

SECTION **BRM**
BODY REPAIR

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

CONTENTS

FOR USA AND CANADA

VEHICLE INFORMATION 2

BODY EXTERIOR PAINT COLOR 2
Body Exterior Paint Color2

PRECAUTION 4

REPAIRING HIGH STRENGTH STEEL 4
High Strength Steel (HSS)4

PREPARATION 7

REPAIRING MATERIAL 7
Foam Repair7

BODY COMPONENT PARTS 9
Underbody Component Parts9
Body Component Parts 11

REMOVAL AND INSTALLATION13

CORROSION PROTECTION13
Description 13
Undercoating 13
Body Sealing 14

BODY CONSTRUCTION18
Body Construction 18
Rear Fender Hemming Process 19

REPLACEMENT OPERATIONS21
Description 21
Radiator Core Support 23
Hoodledge 23
Front Side Member (2WD) 25
Front Side Member (AWD) 27

Front Side Member (Partial Replacement)29
Front Pillar30
Front Pillar (Partial Replacement)32
Center Pillar34
Outer Sill37
Rear Fender43
Outer Wheelhouse44
Rear Panel48
Rear Floor Rear48
Rear Side Member Extension49

SERVICE DATA AND SPECIFICATIONS (SDS)51

BODY ALIGNMENT51
Body Center Marks 51
Description 52
Engine Compartment 52
Underbody 54
Passenger Compartment 57
Rear Body 60

LOCATION OF PLASTIC PARTS 62
Precautions for Plastics62
Location of Plastic Parts62

FOR MEXICO

SERVICE DATA AND SPECIFICATIONS (SDS) 65

BODY ALIGNMENT 65
Description 65
Engine Compartment 65
Underbody 67
Passenger Compartment 70
Rear Body 73

BRM

BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

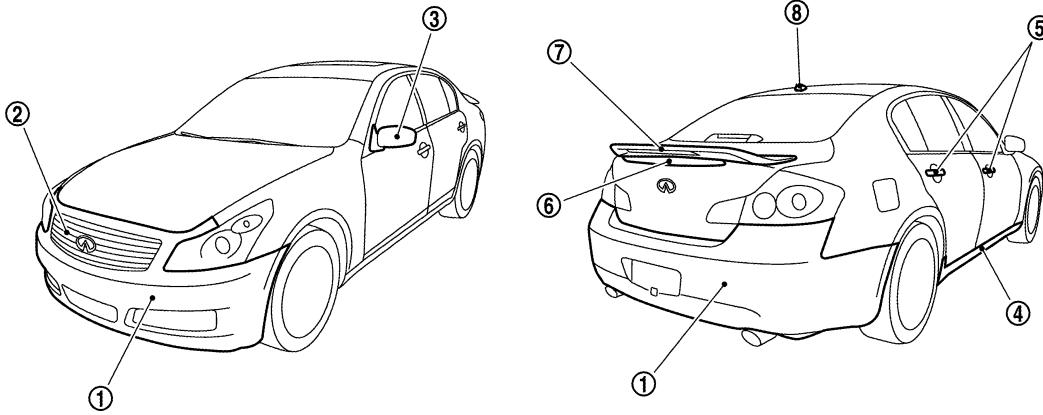
[FOR USA AND CANADA]

VEHICLE INFORMATION

BODY EXTERIOR PAINT COLOR

Body Exterior Paint Color

INFOID:000000008834711



JSKIA0002GB

Component		Color code	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	
		Description	Red	Black	Silver	Dark Gray	Brown-ish Gray	Gray	Black	White	
		Paint type ^{Note}	CS	P	M	PM	TM	M	2S	3P	
		Hard clear coat	×	×	–	×	–	–	×	–	
1	Bumper fascia	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	
2	Front grille	Chromium-plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
3	Door outside mirror	Cover	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA
4	Center mud-guard	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	
5	Door outside handle	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	
6	Trunk lid finisher	Chromium-plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
7	Rear spoiler	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	
8	Satellite radio antenna	Body color	BA54	BGAC	BK23	BK52	BKAC	BKAD	BKH3	BQAA	

NOTE:

- S: Solid
- 2S: Solid + Clear
- 3S: 3-Coat solid
- CS: Color clear solid
- M: Metallic
- P: 2-Coat pearl
- 3P: 3-Coat pearl
- FPM: Iron oxide pearl
- RM, RPM: Multi flex color
- TPM: Titanium pearl metallic

BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

[FOR USA AND CANADA]

- TM: Micro titanium metallic
- PM: Pearl metallic

A

B

C

D

E

F

G

H

I

J

BRM

L

M

N

O

P

REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

[FOR USA AND CANADA]

PRECAUTION

REPAIRING HIGH STRENGTH STEEL

High Strength Steel (HSS)

INFOID:000000008834803

High strength steel is used for body panels in order to reduce vehicle weight.

Accordingly, precautions in repairing automotive bodies made of high strength steel are described below:

Tensile strength	Major applicable parts
370 - 590 MPa	<ul style="list-style-type: none"> • Front & rear side member assembly • Front side member closing plate assembly • Hoodledge assembly • Lower dash assembly • Rear seat crossmember • Other reinforcements
780 - 1350 MPa	<ul style="list-style-type: none"> • Center pillar reinforcement (Component part) • Outer side roof rail reinforcement (Component part)

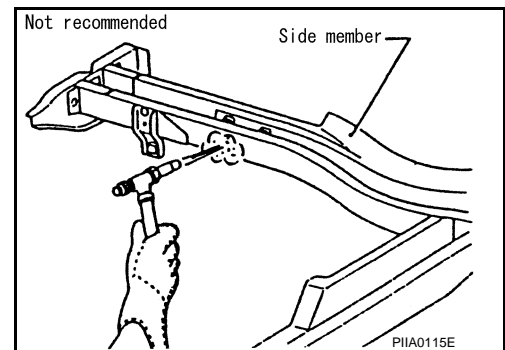
Read the following precautions when repairing HSS:

1. Additional points to consider

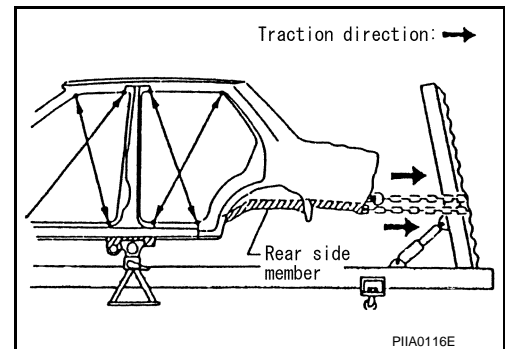
- The repair of reinforcements (such as side members) by heating is not recommended, because it may weaken the component. When heating is unavoidable, never heat HSS parts above 550°C (1,022°F).

Verify heating temperature with a thermometer.

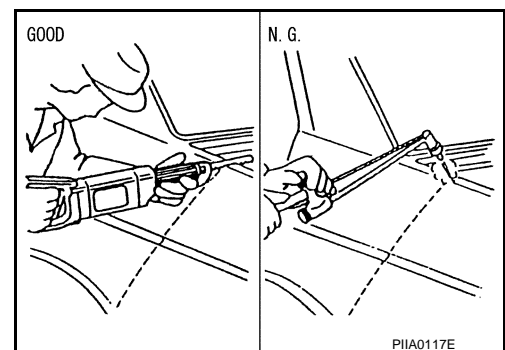
(Crayon-type and other similar type thermometer are appropriate.)



- When straightening body panels, use caution in pulling any HSS panel. Because HSS is very strong, pulling may cause deformation in adjacent sections of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.



- When cutting HSS panels, avoid gas (torch) cutting if possible. Instead, use a saw to avoid weakening surrounding areas due to heat. If gas (torch) cutting is unavoidable, allow a minimum margin of 50 mm (1.97 in).

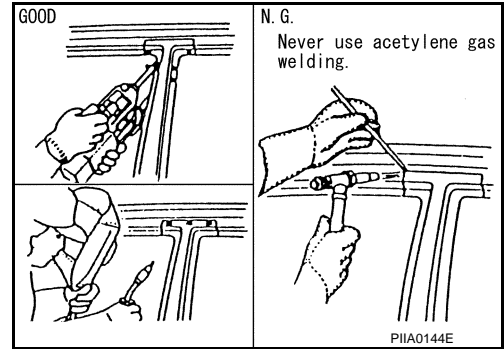


REPAIRING HIGH STRENGTH STEEL

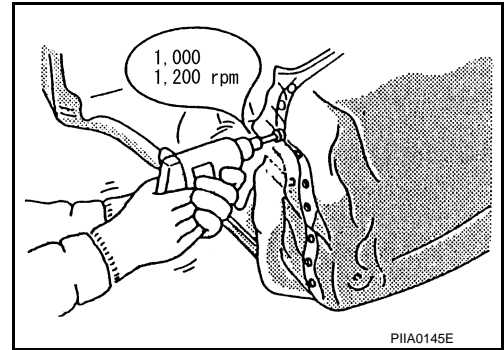
[FOR USA AND CANADA]

< PRECAUTION >

- When welding HSS panels, use spot welding whenever possible in order to minimize weakening surrounding areas due to heat. If spot welding is impossible, use MIG. welding. Do not use gas (torch) for welding because it is inferior in welding strength.



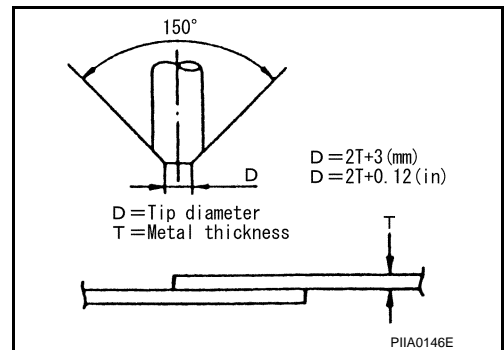
- Spot welding on HSS panels is harder than that of an ordinary steel panel. Therefore, when cutting spot welds on a HSS panel, use a low speed high torque drill (1,000 to 1,200 rpm) to increase drill bit durability and facilitate the operation.



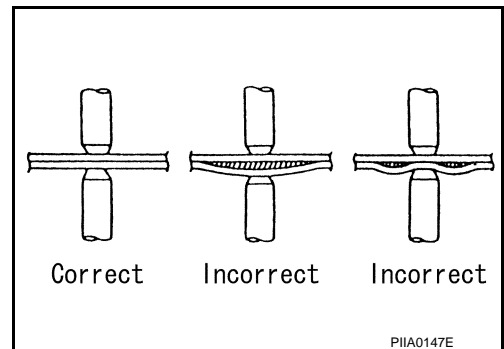
2. Precautions in spot welding HSS

This work should be performed under standard working conditions. Always note the following when spot welding HSS:

- The electrode tip diameter must be sized properly according to the metal thickness.



- The panel surfaces must fit flush to each other, leaving no gaps.



A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPAIRING HIGH STRENGTH STEEL

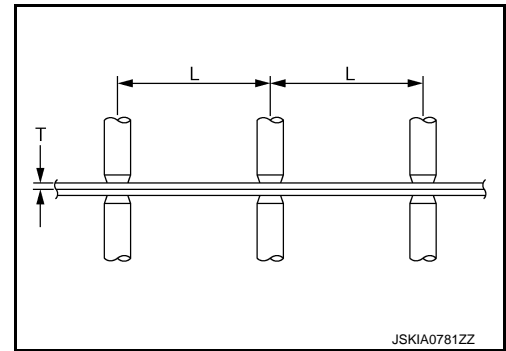
[FOR USA AND CANADA]

< PRECAUTION >

- Follow the specifications for the proper welding pitch.

Unit: mm (in)

Thickness (T)	Minimum pitch (L)
0.6 (0.024)	10 (0.39) or over
0.8 (0.031)	12 (0.47) or over
1.0 (0.039)	18 (0.71) or over
1.2 (0.047)	20 (0.79) or over
1.6 (0.063)	27 (1.06) or over
1.8 (0.071)	31 (1.22) or over



PREPARATION

REPAIRING MATERIAL

Foam Repair

INFOID:000000008834583

During factory body assembly, foam insulators are installed in certain body panels and locations around the vehicle. Use the following procedure(s) to replace any factory-installed foam insulators.

URETHANE FOAM APPLICATIONS

Use commercially available Urethane foam for sealant (foam material) repair of material used on vehicle.

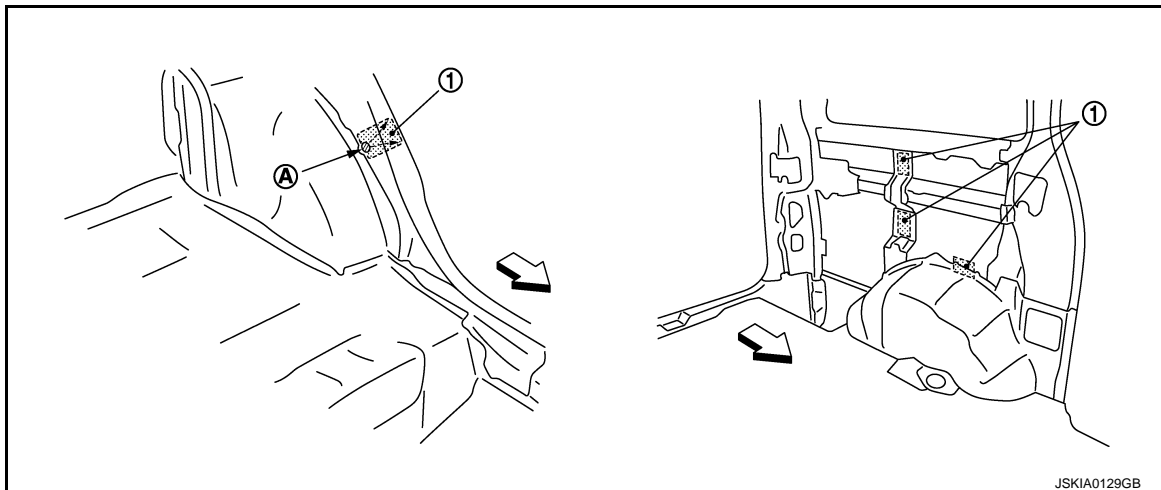
<Urethane foam for foaming agent>

3M™ Automix™ Flexible Foam 08463 or equivalent

Read instructions on product for fill procedures.

Example of foaming agent filling operation procedure

1. Fill procedures after installation of service part.
 - a. Eliminate foam material remaining on vehicle side.
 - b. Clean area after eliminating form insulator and foam material.
 - c. Install service part.
 - d. Insert nozzle into hole near fill area and fill foam material or fill enough to close gap with the service part.



1. Urethane foam
- A. Nozzle insert hole

↔: Vehicle front

2. Fill procedures before installation of service part.
 - a. Eliminate foam material remaining on vehicle side.
 - b. Clean area after eliminating foam insulator and foam material.
 - c. Fill foam material on wheelhouse outer side.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

BRM

REPAIRING MATERIAL

< PREPARATION >

[FOR USA AND CANADA]

- 1. Urethane foam
- A. Fill while avoiding flange area

← Vehicle front

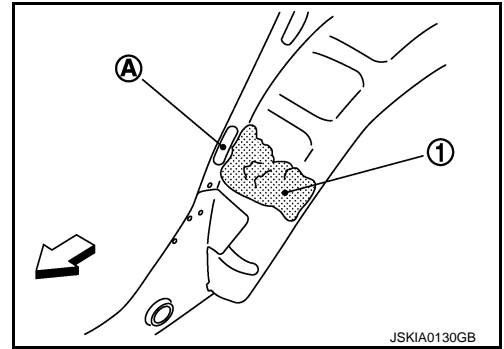
NOTE:

Fill enough to close gap with service part while avoiding flange area.

- d. Install service part.

NOTE:

Refer to label for information on working times.



BODY COMPONENT PARTS

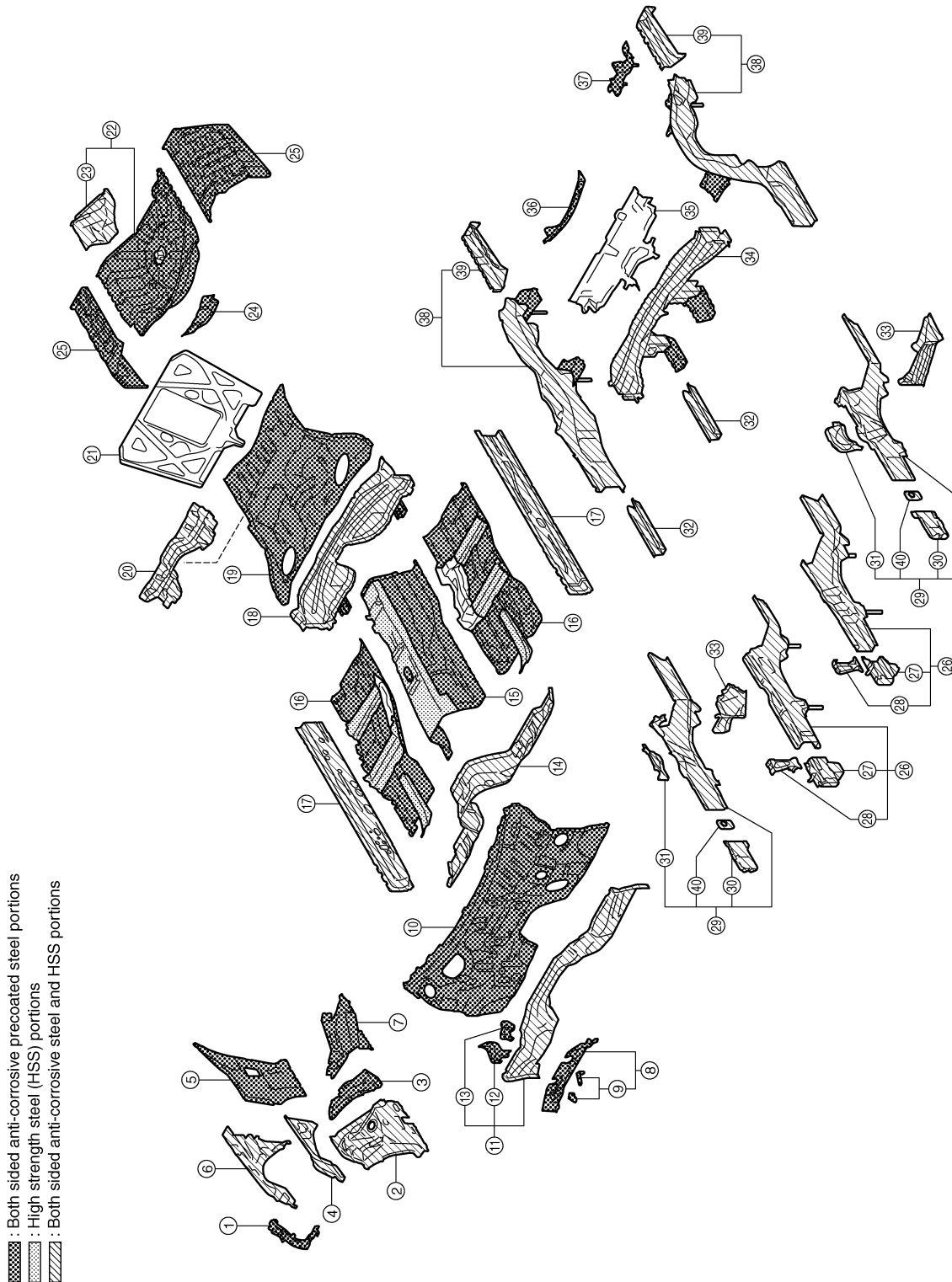
< PREPARATION >

[FOR USA AND CANADA]

BODY COMPONENT PARTS

Underbody Component Parts

INFOID:000000008834728



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

- | | | |
|---|----------------------------------|-------------------------------------|
| 1. Radiator core support assembly (RH & LH) | 2. Front strut housing (RH & LH) | 3. Lower rear hoodedge (RH & LH) |
| 4. Upper front hoodedge (RH & LH) | 5. Upper rear hoodedge (RH & LH) | 6. Hoodedge reinforcement (RH & LH) |

JSKIA0881GB

BODY COMPONENT PARTS

[FOR USA AND CANADA]

< PREPARATION >

- | | | |
|--|--|---|
| 7. Upper side cowl top (RH & LH) | 8. Upper front cowl top assembly | 9. Cowl top bracket |
| 10. Upper dash | 11. Lower dash crossmember assembly | 12. Lower outer battery support bracket |
| 13. Lower battery support bracket | 14. Lower dash | 15. Center front floor |
| 16. Front floor (RH & LH) | 17. Inner sill (RH & LH) | 18. Rear seat crossmember reinforcement assembly |
| 19. Rear floor front | 20. Rear floor seat belt anchor reinforcement | 21. Rear seat back support |
| 22. Rear floor rear | 23. Rear tie down hook | 24. Differential mounting bracket assembly |
| 25. Rear floor side (RH & LH) | 26. Front side member assembly (RH & LH) | 27. Front side member front extension (RH & LH) |
| 28. Front side member connector assembly (RH & LH) | 29. Front side member closing plate assembly (RH & LH) | 30. Front side member front closing plate (RH & LH) |
| 31. Front side member center closing plate (RH & LH) | 32. Front side member rear extension (RH & LH) | 33. Front side member outrigger assembly (RH & LH) |
| 34. Rear seat crossmember | 35. 2nd rear crossmember | 36. Rear crossmember |
| 37. Muffler mounting bracket assembly | 38. Rear side member assembly (RH & LH) | 39. Rear side member extension (RH & LH) |
| 40. Front side rear closing reinforcement (RH & LH) | | |

NOTE:

For the parts without a number described in the figure, it is supplied only with the assembly part that the part is included with.

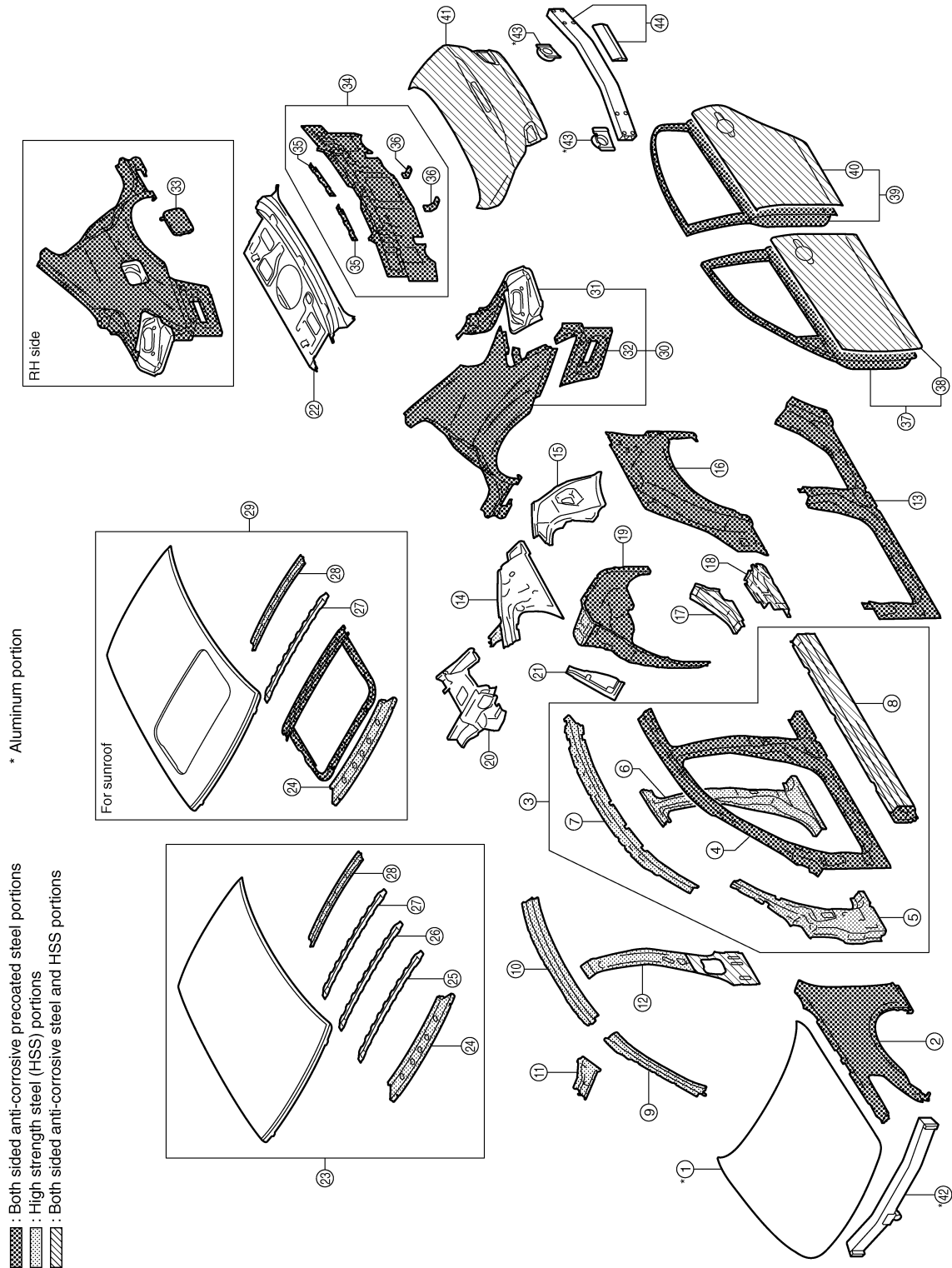
BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

Body Component Parts

INFOID:000000008834729



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

- | | | |
|---|---------------------------------------|--|
| 1. Hood | 2. Front fender (RH & LH) | 3. Side body assembly (RH & LH) |
| 4. Outer front side body (RH & LH) | 5. Front pillar brace (RH & LH) | 6. Center pillar reinforcement (RH & LH) |
| 7. Outer side roof rail reinforcement (RH & LH) | 8. Outer sill reinforcement (RH & LH) | 9. Inner roof rail reinforcement (RH & LH) |

JSKIA1844GB

BODY COMPONENT PARTS

[FOR USA AND CANADA]

< PREPARATION >

- | | | |
|-------------------------------------|---|---|
| 10. Inner side roof rail (RH & LH) | 11. Front roof rail brace (RH & LH) | 12. Inner center pillar (RH & LH) |
| 13. Outer sill (RH & LH) | 14. Inner rear pillar (RH & LH) | 15. Inner rear pillar reinforcement (RH & LH) |
| 16. Outer rear wheelhouse (RH & LH) | 17. Upper outer rear wheelhouse extension (RH & LH) | 18. Lower outer rear wheelhouse extension (RH & LH) |
| 19. Inner rear wheelhouse (RH & LH) | 20. Side parcel shelf (RH & LH) | 21. Seat back support (RH & LH) |
| 22. Parcel shelf with rear waist | 23. Roof assembly | 24. Front roof rail |
| 25. Roof bow No.1 | 26. Roof bow No.2 | 27. Roof bow No.3 |
| 28. Rear roof rail | 29. Roof assembly (For sunroof) | 30. Rear fender assembly (RH & LH) |
| 31. Tail pillar assembly (RH & LH) | 32. Rear fender extension (RH & LH) | 33. Fuel filler lid |
| 34. Rear panel assembly | 35. Rear bumper bracket (RH & LH) | 36. Rear side bumper bracket (RH & LH) |
| 37. Front door assembly (RH & LH) | 38. Outer front door panel (RH & LH) | 39. Rear door assembly (RH & LH) |
| 40. Outer rear door panel (RH & LH) | 41. Trunk lid | 42. Inner center front bumper reinforcement |
| 43. Rear bumper stay (RH & LH) | 44. Inner center rear bumper reinforcement assembly | |

NOTE:

For the parts without a number described in the figure, it is supplied only with the assembly part that the part is included with.

REMOVAL AND INSTALLATION

CORROSION PROTECTION

Description

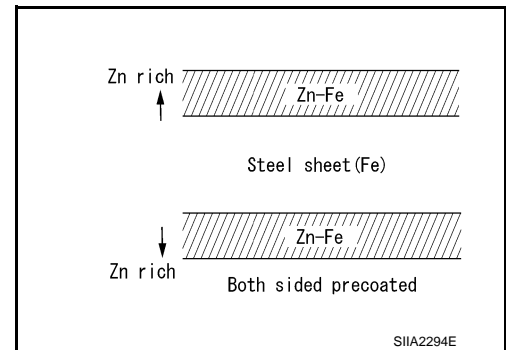
INFOID:000000008834586

To provide improved corrosion prevention, the following anti-corrosive measures have been implemented in NISSAN production plants. When repairing or replacing body panels, it is necessary to use the same anti-corrosive measures.

Anti-Corrosive Precoated Steel (Galvannealed Steel)

To improve repairability and corrosion resistance, a new type of anti-corrosive precoated steel sheet is adopted replacing conventional zinc-coated steel sheet.

Galvannealed steel is electroplated and heated to form Zinc-iron alloy, which provides excellent and long term corrosion resistance with cationic electrodeposition primer.



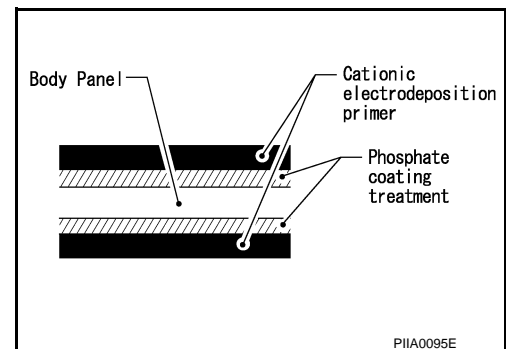
NISSAN genuine parts are fabricated from galvannealed steel. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

Phosphate Coating Treatment and Cationic Electrodeposition Primer

A phosphate coating treatment and a cationic electrodeposition primer, which provide excellent corrosion protection, are applied to all body components.

CAUTION:

Confine paint removal during welding operation to an absolute minimum.



NISSAN genuine parts are also treated in the same manner. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain anti-corrosive performance built into the vehicle at the factory.

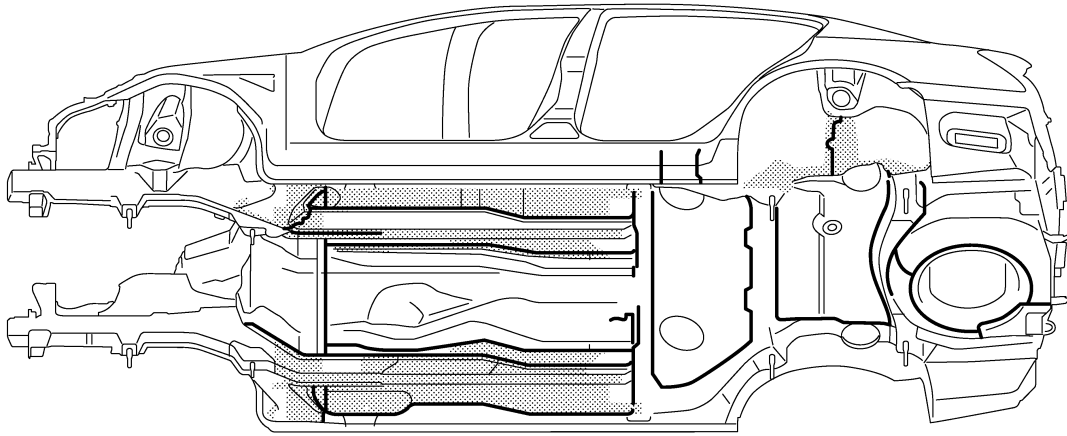
Undercoating

INFOID:000000008834763


The underside of the floor and wheelhouse are undercoated to prevent rust, vibration, noise and stone chipping. Therefore, when such a panel is replaced or repaired, apply undercoating to that part. Use an undercoating which is rust resistant, soundproof, vibration-proof, shock-resistant, adhesive, and durable.

Precautions in Undercoating

1. Never apply undercoating to any place unless specified (such as the areas above the muffler and three way catalyst that are subjected to heat).
2. Never undercoat the exhaust pipe or other parts that become hot.
3. Never undercoat rotating parts.
4. Apply bitumen wax after applying undercoating.
5. After putting seal on the vehicle, put undercoating on it.



JSKIA1696ZZ

 Undercoated areas

 Sealed portions

Body Sealing

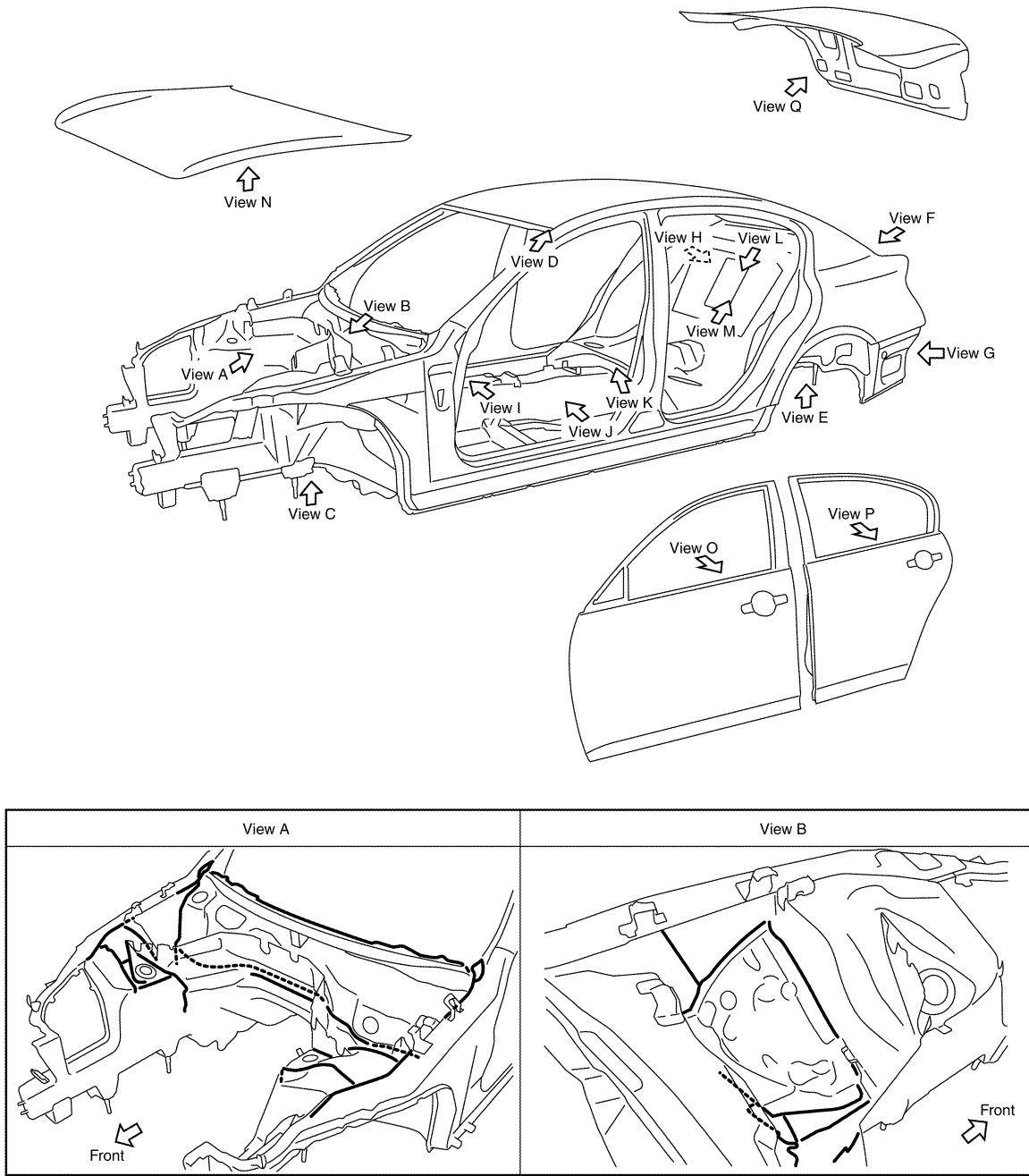
INFOID:000000008834764

The following figure shows the areas that are sealed at the factory. Sealant that is applied to these areas should be smooth and free from cuts or gaps. Care should be taken not to apply an excess amount of sealant and not to allow other unaffected parts to come into contact with the sealant.

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



—: Sealed portions

JSKIA0008GB

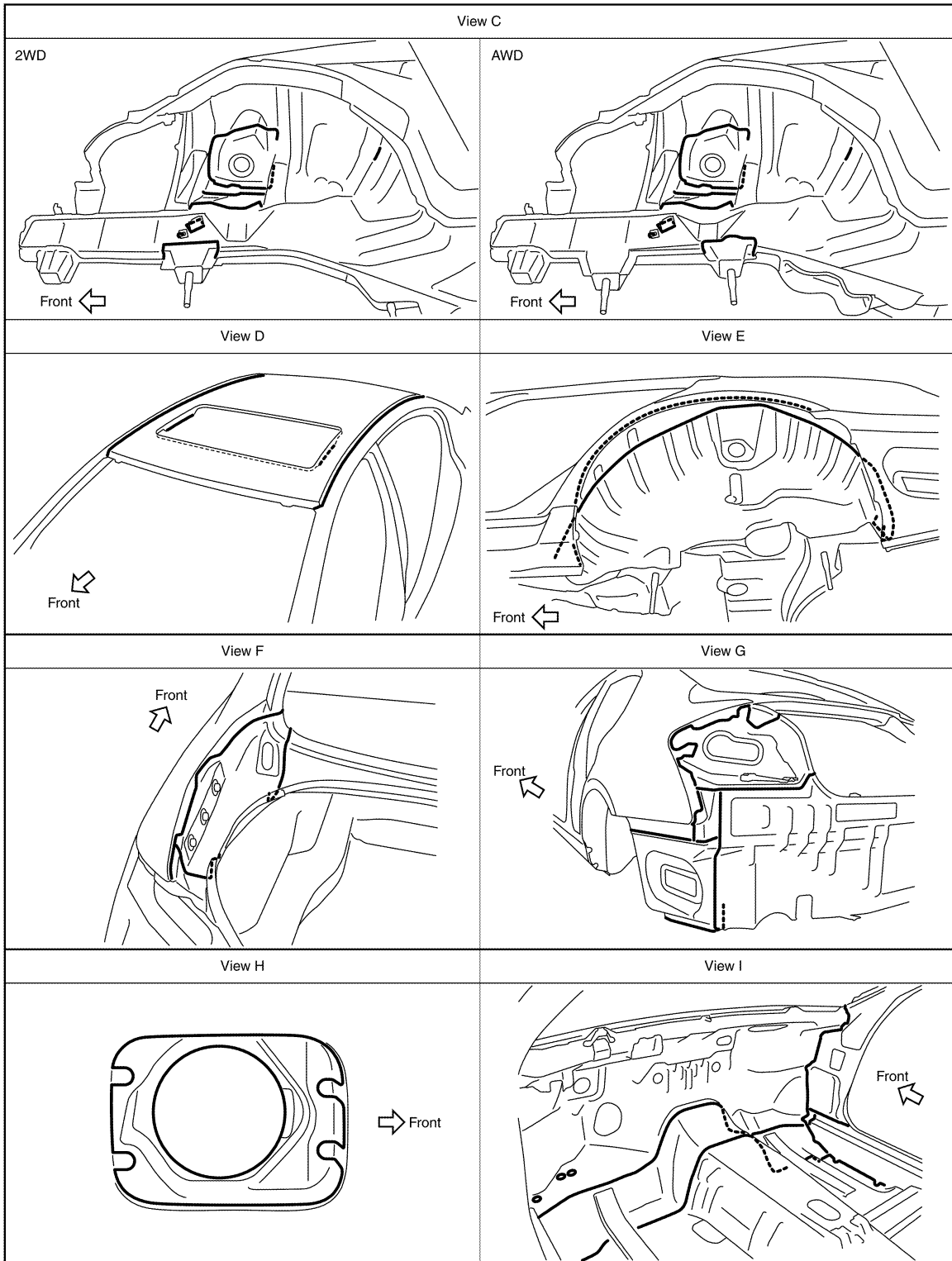
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

BRM

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



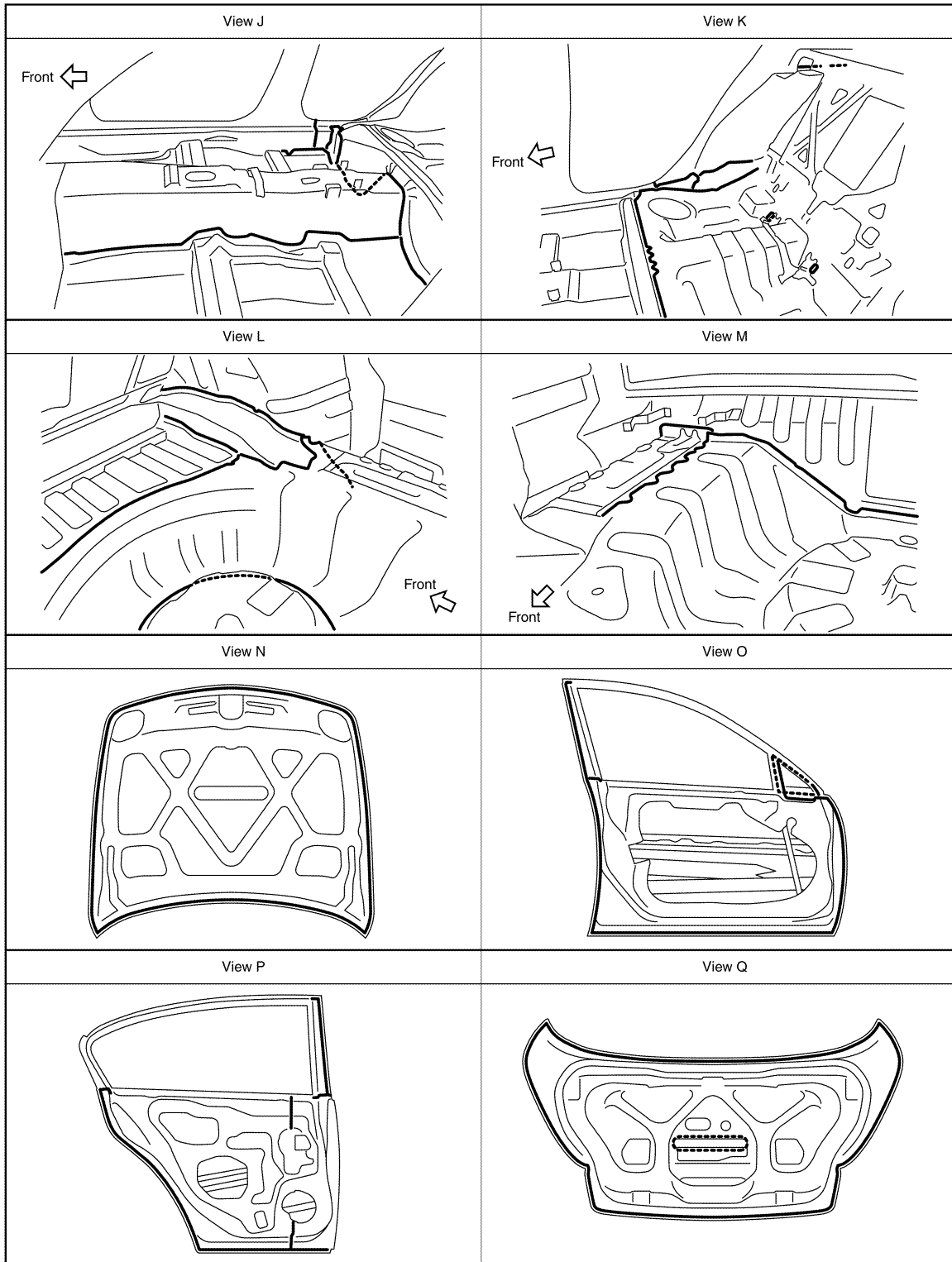
JSKIA0009GB

—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0010GB

—: Sealed portions

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

BODY CONSTRUCTION

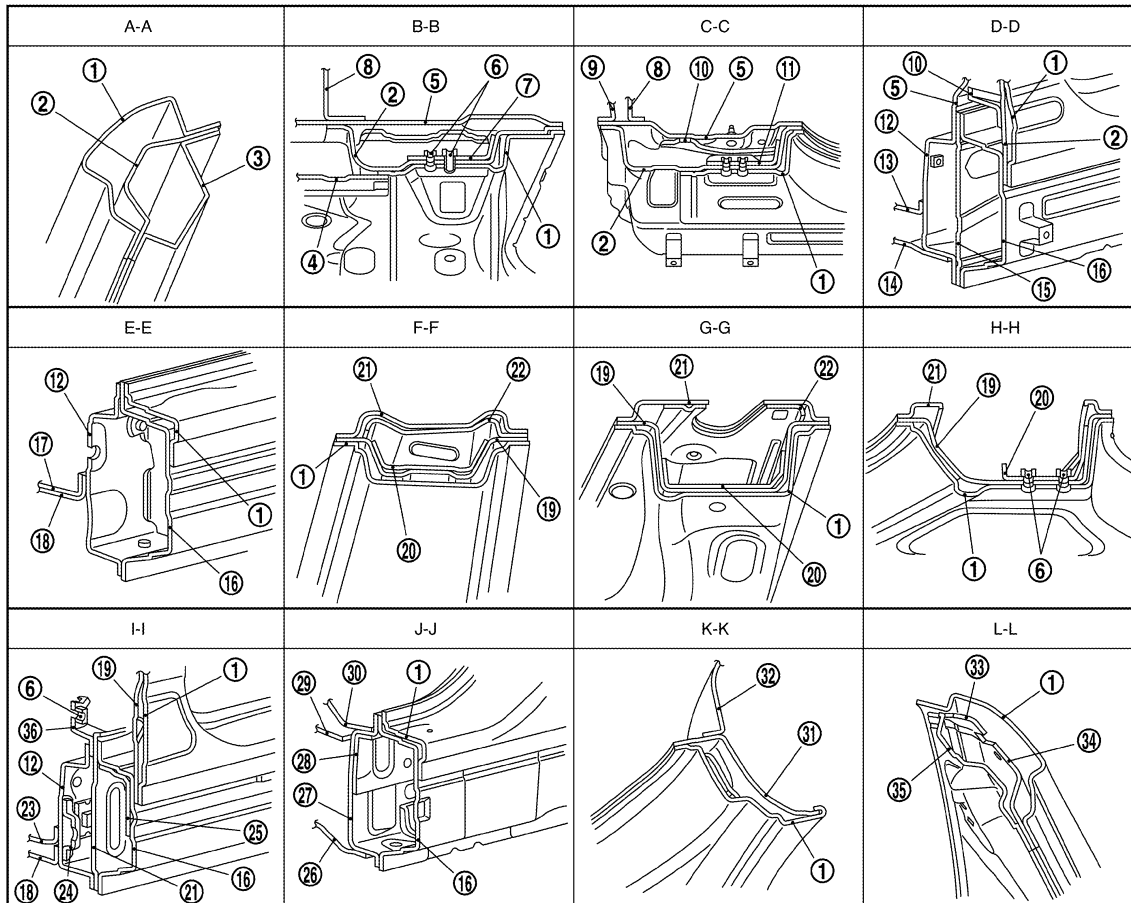
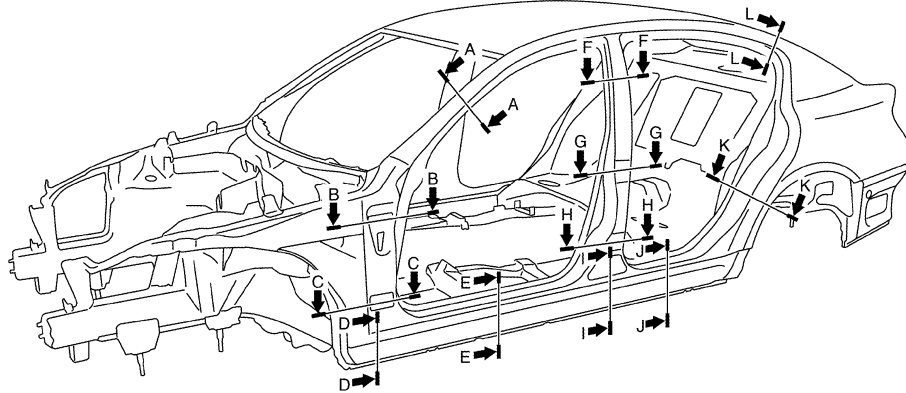
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

BODY CONSTRUCTION

Body Construction

INFOID:000000008834765



JSKIA0011GB

BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

1 Outer side body	2 Front pillar hinge brace	3 Inner front side roof rail	A
4 Hoodledge reinforcement	5 Upper rear hoodledge	6 Nut	
7 Upper hinge plate	8 Upper dash	9 Lower dash crossmember	
10 Lower front pillar gusset	11 Lower hinge plate	12 Inner sill	B
13 Lower dash	14 Front side member outrigger	15 Lower front pillar reinforcement	
16 Outer sill reinforcement	17 2nd crossmember	18 Front floor	
19 Center pillar reinforcement	20 Center pillar seat belt reinforcement	21 Upper inner center pillar	C
22 Center pillar seat belt anchor	23 3rd crossmember	24 Inner center sill reinforcement	
25 Outer center sill reinforcement	26 Rear seat crossmember	27 Rear side member front	
28 Rear side member front reinforcement	29 Lower rear seat crossmember reinforcement	30 Upper rear seat crossmember reinforcement	D
31 Outer rear wheelhouse	32 Inner rear wheelhouse	33 Side roof rail reinforcement	
34 Inner rear pillar reinforcement	35 Inner rear pillar	36 Seat belt anchor bracket	E

Rear Fender Hemming Process

INFOID:000000008834593

1. A wheel arch is to be installed and hemmed over the left and right outer wheel houses.
2. In order to hem the wheel arch, it is necessary to repair any damaged or defaced parts around outer wheel house.

CAUTION:

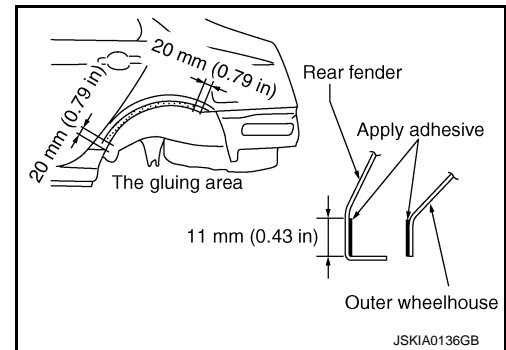
Ensure that the area that is to be glued around the outer wheelhouse is undamaged or defaced.

PROCEDURE OF THE HEMMING PROCESS

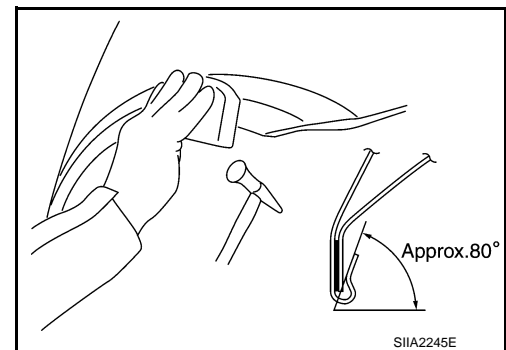
- Peel off old bonding material on the surface of the outer wheelhouse and clean thoroughly.
- Peel off a primer coat in the specified area where new adhesive is to be applied on rear fender (the replacing part).
- Apply new adhesive to both specified areas of the outer wheelhouse and rear fender.

<Adhesive> **3M™ Automix™ Panel Bonding Adhesive 08115 or equivalent**

- Attach rear fender to the body of the car, and weld the required part except the hemming part.



- Bend the welded part starting from the center of the wheel arch gradually with a hammer and a dolly. (Also hem the end of the flange.)
- Hemming with a hammer is conducted to an approximate angle of 80 degrees.



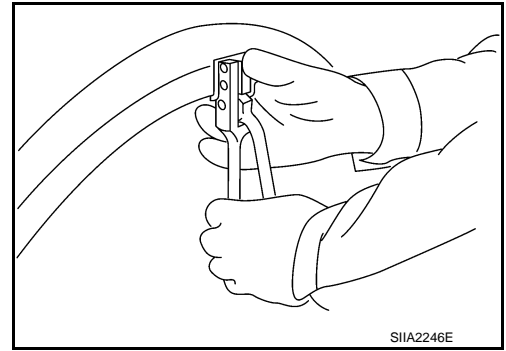
A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

BODY CONSTRUCTION

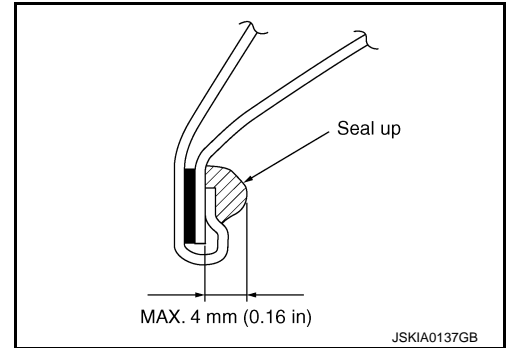
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Starting from the center, hem the wheel arch gradually, using slight back and forth motion with a hemming tool.



- Seal up the area around the hemmed end of the flange.



REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

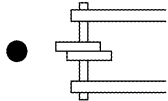
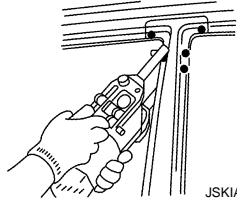
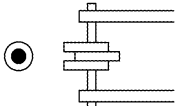
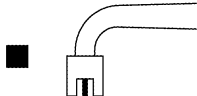

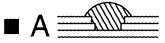
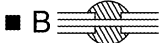
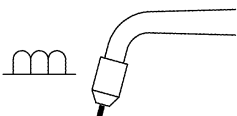
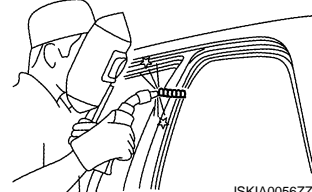
REPLACEMENT OPERATIONS

Description

INFOID:000000008834594

- This section is prepared for technicians who have attained a high level of skill and experience in repairing collision-damaged vehicles and also use modern service tools and equipment. Persons unfamiliar with body repair techniques should not attempt to repair collision-damaged vehicles by using this section.
- Technicians are also encouraged to read the Body Repair Manual (Fundamentals) in order to ensure that the original functions and quality of the vehicle are maintained. The Body Repair Manual (Fundamentals) contains additional information, including cautions and warnings, that are not including in this manual. Technicians should refer to both manuals to ensure proper repair.
- Please note that this information is prepared for worldwide usage, and as such, certain procedures might not apply in some regions or countries.

The symbols used in this section for welding operations are shown below.

Symbol marks	Description	
 <p>JSKIA0049ZZ</p>	2-spot welds	 <p>JSKIA0053ZZ</p>
 <p>JSKIA0050ZZ</p>	3-spot welds	
 <p>JSKIA0051ZZ</p>	MIG plug weld	 <p>JSKIA0054ZZ</p> <p>For 3 panels plug weld method</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div data-bbox="1136 1438 1299 1480"> <p>■ A </p> </div> <div data-bbox="1136 1533 1299 1575"> <p>■ B </p> </div> </div> <p>JSKIA0055ZZ</p>
 <p>JSKIA0052ZZ</p>	MIG seam weld / Point weld	 <p>JSKIA0056ZZ</p>

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

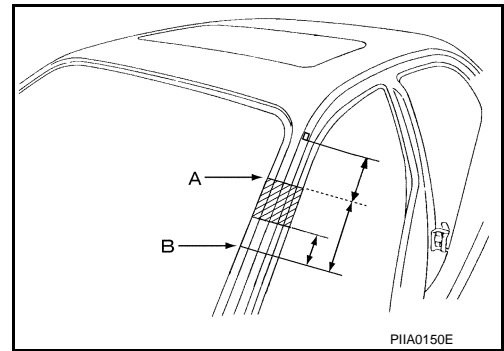
BRM

REPLACEMENT OPERATIONS

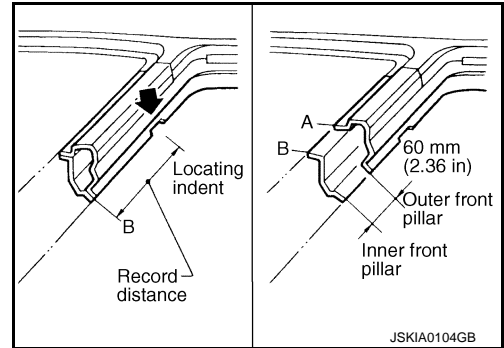
[FOR USA AND CANADA]

< REMOVAL AND INSTALLATION >

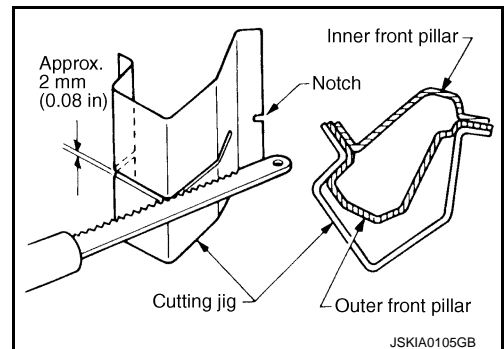
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle.



- Determine cutting position and record distance from the locating indent. Use this distance when cutting the service part. Cut outer front pillar over 60 mm (2.36 in) above the inner front pillar cut position.

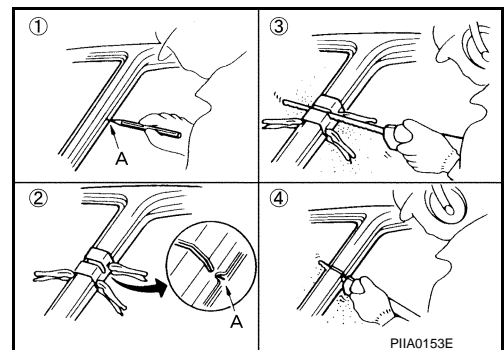


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit the service part to be accurately cut at the joint position.



- An example of cutting operation using a cutting jig is as per the following.

1. Mark cutting lines.
A: Cut position of outer pillar
B: Cut position of inner pillar
2. Align cutting line with notch on jig. Clamp jig to pillar.
3. Cut outer pillar along groove of jig (at position A).
4. Remove jig and cut remaining portions.
5. Cut inner pillar at position B in same manner.



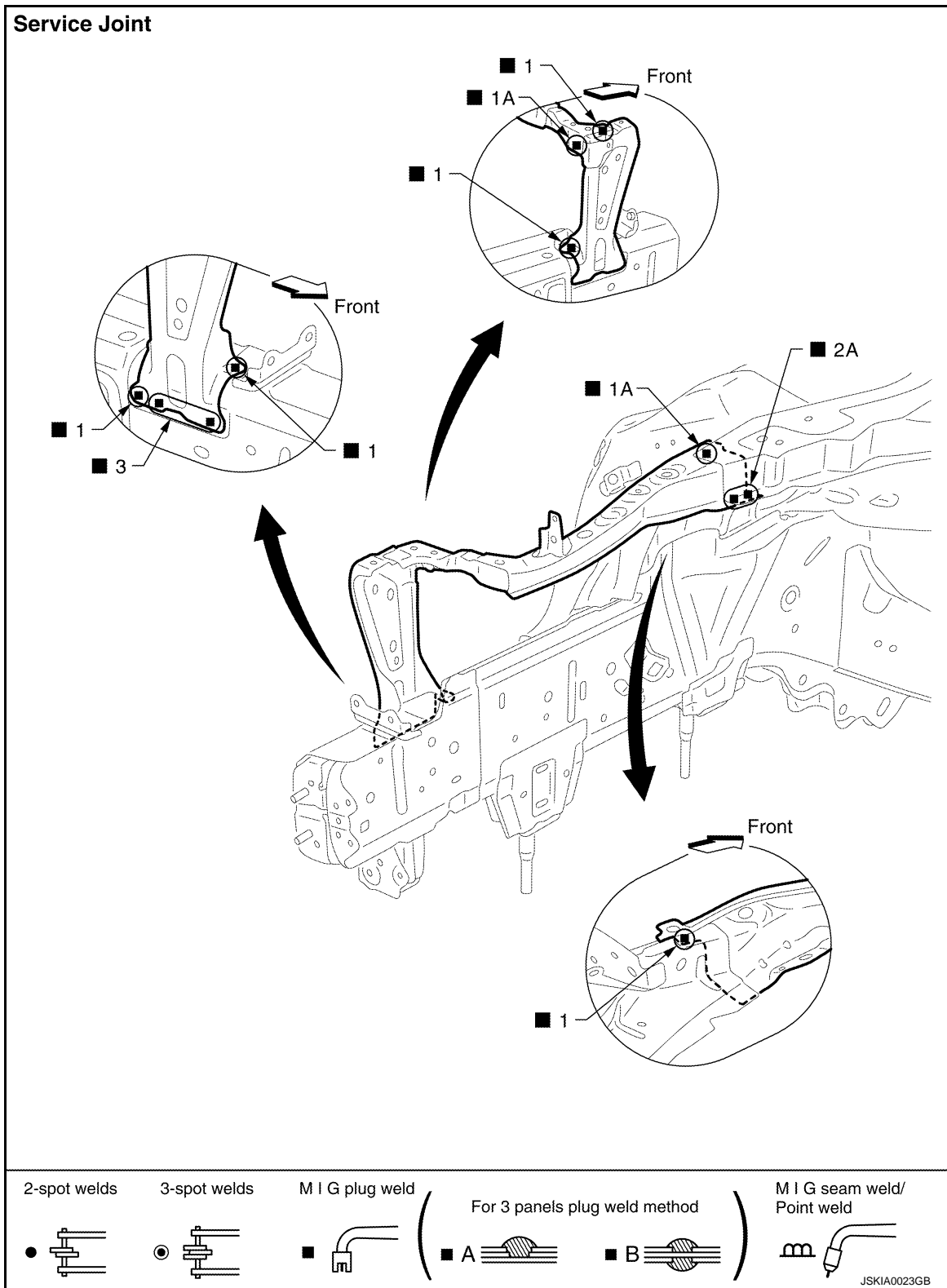
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Radiator Core Support

INFOID:000000008834804



Replacement parts

- Radiator core support assembly (LH)
- Front side member connector assembly (LH)

Hoodledge

INFOID:000000008834805

Work after radiator core support is removed.

A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

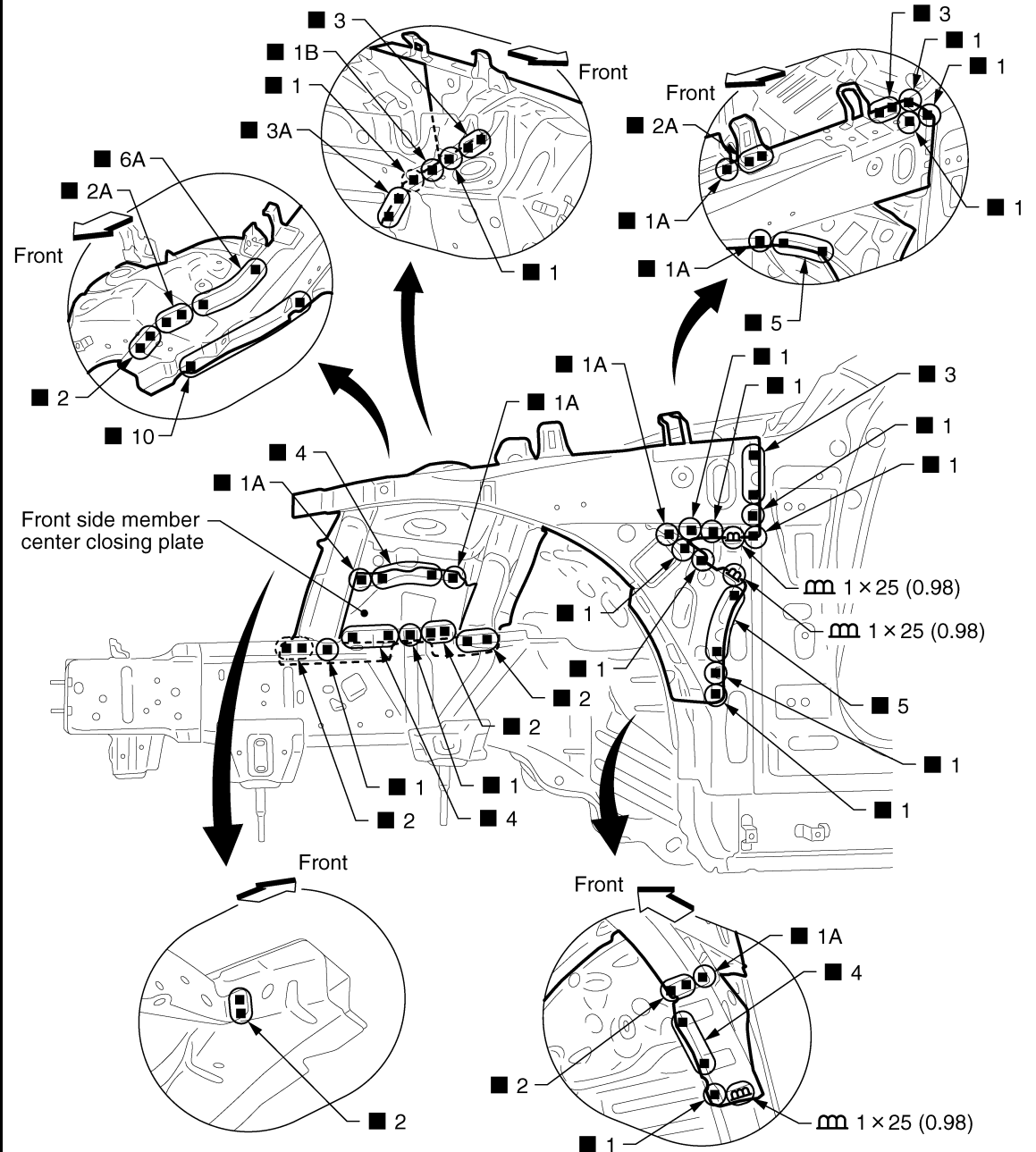
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint

Remove the front side member center closing plate (reusable).



Unit: mm (in)

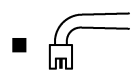
2-spot welds

3-spot welds

M I G plug weld

For 3 panels plug weld method

M I G seam weld/
Point weld



JSKIA0115GB

Replacement parts

● Front strut housing (LH)

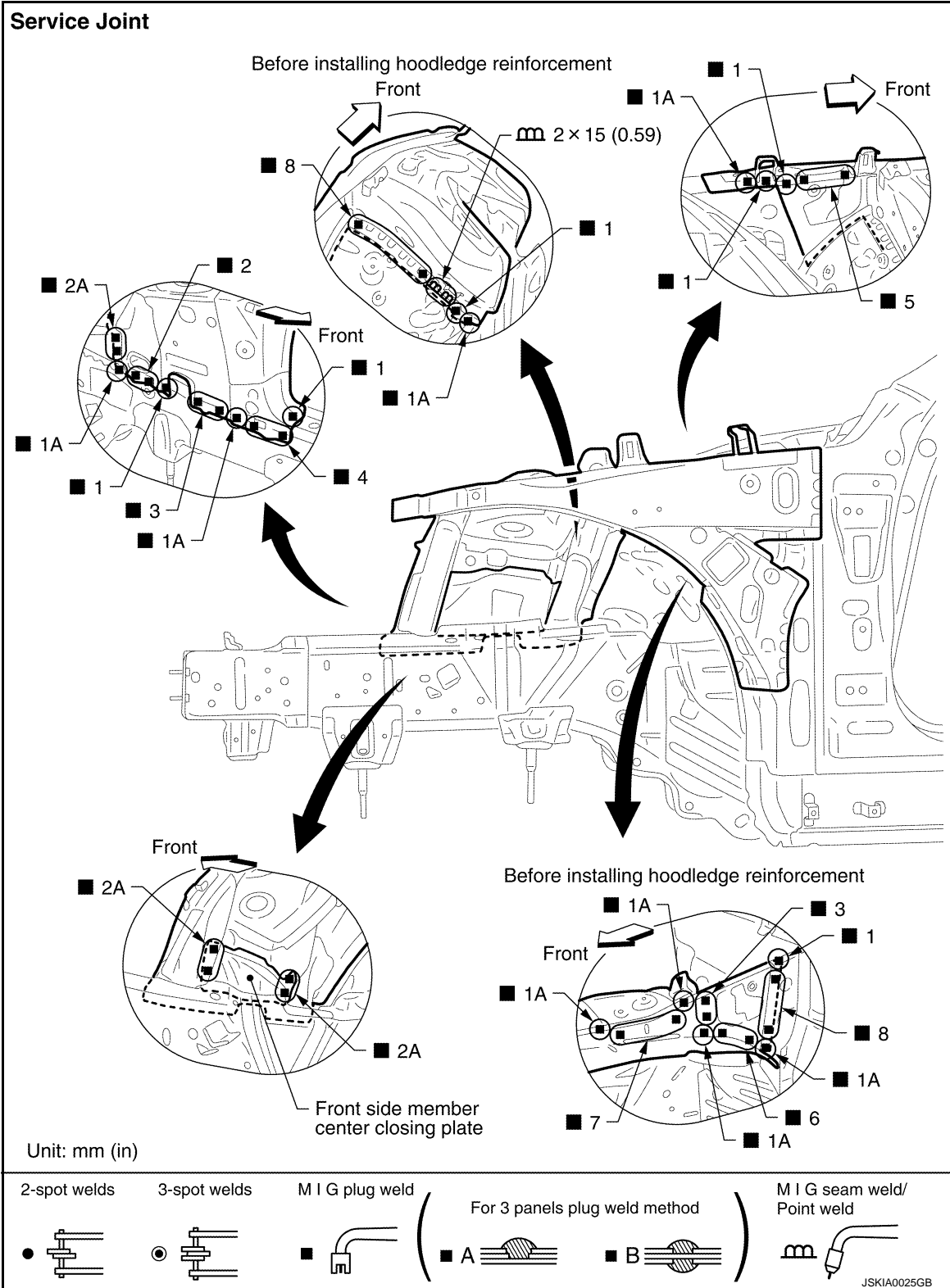
● Upper front hoodledge (LH)

● Hoodledge reinforcement (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

Front Side Member (2WD)

INFOID:000000008834806

Work after radiator core support and hoodledge are removed.

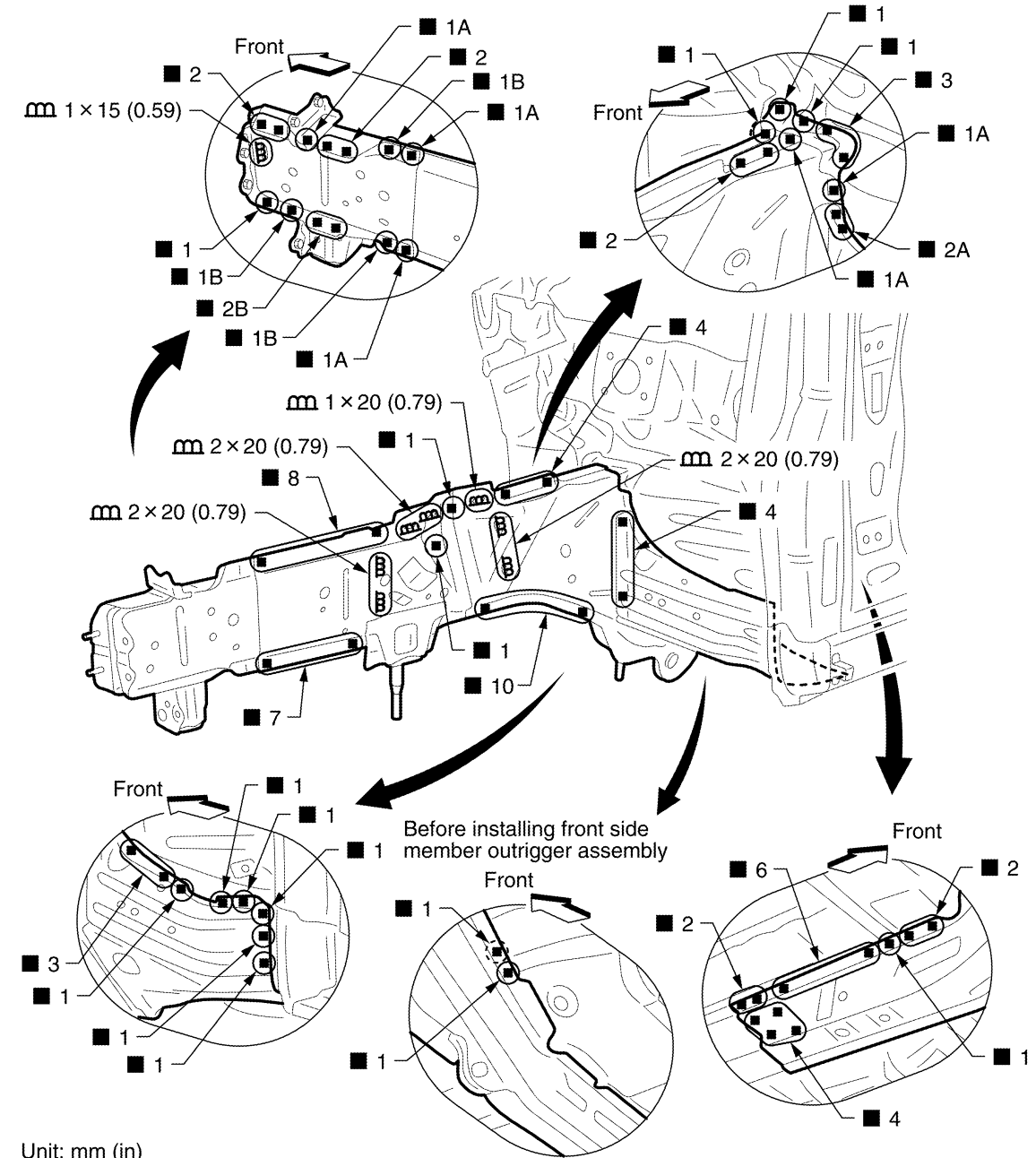
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

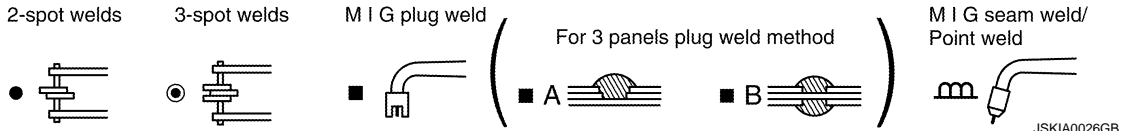
[FOR USA AND CANADA]

Service Joint

Assemble the hoodledge and check the fitting according to Body Alignment before replacing the front side member center closing plate.



Unit: mm (in)



JSKIA0026GB

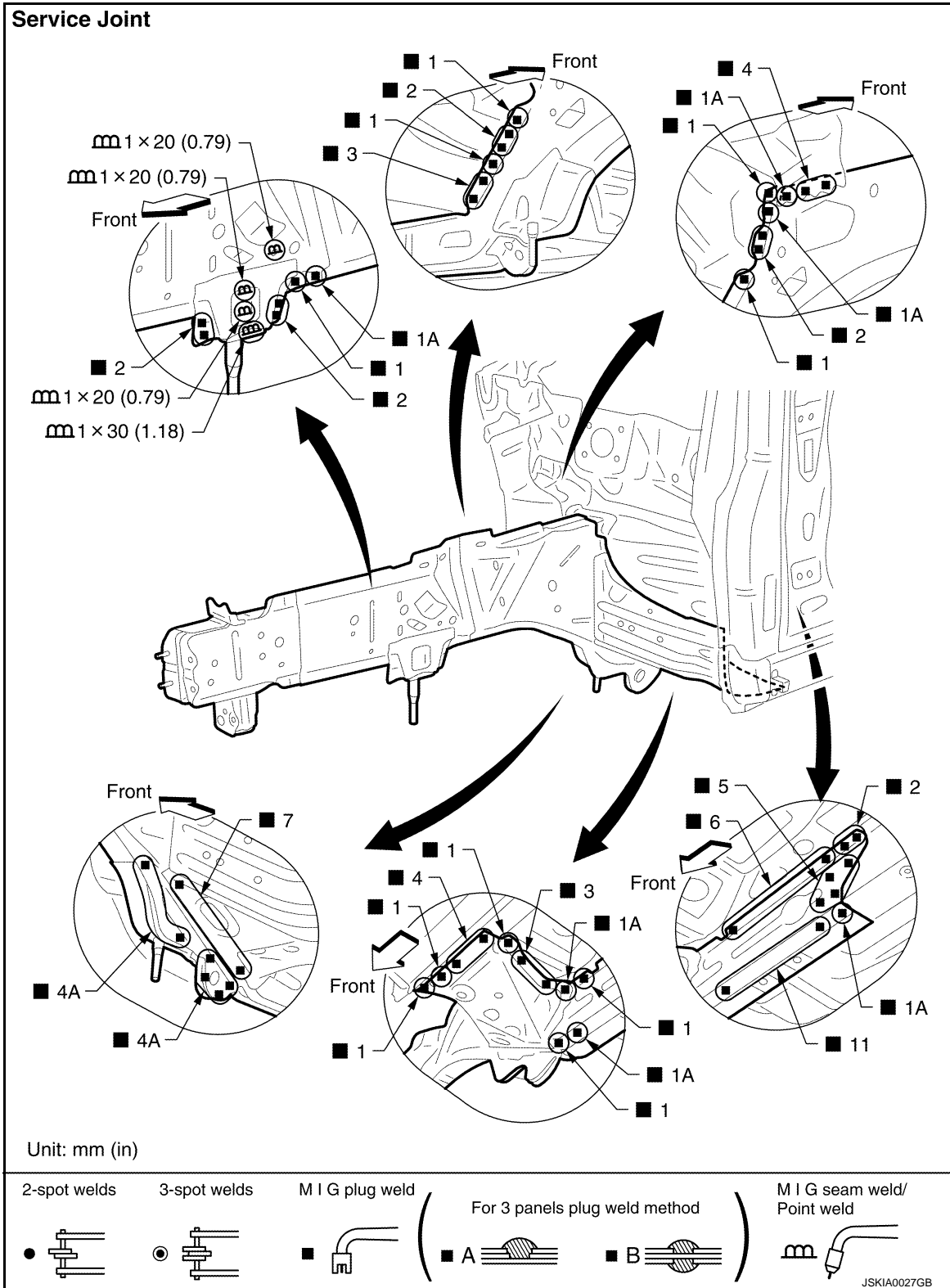
Replacement parts

- Front side member assembly (LH)
- Front side member closing plate assembly (LH)
- Front side member outrigger assembly (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

Front Side Member (AWD)

INFOID:000000008834807

Work after radiator core support and hoodledge are removed.

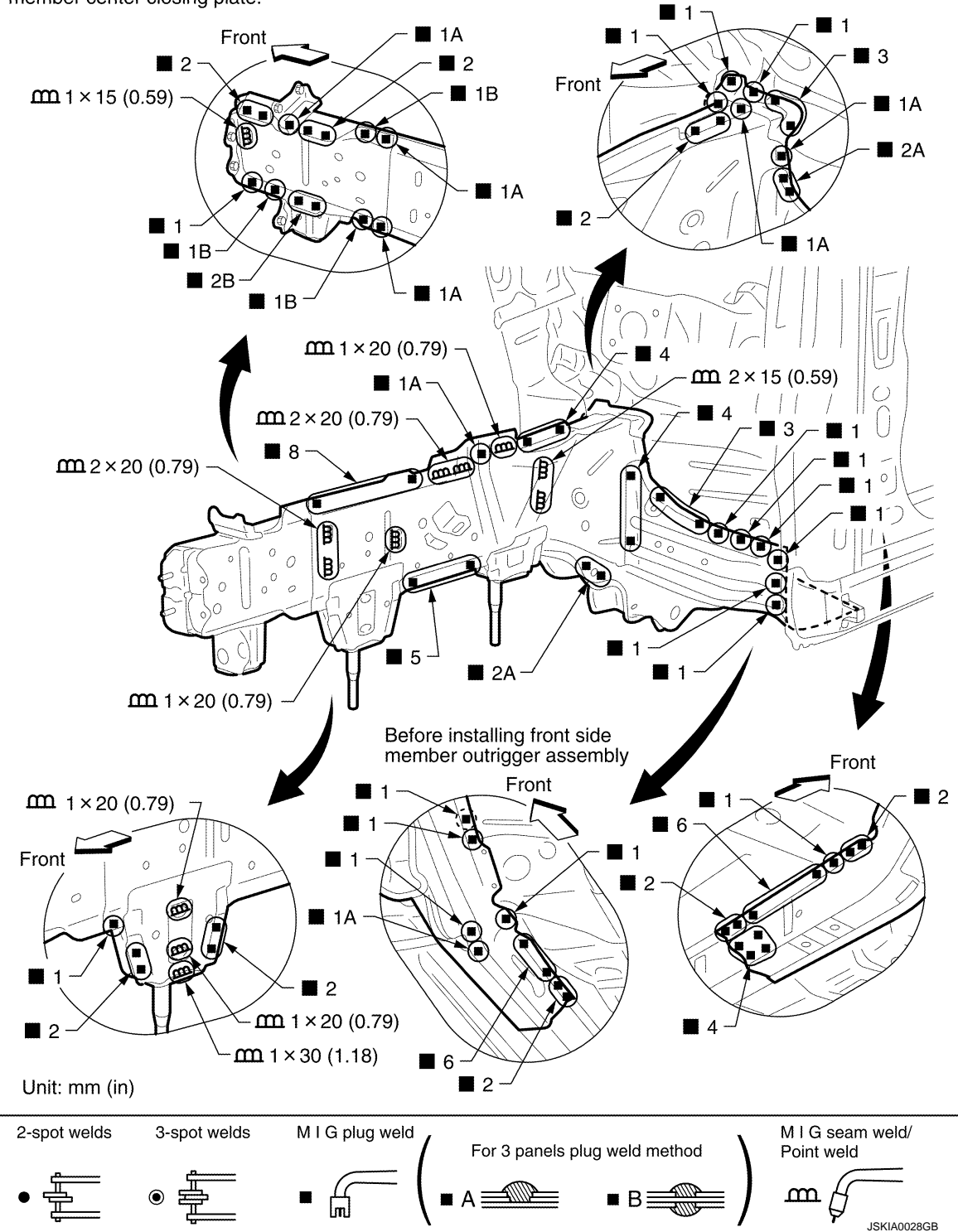
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint

Assemble the hoodledge and check the fitting according to Body Alignment before replacing the front side member center closing plate.



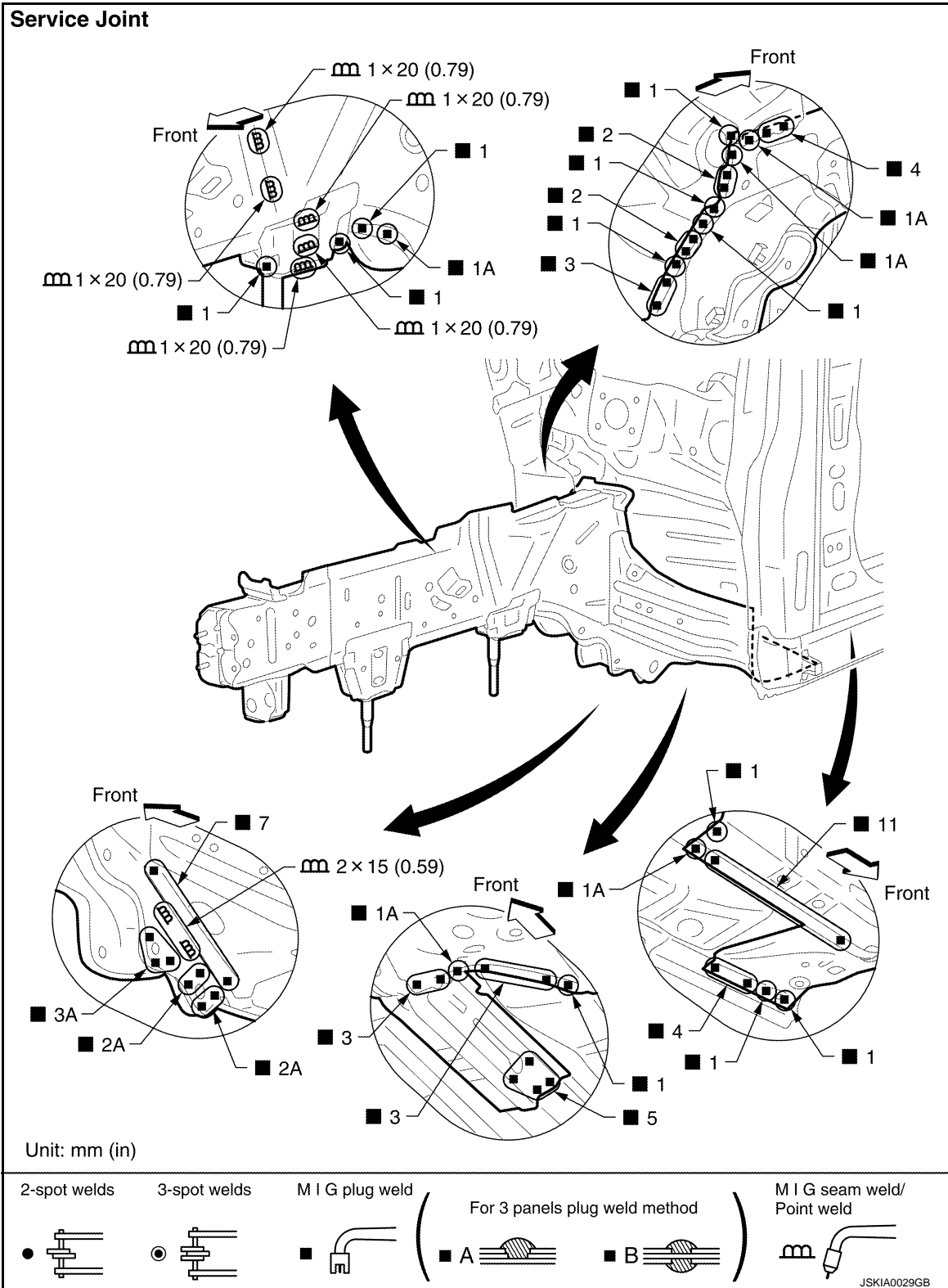
Replacement parts

- Front side member assembly (LH)
- Front side member closing plate assembly (LH)
- Front side member outrigger assembly (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

Front Side Member (Partial Replacement)

INFOID:000000008834808

Work after radiator core support is removed.

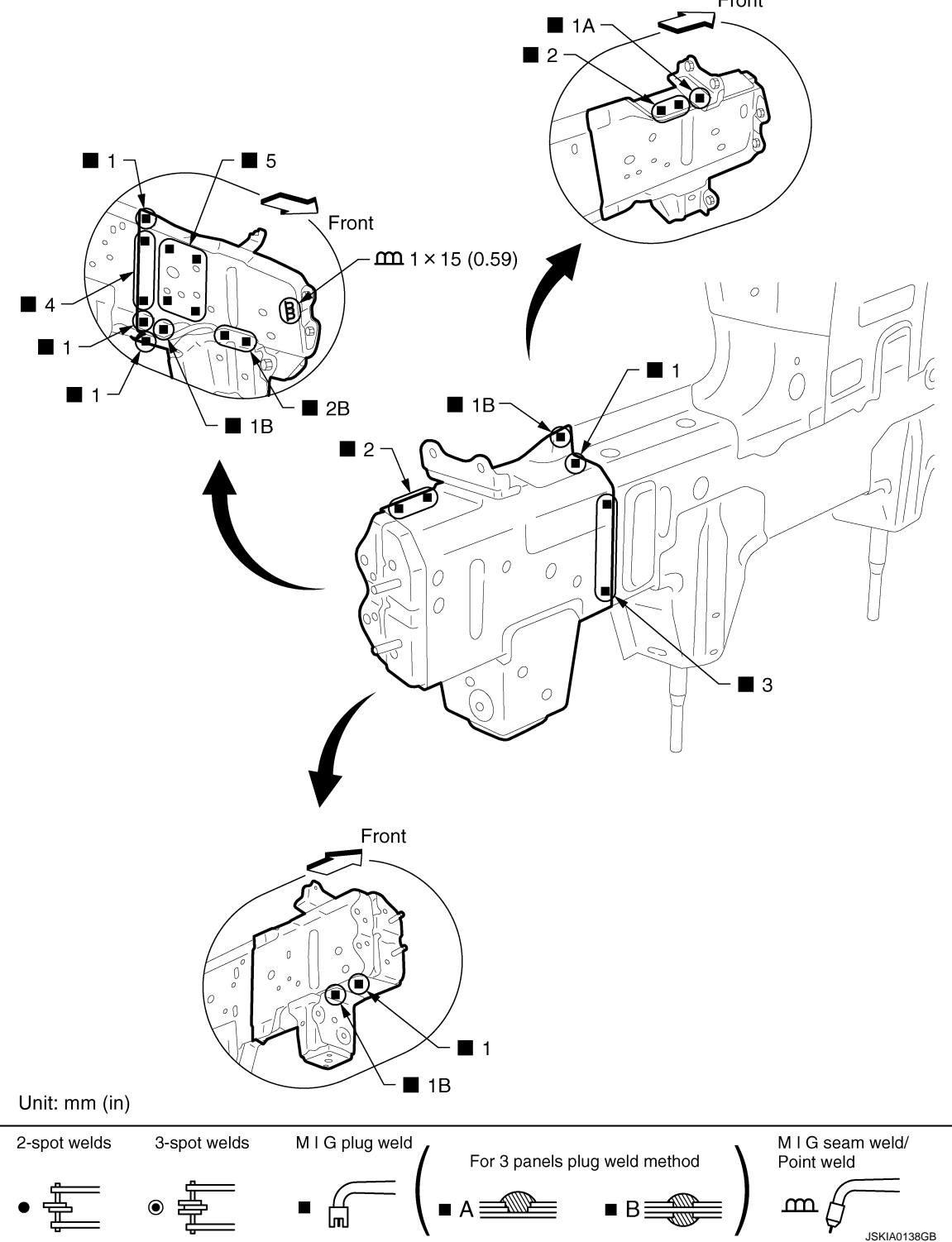
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint

This figure shows right front side member.



Replacement parts

- Front side member front extension (RH)
- Front side member front closing plate (RH)
- Front side rear closing reinforcement (RH)

Front Pillar

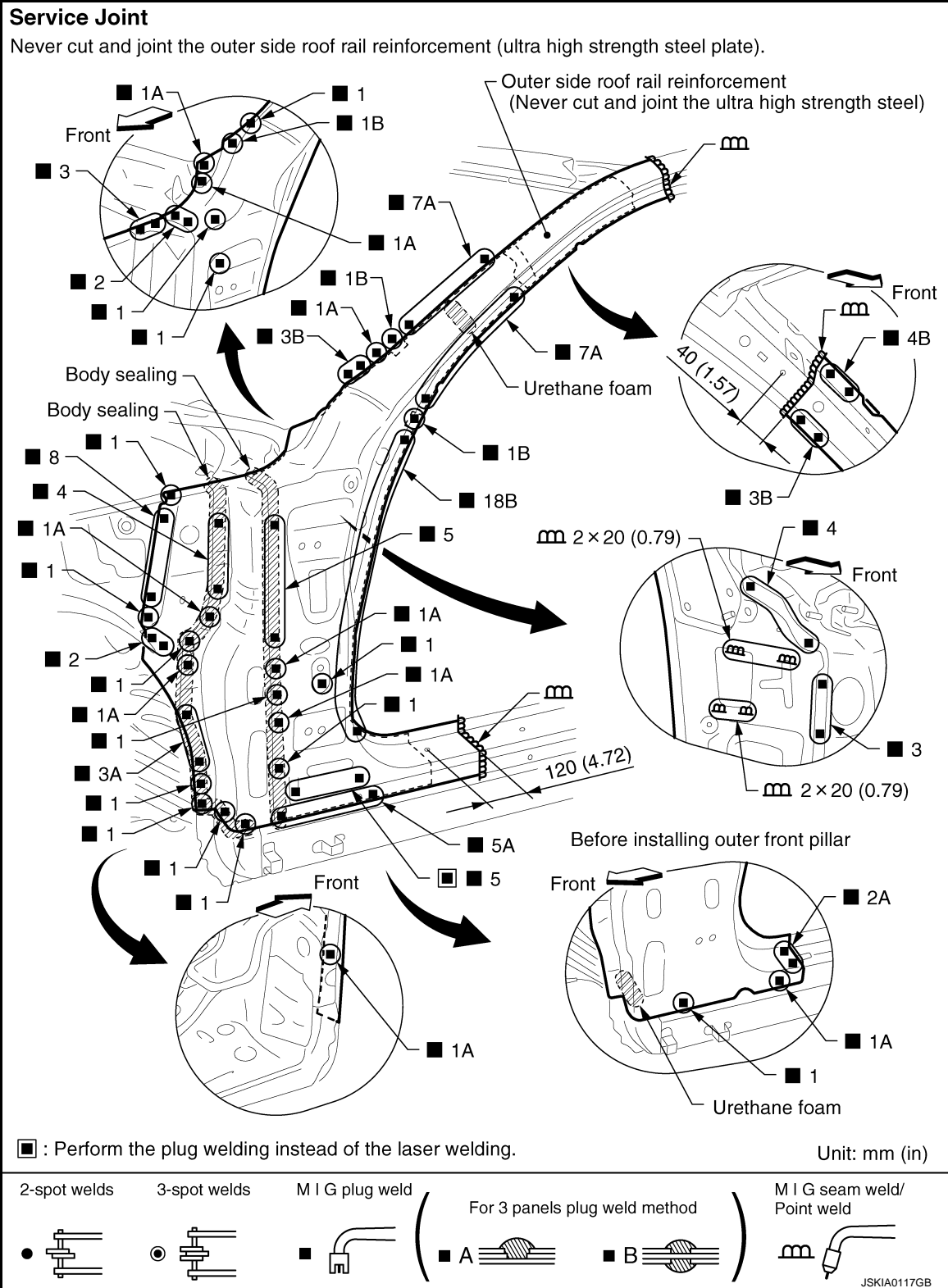
INFOID:000000008834809

Work after hoodledge reinforcement and roof are removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Replacement parts

- Outer front side body (LH)
- Front pillar brace (LH)
- Upper rear hoodledge (LH)
- Outer side roof rail reinforcement (LH)
- Inner roof rail reinforcement (LH)

A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

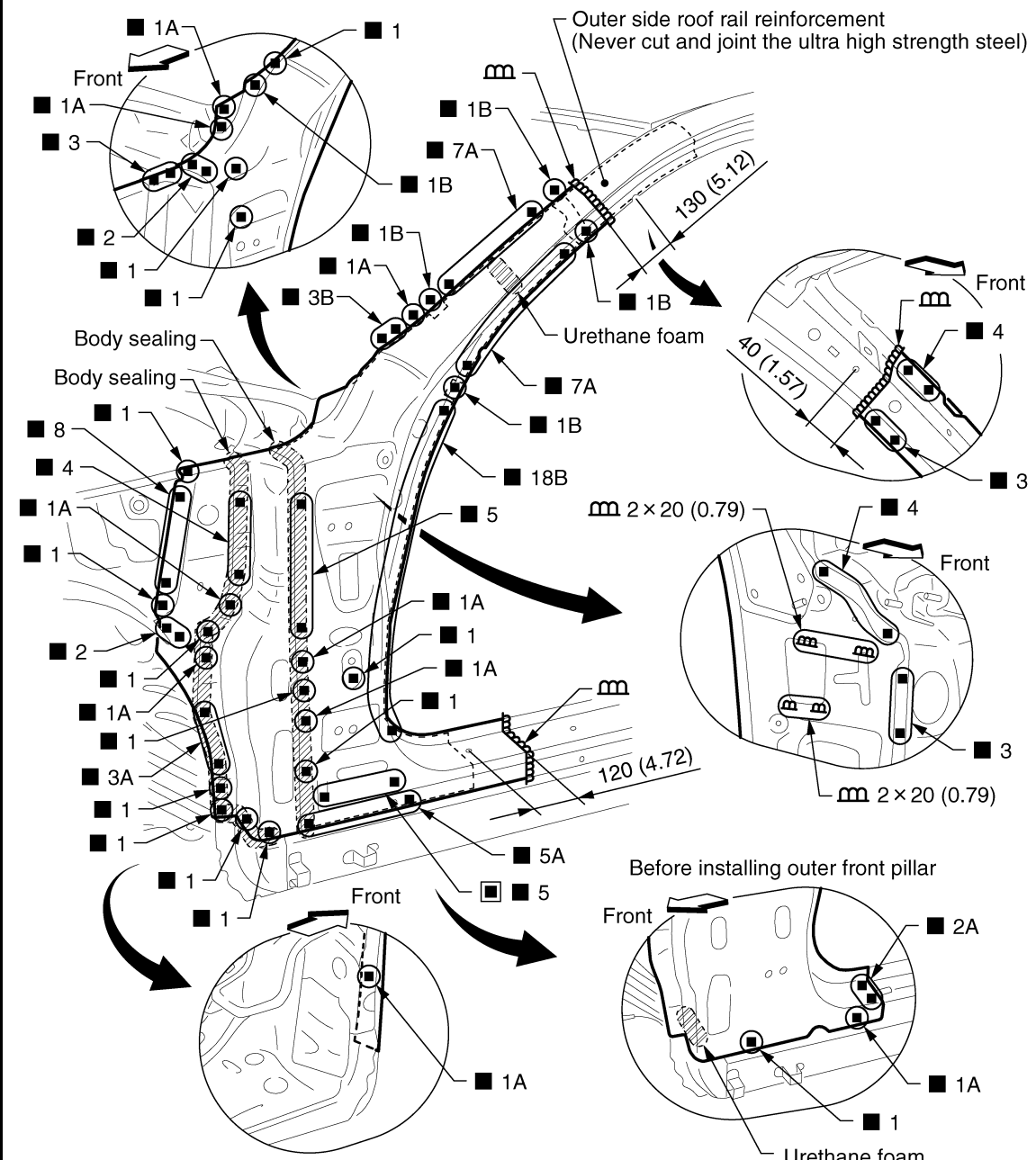
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

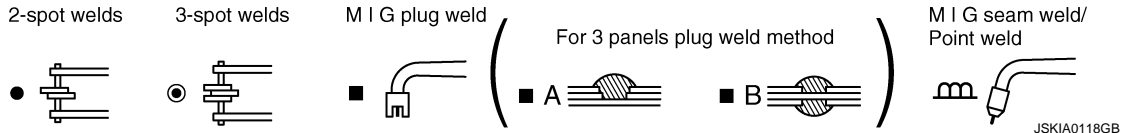
Service Joint

Never cut and joint the outer side roof rail reinforcement (ultra high strength steel plate).



■ : Perform the plug welding instead of the laser welding.

Unit: mm (in)



JSKIA0118GB

Replacement parts

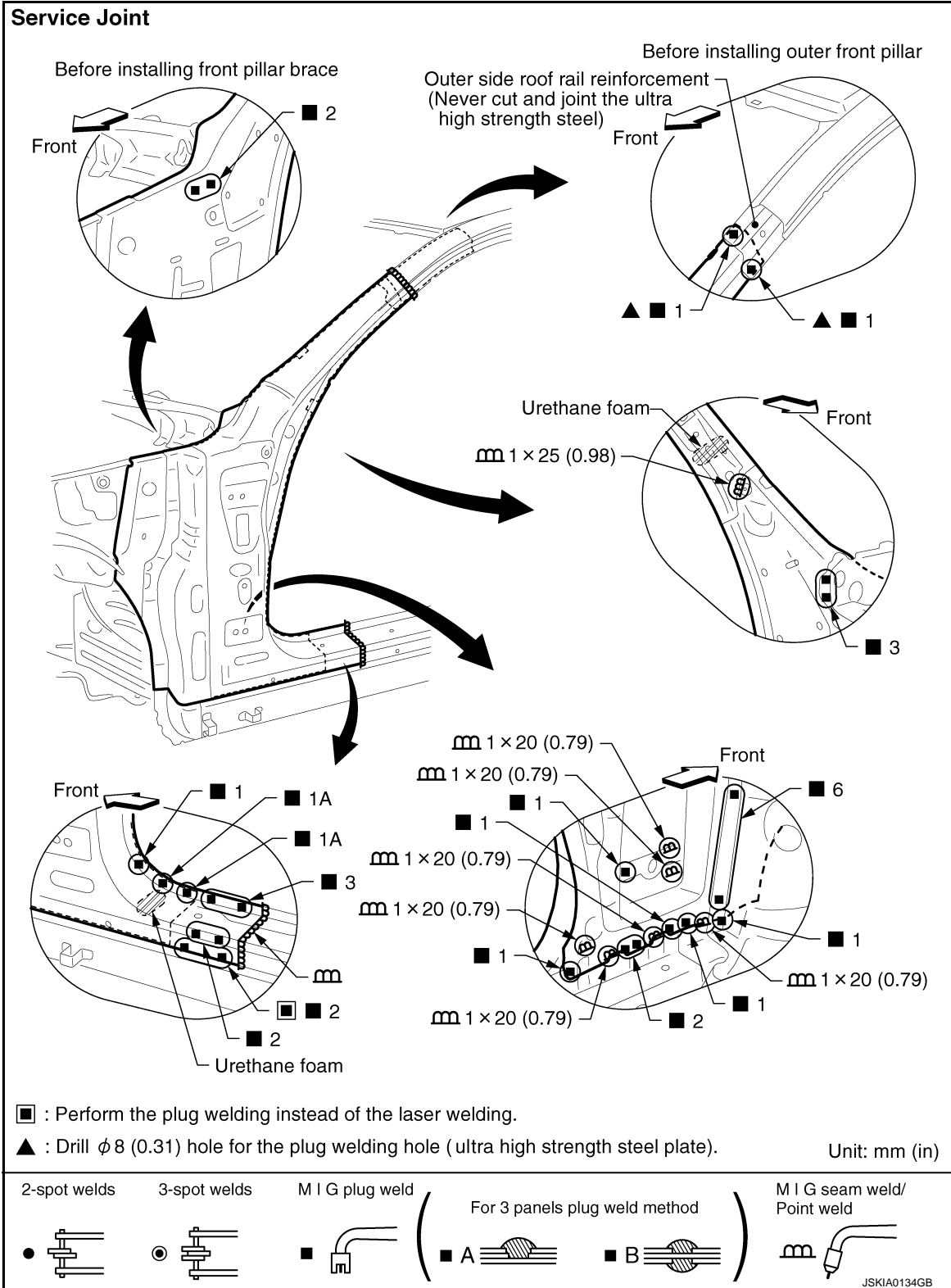
- Outer front side body (LH)
- Front pillar brace (LH)
- Upper rear hoodledge (LH)
- Inner roof rail reinforcement (LH)

A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Center Pillar

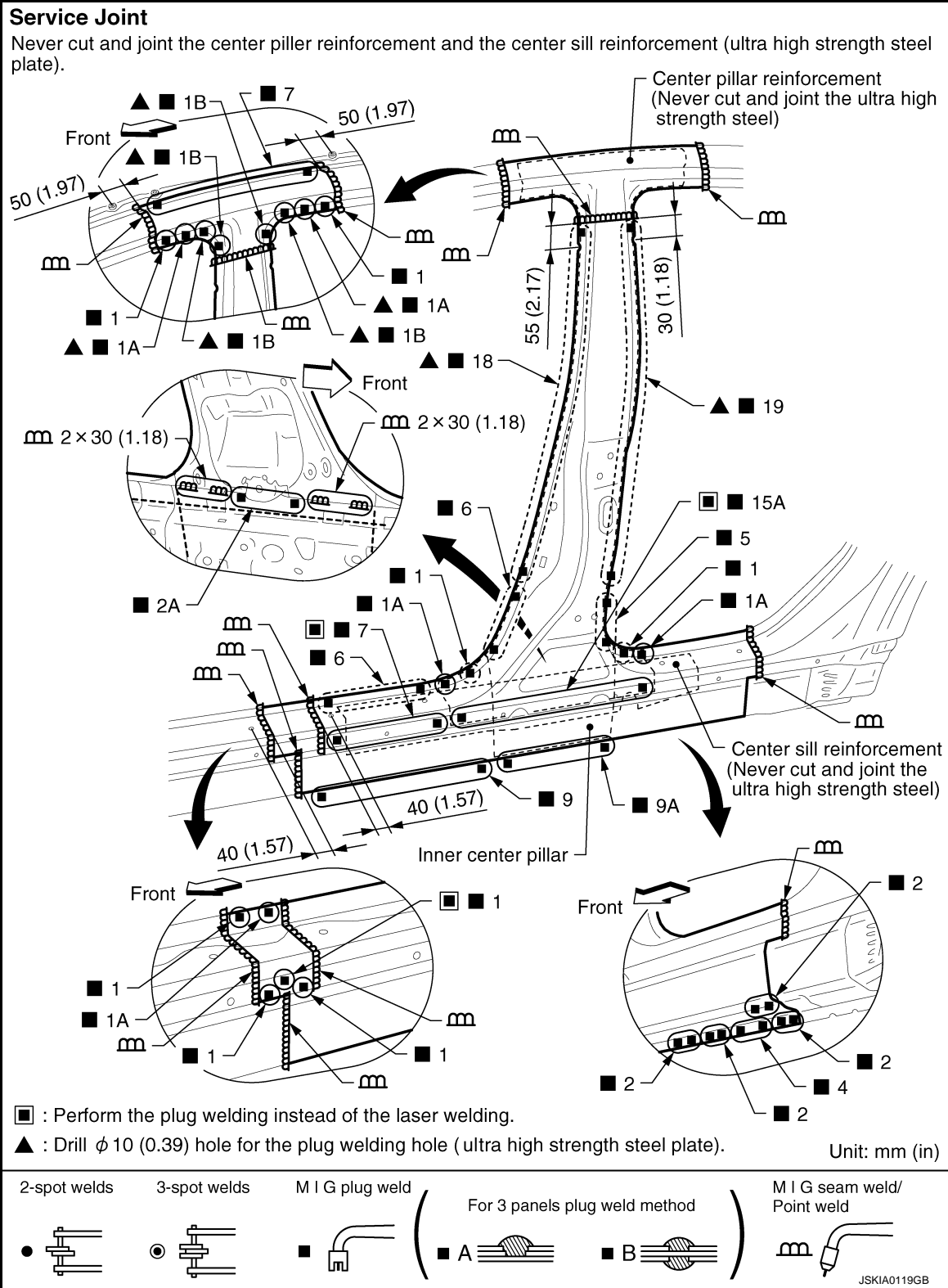
INFOID:000000008834811

Work after roof is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Replacement parts

- Side body assembly (LH)
- Inner center pillar (LH)

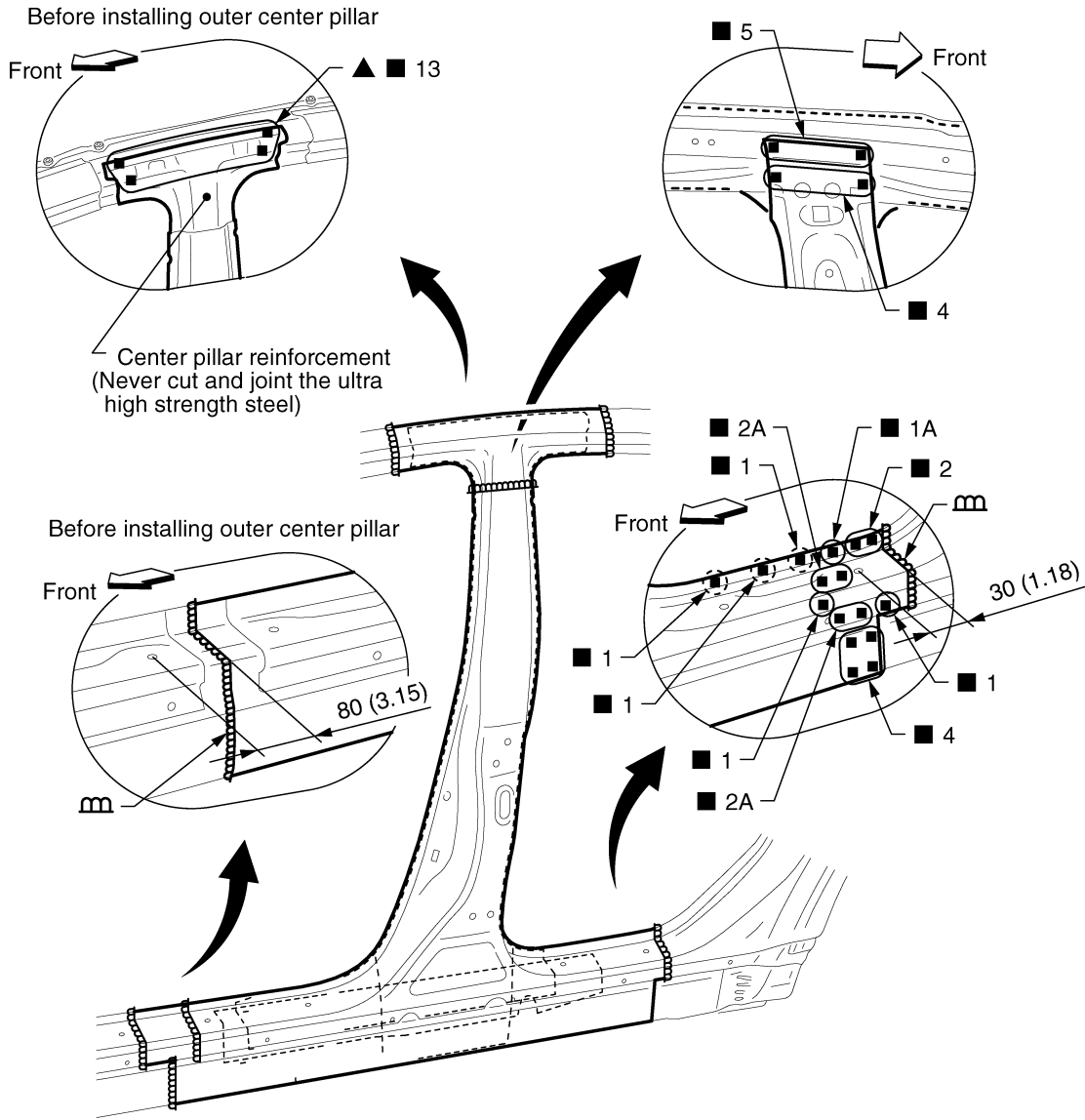
A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint



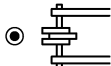
Unit: mm (in)

▲ : Drill ϕ 10 (0.39) hole for the plug welding hole (ultra high strength steel plate).

2-spot welds



3-spot welds



M I G plug weld



For 3 panels plug weld method



M I G seam weld/
Point weld



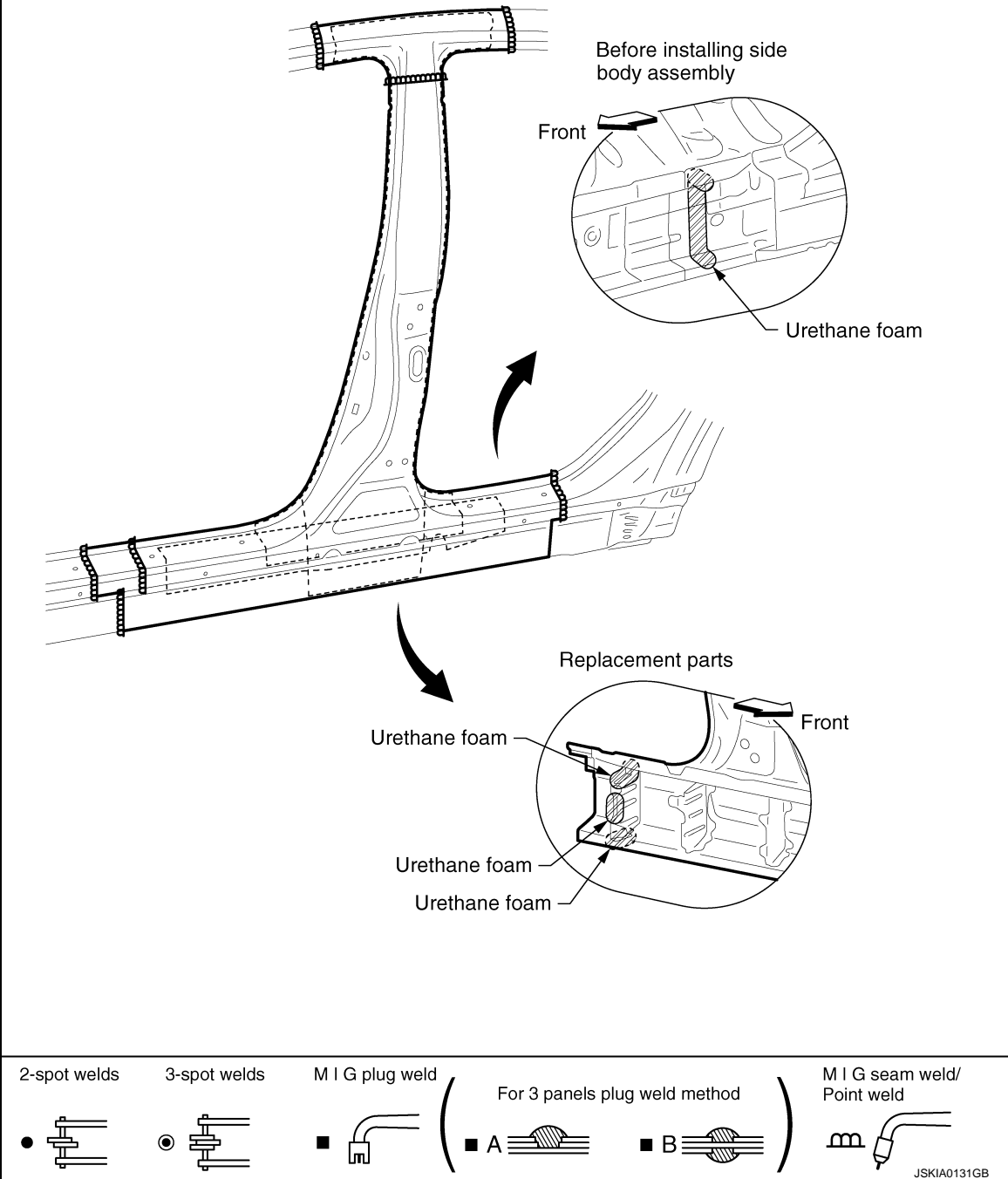
JSKIA0120GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

Outer Sill

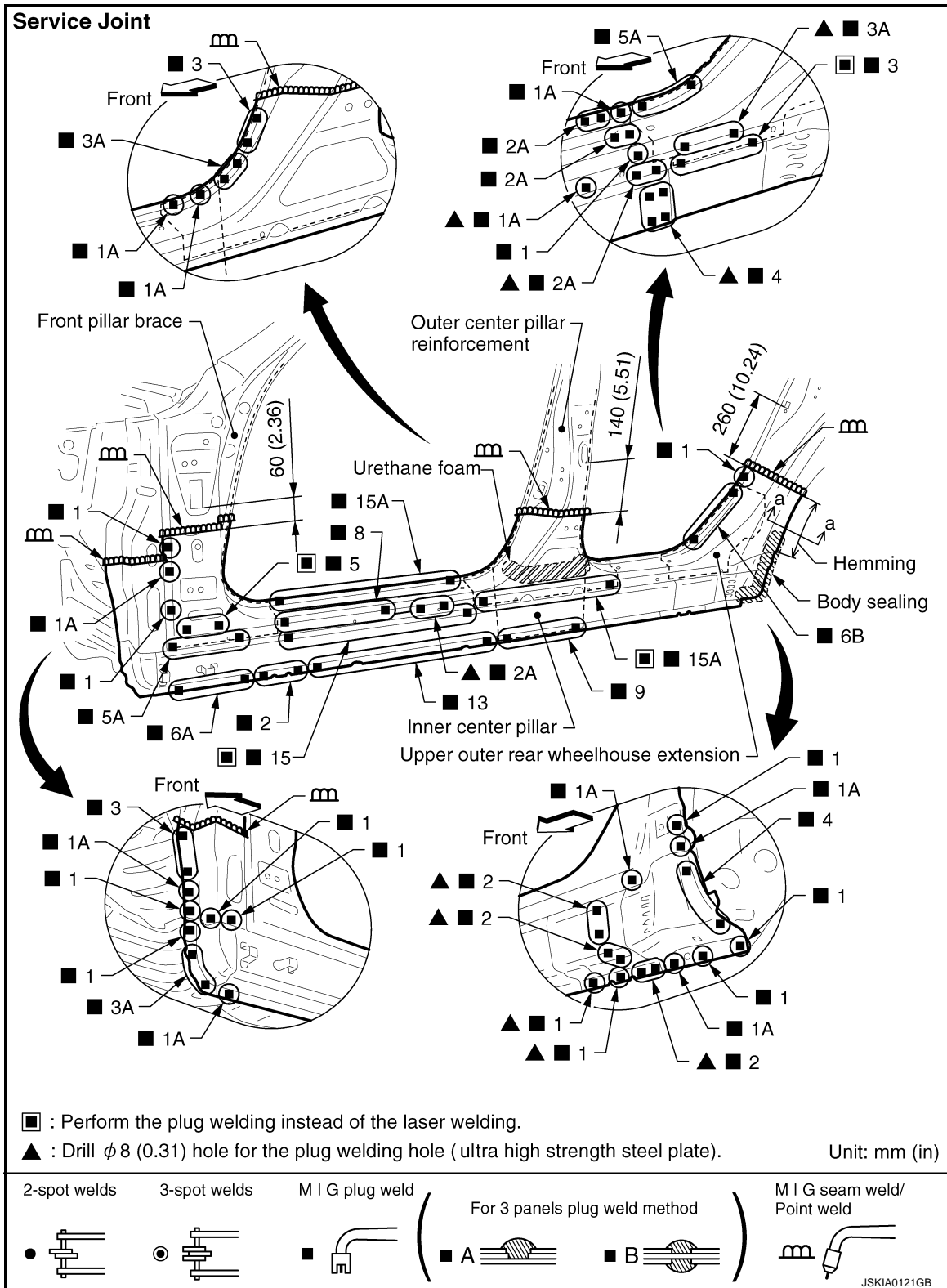
INFOID:000000008834812

Work after hoodledge reinforcement is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Replacement parts

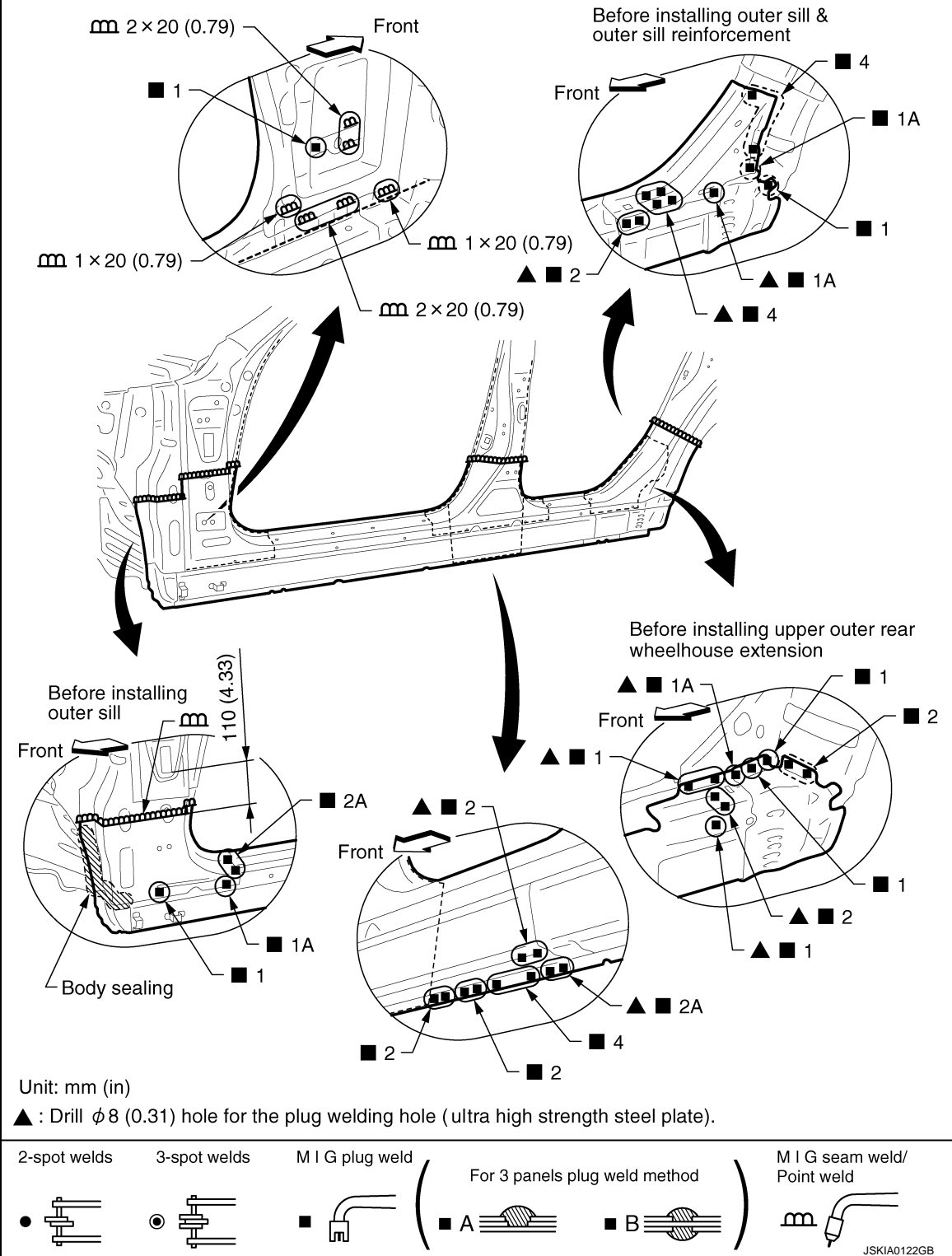
- Outer sill (LH)
- Outer sill reinforcement (LH)
- Upper outer rear wheelhouse extension (LH)
- Front pillar brace (LH)
- Center pillar reinforcement (LH)
- Lower outer rear wheelhouse extension (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint



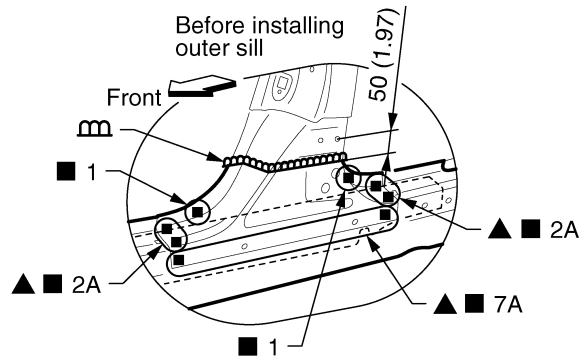
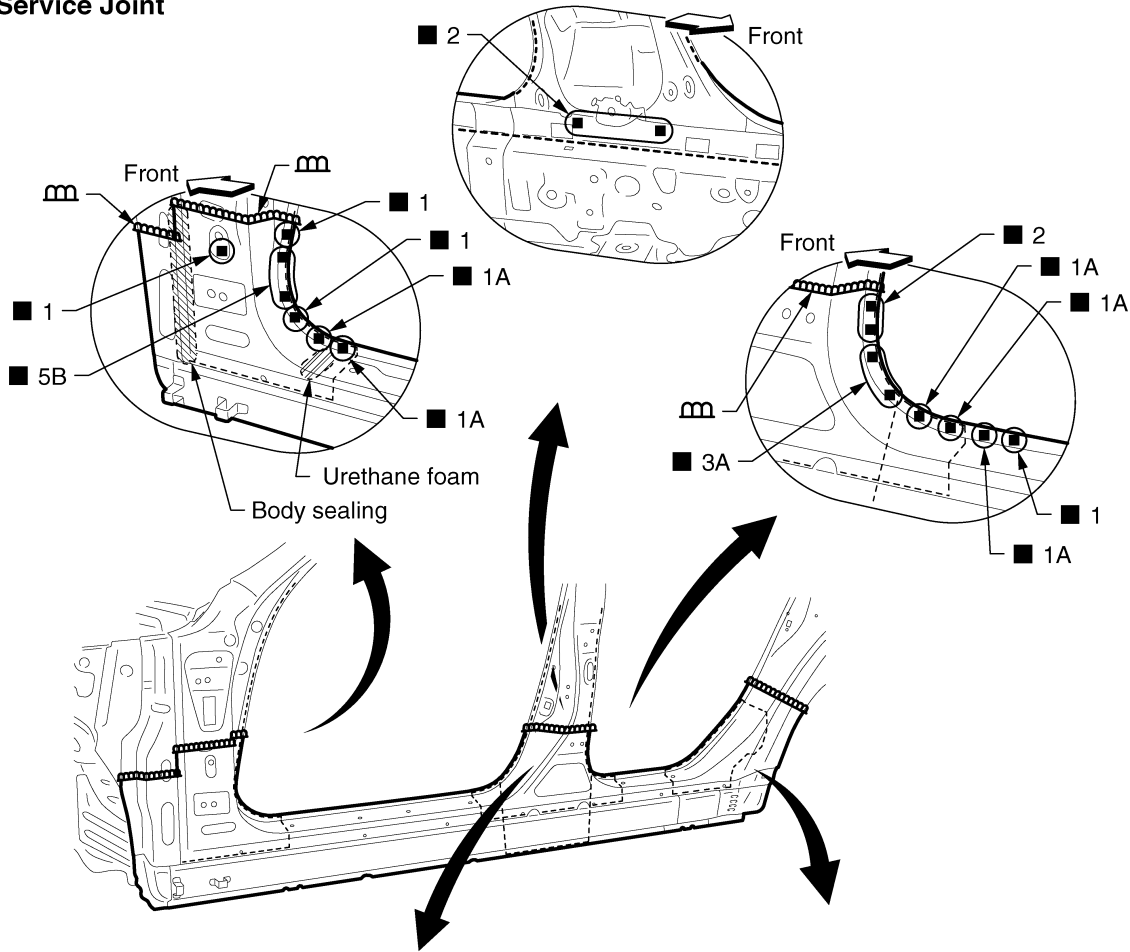
A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPLACEMENT OPERATIONS

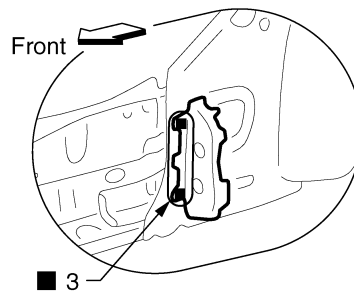
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint



Before installing lower outer rear wheelhouse extension



Unit: mm (in)

▲ : Drill $\phi 8$ (0.31) hole for the plug welding hole (ultra high strength steel plate).

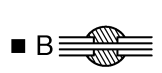
2-spot welds

3-spot welds

M I G plug weld

For 3 panels plug weld method

M I G seam weld/
Point weld

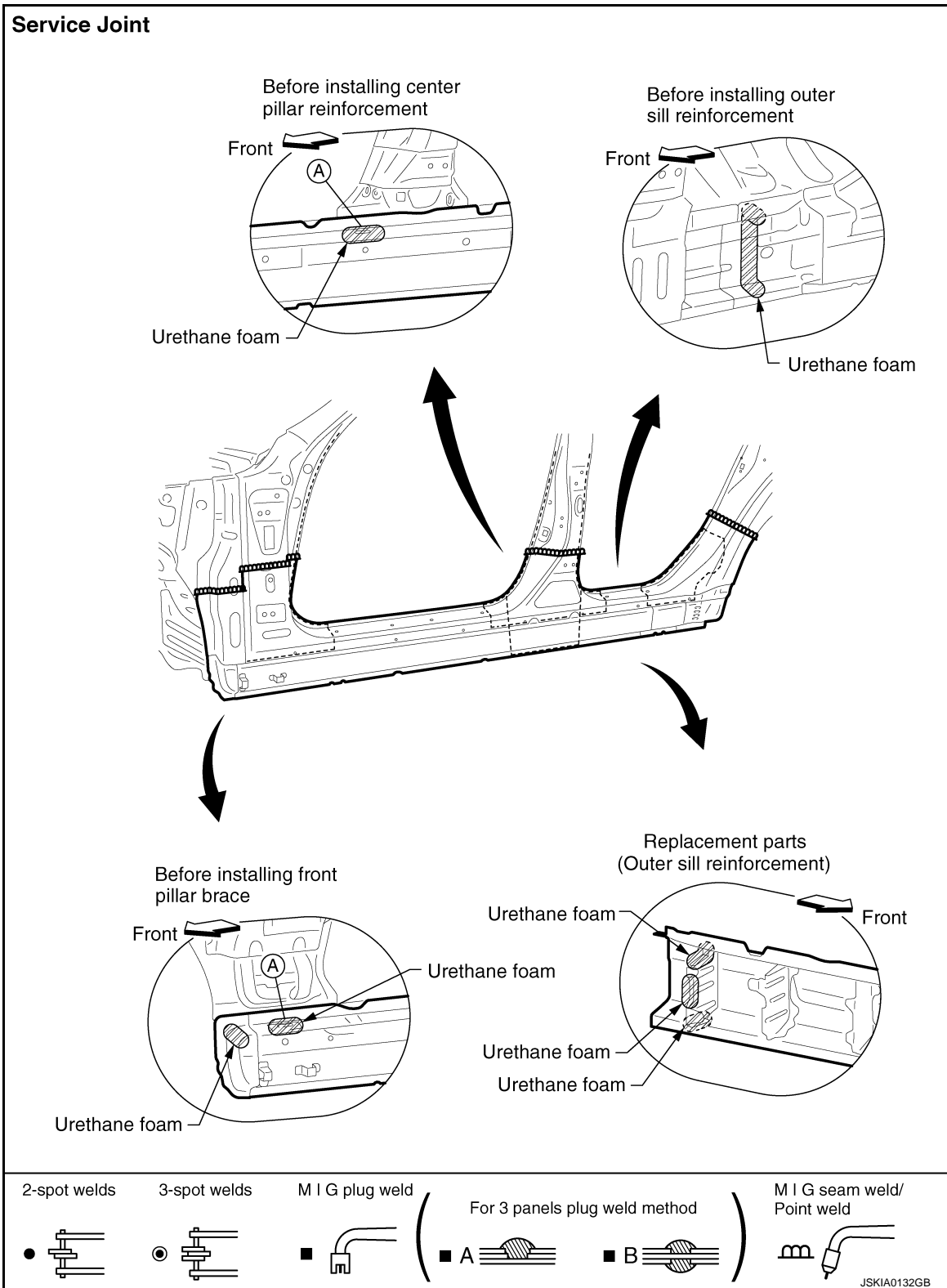


JSKIA0123GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



A. Cover the hole with urethane foam completely.

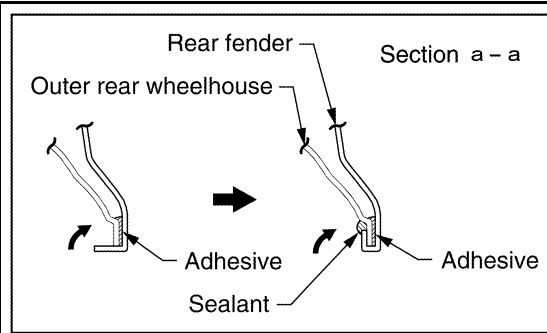
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

REPLACEMENT OPERATIONS

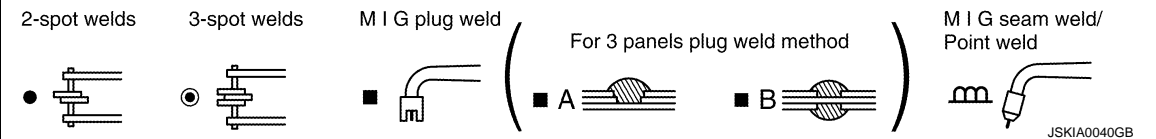
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



INSTALLATION NOTES

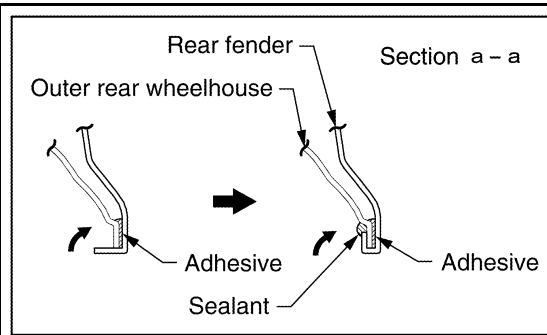
- Apply the adhesive to the flange of wheel arch and hem it.
- Seal up the area around the hemmed end of the flange.
- Refer to "Rear fender hemming process".



REPLACEMENT OPERATIONS

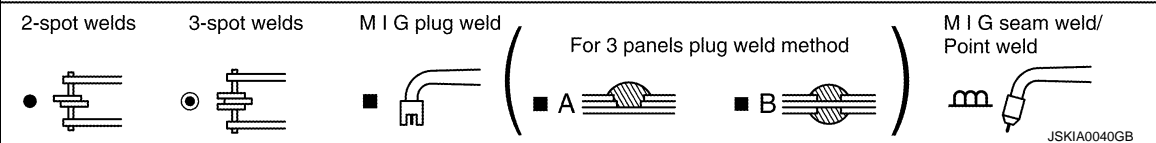
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



INSTALLATION NOTES

- Apply the adhesive to the flange of wheel arch and hem it.
- Seal up the area around the hemmed end of the flange.
- Refer to "Rear fender hemming process".



Outer Wheelhouse

INFOID:000000008834814

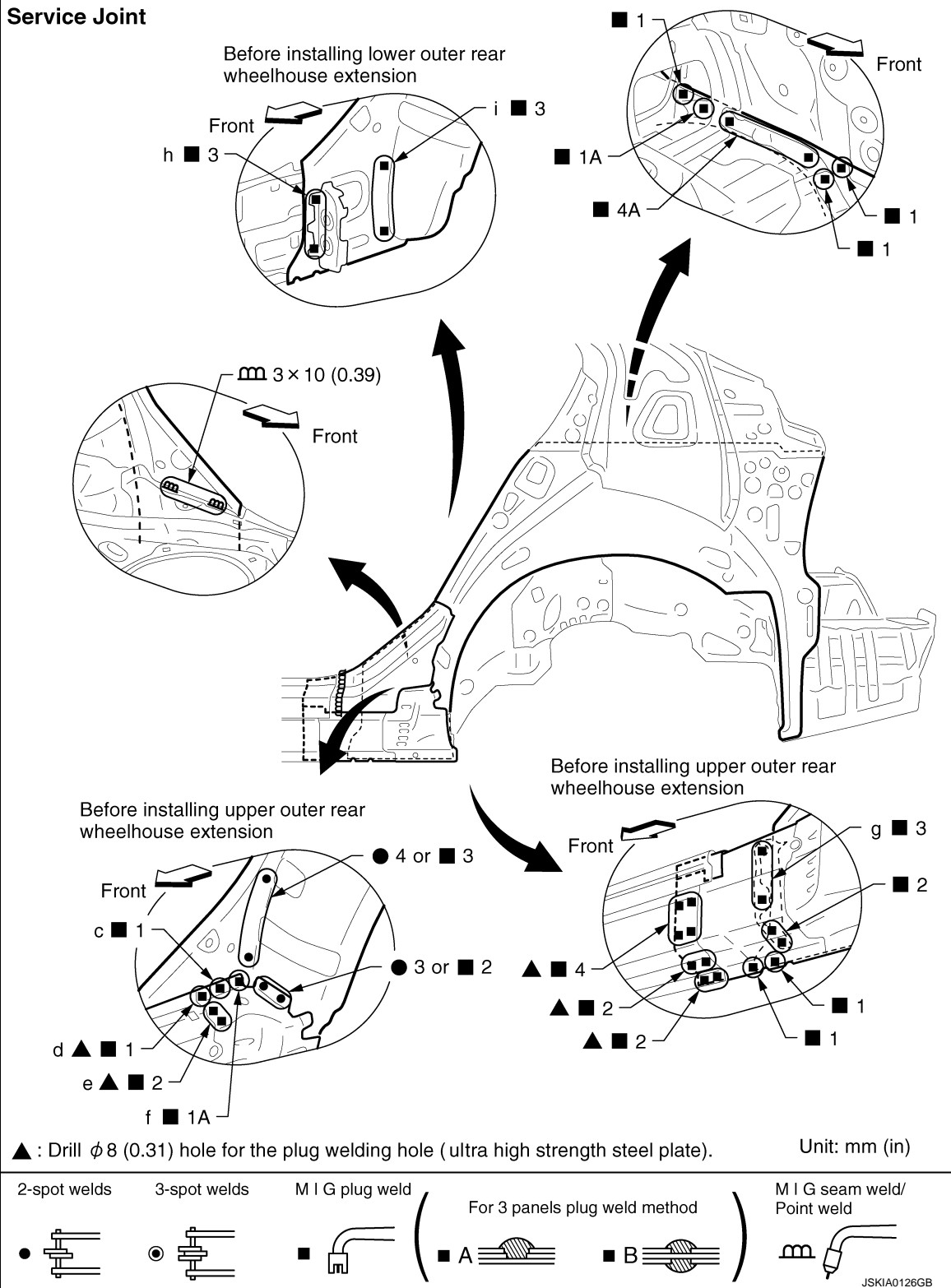
Work after rear fender is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Service Joint

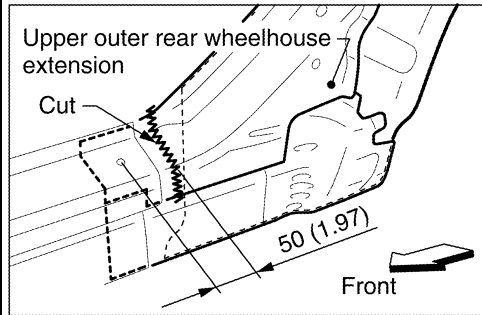


REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

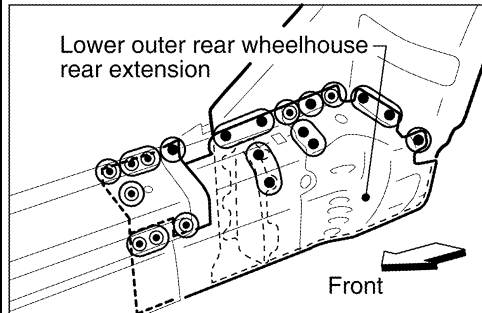
[FOR USA AND CANADA]

Service Joint

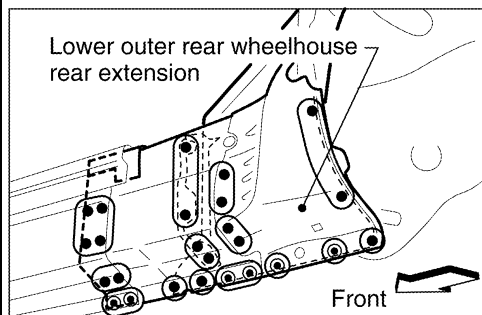


【REMOVAL】

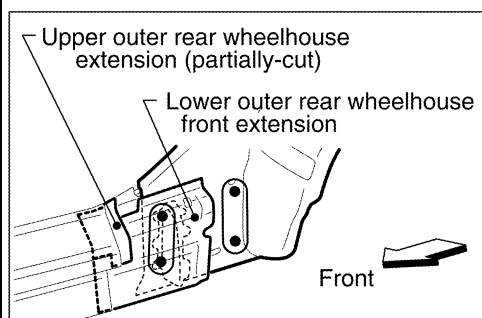
- Reuse the upper outer rear wheelhouse extension and the lower outer rear wheelhouse extension.
- Cut the upper outer rear wheelhouse extension as shown in the figure for removing the hidden welding point (a,b,c,d,e,f,g).



- Cut the lower outer rear wheelhouse rear extension as shown in the figure for removing the hidden welding point (h,i).



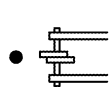
- Remove the welding point as shown in the figure.



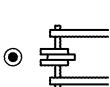
- Pull out the attached (partially-cut) upper outer rear wheelhouse extension and the lower outer rear wheelhouse front extension after removing the lower outer rear wheelhouse rear extension.
- Remove the welding point (h) of the outer rear wheelhouse bias and the outer rear wheelhouse.
- Remove the welding point (i) of the outer rear wheelhouse and the inner rear wheelhouse.

Unit: mm (in)

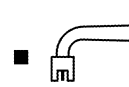
2-spot welds



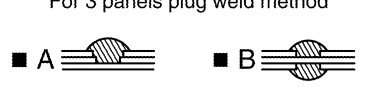
3-spot welds



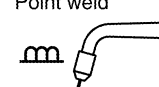
M I G plug weld



For 3 panels plug weld method



M I G seam weld/
Point weld



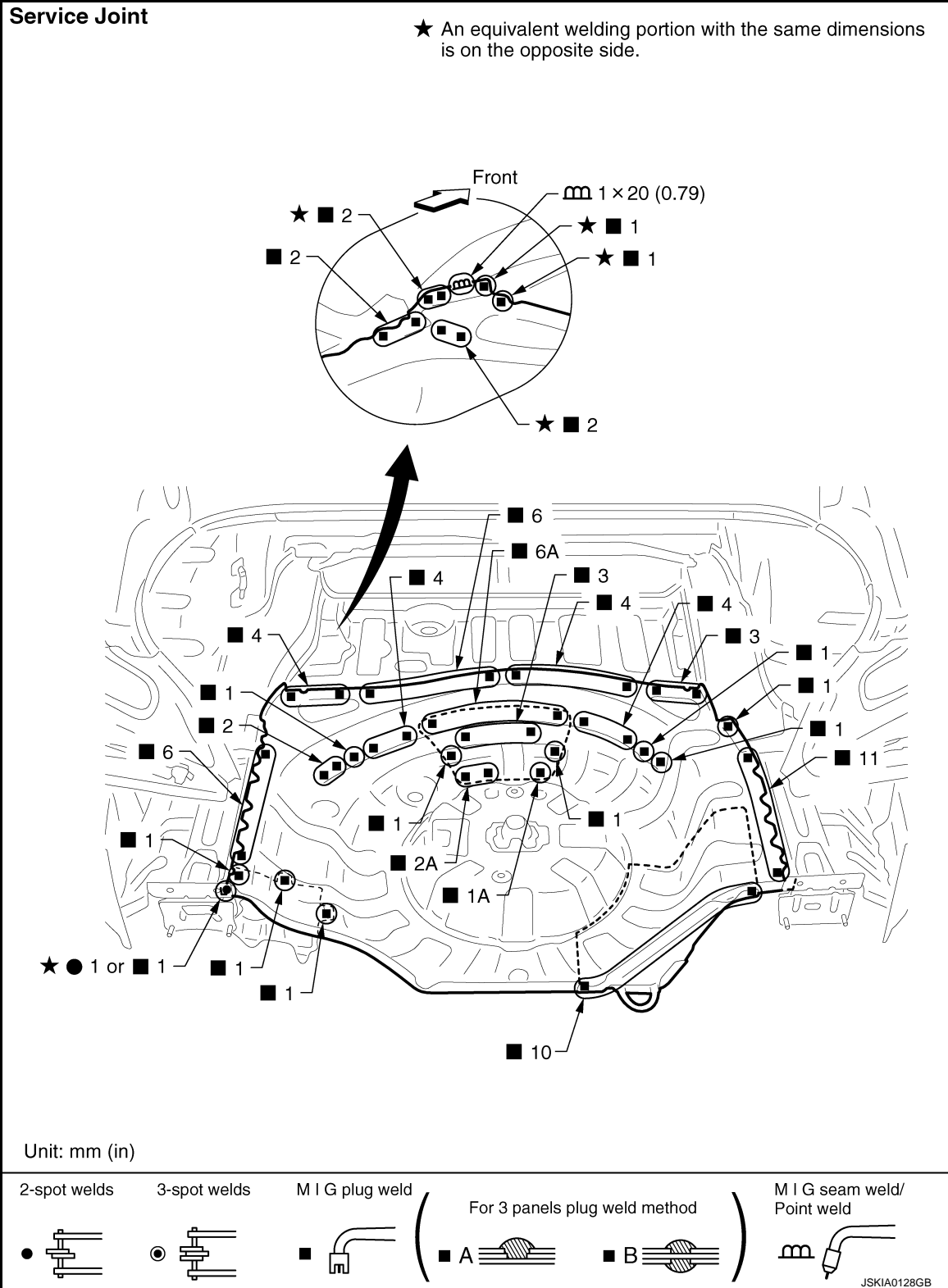
JSKI A0044GB

A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Replacement parts

● Rear floor rear

● Differential mounting bracket assembly

Rear Side Member Extension

Work after rear panel is removed.

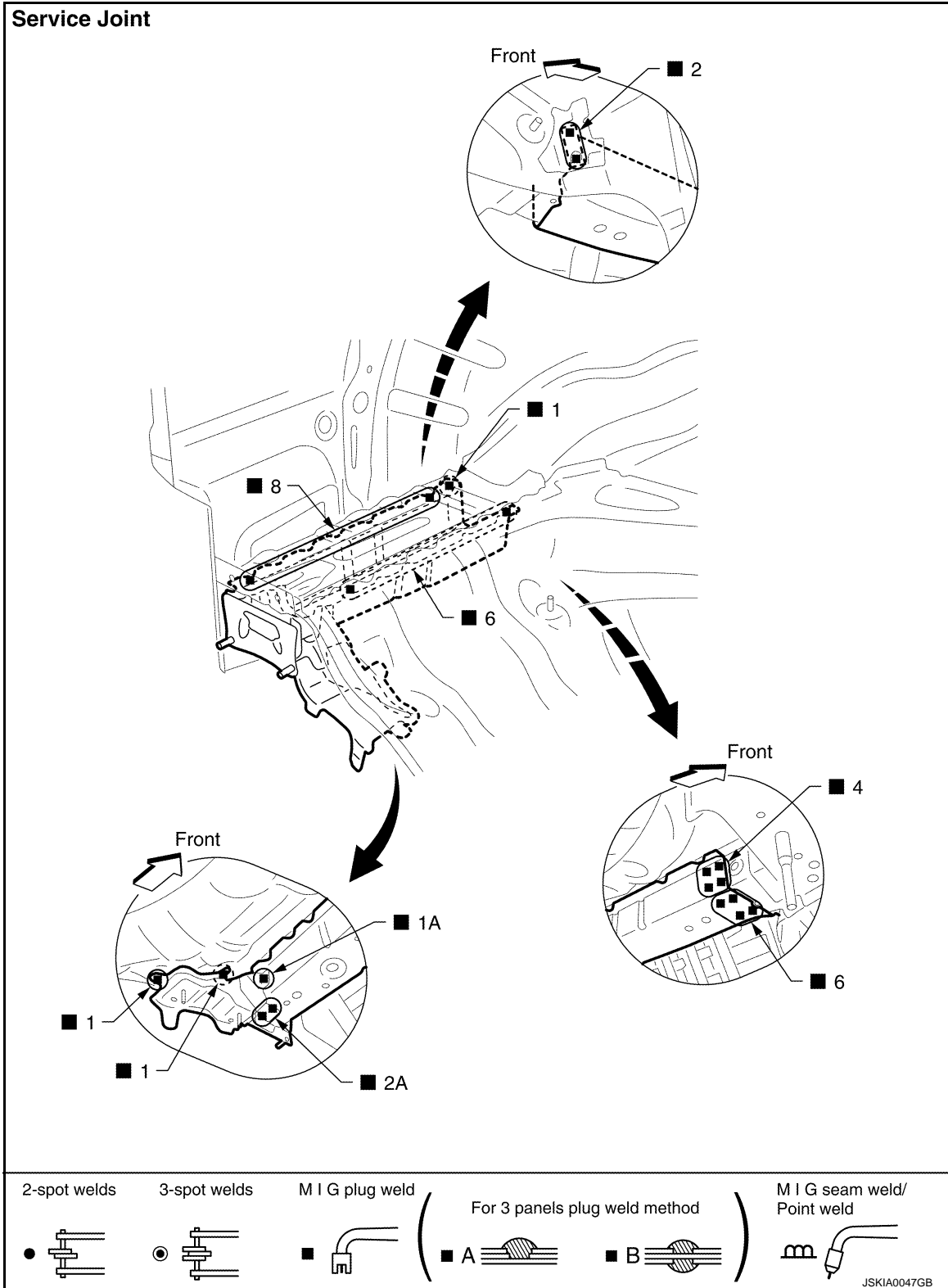
INFOID:000000008834817

A
B
C
D
E
F
G
H
I
J
BRM
L
M
N
O
P

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Replacement parts

- Rear side member extension (LH)
- Muffler mounting bracket assembly

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

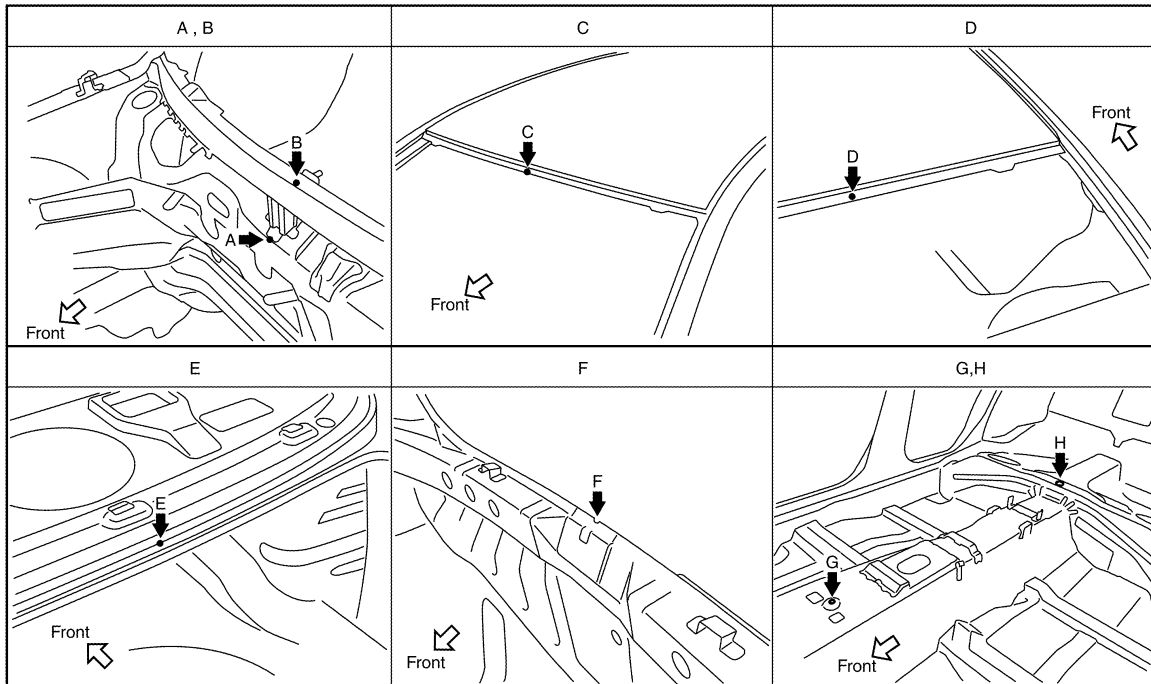
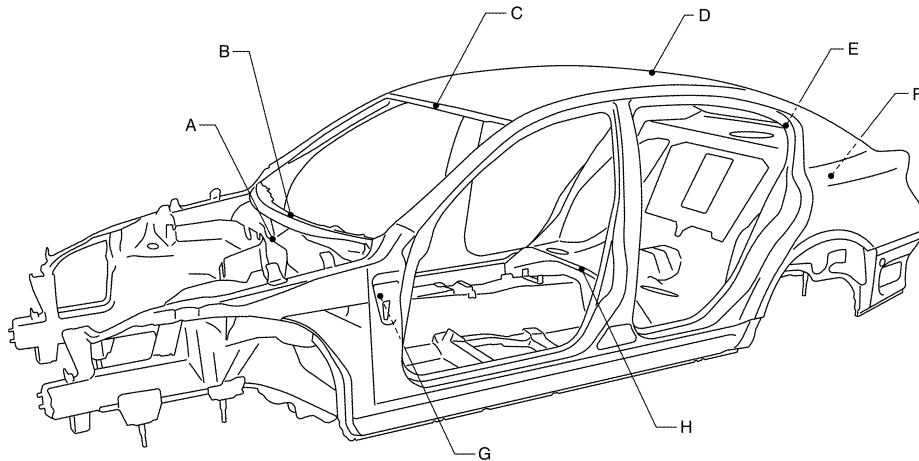
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Body Center Marks

INFOID:000000008834798

A mark is placed on each part of the body to indicate the vehicle center. When repairing the vehicle frame (members, pillars, etc.) damaged by an accident which it enables more accurate and effective repair by using these marks together with body alignment specifications.



JSKIA0012GB

Unit: mm (in)

Points	Portion	Marks
A, B	Upper dash	Embossment
C	Front roof	Embossment
D	Rear roof	Embossment
E	Rear waist panel	Embossment
F	Rear panel	Indent

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

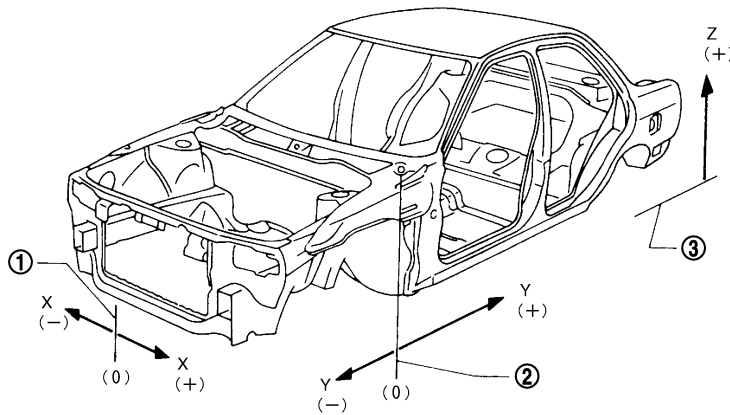
[FOR USA AND CANADA]

Points	Portion	Marks
G	Front floor	Hole 14×12 (0.55×0.47)
H	Rear floor	Hole φ6 (0.24)

Description

INFOID:000000008834611

- All dimensions indicated in the figures are actual.
- When using a tracking gauge, adjust both pointers to equal length. Then check the pointers and gauge itself to make sure there is no free play.
- When a measuring tape is used, check to be sure there is no elongation, twisting or bending.
- Measurements should be taken at the center of the mounting holes.
- An asterisk (*) following the value at the measuring point indicates that the measuring point on the other side is symmetrically the same value.
- The coordinates of the measurement points are the distances measured from the standard line of "X", "Y" and "Z".
- "Z": Imaginary base line [200 mm (7.87 in) below datum line ("0Z" at design plan)]



JSKIA0073GB

1. Vehicle center

2. Front axle center

3. Imaginary base line

Engine Compartment

INFOID:000000008834799

MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

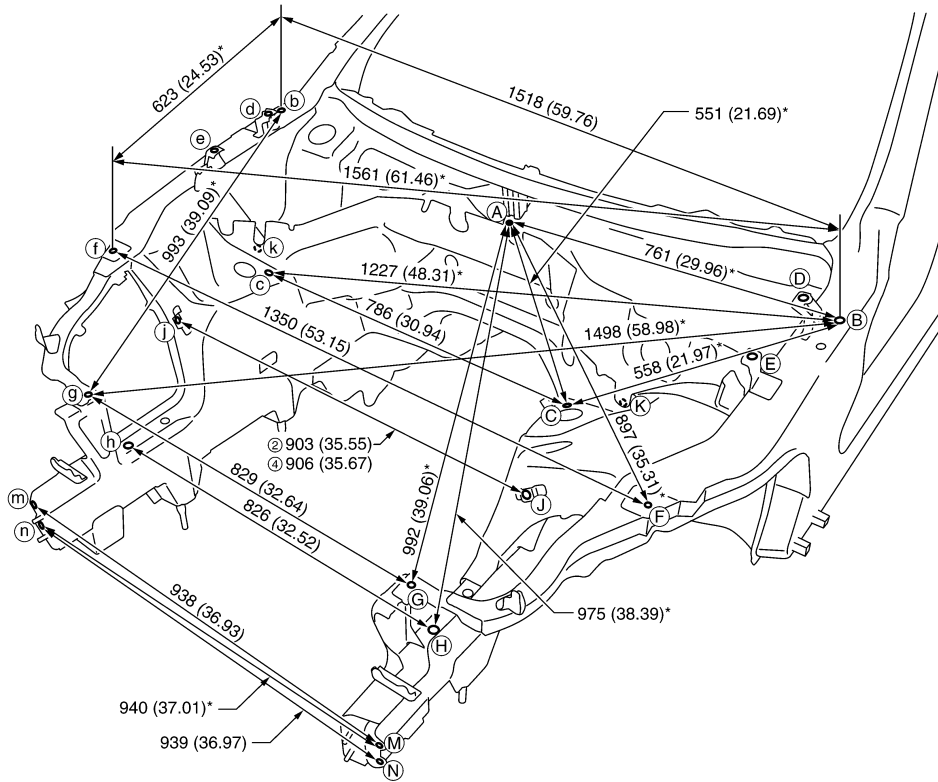
BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

②: 2WD ④: AWD

Unit : mm (in)



JSKIA0015GB

«Engine room»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	761 (29.96)*		B - C	558 (21.97)*		C - c	786 (30.94)		M - m	938 (36.93)	
A - C	551 (21.69)*		B - c	1227 (48.31)*		F - f	1350 (53.15)		M - n	940 (37.01)*	
A - F	897 (35.31)*		B - f	1561 (61.46)*		G - g	829 (32.64)		N - n	939 (36.97)	
A - G	992 (39.06)*		b - f	623 (24.53)*		H - h	826 (32.52)				
A - H	975 (38.39)*		B - g	1498 (58.98)*		J - j	903 (35.55)	2WD			
B - b	1518 (59.76)		b - g	993 (39.09)*		J - j	906 (35.67)	AWD			

«The others»

Unit: mm (in)

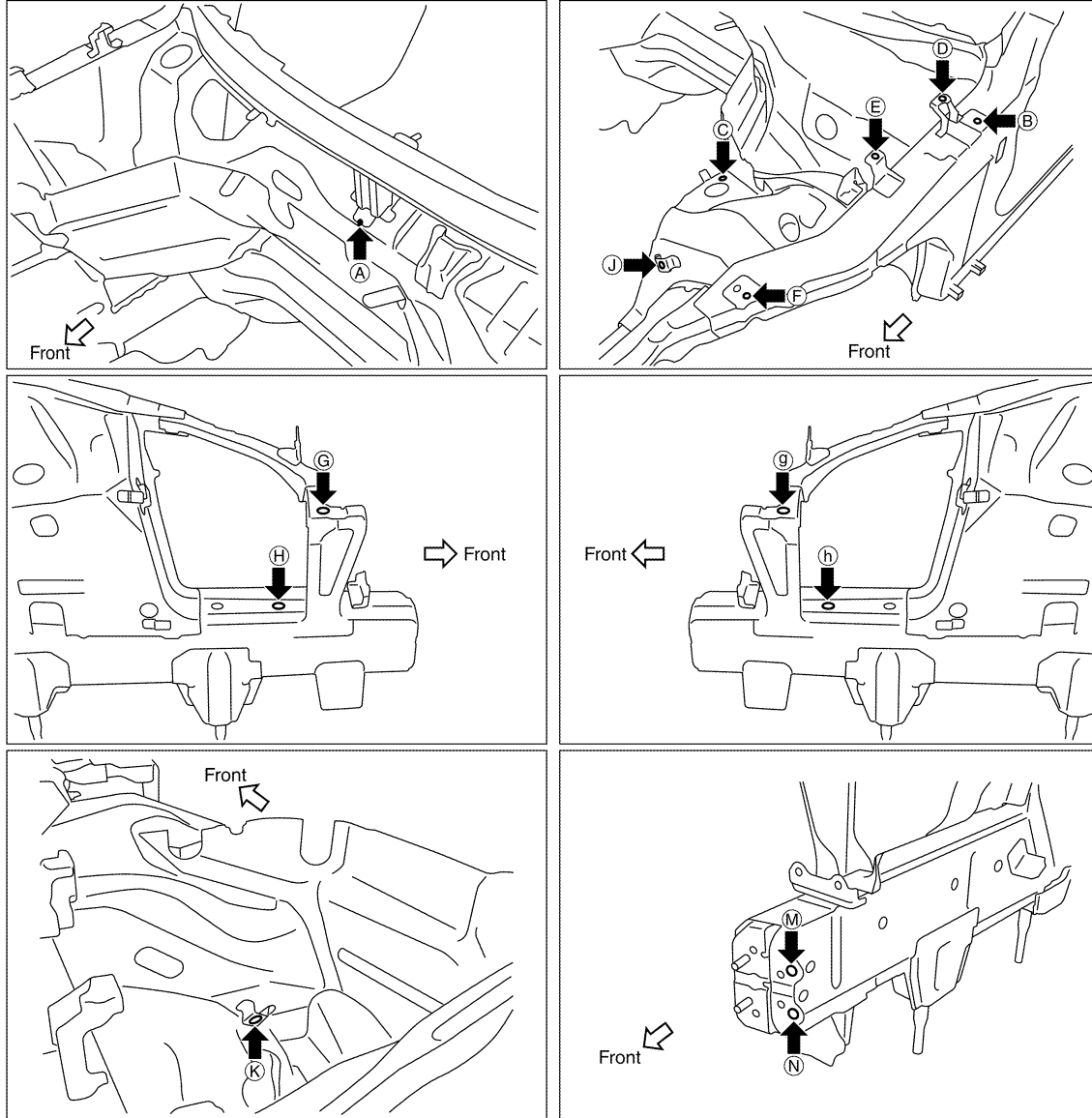
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - D	706 (27.80)*		C - j	875 (34.45)*	2WD	D - d	1393 (54.84)		K - k	903 (35.55)	2WD
A - E	734 (28.90)*		C - j	878 (34.57)*	AWD	E - e	1374 (54.09)		K - k	906 (35.67)	AWD

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0016GB

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash positioning mark enter of center positioning mark	G, g	Radiator core support hole center ϕ 6 (0.24)
B	Hood hinge installing hole center ϕ 12 (0.47)	H, h	Front side member hole center ϕ 20 (0.79)
C, c	Front strut installing hole center ϕ 11 (0.43)	J, j, K, k	Nut holder hole center ϕ 16 (0.63)
D, d, E, e	Front fender installing hole center ϕ 7 (0.28)	M, m, N, n	Front bumper stay installing hole center ϕ 11 (0.43)
F, f	Cowl cover installing hole center ϕ 6 (0.24)		

Underbody

INFOID:000000008834800

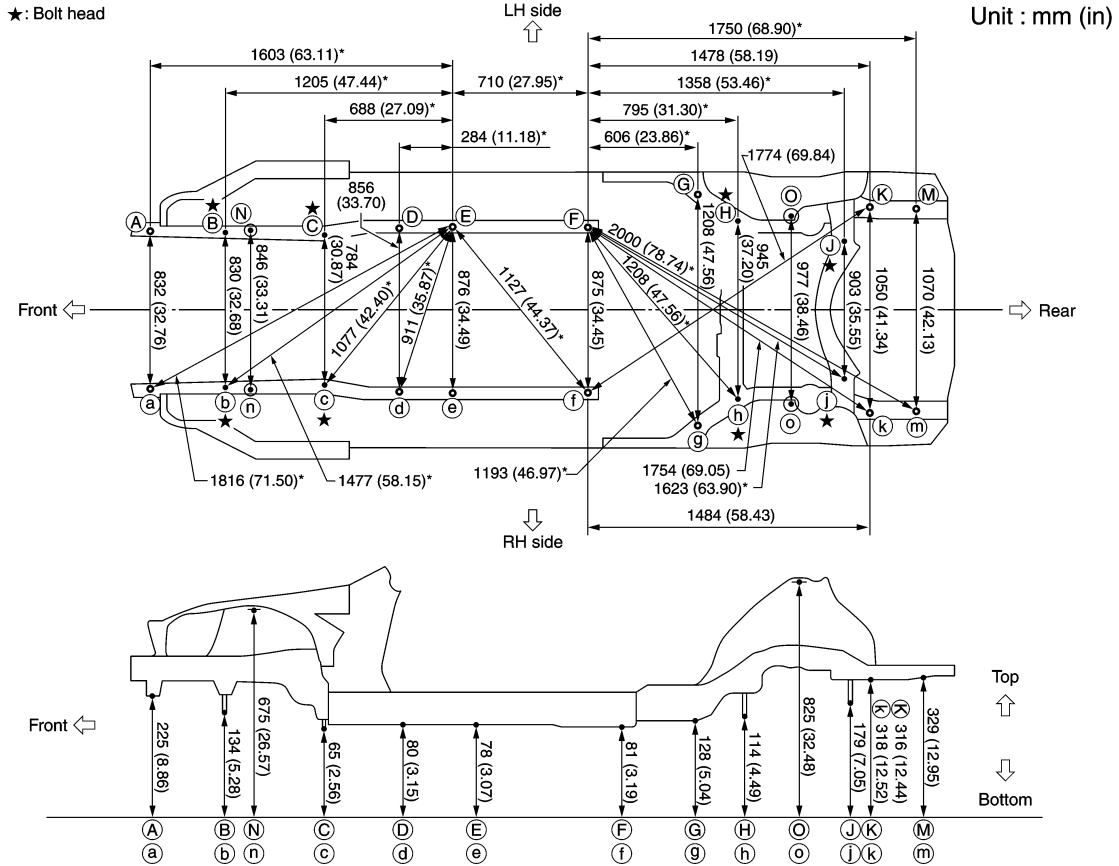
MEASUREMENT (2WD)

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1703GB

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - A	1603 (63.11)*		E - D	284 (11.18)*		F - H	795 (31.30)*		f - k	1484 (58.43)	
E - B	1205 (47.44)*		E - F	710 (27.95)*		F - J	1358 (53.46)*		F - M	1750 (68.90)*	
E - C	688 (27.09)*		F - G	606 (23.86)*		F - K	1478 (58.19)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - a	832 (32.76)		D - d	856 (33.70)		H - h	945 (37.20)		M - m	1070 (42.13)	
B - b	830 (32.68)		E - e	876 (34.49)		O - o	977 (38.46)				
N - n	846 (33.31)		F - f	875 (34.45)		J - j	903 (35.55)				
C - c	784 (30.87)		G - g	1208 (47.56)		K - k	1050 (41.34)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - a	1816 (71.50)*		E - d	911 (35.87)*		F - h	1208 (47.56)*		f - K	1774 (69.84)	
E - b	1477 (58.15)*		E - f	1127 (44.37)*		F - j	1623 (63.90)*		F - m	2000 (78.74)*	
E - c	1077 (42.40)*		F - g	1193 (46.97)*		F - k	1754 (69.05)				

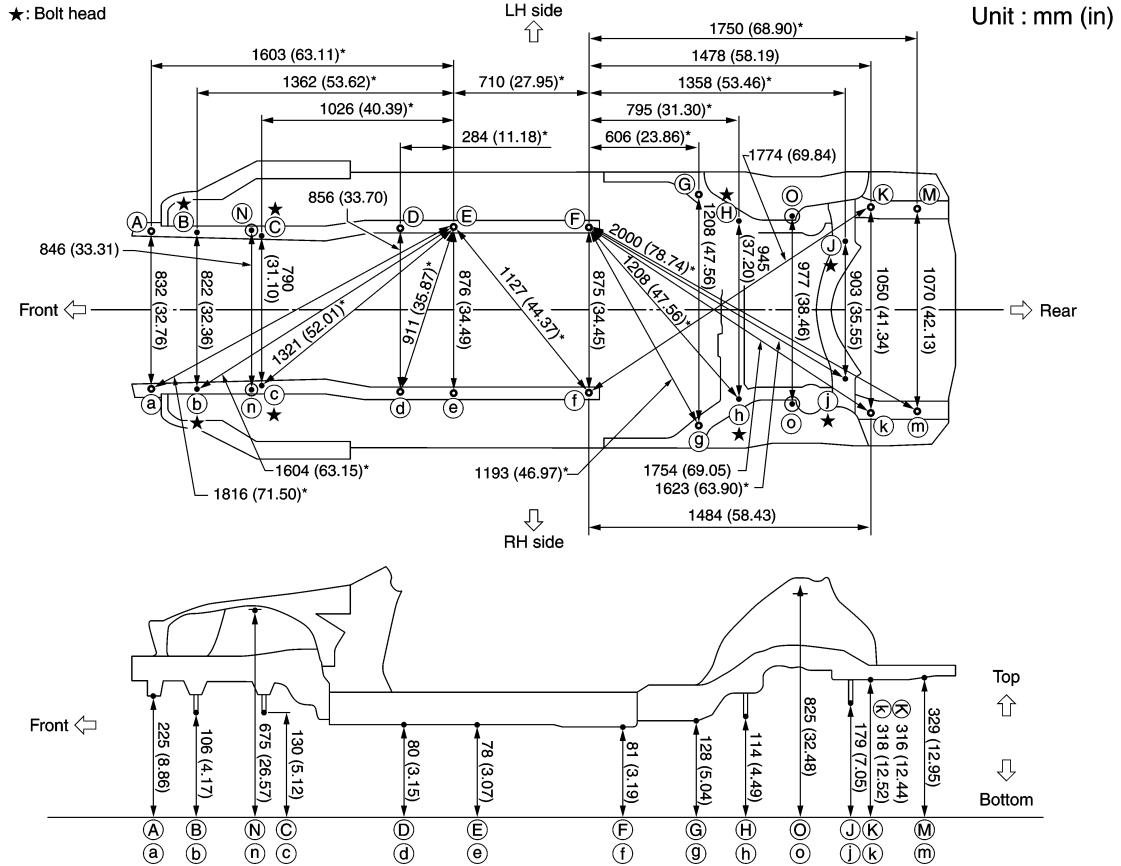
MEASUREMENT (AWD)

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1704GB

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - A	1603 (63.11)*		E - D	284 (11.18)*		F - H	795 (31.30)*		f - k	1484 (58.43)	
E - B	1362 (53.62)*		E - F	710 (27.95)*		F - J	1358 (53.46)*		F - M	1750 (68.90)*	
E - C	1026 (40.39)*		F - G	606 (23.86)*		F - K	1478 (58.19)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - a	832 (32.76)		D - d	856 (33.70)		H - h	945 (37.20)		M - m	1070 (42.13)	
B - b	822 (32.36)		E - e	876 (34.49)		O - o	977 (38.46)				
C - c	790 (31.10)		F - f	875 (34.45)		J - j	903 (35.55)				
N - n	846 (33.31)		G - g	1208 (47.56)		K - k	1050 (41.34)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - a	1816 (71.50)*		E - d	911 (35.87)*		F - h	1208 (47.56)*		f - K	1774 (69.84)	
E - b	1604 (63.15)*		E - f	1127 (44.37)*		F - j	1623 (63.90)*		F - m	2000 (78.74)*	
E - c	1321 (52.01)*		F - g	1193 (46.97)*		F - k	1754 (69.05)				

BODY ALIGNMENT

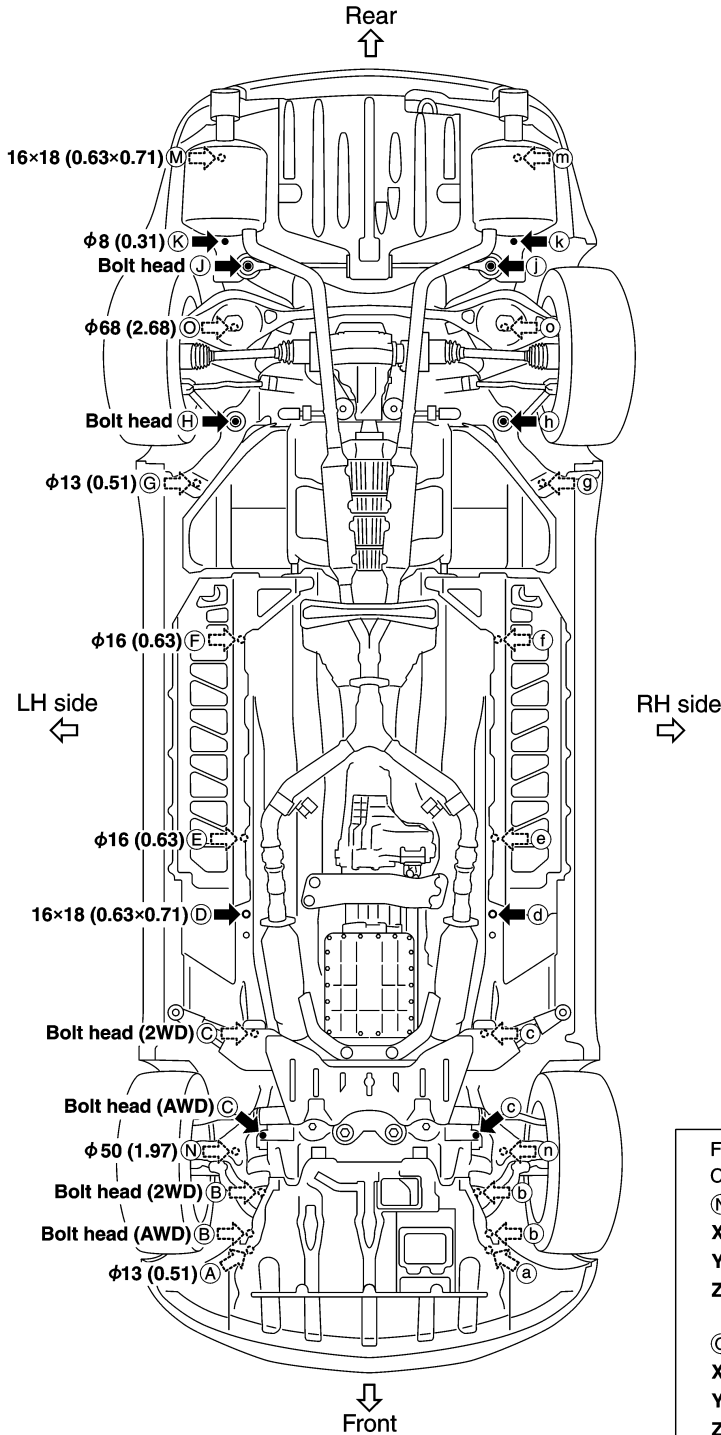
< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

MEASUREMENT POINTS

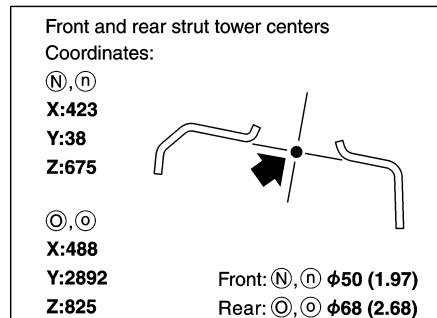
As viewed from underside.

Unit : mm (in)



Coordinates:

(A, a)	(G, g)
X:416	X:604
Y:-496	Y:2391
Z:225	Z:128
(B, b) AWD	(H, h)
X:411	X:473
Y:-261	Y:2604
Z:106	Z:114
(B, b) 2WD	(J, j)
X:415	X:452
Y:-104	Y:3164
Z:134	Z:179
(C, c) AWD	(K)
X:395	X:550
Y:76	Y:3265
Z:130	Z:316
(C, c) 2WD	(k)
X:392	X:-500
Y:414	Y:3273
Z:65	Z:318
(D, d)	(M, m)
X:428	X:535
Y:817	Y:3540
Z:80	Z:329
(E, e)	
X:438	
Y:1100	
Z:78	
(F, f)	
X:438	
Y:1810	
Z:81	



JSKIA1705GB

Passenger Compartment

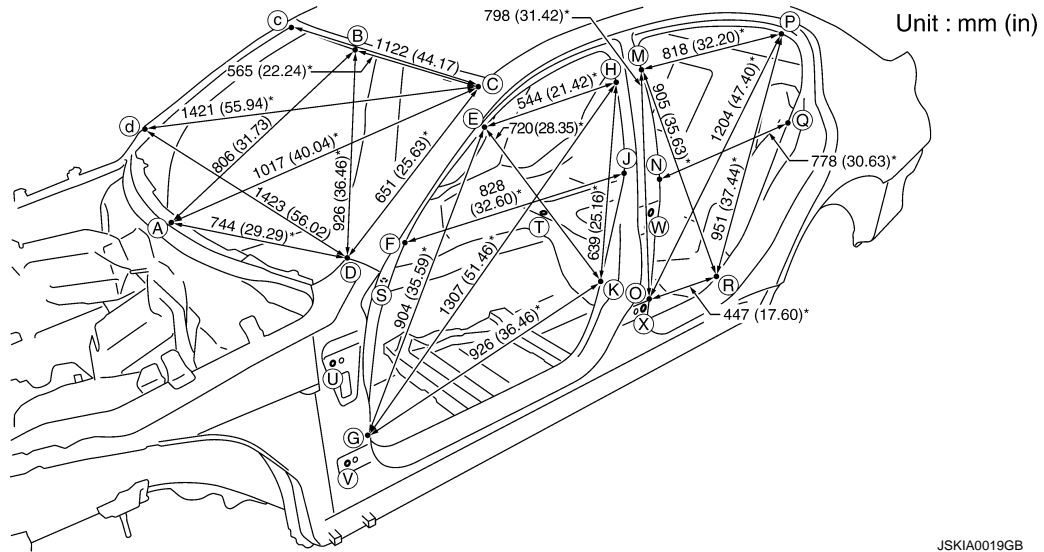
MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



«Front window opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	806 (31.73)		B - c	565 (22.24)*		C - D	651 (25.63)*	
A - C	1017 (40.04)*		B - D	926 (36.46)*		C - d	1421 (55.94)*	
A - D	744 (29.29)*		C - c	1122 (44.17)		D - d	1423 (56.02)	

«Front door opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - G	904 (35.59)*		E - K	720 (28.35)*		G - H	1307 (51.46)*		H - K	639 (25.16)*	
E - H	544 (21.42)*		F - J	828 (32.60)*		G - K	926 (36.46)*				

«Rear door opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
M - O	798 (31.42)*		M - R	905 (35.63)*		O - P	1204 (47.40)*		P - R	951 (37.44)*	
M - P	818 (32.20)*		N - Q	778 (30.63)*		O - R	447 (17.60)*				

«The others»

Unit: mm (in)

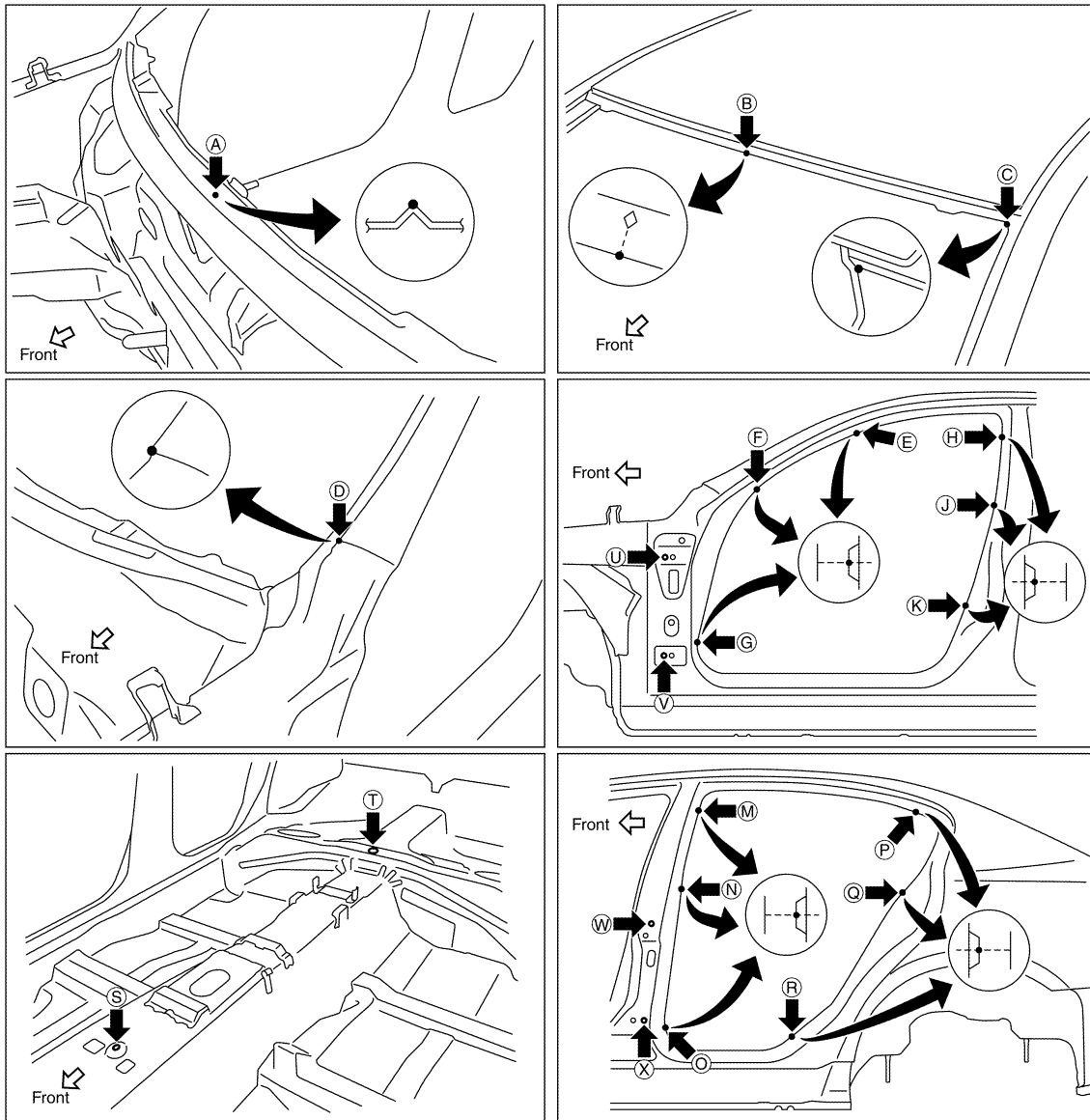
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1249 (49.17)		K - k	1456 (57.32)		R - r	1451 (57.13)		T - R	756 (29.76)*	
E - g	1622 (63.86)*		M - m	1216 (47.87)		S - E	1006 (39.61)*		U - u	1547 (60.91)	
E - h	1359 (53.50)*		M - p	1459 (57.44)*		S - F	863 (33.98)*		U - W	1181 (46.50)*	
E - k	1529 (60.20)*		M - r	1608 (63.31)*		S - G	751 (29.57)*		U - X	1176 (46.30)*	
F - f	1414 (55.67)*		N - n	1444 (56.85)		S - H	1299 (51.14)*		V - v	1574 (61.97)	
F - j	1652 (65.04)*		N - q	1620 (63.78)*		S - J	1187 (46.73)*		V - W	1239 (48.78)*	
G - g	1452 (57.17)		O - o	1450 (57.09)		S - K	1033 (40.67)*		V - X	1147 (45.16)*	
G - h	1874 (73.78)*		O - p	1786 (70.31)*		T - M	981 (38.62)*		W - w	1567 (61.69)	
G - k	1724 (67.87)*		O - r	1518 (59.76)*		T - N	874 (34.41)*		X - x	1605 (63.19)	
H - h	1242 (48.90)		P - p	1200 (47.24)		T - O	766 (30.16)*				
H - k	1489 (58.62)*		P - r	1627 (64.05)*		T - P	1167 (45.94)*				
J - j	1446 (56.93)		Q - q	1398 (55.04)		T - Q	1020 (40.16)*				

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

MEASUREMENT POINTS



JSKIA0020GB

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash crossmember flange end of center positioning mark	H, h, J, j, K, k, M, m, N, n, O, o	Center pillar indent
B	Roof flange end of center positioning mark	P, p, Q, q, R, r	Rear fender indent
C, c	Front pillar joggle	S	Trans control reinforcement hole center of center positioning mark 14×12 (0.55×0.47)
D, d	Body side outer corner	T	Rear seat cross member reinforcement hole center of center positioning mark $\phi 6$ (0.24)
E, e, F, f, G, g	Front pillar indent	U, u, V, v, W, w, X, x	Door hinge installing hole center U, u, X, x: $\phi 12$ (0.47) V, v: $\phi 14$ (0.55) W, w: $\phi 9$ (0.35)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

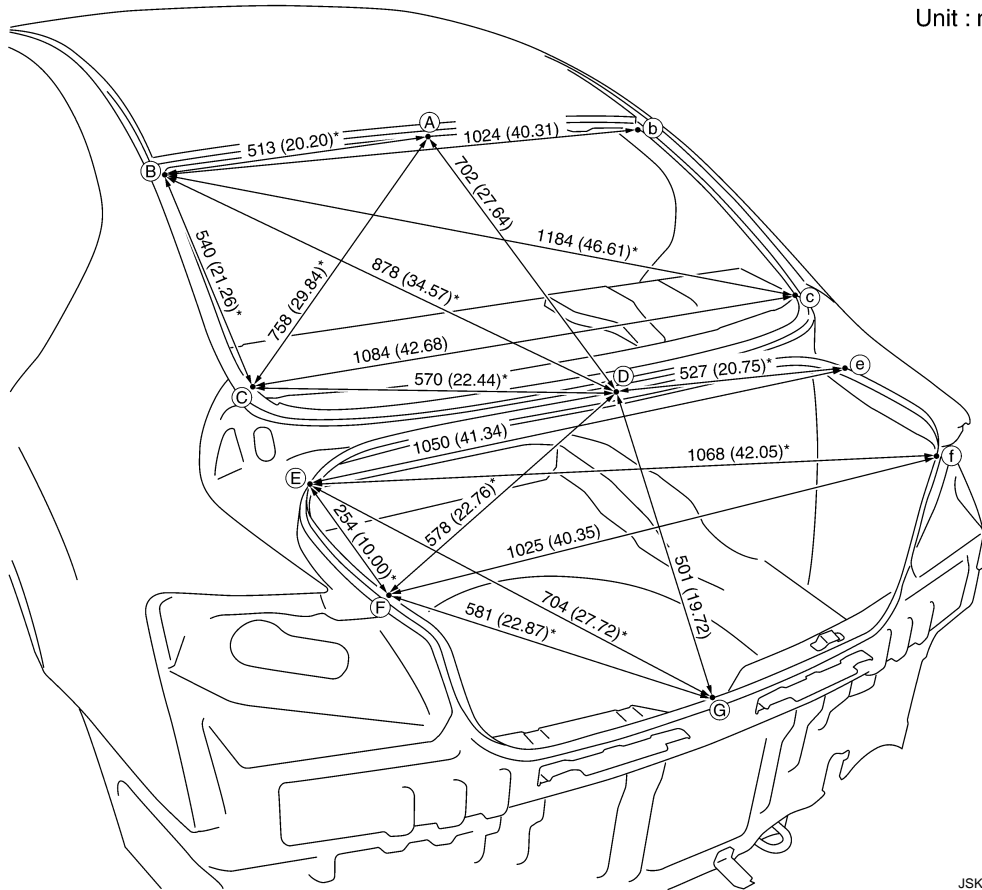
Rear Body

INFOID:000000008834802

MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

Unit : mm (in)



JSKIA0021GB

«Rear window opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	513 (20.20)*		B - b	1024 (40.31)		B - D	878 (34.57)*	
A - C	758 (29.84)*		B - C	540 (21.26)*		C - c	1084 (42.68)	
A - D	702 (27.64)		B - c	1184 (46.61)*		C - D	570 (22.44)*	

«Trunk room opening»

Unit: mm (in)

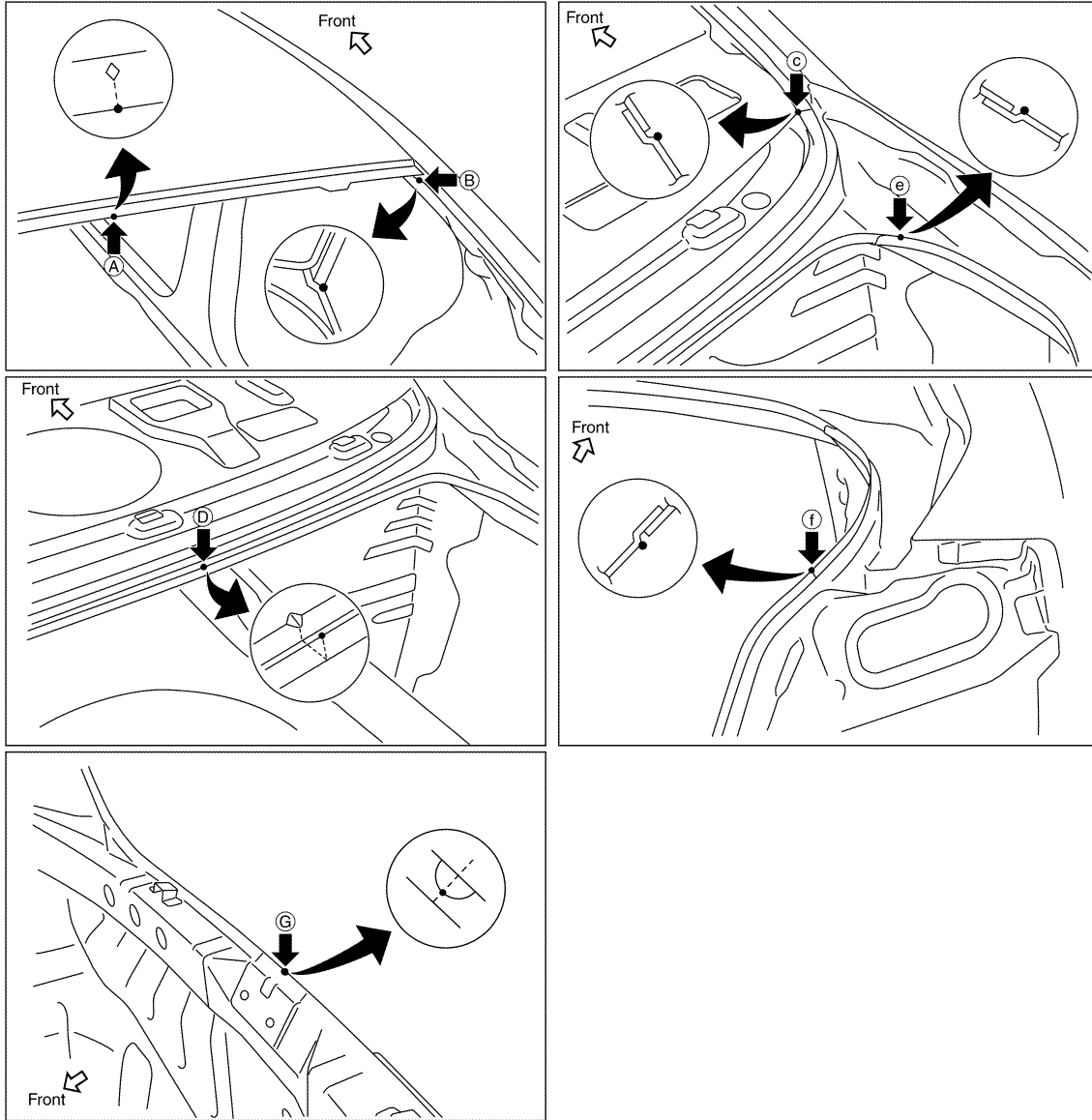
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
D - e	527 (20.75)*		E - e	1050 (41.34)		E - G	704 (27.72)*	
D - F	578 (22.76)*		E - F	254 (10.00)*		F - f	1025 (40.35)	
D - G	501 (19.72)		E - f	1068 (42.05)*		F - G	581 (22.87)*	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

BRM

JSKIA0022GB

Point	Material	Point	Material
A	Roof flange end of center positioning mark	E, e	Rear fender corner extension joggle
B, b	Rear fender joggle	F, f	Rear combination lamp base joggle
C, c	Rear fender extension joggle	G	Rear panel indent of center positioning mark
D	Rear waist flange end of center positioning mark		

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

LOCATION OF PLASTIC PARTS

Precautions for Plastics

INFOID:000000008834618

Abbreviation	Material name	Heatresisting temperature °C (°F)	Resistance to gasoline and solvents	Other cautions
PE	Polyethylene	60 (140)	Gasoline and most solvents are harmless if applied for a very short time (wipe out quickly).	Flammable
ABS	Acrylonitrile Butadiene Styrene	80 (176)	Avoid gasoline and solvents.	—
EPM/EPDM	Ethylene Propylene (Diene) copolymer	80 (176)	Gasoline and most solvents are harmless if applied for a very short time (wipe out quickly).	Flammable
PS	Polystyrene	80 (176)	Avoid solvents.	Flammable
PVC	Poly Vinyl Chloride	80 (176)	Gasoline and most solvents are harmless if applied for a very short time (wipe out quickly).	Poisonous gas is emitted when burned.
TPO	Thermoplastic Olefine	80 (176)	↑	Flammable
AAS	Acrylonitrile Acrylic Styrene	85 (185)	Avoid gasoline and solvents.	—
PMMA	Poly Methyl Methacrylate	85 (185)	↑	—
EVAC	Ethylene Vinyl Acetate	90 (194)	↑	—
PP	Polypropylene	90 (194)	Gasoline and most solvents are harmless if applied for a very short time (wipe out quickly).	Flammable, avoid battery acid.
PUR	Polyurethane	90 (194)	Avoid gasoline and solvents.	—
UP	Unsaturated Polyester	90 (194)	↑	Flammable
ASA	Acrylonitrile Styrene Acrylate	100 (212)	↑	Flammable
PPE	Poly Phenylene Ether	110 (230)	↑	—
TPU	Thermoplastic Urethane	110 (230)	↑	—
PBT+PC	Poly Butylene Terephthalate + Polycarbonate	120 (248)	↑	Flammable
PC	Polycarbonate	120 (248)	↑	—
POM	Poly Oxymethylene	120 (248)	↑	Avoid battery acid.
PA	Polyamide	140 (284)	↑	Avoid immersing in water.
PBT	Poly Butylene Terephthalate	140 (284)	↑	—
PAR	Polyarylate	180 (356)	↑	—
PET	Polyethylene terephthalate	180 (356)	↑	—
PEI	Polyetherimide	200 (392)	↑	—

CAUTION:

- When repairing and painting a portion of the body adjacent to plastic parts, consider their characteristics (influence of heat and solvent) and remove them if necessary or take suitable measures to protect them.
- Plastic parts should be repaired and painted using methods suiting the materials' characteristics.

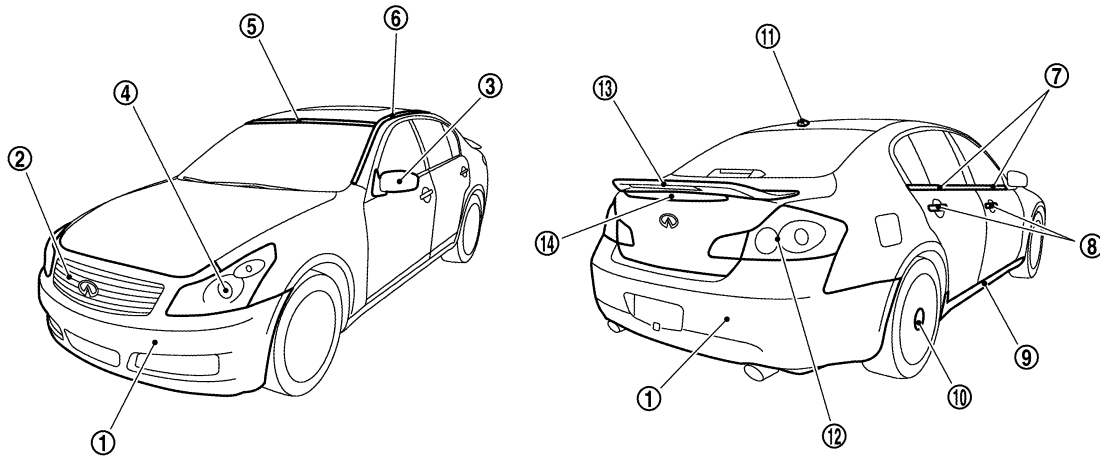
Location of Plastic Parts

INFOID:000000008834712

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0003GB

Component		Material	Component		Material	
1	Bumper fascia	PP	8	Door outside handle	PC + PET	
2	Front grille	ABS	9	Center mudguard	PP	
3	Door outside mirror	Cover	ABS	10	Wheel disk cap	PC + ABS
		Housing	AAS	11	Satellite radio antenna	ASA + PC
		Base	PA + Glass fiber		12	Rear combination lamp (Rear Fender)
4	Head lamp	Lens	PC	Housing		ABS
		Housing	PP	Rear combination lamp (Trunk lid)		Lens
5	Windshield molding	TPO	Housing	PC + ASA		
6	Roof side molding	PVC + Stainless	13	Rear spoiler	UP + Glass fiber	
7	Door outside molding	PVC + Stainless	14	Trunk lid finisher	ABS	

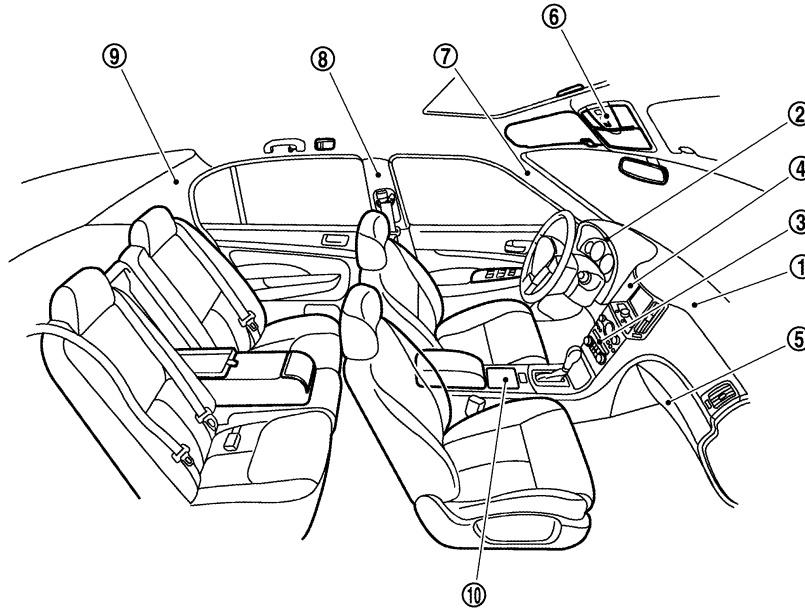
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

BRM

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0004GB

Component		Material	Component		Material		
1	Instrument panel	Core	PP	5	Glove box	Core	ABS
		Pad	PUR			Pad	PUR
		Skin	TPU			Skin	PVC
2	Cluster lid A	Upper	ABS	6	Map lamp	Lens	PC
		Lower	PP			Housing	PP
3	Cluster lid C	Standard finisher	ABS	7	Front pillar garnish	PP	
		Wood finisher	PC + ABS	8	Center pillar garnish	PP	
				9	Rear pillar finisher	PP	
4	Cluster lid D	PC + ABS		10	Console body	PP + PVC	

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

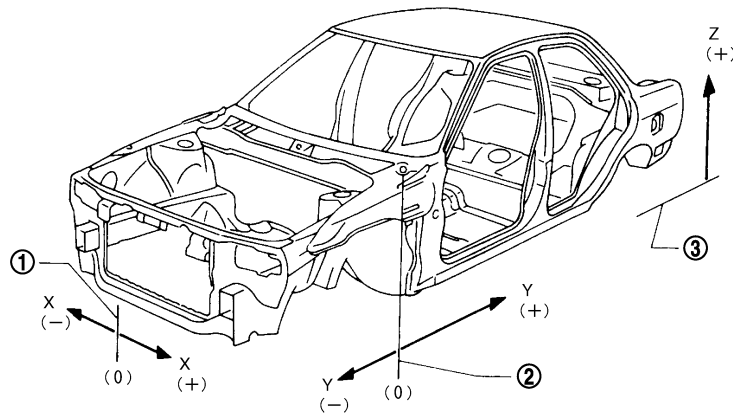
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Description

INFOID:0000000008834891

- All dimensions indicated in the figures are actual.
- When using a tracking gauge, adjust both pointers to equal length. Then check the pointers and gauge itself to make sure there is no free play.
- When a measuring tape is used, check to be sure there is no elongation, twisting or bending.
- Measurements should be taken at the center of the mounting holes.
- An asterisk (*) following the value at the measuring point indicates that the measuring point on the other side is symmetrically the same value.
- The coordinates of the measurement points are the distances measured from the standard line of "X", "Y" and "Z".
- "Z": Imaginary base line [200 mm (7.87 in) below datum line ("0Z" at design plan)]



JSKIA0073GB

1. Vehicle center

2. Front axle center

3. Imaginary base line

Engine Compartment

INFOID:0000000008834892

MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

BRM

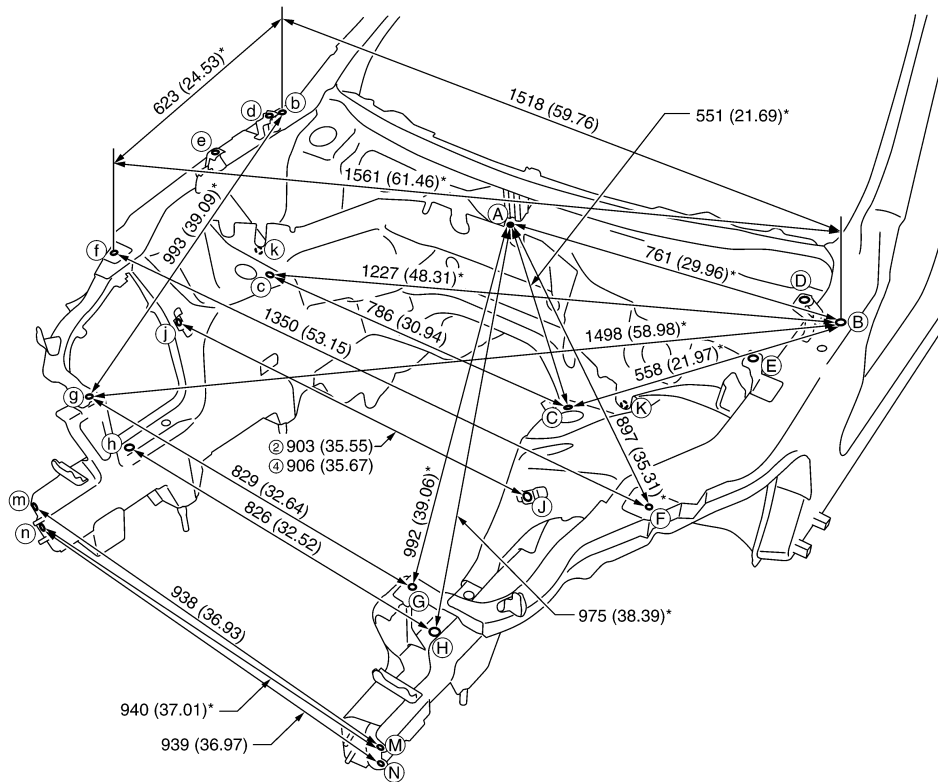
BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

②: 2WD ④: AWD

Unit : mm (in)



JSKIA0015GB

«Engine room»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	761 (29.96)*		B - C	558 (21.97)*		C - c	786 (30.94)		M - m	938 (36.93)	
A - C	551 (21.69)*		B - c	1227 (48.31)*		F - f	1350 (53.15)		M - n	940 (37.01)*	
A - F	897 (35.31)*		B - f	1561 (61.46)*		G - g	829 (32.64)		N - n	939 (36.97)	
A - G	992 (39.06)*		b - f	623 (24.53)*		H - h	826 (32.52)				
A - H	975 (38.39)*		B - g	1498 (58.98)*		J - j	903 (35.55)	2WD			
B - b	1518 (59.76)		b - g	993 (39.09)*		J - j	906 (35.67)	AWD			

«The others»

Unit: mm (in)

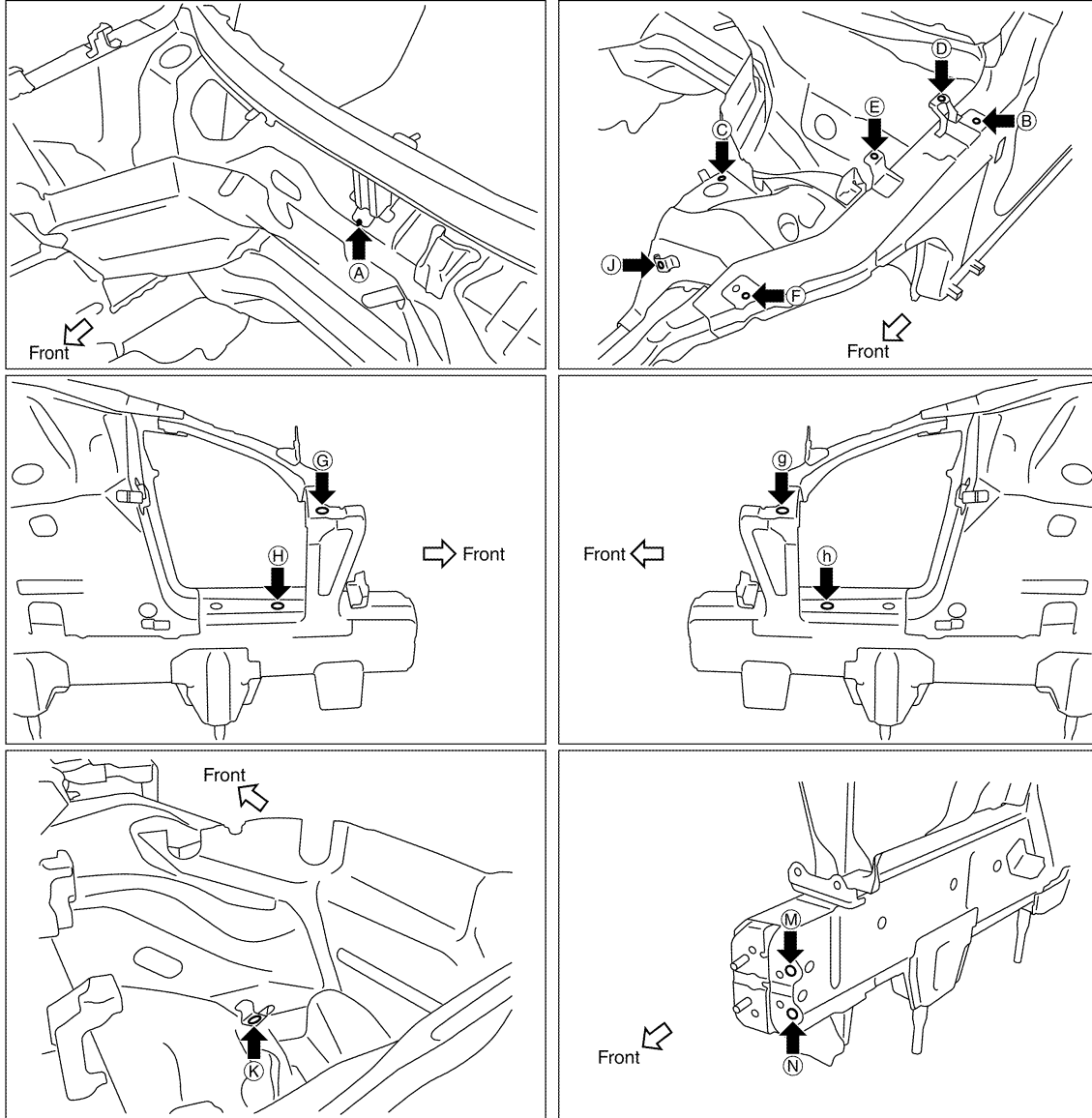
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - D	706 (27.80)*		C - j	875 (34.45)*	2WD	D - d	1393 (54.84)		K - k	903 (35.55)	2WD
A - E	734 (28.90)*		C - j	878 (34.57)*	AWD	E - e	1374 (54.09)		K - k	906 (35.67)	AWD

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



A
B
C
D
E
F
G
H
I
J
L

BRM

JSKIA0016GB

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash positioning mark enter of center positioning mark	G, g	Radiator core support hole center ϕ 6 (0.24)
B	Hood hinge installing hole center ϕ 12 (0.47)	H, h	Front side member hole center ϕ 20 (0.79)
C, c	Front strut installing hole center ϕ 11 (0.43)	J, j, K, k	Nut holder hole center ϕ 16 (0.63)
D, d, E, e	Front fender installing hole center ϕ 7 (0.28)	M, m, N, n	Front bumper stay installing hole center ϕ 11 (0.43)
F, f	Cowl cover installing hole center ϕ 6 (0.24)		

Underbody

INFOID:000000008834893

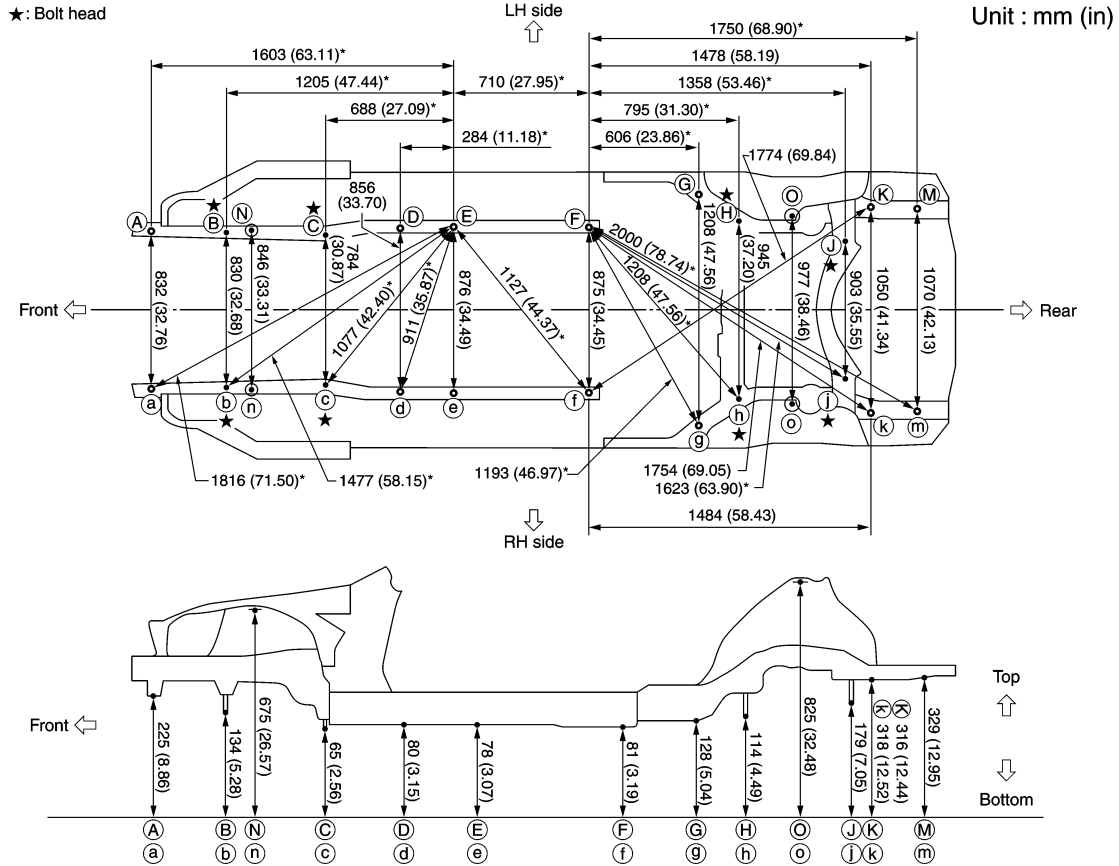
MEASUREMENT (2WD)

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA1703GB

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - A	1603 (63.11)*		E - D	284 (11.18)*		F - H	795 (31.30)*		f - k	1484 (58.43)	
E - B	1205 (47.44)*		E - F	710 (27.95)*		F - J	1358 (53.46)*		F - M	1750 (68.90)*	
E - C	688 (27.09)*		F - G	606 (23.86)*		F - K	1478 (58.19)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - a	832 (32.76)		D - d	856 (33.70)		H - h	945 (37.20)		M - m	1070 (42.13)	
B - b	830 (32.68)		E - e	876 (34.49)		O - o	977 (38.46)				
N - n	846 (33.31)		F - f	875 (34.45)		J - j	903 (35.55)				
C - c	784 (30.87)		G - g	1208 (47.56)		K - k	1050 (41.34)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - a	1816 (71.50)*		E - d	911 (35.87)*		F - h	1208 (47.56)*		f - K	1774 (69.84)	
E - b	1477 (58.15)*		E - f	1127 (44.37)*		F - j	1623 (63.90)*		F - m	2000 (78.74)*	
E - c	1077 (42.40)*		F - g	1193 (46.97)*		F - k	1754 (69.05)				

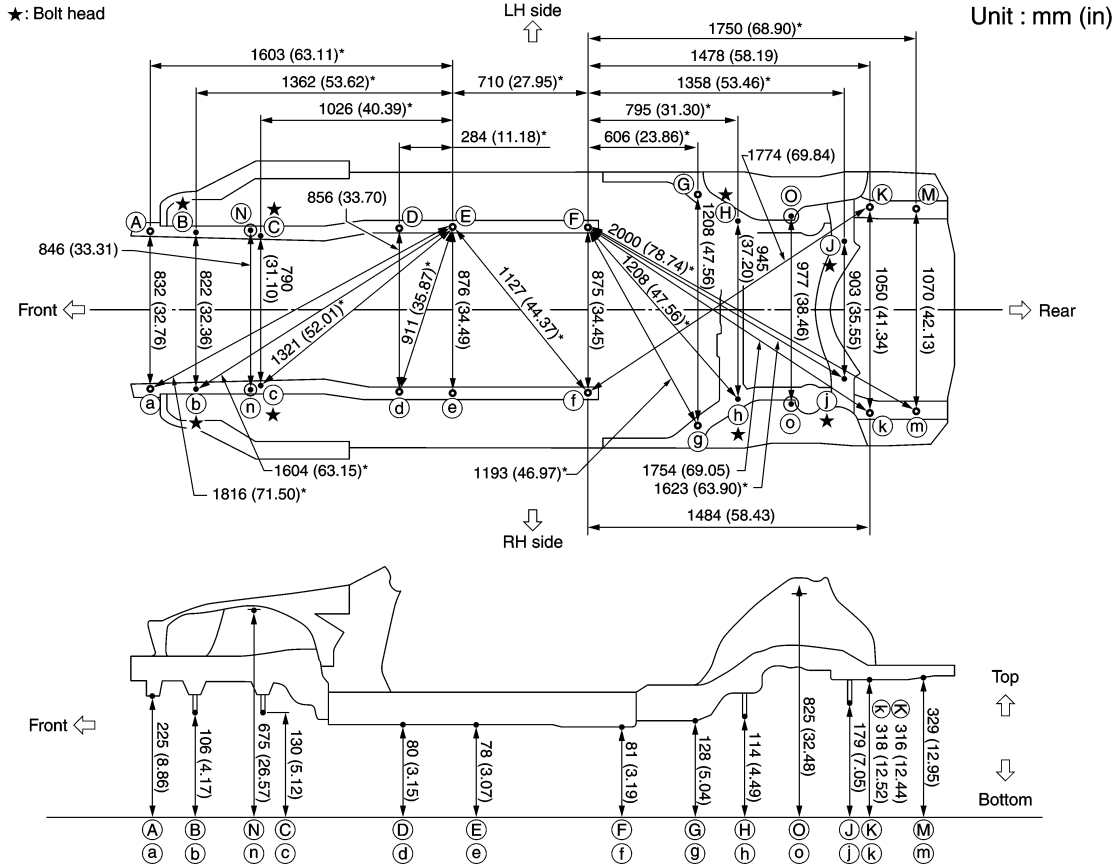
MEASUREMENT (AWD)

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA1704GB

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - A	1603 (63.11)*		E - D	284 (11.18)*		F - H	795 (31.30)*		f - k	1484 (58.43)	
E - B	1362 (53.62)*		E - F	710 (27.95)*		F - J	1358 (53.46)*		F - M	1750 (68.90)*	
E - C	1026 (40.39)*		F - G	606 (23.86)*		F - K	1478 (58.19)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - a	832 (32.76)		D - d	856 (33.70)		H - h	945 (37.20)		M - m	1070 (42.13)	
B - b	822 (32.36)		E - e	876 (34.49)		O - o	977 (38.46)				
C - c	790 (31.10)		F - f	875 (34.45)		J - j	903 (35.55)				
N - n	846 (33.31)		G - g	1208 (47.56)		K - k	1050 (41.34)				

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - a	1816 (71.50)*		E - d	911 (35.87)*		F - h	1208 (47.56)*		f - K	1774 (69.84)	
E - b	1604 (63.15)*		E - f	1127 (44.37)*		F - j	1623 (63.90)*		F - m	2000 (78.74)*	
E - c	1321 (52.01)*		F - g	1193 (46.97)*		F - k	1754 (69.05)				

BODY ALIGNMENT

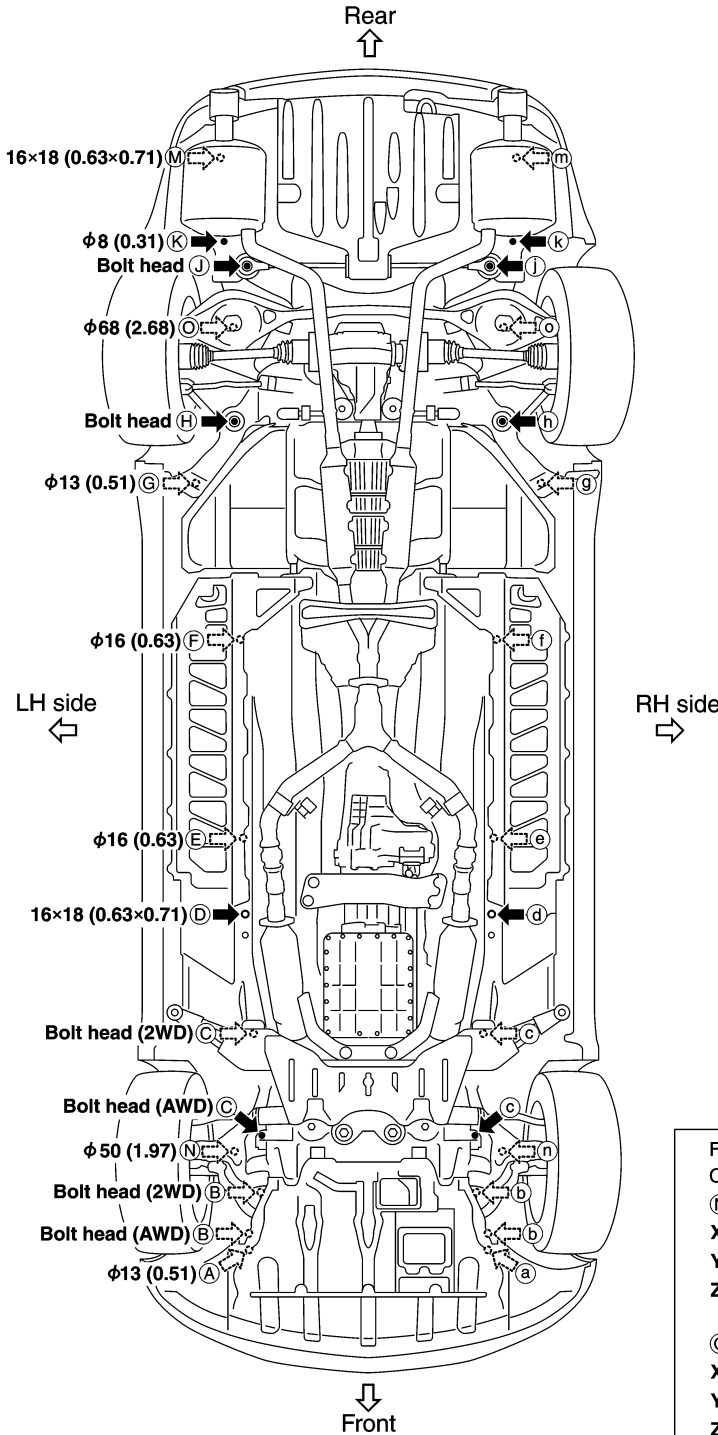
< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

MEASUREMENT POINTS

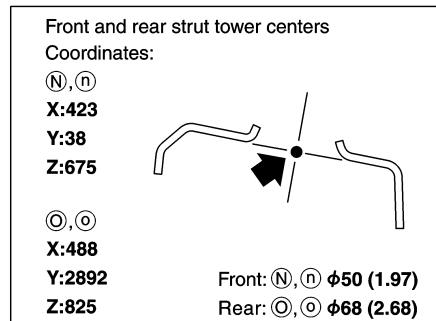
Unit : mm (in)

As viewed from underside.



Coordinates:

(A, a)	(G, g)
X:416	X:604
Y:-496	Y:2391
Z:225	Z:128
(B, b) AWD	(H, h)
X:411	X:473
Y:-261	Y:2604
Z:106	Z:114
(B, b) 2WD	(J, j)
X:415	X:452
Y:-104	Y:3164
Z:134	Z:179
(C, c) AWD	(K)
X:395	X:550
Y:76	Y:3265
Z:130	Z:316
(C, c) 2WD	(k)
X:392	X:-500
Y:414	Y:3273
Z:65	Z:318
(D, d)	(M, m)
X:428	X:535
Y:817	Y:3540
Z:80	Z:329
(E, e)	
X:438	
Y:1100	
Z:78	
(F, f)	
X:438	
Y:1810	
Z:81	



JSK1A1705GB

INFOID:000000008834894

Passenger Compartment

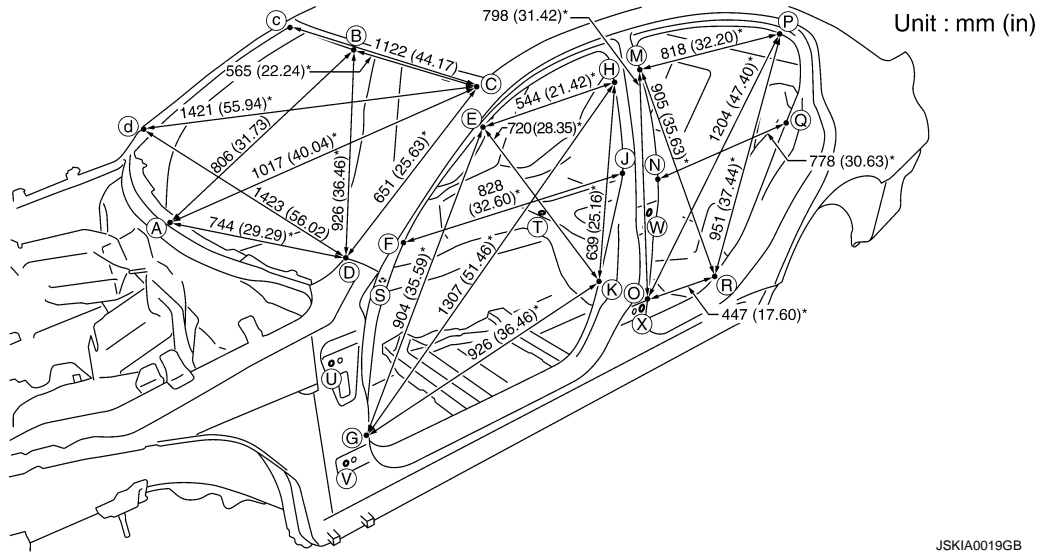
MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



«Front window opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	806 (31.73)		B - c	565 (22.24)*		C - D	651 (25.63)*	
A - C	1017 (40.04)*		B - D	926 (36.46)*		C - d	1421 (55.94)*	
A - D	744 (29.29)*		C - c	1122 (44.17)		D - d	1423 (56.02)	

«Front door opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - G	904 (35.59)*		E - K	720 (28.35)*		G - H	1307 (51.46)*		H - K	639 (25.16)*	
E - H	544 (21.42)*		F - J	828 (32.60)*		G - K	926 (36.46)*				

«Rear door opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
M - O	798 (31.42)*		M - R	905 (35.63)*		O - P	1204 (47.40)*		P - R	951 (37.44)*	
M - P	818 (32.20)*		N - Q	778 (30.63)*		O - R	447 (17.60)*				

«The others»

Unit: mm (in)

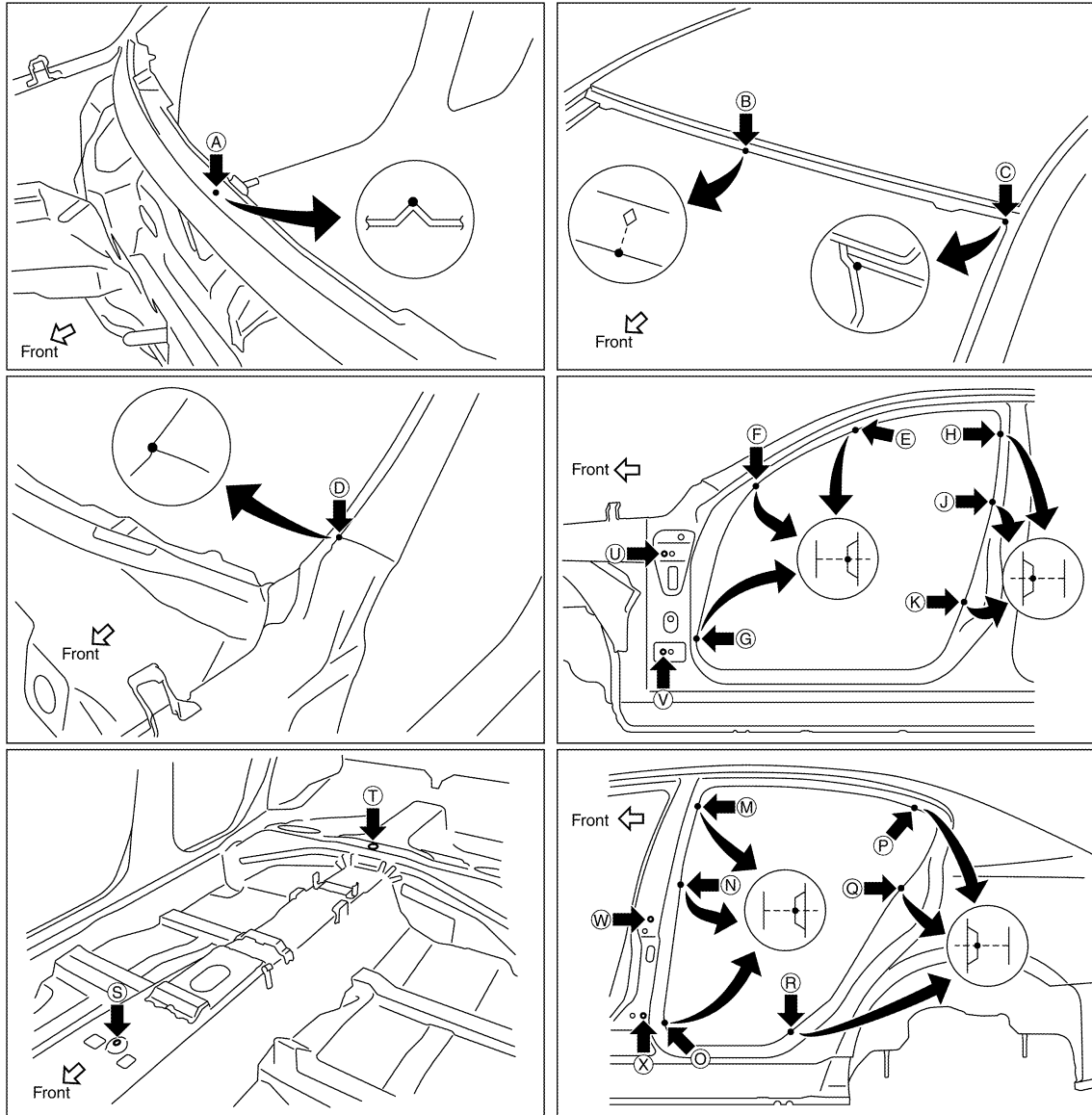
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1249 (49.17)		K - k	1456 (57.32)		R - r	1451 (57.13)		T - R	756 (29.76)*	
E - g	1622 (63.86)*		M - m	1216 (47.87)		S - E	1006 (39.61)*		U - u	1547 (60.91)	
E - h	1359 (53.50)*		M - p	1459 (57.44)*		S - F	863 (33.98)*		U - W	1181 (46.50)*	
E - k	1529 (60.20)*		M - r	1608 (63.31)*		S - G	751 (29.57)*		U - X	1176 (46.30)*	
F - f	1414 (55.67)*		N - n	1444 (56.85)		S - H	1299 (51.14)*		V - v	1574 (61.97)	
F - j	1652 (65.04)*		N - q	1620 (63.78)*		S - J	1187 (46.73)*		V - W	1239 (48.78)*	
G - g	1452 (57.17)		O - o	1450 (57.09)		S - K	1033 (40.67)*		V - X	1147 (45.16)*	
G - h	1874 (73.78)*		O - p	1786 (70.31)*		T - M	981 (38.62)*		W - w	1567 (61.69)	
G - k	1724 (67.87)*		O - r	1518 (59.76)*		T - N	874 (34.41)*		X - x	1605 (63.19)	
H - h	1242 (48.90)		P - p	1200 (47.24)		T - O	766 (30.16)*				
H - k	1489 (58.62)*		P - r	1627 (64.05)*		T - P	1167 (45.94)*				
J - j	1446 (56.93)		Q - q	1398 (55.04)		T - Q	1020 (40.16)*				

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

MEASUREMENT POINTS



JSKIA0020GB

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash crossmember flange end of center positioning mark	H, h, J, j, K, k, M, m, N, n, O, o	Center pillar indent
B	Roof flange end of center positioning mark	P, p, Q, q, R, r	Rear fender indent
C, c	Front pillar joggle	S	Trans control reinforcement hole center of center positioning mark 14×12 (0.55×0.47)
D, d	Body side outer corner	T	Rear seat cross member reinforcement hole center of center positioning mark $\phi 6$ (0.24)
E, e, F, f, G, g	Front pillar indent	U, u, V, v, W, w, X, x	Door hinge installing hole center U, u, X, x: $\phi 12$ (0.47) V, v: $\phi 14$ (0.55) W, w: $\phi 9$ (0.35)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

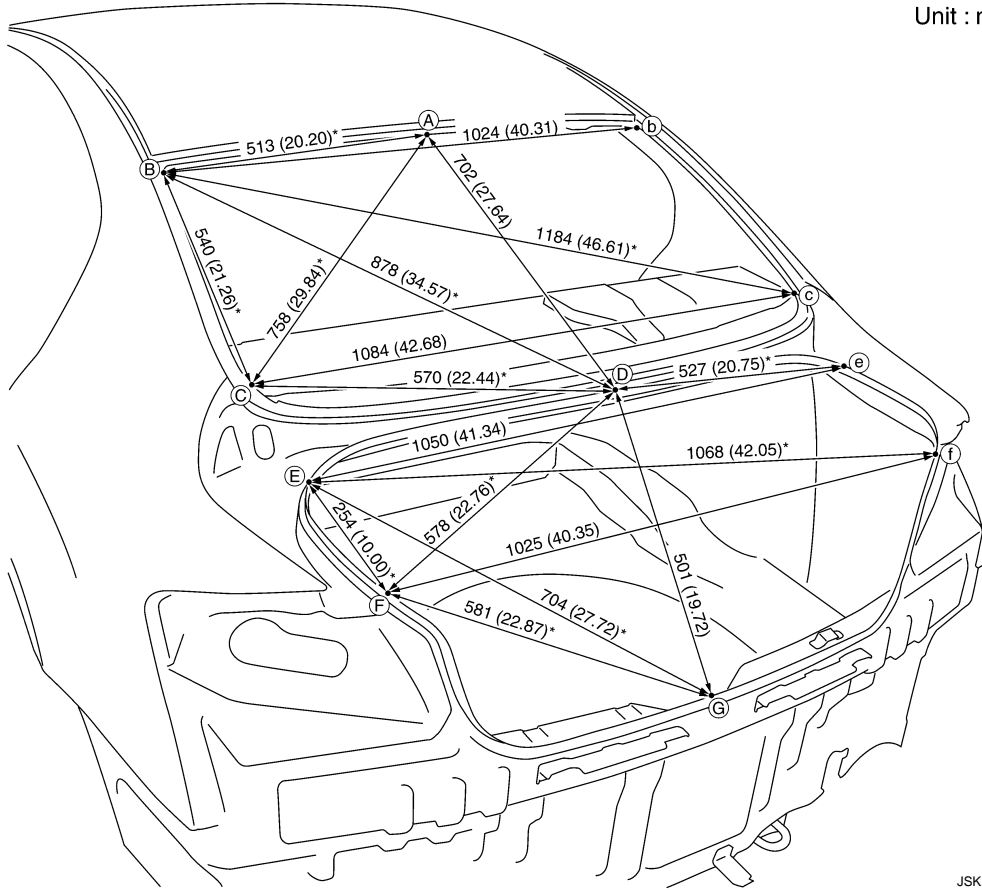
Rear Body

INFOID:000000008834895

MEASUREMENT

Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

Unit : mm (in)



JSKIA0021GB

«Rear window opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - B	513 (20.20)*		B - b	1024 (40.31)		B - D	878 (34.57)*	
A - C	758 (29.84)*		B - C	540 (21.26)*		C - c	1084 (42.68)	
A - D	702 (27.64)		B - c	1184 (46.61)*		C - D	570 (22.44)*	

«Trunk room opening»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
D - e	527 (20.75)*		E - e	1050 (41.34)		E - G	704 (27.72)*	
D - F	578 (22.76)*		E - F	254 (10.00)*		F - f	1025 (40.35)	
D - G	501 (19.72)		E - f	1068 (42.05)*		F - G	581 (22.87)*	

MEASUREMENT POINTS

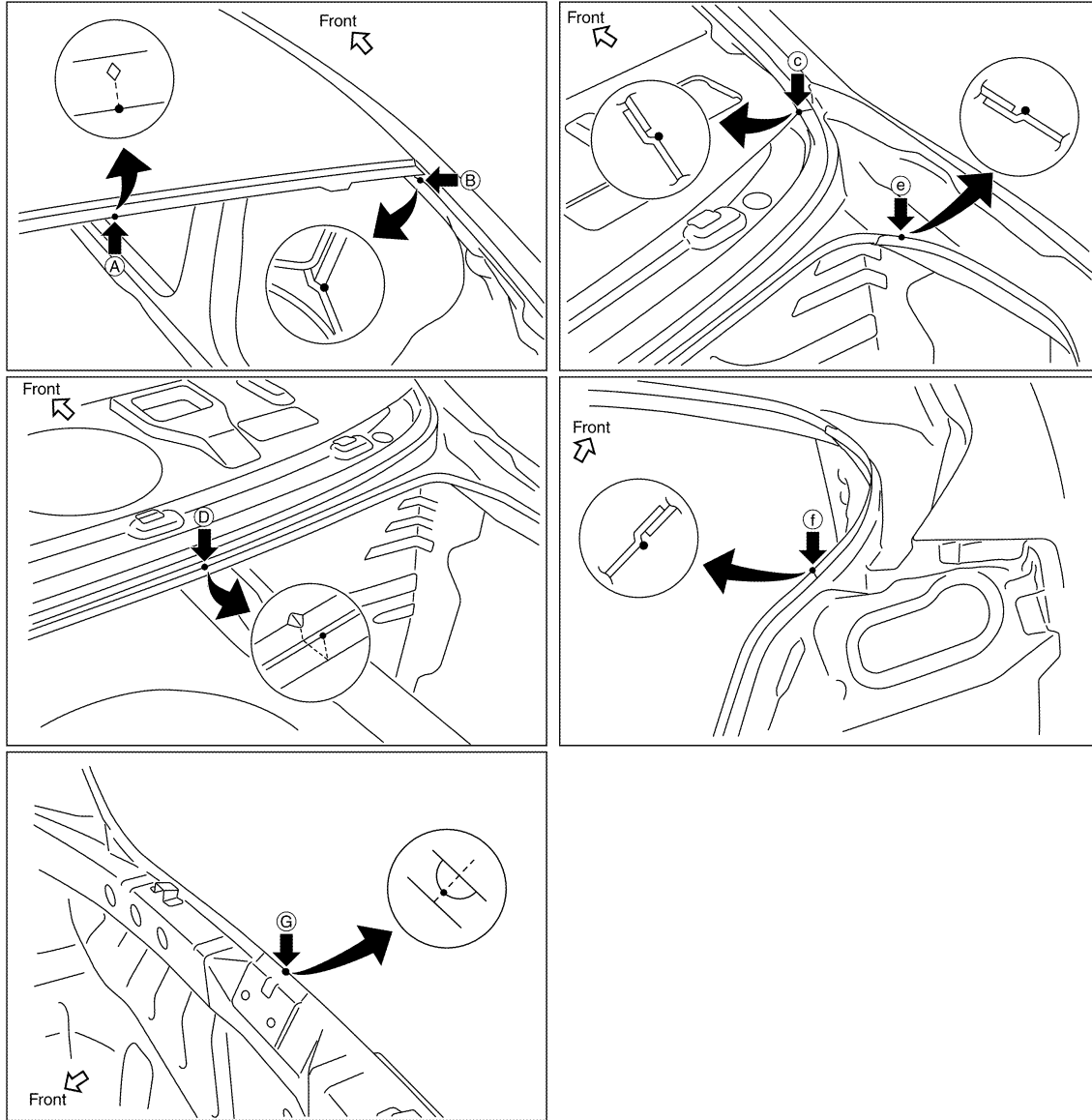
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

BRM

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA0022GB

Point	Material	Point	Material
A	Roof flange end of center positioning mark	E, e	Rear fender corner extension joggle
B, b	Rear fender joggle	F, f	Rear combination lamp base joggle
C, c	Rear fender extension joggle	G	Rear panel indent of center positioning mark
D	Rear waist flange end of center positioning mark		