

Grind the plug welds.

(see 05B, Equipment and Tools, Tool for levelling off weld residue: Use)

Surface the shaving residue.

(see 05B, Equipment and Tools, Tool for surfacing mating faces: Use)



Note:

Do not strike or damage the panel.



Repair-40x01x24x08-02x21-1-1-1.xml



XSL version : 3.02 du 22/07/11

ELECTRICAL RESISTANCE SPOT WELDING CONNECTION WITH INDIRECT ACCESS

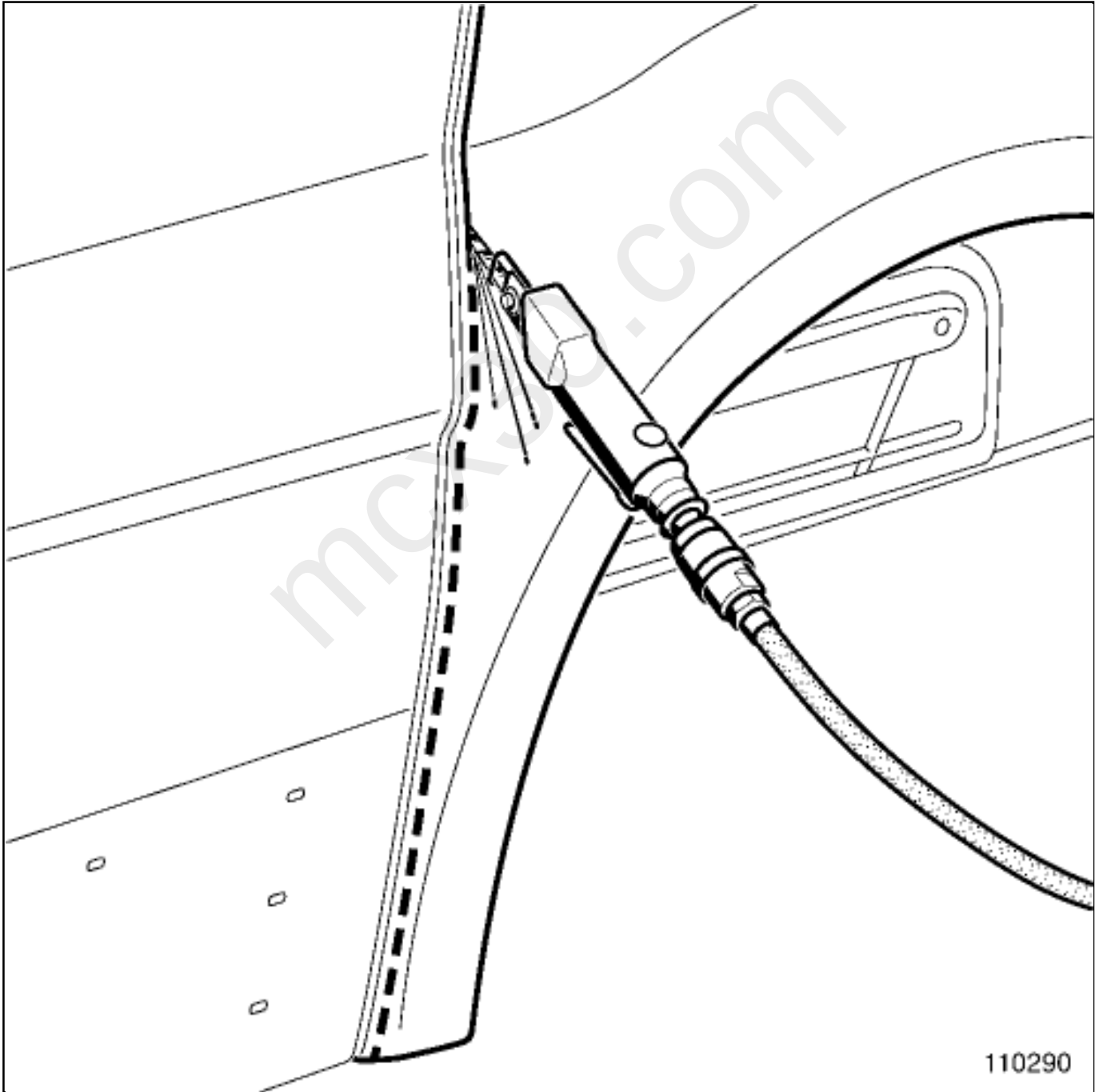


Note, one or more warnings are present in this procedure



1. DISASSEMBLY

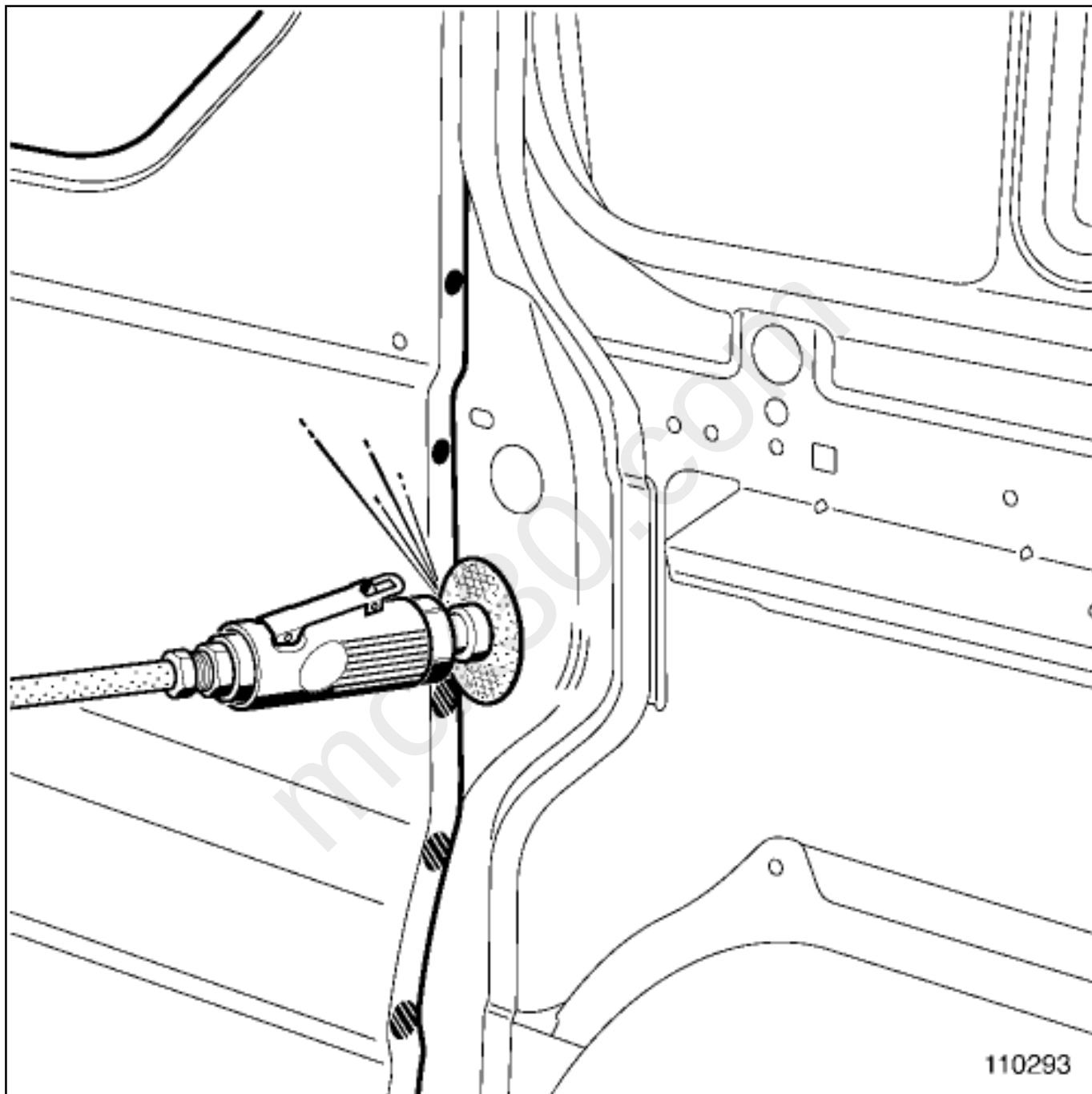
1- CUTTING



Precut the damaged part or remove the part(s) preventing access to the joint.

[\(see 05B, Equipment and Tools, Tools for cutting a structural component: Use\)](#)

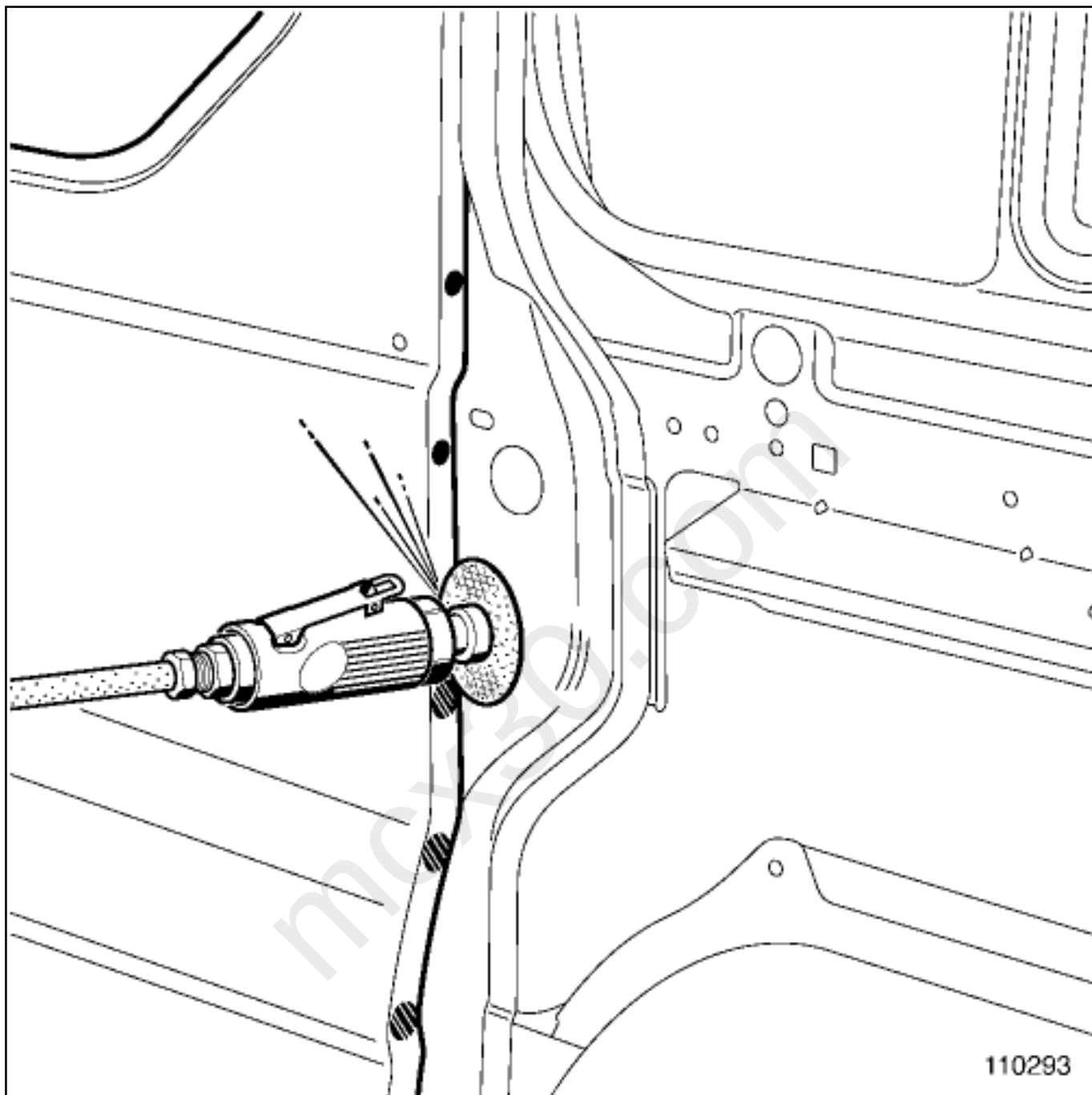
2- UNPICKING



Unpick the spot welds, as in direct access.

[\(see 05B, Equipment and Tools, Tools for unpicking a structural component: Use\)](#)

Remove the remaining part of the damaged part.



Grind the unpicking residue.

[\(see 05B, Equipment and Tools, Tool for levelling off weld residue: Use\)](#)

Surface the joint.

[\(see 05B, Equipment and Tools, Tool for surfacing mating faces: Use\)](#)



Note:

Do not strike or damage the panel.

2. TYPES OF JOINT



There are three types of joints to replace an indirect access resistance welded joint:



Bonded Joint,



GMAW joint by bead of chain weld,



GMAW joint by plug welds.

3. BONDED JOINT

1- PREPARATION BEFORE ASSEMBLY

1) POSITIONING AND ADJUSTMENT

Position the replacement part, adjust it and fix it using the locking pliers.

If necessary, reassemble the adjacent components and check the panel gaps.

(see 05B, Equipment and Tools, Tools for adjusting and supporting a structural component: Use)

2) MARKING AND IDENTIFYING THE JOINTS

Mark the joint areas.

Remove the part.

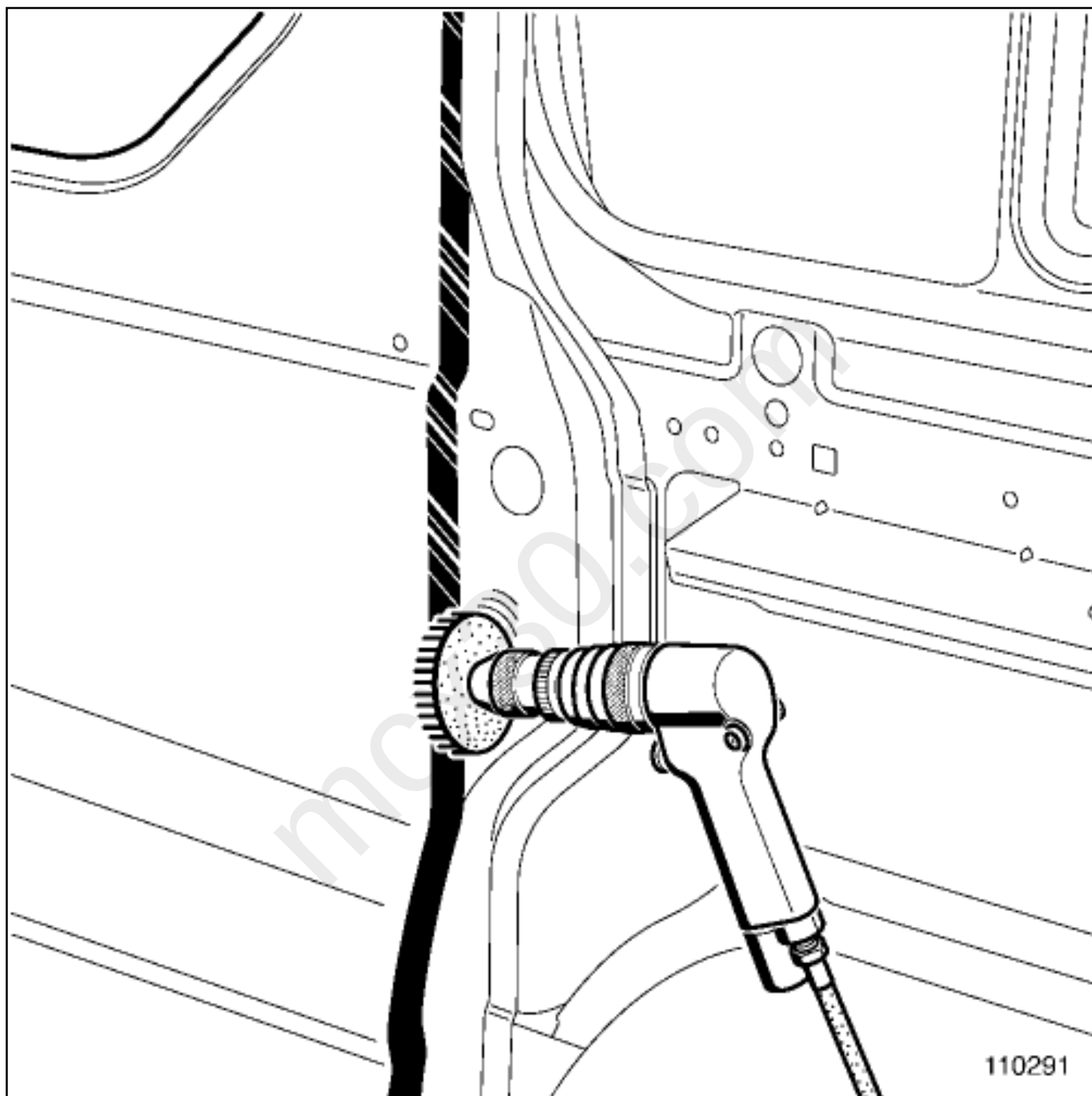
3) PREPARING THE MATING FACES ON THE REPLACEMENT PART

Sand the internal joint of the areas to be bonded with P320 sand paper or using a sanding disc, without

damaging the protection.

Clean the joint face with surface cleaner.

4) PREPARING THE MATING FACES ON THE VEHICLE



Scour the internal joint face.

[\(see 05B, Equipment and Tools, Tools for scraping rigid adhesives and paint: Use\)](#)

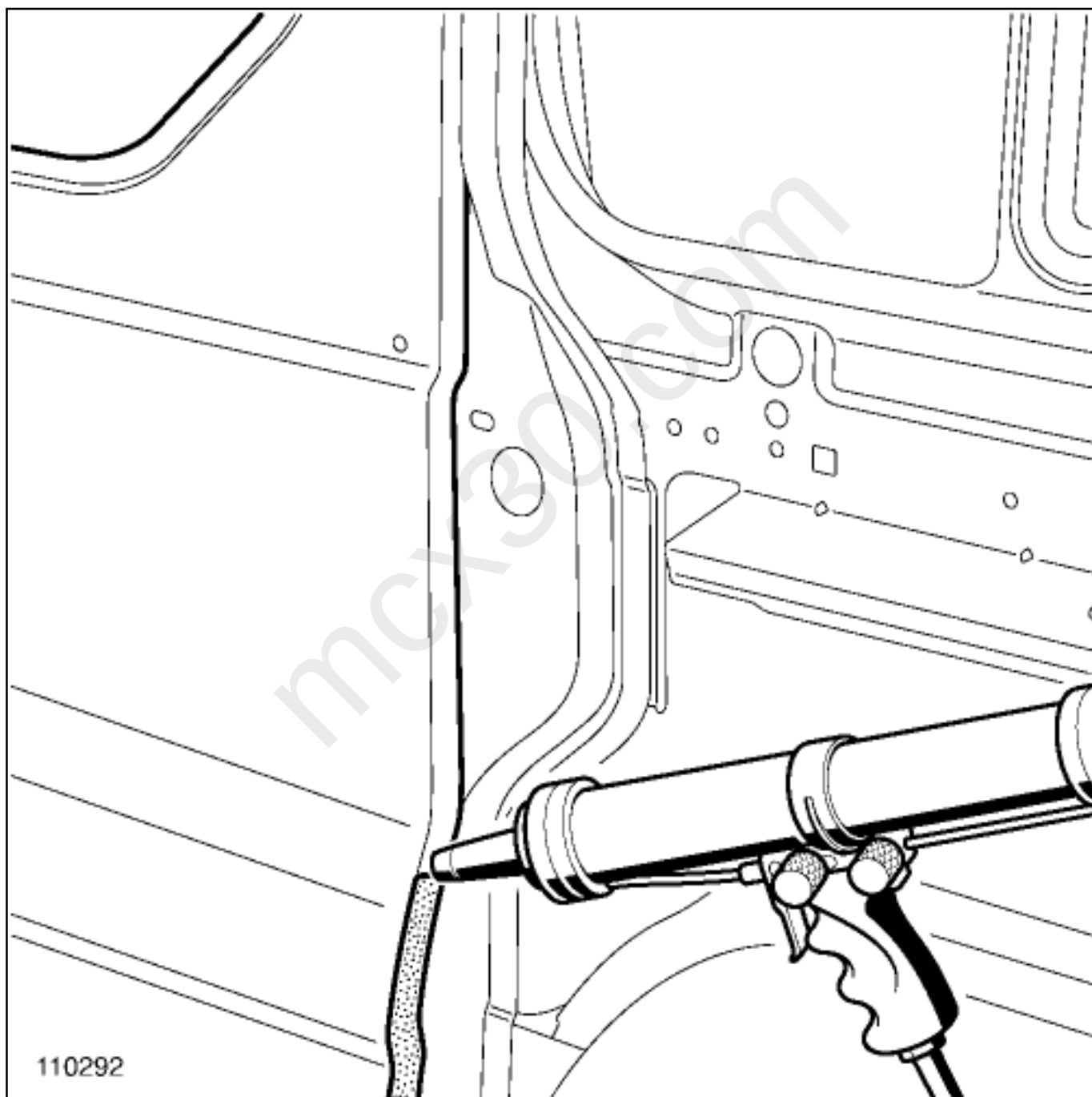
Clean the mating face and the areas to bonded with the surface cleaner.

2- APPLY THE PROTECTION BEFORE ASSEMBLY

Position the acoustic inserts in the hollow sections, if necessary.

(see 04F, Bodywork products and mountings, Soundproofing products before assembly: Use)

3- ASSEMBLY



Apply a structural welding bead over the whole internal joint face of the vehicle.

(see 40F, Bonded connections, Connections by bonding: Precautions for the repair)

4- FITTING AND ADJUSTING THE REPLACED PARTS

Position and adjust the replacement part on the vehicle.

Hold the replacement part to secure it in position.

(see 05B, Equipment and Tools, Tools for adjusting and supporting a structural component: Use)

Get rid of the surplus bonding before it dries.

4. GMAW JOINT BY BEAD OF CHAIN WELD

1- PREPARATION BEFORE ASSEMBLY

1) POSITIONING AND ADJUSTMENT

Position the replacement part, adjust it and fix it using the locking pliers.

If necessary, reassemble the adjacent components and check the panel gaps.

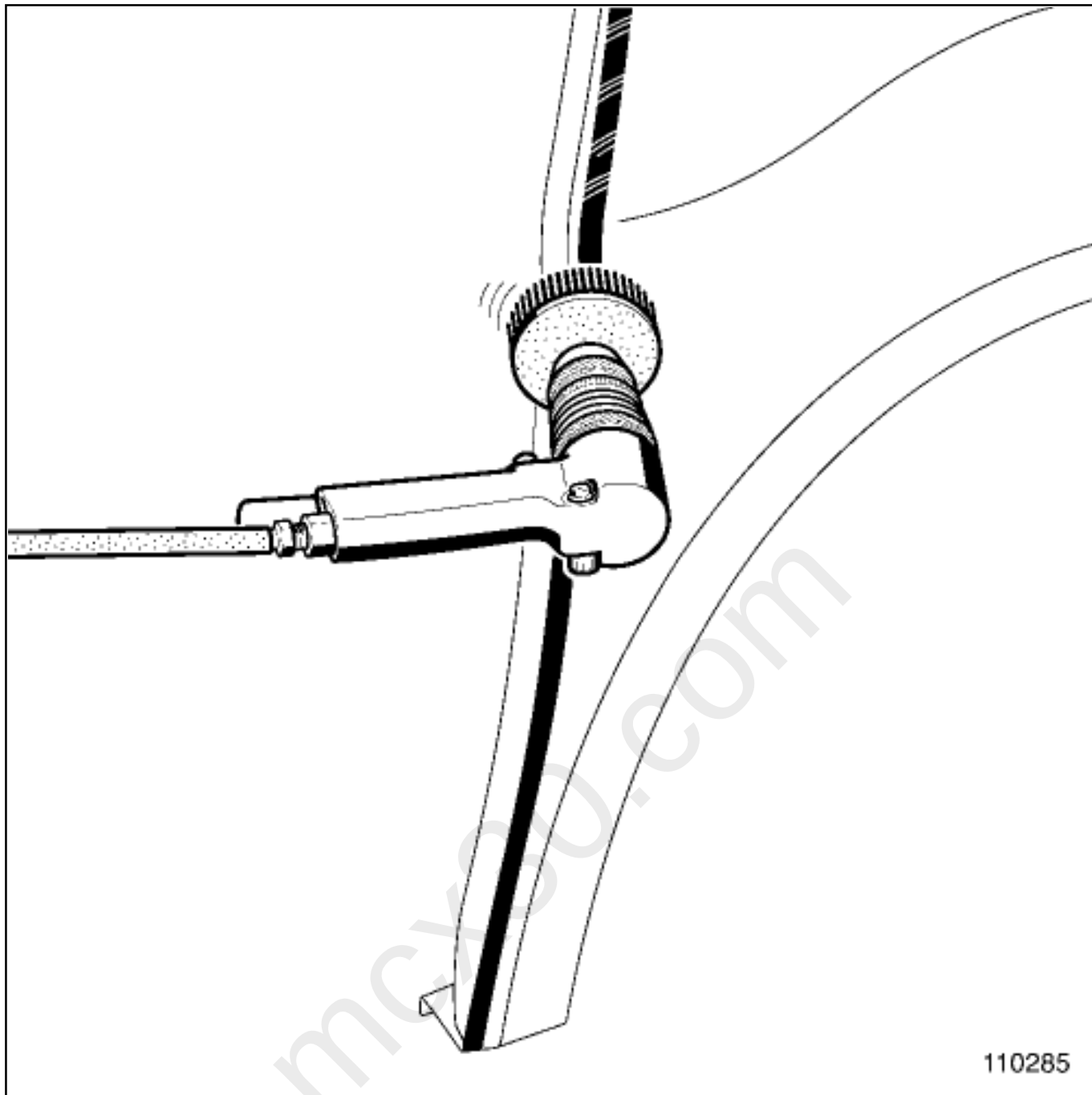
(see 05B, Equipment and Tools, Tools for adjusting and supporting a structural component: Use)

2) MARKING AND IDENTIFYING THE JOINTS

Mark the joint areas.

Remove the part.

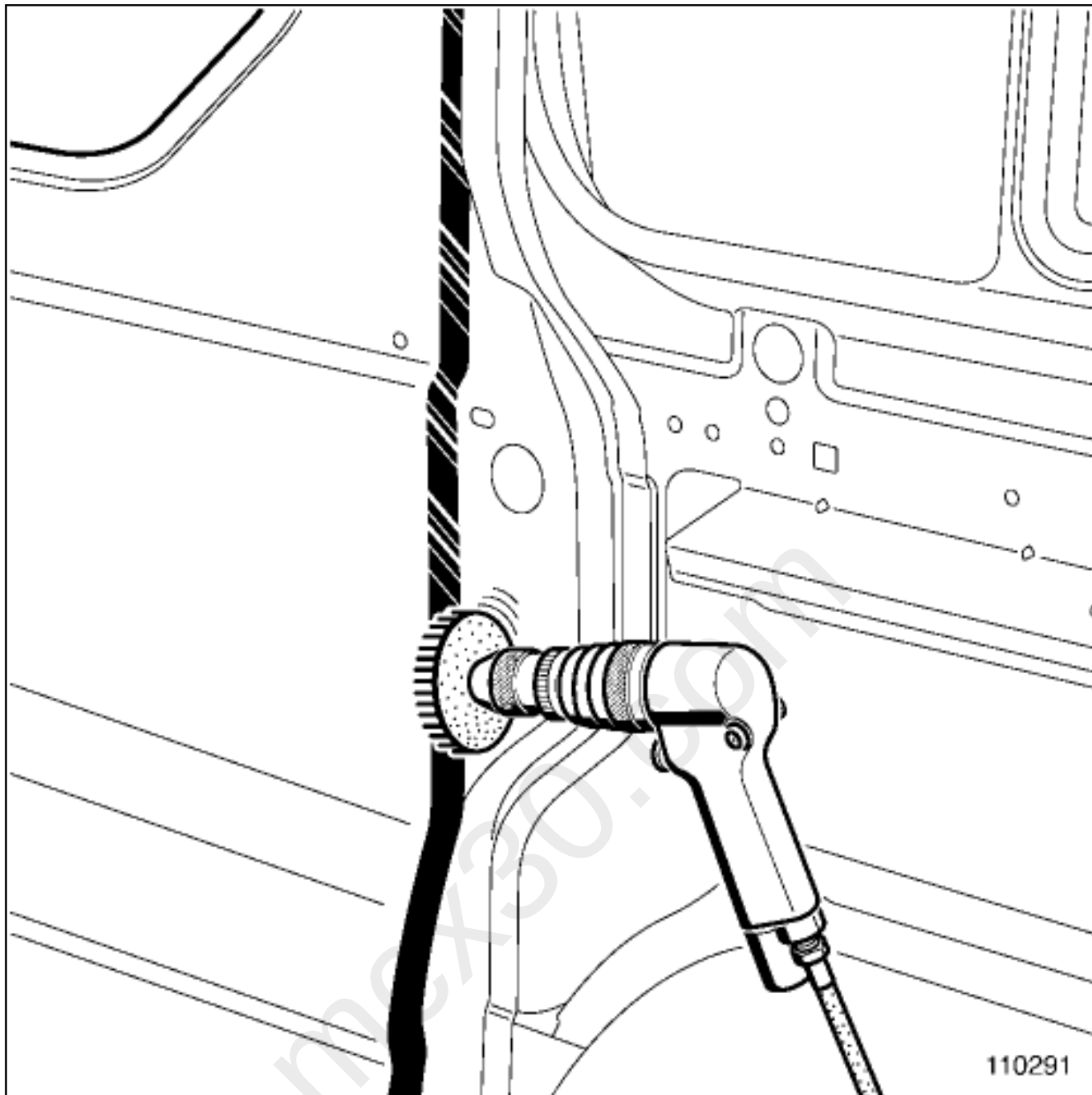
3) PREPARING THE MATING FACES ON THE REPLACEMENT PART



Scour the external mating face.

[\(see 05B, Equipment and Tools, Tools for scraping rigid adhesives and paint: Use\)](#)

4)PREPARING THE MATING FACES ON THE VEHICLE



Scour the internal joint face.

[\(see 05B, Equipment and Tools, Tools for scraping rigid adhesives and paint: Use\)](#)

2- APPLY THE PROTECTION BEFORE ASSEMBLY

Position the acoustic inserts in the hollow sections, if necessary.

[\(see 04F, Bodywork products and mountings, Soundproofing products before assembly: Use\)](#)

Apply the anti-corrosion protection to the internal mating faces according to the type of weld.

(see 04F, Bodywork products and mountings, Anti-corrosion protection product before assembly: Use)

3- ADJUSTING THE WELDER

Joint by GMAW bead of chain weld.

(see 40C, Gas metal arc welded connections, Connections by arc welding under shielding gas: Precautions for the repair)

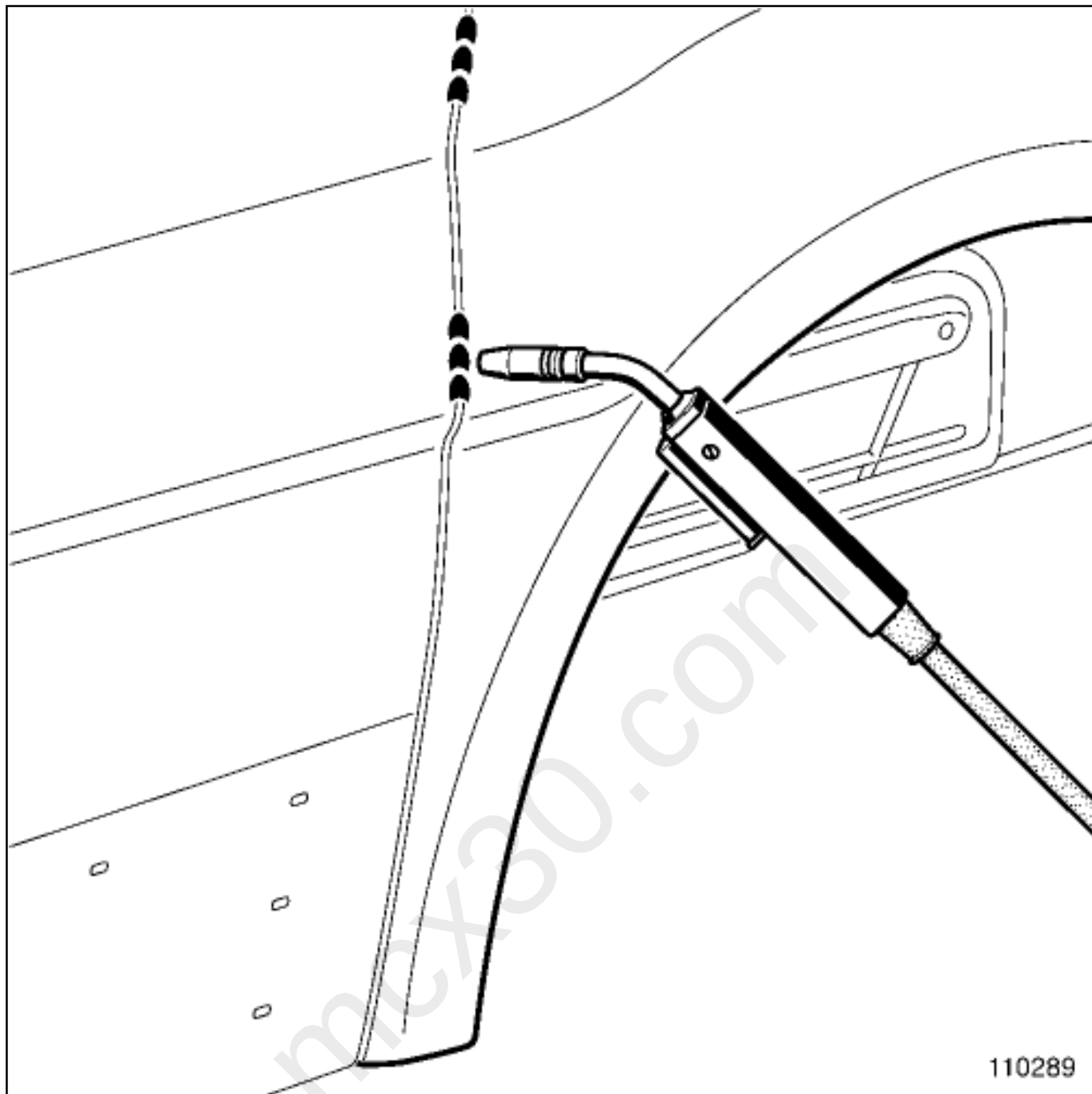
4- ASSEMBLY



CAUTION

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

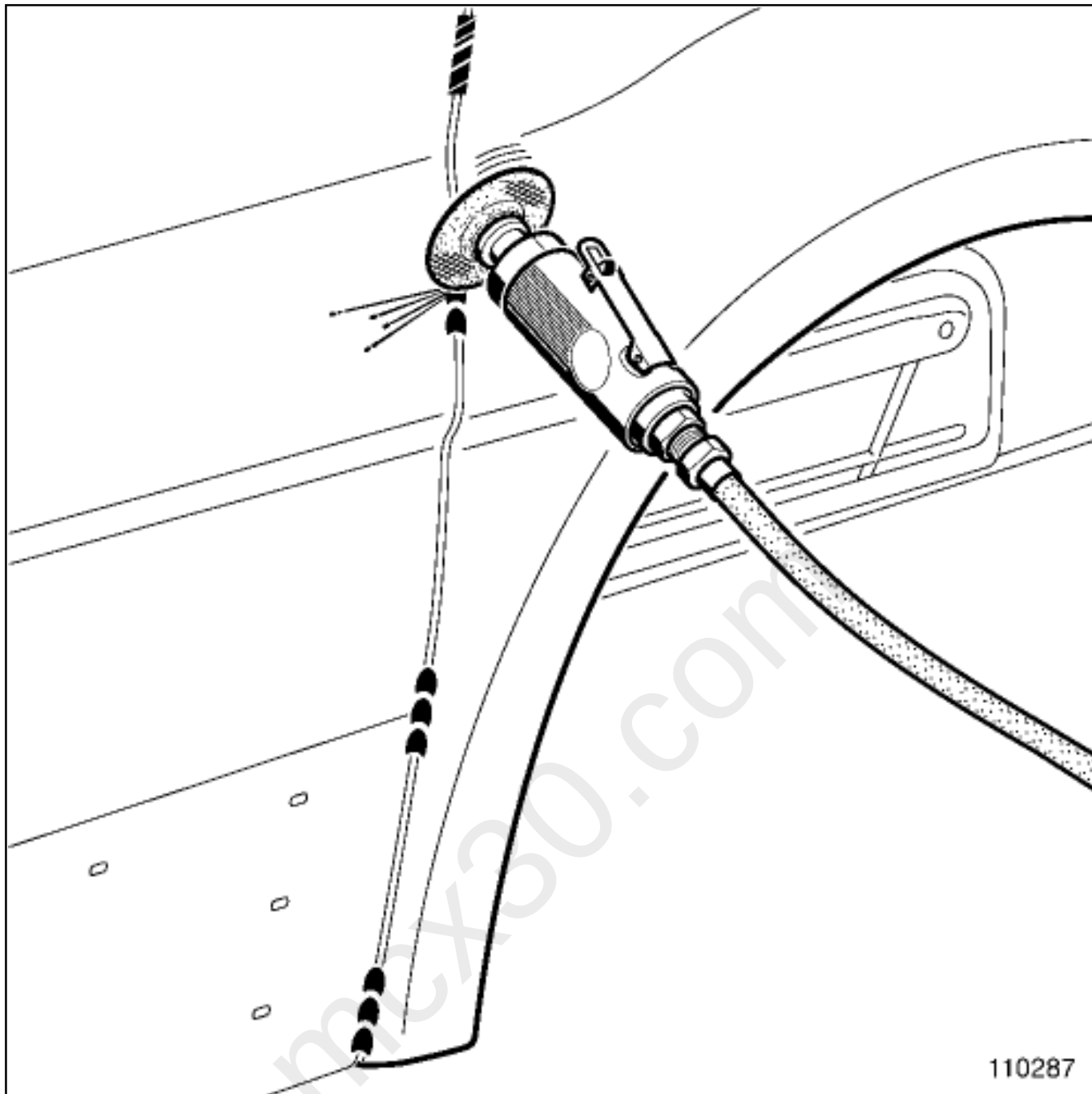
Position the welding machine earth as close as possible to the weld zone (see MR 400).



Carry out the broken continuous welds.

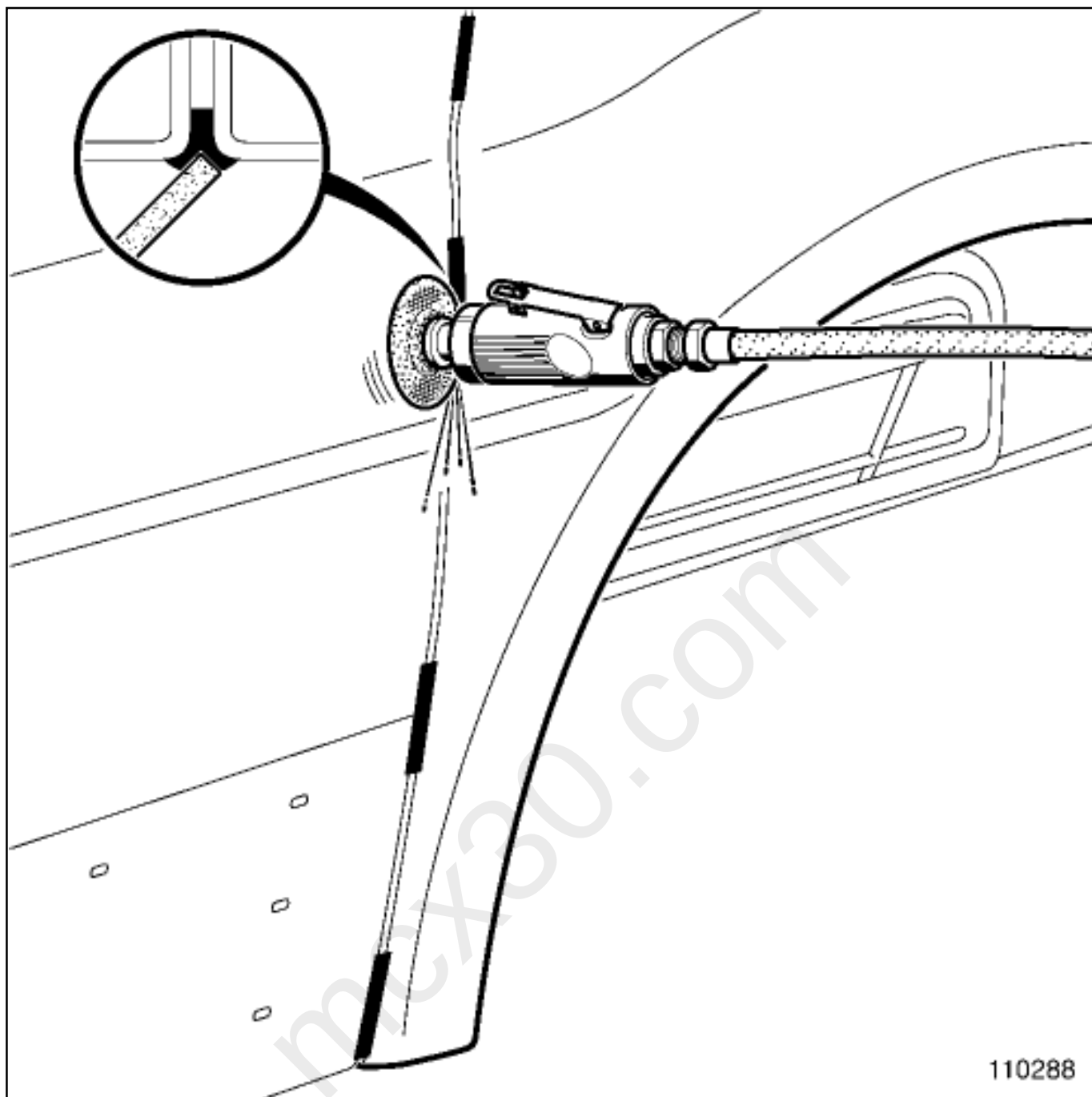
[\(see 40C, Gas metal arc welded connections, Connections by arc welding under shielding gas: Description\)](#)

5- FINISHING



Grind the beads across their width.

[\(see 05B, Equipment and Tools, Tool for levelling off weld residue: Use\)](#)



Slightly hollow out the beads along their length.

[\(see 05B, Equipment and Tools, Tool for levelling off weld residue: Use\)](#)



Note:

Do not strike or damage the panel.

6- FITTING PROTECTION AFTER ASSEMBLY

Apply the acoustic protection.

(see 04F, Bodywork products and mountings, Soundproofing products after assembly: Use)

Apply the anti-corrosion protection.

(see 04F, Bodywork products and mountings, Soundproofing products after assembly: Use)

5. GMAW JOINT BY PLUG WELDS

1- PREPARATION BEFORE ASSEMBLY

1) POSITIONING AND ADJUSTMENT

Position the replacement part, adjust it and fix it using the locking pliers.

If necessary, reassemble the adjacent components and check the panel gaps.

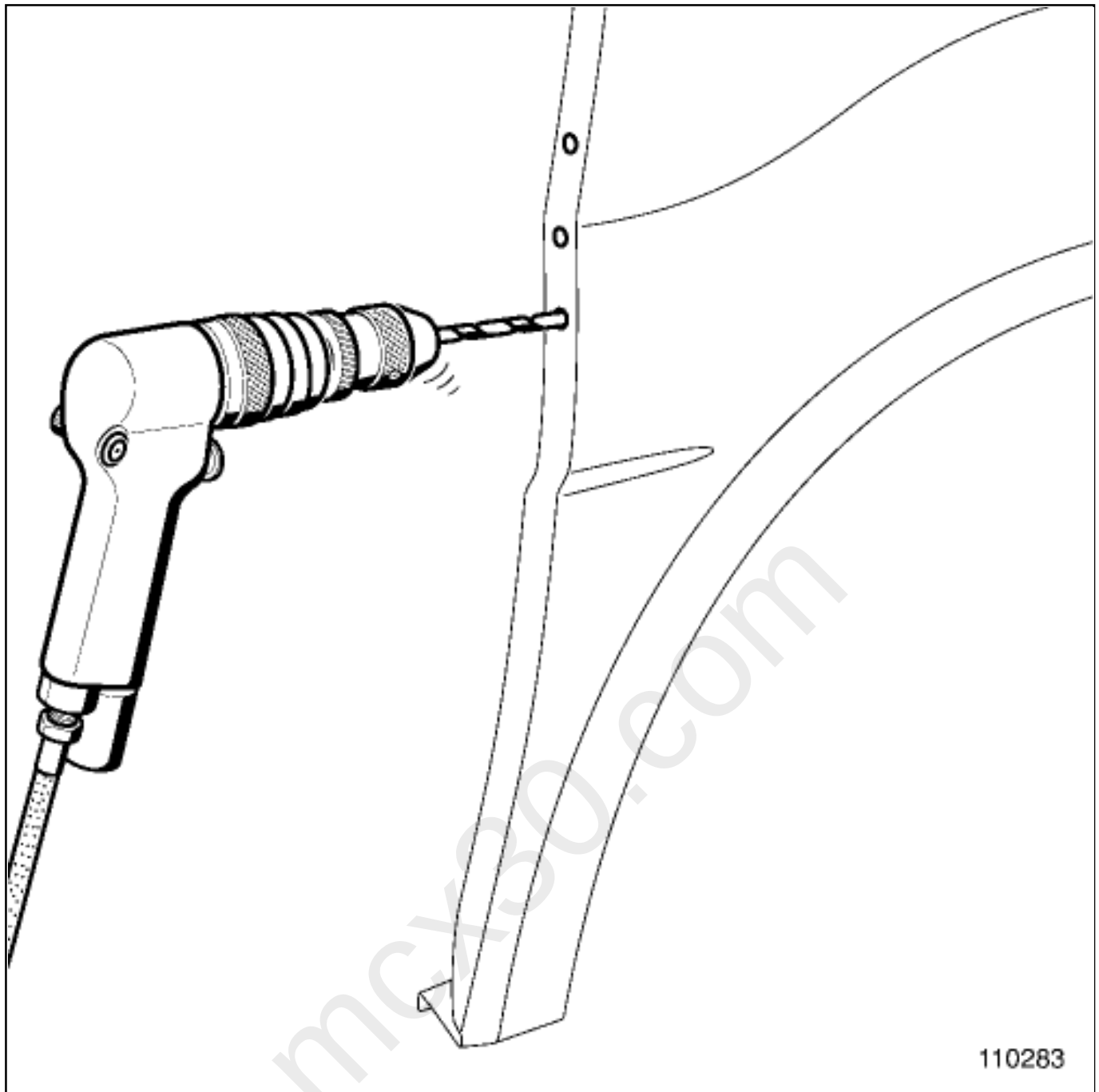
(see 05B, Equipment and Tools, Tools for adjusting and supporting a structural component: Use)

2) MARKING AND IDENTIFYING THE JOINTS

Mark the joint areas.

Remove the part.

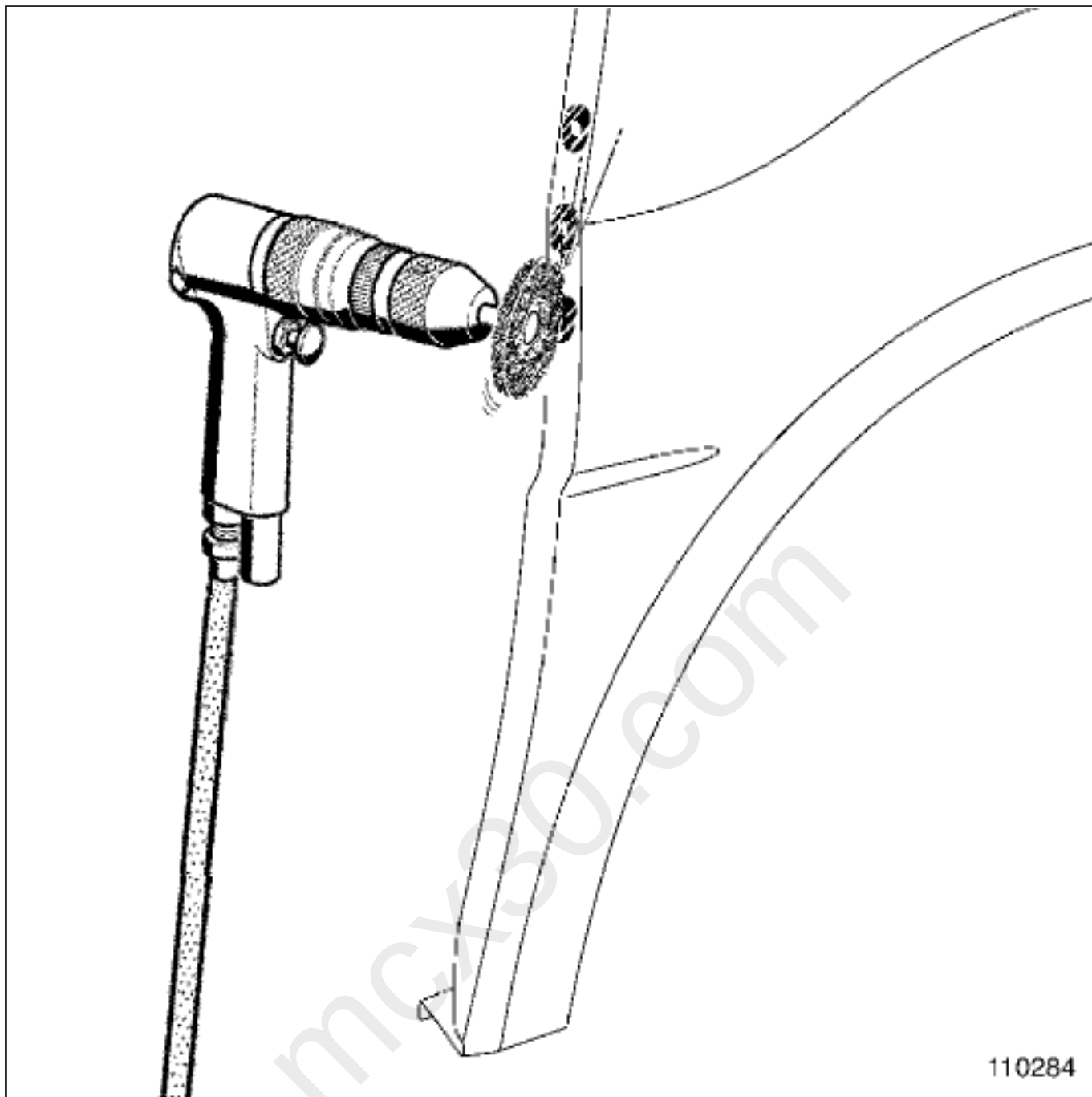
3) PREPARING THE MATING FACES ON THE REPLACEMENT PART



Drill or pierce the support panel via the internal face of the joint for the plug welds, see table below.

Thickness (mm)	Ø drill bit (mm)
0.6 to 1	6
1 to 1.5	7
1.5 to 2	8
2 and more	10

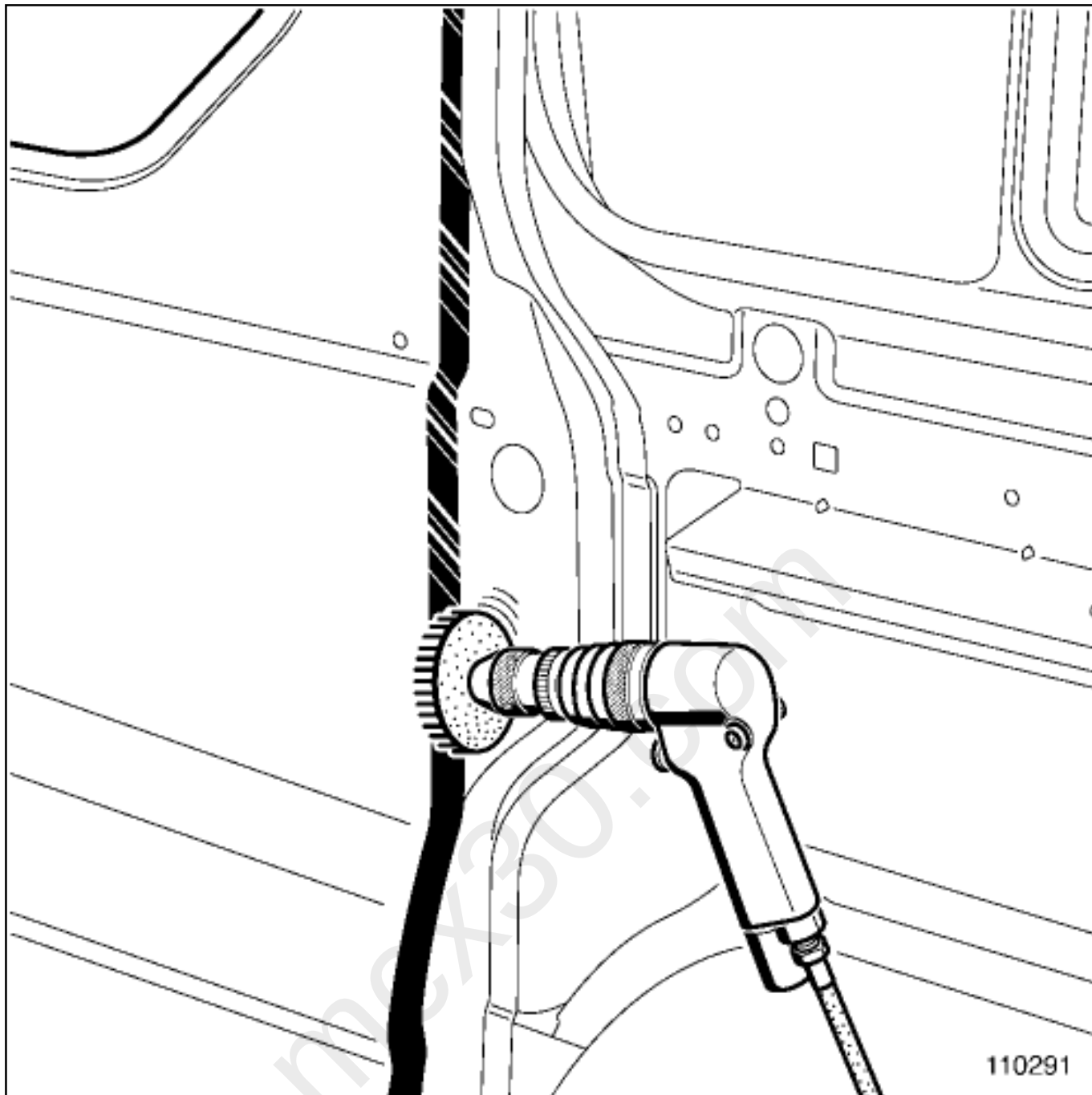
mcx30.com



Scour the outline of the drilling hole via the external face of the joint.

(see 05B, Equipment and Tools, Tools for scraping rigid adhesives and paint: Use)

4)PREPARING THE MATING FACES ON THE VEHICLE



Scour the internal joint face.

[\(see 05B, Equipment and Tools, Tools for scraping rigid adhesives and paint: Use\)](#)

2- APPLY THE PROTECTION BEFORE ASSEMBLY

Position the acoustic inserts in the hollow sections, if necessary.

[\(see 04F, Bodywork products and mountings, Soundproofing products before assembly: Use\)](#)

Apply the anti-corrosion protection to the internal mating faces according to the type of weld ([see 04F, Bodywork products and mountings, Anti-corrosion protection product before assembly: Use](#)) .

3- ADJUSTING THE WELDER

Joint by GMAW plug welds.

([see 40C, Gas metal arc welded connections, Connections by arc welding under shielding gas: Precautions for the repair](#))

4- ASSEMBLY



CAUTION

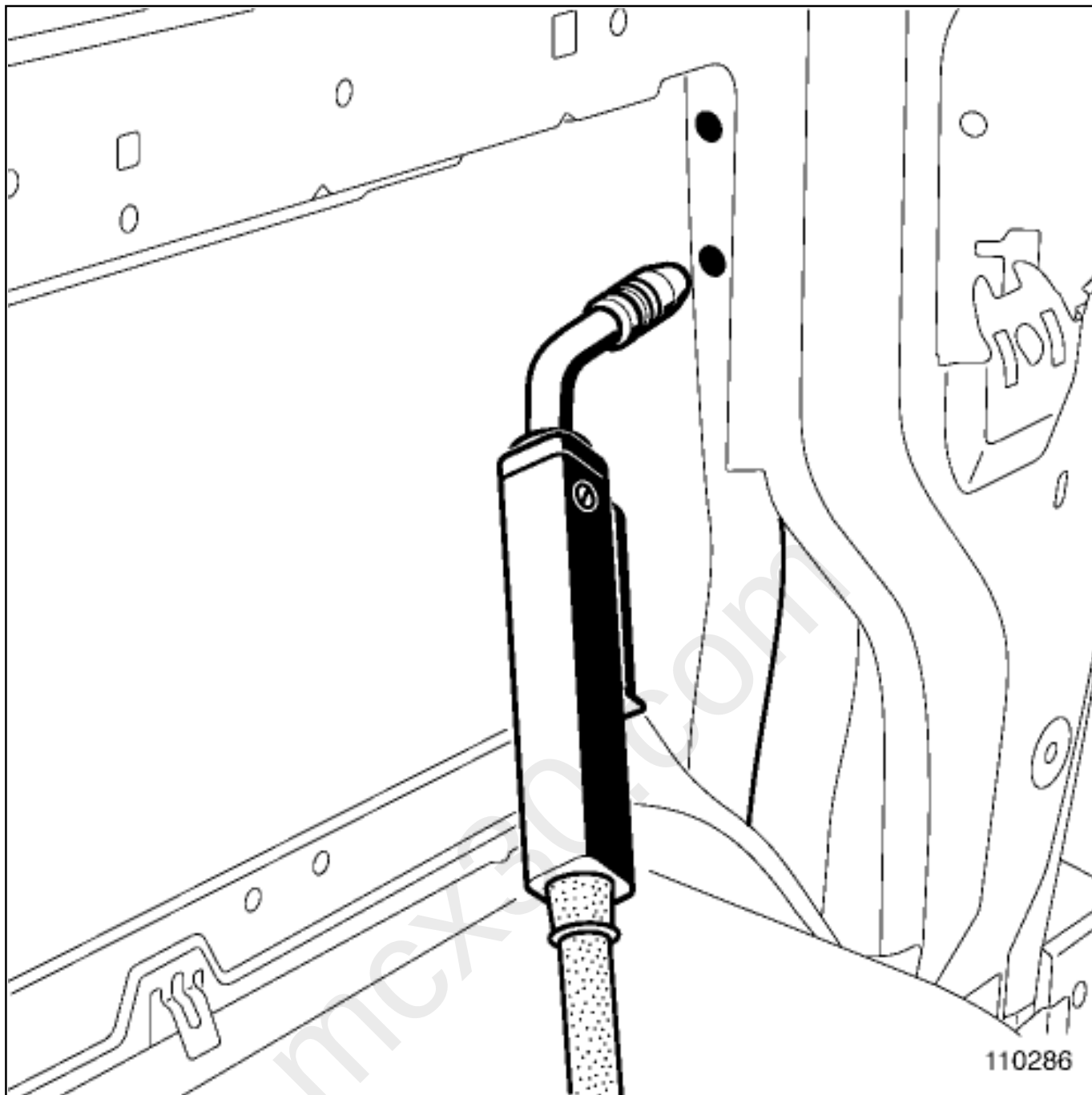
To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

Position the replacement part, adjust it and fix it using the locking pliers.

If necessary, reassemble the adjacent components and check the panel gaps.

([see 05B, Equipment and Tools, Tools for adjusting and supporting a structural component: Use](#))



Do the plug welds.

5- FITTING PROTECTION AFTER ASSEMBLY

Apply the acoustic protection.

[\(see 04F, Bodywork products and mountings, Soundproofing products after assembly: Use\)](#)

Apply the anti-corrosion protection.

[\(see 04F, Bodywork products and mountings, Soundproofing products after assembly: Use\)](#)