

GROUP 1

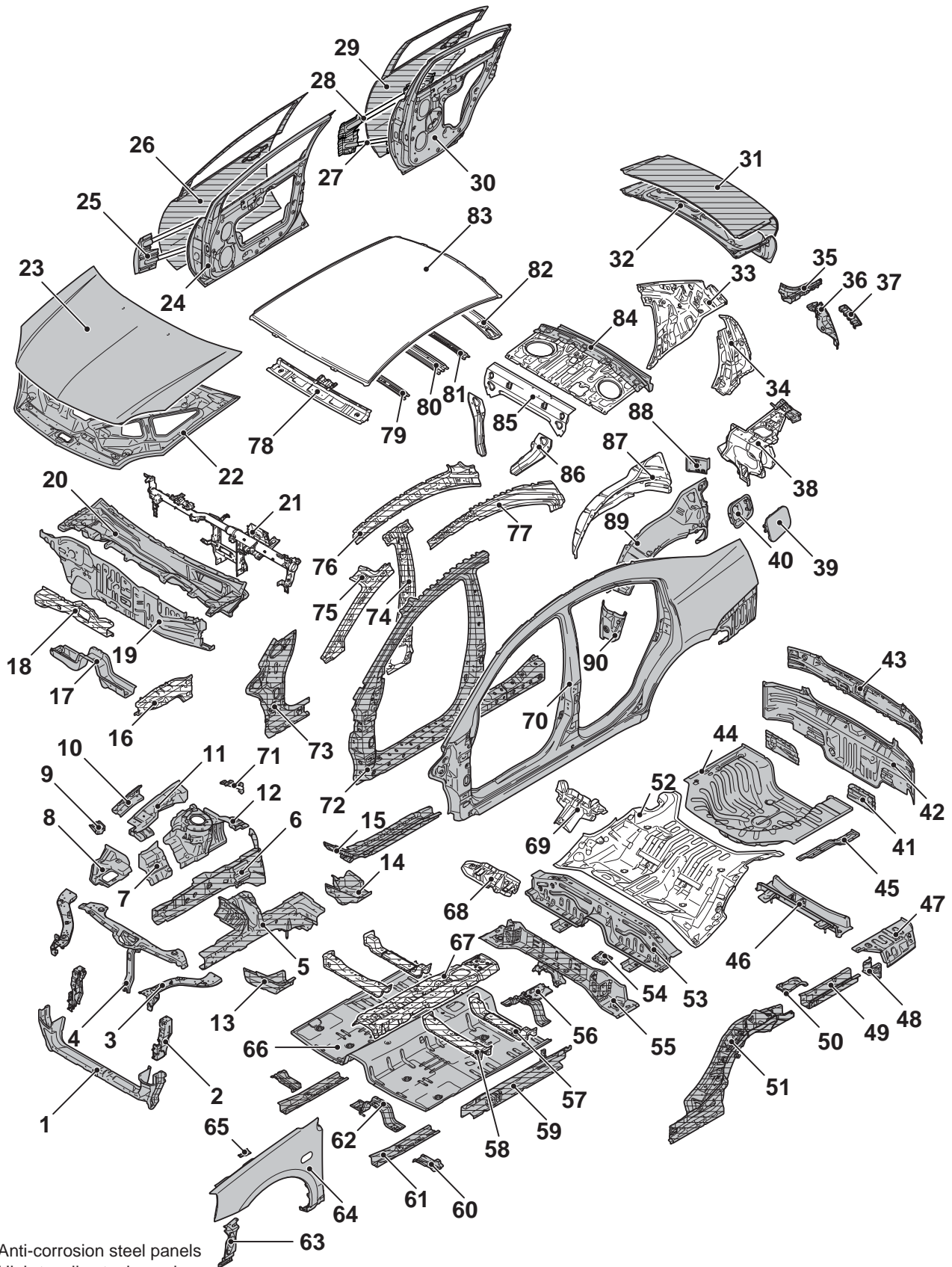
BODY  
CONSTRUCTION

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# BODY COMPONENTS

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1. Front end crossmember
2. Radiator support panel

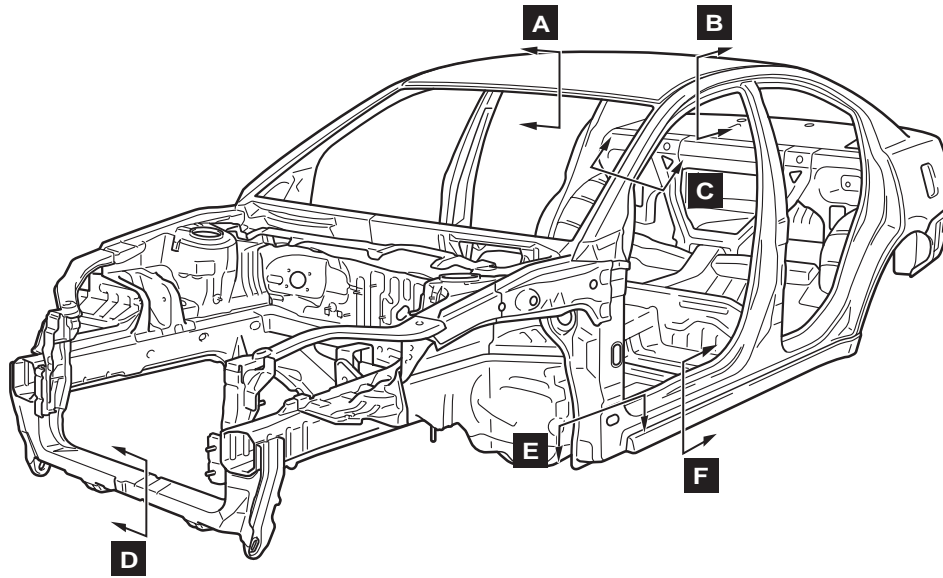
3. Front end upper bar side
4. Front end upper bar

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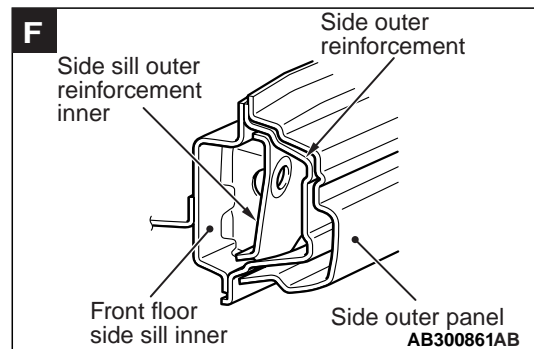
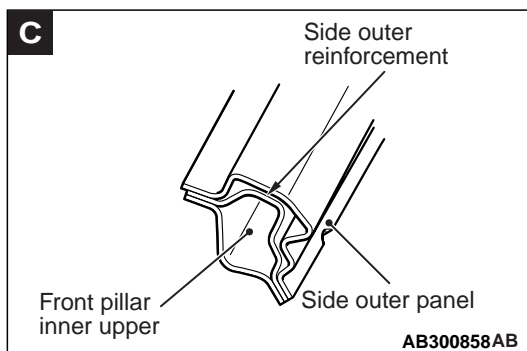
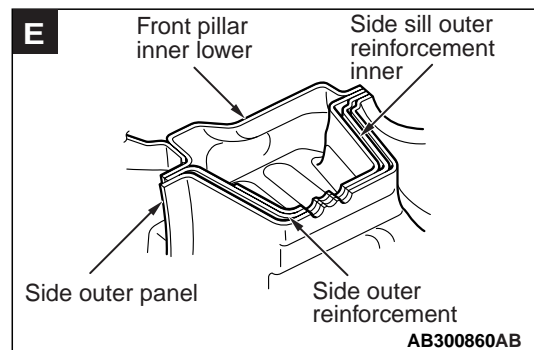
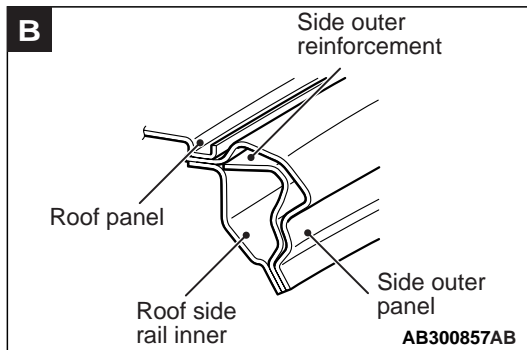
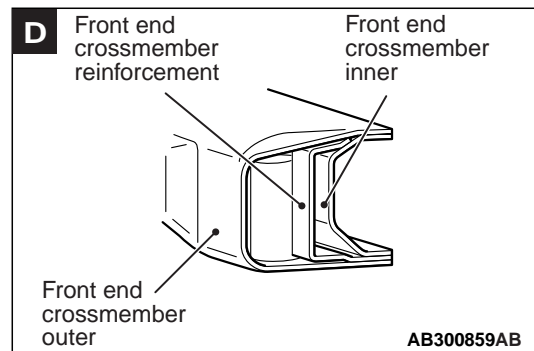
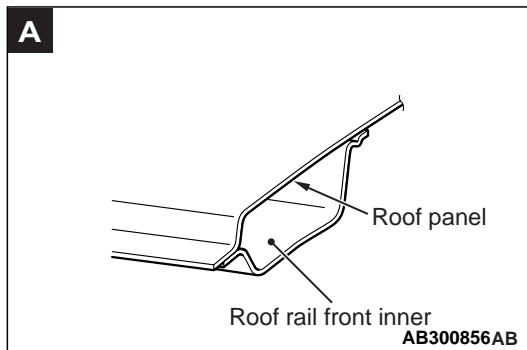
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|--|---|
| 5. Front sidemember inner                  | 64. Front fender                        |
| 6. Front sidemember outer                  | 65. Hood damper bracket                 |
| 7. Front fender shield                     | 66. Front floor pan                     |
| 8. Shield plate                            | 67. Backbone reinforcement              |
| 9. Upper frame reinforcement               | 68. Child anchor bracket                |
| 10. Front upper frame outer                | 69. Rear seatback plate extension       |
| 11. Front upper frame inner                | 70. Side outer panel                    |
| 12. Spring house panel                     | 71. Front pillar to upper frame brace   |
| 13. Front sidemember rear A                | 72. Side outer reinforcement            |
| 14. Front sidemember brace lower           | 73. Front pillar inner lower            |
| 15. Front sidemember rear B                | 74. Centre pillar inner                 |
| 16. Upper frame                            | 75. Front pillar inner upper            |
| 17. Dash crossmember lower                 | 76. Roof side rail inner                |
| 18. Dash crossmember upper                 | 77. Side roof rail reinforcement rear   |
| 19. Dash panel                             | 78. Roof front rail                     |
| 20. Cowl top panel                         | 79. Roof bow front                      |
| 21. Front deck crossmember                 | 80. Roof bow centre                     |
| 22. Hood inner panel                       | 81. Roof bow rear                       |
| 23. Hood outer panel                       | 82. Roof rear rail                      |
| 24. Front door inner panel                 | 83. Roof panel                          |
| 25. Front door side door beam              | 84. Rear shelf panel                    |
| 26. Front door outer panel                 | 85. Rear deck crossmember               |
| 27. Rear door side door beam lower         | 86. Rear seatback plate                 |
| 28. Rear door side door beam upper         | 87. Rear wheel house panel inner        |
| 29. Rear door outer panel                  | 88. Rear wheel house shield plate rear  |
| 30. Rear door inner panel                  | 89. Rear quarter inner panel lower      |
| 31. Trunk lid outer panel                  | 90. Rear wheel house shield plate front |
| 32. Trunk lid inner panel                  |   |
| 33. Rear quarter inner panel upper         |   |
| 34. Rear pillar reinforcement              |   |
| 35. Rear quarter outer panel extension     |   |
| 36. Rear lamp housing                      |   |
| 37. Rear bumper bracket                    |   |
| 38. Rear seatback brace                    |   |
| 39. Fuel filler door (Left side)           |   |
| 40. Fuel filler neck bracket (Left side)   |   |
| 41. Rear bumper bracket                    |   |
| 42. Rear end panel outer                   |   |
| 43. Rear end panel inner                   |   |
| 44. Spare tyre well panel                  |   |
| 45. Spare tyre well reinforcement          |   |
| 46. Rear floor crossmember                 |   |
| 47. Rear floor side brace                  |   |
| 48. Rear floor sidemember gusset           |   |
| 49. Rear floor sidemember extension        |   |
| 50. Rear floor sidemember reinforcement    |   |
| 51. Rear floor sidemember                  |   |
| 52. Rear floor panel front                 |   |
| 53. Rear floor crossmember front           |   |
| 54. Seat belt rear floor reinforcement     |   |
| 55. Rear floor crossmember rear            |   |
| 56. Front floor crossmember rear backbone  |   |
| 57. Front floor crossmember rear           |   |
| 58. Front floor crossmember front          |   |
| 59. Front floor side sill inner            |   |
| 60. Front floor lower reinforcement        |   |
| 61. Front floor sidemember                 |   |
| 62. Front floor crossmember front backbone |   |
| 63. Front fender reinforcement             |   |

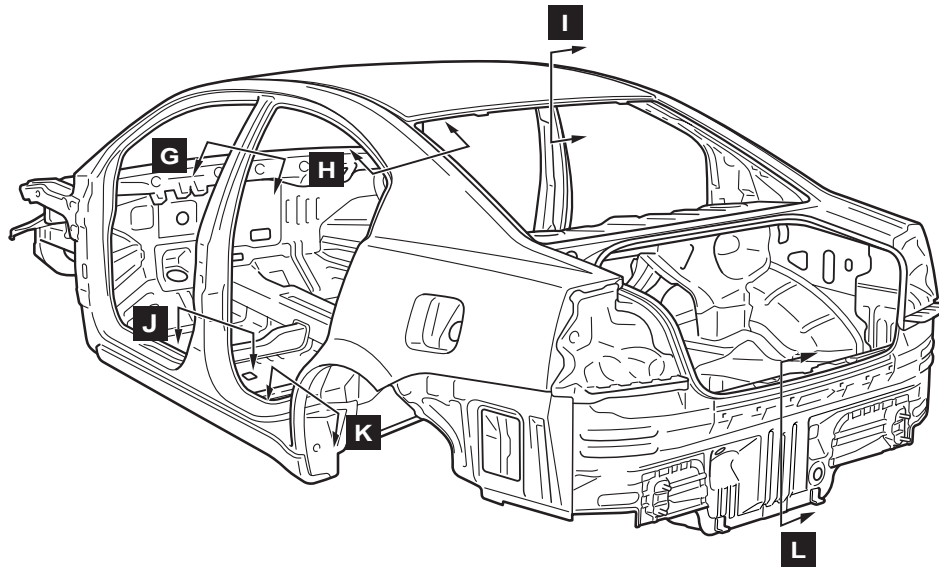
# BODY MAIN CROSS-SECTIONAL VIEWS

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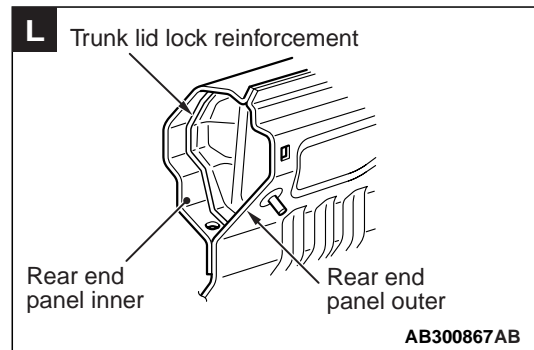
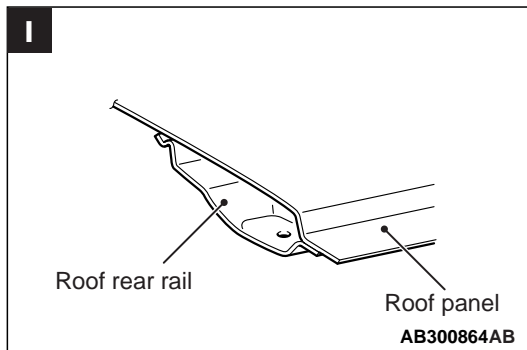
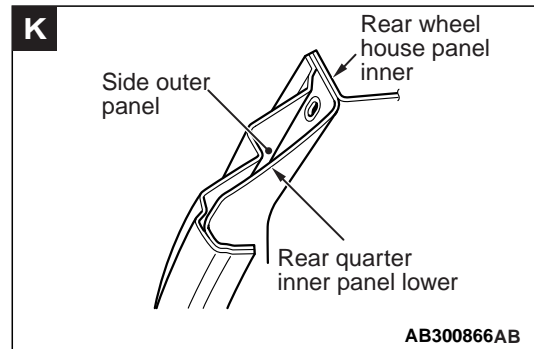
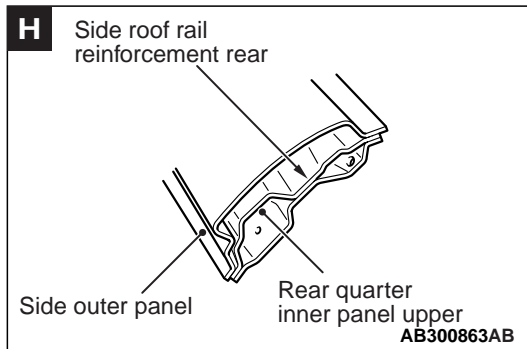
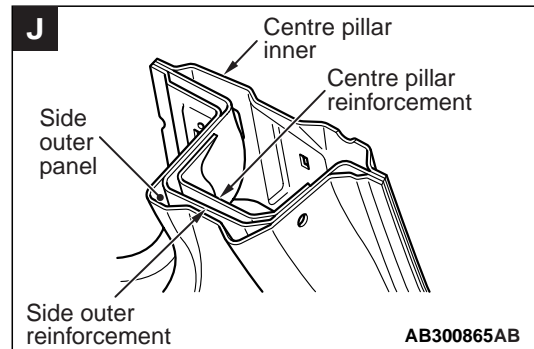
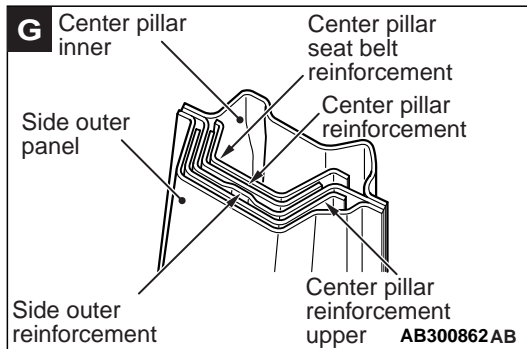


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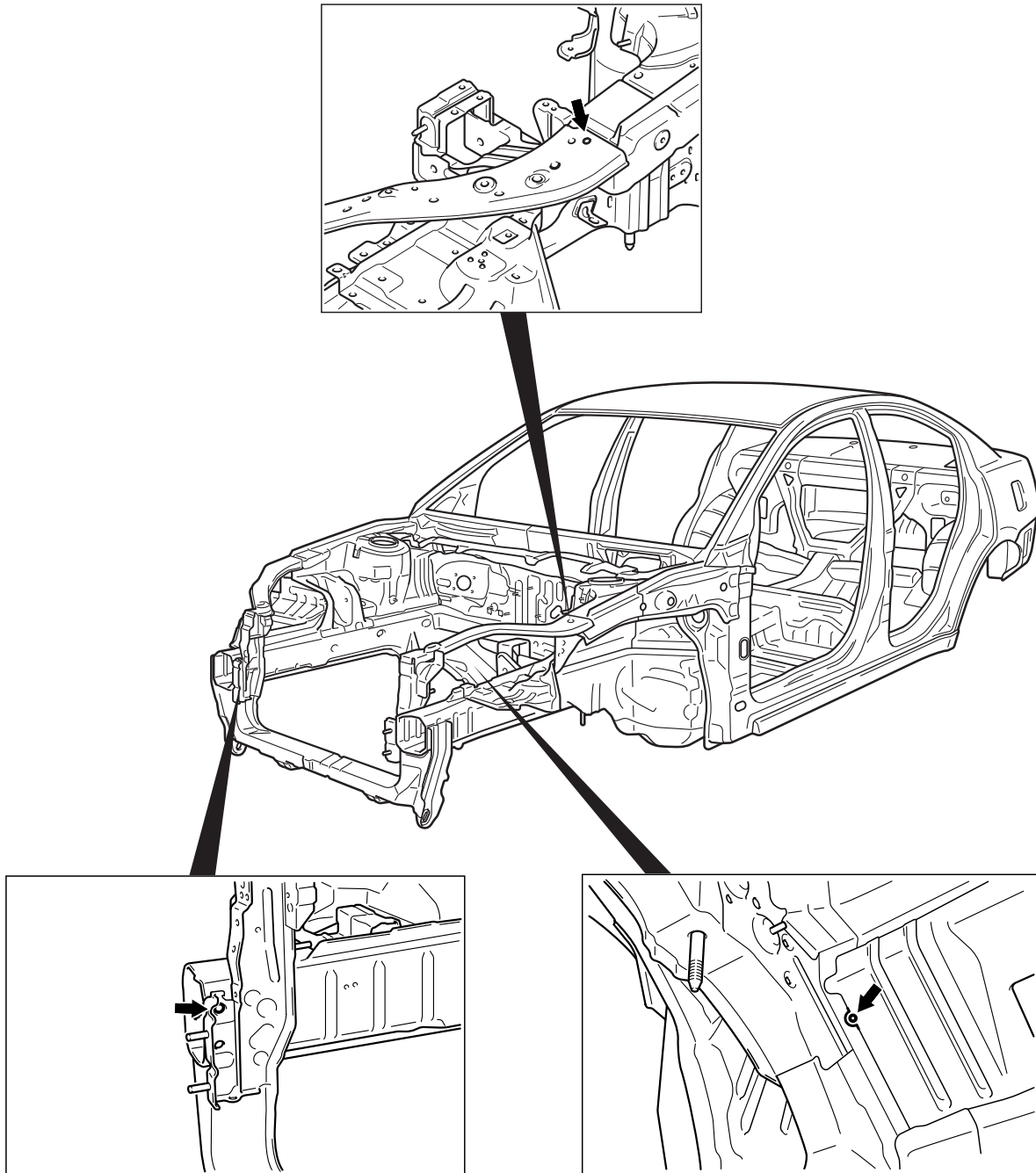


## MAINTENANCE, SERVICEABILITY

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### FENDER SHIELD

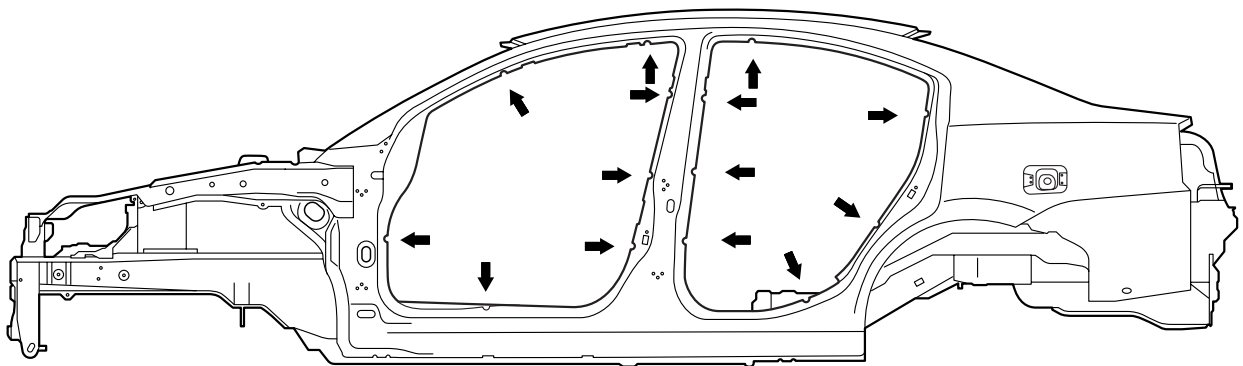
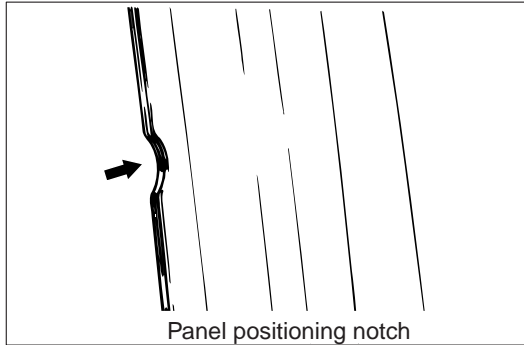
Positioning holes, marks, and notches have been provided at the following overlapped areas to improve operation performance when replacing panels.



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## **SIDE STRUCTURE**

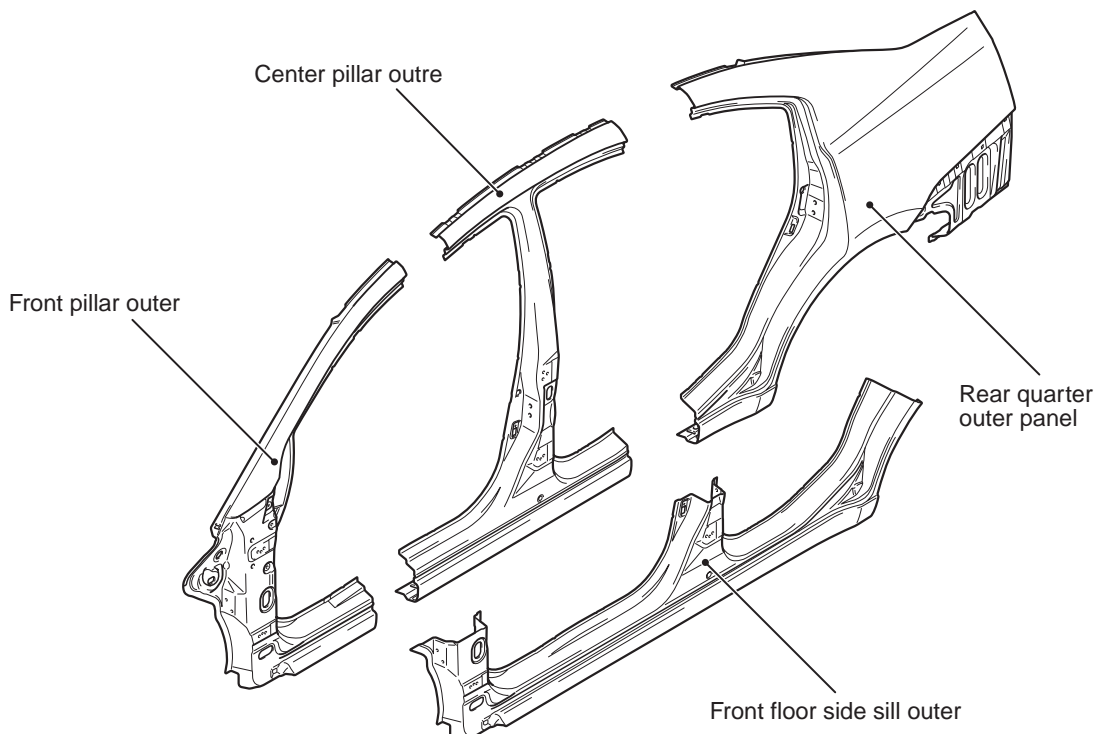
Panel positioning notches have been provided at the door opening section to improve operation performance when replacing panels.



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## **SIDE OUTER PANEL**

Spare parts are provided in the following cut form with the adoption of the pillar integral type side outer panel.



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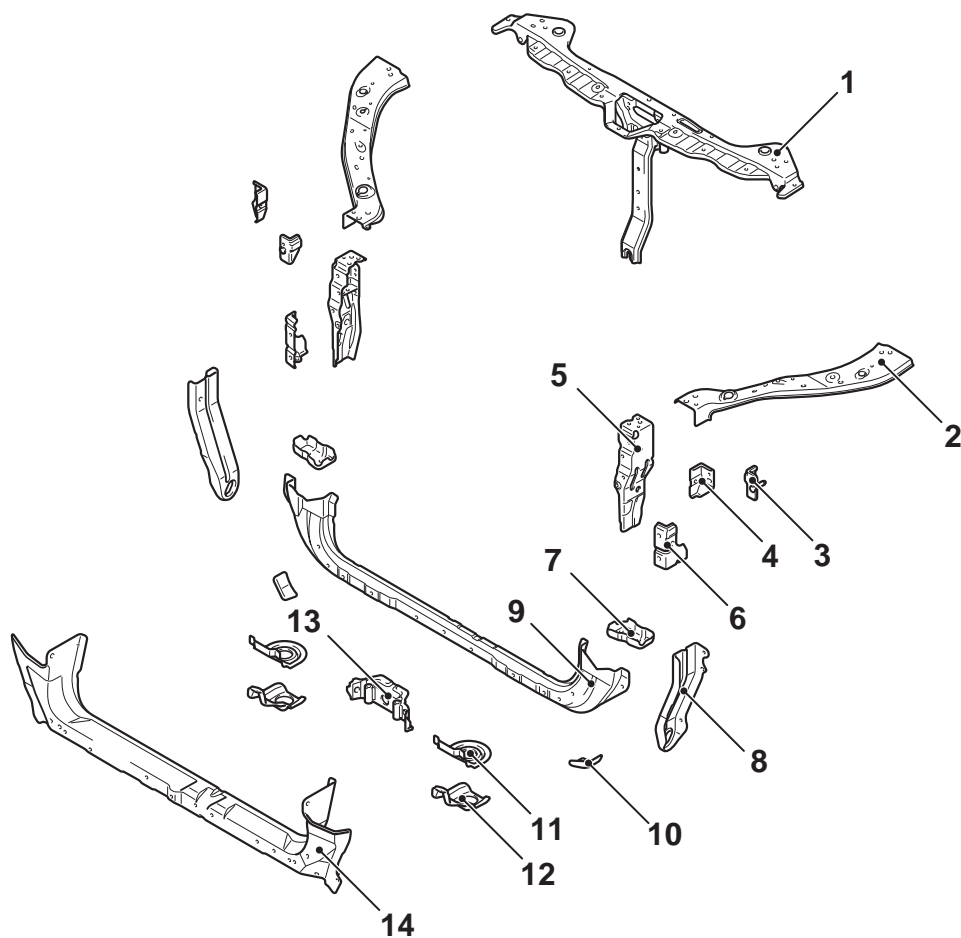


## BODY CONSTRUCTION CHARACTERISTICS

### FRONT BODY

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### HEADLAMP SUPPORT



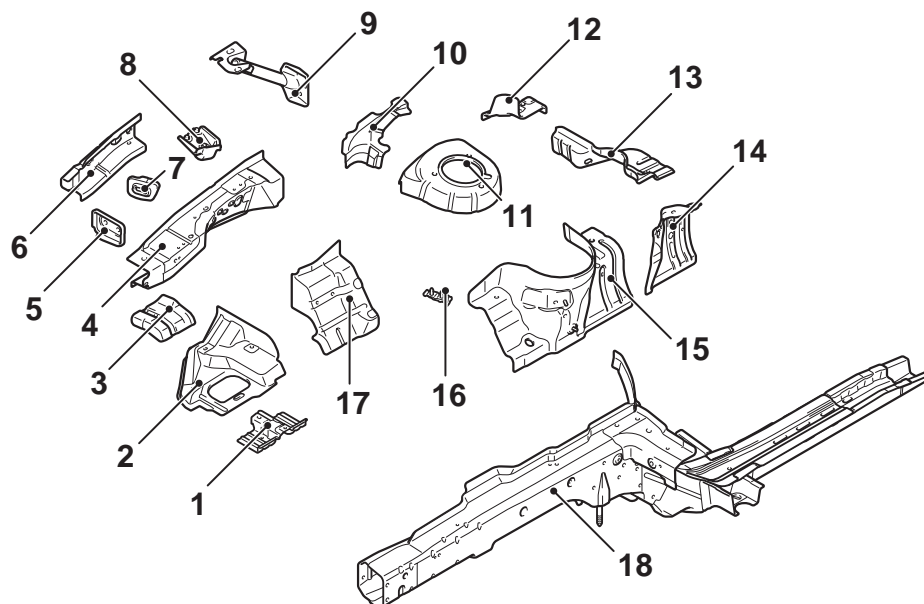
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- |                                    |   |
|------------------------------------|---|
| 1. Front end upper bar             | 8. Shipping hook                        |
| 2. Front end upper bar side        | 9. Front end crossmember inner          |
| 3. G sensor protector bracket      | 10. Shipping Support.                   |
| 4. Head lamp support panel         | 11. Radiator lower bracket A            |
| 5. Radiator support panel          | 12. Radiator lower bracket B            |
| 6. Front bumper reinforcement stay | 13. Front end crossmember reinforcement |
| 7. Front end crossmember bulkhead  | 14. Front end crossmember outer         |

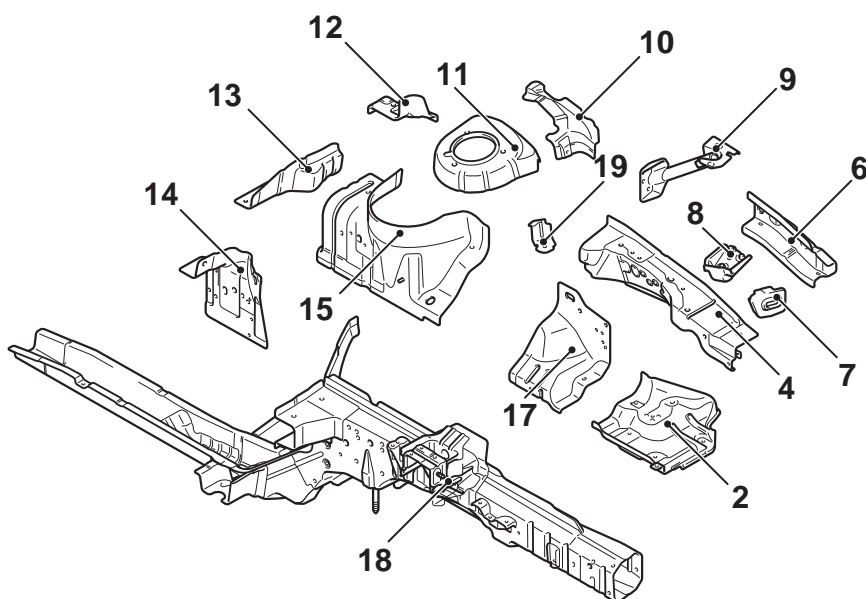


## FENDER SHIELD

Right side



Left side

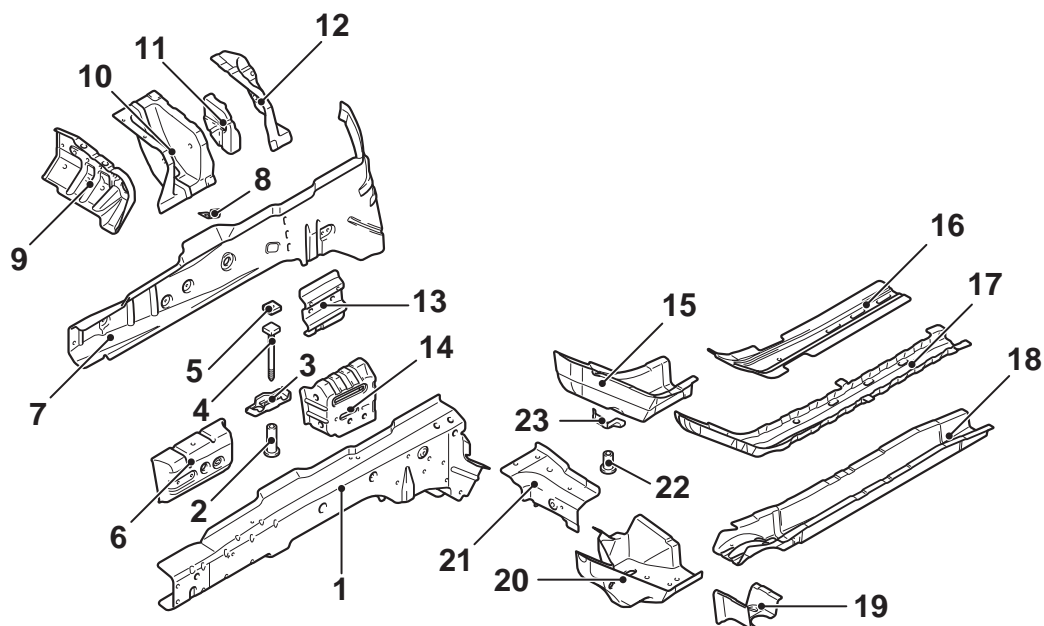


- |  |   |
|--|---|
| 1. Washer tank bracket                           | 11. Spring house bracket                  |
| 2. Shield plate                                  | 12. Front upper frame gusset              |
| 3. Front upper frame brace                       | 13. Spring house gusset                   |
| 4. Front upper frame inner                       | 14. Spring house brace inner              |
| 5. Front upper frame bulkhead front (Right side) | 15. Spring house panel                    |
| 6. Front upper frame outer                       | 16. Power steering reservoir tank bracket |
| 7. Upper frame bulkhead                          | 17. Front fender shield                   |
| 8. Upper frame reinforcement                     | 18. Front sidemember                      |
| 9. Front pillar to upper frame brace             | 19. Relay box bracket (Left side)         |
| 10. Spring house panel upper                     |   |

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## FRONT SIDEMEMBER REINFORCEMENT

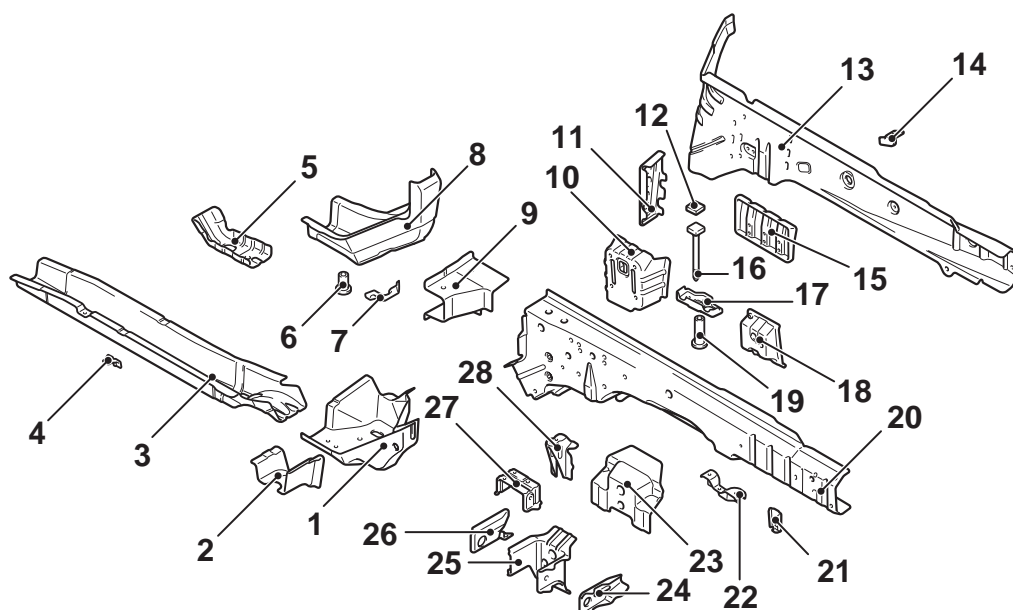
RIGHT SIDE



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- |  |   |
|--|---|
| 1. Front sidemember inner                  | 14. Pipe support front                          |
| 2. Pipe                                    | 15. Front sidemember rear A                     |
| 3. Front suspension support bulkhead front | 16. Front sidemember reinforcement rear B upper |
| 4. Square head bolt                        | 17. Front sidemember reinforcement rear B       |
| 5. Retainer                                | 18. Front sidemember rear B                     |
| 6. Front sidemember reinforcement inner    | 19. Dash crossmember extension lower            |
| 7. Front sidemember outer                  | 20. Front sidemember brace lower                |
| 8. Brake hose bracket                      | 21. Dash crossmember extension upper            |
| 9. Engine mount reinforcement              | 22. Pipe nut                                    |
| 10. Engine mount bracket                   | 23. Pipe support rear                           |
| 11. Engine mount plate rear                |   |
| 12. Engine mount reinforcement rear        |   |
| 13. Front sidemember reinforcement outer B |   |

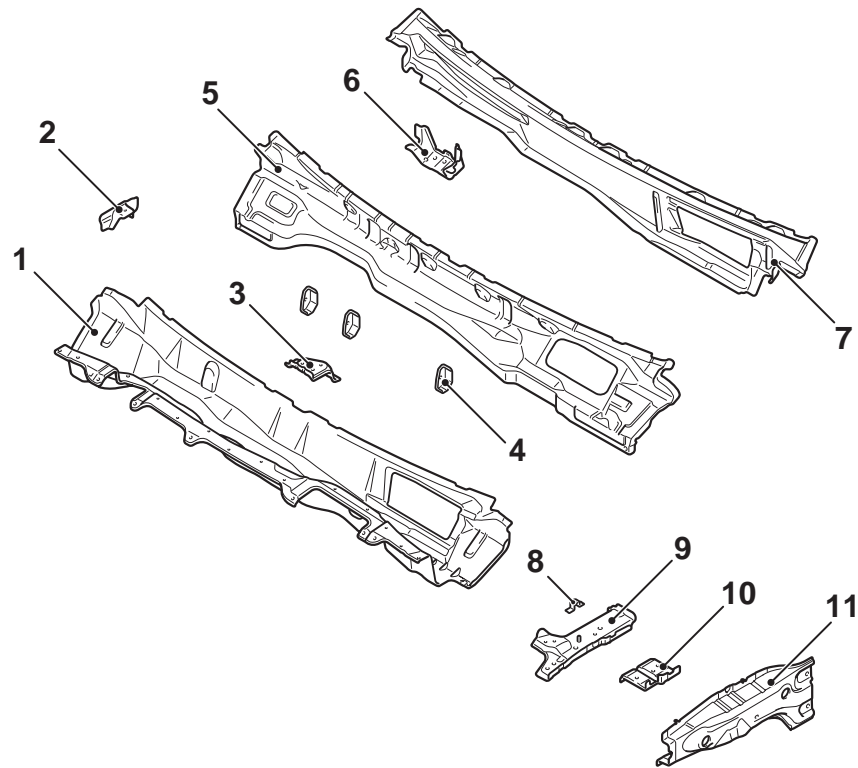
LEFT SIDE



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- |  |   |
|--|---|
| 1. Front sidemember brace lower                | 17. Front suspension support bulkhead front |
| 2. Dash crossmember extension lower            | 18. Front sidemember inner bulkhead         |
| 3. Front sidemember rear B                     | 19. Pipe                                    |
| 4. Fuel pipe bracket                           | 20. Front sidemember inner                  |
| 5. Front sidemember rear B reinforcement lower | 21. Condenser tank bracket                  |
| 6. Pipe nut                                    | 22. Air cleaner bracket                     |
| 7. Pipe support rear                           | 23. Transmission mount gusset               |
| 8. Front sidemember rear A                     | 24. Transmission mount support front        |
| 9. Dash crossmember extension upper            | 25. Transmission mount bracket              |
| 10. Pipe support front                         | 26. Transmission mount support rear         |
| 11. Front sidemember bulkhead rear             | 27. Harness protector bracket               |
| 12. Retainer                                   | 28. Battery tray stay front                 |
| 13. Front sidemember outer                     |   |
| 14. Brake hose bracket                         |   |
| 15. Front sidemember reinforcement front outer |   |
| 16. Square head bolt                           |   |

FRONT DECK

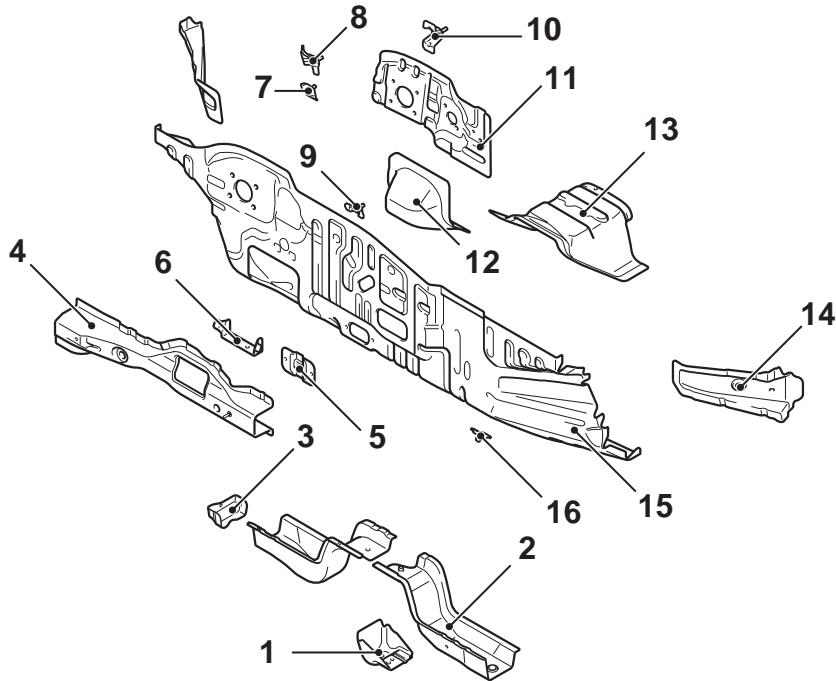


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- |                               |                                       |
|-------------------------------|---------------------------------------|
| 1. Cowl top panel lower       | 8. Fender bracket upper               |
| 2. Wiper motor bracket        | 9. Front upper frame extension inner  |
| 3. Wiper bracket centre       | 10. Plate nut                         |
| 4. Cowl top inner bulkhead    | 11. Front upper frame extension outer |
| 5. Cowl top panel inner       |                                       |
| 6. Clutch upper bracket (M/T) |                                       |
| 7. Cowl top panel upper       |                                       |

## DASH PANEL

- A large dash crossmember and dash brace installed in the chassis is used to disperse energy upon impact efficiently, so that cabin deformation is suppressed.
- Plate thickness of dash panel is increased to suppress cabin deformation and improve sound insulation upon impact.



- |   |                              |
|---|------------------------------|
| 1. Backbone brace bracket lower front   | 11. Dash panel reinforcement |
| 2. Dash crossmember lower               | 12. Steering cover bracket   |
| 3. Dash crossmember lower reinforcement | 13. Dash lower extension     |
| 4. Dash crossmember                     | 14. Dash brace reinforcement |
| 5. Bracket canister                     | 15. Dash panel               |
| 6. Partition plate                      | 16. Bracket                  |
| 7. Accelerator stopper bracket          |                              |
| 8. Accelerator pedal bracket            |                              |
| 9. Clutch stopper bracket (M/T)         |                              |
| 10. Accelerator pedal bracket upper     |                              |

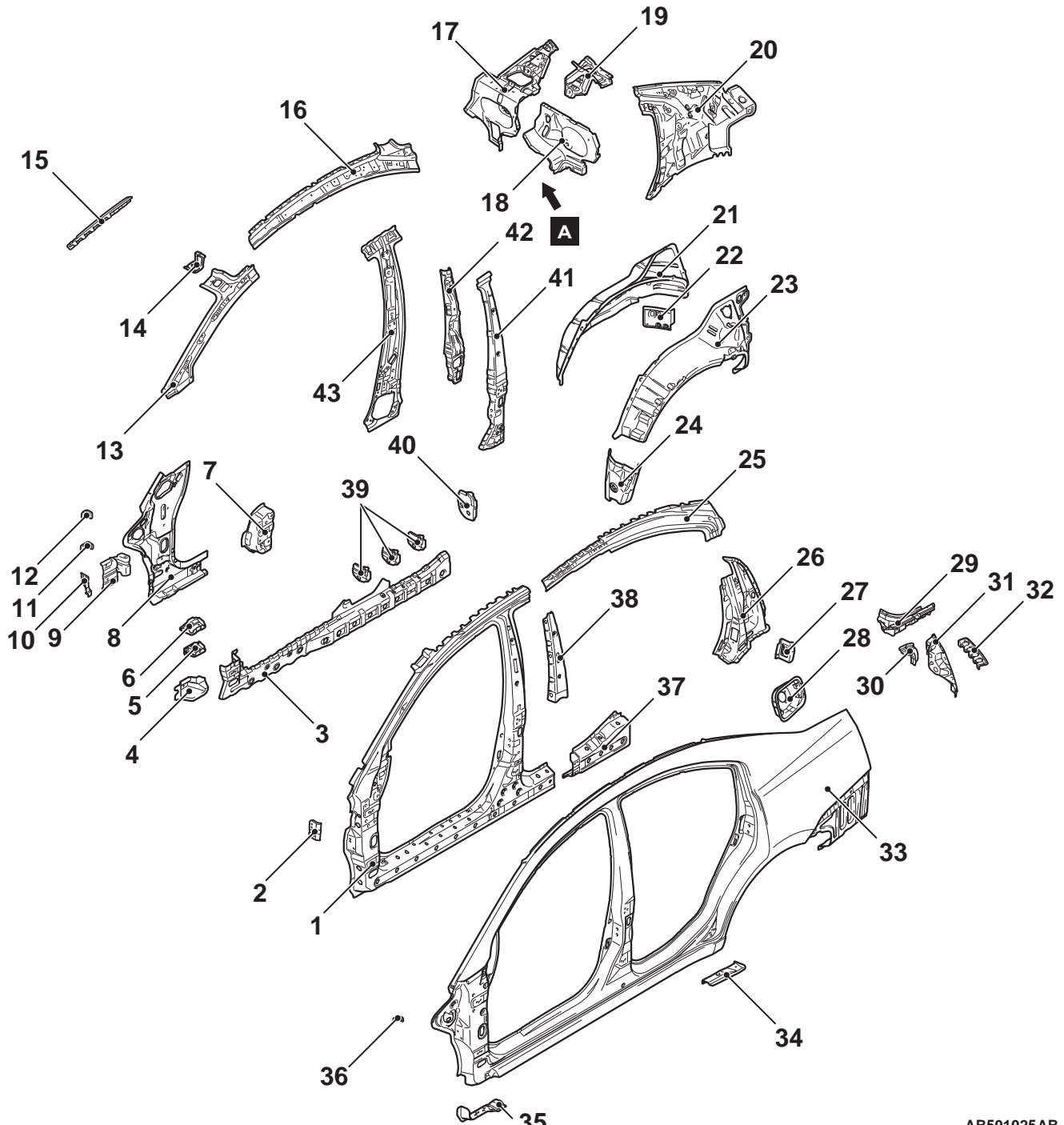
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## SIDE BODY

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### SIDE STRUCTURE

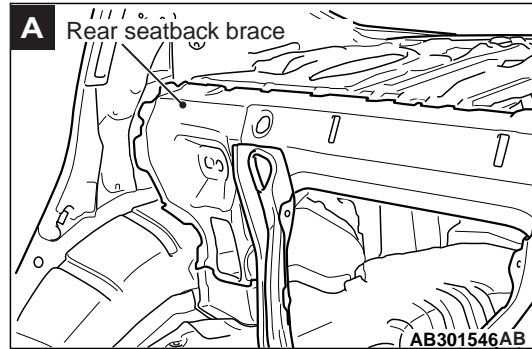
High rigidity cabin structure has maintained the cabin space and improved the passenger rescue upon impact.



- |   |   |
|---|---|
| 1. Side outer reinforcement               | 9. Front pillar reinforcement inner lower (Right side)  |
| 2. Front pillar brace reinforcement       | 10. Crossmember rear bracket (Left side)                |
| 3. Side sill outer reinforcement inner    | 11. Crossmember rear bracket lower (Right side)         |
| 4. Side sill reinforcement front          | 12. Crossmember rear bracket upper (Right side)         |
| 5. Side sill reinforcement bulkhead front | 13. Front pillar inner upper                            |
| 6. Front pillar bulkhead lower            | 14. Sunvisor bracket A                                  |
| 7. Front door hinge reinforcement upper   | 15. Front pillar reinforcement upper (Right side)       |
| 8. Front pillar inner lower               | 16. Roof side rail inner                                |
|   | 17. Front pillar reinforcement inner upper (Right side) |
|   | 18. Front pillar reinforcement inner lower (Right side) |
|   | 19. Front pillar reinforcement inner upper (Left side)  |
|   | 20. Front pillar reinforcement inner lower (Left side)  |
|   | 21. Front pillar reinforcement inner upper (Right side) |
|   | 22. Front pillar reinforcement inner lower (Right side) |
|   | 23. Front pillar reinforcement inner upper (Left side)  |
|   | 24. Front pillar reinforcement inner lower (Left side)  |
|   | 25. Front pillar reinforcement inner upper (Right side) |
|   | 26. Front pillar reinforcement inner lower (Right side) |
|   | 27. Front pillar reinforcement inner upper (Left side)  |
|   | 28. Front pillar reinforcement inner lower (Left side)  |
|   | 29. Front pillar reinforcement inner upper (Right side) |
|   | 30. Front pillar reinforcement inner lower (Right side) |
|   | 31. Front pillar reinforcement inner upper (Left side)  |
|   | 32. Front pillar reinforcement inner lower (Left side)  |
|   | 33. Front pillar reinforcement inner upper (Right side) |
|   | 34. Front pillar reinforcement inner lower (Right side) |
|   | 35. Front pillar reinforcement inner upper (Left side)  |
|   | 36. Front pillar reinforcement inner lower (Left side)  |
|   | 37. Front pillar reinforcement inner upper (Right side) |
|   | 38. Front pillar reinforcement inner lower (Right side) |
|   | 39. Front pillar reinforcement inner upper (Left side)  |
|   | 40. Front pillar reinforcement inner lower (Left side)  |
|   | 41. Front pillar reinforcement inner upper (Right side) |
|   | 42. Front pillar reinforcement inner lower (Right side) |
|   | 43. Front pillar reinforcement inner upper (Left side)  |

- 17. Rear seatback brace
- 18. Rear deck crossmember extension rear
- 19. Seat belt reinforcement
- 20. Rear quarter inner panel upper
- 21. Rear wheel house panel inner
- 22. Rear wheel house shield plate rear
- 23. Rear quarter inner panel lower
- 24. Rear wheel house shield plate front
- 25. Side roof rail reinforcement rear
- 26. Rear pillar reinforcement
- 27. Striker reinforcement
- 28. Fuel filler neck bracket (Left side)
- 29. Rear quarter outer panel extension
- 30. Quarter corner panel
- 31. Rear light housing
- 32. Rear bumper bracket
- 33. Side outer panel
- 34. Side outer extension rear
- 35. Side outer extension front
- 36. Fender bracket
- 37. Side sill reinforcement rear
- 38. Centre pillar reinforcement upper
- 39. Side sill bulkhead B
- 40. Side sill bulkhead rear

- 41. Centre pillar reinforcement
- 42. Centre pillar seat belt reinforcement
- 43. Centre pillar inner



The rear deck has been connected to the rear floor with a closed section by a rear seatback plate and a rear deck crossmember extension rear, so that the body torsional rigidity and handling stability have been improved.

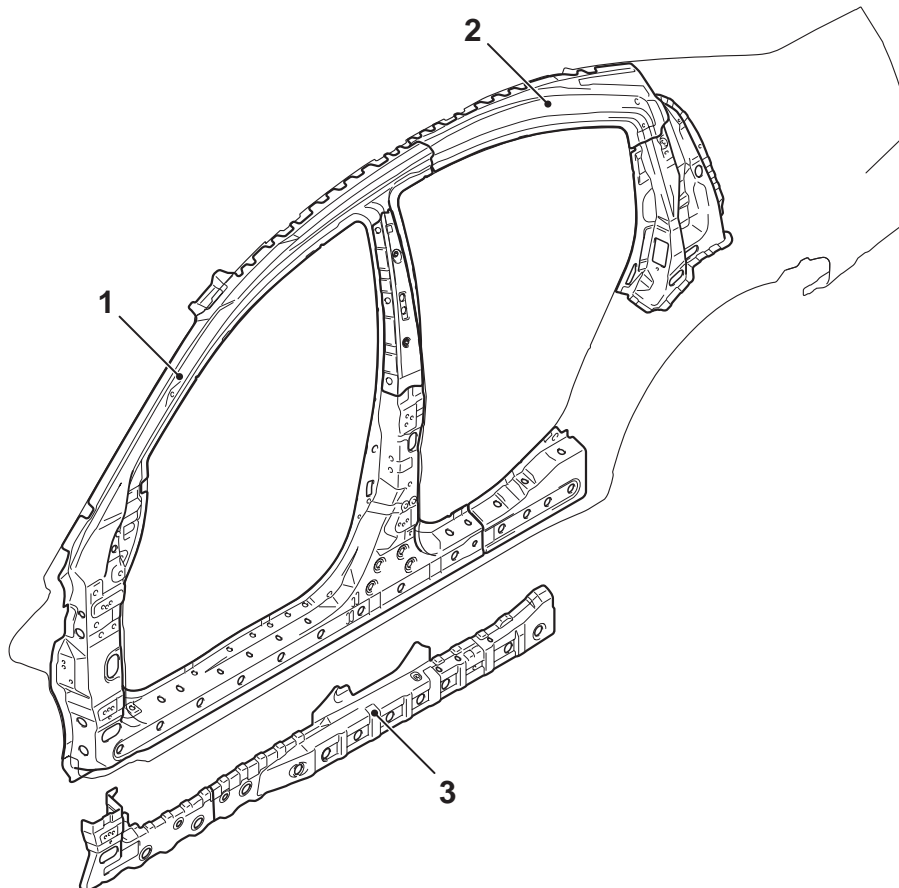


## **SIDE STRUCTURE REINFORCEMENT**

1. A large side outer reinforcement has been installed to disperse energy upon impact efficiently, so that the safety upon impact has been improved.
2. The side roof rail reinforcement rear rigidity has been enhanced to maintain the cabin space and improve the passenger rescue upon off-set rear impact.

3. An uneven-thickness steel sheet\* has been adopted to the side sill outer reinforcement inner to thicken the sheet thickness of the front vehicle, so that the safety upon frontal impact has been improved.

*NOTE: \*: Steel plates with different thickness welded together to make one steel plate.*

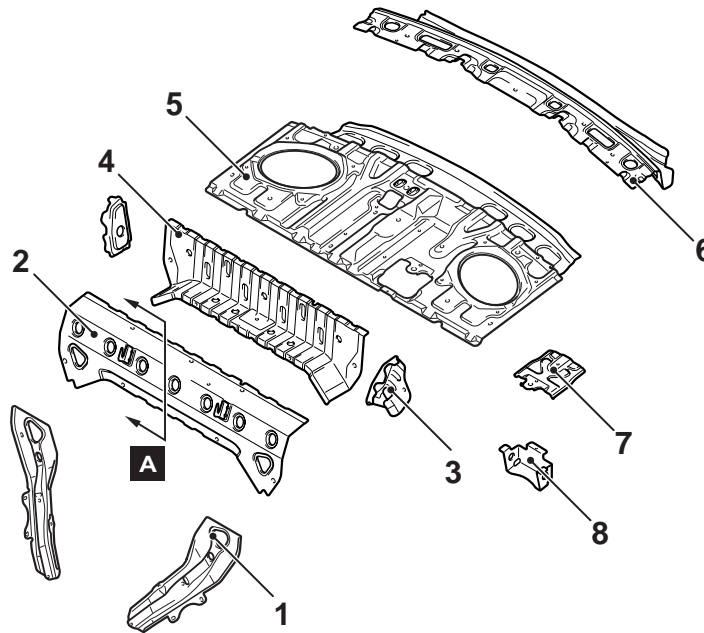


## REAR BODY

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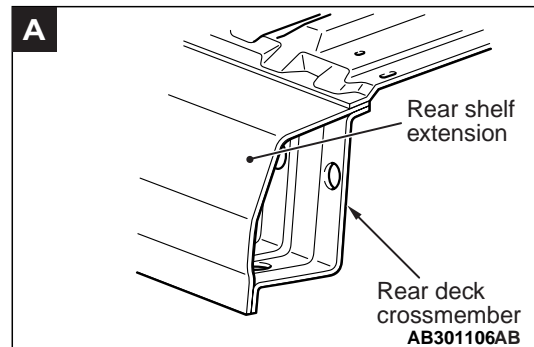
### REAR DECK

A rear seatback plate has been used to improve the body torsional rigidity.



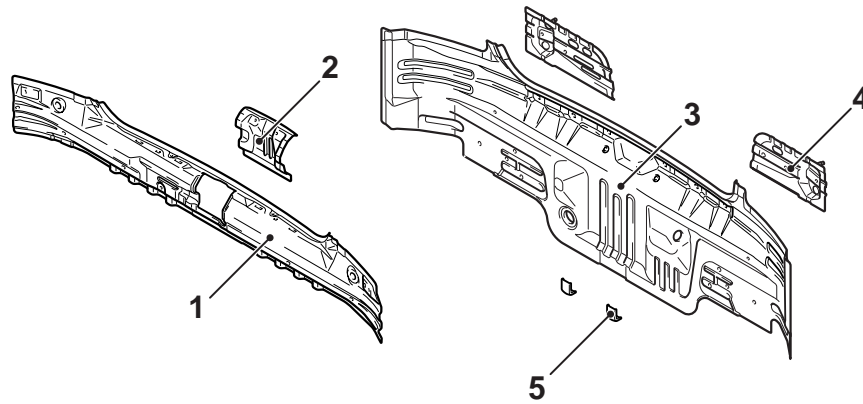
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1. Rear seatback plate
2. Rear shelf extension
3. Rear deck crossmember bulkhead
4. Rear deck crossmember
5. Rear shelf panel
6. Rear shelf reinforcement
7. Seat belt reinforcement centre
8. Seat belt protector bracket



The front side of rear deck features a closed sectional structure, which has improved the body torsional rigidity and the driving stability.

## REAR END PANEL



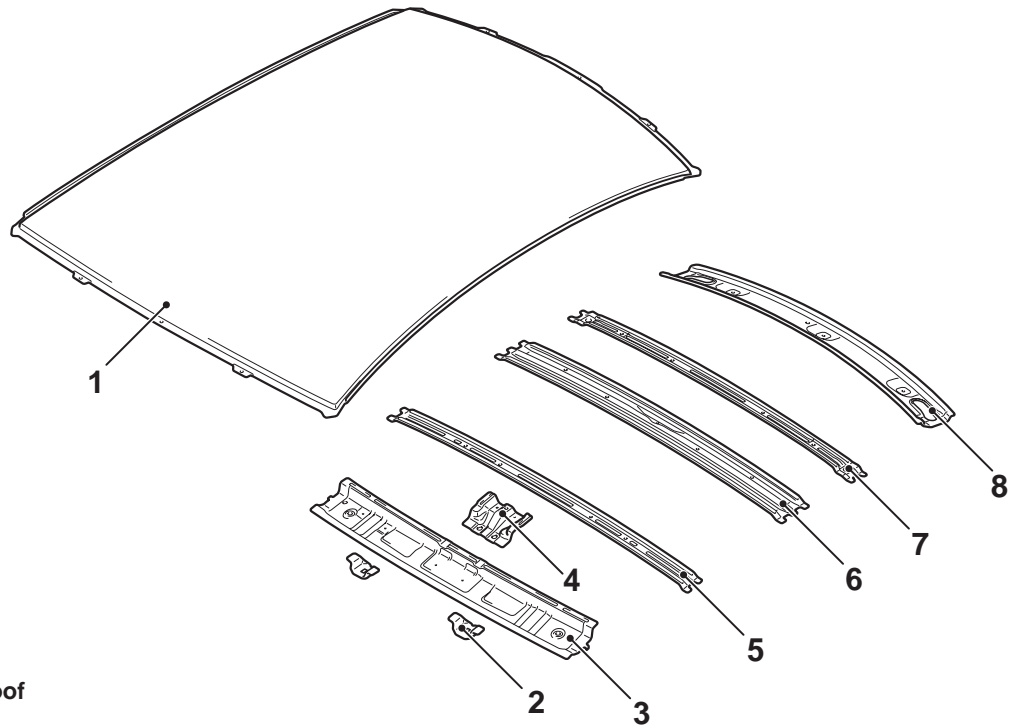
1. Rear end panel inner
2. Trunk lid lock reinforcement
3. Rear end panel outer
4. Rear bumper bracket
5. Rear bumper bracket lower

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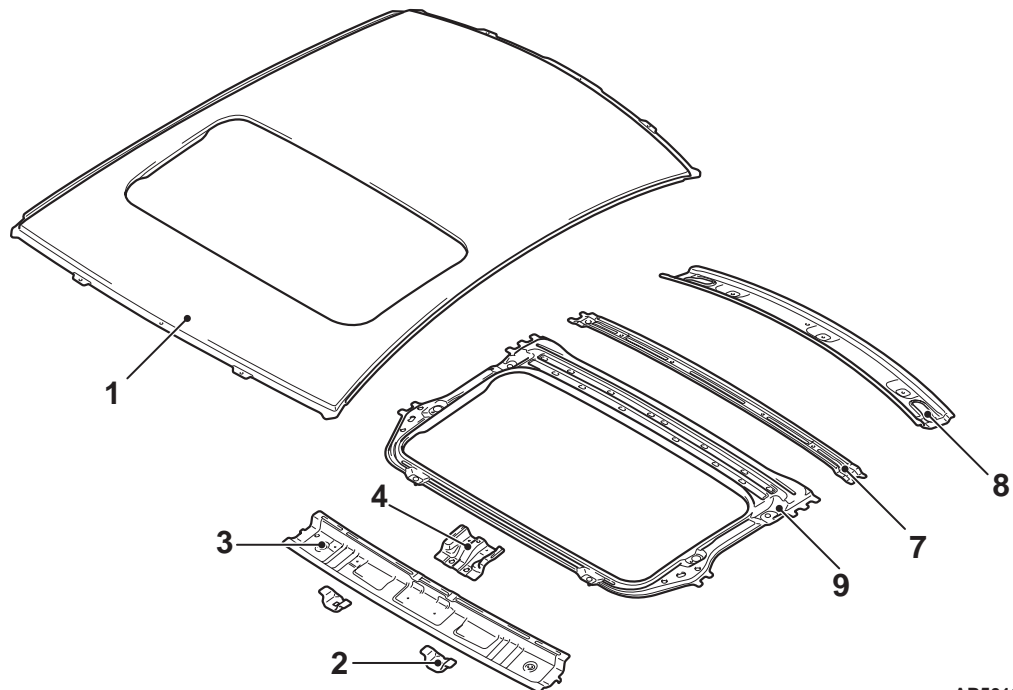
## ROOF

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Vehicles without sunroof



Vehicles with sunroof



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- |                          |                         |
|--------------------------|-------------------------|
| 1. Roof panel            | 6. Roof bow centre      |
| 2. Sunvisor bracket B    | 7. Roof bow rear        |
| 3. Roof front rail inner | 8. Roof rear rail inner |
| 4. Map lamp stay         | 9. Roof reinforcement   |
| 5. Roof bow front        |                         |

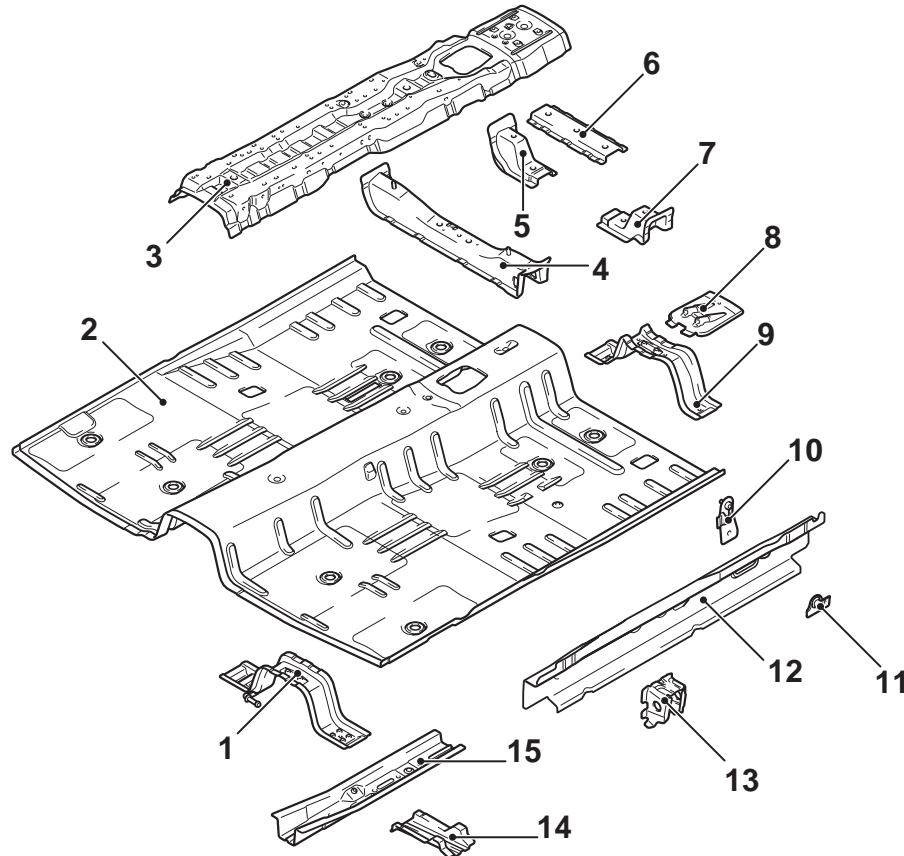
## UNDER BODY

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- The frame members has been thickened and aligned optimal to improve cabin rigidity.

## FRONT FLOOR

- The curved floor is used to reduce vibration.

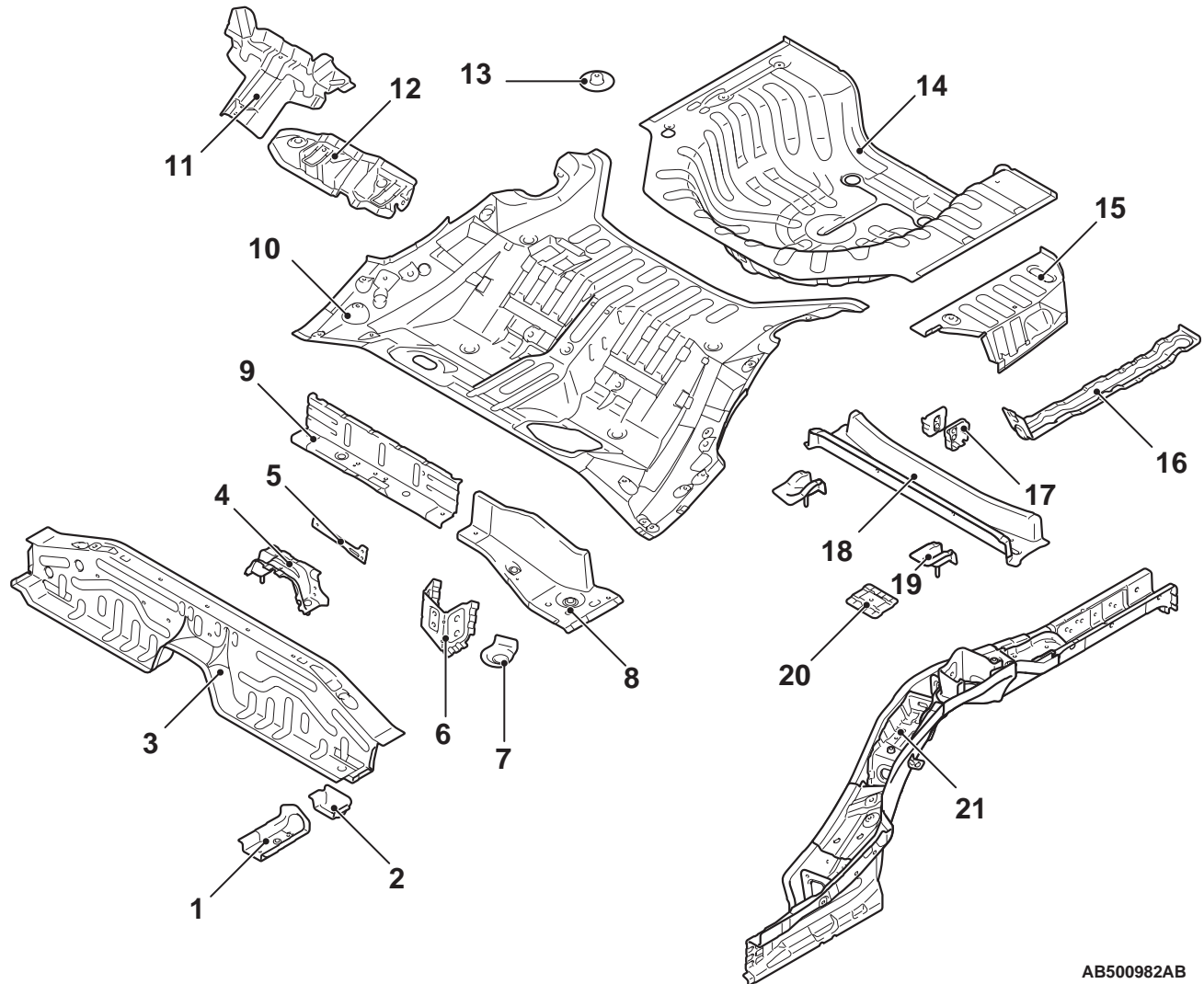


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- |   |                                     |
|---|-------------------------------------|
| 1. Front floor crossmember front backbone | 10. Seat belt side bracket          |
| 2. Front floor pan                        | 11. Seat belt reinforcement         |
| 3. Backbone reinforcement                 | 12. Front floor side sill inner     |
| 4. Front floor crossmember front          | 13. Side sill bulkhead A            |
| 5. Front seat bracket rear centre         | 14. Front floor lower reinforcement |
| 6. Front floor crossmember rear           | 15. Front floor sidemember          |
| 7. Front seat bracket rear side           |                                     |
| 8. Parking cable reinforcement            |                                     |
| 9. Backbone crossmember rear              |                                     |

## REAR FLOOR

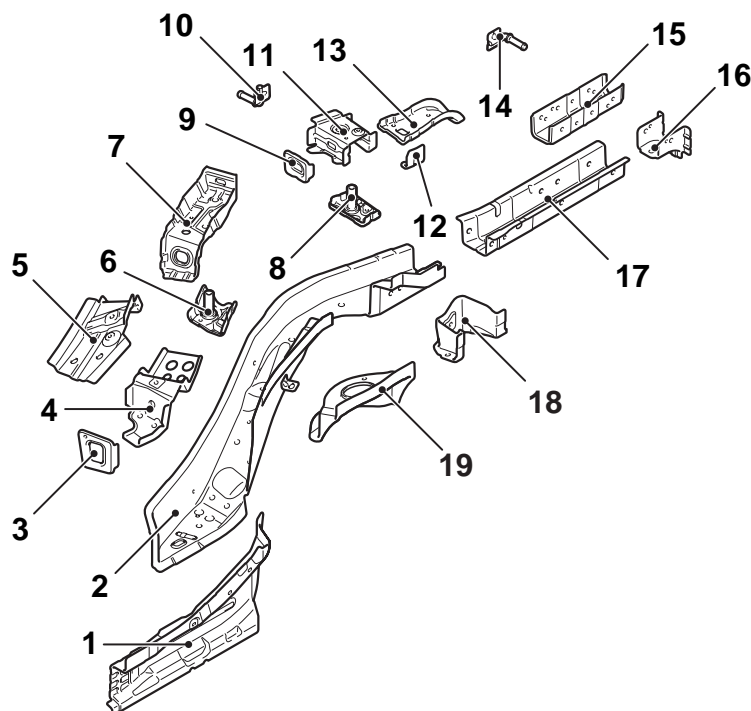
- The rear floor sidemember is straighter and has larger cross-sections to efficiently absorb energy upon impact. And the plate thickness is optimized to reduce weight.
- The rear shock absorber installation part is arranged beside the sidemember to improve assembling rigidity and handling stability.
- The reinforcement in the rear floor side member has been laid out appropriately to enhance the rigidity, so that the protection of fuel tank upon impact has been improved.



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- |   |  |
|---|--|
| 1. Front floor sidemember extension         | 13. Spare tyre bracket                     |
| 2. Fuel tank protector bracket              | 14. Spare tyre well panel                  |
| 3. Rear seat crossmember front              | 15. Rear floor side brace                  |
| 4. Centre bearing bracket                   | 16. Spare tire well reinforcement          |
| 5. Backbone brace rear                      | 17. Rear floor crossmember bulkhead centre |
| 6. Rear seat crossmember bulkhead side      | 18. Rear floor crossmember                 |
| 7. Rear seat crossmember reinforcement rear | 19. Fuel tank support bracket rear         |
| 8. Rear seat crossmember rear side          | 20. Seat belt rear floor reinforcement     |
| 9. Rear seat crossmember rear centre        | 21. Rear floor sidemember                  |
| 10. Rear floor panel front                  |  |
| 11. Rear seat extension back plate          |  |
| 12. Child anchor bracket                    |  |

## REAR FLOOR SIDEMEMBER REINFORCEMENT



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- |  |   |
|--|---|
| 1. Rear floor side sill inner                  | 12. Filler neck protector bracket (Left side) |
| 2. Rear floor sidemember                       | 13. Rear floor sidemember reinforcement       |
| 3. Rear seat crossmember bulkhead              | 14. Muffler hanger rear                       |
| 4. Trailing arm support bulkhead               | 15. Shipping reinforcement (Left side)        |
| 5. Rear seat belt bracket                      | 16. Rear floor sidemember gusset              |
| 6. Rear suspension support reinforcement front | 17. Rear floor sidemember extension           |
| 7. Rear suspension support bulkhead front      | 18. Rear spring bracket support               |
| 8. Rear suspension support reinforcement rear  | 19. Spring house bracket                      |
| 9. Rear floor sidemember bulkhead              |   |
| 10. Muffler hanger rear (Right side)           |   |
| 11. Rear suspension support bulkhead rear      |   |

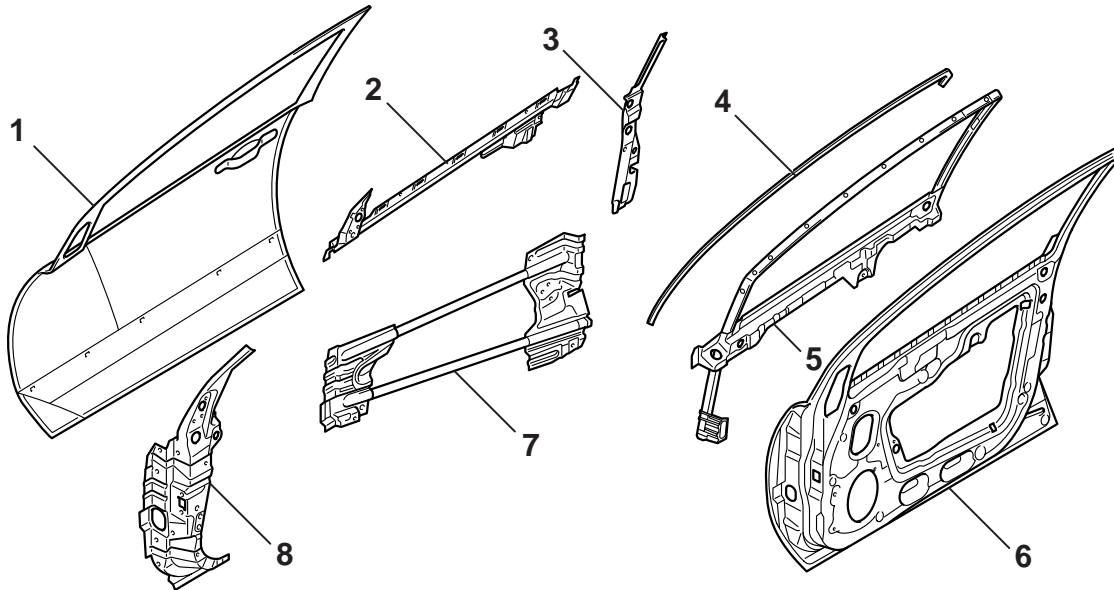


## DOOR

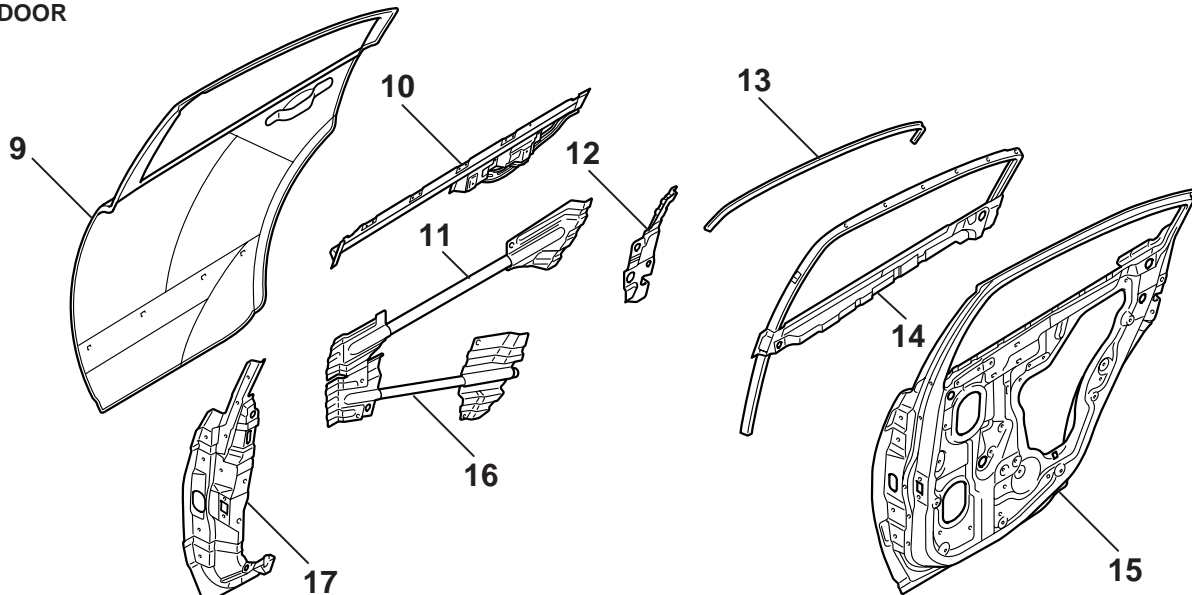
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Two side door beams have been installed to improve the safety upon side impact.

### FRONT DOOR



### REAR DOOR



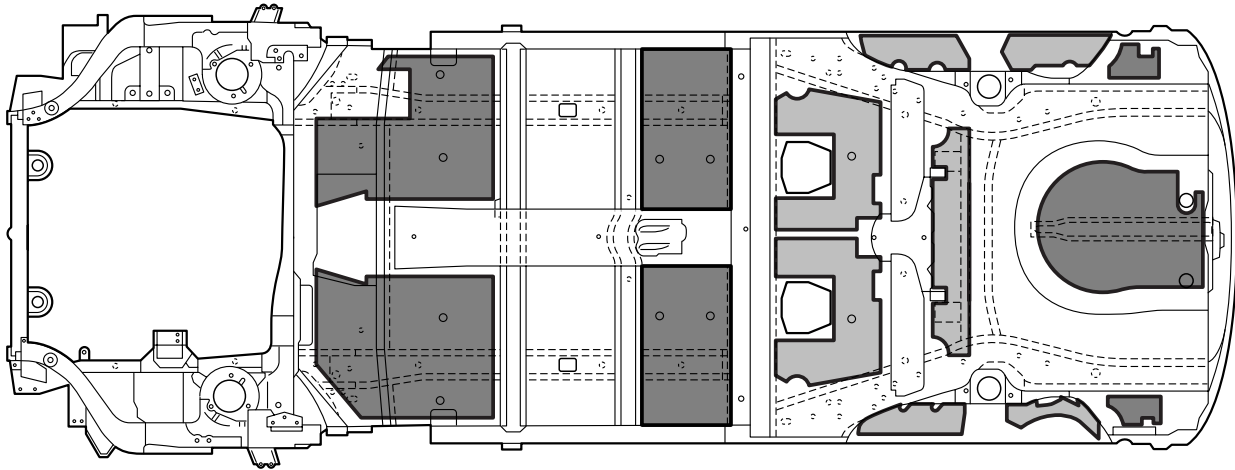
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- |   |   |
|---|---|
| 1. Front door outer panel                   | 10. Rear door belt line outer reinforcement |
| 2. Front door belt line outer reinforcement | 11. Rear door side door beam upper          |
| 3. Front door latch reinforcement           | 12. Rear door latch reinforcement           |
| 4. Front door weather strip holder          | 13. Rear door weather strip holder          |
| 5. Front door sash                          | 14. Rear door sash                          |
| 6. Front door inner panel                   | 15. Rear door inner panel                   |
| 7. Front door side door beam                | 16. Rear door side door beam lower          |
| 8. Front door hinge reinforcement           | 17. Rear door hinge reinforcement           |
| 9. Rear door outer panel                    |   |

## SILENCER APPLICATION LOCATIONS

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Silencers (melting sheet ) have been applied inside the dash panel, the floor in order to improve sound insulation.



■ : 1.6 mm thick melting sheet.

■ : 3.2 mm thick melting sheet. [Place two 1.6 mm melting sheet one on top of another.]

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## FOAMING MATERIAL USAGE LOCATIONS

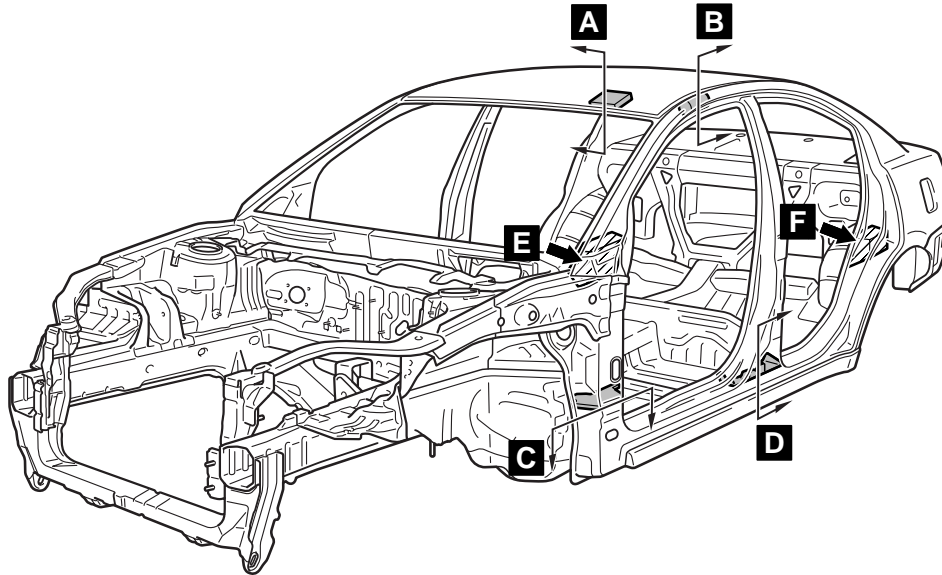
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- Introduction of noise was prevented by inserting urethane foam inside the front pillar and rear spring bracket support.
- By filling the roof rail, the front pillar, centre pillar, rear pillar and inside the wheelhouse arch with acoustic foam materials, penetration of noise is prevented.

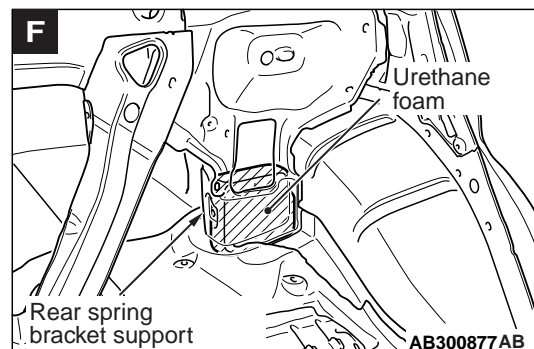
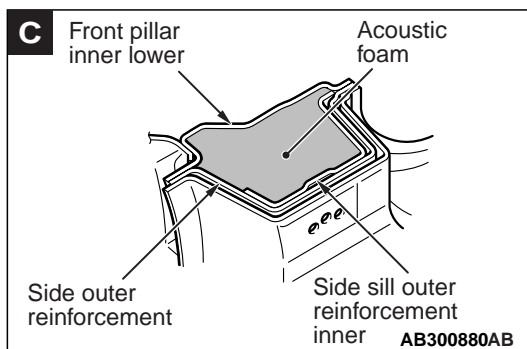
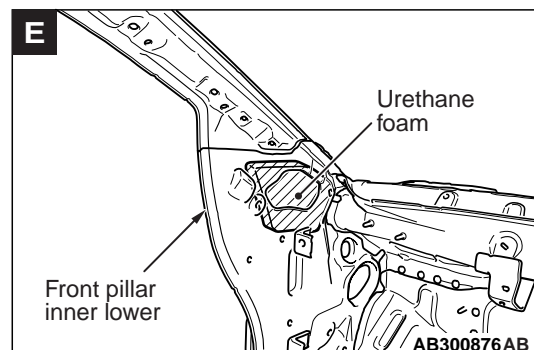
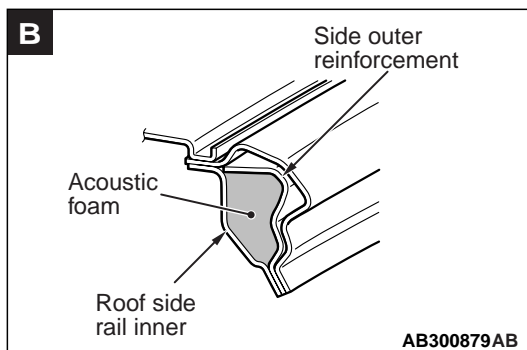
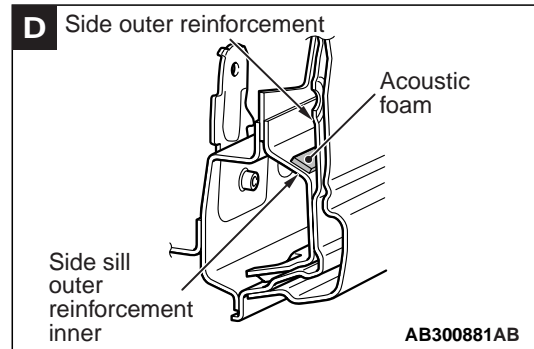
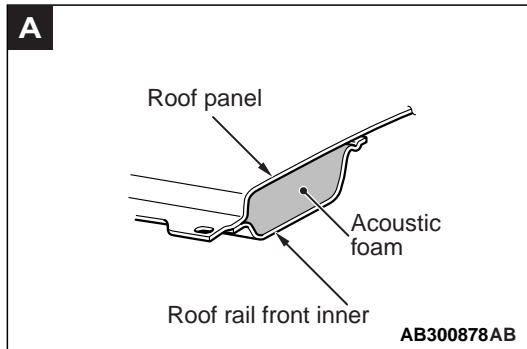
### CAUTION

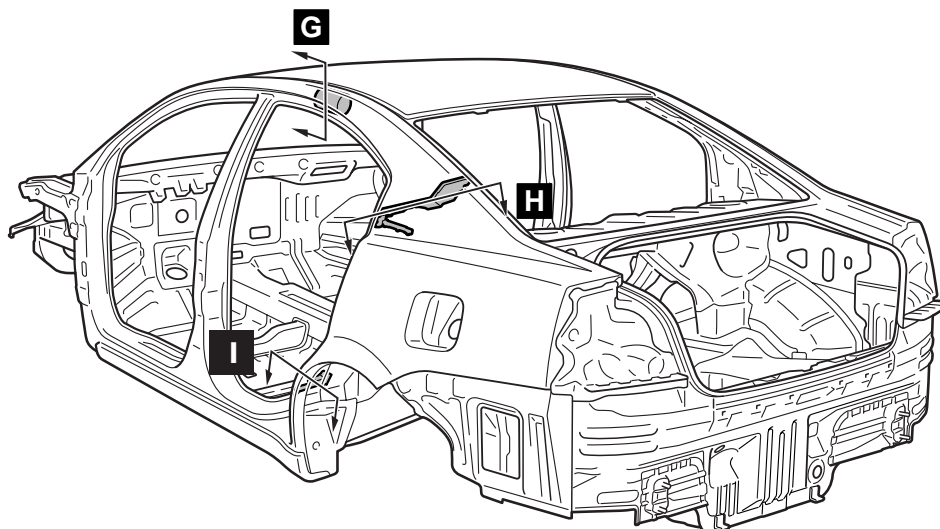
The foam materials may burn when heated. Always observe the following instructions.

- Never use a gas burner or burn the areas using foam materials.
- When cutting the parts using foam materials, ensure to use tools (air saw, etc.) that do not generate fire.
- If there are residual foam materials at body side then weld after removing the foam materials from periphery of the welding area.

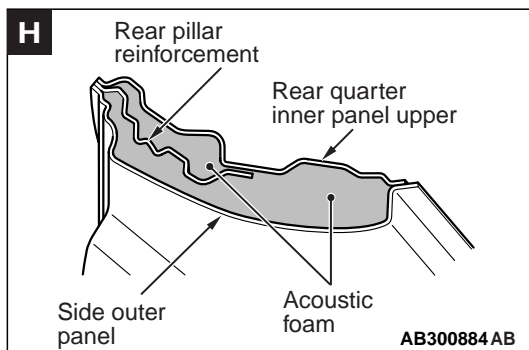
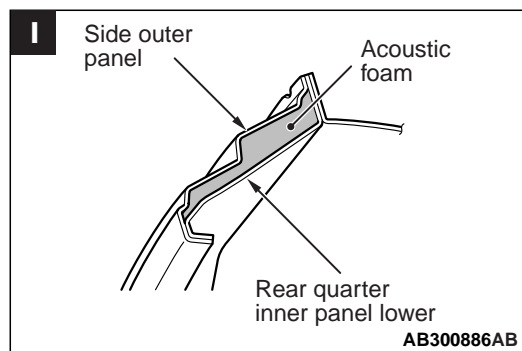
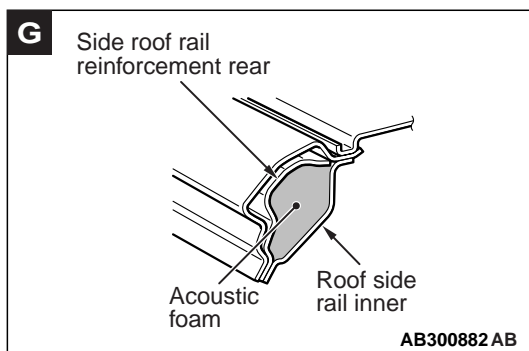


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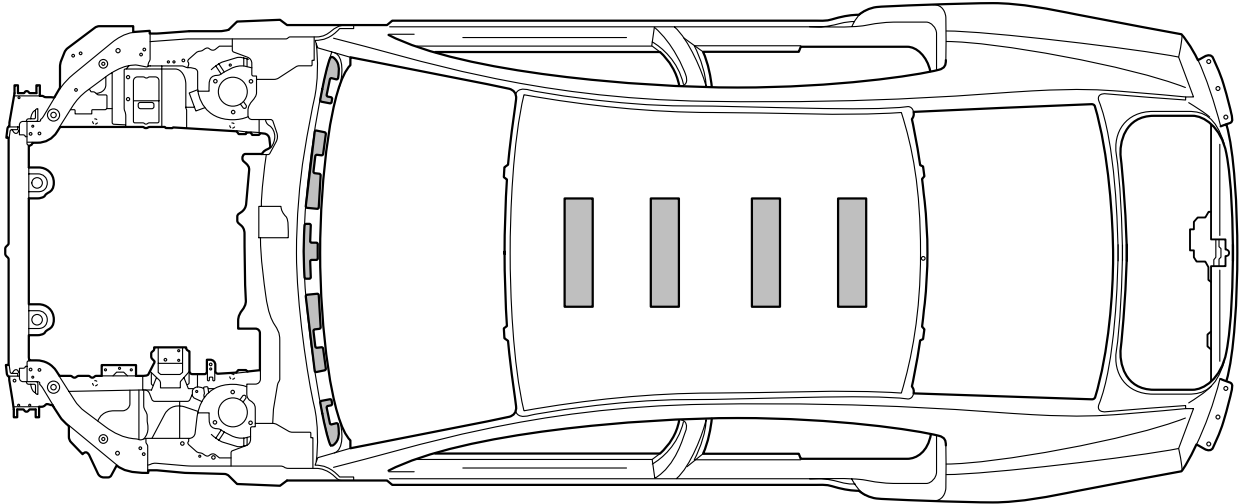


## STIFFENER AND DUMP SHEET APPLICATION LOCATIONS

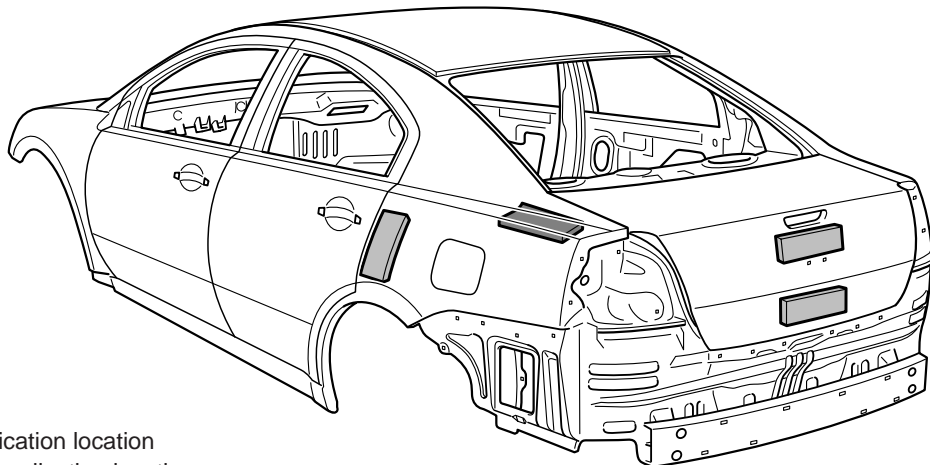
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Sound insulation was improved with anti-vibration effects and heightening surface rigidity with a stiffener on the inner side of the side outer panel, as well as a damping sheet adhered to the inner side of the cowl top panel upper, roof panel, side outer panel and trunk lid outer panel.

*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. It is used to improve the rigidity of the outer plate.*



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■: Stiffener application location  
■: Dump sheet application location

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