

# Side Sill

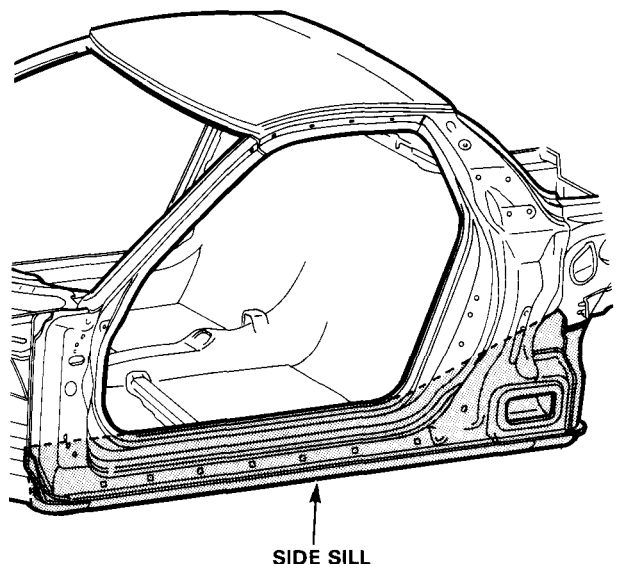
## Replacement

1. Remove the related parts.
  - Front and rear fenders
  - Door
  - Side sill panel
  - Rear pillar panel
  - Door opening trim
  - Carpet
  - Driver's & passenger's seats
  - Seat belt
  - Fuel tank, fuel fill pipe (left side only)
  - NSX-T(open top):Windshield and rear window

### **⚠ WARNING**

**Do not smoke while working near the fuel system. Keep open flame away from the fuel system. If necessary, remove the fuel tank and/or lines before welding nearby. Drain fuel into an approved container.**

2. Pull out and straighten the damaged area.
  - Attach the car to the frame straightener by tightening the underbody clamps located at the jack-up points on the bottom of the side sill and the side sill side flanges.
  - To protect the car body from damage, place a piece of aluminum plate on each clamping section and tighten the clamps.
  - The collision damage may extend to the front floor, front pillar, etc. Check for the damaged sections carefully and pull them out with the frame straightener to reshape.
  - Before pulling out the damaged sections, it might be necessary to heat the sections with an acetylene torch (see page [2-31](#)).

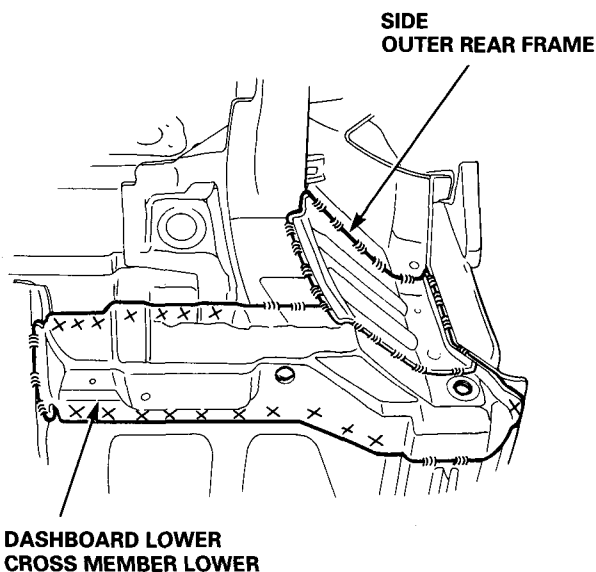


3. Peel off the undercoat.

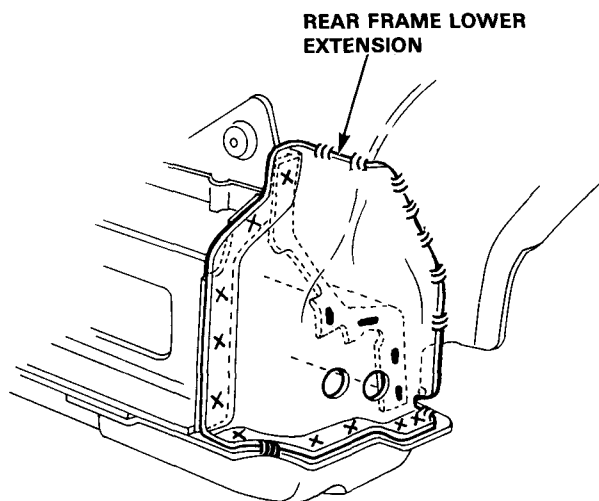
Heat the undercoat at the weld areas of the front floor, side outer rear frame and dashboard lower cross member lower with a gas torch and peel off a metal spatula.

**CAUTION:** Be careful not to burn the finings inside the passenger compartment when heating.

4. Remove the side outer rear frame and dashboard lower cross member lower.



5. Drill the rear frame lower extension and remove it.



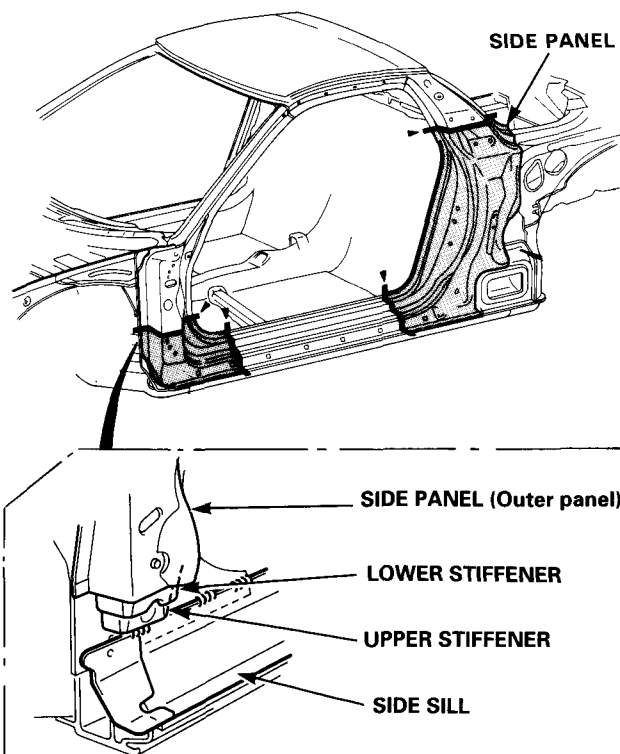
6. Remove the side panel.

- If necessary, replace the dashboard upper side extension (see page 4-21).
- Strike a punch in the center of the spot welds in side panel and drill the spot welds using a 8 mm (5/16") spot cutter.

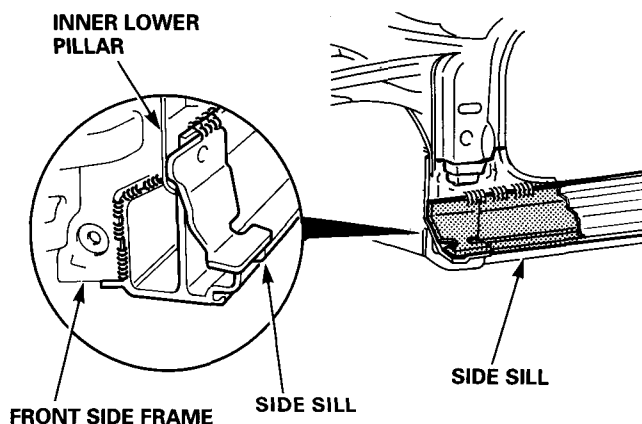
**Coupe:**

- Cut the side panel as shown and remove them.

**NOTE:** Be careful not to damage the inner section.



- Grind the fillet weld of the side sill, inner lower pillar and front side frame joints using a rotary cutter.

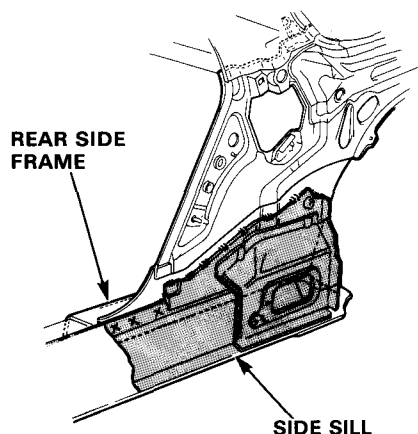


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# Side Sill

## Replacement (cont'd)

- Grind the fillet weld of the side sill and rear side frame joint using a rotary cutter.

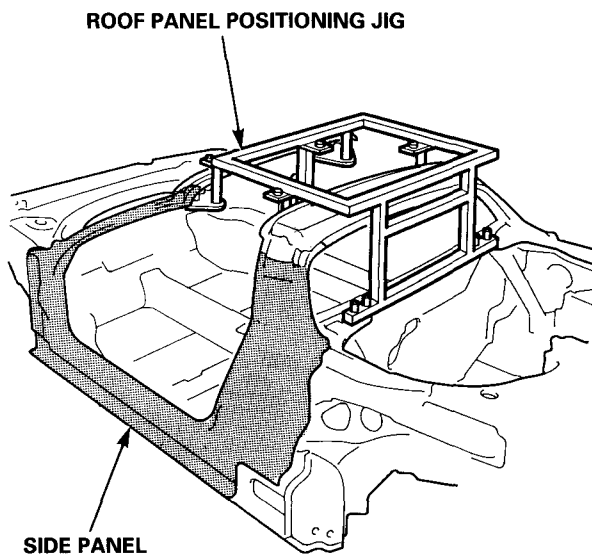


### NSX-T (open top):

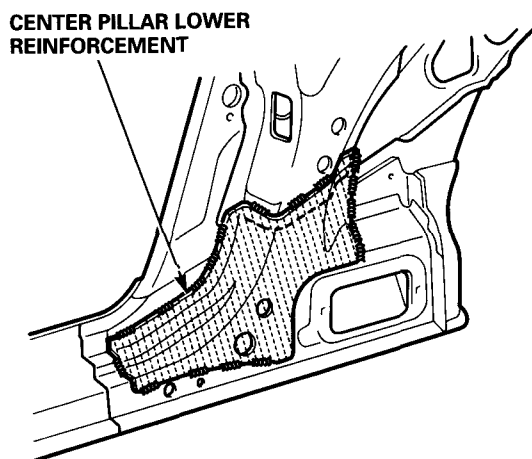
- Remove the side panel (see page 4-22).

NOTE: Use a roof panel positioning jig is recommended.

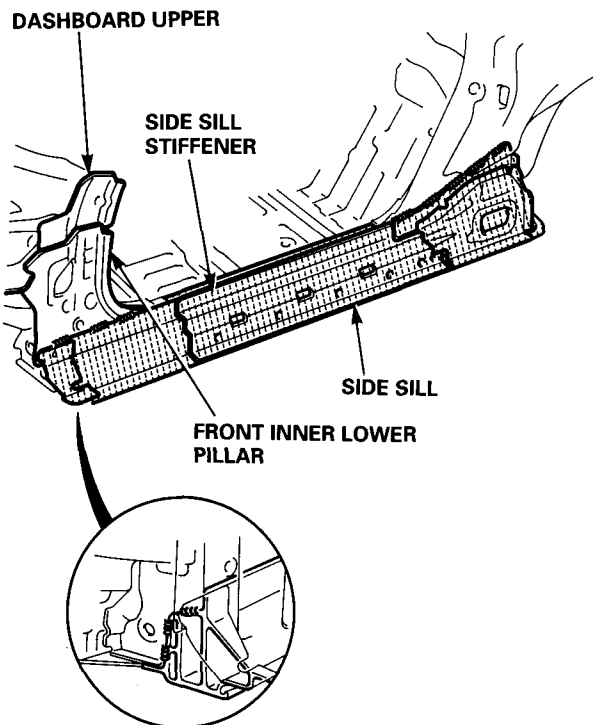
- Install the roof panel positioning jig as shown.



- Remove the center pillar lower reinforcement using a rotary cutter.

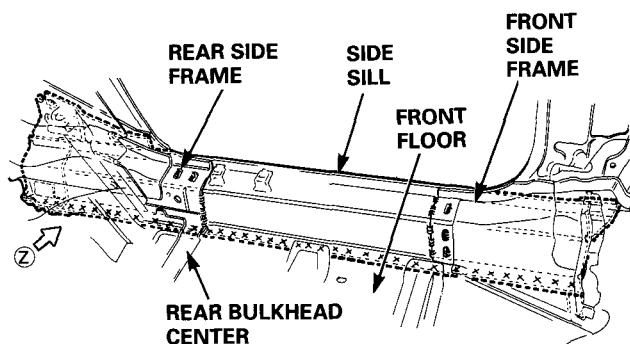


- Grind the fillet weld of the side sill, front inner lower pillar, front side frame joints using a rotary cutter.

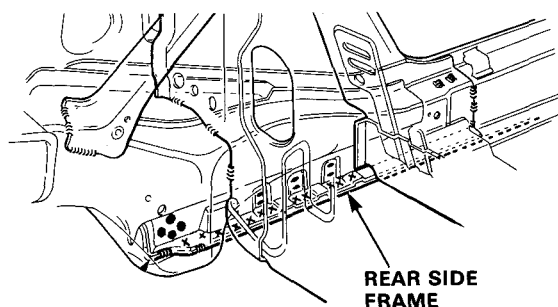


7. Remove the side sill.

- Strike a punch in the center of the spot welds in the side sill, front floor, front side frame, and rear side frame.
- Drill the spot welds using a 10 mm (3/8") spot cutter and plug weld using a 15 mm (5/8") spot cutter (hole saw type).
- Grind the fillet weld of the side sill/front and rear side frames joint using a rotary cutter.



VIEW ②

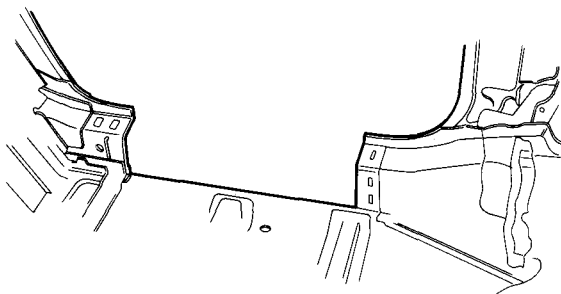


8. Mold the related parts.

- Remove the welding flanges using a chisel.
- Correct the front floor and inner pillar using a hammer and dolly.
- Remove the burrs from the spot welds and MIG welds using a disc sander.

**▲ WARNING**

To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.



NOTE: Check the reshaped parts for cracks (see page 2-29).

9. Set the new side sill.

- Remove the undercoat from the welding sections of the side sill and expose the aluminum alloy base using a disc sander.

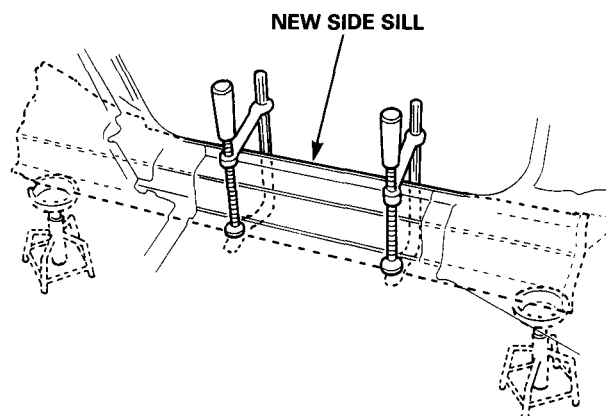
**▲ WARNING**

To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.

- Remove the undercoat and paint film from the welding section of the body and clean oil contaminations with shop towel soaked with wax and grease remover.
- Before setting the side sill, remove the oxide film from the welding section of the replacement part and body using a stainless steel wire brush.

NOTE: Keep the body level.

- Clamp the new side sill in place with screw clamps.



10. Tack weld the side sill at the clamp positions.

**▲ WARNING**

To prevent eye injury and burns when welding, wear an approved welding helmet, gloves and safety shoes.

NOTE: Check the front and rear side frames positions using the body dimensional drawings (see section 6).

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# Side Sill

## Replacement (cont'd)

### 11. Set the new side panel

- Clamp the side panel in place with vise-grips.
- Temporarily mount the front fender, door, and rear fender.

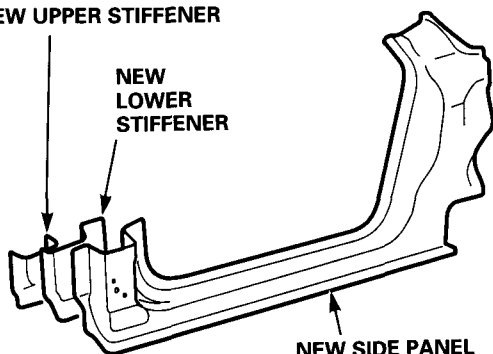
NOTE: Check the body dimensions (see [section 6](#)).

#### Coupe:

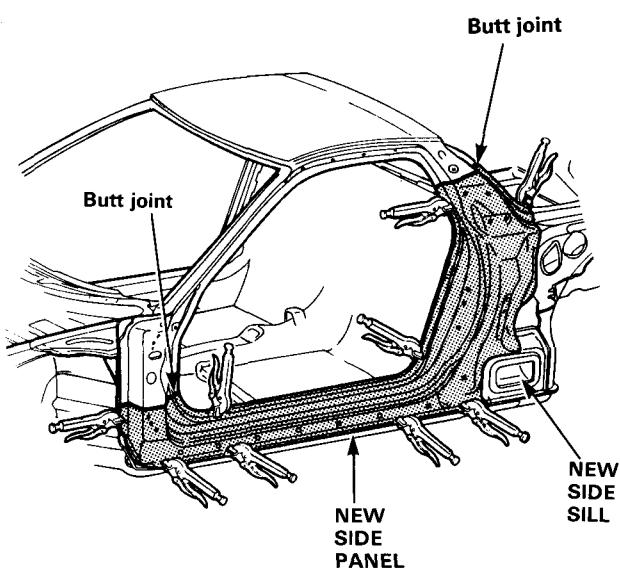
- Remove the upper stiffener and lower stiffener from the new side panel.
- Cut the new upper and lower stiffeners so it overlaps the body side stiffeners by approximately by more than 15 mm (0.6 in).
- Align the new side panel with the top cut section, then cut it with a handsaw.

NEW UPPER STIFFENER

NEW LOWER STIFFENER

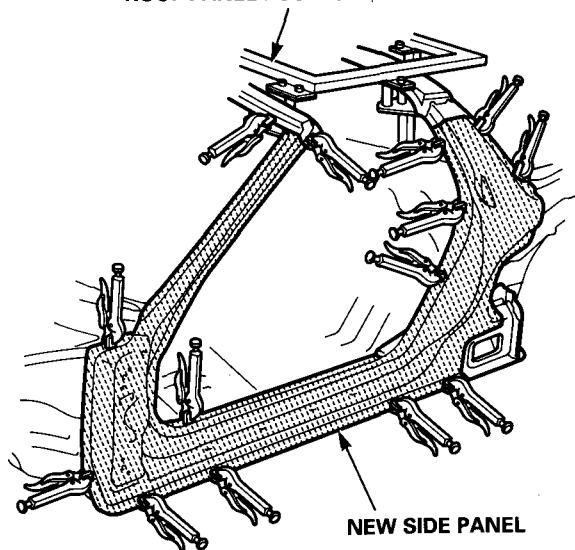


NEW SIDE PANEL



### NSX-T (open top):

ROOF PANEL POSITIONING JIG



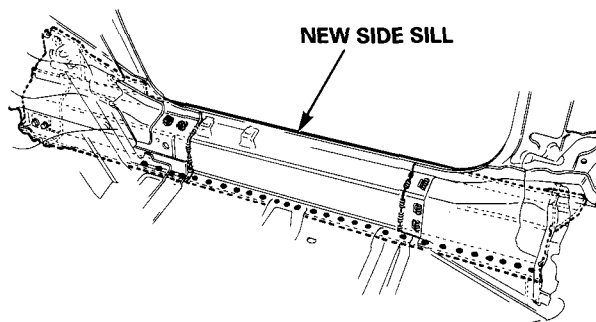
- Remove the new side panel.

### 12. Perform the main welding.

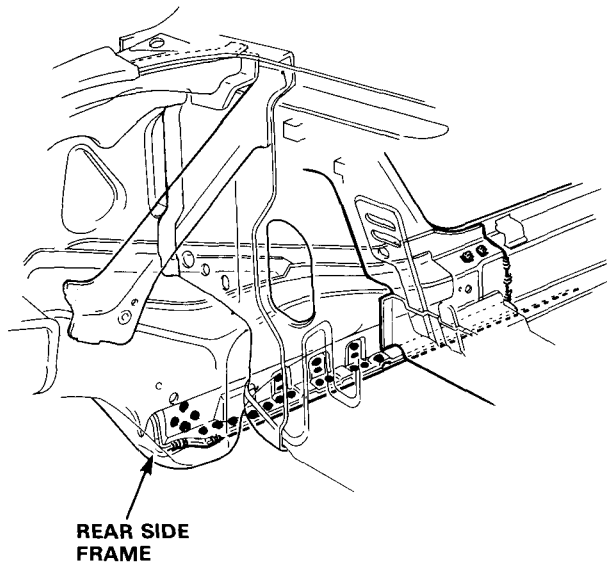
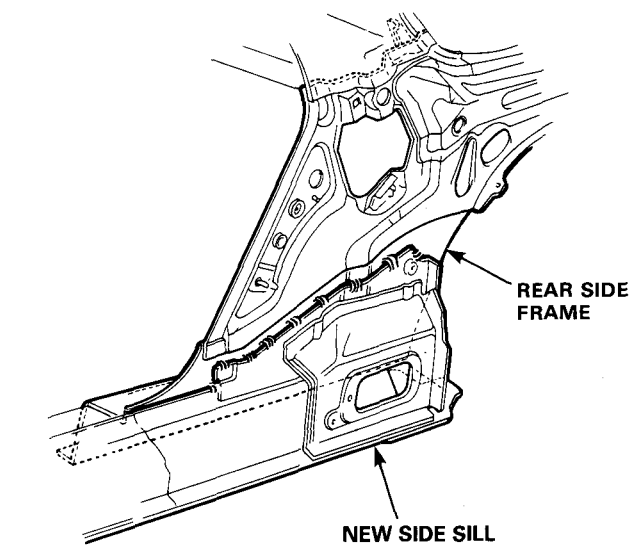
**⚠ WARNING** To prevent eye injury and burns when welding, wear an approved welding helmet, gloves and safety shoes.

- Before welding, perform the trial welding following the welder manufacturer's instructions.
- Remove the oxide film from the welding sections using a stainless steel wire brush.
- The applicable welding methods are the MIG welding, plug welding, or fillet welding.
- Check the welding sections for cracks (see page 2-29).

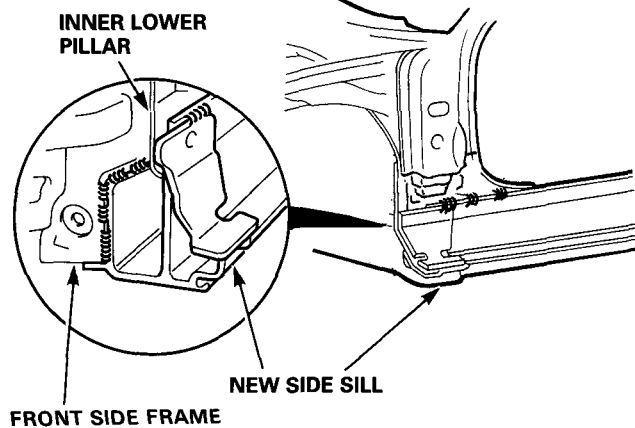
- Weld the floor.



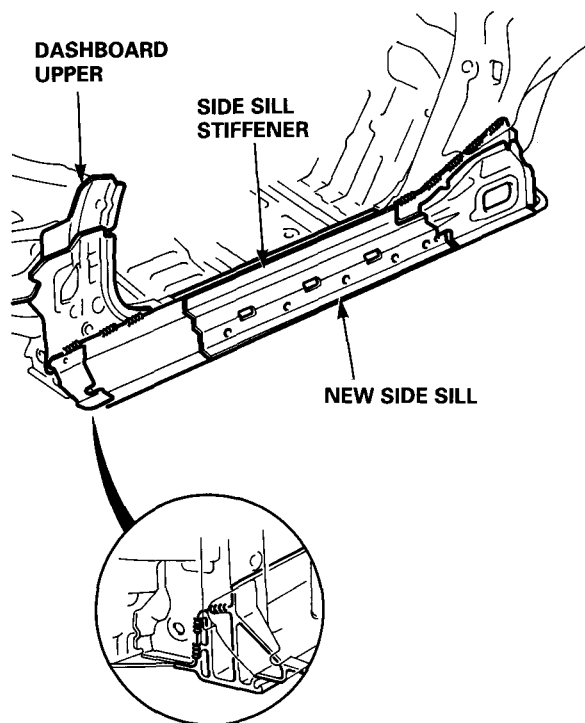
- Weld the side sill rear and front.



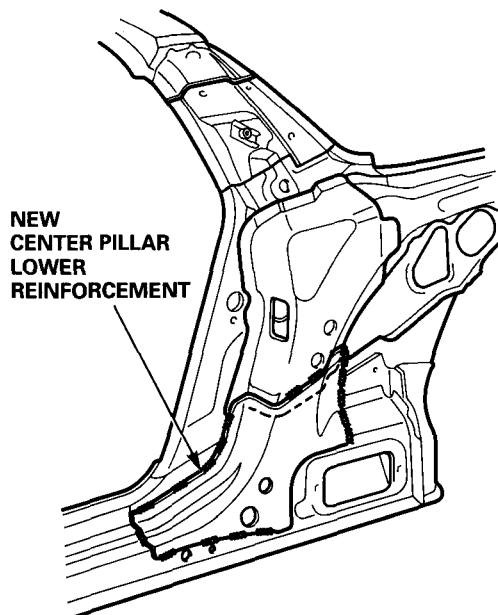
Coupe:



NSX-T (open top):



- Weld the new center pillar lower reinforcement.



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# Side Sill

## Replacement (cont'd)

13. Weld the new side panel (see page 4-21).

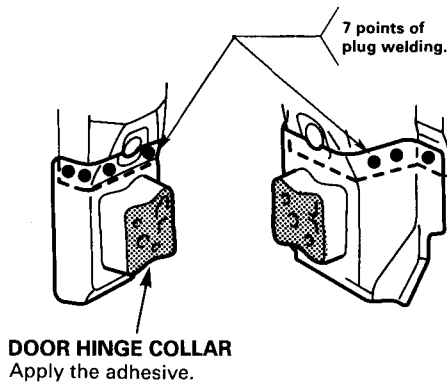
**⚠ WARNING** To prevent eye injury and burns when welding, wear an approved welding helmet, gloves and safety shoes.

- Drill the 8 mm (5/16") plug weld holes in the welding flange of the new side panel.
- Remove the undercoat from the welding sections of the side panel and expose the aluminum alloy base using a disc sander.
- Before welding, remove the oxide film from the welding section using a stainless steel wire brush.

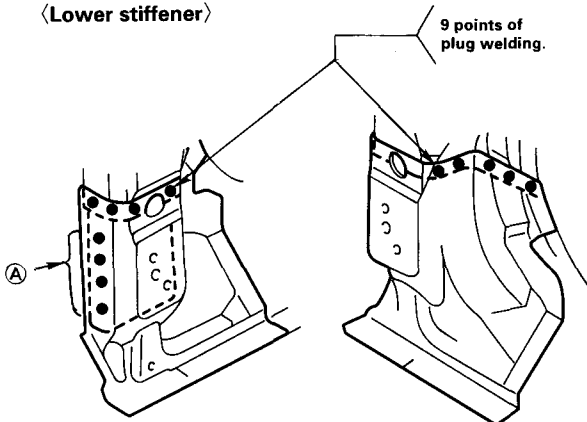
### Coupe:

- Plug weld the new upper stiffener and new lower stiffener.

#### ⟨Upper stiffener⟩

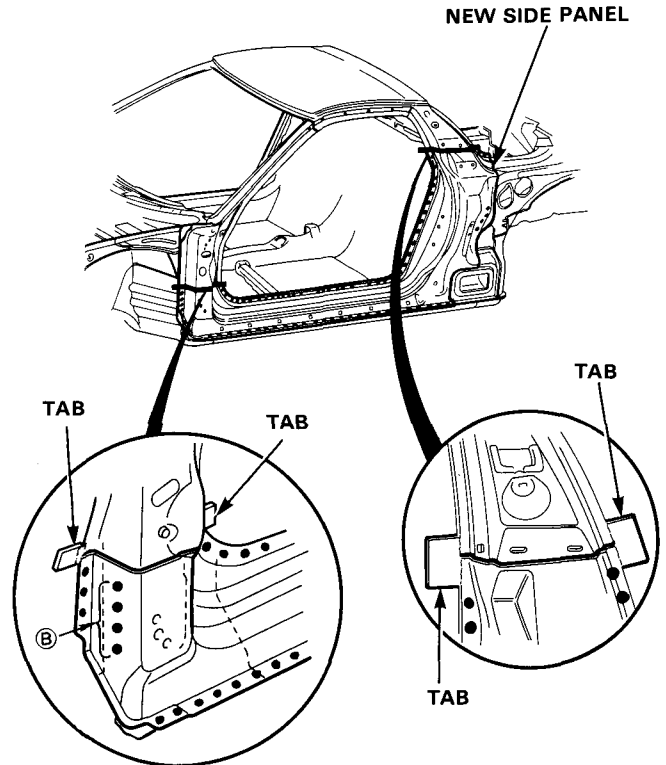


#### ⟨Lower stiffener⟩



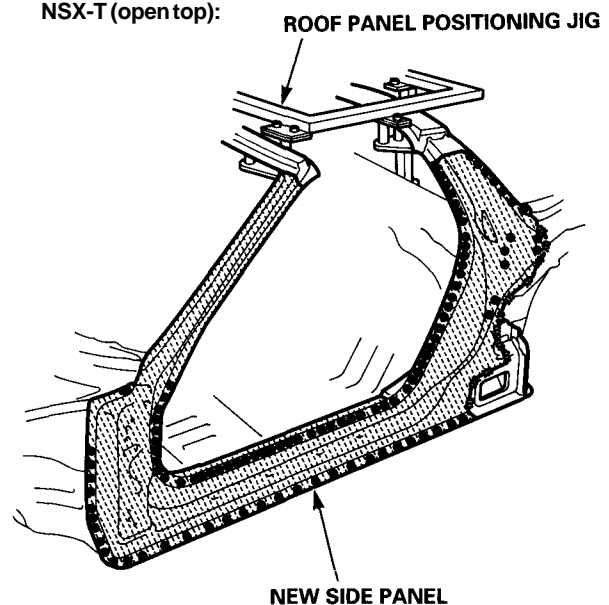
Ⓐ: Plug weld the lower stiffener and upper stiffener (4 points).

- Attach a tab to the butt welding section as shown and weld.
- Preheating effect can be obtained by attaching a tab to the butt welding section.



Ⓑ: Plug weld the outer panel and lower stiffener (4 points).

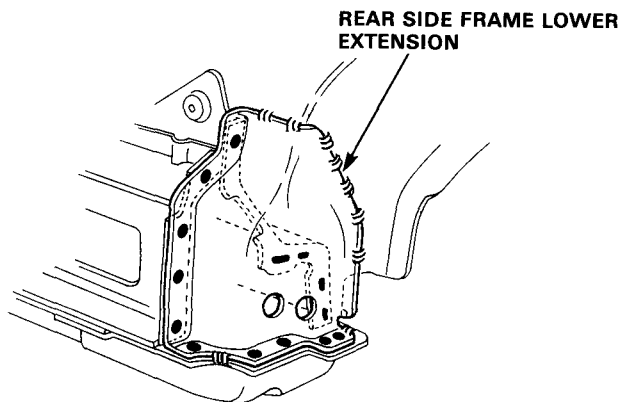
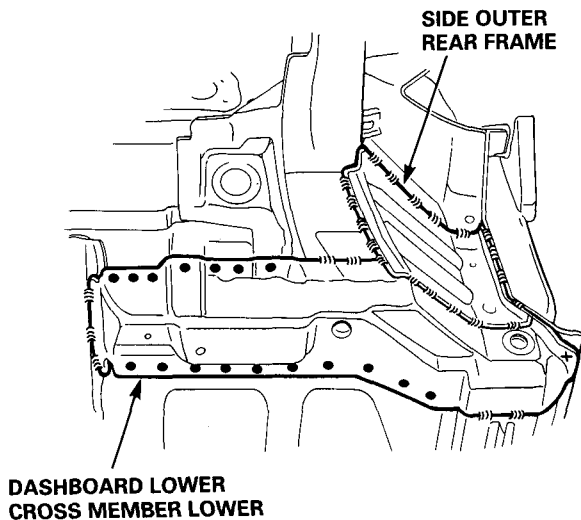
### NSX-T (open top):





14. Weld the related parts.

- Weld the dashboard lower cross member lower and side outer rear frame by MIG welding, plug welding, or fillet welding.
- Weld the rear side frame lower extension.



- Weld the dashboard upper side extension (see page 4-13).

15. Finish the welding area.

- Roughly grind the welds with a disc grinder. Be sure to leave the finishing allowance this time.
- Finish grind the finishing allowance with a disc sander until it is smooth.

**⚠ WARNING** To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.

- Finish the butt weld by removing the tab.
- Take care not to grind the aluminum alloy base while roughly grinding the welds.
- Take care not to grind excessively.
- Do not press on the sanding tools excessively. If the disc face is clogged with the aluminum alloy particles, replace with a new disc.
- Finish the butt welded door opening of the outer panel with a disc sander and putty.

16. Apply the sealer (see section 5).

Apply sealer to the side sill, front floor, dashboard lower, and side panel.

17. Apply the paint.

See Paint Repair section.

**⚠ WARNING**

- Ventilate when spraying paint. Most paint contains substances that are harmful if inhaled or swallowed. Read the paint label before opening paint container.
- Avoid contact with skin. Wear an approved respirator, gloves, eye protection and appropriate clothing when painting.
- Paint is flammable. Store in a safe place, and keep it away from sparks, flames or cigarettes.

18. Apply the undercoat (see section 7).

Undercoat the front floor, etc. and apply anti-rust agent to the inside of the welding section of the front side sill, front and center pillars, etc.

19. Install the related parts.

- Install in the reverse order of removal.
- Adjust the door striker and check the door lock operation.

20. Check and clean.

- Check the electrical parts for proper operation.
- Clean the passenger compartment.

**NSX-T (open top):**

- Set the roof panel, then secure the roof panel by turning the roof side lock handles.
- Make sure the roof side locks are locked securely.

NOTE: Refer to the NSX/NSX-T Service Manual (see section 20) for roof.