

SECTION **BRM**
BODY REPAIR

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FOR USA AND CANADA

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BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

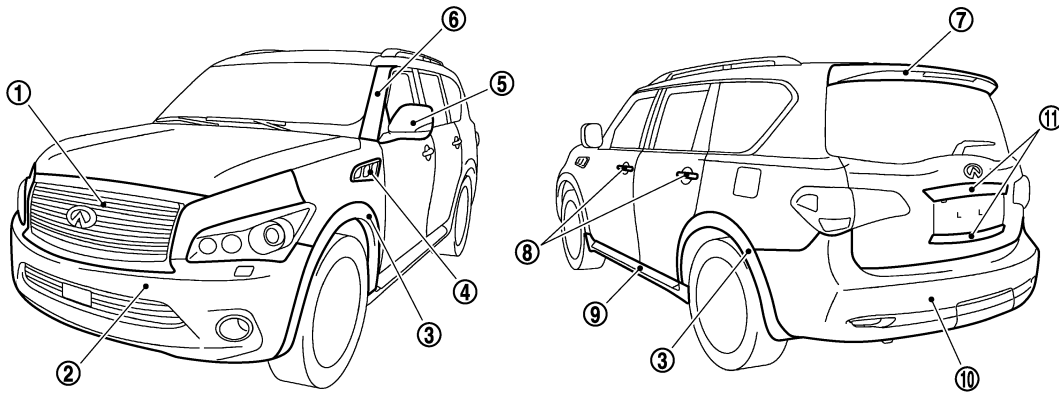
[FOR USA AND CANADA]

VEHICLE INFORMATION

BODY EXTERIOR PAINT COLOR

Body Exterior Paint Color

INFOID:000000011543630



JSKIA1965ZZ

Component		Color code	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
		Description	White	Silver	Black	Gray	Brownish Purple	Brownish Gray	Dark Blue	
		Paint type ^{note}	3P	2M	2S	2M	2P	2TM	2P	
		Hard clear coat	×	×	×	×	×	×	×	
①	Front grille	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
②	Front bumper fascia	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
③	Over fender	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
④	Front fender duct	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑤	Door outside mirror	Cover	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5
⑥	Front pillar finisher	Black	G01	G01	G01	G01	G01	G01	G01	
⑦	Back door air spoiler	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
⑧	Door outside handle	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑨	Side step	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
⑩	Rear bumper fascia	Body color	BQAB	BK23	BKH3	BKAD	BL50	BKAC	BBW5	
⑪	Back door finisher	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	

NOTE:

- 2M: 2-Coat metallic
- 2P: 2-Coat pearl
- 2S: 2-Coat solid
- 3P: 3-Coat pearl
- 2TM: 2-Coat micro titanium metallic

REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

[FOR USA AND CANADA]

PRECAUTION

REPAIRING HIGH STRENGTH STEEL

High Strength Steel (HSS)

INFOID:0000000010258667

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
440 - 780 MPa	<ul style="list-style-type: none"> • Rear floor reinforcement • 2nd seat mounting member assembly • Front seat mounting rear crossmember assembly • Front floor reinforcement • 2nd crossmember (Lower) • Side radiator core support • Radiator core support main assembly • Front side member assembly • 4th crossmember • 2nd seat mounting crossmember • Rear side member • Rear crossmember • Inner side roof rail • Upper inner front pillar • Inner center pillar • Upper front pillar reinforcement • Lower center pillar brace • Front pillar brace • Outer sill reinforcement • Front roof rail • Rear roof rail • Radiator guard crossmember assembly • 2nd crossmember assembly • 2nd crossmember reinforcement • Front side member assembly • Front bound bumper bracket assembly • Lower front link mounting bracket assembly • Center side member assembly • Fuel tank protector assembly • Rear suspension mounting bracket assembly • Rear shock absorber bracket assembly • Rear side member assembly • Rear end gusset • Rear end crossmember assembly
980 - 1350 MPa	<ul style="list-style-type: none"> • Lower dash center reinforcement (Lower dash Component part) • Inner sill • Rear seat crossmember (2nd seat mounting crossmember component part) • Inner center pillar (Upper) • Upper outer center pillar reinforcement (Lower center pillar brace component part) • Front bumper crossmember assembly

Read the following precautions when repairing HSS:

1. Additional points to consider

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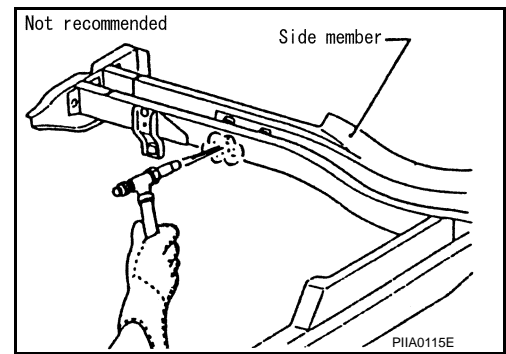
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REPAIRING HIGH STRENGTH STEEL

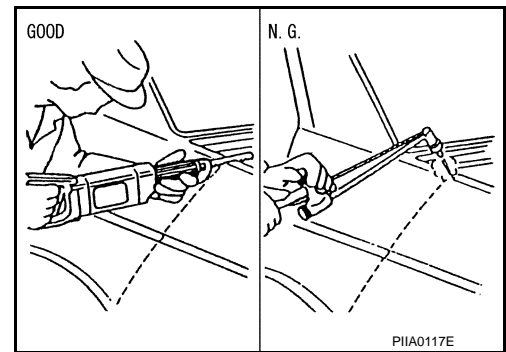
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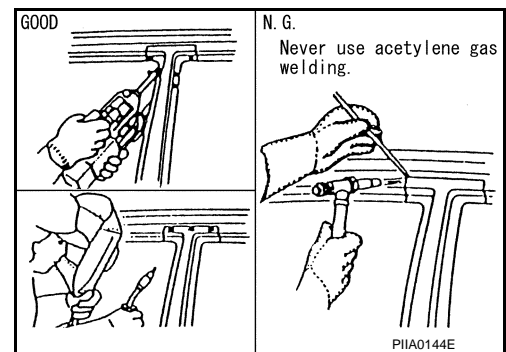
- The repair of reinforcements (such as side members) by heating is not recommended, because it may weaken the component. When heating is unavoidable, never heat HSS parts above 550°C (1,022°F). Verify heating temperature with a thermometer. (Crayon-type and other similar type thermometer are appropriate.)



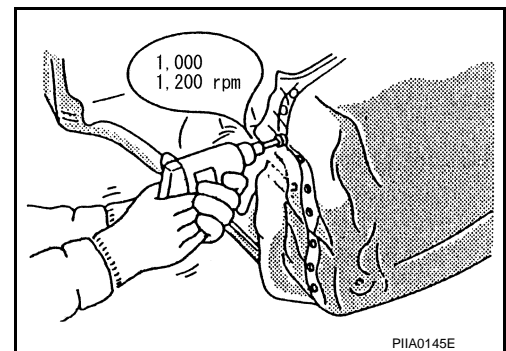
- When straightening body panels, use caution in pulling any HSS panel. Because HSS is very strong, pulling may cause deformation in adjacent sections of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.
- When cutting HSS panels, avoid gas (torch) cutting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



- 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.



REPAIRING HIGH STRENGTH STEEL

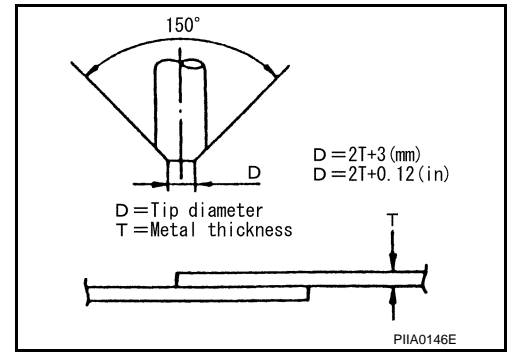
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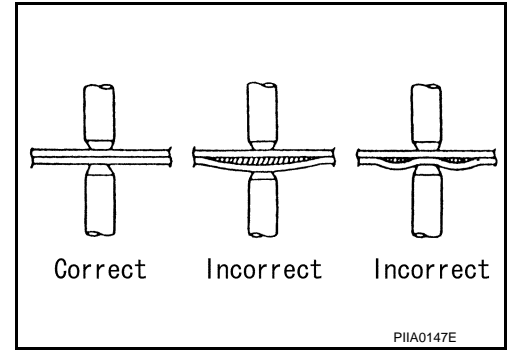
2. Precautions in spot welding HSS

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.



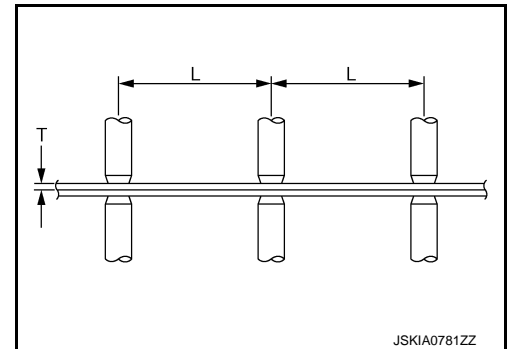
- The panel surfaces must fit flush to each other, leaving no gaps.



- Follow the specifications for the proper welding pitch.

Unit: mm (in)

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



Handling of Ultra High Strength Steel Plate Parts

INFOID:0000000010258668

PROHIBITION OF CUT AND CONNECTION

Never cut and joint the lower lock pillar reinforcement (center pillar reinforcement inside frame parts) because its material is high strength steel plate (ultra high strength steel plate).

The center pillar reinforcement must be replaced if this part is damaged.

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PREPARATION

REPAIRING MATERIAL

Foam Repair

INFOID:0000000010258669

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.

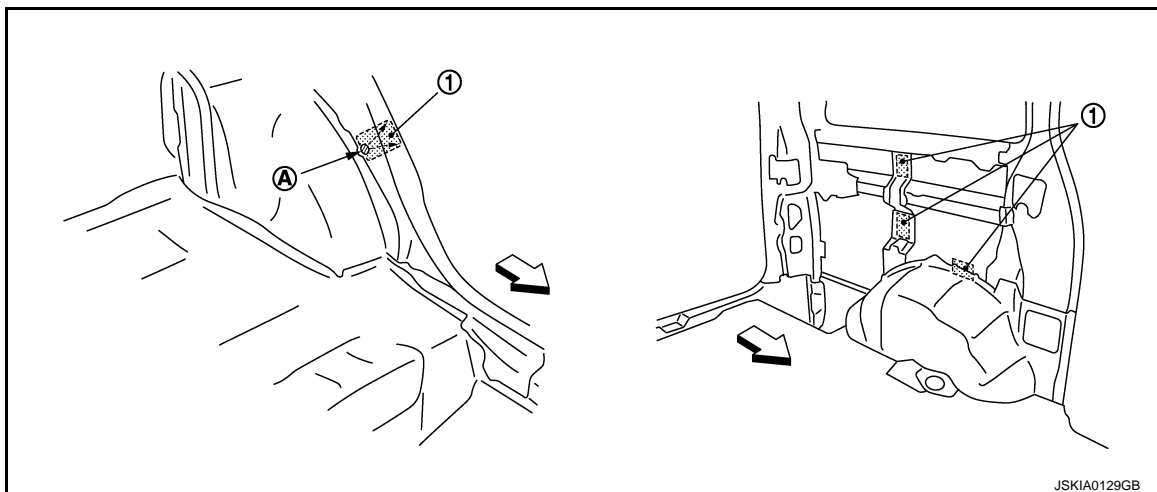
<Urethane foam for foaming agent>

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.

REPAIRING MATERIAL

< PREPARATION >

[FOR USA AND CANADA]

- 1. Urethane foam
 - A. Fill while avoiding flange area
- ← Vehicle front

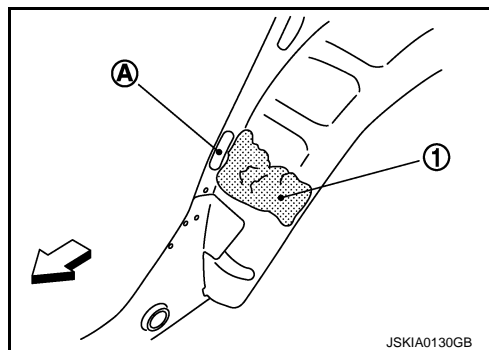
NOTE:

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.



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BODY COMPONENT PARTS

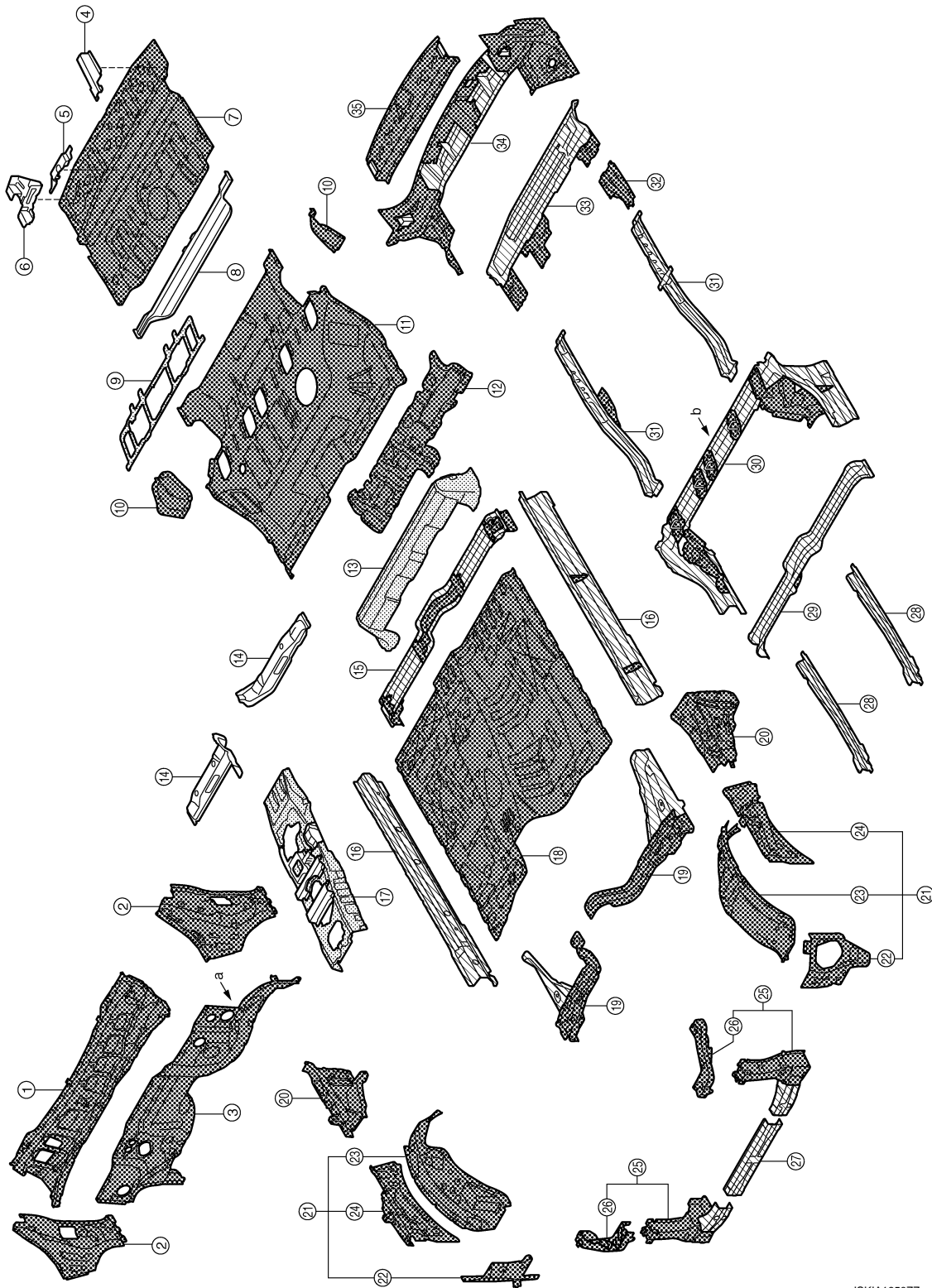
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
BODY COMPONENT PARTS

Underbody Component Parts

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-  Both sided anti-corrosive pre-coated steel sections
-  High strength steel (HSS) sections
-  Both sided anti-corrosive steel and HSS sections

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name		Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections
1.	Air box assembly		Under 440	×
2.	Side dash (RH & LH)		Under 440	×
3.	Lower dash	a. T=2.0 mm (0.079 in)	980 ^{caution}	×
4.	Trim mounting bracket assembly		Under 440	—
5.	Rear floor board reinforcement assembly		Under 440	—
6.	Jack mounting bracket		Under 440	—
7.	Rear floor rear		Under 440	×
8.	3rd seat front mounting bracket assembly		Under 440	—
9.	Rear floor reinforcement		440	—
10.	Inner rear wheelhouse reinforcement (RH & LH)		Under 440	×
11.	Rear floor front		Under 440	×
12.	2nd seat crossmember front reinforcement		Under 440	×
13.	2nd seat mounting member assembly		440	—
14.	2nd crossmember (RH & LH Upper)		Under 440	—
15.	Front seat mounting rear crossmember assembly		440	×
16.	Inner sill (RH & LH)	T=1.4 mm (0.055 in)	980 ^{caution}	×
17.	Front floor reinforcement		440	—
18.	Front floor		Under 440	×
19.	2nd crossmember (RH & LH Lower)		440	×
20.	Hoodledge reinforcement (RH & LH)		Under 440	×
21.	Hoodledge assembly (RH & LH)		Refer to No.22–24	
	22.	Upper hoodledge (RH & LH)	Under 440	×
	23.	Lower hoodledge (RH & LH)	Under 440	×
	24.	Upper rear hoodledge (RH & LH)	Under 440	×
25.	Side radiator core support (RH & LH)		440	×
26.	Upper radiator core support (RH & LH)		Under 440	×
27.	Radiator core support main assembly		440	×
28.	Front side member assembly (RH & LH)		590	×
29.	4th crossmember		590	×
30.	2nd seat mounting crossmember	b. T=2.0 mm (0.079 in)	980 ^{caution}	×
31.	Rear side member (RH & LH)		590	×
32.	3rd seat mounting bracket assembly		Under 440	×
33.	3rd rear crossmember assembly		590	×
34.	Rear crossmember		590	×
35.	Upper rear end crossmember assembly		Under 440	×

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.
- Tensile strength column shows the largest strength value of a part in the component part.

CAUTION:

If the high strength steel (ultra high strength steel) of this is broken, replace by assembly for the supply part.

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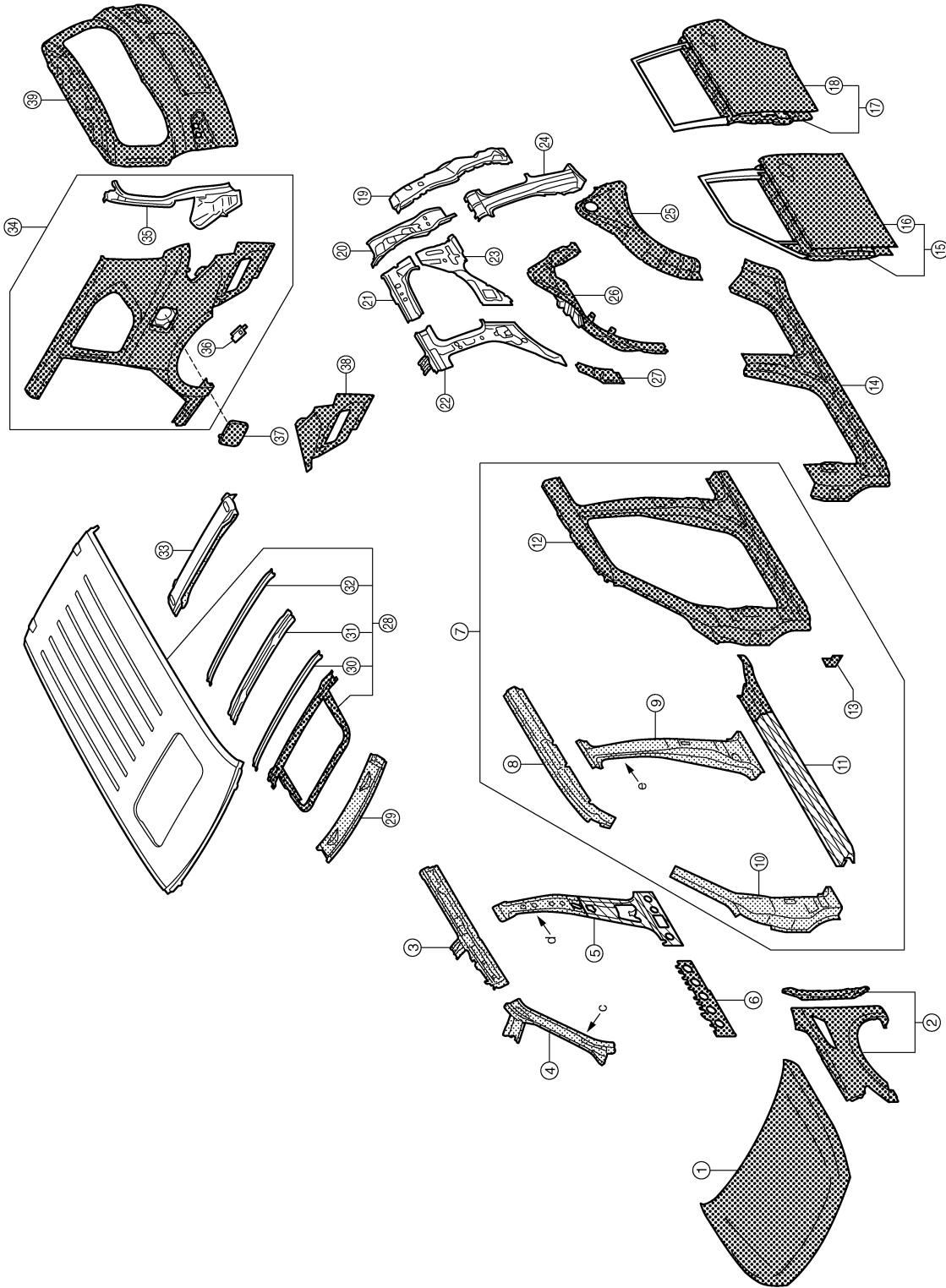
BODY COMPONENT PARTS

< PREPARATION >




[FOR USA AND CANADA]

Body Component Parts

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-  Both sided anti-corrosive pre-coated steel sections
-  High strength steel (HSS) sections
-  Both sided anti-corrosive steel and HSS sections

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name	Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections	A
1.	Hood	Under 440	×	
2.	Front fender (RH & LH)	Under 440	×	B
3.	Inner side roof rail (RH & LH)	590	—	
4.	Upper inner front pillar (RH & LH)	c. T=1.6 mm (0.063 in) 980 ^{caution}	—	C
5.	Inner center pillar (RH & LH)	d. T=1.6 mm (0.063 in) 980 ^{caution}	×	
6.	Center sill reinforcement assembly (RH & LH)	Under 440	×	D
7.	Side body assembly (RH & LH)	Refer to No.8-13		
8.	Upper front pillar reinforcement (RH & LH)	590	—	E
9.	Lower center pillar brace (RH & LH)	e. T=1.8 mm (0.071 in) 980 ^{caution}	—	
10.	Front pillar brace (RH & LH)	590	—	F
11.	Outer sill reinforcement (RH & LH)	590	×	
12.	Outer front side body (RH & LH)	Under 440	×	
13.	Front fender bracket assembly (RH & LH)	Under 440	×	G
14.	Outer sill (RH & LH)	Under 440	×	H
15.	Front door assembly (RH & LH)	440	×	
16.	Outer front door panel (RH & LH)	Under 440	×	I
17.	Rear door assembly (RH & LH)	440	×	
18.	Outer rear door panel (RH & LH)	Under 440	×	J
19.	Back pillar reinforcement (RH & LH)	Under 440	—	
20.	Inner back pillar (RH & LH)	Under 440	—	K
21.	Inner rear side roof rail (RH & LH)	Under 440	—	
22.	Inner rear pillar (RH & LH)	590	—	L
23.	Lower inner rear pillar (RH & LH)v	Under 440	—	M
24.	Side panel reinforcement (RH & LH)	Under 440	—	N
25.	Outer rear wheelhouse (RH & LH)	Under 440	×	O
26.	Inner rear wheelhouse (RH & LH)	Under 440	×	
27.	Outer rear wheelhouse extension (RH & LH)	Under 440	×	P
28.	Roof assembly	Under 440	—	
29.	Front roof rail	440	—	
30.	Roof bow No.3	Under 440	—	
31.	Roof bow No.4	Under 440	—	
32.	Roof bow No.5	Under 440	—	
33.	Rear roof rail	440	—	
34.	Rear fender (RH & LH)	Under 440	×	
35.	Back pillar assembly (RH & LH)	Under 440	—	
36.	Rear fender bracket (RH & LH)	Under 440	—	
37.	Fuel filler lid	Under 440	×	
38.	Rear fender extension (RH & LH)	Under 440	×	
39.	Back door	Under 440	×	

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.
- Tensile strength column shows the largest strength value of a part in the component part.

BODY COMPONENT PARTS

[FOR USA AND CANADA]

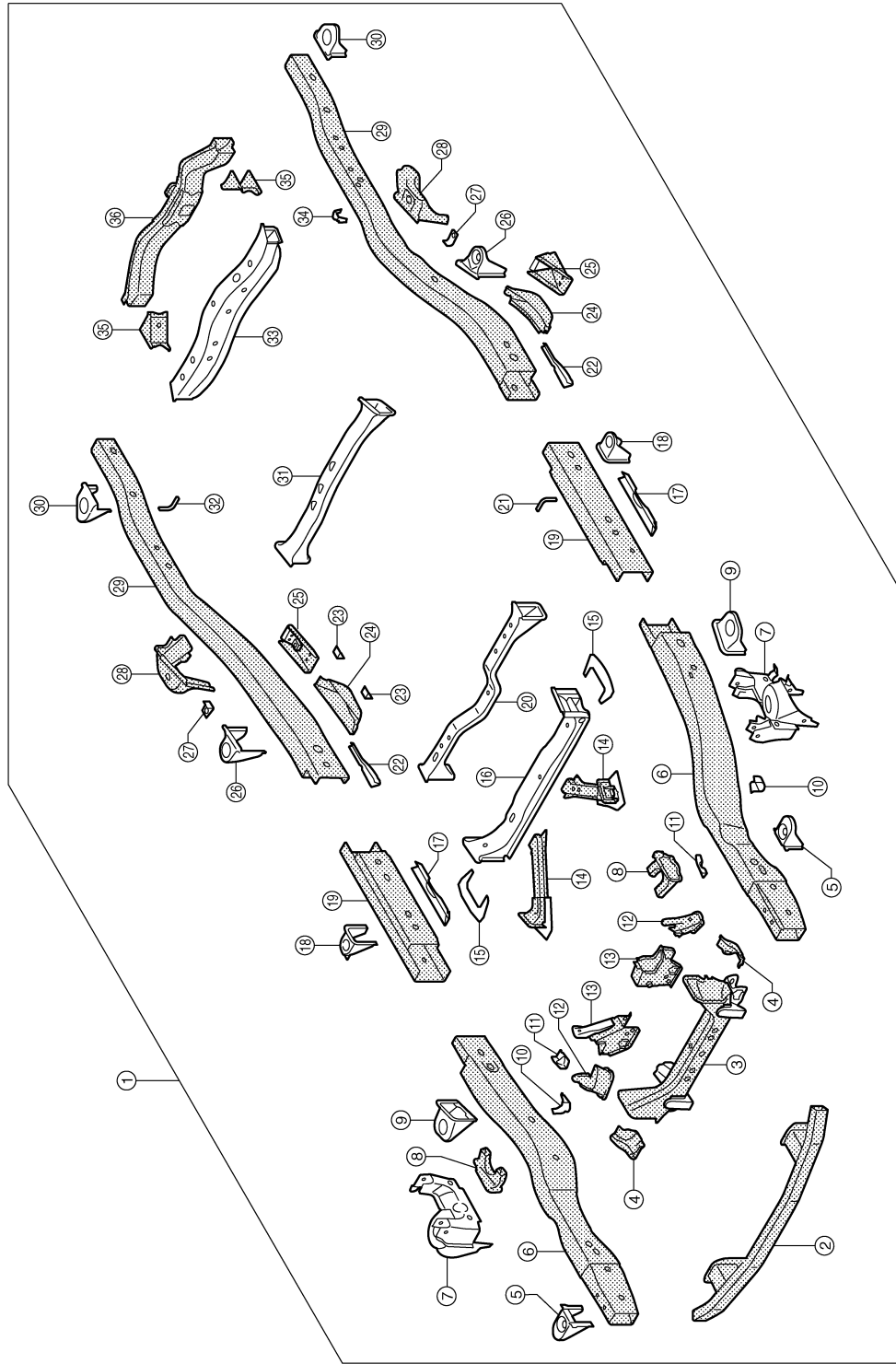
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CAUTION:


If the high strength steel (ultra high strength steel) of this is broken, replace by assembly for the supply part.

Frame Component Parts

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: High strength steel (HSS) sections

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name	Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections
1.	Frame assembly	Refer to No.2-36	
2.	Front bumper crossmember assembly	T=1.8 mm (0.071 in) 980 ^{caution}	—
3.	2nd crossmember assembly	440	—
4.	2nd crossmember reinforcement (RH & LH)	440	—
5.	1st cab mounting bracket (RH & LH)	Under 440	—
6.	Front side member assembly (RH & LH)	540	—
7.	Front suspension bracket assembly (RH & LH)	Under 440	—
8.	Engine mounting bracket assembly (RH & LH)	Under 440	—
9.	2nd cab mounting bracket assembly (RH & LH)	Under 440	—
10.	3way connector bracket assembly (RH & LH)	Under 440	—
11.	Piping bracket assembly (RH & LH)	Under 440	—
12.	Front bound bumper bracket assembly (RH & LH)	540	—
13.	Lower front link mounting bracket assembly (RH & LH)	440	—
14.	Diagonal member complete (RH & LH)	540	—
15.	Rear engine mounting gusset assembly	Under 440	—
16.	Rear engine mounting member complete	Under 440	—
17.	Front fuel tank protector (RH & LH)	Under 440	—
18.	3rd cab mounting bracket assembly (RH & LH)	Under 440	—
19.	Center side member assembly (RH & LH)	540	—
20.	6th crossmember assembly	Under 440	—
21.	Exhaust bracket (Front)	Under 440	—
22.	Fuel tank protector (RH & LH Rear)	Under 440	—
23.	Heat insulator bracket	Under 440	—
24.	Fuel tank protector assembly (RH & LH)	540	—
25.	Rear suspension mounting bracket assembly (RH & LH)	540	—
26.	4th cab body mounting bracket assembly (RH & LH)	Under 440	—
27.	Rear brake hose bracket (RH & LH)	Under 440	—
28.	Rear shock absorber bracket assembly (RH & LH)	540	—
29.	Rear side member assembly (RH & LH)	540	—
30.	5th cab body bracket (RH & LH)	Under 440	—
31.	7th crossmember assembly	Under 440	—
32.	Exhaust bracket (Rear)	Under 440	—
33.	Spare wheel crossmember assembly	Under 440	—
34.	Front under cover bracket assembly	Under 440	—
35.	Rear end gusset (RH & LH)	440	—
36.	Rear end crossmember assembly	540	—

NOTE:

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- Tensile strength column shows the largest strength value of a part in the component part.

CAUTION:

If the high strength steel (ultra high strength steel) of this is broken, replace by assembly for the supply part.

REMOVAL AND INSTALLATION

CORROSION PROTECTION

Description

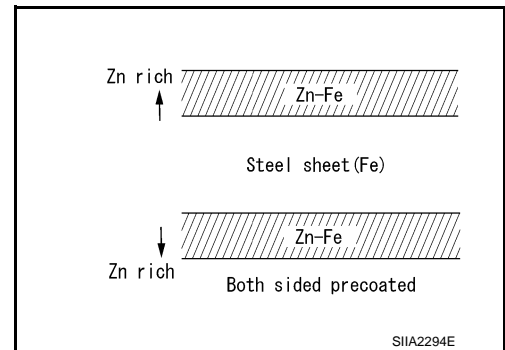
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To provide improved corrosion prevention, the following anti-corrosive measures have been implemented in NISSAN production plants. When repairing or replacing body panels, it is necessary to use the same anti-corrosive measures.

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.



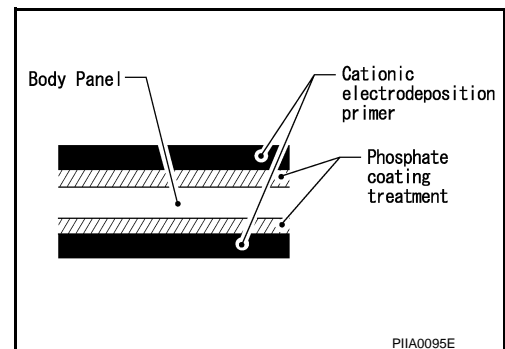
NISSAN genuine parts are fabricated from galvannealed steel. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

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.

Anti-corrosive Wax

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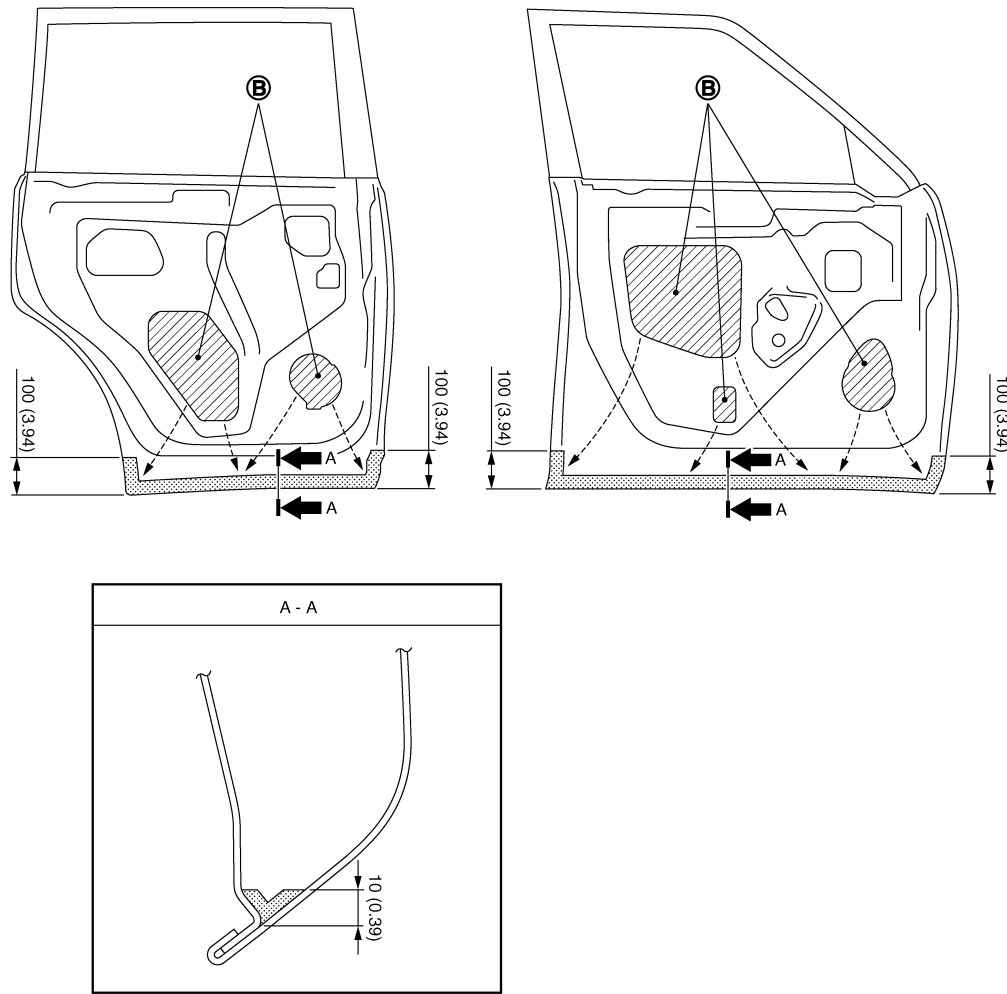
To improve corrosion resistance, anti-corrosive wax is applied inside the body sill and inside other closed sections. Accordingly, when replacing these parts, be sure to apply anti-corrosive wax to the appropriate areas of the new parts. Select an excellent anti-corrosive wax which will penetrate after application and has a long shelf life.

DOOR

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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B. Nozzle insert hole

Unit: mm (in)

: Anti-corrosive wax coated portions

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Undercoating

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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.

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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.

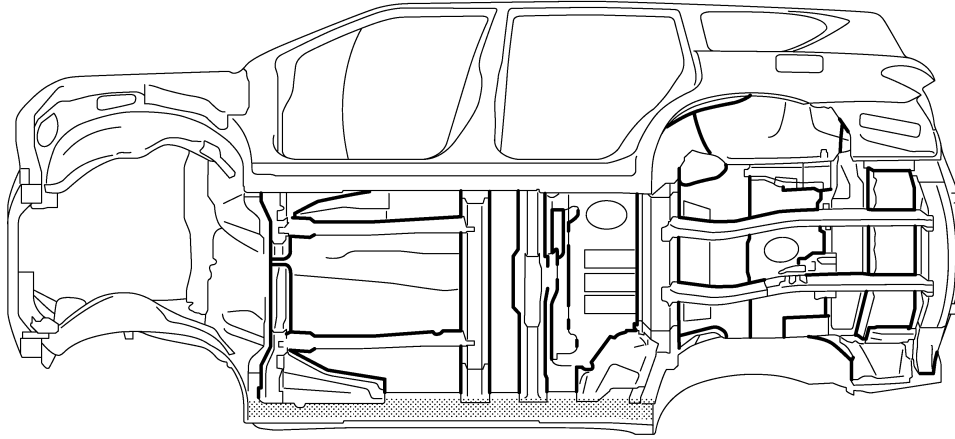
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CORROSION PROTECTION


< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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 Undercoated areas

 Sealed portions

Stone Guard Coat

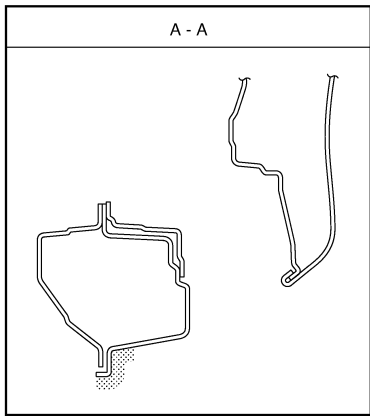
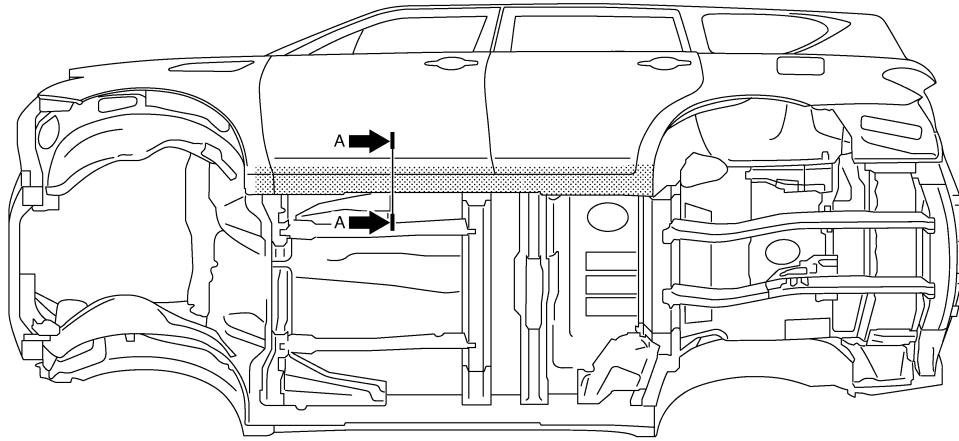
INFOID:000000010258676


To prevent damage caused by stones, the lower outer body panel (fender, door, etc.) have an additional layer of Stone Guard Coating over the ED primer coating. When replacing or repairing these panels, apply Stone Guard coating to the same portions as before. Use a coating which is rust preventive, durable, shock-resistant and has a long shelf life.

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



 : Stone guard coated portions

Body Sealing

INFOID:000000010258677

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.

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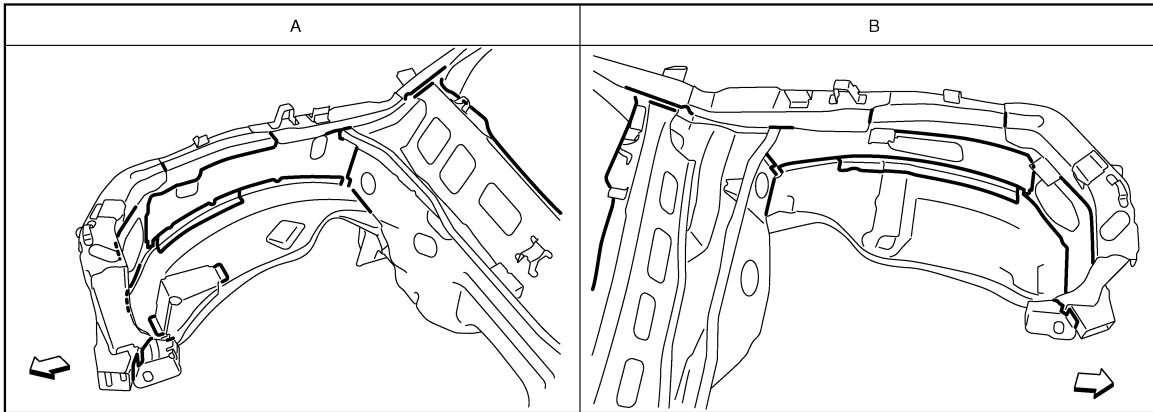
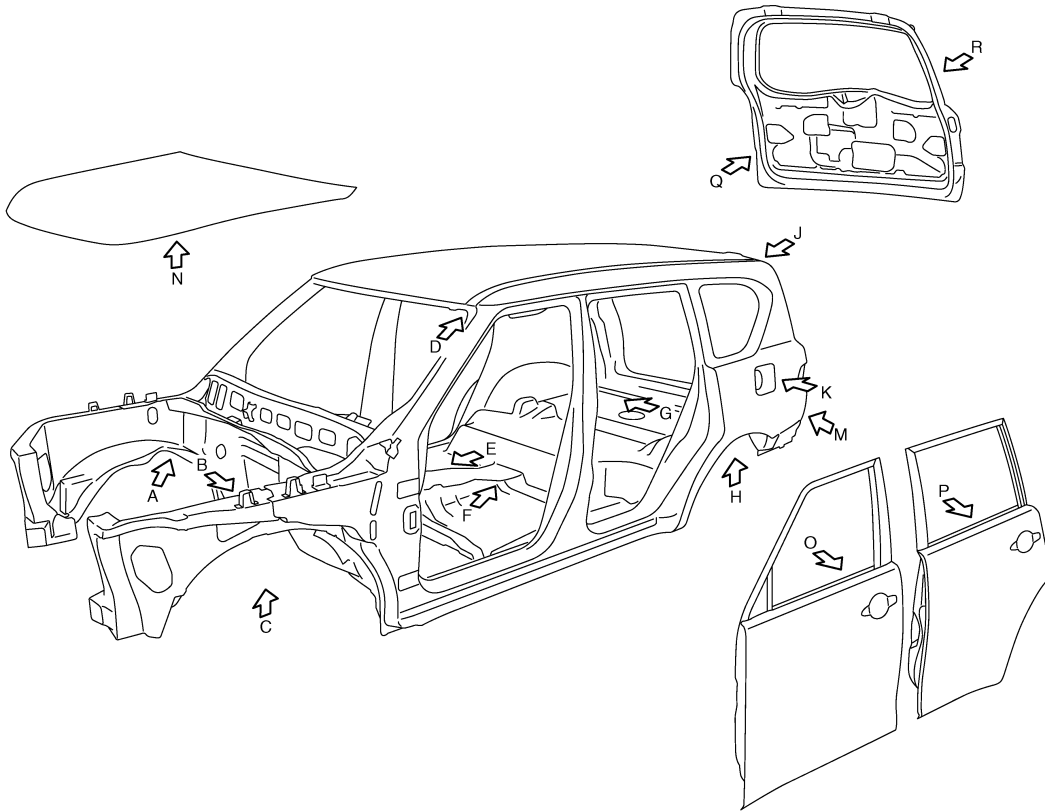
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JSKIA1942ZZ

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1943ZZ

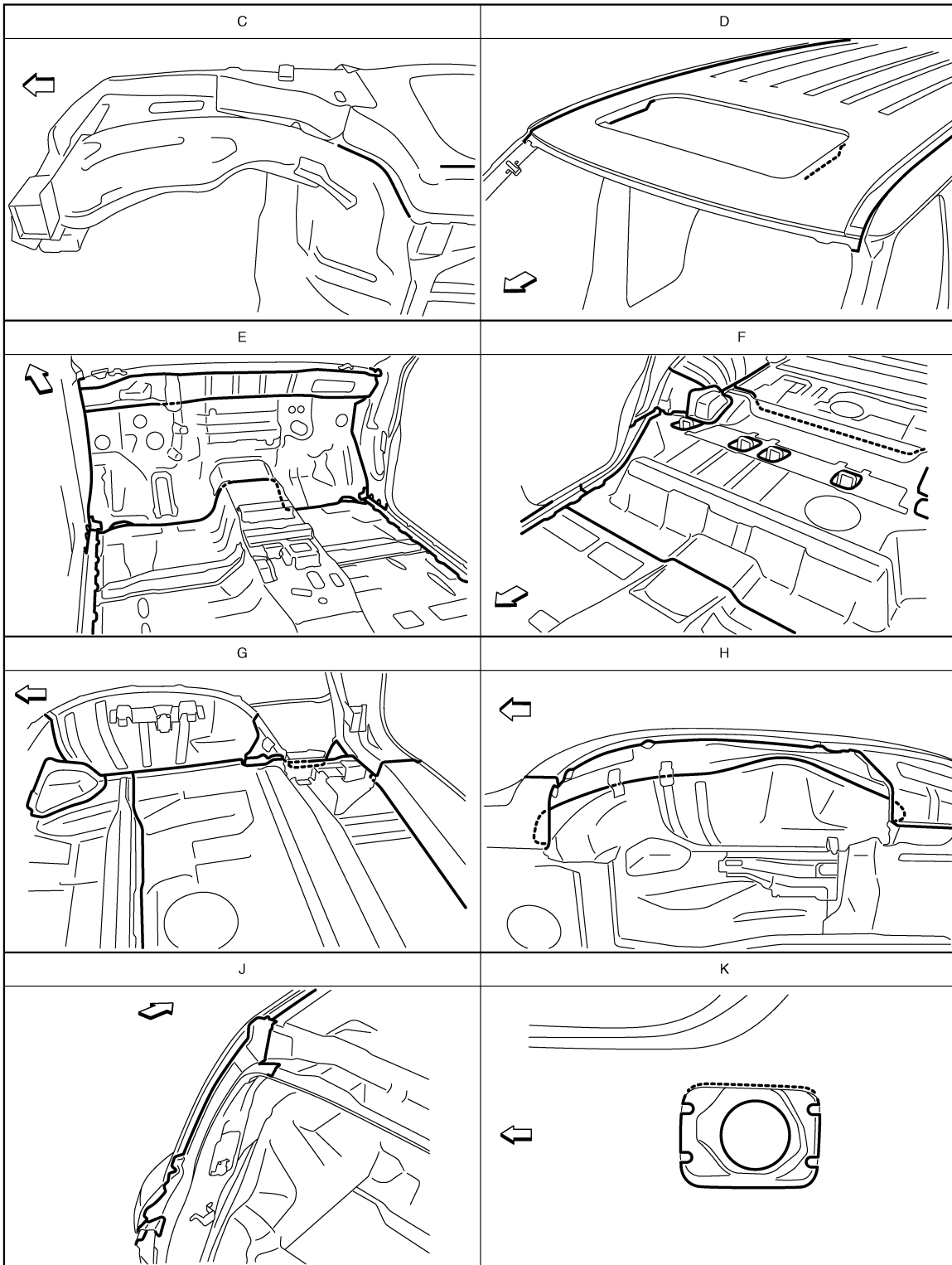
↔: Vehicle front

—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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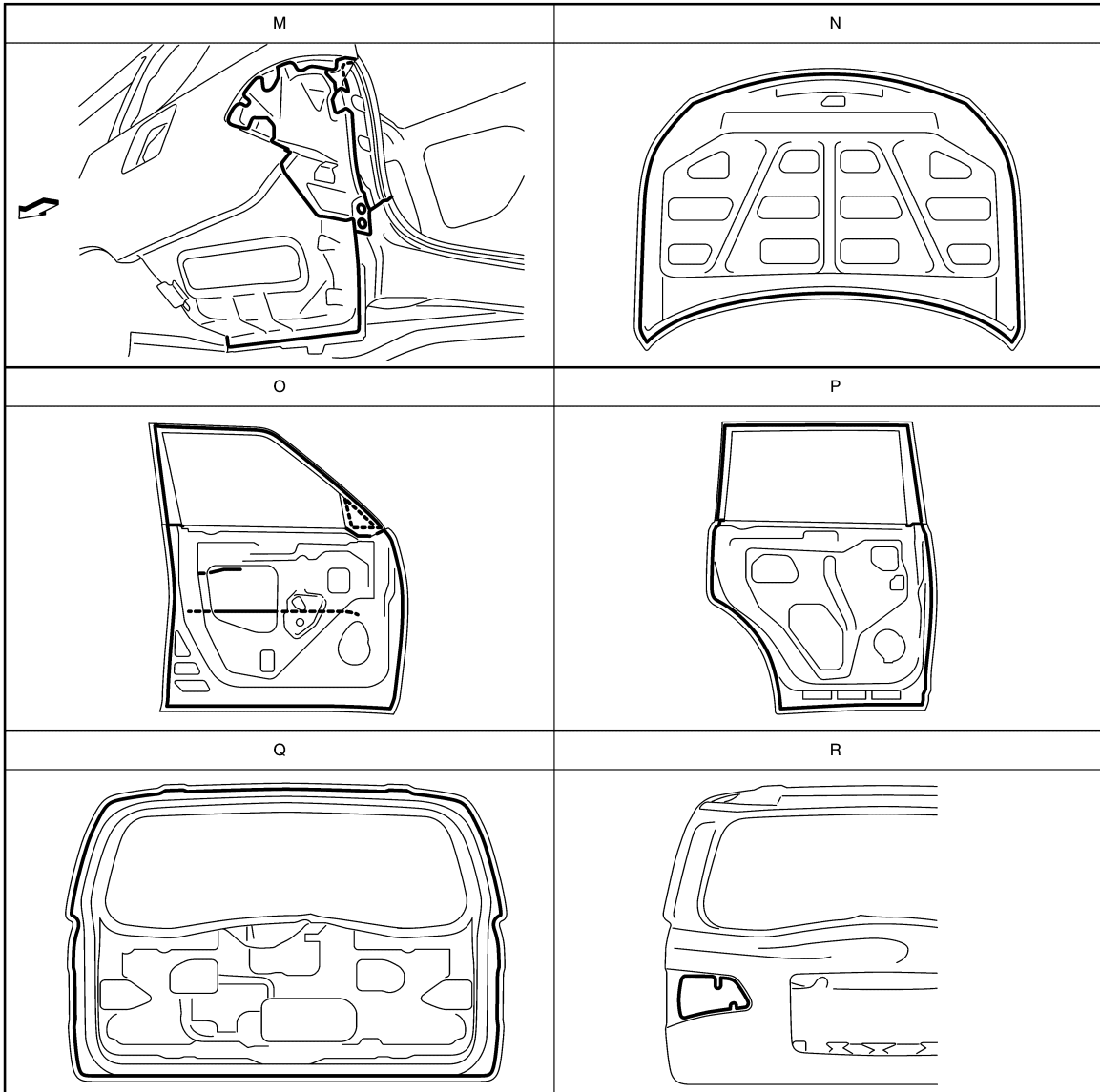
←: Vehicle front
—: Sealed portions

JSKIA1944ZZ

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3450ZZ

↶: Vehicle front

—: Sealed portions

BODY CONSTRUCTION

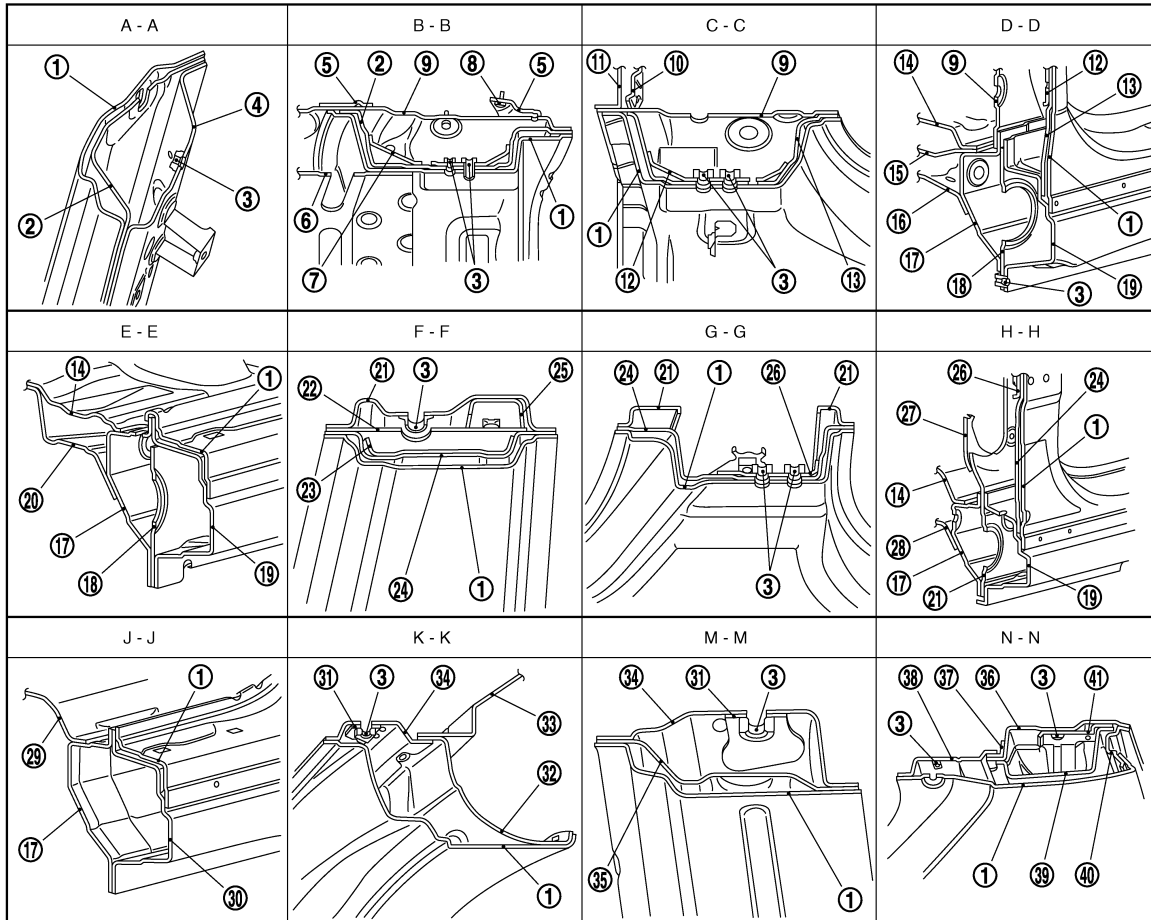
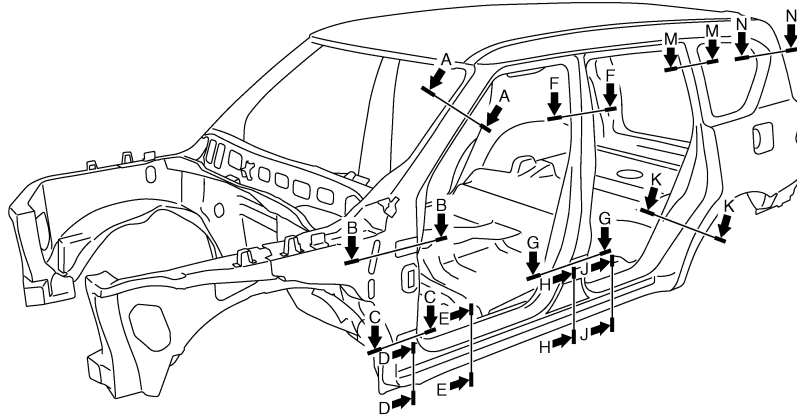
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

BODY CONSTRUCTION

Body Construction

INFOID:000000010258678



1. Outer side body
4. Upper inner front pillar
7. Upper hinge plate

2. Upper front pillar hinge brace
5. Parking brake bracket
8. Weld bolt

3. Weld nut
6. Hoodledge reinforcement
9. Side dash

JSKIA1894ZZ

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BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

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|---------------------------------------|---|-----------------------------------|
| 10. Lower dash reinforcement | 11. Lower dash | 12. Lower hinge plate (Front) |
| 13. Lower front pillar hinge brace | 14. Front floor | 15. 2nd body mounting member |
| 16. 2nd body mounting bracket | 17. Inner sill | 18. Center sill reinforcement |
| 19. Outer sill reinforcement | 20. Side member outrigger | 21. Inner center pillar |
| 22. Inner center pillar reinforcement | 23. Upper outer center pillar reinforcement | 24. Center pillar hinge brace |
| 25. Center pillar plate | 26. Lower hinge plate (Rear) | 27. Lower center pillar bracket |
| 28. 3rd body mounting bracket | 29. Rear floor front | 30. Outer sill rear reinforcement |
| 31. Anchor plate | 32. Outer rear wheelhouse | 33. Sill closing plate |
| 34. Inner rear pillar | 35. Inner side panel reinforcement | 36. Roof rail rear brace |
| 37. Inner back pillar | 38. Inner rear roof side rail | 39. Back pillar reinforcement |
| 40. Upper back pillar main | 41. Back pillar seat belt anchor | |

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

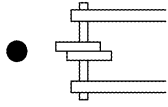
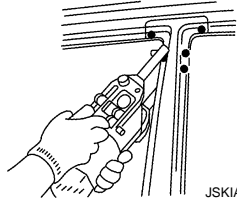
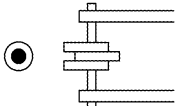
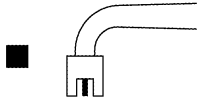



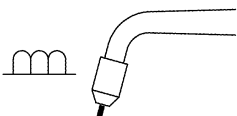
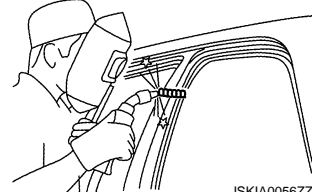
REPLACEMENT OPERATIONS

Description

INFOID:000000010258679

- 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>

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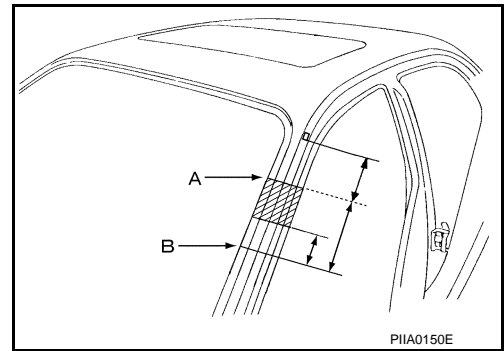
BRM

REPLACEMENT OPERATIONS

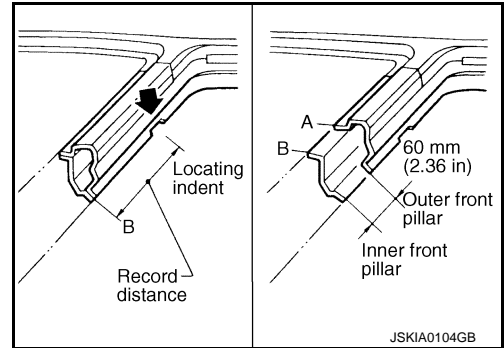
[FOR USA AND CANADA]

< REMOVAL AND INSTALLATION >

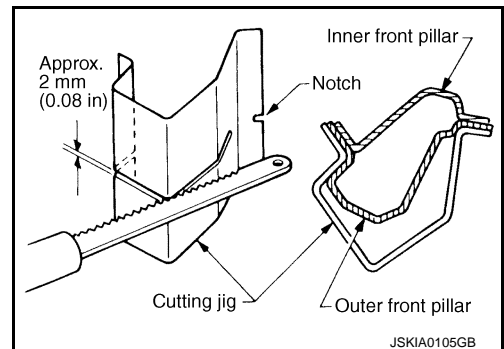
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle.



- 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.

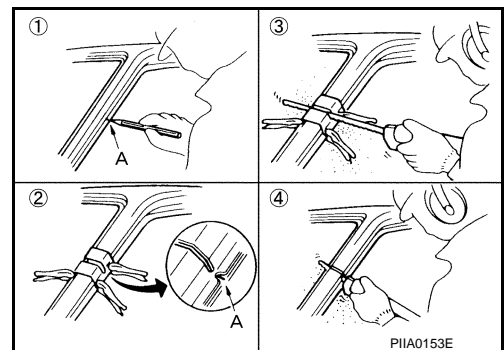


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit the service part to be accurately cut at the joint position.



- 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.



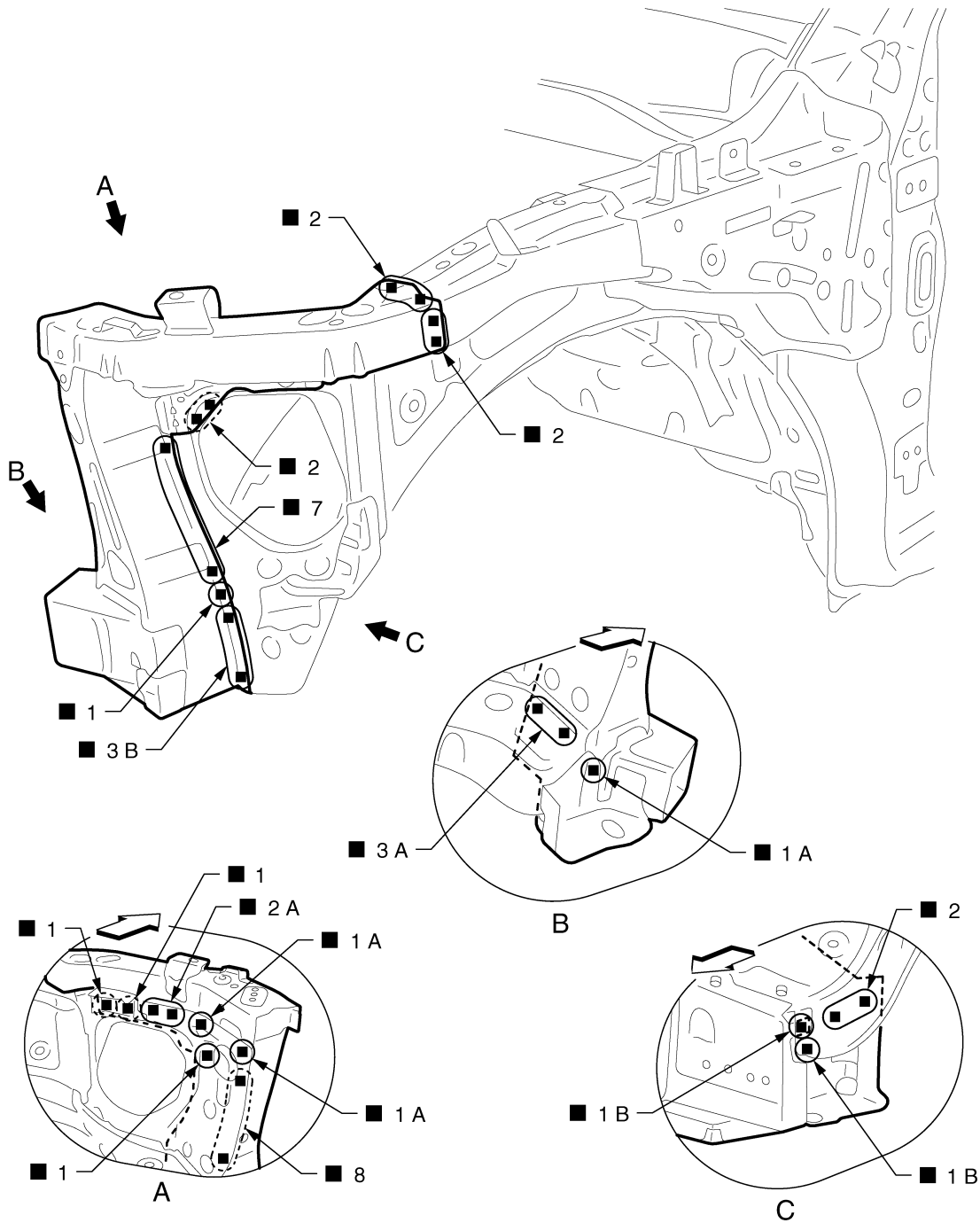
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Radiator Core Support

INFOID:000000010258680



JSKIA1914ZZ

← Vehicle front

(---): Weld the parts onto the back of the component part.

Replacement parts

- Side radiator core support (LH)

Hoodledge

INFOID:000000010258681

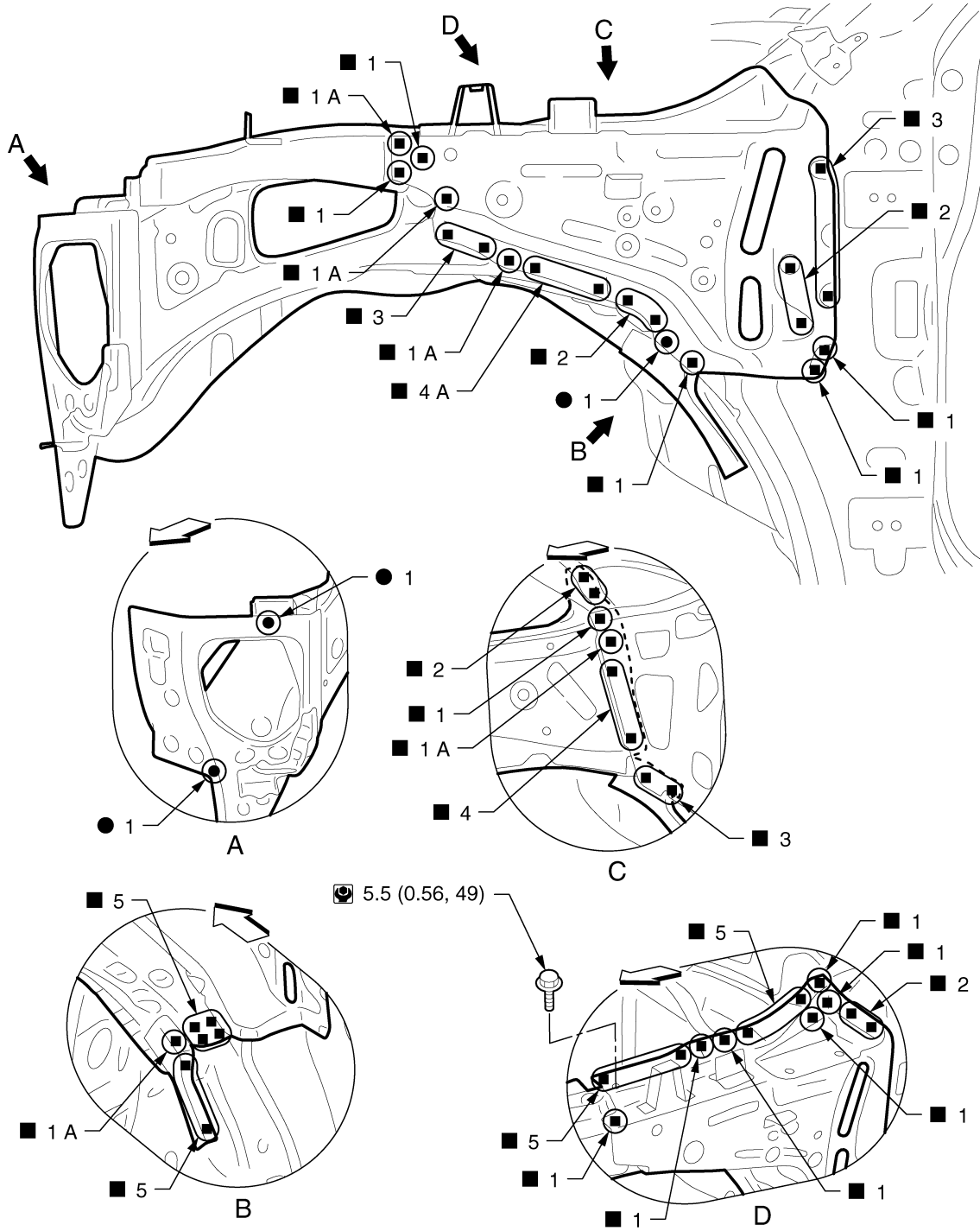
Work after radiator core support is removed.

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1915GB

↔: Vehicle front

Refer to [GI-4, "Components"](#) for symbols in the figure.

Replacement parts

- Hoodledge assembly (LH)
- Hoodledge reinforcement (LH)

View C: Before installing hoodledge reinforcement

Hoodledge (Partial Replacement)

INFOID:000000010258682

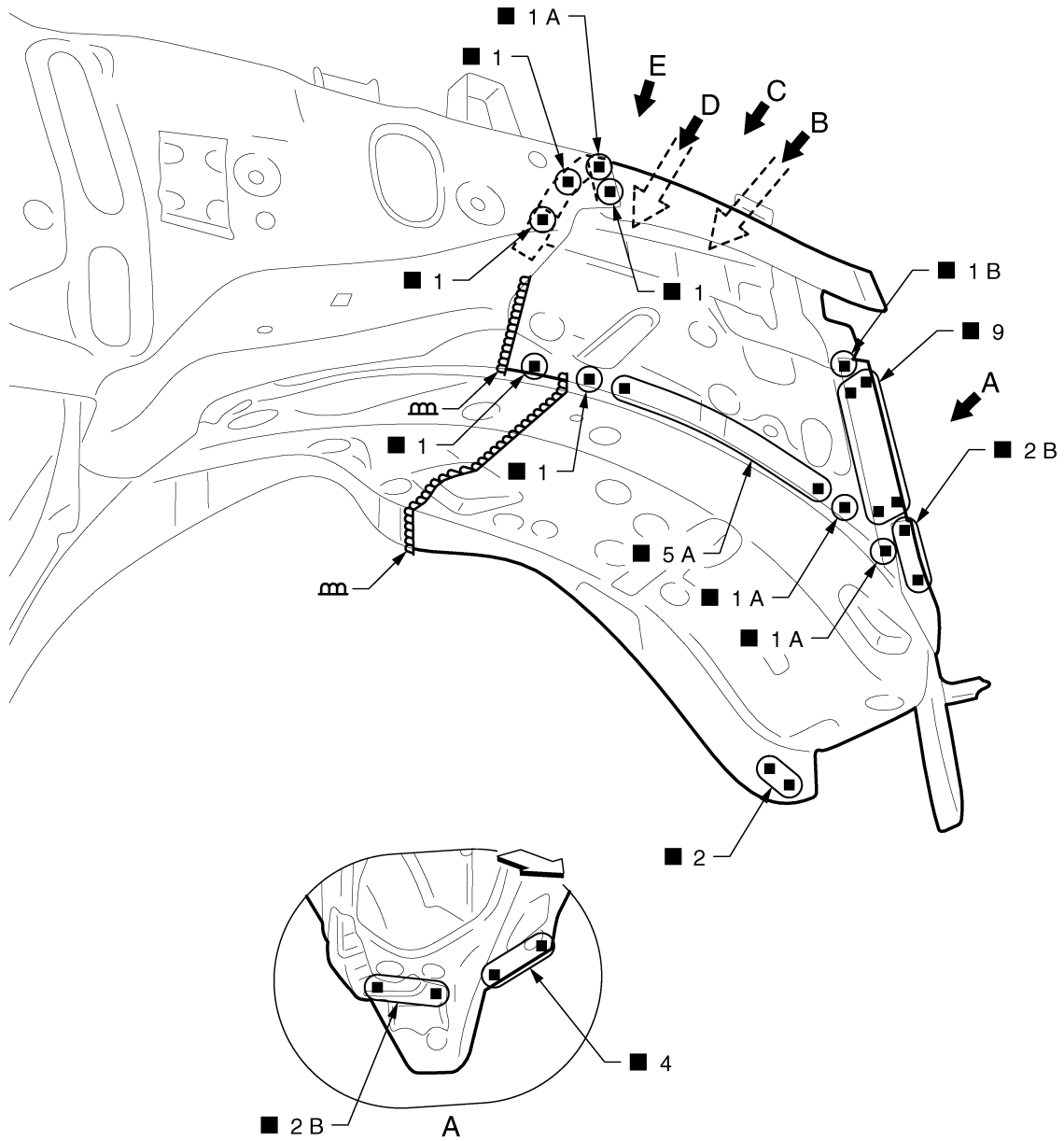
Work after radiator core support is removed.

Remove the connector hoodledge bracket assembly (reusable) from the service part "upper rear hoodledge" for easier installation.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1916ZZ

←: Vehicle front

Replacement parts

● Upper rear hoodledge (RH)

● Upper hoodledge (RH)

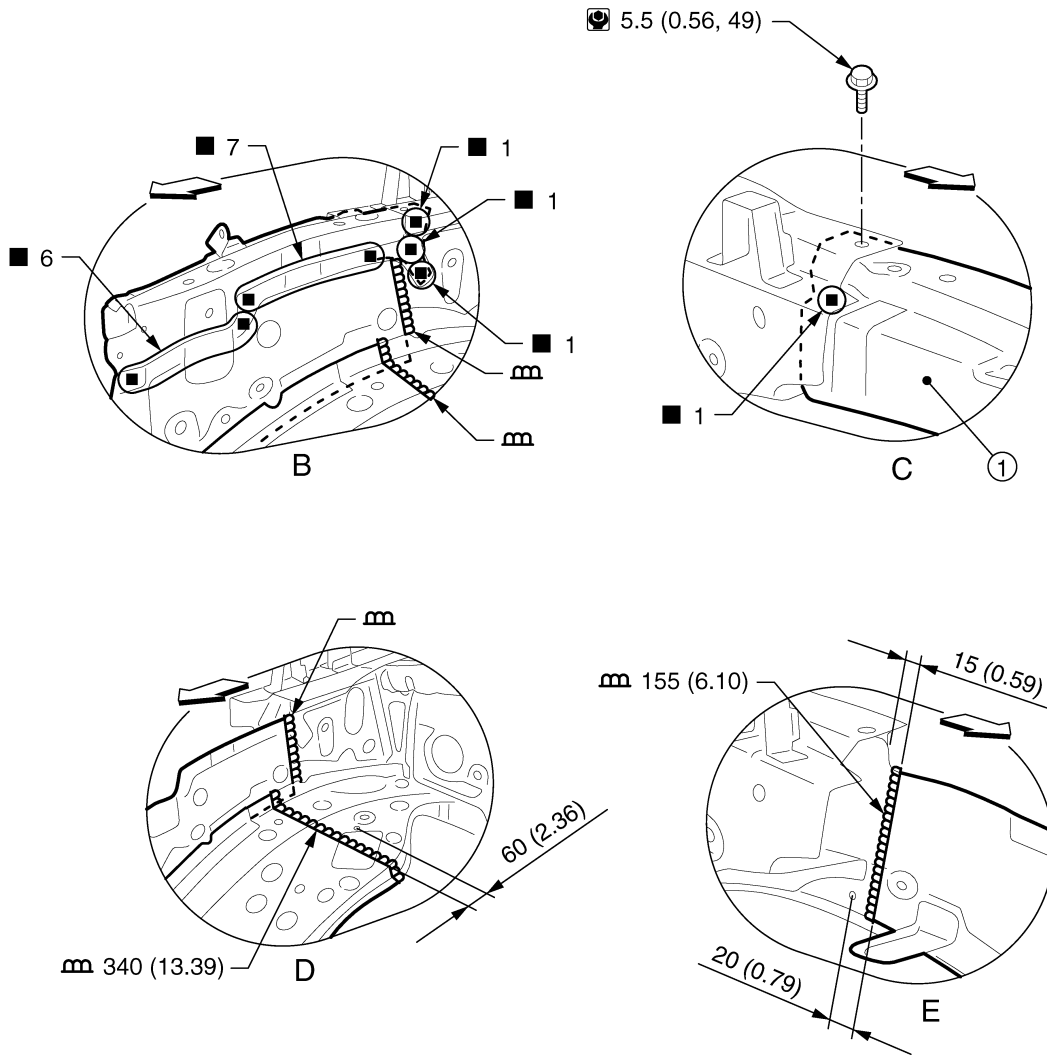
● Lower hoodledge (RH)

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1917GB

1. Connector hoodledge bracket assembly

Unit: mm (in)

↔ Vehicle front

Refer to [GI-4, "Components"](#) for symbols in the figure.

View D and E: Before installing connector hoodledge bracket assembly

Front Pillar

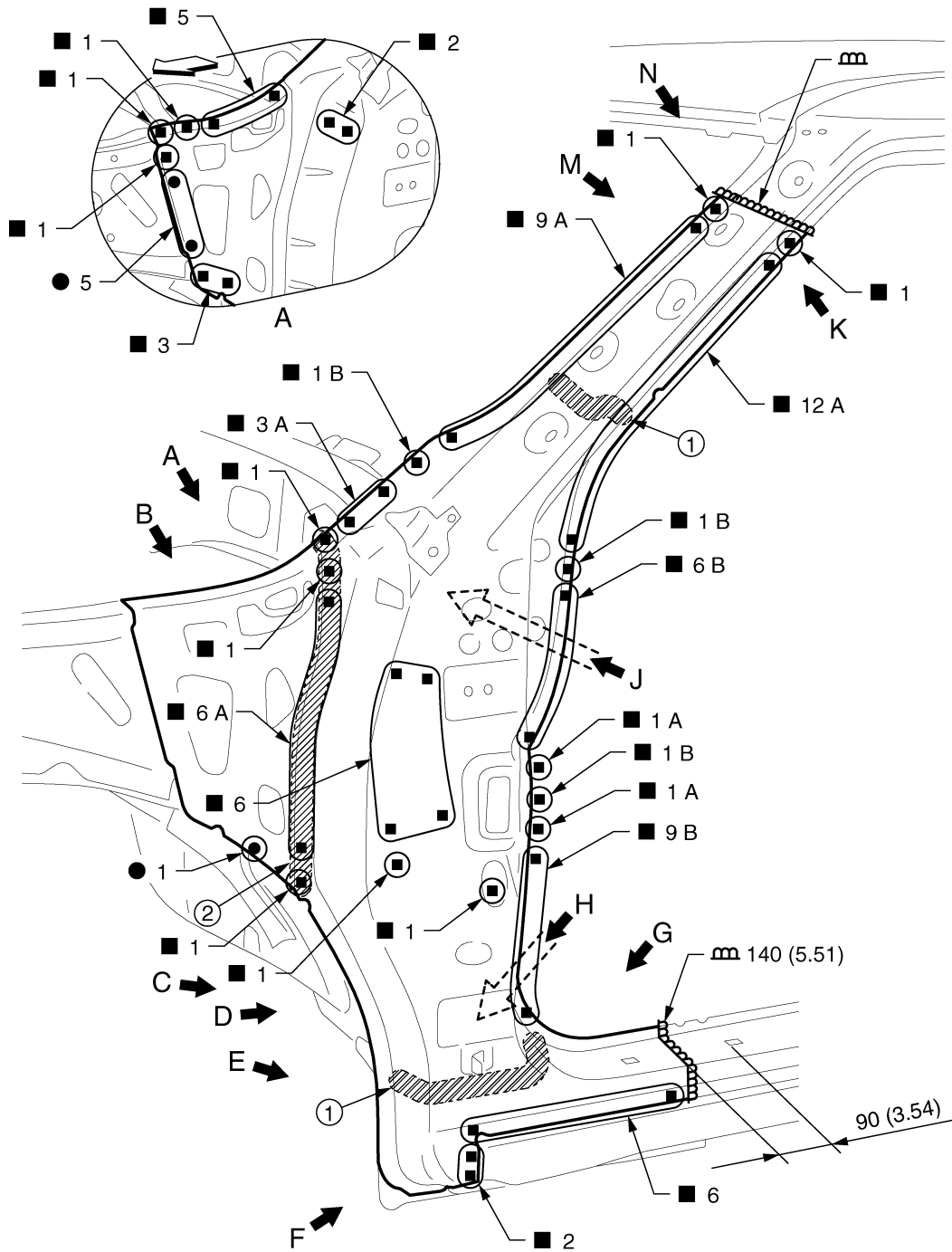
INFOID:0000000010258683

Work after hoodledge reinforcement is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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1. Urethane foam
Unit: mm (in)

2. Body sealing

←: Vehicle front

Replacement parts

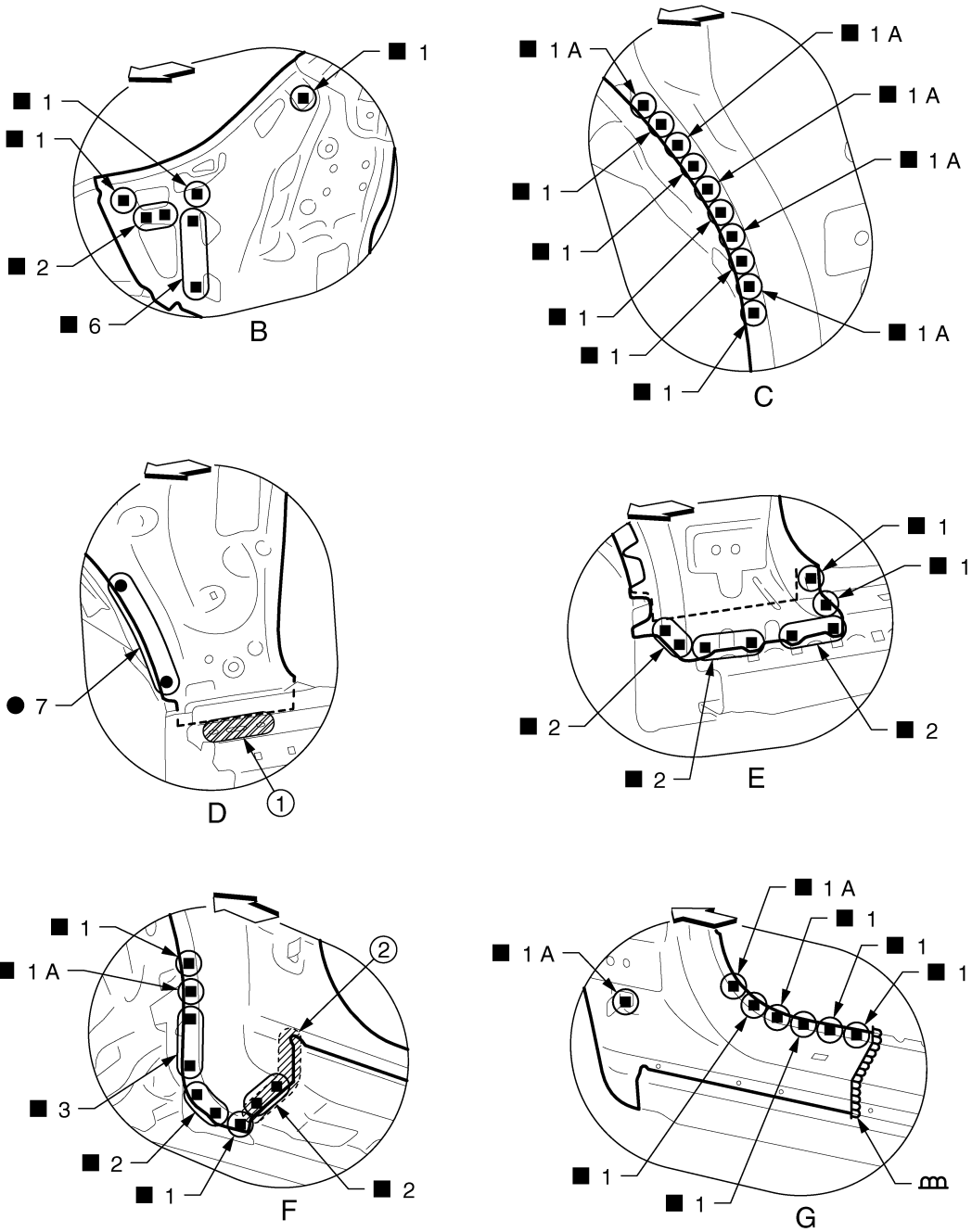
- Outer front side body (LH)
- Front pillar brace (LH)
- Front fender bracket assembly (LH)
- Upper inner front pillar (LH)
- Side dash (LH)

JSKIA1918GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1827ZZ

- 1. Urethane foam
- 2. Body sealing

← Vehicle front

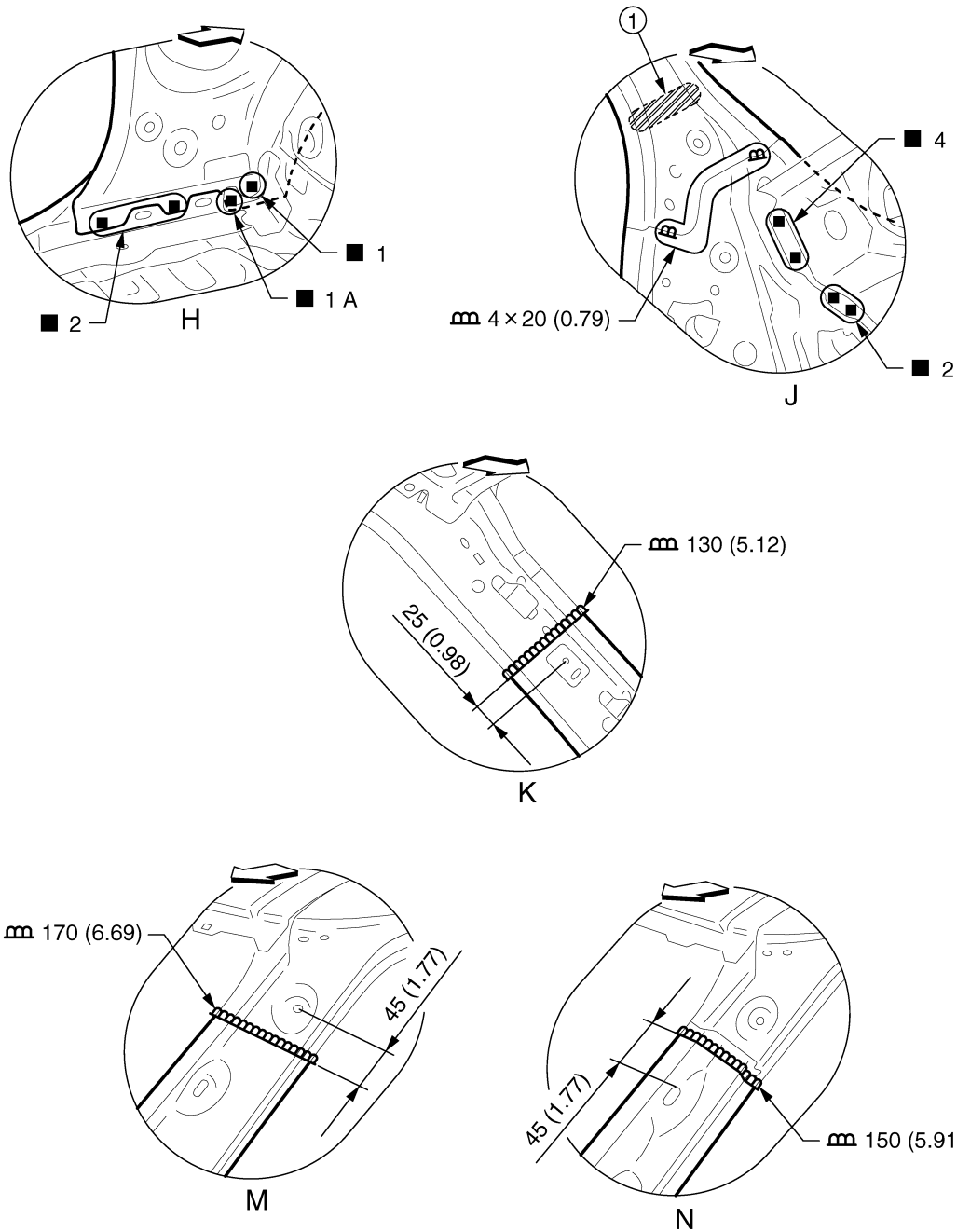
View B and D: Before installing outer front side body and front pillar brace

View E: Before installing outer front side body

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



1. Urethane foam

Unit: mm (in)

↔: Vehicle front

View N: Before installing outer front side body

Center Pillar

Remove the outer sill reinforcement (reusable) for easier installation.

JSKIA1828GB

INFOID:000000010258684

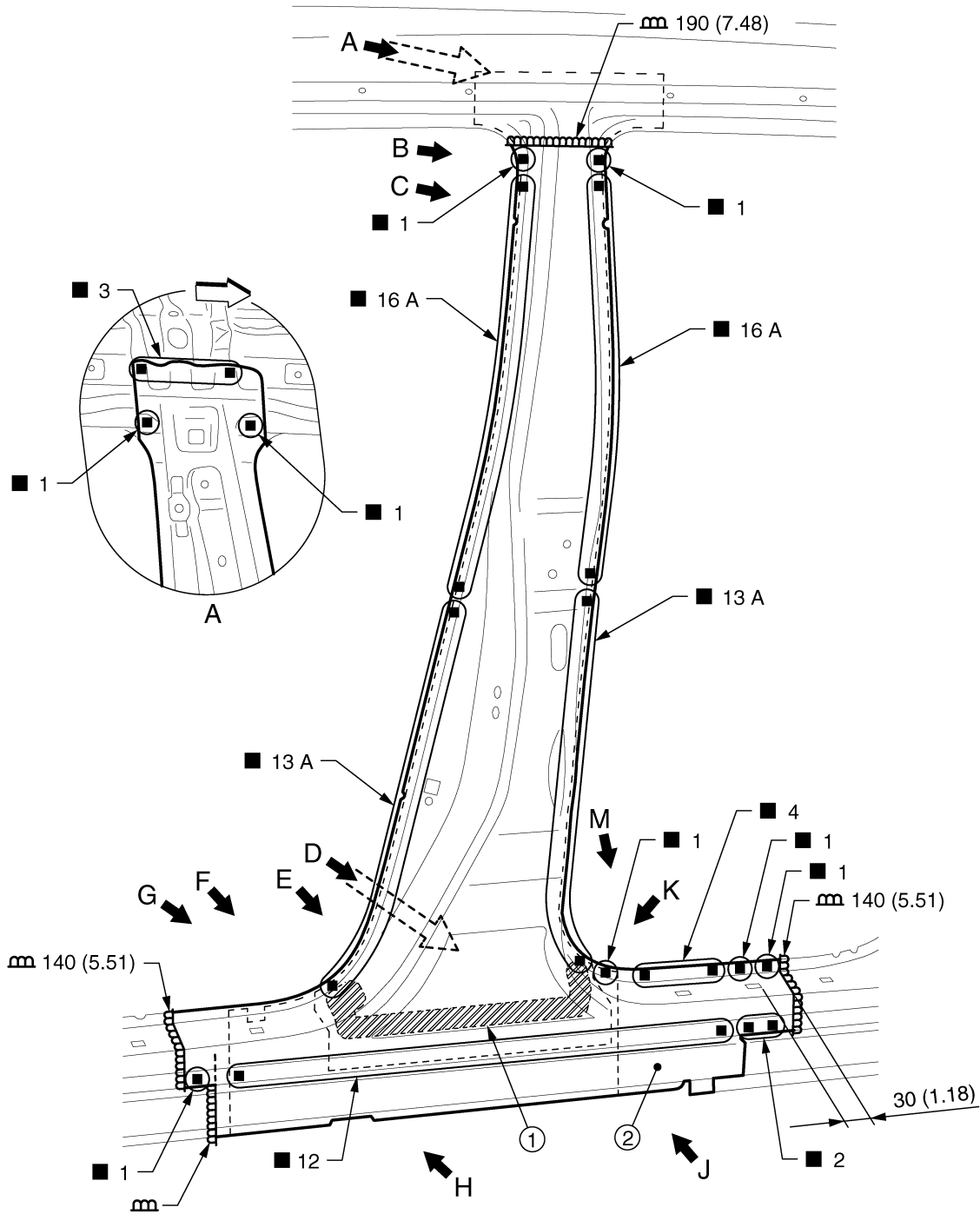
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1829GB

1. Urethane foam

2. Outer sill reinforcement

Unit: mm (in)

◁: Vehicle front

Replacement parts

● Outer front side body (LH)

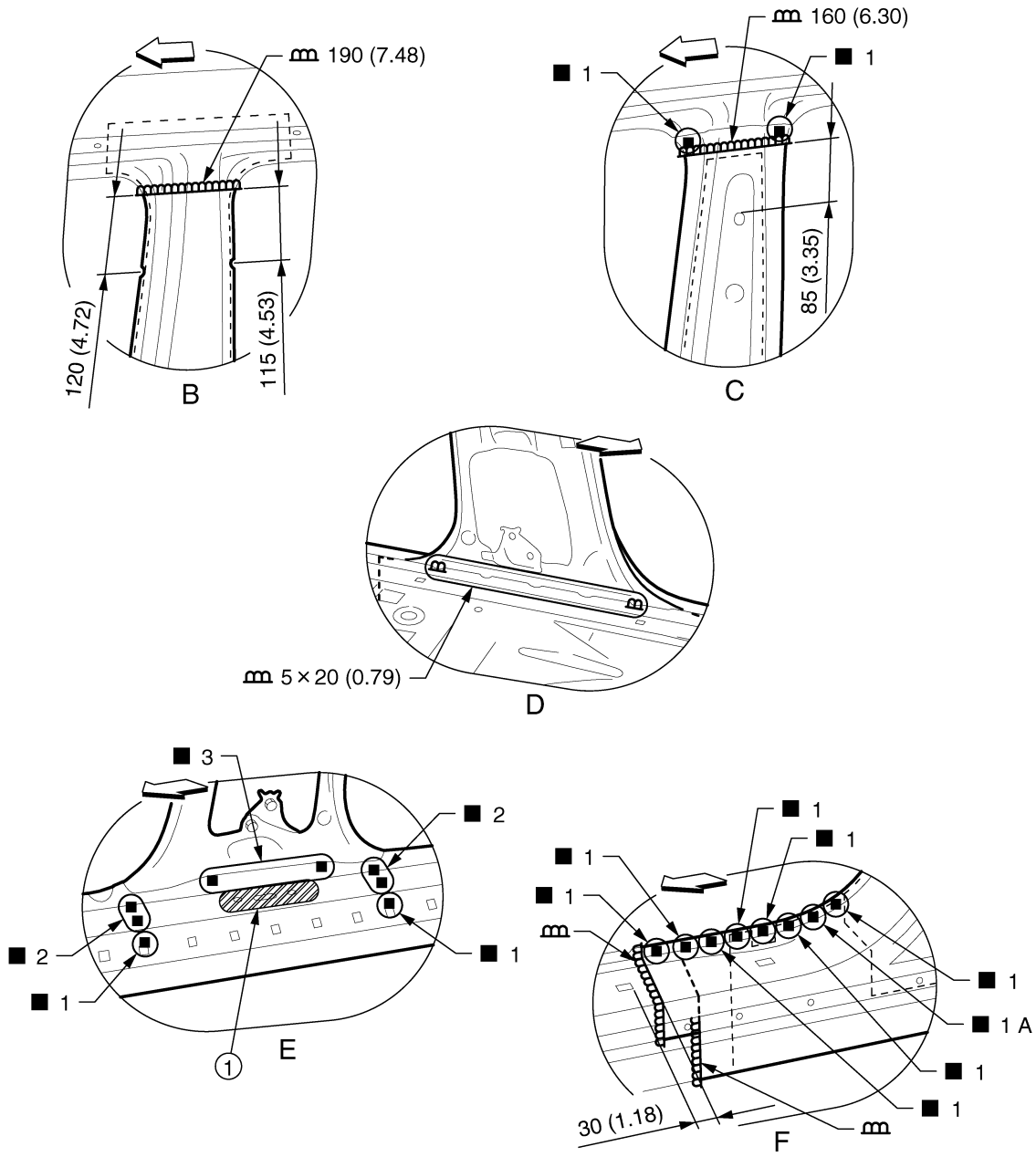
● Lower center pillar brace (LH)

● Inner center pillar (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



- 1. Urethane foam
- Unit: mm (in)
- ↔: Vehicle front

View C: Before installing outer front side body
 View E: Before installing outer front side body and lower center pillar brace

JSKIA1830GB

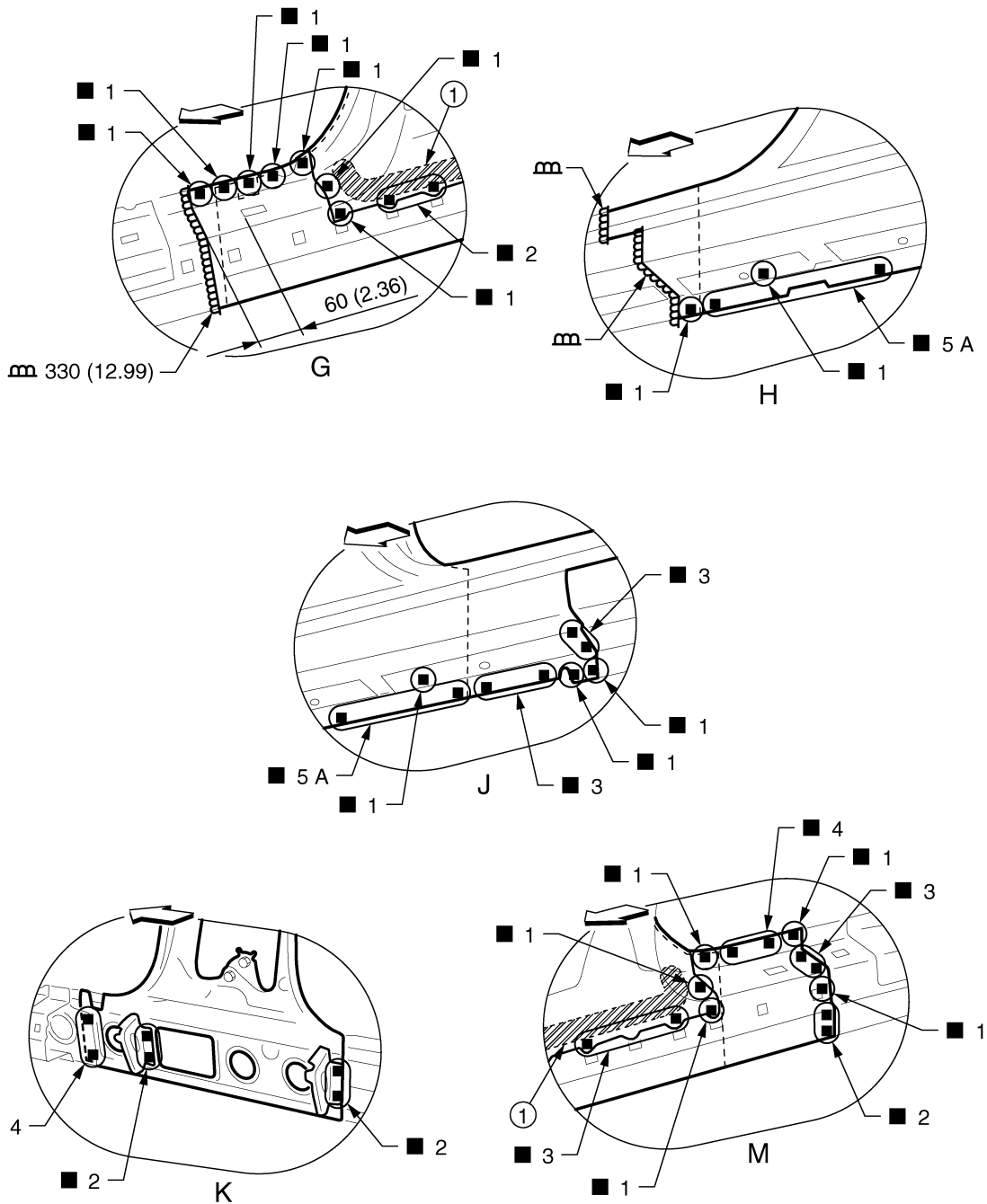
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1919GB

1. Urethane foam

Unit: mm (in)

←: Vehicle front

View G and M: Before installing outer front side body

View K: Before installing outer front side body, lower center pillar brace, and outer sill reinforcement

Outer Sill

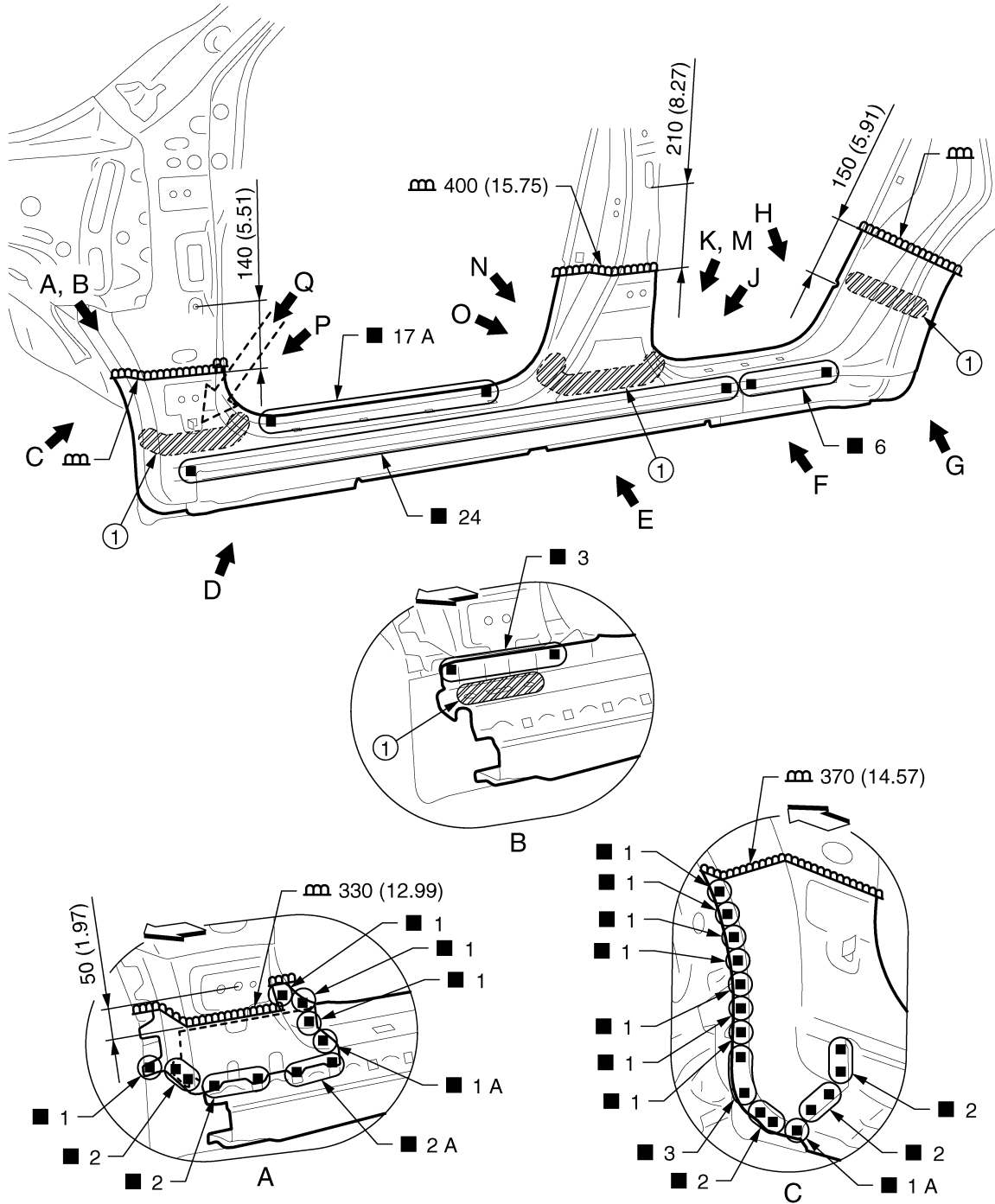
INFOID:000000010258685

Remove the front pillar brace (reusable) and lower center pillar brace (reusable) for easier installation.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1832GB

1. Urethane foam

Unit: mm (in)

◁: Vehicle front

Replacement parts

● Outer sill (LH)

● Outer sill reinforcement (LH)

● Front fender bracket assembly (LH)

View A: Before installing outer sill

View B: Before installing outer sill and front pillar brace

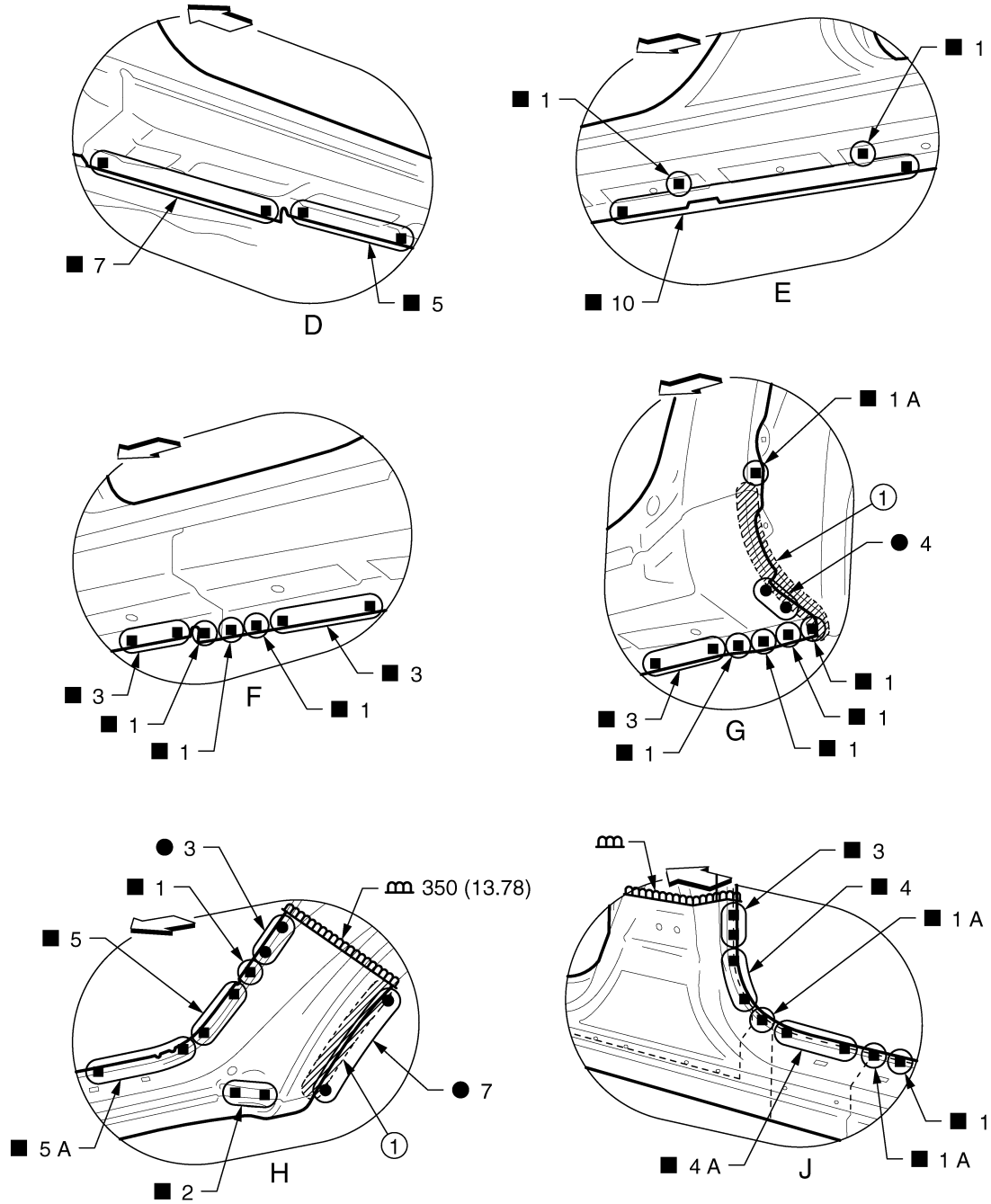
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



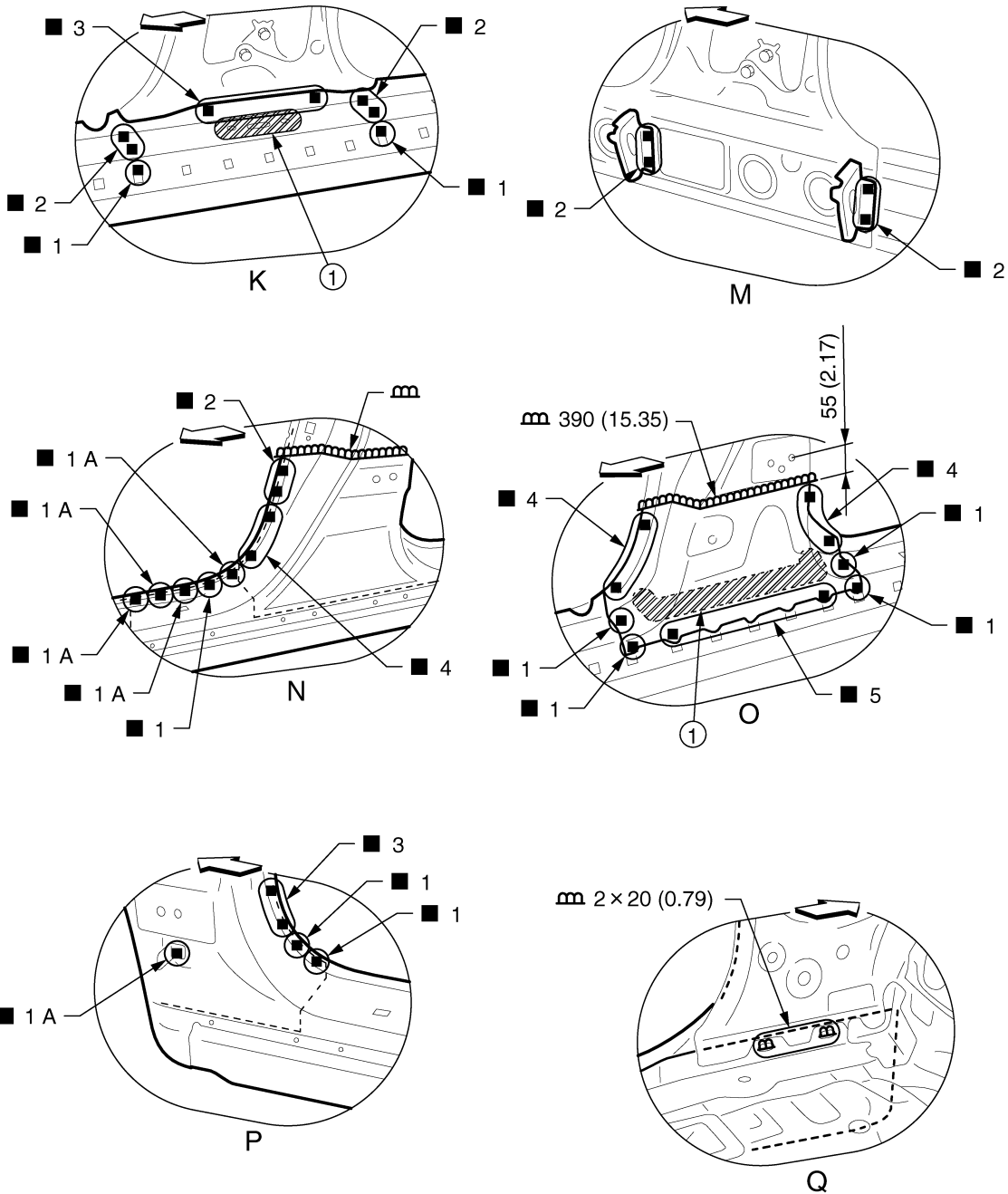
JSKIA1833GB

- 1. Body sealing
- Unit: mm (in)
- ↔: Vehicle front

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



- 1. Urethane foam
 - 2. Body sealing
- Unit: mm (in)
- ↔: Vehicle front

View K: Before installing outer sill and lower center pillar brace
 View M: Before installing outer sill, lower center pillar brace, and outer sill reinforcement
 View O: Before installing outer sill

JSKIA1834GB

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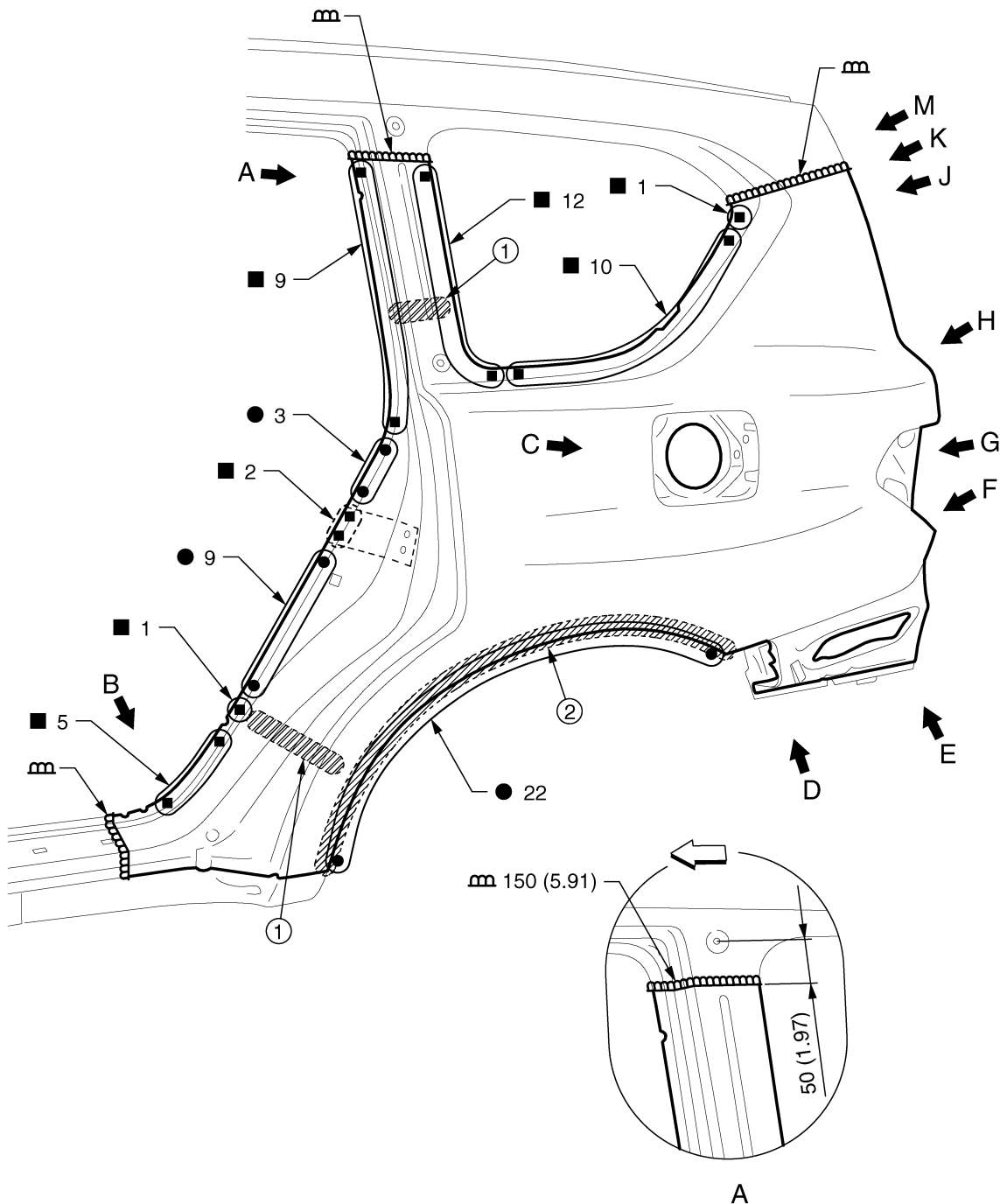
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Rear Fender

INFOID:000000010258686



JSKIA1835GB

- 1. Urethane foam
- 2. Body sealing

Unit: mm (in)

◀: Vehicle front

(○): Weld the parts onto the back of the component part.

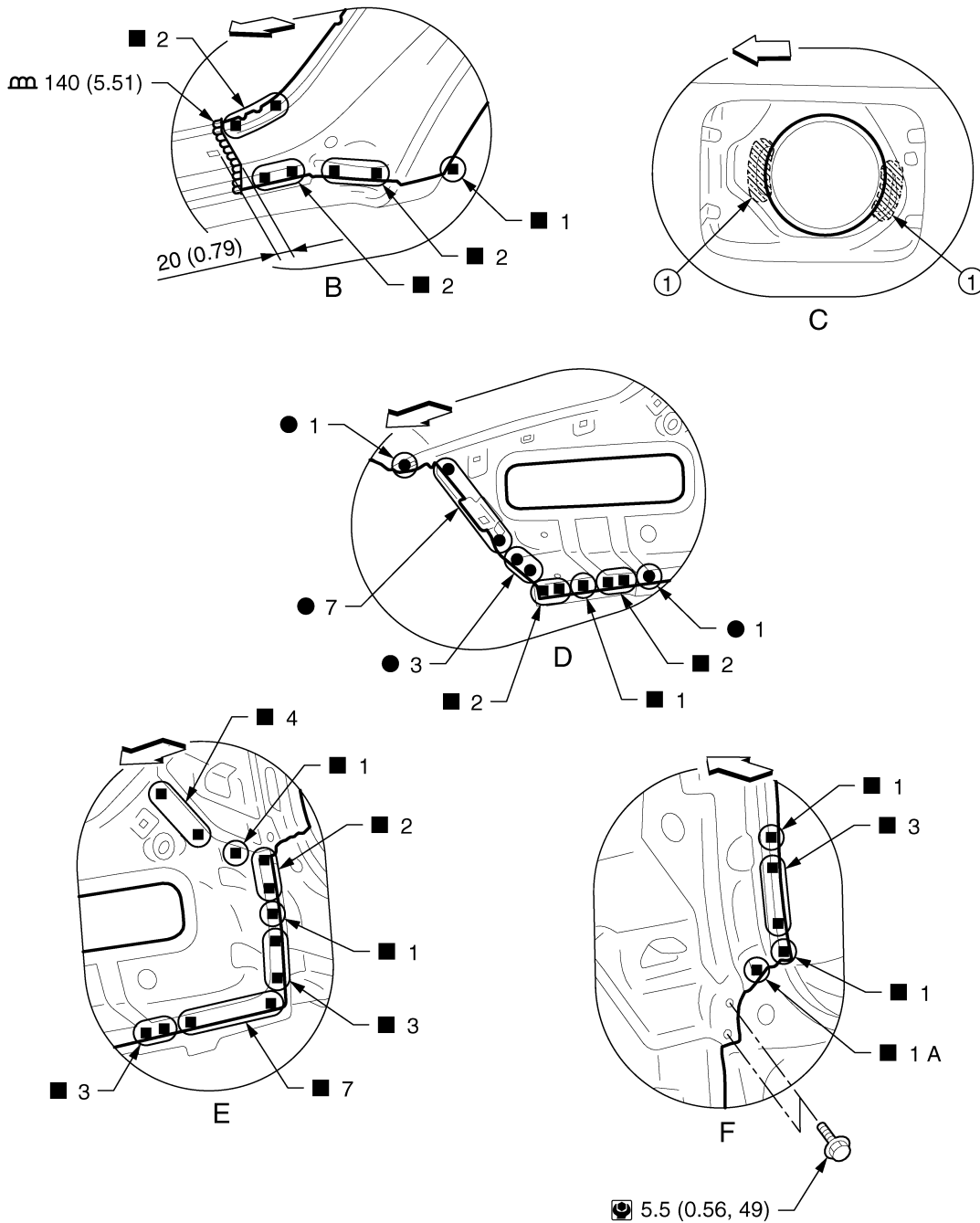
Replacement parts

- Rear fender (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



- 1. Adhesive
- Unit: mm (in)
- ↔: Vehicle front
- Refer to [GI-4, "Components"](#) for symbols in the figure.

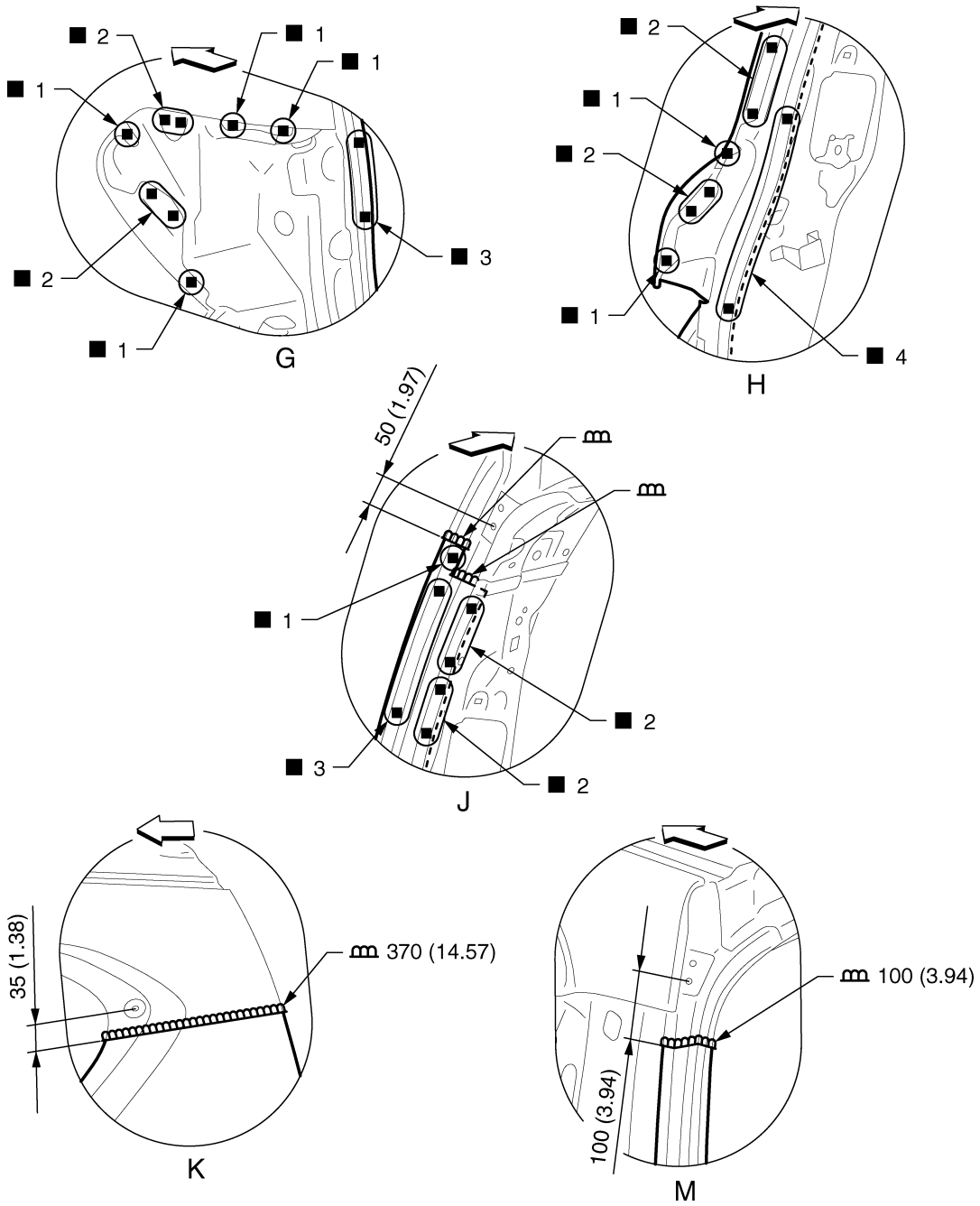
JSKIA1836GB

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1837GB

Unit: mm (in)

↔: Vehicle front

View M: Before installing rear fender

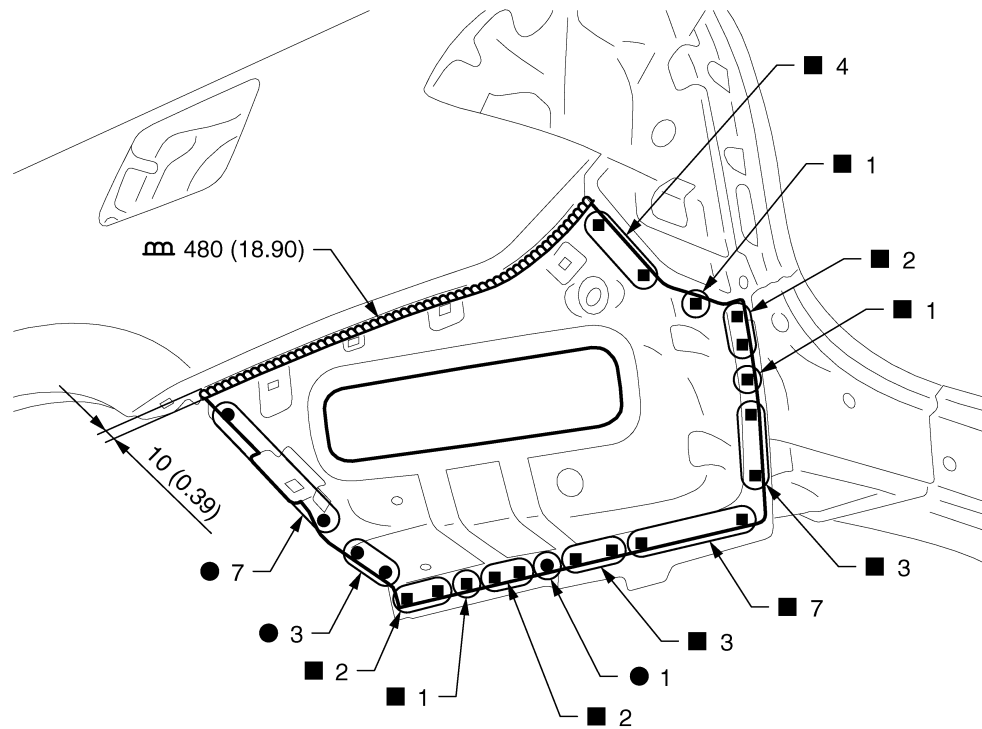
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Rear Fender Extension

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Unit: mm (in)

Replacement parts

- Rear fender extension (LH)

Rear Panel and Rear End Crossmember

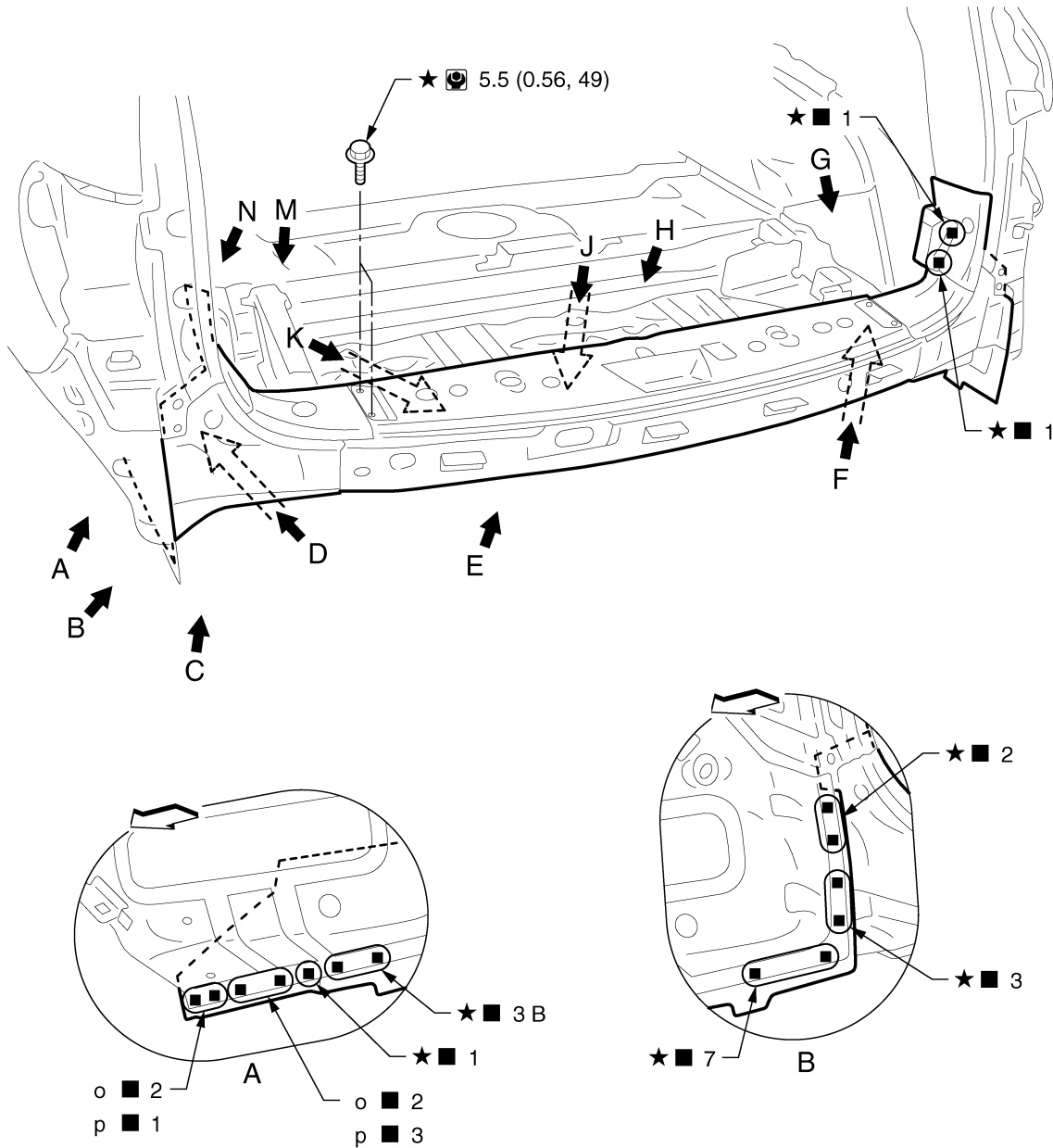
INFOID:000000010258688

Remove the rear side member (reusable) and the rear end cross bracket (reusable) for easier installation.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1920GB

o. Left side

p. Right side

↔: Vehicle front

★: Welding method, the number of welding points, and the tightening torque apply to both side of the vehicle. Refer to [GI-4, "Components"](#) for symbols in the figure.

Replacement parts

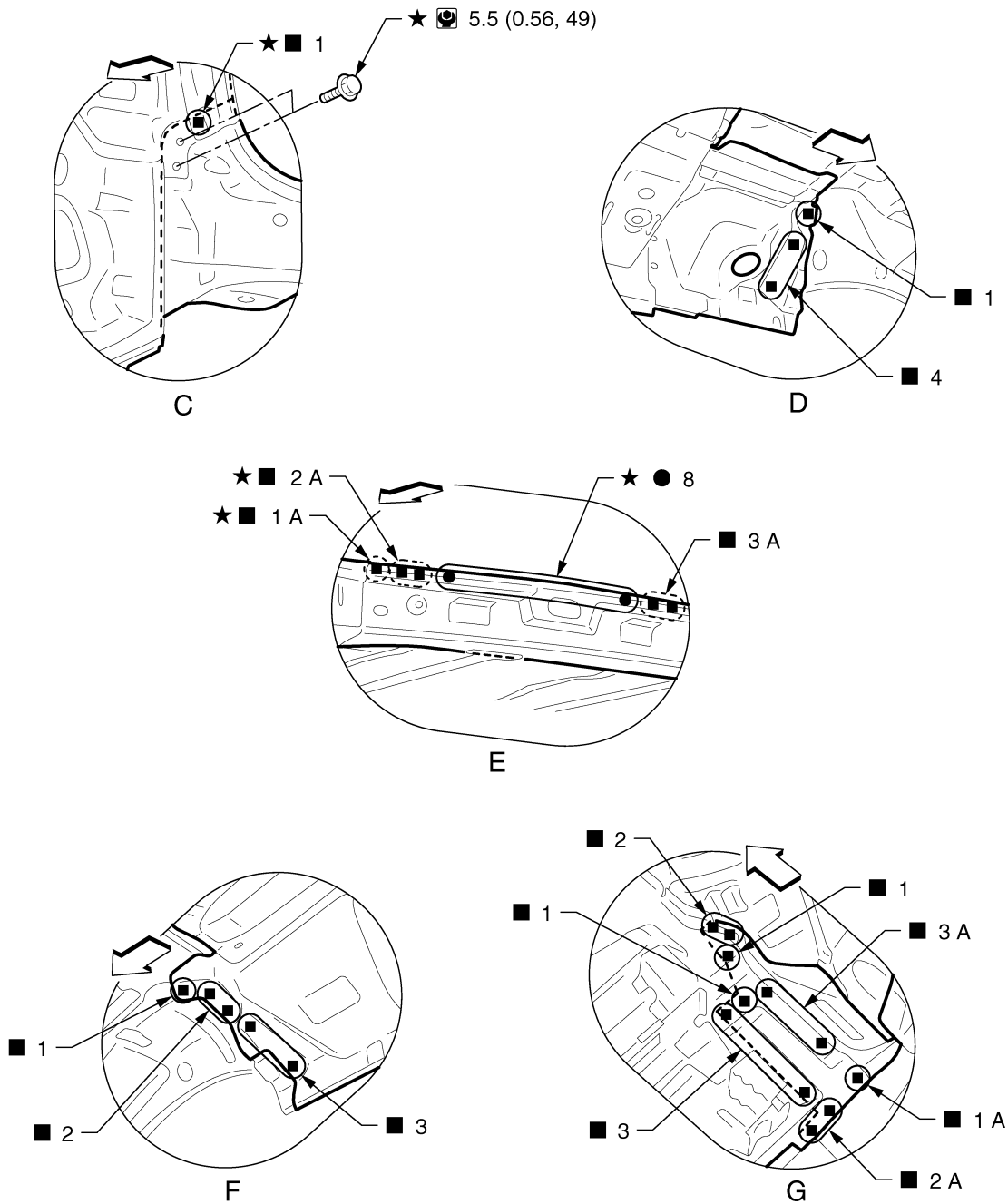
● Rear crossmember

● Upper rear end crossmember assembly

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1840GB

⇐ Vehicle front.

○: Weld the parts onto the back of the component part.

★: Welding method, the number of welding points, and the tightening torque apply to both side of the vehicle. Refer to [GI-4, "Components"](#) for symbols in the figure.

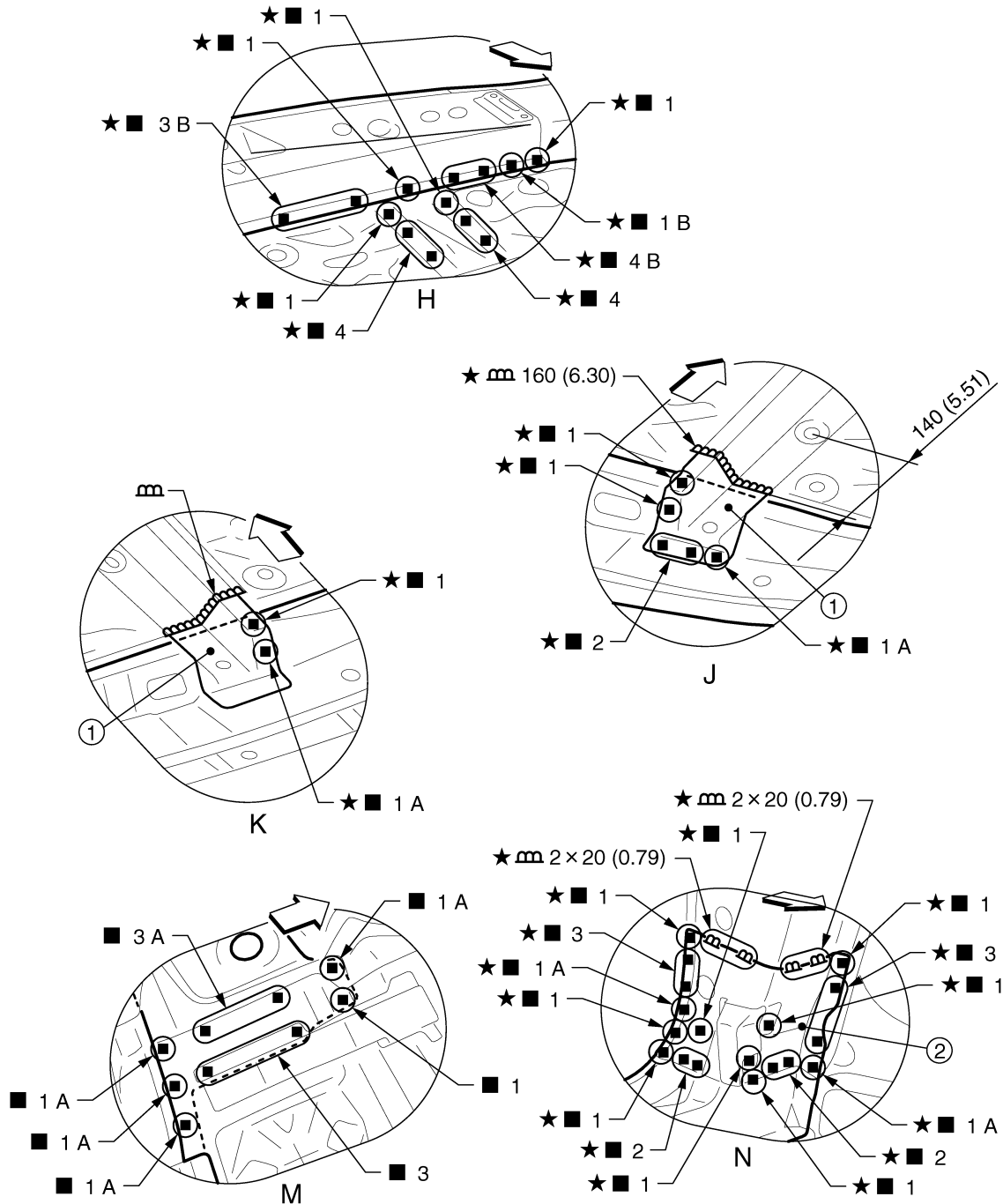
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1921GB

1. Rear side member

2. Rear end cross bracket

Unit: mm (in)

◁: Vehicle front

★: Welding method, the number of welding points, and the tightening torque apply to both side of the vehicle.

Rear Floor Rear

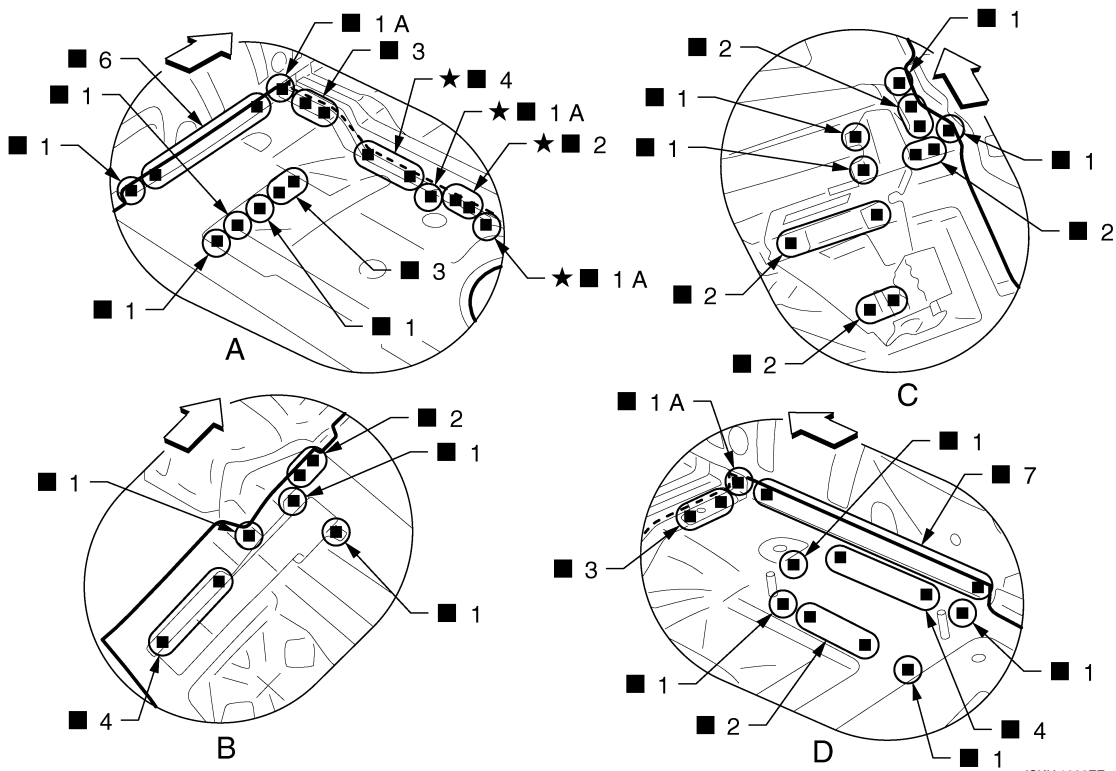
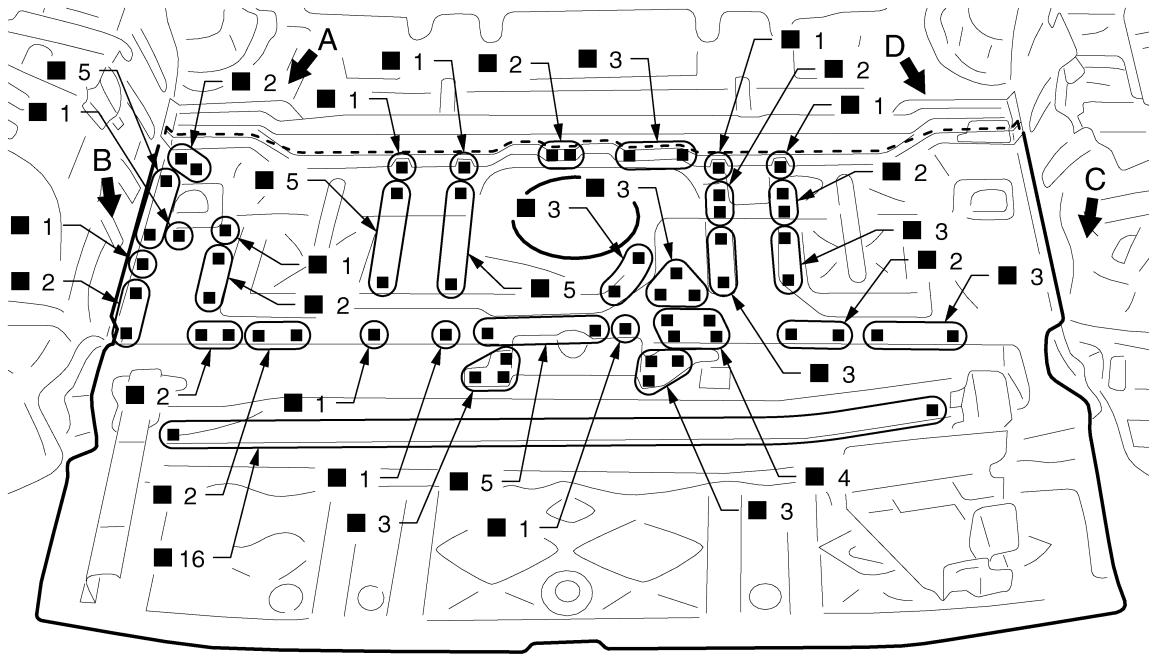
INFOID:000000010258689

Work after rear panel and rear end crossmember are removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA1922ZZ

⇐ Vehicle front

★: Welding method and the number of welding points apply to both side of the vehicle.

Replacement parts

- Rear floor rear
- Jack mounting bracket
- Trim mounting bracket assembly
- Rear floor board reinforcement assembly

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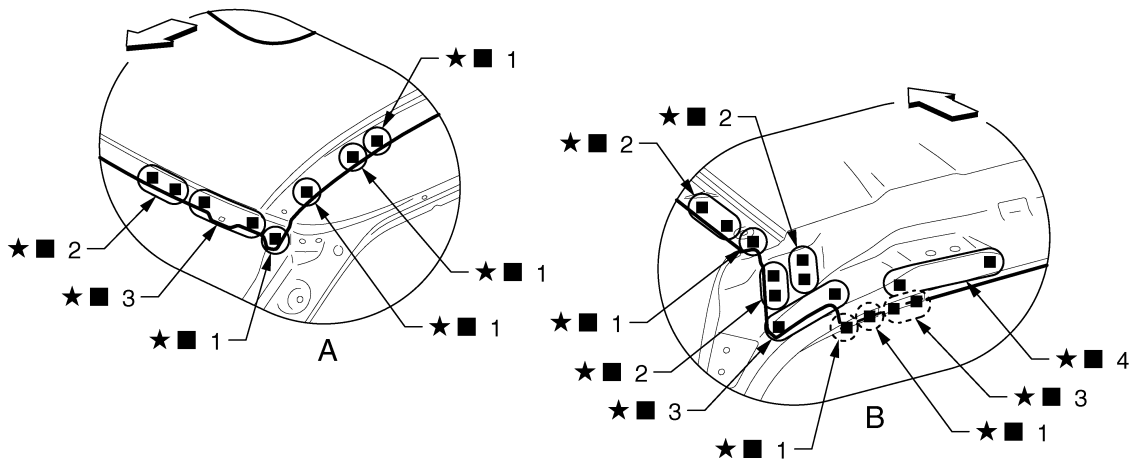
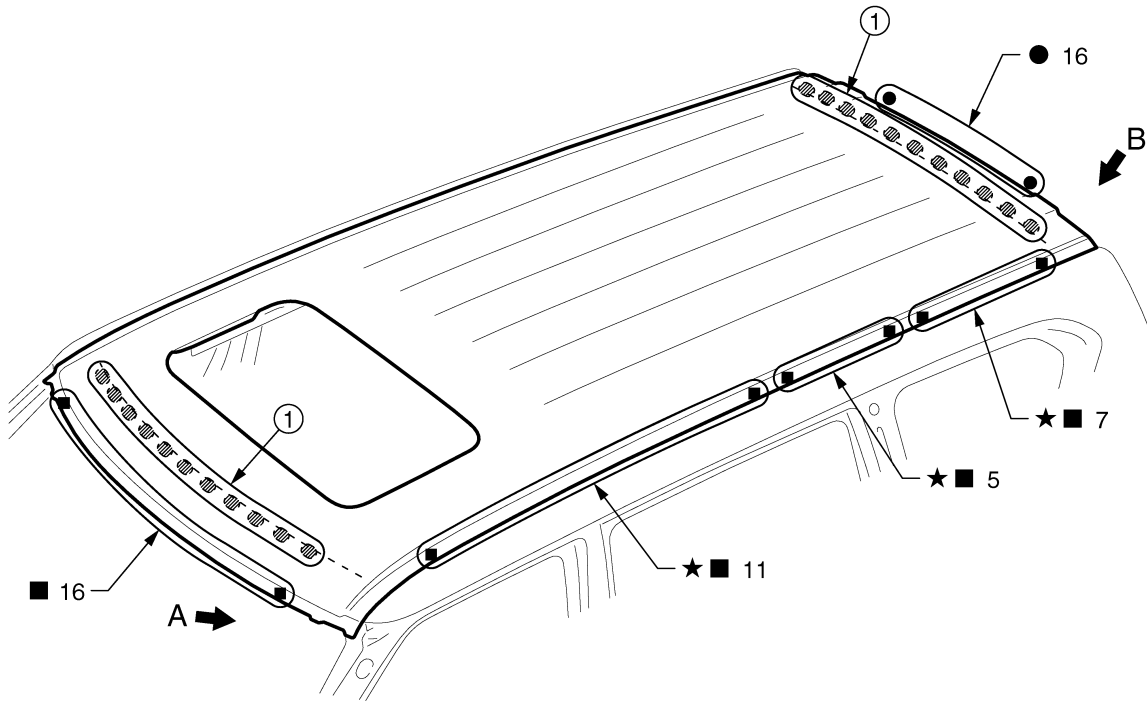
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Roof

INFOID:000000011505777



JSKIA5445ZZ

1. Body sealing

◁: Vehicle front

(): Weld the parts onto the back of the component part.

★: Welding method and the number of welding points apply to both side of the vehicle.

Replacement parts
 ● Roof assembly

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

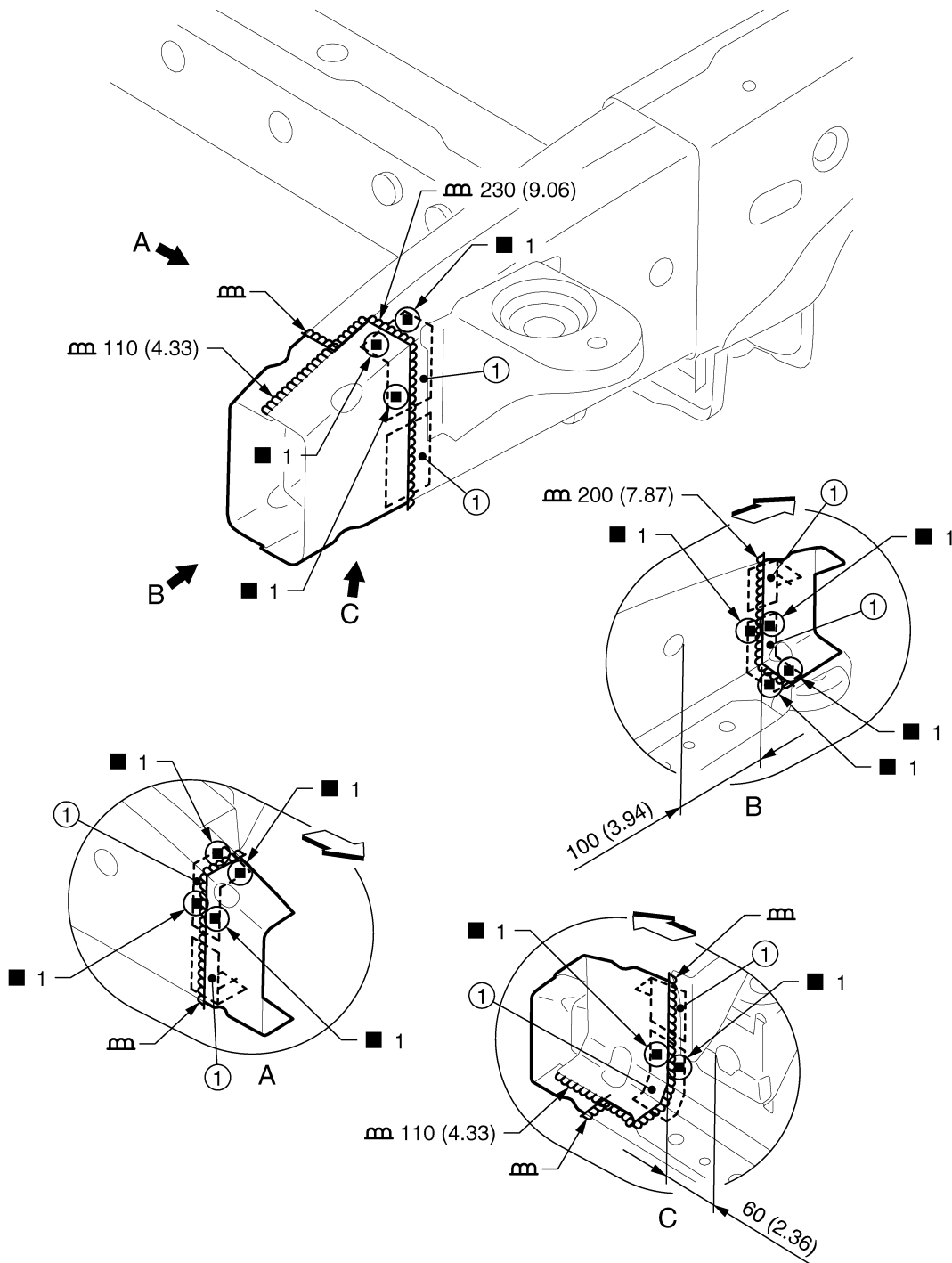
Crush Horn

INFOID:000000010258690

Work after front bumper crossmember assembly is removed.

CAUTION:

Create the reinforcing sheet from the redundant area of service parts for butt welding area. Weld the reinforcing sheet on the back of butt welding area, and then perform butt welding. After welding, apply anti-corrosive wax on the reinforcing sheet-welded area.



1. Reinforcing sheet

Unit: mm (in)

← Vehicle front

BRM

JSKIA2096GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Replacement parts

- Front side member assembly (LH)

View A and B: Before installing outer front side member

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

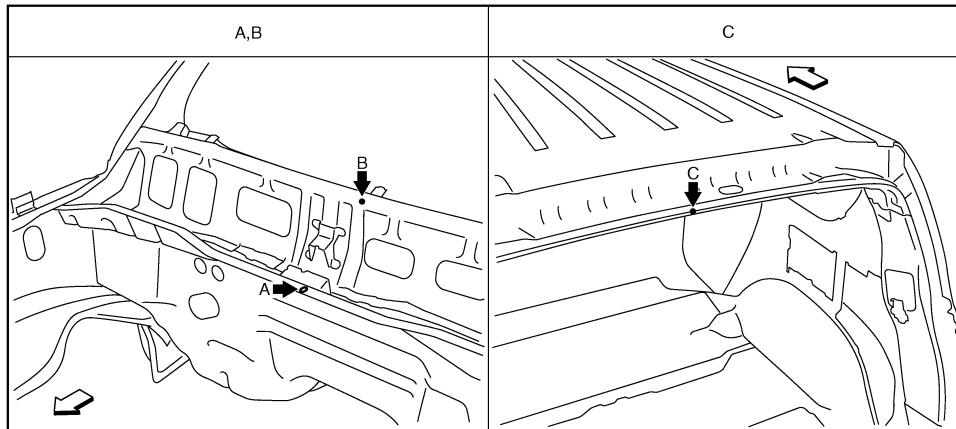
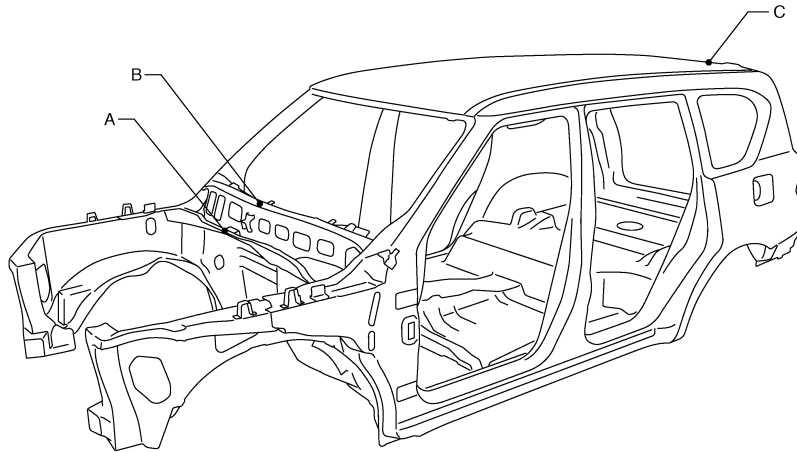
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Body Center Marks

INFOID:0000000010258691

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.



JSKIA1895ZZ

← Vehicle front

Unit: mm (in)

Points	Portion	Marks
A	Upper dash	Hole 7×12 (0.28×0.47)
B	Cowl top	Embossment
C	Rear roof	Indent

Description

INFOID:0000000010258692

- 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.

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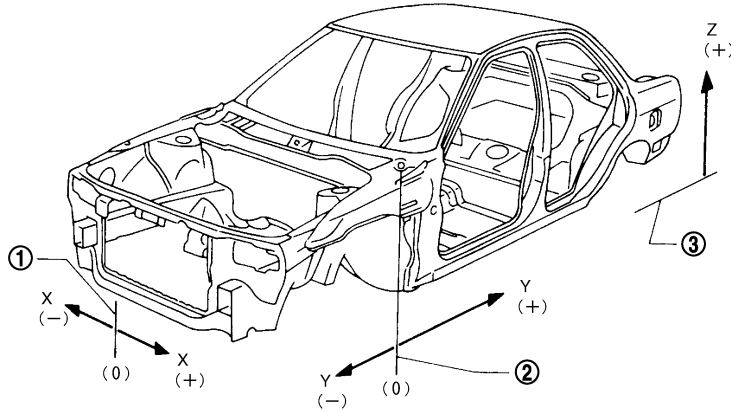
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

- 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 [300 mm (11.81 in) below datum line ("OZ" at design plan)]



JSKIA0073GB

① Vehicle center

② Front axle center

③ Imaginary base line

Engine Compartment

INFOID:000000010258693

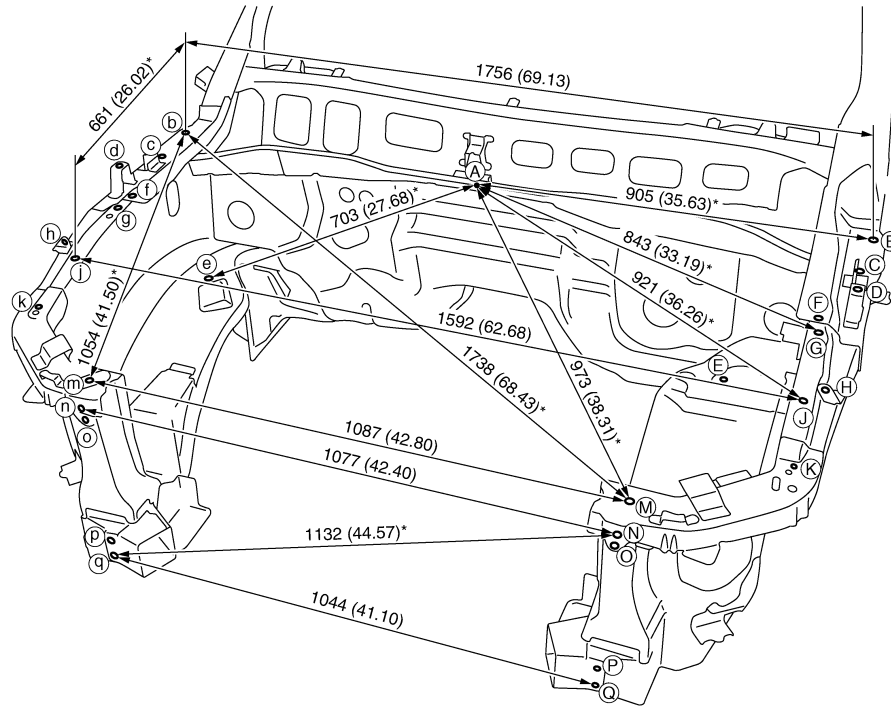
Measurement

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]



JSKIA1946GB

Unit: mm (in)

«The others»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - C	865 (34.06)*		C - M	897 (35.31)*		F - m	1467 (57.76)*		N - o	1078 (42.44)*	
A - D	871 (34.29)*		C - m	1635 (64.37)*		G - g	1608 (63.31)		N - p	1117 (43.98)*	
A - F	821 (32.32)*		D - d	1719 (67.68)		G - j	1614 (63.54)*		N - Q	397 (15.63)*	
A - H	938 (36.93)*		E - M	625 (24.61)*		G - M	613 (24.13)*		O - o	1077 (42.40)	
A - K	1013 (39.88)*		E - m	1320 (51.97)*		G - m	1457 (57.36)*		O - P	322 (12.68)*	
B - G	453 (17.83)*		F - f	1588 (62.52)		H - h	1657 (65.24)		O - p	1108 (43.62)*	
B - g	1740 (68.50)*		F - J	257 (10.12)*		J - M	427 (16.81)*		O - q	1123 (44.21)*	
B - j	1798 (70.79)*		F - j	1611 (63.43)*		J - m	1383 (54.45)*		P - p	1044 (41.10)	
C - c	1720 (67.72)		F - M	652 (25.67)*		K - k	1600 (62.99)		P - q	1045 (41.14)*	

Measurement Points

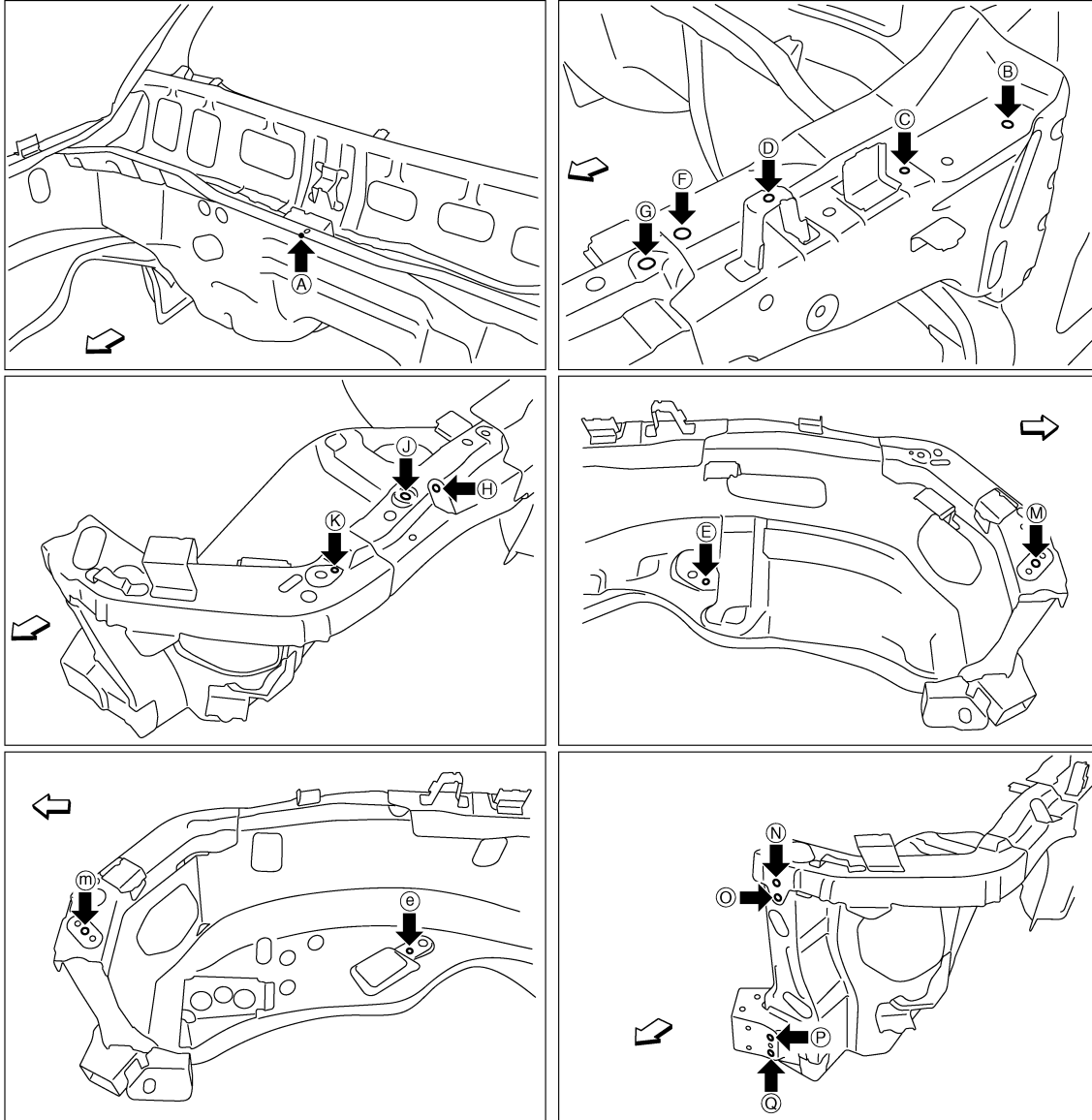
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1947ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash flange end of center positioning mark	E, e	Lower hoodledge hole center $\phi 8$ (0.31)
B, b	Hood hinge installing hole center $\phi 11$ (0.43)	G, g, J, j	Hoodledge connector bracket hole center G, g: 14x12 (0.55x0.47) J, j: $\phi 12$ (0.47)
C, c, F, f	Hoodledge reinforcement hole center C, c: $\phi 8$ (0.31) F, f: $\phi 12$ (0.47)	K, k, M, m, N, n, O, o	Upper radiator core support hole center K, k: $\phi 8$ (0.31) M, m: $\phi 12$ (0.47) N, n, O, o: $\phi 11$ (0.43)
D, d, H, h	Front fender installing hole center $\phi 7$ (0.28)	P, p, Q, q	Lower outer radiator core connector hole center $\phi 7$ (0.28)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

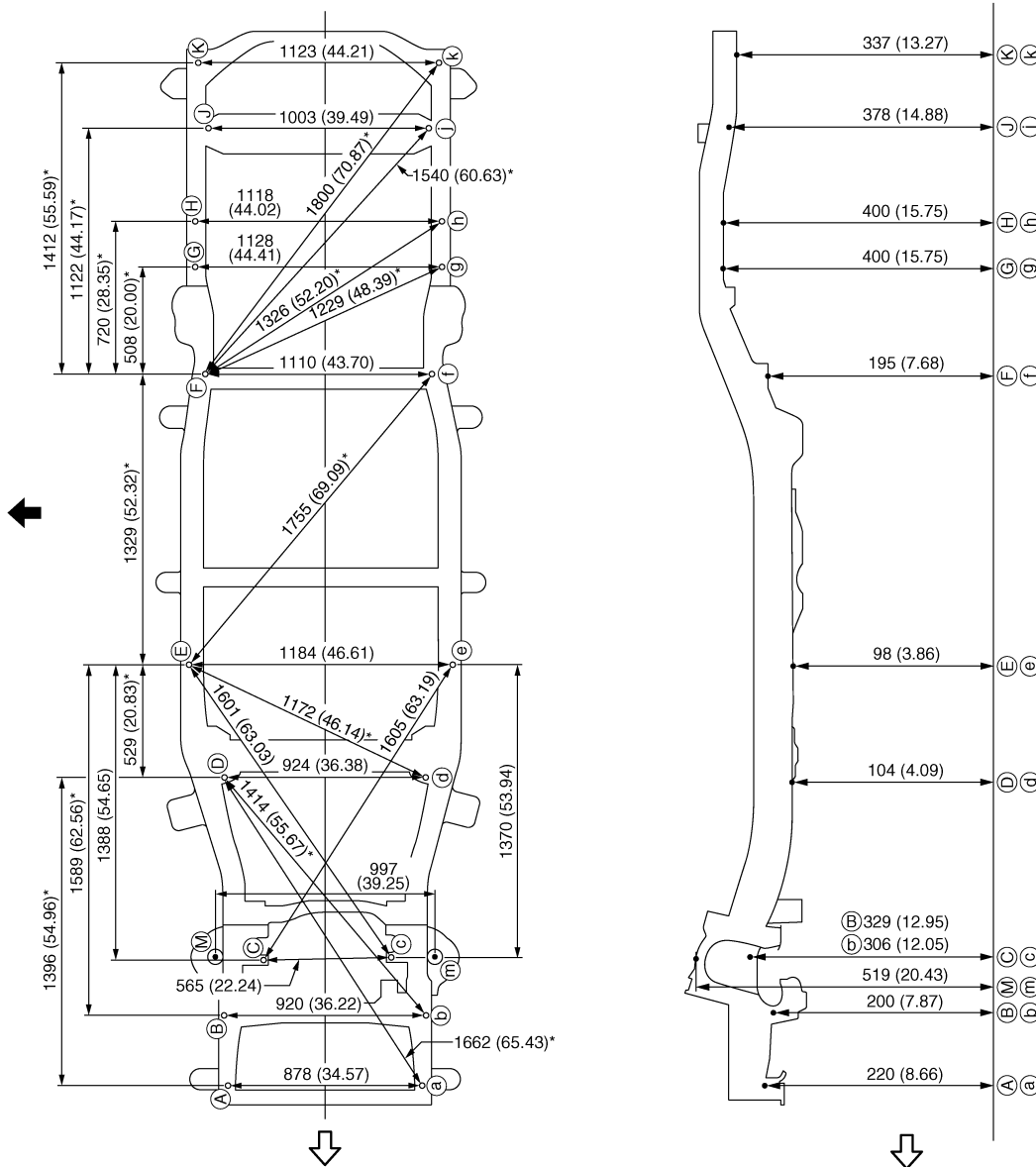
Underbody

INFOID:000000010258694

Measurement

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

The following figure shows a bottom view and a side view of the vehicle.



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JSKIA1948GB

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

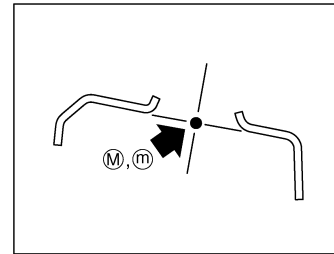
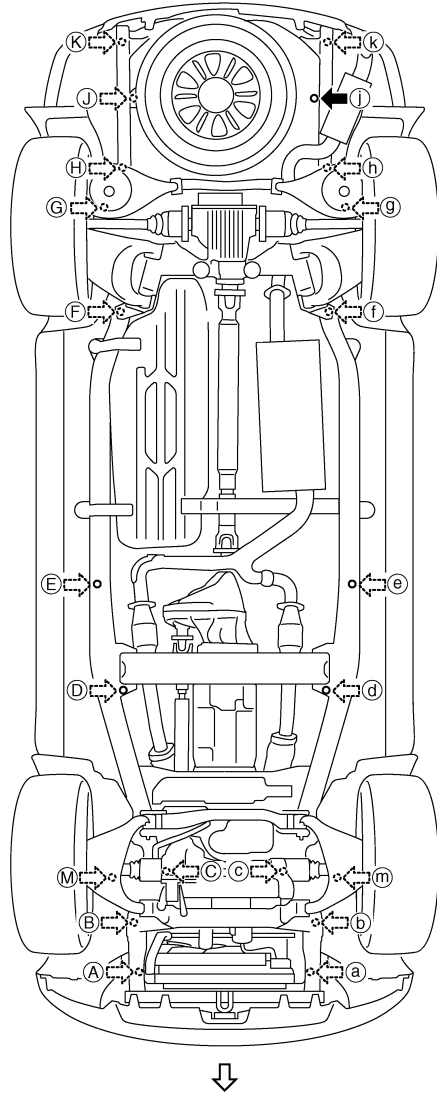
[FOR USA AND CANADA]

Unit: mm (in)

↔: Vehicle front

←: Vehicle left side

Measurement Points



JSKIA1949ZZ

↔: Vehicle front

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
A, a	±439.0 (±17.283)	-583.9 (-22.988)	220.3 (8.673)	Hole φ16 (0.63)	F, f	±555.0 (±21.850)	2645.0 (104.134)	195.0 (7.677)	Hole φ19.5 (0.768)
B, b	±460.0 (±18.110)	-260.0 (-10.236)	199.9 (7.870)	Hole φ12 (0.47)	G, g	±564.0 (±22.205)	3110.0 (122.441)	400.0 (15.748)	Hole φ16 (0.63)
C	274.6 (10.811)	-11.1 (-0.437)	329.2 (12.961)	Hole φ19 (0.75)	H, h	±559.0 (±22.008)	3335.0 (131.299)	400.0 (15.748)	Hole φ16 (0.63)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

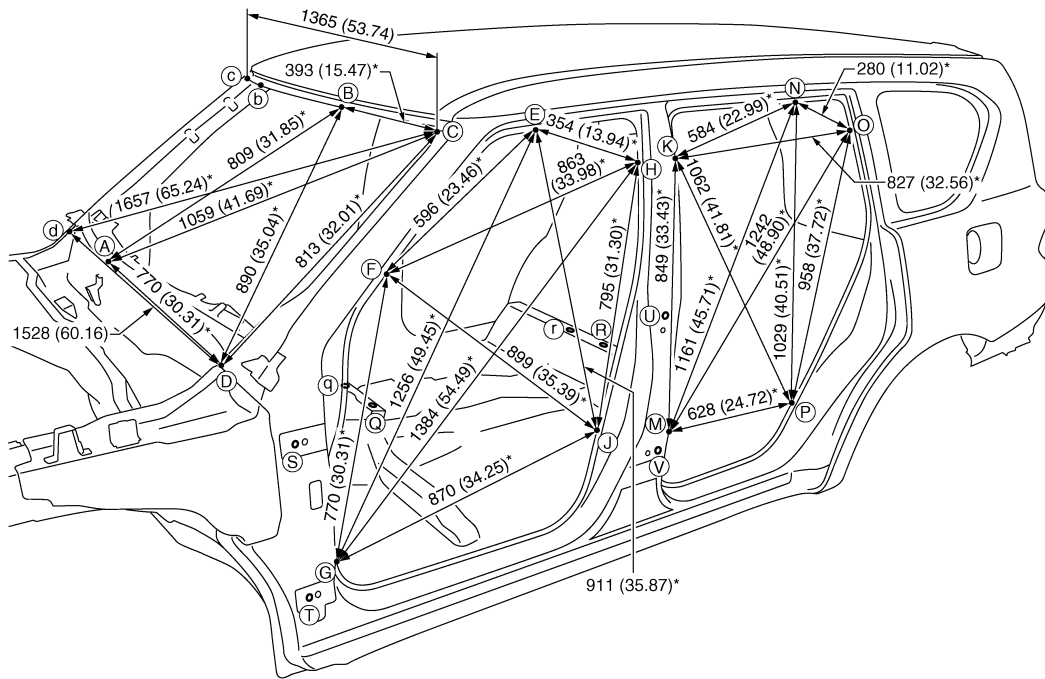
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
c	-289.6 (-11.402)	0.2 (0.008)	305.8 (12.039)	Hole ϕ 19 (0.75)	J, j	\pm 501.7 (\pm 19.752)	3750.7 (147.665)	378.4 (14.898)	Hole ϕ 8 (0.31)
D, d	\pm 461.8 (\pm 18.181)	807.5 (31.791)	104.1 (4.098)	Hole ϕ 10 (0.39)	K, k	\pm 561.6 (\pm 22.110)	4050.0 (159.449)	337.0 (13.268)	Hole ϕ 15 (0.59)
E, e	\pm 592.0 (\pm 23.307)	1320.0 (51.968)	98.3 (3.870)	Hole 20x8 (0.79x0.31)	M, m	\pm 498.4 (\pm 19.622)	-29.6 (-1.165)	519.2 (20.441)	Hole ϕ 70 (2.76)

Passenger Compartment

INFOID:000000010258695

MEASUREMENT

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



BRM

JSKIA1900GB

Unit: mm (in)

«The others»

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Unit: mm (in)

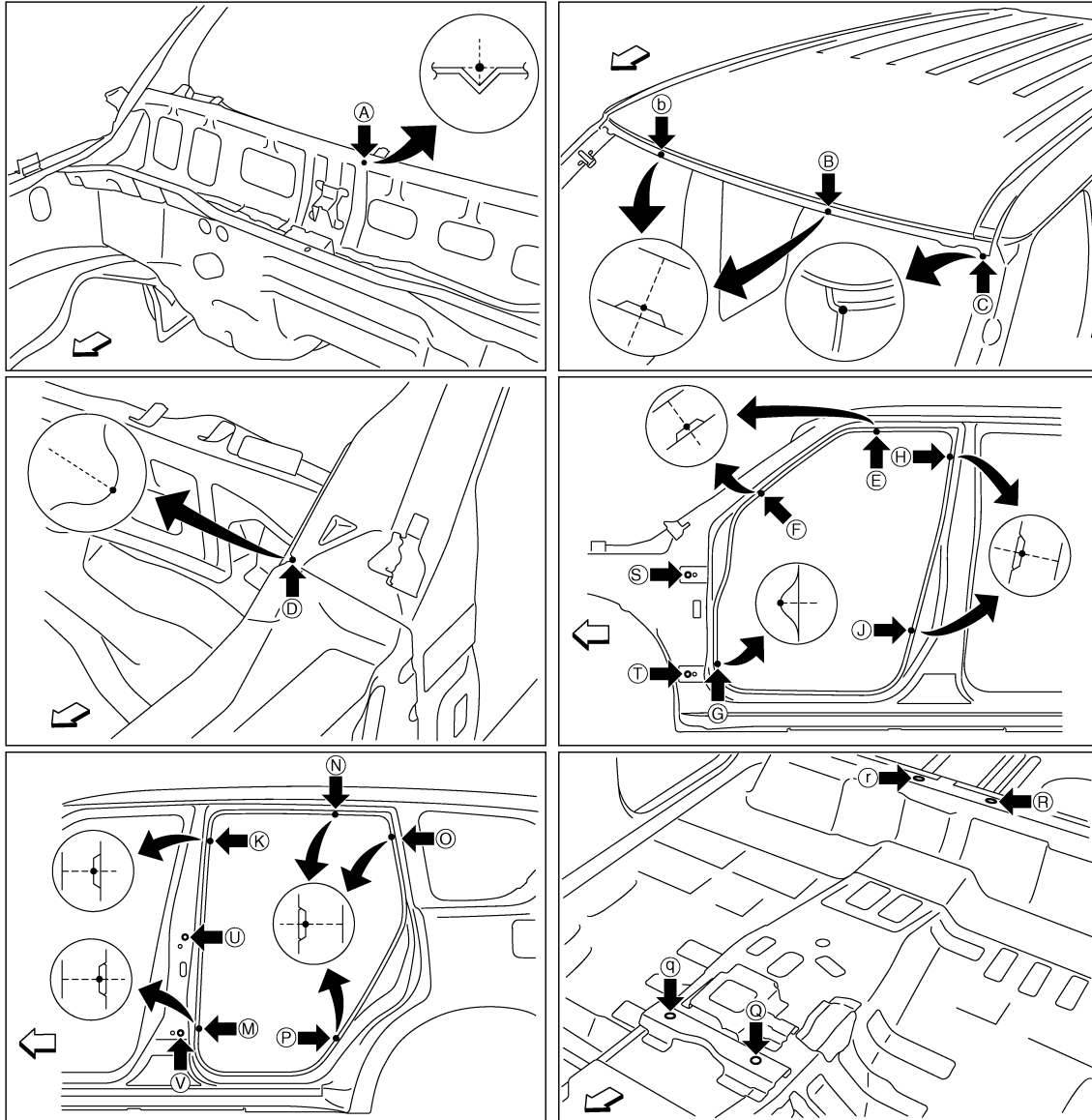
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1442 (56.77)		H - h	1528 (60.16)*		N - n	1416 (55.75)		R - M	820 (32.28)*	
E - f	1638 (64.49)*		H - j	1776 (69.92)*		N - o	1475 (58.07)*		R - N	1182 (46.54)*	
E - g	1987 (78.23)*		J - j	1651 (65.00)		N - p	1839 (72.40)*		R - O	1198 (47.17)*	
E - h	1526 (60.08)*		K - k	1527 (60.12)		O - o	1480 (58.27)		R - P	760 (29.92)*	
E - j	1792 (70.55)*		K - m	1799 (70.83)*		O - p	1829 (72.01)*		S - s	1783 (70.20)	
F - f	1615 (63.58)		K - n	1582 (62.28)*		P - p	1641 (64.61)		S - U	1183 (46.57)*	
F - g	1802 (70.94)*		K - o	1716 (67.56)*		Q - E	1178 (46.38)*		S - V	1195 (47.05)*	
F - h	1792 (70.55)*		K - p	1906 (75.04)*		Q - F	1031 (40.59)*		T - t	1813 (71.38)	
F - j	1864 (73.39)*		M - m	1648 (64.88)		Q - G	876 (34.49)*		T - U	1293 (50.91)*	
G - g	1644 (64.72)		M - n	1919 (75.55)*		Q - H	1217 (47.91)*		T - V	1158 (45.59)*	
G - h	2104 (82.83)*		M - o	1995 (78.54)*		Q - J	823 (32.40)*		U - u	1769 (69.65)	
G - j	1863 (73.35)*		M - p	1760 (69.29)*		R - K	1133 (44.61)*		V - v	1805 (71.06)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1901ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Cowl top positioning mark of center positioning mark	H, h, J, j, K, k, M, m	Center pillar indent
B, b	Roof indent	O, o, P, p	Rear fender indent
C, c	Front pillar joggle	Q, q	Parking brake bracket hole center $\phi 13$ (0.51)
D, d, E, e, N, n	Outer side body indent	R, r	2nd seat mounting front crossmember hole center $\phi 7$ (0.28)
F, f, G, g	Front pillar indent	S, s, T, t, U, u, V, v	Door hinge installing hole center S, s, U, u: $\phi 9$ (0.35) T, t, V, v: $\phi 12$ (0.47)

Rear Body

INFOID:000000010258696

MEASUREMENT

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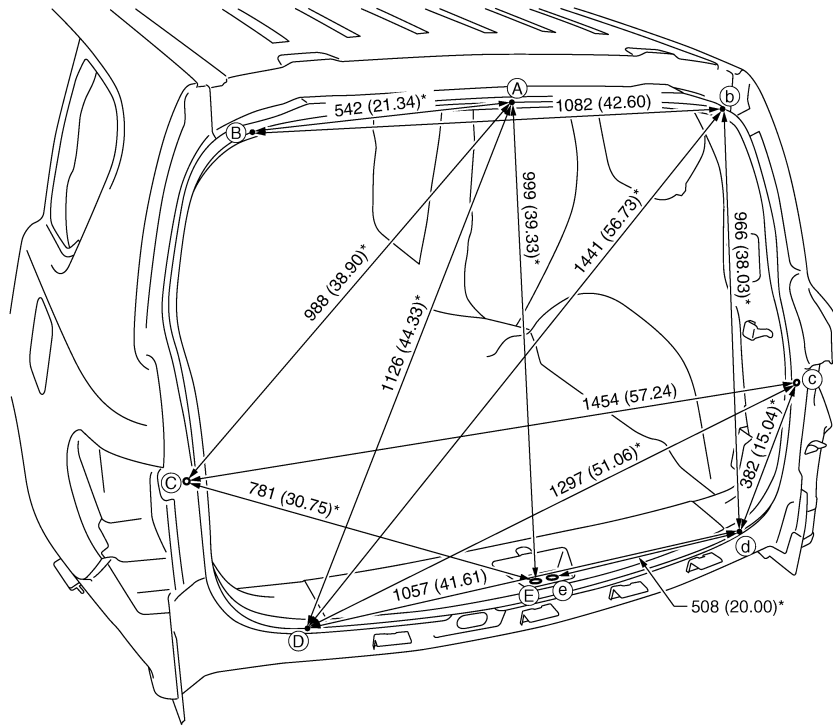
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

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



JSKIA1902GB

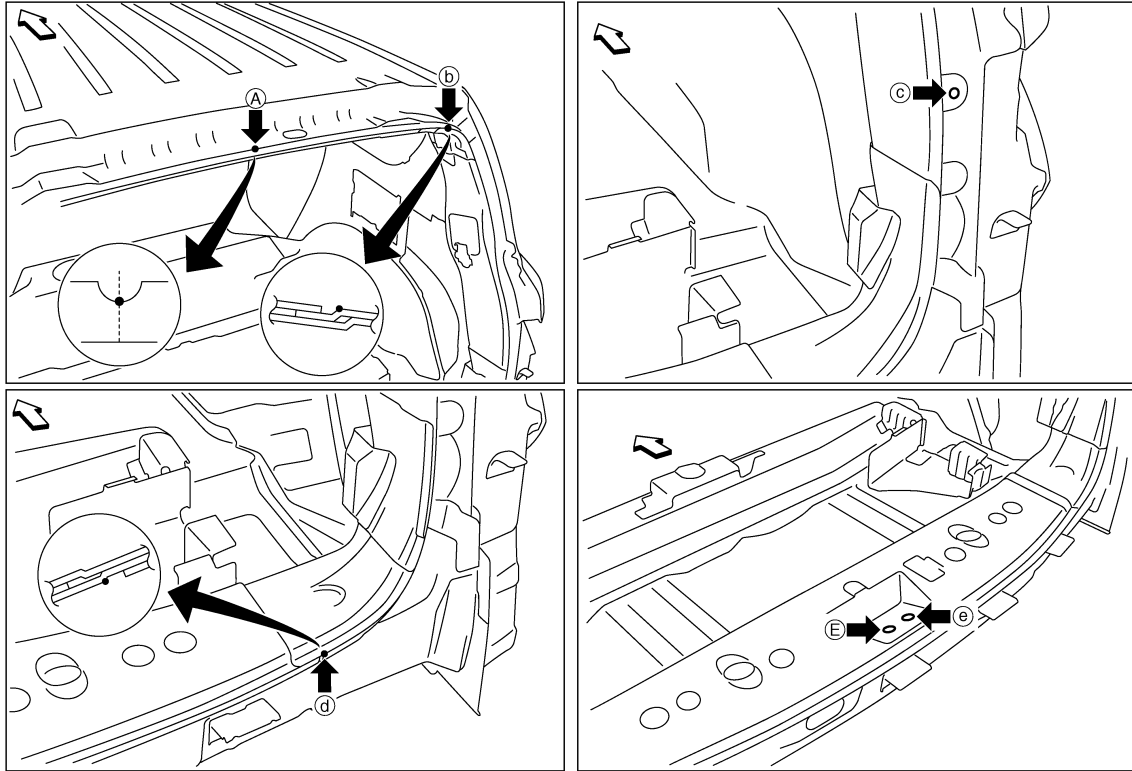
Unit: mm (in)

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1903ZZ

←: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Roof indent of center positioning mark	D, d	Rear center crossmember joggle
B, b	Upper back pillar main joggle	E, e	Rear end crossmember hole center $\phi 13$ (0.51)
C, c	Upper back pillar main hole center $\phi 7$ (0.28)		

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LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

LOCATION OF PLASTIC PARTS

Precautions for Plastics

INFOID:000000010258697

Abbreviation	Material name	Heat resisting 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.

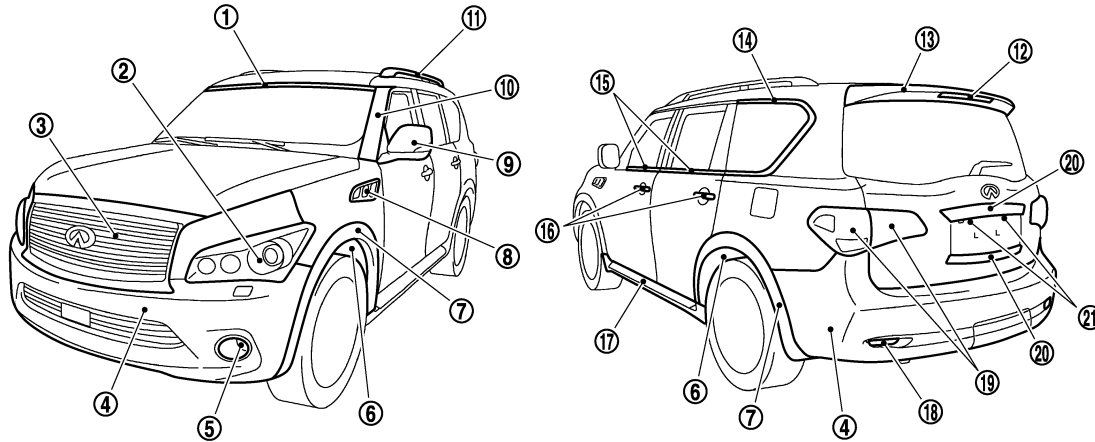
LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Location of Plastic Parts

INFOID:000000010258698



JSKIA1953ZZ

Component		Material	Component		Material	
1	Upper windshield molding	PVC + Stainless	12	High mount stop lamp	Lens PMMA	
2	Front combination lamp	Lens PC	13		Back door air spoiler	ABS
		Housing PP		14	Side window glass molding	Stainless
3	Front grille	ABS	15	Door outside molding	PVC + Stainless	
4	Bumper fascia	PP + EPM	16	Door outside handle	PC + ABS	
5	Front fog lamp	Lens Glass	17	Side step	Side step re-inforcement Aluminum	
		Housing PBT + ASA + Glass fiber			Kicking plate PP	
6	Fender protector	Front PP			18	Reflector
		Rear PP	19	Rear combination lamp (Rear fender)	Lens PMMA	
7	Over fender	Front PP + EPDM			Rear combination lamp (Back door)	Housing ABS
		Rear PP + EPDM	Lens PMMA			
8	Front fender duct	ABS	20	Back door finisher	Upper ABS	
9	Door outside mirror	Housing ABS			Lower ABS	
		Cover ABS	21	License plate lamp	Lens PC	
10	Front pillar finisher	PC + PET			Housing PC	
11	Roof rack	Front cover ABS				
		Center cover ABS				
		Rear cover PC + PET				
		Pipe Aluminum				

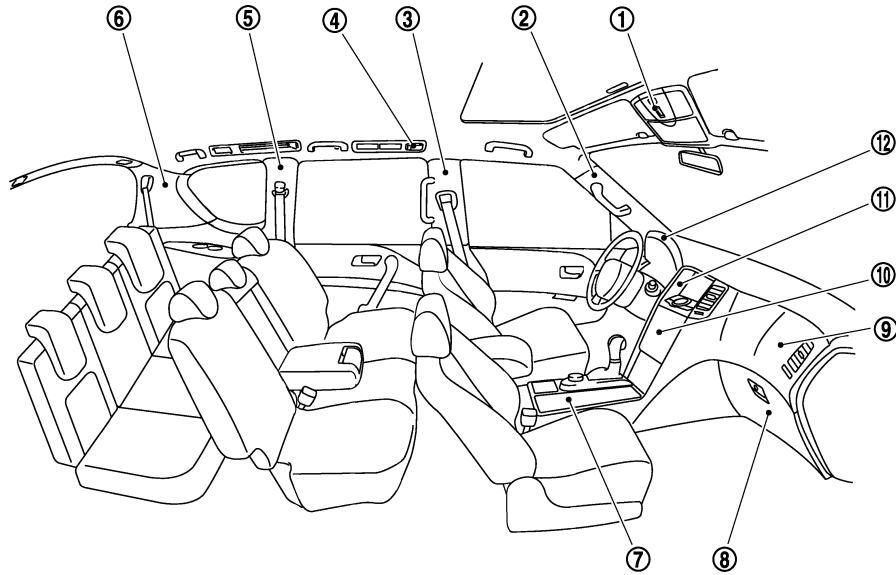
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LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA1905ZZ

Component		Material	Component		Material	
1	Map lamp	Lens	PC	7	Center console	PP
		Housing	PP	8	Glove box	PP
2	Front pillar garnish	PP	9	Instrument panel	Core	PP
3	Center pillar garnish	PP			Skin	TPU
4	Personal lamp	Lens	PC	10	Cluster lid C	PC + ABS
		Housing	PP	11	Cluster lid D	PC + ABS
5	Rear pillar finisher	PP	12	Cluster lid A	ABS	
6	Back pillar garnish	PP				

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

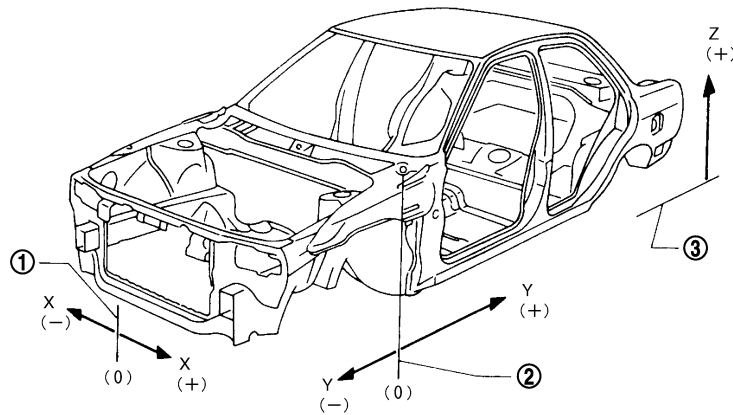
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Description

INFOID:0000000010258699

- 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 [300 mm (11.81 in) below datum line ("OZ" at design plan)]



JSKIA0073GB

① Vehicle center

② Front axle center

③ Imaginary base line

Engine Compartment

INFOID:0000000010258700

Measurement

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

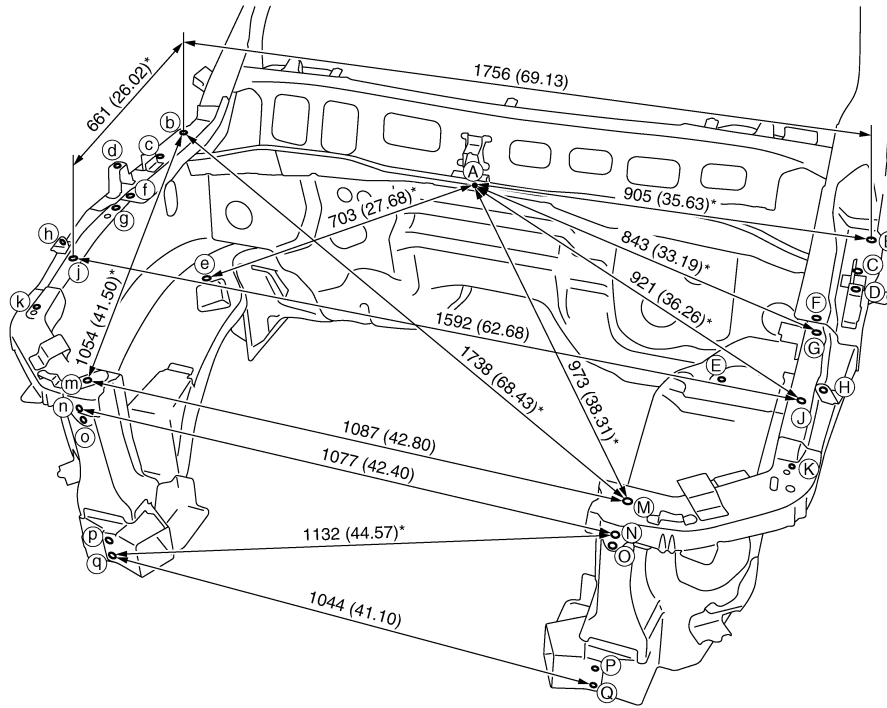
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA1946GB

Unit: mm (in)

«The others»

Unit: mm (in)

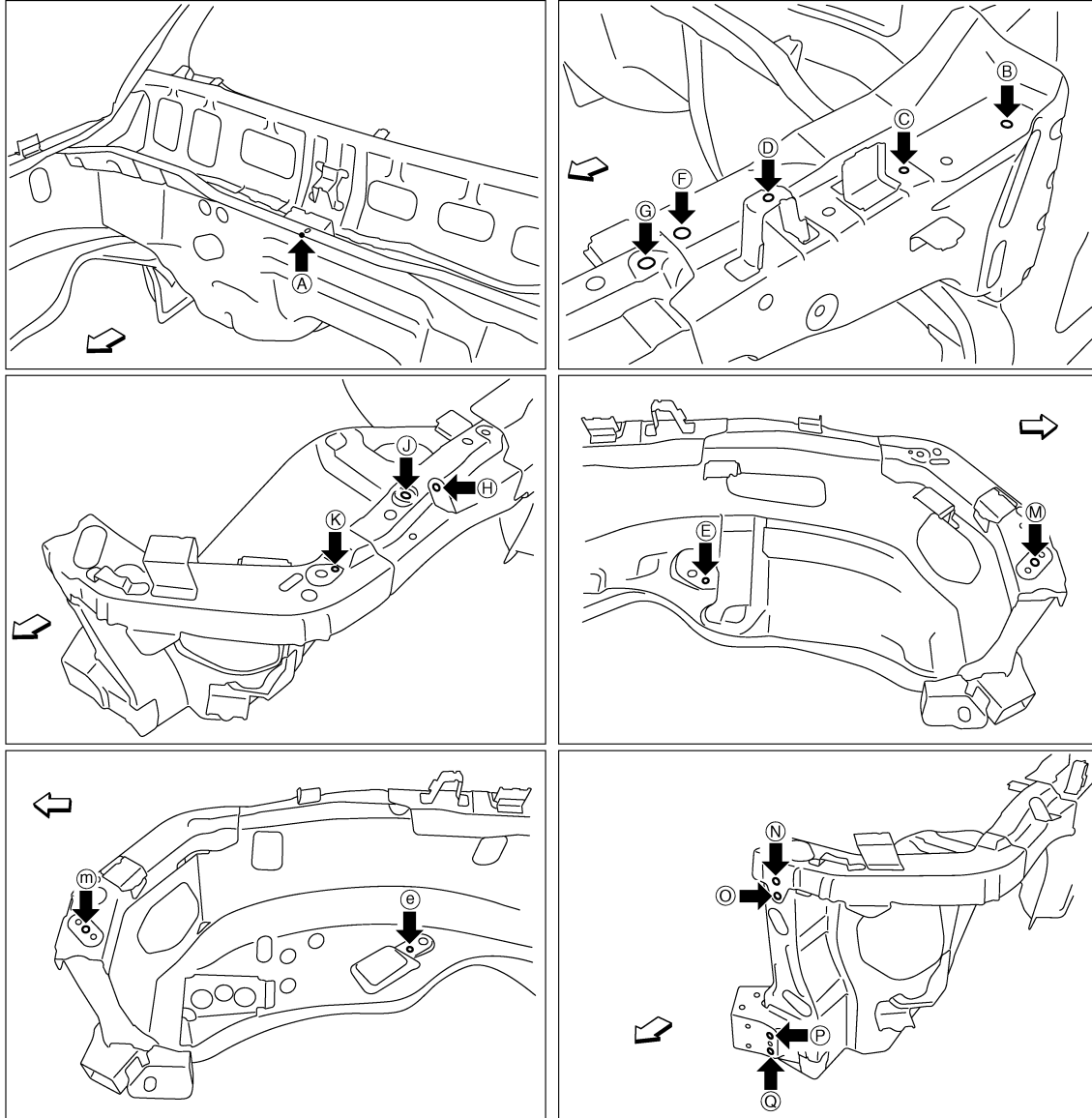
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - C	865 (34.06)*		C - M	897 (35.31)*		F - m	1467 (57.76)*		N - o	1078 (42.44)*	
A - D	871 (34.29)*		C - m	1635 (64.37)*		G - g	1608 (63.31)		N - p	1117 (43.98)*	
A - F	821 (32.32)*		D - d	1719 (67.68)		G - j	1614 (63.54)*		N - Q	397 (15.63)*	
A - H	938 (36.93)*		E - M	625 (24.61)*		G - M	613 (24.13)*		O - o	1077 (42.40)	
A - K	1013 (39.88)*		E - m	1320 (51.97)*		G - m	1457 (57.36)*		O - P	322 (12.68)*	
B - G	453 (17.83)*		F - f	1588 (62.52)		H - h	1657 (65.24)		O - p	1108 (43.62)*	
B - g	1740 (68.50)*		F - J	257 (10.12)*		J - M	427 (16.81)*		O - q	1123 (44.21)*	
B - j	1798 (70.79)*		F - j	1611 (63.43)*		J - m	1383 (54.45)*		P - p	1044 (41.10)	
C - c	1720 (67.72)		F - M	652 (25.67)*		K - k	1600 (62.99)		P - q	1045 (41.14)*	

Measurement Points

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



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BRM

JSKIA1947ZZ

← Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash flange end of center positioning mark	E, e	Lower hoodledge hole center $\phi 8$ (0.31)
B, b	Hood hinge installing hole center $\phi 11$ (0.43)	G, g, J, j	Hoodledge connector bracket hole center G, g: 14×12 (0.55 \times 0.47) J, j: $\phi 12$ (0.47)
C, c, F, f	Hoodledge reinforcement hole center C, c: $\phi 8$ (0.31) F, f: $\phi 12$ (0.47)	K, k, M, m, N, n, O, o	Upper radiator core support hole center K, k: $\phi 8$ (0.31) M, m: $\phi 12$ (0.47) N, n, O, o: $\phi 11$ (0.43)
D, d, H, h	Front fender installing hole center $\phi 7$ (0.28)	P, p, Q, q	Lower outer radiator core connector hole center $\phi 7$ (0.28)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

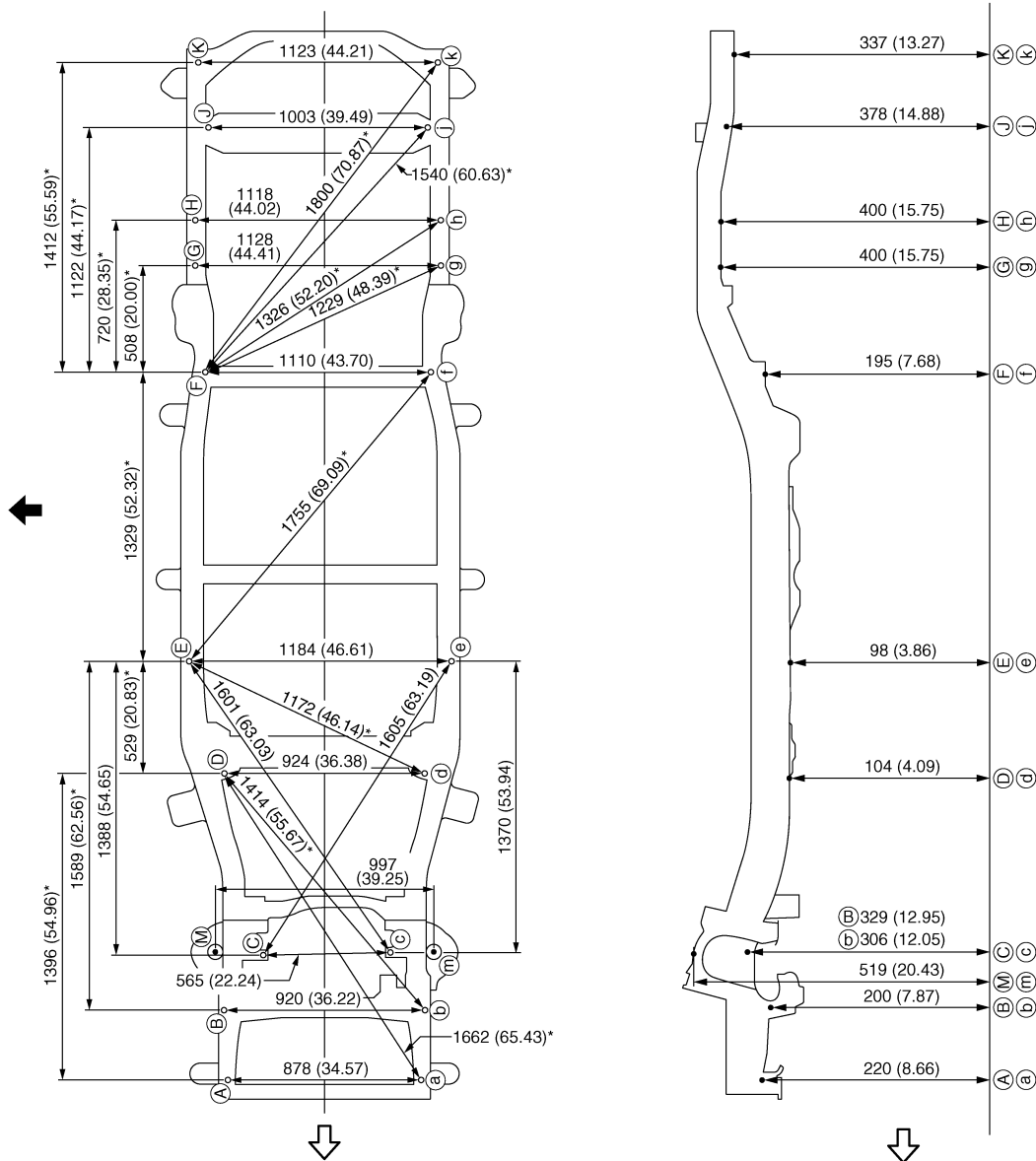
Underbody

INFOID:000000010258701

Measurement

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

The following figure shows a bottom view and a side view of the vehicle.



JSKIA1948GB

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

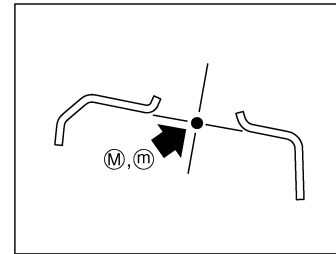
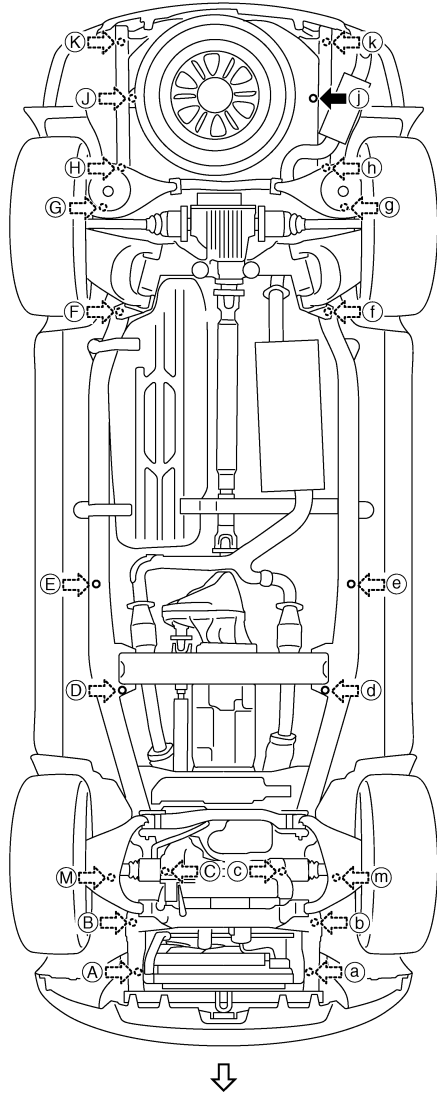
[FOR MEXICO]

Unit: mm (in)

↔: Vehicle front

←: Vehicle left side

Measurement Points



JSKIA1949ZZ

↔: Vehicle front

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
A, a	±439.0 (±17.283)	-583.9 (-22.988)	220.3 (8.673)	Hole φ16 (0.63)	F, f	±555.0 (±21.850)	2645.0 (104.134)	195.0 (7.677)	Hole φ19.5 (0.768)
B, b	±460.0 (±18.110)	-260.0 (-10.236)	199.9 (7.870)	Hole φ12 (0.47)	G, g	±564.0 (±22.205)	3110.0 (122.441)	400.0 (15.748)	Hole φ16 (0.63)
C	274.6 (10.811)	-11.1 (-0.437)	329.2 (12.961)	Hole φ19 (0.75)	H, h	±559.0 (±22.008)	3335.0 (131.299)	400.0 (15.748)	Hole φ16 (0.63)

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

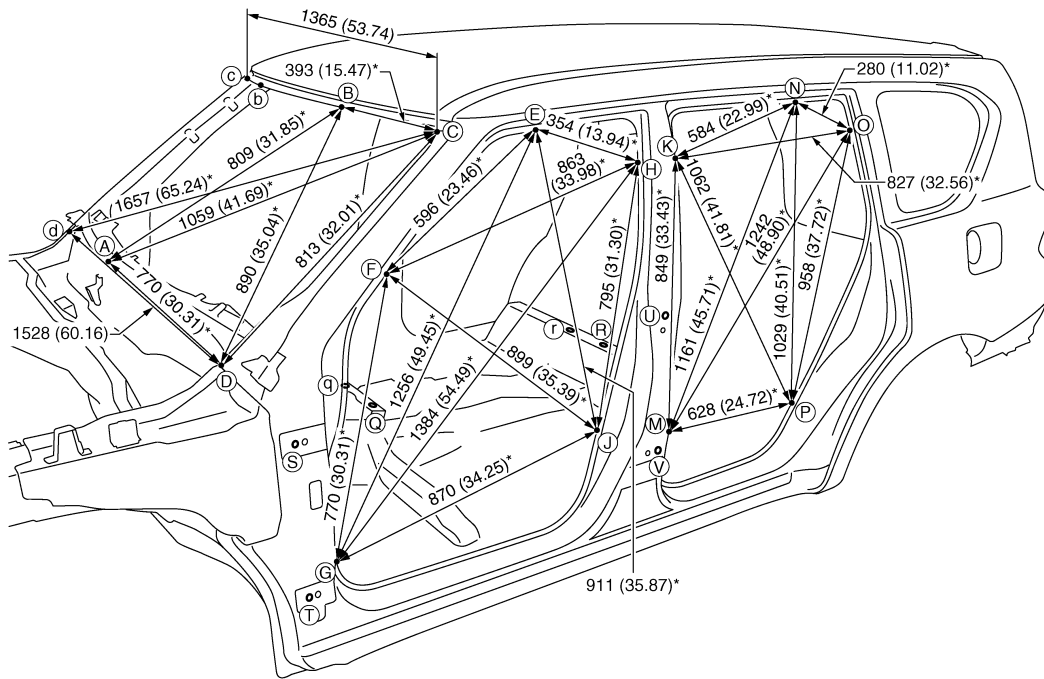
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
c	-289.6 (-11.402)	0.2 (0.008)	305.8 (12.039)	Hole ϕ 19 (0.75)	J, j	\pm 501.7 (\pm 19.752)	3750.7 (147.665)	378.4 (14.898)	Hole ϕ 8 (0.31)
D, d	\pm 461.8 (\pm 18.181)	807.5 (31.791)	104.1 (4.098)	Hole ϕ 10 (0.39)	K, k	\pm 561.6 (\pm 22.110)	4050.0 (159.449)	337.0 (13.268)	Hole ϕ 15 (0.59)
E, e	\pm 592.0 (\pm 23.307)	1320.0 (51.968)	98.3 (3.870)	Hole 20x8 (0.79x0.31)	M, m	\pm 498.4 (\pm 19.622)	-29.6 (-1.165)	519.2 (20.441)	Hole ϕ 70 (2.76)

Passenger Compartment

INFOID:000000010258702

MEASUREMENT

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



JSKIA1900GB

Unit: mm (in)

«The others»

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1442 (56.77)		H - h	1528 (60.16)*		N - n	1416 (55.75)		R - M	820 (32.28)*	
E - f	1638 (64.49)*		H - j	1776 (69.92)*		N - o	1475 (58.07)*		R - N	1182 (46.54)*	
E - g	1987 (78.23)*		J - j	1651 (65.00)		N - p	1839 (72.40)*		R - O	1198 (47.17)*	
E - h	1526 (60.08)*		K - k	1527 (60.12)		O - o	1480 (58.27)		R - P	760 (29.92)*	
E - j	1792 (70.55)*		K - m	1799 (70.83)*		O - p	1829 (72.01)*		S - s	1783 (70.20)	
F - f	1615 (63.58)		K - n	1582 (62.28)*		P - p	1641 (64.61)		S - U	1183 (46.57)*	
F - g	1802 (70.94)*		K - o	1716 (67.56)*		Q - E	1178 (46.38)*		S - V	1195 (47.05)*	
F - h	1792 (70.55)*		K - p	1906 (75.04)*		Q - F	1031 (40.59)*		T - t	1813 (71.38)	
F - j	1864 (73.39)*		M - m	1648 (64.88)		Q - G	876 (34.49)*		T - U	1293 (50.91)*	
G - g	1644 (64.72)		M - n	1919 (75.55)*		Q - H	1217 (47.91)*		T - V	1158 (45.59)*	
G - h	2104 (82.83)*		M - o	1995 (78.54)*		Q - J	823 (32.40)*		U - u	1769 (69.65)	
G - j	1863 (73.35)*		M - p	1760 (69.29)*		R - K	1133 (44.61)*		V - v	1805 (71.06)	

MEASUREMENT POINTS

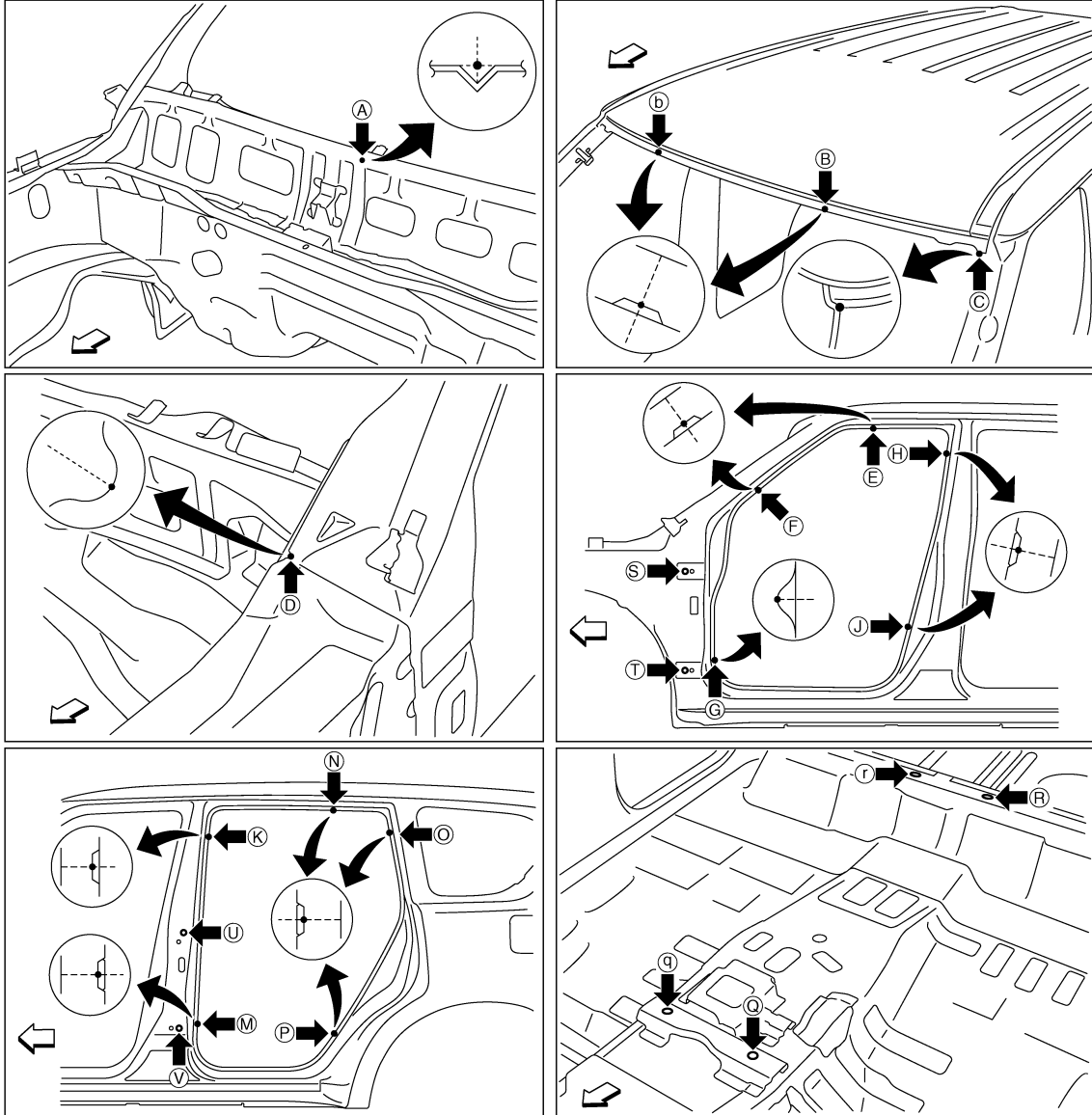
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA1901ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Cowl top positioning mark of center positioning mark	H, h, J, j, K, k, M, m	Center pillar indent
B, b	Roof indent	O, o, P, p	Rear fender indent
C, c	Front pillar joggle	Q, q	Parking brake bracket hole center $\phi 13$ (0.51)
D, d, E, e, N, n	Outer side body indent	R, r	2nd seat mounting front crossmember hole center $\phi 7$ (0.28)
F, f, G, g	Front pillar indent	S, s, T, t, U, u, V, v	Door hinge installing hole center S, s, U, u: $\phi 9$ (0.35) T, t, V, v: $\phi 12$ (0.47)

Rear Body

INFOID:000000010258703

MEASUREMENT

Revision: 2014 October

BRM-70

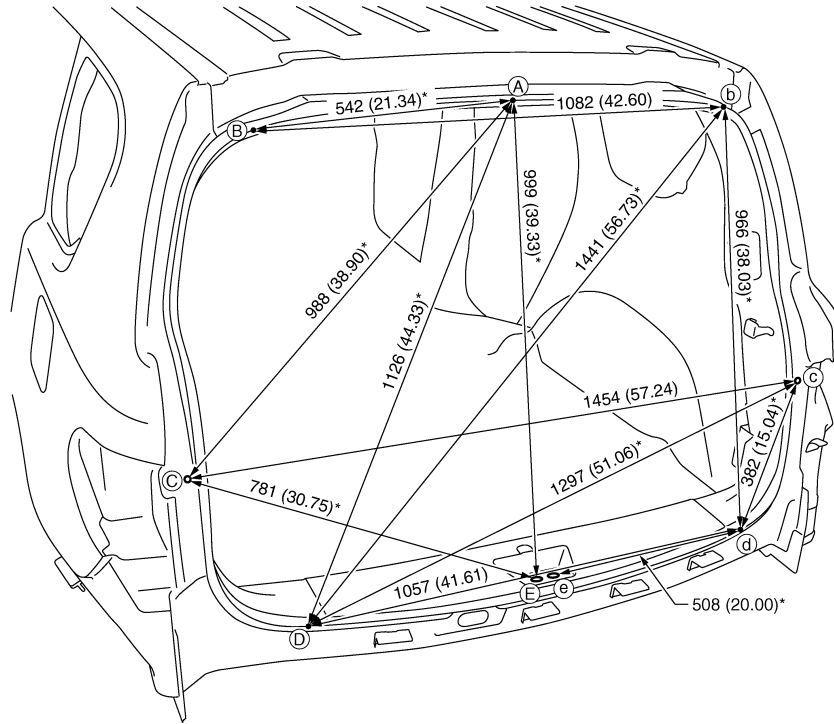
2015 QX80

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

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



JSKIA1902GB

Unit: mm (in)

MEASUREMENT POINTS

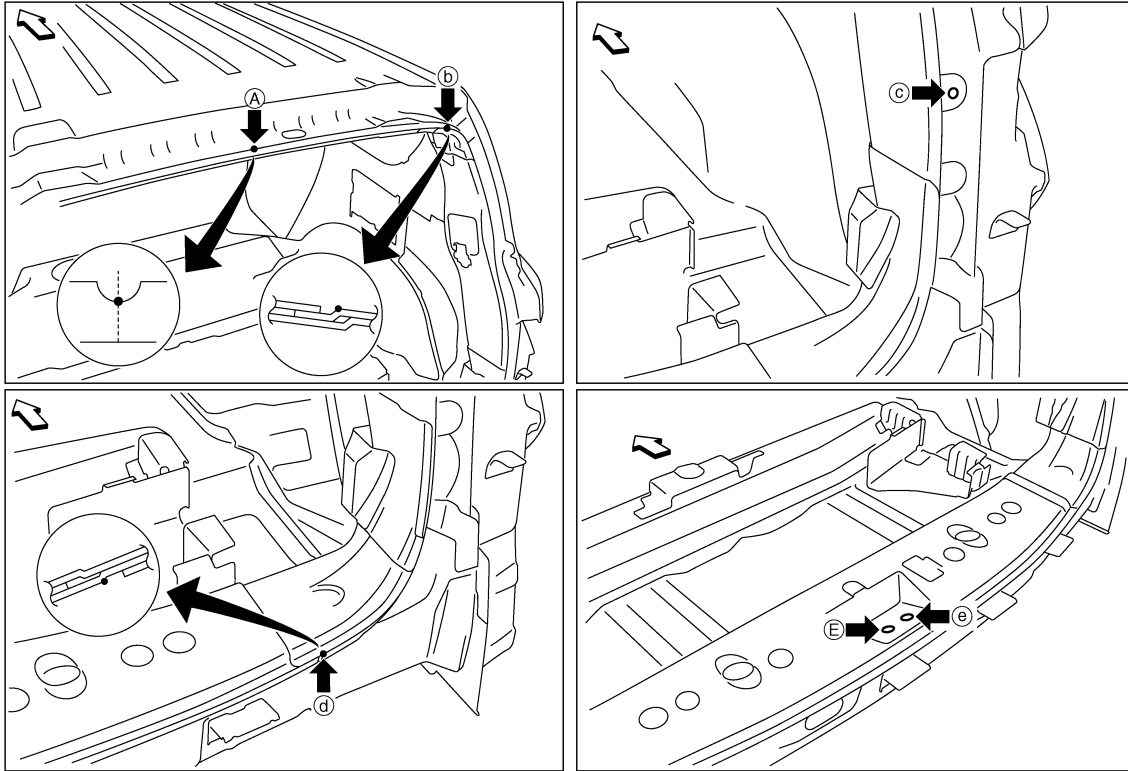
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BRM

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA1903ZZ

↙: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Roof indent of center positioning mark	D, d	Rear center crossmember joggle
B, b	Upper back pillar main joggle	E, e	Rear end crossmember hole center $\phi 13$ (0.51)
C, c	Upper back pillar main hole center $\phi 7$ (0.28)		