

SECTION **BRM**
 BODY REPAIR

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FOR USA AND CANADA

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BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

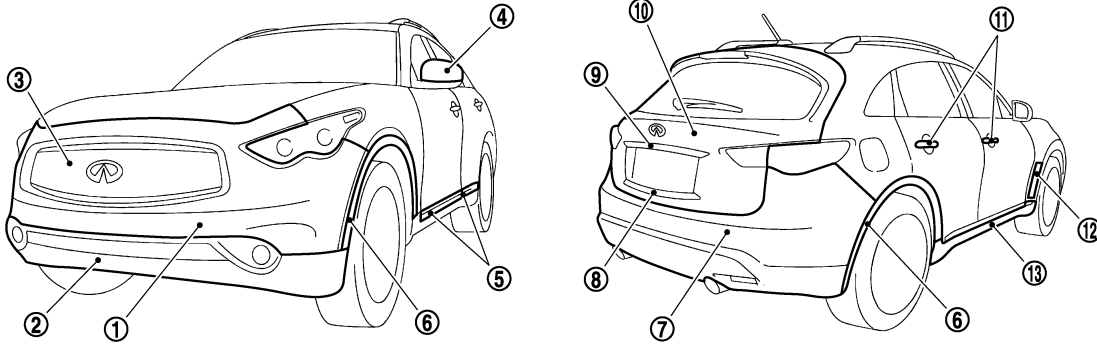
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VEHICLE INFORMATION

BODY EXTERIOR PAINT COLOR

Body Exterior Paint Color

INFOID:000000010581040



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Component		Color code	BGAC	BJAA	BKH3	BK23	BKAD	BRAY	BNAE	BQAA	
		Description	Black	Olive Gray	Black	Silver	Gray	Blue	Dark Red	White	
		Paint type ^{note}	2P	2TM	2S	2M	2M	2P	2P	3P	
		Anti scratch advanced paint	×	×	×	×	×	×	×	×	
①	Front bumper fascia	Body color	BGAC	BJAA	BKH3	BK23	BKAD	BRAY	BNAE	BQAA	
②	Lower front bumper fascia	Material color	-	-	-	-	-	-	-	-	
③	Front grille	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
④	Door outside mirror	Cover	Body color	BGAC	BJAA	BKH3	BK23	BKAD	BRAY	BNAE	BQAA
⑤	Side guard molding	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
		Material color	-	-	-	-	-	-	-	-	
⑥	Fillet molding	Material color	-	-	-	-	-	-	-	-	
⑦	Rear bumper fascia	Body color	BGAC	BJAA	BKH3	BK23	BKAD	BRAY	BNAE	BQAA	
		Material color	-	-	-	-	-	-	-	-	
⑧	Center back door finisher	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑨	Back door finisher	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑩	Back door	Body color	BGAC	BJAA	BKH3	BK23	BKAD	BRAY	BNAE	BQAA	
⑪	Door outside handle	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑫	Front fender duct	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
⑬	Center mudguard	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr	
		Material color	-	-	-	-	-	-	-	-	

BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

[FOR USA AND CANADA]

NOTE:

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

PAINTING BACK DOOR (SERVICE PART)

The supplied back door (service part) is painted by Color Code BK23 (silver).

CAUTION:

- **Glass may drop off. To prevent the glass from dropping off, do not paint the bonding surface (masking area) of the glass.**
- **Sand and degrease the paint surface before painting it in body color. (For painting methods, observe the instructions provided by the paint manufacturer.)**
- **Repaint the surface by BK23 even when the body color is color code BK23. (The paint surface is grinded.)**

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REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

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PRECAUTION

REPAIRING HIGH STRENGTH STEEL

High Strength Steel (HSS)

INFOID:000000010581041

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 strut housing • Hoodledge reinforcement • Upper front hoodledge • Lower dash • Lower dash crossmember assembly • Front roof rail • Inner side roof rail • Inner center pillar • Inner sill • Upper & lower outer rear wheelhouse extension • Center front floor (Component part) • Front floor (Component part) • Front & rear side member assembly • Front side member closing plate assembly • Front side member outrigger assembly • Rear seat crossmember • Other reinforcements
780 - 1350 MPa	<ul style="list-style-type: none"> • Center pillar reinforcement (Component part) • Inner center pillar (Component part) • Outer side roof rail reinforcement (Component part)

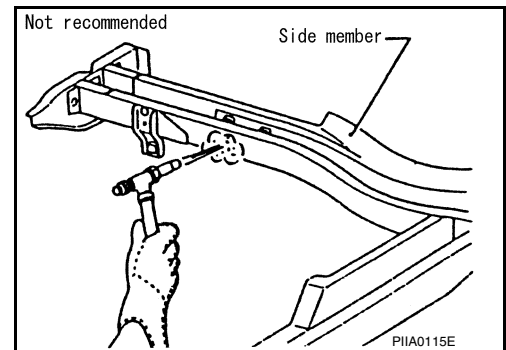
Read the following precautions when repairing HSS:

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.)

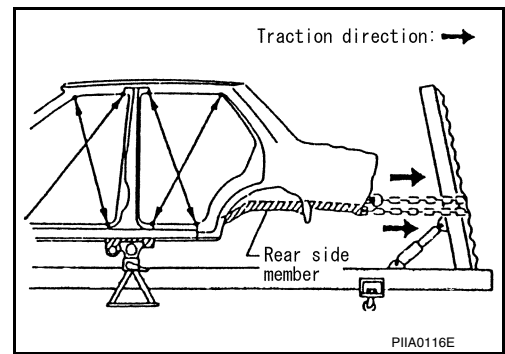


REPAIRING HIGH STRENGTH STEEL

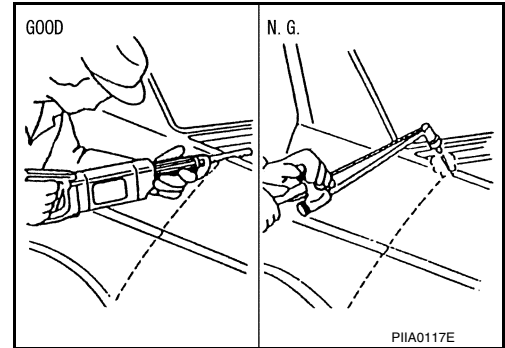
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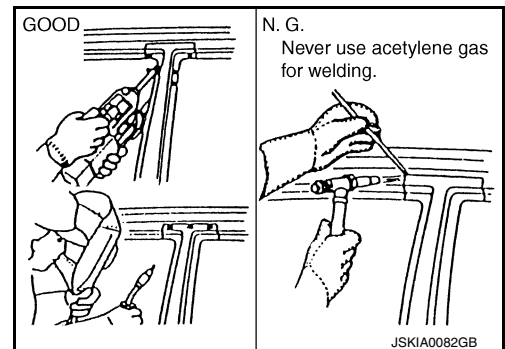
- When straightening body panels, use caution in pulling any HSS panel. Because HSS is very strong, pulling may cause deformation in adjacent sections of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.



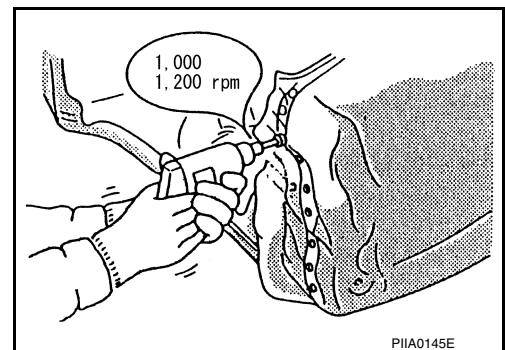
- When cutting HSS panels, avoid gas (torch) cutting if possible. Instead, use a saw to avoid weakening surrounding areas due to heat. If gas (torch) cutting is unavoidable, allow a minimum margin of 50 mm (1.97in).



- 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.



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REPAIRING HIGH STRENGTH STEEL

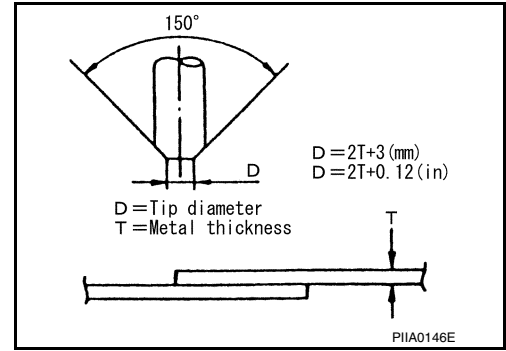
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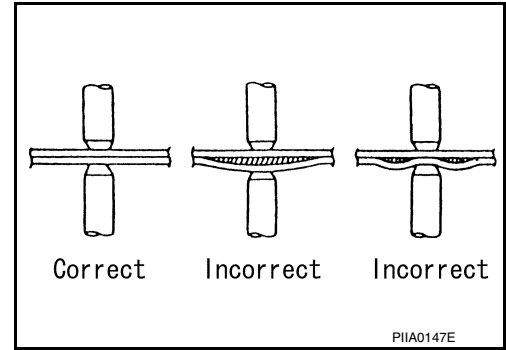
2. Precautions in spot welding HSS

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.



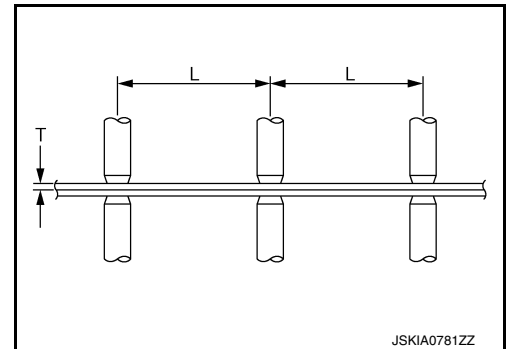
- The panel surfaces must fit flush to each other, leaving no gaps.



- 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:0000000010581042

PROHIBITION OF CUT AND CONNECTION

Never cut and Joint the stiffener front side member (front floor inside frame parts) because its material is high strength steel plate (ultra high strength steel plate).
 The front floor assembly must be replaced if this part is damaged.

PREPARATION

REPAIRING MATERIAL

Foam Repair

INFOID:000000010581043

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.

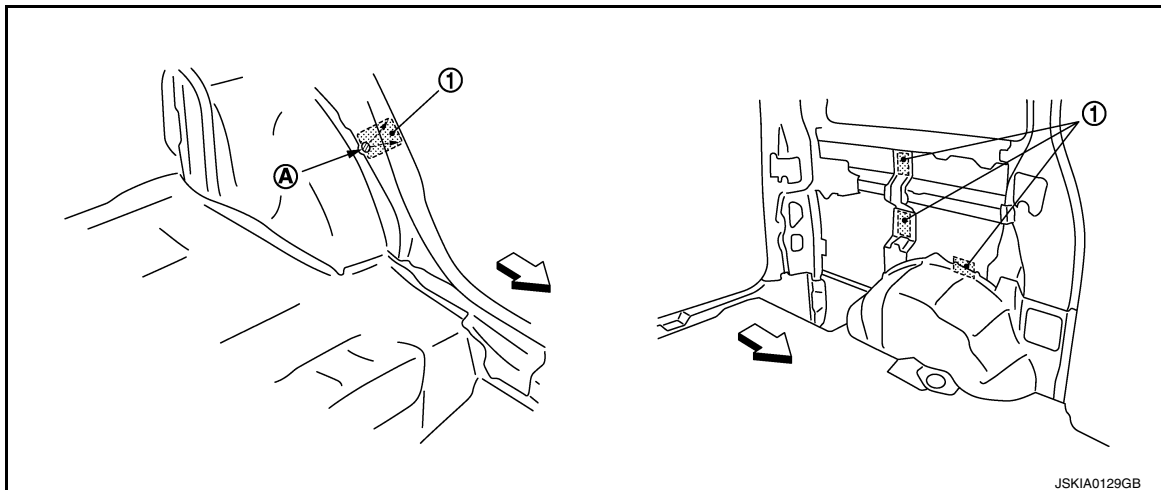
<Urethane foam for foaming agent>

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.

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REPAIRING MATERIAL

< PREPARATION >

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

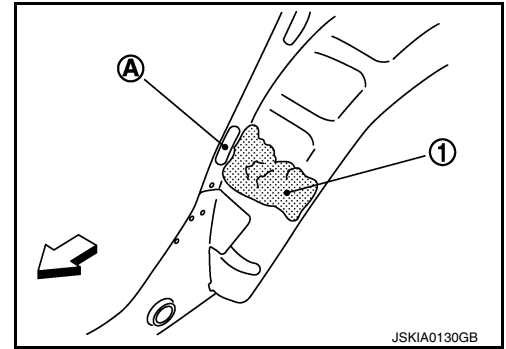
NOTE:

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

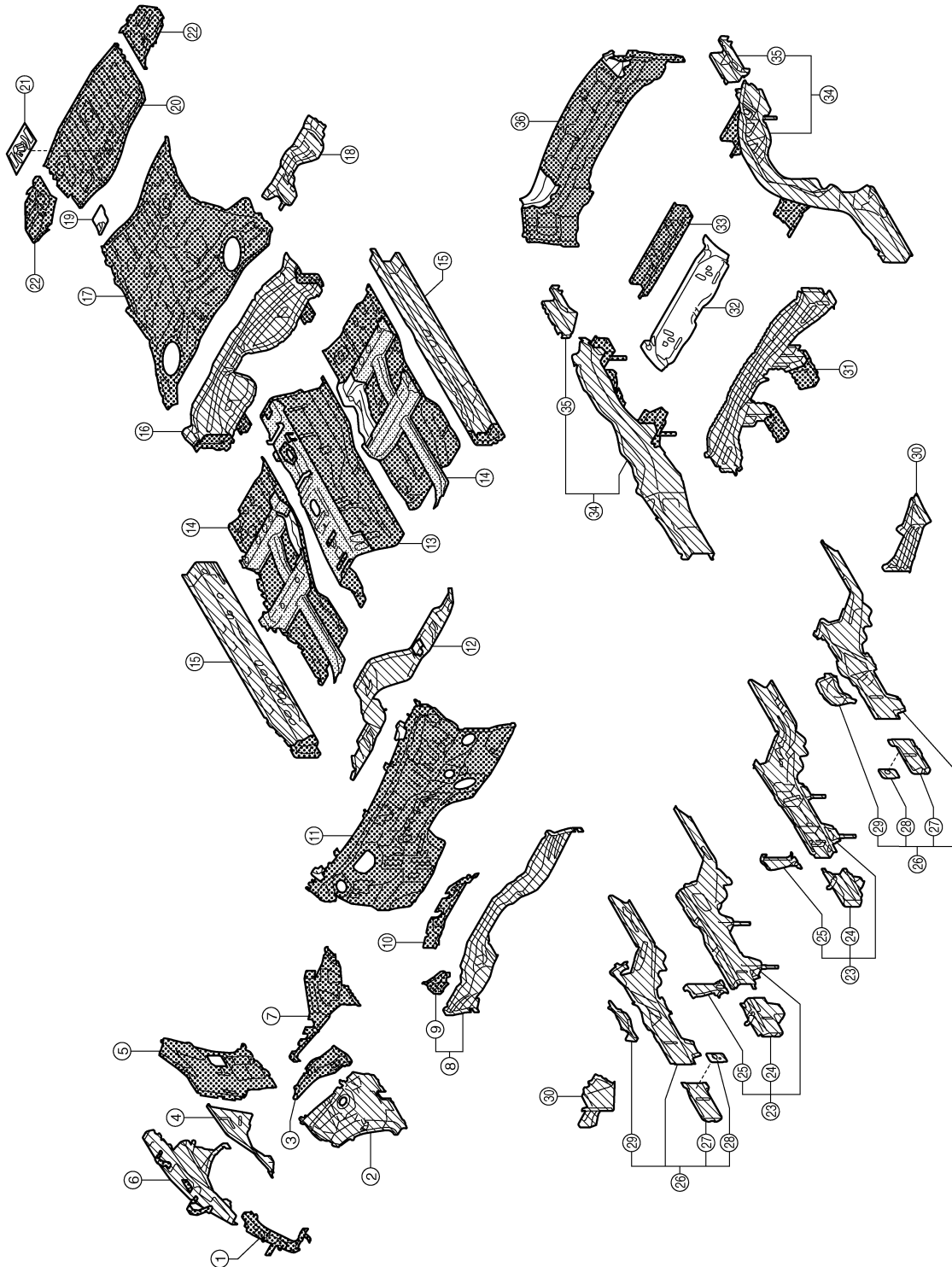
< PREPARATION >

[FOR USA AND CANADA]

BODY COMPONENT PARTS

Underbody Component Parts

INFOID:000000010581044



- | | | |
|--|-----------------------------------|--------------------------------------|
| 1. Side radiator core support assembly (RH & LH) | 2. Front strut housing (RH & LH) | 3. Lower rear hoodledge (RH & LH) |
| 4. Upper front hoodledge (RH & LH) | 5. Upper rear hoodledge (RH & LH) | 6. Hoodledge reinforcement (RH & LH) |

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BODY COMPONENT PARTS


[FOR USA AND CANADA]

< PREPARATION >

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

 Both sided anti-corrosive precoated steel sections

 High strength steel (HSS) sections

 Both sided anti-corrosive steel and HSS sections

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.

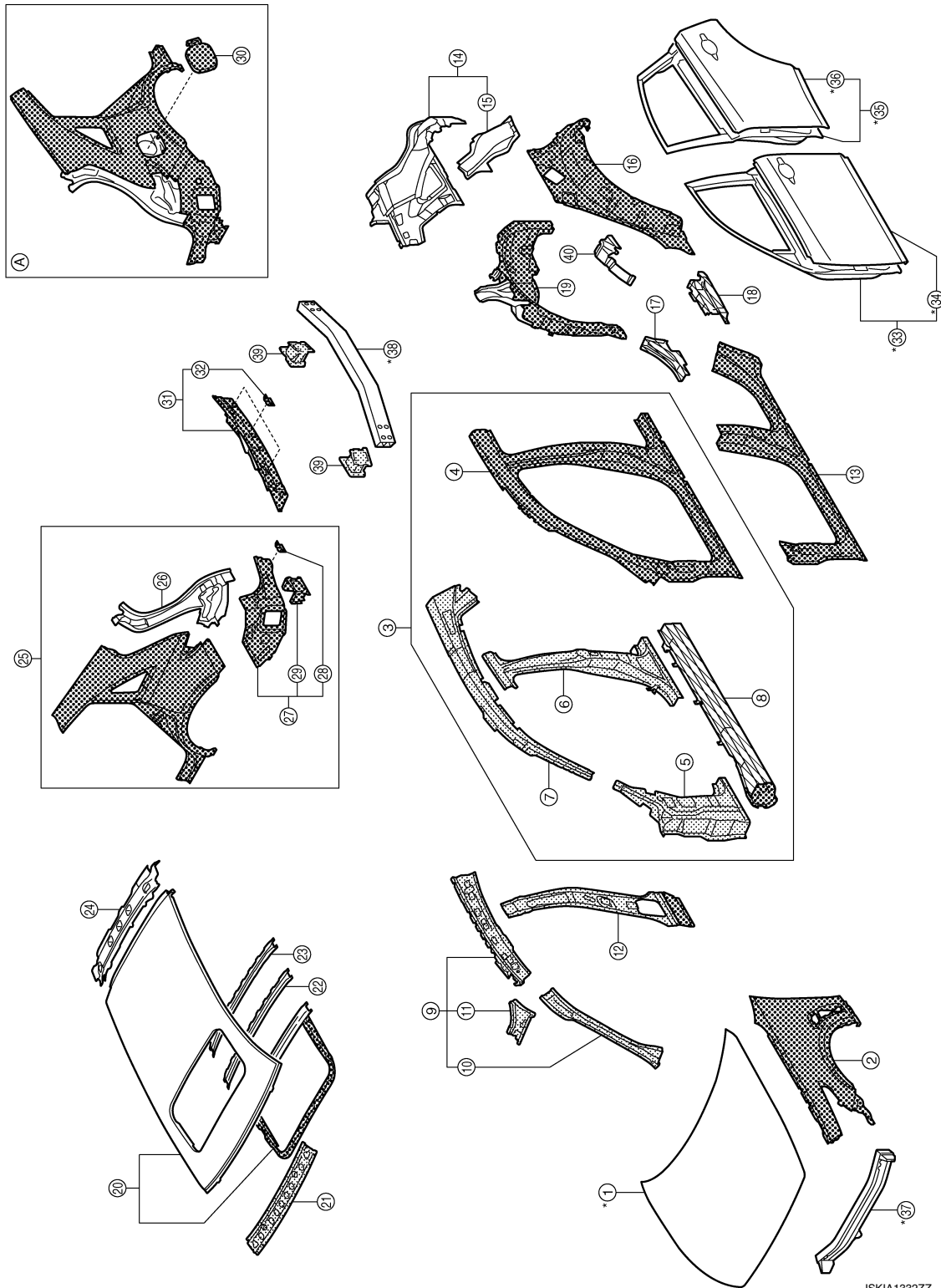
BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

Body Component Parts

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|---|---------------------------------------|--|
| 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) |

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BODY COMPONENT PARTS


[FOR USA AND CANADA]

< PREPARATION >

- | | | |
|---|---|---|
| 10. Upper inner front pillar assembly (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. Roof | 21. Front roof rail |
| 22. Roof bow No. 2 | 23. Roof bow No. 3 | 24. Rear roof rail |
| 25. Rear fender assembly (RH & LH) | 26. Upper back pillar assembly (RH & LH) | 27. Lower back pillar assembly (RH & LH) |
| 28. Rear side bumper retainer (RH & LH) | 29. Rear bumper stay reinforcement | 30. Fuel filler lid |
| 31. Rear panel assembly | 32. Upper rear bumper retainer | 33. Front door assembly (RH & LH) |
| 34. Outer front door panel (RH & LH) | 35. Rear door assembly (RH & LH) | 36. Outer rear door panel (RH & LH) |
| 37. Inner center front bumper reinforcement | 38. Inner center rear bumper reinforcement | 39. Rear bumper stay (RH & LH) |
| 40. Outer rear wheelhouse reinforcement (RH & LH) | | |

 Both sided anti-corrosive precoated steel sections

 High strength steel (HSS) sections

 Both sided anti-corrosive steel and HSS sections

*: Aluminum portion

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

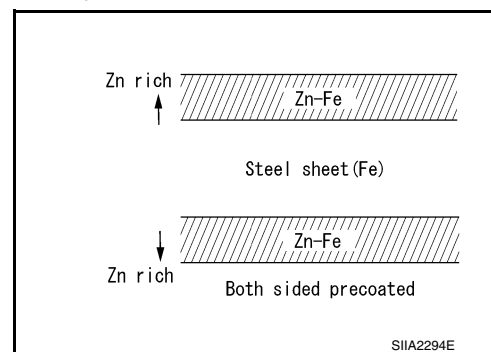
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To provide improved corrosion prevention, the following anti-corrosive measures have been implemented in NISSAN production plants. When repairing or replacing body panels, it is necessary to use the same anti-corrosive measures.

ANTI-CORROSIVE PRECOATED STEEL (GALVANNEALED STEEL)

To improve reparability and corrosion resistance, a new type of anti-corrosive precoated steel sheet has been 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.



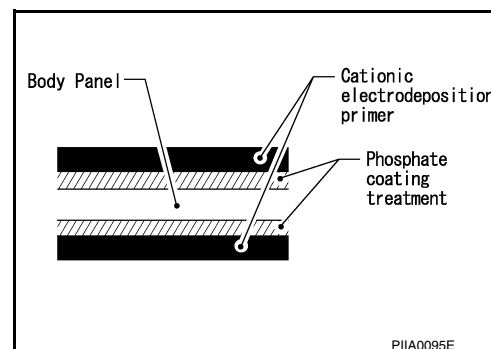
Nissan Genuine Service Parts are fabricated from galvannealed steel. Therefore, it is recommended that GENUINE NISSAN PARTS or equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

PHOSPHATE COATING TREATMENT AND CATIONIC ELECTRODEPOSITION PRIMER

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

CAUTION:

Confine paint removal during welding operations to an absolute minimum.



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

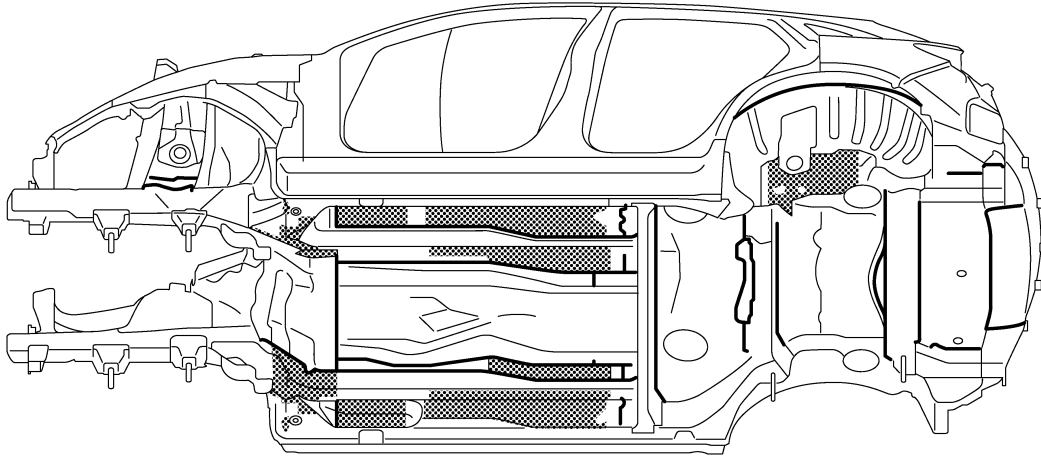
Undercoating

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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.


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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 Undercoated portions

 Sealed portions

Body Sealing

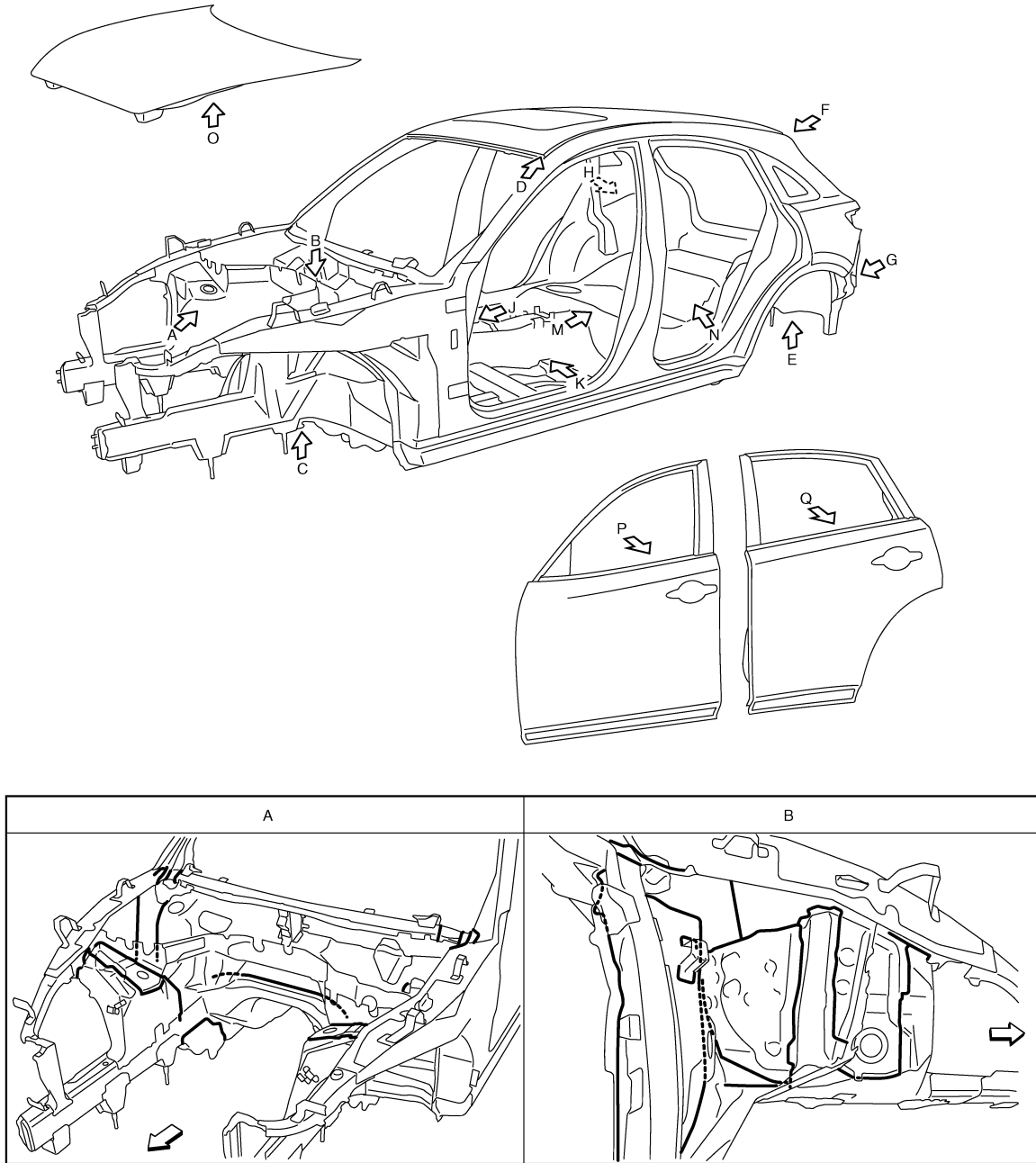
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The following figure shows the areas that are sealed at the factory. Sealant that is applied to these areas should be smooth and free from cuts or gaps. Care should be taken not to apply an excess amount of sealant and not to allow other unaffected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

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

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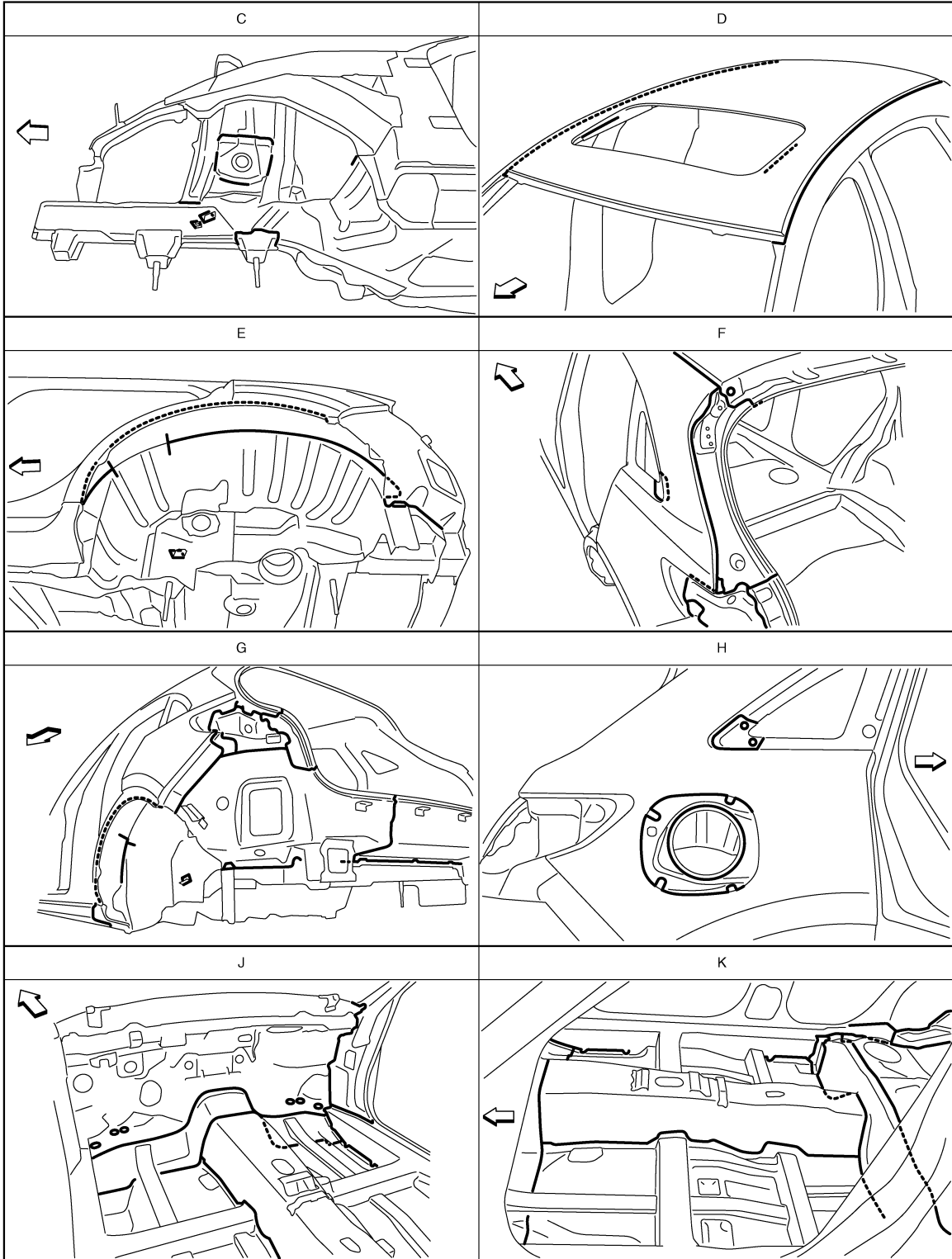
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←: Vehicle front
—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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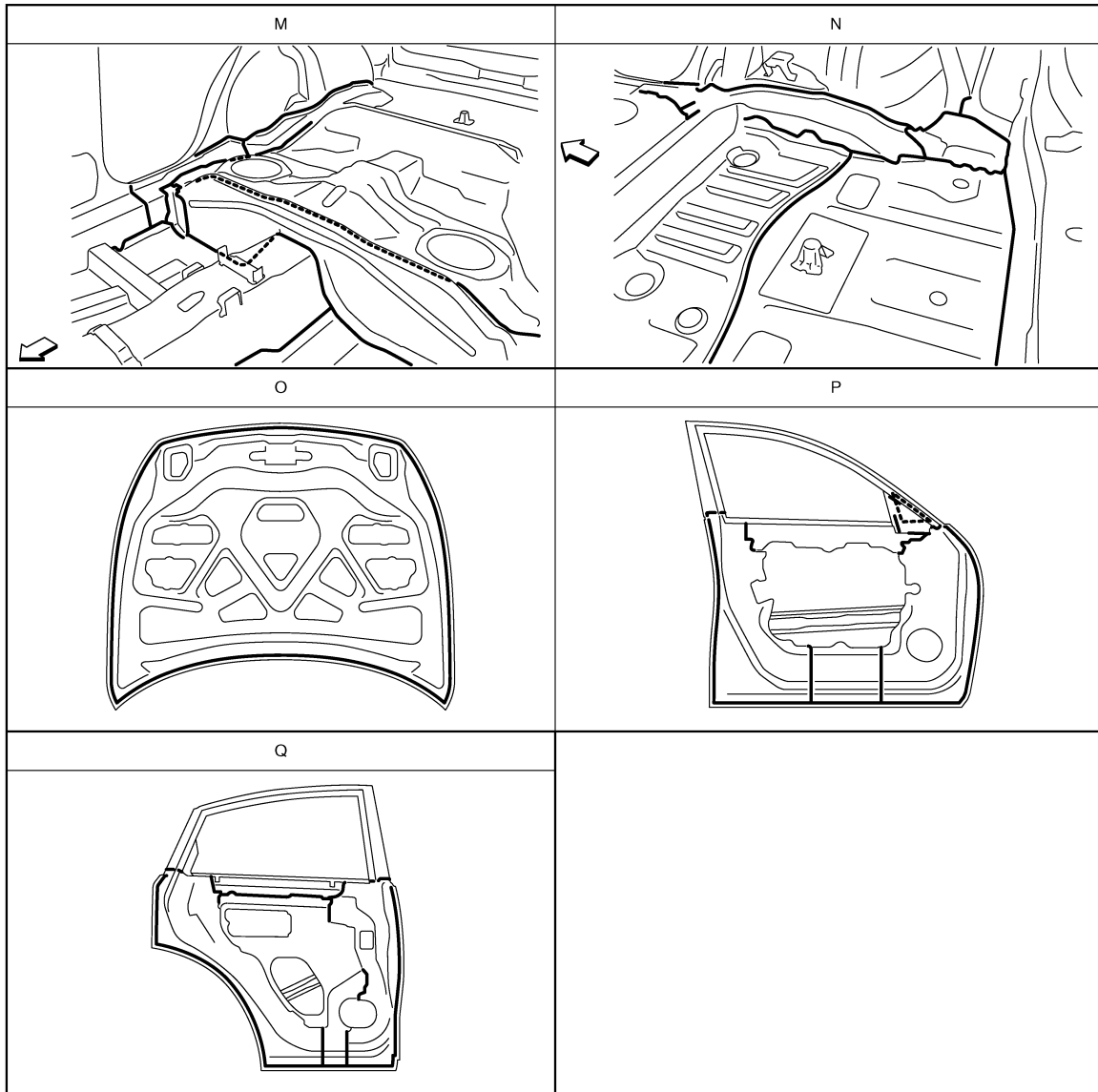
↔: Vehicle front

—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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←: Vehicle front
—: Sealed portions

BODY CONSTRUCTION

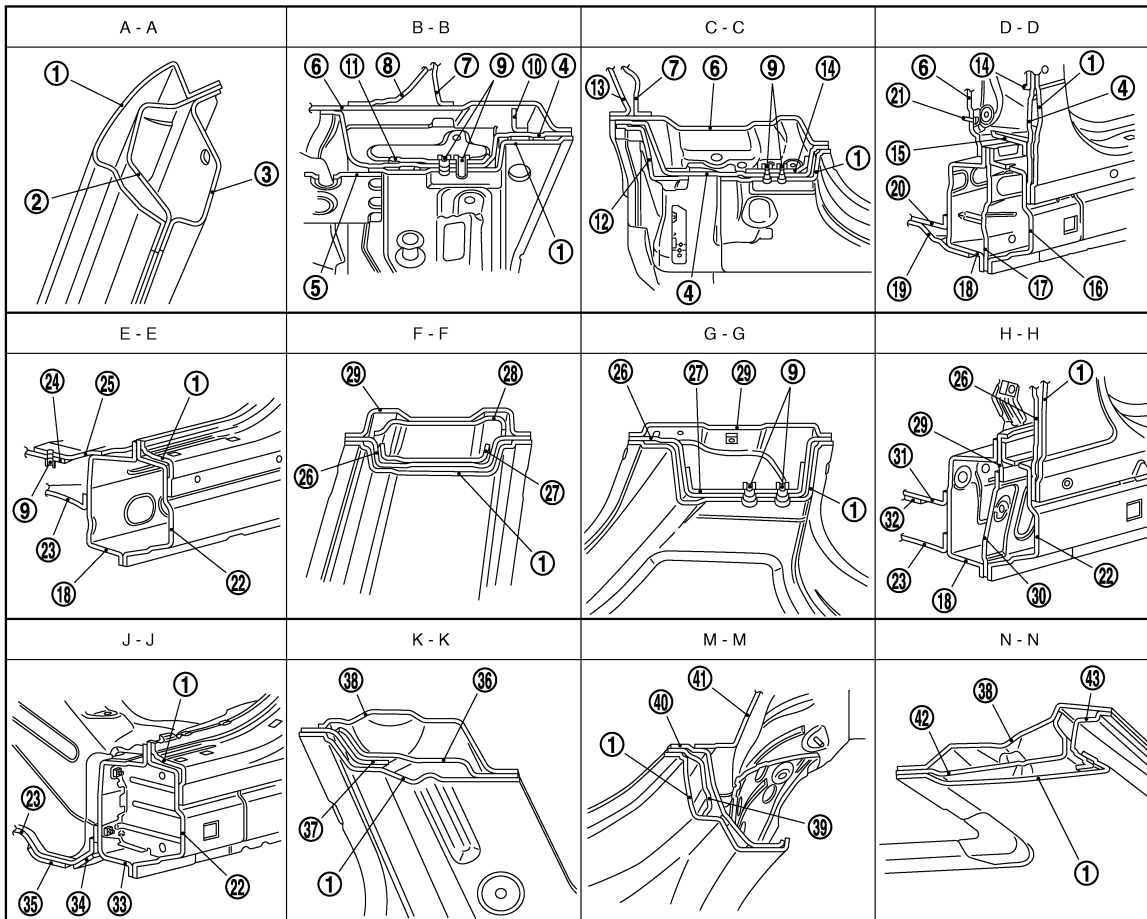
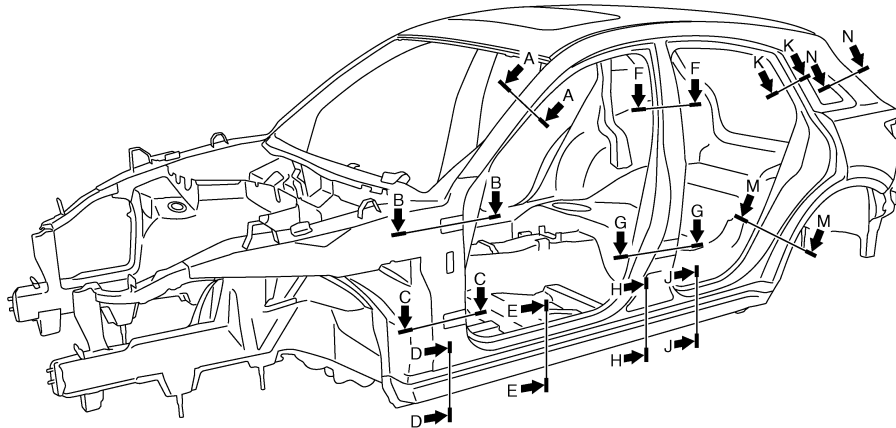
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

BODY CONSTRUCTION

Body Construction

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|-----------------------------|-------------------------------------|-----------------------------|
| 1. Outer side body | 2. Outer front pillar reinforcement | 3. Upper inner front pillar |
| 4. Front pillar hinge brace | 5. Hoodledge reinforcement | 6. Upper rear hoodledge |
| 7. Upper dash | 8. Upper dash reinforcement | 9. Weld nut |

BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

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|------------------------------------|--|---|---|
| 10. Outer front pillar bracket | 11. Front pillar hinge front reinforcement | 12. Rear hoodledge reinforcement | |
| 13. Lower dash crossmember | 14. Lower hinge plate | 15. Lower front pillar gusset | A |
| 16. Outer front sill reinforcement | 17. Lower front pillar reinforcement | 18. Inner sill | |
| 19. Front side member outrigger | 20. Lower dash | 21. Weld bolt | B |
| 22. Outer sill reinforcement | 23. Front floor | 24. 2nd crossmember | B |
| 25. Front floor gusset | 26. Center pillar reinforcement | 27. Center pillar seat belt reinforcement | |
| 28. Center pillar seat belt anchor | 29. Inner center pillar | 30. Lower inner center pillar | C |
| 31. 3rd crossmember | 32. Nut plate | 33. Rear side member front | C |
| 34. Rear floor reinforcement | 35. Rear seat crossmember reinforcement | 36. Inner rear pillar reinforcement | |
| | | | D |
| 37. Side roof rail reinforcement | 38. Inner rear pillar | 39. Outer rear wheelhouse extension | D |
| 40. Outer rear wheelhouse | 41. Inner rear wheelhouse | 42. Upper back pillar reinforcement | |
| 43. Upper back pillar main | | | E |

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

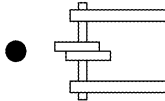
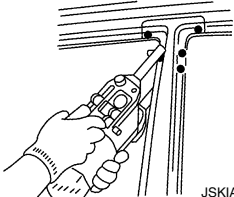
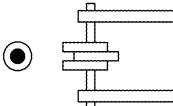
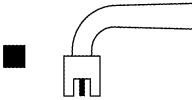



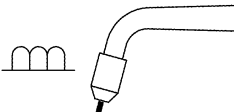
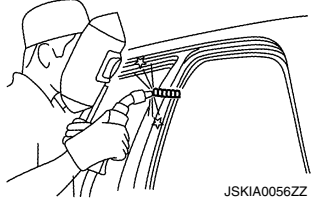
REPLACEMENT OPERATIONS

Description

INFOID:000000010581050

- 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 Body Repair Manual (Fundamentals) in order to ensure that the original functions and quality of the vehicle can be maintained. The Body Repair Manual (Fundamentals) contains additional information, including cautions and warning, that are not including in this manual. Technicians should refer to both manuals to ensure proper repairs.
- Please note that these information are 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.

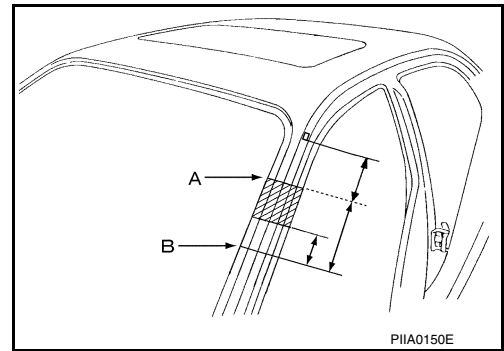
Symbol marks	Description	
 <p data-bbox="402 844 488 861">JSKIA0049ZZ</p>	2-spot welds	 <p data-bbox="1291 970 1377 987">JSKIA0053ZZ</p>
 <p data-bbox="402 1094 488 1110">JSKIA0050ZZ</p>	3-spot welds	
 <p data-bbox="402 1472 488 1488">JSKIA0051ZZ</p>	MIG plug weld	 <p data-bbox="1291 1348 1377 1365">JSKIA0054ZZ</p> <p data-bbox="1008 1381 1317 1409">For 3 panels plug weld method</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div data-bbox="1144 1438 1302 1480"> <p data-bbox="1144 1438 1177 1480">■ A</p>  </div> <div data-bbox="1144 1533 1302 1575"> <p data-bbox="1144 1533 1177 1575">■ B</p>  </div> </div> <p data-bbox="1291 1598 1377 1614">JSKIA0055ZZ</p>
 <p data-bbox="402 1848 488 1864">JSKIA0052ZZ</p>	MIG seam weld / Point weld	 <p data-bbox="1291 1848 1377 1864">JSKIA0056ZZ</p>

REPLACEMENT OPERATIONS

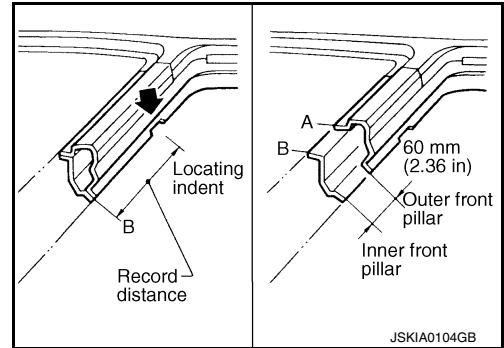
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

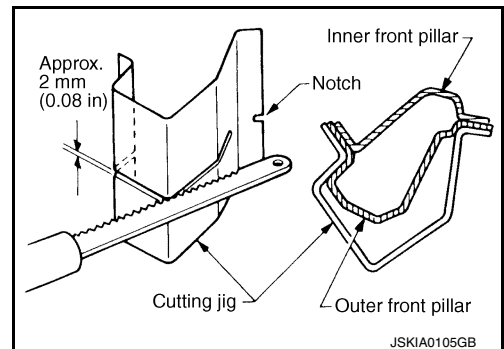
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle. Refer to the front pillar section.



- 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 inner front pillar cut position.

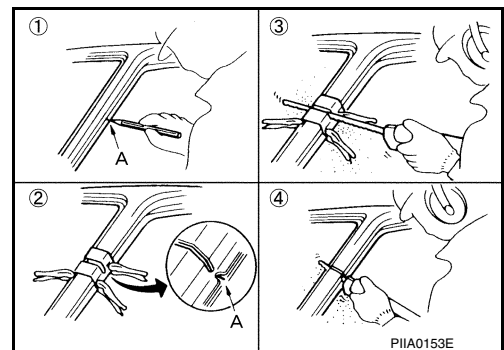


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit service part to be accurately cut at joint position.



- An example of cutting operation using a cutting jig is as follows.

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.



REAR FENDER HEMMING PROCESS

1. A wheel arch is to be installed and hemmed over left and right outer wheel house.
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 outer wheelhouse is undamaged or defaced.

Procedure of the hemming process

REPLACEMENT OPERATIONS

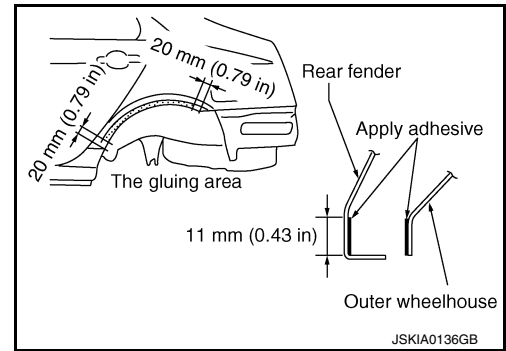
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

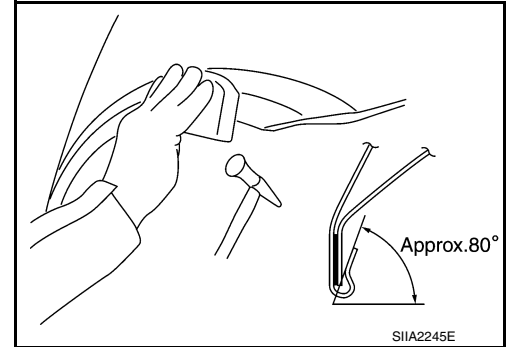
- Peel off old bonding material on the surface of outer wheelhouse and clean thoroughly.
- Peel off a primer coat in the specified area where new adhesive is to be applied on rear fender (the replacing part).
- Apply new adhesive to both specified areas of outer wheelhouse and rear fender.

<Adhesive> **3M automix panel bond 8115,
or any equivalents**

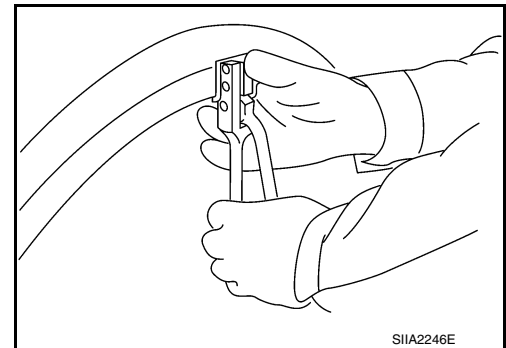
- Attach rear fender to the body of the car, and weld the required part except the hemming part.



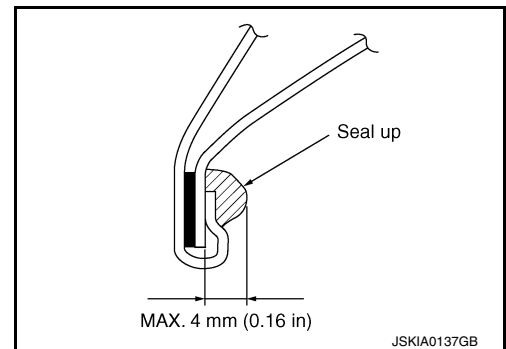
- Bend the welded part starting from the center of the wheel arch gradually with a hammer and a dolly. (Also hem the end of the flange.)
- Hemming with a hammer is conducted to an approximate angle of 80 degrees.



- 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.



FOAM REPAIR

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 spray foam for sealant (foam material) repair of material used on vehicle. Read instructions on product for fill procedures.

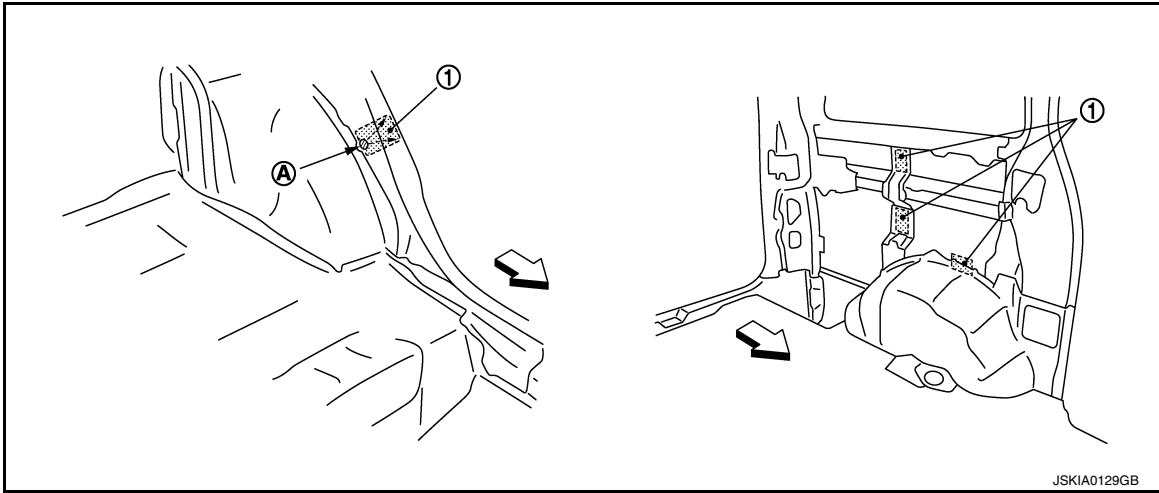
1. Fill procedures after installation of service part.
 - Remove foam material remaining on vehicle side.
 - Clean area in which foam was removed.
 - Install service part.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Insert nozzle into hole near fill area and fill foam material or fill in 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.
 - Remove foam material remaining on vehicle side.
 - Clean area in which foam was removed.
 - Fill foam material on wheelhouse outer side.

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

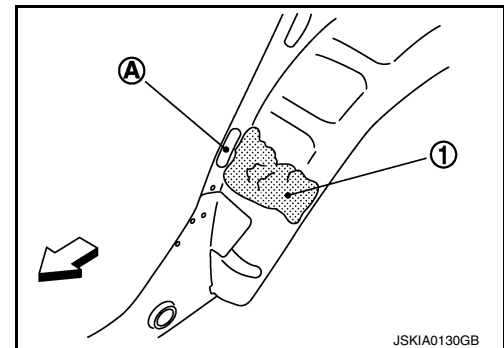
NOTE:

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

- Install service part.

NOTE:

Refer to label for information on working times.



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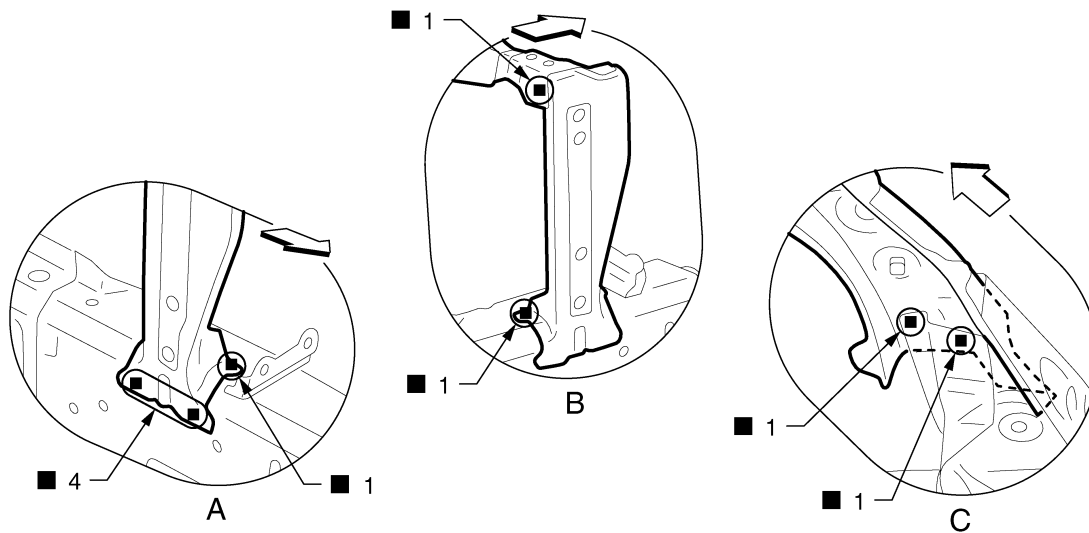
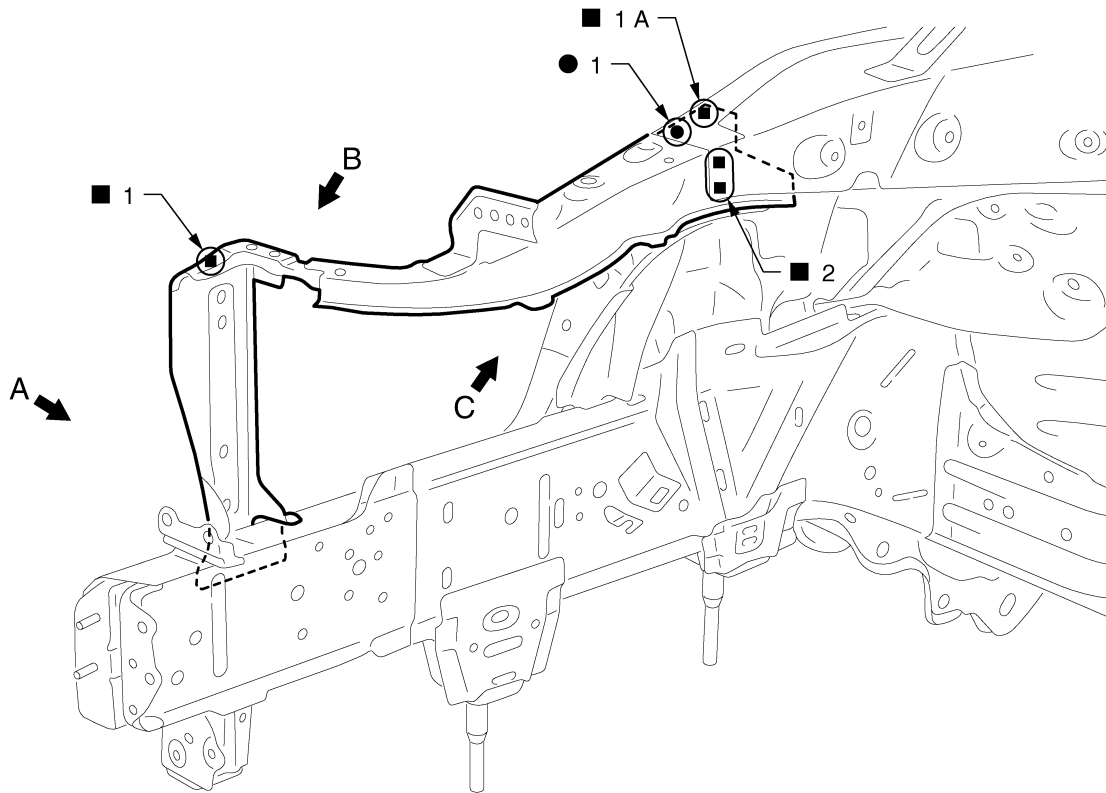
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Radiator Core Support

INFOID:000000010581051



JSKIA0669ZZ

↔: Vehicle front

Replacement parts

- Side radiator core support assembly (LH)
- Front side member connector assembly (LH)

Hoodledge

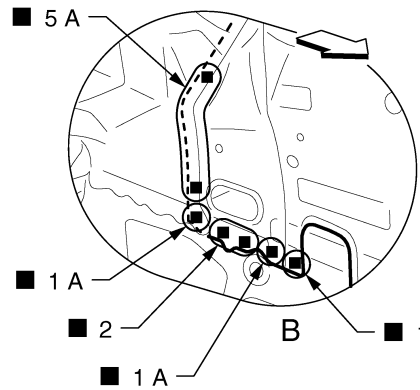
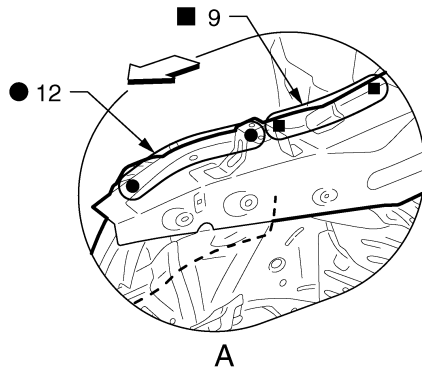
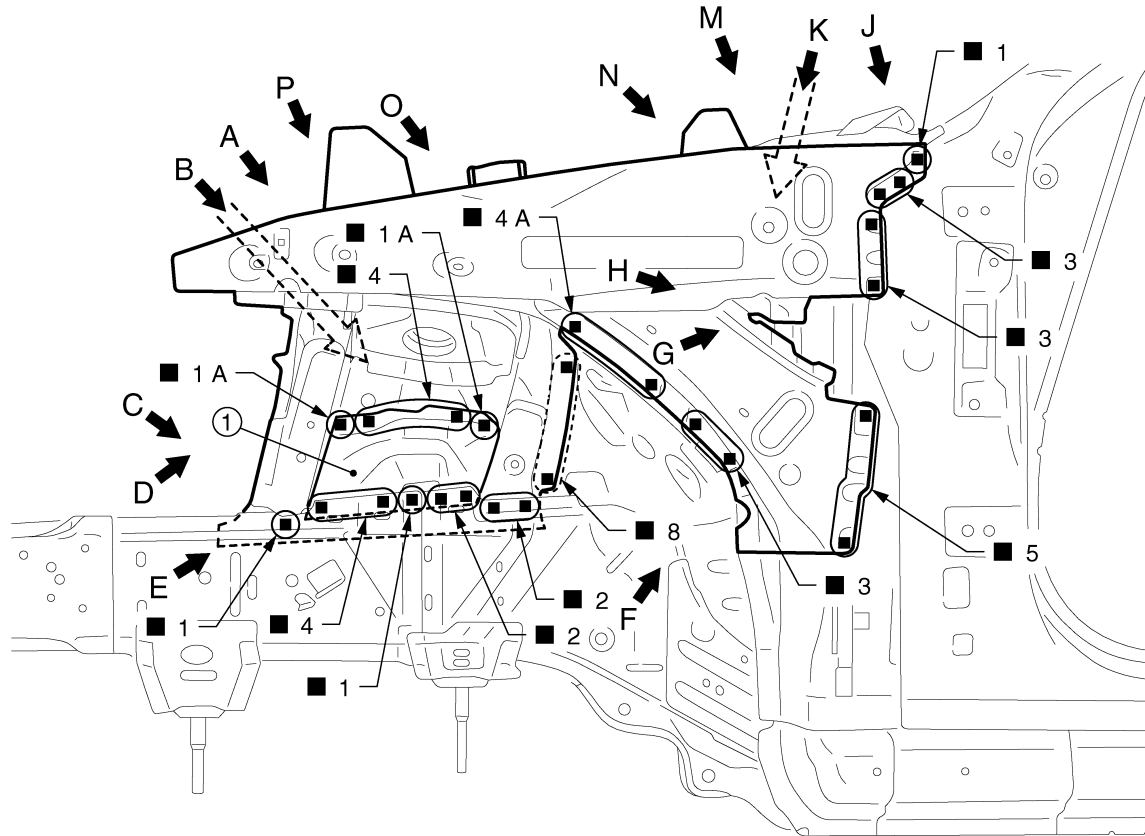
INFOID:000000010581052

Work after radiator core support is removed.
Remove the front side member center closing plate (reusable).

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0670ZZ

1. Front side member center closing plate

← Vehicle front

Replacement parts

- Upper front hoodledge (LH)
- Hoodledge reinforcement (LH)
- Front strut housing (LH)

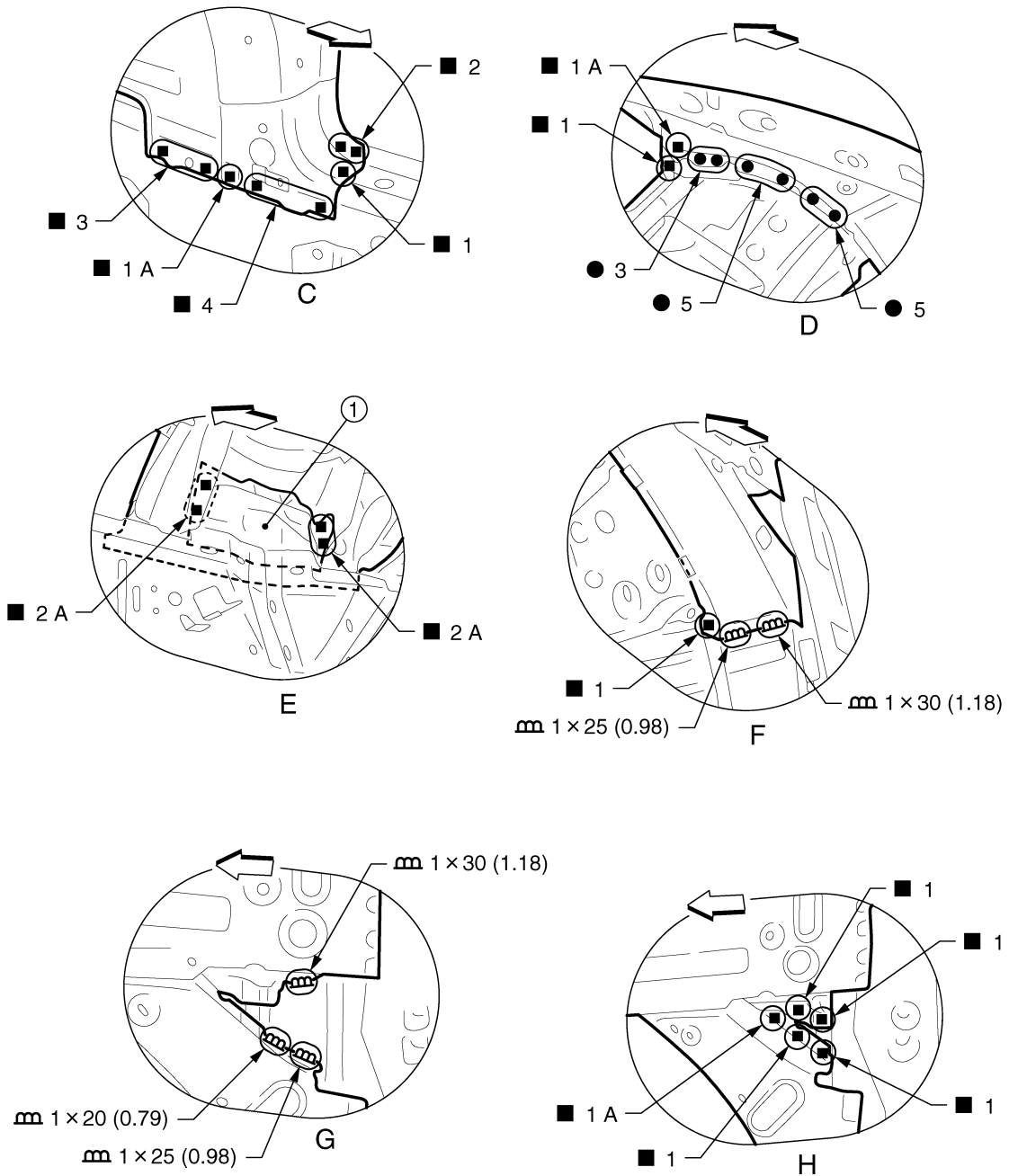
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0671GB

1. Front side member center closing plate

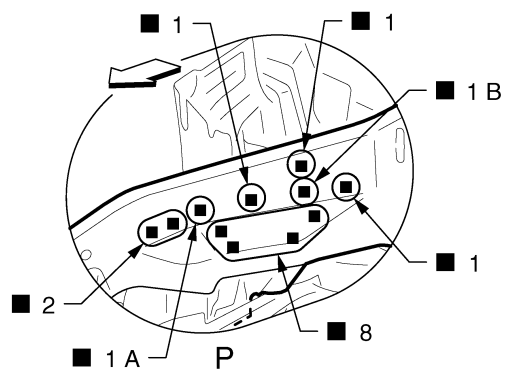
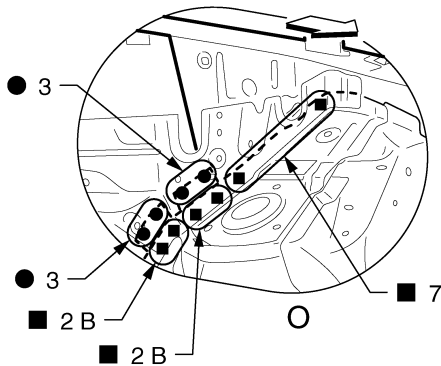
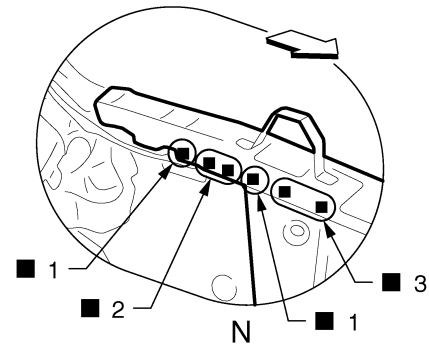
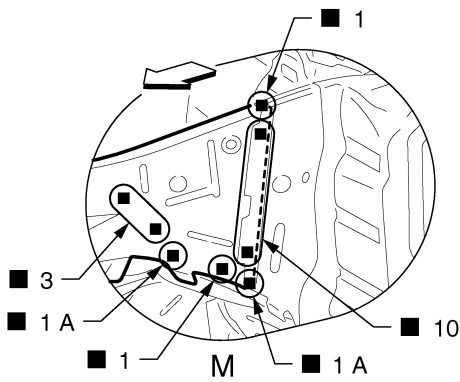
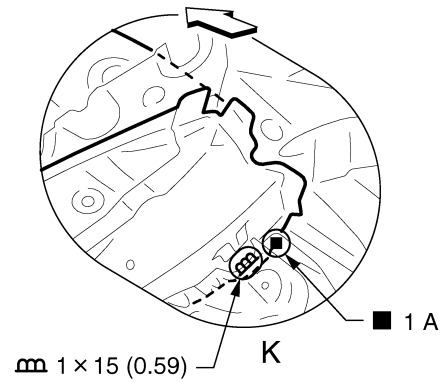
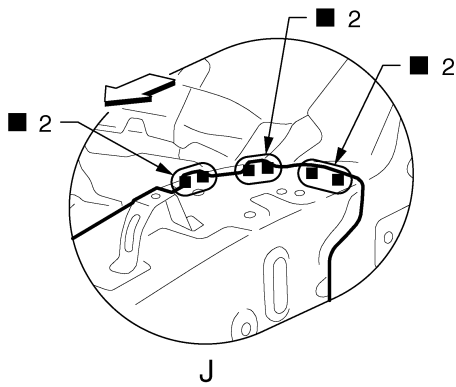
Unit: mm (in)

↔: Vehicle front

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Unit: mm (in)

←: Vehicle front

View M and P: Before installing hoodledge reinforcement

Front Side Member

Work after radiator core support, hoodledge, and lower rear hoodledge are removed. Assemble the hoodledge and check the fitting according to Body Alignment before replacing the front side member center closing plate.

JSKIA0672GB

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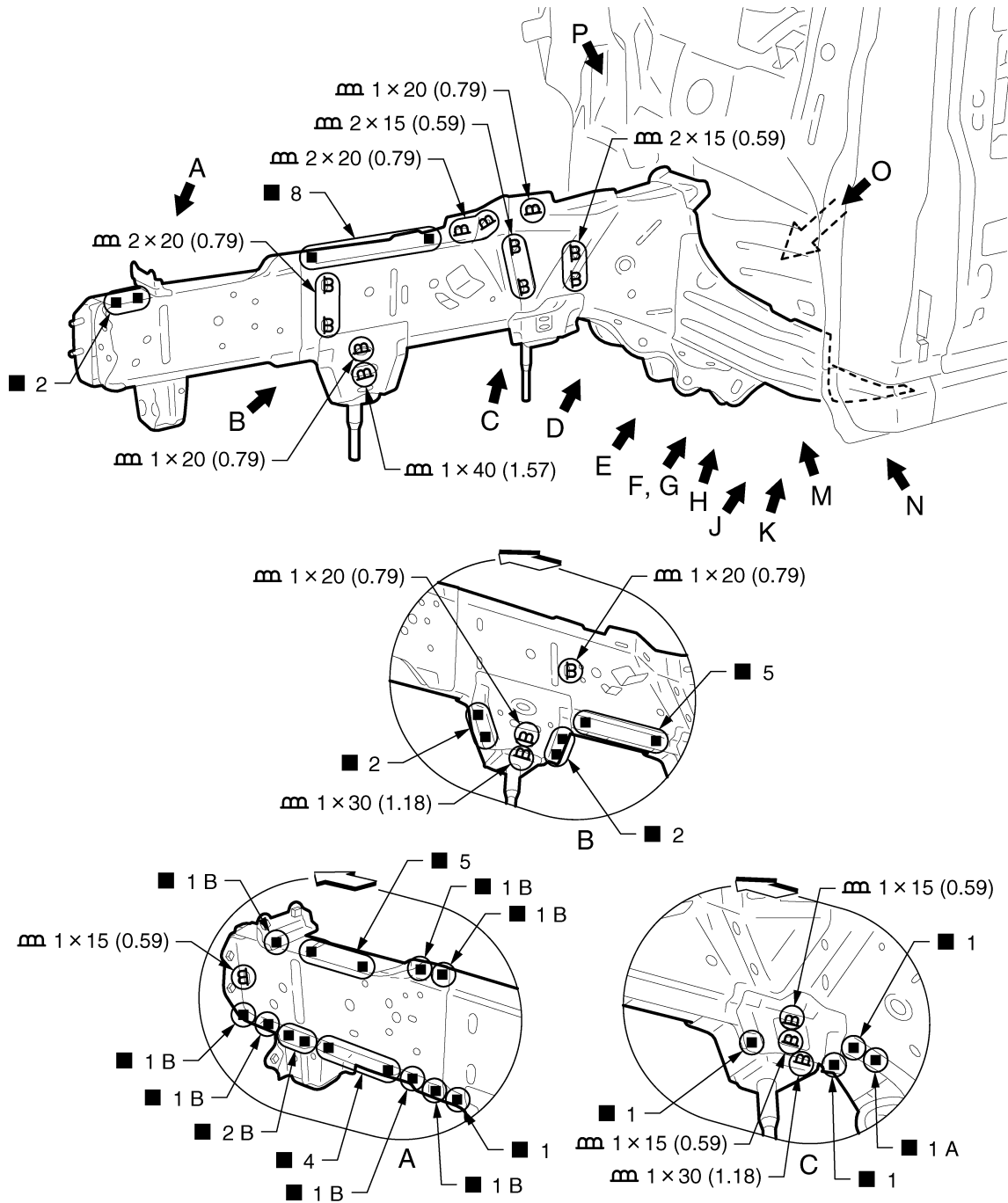
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0673GB

Unit: mm (in)

↔: Vehicle front

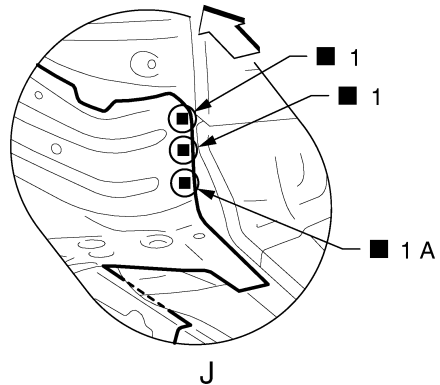
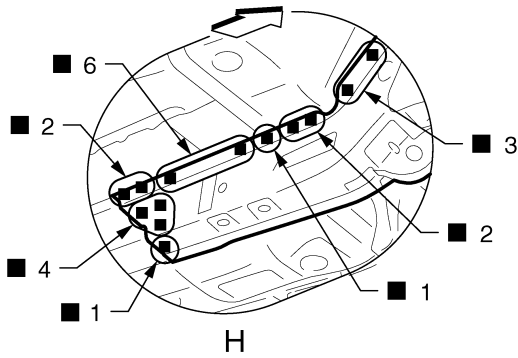
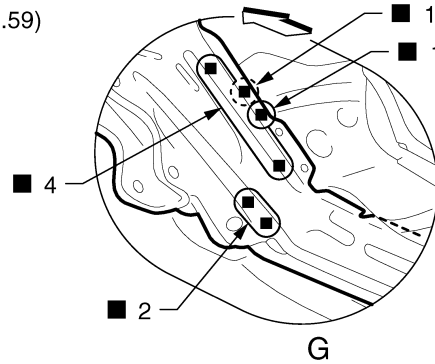
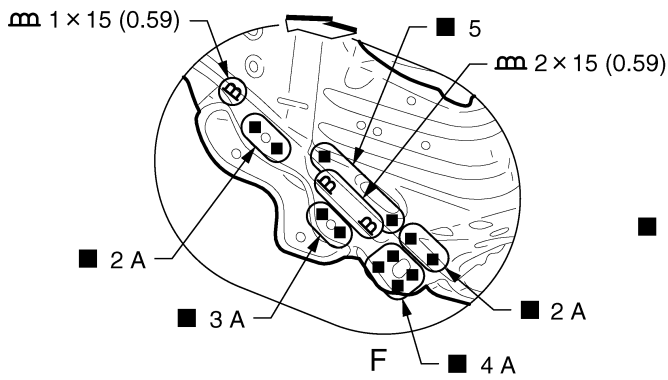
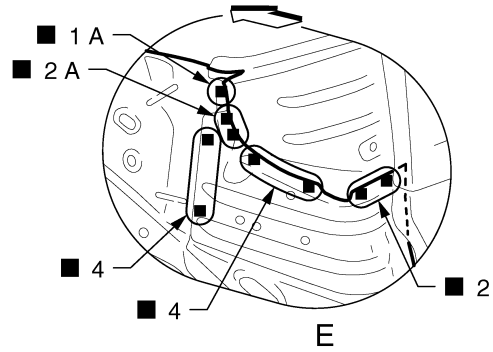
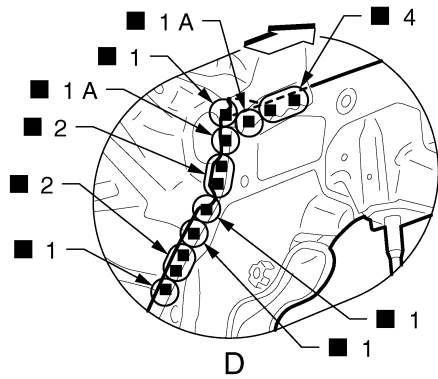
Replacement parts

- 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]



Unit: mm (in)

←: Vehicle front

View G: Before installing front side member outrigger assembly

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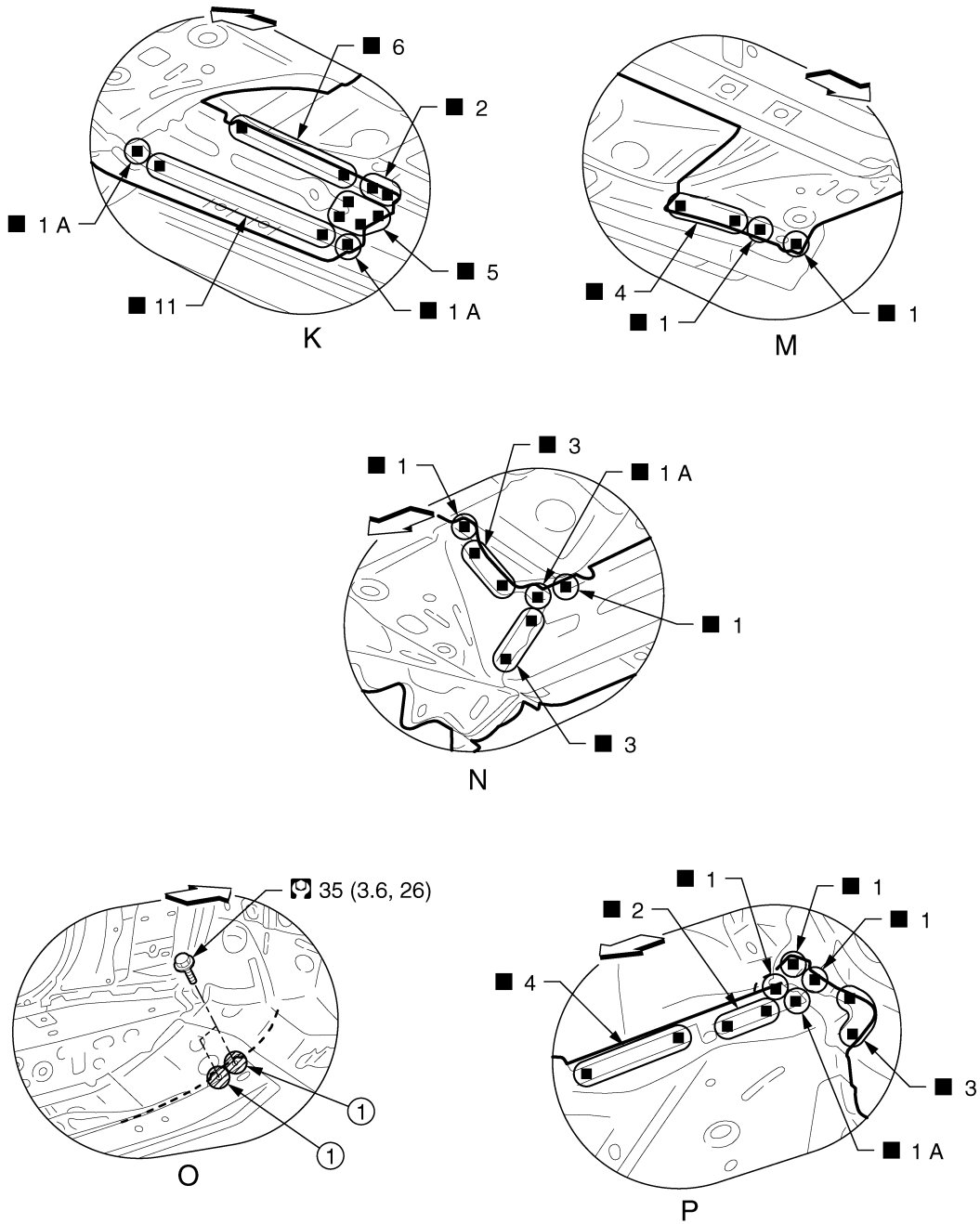
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA6189GB

1. Body sealing

↔: Vehicle front

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

Front Side Member (Partial Replacement)

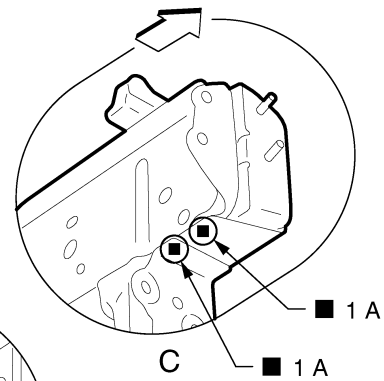
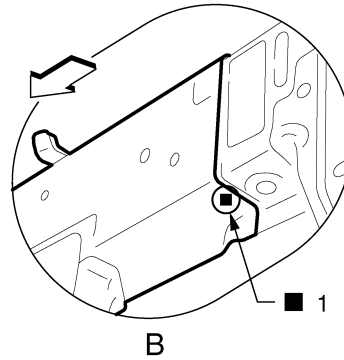
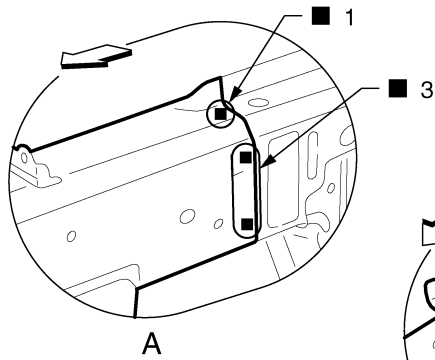
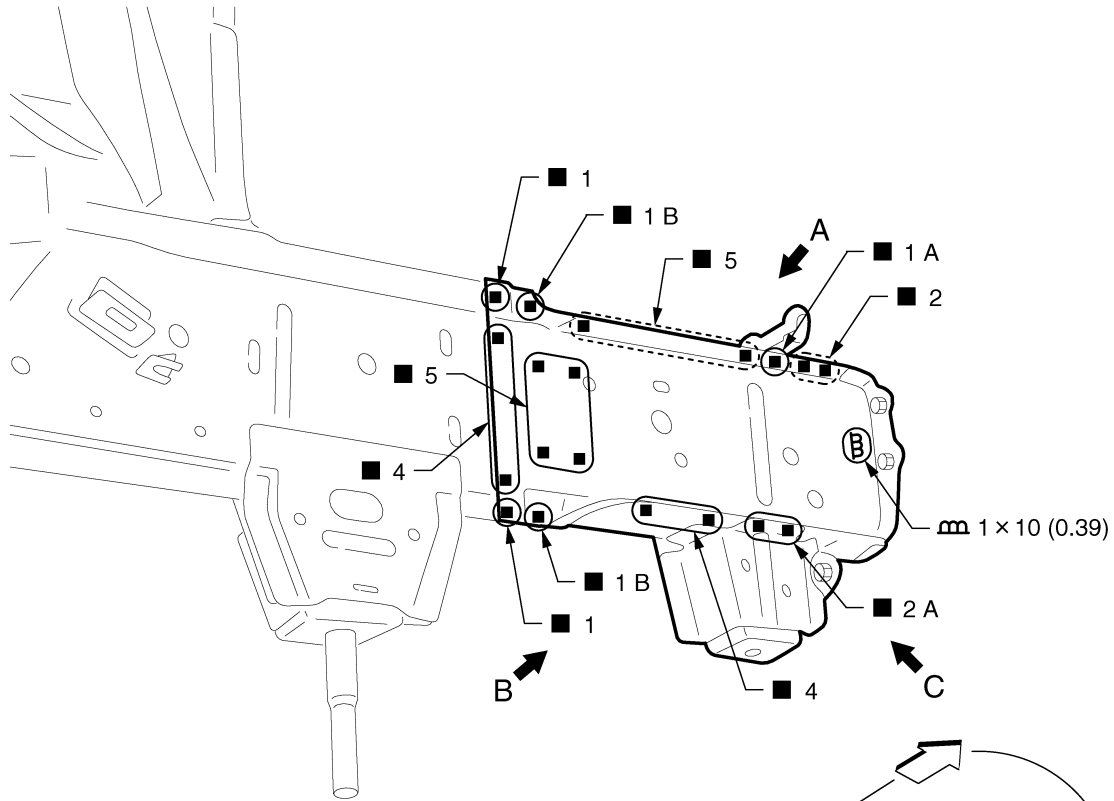
INFOID:000000010581054

Work after radiator core support is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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Unit: mm (in)

← Vehicle front

Replacement parts

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

Front Pillar

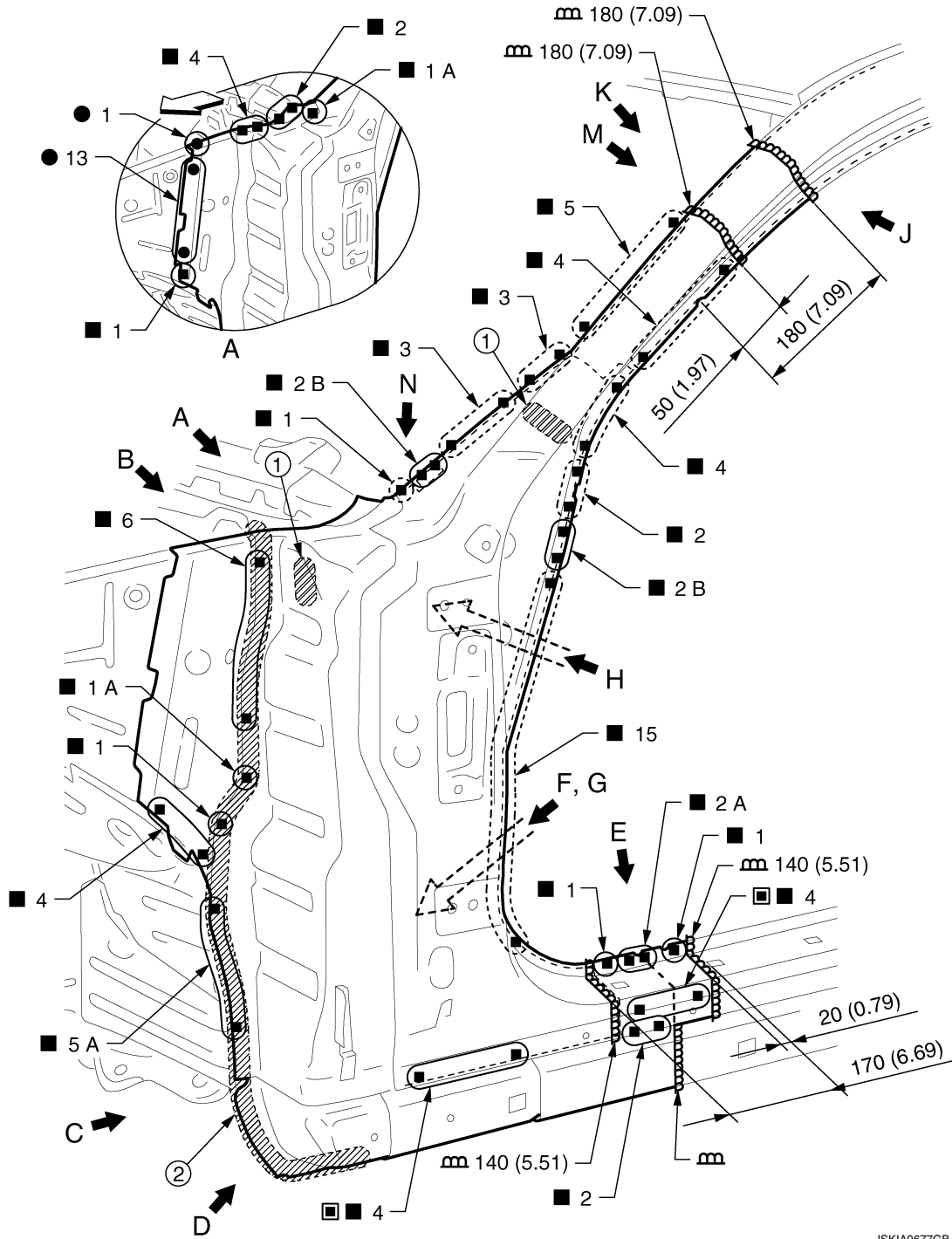
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Work after hoodledge reinforcement is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0677GB

1. Urethane foam

2. Body sealing

Unit: mm (in)

◁: Vehicle front

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

Replacement parts

● Side body assembly (LH)

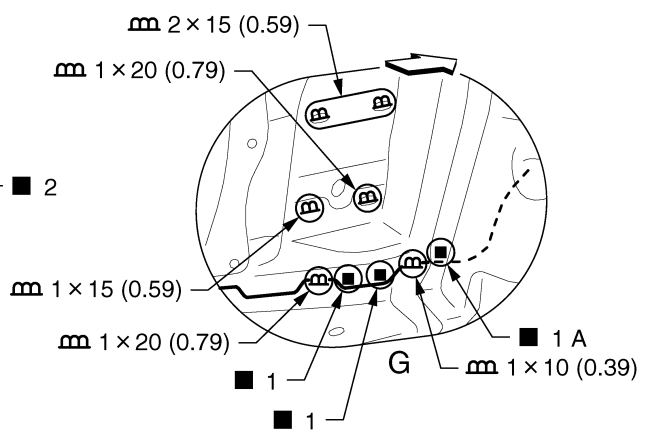
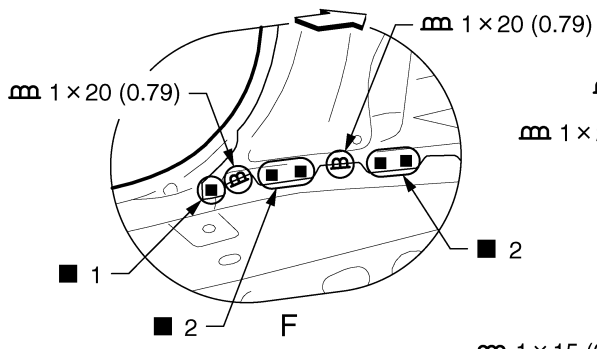
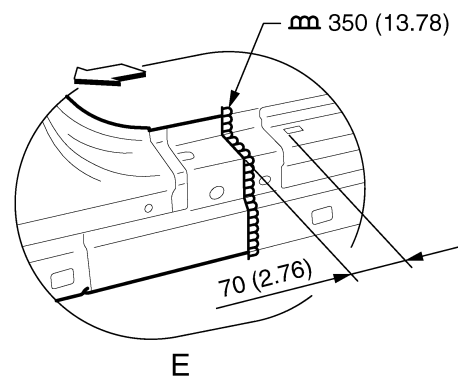
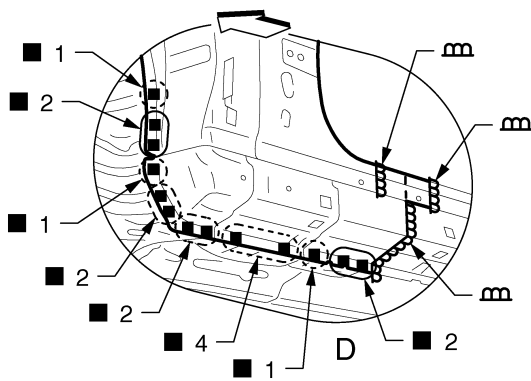
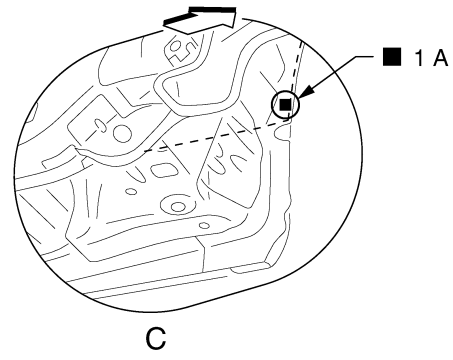
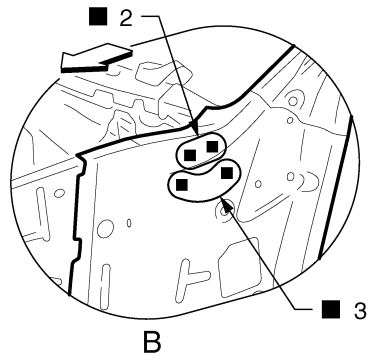
● Upper inner front pillar assembly (LH)

● Upper rear hoodledge (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3251GB

Unit: mm (in)
 ⇐: Vehicle front

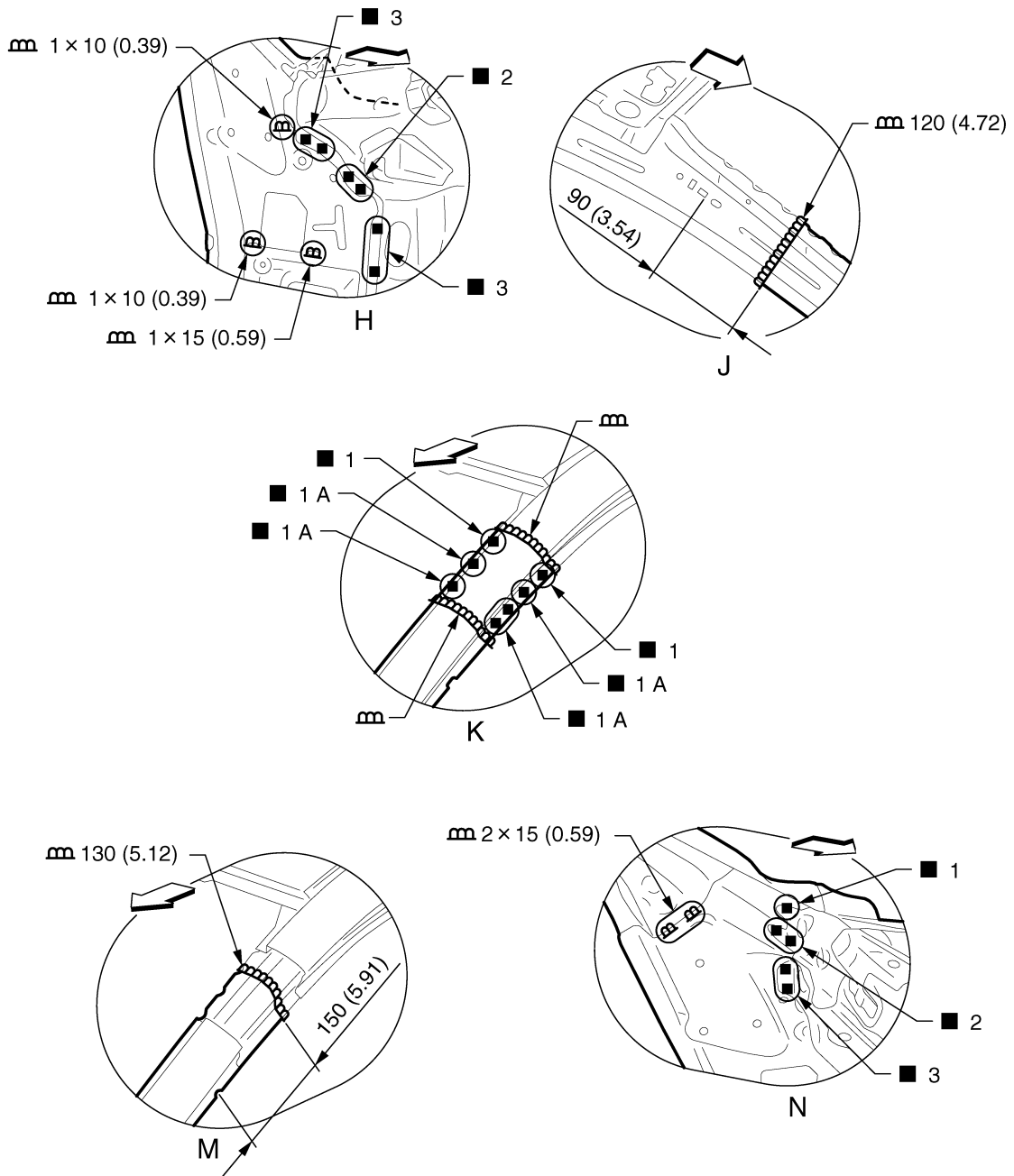
View B: Before installing side body assembly
 View E: Before installing outer front side body

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0679GB

Unit: mm (in)

↔: Vehicle front

View M: Before installing outer front side body

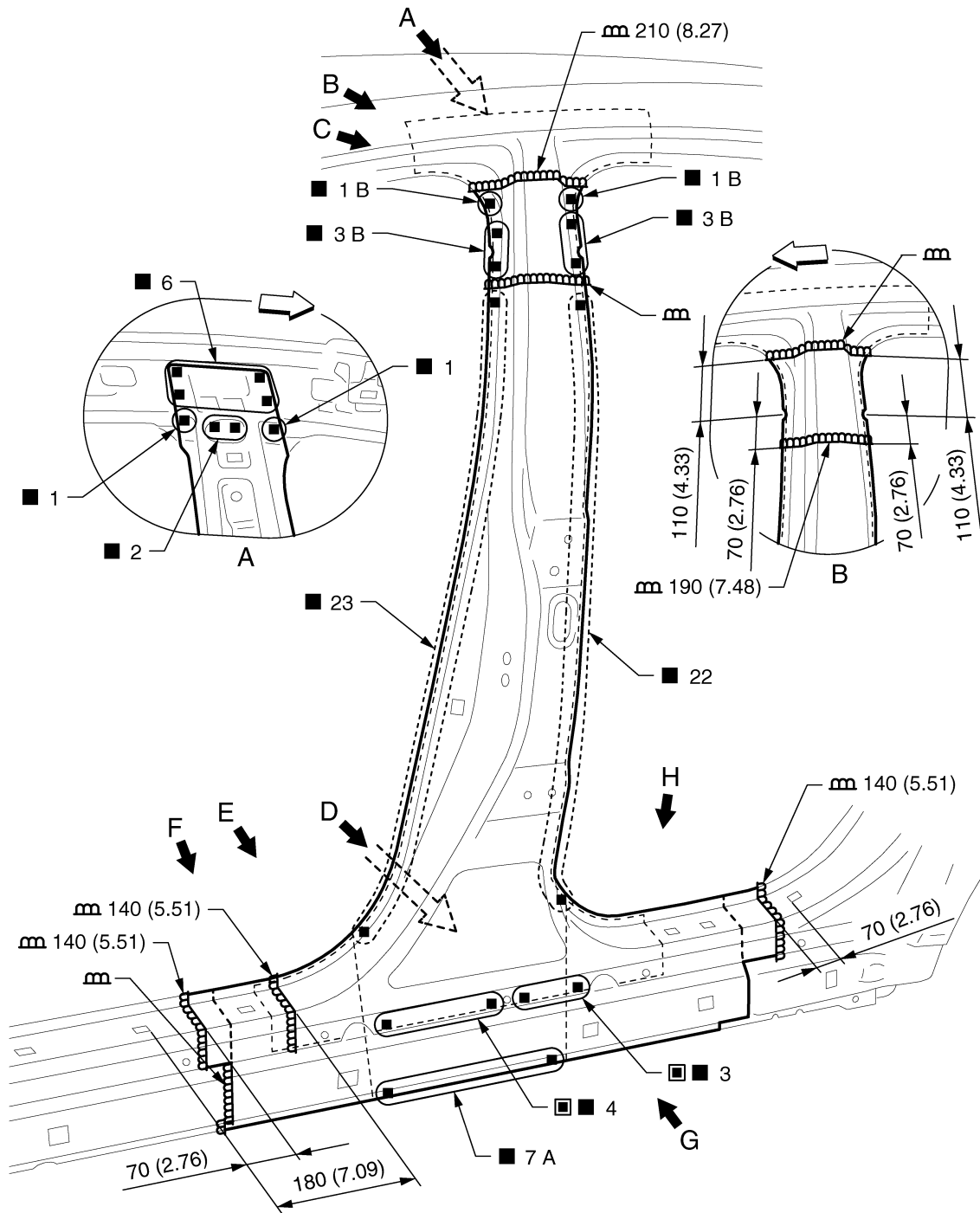
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Center Pillar

INFOID:000000010581056



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Unit: mm (in)

↳: Vehicle front

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

Replacement parts

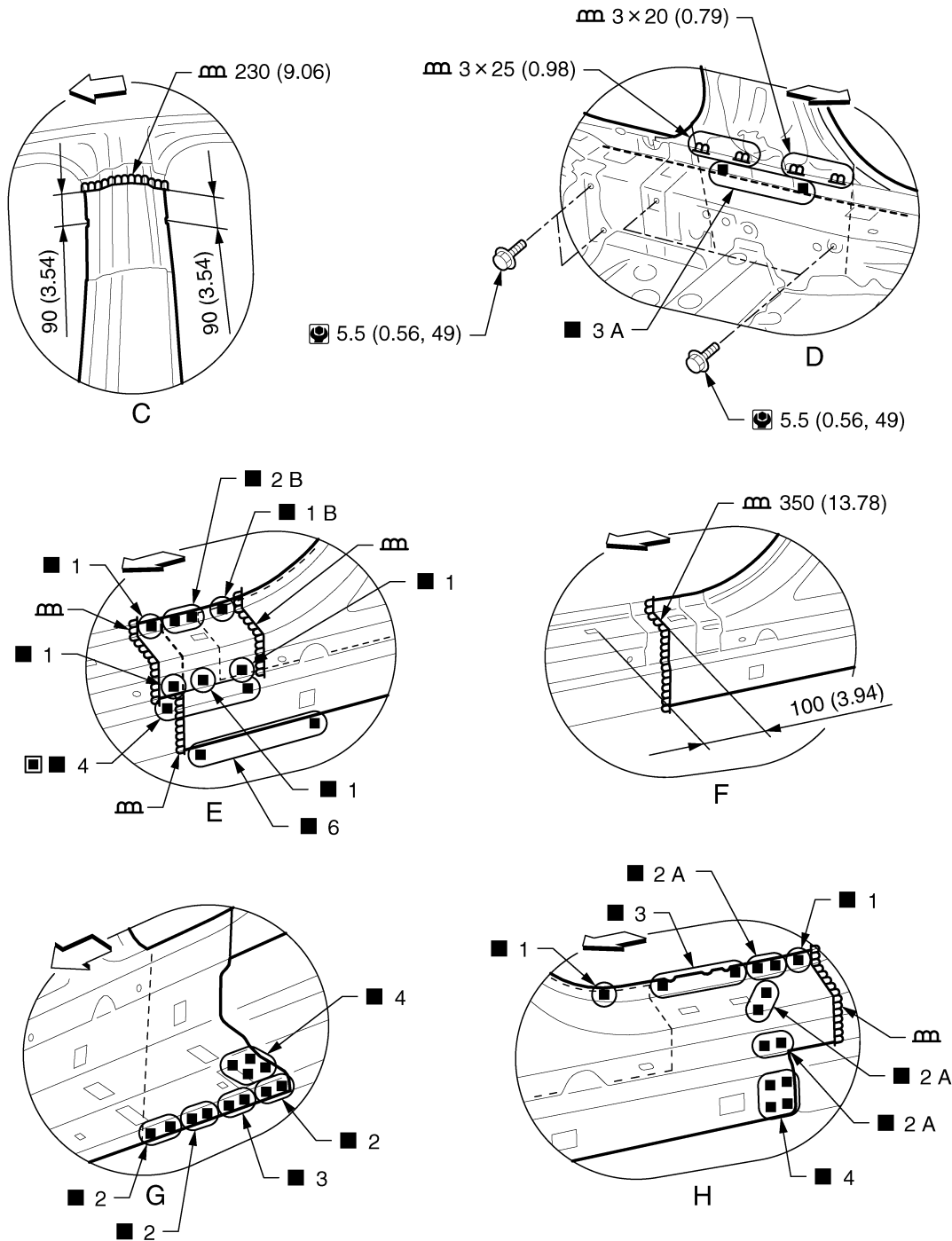
- Side body assembly (LH)
- Inner center pillar (LH)

JSKIA0680GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0681GB

Unit: mm (in)

↔: Vehicle front

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

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

View C and F: Before installing outer front side body

Outer Sill

Work after hoodledge reinforcement is removed.

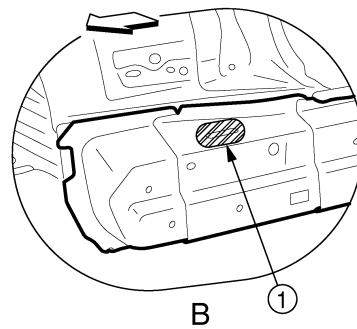
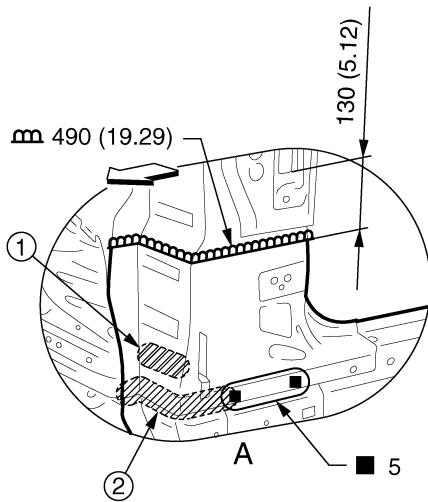
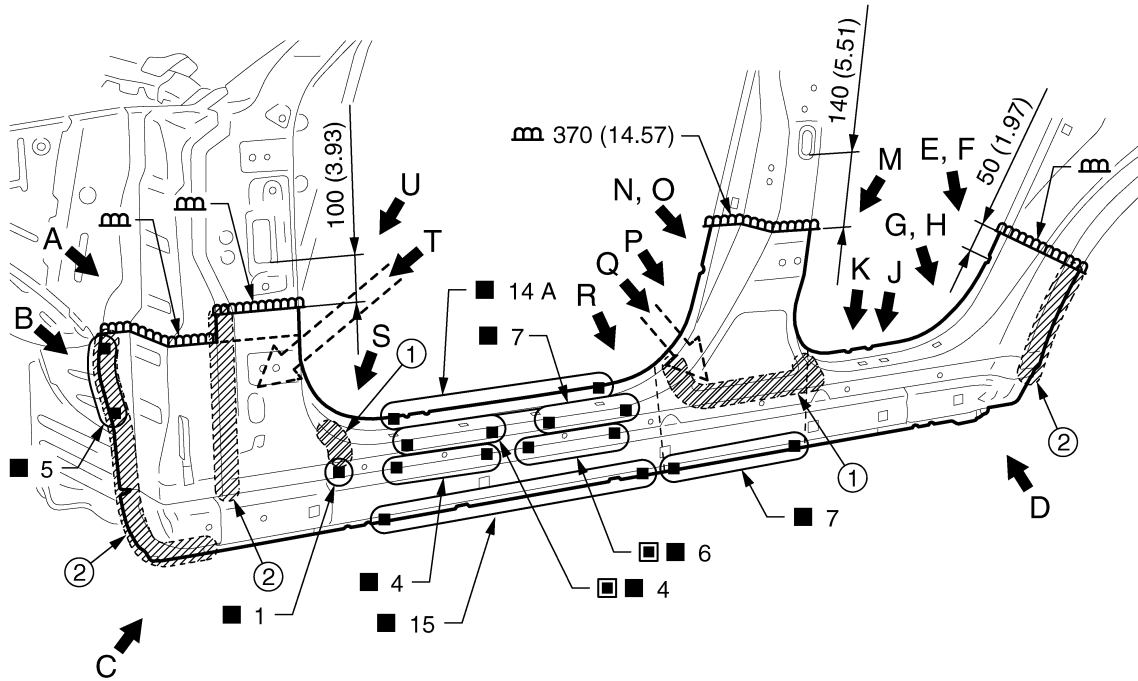
Remove the front pillar brace and the center pillar reinforcement (reusable).

INFOID:000000010581057

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



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JSKIA0682GB

1. Urethane foam

2. Body sealing

Unit: mm (in)

←: Vehicle front

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

Replacement parts

- Outer sill (LH)
- Outer sill reinforcement (LH)
- Upper outer rear wheelhouse extension (LH)
- Lower outer rear wheelhouse extension (LH)

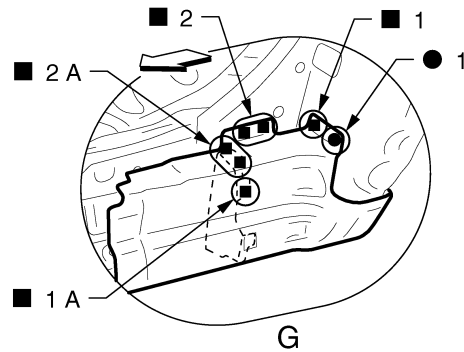
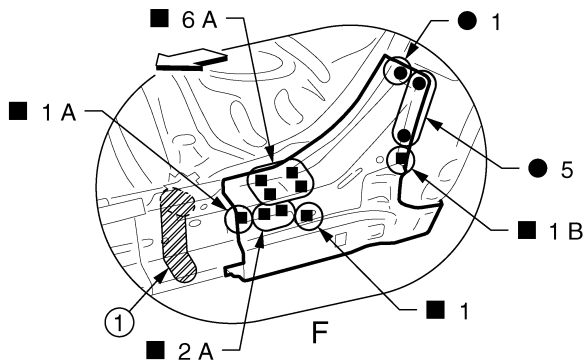
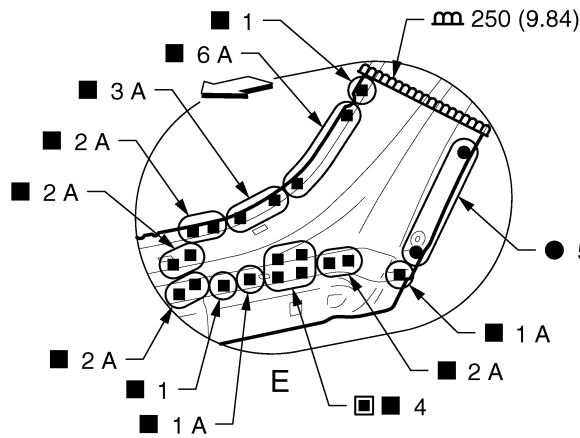
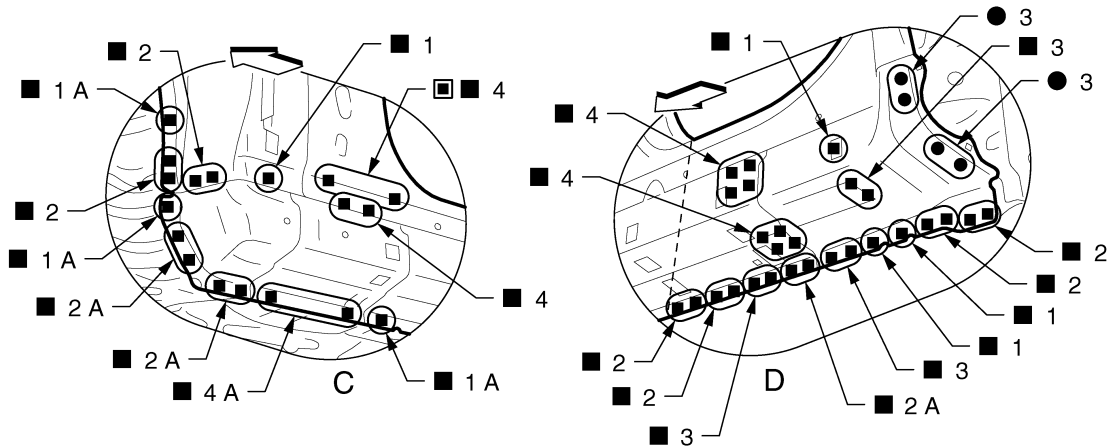
View A: Before installing outer sill

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

View B: Before installing outer sill and front pillar brace



JSKIA0683ZZ

1. Urethane foam

Unit: mm (in)

↔: Vehicle front

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

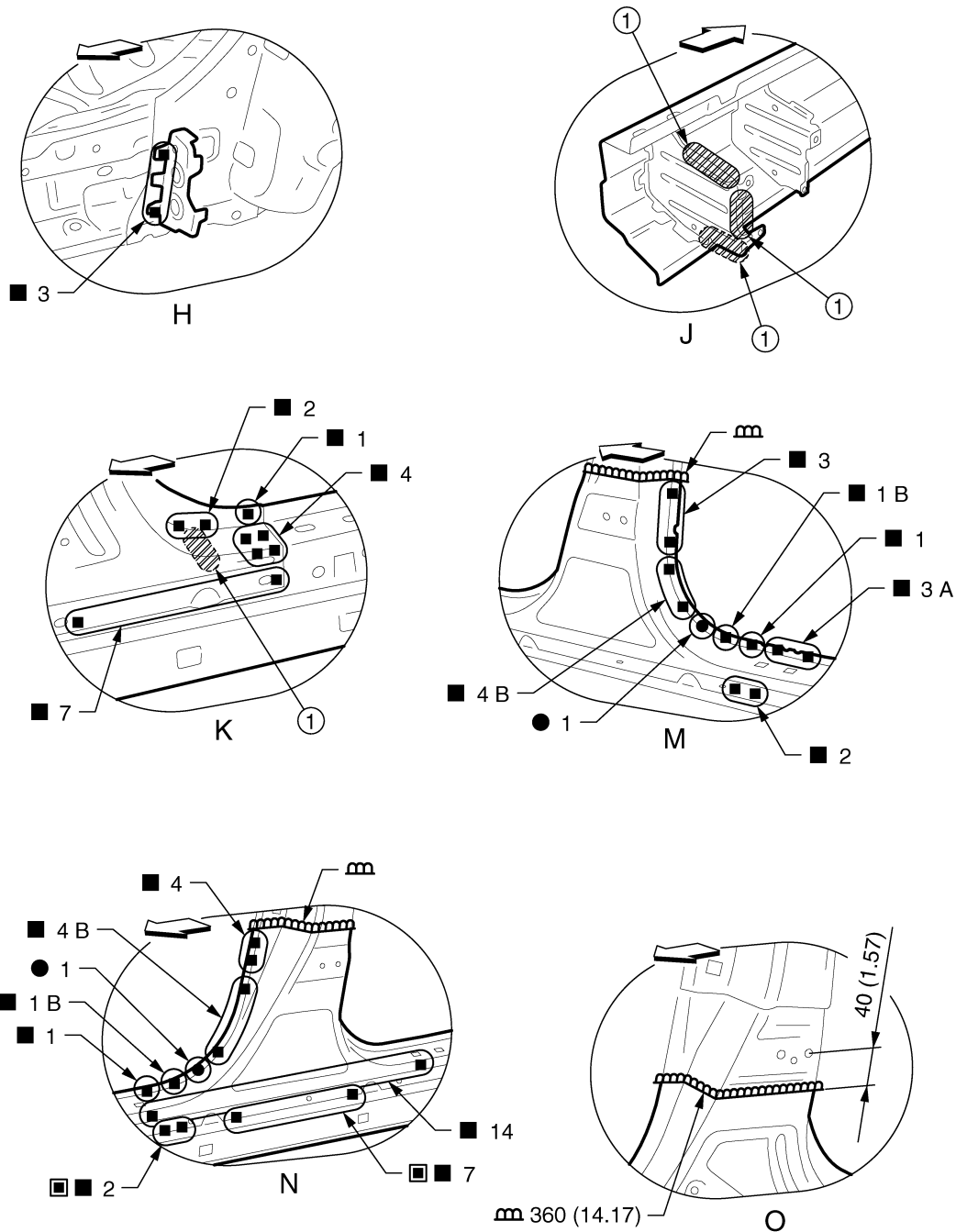
View F: Before installing outer sill and outer sill reinforcement

View G: Before installing outer sill, outer sill reinforcement, and upper outer rear wheelhouse extension

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0684GB

1. Urethane foam

Unit: mm (in)

↔: Vehicle front

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

View H: Before installing outer sill, outer sill reinforcement, upper outer rear wheelhouse extension, and lower outer rear wheelhouse extension

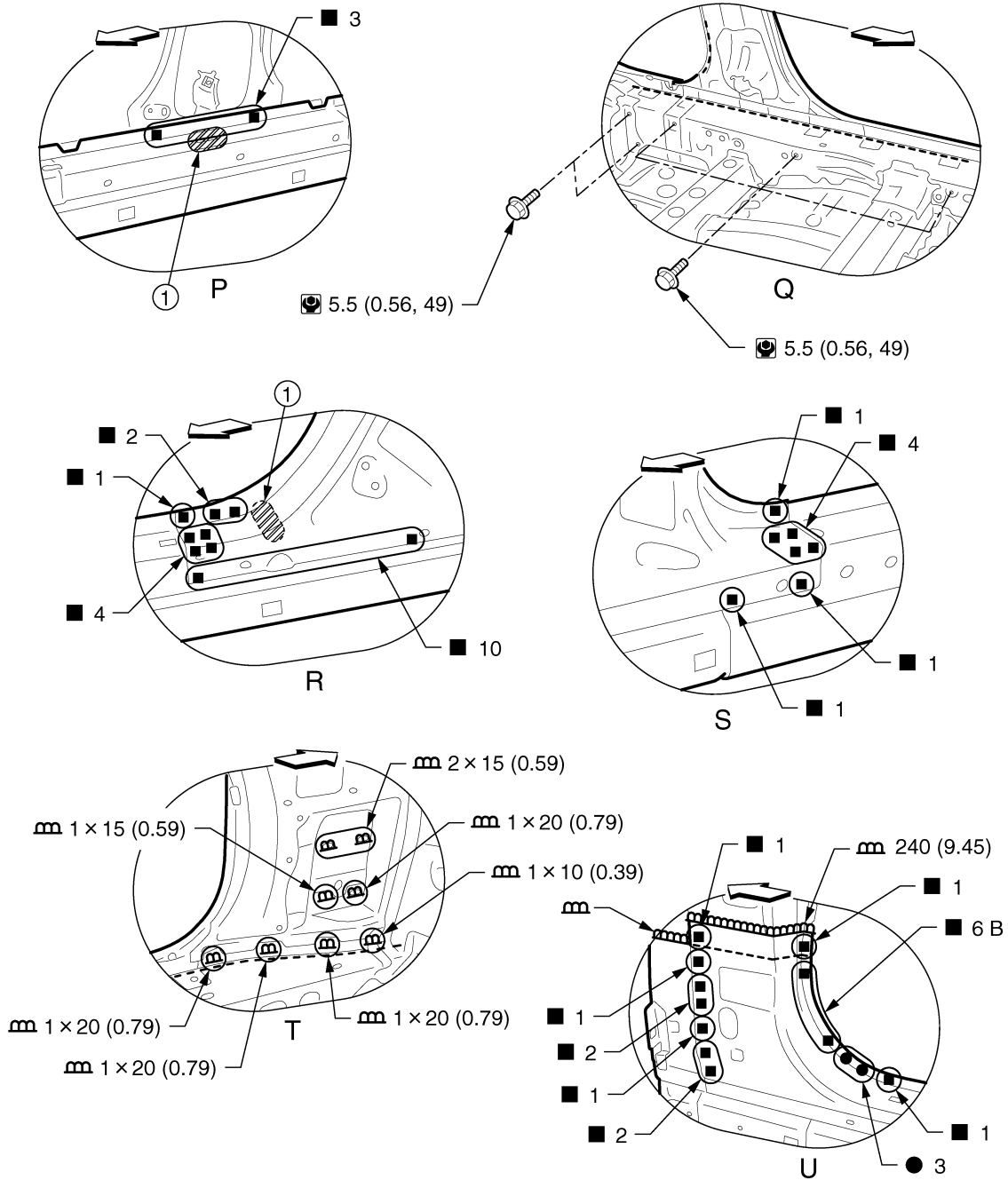
View J: Outer sill reinforcement (replacement parts)

View K and O: Before installing outer sill

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0685GB

1. Urethane foam

Unit: mm (in)

◁: Vehicle front

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

View P: Before installing outer sill and center pillar reinforcement

View R and S: Before installing outer sill

Rear Fender

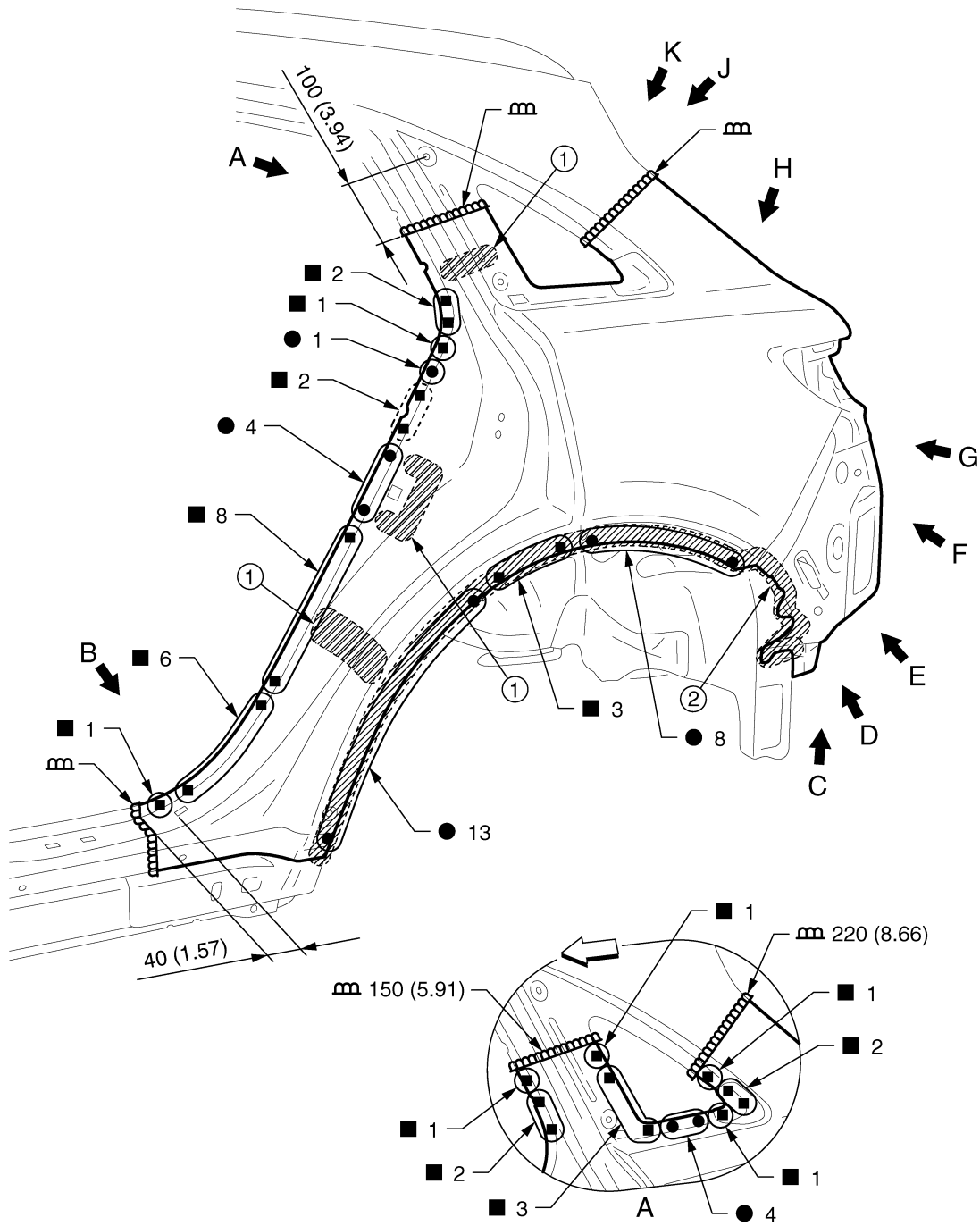
INFOID:0000000010581058

Remove the upper back pillar assembly and lower back pillar assembly from the rear fender assembly service part for easier installation.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



1. Urethane foam

2. Body sealing

Unit: mm (in)

◁: Vehicle front

Replacement parts

● Rear fender assembly (LH)

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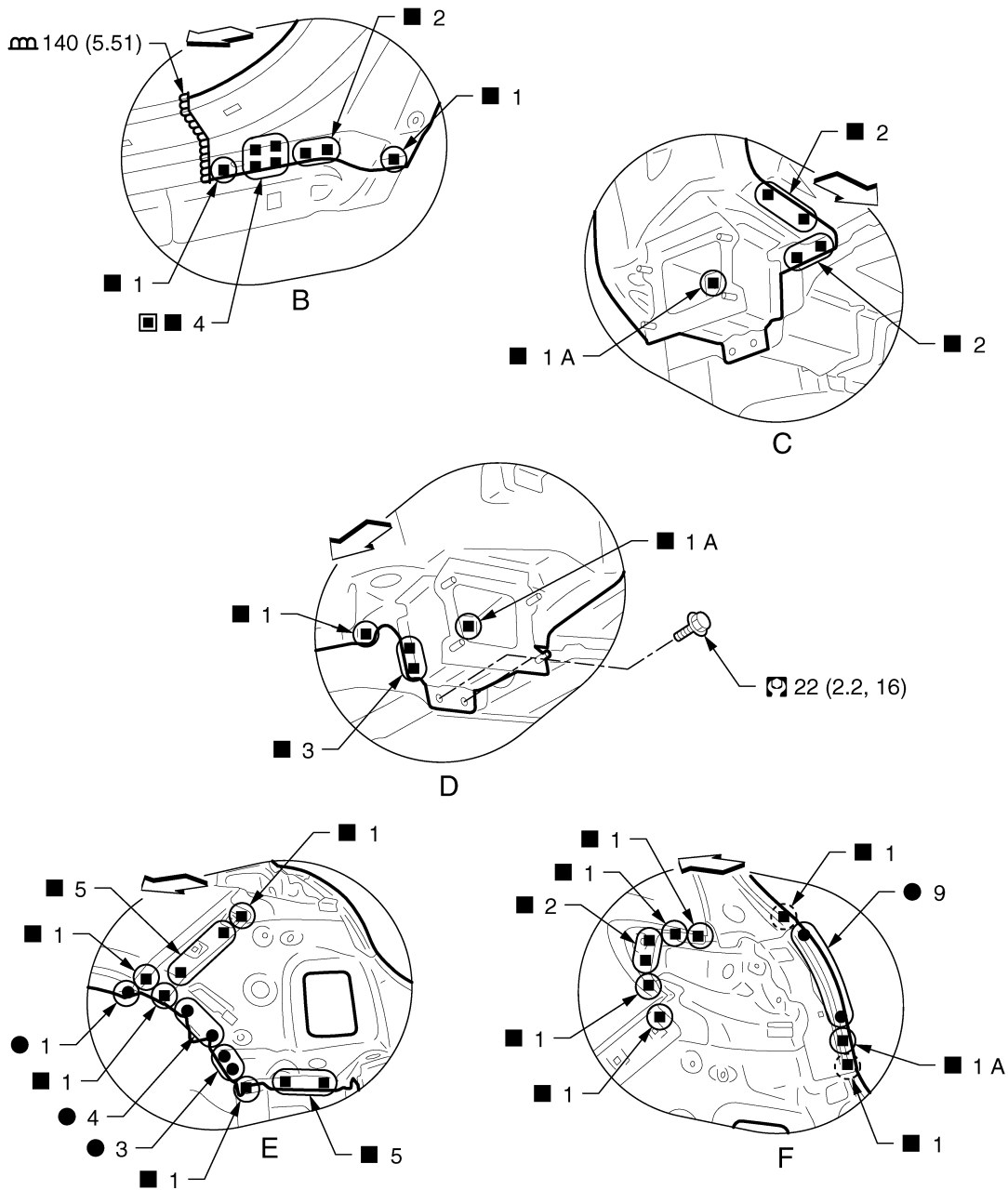
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JSKIA1333GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3252GB

Unit: mm (in)

↔: Vehicle front

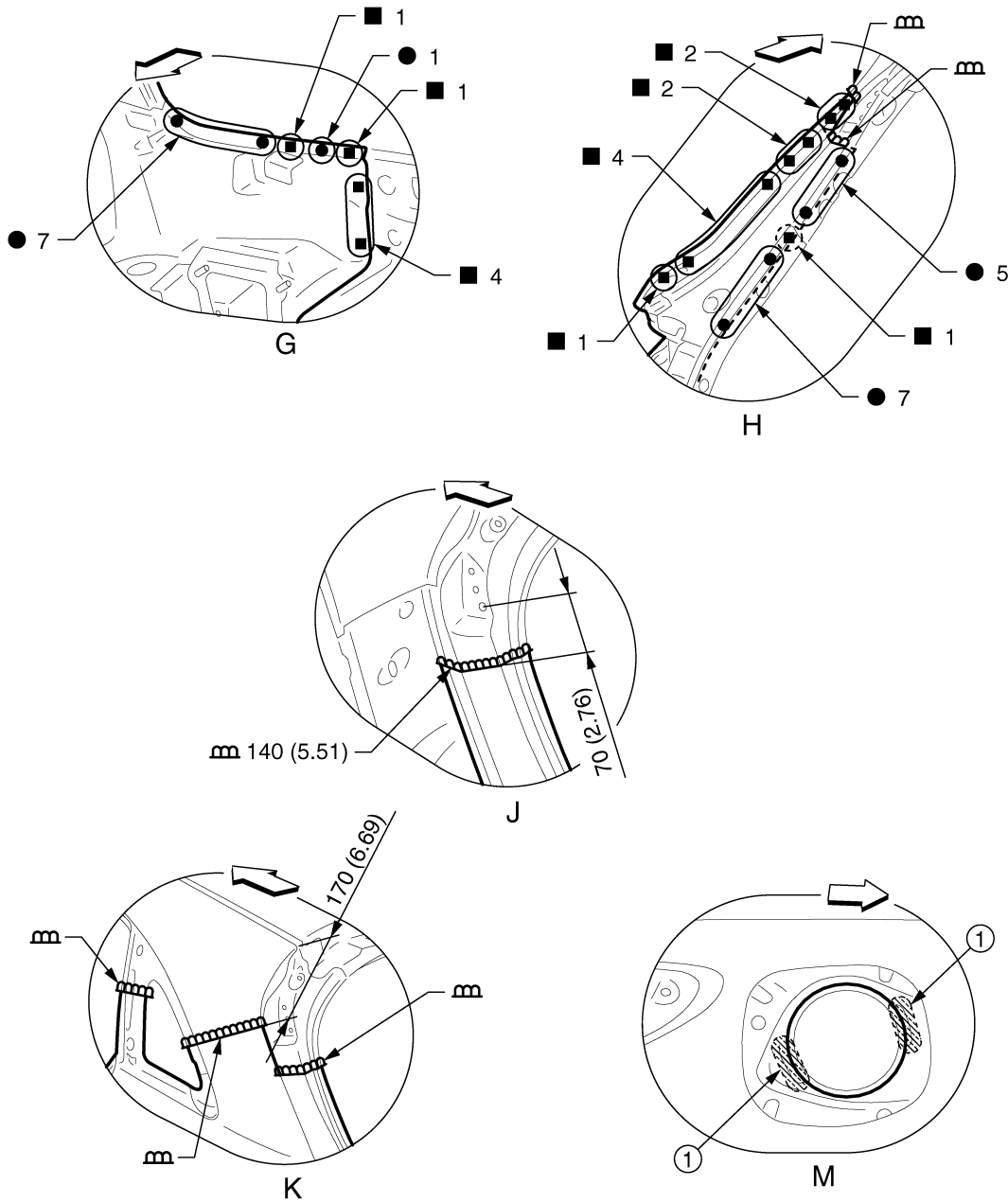
■: Perform the plug welding instead of the laser welding.

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

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



- 1. Adhesive
- Unit: mm (in)
- ← Vehicle front

View J: Before installing rear fender
View M: Right side rear fender

Rear Panel

Remove the welding point "b" for easier replacement.

JSKIA0688GB

INFOID:000000010581059

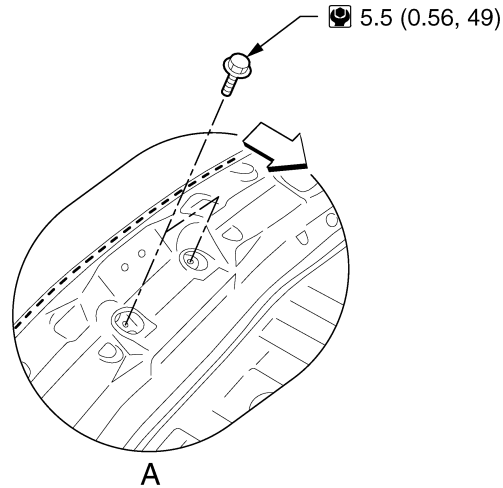
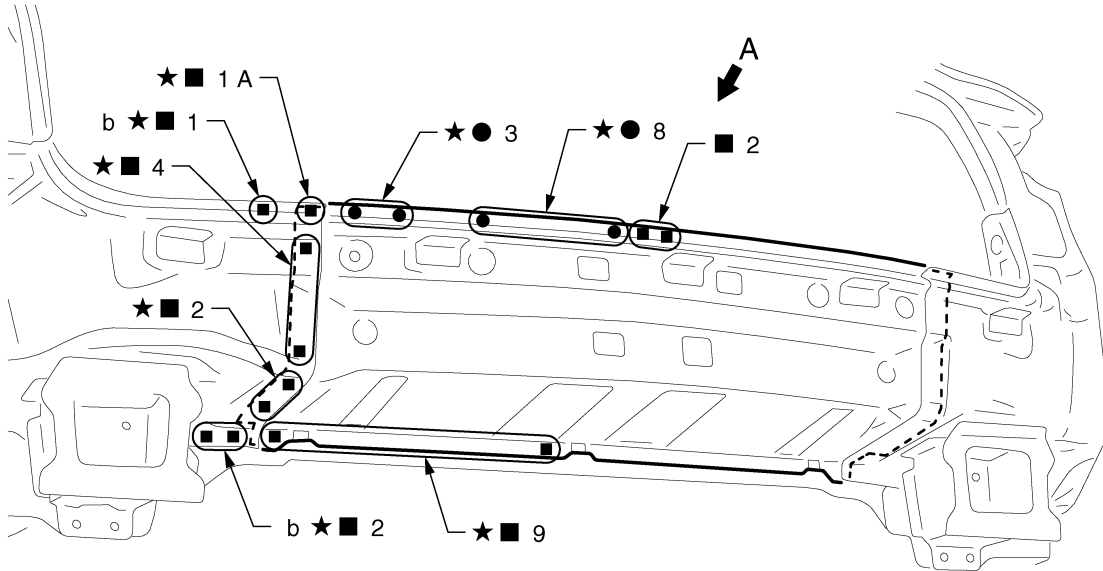
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0689GB

⇐: Vehicle front

★: An equivalent welding portion with the same dimensions is on the opposite side.

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

Replacement parts

- Rear panel assembly

Rear End Crossmember

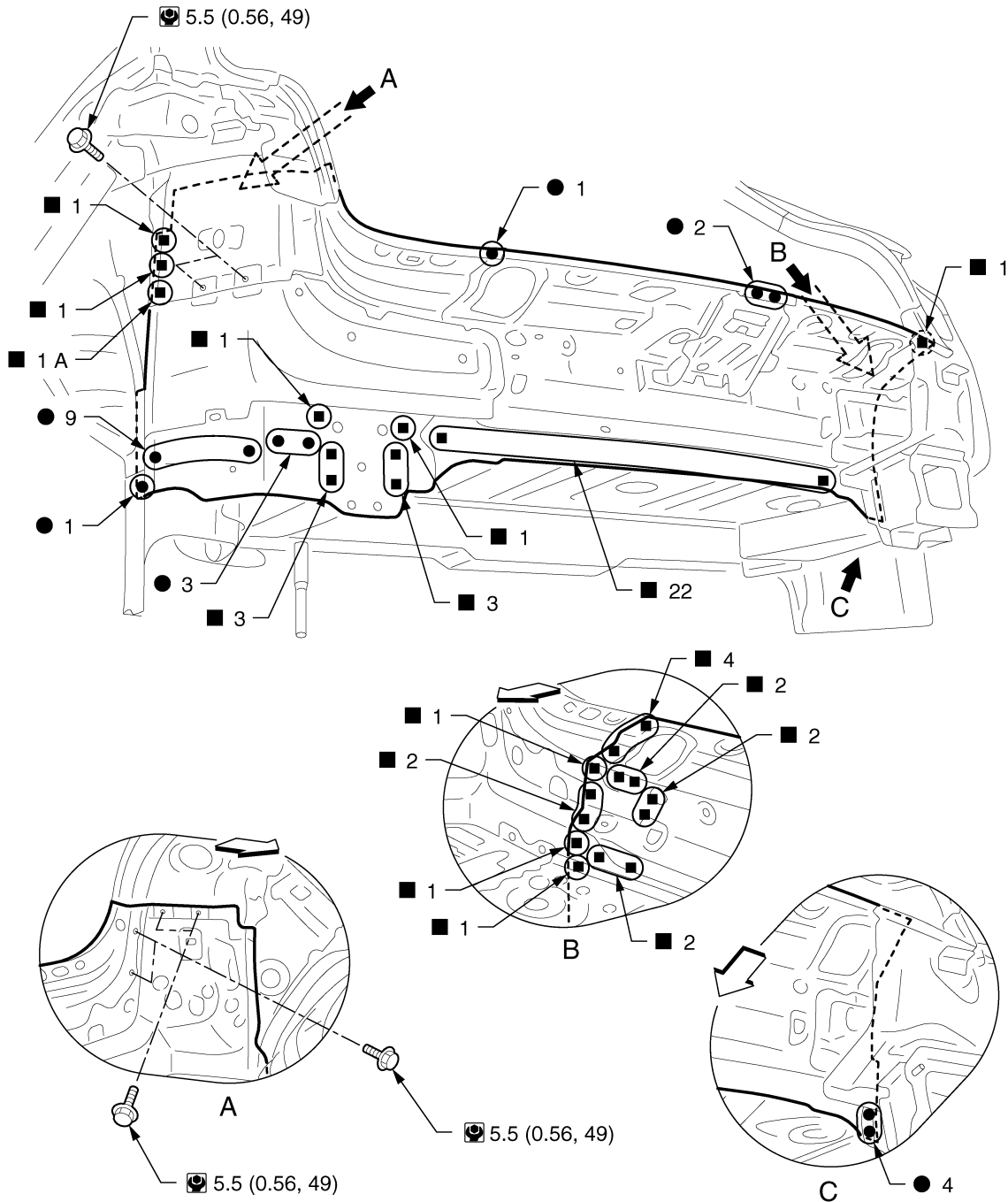
INFOID:000000010581060

Work after rear fender extension and rear panel are removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0690GB

← Vehicle front

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

Replacement parts

- Rear end crossmember assembly

Rear Floor Rear

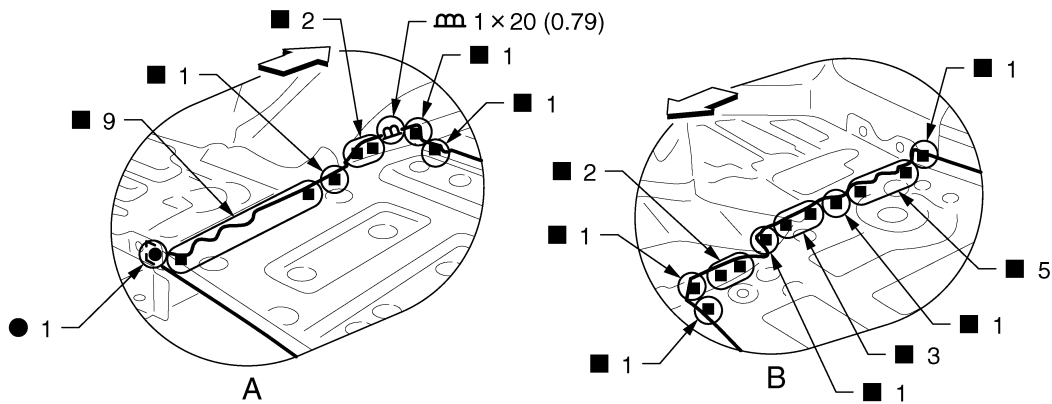
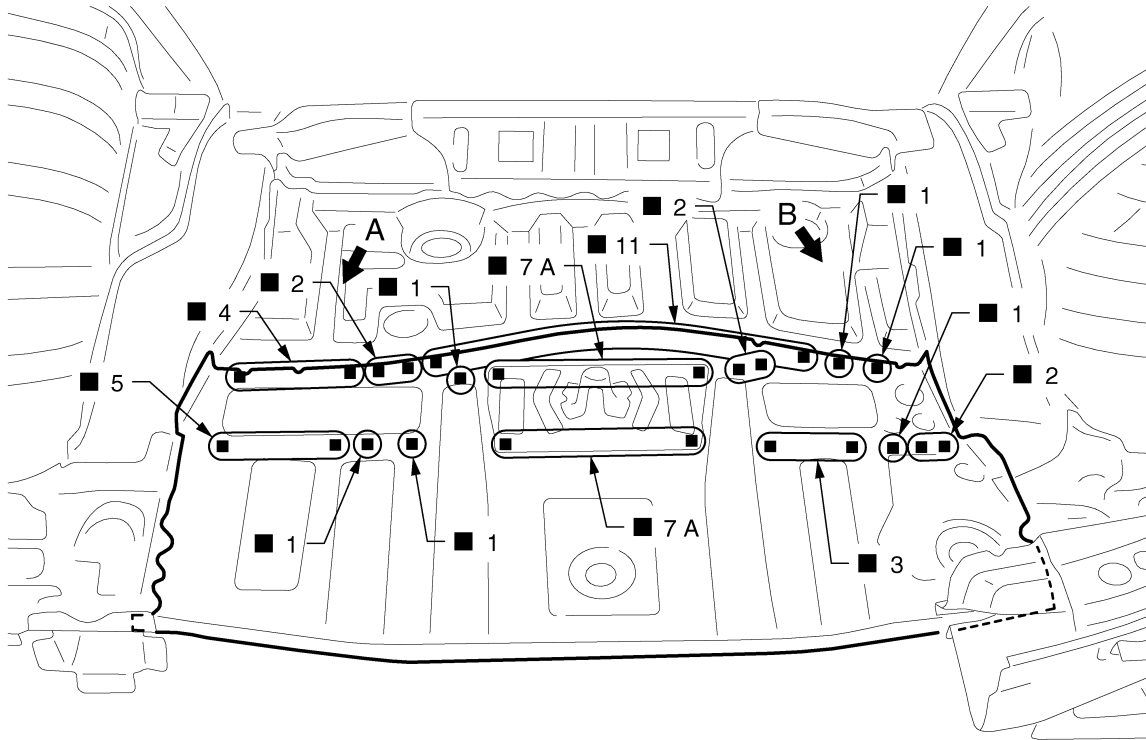
INFOID:000000010581061

Work after rear panel, lower back pillar assembly, and rear end crossmember assembly are removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0691GB

Unit: mm (in)

↔: Vehicle front

Replacement parts

● Rear floor rear

● Spare tire clamp reinforcement

Rear Side Member Extension

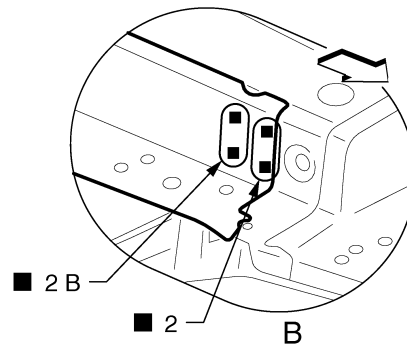
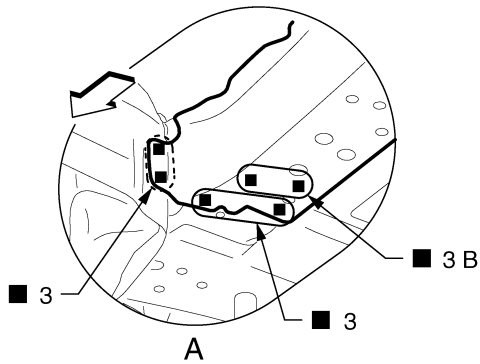
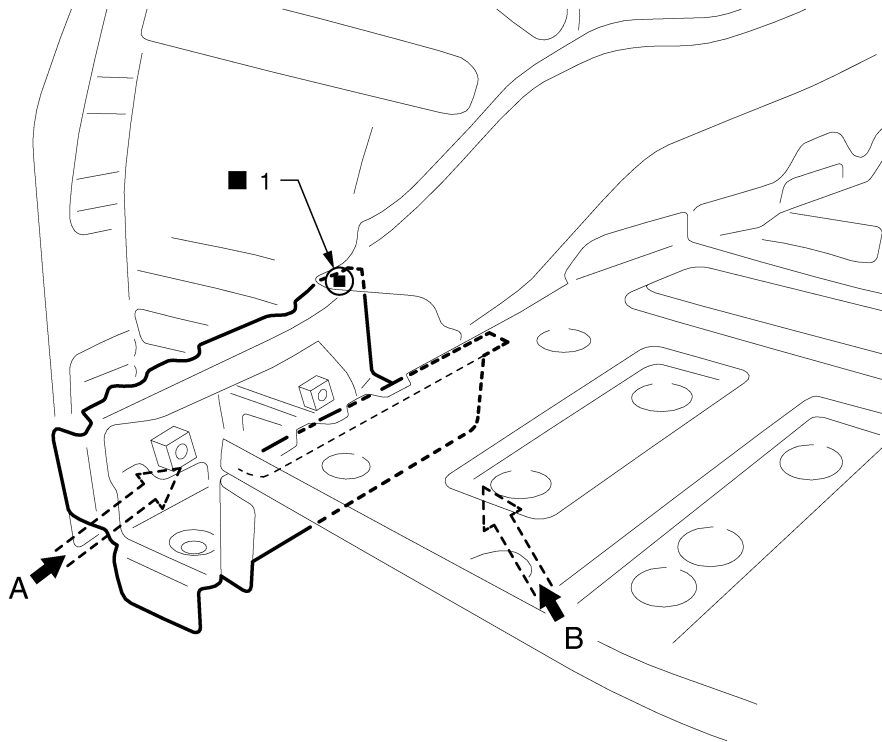
INFOID:000000010581062

Work after rear panel, lower back pillar assembly, rear end crossmember, and rear floor side are removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA0692ZZ

←: Vehicle front

Replacement parts

- Rear side member extension (LH)

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

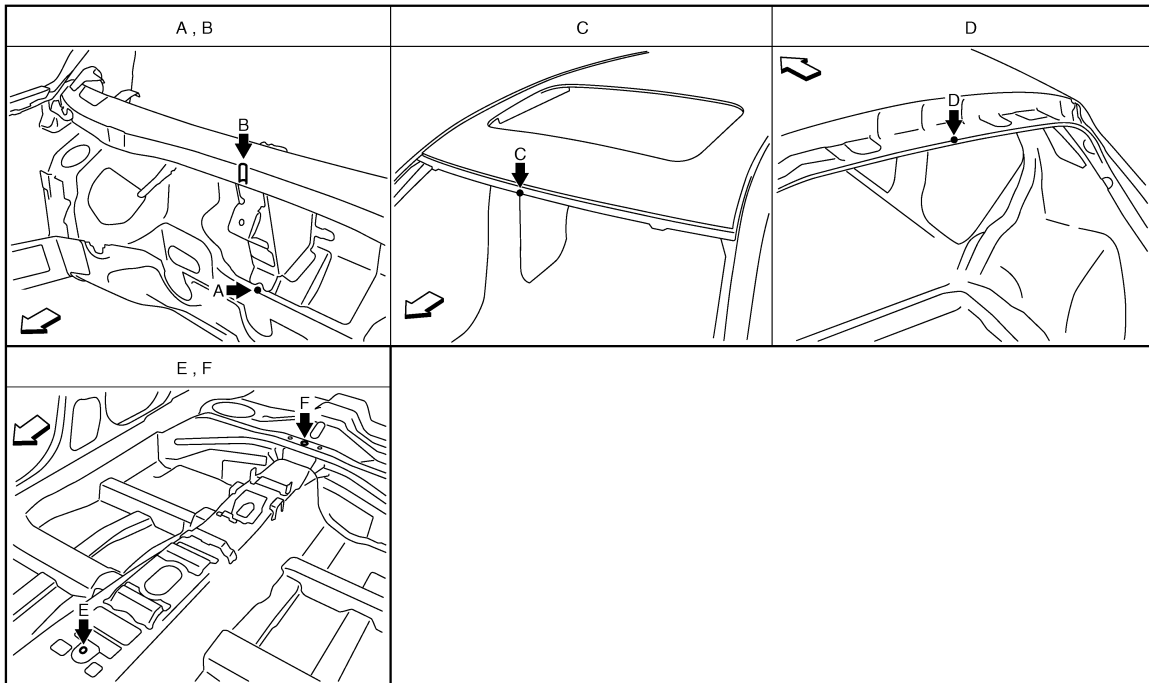
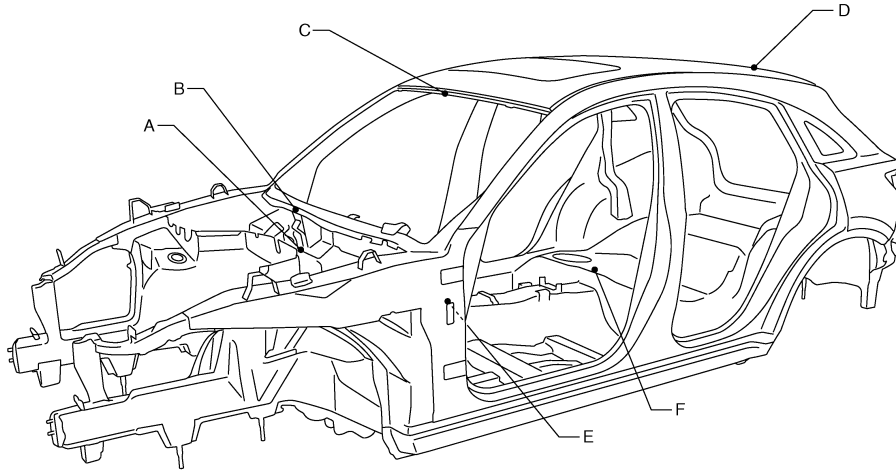
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Body Center Marks

INFOID:000000010581063

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.



JSKIA0660ZZ

↶: Vehicle front

Unit: mm (in)

Points	Portion	Marks
A	Upper dash	Embossment
B	Upper dash crossmember	Bead
C	Front roof	Embossment
D	Rear roof	Indent

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

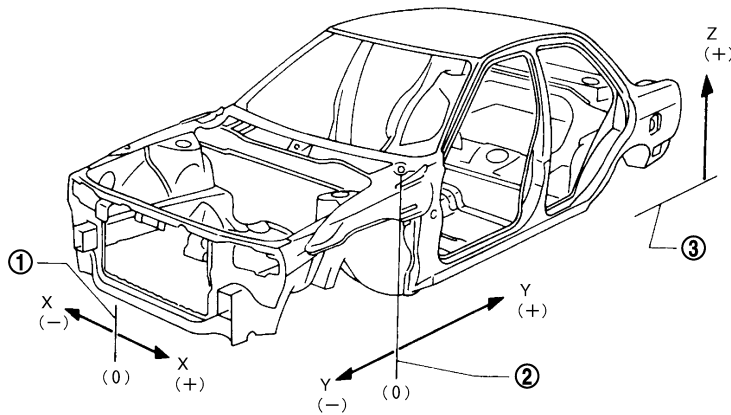
[FOR USA AND CANADA]

Points	Portion	Marks
E	Trans control reinforcement	Hole 12×14 (0.47×0.55)
F	Rear seat crossmember reinforcement	Hole φ5 (0.20)

Description

INFOID:000000010581064

- 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:000000010581065

MEASUREMENT

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

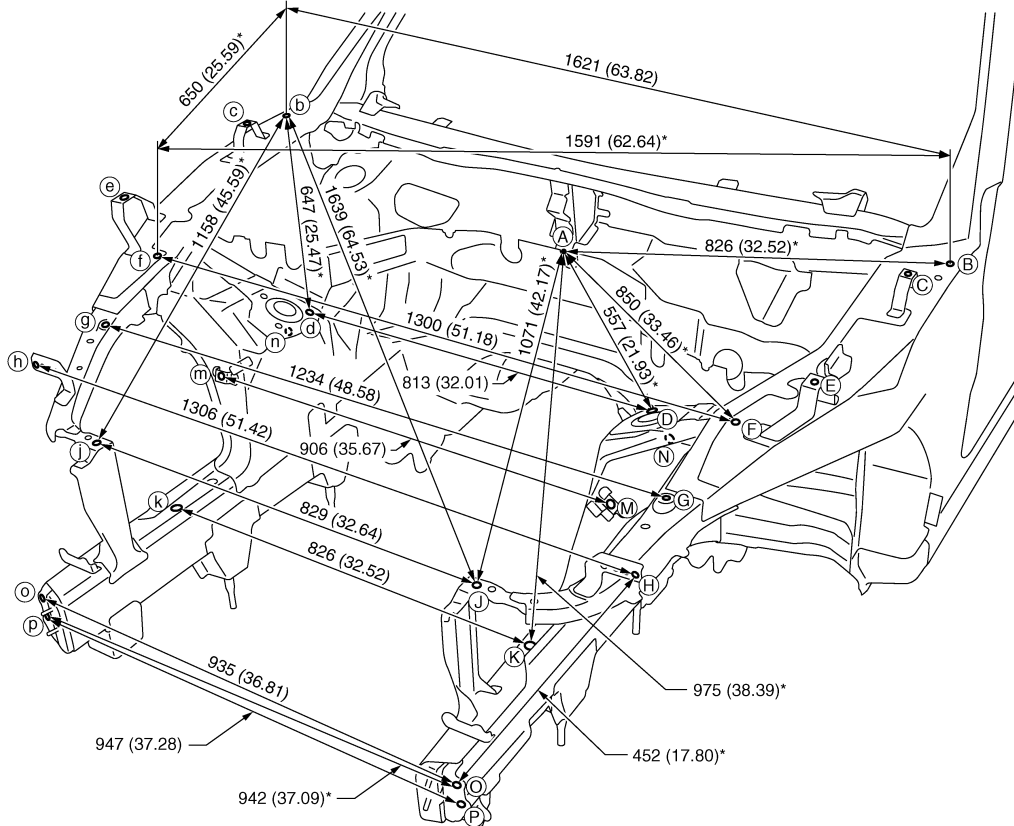
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0661GB

Unit: mm (in)

«The others»

Unit: mm (in)

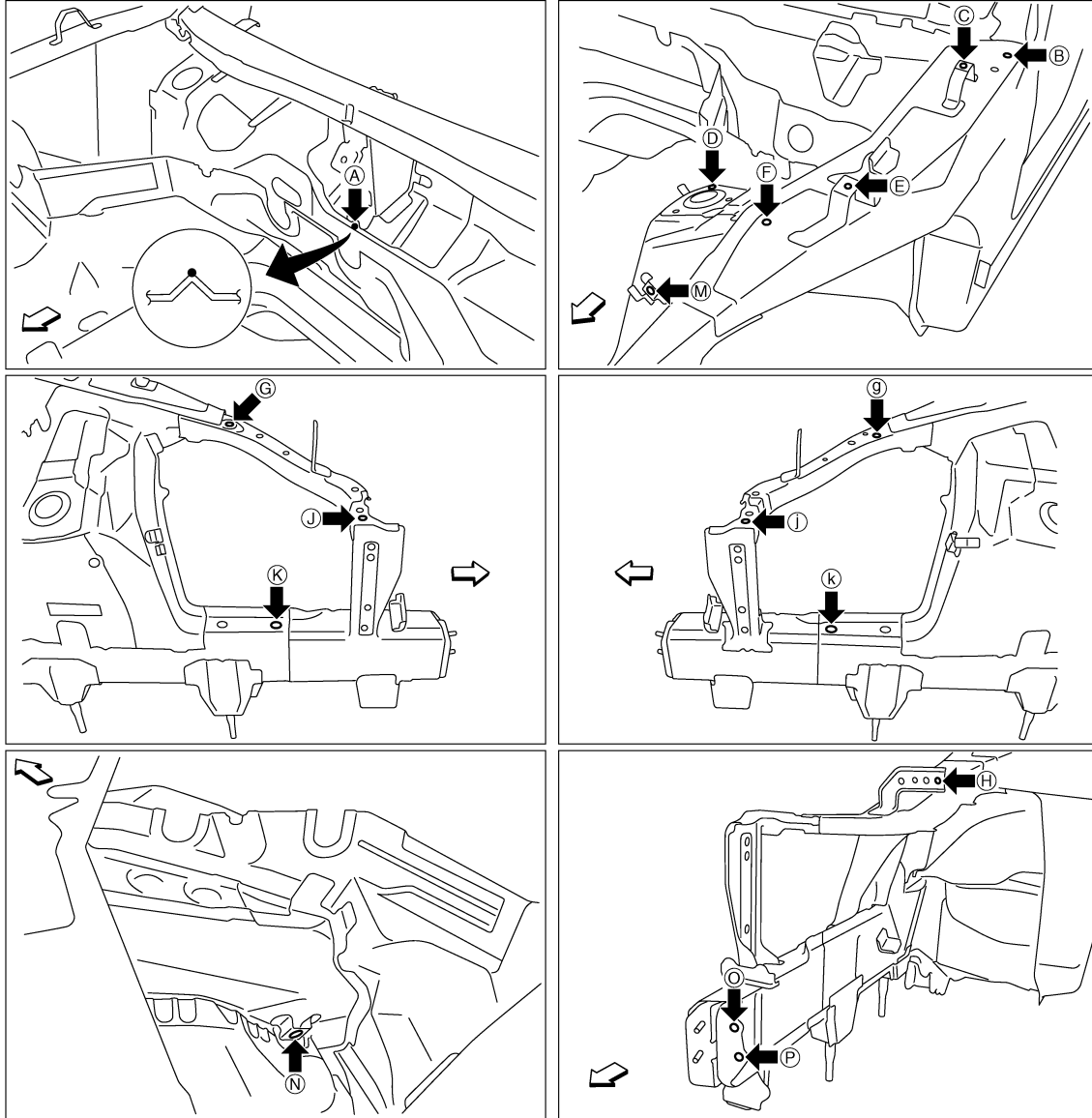
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - C	806 (31.73)*		B - C	178 (7.01)*		B - e	1682 (66.22)*		b - G	1651 (65.00)	
A - E	930 (36.61)*		B - c	1601 (63.03)*		B - G	849 (33.43)		C - c	1561 (61.46)	
A - G	961 (37.83)		B - d	1318 (51.89)*		b - g	860 (33.86)		E - e	1533 (60.35)	
A - g	966 (38.03)		B - E	587 (23.11)*		B - g	1653 (65.08)		N - n	906 (35.67)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



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JSKIA0662ZZ

← Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash positioning mark of center positioning mark	G, g	Radiator core support hole center $\phi 7$ (0.28)
B, b	Hood hinge installing hole center $\phi 9$ (0.35)	J, j	Radiator core support stay hole center $\phi 12$ (0.47)
C, c, E, e, H, h	Front fender installing hole center $\phi 7$ (0.28)	K, k	Front side member hole center $\phi 10$ (0.39)
D, d	Front strut installing hole center $\phi 11$ (0.43)	M, m, N, n	Nut holder hole center $\phi 16$ (0.63)
F, f	Hoodledge reinforcement hole center $\phi 12$ (0.47)	O, o, P, p	Front bumper reinforcement installing hole center $\phi 11$ (0.43)

Underbody

INFOID:000000010581066

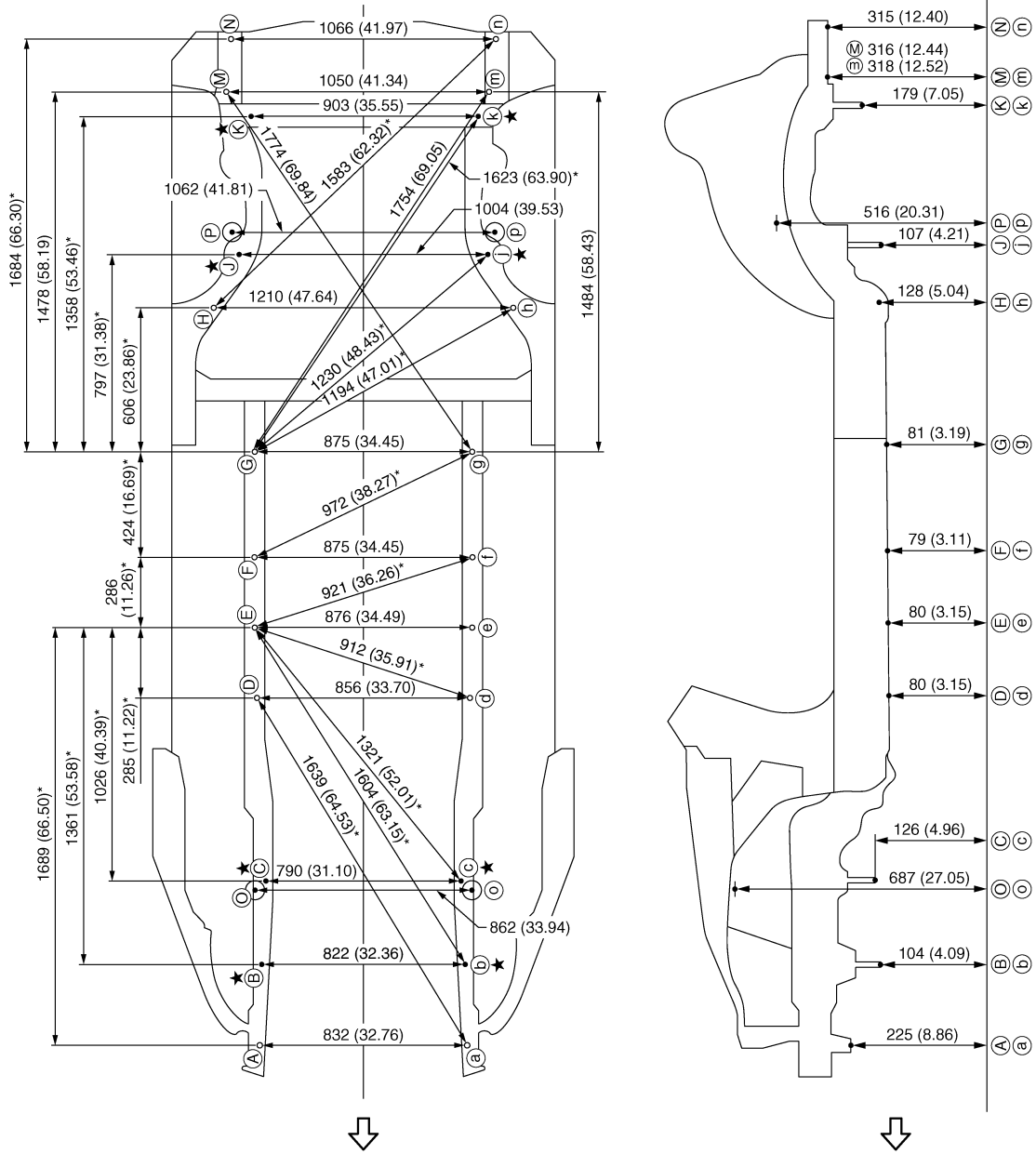
MEASUREMENT

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]



JSKIA0663GB

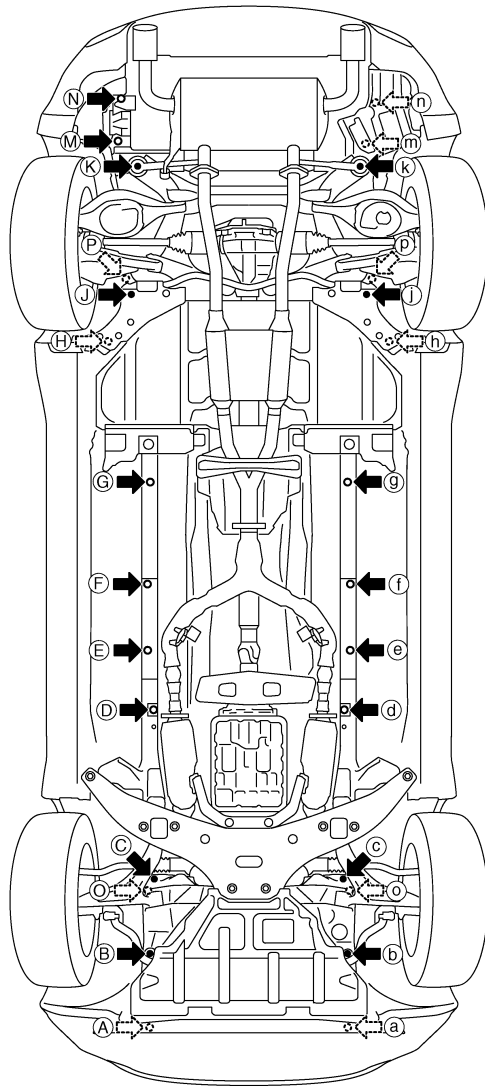
- Unit: mm (in)
- ↳ Vehicle front
- ★ Bolt head

MEASUREMENT POINTS

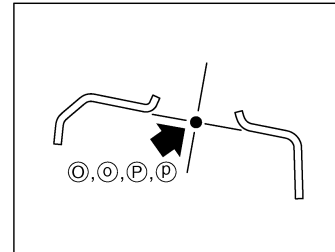
BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



←: Vehicle front



JSKIA0664ZZ

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Unit: mm (in)

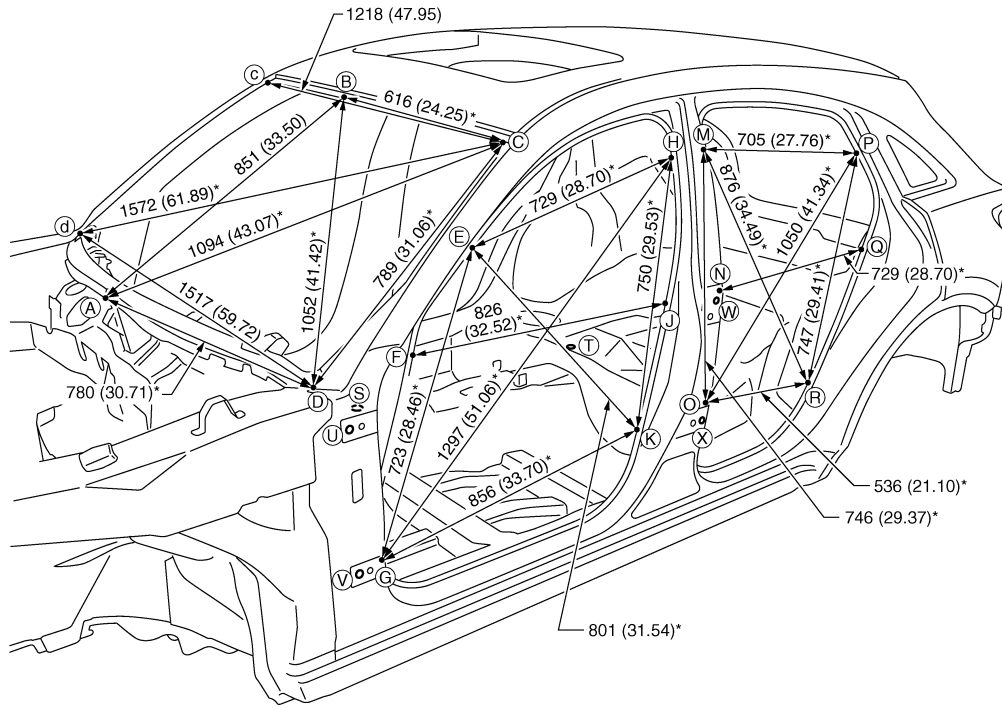
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
A, a	±415.8 (±16.370)	-583.0 (-22.953)	224.6 (8.843)	Hole φ13 (0.51)	J, j	±502.1 (±19.768)	2603.8 (102.512)	106.9 (4.209)	Bolt head
B, b	±411.0 (±16.181)	-261.0 (-10.276)	104.2 (4.102)	Bolt head	K, k	±451.5 (±17.776)	3163.9 (124.563)	179.1 (7.051)	Bolt head
C, c	±395.0 (±15.551)	76.0 (2.992)	126.3 (4.972)	Bolt head	M	550.0 (21.654)	3264.6 (128.527)	316.4 (12.457)	Hole φ8 (0.31)
D, d	±428.0 (±16.850)	815.0 (32.087)	80.0 (3.150)	Hole 16×18 (0.63×0.71)	m	-500.0 (-19.685)	3273.3 (128.870)	318.0 (12.520)	Hole φ8 (0.31)
E, e	±438.0 (±17.244)	1100.0 (43.307)	80.2 (3.157)	Hole φ16 (0.63)	N, n	±533.0 (±20.984)	3475.0 (136.811)	315.4 (12.417)	Hole φ16 (0.63)
F, f	±437.5 (±17.224)	1385.9 (54.563)	78.8 (3.102)	Hole φ15 (0.59)	O, o	±430.8 (±16.961)	39.2 (1.543)	686.6 (27.031)	Hole φ50 (1.97)
G, g	±437.5 (±17.224)	1810.0 (71.260)	81.2 (3.197)	Hole φ16 (0.63)	P, p	±531.2 (±20.913)	2692.7 (106.012)	515.6 (20.299)	Hole φ64 (2.52)
H, h	±604.9 (±23.815)	2390.5 (94.114)	128.3 (5.051)	Hole φ13 (0.51)					

Passenger Compartment

INFOID:0000000010581067

MEASUREMENT

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



JSKIA0665GB

Unit: mm (in)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

«The others»

Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1438 (56.61)		K - k	1553 (61.14)		Q - q	1524 (60.00)		T - Q	1042 (41.02)*	
E - g	1663 (65.47)*		M - m	1337 (52.64)		R - r	1579 (62.17)		T - R	848 (33.39)*	
E - h	1564 (61.57)*		M - o	1623 (63.90)*		S - E	1010 (39.76)*		U - u	1677 (66.02)	
E - k	1696 (66.77)*		M - p	1523 (59.96)*		S - F	907 (35.71)*		U - W	1158 (45.59)*	
F - f	1536 (60.47)		M - r	1697 (66.81)*		S - G	797 (31.38)*		U - X	1151 (45.31)*	
F - j	1746 (68.74)*		N - n	1541 (60.67)		S - H	1373 (54.06)*		V - v	1702 (67.01)	
G - g	1560 (61.42)		N - q	1697 (66.81)*		S - J	1187 (46.73)*		V - W	1230 (48.43)*	
G - h	1939 (76.34)*		O - o	1554 (61.18)		S - K	1049 (41.30)*		V - X	1119 (44.06)*	
G - k	1777 (69.96)*		O - p	1795 (70.67)*		T - M	1056 (41.57)*		W - w	1687 (66.42)	
H - h	1331 (52.40)		O - r	1656 (65.20)*		T - N	903 (35.55)*		X - x	1726 (67.95)	
H - k	1622 (63.86)*		P - p	1363 (53.66)		T - O	814 (32.05)*				
J - j	1540 (60.63)		P - r	1646 (64.80)*		T - P	1161 (45.71)*				

MEASUREMENT POINTS

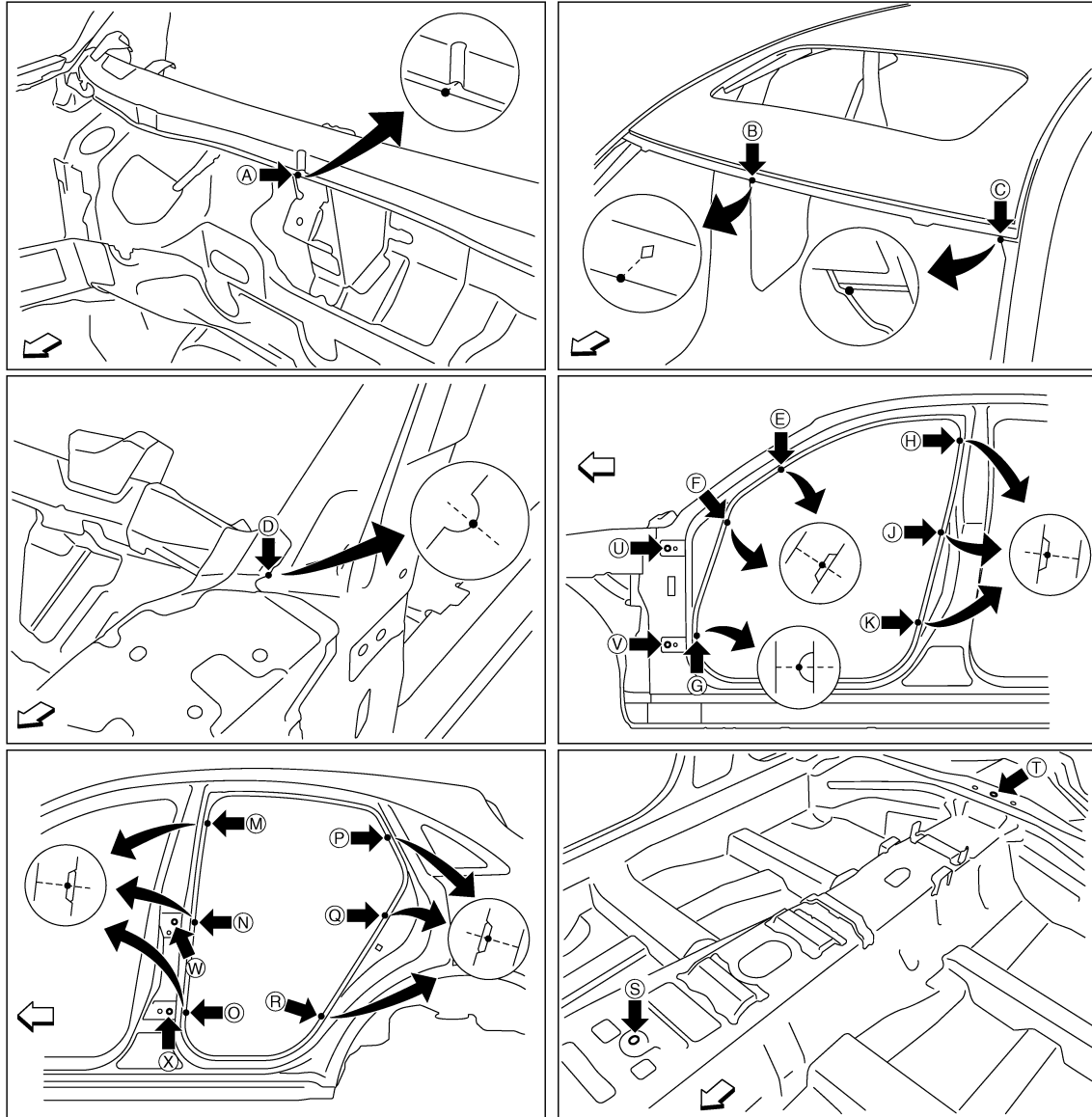
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0666ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash crossmember flange end of center positioning mark	P, p, Q, q, R, r	Rear fender indent
B	Roof flange end of center positioning mark	S	Trans control reinforcement hole center of center positioning mark 12×14 (0.47×0.55)
C, c	Front pillar joggle	T	Rear seat crossmember reinforcement hole center of center positioning mark $\phi 5$ (0.20)
D, d, E, e, F, f, G, g	Front pillar indent	U, u, V, v, W, w, X, x	Door hinge installing hole center U, u, V, v, X, x: $\phi 12$ (0.47) W, w: $\phi 9$ (0.35)
H, h, J, j, K, k, M, m, N, n, O, o	Center pillar indent		

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

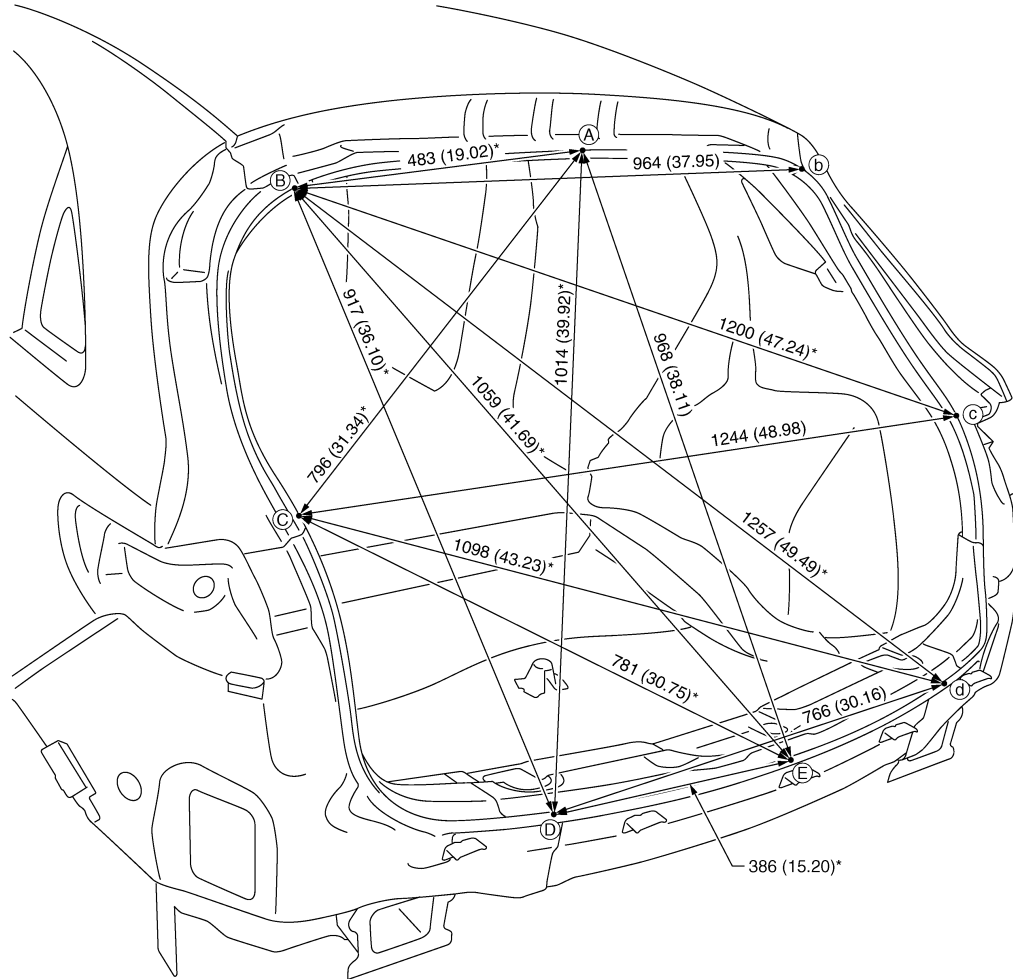
[FOR USA AND CANADA]

Rear Body

INFOID:000000010581068

MEASUREMENT

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



Unit: mm (in)

MEASUREMENT POINTS

JSKIA0667GB

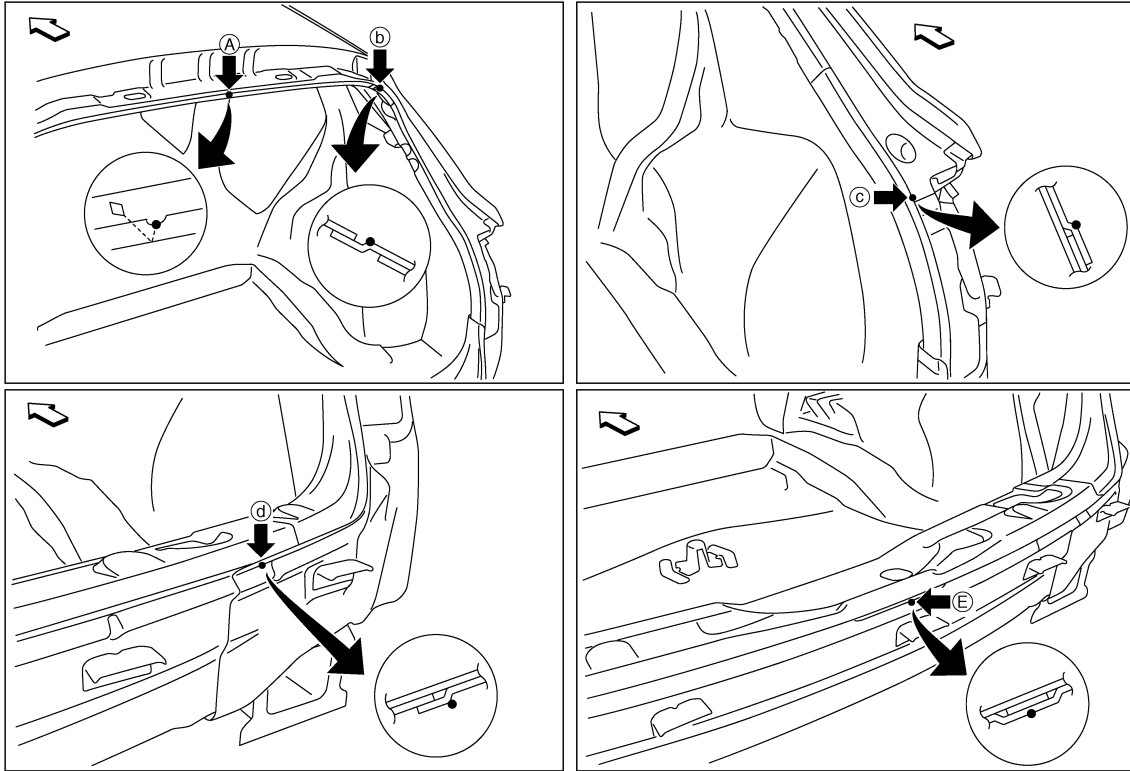
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0668ZZ

↶: Vehicle front

Point	Material	Point	Material
A	Roof indent of center positioning mark	D, d	Lower back pillar main joggle
B, b, C, c	Upper back pillar main joggle	E	Upper rear panel 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:000000010581069

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.	—
AES	Acrylonitrile Ethylene Styrene	80 (176)	↑	—
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.

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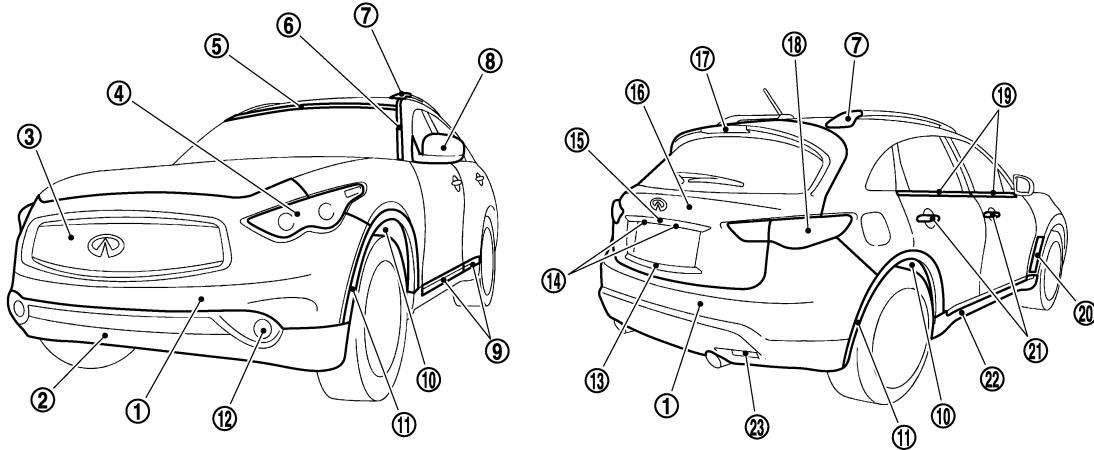
LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Location of Plastic Parts

INFOID:000000010581070



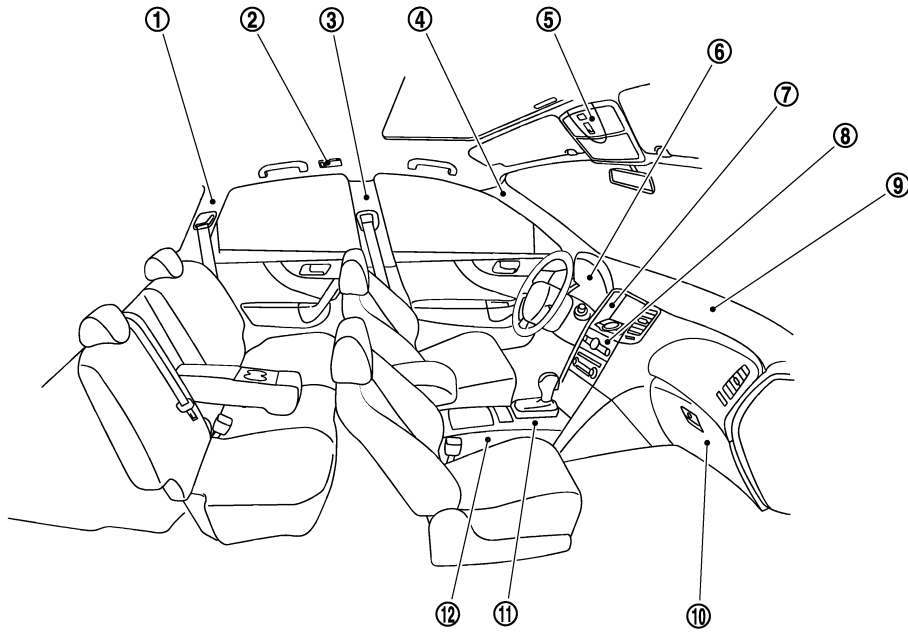
JSKIA0717ZZ

Component		Material	Component		Material		
1	Bumper fascia	PP + EPM	13	Center back door finisher	ABS		
2	Lower front bumper fascia	PP + EPM	14	License plate lamp	Lens	PC	
3	Front grille	Grille			Housing	PC	
		Molding	ABS	15	Back door finisher	ABS	
4	Front combination lamp	Lens	16	Back door	PP		
		Housing	PP	17	High mount stop lamp	Lens	PMMA
5	Upper windshield molding	TPO	Housing			ABS	
6	Roof side molding	PVC + Stainless	18	Rear combination lamp (Rear Fender)	Lens	PMMA	
7	Roof rack cover	ABS			Housing	ABS	
8	Door outside mirror	Cover		Rear combination lamp (Back door)	Lens	PMMA	
		Housing			Housing	ASA	
		Base	ABS	19	Door outside molding	PVC + Stainless	
9	Side guard molding	Body	20	Front fender duct	Outer	ABS	
		Molding	ABS		Inner	ASA	
10	Fender protector	Front	21	Door outside handle	PC + ABS		
		Rear	PET	22	Center mudguard	Body	PP
11	Fillet molding	PP + EPM	Molding			ABS	
12	Front fog lamp	Lens	Glass	23	Reflex reflector	Lens	PMMA
		Housing	PBT + ASA + Glass fiber			Housing	ABS

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA0718ZZ

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

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

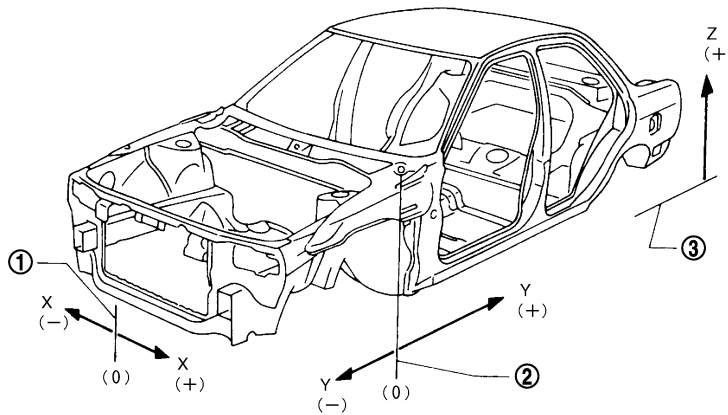
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Description

INFOID:0000000010581071

- 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:0000000010581072

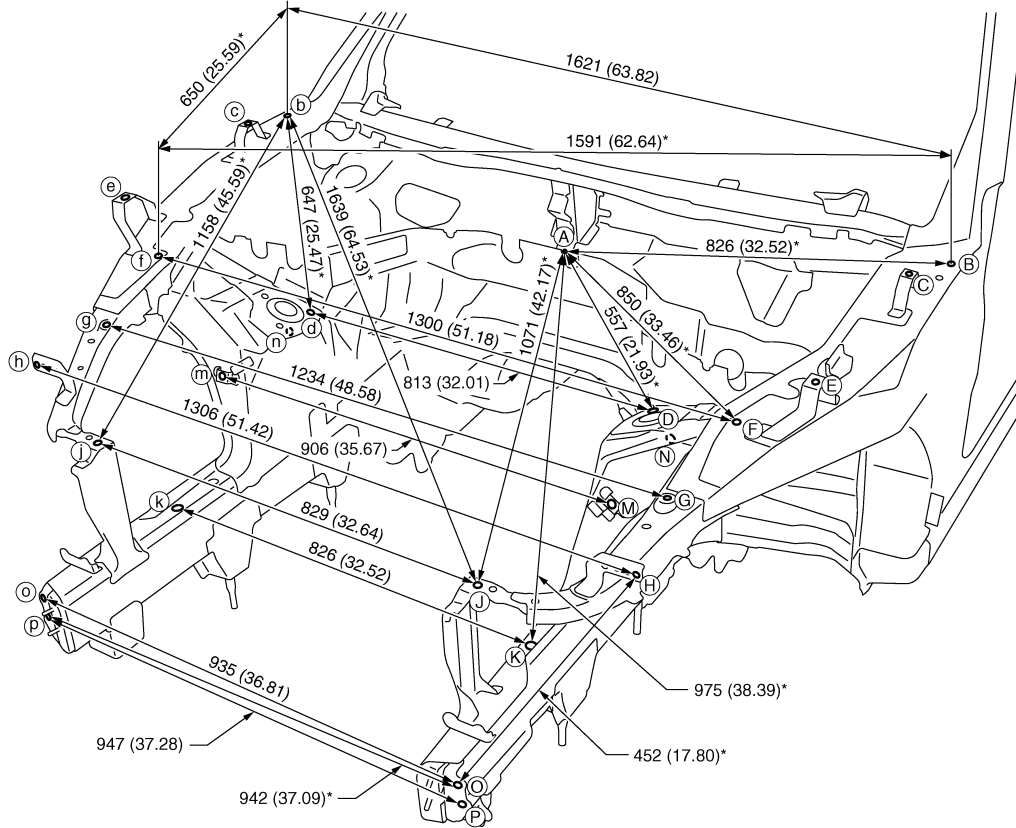
MEASUREMENT

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]



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JSKIA0661GB

Unit: mm (in)

«The others»

Unit: mm (in)

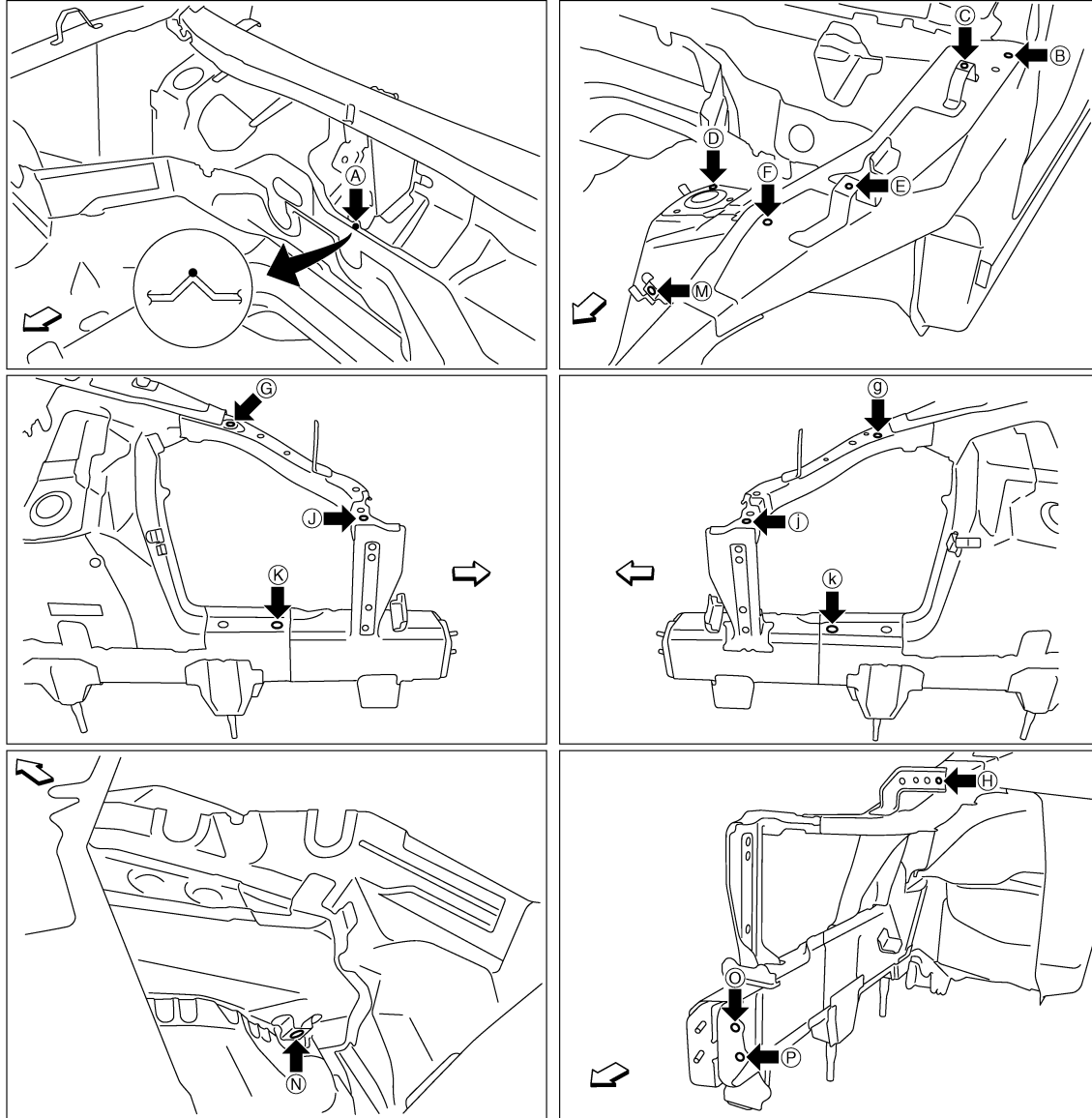
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - C	806 (31.73)*		B - C	178 (7.01)*		B - e	1682 (66.22)*		b - G	1651 (65.00)	
A - E	930 (36.61)*		B - c	1601 (63.03)*		B - G	849 (33.43)		C - c	1561 (61.46)	
A - G	961 (37.83)		B - d	1318 (51.89)*		b - g	860 (33.86)		E - e	1533 (60.35)	
A - g	966 (38.03)		B - E	587 (23.11)*		B - g	1653 (65.08)		N - n	906 (35.67)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA0662ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash positioning mark of center positioning mark	G, g	Radiator core support hole center $\phi 7$ (0.28)
B, b	Hood hinge installing hole center $\phi 9$ (0.35)	J, j	Radiator core support stay hole center $\phi 12$ (0.47)
C, c, E, e, H, h	Front fender installing hole center $\phi 7$ (0.28)	K, k	Front side member hole center $\phi 10$ (0.39)
D, d	Front strut installing hole center $\phi 11$ (0.43)	M, m, N, n	Nut holder hole center $\phi 16$ (0.63)
F, f	Hoodledge reinforcement hole center $\phi 12$ (0.47)	O, o, P, p	Front bumper reinforcement installing hole center $\phi 11$ (0.43)

Underbody

INFOID:000000010581073

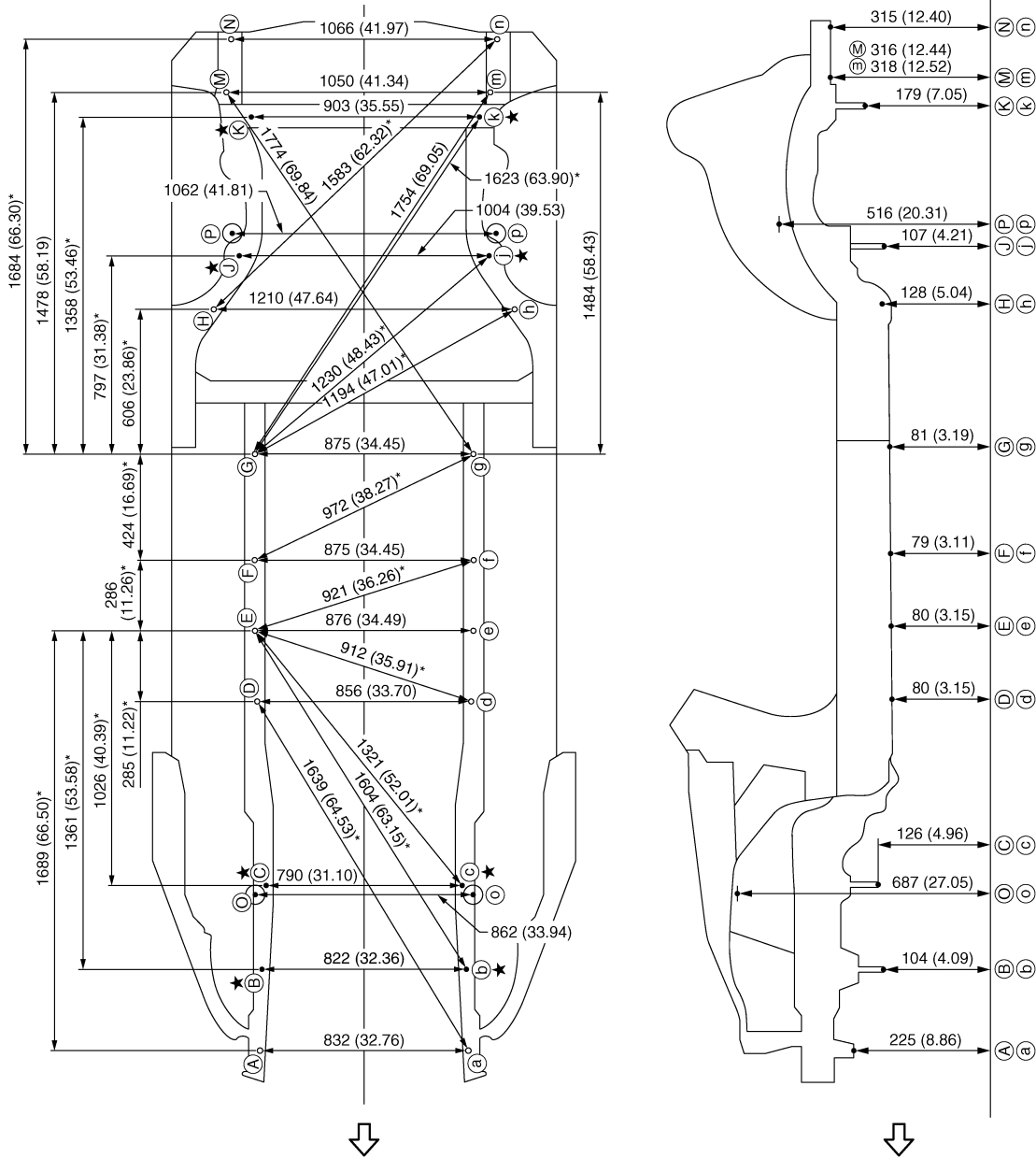
MEASUREMENT

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]



Unit: mm (in)

⇐ Vehicle front

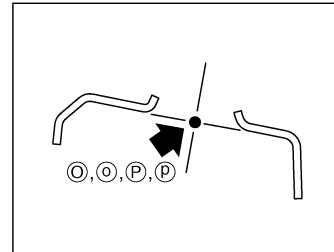
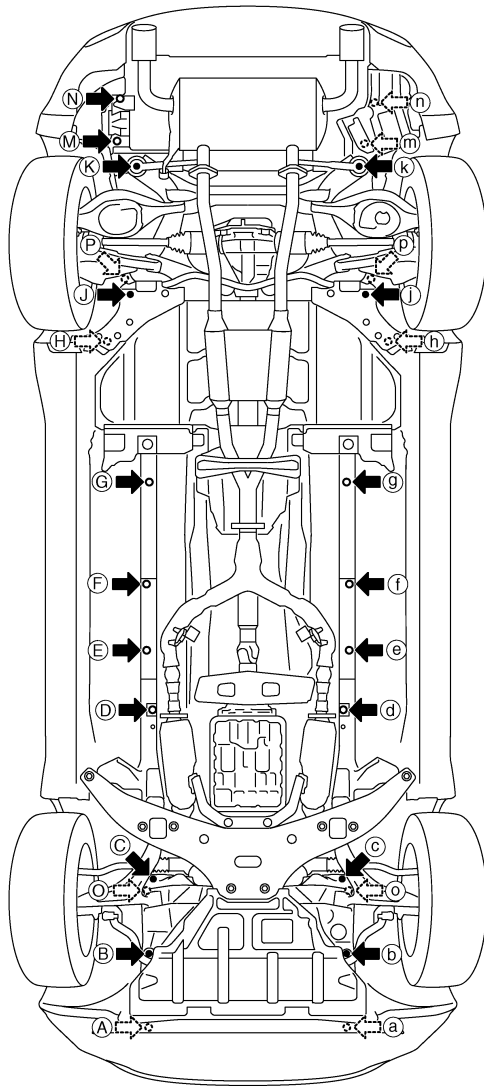
★ Bolt head

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA0664ZZ

←: Vehicle front

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

Unit: mm (in)

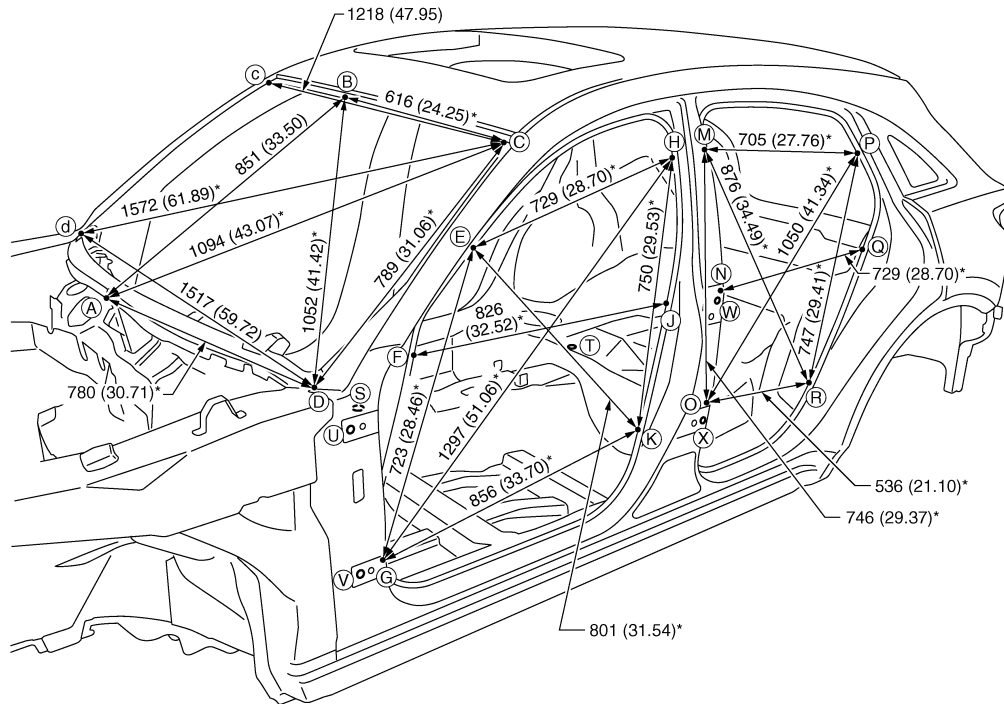
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
A, a	±415.8 (±16.370)	-583.0 (-22.953)	224.6 (8.843)	Hole φ13 (0.51)	J, j	±502.1 (±19.768)	2603.8 (102.512)	106.9 (4.209)	Bolt head
B, b	±411.0 (±16.181)	-261.0 (-10.276)	104.2 (4.102)	Bolt head	K, k	±451.5 (±17.776)	3163.9 (124.563)	179.1 (7.051)	Bolt head
C, c	±395.0 (±15.551)	76.0 (2.992)	126.3 (4.972)	Bolt head	M	550.0 (21.654)	3264.6 (128.527)	316.4 (12.457)	Hole φ8 (0.31)
D, d	±428.0 (±16.850)	815.0 (32.087)	80.0 (3.150)	Hole 16×18 (0.63×0.71)	m	-500.0 (-19.685)	3273.3 (128.870)	318.0 (12.520)	Hole φ8 (0.31)
E, e	±438.0 (±17.244)	1100.0 (43.307)	80.2 (3.157)	Hole φ16 (0.63)	N, n	±533.0 (±20.984)	3475.0 (136.811)	315.4 (12.417)	Hole φ16 (0.63)
F, f	±437.5 (±17.224)	1385.9 (54.563)	78.8 (3.102)	Hole φ15 (0.59)	O, o	±430.8 (±16.961)	39.2 (1.543)	686.6 (27.031)	Hole φ50 (1.97)
G, g	±437.5 (±17.224)	1810.0 (71.260)	81.2 (3.197)	Hole φ16 (0.63)	P, p	±531.2 (±20.913)	2692.7 (106.012)	515.6 (20.299)	Hole φ64 (2.52)
H, h	±604.9 (±23.815)	2390.5 (94.114)	128.3 (5.051)	Hole φ13 (0.51)					

Passenger Compartment

INFOID:0000000010581074

MEASUREMENT

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



JSKIA0665GB

Unit: mm (in)

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

«The others»

Unit: mm (in)

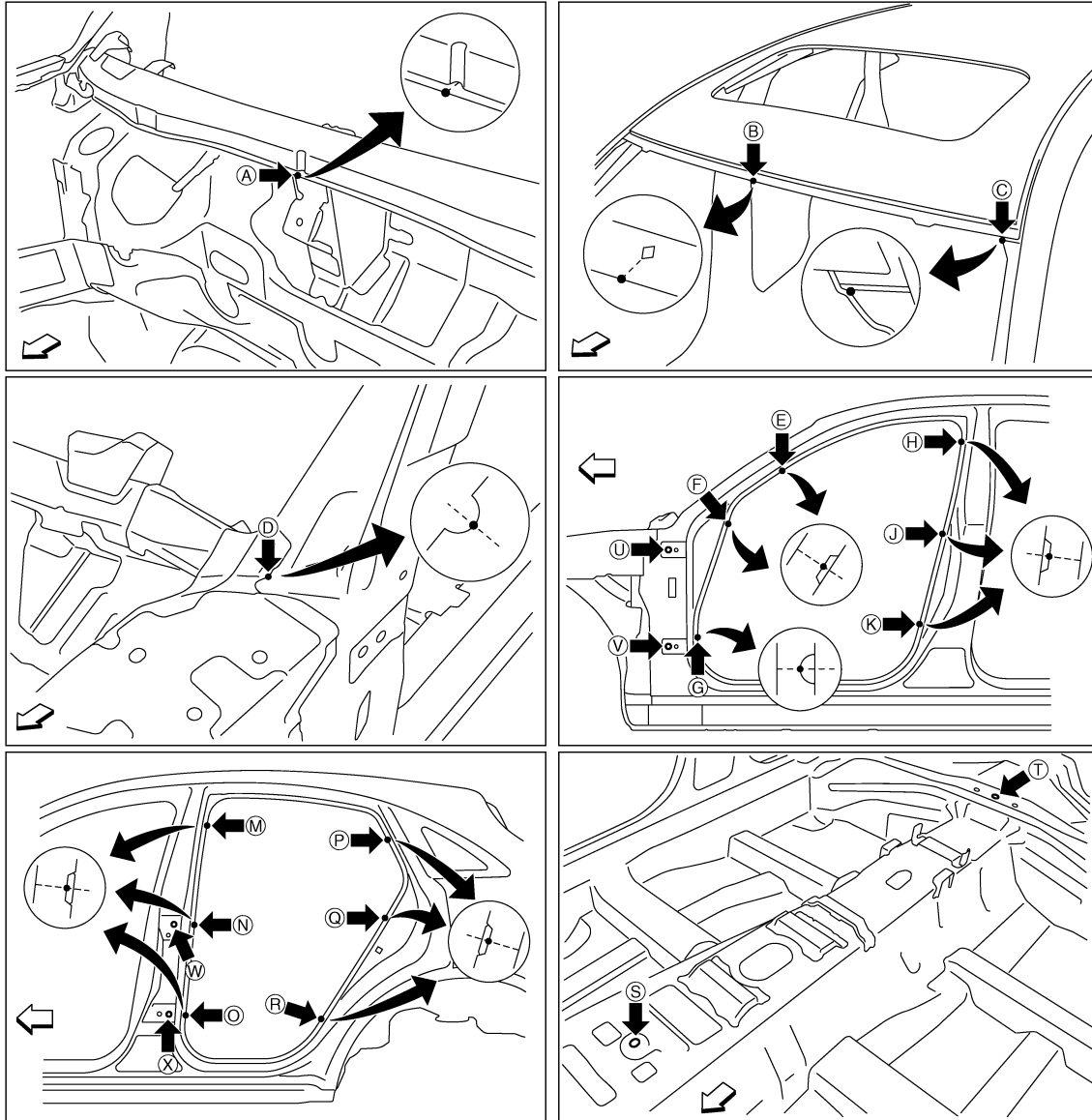
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1438 (56.61)		K - k	1553 (61.14)		Q - q	1524 (60.00)		T - Q	1042 (41.02)*	
E - g	1663 (65.47)*		M - m	1337 (52.64)		R - r	1579 (62.17)		T - R	848 (33.39)*	
E - h	1564 (61.57)*		M - o	1623 (63.90)*		S - E	1010 (39.76)*		U - u	1677 (66.02)	
E - k	1696 (66.77)*		M - p	1523 (59.96)*		S - F	907 (35.71)*		U - W	1158 (45.59)*	
F - f	1536 (60.47)		M - r	1697 (66.81)*		S - G	797 (31.38)*		U - X	1151 (45.31)*	
F - j	1746 (68.74)*		N - n	1541 (60.67)		S - H	1373 (54.06)*		V - v	1702 (67.01)	
G - g	1560 (61.42)		N - q	1697 (66.81)*		S - J	1187 (46.73)*		V - W	1230 (48.43)*	
G - h	1939 (76.34)*		O - o	1554 (61.18)		S - K	1049 (41.30)*		V - X	1119 (44.06)*	
G - k	1777 (69.96)*		O - p	1795 (70.67)*		T - M	1056 (41.57)*		W - w	1687 (66.42)	
H - h	1331 (52.40)		O - r	1656 (65.20)*		T - N	903 (35.55)*		X - x	1726 (67.95)	
H - k	1622 (63.86)*		P - p	1363 (53.66)		T - O	814 (32.05)*				
J - j	1540 (60.63)		P - r	1646 (64.80)*		T - P	1161 (45.71)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



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↶ Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Upper dash crossmember flange end of center positioning mark	P, p, Q, q, R, r	Rear fender indent
B	Roof flange end of center positioning mark	S	Trans control reinforcement hole center of center positioning mark 12×14 (0.47×0.55)
C, c	Front pillar joggle	T	Rear seat crossmember reinforcement hole center of center positioning mark $\phi 5$ (0.20)
D, d, E, e, F, f, G, g	Front pillar indent	U, u, V, v, W, w, X, x	Door hinge installing hole center U, u, V, v, X, x: $\phi 12$ (0.47) W, w: $\phi 9$ (0.35)
H, h, J, j, K, k, M, m, N, n, O, o	Center pillar indent		

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

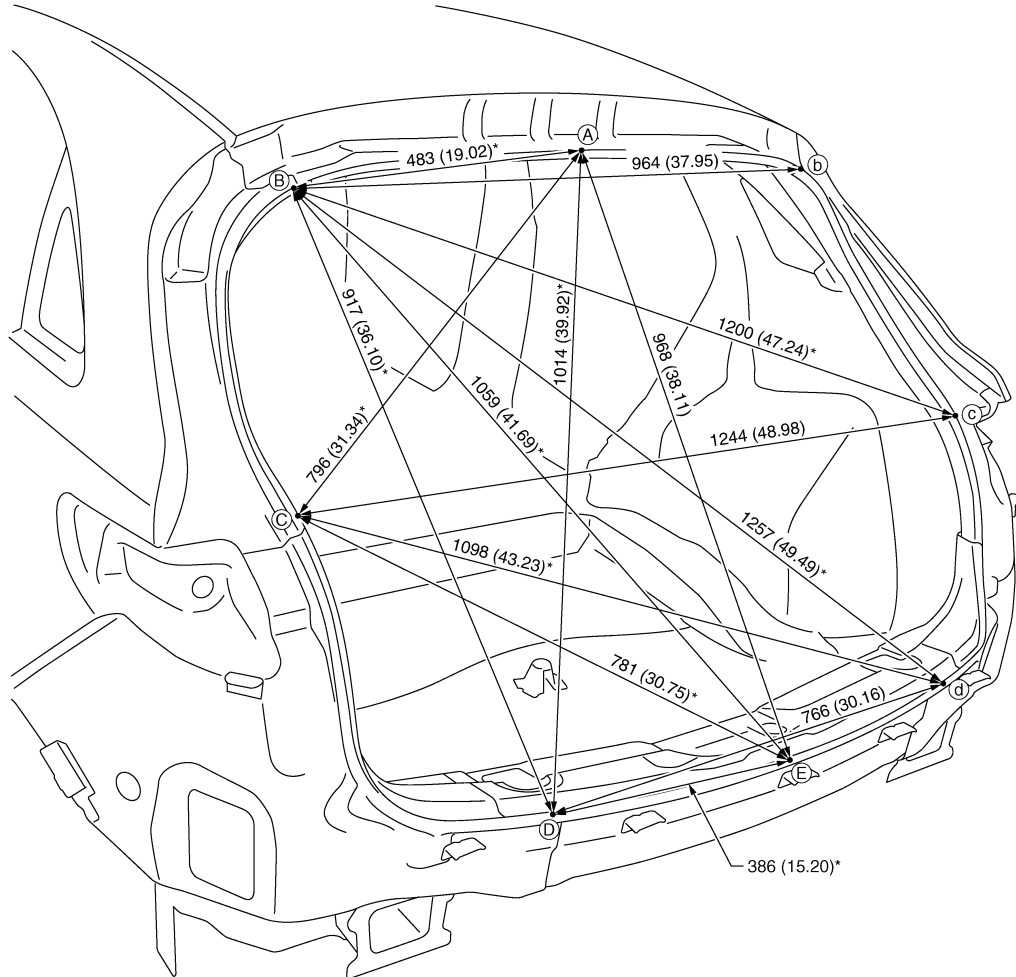
[FOR MEXICO]

Rear Body

INFOID:000000010581075

MEASUREMENT

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



JSKIA0667GB

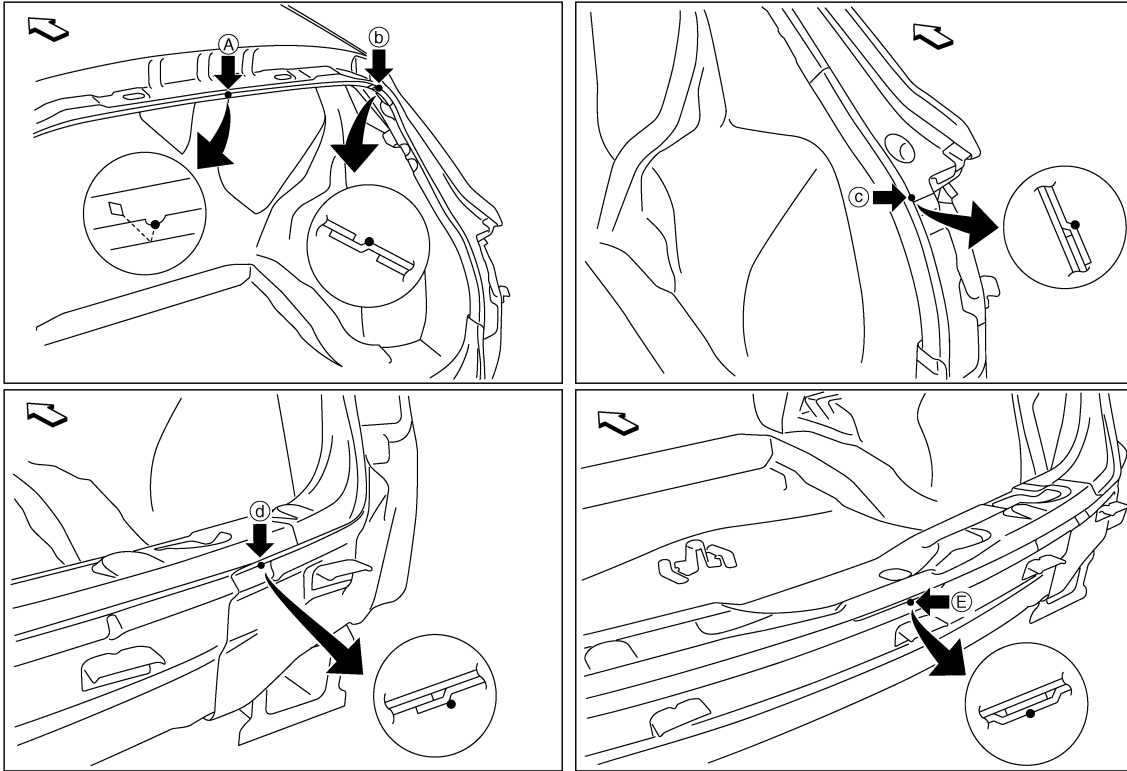
Unit: mm (in)

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA0668ZZ

←: Vehicle front

Point	Material	Point	Material
A	Roof indent of center positioning mark	D, d	Lower back pillar main joggle
B, b, C, c	Upper back pillar main joggle	E	Upper rear panel flange end of center positioning mark

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