
GROUP 0

GENERAL

CONTENTS

VEHICLE IDENTIFICATION	0-2	SUPPLEMENTAL RESTRAINT SYSTEM (SRS)
	
MAJOR SPECIFICATIONS	0-2	0-3

VEHICLE IDENTIFICATION

M4000001003263

<2000>

Model code		Seating capacity	Engine model	Transmission model	Fuel supply system
GF2W	XTSHL6Z	5-persons	4B11 (1,998 mL) DOHC MIVEC petrol engine	F1CJA (Front wheel drive 2WD, INVECS-III CVT with sport mode)	MPI
	XTSHZL6Z			W1CJA (Electronic control 4WD, INVECS-III CVT with sport mode)	

<2400>

Model code		Seating capacity	Engine model	Transmission model	Fuel supply system
GF3W	XTHHZL6Z	5-persons	4B12 (2,360 mL) DOHC MIVEC petrol engine	W1CJA (Electronic control 4WD, INVECS-III CVT with sport mode)	MPI

MAJOR SPECIFICATIONS

M4000003002943

Item	GF2W		GF3W	
	XTSHL6Z	XTSHZL6Z	XTHHZL6Z	
Vehicle dimension mm	Overall length		4,655	
	Overall width		1,800	
	Overall height (unladen)		1,680	
	Wheelbase		2,670	
	Track	Front	1,540	
		Rear	1,540	
	Front overhang		955	
	Rear overhang		1,030	
Ground clearance (unladen)		215		
Vehicle wheel alignment	Front	Toe-in (at the centre of tyre tread) mm		1 ± 2
		Camber		0°20' ± 0°30' ^{*1}
		Caster		2° 35' ± 0°45' ^{*1}
		Kingpin inclination angle		12° 45' ± 1° 30'
	Rear	Toe-in (at the centre of tyre tread) mm		3 ± 2
		Camber		-0° 30' ± 0° 45' ^{*1}

Item	GF2W		GF3W
	XTSHL6Z	XTSHZL6Z	XTHHZL6Z
Wheel and tyre	Tyre size	215/70R16 100H	215/70R16 100H, 225/55R18 98H ^{*2}
	Wheel size	16 × 6.5JJ	16 × 6.5JJ, 16 × 6.5J ^{*2} , 18 × 7J ^{*2}
	Offset mm	38	38

NOTE:

^{*1}: Difference between right and left wheels must be less than 0°30'.

^{*2}: Indicates the optional item.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

M4000004000014

⚠ WARNING

SRS-related component.

- **Improper service or maintenance of any component of the SRS and 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 and passenger (from rendering the SRS inoperative).**
- **The SRS components and seat belt with pre-tensioner should not be subjected to heat, so remove the SRS-ECU, driver's and front passenger's air bag modules, clock spring, side-airbag modules, Curtain air bag modules, front and side impact sensor and seat belt pre-tensioner before drying or baking the vehicle after painting.**
 - **SRS-ECU, air bag modules, clock spring, impact sensor: 93° C or more**
 - **Seat belt with pre-tensioner 90° C or more**
- **Service or maintenance of any SRS component and SRS-related component must be performed only at an authorized MITSUBISHI dealer.**
- **MITSUBISHI dealer personnel must thoroughly review workshop manual, and especially its GROUP 52B - Supplemental Restraint System (SRS), before beginning any service or maintenance of any component of the SRS and any**

GROUP 1

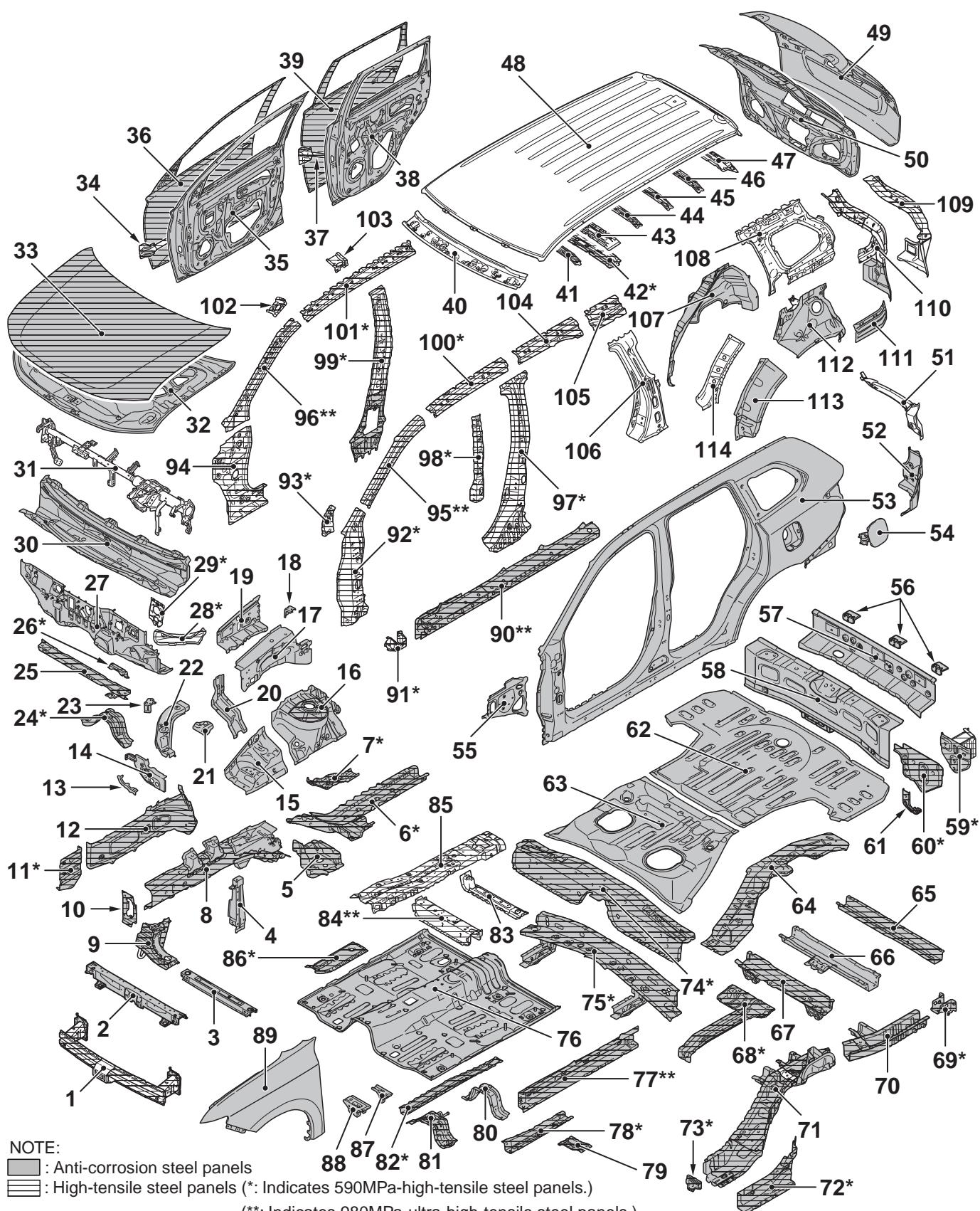
BODY CONSTRUCTION

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BODY COMPONENTS

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1. Front bumper reinforcement
2. Headlamp support panel upper

3. Headlamp support panel lower
4. Headlamp support panel

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- 5. Front body frame to side sill brace
- 6. Front floor sidemember
- 7. Front sidemember rear bulkhead
- 8. Front inner sidemember
- 9. Headlamp support panel lower
- 10. Front sidemember plate
- 11. Front sidemember extension
- 12. Front outer sidemember
- 13. Fender shield extension
- 14. Front fender gusset
- 15. Front fender shield
- 16. Spring house panel
- 17. Fender shield frame upper inner
- 18. Front fender bracket rear
- 19. Front deck frame front upper
- 20. Engine mounting gusset
- 21. Condense tank reinforcement
- 22. Front end upper bar side
- 23. Front fender bracket
- 24. Dash crossmember lower
- 25. Dash panel crossmember upper
- 26. Dash crossmember extension
- 27. Dash panel
- 28. Dash crossmember side
- 29. Dash panel reinforcement
- 30. Cowl top panel
- 31. Front deck crossmember
- 32. Hood panel inner
- 33. Hood panel outer
- 34. Front door side door beam
- 35. Front door panel inner
- 36. Front door panel outer
- 37. Rear door side door beam
- 38. Rear door panel inner
- 39. Rear door panel outer
- 40. Roof rail front
- 41. Roof bow A
- 42. Roof bow centre lower
- 43. Roof bow centre upper
- 44. Roof bow B
- 45. Roof bow C
- 46. Roof bow D
- 47. Roof rail rear
- 48. Roof panel
- 49. Tailgate panel outer
- 50. Tailgate panel inner
- 51. Quarter panel extension outer
- 52. Quarter panel extension rear lower
- 53. Side outer panel
- 54. Fuel filler door panel (Left side)
- 55. Front deck frame rear upper
- 56. Rear bumper reinforcement
- 57. Rear end panel outer
- 58. Rear end inner centre crossmember
- 59. Rear bumper reinforcement
- 60. Rear end inner crossmember side
- 61. Rear bumper bracket
- 62. Rear floor
- 63. Rear seat under floor
- 64. Rear floor side panel
- 65. Rear floor rear end crossmember
- 66. Rear floor crossmember
- 67. Rear floor crossmember
- 68. Rear floor under stringer
- 69. Rear bumper support
- 70. Rear floor sidemember extension
- 71. Rear floor sidemember
- 72. Rear floor side sill inner
- 73. Rear floor sidemember bulkhead
- 74. Rear floor extension
- 75. Rear floor rear seat under crossmember
- 76. Front floor
- 77. Front floor side sill inner
- 78. Front floor sidemember
- 79. Front floor reinforcement
- 80. Front floor crossmember rear centre
- 81. Front floor crossmember front
- 82. Front floor sidemember
- 83. Front floor crossmember rear
- 84. Front floor crossmember front
- 85. Front floor backbone reinforcement
- 86. Front floor sidemember
- 87. Battery tray stay rear (Left side)
- 88. Battery tray stay front (Left side)
- 89. Front fender
- 90. Side sill reinforcement
- 91. Side sill bulkhead front
- 92. Front pillar reinforcement lower inner
- 93. Front pillar reinforcement lower support
- 94. Front lower inner pillar
- 95. Front pillar reinforcement upper
- 96. Front upper inner pillar
- 97. Centre pillar reinforcement
- 98. Rear door hinge reinforcement
- 99. Centre inner pillar
- 100. Roof side rail reinforcement centre
- 101. Roof side rail inner
- 102. Roof rail extension front inner
- 103. Roof rail extension rear inner <Vehicles without sunroof>
- 104. Roof side rail reinforcement rear
- 105. Roof side rail reinforcement rear
- 106. Rear pillar reinforcement
- 107. Rear wheel house panel inner
- 108. Quarter panel upper inner
- 109. Gate pillar reinforcement
- 110. Rear inner pillar
- 111. Quarter panel extension lower inner
- 112. Quarter panel lower inner
- 113. Quarter panel extension inner
- 114. Rear pillar reinforcement lower

BODY MAIN CROSS-SECTIONAL VIEWS

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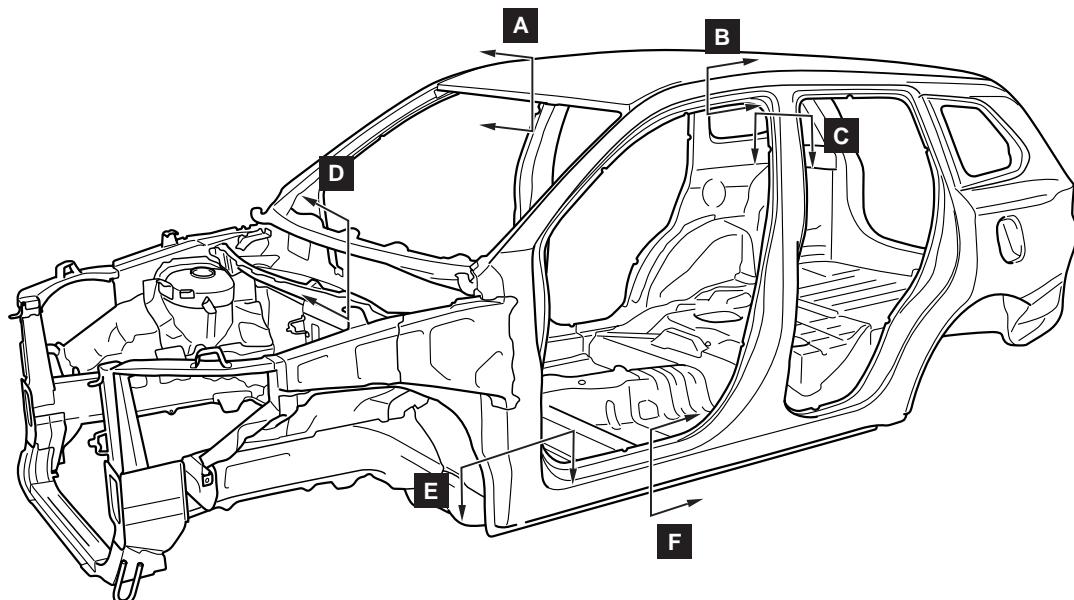
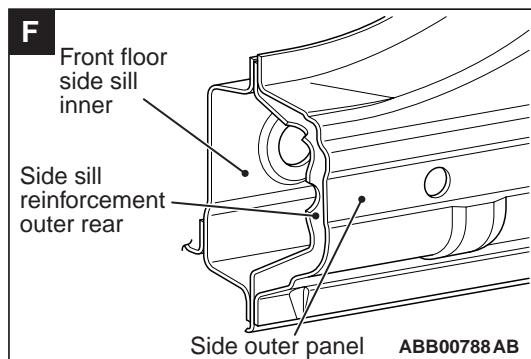
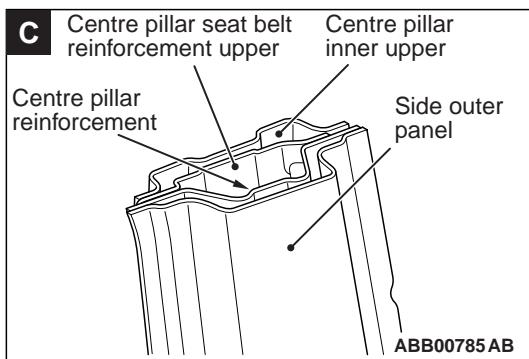
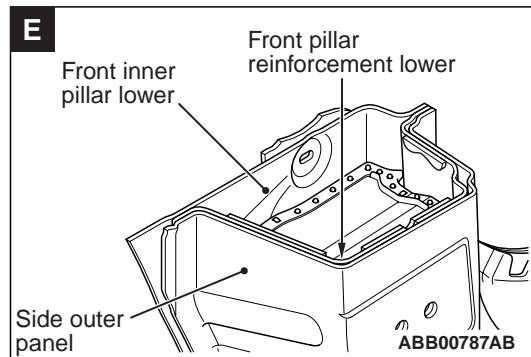
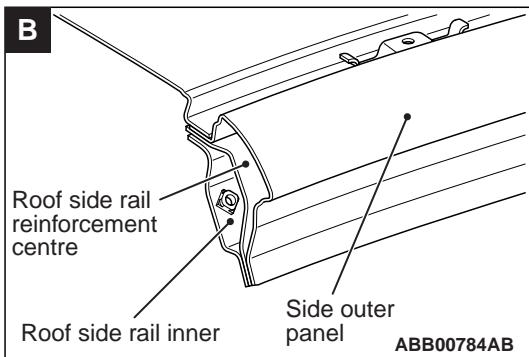
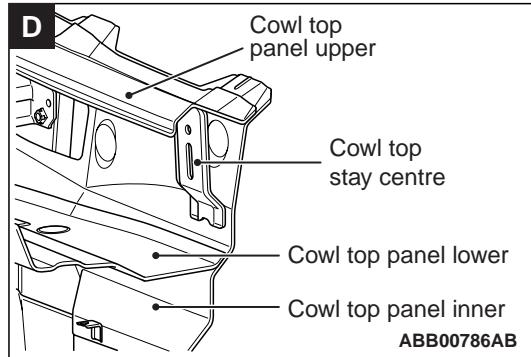
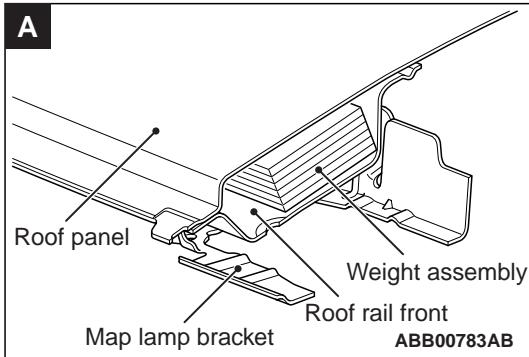


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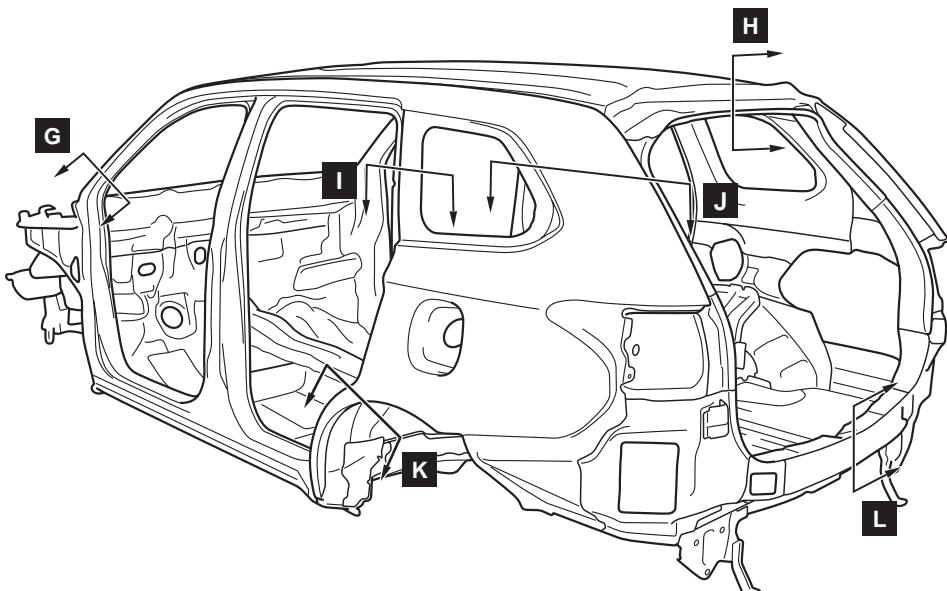
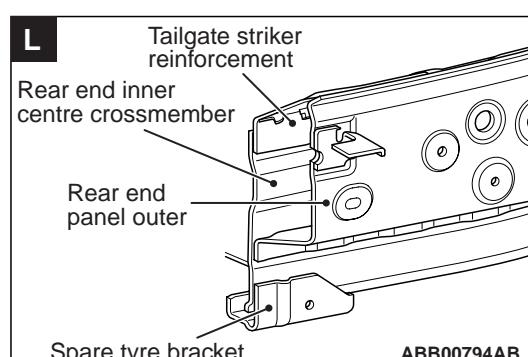
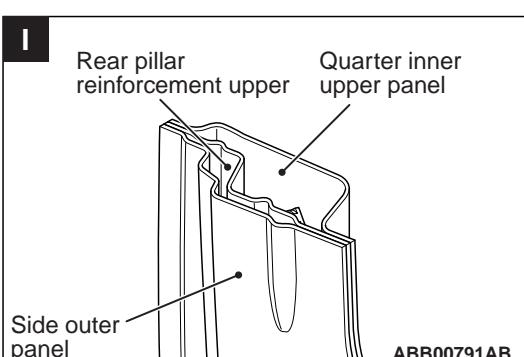
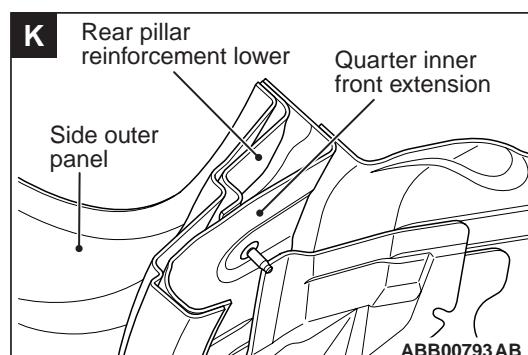
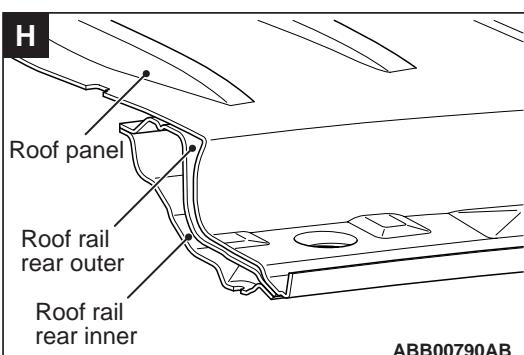
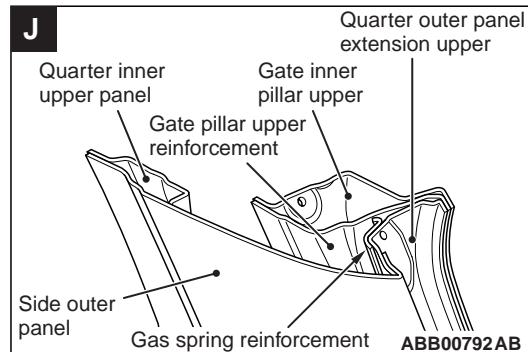
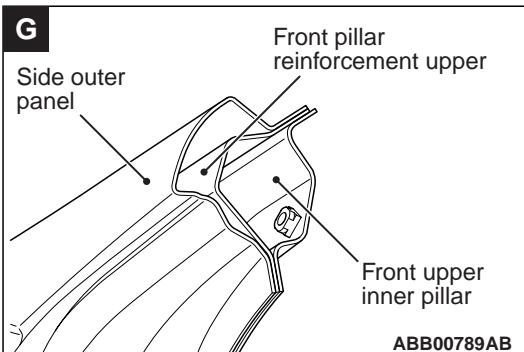


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MAINTENANCE, SERVICEABILITY

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FENDER SHIELD

To facilitate the panel replacement, the dash panel and the front sidemember brace upper have a projection and recess for alignment.

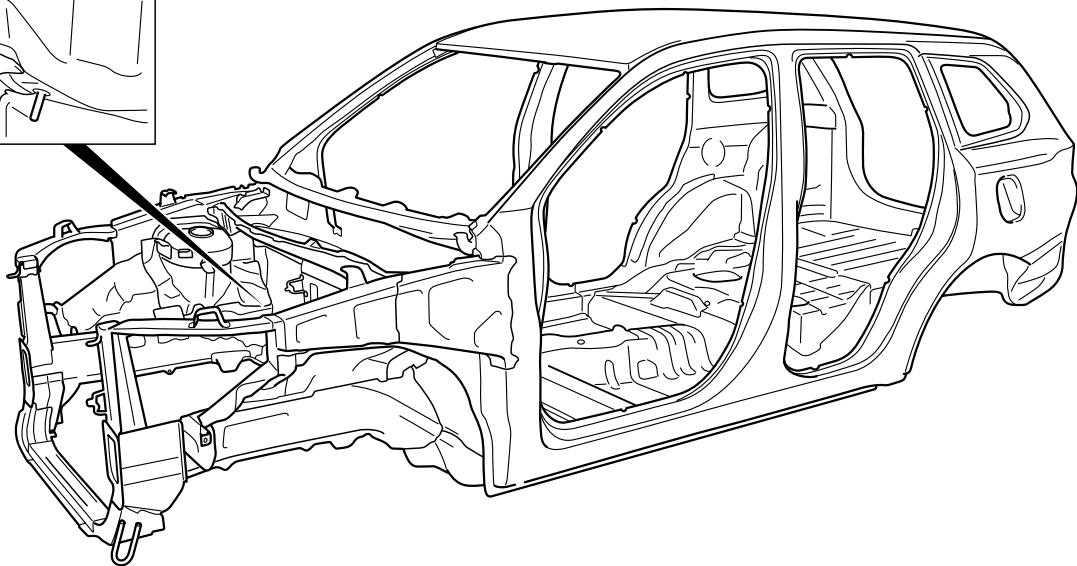
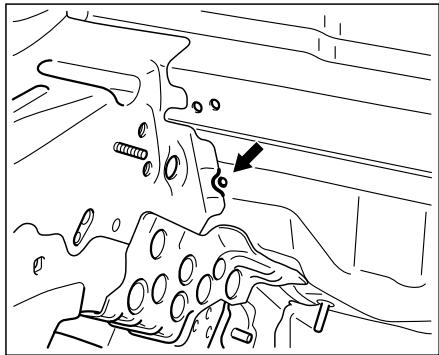


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SIDE STRUCTURE

A panel positioning notch has been added on the door opening to improve assembling workability when replacing the panel.

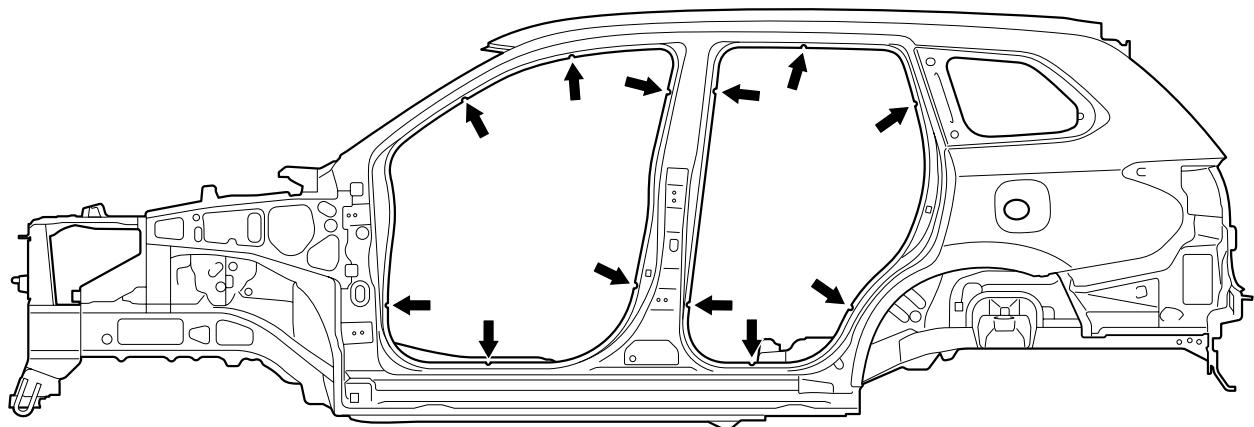
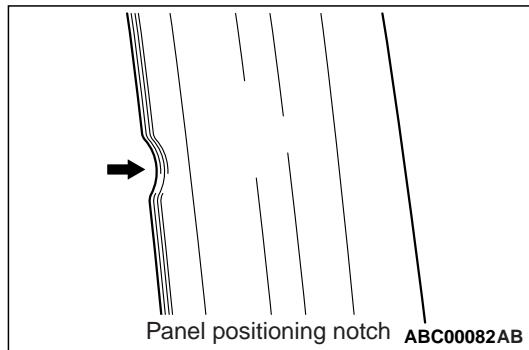
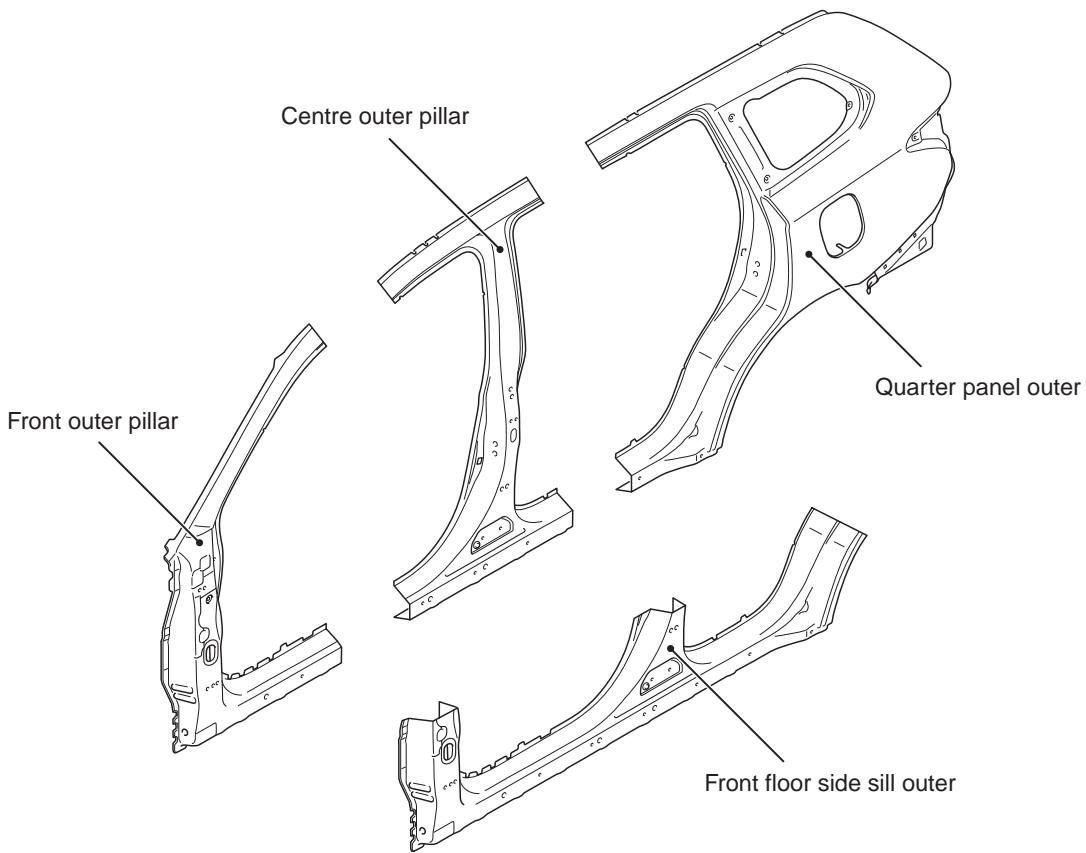


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SIDE OUTER PANEL

The extra parts are supplied in 4 different cut forms as a result of employing the integrated side-frame side outer panel.



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BODY CONSTRUCTION CHARACTERISTICS

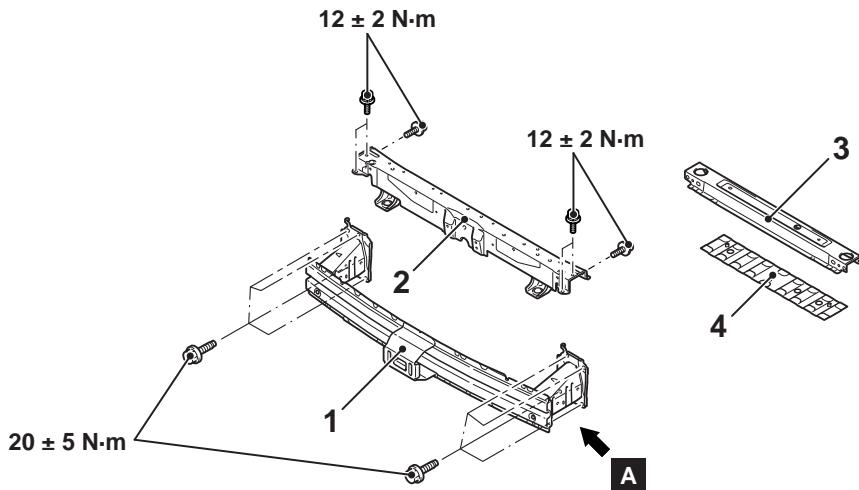
FRONT BODY

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HEADLAMP SUPPORT

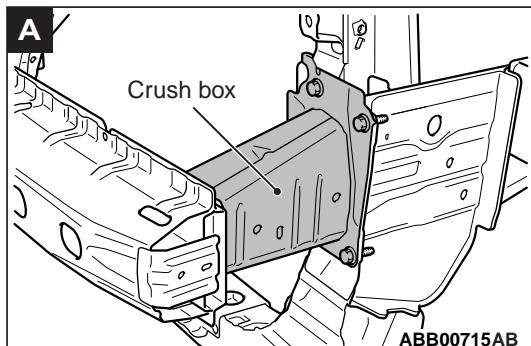
- The crush box structure, which has an octagonal cross-section at the front end of the front side-member, has been adopted. This structure can effectively absorb energy upon frontal impact and reduces the vehicle repair cost caused by a light collision.

- The bolt-on headlamp support panel upper is used to improve maintainability.



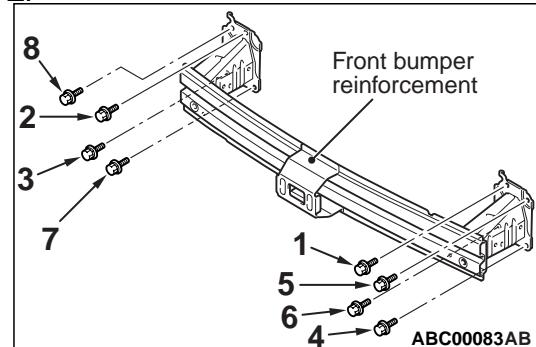
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1. Front bumper reinforcement
2. Headlamp support panel upper
3. Front end crossmember upper
4. Front end crossmember lower

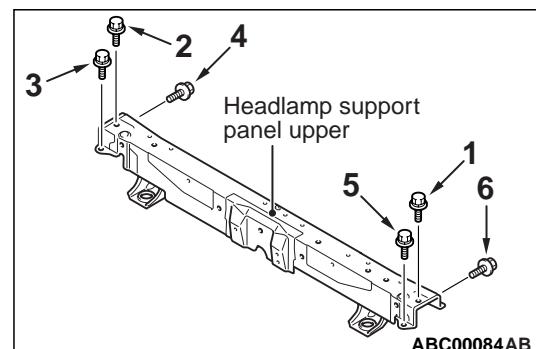


A crash box has been established in order to efficiently absorb energy upon impact.

NOTE:



Tighten the front bumper reinforcement bolts in the numerical order to $20 \pm 5 \text{ N}\cdot\text{m}$.



Tighten the headlamp support panel upper bolts in the numerical order to $12 \pm 2 \text{ N}\cdot\text{m}$.

FENDER SHIELD

- The front frame structure is supported in three directions by the dash crossmember centre, dash crossmember lower and front sidemember rear in order to improve the frontal collision characteristics, and increase the vehicle body rigidity.

- The padding structure of the front fender bracket and the front fender bracket rear has been adopted to have a crushable structure in order to efficiently absorb energy upon impact, improving the pedestrian protection capability.

(Right side)

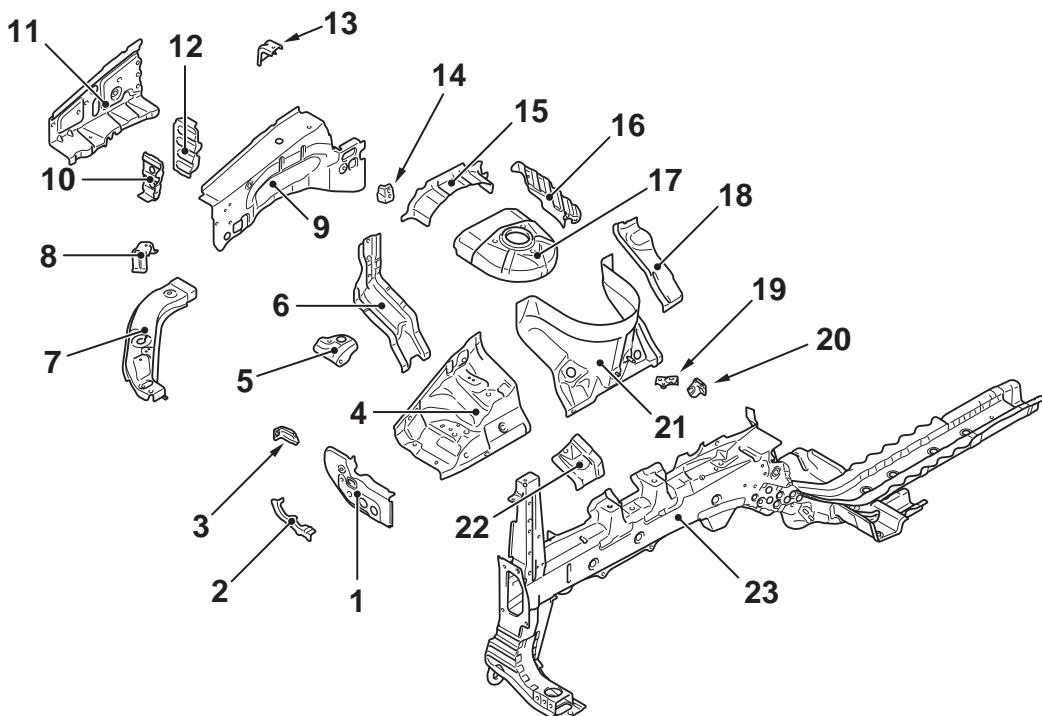


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(Left side)

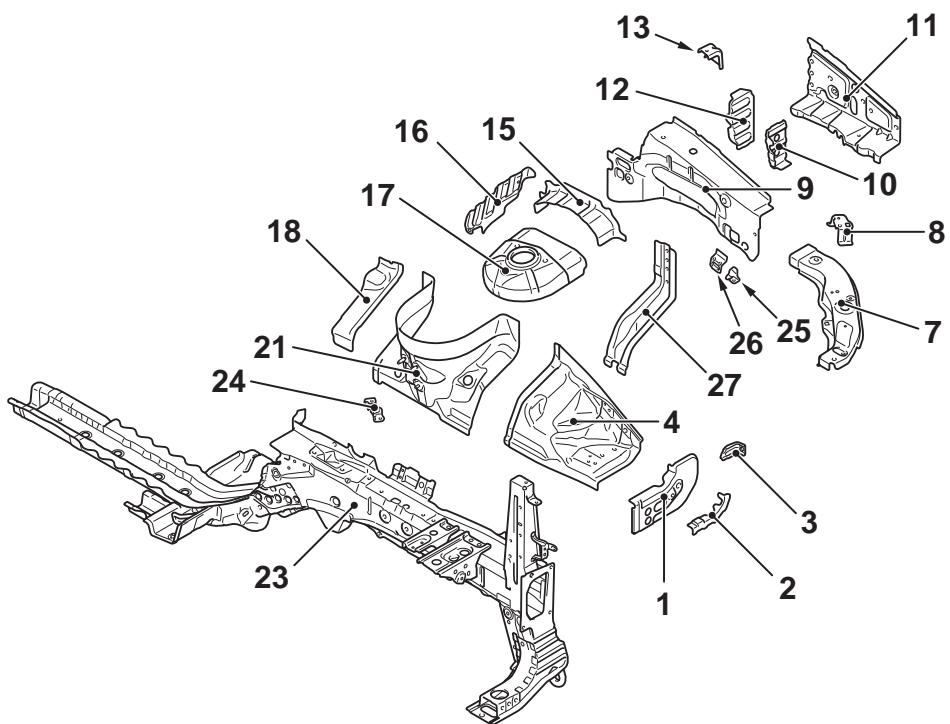


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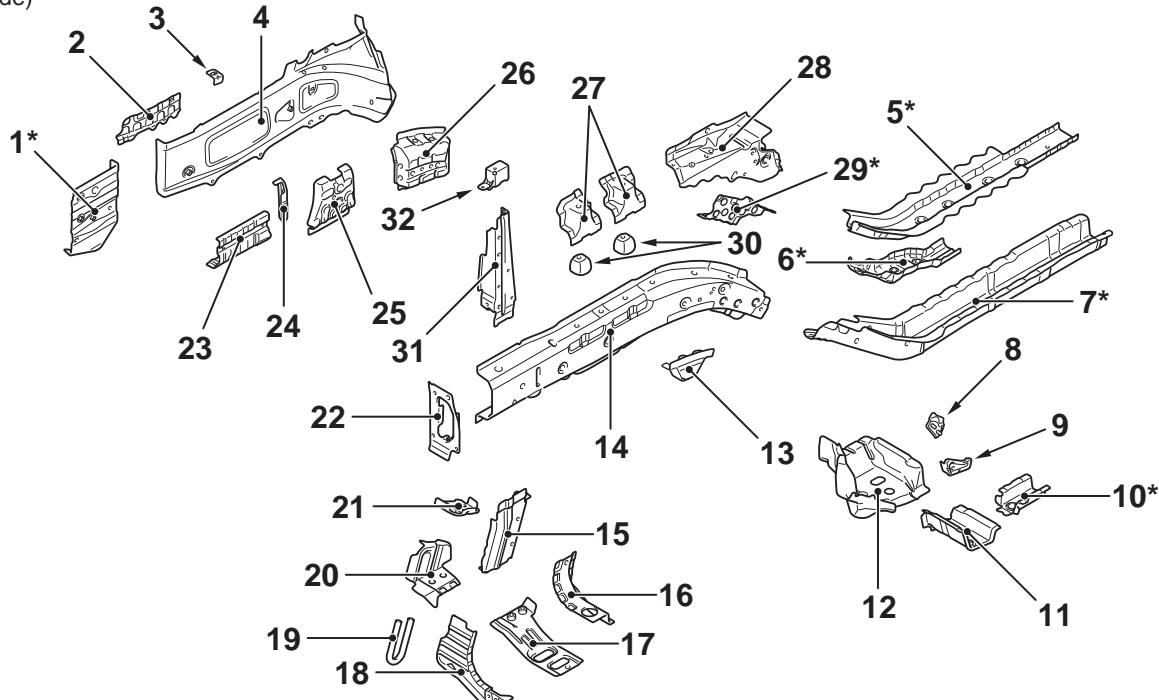
1. Fender gusset
2. Fender shield extension
3. Fender bracket lower
4. Front fender shield
5. Condense tank reinforcement
6. Engine mounting gusset
7. Front end upper bar side
8. Front fender bracket
9. Front upper inner frame
10. Upper frame centre bulkhead
11. Front deck frame front upper
12. Upper frame rear bulkhead
13. Front fender bracket rear
14. Horn bracket
15. Spring house bracket reinforcement
16. Spring house corner gusset
17. Spring house bracket front
18. Spring house panel rear
19. Suction hose bracket
20. Spring house harness bracket
21. Spring house panel
22. Engine mounting bracket upper

23. Front sidemember
24. Engine-ECU bracket
25. Relay box bracket
26. Relay box bracket rear
27. Transmission mounting gusset

FRONT SIDEMEMBER REINFORCEMENT

The 590-MPa class high tensile strength steel panels have been adopted for the front sidemember extension, front sidemember rear reinforcement lower, front sidemember rear bulkhead, front sidemember rear, backbone sidemember extension and front sidemember inner reinforcement to improve the frontal collision characteristics.

(Right side)



NOTE:

*: Indicates 590MPa-high-tensile steel panels.

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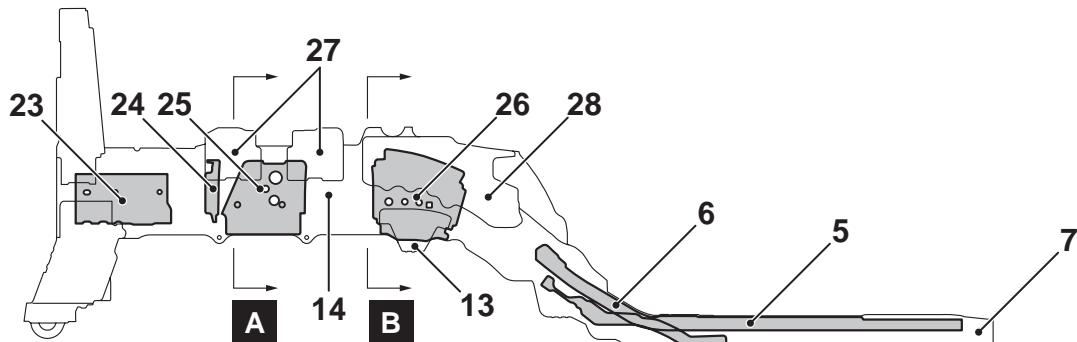
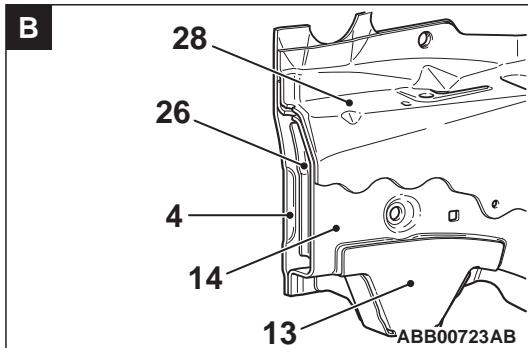
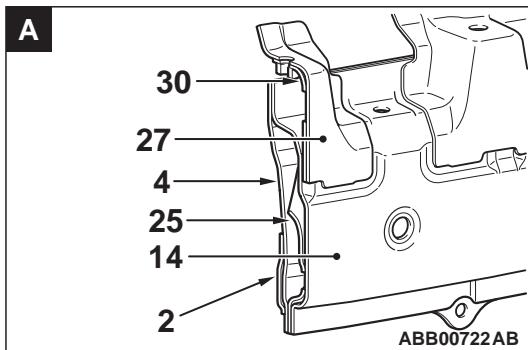


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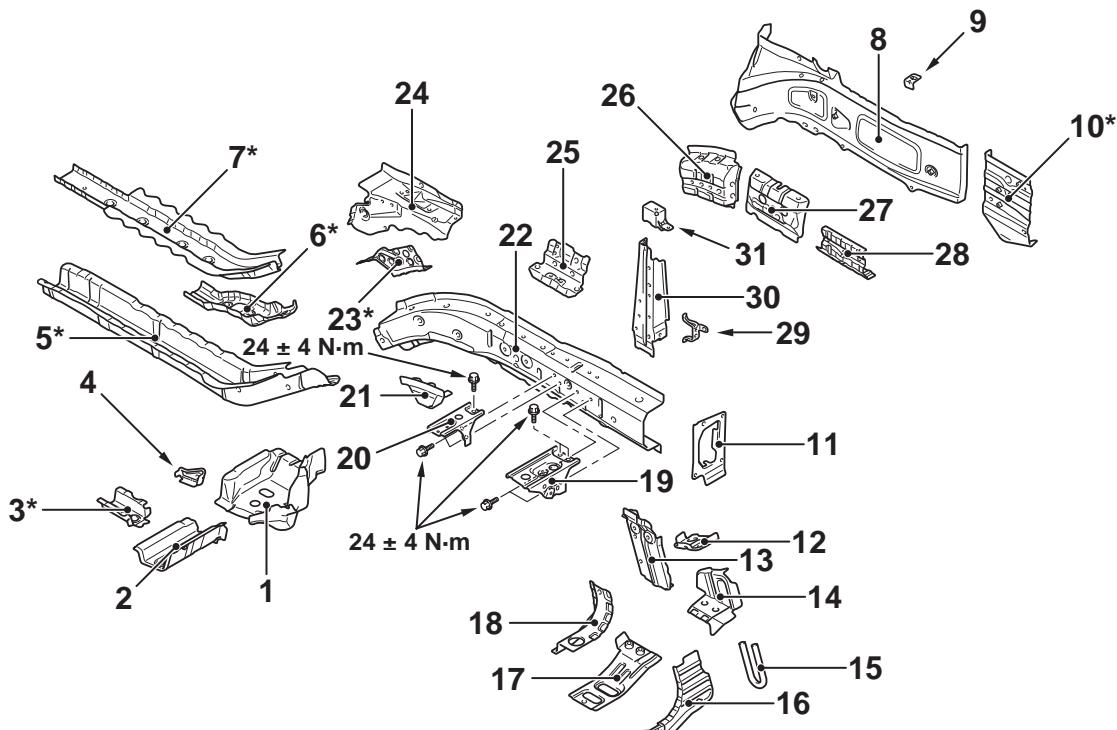
1. Front sidemember extension
2. Sidemember front outer reinforcement
3. Brake hose bracket
4. Front sidemember outer
5. Front sidemember rear reinforcement lower
6. Front sidemember rear bulkhead
7. Front sidemember rear
8. Height sensor bracket
9. Dash crossmember lower bulkhead
10. Backbone sidemember extension

11. Dash crossmember extension lower
12. Front body frame to side sill brace
13. Front suspension crossmember bracket front
14. Front sidemember inner
15. Subframe support panel inner
16. Radiator bracket lower
17. Front end crossmember extension lower
18. Front sidemember plate front lower
19. Towing hook
20. Subframe support panel outer

21. Subframe bulkhead support
22. Front sidemember plate
23. Front sidemember inner reinforcement front
24. Front sidemember bulkhead front
25. Engine mounting bulkhead
26. Front suspension crossmember bulkhead
27. Engine mounting bracket
28. Front sidemember brace upper
29. Front sidemember inner reinforcement
30. Engine mounting reinforcement
31. Headlamp support panel
32. Front end upper bar bracket



(Left side)



NOTE:

*: Indicates 590MPa-high-tensile steel panels.

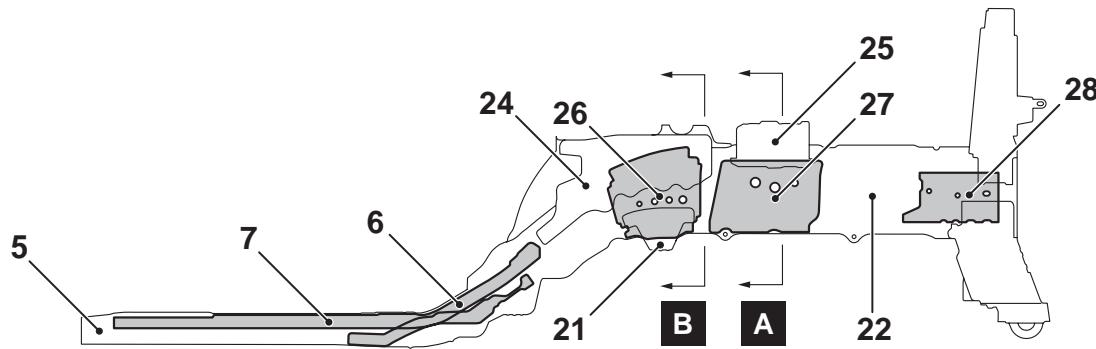


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1. Front body frame to side sill brace
2. Dash crossmember extension lower
3. Backbone sidemember extension
4. Dash crossmember lower bulkhead
5. Front sidemember rear
6. Front sidemember rear bulkhead
7. Front sidemember rear reinforcement lower
8. Front outer sidemember
9. Brake hose bracket
10. Front sidemember extension
11. Front sidemember plate
12. Subframe bulkhead support
13. Subframe support panel inner
14. Subframe support panel outer
15. Towing hook
16. Front sidemember plate front lower
17. Front end crossmember extension lower
18. Radiator bracket lower
19. Battery tray stay front
20. Battery tray stay rear
21. Front suspension crossmember bracket front
22. Front sidemember inner
23. Front sidemember inner reinforcement
24. Front sidemember brace upper
25. Transmission mounting reinforcement
26. Front suspension crossmember bulkhead
27. Transmission mounting bulkhead
28. Front sidemember inner reinforcement front
29. Horn bracket
30. Headlamp support panel
31. Front end upper bar bracket

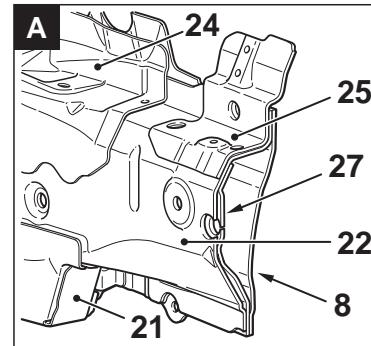


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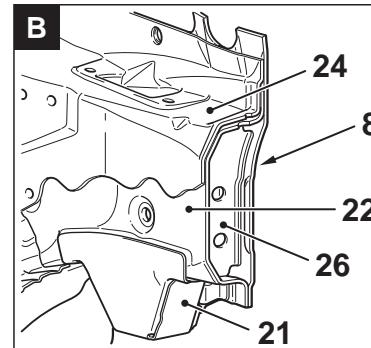


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FRONT DECK

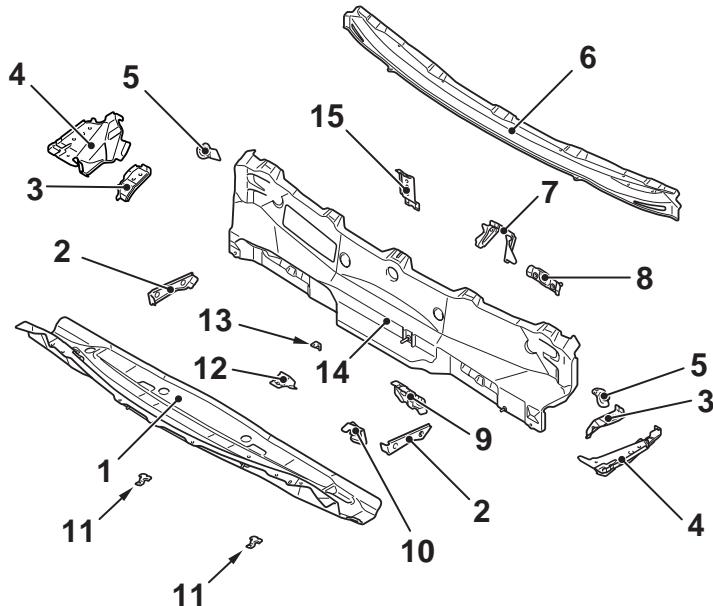


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1. Cowl top panel lower	9. Brake pedal reinforcement upper
2. Cowl top stay side	10. Wiper front bracket
3. Wiper side bracket	11. Harness bracket
4. Upper frame extension inner	12. Wiper bracket centre
5. Fender bracket	13. Harness bracket
6. Cowl top panel upper	14. Cowl top panel inner
7. Deck crossmember bracket	15. Cowl top stay centre
8. Brake pedal support bracket	

DASH PANEL

- The front frame structure is supported in three directions by the dash crossmember centre, dash crossmember lower and front sidemember rear in order to improve the frontal collision characteristics, and increase the vehicle body rigidity.
- The 590-MPa class high tensile strength steel panels have been adopted for the dash crossmember centre, dash crossmember side and dash panel reinforcement to improve the frontal collision characteristics.

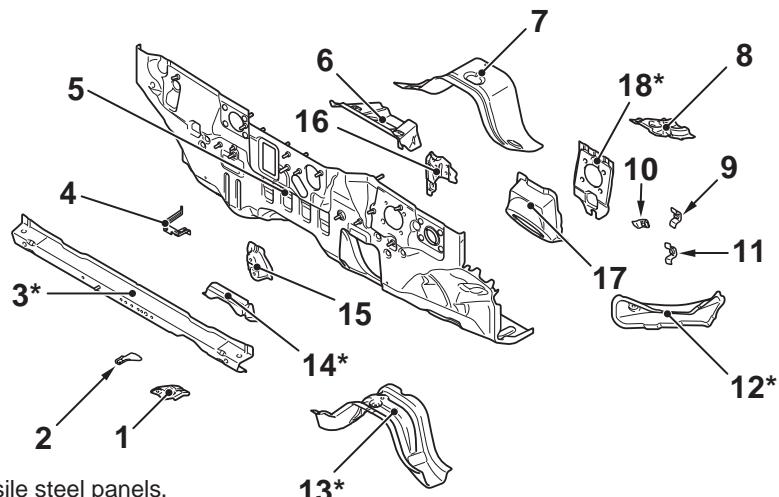


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NOTE:

*: Indicates 590MPa-high-tensile steel panels.

1. Brake tube bracket	4. Dash heat protector bracket
2. Harness bracket	5. Dash panel
3. Dash crossmember centre	6. Backbone reinforcement front

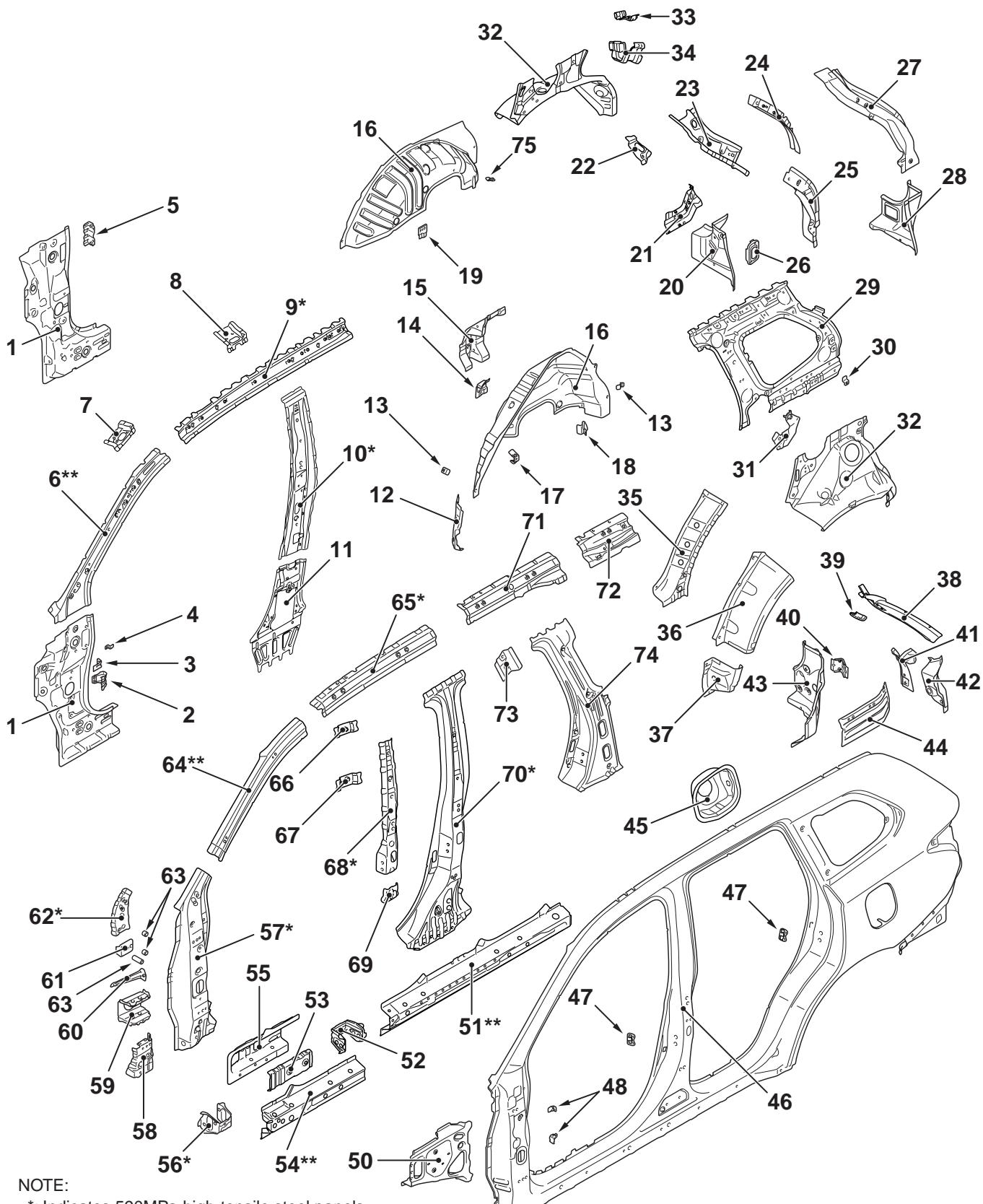
7. Dash panel lower
8. Front floor sidemember reinforcement upper
9. EPS ECU A bracket
10. EPS ECU B bracket
11. EPS ECU C bracket
12. Dash crossmember side
13. Dash crossmember lower
14. Dash crossmember extension
15. Canister bracket
16. Accelerator pedal bracket
17. Steering shaft bracket
18. Dash panel reinforcement

SIDE BODY

M4010011001623

SIDE STRUCTURE

- The 590 MPa-high-tensile steel panel has been adopted for the centre pillar and the roof side rail, and the 980 MPa-ultra-high-tensile steel panel has been adopted for the front pillar and the side sill to improve the collision characteristics.
- The front pillar, centre pillar and rear pillar have been connected to the roof, and the closed section structure has been adopted to the tailgate opening to improve body rigidity, steering stability, and riding comfort.



NOTE:

*: Indicates 590MPa-high-tensile steel panels.

**: Indicates 980MPa-ultra-high-tensile steel panels.

1. Front inner pillar lower
2. Hood opener bracket (Left side)
3. Cowl side trim bracket
4. Harness bracket

5. Deck crossmember bracket (Right side)
6. Front upper inner pillar
7. Roof rail extension front inner

ABC00041AB

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- 8. Roof rail extension rear inner <Vehicles without sunroof>
- 9. Roof side rail inner
- 10. Centre pillar inner upper
- 11. Centre pillar inner lower
- 12. Side sill end plate
- 13. Harness bracket
- 14. Cargo hook bracket
- 15. Rear wheel house reinforcement
- 16. Rear wheel house inner panel
- 17. Filler pipe mounting bracket (Left side)
- 18. Rear wheel house reinforcement rear (Left side)
- 19. Harness bracket (Right side)
- 20. Gate inner pillar extension lower
- 21. Gate inner pillar extension centre
- 22. Gate inner pillar extension upper
- 23. Gate inner pillar upper
- 24. Gate pillar inner reinforcement (Left side) <Vehicles with electric tailgate>
- 25. Gate inner pillar lower
- 26. Gate pillar lower bulkhead
- 27. Gate pillar upper reinforcement
- 28. Gate pillar lower reinforcement
- 29. Quarter inner upper panel
- 30. Harness bracket
- 31. Second seat belt reinforcement lower
- 32. Quarter inner lower panel
- 33. Jack support (Right side)
- 34. Jack bracket (Right side)
- 35. Rear pillar reinforcement lower
- 36. Quarter inner front extension
- 37. Quarter inner front extension lower
- 38. Quarter outer panel extension upper
- 39. Gas spring reinforcement
- 40. Tailgate damper reinforcement side
- 41. Rear lamp housing
- 42. Rear lamp housing extension
- 43. Quarter outer panel extension rear
- 44. Quarter panel extension lower inner
- 45. Fuel filler neck bracket (Left side)
- 46. Side outer panel
- 47. Nut plate
- 48. Front fender bracket
- 49. Fender bracket
- 50. Front deck frame rear upper
- 51. Side sill reinforcement outer rear
- 52. Side sill bulkhead A
- 53. Side sill reinforcement support front
- 54. Side sill reinforcement outer front
- 55. Side sill inner support front
- 56. Side sill bulkhead front
- 57. Front pillar reinforcement lower
- 58. Front door hinge reinforcement lower
- 59. Front pillar reinforcement bulkhead centre
- 60. Front door checker reinforcement
- 61. Front door hinge reinforcement upper
- 62. Front pillar reinforcement lower support
- 63. Deck support pipe (Left side)
- 64. Front pillar reinforcement upper
- 65. Roof side rail reinforcement centre
- 66. Centre pillar seat belt reinforcement upper
- 67. Centre pillar seat belt reinforcement lower
- 68. Rear door hinge reinforcement
- 69. Rear door hinge reinforcement lower
- 70. Centre pillar reinforcement
- 71. Roof side rail reinforcement rear
- 72. Roof side rail reinforcement rear
- 73. Second seat belt reinforcement upper
- 74. Rear pillar reinforcement upper
- 75. Harness bracket (Right side)

SIDE STRUCTURE REINFORCEMENT

The ring structure of the side structure reinforcement has been adopted to improve the side collision characteristics and the rigidity of the whole vehicle.

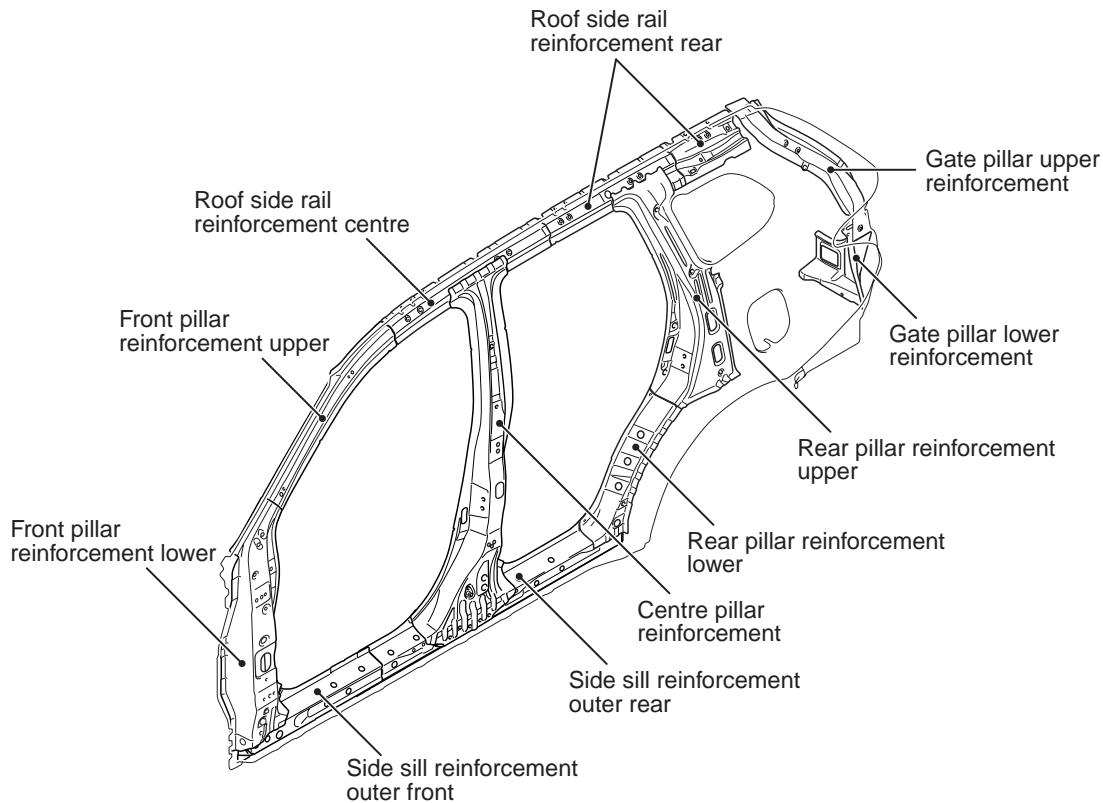


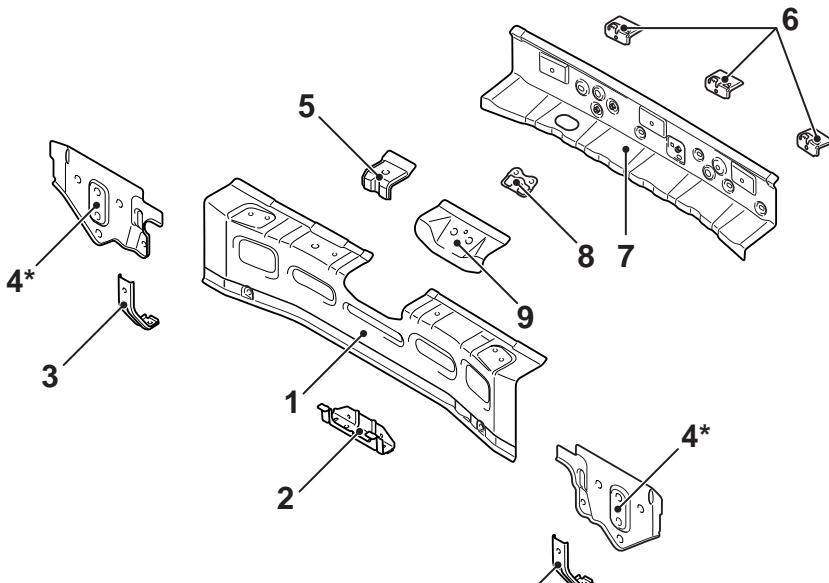
ABB00770AB

REAR BODY

M4010012001002

REAR END CROSMEMBER

The 590-MPa class high tensile strength steel panels have been adopted for the rear end inner crossmember side to improve the frontal collision characteristics.



NOTE:

*: Indicates 590MPa-high-tensile steel panels.

1. Rear end inner centre crossmember
2. Spare tyre bracket
3. Rear bumper bracket
4. Rear end inner crossmember side
5. Spare tyre reinforcement rear end
6. Rear bumper reinforcement
7. Rear end panel outer
8. Nut plate
9. Tailgate striker reinforcement

ABB00771AB

ROOF

M4010013001782

The 590-MPa class high tensile strength steel panels has been adopted for the roof bow centre lower to improve the side collision characteristics.

<Vehicles without Sunroof>

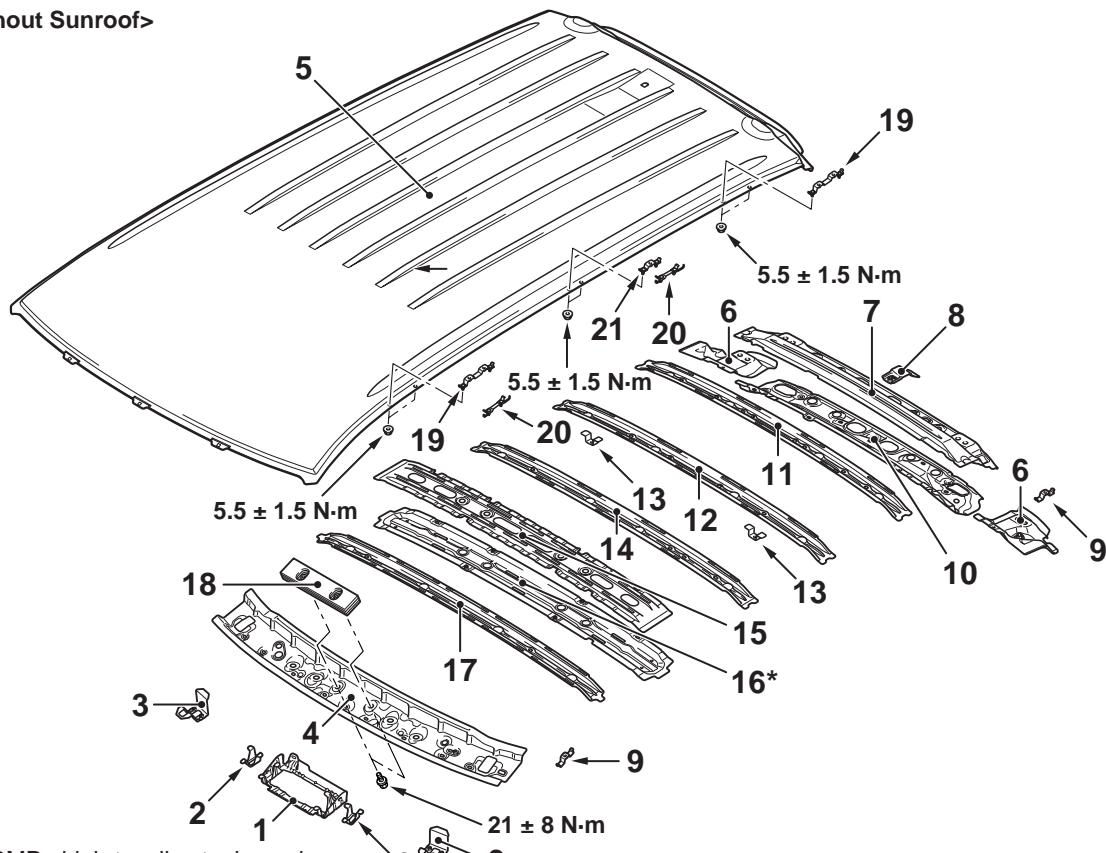


ABB00772AB

<Vehicles with Sunroof>

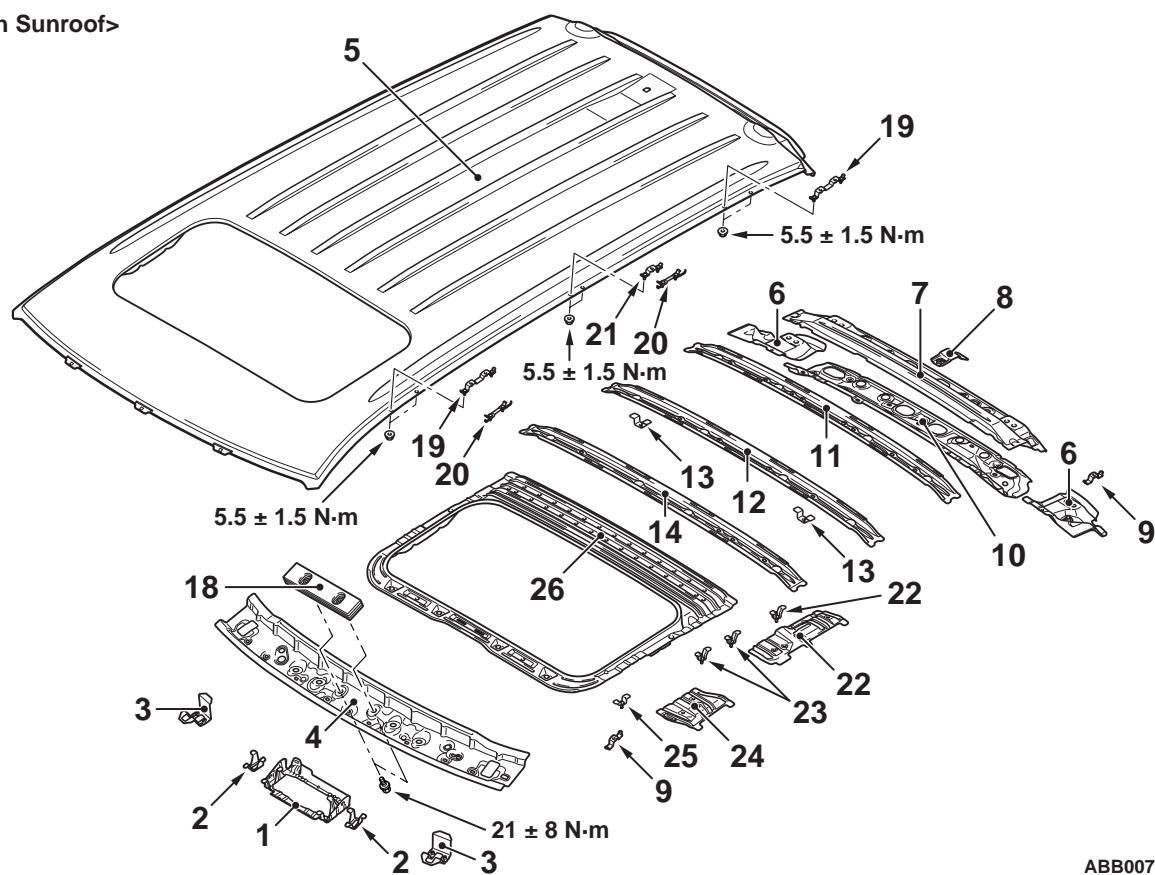


ABB00773AB

1. Map lamp bracket
2. Holder bracket
3. Sunvisor bracket

4. Roof rail front
5. Roof panel
6. Tailgate hinge reinforcement

7. Roof rail rear outer
8. Second seat belt bracket centre
9. Roof rail bracket <Vehicles with roof rail>
10. Roof rail rear inner
11. Roof bow D
12. Roof bow C
13. Head lining bracket
14. Roof bow B
15. Roof bow centre upper
16. Roof bow centre lower
17. Roof bow A
18. Weight assembly
19. Roof rail bracket <Vehicles with roof rail>
20. Roof carrier bracket <Vehicles without roof rail>
21. Roof rail bracket <Vehicles with roof rail>

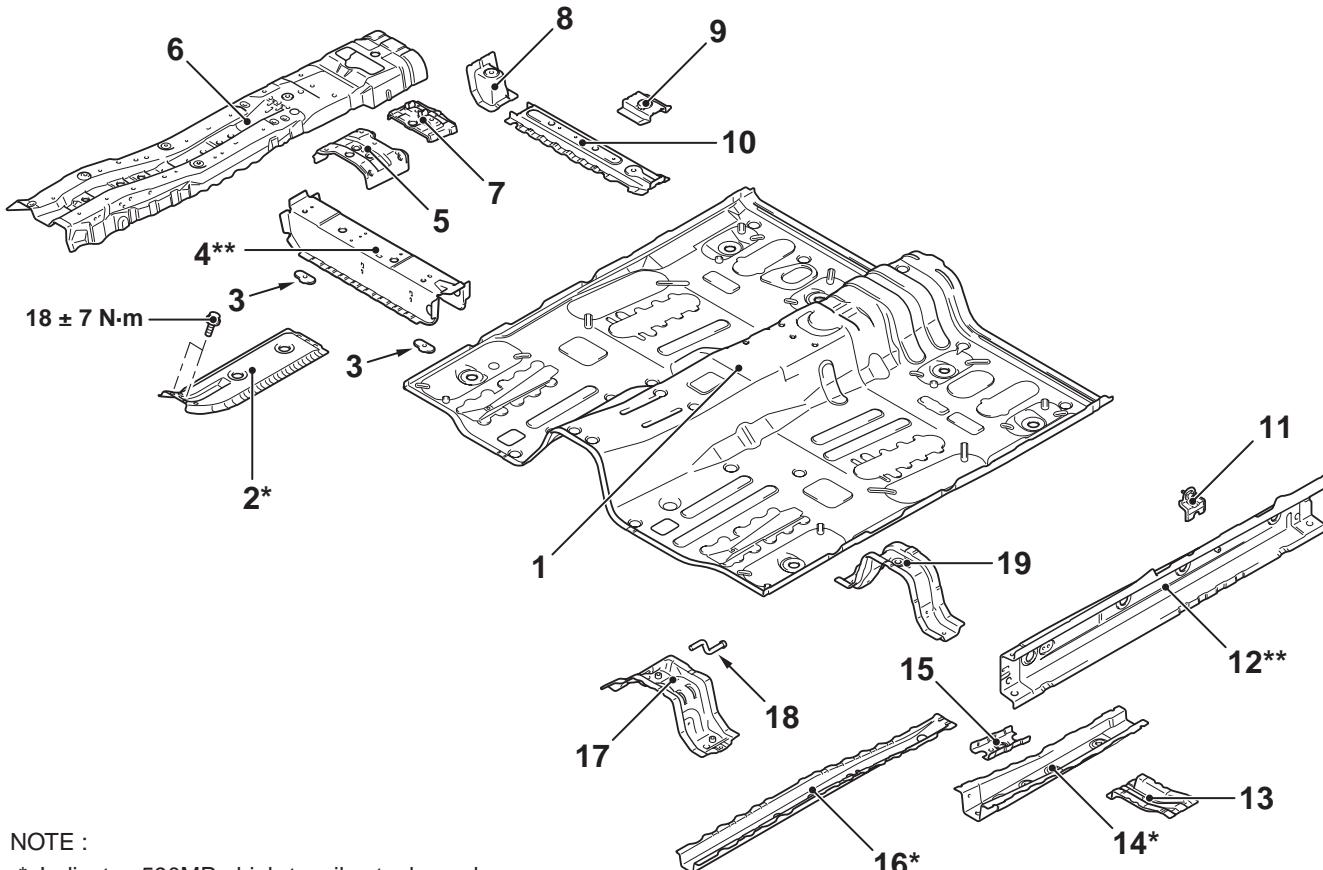
22. Set bracket rear
23. Sunroof bracket
24. Set bracket front
25. Set bracket front
26. Roof reinforcement

UNDER BODY

M4010014001633

FRONT FLOOR

The 590-MPa class high tensile strength steel panels have been adopted for the front floor sidemember and front floor sidemember front, and the 980-MPa class ultra high tensile strength steel panels for the front floor crossmember front and front floor side sill inner to improve the body rigidity.



NOTE :

*: Indicates 590MPa-high-tensile steel panels.

**: Indicates 980MPa-ultra-high-tensile steel panels.

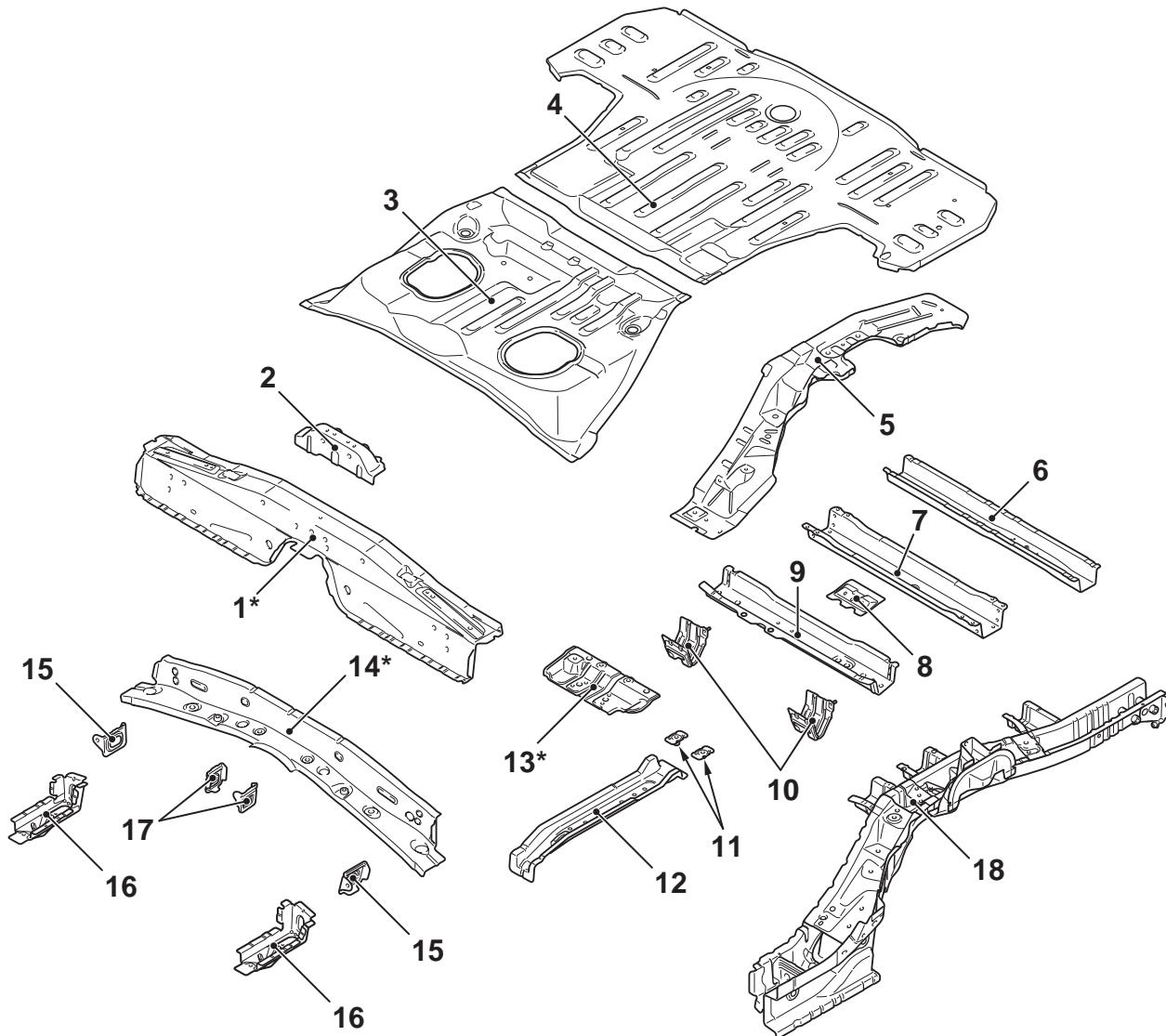
1. Front floor
2. Front floor sidemember
3. Nut plate
4. Front floor crossmember front
5. Parking brake lever reinforcement
6. Backbone reinforcement
7. Parking brake cable reinforcement
8. Seat centre bracket rear
9. Seat side bracket rear
10. Front floor crossmember rear
11. Seat belt reinforcement

12. Front floor side sill inner
13. Front floor reinforcement
14. Front floor sidemember front
15. Front floor sidemember plate
16. Front floor sidemember
17. Backbone crossmember front
18. Muffler hanger hook
19. Front floor crossmember rear centre

ABB00774AB

REAR FLOOR

The 590-MPa class high tensile strength steel panels have been adopted for the rear floor extension, second seat rear reinforcement centre and rear seat crossmember to improve the side collision characteristics.



NOTE :

*: Indicates 590MPa-high-tensile steel panels.

1. Rear floor extension
2. Second seat front bracket centre
3. Rear seat under floor
4. Rear floor
5. Rear floor side panel
6. Rear floor crossmember rear end
7. Rear floor crossmember centre
8. Third seat bracket centre front
9. Rear floor crossmember front
10. Fuel tank rear bracket
11. Nut plate
12. Front stringer
13. Second seat rear reinforcement centre
14. Rear seat crossmember

15. Rear seat crossmember bulkhead side
16. Sidemember front floor extension
17. Rear seat crossmember bulkhead inner
18. Rear floor sidemember

ABC00047AB

REAR FLOOR SIDEMEMBER REINFORCEMENT

The 590-MPa class high tensile strength steel panels have been adopted for the rear bumper support, rear floor side sill inner and rear floor sidemember bulkhead to improve the rear collision characteristics.

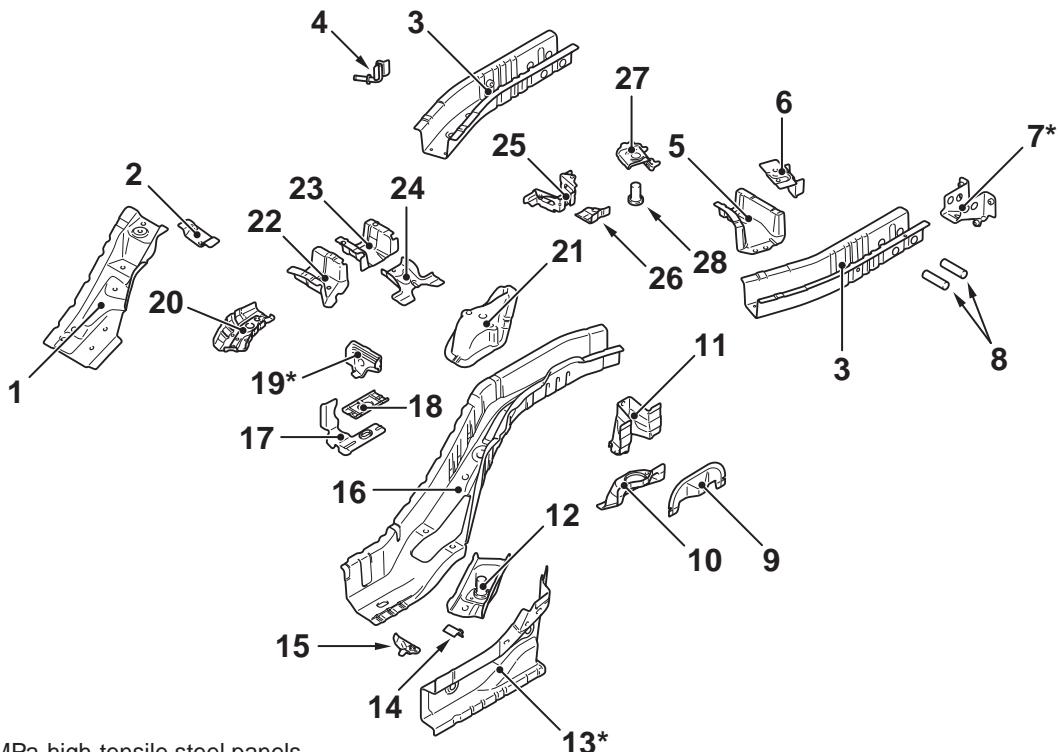


ABB00776AB

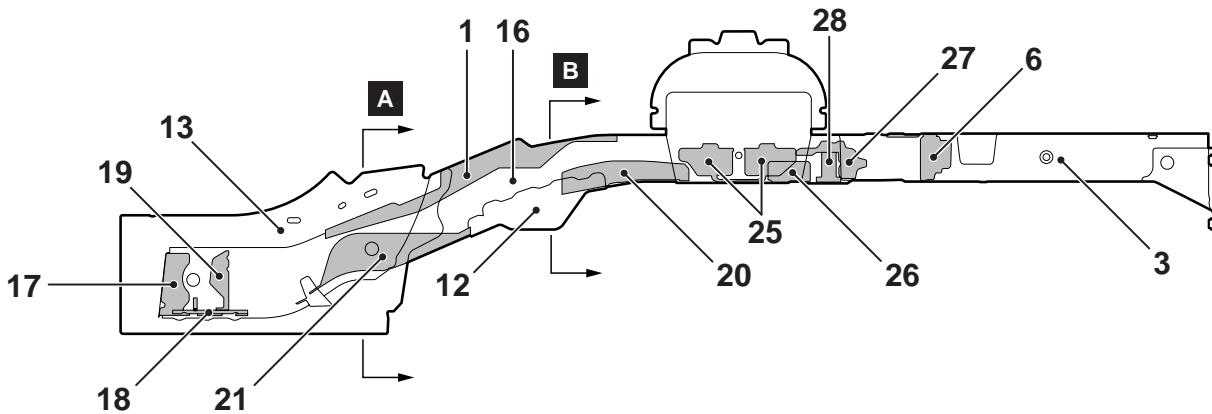
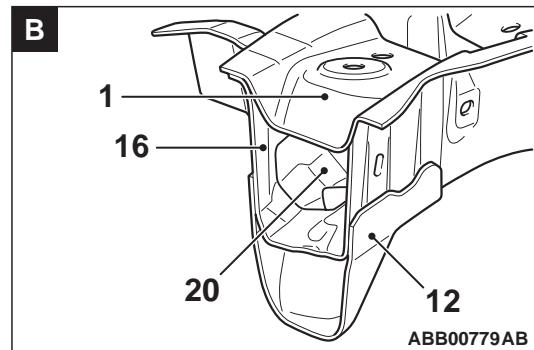
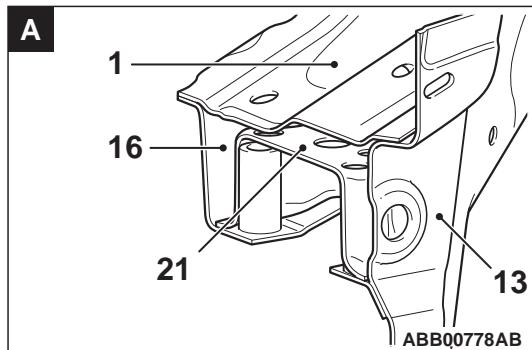


ABB00777AB

1. Rear floor sidemember reinforcement	17. Rear floor sidemember extension front
2. Third seat bracket side front	18. Rear tie down plate
3. Rear floor sidemember extension	19. Rear floor sidemember bulkhead
4. Muffler hanger rear (Right side)	20. Rear floor sidemember reinforcement rear
5. Rear floor crossmember extension rear	21. Trailing arm bracket
6. Third seat anchor reinforcement	22. Rear floor crossmember extension front
7. Rear bumper support	23. Rear floor crossmember extension centre
8. Shipping pipe	24. Rear floor crossmember extension centre lower
9. Rear spring house panel	25. Rear floor sidemember bulkhead rear
10. Rear spring house bracket	26. Rear floor sidemember reinforcement rear
11. Rear spring house reinforcement	27. Rear suspension bracket rear
12. Rear suspension bracket front	28. Pipe nut
13. Rear floor side sill inner	
14. Rear brake hose bracket	
15. Rear parking brake cable rear bracket	
16. Rear floor sidemember lower	



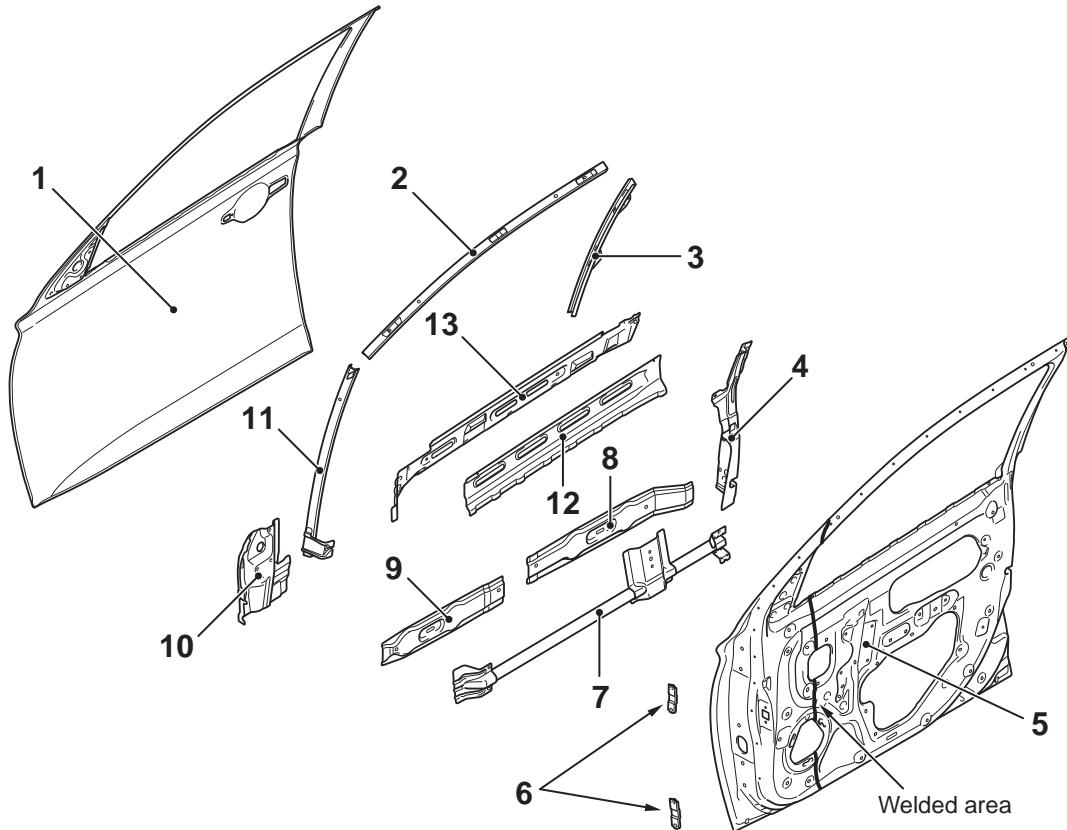
DOOR

M4010015001120

An uneven thickness steel sheet* has been used for the front door panel inners to make the forward part of the vehicle thicker for reduction in vehicle weight and higher rigidity.

*NOTE: *: A steel sheet of varying thickness that is welded into one steel sheet.*

(Front door)



(Rear door)

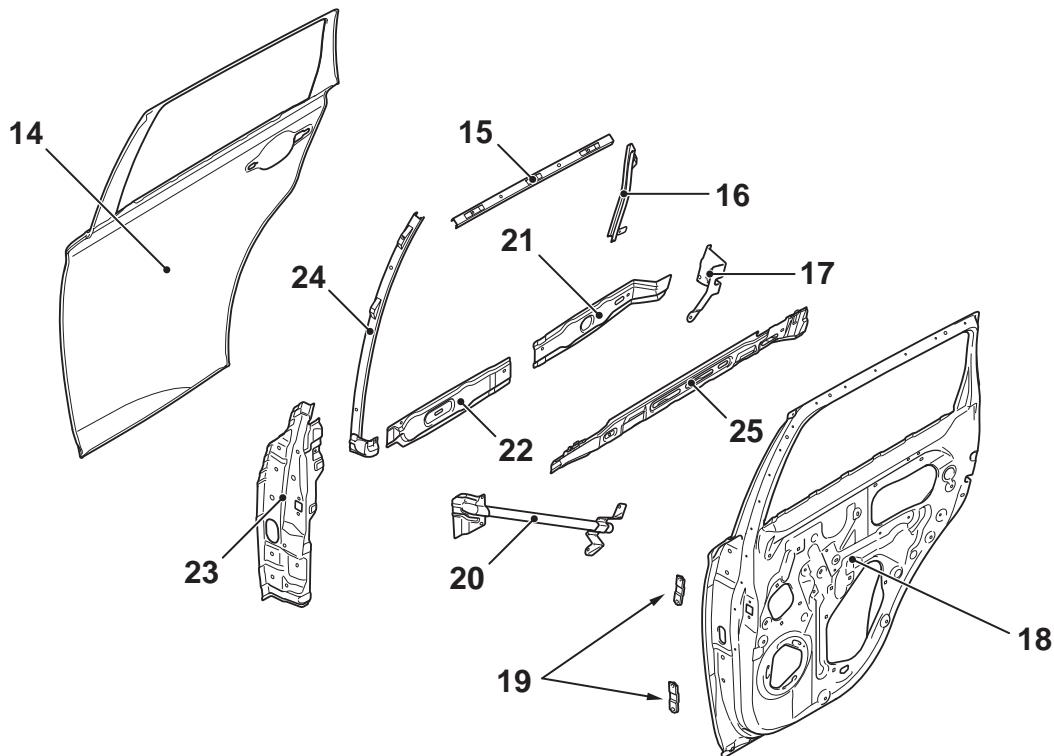


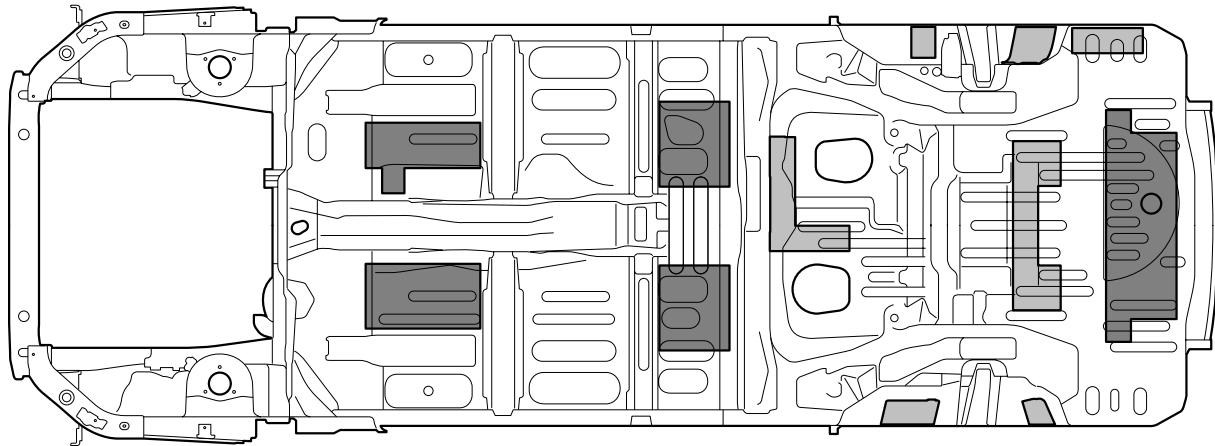
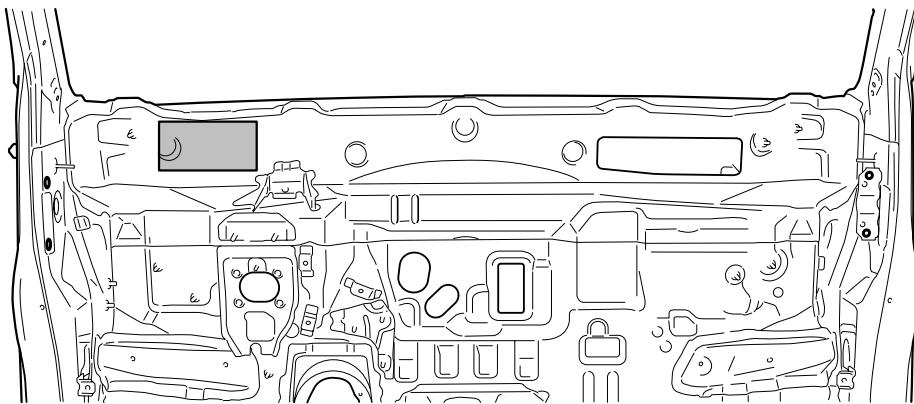
ABB00781AB

1. Front door panel outer	14. Rear door panel outer
2. Front door window upper sash	15. Rear door window upper sash
3. Front door window rear sash	16. Rear door window rear sash
4. Front door latch reinforcement	17. Rear door latch reinforcement
5. Front door panel inner	18. Rear door panel inner
6. Nut plate	19. Nut plate
7. Front door side door beam	20. Rear door side door beam
8. Front door outer stiffener rear	21. Rear door outer stiffener rear
9. Front door outer stiffener front	22. Rear door outer stiffener front
10. Front door mirror reinforcement	23. Rear door hinge reinforcement
11. Front door window front sash	24. Rear door window front sash
12. Front door beltline outer reinforcement	25. Rear door beltline outer reinforcement
13. Front door beltline inner reinforcement	

SILENCER APPLICATION LOCATIONS

A silencer (spray-type anti-vibration agent) have been adhered on the top part of the floor and the inside of the cowl top panel inner to improve anti-vibration performance and to shut out exhaust gas heat.

M4010000100128



NOTE:

: 2.5 mm film thick spray-type anti-vibration agent. (Place two 1.6 mm melting sheet one on top of another.)

: 4.0 mm film thick spray-type anti-vibration agent. (Place three 1.6 mm melting sheet one on top of another.)

() indicates the number of 1.6 mm thick melting sheets that are used for repair.

ABC00051AB

LOCATIONS USING URETHANE FOAM AND FOAM MATERIAL

M4010018000405

CAUTION

The sound dampening foam material may burn when heated. Always observe the following instructions:

- Never use a gas burner to burn the areas where sound dampening foam material are used.
- When cutting the parts which are provided with sound dampening foam material, ensure to use tools (air saw, etc.) that do not generate fire.
- If there are residual sound dampening foam material remaining on the cut section (body side), remove the sound dampening foam material from periphery of the welding area

before welding work.

1. The sound dampening foam material has been adopted to the upper and lower sections of the front pillar, roof side rail section, centre pillar lower section, wheel house arch, and rear end inside to shield from external noise.
2. Urethane foam has been inserted into the centre pillar lower section to shield from external noise.

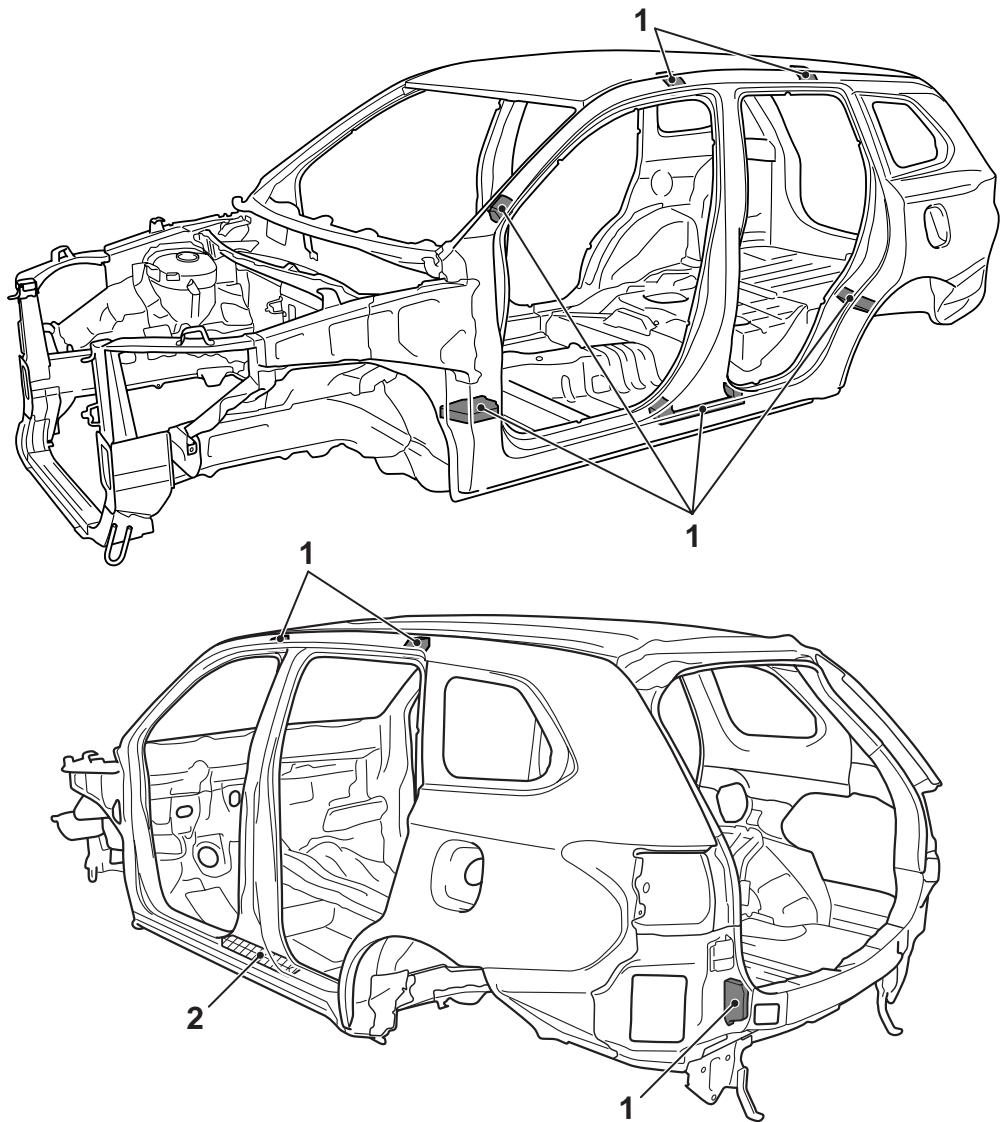


ABB00855AB

STIFFENER AND DAMP SHEET APPLICATION LOCATIONS

To enhance the surface stiffness, a stiffener is adhered to the inside of the side outer panel, and a damping sheet is adhered to the inside of the dash panel.

M4010001400490

NOTE:

- The main contents of a stiffener are epoxy resin. It comes in a sheet form and contains a mixture of glass fibre and filler, and cures (stiffens) when heated.
- No spare part of the stiffener for repair is available in the field. If the stiffener is damaged, replace it together with the panel.

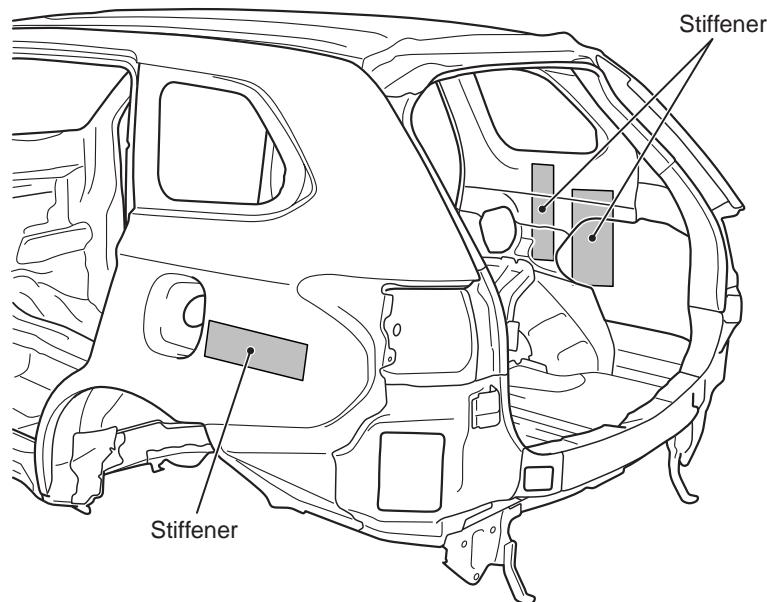


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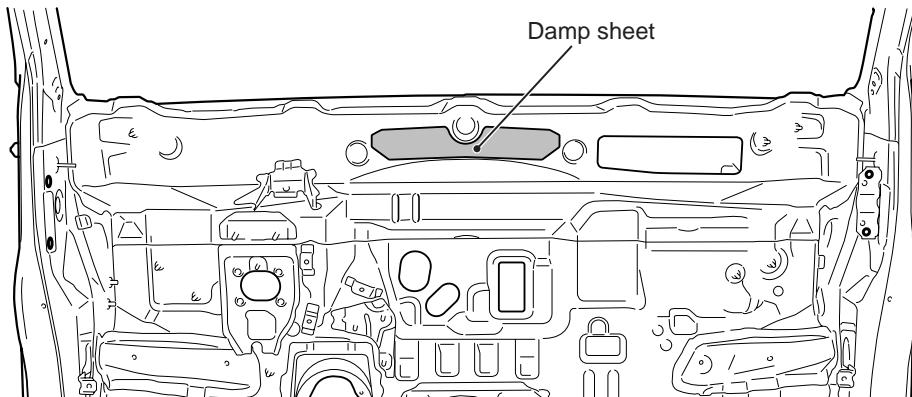


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GROUP 2

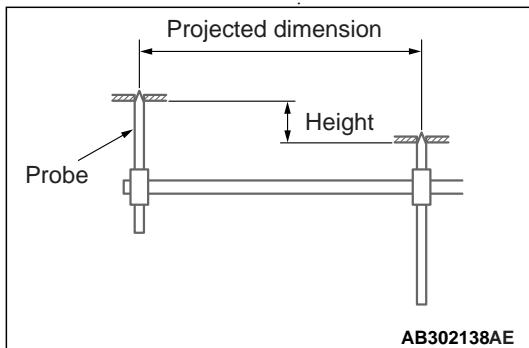
BODY DIMENSIONS

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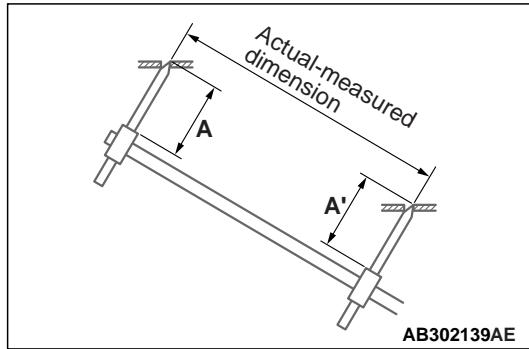
BODY DIMENSIONS AND MEASUREMENT METHODS

M4020001000448



Type A (projected dimensions) is the dimension when a measurement location is projected onto the plane.

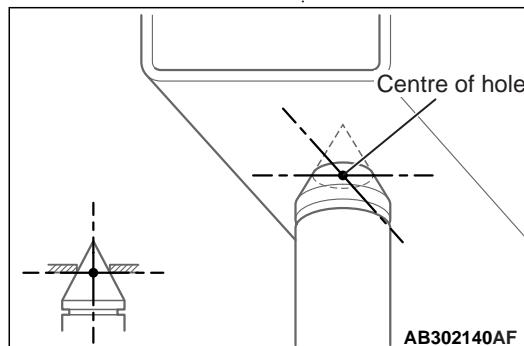
NOTE: The height indicates a distance from the assumed standard line established 100 mm below the lowest measurement point.



Type B (actual-measurement dimensions) is the actual distance between the measurement points. Measure using a tracking gauge or a measuring tape, etc.

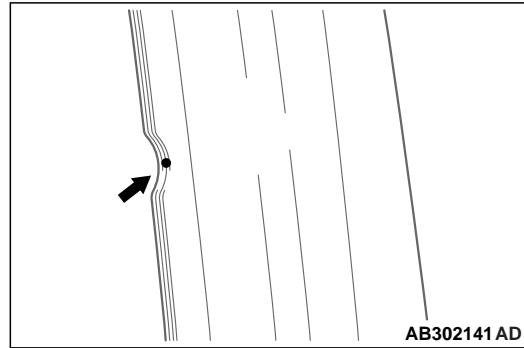
NOTE:

- Make the lengths of the tracking gauge probes the same ($A=A'$).
- Do not bend or twist the measuring tape.



Insert the tracking gauge probes securely into the measurement holes.

- When the standard dimensions in the illustration are enclosed by rectangle, this indicates that the symmetrical left and right positions have the same dimensions.



When using a notch for dimension measurement, set the measuring point at the centre of the outer panel notch.

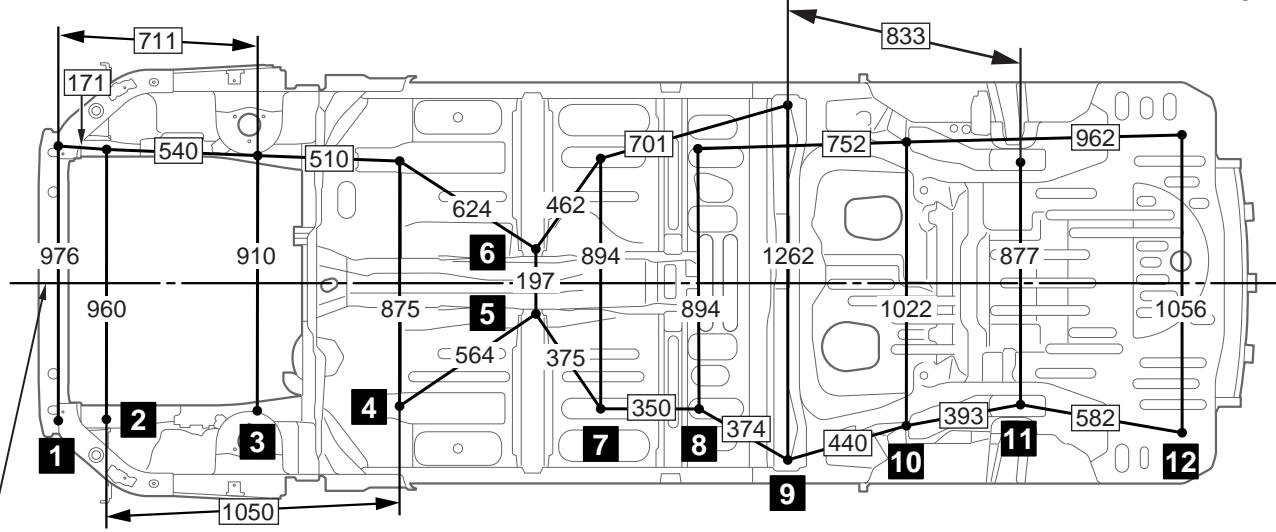
- The body centre points are shown for the purpose of checking the position of the left and right symmetry location.

TYPE A (PROJECTED DIMENSIONS)

UNDER BODY

M4020005002598

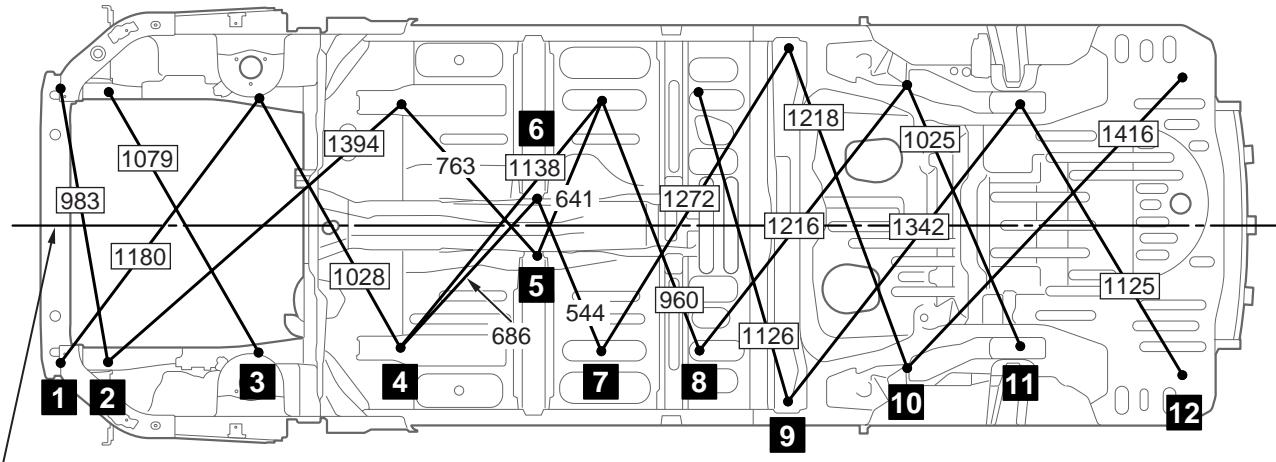
Unit: mm



Centre line of the vehicle

ABB00759AB

Unit: mm



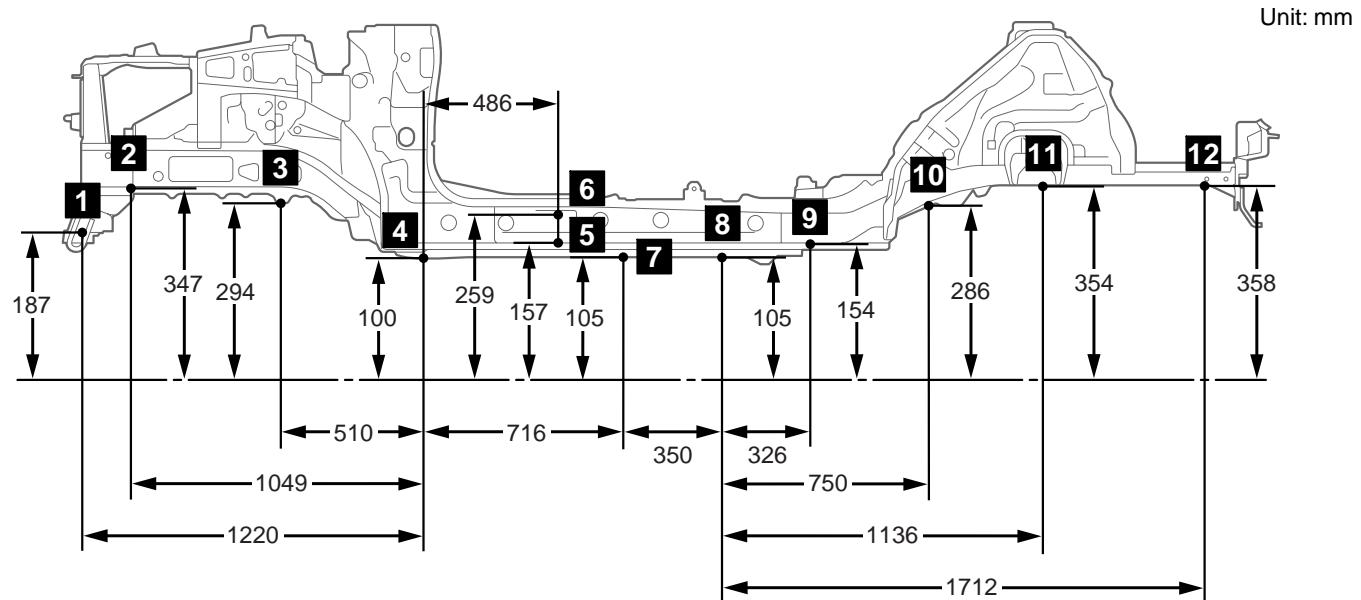
Centre line of the vehicle

ABB00760AB

No.	Standard measurement point	Hole shape	Size mm
1*	Centre of front end side panel mounting hole	Round	16
2*	Centre of front sidemember inner positioning hole	Round	25
3*	Centre of front axle crossmember mounting hole	Round	15.5
4*	Centre of front sidemember rear water draining hole	Round	16
5	Centre of propeller shaft assembly mounting hole (left side)	Round	11
6	Centre of propeller shaft assembly mounting hole (right side)	Round	11
7*	Centre of front floor sidemember front positioning hole	Round	16
8*	Centre of front floor sidemember front positioning hole	Round	16
9*	Centre of rear floor sidemember lower positioning hole	Oblong	33.9×18
10*	Centre of rear suspension bracket front water draining hole	Round	16

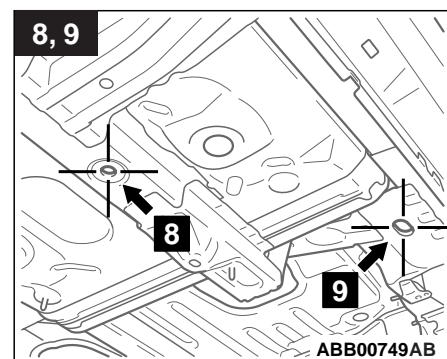
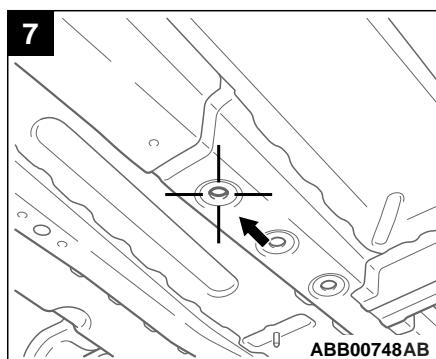
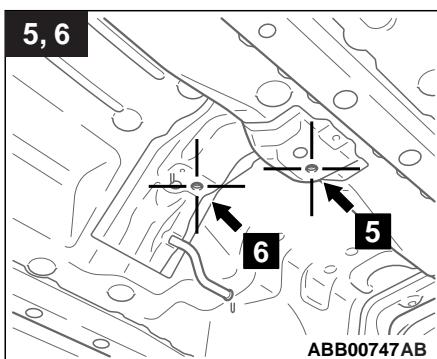
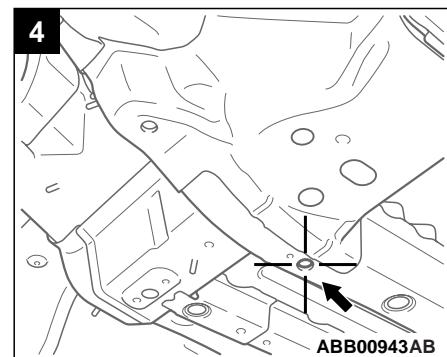
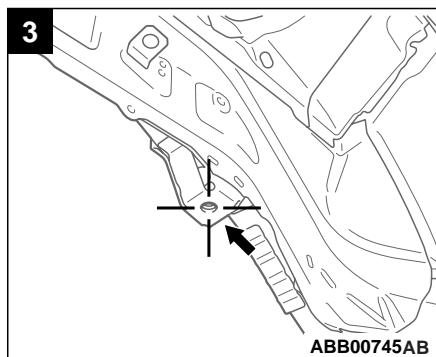
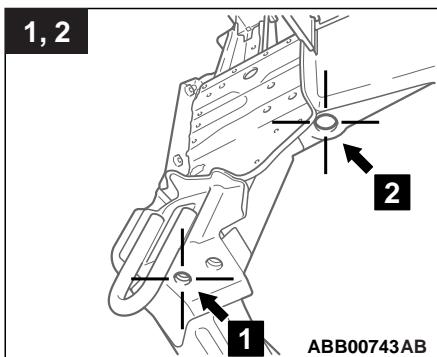
No.	Standard measurement point	Hole shape	Size mm
11*	Centre of rear floor sidemember lower positioning hole	Round	25
12*	Centre of trailer hitch mounting hole	Round	11

NOTE: The * mark indicates the mounting position for the frame centring gauge.

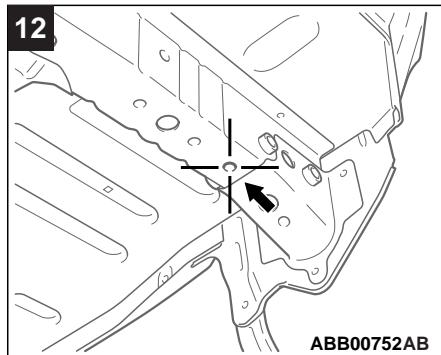
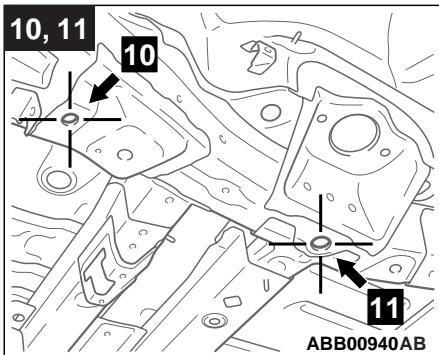


NOTE: The assumed standard line is established 100 mm below the measurement point No.4.

ABB00756AB



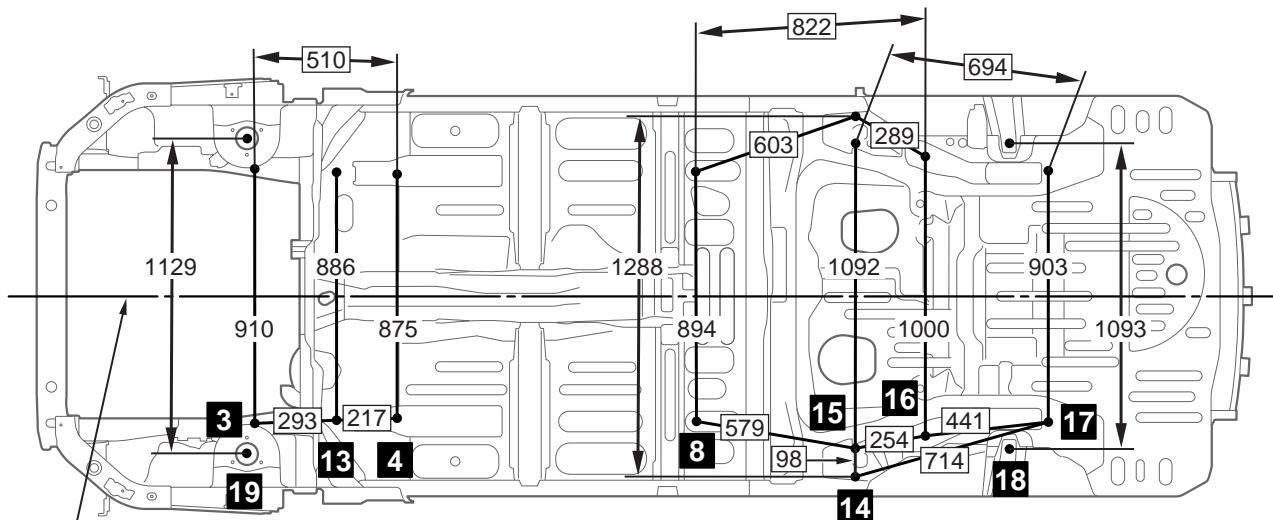
BODY DIMENSIONS
TYPE A (PROJECTED DIMENSIONS)



SUSPENSION INSTALLATION DIMENSIONS

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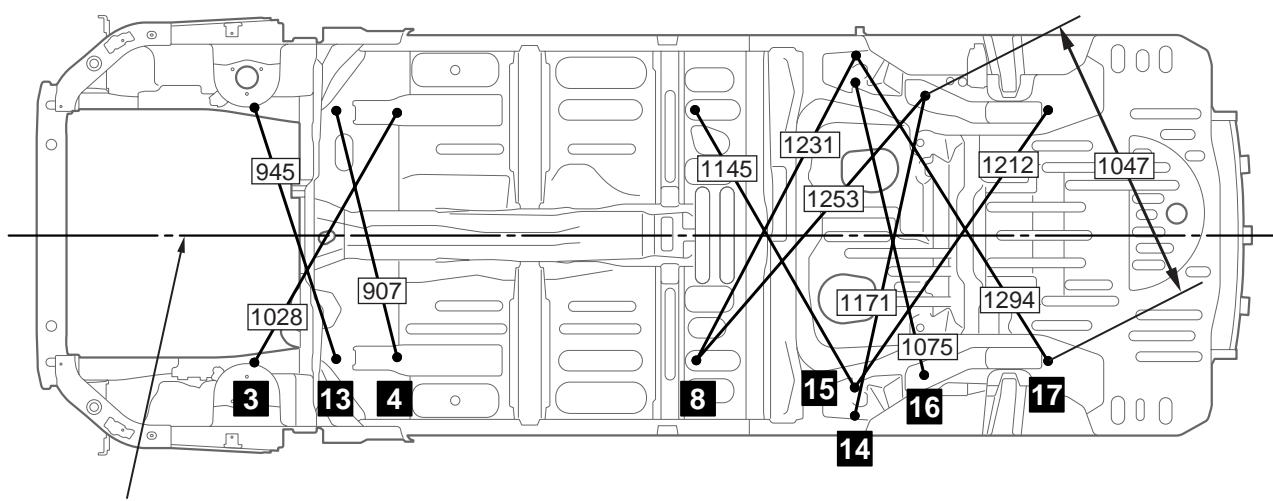
Unit: mm



Centre line of the vehicle

ABB00761AB

Unit: mm

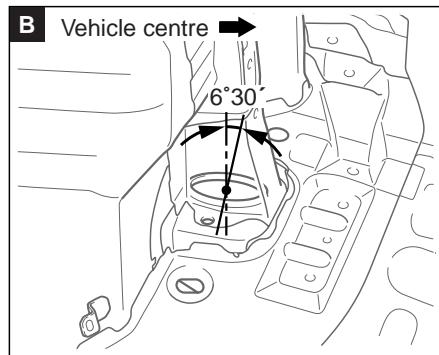
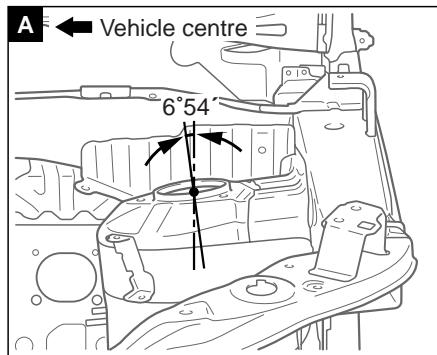


Centre line of the vehicle

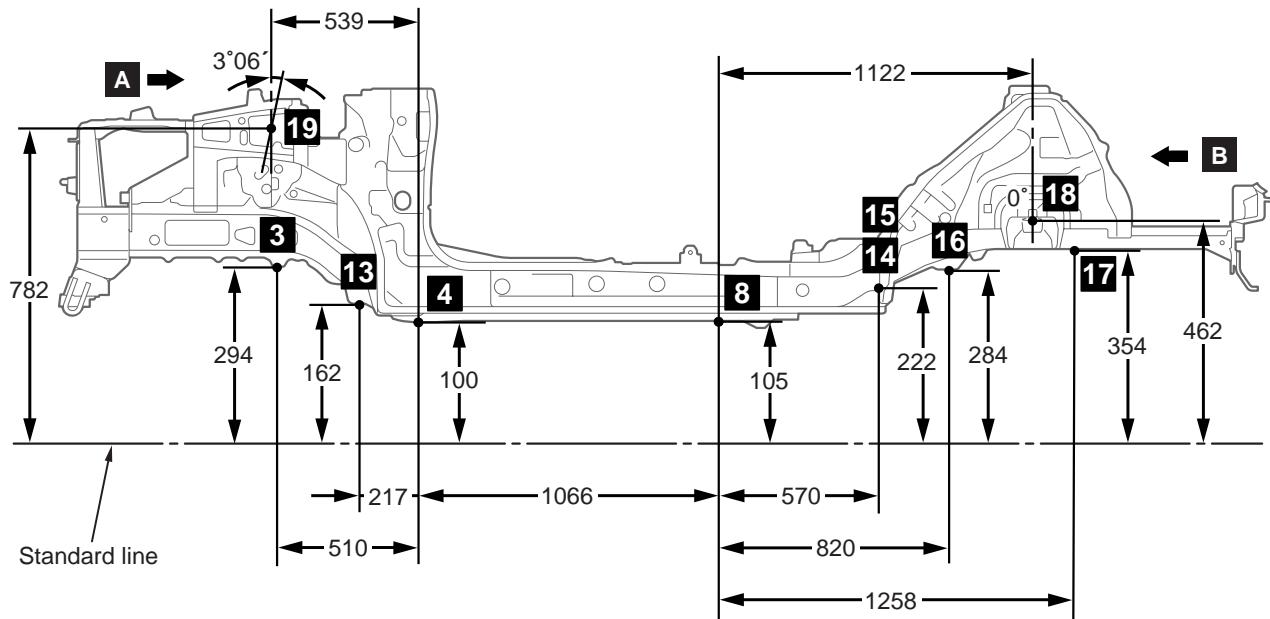
ABB00762AB

No.	Standard measurement point	Hole shape	Size mm
3	Centre of front axle crossmember mounting hole	Round	15.5
4	Centre of front sidemember rear water draining hole	Round	16

No.	Standard measurement point	Hole shape	Size mm
8	Centre of front floor sidemember front positioning hole	Round	16
13	Centre of front axle crossmember mounting hole	Round	15.5
14	Centre of trailing arm assembly mounting hole	Round	14
15	Centre of trailing arm assembly mounting hole	Round	14
16	Centre of rear suspension crossmember mounting hole	Round	15
17	Centre of rear suspension crossmember mounting hole	Round	15
18	Centre of rear shock absorber assembly mounting hole	Round	64
19	Centre of front strut assembly mounting hole	Round	92.6



Unit: mm



NOTE: The assumed standard line is established 100 mm below the measurement point No.4.

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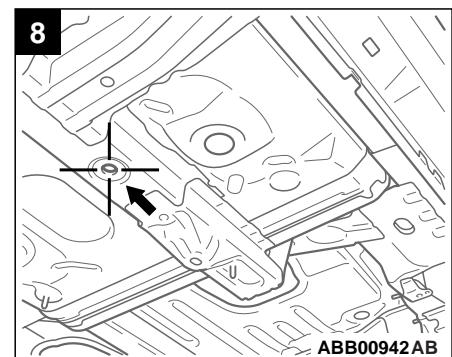
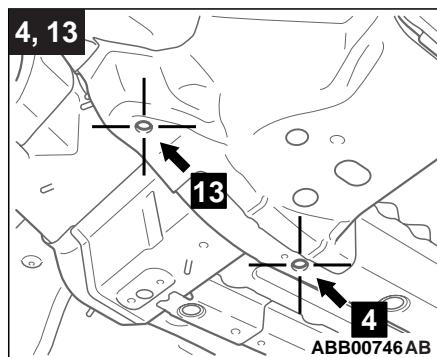
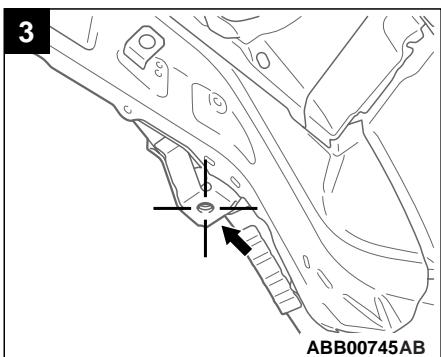
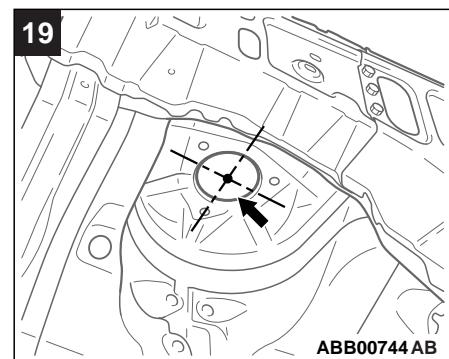
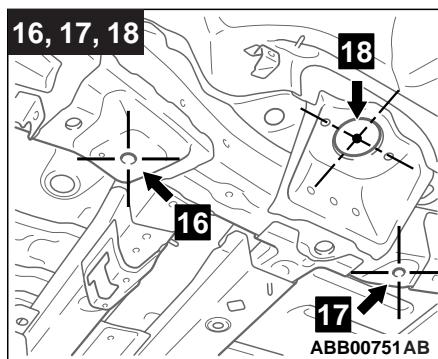
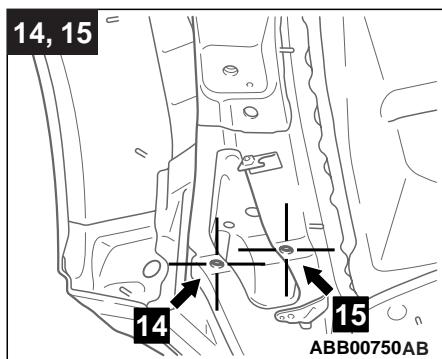


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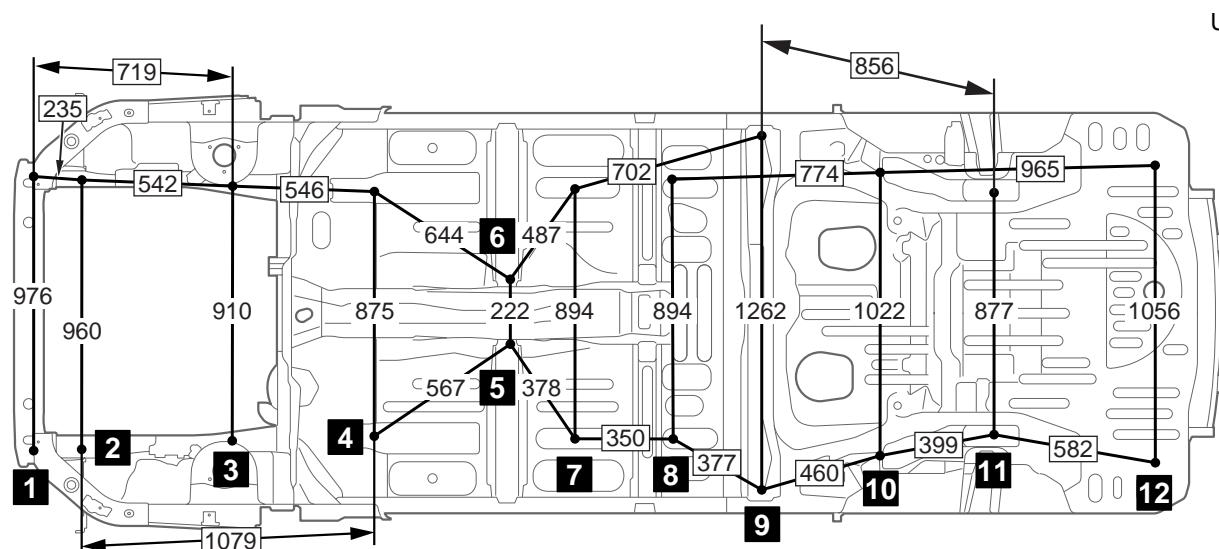
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BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

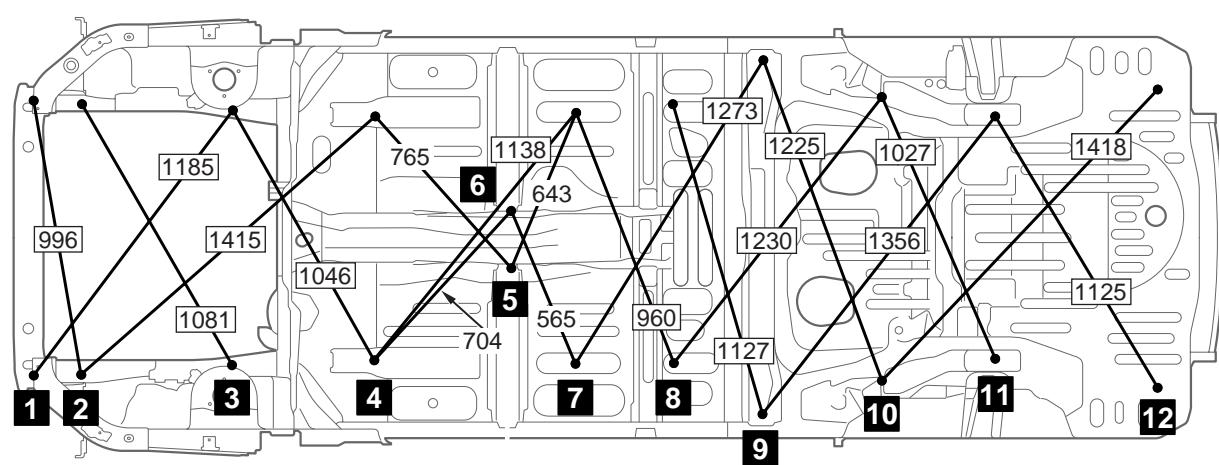


TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)
UNDER BODY

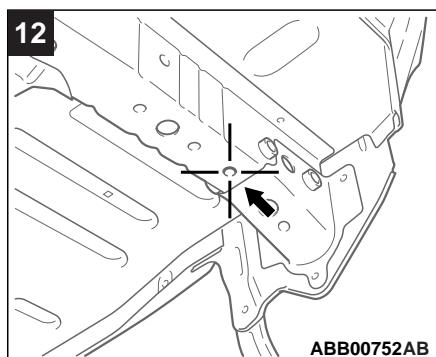
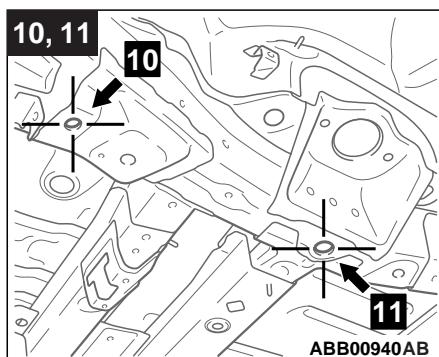
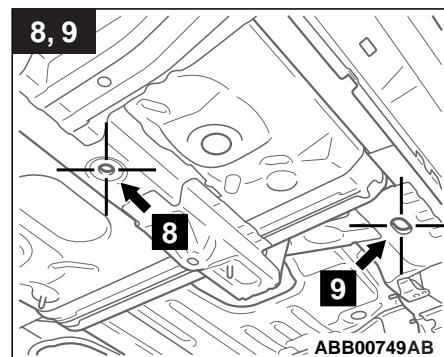
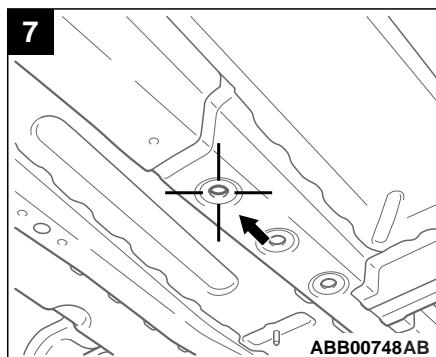
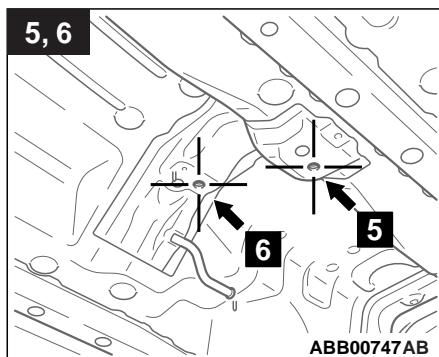
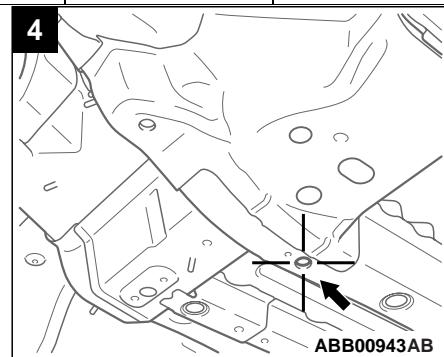
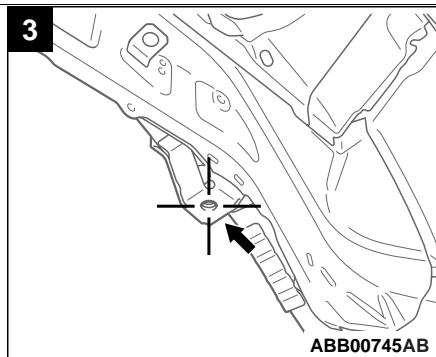
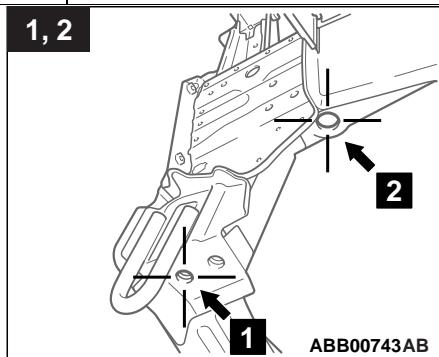
M4020005002606



Unit: mm



No.	Standard measurement point	Hole shape	Size mm
1	Centre of front end side panel mounting hole	Round	16
2	Centre of front sidemember inner positioning hole	Round	25
3	Centre of front axle crossmember mounting hole	Round	15.5
4	Centre of front sidemember rear water draining hole	Round	16
5	Centre of propeller shaft assembly mounting hole (left side)	Round	11
6	Centre of propeller shaft assembly mounting hole (right side)	Round	11
7	Centre of front floor sidemember front positioning hole	Round	16
8	Centre of front floor sidemember front positioning hole	Round	16
9	Centre of rear floor sidemember lower positioning hole	Oblong	33.9×18
10	Centre of rear suspension bracket front water draining hole	Round	16
11	Centre of rear floor sidemember lower positioning hole	Round	25
12	Centre of trailer hitch mounting hole	Round	11



BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

**SUSPENSION INSTALLATION
DIMENSIONS**

M4020013002474

Unit: mm

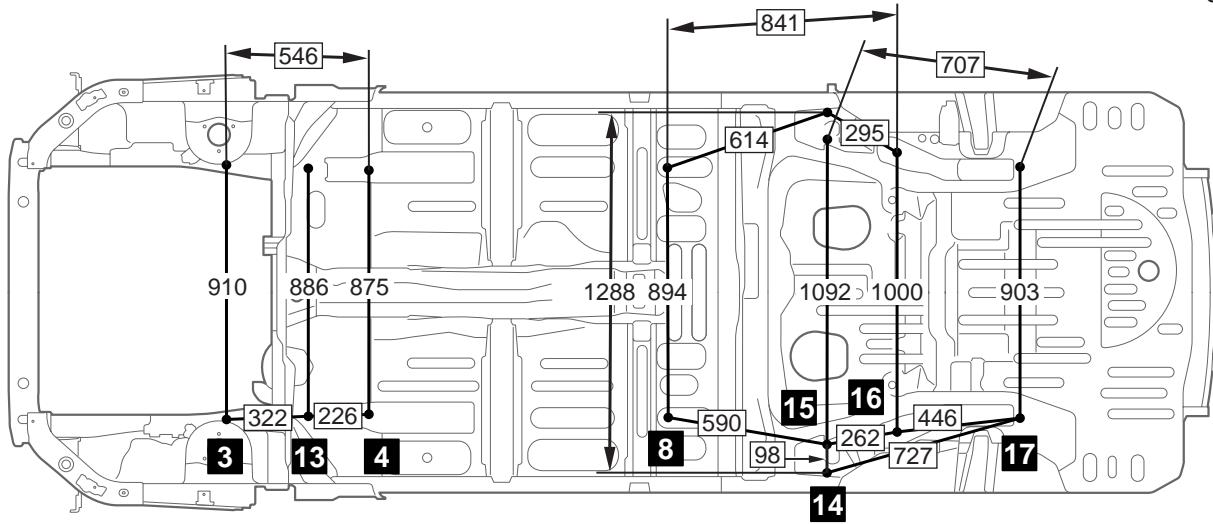


ABB00767AB

Unit: mm

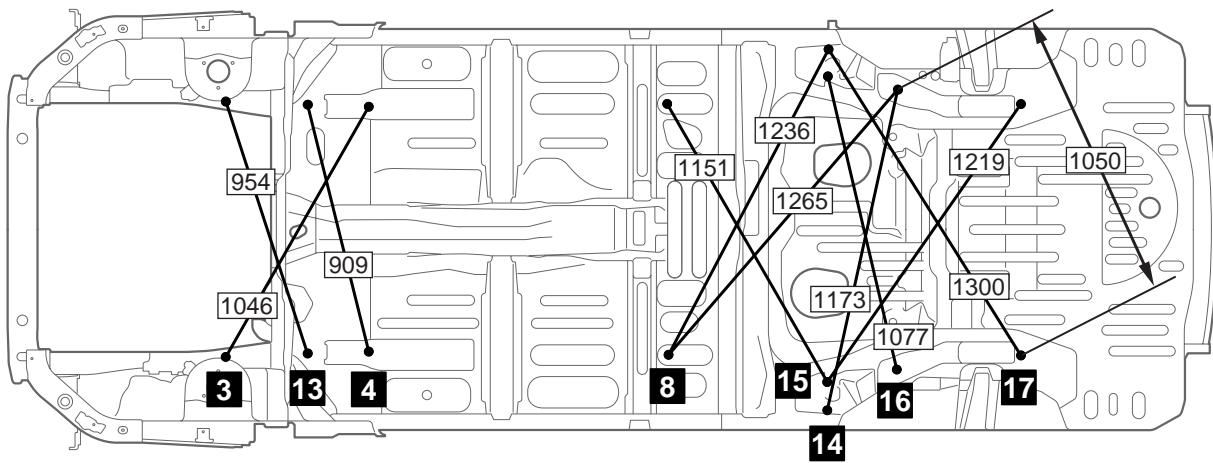
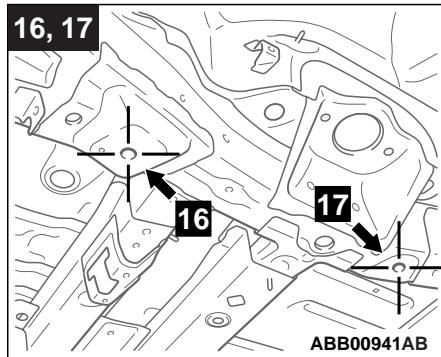
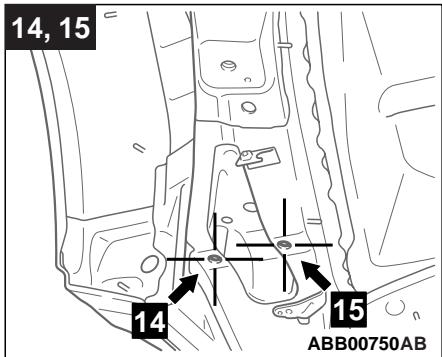
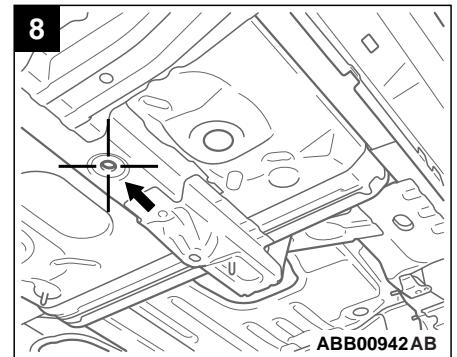
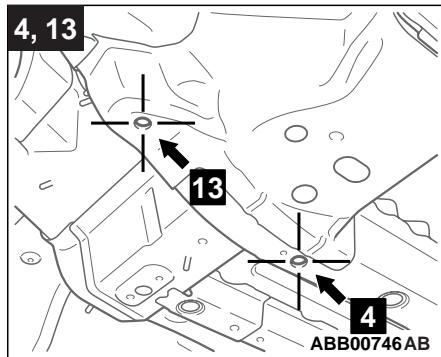
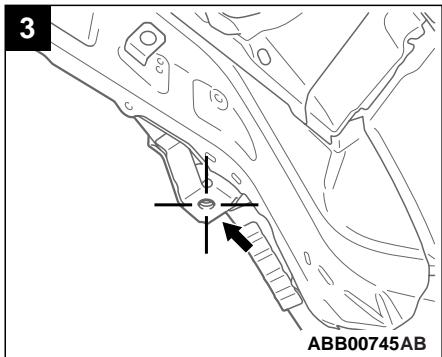


ABB00768AB

No.	Standard measurement point	Hole shape	Size mm
3	Centre of front axle crossmember mounting hole	Round	15.5
4	Centre of front sidemember rear water draining hole	Round	16
8	Centre of front floor sidemember front positioning hole	Round	16
13	Centre of front axle crossmember mounting hole	Round	15.5
14	Centre of trailing arm assembly mounting hole	Round	14
15	Centre of trailing arm assembly mounting hole	Round	14
16	Centre of rear suspension crossmember mounting hole	Round	15
17	Centre of rear suspension crossmember mounting hole	Round	15



FRONT BODY

M4020006001651

Unit: mm

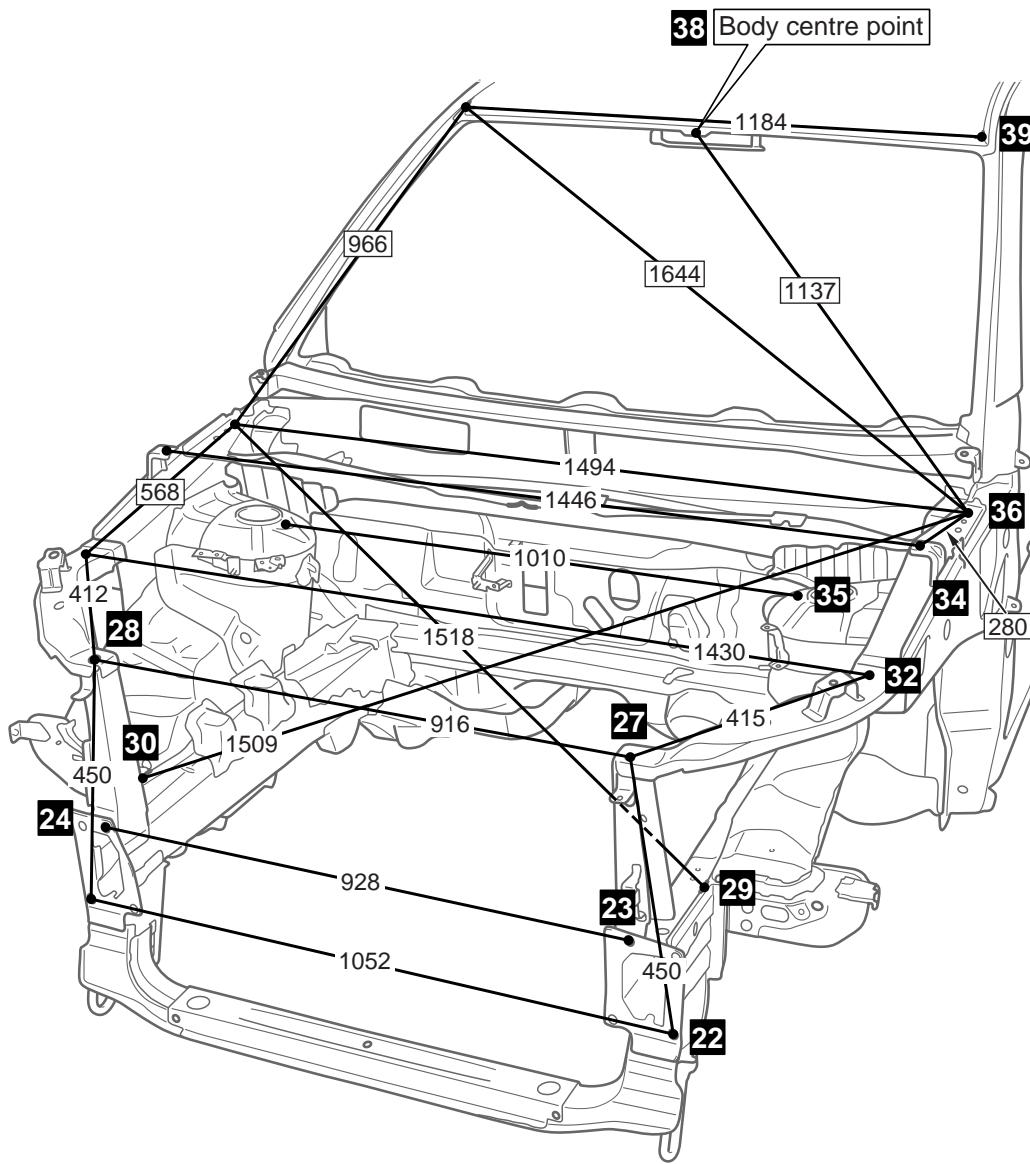


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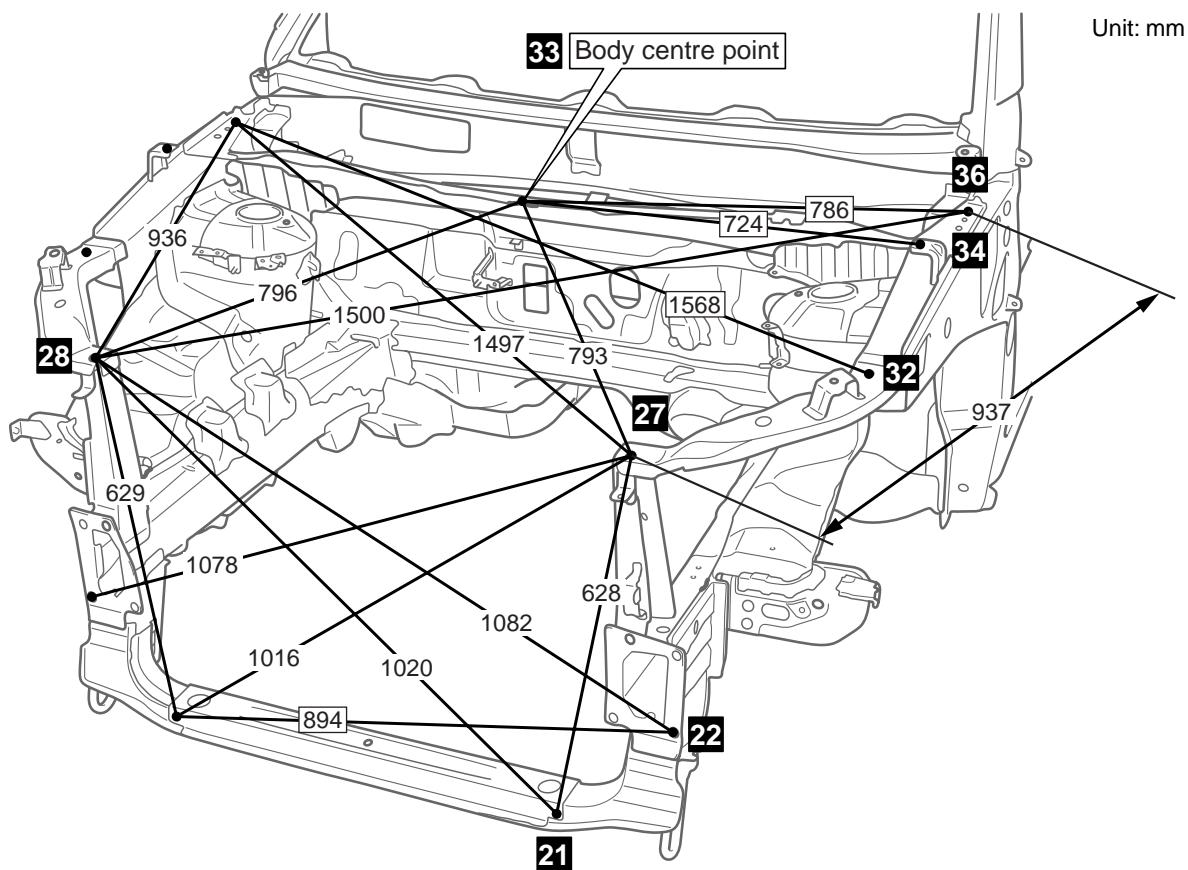


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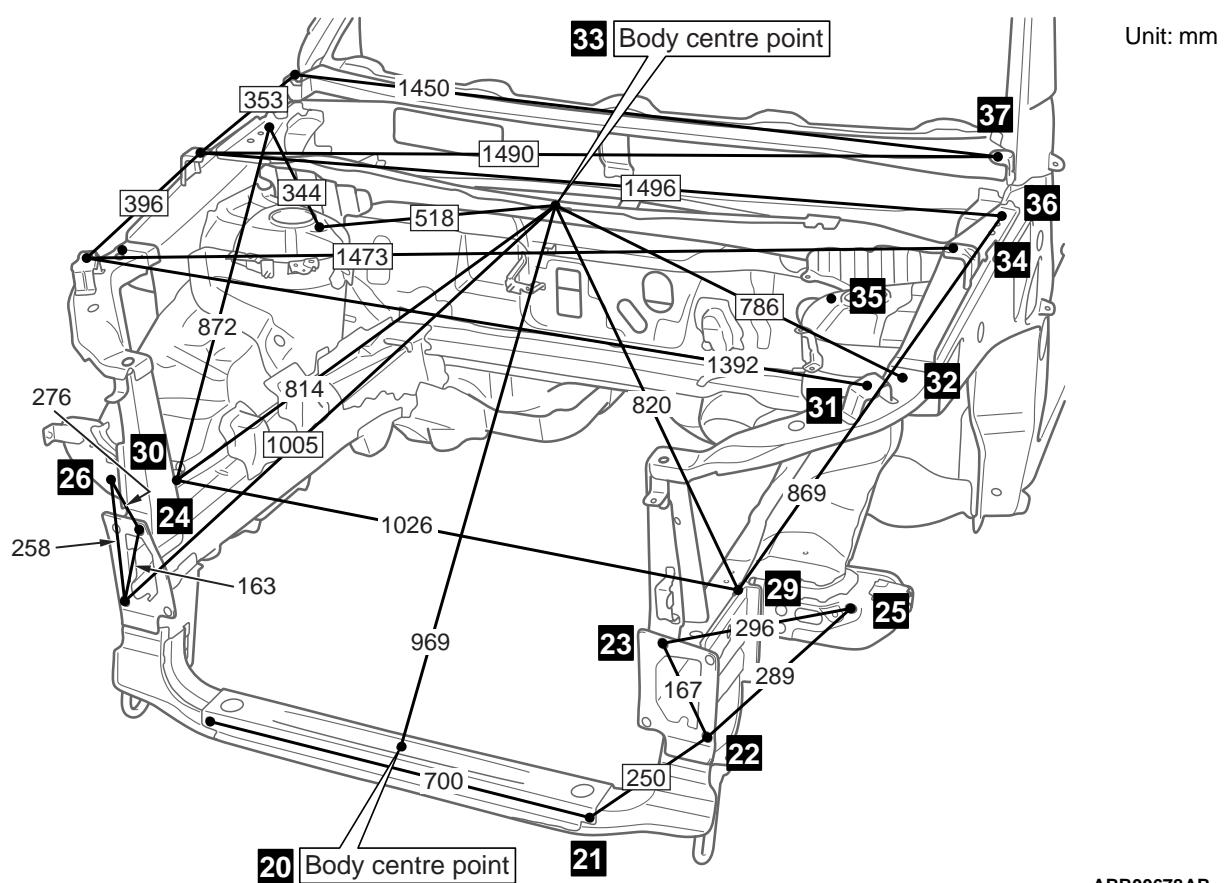
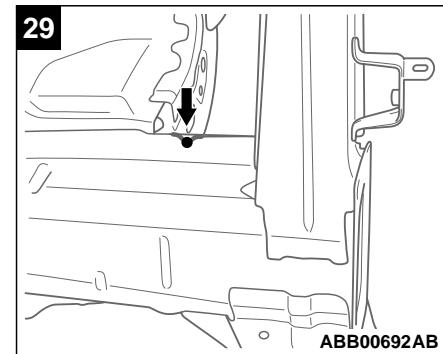
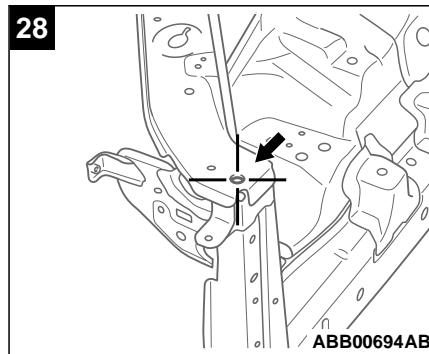
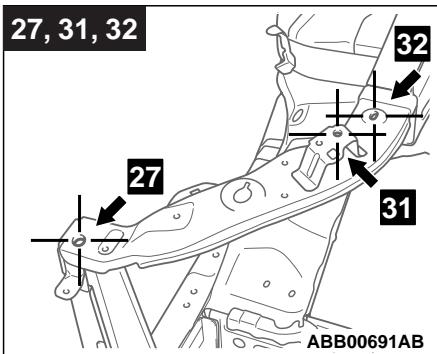
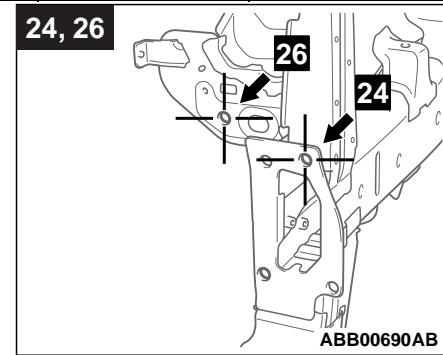
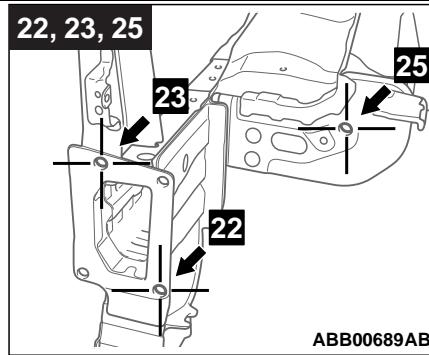
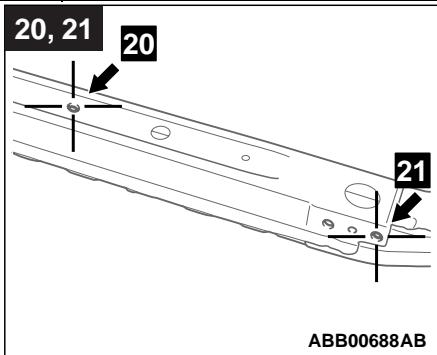
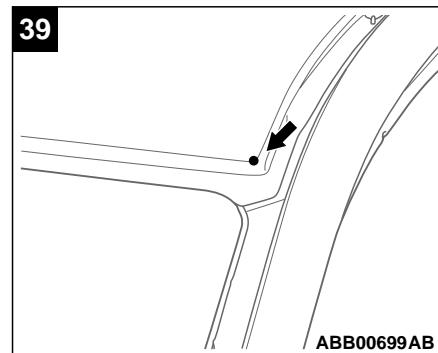
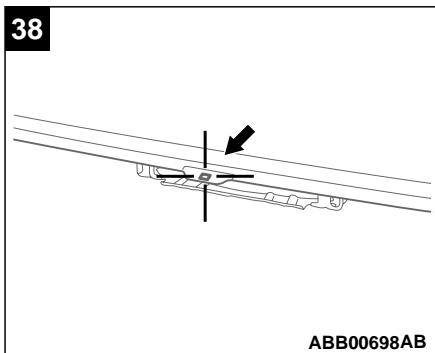
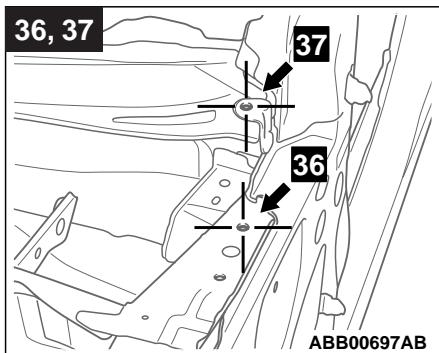
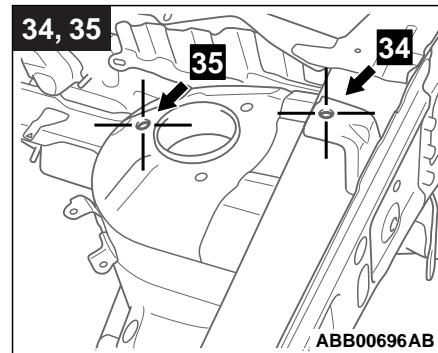
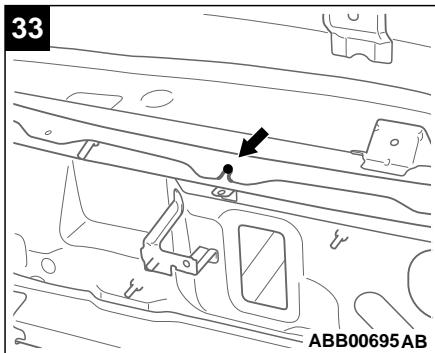
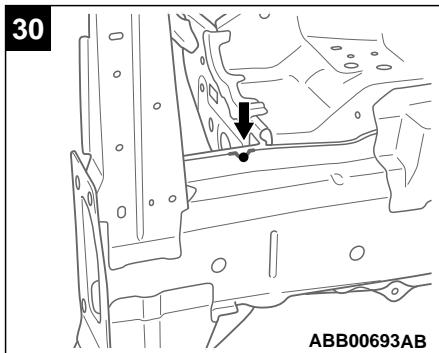


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BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

No.	Standard measurement point	Hole shape	Size mm
20	Body centre point of front end crossmember upper (Body centre point)	Round	6
21	Centre of intercooler mounting hole	Round	12
22	Centre of front bumper reinforcement mounting hole	Round	9
23	Centre of front bumper reinforcement mounting hole (left side)	Round	12
24	Centre of front bumper reinforcement mounting hole (right side)	Round	12
25	Centre of fender gusset positioning hole (left side)	Round	15
26	Centre of fender gusset positioning hole (right side)	Round	15
27	Centre of headlamp support panel upper mounting hole (left side)	Round	11
28	Centre of headlamp support panel upper mounting hole (right side)	Round	11
29	Centre of front sidemember inner positioning notch (left side)	—	—
30	Centre of front sidemember inner positioning notch (right side)	—	—
31	Centre of fender mounting hole	Round	6.6
32	Centre of front end upper bar side positioning hole	Oblong	8×12
33	Cowl top panel lower positioning notch (Body centre point)	—	—
34	Centre of fender mounting hole	Round	6.6
35	Centre of front strut assembly mounting hole	Round	11.5
36	Centre of hood hinge mounting hole	Round	9
37	Centre of fender mounting hole	Round	6.6
38	Centre of pin mounting hole (Body centre point)	Rectangle	8×10
39	Corner of roof panel	—	—

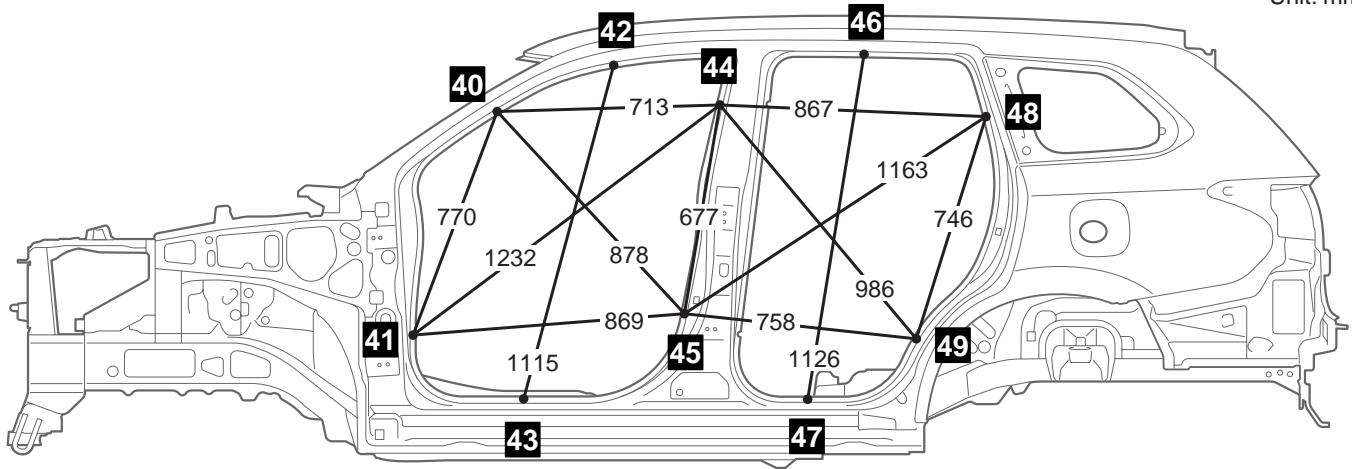




SIDE BODY

M4020007001397

Unit: mm



BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

Unit: mm

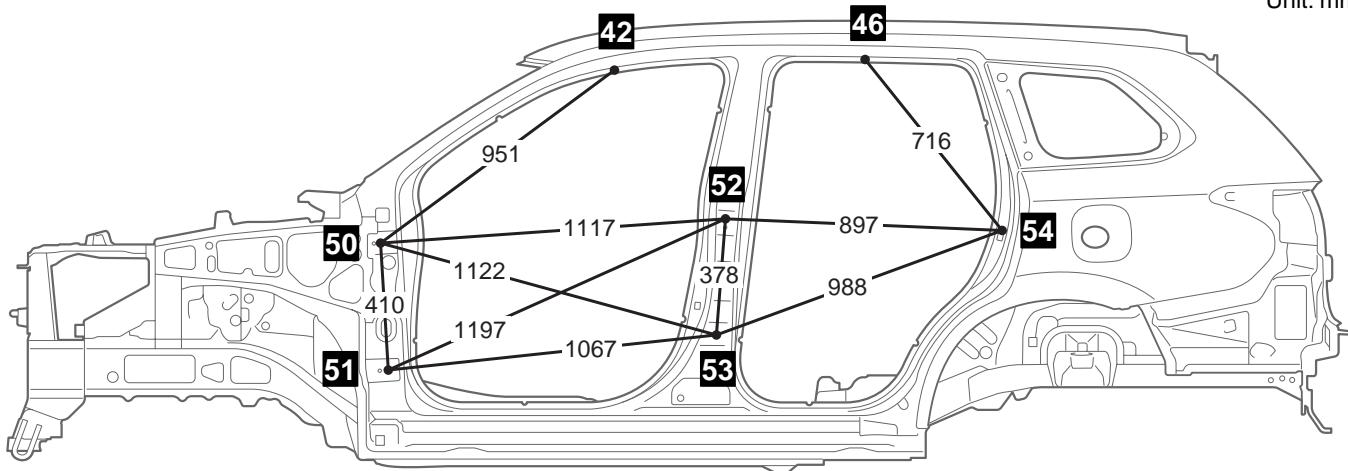


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No.	Standard measurement point	Hole shape	Size mm
40	Front pillar positioning notch	—	—
41	Front pillar positioning notch	—	—
42	Roof side rail positioning notch	—	—
43	Side sill positioning notch	—	—
44	Centre pillar positioning notch	—	—
45	Centre pillar positioning notch	—	—
46	Roof side rail positioning notch	—	—
47	Side sill positioning notch	—	—
48	Quarter panel positioning notch	—	—
49	Quarter panel positioning notch	—	—
50	Centre of front door upper hinge mounting hole	Round	11
51	Centre of front door lower hinge mounting hole	Round	11
52	Centre of rear door upper hinge mounting hole	Round	11
53	Centre of rear door lower hinge mounting hole	Round	11
54	Centre of rear door switch mounting hole	Round	5

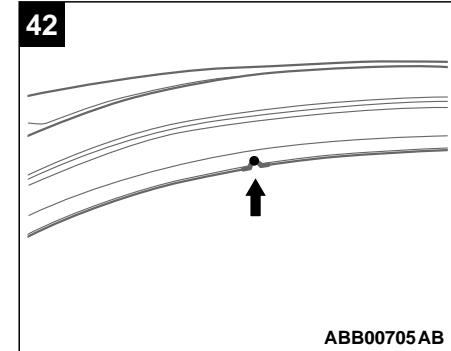
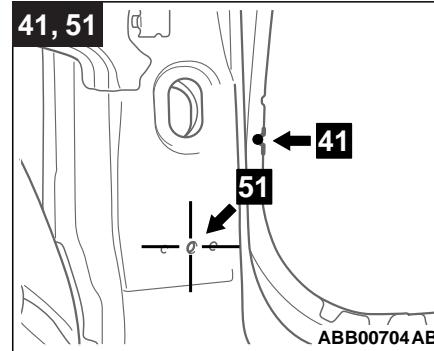
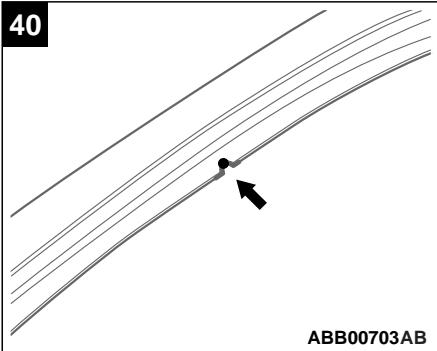
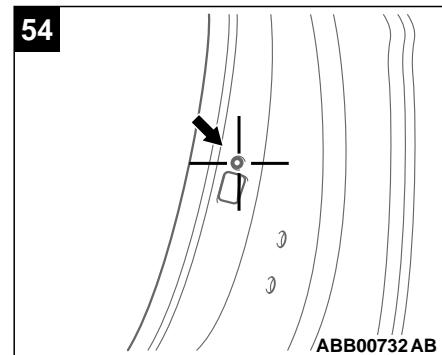
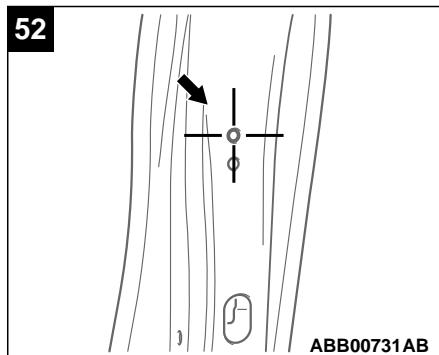
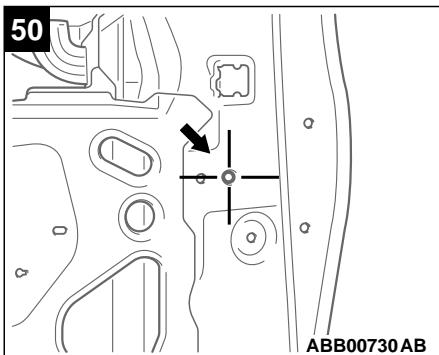
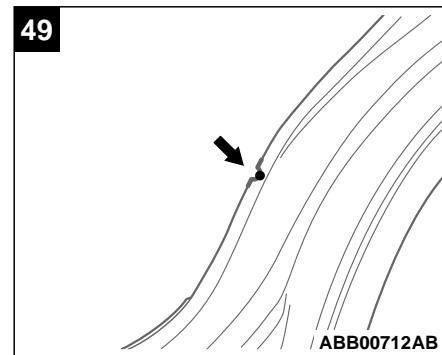
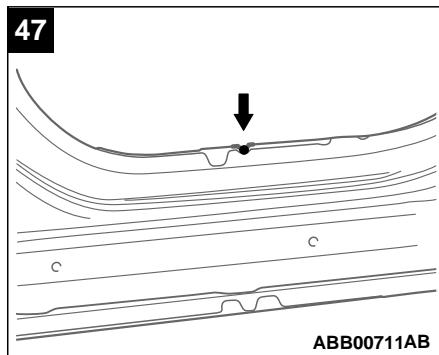
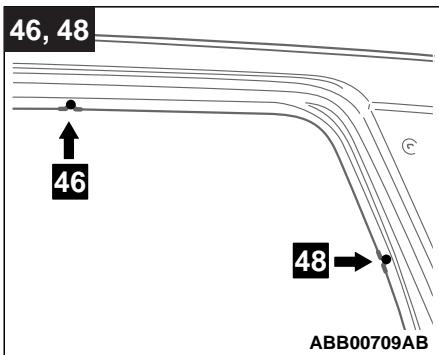
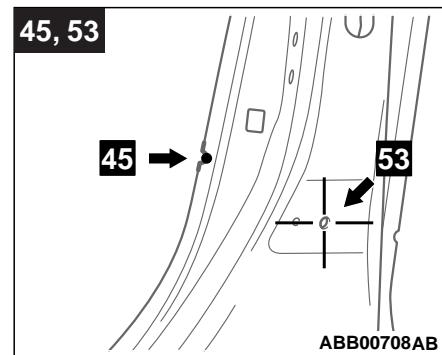
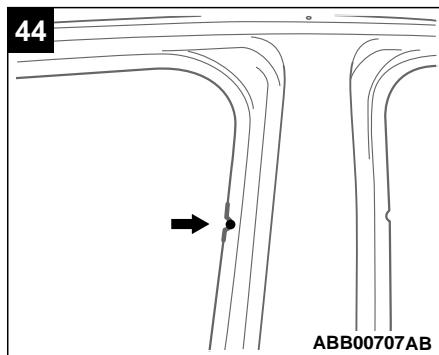
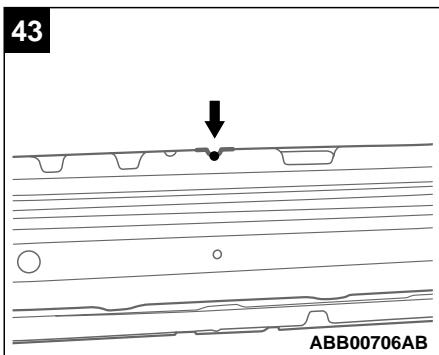


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BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)

REAR BODY

M4020008001367

Unit: mm

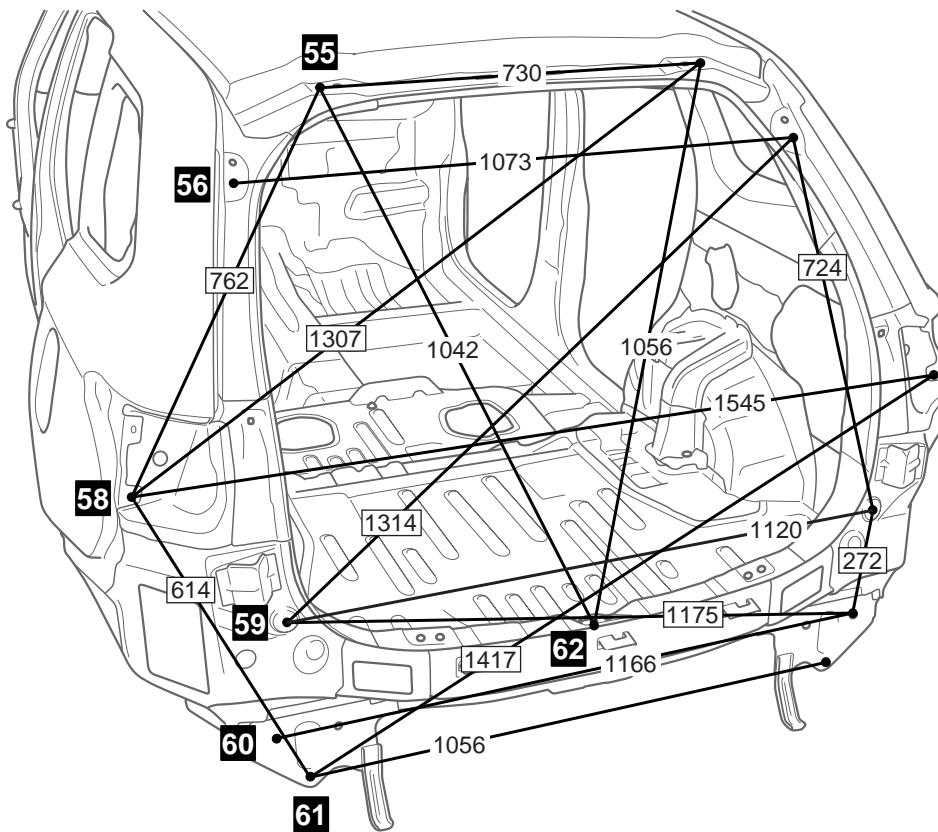


ABB00733AB

Unit: mm

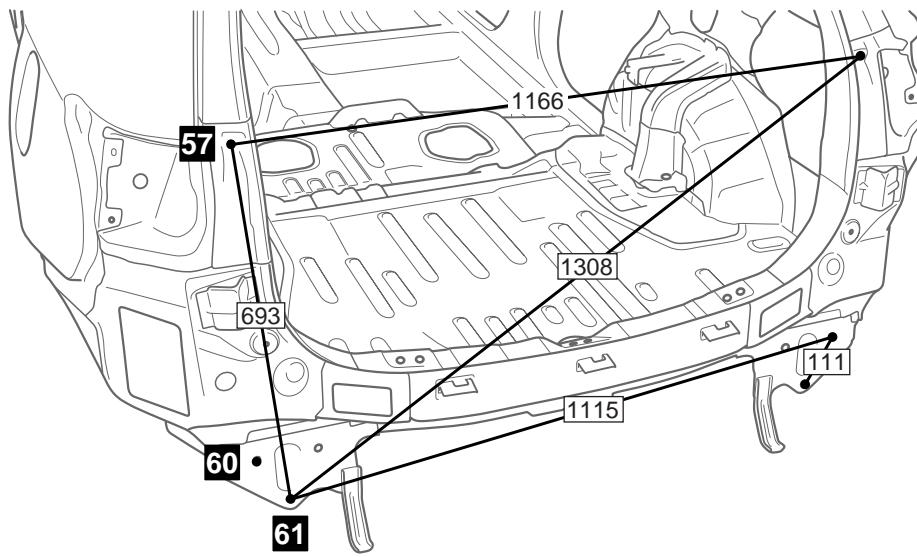
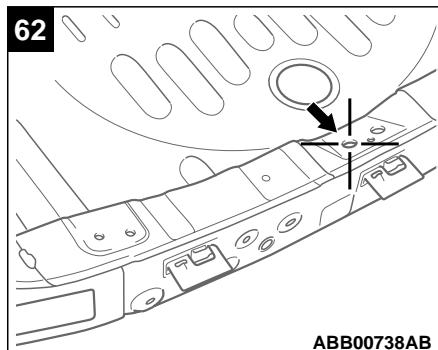
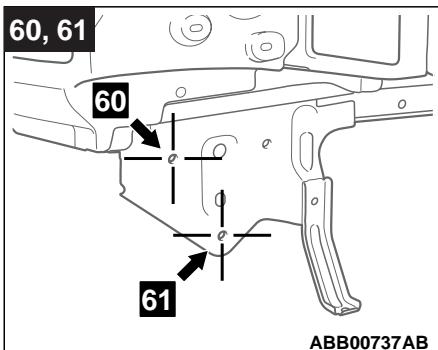
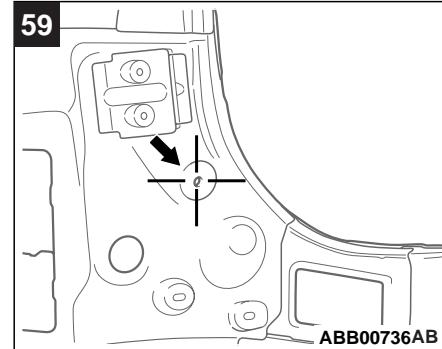
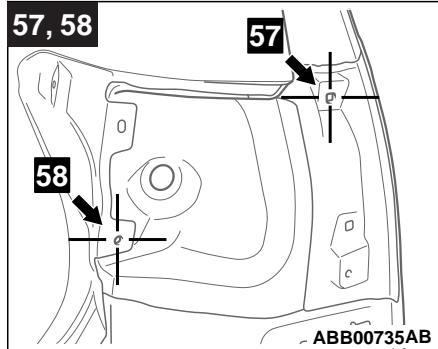
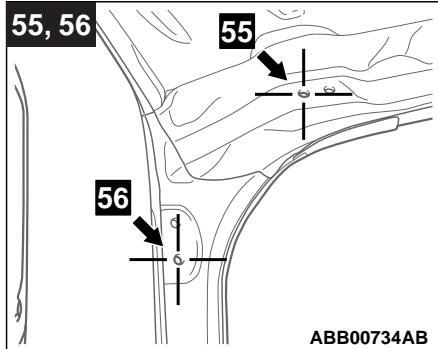


ABB00733AB

No.	Standard measurement point	Hole shape	Size mm
55	Centre of tailgate hinge mounting hole	Round	12
56	Centre of tailgate gas spring assembly mounting hole	Round	9
57	Centre of rear combination lamp assembly mounting hole	Square	8.5
58	Centre of rear combination lamp assembly mounting hole	Round	8
59	Centre of rear bumper assembly mounting hole	Round	7

No.	Standard measurement point	Hole shape	Size mm
60	Centre of rear bumper reinforcement mounting hole	Round	15
61	Centre of rear bumper reinforcement mounting hole	Round	15
62	Centre of tailgate striker mounting hole	Round	14



INTERIOR

M4020009001724

Unit: mm

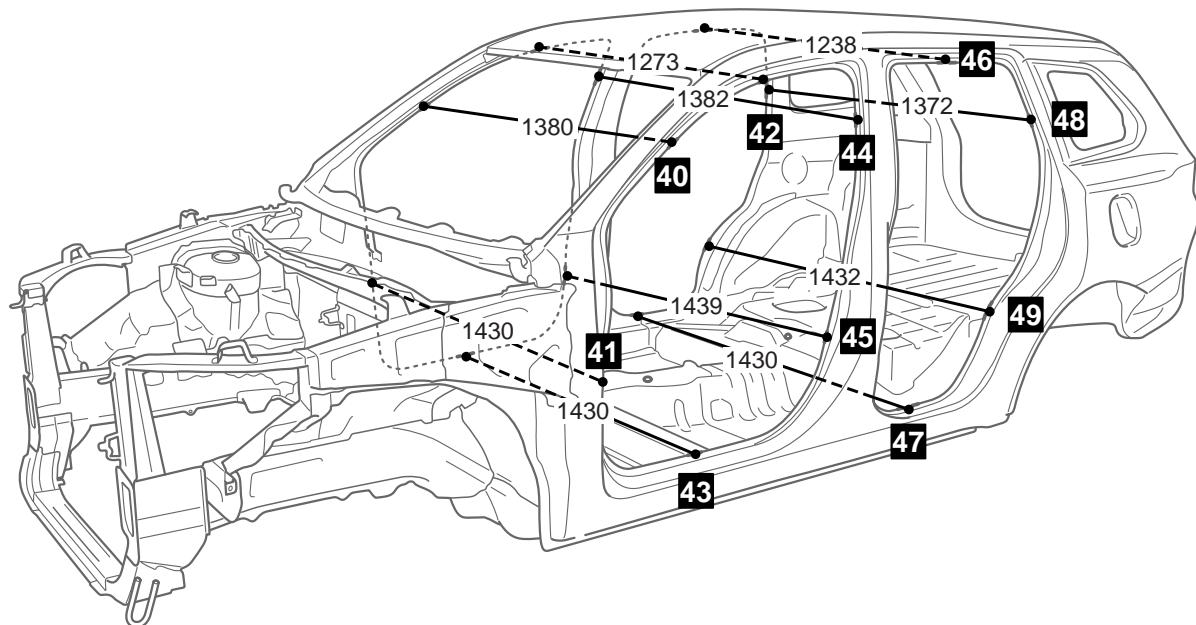


ABB00702AB

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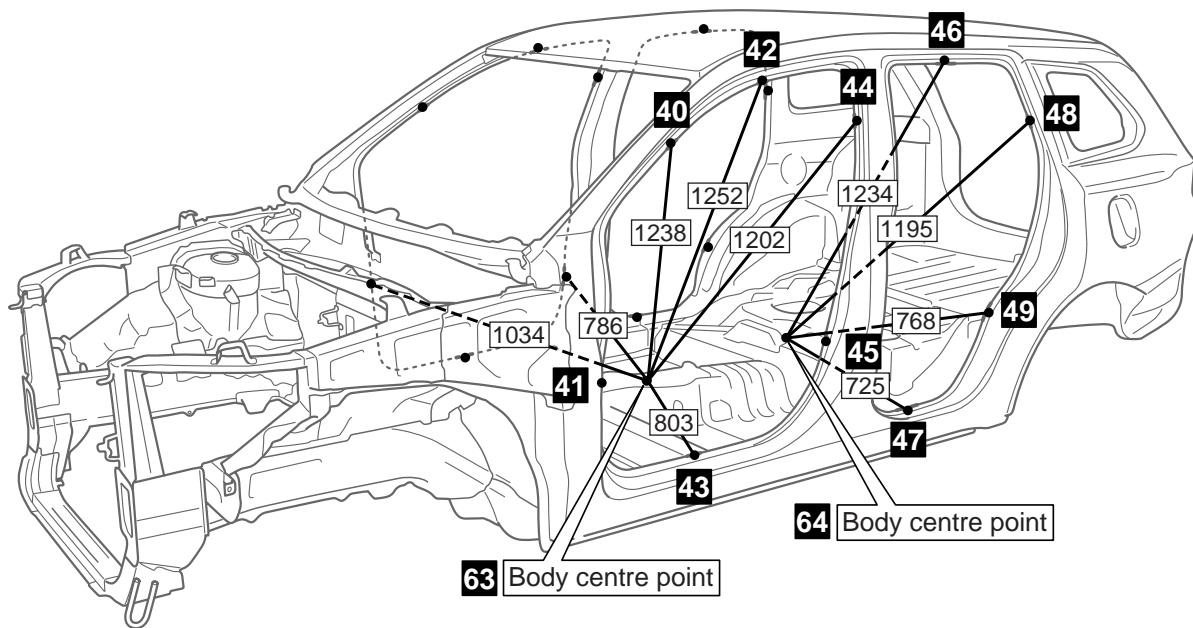


ABB00710AB

Unit: mm

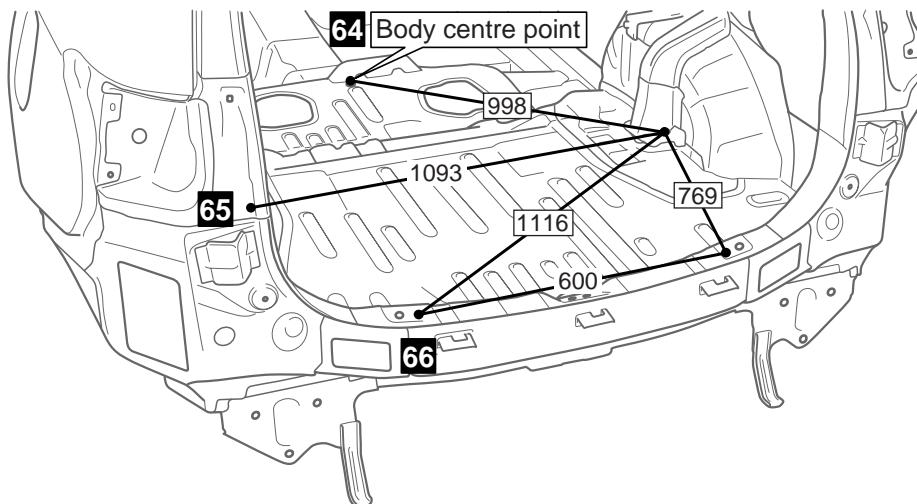
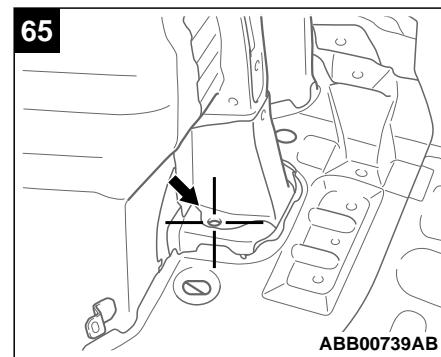
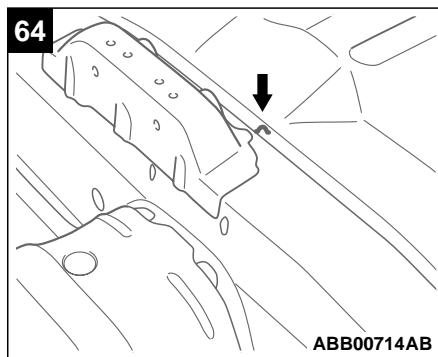
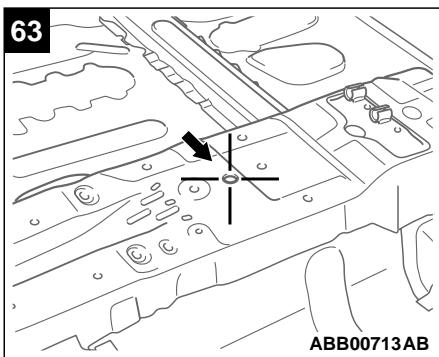
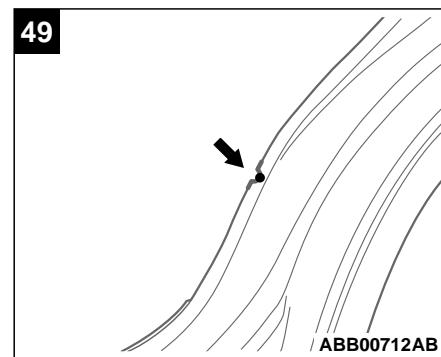
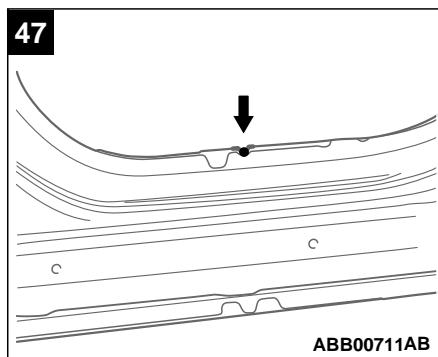
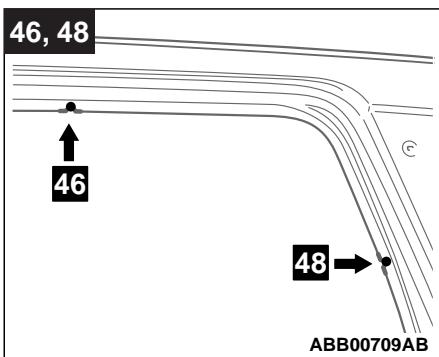
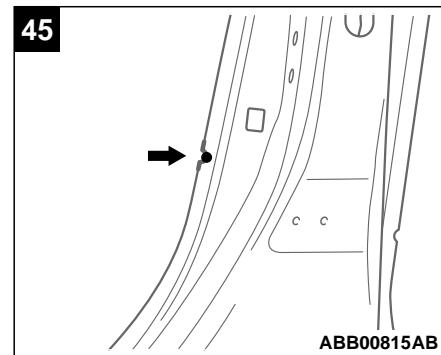
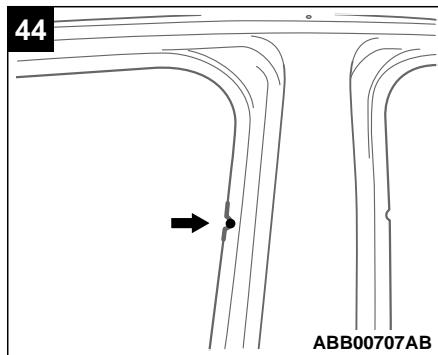
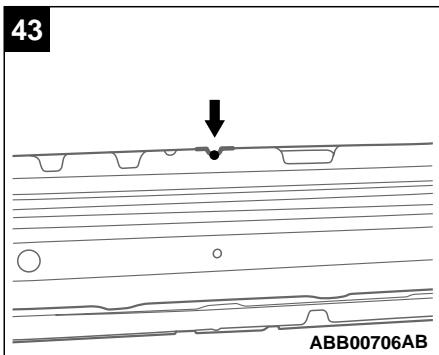
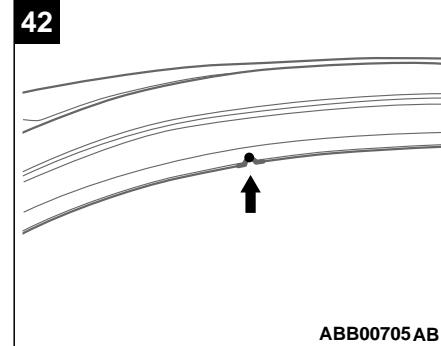
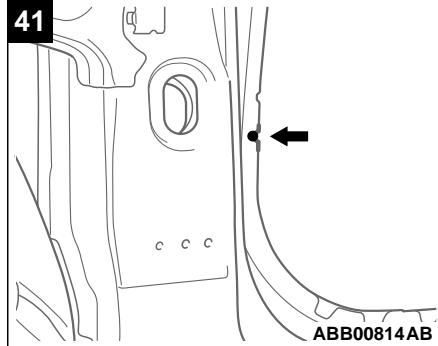
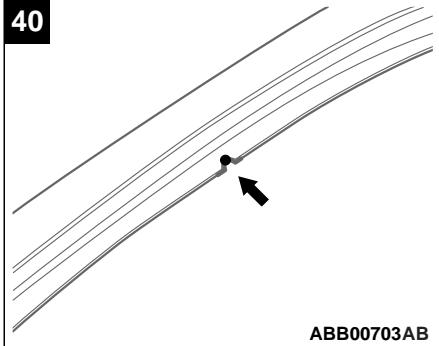


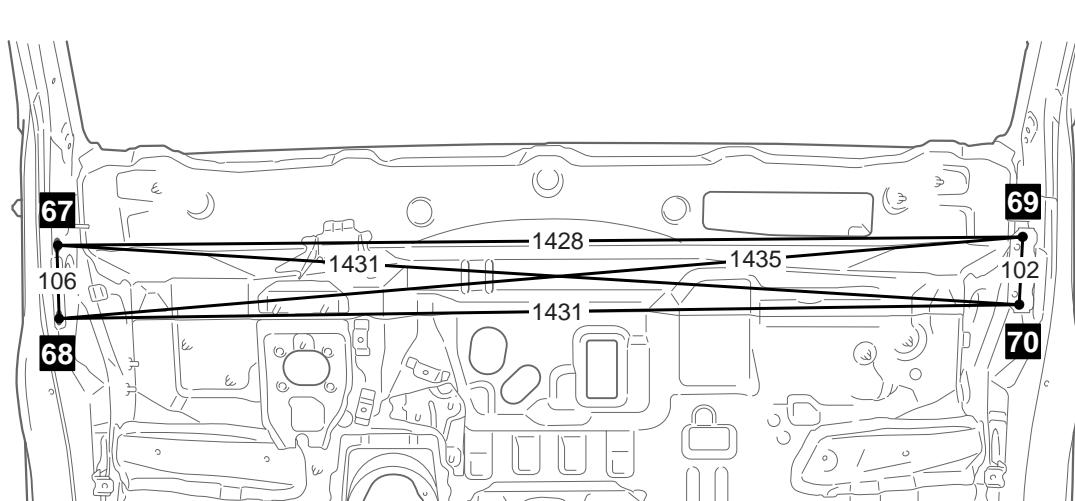
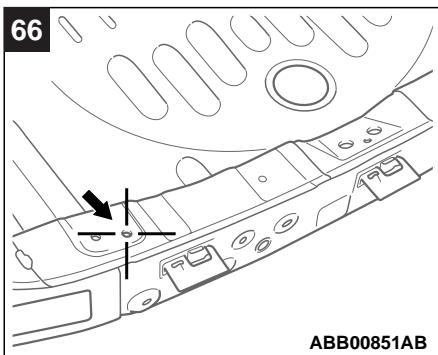
ABB00741AB

No.	Standard measurement point	Hole shape	Size mm
40	Front pillar positioning notch	—	—
41	Front pillar positioning notch	—	—
42	Roof side rail positioning notch	—	—
43	Side sill positioning notch	—	—
44	Centre pillar positioning notch	—	—
45	Centre pillar positioning notch	—	—
46	Roof side rail positioning notch	—	—
47	Side sill positioning notch	—	—
48	Quarter panel positioning notch	—	—
49	Quarter panel positioning notch	—	—
63	Centre of backbone reinforcement positioning hole (Body centre point)	Round	15

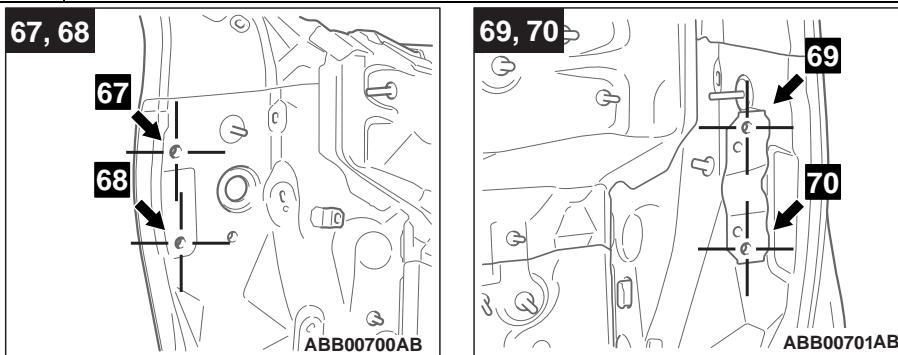
No.	Standard measurement point	Hole shape	Size mm
64	Alignment projection on the rear seat under floor (Body centre point)	—	—
65	Centre of rear shock absorber assembly mounting hole	Round	14
66	Centre of rear end trim mounting hole	Round	8.5



BODY DIMENSIONS
TYPE B (ACTUAL-MEASUREMENT DIMENSIONS)



No.	Standard measurement point	Hole shape	Size mm
67	Centre of front deck crossmember mounting hole	Round	13
68	Centre of front deck crossmember mounting hole	Round	13
69	Centre of front deck crossmember mounting hole	Round	9
70	Centre of front deck crossmember mounting hole	Round	9



GROUP 3

WELDED PANEL REPLACEMENT

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ULTRA HIGH STRENGTH STEEL PLATE	3-2	REAR END CROSMEMBER	3-23
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ULTRA HIGH STRENGTH STEEL PLATE

ADVANTAGES OF ULTRA HIGH STRENGTH STEEL PLATE

The ultra high strength steel plate has the following advantages as compared with conventional high strength steel plate.

- It has tensile strength approximately 1.7 times higher than the conventional high strength steel sheet.
- It has a higher yielding point and yielding ratio (yielding point/tensile strength).

These advantages allow thinner and lighter plates and better fuel efficiency than the high strength steel plate.

PRECAUTION UPON MAINTENANCE OF ULTRA HIGH STRENGTH STEEL PLATE

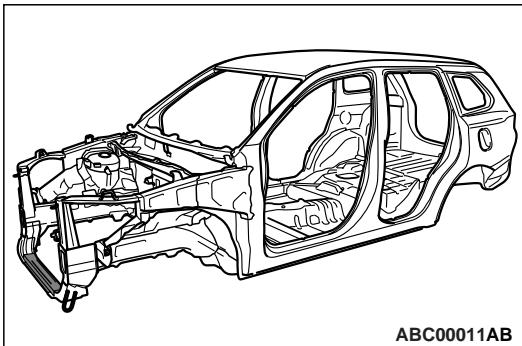
- Use a spot cutter for ultra high strength steel plate to ensure that the spot-welded area is cut off.

M4030002800073

- For the part in which the ultra high strength steel plate is used, do not repair it by cutting and bonding to avoid the reduction in strength by heat. Instead, replace the whole assembly including the part.
- Be careful with rough extending work, because the ultra high strength steel plate has higher tensile strength and a higher yielding point than high strength steel plate and general steel plate. Careless work will cause symptom such as over-pulling and springback. Do not extend it completely at a time. Do it gradually while removing the distortion by sheet metal processing with a hammer.
- Plug welding of ϕ 8 mm diameter plug for repair ensures the strength equivalent to spot welding for 2 steel sheets. For 3 sheets, weld 2 sheets each time instead of welding from one side to give sufficient welding strength.

FRONT END CROSSMEMBER

M4030003100408



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

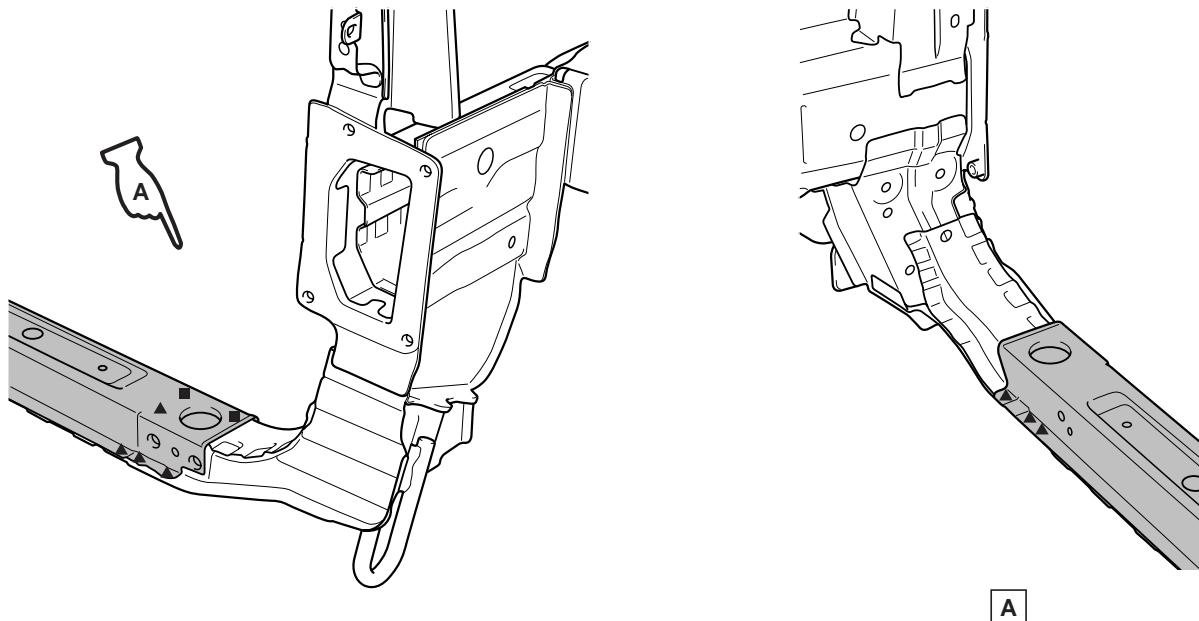
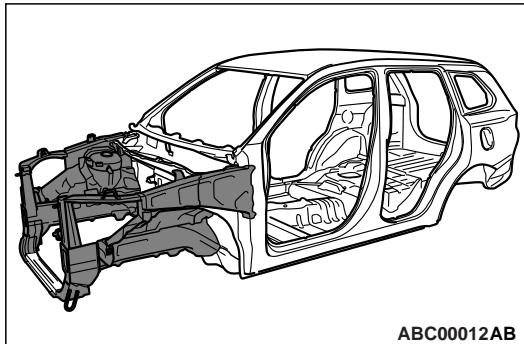


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FENDER SHIELD

M4030004001731



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
○○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

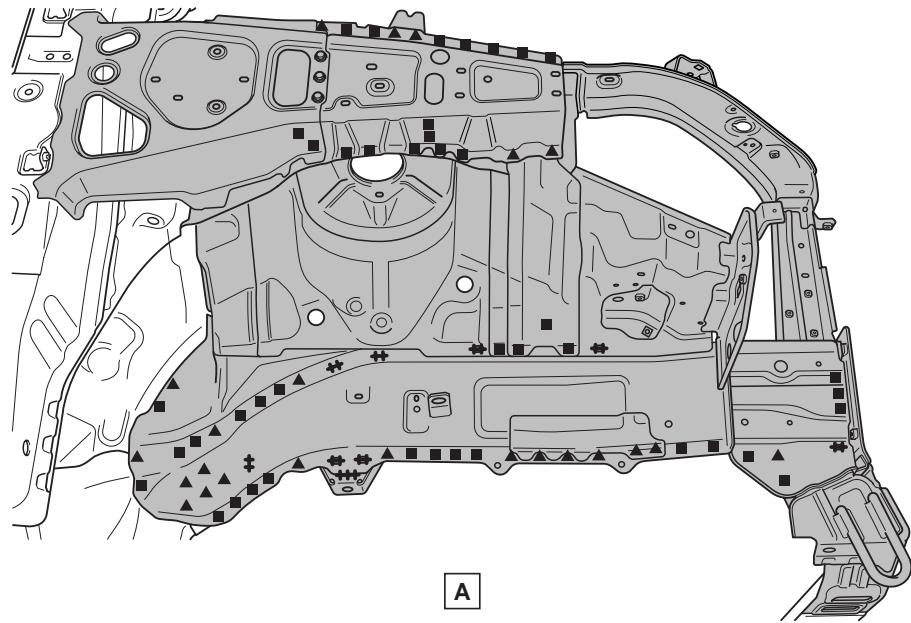
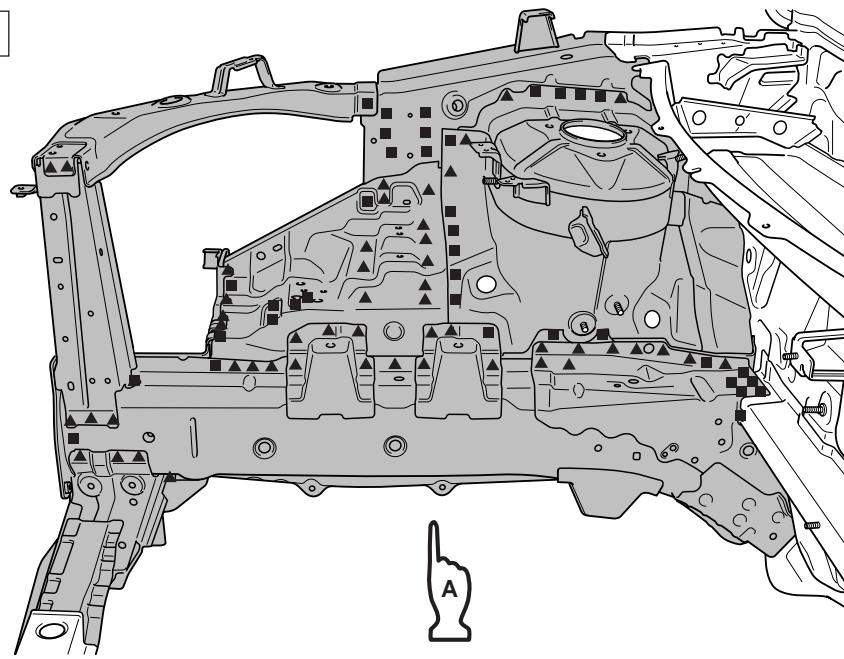


ABB00843AB

NOTE: Refer to the Front End Crossmember section on [P.3-2](#) for the welding point with headlamp support panel lower.

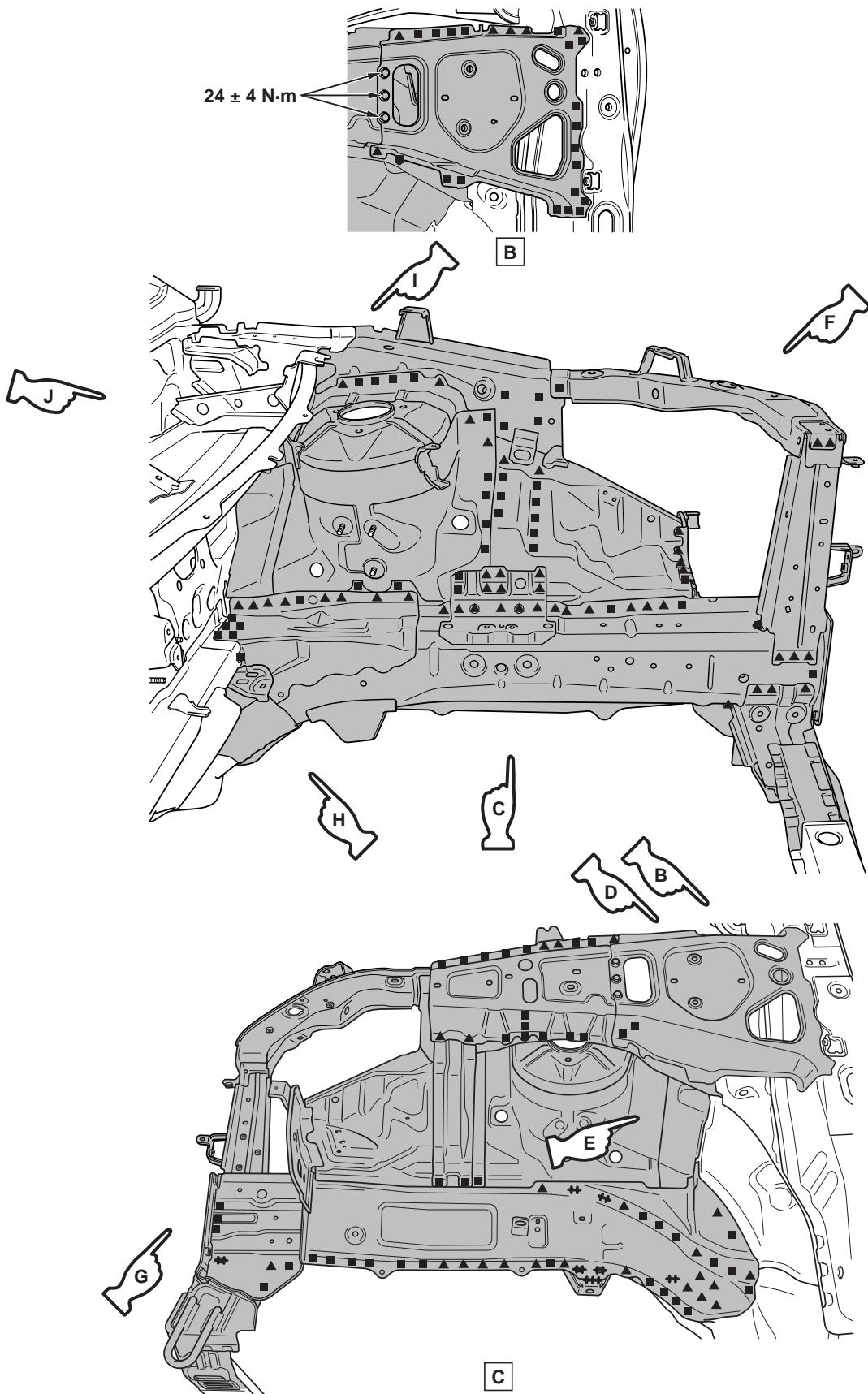
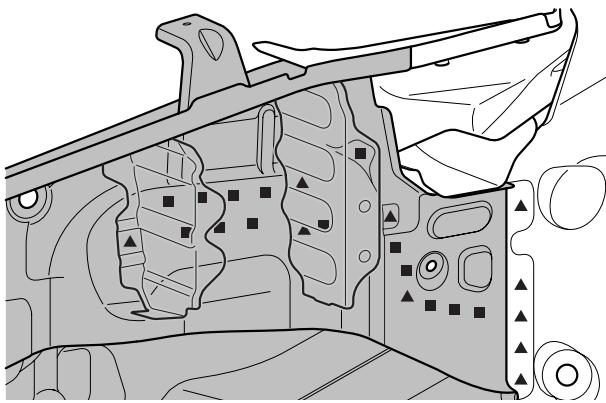
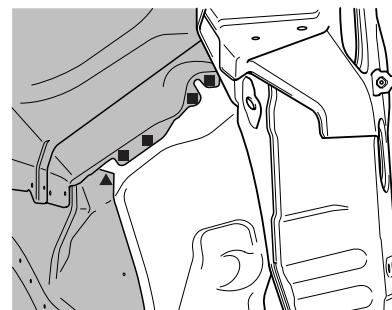


ABB00844AB

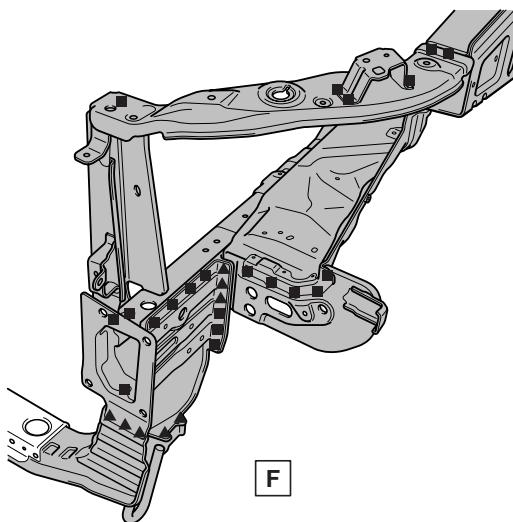


(With the front deck frame front upper
and front deck frame rear upper removed)

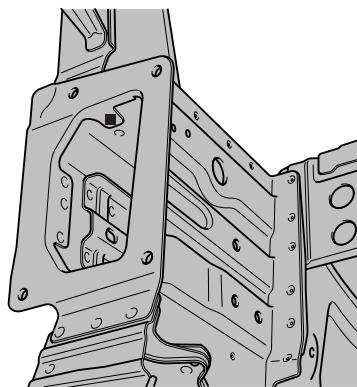
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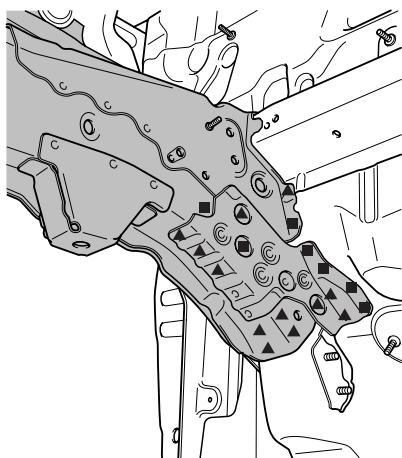
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F

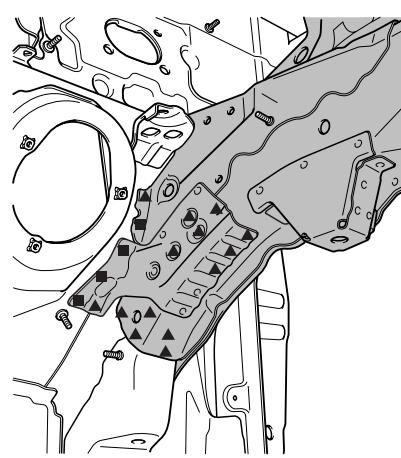


G



H

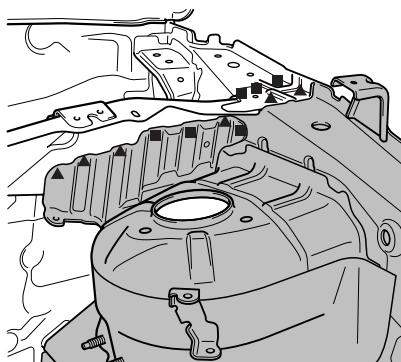
(Right side)



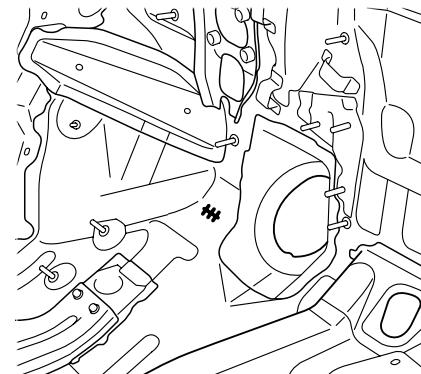
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(Left side)

ABB00845AB



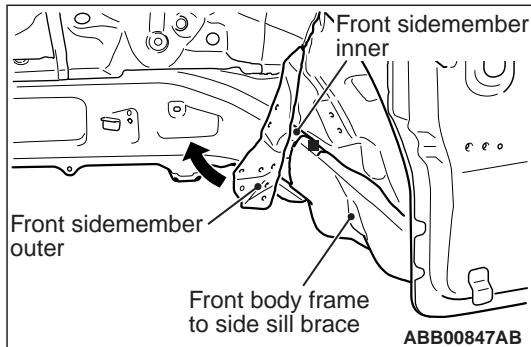
I



J

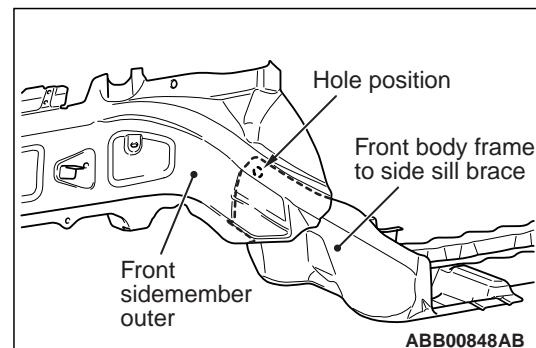
ABB00846AB

NOTE ON REPAIR WORK REMOVAL



Turn up the front sidemember outer as shown to cut off the welded point between the front sidemember inner and the front body frame to side sill brace.

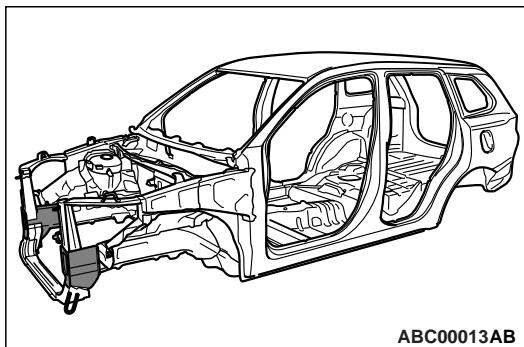
INSTALLATION



Before installing a new front sidemember, remove the front floor sidemember from the existing front sidemember. The welding point between the front sidemember inner and the front body frame-to-side sill brace is not visible from the front sidemember outer. Drill a hole into the front sidemember outer at the same point as the welding point which is visible from the front sidemember inner. Then cut the welding point from front body frame-to-side sill brace. Then weld the front sidemember inner to the front body frame-to-side sill brace and the front sidemember outer.

FRONT SIDEMEMBER (PARTIAL REPLACEMENT)

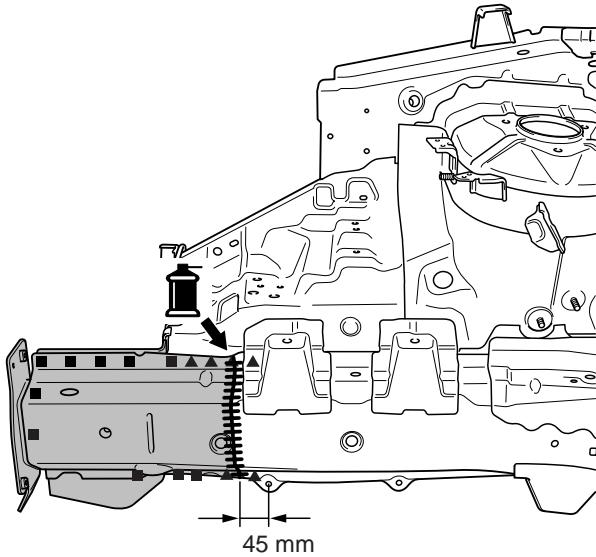
M4030000100937



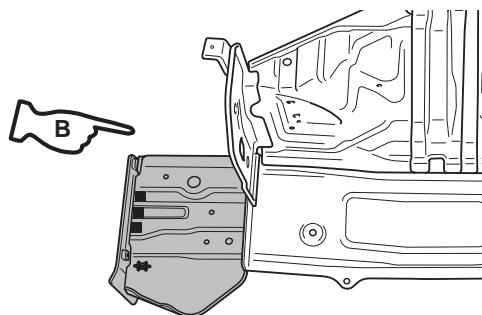
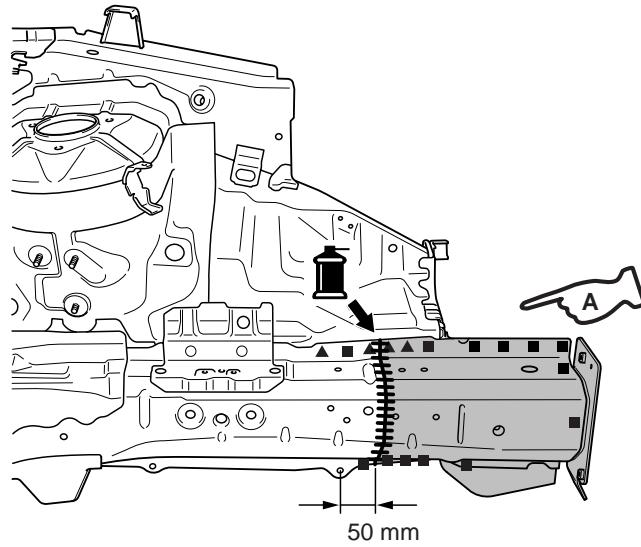
Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++ +	MIG spot welding
=====	MIG arc welding (continuous)
○○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

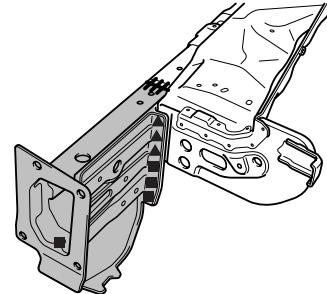
(Right side)



(Left side)



A



ABC00059AB

NOTE:

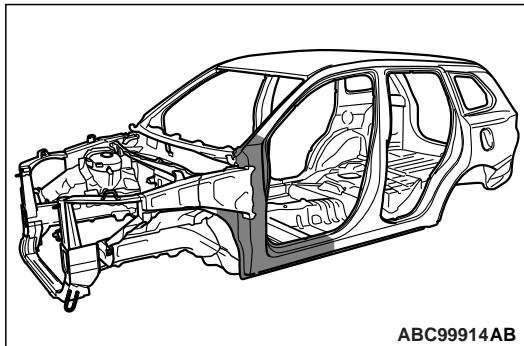
- Refer to the Front End Crossmember section on [P.3-2](#) for the welding point with the headlamp support panel lower.
- Refer to the Fender Shield section on [P.3-3](#) for the welding points with the headlamp support panel and headlamp support panel lower.

FRONT PILLAR

M4030005002113

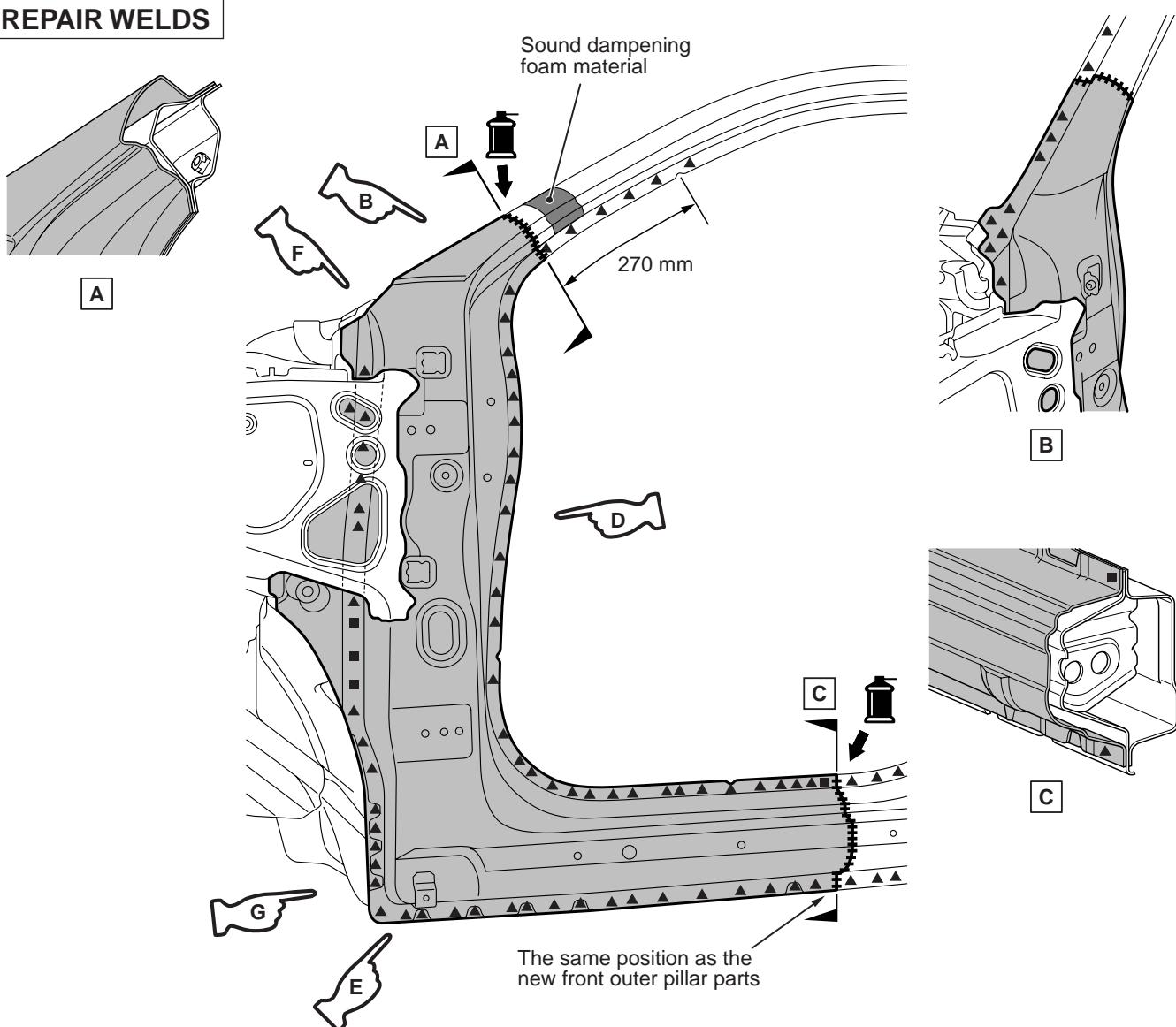
CAUTION

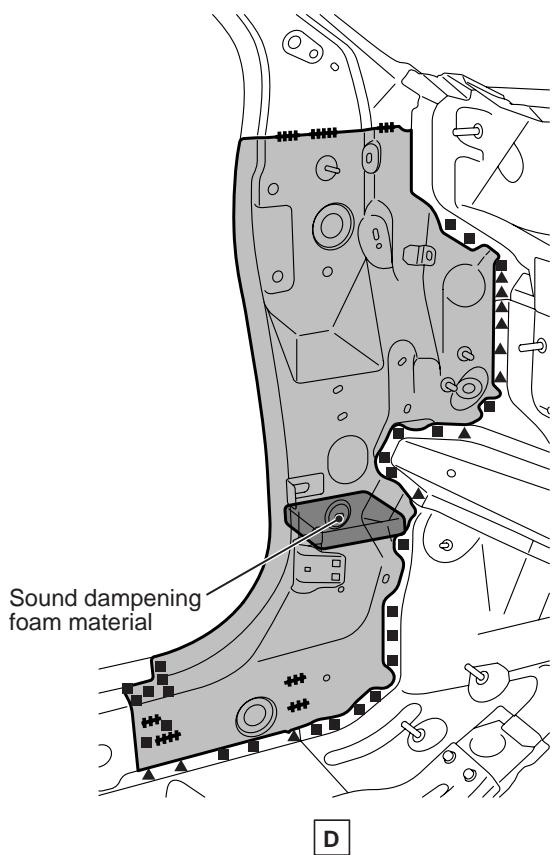
When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.



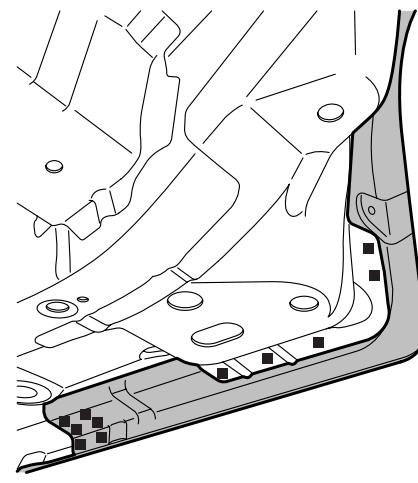
Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
++ + +	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

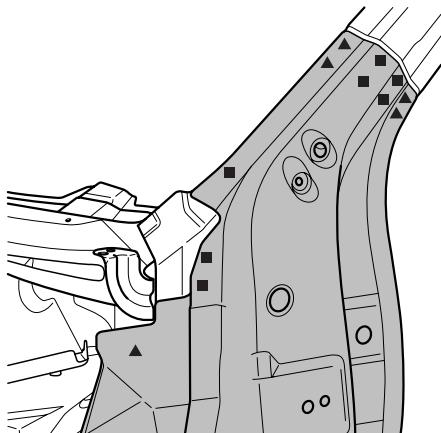




D

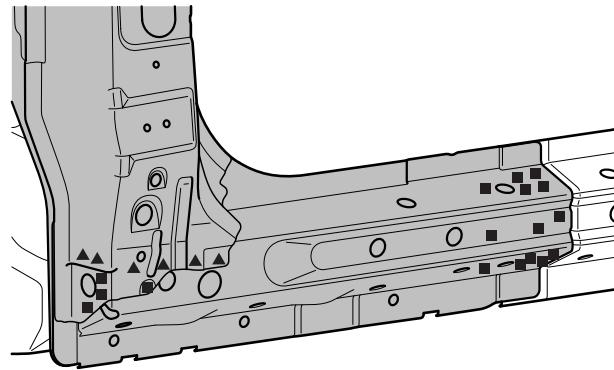


E



F

(With the front deck frame rear upper
and side outer panel removed)



G

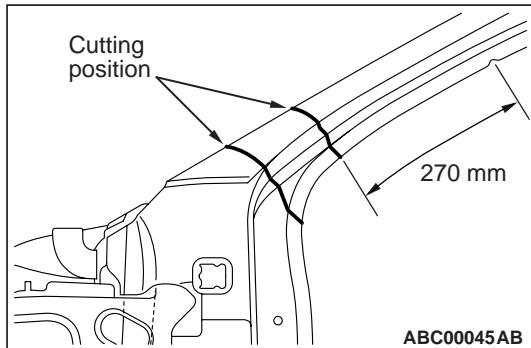
(With the side outer panel removed)

ABB00890AB

NOTE: Refer to the Fender Shield section on P.3-3 for the welding points with the front deck frame rear upper.

NOTE ON REPAIR WORK

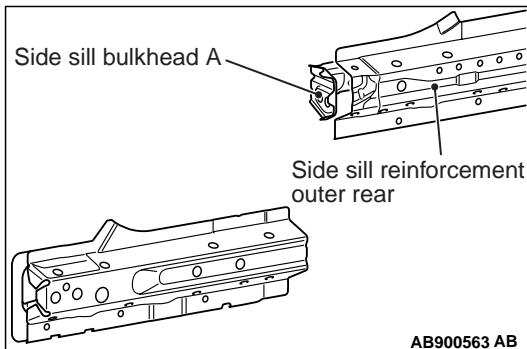
REMOVAL



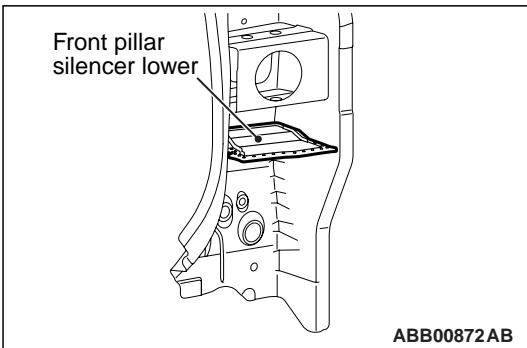
1. Cut the side outer panel as shown to separate the front pillar reinforcement lower from the front pillar upper reinforcement and the side sill reinforcement outer rear.

INSTALLATION

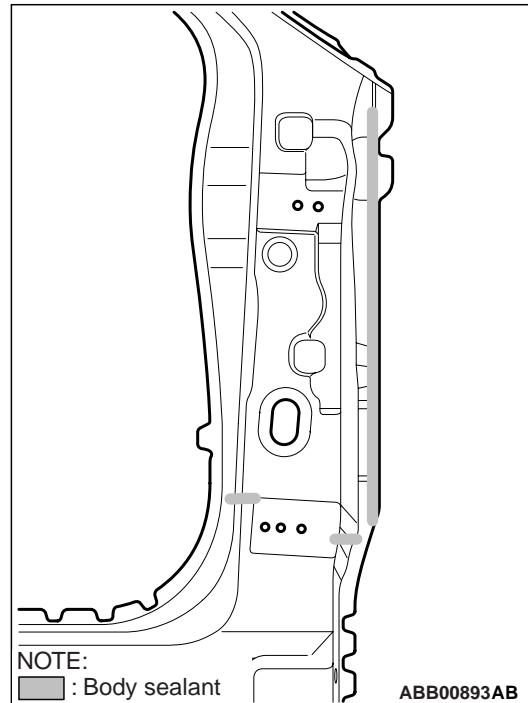
1. Install the new front lower inner pillar parts.



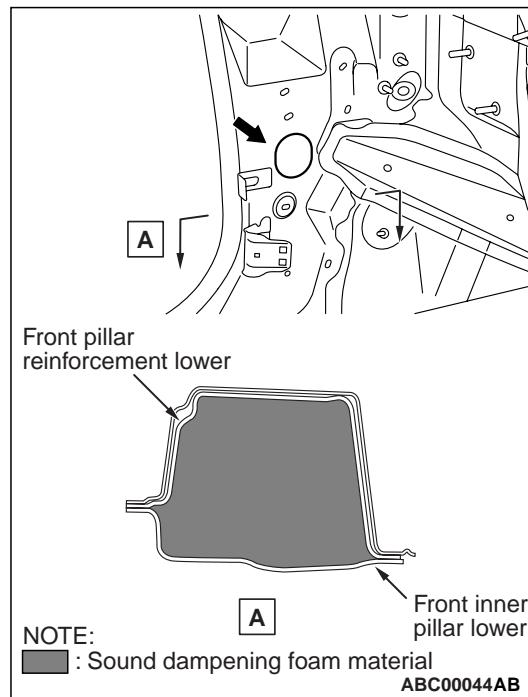
2. When installing the new side sill reinforcement parts, remove the side sill reinforcement outer rear and the side sill bulkhead A from the side sill reinforcement.



3. When installing the new front pillar reinforcement lower inner parts, in order to prevent the dripping of sound dampening foam material to be filled into the front pillar in the next process, install the front pillar silencer lower to the front pillar reinforcement lower inner, and then apply the butyl-tape to close the hole and gap of the front pillar silencer lower.

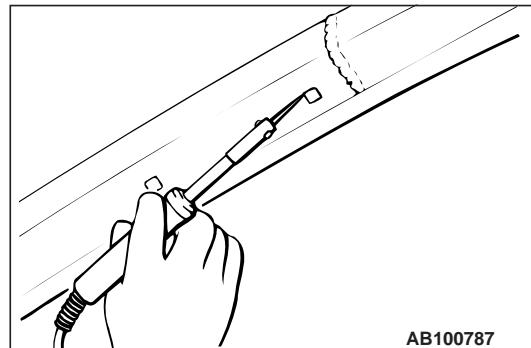


4. Prior to assembling the new front outer pillar parts, apply the body sealant to the area shown in the figure.



5. After installing the front outer pillar, seal the hole and flange with bolt and sheet-metal tape, and then fill the hole with foam materials as shown in the figure.

Sound dampening foam material: 3M ATD
Part No.08463



AB100787

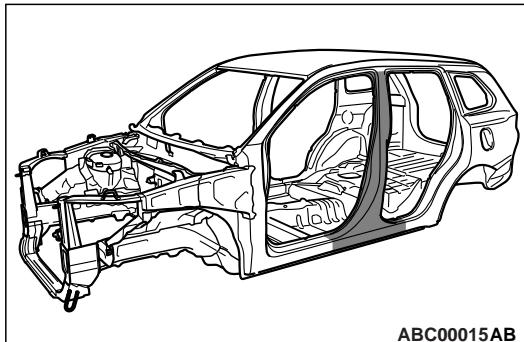
6. Wait 2 hours after filling the sound dampening foam material to remove the bolt and aluminium tape, then melt the sound dampening foam material with a soldering gun so a clip, etc. can thoroughly be inserted in the hole filled with sound dampening foam material.

CENTRE PILLAR

M4030006001362

CAUTION

When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.



ABC00015AB

Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
oooooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

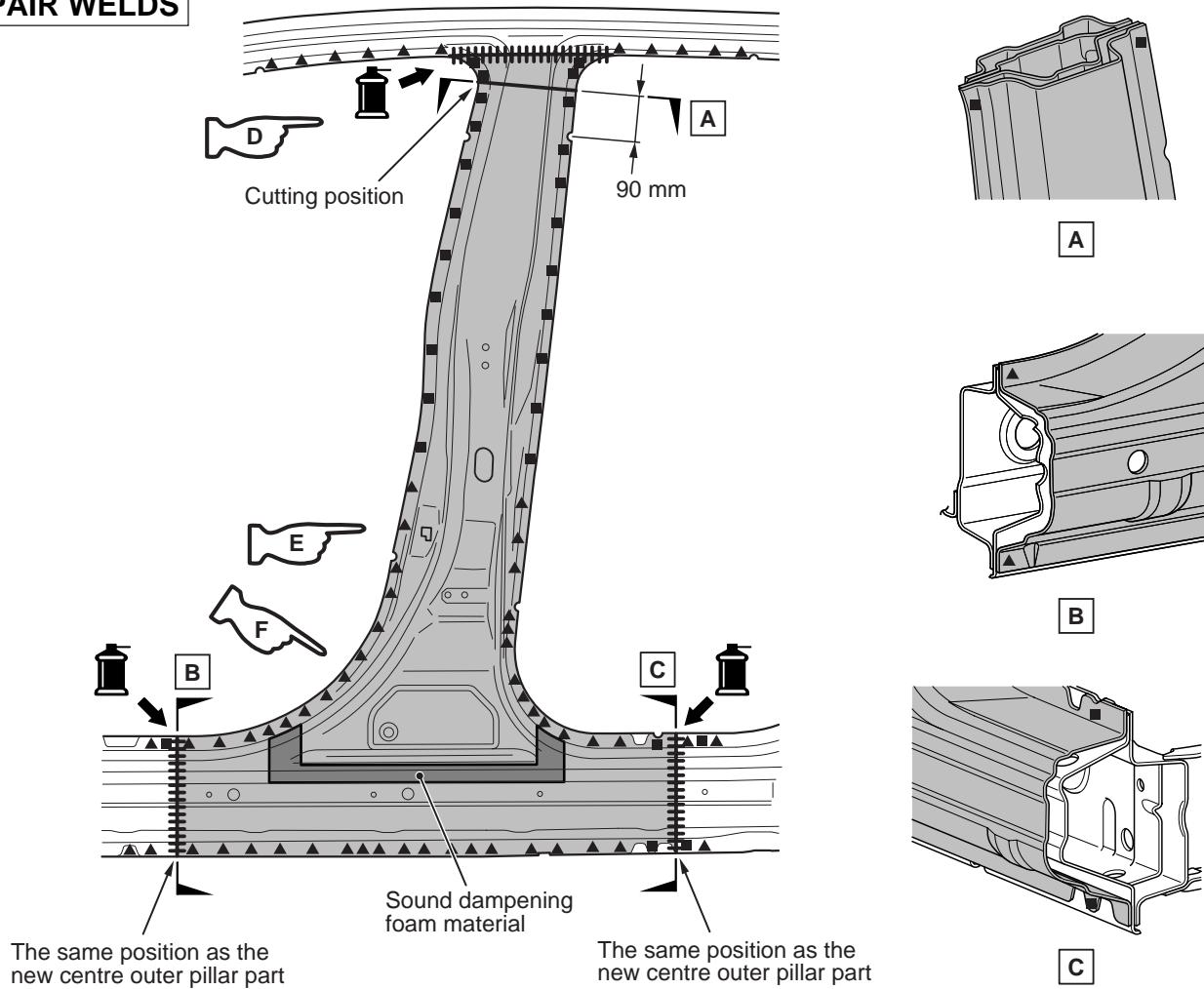


ABB00947AB

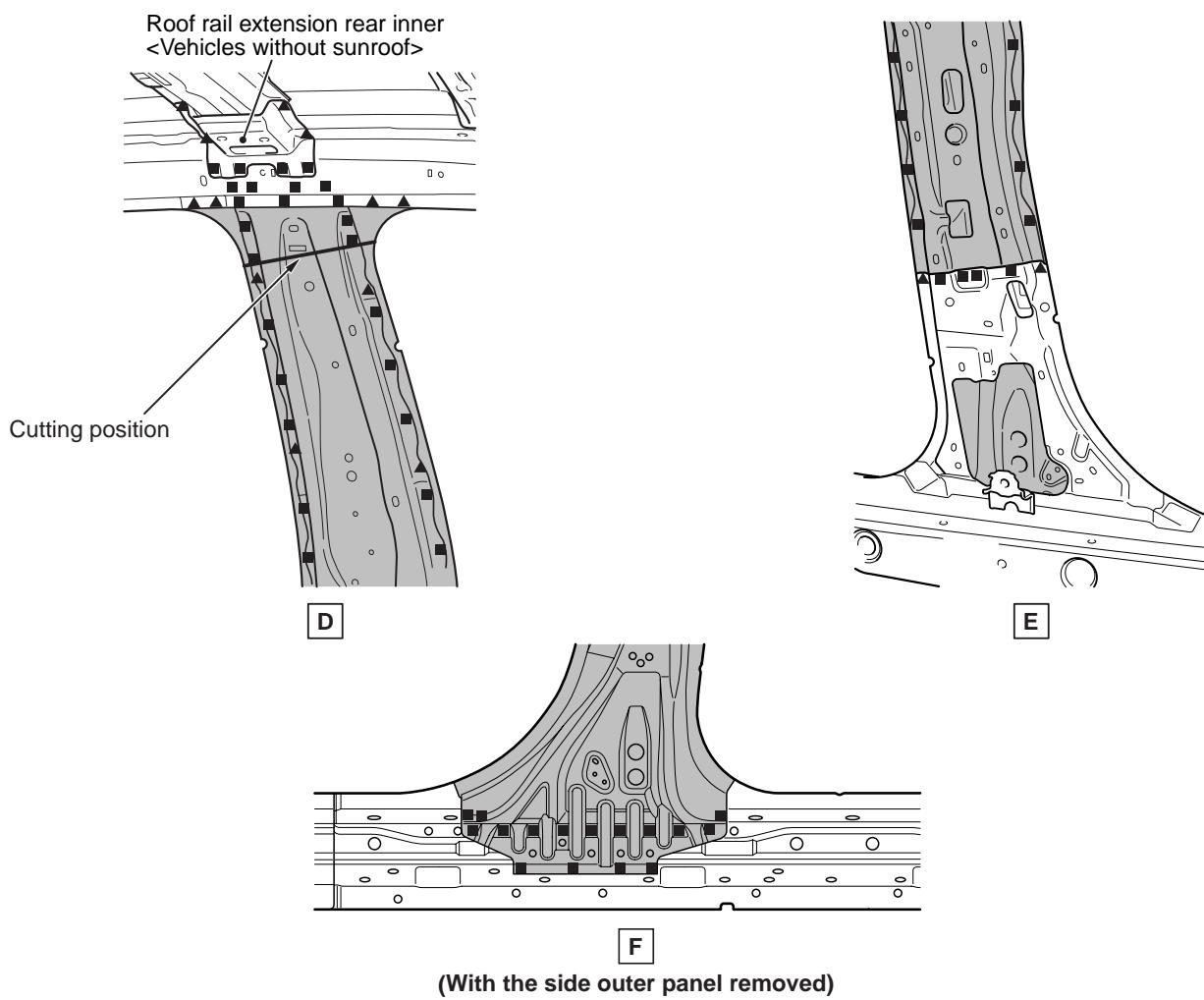
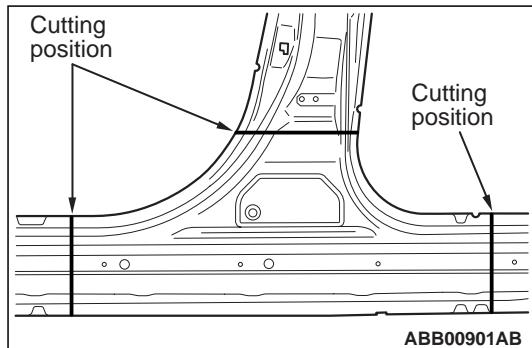
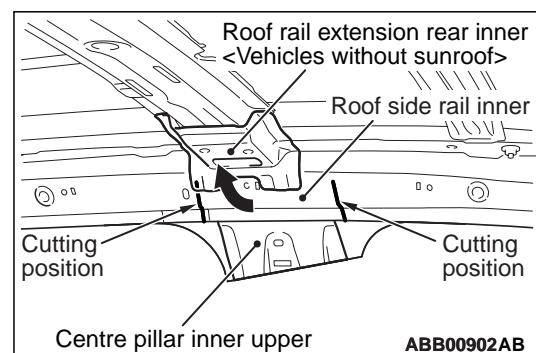


ABB00948AB

NOTE ON REPAIR WORK REMOVAL

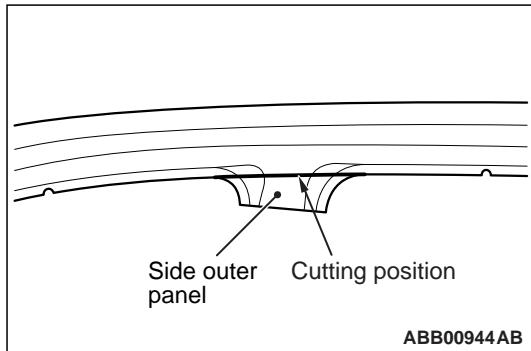


1. To cut the welding points between the centre pillar reinforcement and side sill reinforcement outer rear, cut the side outer panel as shown.

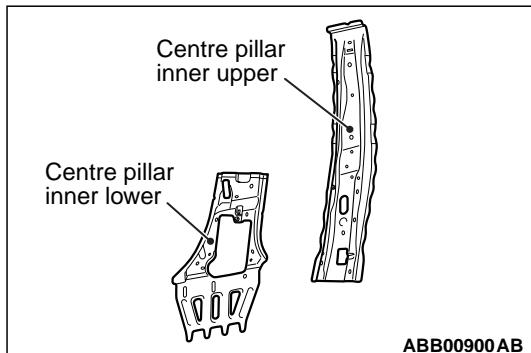


2. Remove the roof rail extension rear inner as the centre pillar inner upper remains on the vehicle body and cannot be removed. Slit the roof side rail inner as shown, and pull it towards you to remove it.

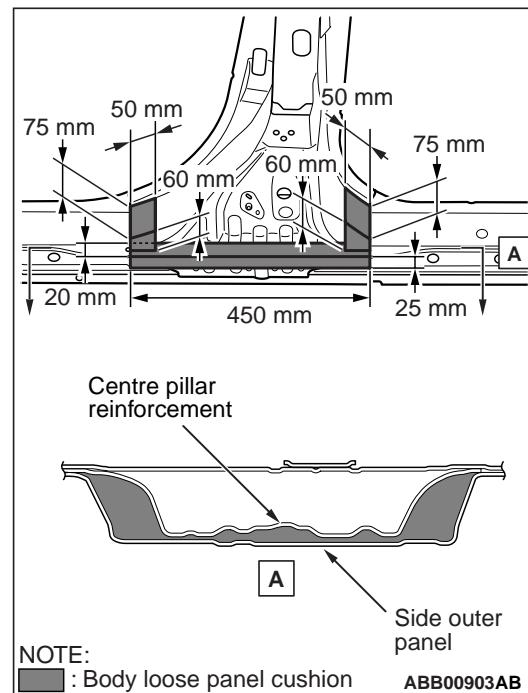
INSTALLATION



1. To guarantee the strength of the centre pillar cut-off area, cut off the side outer panel as shown.



2. When installing the new centre inner pillar parts, remove the centre pillar inner lower from the centre inner pillar.



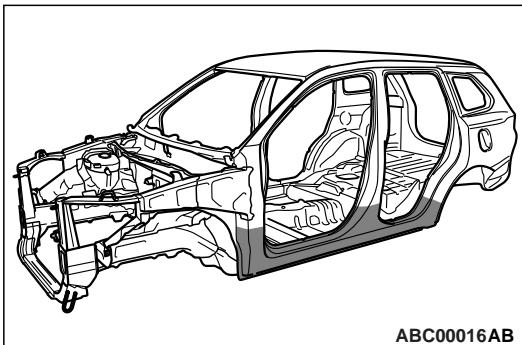
3. When installing the new centre outer pillar part, because the sound dampening foam material cannot be filled into the centre pillar, machine the body loose panel cushion (MR565301 or MR435765) as a substitute according to the method shown in the figure, and then attach it to the body.

SIDE SILL

M4030007001677

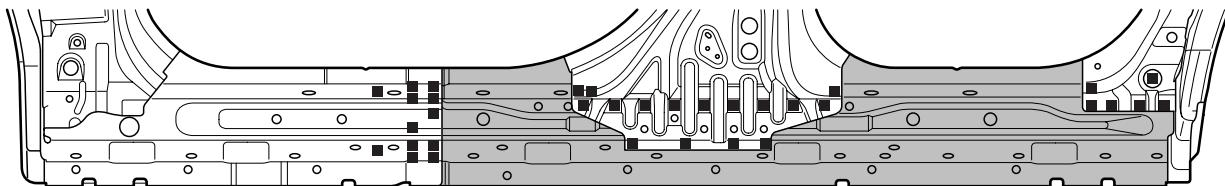
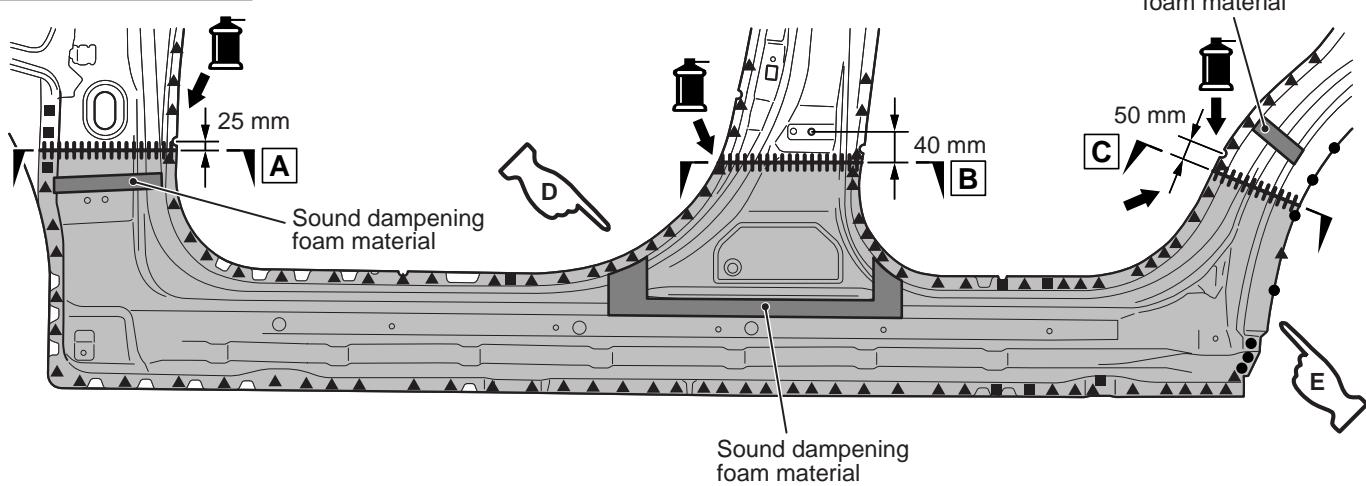
CAUTION

When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.

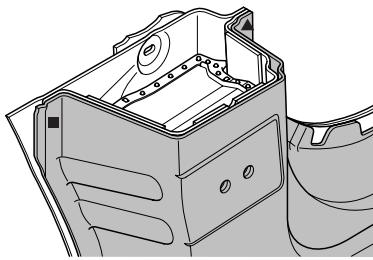


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
ooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

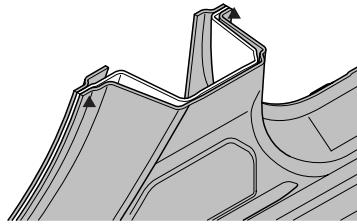
REPAIR WELDS



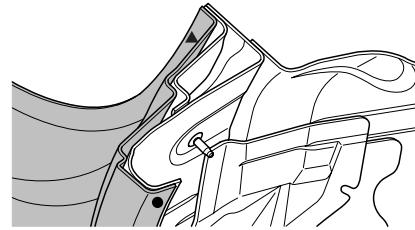
(With the side outer panel removed)



A

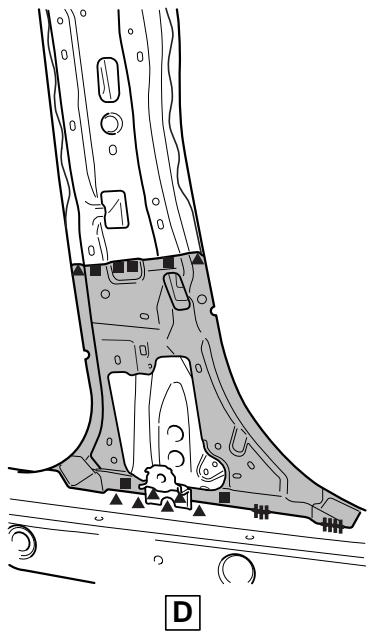


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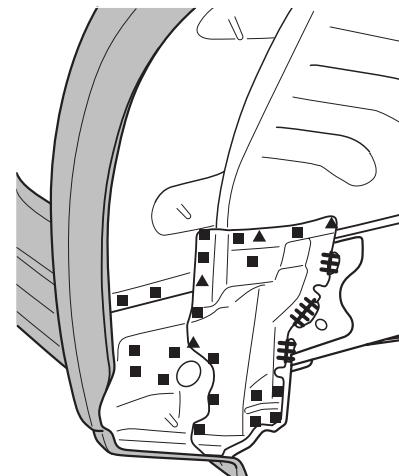


C

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D

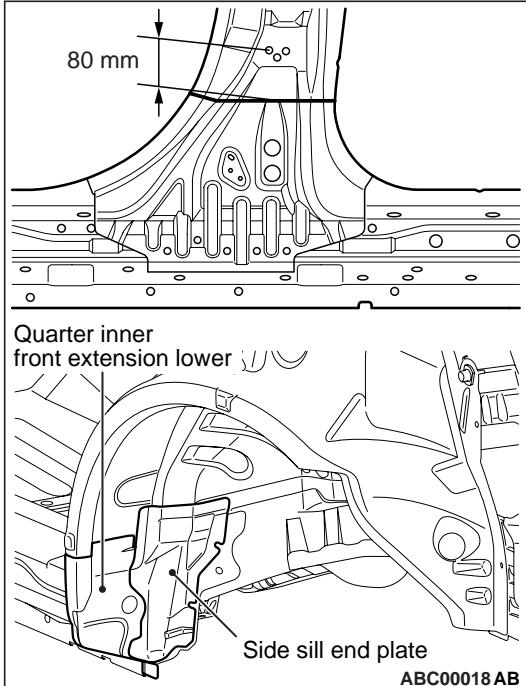


E

ABB00917AB

NOTE ON REPAIR WORK

REMOVAL



When removing the side sill reinforcement outer rear, cut the centre pillar reinforcement 80 mm downward from the installation hole of the rear door hinge because the centre pillar reinforcement interferes with it. Remove the side sill end plate and the quarter inner front extension lower as the side sill reinforcement outer rear interferes with them.

INSTALLATION

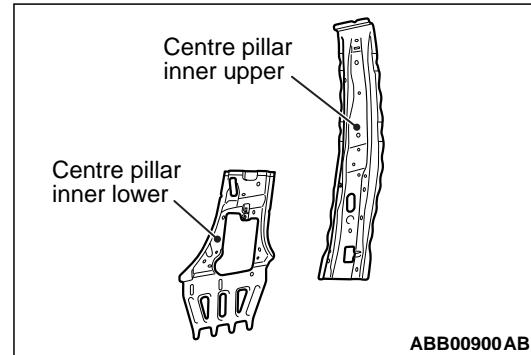
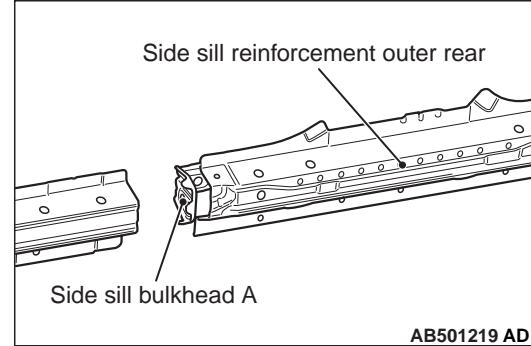


ABB00900 AB

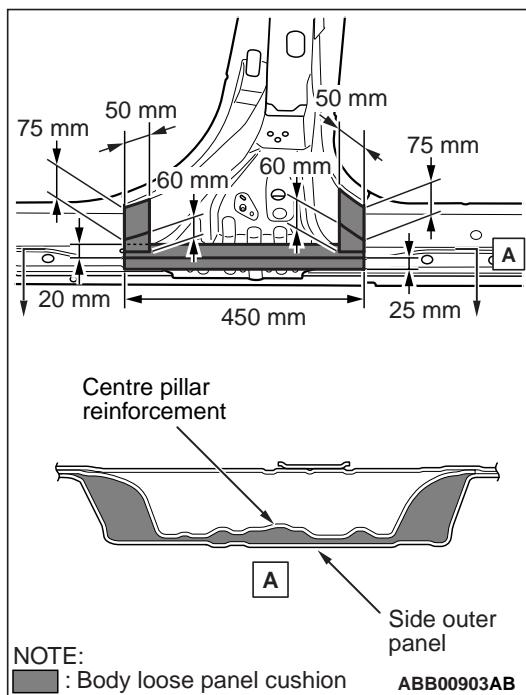
1. When installing the new centre inner pillar parts, remove the centre pillar inner upper from the centre inner pillar.



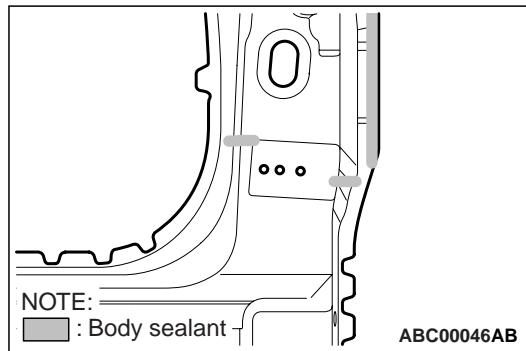
AB501219 AD

2. When installing the new side sill reinforcement parts, use only the side sill reinforcement outer rear and the side sill bulkhead A.
3. After installing the side sill reinforcement, install the side sill end plate and the quarter panel extension front.

4. When assembling the new front floor side sill outer parts, carry out the following procedure.



(1) Machine the body loose panel cushion (MR565301 or MR435765) for replacement as shown and apply it to the body side because the sound dampening foam material cannot be filled into the centre pillar.



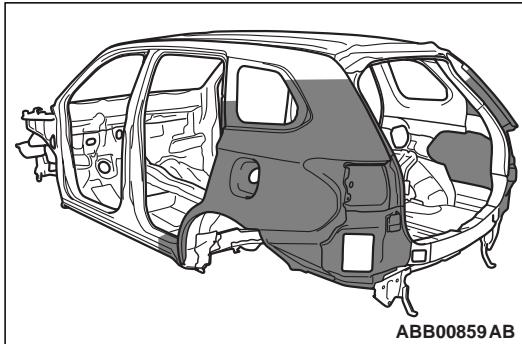
(2) Apply body sealant in the area shown in the figure of the front floor side sill outer.

QUARTER OUTER

M4030008001391

CAUTION

When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded) (▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
ooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

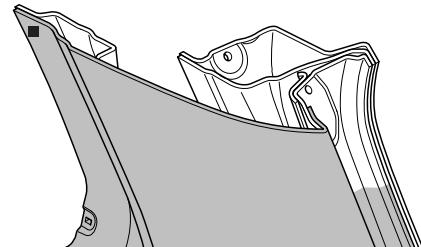
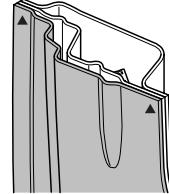
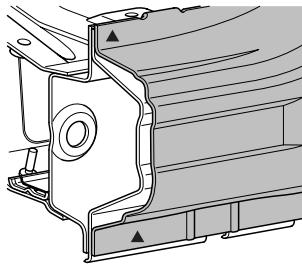
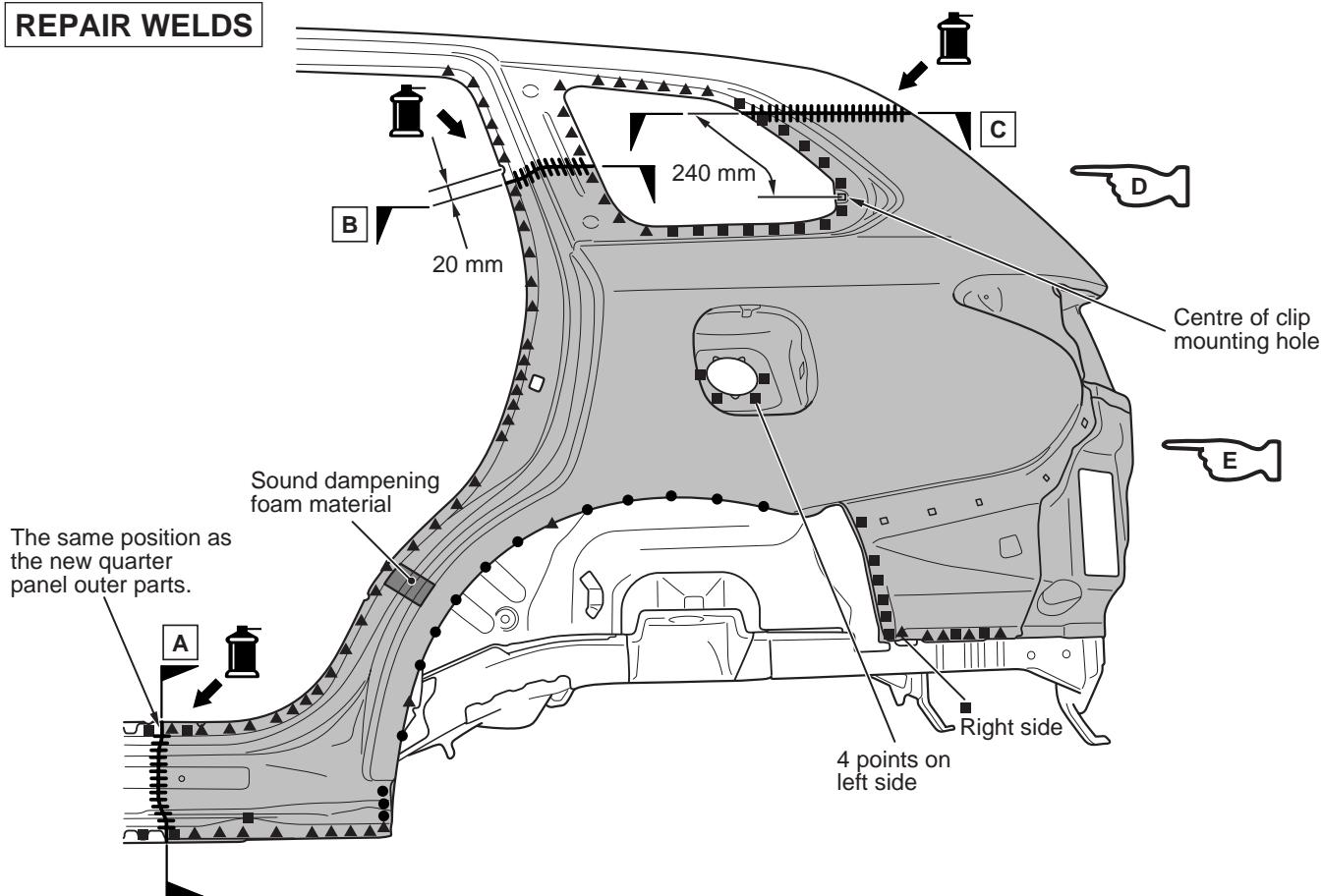
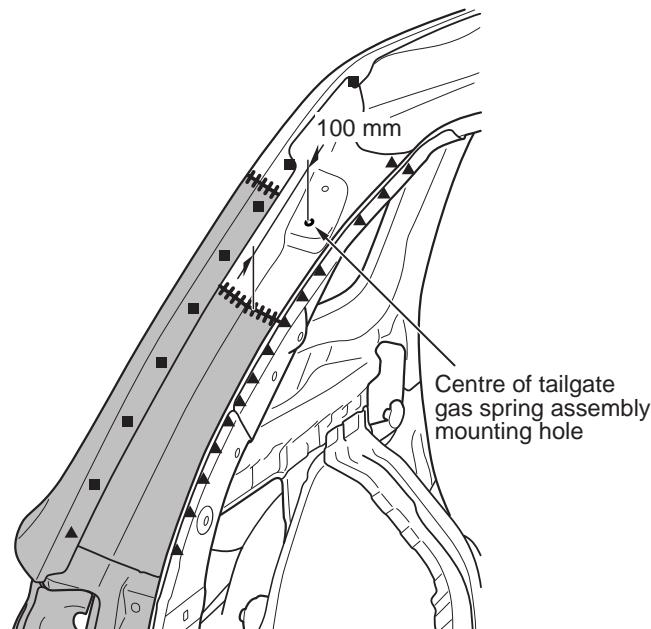
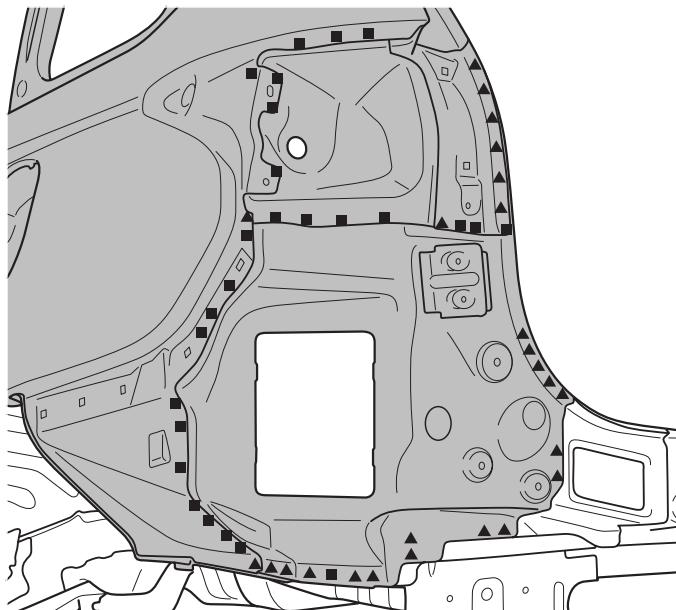


ABB00865AB



D



E

ABB00866AB

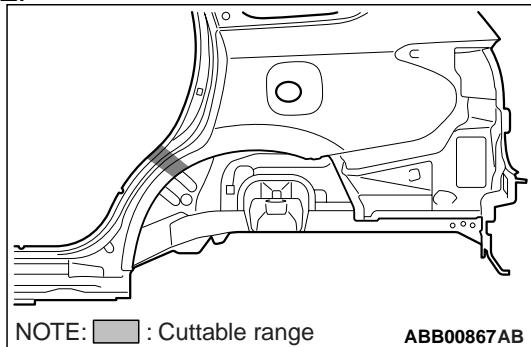
NOTE:

ABB00867AB

Partial replacement is possible depending on the range of damage.

NOTE ON REPAIR WORK INSTALLATION

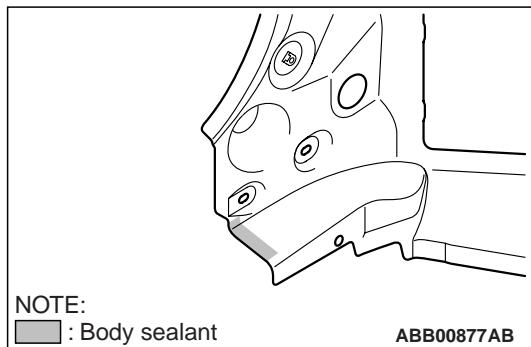


ABB00877AB

1. When installing the new quarter panel extension rear lower parts, apply the body sealant to the areas as shown in advance.
2. When assembling the new quarter panel outer parts, carry out the following procedure.

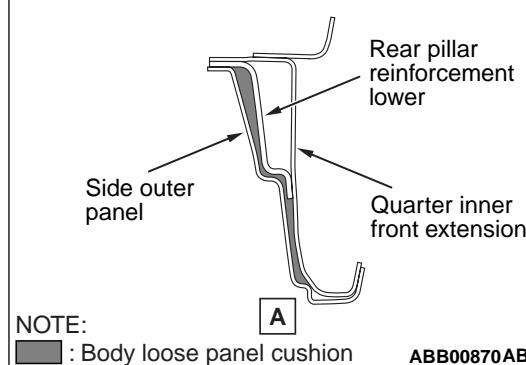
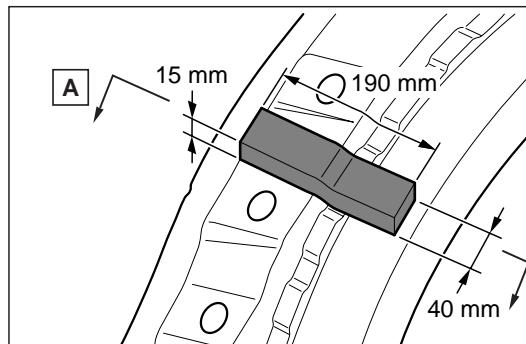
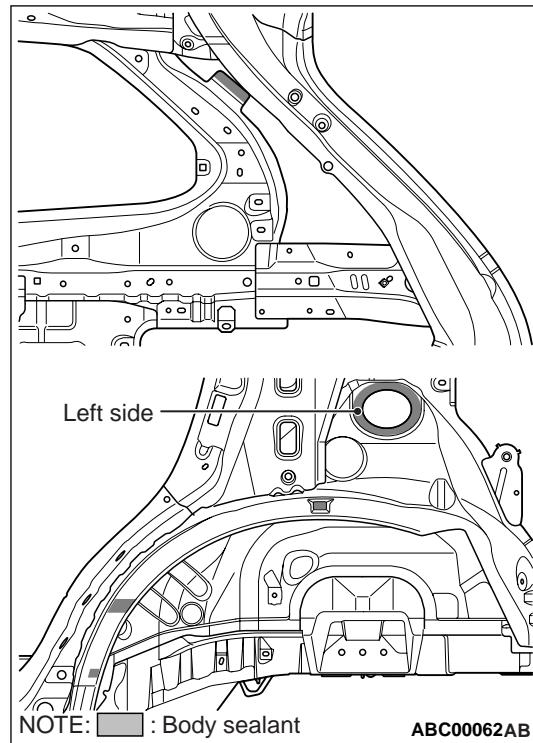


ABB00870AB

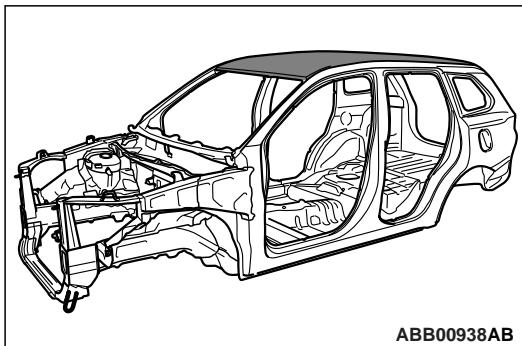
(1) Machine the body loose panel cushion (MR565301 or MR435765) for replacement as shown and apply it to the body side because the sound dampening foam material cannot be filled into the wheel arch.



(2) Apply the body sealant in advance to the areas as shown.

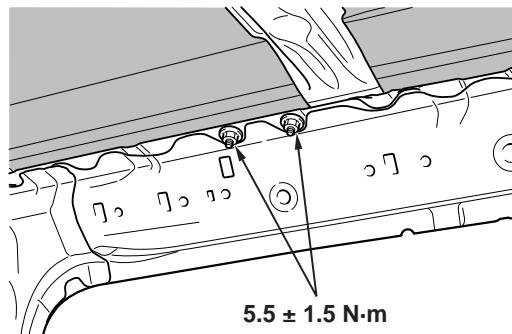
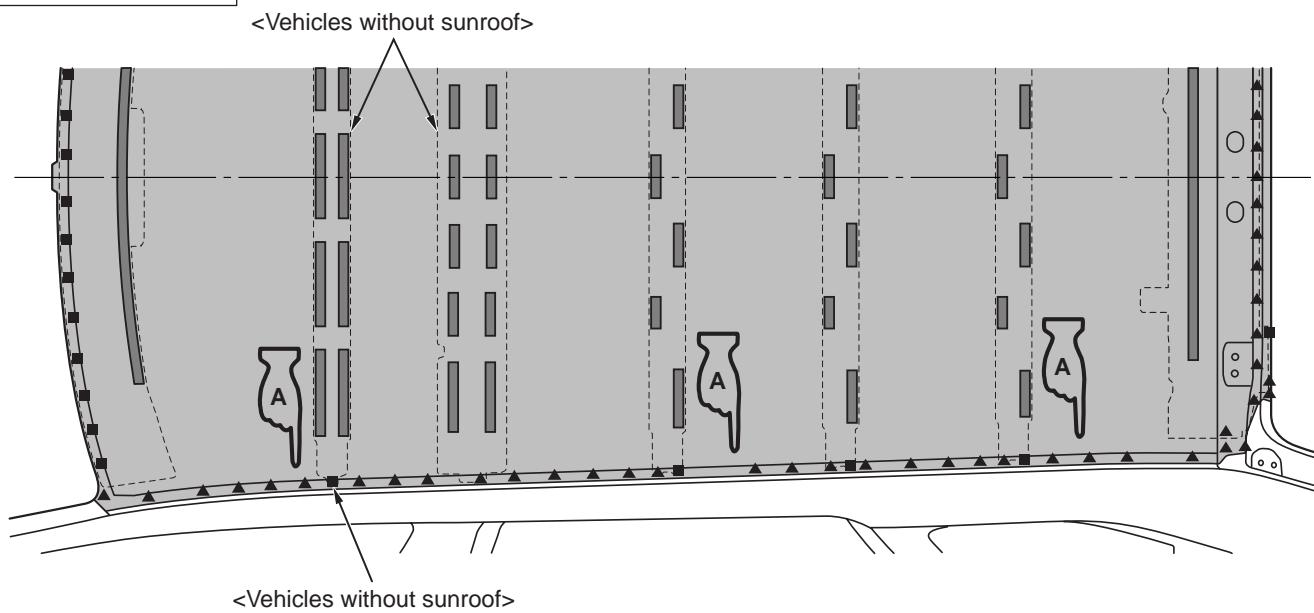
ROOF

M4030011001744



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded) (▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



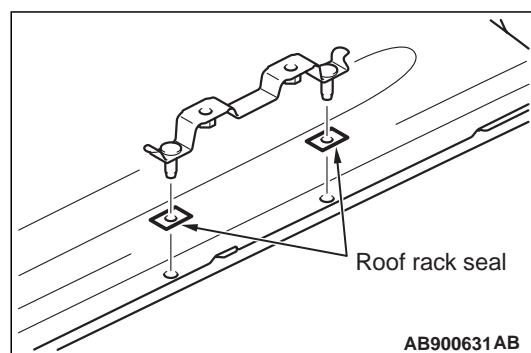
A

ABB00939AB

Adhesive: Urethane body sealer
Brand: 3M ATD Part No.08684, 08782 or
equivalent

NOTE ON REPAIR WORK

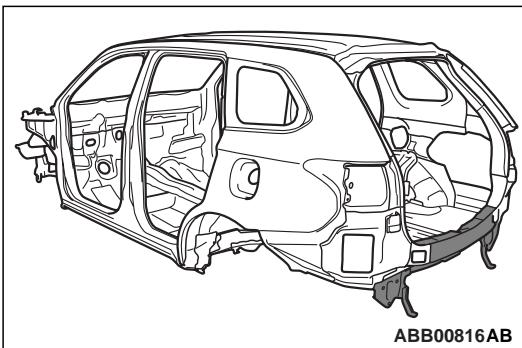
INSTALLATION



When installing the new roof carrier bracket and roof rail bracket, install the roof rack seal to avoid water ingress.

REAR END CROSSMEMBER

M4030015000743



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
++ + +	MIG spot welding
	MIG arc welding (continuous)
ooooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

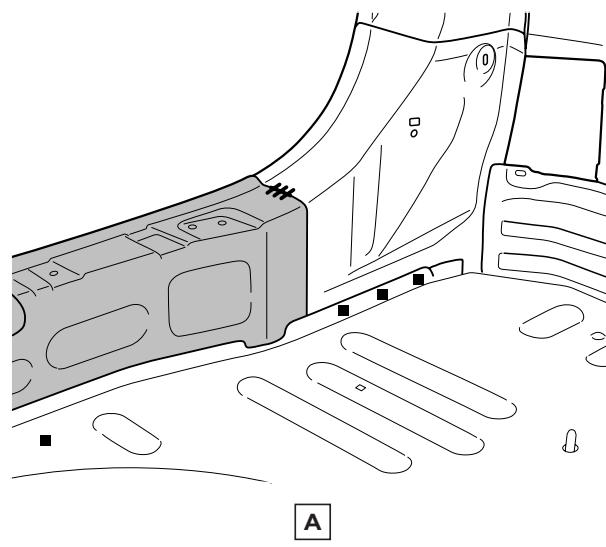
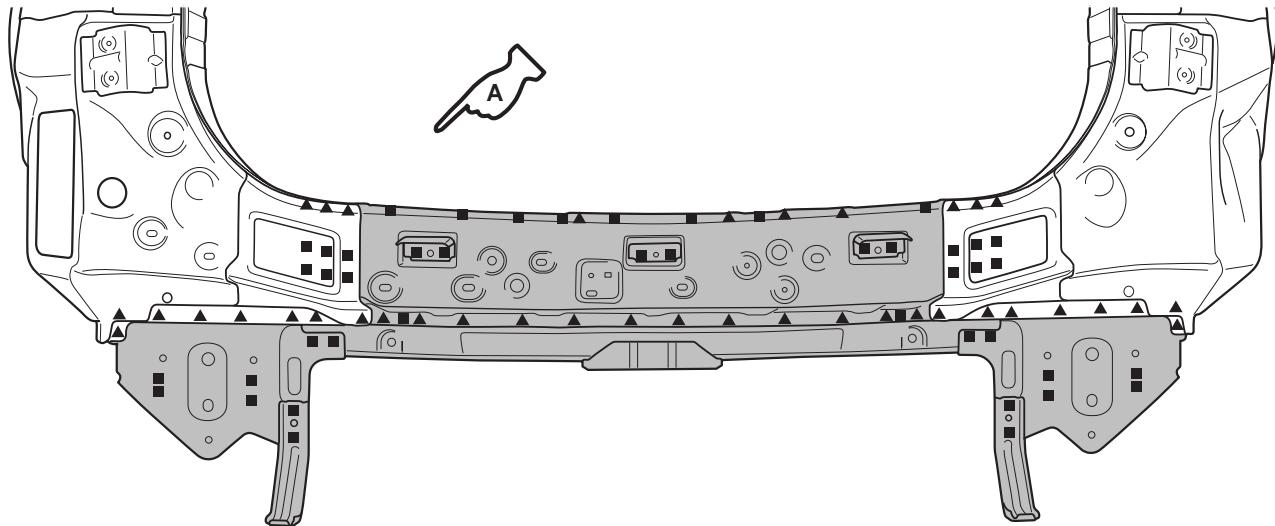
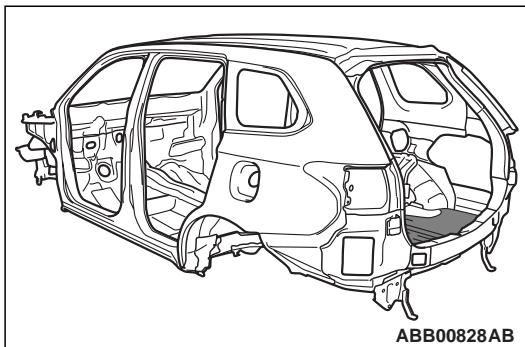


ABB00821AB

REAR FLOOR

M4030010001309



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
++ + +	MIG spot welding
	MIG arc welding (continuous)
○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS

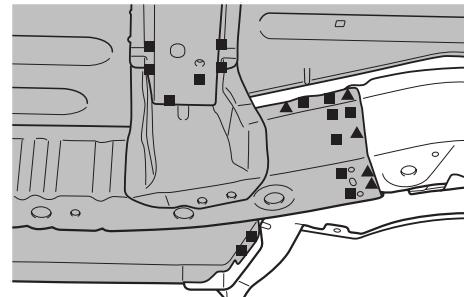
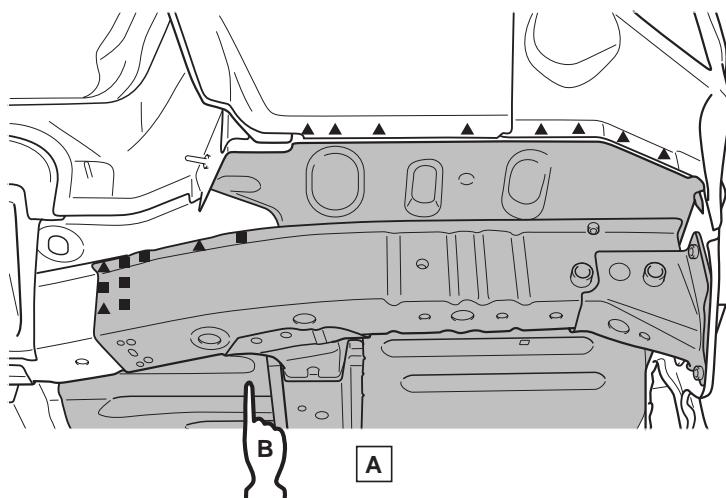
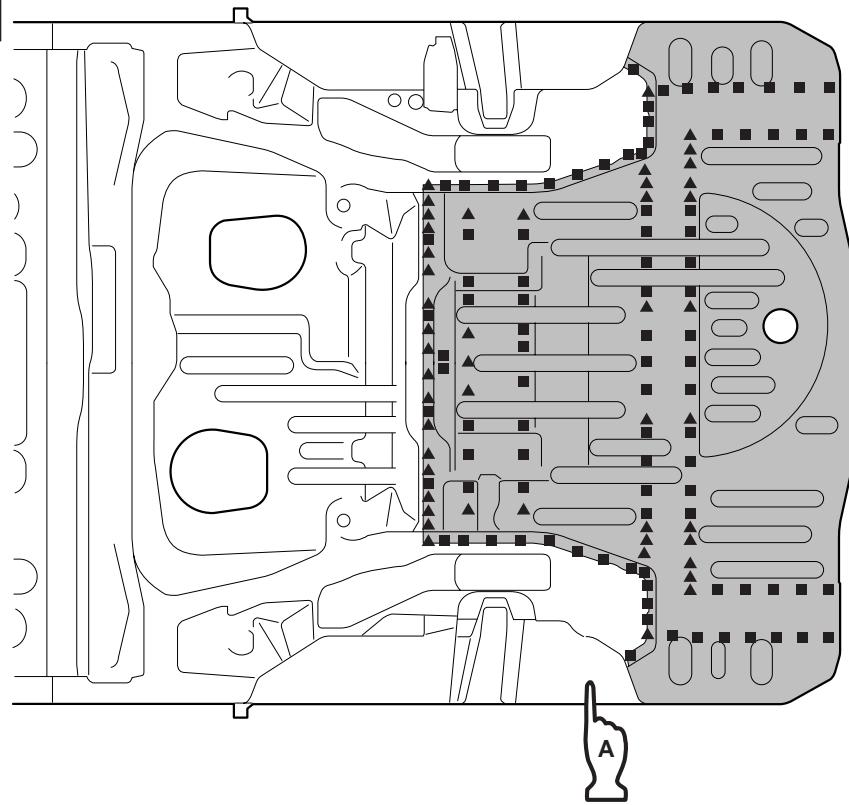


ABB00826AB

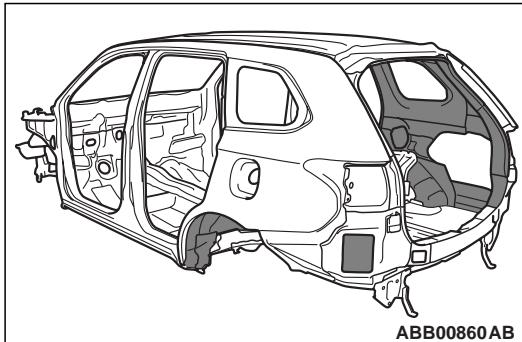
NOTE: Refer to the Rear End Crossmember section on [P.3-23](#) for the welding points with the rear end panel.

QUARTER INNER

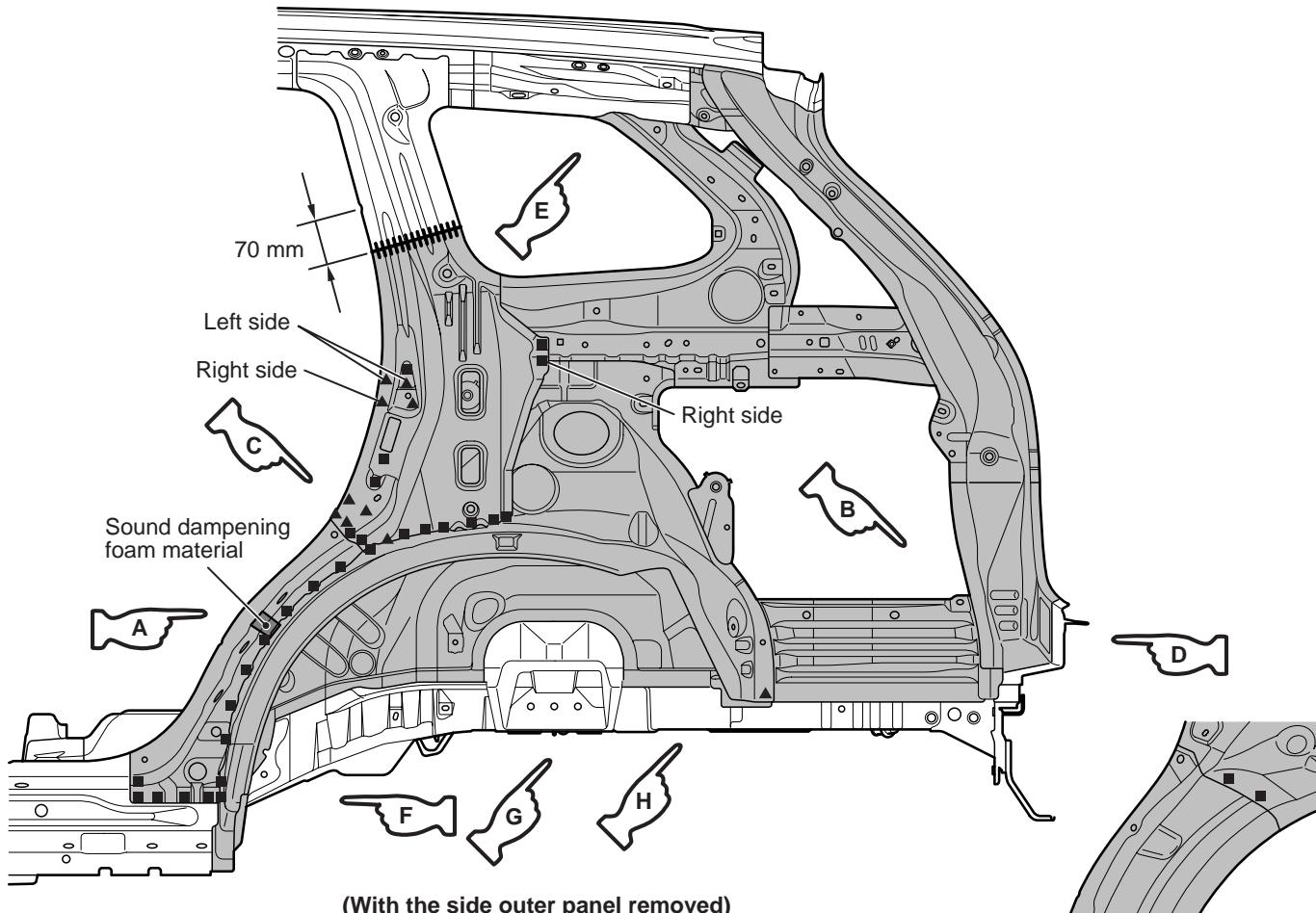
M4030012001446

CAUTION

When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.

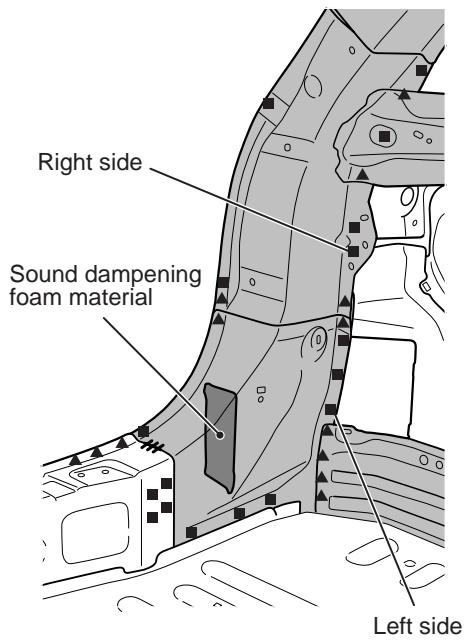
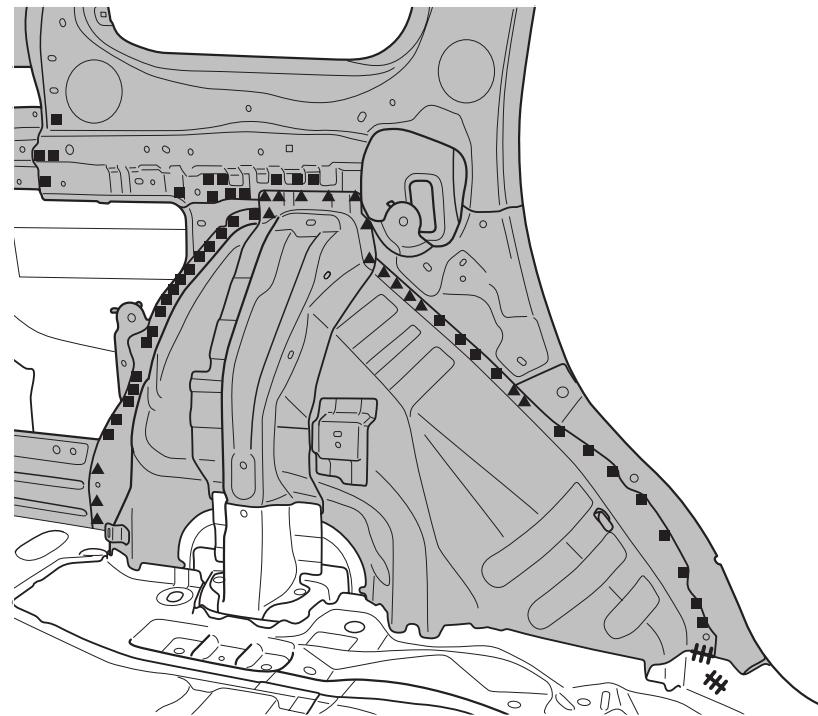


Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
ooooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

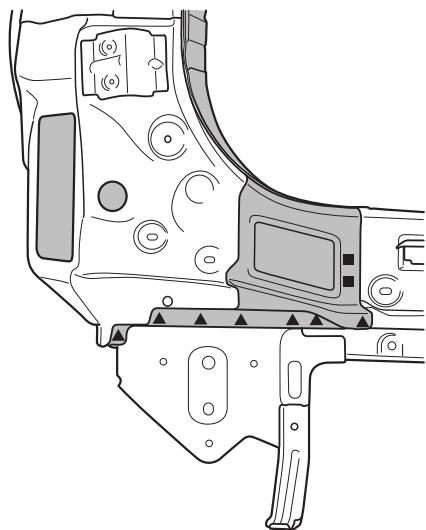
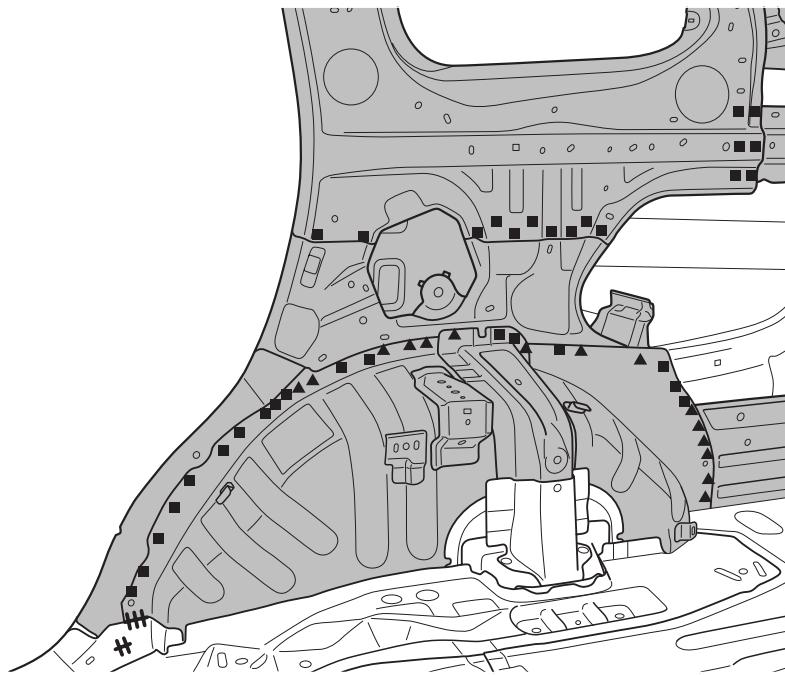
REPAIR WELDS

(With the rear pillar reinforcement and
rear pillar reinforcement lower removed)

ABB00925AB

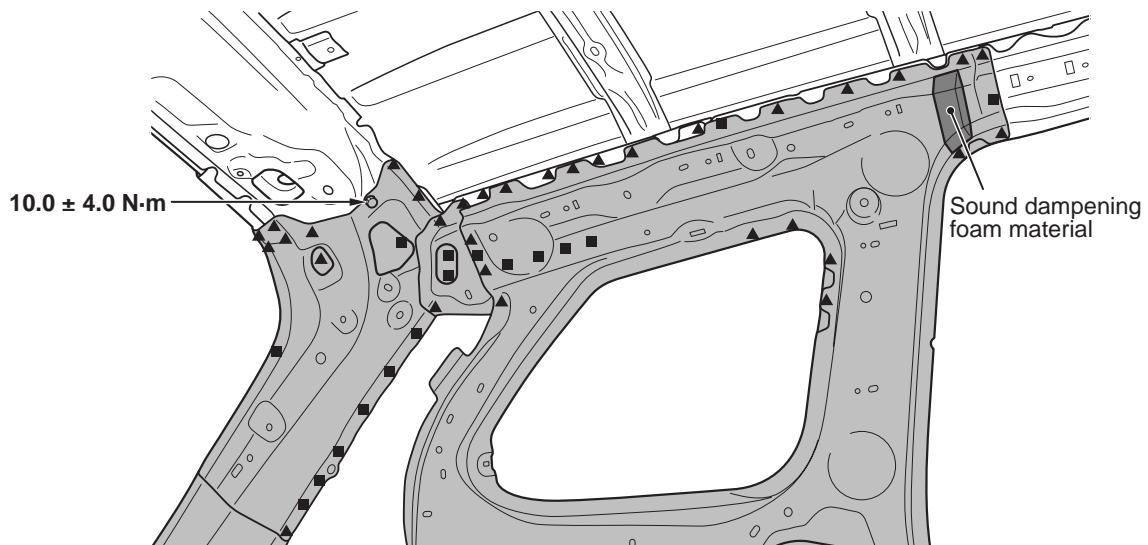
**B****C**

(Left side)

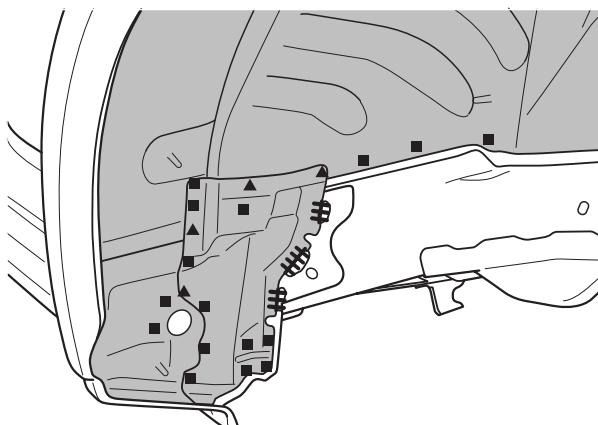
**D****C**

(Right side)

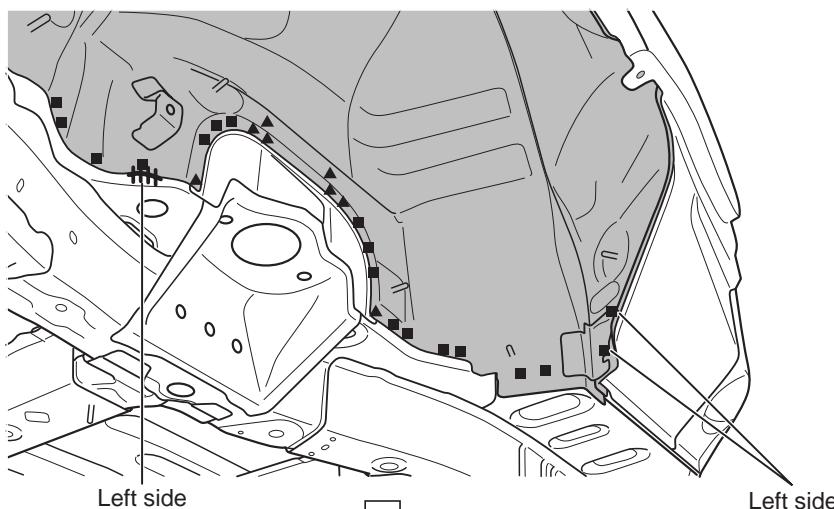
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E



F



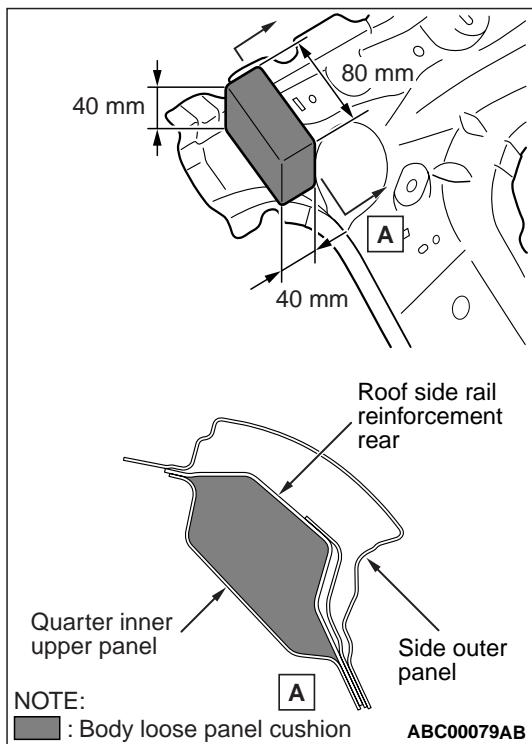
G



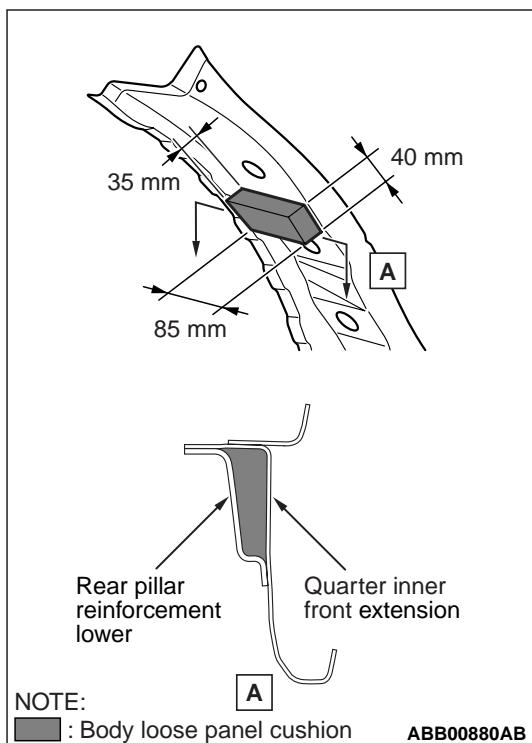
H
(Right side)

ABB00927AB

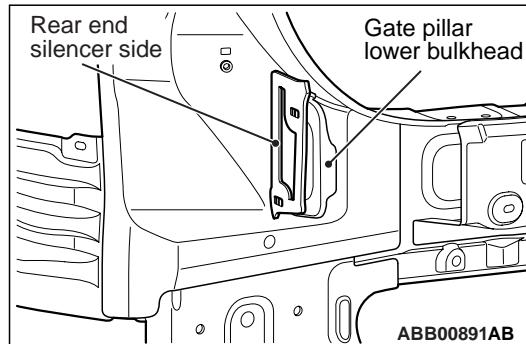
NOTE: Refer to the Quarter Outer section on [P.3-18](#) for the welding points with the quarter outer.

NOTE ON REPAIR WORK
INSTALLATION

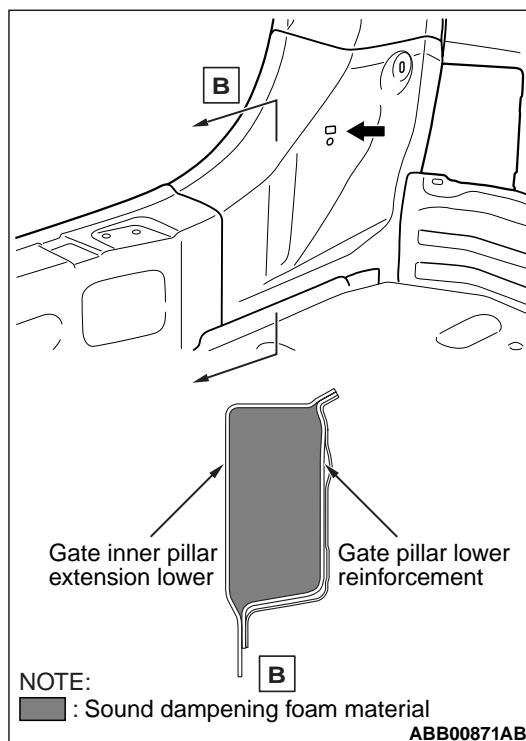
- When installing the new quarter panel upper inner parts, machine the body loose panel cushion (MR565301 or MR435765) for replacement as shown and apply it to the quarter panel upper inner parts because the sound dampening foam material cannot be filled into the quarter panel upper inner.



- When installing the new rear pillar reinforcement lower part, machine the body loose panel cushion (MR565301 or MR435765) for replacement as shown and apply it to the rear pillar reinforcement lower part because the sound dampening foam material cannot be filled into the rear pillar reinforcement lower.

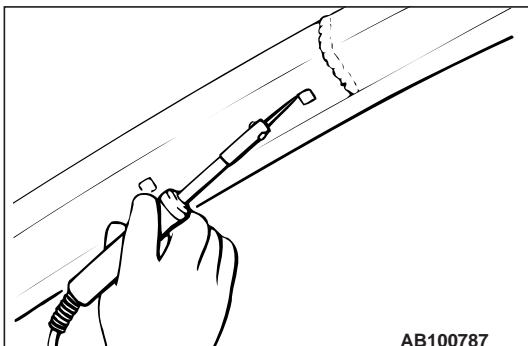


- When installing the new gate pillar reinforcement parts, in order to prevent the dripping of sound dampening foam material to be filled into the gate pillar in the next process, install the rear end silencer side to the gate pillar lower bulkhead, and then apply the butyl-tape to close the gap of the rear end silencer side.



- After installing the quarter panel extension rear lower, seal the hole and flange with sheet-metal tape, and then fill the hole with the sound dampening foam material as shown in the figure of the instructions.

Sound dampening foam material: 3M ATD
Part No.08463



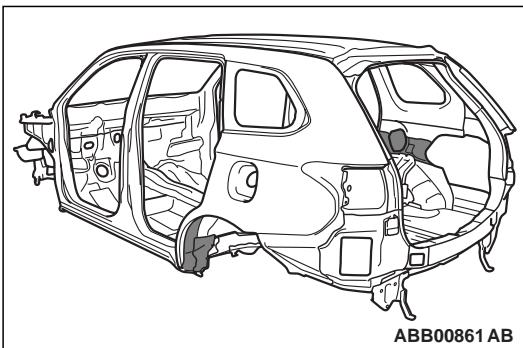
5. Wait 2 hours after filling the sound dampening foam material to remove the bolt and aluminium tape, then melt the sound dampening foam material with a soldering gun so a clip, etc. can thoroughly be inserted in the hole filled with sound dampening foam material.

QUARTER INNER LOWER

M4030001100338

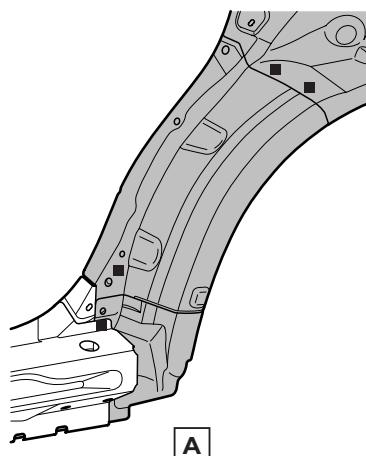
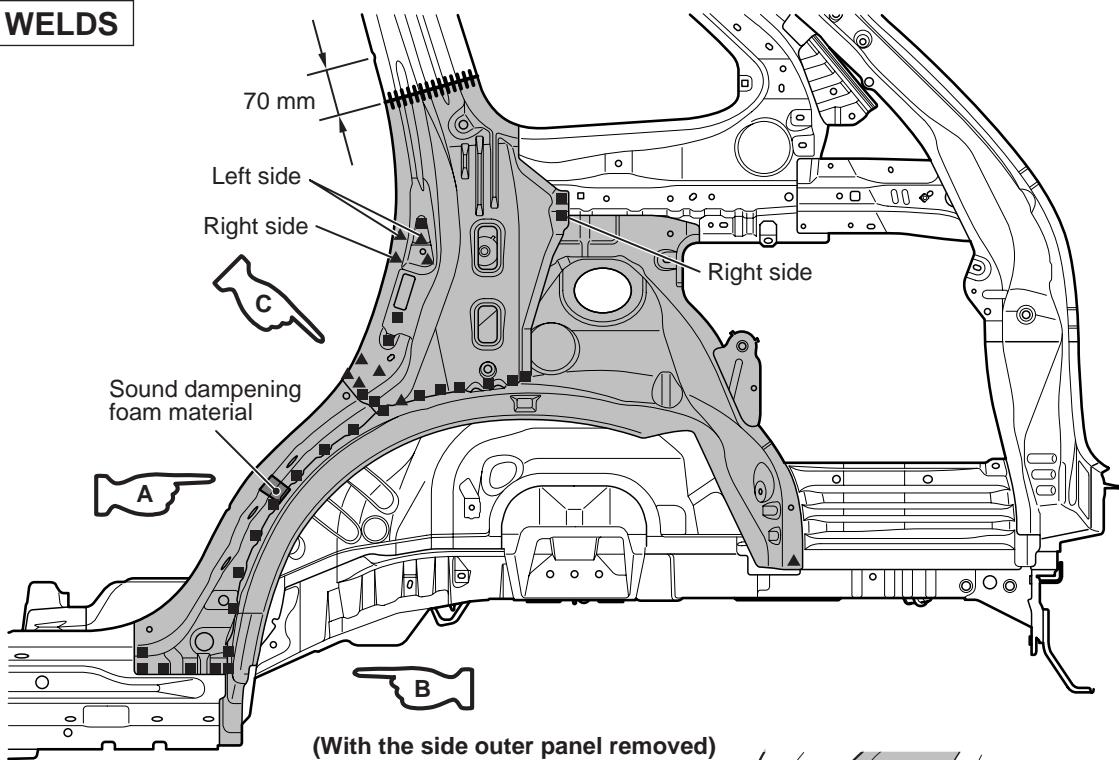
⚠ CAUTION

When repairing the area using sound dampening foam material do not use firing tools since the sound dampening foam material may burn.



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
oooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



(With the rear pillar reinforcement and
rear pillar reinforcement lower removed)

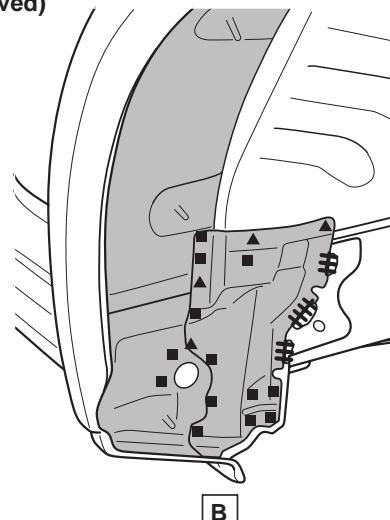


ABB00933AB

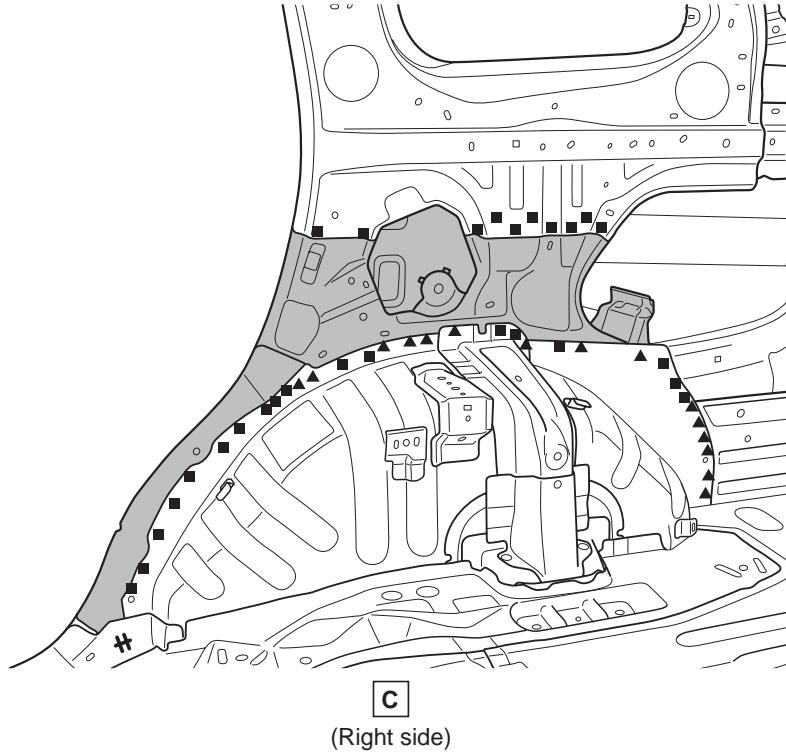
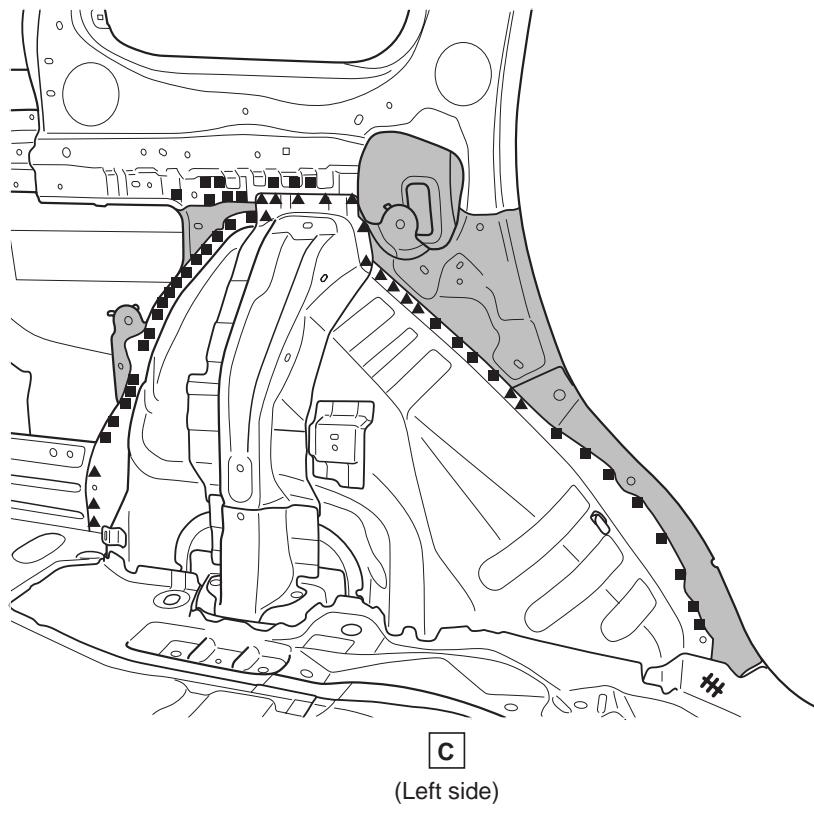
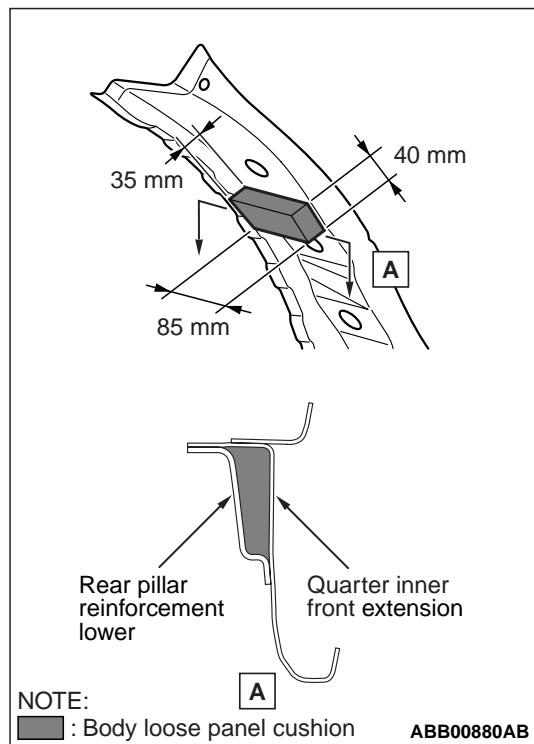


ABB00934AB

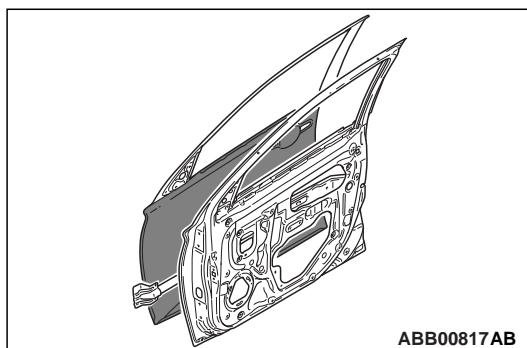
NOTE: Refer to the Quarter Outer section on [P.3-18](#) for the welding points with the quarter outer.

NOTE ON REPAIR WORK
INSTALLATION

When installing the new rear pillar reinforcement lower part, machine the body loose panel cushion (MR565301 or MR435765) for replacement as shown and apply it to the rear pillar reinforcement lower part because the sound dampening foam material cannot be filled into the rear pillar reinforcement lower.

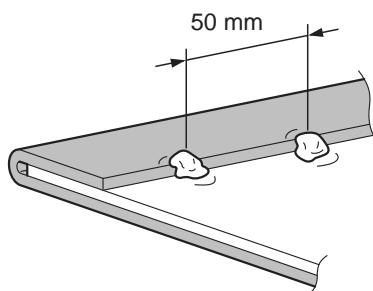
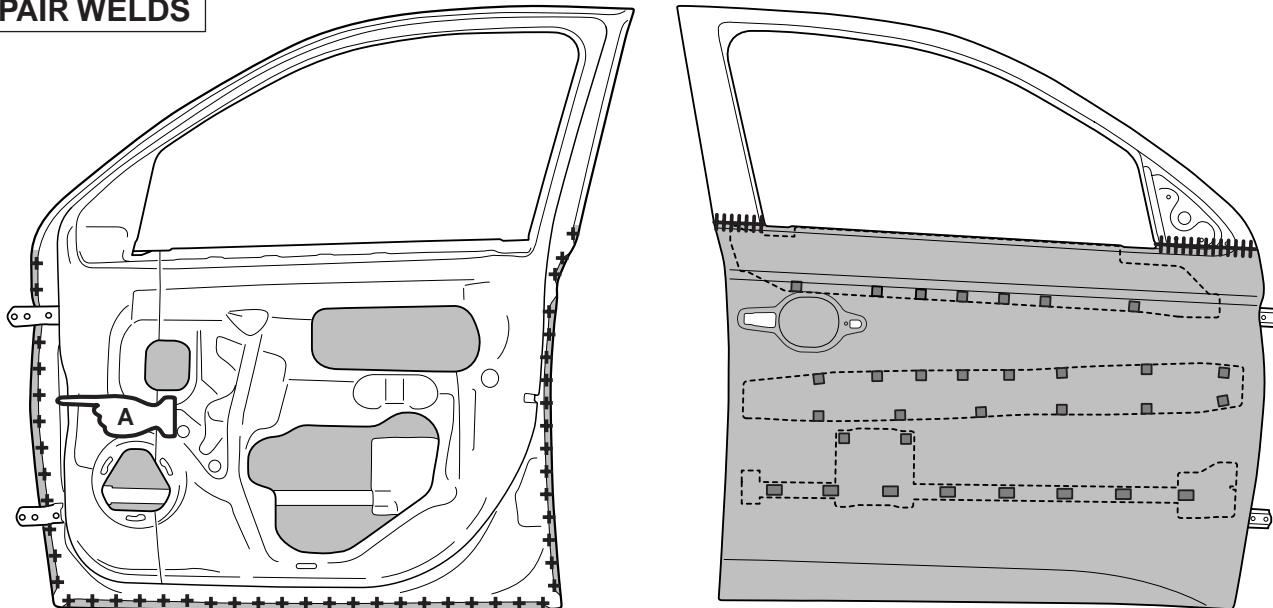
FRONT DOOR OUTER PANEL (WELDED TYPE)

M4030001501061



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
ooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



A

NOTE:

■ : Adhesive

ABB00805AB

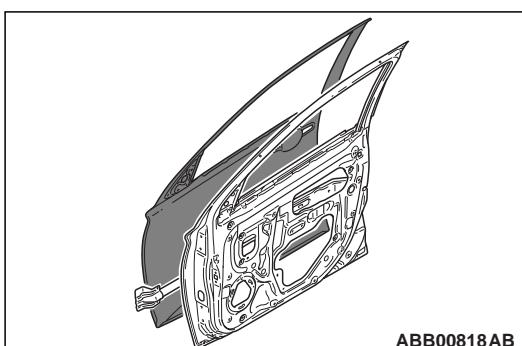
Adhesive: Urethane body sealer

Brand: 3M ATD Part No.08684, 08782 or
equivalent

NOTE: After hemming the new front door panel outer part, MIG spot weld the flange overlap section at a pitch of 50 mm.

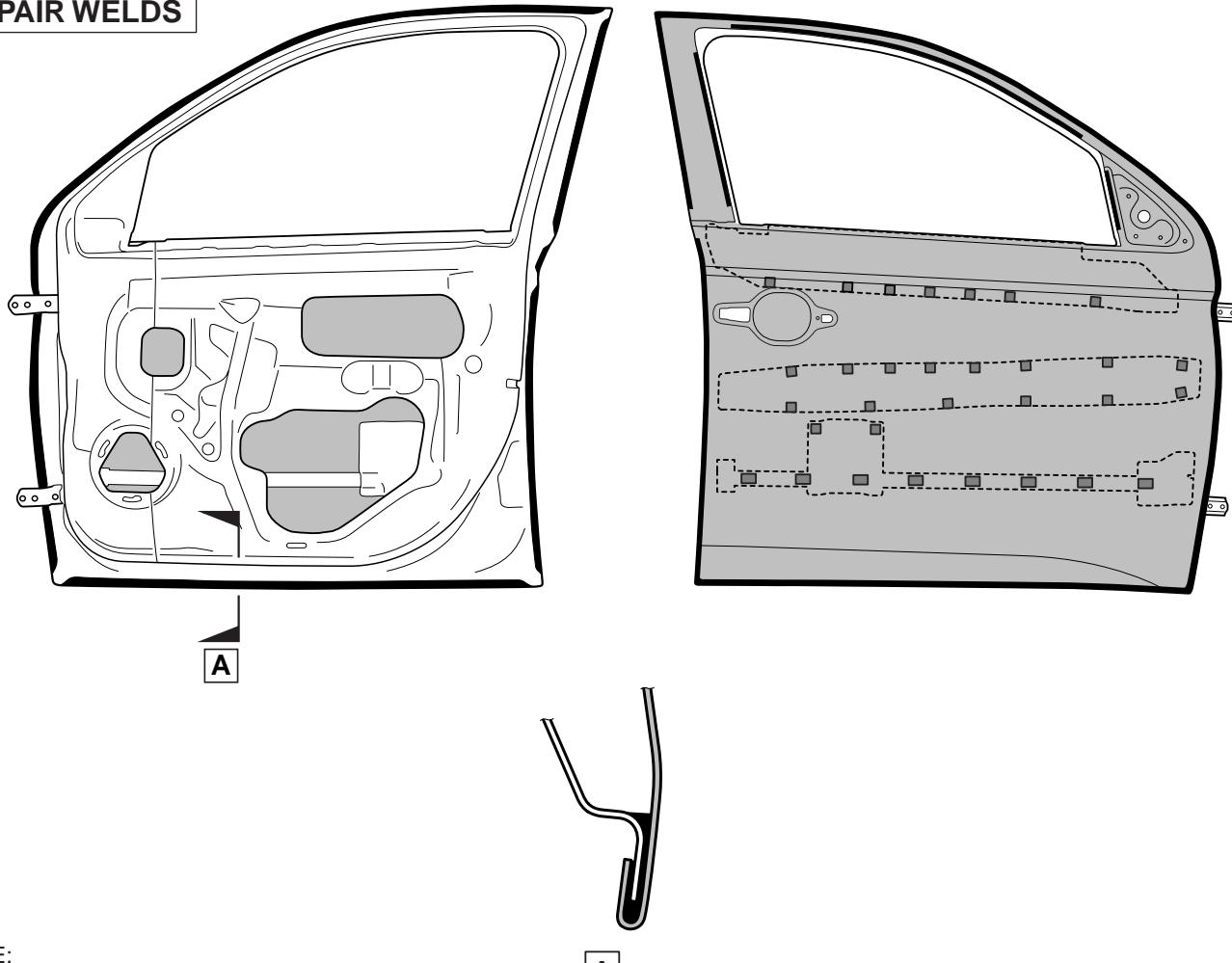
FRONT DOOR OUTER PANEL (ADHESION TYPE)

M4030001701139



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded) ▲: indicates three panels to be welded)
+++	MIG spot welding
	MIG arc welding (continuous)
oooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



NOTE:

: Adhesive 1
 : Adhesive 2

- **Adhesive 1: Urethane body sealer**
Brand: 3M ATD Part No.08684, 08782 or equivalent
- **Adhesive 2: Epoxyayresin adhesive**
Brand: 3M ATD Part No.8115 or equivalent

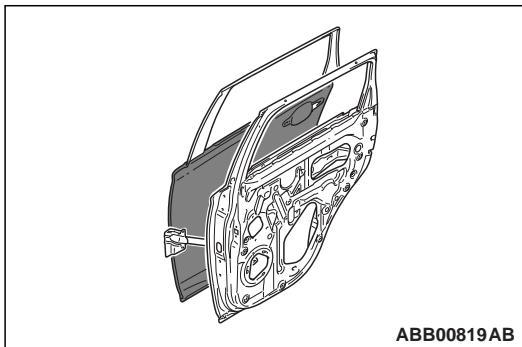
ABB00806AB

NOTE ON REPAIR WORK INSTALLATION

1. When installing the new front door panel outer part, grind the bonding surface and remove the paint to improve adhesion. Then, degrease the front door panel outer.
2. Install the front door panel outer and hem it. Then, wipe off the adhesive that squeezed out.

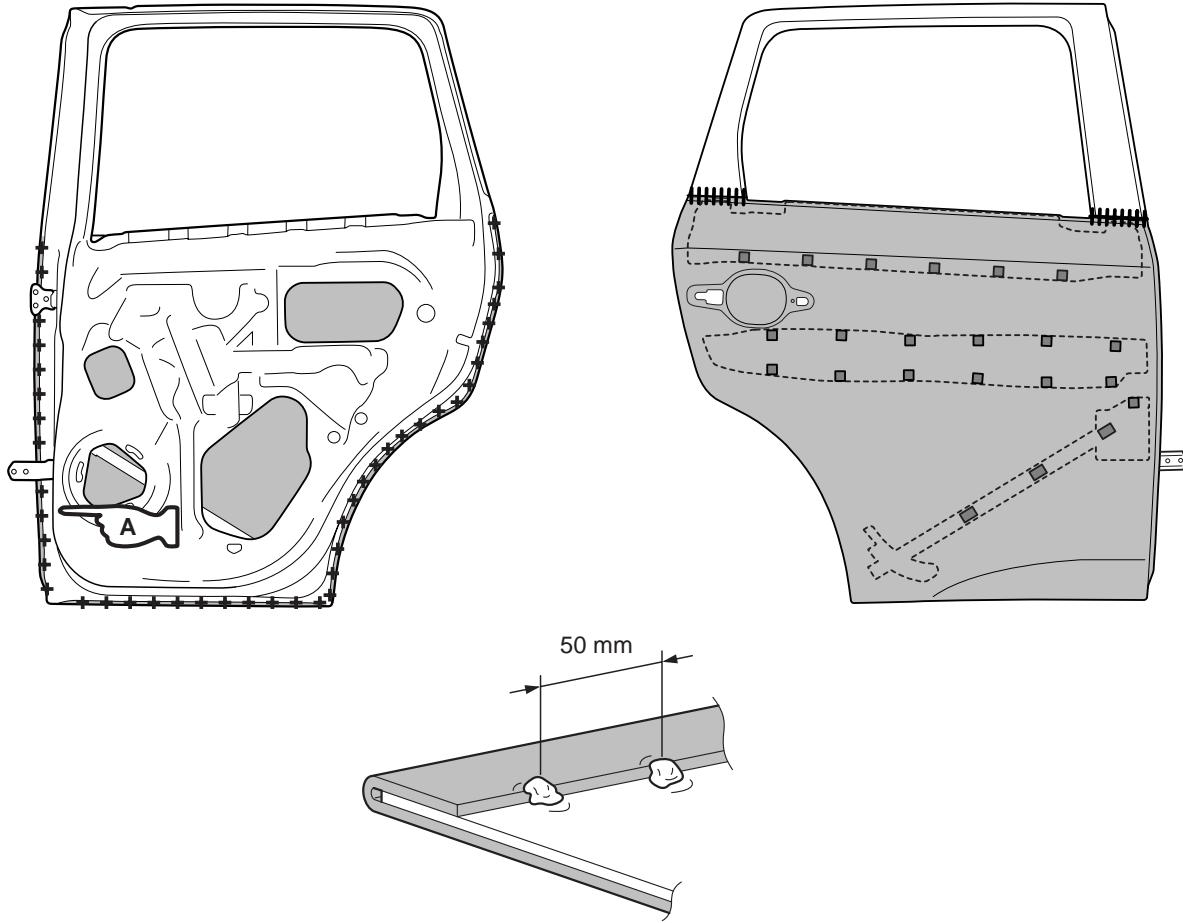
REAR DOOR OUTER PANEL (WELDED TYPE)

M4030001600797



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
++ + +	MIG spot welding
	MIG arc welding (continuous)
○○○○○○○	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



NOTE:

: Adhesive

Adhesive: Urethane body sealer

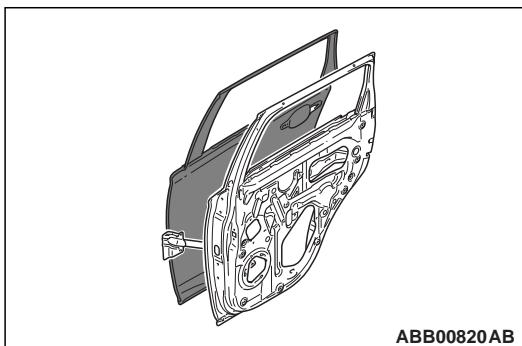
Brand: 3M ATD Part No.08684, 08782 or
equivalent

NOTE: After hemming the new front door panel outer part, MIG spot weld the flange overlap section at a pitch of 50 mm.

ABB00807AB

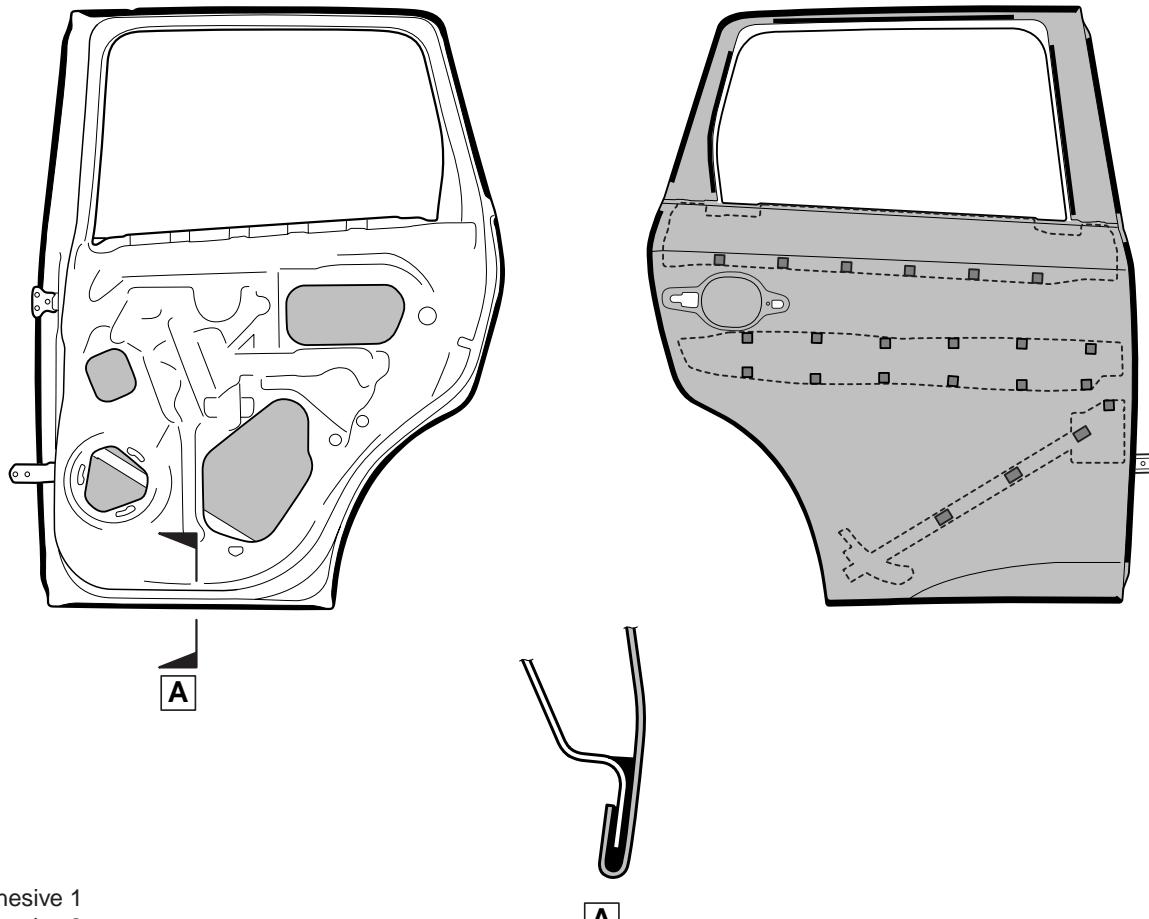
REAR DOOR OUTER PANEL (ADHESION TYPE)

M4030001800779



Symbol	Operation description
● ● ● ●	Spot welding
■ ■ ▲ ▲	MIG plug welding (■: indicates two panels to be welded ▲: indicates three panels to be welded)
++ + +	MIG spot welding
	MIG arc welding (continuous)
oooooooo	Braze welding
	Anti-corrosion agent application locations (Use access holes to apply liberally to butt-welded joints.)

REPAIR WELDS



NOTE:

: Adhesive 1
 : Adhesive 2

- **Adhesive 1: Urethane body sealer**
Brand: 3M ATD Part No.08684, 08782 or equivalent
- **Adhesive 2: Epoxyayresin adhesive**
Brand: 3M ATD Part No.8115 or equivalent



A

ABB00808AB

NOTE ON REPAIR WORK
INSTALLATION

1. When installing the new rear door panel outer part, grind the bonding surface and remove the paint to improve adhesion. Then, degrease the rear door panel outer.
2. Install the rear door panel outer and hem it. Then, wipe off the adhesive that squeezed out.

GROUP 4

CORROSION PROTECTION

CONTENTS

BODY SEALING LOCATIONS	4-2	UNDERCOAT APPLICATION LOCATIONS
	
		4-6

BODY SEALING LOCATIONS

If the sealant application is directly visible on the outer plate and requires appearance quality of the application in areas such as the drip rail, pillar, clinch and so on, then apply the sealant so that it is flat, or wipe off any excess mounding after the application. Be careful not to obstruct the water draining hole.

FLOOR

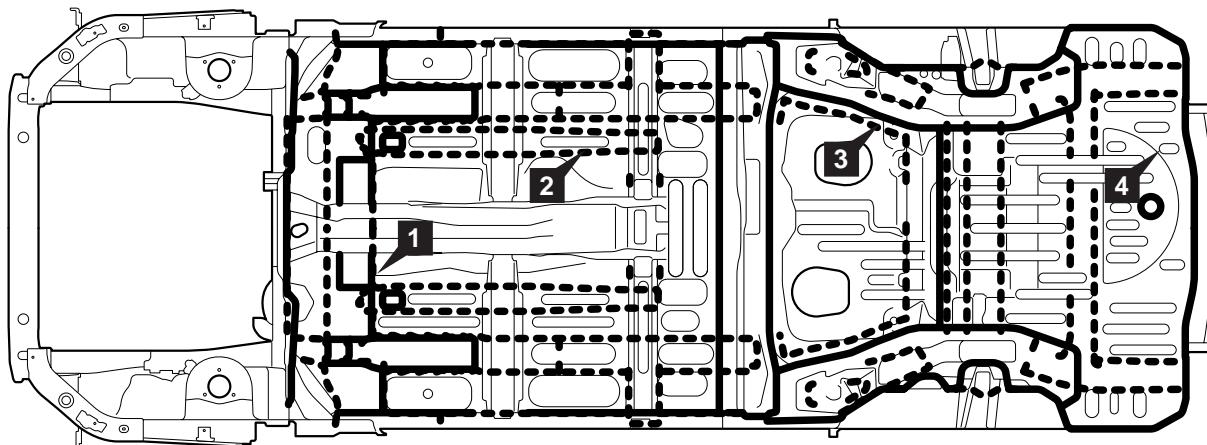


ABB00755AB

UPPER BODY

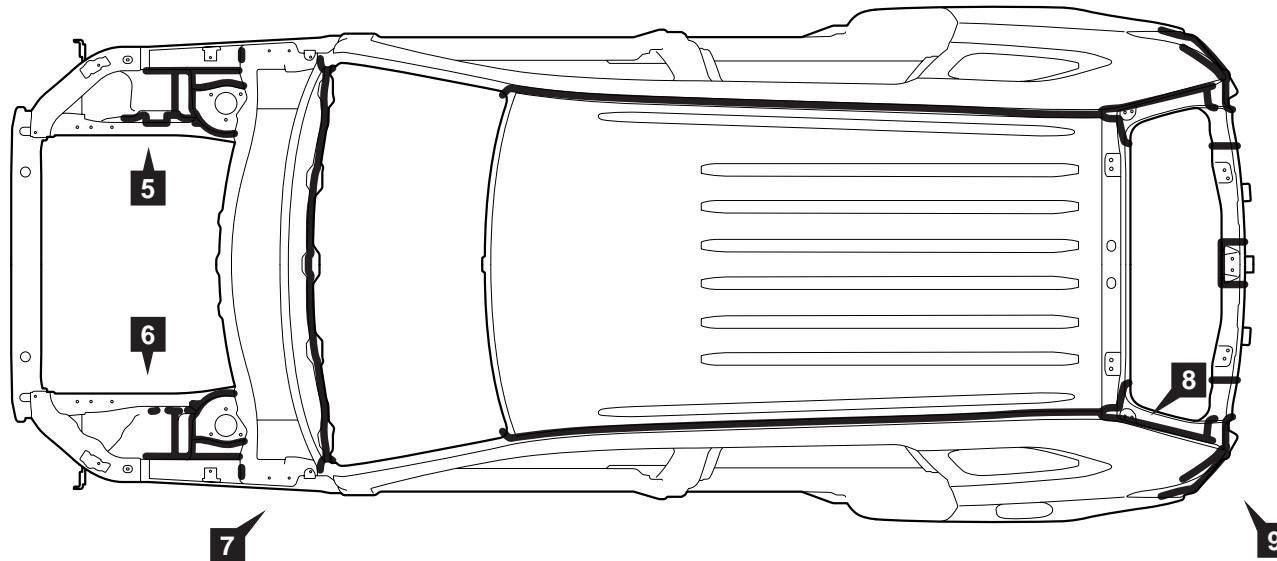
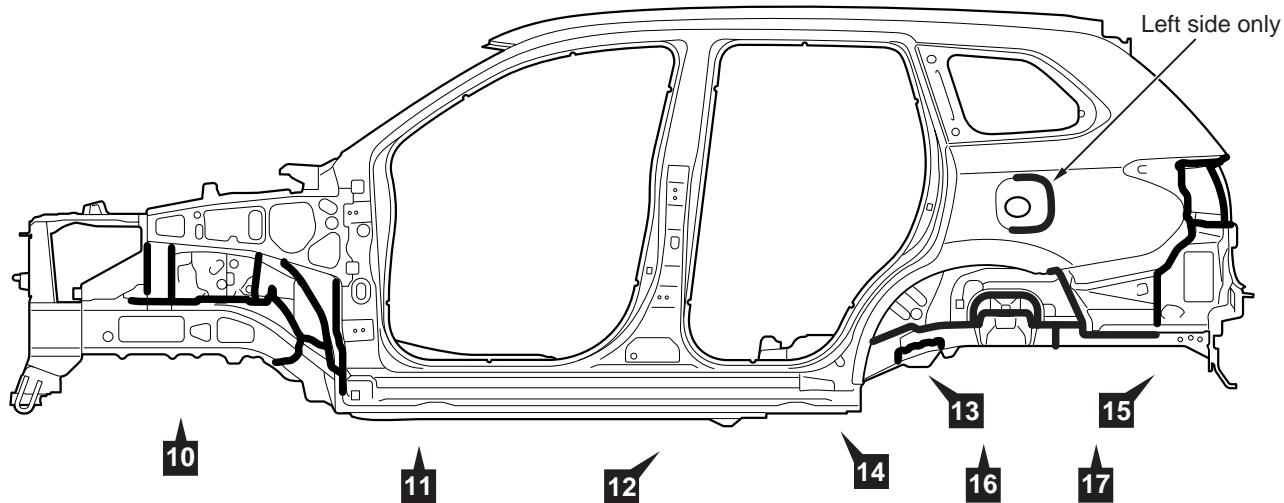


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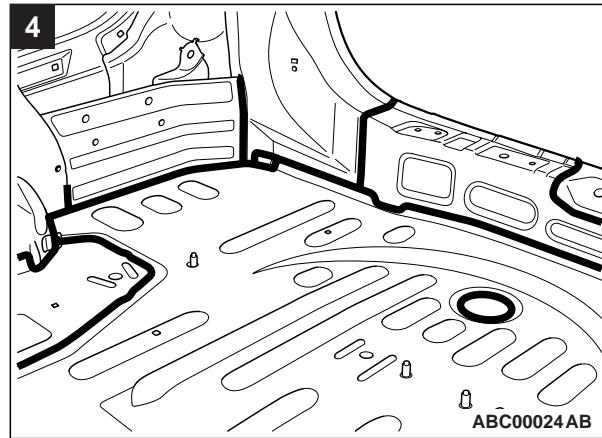
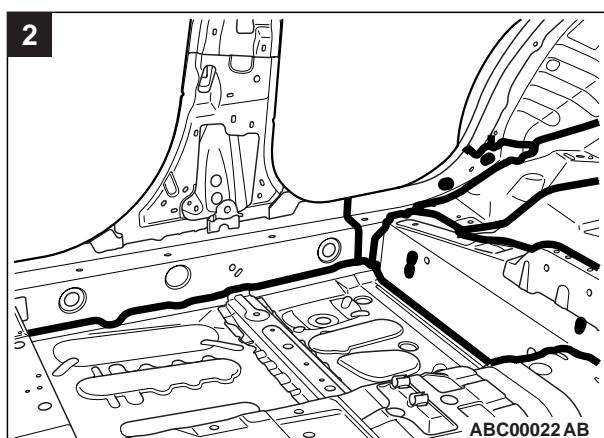
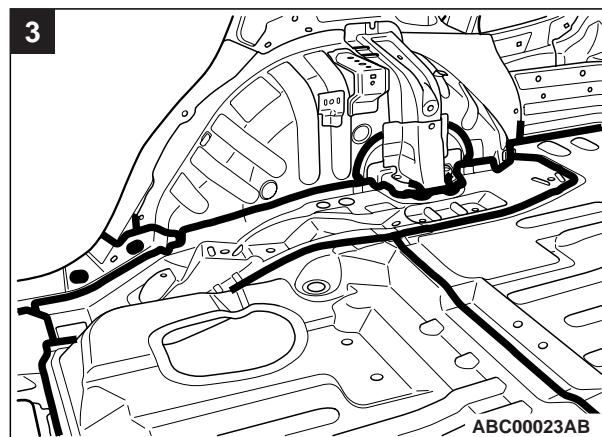
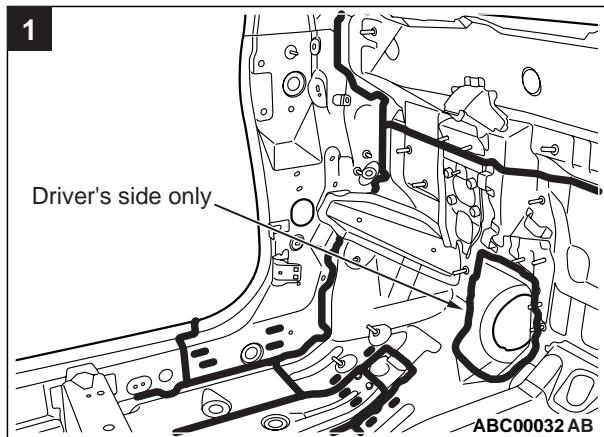
NOTE: The bold dotted line indicates the application area on the underside.

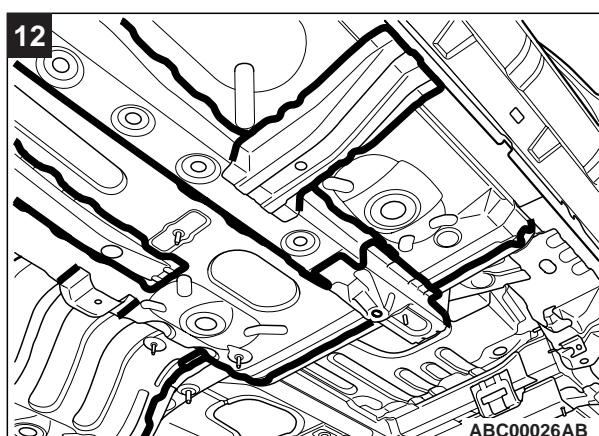
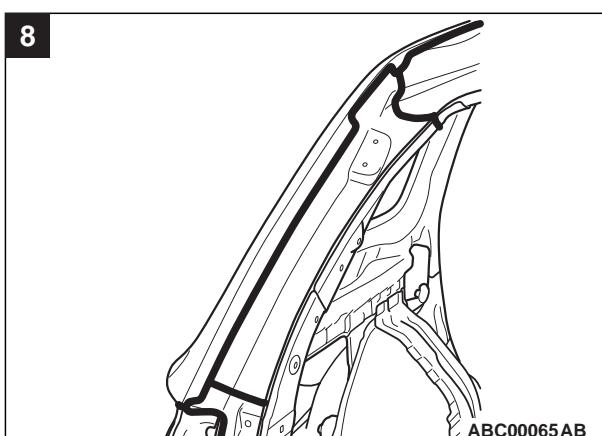
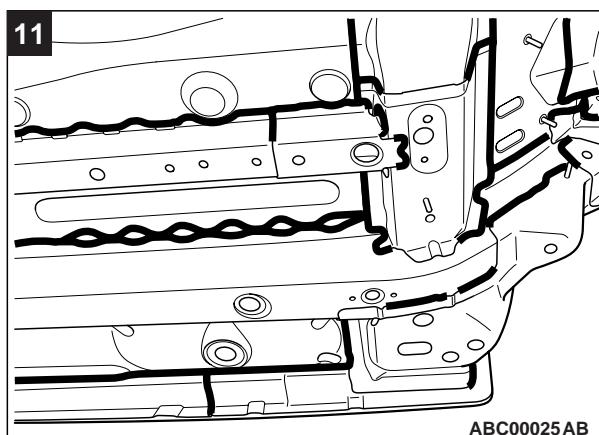
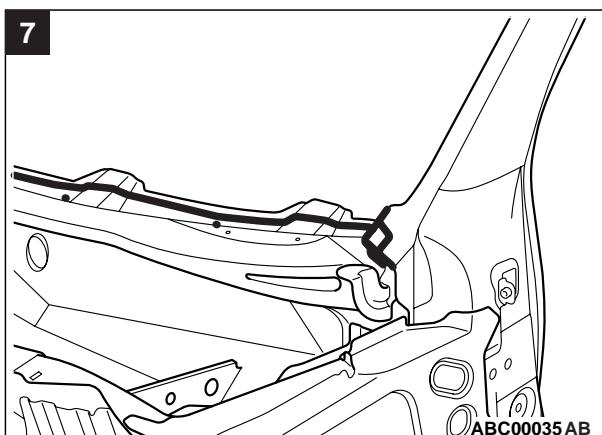
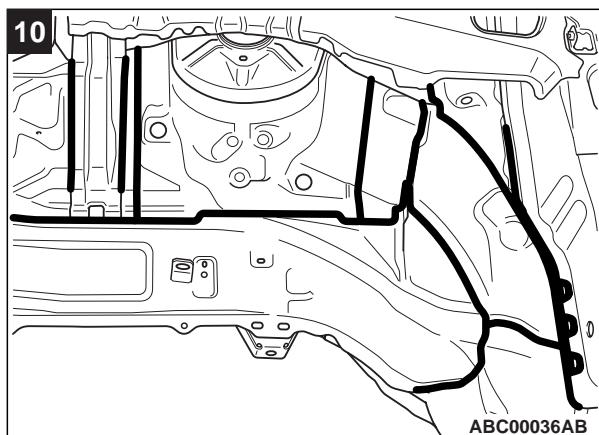
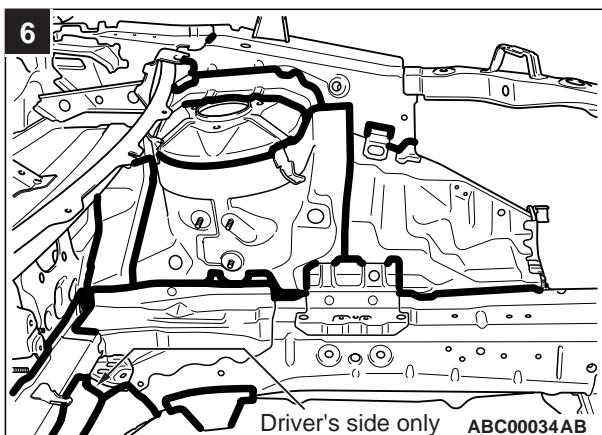
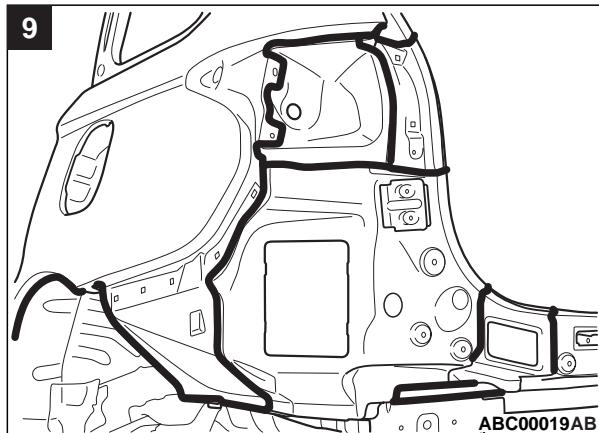
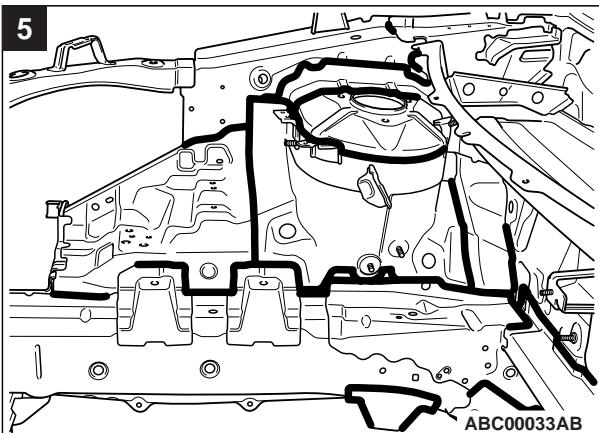
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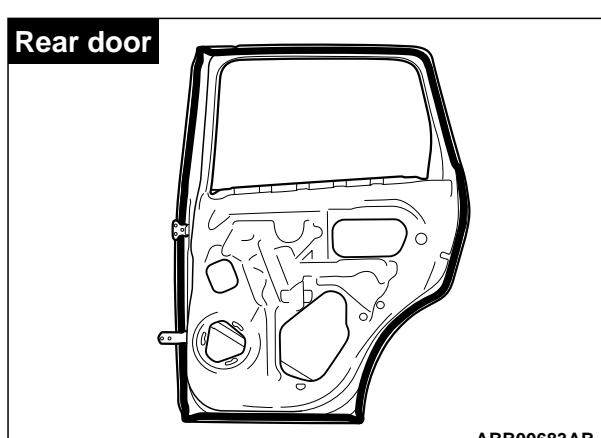
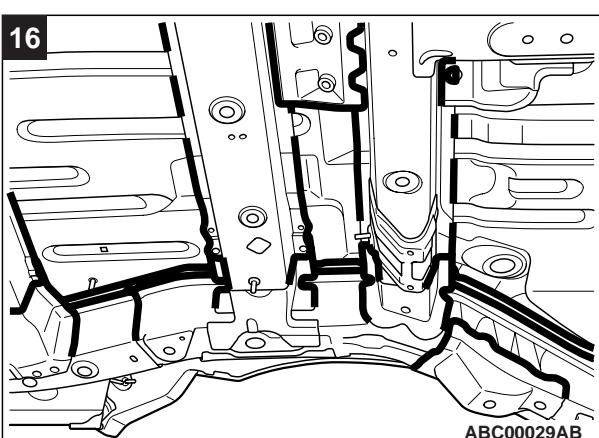
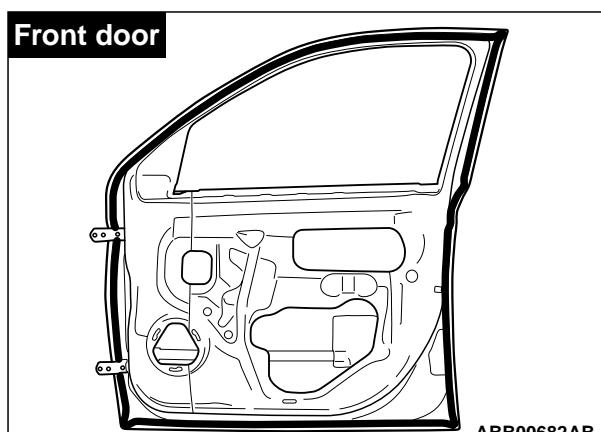
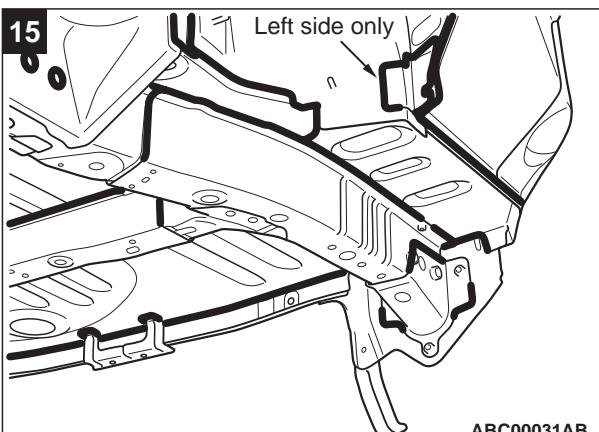
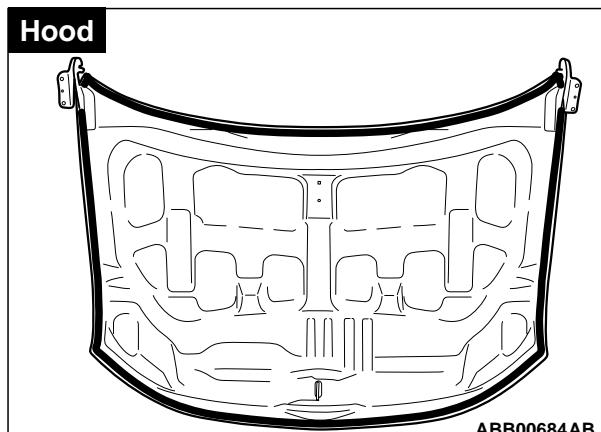
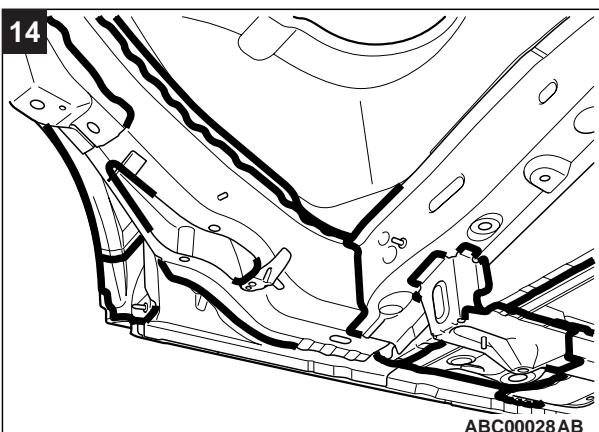
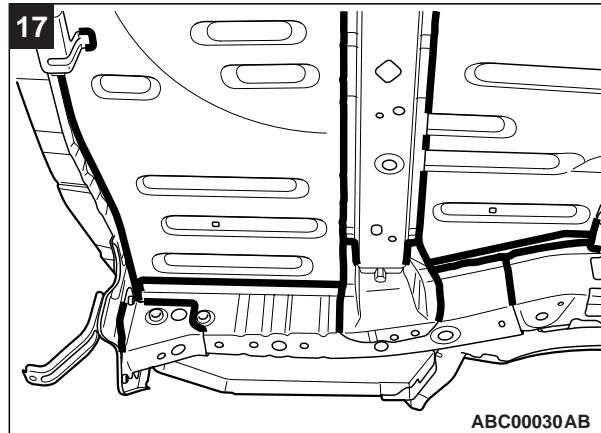
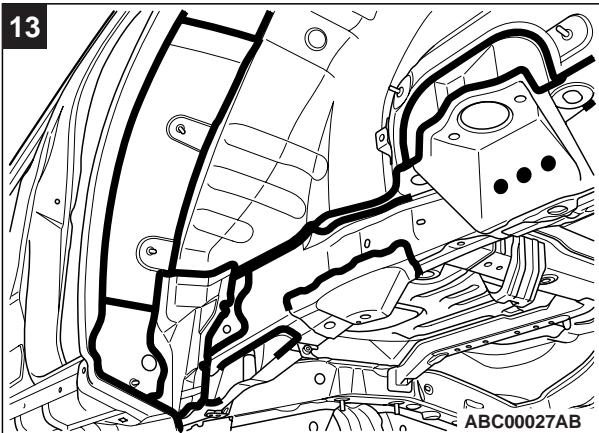
SIDE BODY

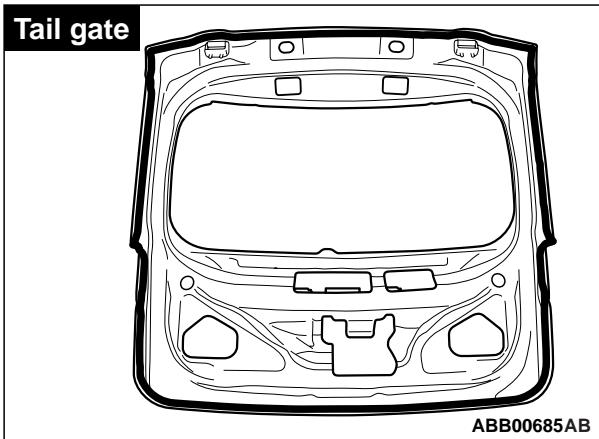


ABC00078AB







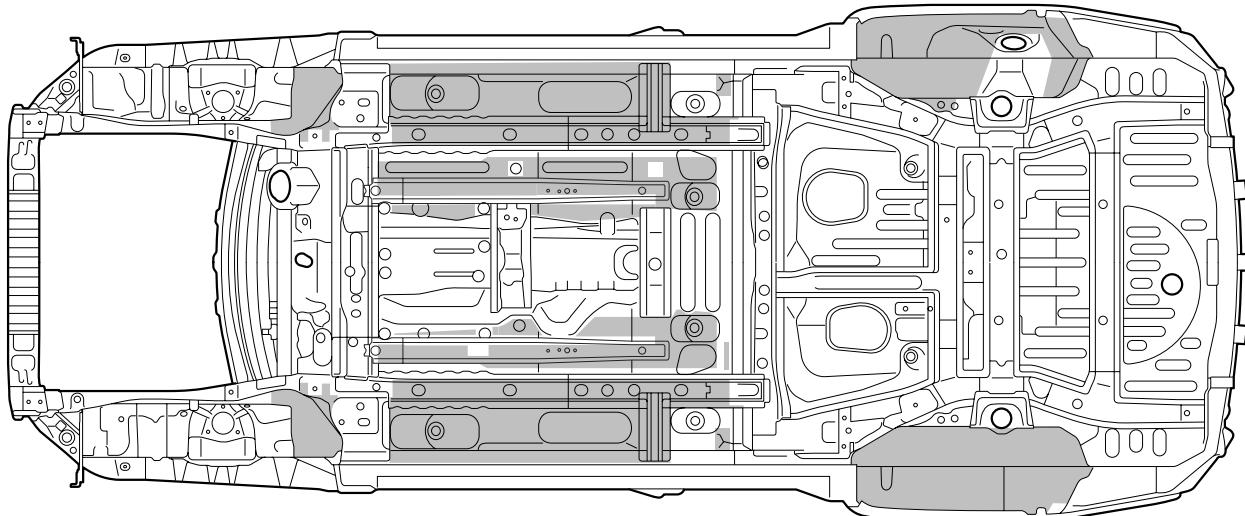


UNDERCOAT APPLICATION LOCATIONS

- The under parts of the body is undercoated for anti-corrosive, anti-rust, anti-chipping, and anti-vibration performance.
- After correcting the body, restore as shown in the instructions of the figure, if necessary.

- To avoid splashing of undercoat material during the coating, protect component installation holes with masking tape.

M4040003001610



NOTE:

■ : Undercoat (film thickness is at least 0.8 mm)

ABB00757AB

GROUP 5

SYNTHETIC-RESIN PARTS

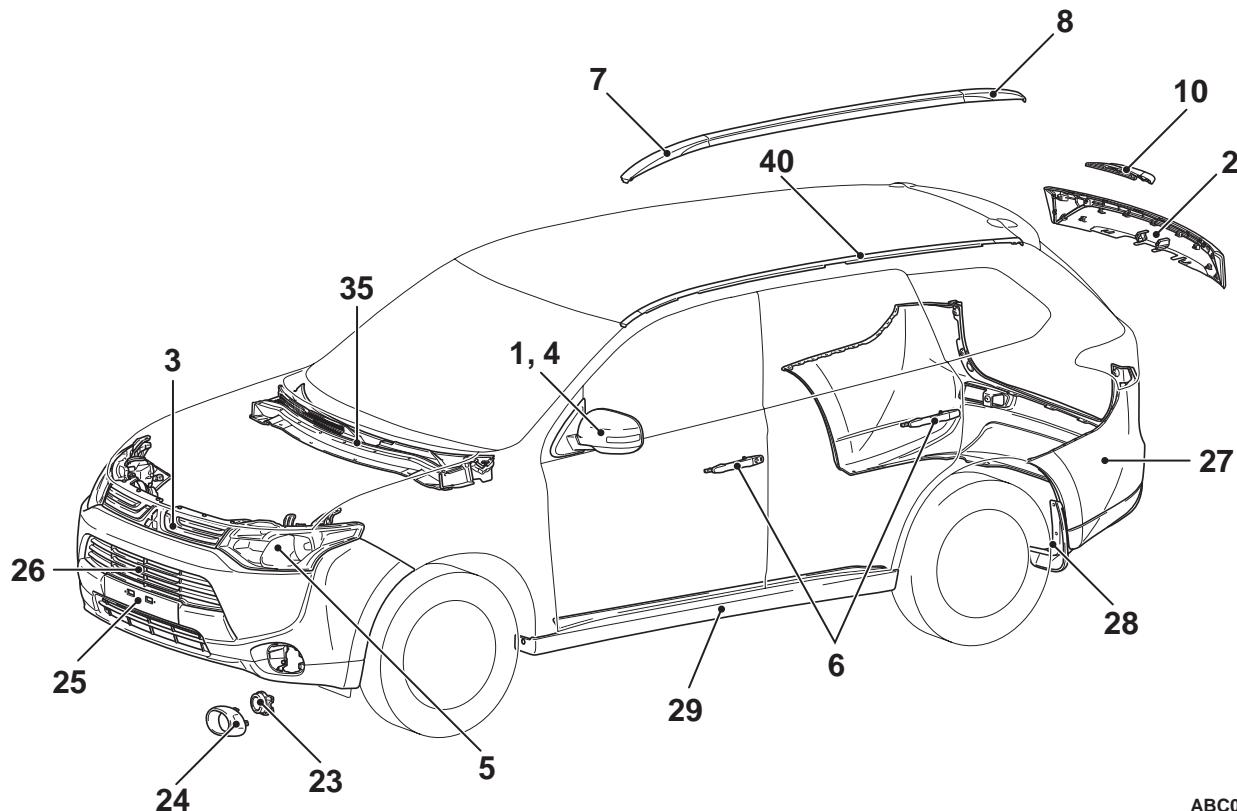
CONTENTS

LOCATION OF SYNTHETIC-RESIN PARTS	5-2
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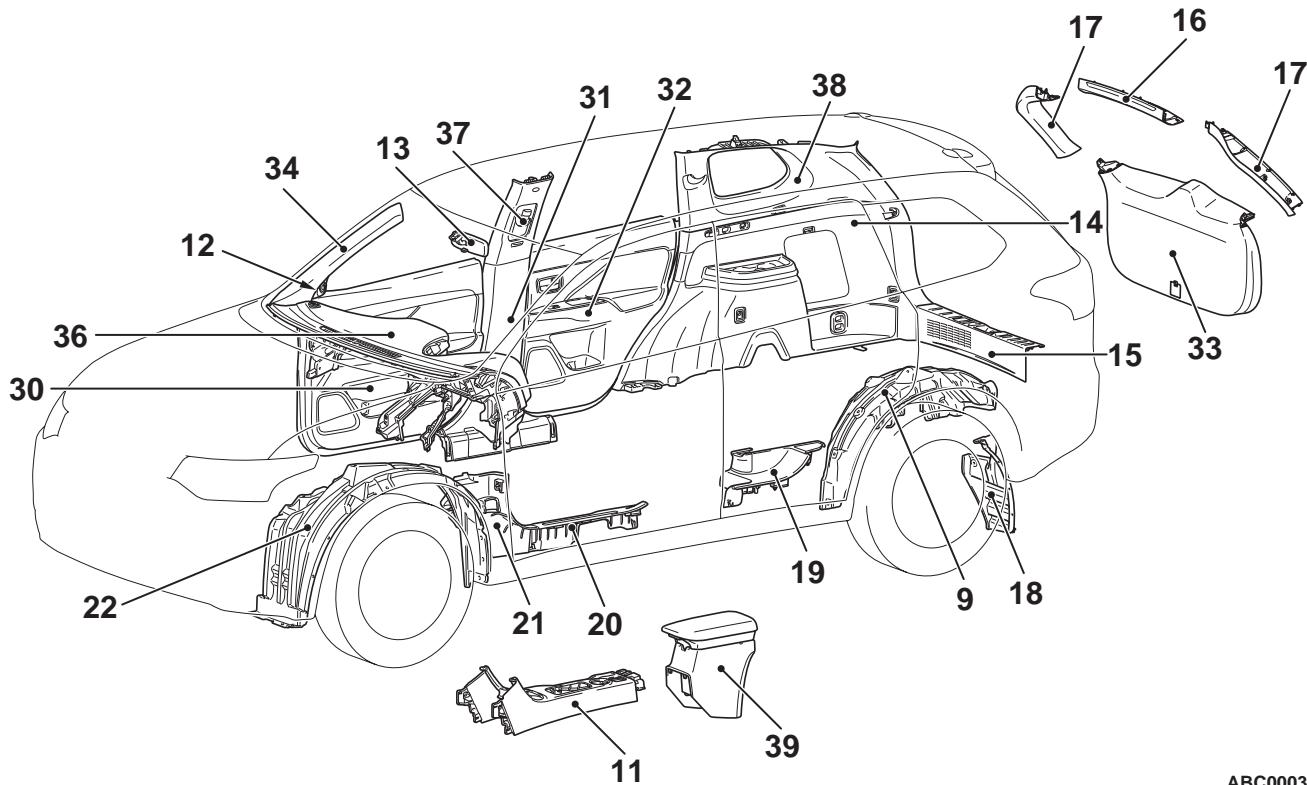
LOCATION OF SYNTHETIC-RESIN PARTS

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

M4050001002102



ABC00037AB



ABC00038AB

SYNTHETIC-RESIN PARTS
LOCATION OF SYNTHETIC-RESIN PARTS

5-3

No.	Part Name	Name Of Resin	Abbreviation	Heat-resistant Temp [°C]
1	Door mirror outer cover (colour)	Acrylonitrile butadiene styrene	ABS	80
2	Tailgate garnish			
3	Radiator grille	Acrylonitrile styrene acrylate	ASA	80
4	Door mirror outer cover (black)			
5	Headlamp	Polycarbonate	PC	120
6	Door outside handle	Polycarbonate+Polyethylene terephthalate	PC+PET	120
7	Front roof rail cover			
8	Rear roof rail cover			
9	Rear splash shield	Polyethylene terephthalate+Allyl chloride	PET+AC	80
10	Rear wiper arm assembly	Glass fibre reinforced polyethylene terephthalate (45%)	PET-GF45	80
11	Shift lever panel assembly	Polyoxymethylene	POM	80
12	Front door sash trim	Polypropylene	PP	80
13	Inside rear view mirror			
14	Quarter trim lower			
15	Rear end trim			
16	Tailgate upper trim			
17	Tailgate opening side trim			
18	Rear splash shield			
19	Rear scuff plate			
20	Front scuff plate			
21	Cowl side trim			
22	Front splash shield			
23	Front bumper lamp hole cover	Rubber modified polypropylene	PP+E/P	80
24	Front fog lamp bezel			
25	Front bumper face			
26	Radiator grille			
27	Rear bumper face			
28	Rear mud guard			
29	Side air dam			
30	Front door trim	Talc filled polypropylene (10%)	PP-TD10	110 – 120
31	Centre pillar trim lower			
32	Rear door trim			
33	Tailgate trim			
34	Front pillar trim	Talc filled rubber modified polypropylene (15%)	PP+E/P-T D15	80

No.	Part Name	Name Of Resin	Abbreviation	Heat-resistant Temp [°C]
35	Front deck garnish	Talc filled polypropylene (20%)	PP-TD20	120 – 130
36	Instrument panel			
37	Centre pillar trim upper			
38	Quarter trim upper			
39	Rear console			
40	Roof drip moulding assembly	Thermoplastic elastomer	TPO	80 – 100

NOTE:

- A slash (/) in the material symbol indicates that two different materials make two-layer construction. A plus sign (+) indicates that the two different materials mix each other.
- The indicated heat-resistant temperature for parts which are composed of two or more types of material is the value for the material with the lowest heat-resistant temperature.
- The material symbols for synthetic-resin parts are embossed on the parts in hidden places.

GROUP 6

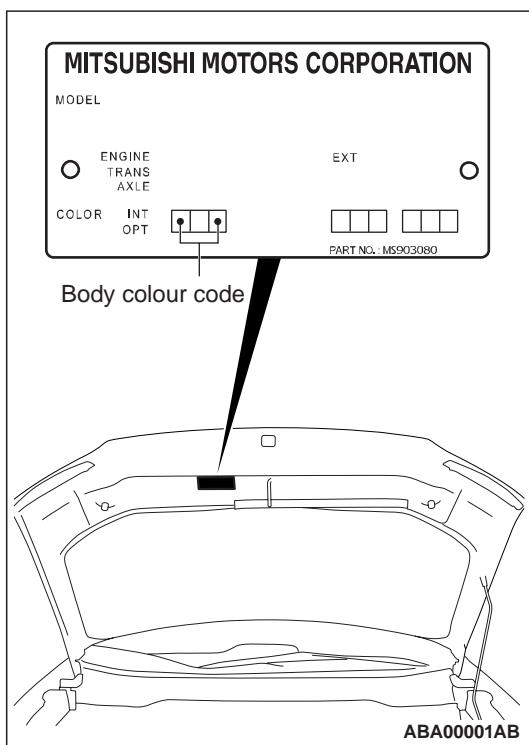
BODY COLOUR

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BODY COLOUR CODE

M4060001001382



Body colour code is stamped on the vehicle information code plate, which is attached on the hood.

BODY COLOUR CHARTS

M4060002004049

Check the vehicle's body colour code, and then use this body colour chart to determine the refinishing paint supplier from which the colour can be purchased.

Colour	Colour code	Colour number	Colour name	Coating film structure	Composition of film
SILVER	A31	CMA10031	Cool Silver Metallic	2M	Metallic
REDDISH BROWN	C07	CMC10007	Copper Metallic	2M	Metallic
DARK BLUE	D14	CMD10014	Cosmic Blue Mica	2P	Interferenced Pearl
GREY	U17	CMU10017	Titanium Grey Metallic	2M	Metallic
BLUISH SILVER	U21	CMU10021	Technical Silver Metallic	2M	Metallic
WHITE	W13	CMW10013	White Pearl	3P	Pearl
WHITE	W37	CMW10037	White Solid	2S	Solid
BLACK	X42	AC11342	Black Mica	2P	Interferenced Pearl

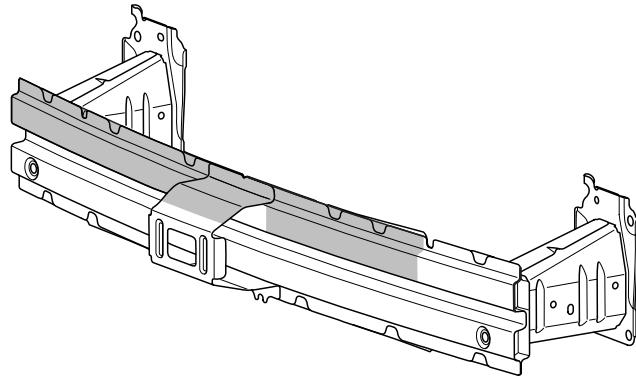
NOTE:

- The coating film structure indicates top coating only (2S: 2 coat solid, 2M: 2 coat metallic, 2P: 2 coat pearl, 3P: 3 coat pearl).
- For painting, inner panel colours should be similar to the outer panel colours.
- The roof rail is coated in Black (AC10657).

BODY COLOURING

FRONT END

M4060015000757



NOTE: : Black (AC10657)

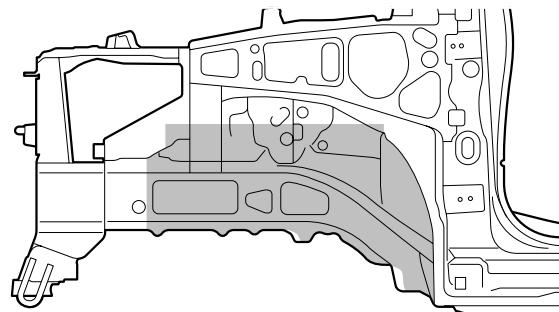
ABC00017AB

WHEELHOUSE

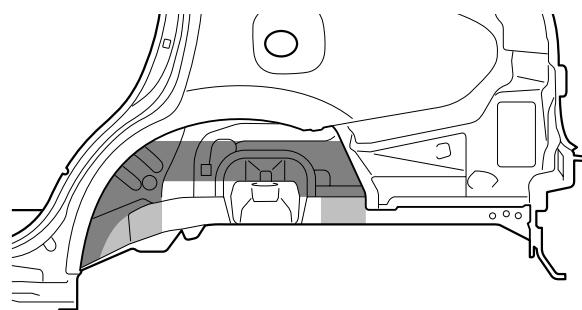
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(EXCEPT COLOUR CODE D14, X42)

<Front>



<Rear>



NOTE:

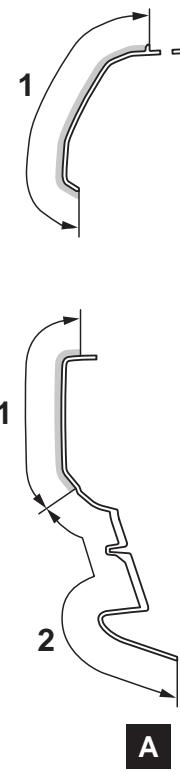
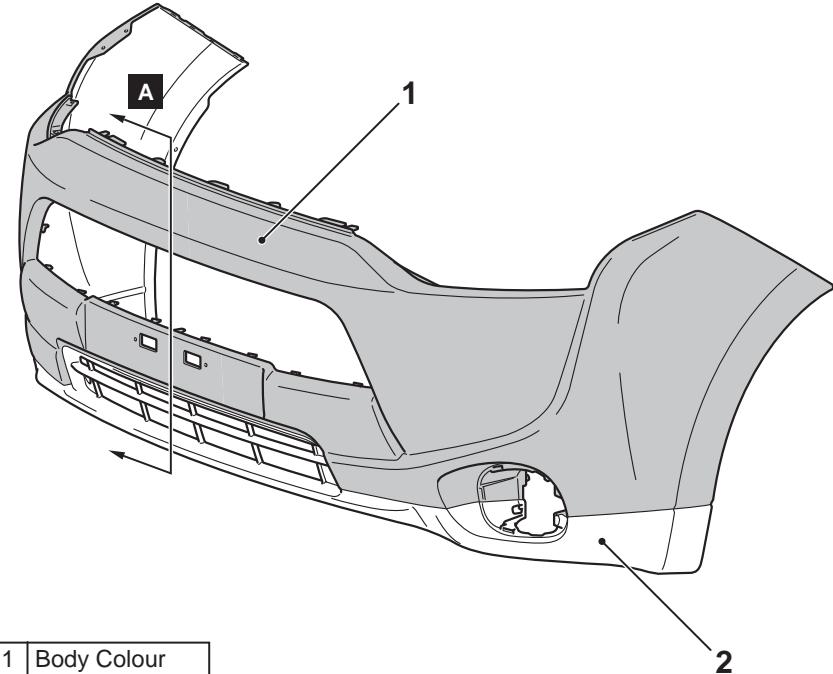
: Black (AC10657)

: Black (AC10657) <Except vehicle with rear splash shield>

ABC00008AB

FRONT BUMPER

M4060000500392

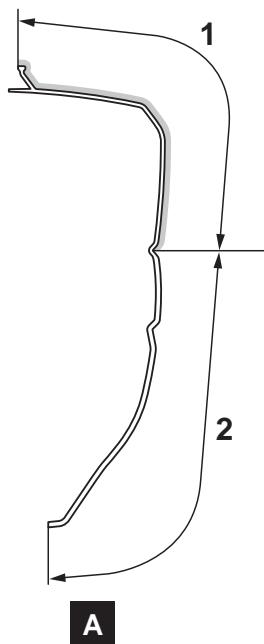
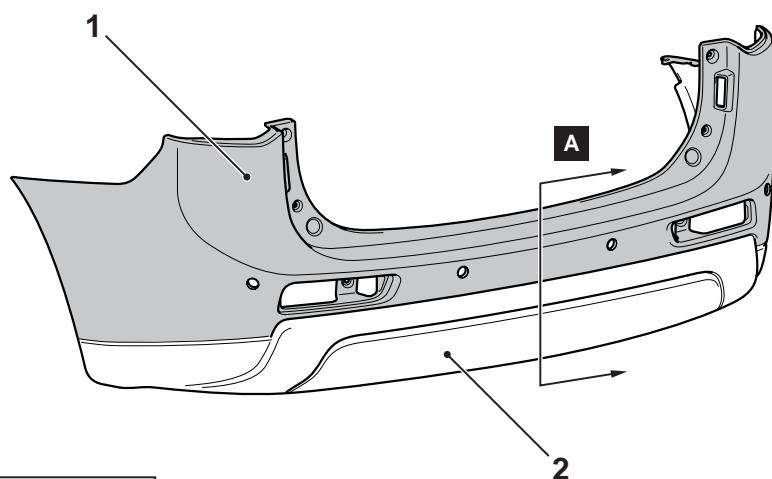


A

ABC00009AB

REAR BUMPER

M4060000300257



A

ABC00010AB