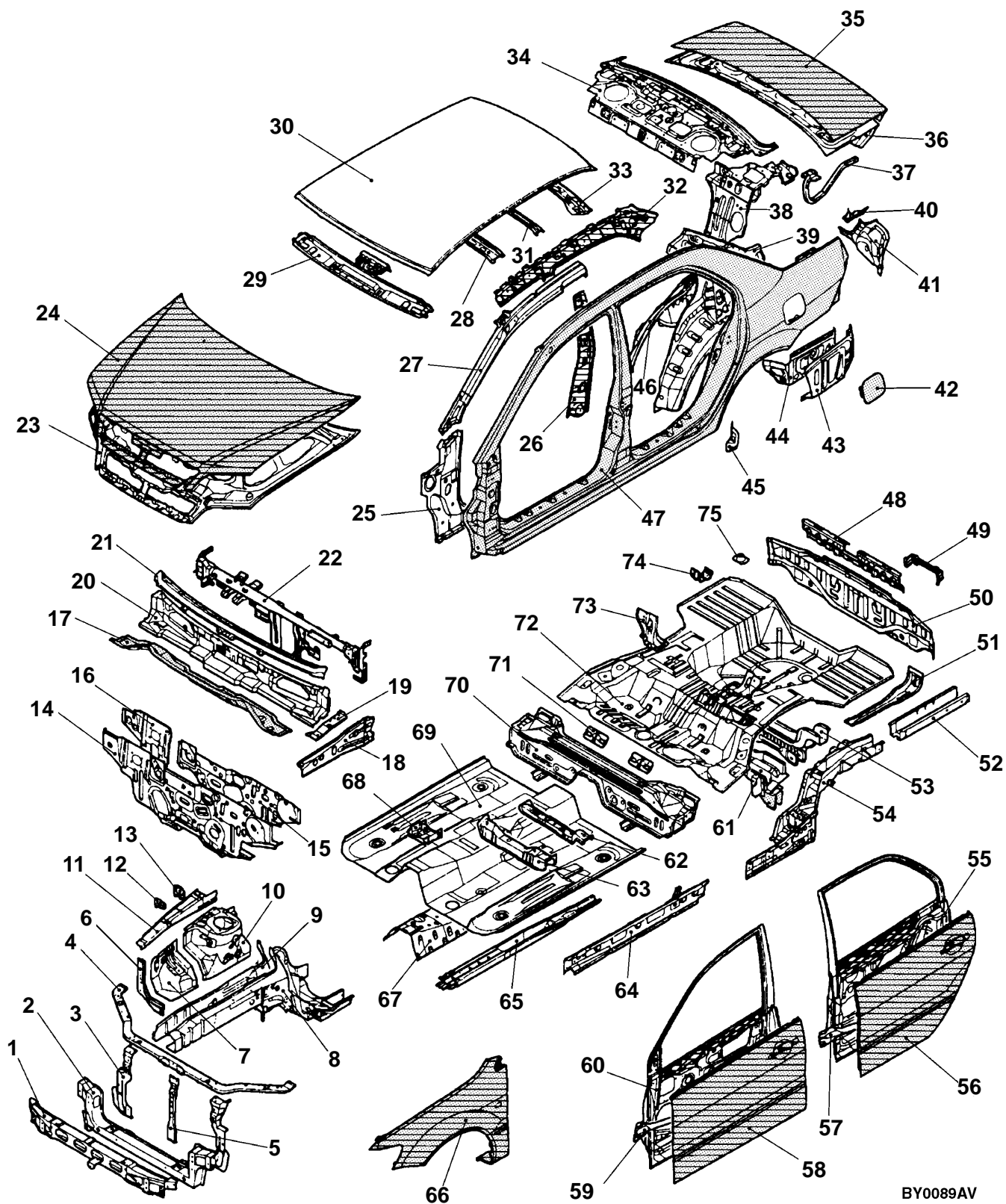




BODY COMPONENTS



BY0089AV

 : Anticorrosion steel plates
 : High-tensile steel panels

BODY CONSTRUCTION – Body Components

1. Front bumper reinforcement
2. Front end crossmember
3. Headlamp support panel
4. Front end upper bar
5. Hood lock stay
6. Headlamp support panel side
7. Front fender shield
8. Front sidemember inner
9. Front sidemember outer
10. Spring house panel
11. Front upper frame inner
12. Upper frame bulkhead front
13. Upper frame bulkhead
14. Dash panel
15. Dash panel silencer
16. Dash panel reinforcement
17. Cowl top lower panel
18. Upper frame extension outer
19. Upper frame extension inner
20. Cowl top inner panel
21. Cowl top upper panel
22. Front deck crossmember
23. Hood inner panel
24. Hood outer panel
25. Front pillar inner lower
26. Center pillar inner
27. Front pillar inner upper
28. Front roof bow
29. Front roof rail
30. Roof panel
31. Rear roof bow
32. Side roof rail inner
33. Rear roof rail
34. Rear shelf panel
35. Trunk lid outer panel
36. Trunk lid inner panel
37. Trunk lid hinge
38. Rear seat back brace
39. Quarter inner panel
40. Quarter corner panel
41. Rear combination lamp housing
42. Fuel filler door
43. Quarter outer lower extension
44. Rear floor side brace
45. Side sill end plate
46. Rear wheel house inner panel
47. Side outer panel
48. Rear end panel inner
49. Rear license plate bracket
50. Rear end panel outer
51. Towing hook reinforcement
52. Rear floor sidemember extension
53. Lower arm bracket
54. Rear floor sidemember
55. Rear door inner panel
56. Rear door outer panel
57. Rear door side door beam
58. Front door outer panel
59. Front door side door beam
60. Front door inner panel
61. Upper arm crossmember
62. Front floor crossmember rear
63. Front floor crossmember front
64. Front floor side sill inner
65. Front floor sidemember
66. Fender panel
67. Backbone reinforcement
68. Installment panel center bracket reinforcement
69. Front floor pan
70. Rear floor extension
71. Rear floor seatbelt reinforcement
72. Rear floor pan
73. Rear seat back reinforcement
74. Jack bracket
75. Spare tire bracket

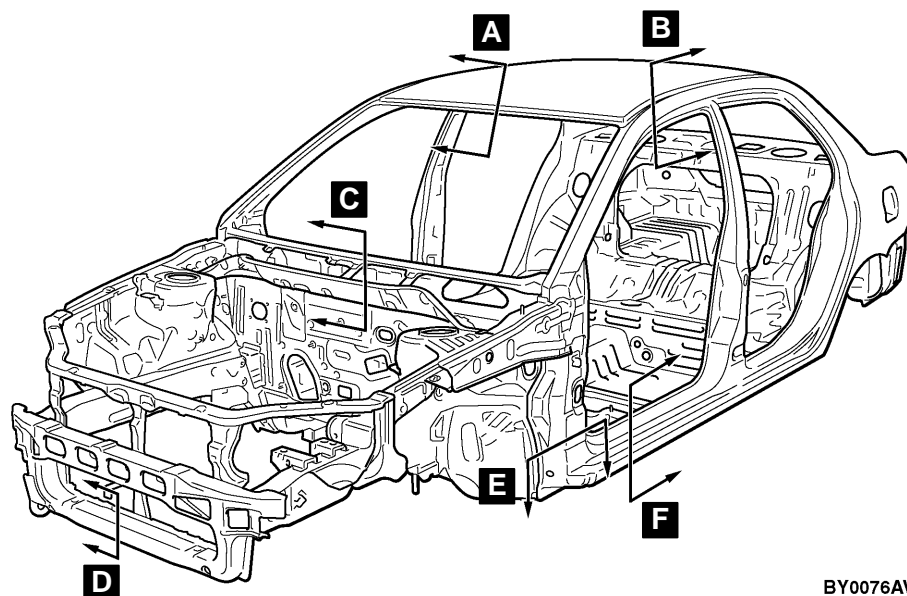
[Main
Index](#)

[Group
TOC](#)

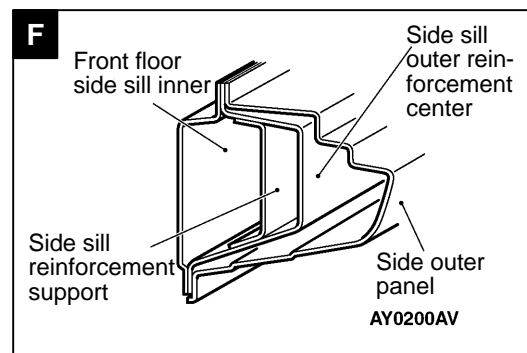
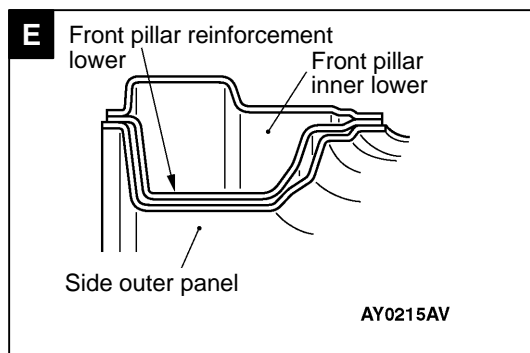
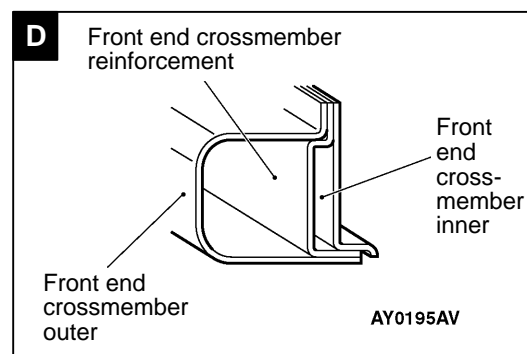
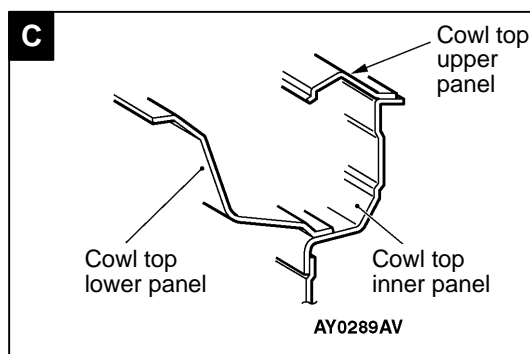
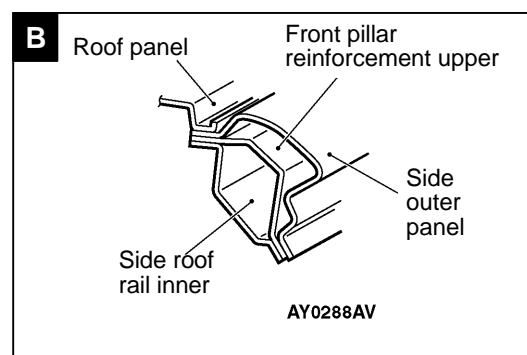
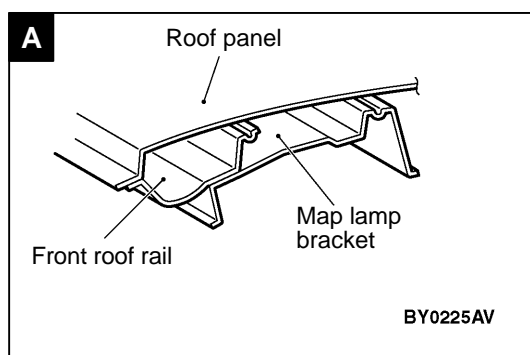
BODY MAIN CROSS-SECTIONAL VIEWS

Main
Index

Group
TOC



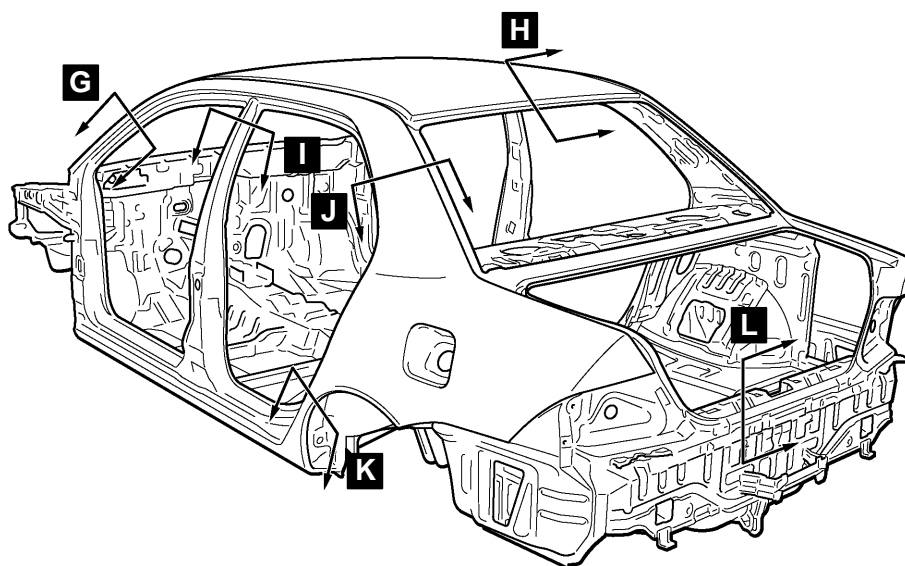
BY0076AV



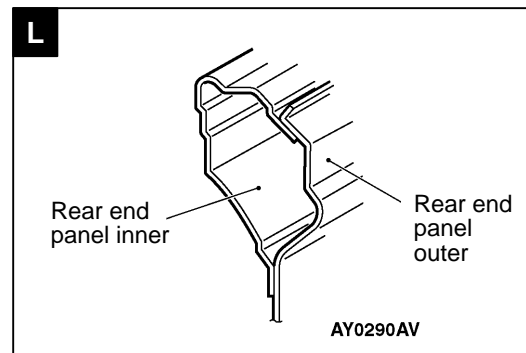
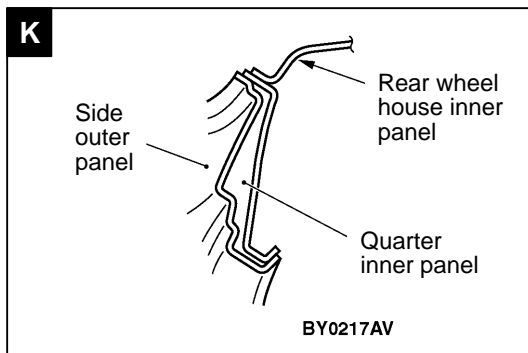
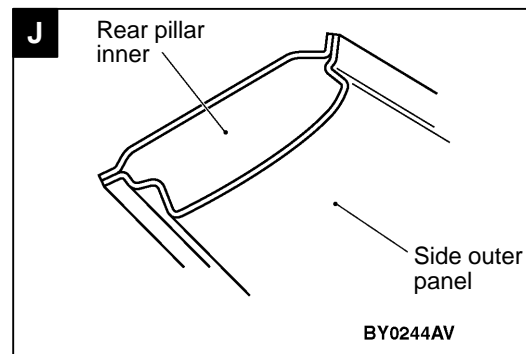
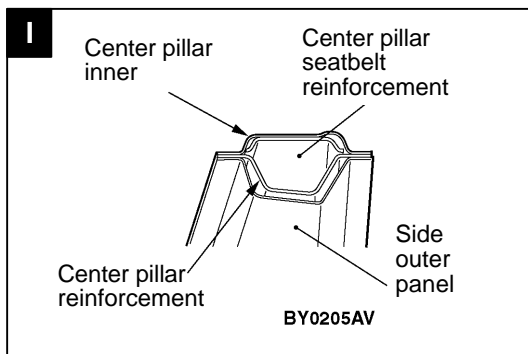
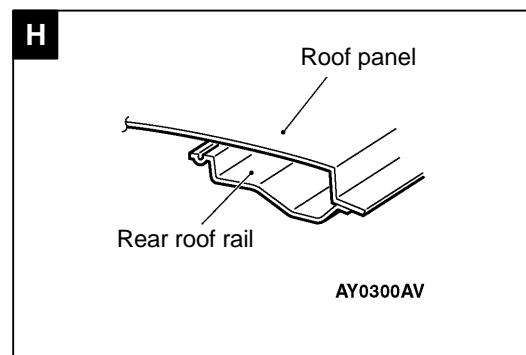
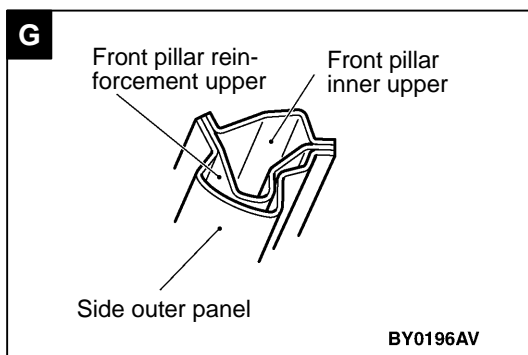
BODY CONSTRUCTION – Body Main Cross-sectional Views

Main
Index

Group
TOC



AY0077AV



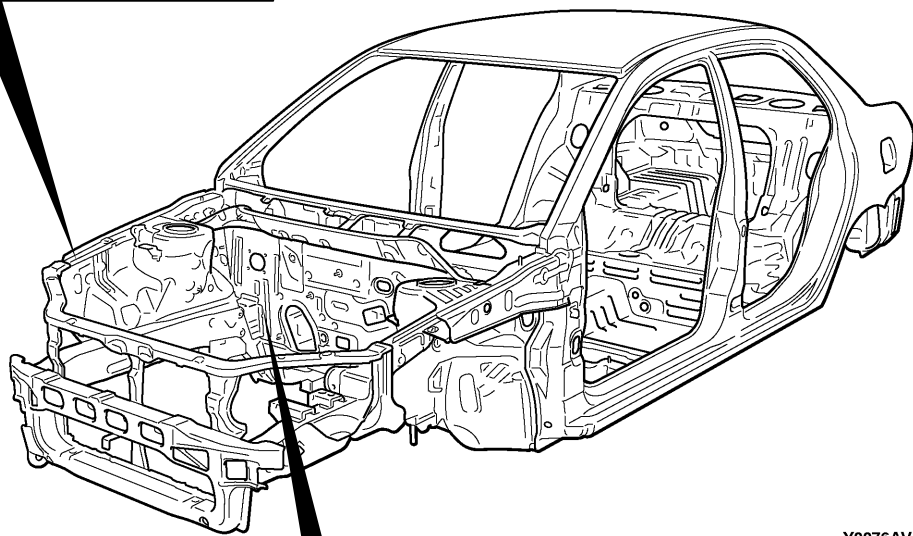
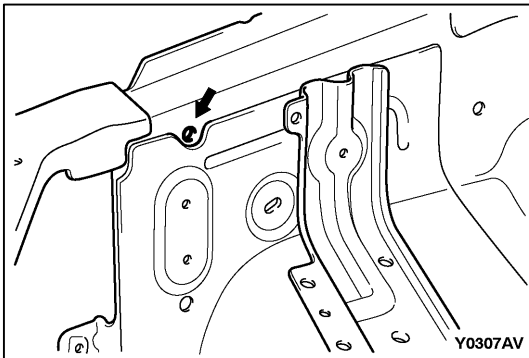
MAINTENANCE, SERVICEABILITY

Fender Shield

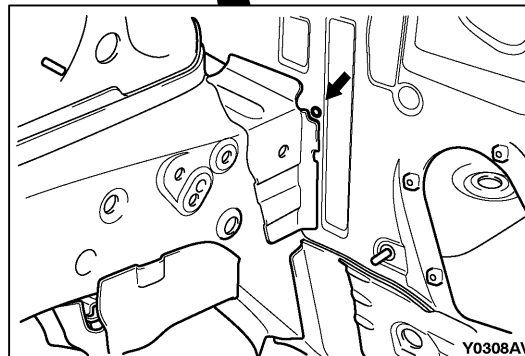
Positioning holes, marks, and notches have been provided at the following overlapped areas to improve operation performance when replacing panels.

Main
Index

Group
TOC

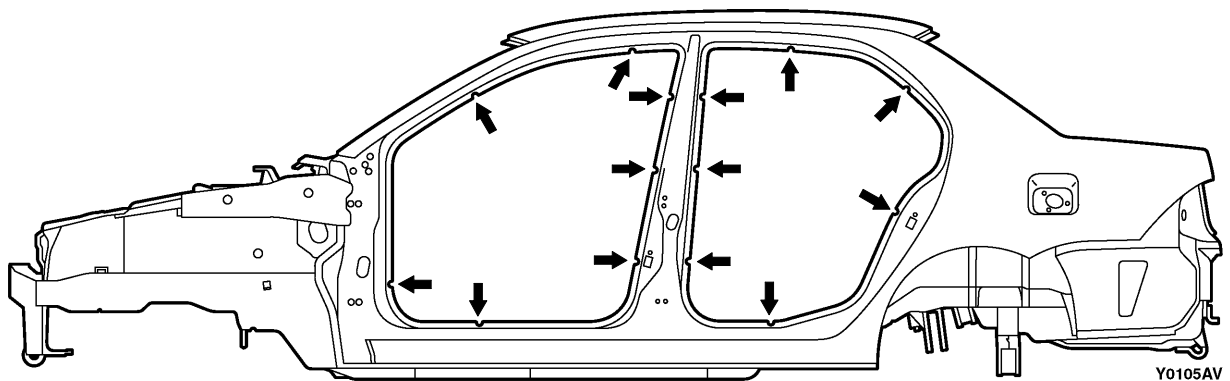
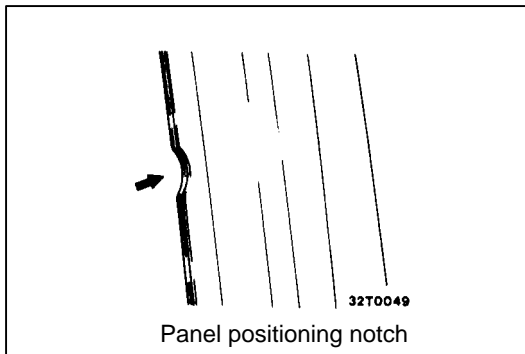


Y0076AV



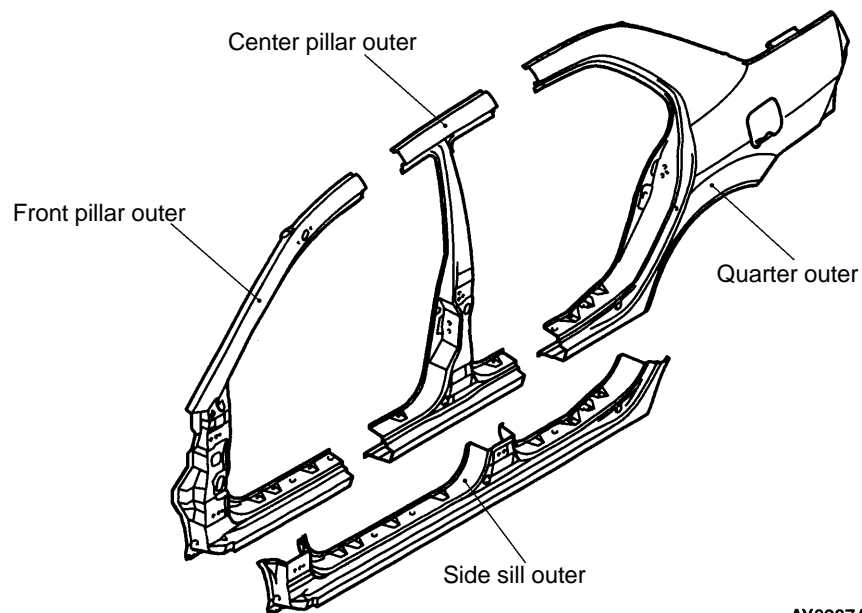
Side Structure

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



Side Outer Panel

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



AY0287AV

BODY CONSTRUCTION CHARACTERISTICS

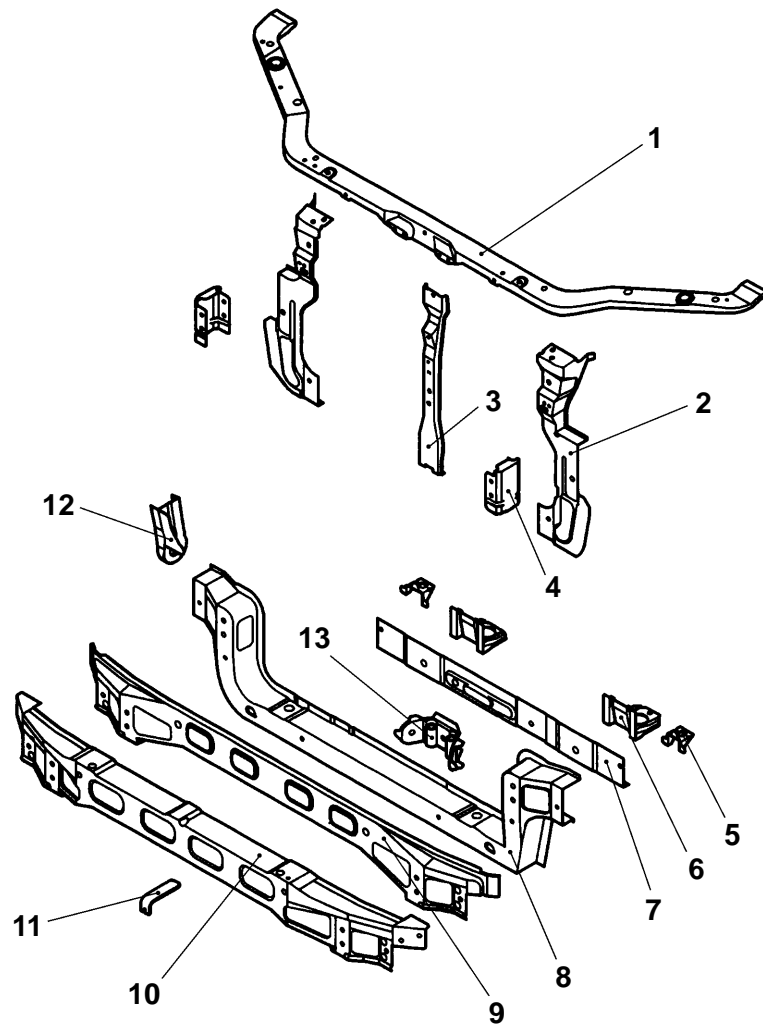
FRONT BODY

Headlamp Support

1. The structure has been designed to absorb energy generated during collisions with the addition of the front bumper reinforcement.
2. By adopting a steel sheet with variable thickness* for the front end crossmember outer, the steel sheet thickness on the right side of the vehicle has been increased to improve safety in collision and body rigidity.

NOTE

*: Steel sheets with different thickness welded to form one steel sheet.



AY0273AV

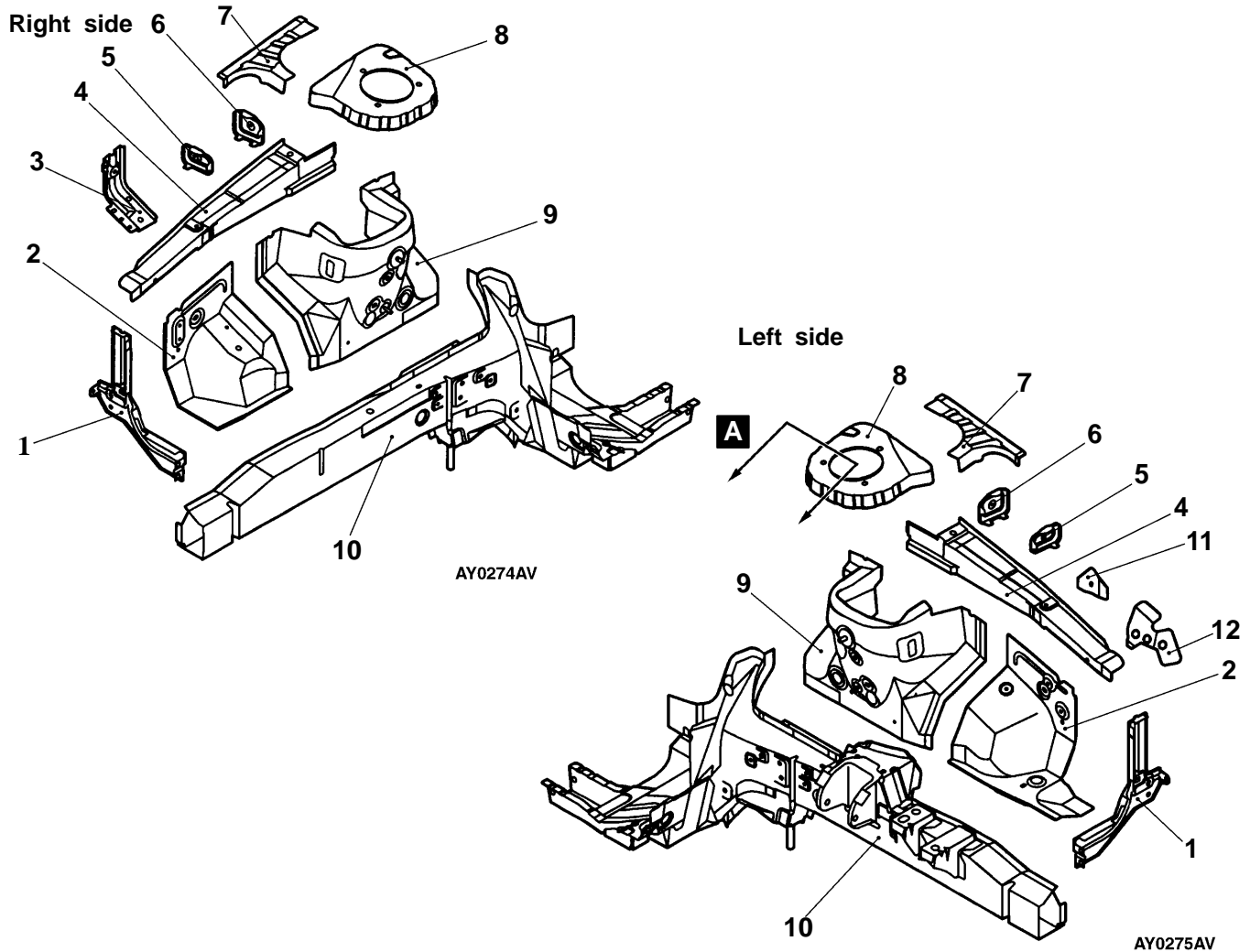
- | | |
|--|---|
| 1. Front end upper bar | 8. Front end crossmember outer |
| 2. Headlamp support panel | 9. Front bumper reinforcement inner |
| 3. Hood lock stay | 10. Front bumper reinforcement outer |
| 4. Front end crossmember inner reinforcement | 11. Bumper bracket |
| 5. A/C condenser bracket | 12. Shipping hook |
| 6. Radiator bracket | 13. Front end crossmember reinforcement |
| 7. Front end crossmember inner | |

Fender Shield

1. The cross section of the front sidemember has been increased and a steel sheet with variable thickness* has been adopted for the front sidemember inner to increase the thickness of the cabinet side in the aim to improve safety in collision, body rigidity, and realize lightweight.

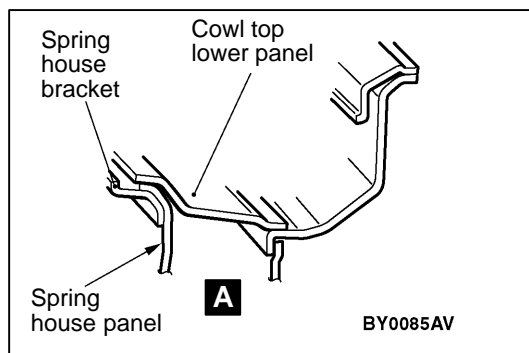
NOTE

*: Steel sheets with different thickness welded to form one steel sheet.



1. Headlamp support panel side
2. Front fender shield
3. Engine mount reinforcement
4. Front upper frame inner
5. Upper frame bulkhead front
6. Upper frame bulkhead

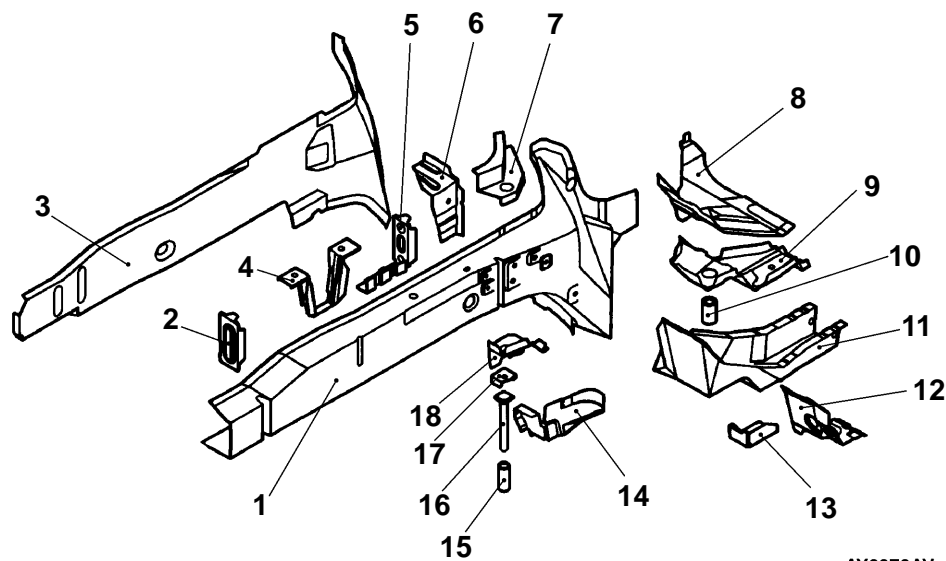
7. Spring house bracket reinforcement
8. Spring house bracket
9. Spring house panel
10. Front sidemember
11. Spring house panel reinforcement
12. Fender shield reinforcement



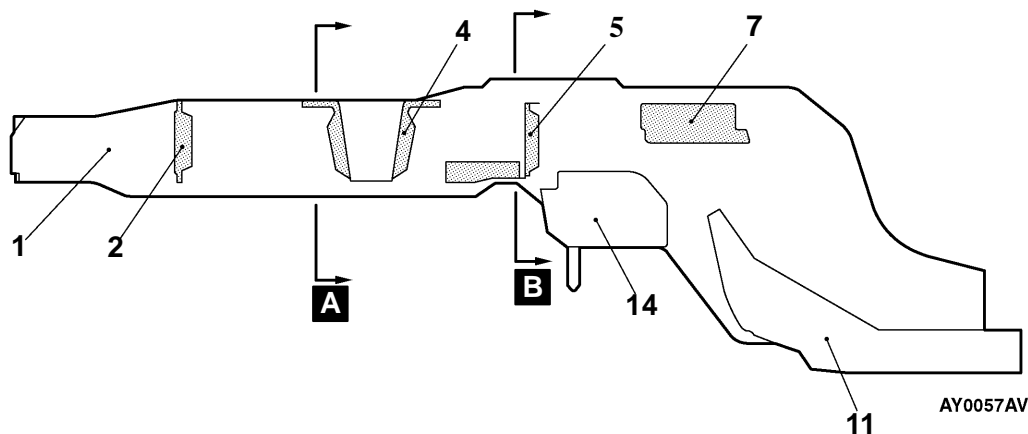
2. The spring house panel has been designed to be directly installed with the cowl top lower panel, and the body rigidity of the suspension attachment holder has been increased to improve operational stability and quietness.

Front Sidemember Reinforcement

Right side

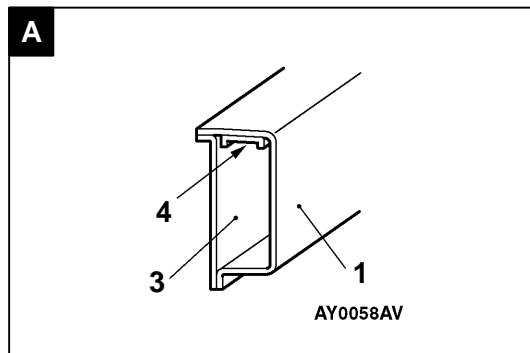


AY0276AV

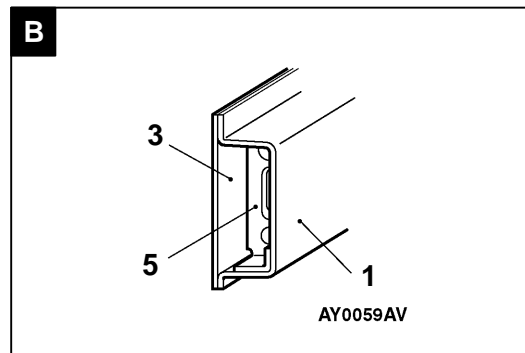


AY0057AV

- | | |
|---|--|
| 1. Front sidemember inner | 10. Pipe nut |
| 2. Front sidemember bulkhead A | 11. Front sidemember rear |
| 3. Front sidemember outer | 12. Dash crossmember extension |
| 4. Front sidemember bulkhead | 13. Suspension crossmember support bracket |
| 5. Front sidemember inner reinforcement lower | 14. Suspension crossmember bracket inner |
| 6. Front sidemember gusset rear | 15. Pipe |
| 7. Front sidemember inner reinforcement rear | 16. Square head bolt |
| 8. Dash panel extension | 17. Retainer |
| 9. Pipe support rear | 18. Pipe support front |



AY0058AV

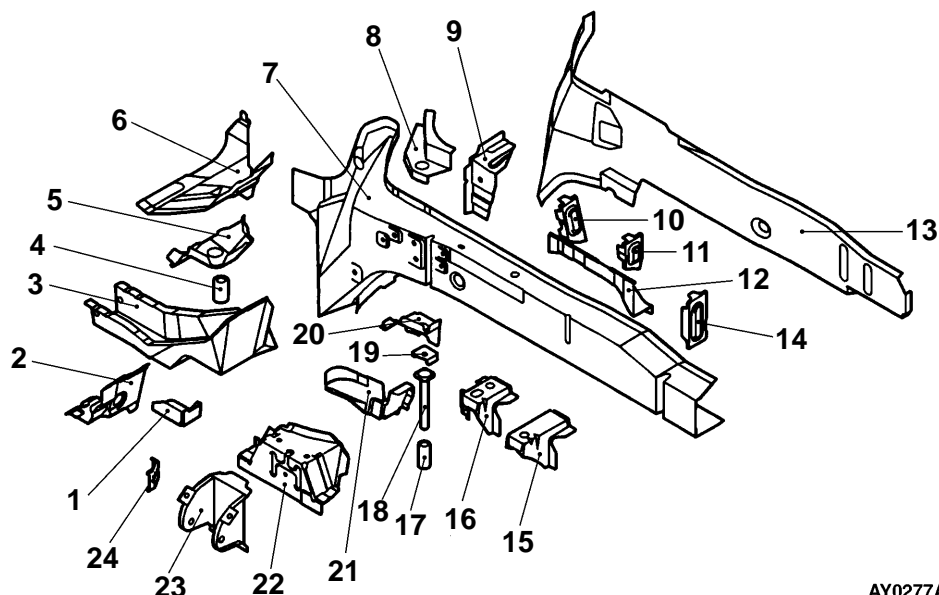


AY0059AV

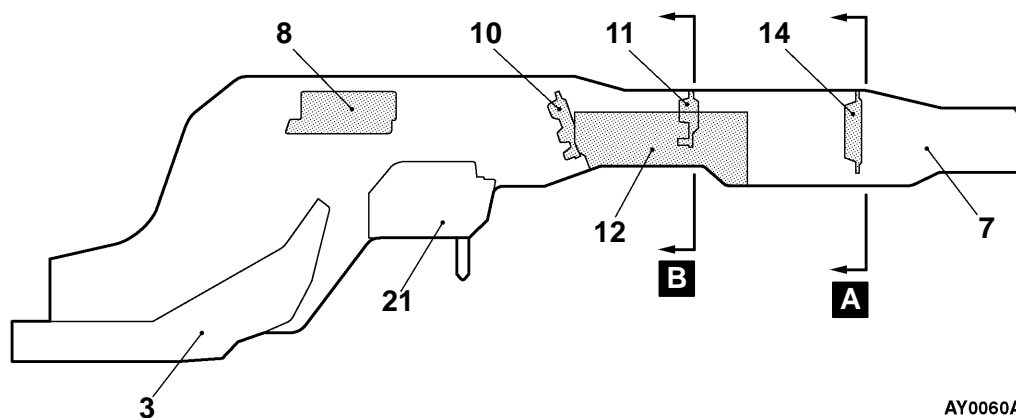
Left side

Main
Index

Group
TOC

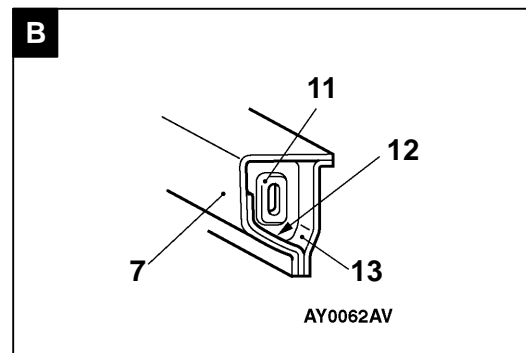
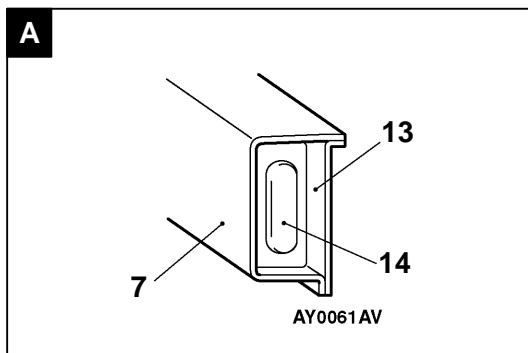


AY0277AV

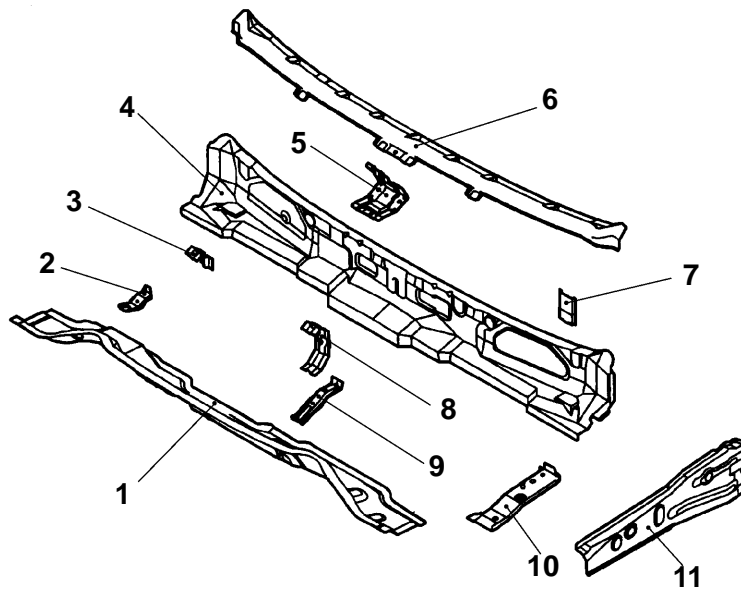


AY0060AV

- | | |
|---|--|
| 1. Suspension crossmember support bracket | 13. Front sidemember outer |
| 2. Dash crossmember extension | 14. Front sidemember bulkhead A |
| 3. Front sidemember rear | 15. Battery bracket front |
| 4. Pipe nut | 16. Battery bracket rear |
| 5. Pipe support rear | 17. Pipe |
| 6. Dash panel extension | 18. Square head bolt |
| 7. Front sidemember inner | 19. Retainer |
| 8. Front sidemember inner reinforcement | 20. Pipe support front |
| 9. Front sidemember gusset rear | 21. Suspension crossmember bracket inner |
| 10. Front sidemember bulkhead rear | 22. Transmission mount reinforcement |
| 11. Front sidemember bulkhead front | 23. Transmission mount bracket |
| 12. Front sidemember inner reinforcement | 24. Transmission mount reinforcement |



Front Deck

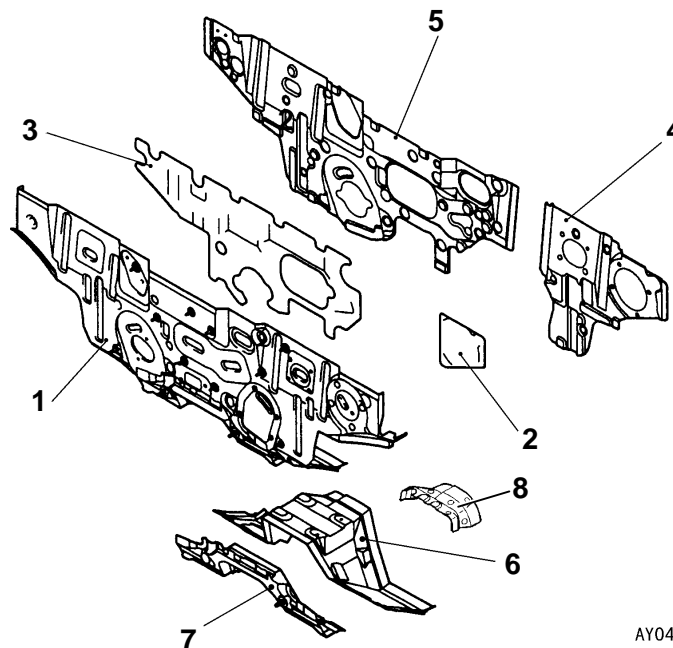
[Main Index](#)
[Group TOC](#)


AY0278AV

- | | |
|---------------------------------|--|
| 1. Cowl top lower panel | 7. A/C Unit bracket |
| 2. Cowl top lower bracket | 8. Cowl top upper reinforcement center |
| 3. Cowl top upper reinforcement | 9. Cowl top upper bracket center |
| 4. Cowl top inner panel | 10. Upper frame extension inner |
| 5. Pedal support bracket | 11. Upper frame extension outer |
| 6. Cowl top upper panel | |

Dash Panel

1. A dash panel crossmember has been added and the thickness of the dash panel lower has been increased to improve collision stability.
2. A silencer (steel sheet binding type vibration damping material) has been added between the dash panel and dash panel silencer to control the penetrating sound and vibration from the engine.

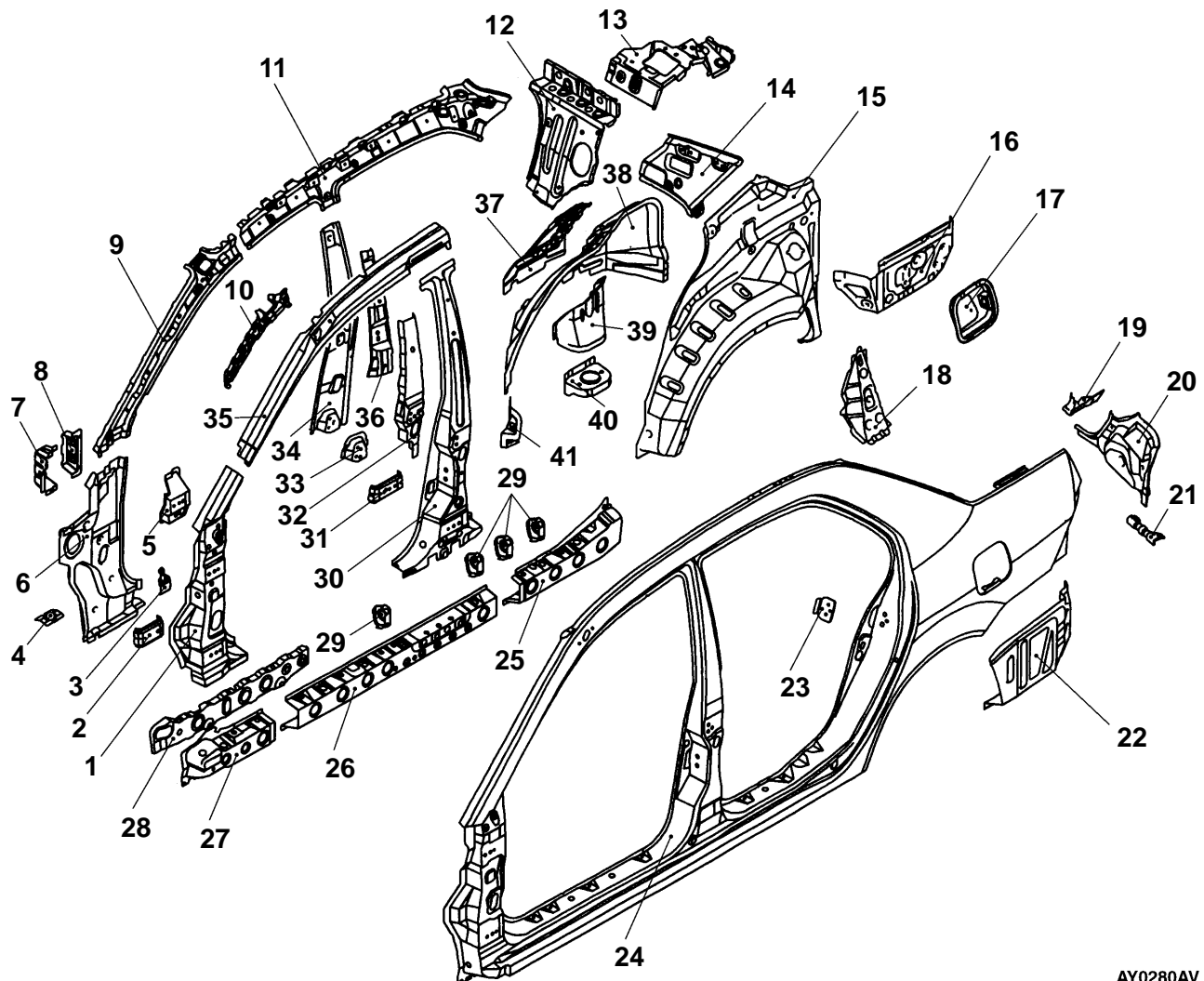


AY0407AV

- | | |
|-----------------------------|-----------------------------|
| 1. Dash panel | 5. Dash panel silencer |
| 2. Dash silencer side | 6. Dash panel lower |
| 3. Dash silencer center | 7. Dash panel crossmember |
| 4. Dash panel reinforcement | 8. Dash lower reinforcement |

SIDE BODY

Side Structure

[Main Index](#)
[Group TOC](#)


AY0280AV

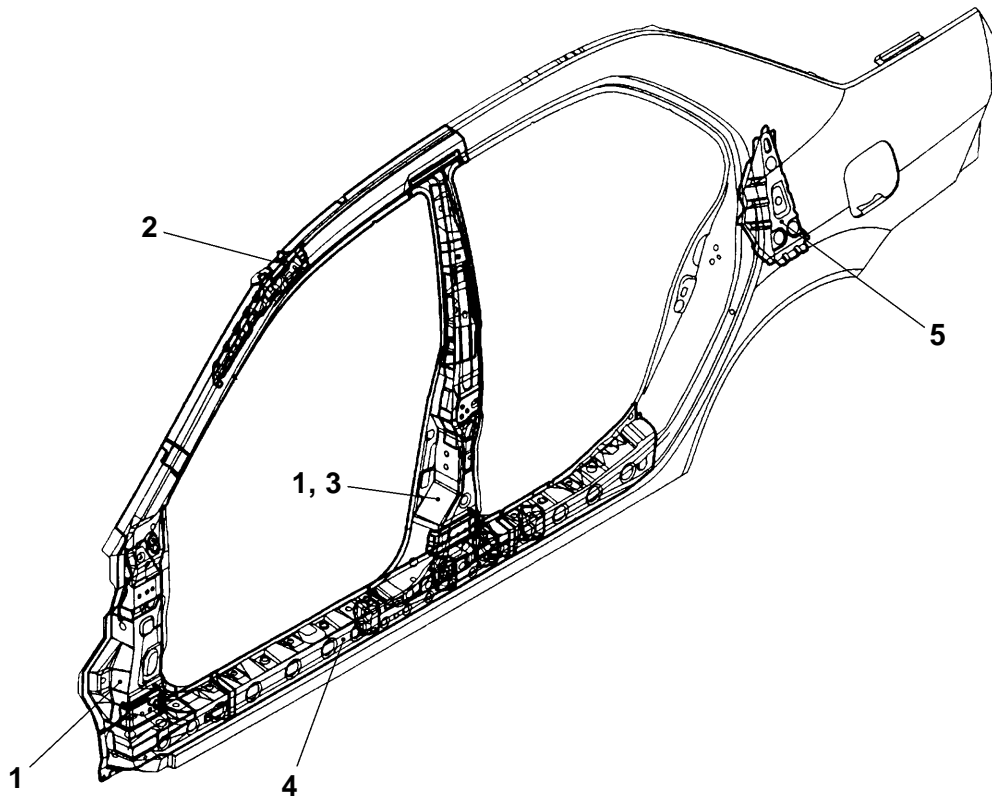
- | | |
|--|--|
| 1. Front pillar reinforcement lower | 22. Quarter outer extension lower |
| 2. Front door hinge reinforcement lower | 23. Striker reinforcement |
| 3. Front door check reinforcement | 24. Side outer panel |
| 4. Side sill-to-floor plate | 25. Side sill outer reinforcement rear |
| 5. Front door hinge reinforcement upper | 26. Side sill outer reinforcement center |
| 6. Front pillar inner lower | 27. Side sill outer reinforcement front |
| 7. Deck crossmember bracket front | 28. Side sill reinforcement support |
| 8. Deck crossmember bracket rear | 29. Side sill bulkhead |
| 9. Front pillar inner upper | 30. Center pillar reinforcement |
| 10. Front pillar inner upper reinforcement | 31. Rear door hinge reinforcement lower |
| 11. Side sill roof rail inner | 32. Rear door hinge reinforcement upper |
| 12. Rear seat back brace | 33. Center pillar plate inner |
| 13. Rear shelf brace upper | 34. Center pillar inner |
| 14. Rear pillar inner | 35. Front pillar reinforcement upper |
| 15. Quarter inner panel | 36. Center pillar seatbelt reinforcement |
| 16. Rear floor side brace | 37. Spring house panel |
| 17. Fuel filler neck bracket (Left) | 38. Rear wheel house inner panel |
| 18. Rear pillar reinforcement | 39. Spring house reinforcement |
| 19. Quarter corner panel | 40. Spring house bracket |
| 20. Rear combination lamp housing | 41. Side sill end plate |
| 21. Rear bumper bracket | |

Side Structure Reinforcement

1. The thickness of the reinforcements of the front pillar and center pillar has been increased to improve collision safety.
2. The front pillar reinforcement upper, side outer panel, and front roof rail have been joined to improve twisting rigidity.
3. The side sill has been made thin by employing a variable thickness steel sheet* for the center pillar reinforcement to improve safety in collision and realize lightweight.
4. The cross section of the side sill outer reinforcement has been made large to improve safety in collision and body rigidity.
5. A rear pillar reinforcement has been added, and the rear shelf and rear wheel house have been joined to improve the twisting rigidity of the suspension attaching portion.

NOTE

*: Steel sheets with different thickness welded to form one steel sheet.

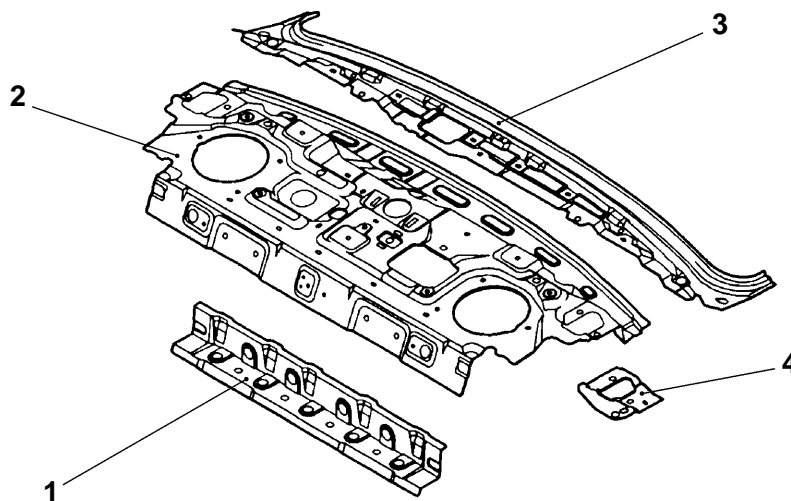


AY0080AV

REAR BODY

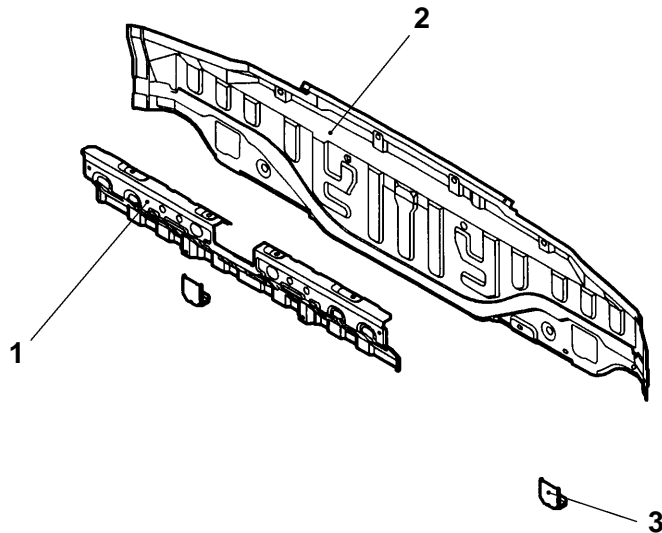
Rear Deck

Twisting rigidity has been improved by adding a rear shelf extension to realise a closed cross section structure.



AY0309AV

- | | |
|-------------------------|----------------------------------|
| 1. Rear shelf extension | 3. Rear shelf reinforcement |
| 2. Rear shelf panel | 4. Trunk lid hinge reinforcement |



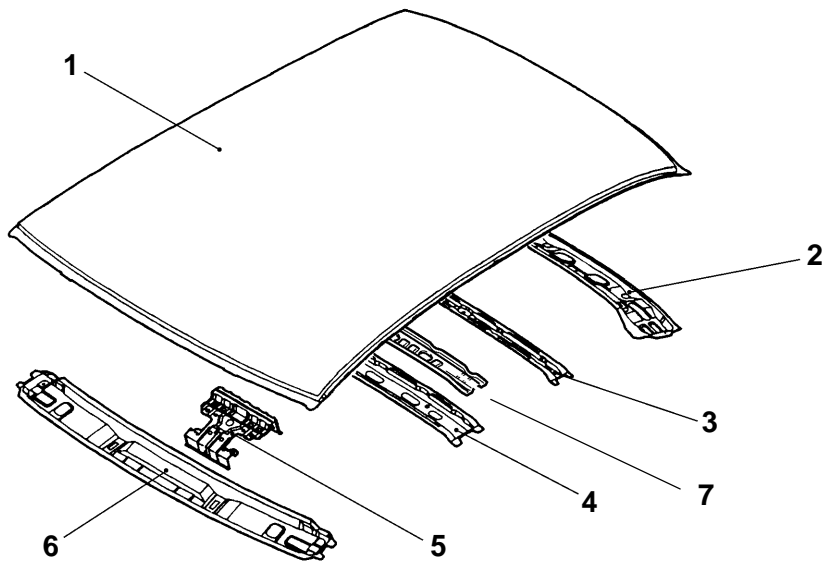
AY0281AV

- | | |
|-------------------------|-------------------------|
| 1. Rear end panel inner | 3. Bumper bracket lower |
| 2. Rear end panel outer | |

ROOF

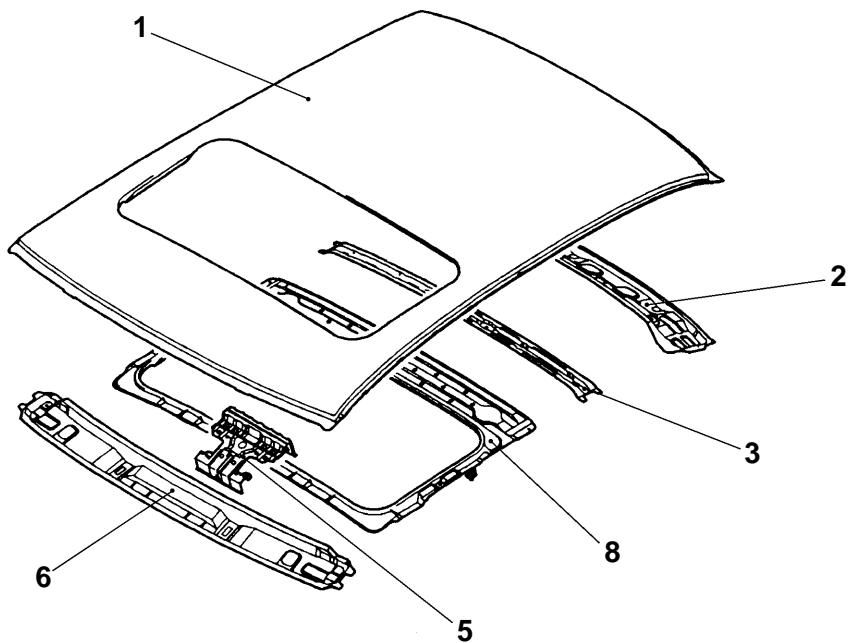
The cross section of the roof bow has been made large to improve safety in collision.

Standard roof



AY0310AV

Sunroof



AY0311AV

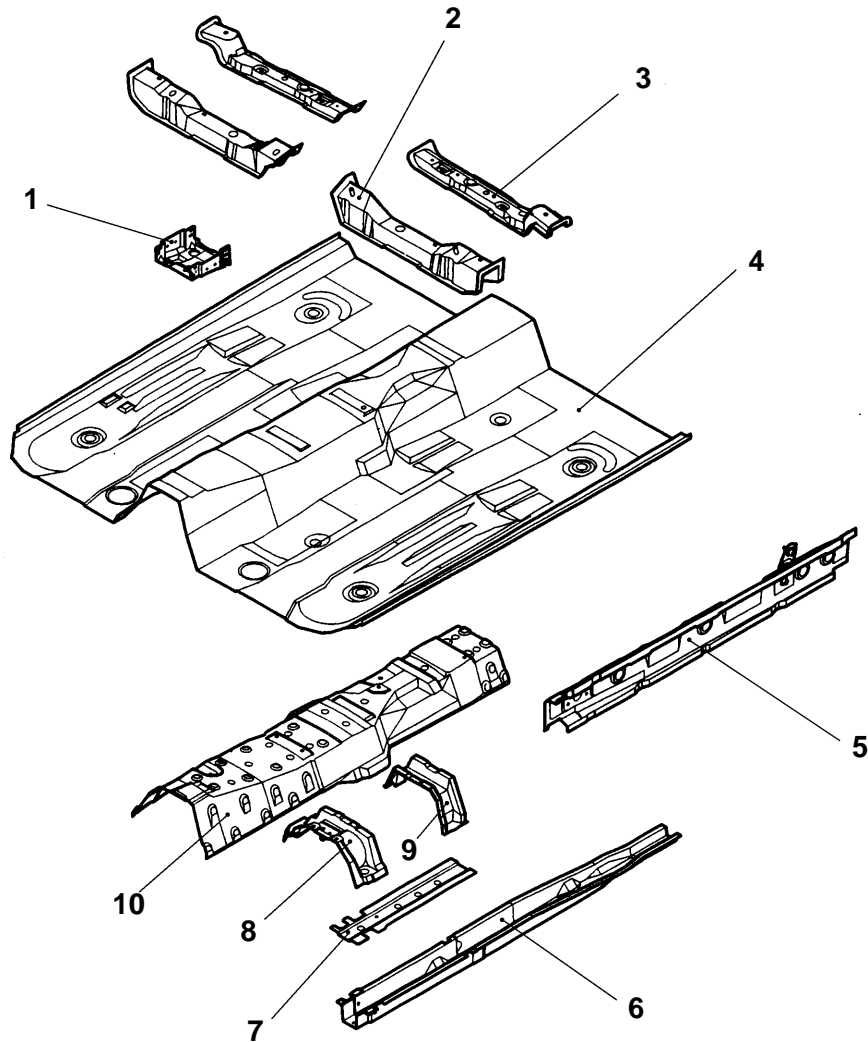
- 1. Roof panel
- 2. Rear roof rail
- 3. Rear roof bow
- 4. Front roof bow

- 5. Map lamp bracket
- 6. Front roof rail
- 7. Roof bow front reinforcement
- 8. Roof panel reinforcement

UNDER BODY

Front Floor

The cross section of the front floor sidemember has been made large to improve safety in collision.

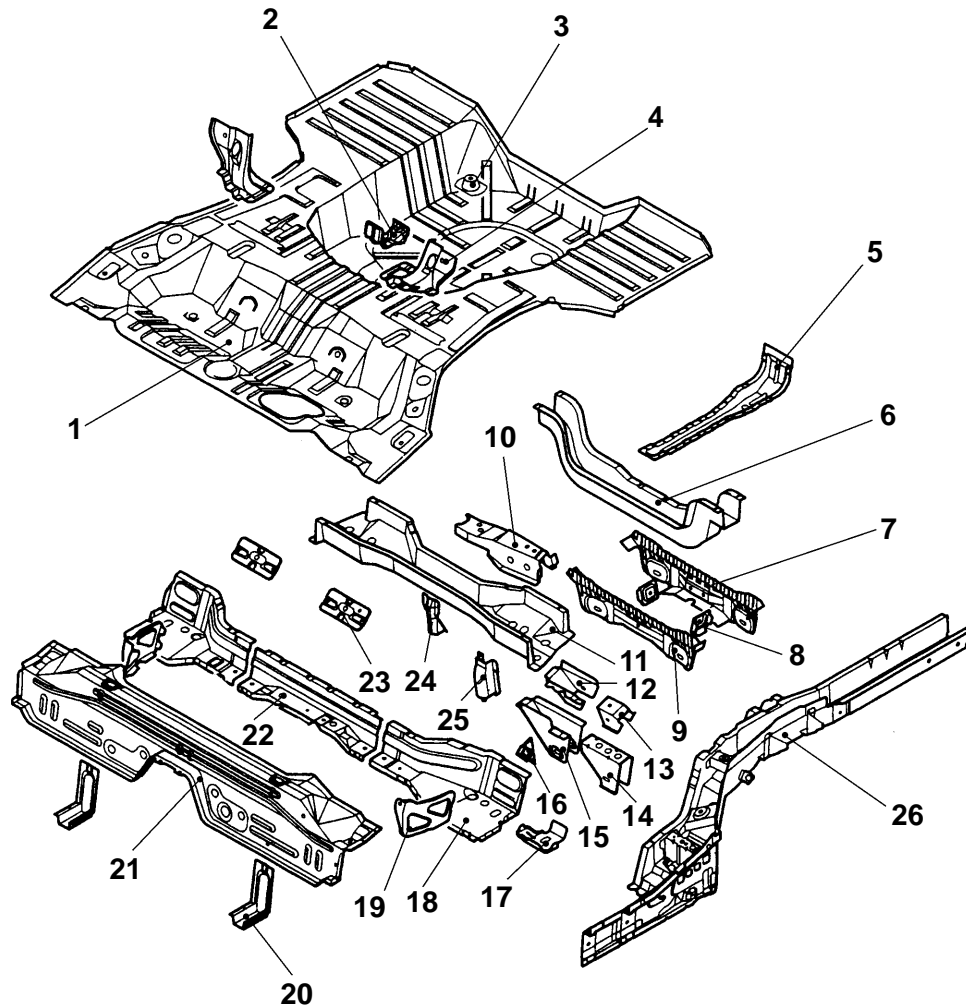


AY0282AV

- | | |
|---|---|
| 1. Installment panel center bracket reinforcement | 6. Front floor sidemember |
| 2. Front floor crossmember front | 7. Front floor sidemember reinforcement |
| 3. Front floor crossmember rear | 8. Backbone crossmember front |
| 4. Front floor pan | 9. Backbone crossmember rear |
| 5. Front floor side sill inner | 10. Backbone reinforcement |

Rear Floor

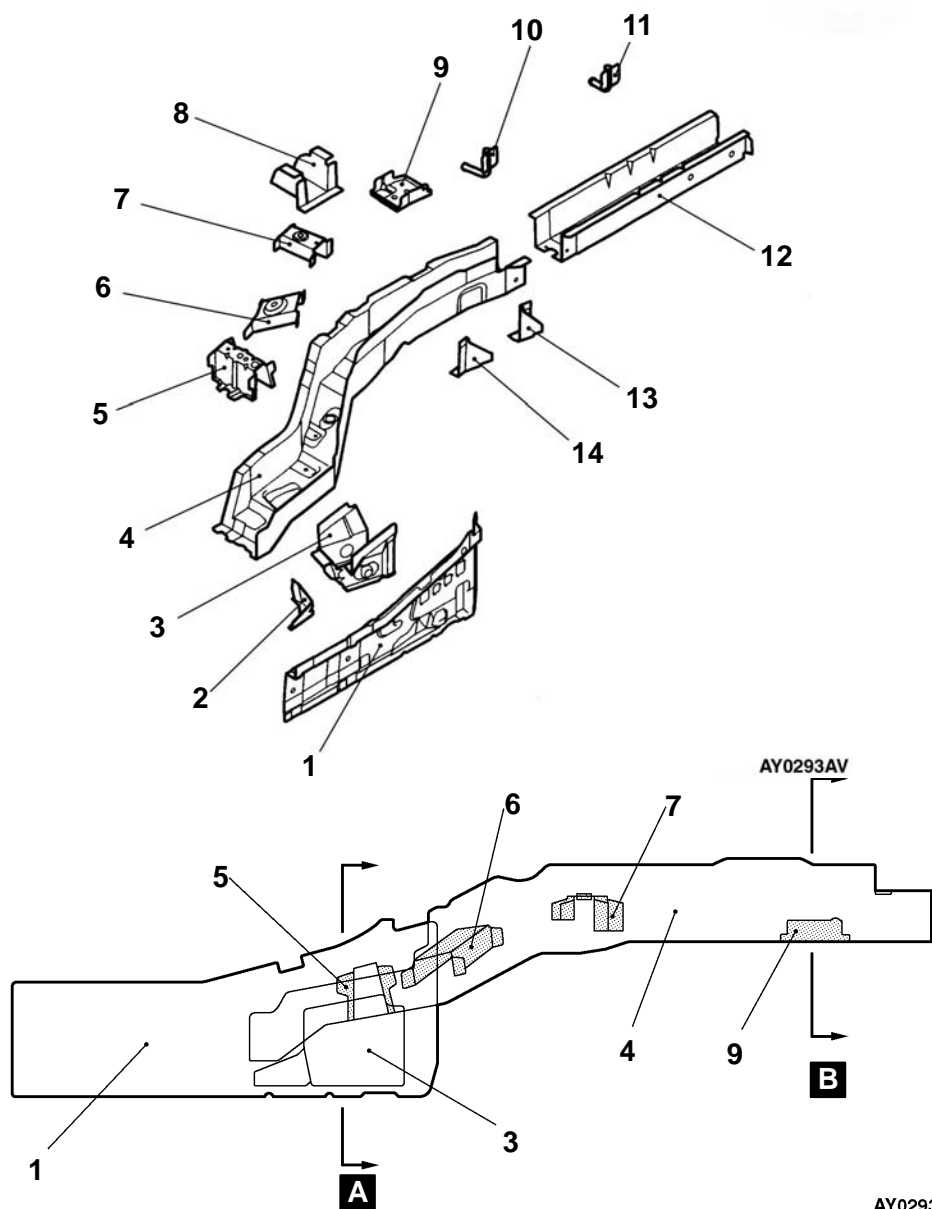
The cross section of the rear floor sidemember has been made large to improve safety in collision.



Y0408AV

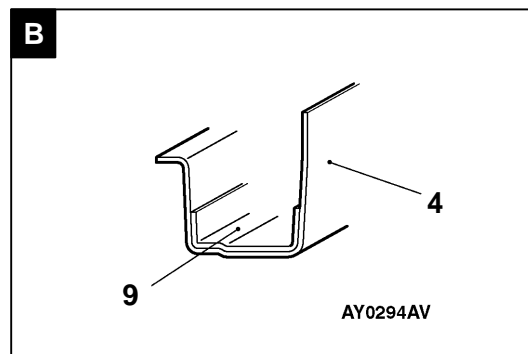
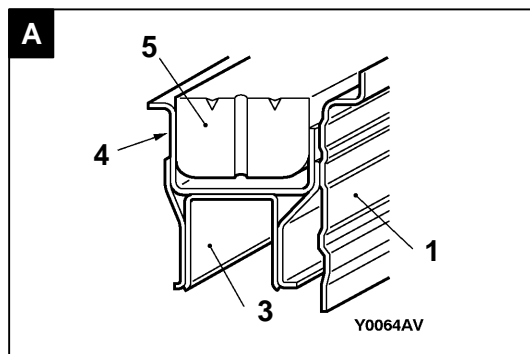
- | | |
|---|---|
| 1. Rear floor pan | 14. Toe-control link reinforcement |
| 2. Jack bracket | 15. Toe-control link bracket |
| 3. Spare tire bracket | 16. Toe-control link bracket support |
| 4. Rear seat back reinforcement | 17. Tie down reinforcement |
| 5. Toe-in hook reinforcement | 18. Rear seat crossmember side |
| 6. Rear floor crossmember | 19. Rear seat crossmember bulkhead side |
| 7. Lower arm bracket rear | 20. Front floor sidemember extension |
| 8. Lower arm bulkhead | 21. Rear floor extension |
| 9. Lower arm bracket front | 22. Rear seat crossmember center |
| 10. Upper arm crossmember reinforcement | 23. Rear floor seatbelt reinforcement |
| 11. Upper arm crossmember | 24. Fuel tank bracket rear center |
| 12. Upper arm support bracket | 25. Fuel tank bracket rear |
| 13. Upper arm bracket reinforcement | 26. Rear floor sidemember |

Rear Floor Sidemember Reinforcement

[Main Index](#)
[Group TOC](#)


AY0293AV

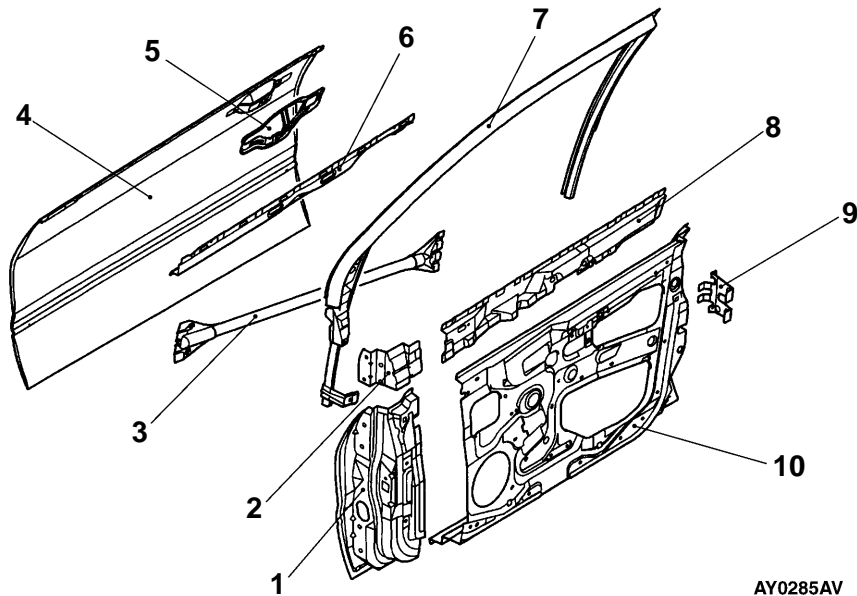
- | | |
|-----------------------------------|---|
| 1. Rear floor side sill inner | 8. Rear floor crossmember extension |
| 2. Rear floor sidemember support | 9. Stabiliser reinforcement |
| 3. Trailing arm bracket | 10. Muffler hanger front A |
| 4. Rear floor sidemember | 11. Muffler hanger rear |
| 5. Rear floor sidemember bulkhead | 12. Rear floor sidemember extension |
| 6. Rear seatbelt bracket | 13. Rear spring house bracket support rear |
| 7. Rear seatbelt bracket side | 14. Rear spring house bracket support front |



DOOR

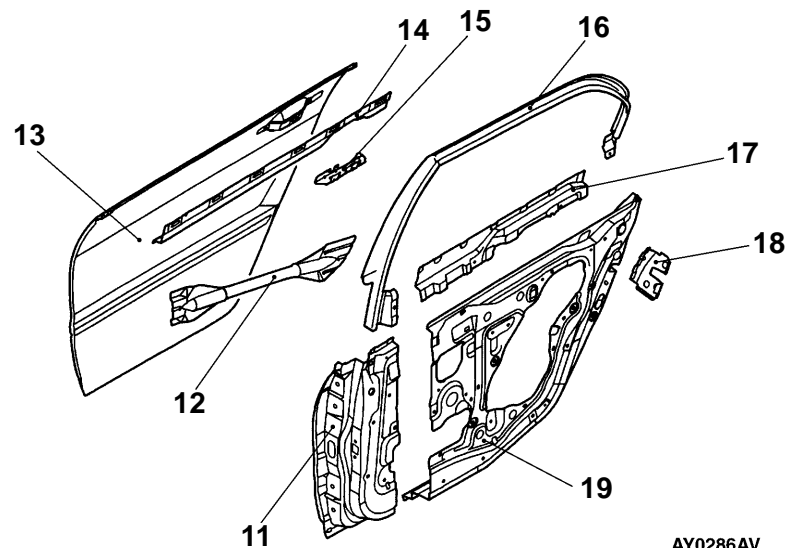
The front and back of the side door beam has been made large to cope with the force from the front and sides during collision.

Front door



AY0285AV

Rear door



AY0286AV

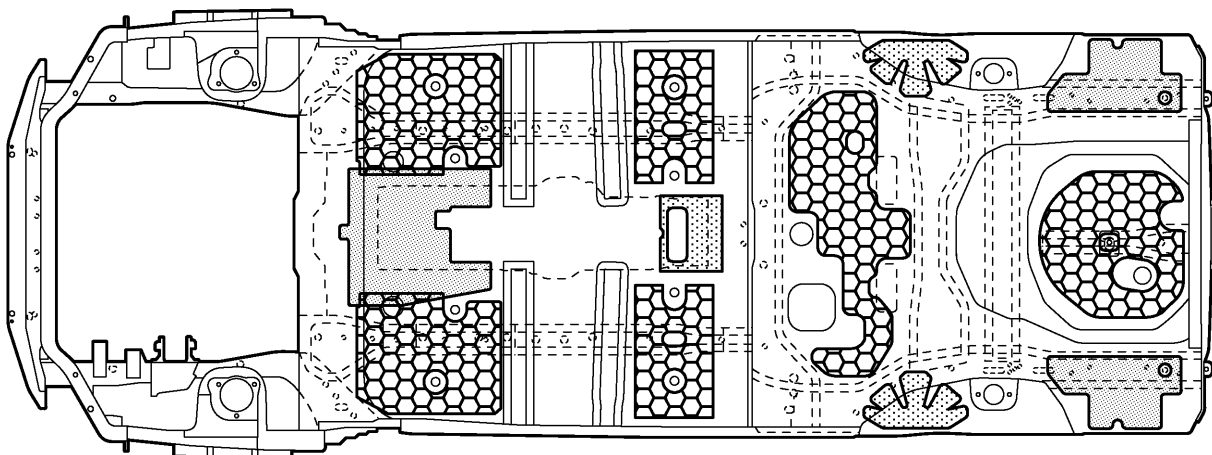
- | | |
|--|--|
| 1. Front door hinge panel | 11. Rear door hinge panel |
| 2. Front door hinge reinforcement upper | 12. Rear door side door beam |
| 3. Front door side door beam | 13. Rear door outer panel |
| 4. Front door outer panel | 14. Rear door beltline reinforcement outer |
| 5. Front door outside handle reinforcement | 15. Rear door beltline bracket |
| 6. Front door beltline reinforcement outer | 16. Rear door window sash |
| 7. Front door window sash | 17. Rear door beltline reinforcement inner |
| 8. Front door beltline reinforcement inner | 18. Rear door latch reinforcement |
| 9. Front door latch reinforcement | 19. Rear door inner panel |
| 10. Front door inner panel | |

SILENCER APPLICATION LOCATIONS

Silencers (MD-12 and melting sheets) are attached to the top of the floor to reduce vibration and insulate against the heat from exhaust gas.

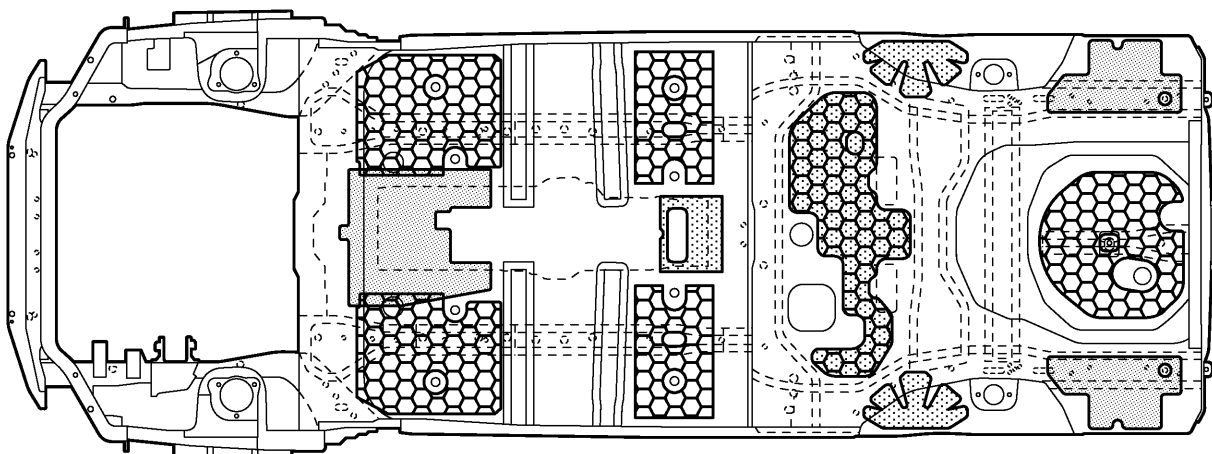
NOTE

MD-12 is a high performance sheet composed of asphalt applied with mica and thermosetting resin for improving anti-vibration performance.







BY0292AV

<Vehicles for Hong Kong – 1800>



AY0292AV

-  : 1.6 mm thick melting sheet
-  : 3.2 mm thick melting sheet (Place two 1.6 mm melting sheets one on top of another.)
-  : 4.0 mm thick MD-12 (Place three 1.6 mm melting sheets one on top of another.)
-  : 5.6 mm thick (1.6 mm + 4.0 mm) MD-12 (Place four 1.6 mm melting sheets one on top of another.)

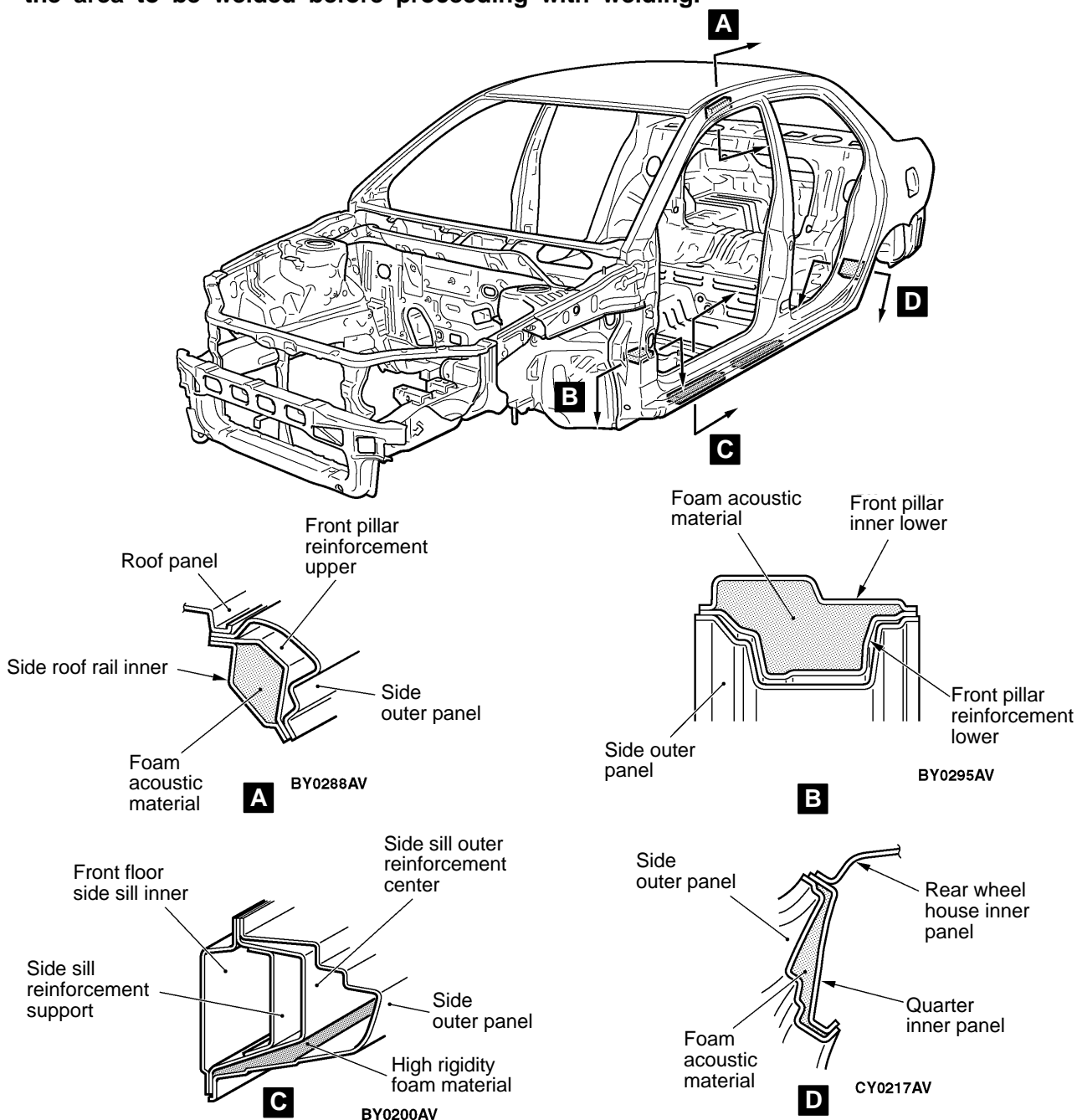
LOCATIONS USING URETHANE FOAM AND FOAM MATERIAL

1. Urethane foam is inserted into the center pillar to prevent the penetration of noise.
2. By filling the top of the front pillar, bottom of the front pillar, center pillar, and inside the wheel house arch with foam acoustic material, penetration of noise is prevented. <Vehicles for Hong Kong – 1800>
3. By filling the rear pillar with foam acoustic material, penetration of noise is prevented. <Standard roof vehicles>
4. By filling the side sill and inside of the floor sidemember with high rigidity foam material, cross-sectional rigidity has been improved, vibration of panels has been controlled, and load noise has been reduced.

Precautions on performing work involving sheet metal at locations using foam material

As foam may burn when heated, observe the following precautions.

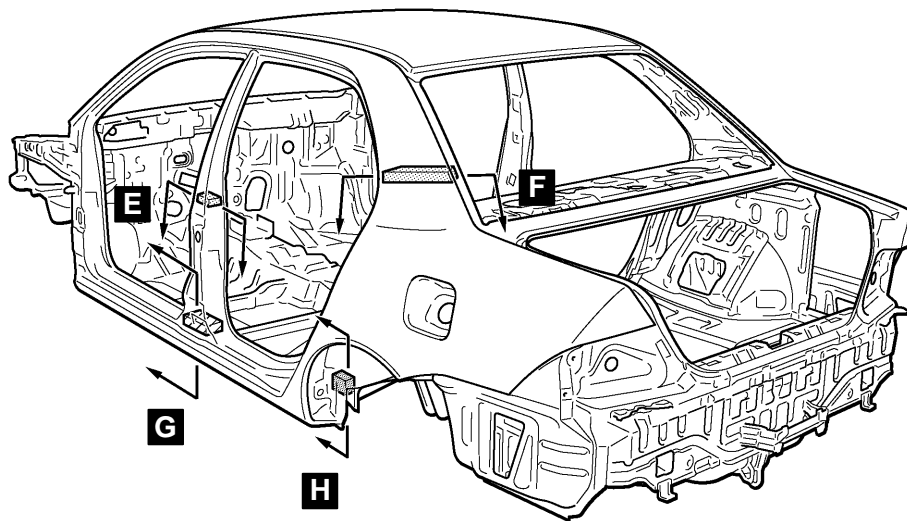
1. Do not perform heating work using gas burners at locations using foam material.
2. When cutting locations using foam material, use tools (air saw, etc.) which do not generate heat.
3. If leftover foam material is present at the area to be cut (body side), remove the foam around the area to be welded before proceeding with welding.



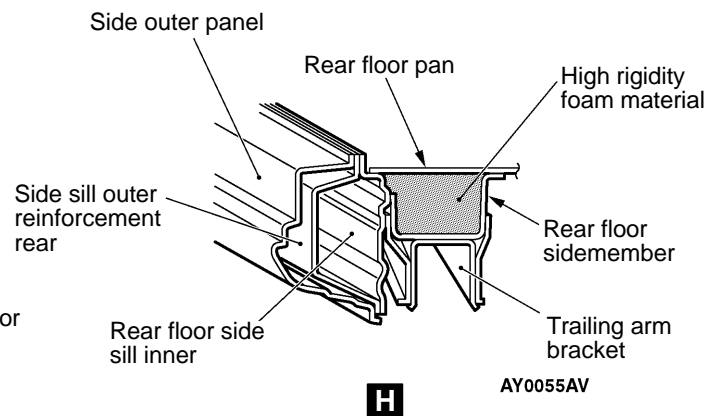
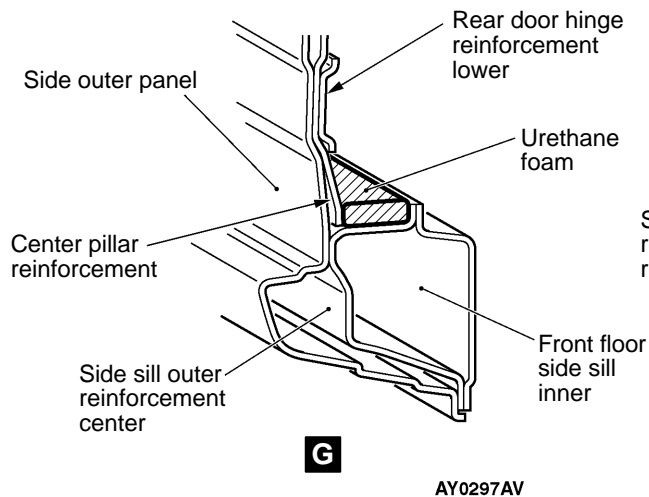
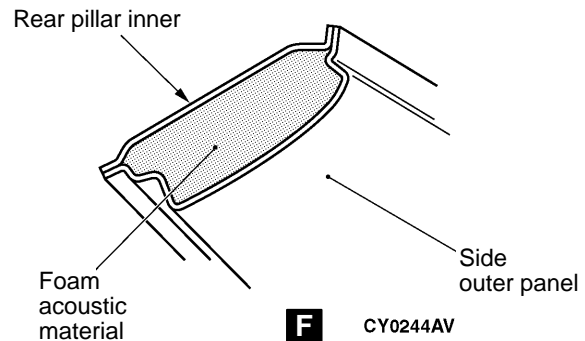
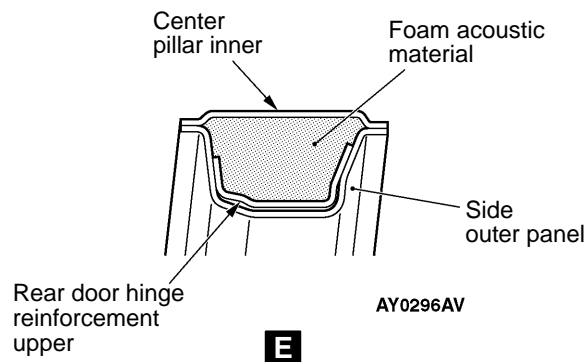
BODY CONSTRUCTION – Locations Using Urethane Foam And Foam Material

[Main Index](#)

[Group TOC](#)



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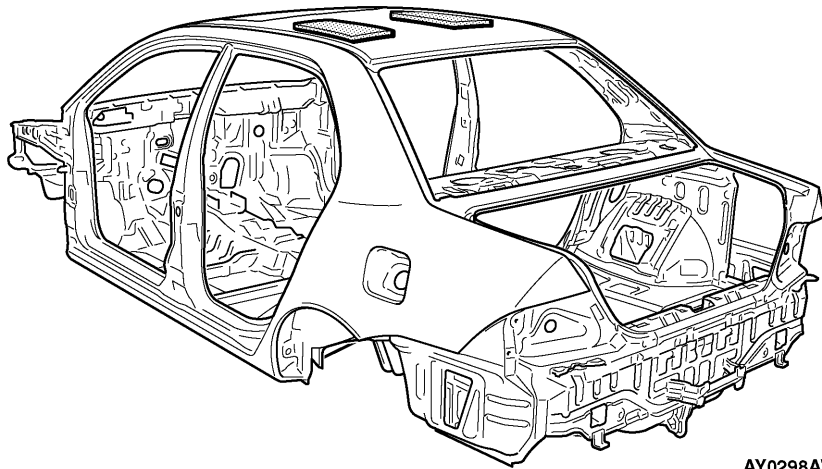
STIFFENER AND DUMP SHEET APPLICATION LOCATIONS

Stiffener is pasted to the inside of the roof panels (vehicles with sunroof), and dump sheets are pasted on the inside of the front doors to increase surface rigidity, thus improving soundproof qualities with the anti-vibration effects.

NOTE

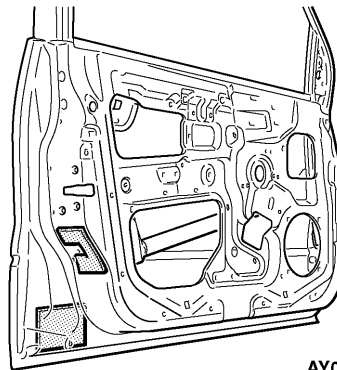
The stiffener comes in sheet form and is composed mainly of epoxy resin, glass fibers, and fillers. It hardens when heated. It is used to improve the rigidity of outer panels.

Stiffener



AY0298AV

Dump sheet



AY0299AV