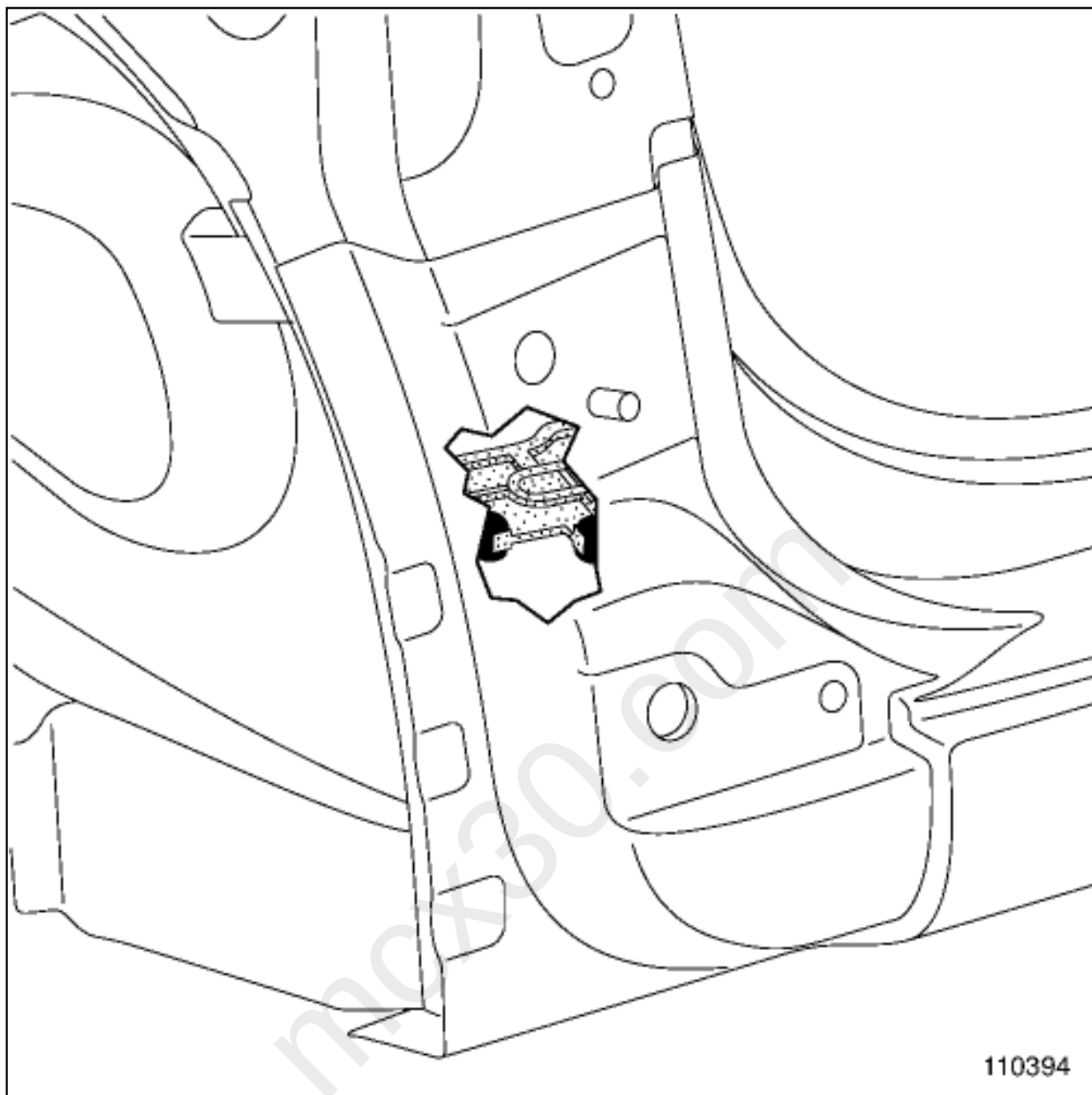




Assemble the new part by squeezing the bead.



Repair-40x01x38-02x21-1-1-1.xml



XSL version : 3.02 du 22/07/11

STRUCTURAL BODYWORK DOCUMENTATION: DESCRIPTION

1. CLASSIFYING INFORMATION

This information is classified in two complementary documents:

1- VEHICLE STRUCTURE BODYWORK REPAIR PROCEDURES (MR OF THE VEHICLE CONCERNED)

This document comprises two sections:

1) SECTION 0:

■ This section does not contain repair methods, it only contains description information; it consists of several subsections:

- 01C Vehicle bodywork specifications,
- 02A Lifting equipment,
- 02B Bodywork innovations,
-
- 03B Collision,
-
- 04B Consumables - Products,
-
- 04E Painting,
-
- 05B Bodywork equipment and tooling.

2) SECTION 4:



This section consists of several subsections:

-
- 40A General information,
-
- 41A Lower front structure,
-
- 41B Lower central structure,
-
- 41C Lower side structure,
-

- 41D Lower rear structure,
- 42A Upper front structure,
- 43A Upper side structure,
- 44A Upper rear structure,
- 45A Top of body,
- 47A Side opening elements,
- 48A Non-side opening elements.

These subsections are linked to the Replacement Parts Catalogue and contain two types of information:

■ Section 1: General description. This section contains information relating to generic structural spare parts and to their design. This information may be the same for several vehicles.

■ Section 2: Description, Removal - Refitting, Stripping - Rebuilding and Adjustment. This section contains information relating to structural spare parts and the special features of the vehicle concerned.

Note:



Always read both parts in order to have all the necessary information to repair the vehicle.

2- FUNDAMENTALS OF THE STRUCTURE BODYWORK REPAIR (MR 400)

This document comprises two sections:

1) SECTION 0:

this section consists of several subsections:



04F Bodywork products and mountings

05B Bodywork equipment and tooling

2)SECTION 4:

This section contains information on the basic operating ranges which concern the bodyshop technician.



this section consists of several subsections:

40A General information

40B Electrical resistance welded connections

40C Gas metal arc welded connections (GMAW)

40D Laser welded connections

40E Partial replacement connections

04F Bonded connections

40G Riveted connections

40H Screw connections

40J Protective devices

2. INFORMATION SEARCH

Questions	Answers
Features of specific tools to repair a given vehicle.	Refer firstly to section 0 of the Vehicle MR then refer to the "special tooling catalogue" or the "garage equipment catalogue" .
Features of specific products to repair a given vehicle.	Firstly refer to section 0 of the Vehicle MR then refer to the "IXELL product catalogue" .
Description and part number of a specific tool to repair a given vehicle.	Firstly refer to section 0 of the Vehicle MR.
Using a bodywork tool.	Refer to subsection 40A of the Vehicle MR.
Information concerning the replacement parts of a given vehicle regarding: - the possibilities of replacement with the position on vehicle, - an adaptation before the assembly, - a cutting place with the special notes on this cut, - special notes on right-left symmetry. - special features of the version or equipment.	Refer to the subsection which corresponds to the part concerned: 41 to 48 of the Vehicle MR.

Information concerning the spare parts of a given vehicle, the composition and the specifications of each part it contains.	Firstly refer to the parts description exploded view in subsection 40 of the Vehicle MR. If this is detailed in the document, refer to subsections 41 to 48 of the Vehicle MR which corresponds to the part concerned. If this does not appear in the description, refer to subsection 41 to 48 for the part in the next level up.
■ Information concerning: ■ details of panel overlap on a joint, ■ a procedure and an operational mode relating to a new type of assembly in Renault, ■ a method for using a tool or a new product which is unfamiliar in Renault.	Refer to the subsection which corresponds to the part concerned: 41 to 48 of the Vehicle MR then subsection 40 of Vehicle MR 400.
Towing and raising a vehicle after an accident.	Firstly refer to subsection 02A of the Vehicle MR then the equipment catalogue.
Combination of impacts to repair a given vehicle.	Refer to subsection 03B of the Vehicle MR.
Fault finding on an impact for a given vehicle.	Firstly refer to subsection 03B of the Vehicle MR or MR 400.
Logic of impact fault finding.	See MR 400.

General instructions for:

- repair,
- safety,
- preparing a vehicle,
- tool classification,
- precautions for repair.

Refer to section 0 of the Vehicle MR or MR 400.

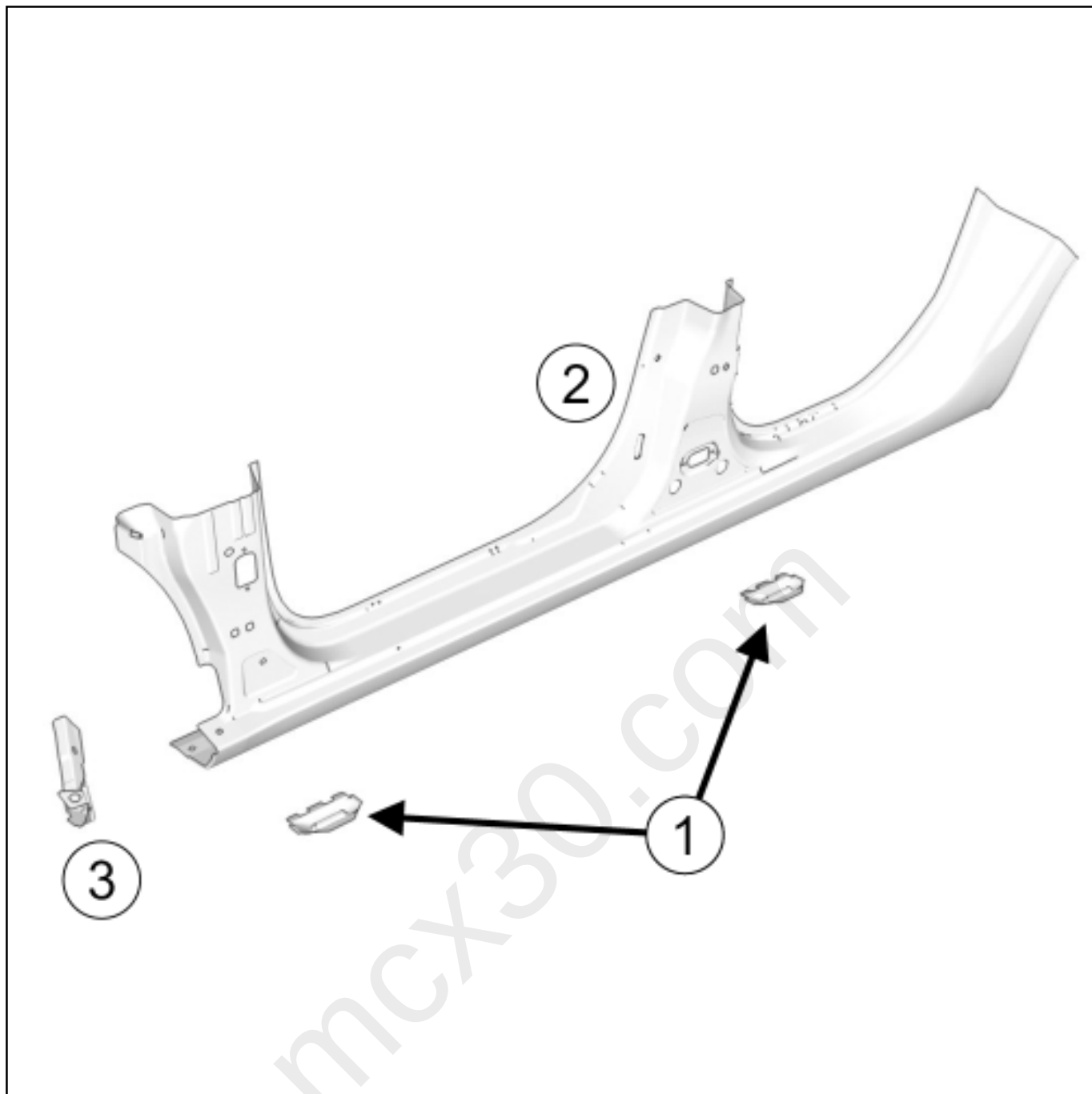
3. SYMBOLS FOR STRUCTURE REPAIR PROCEDURES

You will find below the detailed explanations of all the symbols used in the structure bodywork methods.

At the top of each DU you will find a reminder of these different components:

- the tightening torques,
- the specific tools.

1- SPECIFICATIONS OF SPARE PARTS



When a spare part consists of several parts, a table indicates the components of the spare part with notes on the illustration.

No.	Description	Type	Thickness (mm)
(1)			
(2)			
(3)			

2- IN THE EVENT OF REPLACEMENT

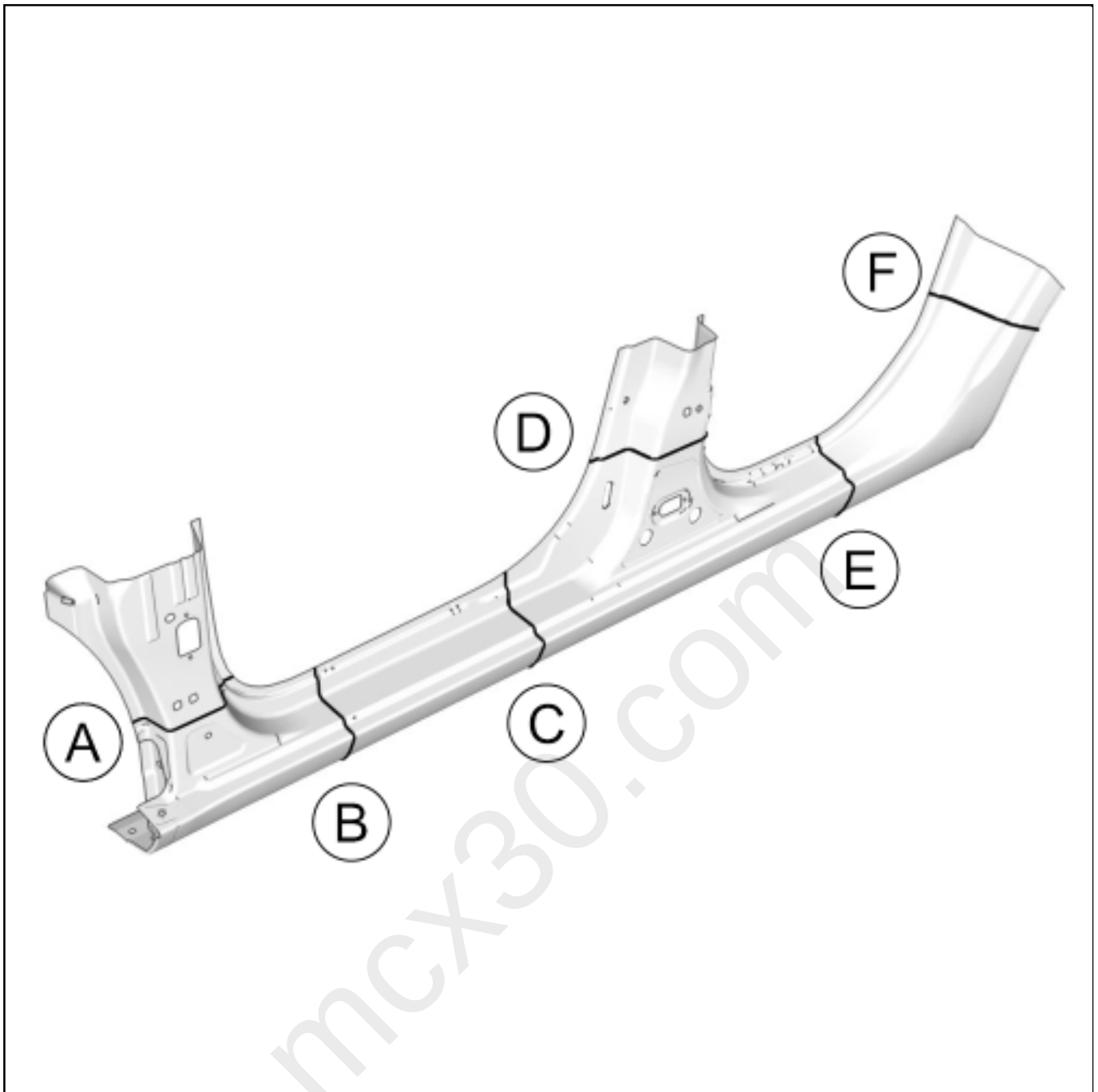
Only on illustrations of replacement parts, the bold lines indicate the possible cuts that can be made in the case of a partial replacement.

A list indicates the name and the marks that delimit the replacement.



The options for replacing this part are as follows:

-
- complete replacement A-D-F,
- front end partial replacement A-C,
- front section partial replacement A-D-E,
- partial replacement under door B-C,
- rear section partial replacement C-D-F,
- rear end section partial replacement E-F.



3- PART IN POSITION ON THE VEHICLE

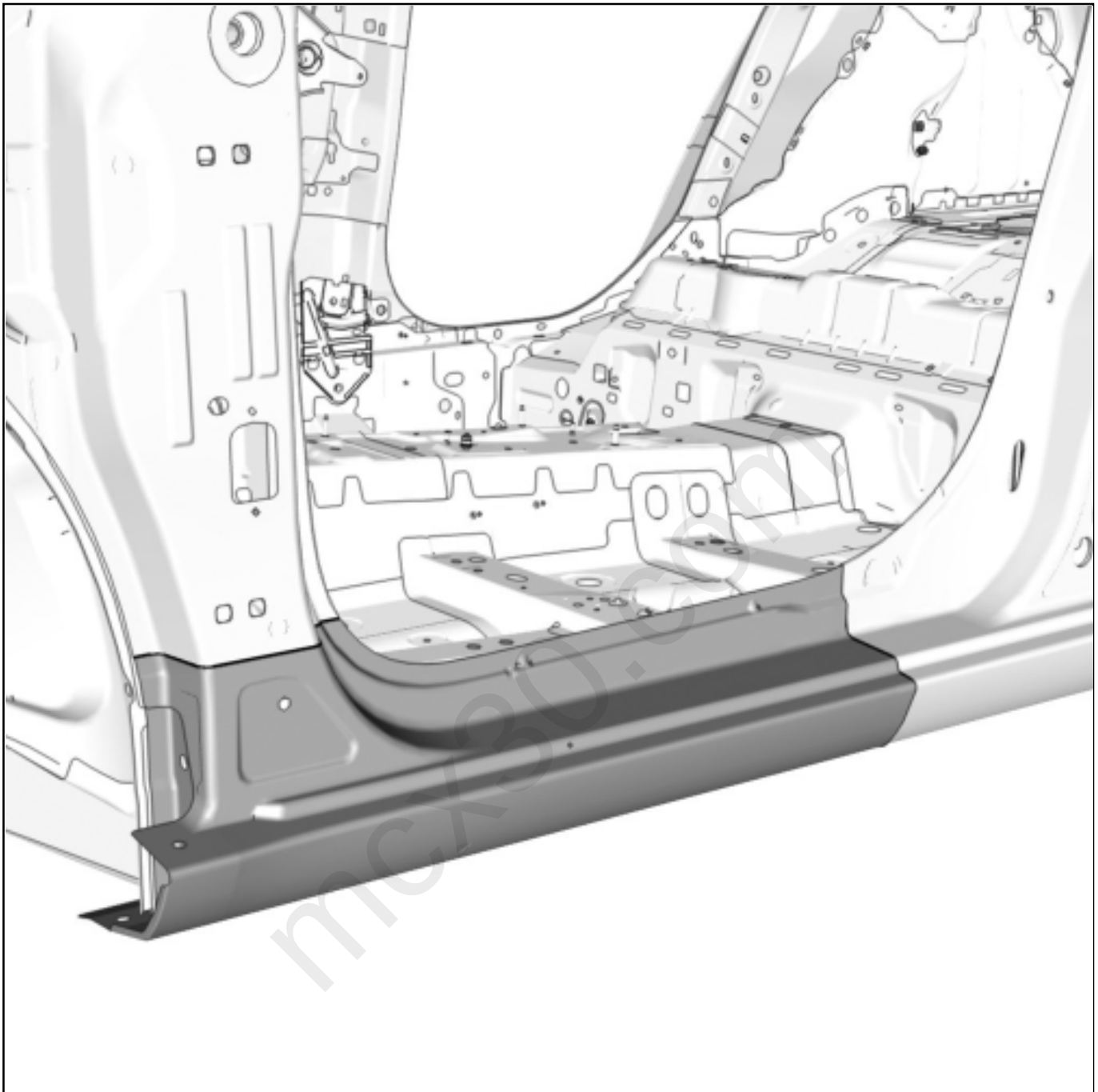
The spare part is always shaded when shown on the vehicle.

The drawings prioritise the different parts depending on the replacement method.

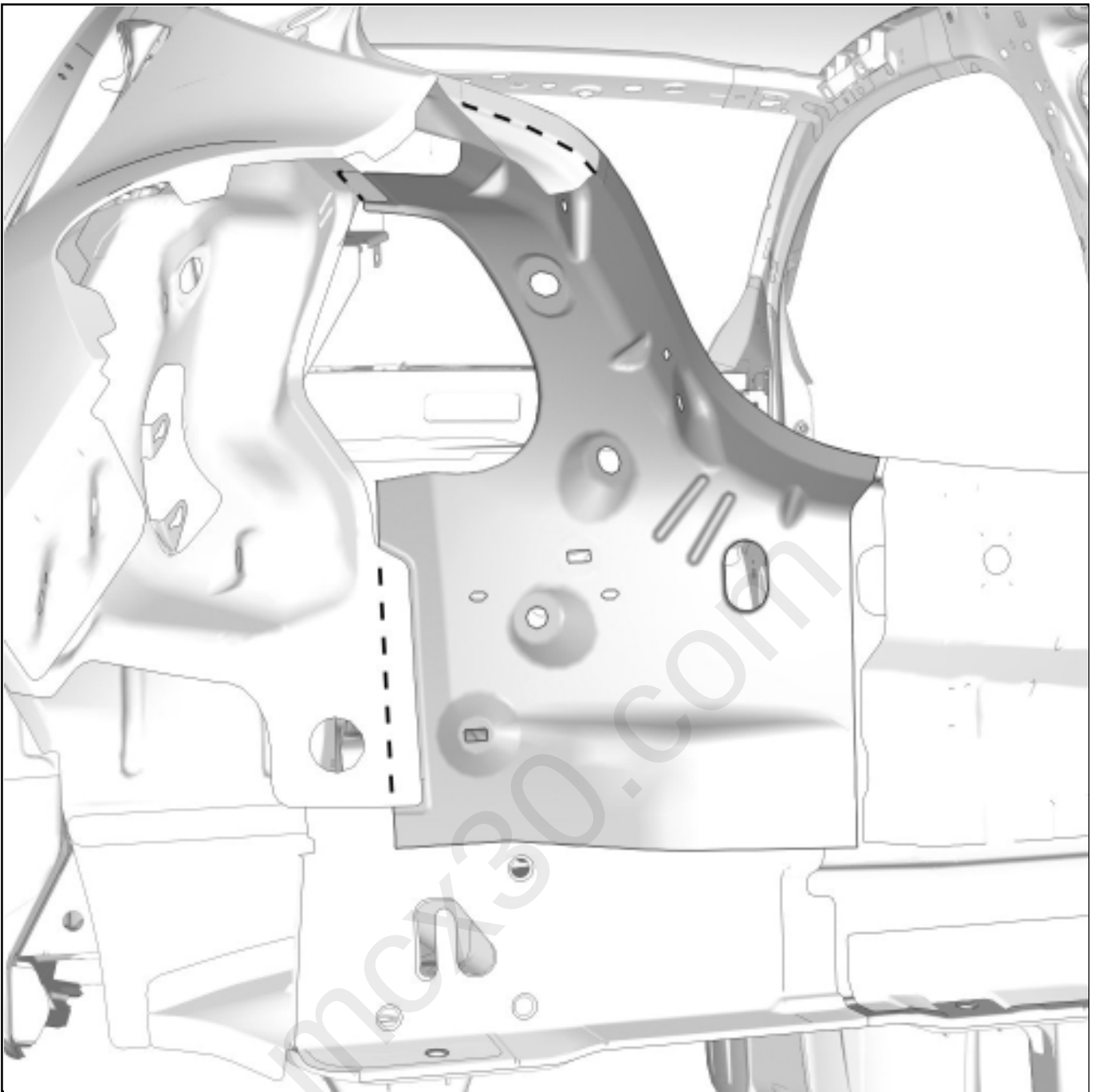
The illustration should show the part to be replaced without the neighbouring components as if they have already been removed.

However, some diagrams may not follow this rule in order to better depict the part in its location.

The structural repair methods are carried out using uncoated steel bodywork panels. The original mastics are not illustrated.



The hidden parts of the spare part are shown with dotted lines.

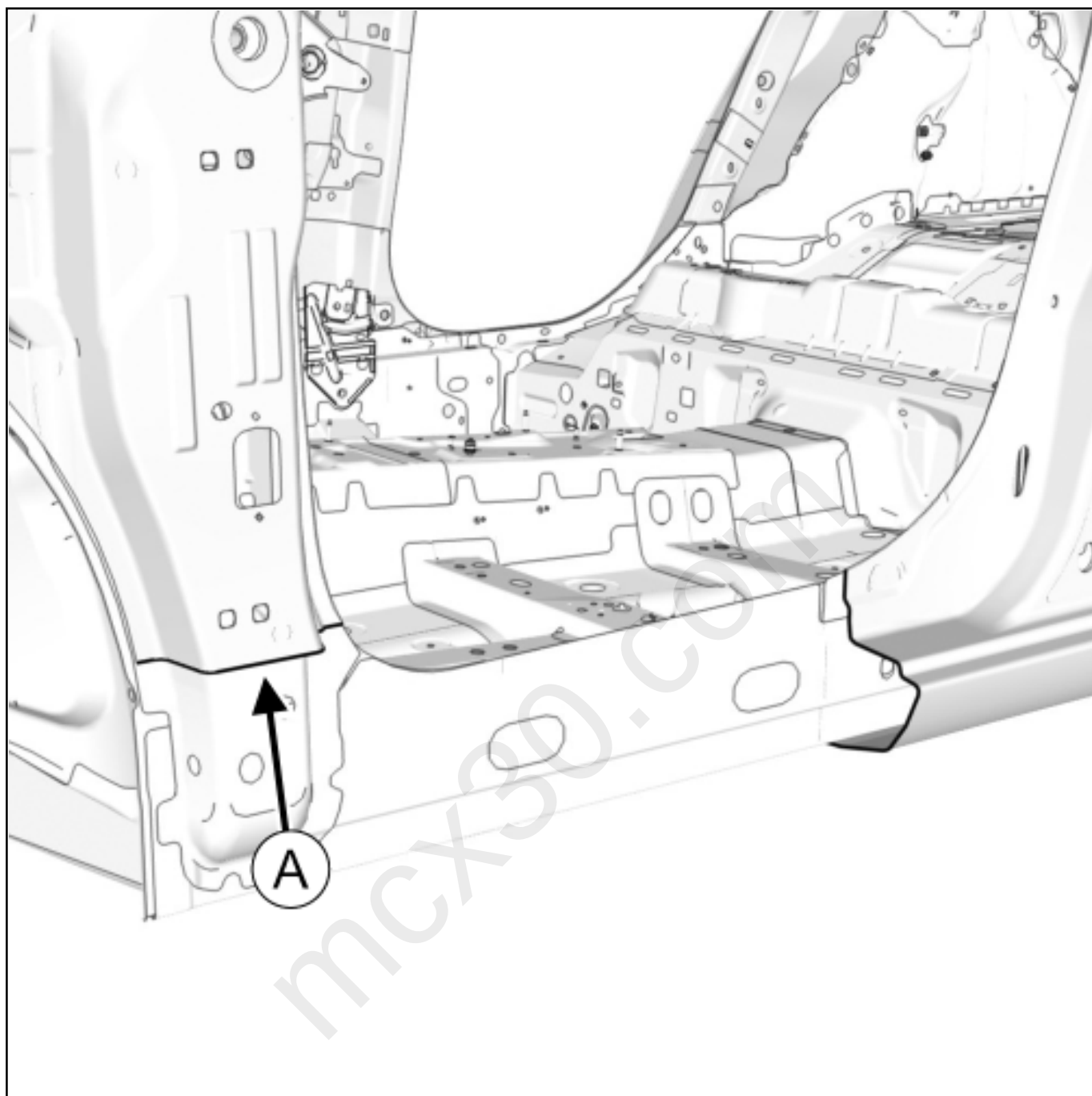


When a part is symmetrical (identical right and left side), there will only be one side shown in the method (e.g.: partial replacement of rear section rear floor).

This means that the same operation is to be carried out on the opposite side (number of spot welds, etc.).

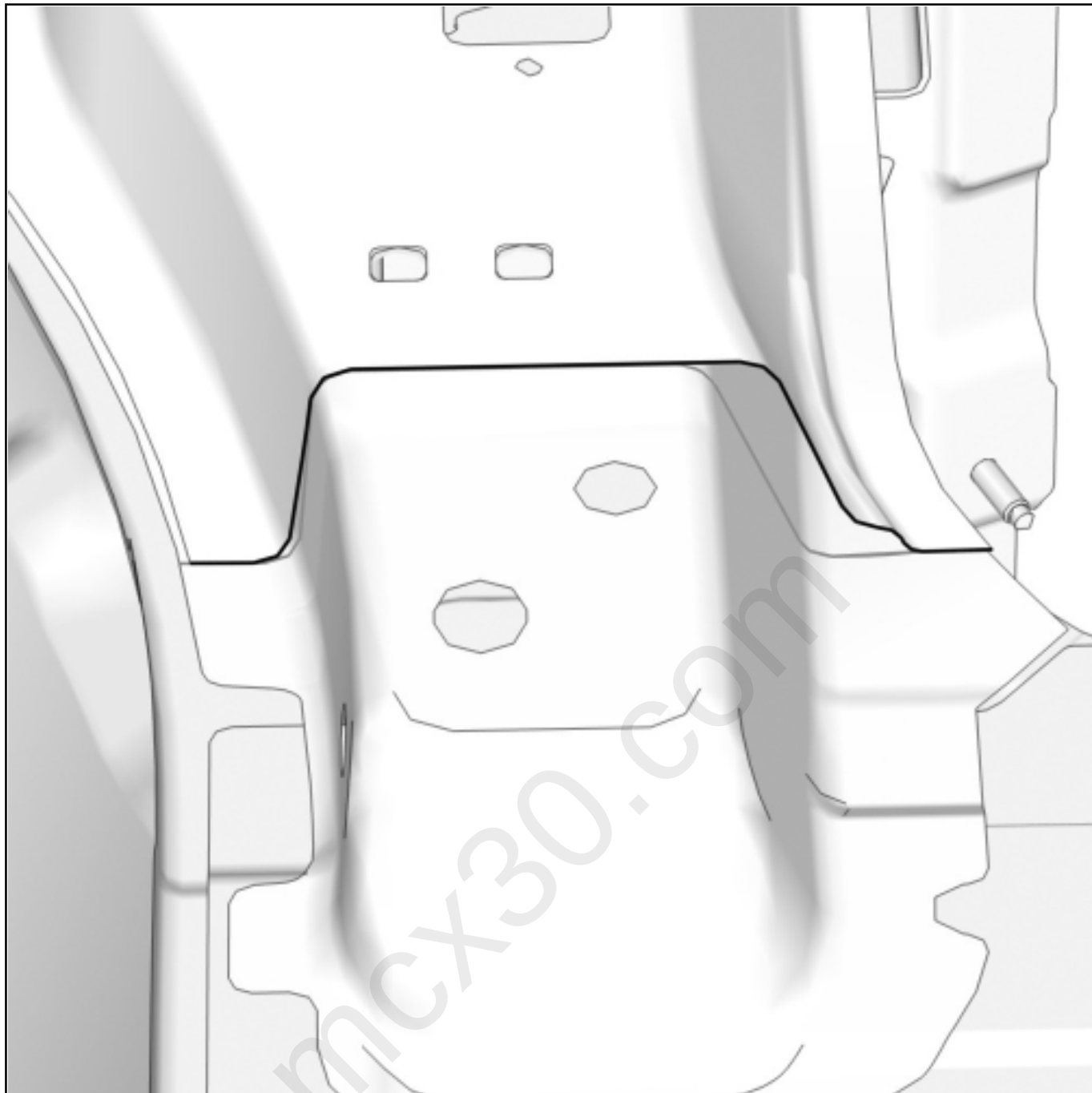
If the opposite is the case, specific details are indicated (including cases with right- and left-hand versions).

The detailed views define the space between the part to replace and the vehicle structure.



The mark(A) designates the viewing direction of the detailed view for proper orientation of the associated detailed view.

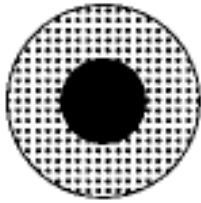
DETAILED VIEW A



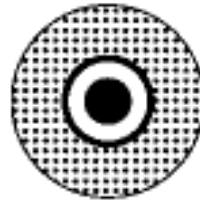
5- SYMBOLS FOR OPENING ELEMENT ADJUSTMENTS

Different symbols indicate the possibilities for adjustment:

A



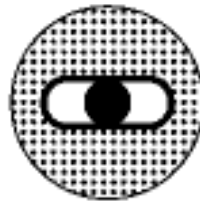
B



C

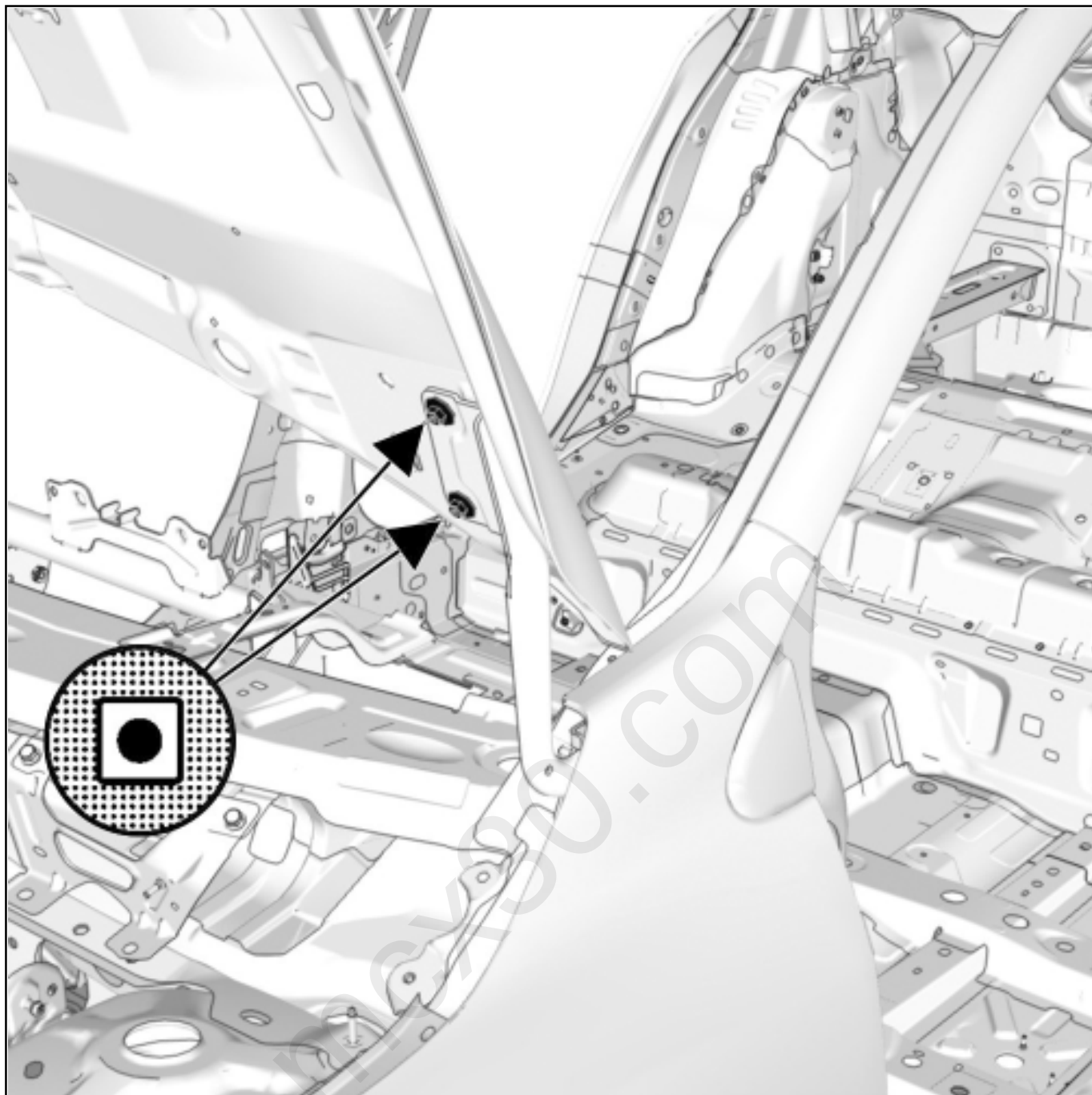


D



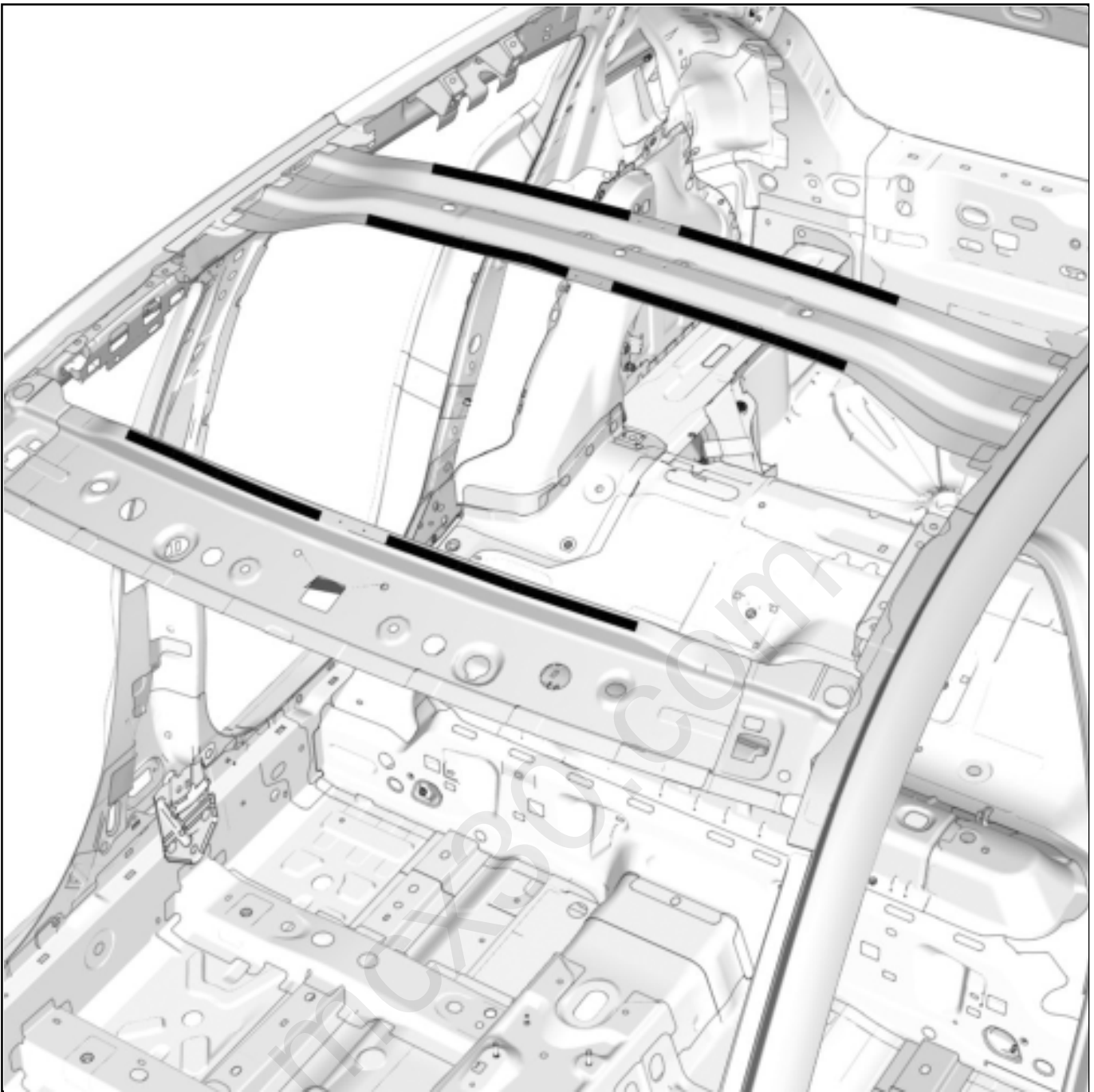
109496

The mountings are shaded.



6- SYMBOLS FOR ADHESIVES AND MASTICS

A shaded band represents the path of a bead of adhesive or mastic.

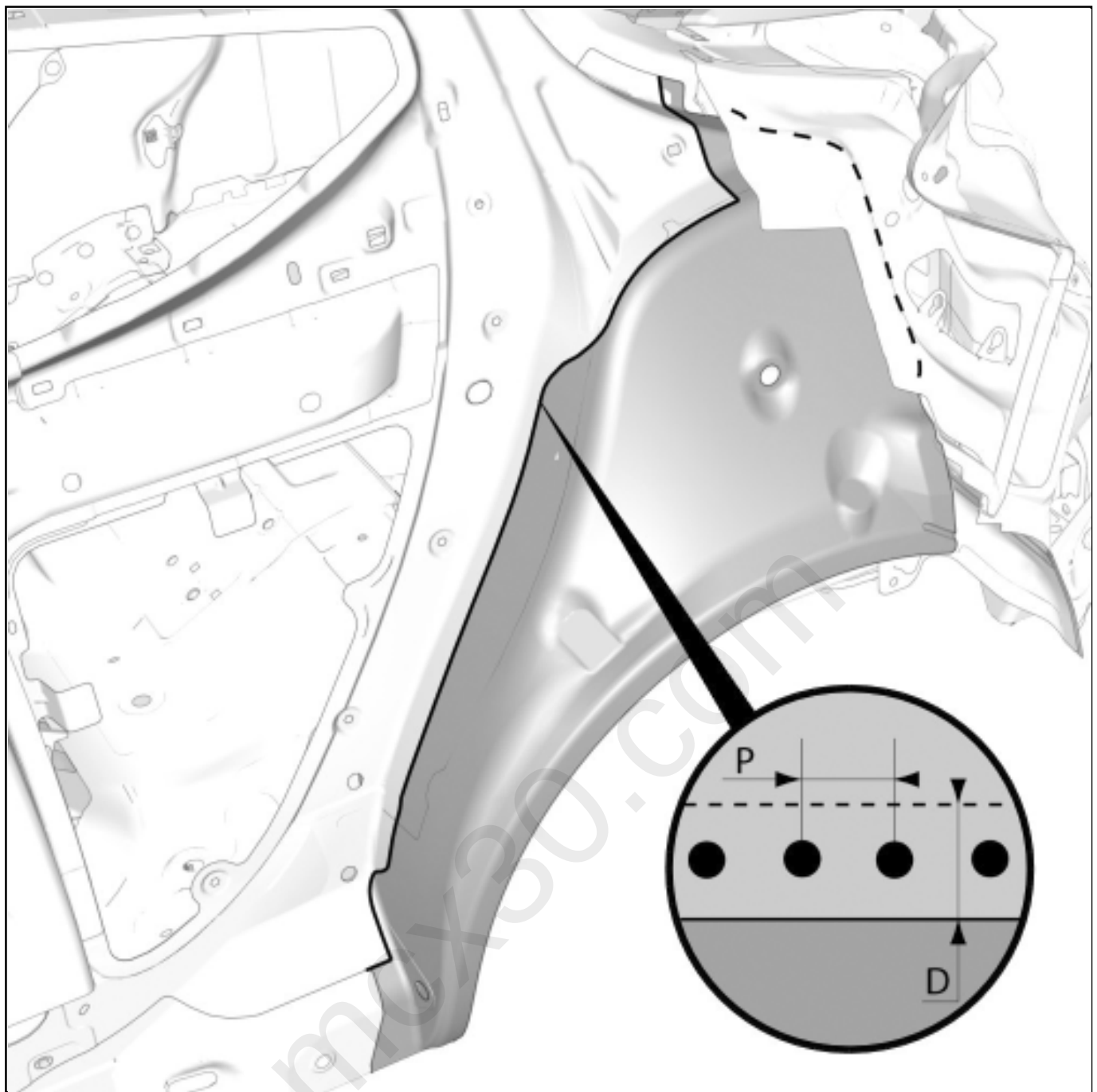


7- SYMBOLS FOR WELDS

Different symbols represent the type of weld to be made if it is not an original weld.

In case of superimposed or joggle welds, the type of weld to be made is indicated in the text accompanying the illustration.

SUPERIMPOSED WELD



COMBINATION OF TWO TYPES OF WELDS