

REPLACING THE PARTIAL UPPER CROSSMEMBER CONNECTING THE REAR WINGS (only for SPIDER)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

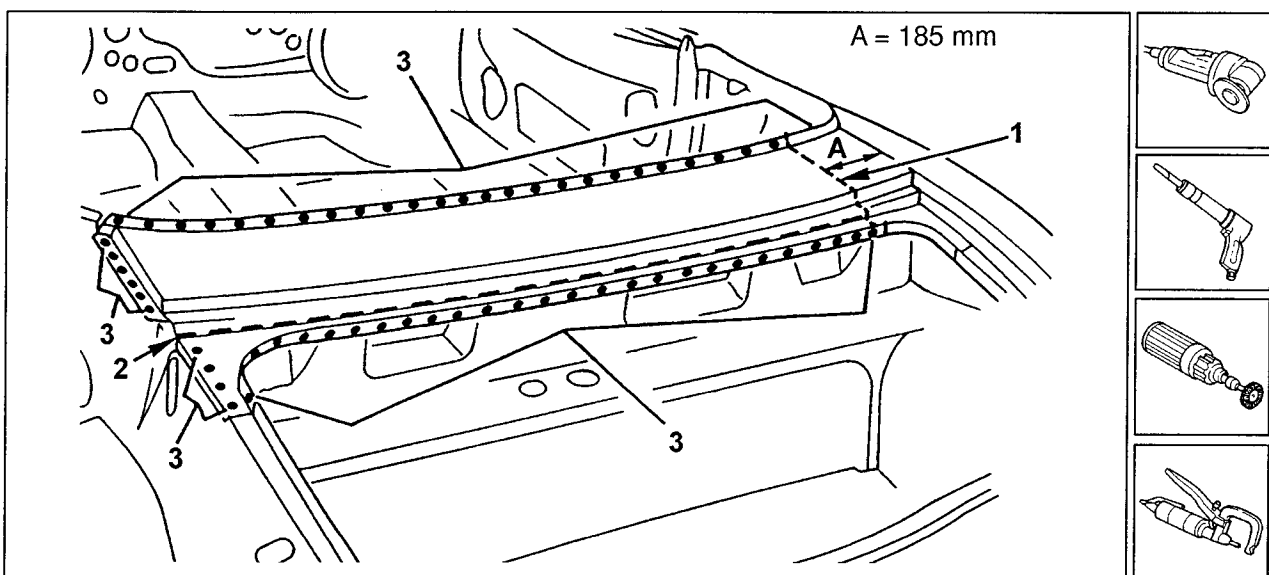
After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.
- Remove the rear wing (see: "Replacing the Rear Wing").

REMOVAL

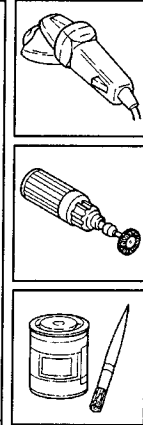
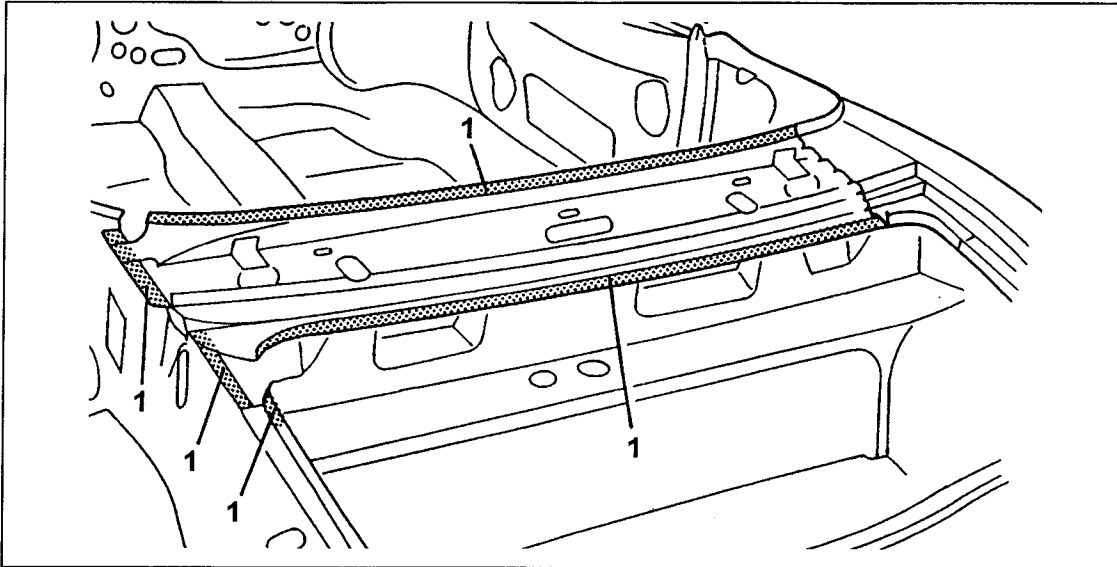
1. Using a circular saw, cut the crossmember, following the line and dimension shown in the illustration, without damaging the part below.
2. Using a chisel, cut the crossmember, following the line and dimension shown in the illustration, without damaging the part below.
 - Using a rotary brush, clean the area to be de-welded to reveal the welding spots.
3. Remove the welding spots using a de-welder.
 - Remove the two parts of the crossmember.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

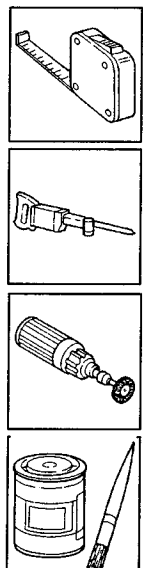
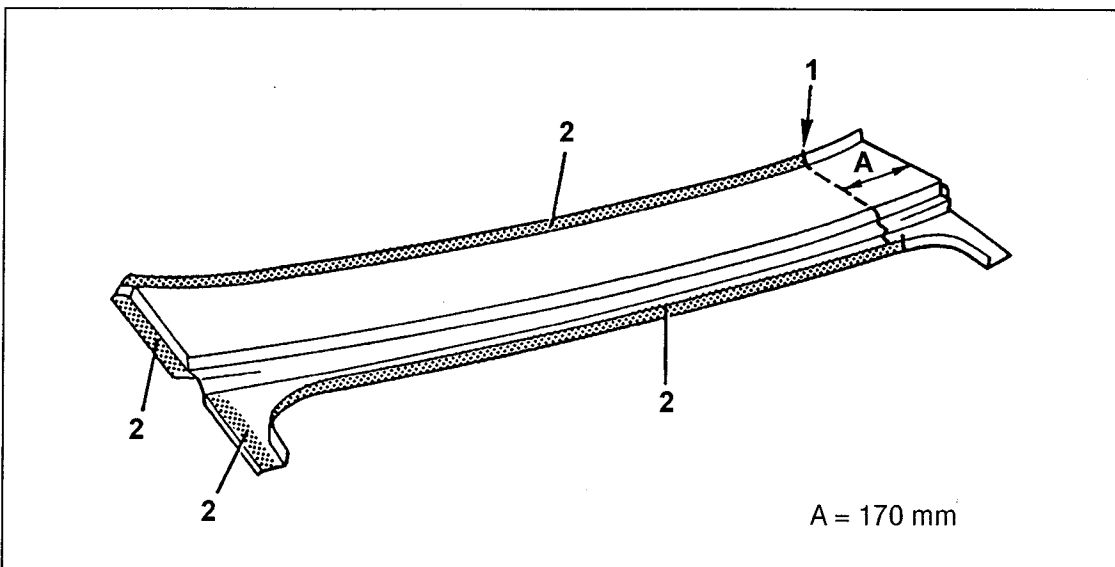
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



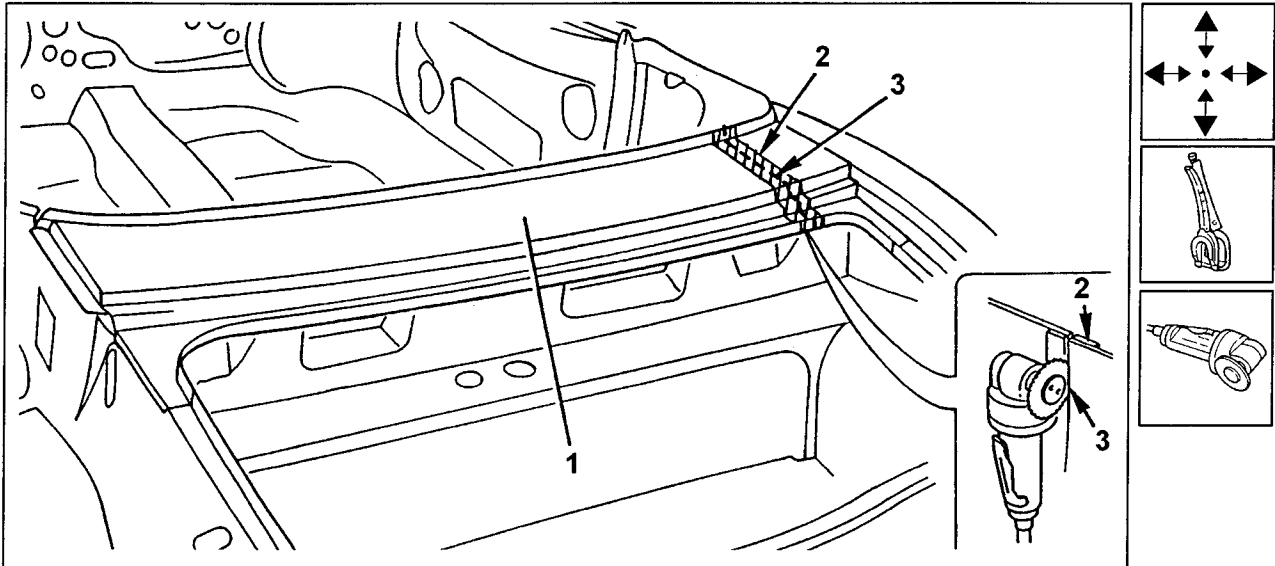
PREPARING THE SPARE - UPPER CROSSMEMBER CONNECTING REAR WINGS

1. Working on the bench trace and cut the new crossmember, at dimension A shown, to maintain an overlap of appr. 15 mm.
- Clean the areas of the crossmember involved by welding, using a rotary brush.
2. Apply electro-galvanizing paint on the areas involved by spot welding.



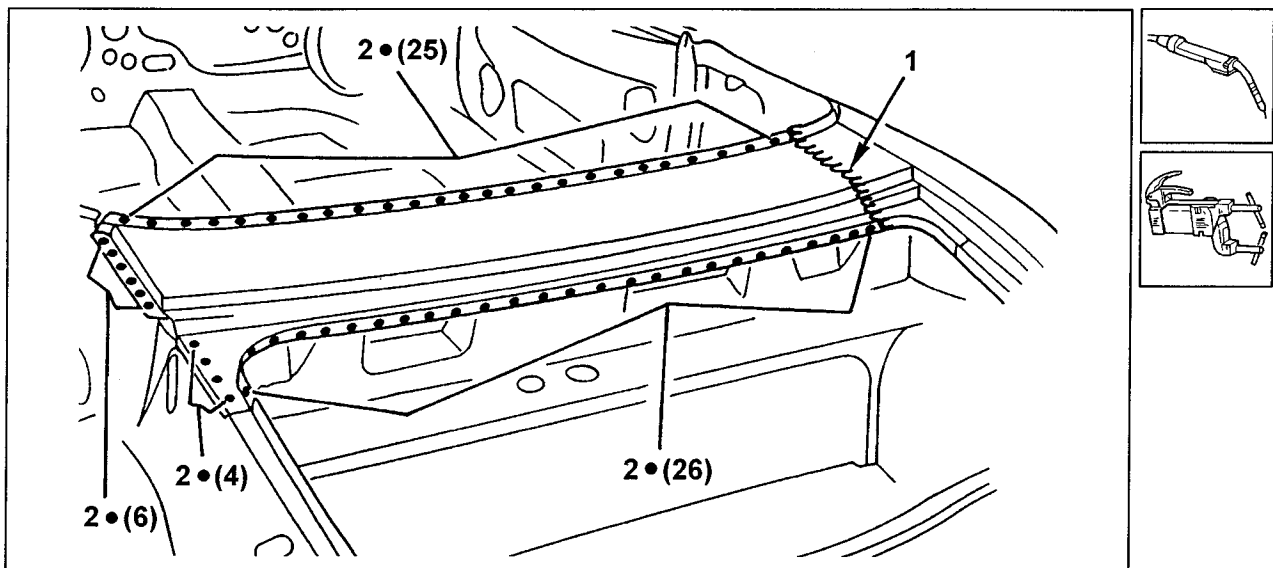
POSITIONING AND WELDING THE SPARE - UPPER CROSSMEMBER CONNECTING REAR WINGS

1. Position the crossmember correctly.
2. Overlay and clamp the components to be welded mating the edges and check alignment.
3. Trim the sheets, eliminating the excess, using a circular saw, taking care not to damage the part below.



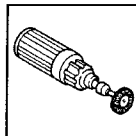
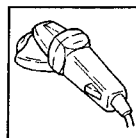
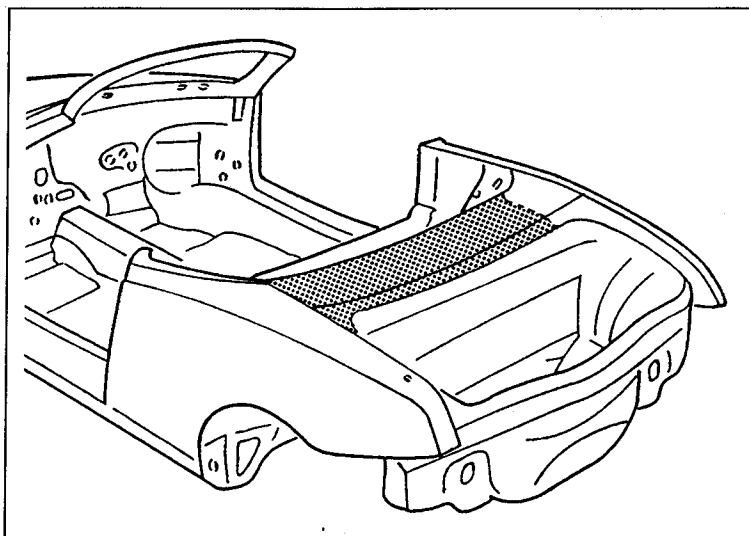
WELDING THE SPARE - UPPER CROSSMEMBER CONNECTING REAR WINGS

1. Seam weld using a MIG welder.
2. Spot weld as illustrated.



FINISHING OPERATIONS

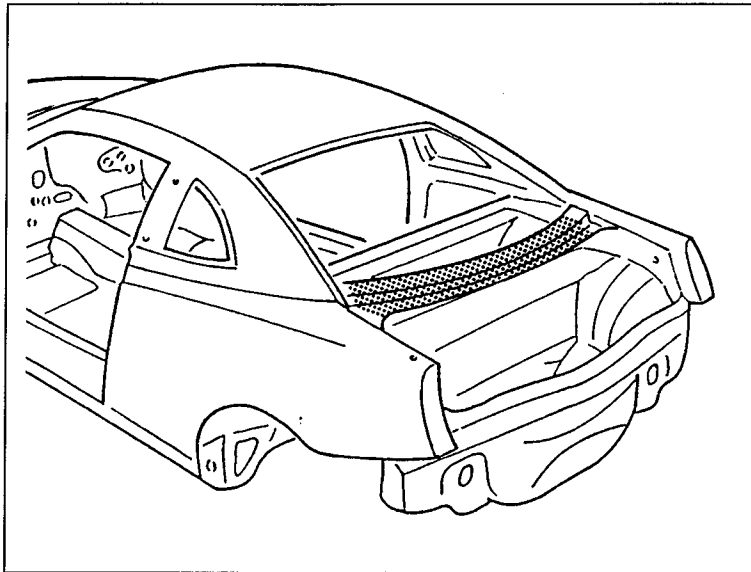
- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.



- Assemble the rear wing (see: "Replacing Rear Wing").

PROTECTIONS

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting operations.



REPLACING THE REARSCREEN CROSSMEMBER (Only for GTV)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

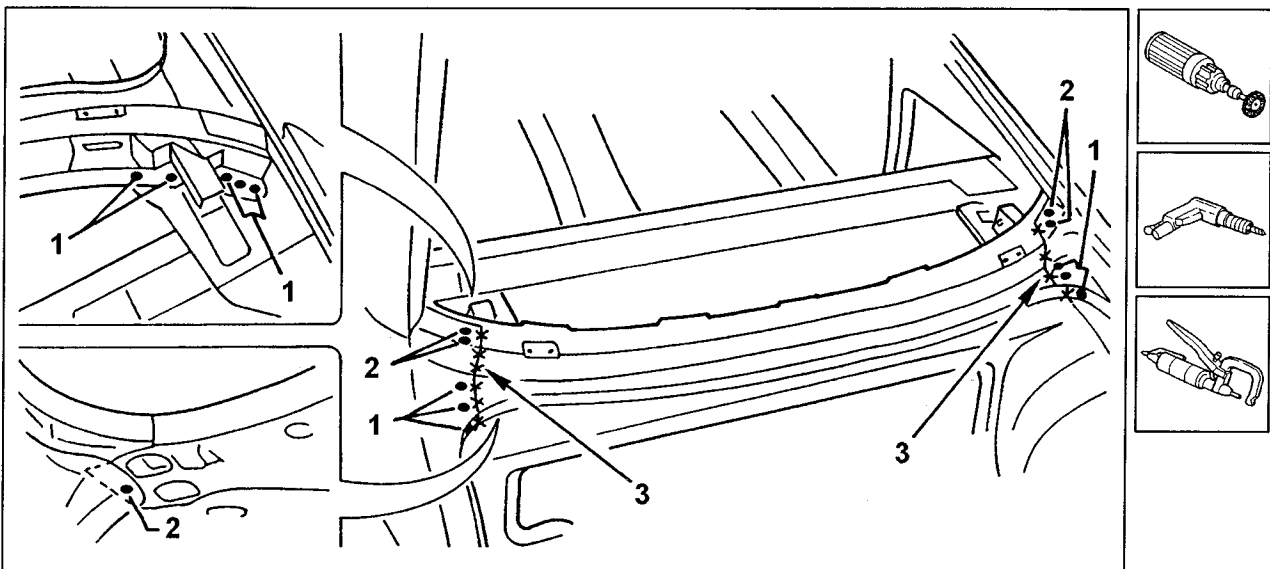
If necessary carry out body straightening operations before cutting the part. After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

REMOVAL

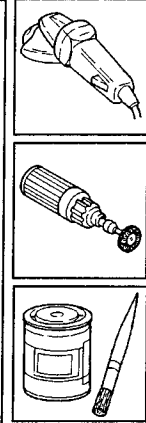
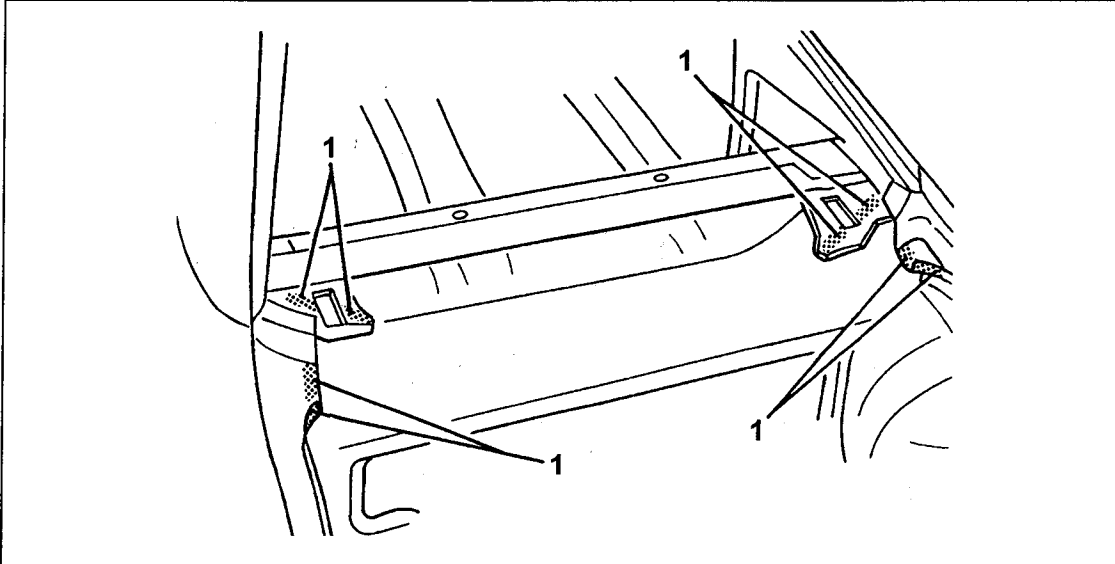
- Using a rotary brush, clean the area to be de-welded to reveal the welding spots.
- 1. Remove the welding spots (from both sides) using a de-welder.
- 2. Remove the welding spots (from both sides) using a drill.
- 3. Remove the braze welds in the areas illustrated.
- Remove the rear screen crossmember.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

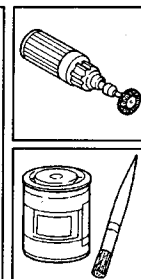
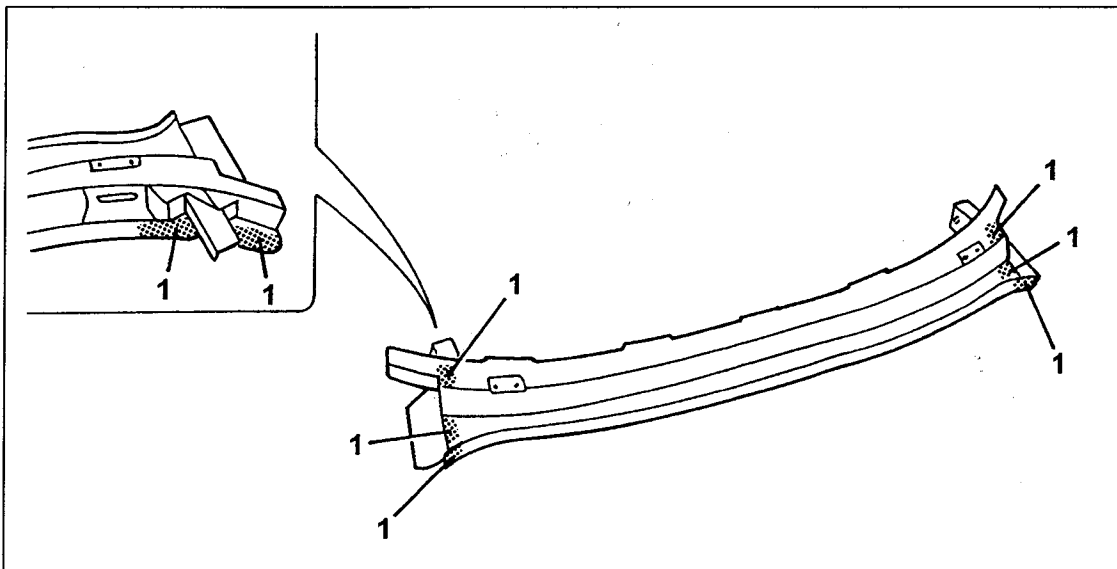
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



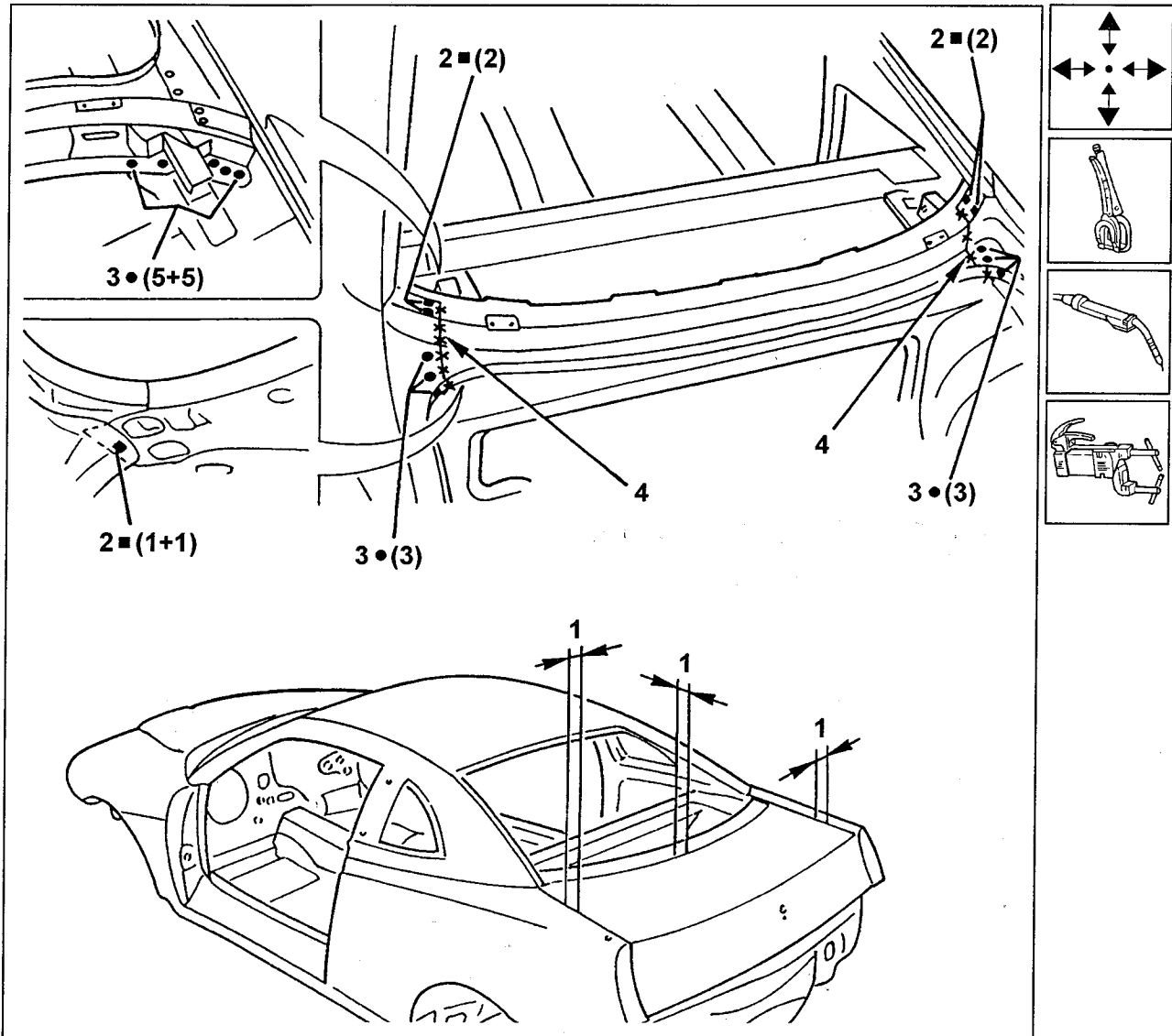
PREPARING THE SPARE - REARSCREEN CROSSMEMBER

1. Apply electro-galvanizing paint on the areas involved by spot welding.



POSITIONING AND WELDING THE SPARE - REARSCREEN CROSSMEMBER

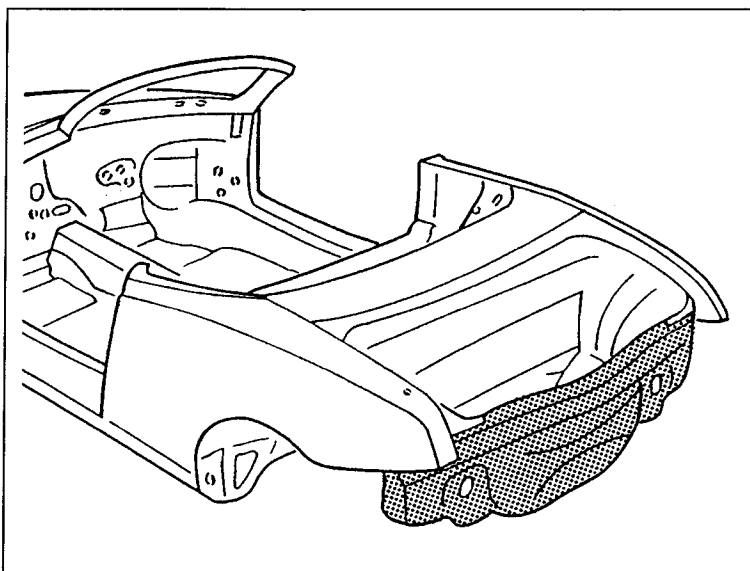
- Position the rearscreen crossmember correctly.
- 1. Clamp the components to be welded mating the edges and check alignment.
- 2. Fill weld using a MIG welder.
- 3. Spot weld as illustrated.
- 4. Braze weld in the areas illustrated.

**FINISHING OPERATIONS**

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Apply rust-proofing in the area involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting operations.



REPLACING THE REAR PANEL, COMPLETE

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

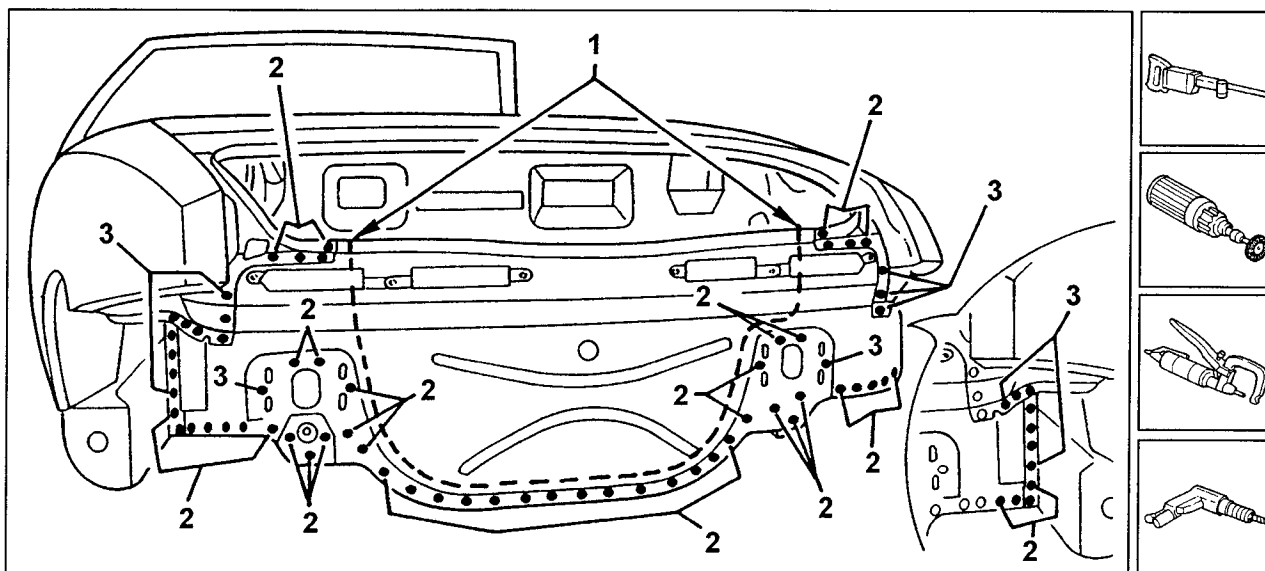
After this operation check that the parts that do not need replacing are intact.


PRELIMINARY DIS-ASSEMBLY OPERATIONS

– Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

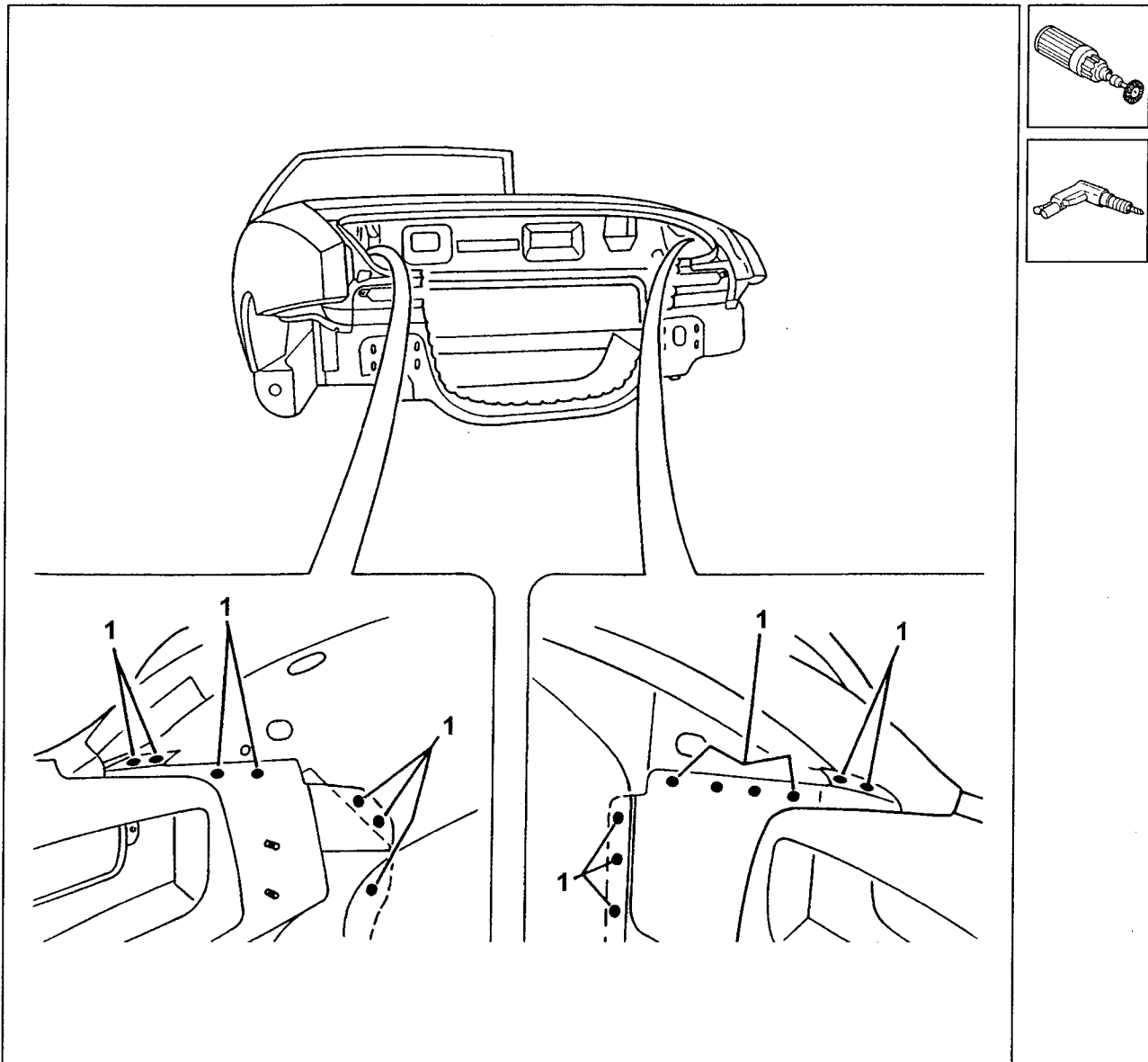
REMOVAL

1. Using a hack saw, cut the rear panel, following the lines shown in the illustration.
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
2. Remove the welding spots using a de-welder.
- Remove the welding spots using a drill.



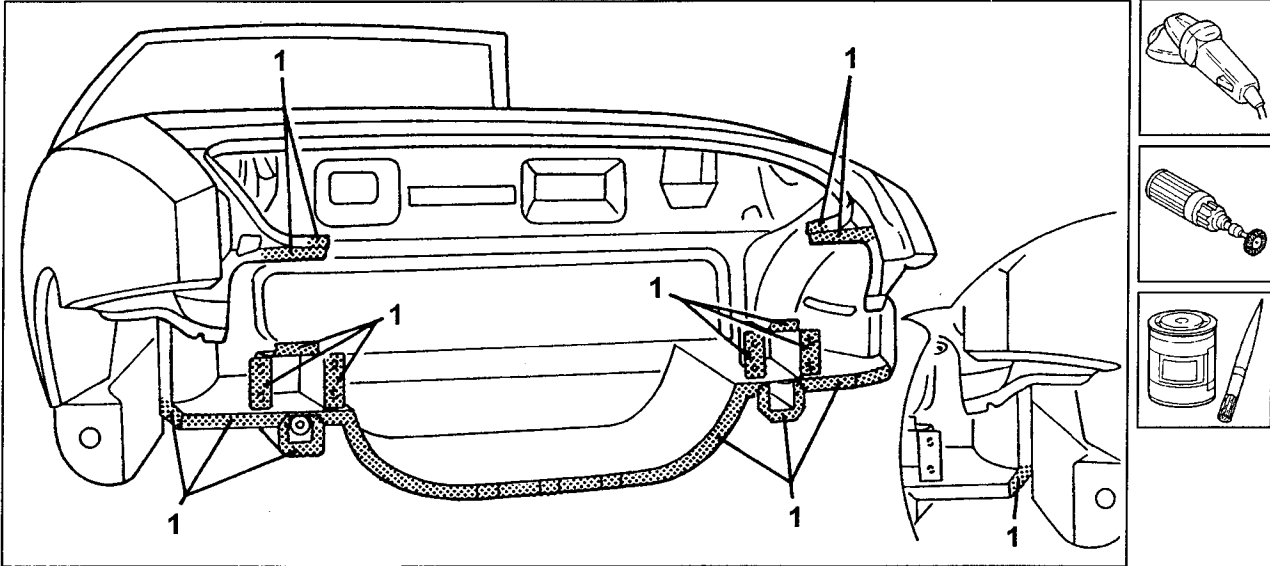
 When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a drill.
- Remove the remaining parts of the rear panel.

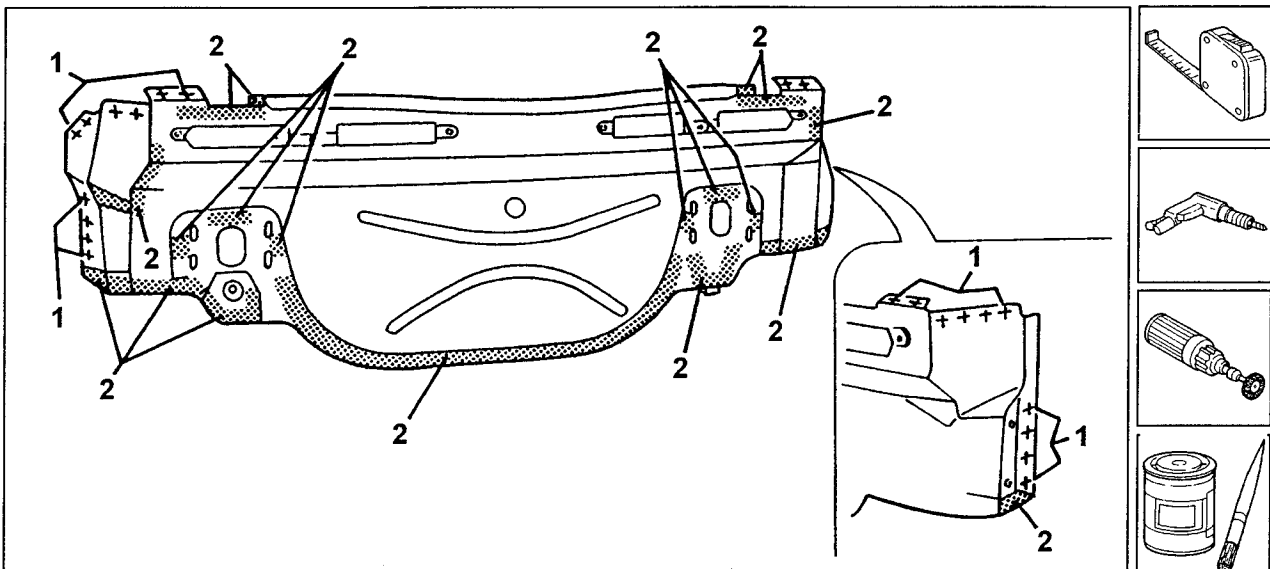


PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.

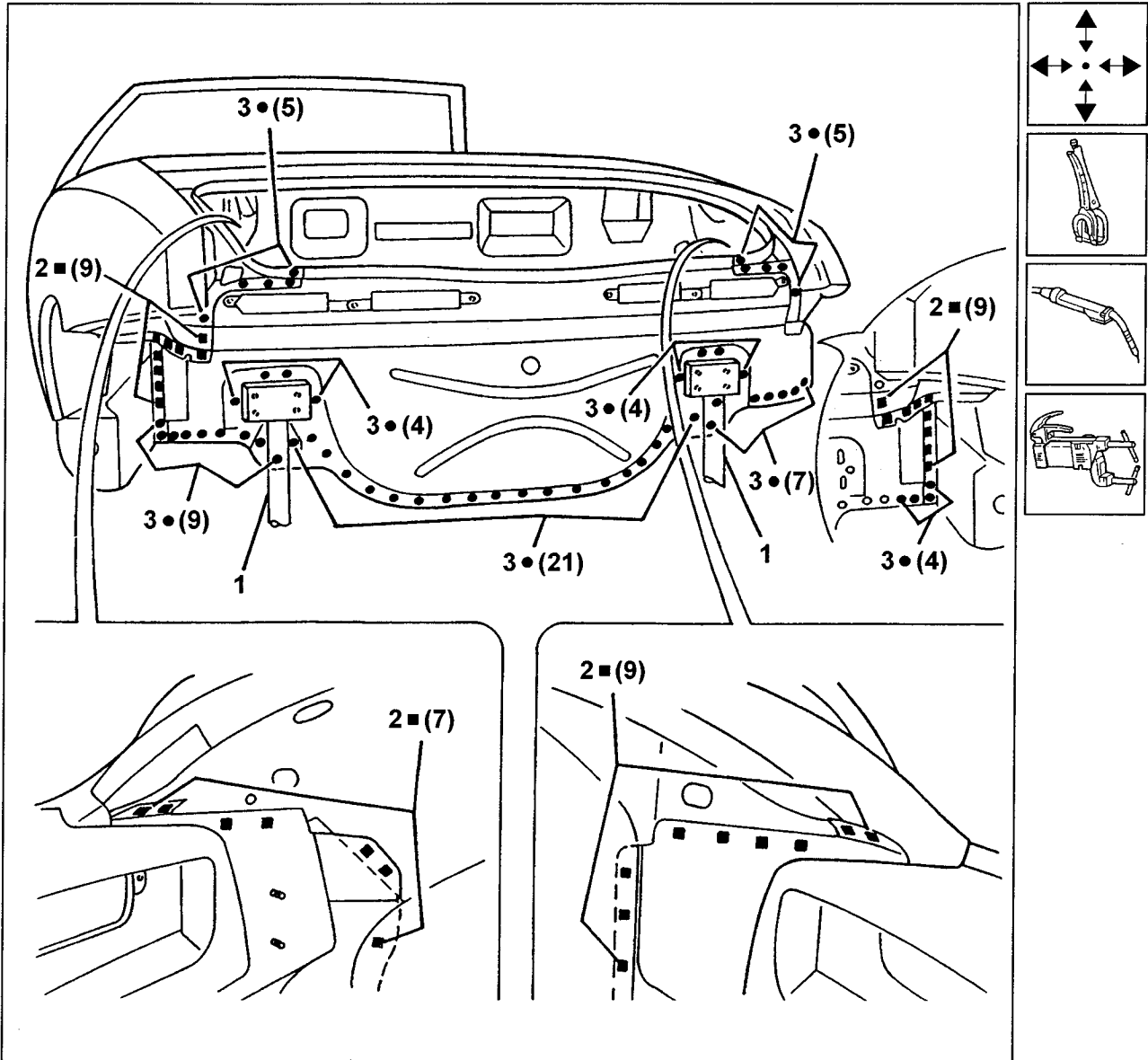
**PREPARING THE SPARE - REAR PANEL**

1. Working on the bench, trace the rear panel and drill using a $\varnothing 5$ mm. bit, as illustrated.
 - Clean the areas of the boxed section involved by welding, using a rotary brush.
2. Apply electro-galvanizing paint on the areas involved by spot welding.



POSITIONING AND WELDING THE SPARE - REAR PANEL

1. Position the rear panel correctly using the template.
 - Clamp the components to be welded mating the edges and check alignment.
2. Fill weld using a MIG welder.
3. Spot weld, as illustrated.

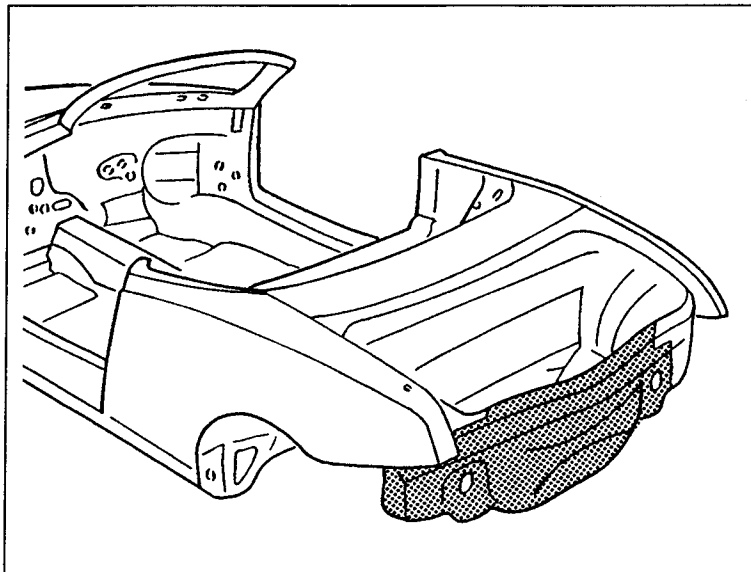


FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments and apply the sound-deadening panels referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting operations.



REPLACING THE REAR PANEL, PARTIALLY AT THE RIGHT

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

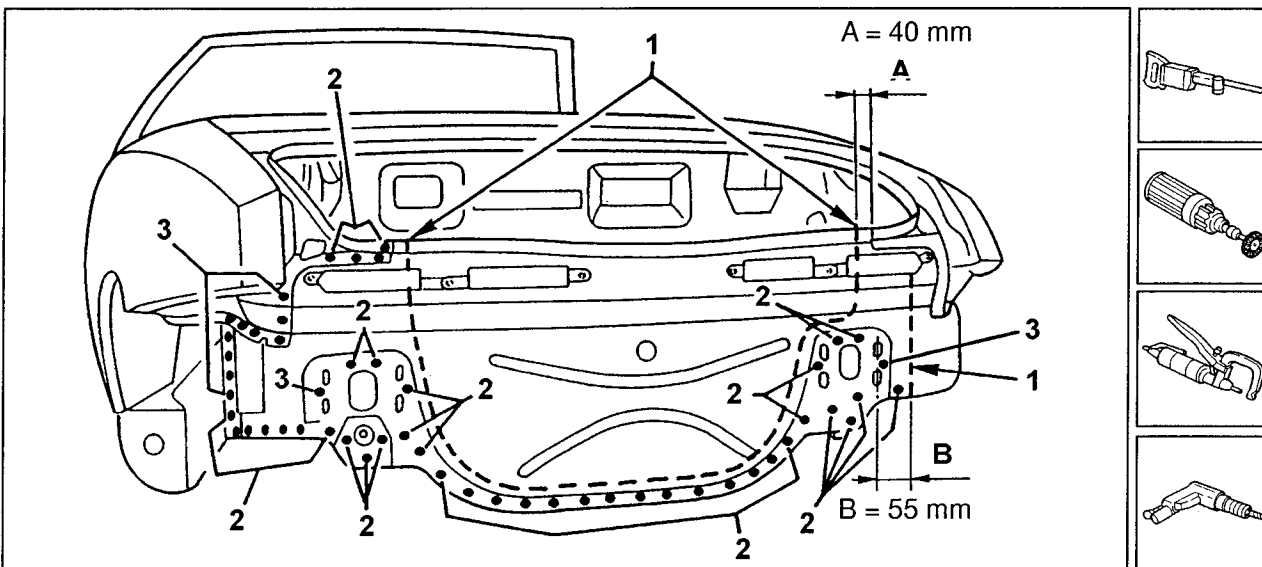
Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges). If necessary carry out body straightening operations before cutting the part. After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

– Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

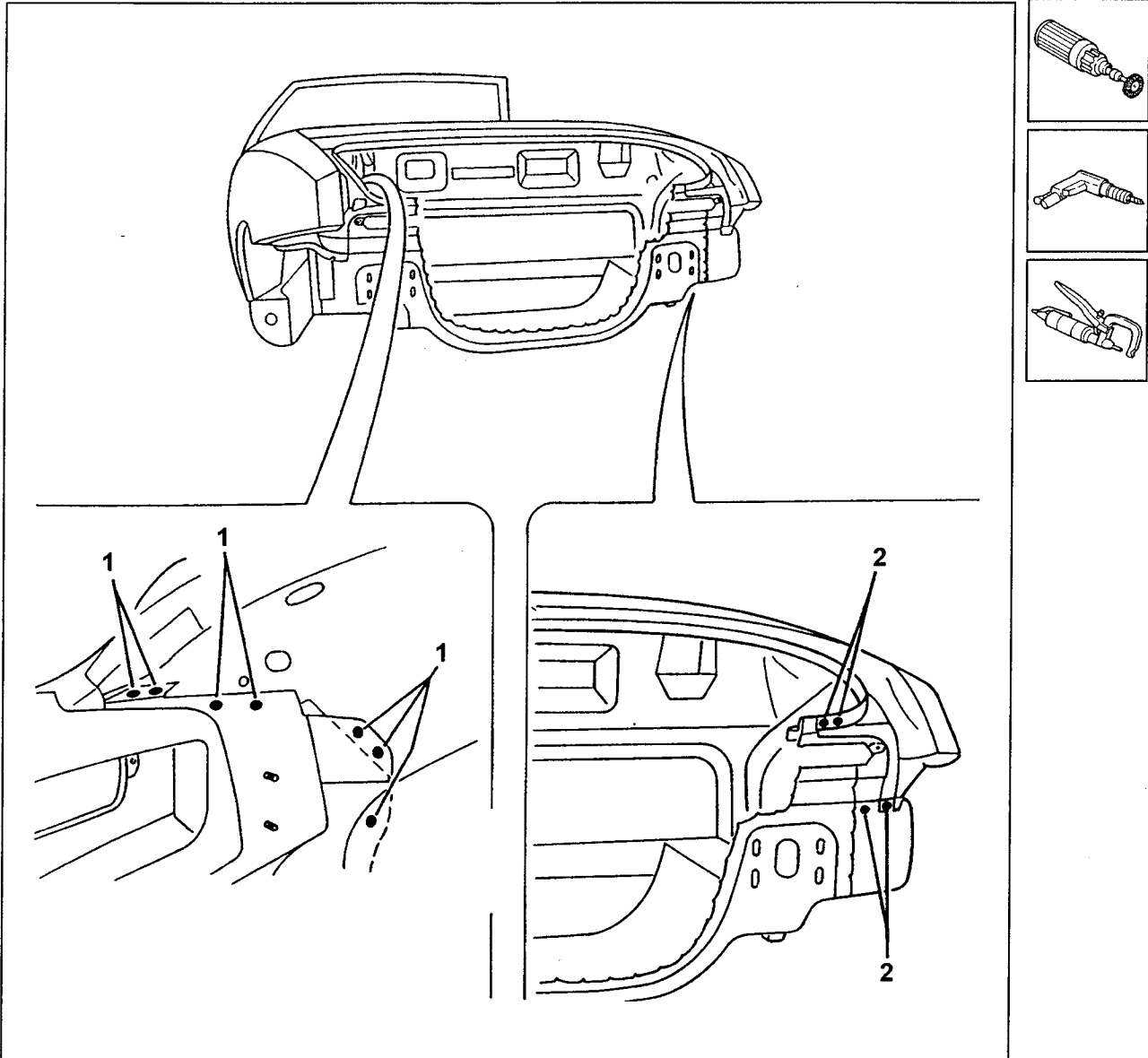
REMOVAL

1. Using a hack saw, cut the rear panel, following the lines shown in the illustration.
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
2. Remove the welding spots using a de-welder.
3. Remove the welding spots using a drill.



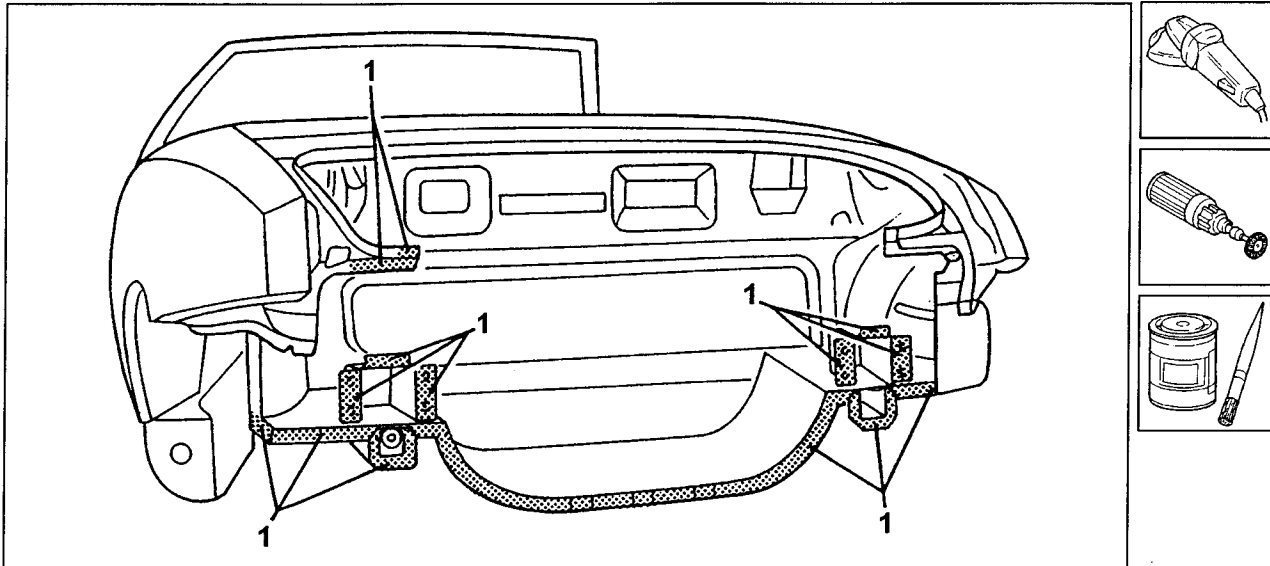
When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a drill.
- 2. Remove the welding spots using a de-welder.
- Remove the remaining parts of the rear panel.

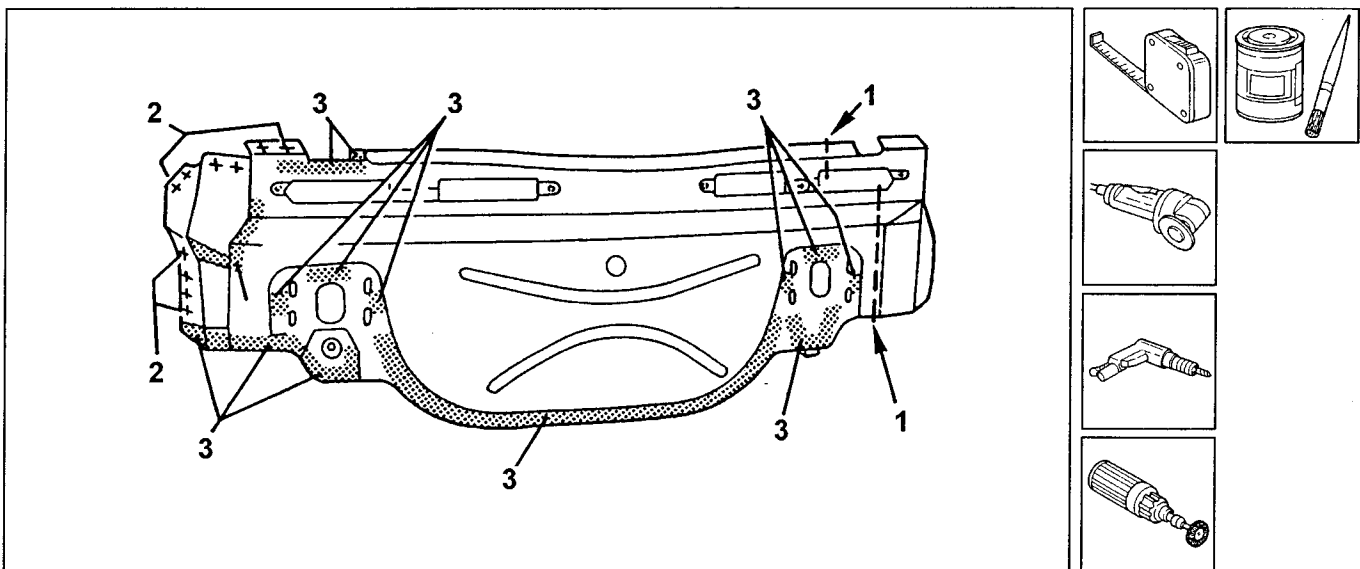


PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.

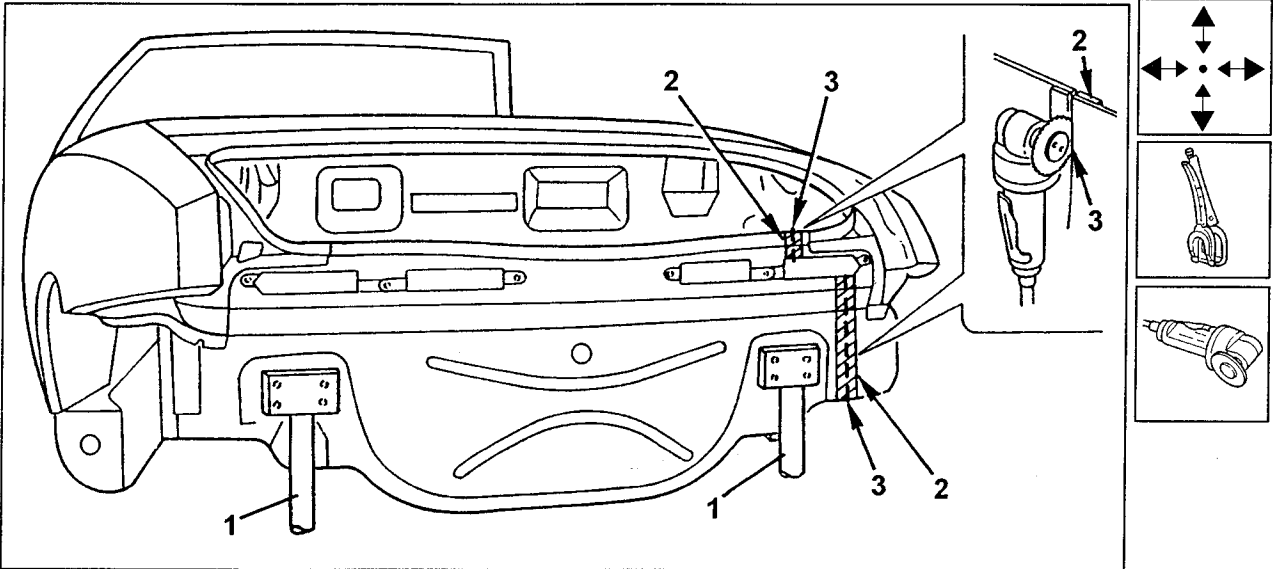
**PREPARING THE SPARE - REAR PANEL**

1. Working on the bench, trace the new rear panel in the positions illustrated, to leave an overlapping area of 1 cm, also take care not to cut the crossmember below.
2. Trace the panel and drill using a \varnothing 5 mm. bit, as illustrated.
 - Clean the areas of panel involved by welding, using a rotary brush.
3. Apply electro-galvanizing paint on the areas involved by spot welding.



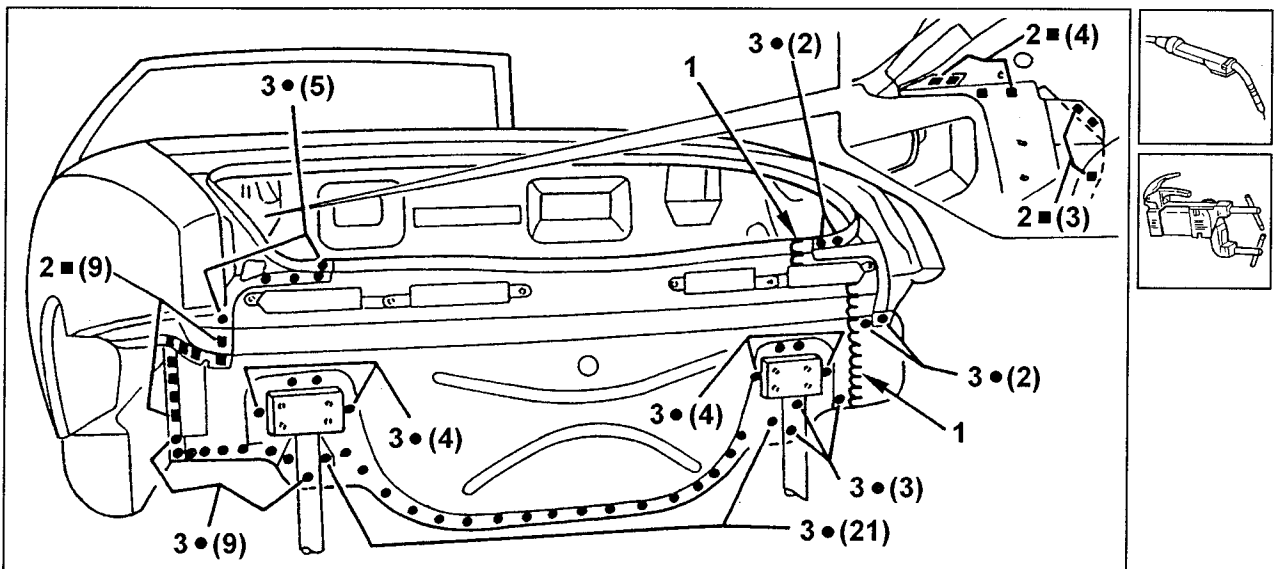
POSITIONING THE SPARE - REAR PANEL

1. Position the rear panel correctly using the template.
2. Overlay and clamp the components to be welded mating the edges and check alignment.
3. Trim the sheets eliminating the excess, using a circular saw; take care not to damage the crossmember below.



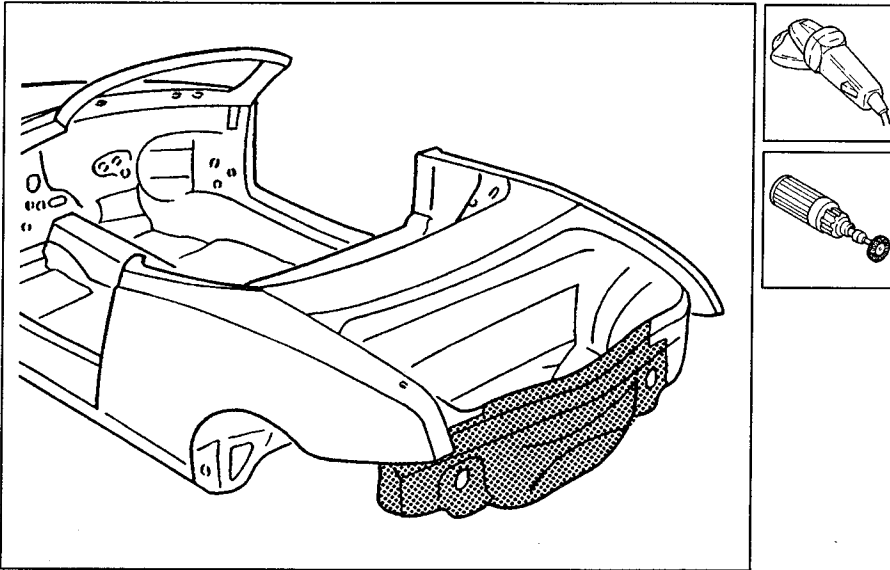
WELDING THE SPARE - REAR PANEL

1. Seam weld using a MIG welder
2. Fill weld using a MIG welder.
3. Spot weld, as illustrated.

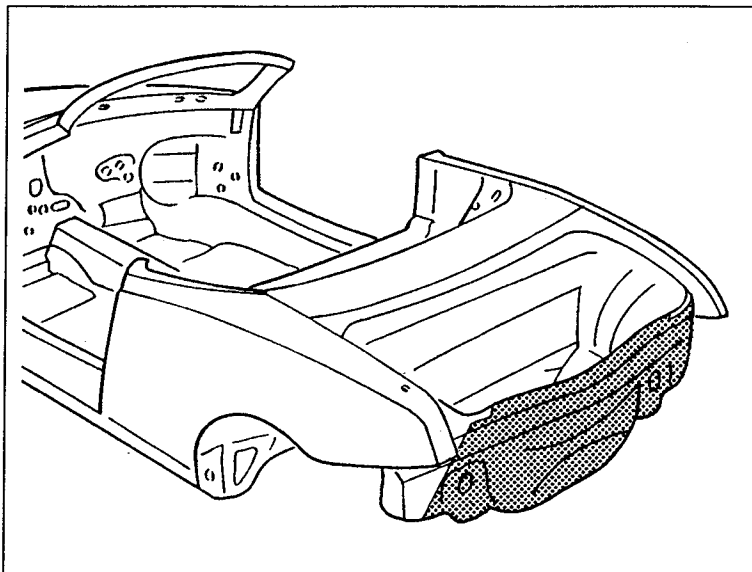


FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

**PROTECTIONS**

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments and apply the sound-deadening panels referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE REAR PANEL, PARTIALLY AT THE LEFT

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

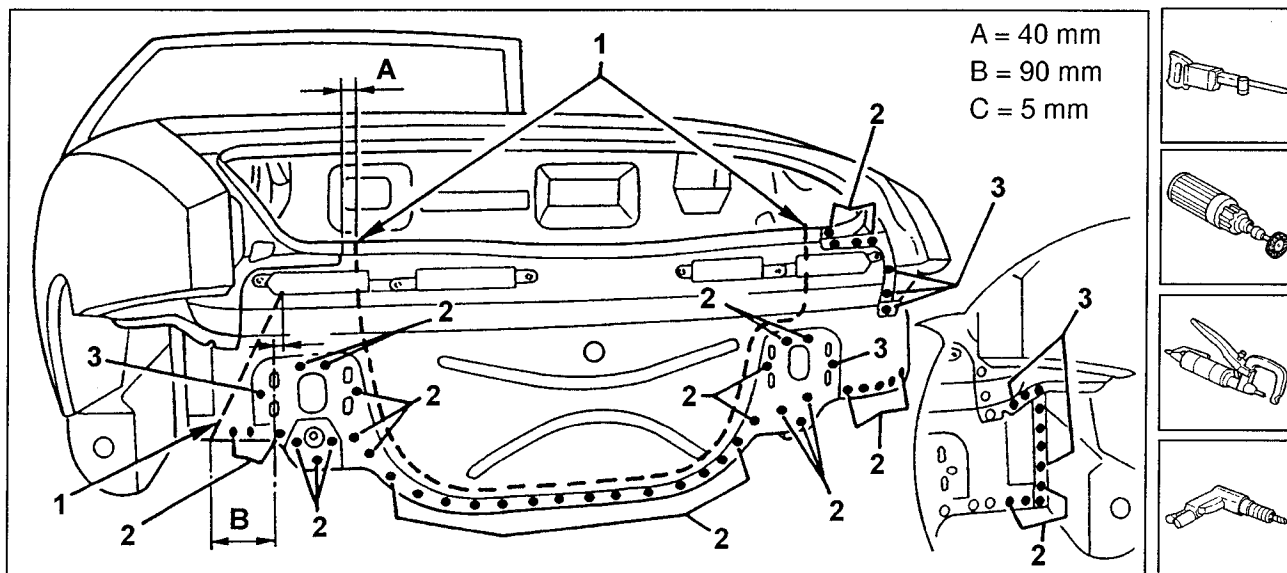
Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).
If necessary carry out body straightening operations before cutting the part.
After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

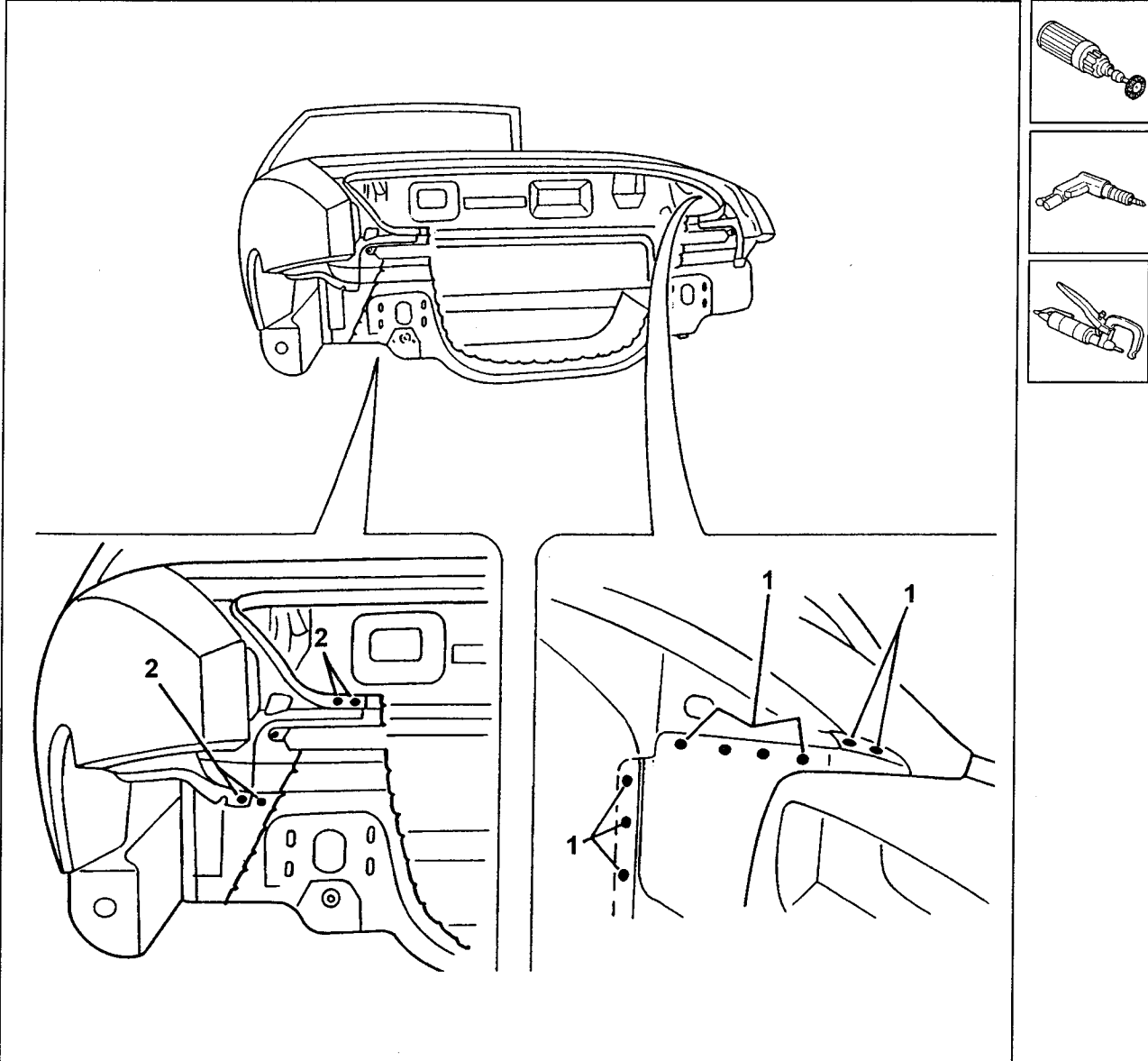
REMOVAL

1. Using a hack saw, cut the rear panel, following the lines shown in the illustration.
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
2. Remove the welding spots using a de-welder.
3. Remove the welding spots using a drill.



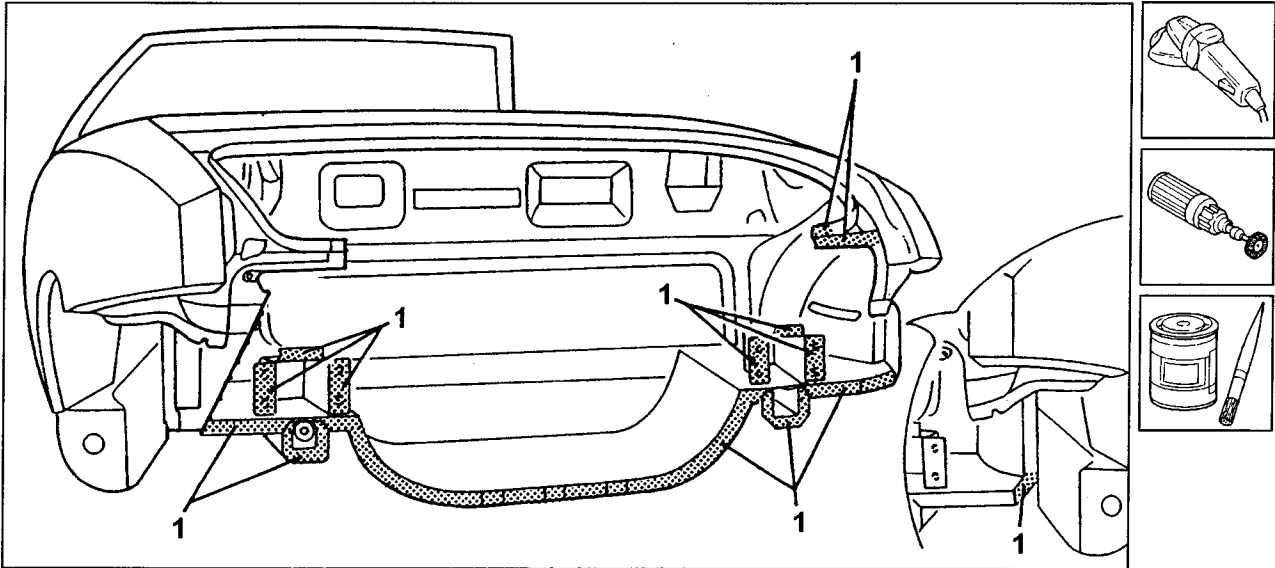
When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a drill.
- 2. Remove the welding spots using a de-welder.
- Remove the remaining parts of the rear panel.



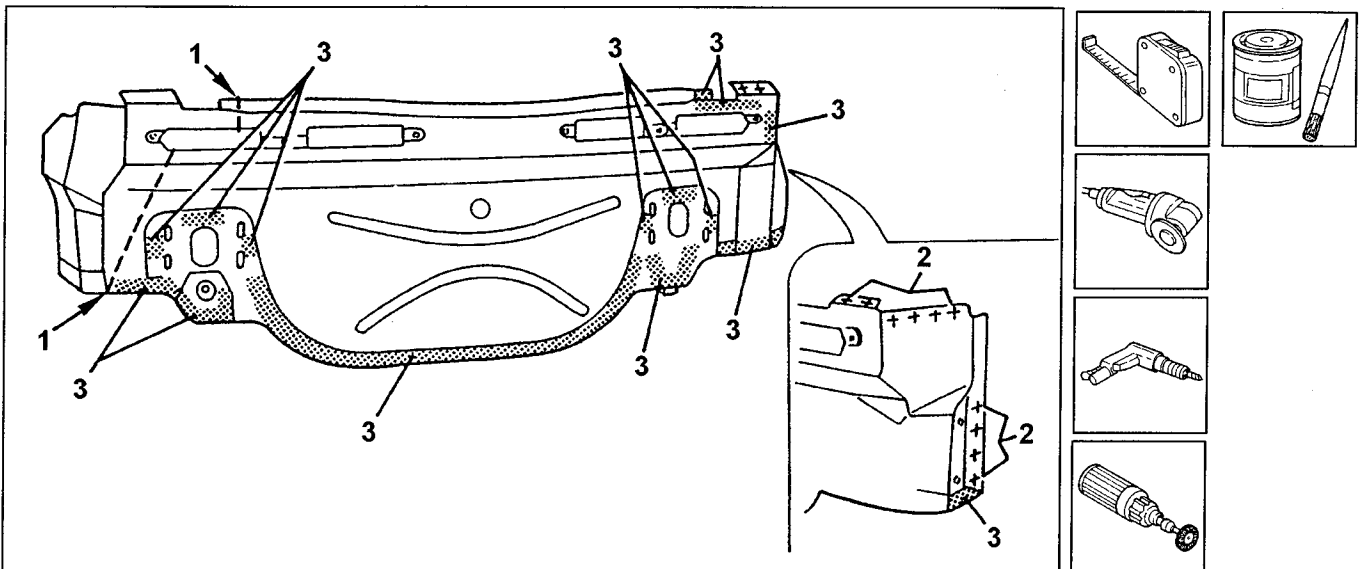
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



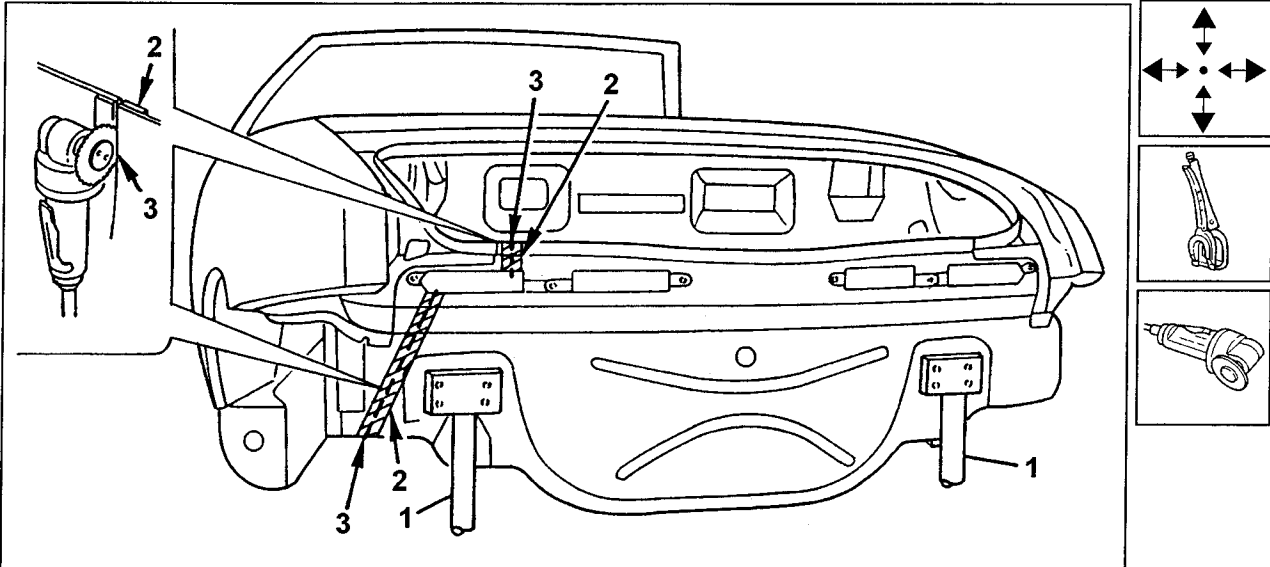
PREPARING THE SPARE - REAR PANEL

1. Working on the bench, trace the new rear panel in the positions illustrated, to leave an overlapping area of 1 cm, also take care not to cut the crossmember below.
2. Trace the panel and drill using a \varnothing 5 mm. bit, as illustrated.
 - Clean the areas of panel involved by welding, using a rotary brush.
3. Apply electro-galvanizing paint on the areas involved by spot welding.



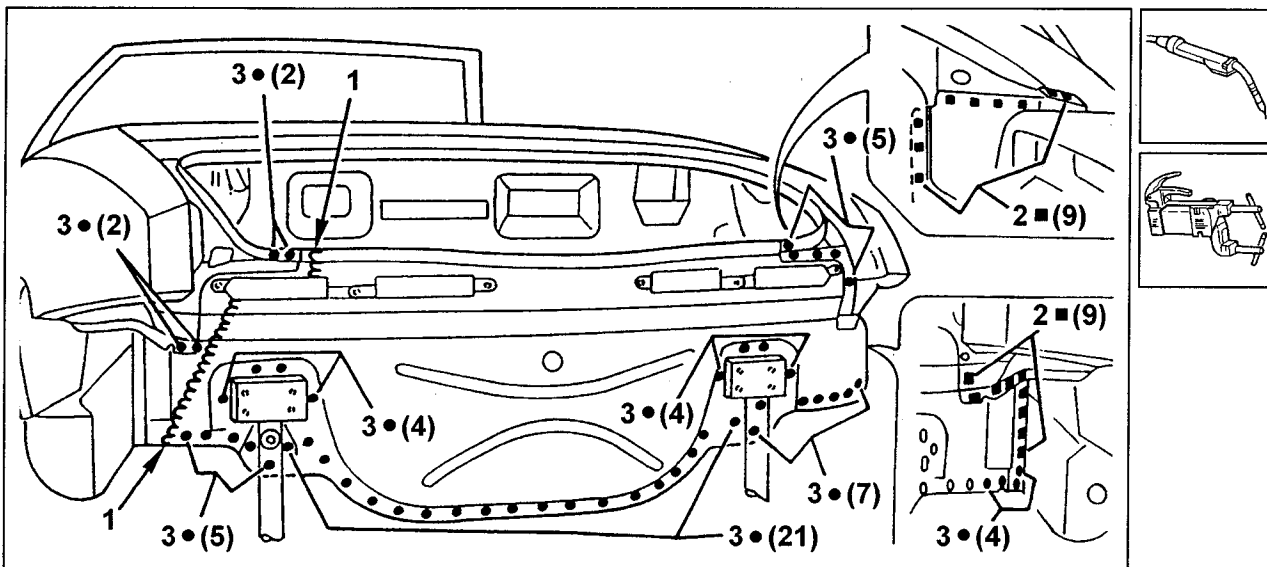
POSITIONING THE SPARE - REAR PANEL

1. Position the rear panel correctly using the template.
2. Overlay and clamp the components to be welded mating the edges and check alignment.
3. Trim the sheets eliminating the excess, using a circular saw; take care not to damage the crossmember below.



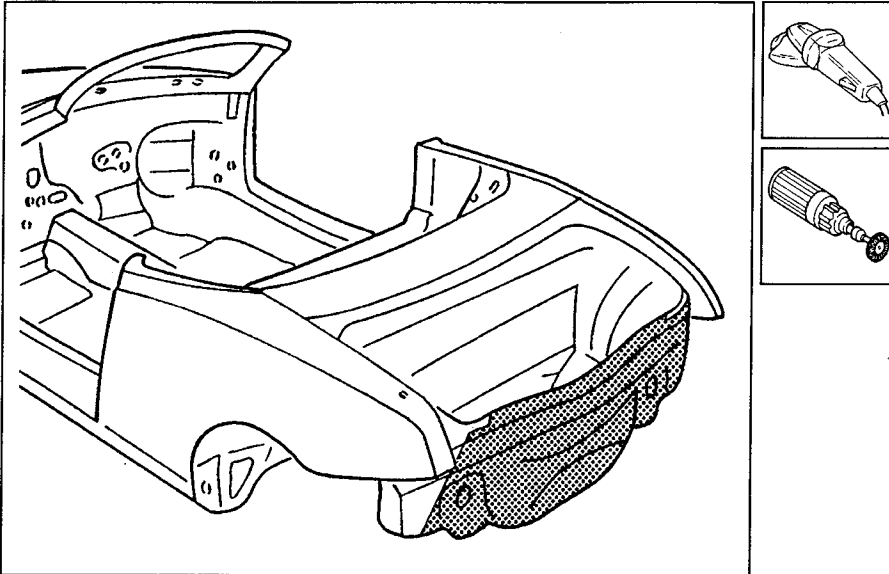
WELDING THE SPARE - REAR PANEL

1. Seam weld using a MIG welder
2. Fill weld using a MIG welder.
3. Spot weld, as illustrated.

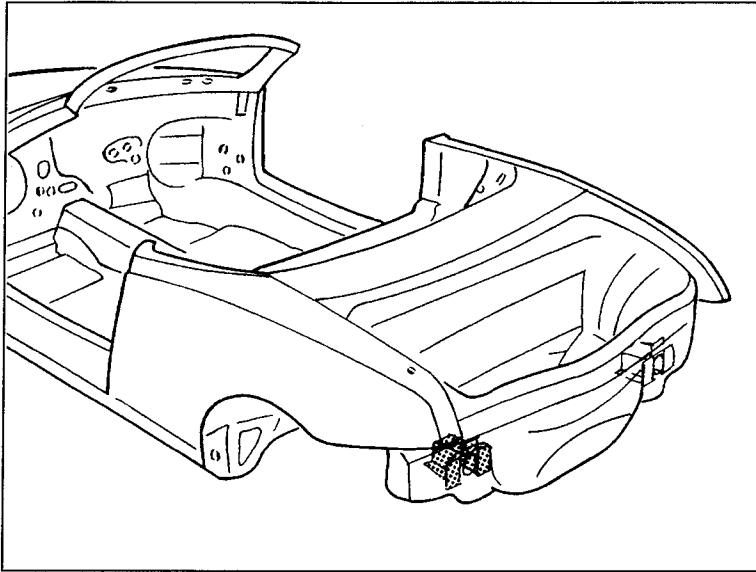


FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

**PROTECTIONS**

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments and apply the sound-deadening panels referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE REAR FLOOR BRACKET (with rear panel removed)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

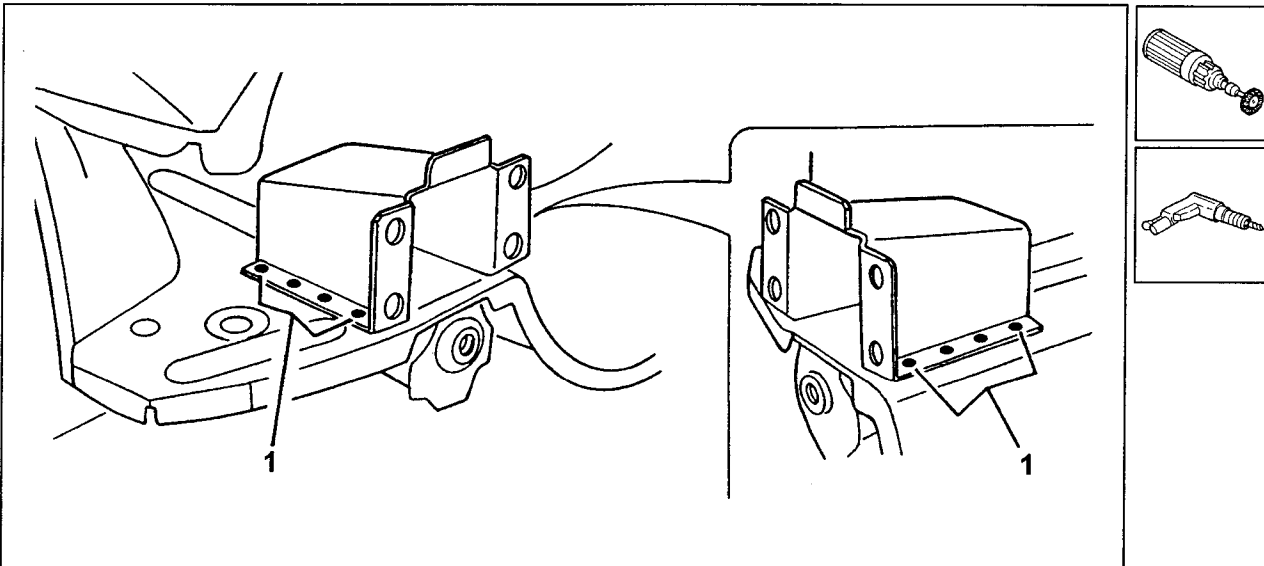
After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.
- Remove the rear panel (see: "Replacing the Rear Panel").

REMOVAL

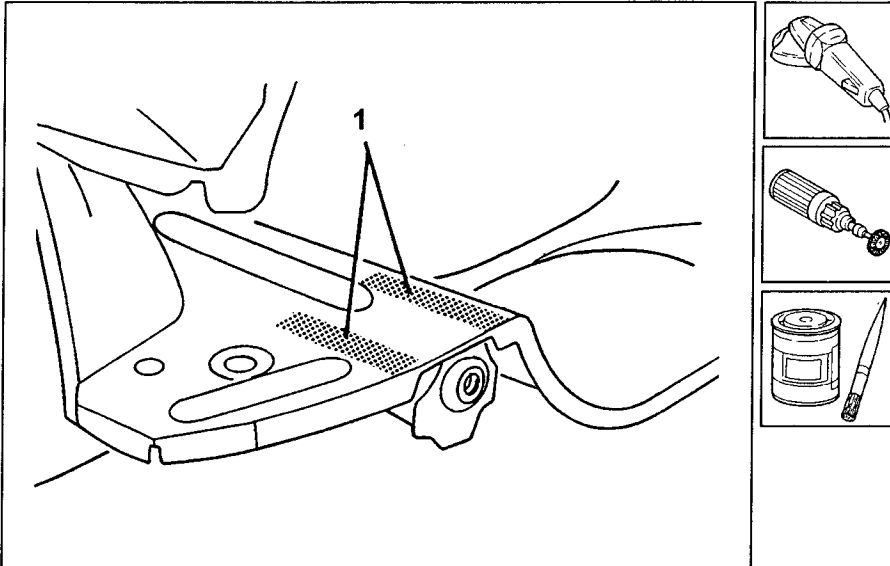
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a drill.
- Remove the rear floor bracket.



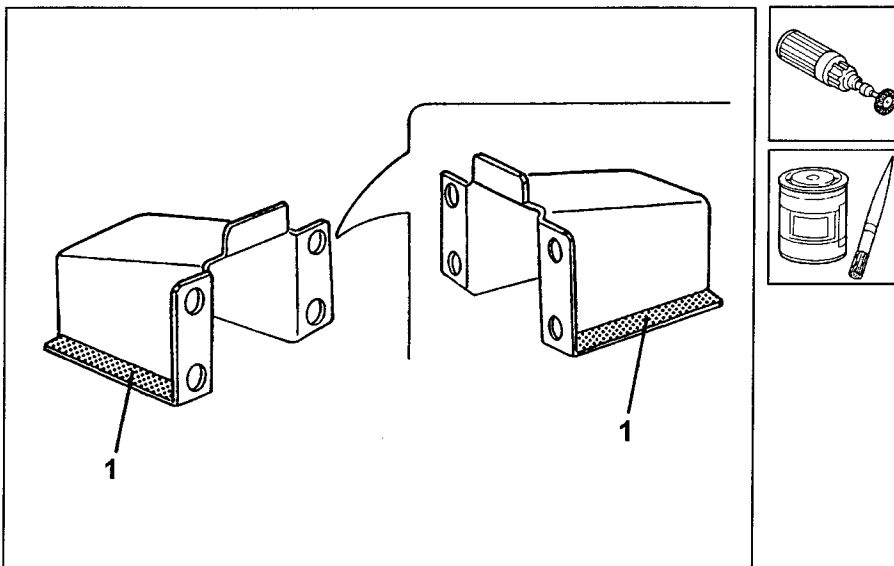
When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.

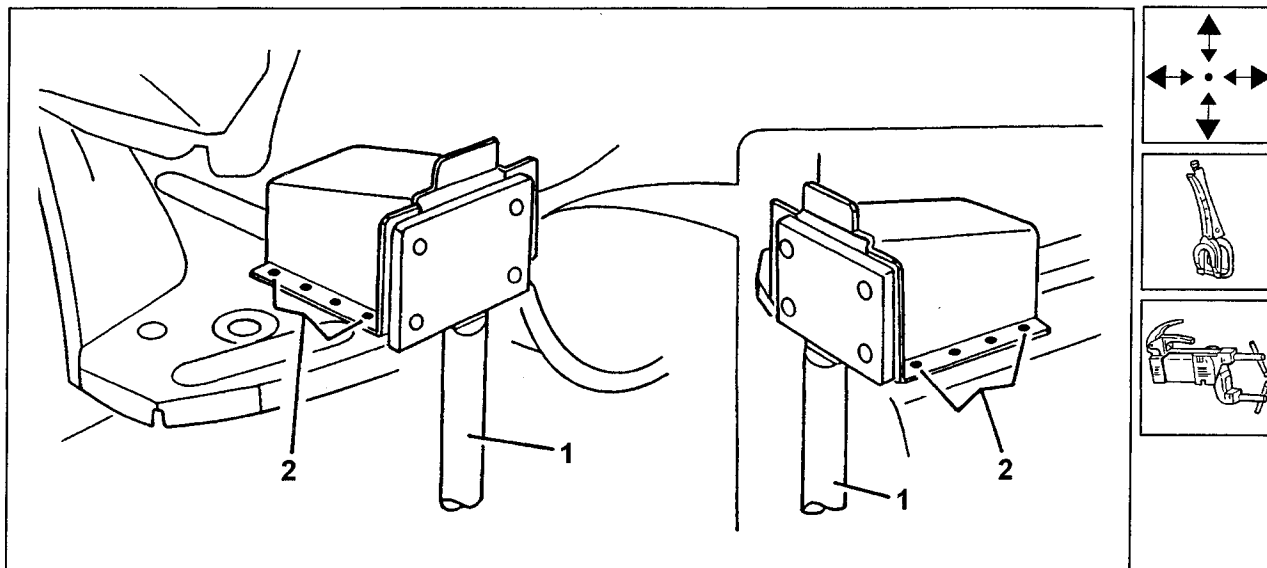
**PREPARING THE SPARE - REAR FLOOR BRACKET**

- Clean the areas of the bracket involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



POSITIONING AND WELDING THE SPARE - REAR FLOOR BRACKET

1. Position the bracket correctly using the template.
 - Clamp the components to be welded mating the edges and check alignment.
2. Spot weld as illustrated.



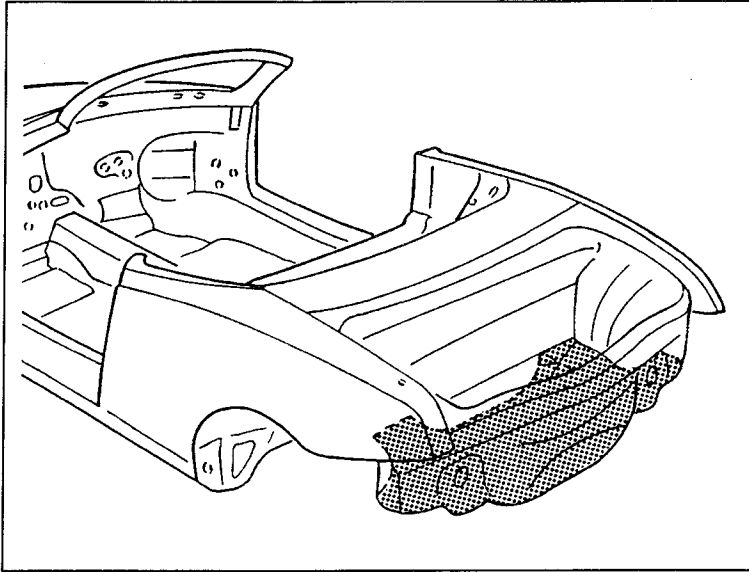
- Assemble the rear panel (see: "Changing the Rear Panel").

FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Seal the joints, carry out the rust-proofing treatments and apply the sound-deadener panels referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE REAR FLOOR (with rear panel removed)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

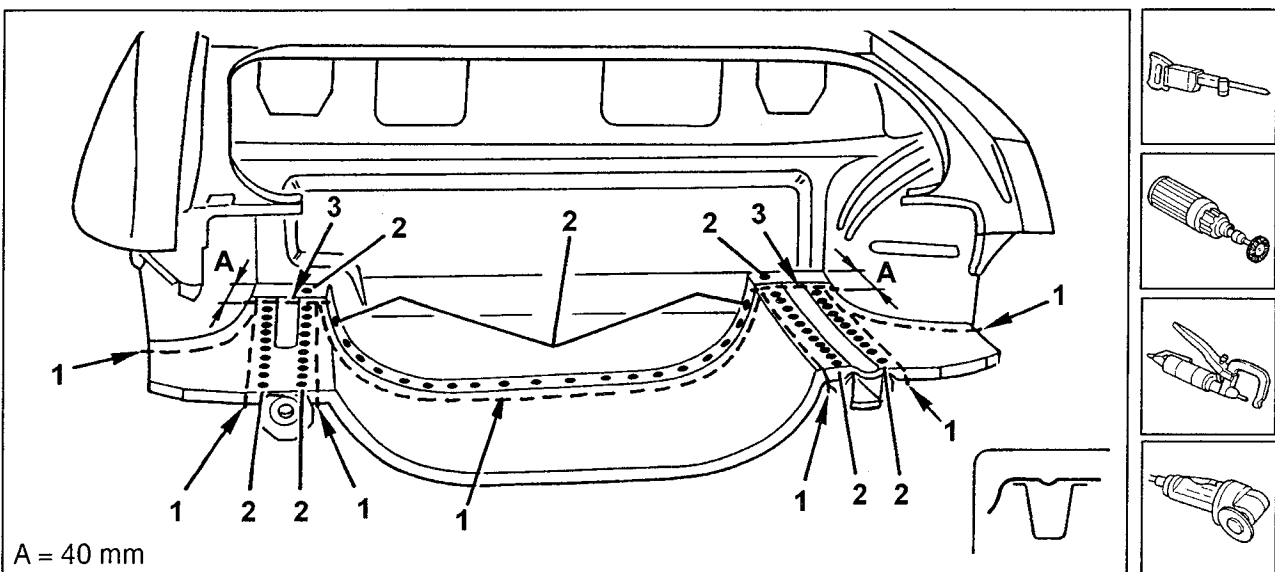
After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.
- Remove the rear panel (see: "Replacing the Rear Panel").
- Remove the rear floor bracket (see: "Replacing the Rear Floor Bracket").

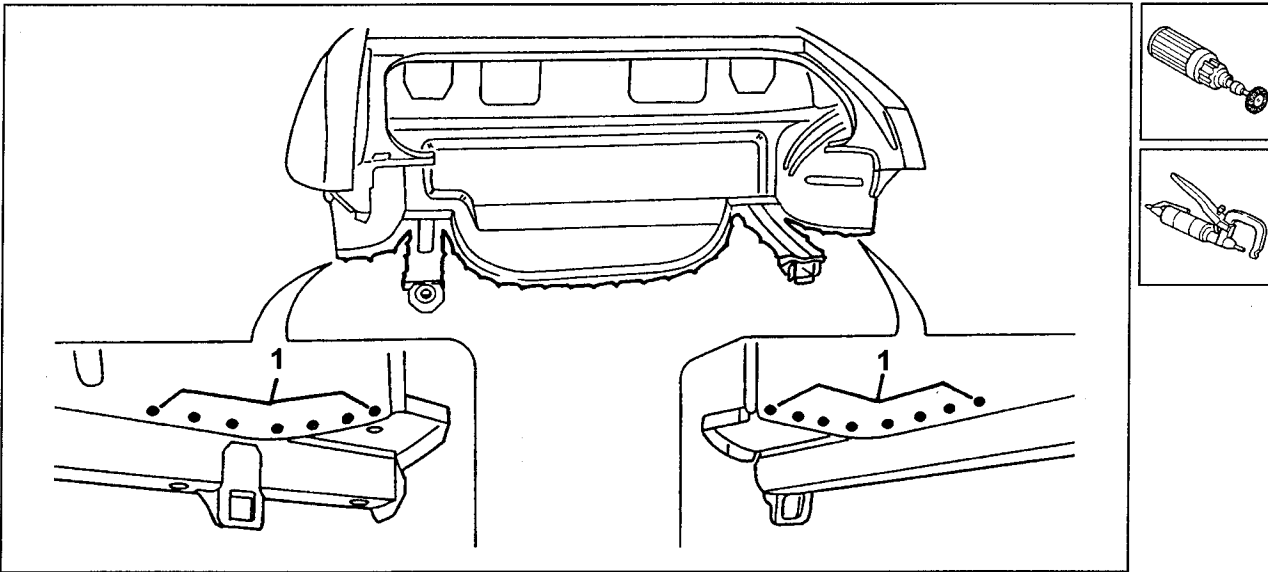
REMOVAL

1. Using a hacksaw, cut the rear floor following the lines illustrated.
 - Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
 2. Remove the welding spots using a de-welder.
 3. Using a circular saw, cut the floor, following the line illustrated and in compliance with dimension A, without damaging the sidemember below.
- The section of the sheet is shown in the more significant point so that the operator can adjust the cutting depth.



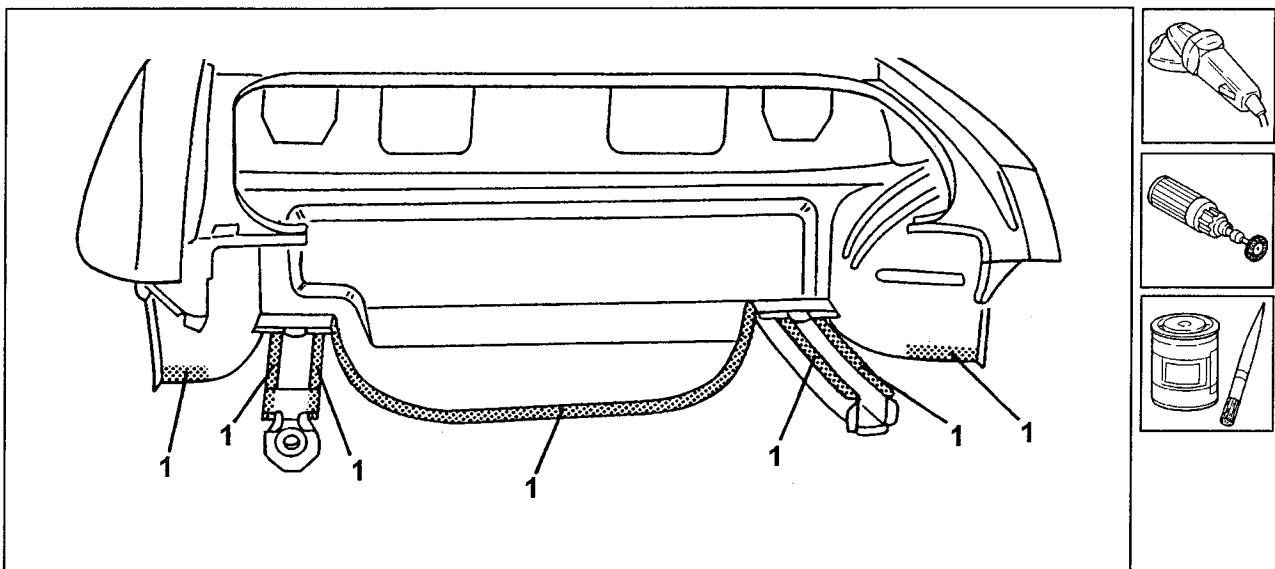
When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a de-welder.
- Remove the remaining parts of the rear floor.



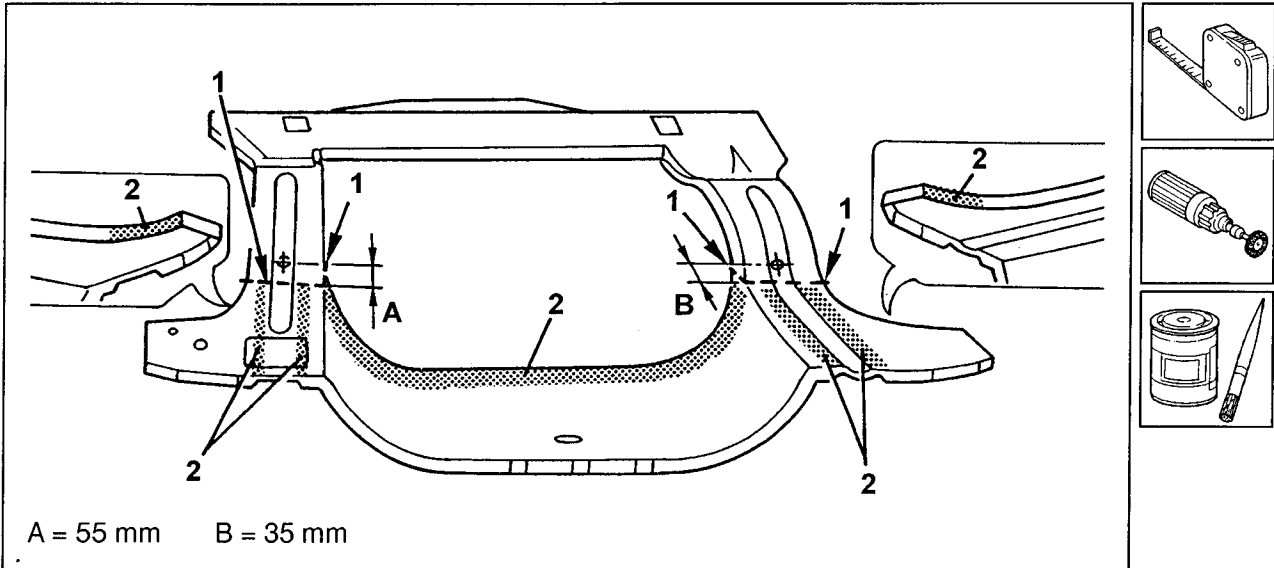
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
- Remove the welding spot remains using a disk sander.
- Clean the areas involved by welding, using a rotary brush.
- 1. Apply electro-galvanizing paint on the areas involved by spot welding.



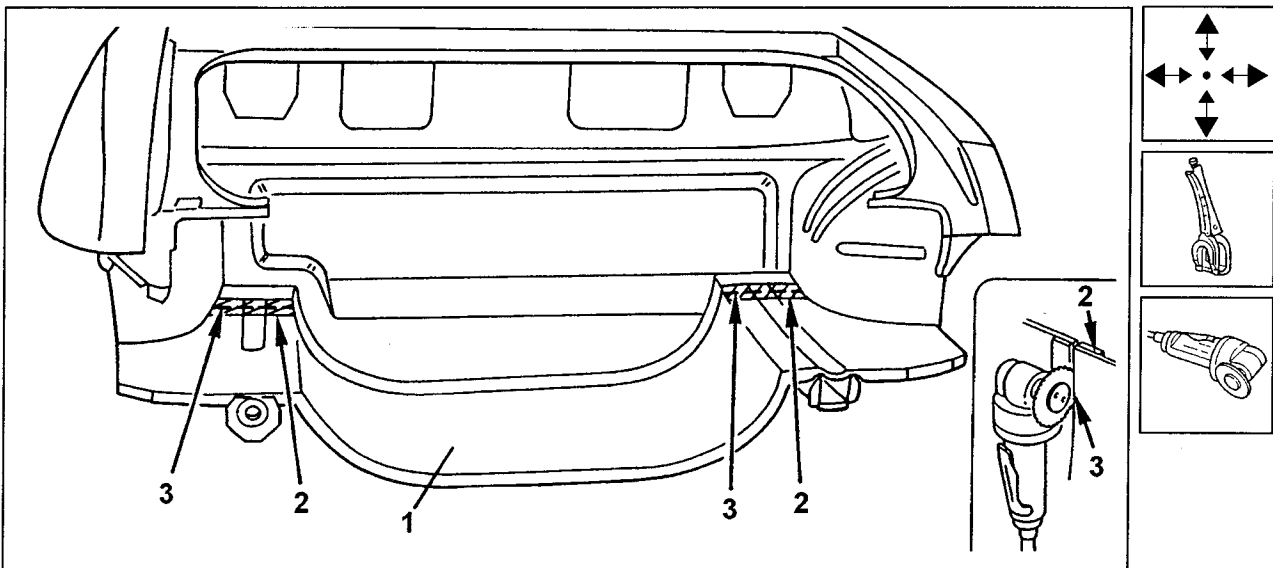
PREPARING THE SPARE - REAR FLOOR

1. Working on the bench and using a hacksaw, cut the new rear floor, where shown, observing the dimensions illustrated to keep a piece of sheet metal for the overlap.
 - Clean the areas of involved by welding on the car, using a rotary brush.
2. Apply electro-galvanizing paint on the areas shown involved by spot welding.



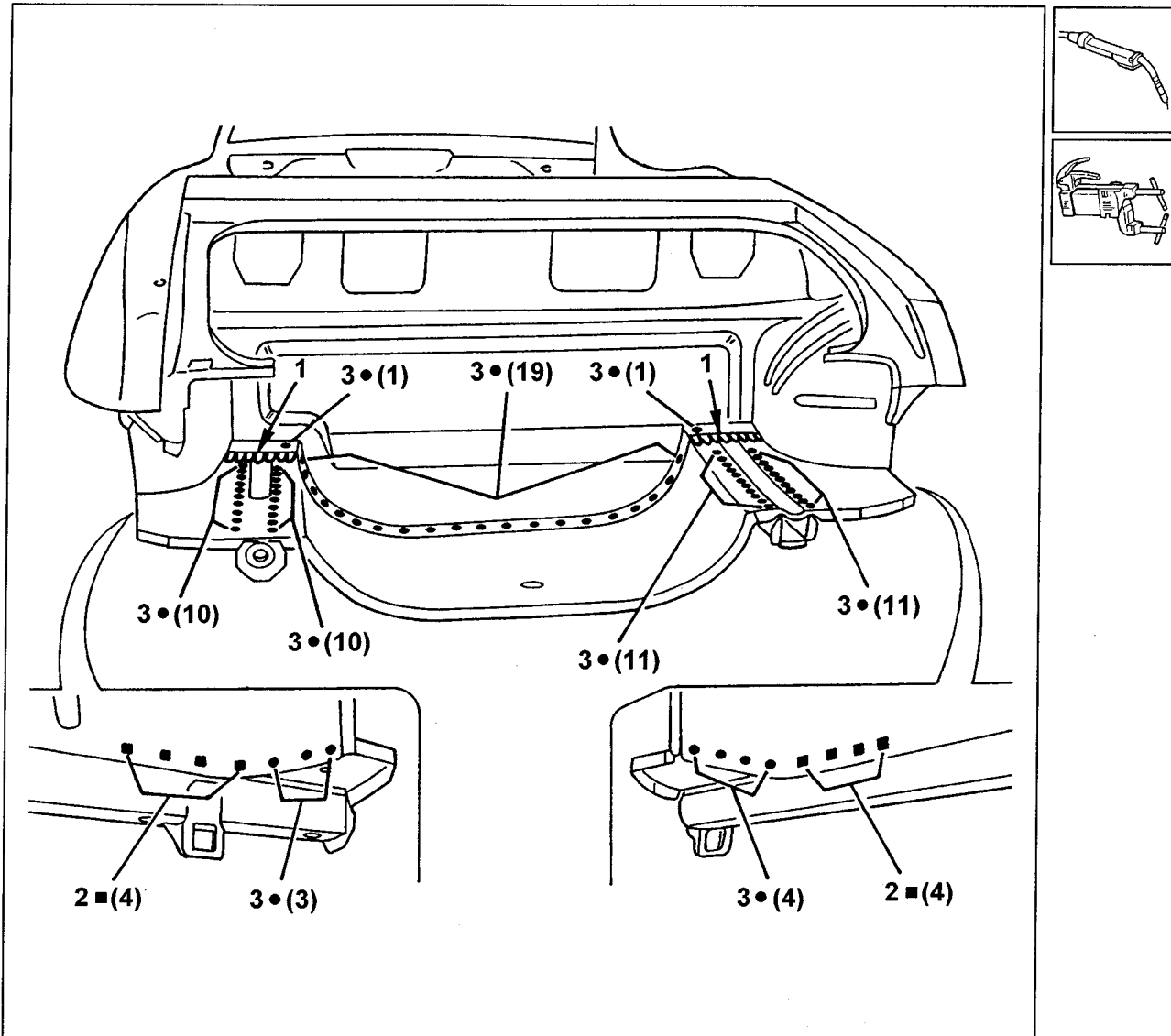
POSITIONING THE SPARE - REAR FLOOR

1. Position the rear floor correctly.
2. Overlay and clamp the components to be welded mating the edges and check alignment.
3. Trim the sheets eliminating the excess, using a circular saw; take care not to damage the sidemember below.



WELDING THE SPARE - REAR FLOOR

1. Seam weld using a MIG welder.
2. Fill weld using a MIG welder.
3. Spot weld as illustrated.



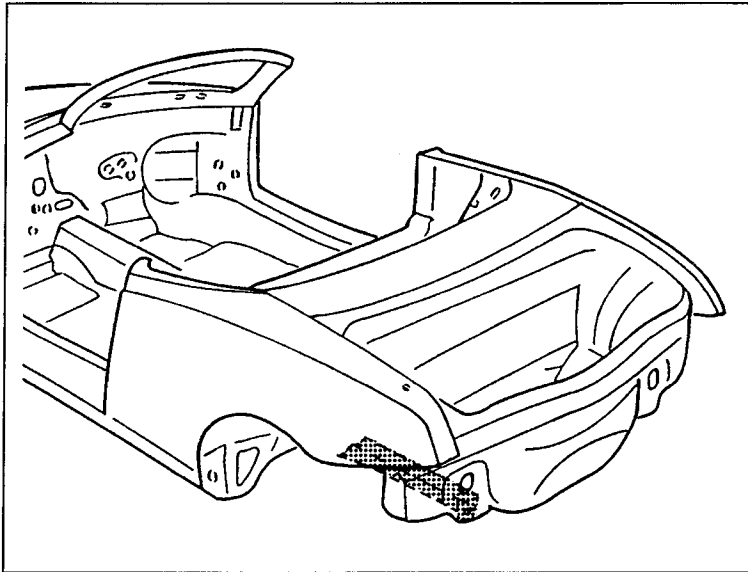
- Assemble the rear floor bracket (see: "Replacing the Rear Floor Bracket").
- Assemble the rear panel (see: "Changing the Rear Panel").

FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- apply the rust-proofing protection in the areas involved by MIG welding.
- Seal the joints, carry out the rust-proofing treatments and apply the sound-deadener panels referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



PARTIALLY REPLACING THE REAR SIDEMEMBERS (with floor removed)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

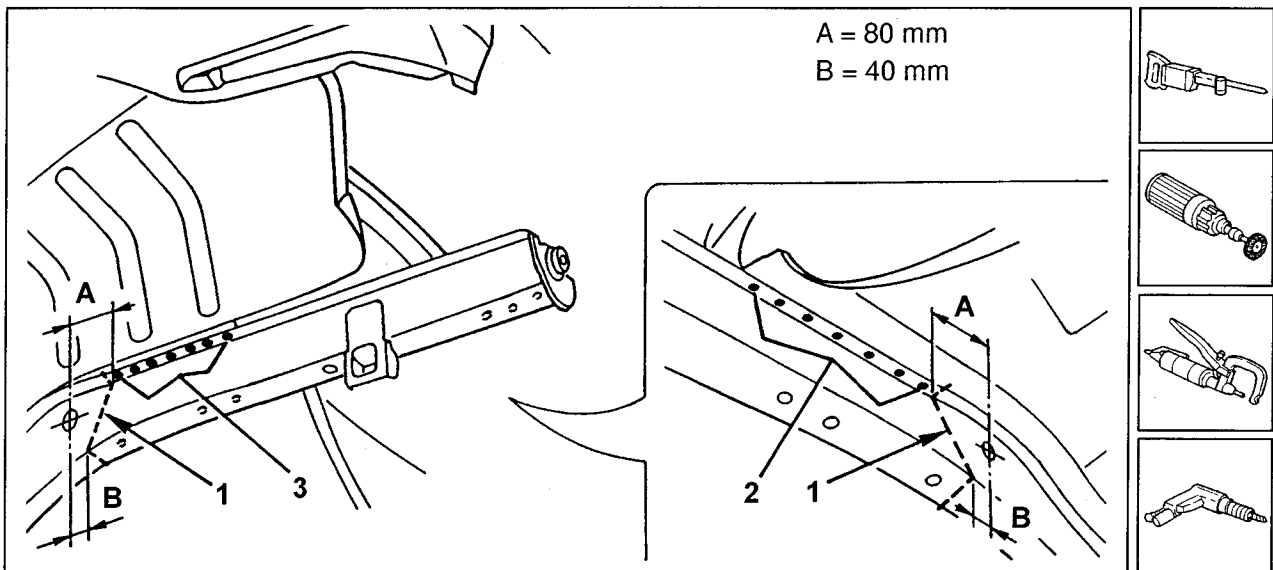
After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.
- Remove the rear floor (see: "Replacing the Rear Floor").

REMOVAL

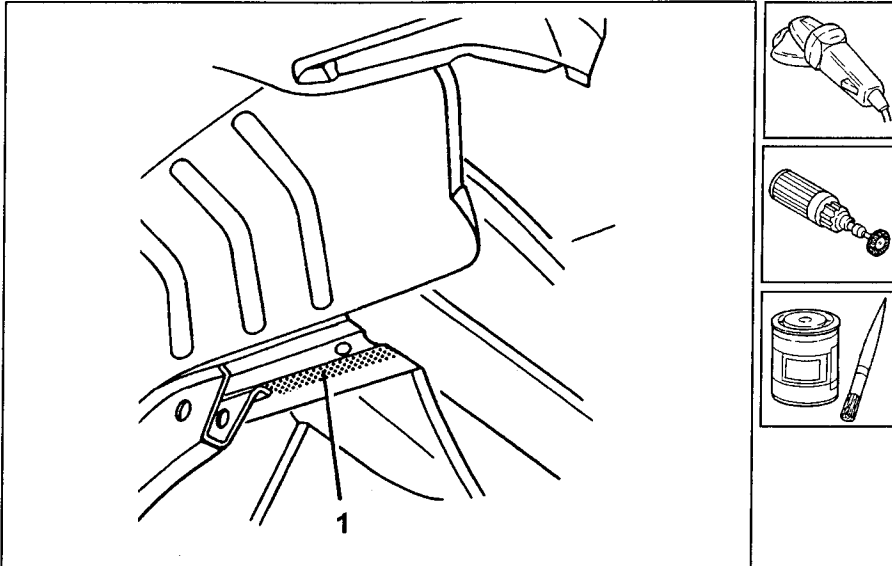
1. Using a hacksaw, cut the sidemember following the line and the dimensions illustrated, without damaging the parts above.
 - Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
2. Remove the welding spots using a de-welder.
3. Remove the welding spots using a drill.
 - Remove the sidemember.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

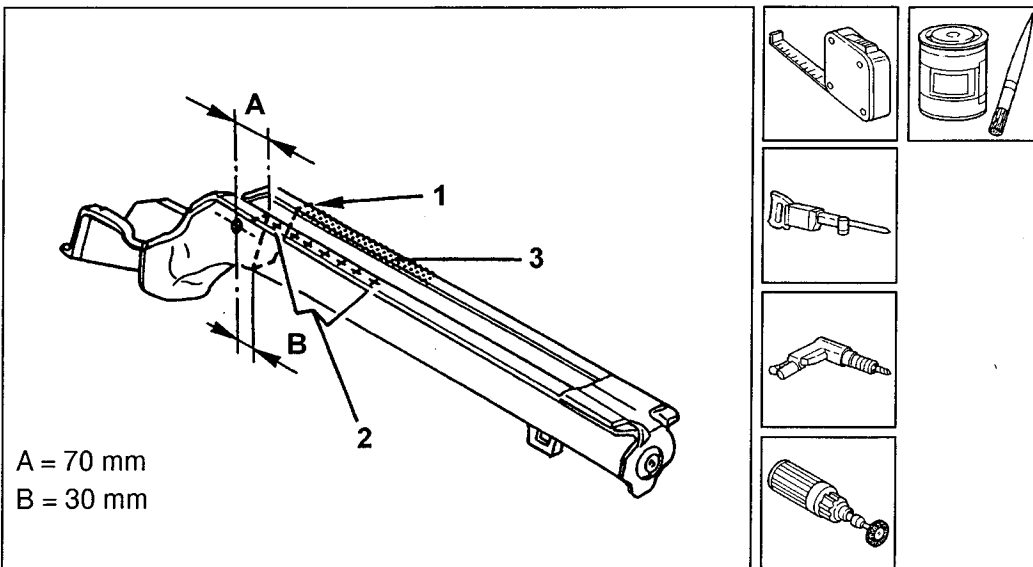
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



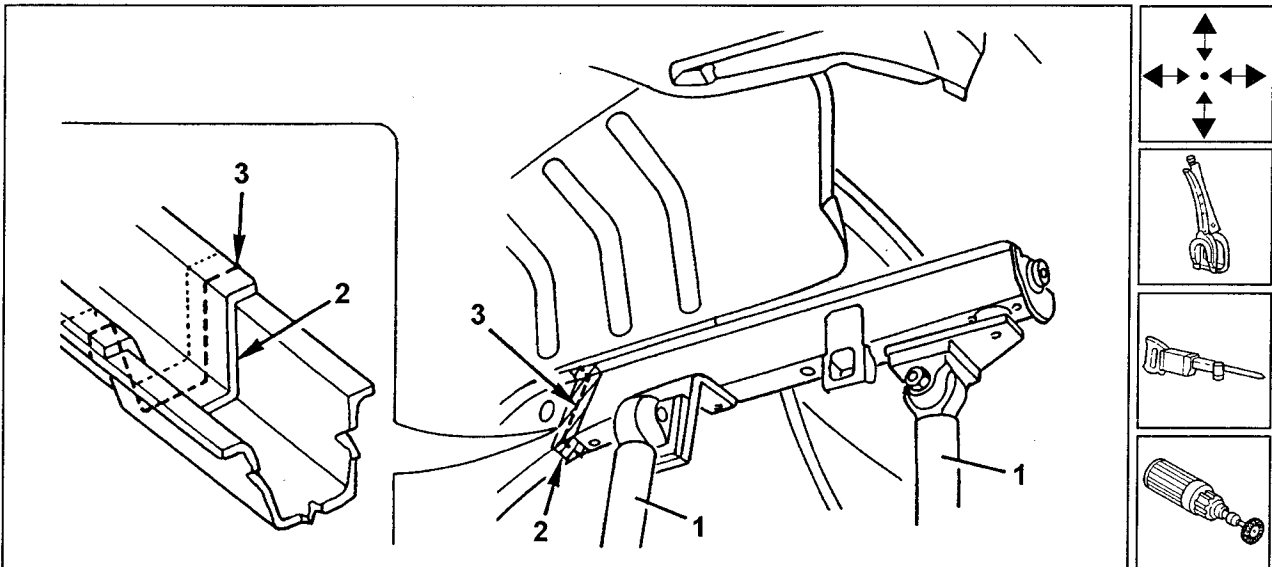
PREPARING THE SPARE - REAR SIDEMEMBER

1. Working on the bench and trace and cut the new sidemember using a pneumatic saw cutting according to the dimensions illustrated to keep a piece of sidemember for the overlap.
2. Trace and drill using a \varnothing 5 mm. bit, as illustrated.
3. Apply electro-galvanizing paint on the areas involved by spot welding.

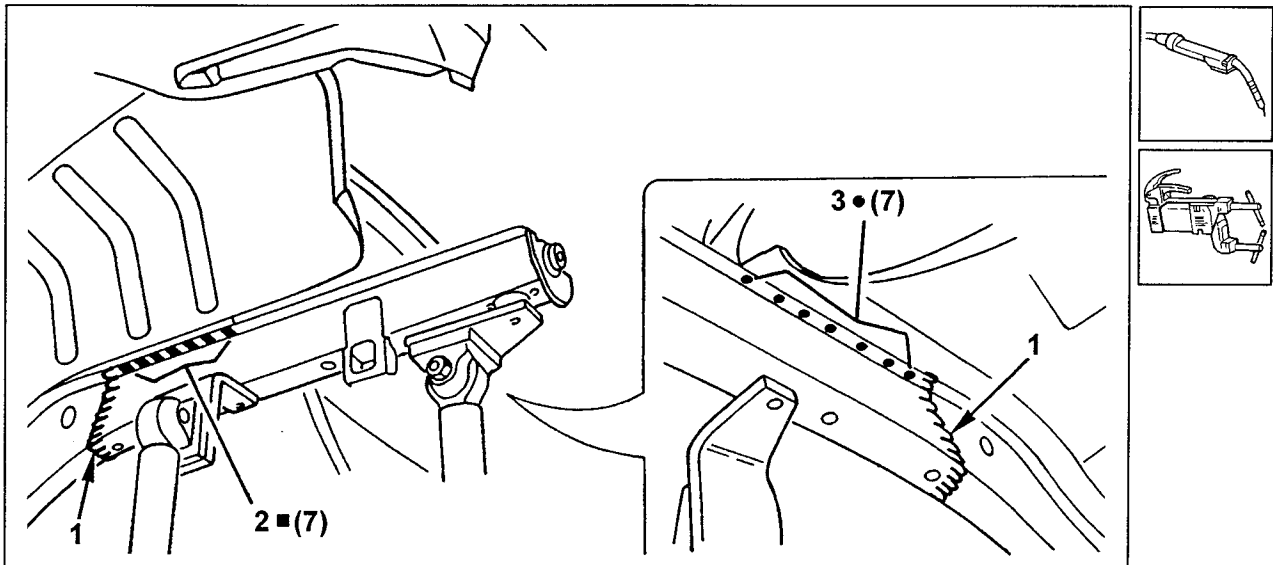


POSITIONING THE SPARE - REAR SIDEMEMBER

1. Position the sidemember correctly using the template.
 2. Overlay and clamp the components to be welded mating the edges and check alignment.
 3. Trim the sheets eliminating the excess, using a pneumatic saw; take care not to damage the parts above.
- Clean the areas involved by welding using a rotary brush.

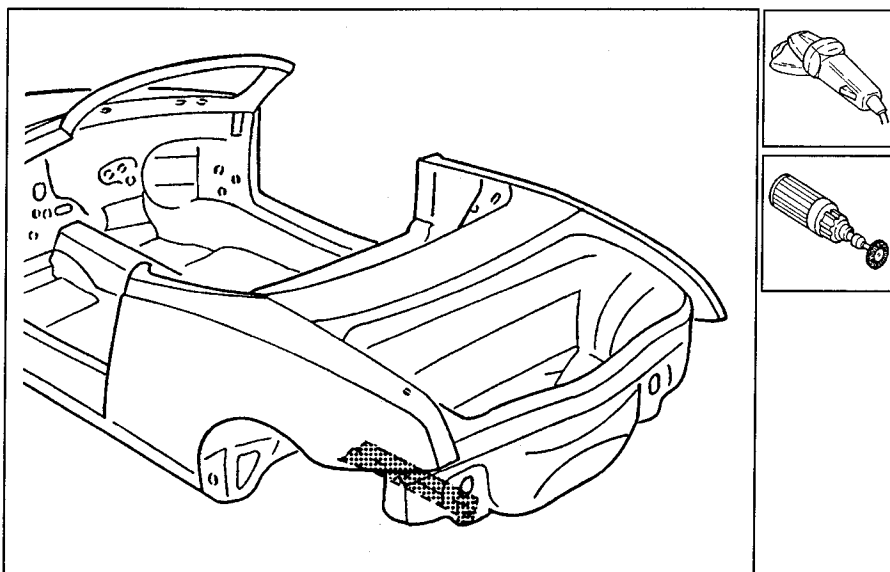
**WELDING THE SPARE - REAR SIDEMEMBER**

1. Seam weld using a MIG welder.
2. Fill weld using a MIG welder.
3. Spot weld as illustrated.



FINISHING OPERATIONS

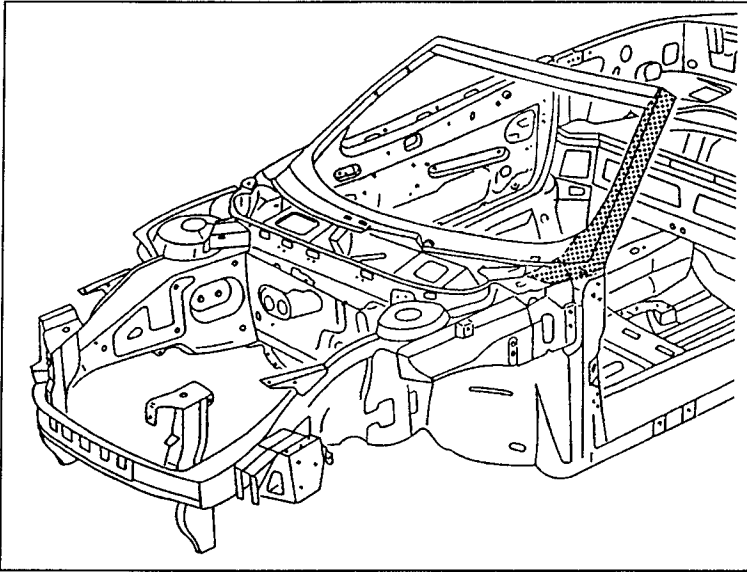
- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.



- Assemble the rear floor (see: "Replacing the Rear Floor").

PROTECTIONS

- Apply the rust-proofing protection in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE WINDSCREEN PILLAR

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

- Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

REMOVAL

1. Using a circular saw, cut the windscreen pillar following the lines illustrated, without damaging the part below. The section of sheet in the more important point is shown so that the operator can adjust the position and cutting depth to avoid damaging the sheet metal below.

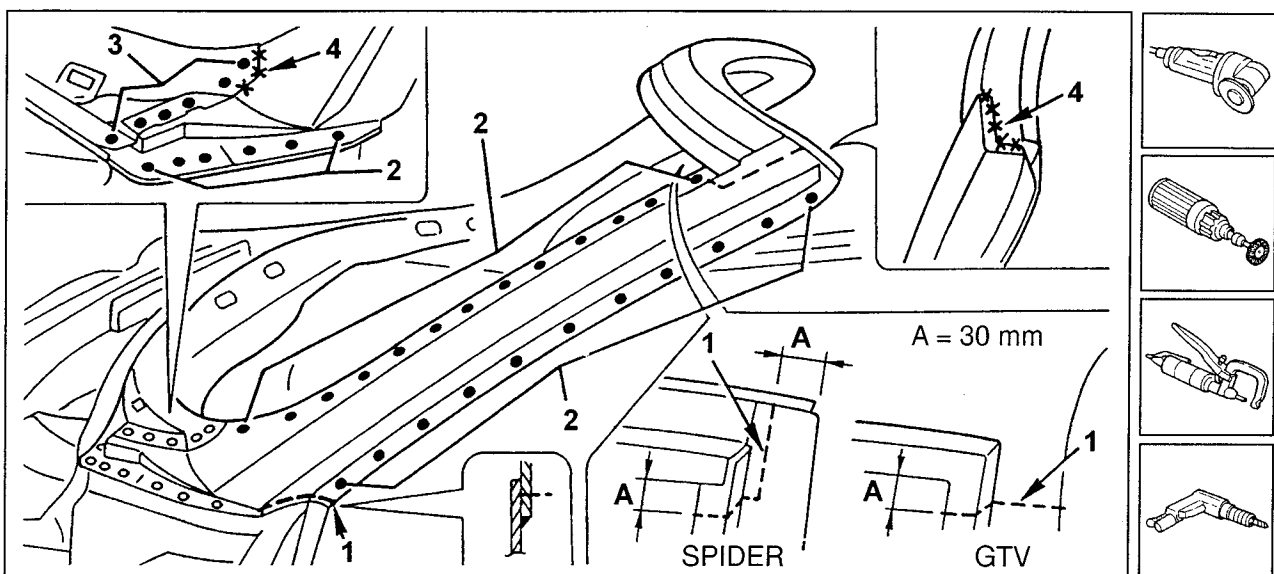
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.

2. Remove the welding spots using a de-welder.

3. Remove the welding spots using a drill.

4. Remove the braze welds in the areas illustrated (Spider only).

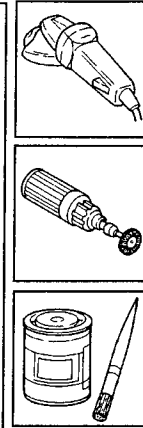
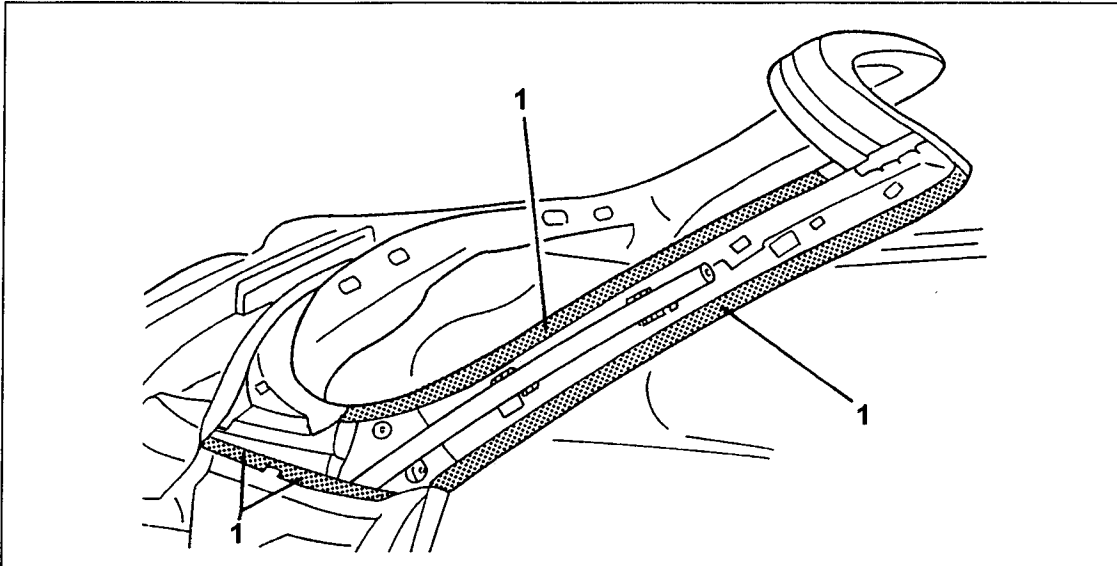
- Remove the front windscreen pillar.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

PREPARING THE EDGES OF THE BODY

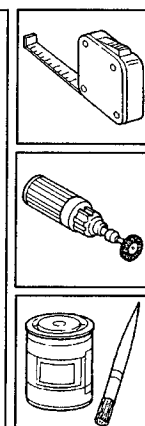
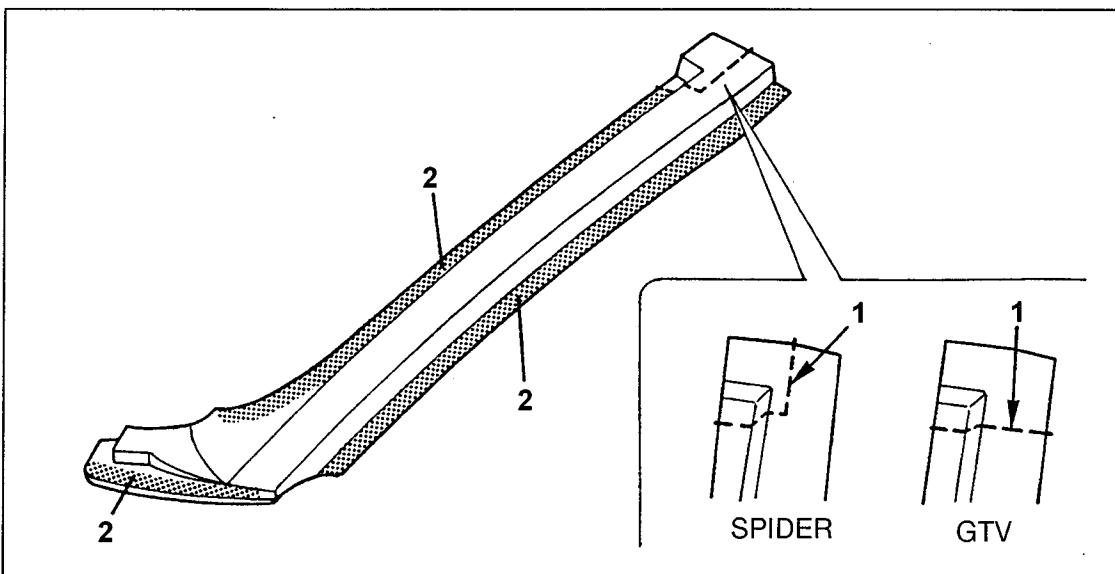
- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



PREPARING

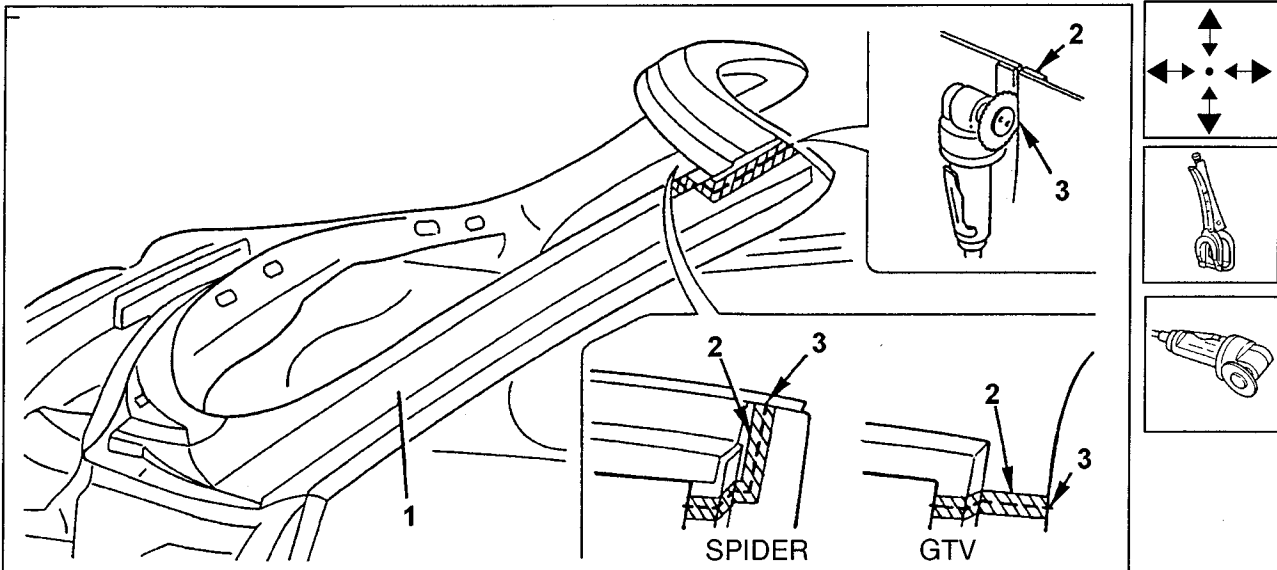
THE SPARE - WINDSCREEN PILLAR

1. Working on the bench trace the and cut the new pillar using a pneumatic saw and keeping a section of pillar for overlapping.
 - Clean the areas involved by welding on the vehicle, using a rotary brush.
2. Apply electro-galvanizing paint on the areas involved by spot welding.

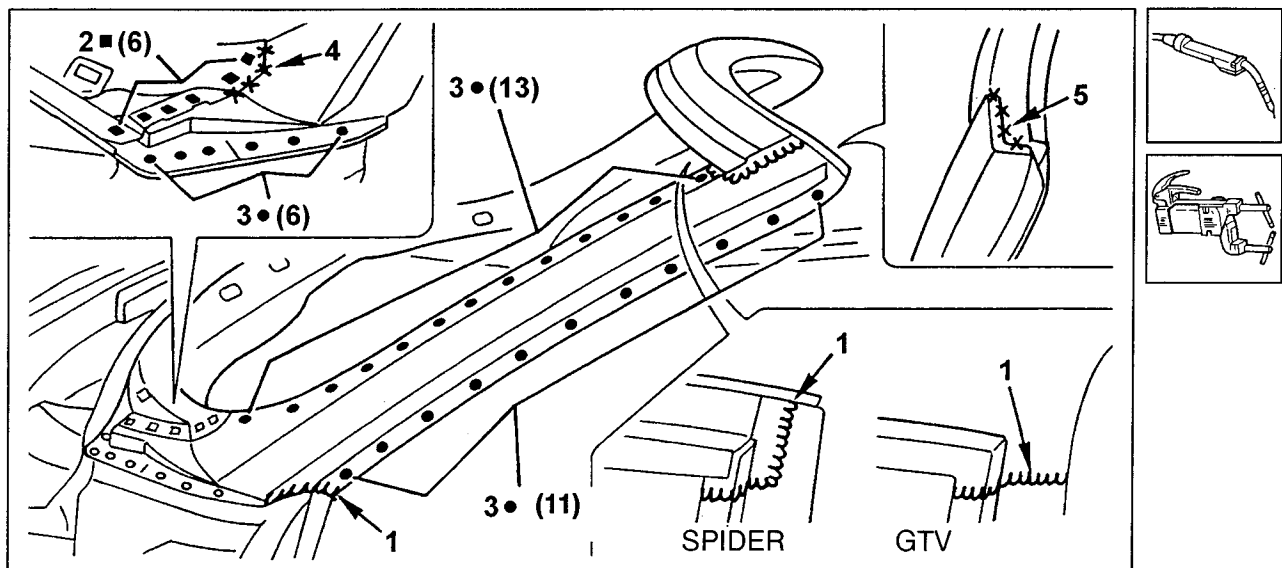


POSITIONING THE SPARE - WINDSCREEN PILLAR

1. Position the windscreen pillar correctly.
2. Overlay and clamp the components to be welded mating the edges and check alignment.
3. Trim the sheets eliminating the excess.

**WELDING THE SPARE - WINDSCREEN PILLAR**

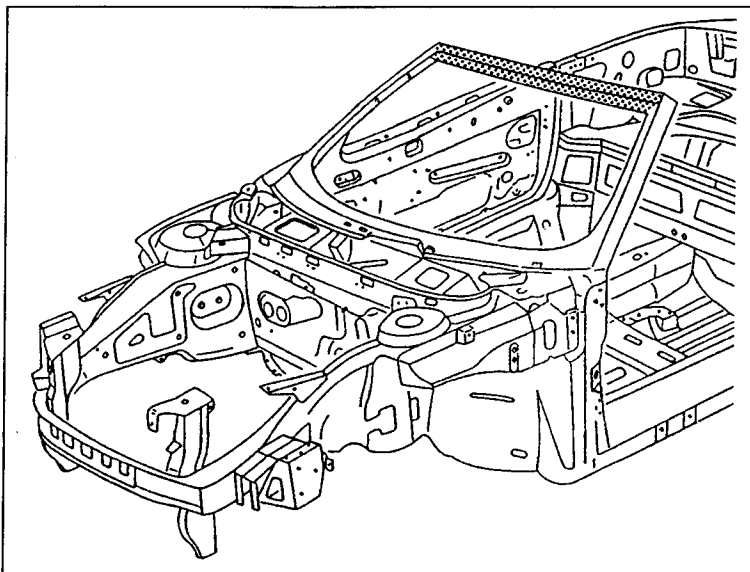
1. Seam weld using a MIG welder.
2. Fill weld using a MIG welder.
3. Spot weld, as illustrated.
4. Braze weld in the area illustrated.
5. Braze weld in the area illustrated (for Spider only).

**FINISHING OPERATIONS**

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing and foaming treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE UPPER WINDSCREEN CROSSMEMBER PANEL (only for SPIDER)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

After this operation check that the parts that do not need replacing are intact.

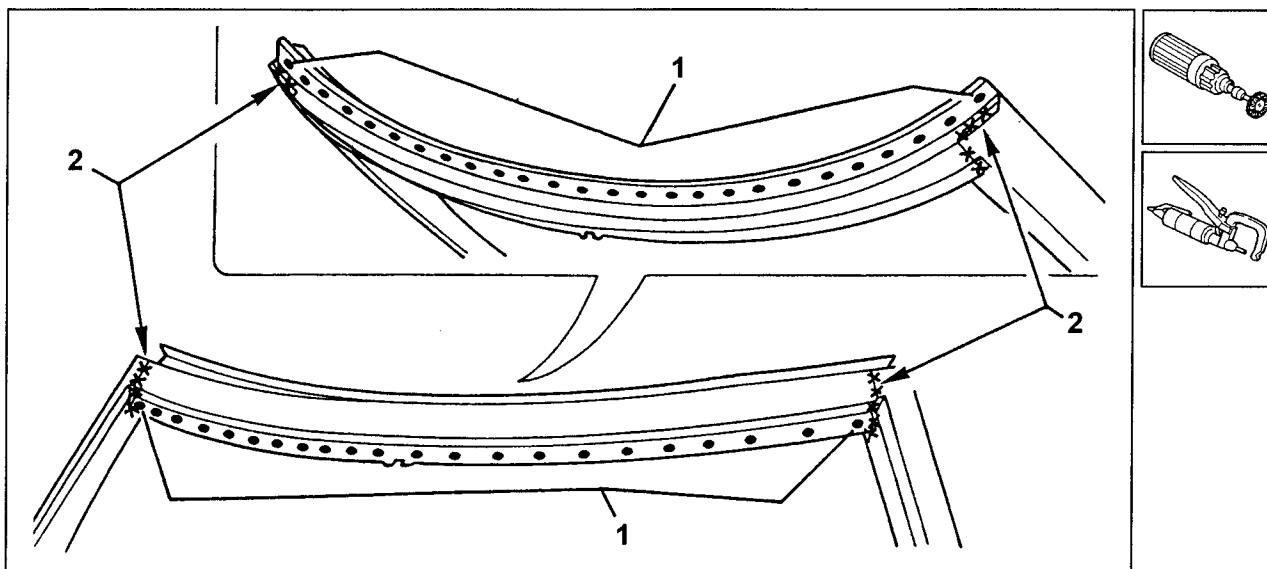
PRELIMINARY DIS-ASSEMBLY OPERATIONS

– Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

REMOVAL

– Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.

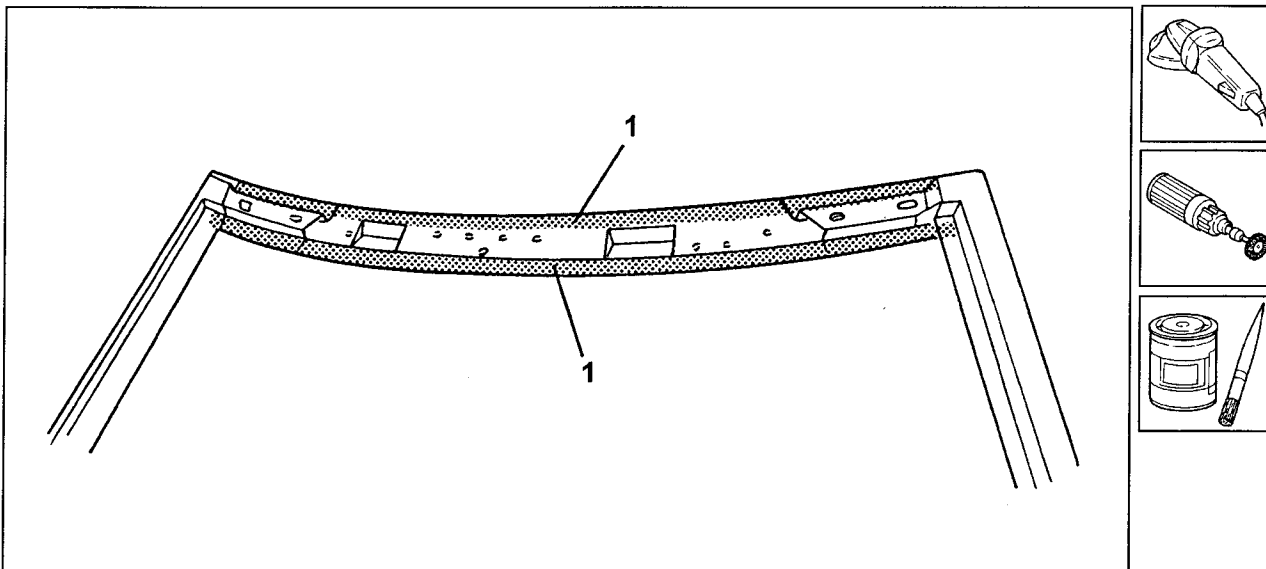
1. Remove the welding spots using a de-welder.
 2. Remove the braze welds in the areas illustrated.
- Remove the upper panel.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

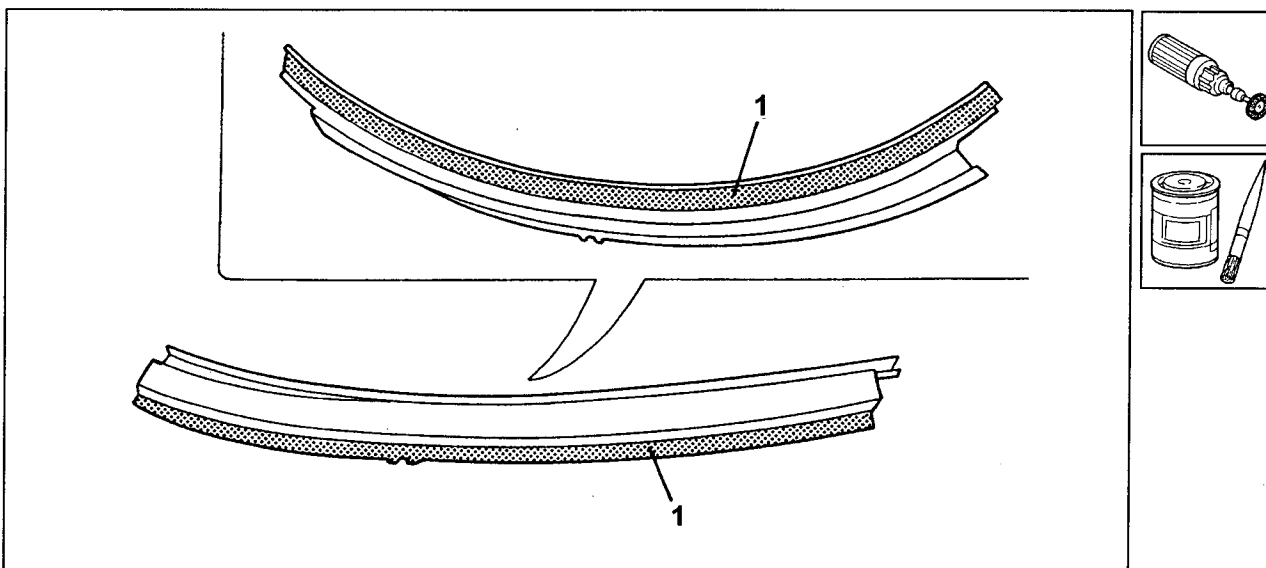
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



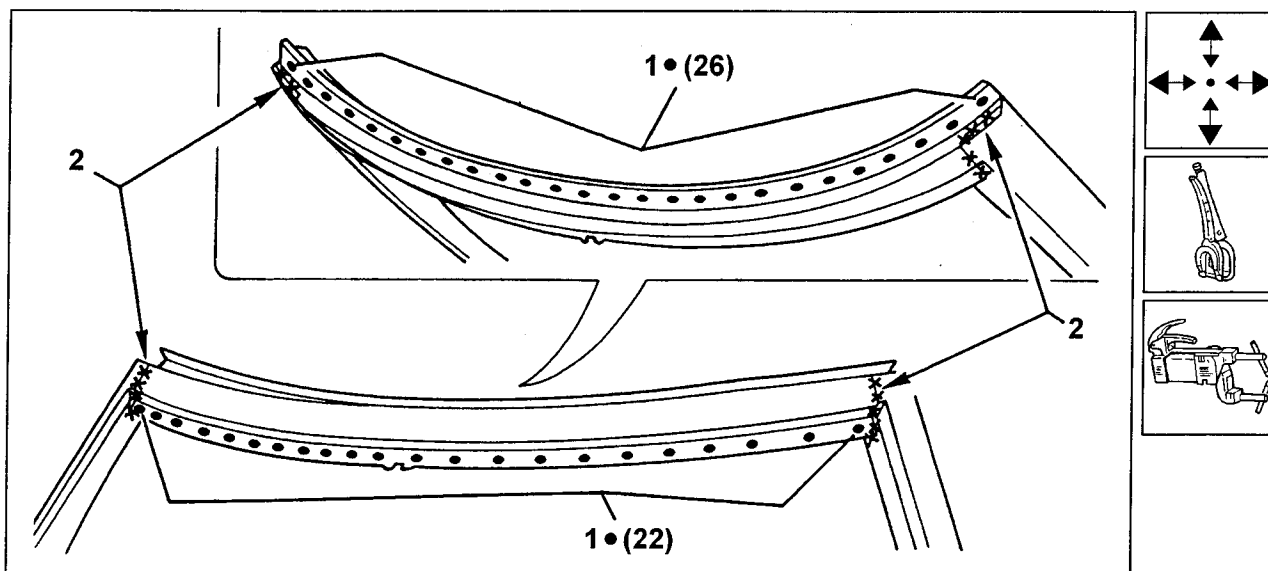
PREPARING THE SPARE - UPPER WINDSCREEN PANEL

- Clean the areas of the front crossmember involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint on the areas involved by spot welding.



POSITIONING AND WELDING THE SPARE - UPPER WINDSCREEN PANEL

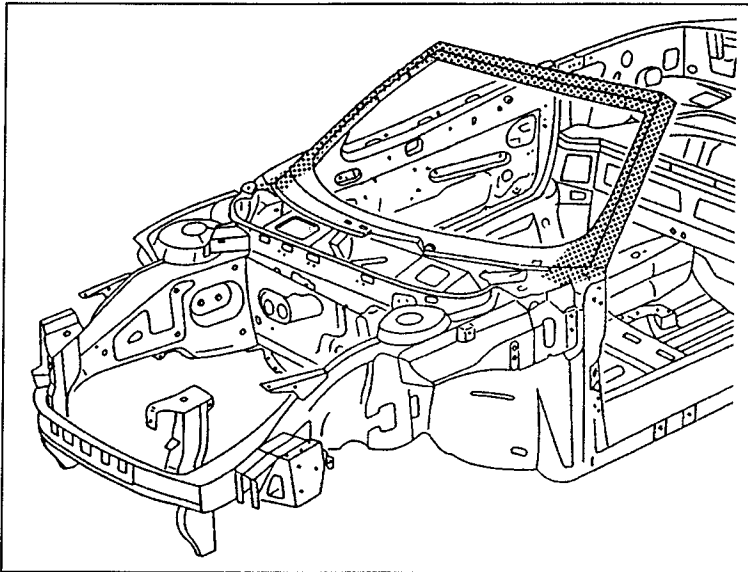
- Position the upper panel correctly.
 - Clamp the components to be welded mating the edges and check alignment.
1. Spot weld, as illustrated.
 2. Braze weld in the areas illustrated.

**FINISHING OPERATIONS**

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Seal the joints and carry out the rust-proofing treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting operations.



REPLACING THE WINDSCREEN FRAME COMPLETE (only for SPIDER)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

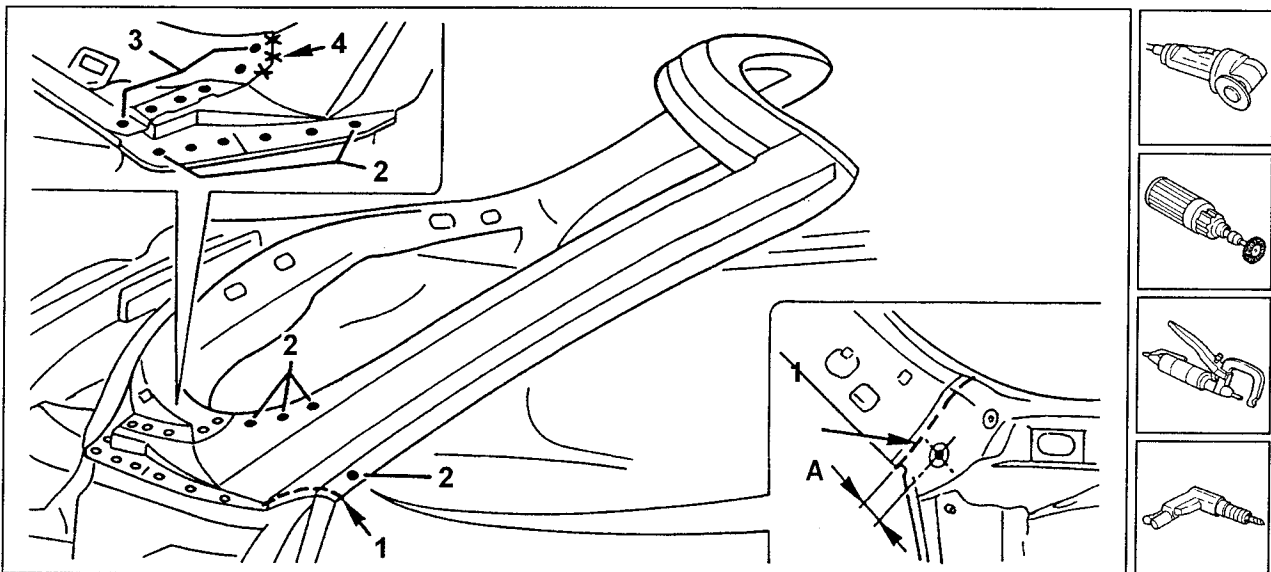
Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges). If necessary carry out body straightening operations before cutting the part. After this operation check that the parts that do not need replacing are intact.

PRELIMINARY DIS-ASSEMBLY OPERATIONS

– Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

REMOVAL

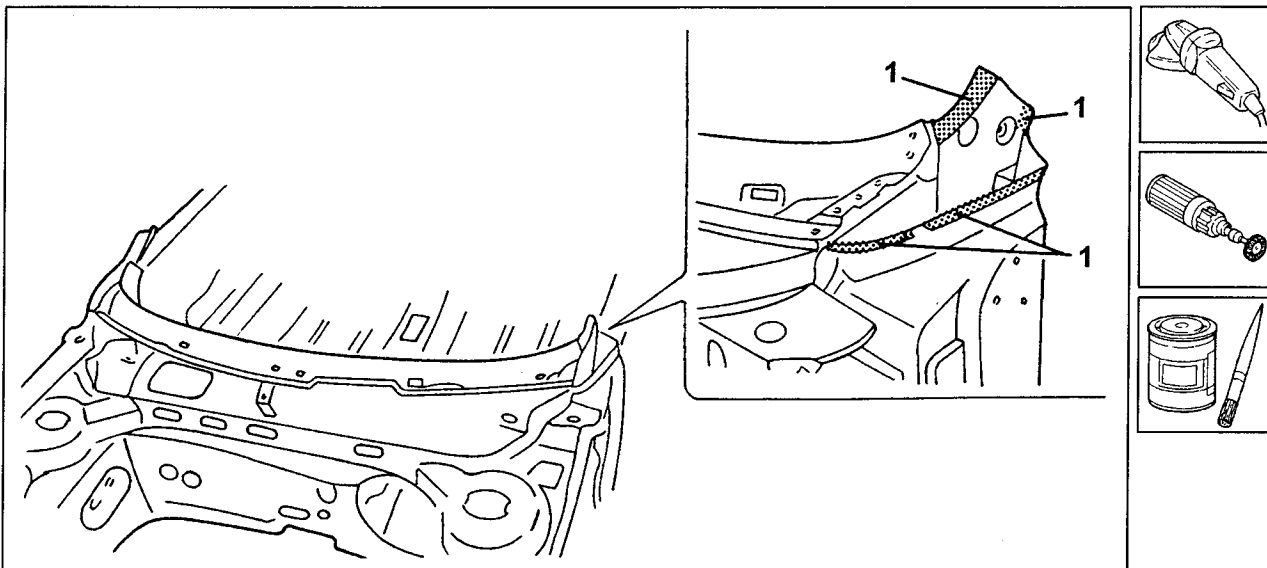
1. Using a circular saw, cut the windscreen pillar on both sides. following the lines illustrated, without damaging the part below.
- Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.
2. Remove the welding spots (from both sides of the windscreen) using a de-welder.
3. Remove the welding spots (from both sides of the windscreen) using a drill.
4. Remove the braze welds (from both sides of the windscreen) in the area illustrated.
- Remove the windscreen frame.



When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

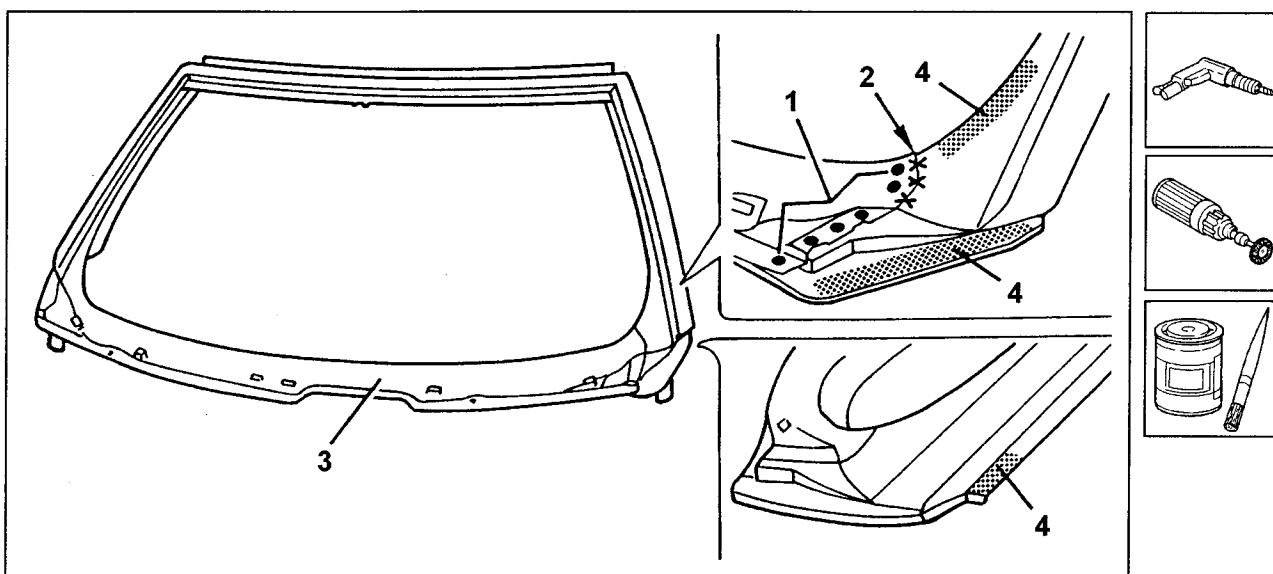
PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Clean the areas involved by welding, using a rotary brush.
1. Apply electro-galvanizing paint (from both sides of the windscreen) on the areas involved by spot welding.



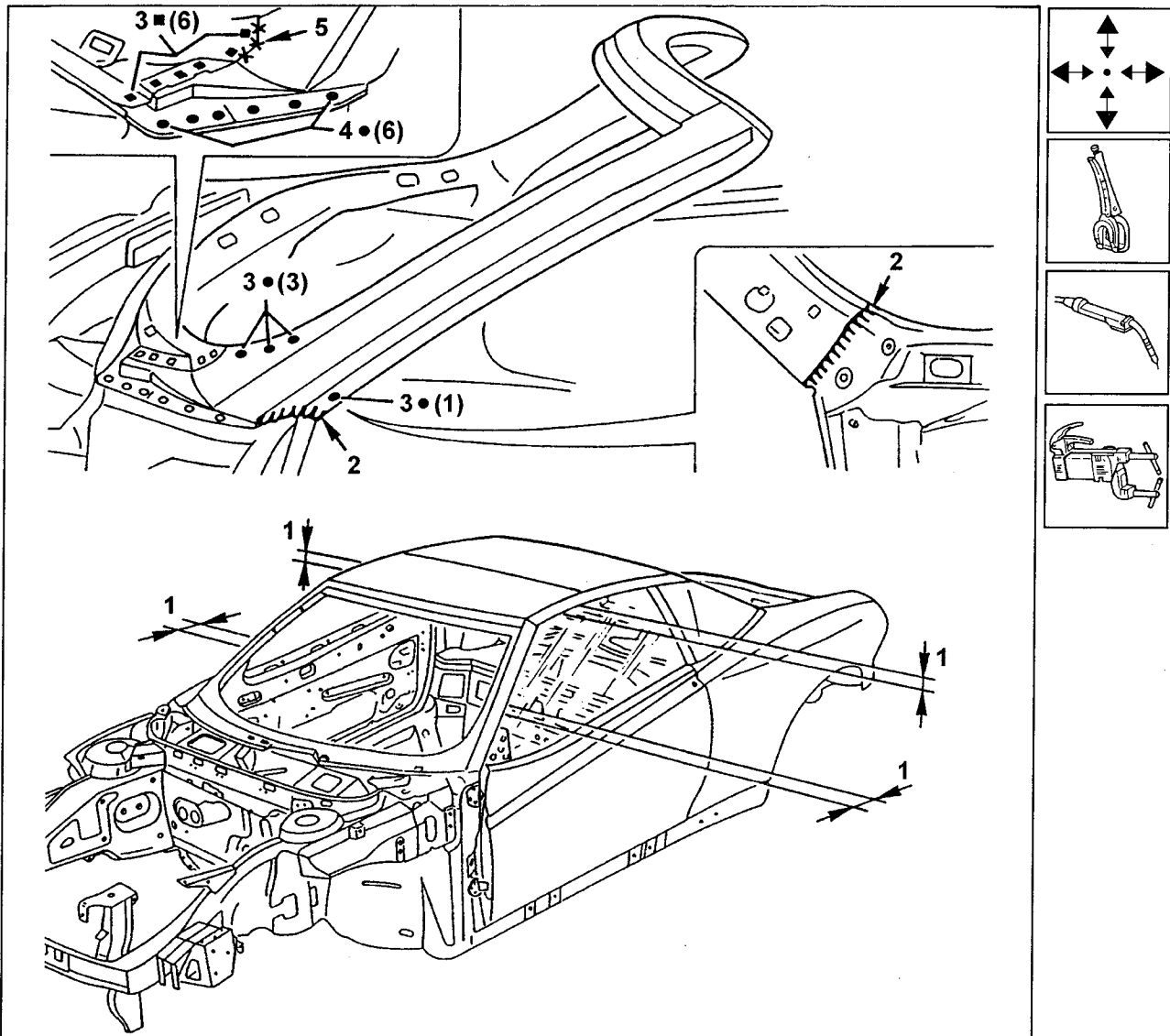
PREPARING THE SPARE - WINDSCREEN FRAME COMPLETE

1. Working on the bench, using a drill de-weld the front lower section of the windscreen frame (from both sides).
2. Remove the braze welds in the area illustrated (from both sides).
3. Remove the front lower section of the windscreen frame.
- Clean the areas involved by welding, using a rotary brush.
4. Apply electro-galvanizing paint on the areas involved by spot welding (from both sides).



POSITIONING AND WELDING THE SPARE - WINDSCREEN FRAME COMPLETE

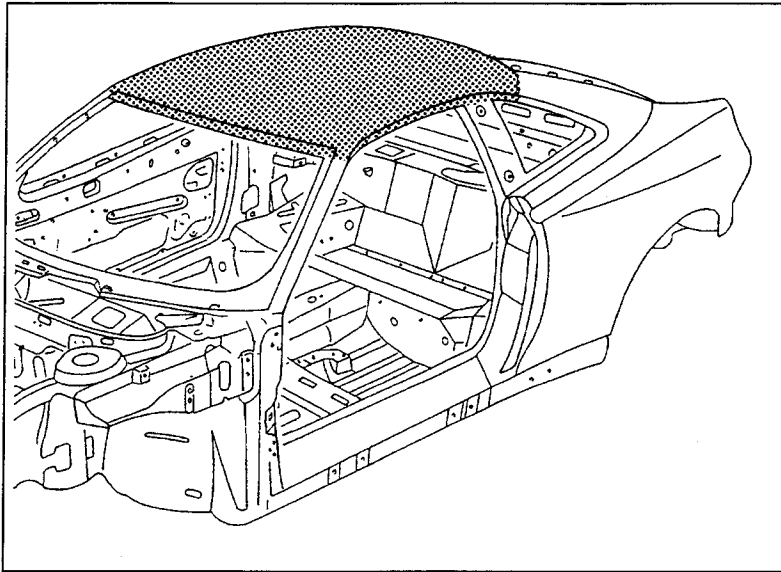
- Position the windscreen frame correctly.
- 1. Overlay and clamp the components to be welded mating the edges and check alignment.
(Carry out the following operations from both sides of the windscreen).
- 2. Seam weld using a MIG welder.
- 3. Fill weld using a MIG welder.
- 4. Spot weld as illustrated.
- 5. Braze weld in the area illustrated.

**FINISHING OPERATIONS**

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Apply rust-proofing in the area involved by MIG welding.
- Seal the joints and carry out the rust-proofing treatments referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting and waxing operations.



REPLACING THE ROOF (Only for GTV)

The part for which the replacement procedure is described is shown in the opposite diagram.

PRELIMINARY PROCEDURES

Establish the amount of damage, check the connected parts for buckling, controlling the body squaring dimensions given in the Manual using suitable measuring tools (locating benches, templates or gauges).

If necessary carry out body straightening operations before cutting the part.

After this operation check that the parts that do not need replacing are intact.

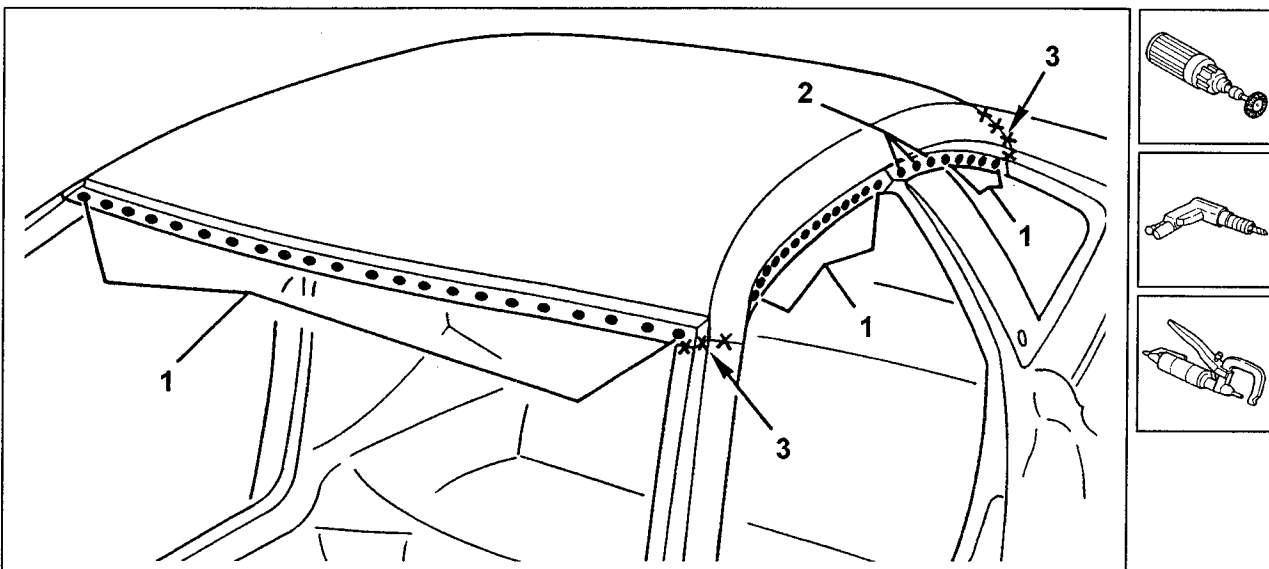
PRELIMINARY DIS-ASSEMBLY OPERATIONS

– Remove the mobile body components, inner trim, electrical and mechanical components that might hinder the repair operations or get damaged during them.

REMOVAL

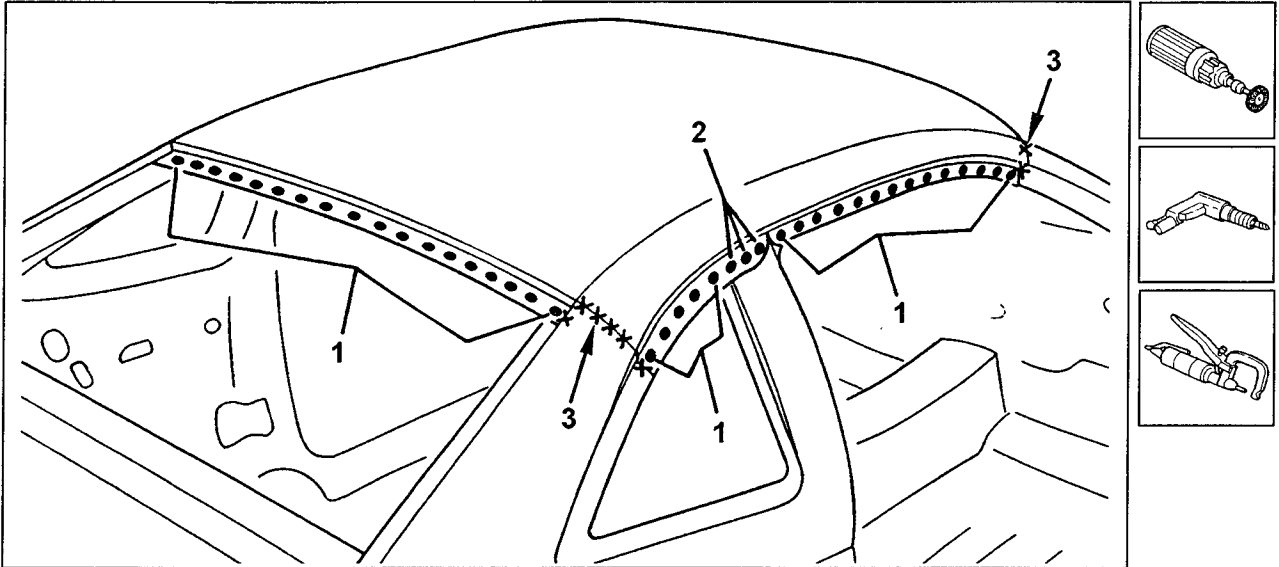
– Using a rotary brush, clean the areas to be de-welded to reveal the welding spots.

1. Remove the welding spots using a de-welder.
2. Remove the welding spots using a drill.
3. Remove the braze welds in the area illustrated.

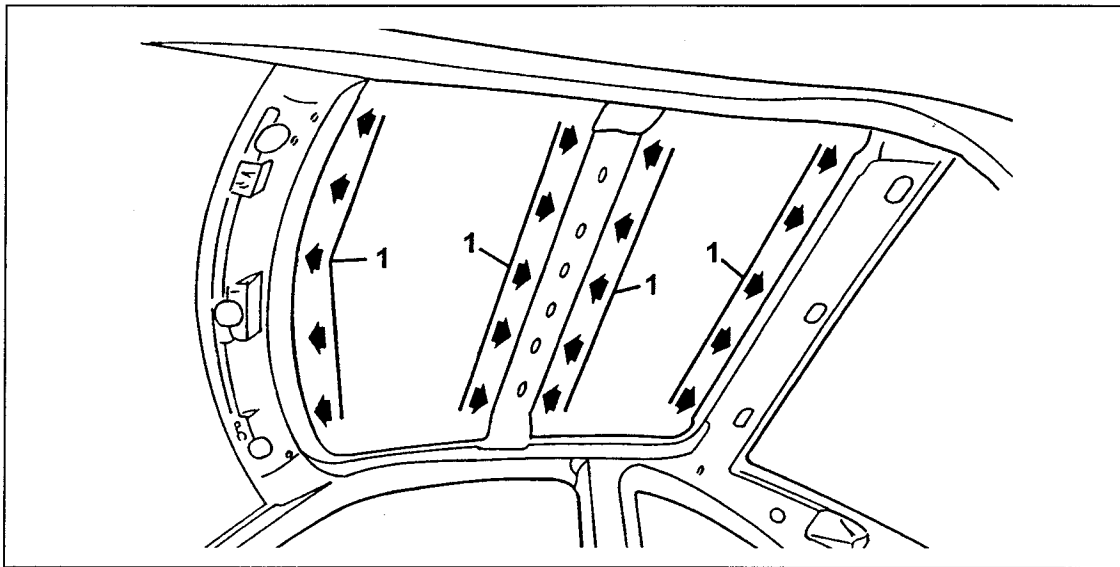


When carrying out the above-mentioned operations closely adhere to accident prevention regulations. Wear safety shoes, noise muffs and gloves when cutting, protective goggles, dust masks and gloves during sanding and brushing, mask and gloves during welding operations, mask and gloves during painting operations. Also see paragraph "PRECAUTIONS FOR OPERATORS".

- Using a rotary brush clean the area to be de-welded to reveal the welding spots.
- 1. Remove the welding spots using a de-welder.
- 2. Remove the welding spots using a drill.
- 3. Remove the braze welding in the area illustrated.

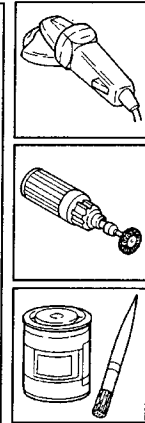
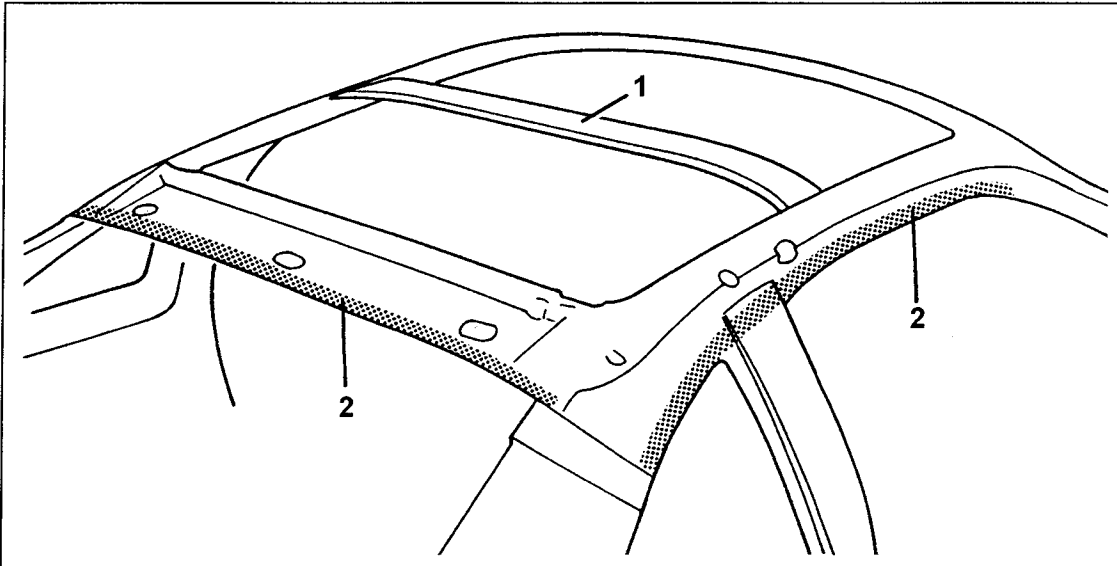


- 1. Remove the roof cutting the structural sealant along the areas illustrated.

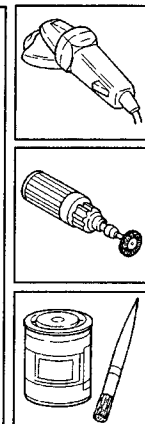
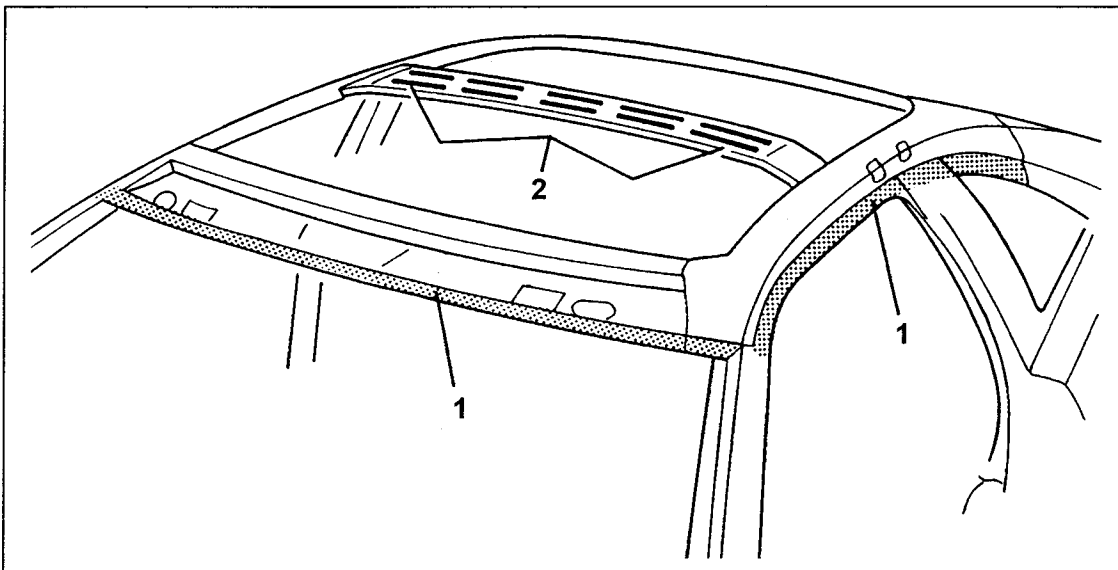


PREPARING THE EDGES OF THE BODY

- Straighten the edges of the body.
 - Remove the welding spot remains using a disk sander.
 - Remove all traces of sealant.
1. Remove all traces of the vibration damper product on the centre rib.
- Clean the areas involved by welding, using a rotary brush.
2. Apply electro-galvanizing paint on the areas involved by spot welding.

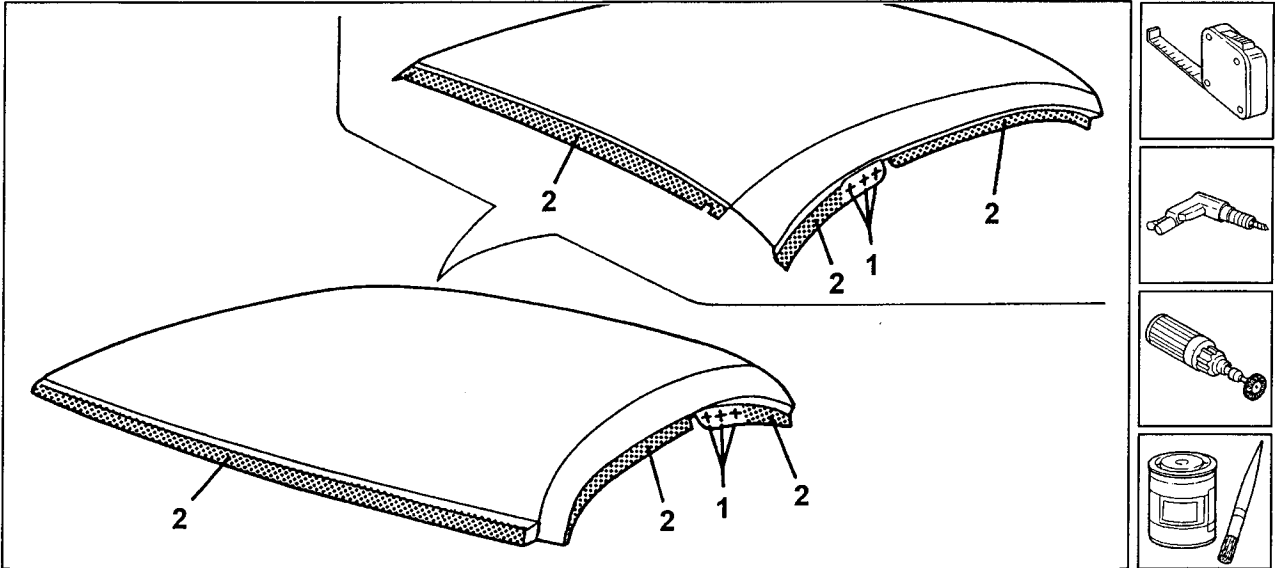


- Straighten the edges of the body.
 - Remove welding remains using a disk sander.
 - Remove all traces of sealant.
 - Clean the areas involved in welding using a rotary brush.
1. Apply electro-galvanising paint on the areas involved by spot welding.
 2. Apply the damping product on the centre rib, spreading as illustrated.



PREPARING THE SPARE - ROOF

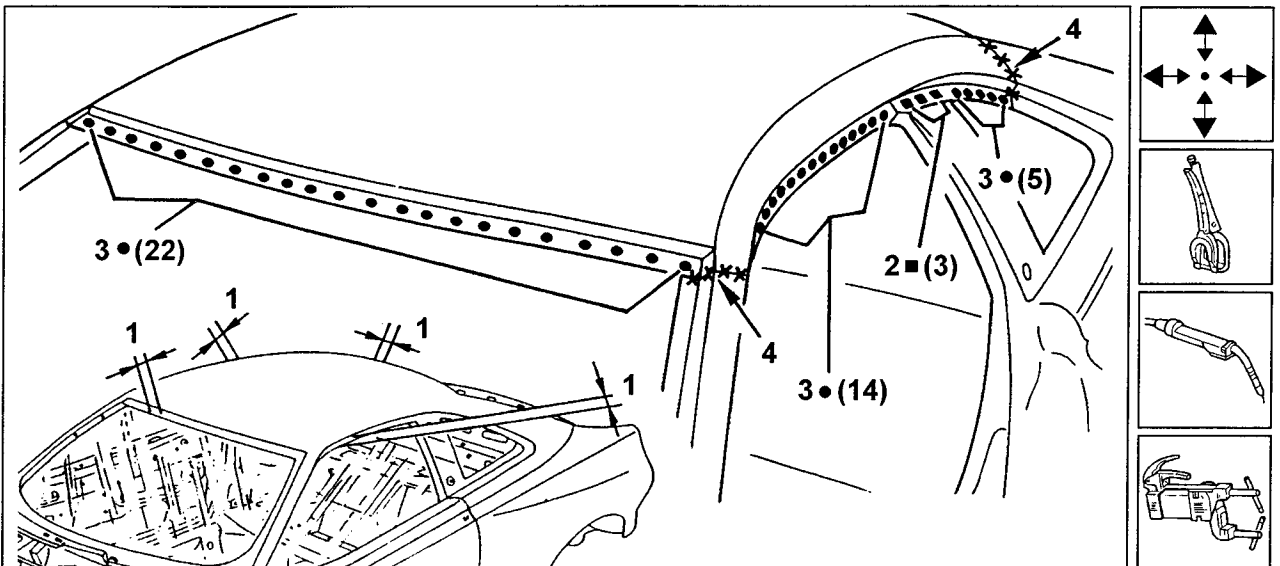
1. Working on the bench trace the roof and drill as illustrated using a $\varnothing 5$ mm bit.
- Clean the areas of the roof involved by welding using a rotary brush.
2. Apply electro-galvanizing paint on the areas involved by spot welding.



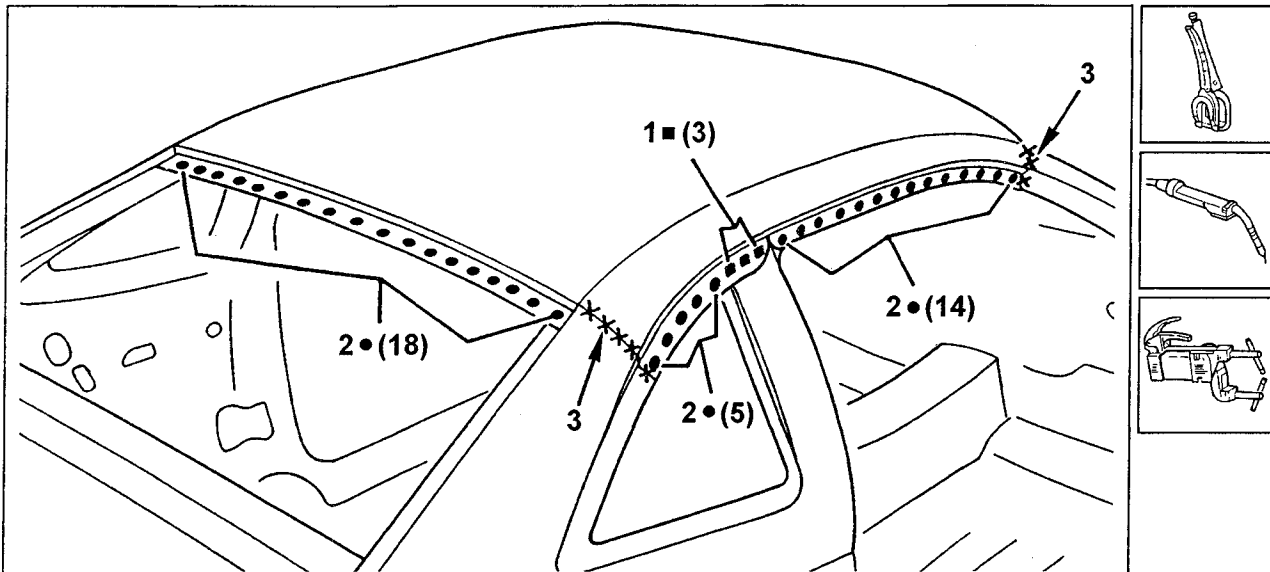
POSITIONING AND WELDING THE SPARE - ROOF

- Position the roof correctly.

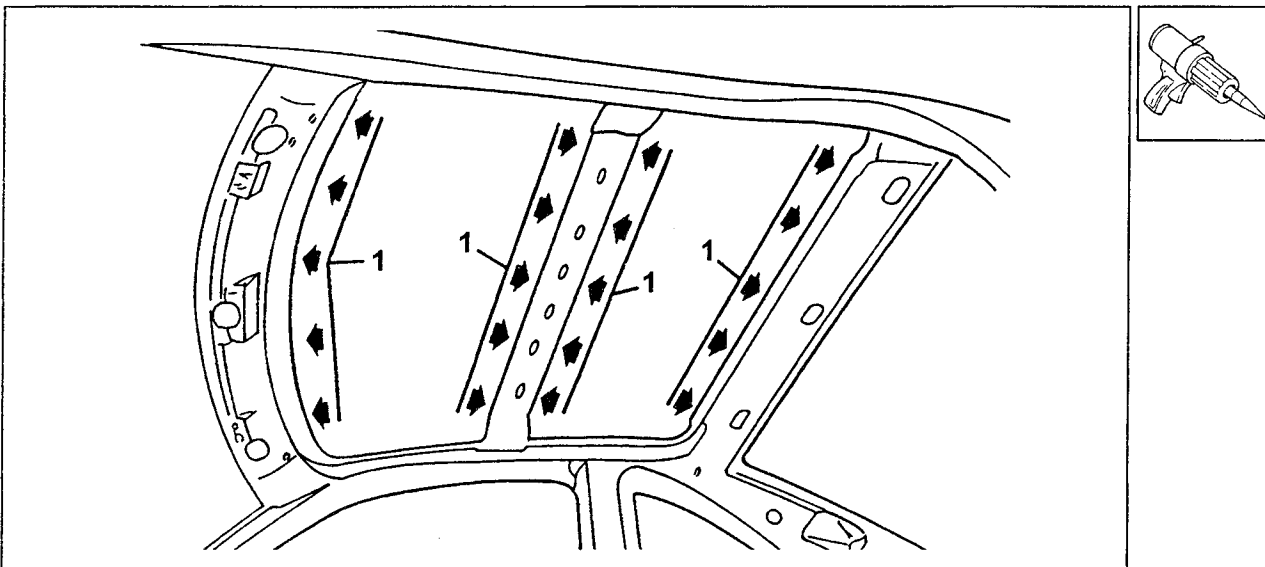
 1. Clamp the components to be welded mating the edges and check alignment.
 2. Fill weld using a MIG welder.
 3. Spot weld, as illustrated.
 4. Braze weld in the areas illustrated.



1. Fill weld using a MIG welder.
2. Spot weld, as illustrated.
3. Braze weld in the areas illustrated.



1. Apply structural sealant between the roof and ribs along the areas illustrated.



FINISHING OPERATIONS

- Remove and level remains of welding, using a sander.
- Clean the welded areas, using a rotary brush.

PROTECTIONS

- Apply rust proofing in the areas involved by MIG welding.
- Seal the joints and carry out the rust-proofing and foaming treatments, referring to the general tables given in the Manual for the areas to be treated and the products to be used.
- Proceed with painting operations.

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FOR THE INFORMATION NOT GIVEN HEREIN,
REFER TO THE CORRESPONDING GROUP OF
"Spider - Gtv".
THE REFERENCE ENGINE IS THE "6 CYLINDER "
(3.0 V6 ENGINE)