Mazda6 Bodyshop Manual

FOREWORD

This bodyshop manual is intended for use by technicians of Authorized Mazda Dealers to help them service and repair Mazda vehicles. It can also be useful to owners and operators of Mazda vehicles in performing limited repair and maintenance on Mazda vehicles.

For proper repair and maintenance, a thorough familiarization with this manual is important, and it should always be kept in a handy place for quick and easy reference.

All the contents of this manual, including drawings and specifications, are the latest available at the time of printing.
As modifications affecting repair or miantenance occur, relevant information supplementary to this volume will be made available at Mazda dealers. This manual should be kept up-to-date.

Mazda Motor Corporation reserves the right to alter the specifications and contents of this manual without obligation or advance notice.

Mazda Motor Corporation
HIROSHIMA, JAPAN

APPLICATION:

This manual is applicable to vehicles beginning with the Vehicle Identification Numbers (VIN) shown on the following page.

CONTENTS

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3360–1E–02C

WARNING

Servicing a vehicle can be dangerous. If you have not received service-related training, the risks of injury, property damage, and failure of servicing increase. The recommended servicing procedures for the vehicle in this workshop manual were developed with Mazda-trained technicians in mind. This manual may be useful to non-Mazda trained technicians, but a technician with our service-related training and experience will be at less risk when performing service operations. However, all users of this manual are expected to at least know general safety procedures.

This manual contains "Warnings" and "Cautions" applicable to risks not normally encountered in a general technician's experience. They should be followed to reduce the risk of injury and the risk that improper service or repair may damage the vehicle or render it unsafe. It is also important to understand that the "Warnings" and "Cautions" are not exhaustive. It is impossible to warn of all the hazardous consequences that might result from failure to follow the procedures.

The procedures recommended and described in this manual are effective methods of performing service and repair. Some require tools specifically designed for a specific purpose. Persons using procedures and tools which are not recommended by Mazda Motor Corporation must satisfy themselves thoroughly that neither personal safety nor safety of the vehicle will be jeopardized.

The contents of this manual, including drawings and specifications, are the latest available at the time of printing, and Mazda Motor Corporation reserves the right to change the vehicle designs and alter the contents of this manual without notice and without incurring obligation.

Parts should be replaced with genuine Mazda replacement parts or with parts which match the quality of genuine Mazda replacement parts. Persons using replacement parts of lesser quality than that of genuine Mazda replacement parts must satisfy themselves thoroughly that neither personal safety nor safety of the vehicle will be jeopardized.

Mazda Motor Corporation is not responsible for any problems which may arise from the use of this manual. The cause of such problems includes but is not limited to insufficient service-related training, use of improper tools, use of replacement parts of lesser quality than that of genuine Mazda replacement parts, or not being aware of any revision of this manual.

VEHICLE IDENTIFICATION NUMBERS (VIN)

European (L.H.D.) specs.

JMZ	GG1232*#	100001—	JMZ	GG1432*#	100001—
JMZ	GG1282*#	100001—	JMZ	GG1482*#	100001—
JMZ	GG12F2*#	100001—	JMZ	GG14F2*#	100001—
JMZ	GG12F5*#	100001—	JMZ	GG14F5*#	100001—

U.K. specs.

JMZ	GG12820#	100001—	JMZ	GG14820#	100001—
JMZ	GG12F20#	100001—	JMZ	GG14F20#	100001—
JMZ	GG12F50#	100001—	JMZ	GG14F50#	100001—
JMZ	GG14320#	100001—			

GCC specs.

JM7	GG32F**#	100001—	JM7	GG34F**#	100001—
JM7	GG42F**#	100001—	JM7	GG44F**#	100001—

GENERAL INFORMATION

HOW TO USE THIS MANUAL

HOW TO READ EFFICIENT REPLACEMENT OF BODY PANELS

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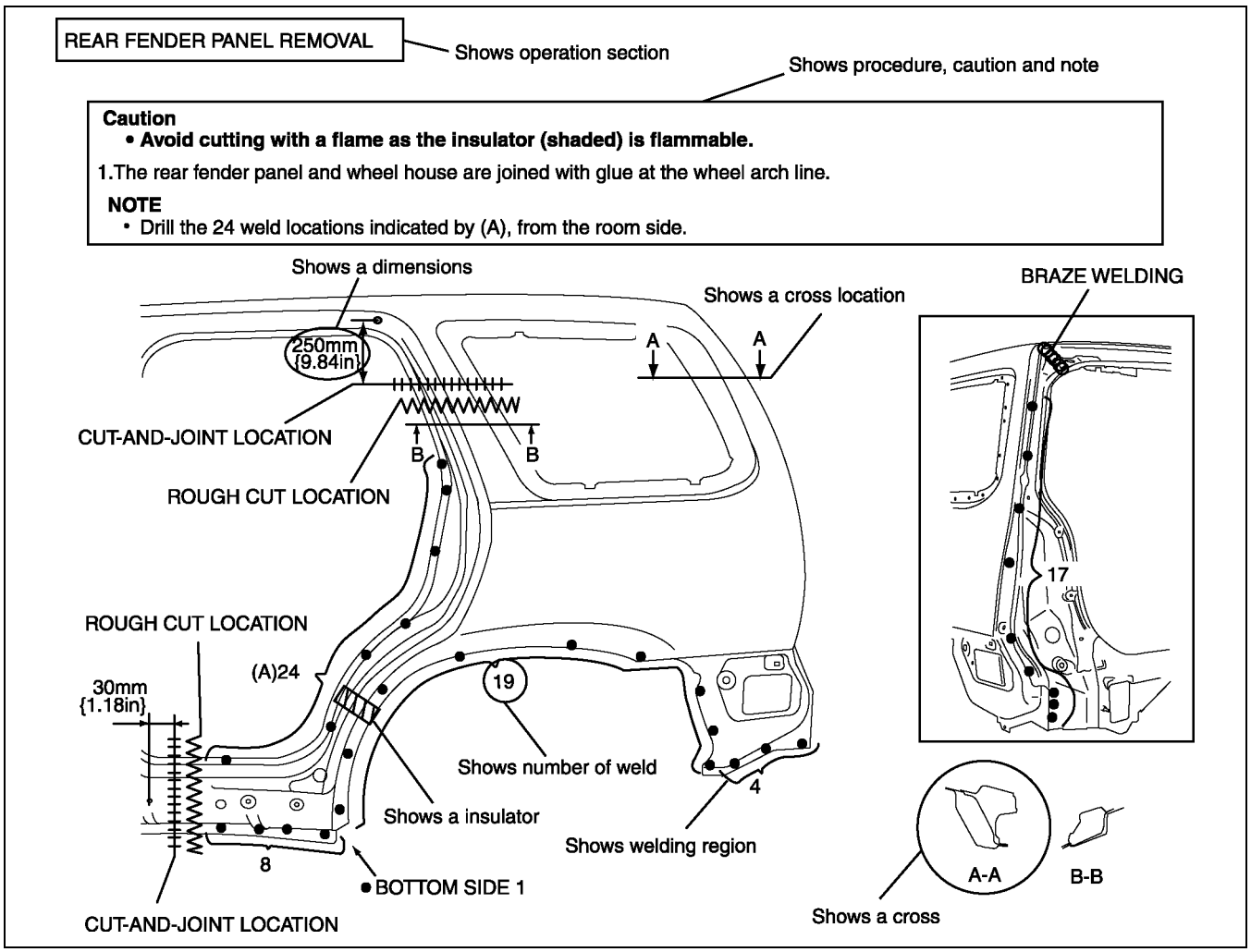
- This section contains information on the body panels in regard to the welding types, number of spot welds, and cut-and-join locations that are necessary for panel removal and installation.
- The type of weld and positions and indicated by symbol.
- Some sections have notes concerning the operation being performed. thoroughly read and understand the notes before carrying out any procedures.



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Symbols of Panel Replacement

- The following 6 symbols are used to indicate the type of weld that is used when replacing body panels.

SYMBOL	MEANING
●	Spot welding
■	CO^2 arc welding (plug welding)
+	CO^2 spot welding

SYMBOL	MEANING
|||||	Continuous MIG welding (Cut-and-join location)
○○○	Braze welding
∧∧∧	Rough cut location

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HOW TO READ BODY DIMINSIONS

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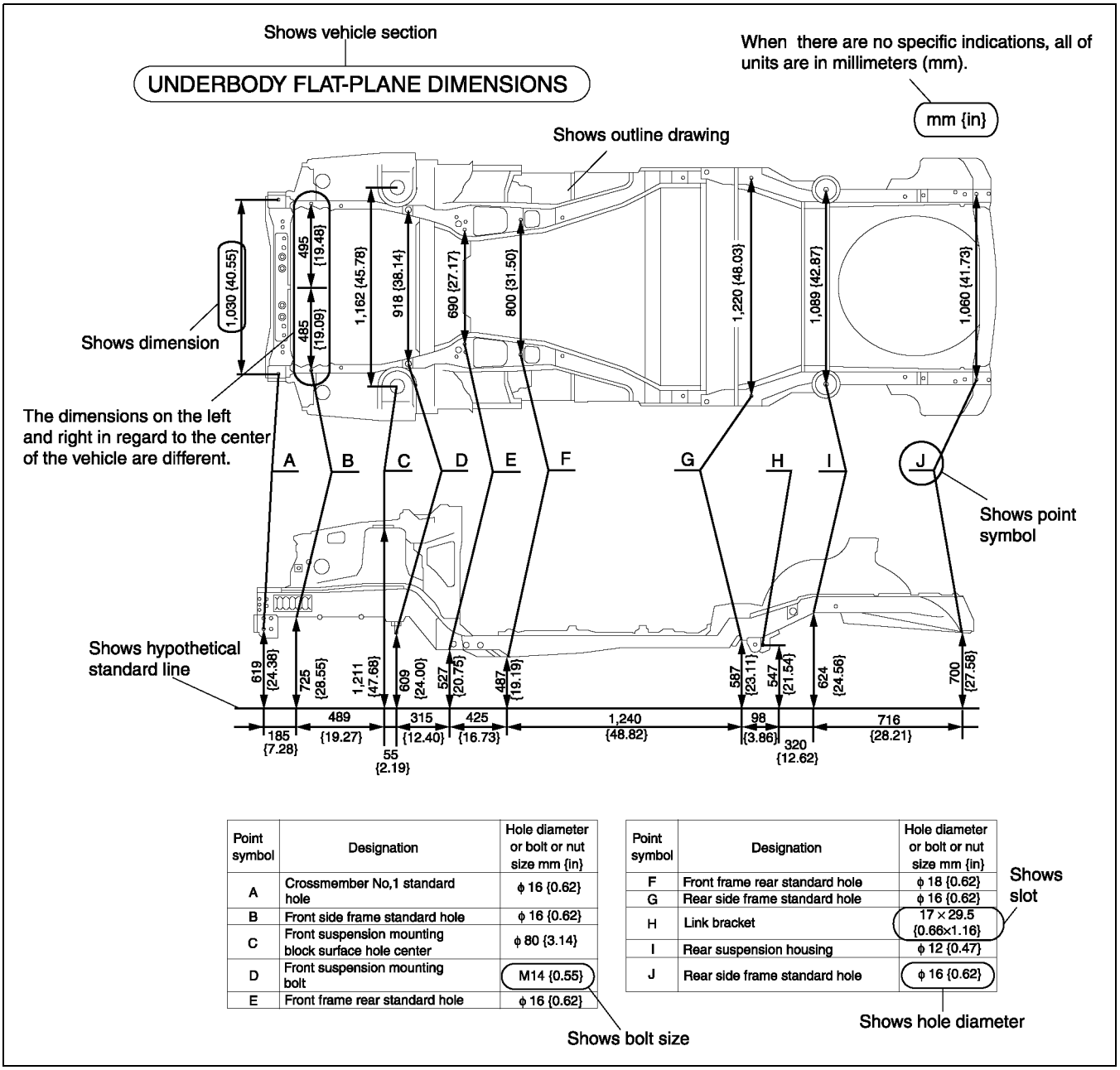
Body Dimensions (Flat-plane Dimensions)

- Flat-plane dimensions are the dimensions measured by projecting certain reference points onto a plane surface.
- When there are no specific indications, the standard points and dimensions are symmetrical in regard to the center of the vehicle.
- The hypothetical lines may differ according to the vehicle model.
- The outline drawing shows the figure that projected vehicle from the upper side.



Point symbol	Designation	Hole diameter or bolt or nut size mm {in}
A	Crossmember No,1 standard hole	ϕ 16 {0.62}
B	Front side frame standard hole	ϕ 16 {0.62}
C	Front suspension mounting block surface hole center	ϕ 80 {3.14}
D	Front suspension mounting bolt	M14 {0.55}
E	Front frame rear standard hole	ϕ 16 {0.62}

Point symbol	Designation	Hole diameter or bolt or nut size mm {in}
F	Front frame rear standard hole	ϕ 18 {0.62}
G	Rear side frame standard hole	ϕ 16 {0.62}
H	Link bracket	17 × 29.5 {0.66×1.16}
I	Rear suspension housing	ϕ 12 {0.47}
J	Rear side frame standard hole	ϕ 16 {0.62}

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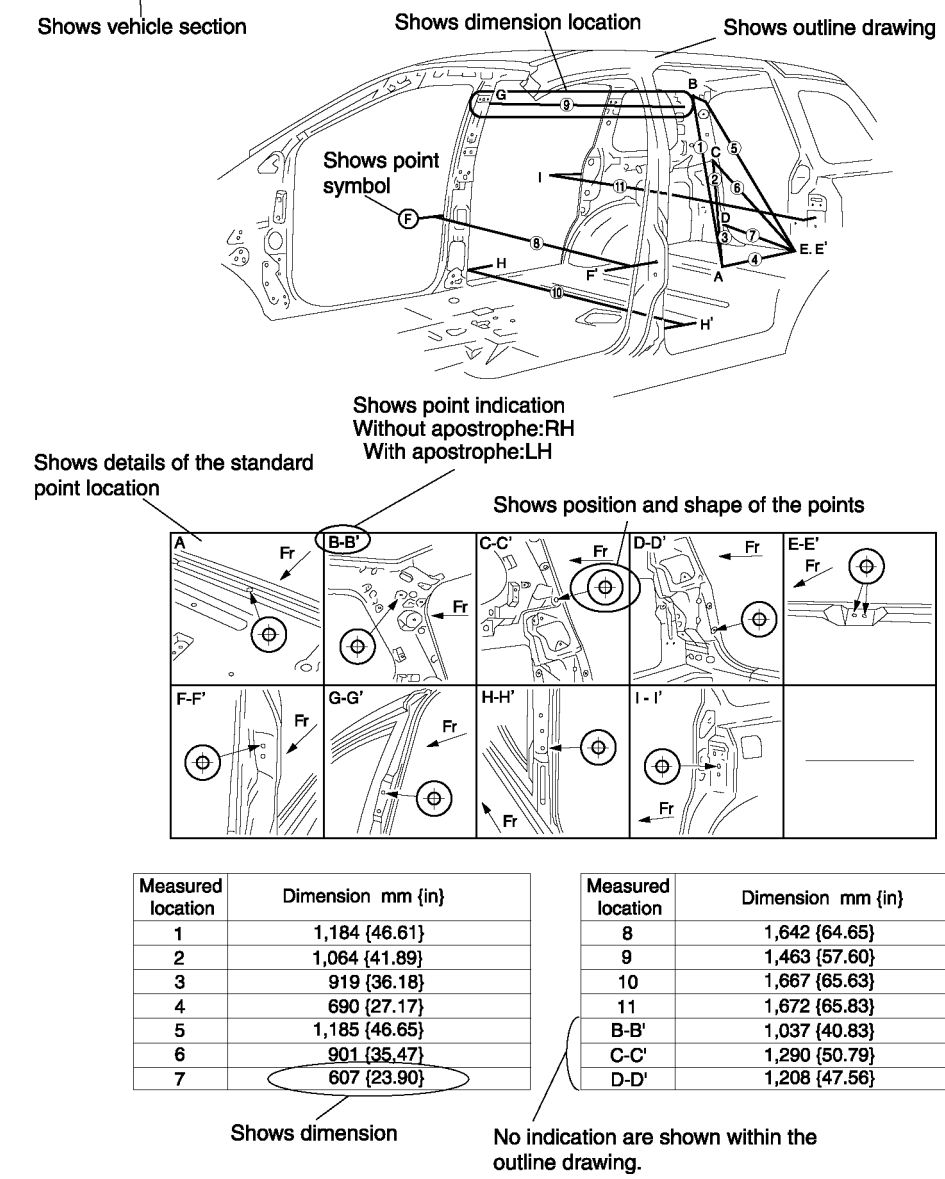
Body Dimensions (Straight-line Dimensions)

- Straight-line dimensions are the actual dimensions between two standard points.
- When there are no specific indications, the standard points and dimensions are symmetrical in regard to the center of the vehicle.

ROOM STRAIGHT-LINE DIMENSIONS (2)



Measured location	Dimension mm {in}
1	1,184 {46.61}
2	1,064 {41.89}
3	919 {36.18}
4	690 {27.17}
5	1,185 {46.65}
6	901 {35.47}
7	607 {23.90}

Measured location	Dimension mm {in}
8	1,642 {64.65}
9	1,463 {57.60}
10	1,667 {65.63}
11	1,672 {65.83}
B-B'	1,037 {40.83}
C-C'	1,290 {50.79}
D-D'	1,208 {47.56}

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Symbols of Body Dimensions

- The following 8 symbols are used to indicate the standard points.

SYMBOL	MEANING
⊕	Center of circular hole
⊕	Center elliptical hole
⊕	Edge of hole
⊕	Notch

SYMBOL	MEANING
⊕	Panel seam, bead, etc.
← (arrow only)	Bolt tip
⊕	Center of rectangular-shaped hole
⊕	Edge of rectangular-shaped hole

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SERVICE PRECAUTIONS

SERVICE PRECAUTIONS

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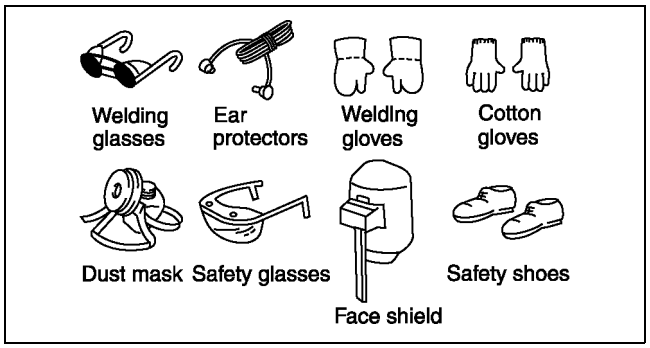
Arrangement of Workshop

- Arrangement of the workshop is important for safe and efficient work.

Safety Precautions

- Protective head covering and safety shoes should always be worn. Depending upon the nature of the work, gloves, safety glasses, ear protectors, face shield, etc., should also be used.



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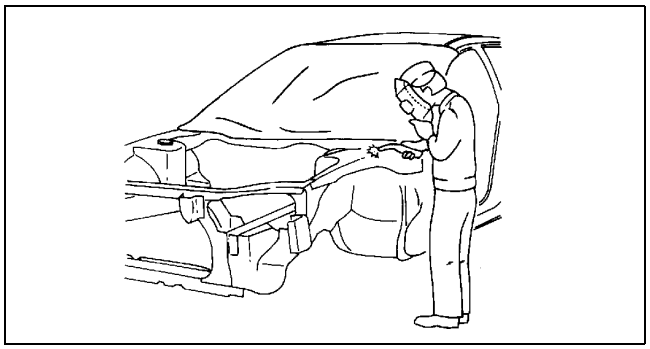
Vehicle Protection

- Use seat covers and floor covers.
- Use heat-resistant protective covers to protect glass areas and seats from heat or sparks during welding.
- Protect items such as moldings, garnishes, and ornaments with tape when welding.



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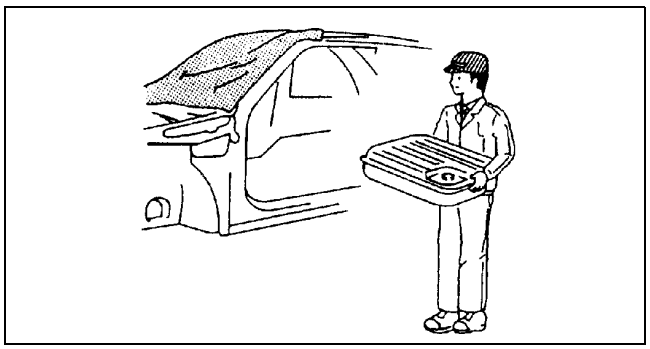
Remove Dangerous Articles

- Remove the fuel tank before using an open flame in that area. Plug connection piping to prevent fuel leakage.



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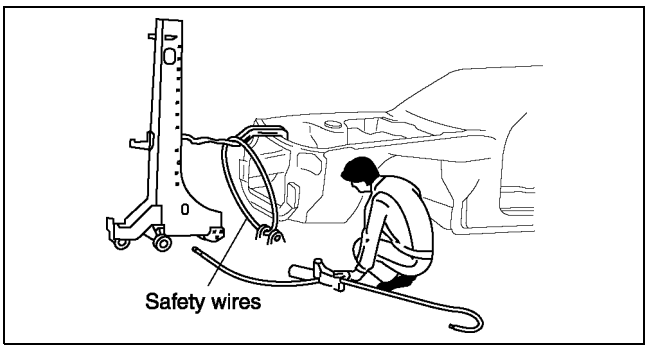
Use of Pulling Equipment

- When using pulling equipment, keep away from the pulling area and use safety wires to prevent accidents.



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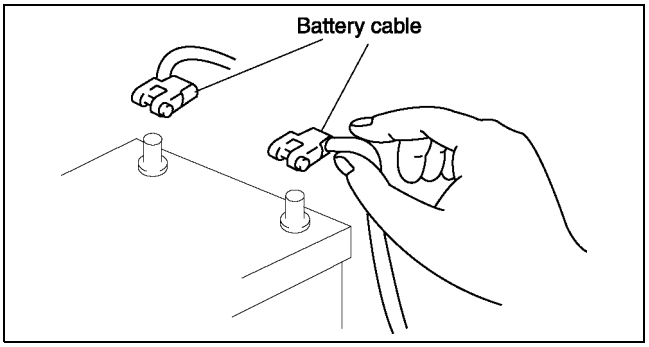
Prevent Short Circuits

- Turn the ignition switch to the LOCK position.
- Disconnect the buttery cables.



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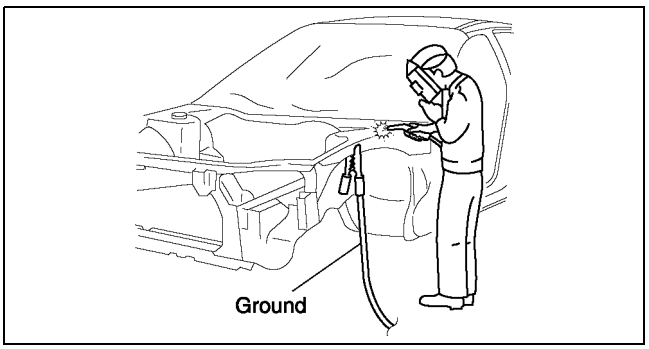
- Securely connect the welding machine ground near the welding area.



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EFFICIENT REPLACEMENT OF BODY PANELS

EFFICIENT REMOVAL OF BODY PANELS

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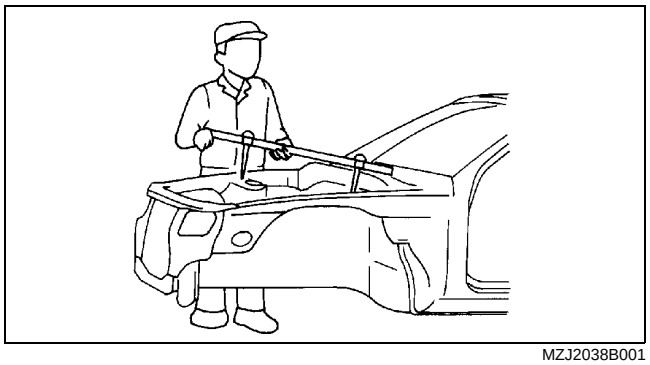
Body Measurements

- Before removal or rough-cutting, first measure the body at and around the damaged area against the standard reference dimension specifications. If there is deformation, use frame repair equipment to make a rough correction.



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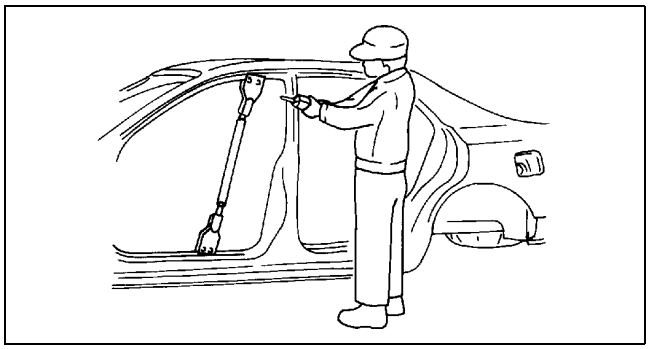
Prevention of Body Deformation

- Use a clamp or a jack for removal and reinforce at and around the rough-cutting location to prevent deforming of the body.



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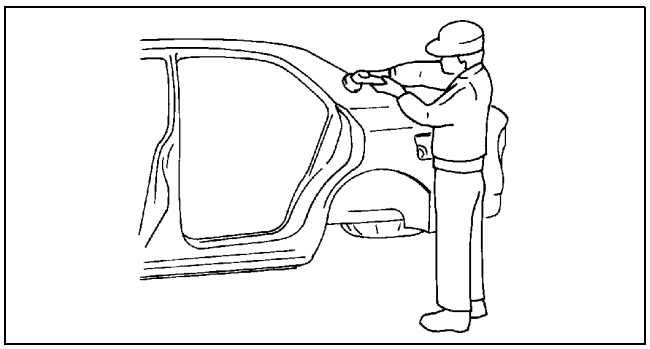
Selection of Cut-and-join Locations

- For parts where complete replacement is not feasible, careful cutting and joining operations should be followed. If the location to be cut is a flat area where there is no reinforcement, the selected cutting location should be where the welding distortion will be minimal.



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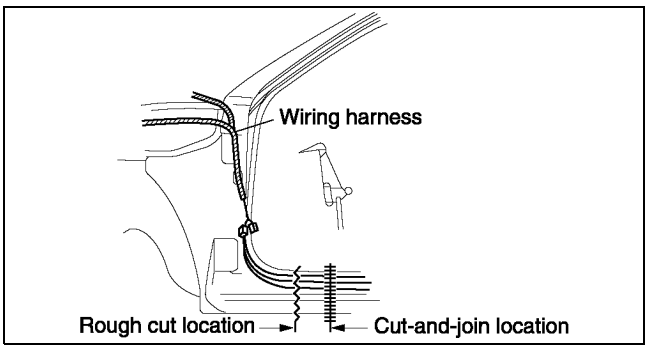
Remove of Associated Parts

- Protect moldings, garnishes, and ornaments with tape when removing associated parts.

Rough Cutting of Damaged Panel

- Verify that there are no parts (such as pipes, hoses, and wiring harness) nearby or on the opposite side of a panel which could be damaged by heat.
- For cut-and-join areas, allow for an overlap of 30—50 mm {1.18—1.97 in} and then rough-cut the damaged panel.



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INSTALLATION PREPARATIONS

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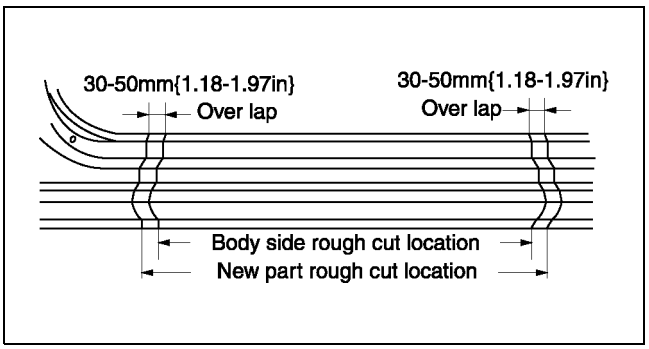
Rough Cutting of New Parts

- For cut-and-join areas, allow for an overlap of 30—50 mm {1.18—1.97 in} with the remaining area on the body side and then rough-cut the new parts.



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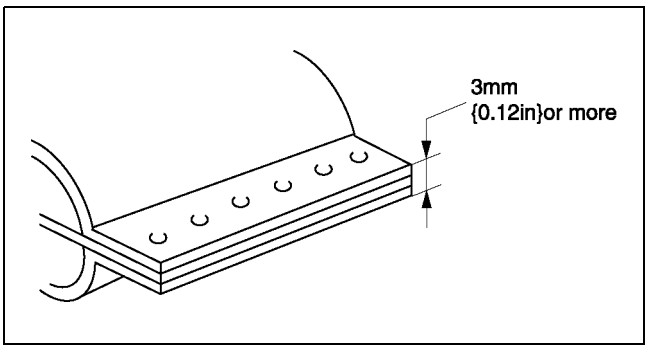
Determination of Welding Method

- If the total thickness at the area to be welded is 3 mm {0.12 in} or more, use a CO_2 gas shielded-arc welder to make the plug welds.



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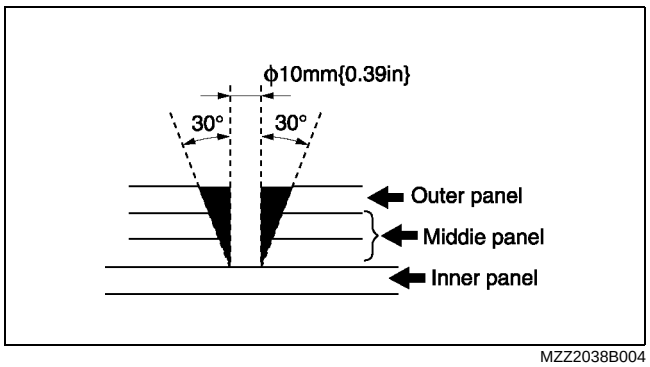
Making Holes for CO_2 Arc Welding

- For places that cannot be spot welded, make a hole for CO_2 arc welding using a punch or drill as follows.

(mm {in})

Board thickness (ø)	Hole diameter (ø)
0.60—0.90 {0.02—0.03}	5 {0.19}
0.91—1.20 {0.04—0.05}	6 {0.23}
1.21—1.80 {0.051—0.07}	8 {0.31}
1.81—4.50 {0.071—0.17}	10 {0.39}

- Grind the shaded section indicated in the diagram below and create a hole in the part where the 3—4 plates are put together. Also, weld the plates together tightly so that gaps do not develop.



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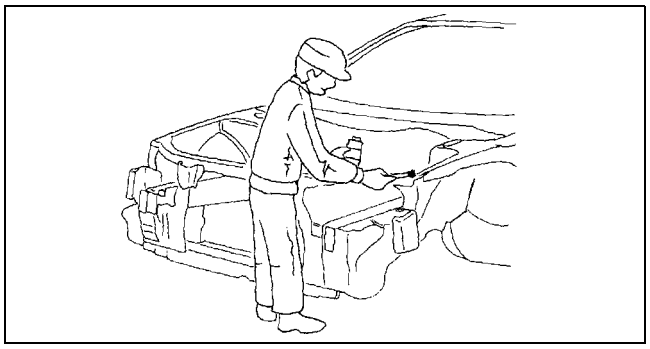
Application of Weld-through Primer

- For treatment against corrosion, remove the paint grease, and other material from the portion of new part and body to be welded, and apply weld-through primer.



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EFFICIENT INSTALLATION OF BODY PANELS

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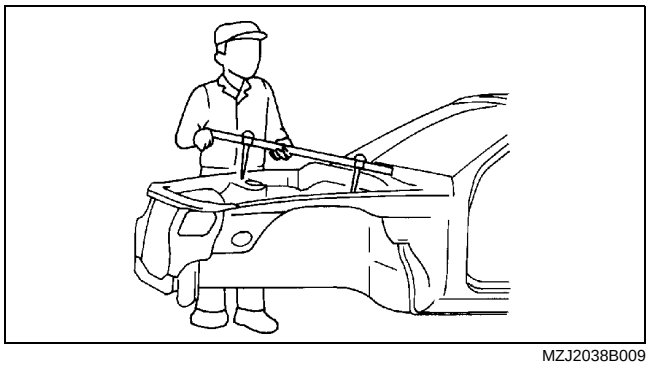
Checking Preweld Measurements And Watching

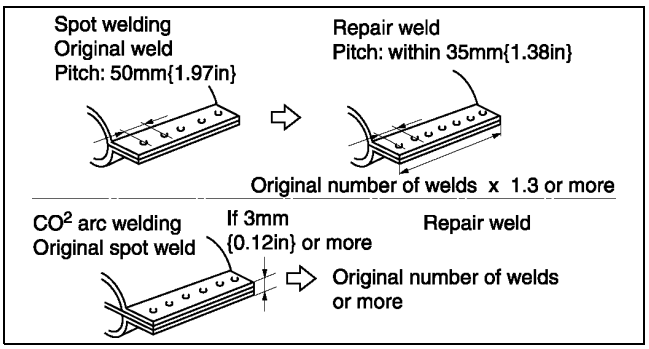
- Align to the standard reference dimensions, based upon the body dimensions illustration, so that new parts are installed in the correct position.



MZJ2038B009

Welding Notes

- For the number of weld points, welding should be performed in accordance with the following reference standards.



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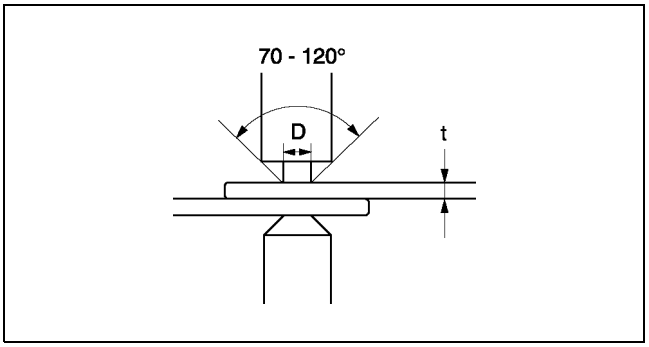
Spot Welding Notes

- The shape of the spot welder tip is D=(2×t)+3. If the upper panel thickness is different from that of the under panel, adjust to the thinner one.



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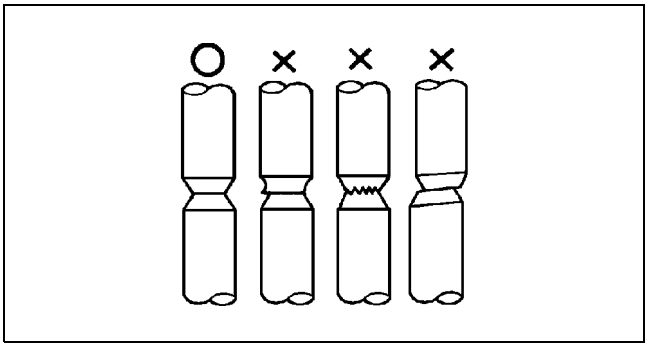
- Because the weld strength is affected by the shape of the spot welder tip, the optimum condition of the tip should always be maintained.
- Spot welds should be made at points other than the originally welded points.



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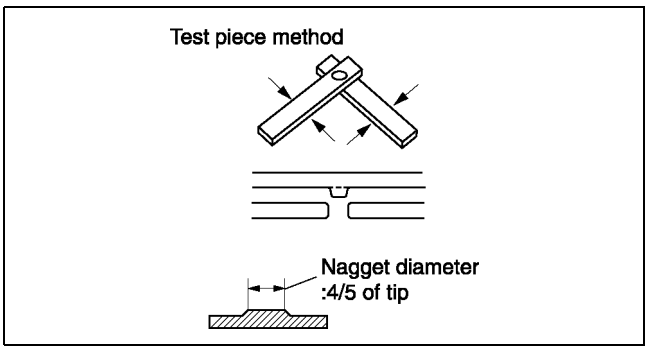
- Before spot welding, make a trial weld using the same material as the body panel to check the weld strength.



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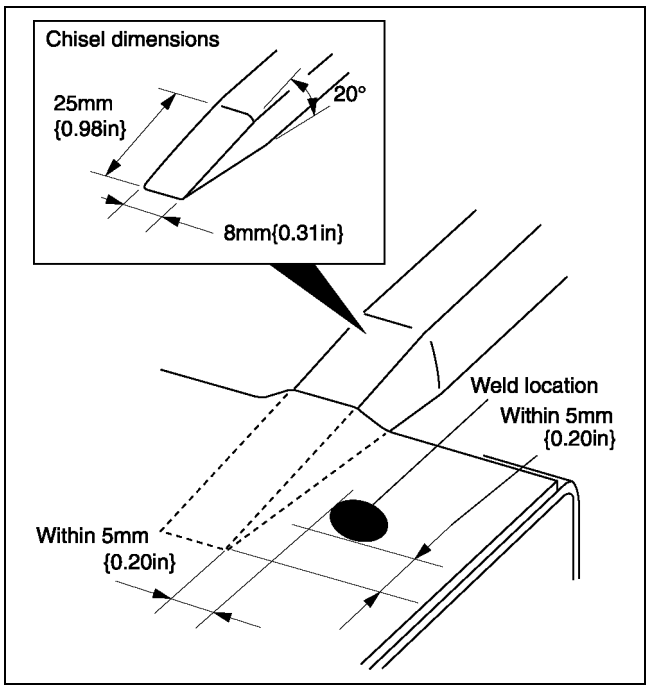
Checking Weld Strength

- Installation locations of the engine, chassis, and seat belts are designated as important safety locations for weld strength. Check weld strength by driving a chisel between the panels at every fourth or fifth weld spot, and every tenth regular weld location.



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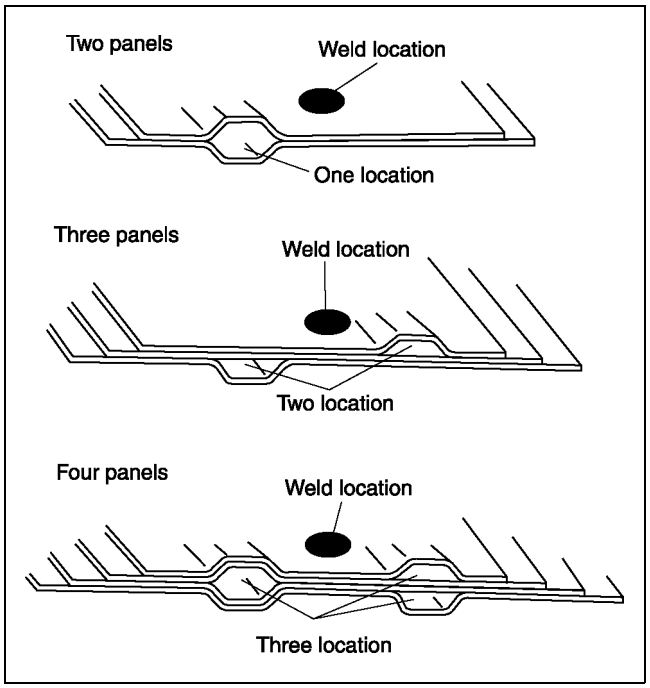
- Drive the chisel between the panels according to the number of panels as shown below.
- To determine weld strength, drive the chisel between the panel and check whether the panels come apart. If the panels come apart, make another weld near the original weld.
- Restore the shape of the checked area.



MZZ2038B008

AFTER-INSTALLATION RUST PROOFING, NOISE AND VIBRATION INSULATING

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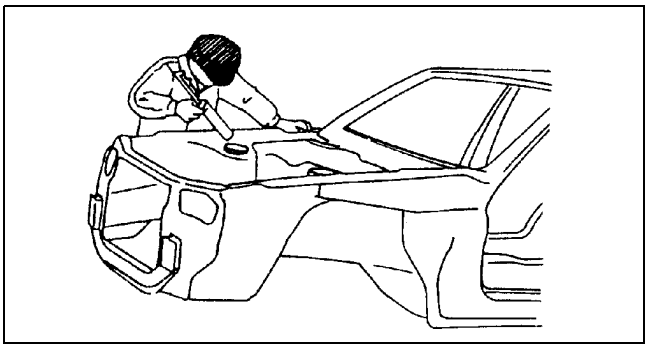
Body Sealing

- Apply body sealer where necessary.
- For locations where application of body sealer is difficult after installation, apply it before installation.



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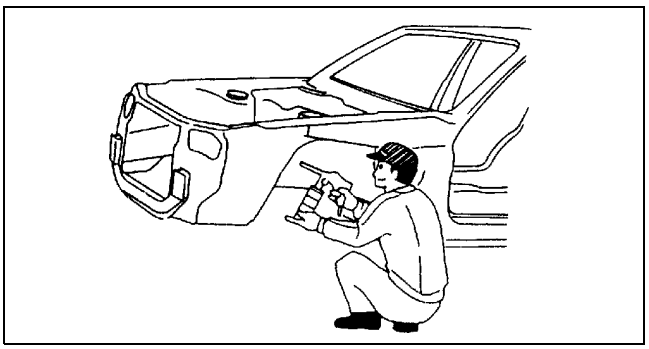
Application of Undercoating

- Apply an undercoat to the required location of the body.



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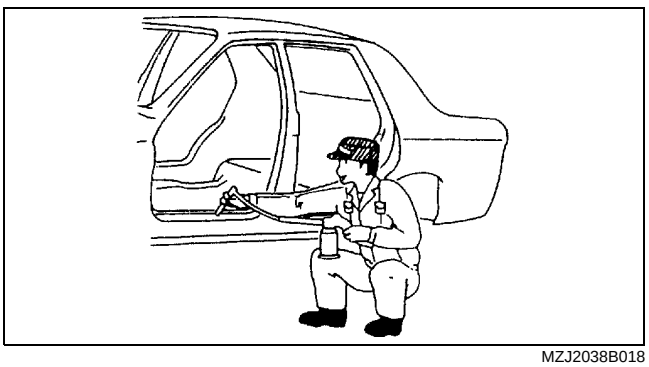
Application of Rust Inhibitor

- Apply rust inhibitor (wax, oil, etc.) to the back of the welded areas.



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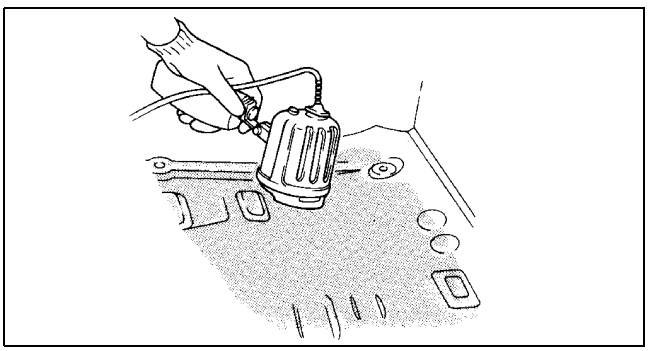
Application of Floor Silencer

- Apply floor silencer by heating with an infrared ray lamp.



MZJ2038B019

ABBREVIATION

5HB	Five-door hatchback
Fr	Front
Rr	Rear
RH	Right
LH	Left
M	Metallic
MC	Mica

CONSTRUCTION

CONSTRUCTION

CONSTRUCTION

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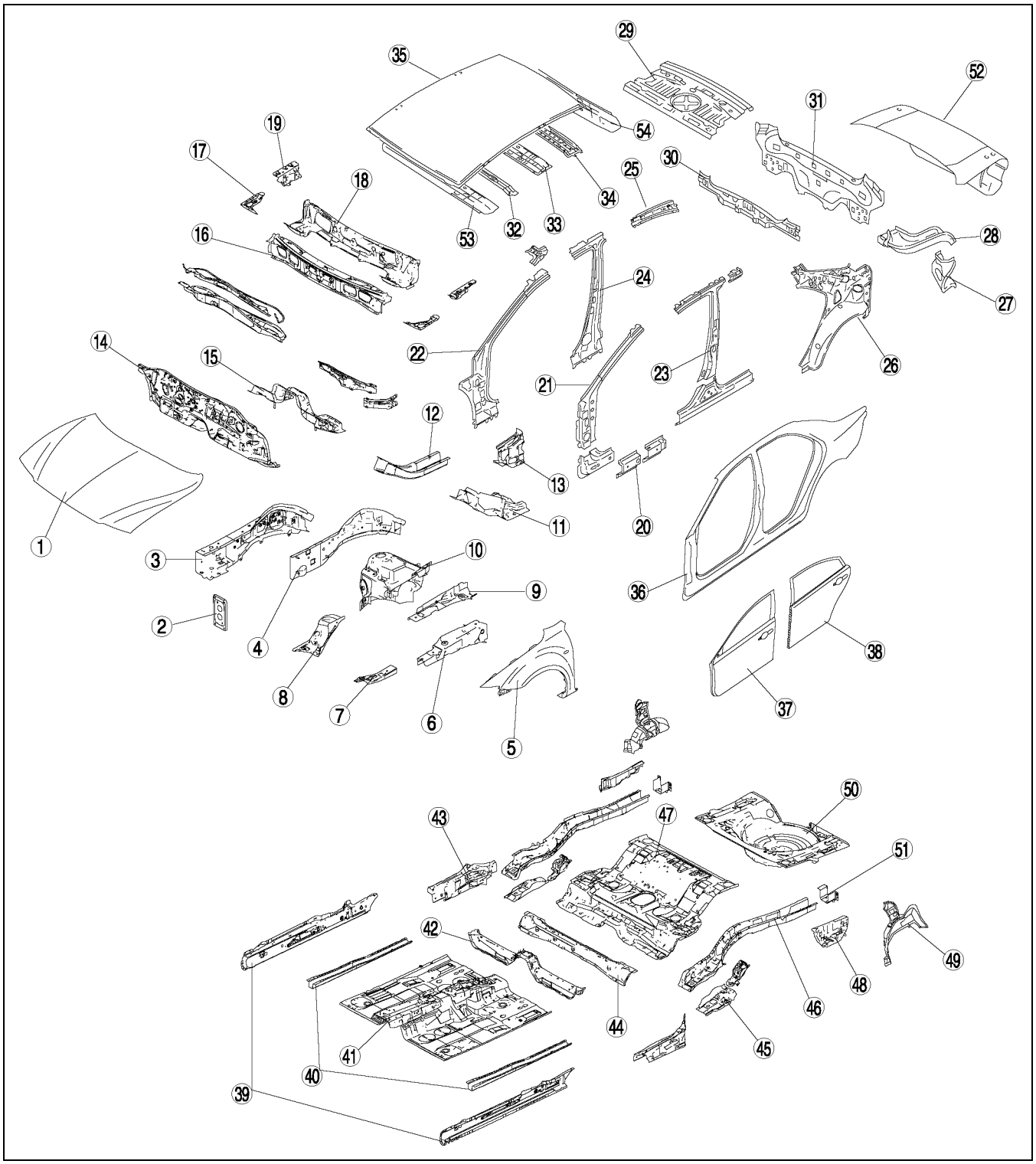
SEDAN



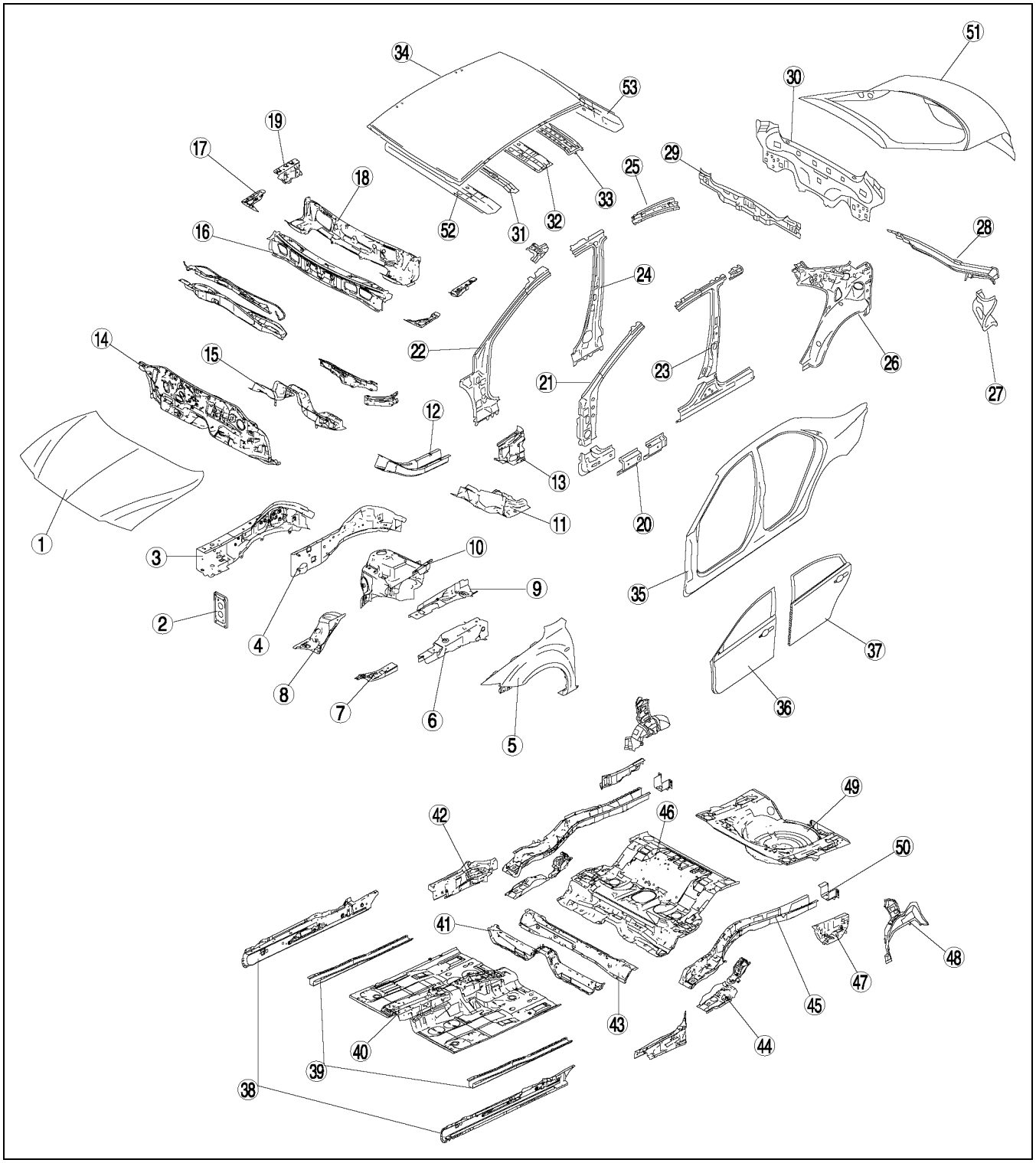
A6J9810B001

x:Applied
-:Not applied

No.	Part Name		High-tension steel	Rust proof steel	Thickness (mm) {in}
1	Bonnet		x	x	0.7{0.028}
2	Front bumper bracket		-	-	2.9{0.114}
3	Front side frame inner	Fr	x	x	1.6{0.063}
		Rr	x	x	2.6{0.102}
4	Front side frame outer	Fr	x	x	1.4{0.055}
		Rr	x	x	2.0{0.079}
5	Front fender panel		x	x	0.75 {0.030}
6	Apron reinforcement upper		-	x	1.0 {0.039}
7	Shroud upper reinforcement		-	x	2.0{0.079}
8	Wheel apron panel front		-	x	0.65 {0.026}
9	Apron reinforcement lower		-	x	1.0 {0.039}
10	Suspension housing	Upper	x	x	3.2{0.126}
		Lower	-	x	1.2{0.047}
11	Torque box		-	x	1.4{0.055}
12	Front frame rear		x	x	2.9{0.114}
13	Cowl side reinforcement		-	x	1.2 {0.047}
14	Dash lower panel		-	x	0.85 {0.033}
15	Member dash lower		-	x	1.6{0.063}
16	Cowl panel		-	x	0.7{0.028}
17	Cowl upper plate		-	x	1.6{0.063}
18	Dash upper panel		-	x	0.9{0.035}
19	Cowl upper plate		x	x	1.4{0.055}
20	Side sill reinforcement		x	x	0.9 {0.035}
21	Front pillar reinforcement		x	-	1.8 {0.071}
22	Front pillar inner	Upper	x	-	1.6{0.063}
		Lower	x	-	1.4{0.055}
23	Center pillar reinforcement	Upper front	x	-	1.8{0.071}
		Upper rear	x	-	1.6{0.063}
		Center	x	-	2.0{0.079}
		Lower	x	-	1.8 {0.071}
24	Center pillar inner	Upper	x	-	1.6{0.063}
		Center	x	-	1.2{0.047}
		Lower	x	-	1.0{0.039}

No.	Part Name		High-tension steel	Rust proof steel	Thickness (mm) {in}
25	Roof rail inner		x	-	1.2{0.047}
26	Rear pillar inner		-	x	0.65 {0.026}
27	Corner plate		-	x	0.7{0.028}
28	Rear fender rain rail		-	x	0.7{0.028}
29	Package tray		-	-	0.65 {0.026}
30	Rear end member		-	-	0.6{0.024}
31	Rear end panel		-	x	0.65 {0.026}
32	Roof reinforcement		-	-	0.5{0.020}
33	Roof reinforcement		x	-	1.4{0.055}
34	Roof reinforcement		-	-	0.55 {0.022}
35	Roof panel		-	-	0.75 {0.030}
36	Side frame outer		-	x	0.7{0.028}
37	Front door		-	x	0.7{0.028}
38	Rear door		-	x	0.7{0.028}
39	Side sill inner		x	x	1.6{0.063}
40	Front B frame	Fr	x	x	2.3{0.091}
		Rr	-	x	1.6{0.063}
41	Front floor pan		-	x	0.65 {0.026}
42	Crossmember No.2		-	-	1.2{0.047}
43	Side sill inner rear		x	x	1.6{0.063}
44	Crossmember No.3		x	-	1.4{0.055}
45	Link bracket		x	x	2.3 {0.091}
46	Rear side frame	Fr	x	x	1.8{0.071}
		Rr	x	x	1.4{0.055}
47	Center floor pan		-	x	0.6{0.024}
48	Floor side panel		-	x	0.6{0.024}
49	Wheel house inner		-	x	0.75 {0.030}
50	Rear floor pan		-	x	0.65{0.26}
51	Rear bumper bracket	LH	x	x	2.0{0.079}
		RH	x	x	1.4{0.055}
52	Trunk lid panel		-	x	0.75 {0.030}
53	Front header		-	-	1.2{0.047}
54	Rear header		-	-	0.65 {0.026}

5HB



A6J9810B002

x:Applied
-:Not applied

No.	Part Name		High-tension steel	Rust proof steel	Thickness (mm) {in}
1	Bonnet		x	x	0.7{0.028}
2	Front bumper bracket		-	-	2.9{0.114}
3	Front side frame inner	Fr	x	x	1.6{0.063}
		Rr	x	x	2.6{0.102}
4	Front side frame outer	Fr	x	x	1.4{0.055}
		Rr	x	x	2.0{0.079}
5	Front fender panel		x	x	0.75 {0.030}
6	Apron reinforcement upper		-	x	1.0 {0.039}
7	Shroud upper reinforcement		-	x	2.0 {0.079}
8	Wheel apron panel front		-	x	0.65 {0.026}
9	Apron reinforcement lower		-	x	1.0 {0.039}
10	Suspension housing	Upper	x	x	3.2{0.126}
		Lower	-	x	1.2{0.047}
11	Torque box		-	x	1.4{0.055}
12	Front frame rear		x	x	2.9{0.114}
13	Cowl side reinforcement		-	x	1.2 {0.047}
14	Dash lower panel		-	x	0.85 {0.033}
15	Member dash lower		-	x	1.6{0.063}
16	Cowl panel		-	x	0.7{0.028}
17	Cowl upper plate		-	x	1.6{0.063}
18	Dash upper panel		-	x	0.9{0.035}
19	Cowl upper plate		x	x	1.4{0.055}
20	Side sill reinforcement		x	x	0.9 {0.035}
21	Front pillar reinforcement		x	-	1.8 {0.071}
22	Front pillar inner	Upper	x	-	1.6{0.063}
		Lower	x	-	1.4{0.055}
23	Center pillar reinforcement	Upper front	x	-	1.8{0.071}
		Upper rear	x	-	1.6{0.063}
		Center	x	-	2.0{0.079}
		Lower	x	-	1.8 {0.071}
24	Center pillar inner	Upper	x	-	1.6{0.063}
		Center	x	-	1.2{0.047}
		Lower	x	-	1.0{0.039}

No.	Part Name		High-tension steel	Rust proof steel	Thickness (mm) {in}
25	Roof rail inner		x	-	1.2{0.047}
26	Rear pillar inner		-	x	0.65 {0.026}
27	Corner plate		-	x	0.7{0.028}
28	Rear fender rain rail		-	x	0.8{0.031}
29	Rear end member		-	-	0.6{0.024}
30	Rear end panel		-	x	0.65 {0.026}
31	Roof reinforcement		-	-	0.5{0.020}
32	Roof reinforcement		x	-	1.4{0.055}
33	Roof reinforcement		-	-	0.55 {0.022}
34	Roof panel		-	-	0.75 {0.030}
35	Side frame outer		-	x	0.7{0.028}
36	Front door		-	x	0.7{0.028}
37	Rear door		-	x	0.7{0.028}
38	Side sill inner		x	x	1.6{0.063}
39	Front B frame	Fr	x	x	2.3{0.091}
		Rr	-	x	1.6{0.063}
40	Front floor pan		-	x	0.65 {0.026}
41	Crossmember No.2		-	-	1.2{0.047}
42	Side sill inner rear		x	x	1.6{0.063}
43	Crossmember No.3		x	-	1.4{0.055}
44	Link bracket		x	x	2.3 {0.091}
45	Rear side frame	Fr	x	x	1.8{0.071}
		Rr	x	x	1.4{0.055}
46	Center floor pan		-	x	0.6{0.024}
47	Floor side panel		-	x	0.6{0.024}
48	Wheel house inner		-	x	0.75 {0.030}
49	Rear floor pan		-	x	0.65 {0.026}
50	Rear bumper bracket	LH	x	x	2.0{0.079}
		RH	x	x	1.4{0.055}
51	Liftgate panel		-	x	0.7{0.028}
52	Front header		-	-	1.2{0.047}
53	Rear header	Center	-	-	0.7 {0.028}
		Side	-	-	1.4{0.055}

PANEL REPLACEMENT

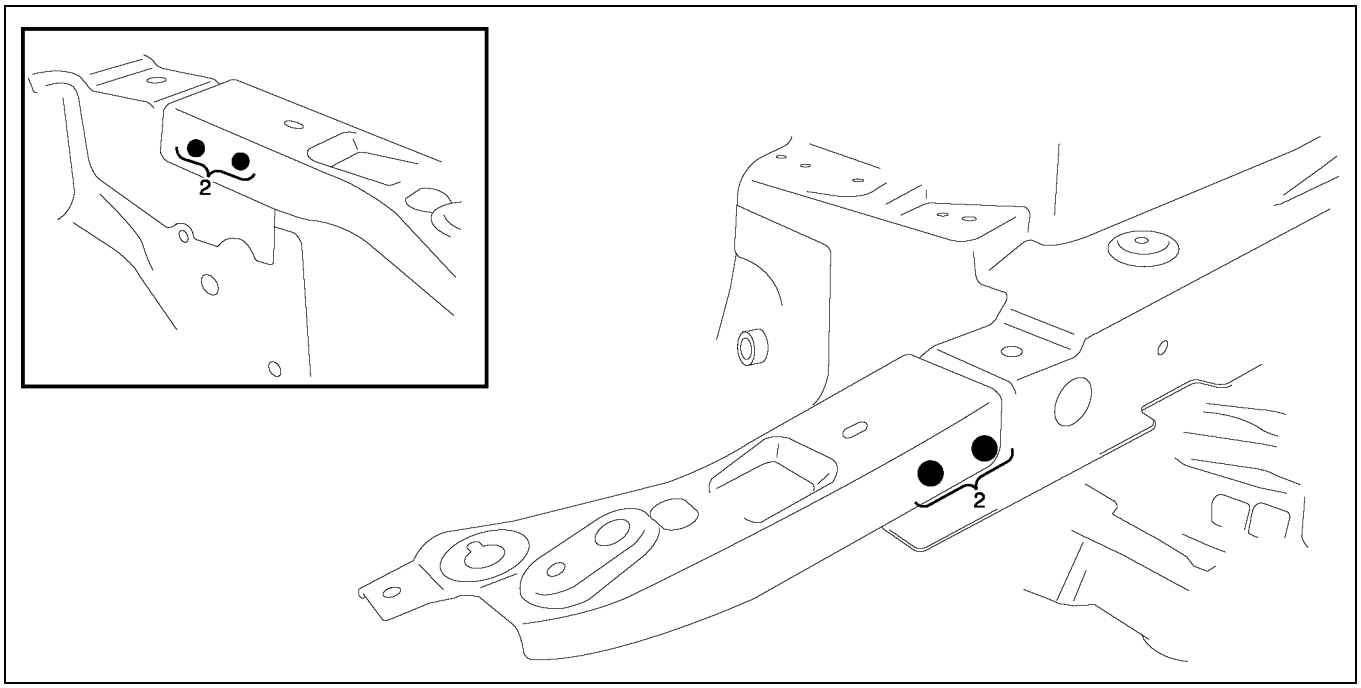
For shroud panel removal/installation and replacement procedures, refer to the MAZDA6 Workshop Manual (1730-1*-02C)
***:Indicates the printing location**
E-Europe
0-Japan

PANEL REPLACEMENT

SHROUD UPPER REINFORCEMENT REMOVAL

A6E981253152B01

1. Remove the shroud upper reinforcement.

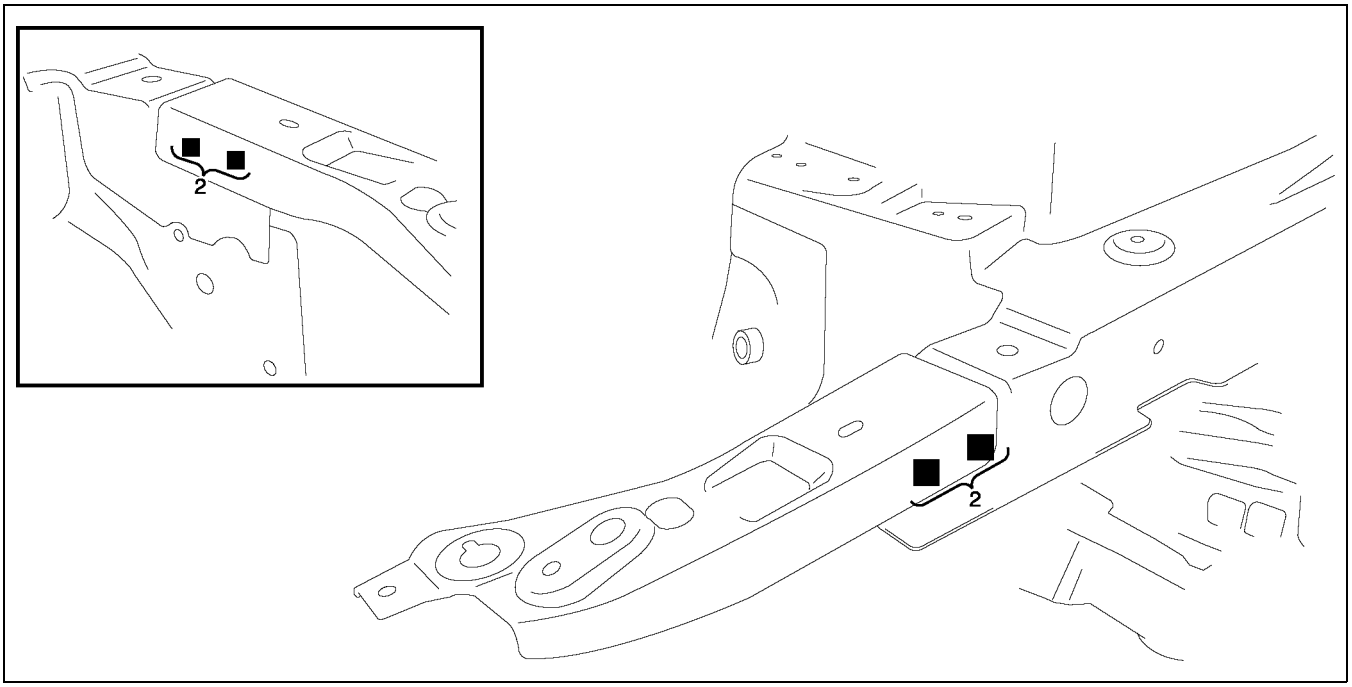


A6E9812B001

SHROUD UPPER RAINFORCEMENT INSTALLATION

A6E981253152B02

1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B002

COWL SIDE REINFORCEMENT AND COWL UPPER PLATE REMOVAL

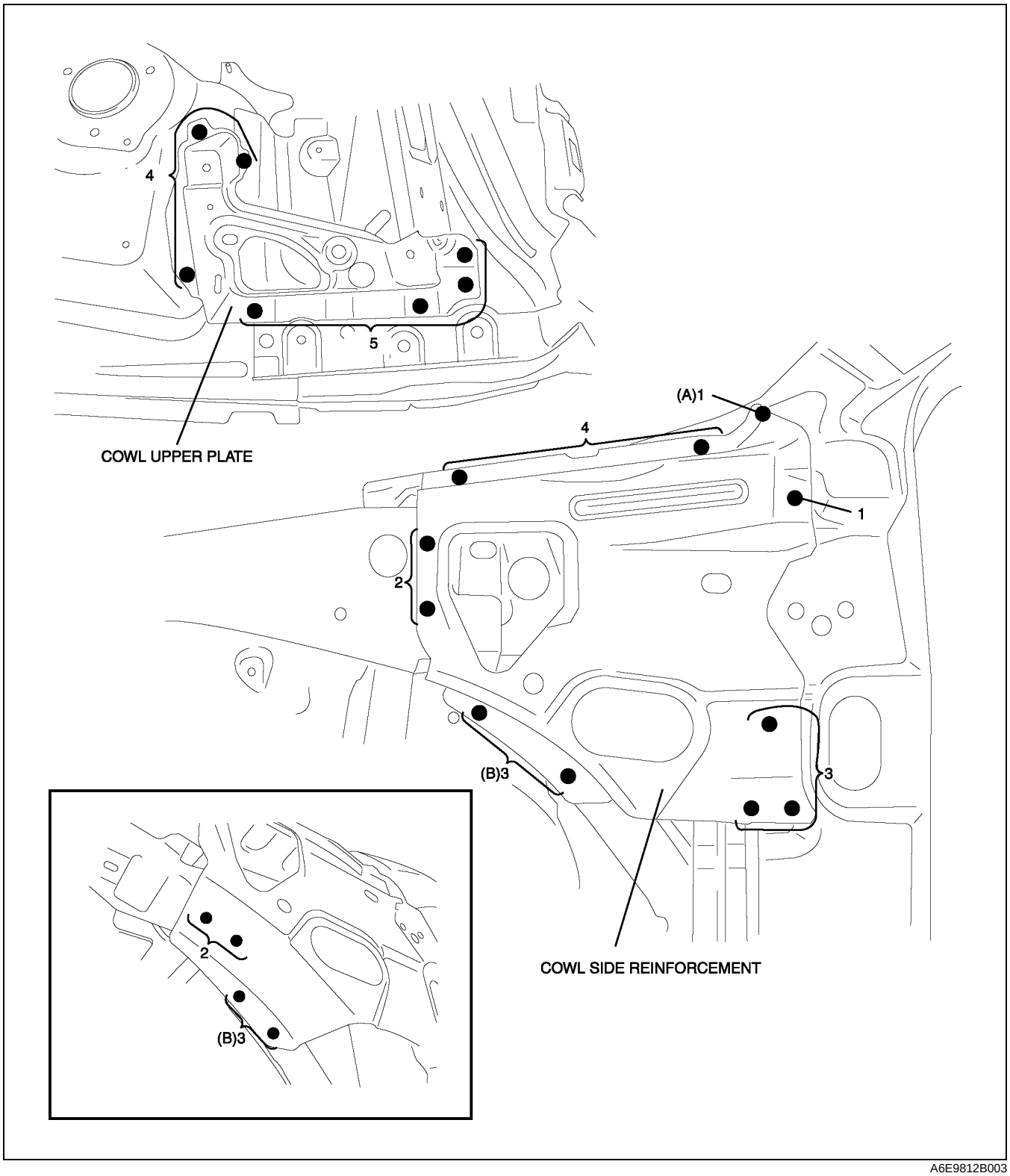
A6E981253290B01

1. Remove the cowl side reinforcement.

Note
- The weld locations (B) in the figure indicate the same locations.

Caution
- **Be careful not to damage the windshield when drilling the location indicated by (A).**

2. Remove the cowl upper plate.

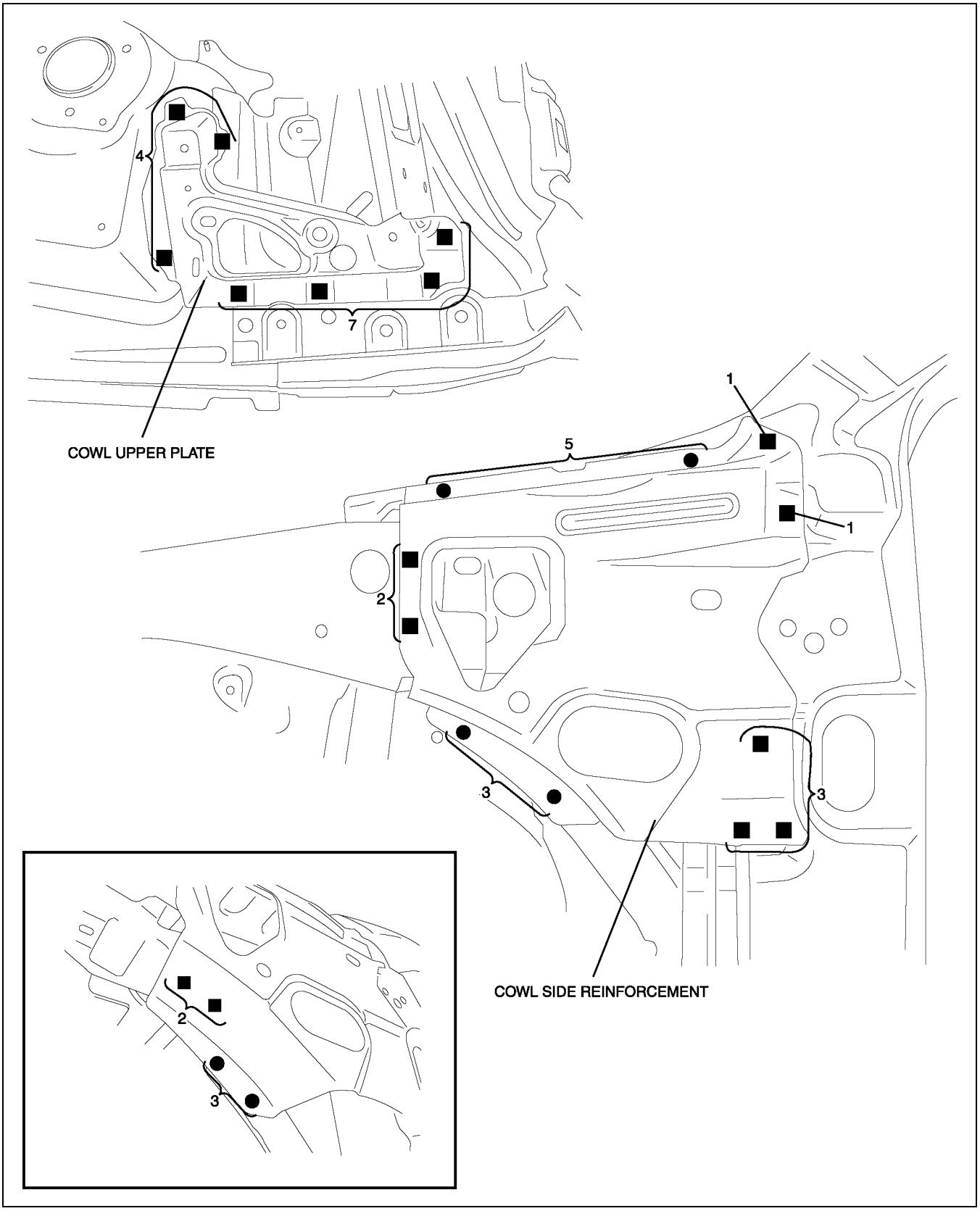


A6E9812B003

COWL SIDE REINFORCEMENT AND COWL UPPER PLATE INSTALLATION

A6E981253290B02

1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.

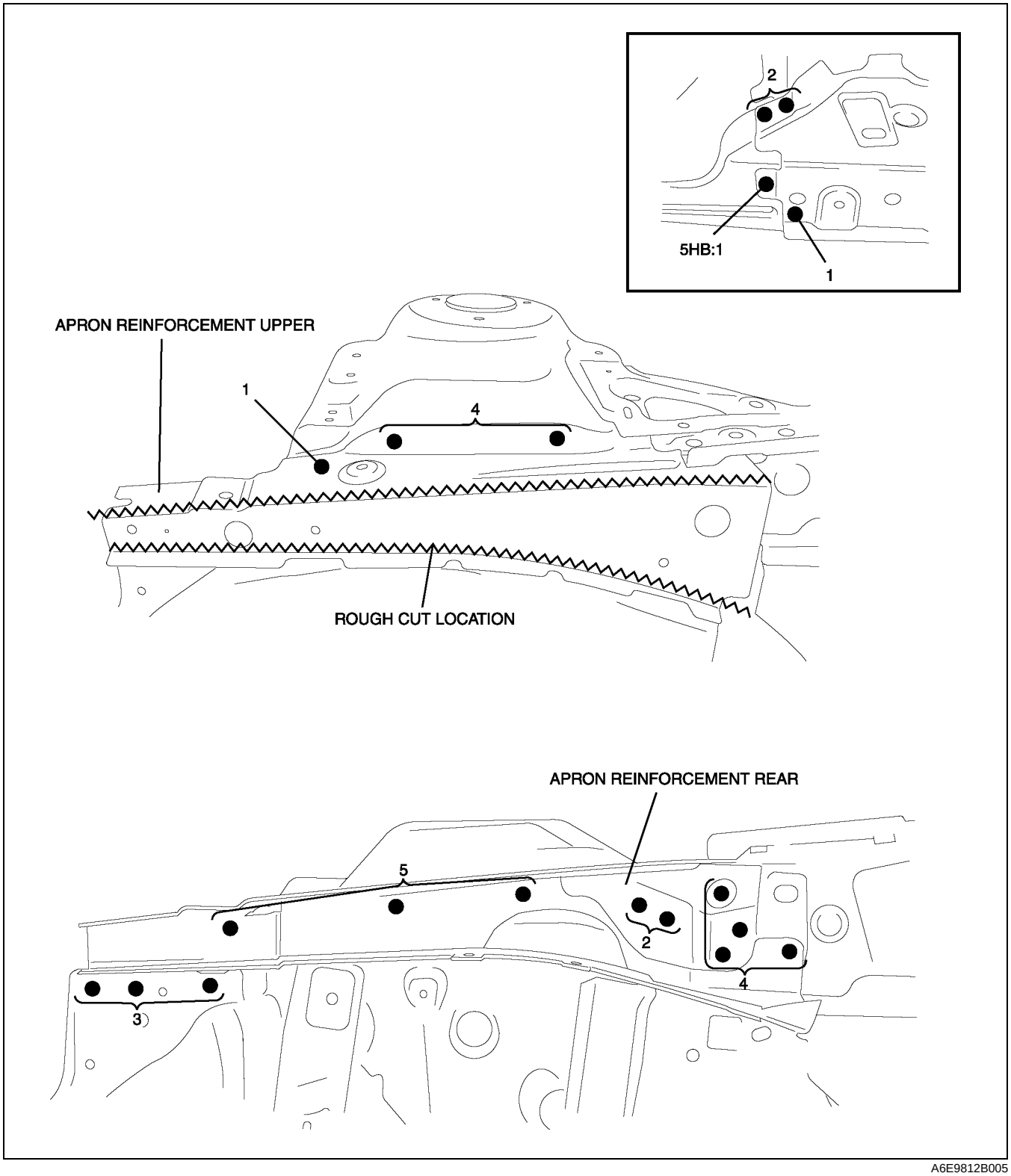


A6E9812B004

APRON REINFORCEMENT ASSEMBLY REMOVAL

A6E981253260B01

1. Rough cut the apron reinforcement upper.
2. Remove the apron reinforcement assembly.



A6E9812B005

APRON REINFORCEMENT ASSEMBLY INSTALLATION

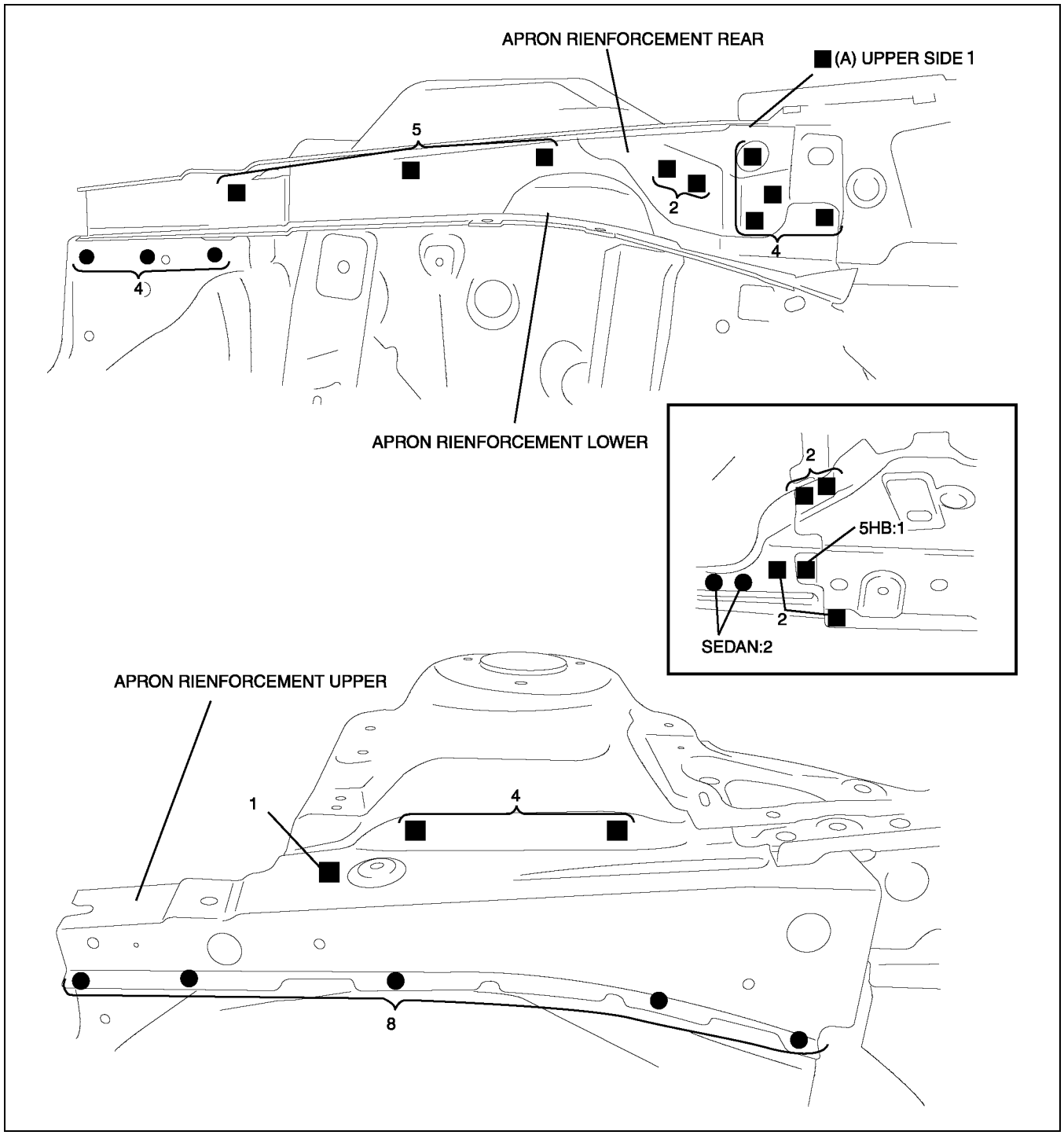
A6E981253260B02

1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. Install in the following order: apron reinforcement lower,apron reinforcement rear, and apron reinforcement upper.

Note
- After installing, fillet weld in location (A).

Caution
- **When fillet welding, be careful of dripping, melted metal.**

4. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B006

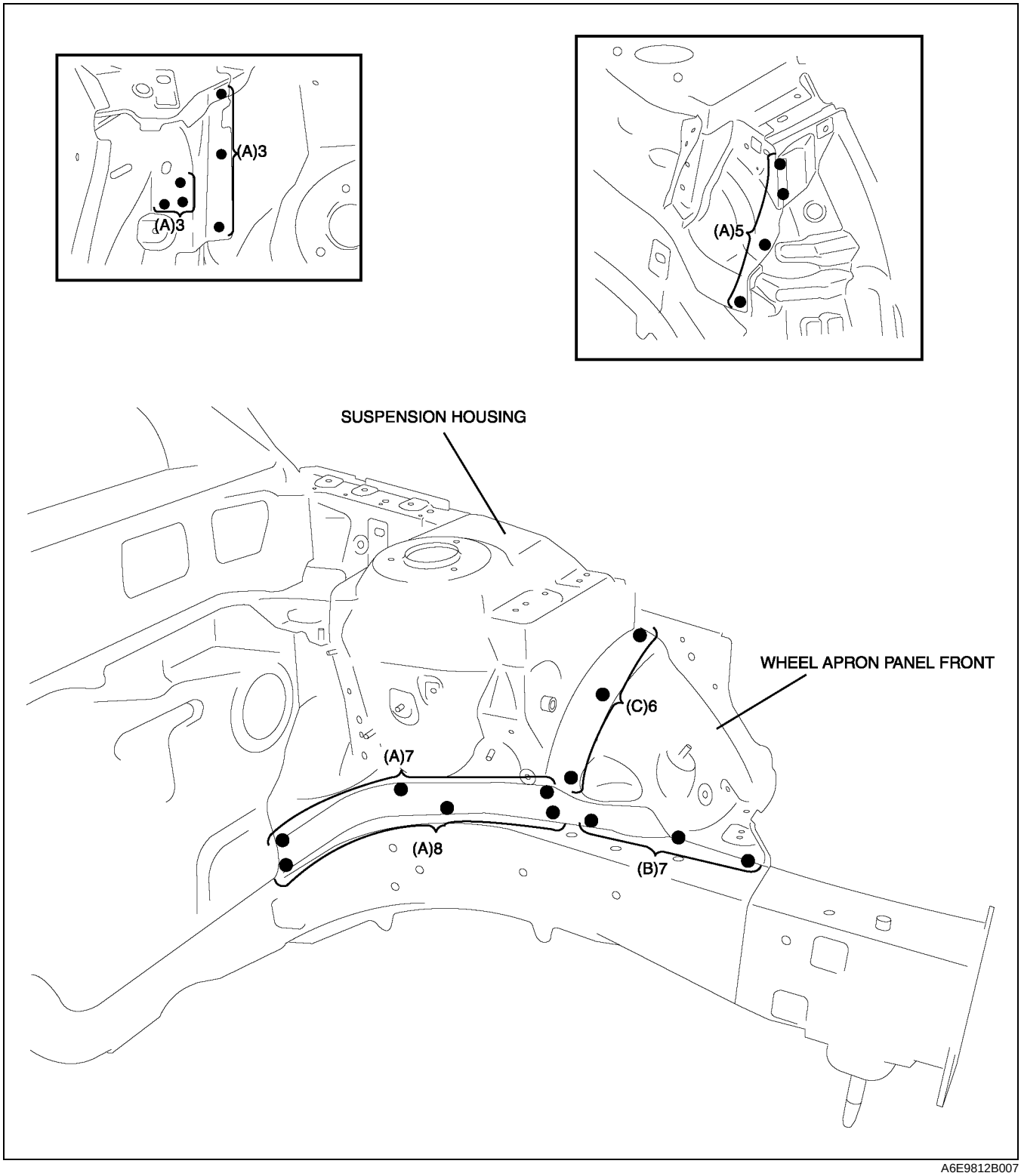
WHEEL APRON PANEL ASSEMBLY REMOVAL

A6E981253210B01

1. Drill the 26 weld locations indicated by (A), and 7 weld locations indicated by (B), remove the wheel apron panel assembly.

Note

- If removing the wheel apron panel front and the suspension housing separately as separate parts, drill 7 locations indicated by (B) and drill 6 locations indicated by (C).



A6E9812B007

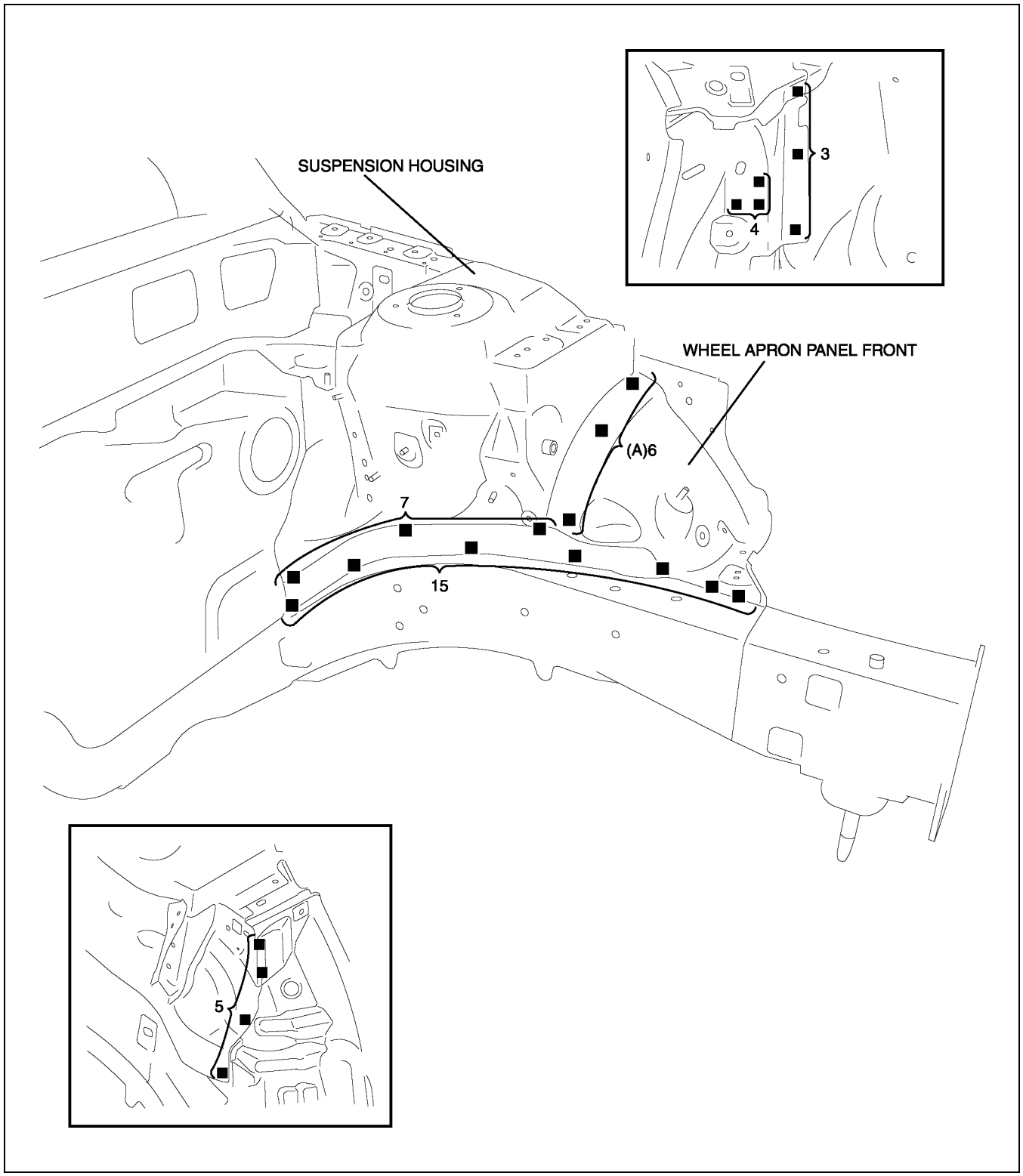
WHEEL APRON PANEL ASSEMBLY INSTALLATION

A6E981253210B02

1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.

Note

- When replacing the wheel apron panel front and the suspension housing separately, weld 6 locations indicated by (A).

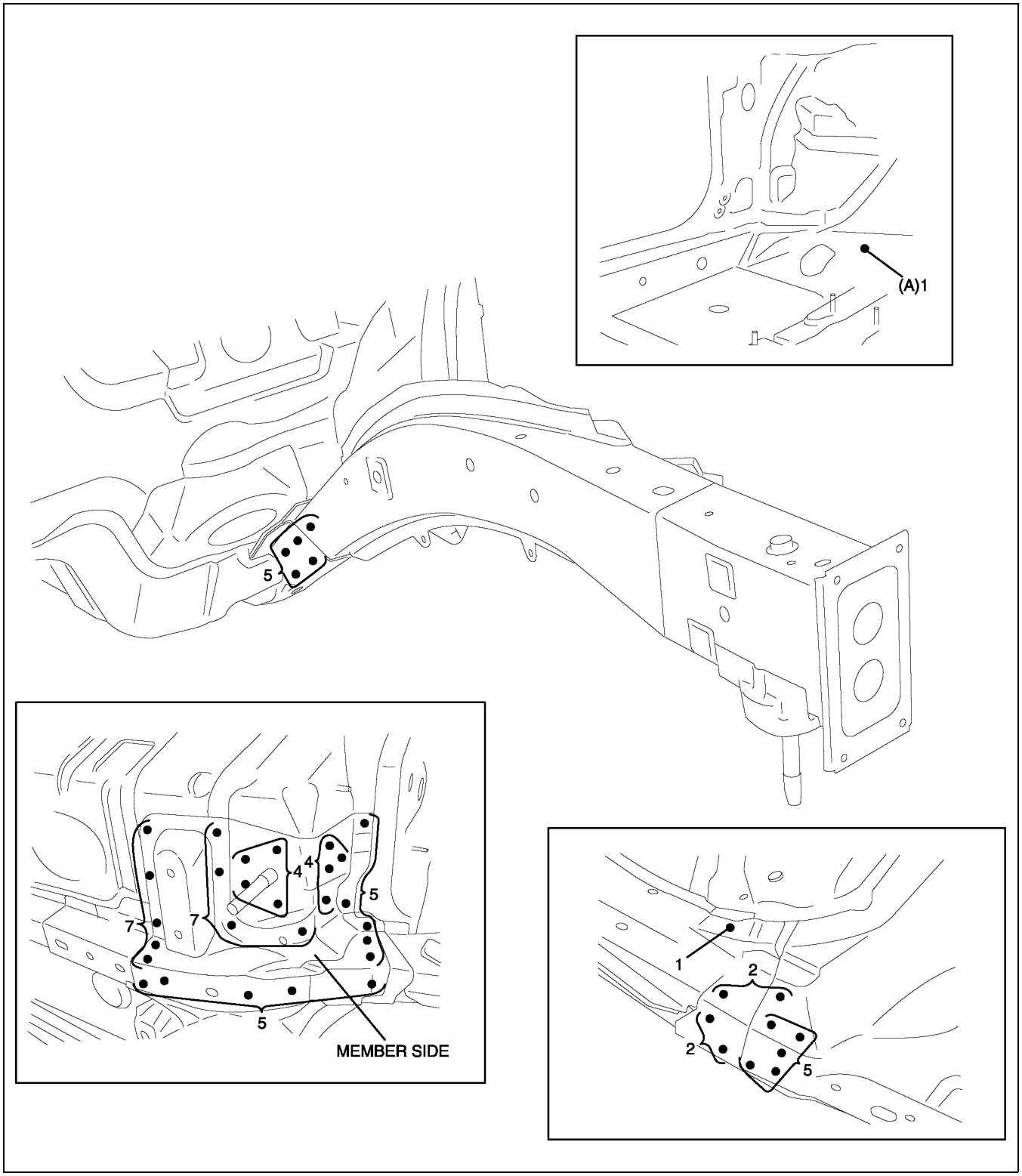


A6E9812B008

FRONT SIDE FRAME REMOVAL

A6E981253300B01

1. Remove the member side.
2. Drill the 1 weld locations indicated by (A), from the room side.
3. Drill the remaining weld locations and remove the front side frame by pulling it.

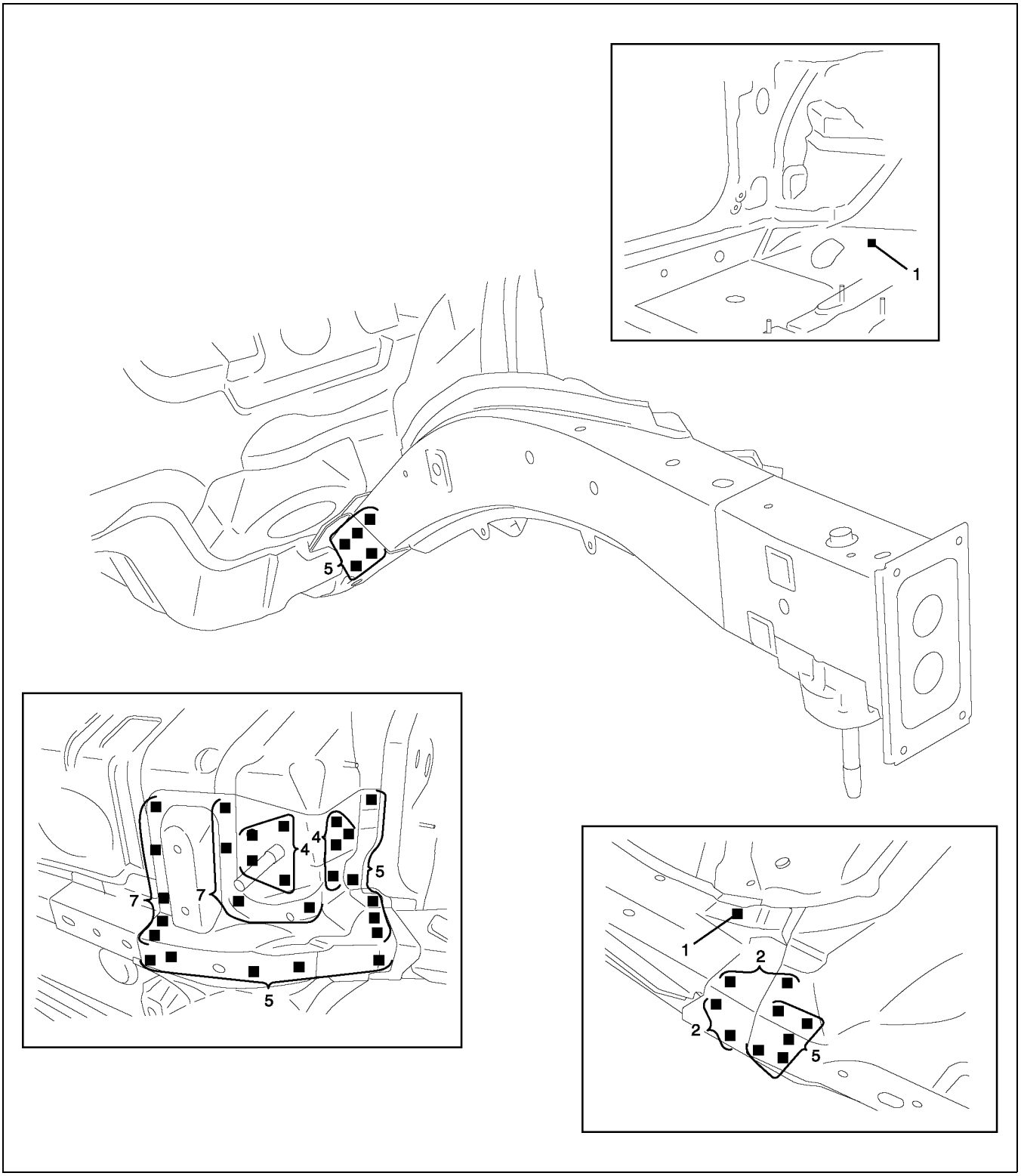


A6E9812B009

FRONT SIDE FRAME INSTALLATION

A6E981253300B02

1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B010

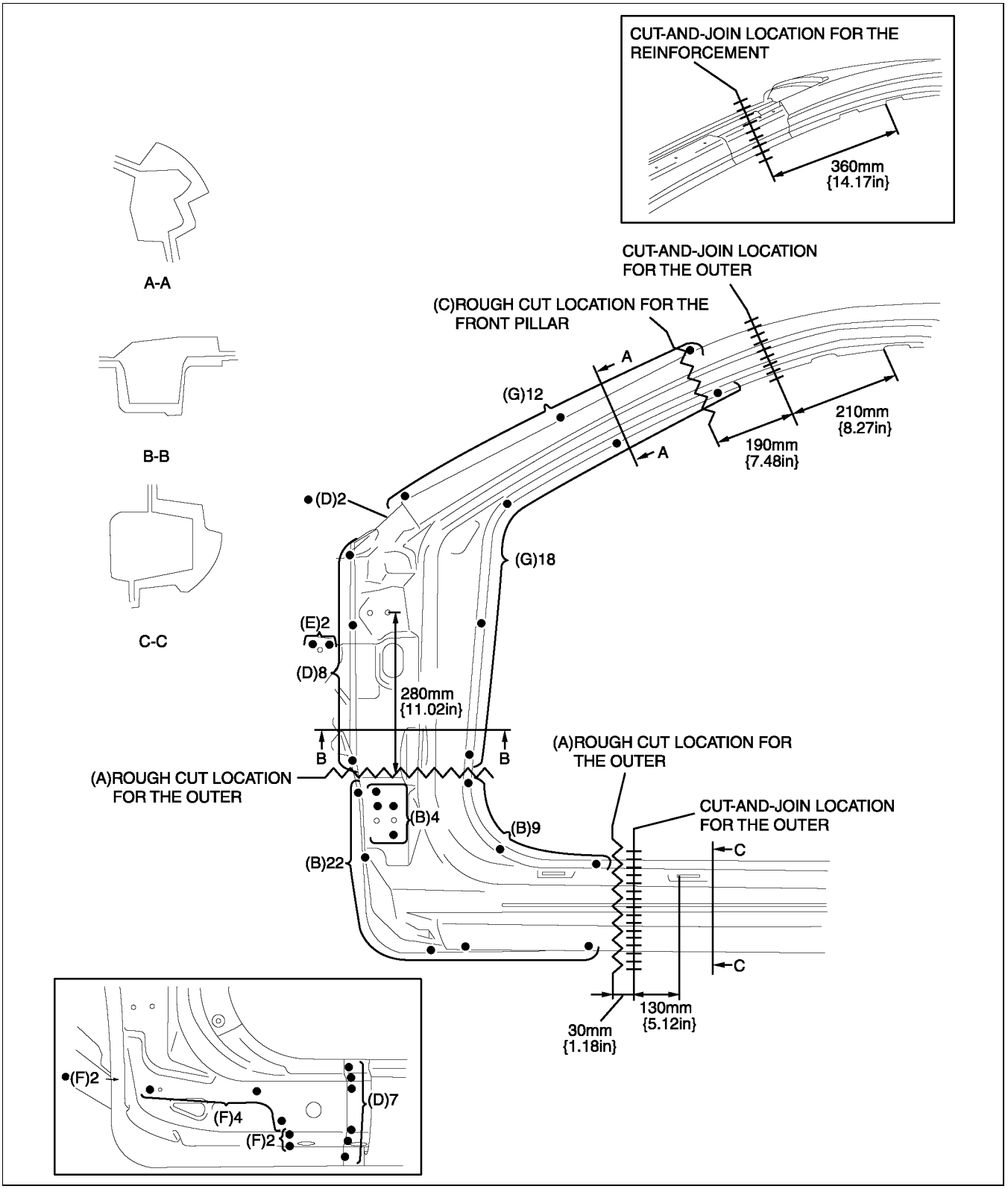
FRONT PILLAR REMOVAL

A6E981274090B01

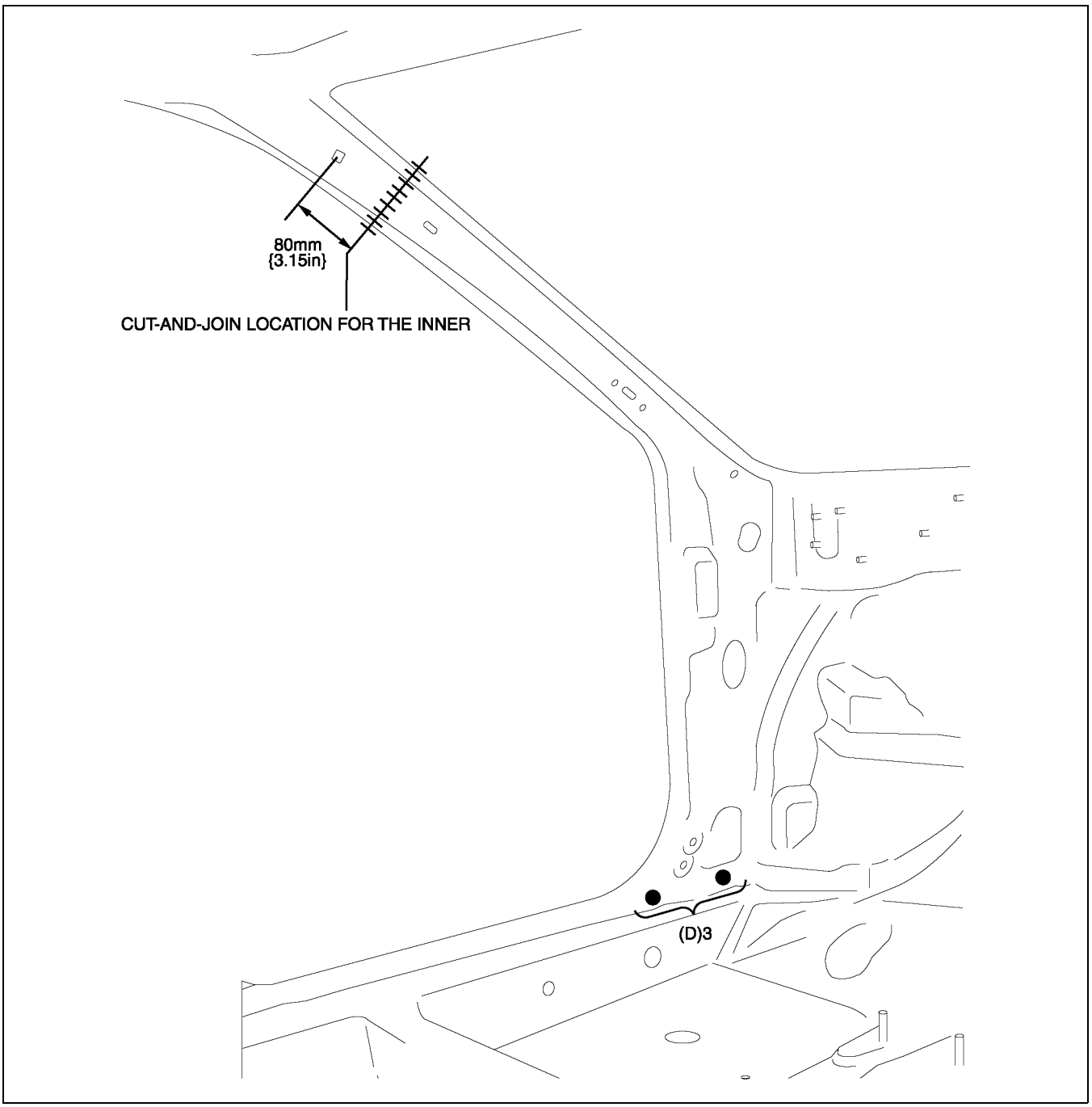
1. Rough cut area (A), drill the 35 weld locations indicated by (B), then remove the lower part of the front pillar outer.
2. Rough cut area (C), drill the 20 weld locations indicated by (D), and 2 weld locations indicated by (E), then remove the front pillar.

Note

- If removing the front pillar reinforcement and the front pillar inner as separate parts, drill 8 locations indicated by (F) and drill 30 locations indicated by (G).



A6E9812B011



A6E9812B012

FRONT PILLAR INSTALLATION

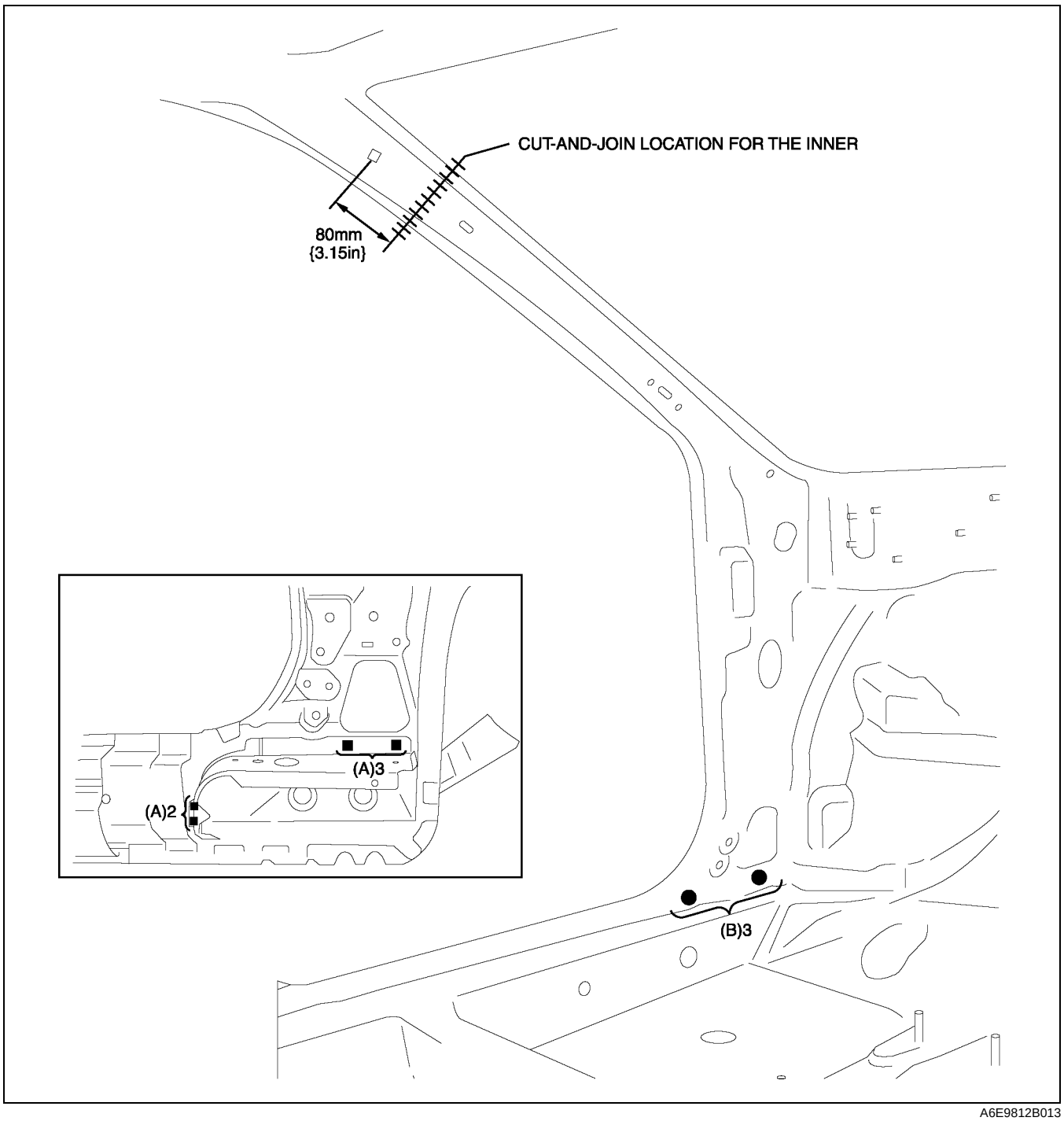
A6E981274090B02

1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. Drill holes for plug welds before installing new parts.

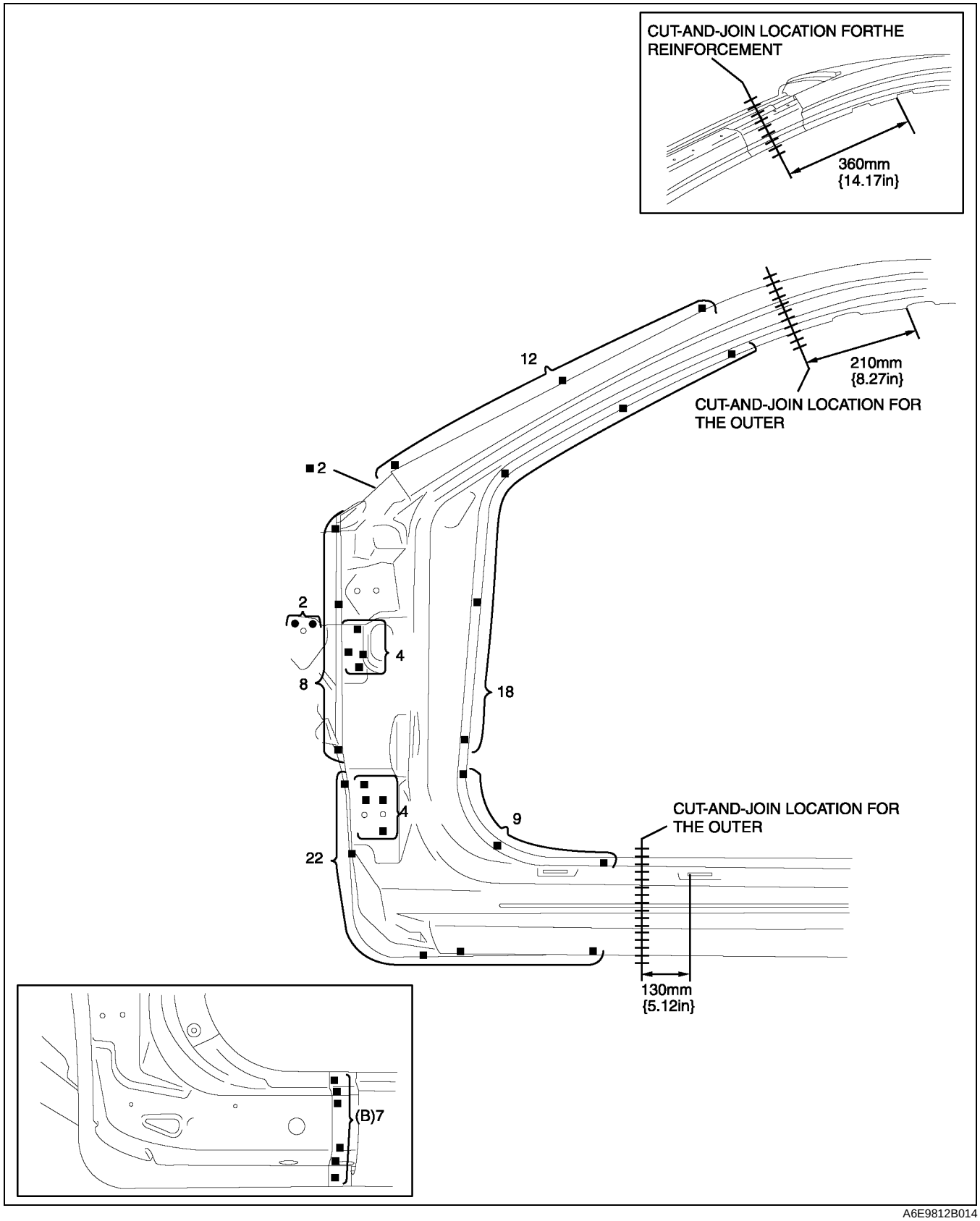
Note

- In areas where the outer, reinforcement, inner, etc. are in 3-4 layers, drill holes for plug welds in all but the innermost panel.

3. Weld in 5 locations indicated by (A), then trial-fit the inner and reinforcement.
4. Weld in 10 locations indicated by (B), then install the inner and reinforcement to the existing parts.
5. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B013

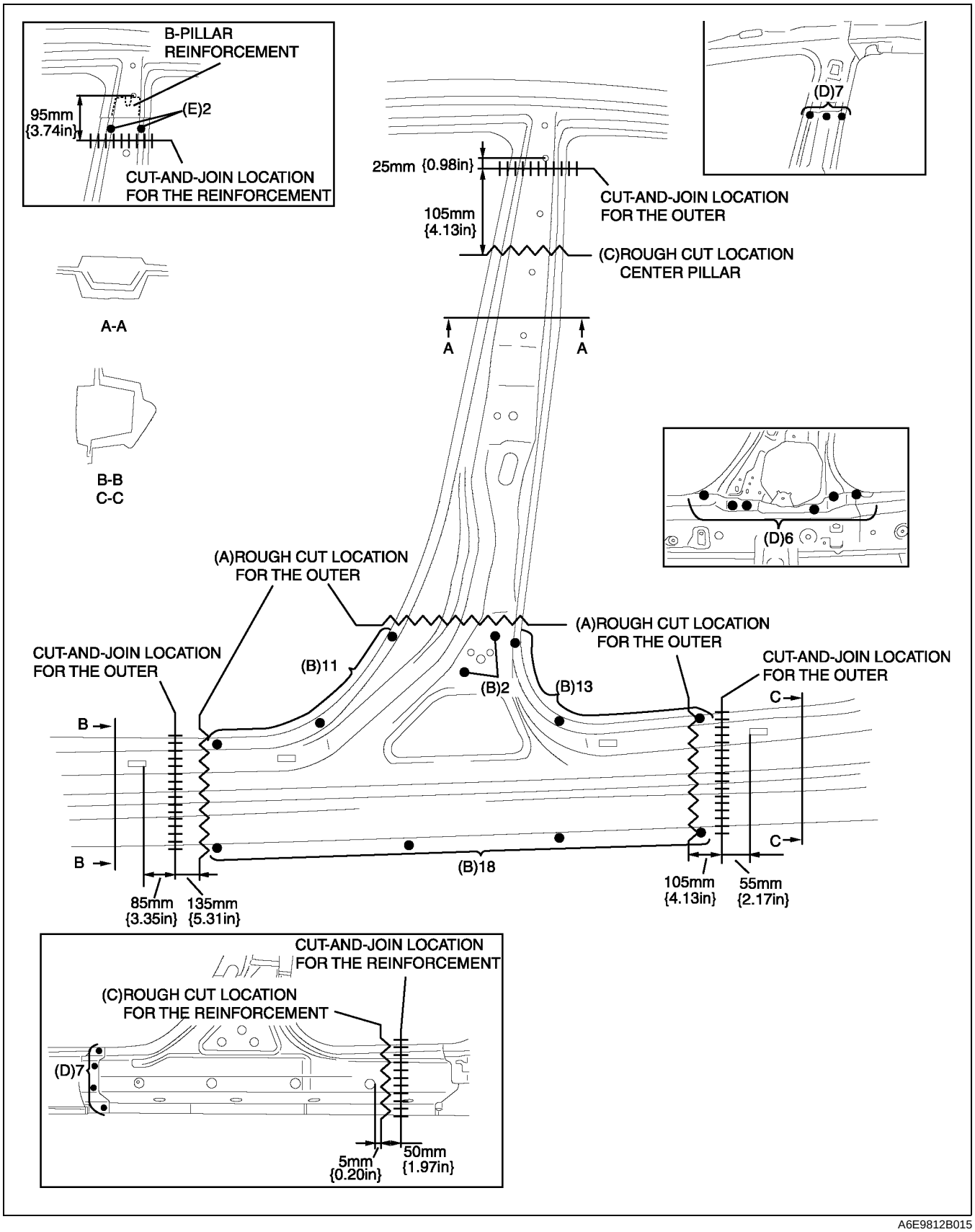


A6E9812B014

CENTER PILLAR REMOVAL

A6E981270350B01

1. Rough cut area (A), drill the 44 weld locations indicated by (B), then remove the lower part of the center pillar outer.
2. Rough cut area (C), drill the 20 weld locations indicated by (D), then remove the center pillar outer.
3. Drill the 2 weld locations indicated by (E) and remove the B-pillar reinforcement.



A6E9812B015

CENTER PILLAR INSTALLATION

A6E981270350B02

1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. Drill holes for plug welds before installing new parts.

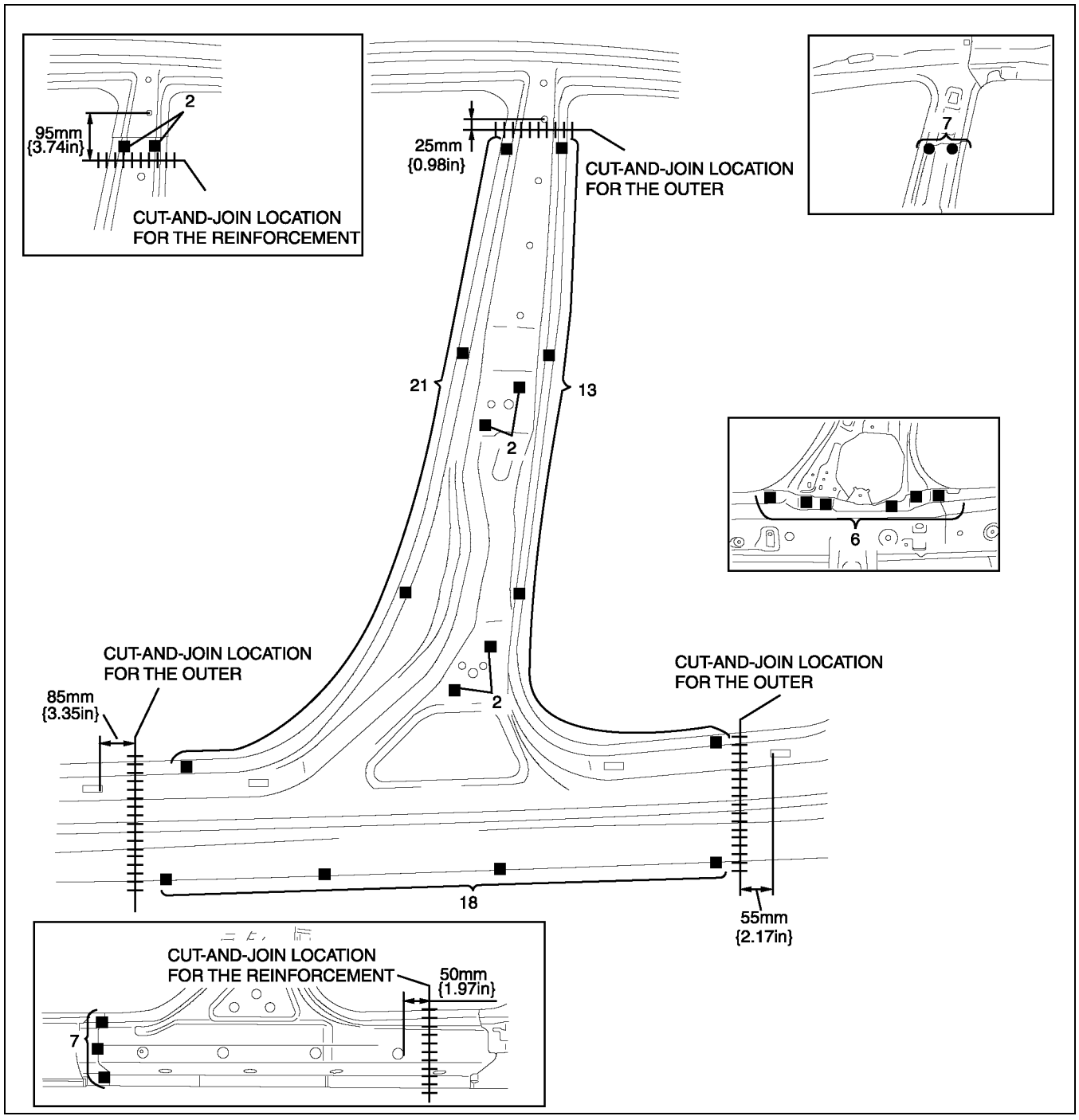
Note

- In areas where the outer, reinforcement, inner, etc. are in 3-4 layers, drill holes for plug welds in all but the innermost panel.

Warning

- **When cutting and joining the reinforcement, make sure not to damage or scratch the B-pillar reinforcement.**

3. Install in the following order: inner, reinforcement, and outer.
4. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B016

REAR FENDER PANEL REMOVAL

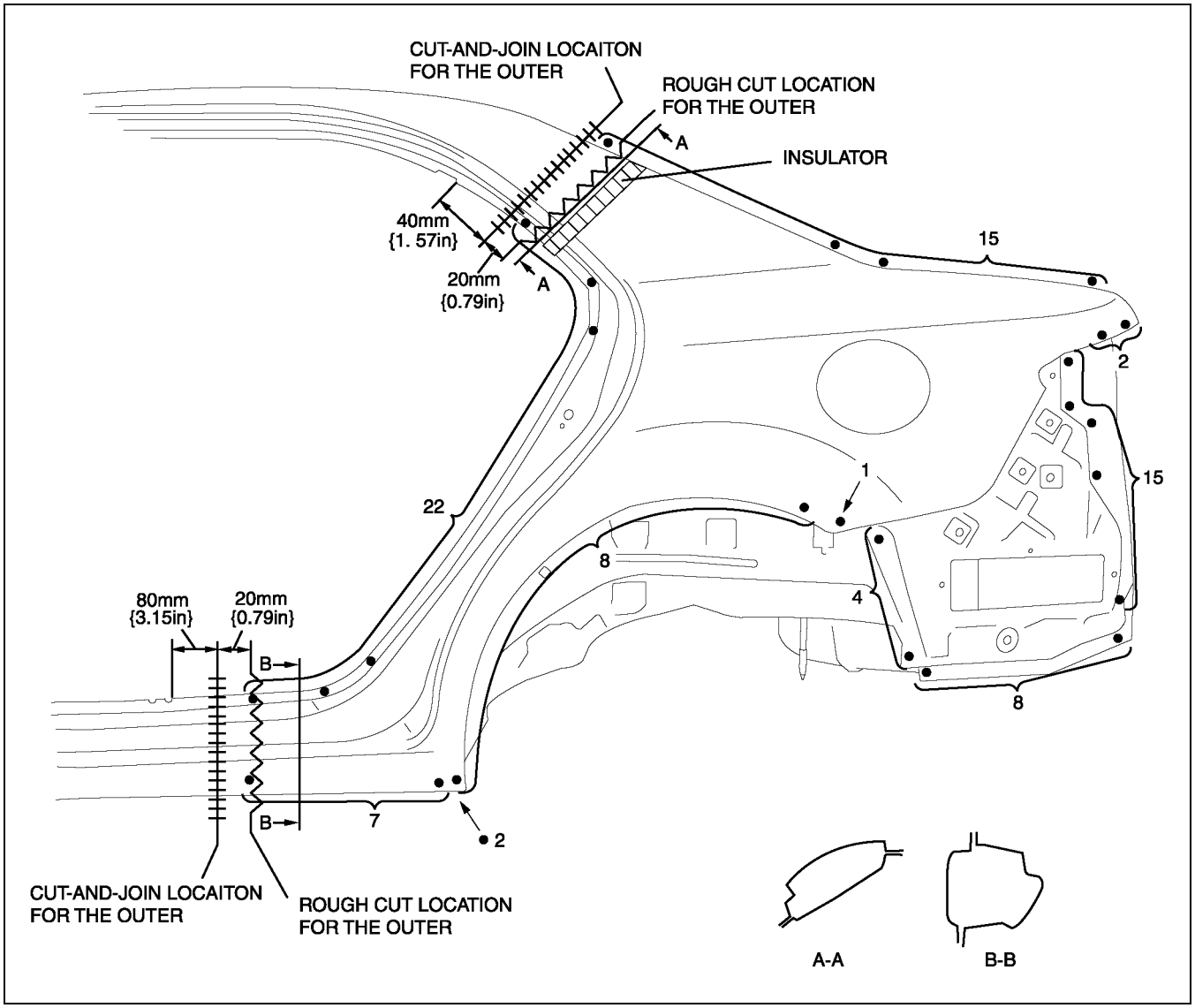
A6E981274100B01

SEDAN

Caution

- **Avoid cutting with a blowtorch or similar tools as the insulator (shaded area) is flammable.**

1. The rear fender panel and the rear pillar inner are joined with glue at the wheel arch line. Use a chisel or other to separate the rear fender panel from the rear pillar inner, then remove the rear fender panel.

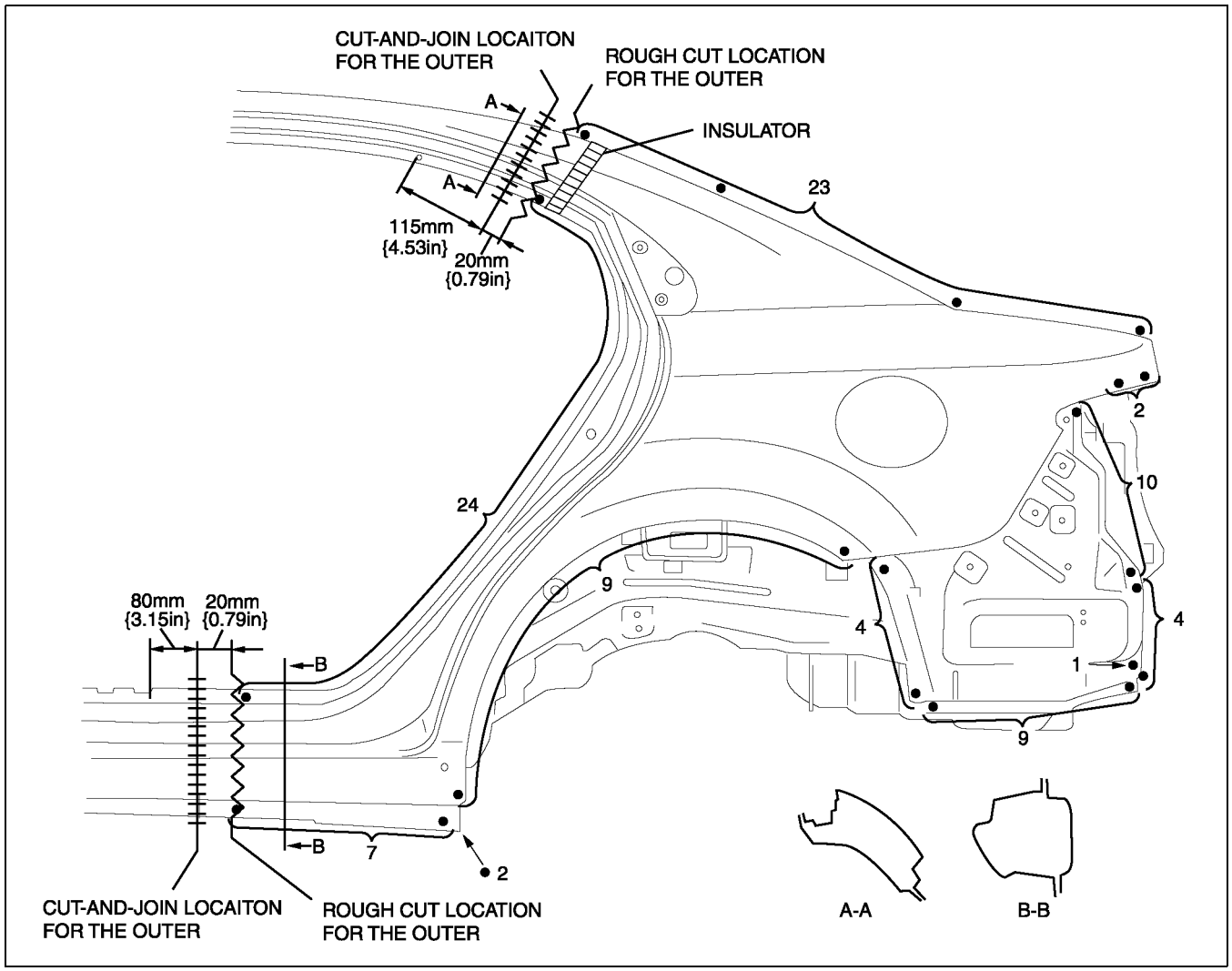


A6E9812B017

5HB

Caution
- **Avoid cutting with a blowtorch or similar tools as the insulator (shaded area) is flammable.**

1. The rear fender panel and the rear pillar inner are joined with glue at the wheel arch line. Use a chisel or other to separate the rear fender panel from the rear pillar inner, then remove the rear fender panel.



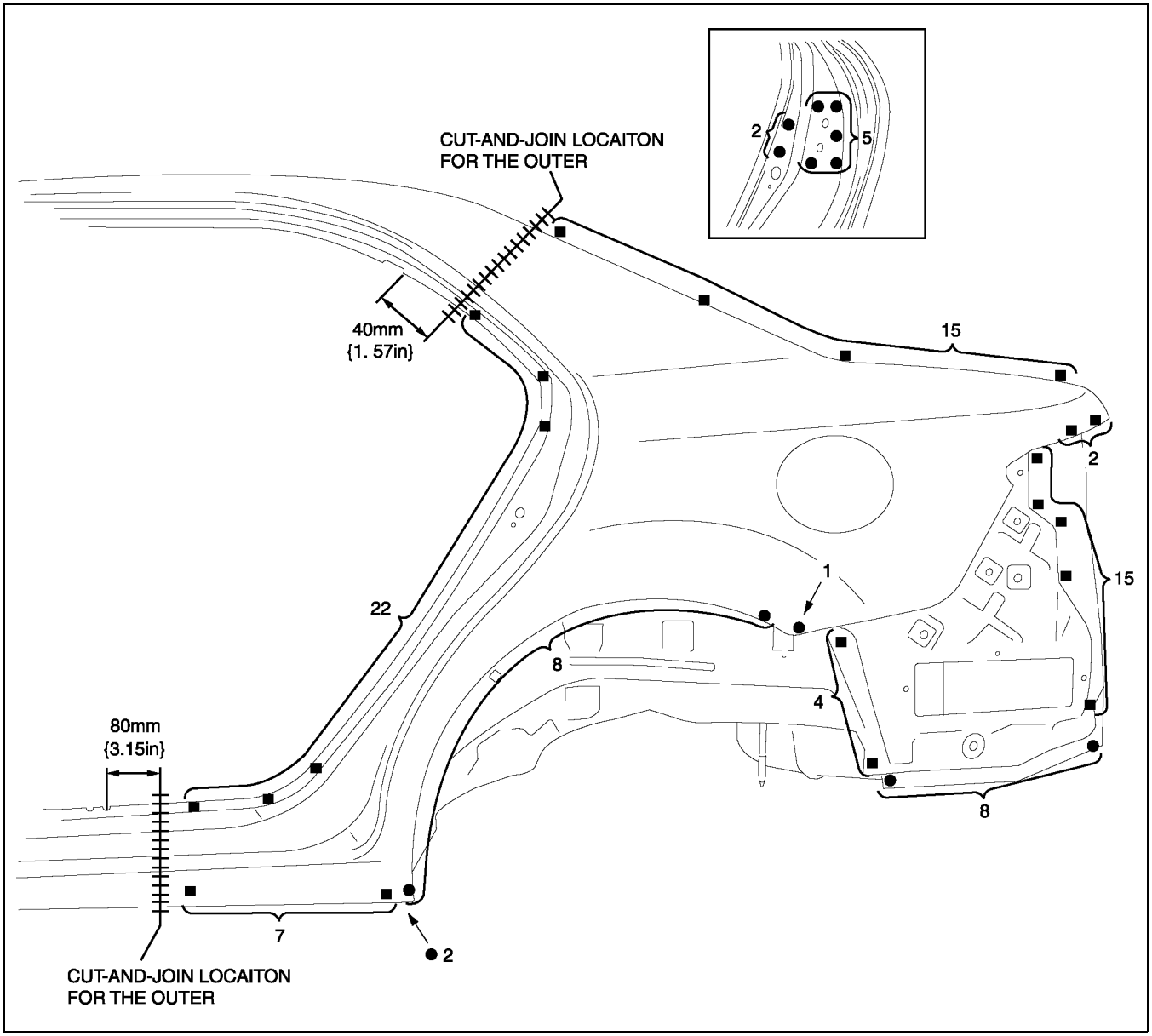
A6E9812B018

REAR FENDER PANEL INSTALLATION

A6E981274100B02

SEDAN

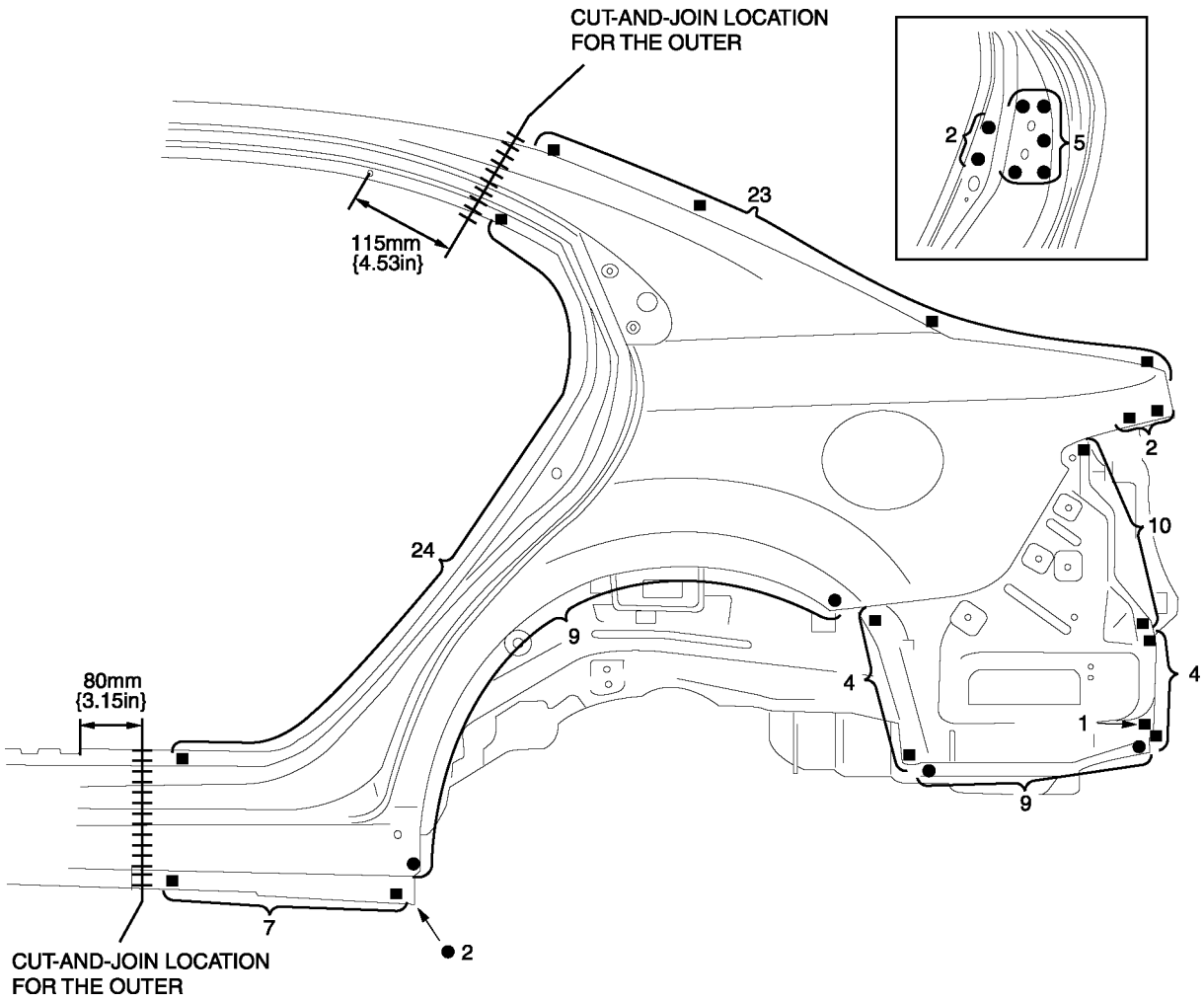
1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. Drill holes for plug welds before installing new parts.
3. Before installing new parts, apply spot weld sealer to the wheel arch line.
4. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B019

5HB

1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. Drill holes for plug welds before installing new parts.
3. Before installing new parts, apply spot weld sealer to the wheel arch line.
4. After trial-fitting new parts, make sure the related parts fit properly.

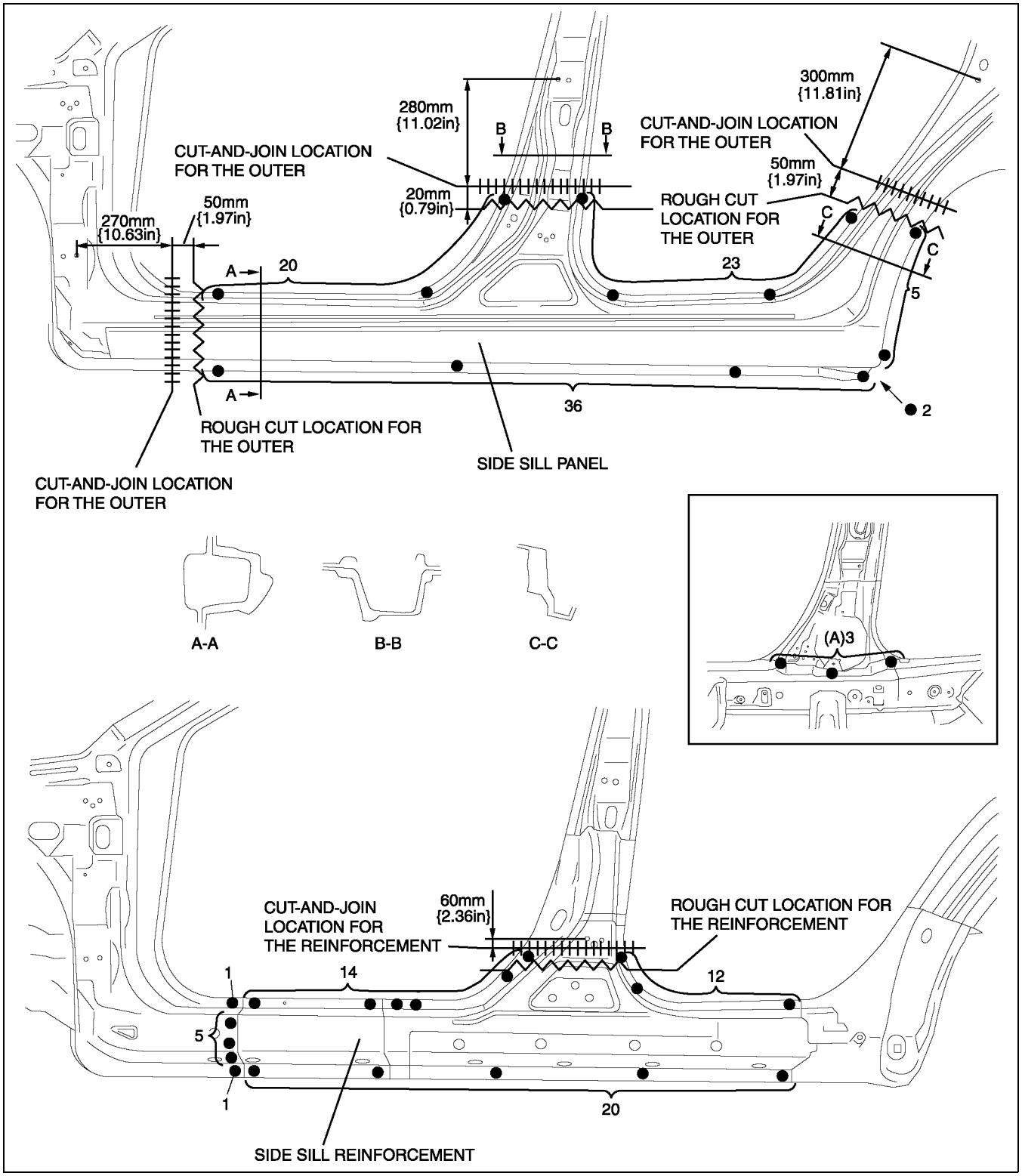


A6E9812B020

SIDE SILL PANEL REMOVAL

A6E981270270B01

1. Remove the side sill panel.
2. Drill the 3 weld locations indicated by (A), from the room side.
3. Remove the side sill reinforcement.

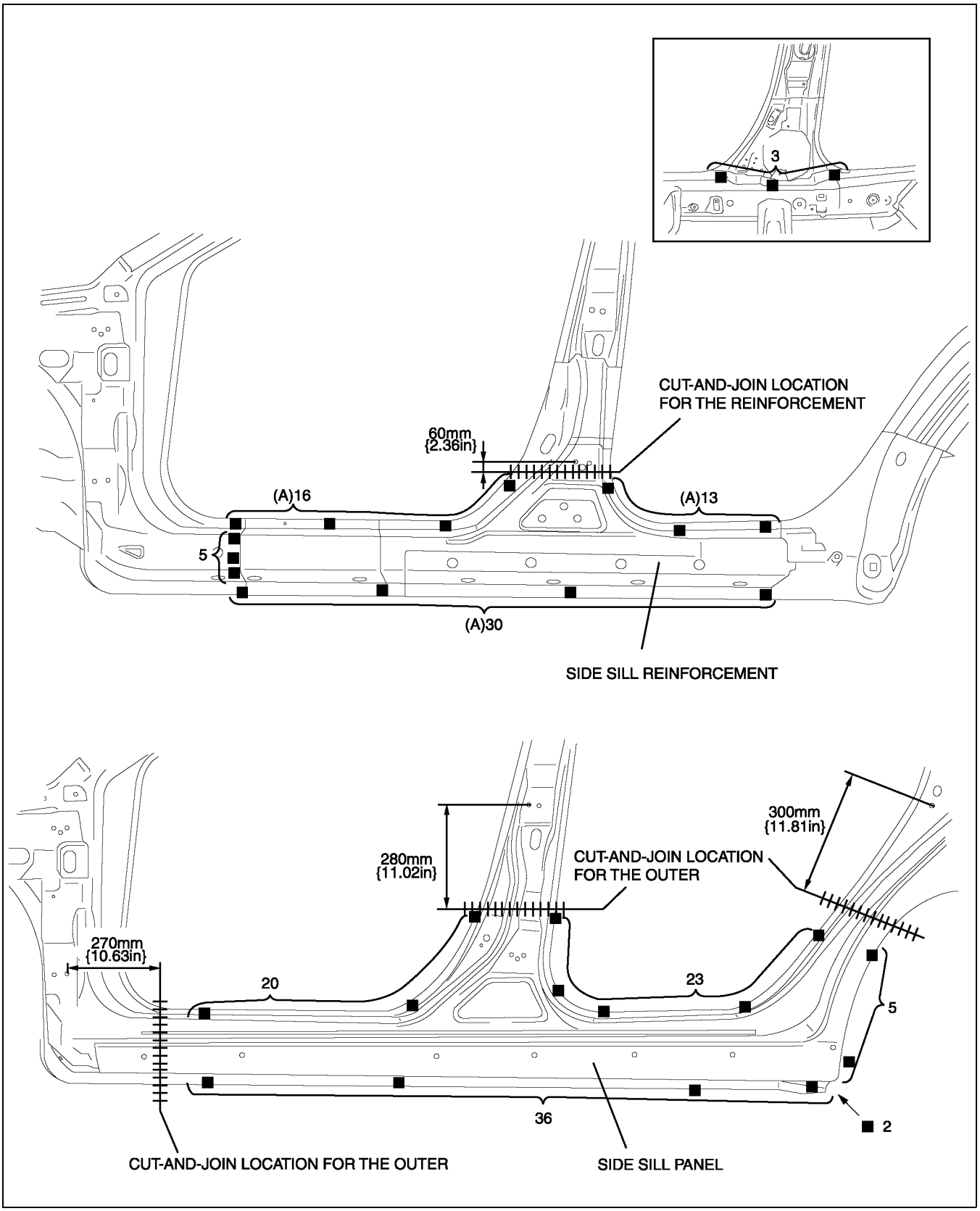


A6E9812B021

SIDE SILL PANEL INSTALLATION

A6E981270270B02

1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. Drill holes for plug welds before installing new parts.
3. Plug welding of 59 weld locations indicated by (A), during installation of the side sill panel.
4. After trial-fitting new parts, make sure the related parts fit properly.



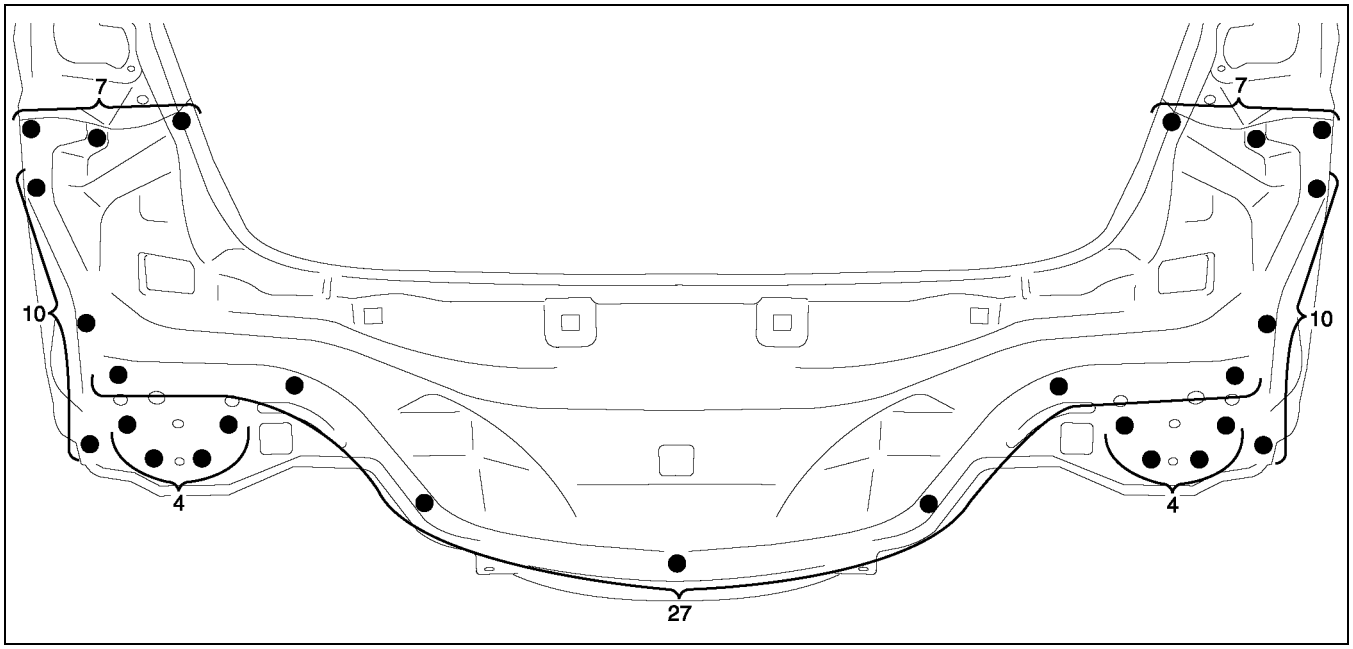
A6E9812B022

REAR END PANEL REMOVAL

A6E981270750B01

SEDAN

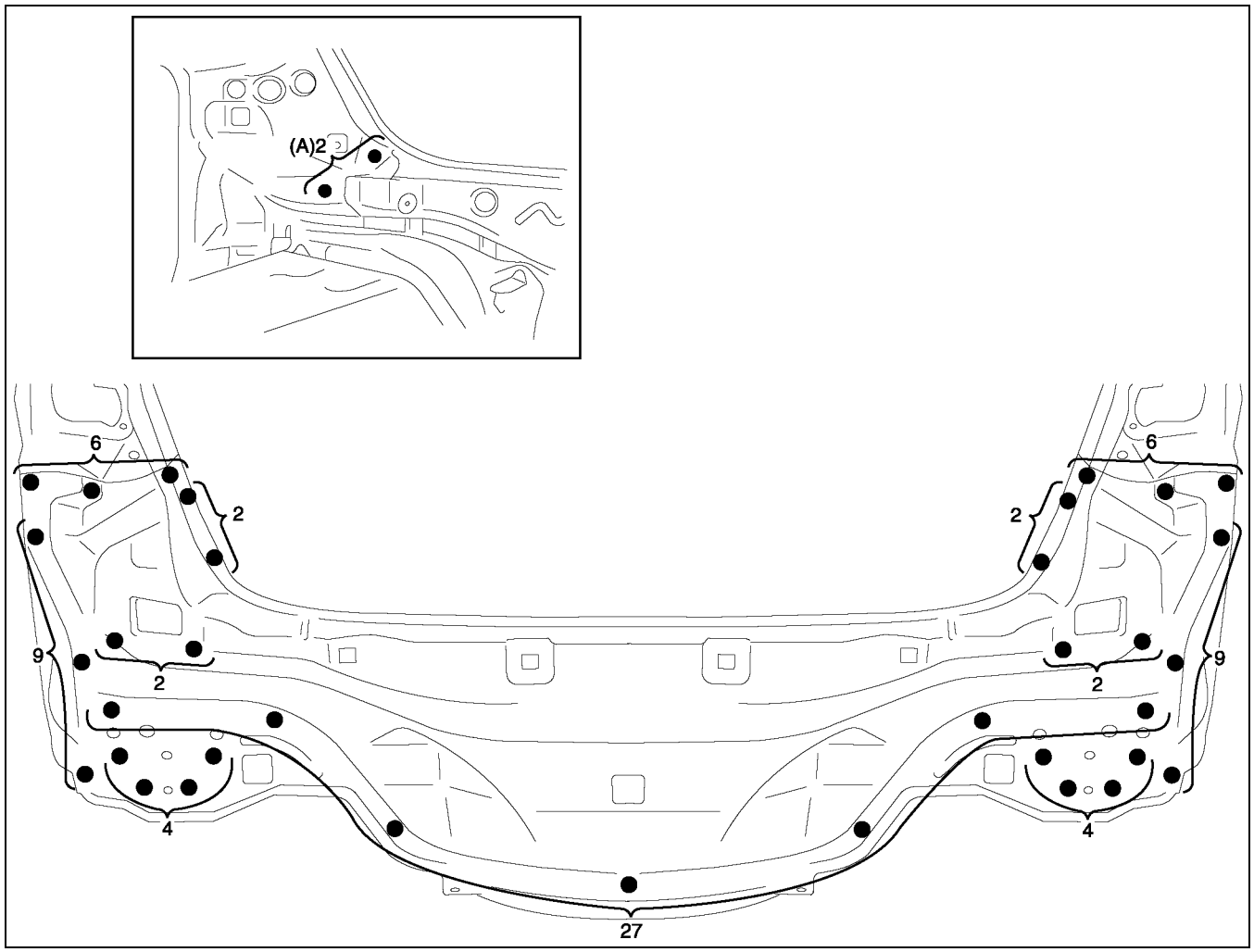
1. Remove the rear end panel.



A6E9812B023

5HB

1. Drill the 2 weld locations indicated by (A), from the room side.
2. Remove the rear end panel.



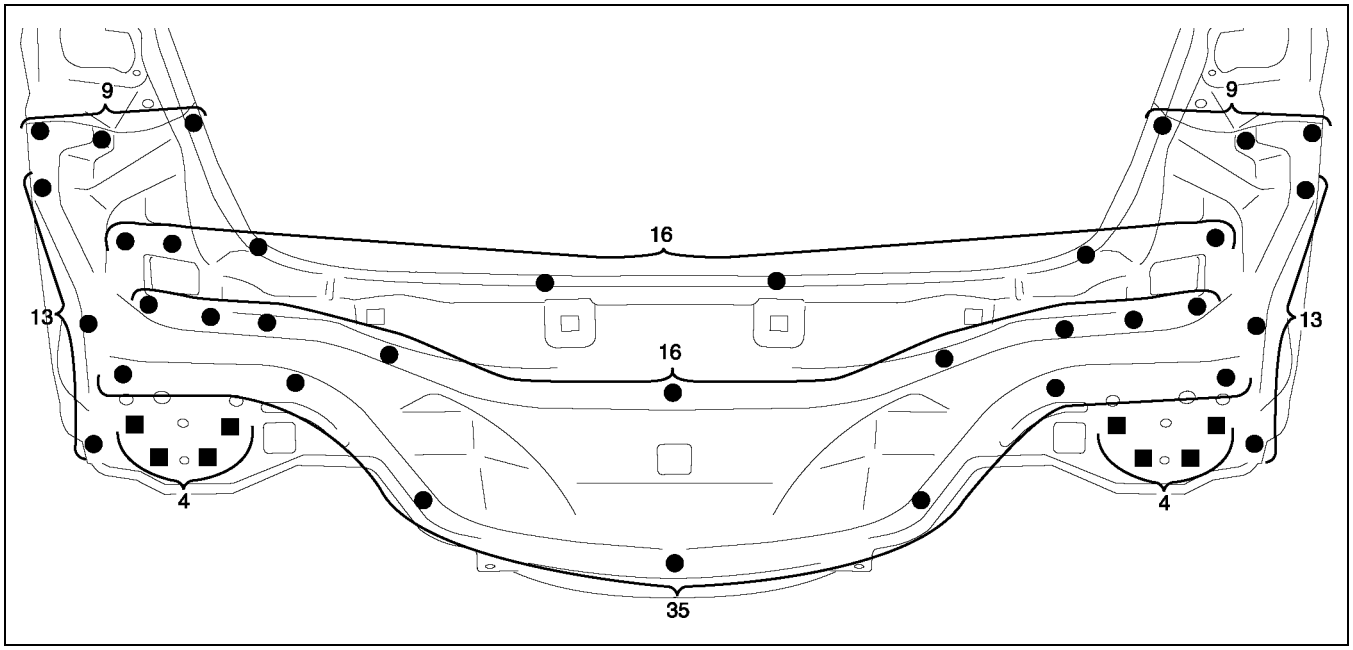
A6E9812B025

REAR END PANEL INSTALLATION

A6E981270750B02

SEDAN

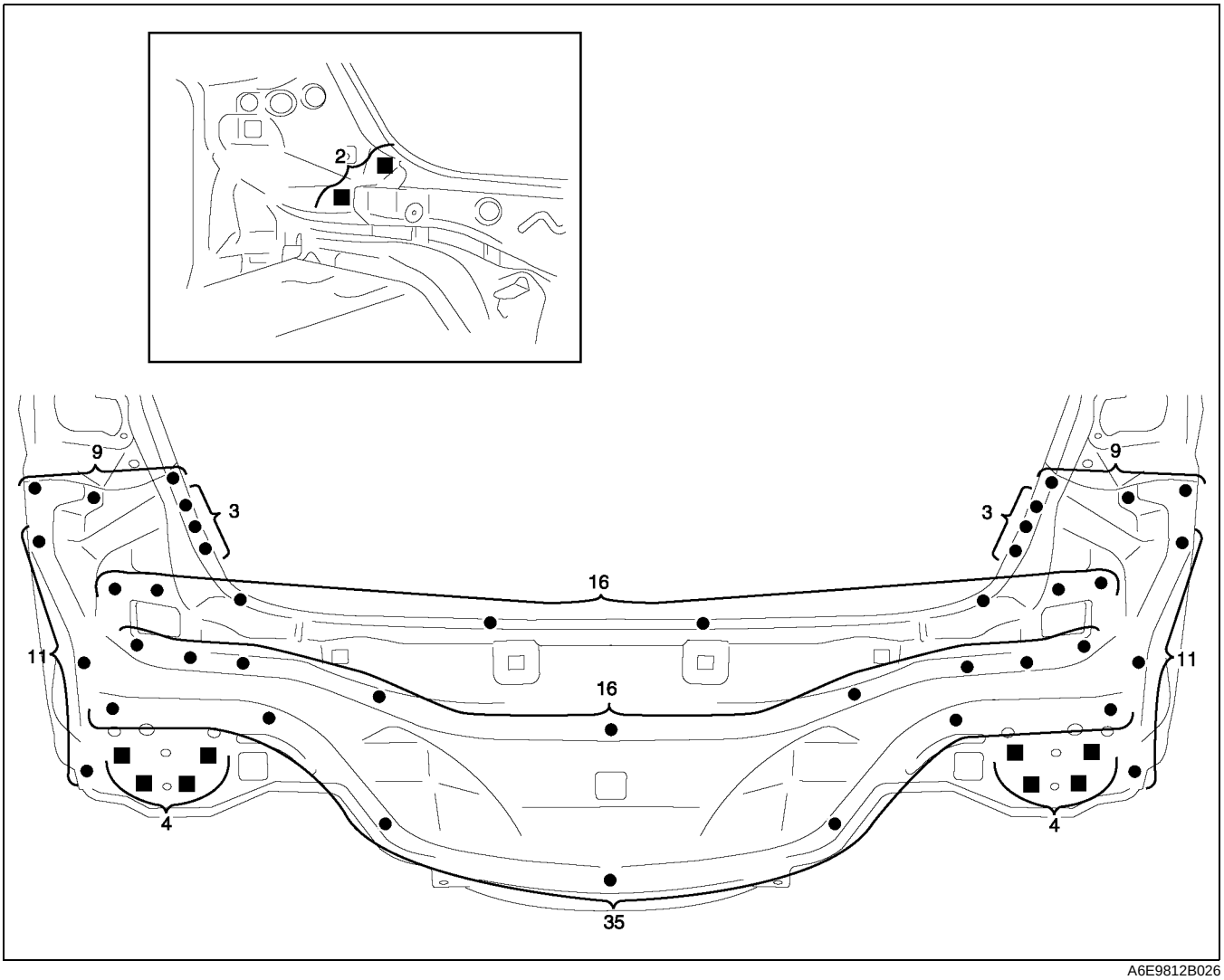
1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B024

5HB

1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B026

REAR FENDER RAIN RAIL AND CORNER PLATE REMOVAL

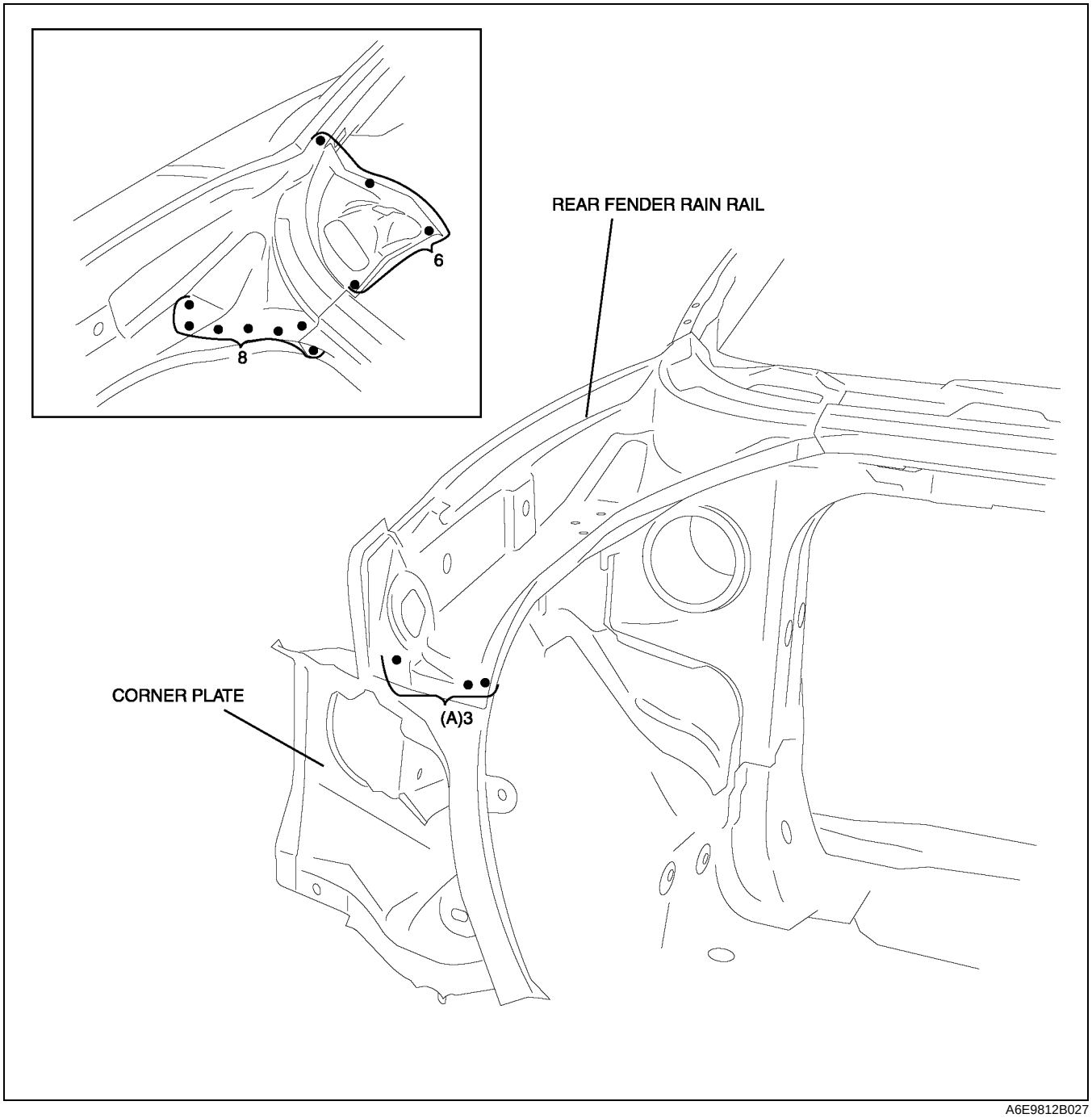
A6E981270440B01

SEDAN

1. Remove the rear fender rein rail and corner plate.

Note

- When removing the rear fender rain rail and the corner plate separately, drill 3 locations indicated by (A).



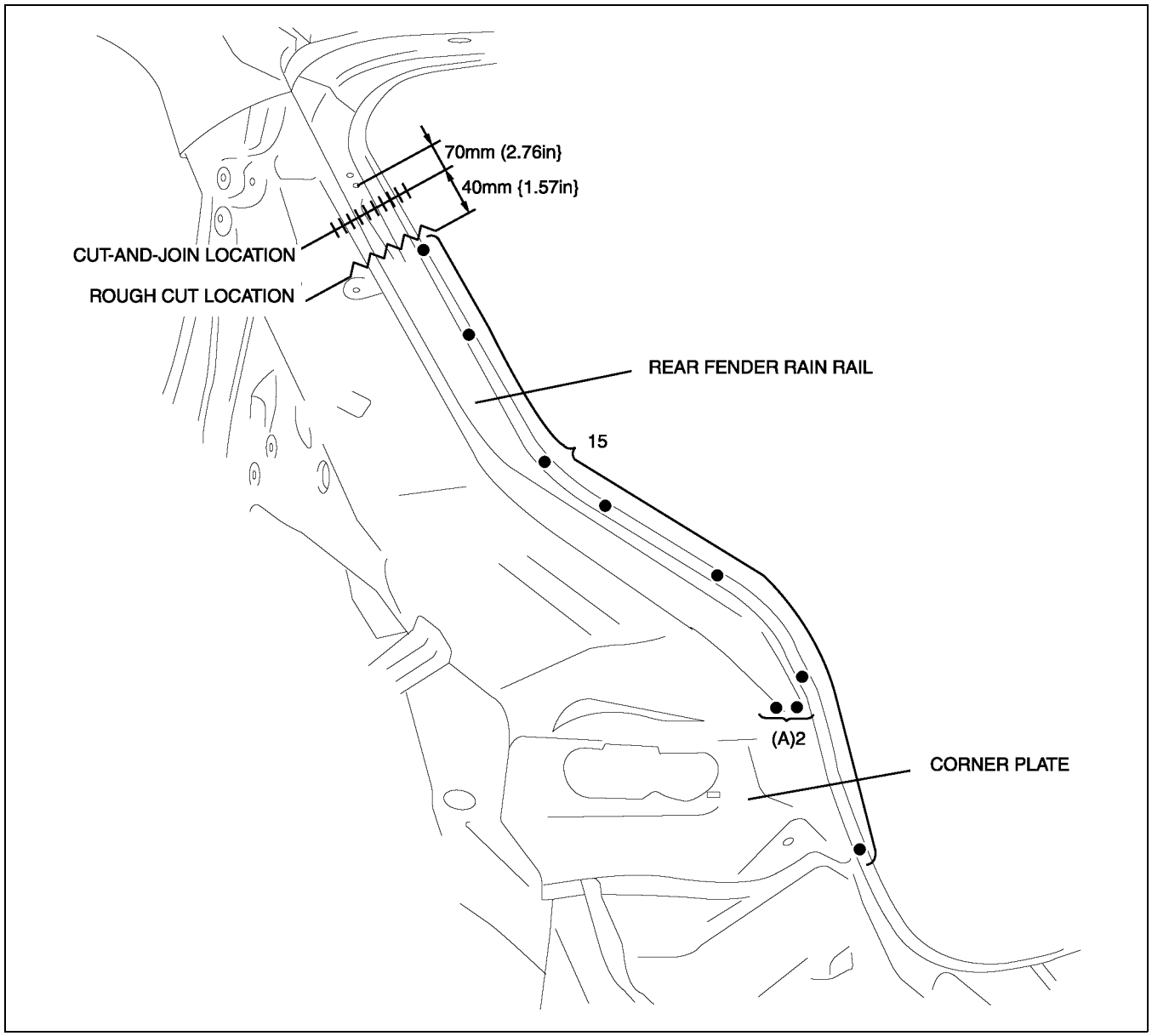
A6E9812B027

5HB

1. Remove the rear fender rain rail and corner plate.

Note

- When removing the rear fender rain rail and the corner plate separately, drill 2 locations indicated by (A).



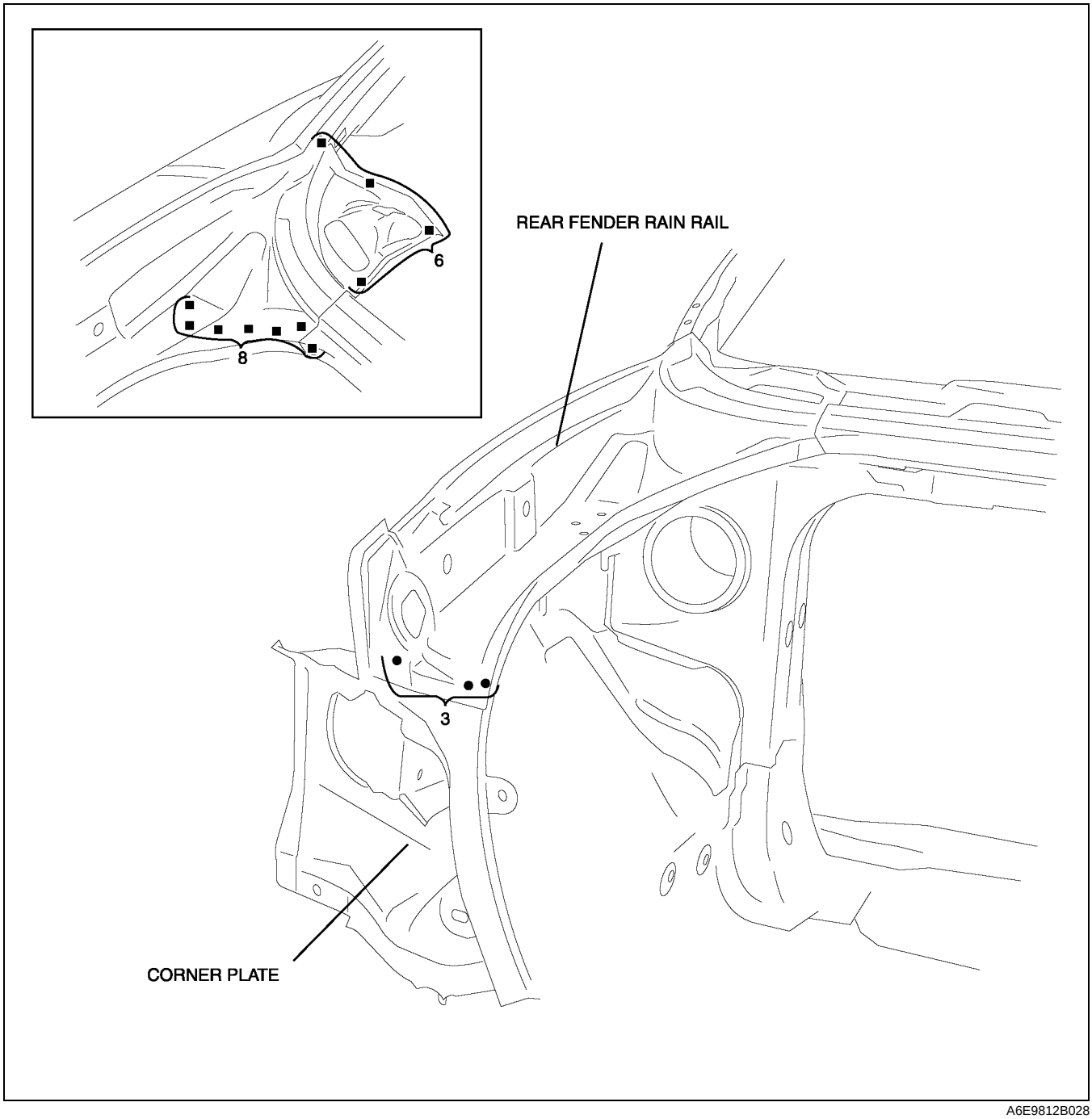
A6E9812B029

REAR FENDER RAIN RAIL AND CORNER PLATE INSTALLATION

A6E981270440B02

SEDAN

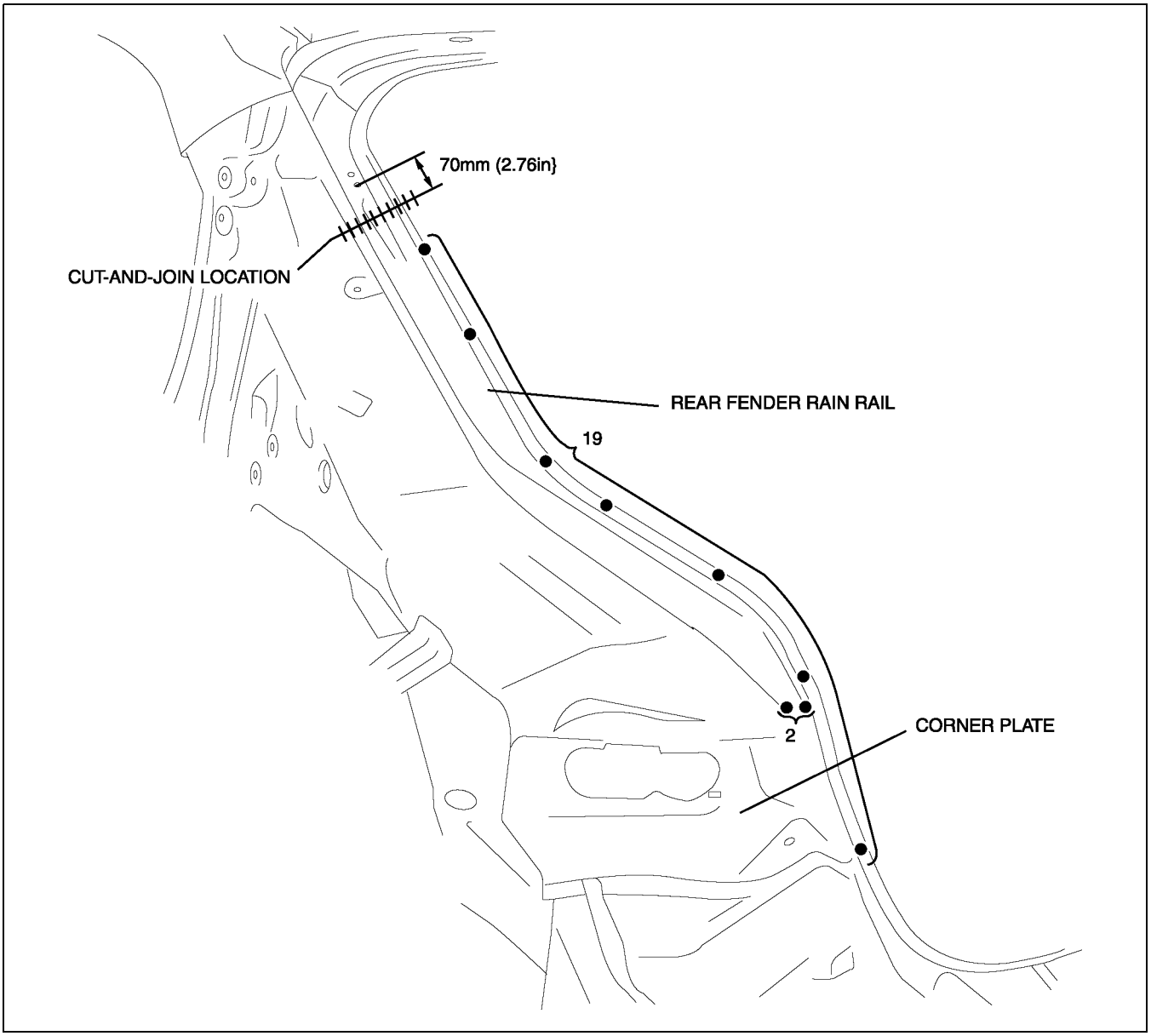
1. When installing new parts, position each part so that the section measurement aligns to the body dimension.
2. Drill holes for plug welds before installing new parts.
3. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B028

5HB

1. When joining the new and old parts, temporarily install and fit the new part in position, measure each dimension according to the body dimension, then adjust the position to align it to the standard dimensions.
2. After trial-fitting new parts, make sure the related parts fit properly.

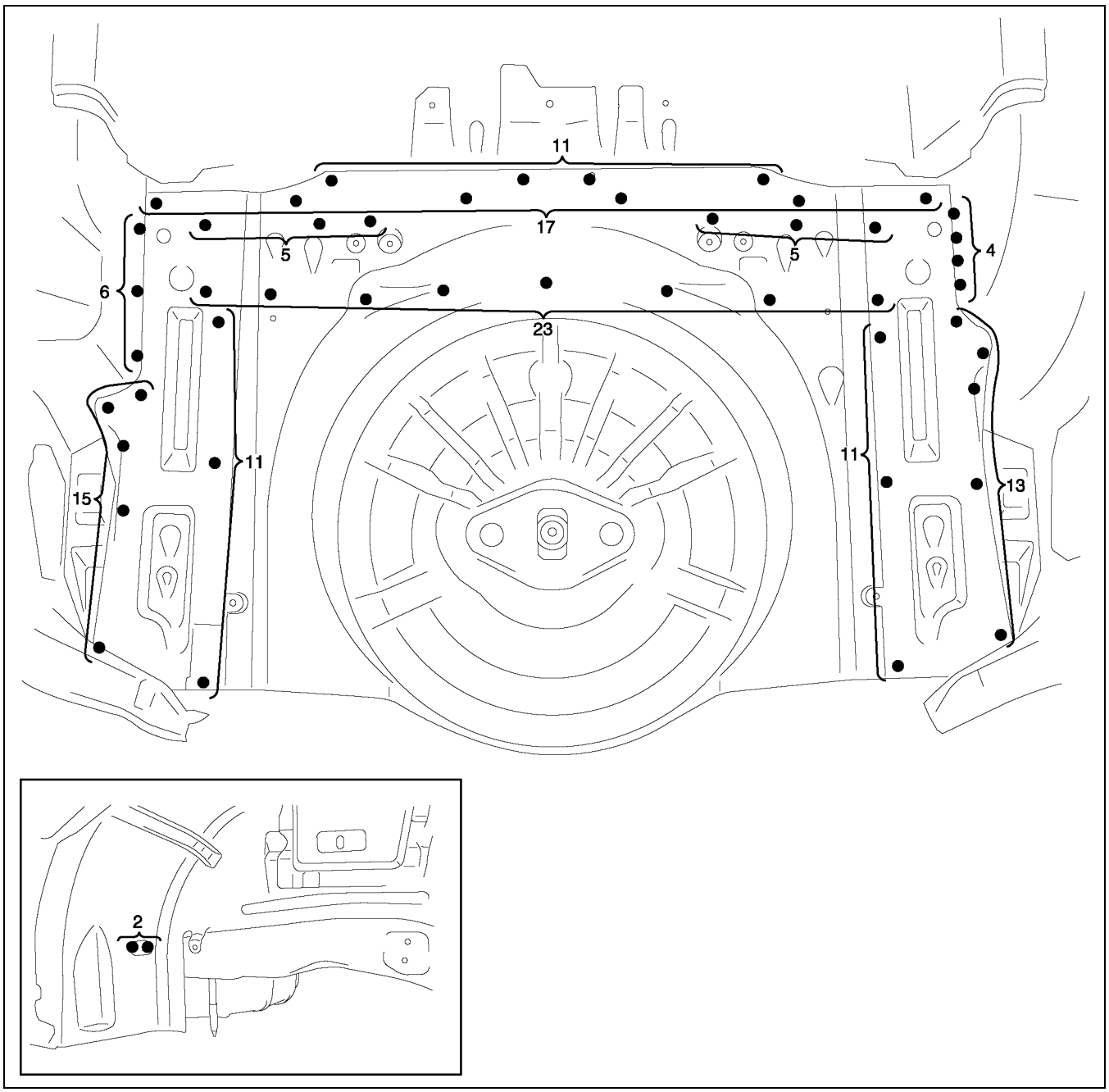


A6E9812B030

REAR FLOOR PAN REMOVAL

A6E981253750B01

1. Remove the rear floor pan.

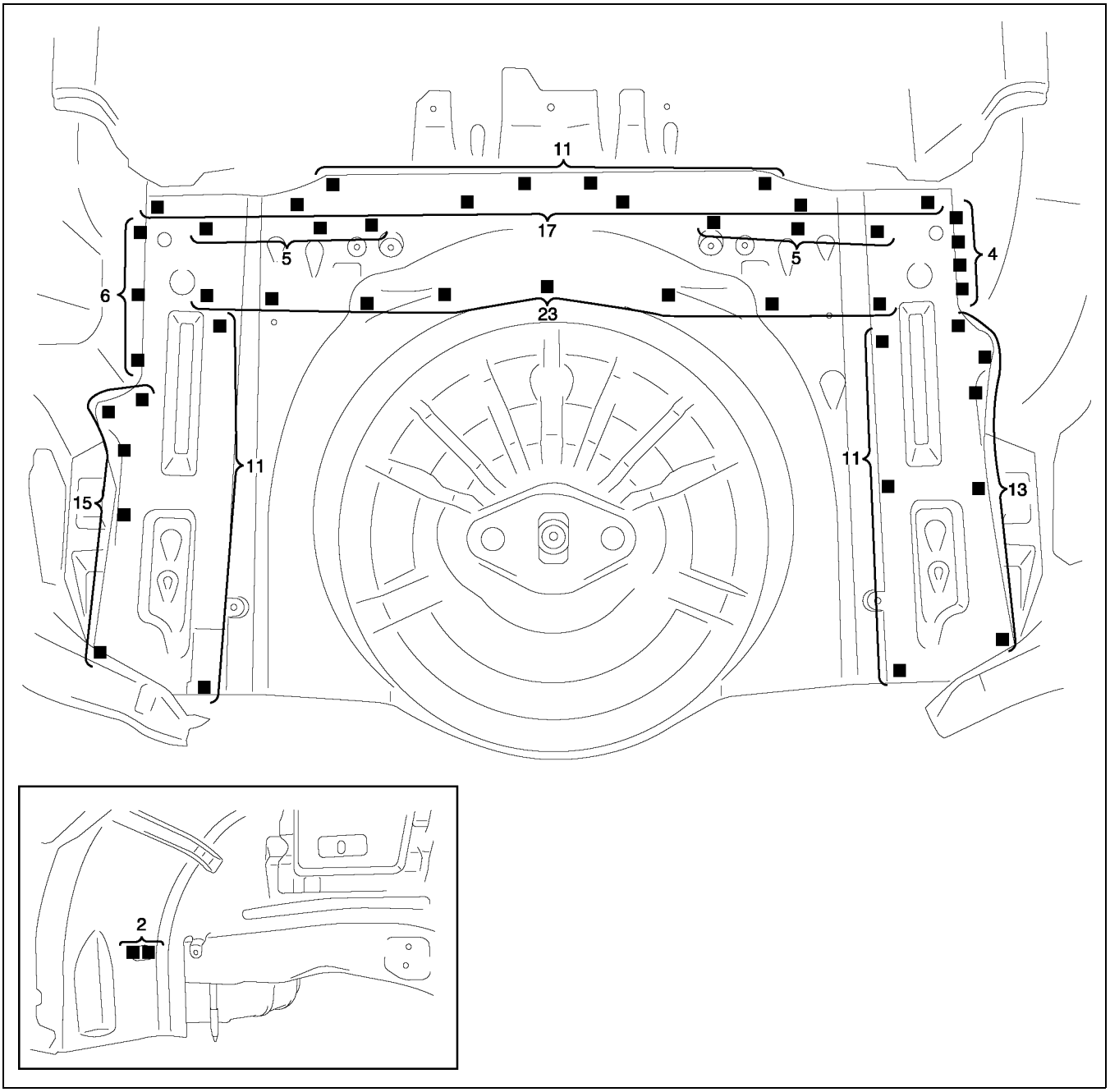


A6E9812B035

REAR FLOOR PAN INSTALLATION

A6E981253750B02

1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.



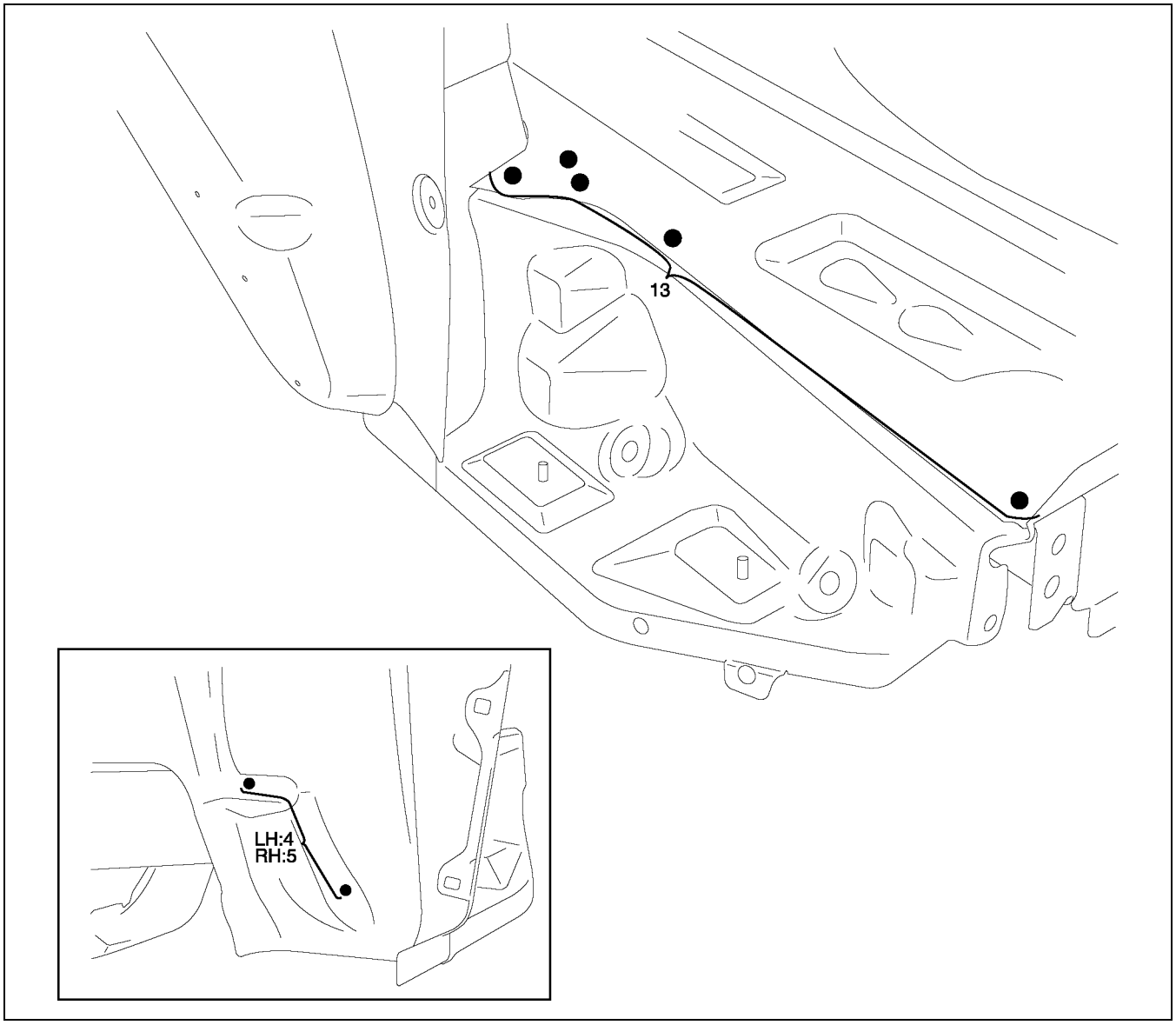
A6E9812B036

FLOOR SIDE PANEL REMOVAL

A6E981253730B01

SEDAN

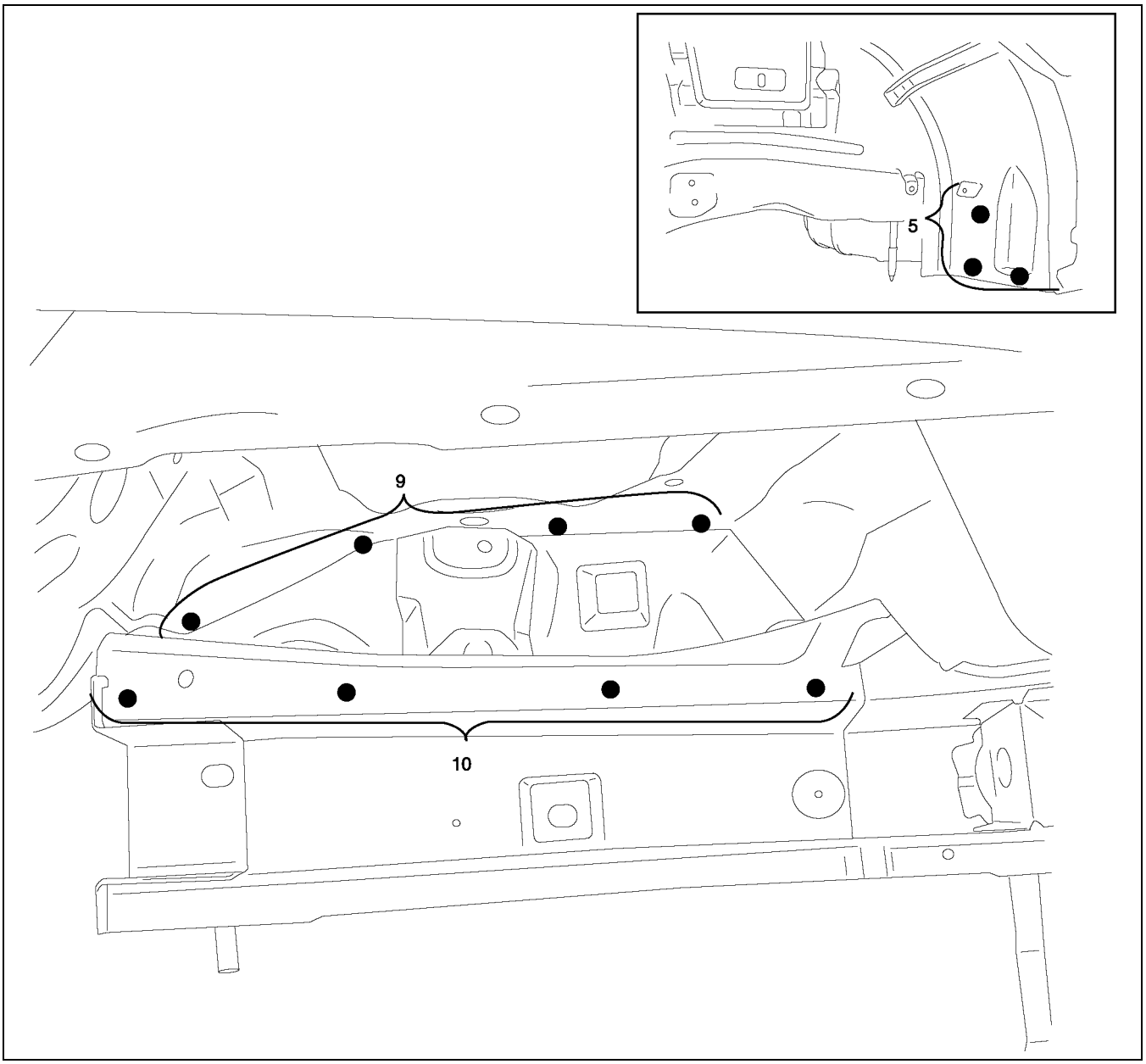
1. Remove the floor side panel.



A6E9812B037

5HB

1. Remove the floor side panel.



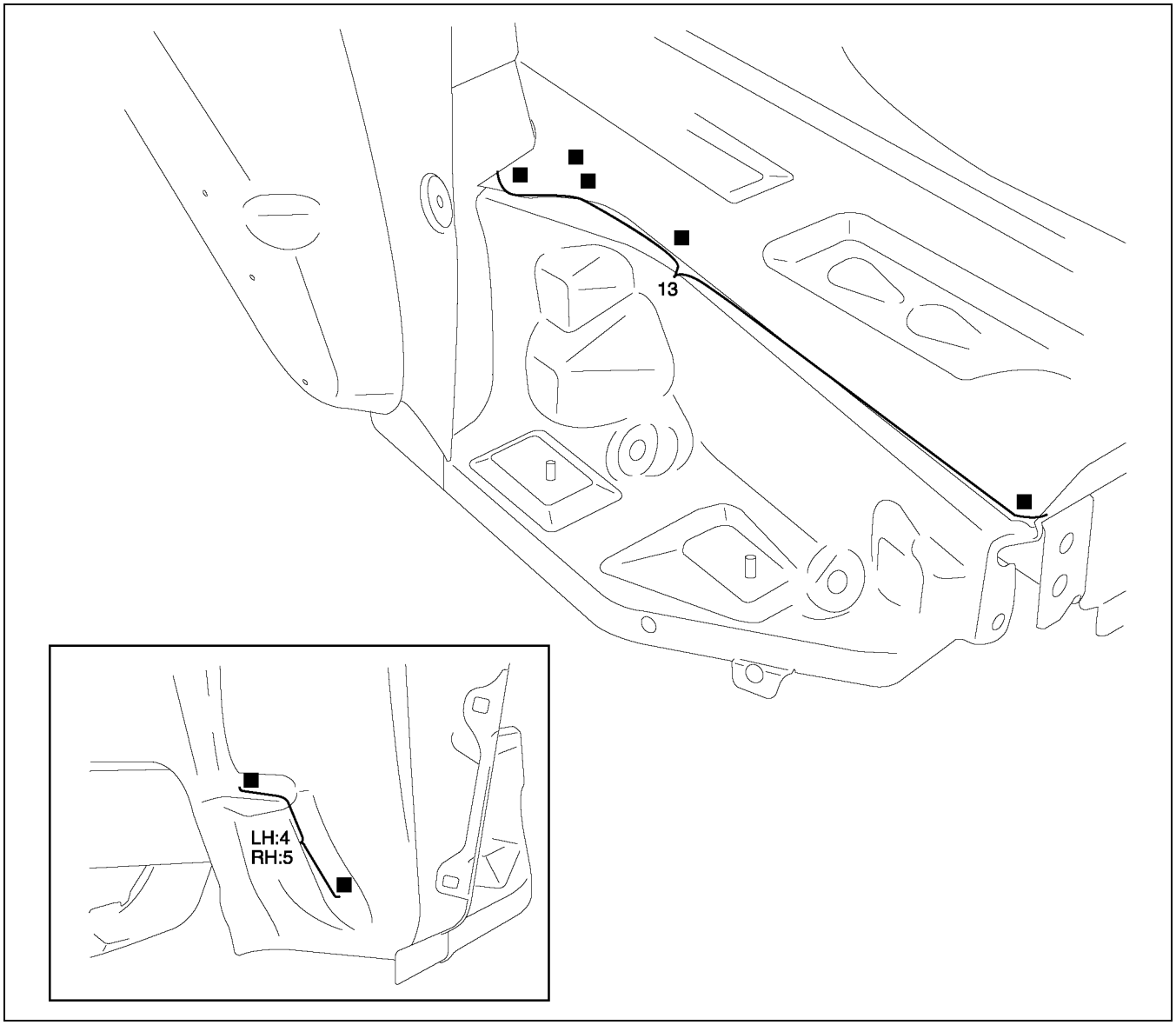
A6E9812B039

FLOOR SIDE PANEL INSTALLATION

A6E981253730B02

SEDAN

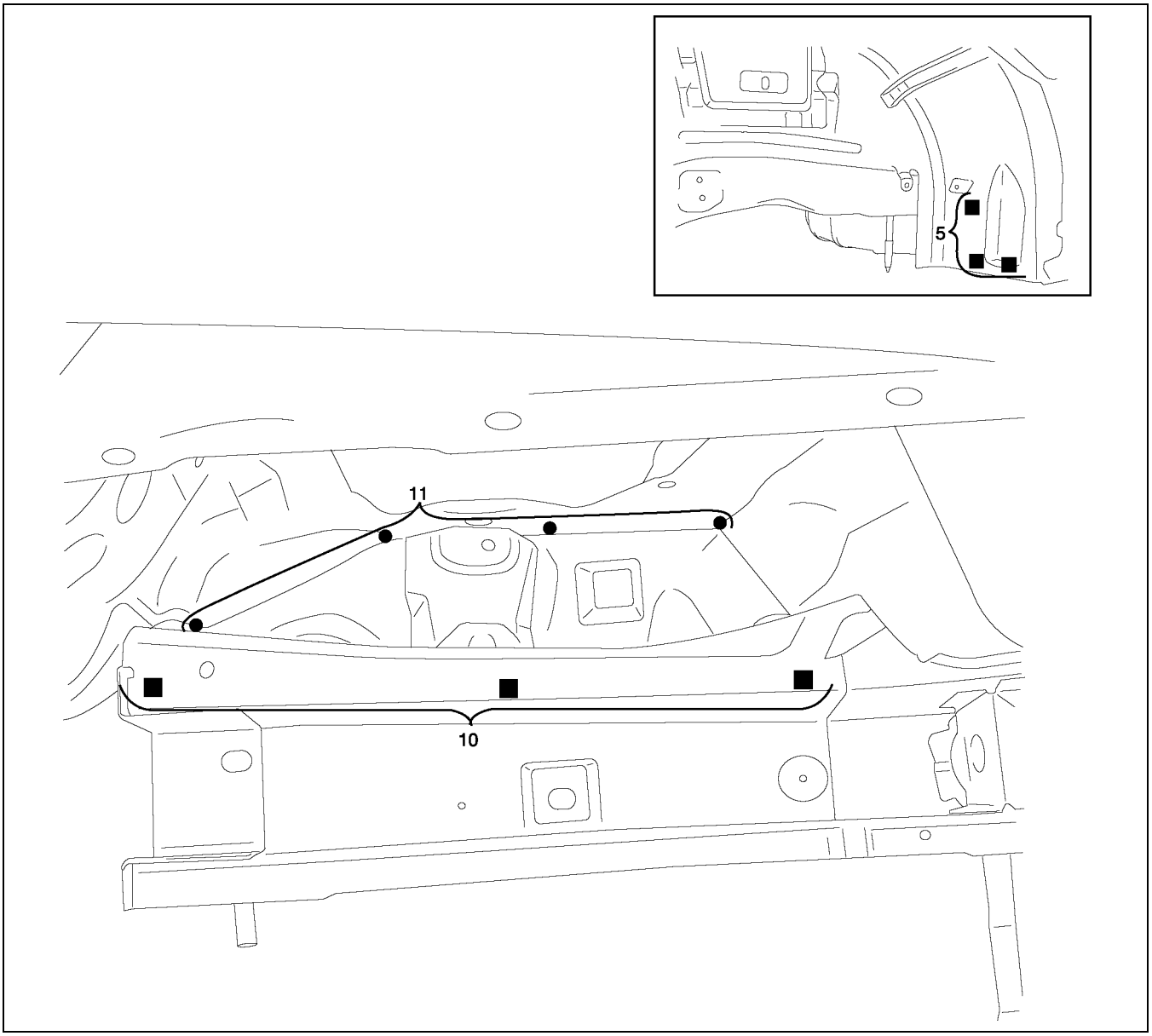
1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B038

5HB

1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.

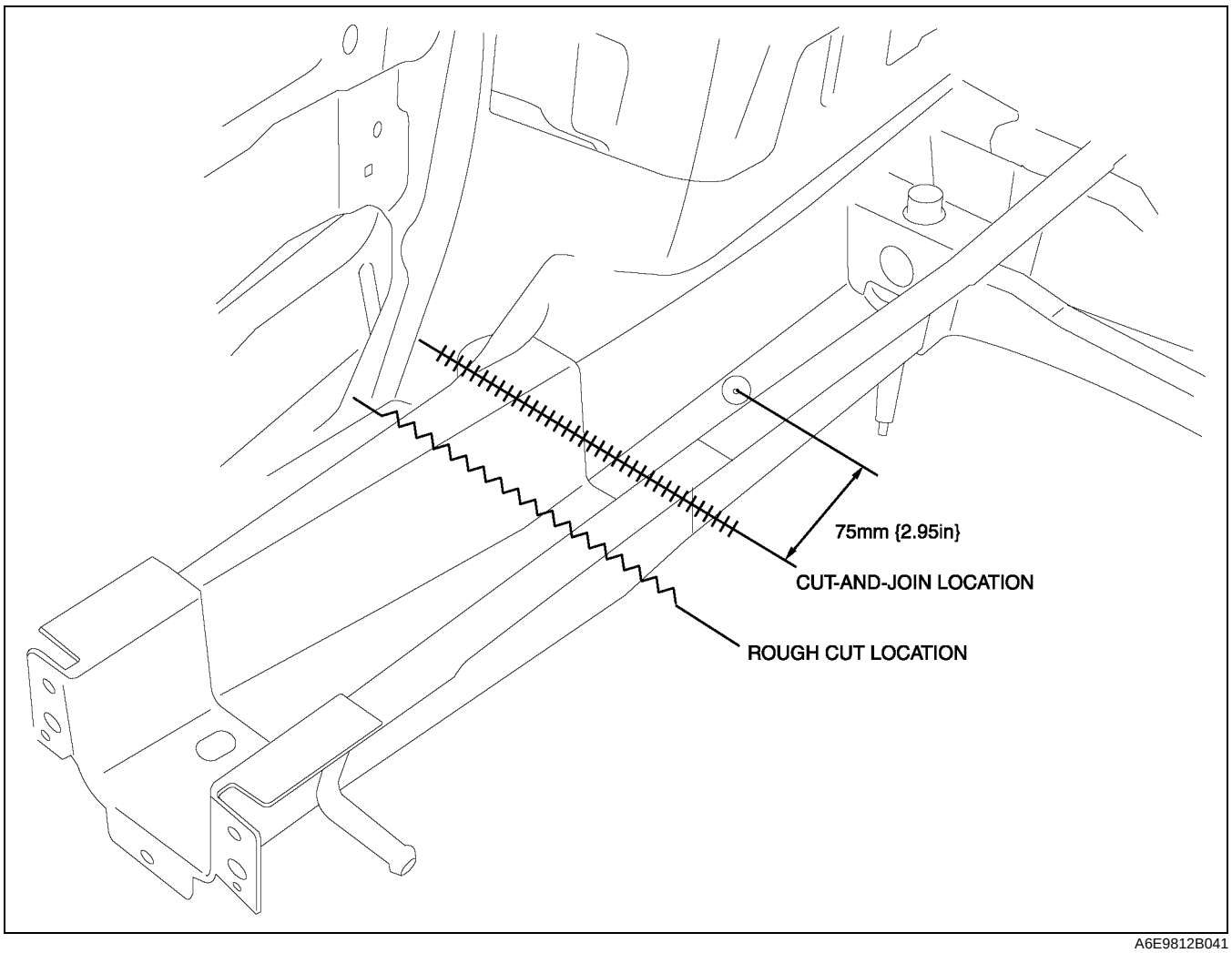


A6E9812B040

REAR SIDE FRAME (PARTIAL CUTTING) REMOVAL

A6E981253815B01

1. Rough cut and remove the damaged part of the rear side frame.

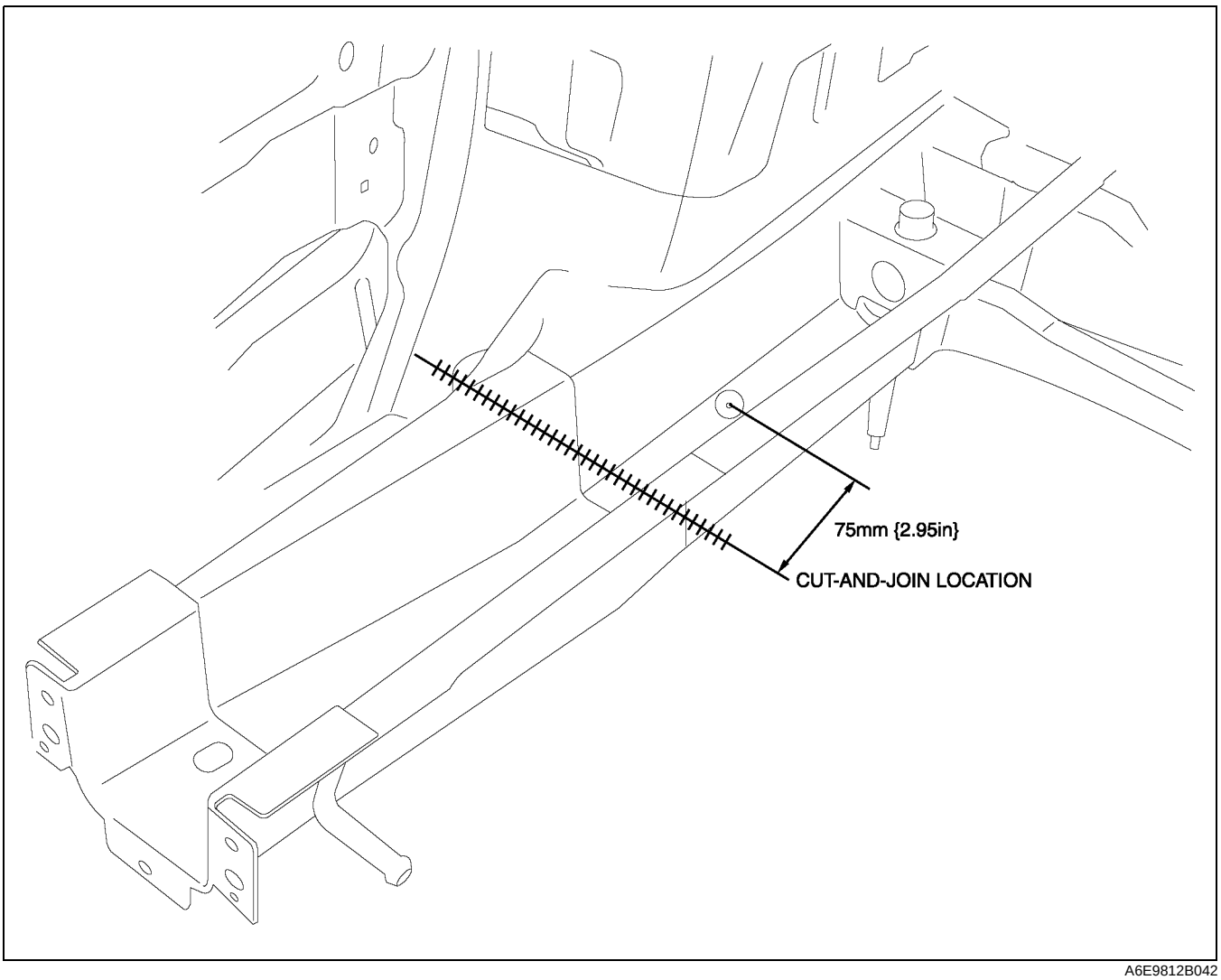


A6E9812B041

REAR SIDE FRAME (PARTIAL CUTTING) INSTALLATION

A6E981253815B02

1. Cut the new and old parts at the cut-and-join location, and bevel the parts.
2. When installing new parts, position each part so that the section measurement aligns to the standard dimensions.
3. After trial-fitting new parts, make sure the related parts fit properly.



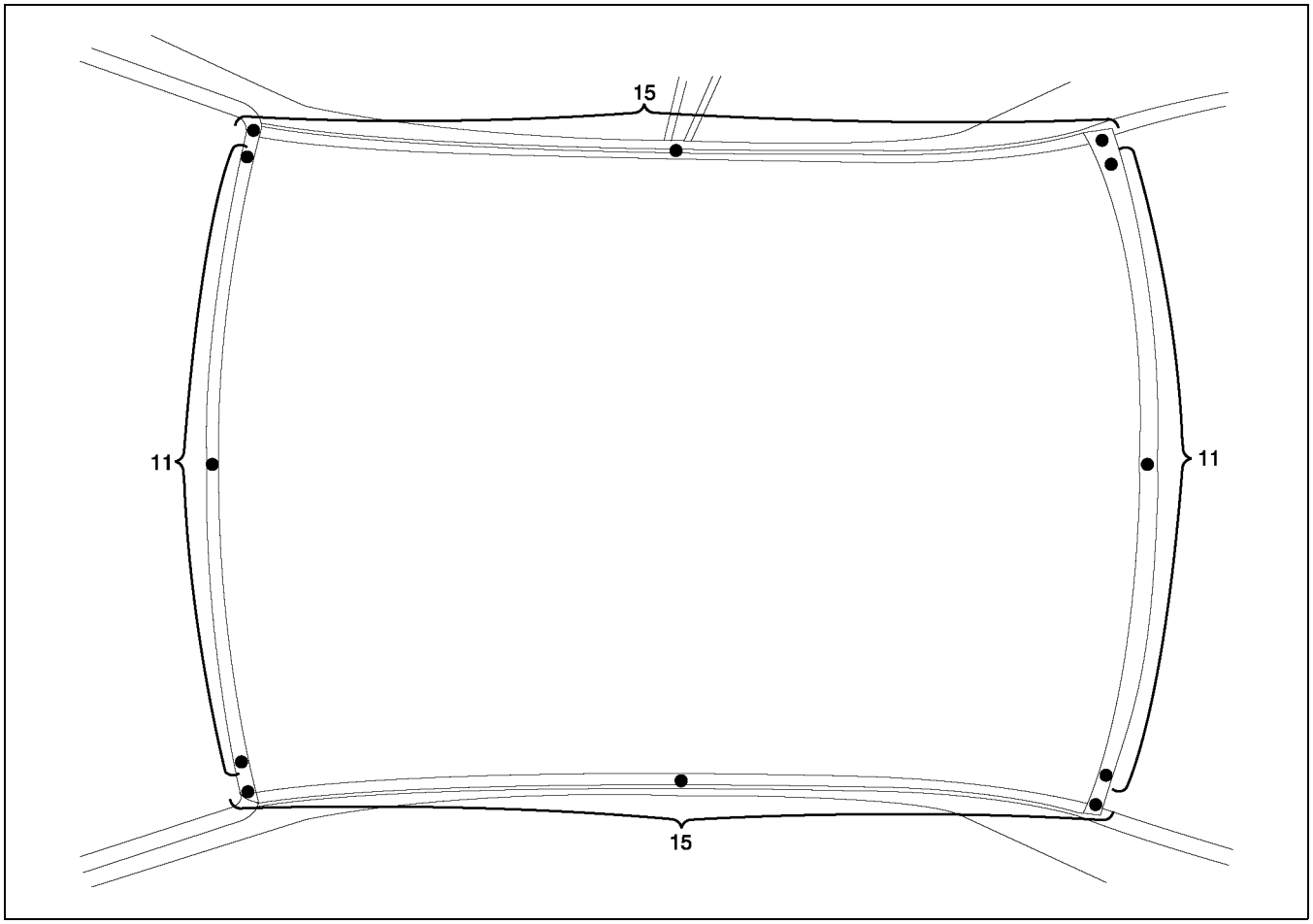
A6E9812B042

ROOF PANEL REMOVAL

A6E981270600B01

SEDAN

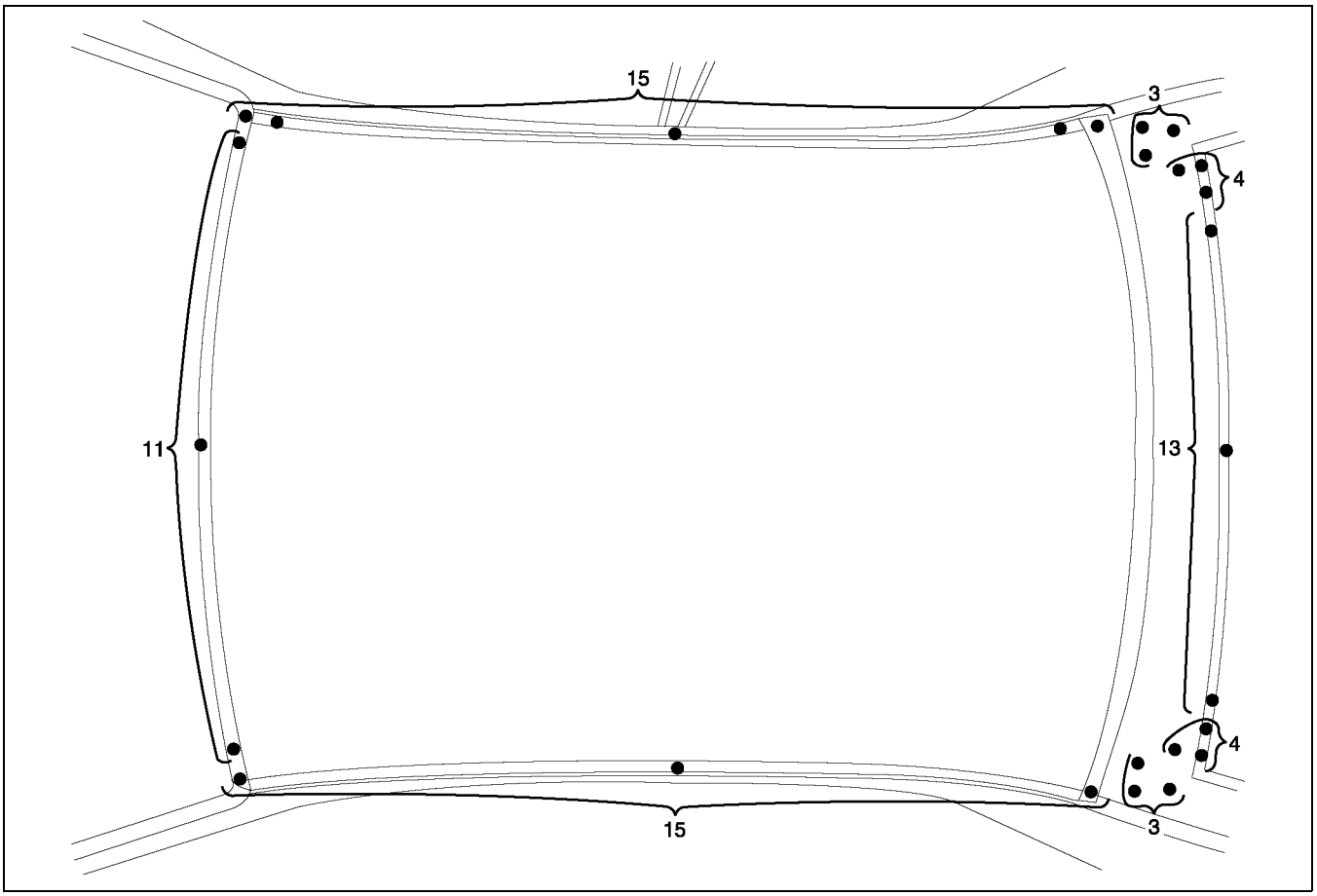
1. Remove the roof panel.



A6E9812B031

5HB

1. Remove the roof panel.



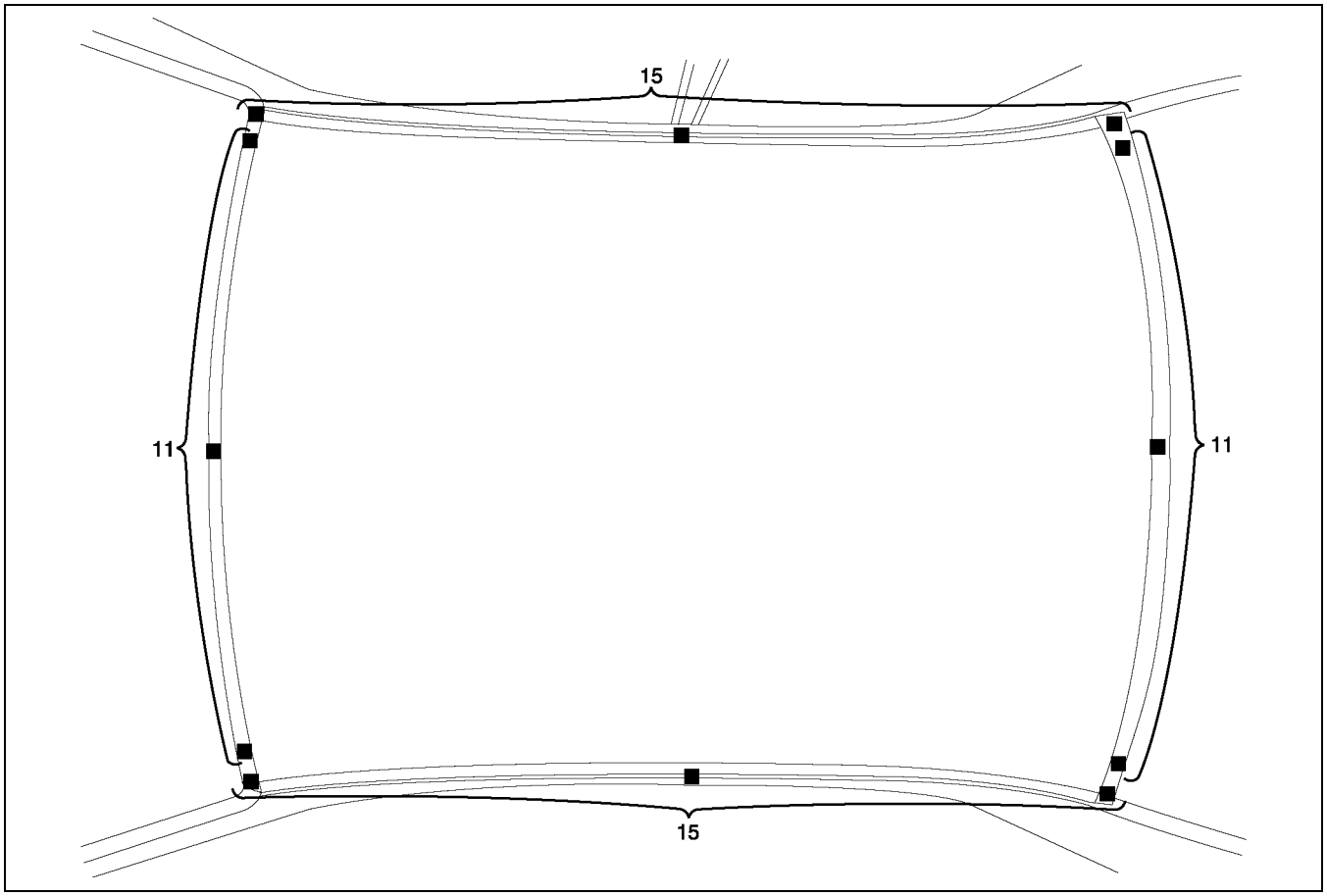
A6E9812B033

ROOF PANEL INSTALLATION

A6E981270600B02

SEDAN

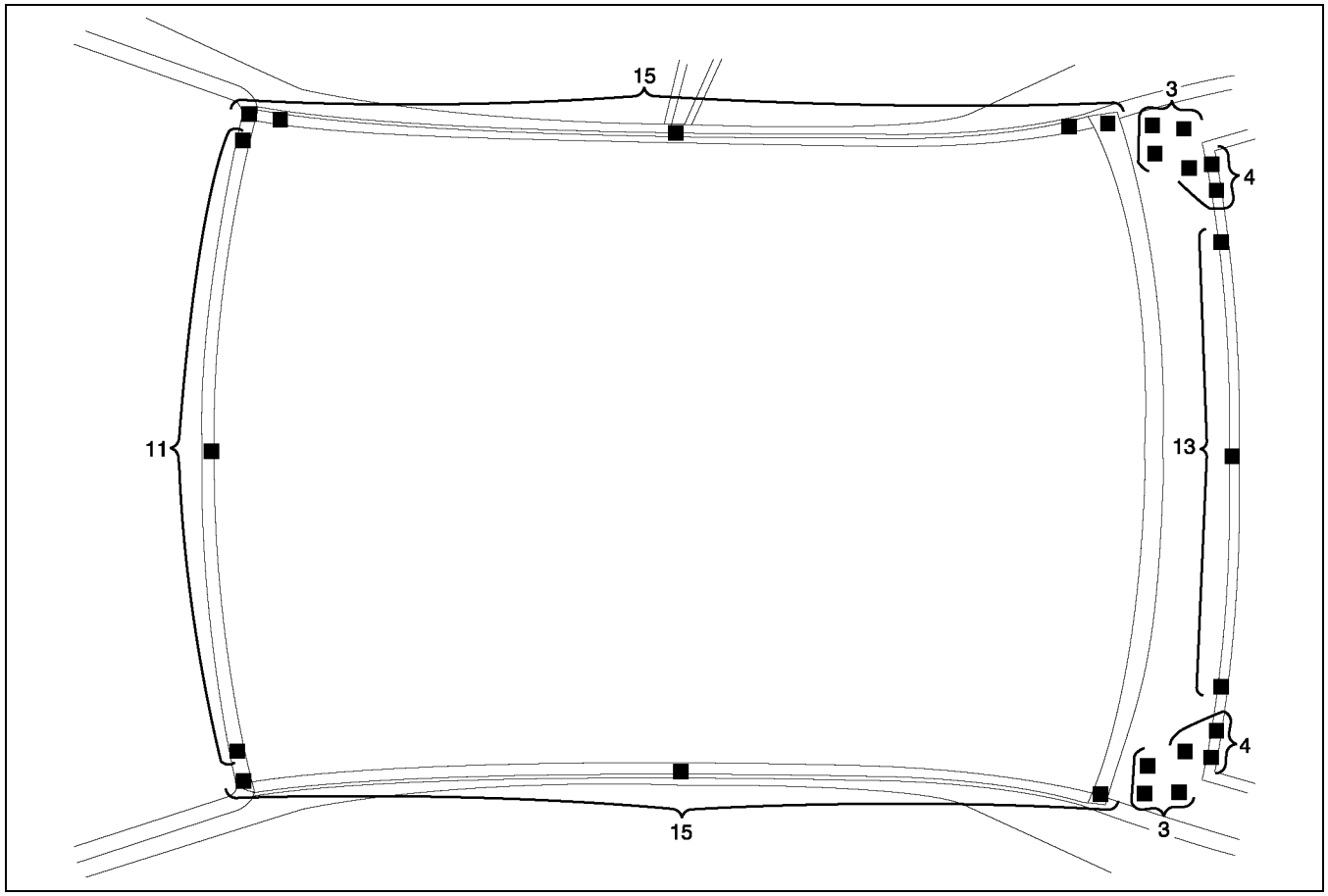
1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B032

5HB

1. Drill holes for plug welds before installing new parts.
2. After trial-fitting new parts, make sure the related parts fit properly.



A6E9812B034

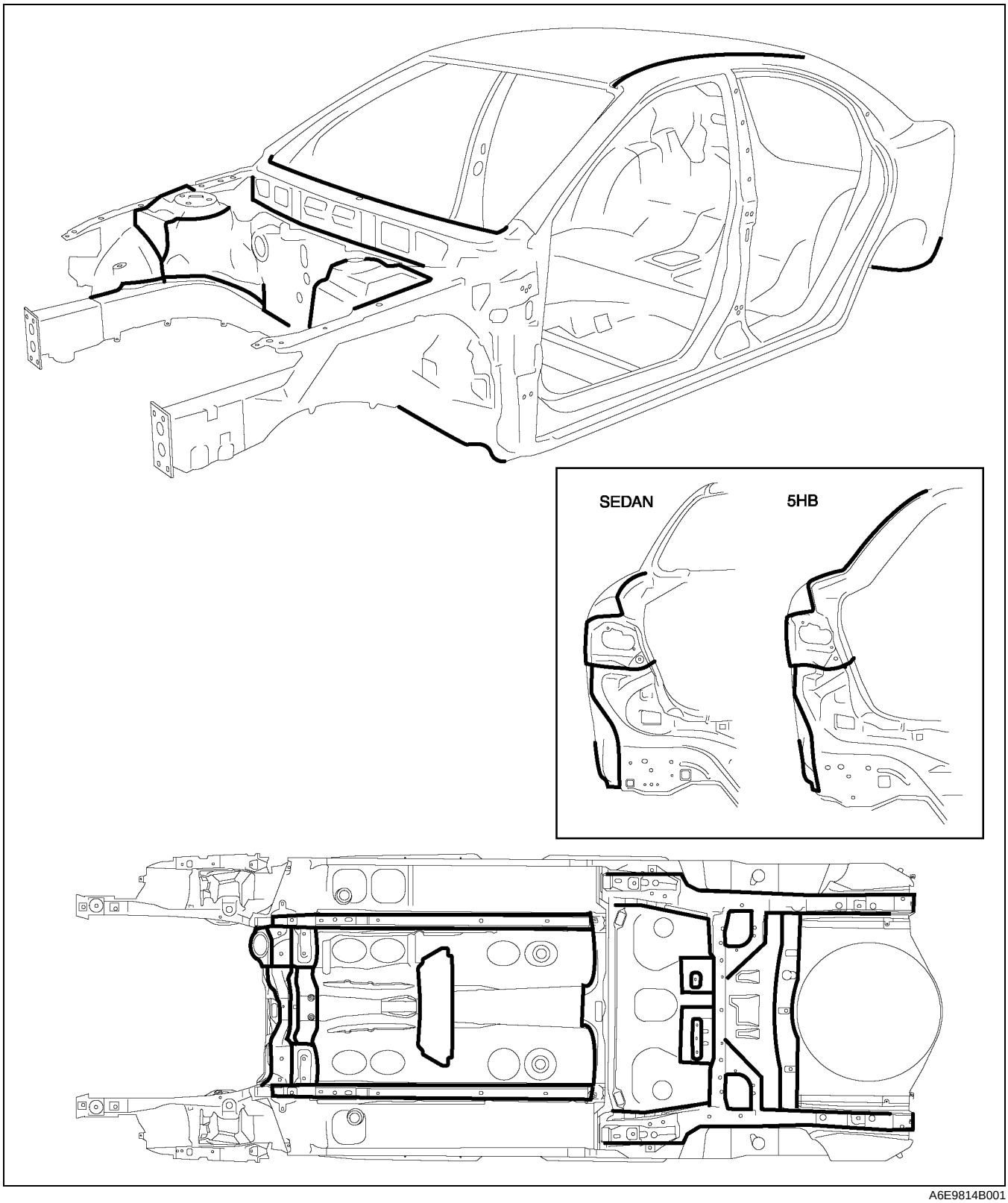
WATER-PROOF AND RUST PREVENTIVE TREATMENT

WATER-PROOF AND RUST PREVENTIVE TREATMENT

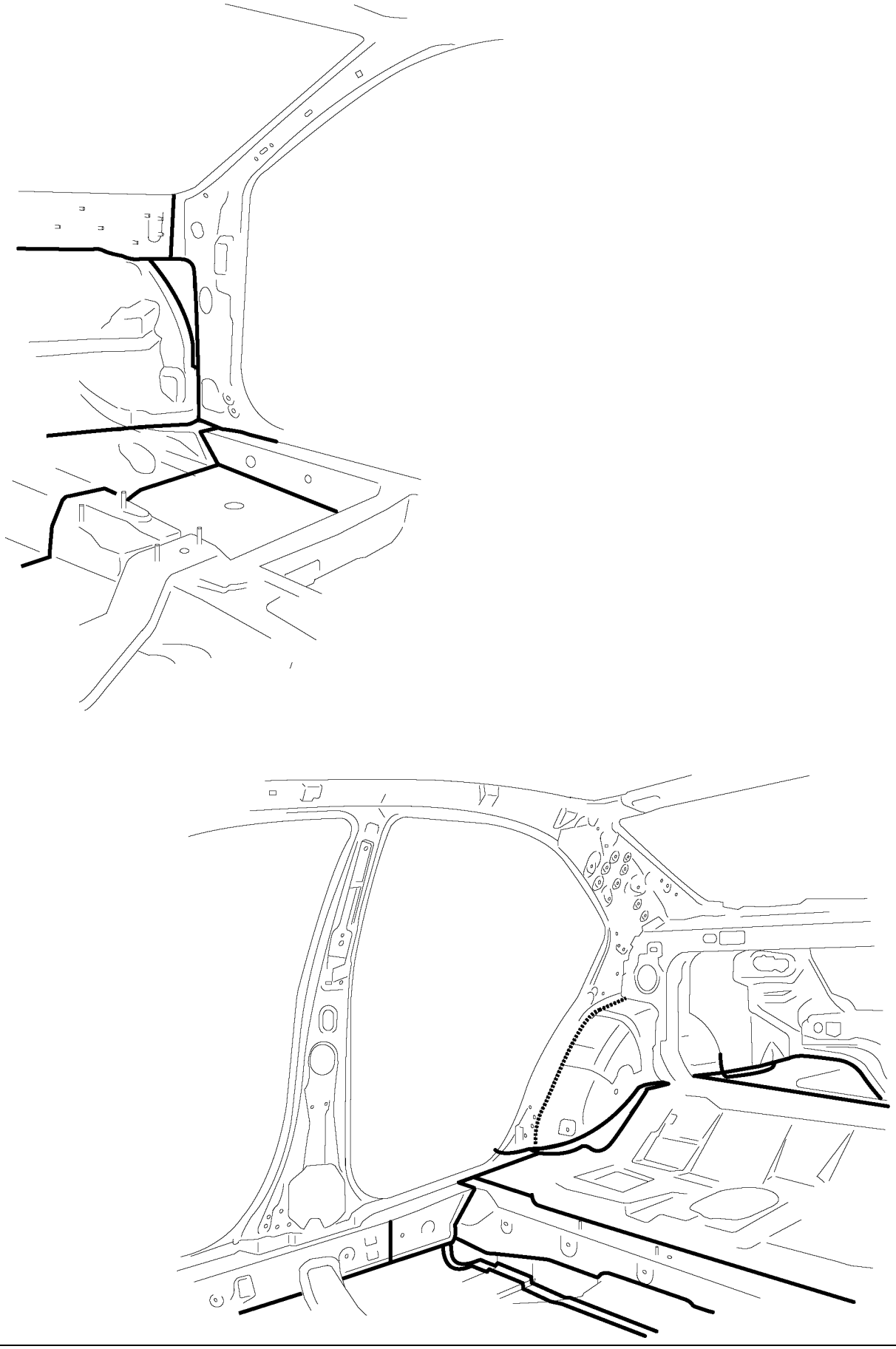
BODY SEALING

A6E981407000B01

Sealant is applied to the parts where the panels meet and to the hemmed parts of the door panel and bonnet to provide waterproofing and rust proofing.

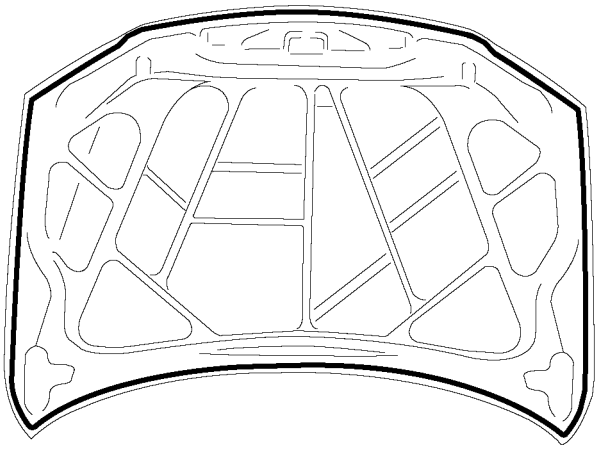


A6E9814B001

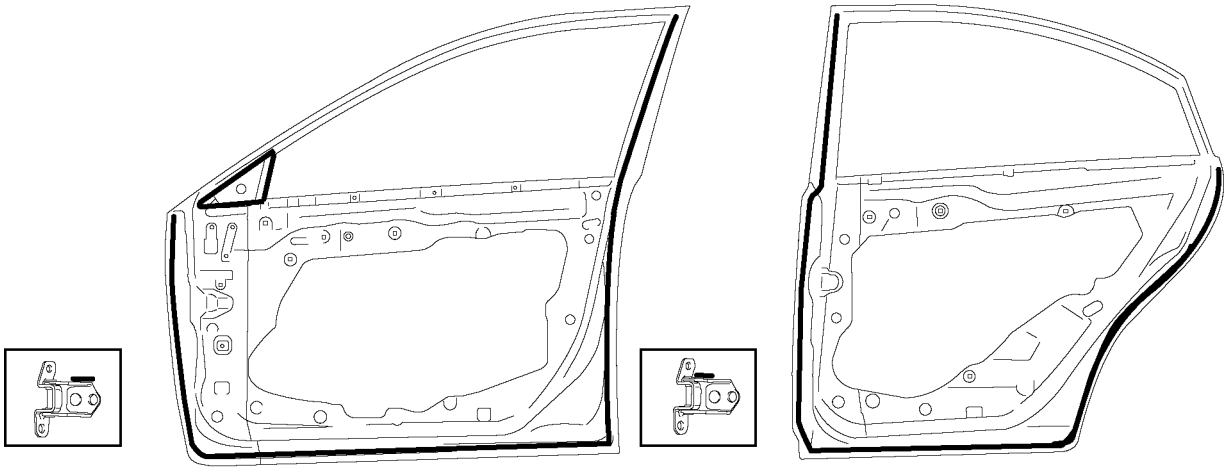


A6E9814B002

BONNET

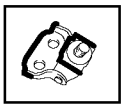


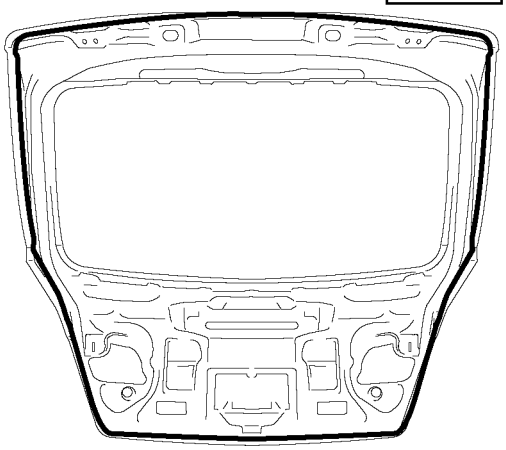
DOOR



TRUNK LID

LIFTGATE





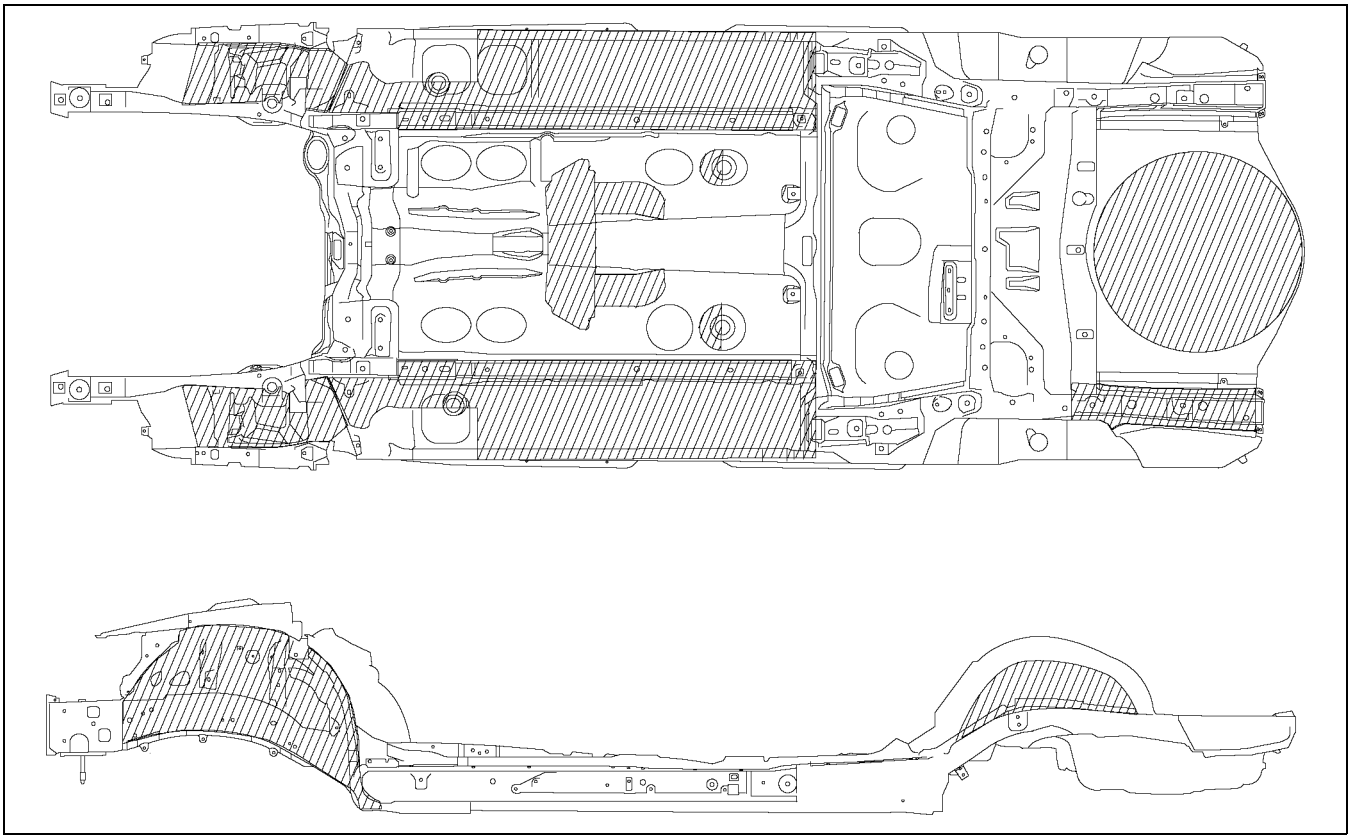
A6E9814B003

UNDER COATING

A6E981407000B02

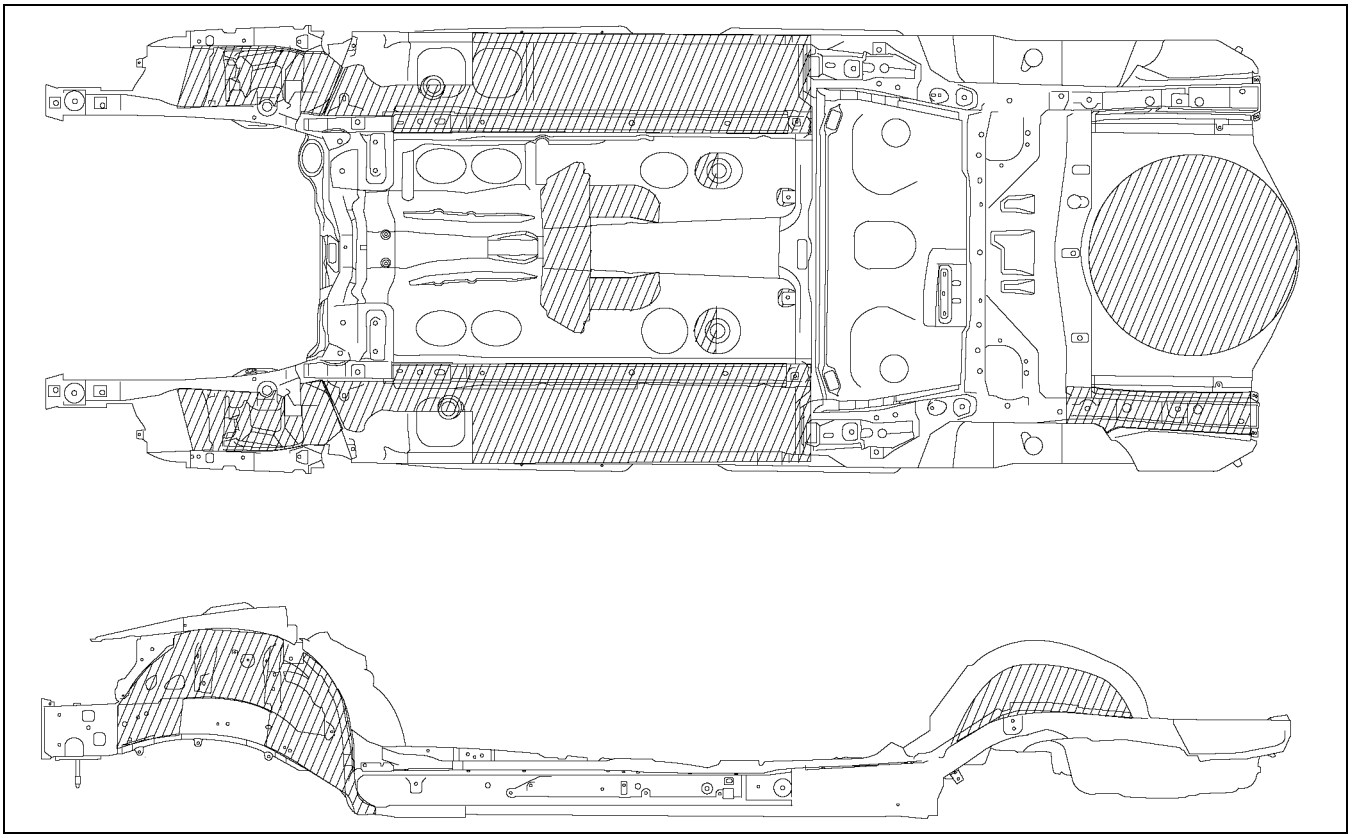
The shaded areas indicated underbody locations that are undercoated to prevent noise and rusting.

European(L.H.D. U.K.)specs



A6E9814B004

GCC specs



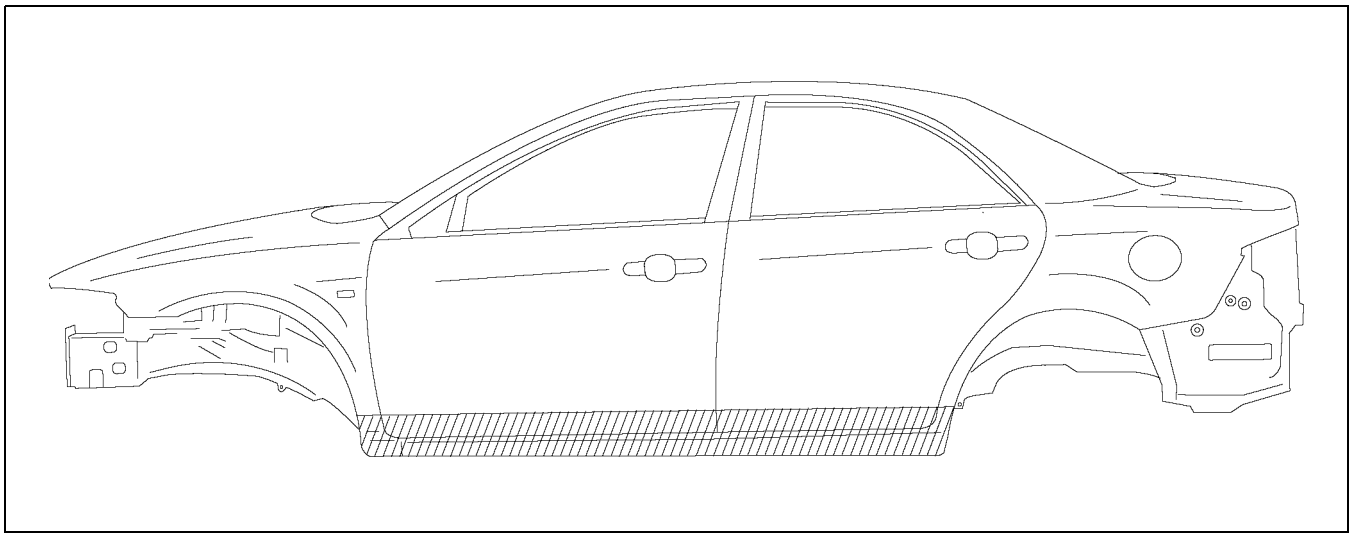
A6E9814B009

PVC PAINTING

A6E981407000B04

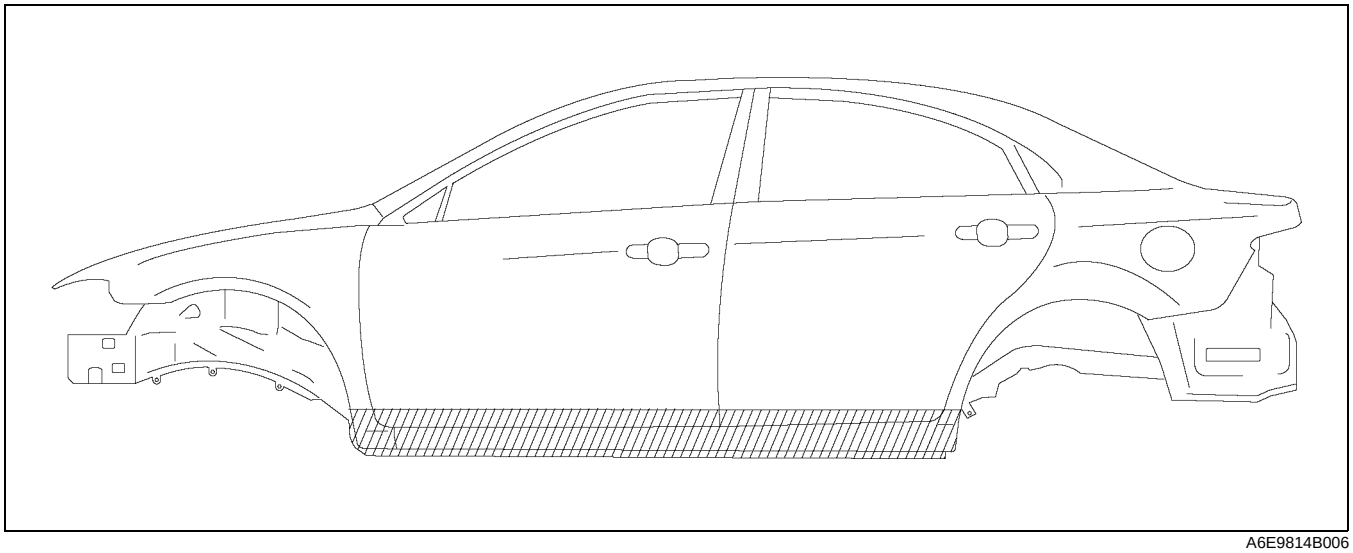
The coating locations are indicated by the shaded areas.

SEDAN



A6E9814B005

5HB



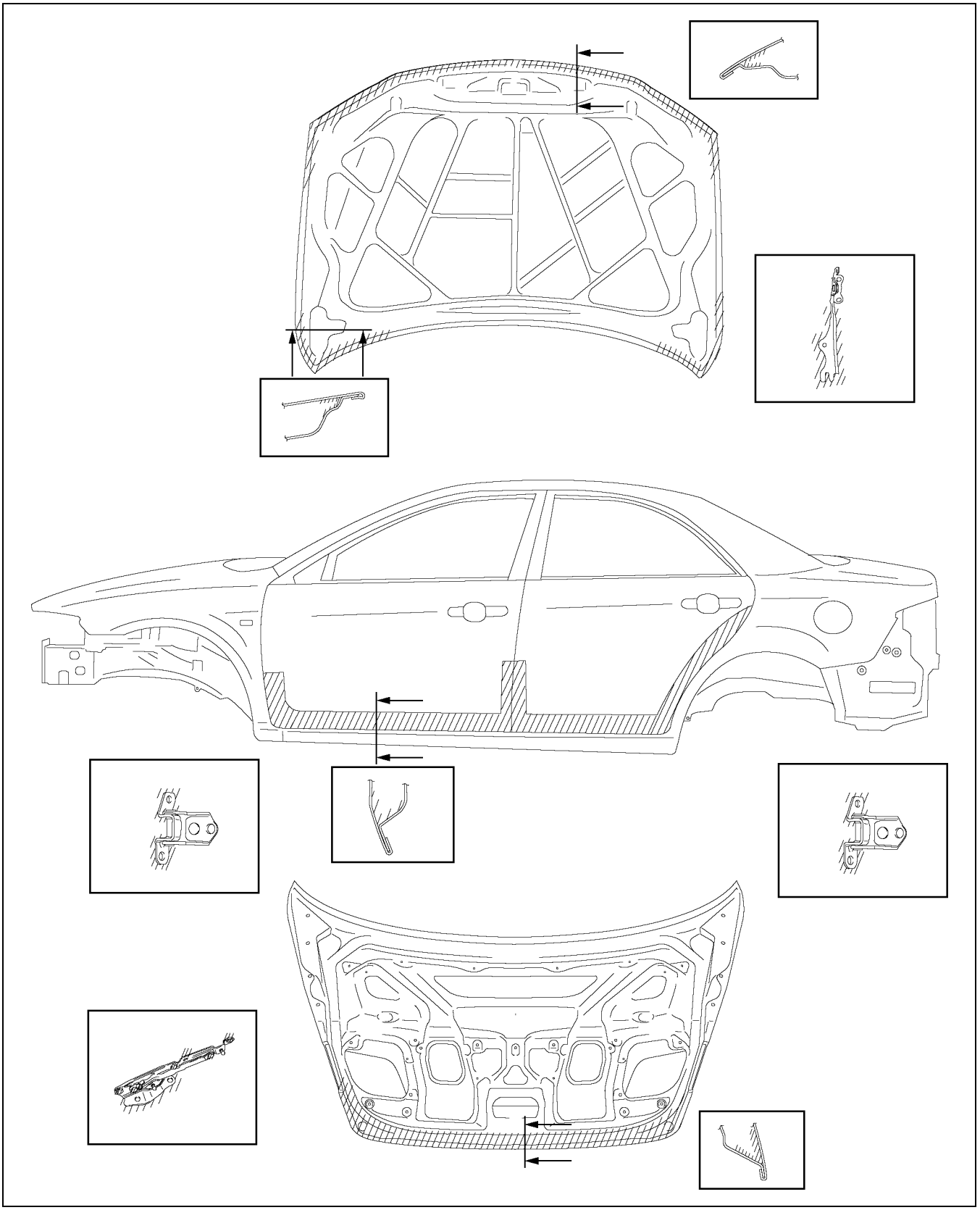
A6E9814B006

RUST PREVENTIVE TREATMENT

A6E981407000B03

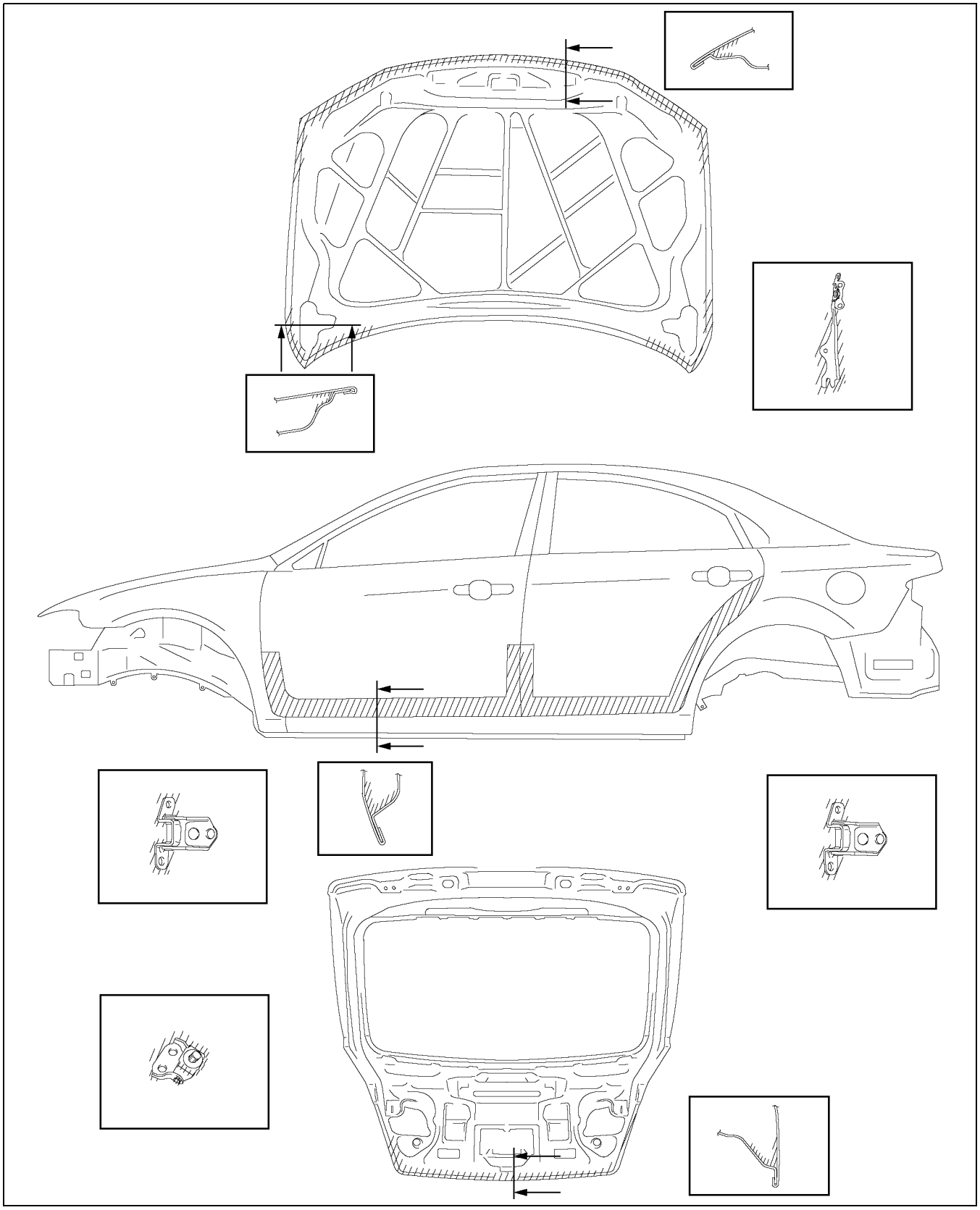
The coating locations are indicated by the shaded areas.

SEDAN



A6E9814B007

5HB



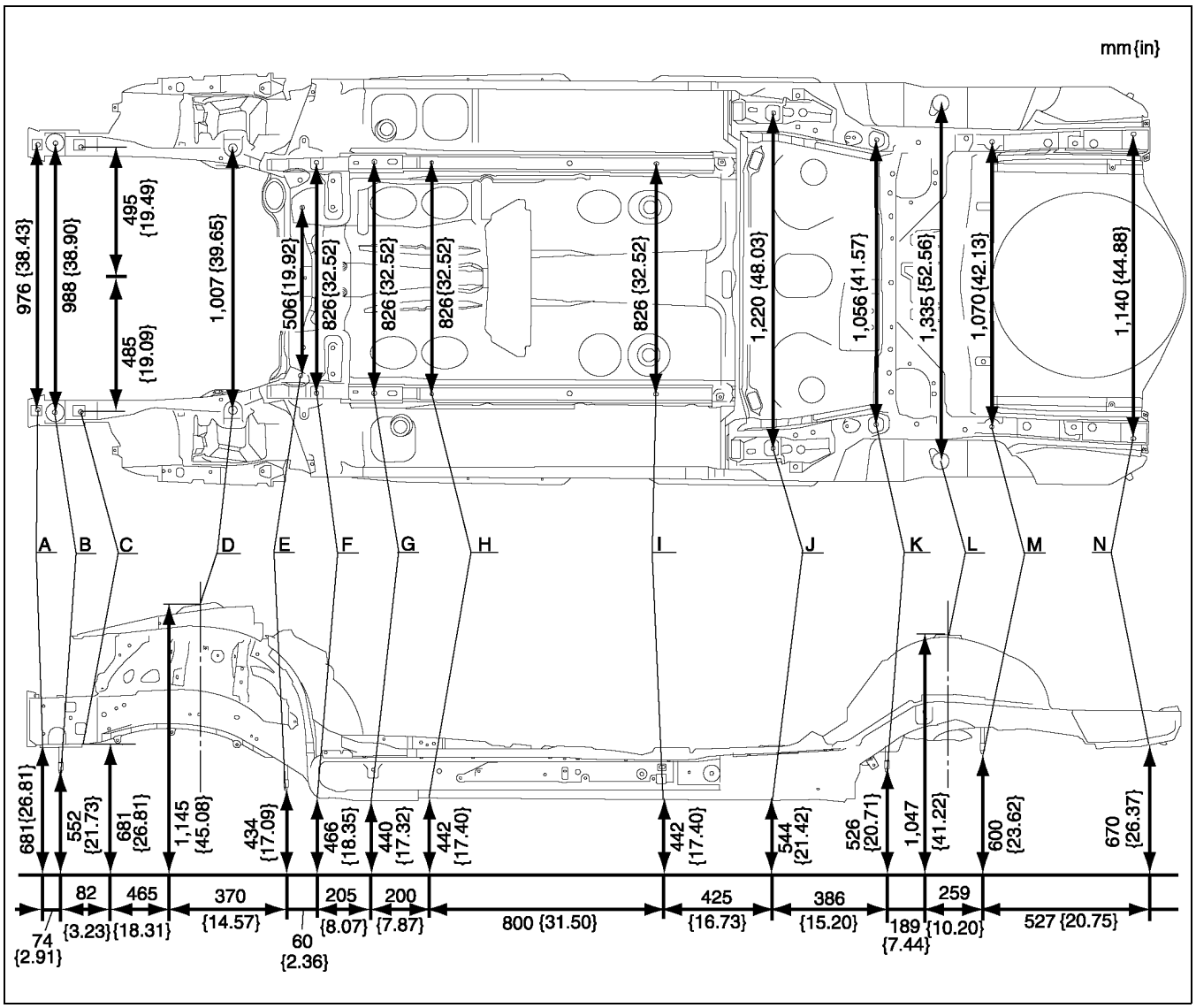
A6E9814B008

DIMENSIONS

DIMENSIONS

UNDERBODY FLAT-PLANE DIMENSIONS

A6E981653010B01



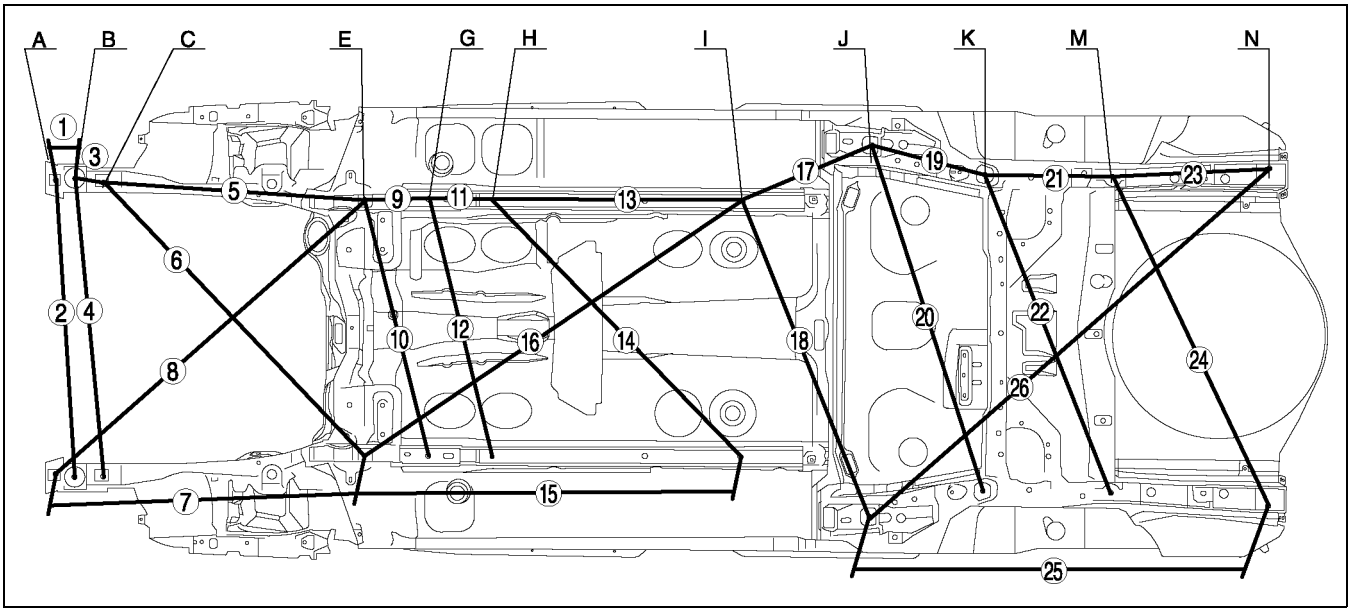
A6E9816B001

Point symbol	Designation	Hole diameter or bolt or nut size mm {in}
A	Front side frame standard hole	ø16 {0.63}
B	Front crossmember mounting bolt	M14 {0.55}
C	Front side frame standard hole	ø16 {0.63}
D	Front suspension mounting block standard hole	ø59 {2.32}
E	Front crossmember mounting bolt	M14 {0.55}
F	Front frame rear standard hole	ø18 {0.71}
G	Front frame rear standard hole	ø16 {0.63}
H	Front B frame standard hole	ø12 {0.47}

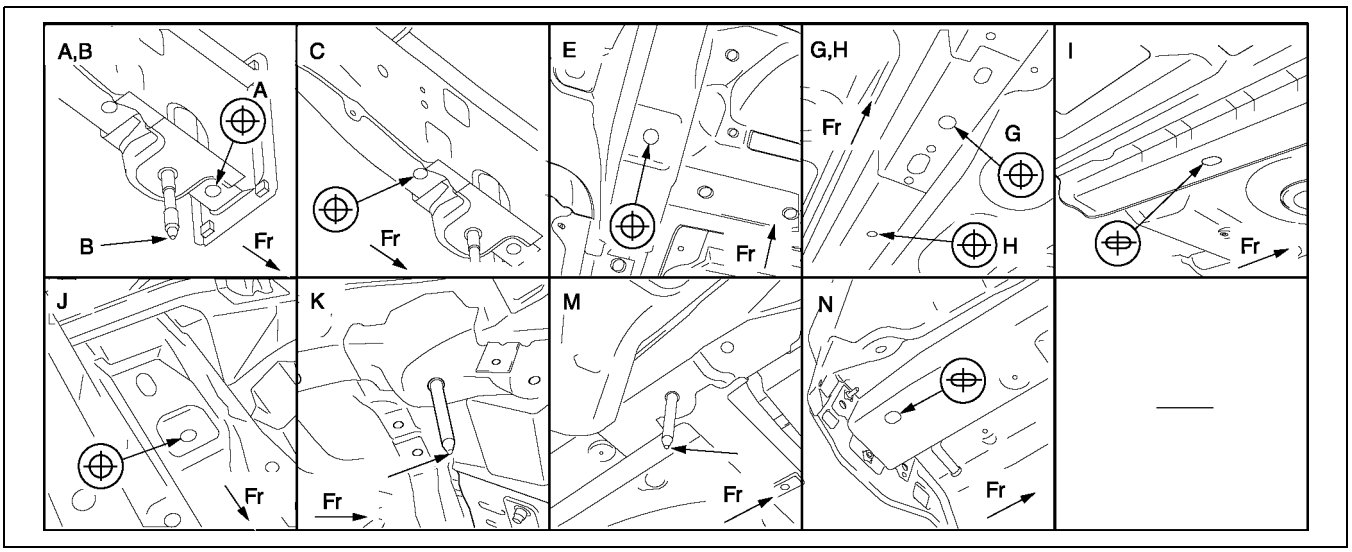
Point symbol	Designation	Hole diameter or bolt or nut size mm {in}
I	Front B frame standard hole	14 × 20 {0.55 × 0.79}
J	Rear side frame standard hole	ø20 {0.79}
K	Rear crossmember mounting bolt	M14 {0.55}
L	Rear suspension housing bolt	M6 {0.24}
M	Rear crossmember mounting bolt	M14 {0.55}
N	Rear side frame standard hole	16 × 20 {0.63 × 0.79}

UNDERBODY STRAIGHT-LINE DIMENSIONS

A6E981653010B02



A6E9816B002



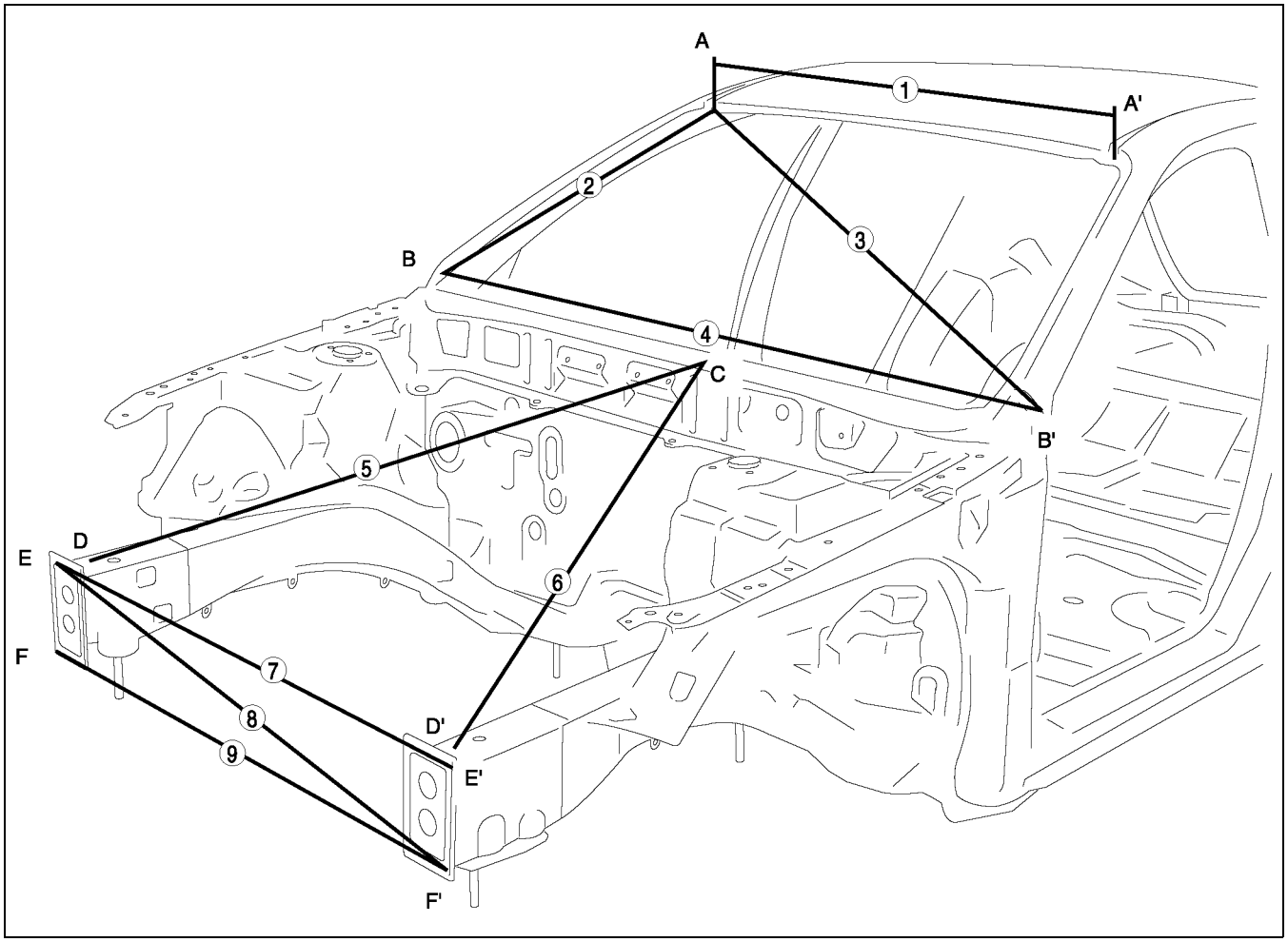
A6E9816B003

Measured location	Dimensions mm {in}
1	149 {5.87}
2	993 {39.09}
3	152 {5.98}
4	991 {39.02}
5	924 {36.38}
6	1,293 {50.91}
7	1,076 {42.36}
8	1,401 {55.16}
9	207 {8.15}
10	851 {33.50}
11	200 {7.87}
12	850 {33.46}
13	800 {31.50}

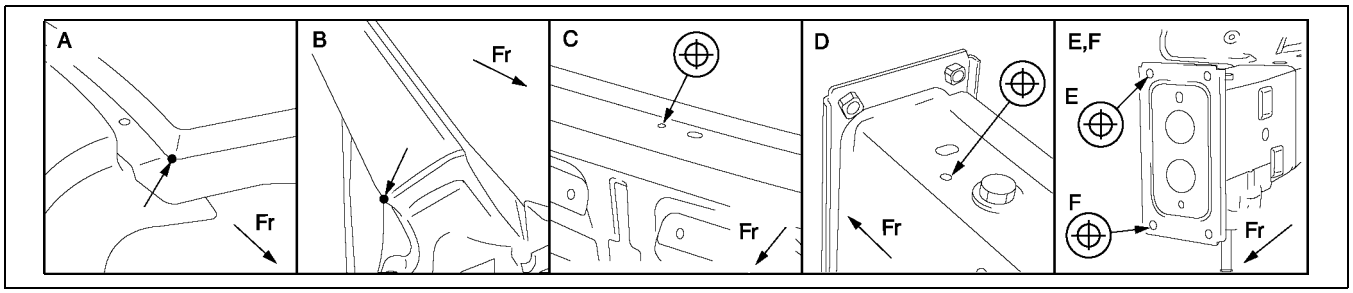
Measured location	Dimensions mm {in}
14	1,150 {45.28}
15	1,205 {47.44}
16	1,461 {57.52}
17	479 {18.86}
18	1,112 {43.78}
19	395 {15.55}
20	1,202 {47.32}
21	454 {17.87}
22	1,156 {45.51}
23	532 {20.94}
24	1,226 {48.27}
25	1,366 {53.78}
26	1,805 {71.06}

FRONT BODY STRAIGHT-LINE DIMENSIONS (1)

A6E981653020B01



A6E9816B004



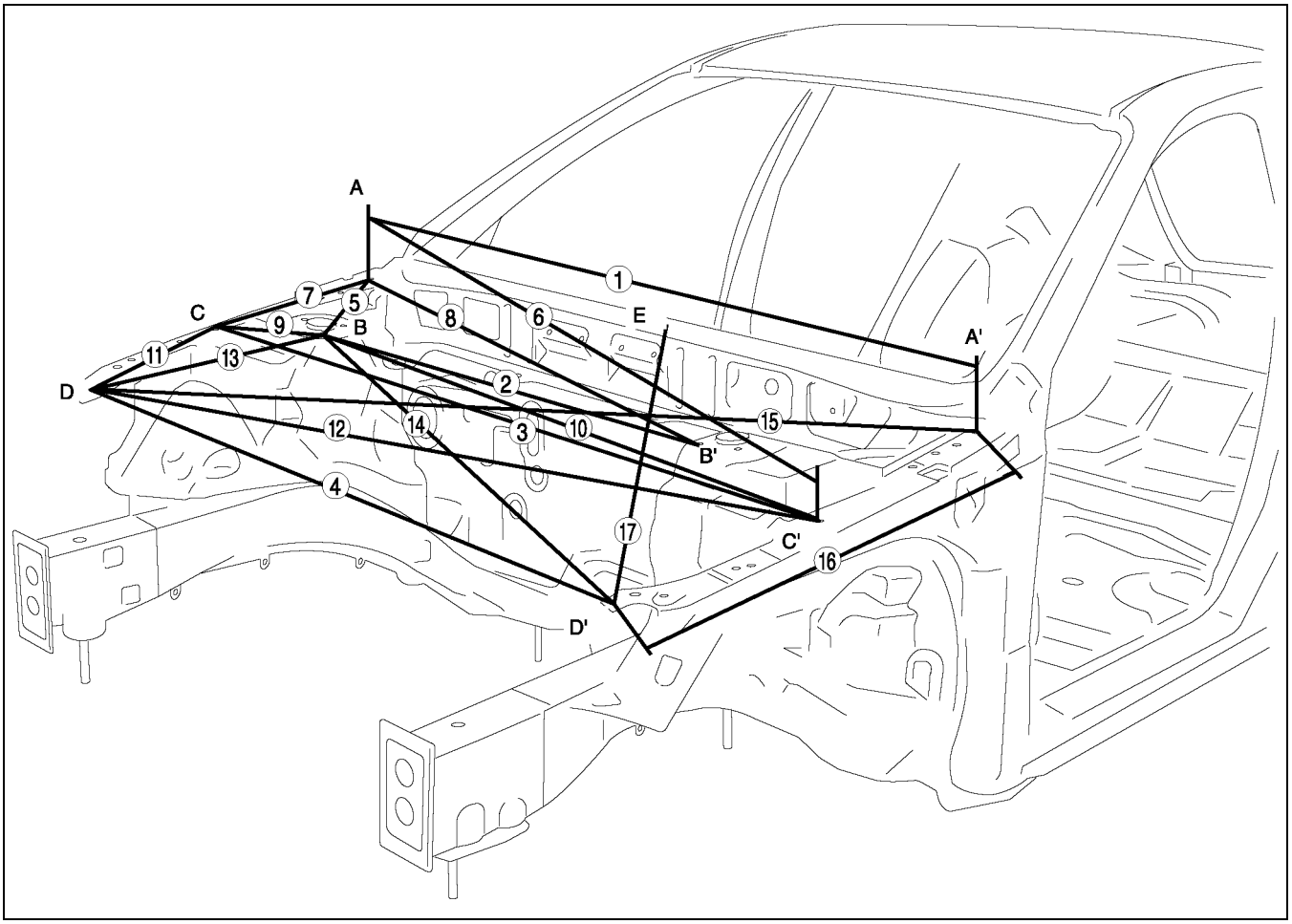
A6E9816B005

Measured location	Dimensions mm {in}
1	1,023 {40.28}
2	749 {29.49}
3	1,458 {57.40}
4	1,529 {60.20}
5	1,070 {42.13}

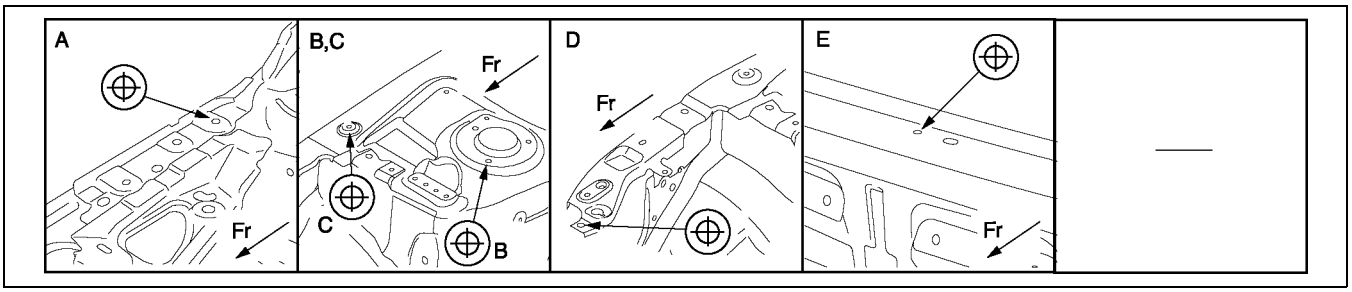
Measured location	Dimensions mm {in}
6	1,085 {42.72}
7	1,070 {42.13}
8	1,084 {42.68}
9	1,070 {42.13}

FRONT BODY STRAIGHT-LINE DIMENSIONS (2)

A6E981653020B02



A6E9816B006



A6E9816B007

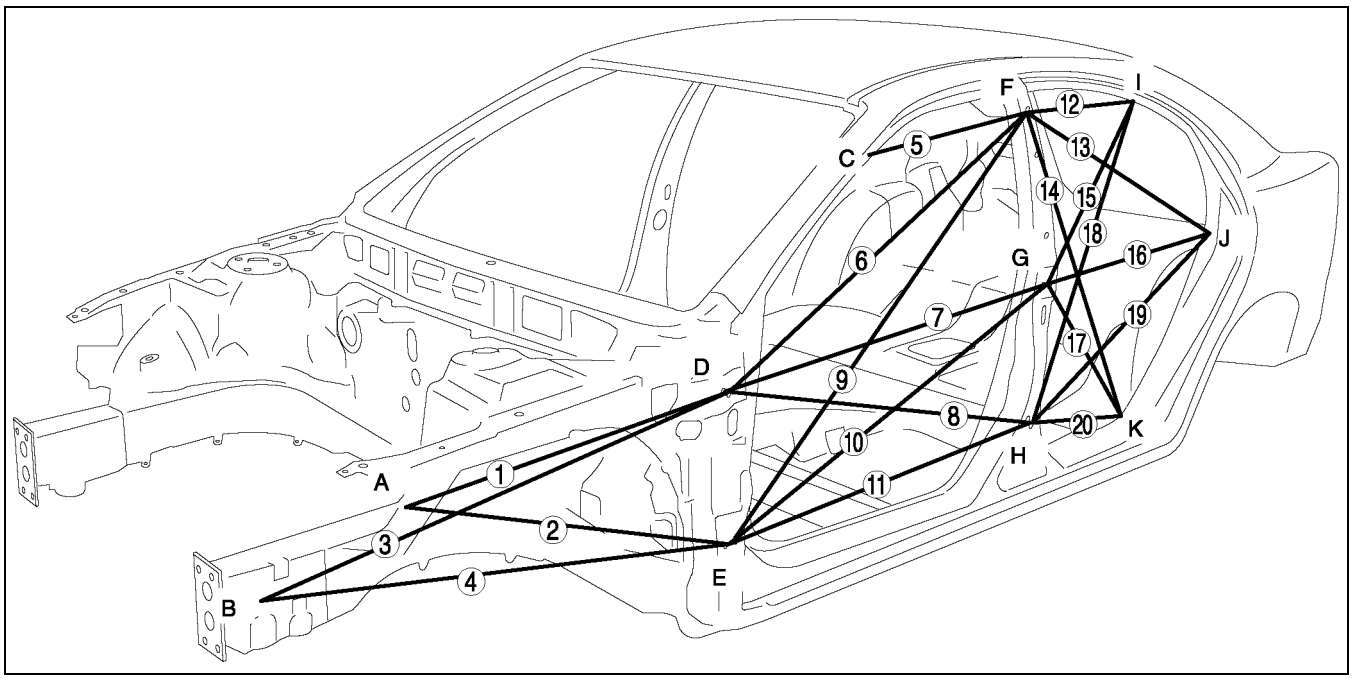
Measured location	Dimensions mm {in}
1	1,480 {58.27}
2	959 {37.76}
3	1,481 {58.31}
4	1,340 {52.76}
5	452 {17.80}
6	1,538 {60.55}
7	418 {16.46}
8	1,274 {50.16}
9	268 {10.55}

Measured location	Dimensions mm {in}
10	1,221 {48.07}
11	363 {14.29}
12	1,455 {57.28}
13	451 {17.76}
14	1,220 {48.03}
15	1,608 {63.31}
16	777 {30.59}
17	1,009 {39.72}

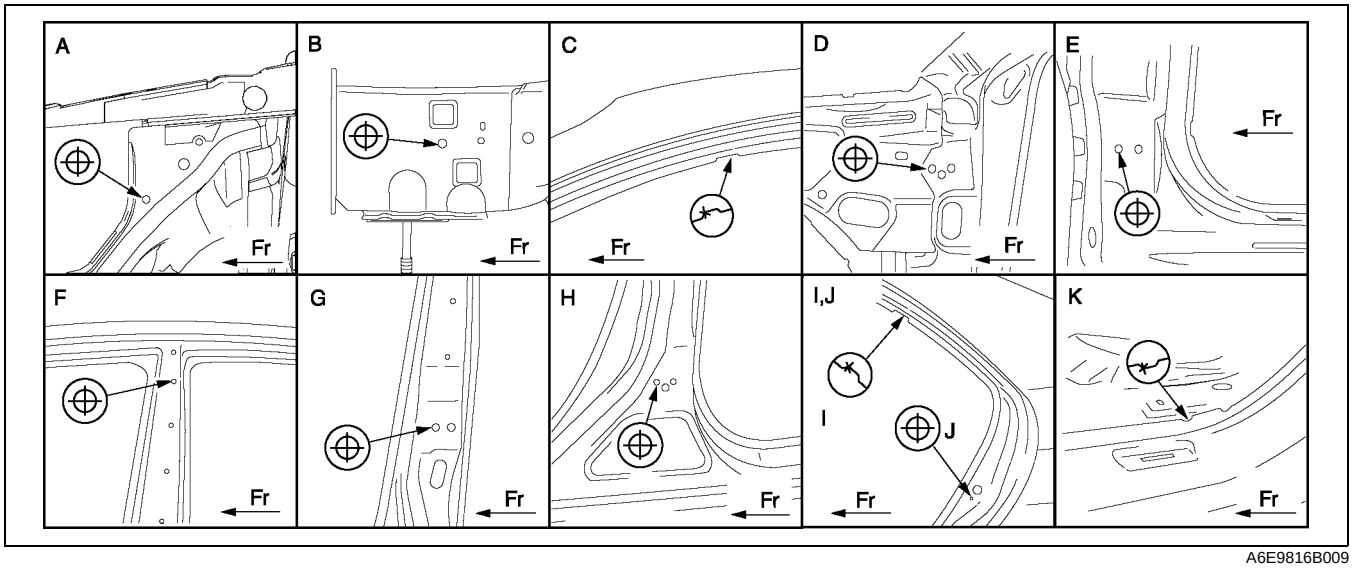
CABIN SIDE FRAME STRAIGHT-LINE DIMENSIONS

A6E981670010B01

SEDAN



A6E9816B008

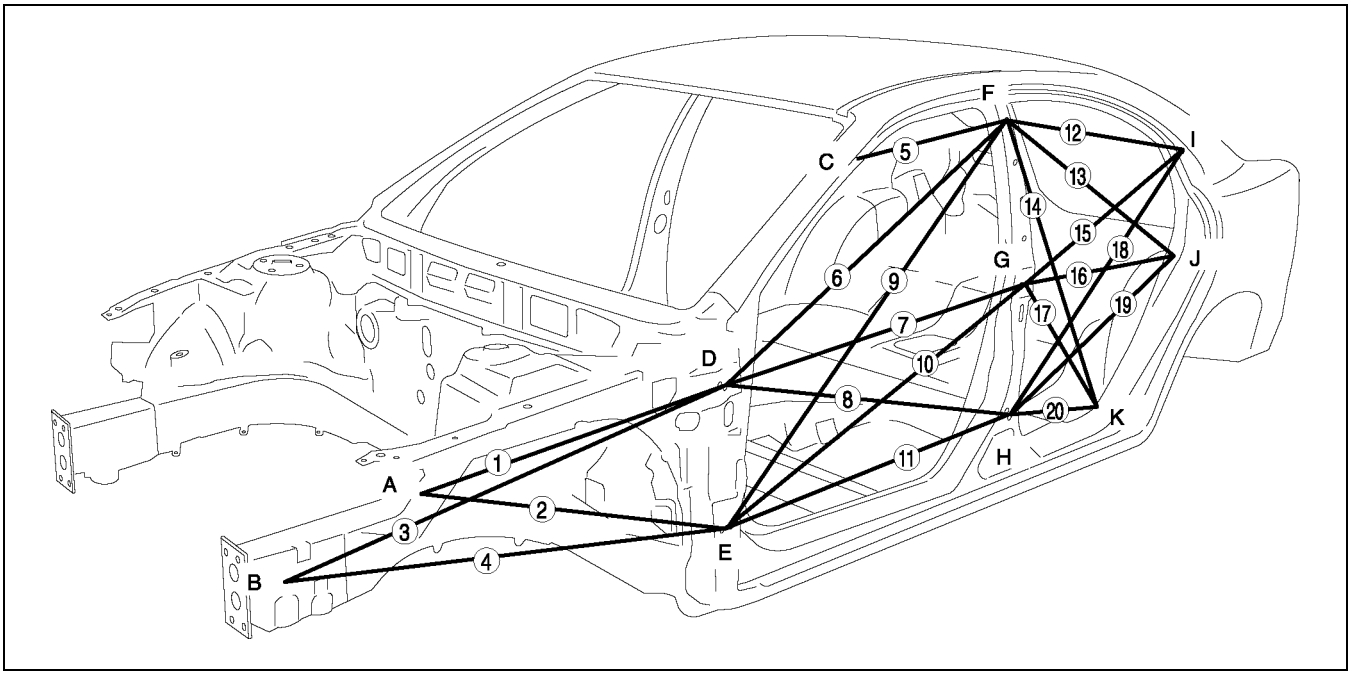


A6E9816B009

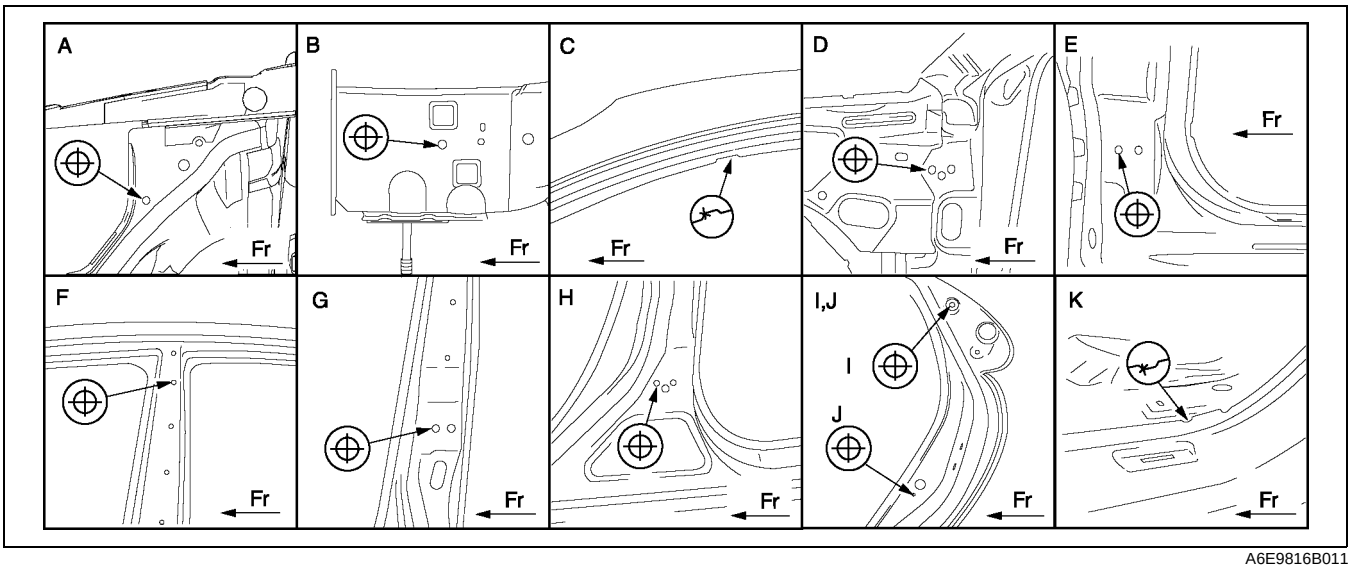
Measured location	Dimensions mm {in}
1	692 {27.24}
2	747 {29.41}
3	998 {39.29}
4	968 {38.11}
5	451 {17.76}
6	1,349 {53.11}
7	1,144 {45.04}
8	1,144 {45.04}
9	1,501 {59.09}
10	1,204 {47.40}

Measured location	Dimensions mm {in}
11	1,093 {43.03}
12	662 {26.06}
13	943 {37.13}
14	979 {38.54}
15	864 {34.02}
16	921 {36.26}
17	683 {26.89}
18	1,093 {43.03}
19	1,004 {39.53}
20	536 {21.10}

5HB



A6E9816B010



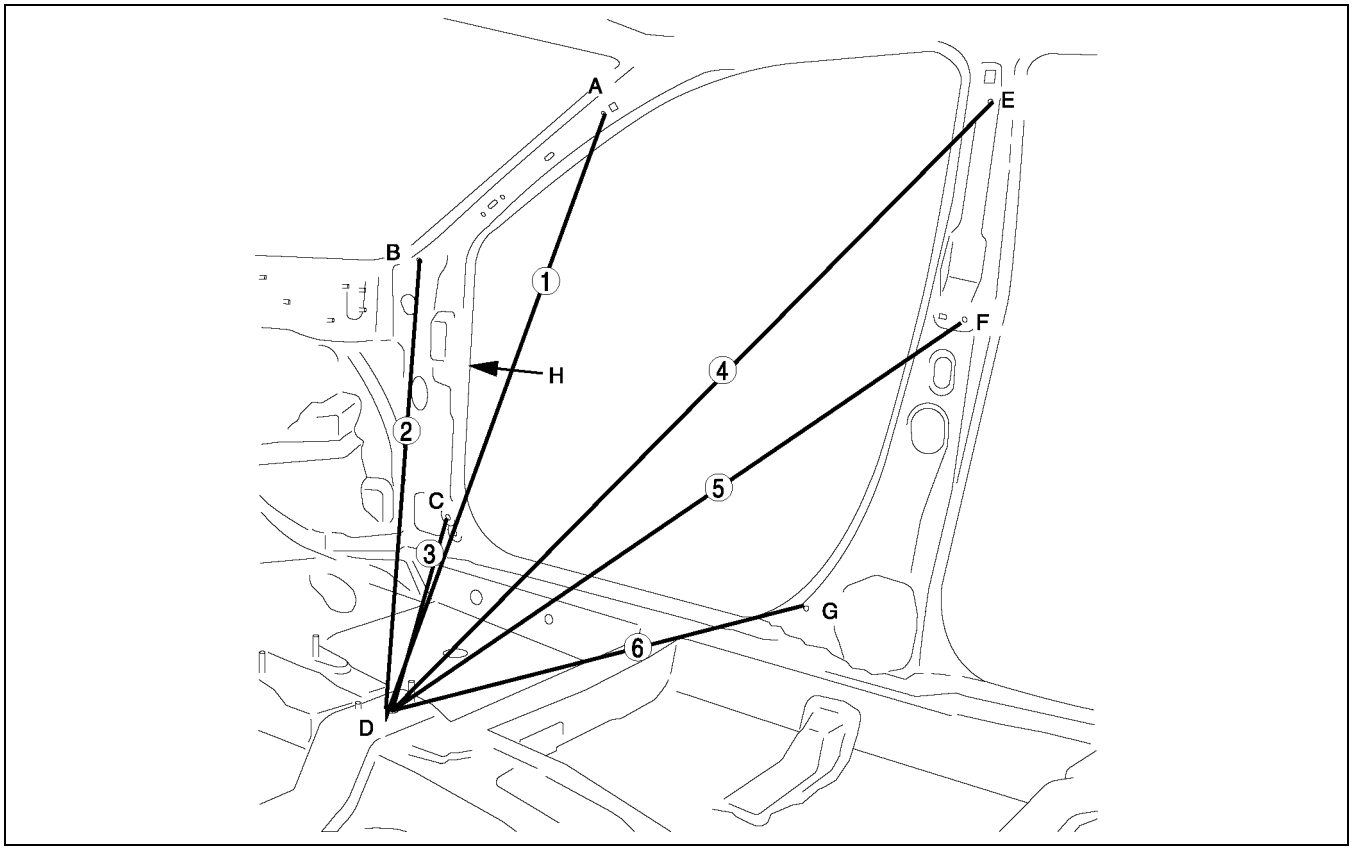
A6E9816B011

Measured location	Dimensions mm {in}
1	692 {27.24}
2	747 {29.41}
3	998 {39.29}
4	968 {38.11}
5	451 {17.76}
6	1,349 {53.11}
7	1,144 {45.04}
8	1,144 {45.04}
9	1,501 {59.09}
10	1,204 {47.40}

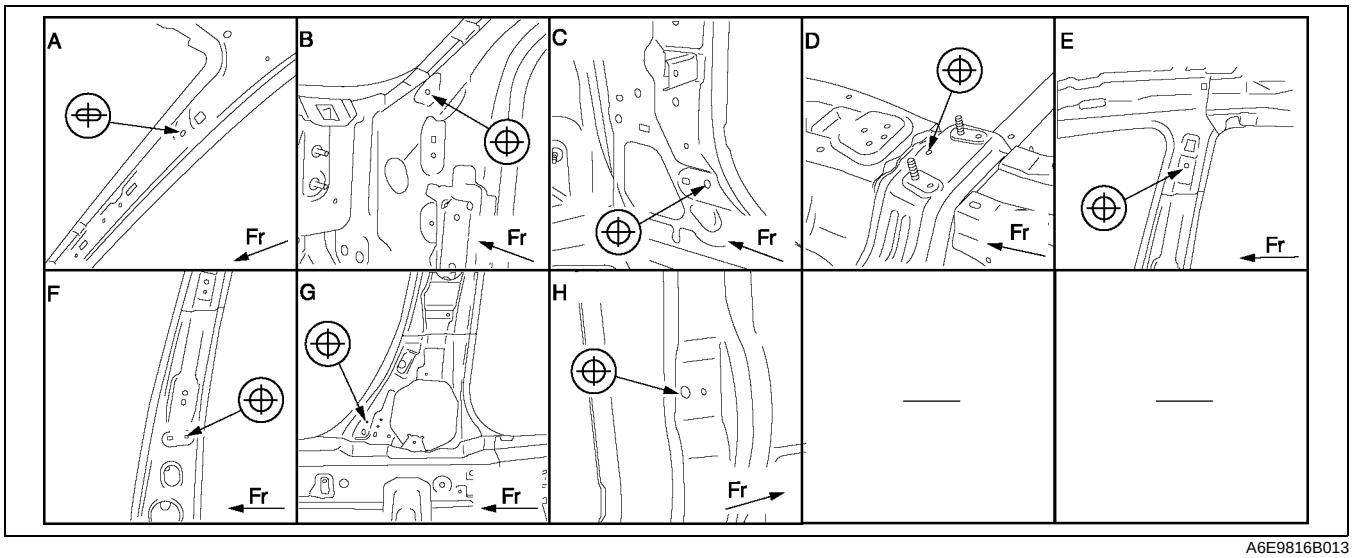
Measured location	Dimensions mm {in}
11	1,093 {43.03}
12	908 {35.75}
13	943 {37.13}
14	979 {38.54}
15	1,050 {41.34}
16	921 {36.26}
17	683 {26.89}
18	1,231 {48.46}
19	1,004 {39.53}
20	536 {21.10}

ROOM STRAIGHT-LINE DIMENSIONS (1)

A6E981670001B01



A6E9816B012



A6E9816B013

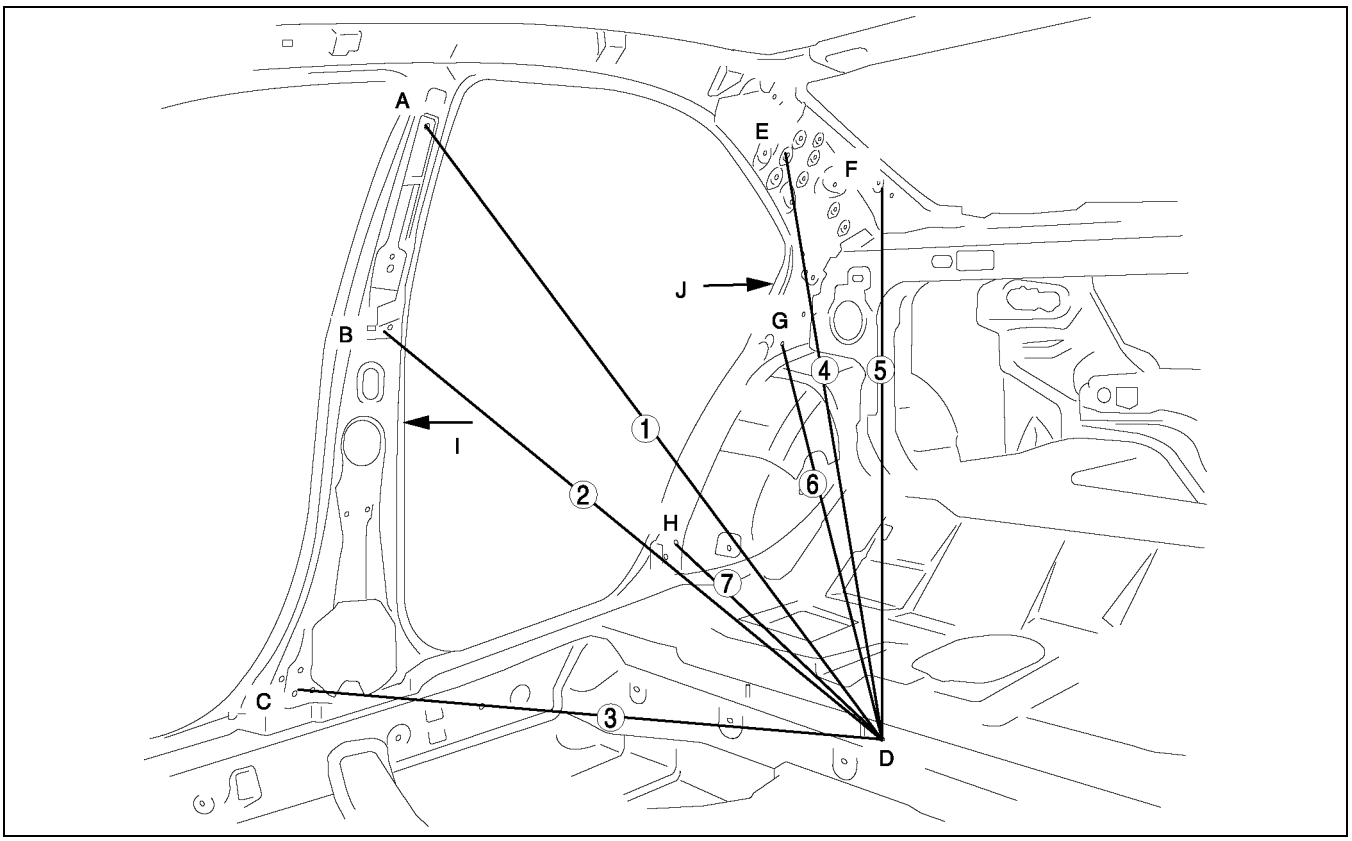
Measured location	Dimensions mm {in}
1	1,024 {40.31}
2	1,098 {43.23}
3	920 {36.22}
4	1,175 {46.26}

Measured location	Dimensions mm {in}
5	1,010 {39.76}
6	767 {30.20}
H-H'	1,487 {58.54}

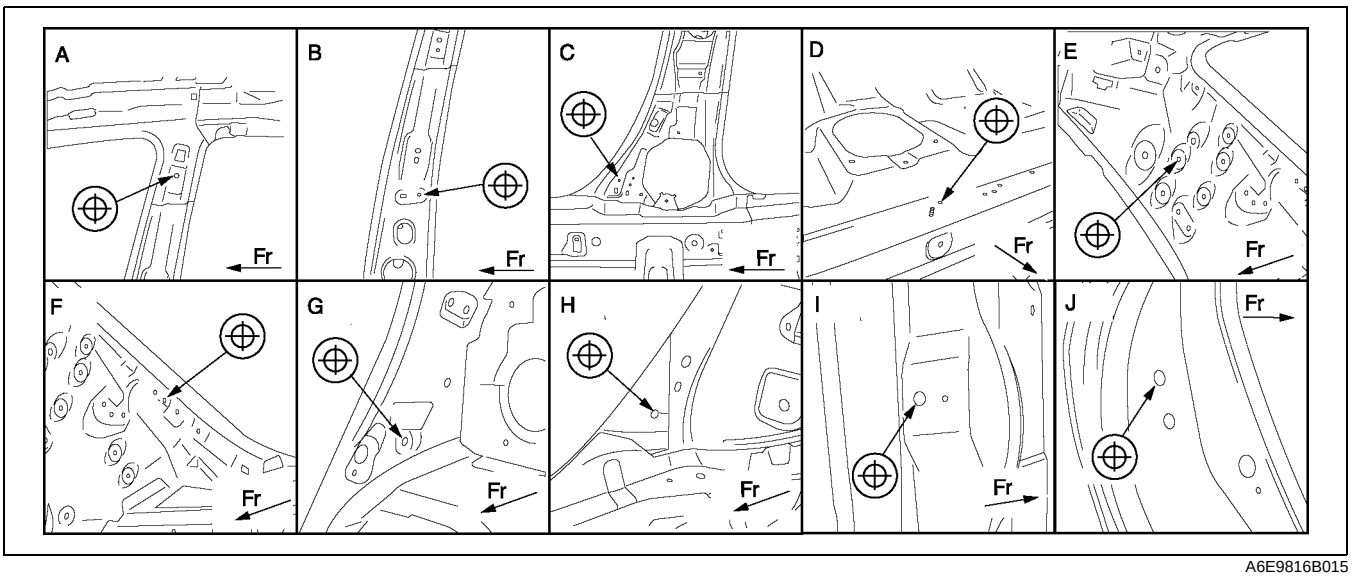
ROOM STRAIGHT-LINE DIMENSIONS (2)

A6E981670001B02

SEDAN



A6E9816B014

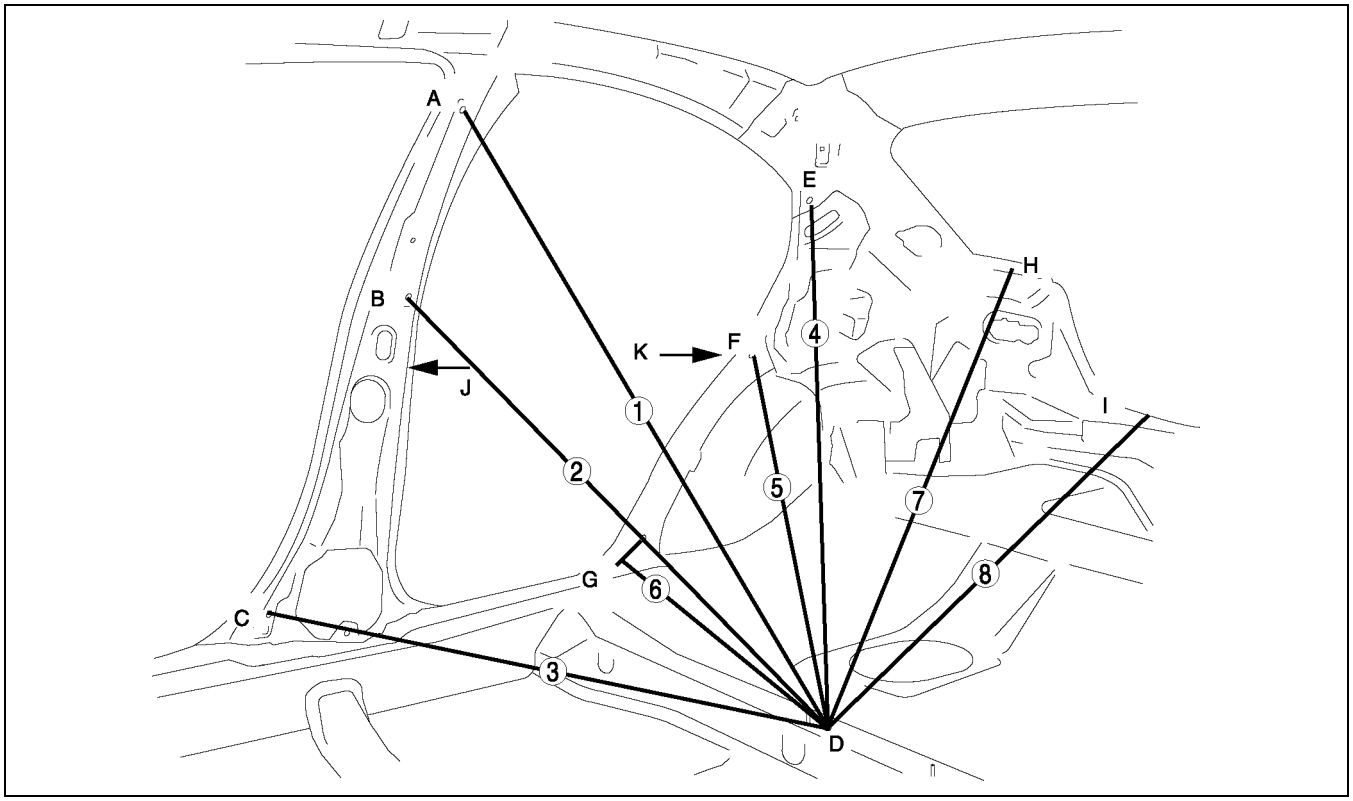


A6E9816B015

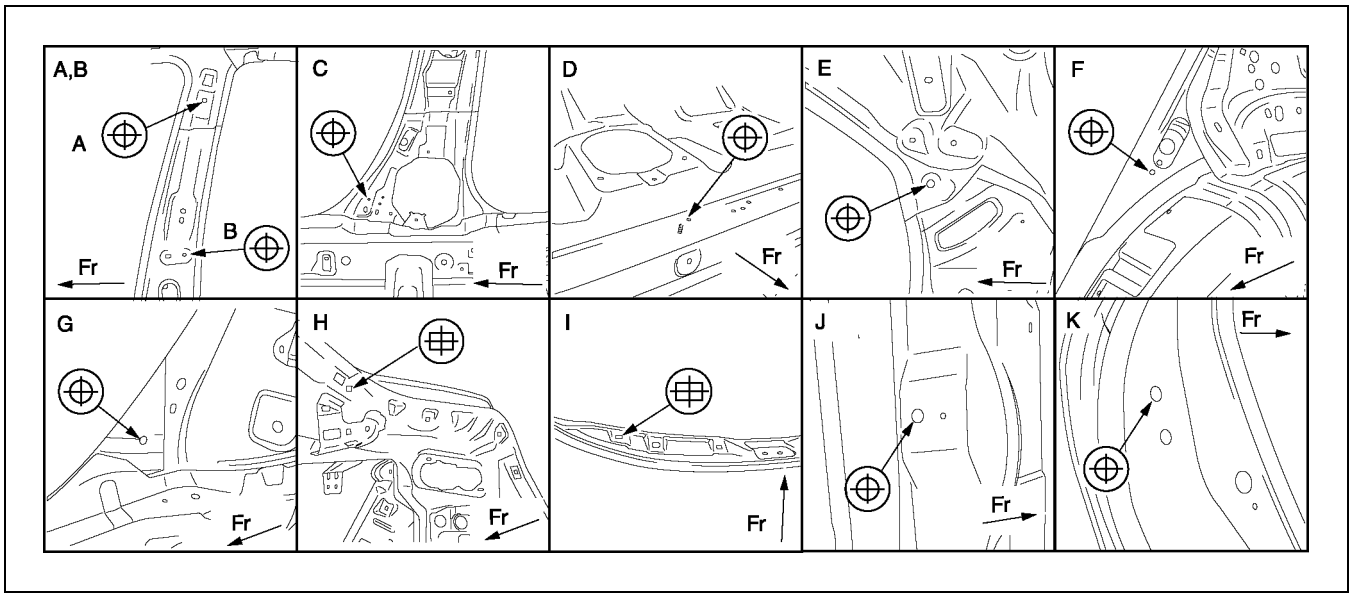
Measured location	Dimensions mm {in}
1	RH:1,141 {44.92}, LH:1,104 {43.46}
2	RH:996 {39.21}, LH:946 {37.24}
3	RH:952 {37.48}, LH:897 {35.31}
4	RH:1,193 {46.97}, LH:1,157 {45.55}
5	RH:1,285 {50.59}, LH:1,252 {49.29}

Measured location	Dimensions mm {in}
6	RH:1.079 {42.48}, LH:1,030 {40.55}
7	RH:833 {32.80}, LH:767 {30.20}
I-I'	1,584 {62.36}
J-J'	1,557 {61.30}

5HB



A6E9816B016



A6E9816B017

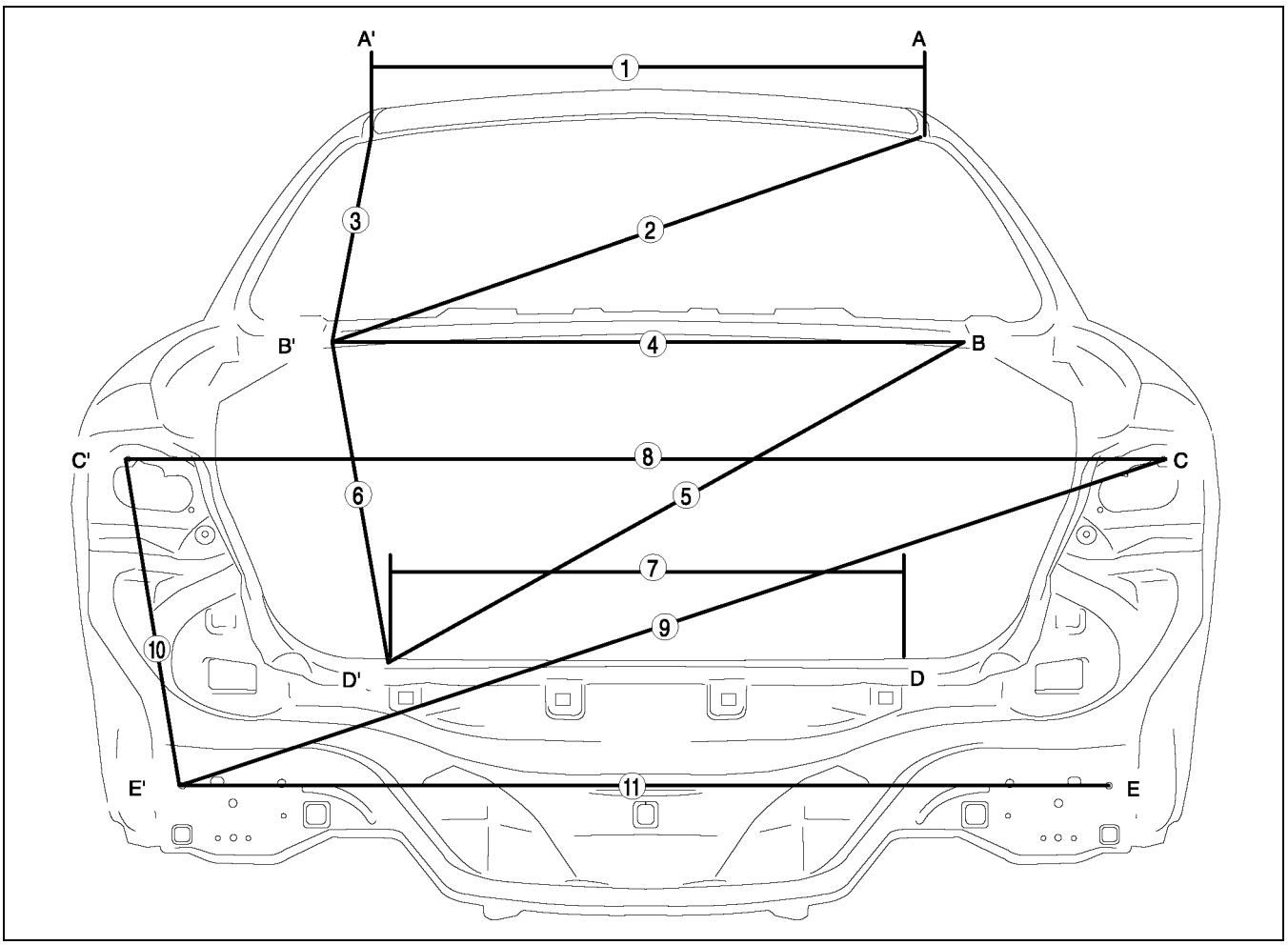
Measured location	Dimensions mm {in}
1	RH:1,141 {44.92}, LH:1,104 {43.46}
2	RH:996 {39.21}, LH:946 {37.24}
3	RH:952 {37.48}, LH:897 {35.31}
4	RH:1,204 {47.40}, LH:1,166 {45.91}
5	RH:1,027 {40.43}, LH:976 {38.43}

Measured location	Dimensions mm {in}
6	RH:833 {32.80}, LH:767 {30.20}
7	RH:1,402 {55.20}, LH:1,374 {54.09}
8	RH:1,671 {65.79}, LH:1,657 {65.24}
J-J'	1,584 {62.36}
K-K'	1,557 {61.30}

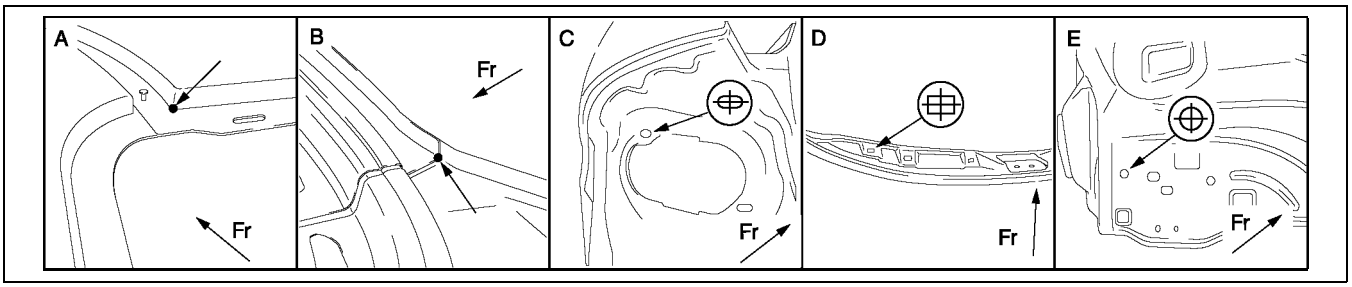
REAR BODY STRAIGHT-LINE DIMENSIONS

A6E981670002B01

SEDAN



A6E9816B018

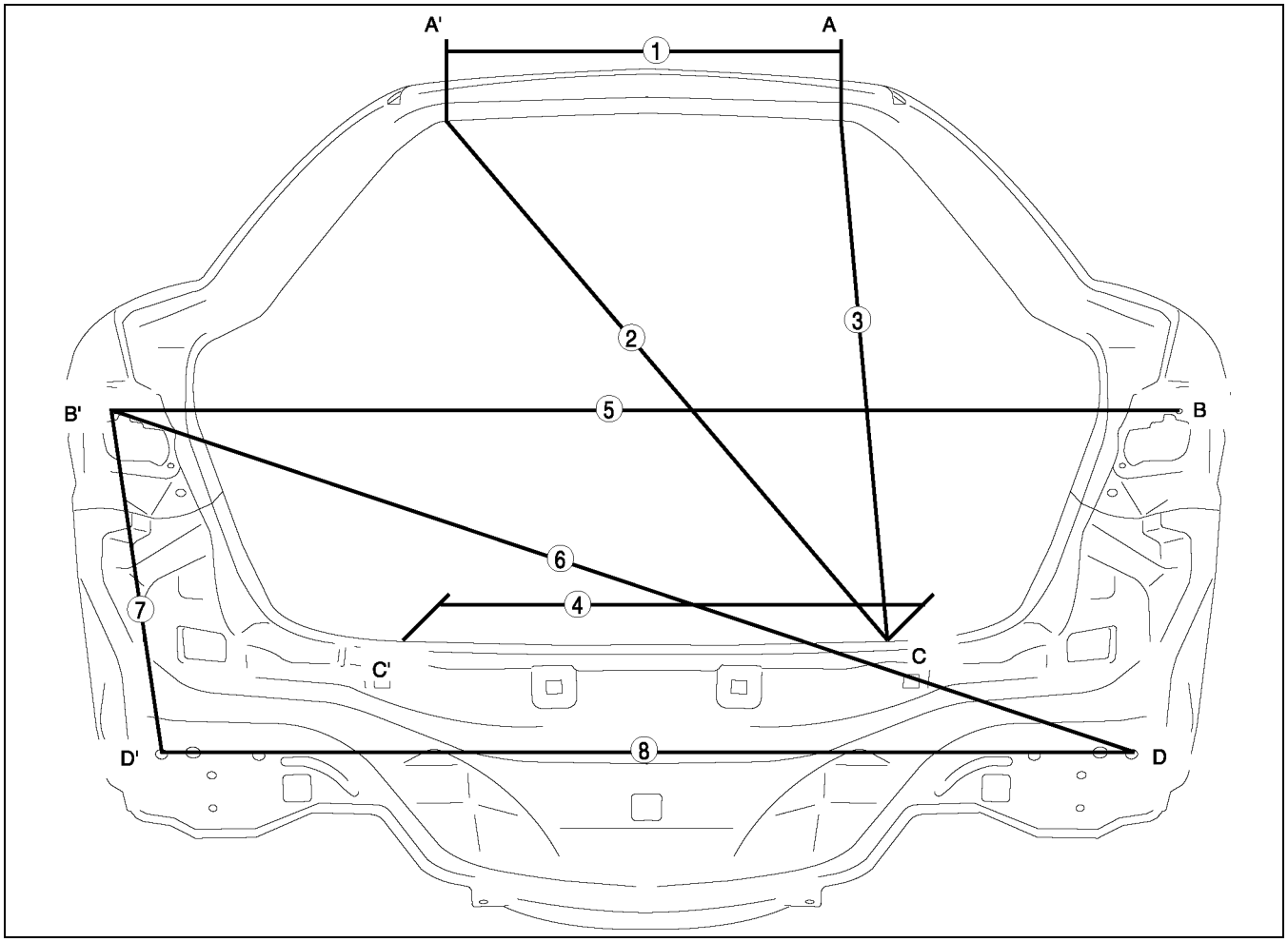


A6E9816B019

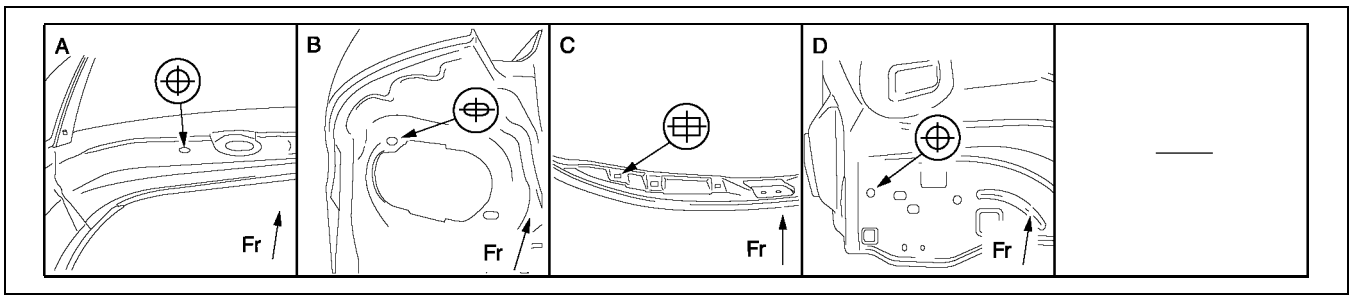
Measured location	Dimensions mm {in}
1	1,013 {39.88}
2	1,273 {50.12}
3	826 {32.52}
4	928 {36.54}
5	969 {38.15}
6	555 {21.85}

Measured location	Dimensions mm {in}
7	680 {26.77}
8	1,402 {55.20}
9	1,388 {54.65}
10	452 {17.80}
11	1,228 {48.35}

5HB



A6E9816B020



A6E9816B021

Measured location	Dimensions mm {in}
1	700 {27.56}
2	1,436 {56.54}
3	1,260 {49.61}
4	680 {26.77}

Measured location	Dimensions mm {in}
5	1,402 {55.20}
6	1,388 {54.65}
7	452 {17.80}
8	1,228 {48.35}

PLASTIC BODY PARTS

PLASTIC BODY PARTS

PLASTIC PARTS HEAT RESISTING TEMPERATURE

A6E981850000B01

Part Name		Code	Material Name	Heat resisting TemperatureC°{F°}
WINDSHIELD MOULDING		PVC	POLYVINYLCHLORIDE	95 {203}
COWL GRILLE		PP	POLYPROPYLENE	95 {203}
FRONT COMBINATION LIGHT	LENS	PC	POLYCARBONATE	130 {266}
	HOUSING	PBT	PBT	120 {248}
RADIATOR GRILLE	GRILLE	ABS	ABS	90 {194}
	REINFORCE-MENT	PP	POLYPROPYLENE	95 {203}
FRONT BUMPER		PP	POLYPROPYLENE	100 {212}
FRONT SIDE TURN LIGHT	LENS	PMMA	ACRYLIC	75 {167}
	HOUSING	PC-PBT	POLYPROPYLENE-PBT	120 {248}
OUTSIDE MIRROR	HOUSING	ABS	ABS	95 {200}
	BASE	PBT	PBT	200 {395}
	BLACK	AES	AES	75 {167}
	BODY COLOR	ABS	ABS	90 {194}
	MIRROR HOLDER	PP	POLYPROPYLENE	50 {122}
REAR COMBINATION LIGHT	LENS	PMMA	ACRYLIC	80 {167}
	HOUSING	AES	AES	70 {158}
REAR BUMPER		PP	POLYPROPYLENE	100 {212}
REAR FINISHER		ABS	ABS	90 {194}
HIGH-MOUNT BRAKE LIGHT(5HB)		PC	POLYCARBONATE	130 {266}
ROOF MOULDING		PVC	POLYVINYLCHLORIDE	95 {203}
BELTLINE MOLDING		PVC	POLYVINYLCHLORIDE	95 {203}
REAR SPOILER		ABS	ABS	90 {194}
SHROUD PANEL		PP	POLYPROPYLENE	100 {212}

Note

- The application of temperatures higher then heat resisting temperatures may result in part deformation.

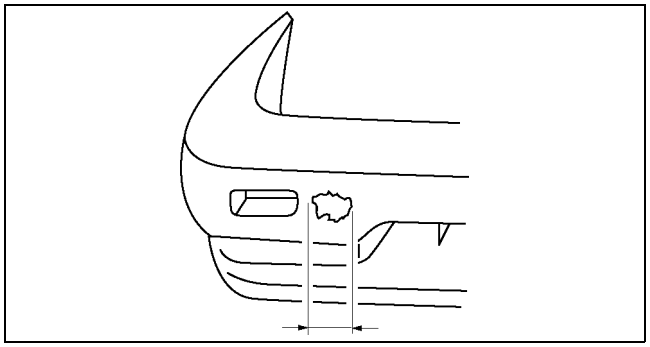
REPAIRABLE RANGE OF POLYPROPYLENE BUMPERS

A6E981850010B01

The three types of damaged bumpers shown below are considered repairable. Although a bumper which has been damaged greater than this could also be repaired, it should be replaced with a new one because such repair would detract from the looks and quality of the bumper. In addition, such repair is not considered reasonable in terms of work time.

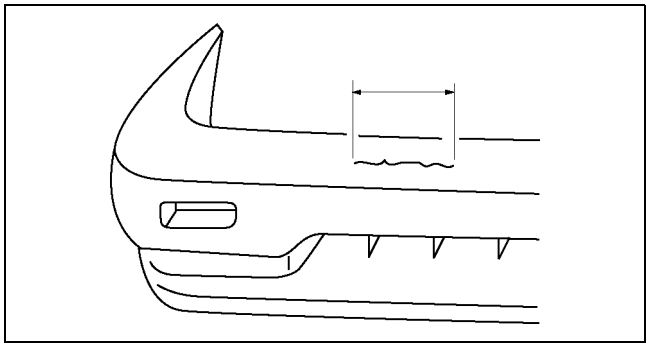
Repairable Bumpers

1. A bumper with a hole less than 50 mm {1.97 in} in diameter.



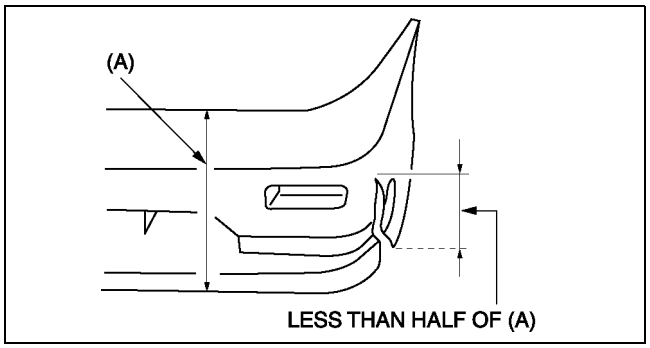
YMU980PCM

2. A bumper with a crack less than 100 mm {3.94 in} in length.



YMU980PCN

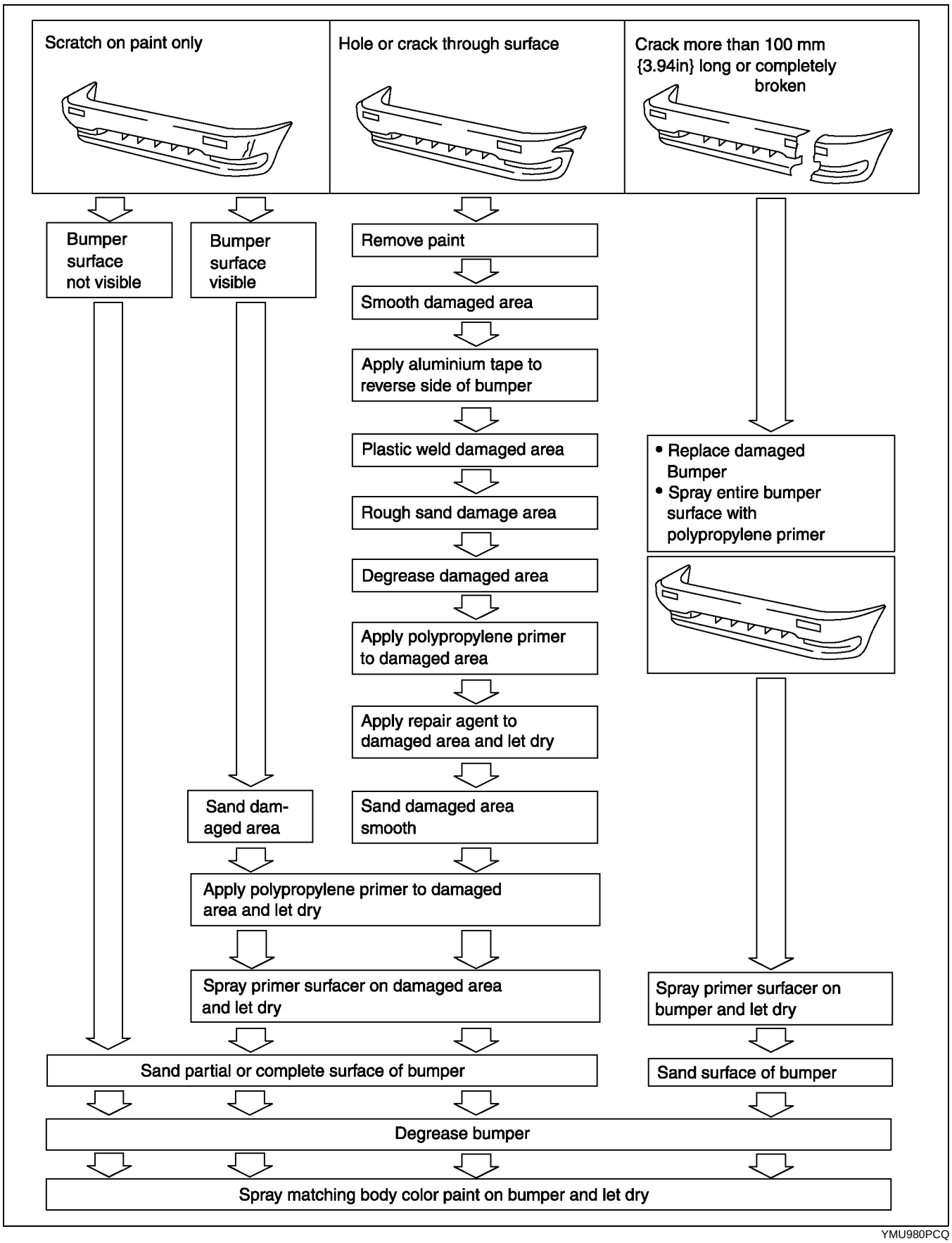
3. A bumper with a crack less than 100 mm {3.94 in} in length that is less than half of the width of the bumper.



YMU980PCP

POLYPROPYLENE BUMPER REPAIR

A6E981850010B02

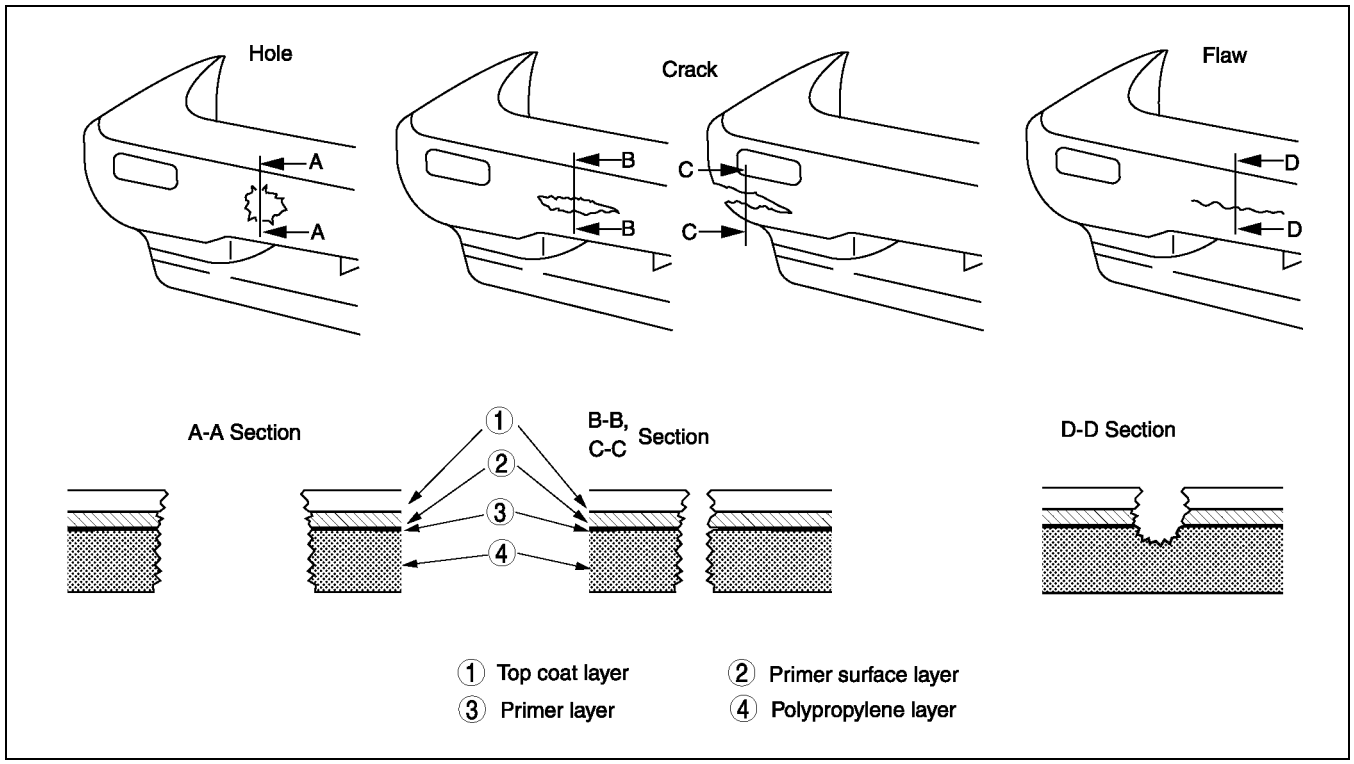


YMU980PCQ

PROCEDURE

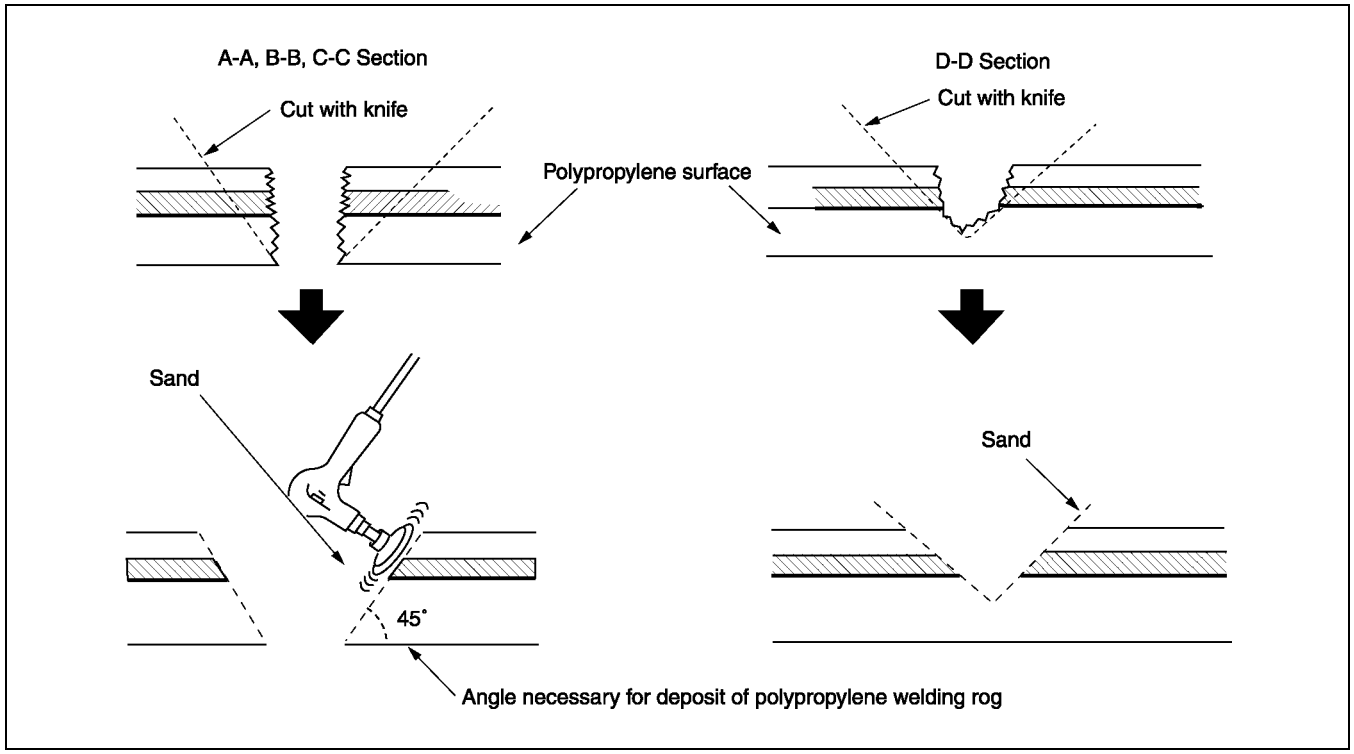
A6E981850010B03

Repair of polypropylene bumpers having damage that has reached the surface of the polypropylene and are too serious to be restored by painting only.



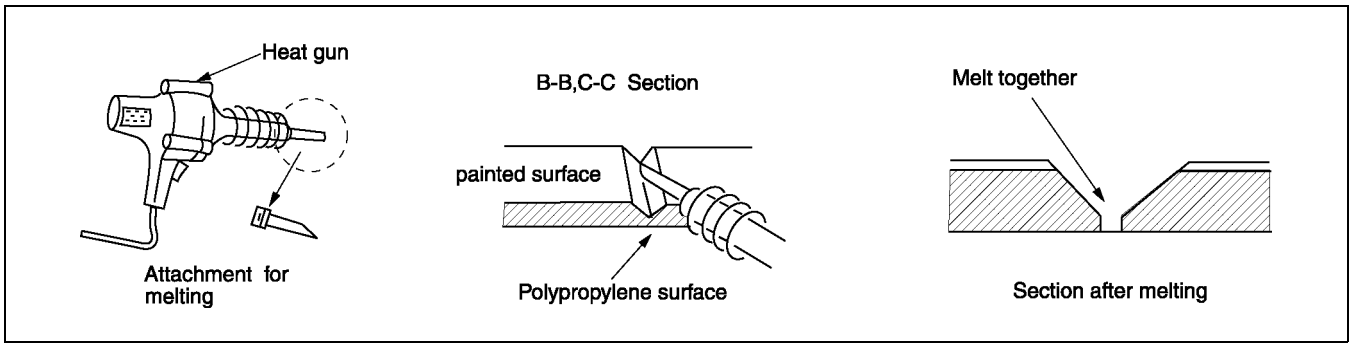
ZUA9818B001

1. Cut the rough edges around the damage with a knife to make it smooth. Sand the area with a sander to make an angle of about 45°.



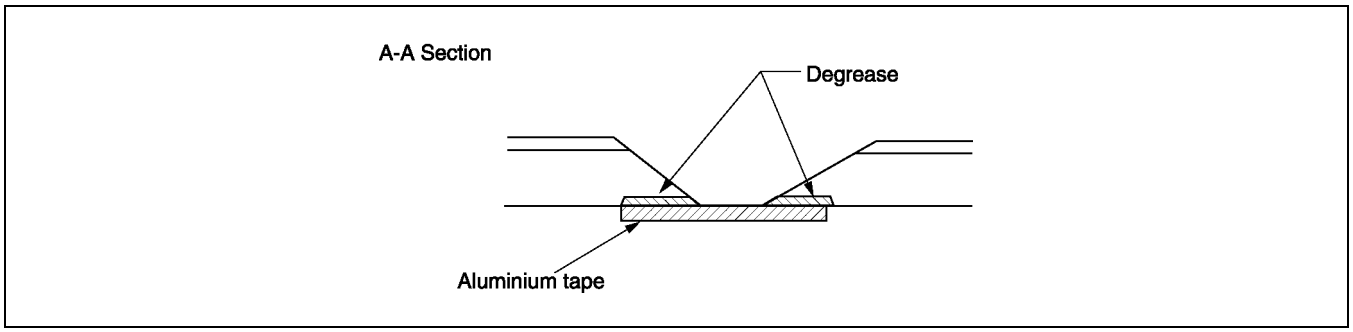
ZUA9818B002

2. Weld the damaged area.
   - For repair of a cracked area, melt the crack together with a heat gun and a melting attachment.



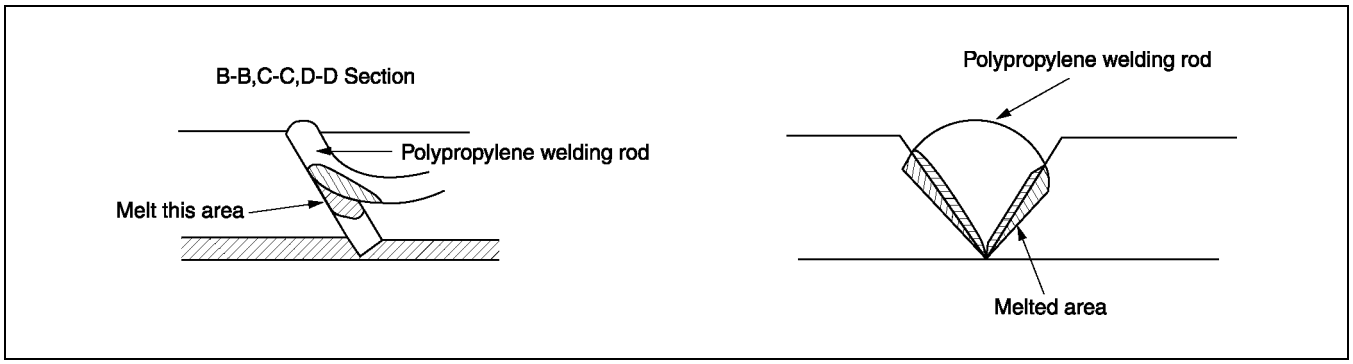
ZUA9818B003

   - For repair of a hole, degrease the area on both sides of the bumper and apply aluminium tape on the reverse side of the damage area.



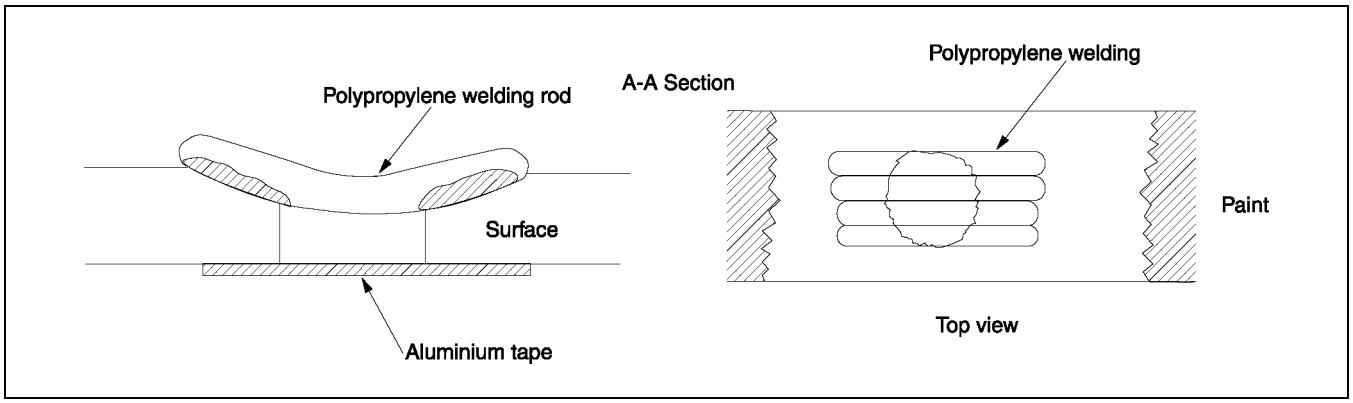
ZUA9818B005

3. Melt the polypropylene welding rod with a heat gun and deposit it the cracked area.



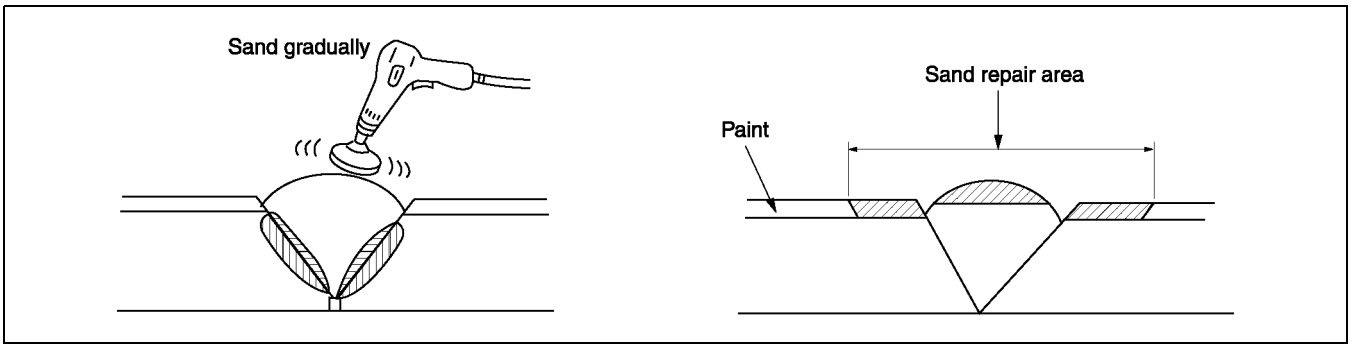
ZUA9818B004

Note
- Heat the shaded area to melt it.
- Take care not to overlay melt welding rod. If the part is welded with the welding rod melted like jelly, the welding strength will be reduced.
- Hold the heat gun 10—20 mm {0.39—0.79 in} from the part being welded.
- Do not move the welding rod until the welded parts cool.



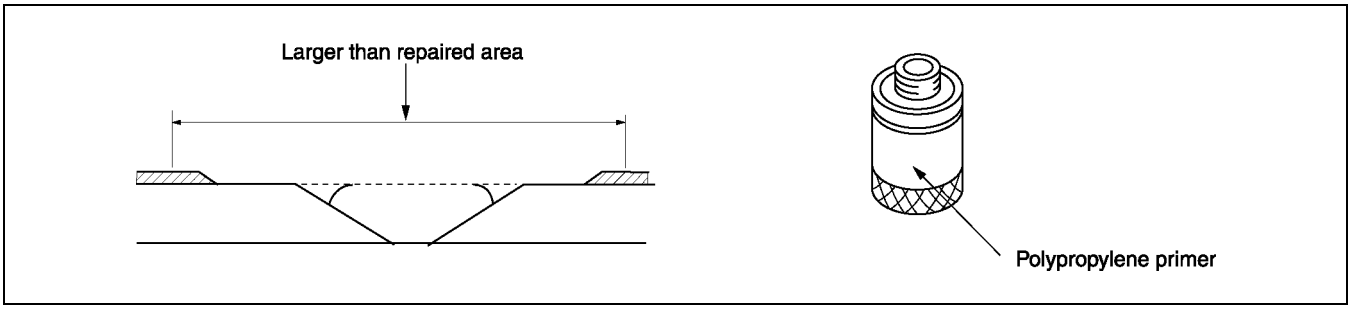
ZUA9818B006

4. Sand the surface of the polypropylene gradually as it is easily melted by the abrasion heat. Sand the area to which repair agent will be applied.



YMU980PCX

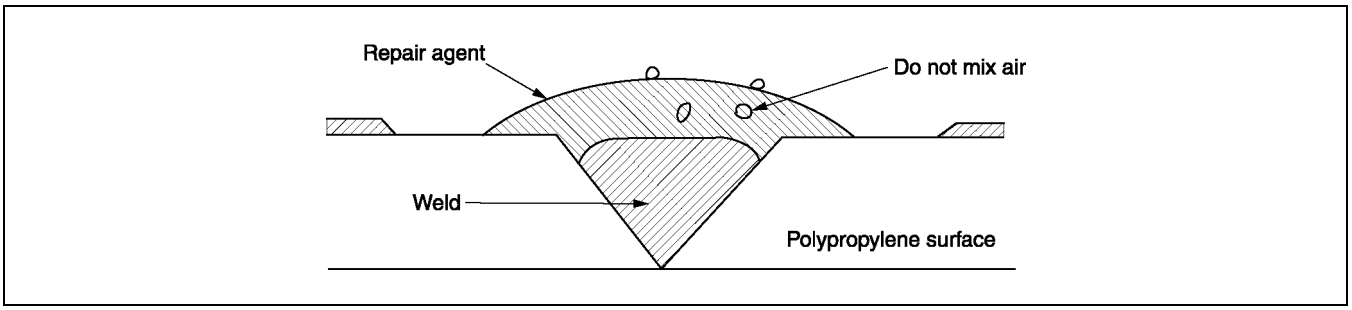
5. Uniformly apply polypropylene primer with a brush to an area larger than the repaired area. Allow to dry about 10 minutes at 20 °C {68 °F}.



YMU980PCY

6. Mix the main agent and the stiffening agent in a ratio of one to one. Apply the mixed repair agent to the damaged area.

Note
- When mixing the main and stiffening agents, take care not to allow bubbles to form.
- The repair agent hardens quickly (about 5 minutes); proceed with the work immediately after mixing the agents.
- Allow about 30 minutes to dry (20 °C {68 °F}) before sanding.

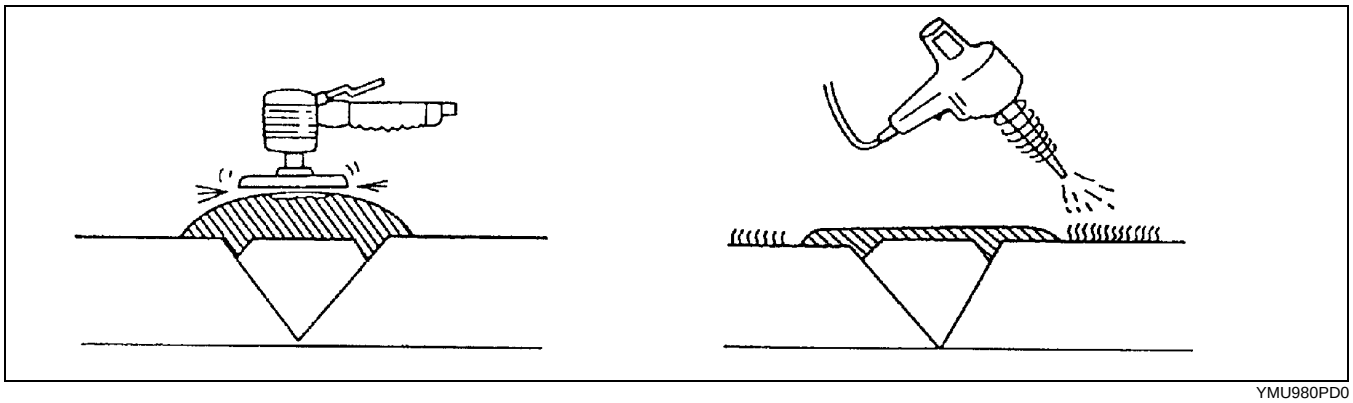


YMU980PCZ

The repair agent is a two part epoxy adhesive.
When the repair agent hardens, it will provide a good finish with the same flexibility as the polypropylens.
The repair agent for a **urethane** bumper is also a two part adhesive compound. However, this is different from that for a polypropylene bumper. If the incorrect repair agent is used, the repair will be faulty.

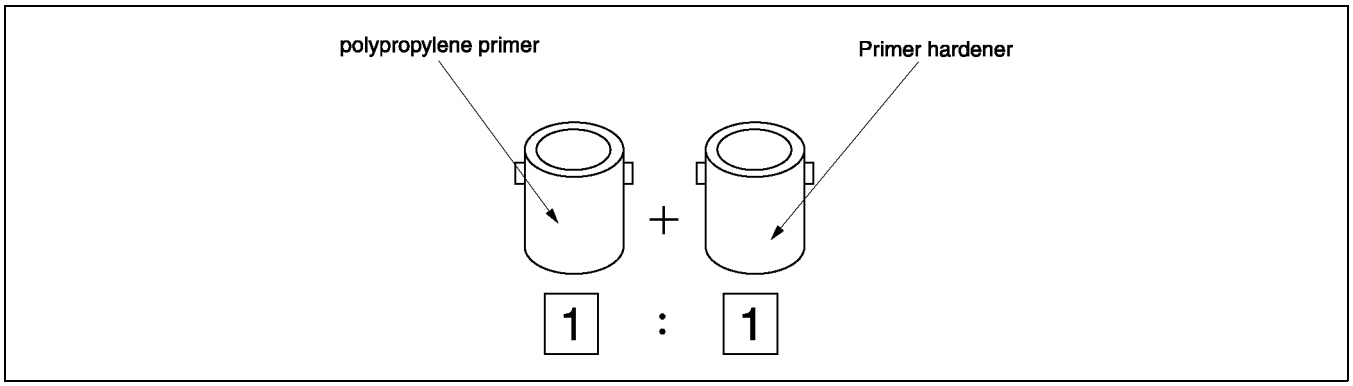
7. Sand the area with #180—240 sandpaper.

Note
- If excessive force is applied to the area when sanding, the surface will be damaged.
- If fuzz remains around the repaired area, melt it with a heat gun.



YMU980PD0

8. Degrease the painted surface.
9. Mix the primer and the hardener at a ratio of one to one. Apply the primer to the repaired area and the surface of the bumper with a brush or spray.



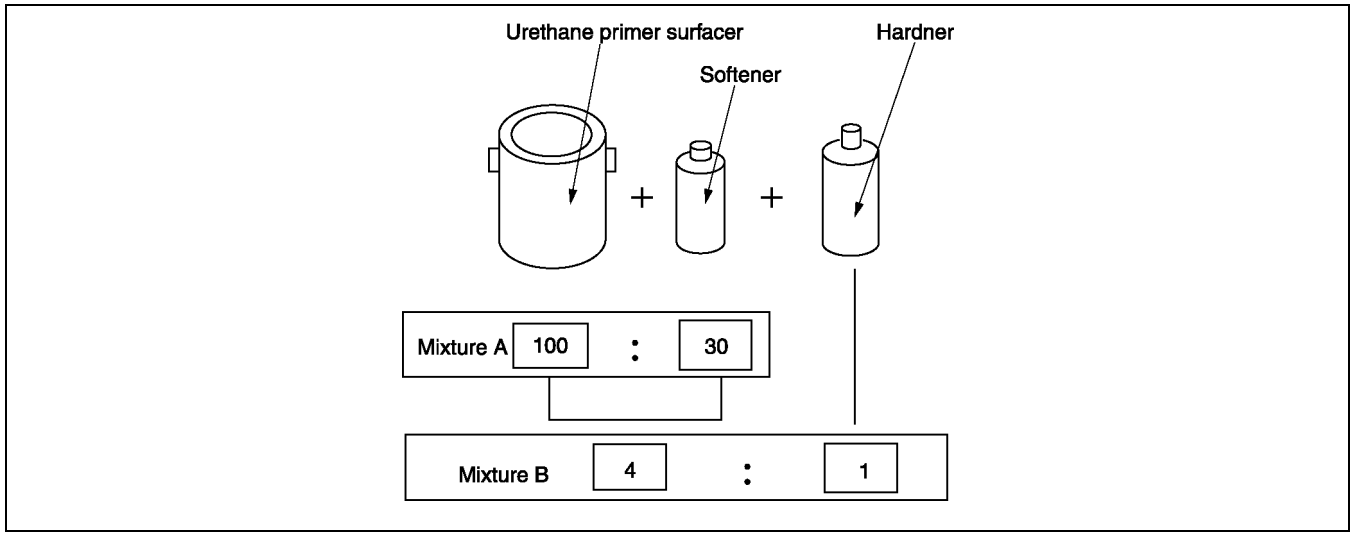
YMU980PD1

Use the primer within 16 hours after it is mixed.

Note
- Polypropylene primer will dissolve even after drying if it is wiped with solvent. Use only water to clean around the primer.

10. Allow the part to dry.

11. Add the softener to the urethane primer surfacer and spray it on the repaired area.
    a. Mixing method
       Urethane primer surfacer + Softener..... Mixture A
       Mixture A + hardener..... Mixture B
       Dilute mixture B with thinner to spray on bumper
    b. Viscosity
       14—16 seconds/viscosimeter 20 °C {68 °F}



YMU980PD2

Note
- Mix the solutions at the specified ratio.

    c. Spray pressure
       300—400 kPa {3—4 kgf/cm^2, 43—57 psi}
    d. Standard film thickness
       30—40 μ
    e. Spray method
       Spot-spray primer surfacrer on bumper three of four times
12. Air drying 20 °C {68 °F} — 8 hours minimum.
    Forced drying 60 °C {140 °F} — 1 hour
13. Lightly sand the complete surface of the bumper with #400—#600 sandpaper. Do not expose the surface of the polypropylene. (Wet or dry sanding is acceptable.)
14. Wipe the complete surface of the bumper with degreasing agent. Quickly wipe the surface with a clean rag to degrease it.
15. Apply a matching coat of body color to the polypropylene bumper.

Note
- Be sure to use only urethane primer for a urethane bumper and polypropylene primer for a polypropylene bumper. Other paints for repairing a polypropylene bumper are the same as those for the urethane bumper.

16. Air drying 20 °C {68 °F} — 8 hours minimum.
    Forced drying 60 °C {140 °F} — 1 hour

Note
- Let the part air dry when possible as forced drying could cause bubbles in the top coat.

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

A6E982089000B01

- This is the primary color mixture chart for body colors.
- Please use the paint available in your country.
- A blank column indicates that there is no primary color available.

AKZO

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYXITHANE/POLYURETHANE	
			LABEL	AUTOBASE	AUTOCRYL
			INGREDIENTS	CC/CC g{oz}	CC/CC g{oz}
A3E	CLASSIC RED CLE	956	VIOLET-RED TRANSPARENT		537.0 {18.94}
		559	RED OXIDE		544.2 {19.20}
		528	RED MAROON TRANSPARENT		621.4 {21.92}
		359	BRILLIANT RED	777.7 {27.43}	989.8 {34.91}
		00	WHITE	778.2 {27.45}	
		744	MIXING BLACK	781.9 {27.58}	
		538	BRIGHT MAROON TRANSPARENT	989.9 {34.92}	
A4D	ARCTIC WHITE CLE	00	WHITE	1,172.5 {41.36}	1,283.0 {45.26}
		558	LIGHT OXIDE YELLOW	1,173.9 {41.41}	
		744	MIXING BLACK	1,175.5 {41.46}	
		971	VIOLET TRANSPARENT		1,283.6 {45.28}
		904	DARK BLUE		1,284.5 {45.31}
		744	MIXING BLACK		1,286.3 {45.37}
		558	LIGHT OXIDE YELLOW		1,292.5 {45.59}
16W	BLACK MC	400	DEEP BLACK	454.3 {16.02]	
		334YA	YELLOW GOLD PALIOCROM	457.2 {16.13}	
		333DF	SILVER DOLLAR FINE	476.4 {16.80}	
		777	LIGHT GRAY TRANSPARENT	540.6 {19.07}	
		505	RED SEMI-TRANSPARENT	614.4 {21.67}	
		261	BRIGHT BLUE TRANSPARENT	958.5 {33.81}	
18J	GRACE GREEN MC	732	DARK GREEN TRANSPARENT	545.1 {19.23}	
		333M	MIXING METALLIC MEDIUM COARSE	550.9 {19.43}	
		777	LIGHT GRAY TRANSPARENT	565.6 {19.95}	
		575	BLUE TRANSPARENT	603.9 {21.30}	
		333PG	YELLOW(GOLD)PEARL-EFFECT MIXING COLOR	642.2 {22.65}	
		400	DEEP BLACK	755.6 {26.65}	
		333P	WHITE PEARL-EFFECT MIXING COLOR	870.9 {30.72}	
		952	DARK RED OXIDE TRANSPARENT	996.6 {35.15}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYXITHANE/POLYURETHANE	
			LABEL	AUTOBASE	AUTOCRYL
			INGREDIENTS	CC/CC g{oz}	CC/CC g{oz}
24E	SPARKLING SILVER M	333DC	SILVER DOLLAR METALLIC COARSE	479.9 {16.93}	
		952	DARK RED OXIDE TRANSPARENT	493.8 {17.42}	
		777	LIGHT GRAY	526.2 {18.56}	
		977	DARK OXIDE YELLOW	560.9 {19.78}	
		666	CORRECTION BINDER	676.8 {23.87}	
		333EC	MIXING METALLIC EXTRA COARSE	978.2 {34.50}	
25B	BLUE PACIFIC MC	261	BRIGHT BLUE TRANSPARENT	496.5 {17.51}	
		777	LIGHT GRAY	506.2 {17.86}	
		400	DEEP BLACK	537.5 {18.96}	
		333CC	MIXING METALLIC VERY COARSE	581.9 {20.53}	
		341	BLUE GREEN	630.2 {22.23}	
		971	VIOLET TRANSPARENT	724.6 {25.56}	
		333PB	BLUE PEARL-EFFECT MIXING COLOR	966.1 {34.08}	
25C	CANARY YELLOW MC		FIRST COAT		
		297	LIGHT YELLOW	521.4 {18.39}	
		744	MIXING BLACK	525.2 {18.53}	
		360	RED OXIDE	542.4 {19.13}	
		361	RED YELLOW	607.0 {21.41}	
		00	WHITE	1,077.2 {38.00}	
			SECOND COAT		
		666	CORRECTION BINDER	746.4 {26.33}	
		332XS	XIRALLIC CRYSTAL SILVER	794.2 {28.01}	
		332XG	XIRALLIC SUNBEARN GOLD	861.2 {30.38}	
		777	LIGHT GRAY	956.9 {33.75}	
25D	SNOWFLAKE WHITE PEARL MC		FIRST COAT		
		00	WHITE	1,172.7 {41.37}	
		744	MIXING BLACK	1,174.2 {41.42}	
		558	LIGHT OXIDE YELLOW	1,175.6 {41.47}	
			SECOND COAT		
		332XS	XIRALLIC CRYSTAL SILVER	481.3 {16.98}	
		332XG	XIRALLIC SUNBEARN GOLD	529.4 {18.67}	
		777	LIGHT GRAY	649.7 {22.92}	
		666	CORRECTION BINDER	962.5 {33.95}	
25E	STRATO BLUE MC	332VA	VIOLET PEARL	390.6 {13.78}	
		777	LIGHT GRAY	401.1 {14.15}	
		956	VIOLET-RED TRANSPARENT	425.1 {14.99}	
		261	BRIGHT BLUE TRANSPARENT	507.7 {17.91}	
		333PB	BLUE PEARL-EFFECT MIXING COLOR	612.9 {21.62}	
		400	DEEP BLACK	736.1 {25.96}	
		341	BLUE GREEN	973.5 {34.34}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYXITHANE/POLYURETHANE	
			LABEL	AUTOBASE	AUTOCRYL
			INGREDIENTS	CC/CC g{oz}	CC/CC g{oz}
25F	GARNET RED MC	334XR	XIRALLIC RADIANT RED	352.2 {12.42}	
		400	DEEP BLACK	378.8 {13.36}	
		538	BRIGHT MAROON TRANSPARENT	449.2 {15.84}	
		777	LIGHT GRAY	543.1 {19.16}	
		956	VIOLET-RED TRANSPARENT	746.6 {26.34}	
		262	RED TRANSPARENT	973.5 {34.34}	
25G	TITANIUM GRAY M	333DC	SILVER DOLLAR METALLIC COARSE	409.9 {14.46}	
		777	LIGHT GRAY	429.5 {15.15}	
		261	BRIGHT BLUE TRANSPARENT	472.3 {16.66}	
		744	MIXING BLACK	639.3 {22.55}	
		333PR	RED PEARL-EFFECT MIXING COLOR	982.3 {34.65}	
25H	SILVER CONTRAIL M	333DC	SILVER DOLLAR METALLIC COARSE	965.4 {34.05}	
		777	LIGHT GRAY	967.1 {34.11}	
		101	OPAL	971.4 {34.26}	
		400	DEEP BLACK	977.8 {34.49}	
		732	DARK GREEN TRANSPARENT	986.1 {34.78}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

E.I.du pont de nemours &Co.(Inc.)

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYXITHANE/POLYURETHANE		
			LABEL	CRONAR	CRONAR	-
			INGREDIENTS	CENTARI 6000 g{oz}	CENTARI 600 g{oz}	CENTARI 500 g{oz}
A3E	CLASSIC RED CLE	AM 64	MAGENTA	240.4 {8.48}	184.1 {6.49}	
		AM 50	BRILLIANT RED	440.7 {15.54}	337.4 {11.90}	
		AM 66	RED VIOLET	460.7 {16.25}	352.8 {12.44}	
		AM 150	BINDER		935.6 {33.00}	
		XB 155	M.S. BINDER	950.4 {33.52}		
A4D	ARCTIC WHITE CLE	AM1	WHITE H.S.	663.9 {23.42}	622.3 {21.95}	
		AM7	BLACK L.S.	677.4 {23.89}	635.0 {22.40}	
		AM82	YELLOW OXIDE L.S.	679.3 {23.96}	636.8 {22.46}	
		AB 150	B/C BALANCER		1,167.0 {41.16}	
		XB 155	M.S. BINDER	1,187.8 {41.90}		
16W	BLACK MC	AM6	BLACK H.S.		174.4 {6.15}	
		4530S	FLOP CONTROL AGENT		252.9 {8.92}	
		AM14	COARSE ALUMINIUM		255.1 {9.00}	
		AM74	BLUE PEARL		263.6 {9.30}	
		AB150	B/C BALANCER		772.8 {27.26}	
		1B160	BINDER		925.6 {32.65}	
18J	GRACE GREEN MC	AM27	TRANSPARENT BLUE	94.9 {3.35}		
		AM32	GREEN	170.5 {6.01}		
		AM5	JET BLACK	235.6 {8.31}		
		4530S	FLOP CONTROL AGENT	287.4 {10.14}		
		AM75	SUPER GREEN PEARL	326.2 {11.51}		
		AM76	GOLD PEARL	341.8 {12.06}		
		XB155	M.S. BINDER	715.5 {25.24}		
		XB165	M.S. BINDER	950.2 {33.52}		
24E	SPARKLING SILVER M	AM95	BR COARSE ALUMINIUM	127.6 {4.50}	110.2 {3.89}	
		AM11	MEDIUM ALUMINIUM	185.8 {6.55}	160.4 {5.66}	
		AM90	TRANSOXIDE YELLOW	206.9 {7.30}	178.7 {6.30}	
		AM91	TRANSOXIDE RED	214.4 {7.56}	185.2 {6.53}	
		AM2	WHITE L.S.	219.3 {7.74}	189.4 {6.68}	
		AM5	JET BLACK	221.8 {7.82}	191.5 {6.75}	
		AB150	B/C BALANCER		546.6 {19.28}	
		AB160	BINDER		945.5 {33.35}	
		XB155	M.S. BINDER	436.5 {15.40}		
		XB165	M.S. BINDER	958.0 {33.79}		
25B	BLUE PACIFIC MC	AM27	TRANSPARENT BLUE	239.0 {8.43}	194.6 {6.86}	
		AM74	BLUE PEARL	347.8 {12.27}	283.2 {9.99}	
		AM62	TRANSPARENT RED	422.6 {14.91}	344.1 {12.14}	
		4530S	FLOP CONTROL AGENT	466.0 {16.44}	379.4 {13.38}	
		AM29	LIGHT BLUE	484.7 {17.10}	394.6 {13.92}	
		AM5	JET BLACK	500.6 {17.66}	407.6 {14.38}	
		AM17	BRIGHT-FINE ALUMINIUM	503.1 {17.75}	409.5 {14.44}	
		AB 150	B/C BALANCER		941.3 {33.20}	
		XB 155	M.S. BINDER	952.3 {33.59}		
25C	CANARY YELLOW MC	Please contact with your distributor or Du Pont office for the formula. Du pont is ready to provide the specialized color of CANARY YELLOW MC as a ready-to-use product.				

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYXITHANE/POLYURETHANE		
			LABEL	CRONAR	CRONAR	-
		INGREDIENTS		CENTARI 6000 g{oz}	CENTARI 600 g{oz}	CENTARI 500 g{oz}
25D	SNOWFLAKE@ WHITE PEARL MC COLOR BASE	AM1	WHITE H.S.		655.7 {23.13}	
		AB150	B/C BALANCER		1,186.9 {41.87}	
	SNOWFLAKE WHITE PEARL MC PEARL BASE	M8819	SILVER CRYSTAL(FAC PAC)		844.7 {29.80}	
		4530S	FLOP CONTROL AGENT		930.9 {32.84}	
		AM2	WHITE L.S.		936.9 {33.05}	
		AM7	BLACK L.S.		937.9 {33.08}	
		AM70	FAST BLUE L.S.		938.3 {33.10}	
25E	STRATO BLUE MC	AM27	TRANSPARENT BLUE	144.2 {5.09}	116.5 {4.11}	
		AM79	VIOLET PEARL	243.1 {8.57}	196.5 {6.93}	
		AM74	BLUE PEARL	314.2 {11.08}	253.9 {8.96}	
		AM5	JET BLACK	376.3 {13.27}	304.1 {10.73}	
		AM20	VIOLET	432.9 {15.27}	349.8 {12.34}	
		AM66	RED VIOLET	485.1 {17.11}	392.0 {13.83}	
		AB 150	B/C BALANCER		948.9 {33.47}	
		XB 155	M.S. BINDER	962.3 {33.94}		
25F	GARNET RED MC	AM64	MAGENTA	228.7 {8.07}	186.5 {6.58}	
		AM85	TRANS MAROON	331.6 {11.70}	270.4 {9.54}	
		4530S	FLOP CONTROL AGENT	397.2 {14.01}	323.9 {11.43}	
		AM76	GOLD PEARL	422.4 {14.90}	344.4 {12.15}	
		AM94	EXTRA COARSE ALUMINUM	434.7 {15.33}	354.5 {12.50}	
		AM5	JET BLACK	443.9 {15.66}	362.0 {12.77}	
		AM2	WHITE L.S.	452.2 {15.95}	368.7 {13.01}	
		AB 150	B/C BALANCER		939.1 {33.13}	
		XB 155	M.S. BINDER	949.9 {33.51}		
25G	TITANIUM GRAY M	AM95	BR COARSE ALUMINIUM	89.6 {3.16}	83.6 {2.95}	
		AM5	JET BLACK	140.6 {4.96}	131.1 {4.62}	
		AM28	FAST BLUE H.S.	157.4 {5.55}	146.8 {5.18}	
		AM20	VIOLET	171.5 {6.05}	159.9 {5.64}	
		AM84	RED OXIDE L.S.	184.9 {6.52}	172.5 {6.08}	
		AM2	WHITE L.S.	197.2 {6.96}	183.9 {6.49}	
		AB 150	B/C BALANCER		597.3 {21.07}	
		AB 160	BINDER		933.8 {32.94}	
		XB 155	M.S. BINDER	424.6 {14.98}		
		XB 165	M.S. BINDER	943.5 {33.28}		
25H	SILVER CONTRAIL M	AM95	BR COARSE ALUMINIUM	155.2 {5.47}	131.8 {4.65}	
		4530S	FLOP CONTROL AGENT	172.4 {6.08}	146.5 {5.17}	
		AM31	FIRST GREEN L.S.	189.0 {6.67}	160.6 {5.66}	
		AM70	FAST BLUE L.S.	203.3 {7.17}	172.7 {6.09}	
		AM2	WHITE L.S.	211.7 {7.47}	179.8 {6.34}	
		AM5	JET BLACK	215.3 {7.59}	182.9 {6.45}	
		AB 150	B/C BALANCER		571.2 {20.15}	
		AB 160	BINDER		938.1 {33.09}	
		XB 155	M.S. BINDER	449.8 {15.87}		
		XB 165	M.S. BINDER	950.1 {33.51}		

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

STANDOX

COLOR CODE	COLOR NAME	KIND OF PAINT / LABEL / MIXING No.	POLYURETHANE STANDOX CC/CC g{oz}
A3E	CLASSIC RED CLE	861	526.0 {18.55}
		566	714.9 {25.22}
		576	899.9 {31.74}
		564	939.4 {33.14}
A4D	ARCTIC WHITE CLE	870	1,120.9 {39.54}
		564	1,140.3 {40.22}
		574	1,141.9 {40.28}
16W	BLACK MC	571	716.5 {25.27}
		803	789.6 {27.85}
		008	856.2 {30.20}
		811	897.0 {31.64}
		859	918.2 {32.39}
		823	921.9 {32.52}
		570	925.6 {32.65}
18J	GRACE GREEN MC	571	262.6 {9.26}
		573	690.2 {24.35}
		823	764.3 {26.96}
		824	844.9 {29.80}
		008	868.4 {30.63}
		588	924.7 {32.62}
		802	937.9 {33.08}
24E	SPARKLING SILVER M	590	302.2 {10.66}
		811	836.2 {29.50}
		008	870.9 {30.72}
		581	924.6 {32.61}
		582	937.9 {33.08}
		571	941.7 {33.22}
25B	BLUE PACIFIC MC	859	673.3 {23.75}
		853	808.0 {28.50}
		825	905.7 {31.95}
		812	922.5 {32.54}
		563	936.0 {33.02}
25C	CANARY YELLOW MC	801	563.2 {19.87}
		008	695.7 {24.54}
		574	795.1 {28.05}
		570	894.4 {31.55}
		580	983.9 {34.71}
		575	990.5 {34.94}
	GROUND	870	1,131.2 {39.90}
		571	1,140.6 {40.23}
		563	1,143.8 {40.35}
25D	SNOWFLAKE WHITE PEARL MC	599	748.5 {26.40}
		801	873.2 {30.80}
		802	898.2 {31.68}
		008	939.8 {33.15}
		570	943.9 {33.29}
	GROUND	570	1,032.5 {36.42}
		564	1,053.6 {37.16}
		581	1,054.7 {37.20}

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT / LABEL / MIXING No.	POLYURETHANE / STANDOX / CC/CC g{oz}
25E	STRATO BLUE MC	853	271.8 {9.59}
		825	482.7 {17.03}
		571	685.3 {24.17}
		821	795.0 {28.04}
		859	872.6 {30.78}
		569	945.2 {33.34}
25F	GARNET RED MC	833	332.3 {11.72}
		566	664.6 {23.44}
		805	767.6 {27.08}
		828	847.4 {29.89}
		576	913.8 {32.23}
		571	950.4 {33.52}
25G	TITANIUM GRAY M	811	477.5 {16.84}
		593	716.3 {25.27}
		571	823.7 {29.05}
		585	888.2 {31.33}
		569	912.1 {32.17}
		008	924.0 {32.59}
		567	933.6 {32.93}
25H	SILVER CONTRAIL M	593	505.1 {17.82}
		811	926.0 {32.66}
		589	932.3 {32.89}
		571	934.4 {32.96}

SPIES HACKER

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE
		LABEL	PERMACRON
		INGREDIENTS	g{oz}
A3E	CLASSIC RED CLE	MB 544	528.2 {18.63}
		MB 536	717.7 {25.32}
		MB 529	903.5 {31.87}
		MB 525	943.2 {33.27}
A4D	ARCTIC WHITE	MB 511	1,123.1 {39.62}
		MB 525	1,142.6 {40.30}
		MB 505	1,144.2 {40.36}
16W	BLACK MC	MB 502	713.7 {25.17}
		MB 799	780.1 {27.52}
		MB 558	814.8 {28.74}
		MB 593	853.0 {30.09}
		MB 554	874.2 {30.84}
		MB 501	918.5 {32.40}
		MB 561	922.2 {32.53}
18J	GRACE GREEN MC	MB 522	429.4 {15.15}
		MB 502	693.0 {24.44}
		MB 572	774.0 {27.30}
		MB 561	848.3 {29.92}
		MB 553	904.8 {31.92}
		MB 799	928.3 {32.74}
		MB 592	941.5 {33.21}
24E	SPARKLING SILVER M	MB 558	532.9 {18.80}
		MB 514	834.5 {29.44}
		MB 532	888.1 {31.33}
		MB 799	922.8 {32.55}
		MB 531	936.0 {33.02}
		MB 502	939.8 {33.15}
25B	BLUE PACIFIC MC	MB 554	672.0 {23.70}
		MB 546	806.4 {28.44}
		MB 563	903.9 {31.88}
		MB 557	920.7 {32.48}
		MB 527	934.1 {32.95}
25C	CANARY YELLOW MC	MB 591	562.1 {19.83}
		MB 799	694.3 {24.49}
		MB 505	793.5 {27.99}
		MB 501	892.6 {31.49}
		MB 523	981.9 {34.63}
		MB 528	988.5 {34.87}
	GROUND	MB 511	1,133.5 {39.98}
		MB 502	1,142.9 {40.31}
		MB 527	1,146.1 {40.43}
25D	SNOWFLAKE WHITE PEARL MC	MB 299	747.0 {26.35}
		MB 591	871.5 {30.74}
		MB 799	913.0 {32.20}
		MB 592	937.9 {33.08}
		MB 501	942.0 {33.23}
	GROUND	MB 501	1,036.7 {36.57}
		MB 525	1,057.8 {37.31}
		MB 532	1,058.9 {37.35}

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE
		LABEL	PERMACRON
		INGREDIENTS	g{oz}
25E	STRATO BLUE MC	MB 546	272.3 {9.60}
		MB 563	483.7 {17.06}
		MB 502	686.7 {24.22}
		MB 568	796.6 {28.10}
		MB 554	874.3 {30.84}
		MB 520	947.1 {33.41}
25F	GARNET RED MC	MB 582	331.6 {11.70}
		MB 536	663.3 {23.40}
		MB 595	766.1 {27.02}
		MB 564	845.7 {29.83}
		MB 529	912.0 {32.17}
		MB 502	948.5 {33.46}
25G	TITANIUM GRAY M	MB 558	487.5 {17.20}
		MB 513	717.7 {25.32}
		MB 502	825.3 {29.11}
		MB 552	890.0 {31.39}
		MB 520	913.9 {32.24}
		MB 799	925.8 {32.66}
		MB 506	935.5 {33.00}
25H	SILVER CONTRAIL M	MB 513	504.1 {17.78}
		MB 558	924.1 {32.60}
		MB 538	930.4 {32.82}
		MB 502	932.5 {32.89}

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

Nexa Autocolor

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYURETHANE	
			LABEL	AUTOCOLOR	
			INGREDIENTS	1L g{oz}	5L g{oz}
A3E	CLASSIC RED CLE		P425-941	461.9 {16.29}	2,309.5 {81.46}
			P429-976	558.5 {19.70}	2,792.5 {98.50}
			P425-900	562.6 {19.84}	2,813.0 {99.22}
			P425-921	678.6 {23.94}	3,393.0 {119.68}
			P192-474	1,017.4 {35.89}	5,087.0 {179.44}
A4D	ARCTIC WHITE CLE		P425-900	772.0 {27.23}	3,860.0 {136.16}
			P420-918RT	776.8 {27.40}	3,884.0 {137.00}
			P420-960RT	778.0 {27.44}	3,890.0 {137.21}
			P420-904RT	795.9 {28.07}	3,979.5 {140.37}
			P192-475	1,193.3 {42.09}	5,966.5 {210.46}
16W	BLACK MC		P425-0948	356.1 {12.56}	1,780.5 {62.80}
			P420-0902RT	388.6 {13.71}	1,943.0 {68.54}
			P425-0988	410.6 {14.48}	2,053.0 {72.42}
			P420-0920	424.0 {14.96}	2,120.0 {74.78}
			P425-0922	456.5 {16.10}	2,282.5 {80.51}
			P426-PP07	524.5 {18.50}	2,622.5 {92.50}
			P192-0500	957.2 {33.76}	4,786.0 {168.82}
18J	GRACE GREEN MC		P426-PP65	138.7 {4.89}	693.5 {24.46}
			P425-0948	263.7 {9.30}	1,318.5 {46.51}
			P420-0938	314.5 {11.09}	1,572.5 {55.47}
			P426-PP60	338.9 {11.95}	1,694.5 {59.77}
			P420-902RT	356.5 {12.57}	1,782.5 {62.87}
			P420-0982	398.5 {14.06}	1,992.5 {70.28}
			P425-0922	464.9 {16.40}	2,324.5 {81.99}
			P425-0954	594.8 {20.98}	2,974.0 {104.90}
			P192-0500	976.7 {34.45}	4,883.5 {172.26}
24E	SPAKING SILVER M		P425-984	396.5 {13.99}	1,982.5 {69.93}
			P420-938	419.0 {14.78}	2,095.0 {73.90}
			P420-942	429.7 {15.16}	2,148.5 {75.78}
			P420-982	451.2 {15.92}	2,256.0 {79.58}
			P425-989	634.8 {22.39}	3,174.0 {111.96}
			P192-528	976.7 {34.45}	4,883.5 {172.26}
25B	BLUE PACIFIC MC		P426-PP07	258.2 {9.11}	1,291.0 {45.54}
			P425-922	345.3 {12.18}	1,726.5 {60.90}
			P420-920	423.6 {14.94}	2,118.0 {74.71}
			P420-938	448.1 {15.81}	2,240.5 {79.03}
			P425-948	487.2 {17.19}	2,436.0 {85.93}
			P425-957	572.3 {20.19}	2,861.5 {100.93}
			P426-PP63	729.8 {25.74}	3,649.0 {128.71}
			P192-500	978.2 {34.50}	4,891.0 {172.52}
25C	CANARY YELLOW MC	GROUND COAT	P420-905	299.1 {10.55}	1,495.5 {52.75}
			P425-900	419.2 {14.79}	2,096.0 {73.93}
			P420-926	430.1 {15.17}	2,150.5 {75.86}
			P429-937	728.1 {25.68}	3,640.5 {128.41}
			P192-475	1,091.6 {38.50}	5,458.0 {192.52}
		BASE COAT	P426-PP05	14.2 {0.50}	71.0 {2.50}
			P426-PP09	18.9 {0.67}	94.5 {3.33}
			P192-500	530.0 {18.69}	2,650.0 {93.47}
			P190-376	948.1 {33.44}	4,740.5 {167.21}

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME		KIND OF PAINT	POLYURETHANE	
			LABEL	AUTOCOLOR	
			INGREDIENTS	1L g{oz}	5L g{oz}
25D	SNOW-FLAKE WHITE PEARL MC	GROUND COAT	P425-900	786.5 {27.74}	3,932.5 {138.71}
			P420-910RT	787.7 {27.78}	3,938.5 {138.92}
			P420-904RT	798.5 {28.17}	3,992.5 {140.83}
			P192-475	1,197.1 {42.23}	5,985.5 {211.13}
		TOP COAT	P426-PP05	62.8 {2.22}	314.0 {11.08}
			P426-PP09	74.2 {2.62}	371.0 {13.09}
			P192-500	556.3 {19.62}	2,781.5 {98.11}
			P190-376	950.9 {33.54}	4,754.5 {167.71}
25E	STRATO BLUE MC		P420-930	202.4 {7.14}	1,012.0 {35.70}
			P420-920	271.8 {9.59}	1,359.0 {47.94}
			P425-922	333.5 {11.76}	1,667.5 {58.82}
			P425-948	383.6 {13.53}	1,918.0 {67.65}
			P426-PP64	453.0 {15.98}	2,265.0 {79.89}
			P426-PP07	582.1 {20.53}	2,910.5 {102.66}
			P192-500	963.7 {33.99}	4,818.5 {169.96}
25F	GARNET RED MC		P429-923	360.2 {12.71}	1,801.0 {63.53}
			P426-HE01	453.2 {15.99}	2,266.0 {79.93}
			P420-938	534.3 {18.85}	2,671.5 {94.23}
			P426-PP09	553.1 {19.51}	2,765.5 {97.55}
			P425-984	562.0 {19.82}	2,810.0 {99.12}
			P429-976	608.5 {21.46}	3,042.5 {107.32}
			P420-933	700.5 {24.71}	3,502.5 {123.54}
			P426-PP08	920.2 {32.46}	4,601.0 {162.29}
			P192-500	989.5 {34.90}	4,947.5 {174.51}
25G	TITANIUM GRAY M		P425-989	323.3 {11.40}	1,616.5 {57.02}
			P425-950	381.9 {13.47}	1,909.5 {67.35}
			P420-938	402.4 {14.19}	2,012.0 {70.97}
			P429-976	413.1 {14.57}	2,065.5 {72.86}
			P420-907	419.9 {14.81}	2,099.5 {74.06}
			P425-922	434.6 {15.33}	2,173.0 {76.65}
			P420-930	457.1 {16.12}	2,285.5 {80.62}
			P425-992	634.9 {22.40}	3,174.5 {111.98}
			P192-528	976.8 {34.46}	4,884.0 {172.28}
25H	SILVER CONTRAIL M		P425-992	477.0 {16.83}	2,385.0 {84.13}
			P425-989	526.8 {18.58}	2,634.0 {92.91}
			P420-960RT	535.6 {18.89}	2,678.0 {94.46}
			P425-957	539.5 {19.03}	2,697.5 {95.15}
			P425-948	545.4 {19.24}	2,727.0 {96.19}
			P420-938	565.9 {19.96}	2,829.5 {99.81}
			P420-918RT	634.2 {22.37}	3,171.0 {111.85}
			P192-528	975.6 {34.41}	4,878.0 {172.06}

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

PPG INDUSTRIES

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE	
		LABEL	DELTRON	
		INGREDIENTS	1L g{oz}	NOTE
A3E	CLASSIC RED CLE	752	670.0 {23.63}	
		746	875.0 {30.86}	
		791	953.0 {33.62}	
		756	957.9 {33.79}	
A4D	ARCTIC WHITE CLE	753	1,237.9 {43.66}	
		745	1,239.0 {43.70}	
		742	1,239.4 {43.71}	
		740	1,239.6 {43.72}	
16W	BLACK MC	740	672.0 {23.70}	
		763	864.0 {30.48}	
		952	901.1 {31.78}	
		953	936.1 {33.02}	
		752	950.1 {33.51}	
		753	952.9 {33.61}	
18J	GRACE GREEM MC	957	336.0 {11.85}	
		797	599.0 {21.13}	
		740	799.0 {28.18}	
		754	948.0 {33.44}	
		759	959.2 {33.83}	
		753	962.0 {33.93}	
24E	SPARKLING SILVER M	952	917.0 {32.35}	
		743	947.6 {33.43}	
		745	958.3 {33.80}	
		779	960.9 {33.89}	
		740	961.9 {33.93}	
25B	BLUE PACIFIC MC	776	534.0 {18.84}	
		763	813.0 {28.68}	
		755	890.0 {31.39}	
		958	919.6 {32.44}	
		770	943.3 {33.27}	
		740	964.1 {34.01}	
25C	CANARY YELLOW MC COLOR BASE	744	524.0 {18.48}	
		753	870.0 {30.69}	
		794	1,080.0 {38.10}	
		756	1,084.2 {38.24}	
		792	1,087.3 {38.35}	
	CANARY YELLOW MC PEARL BASE	941	781.0 {27.55}	
		956	876.0 {30.90}	
		960	932.0 {32.87}	
25D	SNOWFLAKE WHITE PEARL MC COLOR BASE	753	1,240.0 {43.74}	
	SNOWFLAKE WHITE PEARL MC PEARL BASE	751	602.0 {21.23}	
		941	919.0 {32.42}	
		753	960.2 {33.87}	
		759	976.0 {34.43}	
		755	976.4 {34.44}	
		756	976.7 {34.45}	
		741	976.8 {34.46}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE	
		LABEL	DELTRON	
		INGREDIENTS	1L g{oz}	NOTE
25E	STRATO BLUE MC	958	336.0 {11.85}	
		776	653.0 {23.03}	
		763	768.0 {27.09}	
		740	869.0 {30.65}	
		755	965.0 {34.04}	
25F	GARNET RED MC	775	343.0 {12.10}	
		774	511.0 {18.02}	
		793	679.0 {23.95}	
		955	818.0 {28.85}	
		759	891.0 {31.43}	
		756	955.0 {33.69}	
		753	957.2 {33.76}	
25G	TITANIUM GRAY M	952	682.0 {24.06}	
		756	911.0 {32.13}	
		741	928.6 {32.75}	
		755	939.3 {33.13}	
		955	950.0 {33.51}	
		799	958.0 {33.79}	
25H	SILVER CONTRAIL M	952	936.0 {33.02}	
		759	943.5 {33.28}	
		740	949.5 {33.49}	
		797	953.5 {33.63}	
		963	956.7 {33.75}	
		743	959.2 {33.83}	
		753	960.2 {33.87}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

DIAMONT

COLOR CODE	COLOR NAME	KIND OF PAINT LABEL INGREDIENTS		POLYURETHANE DIAMONT BASE g{oz}	POLYURETHANE SOLO DE DIAMONT BASE g{oz}
A3E	CLASSIC RED CLE	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 832	RED 2	618.7 {21.82}	
		BC 816	ORGANIC BRIGHT RED	915.4 {32.29}	
		BC 250	CARBON BLACK 2	923.8 {32.59}	
A4D	ARCTIC WHITE CLE	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 190	WHITE	962.4 {33.95}	
		BC 209	BLACK TINT	1,030.3 {36.34}	
		BC 609	YELLOW TINT	1,078.9 {38.06}	
		BC 809	RED TINT	1,093.6 {38.57}	
16W	BLACK MC	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 200	CARBON BLACK	667.8 {23.56}	
		BC 406	PHTALO BLUE 3	742.7 {26.20}	
		BC 470	INDO BLUE	809.1 {28.54}	
		BC 118	BLUE PEARL	842.1 {29.70}	
		BC 171	MEDIUM ROUND ALUMINUM	867.4 {30.60}	
		BC 805	IRON RED	876.9 {30.93}	
		BC 101	FLOP CONTROL	916.8 {32.34}	
18J	GRACE GREEN MC	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 500	PHTALO GREEN 1	393.4 {13.88}	
		BC 200	CARBON BLACK 1	653.5 {23.05}	
		BC 1255	GREEN PEARL	781.8 {27.58}	
		BC 406	PHTALO PEARL 3	882.3 {31.12}	
		BC 105	WHITE TINT	895.3 {31.58}	
		BC 101	FLOP CONTROL	926.7 {32.69}	
24E	SPARKLING SILVER M	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 171	MEDIUM ROUND ALUMINUM	735.1 {25.93}	
		BC 600	INORGANIC YELLOW 1	839.5 {29.61}	
		BC 180	COARSE ALUMINUM	882.9 {31.14}	
		BC 200	CARBON BLACK 1	918.5 {32.40}	
		BC 805	IRON RED 2	929.9 {32.80}	
25B	BLUE PACIFIC MC	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 406	PHTALO PEARL 3	382.5 {13.49}	
		BC 118	BLUE PEARL	587.2 {20.71}	
		BC 400	PHTALO BLUE 1	789.5 {27.85}	
		BC 300	VIOLET	869.4 {30.67}	
		BC 200	CARBON BLACK 1	894.9 {31.57}	
		BC 140	MEDIUM FINE ALUMINUM	916.1 {32.31}	
		BC 171	MEDIUM ROUND ALUMINUM	926.4 {32.68}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT / LABEL / INGREDIENTS		POLYURETHANE	
				DIAMONT BASE g{oz}	SOLO DE DIAMONT BASE g{oz}
25C	CANARY YELLOW MC	GROUND COAT			
		BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 621	ORGANIC YELLOW 2	500.1 {17.64}	
		BC 190	WHITE	857.0 {30.23}	
		BC 615	ORGANIC YELLOW 3	983.4 {34.69}	
		BC 805	IRON RED 2	1,016.7 {35.86}	
		BC 250	LAMP BLACK	1,026.0 {36.19}	
		COLOR BASE			
		BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 111	WHITE PEARL	339.8 {11.99}	
		BC 100	MIXING CLEAR	551.1 {19.44}	
		BC 605	INORGANIC YELLOW 2	709.4 {25.02}	
		CB 63L	CRYSTAL BRASS	780.0 {27.51}	
		BC 621	ORGANIC YELLOW 2	824.2 {29.07}	
		BC 615	ORGANIC YELLOW 3	837.1 {29.53}	
		BC 101	FLOP CONTROL	969.3 {34.19}	
25D	SNOWFLAKE WHITE PEARL MC	GROUND COAT			
		BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 190	WHITE	1,010.9 {35.66}	
		BC 209	BLACK TINT	1,058.6 {37.34}	
		BC 809	RED TINT	1,080.7 {38.12}	
		BC 609	YELLOW TINT	1,097.2 {38.70}	
		BC 409	BLUE TINT	1,103.6 {38.93}	
		PEARL BASE			
		BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 100	MIXING CLEAR	721.9 {25.46}	
		BC 111	WHITE PEARL	779.3 {27.49}	
		BC 1265	GOLD PEARL 2	804.4 {28.37}	
		BC 101	FLOP CONTROL	910.9 {32.13}	
25E	STRATO BLUE MC	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 200	CARBON BLACK 1	290.4 {10.24}	
		BC 100	MIXING CLEAR	479.2 {16.90}	
		BC 400	PHTALO BLUE 1	646.4 {22.80}	
		BC 406	PHTALO PEARL 3	725.3 {25.58}	
		BC 118	BLUE PEARL	794.2 {28.01}	
		BC 300	VIOLET	860.3 {30.35}	
		CB 34M	CRYSTAL VIOLET	923.2 {32.56}	
		BC 111	WHITE PEARL	931.3 {32.85}	
25F	GARNET RED MC	BC 020	REDUCER(THINNER)	88.1 {3.11}	
		BC 820	MAROON 1	423.7 {14.95}	
		BC 840	MAGENTA	658.7 {23.23}	
		BC 115	RUSSET PEARL	742.6 {26.19}	
		BC 200	CARBON BLACK 1	771.8 {27.22}	
		BC 1265	GOLD PEARL 2	796.8 {28.11}	
		BC 101	FLOP CONTROL	927.1 {32.70}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT / LABEL / INGREDIENTS		POLYURETHANE	
				DIAMONT BASE g{oz}	SOLO DE DIAMONT BASE g{oz}
25G	TITANIUM GRAY M	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 175	MEDIURM SHINY ALUMIUIUM	639.4 {22.55}	
		BC 200	CARBON BLACK 1	739.5 {26.08}	
		BC 115	RUSSET PEARL	822.8 {29.02}	
		BC 180	COARSE ALUMINUM	866.8 {30.57}	
		BC 410	PHTALO BLUE 2	892.1 {31.47}	
		BC 300	VIOLET	915.0 {32.28}	
		BC 250	LAMP BLACK	926.7 {32.69}	
		BC 101	FLOP CONTROL	936.0 {33.02}	
25H	SILVER CONTRAIL M	BC 020	REDUCER(THINNER)	88.0 {3.10}	
		BC 171	MEDIUM ROUND ALUMINUM	787.3 {27.77}	
		BC 170	MEDIUM ALUMINIUM	854.7 {30.15}	
		BC 200	CARBON BLACK 1	883.9 {31.18}	
		BC 510	PHTALO GREEN 2	893.4 {31.51}	
		BC 406	PHTALO PEARL 3	902.6 {31.84}	
		BC 101	FLOP CONTROL	928.3 {32.74}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

GLASURIT

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE	
		LABEL	GLASSOMAX BASE COAT	GLASSODUR PUR TOP COAT 21-
		INGREDIENTS	g{oz}	g{oz}
A3E	CLASSIC RED CLE	352-91	173.8 {6.13}	
		A 352	646.0 {22.79}	
		A 324	910.8 {32.13}	
		A 974	918.2 {32.39}	
A4D	ARCTIC WHITE CLE	352-91	173.8 {6.13}	
		M 25	950.9 {33.54}	
		A 927	1,011.3 {35.67}	
		A 137	1,054.5 {37.20}	
		A 307	1,067.6 {37.66}	
16W	BLACK MC	M99/19	30.0 {1.06}	
		69-M505	70.0 {2.47}	
		A 098	80.0 {2.82}	
		A 531	135.0 {4.76}	
		A 555	215.0 {7.58}	
		A 926	988.0 {34.85}	
		A 105	1,000.0 {35.27}	
18J	GRACE GREEN MC	35291	174.2 {6.14}	
		M 600	288.3 {10.17}	
		A 640	561.0 {19.79}	
		A 926	791.8 {27.93}	
		A 555	880.7 {31.07}	
		A 125	891.8 {31.46}	
		M 1	919.4 {32.43}	
24E	SPARKLING SILVER M	352-91	173.8 {6.13}	
		M 99/19	748.9 {26.42}	
		M 99/20	787.5 {27.78}	
		A 136	880.4 {31.05}	
		A 926	912.0 {32.17}	
		M 306	922.1 {32.53}	
25B	BLUE PACIFIC MC	352-91	173.8 {6.13}	
		M 505	355.8 {12.55}	
		M 99/10	374.6 {13.21}	
		M 99/19	383.8 {13.54}	
		A 555	645.4 {22.77}	
		A 552	825.3 {29.11}	
		A 427	896.3 {31.62}	
		A 926	919.0 {32.42}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE	
		LABEL	GLASSOMAX BASE COAT	GLASSODUR PUR TOP COAT 21-
		INGREDIENTS	g{oz}	g{oz}
25C	CANARY YELLOW MC	GROUND COAT		
		352-91	173.8 {6.13}	
		A 143	540.1 {19.05}	
		M 25	857.1 {30.23}	
		M 146	969.4 {34.19}	
		M 306	999.0 {35.24}	
		A 974	1,007.2 {35.53}	
		COLOR BASE		
		352-91	173.8 {6.13}	
		M 010	397.9 {14.04}	
		E 910	460.6 {16.25}	
		M 0	648.4 {22.87}	
		M 105	789.1 {27.83}	
		A 143	828.4 {29.22}	
		M 146	839.8 {29.62}	
		M 1	957.2 {33.76}	
25D	SNOWFLAKE WHITE PEARL MC	GROUND COAT		
		352-91	173.8 {6.13}	
		M 25	994.0 {35.06}	
		A 927	1,036.4 {36.56}	
		A 307	1,056.0 {37.25}	
		A 137	1,070.7 {37.77}	
		A 553	1,076.4 {37.97}	
		PEARL BASE		
		352-91	173.8 {6.13}	
		M 010	224.9 {7.93}	
		M 179	247.2 {8.72}	
		M 0	810.6 {28.59}	
		M 1	905.3 {31.93}	
25E	STRATO BLUE MC	352-91	173.8 {6.13}	
		M 505	235.0 {8.29}	
		E 440	290.9 {10.26}	
		M 010	298.0 {10.51}	
		A 926	478.2 {16.87}	
		M 0	646.0 {22.79}	
		A 552	794.7 {28.03}	
		A 555	864.8 {30.50}	
		A 427	923.5 {32.57}	
25F	GARNET RED MC	352-91	173.8 {6.13}	
		M 800	248.4 {8.76}	
		M 179	270.6 {9.54}	
		A 347	569.0 {20.07}	
		A 353	778.0 {27.44}	
		A 926	804.0 {28.36}	
		M 1	919.8 {32.44}	

PRIMARY COLOR MIXTURE CHART FOR BODY COLORS

COLOR CODE	COLOR NAME	KIND OF PAINT	POLYURETHANE	
		LABEL	GLASSOMAX BASE COAT	GLASSODUR PUR TOP COAT 21-
		INGREDIENTS	g{oz}	g{oz}
25G	TITANIUM GRAY M	352-91	173.8 {6.13}	
		M 99/22	663.8 {23.41}	
		M 800	737.9 {26.03}	
		M 99/20	777.0 {27.41}	
		A 926	866.0 {30.55}	
		A 548	888.4 {31.34}	
		A 427	908.8 {32.06}	
		A 974	919.2 {32.42}	
		M 1	927.5 {32.72}	
25H	SILVER CONTTAIL M	352-91	173.8 {6.13}	
		M 99/19	795.4 {28.06}	
		M 99/12	855.3 {30.17}	
		A 926	881.3 {31.09}	
		A 696	889.8 {31.39}	
		A 555	898.0 {31.68}	
		M 1	920.8 {32.48}	