

FOREWORD

This Body Repair Information booklet contains information and instructions for repairing the body structure for the 1996 INFINITI I30 model. In order to achieve reliable repair work and ensure customer satisfaction, the technician should study this booklet and become familiar with appropriate sections before starting repair and rebuilding work.

This Body Repair booklet is prepared for use by technicians who are assumed to have a high level of skill and experience in repairing collision-damaged vehicles and also use modern servicing tools and equipment. It is not recommended that persons unfamiliar with body repair techniques attempt to repair collision-damaged vehicles by using this booklet.

Technicians are also encouraged to read the 1996 INFINITI I30 Service Manual and Body Repair Manual (Fundamentals) in order to ensure that the original functions and quality of the vehicle can be maintained. The Body Repair Manual (Fundamentals) contains additional information, including cautions and warnings, that are not included in this booklet. Technicians should refer to both manuals to ensure proper repairs.

Please note that these booklets are prepared for worldwide usage, and as such, certain procedures might not apply in some regions or countries. In the U.S.A. it is recommended that a M.I.G. welder be used by a technician trained to weld structural body parts.

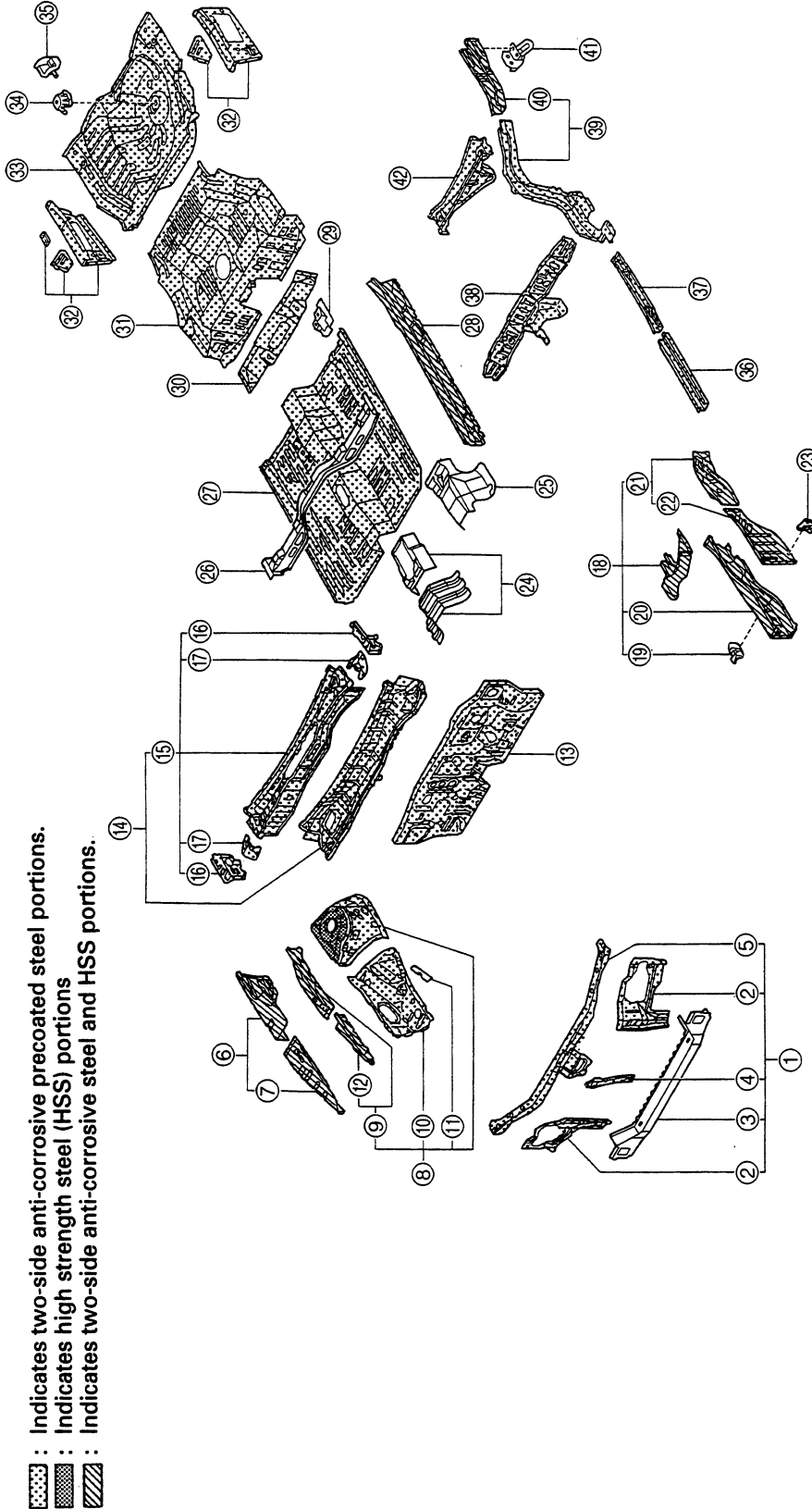
All information in this booklet is based on the latest product information at the time of publication. The right is reserved to make changes in specifications and methods at any time without notice.

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BODY COMPONENT PARTS

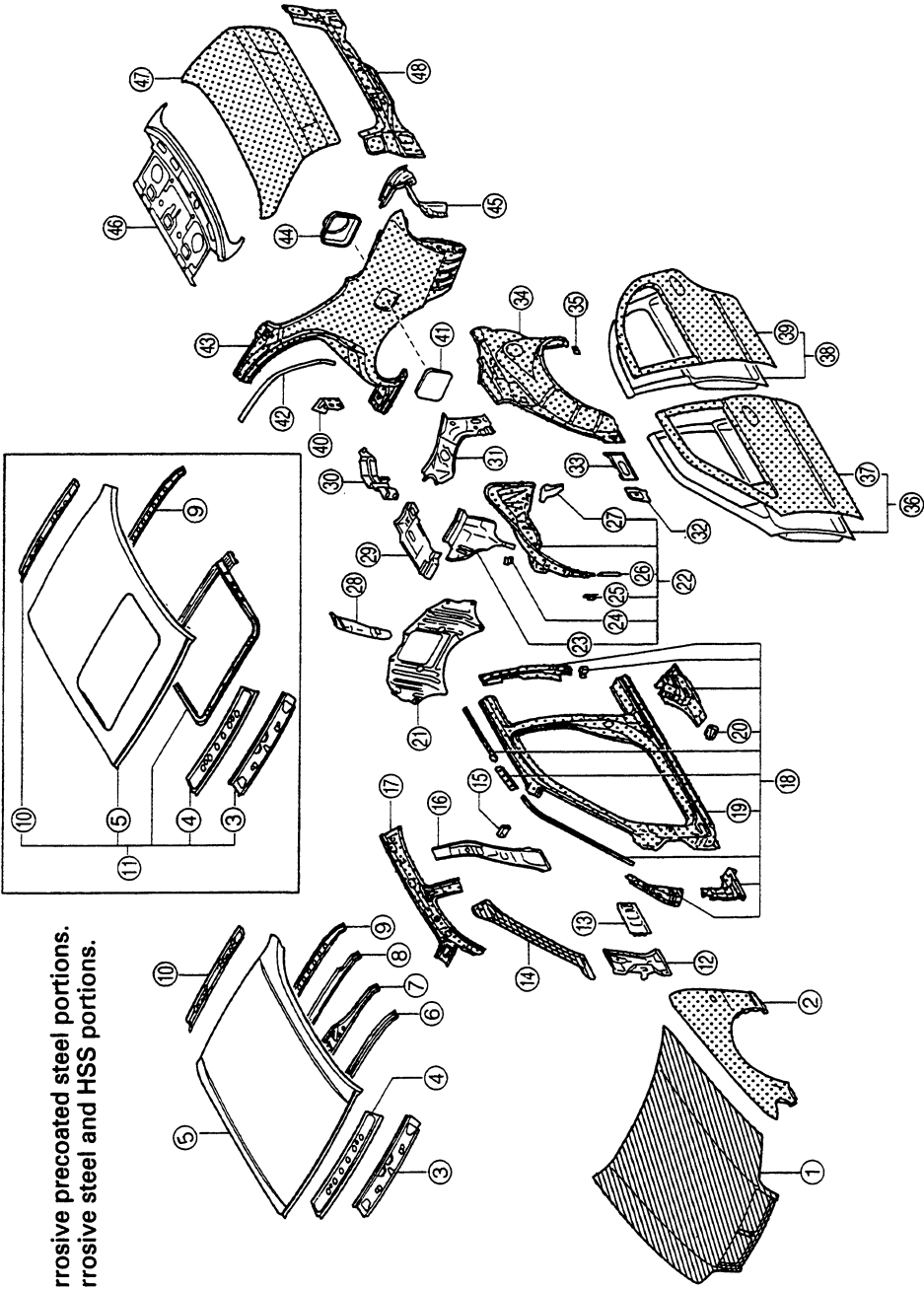
UNDERBODY COMPONENT PARTS



- 1 Radiator core support assembly
- 2 Side radiator core support
- 3 Lower radiator core support
- 4 Hood lock stay
- 5 Upper radiator core support
- 6 Hoodledge reinforcement (R.H. & L.H.)
- 7 Front hoodledge reinforcement (R.H. & L.H.)
- 8 Hoodledge assembly (R.H. & L.H.)
- 9 Upper hoodledge (R.H. & L.H.)
- 10 Front lower hoodledge (R.H. & L.H.)
- 11 Engine mounting reinforcement
- 12 Upper hoodledge front (R.H. & L.H.)
- 13 Lower instrument panel
- 14 Air box assembly
- 15 Cowl top
- 16 Side cowl top brace
- 17 Side member assembly (R.H. & L.H.)
- 18 Front side member assembly (R.H. & L.H.)
- 19 Battery support bracket
- 20 Front side member (R.H. & L.H.)
- 21 Front side member closing plate (R.H. & L.H.)
- 22 Front side member front closing plate (R.H. & L.H.)
- 23 Front hook (R.H. & L.H.)
- 24 Exhaust mounting bracket
- 25 Hand brake & seat belt reinforcement
- 26 2nd crossmember assembly
- 27 Front floor
- 28 Inner sill (R.H. & L.H.)
- 29 Outer front seat mounting bracket (R.H. & L.H.)
- 30 Rear floor anchor belt reinforcement
- 31 Rear floor front
- 32 Rear floor side
- 33 Rear floor rear
- 34 Spare wheel clamp bracket
- 35 Muffler mounting bracket
- 36 Front side member center extension (R.H. & L.H.)
- 37 Front side member rear extension (R.H. & L.H.)
- 38 Rear seat crossmember
- 39 Rear side member (R.H. & L.H.)
- 40 Rear side member extension (R.H. & L.H.)
- 41 Rear towing hook bracket
- 42 Rear crossmember

BODY COMPONENT PARTS

BODY COMPONENT PARTS



 : Indicates two-side anti-corrosive pre-coated steel portions.
 : Indicates two-side anti-corrosive steel and HSS portions.

- 1 Hood
- 2 Front fender (R.H. & L.H.)
- 3 Front roof rail
- 4 Front roof rail reinforcement
- 5 Roof
- 6 No.1 roof bow
- 7 No.2 roof bow
- 8 No.3 roof bow
- 9 No.4 roof bow
- 10 Rear roof rail
- 11 Roof assembly
- 12 Inner lower front pillar (R.H. & L.H.)
- 13 Lower front pillar reinforcement (R.H. & L.H.)
- 14 Inner upper front pillar (R.H. & L.H.)
- 15 Center pillar hinge support (R.H. & L.H.)
- 16 Inner center pillar (R.H. & L.H.)
- 17 Inner side roof rail (R.H. & L.H.)
- 18 Side body assembly (R.H. & L.H.)
- 19 Outer side body (R.H. & L.H.)
- 20 Outer sill brace (R.H. & L.H.)
- 21 Rear seat back support
- 22 Inner rear wheelhouse (R.H. & L.H.)
- 23 Side rear seat back support (R.H. & L.H.)
- 24 Rear seat back bracket (R.H. & L.H.)
- 25 Filler tube protector bracket
- 26 Sill closing plate (R.H. & L.H.)
- 27 Inner rear wheelhouse extension (R.H. & L.H.)
- 28 Rear pillar reinforcement lower
- 29 Side parcel shelf (R.H. & L.H.)
- 30 Jack mounting bracket
- 31 Inner rear pillar (R.H. & L.H.)
- 32 Outer rear wheelhouse reinforcement
- 33 Outer rear wheelhouse extension (R.H. & L.H.)
- 34 Outer rear wheelhouse (R.H. & L.H.)
- 35 Anchor plate (R.H. & L.H.)
- 36 Front door assembly (R.H. & L.H.)
- 37 Outer front door panel (R.H. & L.H.)
- 38 Rear door assembly (R.H. & L.H.)
- 39 Outer rear door panel (R.H. & L.H.)
- 40 Striker tapping retainer (R.H. & L.H.)
- 41 Fuel filler lid
- 42 Rear fender drip (R.H. & L.H.)
- 43 Rear fender (R.H. & L.H.)
- 44 Filler lid base
- 45 Corner rear fender (R.H. & L.H.)
- 46 Parcel shelf with rear waist
- 47 Trunk lid
- 48 Rear panel

CORROSION PROTECTION

DESCRIPTION

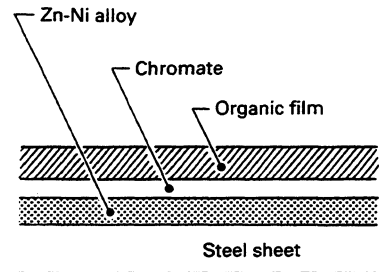
To provide improved corrosion prevention, the following anti-corrosive measures have been implemented in our production plants. When repairing or replacing body panels, it is necessary to use these same anti-corrosive measures.

ANTI-CORROSIVE PRECOATED STEEL (DURASTEEL)

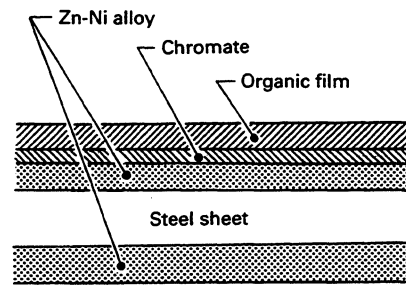
To improve reparability and corrosion resistance, a new type of anti-corrosive pre-coated steel sheets have been adopted taking the place of conventional zinc-coated steel sheets.

This durasteel is electroplated, zinc-nickel alloy under organic film, which provides excellent corrosion resistance.

Durasteel is classified as either one-side pre-coated steel or two-side pre-coated steel. The two-side pre-coated steel provides excellent corrosion resistance.



One-side pre-coated



Outside

Two-side pre-coated

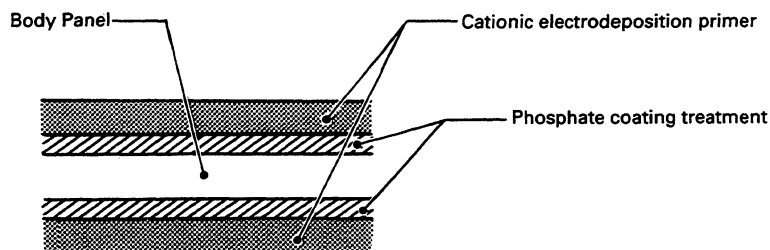
Nissan Genuine Service Parts are fabricated from durasteel sheets. Therefore, it is recommended that GENUINE NISSAN PARTS be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

PHOSPHATE COATING TREATMENT AND CATIONIC ELECTRODEPOSITION PRIMER

A phosphate coating treatment and a cationic electrodeposition primer, which provide an excellent anti-corrosion effect, are employed on all body components.

Caution:

Confine paint removal in the welding operation to the absolute minimum.



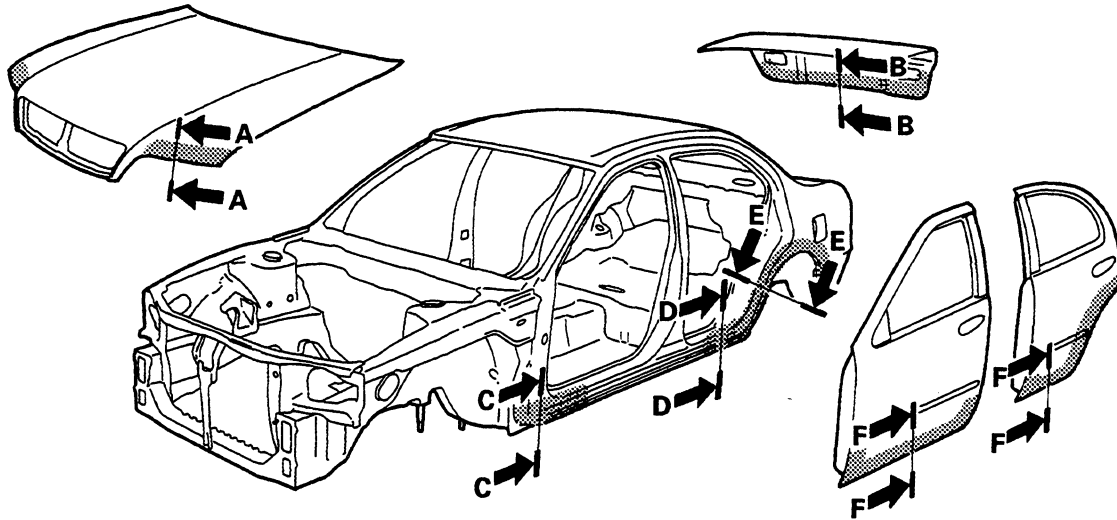
Nissan Genuine Service Parts also are treated in the same manner. Therefore, it is recommended that GENUINE NISSAN PARTS be used for panel replacement to maintain anti-corrosive performance built into the vehicle at the factory.

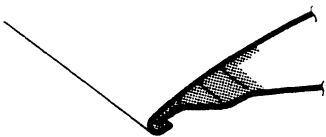
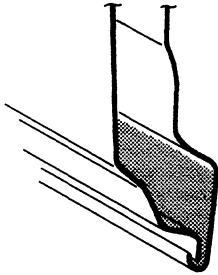
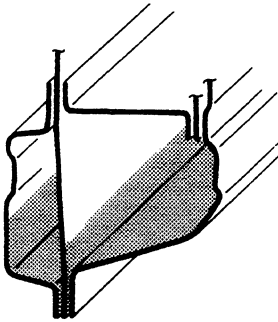
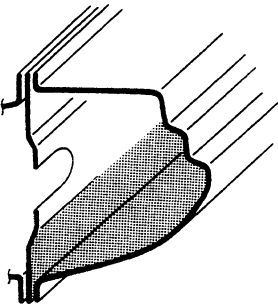
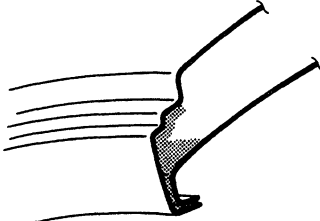
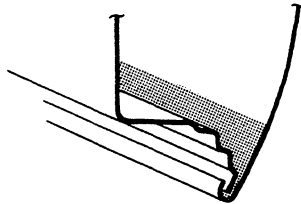
CORROSION PROTECTION

ANTI-CORROSIVE WAX

In order to improve corrosion resistance, anti-corrosive wax is applied inside the body sill and inside other closed sections. Accordingly, when replacing these parts, be sure to apply anti-corrosive wax to the appropriate areas of the new parts. Select an excellent anti-corrosive wax which will penetrate after application and has a long shelf life.

 : Indicates anti-corrosive wax coated portions



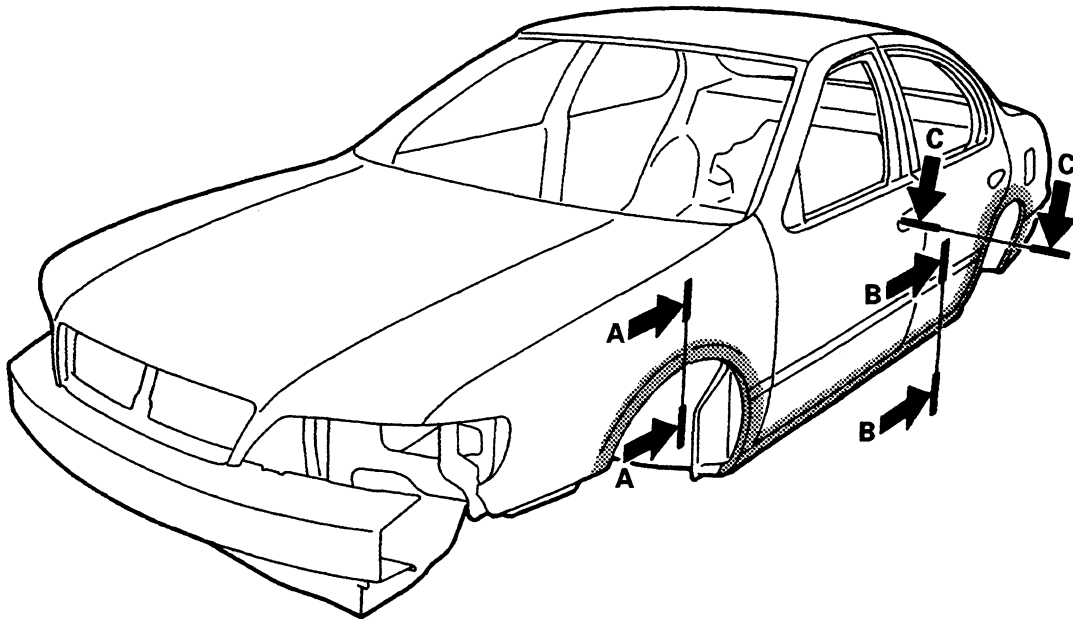
Section A-A	Section B-B	Section C-C
		
Section D-D	Section E-E	Section F-F
		

CORROSION PROTECTION

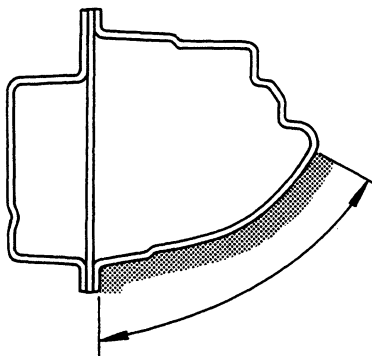
STONE GUARD COAT

To prevent damage caused by stones, the lower outer body panels (fender, door, etc.) have an additional layer of Stone Guard Coat over the ED primer coating. Thus, when replacing or repairing these panels, apply undercoat to the same portions as before. Use a coat which is rust preventive, durable, shock-resistant and has a long shelf life.

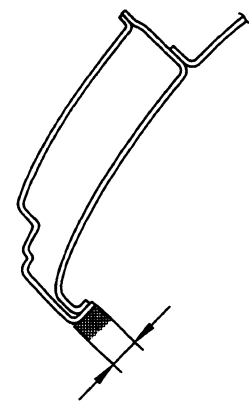
▨ : Indicates stone guard coated portions.



Section A-A



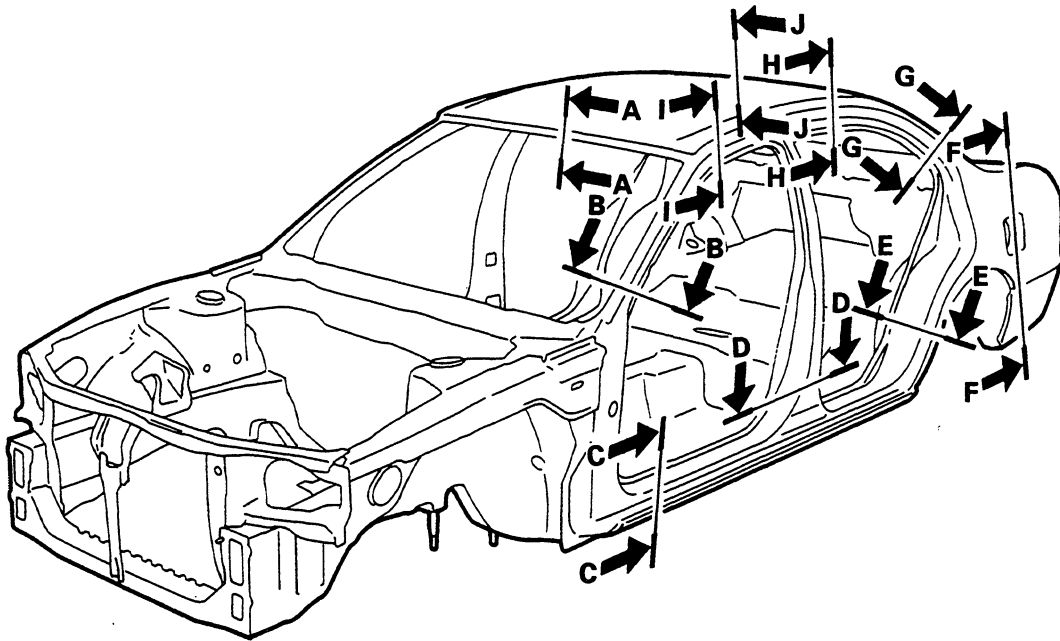
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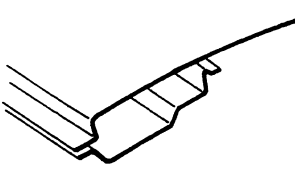
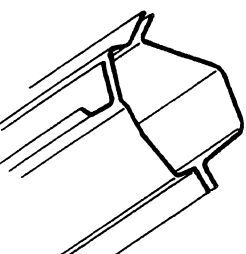
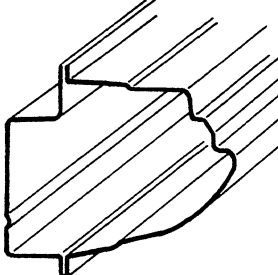
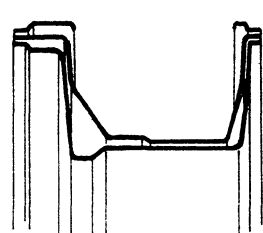
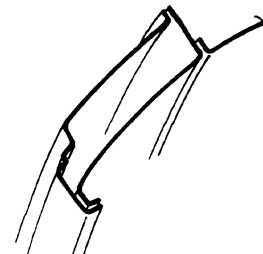
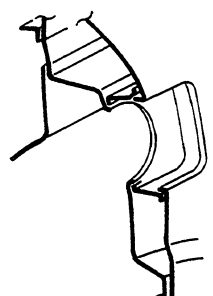
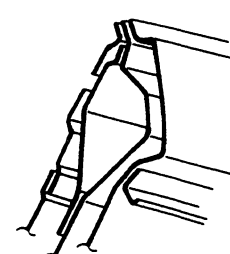
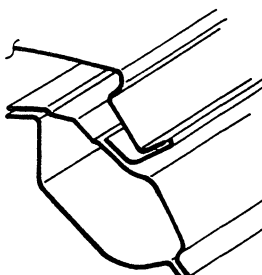
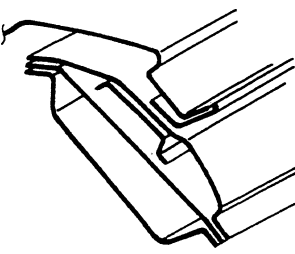
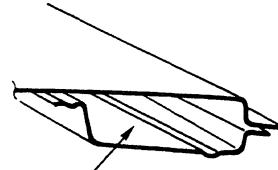


Section C-C

BODY CONSTRUCTION

BODY CONSTRUCTION

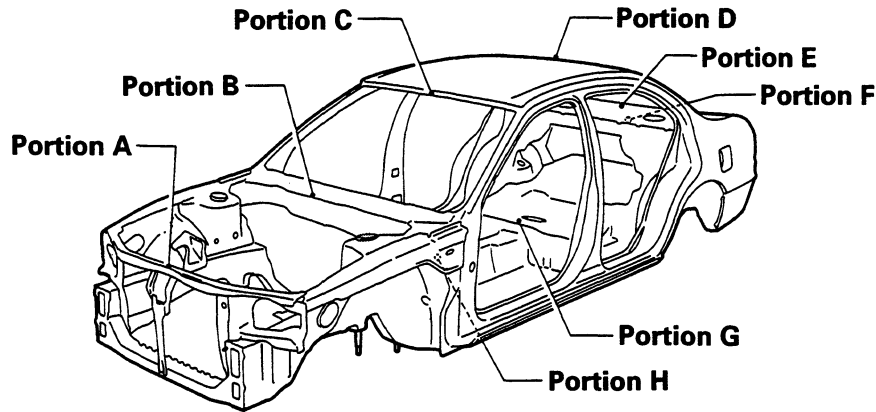


Section A-A	Section B-B	Section C-C	Section D-D
			
Section E-E	Section F-F	Section G-G	Section H-H
			
Section I-I	Section J-J		
	 <p data-bbox="568 1921 747 1953">Rear roof rail</p>		

BODY ALIGNMENT

BODY CENTER MARKS

A mark has been placed on each part of the body to indicate the vehicle center. When repairing parts damaged by an accident which might affect the vehicle frame (members, pillars, etc.) more accurate, effective repair will be possible by using these marks together with body alignment data.



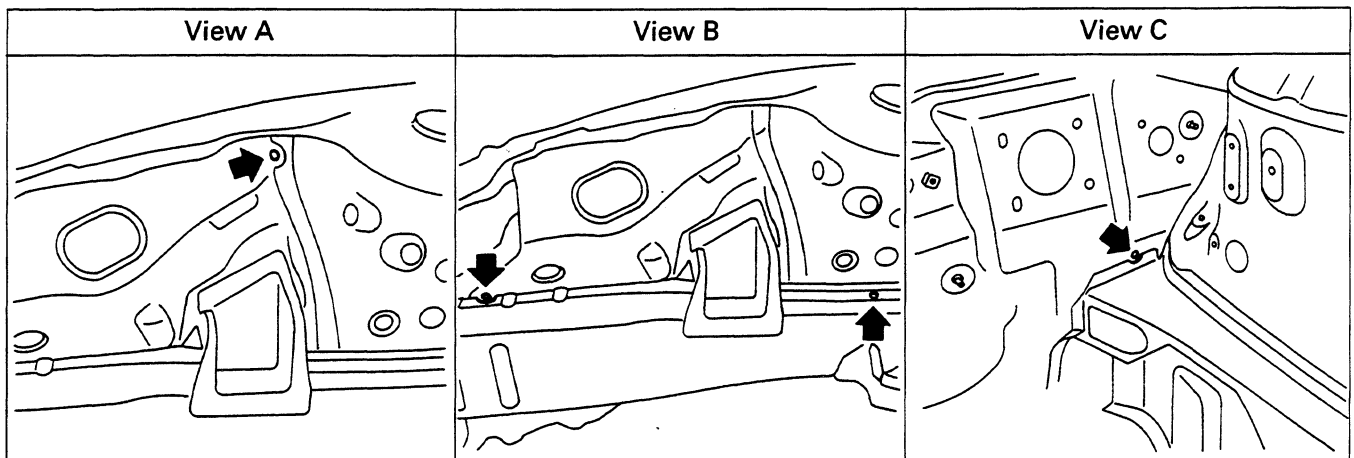
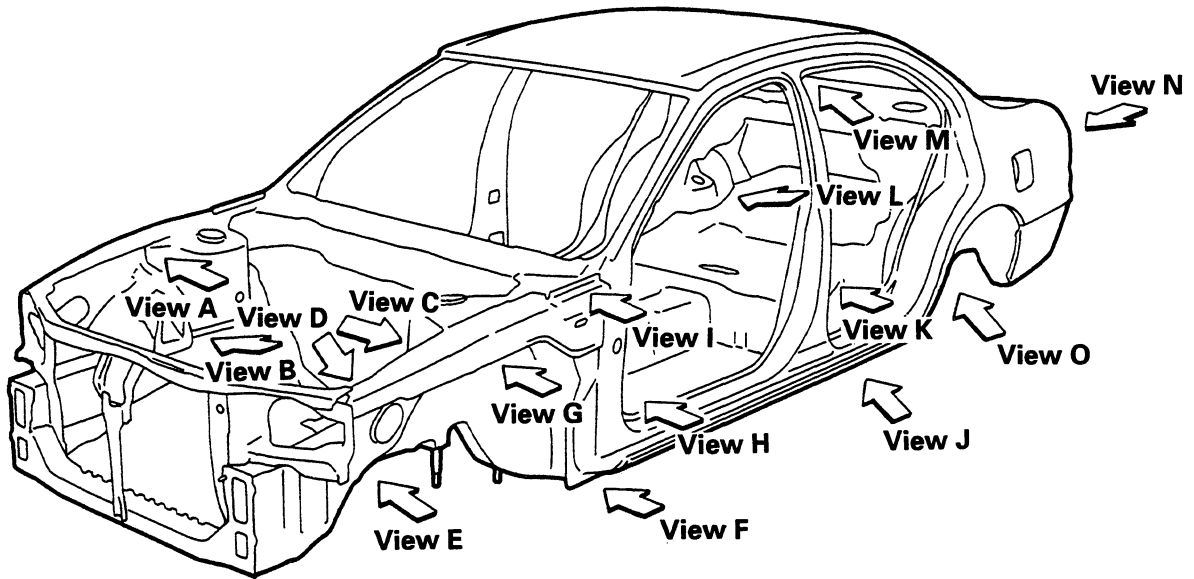
Unit: mm

Portion A Hole (4 dia.) • Upper radiator core support	Portion B Hole (5 dia.) • Cowl top	Portion C • Front roof
Portion D • Rear roof	Portion E Slot (7×11) • Rear waist panel slot	Portion F Hole (8 dia.) • Rear seat back side support
Portion G Hole (8.5 square) • Rear floor front	Portion H Hole (6 dia.) • Parking brake reinforcement	

BODY ALIGNMENT

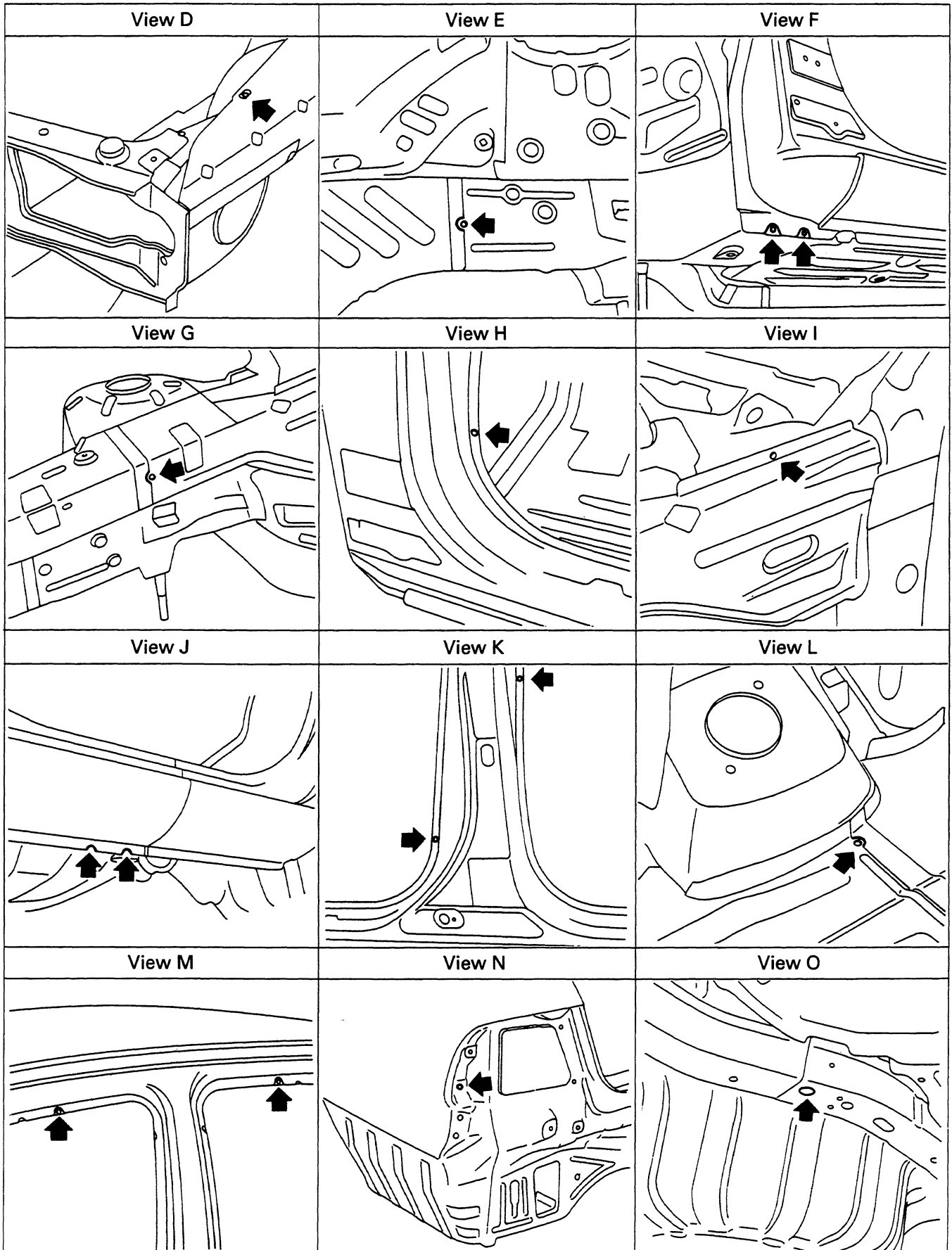
PANEL PARTS MATCHING MARKS

A mark has been placed on each part of the body to indicate the panel parts matching positions. When repairing parts damaged by an accident which might affect the vehicle frame (members, pillars, etc.) more accurate, effective repair will be possible by using these marks together with body alignment data.



BODY ALIGNMENT

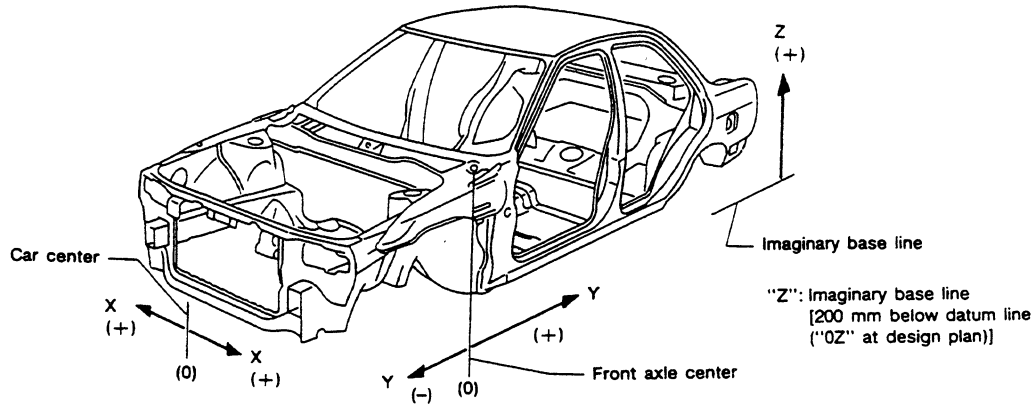
PANEL PARTS MATCHING MARKS



BODY ALIGNMENT

DESCRIPTION

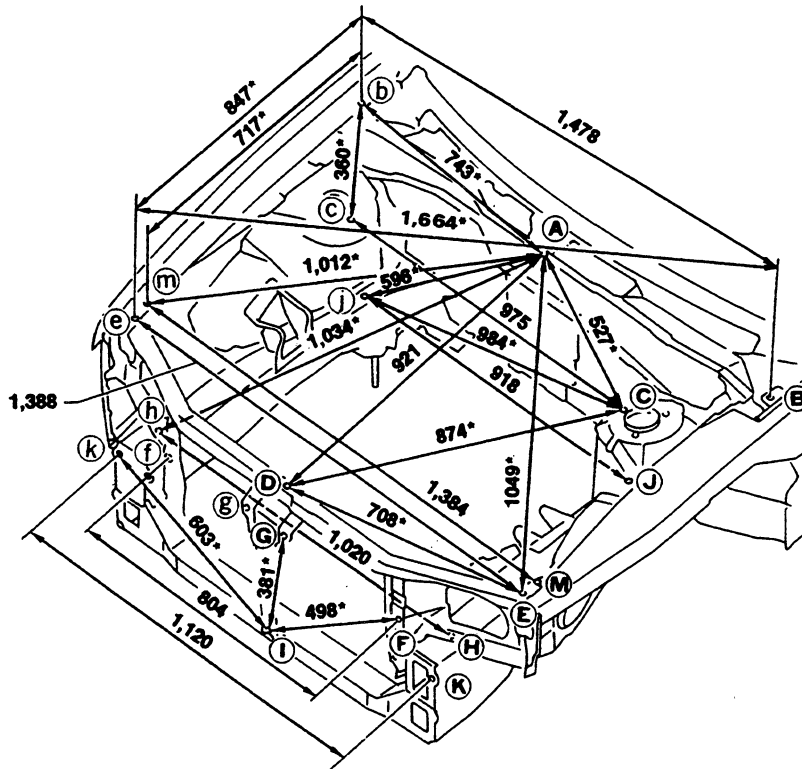
- All dimensions indicated in figures are actual ones.
- When a tram tracking gauge is used, adjust both pointers to equal length and check the pointers and gauge itself to make sure there is no free play.
- When a measuring tape is used, check to be sure there is no elongation twisting or bending.
- Measurements should be taken at the center of the mounting holes.
- An asterisk (*) following the value at the measuring point indicates that the measuring point on the other side is the same value.
- The coordinates of the measurement points are the distances measured from the standard line of "X", "Y" and "Z".



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ENGINE COMPARTMENT

MEASUREMENT



Unit: mm

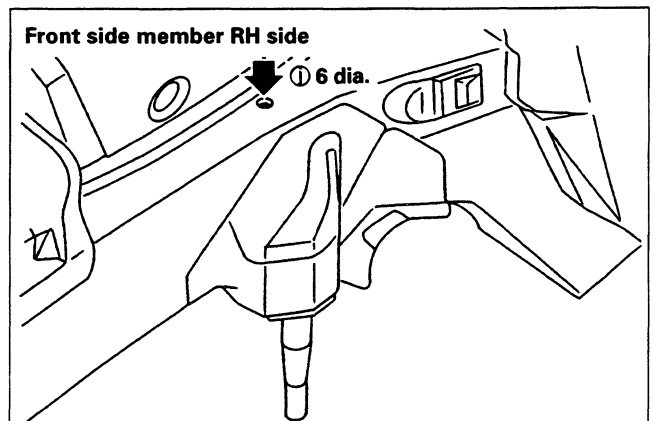
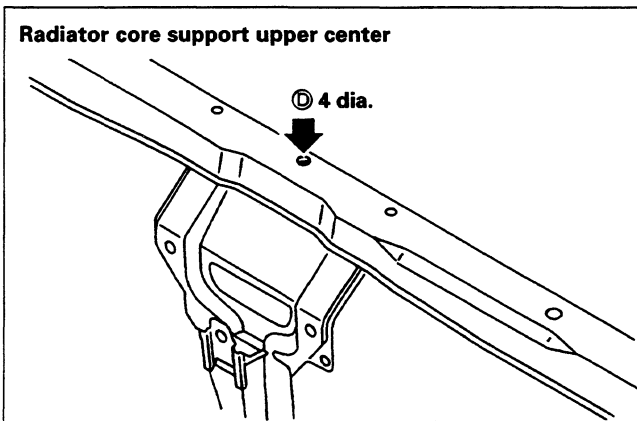
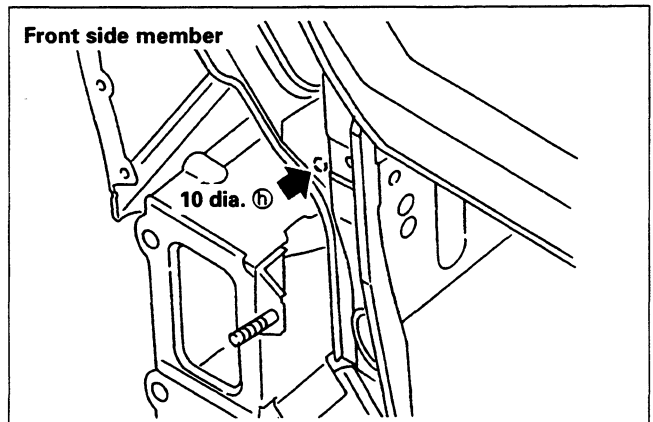
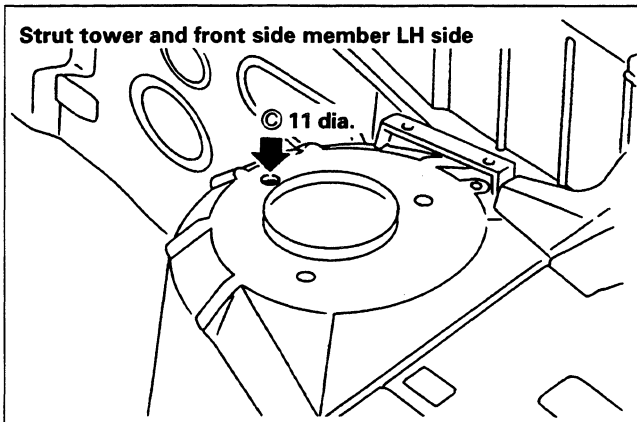
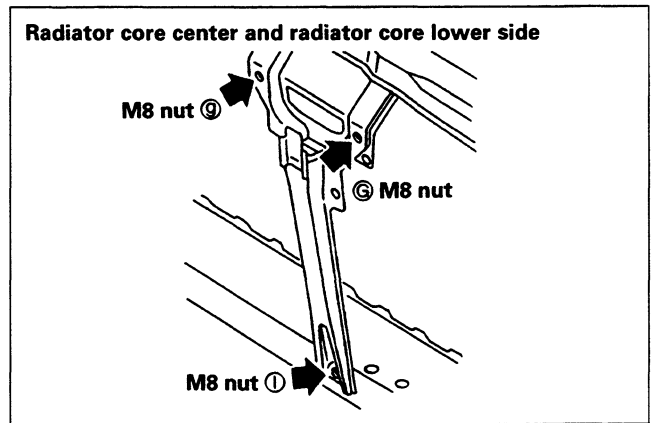
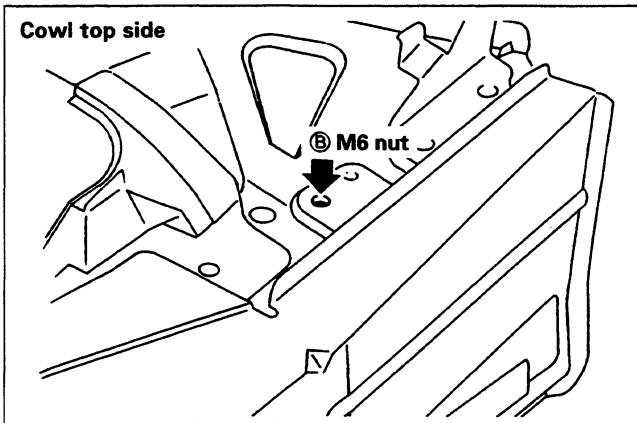
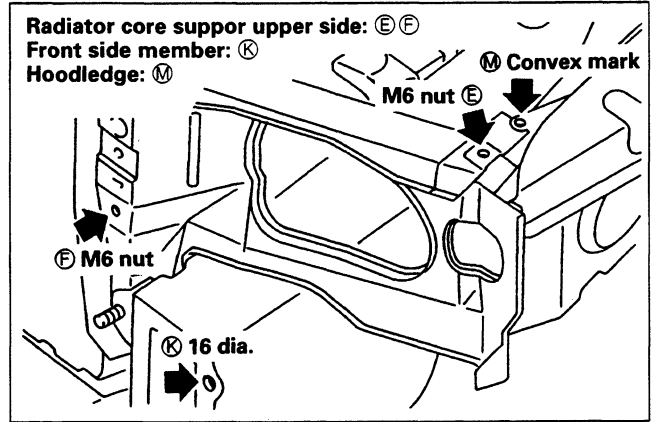
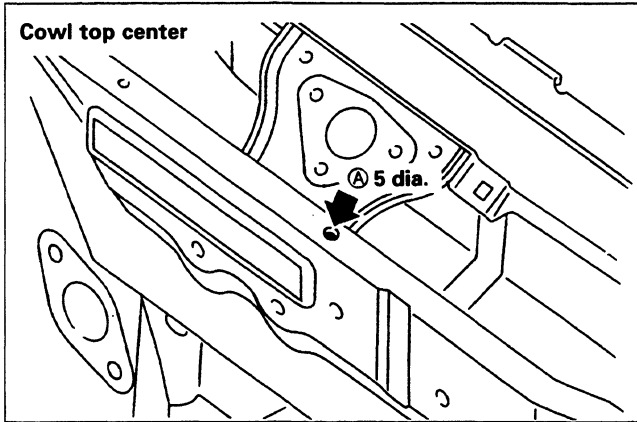
SBF390HA

BODY ALIGNMENT

ENGINE COMPARTMENT

MEASUREMENT POINTS

Unit: mm

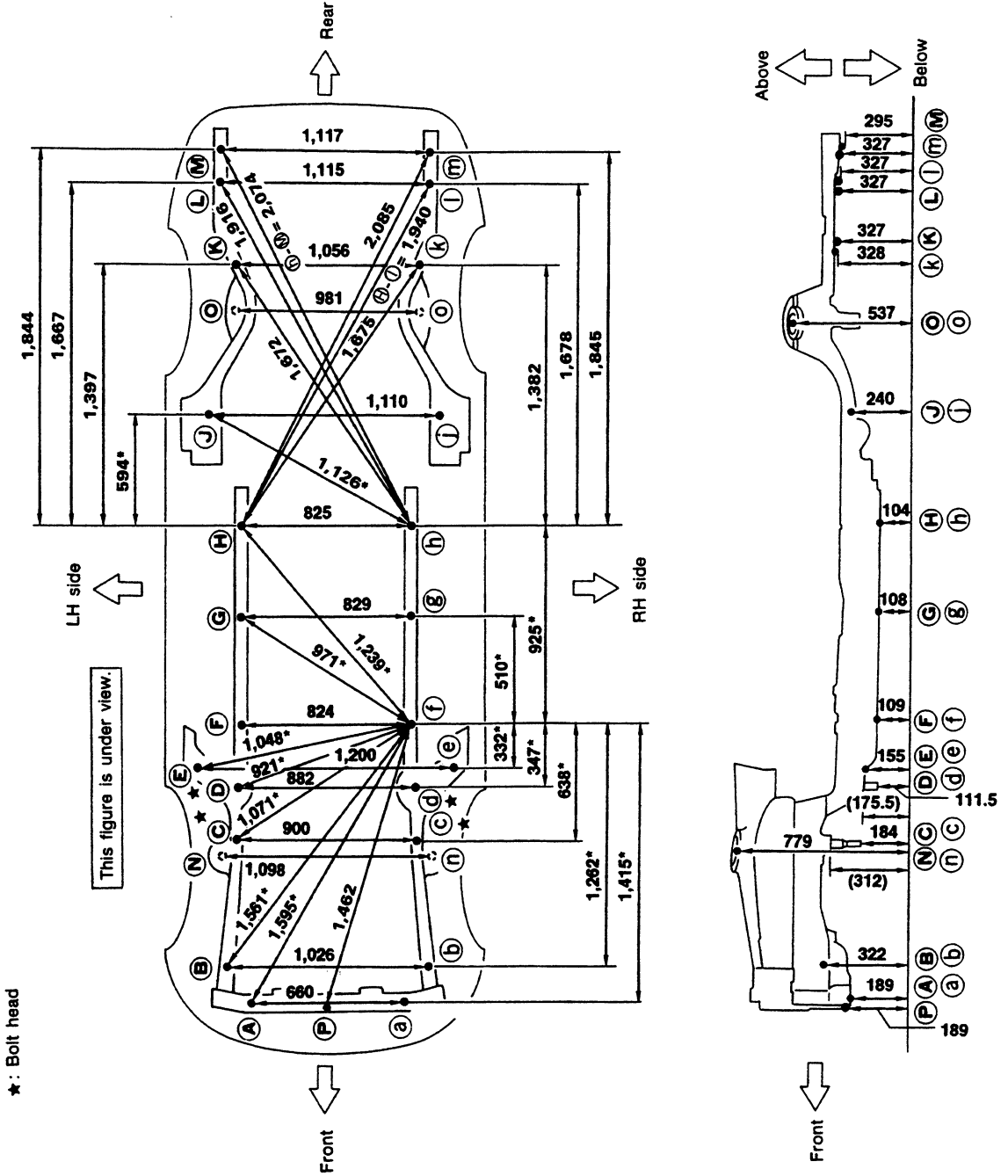


BODY ALIGNMENT

UNDERBODY

MEASUREMENT

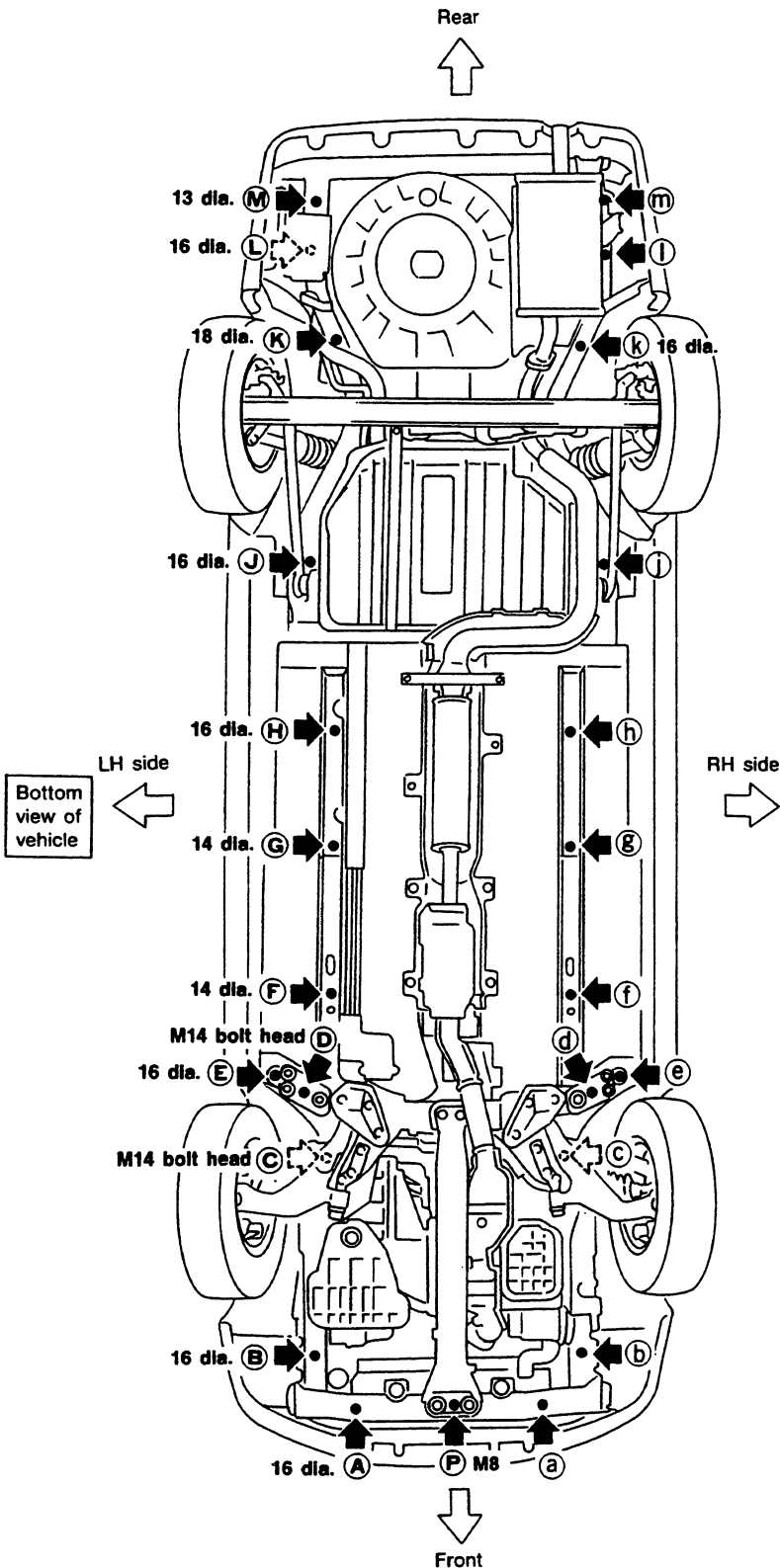
All dimensions indicated in this figure are actual ones. (There are no projected dimensions.)



BODY ALIGNMENT

UNDERBODY

MEASUREMENT POINTS



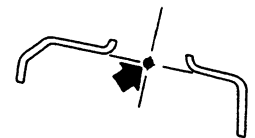
Coordinates:

(A), (a)	(J), (j)
X : 330	X : 555
Y : -710	Y : 2,185
Z : 188.8	Z : 239.5
(B), (b)	(K), (k)
X : 513	X : 512
Y : -540	Y : 3,000
Z : 322	Z : 326.6
(C), (c)	(L), (l)
X : 450	X : -544
Y : 68	Y : 2,982
Z : 184	Z : 328.2
(D), (d)	(M), (m)
X : 441	X : 540
Y : 354	Y : 3,272
Z : 111.5	Z : 326.6
(E), (e)	(N), (n)
X : 600	X : -575
Y : 430	Y : 3,280
Z : 154.9	Z : 326.6
(F), (f)	(O), (o)
X : 412	X : 546
Y : 700	Y : 3,454
Z : 109	Z : 295.4
(G), (g)	(P), (p)
X : 414.5	X : -570.5
Y : 1,210	Y : 3,450
Z : 108.4	Z : 326.6
(H), (h)	(Q), (q)
X : 412.5	X : 0
Y : 1,625	Y : -700.5
Z : 104	Z : 188.8

Front and rear strut tower centers

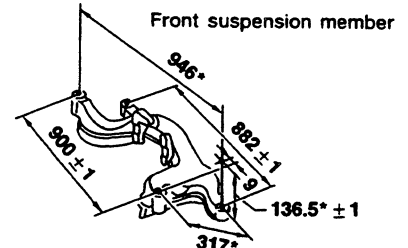
Coordinates:

(N), (n)
X : 548.8
Y : 28.7
Z : 779.3
(O), (o)
X : 490.3
Y : 2,621
Z : 537.2



Front: (N), (n) 87 dia.
Rear: (O), (o) 61.4 dia.

Suspension link mounting hole

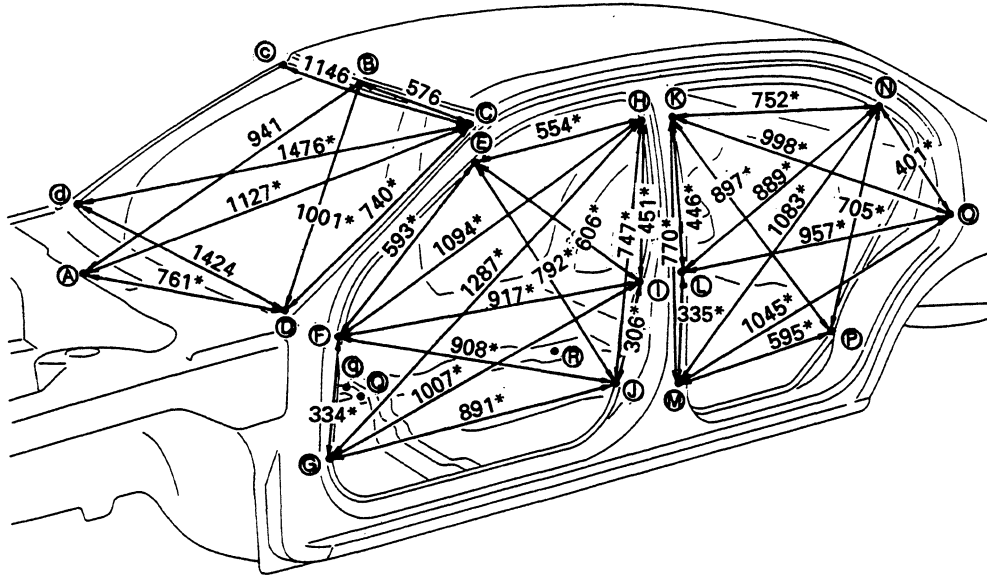


Unit: mm

BODY ALIGNMENT

PASSENGER COMPARTMENT

MEASUREMENT



Point	Dimension
E~e	1,281
F~f	1,441
G~g	1,426
H~h	1,239
I~i	1,470
J~j	1,430
K~k	1,237
L~l	1,470
M~m	1,425
N~n	1,296
O~o	1,656
P~p	1,419
Q~E	1,021*
Q~F	908*
Q~H	1,209*
Q~I	972*
R~K	1,071*
R~N	1,284*
R~L	862*
R~P	895*

Figures marked with a * show symmetrically identical dimensions on both right and left hand sides of the vehicle.

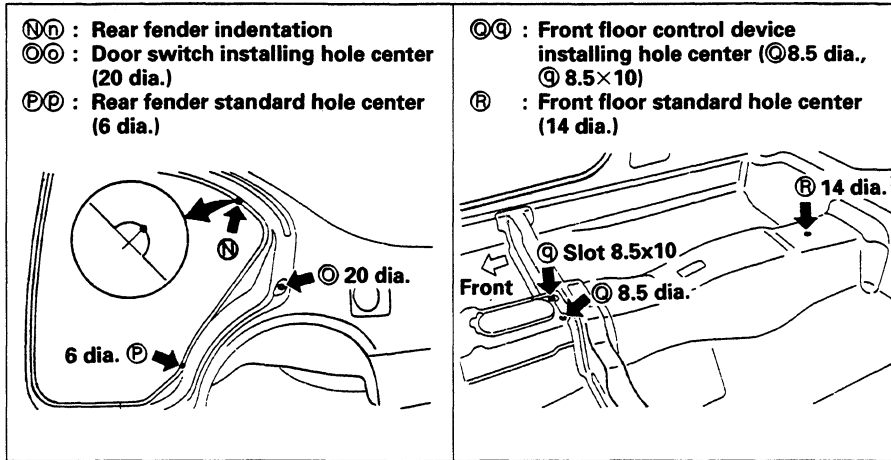
Unit: mm

<p>ⓑ : Cowl top hole center (5 dia.)</p>	<p>Ⓐ : Front roof flange end at center positioning mark</p>	<p>ⒸⒸ : Outer front pillar joggle ⒺⒺ : Outer front pillar positioning mark</p>
<p>ⒹⒹ : Outer front pillar joggle</p>	<p>ⒻⒻ : Outer front pillar indentation ⒼⒼ : Outer front pillar standard hole center (7 dia.)</p>	<p>ⒻⒻⒼⒼ : Outer center pillar indentation ⒾⒾⒿⒿⓁⓁⓂⓂ : Center pillar standard hole center</p>

BODY ALIGNMENT

PASSENGER COMPARTMENT

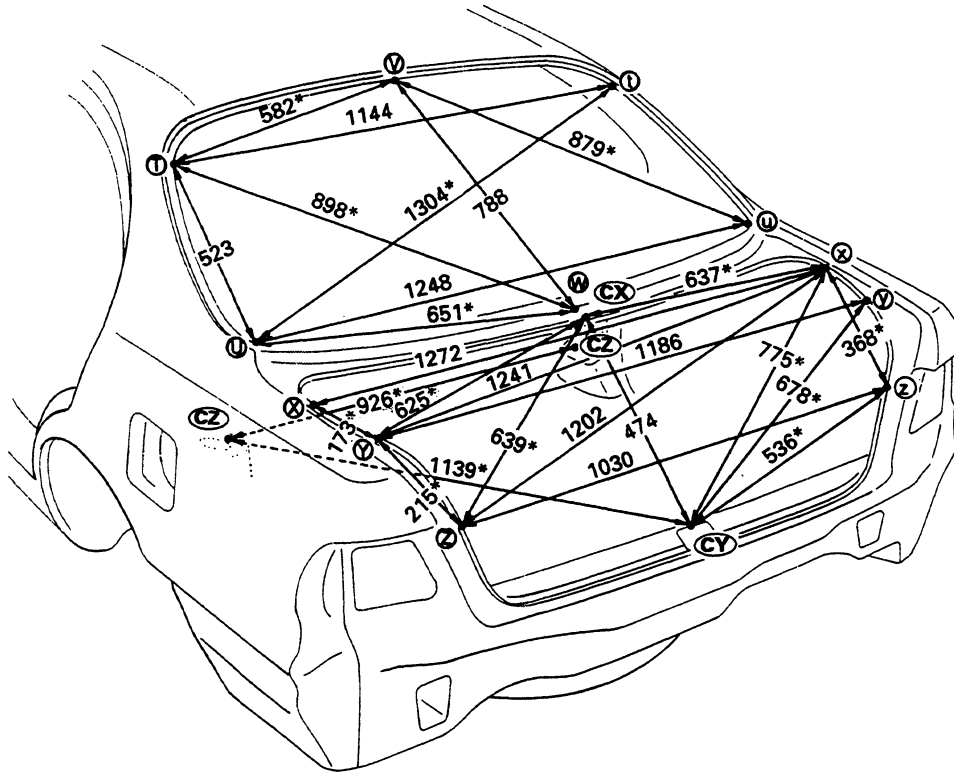
Unit: mm



BODY ALIGNMENT

REAR BODY

MEASUREMENT



Point	Dimension
Ⓣ~Ⓣ	1,144
Ⓤ~Ⓤ	1,248
ⓧ~ⓧ	1,272
Ⓨ~Ⓨ	1,186
Ⓩ~Ⓩ	1,030

Unit: mm

<p>ⓉⓉ : Rear fender joggle Ⓥ : Roof flange positioning mark</p>	<p>ⓊⓊ : Rear fender joggle</p>	<p>Ⓦ : Rear waist molding installation hole upper side (7 x 11) ⓐⓧ : Rear waist panel flange end</p>
<p>ⓧⓧ : Rear fender joggle ⓎⓎⓏⓏ : Rear fender corner joggle</p>	<p>ⓐⓎ : Rear panel trunk lid lock installation hole flange end</p>	<p>ⓐⓏ : Shock absorber mounting upper bracket hole center (8 dia.)</p>

HANDLING PRECAUTIONS FOR PLASTICS

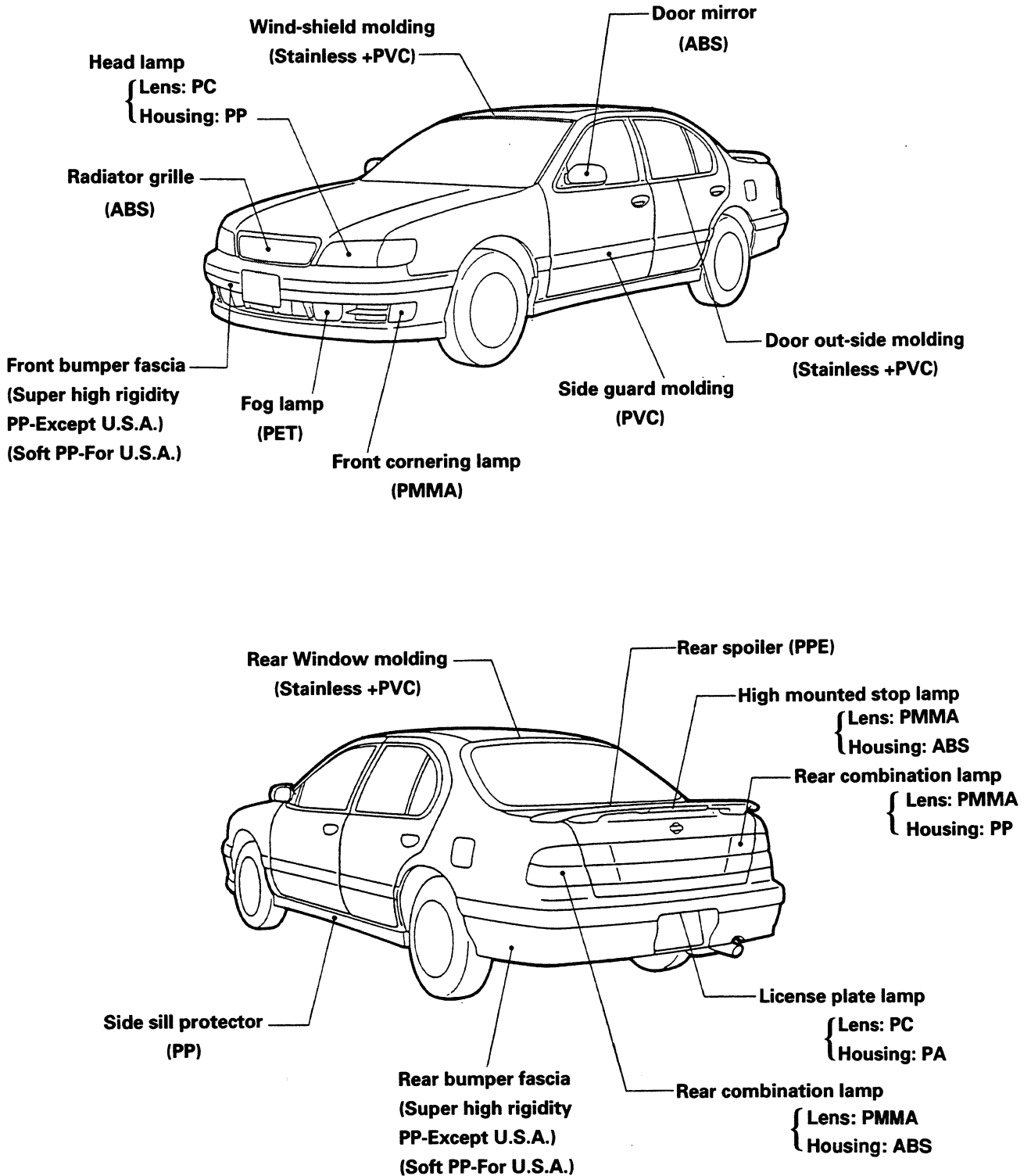
HANDLING PRECAUTIONS FOR PLASTICS

Abbreviation	Material name	Heat resisting temperature °C (°F)	Resistance to gasoline and solvents	Other cautions
PE	Polyethylene	80 (176)	Gasoline and most solvents are harmless.	Flammable
PET	Polyethylene terephthalate	180 (356)	Gasoline and most solvents are harmless.	
PVC	Polyvinyl chloride	80 (176)	Gasoline and most solvents are harmless if applied for a very short time (wipe up quickly).	Poison gas is emitted when burned.
PP	Polypropylene	90 (194)	Same as above. Also avoid battery acid.	Flammable
ABS	Acrylonitrile butadiene styrene resin	80 (176)	Avoid gasoline and solvents.	
AES	Acrylonitrile ethylene styrene	80 (176)	Avoid gasoline and solvents.	
PMMA	Polymethyl methacrylate	85 (185)	Avoid gasoline and solvents.	
PUR	Polyurethane	90 (194)	Gasoline and most solvents are harmless.	Avoid battery acid.
AAS	Acrylonitrile acrylic rubber styrene	85 (185)	Avoid gasoline and solvents.	
AS	Styrene-acrylonitrile	85 (185)	Avoid gasoline and solvents.	
PPO	Polyphenylene oxide	110 (230)	Avoid gasoline and solvents.	
POM	Polyacetal	120 (248)	Gasoline and solvents are harmless.	Avoid battery acid.
PC	Polycarbonate	120 (248)	Avoid gasoline and solvents.	
PA	Polyamide (Nylon)	140 (284)	Gasoline and most solvents are harmless.	Avoid immersing in water.
FRP	Fiber reinforced plastics	170 (338)	Gasoline and most solvents are harmless.	Avoid battery acid.
PPC	Polypropylene composite	115 (239)	Gasoline and most solvents are harmless.	Flammable
PBT	Polybutylene terephthalate	140 (284)	Gasoline and most solvents are harmless.	
TPR	Thermoplastic rubber	80 (176)	Avoid gasoline and solvents.	
TPE	Thermoplastic elastomer	80 (176)	Avoid gasoline and solvents.	
TPUR	Thermoplastic polyurethane	80 (176)	Avoid gasoline and solvents.	

1. When repairing and painting a portion of the body adjacent to plastic parts, consider their characteristics (influence of heat and solvent) and remove them if necessary or take suitable measures to protect them.
2. Plastic parts should be repaired and painted using methods suiting the materials.

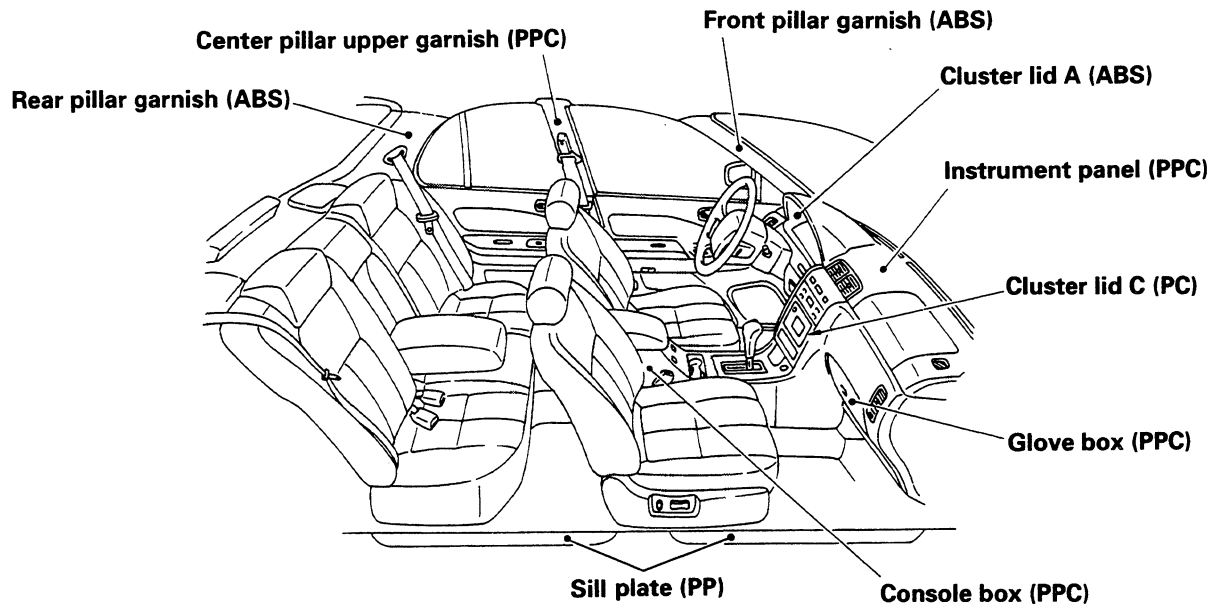
HANDLING PRECAUTIONS FOR PLASTICS

LOCATION OF PLASTIC PARTS



HANDLING PRECAUTIONS FOR PLASTICS

LOCATION OF PLASTIC PARTS



PRECAUTIONS

PRECAUTIONS FOR HANDLING HIGH STRENGTH STEEL

High strength steel has been used for body panels in order to reduce vehicle weight.

Accordingly, precautions in repairing automotive bodies made of high strength steel are described below:

HIGH STRENGTH STEEL (HSS) USED IN NISSAN VEHICLES

Tensile strength	Nissan designation	Major applicable parts
373 N/mm ² (38 kg/mm ² , 54 klb/sq in)	NP130	<ul style="list-style-type: none">● Side member● Hoodledge● Pillar● Hood● Trunk lid outer
785 – 981 N/mm ² (80 – 100 kg/mm ² , 114 – 142 klb/sq in)	NP150	<ul style="list-style-type: none">● Bumper reinforcement● Door guard beam

- In Nissan vehicles, HSS plates of 373 N/mm² (38 kg/mm², 54 klb/sq in) (NP130) are most commonly utilized, and those with a tensile strength of 785 to 981 N/mm² (80 to 100 kg/mm², 114 to 142 klb/sq in) (NP150) are used only on parts requiring much more strength.

PRECAUTIONS

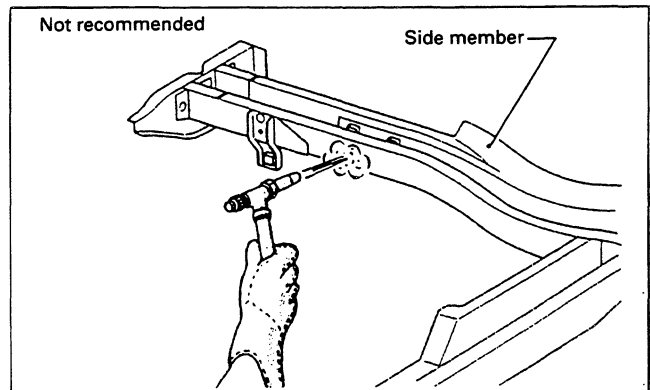
PRECAUTIONS FOR HANDLING HIGH STRENGTH STEEL

Special consideration for HSS must be given to the following points:

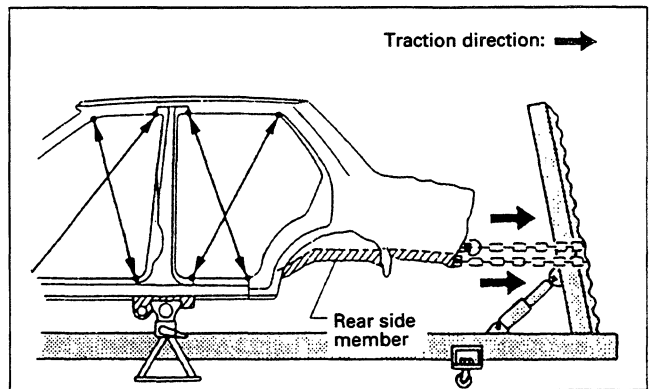
1. Additional points to consider

- The repair of reinforcements (such as side members) by heating is not recommended since it involves the risk of lowering strength. When heating is unavoidable, do not heat such parts at temperatures above 550°C (1,022°F).

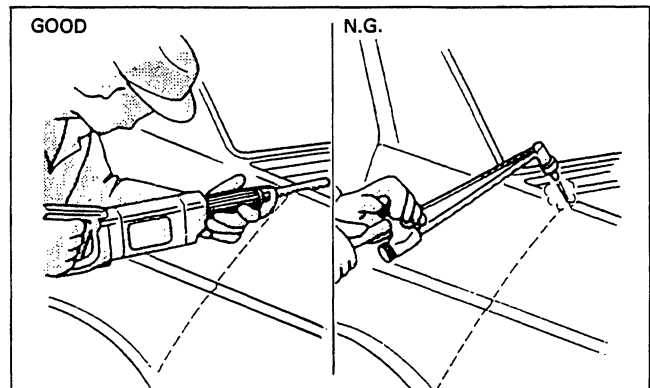
Heating temperature should be verified with a thermometer. (A crayon-type and other thermometer are available.)



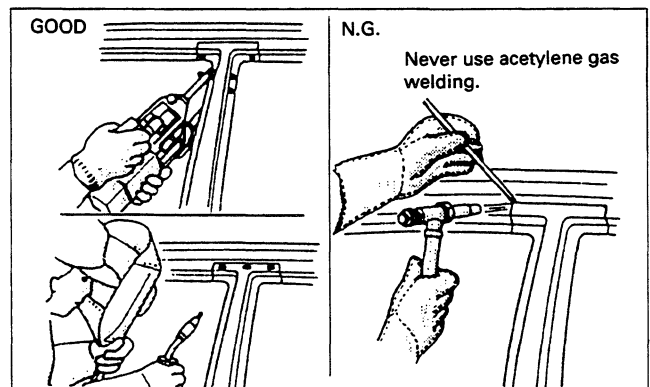
- When straightening body panels, use caution in pulling any HSS panel. Because it is very strong, this may cause deformation in adjacent portions of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.



- In cutting HSS panel, avoid gas cutting if possible. Instead, use an air saw or a hand cutter to avoid decreasing the strength of surrounding portions due to the influence of heat. In case gas cutting is inevitable, a minimum allowance of 50 mm (1.97 in) must be given.



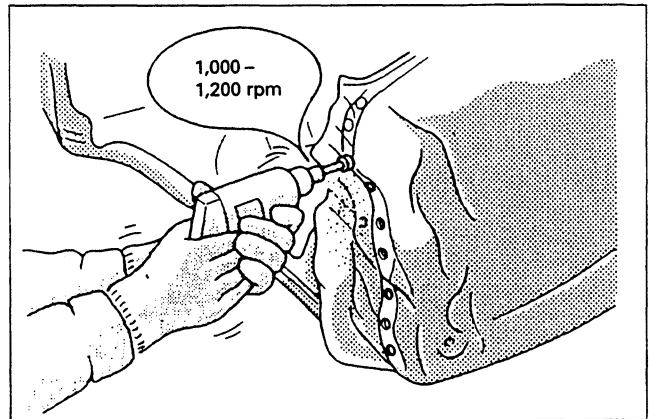
- In welding HSS panel, use spot welding whenever possible in order to minimize any decrease in strength of surrounding portions due to the influence of heat. If spot welding is impossible, use M.I.G. welding. Do not use acetylene gas welding because it is inferior in welding strength.



PRECAUTIONS

PRECAUTIONS FOR HANDLING HIGH STRENGTH STEEL

- The spot nugget on HSS panel is harder than that of an ordinary steel panel. Therefore, for spot cutting HSS panel, a high torque drill of a low speed (1,000 to 1,200 rpm) may be used to maintain its durability and facilitate the operation.

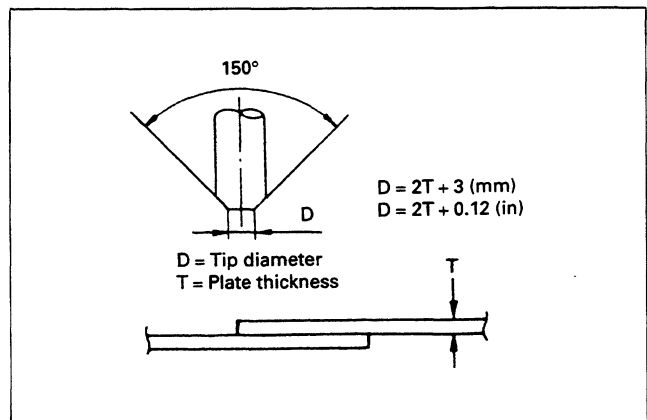


- HSS panels with a tensile strength of 785 to 981 N/mm² (80 to 100 kg/mm², 114 to 142 klb/sq in), used as reinforcement in the door guard bar and in the bumper, is too high in tensile strength to use for general repairs. When these panels are damaged, the outer panels also sustain consequential damage; therefore, these panels are never remedied without replacing the door assembly or bumper assembly.

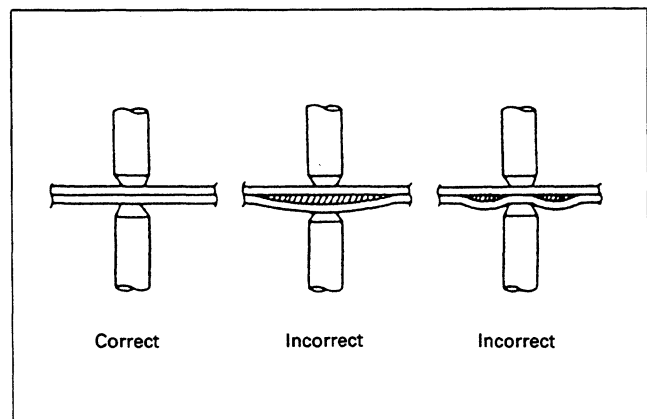
2. Precautions in spot welding

This work should be performed under standard work conditions. However, work control must be exercised as follows:

- The electrode tip diameter must be reformed properly according to the panels thickness.



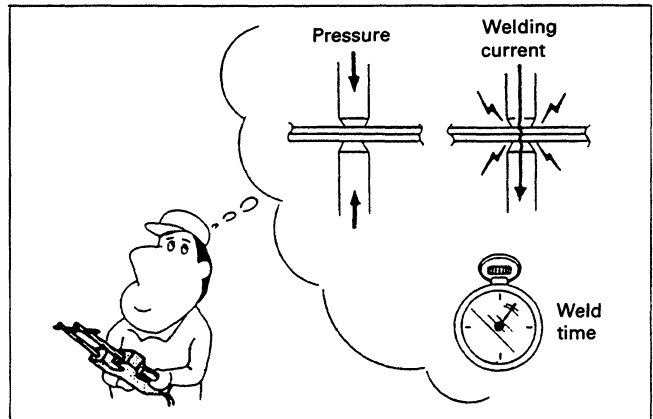
- The panel surfaces must be fitted to each other, leaving no gaps.



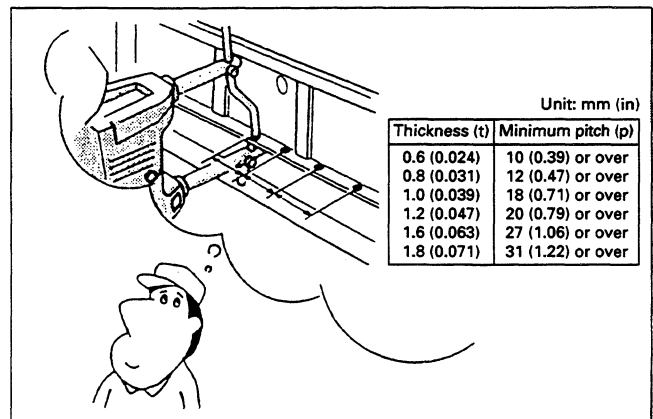
PRECAUTIONS

PRECAUTIONS FOR HANDLING HIGH STRENGTH STEEL

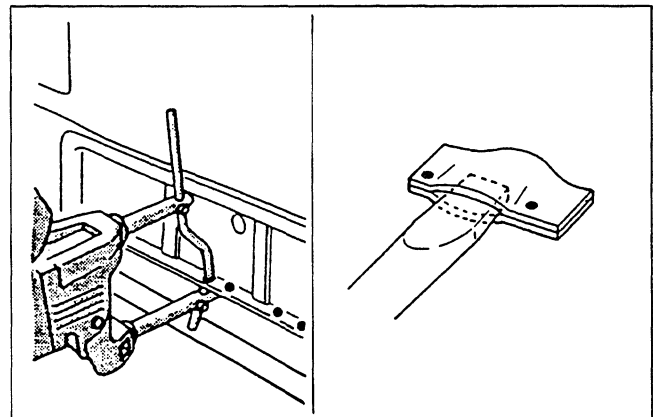
- Follow established specifications for the appropriate pressure level, current level and weld time.



- Follow the specifications for the proper welding pitch.



- After welding, welding strength must be tested.



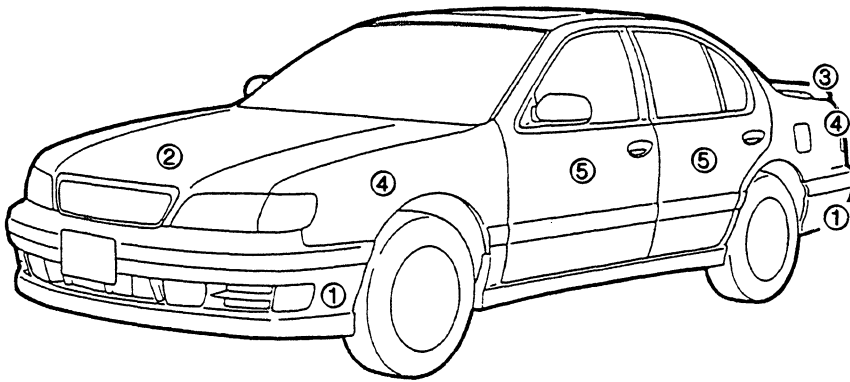
THEFT PREVENTION

THEFT PREVENTION FOR BODY PARTS (FOR U.S.A.)

This vehicle complies with the U.S. Federal Motor Vehicle Theft Prevention Standard (49 CFR Part 541). Certain body parts (see illustration) are labeled at the factory, the labels show the VIN-number of this vehicle.

Spare parts are similarly labeled at the factory in a different location. The labels show the letter R (for replacement) instead of the VIN-number.

The labels are intended for parts identification in case of theft.



Location of labels

- ① **Bumper front/rear**
- ② **Hood**
- ③ **Trunk lid**
- ④ **All fenders**
- ⑤ **All doors**

Notes:

- Do not remove these labels.
- Do not damage or spray paint over these labels, when repairing. (use masking tape)
- Make sure the replacement parts you receive have labels.
- After spraying the paint, remove the masking tape placed over the labels.