Replacement

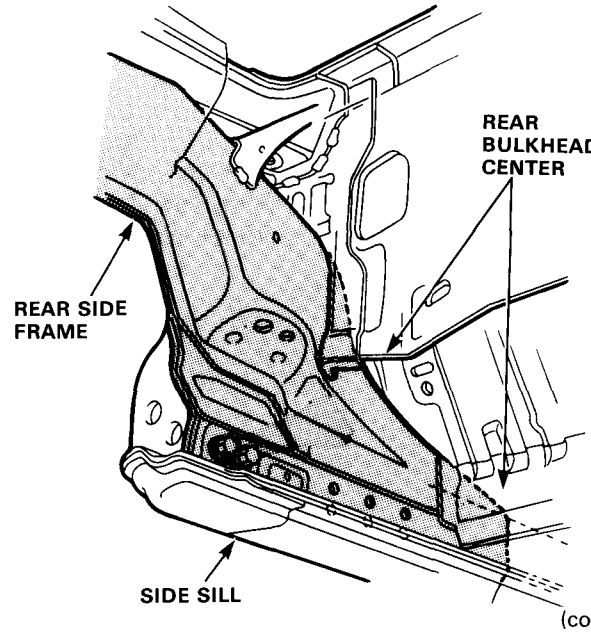
1. Remove the related parts.
   - Engine assembly
   - Fuel tank assembly

⚠ 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.**

   - Rear suspension and the related parts
   - Brake hose and pipes
   - Garnish, etc. in trunk compartment
   - Rear fender
   - Others

NOTE: With the rear panel and rear floor removed:

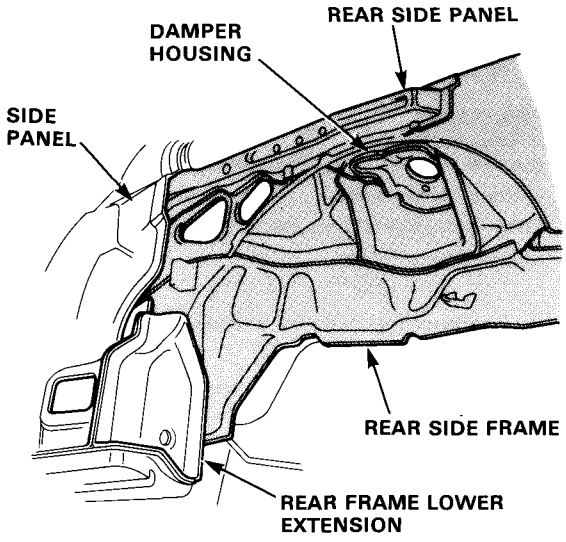
2. Pull out and straighten the damaged area.
   - Attach the car to the frame straightener by tightening the underbody clamps located at the jack-up points on the bottom of the side sill and the side sill side flanges.
   - To protect the car body from damage, place a piece of aluminum plate on each clamping section and tighten the clamps.
   - The collision damage may extend to the rear floor, rear inner panel, 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).

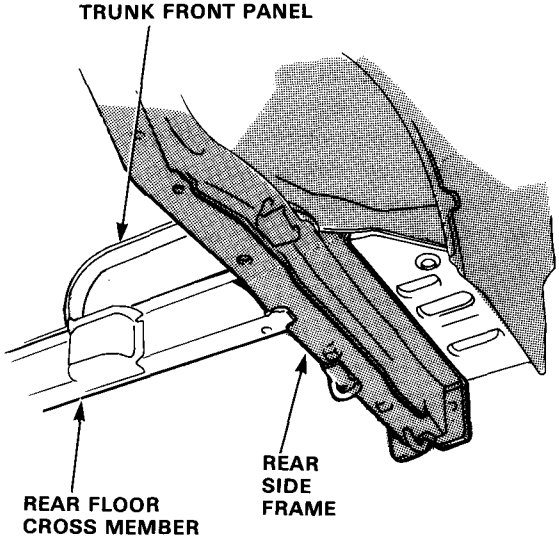


(cont'd)

Rear Side Frame

Replacement (cont'd)



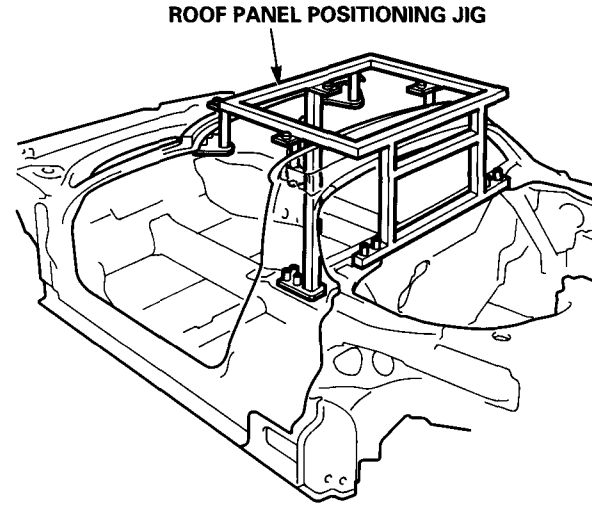


- After pulling, check the damper base and side frame positions using the body dimensional drawings (see section 6) and positioning jig (see page 1-7).

NSX-T (open top):

NOTE: Use of a roof panel positioning jig is recommended.

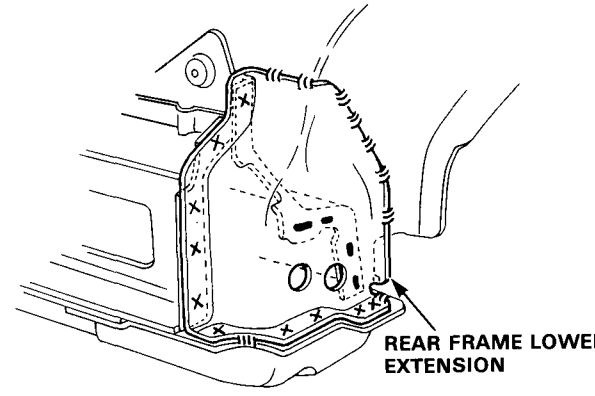
Install the roof panel positioning jig as shown.



3. Peel off the undercoat.
   Heat the undercoat at the weld area of the front floor with a gas torch and peel off a metal spatula.

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

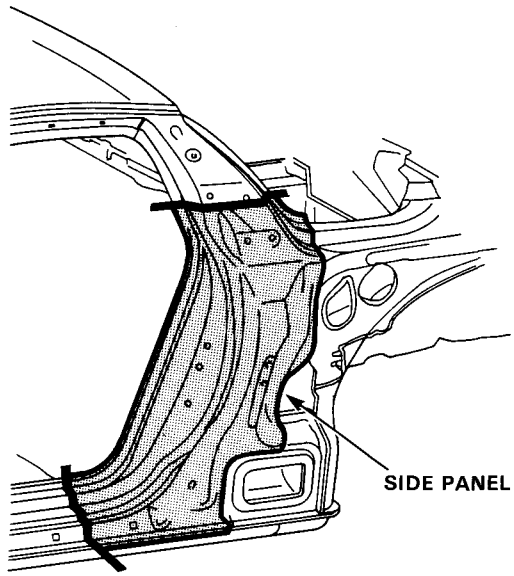
4. Drill the rear frame lower extension and remove it.

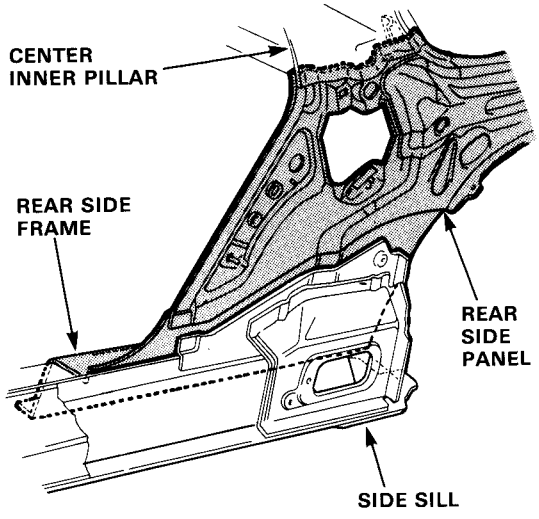


5. Remove the rear side frame.
   - Strike a punch in the center of the spot welds of the side panel and drill the spot welds using a 8 mm (5/16") spot cutter.
   - Cut out the side panel as shown and remove it.
   - Remove the MIG/plug welds and fillet weld in the joint section of the rear side frame and side sill using a 15 mm (5/8") spot cutter (hole saw type) and rotary cutter.

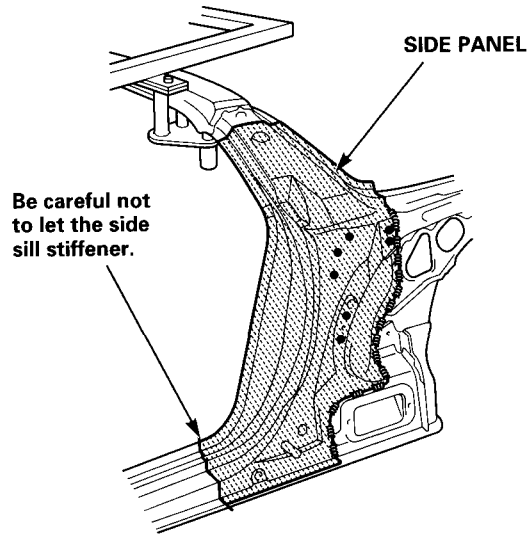
⚠WARNING To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.

Coupe:

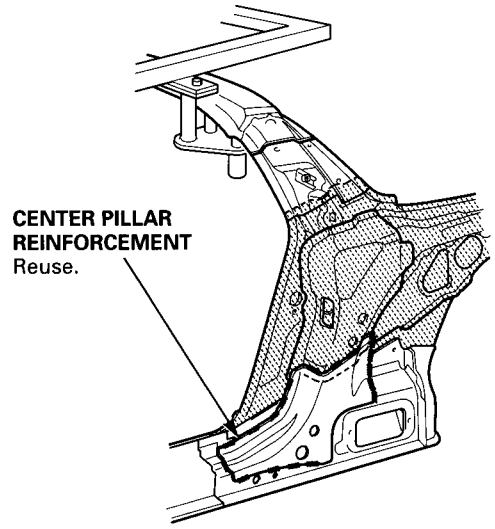


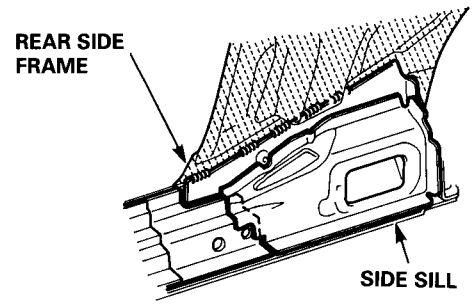


NSX-T (open top):



- Remove the center pillar lower reinforcement.



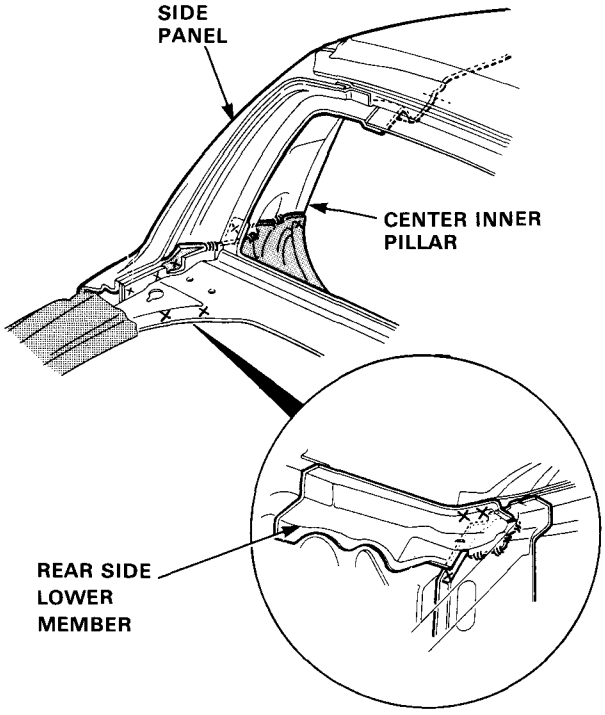


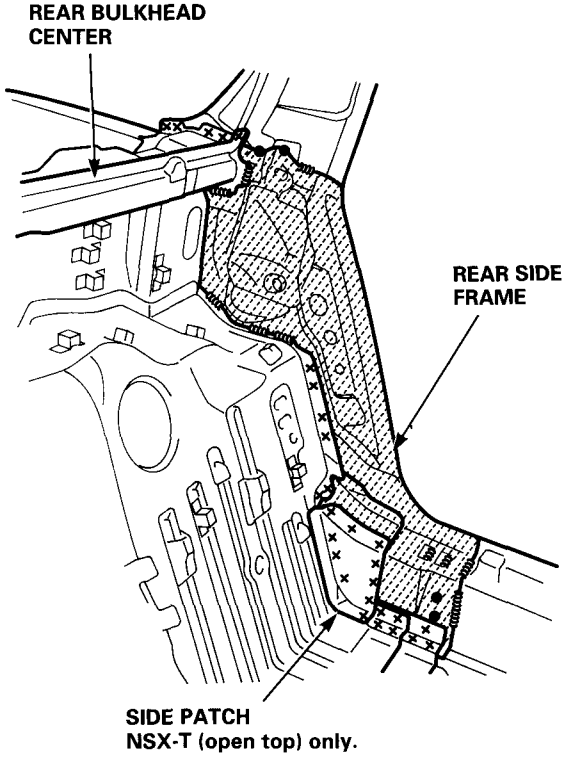
(cont'd)

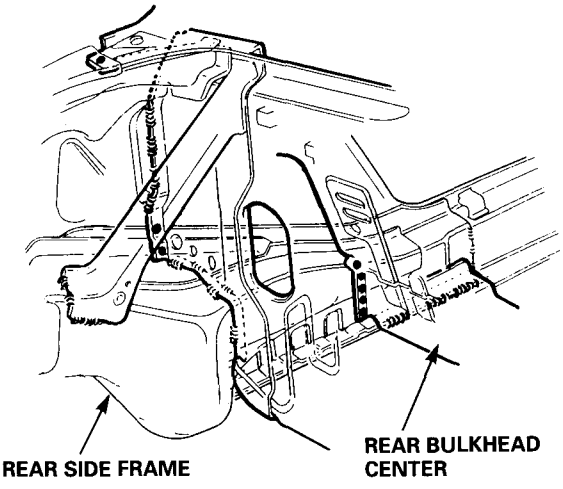
Rear Side Frame

Replacement(cont'd)

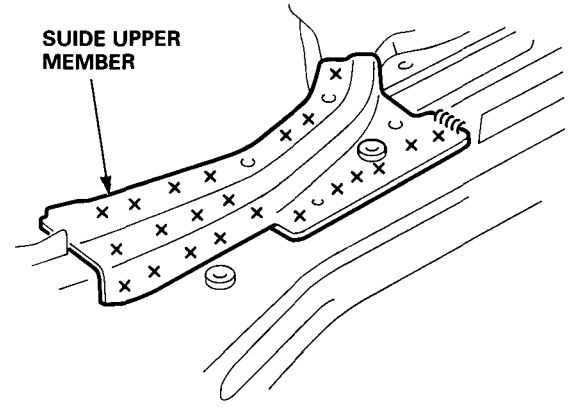
- Strike a punch in the center of the spot welds in the rear side frame, rear floor and rear bulkhead center, etc.
- Drill the spot welds using a 10 mm (3/8") spot cutter.

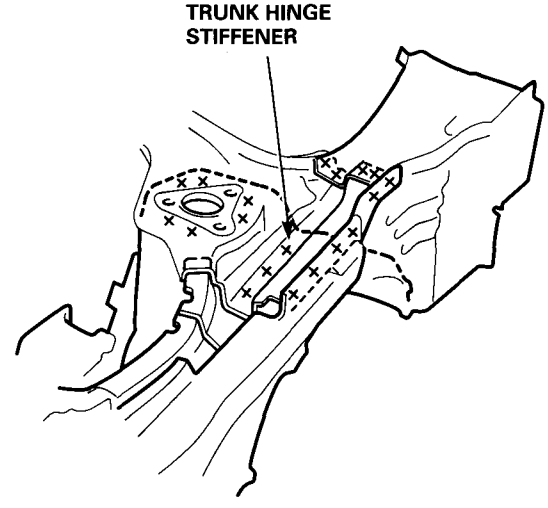


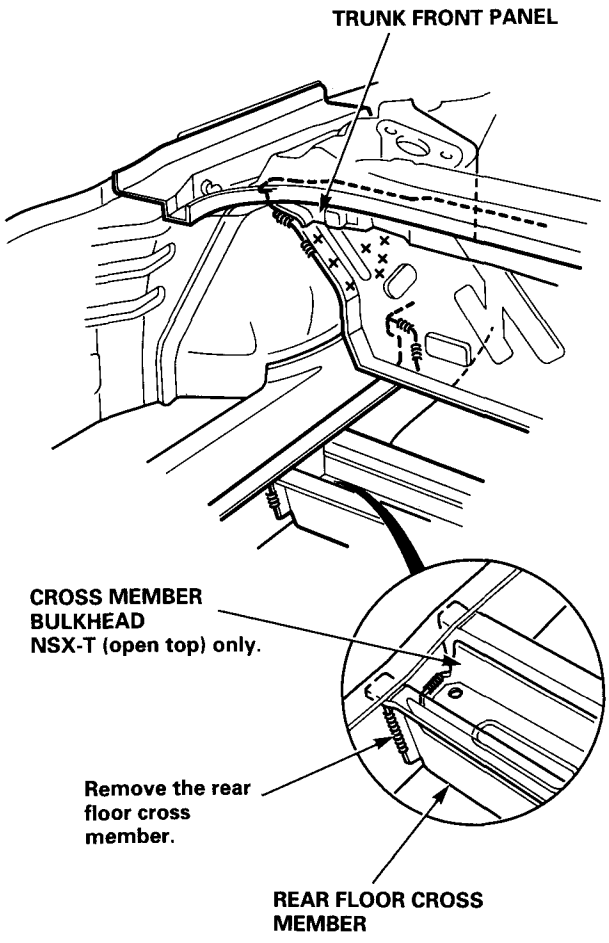




- Strike a punch in the center of the spot welds in the trunk front panel and side upper member.
- Drill the spot welds using a 10 mm (3/8") spot cutter.







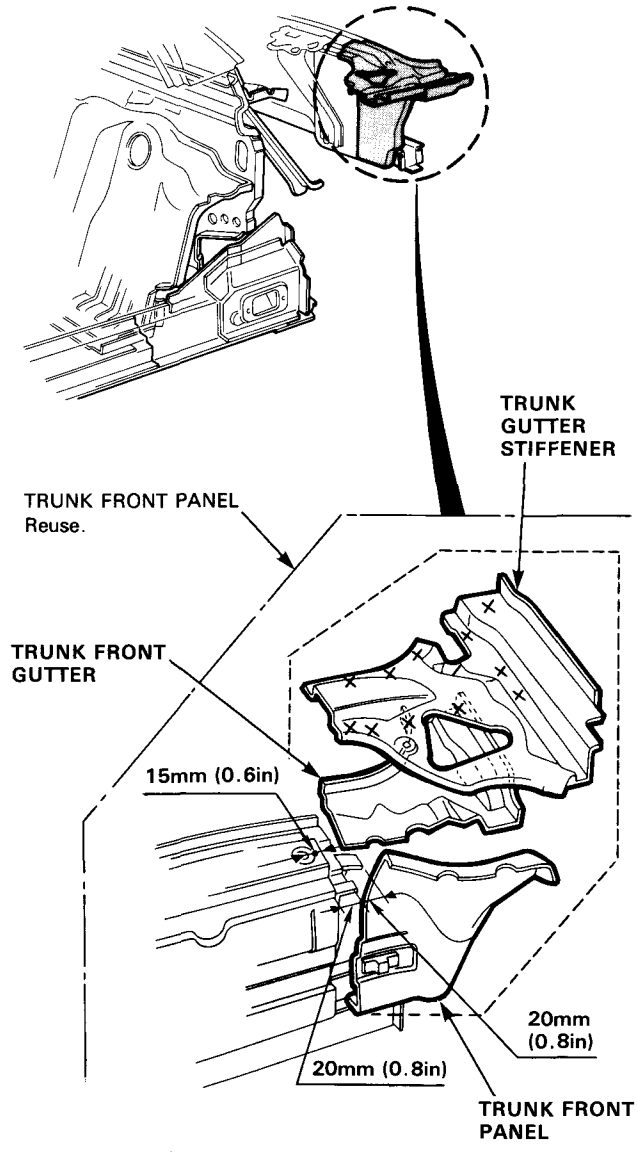
6. Mold the related parts.
   - Correct the rear bulkhead and front floor using a hammer and dolly.
   - Remove the burrs from the spot welds and MIG weld using a disc sander.

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

7. Before installing the rear side frame, first cut the trunk front panel as shown.

   NOTE: Cut it carefully in such a way that it can be reused after installing the rear side frame.

   Coupe:



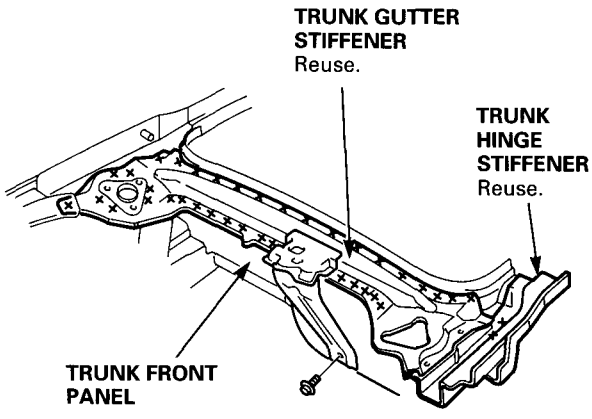
(cont'd)

Rear Side Frame

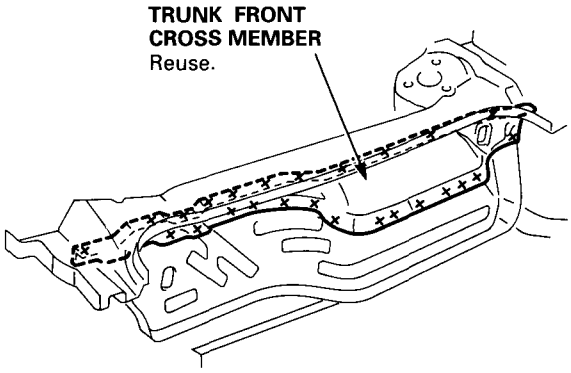
Replacement (cont'd)

NSX-T (open top):

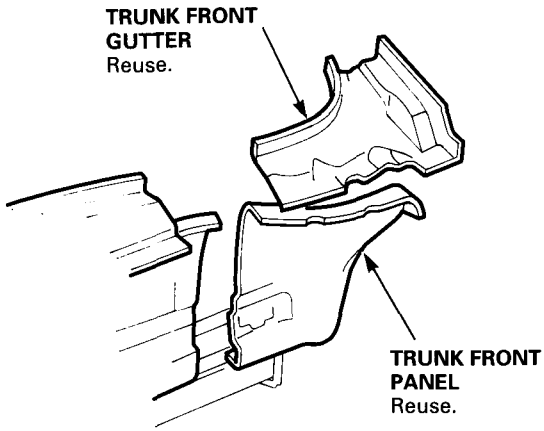
- Remove the trunk gutter stiffener and trunk hinge stiffener (one side).



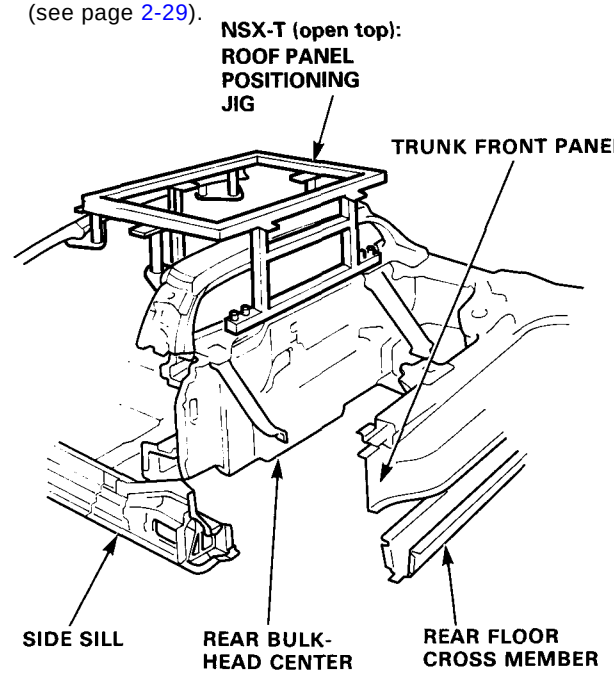
- Remove the trunk front cross member.



- Cut the trunk front gutter and trunk front panel.



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



8. Keep the body level.
   Jack up the body and place safety stands at the four designated of the side sills.

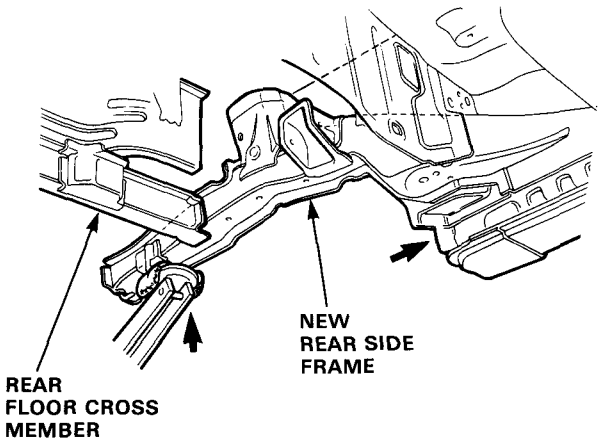
   NOTE : Refer to the NSX/NSX-T Service Manual for safety stand location points.

9. Set the new rear side frame and trunk front panel.
   - Drill the 8~10 mm (5/16"~3/8") plug weld holes in the welding flange of the new rear side frame.
   - Remove the undercoat from the welding section of the rear side frame, and expose the aluminum alloy base using a disc sander.

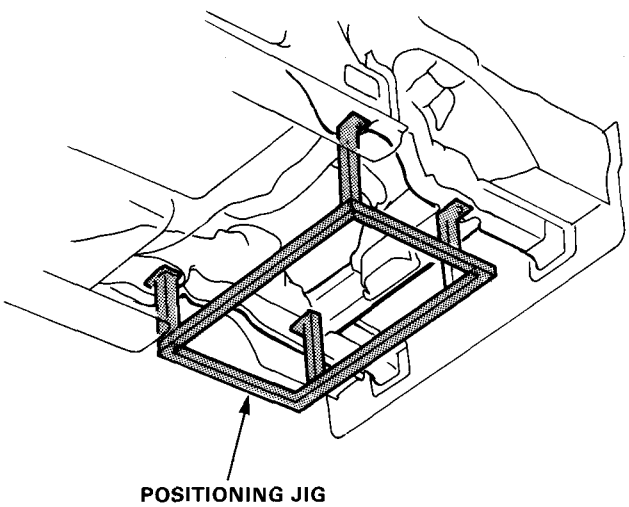
   ⚠ WARNING To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.

   - Remove the paint film from the welding section of the body and clean oil spots with a shop towel soaked with wax and grease remover.
   - Before setting the rear side frame, remove the oxide film from the welding sections of the rear side frame and body using a stainless steel wire brush.

- Tighten the rear side frame against the side sill, rear bulkhead center and rear floor cross member.
- Place the jack under the rear side frame and support it, and measure the positions for temporary attachment.
- Clamp the rear floor and rear panel.
- Check the rear side frame and rear damper base positions using the body dimensional drawings (see section 6).



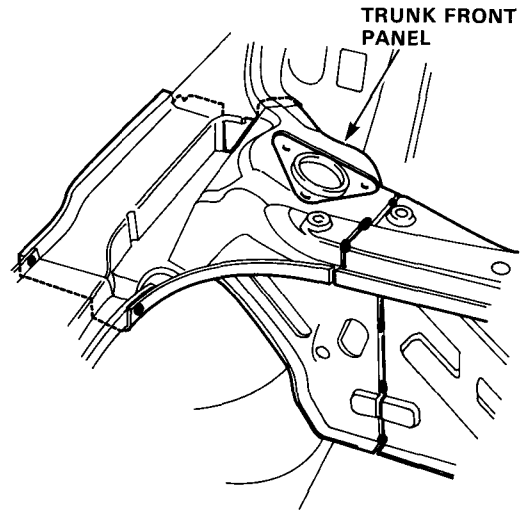
NOTE: Use of positioning jig as shown is recommend (see page 1-7).



10. Tack weld the rear side frame and trunk front panel.

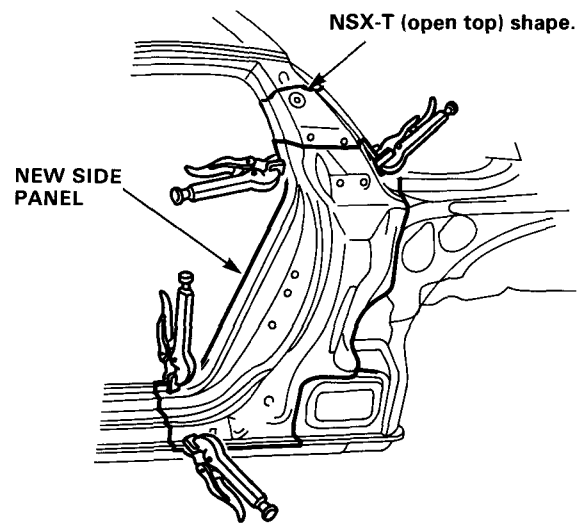
Coupe:

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



11. Set the new side panel.
    - Align the new part with the top cut section, then cut it with handsaw.
    - Clamp the side panel in place with vise-grips.
    - Temporarily install the door, rear fender, trunk lid and rear bumper, and check for clearance and level differences.

NOTE: Check for flushness of the front fender, door, and rear fender, and check for smooth body line of car.



- Remove the new side panel.

(cont'd)

Rear Side Frame

Replacement (cont'd)

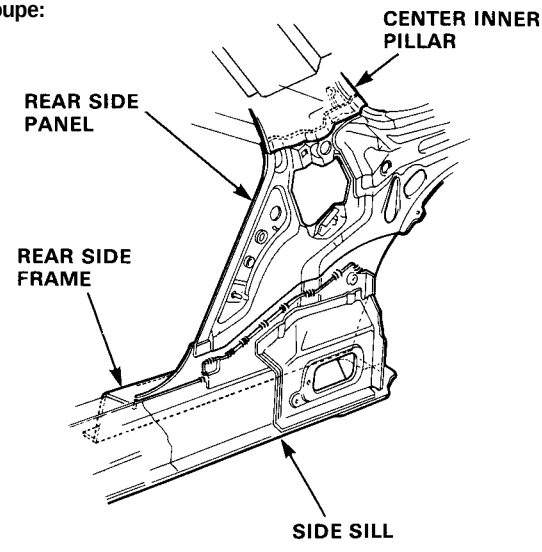
12. Perform the main welding.

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

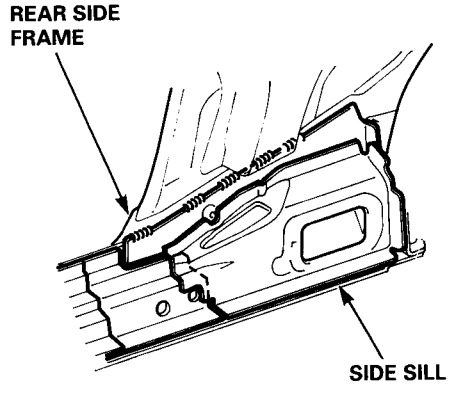
- Before welding, perform the trial welding following the welder manufacturer's instructions.
- Remove the oxide film from the welding section using a stainless steel wire brush.
- The applicable welding methods are MIG welding, plug welding, and fillet welding.
- Check the welding sections for cracks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

- Weld the side sill

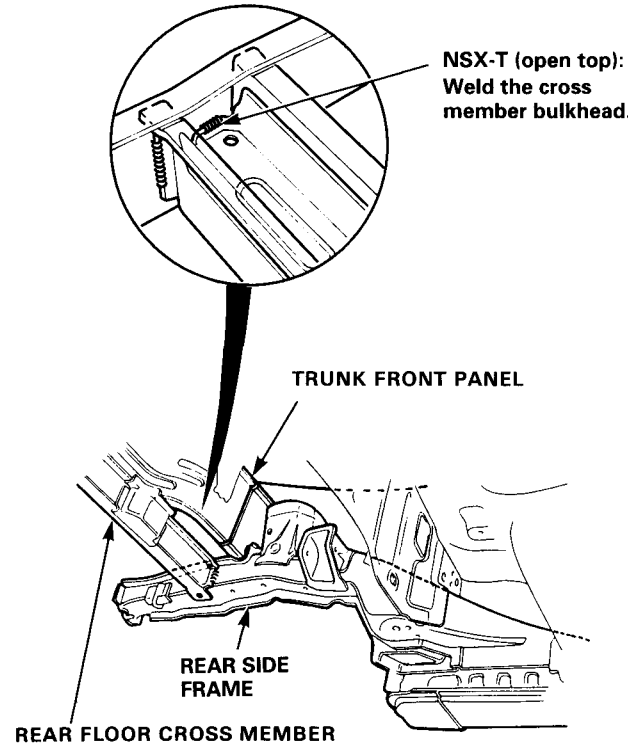
Coupe:



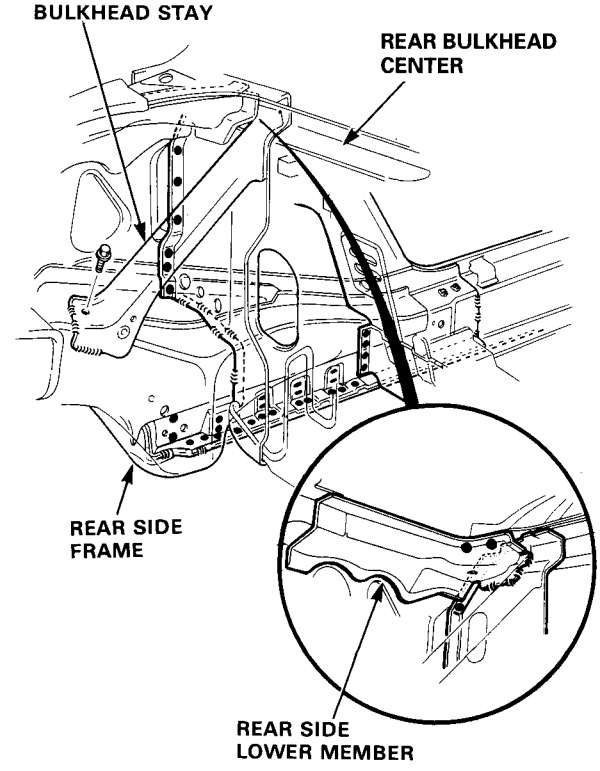
NSX-T (open top):

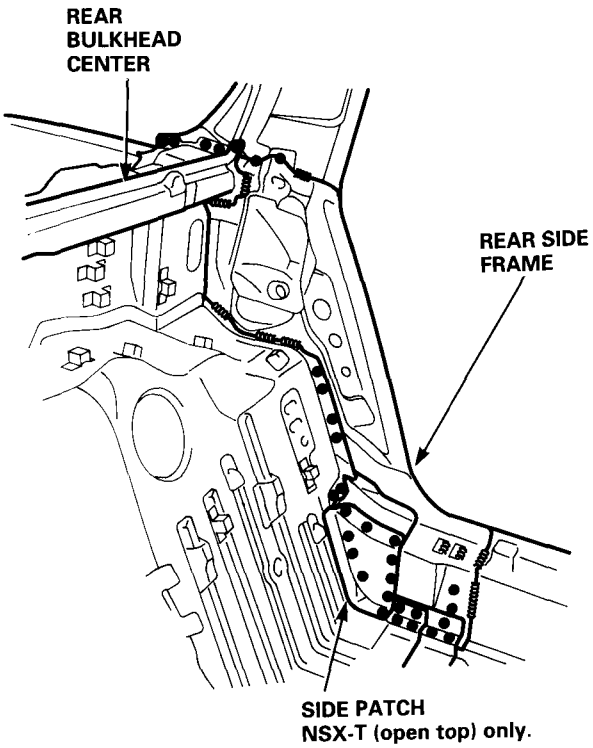


- Weld the rear floor cross member and trunk front panel.



- Weld the rear bulkhead center and side sill.



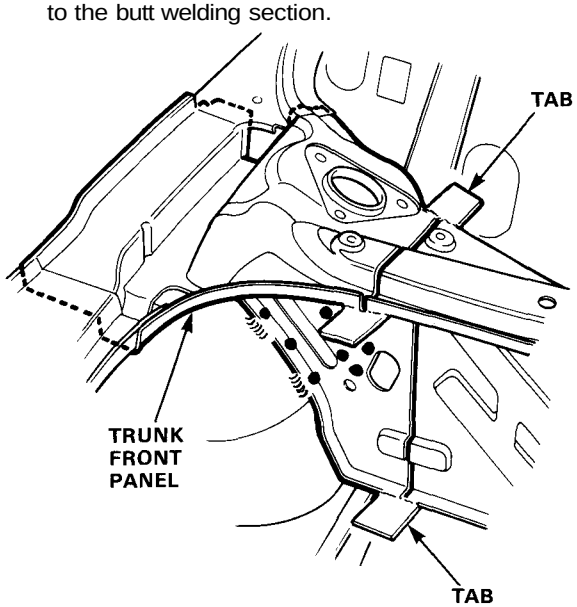


- Main weld the trunk front panel.

Coupe:

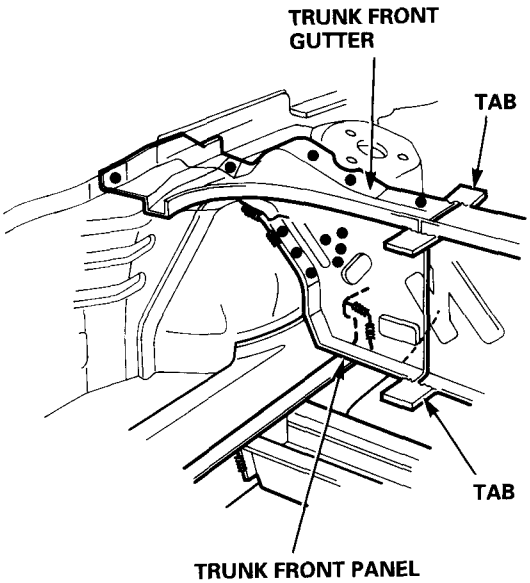
NOTE:

- 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.

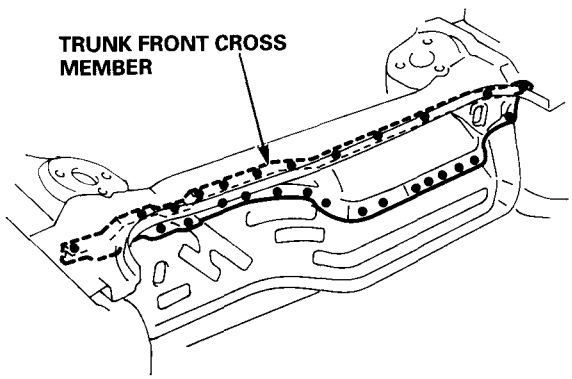


NSX-T (open top):

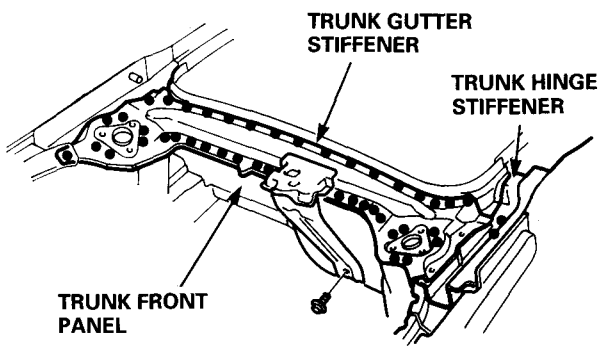
- Weld the trunk front gutter and trunk front panel.



- Weld the trunk front cross member.



- Weld the trunk gutter stiffener and trunk hinge stiffener.

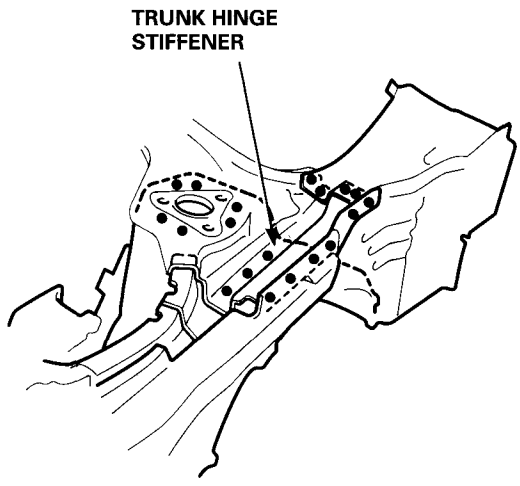


(cont'd)

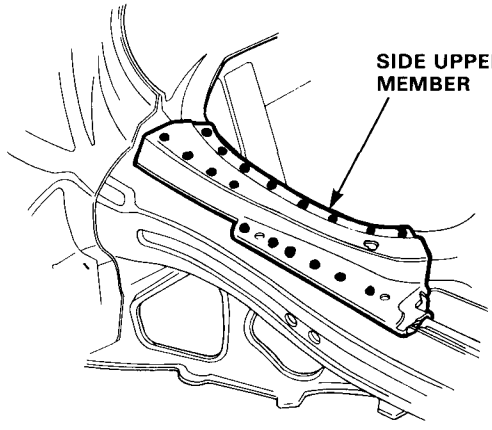
Rear Side Frame

Replacement (cont'd)

- Weld the trunk hinge stiffener.

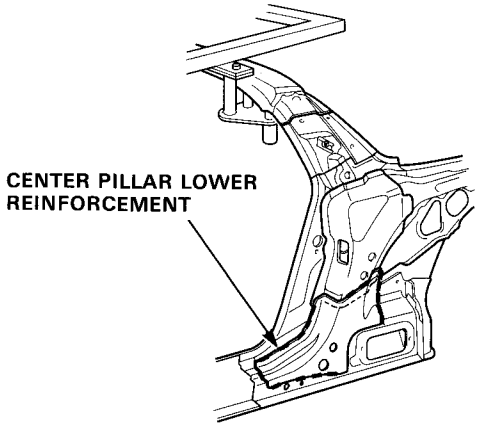


- Weld the side upper member.

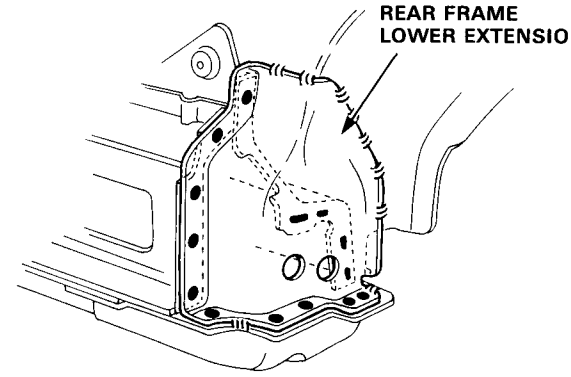


NSX-T (open top):

- Weld the center pillar lower reinforcement.



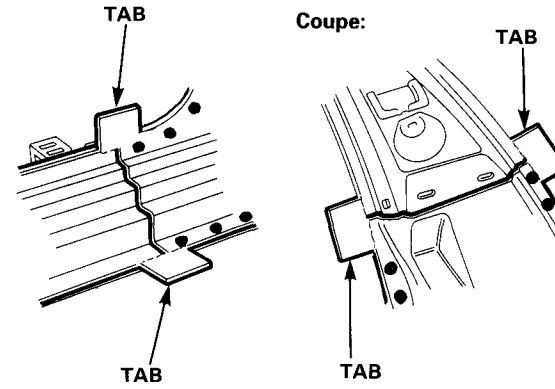
- Weld the rear frame lower extension.



13. Weld the new side panel (see pages 4-21, 4-22), new rear floor and rear panel (see pages 4-61, 4-58).

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

- Before welding, remove the oxide film from the welding sections using a stainless steel wire brush.
- The applicable welding methods are MIG welding, plug welding, and fillet welding.
- 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.



14. 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.

15. Apply the sealer (see section 5).
    Apply sealer to each all mating surface.

16. 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.**

17. Apply the undercoat (see section 7).
    Apply anti-rust agent to the inside of the side sill and rear side frame.

18. Install the related parts.
    - Install in the reverse order of removal.
    - Install the rear fender, door, and trunk lid, and adjust the clearance and any level differences.

19. Check and clean
    - Measure the rear wheel alignment.
    - Check the lights, etc. for proper operation.
    - Clean the trunk 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.
- Check for water leaks.

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