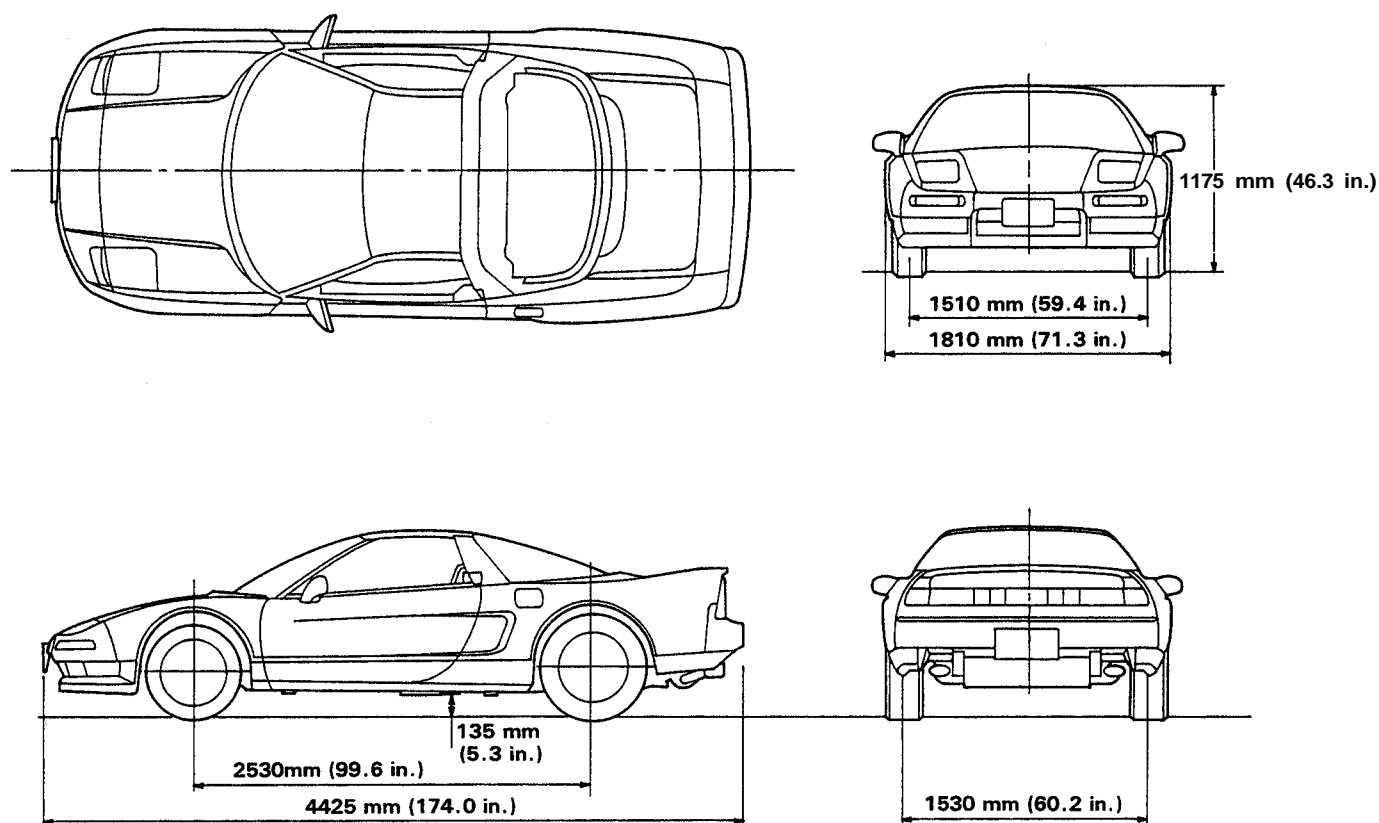


Preparation of Work

Description

- Most monocoque bodies are composed as a single unit by welding together pressed parts made of steel plates which come in a variety of different shapes and sizes. Each part is responsible for displaying a certain strength and durability in order that it may play its role in meeting the functions of the body as a whole.
- The NSX has an all aluminum monocoque body made of the aluminum alloy. Generally speaking, the collision damage of the aluminum alloy body is not very different from that of the steel plate body.

Damage to the exterior of the body can be inspected visually, but where there has been an external impact, it is necessary to inspect the extent of the damage. In some cases, the deformation has spread beyond the actual areas which were in the collision and so this has to be inspected closely.



Front wheel alignment:

Camber	-0° 20' ± 30'
Caster	+ 8° 00' ± 45'
Toe	Out 3.5 ± 1 mm (0.14 ± 0.04 in)
Wheel turning angle	In 33° 06' ± 2°
	Out 26° 34'

Rear wheel alignment:

Camber	-1° 30' ± 30'
Toe	In 4.0 ± 1 mm (0.16 ± 0.04 in)

Checkpoints

- **Accurate Inspection of Damaged Parts (Visual)**

Seat Belts

Always replace the seat belt if:

1. The belt material is cut, punctured, burned or in any way damaged.
2. The buckle or retractor does not work properly.
3. They were being worn at the time of a collision (also check for damage at the seat belt anchor points).
4. Their condition is questionable.

Front Section:

1. Is there any bending, splitting, denting or other damage to the suspension and its related parts?
2. Is there any deformation of the front bulkhead or radiator core? Have any of the connected sections come apart?
3. Are there any creases or distortion in the front wheelhouse or side frame? Have any of the connected sections come apart?
4. Is there any bending or twisting of the whole front area?
5. Is there any deformation like creases, bulges, or dents in the front pillar, dashboard, floor, etc.?
6. Is there any vertical twisting or misaligned clearance in the door?
7. Is the windshield seal broken?
8. Is there any deformation in the top part of the center pillar?
9. Is there any damage inside the automobile (is there any twisting of the dashboard, or anything irregular with the clearances or sheet-mounting parts) ?
10. Is there any damage to the steering wheel ? Is there any deformation in the column and the column-mounted parts ?

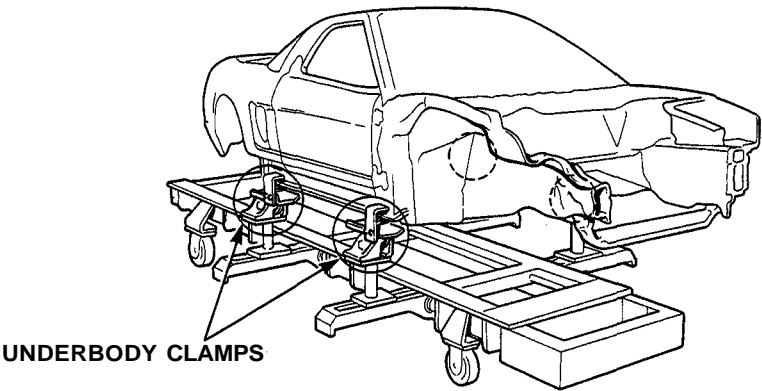
Rear Section:

1. Is there any twisting, bulging or denting of the rear floor and rear bolsters? Have any of the connected sections come apart?
2. Is there any irregular bulging or denting in the rear fender?
3. Is there any distortion in the rear inner panel? Is there any bending and denting in the vicinity of the rear pillar?
4. Is there any distortion or creasing in the rear wheelhouse and arch sections? Have any of the connected sections come apart?
5. Is there anything irregular in the rear glass seal clearance?
6. Is there any twisting or misalignment of the clearance of the trunk lid opening section?
7. Is there any bending, splitting, denting or other damage to the suspension and its related parts?
8. Is there any deformation oh the rear floor cross member, trunk front panel and damper base? Have any of the connected sections come apart?
9. Is there any oil or water leakage and damage to the engine, transmission or brakes?
10. Is there any irregular noise in the gear changing operation, engine and transmission rotation?
11. Are there any traces of contact between the engine block and the center cross member?
12. Is there any damage to brake or fuel lines, or wire harnesses?

Preparation of Work

Correction of the Damaged Area

Set the frame corrector on the car body.
The side sill is flangeless to allow reshaping by pulling it out.
Use the horizontal pinch welds for anchoring the car.

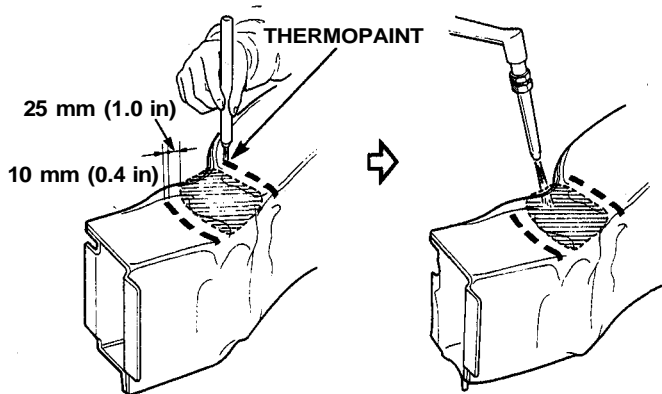
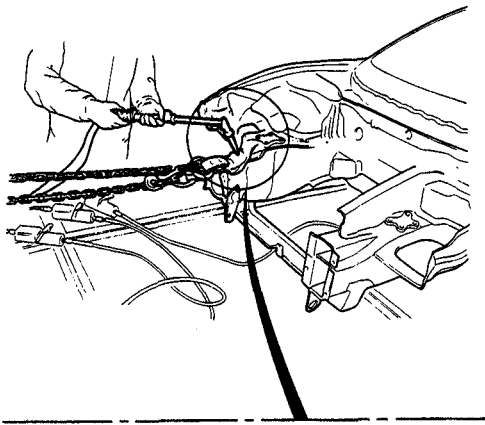


Underbody Clamp Specifications:

UNDERBODY CLAMP (Recommended)	Clamp Number	
<p>ATTACHMENT</p>	AT-68	
	Frame correctors	
Standard type:	AT-68-AL	<ul style="list-style-type: none">● Dataliner● Car-o-liner● Celette● Flex-o-liner● etc.
C - type:	AT-68-C	<ul style="list-style-type: none">● Korek● Auto pole● etc.
U - type:	AT-68-U	<ul style="list-style-type: none">● U-Base● Pro-Tec● etc.

1. Apply load to the damage section and pull it out until the section is almost restored to the original shape.
2. Check that the parts of the body they cover have been more or less restored to their original shapes.

NOTE: As work-hardening occurs to the buckled section of the aluminum alloy, it can crack easily. Heat up the damaged section with an acetylene welder and pull it out to reshape. 1184°F (640°C) is the melting point of the aluminum alloy. Take care not to overheat it. Watch the heating temperature using a thermopaint, or heat crayon (see page 2-31).



3. Check the original position using the body dimensional drawings (see section 6) and the positioning jigs (see page 1-7).
4. Remove the parts that require replacement.

5. Decide whether to cut the weld joint parts and replace partially, or whether to replace all the parts.
NOTE: Welded parts that can be partially cut and replaced are restricted to those listed in this manual (see section 4).
6. Cut off and separate the damaged parts.
NOTE: When cutting the parts off, take special care that you do not damage adjacent parts on the automobile.
7. Mold the related parts.
8. Check the reshaped parts for cracks (see page 2-29).
9. Set and tack weld the replacement parts.
NOTE: Temporarily mount the related parts and check the clearance and level differences.
10. Weld the replacement parts.
Welding methods (see section 2).
NOTE: Use of the positioning jig is recommended.
11. Check the welding sections for cracks (see page 2-29).

NOTE: The paint film, which is designed to prevent corrosion caused by moisture, is destroyed around the edges of the locations that have been repaired by welding.

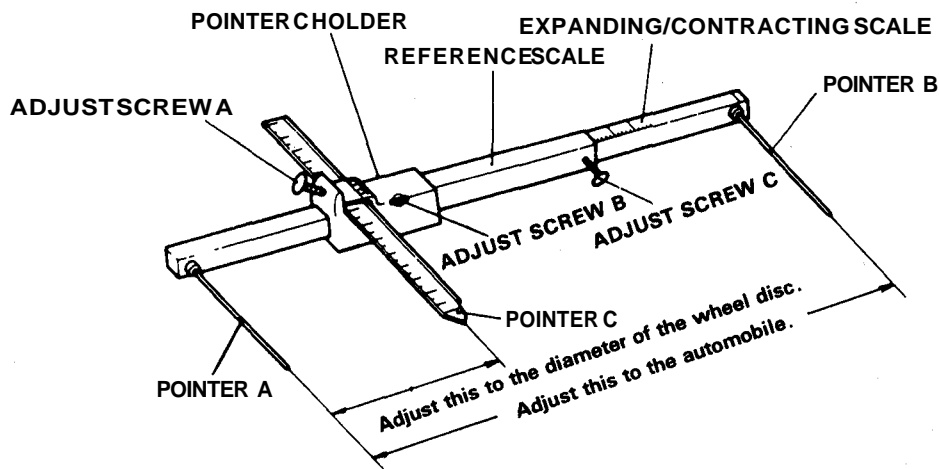
Therefore, in such places and especially in those areas that are not visible, apply another coat of the paint; refer to the anti-corrosion painting manual. This operation is designed to maintain durability and quality (see section 7).

Preparation of Work

Measurement (Excluding Small Damage)

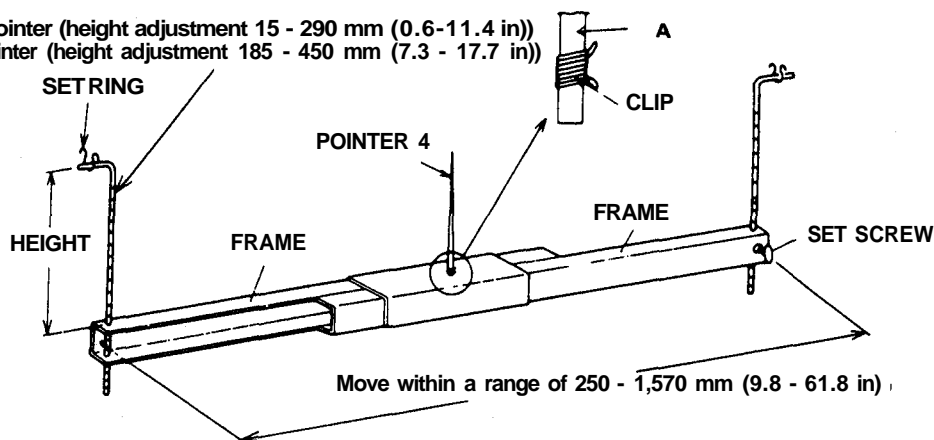
Whenever possible, make judgements and conclusions based on measurement. Measure the wheel alignment (see page 1-2) to prevent any future trouble like unsymmetrical wear of the tires or catching of the steering wheel.

If there are any deviations, use a tram tracking gauge and measure parts of the body.

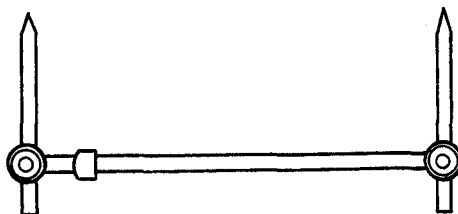


If there is any twisting to the body, measure using a frame centering gauge.

Pointer B - short pointer (height adjustment 15 - 290 mm (0.6-11.4 in))
- long pointer (height adjustment 185 - 450 mm (7.3 - 17.7 in))



When measuring body dimensions, use a universal tram gauge.



Positioning Jig (Recommended)

No.	Jig Number	Description	Page Reference
①	HJ-16-01	Front under frame positioning jig	4-14
②	HJ-16-02	Rear under frame positioning jig	4-53, 57, 60

