

0 GENERAL

0

VEHICLE IDENTIFICATION	0-2
MAJOR SPECIFICATIONS	0-3

VEHICLE IDENTIFICATION**MODELS****Vehicles for Europe**

Model code	Engine model	Transmission model	Fuel supply system
Z16AMNGFL6	6G72 [2,972 cm ³ (181.4 cu.in.)]	W5MG1	MPI
Z16AMNGFR6			

Vehicles for General Export

Model code	Engine model	Transmission model	Fuel supply system
Z16AMNGFL	6G72 [2,972 cm ³ (181.4 cu.in.)]	W5MG1	MPI
Z16AMNGFR			

Vehicles for GCC

Model code	Engine model	Transmission model	Fuel supply system
Z16AMNGFLW	6G72 [2,972 cm ³ (181.4 cu.in.)]	W5MG1	MPI

Vehicles for Australia

Model code	Engine model	Transmission model	Fuel supply system
Z16AMNGFR8	6G72 [2,972 cm ³ (181.4 cu.in.)]	W5MG1	MPI

MAJOR SPECIFICATIONS

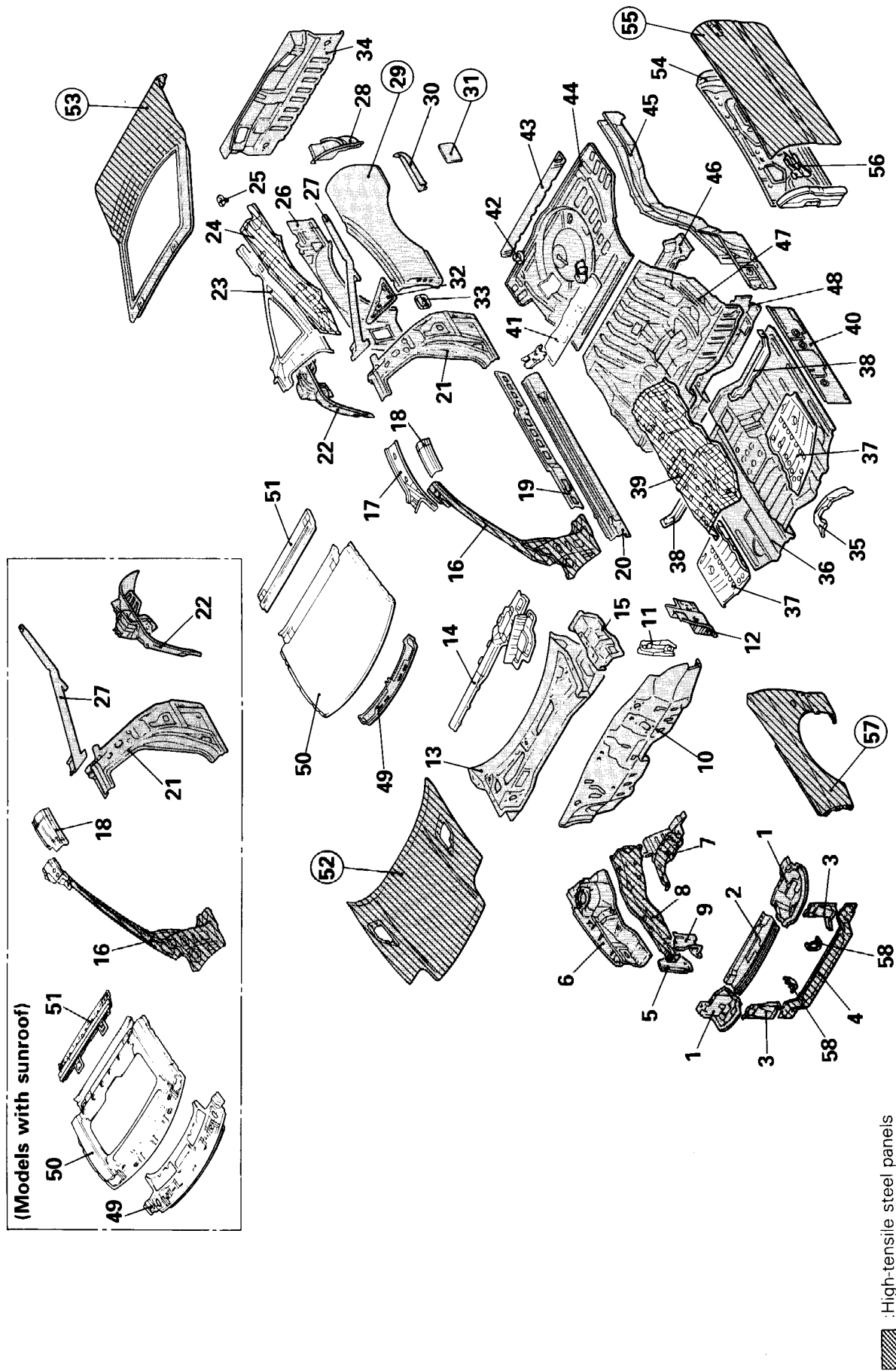
Items		Z16AMNGFL6 Z16AMNGFR6	Z16AMNGFL Z16AMNGFR	Z16AMNGFLW Z16AMNGFR8
Dimensions	mm (in.)			
Overall length			4,560 (179.5)	
Overall width			1,840 (72.4)	
Overall height			1,285 (50.6)	
Wheelbase			2,470 (97.2)	
Track-front			1,560 (61.4)	
Track-rear			1,580 (62.2)	
Body overhang				
Front			1,030 (40.6)	
Rear			1,060 (41.7)	
Ground clearance (laden)			105 (4.1)	
Wheel alignment				
Front wheel alignment				
Toe-in (at the centre of tyre tread)	mm (in.)		-3 to 3 (-0.11 to 0.11)	
Toe-in (at the rim of wheel disc)	mm (in.)		-1.5 to 1.5 (-0.06 to 0.06)	
Camber			0° ± 30'	
Caster			3°55' ± 30'	
Kingpin inclination angle			14°2'	
Rear wheel alignment				
Toe-in (at the centre of tyre tread)	mm (in.)		-2 to 3 (-0.07 to 0.11)	
Toe-in (at the rim of wheel disc)	mm (in.)		-1 to 1.5 (-0.04 to 0.06)	
Camber			-0°10' ± 30'	
Wheels and tyres				
Tyre size			225/50ZR17	
Wheel size			17 × 7 2/1 JJ	
Offset	mm (in.)		46 (1.81)	

1 BODY CONSTRUCTION

1

BODY COMPONENTS.....	1-2
BODY CONSTRUCTION CHARACTERISTICS	1-4
BODY MAIN CROSS-SECTIONAL VIEWS	1-4
MAINTENANCE, SERVICEABILITY.....	1-6
FRONT BODY.....	1-7
SIDE BODY	1-12
REAR BODY	1-14
UNDER BODY	1-15
ROOF.....	1-18
DOOR	1-18
SILENCER APPLICATION LOCATIONS	1-19

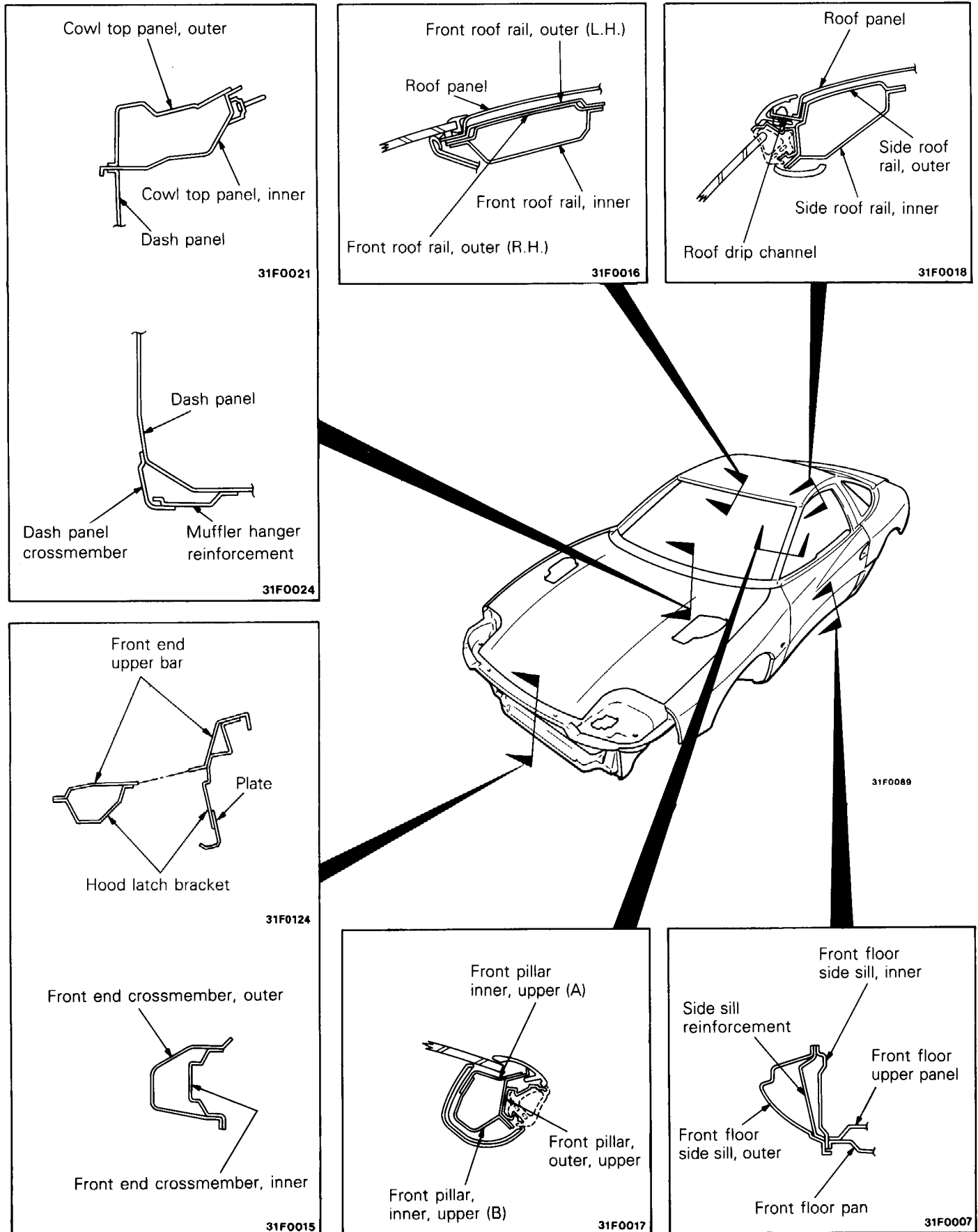
BODY COMPONENTS

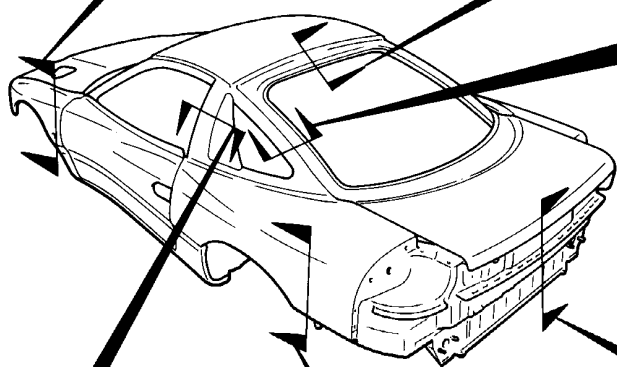
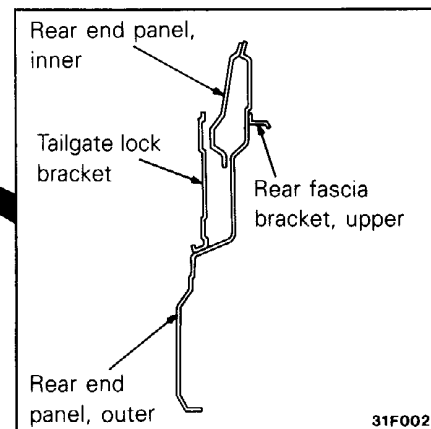
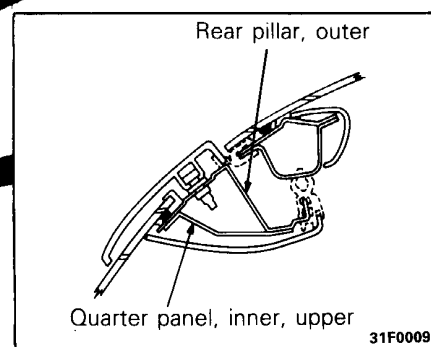
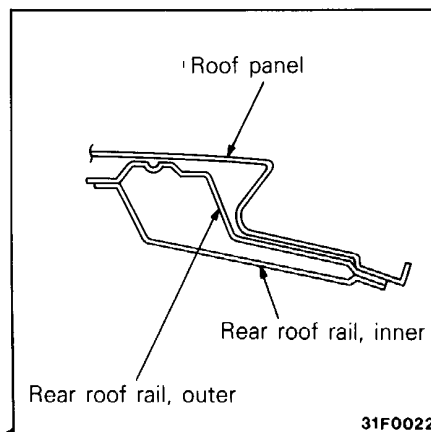
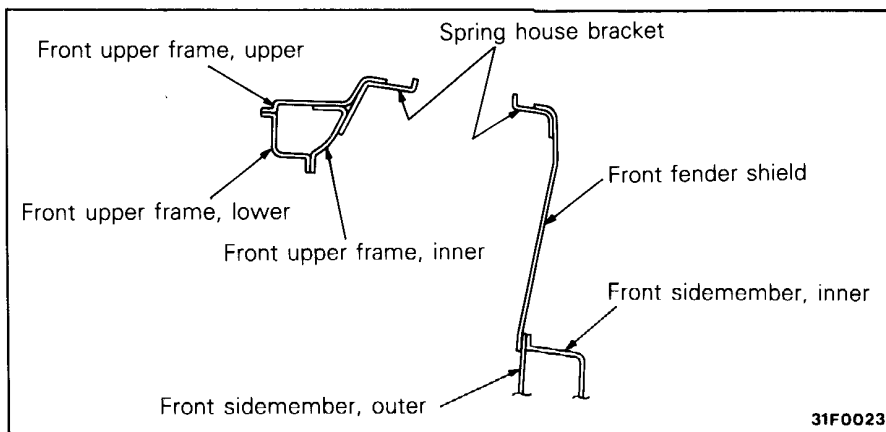


1. Headlamp housing
2. Front end upper bar
3. Front end crossmember brace
4. Front end crossmember
5. Front end gusset, outer
6. Front wheelhouse, inner
7. Front sidemember, rear
8. Front sidemember
9. Front end gusset, inner
10. Dash panel
11. Footrest bracket
12. Front floor side sill, inner, front
13. Cowl top panel
14. Front deck crossmember
15. Front upper frame extension
16. Front pillar
17. Side roof rail, inner
18. Side roof rail, outer
19. Side sill reinforcement
20. Front floor side sill, outer
21. Center pillar, outer
22. Rear wheelhouse panel, inner
23. Quarter panel, inner, upper
24. Beltline reinforcement
25. Drain pipe
26. Quarter panel, inner, lower
27. Rear pillar, outer
28. Rear lamp housing
29. Quarter panel, outer
30. Quarter outer extension, lower
31. Fuel filler panel
32. Center pillar outer extension
33. Seat belt reinforcement
34. Rear end panel
35. Backbone crossmember
36. Front floor pan
37. Front floor plate, upper
38. Front floor crossmember, rear
39. Backbone reinforcement
40. Front floor side sill, inner
41. Rear floor crossmember, upper
42. Spare tyre bracket
43. Rear end crossmember
44. Rear floor pan
45. Rear floor sidemember
46. Rear floor crossmember, lower
47. Rear seat pan
48. Rear seat crossmember
49. Front roof rail
50. Roof panel
51. Rear roof rail
52. Hood panel
53. Tailgate panel
54. Front door panel, inner
55. Front door panel, outer
56. Side door beam
57. Front fender
58. Air guide bracket

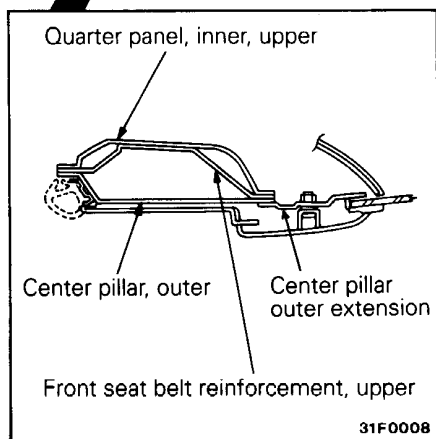
BODY CONSTRUCTION CHARACTERISTICS

BODY MAIN CROSS-SECTIONAL VIEWS

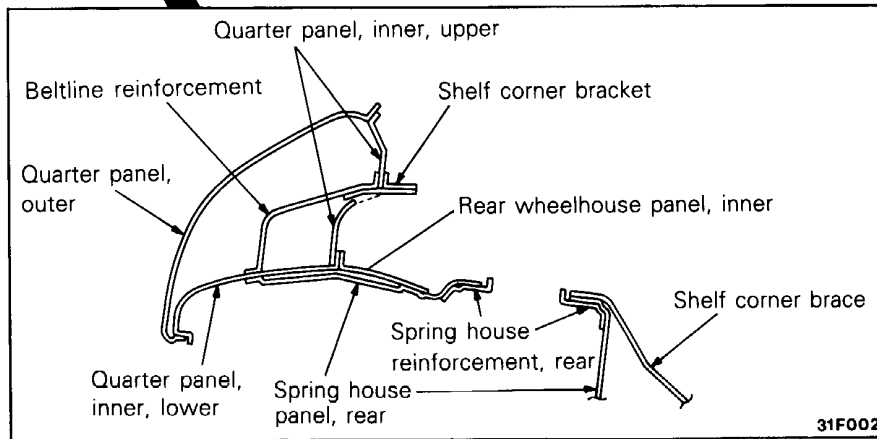




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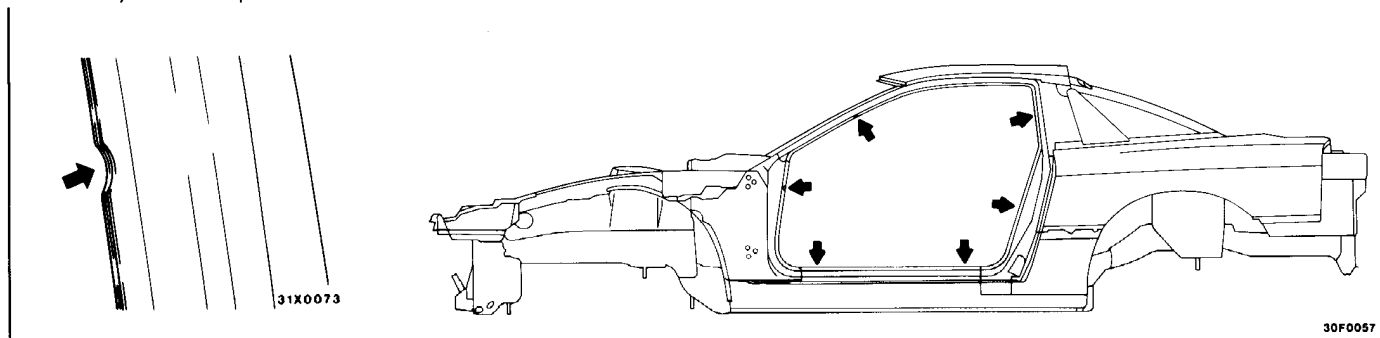
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MAINTENANCE, SERVICEABILITY**Side Structure**

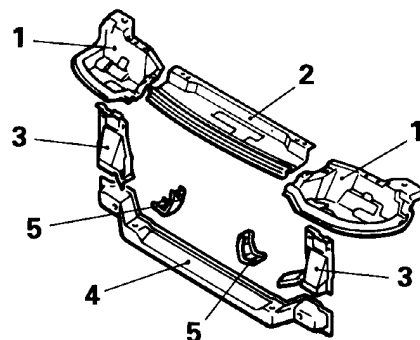
Notches are provided in the door openings for use in aligning panel positions, thus facilitating the assembly of new parts.

**Headlamp Support**

The following supplied shapes are designed to cope with various types of damage.

- Supplied with the assembly
Front end crossmember
3+4
- Supplied as single parts
1, 2, 3, 5

1. Headlamp housing
2. Front end bar, upper
3. Front end brace crossmember
4. Front end crossmember
5. Air guide bracket



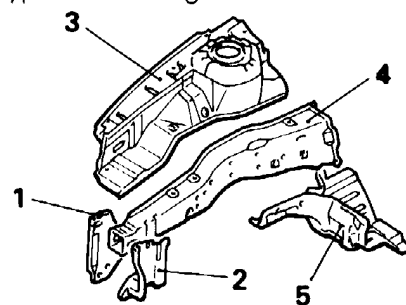
31F0031

Fender Shield

The following supplied shapes are designed to cope with various types of damage.

- Supplied with the assembly
Fender shield
1+2+3+4+5
- Supplied as single parts
1, 2, 3, 5

1. Front end gusset, outer
2. Front end gusset, inner
3. Front wheelhouse, inner
4. Front sidemember
5. Front sidemember, rear

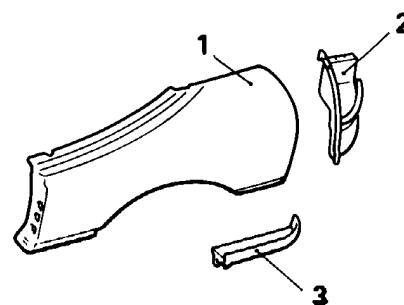


31F0031

Quarter Panel, Outer

The following supplied shapes are designed to cope with various types of damage.

- Supplied with the assembly
Quarter panel, outer
1+2+3
 - Supplied as single parts
2, 3
1. Quarter panel, outer
 2. Rear lamp housing
 3. Quarter outer extension, lower



31F0031

FRONT BODY

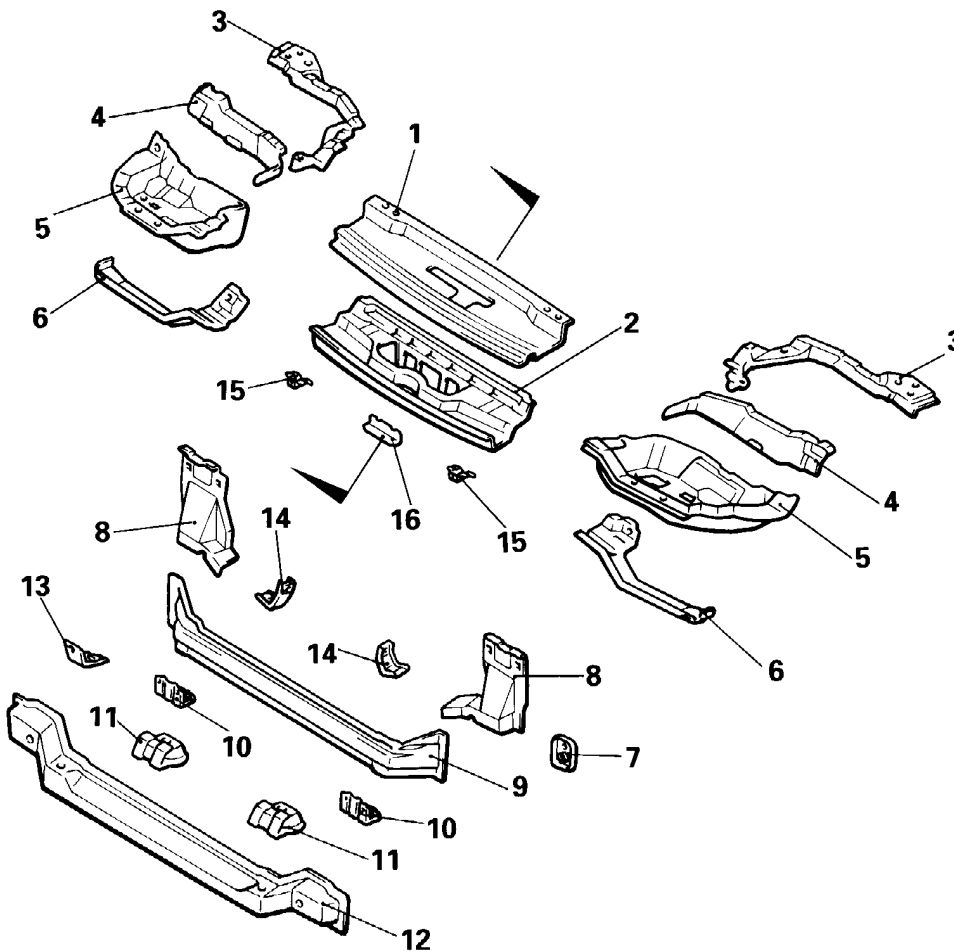
Headlamp support

A structure as shown below is used with the large soft fascia which consists of the front bumper, skirt panel and header panel molded into one unit.

(1) A large and very rigid front end upper bar is used.

Furthermore, the hood latch opening has a closed cross section to improve strength.

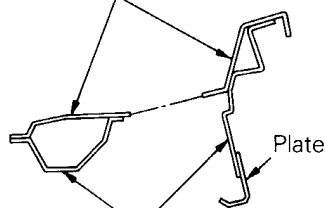
(2) A large headlamp housing is used to improve strength.



1. Front end upper bar
2. Hood latch bracket
3. Front end upper bar, side
4. Headlamp housing extension
5. Headlamp housing panel
6. Upper bar reinforcement, side
7. Reinforcement (vehicles for Europe)
8. Sidemember to crossmember brace
9. Front end crossmember, inner
10. Front air dam reinforcement LH (vehicles for Europe)
11. Radiator bracket
12. Front end crossmember, outer
13. Front air dam reinforcement RH (vehicles for Europe)
14. Air guide bracket
15. Headlamp washer tank upper bracket (vehicles for Europe)
16. Plate

31F0129

Front end upper bar

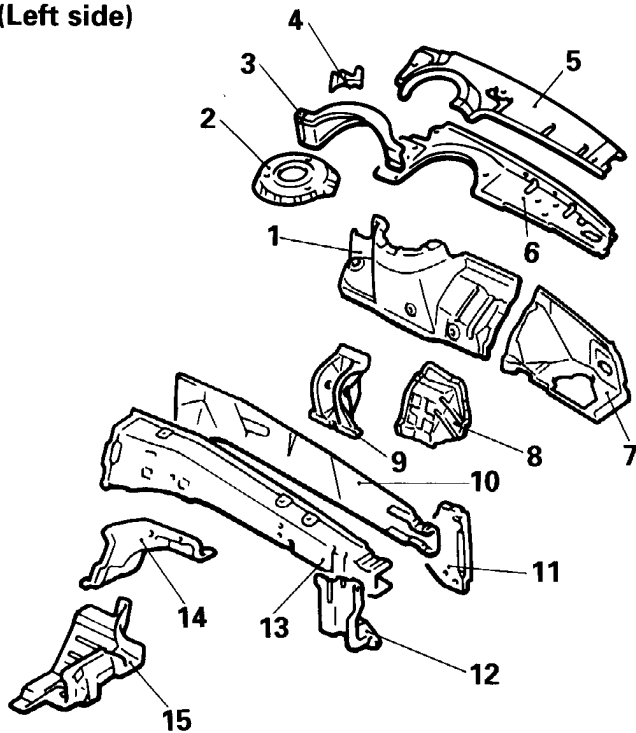


Hood latch bracket

31F0124

Fender Shield

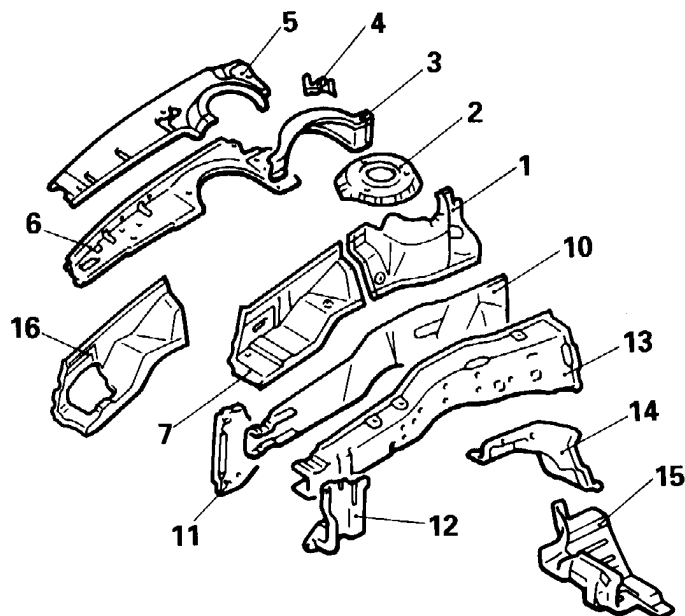
(Left side)



1. Front fender shield
2. Spring house bracket
3. Front upper frame, inner
4. Upper frame extension gusset
5. Front upper frame, upper
6. Front upper frame, lower
7. Front fender shield, front
8. Engine mounting reinforcement
9. Engine mounting bracket
10. Front sidemember, outer
11. Front end gusset, outer
12. Front end gusset, inner
13. Front sidemember, inner
14. Front sidemember reinforcement, rear
15. Front sidemember, rear
16. Front fender shield, front (models with ABS)

31F0137

(Right side)



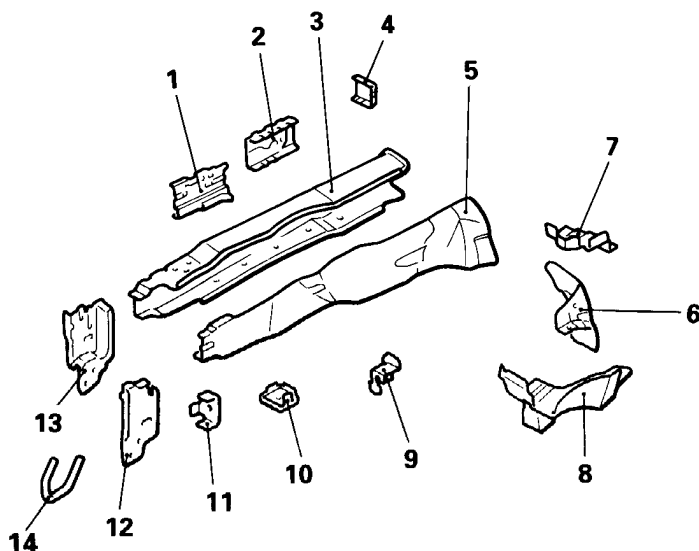
31V0136

FRONT SIDEMEMBER REINFORCEMENTS

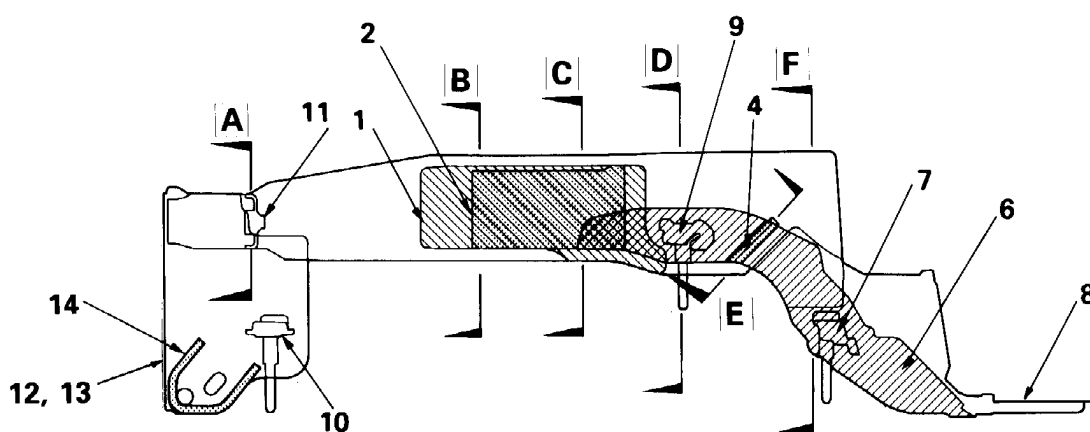
The following reinforcements have been installed to the front sidemember.

(Left side)

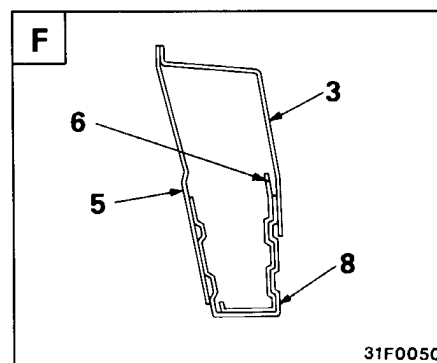
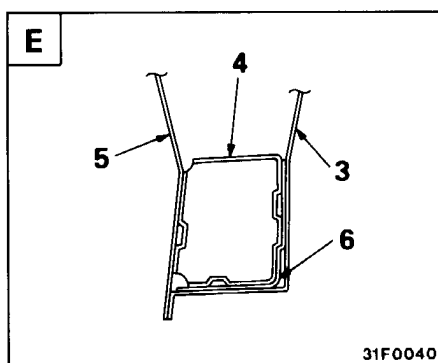
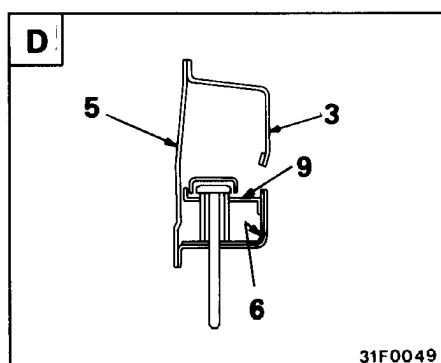
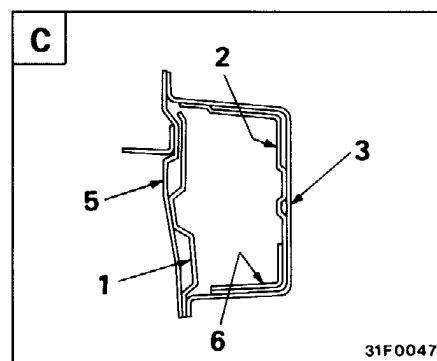
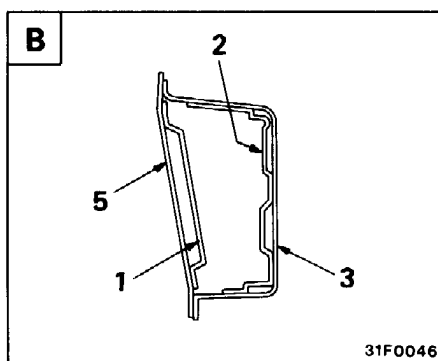
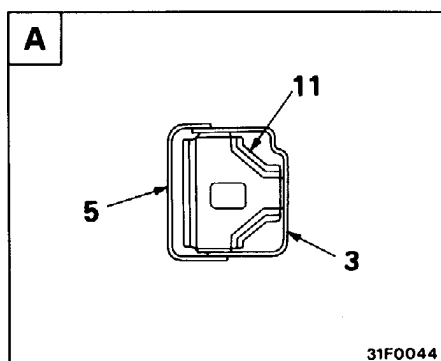
1. Front sidemember reinforcement, outer
2. Front sidemember reinforcement, front
3. Front sidemember, inner
4. Front sidemember bulkhead
5. Front sidemember, outer
6. Front sidemember reinforcement, rear
7. Pipe support, rear
8. Front sidemember, rear
9. Pipe support, front
10. Pipe support
11. Absorber bracket
12. Front end gusset, outer
13. Front end gusset, inner
14. Front hook reinforcement



31F0134

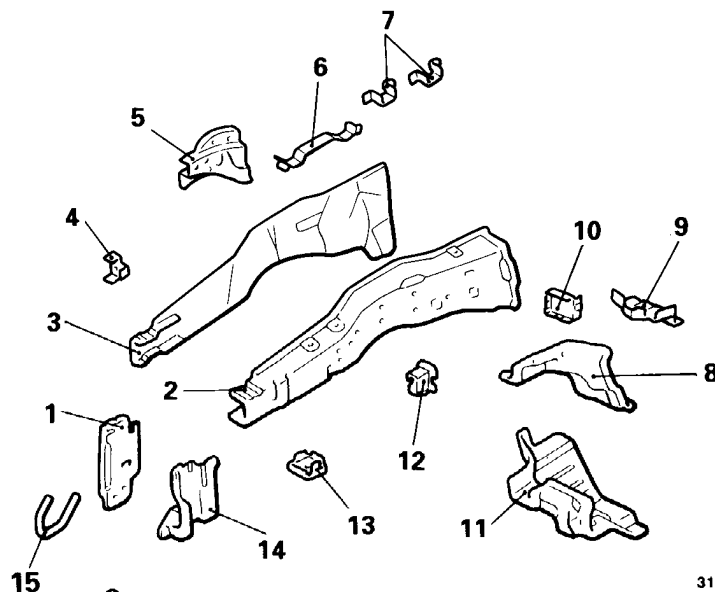


31F0130

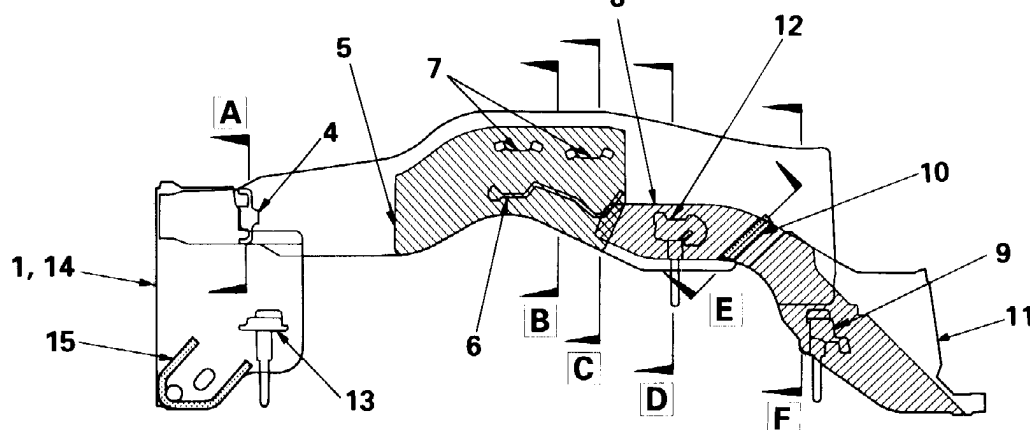


(Right side)

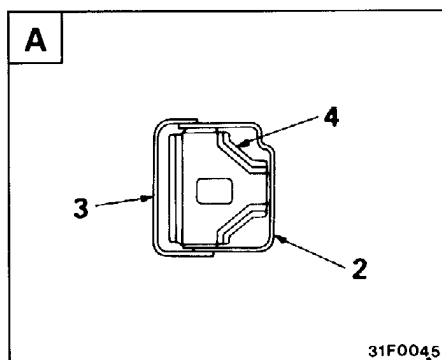
1. Front end gusset, outer
2. Front sidemember, inner
3. Front sidemember, outer
4. Absorber bracket
5. Front sidemember reinforcement, front
6. Bolt guide plate
7. Bolt guide plate, rear
8. Front sidemember reinforcement, rear
9. Pipe support, rear
10. Front sidemember bulkhead
11. Front sidemember, rear
12. Pipe support, front
13. Pipe support
14. Front end gusset, outer
15. Front hook reinforcement



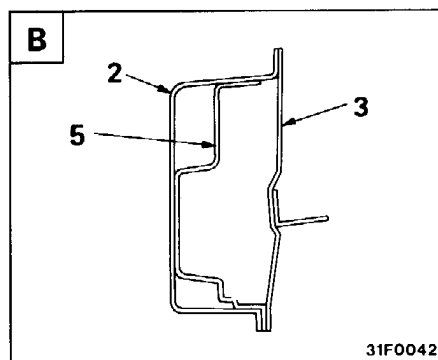
31F0133



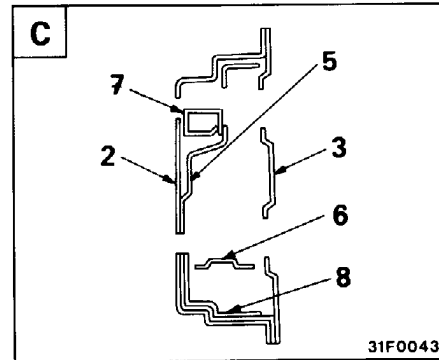
31F0131



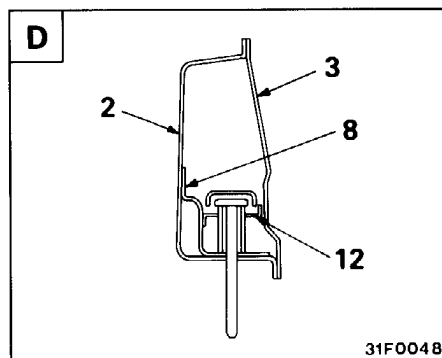
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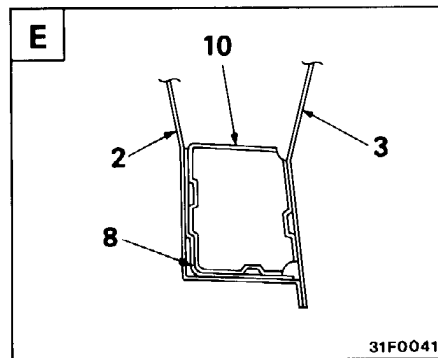
31F0042



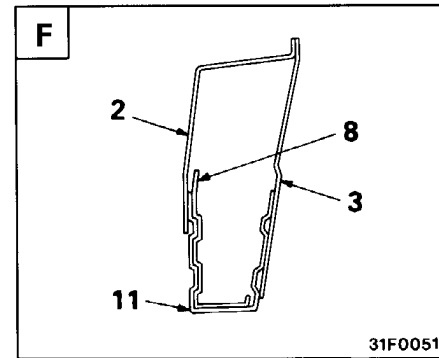
31F0043



31F0048

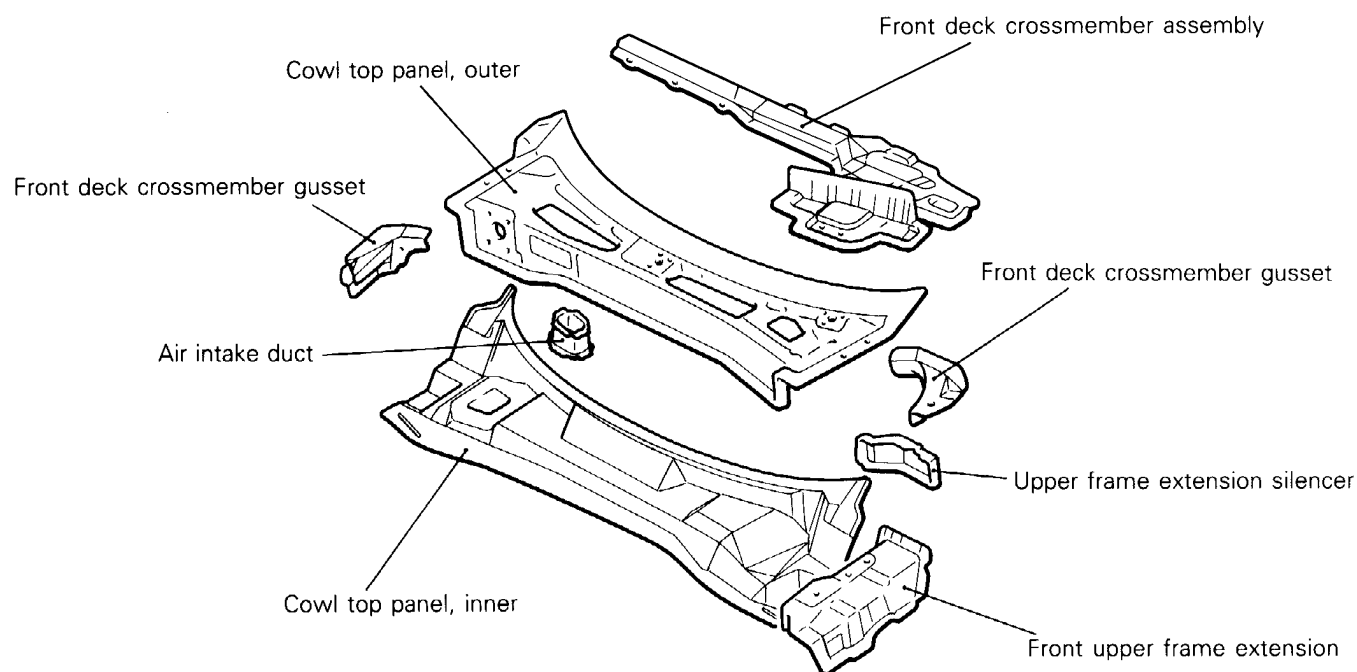


31F0041



31F0051

Front Deck

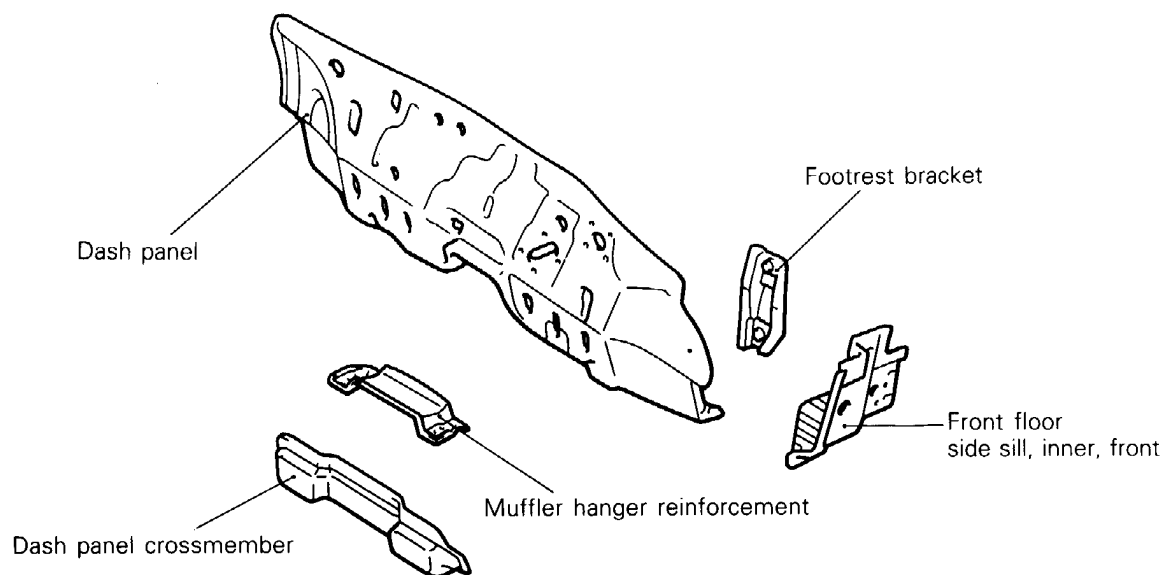


31F0103

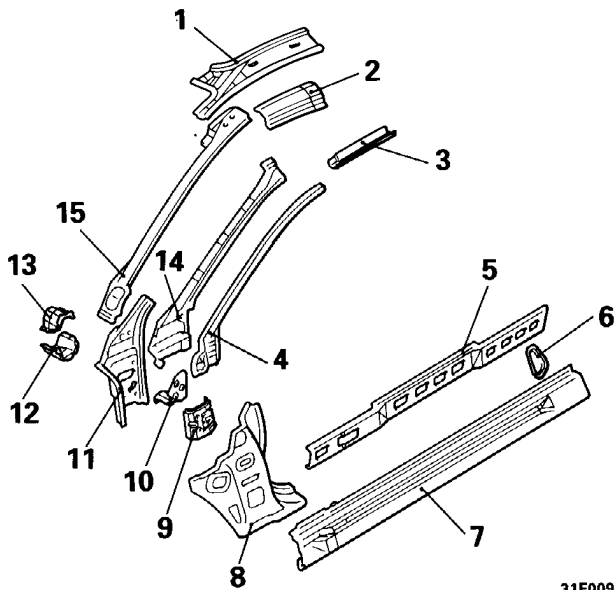
Dash Panel

The dash panel is not a double-walled structure consisting of the dash panel and dash panel reinforcement as in former models but is made

from a single thick plate. The engine compartment has effectively expanded while preserving rigidity.

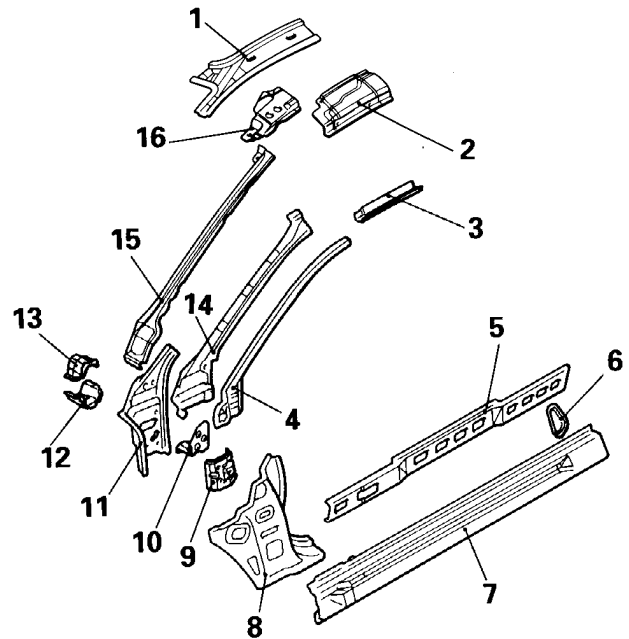


31F0096

SIDE BODY**Front Side Structure****(Models with standard roof)**

31F0094

1. Side roof rail, inner
2. Side roof rail, outer
3. Roof drip channel
4. Front pillar, outer, upper
5. Side sill reinforcement
6. Side sill silencer
7. Front floor side sill, outer
8. Front pillar, outer, lower
9. Front door hinge reinforcement, lower

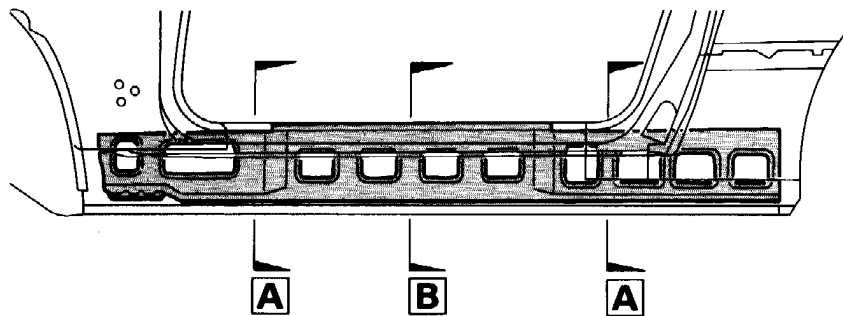
(Models with sunroof)

31F0117

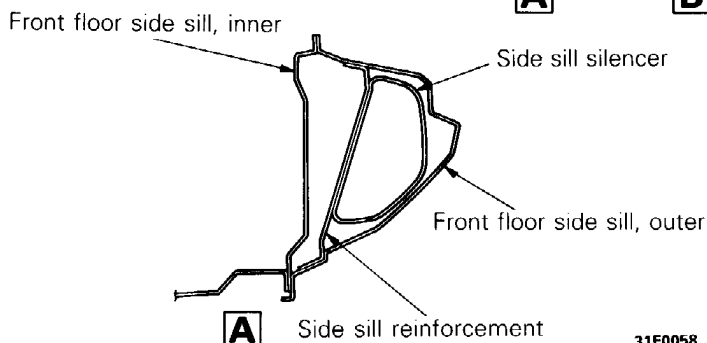
10. Hinge reinforcement, upper
11. Front pillar, inner, lower
12. Front deck crossmember support, lower
13. Front deck crossmember support, upper
14. Front pillar, inner, upper (B)
15. Front pillar, inner, upper (A)
16. Front pillar extension

Side Sill

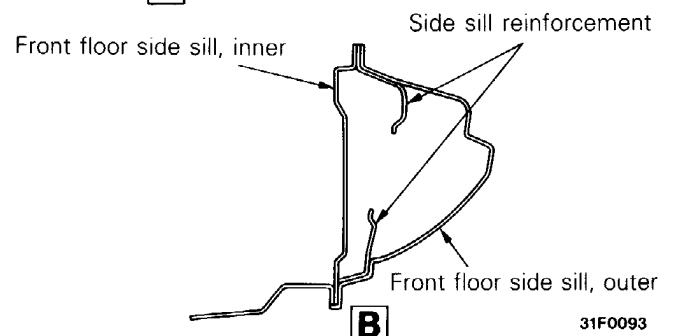
- (1) Large one-piece side sill reinforcement is used to improve body rigidity and crash characteristics.
- (2) Sound absorption is improved by the use of a side sill silencer.



31F0081

**A**

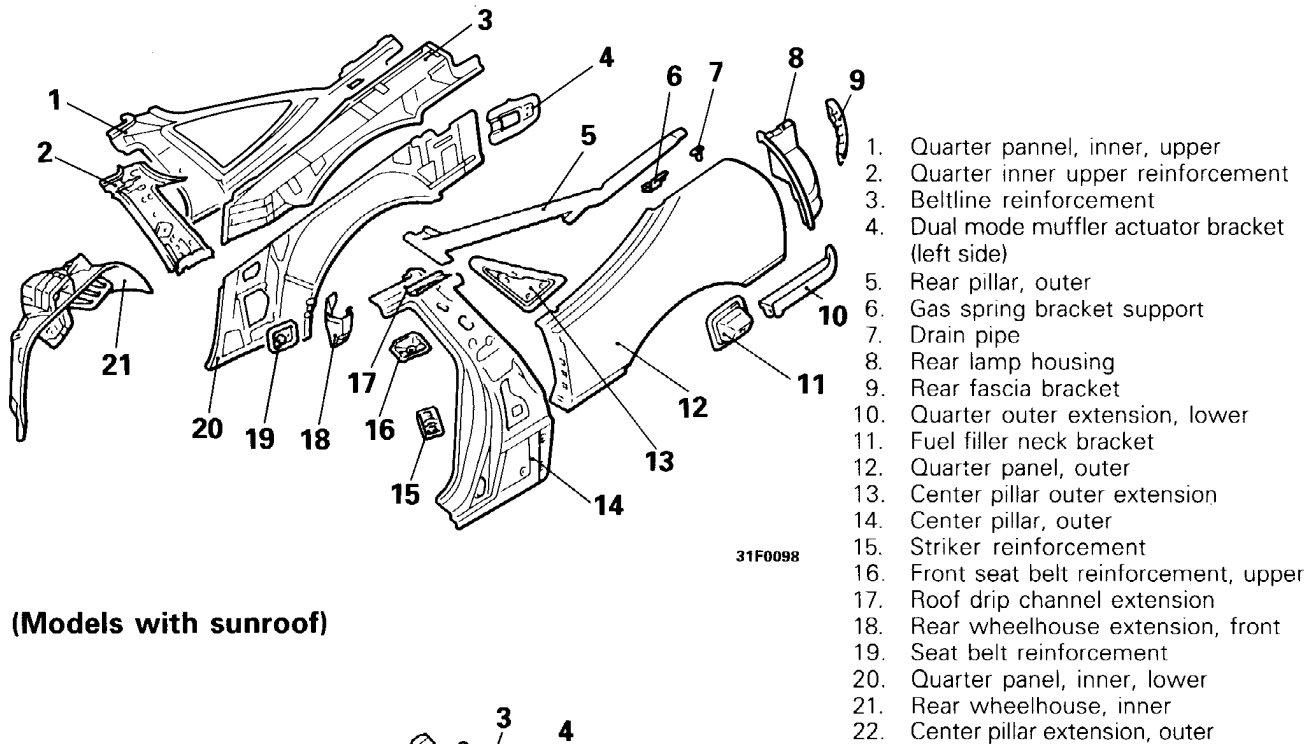
31F0058

**B**

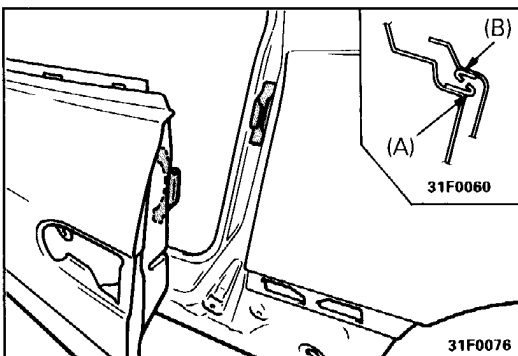
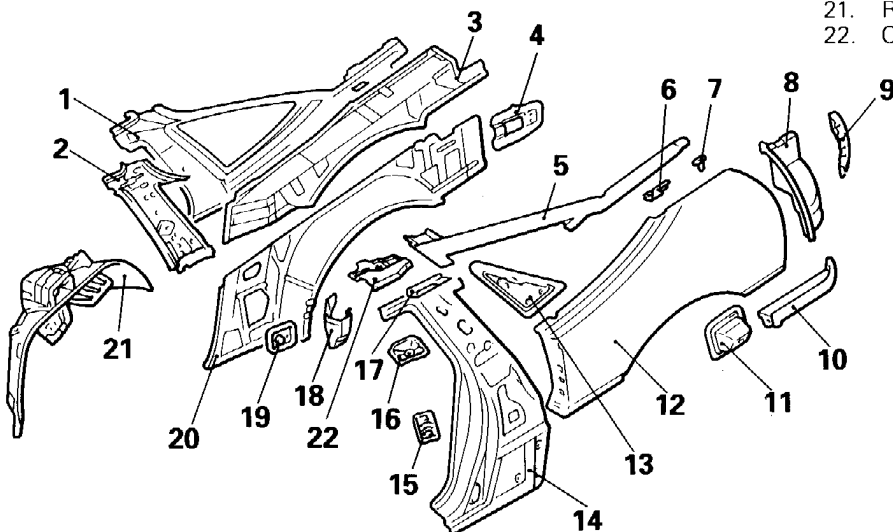
31F0093

Rear Side Structure

(Models with standard roof)



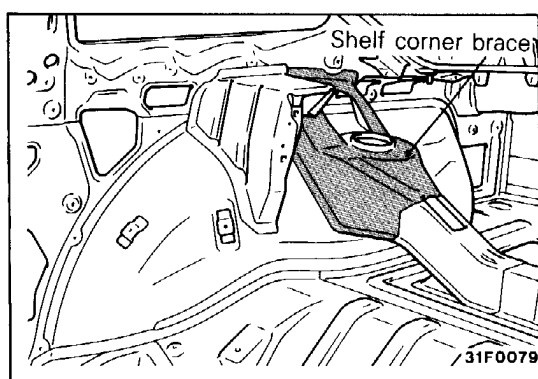
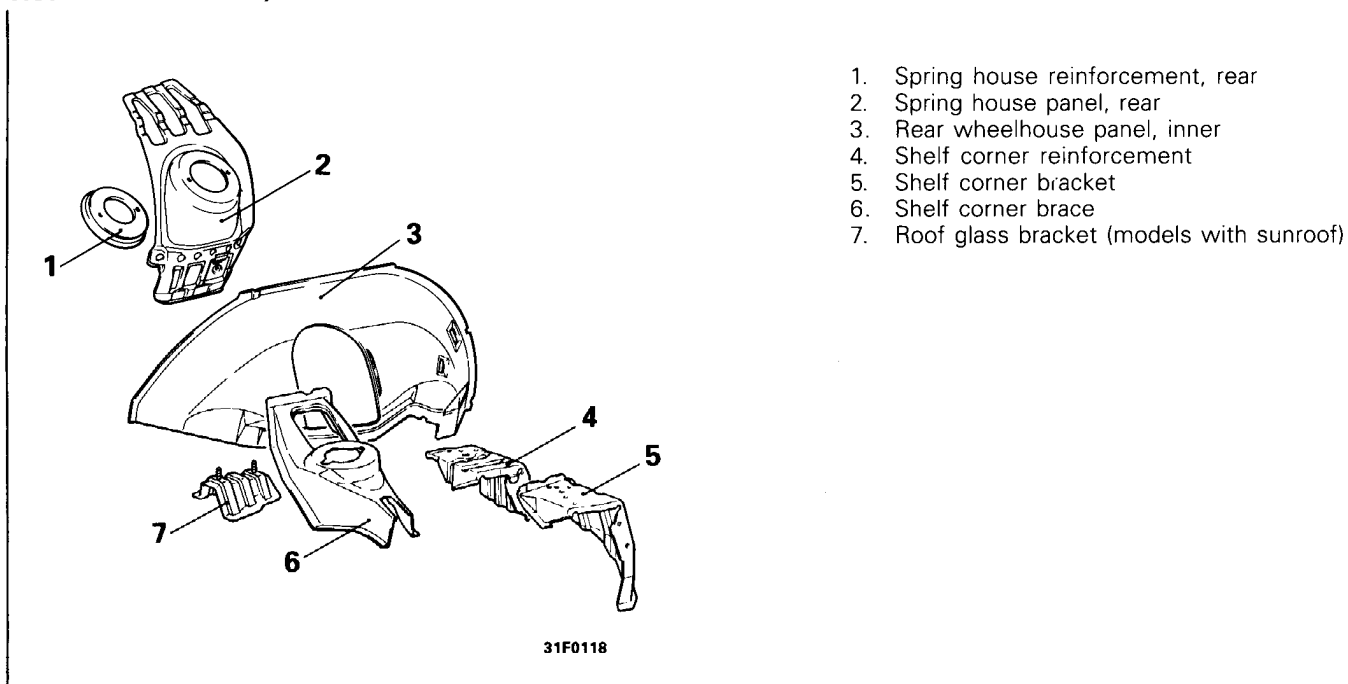
(Models with sunroof)



Center pillar

There are safety hook (B) on the center pillar and safety hook (A) on the door to prevent the door from being pushed in when there is an impact from the side. This is to protect the passengers.

Rear Wheelhouse, Inner

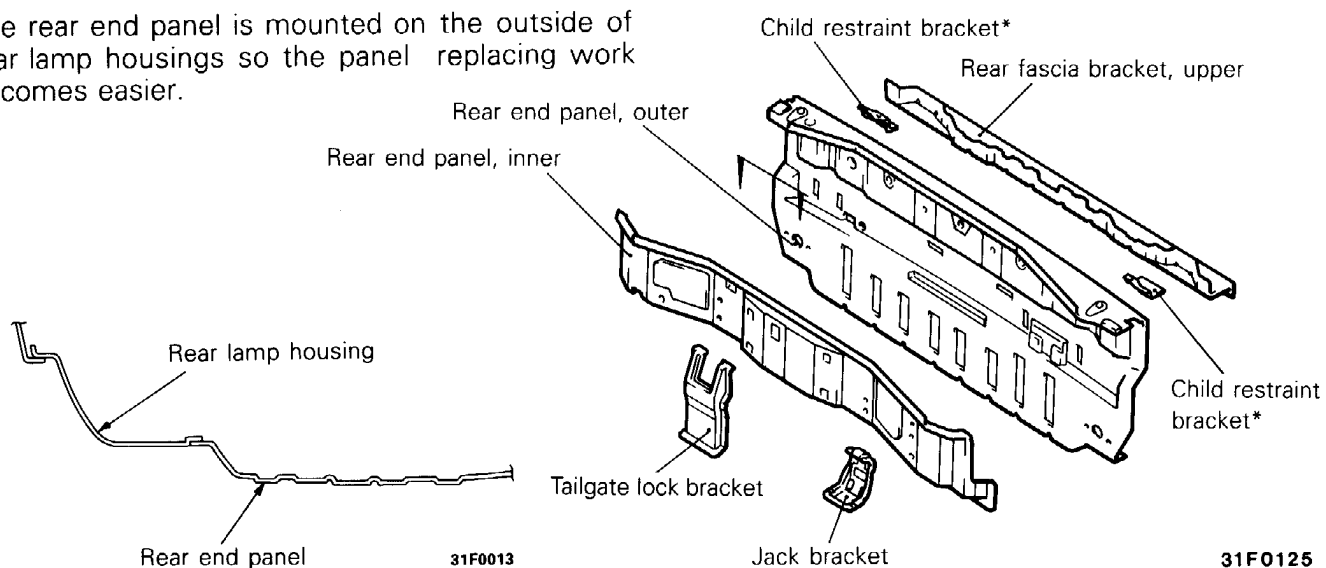


The shelf corner brace is connected to the side body and rear floor, and held rigidly on strut assembly mounting.

REAR BODY

Rear End Panel

The rear end panel is mounted on the outside of rear lamp housings so the panel replacing work becomes easier.



* : Vehicles for Australia

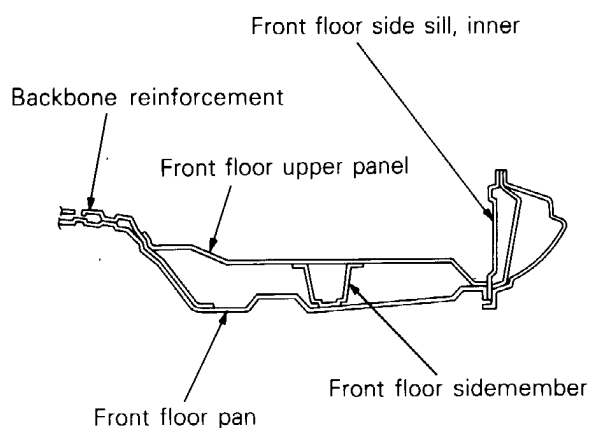
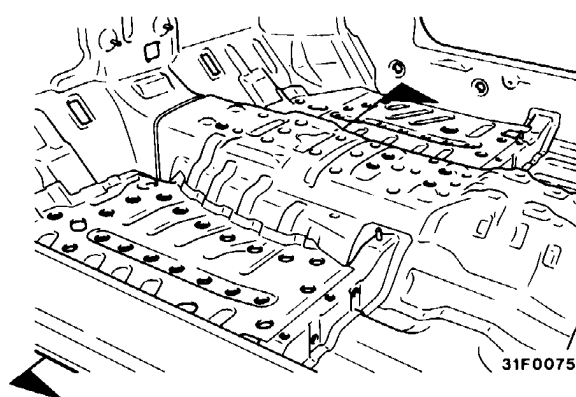
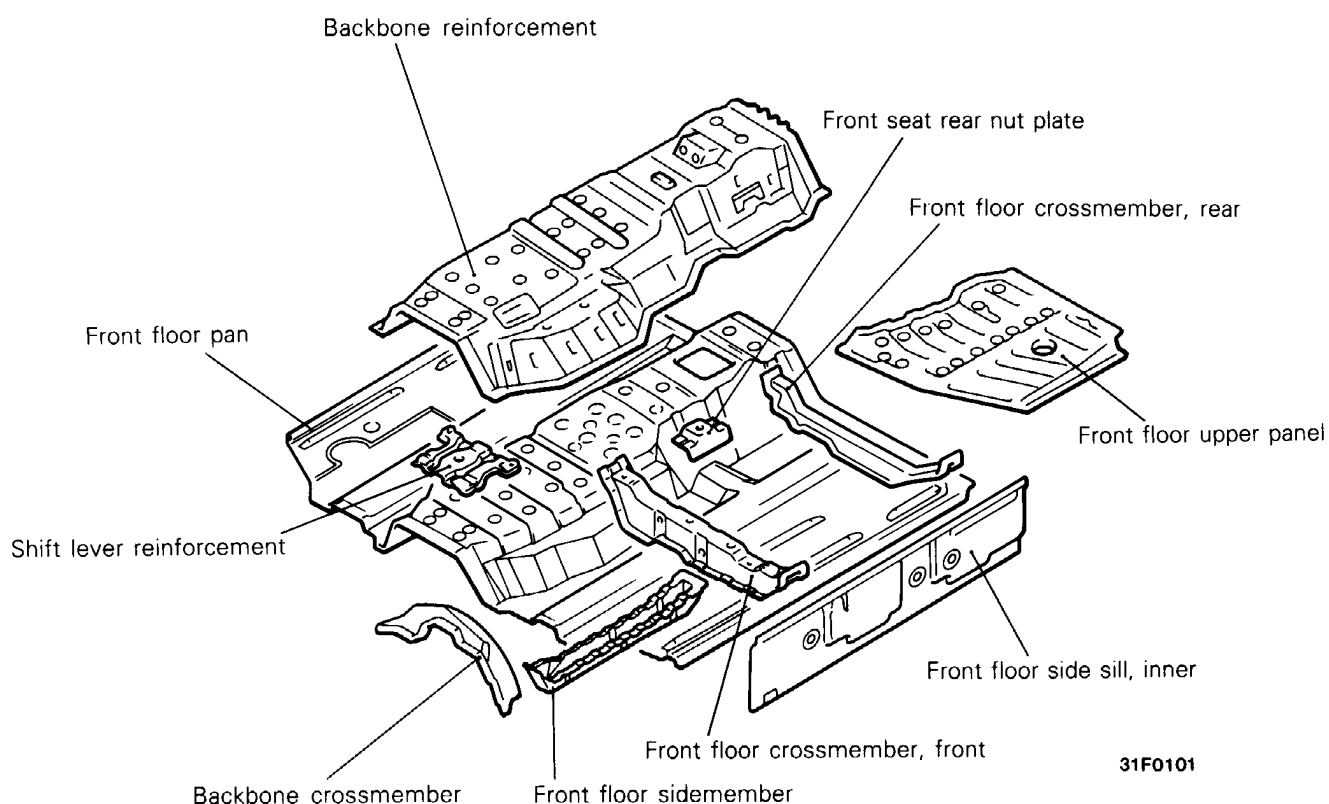
UNDER BODY

Front Floor

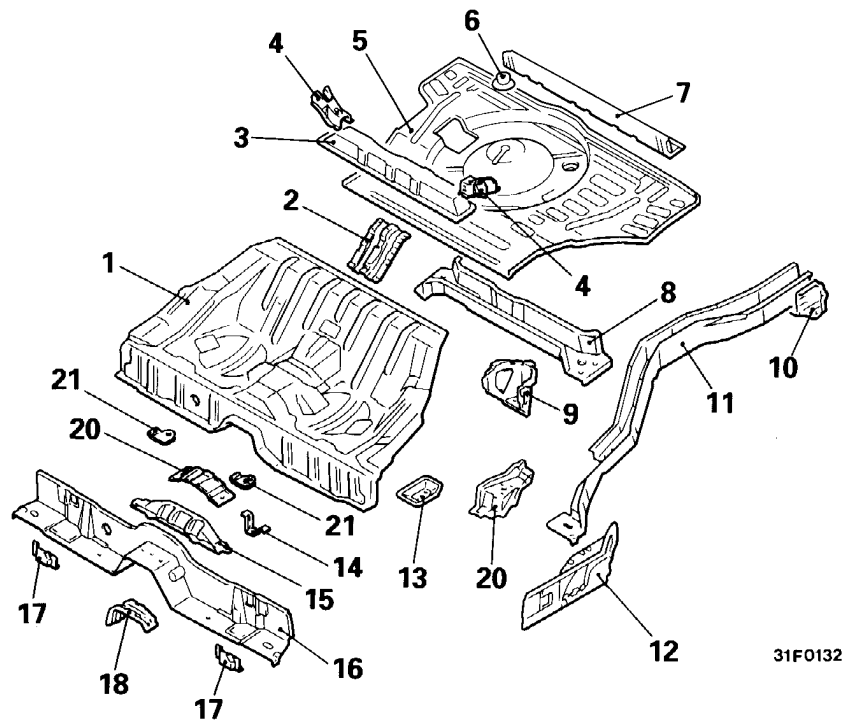
A double-floor structure is adopted and this not only improves rigidity but also reduces air resistance because of the flatness of the floor's bottom surface.

- (1) A very rigid, double-layer floor is used with a front floor sidemember on the upper surface of the front floor and also a front floor upper panel on top.

- (2) There is large, integrated backbone reinforcement on the upper surface of the front floor to improve rigidity.
- (3) The number of beads in the front floor pan are reduced to make the bottom surface of the floor flat.



Rear Floor

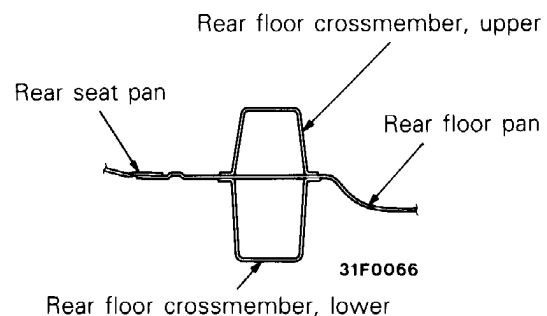
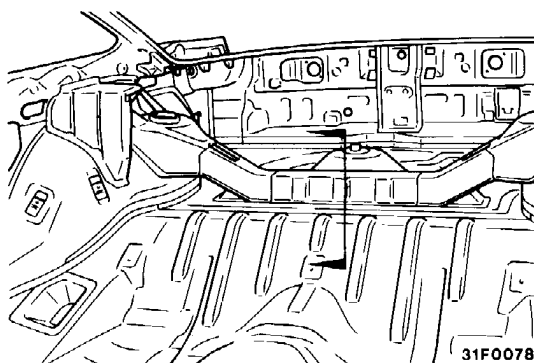


31F0132

- | | |
|---|---|
| 1. Rear seat pan | 12. Rear floor side sill |
| 2. Split seat bracket | 13. Sidemember seat belt bracket |
| 3. Rear floor crossmember, upper | 14. Heat protector panel bracket |
| 4. Rear floor crossmember upper extension | 15. Rear seat pan reinforcement, front |
| 5. Rear floor pan | 16. Rear seat crossmember |
| 6. Spare tyre bracket | 17. Tie down reinforcement |
| 7. Rear end crossmember | 18. Propeller shaft bracket, rear |
| 8. Rear floor crossmember, lower | 19. Rear floor seat belt reinforcement |
| 9. Fuel tank support, front | 20. Rear floor sidemember extension, front |
| 10. Rear floor sidemember extension, rear | 21. Plate (vehicles for Europe and Australia) |
| 11. Rear floor sidemember | |

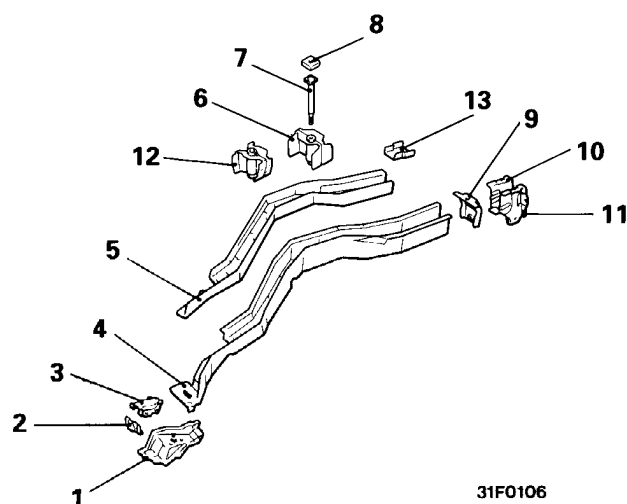
REAR FLOOR CROSSMEMBER, UPPER

The rear floor crossmember (upper) forms a large closed section in the rear floor pan. High rigidity is assured by connecting this rear floor crossmember (upper) with the side body.

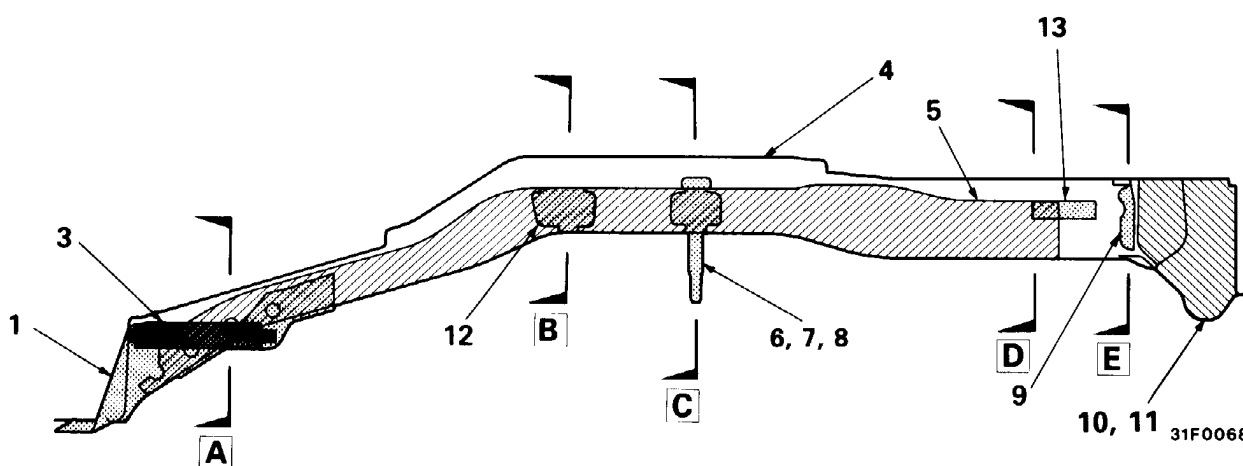


REAR FLOOR SIDEMEMBER REINFORCEMENTS

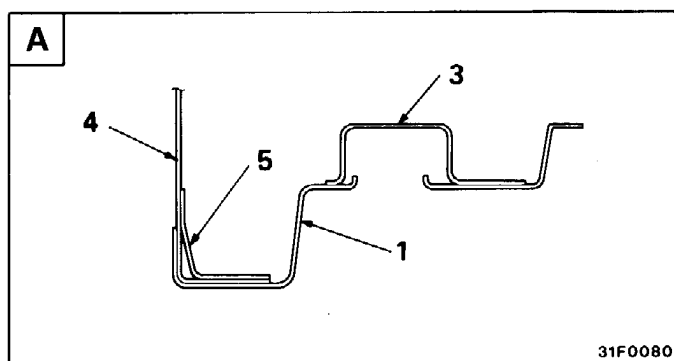
1. Rear floor sidemember extension, front
2. Tie down reinforcement
3. Rear suspension crossmember bracket
4. Rear floor sidemember
5. Rear floor sidemember reinforcement
6. Differential mount bulkhead assembly
7. Square head bolt
8. Retainer
9. Rear floor sidemember bulkhead, rear
10. Rear floor sidemember extension, rear, inner
11. Rear floor sidemember extension, rear, outer
12. Suspension support bulkhead assembly, front
13. Bulkhead



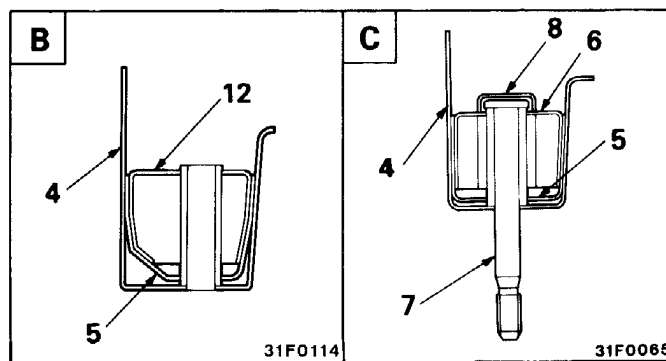
31F0106



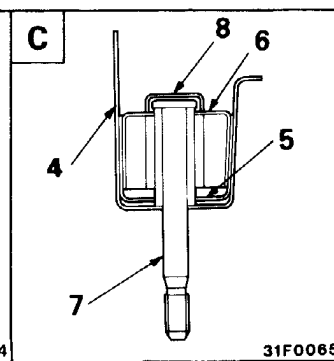
31F0068



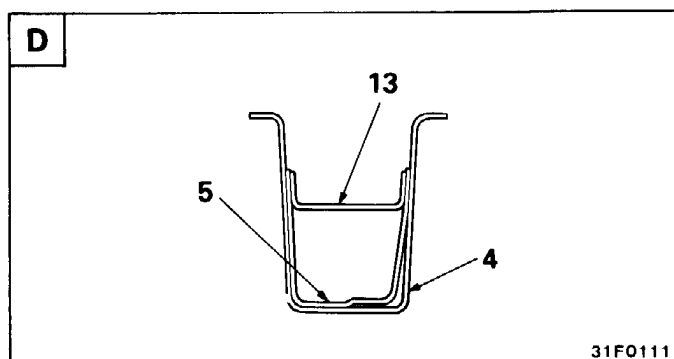
31F0080



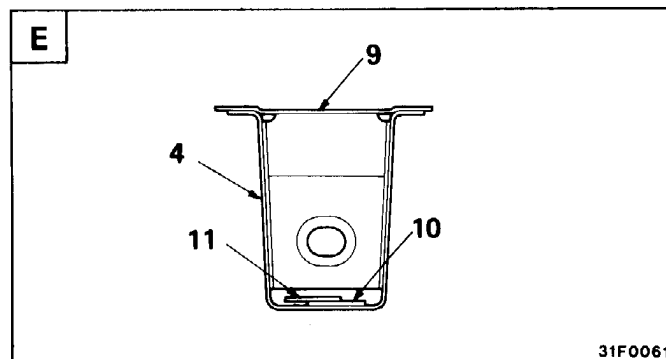
31F0114



31F0065



31F0111

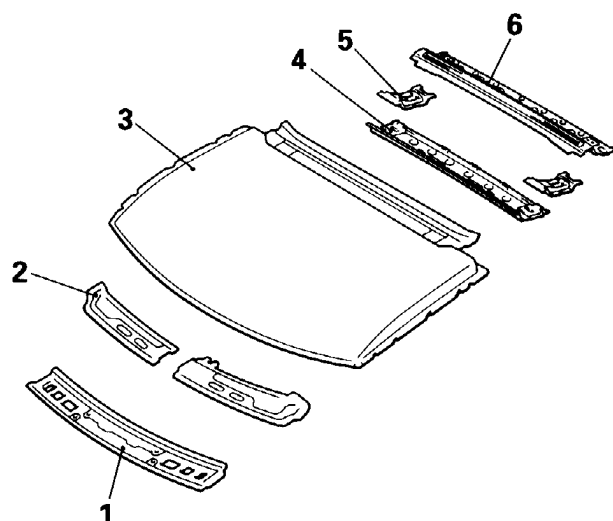


31F0061

ROOF

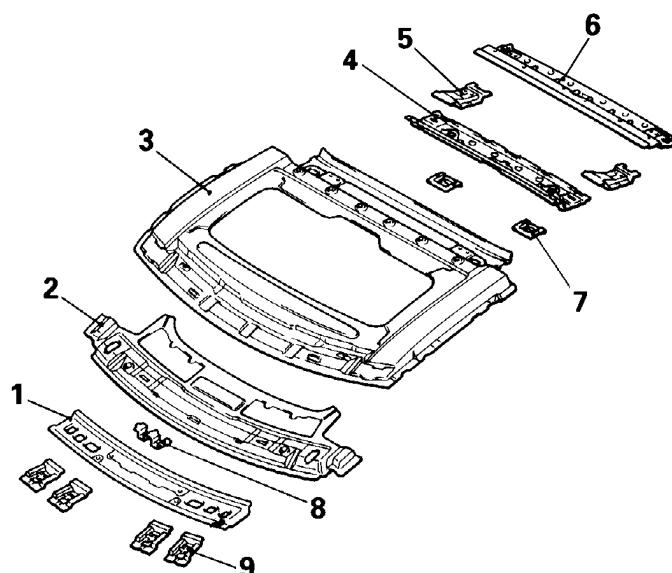
A construction without the roof bow has been achieved by making the roof surface small and increasing the camber.

(Standard roof)



31F0091

(Sunroof)



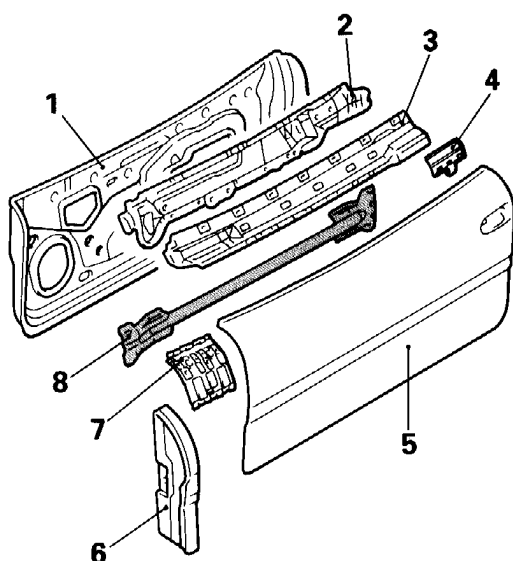
31F0115

1. Front roof rail, inner
2. Front roof rail, outer
3. Roof panel
4. Rear roof rail, inner
5. Tailgate hinge reinforcement

6. Rear roof rail, outer
7. Rear roof rail reinforcement
8. Room lamp bracket
9. Front roof rail reinforcement

DOOR

In order to provide increased passenger safety in the event of a side collision, a side door beam is provided inside the door.



31F0092

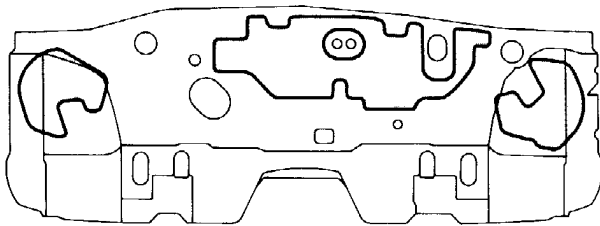
1. Front door panel, inner
2. Front door beltline reinforcement, inner
3. Front door beltline reinforcement, outer
4. Front door stiffener, outer
5. Front door panel, outer
6. Front door hinge reinforcement
7. Front door mirror reinforcement
8. Side door beam

SILENCER APPLICATION LOCATIONS

In order to reduce vibration and screen out heat from the exhaust gas, silencers (melting sheets) are applied to the top of the floor and to the passenger compartment side of the dash panel. If

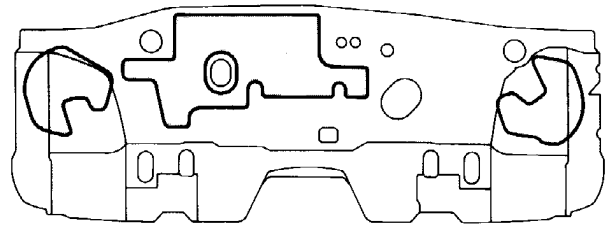
the silencers come off during welded panel replacement or other repairs, cut the replacement parts in the shapes indicated and apply them in the appropriate locations.

L.H. drive vehicles



31F0121

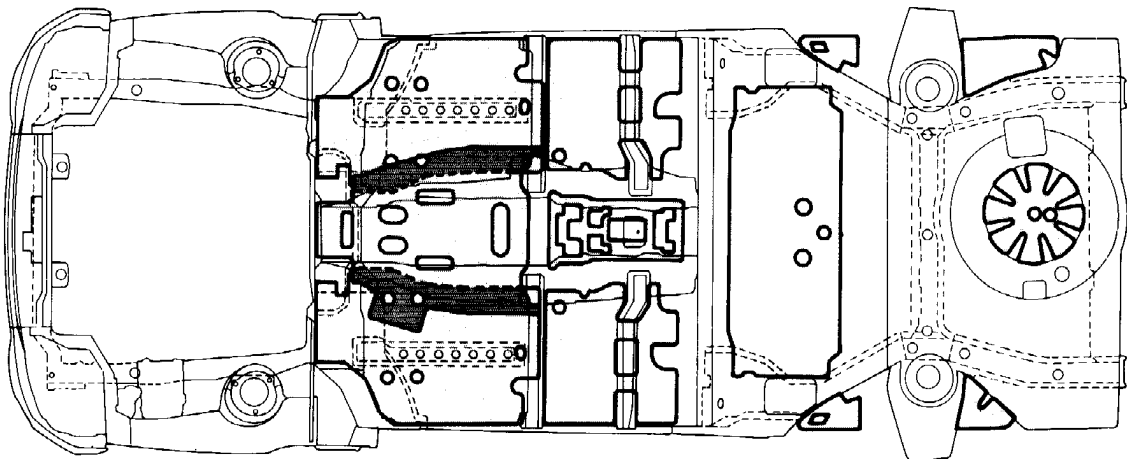
R.H. drive vehicles



31F0122

Passenger compartment side of the dash panel

Passenger compartment side of the dash panel

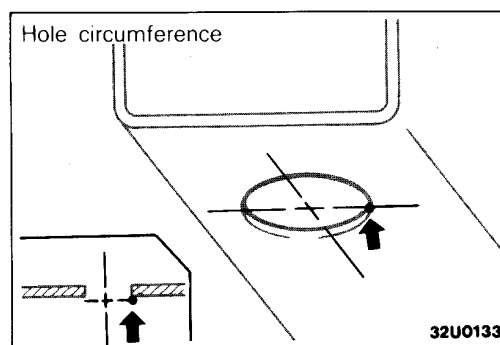
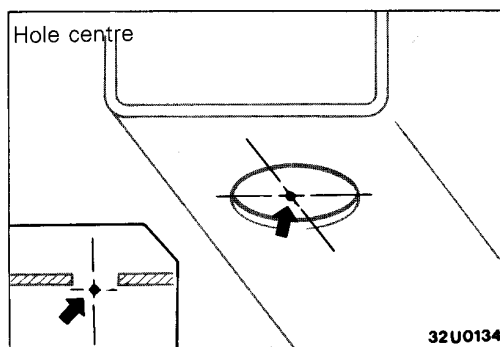
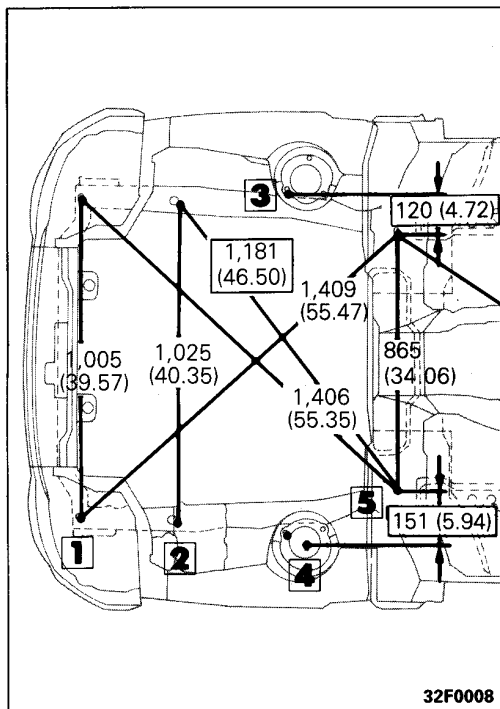
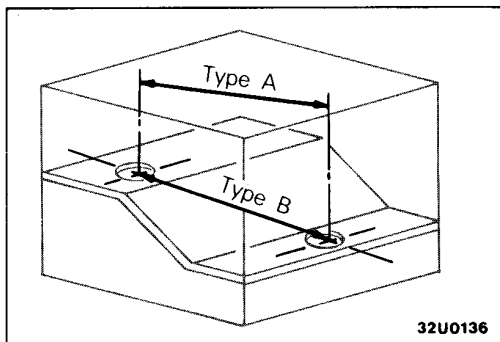


□ 1.6 mm (0.06 in.) thick

31F0135

2 BODY DIMENSIONS

BODY DIMENSIONS AND MEASUREMENT	
METHODS	2-2
TYPE A	
(PROJECTED DIMENSIONS).....	2-4
TYPE B	
(ACTUAL-MEASUREMENT DIMENSIONS)	2-5
UNDER BODY	2-5
UPPER BODY	2-6
SIDE BODY	2-6
ENGINE COMPARTMENT	2-7
INTERIOR.....	2-8
INCLINATION OF SPRING HOUSE PANEL	2-9



BODY DIMENSIONS AND MEASUREMENT METHODS

HOW BODY DIMENSIONS ARE INDICATED

1. Type A (Projected dimensions)
These are the dimensions measured when the measurement points are projected into the reference plane, and are the reference dimensions used for body alterations.
2. Type B (Actual-measurement dimensions)
These dimensions indicate the actual linear distance between measurement points, and are the reference dimensions for use if a tracking gauge is used for measurements.
3. The units given for the dimensions of both types (A and B) are mm (in.).

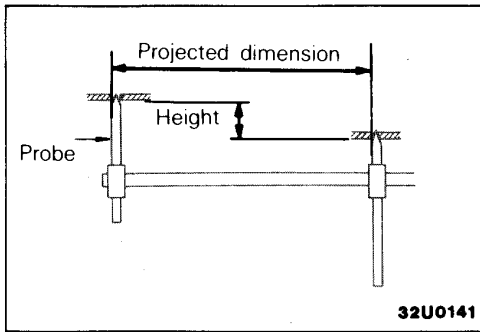
INDICATION OF REFERENCE DIMENSIONS

Dimension surrounded by $\square$ means it is the same dimension as in a relative position.

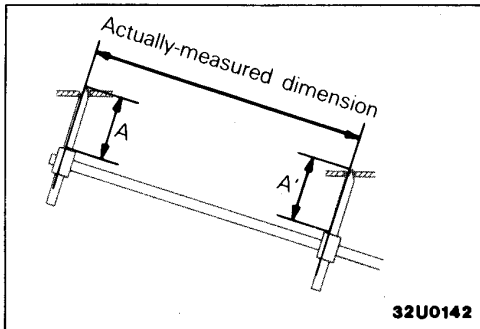
MEASUREMENT POINTS

Measurement points are used to indicate the following:

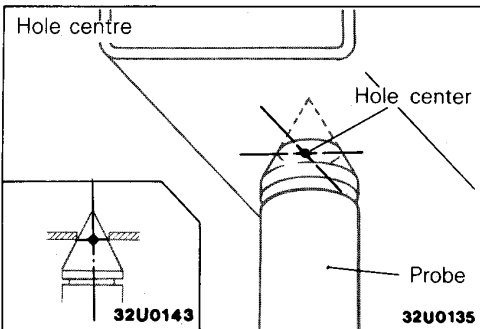
1. If a measurement is to be made at a hole center, the point of the surface from which the measuring instrument is applied is the measurement point.
2. If a measurement is to be made at the circumference of a hole, the point of the hole circumference of the surface from which the measuring instrument is applied is the measurement point.



32U0141

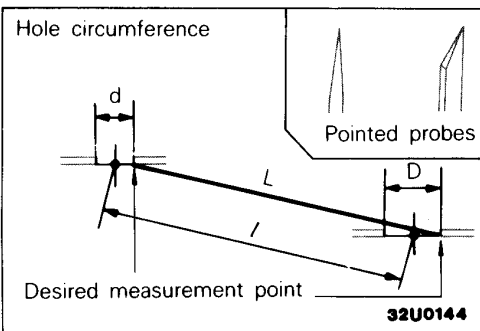


32U0142

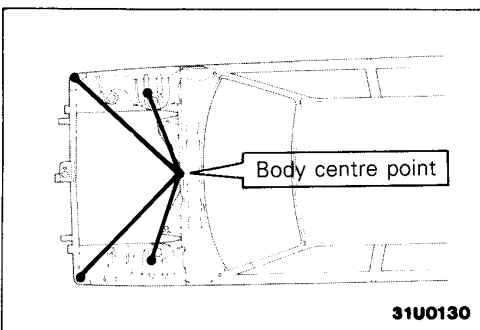


32U0143

32U0135



32U0144



31U0130

MEASUREMENT METHODS

USING A TRACKING GAUGE

NOTE

Use a tracking gauge without looseness between gauge body and probes.

1. TYPE A (PROJECTED DIMENSIONS)

If the length of the tracking gauge probes are adjustable, make the measurement by lengthening one probe by the amount equivalent to the difference in height of the two surfaces.

2. TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

Measure by first adjusting both probes to the same length ($A = A'$).

3. IF HOLE DIAMETERS ARE THE SAME AND THE PROBES ARE CONICAL

For both Type A and Type B, insert the probes into the holes, and then make the measurement. This method of measurement should be used if the diameters of the holes in the location to be measured are the same.

4. IF HOLE DIAMETERS ARE DIFFERENT, OR THE PROBES ARE POINTED

Because measurement at the hole centres is impossible, the circumferences must be used instead.

HOW TO DETERMINE DIMENSIONS

$$\text{Desired dimensions : } L = l + \frac{D - d}{2}$$

Example :

Reference dimensions : $l = 600$ (23.6)

Measured hole diameters : $D = 20\phi$ (0.79),
 $d = 10\phi$ (0.39)

Desired dimensions :

$$L = 600 (23.6) + \frac{20\phi (0.79) - 10\phi (0.39)}{2}$$

$$= 605 (23.8)$$

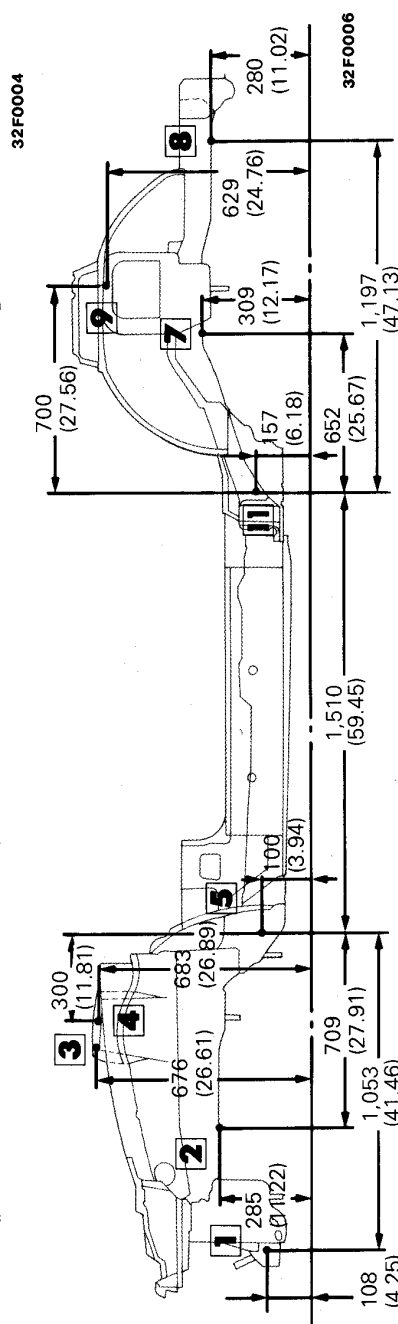
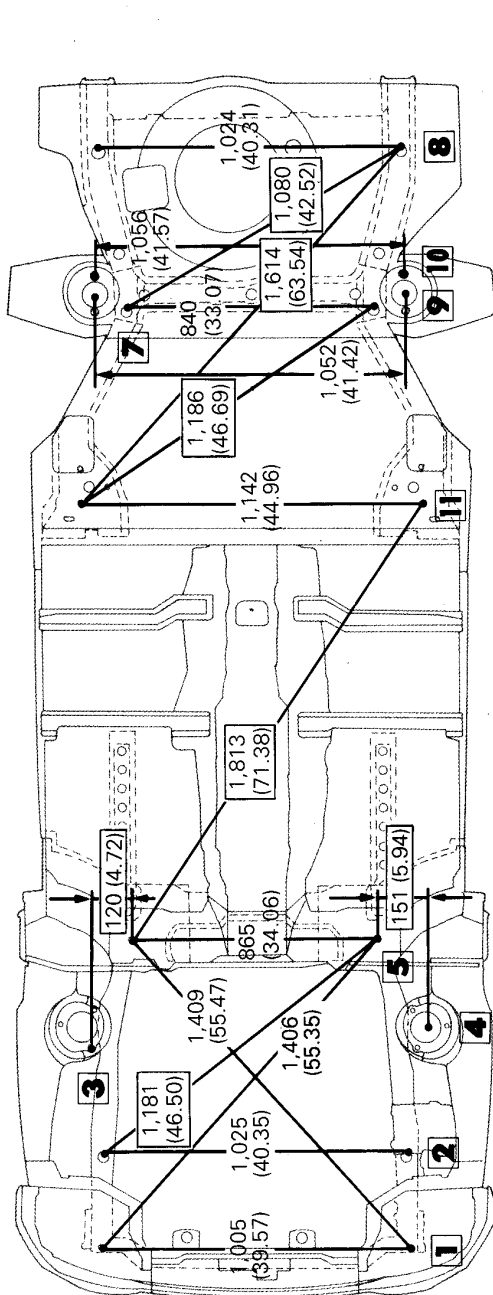
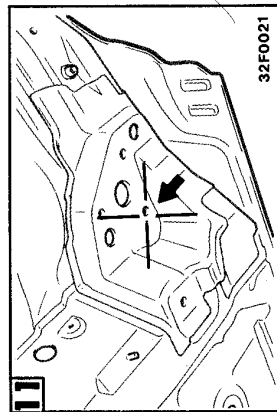
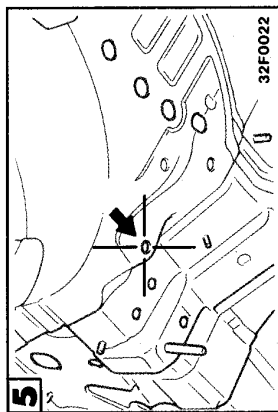
mm (in.)

BODY CENTRE POINTS

When measuring locations that should be symmetrical left and right and there are no specific instructions with regard to measurements in "Body Dimensions", the body centre points should be used to confirm that the left and right measurements from these points are the same. One body centre point is specified for the front of the body and another is specified for the rear.

1

32F0018



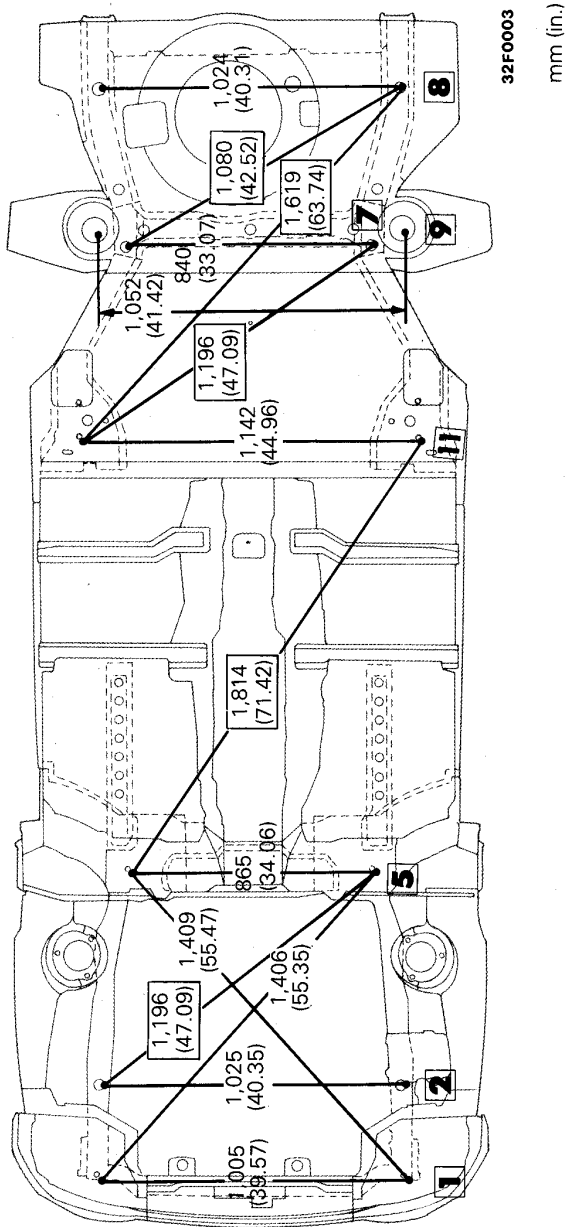
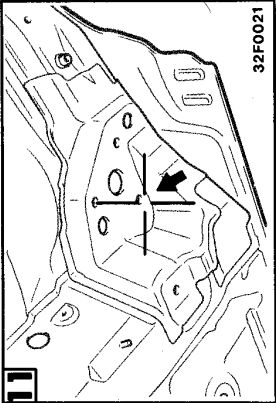
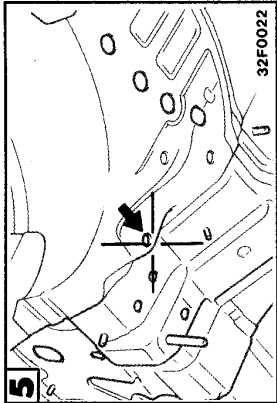
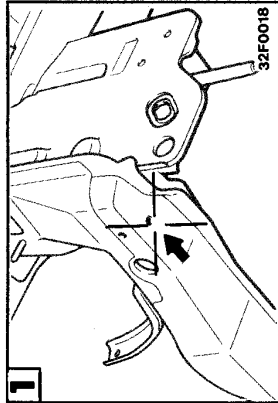
No.	Measurement points	Diameters	No.	Measurement points	Diameters	No.	Measurement points	Diameters
1	Centre of air dam mounting hole	7 mm (0.28 in.)	4	Centre of strut insulator	—	*8	Rear of rear floor sidemember locating hole	35 mm (1.38 in.)
*2	Rear of front sidemember locating hole	25 mm (0.98 in.)	*5	Centre of suspension crossmember mounting hole	15 mm (0.59 in.)	9	Centre of rear spring housing hole	—
3	Centre of front strut mounting hole	11 mm (0.43 in.)	7	Rear of rear floor crossmember water drain hole	24 mm (0.94 in.)	10	Centre of shock absorber mounting hole	11 mm (0.43 in.)
						*11	Centre of crossmember mounting hole	15 mm (0.59 in.)

NOTE The *mark in the No. column indicates the frame centering gauge mounting positions.

NOTE The *mark in the No. column indicates the frame centering gauge mounting positions.

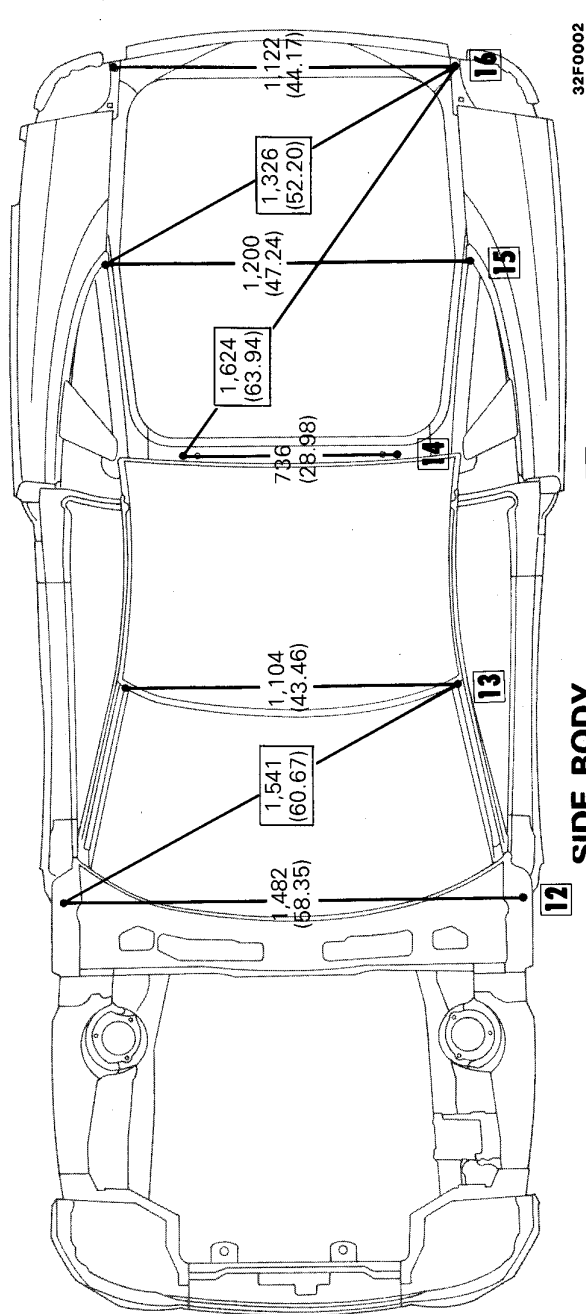
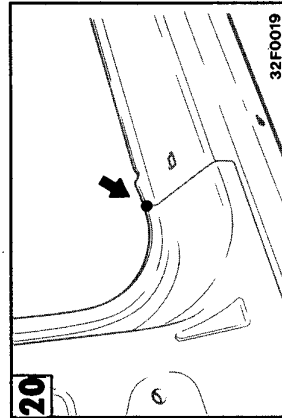
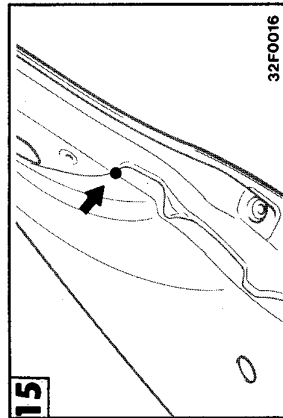
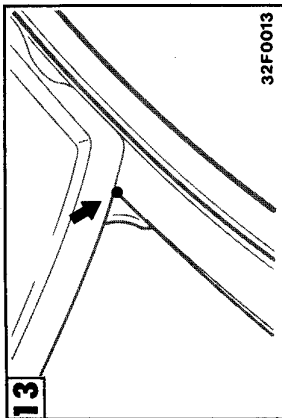
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

UNDER BODY

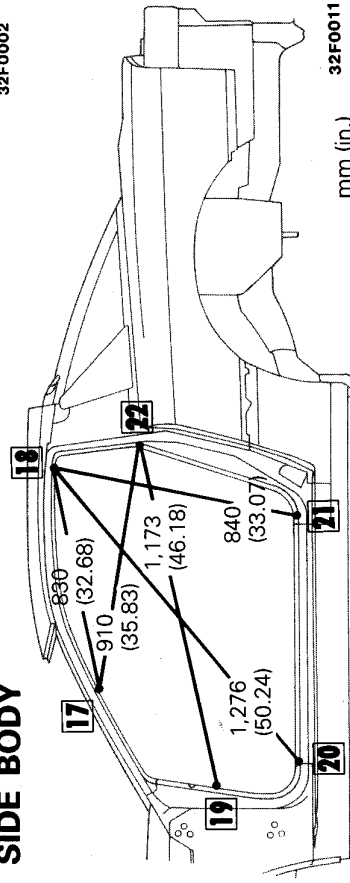
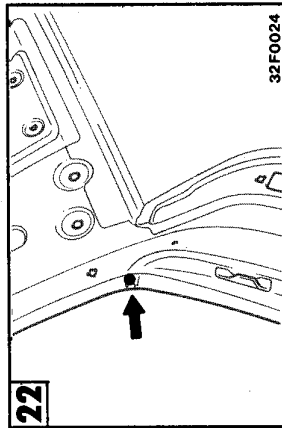


No.	Measurement points	Diameters	No.	Measurement points	Diameters
1	Centre of air dam mounting hole	7 mm (0.28 in.)	8	Rear of rear floor sidemember locating hole	35 mm (1.38 in.)
2	Rear of front sidemember locating hole	25 mm (0.98 in.)	9	Centre of rear spring housing hole	—
5	Centre of suspension crossmember mounting hole	15 mm (0.59 in.)	11	Centre of crossmember mounting hole	15 mm (0.59 in.)
7	Rear of rear floor crossmember water drain hole	24 mm (0.94 in.)			

UPPER BODY

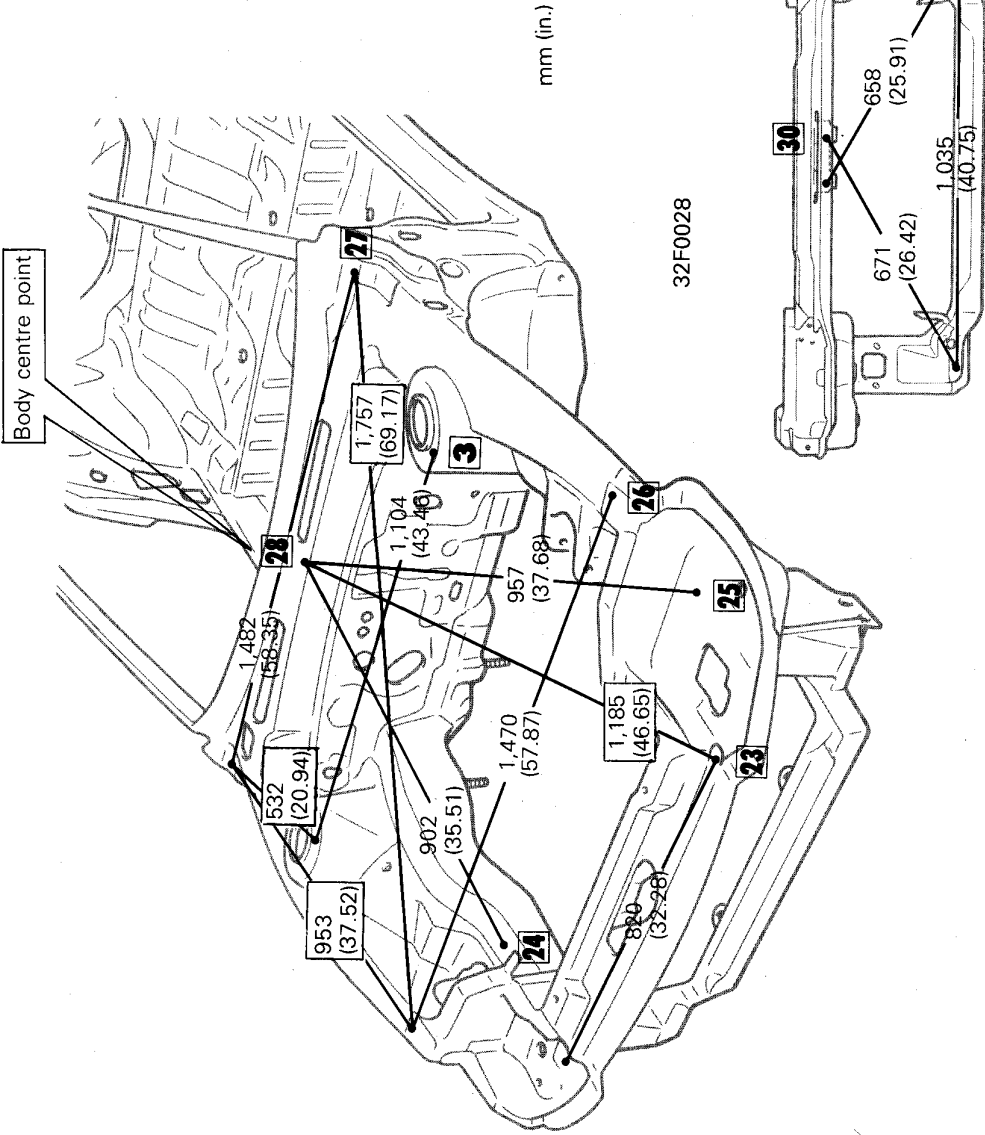
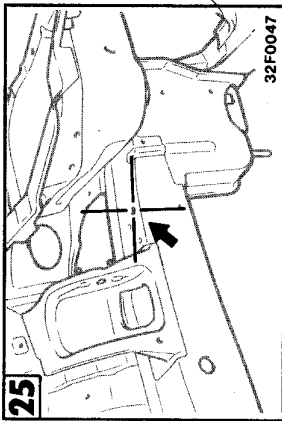
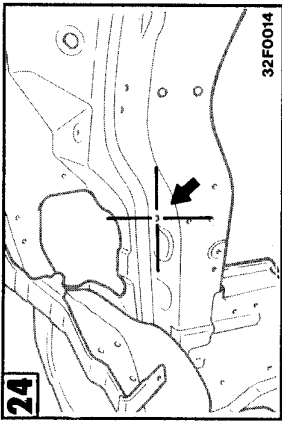
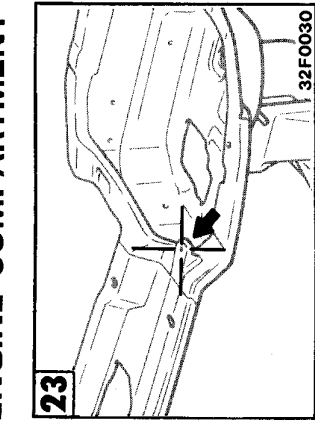


SIDE BODY



No.	Measurement points	Diameters	No.	Measurement points	Diameters
12	Centre of front fender mounting hole	6.6 mm (0.26 in.)	20	Front pillar and side sill connection	—
13	Front pillar and roof connection	—	21	Centre of center pillar reference point (lower)	8 mm (0.31 in.)
14	Centre of tailgate hinge mounting hole	12 mm (0.47 in.)	22	Center pillar reference point	—
15	Rear pillar and quarter panel connection	—			

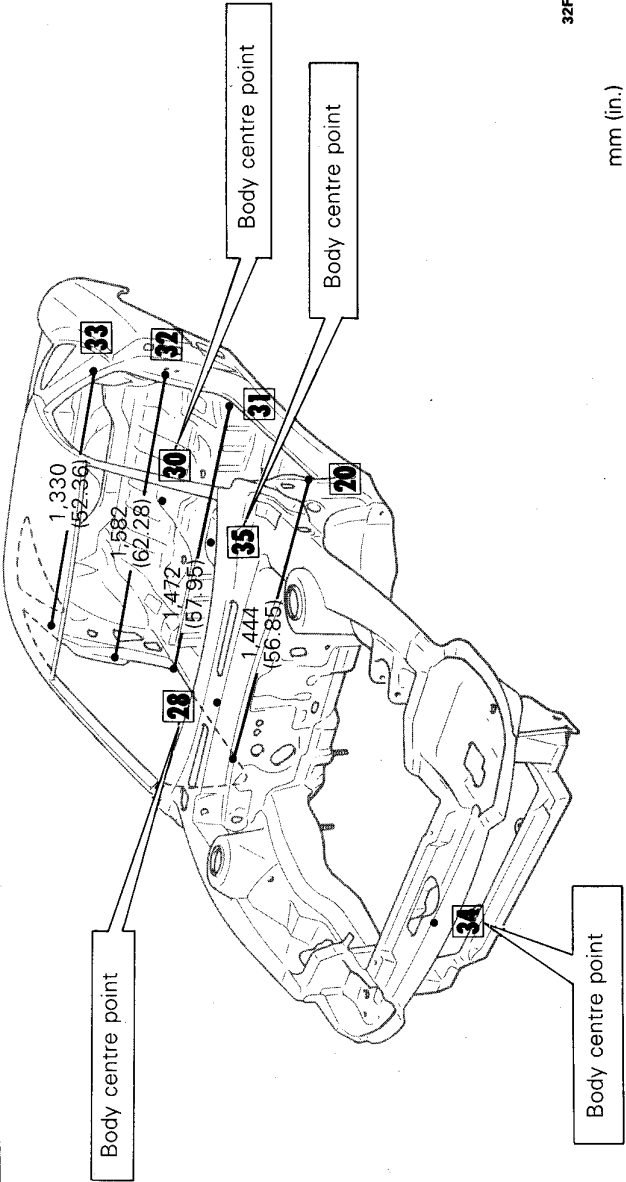
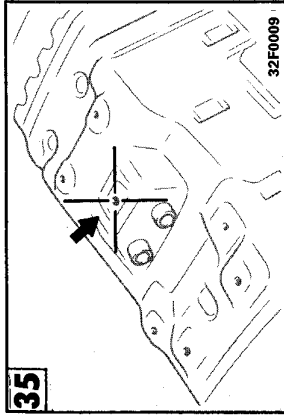
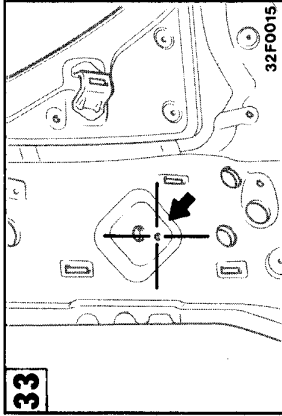
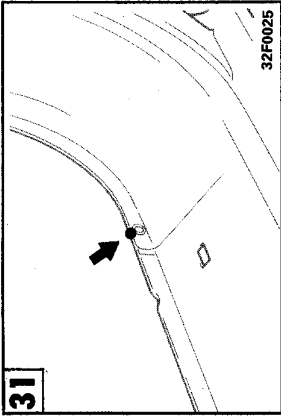
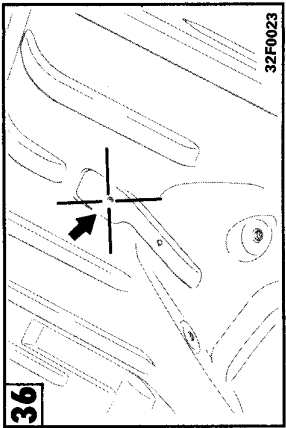
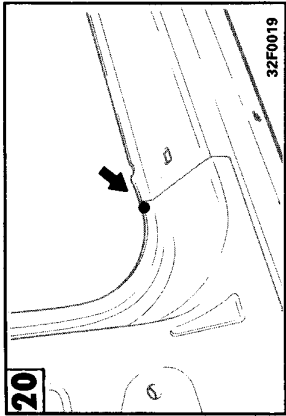
ENGINE COMPARTMENT



32F0012

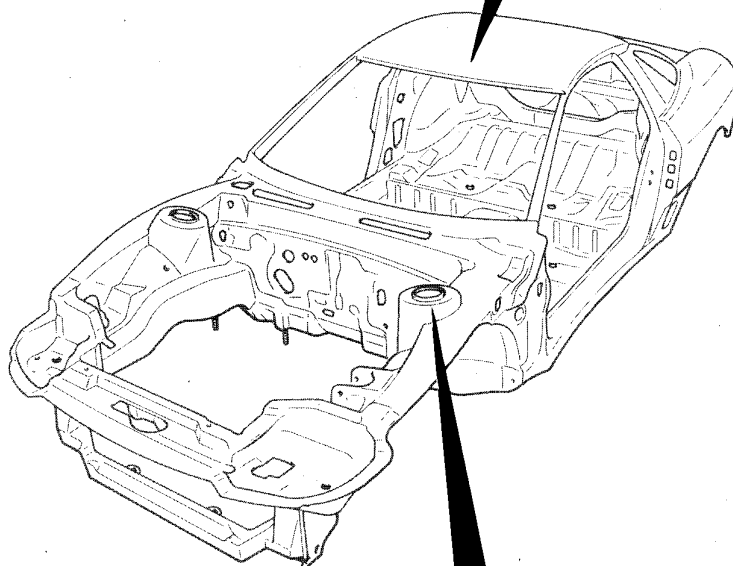
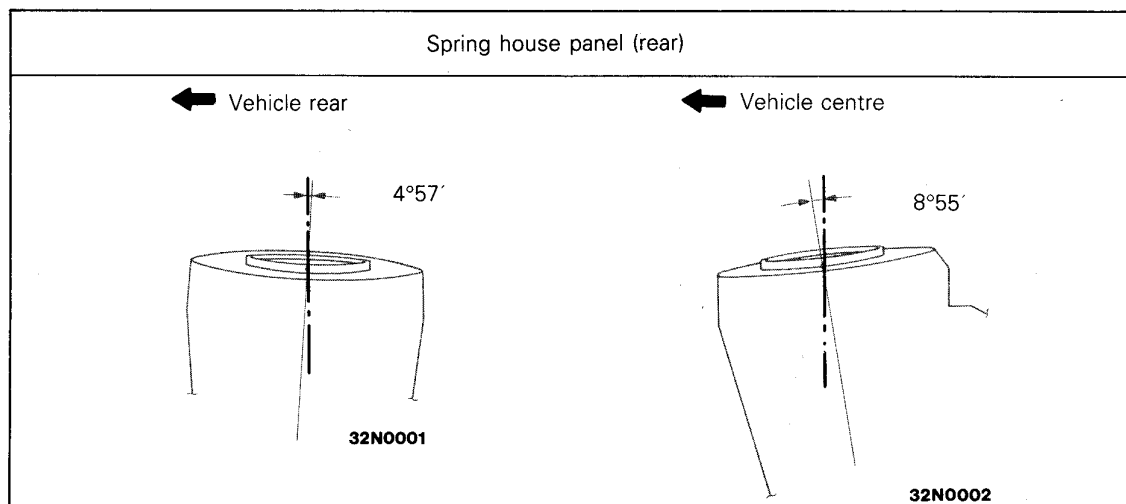
No.	Measurement points	Diameters	No.	Measurement points	Diameters
3	Centre of front strut mounting hole	11 mm (0.43 in.)	28	Body centre point (weatherstrip mounting hole)	5 mm (0.20 in.)
23	Centre of front bumper face	6.6 mm (0.26 in.)	29	Centre of harness clip mounting hole	7 mm (0.28 in.)
24	Centre of harness clip mounting hole	7 mm (0.28 in.)	30	Centre of hood latch mounting hole	6.6 mm (0.26 in.)

INTERIOR

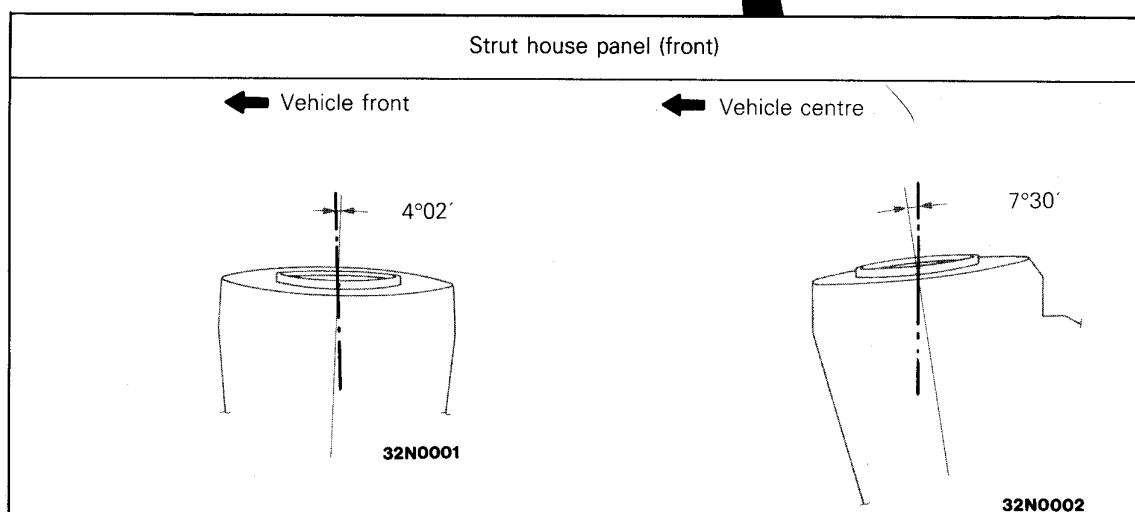


No.	Measurement points	Diameters	No.	Measurement points	Diameters
20	Front pillar and side sill connection	—	33	Centre of front seat belt locating hole	8 mm (0.31 in.)
28	Body centre point (weatherstrip mounting hole)	5 mm (0.20 in.)	34	Body centre point (front bumper face mounting hole)	6.6 mm (0.26 in.)
31	Top of center pillar reference point	—	35	Body centre point	6.6 mm (0.26 in.)
32	Centre of front door striker mounting hole	14 mm (0.55 in.)	36	Body centre point	7 mm (0.28 in.)

INCLINATION OF SPRING HOUSE PANEL



32F0026



3 WELDED PANEL REPLACEMENT

EXPLANATION OF MANUAL CONTENTS	3-2
HEADLAMP HOUSING.....	3-4
FRONT END UPPER BAR	3-5
FRONT END CROSSMEMBER	3-6
FENDER SHIELD	3-7
COWL TOP PANEL	3-13
FRONT PILLAR.....	3-15
SIDE SILL, OUTER	3-18
CENTER PILLAR.....	3-20
QUARTER PANEL, OUTER	3-22
REAR PILLAR, OUTER	3-24
REAR END PANEL.....	3-26
REAR FLOOR PAN	3-27
REAR FLOOR CROSSMEMBER, LOWER	3-30
REAR FLOOR SIDEMEMBER	3-31
ROOF PANEL	3-34
QUARTER PANEL, INNER, LOWER.....	3-38
REAR WHEELHOUSE, INNER.....	3-40
FRONT DOOR OUTER PANEL.....	3-42

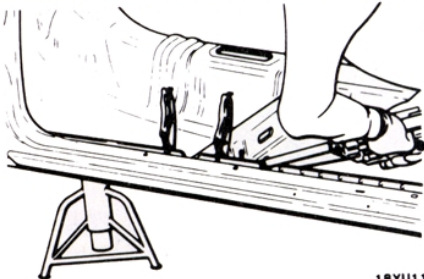
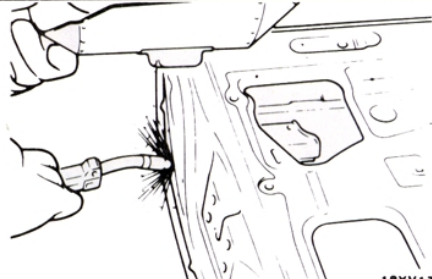
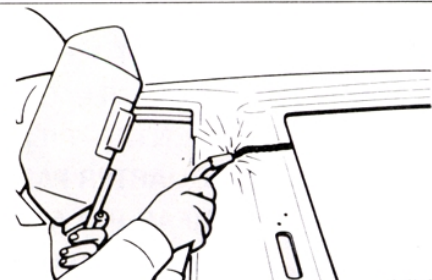
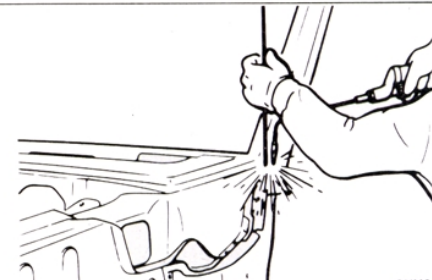
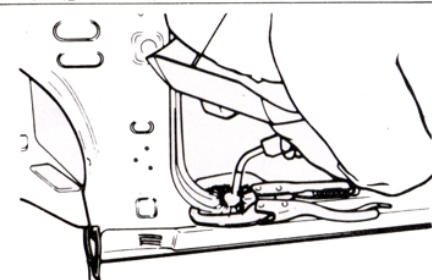
WELDED PANEL REPLACEMENT

EXPLANATION OF MANUAL CONTENTS

The basic parts supply units of the body structure are the weld-mounted outer panels. Herein are explained the procedures for replacement of these panels.

SYMBOLS

The various operations for panel replacement are designated by the following symbols.

Symbol	Operation description	Illustration
● ● ● ●	Spot welding	 18YU11
+ + + +	MIG spot welding	 18YU17
	MIG arc welding (continuous)	 18YU18
○ ○ ○ ○ ○ ○ ○ ○ ○ ○	Braze welding	 18YU99
■ ■ ■ ■ ■ ■ ■ ■	MIG plug welding ■ indicates two panels to be welded ■ indicates three panels to be welded	 18YU29

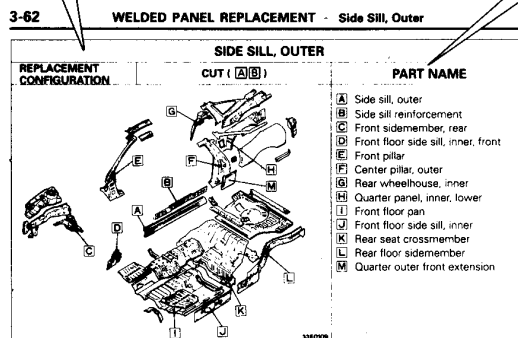
EXPLANATION OF WELDED PANEL REPLACEMENT

The replacement parts to be used in the welded panel replacement are indicated here:

- "ASSEMBLY" indicates that the assembly part (for example, [A]) is to be used without alteration.
- "CUT" indicates that the replacement panel (for example, [A]) is to be cut into easy-to-use sections and then used for replacement.
- "PART" indicates that only the damaged section of the assembly part (for example, [A]) is to be replaced by a section of the replacement panel.

Note that, in "CUT" and "PART" replacement, the location of the cutting must be selected carefully, considering both the construction of the vehicle and the level of strength following repairs.

Shows the part names keyed by symbols in the illustration.



The welded components are indicated by using the designations given in the illustration.

For example, "[A] + [B]" indicates that component [A] and component [B] shown in the illustration are welded together.

★ This mark is used to indicate the weld of a part which is especially important to the vehicle body from a structural viewpoint: therefore, the weld must be made securely.

The weld point classification numbers are indicated:

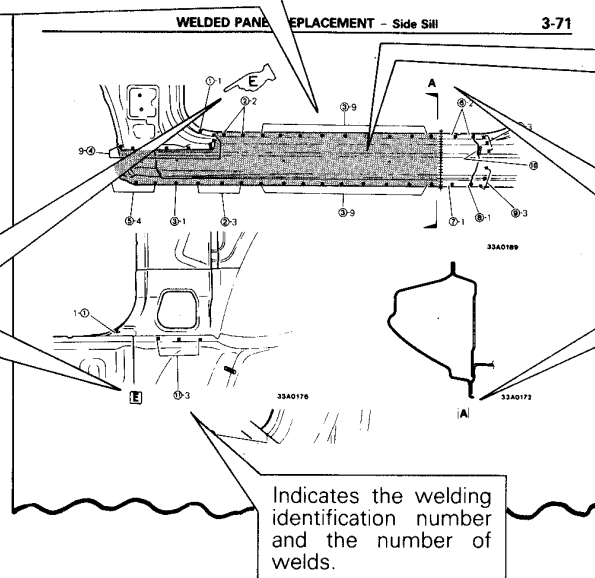
○ indicates one panel to be replaced.
□ indicates two (or more) panels to be replaced.

No.	Welded parts
1	[A] + [E]
2	[A] + [B] + [E]
3	[A] + [D] + [E]
4	[A] + [C] + [D]
5	[A] + [D] + [I]
6	[A] + [D] + [J]
7	[A] + [B] + [J]
8	[A] + [I] + [J]
9	[A] + [J] + [L]
10	[A] + [B] + [F]
11	[A] + [F] + [L]
12	[A] + [I] + [L]

3

For weld points (flange parts, etc.) on the same surface, only weld points at both ends are indicated; weld points between those end weld points are omitted.

Indicates a view as seen from the direction of the finger.
" [E] " indicates that the view as seen from the direction of " [E] " is shown in figure [E].



Parts indicated by a light black colour are panels to be replaced.

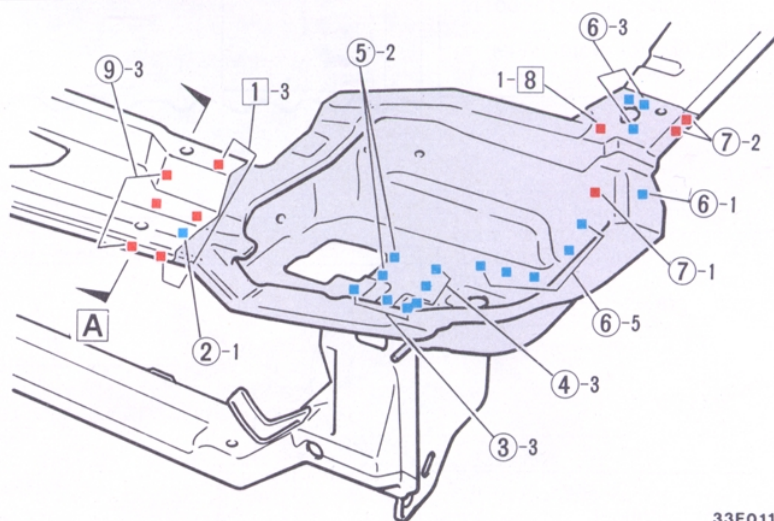
Indicates cross section and its position. If arrow ([A]) is directed from rear to front in drawing, cross section viewed from front side of drawing is shown at [A].

HEADLAMP HOUSING		
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Headlamp housing B Front end upper bar C Front end crossmember brace D Front wheelhouse, inner E Front end gusset, outer F Front end gusset, inner G Front sidemember

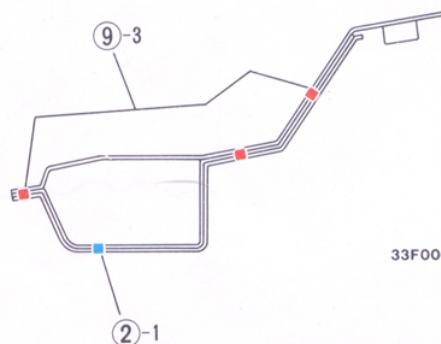
31F0031

[illegible]

REPAIR WELDS

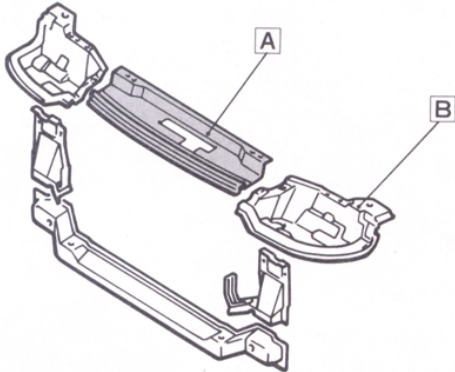


33F0113



33F0003

FRONT END UPPER BAR

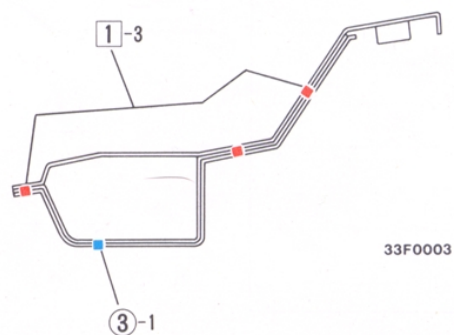
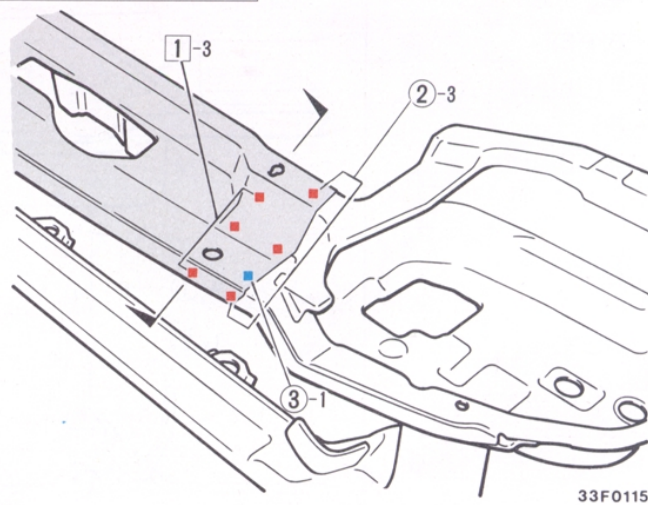
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Front end upper bar B Headlamp housing

31F0031

3

[illegible]

REPAIR WELDS



FRONT END CROSSMEMBER		
REPLACEMENT CONFIGURATION	ASSEMBLY (A B F)	PART NAME
		A Front end crossmember B Front end crossmember brace C Headlamp housing D Front end gusset, outer E Front end gusset, inner F Air guide bracket

31F0031

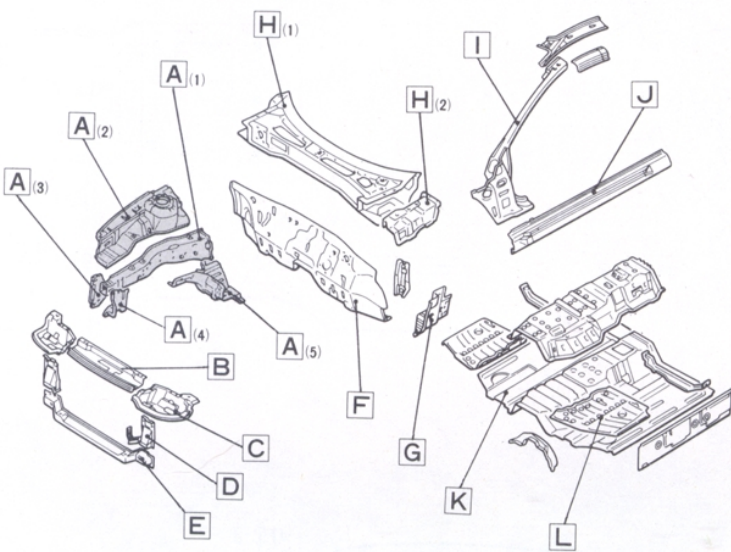
[illegible]

REPAIR WELDS

33F0018

Diagram illustrating the repair weld locations for the rear cross member and rear suspension cross member. The diagram shows two views: a top view of the rear cross member and a side view of the rear suspension cross member. Weld locations are marked with blue squares and numbered 1 through 7. A red square indicates a weld location on the rear suspension cross member. The diagram is labeled 'REPAIR WELDS' and '33F0018'.

FENDER SHIELD (ASSEMBLY)

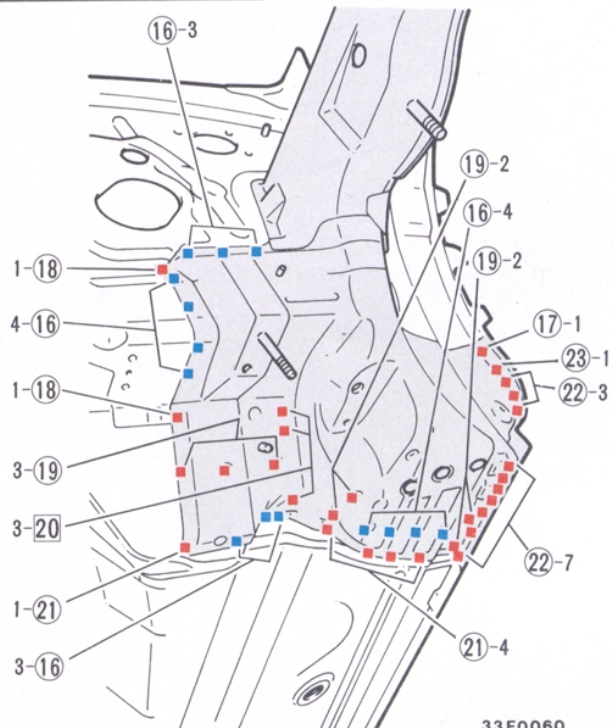
REPLACEMENT CONFIGURATION	ASSEMBLY (A ₍₁₎ — A ₍₅₎)	PART NAME
		A₍₁₎ Front sidemember A₍₂₎ Front wheelhouse, inner A₍₃₎ Front end gusset, outer A₍₄₎ Front end gusset, inner A₍₅₎ Front sidemember, rear B Front end upper bar C Headlamp housing D Front end crossmember brace E Front end crossmember F Dash panel G Front floor side sill, inner, front H₍₁₎ Cowl top panel H₍₂₎ Front upper frame extension I Front pillar J Front floor side sill, outer K Front floor pan L Front floor upper plate

31F0031

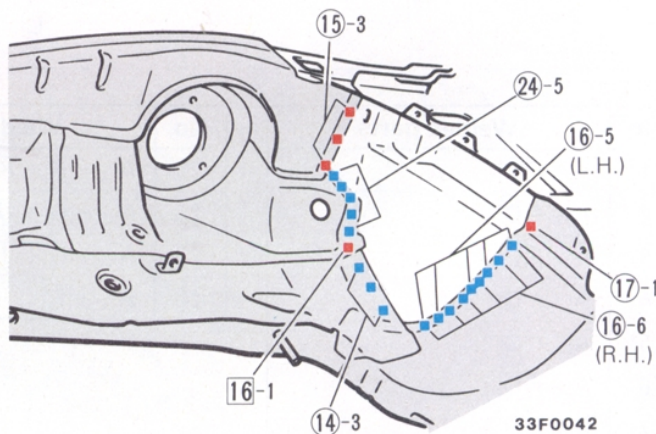
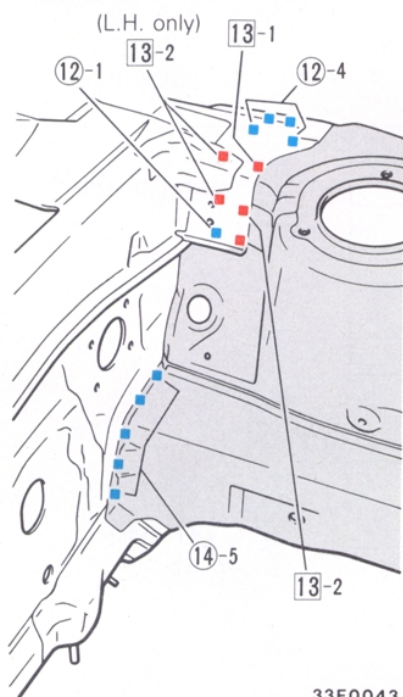
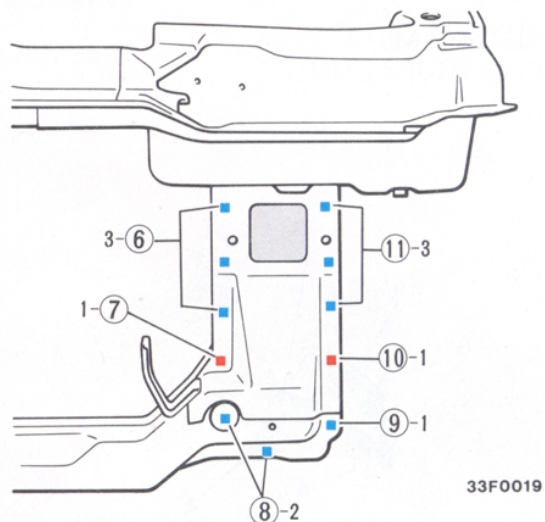
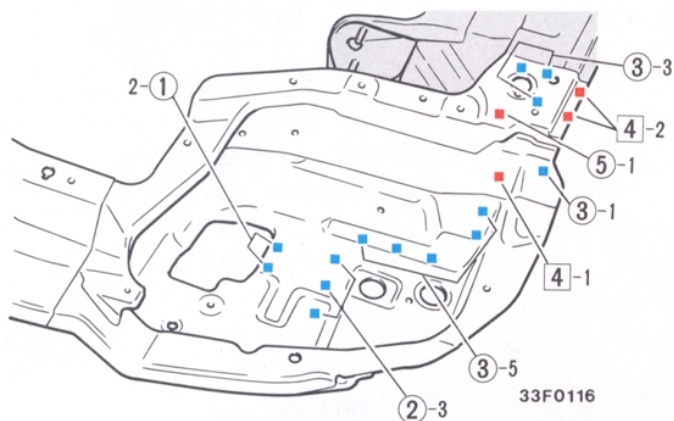
No.	Welded parts
①	A ₍₁₎ + C
②	A ₍₃₎ + C
③	A ₍₂₎ + C
④	A ₍₂₎ + C
⑤	A ₍₂₎ + C
⑥	A ₍₄₎ + D
⑦	A ₍₄₎ + D + E
⑧	A ₍₄₎ + E
⑨	A ₍₃₎ + E
⑩	A ₍₃₎ + D + E
⑪	A ₍₃₎ + D
⑫	A ₍₂₎ + H ₍₂₎
⑬	A ₍₂₎ + H ₍₂₎
⑭	A ₍₁₎ + F
⑮	A ₍₂₎ + F + H ₍₁₎
⑯	A ₍₁₎ + A ₍₂₎ + F
⑰	A ₍₅₎ + F
⑱	A ₍₅₎ + F + G
⑲	A ₍₅₎ + F
⑳	A ₍₅₎ + F + L
㉑	A ₍₅₎ + F

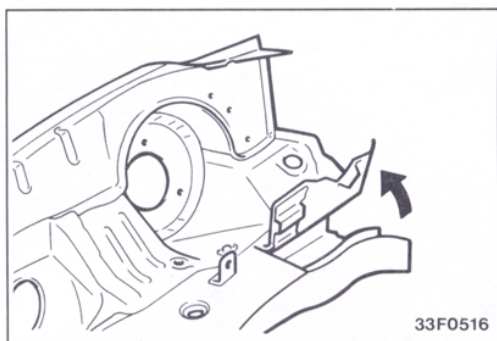
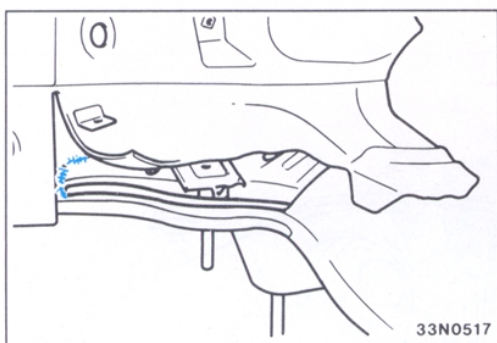
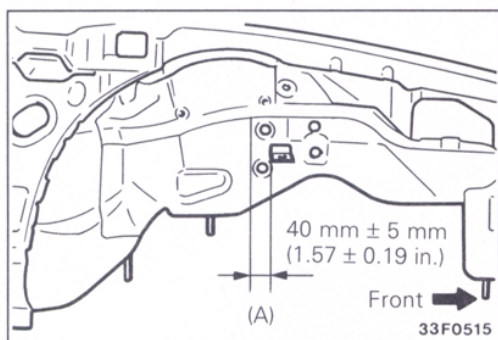
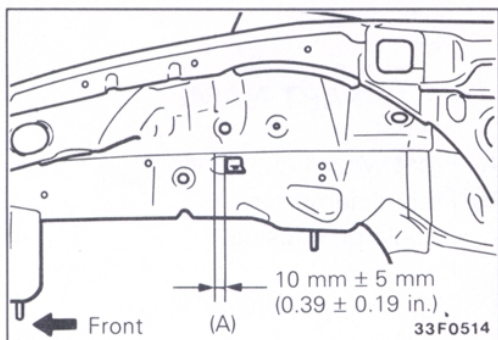
No.	Welded parts
㉒	A ₍₅₎ + F + K
㉓	A ₍₅₎ + G + J
㉔	A ₍₅₎ + G + I
㉕	A ₍₂₎ + F

REPAIR WELDS



33F0060





NOTES WITH REGARD TO REPAIR WORK

If damage does not extend to the front sidemember (rear), to shorten the repair time, part replacement that the front sidemember (rear) is remained to the body side is recommended.

REMOVAL

(1) (Left side): Cut the front sidemember (outer) and front sidemember reinforcement (outer) at the illustrated location. 10 mm $\pm$ 5 mm (0.39 $\pm$ 0.19 in.) forward from the brake hose bracket end (A).

(Right side): Cut only the front sidemember (outer). 40 mm $\pm$ 5 mm (1.57 $\pm$ 0.19 in.) backward from the brake hose bracket end (A).

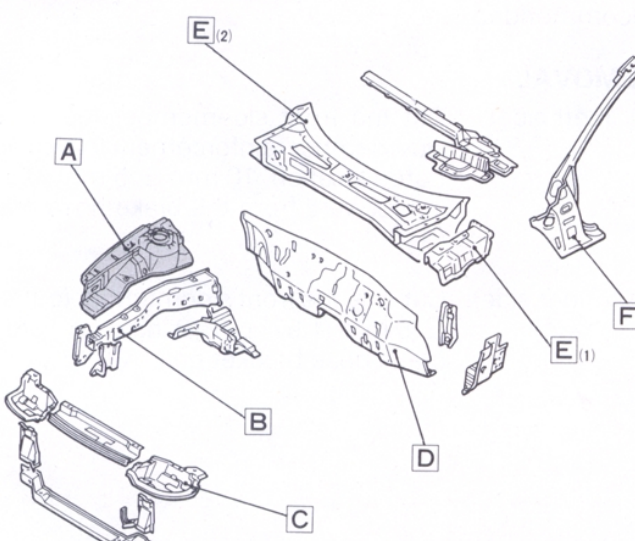
(2) In order to cut and separate the MIG arc welds between the front sidemember (inner) and front sidemember reinforcement (rear), bend the cut front sidemember (outer) upward as shown in the illustration.

INSTALLATION

Install the new front sidemember (outer) onto the body with illustrated portion bent upward.

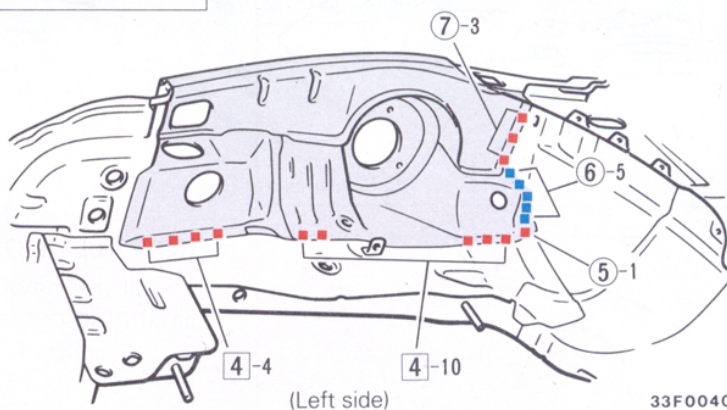
NOTE

Cut the left and right front sidemembers (outer) exactly at the same location as done in the removal step.

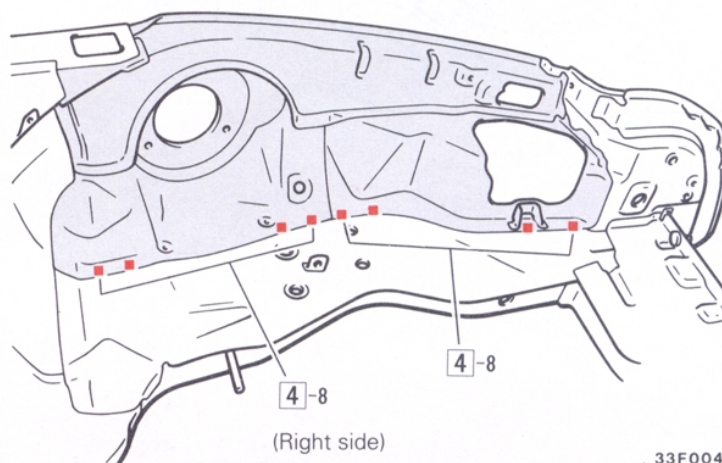
FENDER SHIELD (PART)		
REPLACEMENT CONFIGURATION	PART (A)	PART NAME
		A Front wheelhouse, inner B Front sidemember C Headlamp housing D Dash panel E₍₁₎ Front upper frame extension E₍₂₎ Cowl top panel F Front pillar
31F0031		

No.	Welded parts
①	A + C
②	A + C
③	A + C
④	A + B
⑤	A + B + D
⑥	A + D
⑦	A + D + E ₍₂₎
⑧	A + E ₍₁₎
⑨	A + E ₍₁₎
⑩	A + D + F
⑪	A + B
⑫	A + B

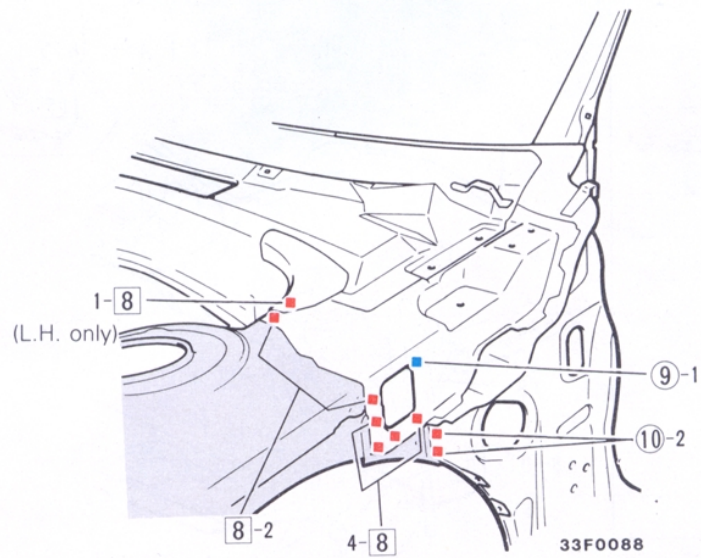
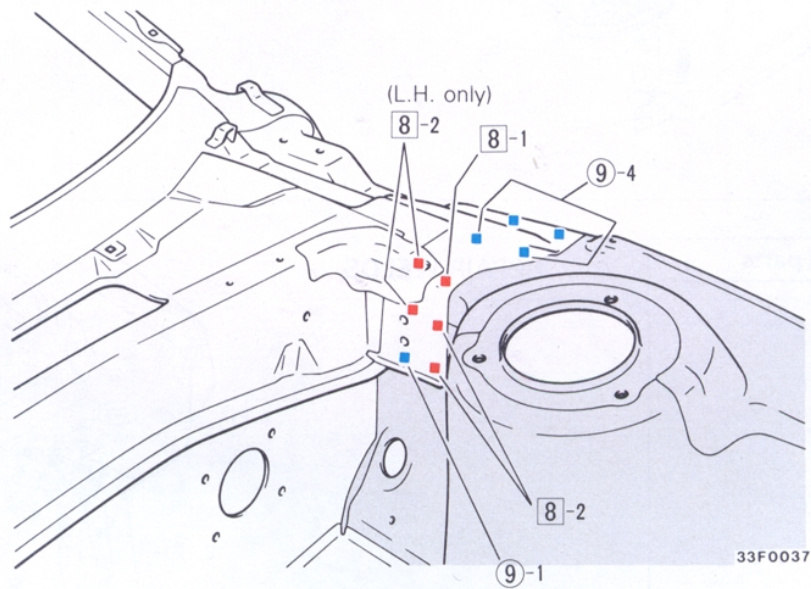
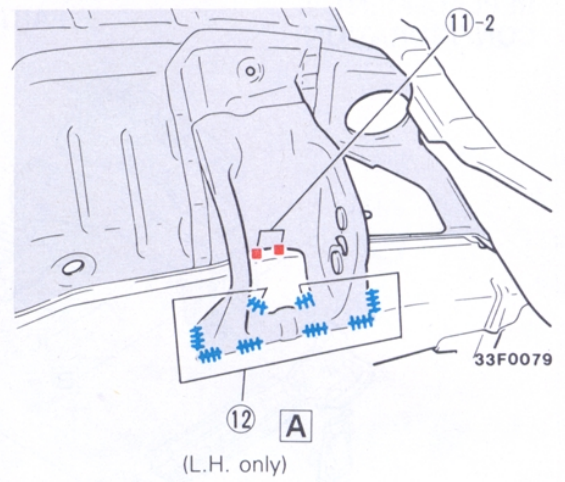
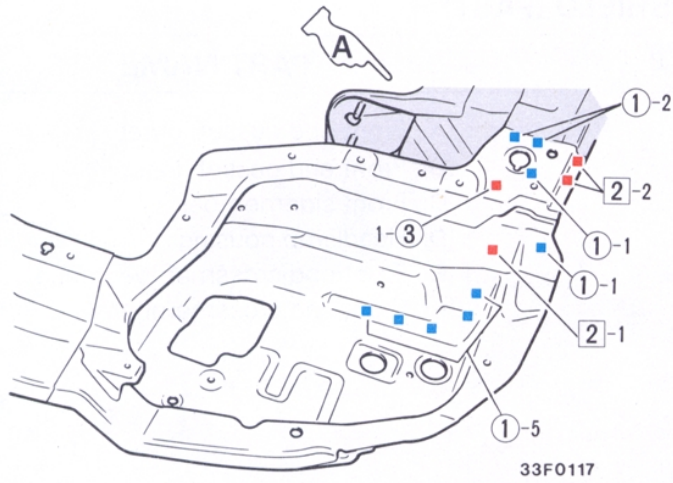
REPAIR WELDS



33F0040



33F0041



FENDER SHIELD (PART)		
REPLACEMENT CONFIGURATION	PART (A B)	PART NAME
		A Front end gusset, outer B Front end gusset, inner C Front sidemember D Headlamp housing E Front end crossmember brace F Front end crossmember

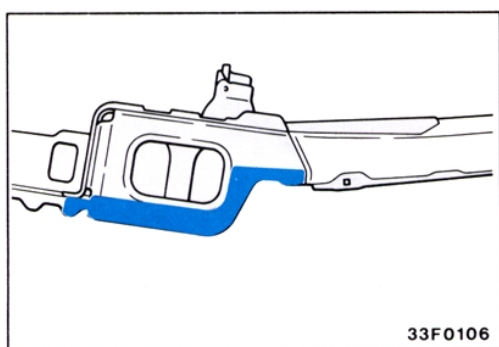
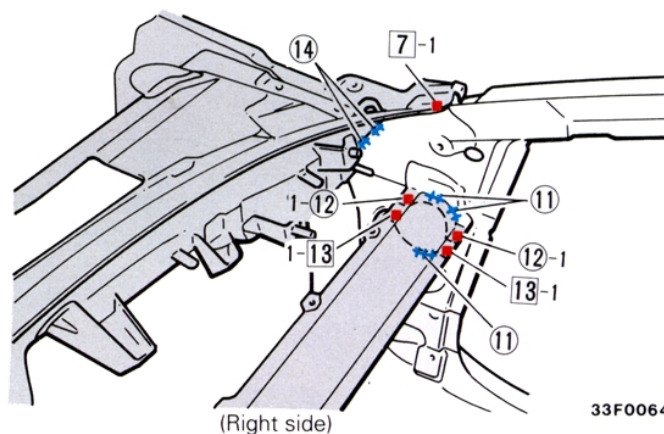
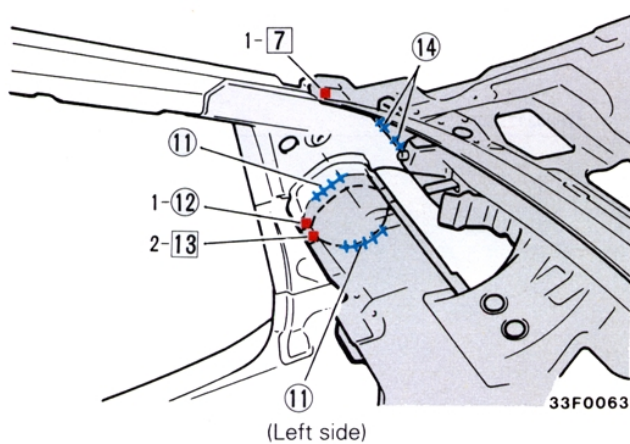
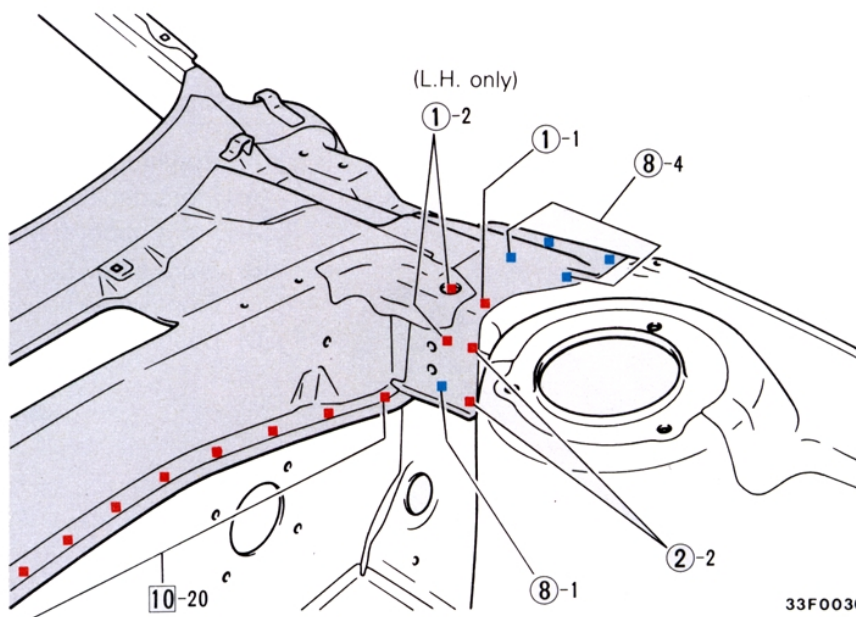
31F0031

[illegible]

REPAIR WELDS

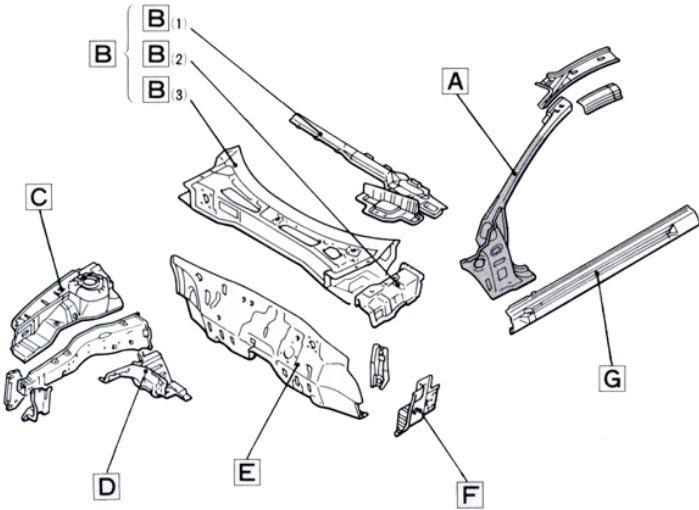
33F0127

33F0054



INSTALLATION

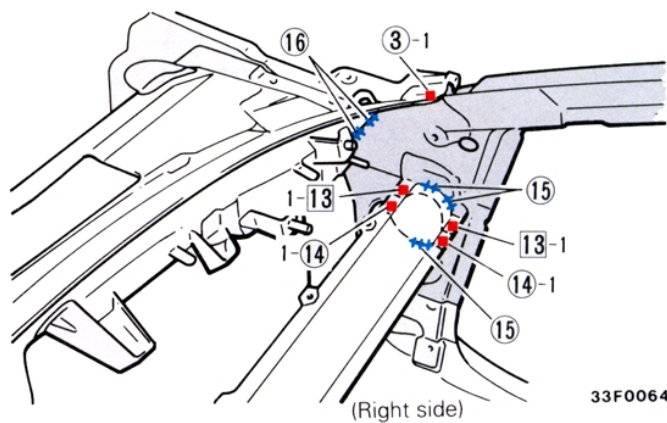
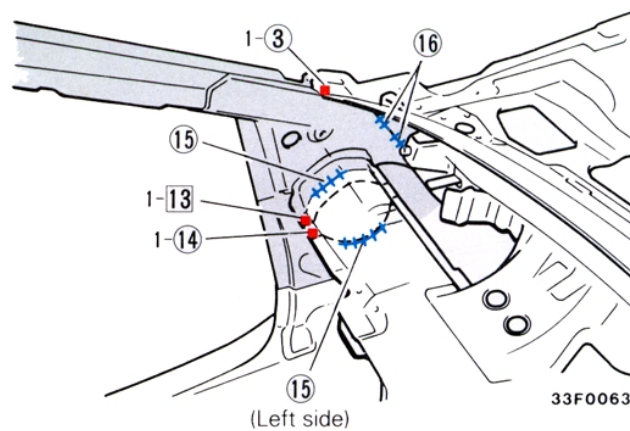
- (1) Apply a coating of body sealant to the front pillar at the body side where shown in the illustration.

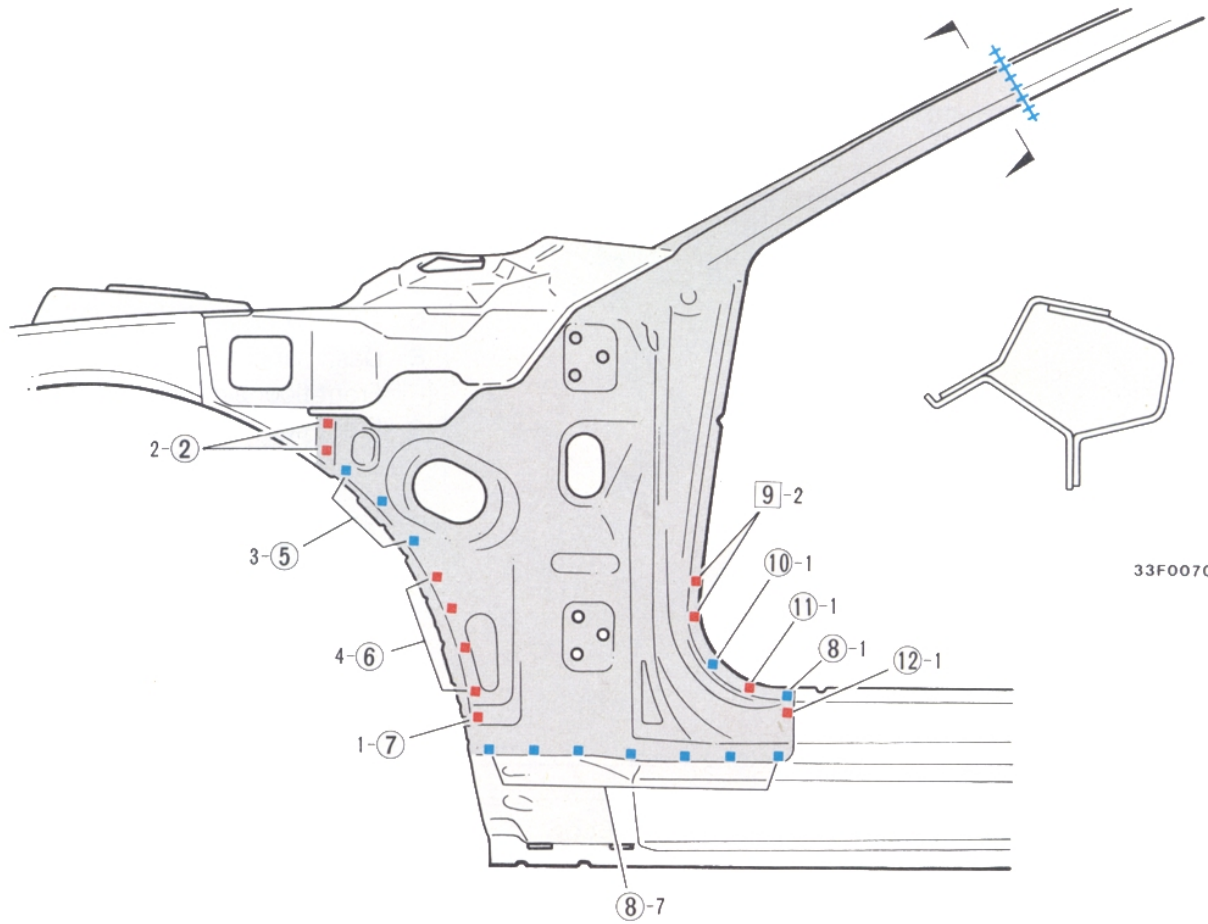
FRONT PILLAR		
REPLACEMENT CONFIGURATION	CUT (A)	PART NAME
		A Front pillar B₁ Front deck crossmember B₂ Front upper frame extension B₃ Cowl top panel C Front wheelhouse, inner D Front sidemember, rear E Dash panel F Front floor side sill, inner, front G Front floor side sill, outer

31F0031

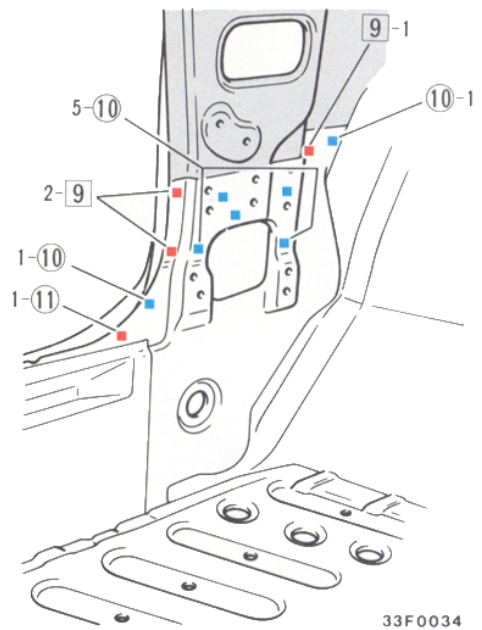
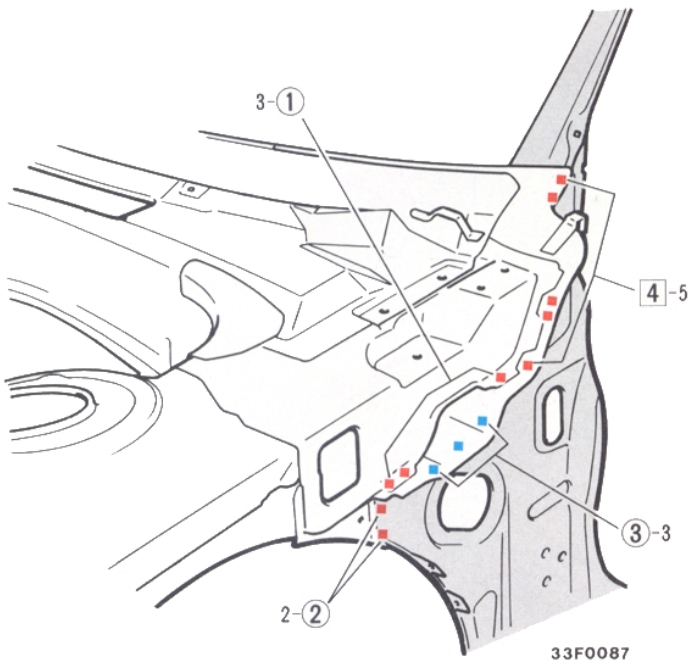
No.	Welded parts
①	A + B ₍₂₎ + B ₍₃₎
②	A + C + E
③	A + B ₍₃₎
④	A + B ₍₃₎
⑤	A + E
⑥	A + E + F
⑦	A + D + F
⑧	A + G
⑨	A + F
⑩	A + F
⑪	A + F + G
⑫	A + G
⑬	A + B ₍₁₎
⑭	A + B ₍₁₎
⑮	A + B ₍₁₎
⑯	A + B ₍₃₎

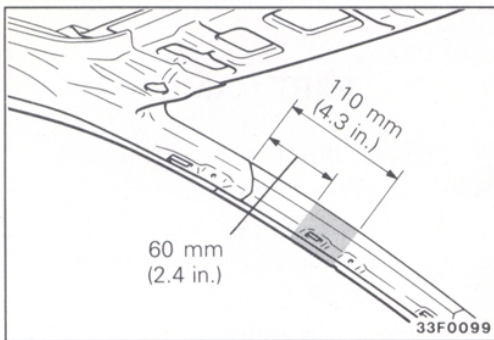
REPAIR WELDS





33F0071



**NOTES WITH REGARD TO REPAIR WORK****REMOVAL**

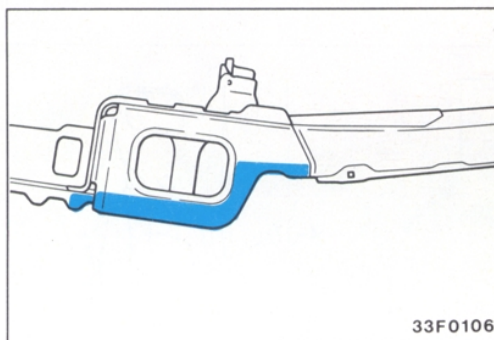
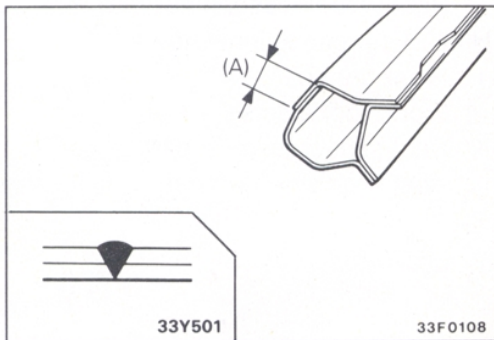
- (1) Cut the front pillar at a position 60 – 110 mm (2.4 – 4.3 in.) down from the end of the panel of the side roof rail (inner).

Caution

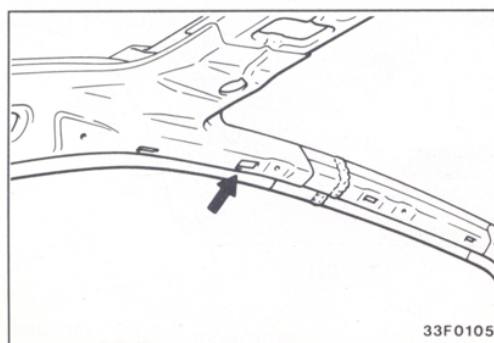
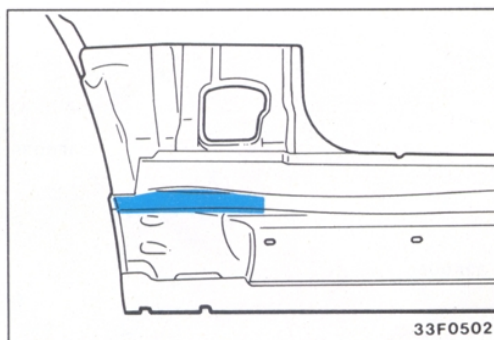
Because the pillar will be butt-welding, make the cut at a right angle to the pillar.

INSTALLATION

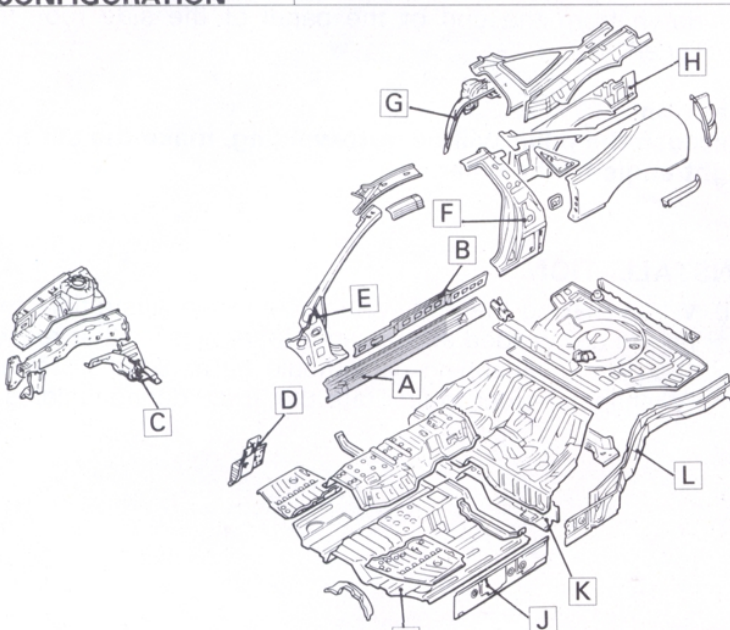
- (1) When making the butt weld at (A) in the illustration, two panels are welded at the same time, and for that reason the panel overlapping part should be abraded to form a "V" shape in order to facilitate the "melt" during welding.



- (2) Apply a coating of body sealant to both the new part and the body side where shown in the illustration.



- (3) Use the front pillar trim mounting hole to spray an ample amount of corrosion-prevention agent onto the inside of the butt-welded joints.

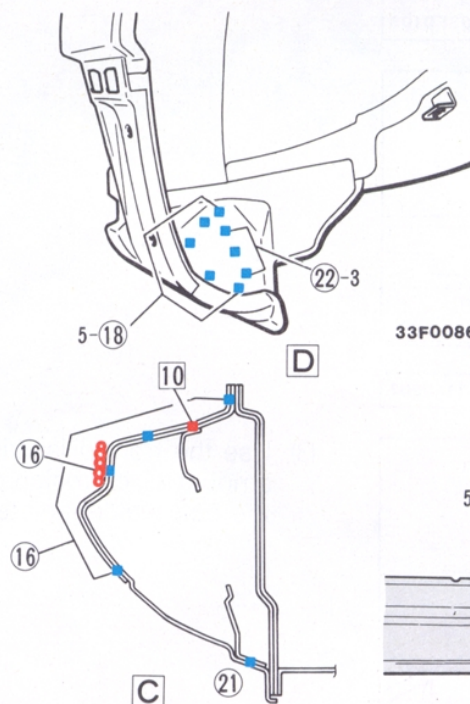
SIDE SILL, OUTER		
REPLACEMENT CONFIGURATION	CUT (A B)	PART NAME
		A Side sill, outer B Side sill reinforcement C Front sidemember, rear D Front floor side sill, inner, front E Front pillar F Center pillar, outer G Rear wheelhouse, inner H Quarter panel, inner, lower I Front floor pan J Front floor side sill, inner K Rear seat crossmember L Rear floor sidemember

33F0111

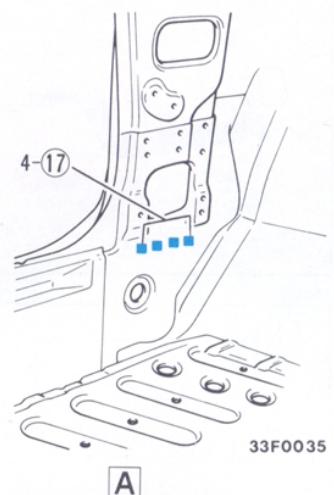
No.	Welded parts
①	A + E
②	A + B + E
③	A + D + E
④	A + C + D
⑤	A + D + I
⑥	A + D + J
⑦	A + B + J
⑧	A + I + J
⑨	A + J + L
⑩	A + B + F
⑪	A + F + L
⑫	A + I + L
⑬	A + K + L
⑭	A + L
⑮	A + L
⑯	A + F
⑰	A + D
⑱	A + G
⑲	A + G + H
⑳	A + H + L
㉑	A + B

No.	Welded parts
㉒	B + G

REPAIR WELDS

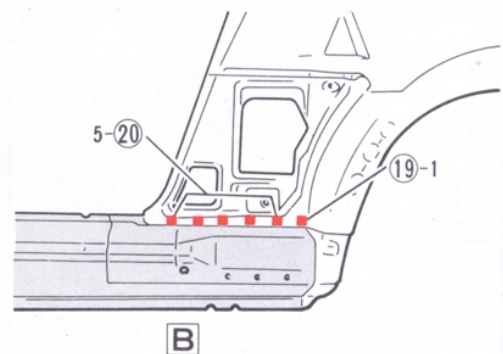


33F0069

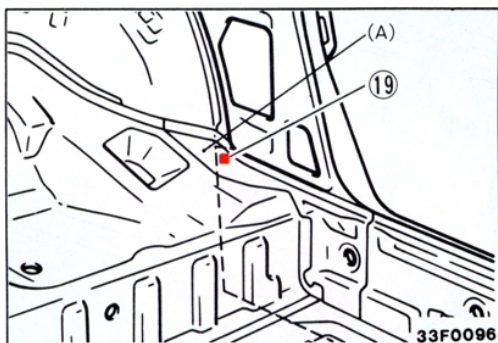
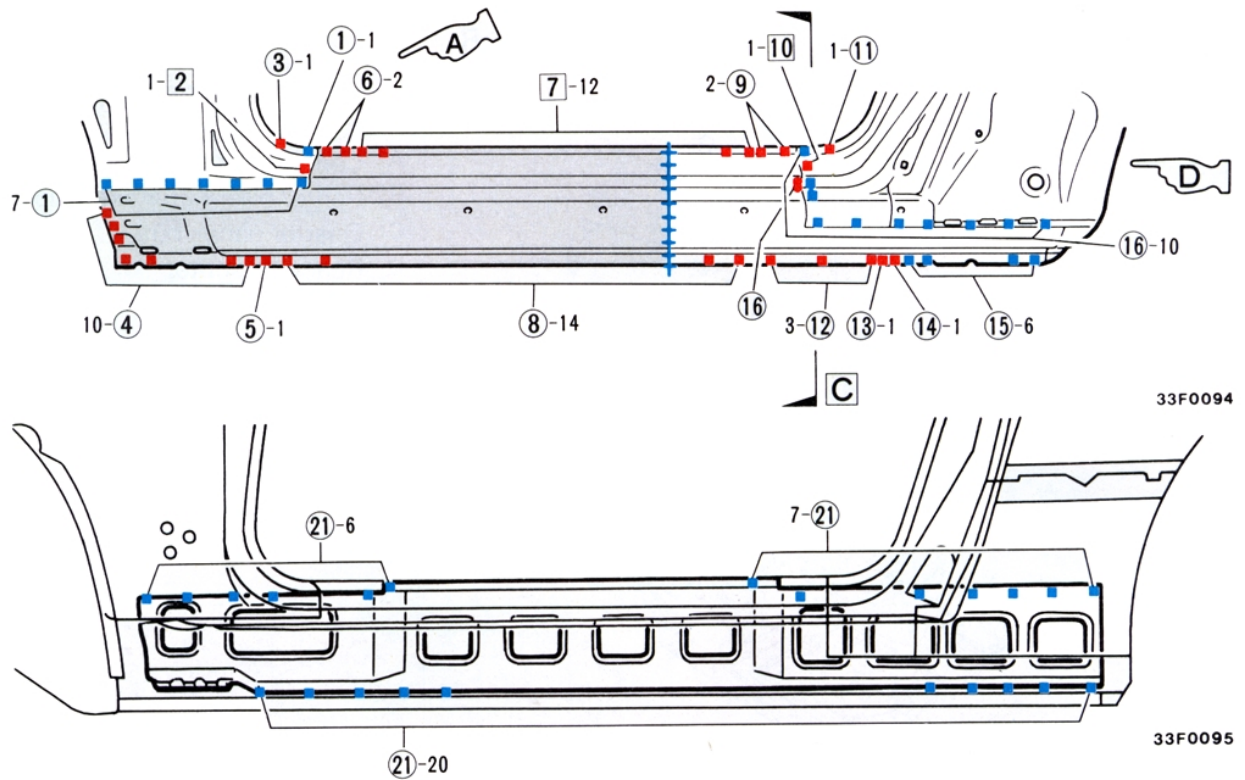


33F0035

33F0086

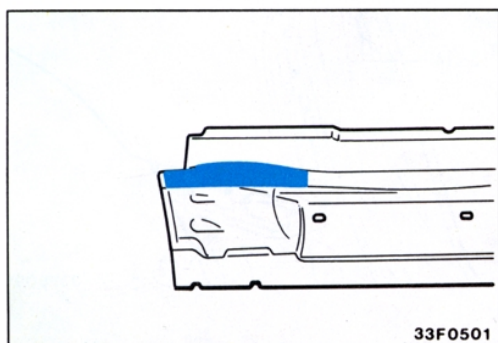


(Illustration shows the center pillar outer panel in the removed condition) 33F0068



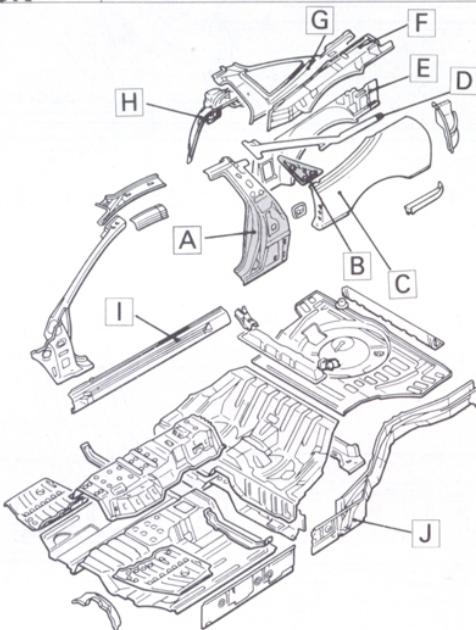
NOTES WITH REGARD TO REPAIR WORK REMOVAL

- (1) Because the welded point 19 is located under the panel (A) and cannot detect it directly, remove the center pillar at first and cut the spot weld from vehicle outside.



INSTALLATION

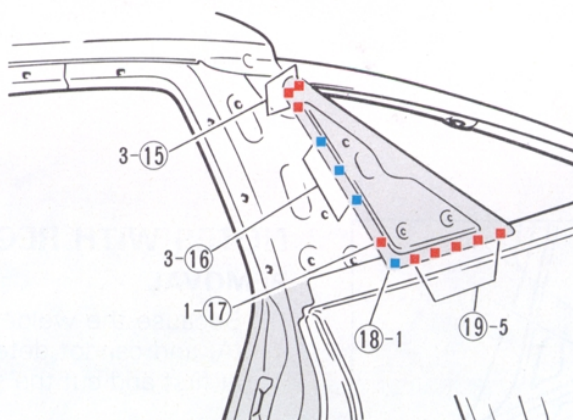
- (1) Apply a coating of body sealant where shown in the illustration.

CENTER PILLAR		
REPLACEMENT CONFIGURATION	CUT (A B)	PART NAME
		A Center pillar, outer B Center pillar outer extension C Quarter panel, outer D Rear pillar, outer E Quarter panel, inner, lower F Beltline reinforcement G Quarter panel, inner, upper H Rear wheelhouse, inner I Front floor side sill, outer J Rear floor sidemember

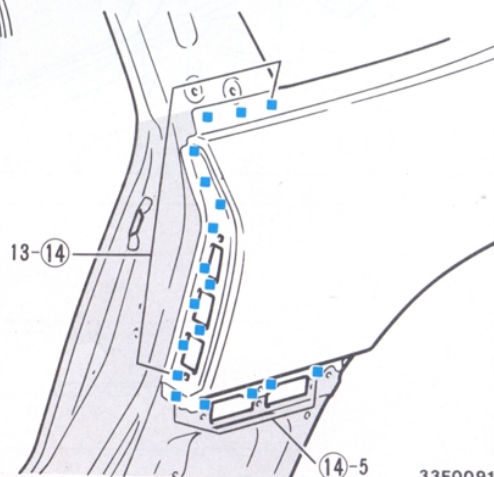
31F0032

No.	Welded parts
①	A + G
②	A + G ★
③	A + F + G
④	A + E + F
⑤	A + E
⑥	A + I + J
⑦	A + I
⑧	A + I
⑨	A + H
⑩	A + E
⑪	A + F
⑫	A + G
⑬	A + D + G
⑭	A + C
⑮	A + B + D
⑯	A + B
⑰	A + B + G
⑱	B + C
⑲	B + C + G

REPAIR WELDS

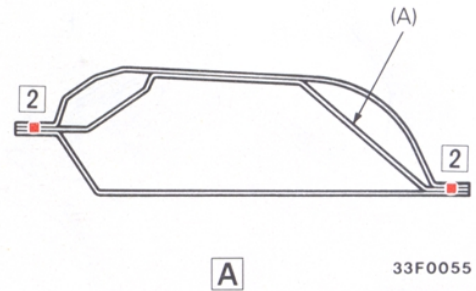
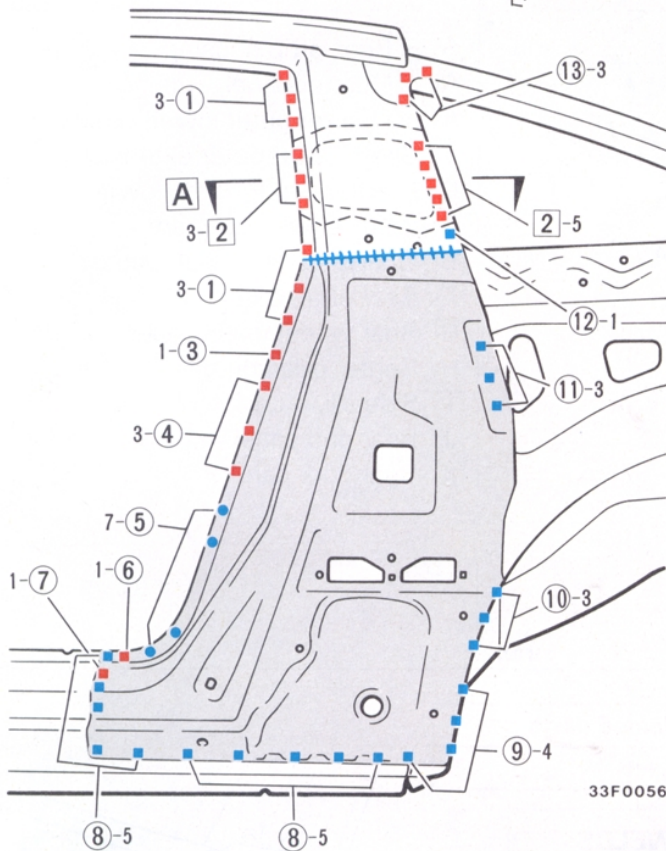


33F0119

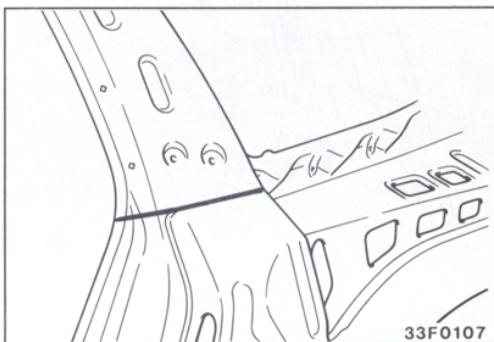


33F0091

Care should be taken not to cut the seat belt reinforcement (A) as indicated in dotted line when removing/installing the pillar.

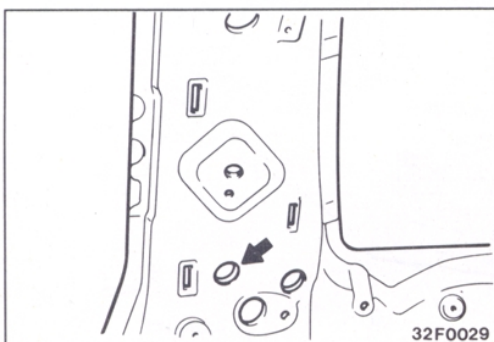


(Illustration shows the quarter outer panel in the removed condition.)



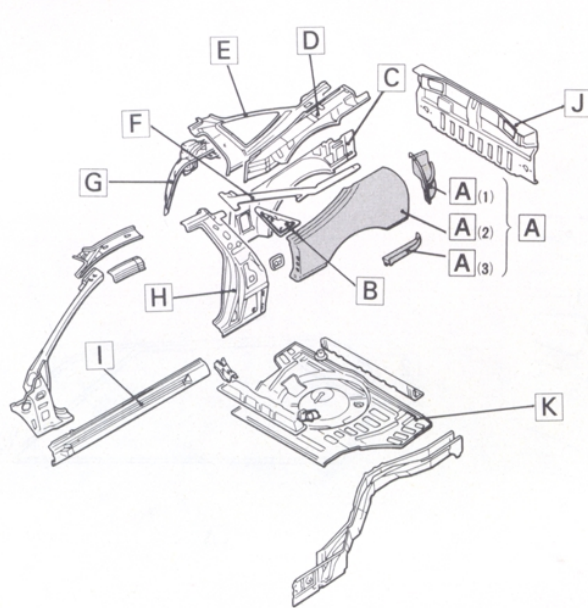
NOTES WITH REGARD TO REPAIR WORK REMOVAL

- (1) Cut only the center pillar outer panel at the illustrated location, taking care not to cut the garnish mounting hole.



INSTALLATION

- (1) Apply a liberal amount of corrosion-prevention agent (using the hole indicated in the illustration) to the butt-weld locations.

QUARTER PANEL, OUTER		
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A (1) Rear lamp housing A (2) Quarter panel, outer A (3) Quarter outer lower extension B Center pillar outer extension C Quarter panel, inner, lower D Beltline reinforcement E Quarter panel, inner, upper F Rear pillar, outer G Rear wheelhouse, inner H Center pillar, outer I Side sill, outer J Rear end panel K Rear floor pan

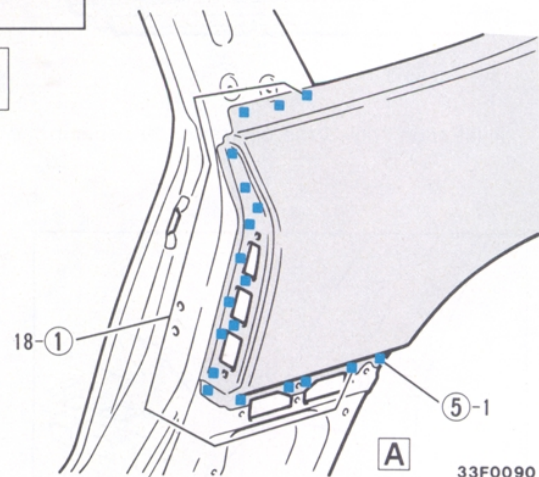
31F0032

No.	Welded parts
①	A ₍₂₎ + H
②	A ₍₂₎ + E
③	A ₍₂₎ + E + F
④	A ₍₂₎ + F
⑤	A ₍₂₎ + C
⑥	A ₍₃₎ + C
⑦	A ₍₂₎ + C
⑧	A ₍₁₎ + A ₍₂₎
⑨	A ₍₁₎ + A ₍₂₎ + A ₍₃₎
⑩	A ₍₂₎ + B
⑪	A ₍₂₎ + B + E
⑫	A ₍₁₎ + F
⑬	A ₍₁₎ + F + J
⑭	A ₍₁₎ + C + D
⑮	A ₍₁₎ + J
⑯	A ₍₁₎ + K
⑰	A ₍₁₎ + C + K
⑱	A ₍₁₎ + C
⑲	A ₍₁₎ + A ₍₃₎
⑳	A ₍₂₎ + A ₍₃₎
㉑	A ₍₂₎ + A ₍₃₎ + C

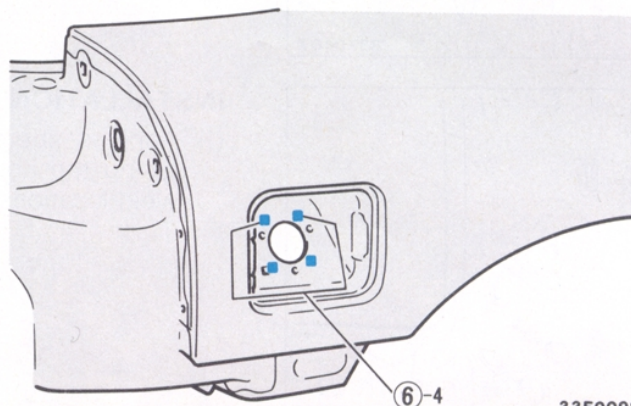
No.	Welded parts
㉒	A ₍₃₎ + C + K

REPAIR WELDS

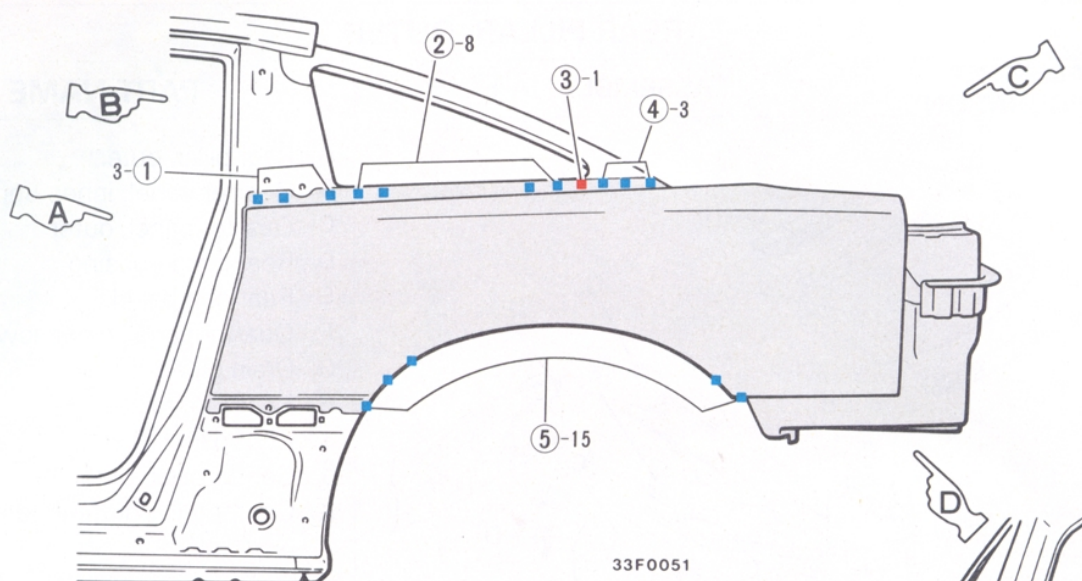
(R.H. only)



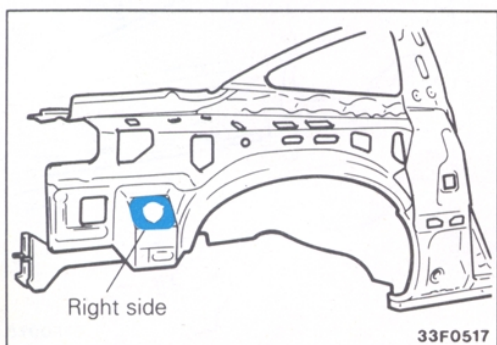
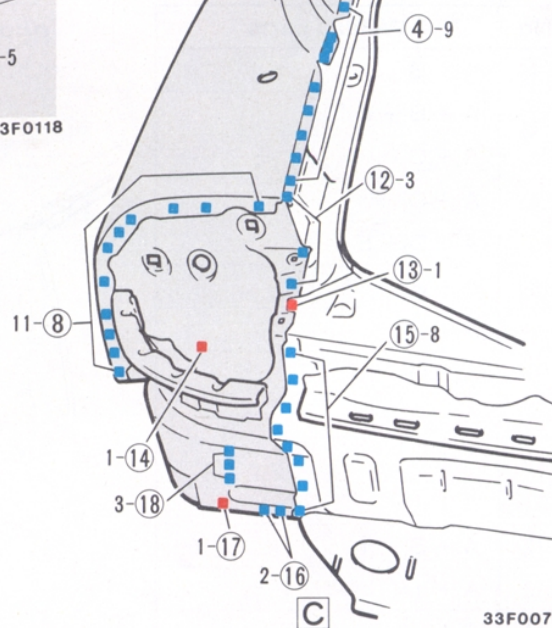
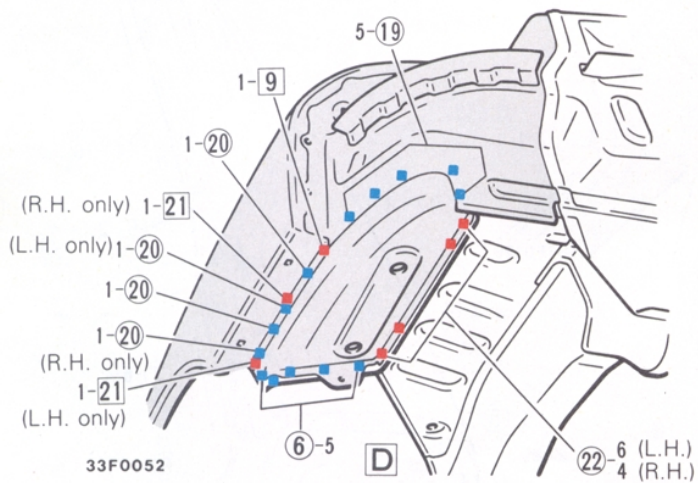
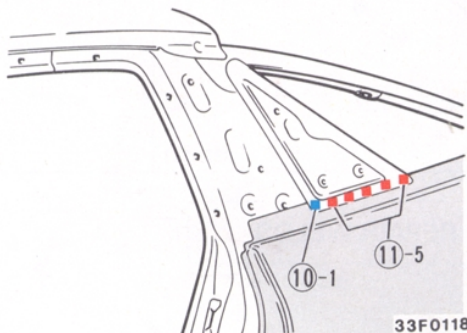
33F0090



33F0092



(Illustration shows the center pillar outer extension in the removed condition)

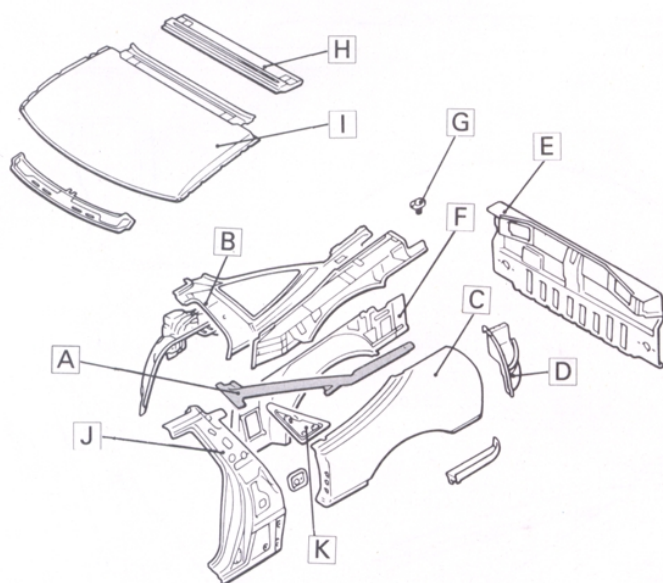


NOTES WITH REGARD TO REPAIR WORK INSTALLATION

- (1) Apply a coating of body sealant at the body side where shown in the illustration.

REPLACEMENT CONFIGURATION

PART NAME



- ☐ A Rear pillar, outer
- ☐ B Quarter panel, inner, upper
- ☐ C Quarter panel, outer
- ☐ D Rear lamp housing
- ☐ E Rear end panel
- ☐ F Quarter panel, inner, lower
- ☐ G Drain pipe
- ☐ H Rear roof rail
- ☐ I Roof panel
- ☐ J Center pillar, outer
- ☐ K Center pillar outer extension

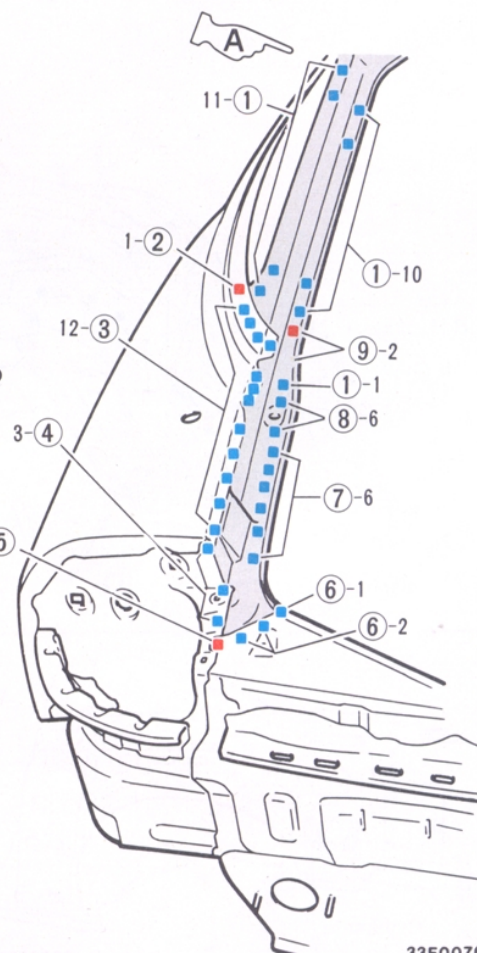
33F0111

No.	Welded parts
①	$A + B$
②	$A + B + C$
③	$A + C$
④	$A + D$
⑤	$A + D + E$
⑥	$A + E$
⑦	$A + F$
⑧	$A + G$
⑨	$A + B$
⑩	$A + H$
⑪	$A + I$
⑫	$A + B + I$
⑬	$A + I$
⑭	$A + J$
⑮	$A + B + J$
⑯	$A + K$

A

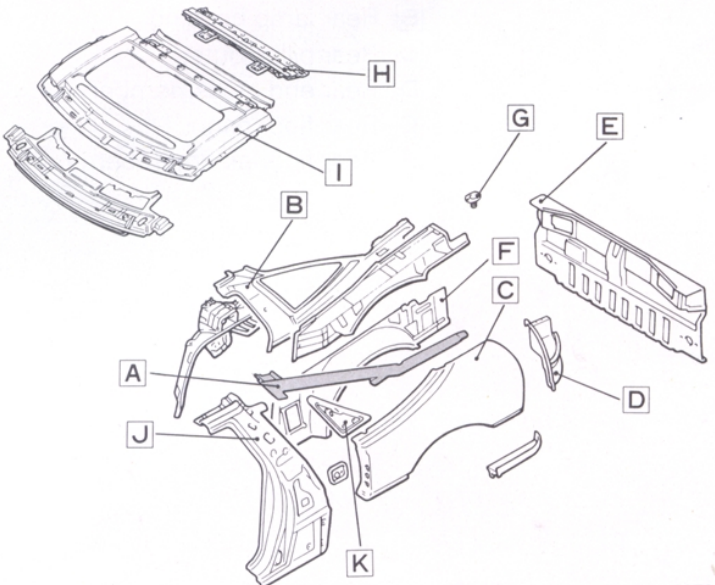


(Illustration shows the part **K** in the removed condition)



33F0076

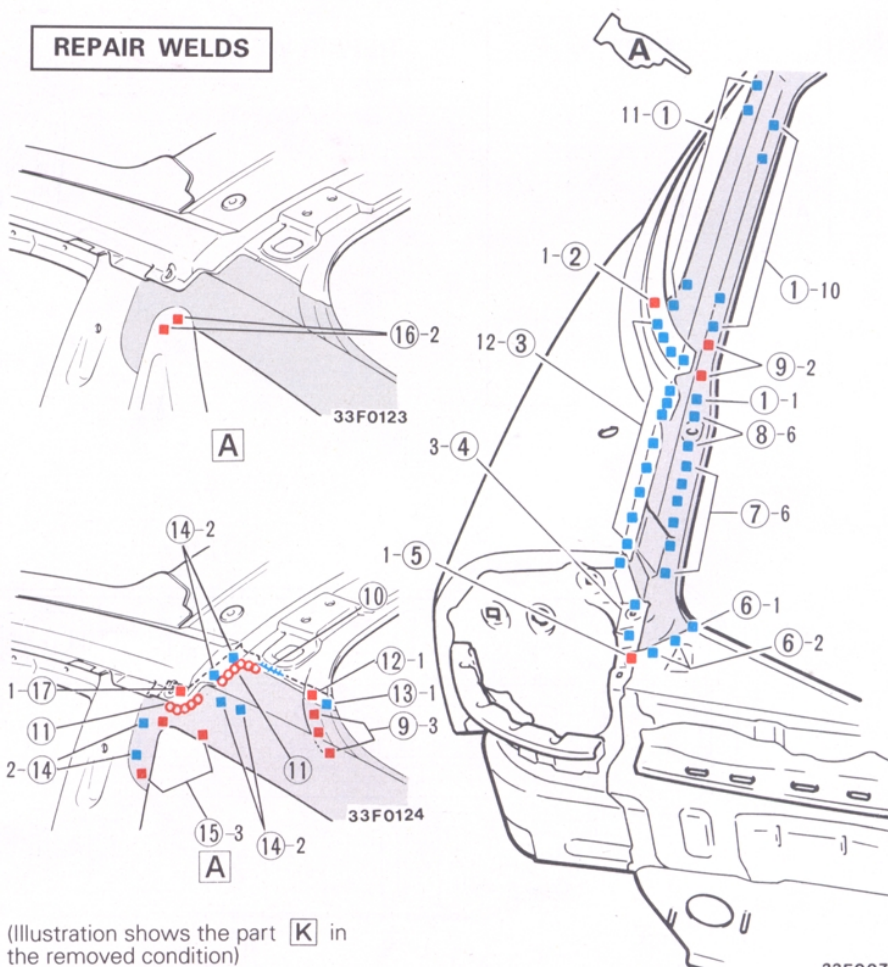
REAR PILLAR, OUTER (MODELS WITH SUNROOF)

REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Rear pillar, outer B Quarter panel, inner, upper C Quarter panel, outer D Rear lamp housing E Rear end panel F Quarter panel, inner, lower G Drain pipe H Rear roof rail I Roof panel J Center pillar, outer K Center pillar outer extension

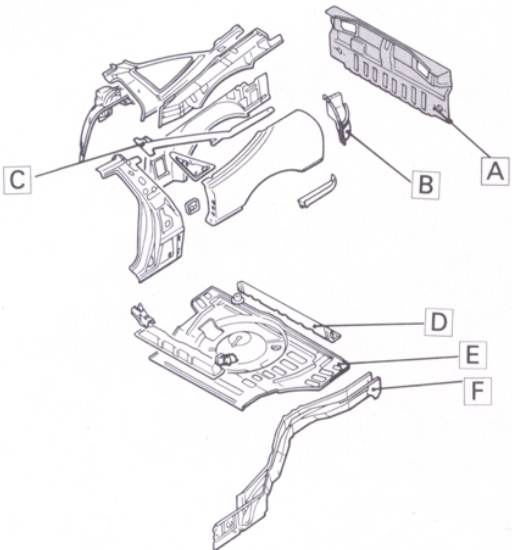
33F0518

No.	Welded parts
①	A + B
②	A + B + C
③	A + C
④	A + D
⑤	A + D + E
⑥	A + E
⑦	A + F
⑧	A + G
⑨	A + B
⑩	A + H
⑪	A + I
⑫	A + B + I
⑬	A + I
⑭	A + J
⑮	A + B + J
⑯	A + B + J + K
⑰	A + J

REPAIR WELDS

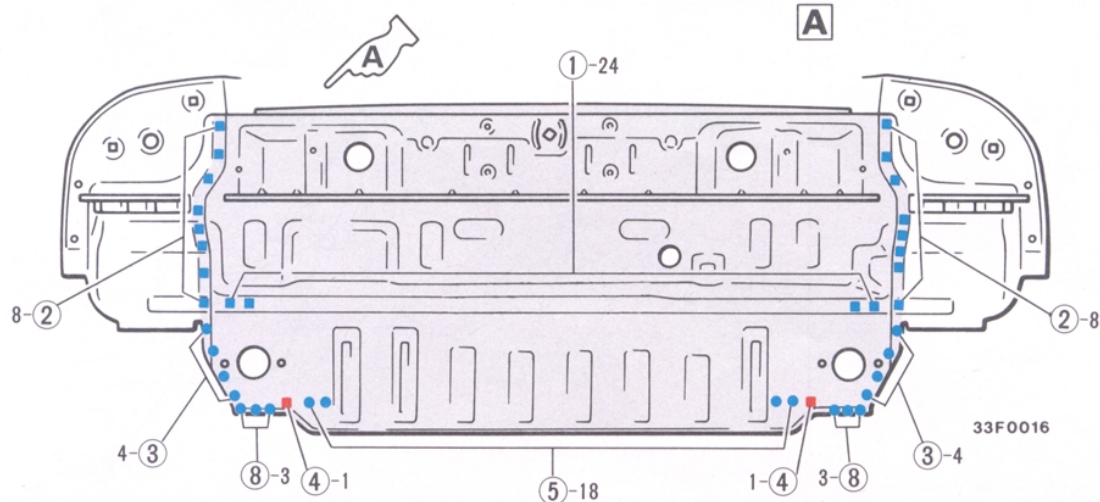
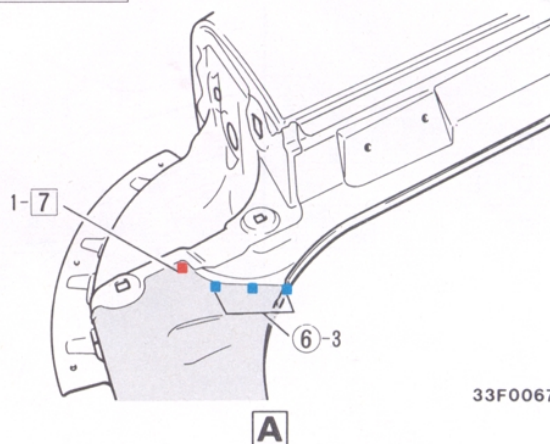


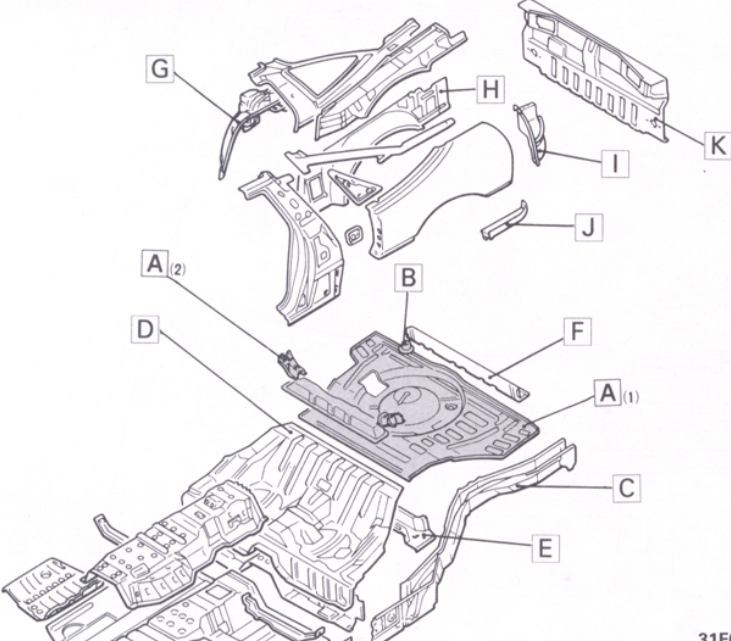
33F0076

REAR END PANEL		
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Rear end panel B Rear lamp housing C Rear pillar, outer D Rear end crossmember E Rear floor pan F Rear floor sidemember
31F0032		

No.	Welded parts
①	A + H
②	A + B
③	A + I
④	A + G + I
⑤	A + G
⑥	A + D
⑦	A + B + D
⑧	A + F

REPAIR WELDS

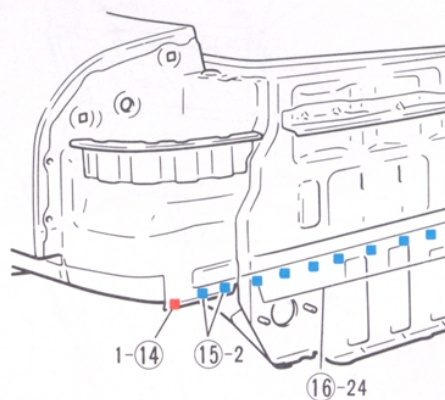


REAR FLOOR PAN		
REPLACEMENT CONFIGURATION	ASSEMBLY ($A_{(1)}$ $A_{(2)}$ B)	PART NAME
		$A_{(1)}$ Rear floor pan $A_{(2)}$ Rear floor crossmember upper extension B Spare tire bracket C Rear floor sidemember D Rear seat pan E Rear floor crossmember, lower F Rear end crossmember G Rear wheelhouse, inner H Quarter panel, inner, lower I Rear lamp housing J Quarter outer extension, lower K Rear end panel

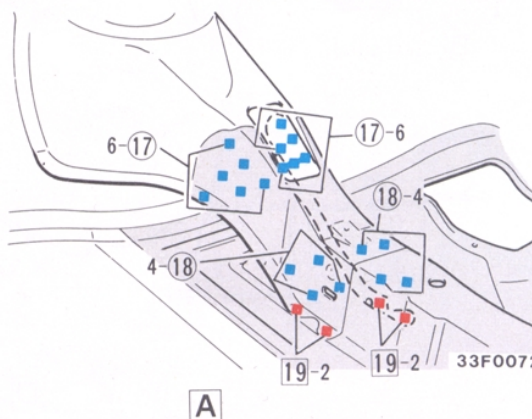
31F0032

No.	Welded parts
①	$A_{(1)} + C + D$
②	$A_{(1)} + D$
③	$A_{(1)} + C + E$
④	$A_{(1)} + C$
⑤	$A_{(1)} + E$ ★
⑥	$A_{(1)} + E$
⑦	$A_{(1)} + C$
⑧	$A_{(1)} + B$
⑨	$A_{(1)} + C$
⑩	$A_{(1)} + F$
⑪	$A_{(1)} + G$
⑫	$A_{(1)} + G + H$
⑬	$A_{(1)} + H + J$
⑭	$A_{(1)} + H + I$
⑮	$A_{(1)} + I$
⑯	$A_{(1)} + K$
⑰	$A_{(2)} + G$
⑱	$A_{(1)} + A_{(2)}$
⑲	$A_{(1)} + A_{(2)}$

REPAIR WELDS

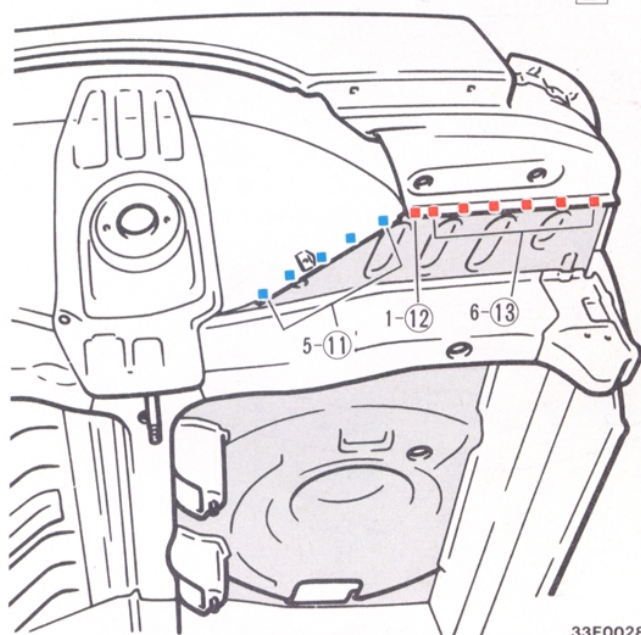
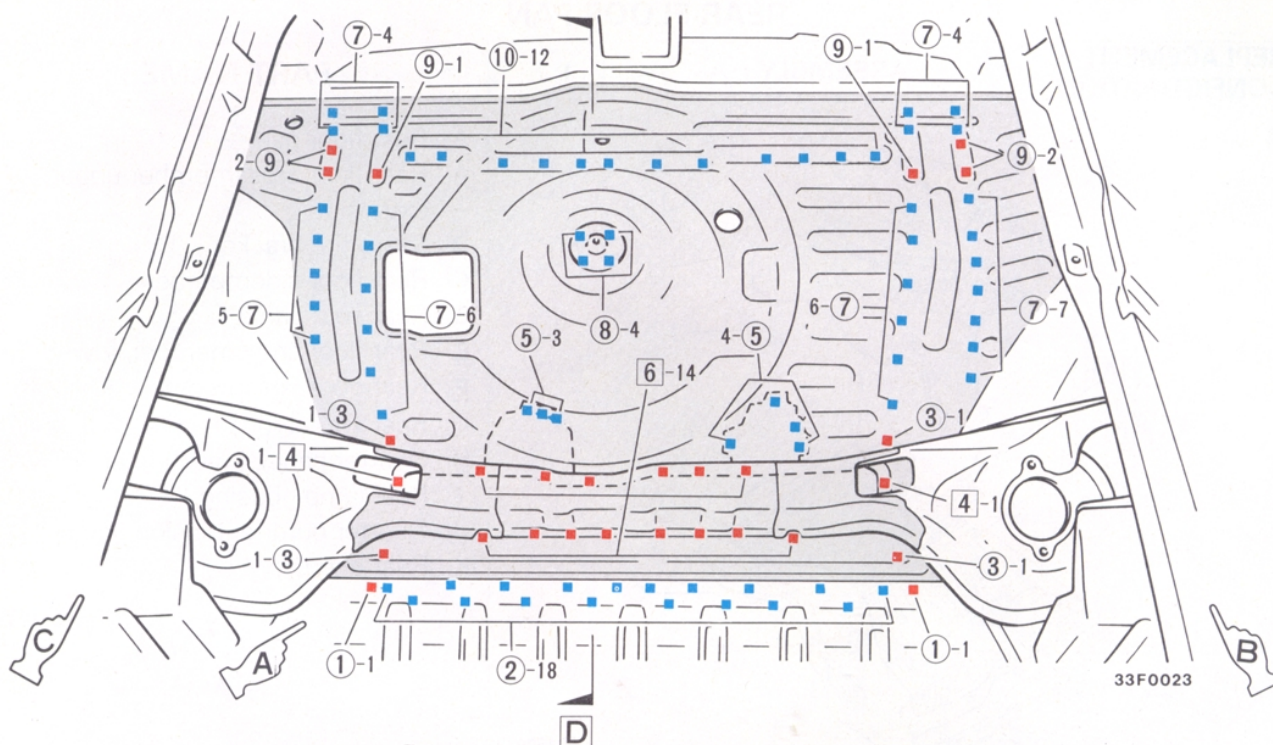


33F0039

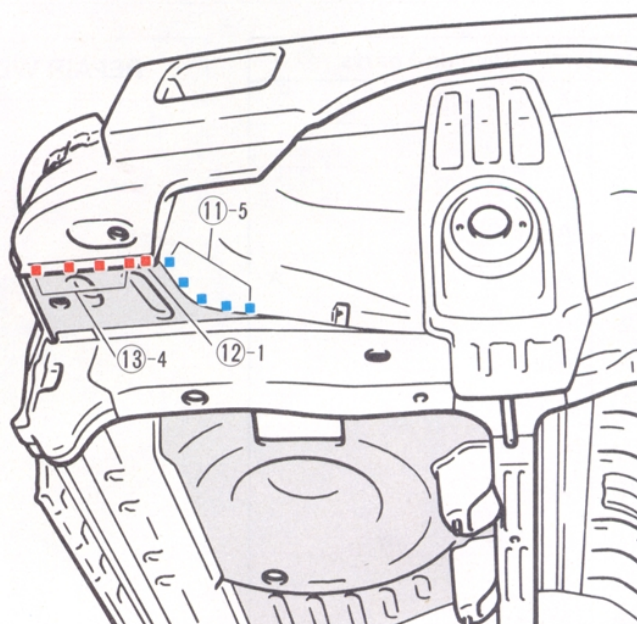


33F0072

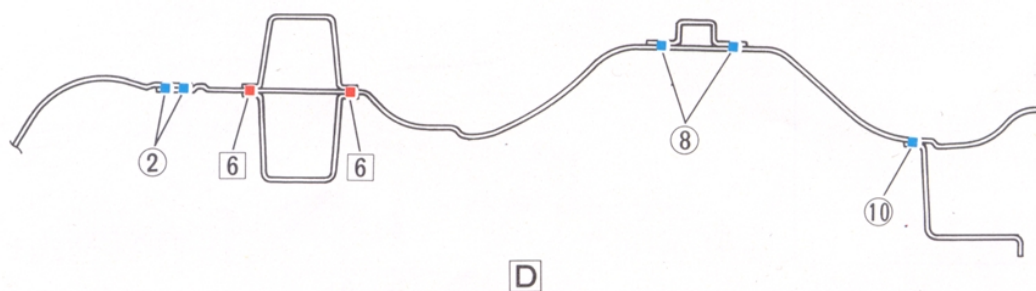
A

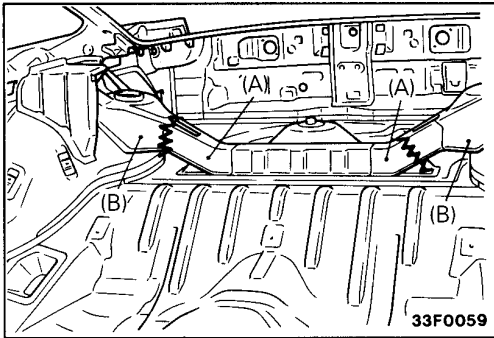


B (Left side)



C (Right side)





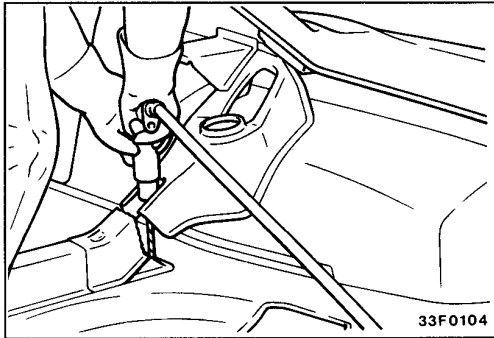
NOTES WITH REGARD TO REPAIR WORK

REMOVAL

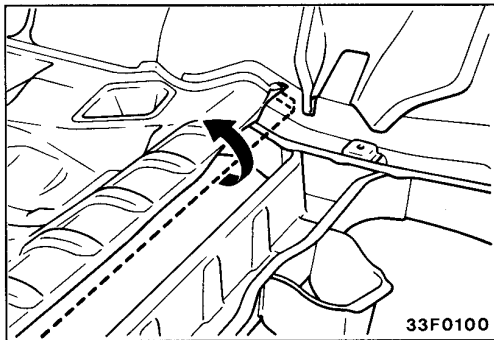
- (1) In order to facilitate the cutting and removal of spot-welded places, cut only the rear floor crossmember upper extension (A) at the illustrated locations.

Caution

Do not cut the shelf corner braces (B) at the body side.



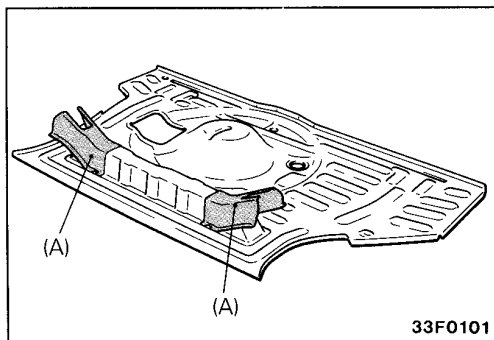
- (2) Cut the spot-welded place [4] with a drill through the clearance at the shelf corner brace.



- (3) In order to facilitate the removal and installation of the rear floor pan, bend the end of the rear seat pan upward as shown in the illustration.

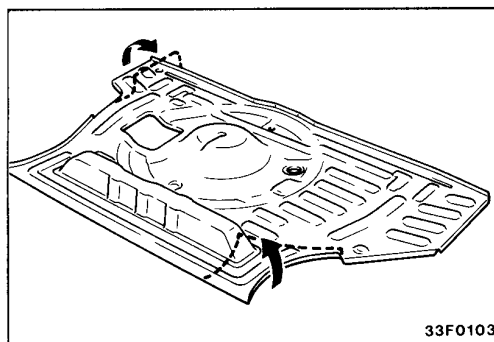
Caution

Bend the rear seat pan the minimum necessary only.



INSTALLATION

- (1) Remove the rear floor crossmember upper extensions (A) from the new part before installing the new rear floor pan onto the body. Install the parts (A) to the rear floor pan after installing the rear floor pan onto the body.

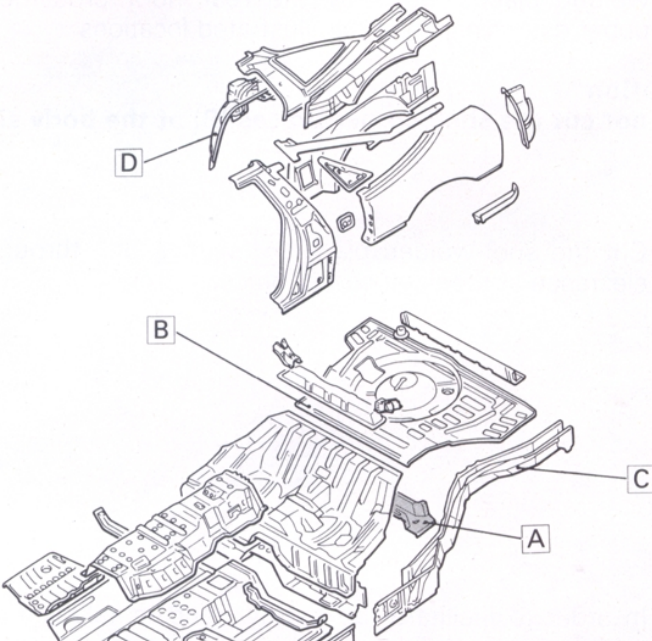


- (2) In order to facilitate the installation of the new part, bend the illustrated part upward as shown in the illustration.

Caution

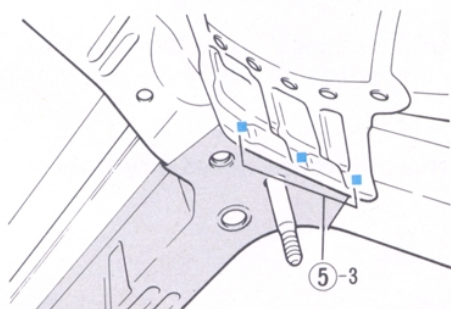
Bend the new part the minimum necessary only.

REAR FLOOR CROSSMEMBER, LOWER

REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Rear floor crossmember, lower B Rear floor pan C Rear floor sidemember D Rear wheelhouse, inner

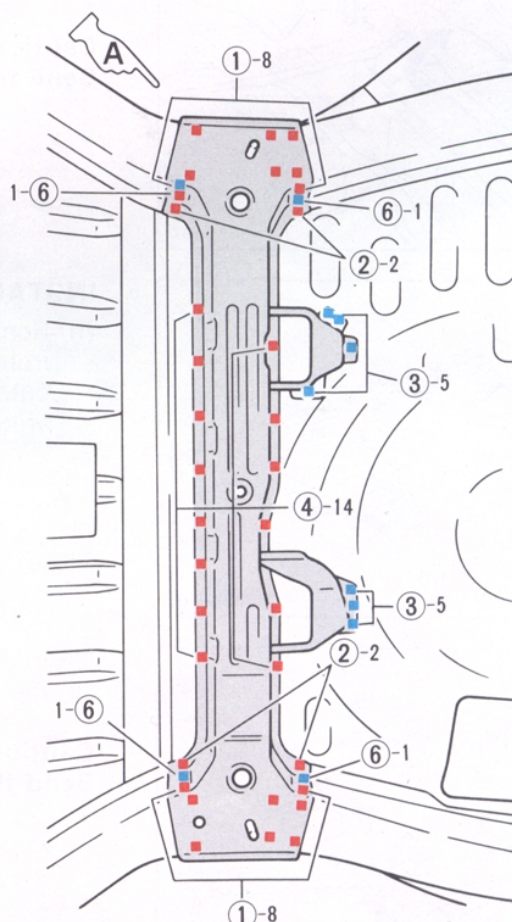
31F0032

No.	Welded parts
①	A + C
②	A + B + C
③	A + B
④	A + B
⑤	A + D
⑥	A + C



A

33F0044



(Underside of floor)

33F0033

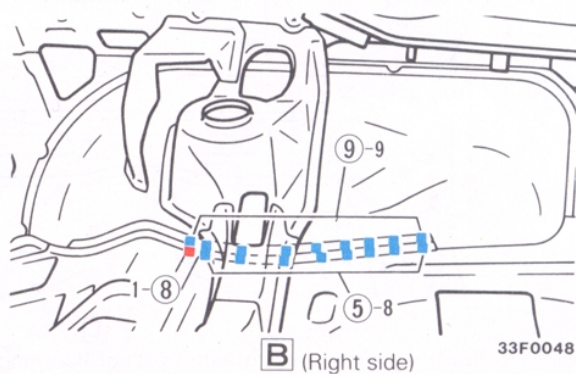
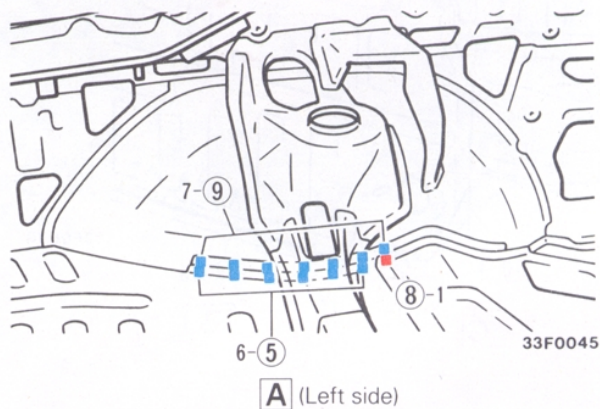
REAR FLOOR SIDEMEMBER

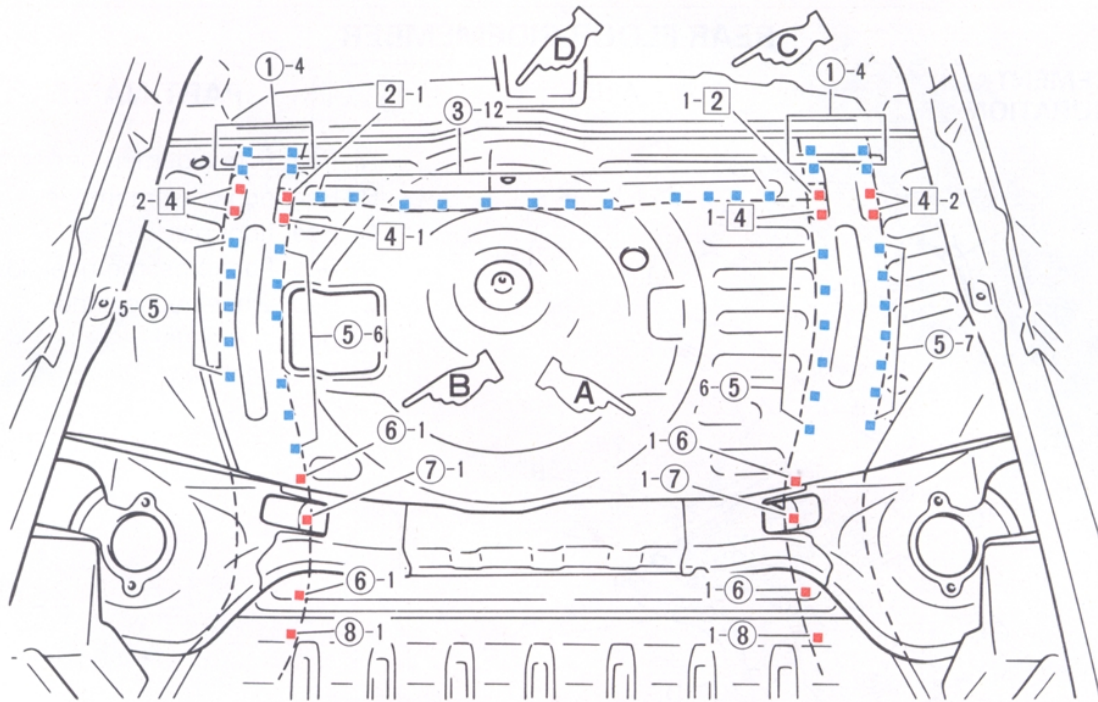
REPLACEMENT CONFIGURATION	CUT (A B)	PART NAME
		A Rear floor sidemember B Rear end crossmember C Rear floor pan D Rear floor crossmember, lower E Rear wheelhouse, inner F Rear end panel G Rear seat pan

31F0032

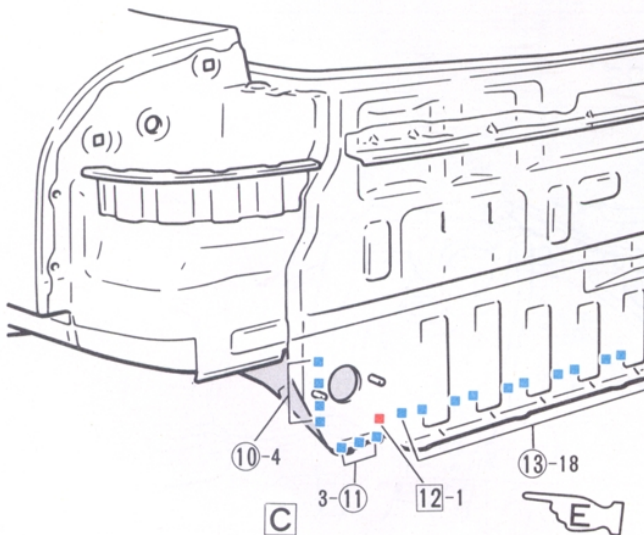
No.	Welded parts
①	$A + C$
②	$A + B$
③	$B + C$
④	$A + C$
⑤	$A + C$
⑥	$A + C + D$
⑦	$A + C$
⑧	$A + C + G$
⑨	$A + E$
⑩	$A + F$
⑪	$A + F$
⑫	$A + B + F$
⑬	$B + F$
⑭	$A + B$
⑮	$A + D$

REPAIR WELDS

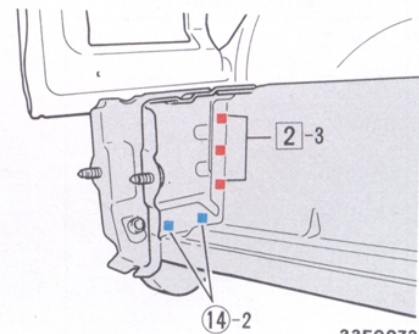




33F0024



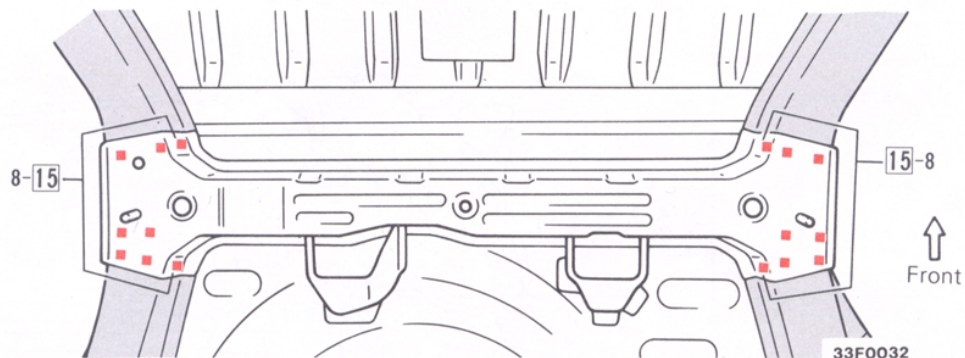
33F0038



33F0073

E

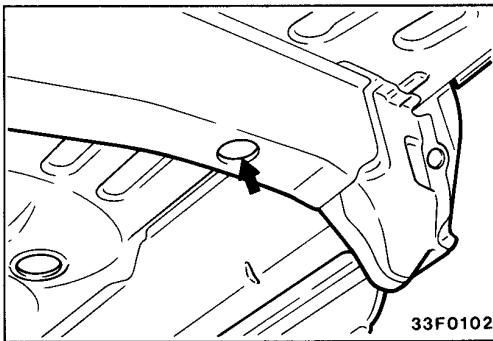
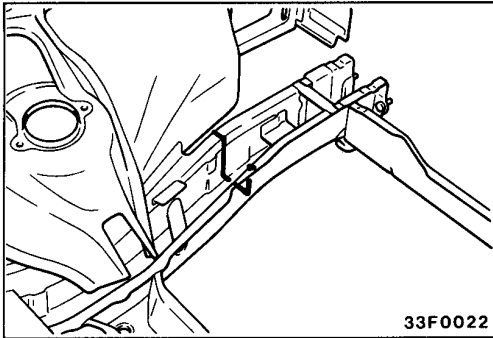
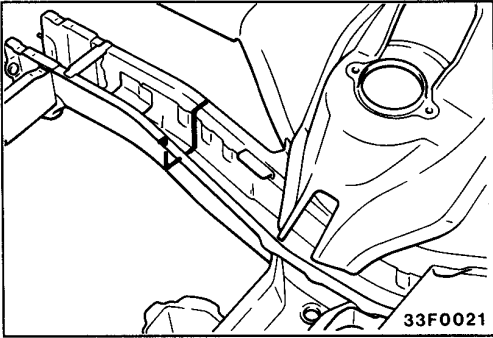
(Illustration shows the rear end panel in the removed condition.)



33F0032

D

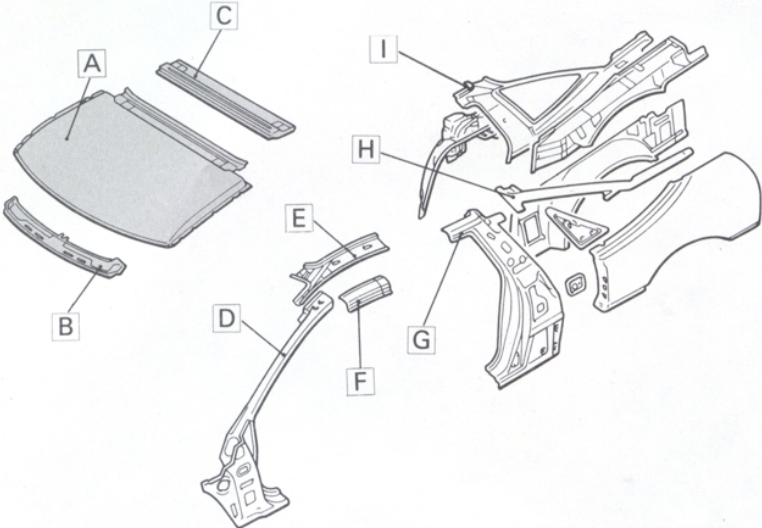
(Center part of floor underside)

**NOTES WITH REGARD TO REPAIR WORK****REMOVAL**

- (1) Cut the rear floor sidemember where shown in the illustration.

INSTALLATION

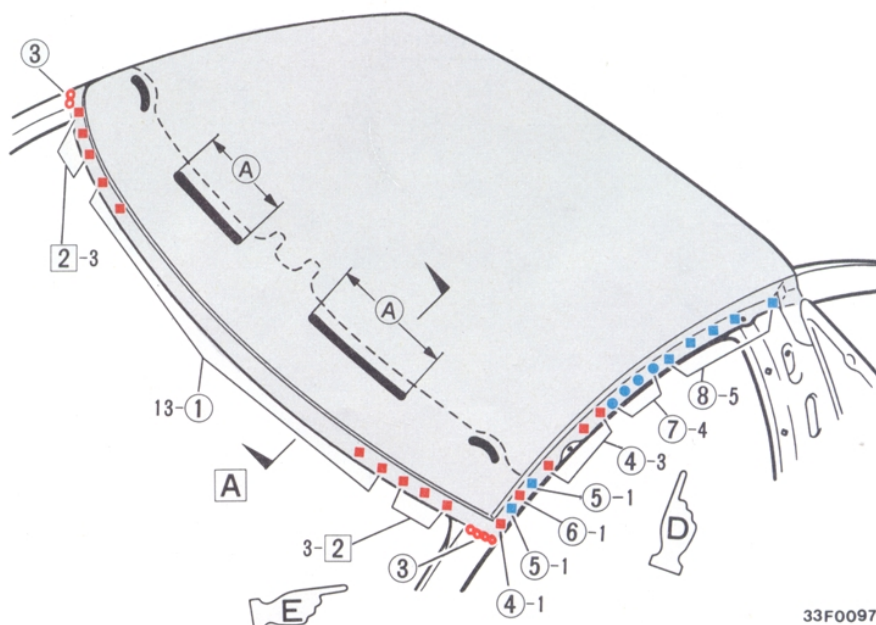
- (1) Butt-weld the new part.
Make the butt-welding securely from both sides (inner and outer) of the sidemember.
- (2) Apply a liberal amount of corrosion-prevention agent (using the hole indicated in the illustration) to the butt-weld locations.

ROOF PANEL		
REPLACEMENT CONFIGURATION	ASSEMBLY (A B C)	PART NAME
		A Roof panel B Front roof rail C Rear roof rail D Front pillar E Roof side rail, inner F Roof side rail, outer G Center pillar, outer H Rear pillar, outer I Quarter panel, inner, upper

31F0032

No.	Welded parts
①	A + B
②	A + B + E
③	A + D
④	A + D
⑤	A + B
⑥	B + D
⑦	A + F
⑧	A + G
⑨	A + H + I
⑩	A + C + I
⑪	A + C
⑫	A + C
⑬	A + H
⑭	A + H
⑮	C + I
⑯	C + H
⑰	C + G
⑱	B + E

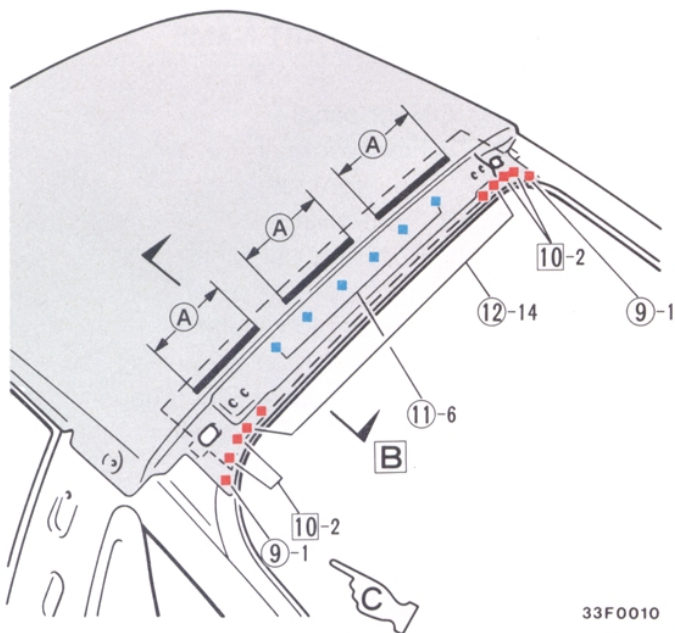
REPAIR WELDS



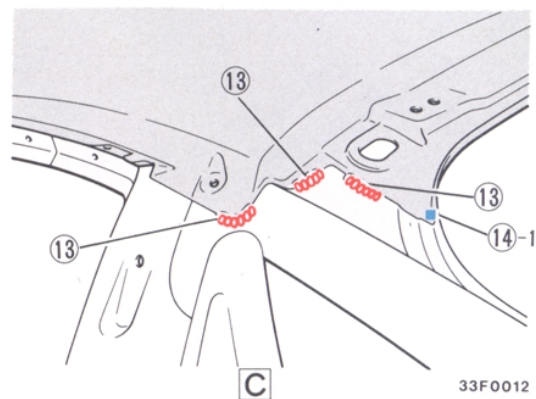
33F0097

Ⓐ : 200 mm (7.9 in.)

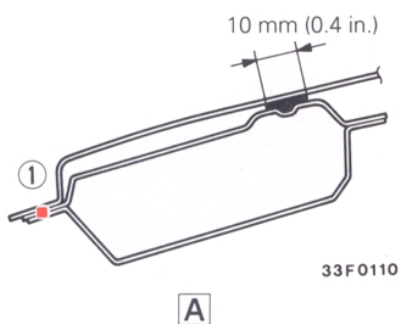
■ : Adhesive



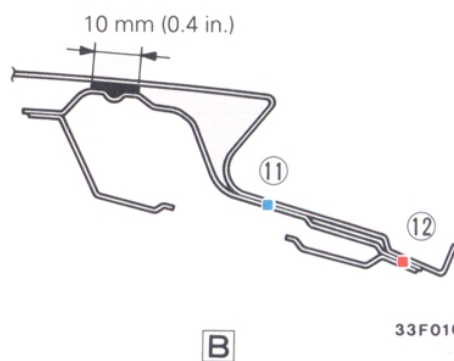
33F0010



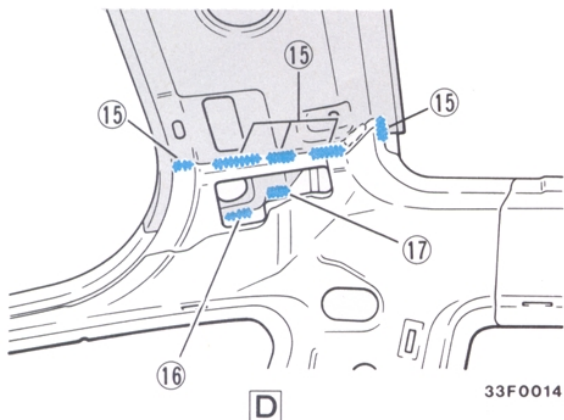
33F0012



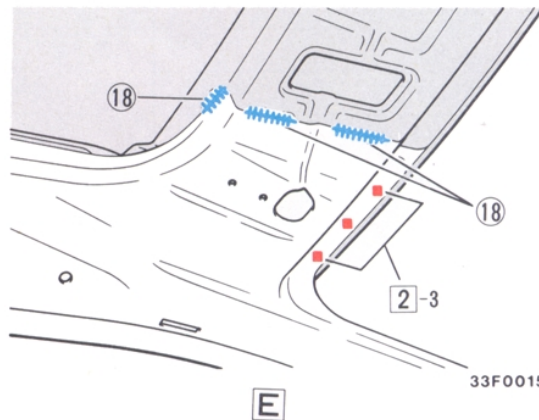
33F0110



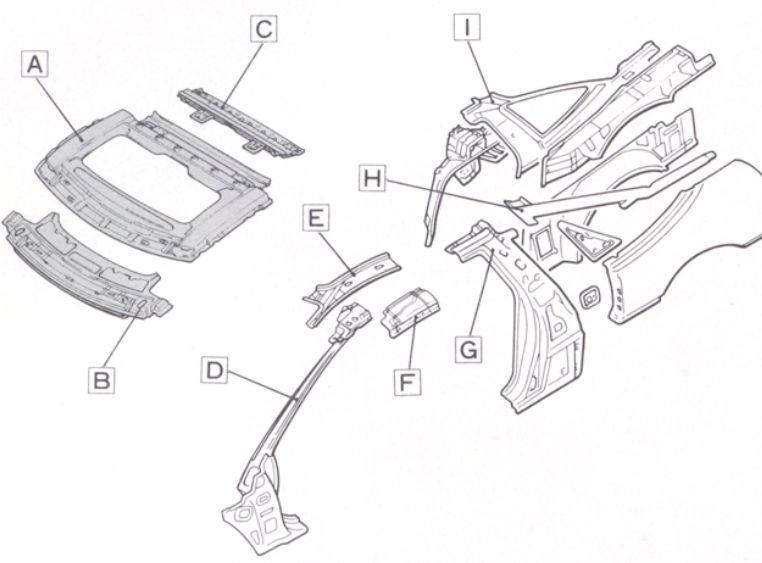
33F0109



33F0014

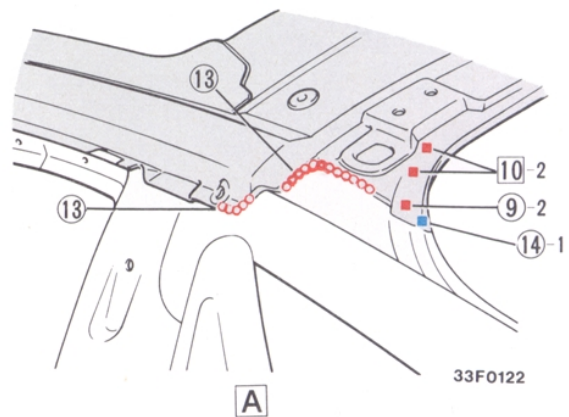


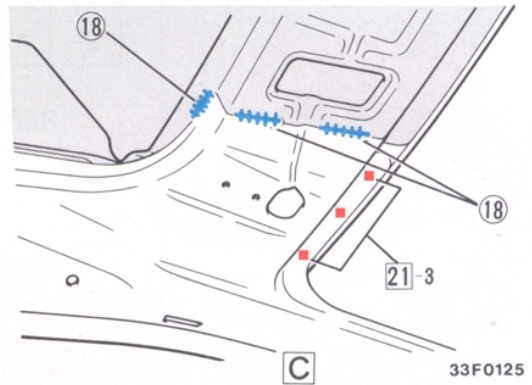
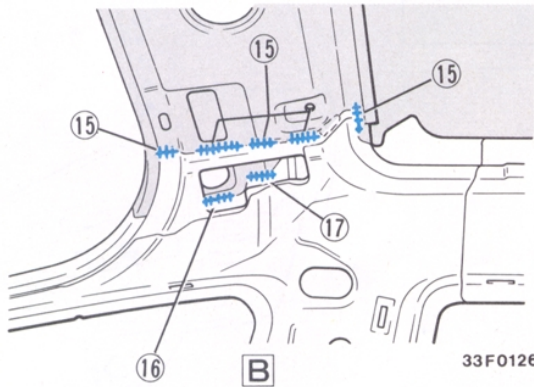
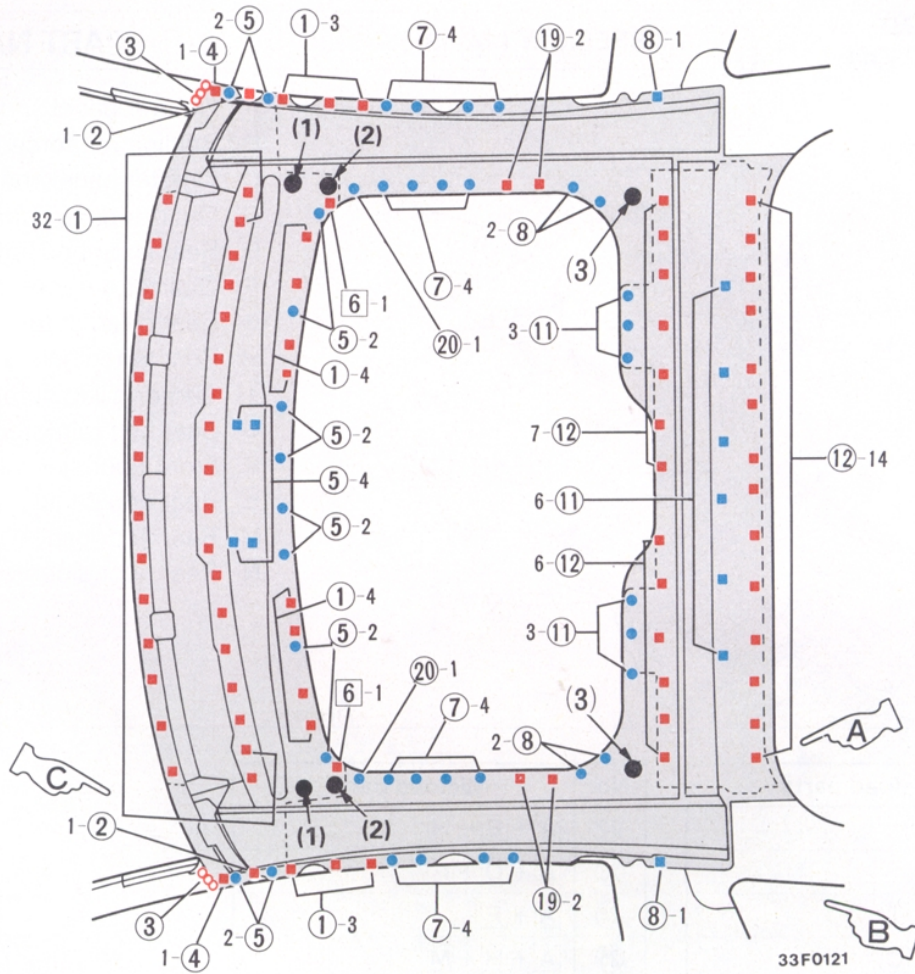
33F0015

ROOF PANEL (MODELS WITH SUNROOF)		
REPLACEMENT CONFIGURATION	ASSEMBLY (A B C)	PART NAME
		A Roof panel B Front roof rail C Rear roof rail D Front pillar E Roof side rail, inner F Roof side rail, outer G Center pillar, outer H Rear pillar, outer I Quarter panel, inner, upper

No.	Welded parts
①	A + B
②	B + D
③	A + D
④	A + D
⑤	A + B
⑥	A + B + D
⑦	A + F
⑧	A + G
⑨	A + H + I
⑩	A + C + I
⑪	A + C
⑫	A + C
⑬	A + H
⑭	A + H
⑮	C + I
⑯	C + H
⑰	C + G
⑱	B + E
⑲	A + F + G
⑳	A + D
㉑	A + B + E

REPAIR WELDS

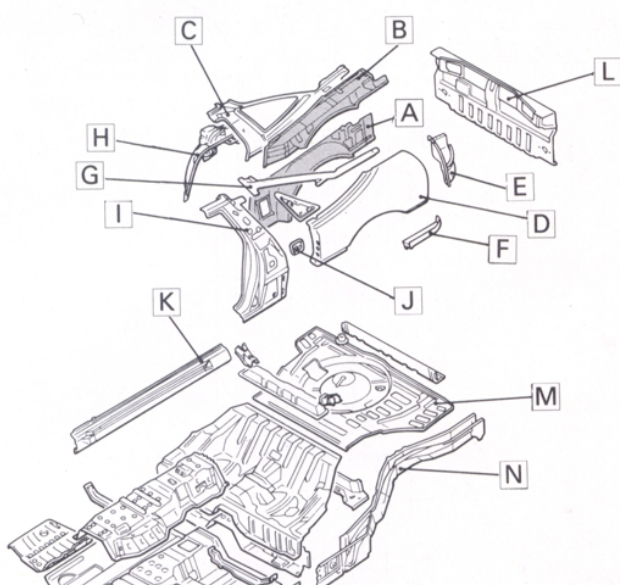




■ : Adhesive

- (1) Between the front roof rail **B** and the front pillar **D**
 - (2) Between the roof panel **A** and the front roof rail **B**
 - (3) Between the roof panel **A** and the center pillar outer **G**
- } Apply adhesive more than 20 mm (0.7 in.) in diameter.

QUARTER PANEL, INNER, LOWER

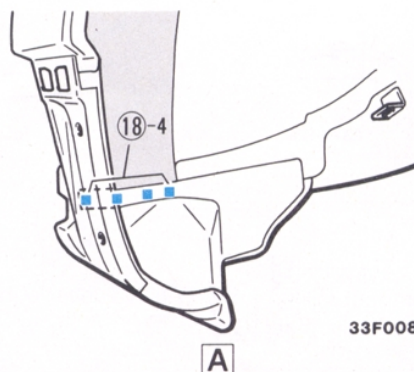
REPLACEMENT CONFIGURATION	ASSEMBLY (A B)	PART NAME
		A Quarter panel, inner, lower B Beltline reinforcement C Quarter panel, inner, upper D Quarter panel, outer E Rear lamp housing F Quarter outer extension, lower G Rear pillar, outer H Rear wheelhouse, inner I Center pillar, outer J Seat belt reinforcement K Front floor side sill, outer L Rear end panel M Rear floor pan N Rear floor sidemember

31F0032

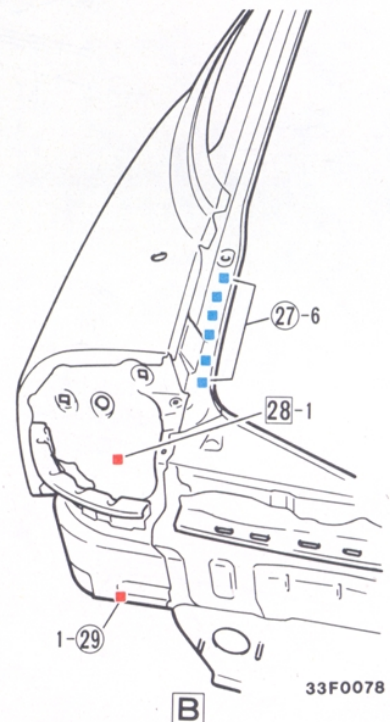
No.	Welded parts
①	B + C
②	B + I
③	B + C + I
④	A + B + C
⑤	A + B + I
⑥	A + B
⑦	B + C
⑧	B + C + H
⑨	B + C + H
⑩	A + B
⑪	A + C
⑫	A + C
⑬	A + J
⑭	A + I
⑮	A + K + N
⑯	A + H + K
⑰	A + H + N
⑱	A + H
⑲	A + C + H
⑳	A + E
㉑	A + D

No.	Welded parts
22	A + B + H
23	A + D + F
24	A + F
25	A + H + M
26	A + F + M
27	A + G
28	A + B + E
29	A + E + M

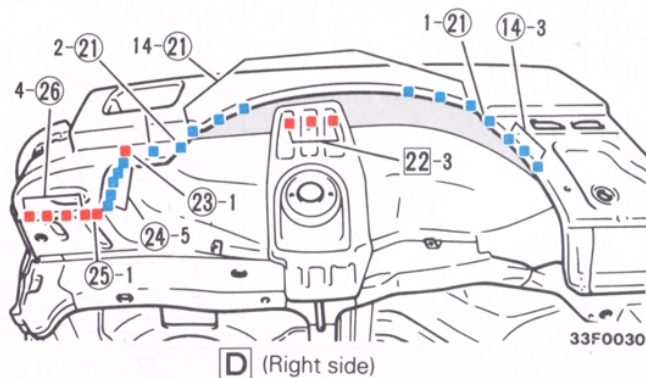
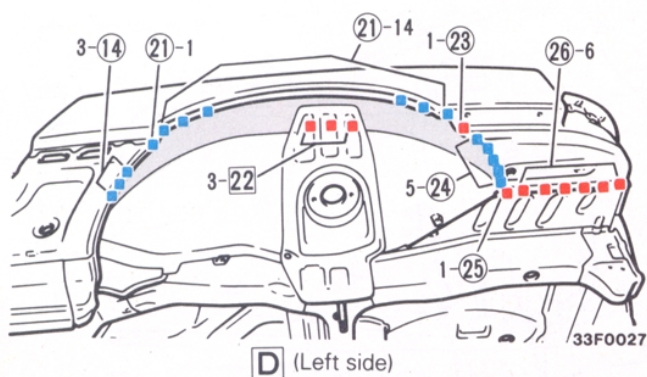
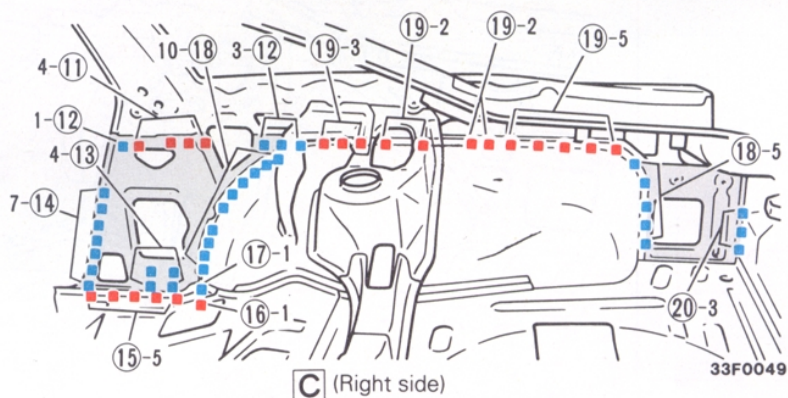
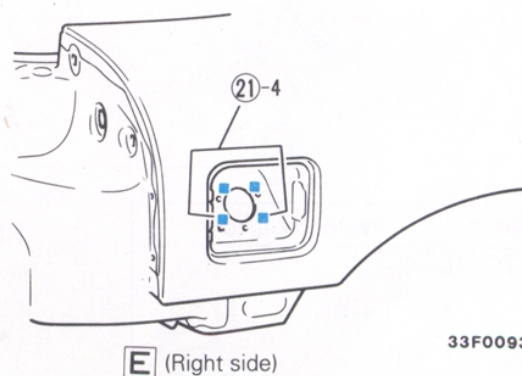
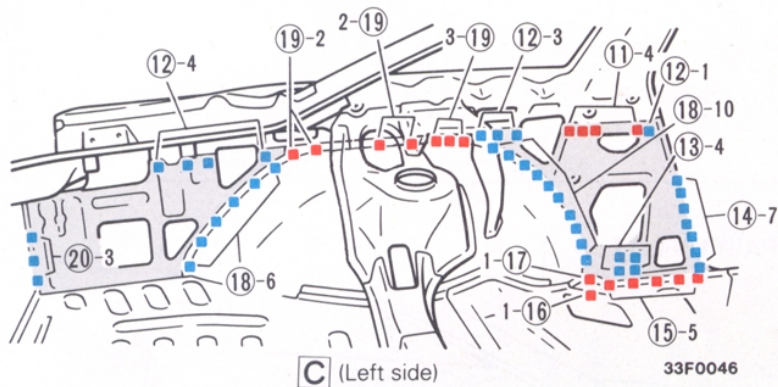
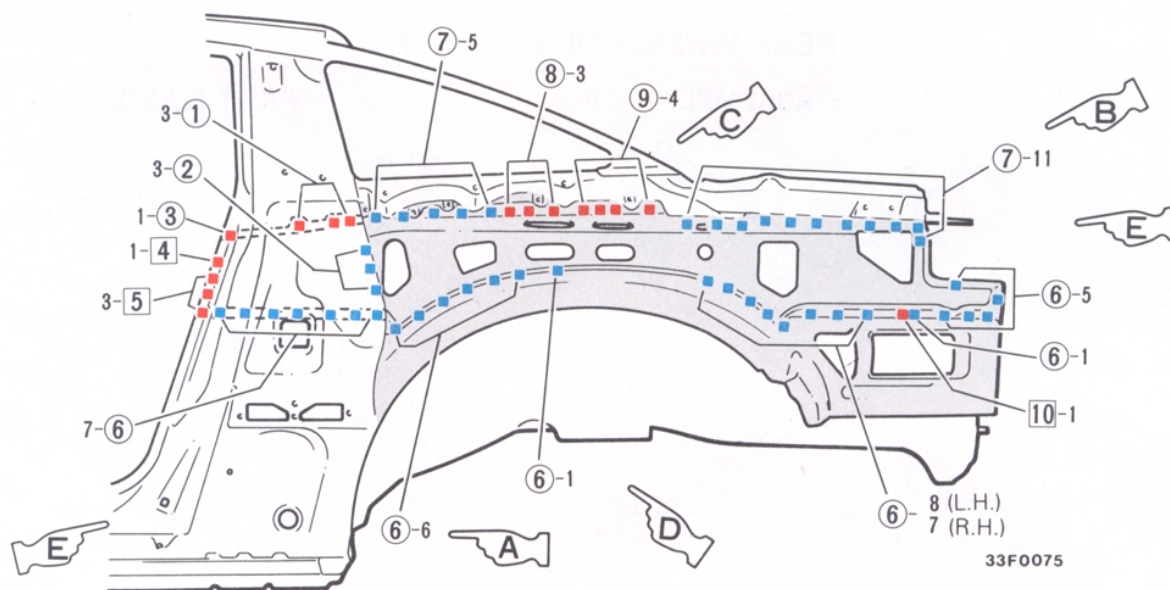
REPAIR WELDS

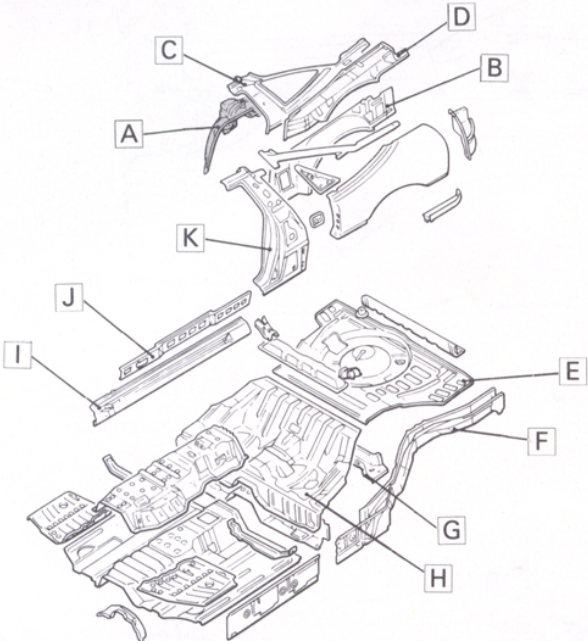


33F0084



33F0078

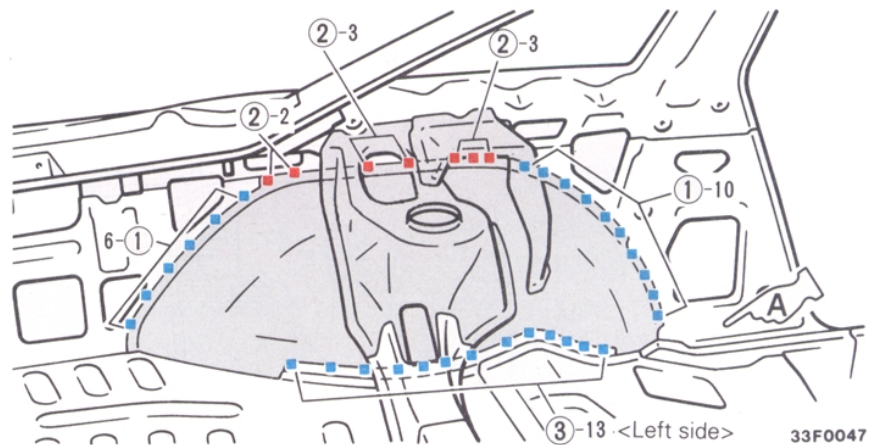


REAR WHEELHOUSE, INNER		
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Rear wheelhouse, inner B Quarter panel, inner, lower C Quarter panel, inner, upper D Beltline reinforcement E Rear floor pan F Rear floor sidemember G Rear floor crossmember, lower H Rear seat pan I Front floor side sill, outer J Side sill reinforcement K Center pillar, outer

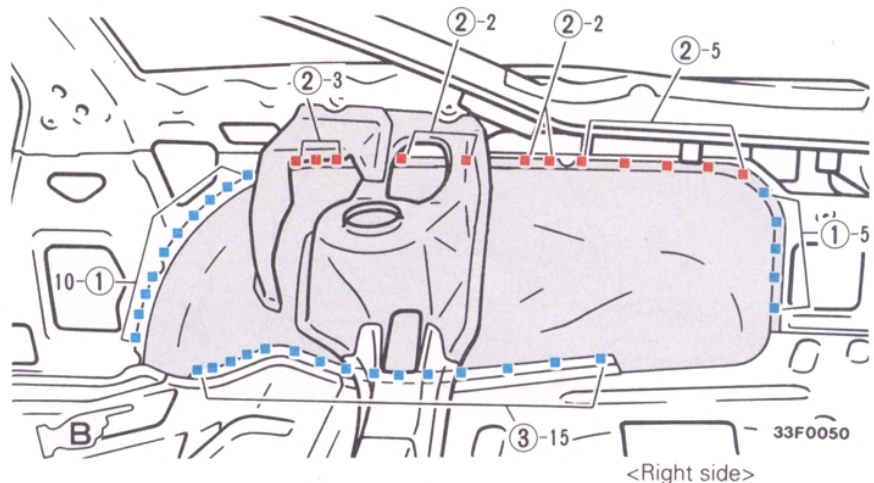
33F0111

No.	Welded parts
①	A + B
②	A + B + C
③	A + F
④	A + F + H
⑤	A + F
⑥	A + B + F
⑦	A + B + I
⑧	A + C
⑨	A + C + D
⑩	A + C
⑪	A + E
⑫	A + B + D
⑬	A + G
⑭	A + B + E
⑮	A + K
⑯	A + I
⑰	A + J

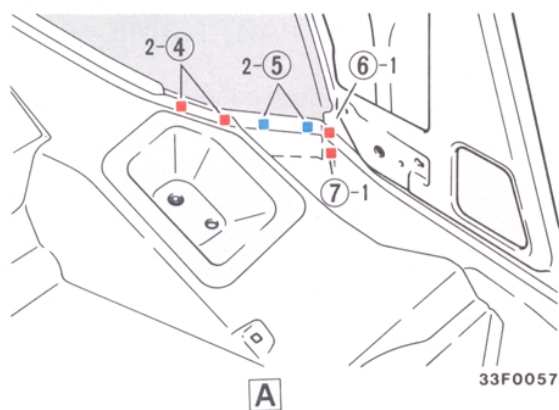
REPAIR WELDS



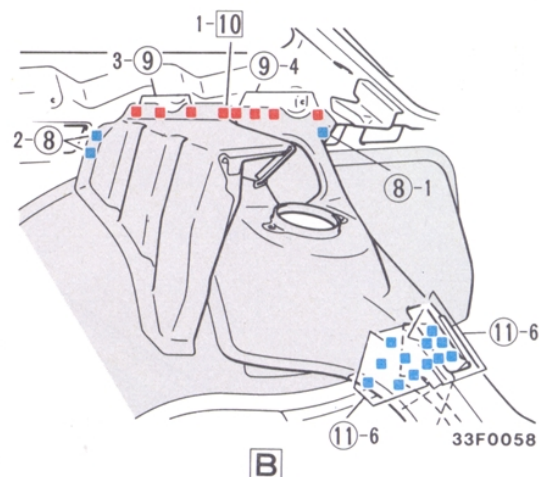
33F0047



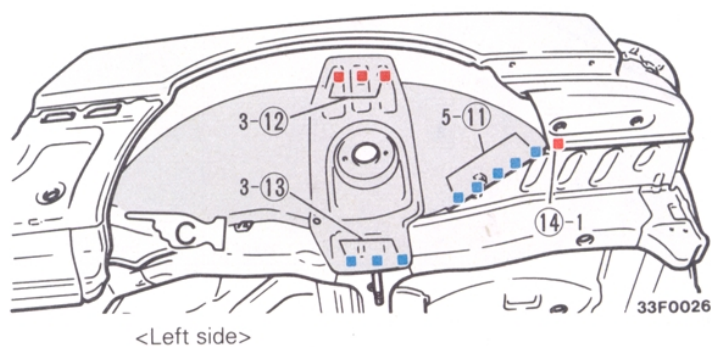
33F0050



33F0057

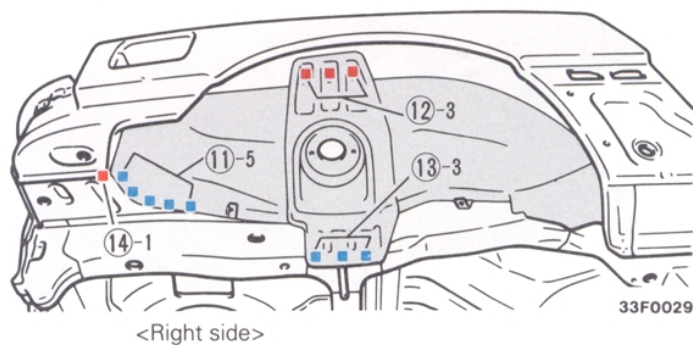


33F0058



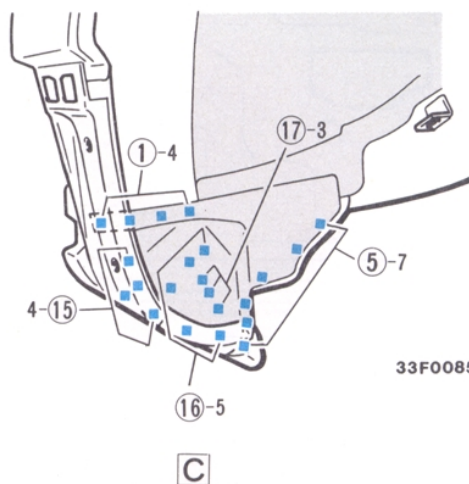
33F0026

<Left side>

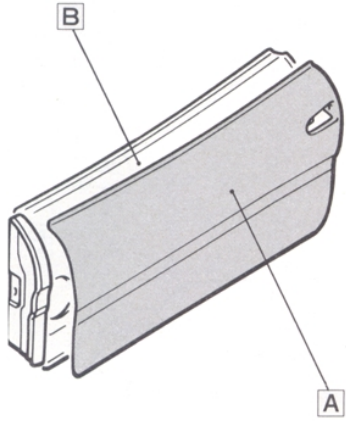


33F0029

<Right side>



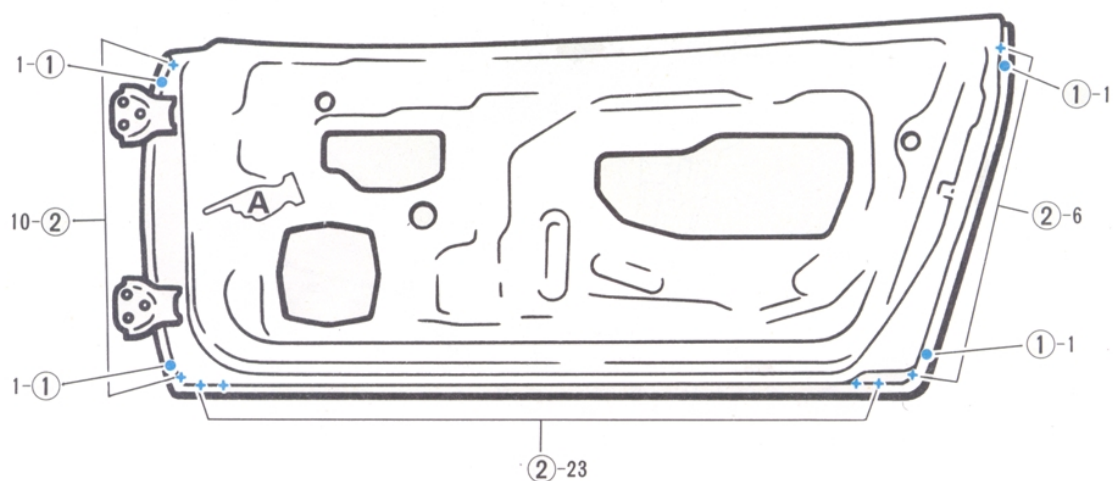
33F0085

FRONT DOOR OUTER PANEL		
REPLACEMENT CONFIGURATION	ASSEMBLY (A)	PART NAME
		A Front door panel, outer B Front door panel, inner

31F0031

No.	Welded parts
①	A + B
②	A + B

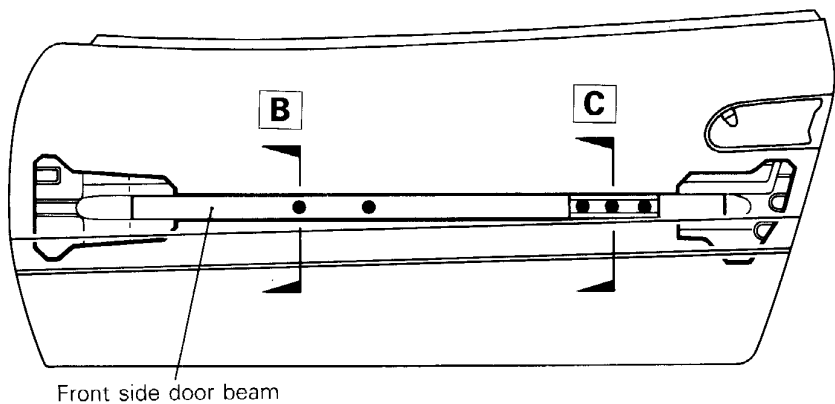
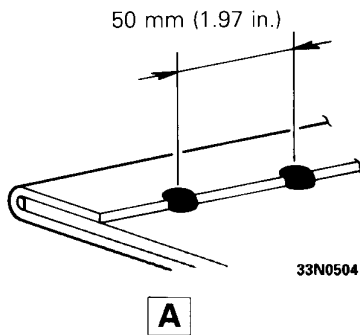
REPAIR WELDS



NOTES

- (1) The weld points ① show the manufacturer's joints (unnecessary when repairing).
- (2) After hemming the door outer panel, MIG spot weld the flange overlap section at a pitch of approx. 50 mm (1.97 in.) (weld point ②).

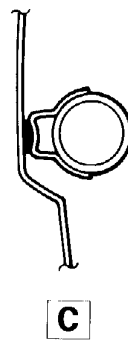
33F0025



33F0128



33F0129



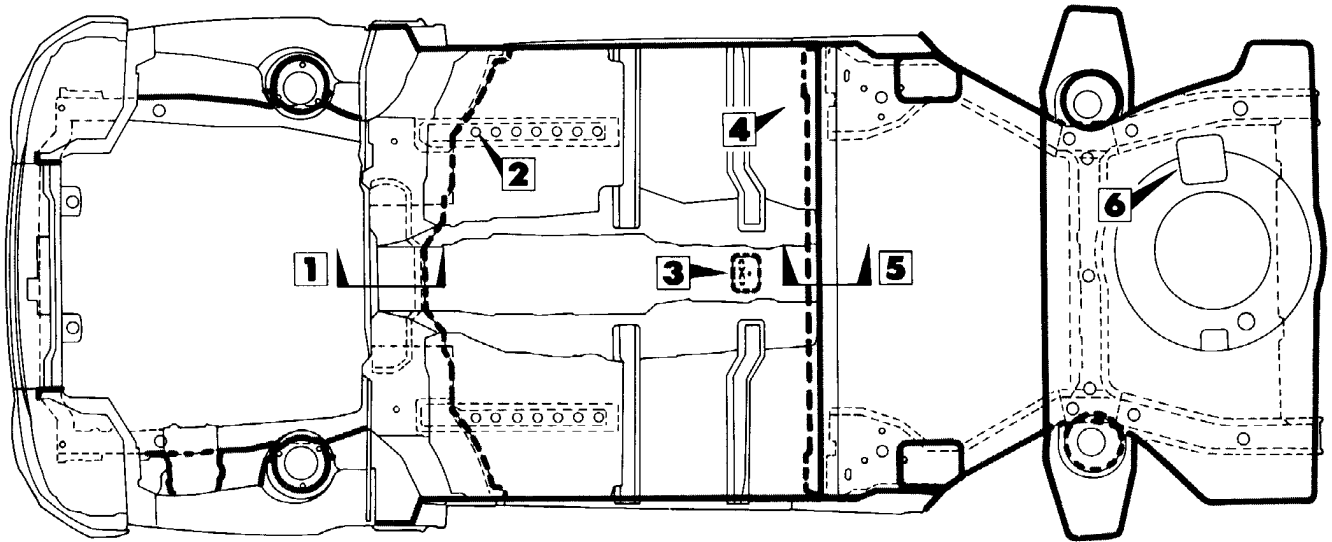
33F0128

■ : Adhesive

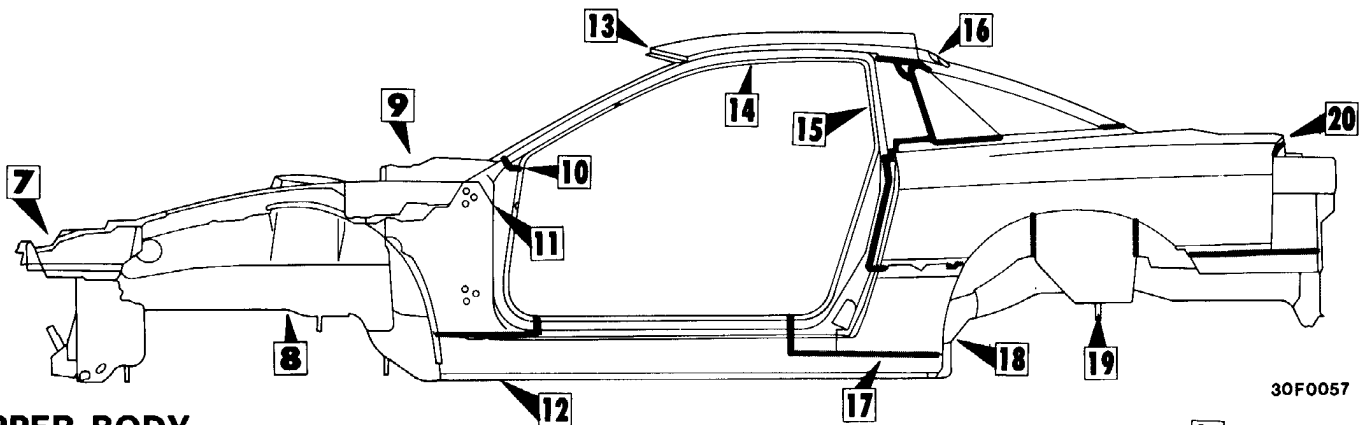
Adhesive	Type
	Chloroprene-base drying sealant

4 CORROSION PROTECTION

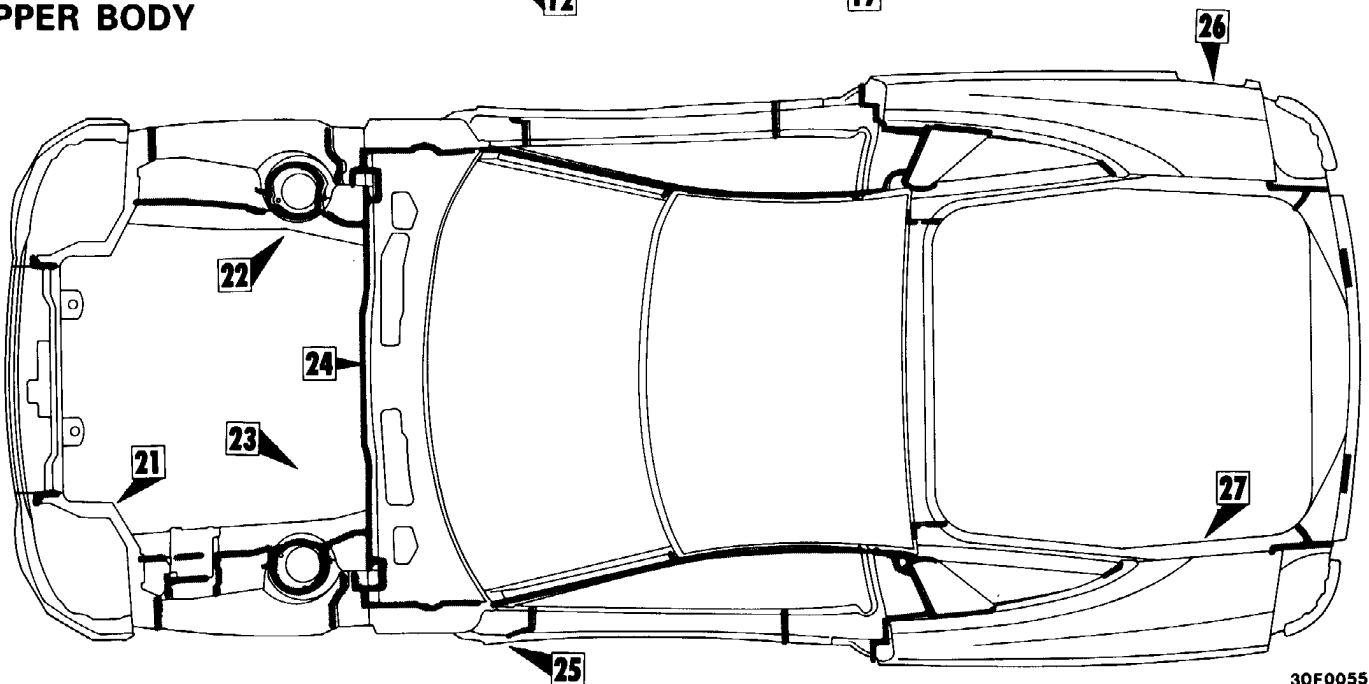
BODY SEALING LOCATIONS.....	4-2
FLOOR	4-2
SIDE BODY	4-2
UPPER BODY	4-2
HOOD, DOOR, TAILGATE AND FUEL FILLER DOOR	4-3
WAX INJECTION LOCATIONS	4-8
UNDERCOAT APPLICATION LOCATIONS	4-12
UNDERBODY ANTICORROSION AGENT LOCATIONS.....	4-14

BODY SEALING LOCATIONS**FLOOR**

30F0053

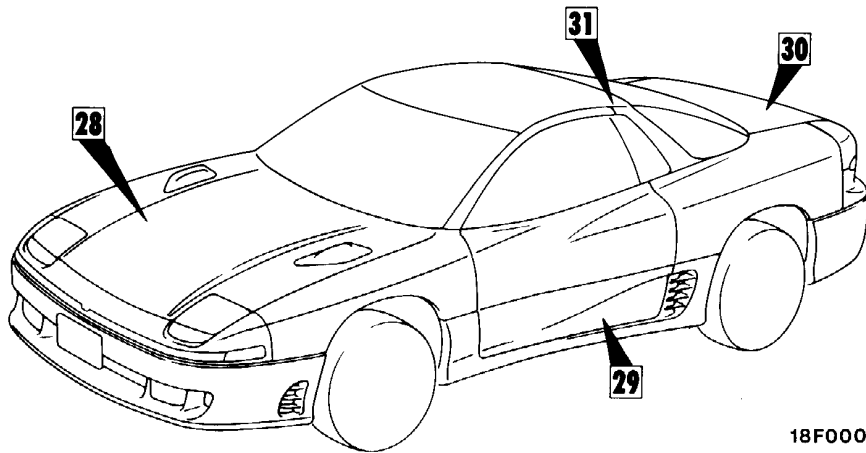
SIDE BODY

30F0057

UPPER BODY

30F0055

HOOD, DOOR, TAILGATE AND FUEL FILLER DOOR

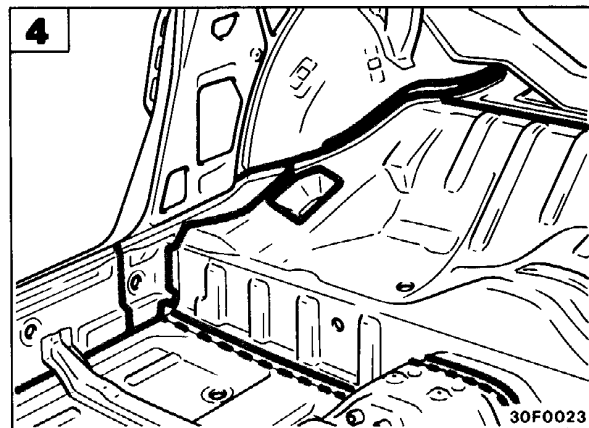
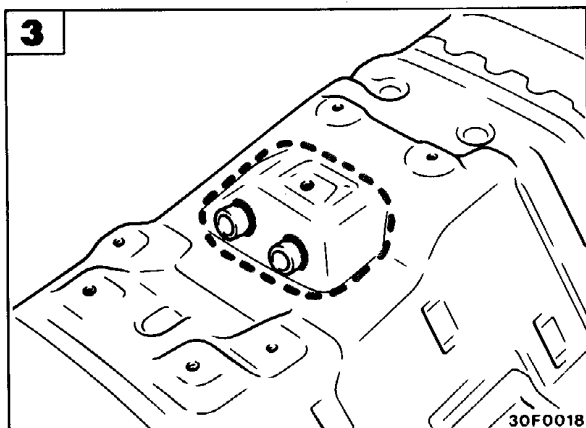
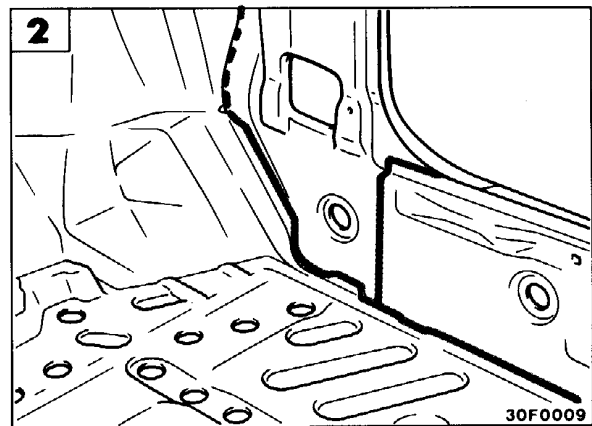
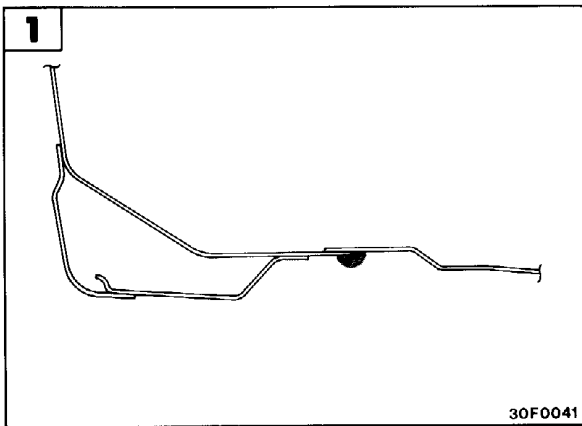


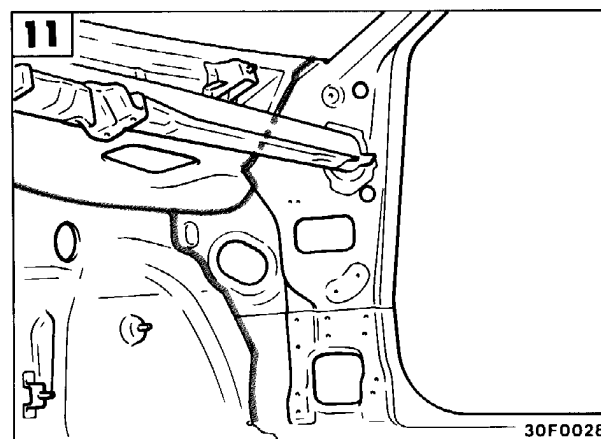
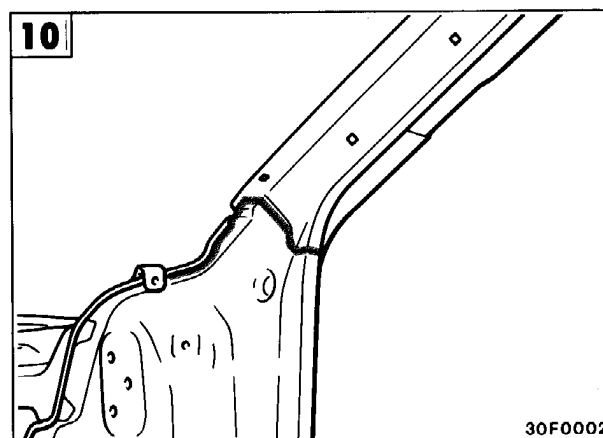
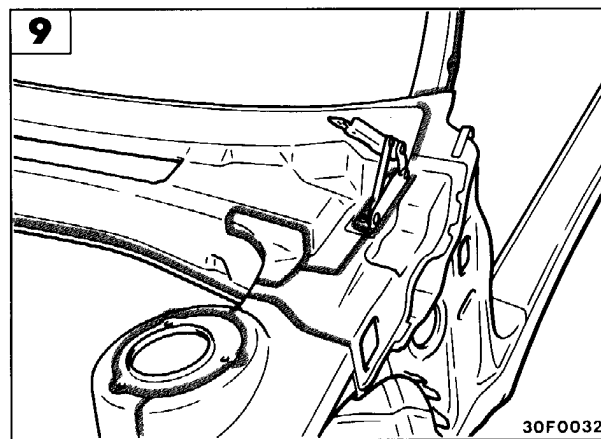
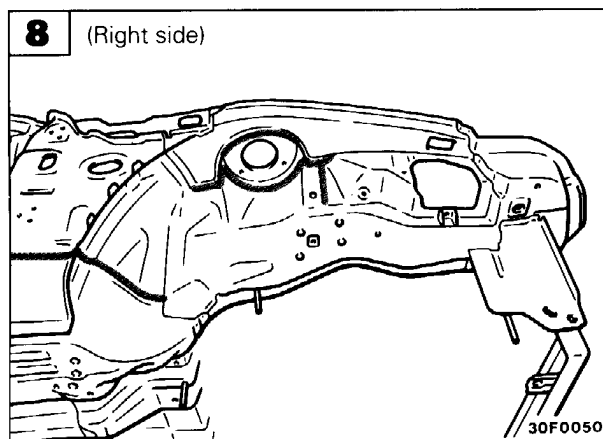
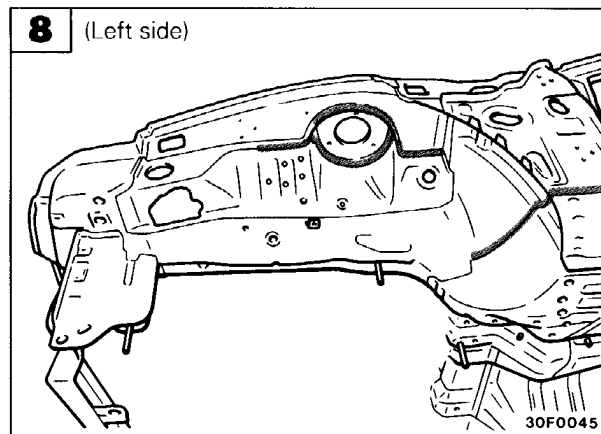
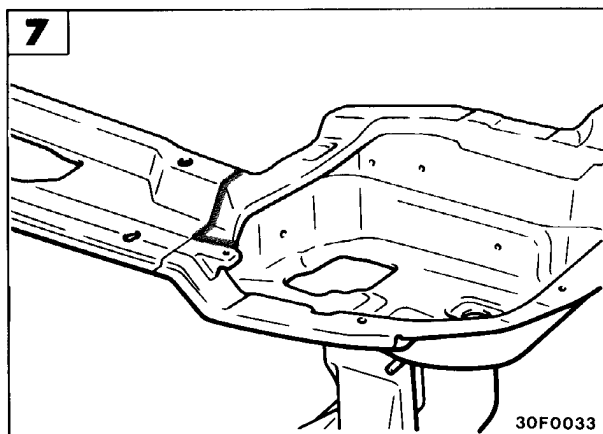
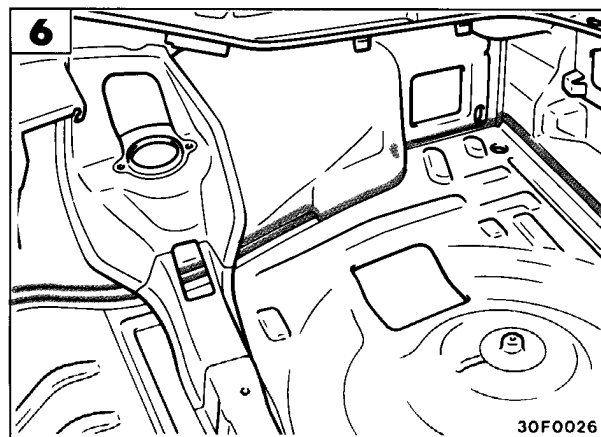
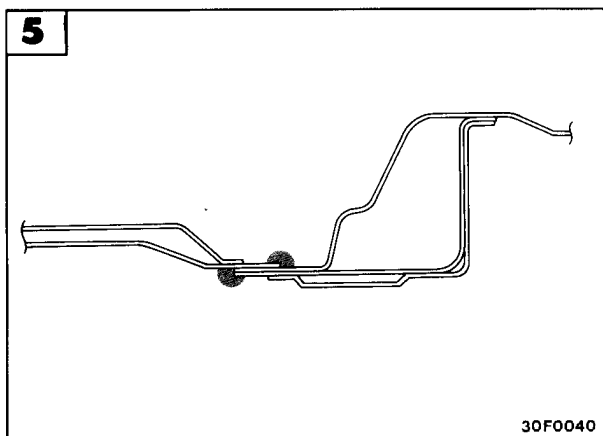
18F0005

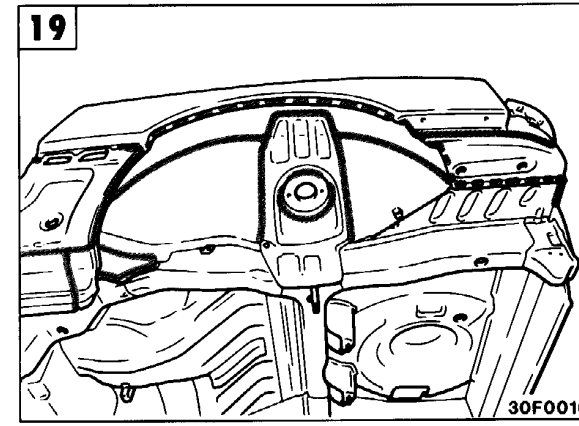
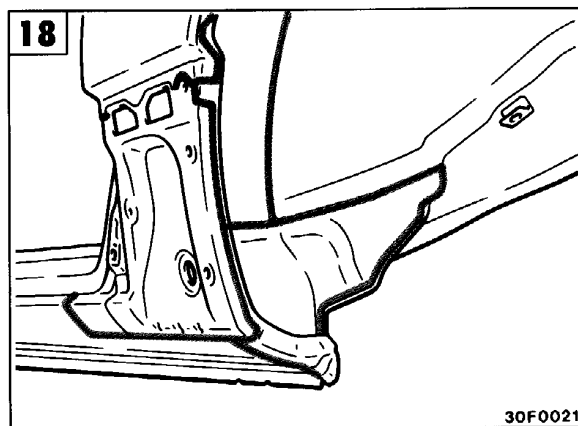
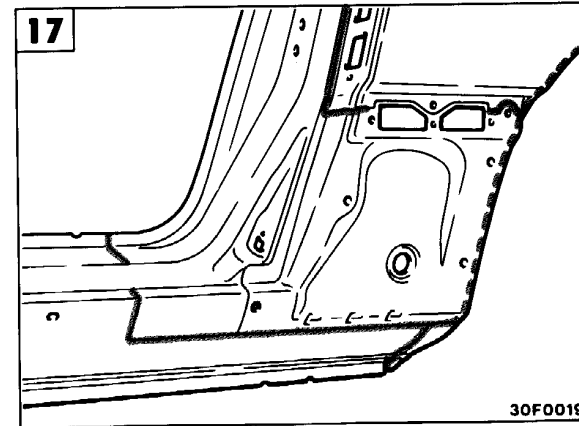
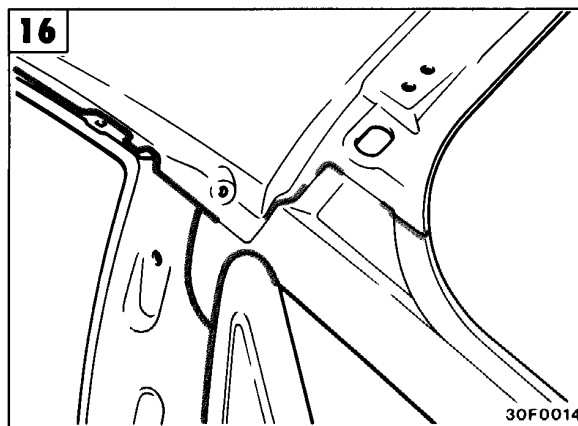
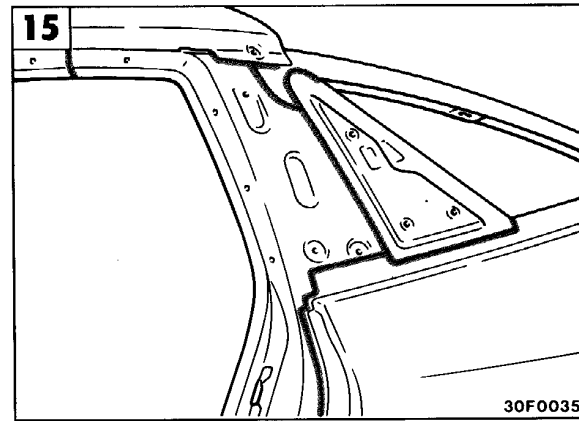
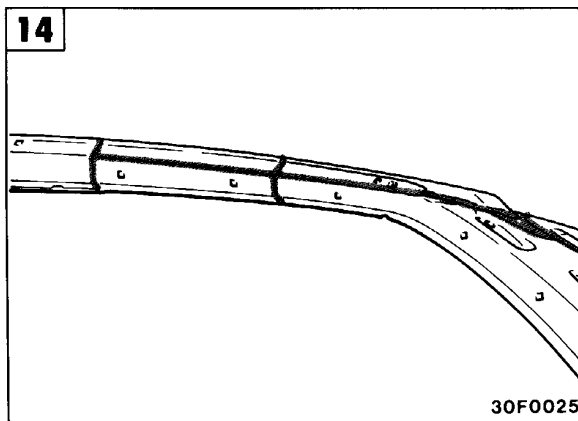
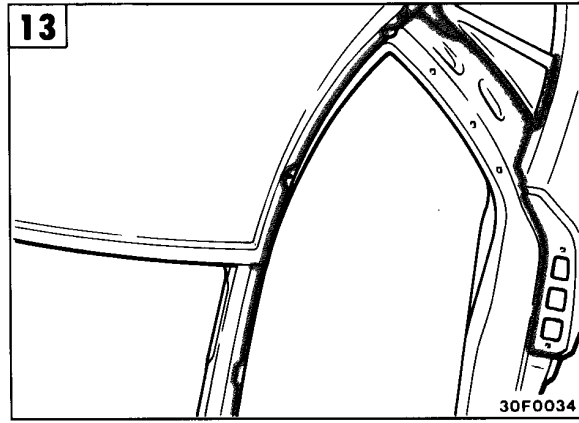
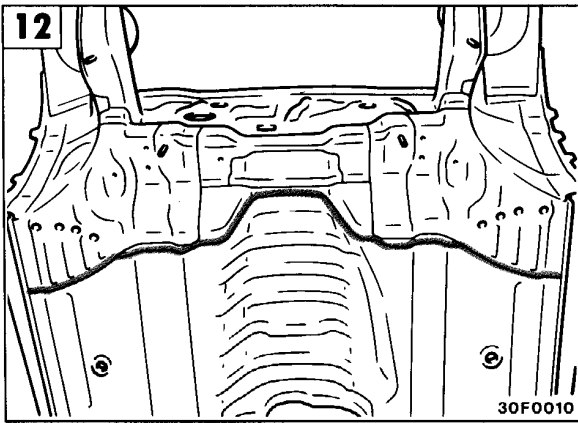
NOTE

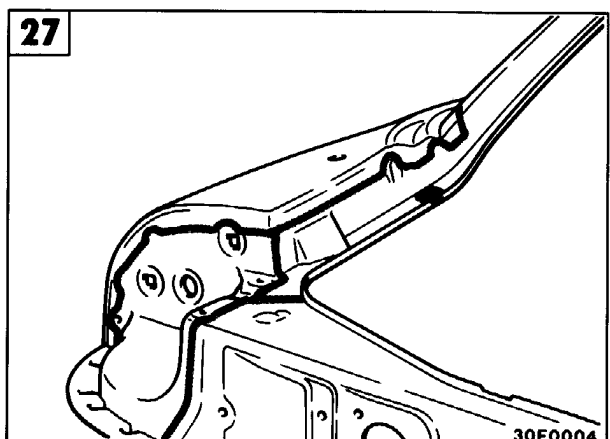
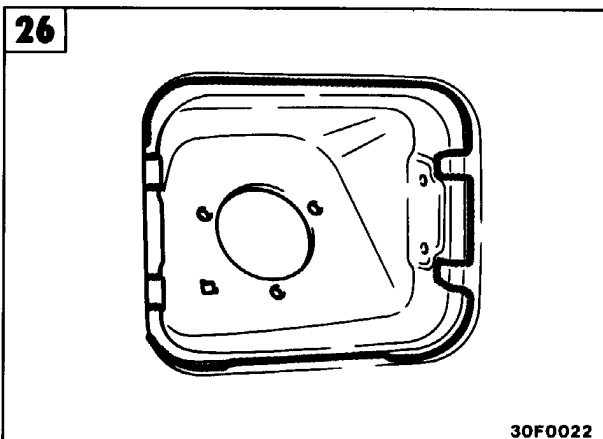
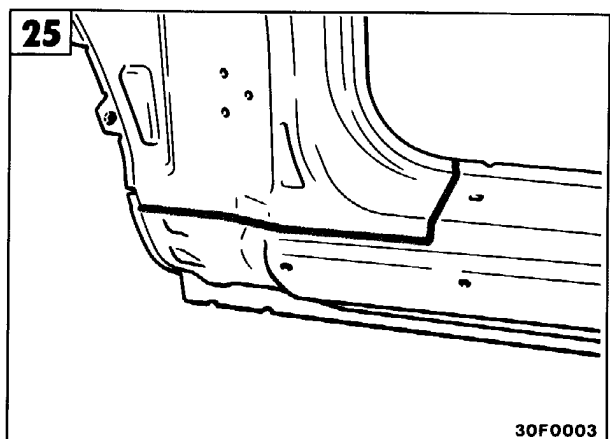
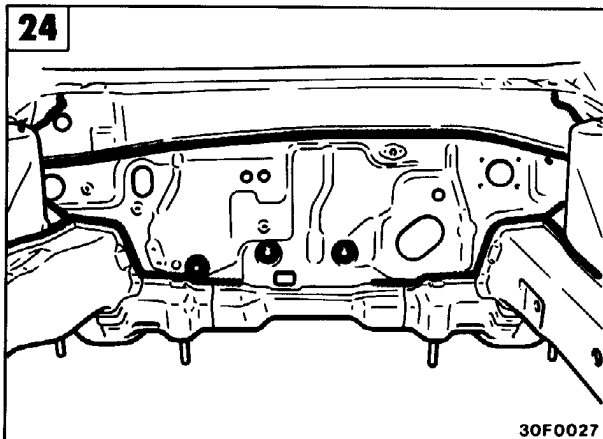
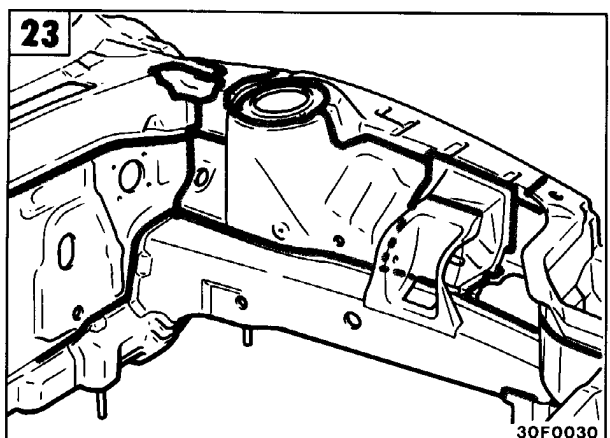
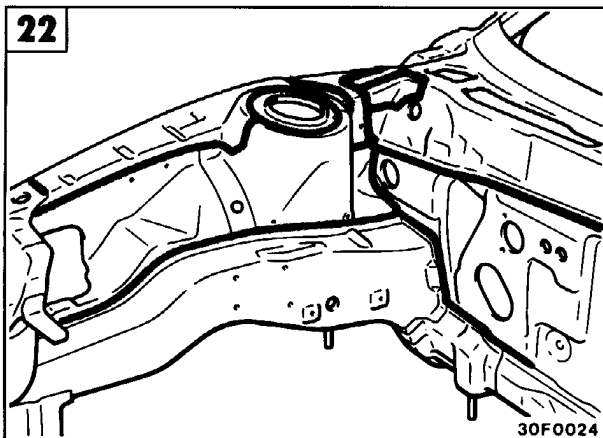
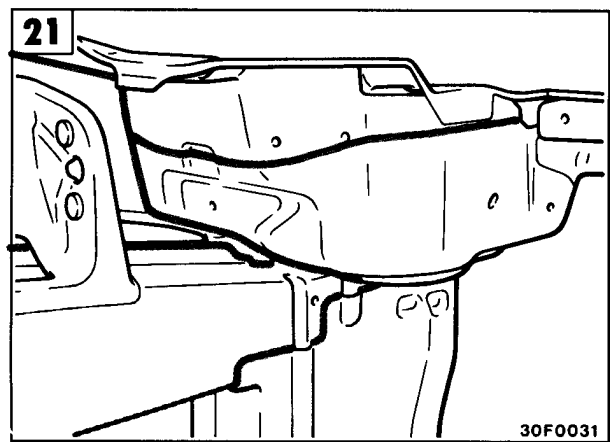
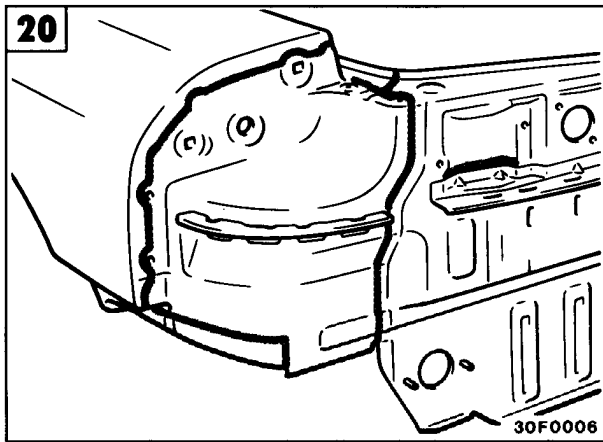
For external surfaces such as the drip channels, pillars, clinches, etc., where the sealant application can be seen directly, and where it will be necessary that the appearance of the application be attractive, apply the sealant so that it is smooth and level, or wipe the surface after applying the sealant.

4

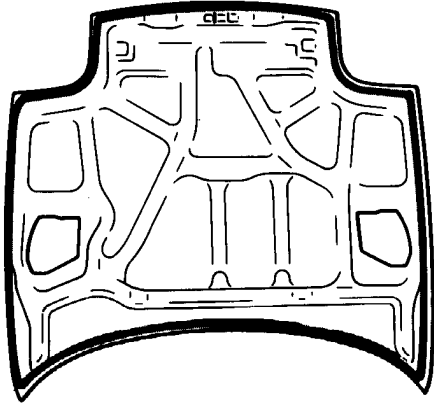






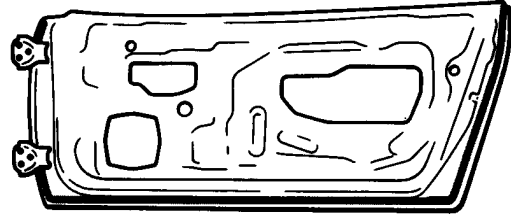


28



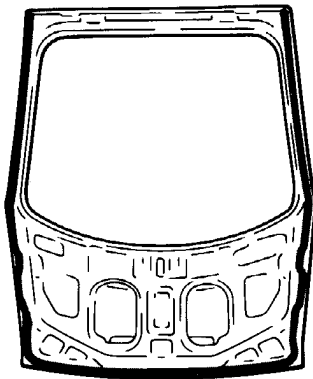
30F0011

29



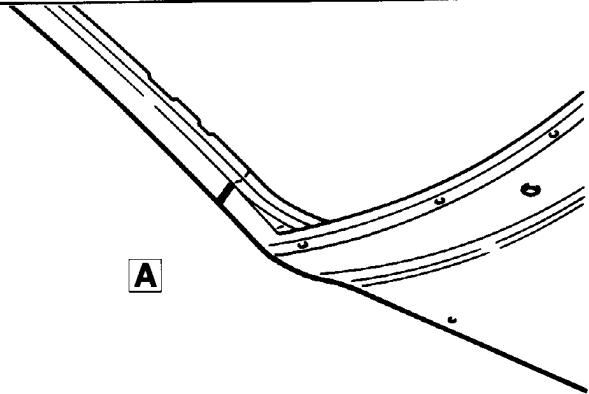
30F0012

30



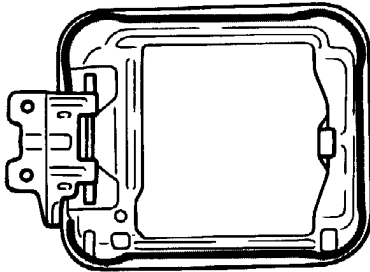
30F0013

A



30F0005

31



30F0007

WAX INJECTION LOCATIONS

[Vehicles for Europe]

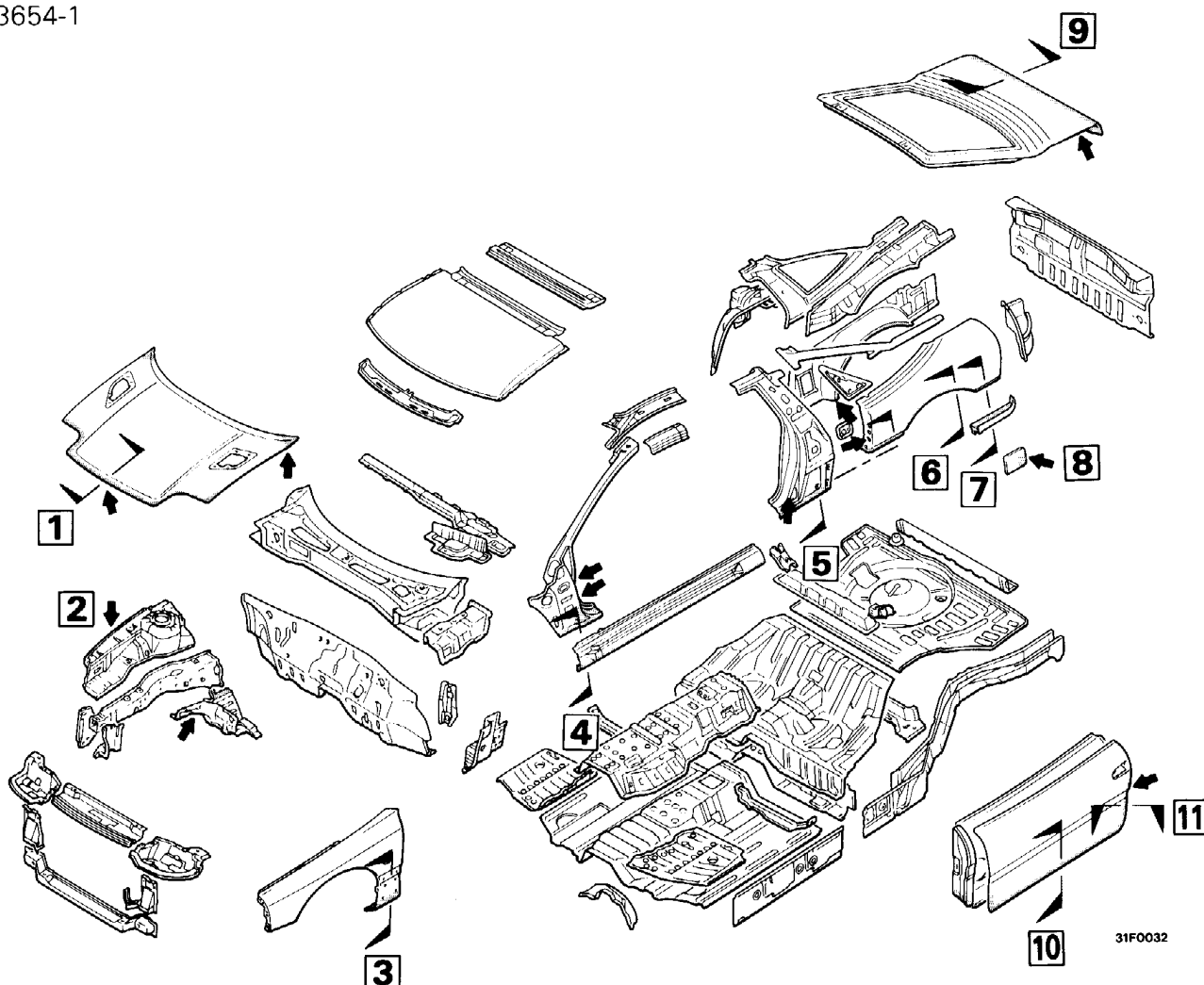
In order to provide greater corrosion resistance, wax injection has been performed for the lower areas of the vehicle, such as the frame, the side sill, and other panels which are a hollow-construction. If any of these panels are replaced, wax injection must be performed for the new parts.

Recommended wax:

- | | |
|---------------------------|----------------------|
| • Tectyl 506, 506T or ML | • Mercasol 831-ML |
| • Waxoyl | • Terotex |
| • Dinitrol 3122 or 3654-1 | • HV200PLUS or HV300 |

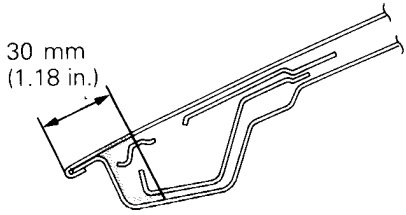
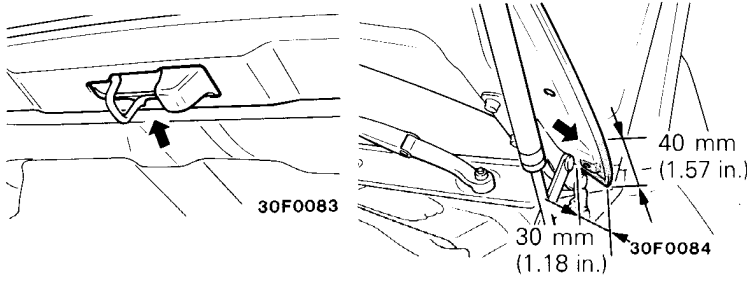
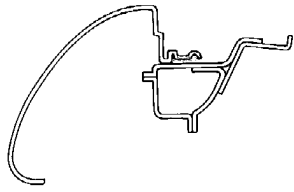
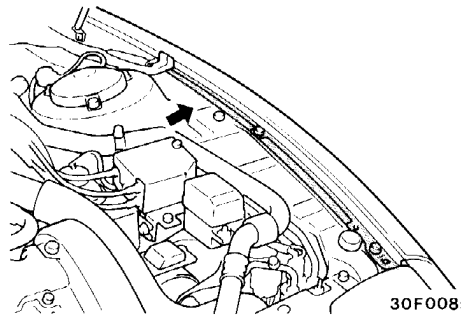
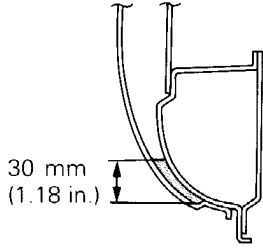
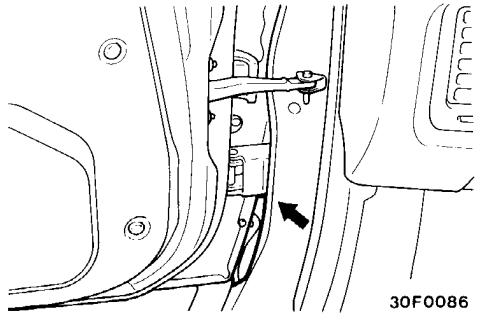
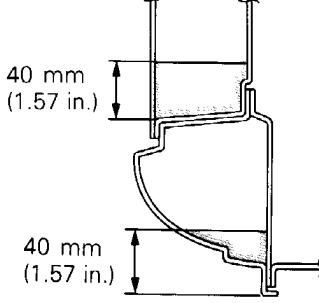
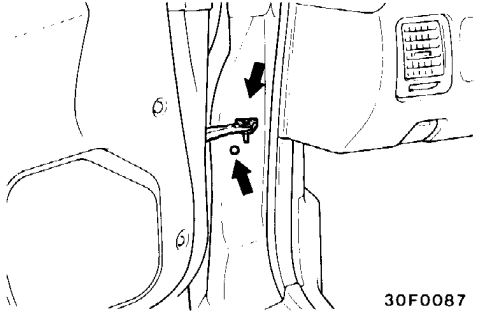
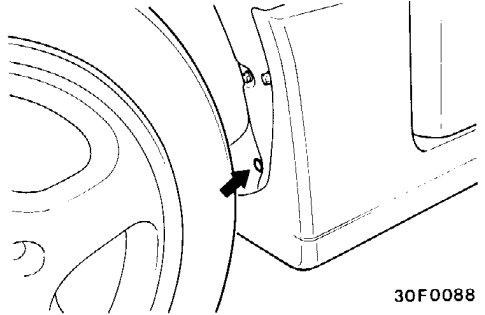
NOTES REGARDING WAX INJECTION WORK

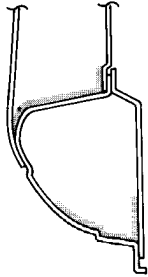
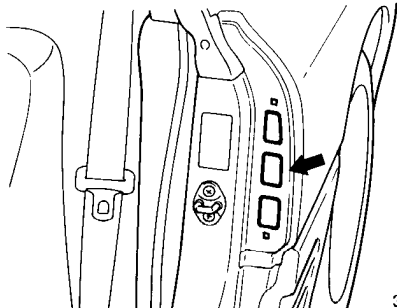
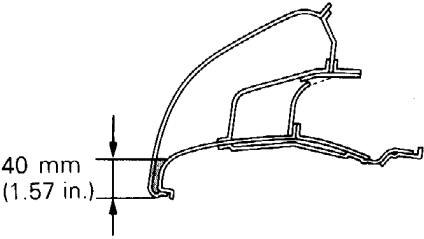
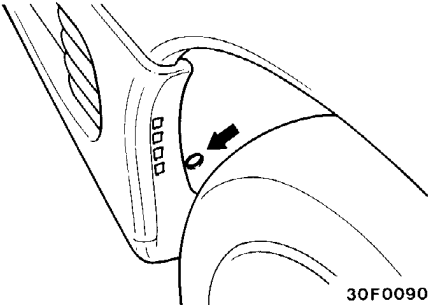
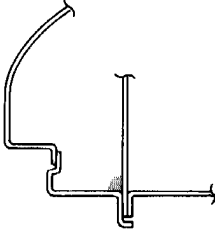
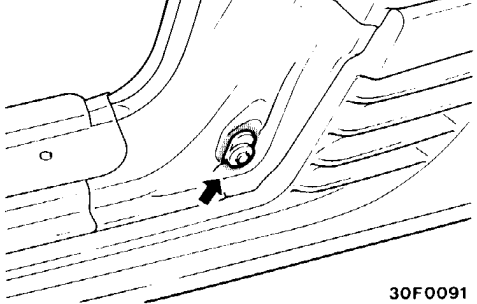
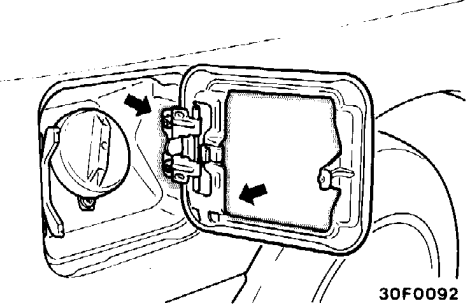
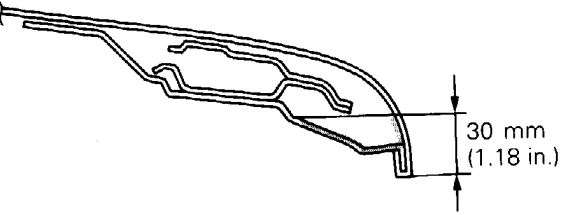
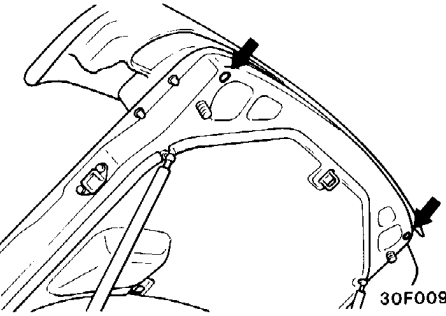
- Be careful that the wax does not get onto other parts. Especially if wax is to be injected into the lower part of the center pillar and into the side sill, first remove the seat belt retractor and the door switch.
- For wax injection locations which have a rubber plug, do not forget to reinstall the rubber plug after the wax injection is completed.

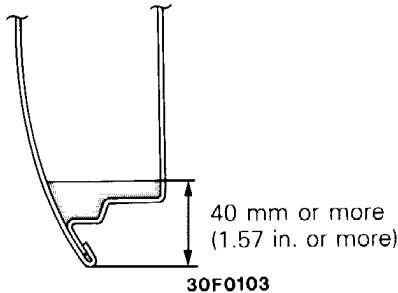
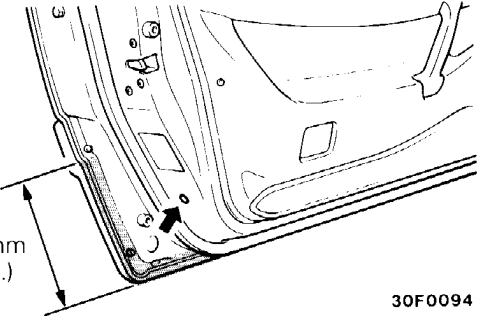
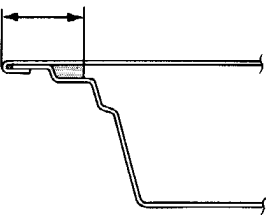


NOTES

- (1) ➡ : Nozzle insertion openings
 (2) For the numbers shown in the figure, refer to detailed illustrations with the same numbers on later pages.

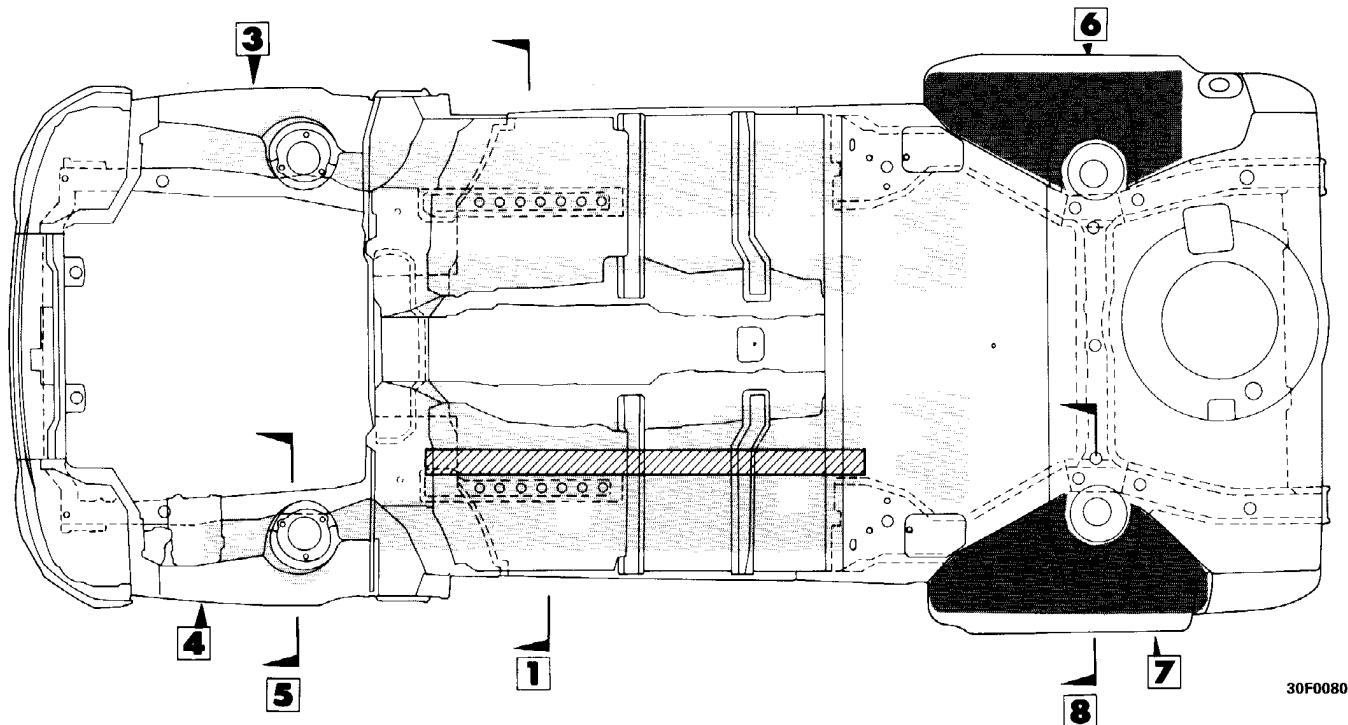
Application surfaces		← : Nozzle insertion openings	
1	 30F0095	 30F0083 30F0084	
2	 33F0512	 30F0085	
3	 30F0097	 30F0086	
4	 30F0098	 30F0087  30F0088	

Application surfaces	← : Nozzle insertion openings
5  30F0099	 30F0089 (Illustration shows the rear ventilation duct A in the removed condition.)
6  40 mm (1.57 in.) 33F0025	 30F0090
7  30F0101	 30F0091
8  30F0092	
9  30 mm (1.18 in.) 30F0102	 30F0093

Application surfaces		← : Nozzle insertion openings
10	 40 mm or more (1.57 in. or more) 30F0103	 150 mm (5.9 in.) 30F0094
11	 25 mm or more (0.98 in. or more) 30F0104	

UNDERCOAT APPLICATION LOCATIONS

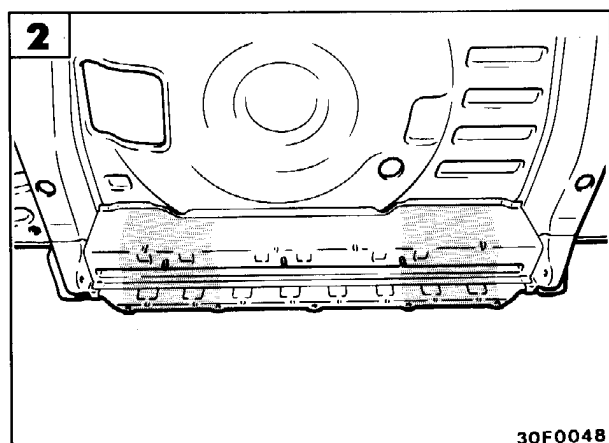
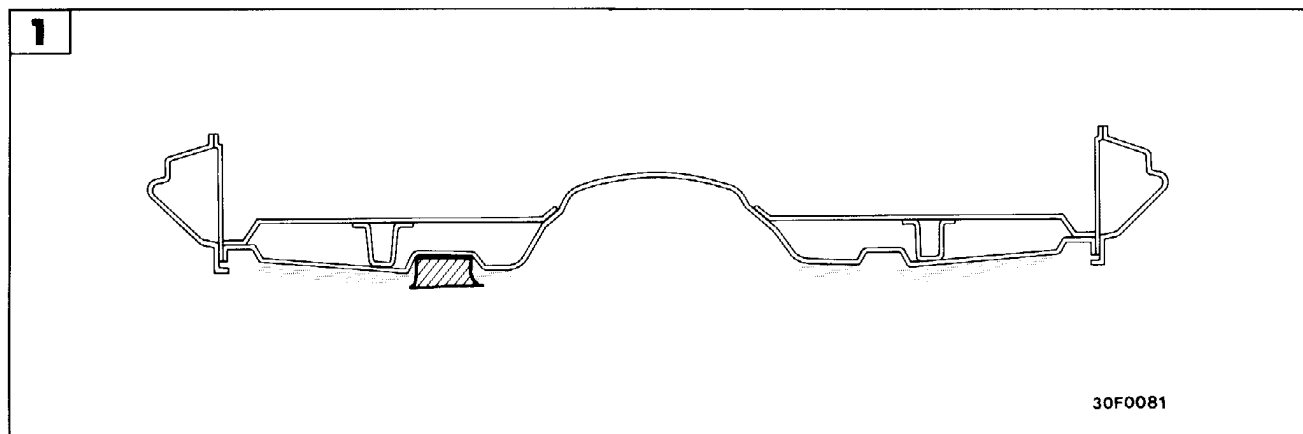
In order to provide rust, corrosion, chipping, and vibration resistance, an undercoat is applied to certain areas of the underbody. After completing body repairs, restore this undercoat if necessary.

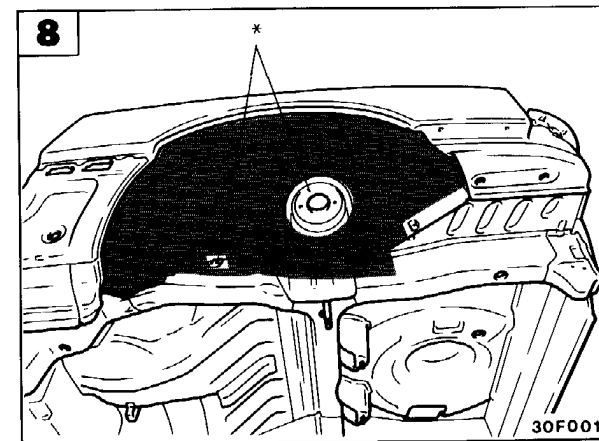
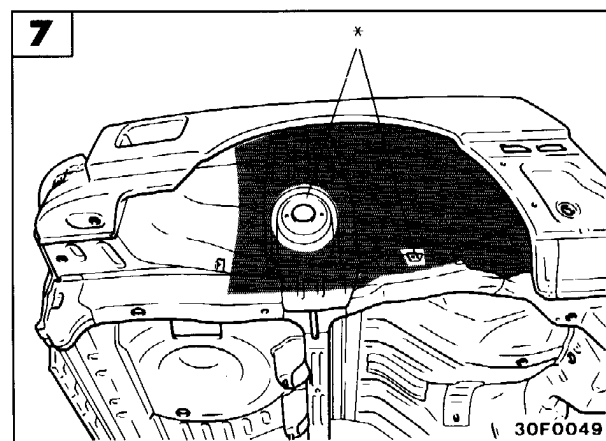
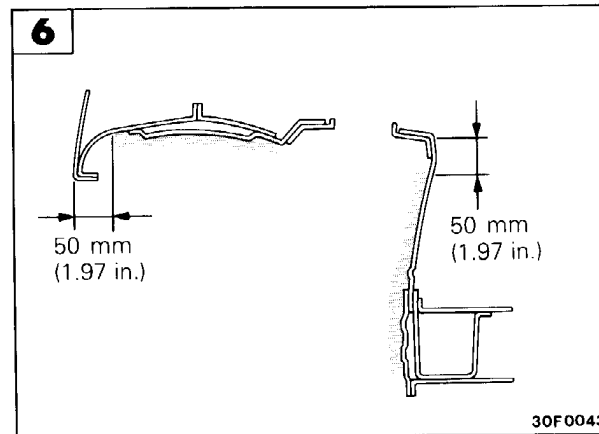
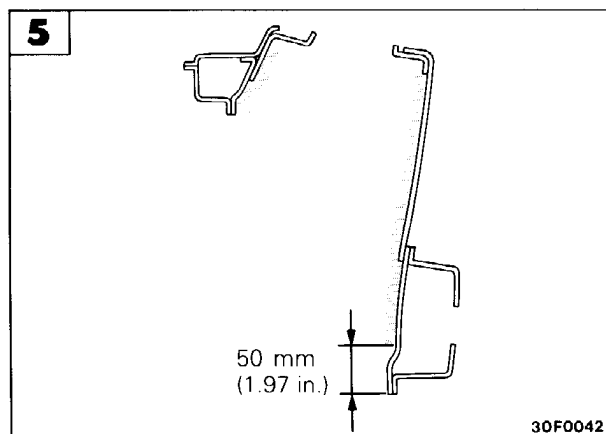
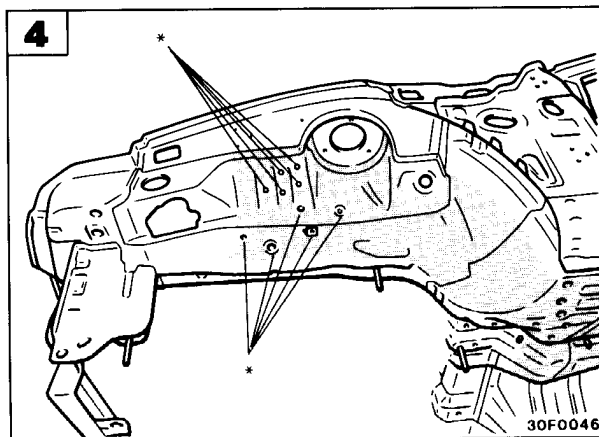
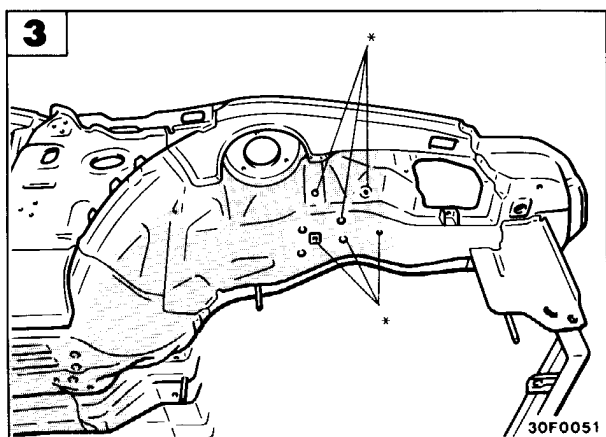


NOTE

* Because parts are to be mounted in these locations, mask the location before applying the undercoat.

-  : Undercoat is applied on models without 4WS only.
-  : Undercoating [film thickness of at least 0.8 mm (0.03 in.)]
-  : Undercoating [film thickness of at least 2.0 mm (0.08 in.)]





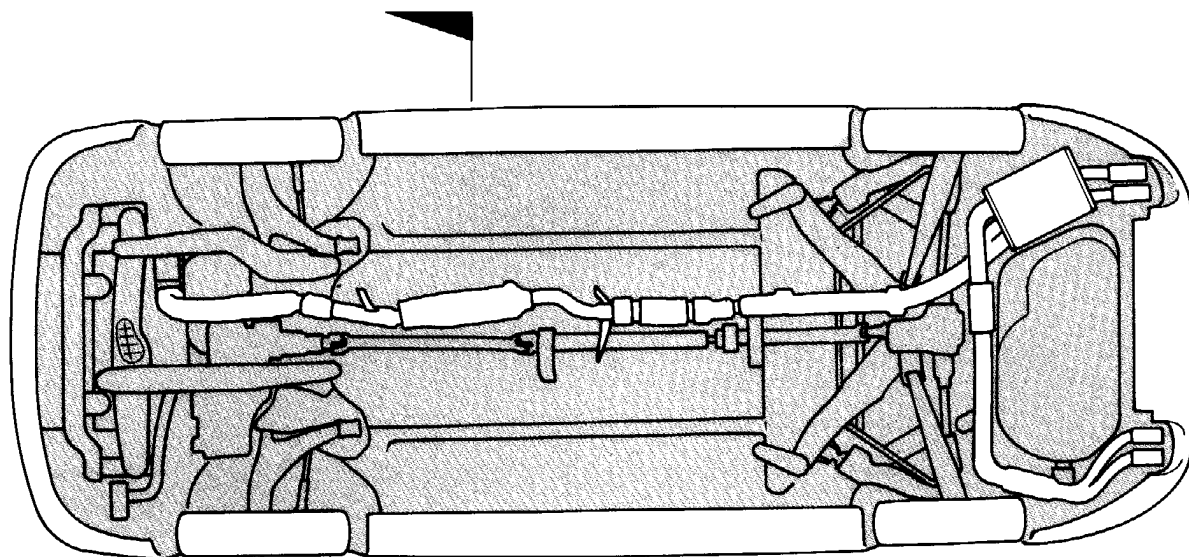
4-14 CORROSION PROTECTION – Underbody Anticorrosion Agent Locations

UNDERBODY ANTICORROSION AGENT LOCATIONS

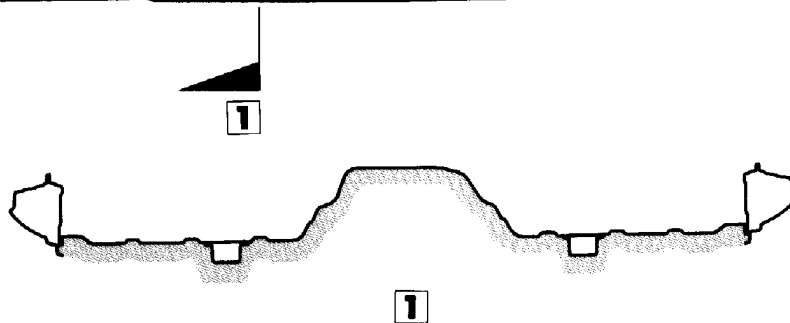
In order to provide a greater corrosion resistance, underbody corrosion prevention treatment should be performed after undercoat application. After completing body repairs, restore this underbody corrosion prevention treatment as indicated in the illustration if necessary.

Recommended agent:

- Tectyl 506T, 506 or S
- Waxoly
- Dinitrol 4954
- Terotex WAX
- Mercasol NON-DRIP



00F0019



 : 100 μ or more

30A0154

NOTE

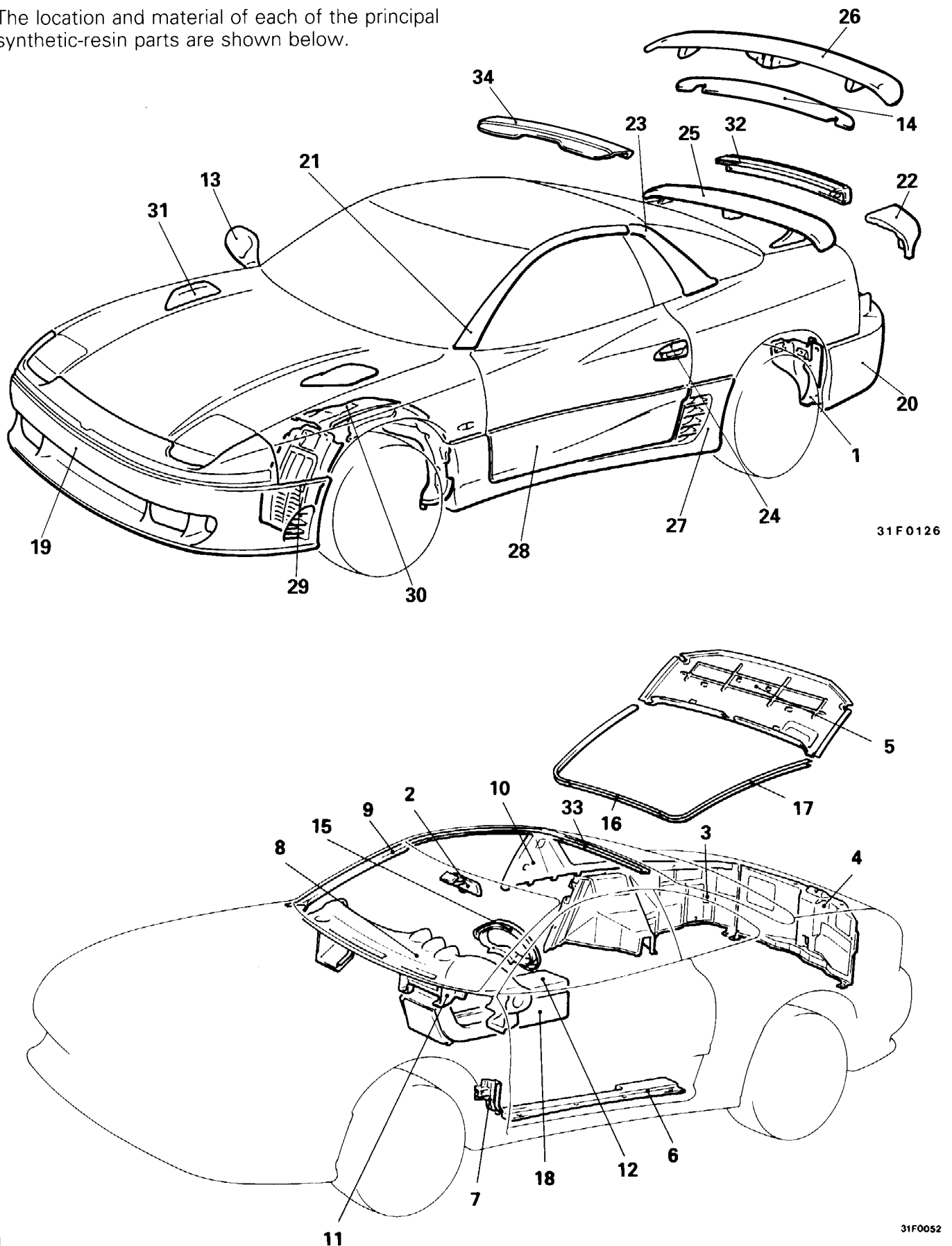
- (1) Take care not to permit the anticorrosion agent to come in contact with front axle inner oil seal, exhaust pipe, main muffler, pre-muffler, UCC, brake rotor, brake pad, drive shaft boot and tyres.
- (2) Underbody parts which are not easily accessible because of the installation location and/or other parts should as far as possible be coated with the anticorrosion agent.

5 SYNTHETIC-RESIN PARTS

LOCATION OF SYNTHETIC-RESIN PARTS 5-2

LOCATION OF SYNTHETIC-RESIN PARTS

The location and material of each of the principal synthetic-resin parts are shown below.

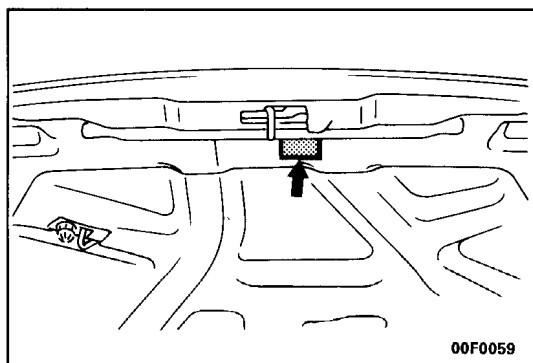


No.	Part name	Name of resin	Abbreviation
1	Rear splash shield	Polypropylene	PP
2	Room mirror		
3	Rear side trim		
4	Rear end trim		
5	Tailgate trim, lower		
6	Scuff plate		
7	Cowl side trim		
8	Instrument panel	Polyvinyl chloride/Urethane	PVC/U
9	Front pillar trim		
10	Quarter trim, upper		
11	Front console		
12	Console lid		
13	Door mirror	ABS resin	ABS
14	Lower spoiler (Active aero)		
15	Meter bezel		
16	Tailgate trim, upper		
17	Tailgate trim, side		
18	Rear console		
19	Front bumper face	Thermoplastic elastomer	TPO
20	Rear bumper face		
21	Drip moulding	Unsaturated polyester	UP
22	Rear bumper extension, upper		
23	Center pillar garnish	Polyamide	PA
24	Door outside handle		
25	Air spoiler	Polyphenylene oxide	PRO
26	Upper spoiler (Active aero)		
27	Side airdam	Polyurethane	PUR
28	Door side garnish		
29	Front splash shield extension	Polyethylene	PE
30	Front splash shield		
31	Hood garnish	6 Nylon	–
32	Rear panel garnish	Polyacrylate/polypropylene	PMMA/PP
33	Rear roof rail trim	Polyvinyl chloride	PVC
34	Roof lid extension, rear <Models with sunroof>	Glass fiber-reinforced plastic	FRP

NOTES: The "/" symbol indicates manufacture from two types of materials.

6 BODY COLOUR

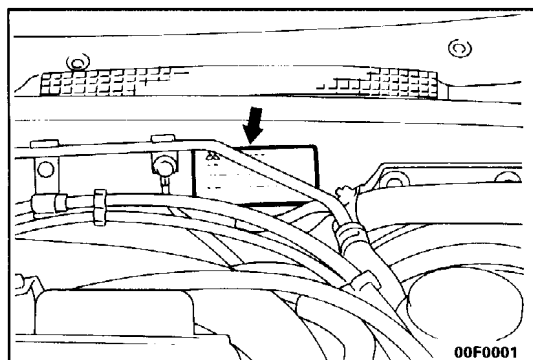
BODY COLOUR CODE	6-2
BODY COLOUR CODE INTERPRETATION	6-2
INTERFERENCE PEARL COATING	6-4
COLOURED PEARL COATING.....	6-5
3C1B PEARL COATING.....	6-5
3 COAT PEARL TONE COATING	6-5
BODY COLOURING	6-6



BODY COLOUR CODE

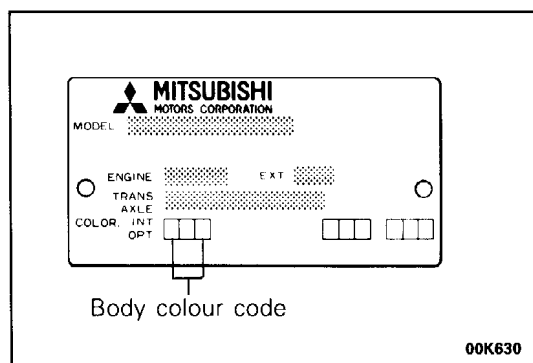
[Vehicles for Europe and Australia]

The body colour code is imprinted on the vehicle information code plate, which is mounted on the underside of the hood.



[Vehicles for General Export and GCC]

The body colour code is imprinted on the vehicle information code plate, which is mounted on the front deck.



BODY COLOUR CODE INTERPRETATION

The information contained in the body colour code is explained in the body colour charts.

BODY COLOUR CHARTS

(M): Metallic paint
(P): Pearl paint

Body colour code	Colour	Colour number	Body colour name	Composition of film	Engine compartment and luggage compartment colour	
					Colour number	Colour
W29	WHITE	AC11029	Misty White (P)	White pearl (3C1B)	AC11064	LIGHT GRAY
X02	BLACK	AC11002	Toscana Black (P)	Interference pearl (2C1B)	AC10903	BLACK
R25	RED	AC10925	Kutani Red (P)	Coloured pearl (2C1B)	AC10632	MAROON
R71		AC11071	Passion Red	Solid	AC10795	RED
B34	BLUE	AC11034	Mariana Blue (P)	Coloured pearl (2C1B)	AC11066	BLUE

Paint used by manufacturer

Colour number	I.C.I.	DUPONT	AKZO	GLASURIT	R-M	SPIES	A & W	STANDOX	SHERWIN	PPG US	PPG EC
AC11029											
AC11002											
AC10925	PH73B	N9332	MIT9419	MIT329/00C	R25	98694	42776	R25	44565	4319	MIT R25
AC11071											
AC11034											
AC11064											
AC10903	XE28	47600	MIT4657	MIT915	AC10903		41656				
AC10632	KH79	H9073	MIT3882	MIT326	AC10632		36431				
AC10795		N9233	MIT3881		AC10795		49406				
AC11066											

Refinishing paint for repairs

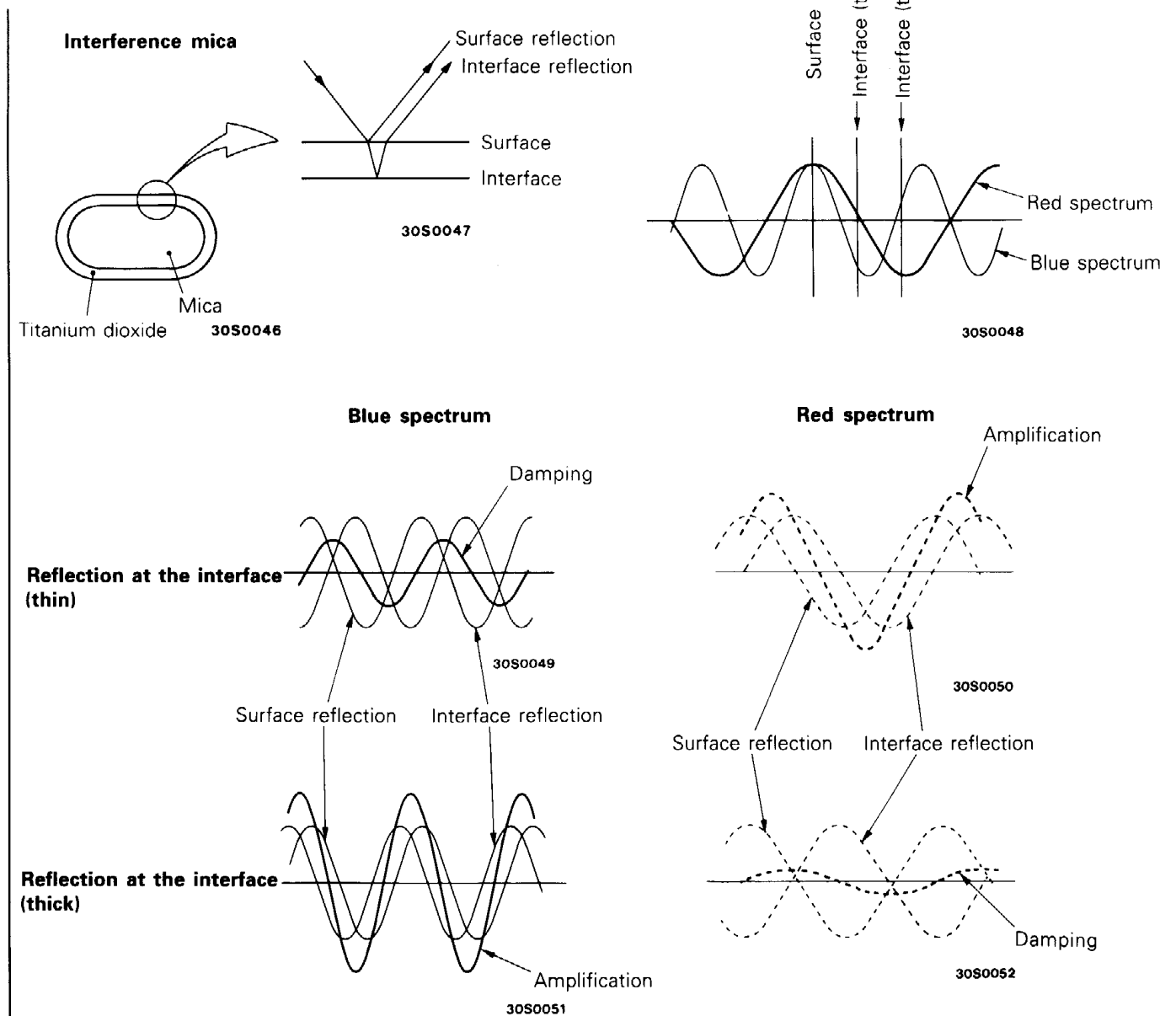
Refinishing paint supplier

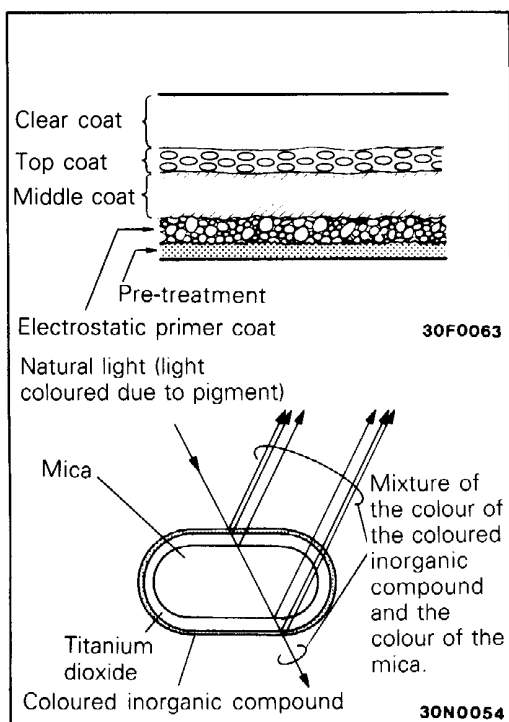
NOTE
The paint codes for the non-indicated spaces has not been established at the time of publication of this manual. For further information about these paint codes, refer to the NEWSLETTER (refinishing paint formula numbers) which will be sent under separate cover.

INTERFERENCE PEARL COATING

In the same way as for the mica powder in conventional pearl coatings, the surface of the mica powder in the interference pearl coating is coated by a titanium dioxide coating. Because light is reflected by surfaces with different densities, it is reflected by the titanium dioxide surface and by the interface surface between the titanium dioxide and mica. Because of this, phase displacement occurs in the reflections from the surface and the interface. However, when the amount of titanium dioxide coating is small, like the mica powder in the white pearl coating, this phase difference can be almost ignored, so almost all light is reflected and a white pearl glossiness tinted with mica powder is obtained. Due to the thick coating of titanium dioxide, the mica powder in the interference pearl coating has a large phase displacement, and the light interference is used to add colour. If the amount of coating is thin, light with short wavelengths is dampened, and light with long wavelengths is amplified. If the coating is thick, the reverse is true. As the coating is changed from thin to red, violet, blue and then green.

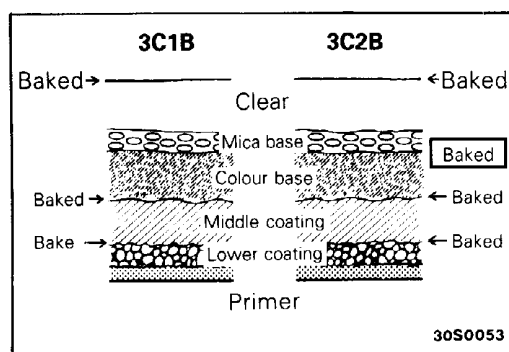
- Toscana Black: Interference blue mica.





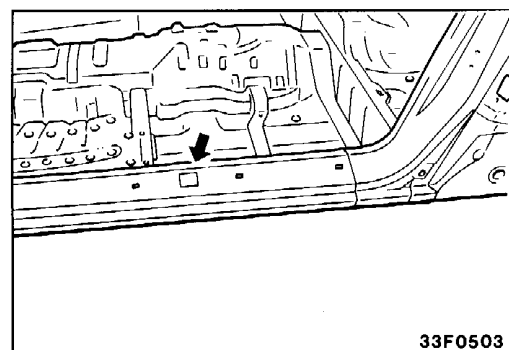
COLOURED PEARL COATING (AC10925, AC11034)

The coloured inorganic compound is coated on the surface of the mica powder coated with titanium dioxide and the colouring mixed into the colour base. The hue of the mica powder that forms the base and the coloured inorganic compound are mixed. Fox Kutani Red (R25), coat bright red iron oxide on the white based mica powder. Refinishing paint is the same as for normal metallic painting.



3C1B PEARL COATING (3 COAT 1 BAKED PEARL COATING) (AC11029)

The 3 coat pearl coating used in the conventional 3C2B has been utilized in the 3C1B.



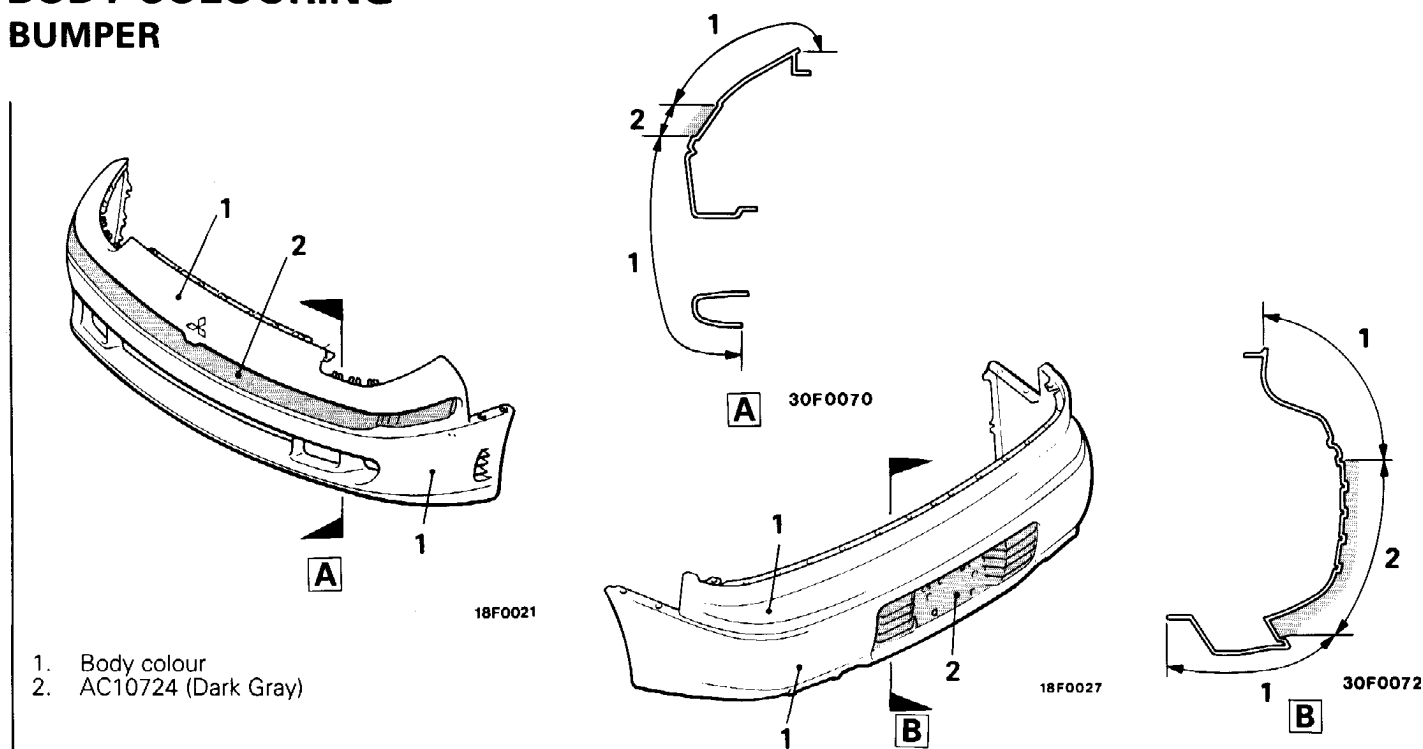
3 COAT PEARL TONE COATING (AC11029)

Colour base exposed section

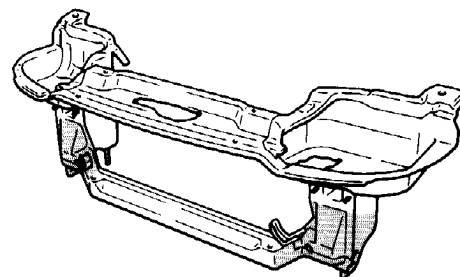
The side sill is provided with a colour base exposed section, so use this to determine the colour matching.

BODY COLOURING

BUMPER



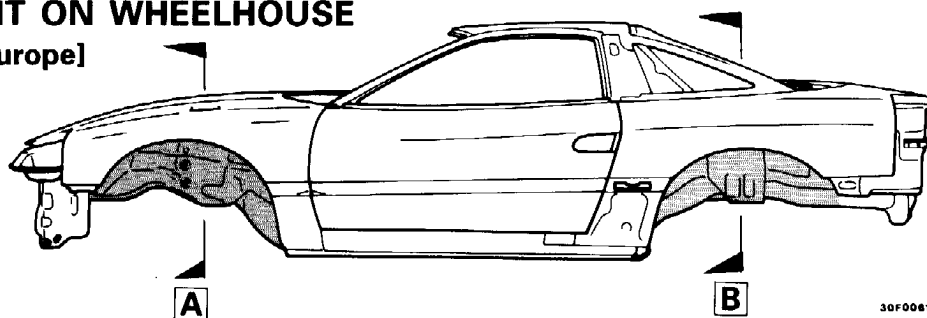
BLACK PAINT ON HEADLAMP SUPPORT



AC10657 (Black)
Except body colour code X02

BLACK PAINT ON WHEELHOUSE

[Except for Europe]



30F0061

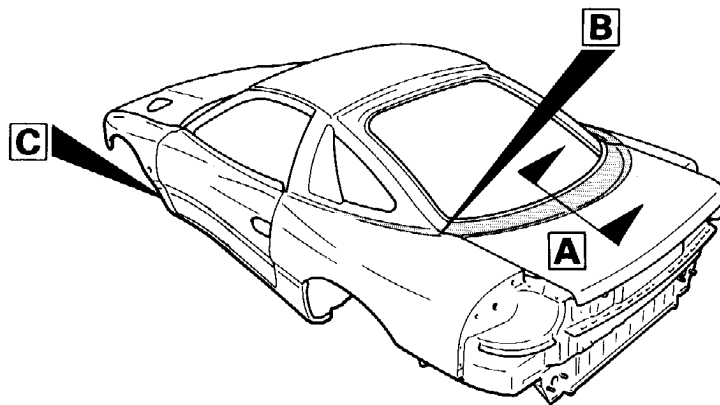
B

AC10657 (Black)

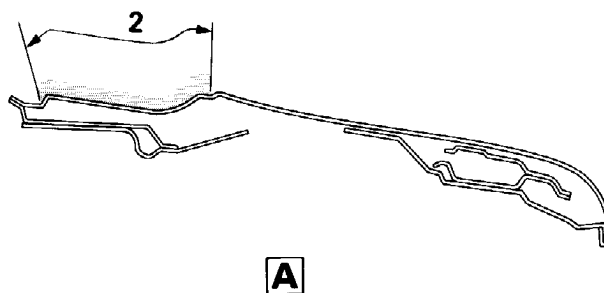
33F0512

33F0511

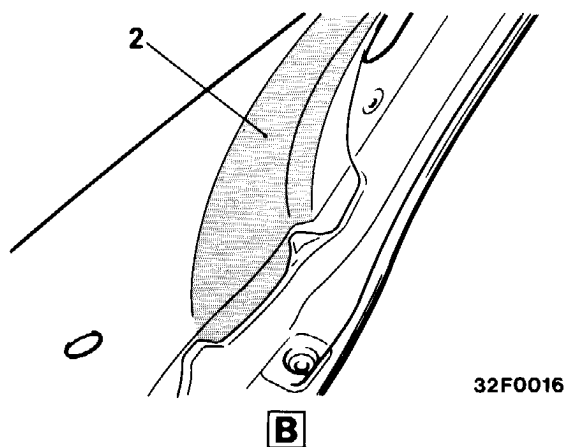
BLACK PAINT ON TAILGATE, FRONT FENDER AND QUARTER, OUTER



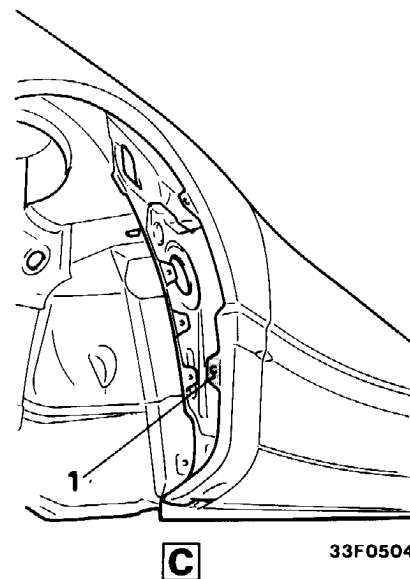
31F0087



30F0082



32F0016

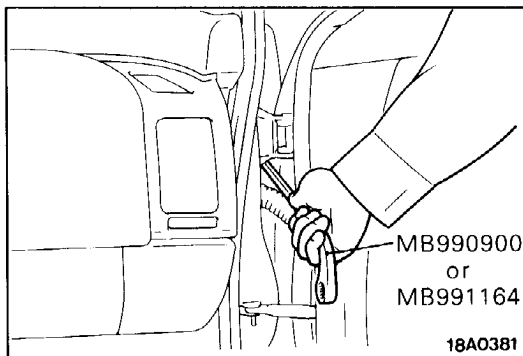
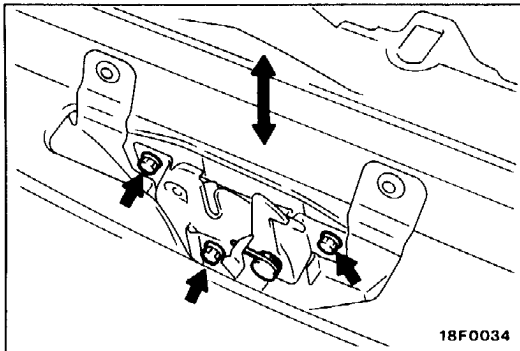
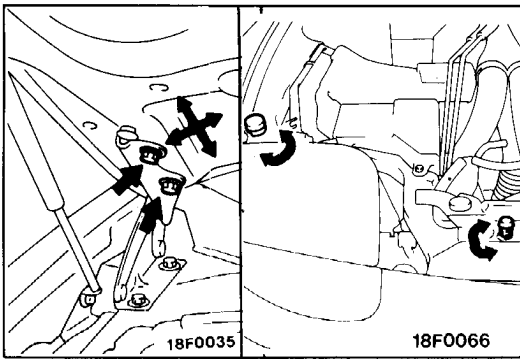


33F0504

1. AC10657 (Black)
2. AC10724 (Dark Gray)

8 REFERENCE MATERIAL

BOLTED PANEL FIT AND ADJUSTMENT	8-2
HOOD	8-2
DOOR	8-2
TAILGATE	8-3
INSTALLATION AND REMOVAL OF ADHESIVE COMPONENTS	8-4
SIDE GARNISH	8-4
SIDE AIR DAM	8-6
ADJUSTMENT OF OTHER PARTS	8-7
FRONT WHEEL ALIGNMENT	8-7
REAR WHEEL ALIGNMENT	8-8
HEADLAMP AIMING	8-9
DRIVING LAMP, FOG LAMP AIMING	8-10
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)	8-11



BOLTED PANEL FIT AND ADJUSTMENT HOOD

ADJUSTMENT OF HOOD FIT

- (1) If the gap between hood and body is not even, loosen the hood mounting bolts and move the hood to the front and rear, right and left until the gap around the hood is even.
- (2) If the height of the hood and body is not the same, turn the hood bumper and adjust the height of the hood.
- (3) If the hood is not flush or if it is difficult to lock and unlock, first check the release cable and then loosen the hood latch mounting bolts and move the hood latch to adjust the way it catches on the hood striker.

Hood mounting bolt tightening torque:

9 Nm
0.9 kgm
7 ft.lbs.

Hood latch mounting bolt tightening torque:

12 Nm
1.2 kgm
9 ft.lbs.

DOOR

ADJUSTMENT OF DOOR FIT

- (1) If the gap between the door and body is not even, put protective tape on the fender near the hinge installation section and on the door edge and, using the special tool, loosen the door hinge mounting bolts on the body side and move the door front and rear, up and down until the gap around the door is even.
- (2) When making the door flush when replacing a door, loosen the door hinge mounting bolts on the door side with the special tool and move the door front and rear, up and down to adjust the gap around the door. Note that this adjustment is not necessary if a door is not replaced.

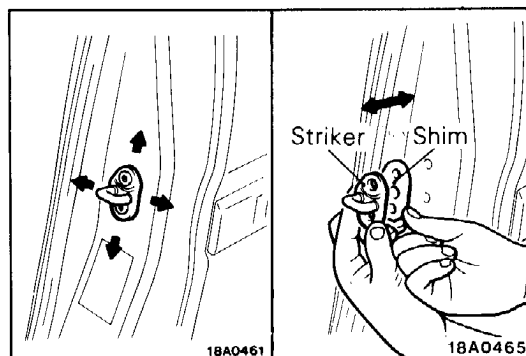
Door hinge bolt tightening torque

Body side: 44 Nm
4.4 kgm
33 ft.lbs.

Door side: 22 Nm
2.2 kgm
16 ft.lbs.

NOTE

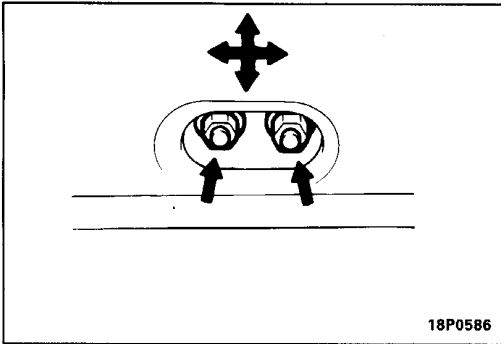
Do not apply torque greater than 100 Nm (10 kgm, 72 ft.lbs.) with the special tool.



- (3) If it is difficult to open and close the door, adjust the striker and door latch (moving to front and rear) catches using a shim in the striker mounting part and also move the striker up and down, right and left.

Striker mounting screw tightening torque:

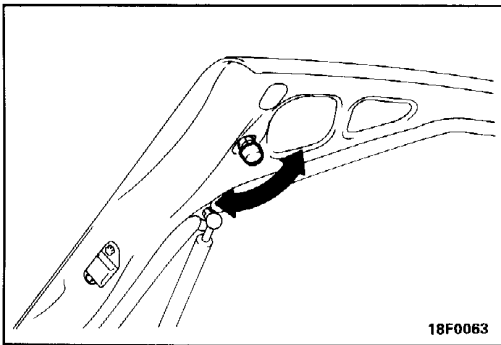
12 Nm
1.2 kgm
9 ft.lbs.



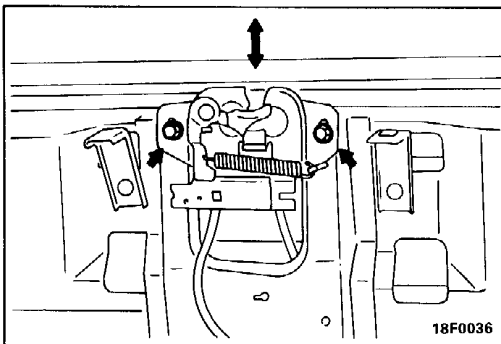
TAILGATE

ADJUSTMENT OF TAILGATE FIT

- (1) If the gap between the tailgate and body is not even, loosen the tailgate mounting bolts and adjust the tailgate by moving it so the gap around the tailgate is even.



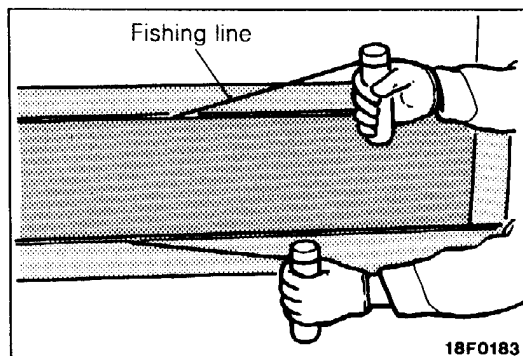
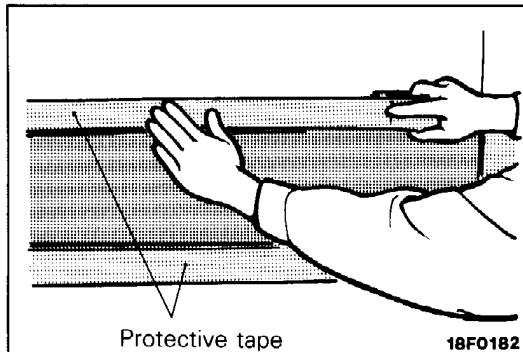
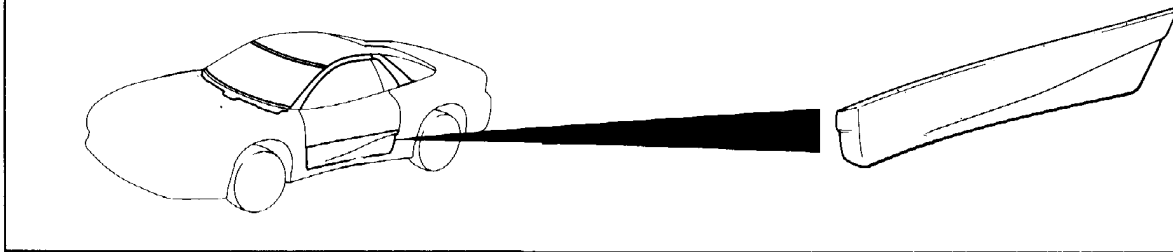
- (2) If the height of the tailgate and body is not the same, turn the tailgate bumper and adjust the height of the tailgate.



- (3) If the tailgate is not flush and if it is difficult to lock and unlock, first check the release cable and then loosen the tailgate striker mounting bolts and move the striker to adjust the way it catches with the tailgate latch.

INSTALLATION AND REMOVAL OF ADHESIVE COMPONENTS

SIDE GARNISH



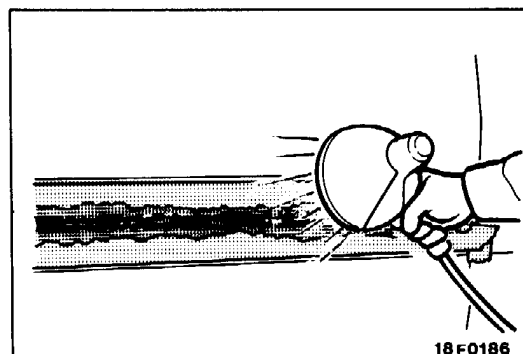
REMOVAL

- (1) Remove the side garnish mounting nut.
- (2) Stick protective tape around the outside of the side garnish.

- (3) Insert fishing line [$\varnothing$ 0.8 mm (0.03 in.)] between the body and the side garnish, pull both sides alternately to cut the glued parts and remove the side garnish.
- (4) For the sections where there are clips or bolts, remove them by pulling the side garnish toward yourself.

Caution

- (1) If the side garnish is to be reused, pull the fishing line along the body to remove it so the ends of the side garnish are not scratched.
- (2) If it is difficult to cut the glued parts, heat them to about 40°C (104°F).

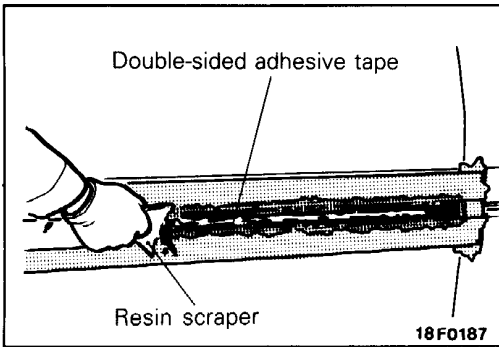


REMOVAL OF DOUBLE-SIDED ADHESIVE TAPE

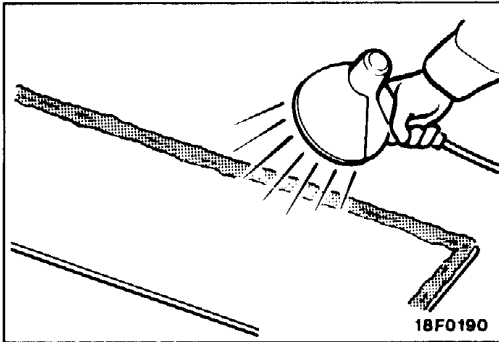
- (1) Use an infra-red lamp, etc. to heat at 40 – 60°C (104 – 140°F) the double-sided adhesive tape for 5 – 10 minutes that remains on the body.

Caution

Do not heat it so much that the surface becomes white and dry.



- (2) Scrape away the double-sided tape with a resin scraper or similar instrument.
- (3) Wipe off application surface of body with a rag moistened with isopropyl alcohol.

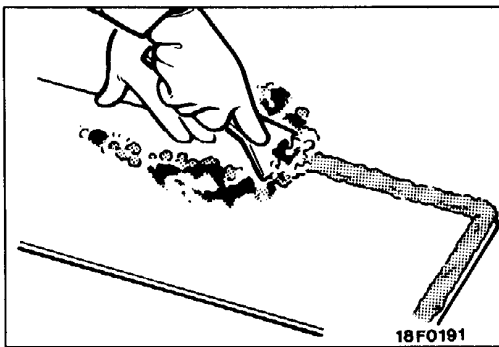


STICKING ON DOUBLE-SIDED ADHESIVE TAPE (WHEN REUSED)

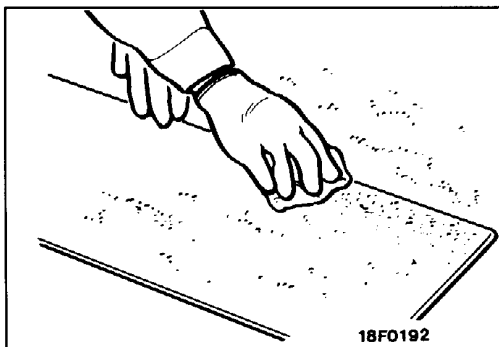
- (1) Use an infra-red lamp, etc. to heat the double-sided adhesive tape for 5 – 10 minutes at 40 – 60°C (104 – 140°F).

Caution

Do not heat it so much that the surface becomes white and dry.



- (2) Remove the double-sided adhesive tape with a resin scraper or gasket scraper.
- (3) If some double-sided adhesive tape still remains, repeat the work in steps (1) and (2).

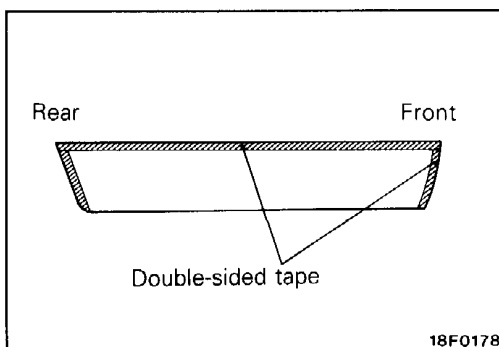


- (4) Wipe it clean with a rag moistened with isopropyl alcohol.
- (5) Remove a little of the old adhesive agent.

Caution

Do not remove all the old adhesive agent.

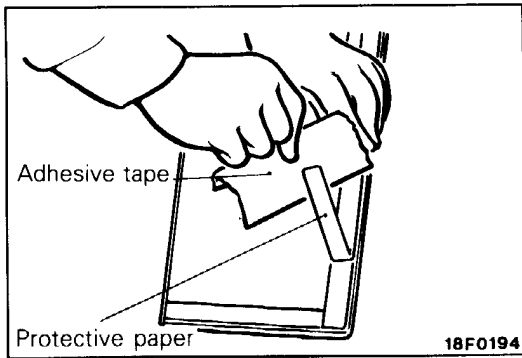
8



- (6) Stick the double-sided adhesive tape on side garnish as indicated.

**Specified adhesive tape: 3M ATD Part No. 6382
or equivalent**

8-6 REFERENCE MATERIAL – Installation and Removal of Adhesive Components

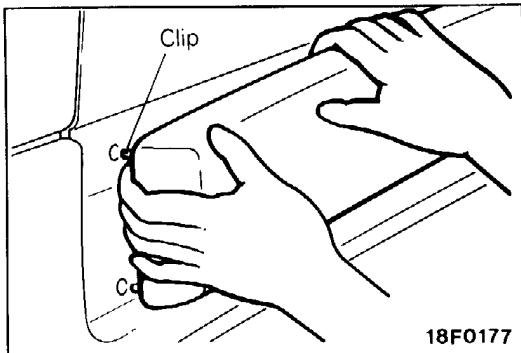


INSTALLATION

- (1) Remove the protective paper from the double-sided tape.

NOTE

If the adhesive tape is stuck to the end of the protective paper, it is easy to remove it.



- (2) Align the clips and bolts in the body holes and attach the side garnish.

NOTE

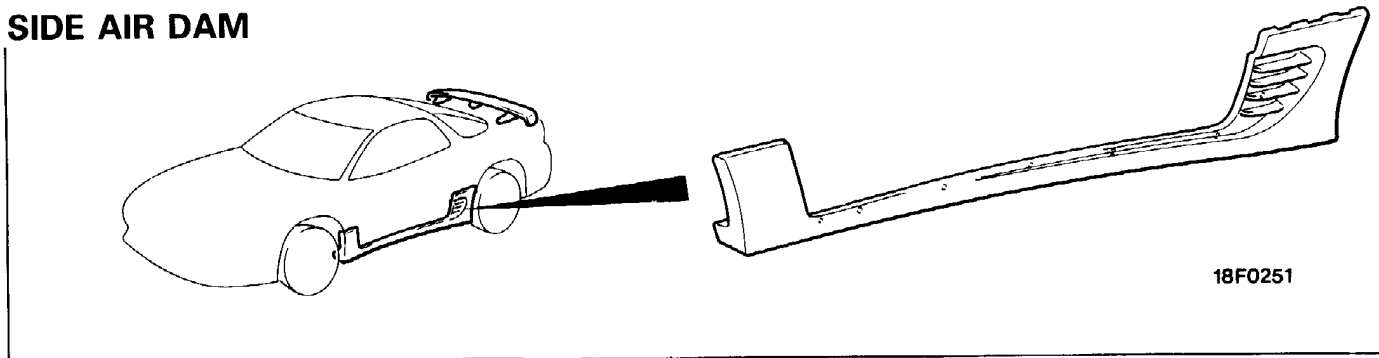
If it is difficult to stick on the double-sided tape during the cold season, first heat up the body adhesive surface and side garnish adhesive surface.

Body .. 40 – 60°C (104 – 140°F)

Side garnish .. 20 – 30°C (68 – 86°F)

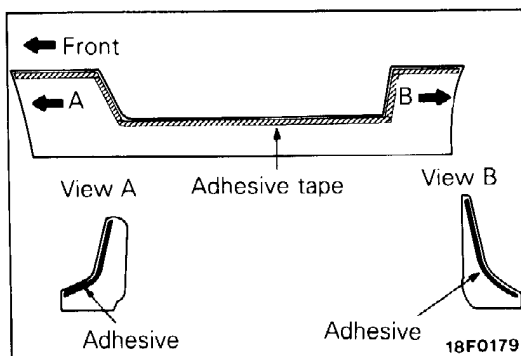
- (3) Stick on the side garnish so it adheres firmly.

SIDE AIR DAM



REMOVAL

Remove it in the same way as the side garnish is removed.



INSTALLATION

Install it in the same way as the side garnish is installed. However, when attaching the side air dam, apply adhesive as indicated.

-  **Adhesive tape : 3M ATD Part No. 6382 or equivalent**
-  **Adhesive : 3M ATD Part No. 8609 SUPER FAST URETHANE or equivalent**

ADJUSTMENT OF OTHER PARTS

FRONT WHEEL ALIGNMENT

TOE-IN

1. Measure the toe-in.

Standard value:

At the centre of tyre tread -3 to 3 mm (-0.12 to 0.12 in.)

At the rim of disc wheel -1.5 to 1.5 mm (-0.06 to 0.06 in.)

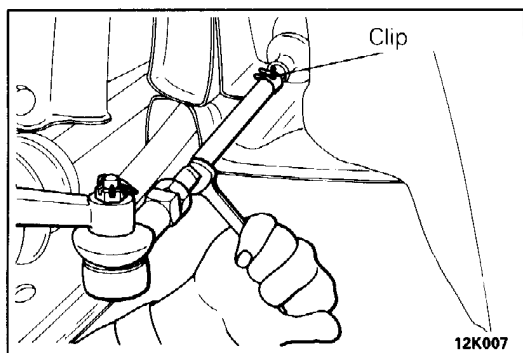
Toe angle (per wheel) $-8'$ to $8'$

2. If the toe-in is not within the standard value, adjust the toe-in by undoing the clips and turning the left and right tie rod turnbuckles by the same amount (in opposite directions).
3. After making the adjustments, use a turning radius gauge to confirm that the steering wheel turning angle is within the standard value range.

Standard value:

Inner wheel $33^{\circ}45' \pm 2^{\circ}$

Outer wheel $28^{\circ}21'$



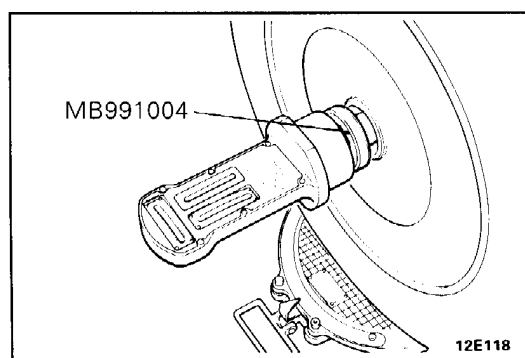
TOE-OUT ANGLE ON TURNS

To check the steering linkage, especially after the vehicle has been involved in an accident or if an accident is presumed, it is advisable to check the toe-out angle on turns in addition to the wheel alignment.

Conduct this test on the left turn as well as on the right turn.

Standard value:

22° (inner wheel when outer wheel at 20°)



CAMBER, CASTER AND KINGPIN INCLINATION

Standard value:

Camber $0^{\circ} \pm 30'$

Caster $3^{\circ}55' \pm 30'$

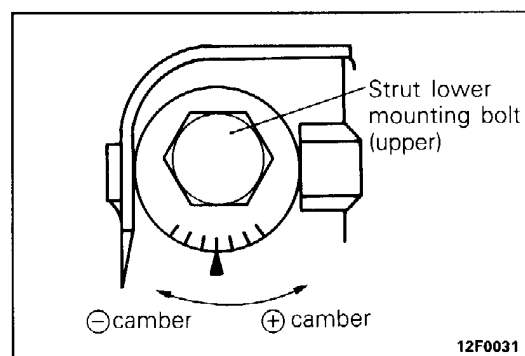
Kingpin inclination $14^{\circ}2'$

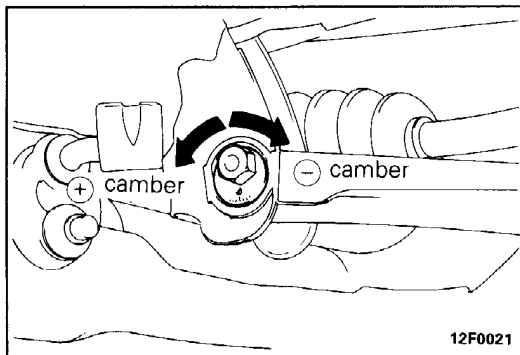
Install the special tool by tightening it to the same torque as that applied to the drive shaft nut.

To adjust camber, turn the strut lower mounting bolt (upper). One graduation is equivalent to about $20'$ in chamber. Caster and kingpin inclination have been factory-adjusted to the standard value and requires no adjustment.

Caution

1. One camber graduation changes toe by about 0.5 mm (0.02 in.). Be sure to adjust toe after camber has been adjusted.
2. The difference in camber between right and left should be within $0^{\circ}30'$.





REAR WHEEL ALIGNMENT

CAMBER

Standard value: $-0^{\circ}10' \pm 30'$

To adjust camber, turn the lower arm mounting bolt on the cross-member side.

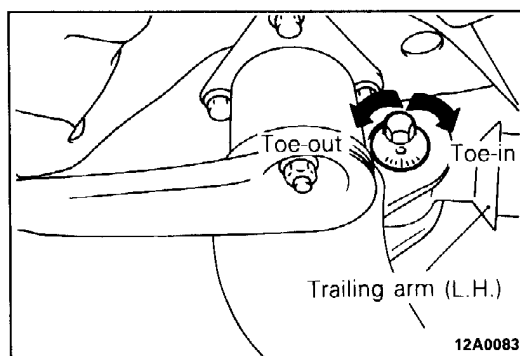
NOTE

Left wheel: Clockwise ($\ominus$ camber)

Right wheel: Clockwise ($\oplus$ camber)

The difference between the right and left wheels should be $30'$ or less.

One graduation changes camber by about $12'$.



TOE-IN

Standard value:

At the centre of tyre tread -2 to 3 mm (-0.08 to 0.12 in.)

At the rim of disc wheel -1 to 1.5 mm (-0.04 to 0.06 in.)

Toe angle (per wheel) $-5'$ to $8'$

To adjust toe, turn the trailing arm mounting bolts on the crossmember side on both sides the same amount.

NOTE

Left wheel: Clockwise (toe-in)

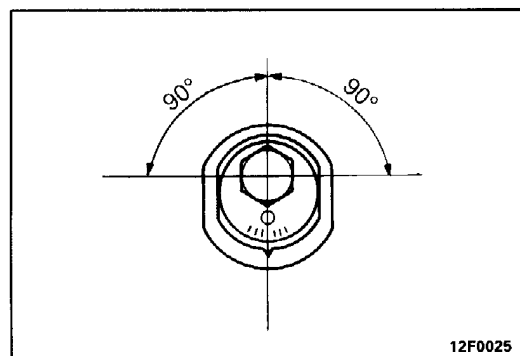
Right wheel: Clockwise (toe-out)

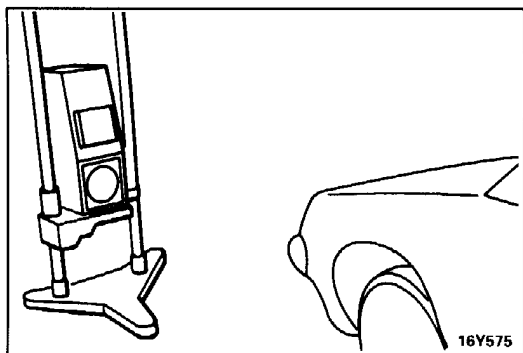
The difference between right and left wheels should be 3 mm (0.12 in.) or less.

One graduation changes toe by about 2 mm (0.08 in.).

Caution

1. Adjust the eccentric cam bolt within 90° from the central position.
2. Adjust camber and toe in this order after disconnecting the tie rod end and trailing arm. If camber is adjusted, be sure to adjust toe also.





HEADLAMP AIMING

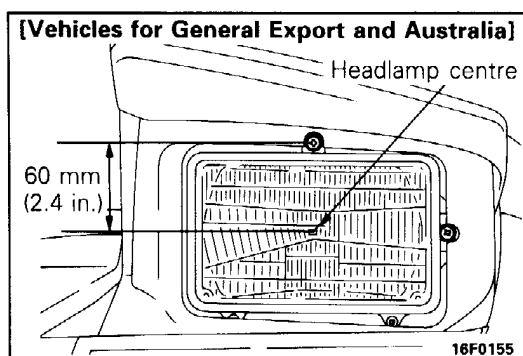
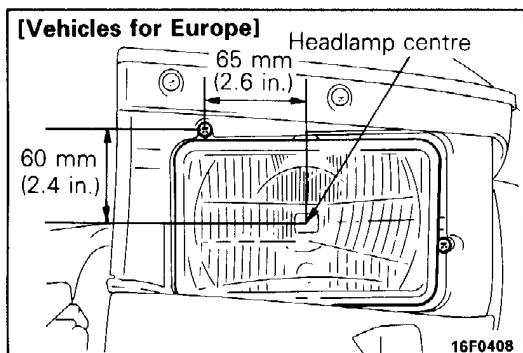
<Using a Beamsetting Equipment>

- (1) The headlamps should be aimed with the proper beamsetting equipment, and in accordance with the equipment manufacture's instructions.

NOTE

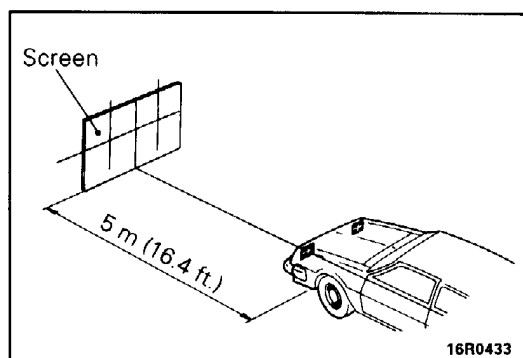
If there are any regulations pertinent to the aiming of headlamps in the area where the vehicle is to be used, adjust so as to meet those requirements.

- (2) Alternately turn the adjusting screw to adjust the headlamp aiming.



<Using a Screen>

- (1) Measure the centre of the headlamp as shown in the illustration.
- (2) Inflate the tyres to the specified pressures and remove the load from the vehicle (except a driver).



- (3) Set the distance between the screen and the centre of the headlamps as shown in the illustration.
- (4) With the engine running at 2,000 r/min, aim the headlamps.

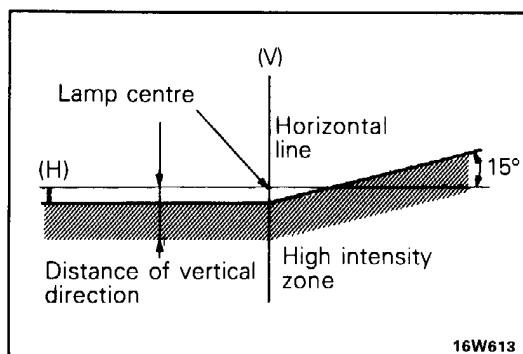
- (5) Check if the beam shining onto the screen is at the standard value.

Standard value: <For lower beam adjustment> (Vertical direction)

60 mm (2.36 in.) below horizontal (H)

(Horizontal direction)

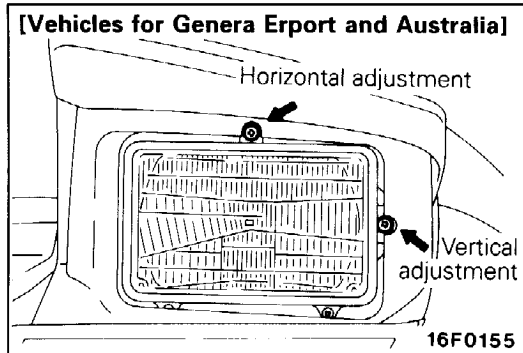
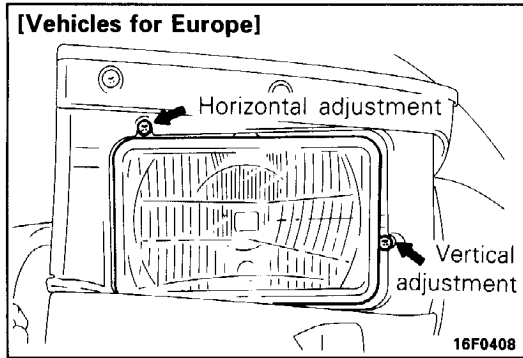
Position where the 15° sloping section intersects the vertical line (V)



Caution

When making the aiming adjustment, be sure to mask those lamps which are not being adjusted.

When it is difficult, because of outside light, to distinguish the light/dark dividing line, use a curtain, screen or similar material to reduce the effects of the outside light.



- (6) Alternately turn the adjusting screw to adjust the headlamp aiming.

Caution

Be sure to adjust the aiming adjustment screw in the tightening direction.

INTENSITY MEASUREMENT

Using a photometer, and following its manufacture's instruction manual, measure the headlamp intensity and check to be sure that the limit value is satisfied.

Limit: 30,000 cd or more.

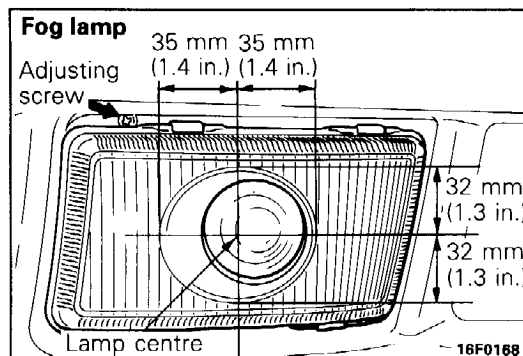
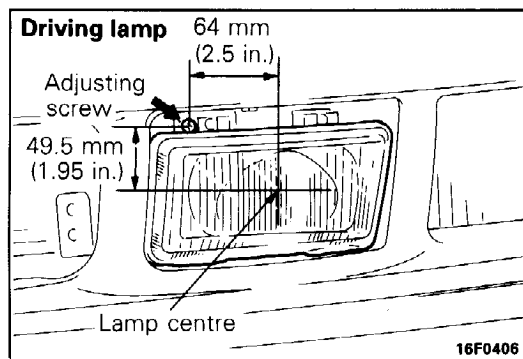
NOTE

1. When measuring the intensity, maintain an engine speed of 2,000 r/min., with the battery in the charging condition.
2. There may be special local regulations pertaining to headlamp intensity; be sure to make any adjustments necessary to satisfy such regulations.
3. If an illuminometer is used to make the measurements, convert its values to photometer values by using the following formula.

$I = E r^2$ Where: I = intensity (cd)

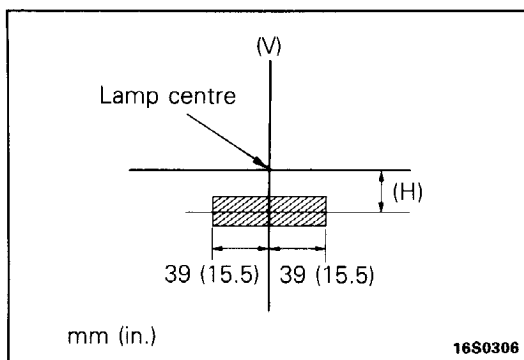
E = illumination (lux)

r = distance (m) from headlamps to illuminometer



DRIVING LAMP, FOG LAMP AIMING

1. Measure the centre of the driving lamps or fog lamp, as shown in the illustration.
2. Inflate the tyres to the specified pressures and remove the load from the vehicle (except a driver).
3. Set the distance between the screen and the centre of the driving lamps at 5 m (16.4 ft.).
4. For vehicles with driving lamp, set the headlamp at the upper beam, and turn on the driving lamp.
5. With the engine running at 2,000 r/min., aim the driving lamp.
6. Check if the beam shining onto the screen is at the standard value.

**Standard value:****(Vertical direction)****140 mm (5.5 in.) below horizontal (H)****(Horizontal direction)****Deviation of light beam axis is within 394 mm (15.5 in.) to the left and right****NOTE**

The horizontal direction is non-adjustable. If the deviation of the light beam axis exceeds the standard value, check to be sure that the mounting location or some other point is not defective.

Caution

When making the aiming adjustment, be sure to mask those lamps which are not being adjusted.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – AIR BAG

- (1) A Supplemental Restraint System (SRS), which uses a driver-side air bag, has been installed in this vehicle.
- (2) The SRS includes the following components: impact sensors, SRS diagnosis unit; SRS warning lamp, air bag module, clock spring, interconnecting wiring. Other SRS-related components (that may have to be removed/installed in connection with SRS service or maintenance) are indicated in the table of contents by an asterisk (*).

The Supplemental Restraint System (SRS)-related components are shown on the MASTER TABLE OF CONTENTS in the following page. Be sure to carefully read and understand the WARNING below before proceeding.

WARNING!

- (1) **Improper service or maintenance of any component of the SRS, or any SRS-related component, can lead to personal injury or death to service personnel (from inadvertent firing of the air bag) or to the driver (from rendering the SRS inoperative).**
- (2) **If it is possible that the SRS components are subjected to heat over 93°C (200°F) in baking or in drying after painting, remove the SRS components (air bag module, SRS diagnosis unit, front impact sensors) beforehand.**
- (3) **Service or maintenance of any SRS component or SRS-related component must be performed only at an authorized MITSUBISHI dealer.**
- (4) **MITSUBISHI dealer personnel must thoroughly review this manual, and especially its GROUP 52B-Supplemental Restraint System (SRS), before beginning any service or maintenance of any component of the SRS or any SRS-related component.**

MASTER TABLE OF CONTENTS

Group. number	Group name	SRS-related components
13	FUEL	CRUISE CONTROL SYSTEM
22	MANUAL TRANSMISSION	TRANSMISSION CONTROL
32	POWER PLANT MOUNT	RIGHT MEMBER, LEFT MEMBER AND CROSSMEMBER
33B	ELECTRONIC CONTROL SUSPENSION	STEERING ANGULAR VELOCITY SENSOR
35	SERVICE BRAKES	G SENSOR
36	PARKING BRAKES	PARKING BRAKE LEVER AND PARKING BRAKE CABLE
37A	STEERING	STEERING WHEEL AND SHAFT
		POWER STEERING GEAR BOX
42	BODY	FENDER
52A	INTERIOR	INSTRUMENT PANEL
		FLOOR CONSOLE
		FRONT SEAT
		SEAT BELT
54	CHASSIS ELECTRICAL	COLUMN SWITCH
		HORN SWITCH
		IGNITION SWITCH
55	HEATER, AIR CONDITIONER AND VENTILATION	AIR-CONDITIONER CONTROL PANEL AND AIR-CONDITIONER CONTROL UNIT
		HEATER UNIT
		DAMPER CONTROL MOTOR ASSEMBLY
		VENTILATORS (INSTRUMENT PANEL)

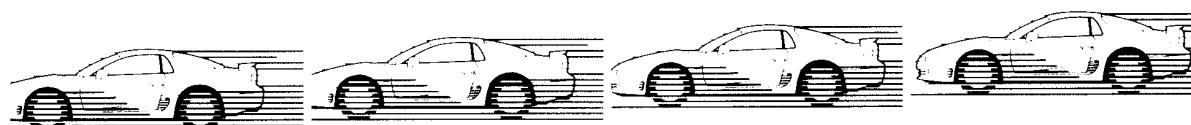
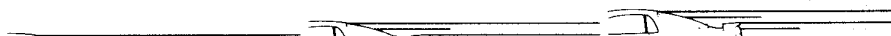
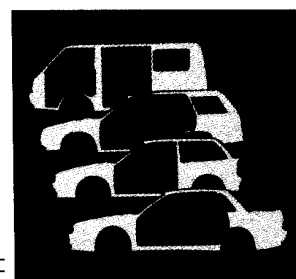
NOTE

Refer to the 3000 GT Workshop Manual for each Group Number, Group Name concerned as shown in the table.



Body Repair Manual

3000GT '93



3000GT

BODY REPAIR MANUAL

FOREWORD

This manual has been prepared for the use of all service mechanics engaged in the body repair service.

Body dimensions, welded panel replacement procedures, body sealing application instructions, and all the other information required to provide quick and accurate body repair service are contained herein. One especially important point is the welding method. All of the vehicle's original strength and durability can be maintained by following the welding procedures contained in this manual.

Note that, in order to maximize the efficiency of the repair work, first, both the extent of the damage and the replacement parts that are needed must be calculated accurately, and then the actual work must be performed accurately and efficiently.

The publications shown on the following page are also available, and should be used in conjunction with this manual.

Mitsubishi Motors Corporation reserves the right to make changes in design and specifications and/or to make additions to or improvements in its products without imposing any obligation upon itself to install them on its products previously manufactured.

GROUP INDEX

GENERAL	0
BODY CONSTRUCTION	1
BODY DIMENSIONS	2
WELDED PANEL REPLACEMENT	3
CORROSION PROTECTION	4
SYNTHETIC-RESIN PARTS	5
BODY COLOUR	6
REFERENCE MATERIAL	8



RELATED PUBLICATIONS

- TECHNICAL INFORMATION MANUAL
Pub. No. PYUE9201
- WORKSHOP MANUAL
CHASSIS GROUP
Pub. No. PWUE9119 (for Europe)
Pub. No. PWUE9203 (for General Export)
ENGINE GROUP
Pub. No. PWEE□ □ □ □ (Looseleaf edition)
ELECTRICAL WIRING
Pub. No. PHUE9201 (for Europe)
Pub. No. PHUE9203 (for General Export)
- PARTS CATALOGUE
Pub. No. B608K402A□ (Vehicles for Europe)
Pub. No. B808K402A□ (Vehicles for General Export)
Pub. No. BFA8K402A1 (Vehicles for Australia)

MANUAL DESCRIPTION

CONTENTS

The first page of this manual contains a table of contents which lists the title and number of each group.

TEXT

The vehicles to which the information in the text pertains are generally designated according to their body classification. In some cases, other limiting designations such as name, type of drive system, etc., are given. If there are no such limiting designations, the information can be assumed to cover all models.

PAGE NUMBERS

All pages are numbered consecutively within each group. The page numbers can be found on the upper left or right of each page.

SECTION TITLES

The section titles can be found at the upper centre of each page.

NOTE

"GCC" indicates a classification within the models for General Export category: models for countries that are member of the Gulf Cooperation Council.

