

SECTION **BRM** BODY REPAIR

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BODY EXTERIOR PAINT COLOR

< VEHICLE INFORMATION >

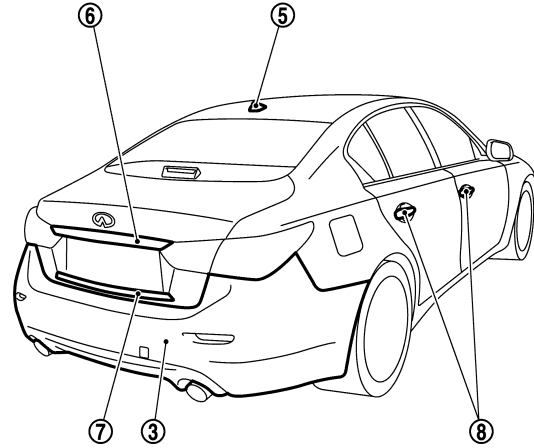
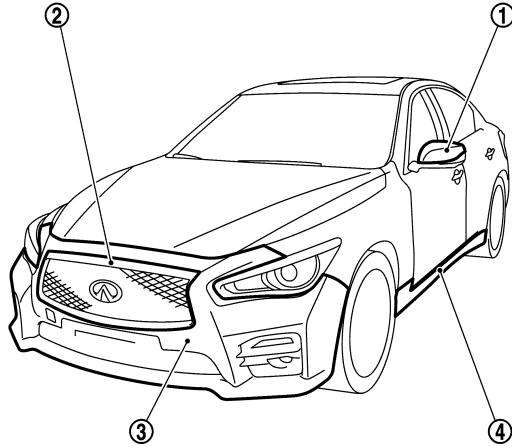
[FOR USA AND CANADA]

VEHICLE INFORMATION

BODY EXTERIOR PAINT COLOR

Body Exterior Paint Color

INFOID:000000009238604



JSKIA3260ZZ

Component			Color code	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
			Description	Brown	Black	Silver	Gray	Black	Red	White	Grayish Blue
			Paint type ^{note}	2M	2P	2M	2M	2S	2PM	3P	2M
			Anti scratch advanced paint	×	×	×	×	×	×	×	×
①	Door mirror cover		Body color	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
②	Front grille		Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr
③	Bumper fascia		Body color	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
④	Sill cover		Body color	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
⑤	Antenna base cover		Body color	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
⑥	Trunk lid finisher		Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr
⑦	Trunk lid molding		Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr
⑧	Door out-side handle	Grip body	Body color	BCAN	BGAC	BK23	BKAD	BKH3	BNAH	BQAA	BRBP
		Grip finisher	Chromium plate	Cr	Cr	Cr	Cr	Cr	Cr	Cr	Cr

NOTE:

- 2M: 2-Coat Metallic
- 2P: 2-Coat pearl
- 2S: Solid + Clear
- 3P: 3-Coat pearl
- 2PM: 2-Coat Pearl metallic

PRECAUTION

REPAIRING HIGH STRENGTH STEEL

High Strength Steel (HSS)

INFOID:000000009726179

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	• Rear side floor (Rear floor rear side component part) • Rear seat crossmember reinforcement assembly • Trans control reinforcement (Center front floor component part) • Front side member center extension (Front floor component part) • 2nd and 3rd crossmember (Front floor component part) • Inner sill • Lower dash • Lower dash crossmember • Upper front hoodledge • Front hoodledge reinforcement • Hoodledge reinforcement • Front strut housing • Front side member closing plate assembly • Front side member center closing plate • Front side member front closing plate • Front side member assembly • Add on frame bracket • Front side member front extension • Front side member outrigger (Front side member outrigger assembly component part) • Rear seat crossmember (Rear seat crossmember component part) • Rear floor belt anchor reinforcement • Rear side member front (Rear side member assembly component part) • Rear side member rear • Rear side member extension • Rear roof rail • Inner side roof rail • Front roof rail brace • Inner center pillar (Lower) (Inner center pillar component part) • Center pillar reinforcement (Lower) (Center pillar reinforcement component part) • Front pillar hinge brace (Front pillar brace component part) • Outer sill reinforcement • Rear roof rail brace (Inner rear pillar component part) • Outer rear wheelhouse extension (Rear) (Outer rear wheelhouse extension component part)

REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

[FOR USA AND CANADA]

Tensile strength	Major applicable parts
980 - 1350 MPa	• Front side member stiffener (Front floor component part) • Center sill reinforcement (Inner sill component part) • Outrigger reinforcement (Front side member outrigger assembly component part) • Front side member rear extension • Rear side member rear reinforcement (Rear side member assembly component part) • Front roof rail • Roof reinforcement assembly • Side roof reinforcement • Inner center pillar (Upper) (Inner center pillar component part) • Center pillar seat belt anchor (Inner center pillar component part) • Outer side roof rail reinforcement • Center pillar reinforcement (Upper) (Center pillar reinforcement component part) • Center pillar seat belt reinforcement (Center pillar reinforcement component part) • Center sill reinforcement (Outer sill reinforcement component part) • Outer rear sill reinforcement (Outer rear wheelhouse extension component part)

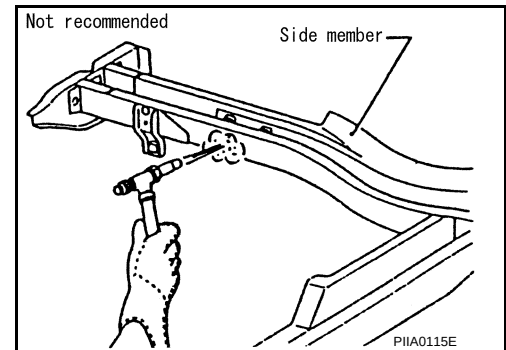
Read the following precautions when repairing HSS:

1. Additional points to consider

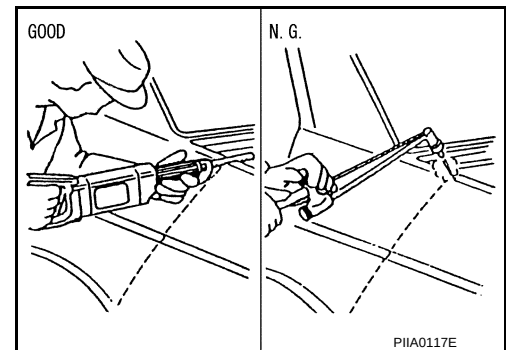
- The repair of reinforcements (such as side members) by heating is not recommended, because it may weaken the component. When heating is unavoidable, never heat HSS parts above 550°C (1,022°F).

Verify heating temperature with a thermometer.

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



- When straightening body panels, use caution in pulling any HSS panel. Because HSS is very strong, pulling may cause deformation in adjacent sections of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.
- When cutting HSS panels, avoid gas (torch) cutting if possible. Instead, use a saw to avoid weakening surrounding areas due to heat. If gas (torch) cutting is unavoidable, allow a minimum margin of 50 mm (1.97 in).

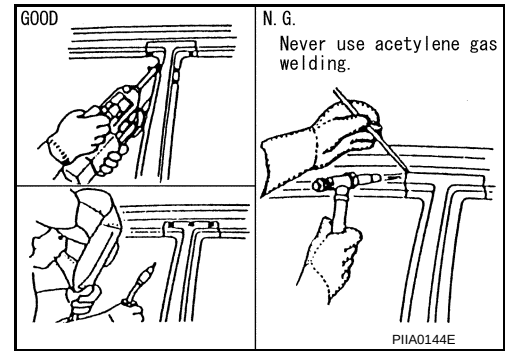


REPAIRING HIGH STRENGTH STEEL

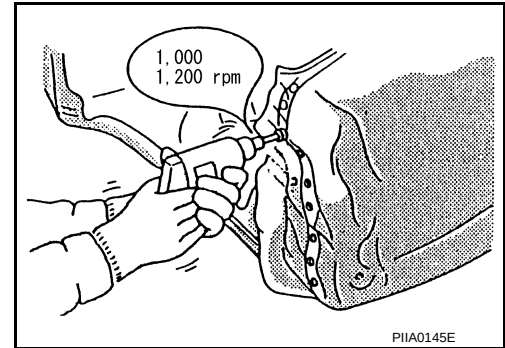
< PRECAUTION >

[FOR USA AND CANADA]

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



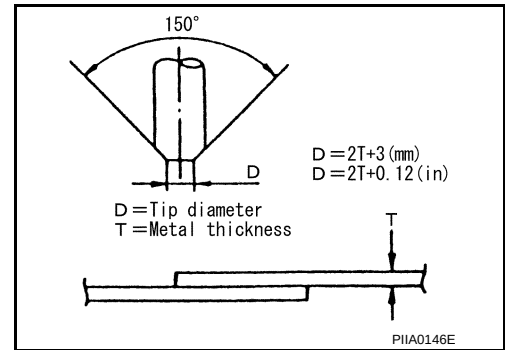
- Spot welding on HSS panels is harder than that of an ordinary steel panel.
Therefore, when cutting spot welds on a HSS panel, use a low speed high torque drill (1,000 to 1,200 rpm) to increase drill bit durability and facilitate the operation.



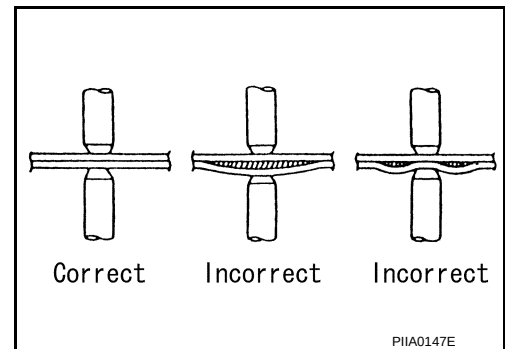
2. Precautions in spot welding HSS

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

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



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



REPAIRING HIGH STRENGTH STEEL

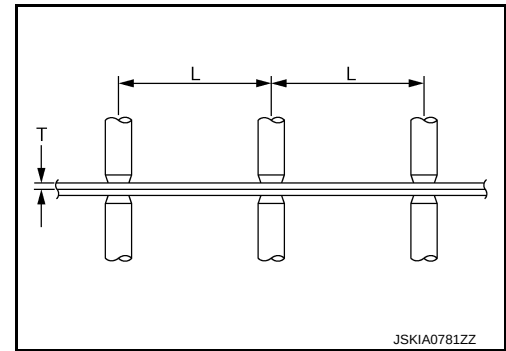
< PRECAUTION >

[FOR USA AND CANADA]

- 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



INFOID:000000009238606

Handling of Ultra High Strength Steel Plate Parts

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:000000009725721

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.

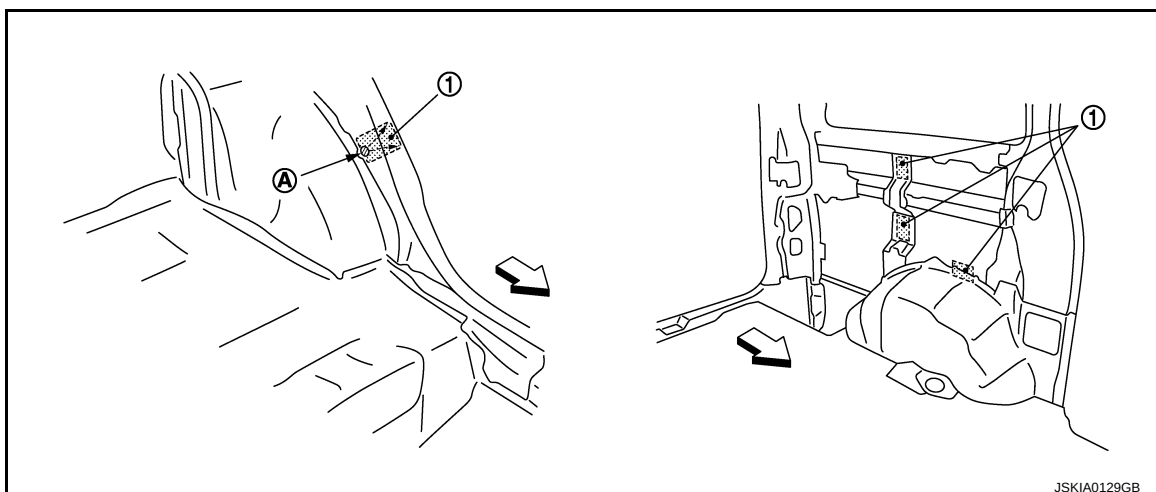
<Urethane foam for foaming agent>

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
- Ⓐ Fill while avoiding flange area
- ⇐: Vehicle front

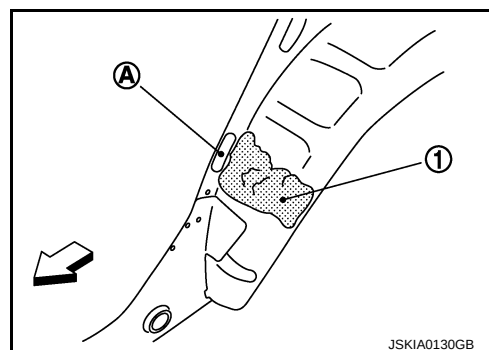
NOTE:

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

< PREPARATION >

[FOR USA AND CANADA]

BODY COMPONENT PARTS

2WD

2WD : Underbody Component Parts

INFOID:000000009726231

Refer to parts catalogue for the replacement parts.



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BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

-  Both sided anti-corrosive precoated steel sections
 High strength steel (HSS) sections
 Both sided anti-corrosive steel and HSS sections
 *: Aluminum portion

No.	Parts name			Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections	Aluminum portion
①	Spare wheel clamp reinforcement			Under 440	—	—
②	Rear floor rear			Under 440	×	—
③	Rear floor rear side (RH & LH)			590	×	—
④	2nd rear crossmember (Upper)			590	—	—
⑤	Rear floor front			Under 440	×	—
⑥	Rear seat crossmember reinforcement assembly			590	×	—
⑦	Center front floor			440	×	—
⑧	Front floor (RH & LH)	a.	1350MPa ^{caution} T=1.6 mm (0.063 in)	590	×	—
⑨	Inner sill (RH & LH)	b.	980MPa ^{caution} T=1.0 mm (0.039 in)	590	×	—
⑩	Lower dash			440	×	—
⑪	Upper dash			Under 440	×	—
⑫	Side dash (RH & LH)			Under 440	×	—
⑬	Upper front cowl top assembly			Under 440	×	—
⑭	Cowl top bracket			Under 440	×	—
⑮	Lower dash crossmember			590	×	—
⑯	Lower battery support bracket			Under 440	×	—
⑰	Front cowl top assembly (RH & LH)			Under 440	×	—
⑱	Upper front hoodledge (RH & LH)			440	×	—
⑲	Front hoodledge reinforcement (RH & LH)			Under 440	×	—
⑳	Hoodledge reinforcement (RH & LH)			440	×	—
㉑	Battery support bracket			Under 440	×	—
㉒	Lower rear hoodledge (RH & LH)			Under 440	×	—
㉓	Side radiator core support (RH & LH)			Under 440	×	—
㉔	Front strut housing (RH & LH)			440	×	—
㉕	Inner center front bumper reinforcement			—	—	×
㉖	Front bumper armature assembly			—	—	×
㉗	Side apron bracket assembly (RH & LH)			Under 440	—	—
㉘	Front bumper stay (RH & LH)			Under 440	—	—
㉙	Front side member closing plate assembly (RH & LH)			590	×	—
㉚	Front side member center closing plate (RH & LH)			440	×	—
㉛	Bumper reinforcement bracket (RH & LH)			Under 440	×	—

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name		Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections	Aluminum portion
③②	Front side member front closing plate (RH & LH)		590	×	—
③③	Front side member assembly (RH & LH)		590	×	—
③④	Front side member connector assembly (RH & LH)		Under 440	×	—
③⑤	Add on frame bracket (RH & LH)		440	×	—
③⑥	Front side member front extension (RH & LH)		780	×	—
③⑦	Front side member outrigger assembly (RH & LH)	c.	980MPa ^{caution} T=2.0 mm (0.079 in)	×	—
③⑧	Front side member rear extension (RH & LH)		980MPa ^{caution} T=1.2 mm (0.047 in)	×	—
③⑨	Rear seat crossmember		590	×	—
④①	Rear floor belt anchor reinforcement		590	×	—
④①	2nd rear crossmember (Lower)		590	×	—
④②	Rear side member assembly (RH & LH)	d.	980MPa ^{caution} T=1.2 mm (0.047 in)	×	—
④③	Rear side member rear (RH & LH)		590	×	—
④④	Rear side member extension (RH & LH)		780	×	—

CAUTION:

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

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.

2WD : Body Component Parts

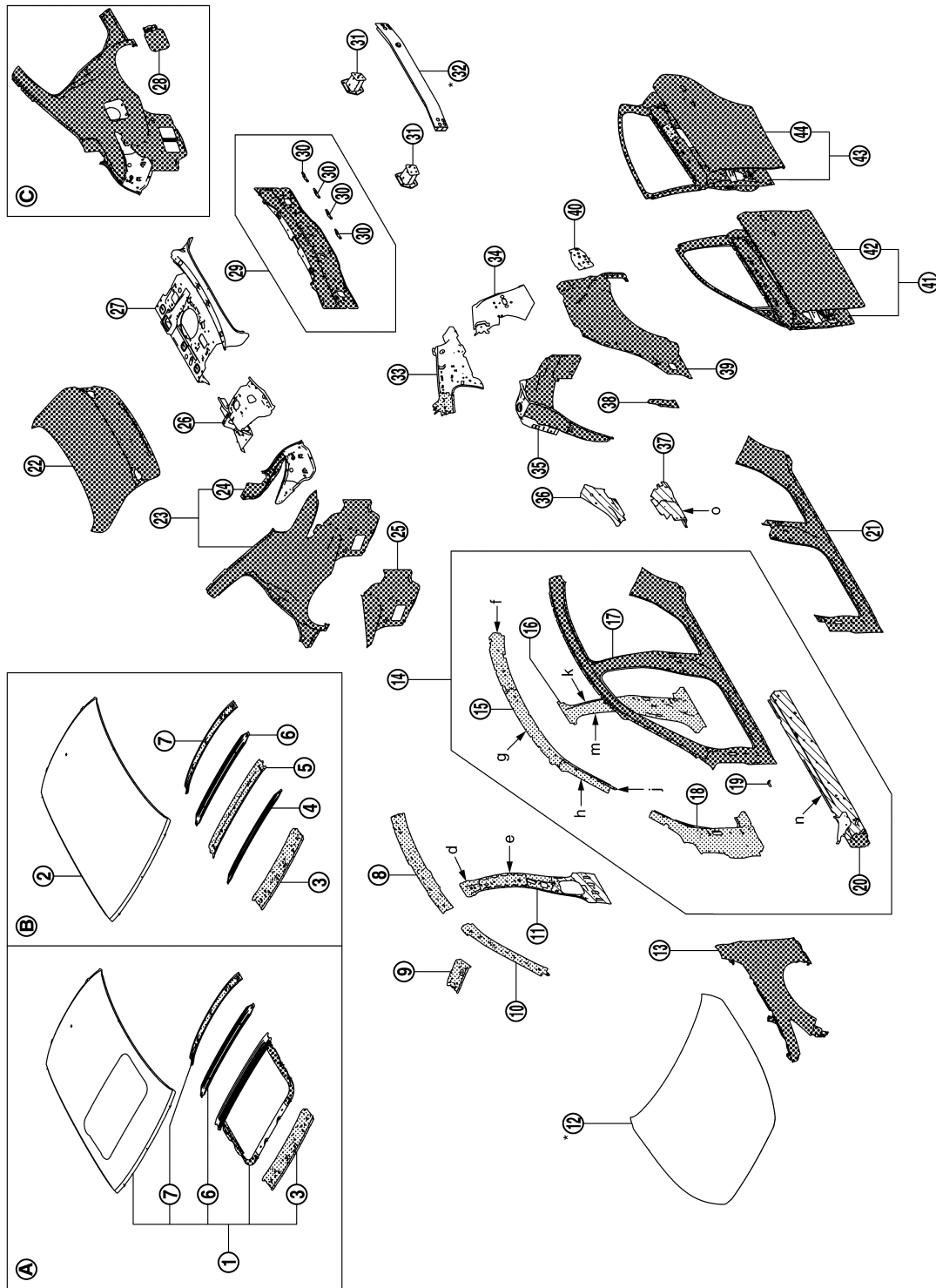
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Refer to parts catalogue for the replacement parts.

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]



- (A) Sunroof models (B) Without sunroof models (C) Right side

Both sided anti-corrosive precoated steel sections

High strength steel (HSS) sections

Both sided anti-corrosive steel and HSS sections

*: Aluminum portion

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BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name		Tensile strength (MPa)	Both sided anti-corrosive pre-coated steel sections	Aluminum portion
①	Roof assembly		590	—	—
②	Roof		Under 440	—	—
③	Front roof rail	1180MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
④	Roof bow No.1		Under 440	—	—
⑤	Roof reinforcement assembly	980MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
⑥	Roof bow No.2		Under 440	—	—
⑦	Rear roof rail		590	—	—
⑧	Inner side roof rail (RH & LH)		590	—	—
⑨	Front roof rail brace (RH & LH)		590	—	—
⑩	Side roof reinforcement (RH & LH)	1180MPa ^{caution} T=1.2 mm (0.047 in)	—	—	—
⑪	Inner center pillar (RH & LH)	d. 1180MPa ^{caution} T=1.2 mm (0.047 in)	440	—	—
		e. 1350MPa ^{caution} T=1.8 mm (0.071 in)			
⑫	Hood		—	—	×
⑬	Front fender (RH & LH)		Under 440	×	—
⑭	Side body assembly (RH & LH)		Refer to No. ⑮ - ⑳		
⑮	Outer side roof rail reinforcement (RH & LH)	f. 1180MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
		g. 1350MPa ^{caution} T=1.4 mm (0.055 in)			
		h. 1180MPa ^{caution} T=1.2 mm (0.047 in)			
		j. 980MPa ^{caution} T=1.6 mm (0.063 in)			
⑯	Center pillar reinforcement (RH & LH)	k. 1180MPa ^{caution} T=1.2 mm (0.047 in)	440	—	—
		m. 1350MPa ^{caution} T=1.4 mm (0.055 in)			
⑰	Outer front side body (RH & LH)		Under 440	×	—
⑱	Front pillar brace (RH & LH)		590	—	—
⑲	Cowl top bracket extension (RH & LH)		Under 440	×	—
⑳	Outer sill reinforcement (RH & LH)	n. 1180MPa ^{caution} T=1.0 mm (0.039 in)	590	×	—
㉑	Outer sill (RH & LH)		Under 440	×	—
㉒	Trunk lid		Under 440	×	—
㉓	Rear fender (RH & LH)		Under 440	×	—
㉔	Tail pillar assembly (RH & LH)		Under 440	—	—

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name	Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections	Aluminum portion
②5	Rear fender extension (RH & LH)	Under 440	×	—
②6	Side parcel shelf (RH & LH)	Under 440	—	—
②7	Parcel shelf	Under 440	—	—
②8	Fuel filler lid	Under 440	×	—
②9	Upper rear panel assembly	Under 440	×	—
③0	Rear bumper bracket	Under 440	×	—
③1	Rear bumper stay (RH & LH)	Under 440	—	—
③2	Inner center rear bumper reinforcement	—	—	×
③3	Inner rear pillar (RH & LH)	590	—	—
③4	Inner rear pillar reinforcement (RH & LH)	Under 440	—	—
③5	Inner rear wheelhouse (RH & LH)	Under 440	×	—
③6	Outer rear wheelhouse extension (RH & LH Upper)	590	×	—
③7	Outer rear wheelhouse extension (RH & LH Lower)	o. 980MPa ^{caution} T=1.0 mm (0.039 in)	×	—
③8	Inner rear wheelhouse front extension (RH & LH)	Under 440	×	—
③9	Outer rear wheelhouse (RH & LH)	Under 440	×	—
④0	Outer rear wheelhouse extension (RH & LH Rear)	Under 440	—	—
④1	Front door assembly (RH & LH)	440	×	—
④2	Outer front door panel (RH & LH)	Under 440	×	—
④3	Rear door assembly (RH & LH)	440	×	—
④4	Outer rear door panel (RH & LH)	Under 440	×	—

CAUTION:

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

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.

AWD

AWD : Underbody Component Parts

INFOID:000000009726247

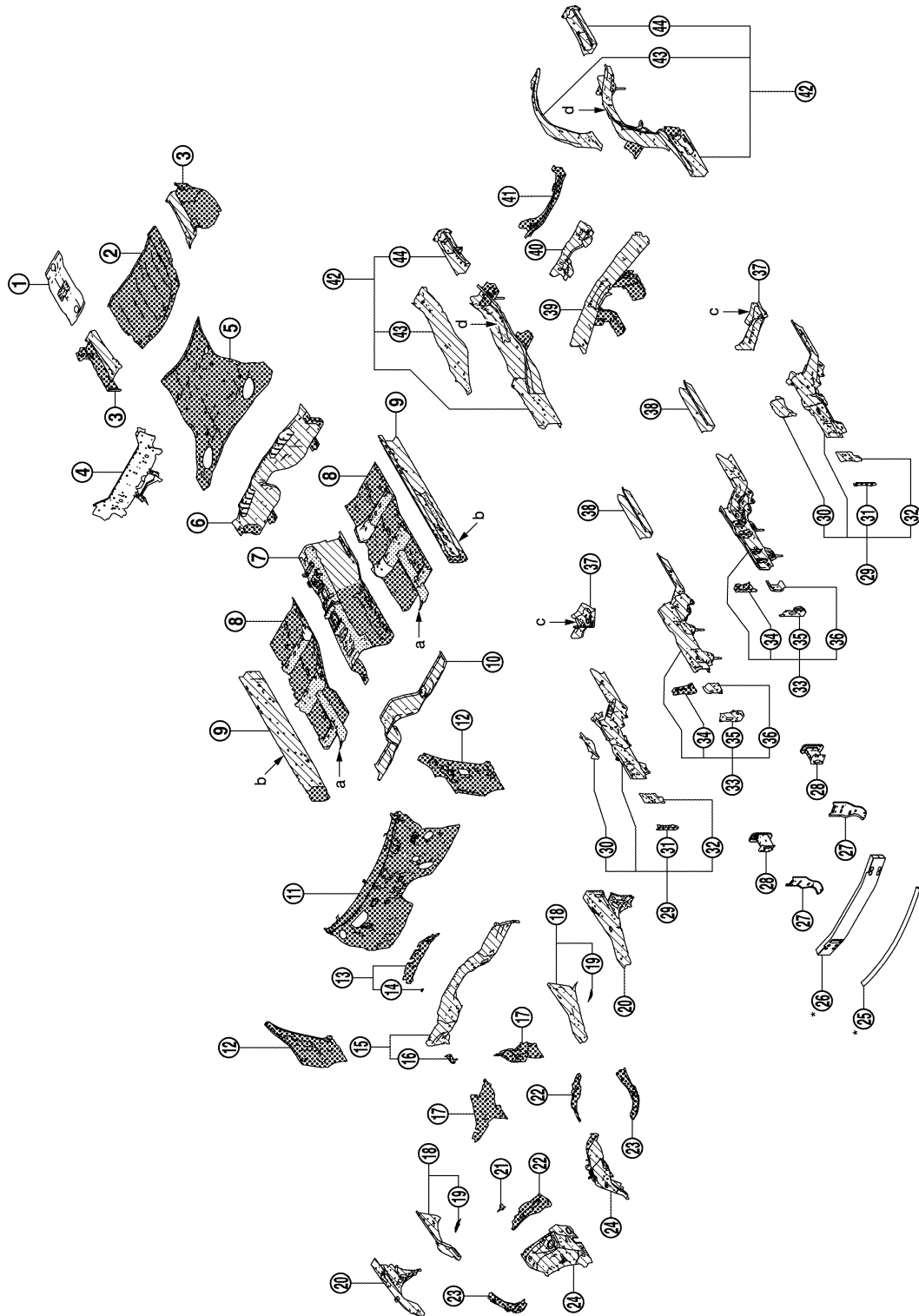
Refer to parts catalogue for the replacement parts.

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BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]



JSKIA3263ZZ

Both sided anti-corrosive precoated steel sections

High strength steel (HSS) sections

Both sided anti-corrosive steel and HSS sections

*: Aluminum portion

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name			Tensile strength (MPa)	Both sided anti-corrosive pre-coated steel sections	Aluminum portion
①	Spare wheel clamp reinforcement			Under 440	—	—
②	Rear floor rear			Under 440	×	—
③	Rear floor rear side (RH & LH)			590	×	—
④	2nd rear crossmember (Upper)			590	—	—
⑤	Rear floor front			Under 440	×	—
⑥	Rear seat crossmember reinforcement assembly			590	×	—
⑦	Center front floor			440	×	—
⑧	Front floor (RH & LH)	a.	1350MPa ^{caution} T=1.6 mm (0.063 in)	590	×	—
⑨	Inner sill (RH & LH)	b.	980MPa ^{caution} T=1.0 mm (0.039 in)	590	×	—
⑩	Lower dash			440	×	—
⑪	Upper dash			Under 440	×	—
⑫	Side dash (RH & LH)			Under 440	×	—
⑬	Upper front cowl top assembly			Under 440	×	—
⑭	Cowl top bracket			Under 440	×	—
⑮	Lower dash crossmember			590	×	—
⑯	Lower battery support bracket			Under 440	×	—
⑰	Front cowl top assembly (RH & LH)			Under 440	×	—
⑱	Upper front hoodledge (RH & LH)			440	×	—
⑲	Front hoodledge reinforcement (RH & LH)			Under 440	×	—
⑳	Hoodledge reinforcement (RH & LH)			440	×	—
㉑	Battery support bracket			Under 440	×	—
㉒	Lower rear hoodledge (RH & LH)			Under 440	×	—
㉓	Side radiator core support (RH & LH)			Under 440	×	—
㉔	Front strut housing (RH & LH)			440	×	—
㉕	Inner center front bumper reinforcement			—	—	×
㉖	Front bumper armature assembly			—	—	×
㉗	Side apron bracket assembly (RH & LH)			Under 440	—	—
㉘	Front bumper stay (RH & LH)			Under 440	—	—
㉙	Front side member closing plate assembly (RH & LH)			590	×	—
㉚	Front side member center closing plate (RH & LH)			440	×	—
㉛	Bumper reinforcement bracket (RH & LH)			Under 440	×	—
㉜	Front side member front closing plate (RH & LH)			590	×	—
㉝	Front side member assembly (RH & LH)			590	×	—
㉞	Front side member connector assembly (RH & LH)			Under 440	×	—
㉟	Add on frame bracket (RH & LH)			440	×	—

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BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name			Tensile strength (MPa)	Both sided anti-corrosive precoated steel sections	Aluminum portion
③⑥	Front side member front extension (RH & LH)			780	×	—
③⑦	Front side member outrigger assembly (RH & LH)	c.	980MPa ^{caution} T=2.0 mm (0.079 in)	590	×	—
③⑧	Front side member rear extension (RH & LH)		980MPa ^{caution} T=1.2 mm (0.047 in)	—	×	—
③⑨	Rear seat crossmember			590	×	—
④①	Rear floor belt anchor reinforcement			590	×	—
④①	2nd rear crossmember (Lower)			590	×	—
④②	Rear side member assembly (RH & LH)	d.	980MPa ^{caution} T=1.2 mm (0.047 in)	590	×	—
④③	Rear side member rear (RH & LH)			590	×	—
④④	Rear side member extension (RH & LH)			780	×	—

CAUTION:

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

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.

AWD : Body Component Parts

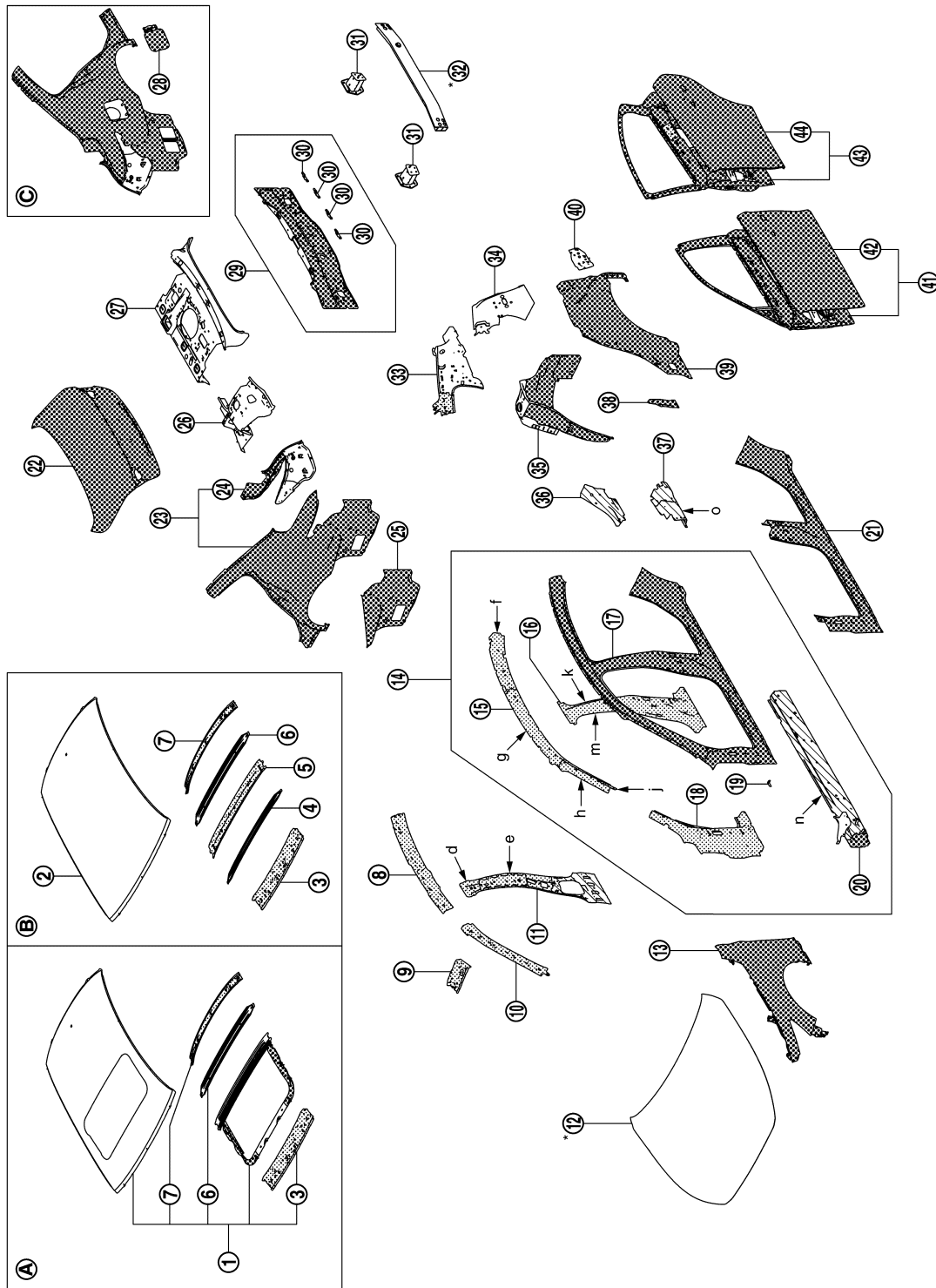
INFOID:000000009755141

Refer to parts catalogue for the replacement parts.

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]



- (A) Sunroof models (B) Without sunroof models (C) Right side

▨: Both sided anti-corrosive precoated steel sections

▧: High strength steel (HSS) sections

▩: Both sided anti-corrosive steel and HSS sections

*: Aluminum portion

JSKIA3262ZZ

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BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name		Tensile strength (MPa)	Both sided anti-corrosive pre-coated steel sections	Aluminum portion
①	Roof assembly		590	—	—
②	Roof		Under 440	—	—
③	Front roof rail	1180MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
④	Roof bow No.1		Under 440	—	—
⑤	Roof reinforcement assembly	980MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
⑥	Roof bow No.2		Under 440	—	—
⑦	Rear roof rail		590	—	—
⑧	Inner side roof rail (RH & LH)		590	—	—
⑨	Front roof rail brace (RH & LH)		590	—	—
⑩	Side roof reinforcement (RH & LH)	1180MPa ^{caution} T=1.2 mm (0.047 in)	—	—	—
⑪	Inner center pillar (RH & LH)	d. 1180MPa ^{caution} T=1.2 mm (0.047 in)	440	—	—
		e. 1350MPa ^{caution} T=1.8 mm (0.071 in)			
⑫	Hood		—	—	×
⑬	Front fender (RH & LH)		Under 440	×	—
⑭	Side body assembly (RH & LH)		Refer to No. ⑮ - ⑳		
⑮	Outer side roof rail reinforcement (RH & LH)	f. 1180MPa ^{caution} T=1.0 mm (0.039 in)	—	—	—
		g. 1350MPa ^{caution} T=1.4 mm (0.055 in)			
		h. 1180MPa ^{caution} T=1.2 mm (0.047 in)			
		j. 980MPa ^{caution} T=1.6 mm (0.063 in)			
⑯	Center pillar reinforcement (RH & LH)	k. 1180MPa ^{caution} T=1.2 mm (0.047 in)	440	—	—
		m. 1350MPa ^{caution} T=1.4 mm (0.055 in)			
⑰	Outer front side body (RH & LH)		Under 440	×	—
⑱	Front pillar brace (RH & LH)		590	—	—
⑲	Cowl top bracket extension (RH & LH)		Under 440	×	—
⑳	Outer sill reinforcement (RH & LH)	n. 1180MPa ^{caution} T=1.0 mm (0.039 in)	590	×	—
㉑	Outer sill (RH & LH)		Under 440	×	—
㉒	Trunk lid		Under 440	×	—
㉓	Rear fender (RH & LH)		Under 440	×	—
㉔	Tail pillar assembly (RH & LH)		Under 440	—	—

BODY COMPONENT PARTS

< PREPARATION >

[FOR USA AND CANADA]

No.	Parts name	Tensile strength (MPa)	Both sided anti-corrosive pre-coated steel sections	Aluminum portion
②⑤	Rear fender extension (RH & LH)	Under 440	×	—
②⑥	Side parcel shelf (RH & LH)	Under 440	—	—
②⑦	Parcel shelf	Under 440	—	—
②⑧	Fuel filler lid	Under 440	×	—
②⑨	Upper rear panel assembly	Under 440	×	—
③⑩	Rear bumper bracket	Under 440	×	—
③①	Rear bumper stay (RH & LH)	Under 440	—	—
③②	Inner center rear bumper reinforcement	—	—	×
③③	Inner rear pillar (RH & LH)	590	—	—
③④	Inner rear pillar reinforcement (RH & LH)	Under 440	—	—
③⑤	Inner rear wheelhouse (RH & LH)	Under 440	×	—
③⑥	Outer rear wheelhouse extension (RH & LH Upper)	590	×	—
③⑦	Outer rear wheelhouse extension (RH & LH Lower)	o. 980MPa ^{caution} T=1.0 mm (0.039 in)	×	—
③⑧	Inner rear wheelhouse front extension (RH & LH)	Under 440	×	—
③⑨	Outer rear wheelhouse (RH & LH)	Under 440	×	—
④⑩	Outer rear wheelhouse extension (RH & LH Rear)	Under 440	—	—
④①	Front door assembly (RH & LH)	440	×	—
④②	Outer front door panel (RH & LH)	Under 440	×	—
④③	Rear door assembly (RH & LH)	440	×	—
④④	Outer rear door panel (RH & LH)	Under 440	×	—

CAUTION:

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

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.

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REMOVAL AND INSTALLATION

CORROSION PROTECTION

2WD

2WD : Description

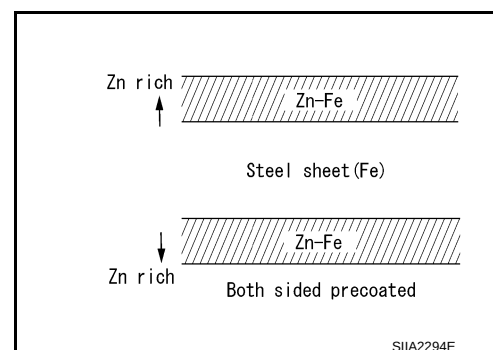
INFOID:000000009238610

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.



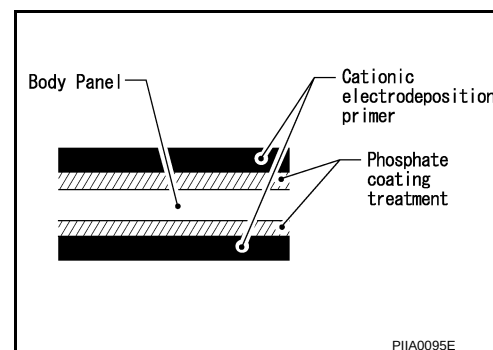
NISSAN genuine parts are fabricated from galvannealed steel. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

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.



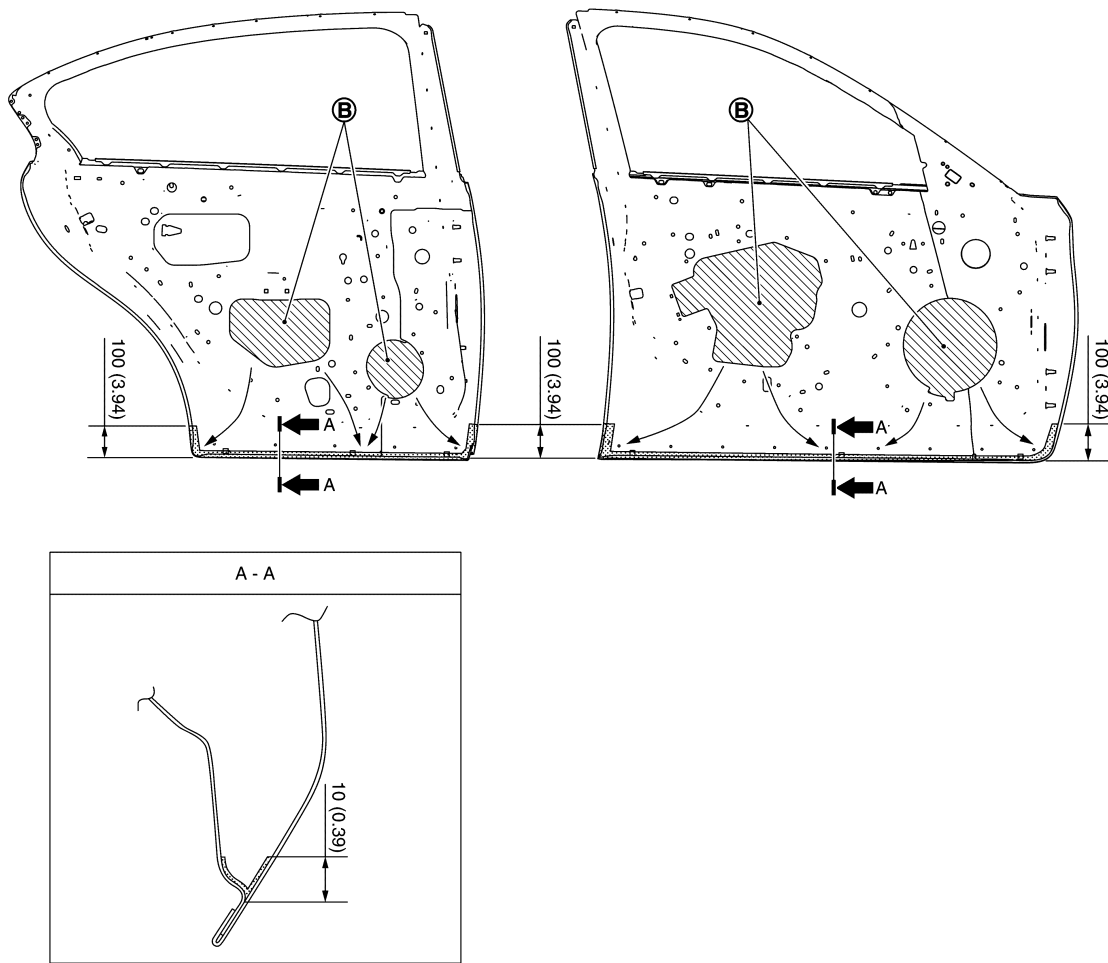
NISSAN genuine parts are also treated in the same manner. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain anti-corrosive performance built into the vehicle at the factory.

2WD : Anti-corrosive Wax

INFOID:000000009375032

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



Ⓑ Nozzle insert hole

Unit: mm (in)

▨ Anti-corrosive wax coated portions

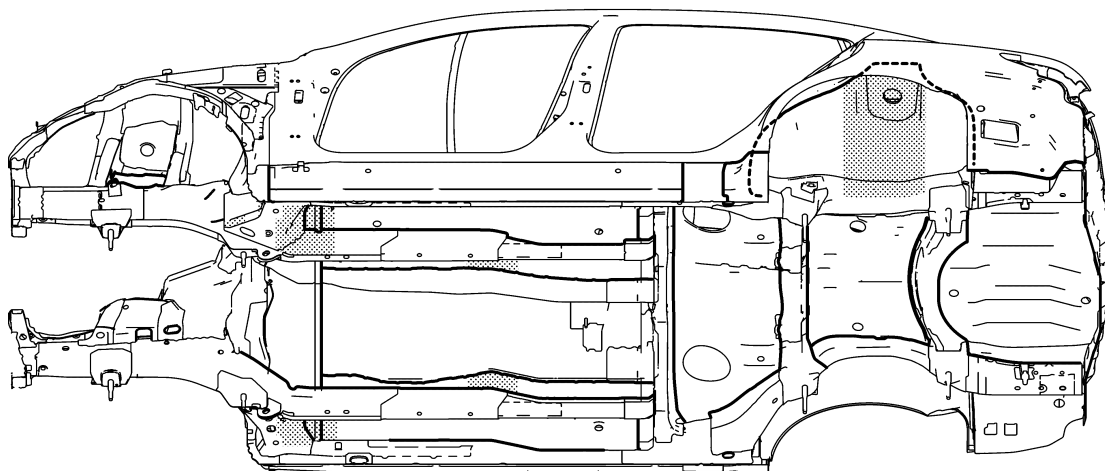
2WD : Undercoating

INFOID:0000000009238611

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.



JSKIA3266ZZ

 Undercoated areas Sealed portions

2WD : Body Sealing

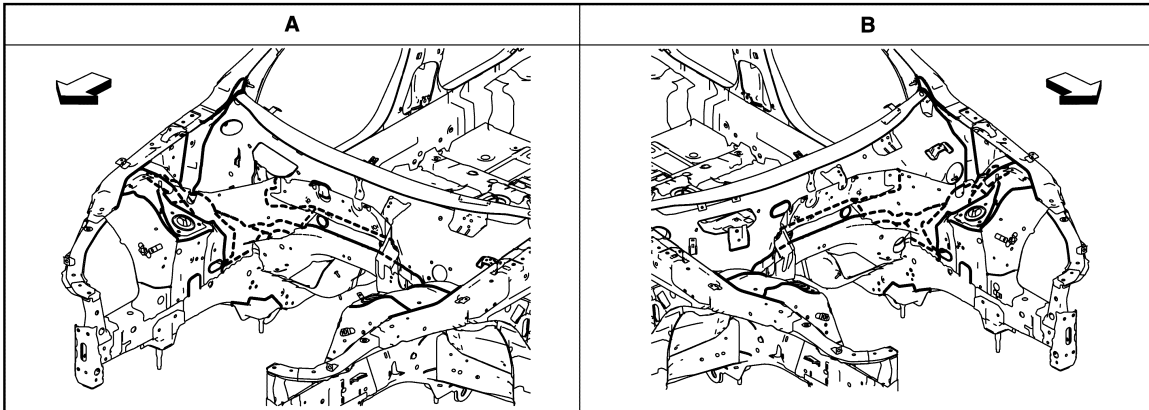
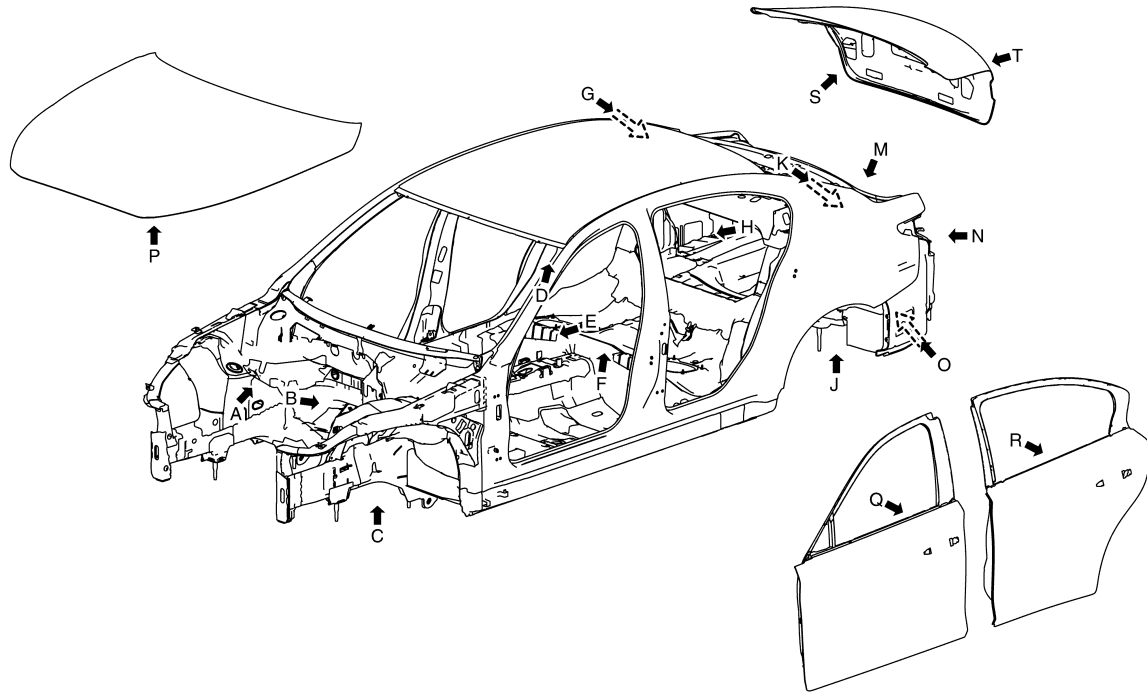
INFOID:000000009238612

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

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



←: Vehicle front
 —: Sealed portions

JSKIA3267ZZ

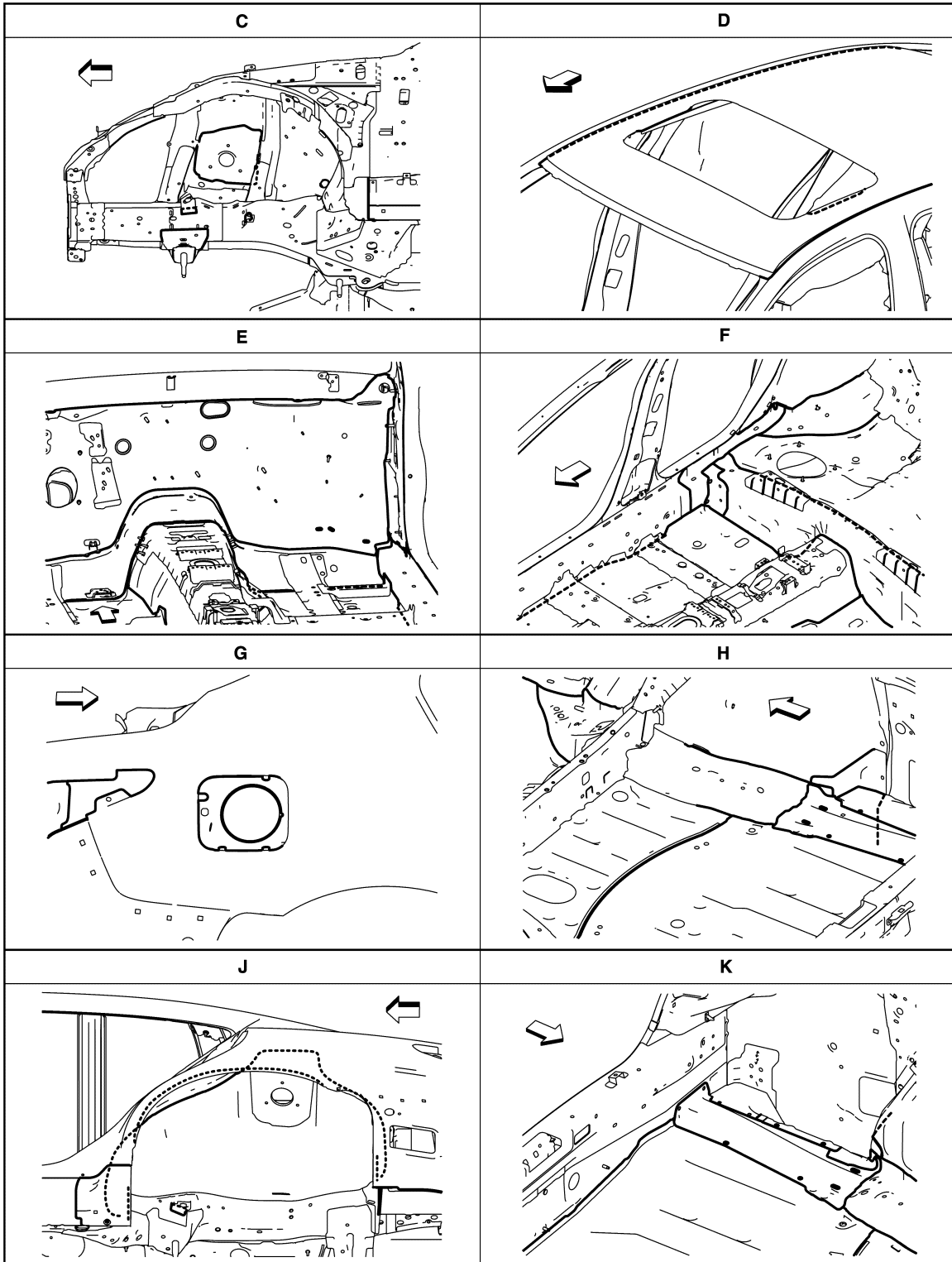
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CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



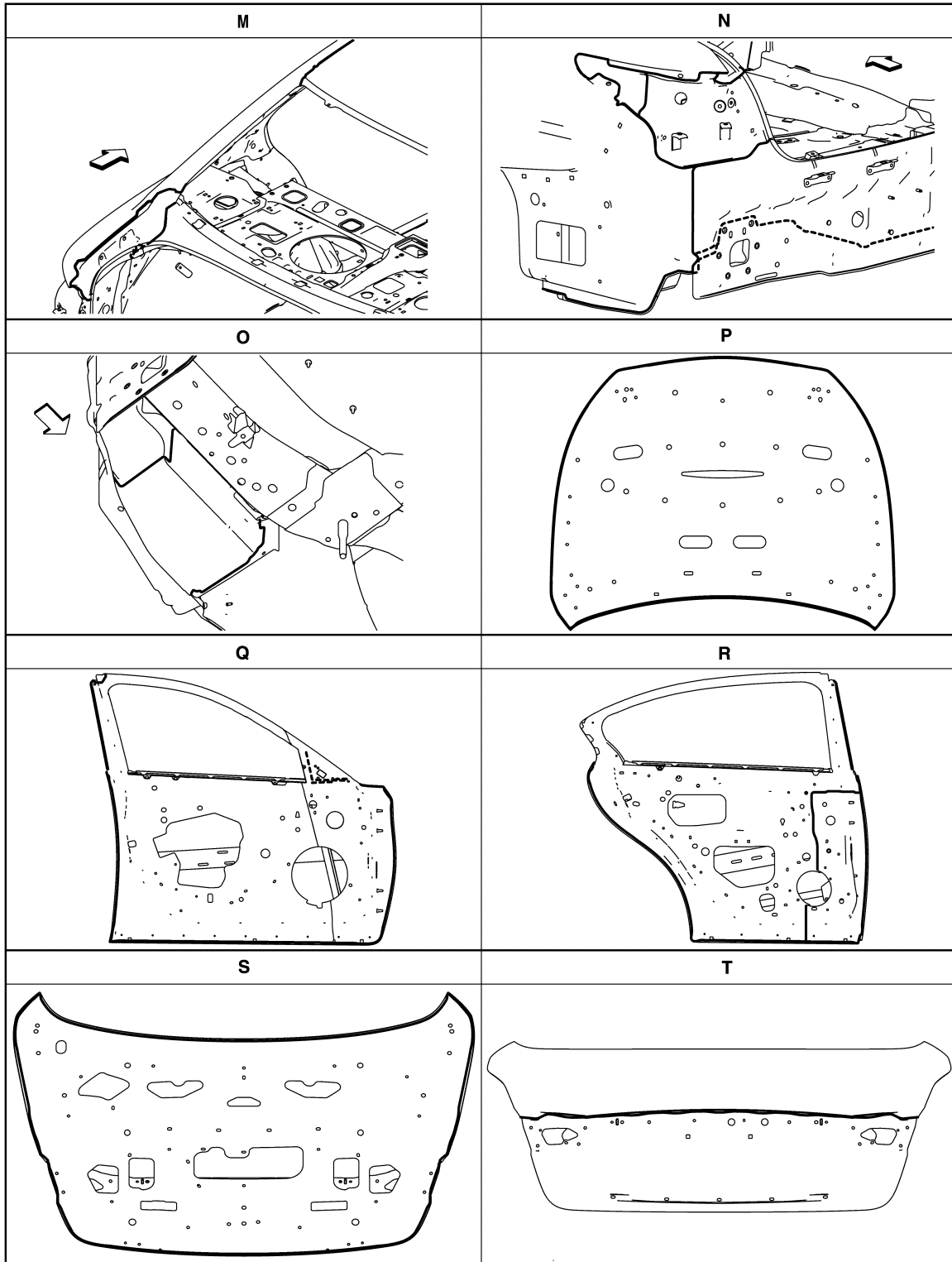
JSKIA3268ZZ

↔: Vehicle front
 —: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3269ZZ

↩: Vehicle front
 —: Sealed portions

AWD

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AWD : Description

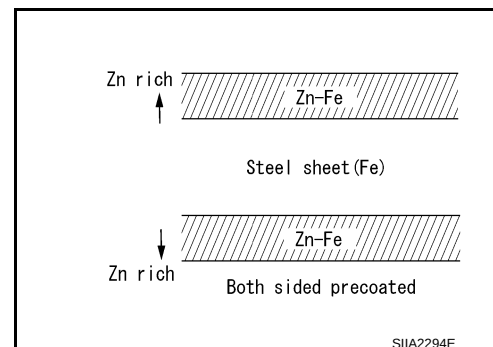
INFOID:000000009375019

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 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.



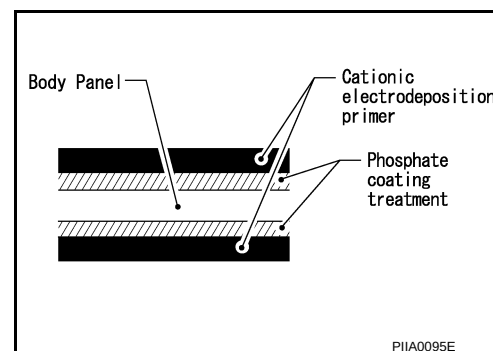
NISSAN genuine parts are fabricated from galvannealed steel. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

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.

AWD : Anti-corrosive Wax

INFOID:000000009375037

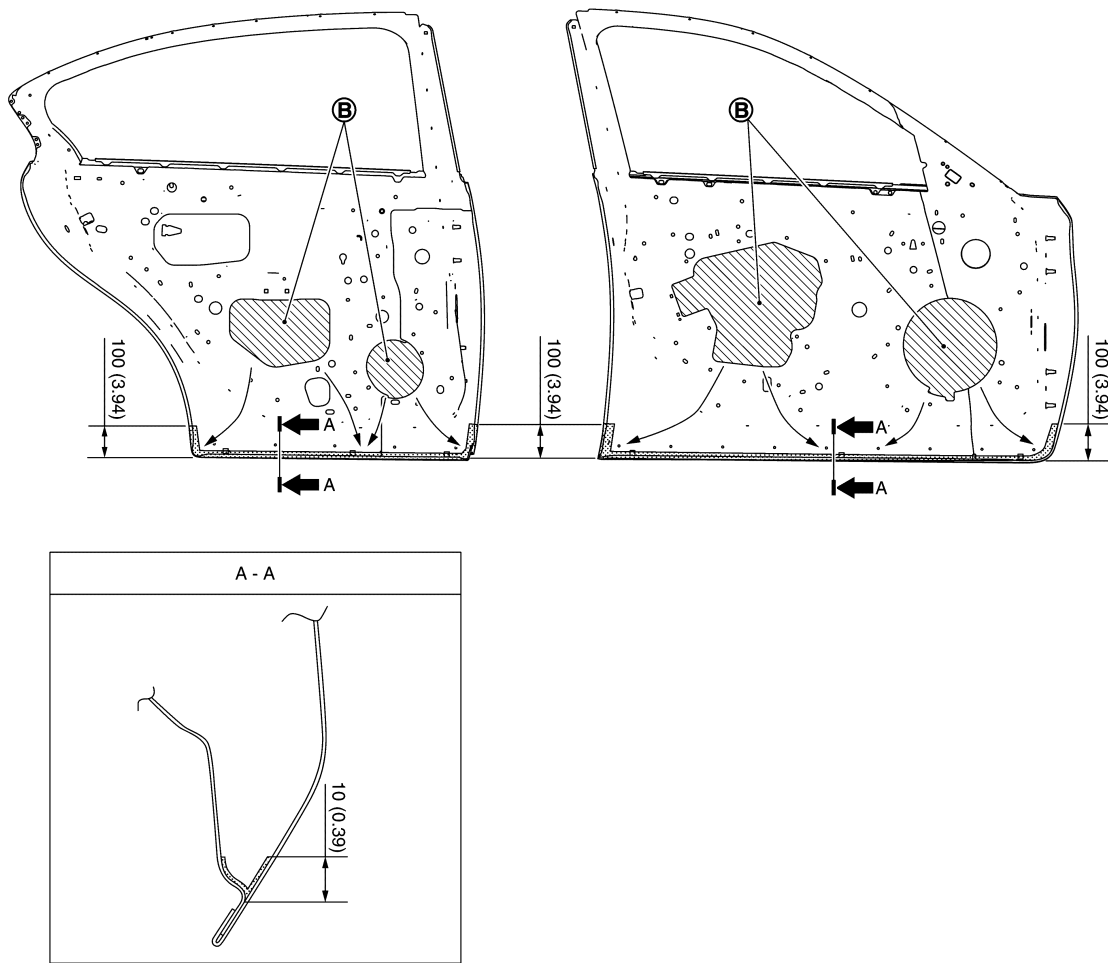
To improve corrosion resistance, anti-corrosive wax is applied inside the body sill and inside other closed sections. Accordingly, when replacing these parts, be sure to apply anti-corrosive wax to the appropriate areas of the new parts. Select an excellent anti-corrosive wax which will penetrate after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

DOOR

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Ⓑ Nozzle insert hole

Unit: mm (in)

▨ Anti-corrosive wax coated portions

AWD : Undercoating

INFOID:000000009375020

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.

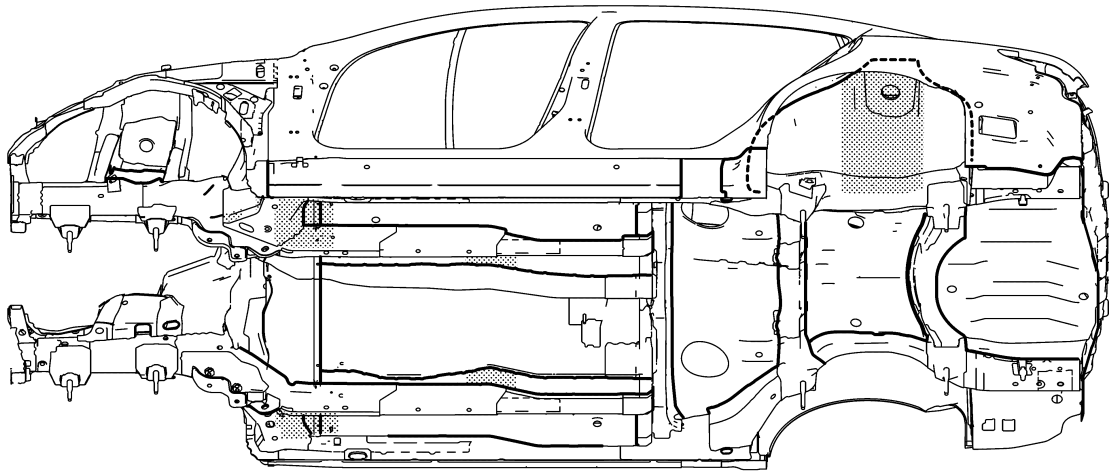
Precautions in Undercoating

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.

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3270ZZ

Undercoated areas

Sealed portions

AWD : Body Sealing

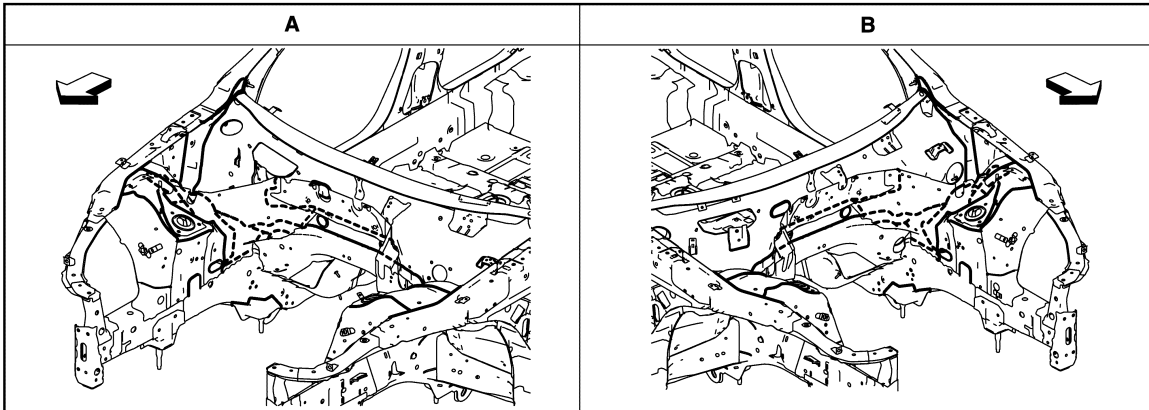
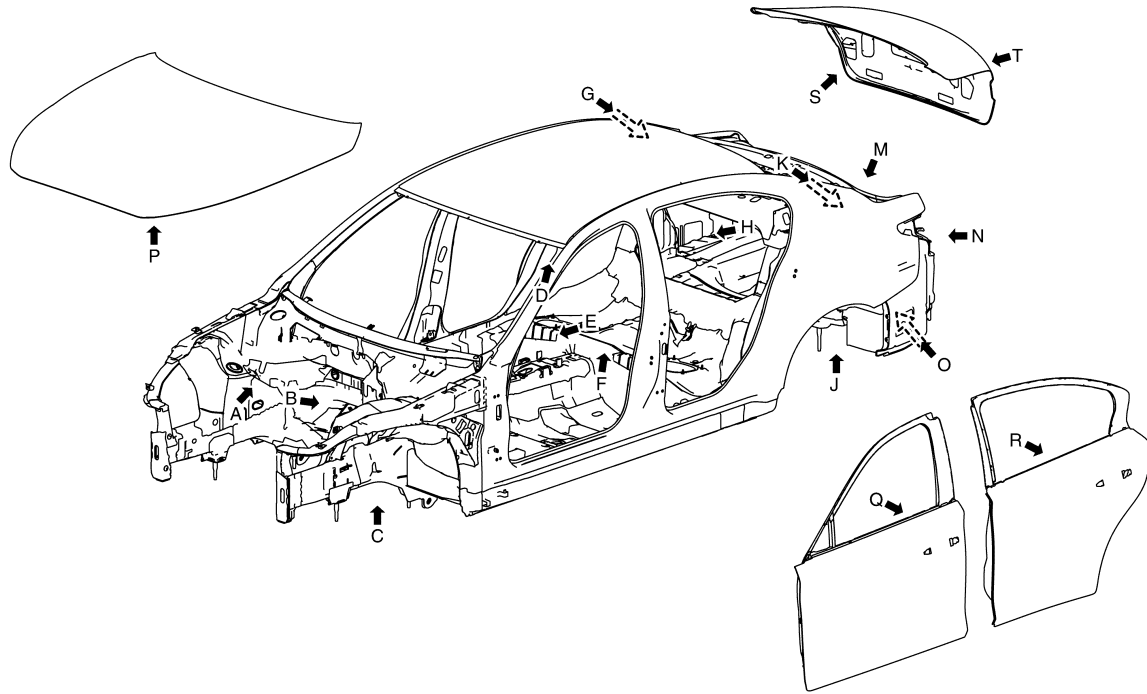
INFOID:000000009375021

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

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



←: Vehicle front
 —: Sealed portions

JSKIA3271ZZ

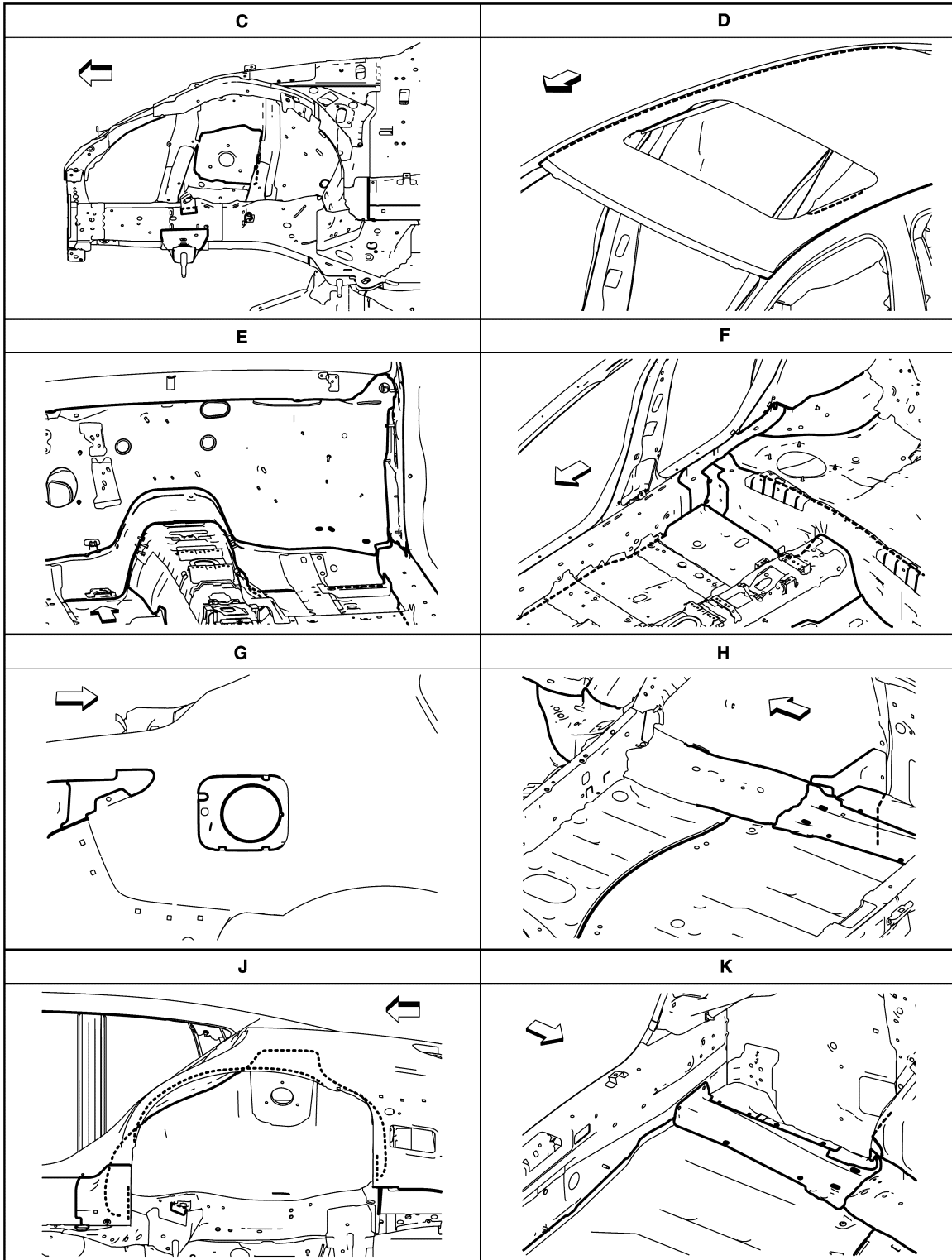
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CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



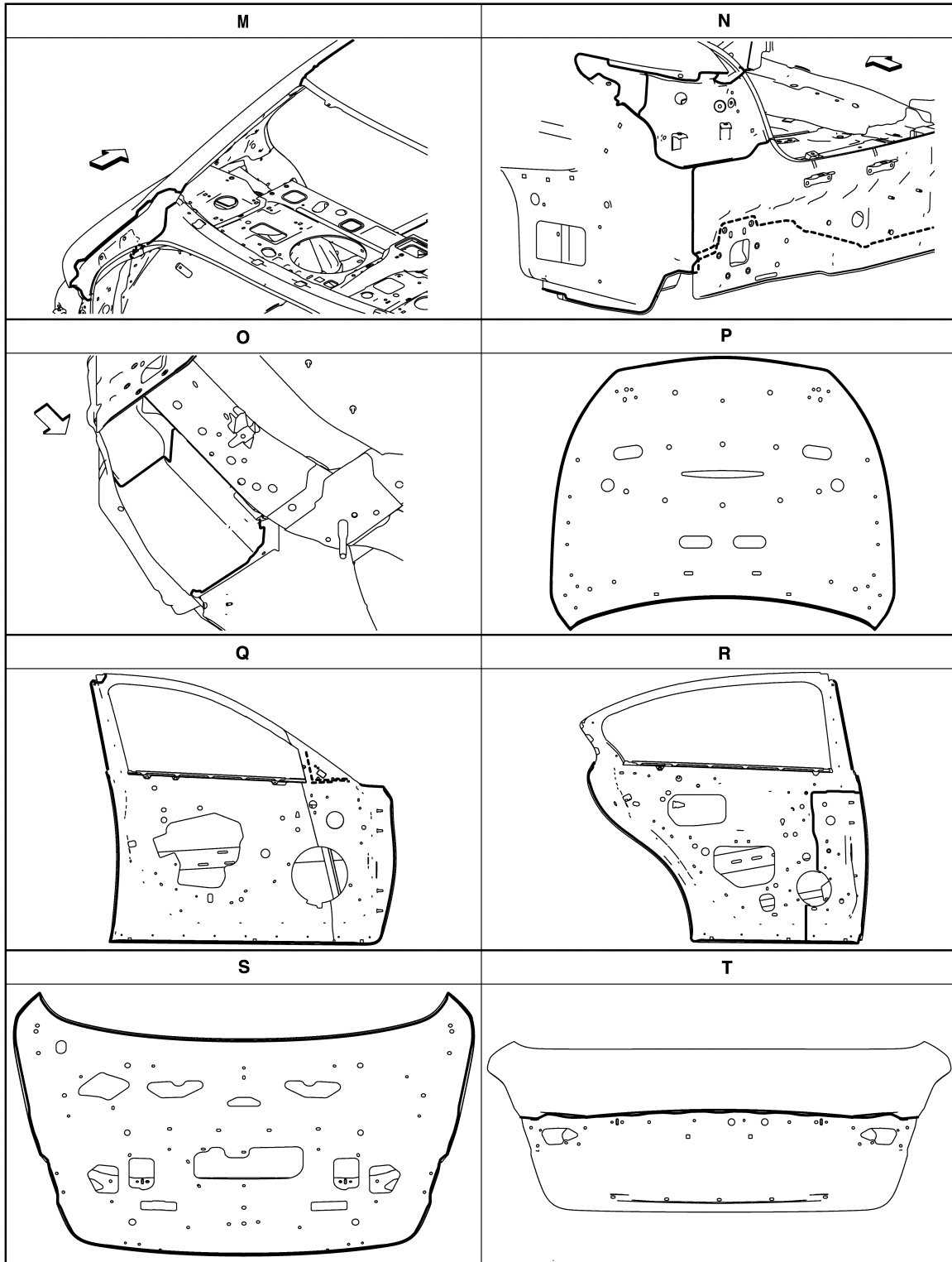
JSKIA3272ZZ

↩: Vehicle front
—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3269ZZ

Vehicle front
 Sealed portions

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BODY CONSTRUCTION

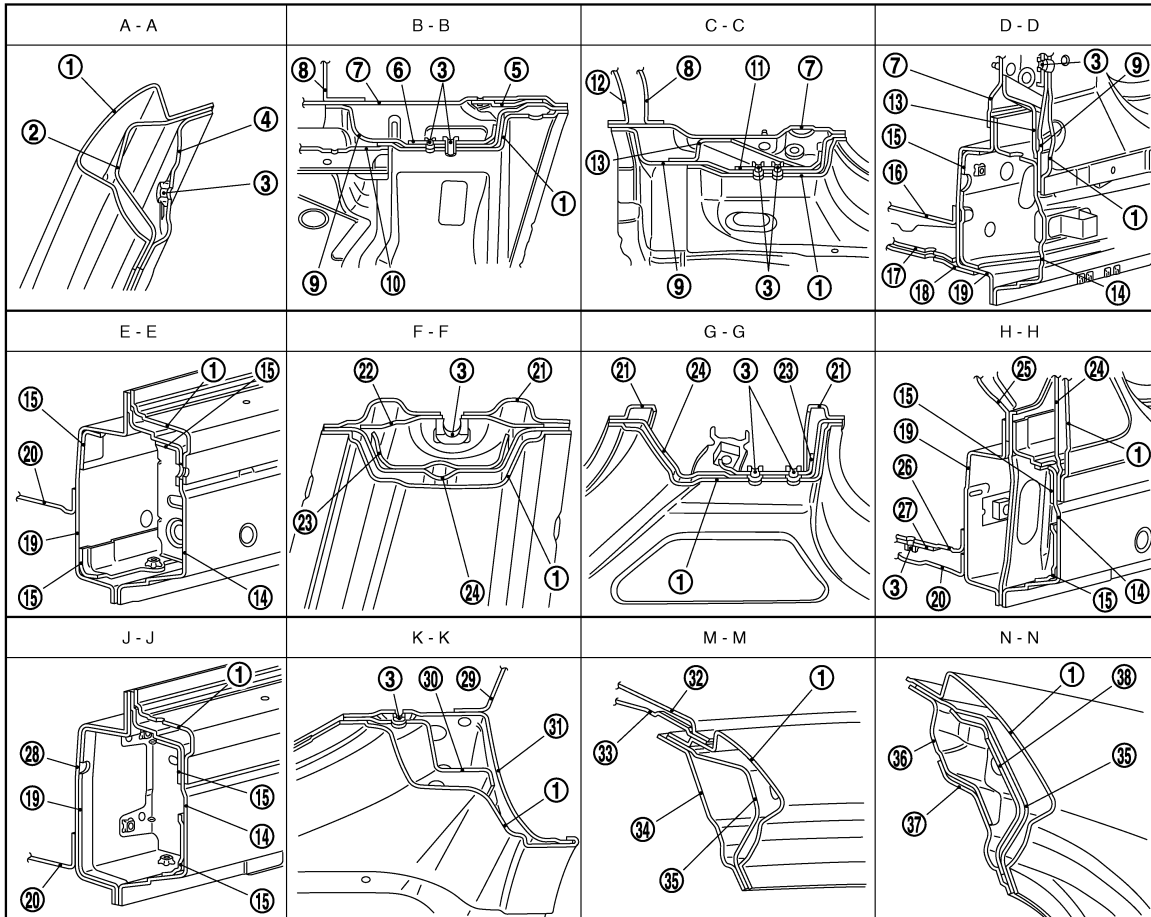
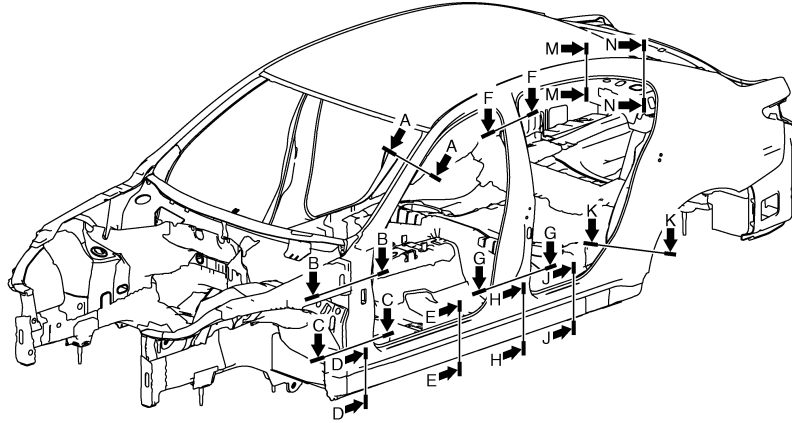
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

BODY CONSTRUCTION

Body Construction

INFOID:000000009726382



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|------------------------------|------------------------------------|----------------------------|
| ① Outer side body | ② Outer front pillar reinforcement | ③ Weld nut |
| ④ Inner front side roof rail | ⑤ Outer front pillar bracket | ⑥ Upper hinge plate |
| ⑦ Side dash | ⑧ Upper dash | ⑨ Front pillar hinge brace |

JSKIA3274ZZ

BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- | | | |
|----------------------------------|---|-----------------------------------|
| ⑩ Hoodledge reinforcement | ⑪ Lower hinge plate | ⑫ Lower dash crossmember |
| ⑬ Lower front pillar gusset | ⑭ Outer sill reinforcement | ⑮ Center sill reinforcement |
| ⑯ Lower dash | ⑰ Outrigger reinforcement | ⑱ Front side member outrigger |
| ⑲ Inner sill | ⑳ Front floor | ㉑ Inner center pillar |
| ㉒ Center pillar seat belt anchor | ㉓ Center pillar seat belt reinforcement | ㉔ Center pillar reinforcement |
| ㉕ Seat belt anchor | ㉖ 3rd crossmember | ㉗ Nut plate |
| ㉘ Rear side member front | ㉙ Inner rear wheelhouse | ㉚ Outer rear wheelhouse extension |
| ㉛ Outer rear wheelhouse | ㉜ Roof | ㉝ 2nd roof bow |
| ㉞ Inner side roof rail | ㉟ Side roof rail reinforcement | ㊱ Rear roof rail brace |
| ㊲ Inner rear pillar | ㊳ Inner rear pillar reinforcement | |

Rear Fender Hemming Process

INFOID:000000009238614

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

CAUTION:

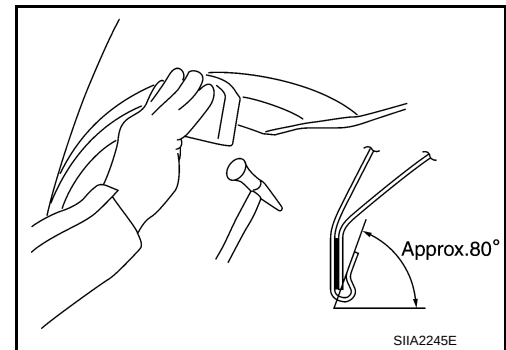
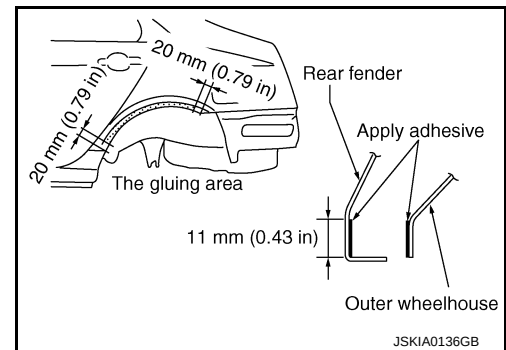
Ensure that the area that is to be glued around the outer wheelhouse is undamaged or defaced.

PROCEDURE OF THE HEMMING PROCESS

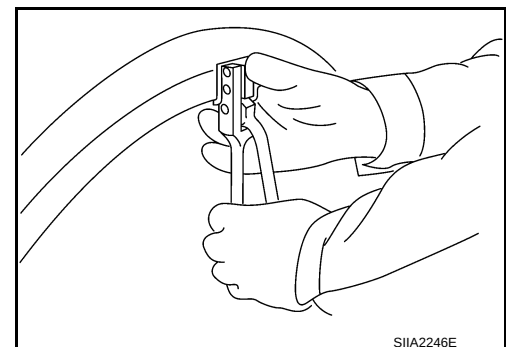
- Peel off old bonding material on the surface of the outer wheelhouse and clean thoroughly.
- Peel off a primer coat in the specified area where new adhesive is to be applied on rear fender (the replacing part).
- Apply new adhesive to both specified areas of the outer wheelhouse and rear fender.

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

- Attach rear fender to the body of the car, and weld the required part except the hemming part.
- Bend the welded part starting from the center of the wheel arch gradually with a hammer and a dolly. (Also hem the end of the flange.)
- Hemming with a hammer is conducted to an approximate angle of 80 degrees.



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

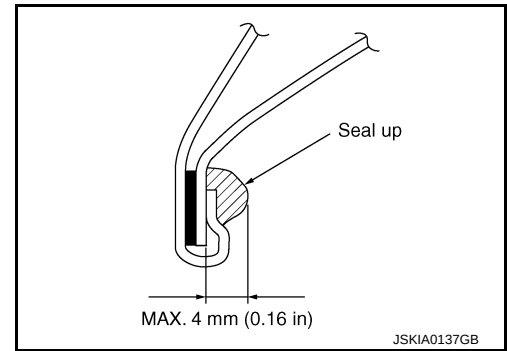


BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

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



REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

REPLACEMENT OPERATIONS

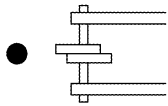
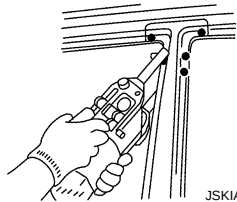
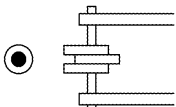
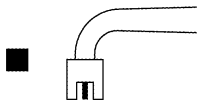
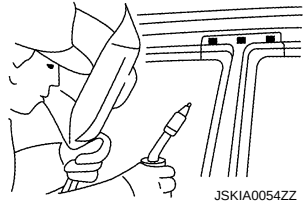
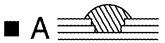
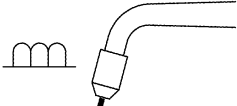
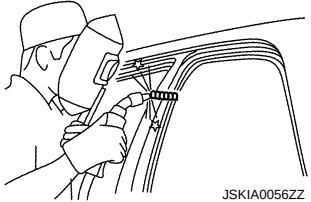
2WD

2WD : Description

INFOID:000000009238615

- 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.

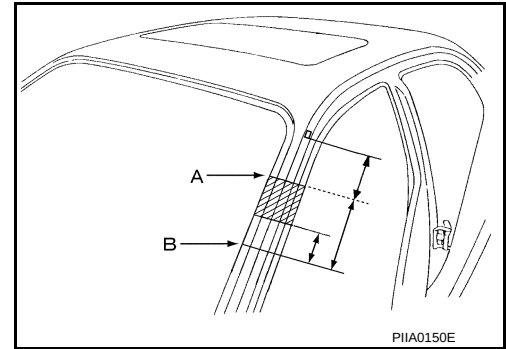
Symbol marks	Description	
 JSKIA0049ZZ	2-spot welds	 JSKIA0053ZZ
 JSKIA0050ZZ	3-spot welds	
 JSKIA0051ZZ	MIG plug weld	 JSKIA0054ZZ For 3 panels plug weld method  A  B JSKIA0055ZZ
 JSKIA0052ZZ	MIG seam weld / Point weld	 JSKIA0056ZZ

REPLACEMENT OPERATIONS

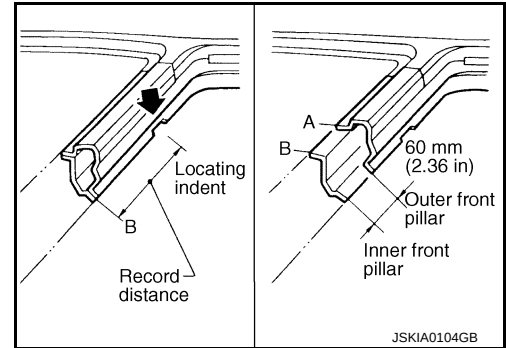
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

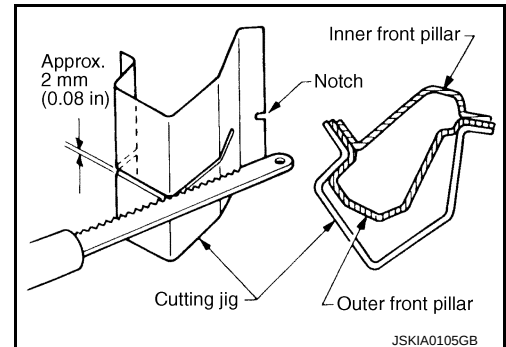
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle.



- 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.

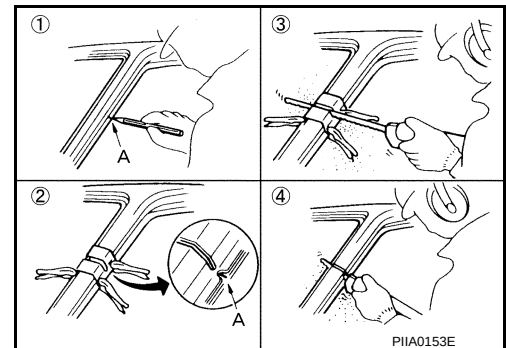


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit the service part to be accurately cut at the joint position.



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

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



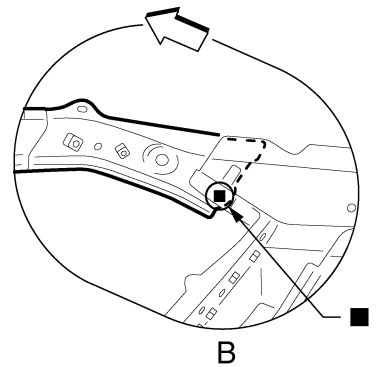
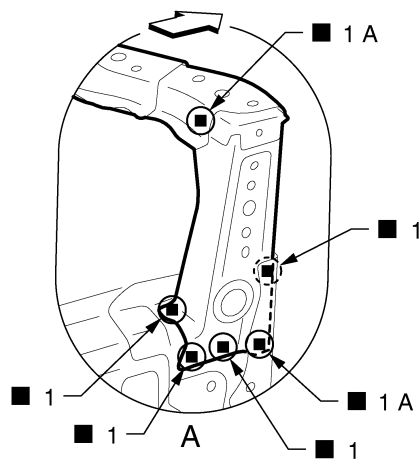
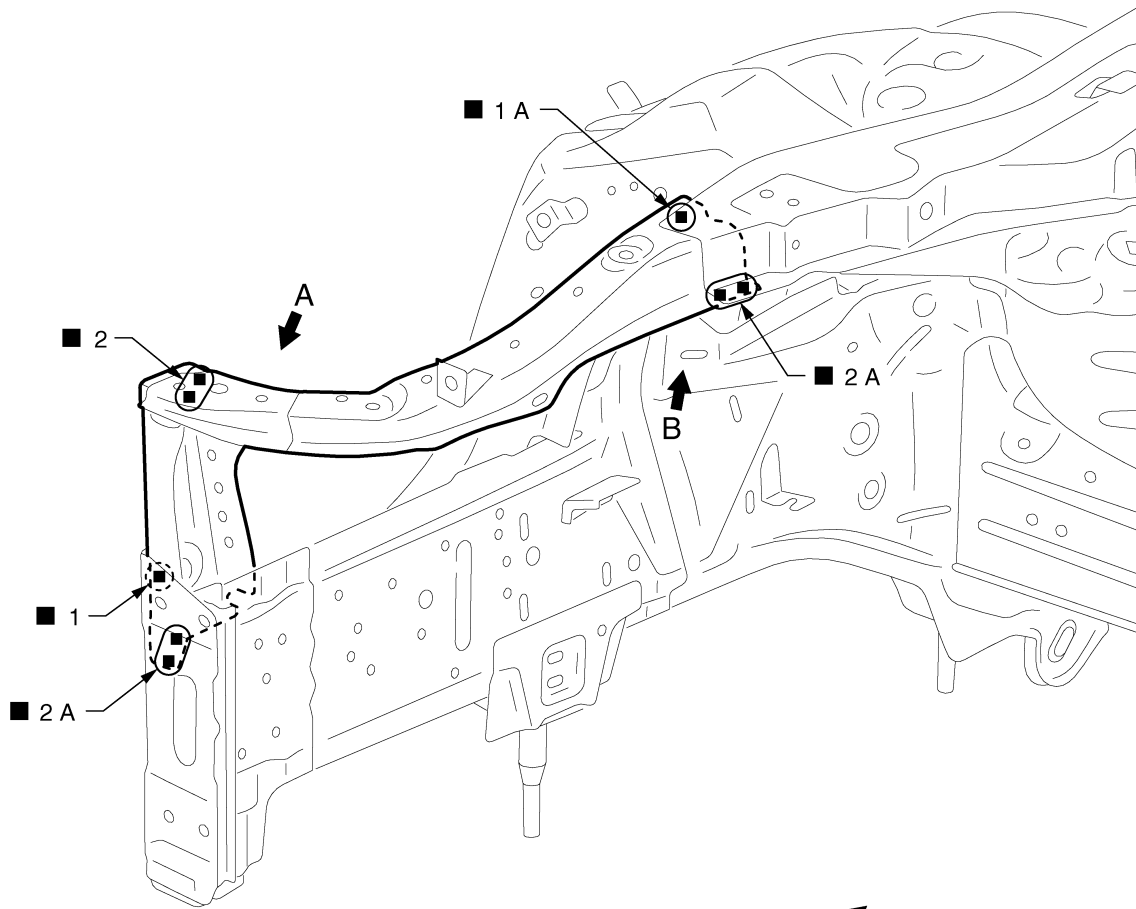
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

2WD : Radiator Core Support

INFOID:000000009238616



⇐: Vehicle front

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

Replacement parts

- Side radiator core support
- Front side member connector assembly

2WD : Hoodledge

INFOID:000000009238617

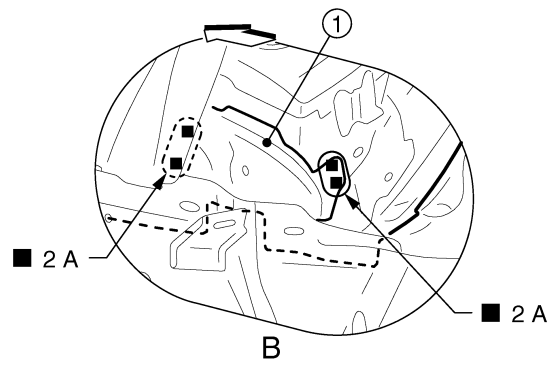
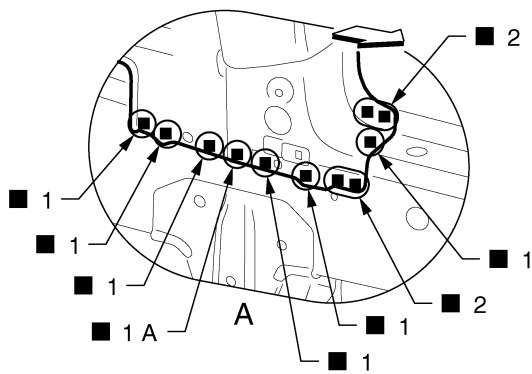
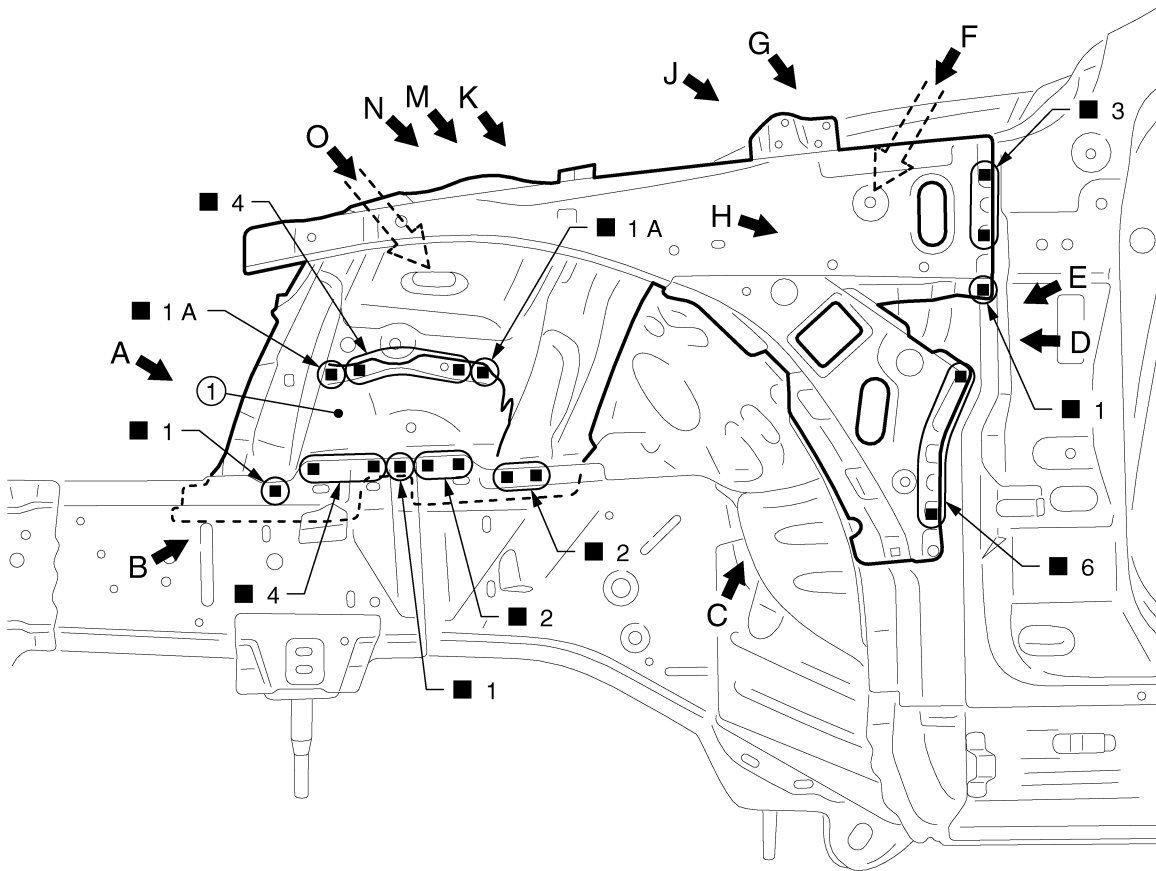
Work after radiator core support is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

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



JSKIA3353ZZ

① Front side member center closing plate (reusable)

← Vehicle front

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

Replacement parts

● Upper front hoodledge

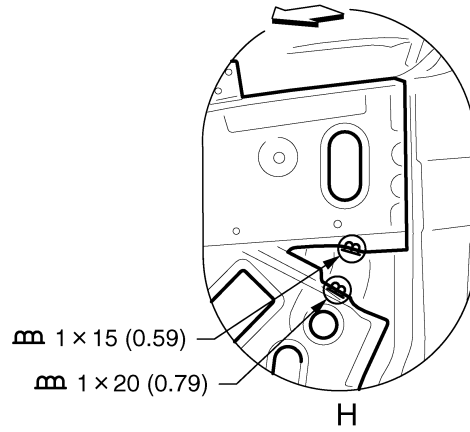
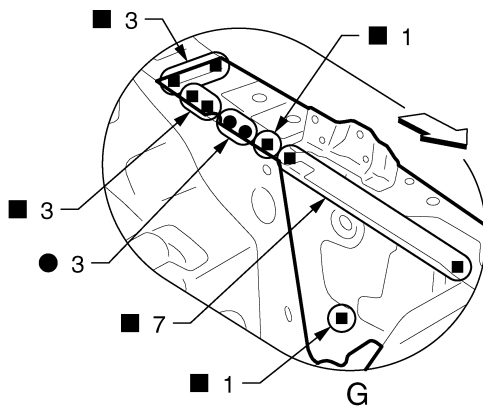
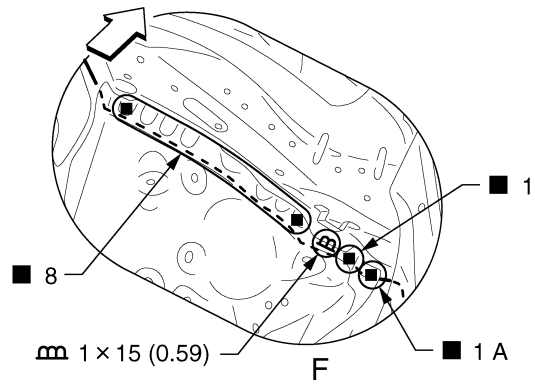
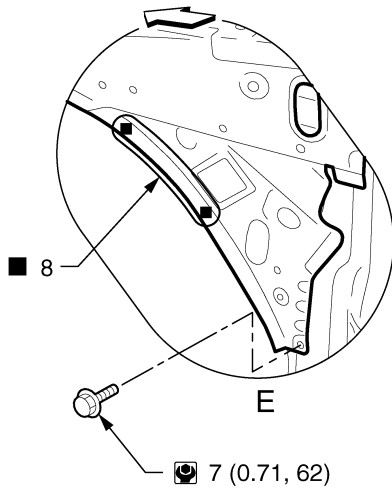
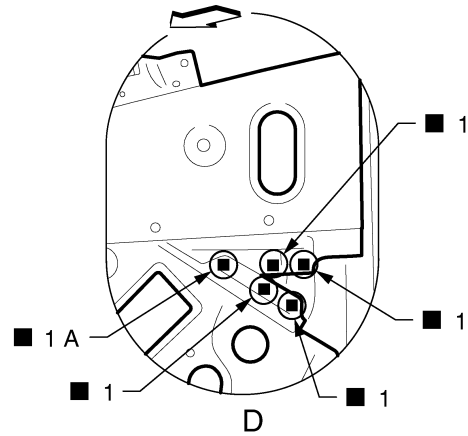
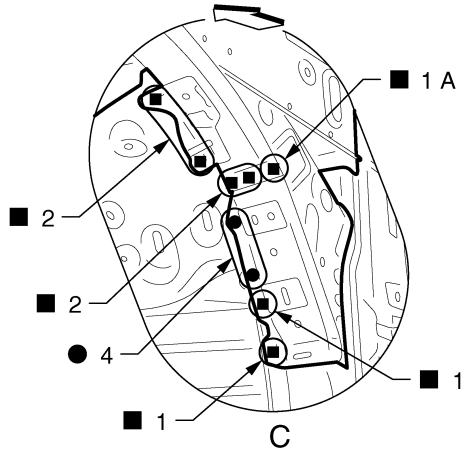
● Hoodledge reinforcement

● Front strut housing

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



Unit: mm (in)

←: Vehicle front

⊗: N·m (kg·m, in·lb)

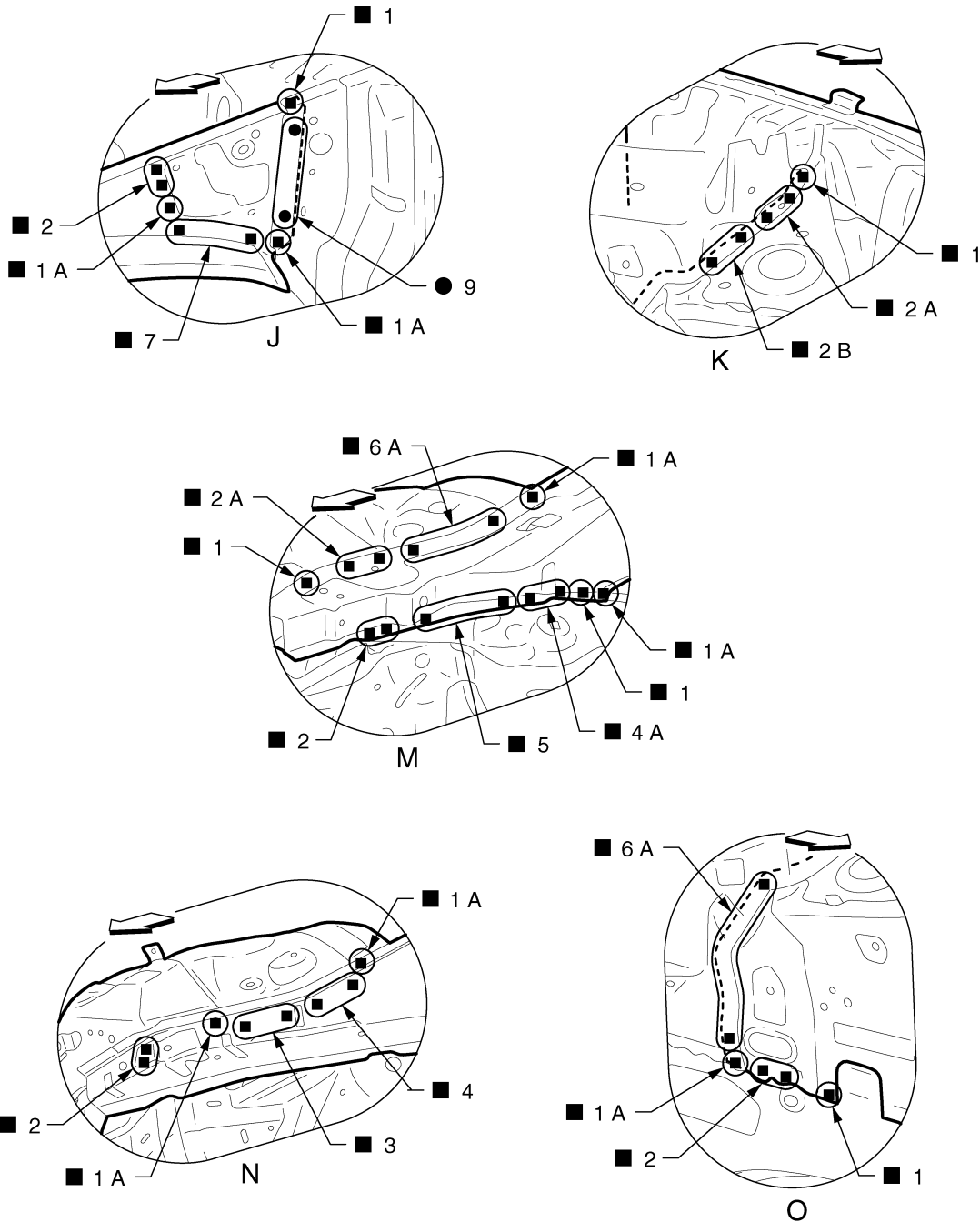
JSKIA3316GB

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3354ZZ

← Vehicle front

View J and N: Before installing hoodledge reinforcement

2WD : Front Side Member

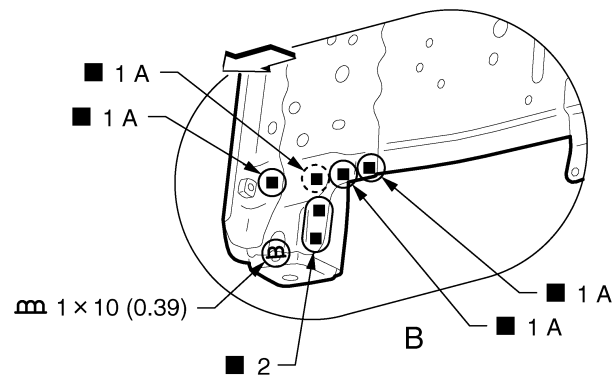
INFOID:000000009238618

Work after radiator core support and hoodledge are removed.

Remove the front side member outrigger (reusable).

Remove the front side member center closing plate (reusable) from the service part "front side member closing plate assembly" for easier installation of hoodledge.

[FOR USA AND CANADA]



2014 Q50

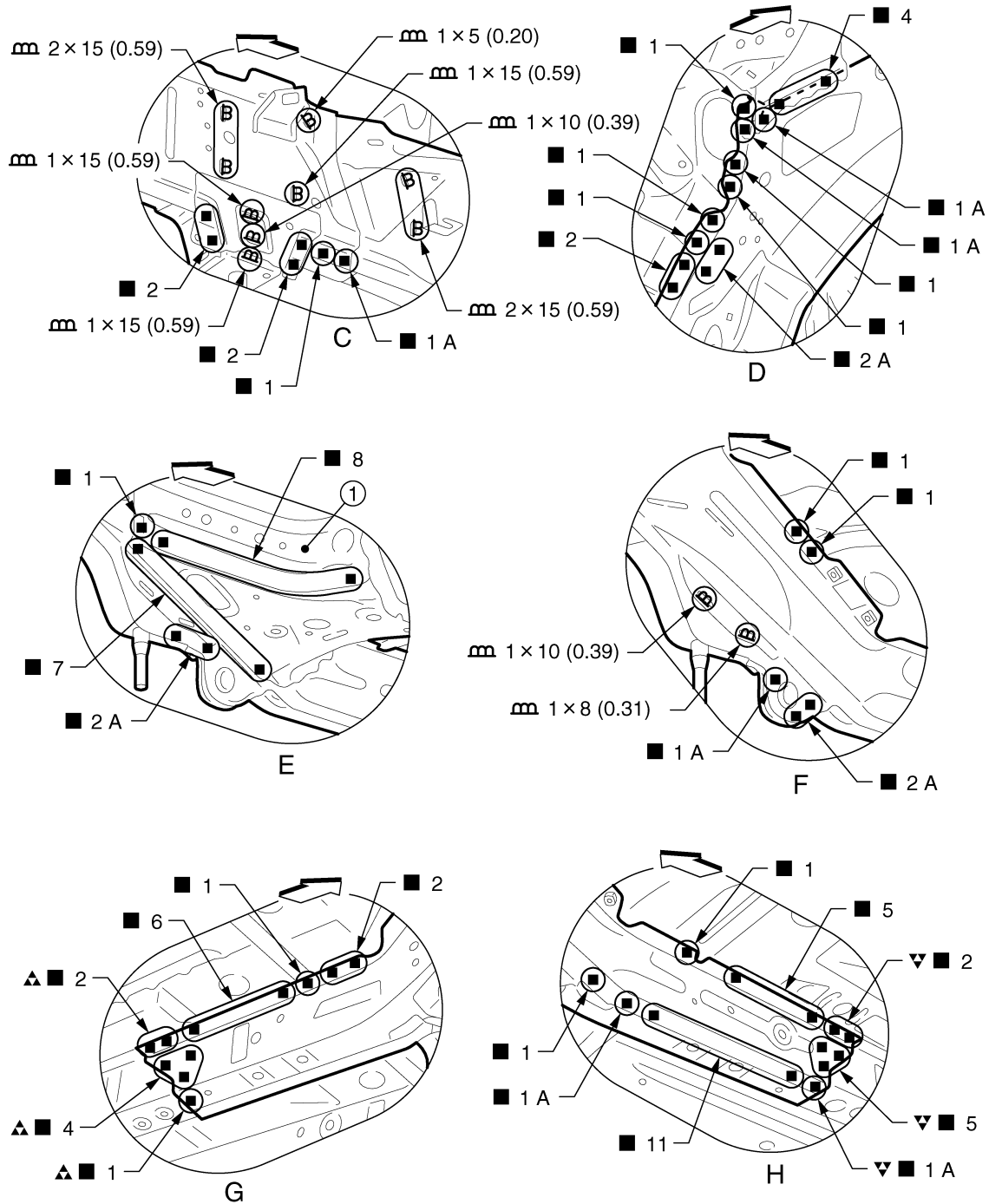
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3356GB

① Front side member outrigger (reusable)

Unit: mm (in)

↔ Vehicle front

▲: Drill $\phi 10$ mm (0.39 in) hole for the plug welding hole (ultra high strength steel plate).

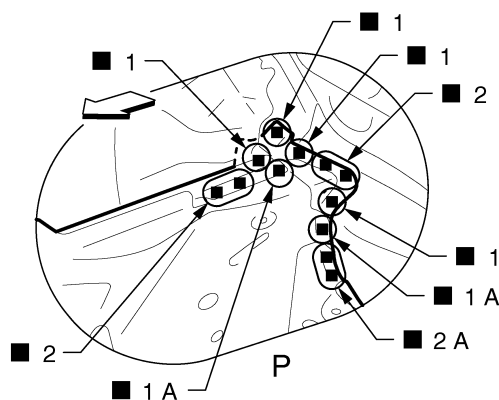
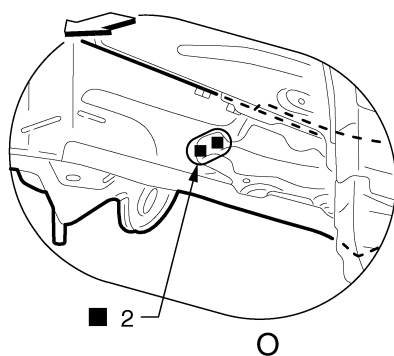
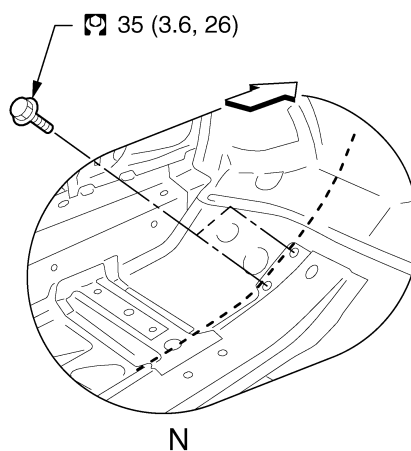
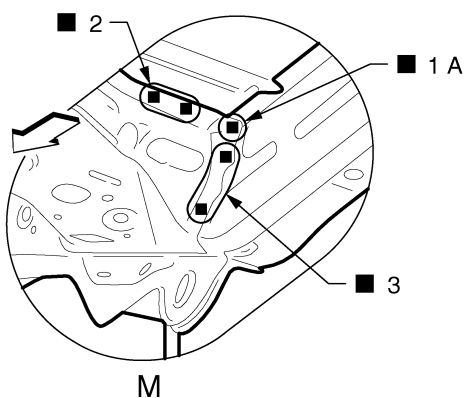
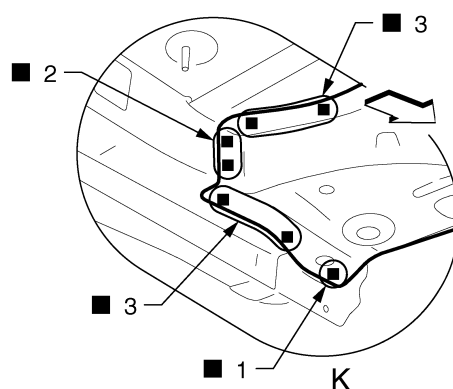
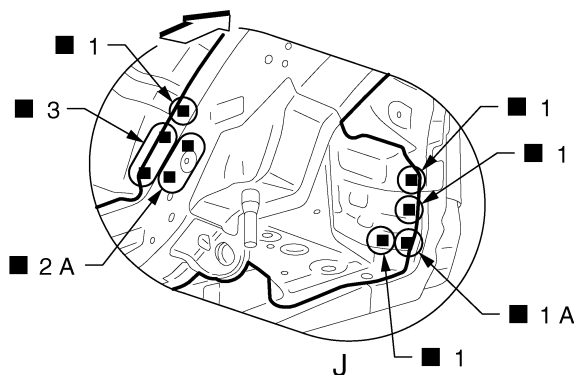
▼: Drill $\phi 11$ mm (0.43 in) hole for the plug welding hole (ultra high strength steel plate).

View F and H: Before installing front side member outrigger assembly

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



←: Vehicle front

⊞: N·m (kg-m, ft-lb)

View O: Before installing front side member outrigger (reusable)

2WD : Front Side Member (Partial Replacement)

Work after side radiator core support is removed.

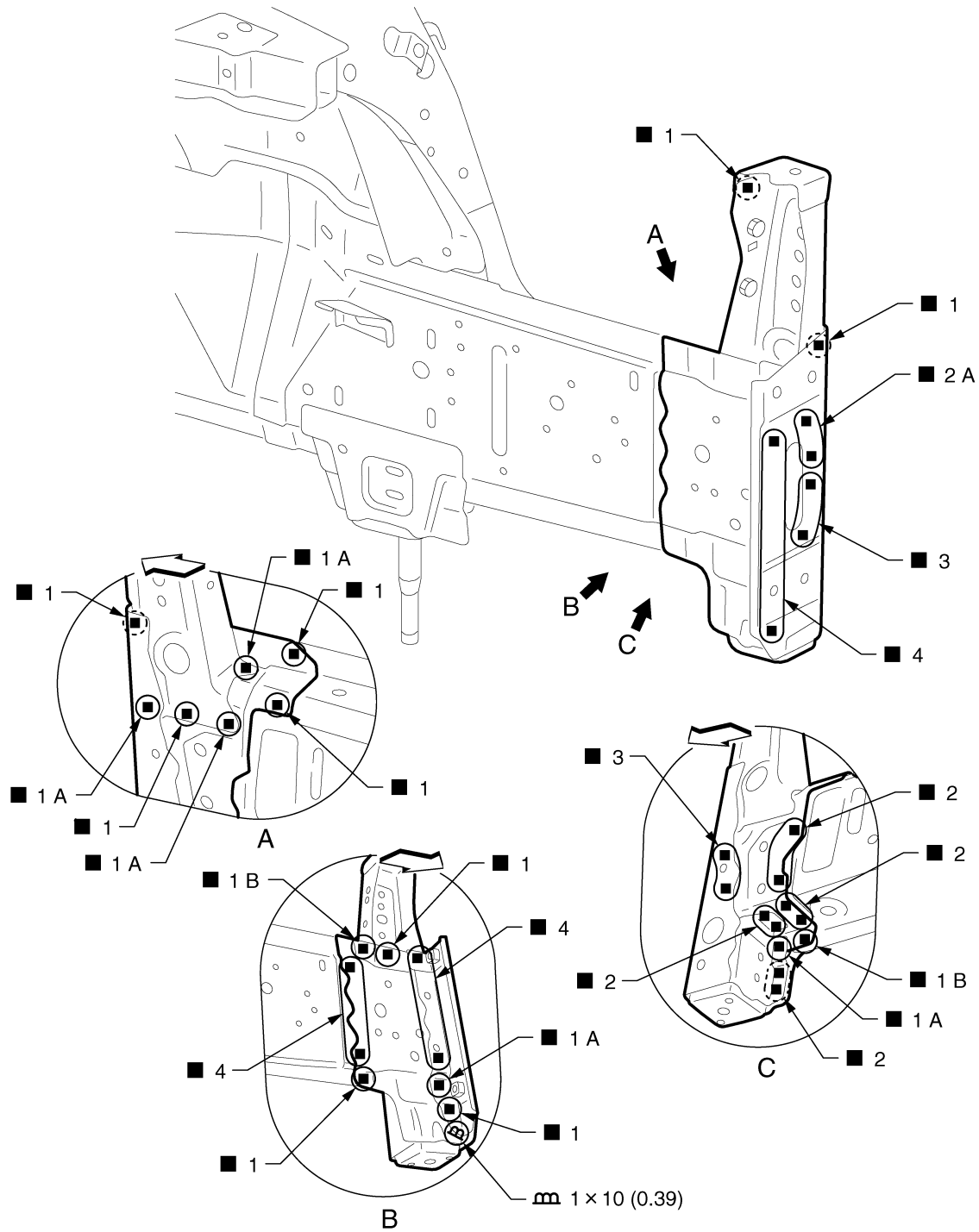
JSKIA3357GB

INFOID:000000009238620

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3358GB

Unit: mm (in)

↔: Vehicle front

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

Replacement parts

- Front side member front extension
- Front side member front closing plate
- Add on frame bracket plate
- Front side member connector assembly
- Bumper reinforcement bracket

REPLACEMENT OPERATIONS

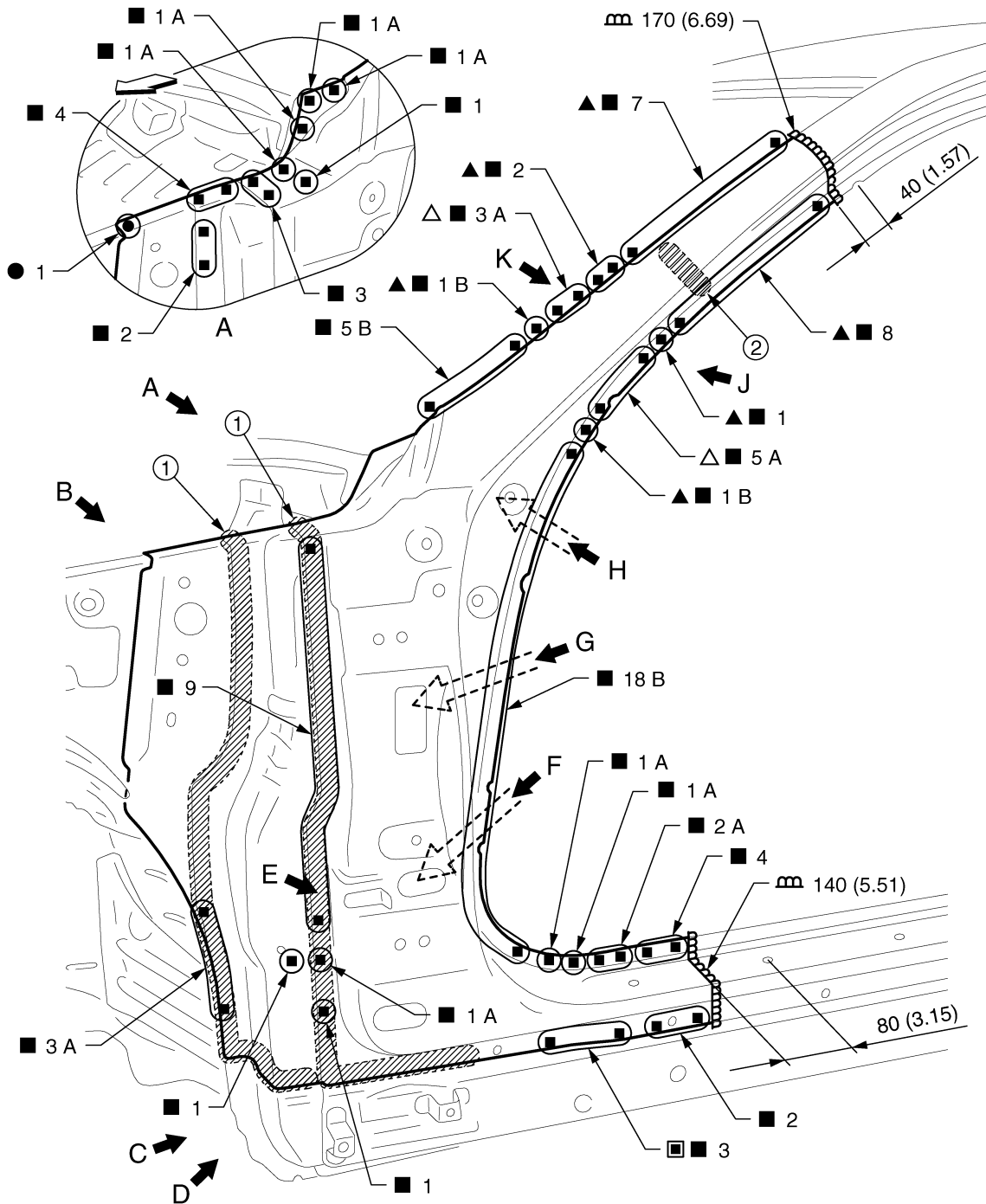
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

2WD : Front Pillar

INFOID:000000009238621

Work after hoodedge reinforcement is removed.
Remove the upper front pillar reinforcement (reusable).



① Body sealing

② Urethane foam

Unit: mm (in)

↔ Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

JSKIA3404GB

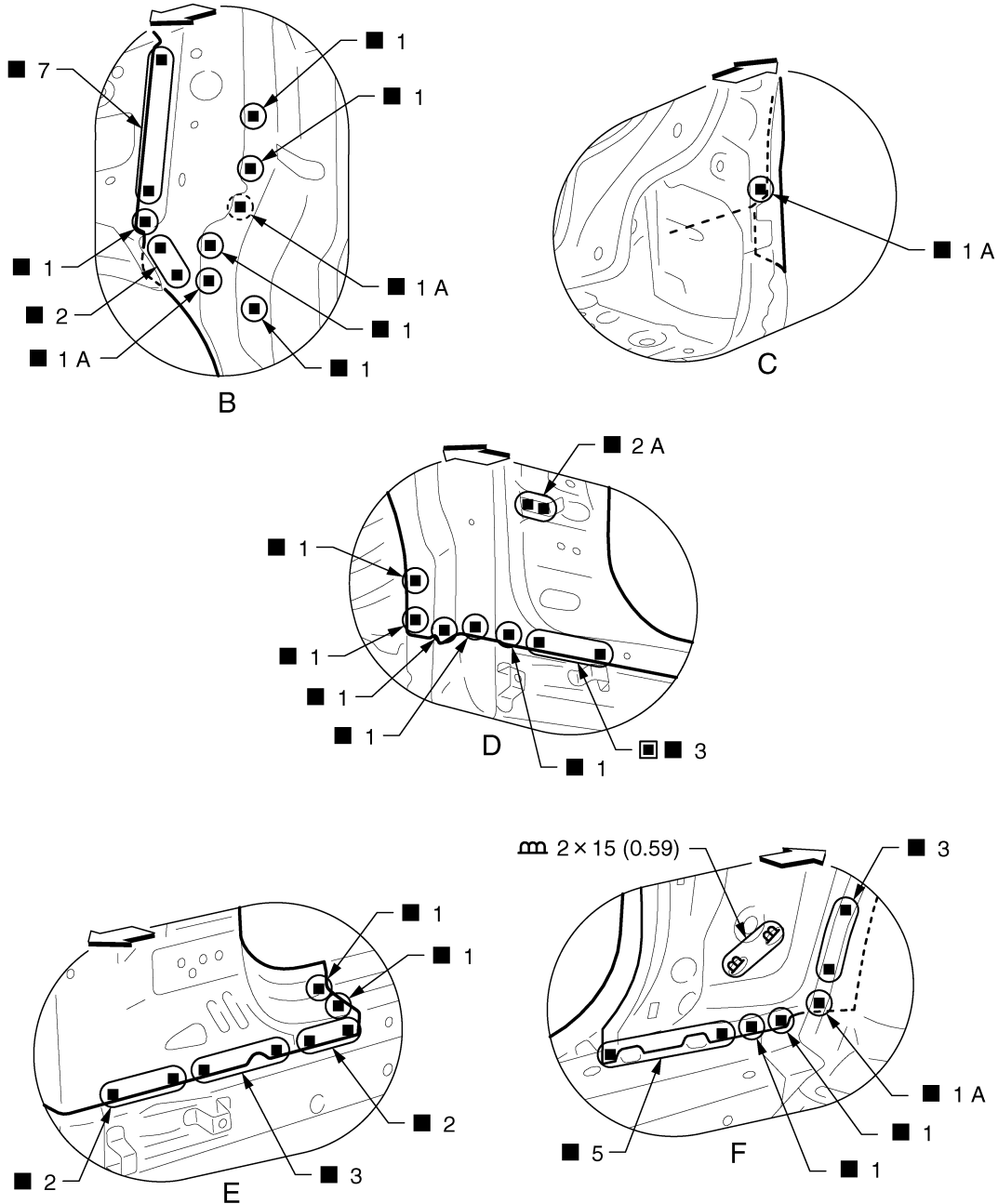
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Replacement parts

- Outer front side body
- Front pillar brace
- Side dash
- Cowl top bracket extension



JSKIA3405GB

Unit: mm (in)

↔ Vehicle front

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

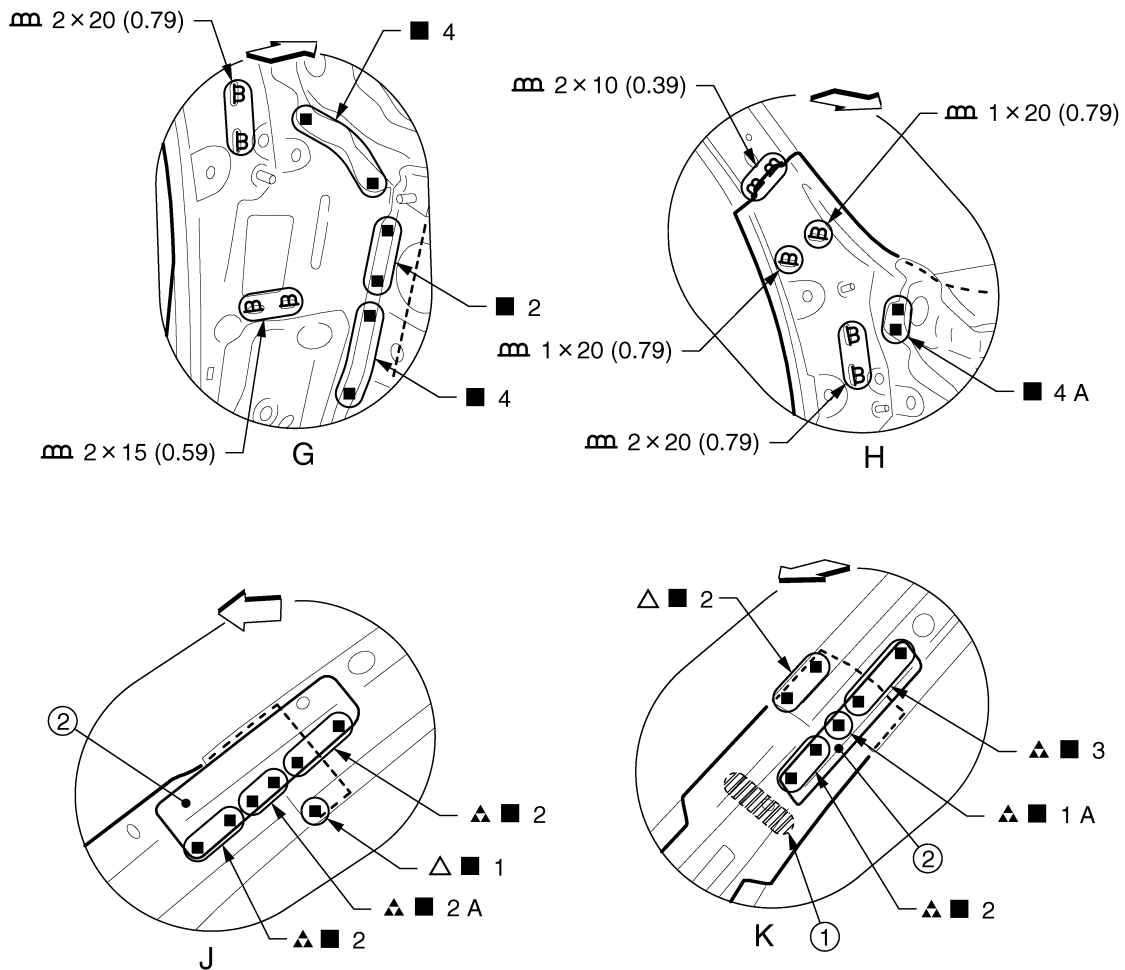
○: Weld the parts onto the back of the component part.

View E: Before installing outer front side body

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



① Urethane foam

② Upper front pillar reinforcement (re-usable)

Unit: mm (in)

⇐: Vehicle front

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

▲: Drill $\phi 10$ mm (0.39 in) hole for the plug welding hole (ultra high strength steel plate).

View J and K: Before installing outer front side body

2WD : Center Pillar

Remove the outer sill reinforcement (reusable).

JSKIA3324GB

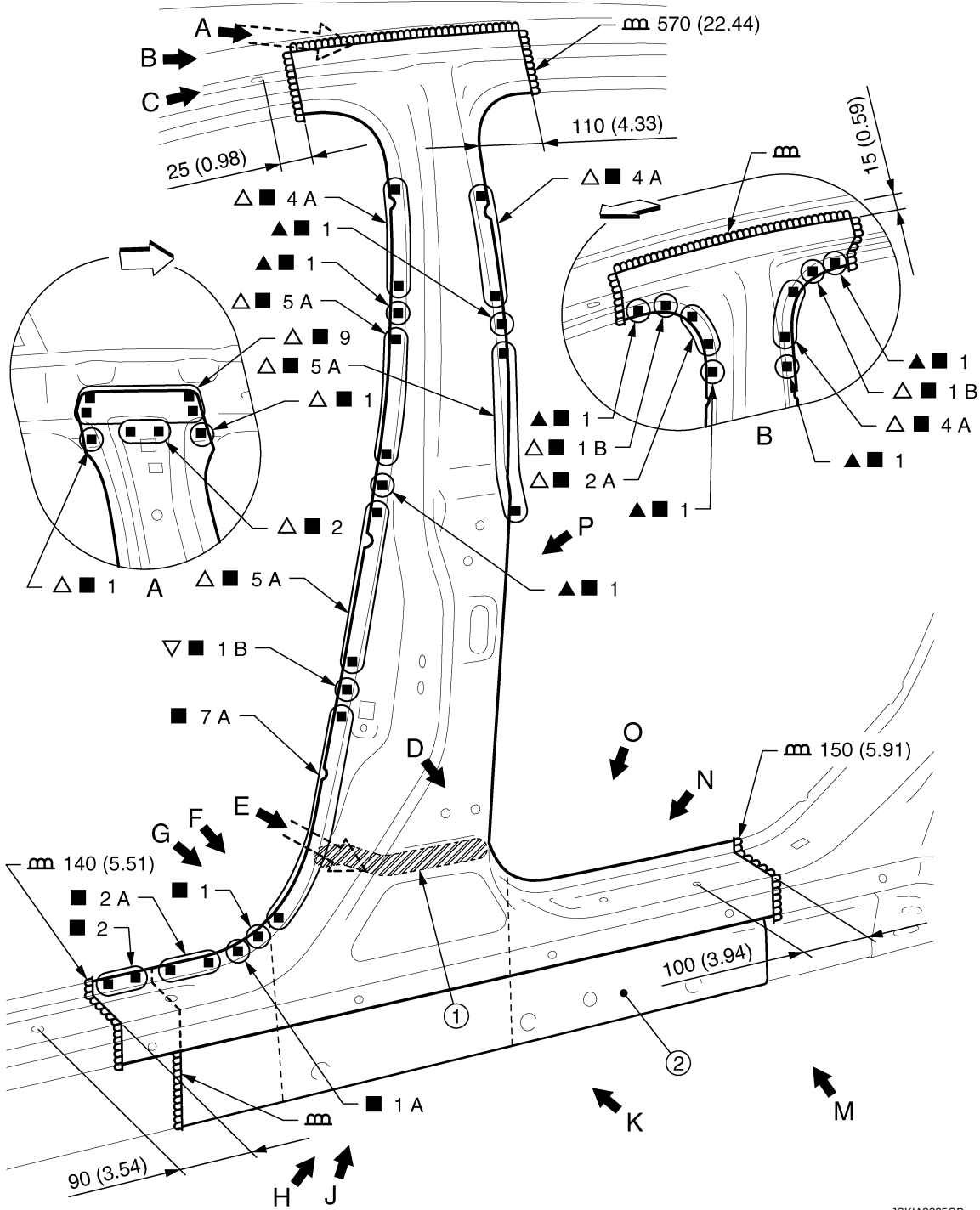
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3325GB

① Urethane foam

② Outer sill reinforcement (reusable)

Unit: mm (in)

↖ Vehicle front

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

Replacement parts

● Outer front side body

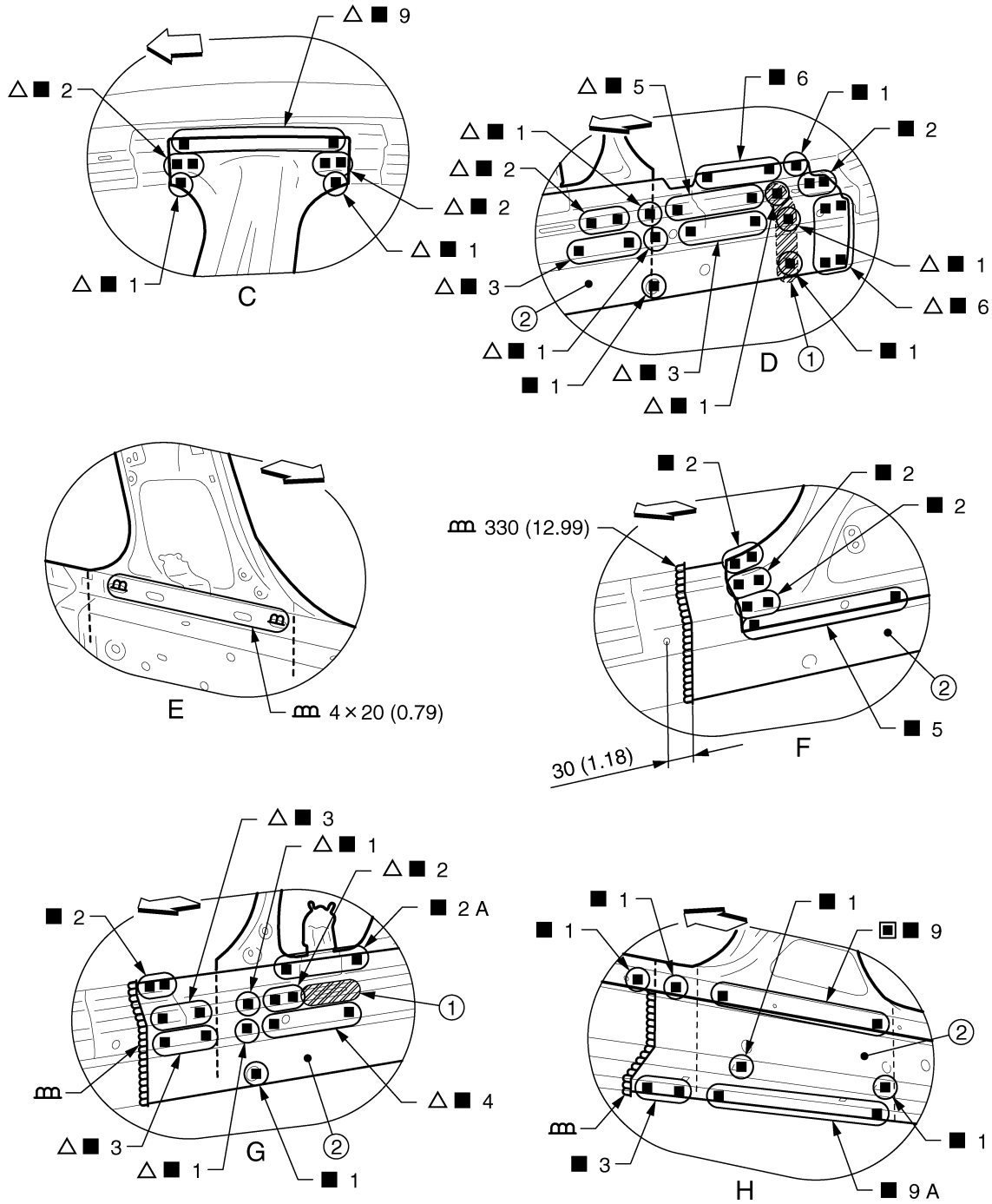
● Center pillar reinforcement

● Inner center pillar

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



① Urethane foam

② Outer sill reinforcement (reusable)

Unit: mm (in)

↔: Vehicle front

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

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

View C and F: Before installing outer front side body

View D and G: Before installing outer front side body and center pillar reinforcement

JSKIA3326GB

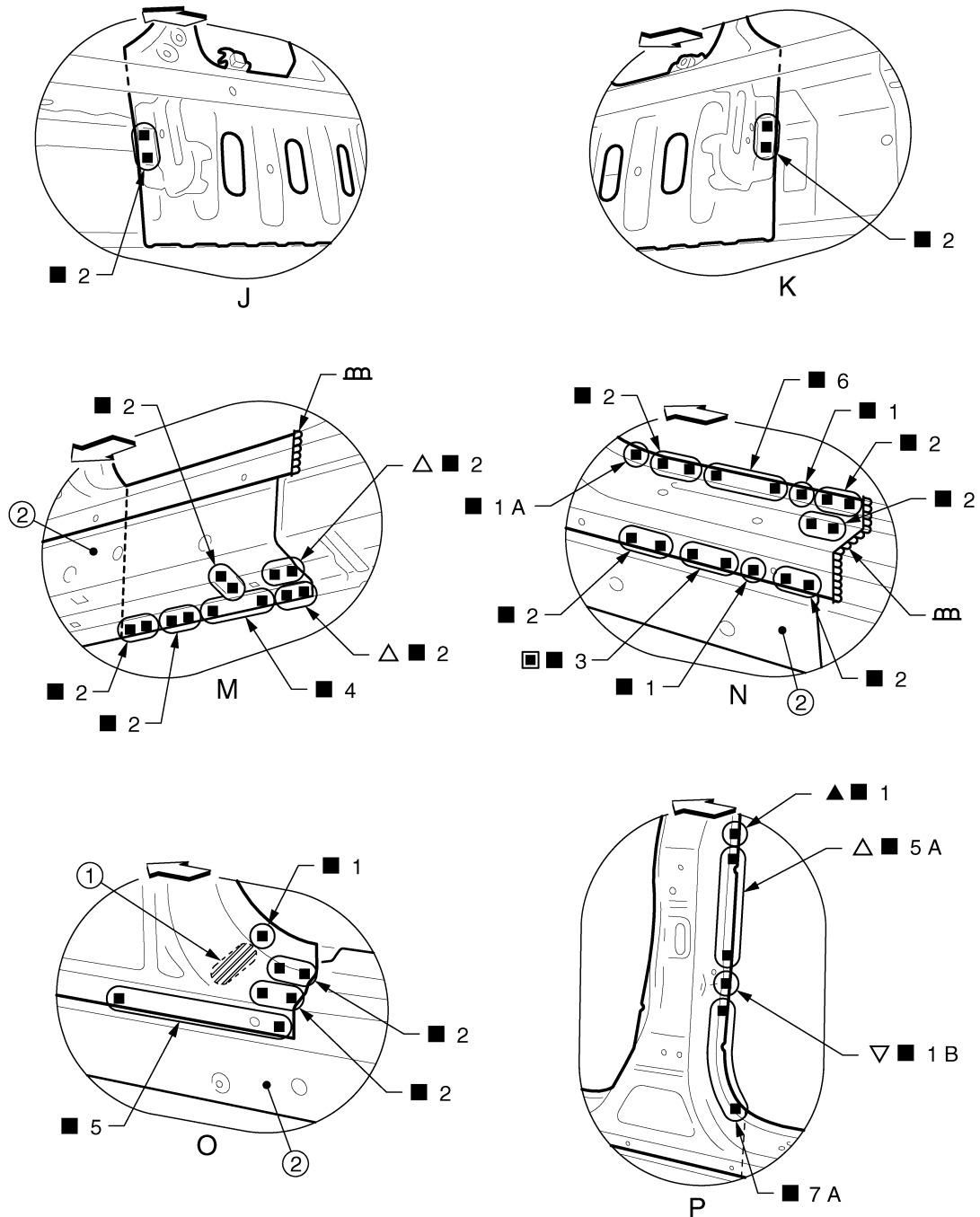
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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3327ZZ

① Urethane foam

② Outer sill reinforcement (reusable)

⇐ Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

View J and K: Before installing outer front side body, center pillar reinforcement, and outer sill reinforcement (reusable)

View O: Before installing outer front side body

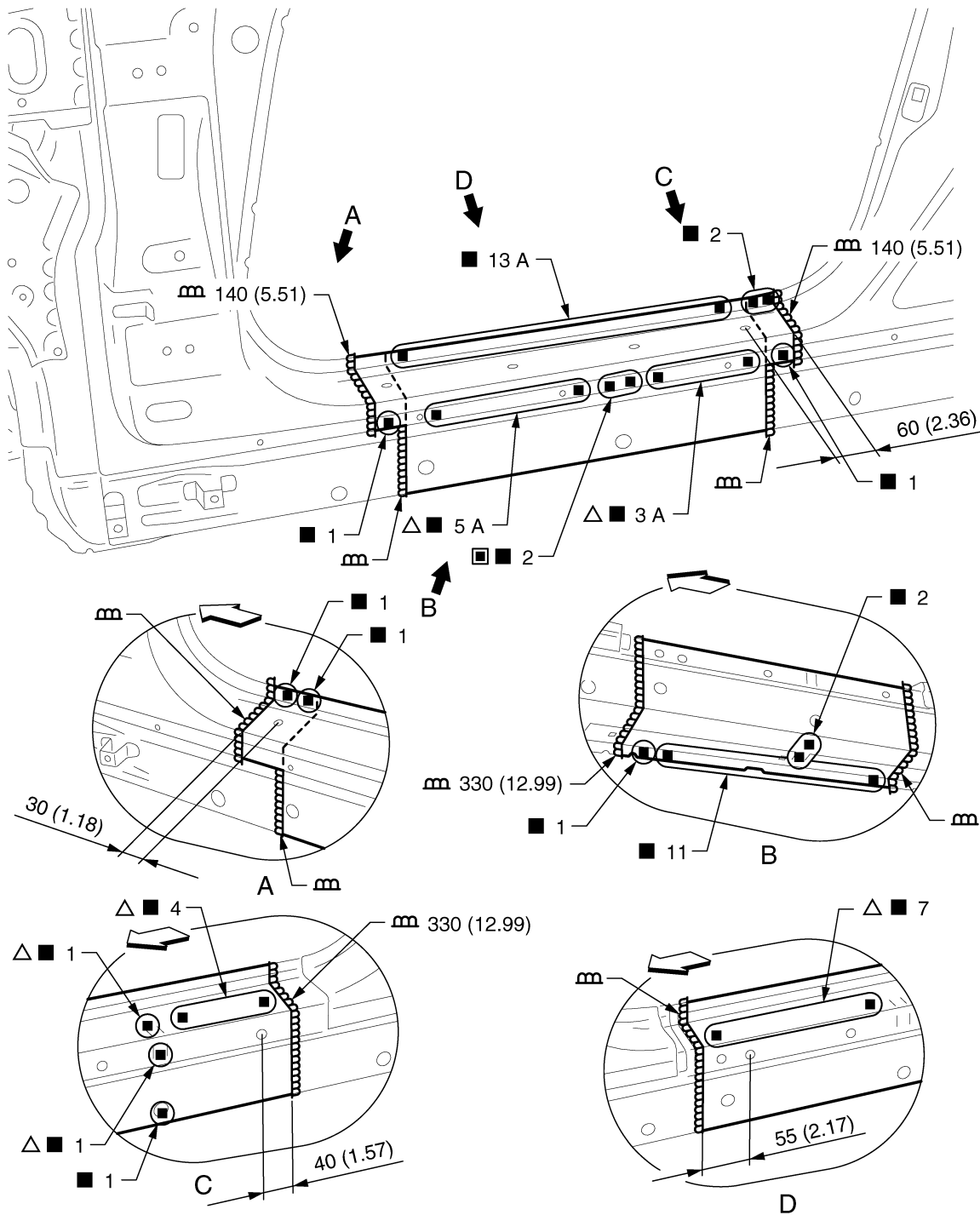
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

2WD : Outer Sill (Partial Replacement)

INFOID:000000009238624



Unit: mm (in)

◀: Vehicle front

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

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

Replacement parts

- Outer sill
- Outer sill reinforcement

View B, C, and D: Before installing outer sill

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

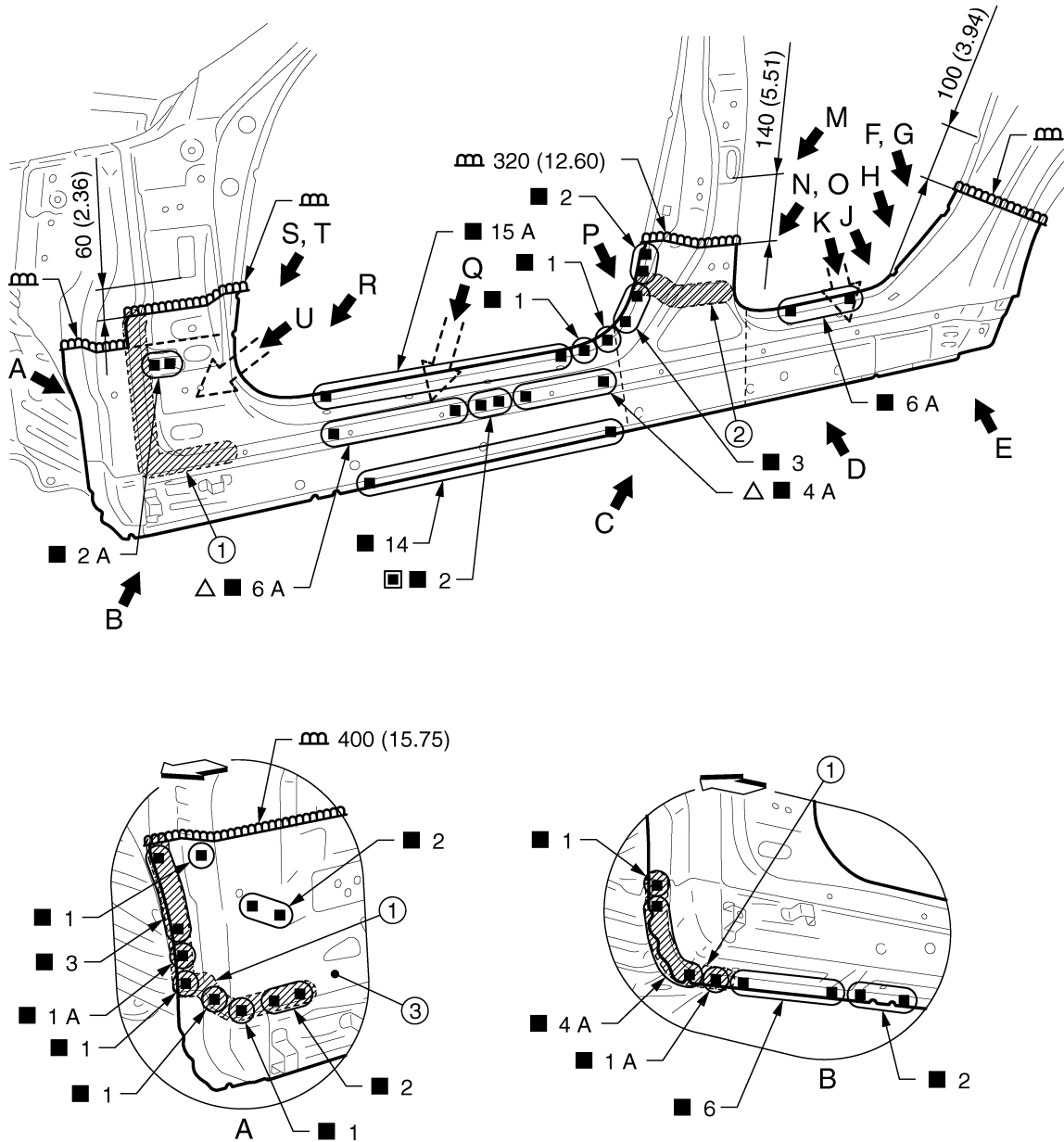
[FOR USA AND CANADA]

INFOID:0000000009238625

2WD : Outer Sill

Work after hoodledge reinforcement is removed.

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



JSKIA3329GB

- ① Body sealing ② Urethane foam ③ Front pillar brace (reusable)

Unit: mm (in)

←: Vehicle front

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

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

Replacement parts

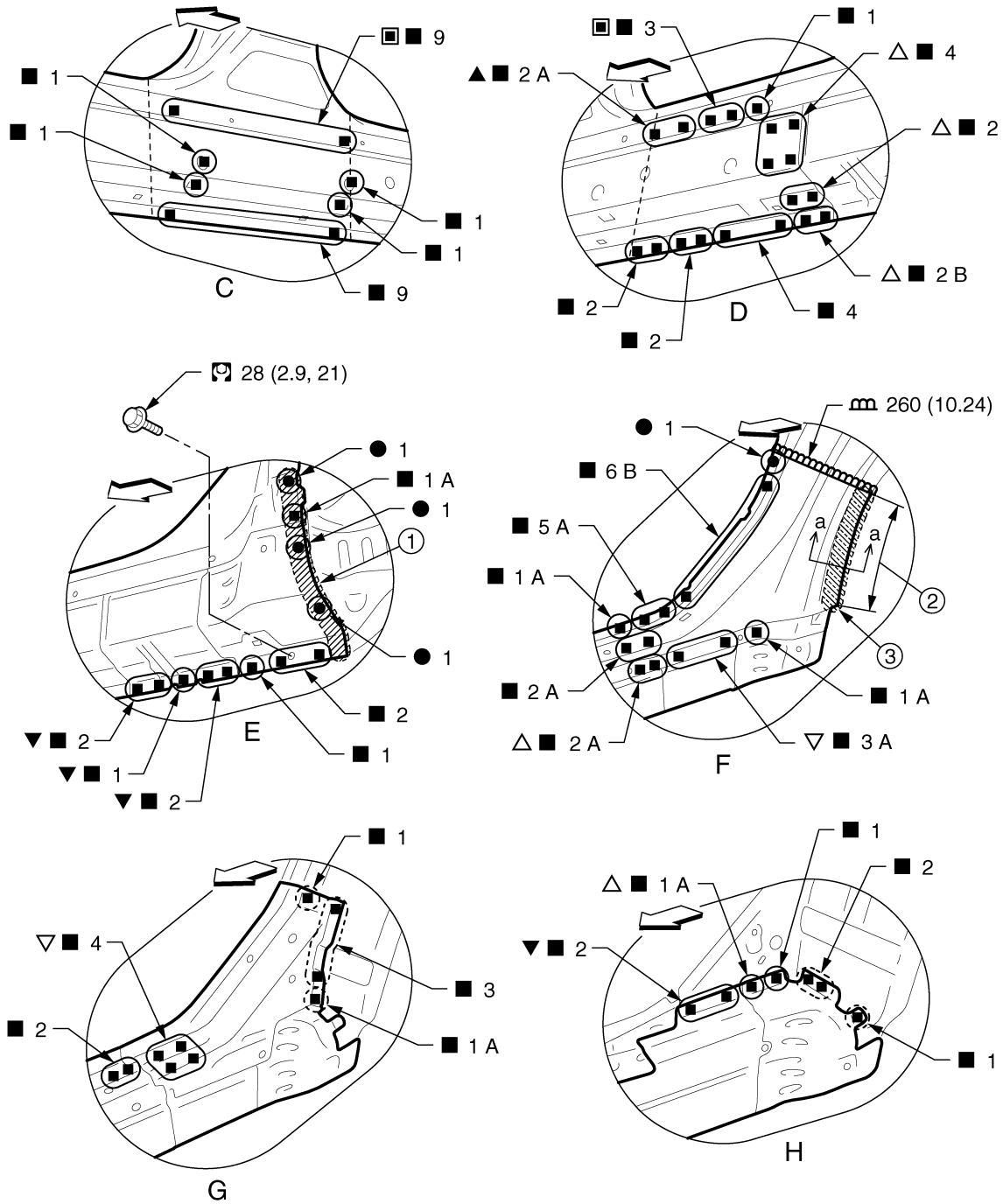
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Outer sill
- Outer sill reinforcement
- Outer rear wheelhouse extension (Upper)
- Outer rear wheelhouse extension (Lower)
- Cowl top bracket extension

View A: Before installing outer sill and cowl top bracket extension



① Body sealing

② Hemming portion

③ Adhesive

JSKIA3330GB

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Unit: mm (in)

↩: Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

▼: Drill $\phi 7$ mm (0.28 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

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

⌚: N·m (kg-m, ft-lb)

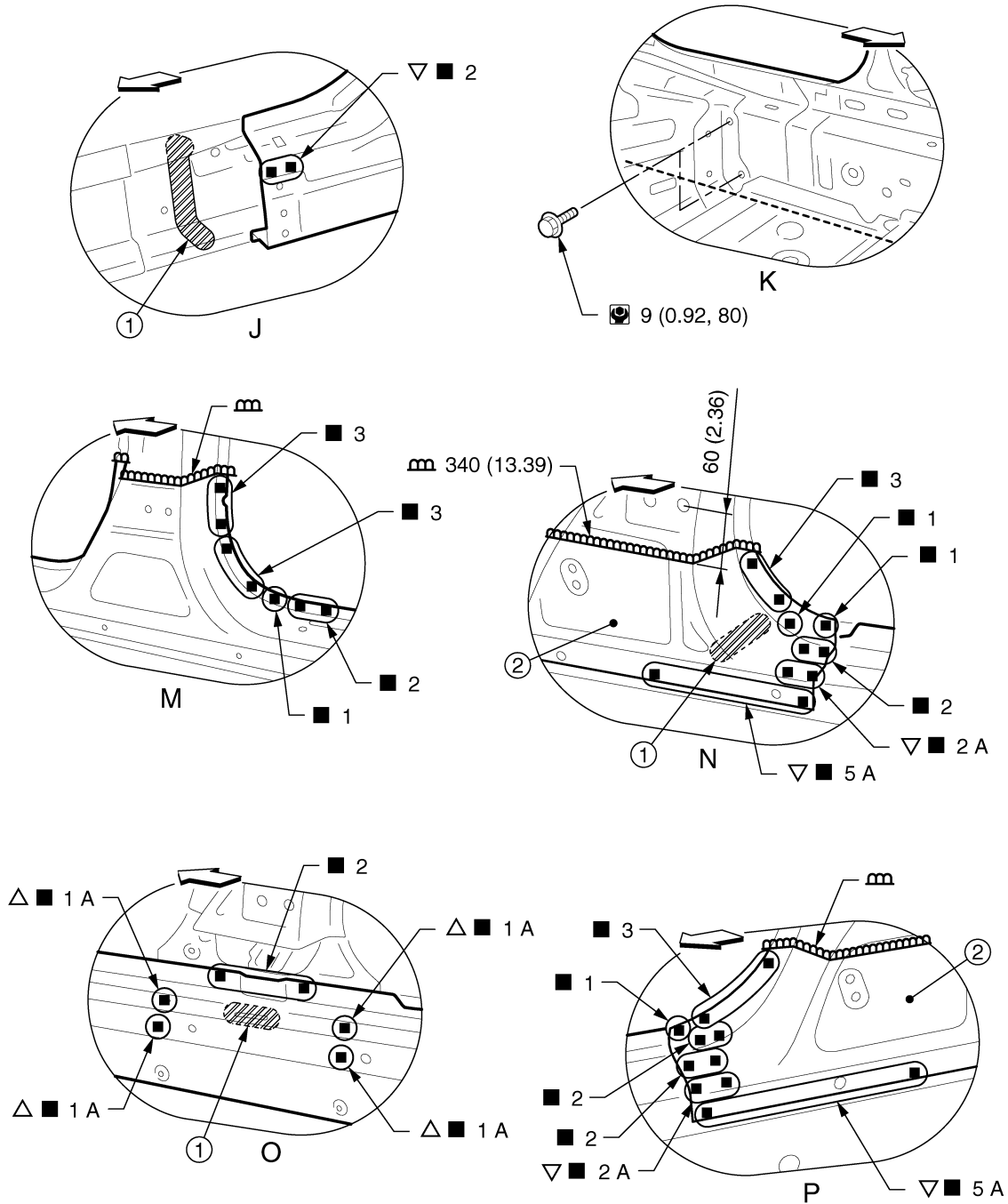
View G: Before installing outer sill

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

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



① Urethane foam

② Center pillar reinforcement (reusable)

Unit: mm (in)

↔: Vehicle front

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

Ⓜ: N·m (kg-m, in-lb)

View J: Before installing outer sill and outer sill reinforcement

View N and P: Before installing outer sill

View O: Before installing outer sill and center pillar reinforcement (reusable)

JSKIA3331GB

REPLACEMENT OPERATIONS

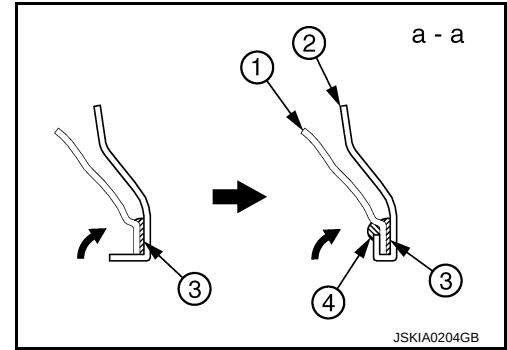
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

POINT

- Perform the hemming to the flange of wheelarch after applying the adhesive.
- Apply the sealing to the flange end.
- Refer to [BRM-35. "Rear Fender Hemming Process"](#).

- ① **Outer rear wheelhouse**
- ② **Rear fender**
- ③ **Adhesive**
- ④ **Sealant**



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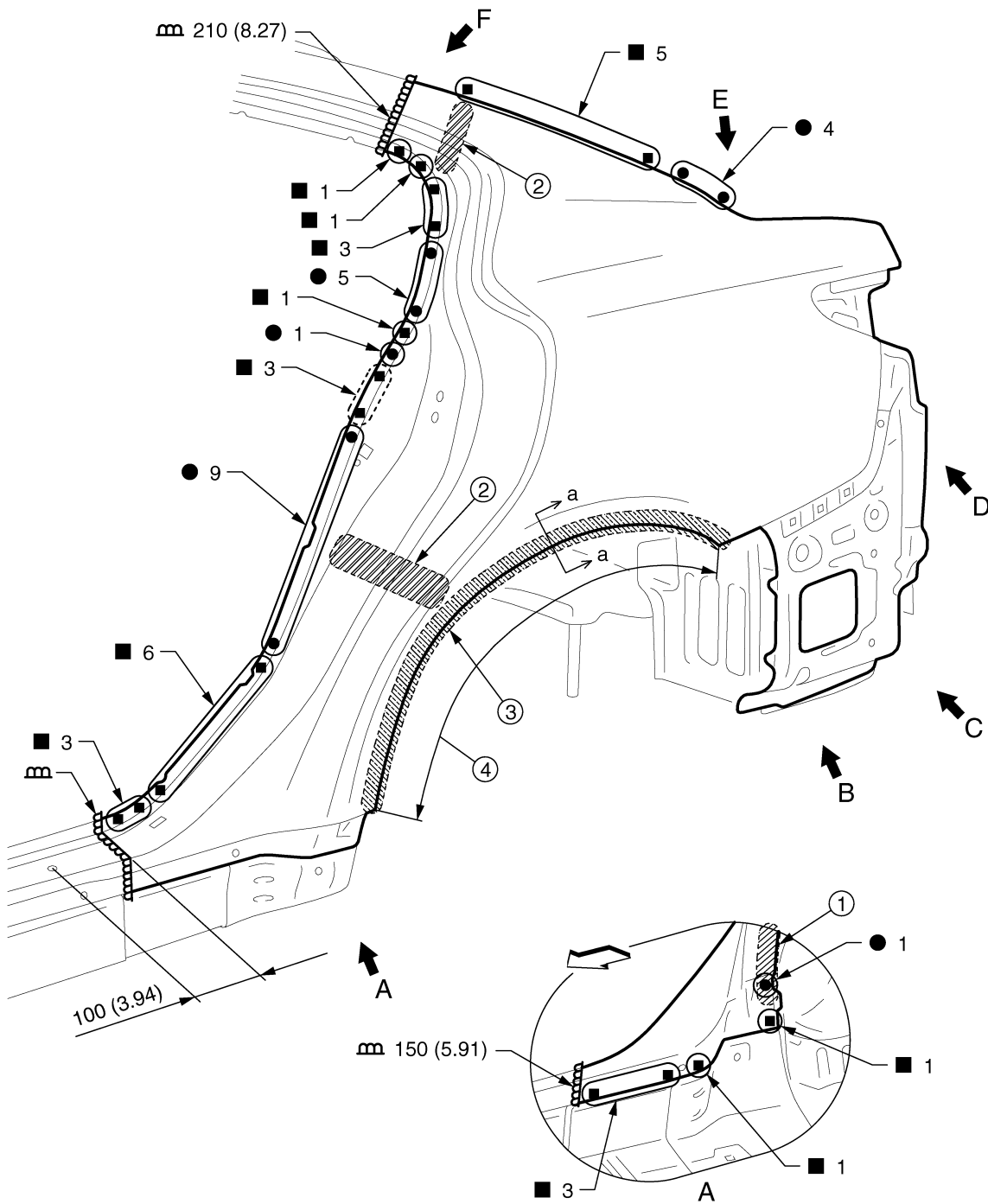
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

2WD : Rear Fender

INFOID:0000000009238626



JSKIA3335GB

- ① Body sealing ② Urethane foam ③ Adhesive

- ④ Hemming portion

Unit: mm (in)

←: Vehicle front

①: Weld the parts onto the back of the component part.

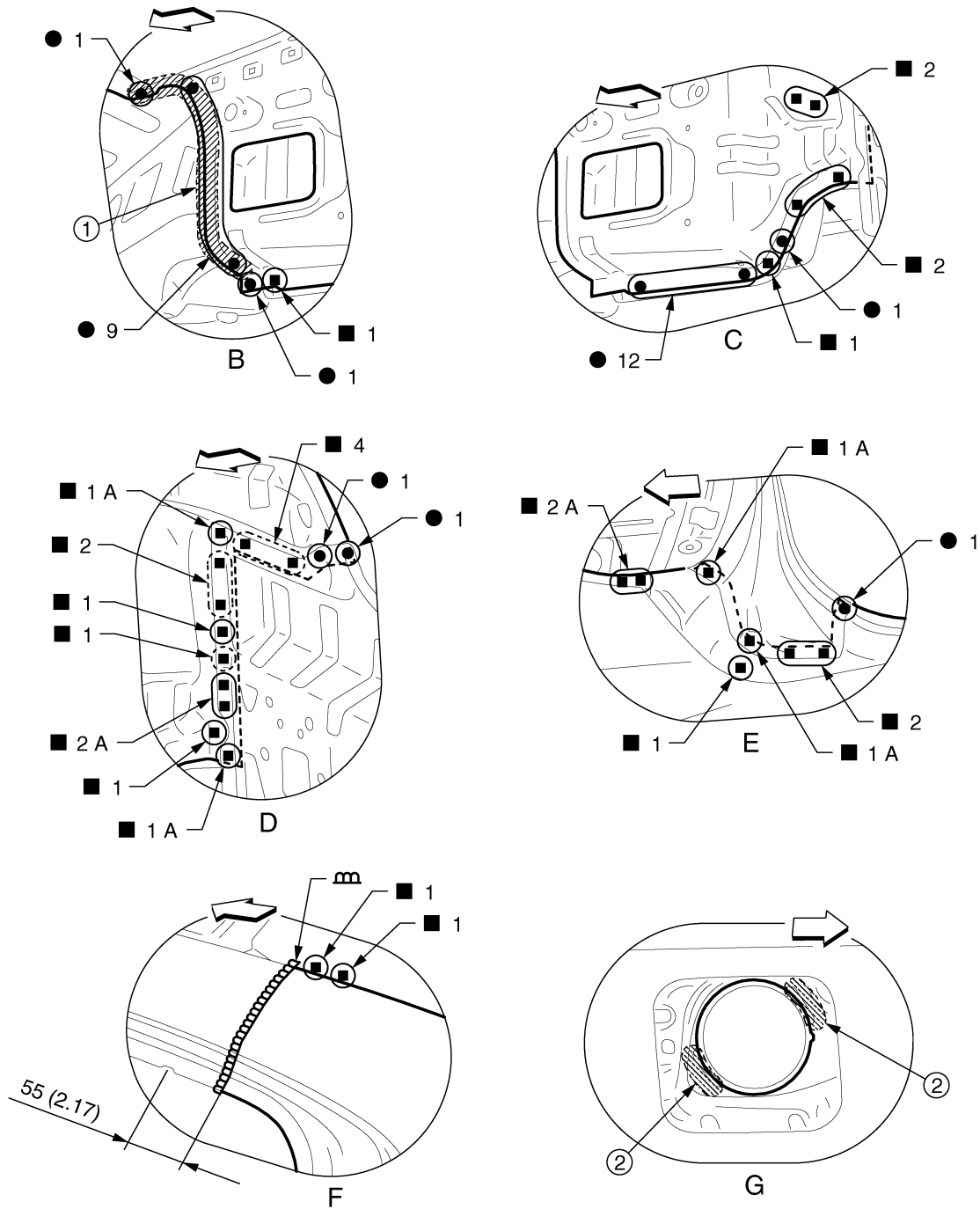
Replacement parts

- Rear fender

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



- ① Body sealing
- ② Adhesive
- Unit: mm (in)
- <- Vehicle front
- (○): Weld the parts onto the back of the component part.

View G: Right side rear fender

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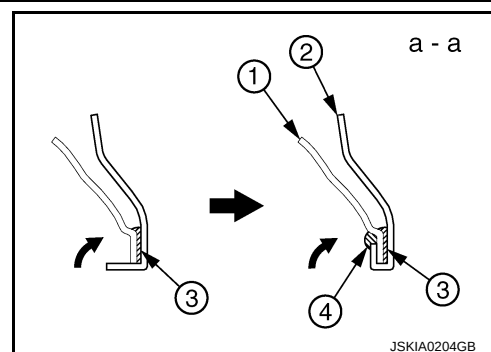
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Perform the hemming to the flange of wheelarch after applying the adhesive.
- Apply the sealing to the flange end.
- Refer to [BRM-35, "Rear Fender Hemming Process"](#).

- ① **Outer rear wheelhouse**
- ② **Rear fender**
- ③ **Adhesive**
- ④ **Sealant**



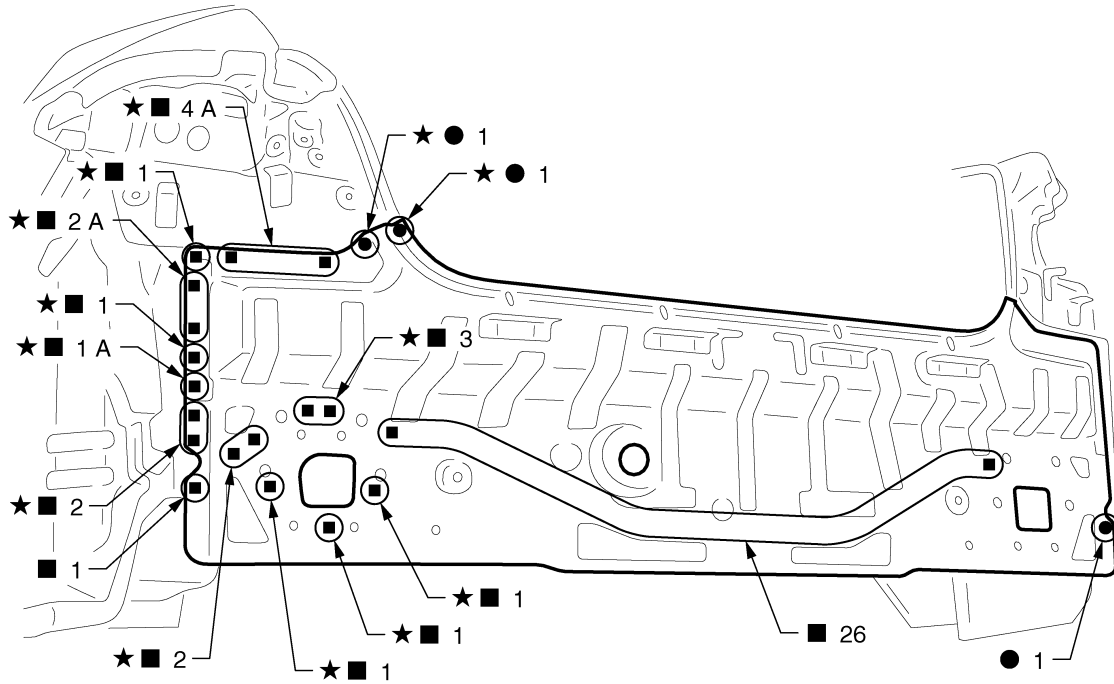
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

2WD : Rear Panel

INFOID:000000009238629



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

Replacement parts

- Upper rear panel assembly

2WD : Rear Floor Rear

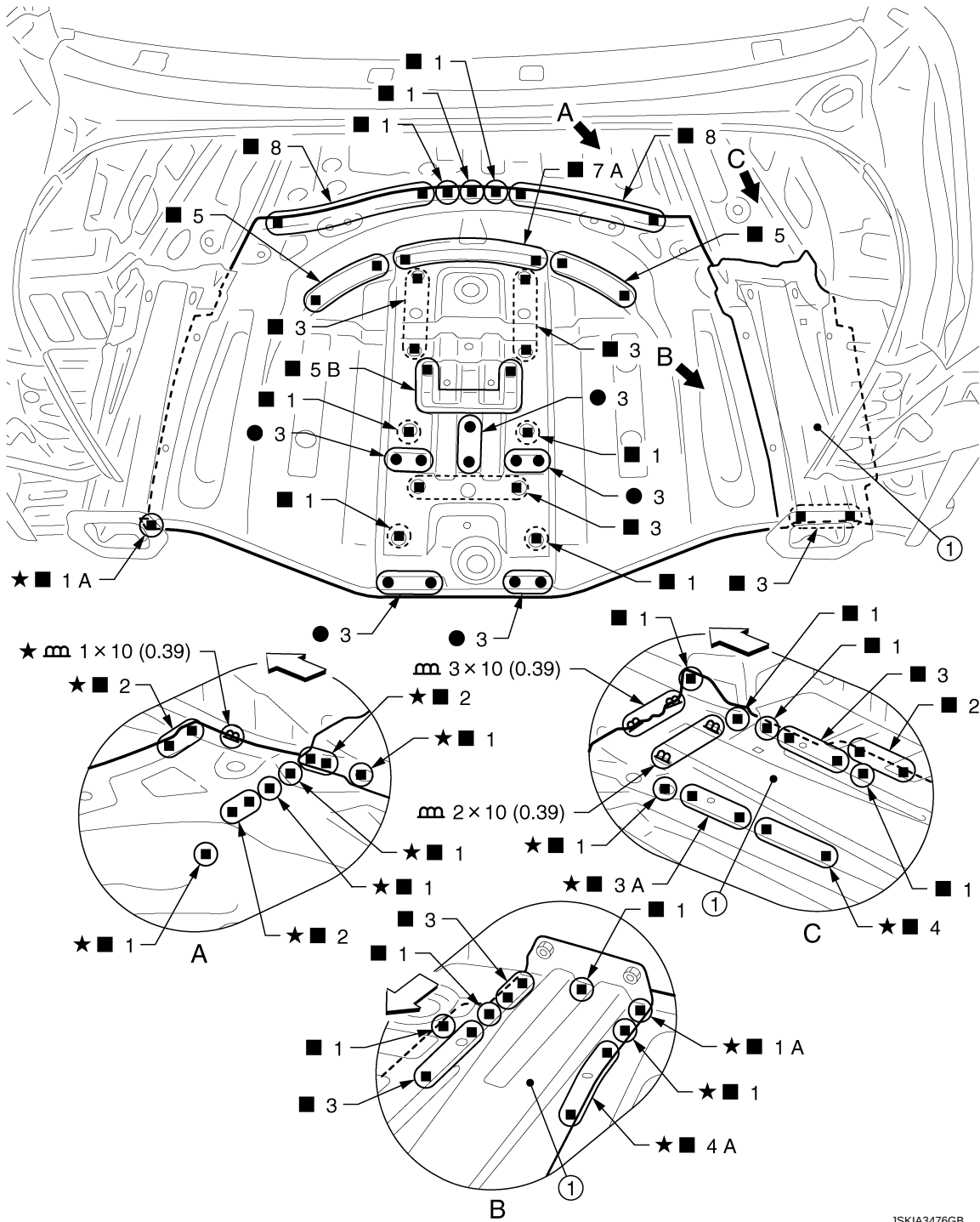
INFOID:000000009238630

Work after rear panel is removed.
Remove the rear floor rear side (reusable).

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3476GB

① Rear floor rear side (reusable)

Unit: mm (in)

↔: 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

● Rear floor rear

● Spare wheel clamp reinforcement

2WD : Rear Side Member Extension

INFOID:000000009238631

Work after rear panel is removed.

Revision: 2013 October

BRM-64

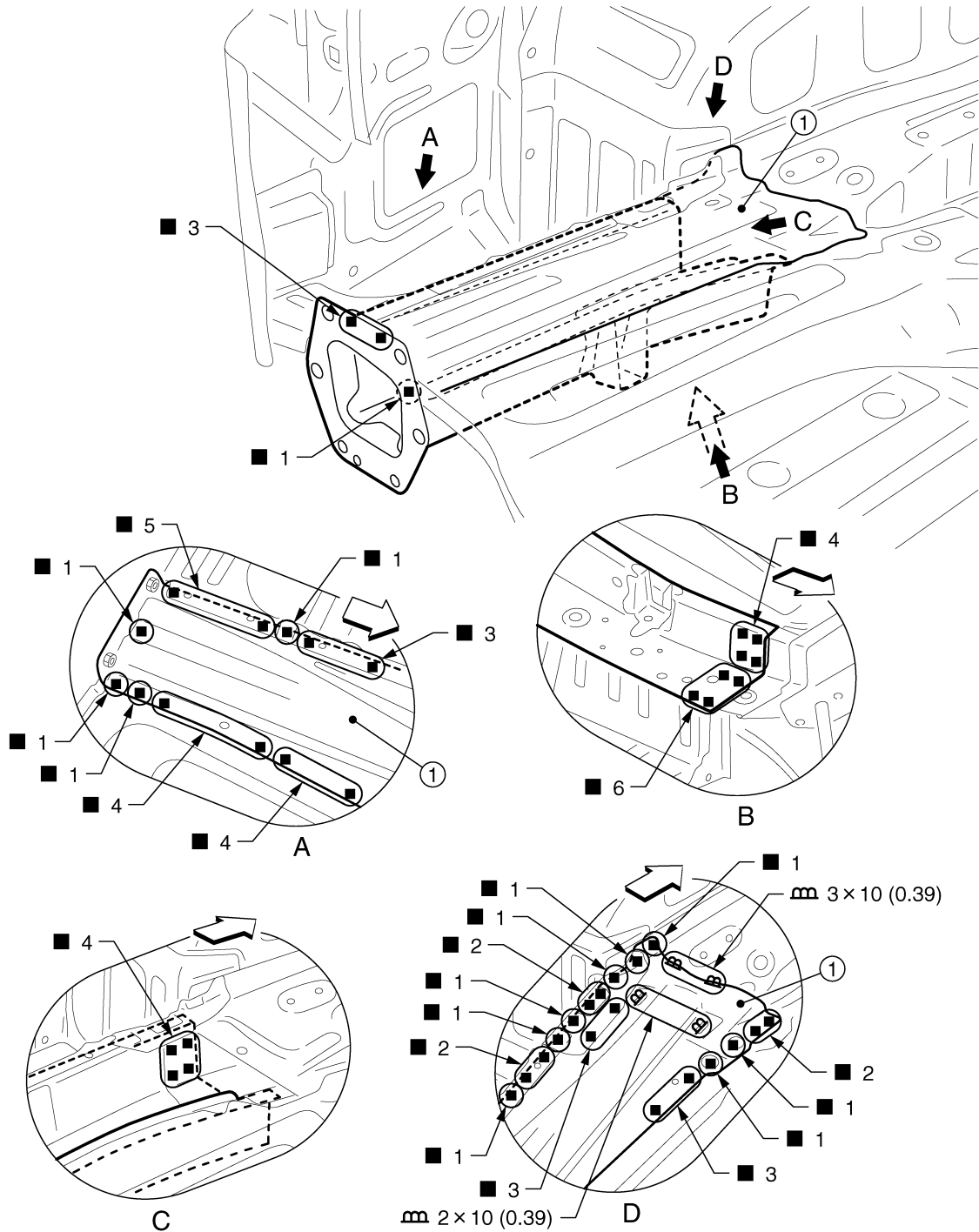
2014 Q50

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Remove the rear floor rear side (reusable).



① Rear floor rear side (reusable)

Unit: mm (in)

↔: Vehicle front

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

Replacement parts

- Rear side member extension

View C: Before installing rear floor rear side (reusable)
AWD

JSKIA3403GB

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

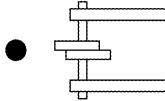
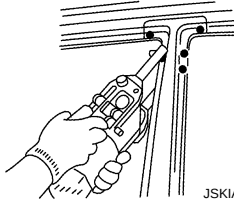
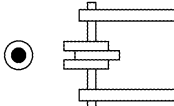
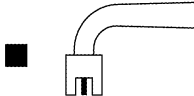
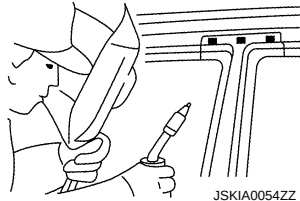
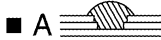
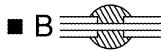
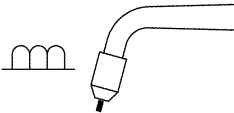
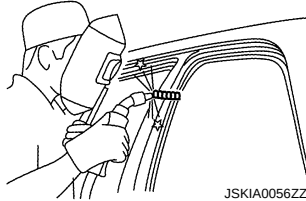
[FOR USA AND CANADA]

AWD : Description

INFOID:000000009398160

- 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.

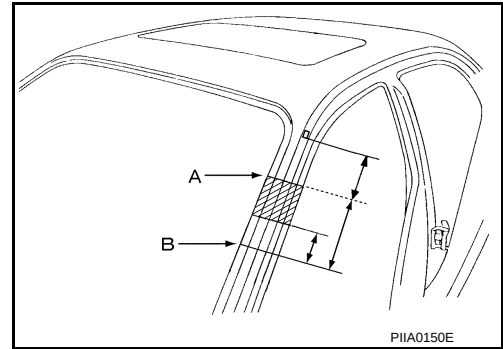
Symbol marks	Description	
 JSKIA0049ZZ	2-spot welds	 JSKIA0053ZZ
 JSKIA0050ZZ	3-spot welds	
 JSKIA0051ZZ	MIG plug weld	 JSKIA0054ZZ For 3 panels plug weld method  ■ A  ■ B JSKIA0055ZZ
 JSKIA0052ZZ	MIG seam weld / Point weld	 JSKIA0056ZZ

REPLACEMENT OPERATIONS

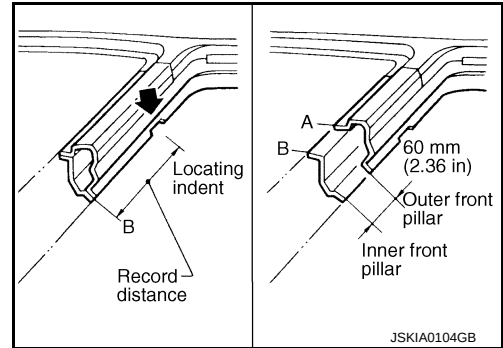
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

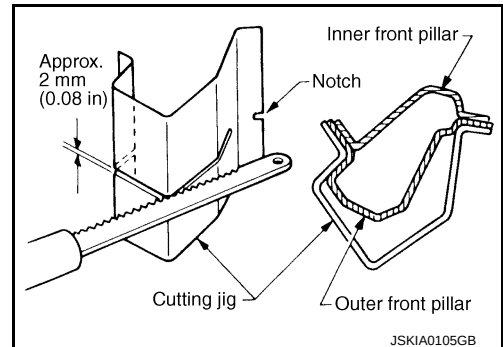
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle.



- 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.

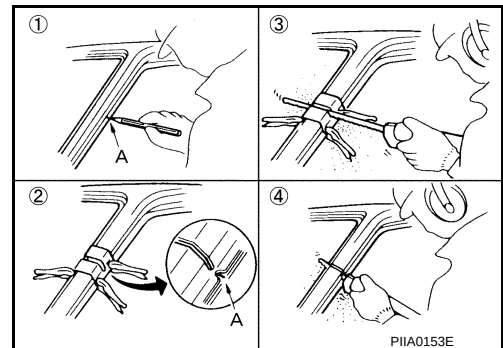


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit the service part to be accurately cut at the joint position.



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

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



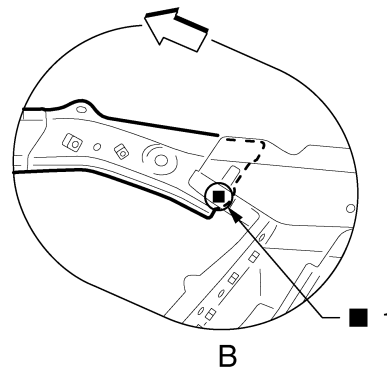
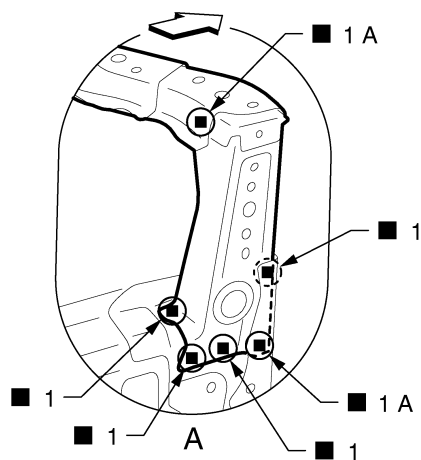
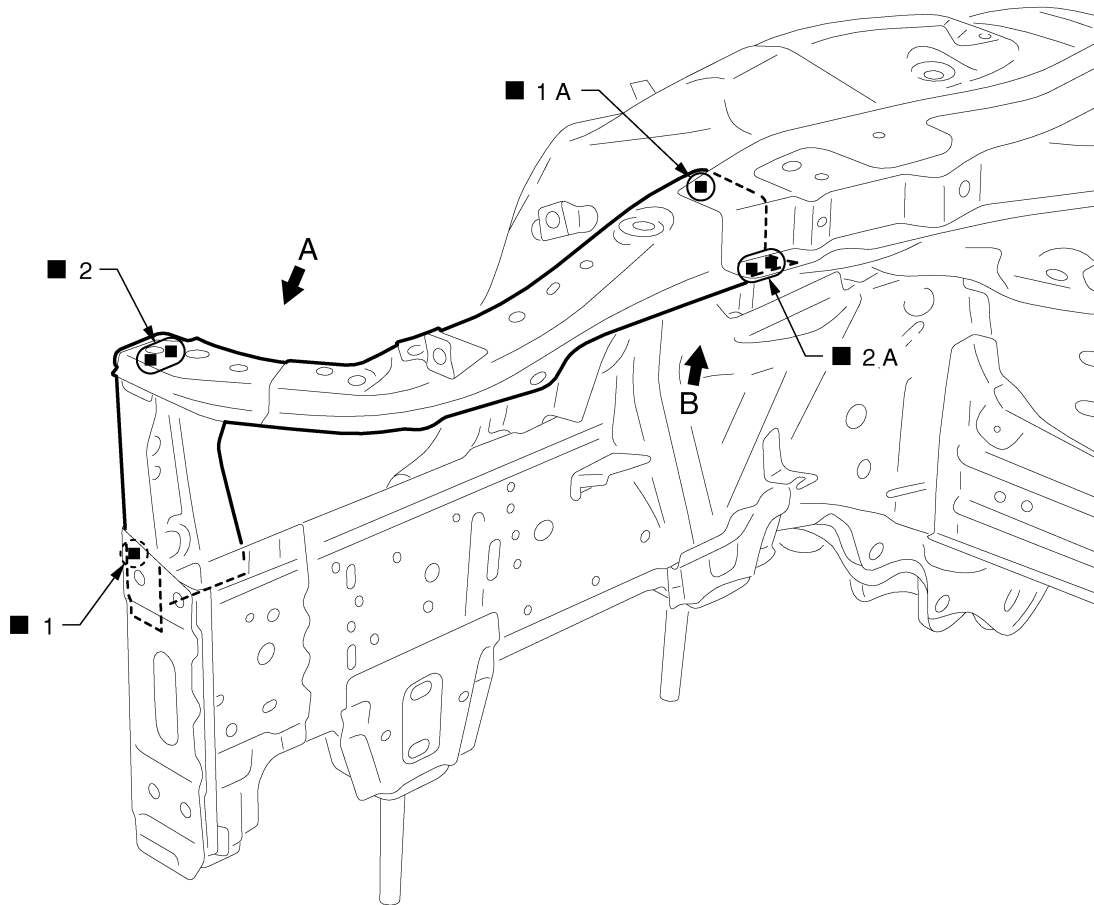
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

AWD : Radiator Core Support

INFOID:000000009398161



JSKIA3314ZZ

←: Vehicle front

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

Replacement parts

- Side radiator core support
- Front side member connector assembly

AWD : Hoodledge

INFOID:000000009398162

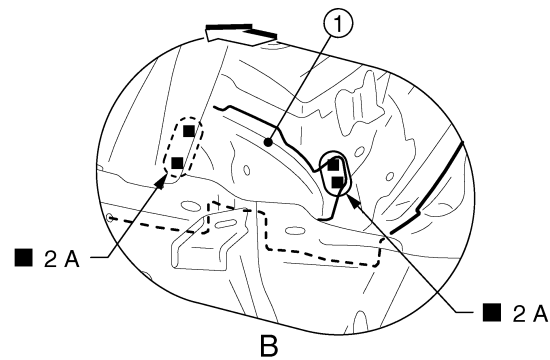
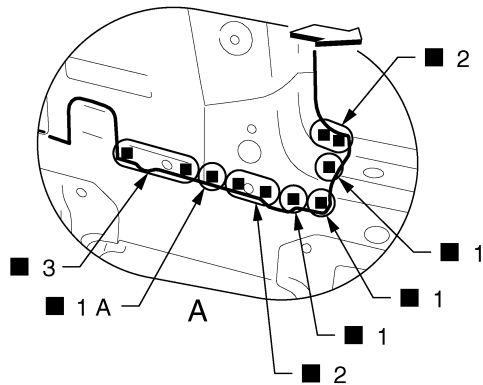
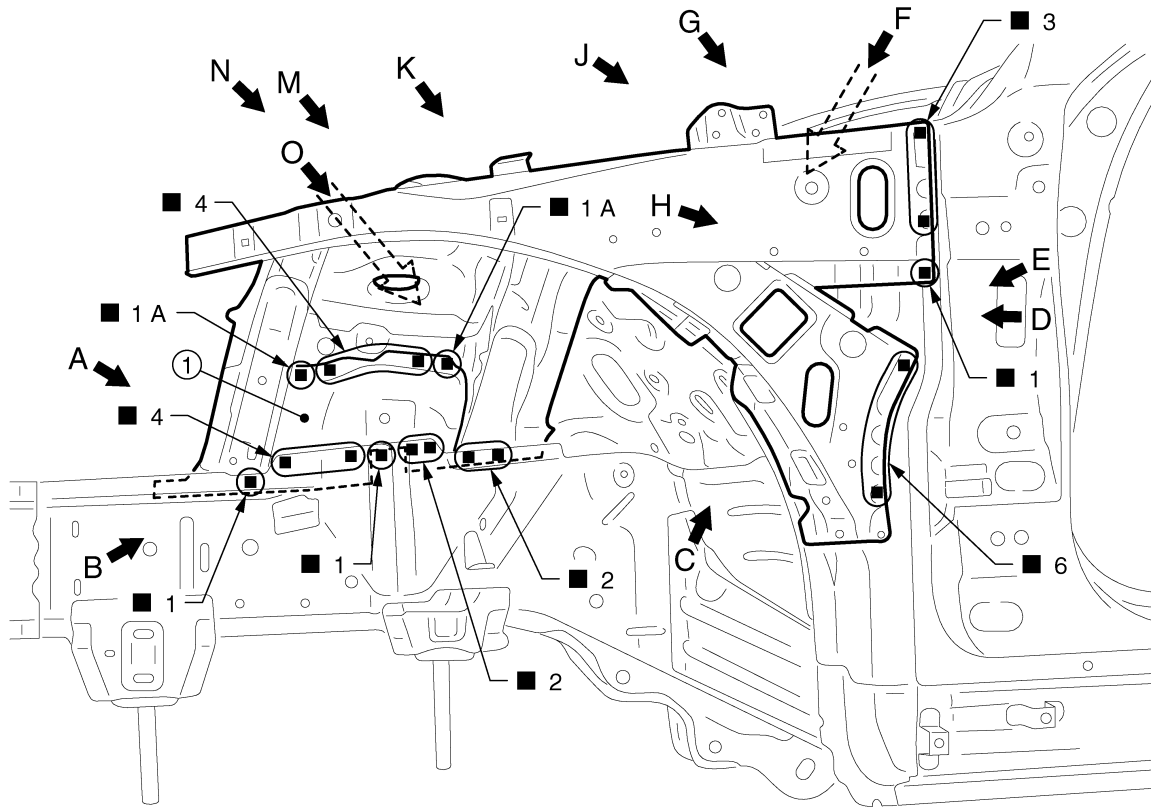
Work after radiator core support is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

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



JSKIA3315ZZ

⑩ Front side member center closing plate (reusable)

⇐: Vehicle front

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

Replacement parts

● Upper front hoodledge

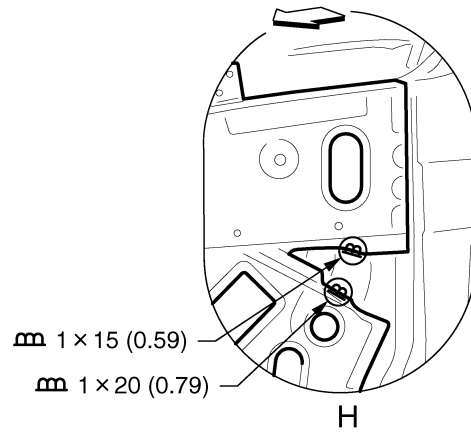
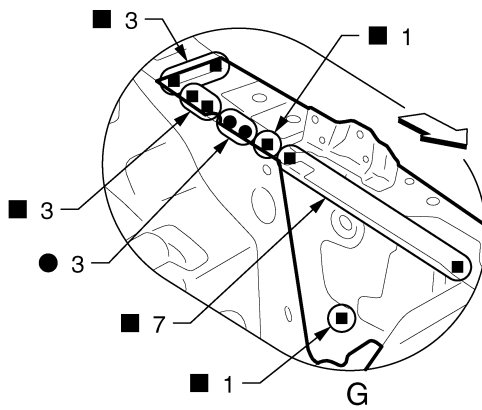
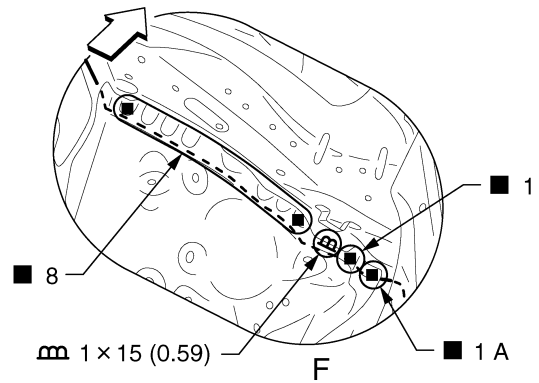
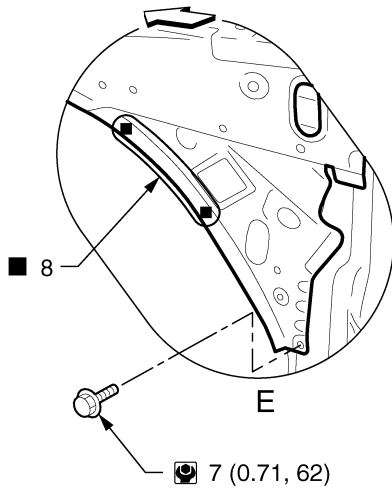
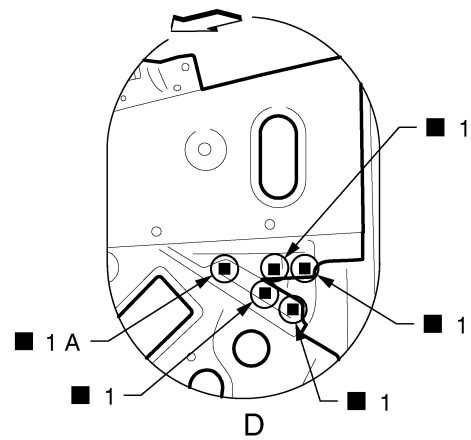
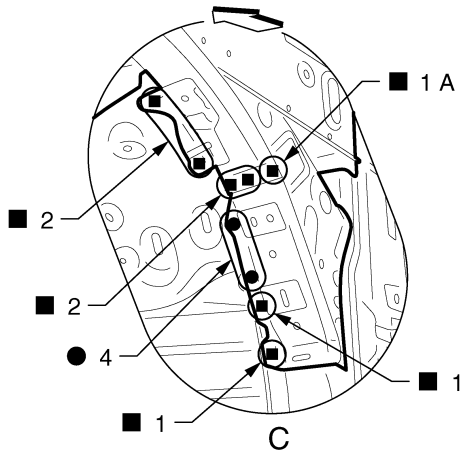
● Hoodledge reinforcement

● Front strut housing

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3316GB

Unit: mm (in)

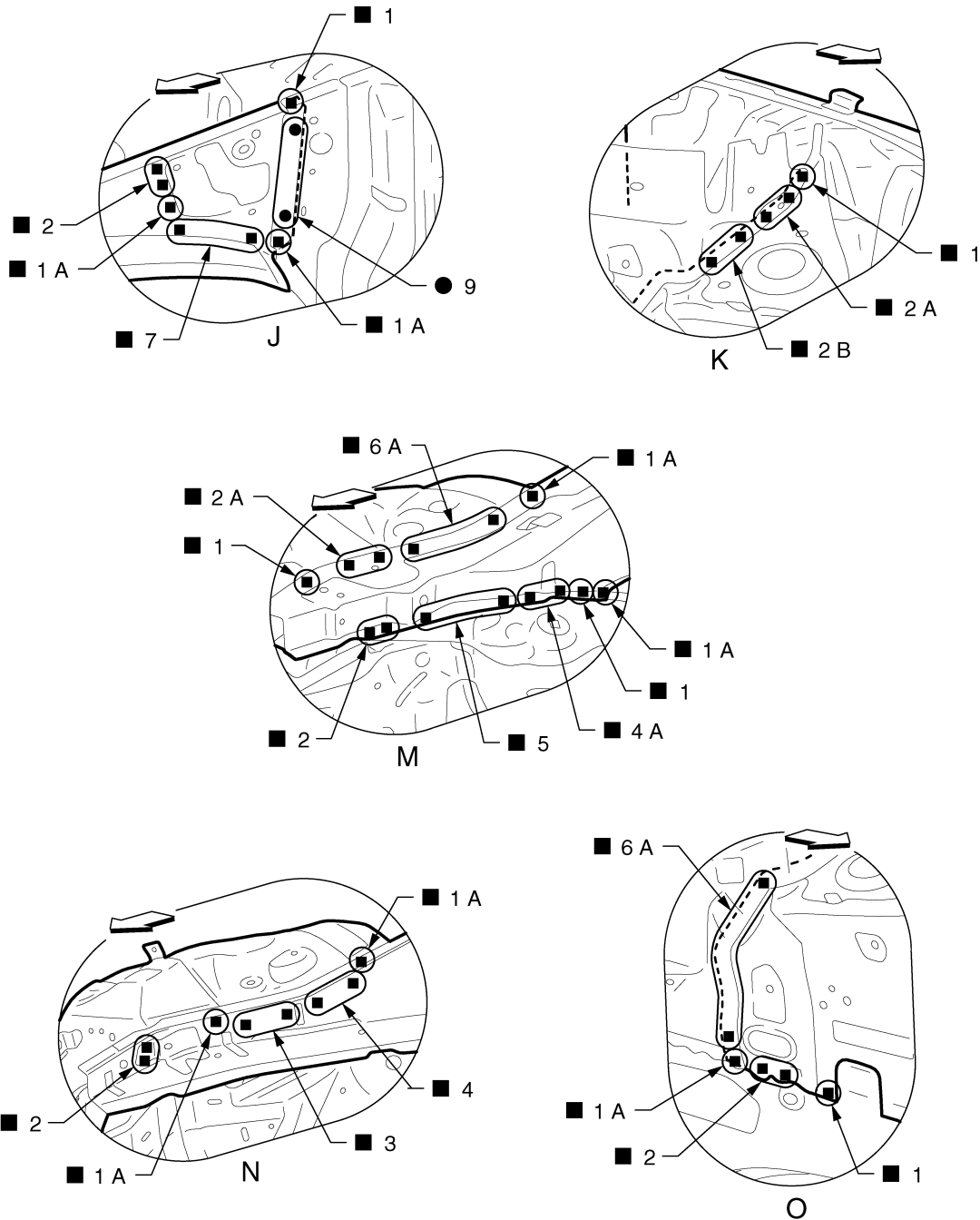
↔: Vehicle front

⊙: N·m (kg·m, in·lb)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3354ZZ

←: Vehicle front

View J and N: Before installing hoodledge reinforcement

AWD : Front Side Member

INFOID:000000009238619

Work after radiator core support and hoodledge are removed.

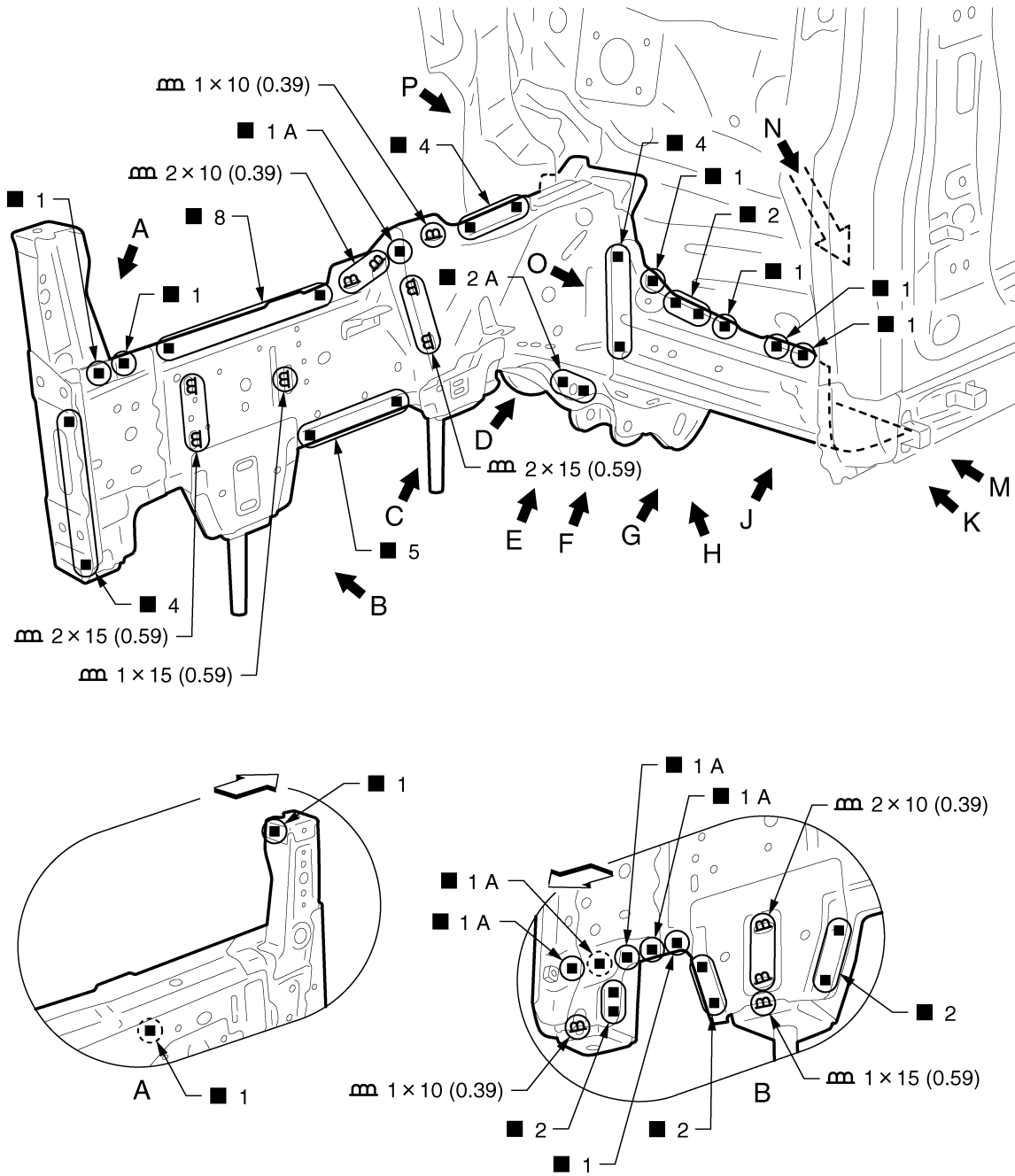
Remove the front side member outrigger (reusable).

Remove the front side member center closing plate (reusable) from the service part "front side member closing plate assembly" for easier installation of hoodledge.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3318GB

Unit: mm (in)

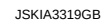
↔: Vehicle front

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

Replacement parts

- Front side member assembly
- Front side member closing plate assembly
- Front side member outrigger assembly

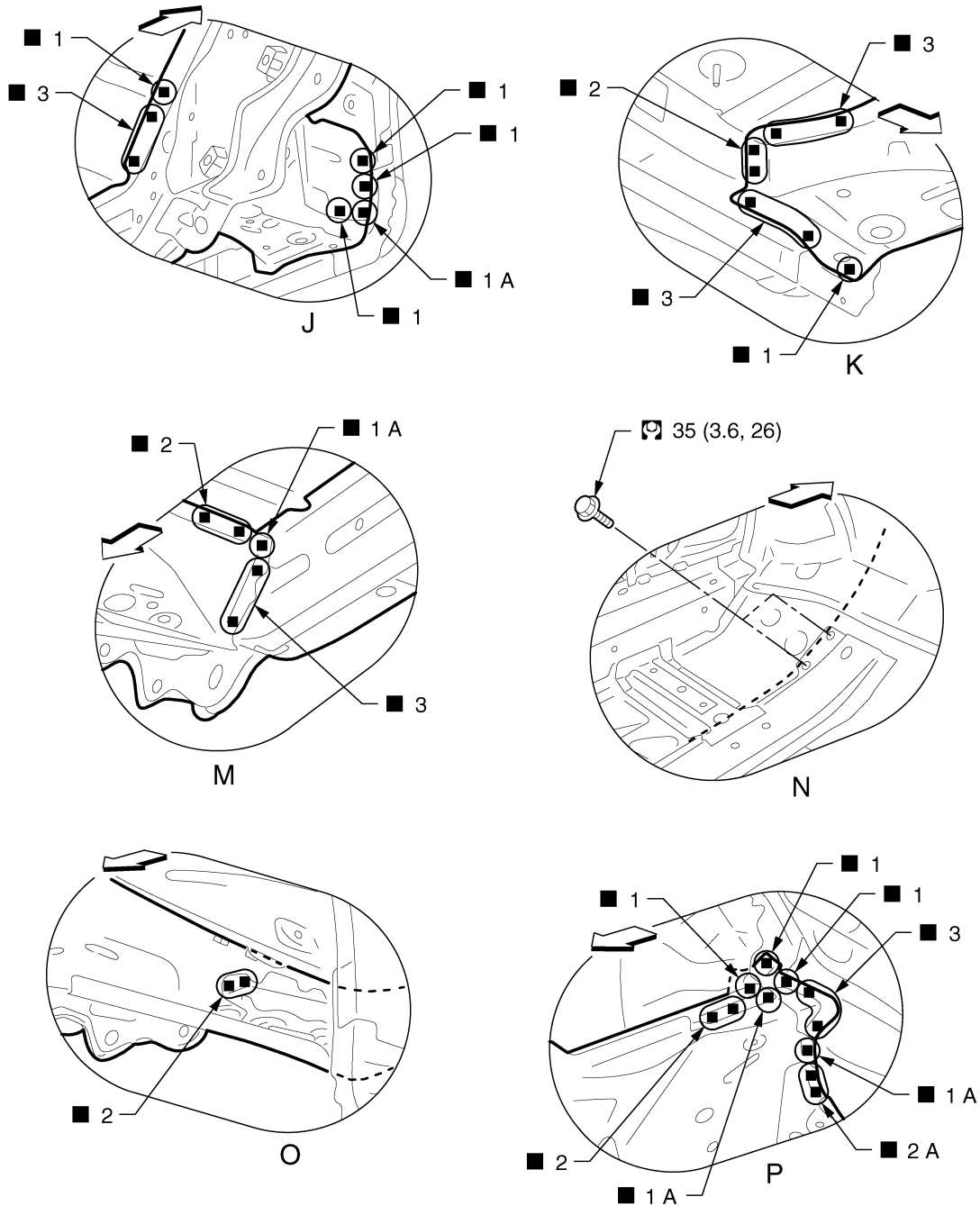
[FOR USA AND CANADA]



REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3320GB

←: Vehicle front

⌘: N·m (kg-m, ft-lb)

View O: Before installing front side member outrigger (reusable)

AWD : Front Side Member (Partial Replacement)

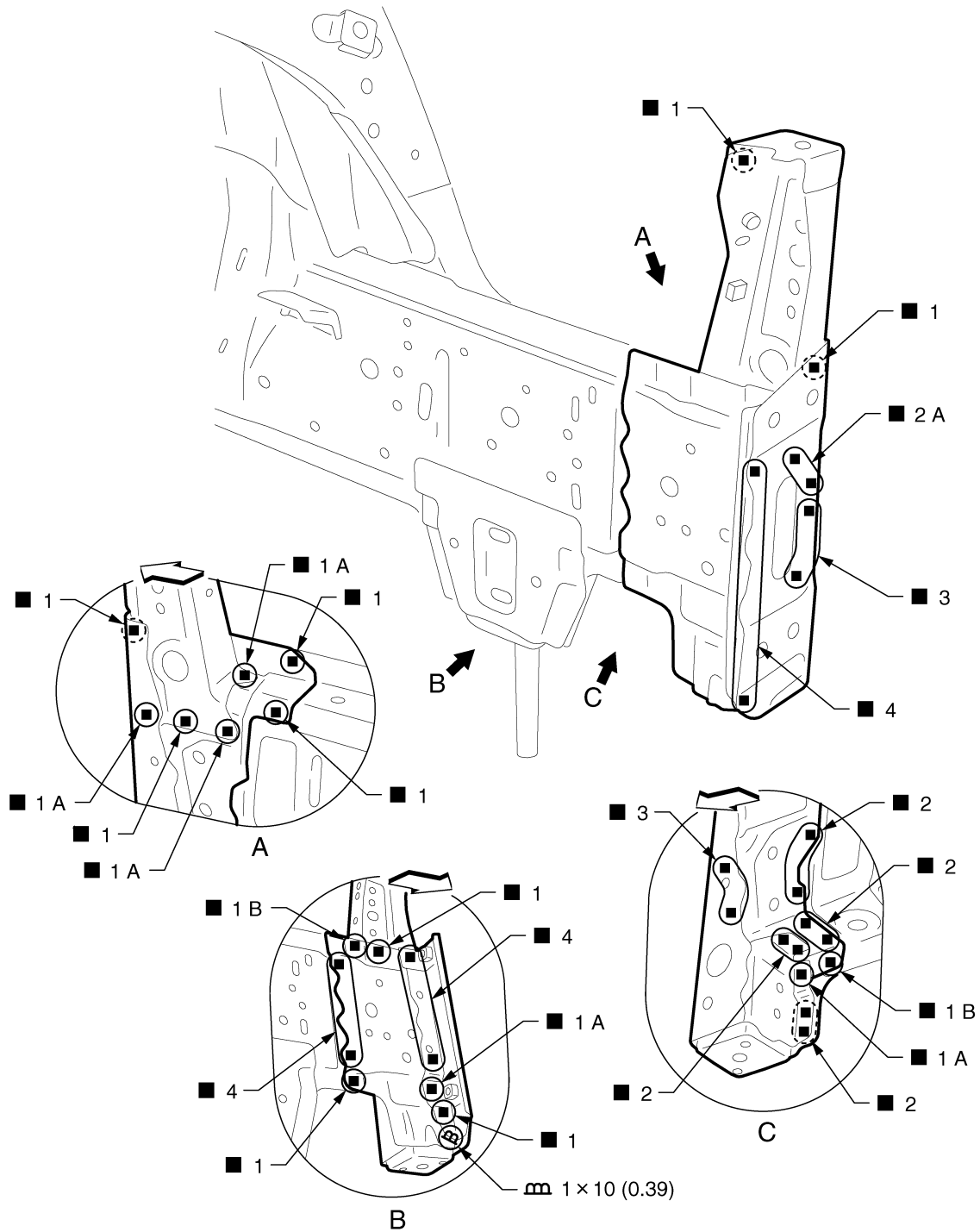
INFOID:000000009398159

Work after side radiator core support is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3321GB

Unit: mm (in)

⇐: Vehicle front

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

Replacement parts

- Front side member front extension
- Front side member front closing plate
- Add on frame bracket plate
- Front side member connector assembly
- Bumper reinforcement bracket

REPLACEMENT OPERATIONS

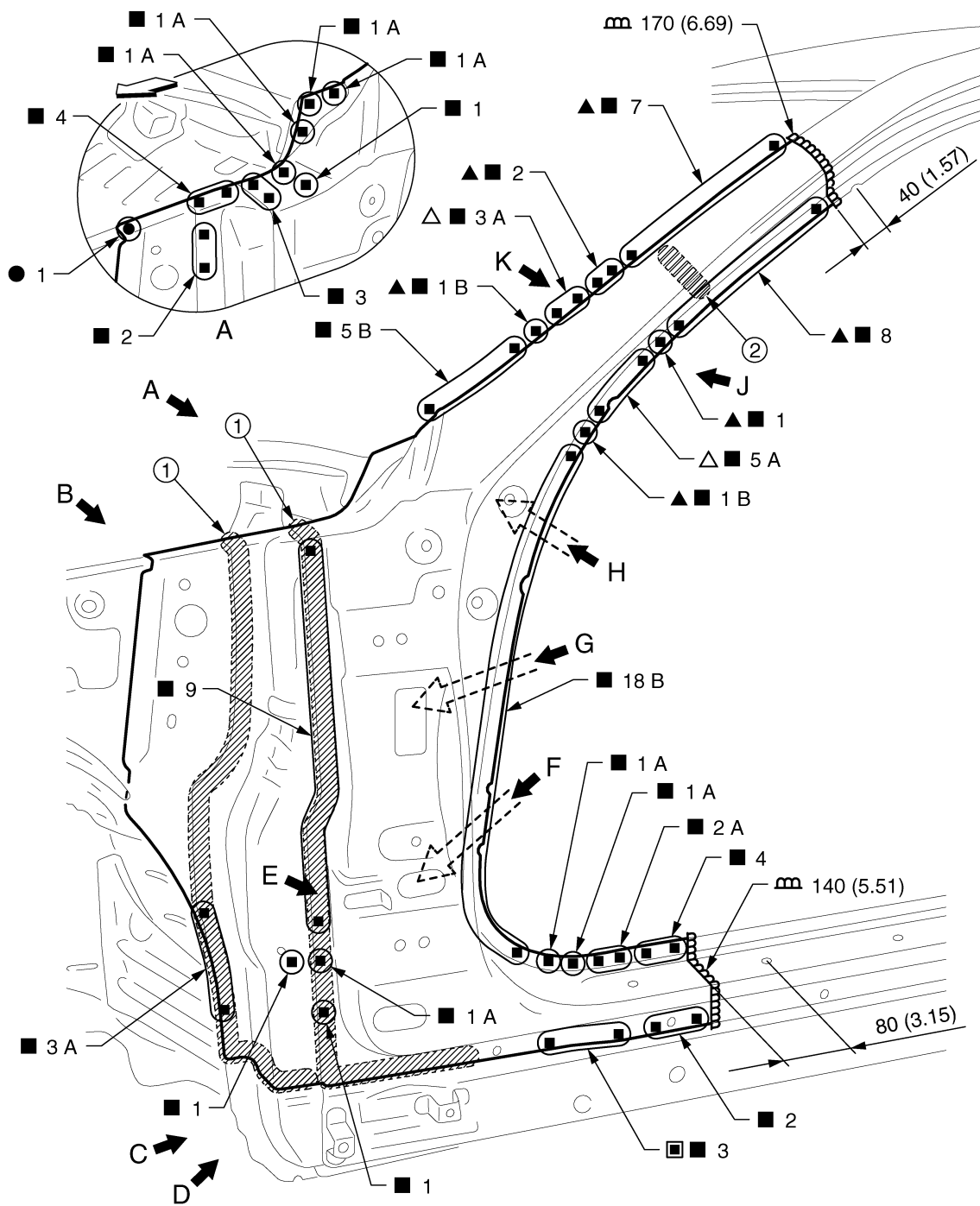
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

INFOID:0000000009728580

AWD : Front Pillar

Work after hoodledge reinforcement is removed.
Remove the upper front pillar reinforcement (reusable).



JSKIA3404GB

- ① Body sealing ② Urethane foam

Unit: mm (in)

←: Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

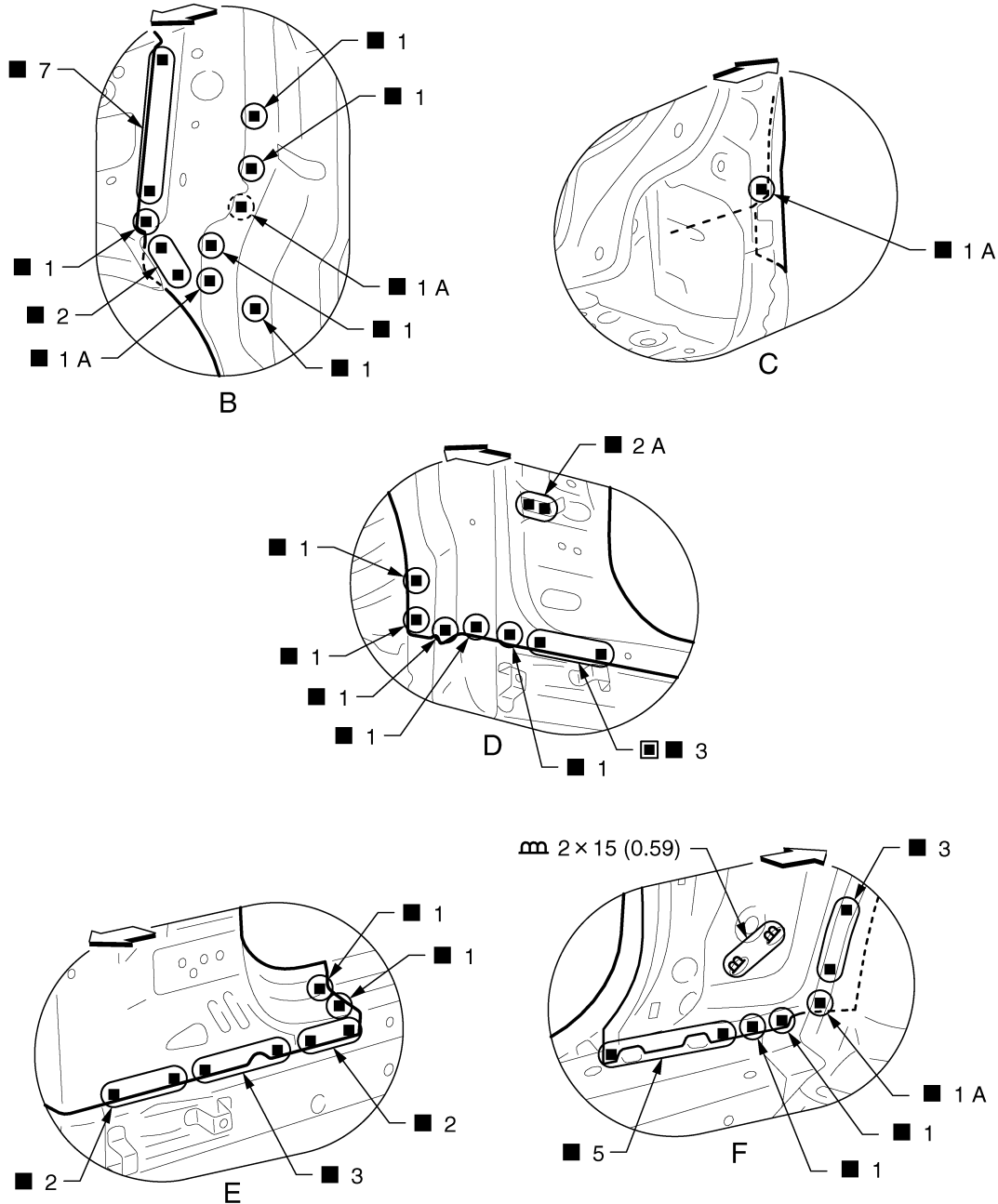
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Replacement parts

- Outer front side body
- Front pillar brace
- Side dash
- Cowl top bracket extension



Unit: mm (in)

⇐: Vehicle front

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

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

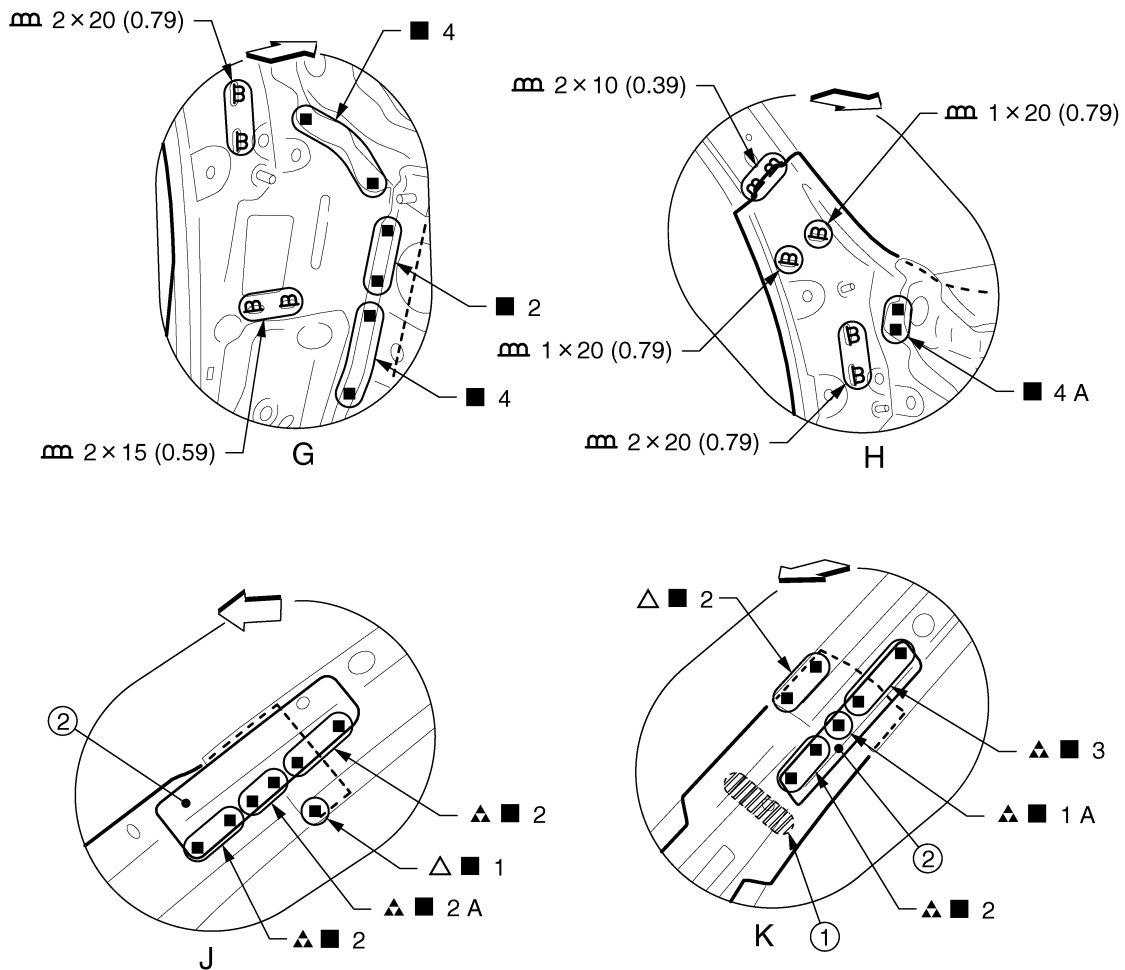
View E: Before installing outer front side body

JSKIA3405GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3324GB

① Urethane foam

② Upper front pillar reinforcement (re-usable)

Unit: mm (in)

↔ Vehicle front

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

▲: Drill $\phi 10$ mm (0.39 in) hole for the plug welding hole (ultra high strength steel plate).

View J and K: Before installing outer front side body

AWD : Center Pillar

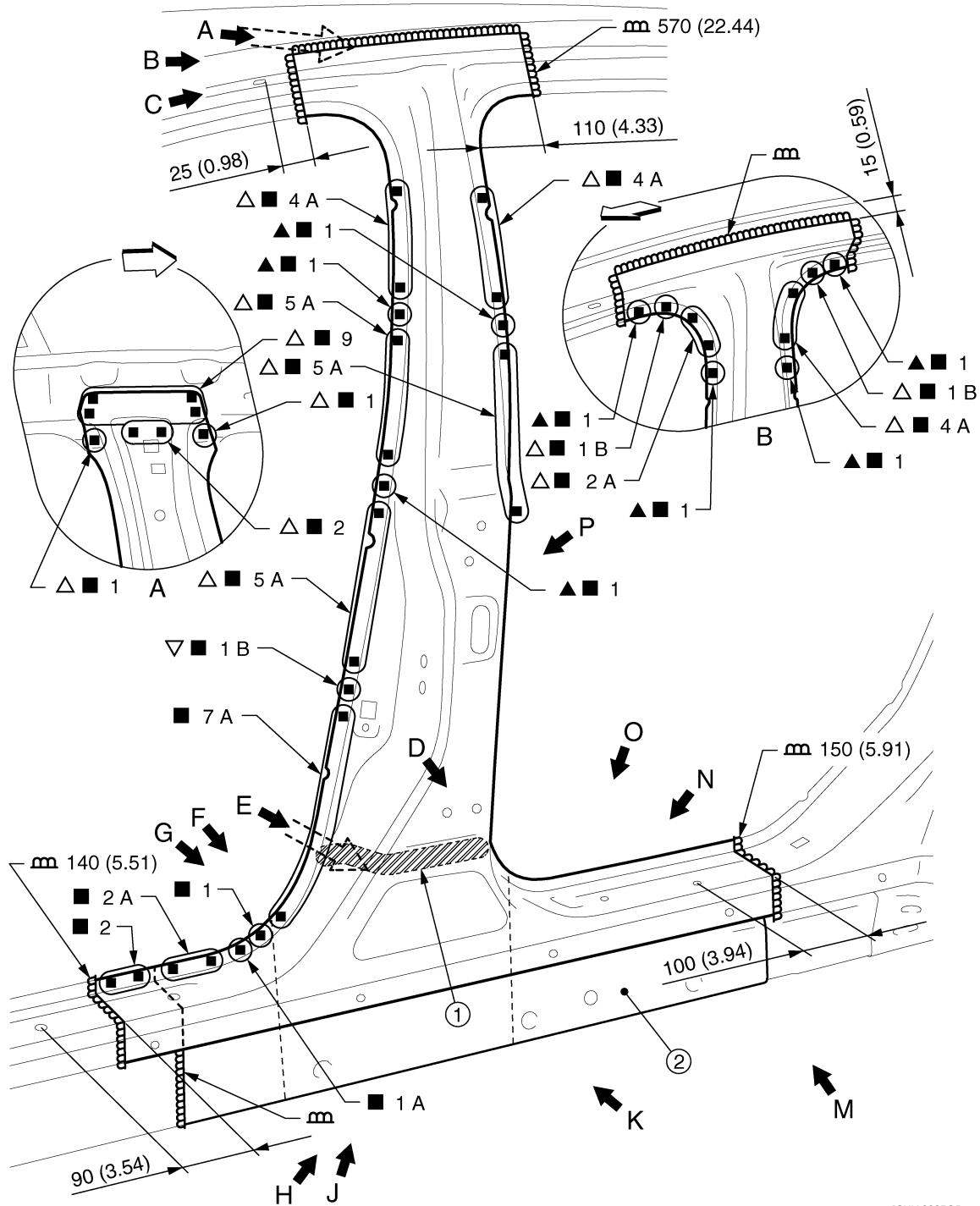
INFOID:000000009398164

Remove the outer sill reinforcement (reusable).

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3325GB

① Urethane foam

② Outer sill reinforcement (reusable)

Unit: mm (in)

↔ Vehicle front

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

Replacement parts

● Outer front side body

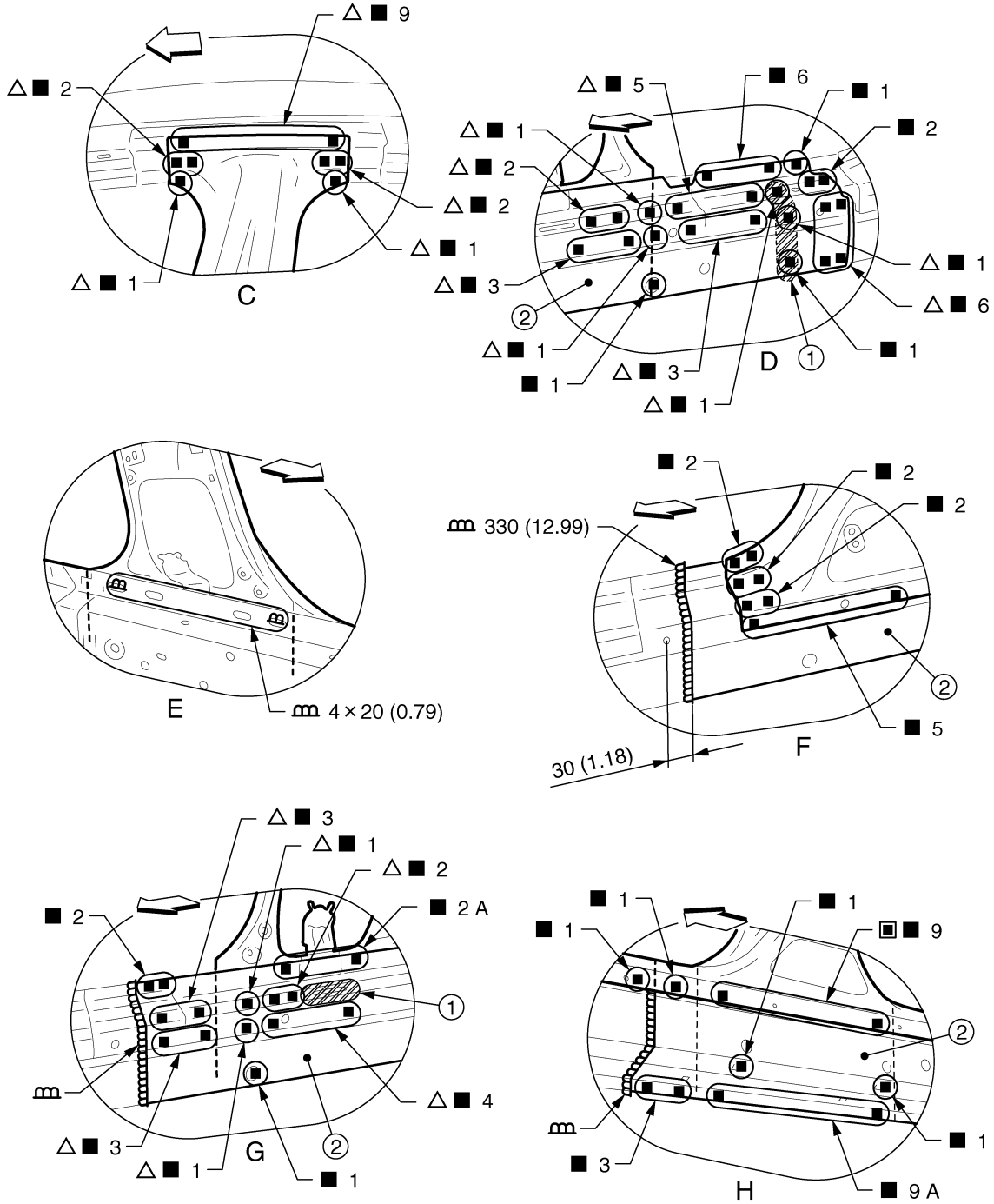
● Center pillar reinforcement

● Inner center pillar

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3326GB

① Urethane foam

② Outer sill reinforcement (reusable)

Unit: mm (in)

◀ Vehicle front

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

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

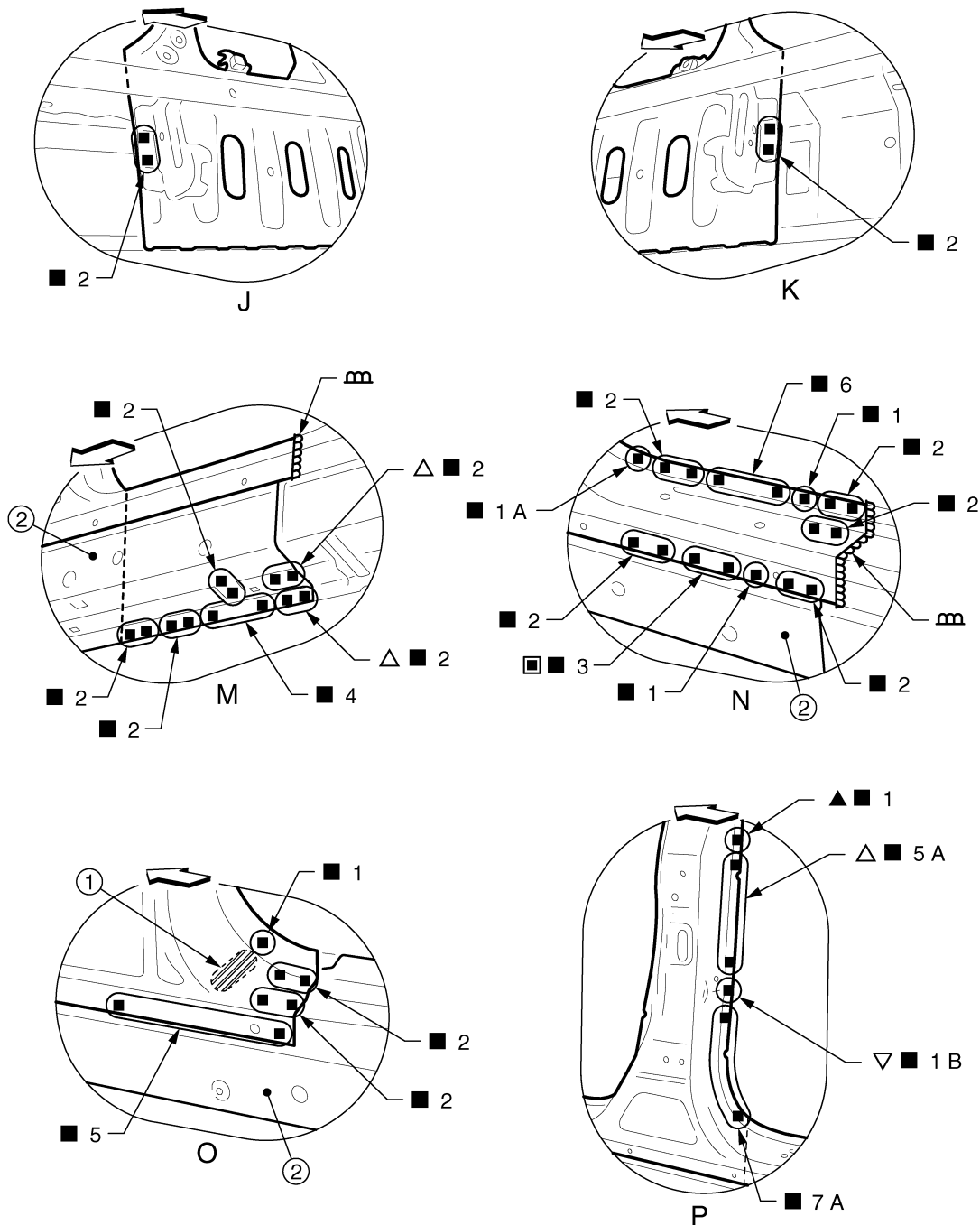
View C and F: Before installing outer front side body

View D and G: Before installing outer front side body and center pillar reinforcement

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



① Urethane foam

② Outer sill reinforcement (reusable)

⇐ Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

View J and K: Before installing outer front side body, center pillar reinforcement, and outer sill reinforcement (reusable)

View O: Before installing outer front side body

JSKIA3327ZZ

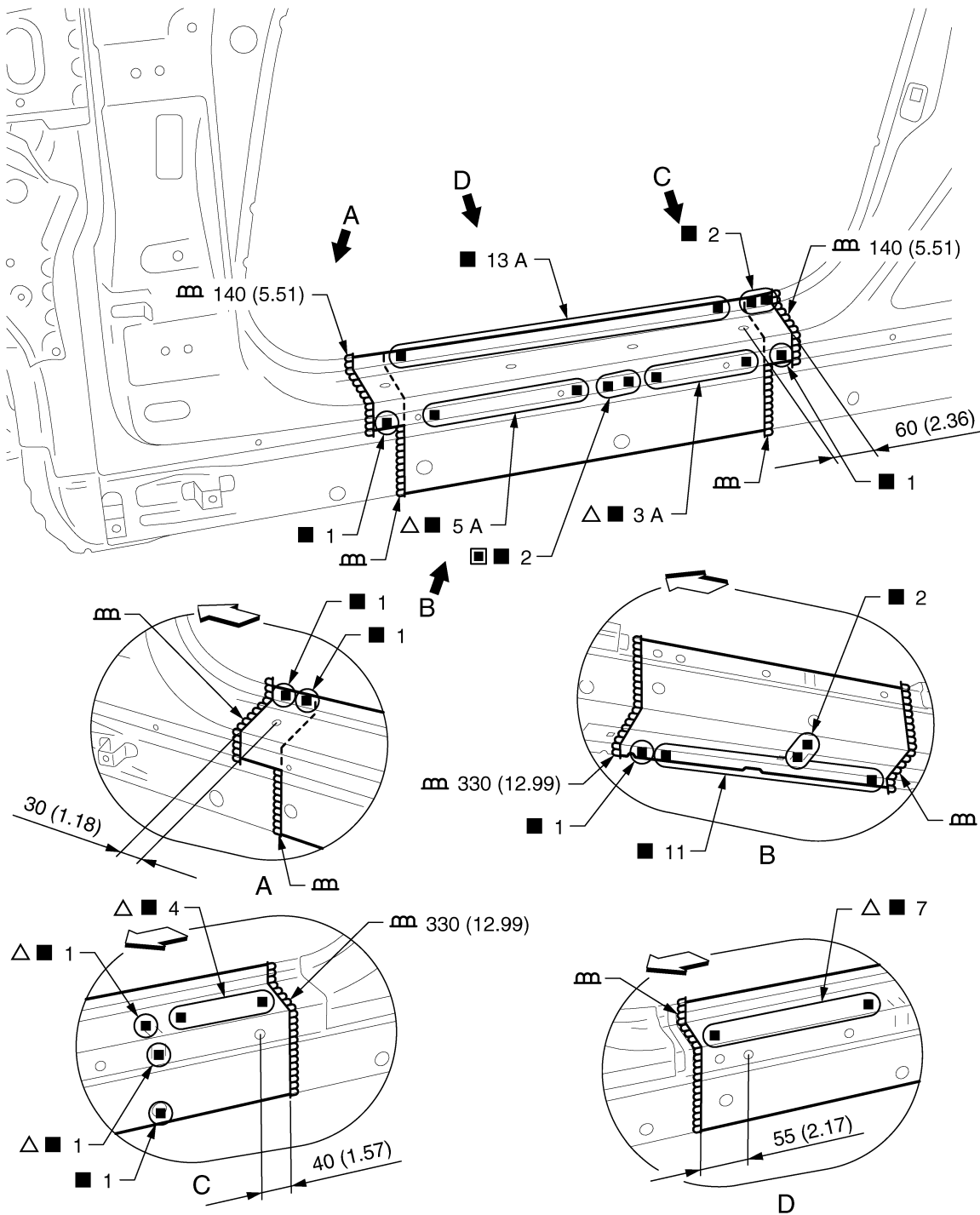
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

AWD : Outer Sill (Partial Replacement)

INFOID:000000009398165



JSKIA3328GB

Unit: mm (in)

◀: Vehicle front

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

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

Replacement parts

- Outer sill
- Outer sill reinforcement

View B, C, and D: Before installing outer sill

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

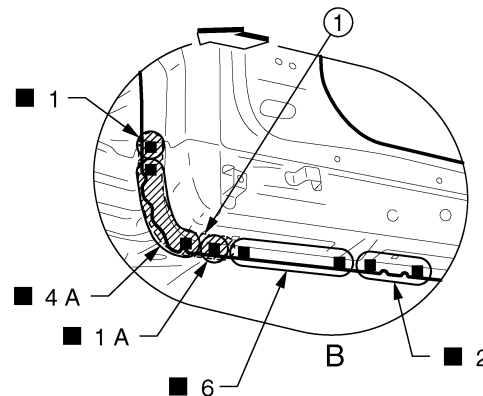
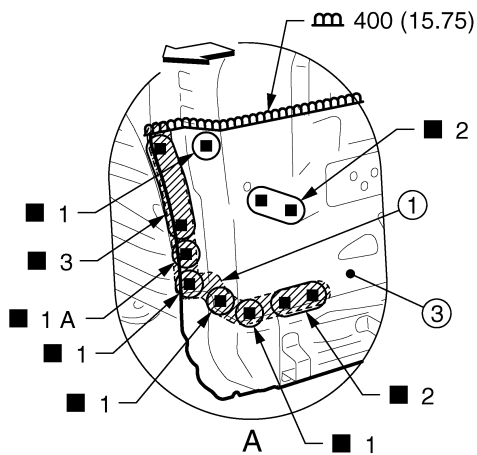
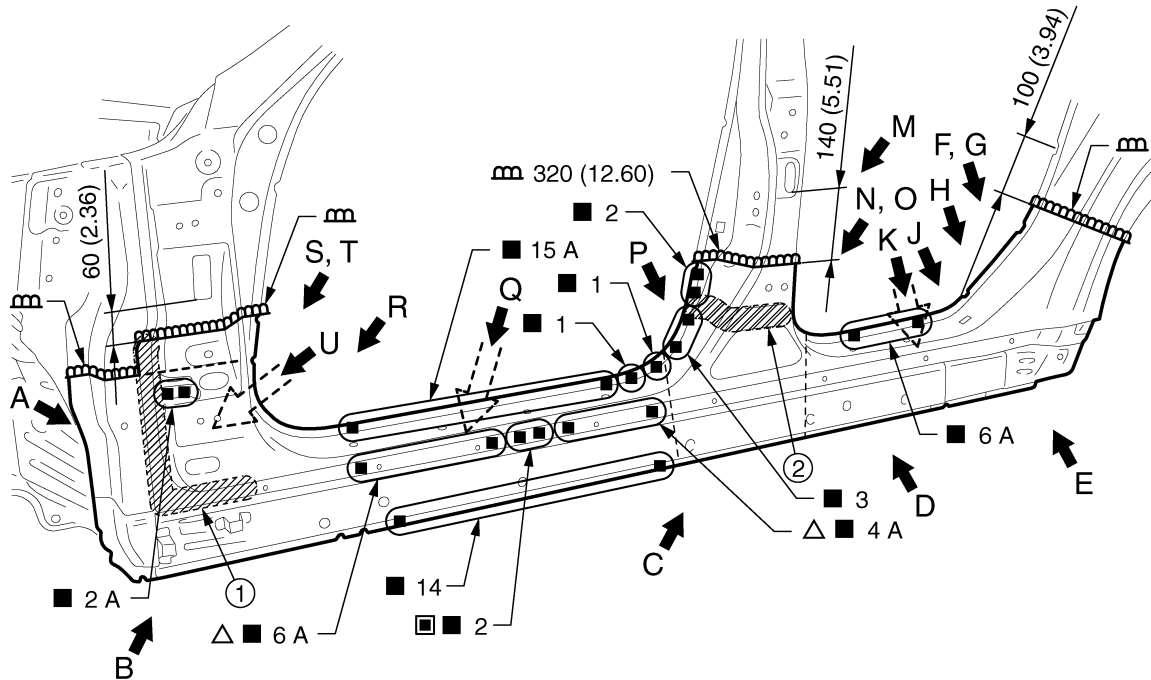
[FOR USA AND CANADA]

INFOID:0000000009398166

AWD : Outer Sill

Work after hoodedge reinforcement is removed.

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



① Body sealing

② Urethane foam

③ Front pillar brace (reusable)

Unit: mm (in)

←: Vehicle front

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

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

Replacement parts

JSKIA3329GB

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BRM

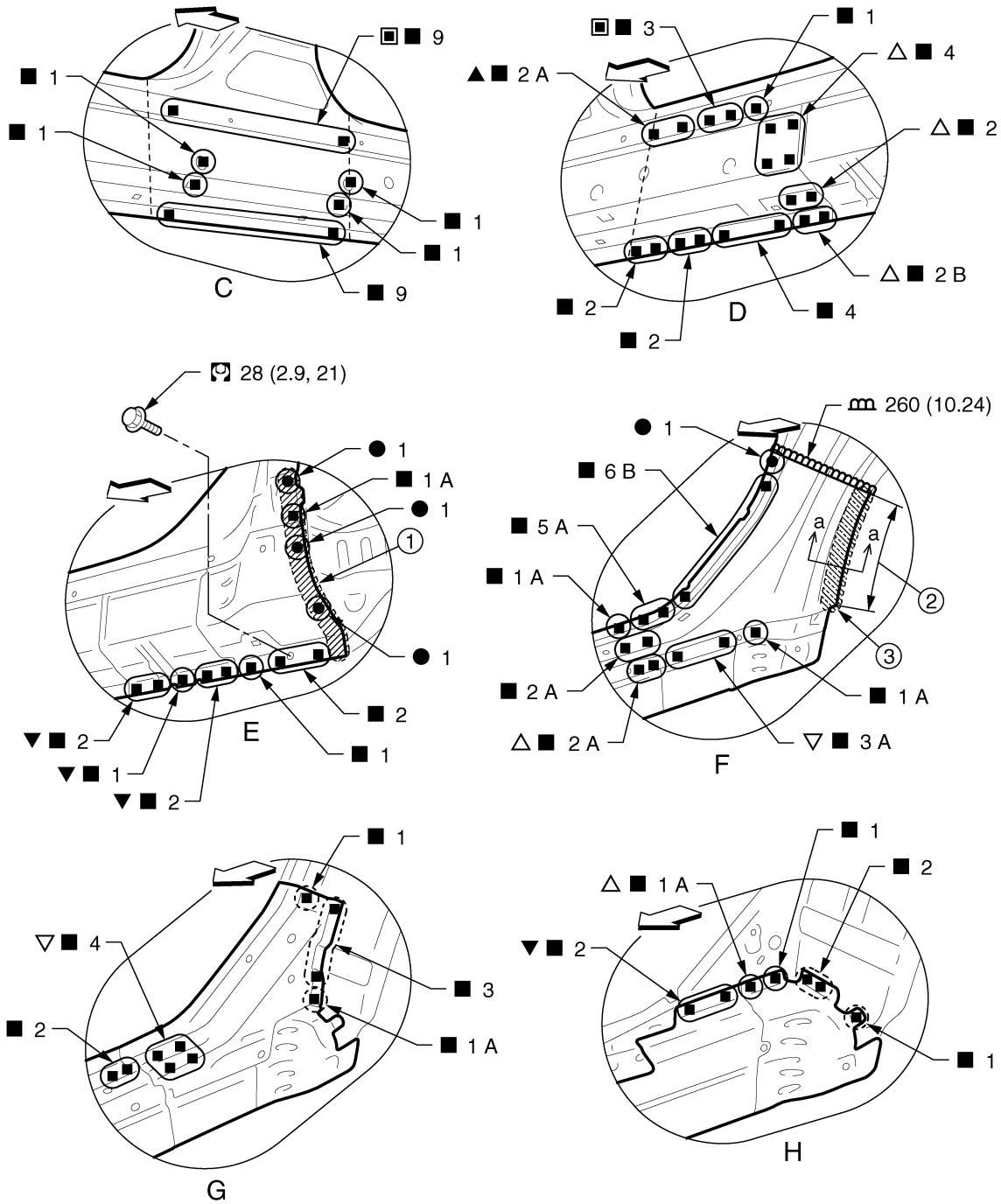
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Outer sill
- Outer sill reinforcement
- Outer rear wheelhouse extension (Upper)
- Outer rear wheelhouse extension (Lower)
- Cowl top bracket extension

View A: Before installing outer sill and cowl top bracket extension



JSKIA3330GB

① Body sealing

② Hemming portion

③ Adhesive

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Unit: mm (in)

↩: Vehicle front

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

▲: Drill $\phi 6$ mm (0.24 in) hole for the plug welding hole (ultra high strength steel plate).

▼: Drill $\phi 7$ mm (0.28 in) hole for the plug welding hole (ultra high strength steel plate).

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

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

⚙: N·m (kg-m, ft-lb)

View G: Before installing outer sill

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

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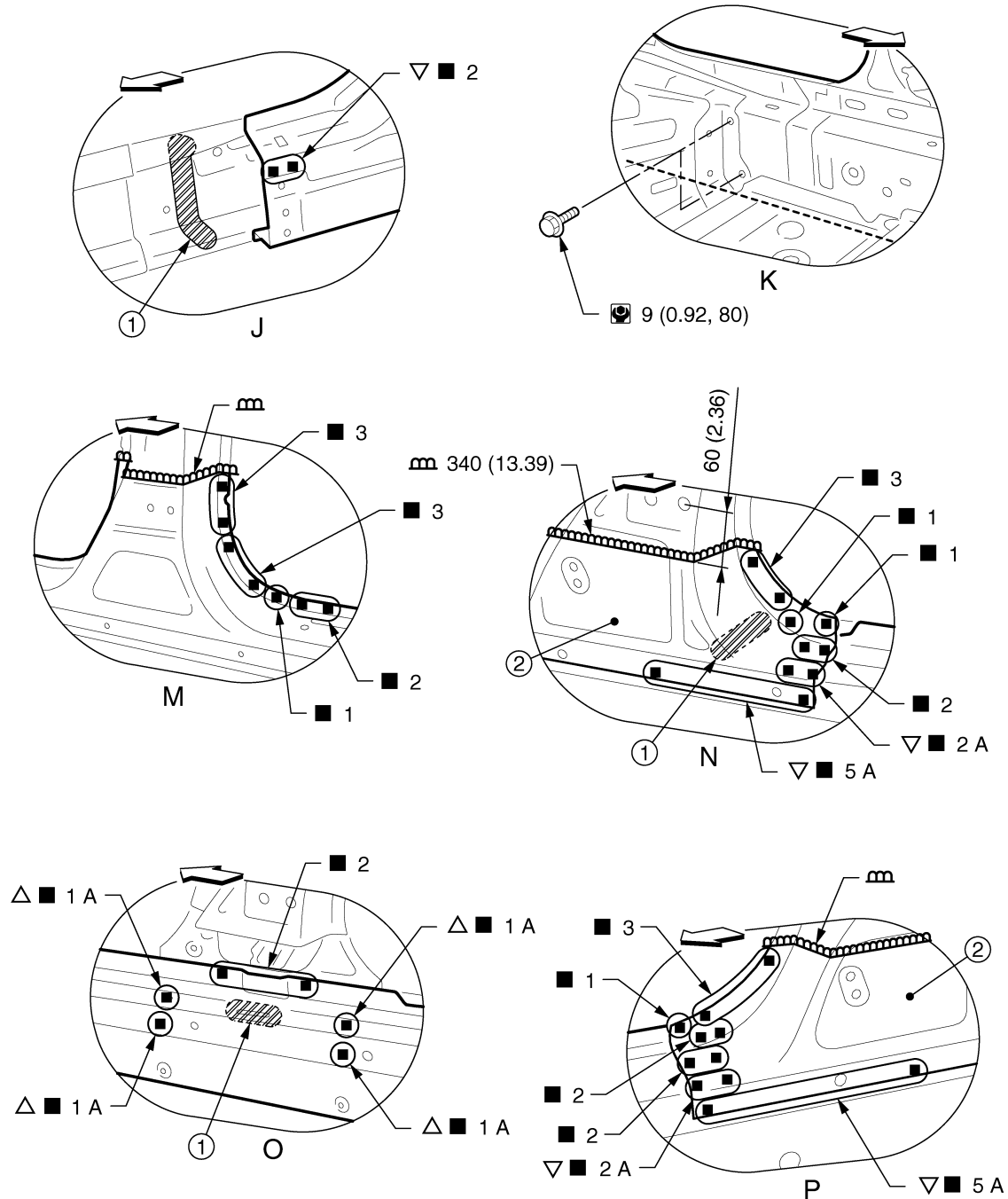
O

P

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3331GB

① Urethane foam

② Center pillar reinforcement (reusable)

Unit: mm (in)

↔ Vehicle front

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

▽: Drill $\phi 9$ mm (0.35 in) hole for the plug welding hole (ultra high strength steel plate).

Ⓜ: N·m (kg·m, in·lb)

View J: Before installing outer sill and outer sill reinforcement

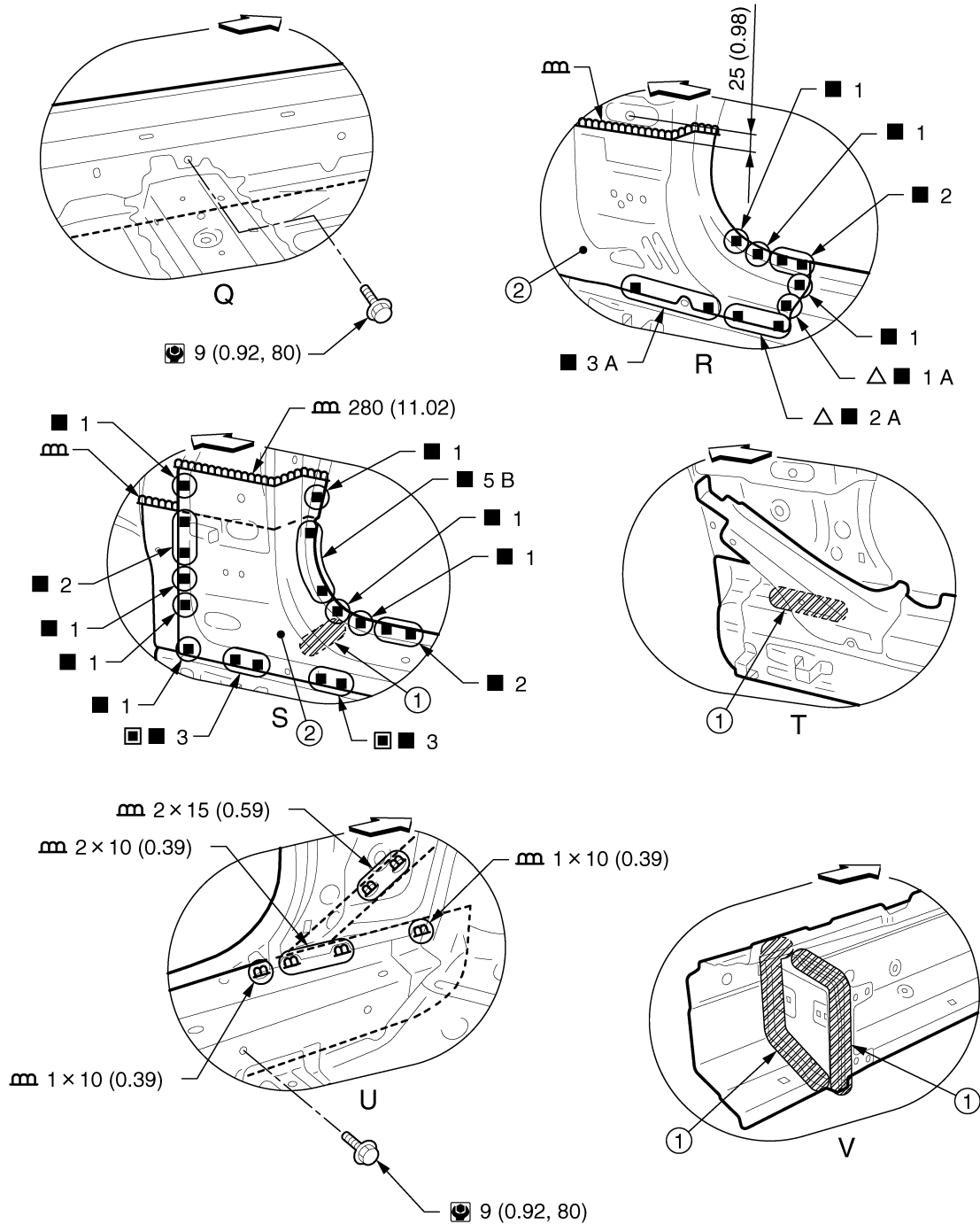
View N and P: Before installing outer sill

View O: Before installing outer sill and center pillar reinforcement (reusable)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3332GB

- ① Urethane foam ② Front pillar brace (reusable)

Unit: mm (in)

←: Vehicle front

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

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

: N·m (kg-m, in-lb)

View R: Before installing outer sill

View T: Before installing outer sill and front pillar brace (reusable)

View V: Outer sill reinforcement (replacement parts)

REPLACEMENT OPERATIONS

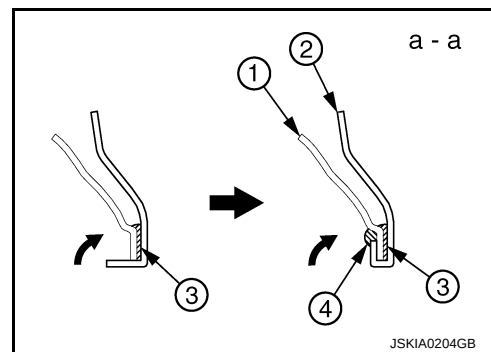
< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

POINT

- Perform the hemming to the flange of wheelarch after applying the adhesive.
- Apply the sealing to the flange end.
- Refer to [BRM-35. "Rear Fender Hemming Process"](#).

- ① Outer rear wheelhouse
- ② Rear fender
- ③ Adhesive
- ④ Sealant



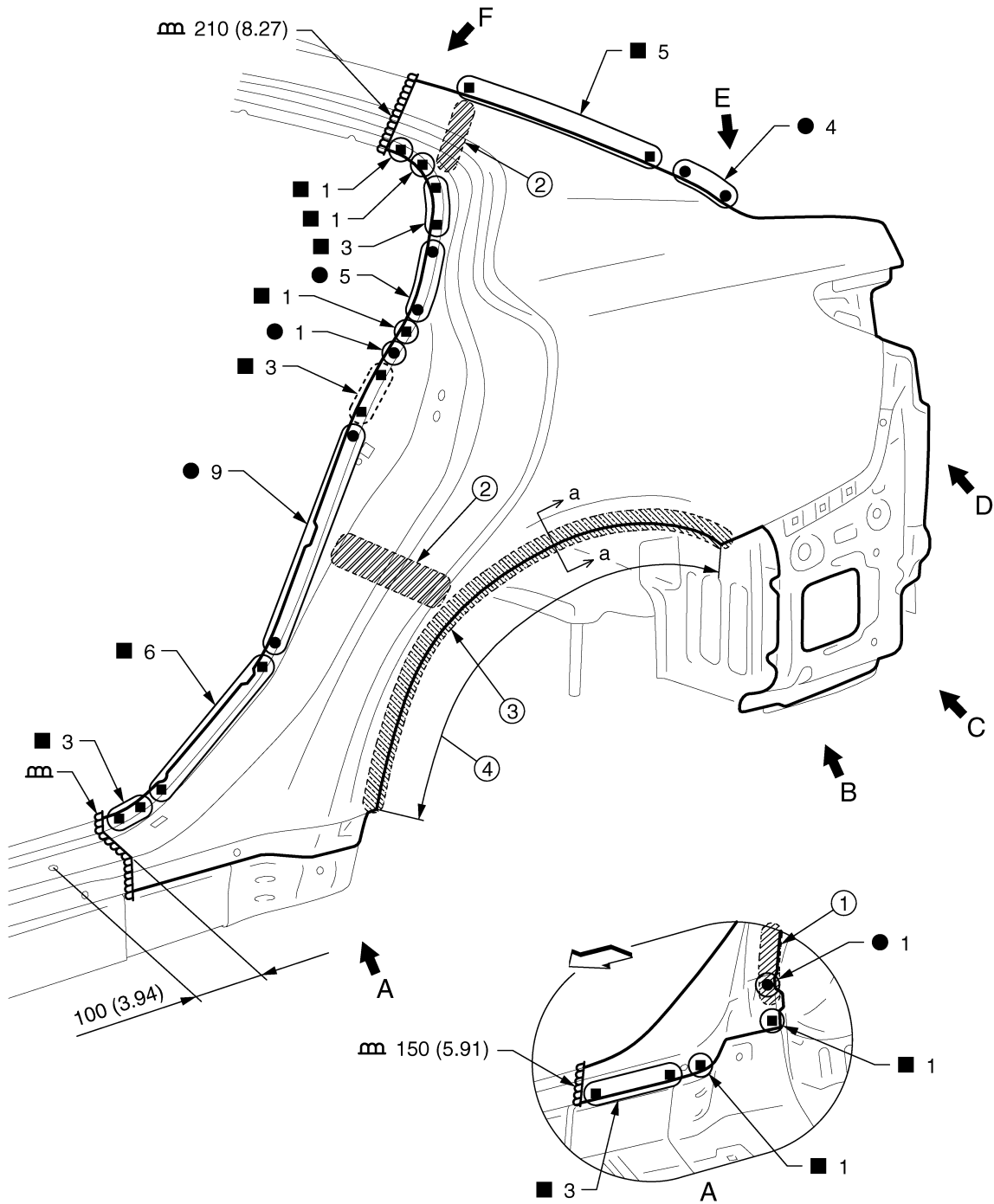
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

AWD : Rear Fender

INFOID:000000009398167



① Body sealing

② Urethane foam

③ Adhesive

④ Hemming portion

Unit: mm (in)

⇐: Vehicle front

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

Replacement parts

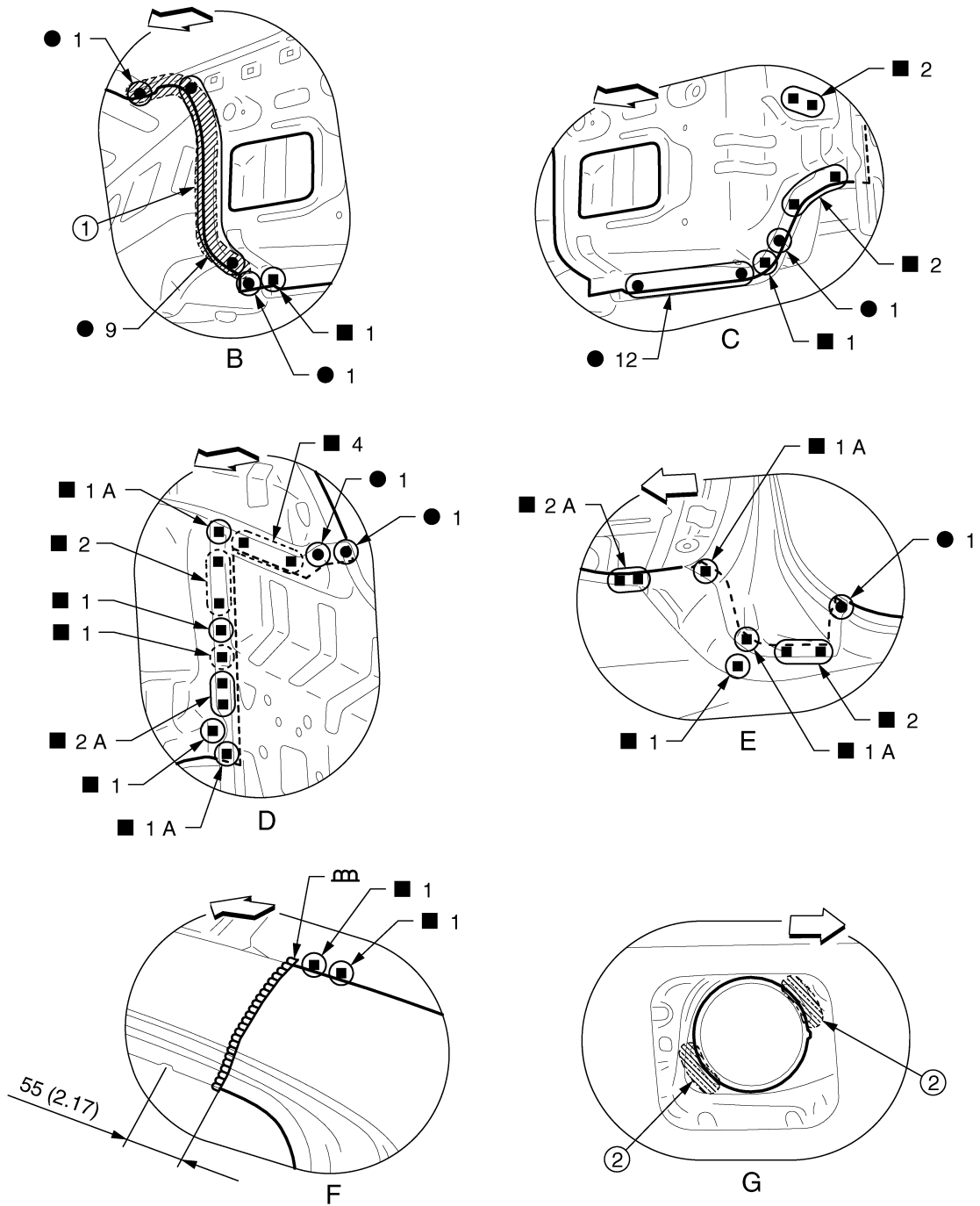
● Rear fender

JSKIA3335GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3336GB

① Body sealing

② Adhesive

Unit: mm (in)

◀: Vehicle front

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

View G: Right side rear fender

POINT

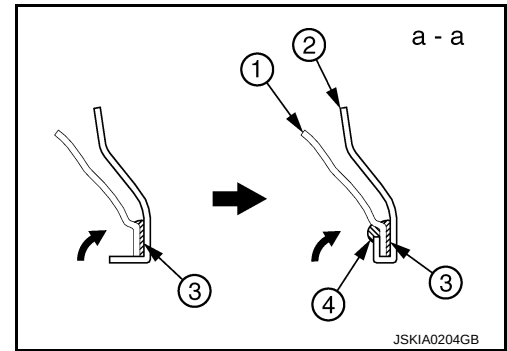
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

- Perform the hemming to the flange of wheelarch after applying the adhesive.
- Apply the sealing to the flange end.
- Refer to [BRM-35. "Rear Fender Hemming Process"](#).

- ① **Outer rear wheelhouse**
- ② **Rear fender**
- ③ **Adhesive**
- ④ **Sealant**



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BRM

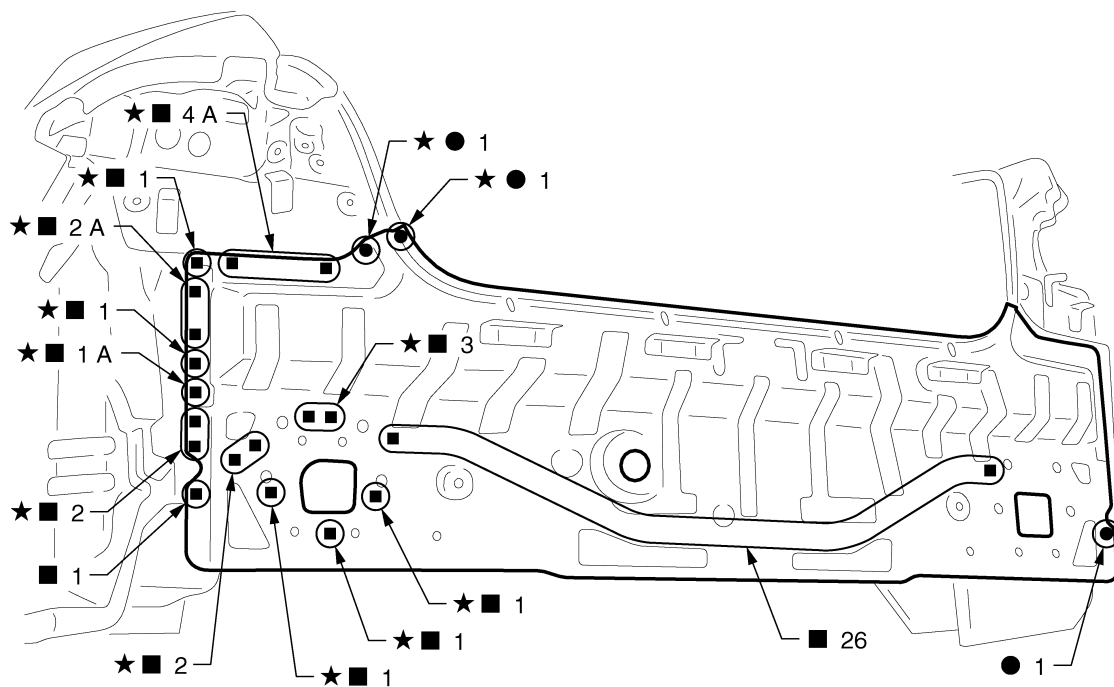
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

AWD : Rear Panel

INFOID:0000000009398170



JSKIA3345ZZ

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

Replacement parts

- Upper rear panel assembly

AWD : Rear Floor Rear

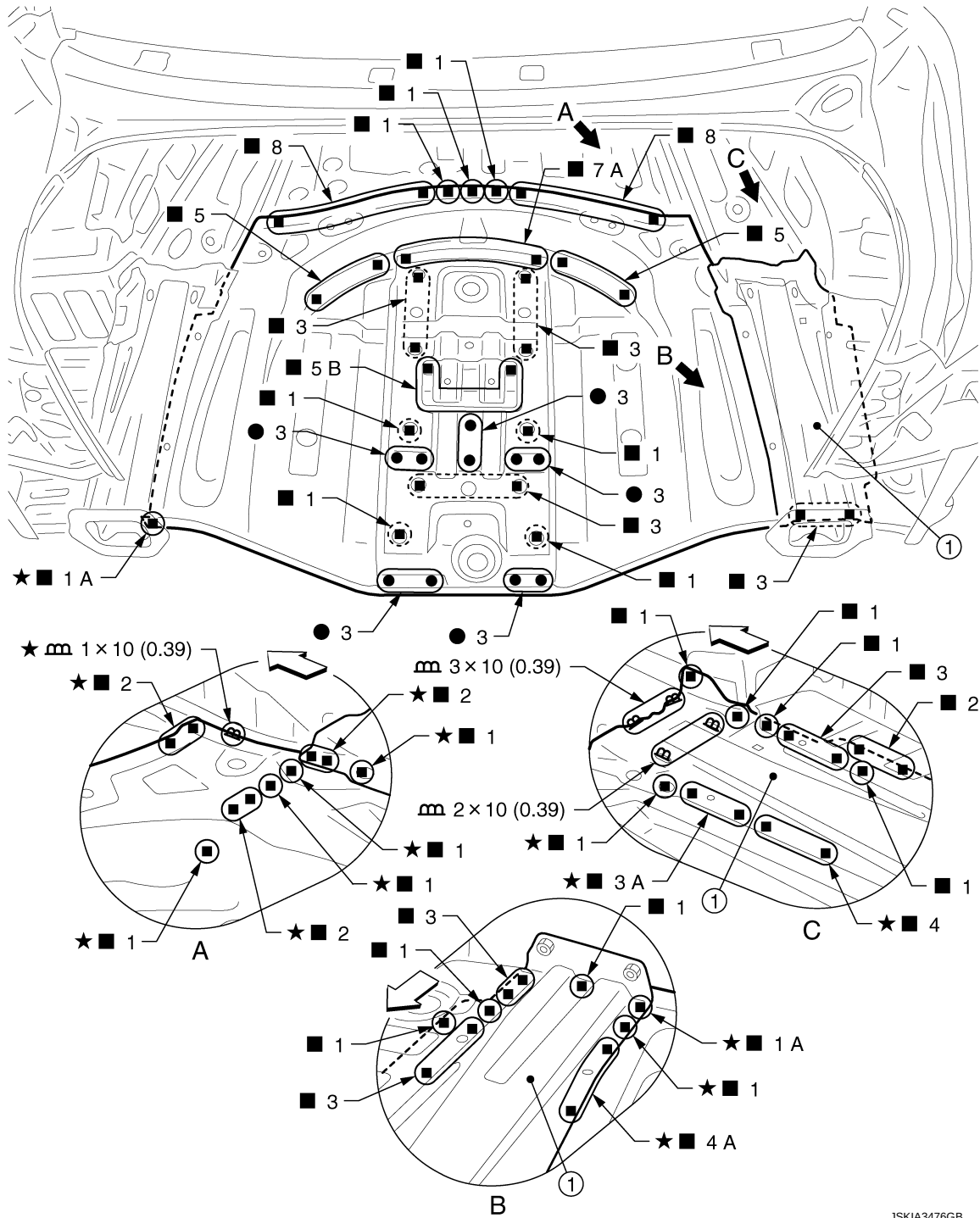
INFOID:0000000009724865

Work after rear panel is removed.
Remove the rear floor rear side (reusable).

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]



JSKIA3476GB

AWD : Rear Side Member Extension

INFOID:000000009724490

Work after rear panel is removed.

Revision: 2013 October

BRM-93

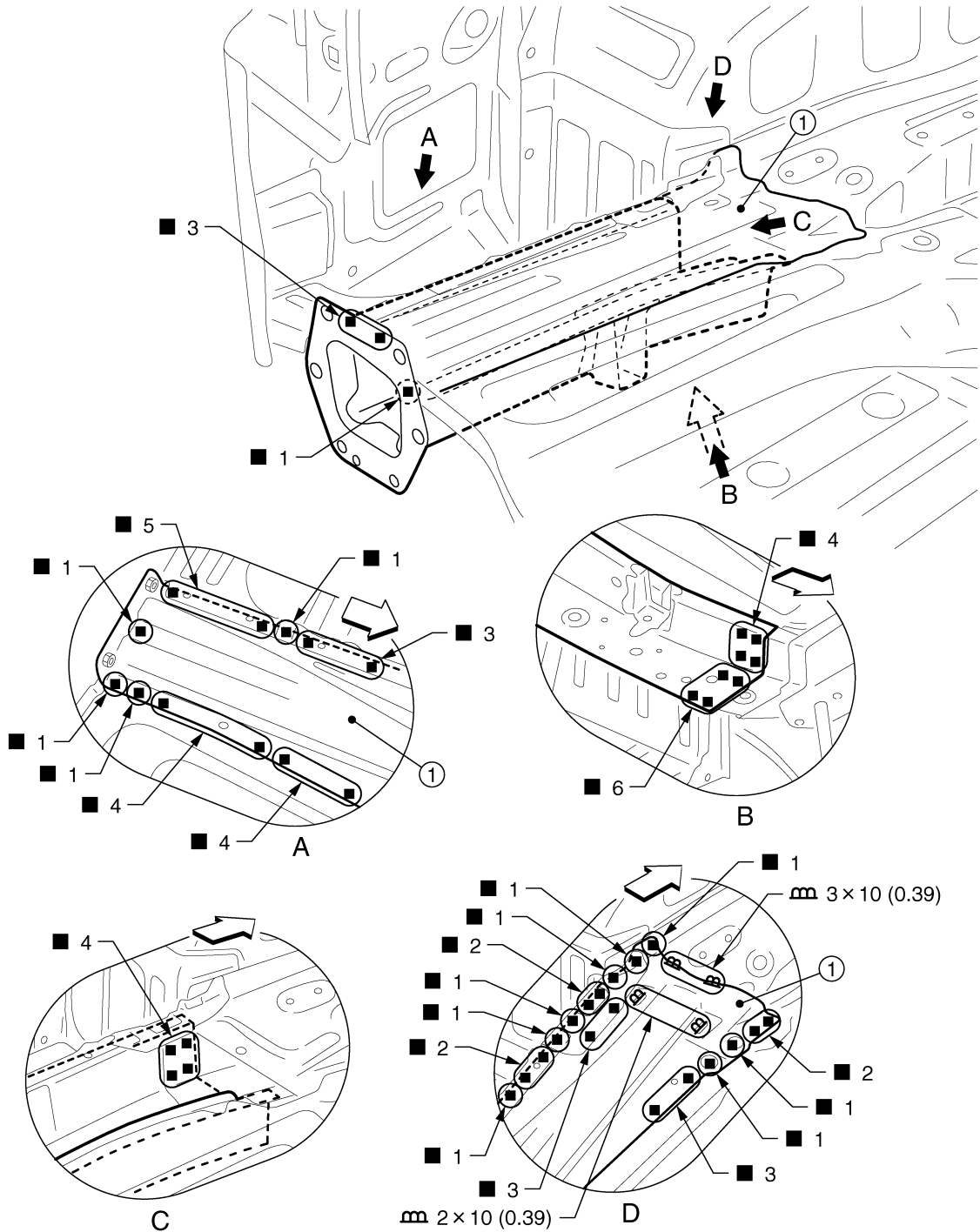
2014 Q50

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

[FOR USA AND CANADA]

Remove the rear floor rear side (reusable).



JSKIA3403GB

① Rear floor rear side (reusable)

Unit: mm (in)

↔ Vehicle front

⊞ Weld the parts onto the back of the component part.

Replacement parts

● Rear side member extension

View C: Before installing rear floor rear side (reusable)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

SERVICE DATA AND SPECIFICATIONS (SDS)

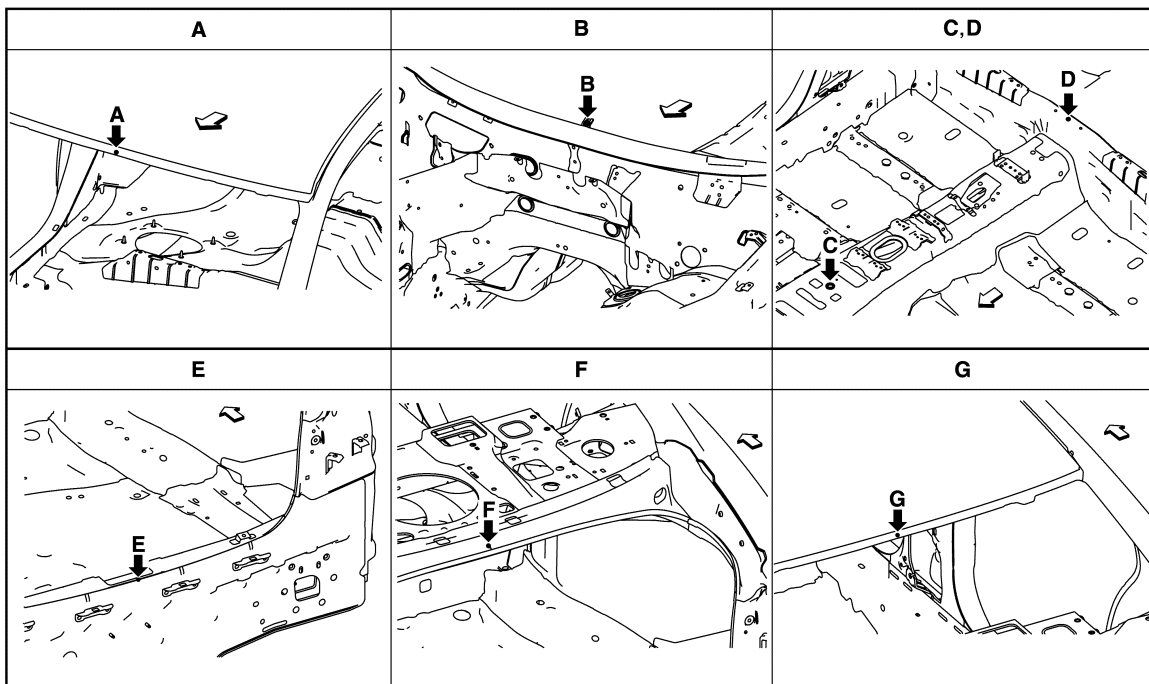
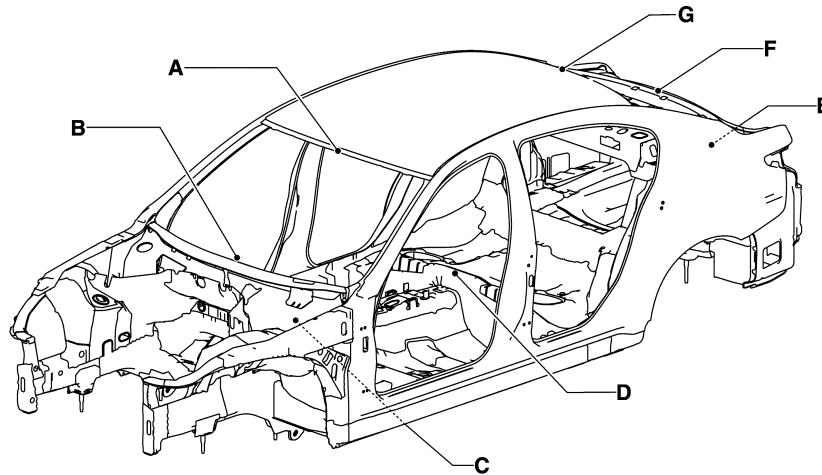
BODY ALIGNMENT

2WD

2WD : Body Center Marks

INFOID:000000009238632

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.



JSKIA3275ZZ

↩: Vehicle front

Unit: mm (in)

Points	Portion	Marks
A	Front roof	Embossment
B	Upper dash	Hole $\phi 8$ (0.31)
C	Trans control reinforcement	Hole 14×12 (0.55×0.47)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

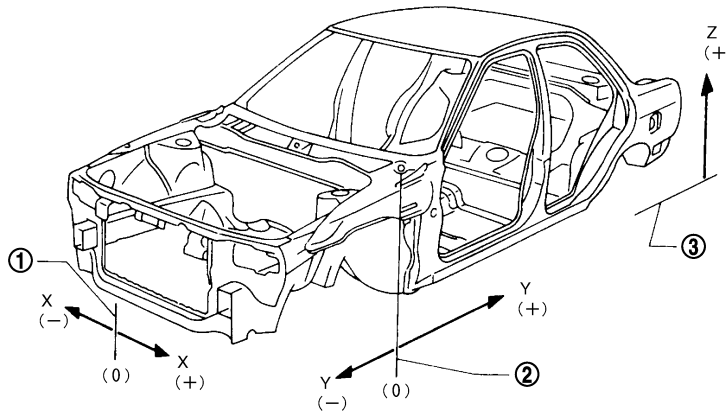
[FOR USA AND CANADA]

Points	Portion	Marks
D	Rear seat crossmember reinforcement	Hole $\phi 5$ (0.20)
E	Upper rear panel	Indent
F	Rear waist	Bead
G	Rear roof	Embossment

2WD : Description

INFOID:000000009641396

- 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)]



JSK1A0073GB

① Vehicle center

② Front axle center

③ Imaginary base line

2WD : Engine Compartment

INFOID:000000009238634

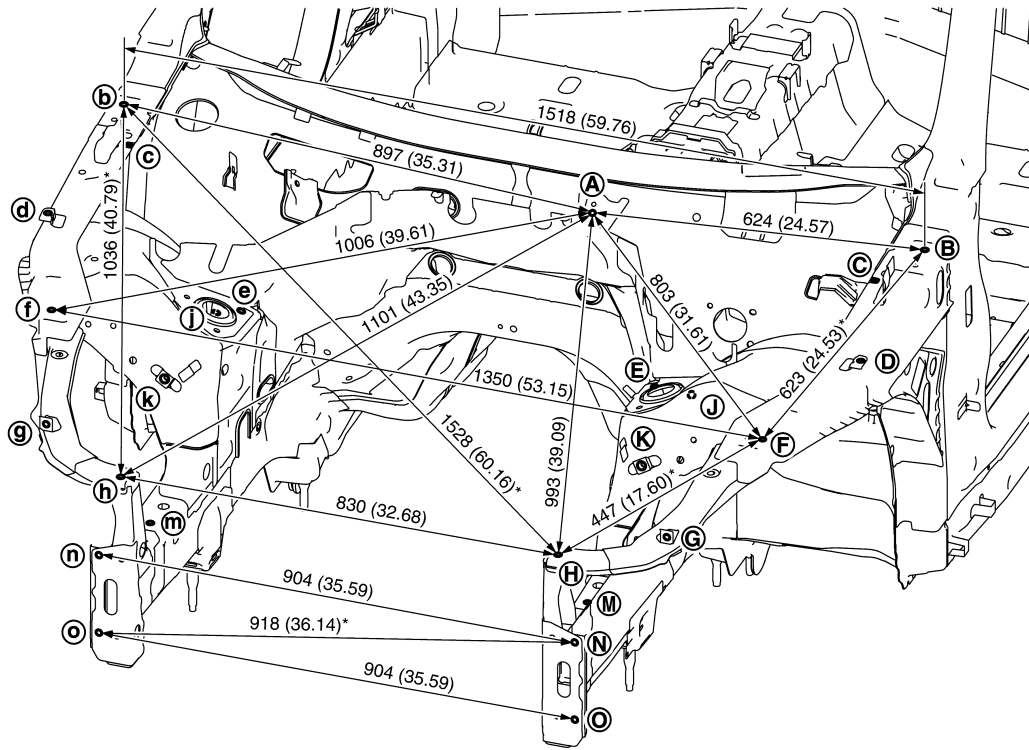
MEASUREMENT

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]



JSKIA3276GB

Unit: mm (in)

«The others»

Unit: mm (in)

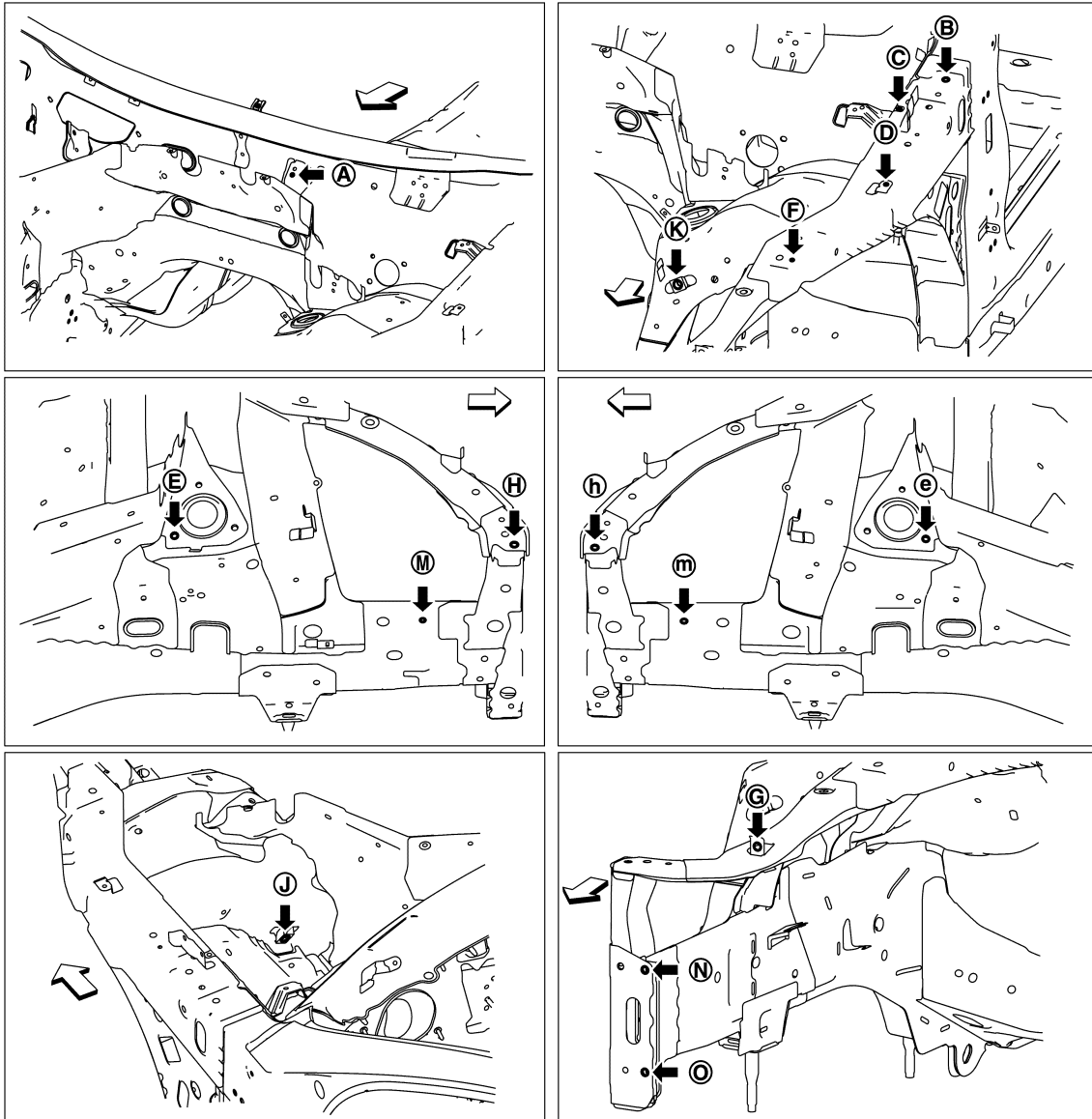
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
(A) – (C)	580 (22.83)		(B) – (E)	558 (21.97)*		(E) – (e)	786 (30.94)	
(A) – (c)	850 (33.46)		(B) – (e)	1227 (48.31)*		(E) – (h)	985 (38.78)*	
(A) – (D)	722 (28.43)		(B) – (f)	1561 (61.46)*		(E) – (m)	934 (36.77)*	
(A) – (d)	971 (38.23)		(B) – (J)	488 (19.21)*		(F) – (h)	1149 (45.24)*	
(A) – (E)	469 (18.46)		(C) – (C)	1416 (55.75)		(G) – (g)	1179 (46.42)	
(A) – (e)	659 (25.94)		(C) – (F)	504 (19.84)*		(G) – (H)	197 (7.76)*	
(A) – (G)	975 (38.39)		(C) – (f)	1472 (57.95)*		(G) – (N)	254 (10.00)*	
(A) – (g)	1128 (44.41)		(C) – (H)	912 (35.91)*		(J) – (j)	903 (35.55)	
(A) – (M)	898 (35.35)		(C) – (h)	1417 (55.79)*		(K) – (k)	903 (35.55)	
(A) – (m)	1017 (40.04)		(D) – (d)	1544 (60.79)		(M) – (m)	833 (32.80)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3277ZZ

↩: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
(A)	Wiper mounting bracket hole center $\phi 7$ (0.28)	(F) (f)	Hoodledge reinforcement hole center $\phi 6$ (0.24)
(B) (b)	Hood hinge installing hole center $\phi 12$ (0.47)	(H) (h)	Side radiator core support hole center $\phi 12$ (0.47)
(C) (c)	Upper hoodledge hole center $\phi 8$ (0.31)	(J) (j) (K) (k)	Nut holder hole center $\phi 16$ (0.63)
(D) (d) (G) (g)	Front fender installing hole center (D) (d): $\phi 7$ (0.28) (G) (g): $\phi 12$ (0.47)	(M) (m)	Front side member hole center $\phi 7$ (0.28)
(E) (e)	Front strut installing hole center $\phi 11$ (0.43)	(N) (n) (O) (o)	Front bumper stay installing hole center $\phi 11$ (0.43)

2WD : Underbody

INFOID:000000009238635

MEASUREMENT

Revision: 2013 October

BRM-98

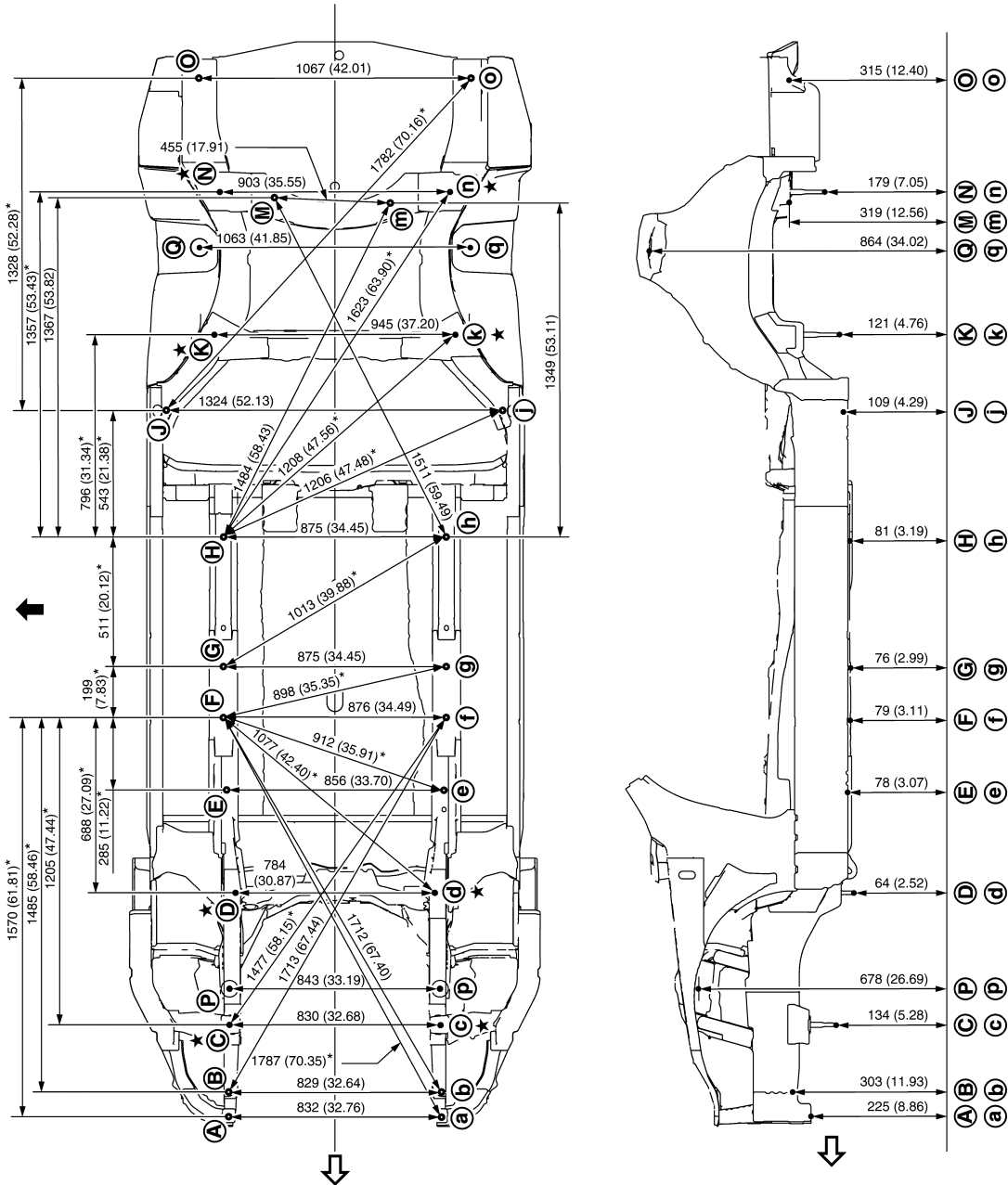
2014 Q50

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.



Unit: mm (in)

↔ Vehicle front

← Vehicle left side

★ Bolt head

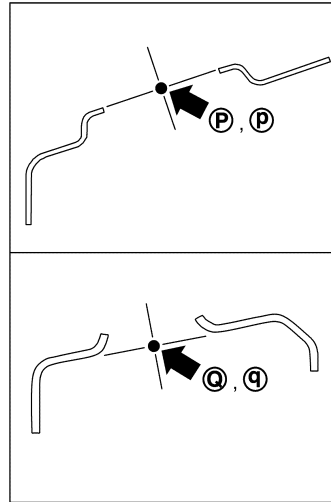
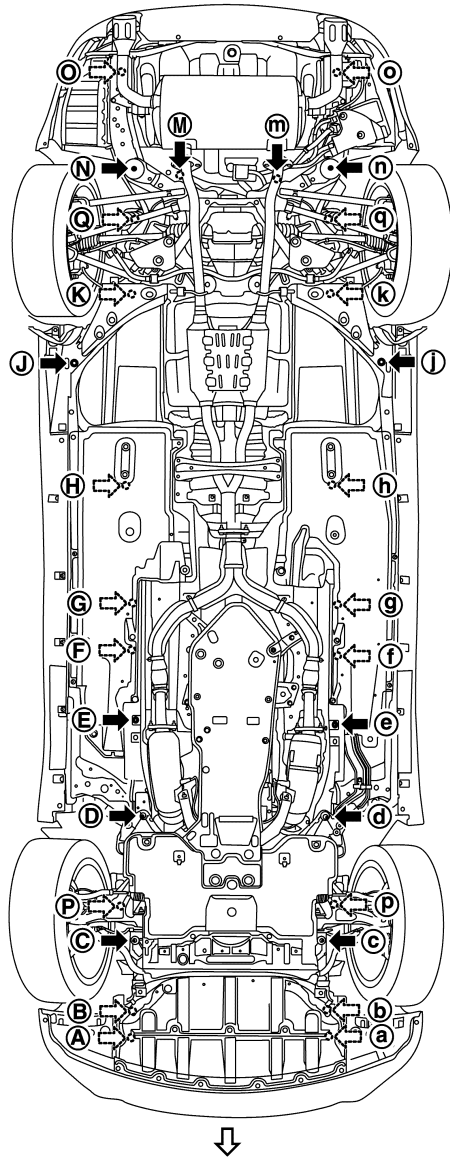
JSKIA3278GB

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

MEASUREMENT POINTS



JSK1A3279ZZ

↔: Vehicle front

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
Ⓐ Ⓐ	±415.8 (±16.370)	-463.0 (-18.228)	224.6 (8.843)	Hole φ13 (0.51)	ⓐ ⓐ	±662.0 (±26.063)	2304.0 (90.708)	108.5 (4.272)	Hole φ8 (0.31)
Ⓑ Ⓑ	416.2 (16.386)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	ⓑ ⓑ	±472.6 (±18.606)	2603.8 (102.512)	120.8 (4.756)	Bolt head
Ⓒ Ⓒ	-413.2 (-16.268)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	ⓓ ⓓ	238.0 (9.370)	3141.0 (123.661)	318.6 (12.543)	Hole φ16 (0.63)
Ⓓ Ⓓ	±415.0 (±16.339)	-104.0 (-4.094)	133.9 (5.272)	Bolt head	ⓔ ⓔ	-217.0 (-8.543)	3120.0 (122.834)	318.6 (12.543)	Hole 16×18 (0.63×0.71)
Ⓔ Ⓔ	±392.0 (±15.433)	414.0 (16.299)	64.3 (2.531)	Bolt head	ⓕ ⓕ	±451.5 (±17.776)	3163.9 (124.563)	179.0 (7.047)	Bolt head

[FOR USA AND CANADA]

A
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INFOID:0000000009238637

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



JSKIA3280GB

«The others»

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Unit: mm (in)

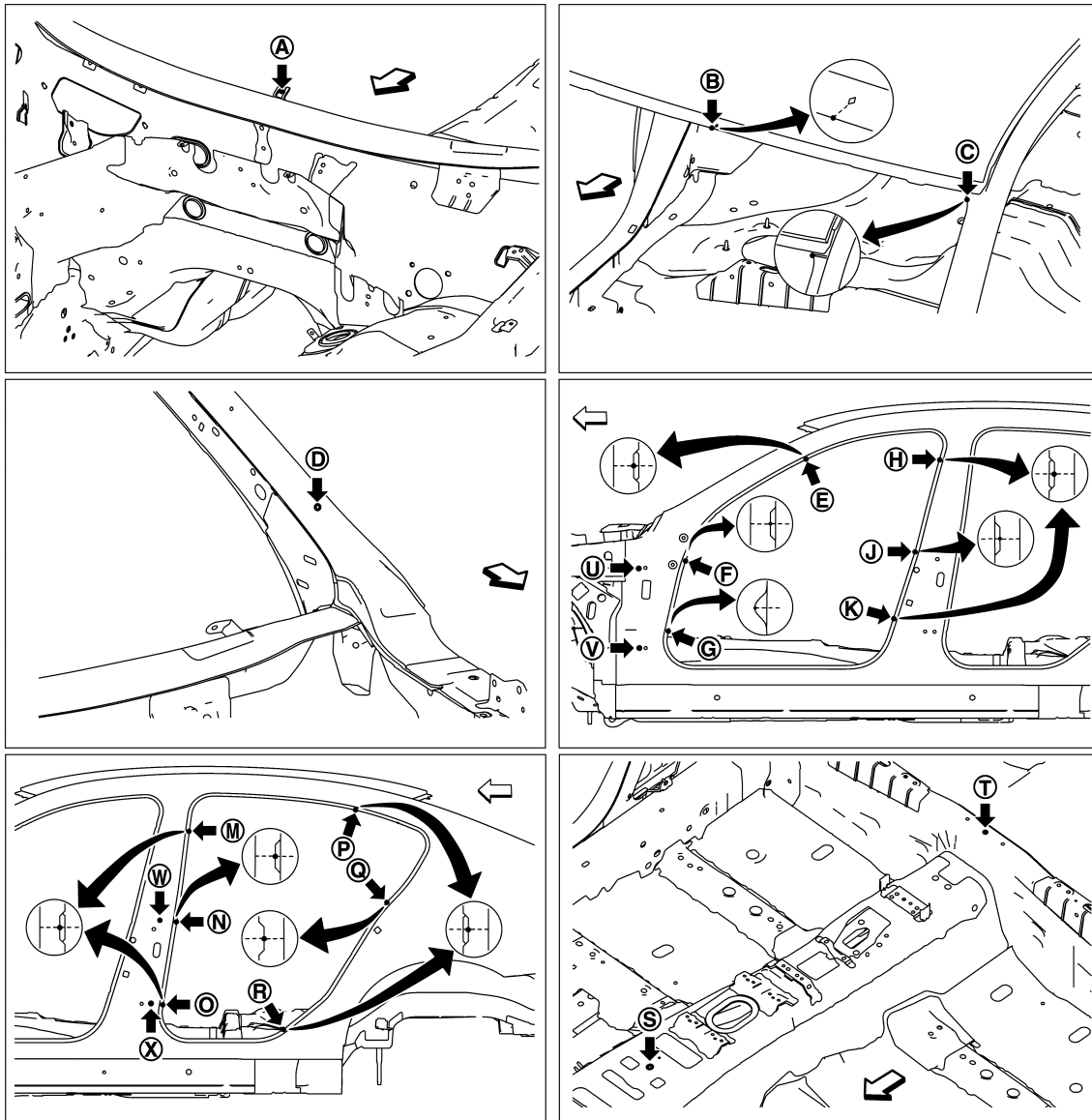
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
Ⓔ - ⓔ	1232 (48.50)		Ⓜ - Ⓡ	1619 (63.74)*		Ⓣ - Ⓜ	953 (37.52)*	
Ⓔ - ⓖ	1604 (63.15)*		Ⓝ - Ⓝ	1450 (57.09)		Ⓣ - Ⓝ	829 (32.64)*	
Ⓔ - ⓗ	1344 (52.91)*		Ⓝ - ⓓ	1637 (64.45)*		Ⓣ - Ⓞ	785 (30.91)*	
Ⓔ - Ⓚ	1529 (60.20)*		Ⓞ - Ⓞ	1477 (58.15)		Ⓣ - Ⓟ	1072 (42.20)*	
Ⓕ - ⓕ	1444 (56.85)		Ⓞ - Ⓠ	1682 (66.22)*		Ⓣ - Ⓠ	1003 (39.49)*	
Ⓕ - ⓙ	1693 (66.65)*		Ⓞ - Ⓡ	1555 (61.22)*		Ⓣ - Ⓡ	772 (30.39)*	
Ⓖ - ⓖ	1474 (58.03)		Ⓟ - Ⓟ	1144 (45.04)		Ⓤ - Ⓤ	1584 (62.36)	
Ⓖ - ⓗ	1844 (72.60)*		Ⓟ - Ⓡ	1590 (62.60)*		Ⓤ - Ⓦ	1164 (45.83)*	
Ⓖ - Ⓚ	1705 (67.13)*		Ⓠ - Ⓠ	1401 (55.16)		Ⓤ - Ⓧ	1157 (45.55)*	
ⓗ - ⓗ	1253 (49.33)		Ⓡ - Ⓡ	1485 (58.46)		Ⓥ - Ⓥ	1611 (63.43)	
ⓗ - Ⓚ	1511 (59.49)*		Ⓢ - Ⓔ	994 (39.13)*		Ⓥ - Ⓦ	1226 (48.27)*	
ⓙ - ⓙ	1450 (57.09)		Ⓢ - ⓕ	791 (31.14)*		Ⓥ - Ⓧ	1129 (44.45)*	
Ⓚ - Ⓚ	1466 (57.72)		Ⓢ - ⓖ	761 (29.96)*		Ⓦ - Ⓦ	1588 (62.52)	
Ⓜ - Ⓜ	1273 (50.12)		Ⓢ - ⓗ	1268 (49.92)*		Ⓧ - Ⓧ	1623 (63.90)	
Ⓜ - Ⓞ	1533 (60.35)*		Ⓢ - ⓙ	1099 (43.27)*				
Ⓜ - Ⓟ	1369 (53.90)*		Ⓢ - Ⓚ	999 (39.33)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3281ZZ

←: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
Ⓐ	Upper dash hole center of center positioning mark $\phi 8$ (0.31)	ⓓ ⓓ ⓓ ⓓ ⓔ ⓔ ⓔ ⓔ ⓕ ⓕ ⓕ ⓕ	Center pillar indent
Ⓑ	Roof flange end of center positioning mark	ⓖ ⓖ ⓖ ⓖ ⓗ ⓗ	Rear fender indent
Ⓒ Ⓒ	Outer side body joggle	ⓙ	Trans control reinforcement hole center of center positioning mark 14×12 (0.55×0.47)
Ⓓ Ⓓ	Outer side body hole center $\phi 4$ (0.16)	ⓓ	Rear seat crossmember reinforcement hole center of center positioning mark $\phi 5$ (0.20)
Ⓔ Ⓔ Ⓕ Ⓕ Ⓖ Ⓖ	Front pillar indent	ⓞ ⓞ ⓞ ⓞ ⓟ ⓟ ⓟ ⓟ ⓠ ⓠ ⓠ ⓠ	Door hinge installing hole center ⓞ ⓞ ⓞ ⓞ ⓟ ⓟ: $\phi 12$ (0.47) ⓠ ⓠ: 11×9 (0.43×0.35)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

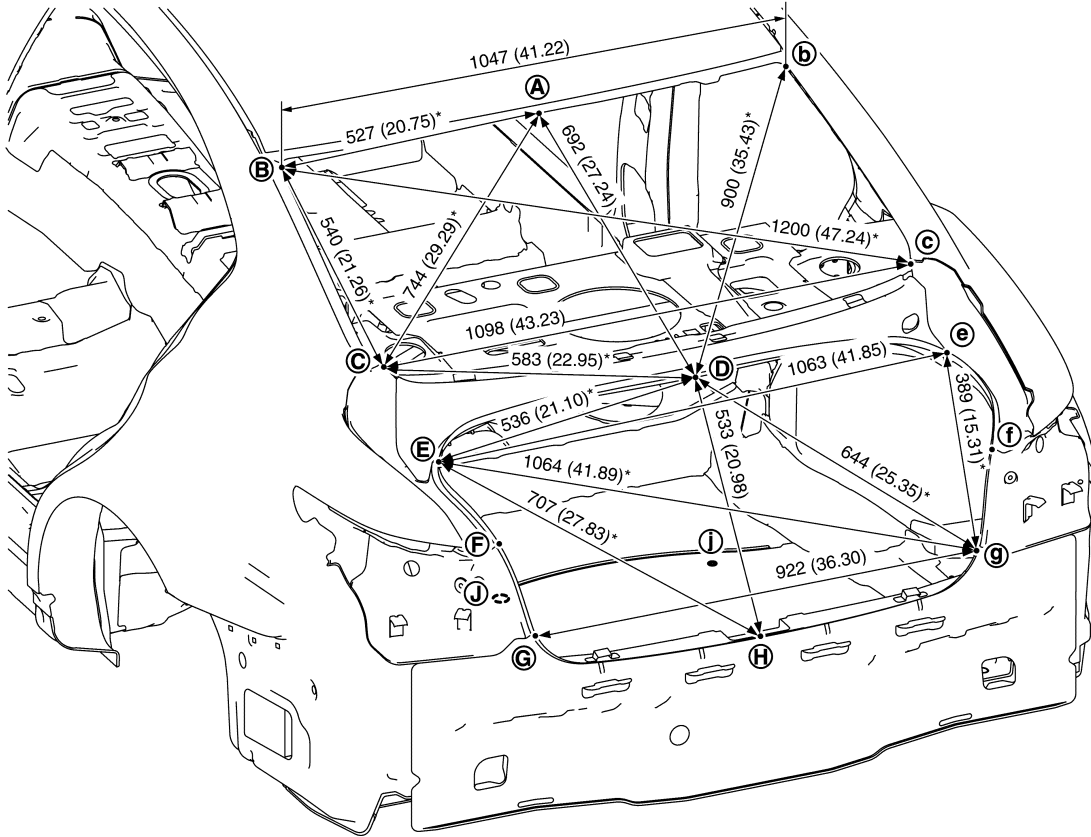
[FOR USA AND CANADA]

2WD : Rear Body

INFOID:000000009238638

MEASUREMENT

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



JSK1A3282GB

Unit: mm (in)

«The others»

Unit: mm (in)

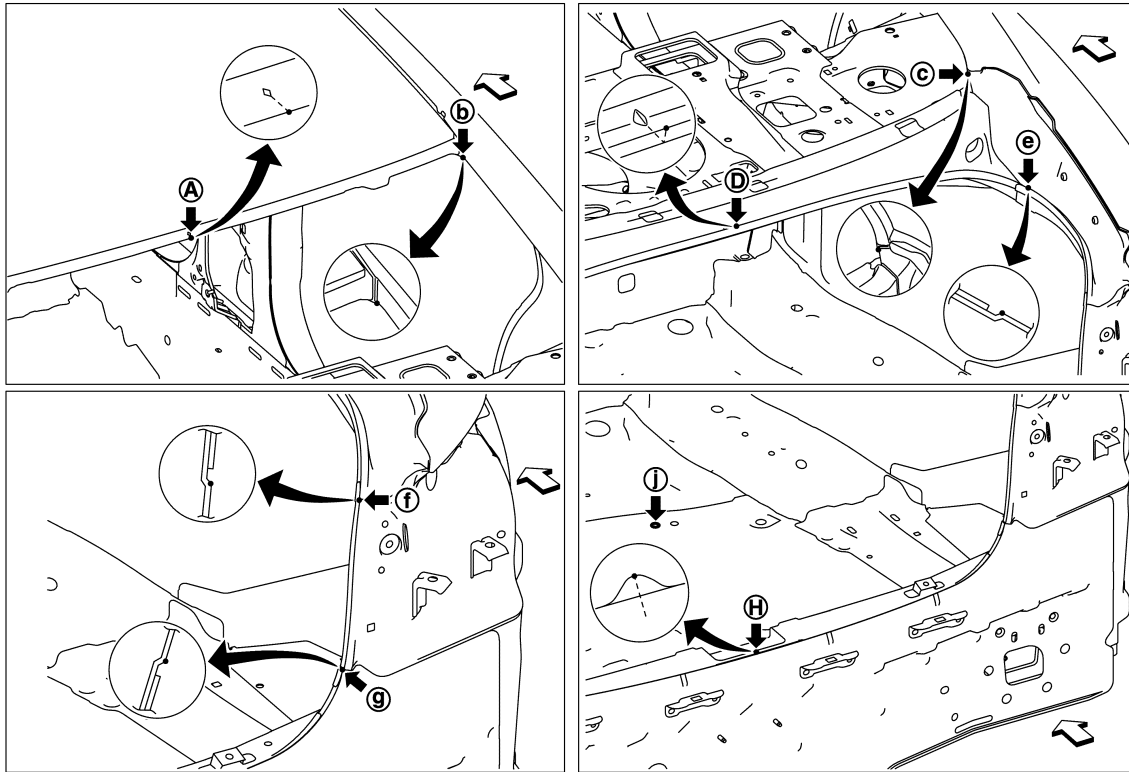
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
Ⓐ – Ⓔ	916 (36.06)*		Ⓔ – ⓙ	726 (28.58)*		ⓖ – ⓓ	469 (18.46)*	
Ⓐ – ⓖ	1207 (47.52)*		Ⓔ – ⓙ	995 (39.17)*		ⓖ – ⓙ	750 (29.53)*	
Ⓐ – ⓓ	1190 (46.85)		ⓕ – ⓕ	1019 (40.12)		ⓖ – ⓙ	981 (38.62)*	
Ⓒ – ⓔ	1108 (43.62)*		ⓕ – ⓓ	573 (22.56)*		ⓓ – ⓙ	754 (29.68)*	
ⓓ – ⓕ	592 (23.31)*		ⓕ – ⓙ	801 (31.54)*				
ⓓ – ⓙ	725 (28.54)*		ⓕ – ⓙ	1041 (40.98)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3283ZZ

←: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
(A)	Roof flange end of center positioning mark	(F) (f) (G) (g)	Rear combination lamp base joggle
(B) (b)	Outer side body joggle	(H)	Upper rear panel indent of center positioning mark
(C) (c) (E) (e)	Rear fender corner joggle	(J) (j)	Rear floor rear hole center $\phi 12$ (0.47)
(D)	Rear waist flange end of center positioning mark		

BRM

AWD

AWD : Body Center Marks

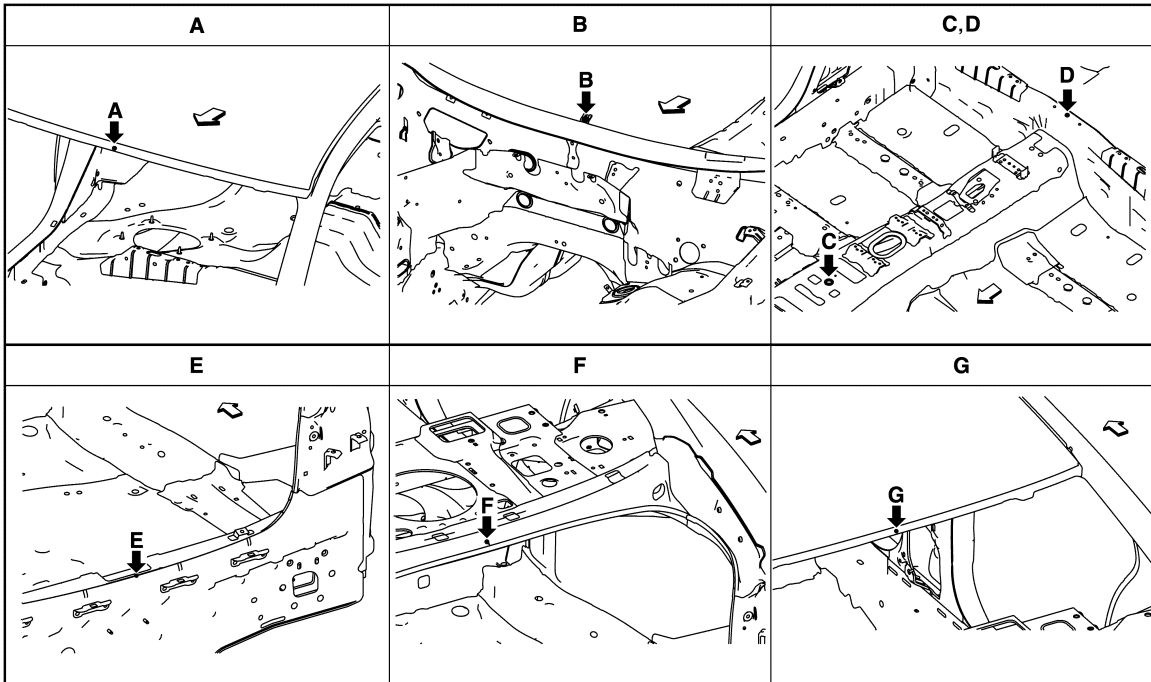
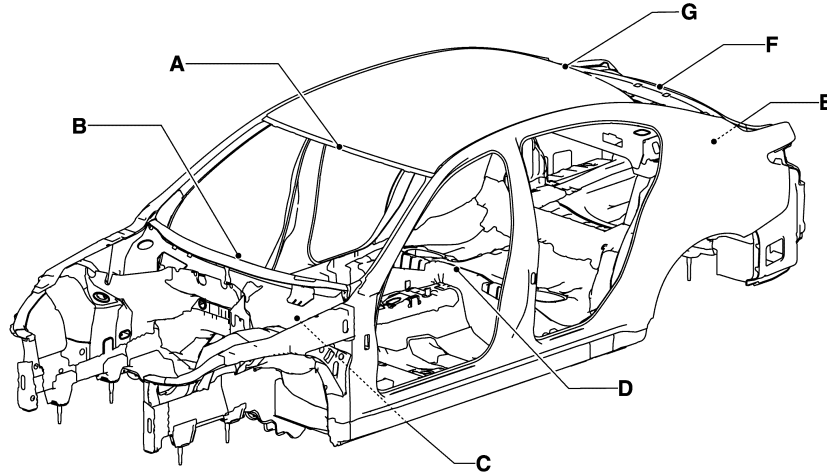
INFOID:000000009374988

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.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3284ZZ

↩: Vehicle front

Unit: mm (in)

Points	Portion	Marks
A	Front roof	Embossment
B	Upper dash	Hole $\phi 8$ (0.31)
C	Trans control reinforcement	Hole 14×12 (0.55×0.47)
D	Rear seat crossmember reinforcement	Hole $\phi 5$ (0.20)
E	Upper rear panel	Indent
F	Rear waist	Bead
G	Rear roof	Embossment

AWD : Description

INFOID:000000009641397

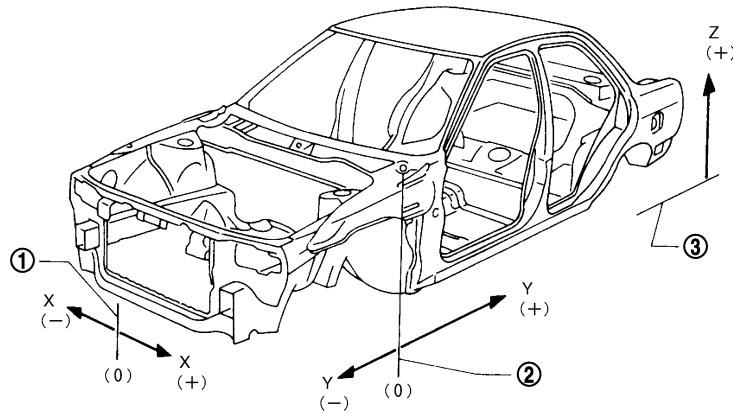
- All dimensions indicated in the figures are actual.

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

- 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

AWD : Engine Compartment

INFOID:000000009374990

MEASUREMENT

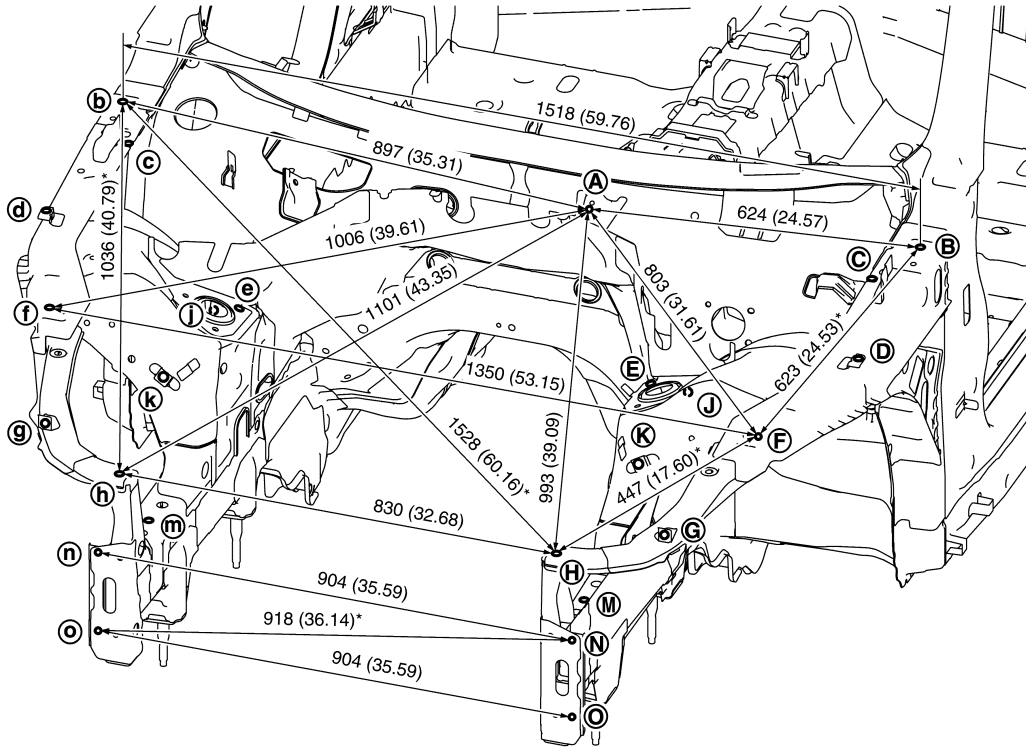
Dimensions marked with "*" indicate symmetrically identical dimensions on both the right and left hand of the vehicle.

BRM

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3285GB

Unit: mm (in)

«The others»

Unit: mm (in)

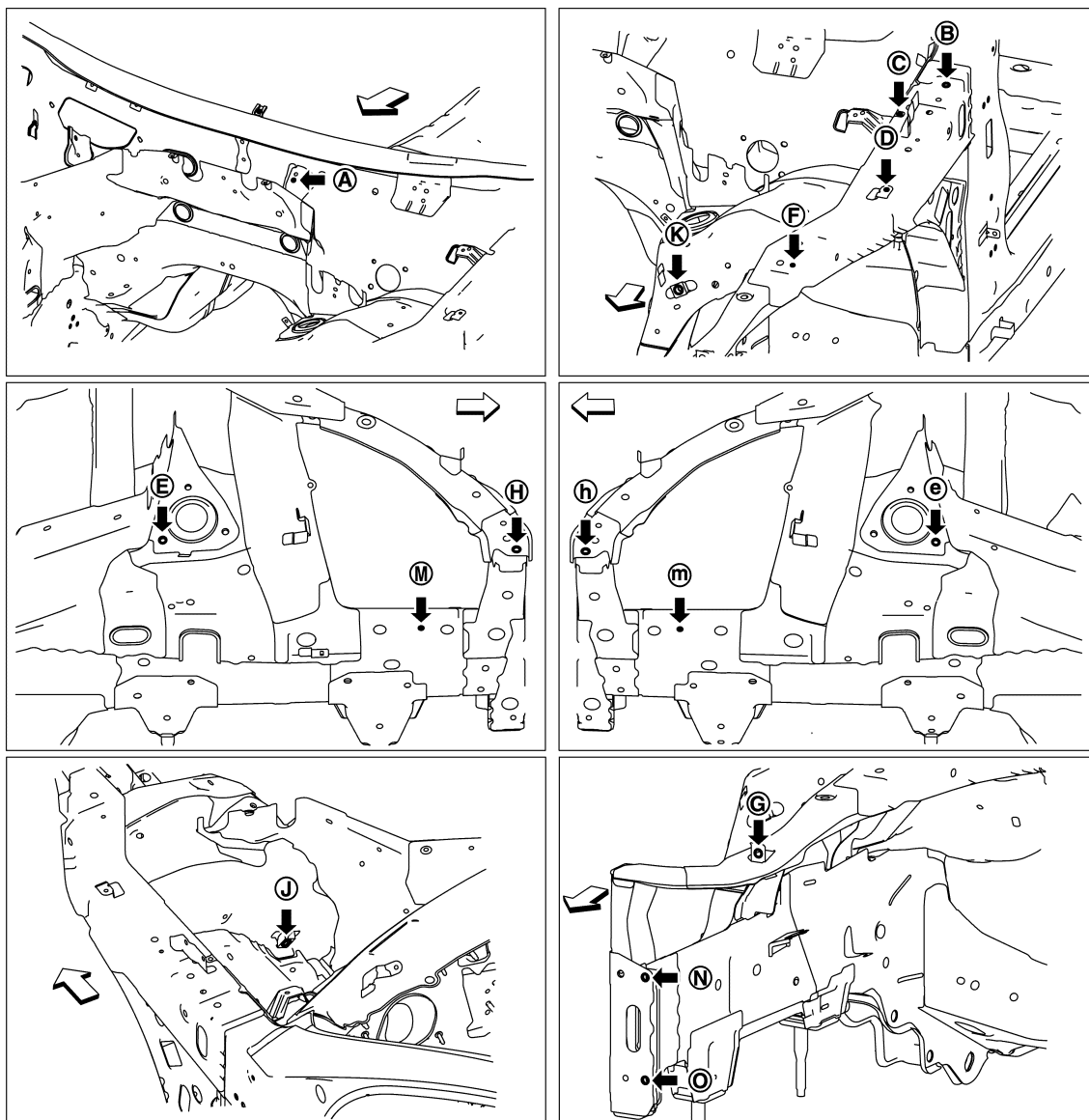
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
(A) – (C)	580 (22.83)		(B) – (E)	558 (21.97)*		(E) – (e)	786 (30.94)	
(A) – (C)	850 (33.46)		(B) – (e)	1227 (48.31)*		(E) – (h)	985 (38.78)*	
(A) – (D)	722 (28.43)		(B) – (f)	1561 (61.46)*		(E) – (m)	934 (36.77)*	
(A) – (d)	971 (38.23)		(B) – (J)	497 (19.57)*		(F) – (h)	1149 (45.24)*	
(A) – (E)	469 (18.46)		(C) – (C)	1416 (55.75)		(G) – (g)	1179 (46.42)	
(A) – (e)	659 (25.94)		(C) – (F)	504 (19.84)*		(G) – (H)	197 (7.76)*	
(A) – (G)	975 (38.39)		(C) – (f)	1472 (57.95)*		(G) – (N)	254 (10.00)*	
(A) – (g)	1128 (44.41)		(C) – (H)	912 (35.91)*		(J) – (j)	906 (35.67)	
(A) – (M)	898 (35.35)		(C) – (h)	1417 (55.79)*		(K) – (k)	906 (35.67)	
(A) – (m)	1017 (40.04)		(D) – (d)	1544 (60.79)		(M) – (m)	833 (32.80)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3286ZZ

↩: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
(A)	Wiper mounting bracket hole center $\phi 7$ (0.28)	(F) (f)	Hoodledge reinforcement hole center $\phi 6$ (0.24)
(B) (b)	Hood hinge installing hole center $\phi 12$ (0.47)	(H) (h)	Side radiator core support hole center $\phi 12$ (0.47)
(C) (c)	Upper hoodledge hole center $\phi 8$ (0.31)	(J) (j) (K) (k)	Nut holder hole center $\phi 16$ (0.63)
(D) (d) (G) (g)	Front fender installing hole center (D) (d): $\phi 7$ (0.28) (G) (g): $\phi 12$ (0.47)	(M) (m)	Front side member hole center $\phi 7$ (0.28)
(E) (e)	Front strut installing hole center $\phi 11$ (0.43)	(N) (n) (O) (o)	Front bumper stay installing hole center $\phi 11$ (0.43)

AWD : Underbody

INFOID:000000009238636

MEASUREMENT

Revision: 2013 October

BRM-109

2014 Q50

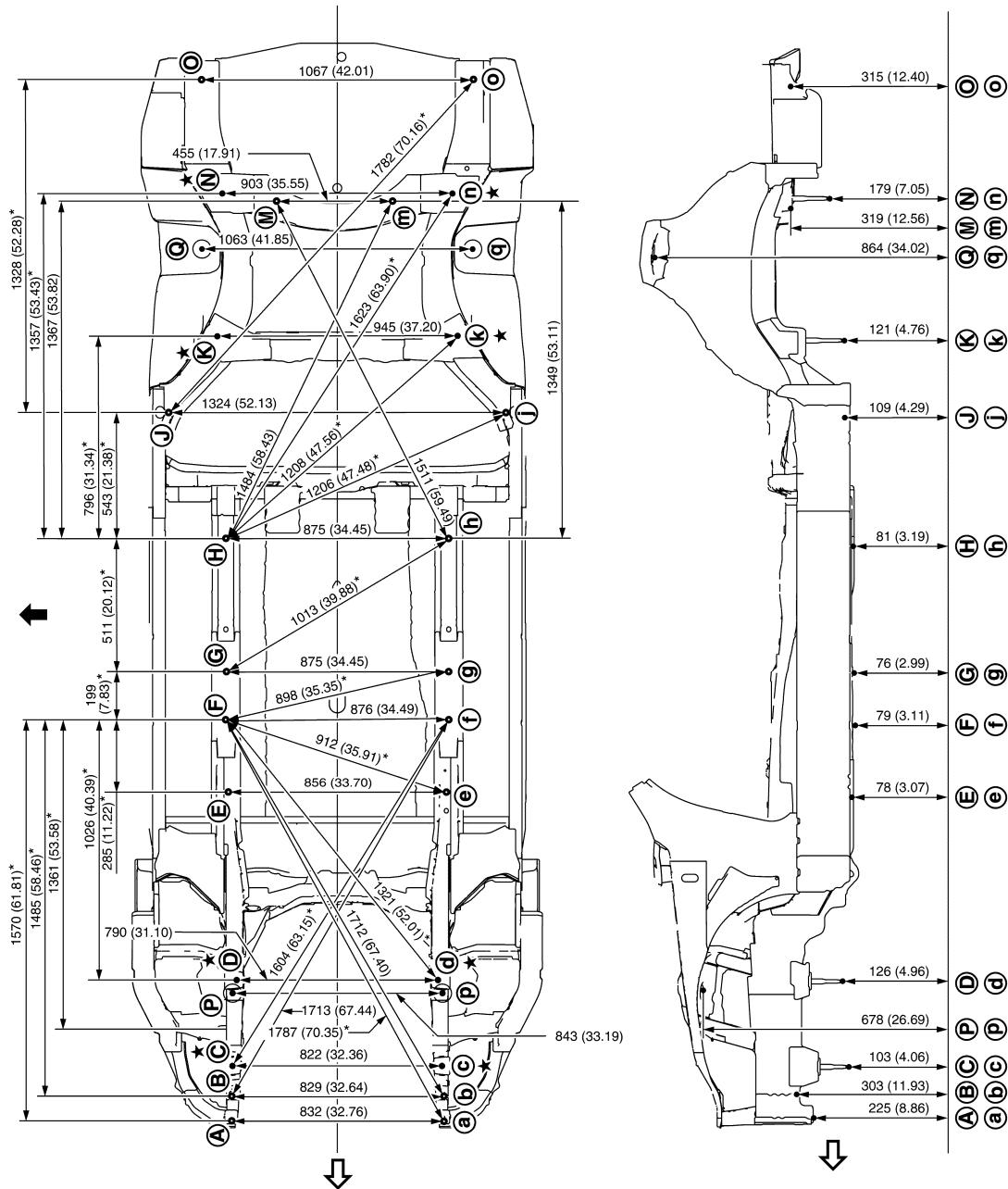
BRM

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.



JSKIA3287GB

Unit: mm (in)

↔: Vehicle front

←: Vehicle left side

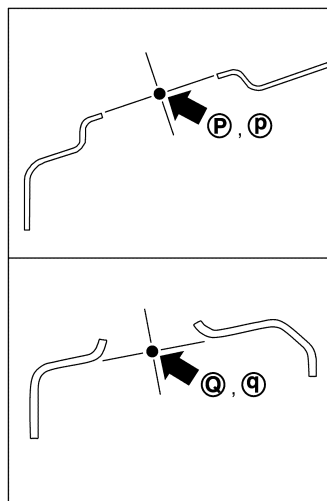
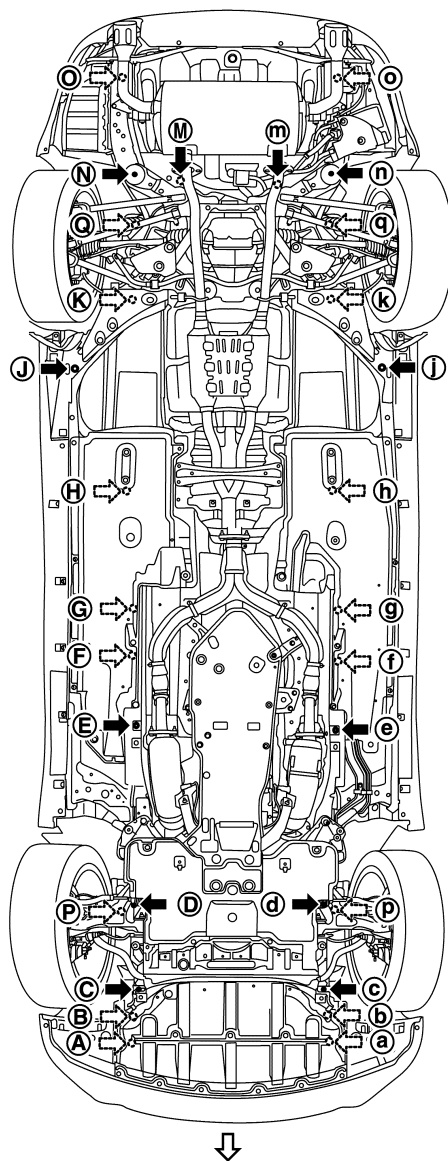
★: Bolt head

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

MEASUREMENT POINTS



↩: Vehicle front

JSKIA3288ZZ

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
(A) (a)	±415.8 (±16.370)	-463.0 (-18.228)	224.6 (8.843)	Hole φ13 (0.51)	(J) (j)	±662.0 (±26.063)	2304.0 (90.708)	108.5 (4.272)	Hole φ8 (0.31)
(B)	416.2 (16.386)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	(K) (k)	±472.6 (±18.606)	2603.8 (102.512)	120.8 (4.756)	Bolt head
(b)	-413.2 (-16.268)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	(M)	238.0 (9.370)	3141.0 (123.661)	318.6 (12.543)	Hole φ16 (0.63)
(C) (c)	±411.0 (±16.181)	-261.0 (-10.276)	103.3 (4.067)	Bolt head	(m)	-217.0 (-8.543)	3120.0 (122.834)	318.6 (12.543)	Hole 16×18 (0.63×0.71)
(D) (d)	±395.0 (±15.551)	76.0 (2.992)	126.3 (4.972)	Bolt head	(N) (n)	±451.5 (±17.776)	3163.9 (124.563)	179.0 (7.047)	Bolt head

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

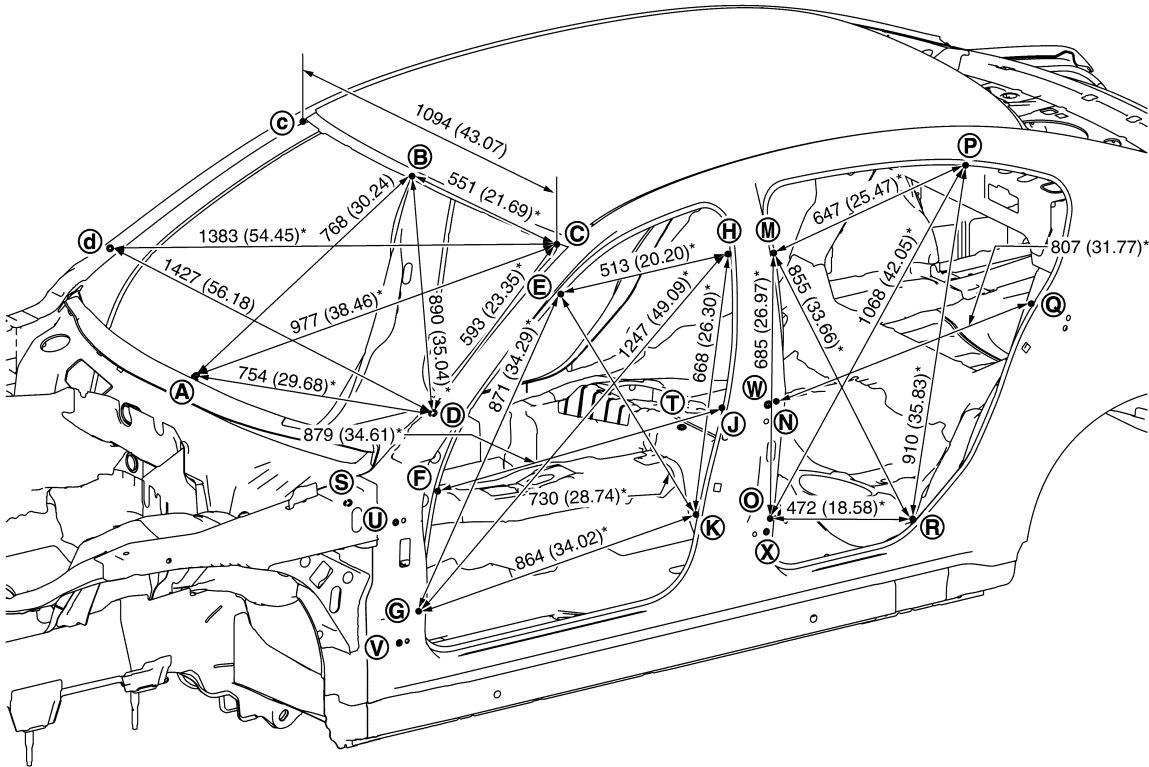
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
Ⓔ ⓔ	±428.0 (±16.850)	815.0 (32.087)	78.4 (3.087)	Hole 16×20 (0.63×0.79)	ⓐ ⓐ	±533.5 (±21.004)	3609.8 (142.118)	315.2 (12.409)	Hole 16×20 (0.63×0.79)
Ⓕ Ⓕ	±438.0 (±17.244)	1100.0 (43.307)	79.0 (3.110)	Hole φ16 (0.63)	ⓑ ⓑ	±421.6 (±16.598)	38.2 (1.504)	677.9 (26.689)	Hole φ50.1 (1.972)
Ⓖ Ⓖ	±437.5 (±17.224)	1299.0 (51.142)	76.1 (2.996)	Hole φ16 (0.63)	Ⓒ Ⓒ	±531.3 (±20.917)	2945.8 (115.976)	864.1 (34.020)	Hole φ71.8 (2.827)
Ⓗ Ⓗ	±437.5 (±17.224)	1810.0 (71.260)	81.2 (3.197)	Hole φ16 (0.63)					

AWD : Passenger Compartment

INFOID:000000009375265

MEASUREMENT

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



JSK1A3289GB

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
Ⓔ - ⓔ	1232 (48.50)		Ⓜ - Ⓡ	1619 (63.74)*		Ⓣ - Ⓜ	953 (37.52)*	
Ⓔ - ⓖ	1604 (63.15)*		Ⓝ - Ⓝ	1450 (57.09)		Ⓣ - Ⓝ	829 (32.64)*	
Ⓔ - ⓗ	1344 (52.91)*		Ⓝ - ⓓ	1637 (64.45)*		Ⓣ - Ⓞ	785 (30.91)*	
Ⓔ - Ⓚ	1529 (60.20)*		Ⓞ - Ⓞ	1477 (58.15)		Ⓣ - Ⓟ	1072 (42.20)*	
Ⓕ - ⓕ	1444 (56.85)		Ⓞ - Ⓟ	1682 (66.22)*		Ⓣ - Ⓠ	1003 (39.49)*	
Ⓕ - ⓖ	1693 (66.65)*		Ⓞ - Ⓡ	1555 (61.22)*		Ⓣ - Ⓡ	772 (30.39)*	
Ⓖ - ⓖ	1474 (58.03)		Ⓟ - Ⓟ	1144 (45.04)		Ⓤ - Ⓤ	1584 (62.36)	
Ⓖ - ⓗ	1844 (72.60)*		Ⓟ - Ⓡ	1590 (62.60)*		Ⓤ - Ⓦ	1164 (45.83)*	
Ⓖ - Ⓚ	1705 (67.13)*		Ⓠ - Ⓠ	1401 (55.16)		Ⓤ - Ⓧ	1157 (45.55)*	
ⓗ - ⓗ	1253 (49.33)		Ⓡ - Ⓡ	1485 (58.46)		Ⓥ - Ⓥ	1611 (63.43)	
ⓗ - Ⓚ	1511 (59.49)*		Ⓢ - Ⓔ	994 (39.13)*		Ⓥ - Ⓦ	1226 (48.27)*	
Ⓣ - Ⓣ	1450 (57.09)		Ⓢ - ⓕ	791 (31.14)*		Ⓥ - Ⓧ	1129 (44.45)*	
Ⓚ - Ⓚ	1466 (57.72)		Ⓢ - ⓖ	761 (29.96)*		Ⓦ - Ⓦ	1588 (62.52)	
Ⓜ - Ⓜ	1273 (50.12)		Ⓢ - ⓗ	1268 (49.92)*		Ⓧ - Ⓧ	1623 (63.90)	
Ⓜ - Ⓞ	1533 (60.35)*		Ⓢ - Ⓣ	1099 (43.27)*				
Ⓜ - Ⓟ	1369 (53.90)*		Ⓢ - Ⓚ	999 (39.33)*				

MEASUREMENT POINTS

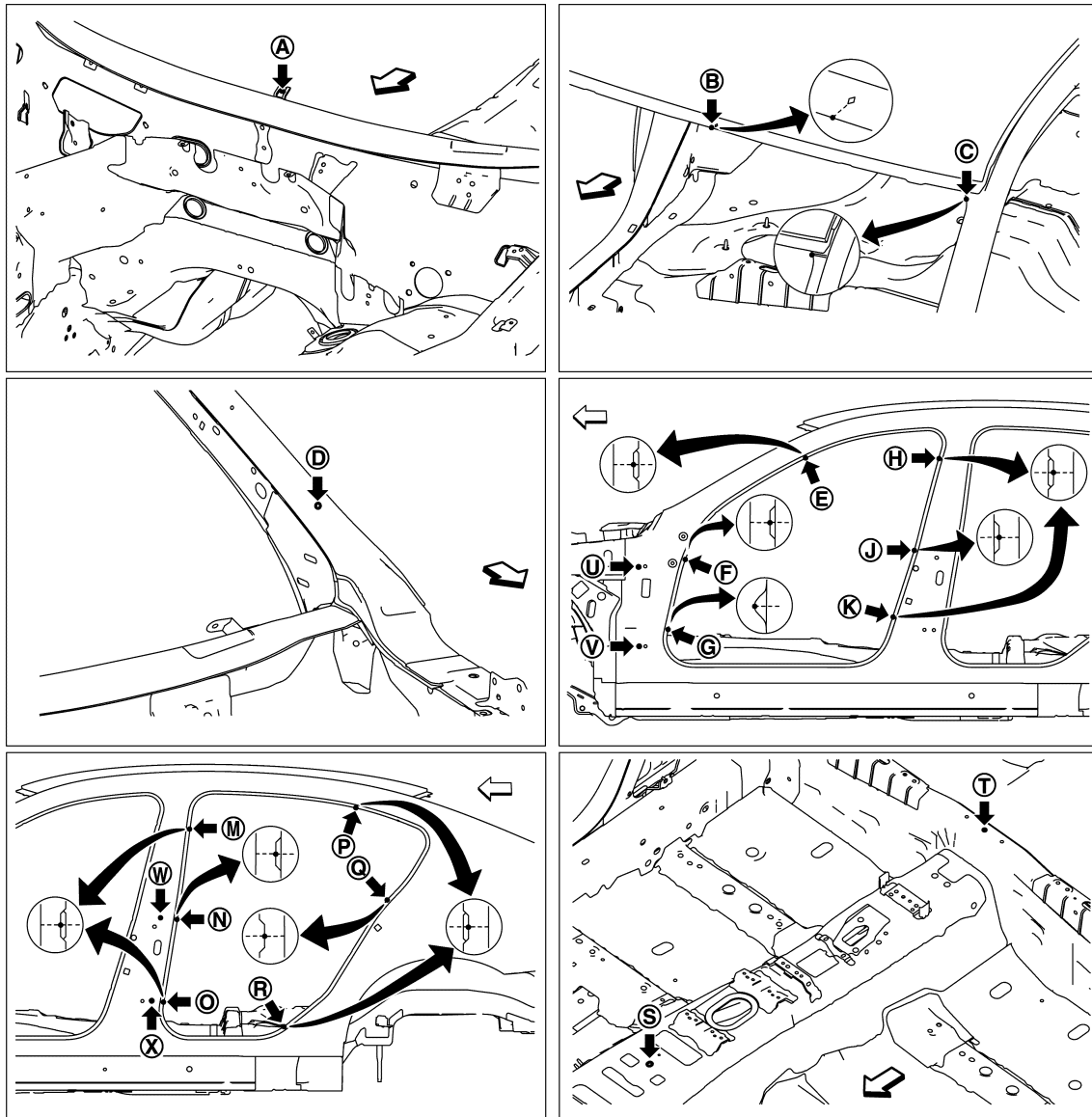
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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSK1A3290ZZ

↶: Vehicle front

Unit: mm (in)

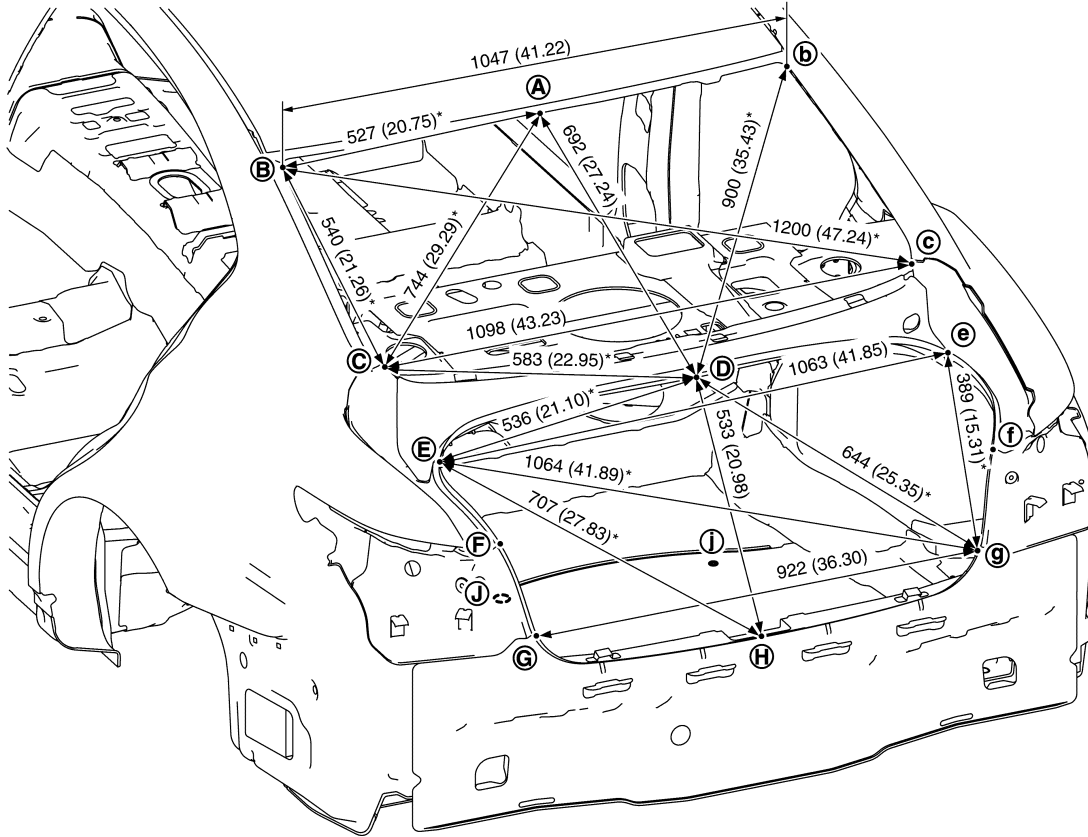
Point	Material	Point	Material
Ⓐ	Upper dash hole center of center positioning mark $\phi 8$ (0.31)	ⓓ ⓓ ⓓ ⓓ ⓓ ⓓ ⓔ ⓔ ⓔ ⓔ ⓔ ⓔ ⓕ ⓕ ⓕ ⓕ ⓕ ⓕ	Center pillar indent
Ⓑ	Roof flange end of center positioning mark	ⓖ ⓖ ⓖ ⓖ ⓗ ⓗ	Rear fender indent
Ⓒ Ⓒ	Outer side body joggle	ⓙ	Trans control reinforcement hole center of center positioning mark 14×12 (0.55×0.47)
Ⓓ Ⓓ	Outer side body hole center $\phi 4$ (0.16)	ⓚ	Rear seat crossmember reinforcement hole center of center positioning mark $\phi 5$ (0.20)
Ⓔ Ⓔ Ⓕ Ⓕ Ⓖ Ⓖ	Front pillar indent	ⓞ ⓞ ⓞ ⓞ ⓟ ⓟ ⓟ ⓟ	Door hinge installing hole center ⓞ ⓞ ⓞ ⓞ ⓟ ⓟ: $\phi 12$ (0.47) ⓟ ⓟ: 11×9 (0.43×0.35)

AWD : Rear Body

INFOID:0000000009749711

MEASUREMENT

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



JSKIA3282GB

Unit: mm (in)

«The others»

Unit: mm (in)

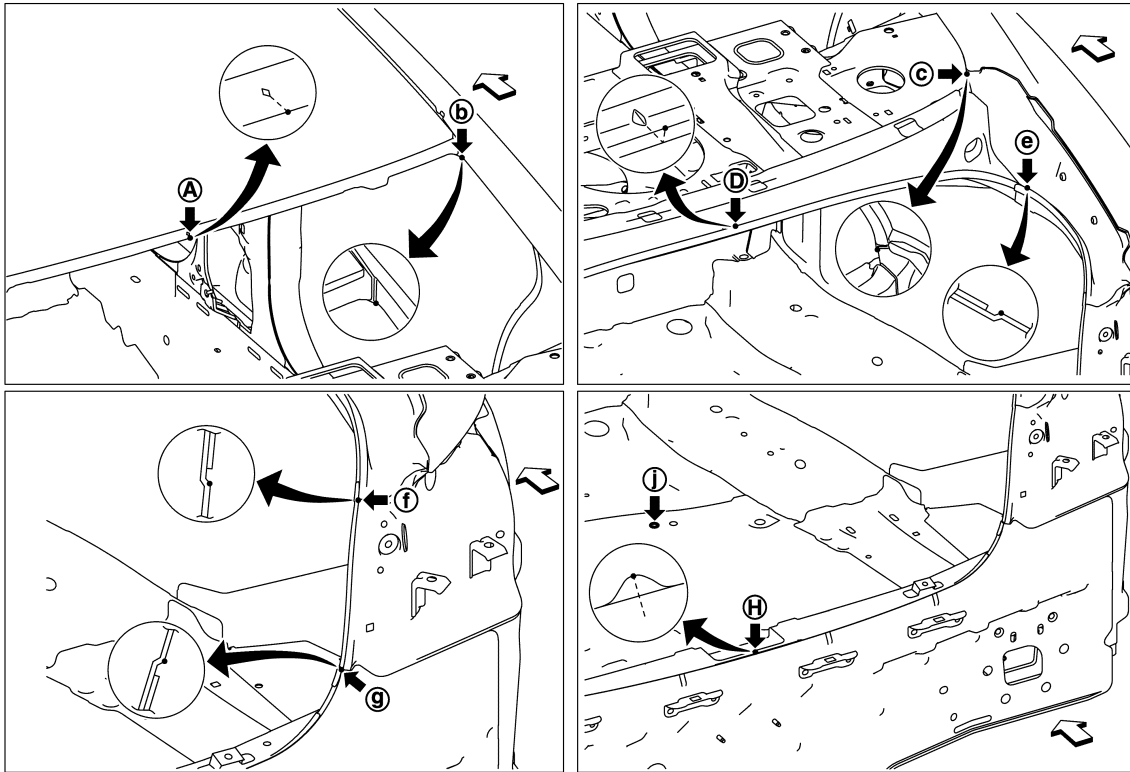
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
Ⓐ – Ⓔ	916 (36.06)*		Ⓔ – Ⓜ	726 (28.58)*		Ⓜ – Ⓢ	469 (18.46)*	
Ⓐ – Ⓜ	1207 (47.52)*		Ⓔ – Ⓢ	995 (39.17)*		Ⓜ – Ⓢ	750 (29.53)*	
Ⓐ – Ⓢ	1190 (46.85)		Ⓢ – Ⓢ	1019 (40.12)		Ⓜ – Ⓢ	981 (38.62)*	
Ⓒ – Ⓢ	1108 (43.62)*		Ⓢ – Ⓢ	573 (22.56)*		Ⓢ – Ⓢ	754 (29.68)*	
Ⓓ – Ⓢ	592 (23.31)*		Ⓢ – Ⓢ	801 (31.54)*				
Ⓓ – Ⓢ	725 (28.54)*		Ⓢ – Ⓢ	1041 (40.98)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3283ZZ

←: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
(A)	Roof flange end of center positioning mark	(F) (f) (G) (g)	Rear combination lamp base joggle
(B) (b)	Outer side body joggle	(H)	Upper rear panel indent of center positioning mark
(C) (c) (E) (e)	Rear fender corner joggle	(J) (j)	Rear floor rear hole center $\phi 12$ (0.47)
(D)	Rear waist flange end of center positioning mark		

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

LOCATION OF PLASTIC PARTS

Precautions for Plastics

INFOID:000000009726401

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.

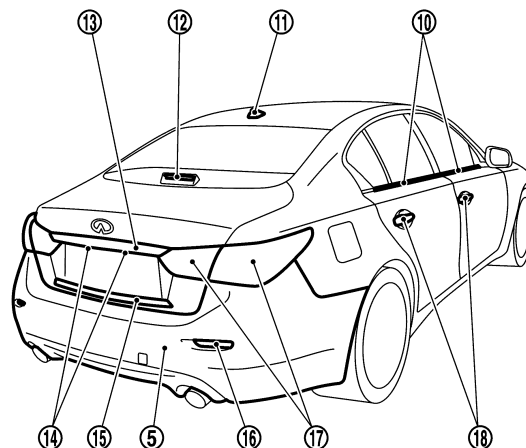
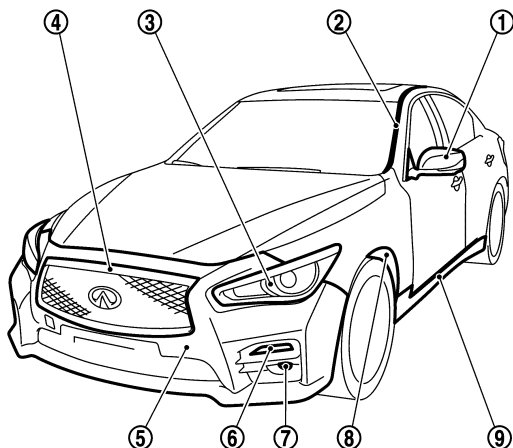
LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]

Location of Plastic Parts

INFOID:000000009726400



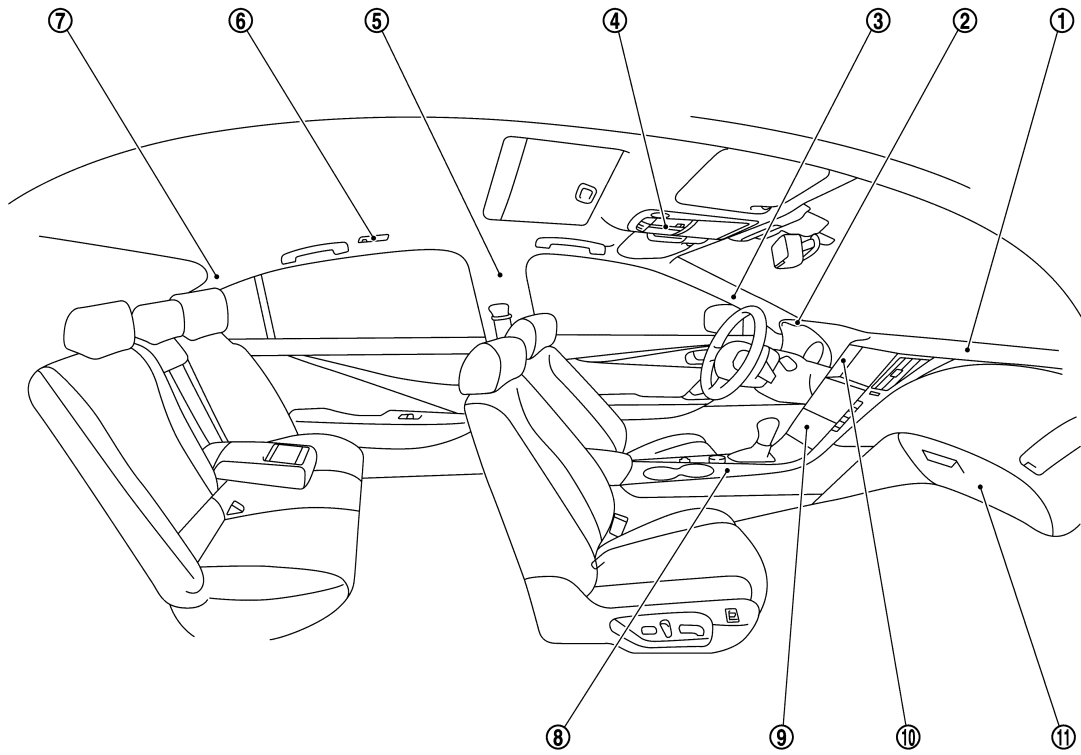
JSKIA3291ZZ

Component			Material	Component			Material	
①	Door mirror	Cover	ABS	⑧	Front fender protector		PP	
		Base	PA	⑨	Sill cover		PP + EPM	
		With cam- era	Housing	ABS	⑩	Door outside molding		PVC + Stainless
			finisher	ABS	⑪	Antenna base cover		ASA + PC
		Without camera	Housing	ASA	⑫	High mount stop lamp	Lens	PC
			finisher	ASA			Housing	PC + ABS
	Side turn signal lamp	Lens	PMMA	⑬	Trunk lid finisher	Outer	ABS	
		Housing	ABS			Inner	ASA	
	②	Side roof molding		PVC + Stainless	⑭	License plate lamp	Lens	PC
Lower side molding		ASA	Housing	PC				
③	Front combination lamp	Lens	PC	⑮	Trunk lid molding		ABS	
		Housing	PP					
④	Front grille		ABS	⑯	Reflex reflector	Lens	PMMA	
						Housing	ABS	
⑤	Bumper fascia		PP + EPM	⑰	Rear combination lamp	Lens	PMMA	
⑥	Front turn signal lamp	Lens	PC			Housing	ABS + ASA	
		Housing	PC	⑱	Door outside handle	Grip body	PC + PET	
⑦	Front fog lamp	Lens	PC			Grip finisher	ABS	
		Housing	PBT + ASA + Glass fiber					

LOCATION OF PLASTIC PARTS

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR USA AND CANADA]



JSKIA3292ZZ

Component			Material	Component			Material		
①	Instrument panel		Skin	TPU	⑧	Center con- sole	Body		PP
			Pad	PUR			Console box		ABS
			Core	PP + EPDM			Console lid	Insert lid	PC + ABS
②	Cluster lid A		PP	Inner lid				PP	
③	Front pillar garnish		Base	PP			Instrument side panel		PP + EPDM
			Skin	PET			Console finisher		PC + ABS
④	Map lamp	Switch finisher		PP			Upper rear console	Aluminum	PC + ABS
		Console		PP				Wood	PC + Glass fiber
	Lid box assembly			PC + ABS	⑨	Console finisher			ABS
⑤	Center pillar garnish		Base	PP	⑩	Instrument finisher C		Aluminum	PC + ABS
			Skin	PET				Wood	PC + Glass fiber
⑥	Personal lamp		Lens	PC	⑪	Side ventilator grille			PC + ABS
			Housing	PP		Glove box	Skin	PVC	
⑦	Rear pillar finisher		Base	PP			Pad	PUR	
			Skin	PET			Core	ABS	

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BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

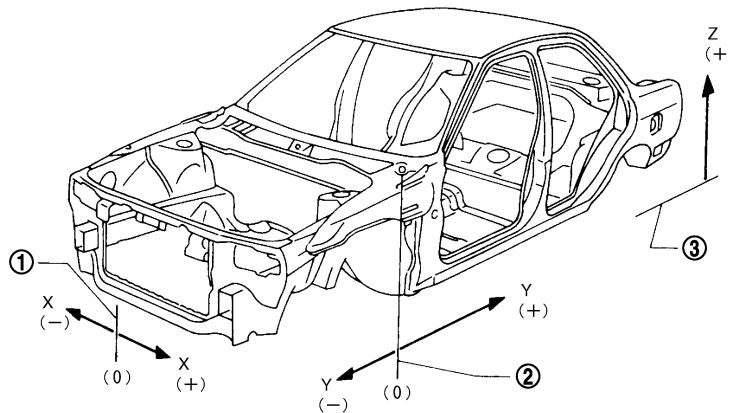
SERVICE DATA AND SPECIFICATIONS (SDS)

BODY ALIGNMENT

Description

INFOID:000000009759904

- 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:000000009759905

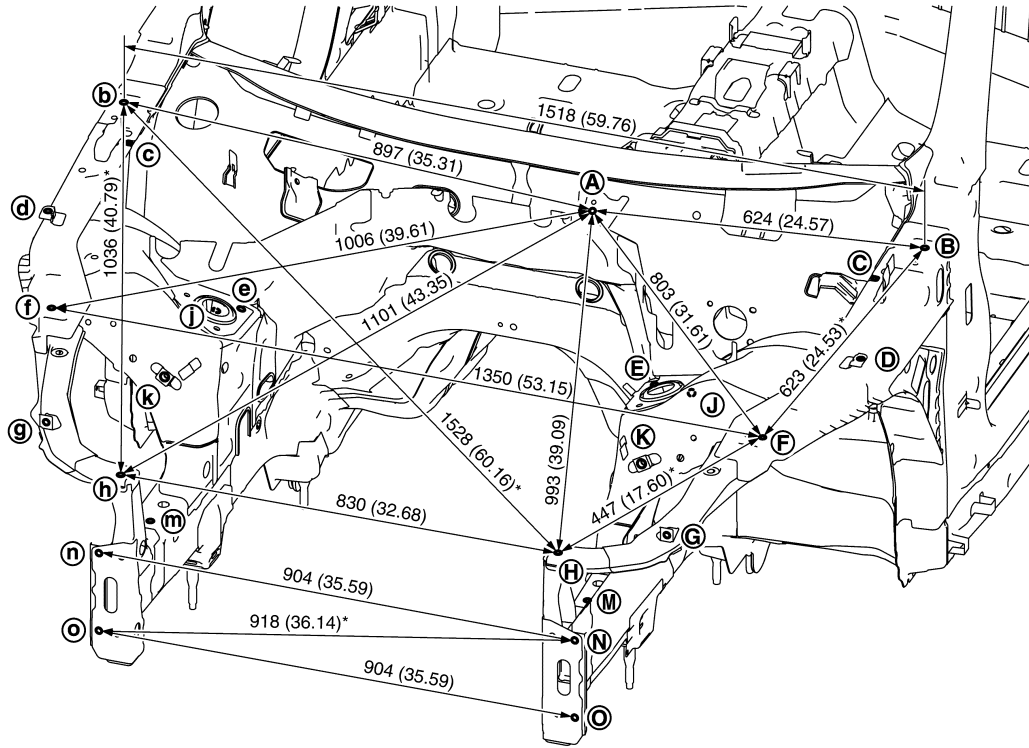
MEASUREMENT

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]



JSKIA3276GB

Unit: mm (in)

«The others»

Unit: mm (in)

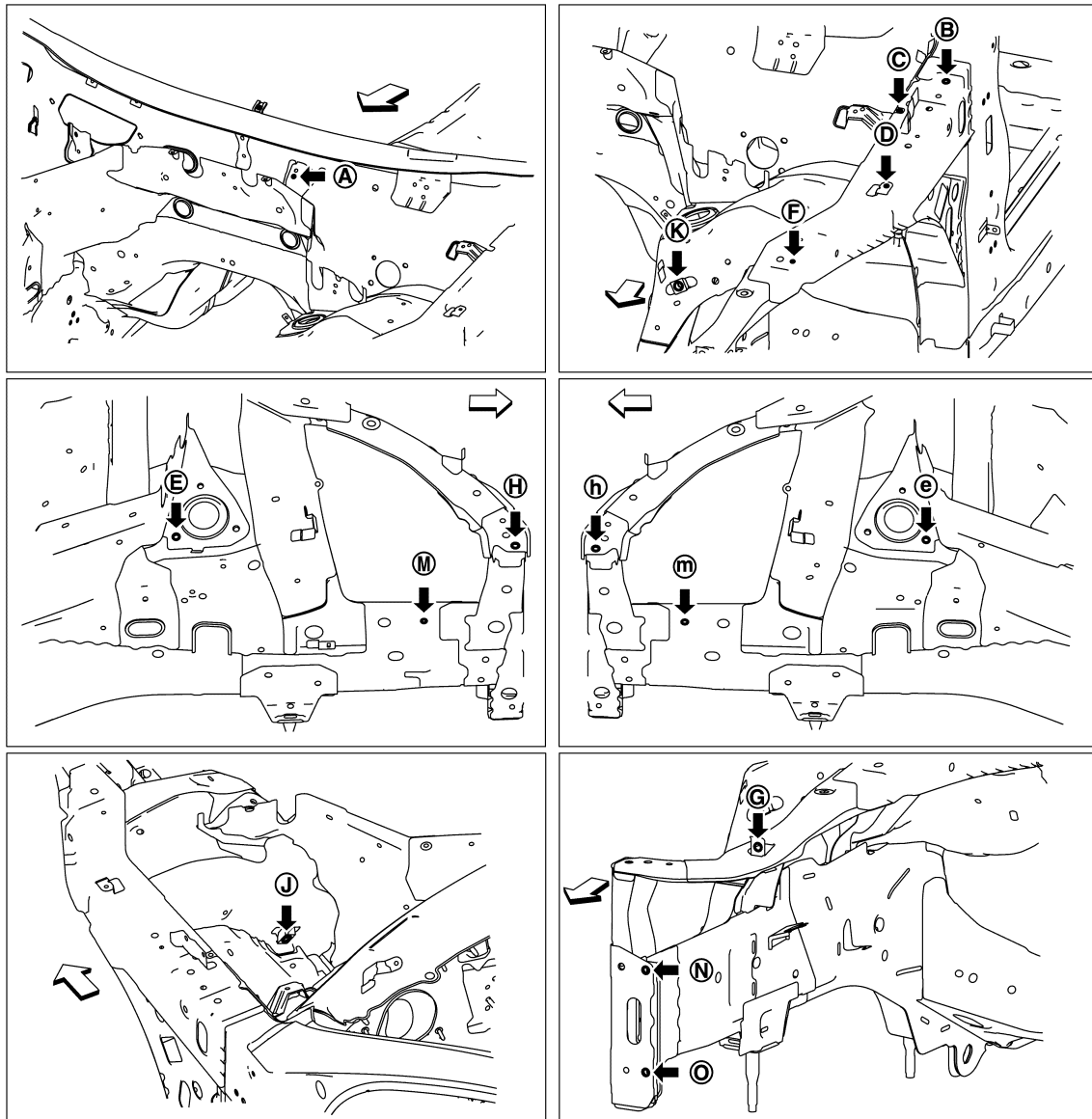
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
(A) – (C)	580 (22.83)		(B) – (E)	558 (21.97)*		(E) – (e)	786 (30.94)	
(A) – (c)	850 (33.46)		(B) – (e)	1227 (48.31)*		(E) – (h)	985 (38.78)*	
(A) – (D)	722 (28.43)		(B) – (f)	1561 (61.46)*		(E) – (m)	934 (36.77)*	
(A) – (d)	971 (38.23)		(B) – (J)	488 (19.21)*		(F) – (h)	1149 (45.24)*	
(A) – (E)	469 (18.46)		(C) – (C)	1416 (55.75)		(G) – (g)	1179 (46.42)	
(A) – (e)	659 (25.94)		(C) – (F)	504 (19.84)*		(G) – (H)	197 (7.76)*	
(A) – (G)	975 (38.39)		(C) – (f)	1472 (57.95)*		(G) – (N)	254 (10.00)*	
(A) – (g)	1128 (44.41)		(C) – (H)	912 (35.91)*		(J) – (j)	903 (35.55)	
(A) – (M)	898 (35.35)		(C) – (h)	1417 (55.79)*		(K) – (k)	903 (35.55)	
(A) – (m)	1017 (40.04)		(D) – (d)	1544 (60.79)		(M) – (m)	833 (32.80)	

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA3277ZZ

↩: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
(A)	Wiper mounting bracket hole center $\phi 7$ (0.28)	(F) (f)	Hoodledge reinforcement hole center $\phi 6$ (0.24)
(B) (b)	Hood hinge installing hole center $\phi 12$ (0.47)	(H) (h)	Side radiator core support hole center $\phi 12$ (0.47)
(C) (c)	Upper hoodledge hole center $\phi 8$ (0.31)	(J) (j) (K) (k)	Nut holder hole center $\phi 16$ (0.63)
(D) (d) (G) (g)	Front fender installing hole center (D) (d): $\phi 7$ (0.28) (G) (g): $\phi 12$ (0.47)	(M) (m)	Front side member hole center $\phi 7$ (0.28)
(E) (e)	Front strut installing hole center $\phi 11$ (0.43)	(N) (n) (O) (o)	Front bumper stay installing hole center $\phi 11$ (0.43)

Underbody

INFOID:000000009759906

MEASUREMENT

Revision: 2013 October

BRM-122

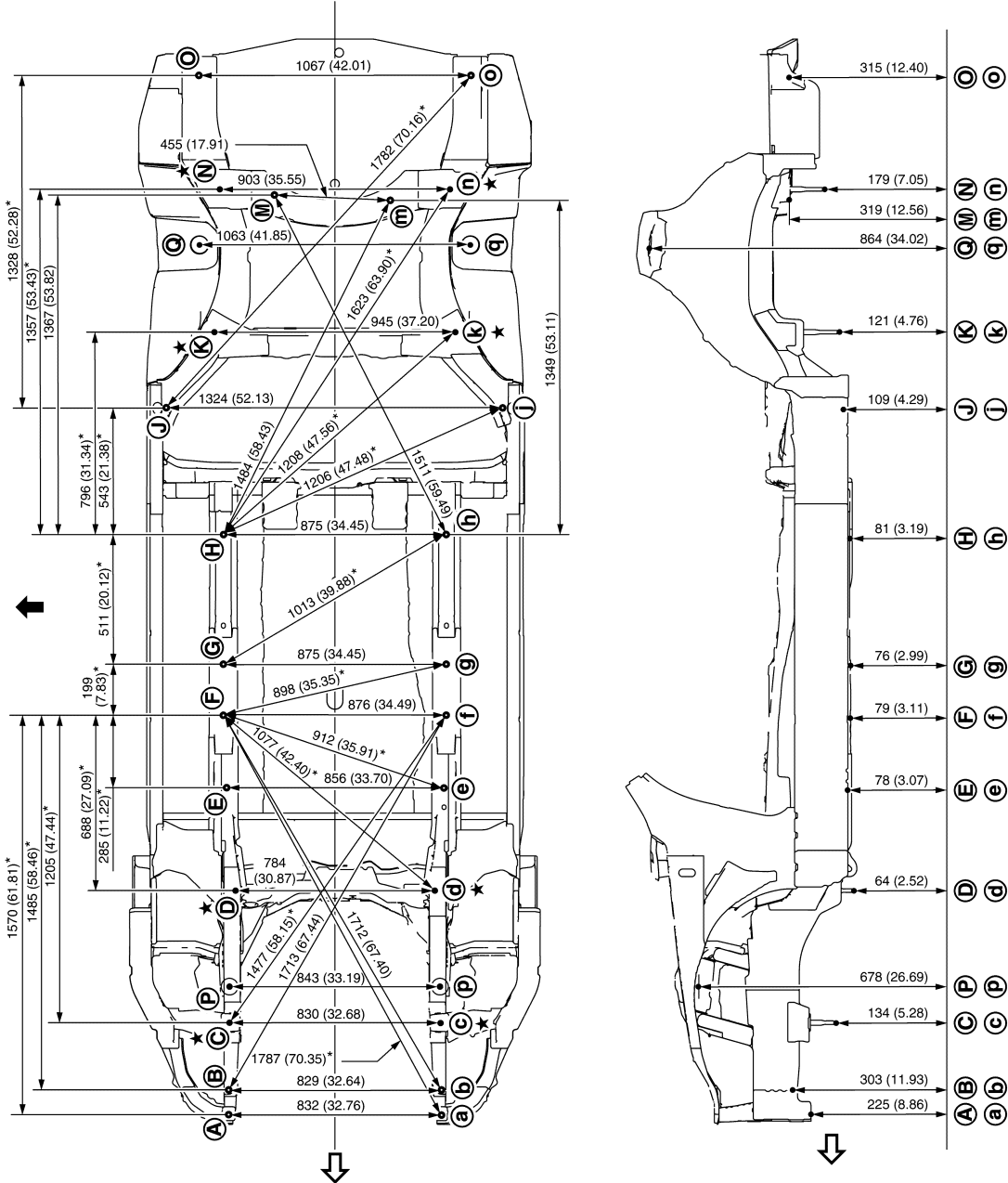
2014 Q50

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.



Unit: mm (in)

↔ Vehicle front

← Vehicle left side

★ Bolt head

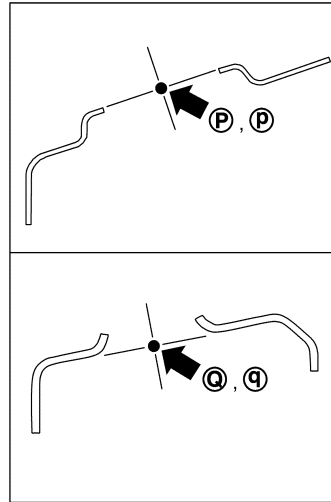
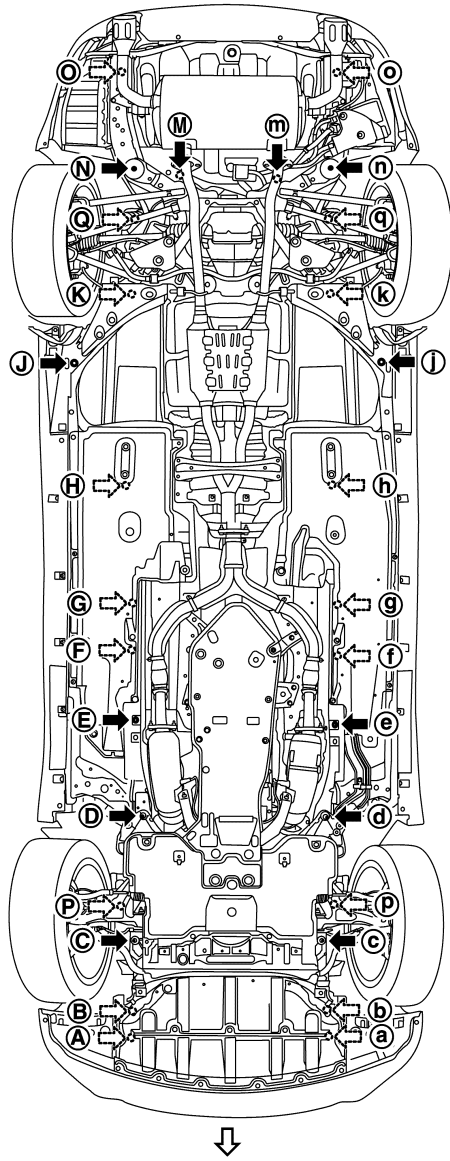
JSKIA3278GB

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

MEASUREMENT POINTS



JSK1A3279ZZ

↩: Vehicle front

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
Ⓐ Ⓐ	±415.8 (±16.370)	-463.0 (-18.228)	224.6 (8.843)	Hole φ13 (0.51)	ⓐ ⓐ	±662.0 (±26.063)	2304.0 (90.708)	108.5 (4.272)	Hole φ8 (0.31)
Ⓑ Ⓑ	416.2 (16.386)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	ⓑ ⓑ	±472.6 (±18.606)	2603.8 (102.512)	120.8 (4.756)	Bolt head
Ⓒ Ⓒ	-413.2 (-16.268)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	ⓓ ⓓ	238.0 (9.370)	3141.0 (123.661)	318.6 (12.543)	Hole φ16 (0.63)
Ⓓ Ⓓ	±415.0 (±16.339)	-104.0 (-4.094)	133.9 (5.272)	Bolt head	ⓔ ⓔ	-217.0 (-8.543)	3120.0 (122.834)	318.6 (12.543)	Hole 16×18 (0.63×0.71)
Ⓔ Ⓔ	±392.0 (±15.433)	414.0 (16.299)	64.3 (2.531)	Bolt head	ⓕ ⓕ	±451.5 (±17.776)	3163.9 (124.563)	179.0 (7.047)	Bolt head

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

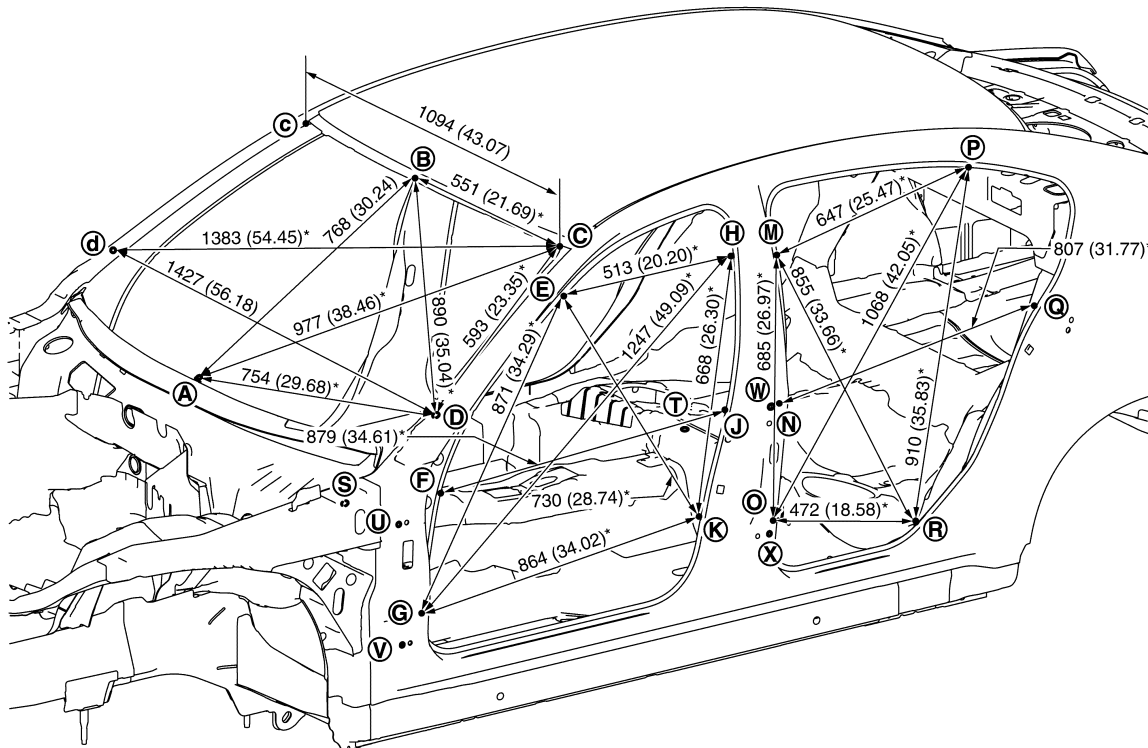
Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
Ⓔ Ⓜ	±428.0 (±16.850)	815.0 (32.087)	78.4 (3.087)	Hole 16×20 (0.63×0.79)	Ⓢ Ⓢ	±533.5 (±21.004)	3609.8 (142.118)	315.2 (12.409)	Hole 16×20 (0.63×0.79)
Ⓕ Ⓨ	±438.0 (±17.244)	1100.0 (43.307)	79.0 (3.110)	Hole φ16 (0.63)	Ⓟ Ⓟ	±421.6 (±16.598)	38.2 (1.504)	677.9 (26.689)	Hole φ50.1 (1.972)
Ⓖ Ⓢ	±437.5 (±17.224)	1299.0 (51.142)	76.1 (2.996)	Hole φ16 (0.63)	Ⓠ Ⓠ	±531.3 (±20.917)	2945.8 (115.976)	864.1 (34.020)	Hole φ71.8 (2.827)
Ⓗ Ⓗ	±437.5 (±17.224)	1810.0 (71.260)	81.2 (3.197)	Hole φ16 (0.63)					

Passenger Compartment

INFOID:000000009759907

MEASUREMENT

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



JSKIA3280GB

Unit: mm (in)

«The others»

BRM

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]

Unit: mm (in)

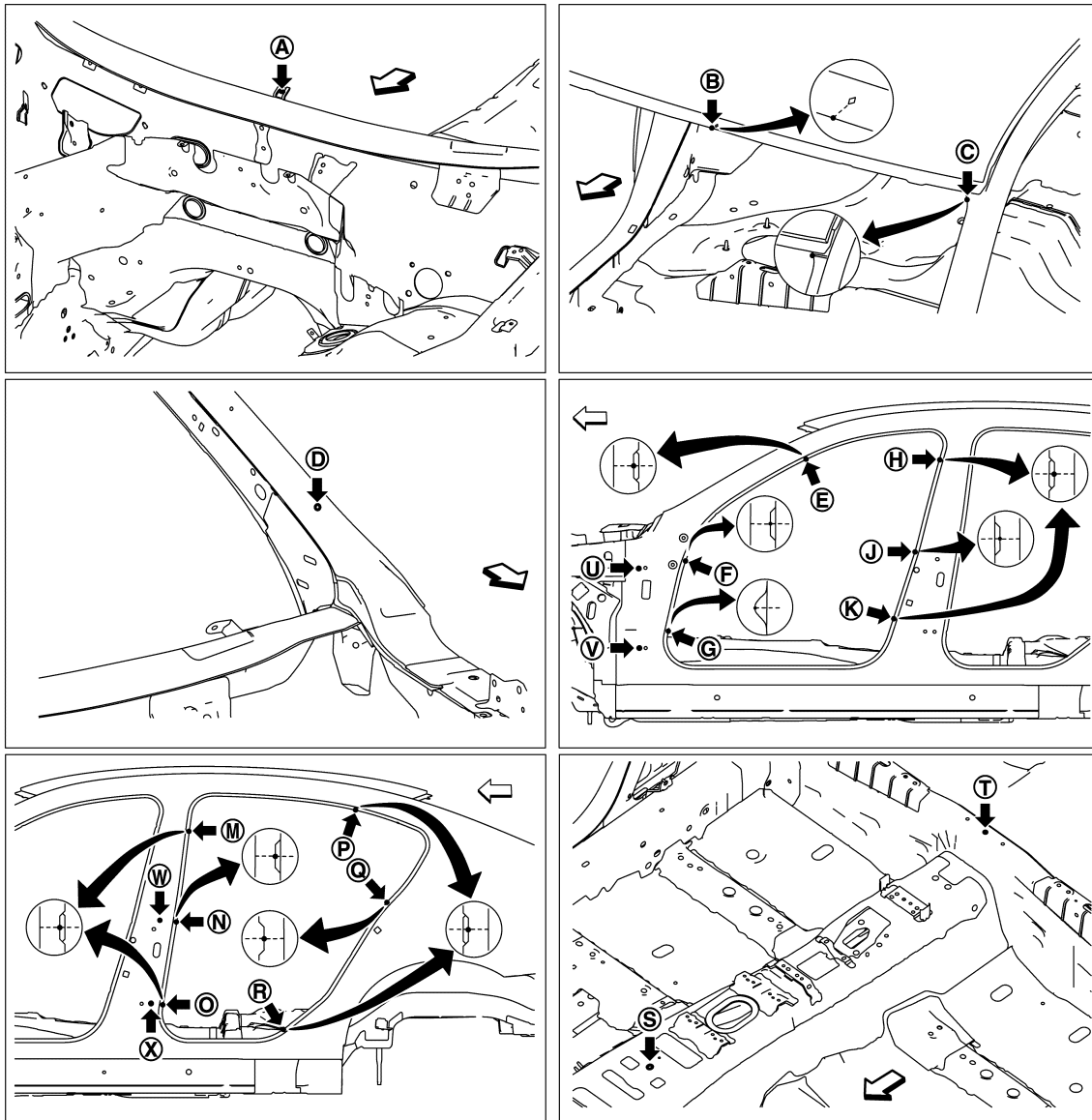
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
Ⓔ - ⓔ	1232 (48.50)		Ⓜ - Ⓡ	1619 (63.74)*		Ⓣ - Ⓜ	953 (37.52)*	
Ⓔ - ⓖ	1604 (63.15)*		Ⓝ - Ⓝ	1450 (57.09)		Ⓣ - Ⓝ	829 (32.64)*	
Ⓔ - ⓗ	1344 (52.91)*		Ⓝ - ⓓ	1637 (64.45)*		Ⓣ - Ⓞ	785 (30.91)*	
Ⓔ - Ⓚ	1529 (60.20)*		Ⓞ - Ⓞ	1477 (58.15)		Ⓣ - Ⓟ	1072 (42.20)*	
Ⓕ - Ⓕ	1444 (56.85)		Ⓞ - Ⓟ	1682 (66.22)*		Ⓣ - Ⓠ	1003 (39.49)*	
Ⓕ - Ⓛ	1693 (66.65)*		Ⓞ - Ⓡ	1555 (61.22)*		Ⓣ - Ⓡ	772 (30.39)*	
Ⓢ - ⓖ	1474 (58.03)		Ⓟ - Ⓟ	1144 (45.04)		Ⓤ - Ⓤ	1584 (62.36)	
Ⓢ - ⓗ	1844 (72.60)*		Ⓟ - Ⓡ	1590 (62.60)*		Ⓤ - Ⓦ	1164 (45.83)*	
Ⓢ - Ⓚ	1705 (67.13)*		Ⓠ - Ⓠ	1401 (55.16)		Ⓤ - Ⓧ	1157 (45.55)*	
ⓗ - ⓗ	1253 (49.33)		Ⓡ - Ⓡ	1485 (58.46)		Ⓥ - Ⓥ	1611 (63.43)	
ⓗ - Ⓚ	1511 (59.49)*		Ⓢ - Ⓔ	994 (39.13)*		Ⓥ - Ⓦ	1226 (48.27)*	
Ⓣ - Ⓣ	1450 (57.09)		Ⓢ - Ⓕ	791 (31.14)*		Ⓥ - Ⓧ	1129 (44.45)*	
Ⓚ - Ⓚ	1466 (57.72)		Ⓢ - Ⓢ	761 (29.96)*		Ⓦ - Ⓦ	1588 (62.52)	
Ⓜ - Ⓜ	1273 (50.12)		Ⓢ - ⓗ	1268 (49.92)*		Ⓧ - Ⓧ	1623 (63.90)	
Ⓜ - Ⓞ	1533 (60.35)*		Ⓢ - Ⓣ	1099 (43.27)*				
Ⓜ - Ⓟ	1369 (53.90)*		Ⓢ - Ⓚ	999 (39.33)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA3281ZZ

↶: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
Ⓐ	Upper dash hole center of center positioning mark $\phi 8$ (0.31)	Ⓗ Ⓖ Ⓙ ⓫ Ⓚ Ⓛ Ⓜ Ⓝ Ⓝ Ⓞ Ⓟ	Center pillar indent
Ⓑ	Roof flange end of center positioning mark	Ⓟ Ⓠ Ⓡ Ⓢ Ⓡ Ⓣ	Rear fender indent
Ⓒ Ⓒ	Outer side body joggle	Ⓢ	Trans control reinforcement hole center of center positioning mark 14×12 (0.55×0.47)
Ⓓ Ⓓ	Outer side body hole center $\phi 4$ (0.16)	Ⓣ	Rear seat crossmember reinforcement hole center of center positioning mark $\phi 5$ (0.20)
Ⓔ Ⓔ Ⓕ Ⓖ Ⓖ Ⓖ	Front pillar indent	Ⓤ Ⓤ Ⓟ Ⓟ Ⓟ Ⓟ Ⓡ Ⓡ Ⓡ Ⓡ: 11×9 (0.43×0.35)	Door hinge installing hole center Ⓤ Ⓤ Ⓟ Ⓟ Ⓡ Ⓡ: $\phi 12$ (0.47) Ⓡ Ⓡ: 11×9 (0.43×0.35)

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

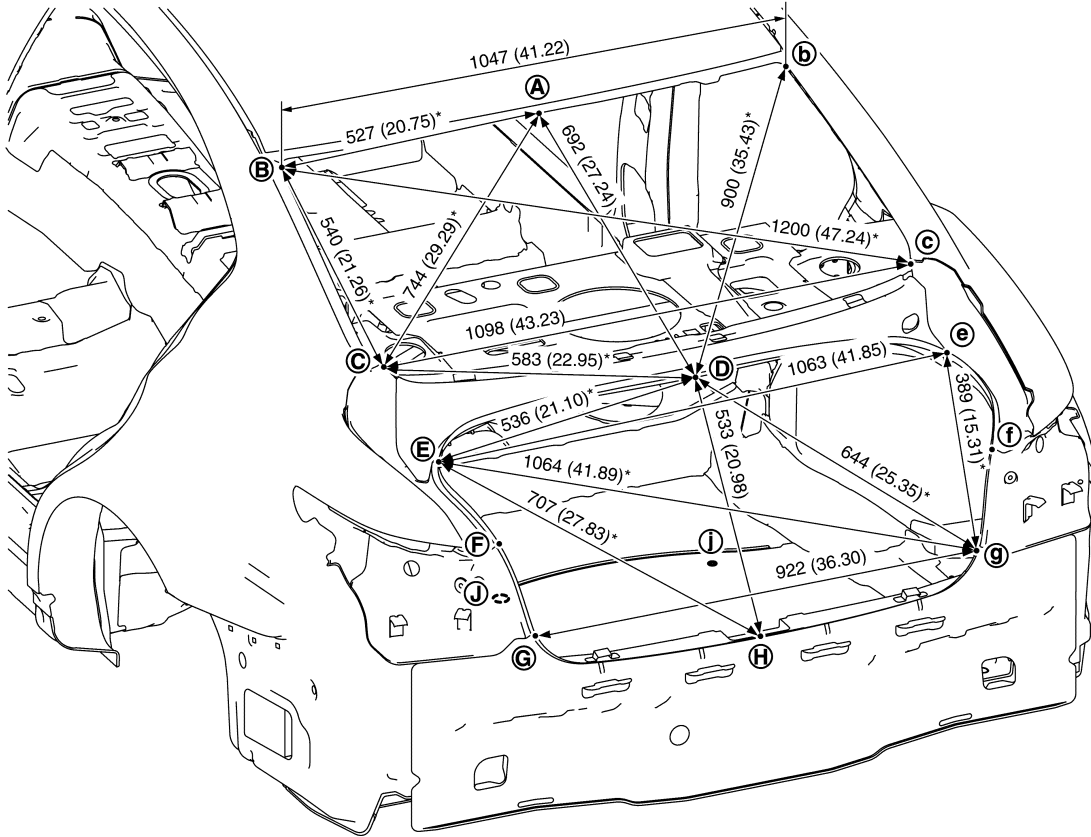
[FOR MEXICO]

Rear Body

INFOID:000000009759908

MEASUREMENT

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



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Unit: mm (in)

«The others»

Unit: mm (in)

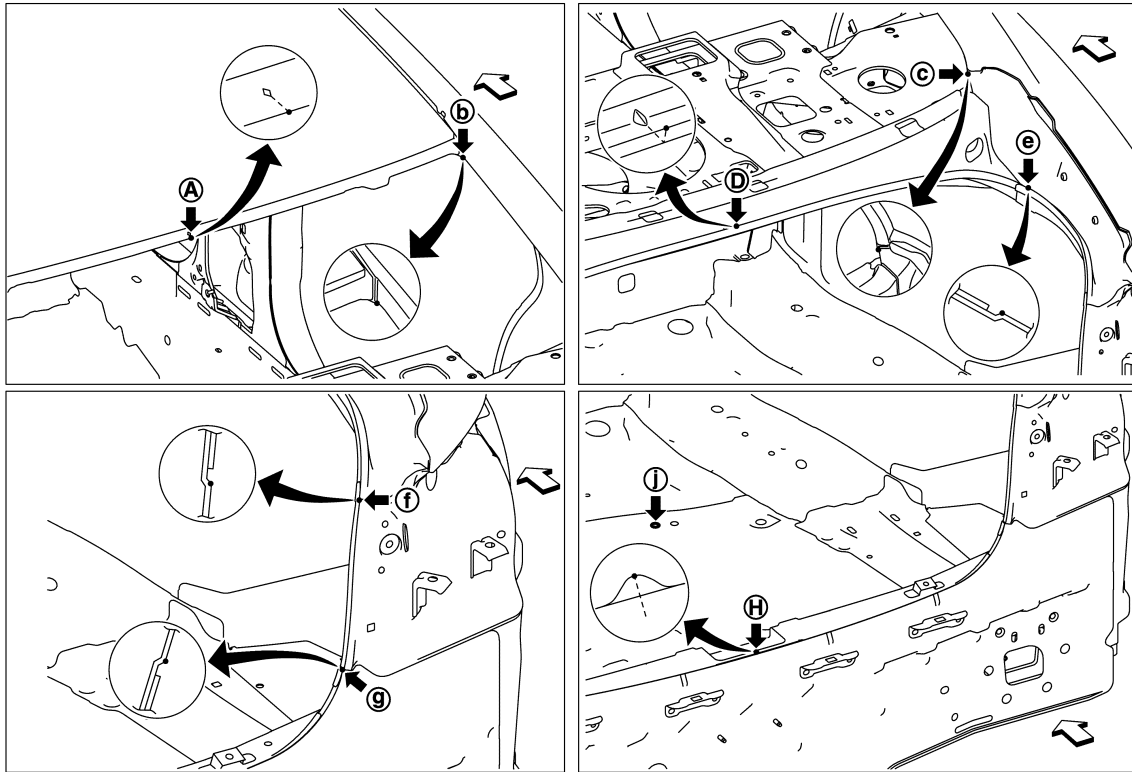
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
(A) – (E)	916 (36.06)*		(E) – (J)	726 (28.58)*		(G) – (H)	469 (18.46)*	
(A) – (G)	1207 (47.52)*		(E) – (I)	995 (39.17)*		(G) – (J)	750 (29.53)*	
(A) – (H)	1190 (46.85)		(F) – (f)	1019 (40.12)		(G) – (I)	981 (38.62)*	
(C) – (e)	1108 (43.62)*		(F) – (H)	573 (22.56)*		(H) – (J)	754 (29.68)*	
(D) – (F)	592 (23.31)*		(F) – (J)	801 (31.54)*				
(D) – (J)	725 (28.54)*		(F) – (I)	1041 (40.98)*				

MEASUREMENT POINTS

BODY ALIGNMENT

< SERVICE DATA AND SPECIFICATIONS (SDS)

[FOR MEXICO]



JSKIA3283ZZ

←: Vehicle front

Unit: mm (in)

Point	Material	Point	Material
Ⓐ	Roof flange end of center positioning mark	Ⓕ Ⓖ Ⓖ Ⓖ	Rear combination lamp base joggle
Ⓑ Ⓑ	Outer side body joggle	Ⓗ	Upper rear panel indent of center positioning mark
Ⓒ Ⓒ Ⓔ Ⓔ	Rear fender corner joggle	Ⓙ Ⓙ	Rear floor rear hole center $\phi 12$ (0.47)
Ⓓ	Rear waist flange end of center positioning mark		

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