

BODY REPAIRS – VEHICLE SPECIFIC INFORMATION AND TOLERANCE CHECKS

BODY AND FRAME – 90 (G2394538)

DESCRIPTION AND OPERATION

Measuring options



NOTE:

The same reference points must be chosen on both sides when checking for changed dimensions (e.g. bores, edges, beads/swage lines etc.).

- Comparison measurements can also be made on the outside of the body. Depending on the damage, comparison measurements and diagonal measurements can be completed using compass, telescopic rod, tape measure or ruler.
- A jig is required for accurate measurements of the body. The measuring systems are categorized by their means of operation:
 - Mechanical measuring system.
 - Optical measuring system.

Quick and accurate measuring results can be obtained using computerized measuring systems.

A minimum of three intact measuring points on the body are required for measurements of length, width and height dimensions.

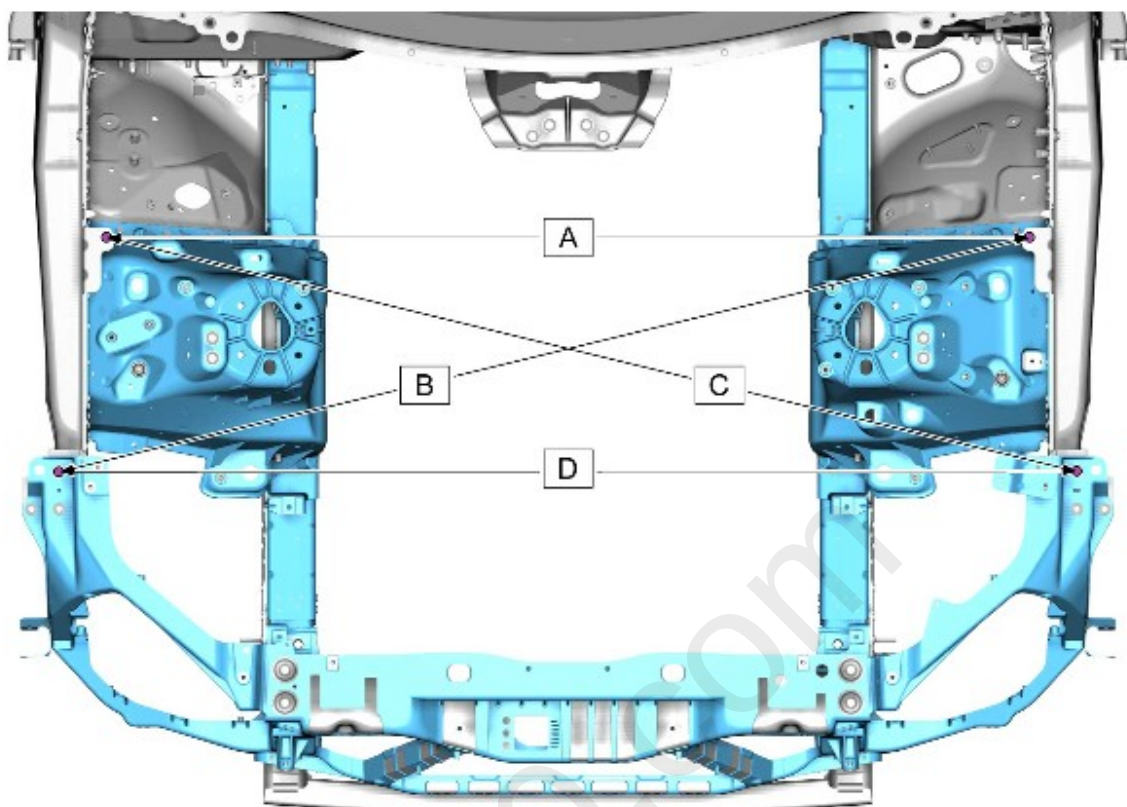
In some cases this may mean making the measuring points accessible. All of these measuring systems can be used to make body measurements, provided all the equipment is available.



NOTES:

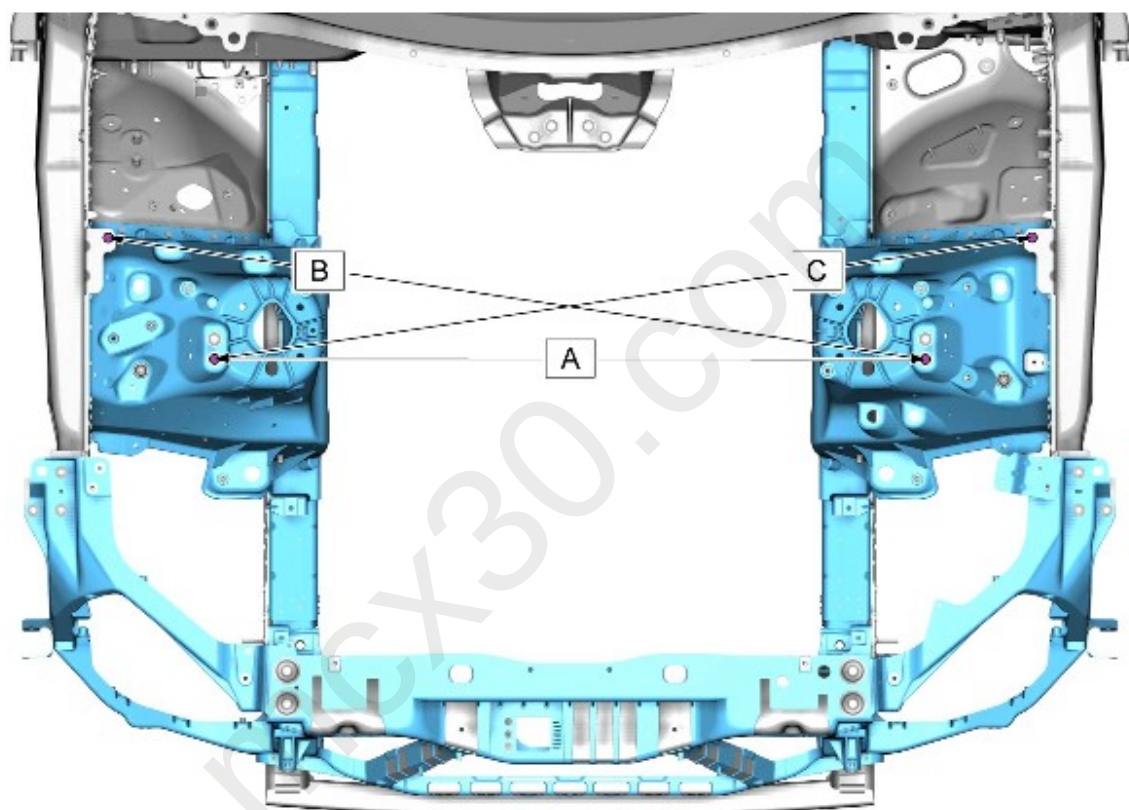
- All dimensions shown are in millimetres (mm).
- Dimensions shown to holes, are always taken from/to the hole centre. They are also always to the body panel surface, not to the top of bolts or components.

Front End Body Dimensions



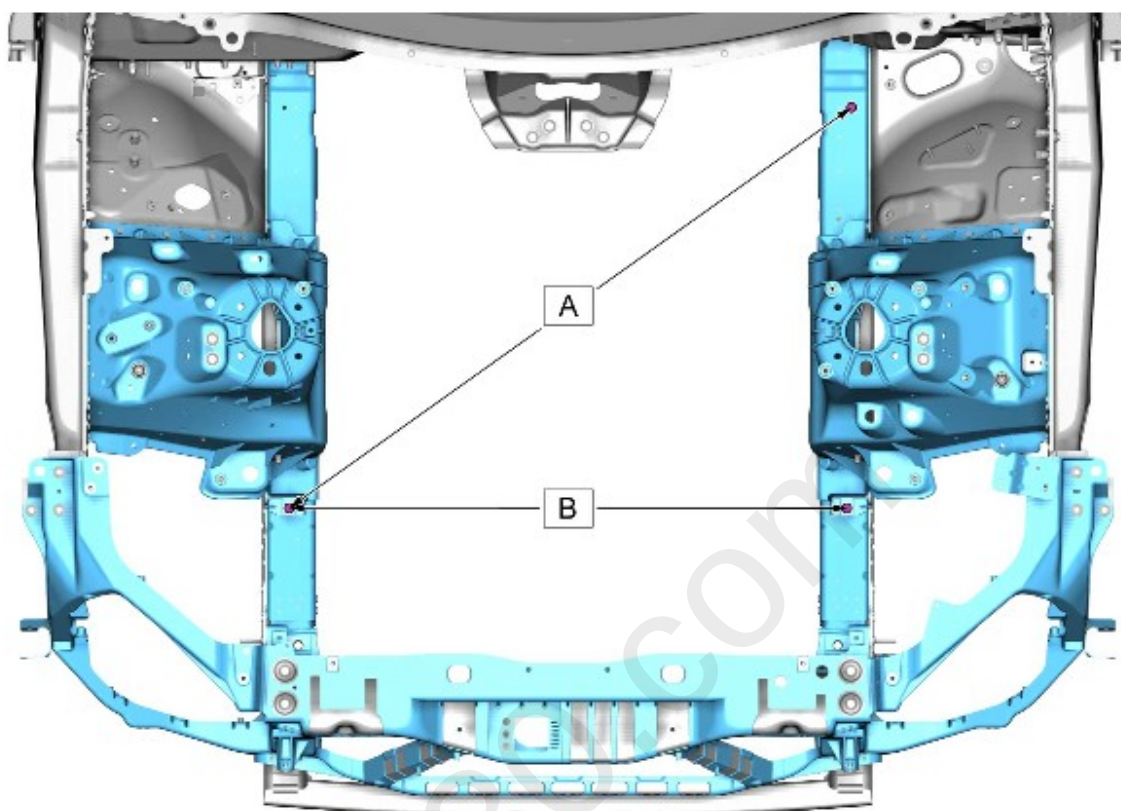
E255017

ITEM	FROM	TO	DIMENSION
A	Left fender rear fixing hole	Right fender rear fixing hole	1472
B	Right front end carrier rear fixing hole	Left fender rear fixing hole	1592
C	Left front end carrier rear fixing hole	Right fender rear fixing hole	1592
D	Left front end carrier rear fixing hole	Right front end carrier rear fixing hole	1624



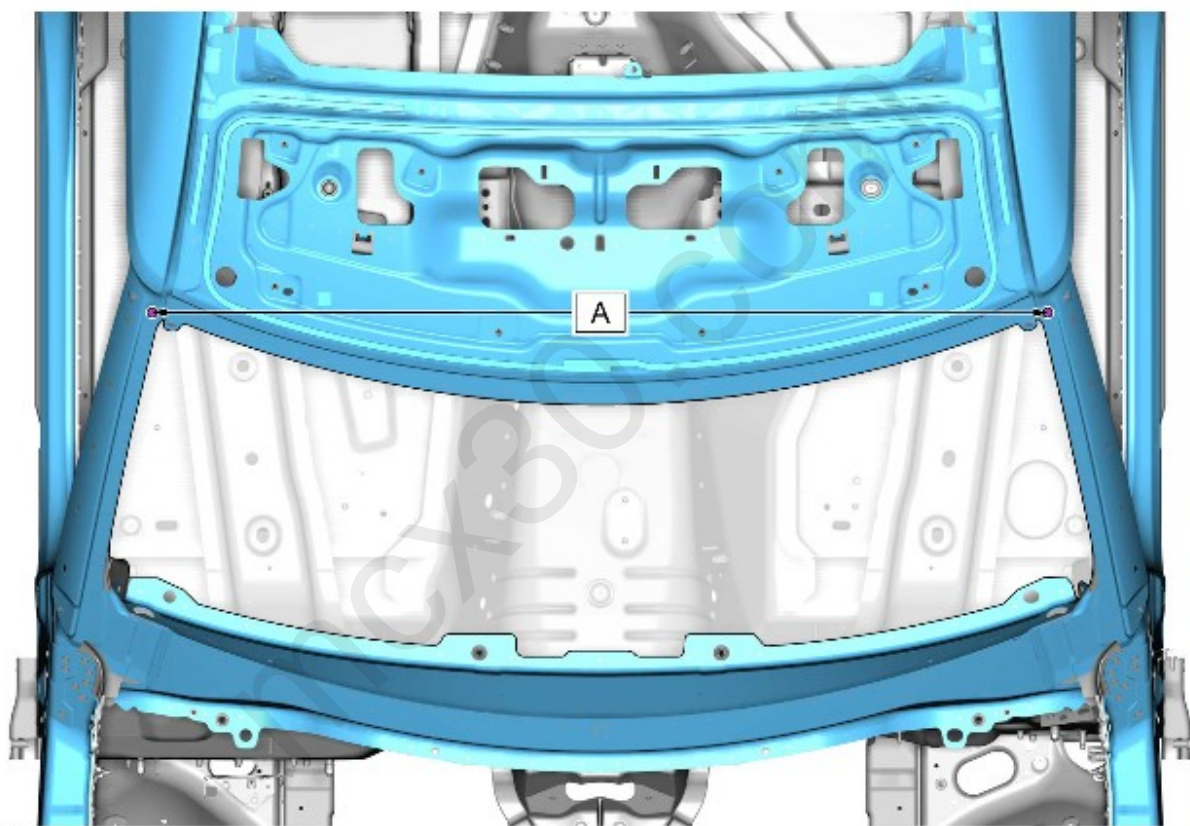
E255018

ITEM	FROM	TO	DIMENSION
A	Left suspension top mount front outboard fixing	Right suspension top mount front outboard fixing	1135
B	Left suspension top mount front outboard fixing	Right fender rear fixing hole	1317
C	Right suspension top mount front outboard fixing	left fender rear fixing hole	1317



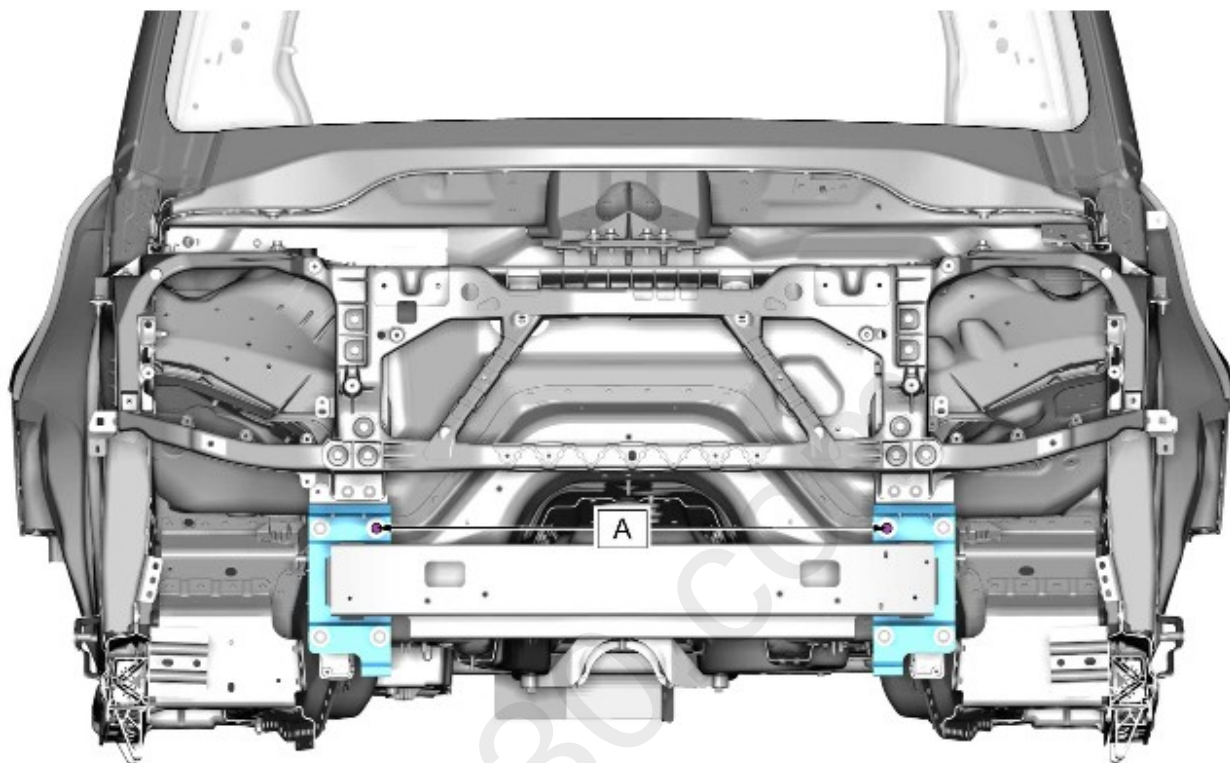
E255019

ITEM	FROM	TO	DIMENSION
A	Right suspension top mount front fixing hole	Left side member rear fixing hole	1102
B	Right suspension top mount front fixing hole	Left suspension top mount front fixing hole	890



E255020

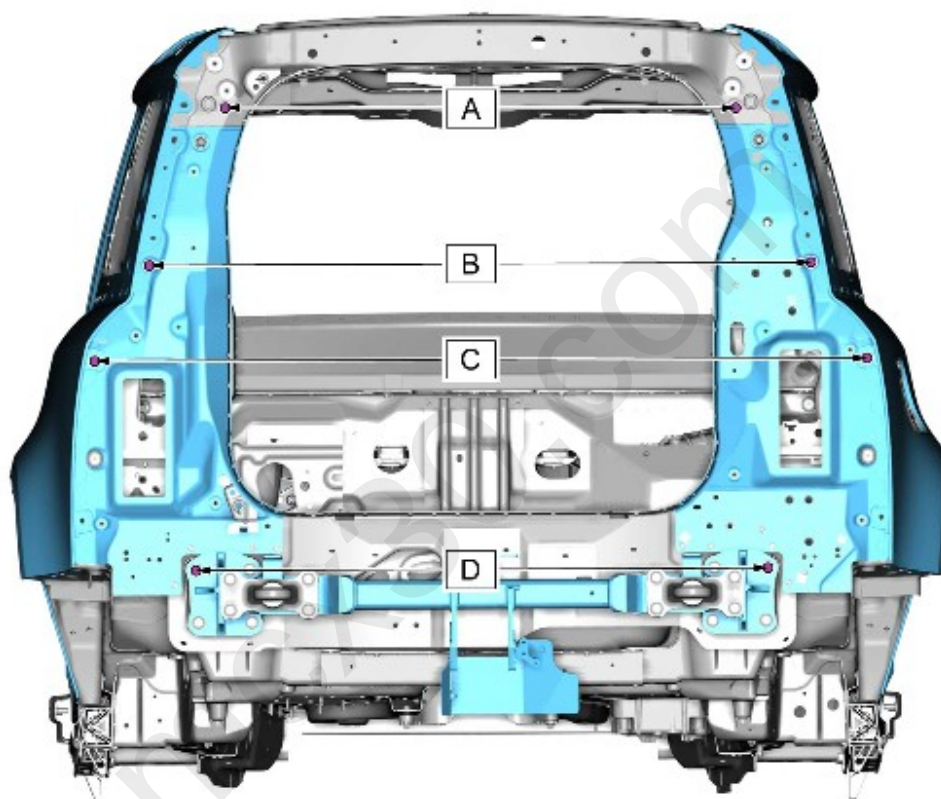
ITEM	FROM	TO	DIMENSION
A	Upper left A pillar top fixing joint	Upper right A pillar top fixing joint	1356



E255021

ITEM	FROM	TO	DIMENSION
A	Right upper inboard front bumper mounting	Left upper inboard front bumper mounting	822

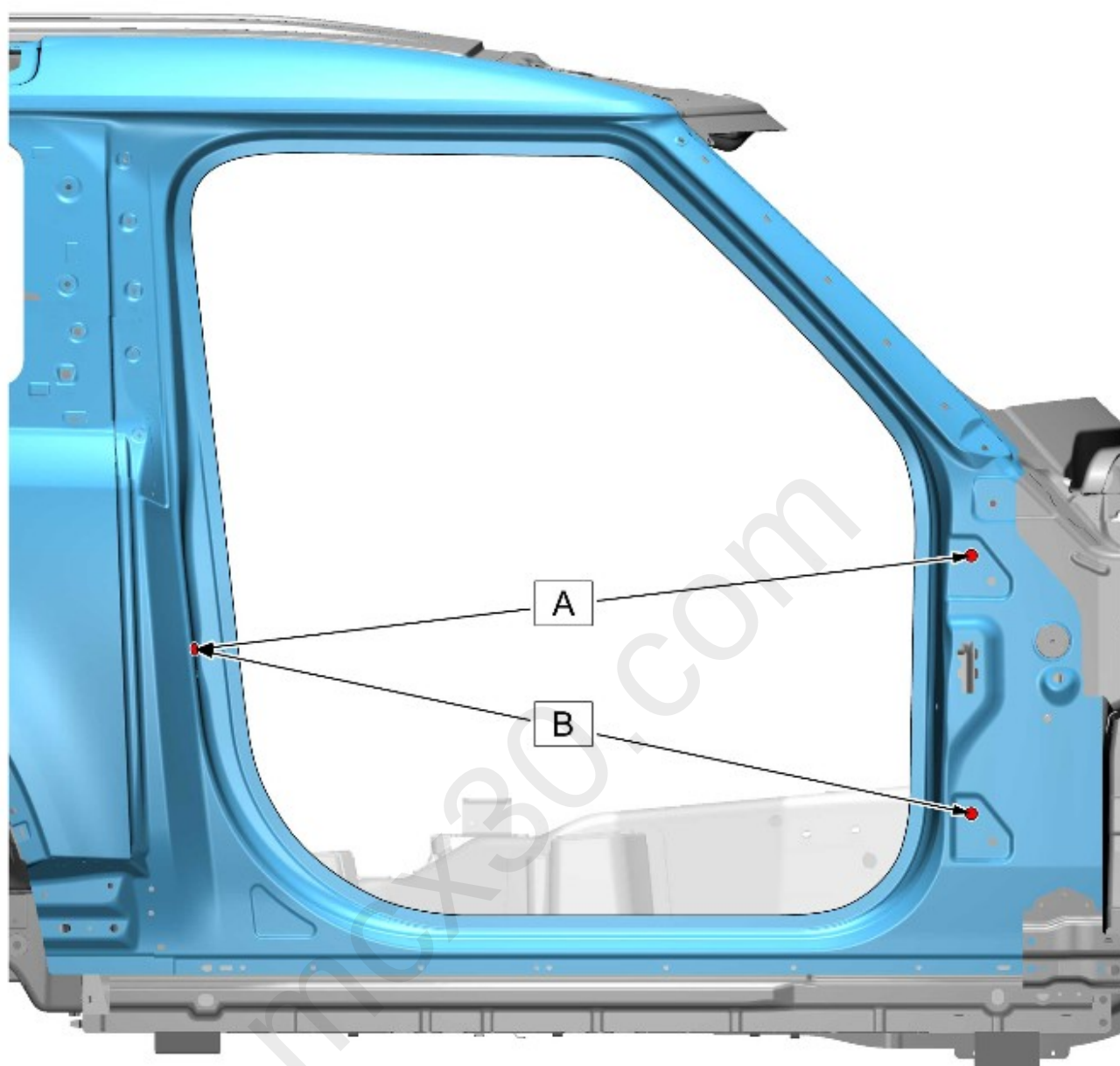
Rear End Body Dimensions



E255022

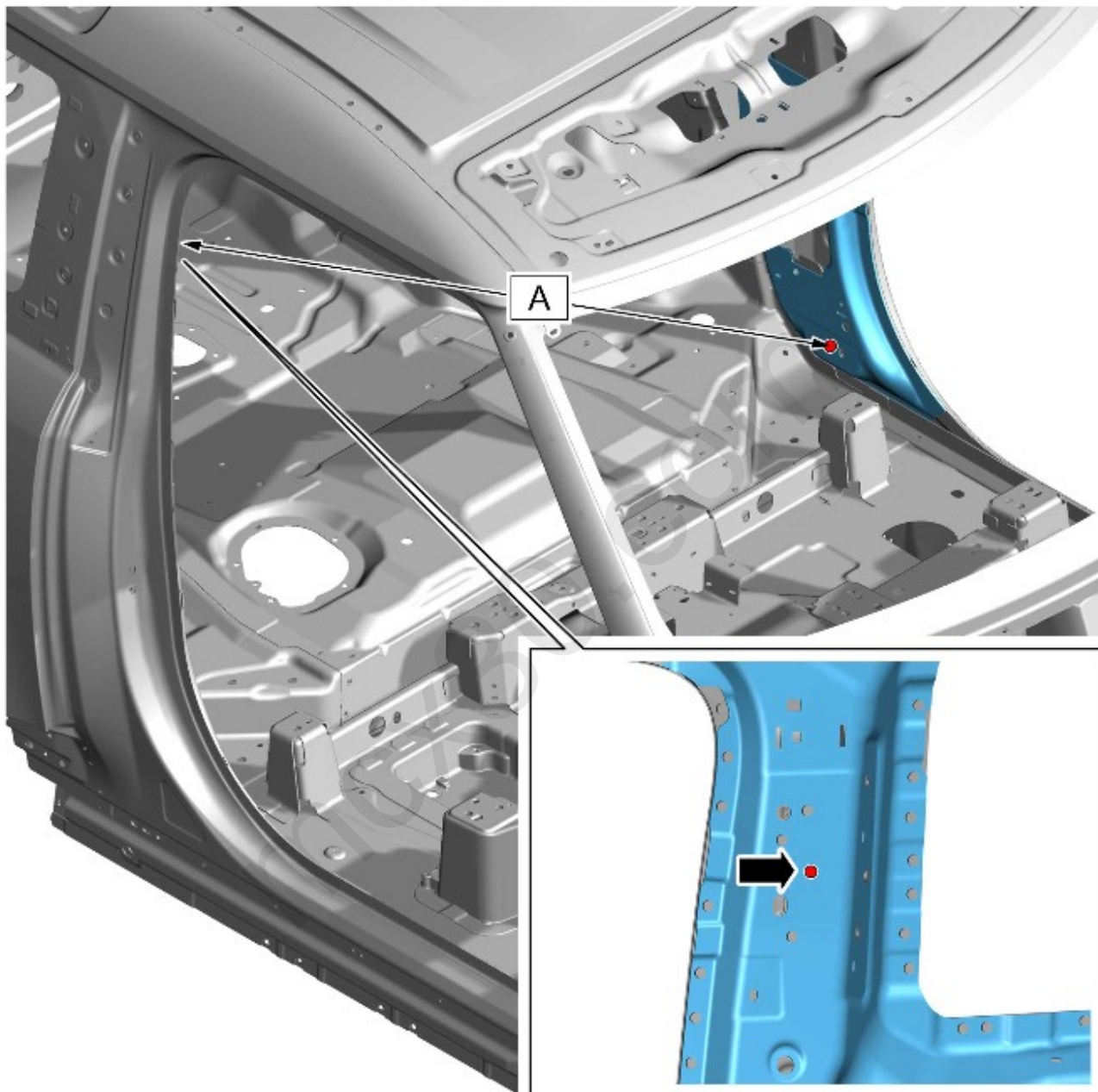
ITEM	FROM	TO	DIMENSION
A	Right side exterior trim finisher hole	Left side exterior trim finisher hole	1067
B	Right side exterior trim finisher hole	Left side exterior trim finisher hole	1386
C	Right side exterior trim finisher hole	Left side exterior trim finisher hole	1620
D	Rear armature outboard top left fixing hole	Rear armature outboard top right fixing hole	1200

Side Panel Body Dimensions



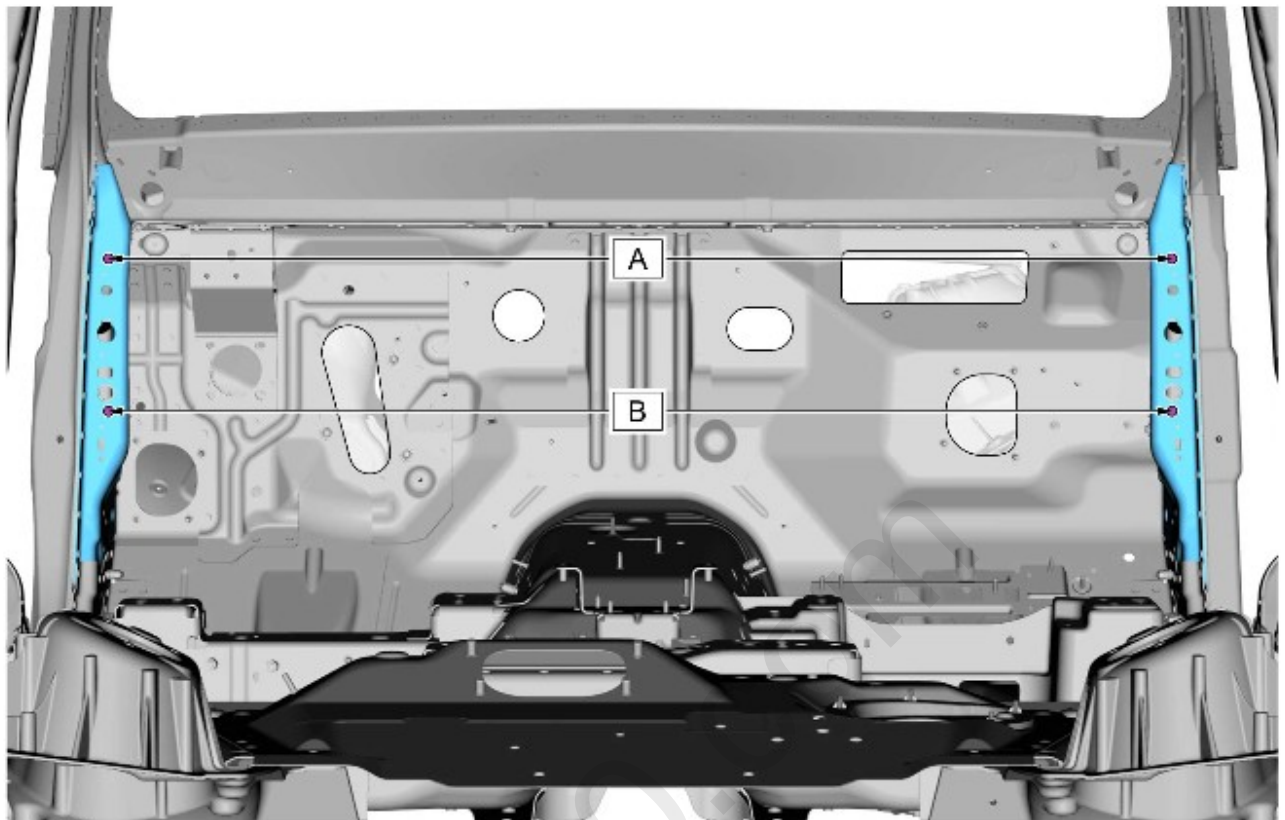
E261961

ITEM	FROM	TO	DIMENSION
A	Front door upper hinge upper fixing hole	Door striker upper fixing hole	1196
B	Front door lower hinge upper fixing hole	Door striker upper fixing hole	1216



E261962

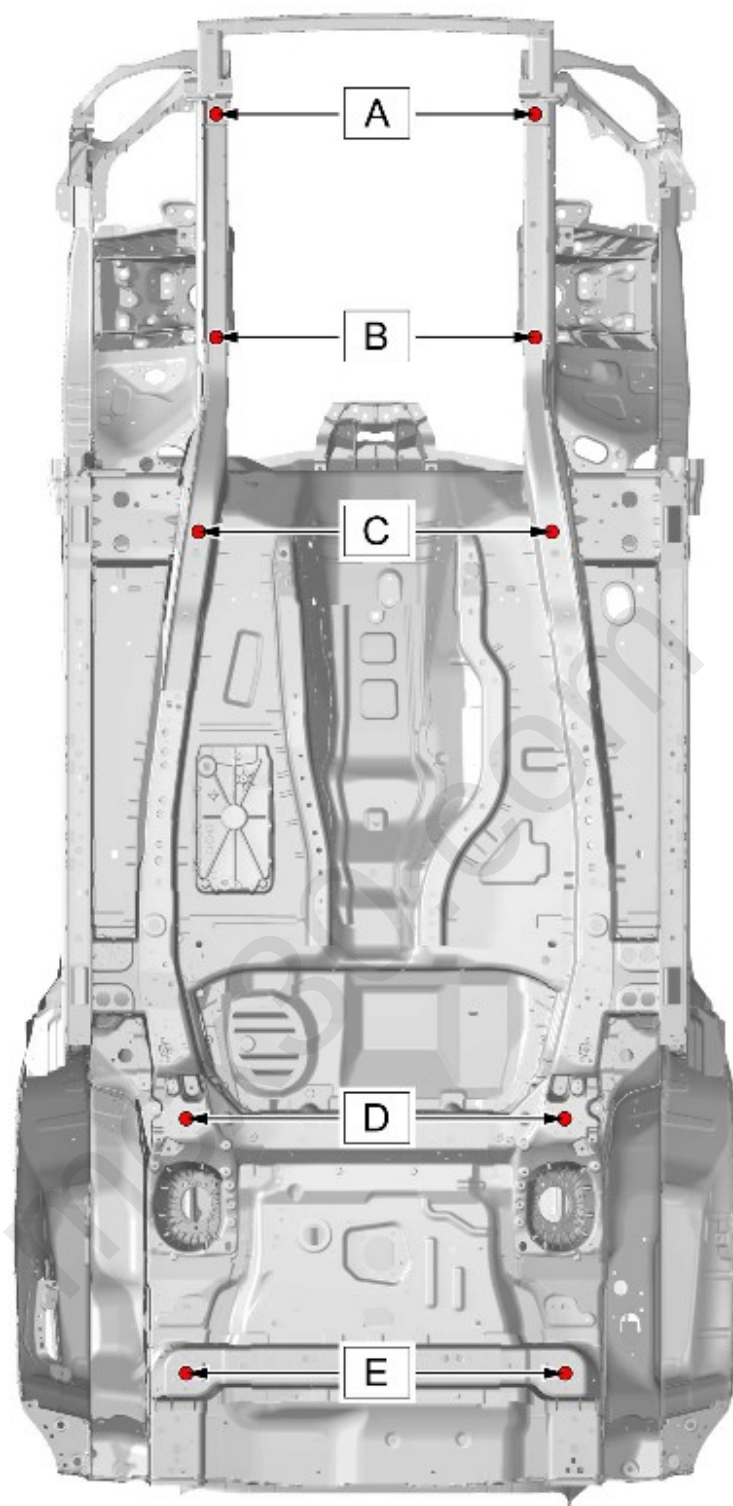
ITEM	FROM	TO	DIMENSION
A	Front right side upper seatbelt fixing hole	Front left side lower seatbelt fixing hole	1696



E255025

ITEM	FROM	TO	DIMENSION
A	Right side instrument panel carrier upper fixing hole	Left side instrument panel carrier upper fixing hole	1484
B	Right side instrument panel carrier lower fixing hole	Left side instrument panel carrier lower fixing hole	1484

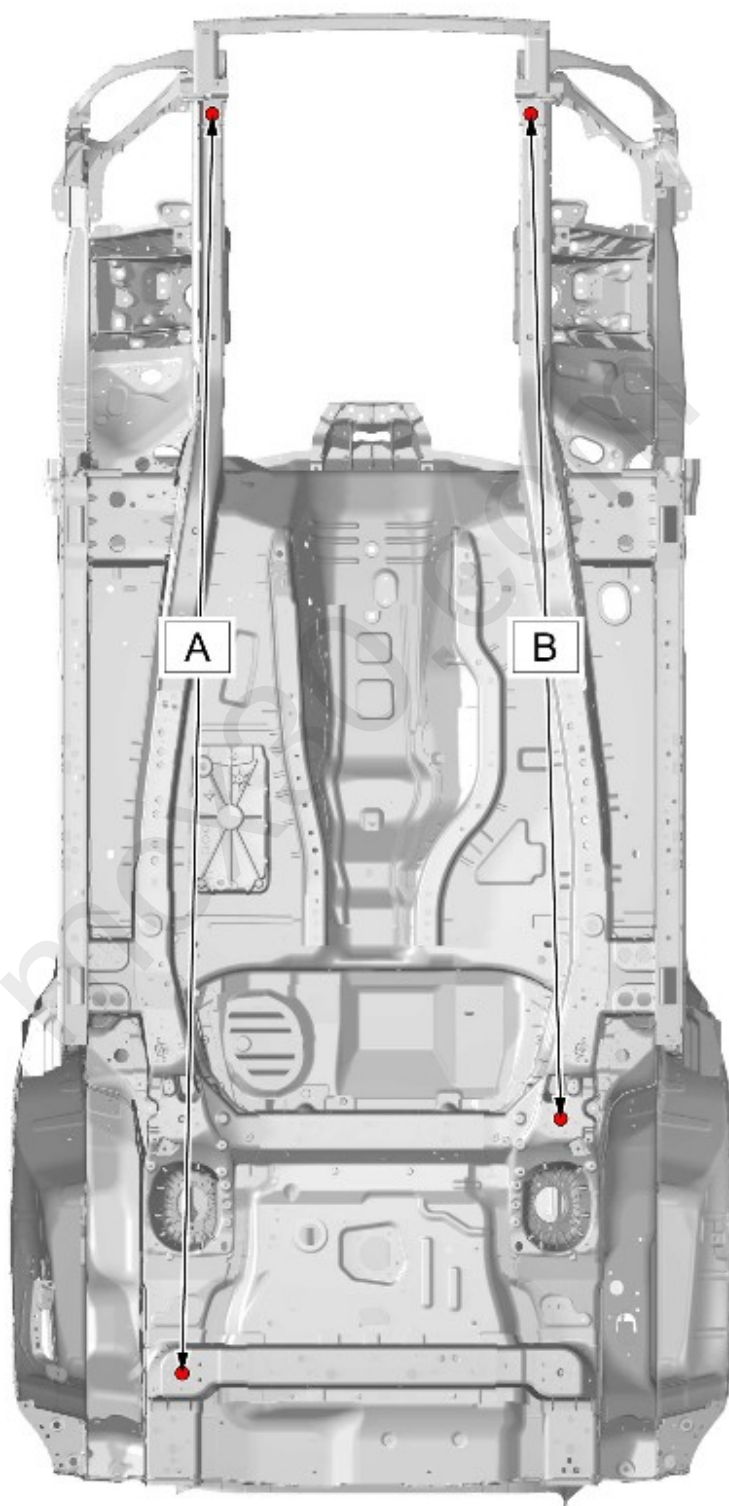
Under Body Dimensions



E261963

ITEM	FROM	TO	DIMENSION
A	Right side front subframe front fixing hole	Left side front subframe front fixing hole	861
B	Right side front subframe center fixing hole	Left side front subframe center fixing hole	861
C	Right side front subframe rear fixing hole	Left side front subframe rear fixing hole	959

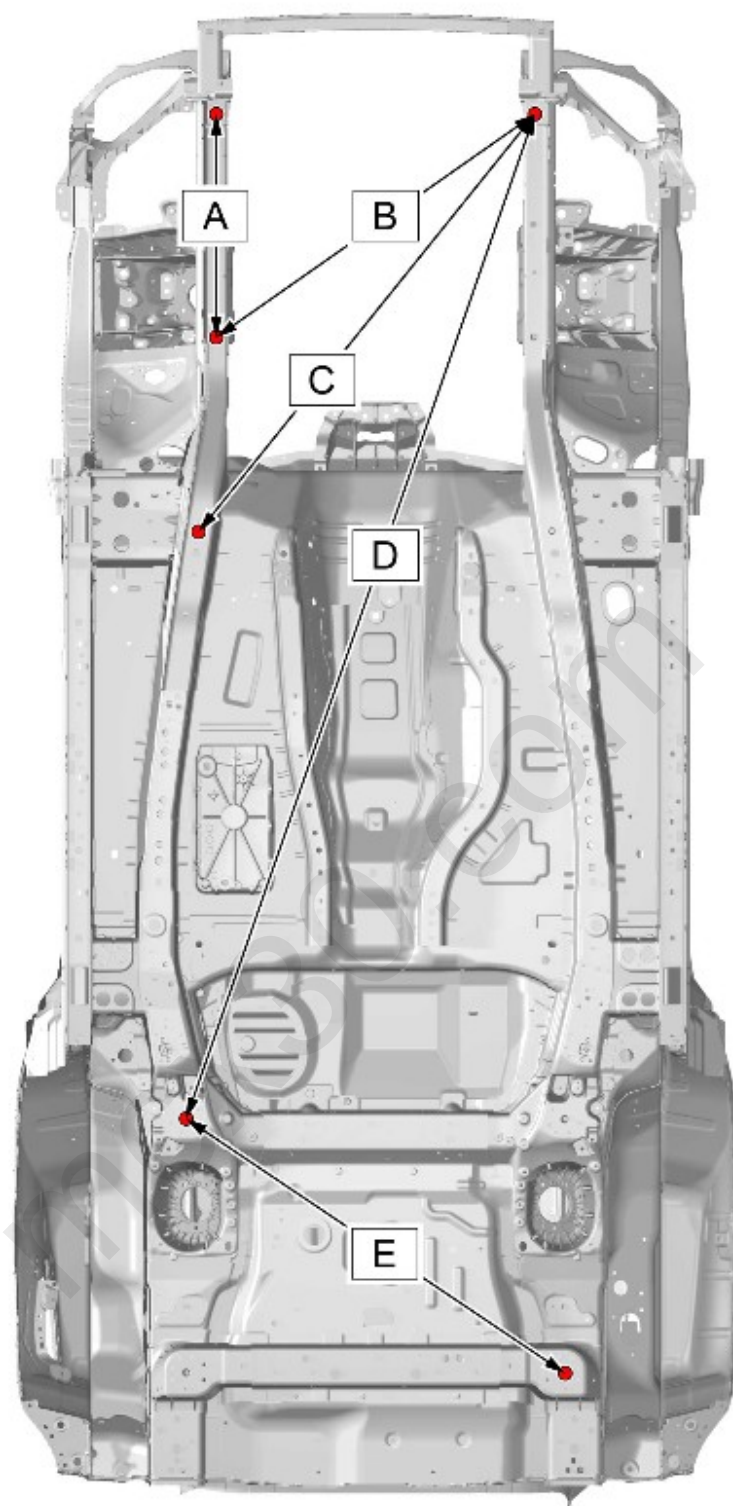
ITEM	FROM	TO	DIMENSION
D	Right side rear subframe front fixing hole	Left side rear subframe front fixing hole	1028
E	Right side rear subframe rear fixing hole	Left side rear subframe rear fixing hole	1028



E261964

ITEM	FROM	TO	DIMENSION
A	Right side front subframe front fixing hole	Right side rear subframe rear fixing hole	3416
B	Left side front subframe front fixing hole	Left side rear subframe front fixing hole	2728

mcx30.com



E261965

ITEM	FROM	TO	DIMENSION
A	Right side front subframe front fixing hole	Right side front subframe center fixing hole	603
B	Left side front subframe front fixing hole	Right side front subframe center fixing hole	1051
C	Left side front subframe front fixing hole	Right side front subframe rear fixing hole	1451

ITEM	FROM	TO	DIMENSION
D	Left side front subframe front fixing hole	Right side rear subframe front fixing hole	2886
E	Right side rear subframe front fixing hole	Left side rear subframe rear fixing hole	1238

Gap and Profile measurements

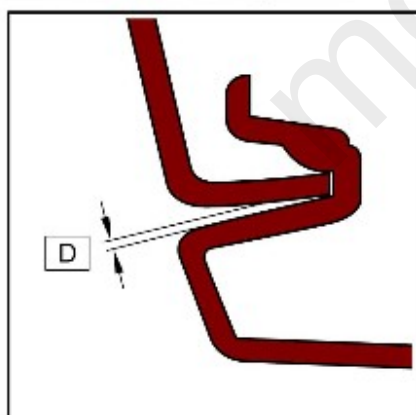
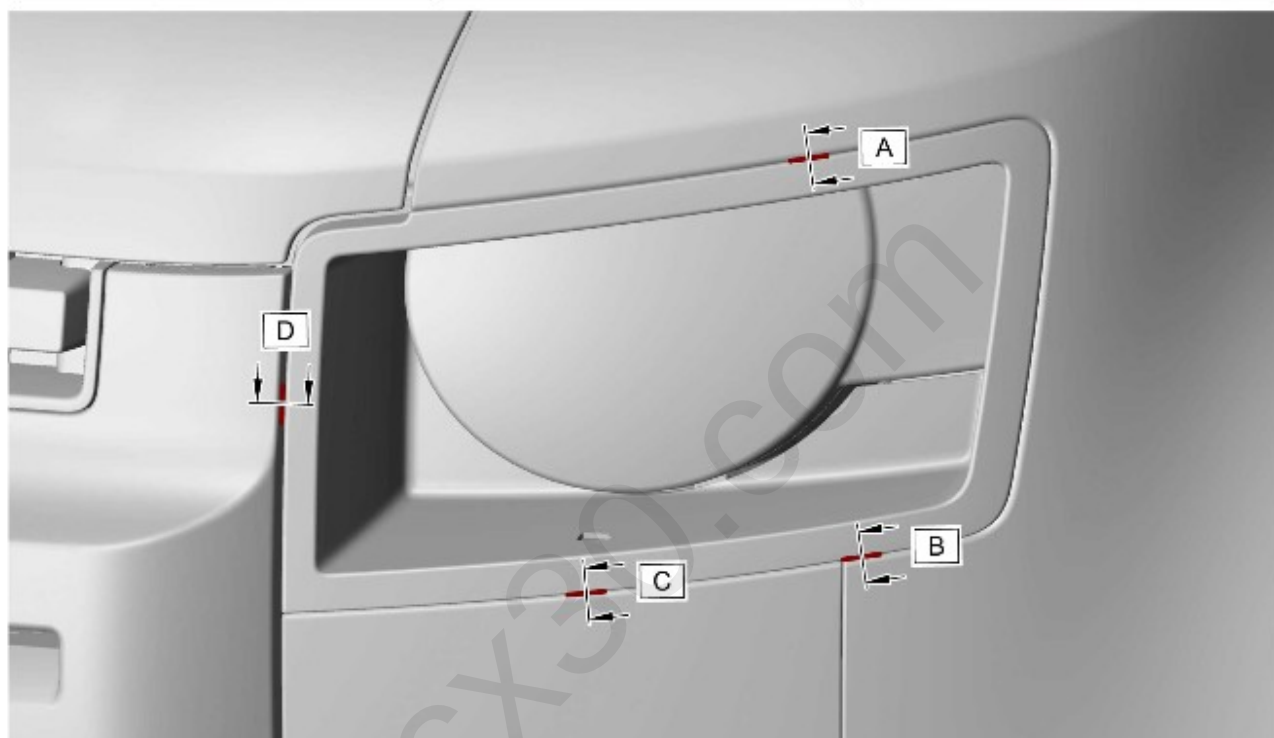
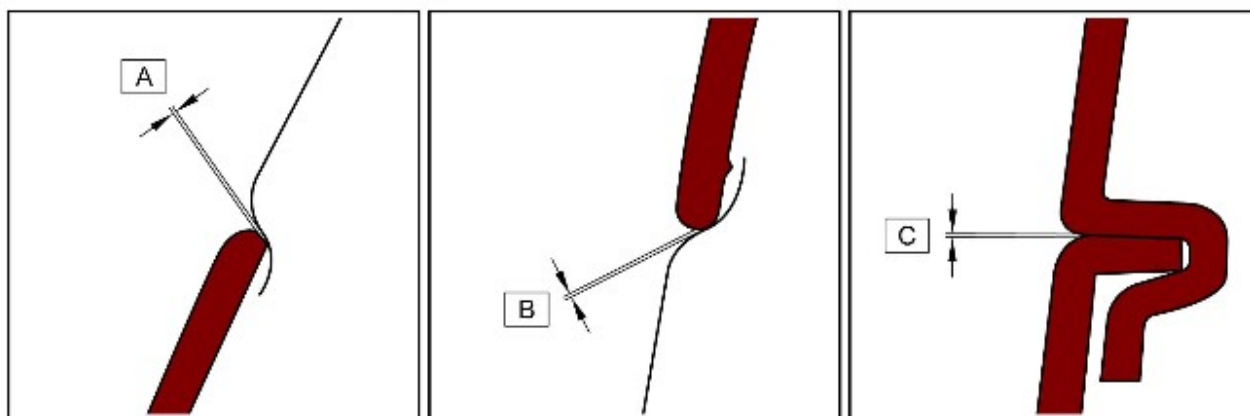


NOTE:

All dimensions shown are in millimetres (mm).

The following information is to be used as a guide to assist the technician in installing exterior body panels and trim items so as to achieve a correctly aligned and cosmetically acceptable vehicle.

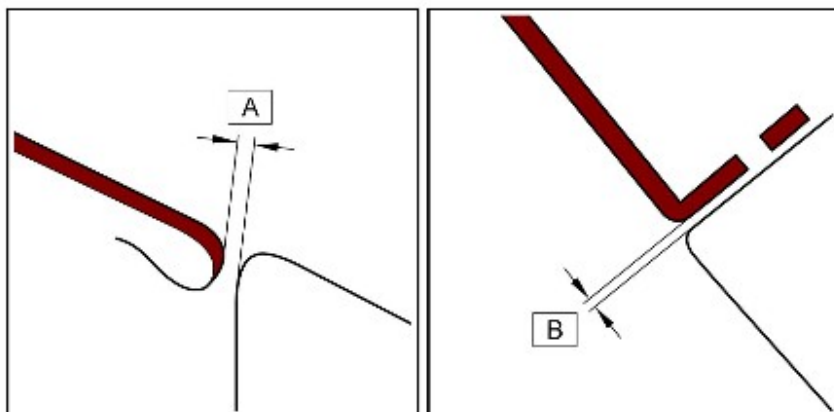
mcx30.com



E255785

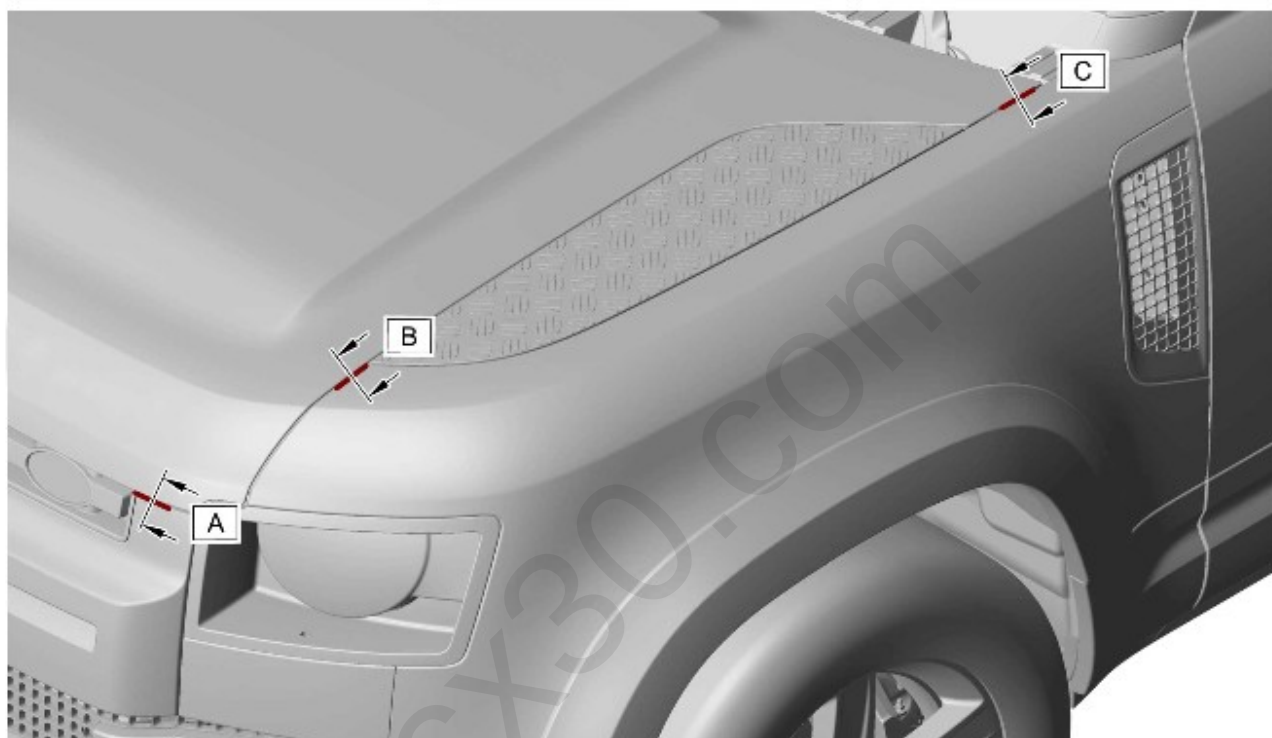
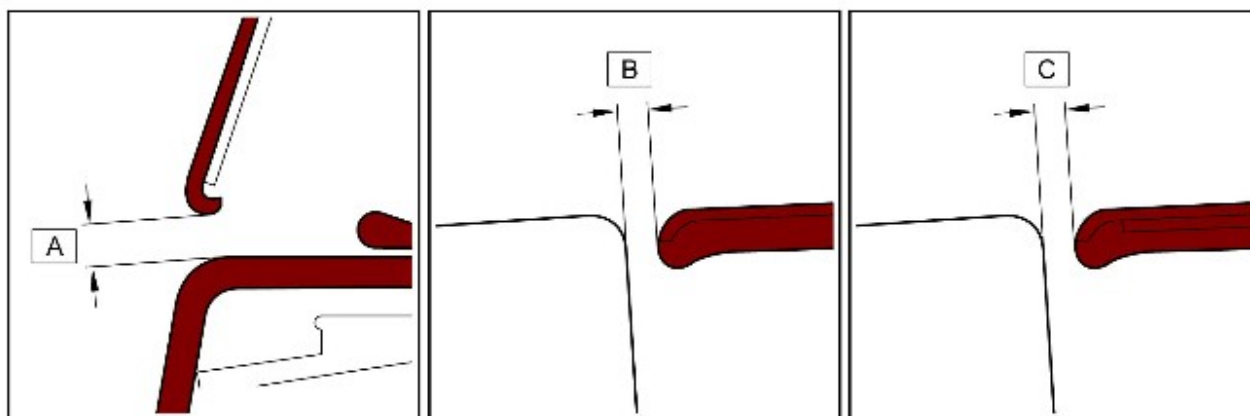
SECTION	DESCRIPTION	GAP	PROFILE
A	Fender to headlamp bezel upper	0.3 +0.5 -0.3	0.0 ± 1.0
B	Fender to headlamp bezel lower	0.3 +0.9 -0.3	0.0 ± 1.0
C	Bumper to headlamp bezel lower	0.0 +0.5 -0.0	0.0 ± 1.0

SECTION	DESCRIPTION	GAP	PROFILE
D	Bumper to headlamp bezel centre	3.0 ± 1.3	1.0 ± 1.0



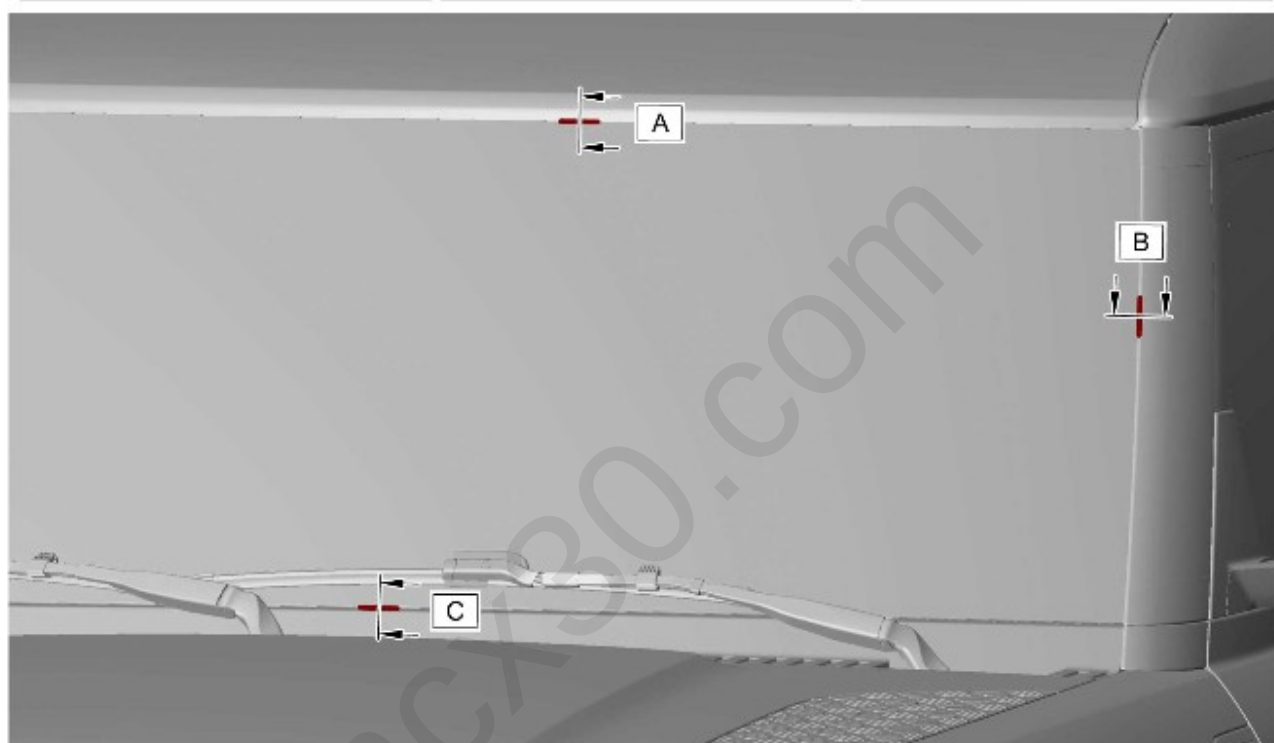
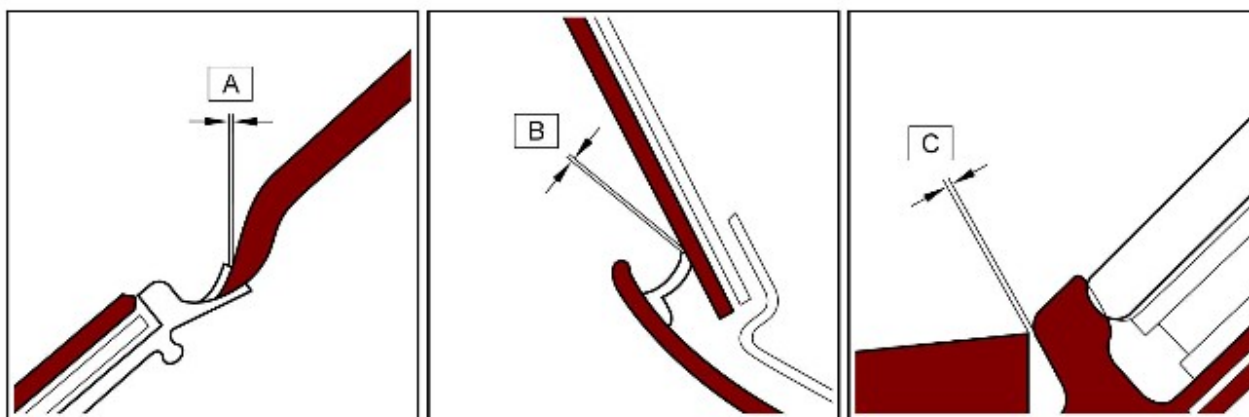
SECTION	DESCRIPTION	GAP	PROFILE
A	Fender to hood	3.2 ± 1.0	0.5 ± 1.0
B	Fender to bumper	$0.0 +0.5 -0.0$	0.0 ± 0.6

mcx30.com



E255787

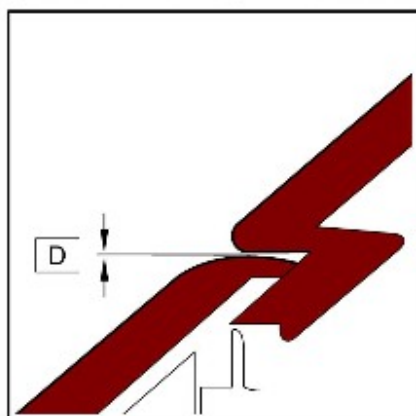
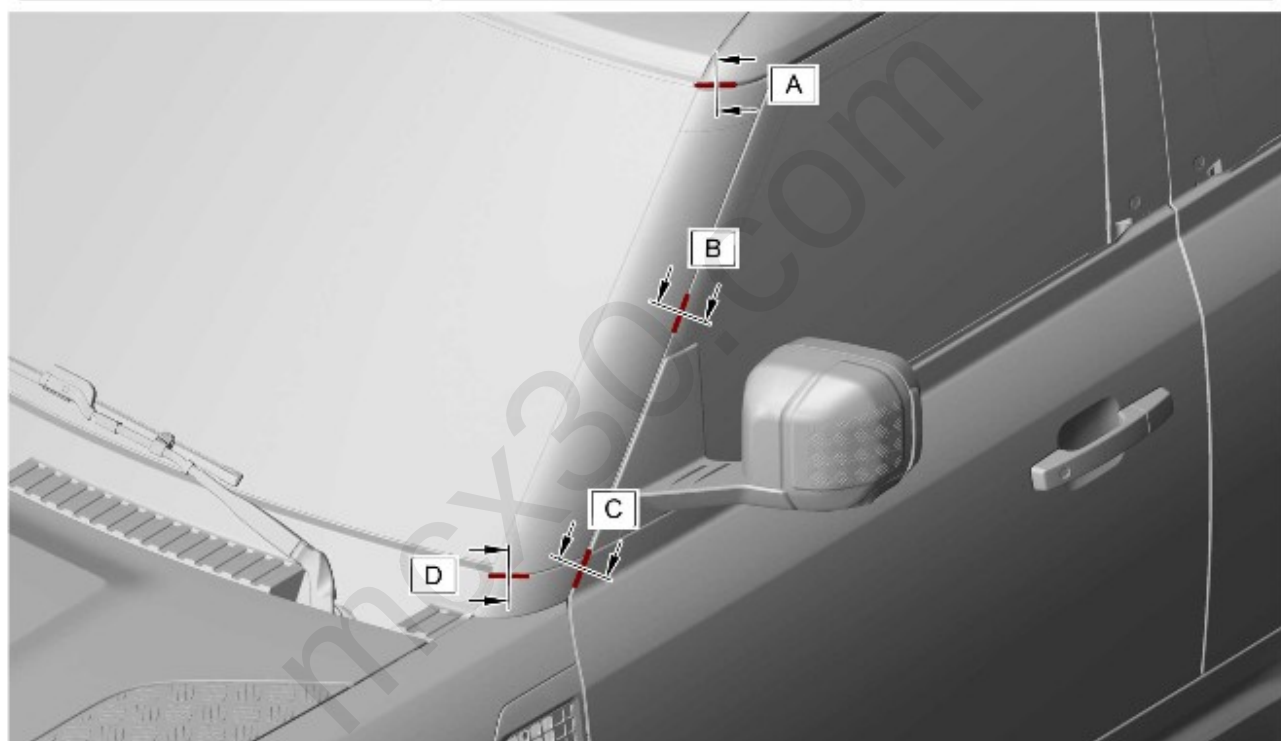
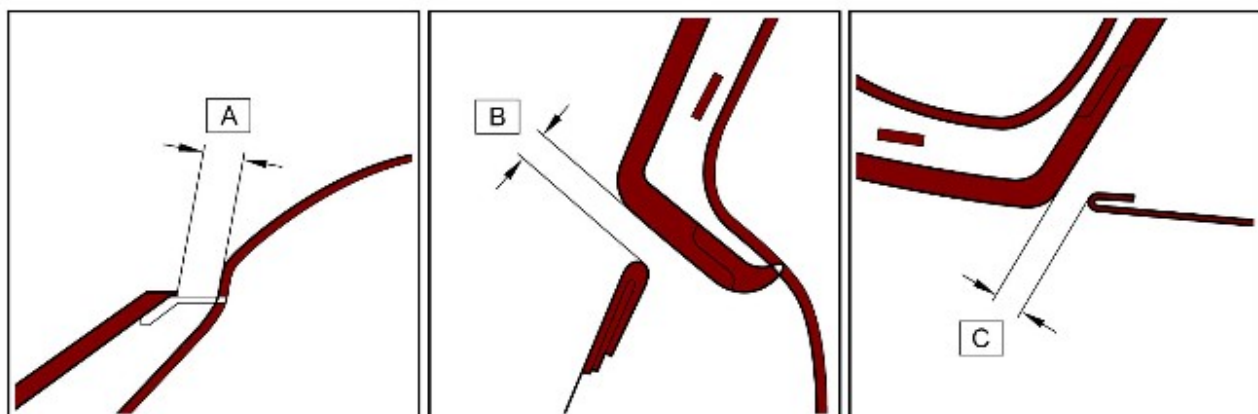
SECTION	DESCRIPTION	GAP	PROFILE
A	Bumper to hood	5.0 ± 1.6	-2.0 ± 1.2
B	Fender to hood front	3.0 ± 1.0	0.5 ± 1.1
C	Fender to hood rear	3.0 ± 1.1	0.7 ± 1.1



E255788

SECTION	DESCRIPTION	GAP	PROFILE
A	Windshield to roof	N/A	N/A
B	A-pillar finisher to windshield	N/A	N/A

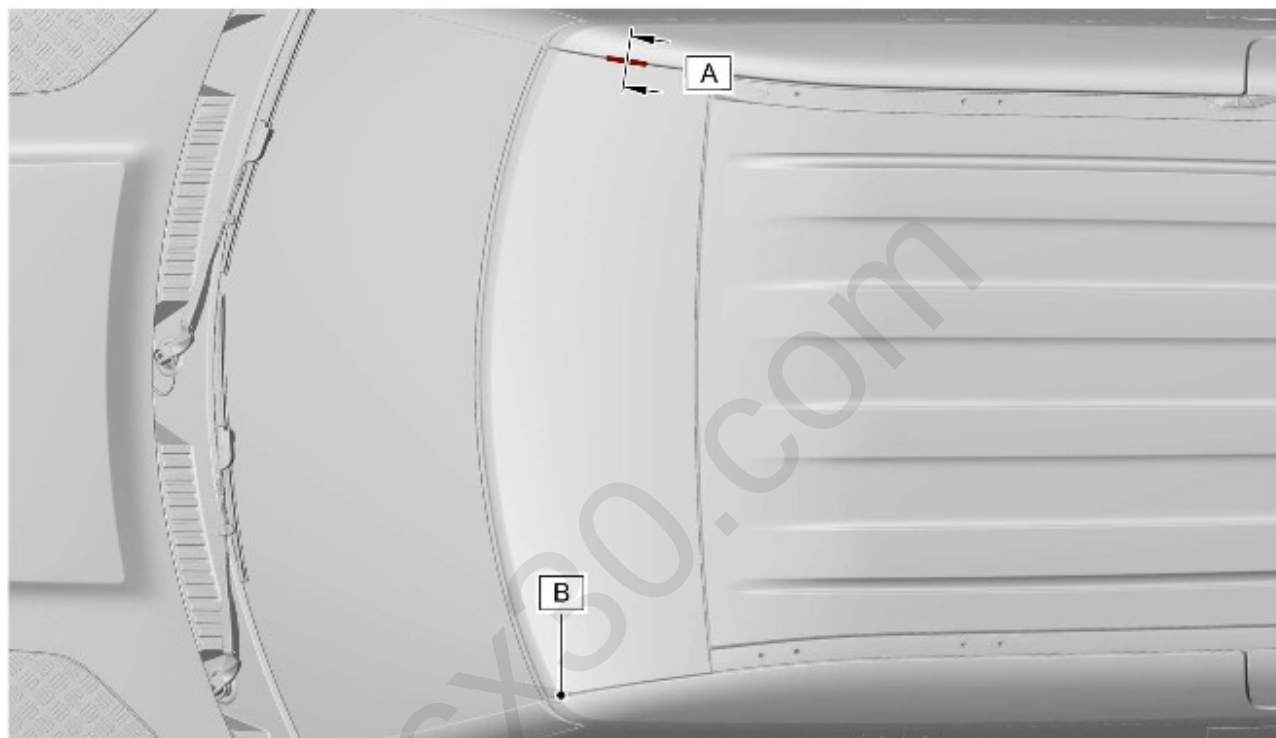
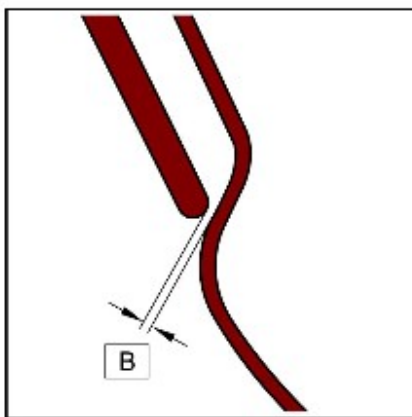
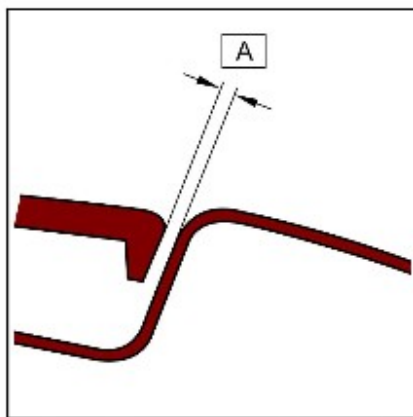
SECTION	DESCRIPTION	GAP	PROFILE
C	Cowl panel to windshield	0.5 ± 0.5	N/A



E255800

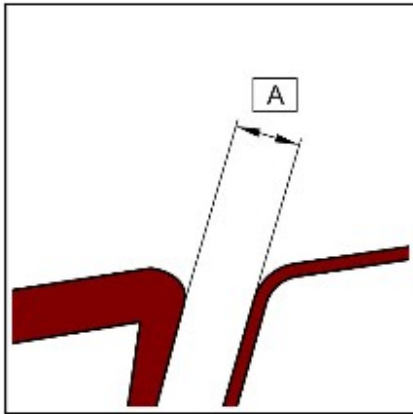
SECTION	DESCRIPTION	GAP	PROFILE
A	A-pillar finisher to cantrail	2.5 ± 1.8	N/A
B	Front door frame to A-pillar finisher	4.0 ± 1.0	-2.0 ± 1.5
C	Front door to A-pillar finisher	3.5 ± 0.9	-0.7 ± 1.4
D	A-pillar finisher lower to A-pillar	0.4 ± 0.4	0.0 ± 0.6

mcx30.com



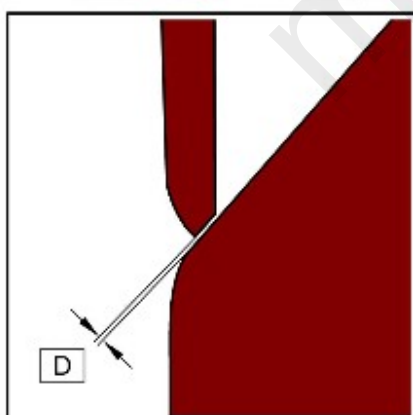
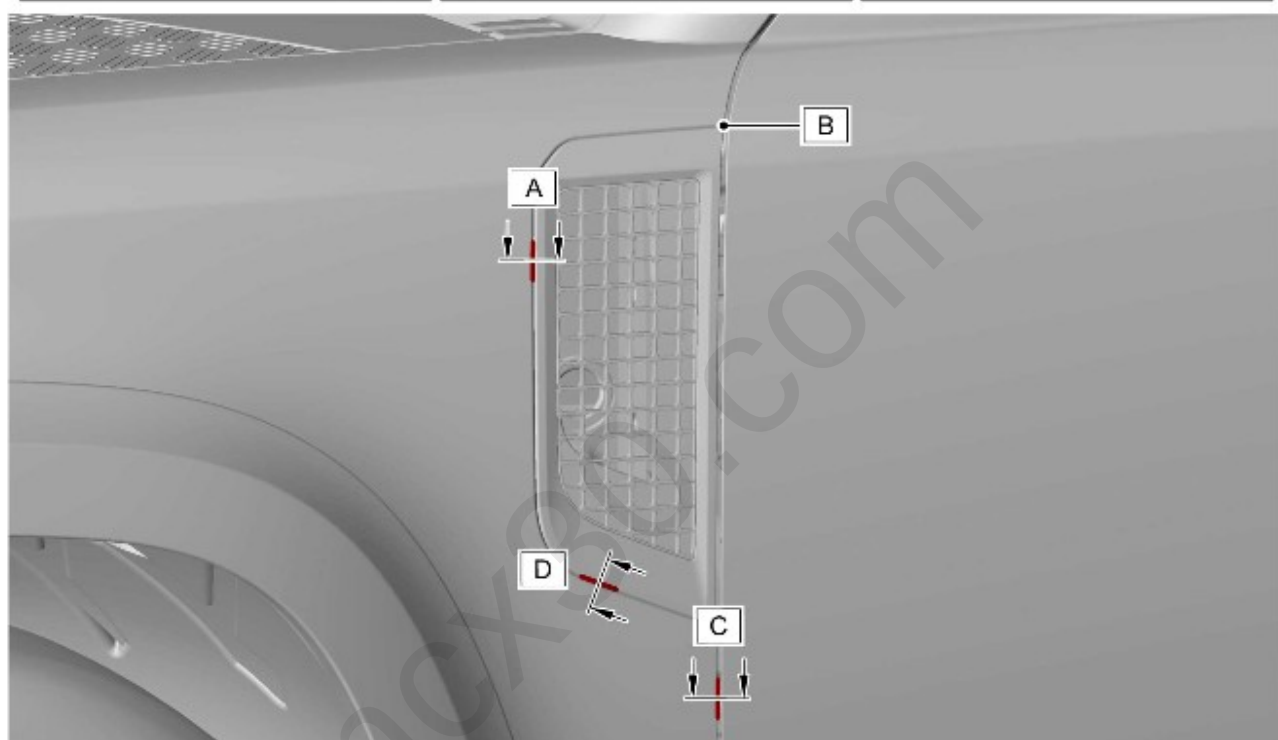
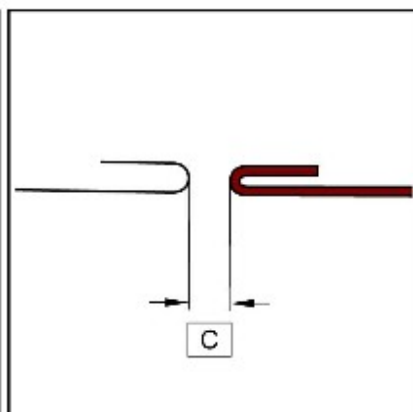
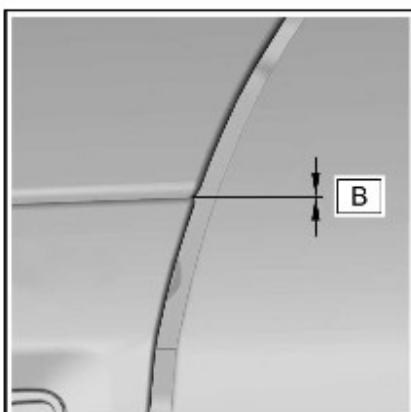
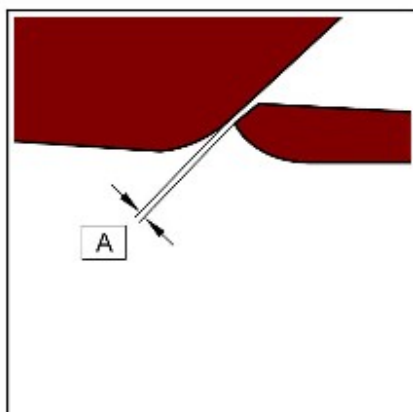
E255794

SECTION	DESCRIPTION	GAP	PROFILE
A	Front roof trim panel to cant rail	2.5 ± 1.5	-1.5 ± 1.0
B	Front roof trim panel to cant rail front	1.5 ± 1.5	-2.0 ± 1.5



E255795

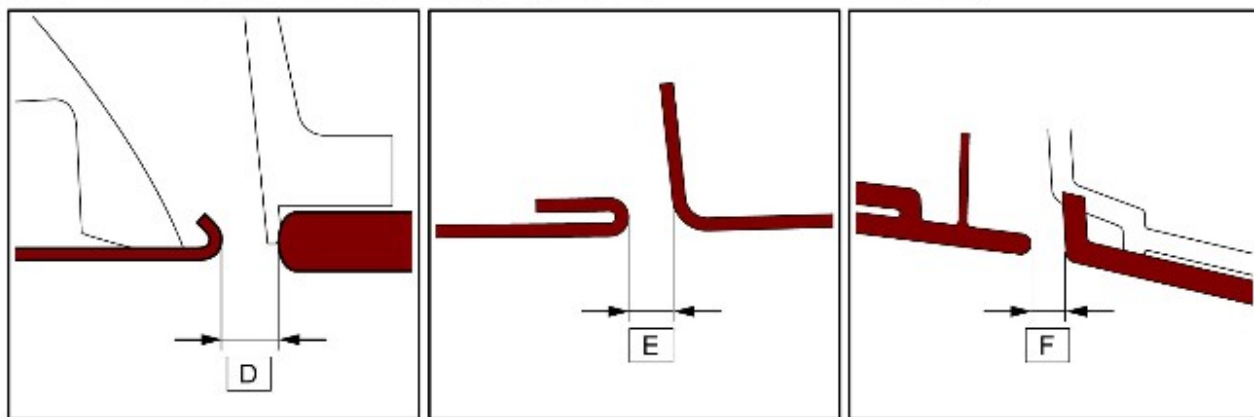
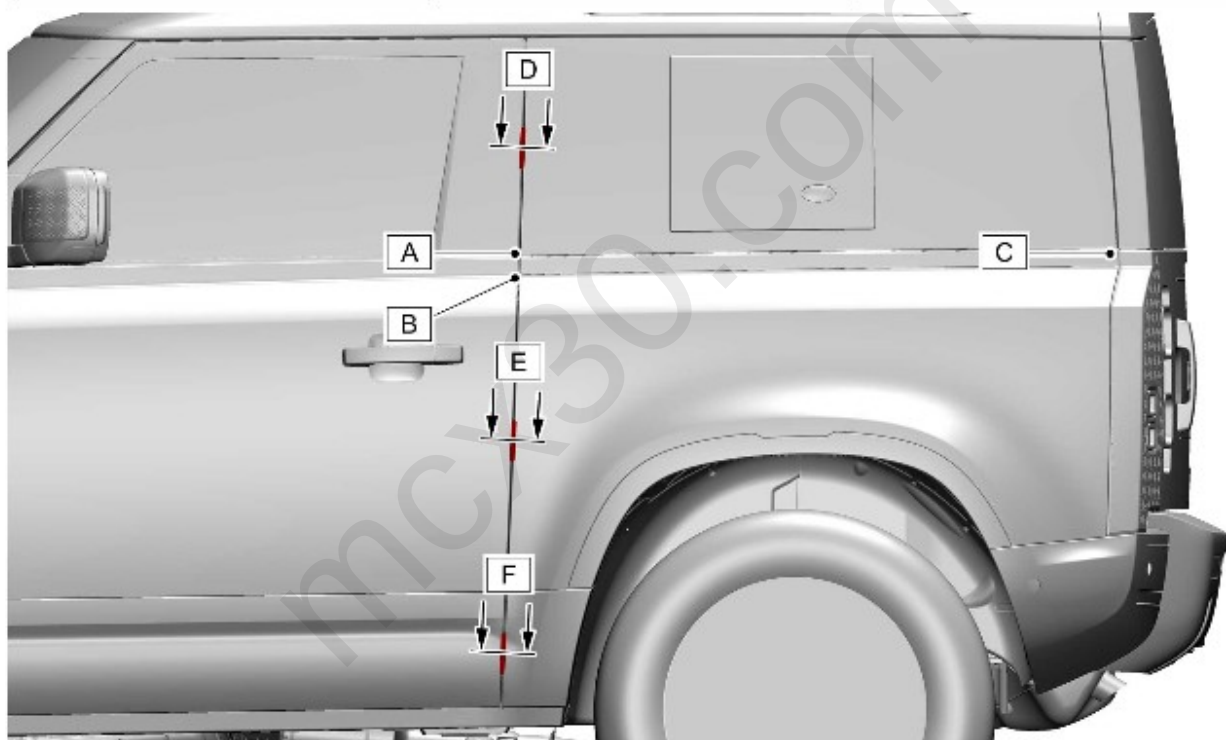
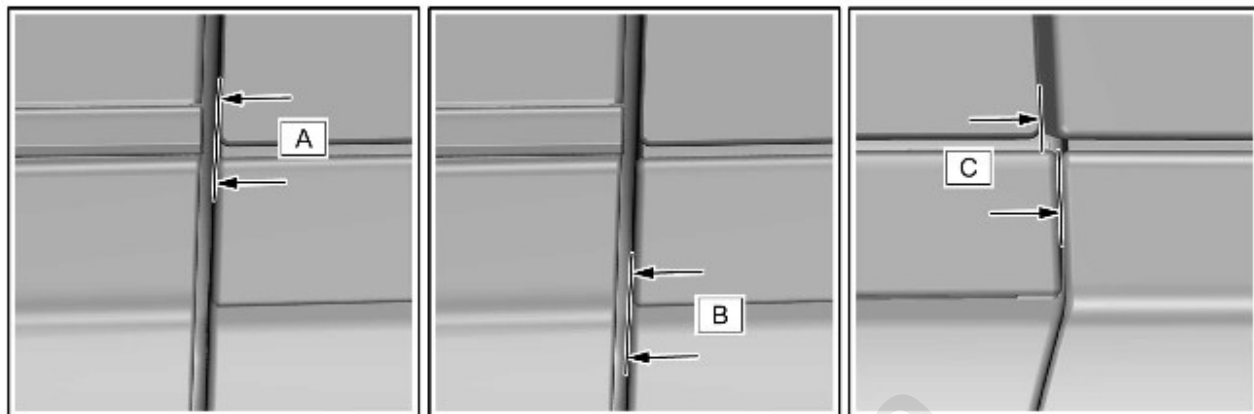
SECTION	DESCRIPTION	GAP	PROFILE
A	Front roof trim panel to fixed roof panel	5.0 ± 1.4	1.0 ± 0.8



E255799

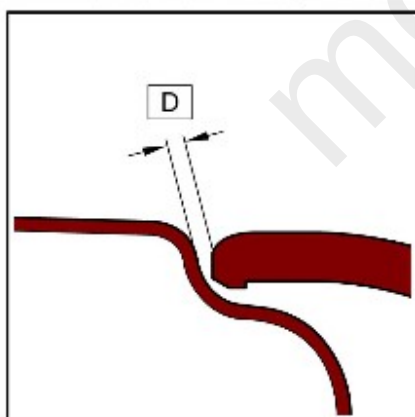
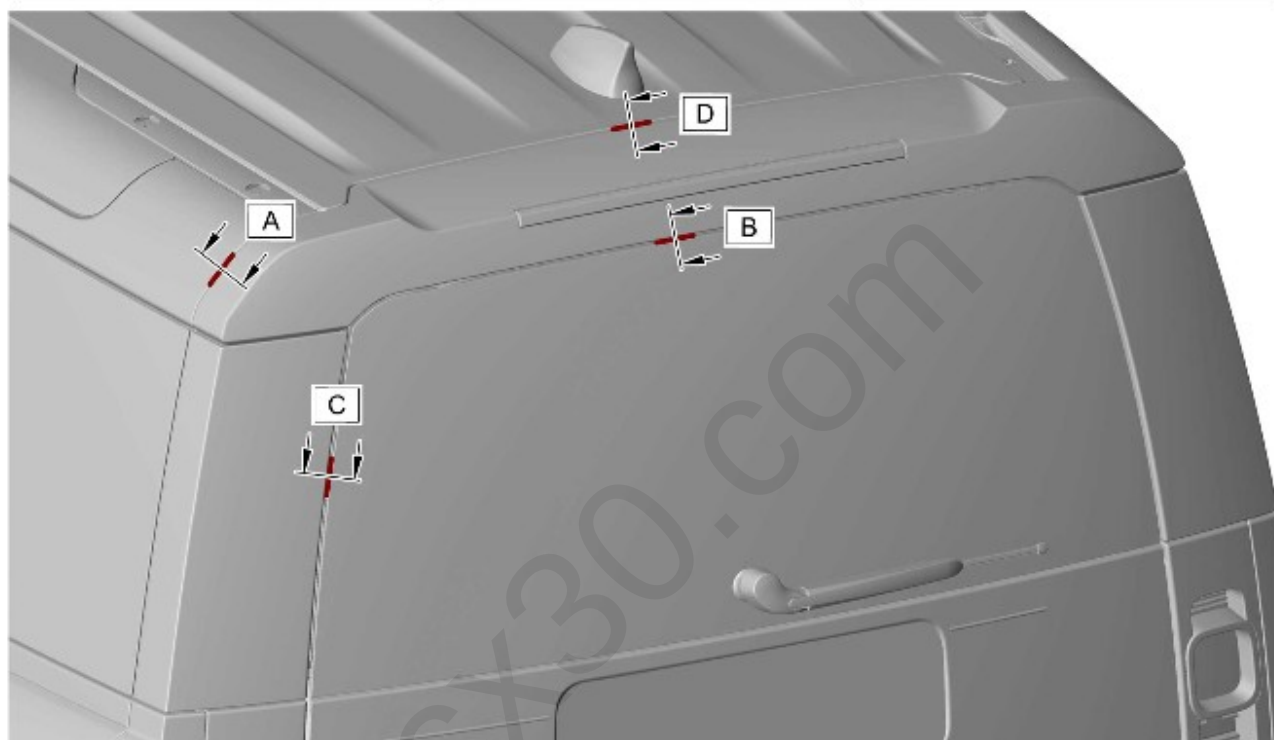
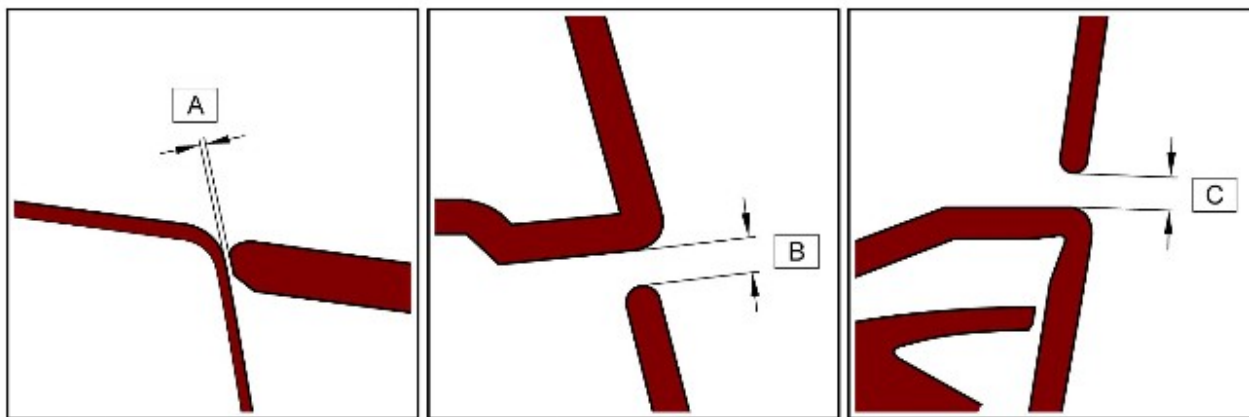
SECTION	DESCRIPTION	GAP	PROFILE
A	Fender louvre to fender	0.2 +0.5 -0.0	N/A
B	Fender louvre moulding to fender	N/A	-0.5 ± 0.6

SECTION	DESCRIPTION	GAP	PROFILE
C	Fender to front door	3.5 ± 0.6	0.0 ± 0.7
D	Fender louvre to fender lower	$0.2 +0.5 -0.0$	N/A



SECTION	DESCRIPTION	GAP	PROFILE
A	Quarter glass to quarter glass finisher	N/A	0.0 ± 1.0
B	Quarter finisher to fixed rear quarter	N/A	0.0 ± 0.9
C	Quarter glass to quarter glass finisher	N/A	-3.5 ± 1.3
D	Front door frame to quarter glass	4.0 ± 1.1	0.0 ± 1.5
E	Front door to fixed rear quarter	3.5 ± 0.7	0.0 ± 0.7
F	Front door cladding to fixed rear quarter cladding	N/A	0.0 ± 2.0

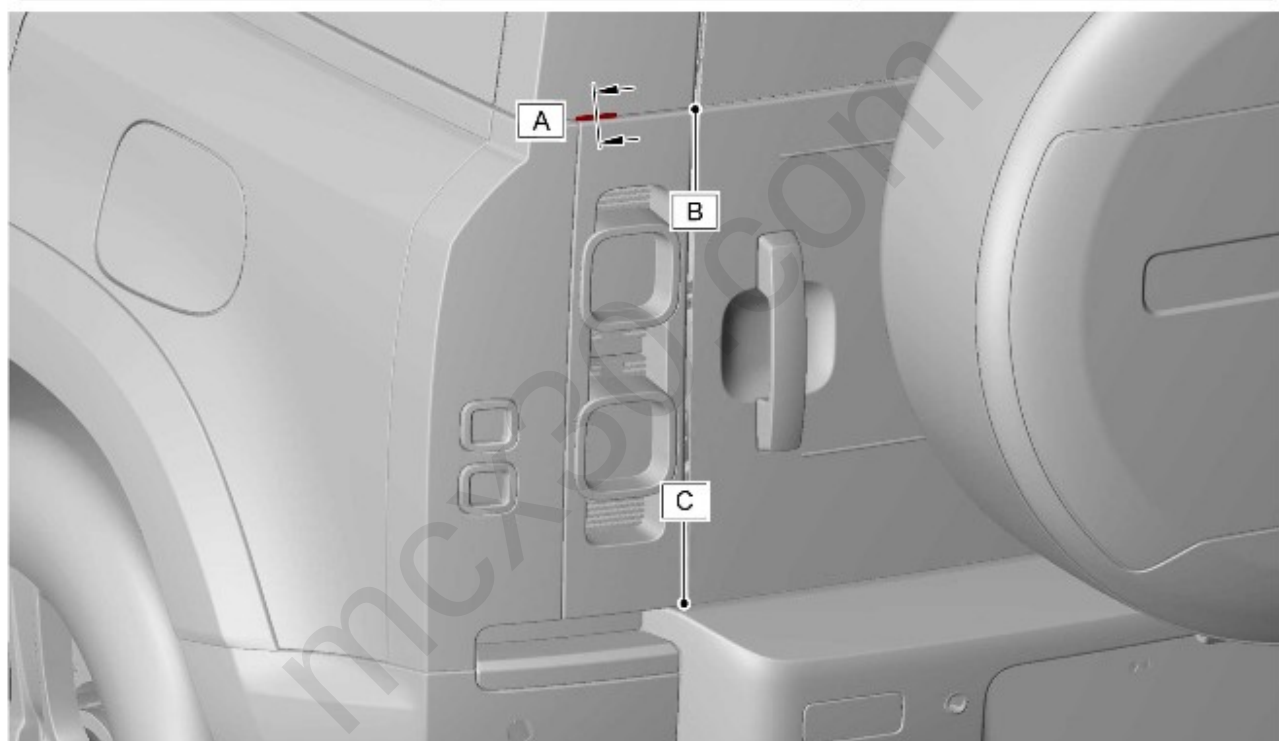
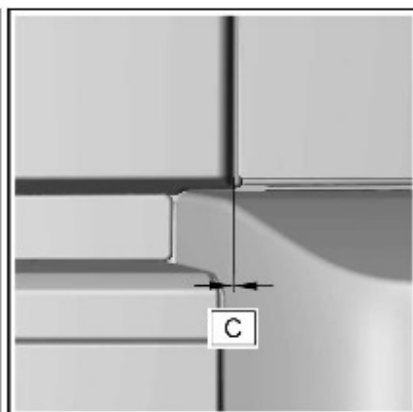
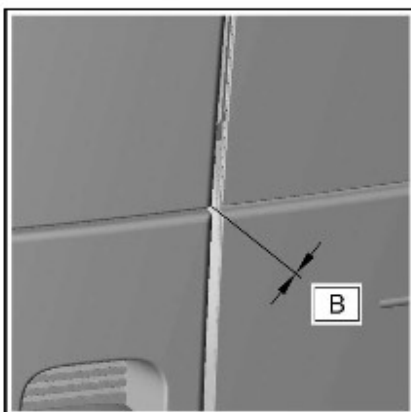
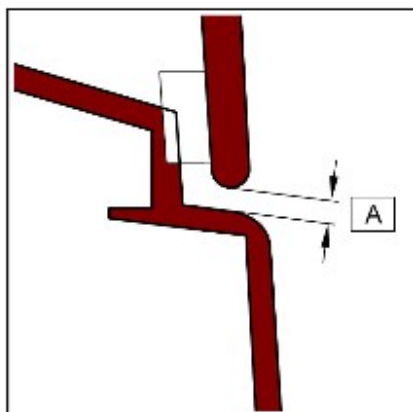
mcx30.com



E255792

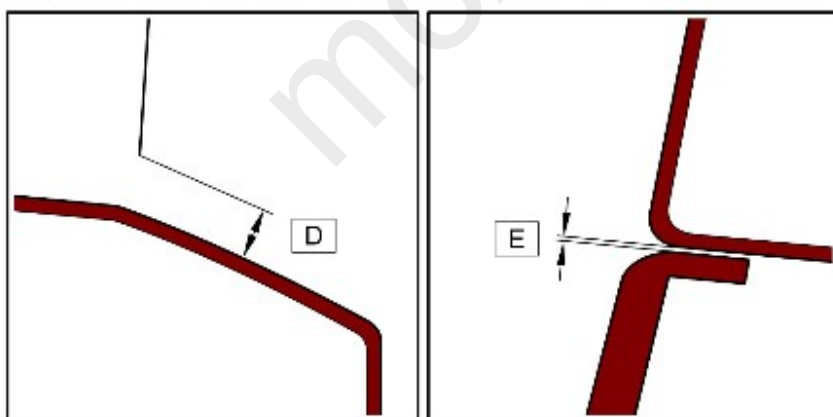
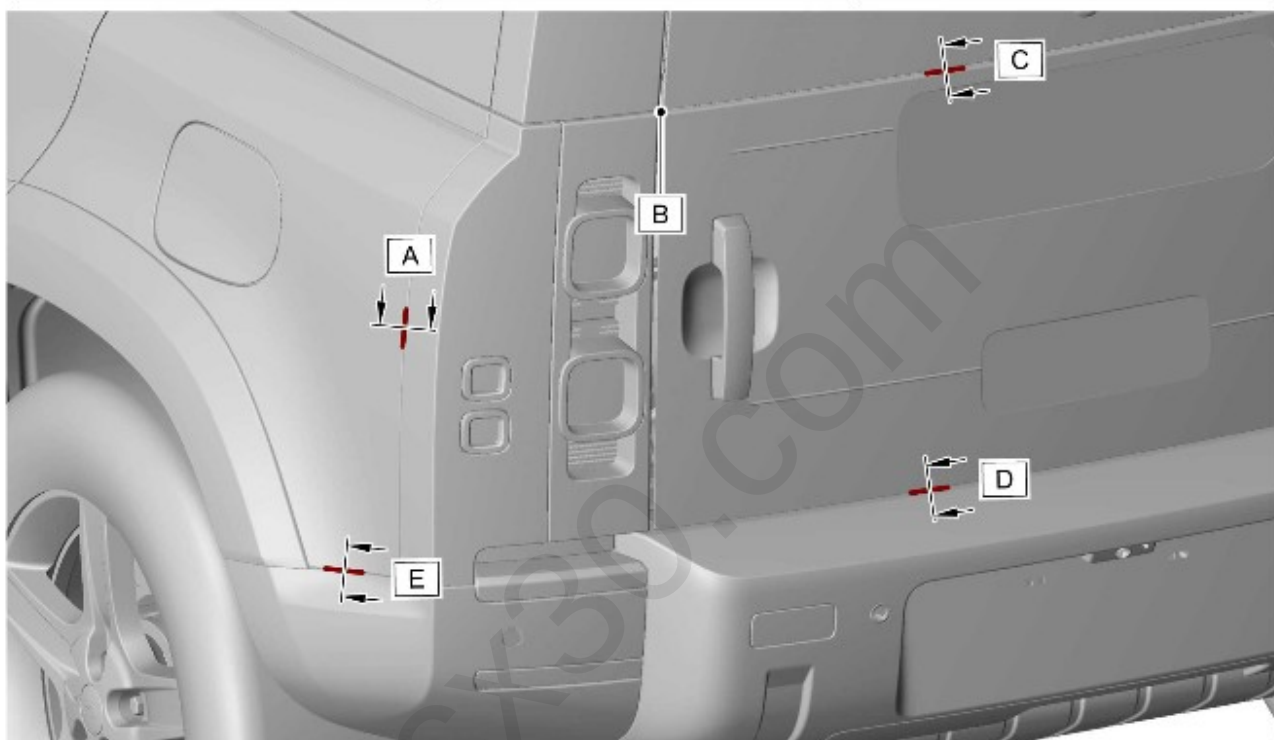
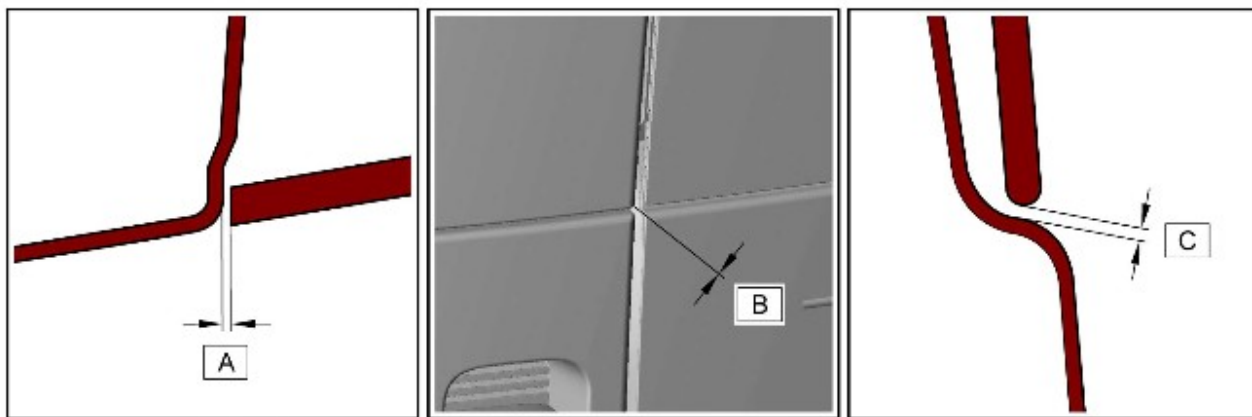
SECTION	DESCRIPTION	GAP	PROFILE
A	Rear roof fin to cantrail	$0.5 +1.2 -0.5$	-0.5 ± 1.6
B	Tailgate glass to roof fin	4.5 ± 2.5	-3.0 ± 2.2
C	D-pillar fin to tailgate glass	4.5 ± 2.0	2.0 ± 2.0

SECTION	DESCRIPTION	GAP	PROFILE
D	Roof finisher to roof panel	1.7 ± 1.7	-0.5 ± 1.6



SECTION	DESCRIPTION	GAP	PROFILE
A	D-pillar finisher to tail lamp finisher	2.4 ± 1.3	-1.5 ± 1.5
B	Tail lamp finisher to tailgate upper with spare wheel	N/A	0.5 ± 1.5
C	Tail lamp finisher to tailgate lower with spare wheel	N/A	0.0 ± 1.3

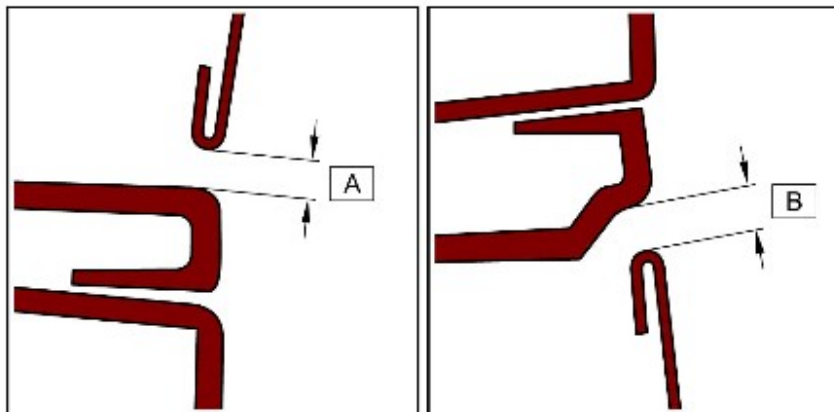
mcx30.com



E255789

SECTION	DESCRIPTION	GAP	PROFILE
A	D-pillar finisher to quarter panel	$0.5 +0.7 -0.5$	-0.5 ± 0.8
B	Tail lamp finisher to tailgate upper without spare wheel	N/A	$-0.3 +1.5 -1.1$
C	Tailgate glass to tailgate	2.5 ± 1.0	-2.0 ± 1.0

SECTION	DESCRIPTION	GAP	PROFILE
D	Tailgate to bumper	10 ± 1.5	N/A
E	Quarter panel to bumper	0.0 ± 0.5	1.0 ± 0.7



SECTION	DESCRIPTION	GAP	PROFILE
A	Tail lamp finisher to tailgate	5.0 ± 1.5	-1.5 ± 1.3
B	Tail lamp finisher to tailgate	5.0 ± 1.5	-1.5 ± 1.3

cmIjaGFyZG1vbnRvbjsyMDIwLTA5LTE4VDE4OjQ5OjEwLjA4Ni7OTAuMTk5LjEyMS4xMTc7

mcx30.com