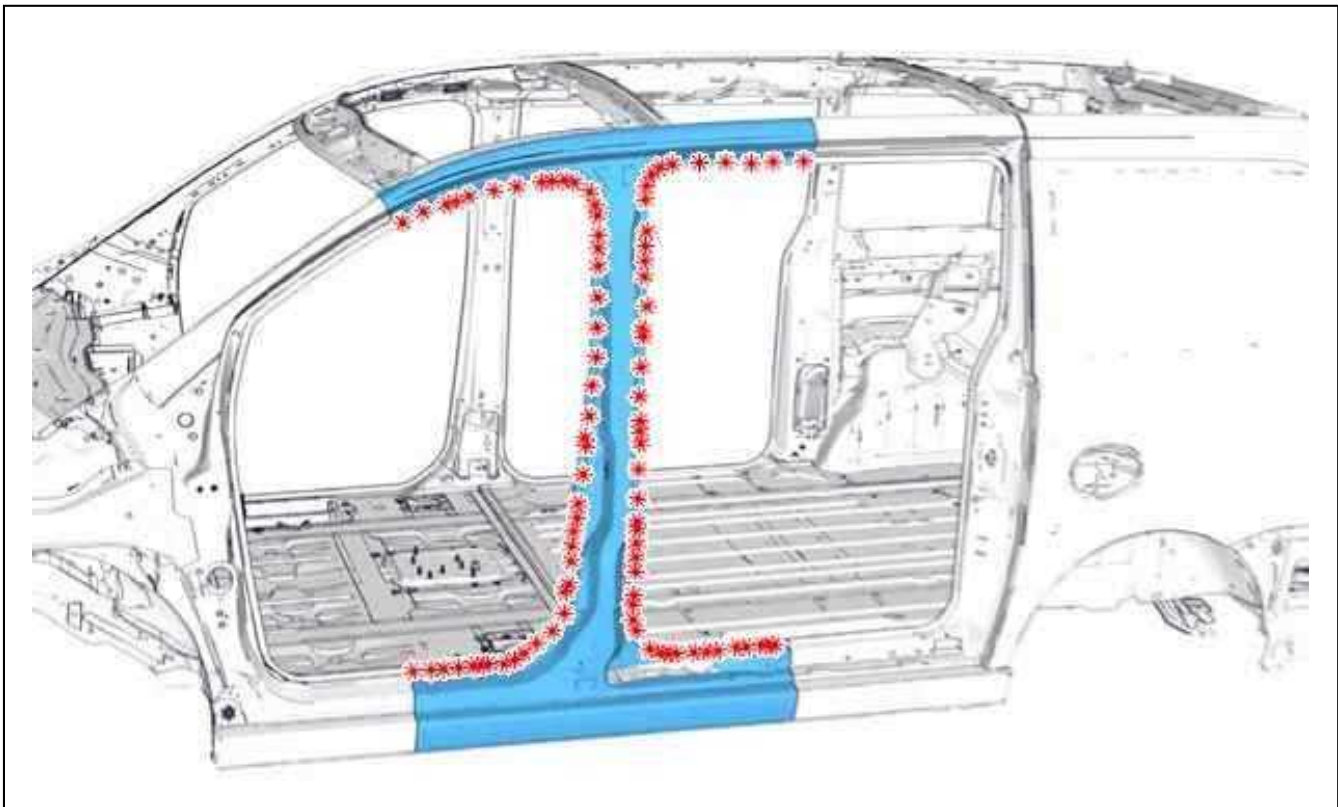


Figure : C4CM021D

Cut the spot welds to Ø 8 mm.
Remove : Centre pillar assembly.

4. Bodywork cleaning and preparation

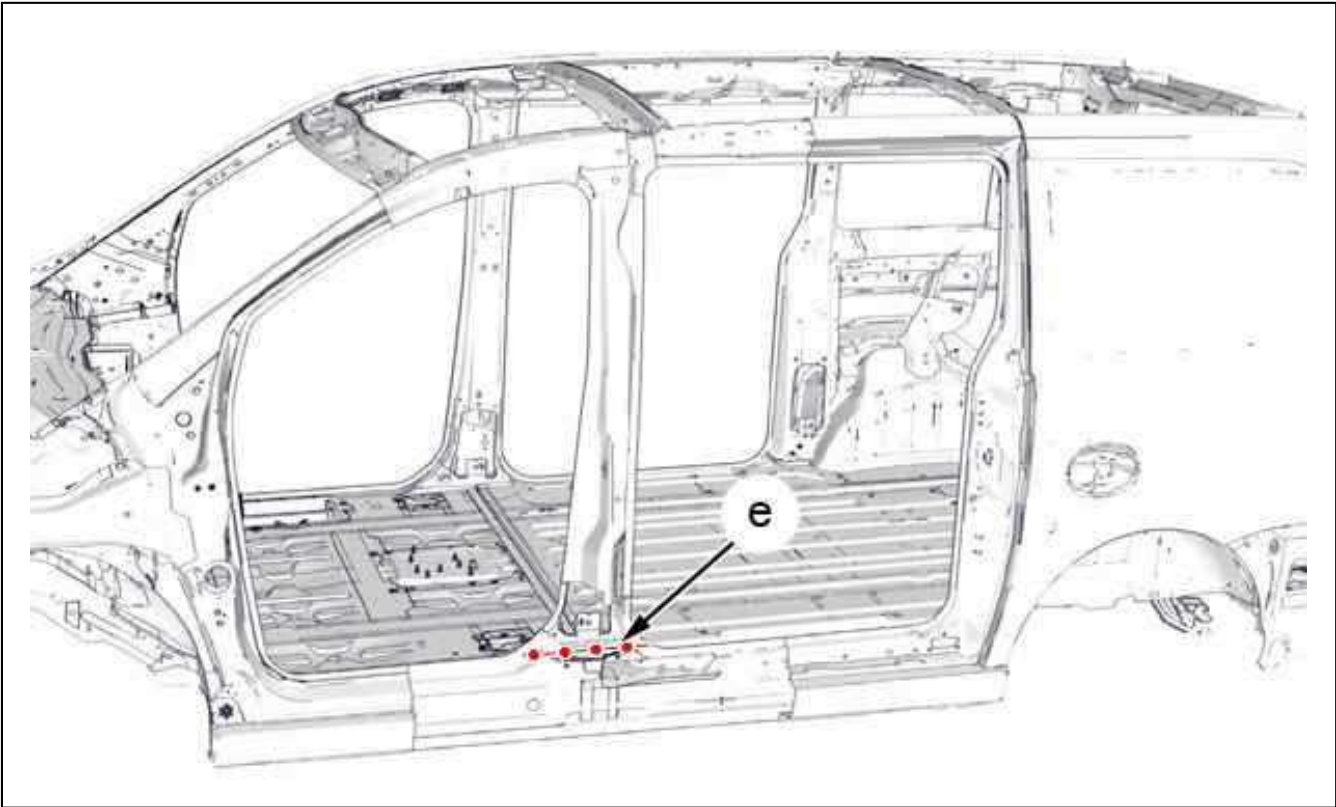


Figure : C4CM022D

Prepare the mating edges and protect them using a weldable primer .

Fit : Centre pillar expanding insert .

Apply a filling adhesive "A2".

When replacing a part containing an expanding foam insert "e" :The following operations must be carried out.

4.1. First method

Position the inflating insert in the component.

Inject " C6" polyurethane foam.

4.2. Second method

Position the inflating insert in the component.

Create a seal on the periphery of the inflating insert using an index "A1" sealing product.

5. Adjustment

Fit the centre pillar.

Check the adjustment of the components.

Adjust the cut lines.

6. Welding

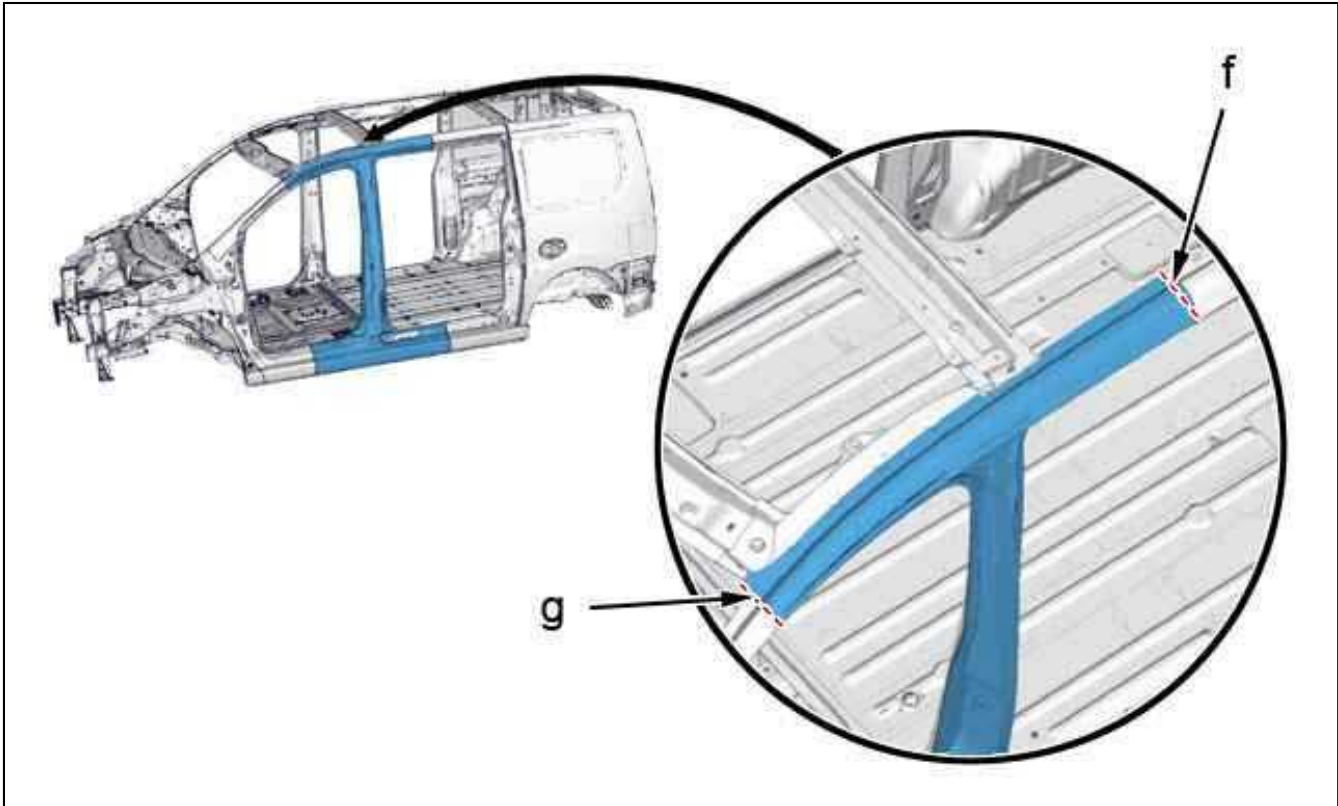


Figure : C4CM023D

MAG weld with beads in succession (as "f", "g").

Grind the MAG weld beads.

Resistance welding parameters ⓘ (passenger compartment side) ⓘ .

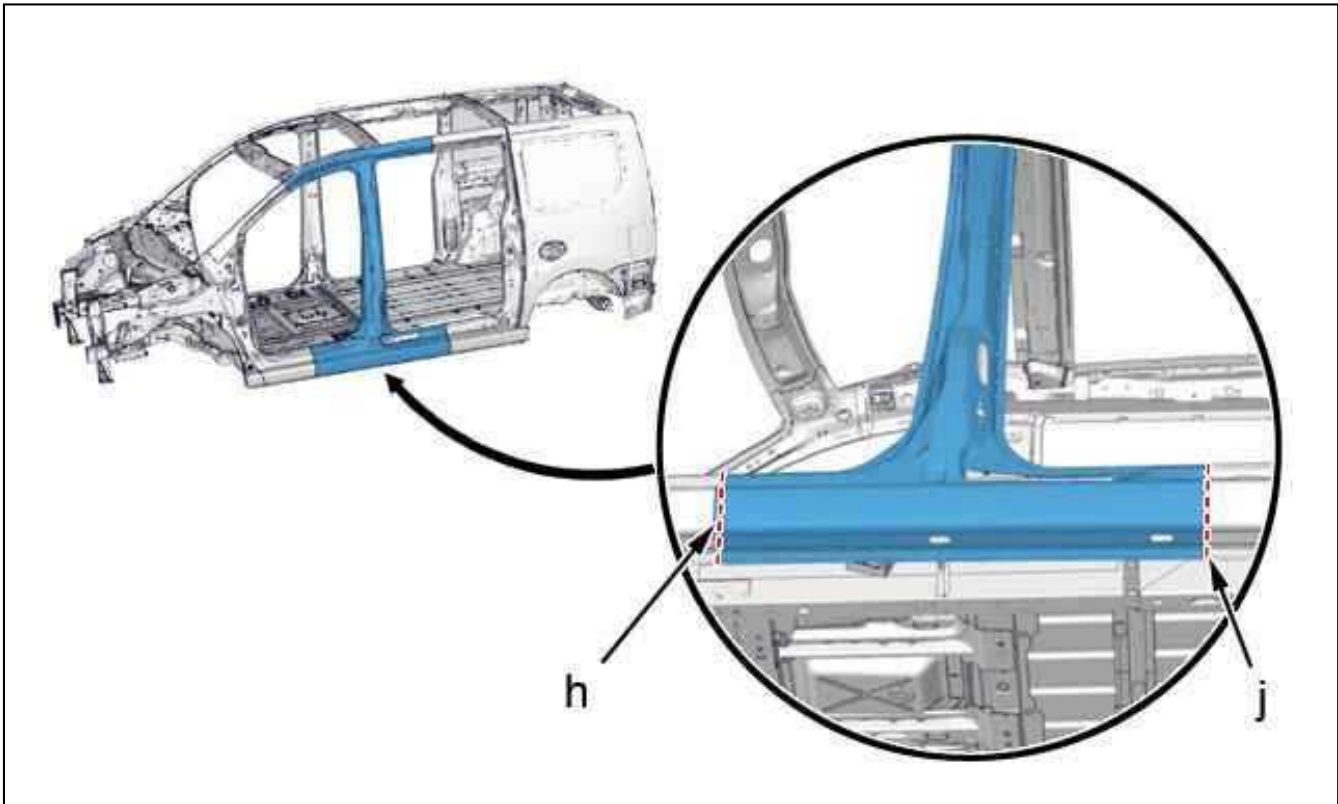


Figure : C4CM024D

MAG weld with beads in succession (as "f", "g").

Grind the MAG weld beads.

Weld with electric spot welds. Resistance welding parameters ⓘ (passenger compartment side) ⓘ .

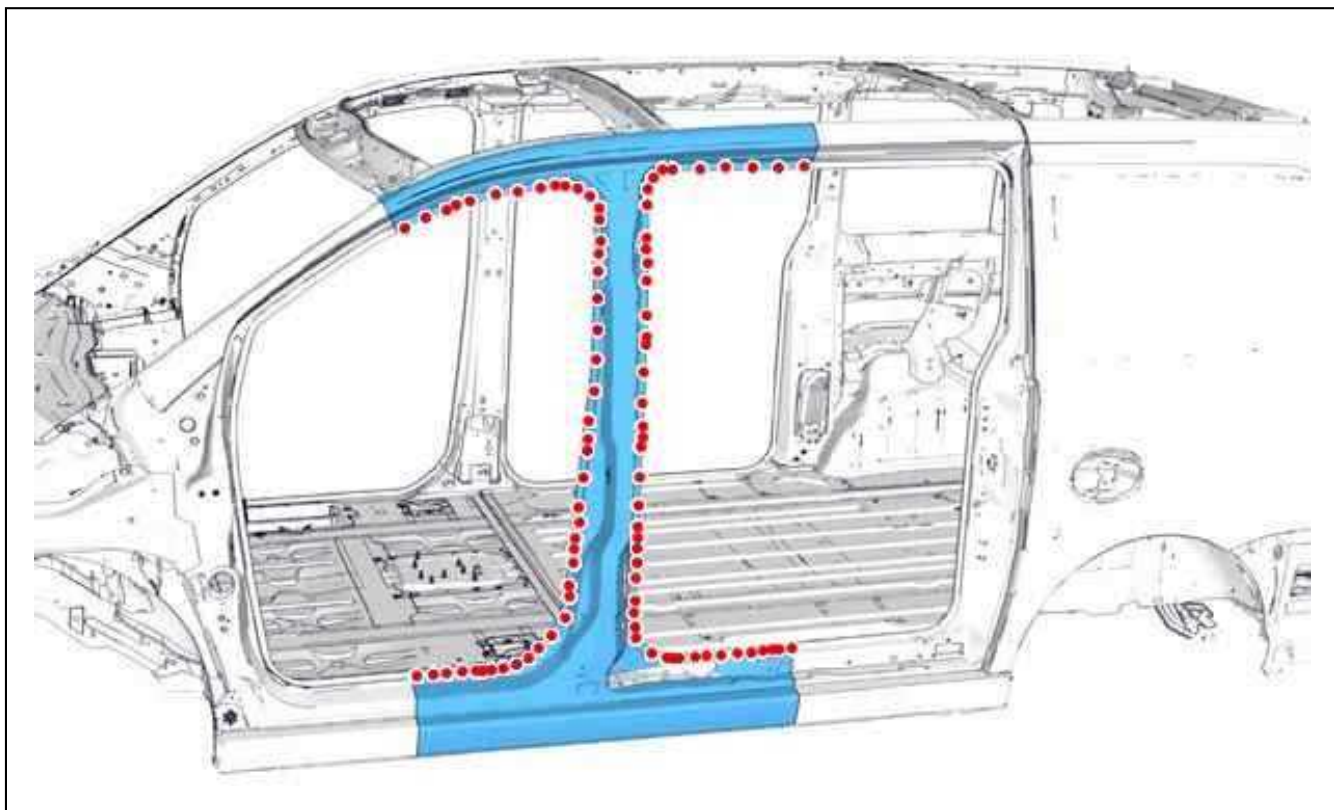


Figure : C4CM025D

Resistance welding parameters ⓘ (passenger compartment side) ⓘ .

7. Sealing protection

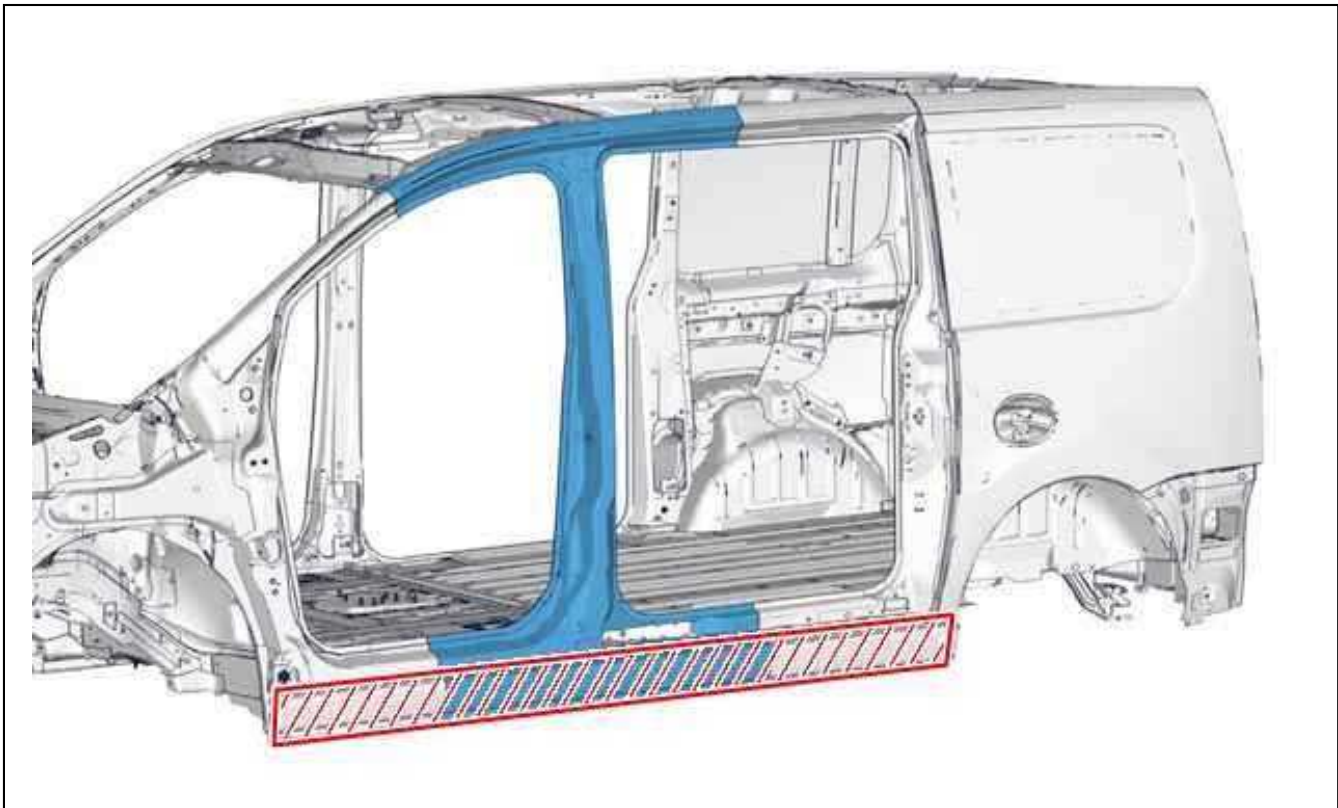


Figure : C4CM026D

Apply a phosphate-print layer on the zone laid bare.

Identification ⓘ : Anti-chip protection ⓘ .

Paint then spray into the hollow sections, product index C5, in the repair zone.

8. Reinitialisation

Carry out the additional operations.

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ .

REPLACEMENT : CENTRE PILLAR STIFFENER - CENTRE PILLAR INNER PANEL

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : The number of spot welds necessary for the assembly of a new part must be identical to the number of spot welds fixing the original part.

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

1. Additional operations

Disconnect the battery.

Detrim-retrim :

- The centre pillar
- The floor (According to equipment)

Replace :

- The centre pillar ⓘ
- Sill web ⓘ

Release the wiring harnesses.

Protect the interior of the passenger compartment.

2. Identification of replacement parts



Figure : C4CM0AJD

Reference	Designation	Thickness	Nature/classification
(1)	Centre pillar stiffener	2 mm	HLE (*)
(2)	Centre pillar inner panel	1,76 mm	HLE (*)
(*) : HLE : high-strength steel			

3. Cutting out

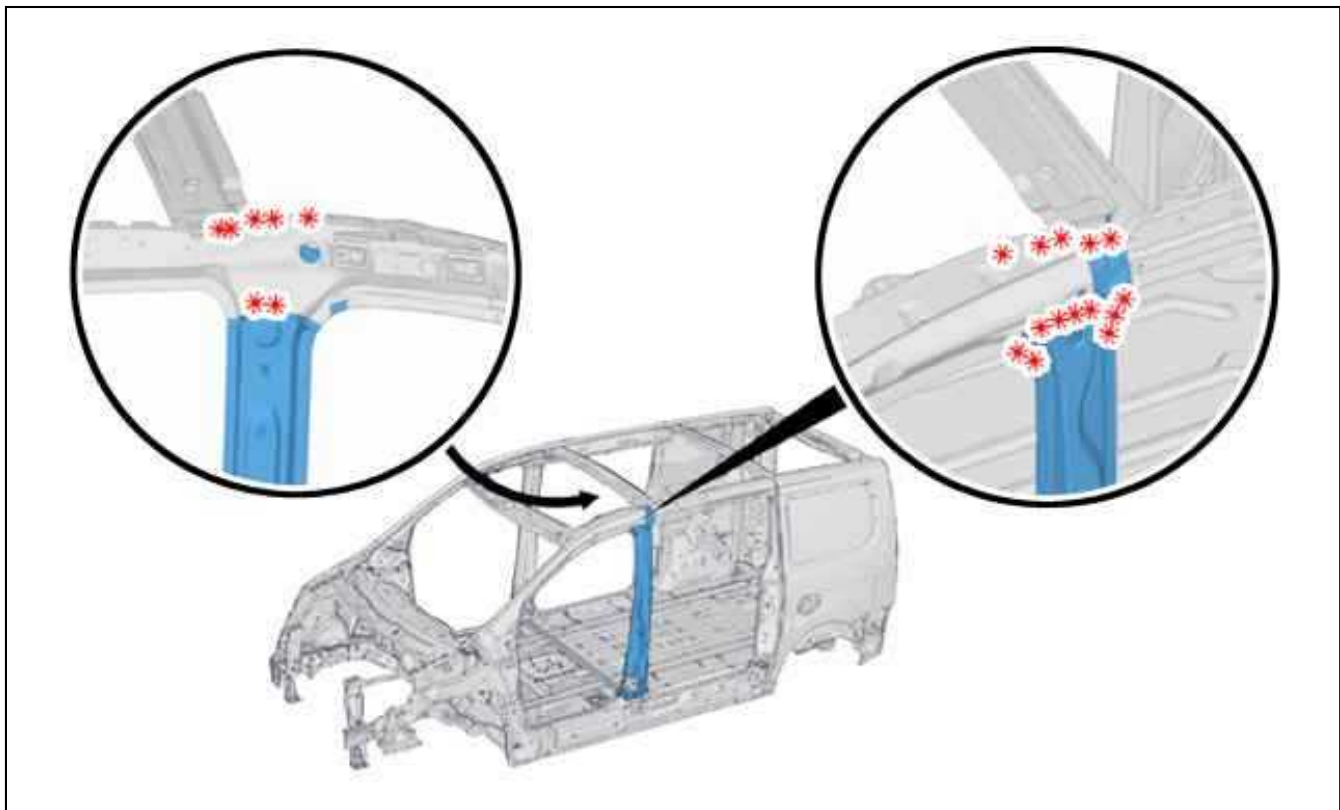


Figure : C4CM0AKD

Cut out the spot welds ; Using a mill of Ø 8 mm.

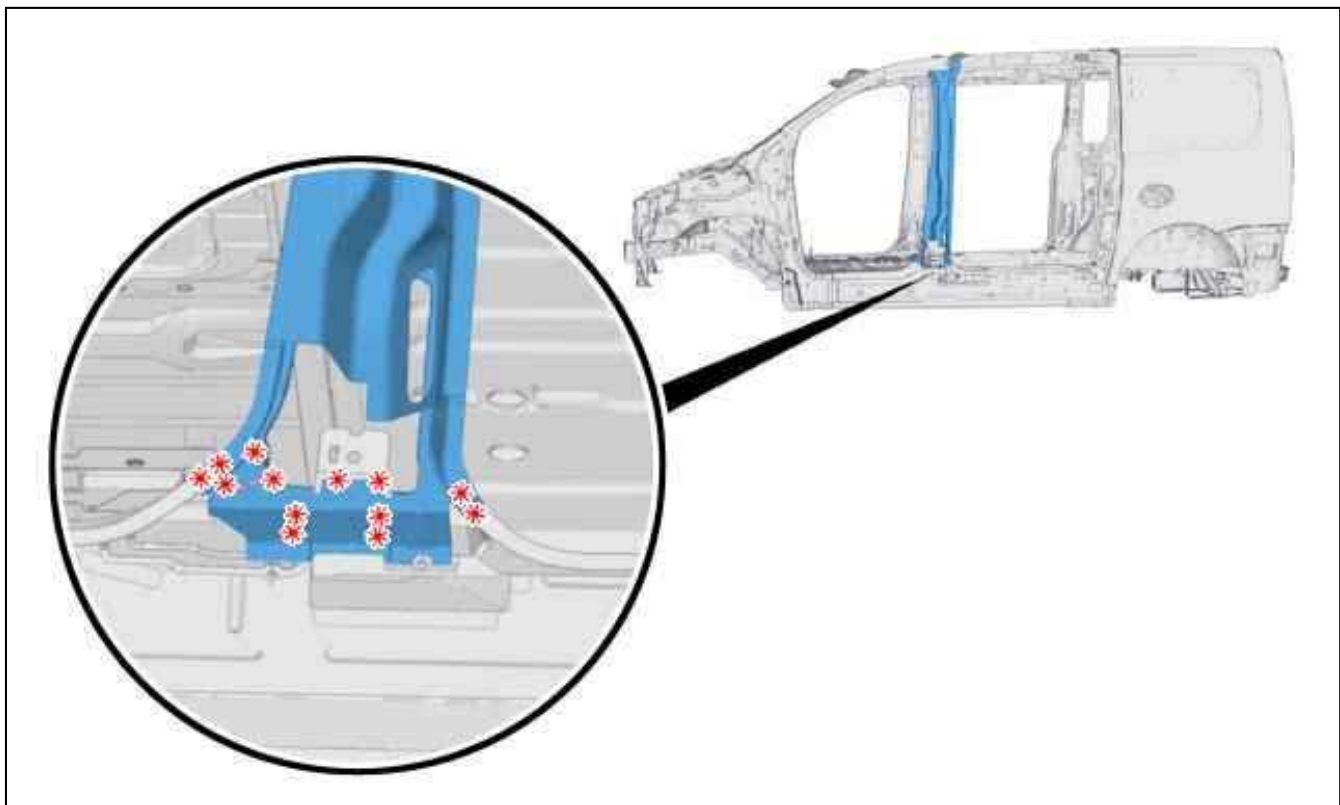


Figure : C4CM0ALD

Cut out the spot welds ; Using a mill of Ø 8 mm.

Remove :

- The centre pillar strengthener
- The centre pillar inner panel

4. Bodywork cleaning and preparation

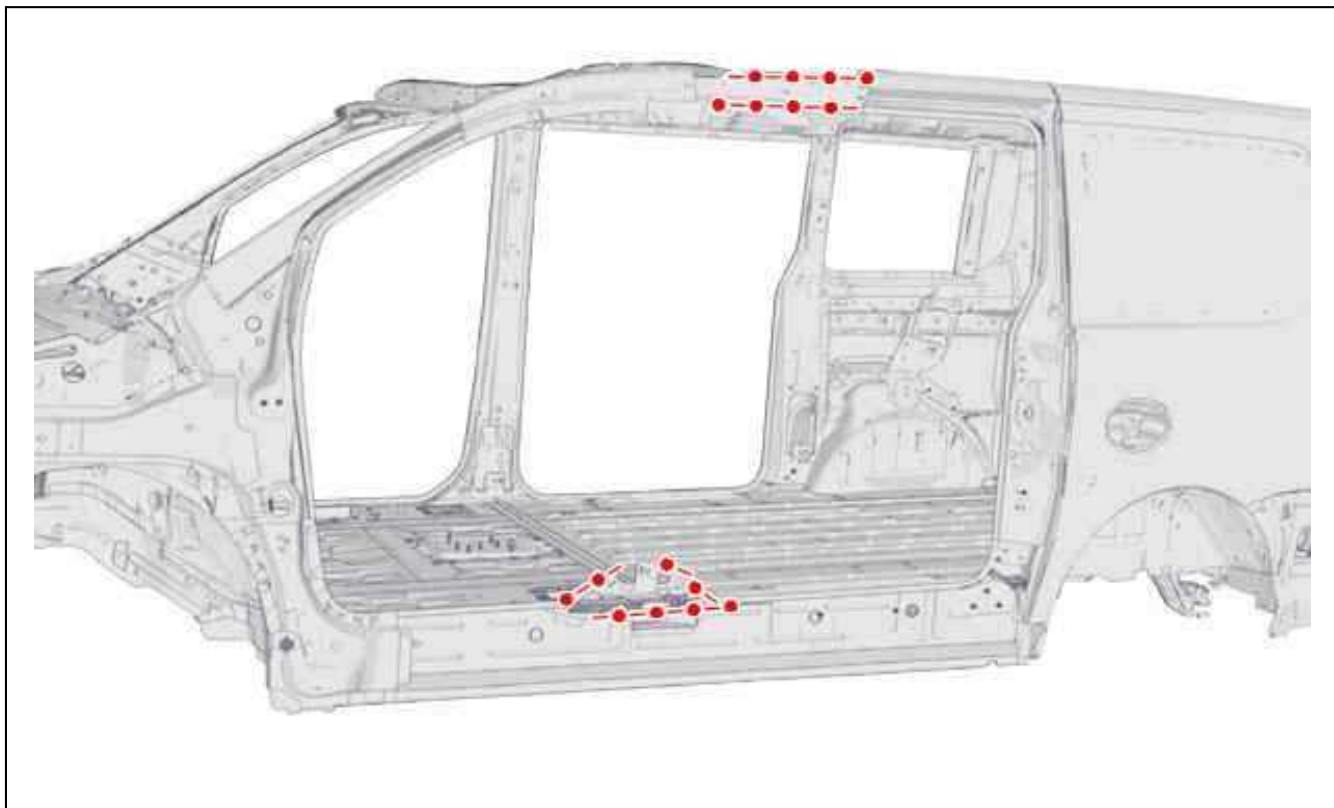


Figure : C4CM0AMD

Prepare the mating edges and protect them using a weldable primer .

5. Adjustment

Position :

- The centre pillar strengthener
- The centre pillar inner panel

Check the position of the centre pillar inner panel.

6. Welding

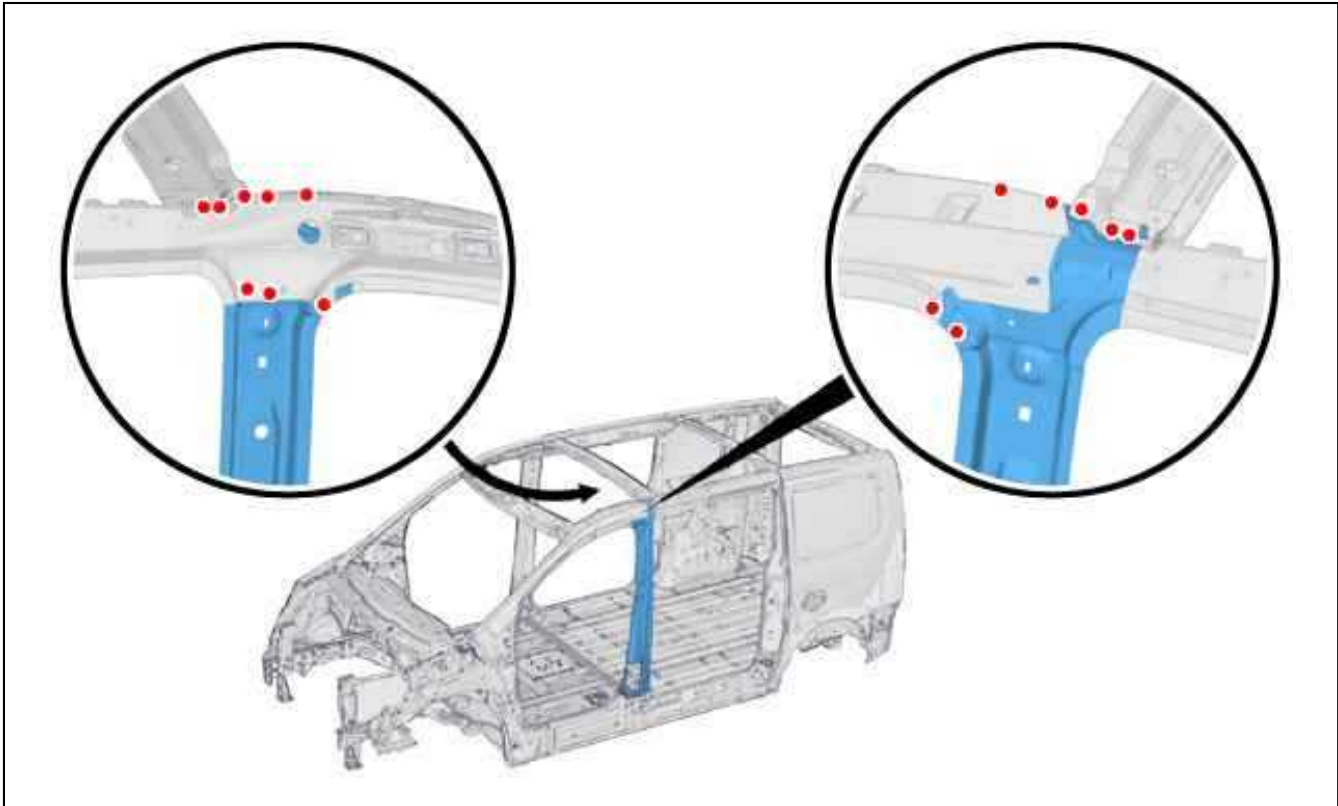


Figure : C4CM0AND

Weld with MAG plug welds.
Grind the MAG plug welds.
Weld with electric spot welds.

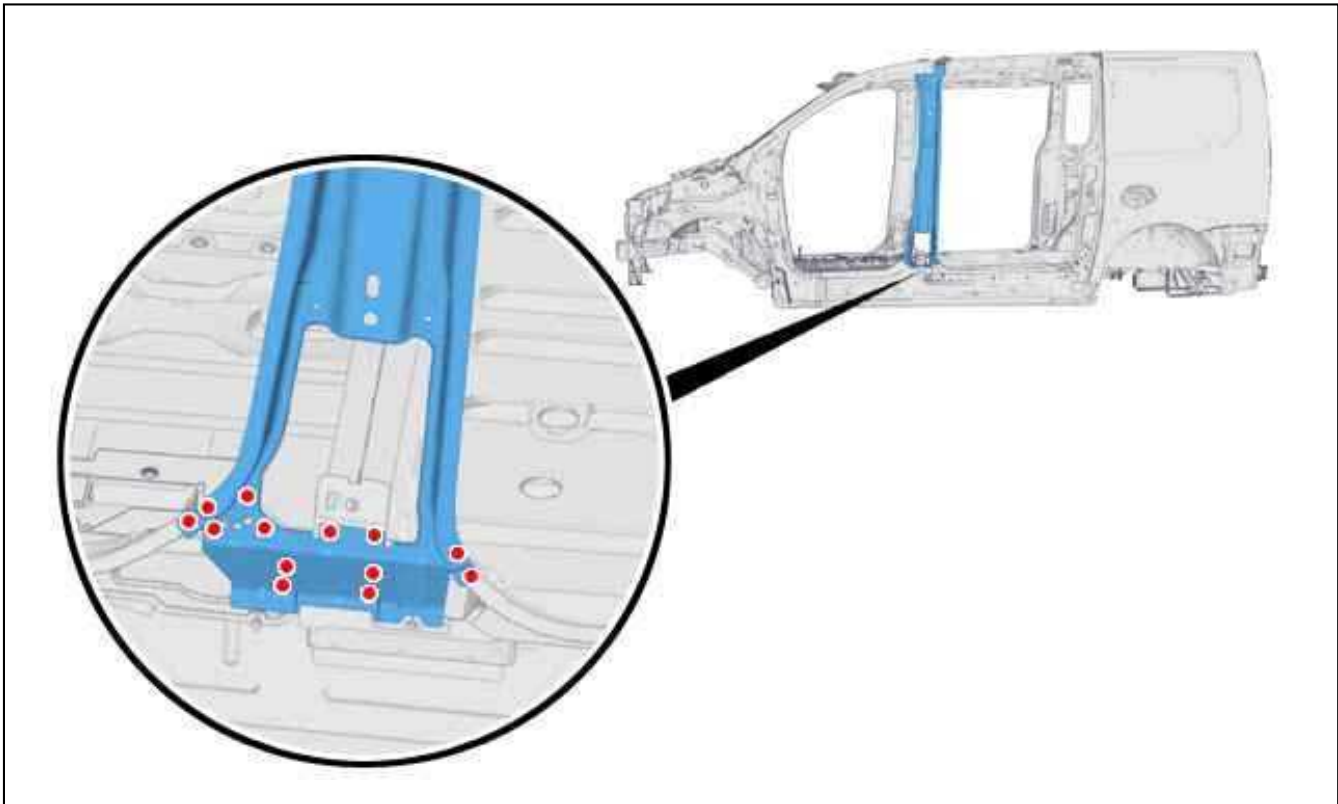


Figure : C4CM0APD

Weld with electric spot welds.

Fit the centre pillar strengthener .

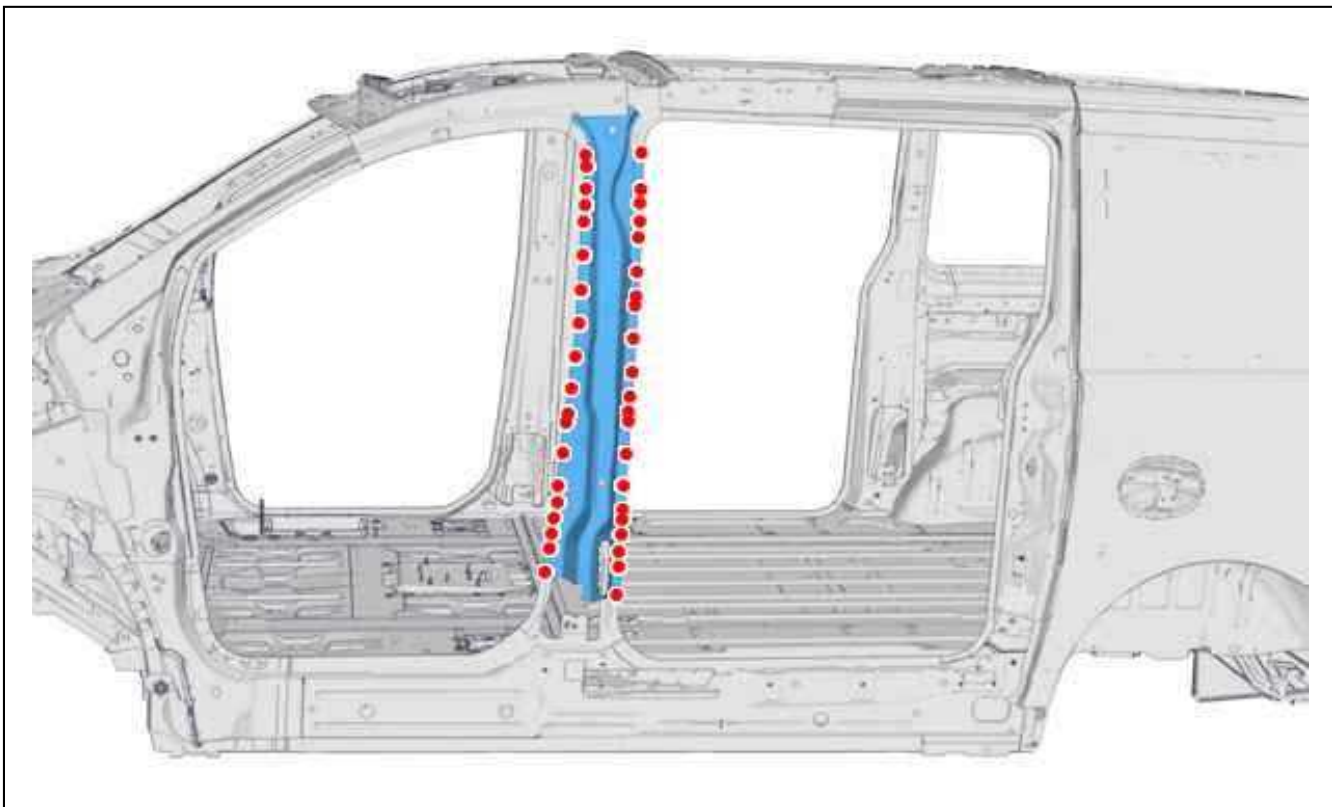


Figure : C4CM0AQD

Weld with electric spot welds.

7. Sealing protection

Apply a phosphate-print layer on the zone laid bare.

Paint then spray into the hollow sections, product index C5, in the repair zone.

8. Reinitialisation

Carry out the additional operations.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ .

Reconnect the battery.

REPLACEMENT : OUTER SILL ASSEMBLY (PANEL VAN)

ESSENTIAL : Depending on the operation to be carried out, observe the instructions for chocking up the vehicle.

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

CAUTION : All of the stripped surfaces must be protected by means of the approved electrolytic rezincing process .

ESSENTIAL : Observe the elementary rules of hygiene and safety (wear a face mask to protect against fumes and vapour - work in a well ventilated space).

1. Additional operations

Disconnect the battery.

Remove-refit the following components :

- Front mud flaps
- Rear mud guard
- Front wing
- Front door
- Side door
- Sliding side door rail
- Front seat

Strip - retrim the front floor.

Release the wiring harnesses.

Protect the interior of the passenger compartment.

Replace : The panelled intermediate side panel ⓘ .

2. Identification of replacement parts

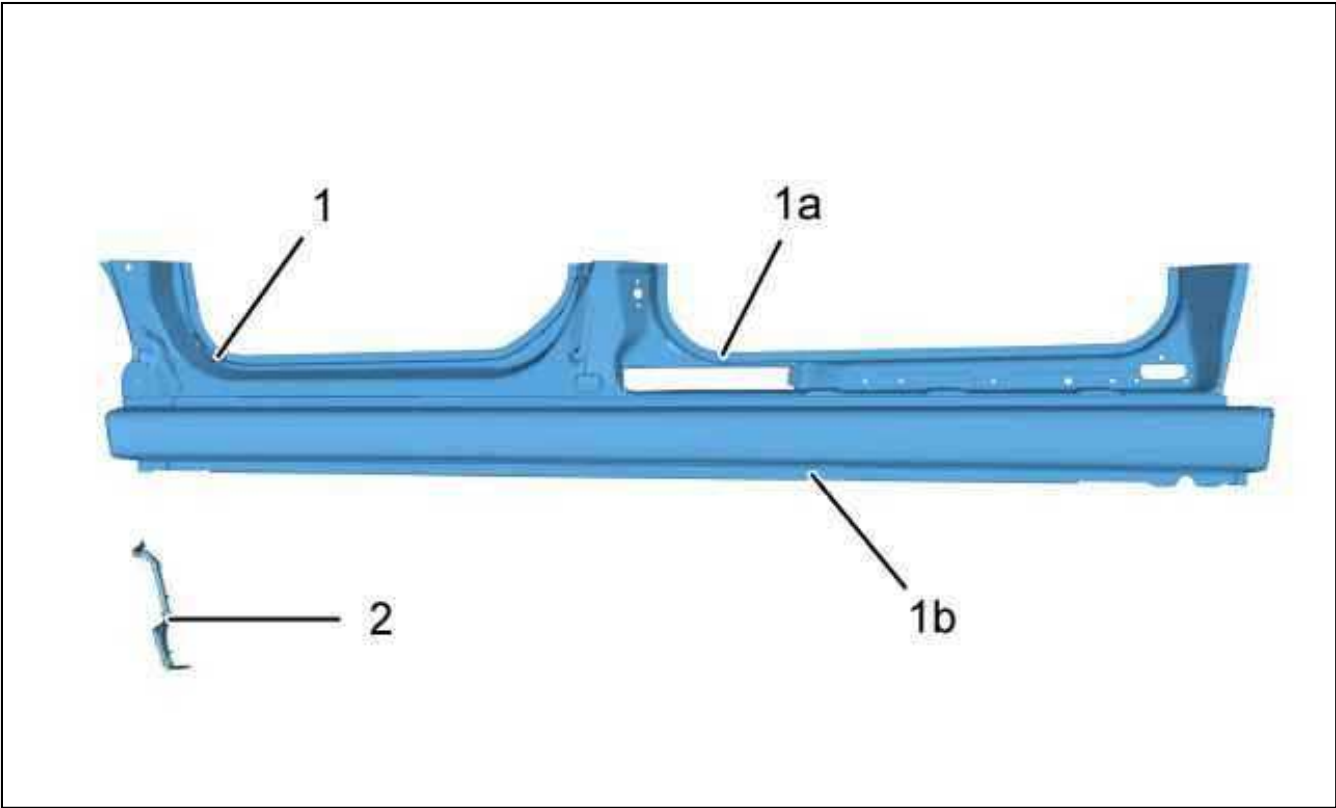


Figure : C4CH1IKD

Reference	Designation	Thickness	Nature/classification
(1)	Outer longeron assembly, left hand side	-	-
(1a)	Partial left-hand passenger compartment side	0.97 mm	ADX (*)
(1b)	LH outer longeron	0.97 mm	ADX (*)
(2)	Front pillar interior strengthener exterior expanding insert	-	-

3. Replacement part preparation

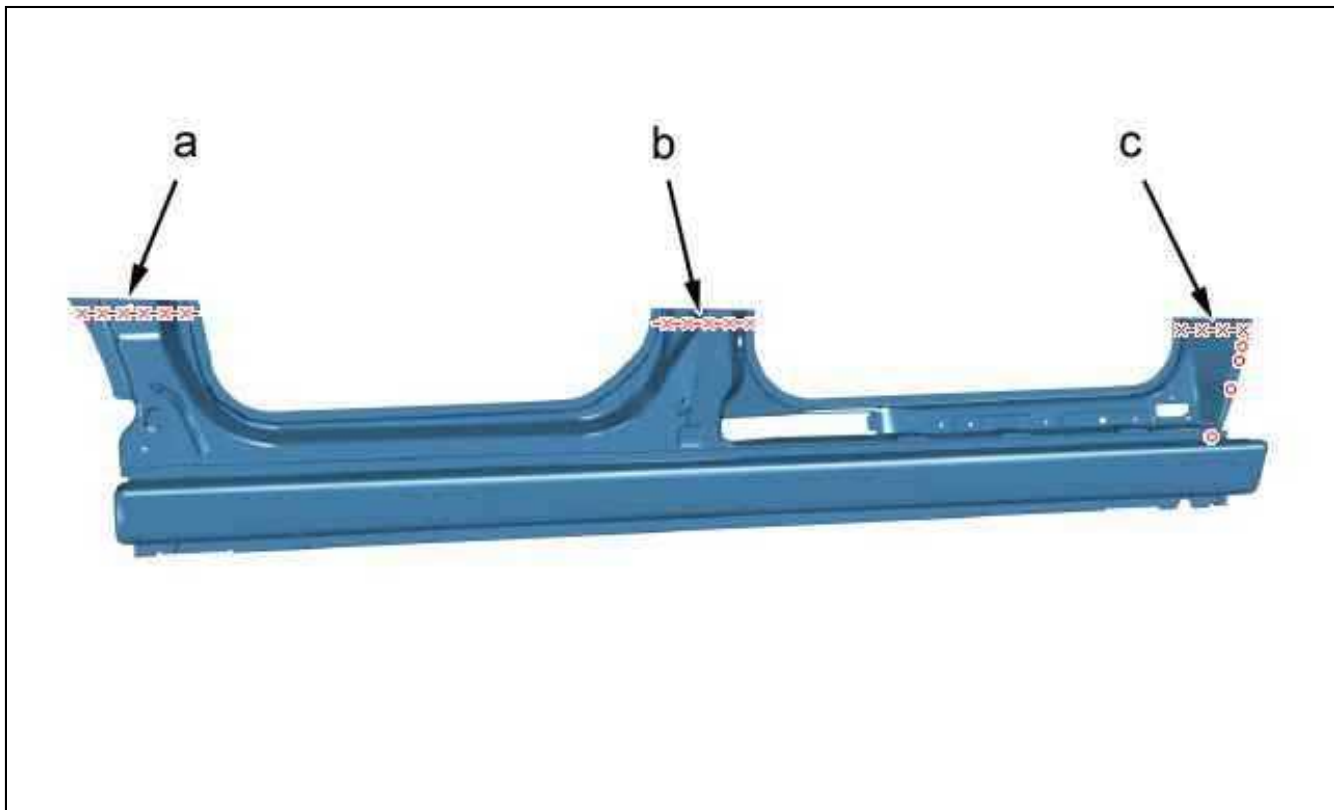


Figure : C4CP2KKD

Mark then cut (at "a", "b", "c") (Final cut).

Drill 6,5 mm holes for later plug welding.

Prepare the mating edges and protect them using a weldable primer .

CAUTION : To prevent damage to the expanding inserts, cutting zones close to an expanding insert should leave a safety distance of more than 30 mm.

4. Cutting out

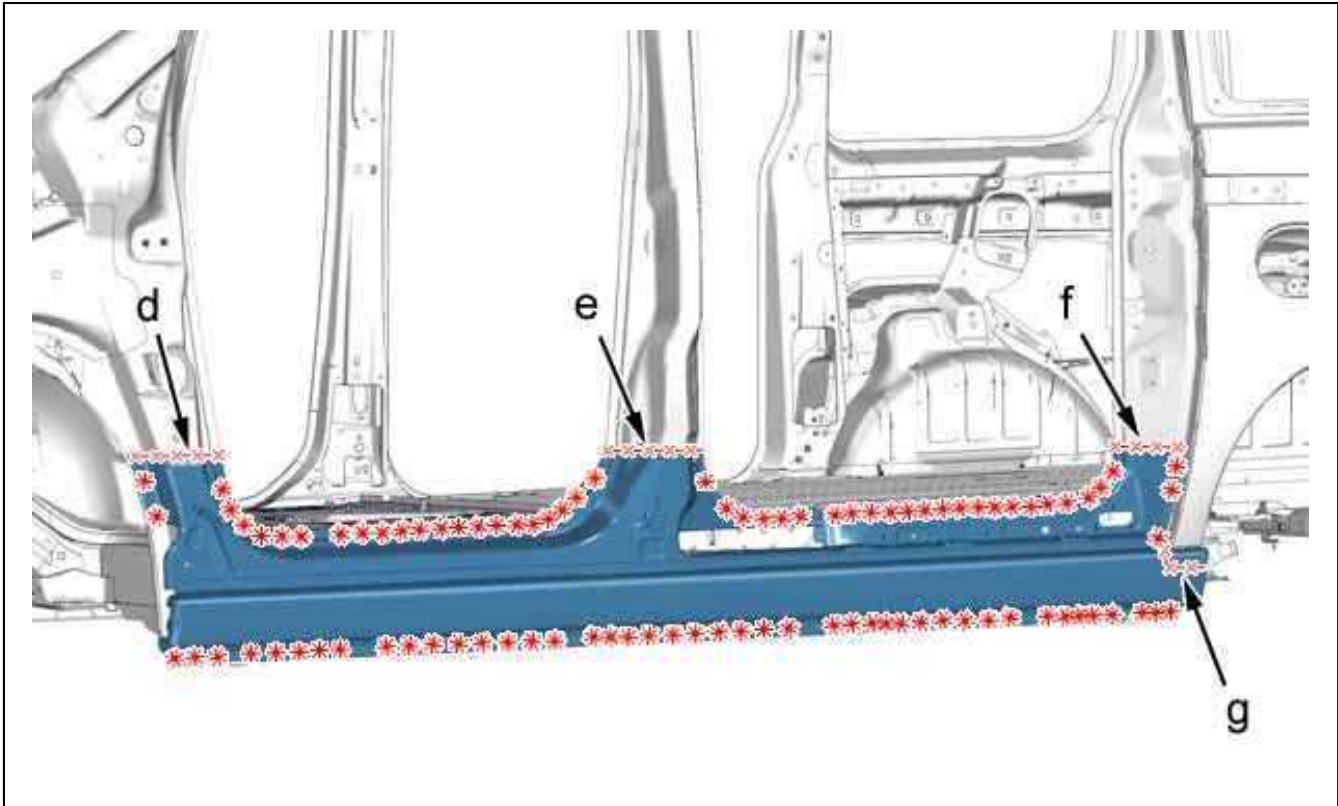


Figure : C4CP2KLD

Cut out the spot welds .

Mark then cut (at "d", "e", "f") (Provisional cut).

CAUTION : To prevent damage to the expanding inserts, cutting zones close to an expanding insert should leave a safety distance of more than 30 mm.

CAUTION : When making the cut "d", take care not to cut the front pillar strengthener.

Mark then cut (at "g").

Remove the partial exterior chassis member assembly.

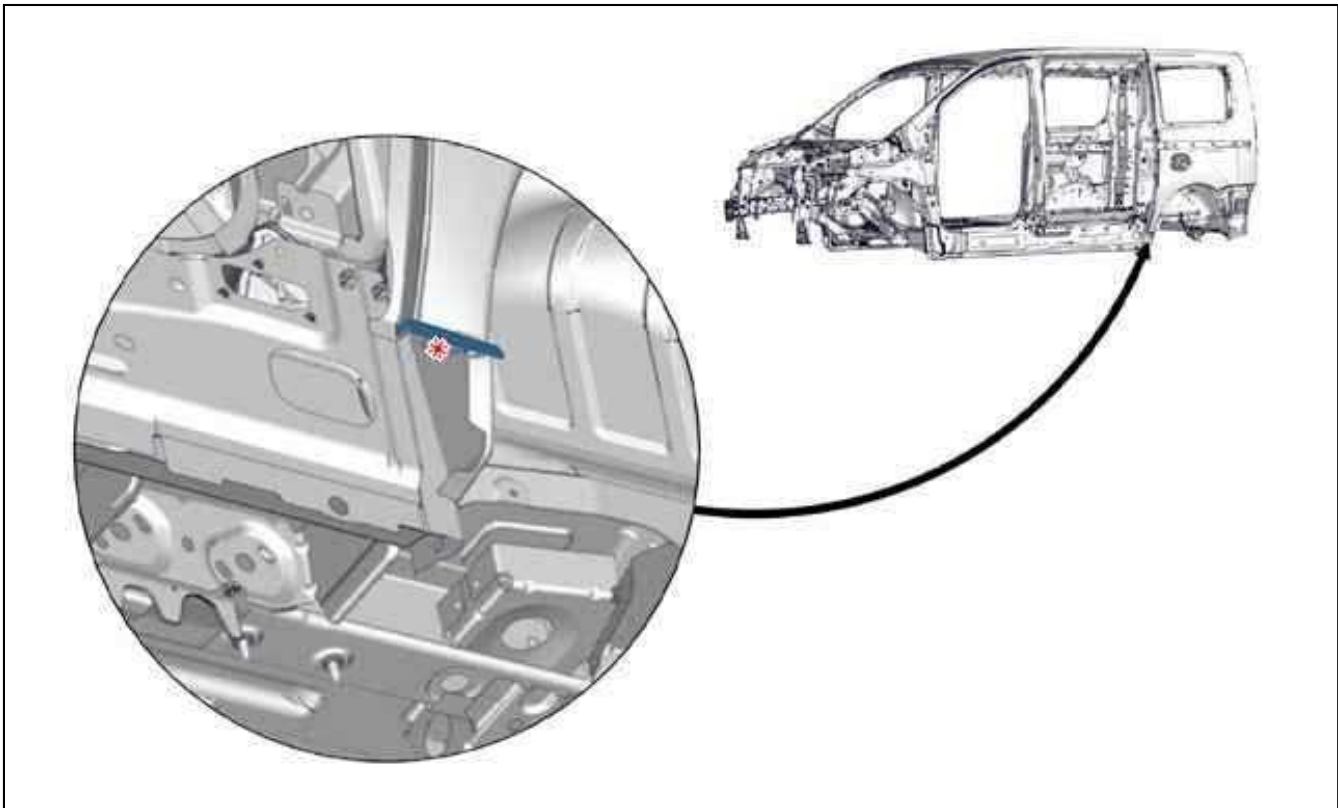


Figure : C4CP2KMD

Cut out the spot weld .
Remove the remainder of the exterior chassis member assembly.

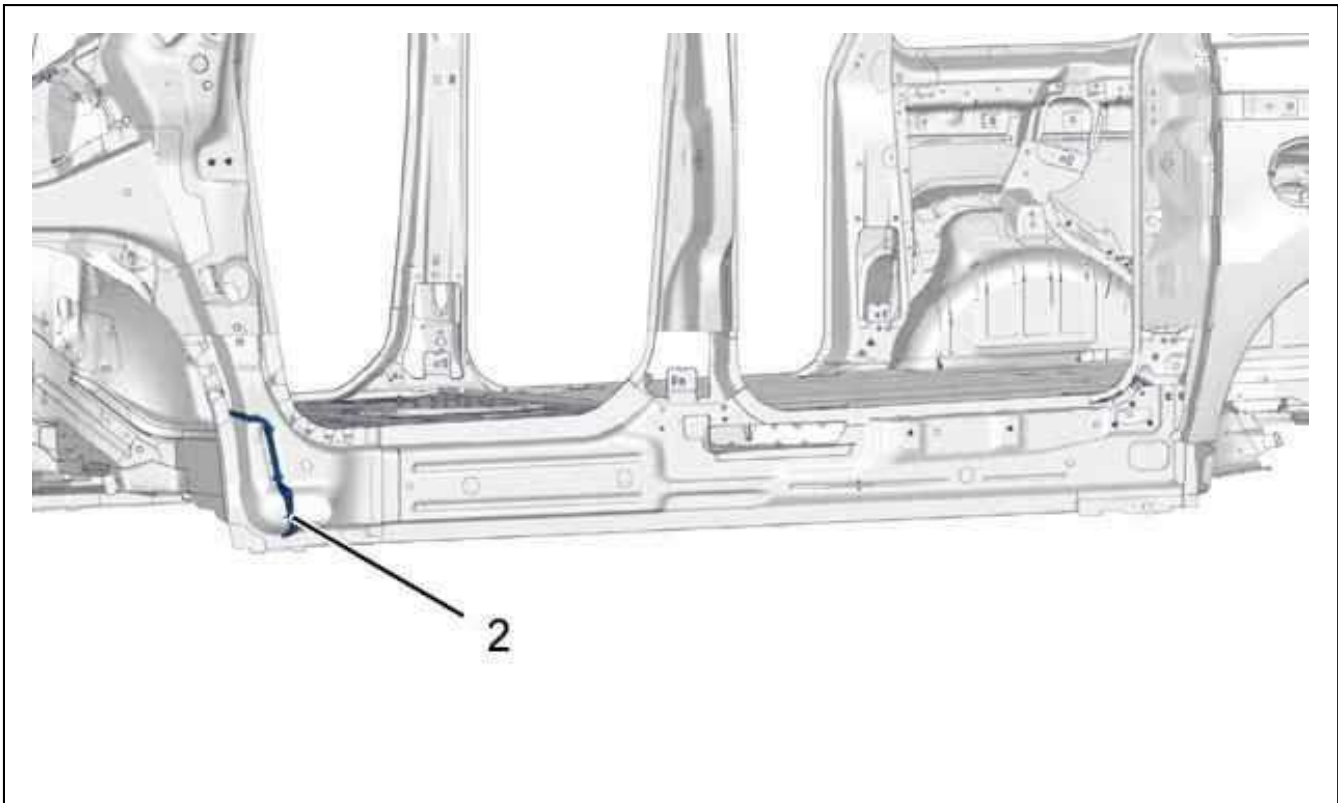


Figure : C4CH1IND

Remove the front pillar interior strengthener exterior expanding insert (2).

5. Bodywork cleaning and preparation

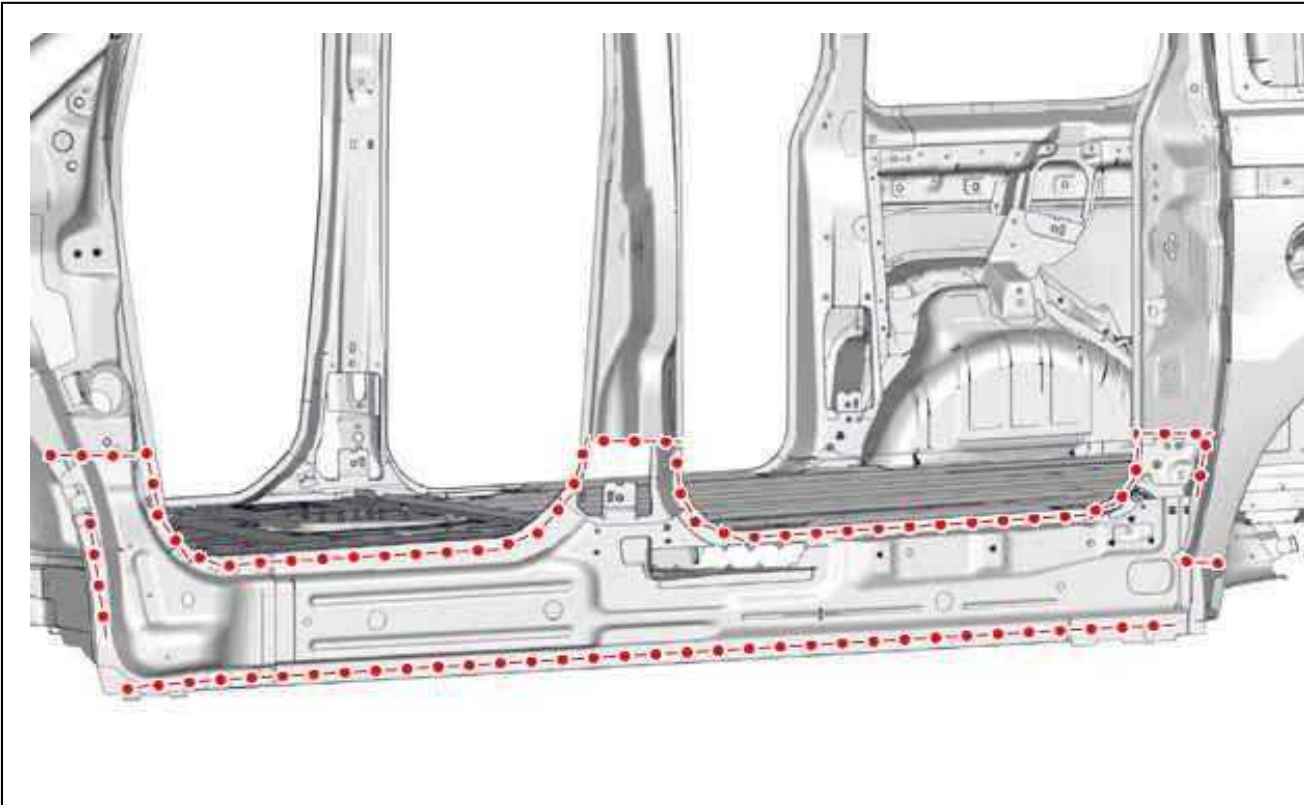


Figure : C4CP2KPD

Prepare the mating edges and protect them using a weldable primer .

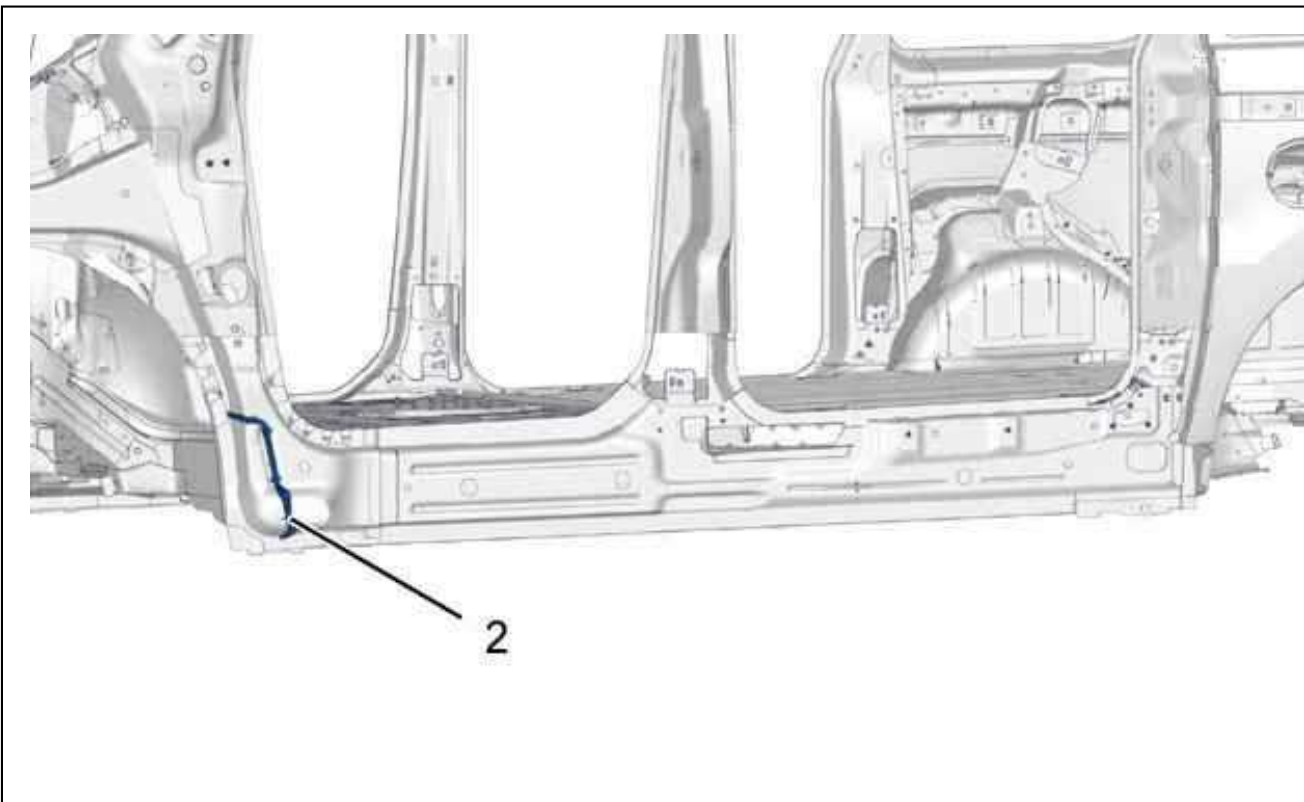


Figure : C4CH1IOD

Fit the front pillar interior strengthener exterior expanding insert (2).

To respect the following sealing functions :

- Acoustic
- Water
- Dust

Seal the expanding inserts  .

6. Adjustment

Fit the outer sill assembly.

Check the fit.

Clean up the cuts (Final cuts).

7. Welding

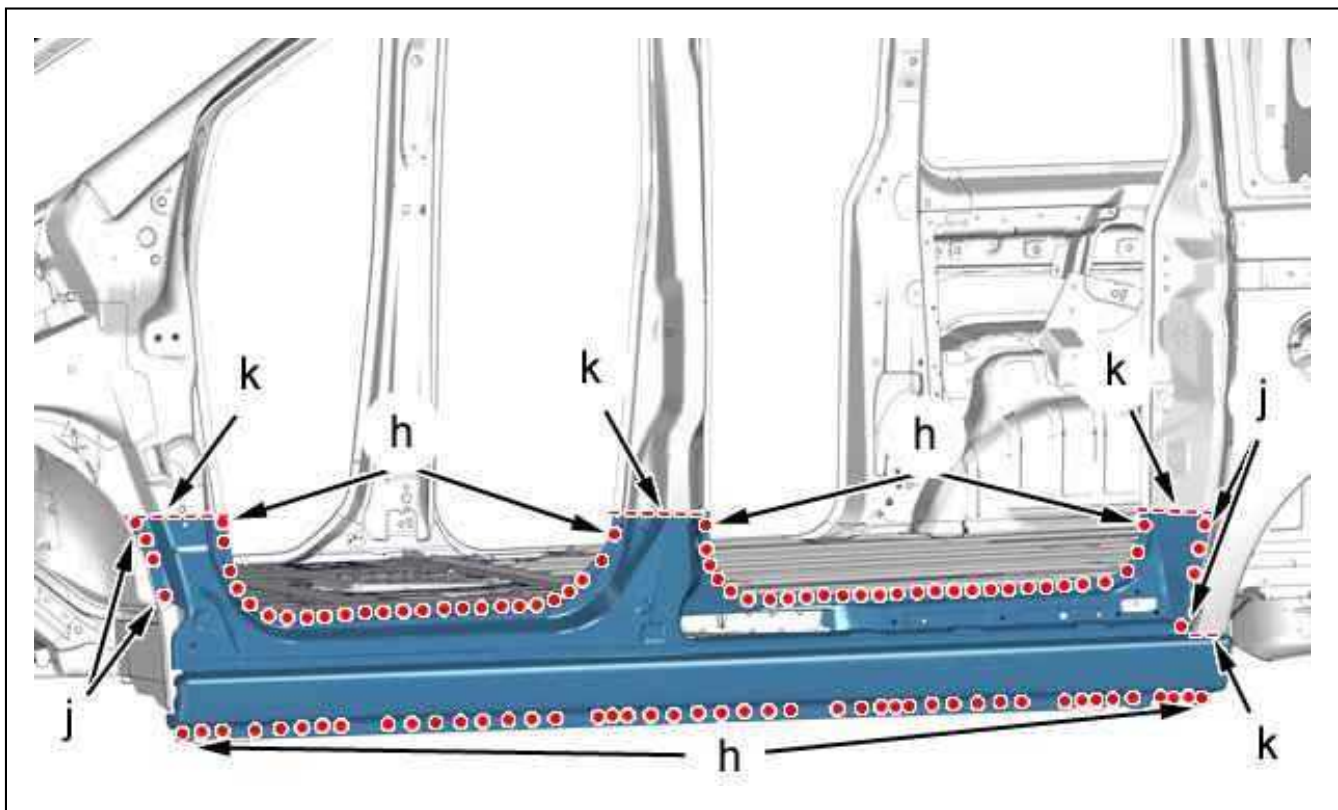


Figure : C4CP2KQD

Weld :

- By means of electric spot welds (as "h")
- By means of MAG plug welds (at "j")

Grind the MAG plug welds.

MAG weld with beads in succession (at "k").

Grind the MAG weld beads.

8. Sealing protection

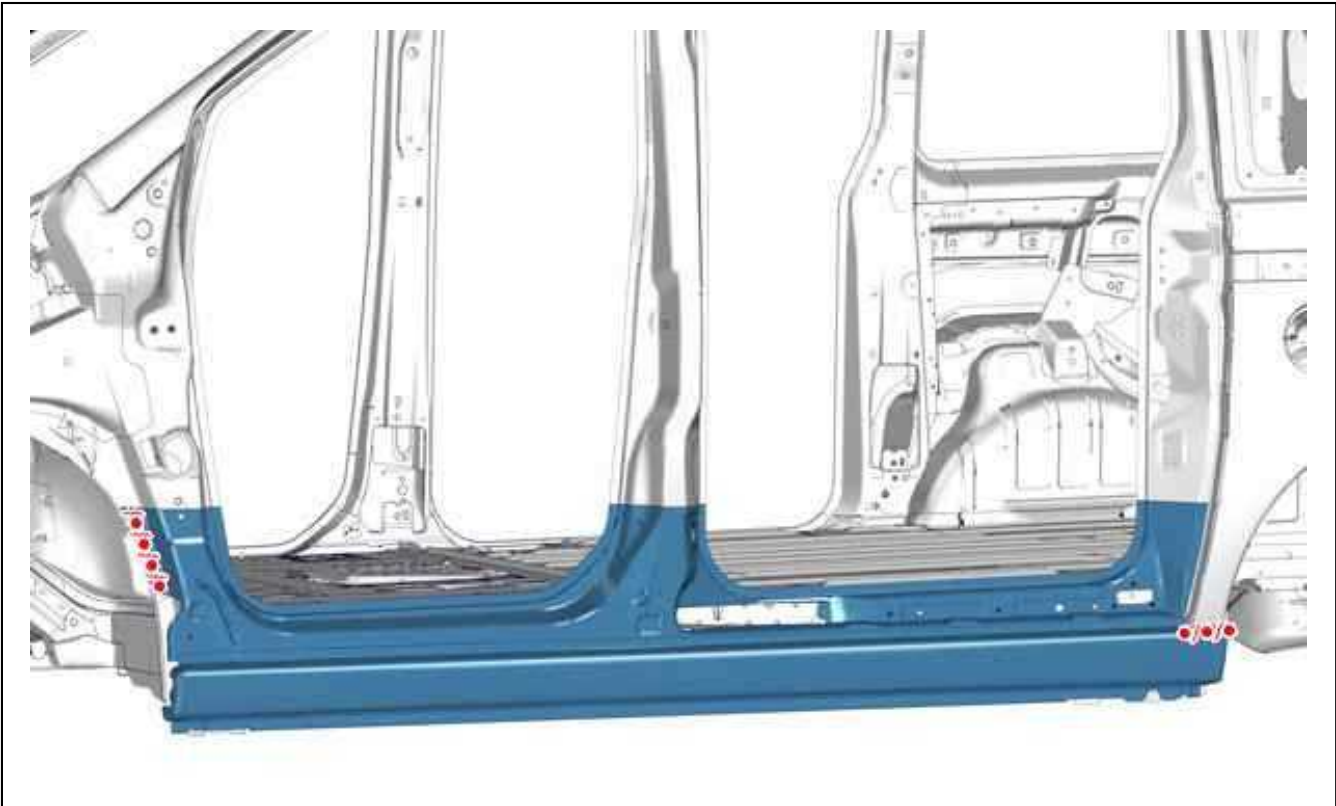


Figure : C4CP2KRD

Apply :

- Apply a phosphate-print layer to the zones laid bare
- A sealing mastic index "A1"

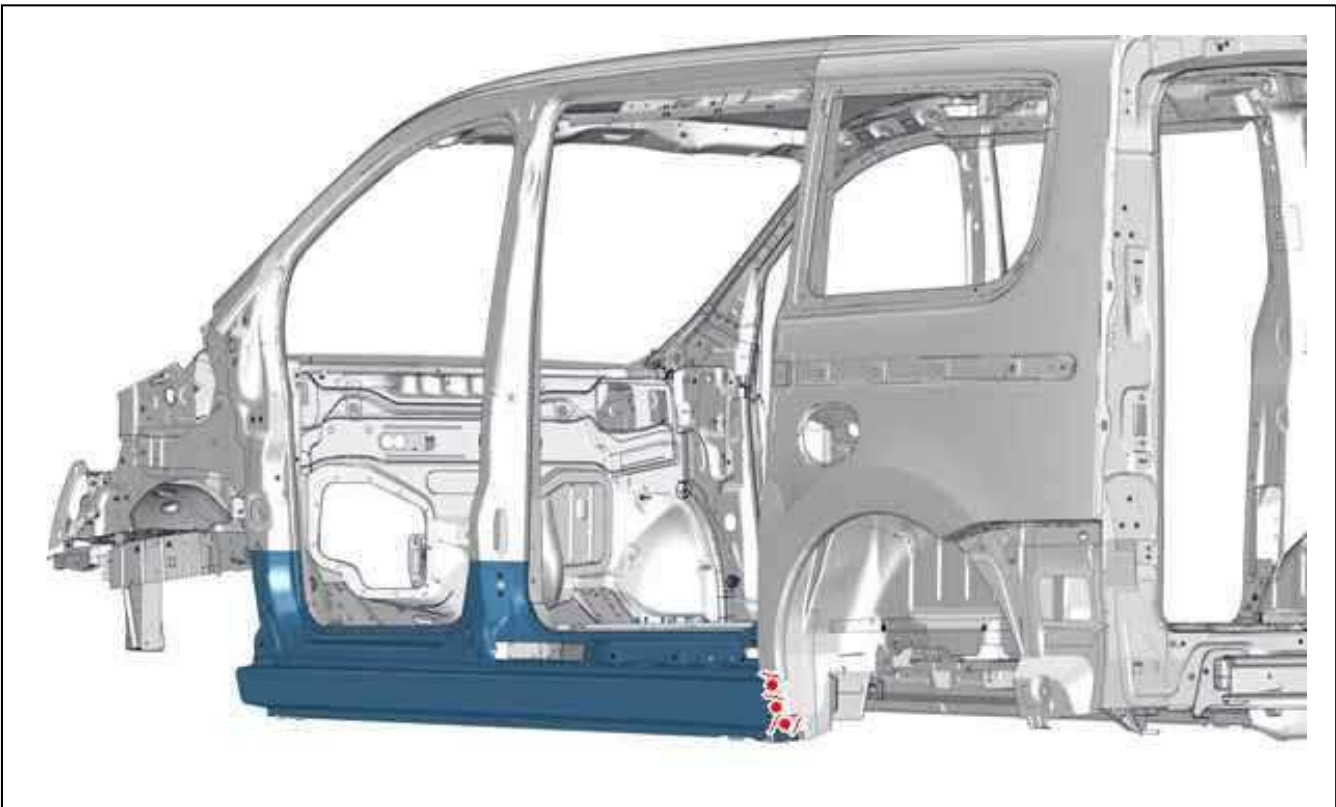


Figure : C4CP2KSD

Apply :

- Apply a phosphate-print layer to the zones laid bare
- A sealing mastic index "A1"

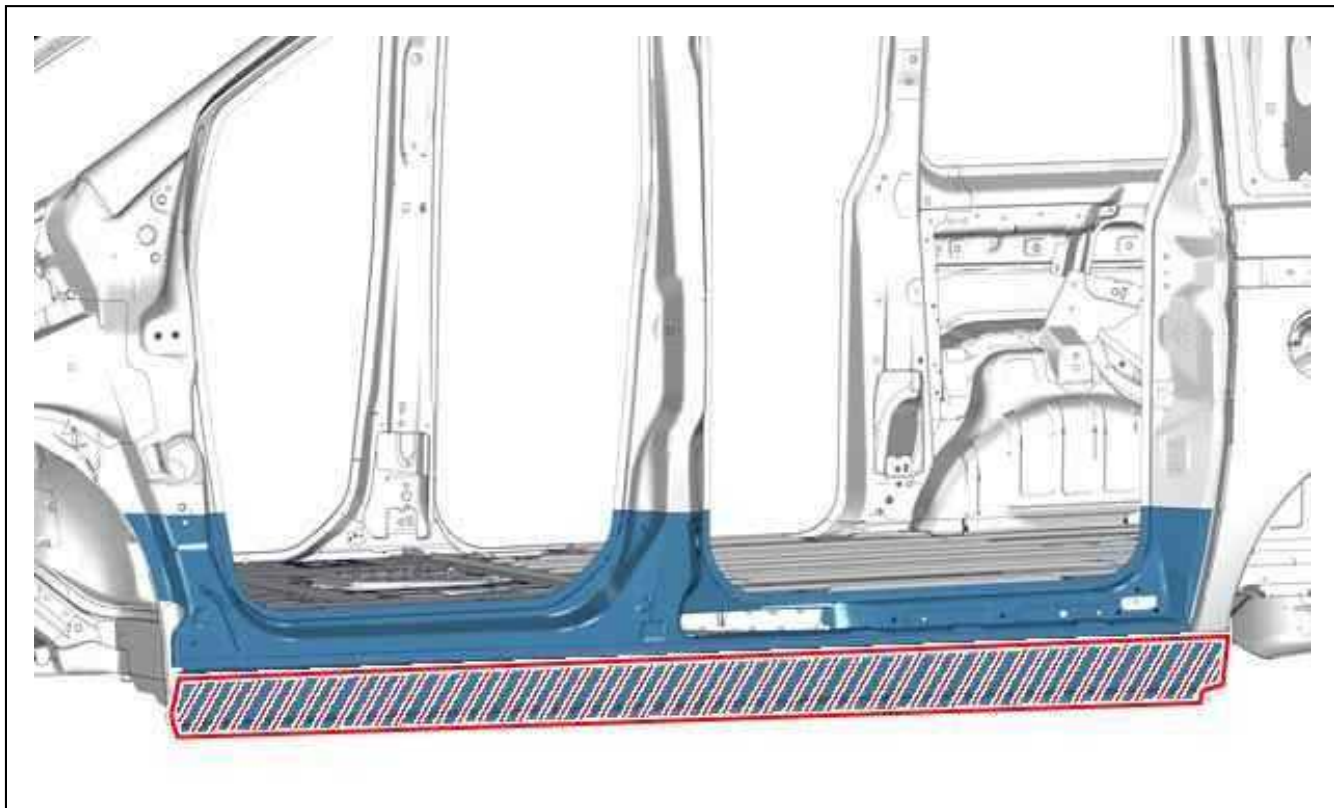


Figure : C4CP2KTD

Apply a phosphate-print layer to the zones laid bare.

Apply an anti-chip layer (index "C4").

Paint then spray into the hollow sections, product index C5, in the repair zone.

9. Reinitialisation

Carry out the additional operations.

CAUTION : Operations to be carried out following reconnection of the battery ⓘ .