

# Rear Assembly

## 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
- Rear hatch
- Rear window

2. Pull out and straighten the damaged area.

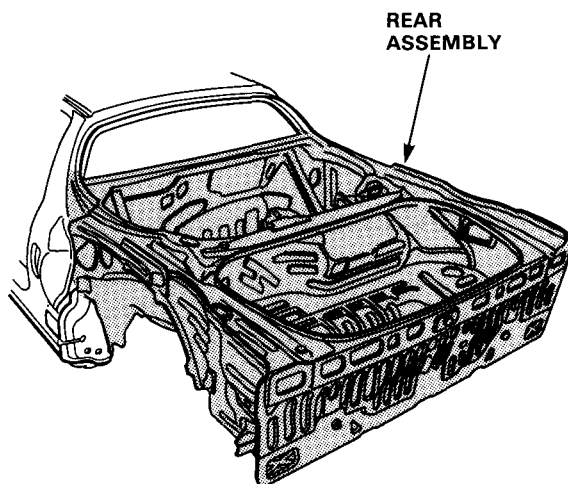
- Attach the car to the frame straightener by tightening the underbody clamps located at the jack-up points on the bottom of the side sill and the side sill side flanges.

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

- 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, and side sill, 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).

NOTE: Pull out until the center pillar inner is lined up with the surface of the rear window.

- After pulling, check the damper housing and rear side frame positions using the body dimensional drawings (see section 6).

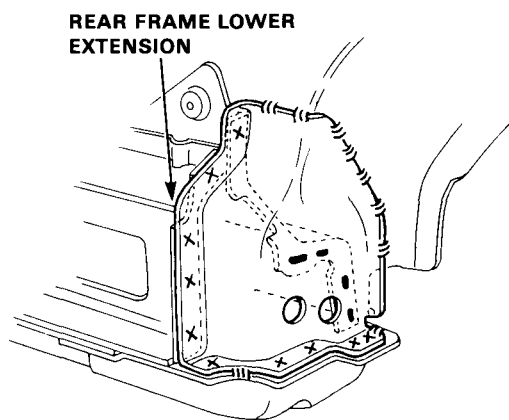


3. Peel off the undercoat.

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 finings inside the passenger compartment when heating.

4. Remove the rear frame lower extension on each side.

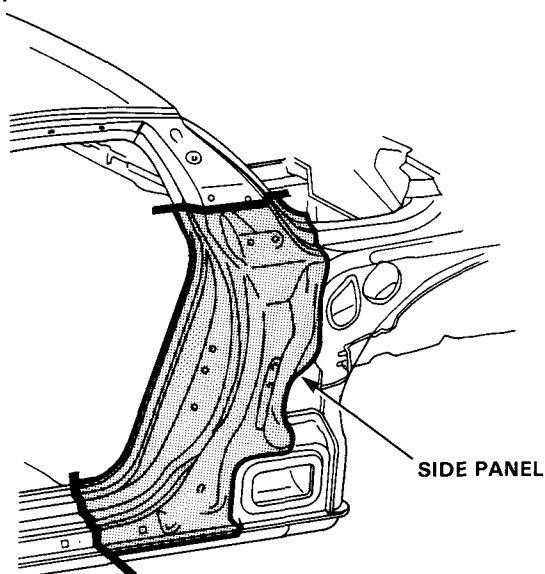


5. Cut out the bottom of the side panel, and remove it on each side.

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.

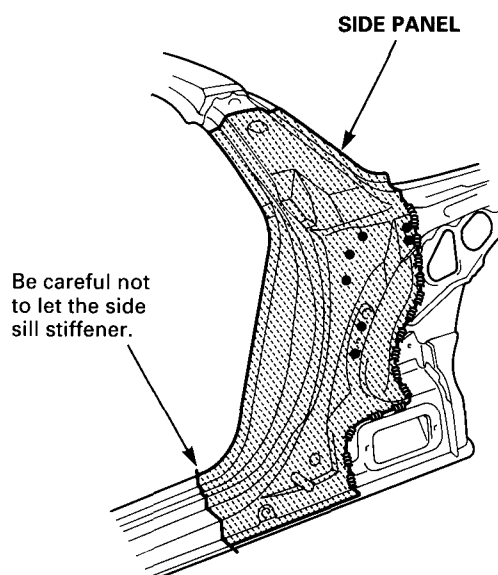
**⚠ WARNING** To prevent eye injury, wear goggles or safety glasses whenever sanding, cutting or grinding.

Coupe:

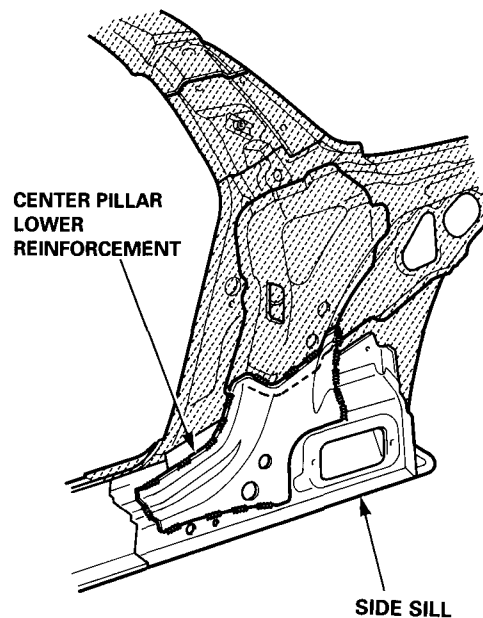


NOTE: Be careful not to cut the inner section.

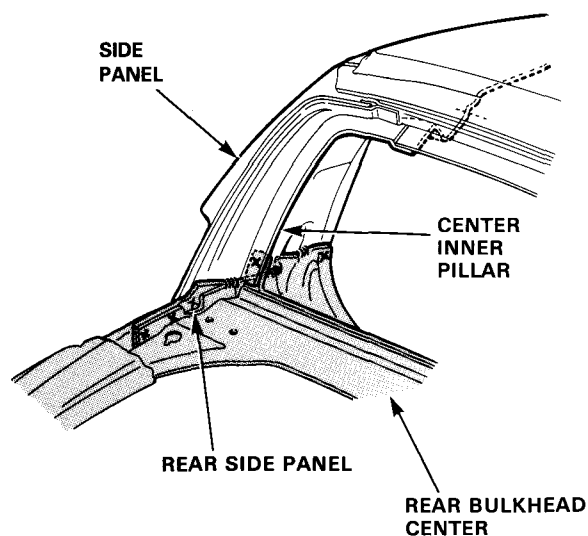
NSX-T (open top):



- Remove the center pillar lower reinforcement.



6. Remove the center inner pillar and rear bulkhead center on each side (coupe only).

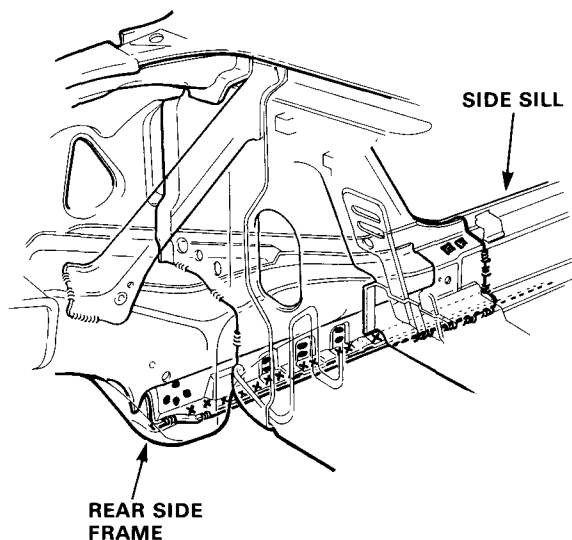


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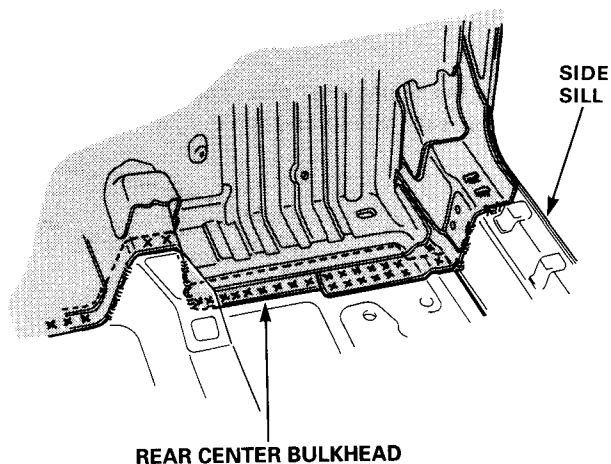
# Rear Assembly

## Replacement (cont'd)

7. Remove the rear side frame on each side.



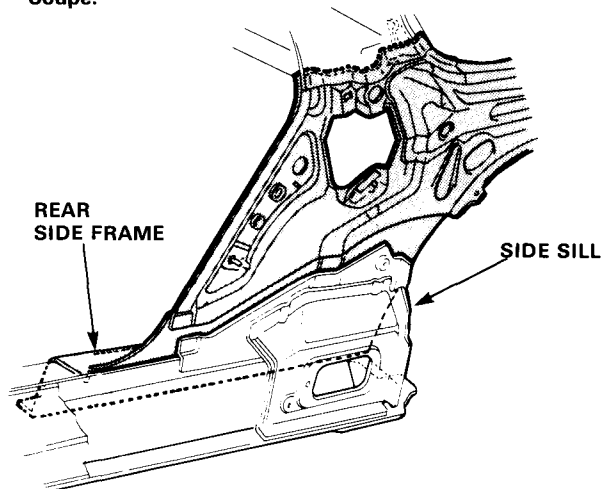
8. Remove the front floor.



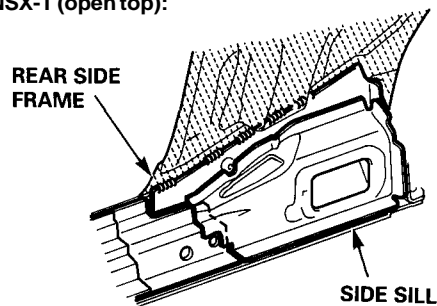
9. Remove the rear assembly.

- 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 on each side.

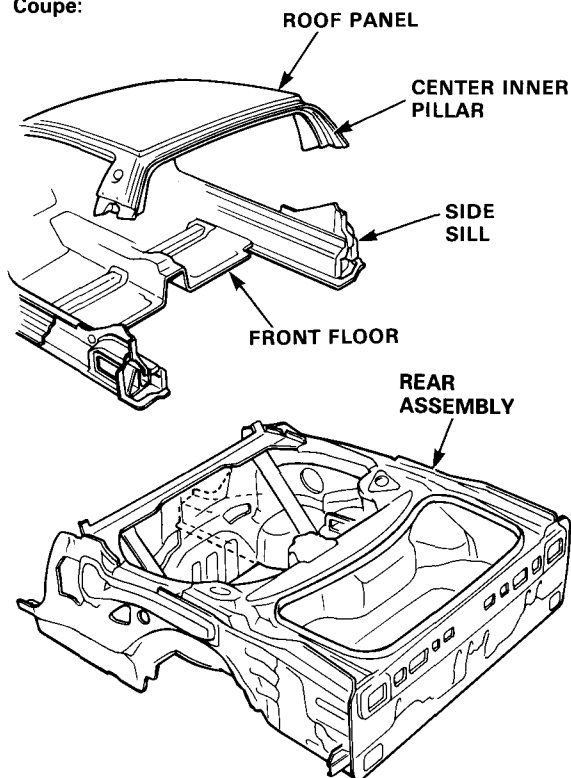
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**NSX-T (open top):**



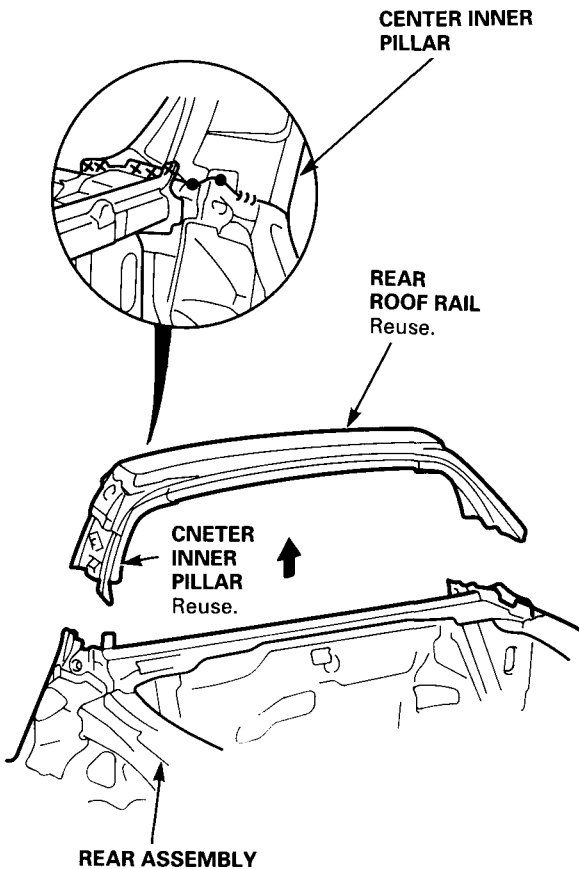
**Coupe:**



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

- Remove the center inner pillar and rear roof rail.

NOTE: Remove it carefully so that it can be reused after installing the rear assembly.



10. Mold the related parts.

- Correct the side sill 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.

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

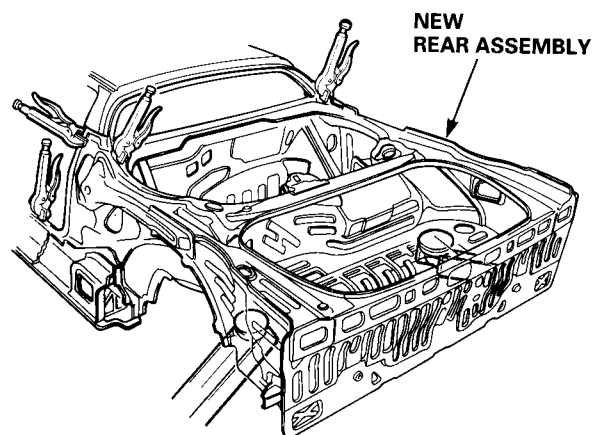
- Keep the body level.

11. Set the new rear assembly.

- Drill 8~10 mm(5/16"~3/8") holes for spot welding in the welding flange.
- Remove the undercoat from the welding section of the rear assembly, and expose the aluminum alloy base using a disc sander.

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- Remove the paint film from the welding section of the body and clean oil contaminations with a shop towel soaked with wax and grease remover.
- Before setting the rear assembly, remove the oxide film from the welding sections of the rear assembly and body using a stainless steel wire brush.
- Tighten the rear assembly against the side sill and center inner pillar flange using the vise-grips, pliers etc.
- Place a jack under the rear side frame on each side and support it, and measure the positions for temporarily attachment.
- Checked over the body dimensions.



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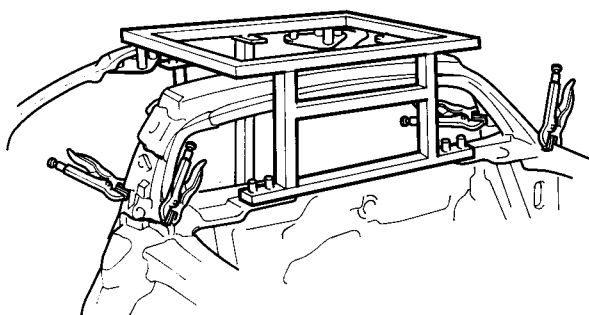
# Rear Assembly

## Replacement (cont'd)

### NSX-T (open top):

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

- Clamp the center inner pillar and rear roof rail and install the roof panel positioning jig as shown.
- Check the roof rail position.

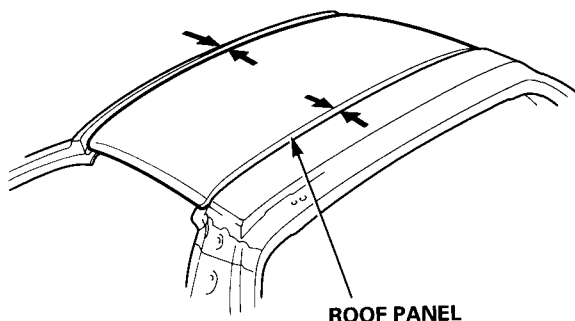


12. Temporarily install and weld the rear assembly, rear window and check for clearance and difference in level.

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

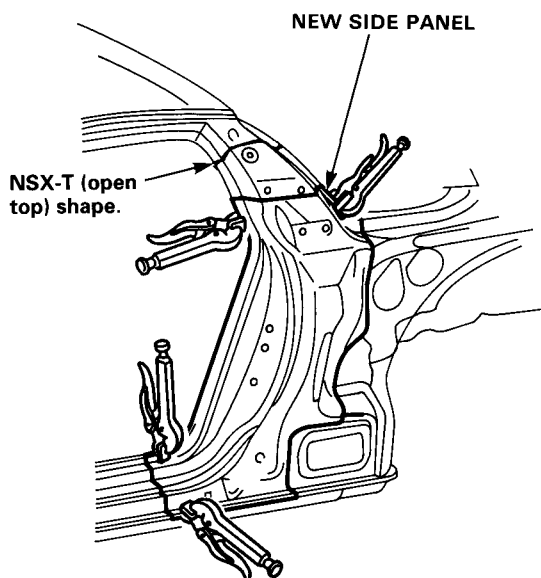
### NSX-T (open top):

Remove the jig and install the front and rear lock receivers, then check the clearance and level differences of the roof panel and roof rails.



13. Set the new side panel.

- Align the new part with the top cut section, the cut it with handsaw.
- Clamp the side panel in place with vise-grips.
- Temporarily install the rear fender, rear hatch and trunk lid, and check for clearance and difference in level.



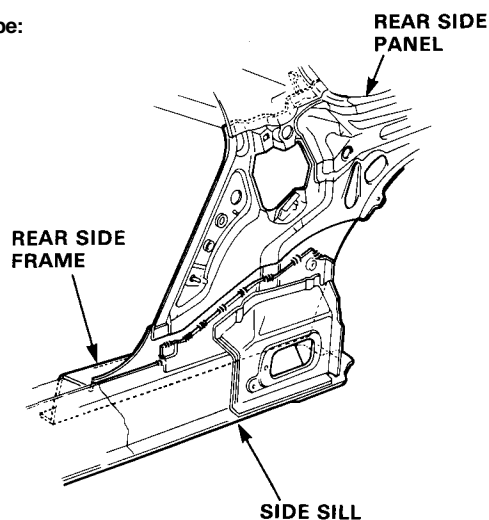
- Remove the new side panel.

14. Perform the main welding

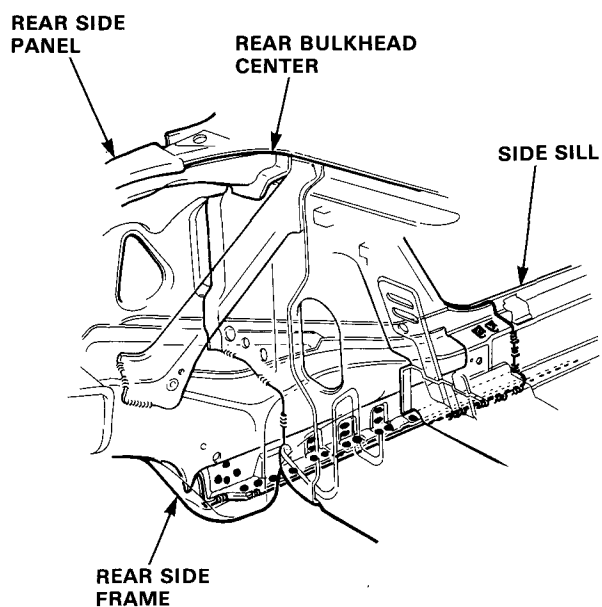
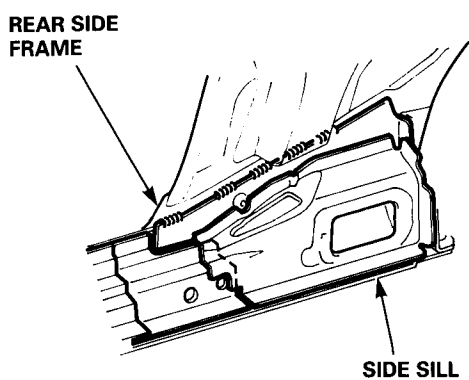
**⚠ WARNING** To prevent eye injury and burns when welding, wear an approved welding helmet, gloves and safety shoes.

- 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 rear side frame on each side.

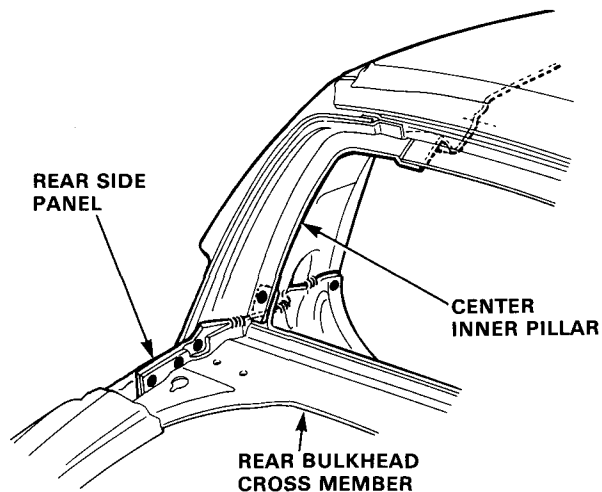
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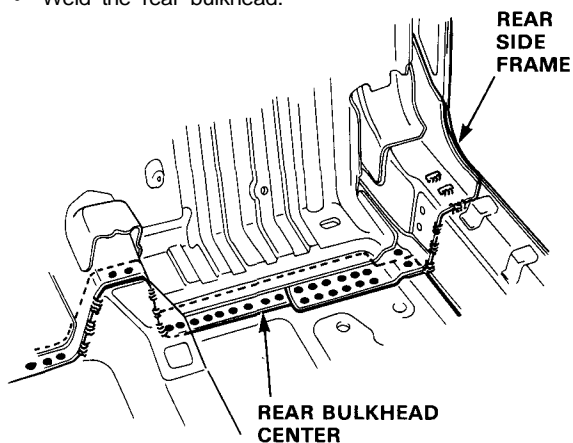
NSX-T (open top):



- Weld the rear side panel and rear bulkhead cross member on each side.



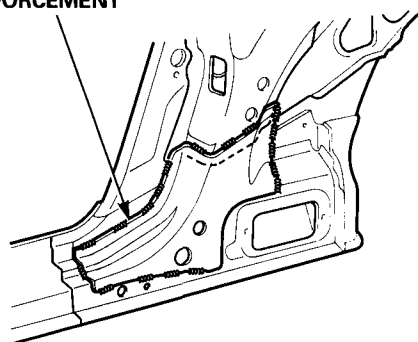
- Weld the rear bulkhead.



NSX-T (open top):

- Weld the center pillar lower reinforcement.

CENTER PILLAR LOWER REINFORCEMENT

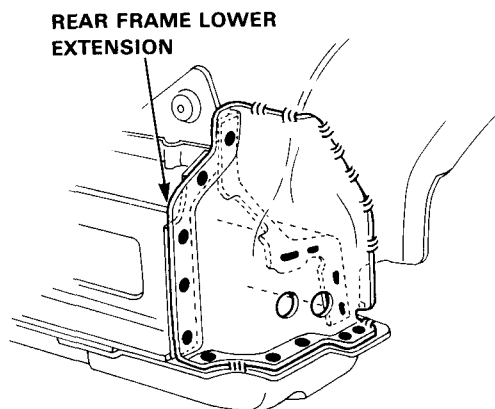


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# Rear Assembly

## Replacement (cont'd)

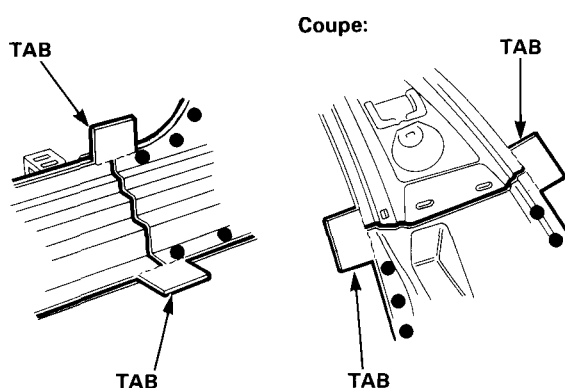
- Weld the rear frame lower extension on each side.



- Weld the new side panel (see pages 4-21, 4-22).

**⚠ 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.



- 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.

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

- 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.

- Apply the undercoat (see section 7)  
Undercoat the front floor, etc, and apply anti-rust agent to inside of the welding section of the rear side frame, side sill and center pillars, etc.

- Install the related parts.
  - Install in the reverse order of removal.
  - Adjust the rear hatch and door strikers, and check the lock operation.

- Check and clean
  - Check the lights, etc. 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.
- Check for water leaks.

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