

SECTION

BRM

BODY REPAIR

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BODY EXTERIOR PAINT COLOR

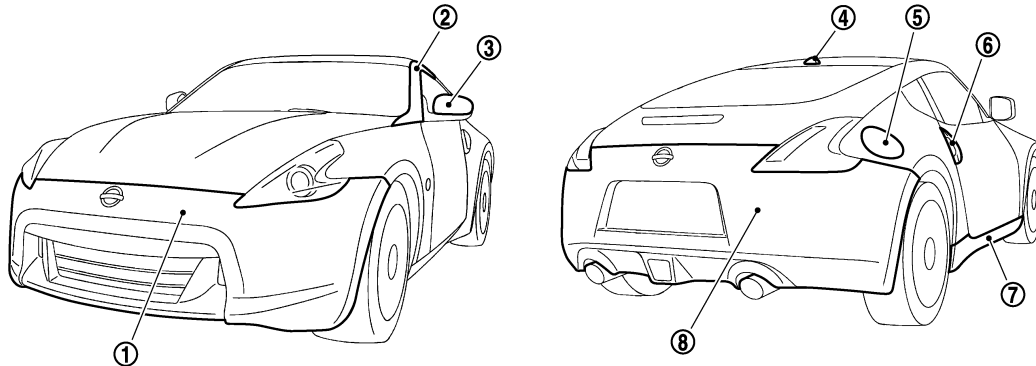
< FEATURES OF NEW MODEL >

FEATURES OF NEW MODEL

BODY EXTERIOR PAINT COLOR

Body Exterior Paint Color

INFOID:000000004609557



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Component			Color code	BA54	BEAC	BG41	BK23	BK51	BKAC*	BQAA	BRAE
			Description	Red	Yellow	Black	Silver	Gray	Brownish Gray	White	Blue
			Paint type ^{note}	CS	2S	P	M	M	TM	3P	3P
			Hard clear coat	×	-	×	-	-	-	-	×
1	Front bumper fascia	Body	Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
		Grille	Material color	-	-	-	-	-	-	-	-
2	Front pillar fin-isher		Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
3	Door outside mirror	Cover	Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
4	Satellite radio antenna		Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
5	Fuel filler lid		Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
6	Door outside handle and es-cutcheon		Velour chro-mium plate	Cr2p	Cr2p	Cr2p	Cr2p	Cr2p	Cr2p	Cr2p	Cr2p
7	Center mud-guard		Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE
8	Rear bumper fascia		Body color	BA54	BEAC	BG41	BK23	BK51	BKAC	BQAA	BRAE

NOTE:

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

BODY EXTERIOR PAINT COLOR

< FEATURES OF NEW MODEL >

- TM: Micro titanium metallic
- PM: Pearl metallic
- *: Canada and Mexico only

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REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

PRECAUTION

REPAIRING HIGH STRENGTH STEEL

High Strength Steel (HSS)

INFOID:000000004687071

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

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

Tensile strength	Major applicable parts
370 - 590 MPa	<ul style="list-style-type: none">• Front side member assembly• Front side member closing plate assembly• Front side member outrigger assembly• Upper front hoodledge• Hoodledge reinforcement• Front strut housing• Lower dash• Lower dash crossmember assembly• Front roof rail• Upper front pillar reinforcement• Center front floor• Front floor (Component part)• Outer sill reinforcement• Inner rear pillar (Component part)• Outer rear wheelhouse extension• Lock pillar reinforcement assembly• Rear seat crossmember• Rear seat crossmember reinforcement assembly• Rear side member assembly• Rear pillar reinforcement• Other reinforcements
780 - 1350 MPa	<ul style="list-style-type: none">• Upper front pillar reinforcement (Component part)• Stiffener front side member (Front floor component part)• Front side member rear extension• Inner sill• Inner lock pillar assembly (Component part)• Inner rear pillar (Component part)

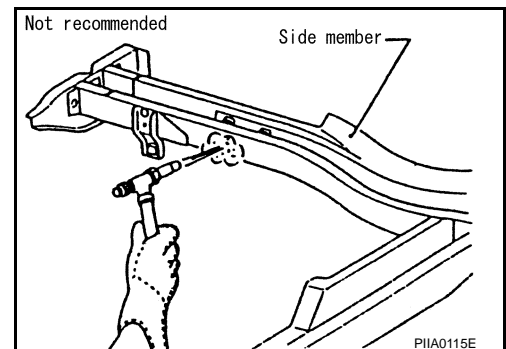
Read the following precautions when repairing HSS:

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.)

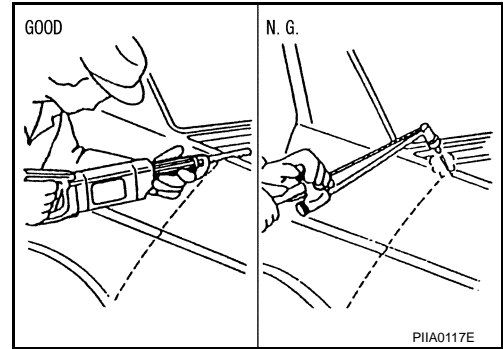


- When straightening body panels, use caution in pulling any HSS panel. Because HSS is very strong, pulling may cause deformation in adjacent sections of the body. In this case, increase the number of measuring points, and carefully pull the HSS panel.

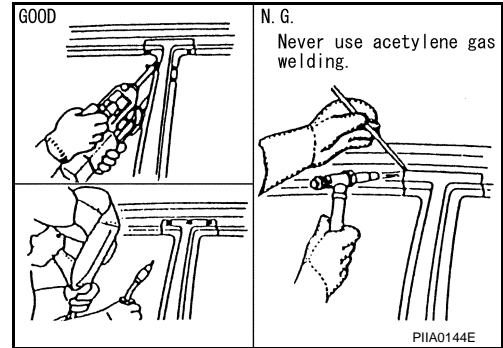
REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

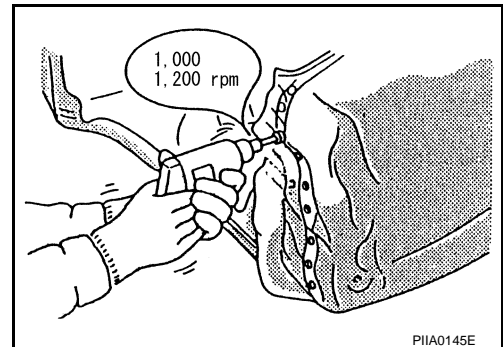
- When cutting HSS panels, avoid gas (torch) cutting if possible. Instead, use a saw to avoid weakening surrounding areas due to heat. If gas (torch) cutting is unavoidable, allow a minimum margin of 50 mm (1.97 in).



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



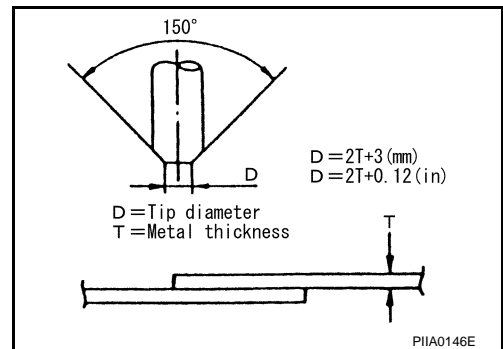
- Spot welding on HSS panels is harder than that of an ordinary steel panel. Therefore, when cutting spot welds on a HSS panel, use a low speed high torque drill (1,000 to 1,200 rpm) to increase drill bit durability and facilitate the operation.



2. Precautions in spot welding HSS

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

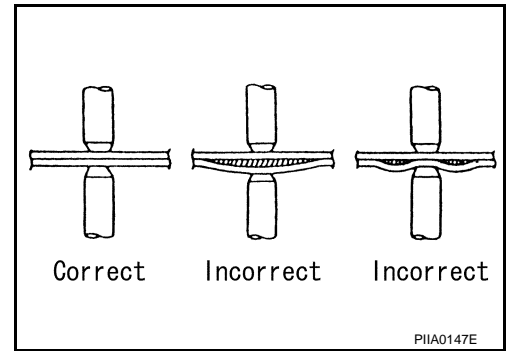
- The electrode tip diameter must be sized properly according to the metal thickness.



REPAIRING HIGH STRENGTH STEEL

< PRECAUTION >

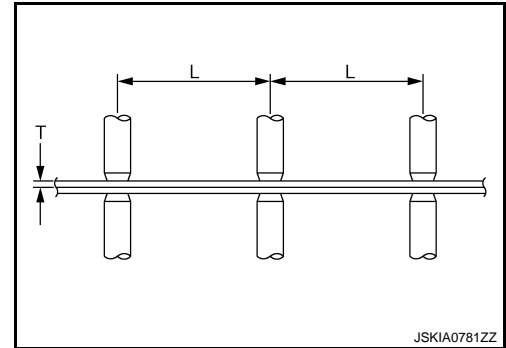
- The panel surfaces must fit flush to each other, leaving no gaps.



- Follow the specifications for the proper welding pitch.

Unit: mm (in)

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



Handling of Ultra High Strength Steel Plate Parts

INFOID:000000004687072

PROHIBITION OF CUT AND CONNECTION

Never cut and connect the stiffener front side member (front floor inside frame parts) because its material is high strength steel plate (ultra high strength steel plate).

The front floor assembly must be replaced if this part is damaged.

REPAIRING MATERIAL

< PREPARATION >

PREPARATION

REPAIRING MATERIAL

Foam Repair

INFOID:000000004609551

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.

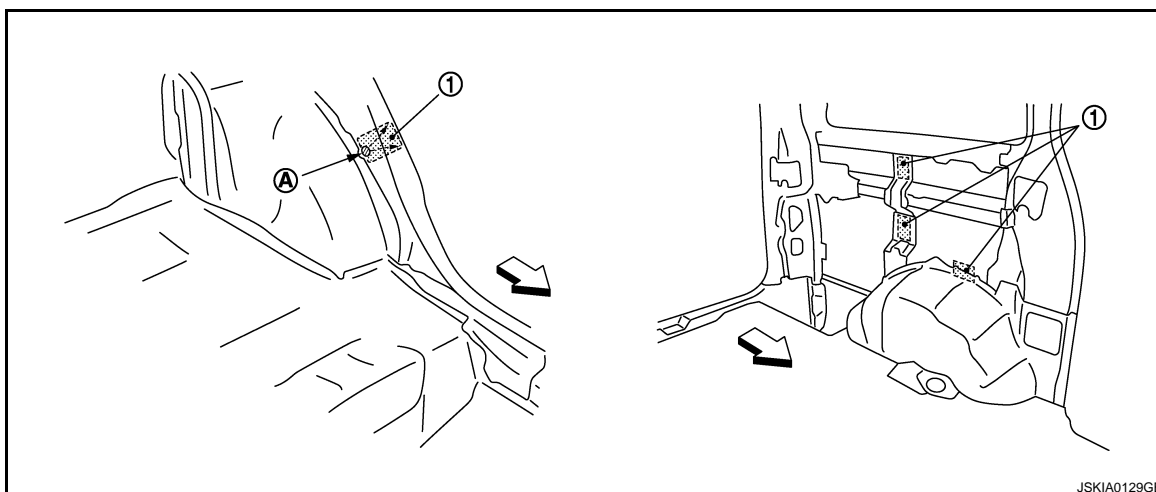
<Urethane foam for foaming agent>

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 >

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

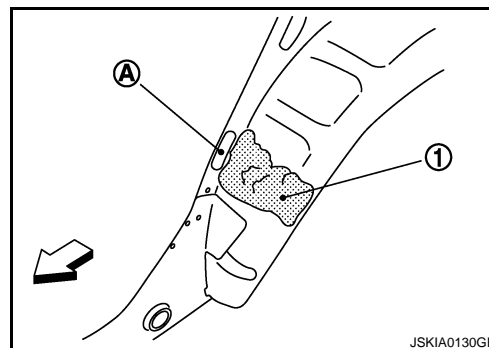
NOTE:

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

- d. Install service part.

NOTE:

Refer to label for information on working times.



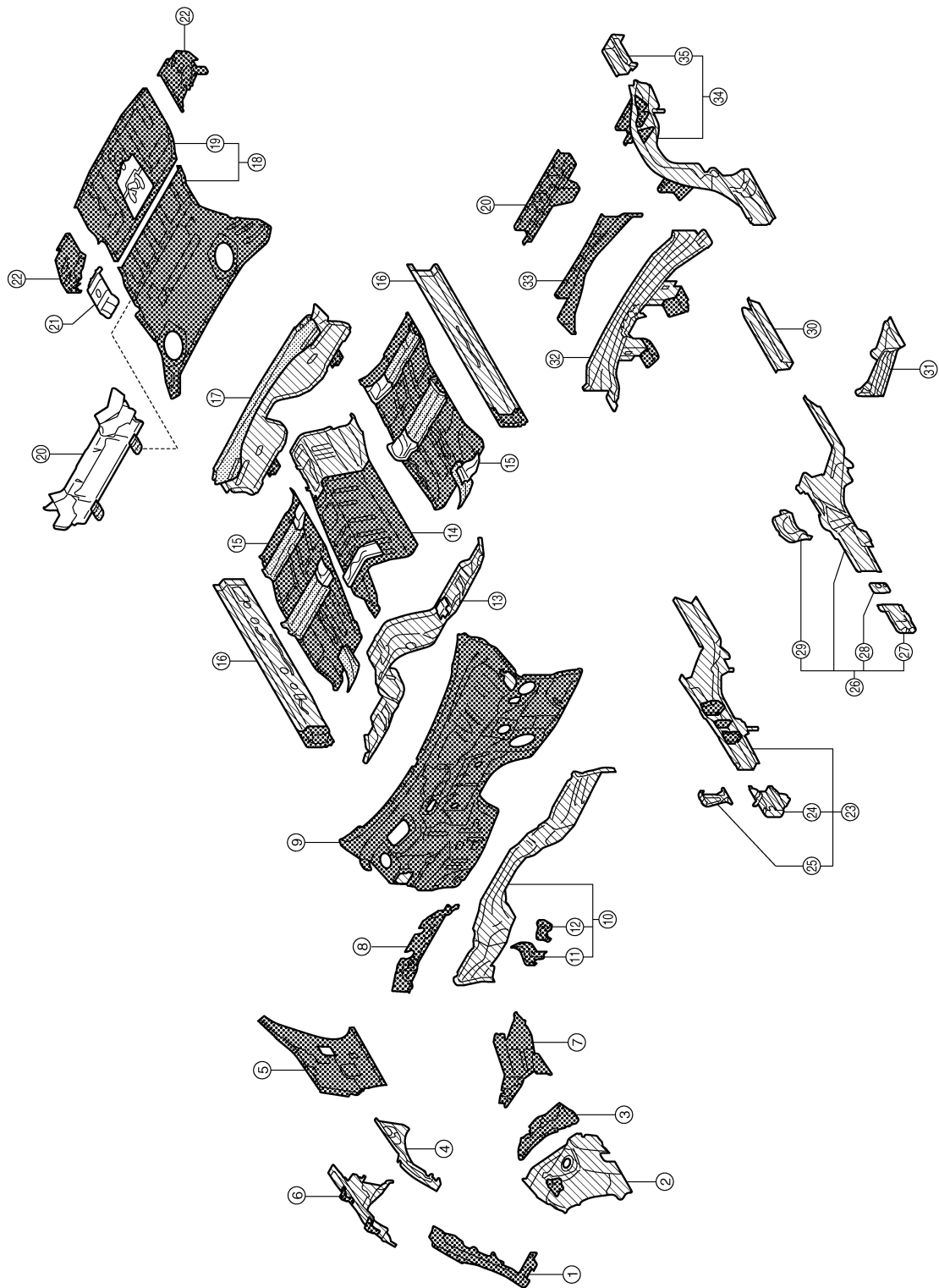
BODY COMPONENT PARTS

< PREPARATION >

BODY COMPONENT PARTS

Underbody Component Parts

INFOID:000000004609552



- | | | |
|---|-----------------------------------|--------------------------------------|
| 1. Side radiator core support (RH & LH) | 2. Front strut housing (RH & LH) | 3. Lower rear hoodledge (RH & LH) |
| 4. Upper front hoodledge (RH & LH) | 5. Upper rear hoodledge (RH & LH) | 6. Hoodledge reinforcement (RH & LH) |
| 7. Upper side cowl top (RH & LH) | 8. Front cowl top | 9. Upper dash |


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
BODY COMPONENT PARTS

< PREPARATION >

- | | | |
|---|--|---|
| 10. Lower dash crossmember assembly | 11. Lower outer battery support bracket | 12. Lower battery support bracket |
| 13. Lower dash | 14. Center front floor | 15. Front floor (RH & LH) |
| 16. Inner sill (RH & LH) | 17. Rear seat crossmember reinforcement assembly | 18. Rear floor front |
| 19. Rear floor rear | 20. Rear crossmember center assembly | 21. Sensor bracket |
| 22. Rear floor side (RH & LH) | 23. Front side member assembly (RH & LH) | 24. Front side member front extension (RH & LH) |
| 25. Front side member connector assembly (RH & LH) | 26. Front side member closing plate assembly (RH & LH) | 27. Front side member front closing plate (RH & LH) |
| 28. Front side rear closing reinforcement (RH & LH) | 29. Front side member center closing plate (RH & LH) | 30. Front side member rear extension (RH & LH) |
| 31. Front side member outrigger assembly (RH & LH) | 32. Rear seat crossmember | 33. Rear crossmember |
| 34. Rear side member assembly (RH & LH) | 35. Rear side member extension (RH & LH) | |

 Both sided anti-corrosive precoated steel sections

 High strength steel (HSS) sections

 Both sided anti-corrosive steel and HSS sections

NOTE:

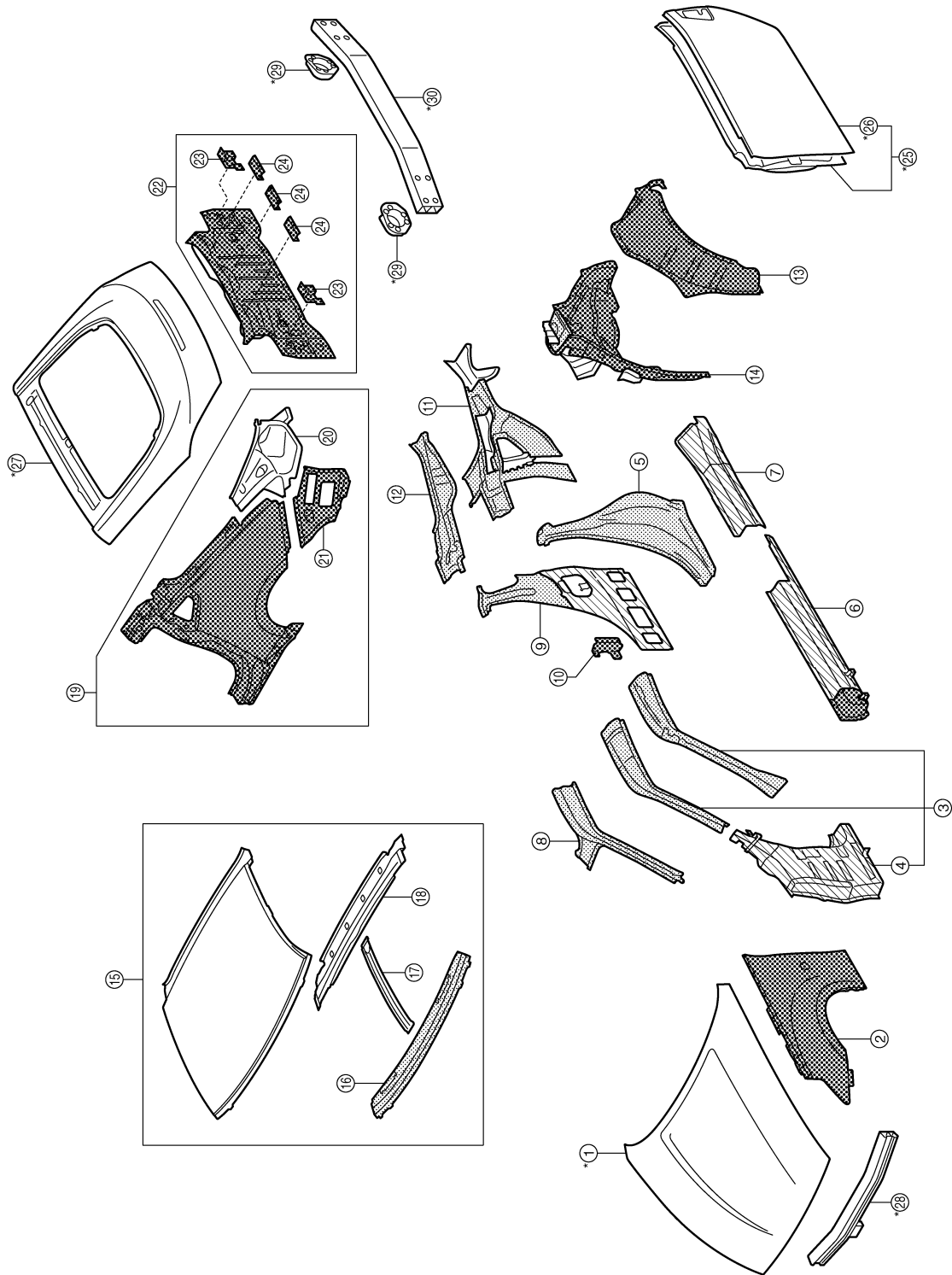
For the parts without a number described in the figure, it is supplied only with the assembly part that the part is included with.

BODY COMPONENT PARTS

< PREPARATION >

Body Component Parts

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- | | | |
|---------------------------------|---|---|
| 1. Hood | 2. Front fender (RH & LH) | 3. Upper front pillar reinforcement (RH & LH) |
| 4. Front pillar brace (RH & LH) | 5. Lock pillar reinforcement assembly (RH & LH) | 6. Outer sill reinforcement (RH & LH) |

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
BODY COMPONENT PARTS

< PREPARATION >

- | | | |
|--|--|---|
| 7. Outer rear wheelhouse extension (RH & LH) | 8. Inner side roof rail (RH & LH) | 9. Inner lock pillar assembly (RH & LH) |
| 10. Outer sill brace (RH & LH) | 11. Inner rear pillar (RH & LH) | 12. Rear pillar reinforcement (RH & LH) |
| 13. Outer rear wheelhouse (RH & LH) | 14. Inner rear wheelhouse (RH & LH) | 15. Roof |
| 16. Front roof rail | 17. Center roof bow | 18. Rear roof rail |
| 19. Rear fender assembly (RH & LH) | 20. Rear combination lamp base (RH & LH) | 21. Rear fender extension (RH & LH) |
| 22. Rear panel assembly | 23. Rear bumper fascia center bracket | 24. Rear bumper bracket |
| 25. Door assembly (RH & LH) | 26. Outer door panel (RH & LH) | 27. Back door |
| 28. Front bumper armature assembly | 29. Rear bumper stay (RH & LH) | 30. Inner center rear bumper reinforcement assembly |

 Both sided anti-corrosive precoated steel sections

 High strength steel (HSS) sections

 Both sided anti-corrosive steel and HSS sections

*: Aluminum portion

NOTE:

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

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >

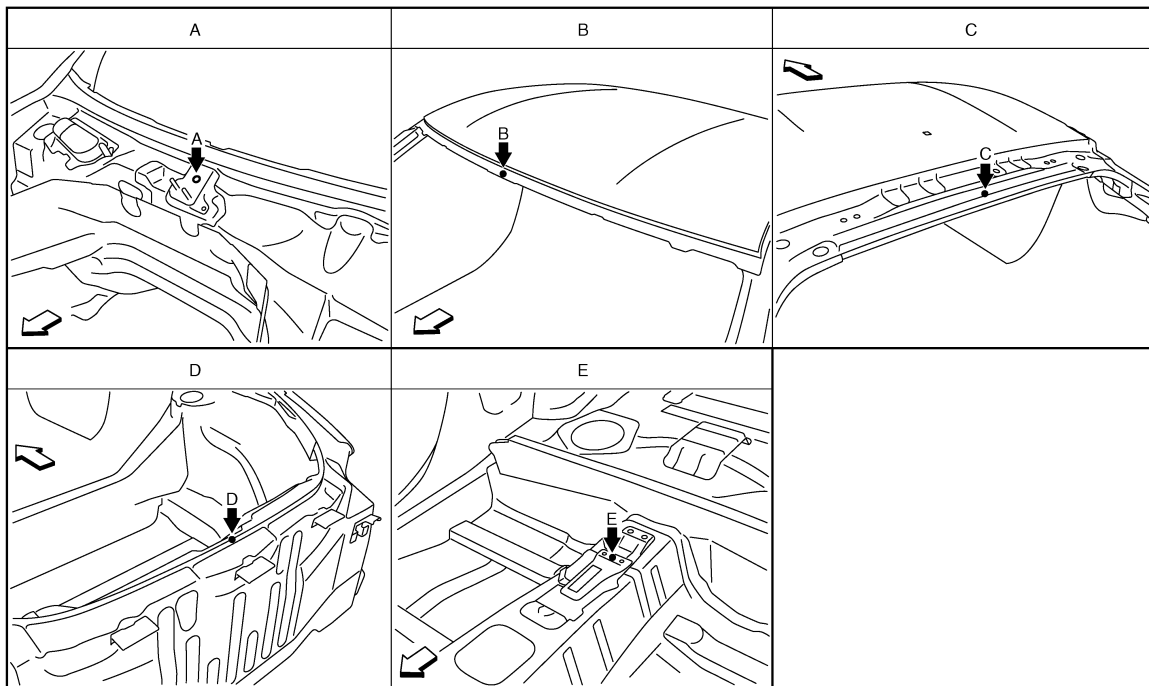
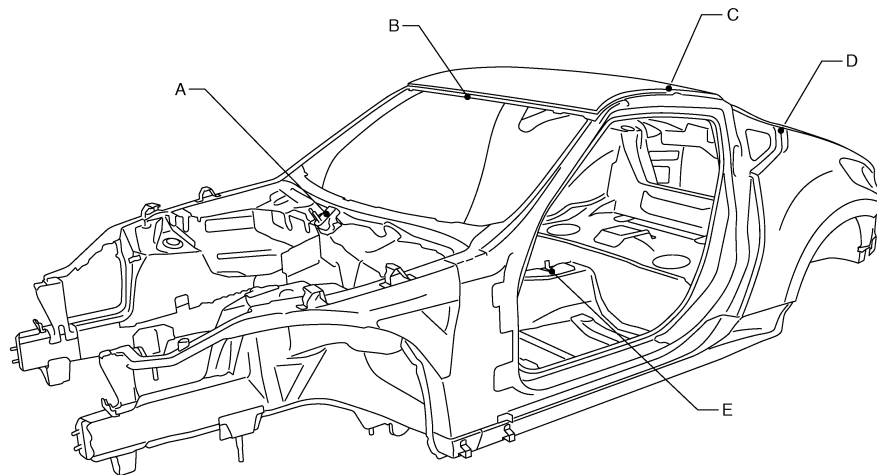
ON-VEHICLE MAINTENANCE

BODY ALIGNMENT

Body Center Marks

INFOID:000000004583859

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.



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↩ : Vehicle front

Unit: mm (in)

Points	Portion	Marks
A	Upper dash	Hole $\phi 8$ (0.31)
B	Front roof	Embossment
C	Rear roof	Embossment

BODY ALIGNMENT

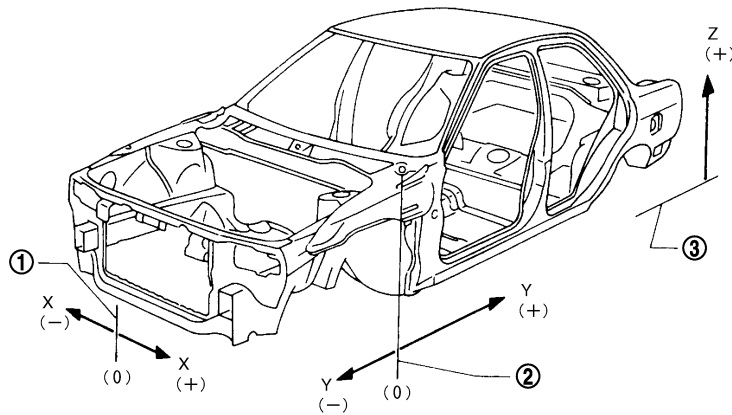
< ON-VEHICLE MAINTENANCE >

Points	Portion	Marks
D	Rear panel	Indent
E	Trans control reinforcement	Embossment

Description

INFOID:000000004583860

- 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)]



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1. Vehicle center

2. Front axle center

3. Imaginary base line

Engine Compartment

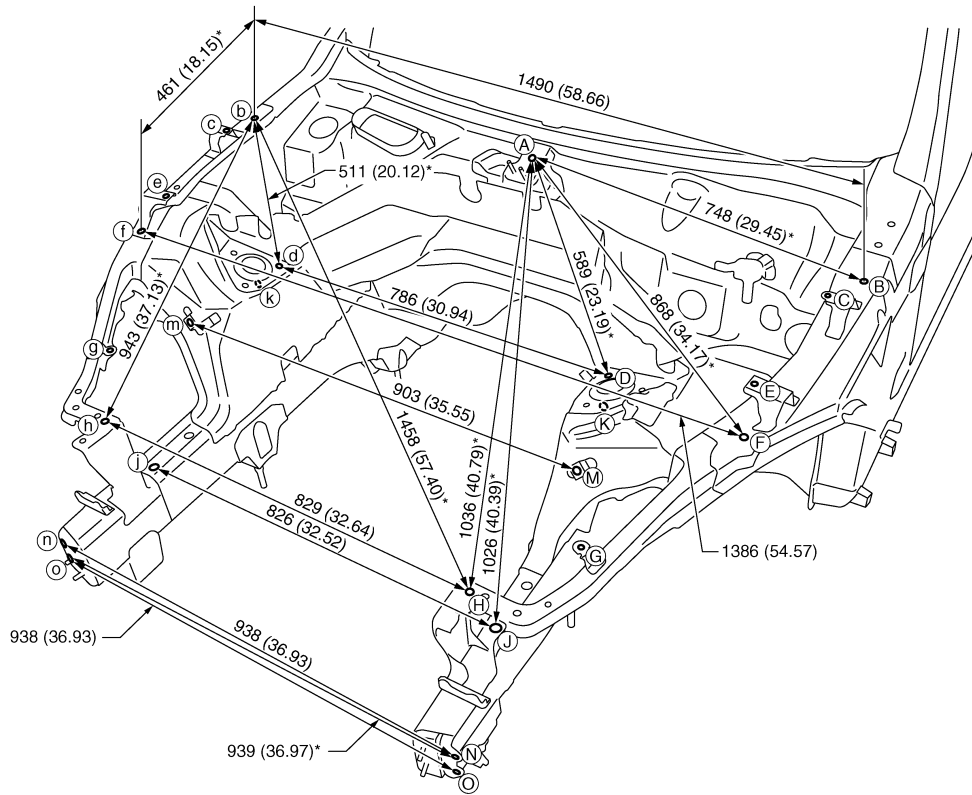
INFOID:000000004583861

Measurement

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

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



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Unit: mm (in)

«The others»

Unit: mm (in)

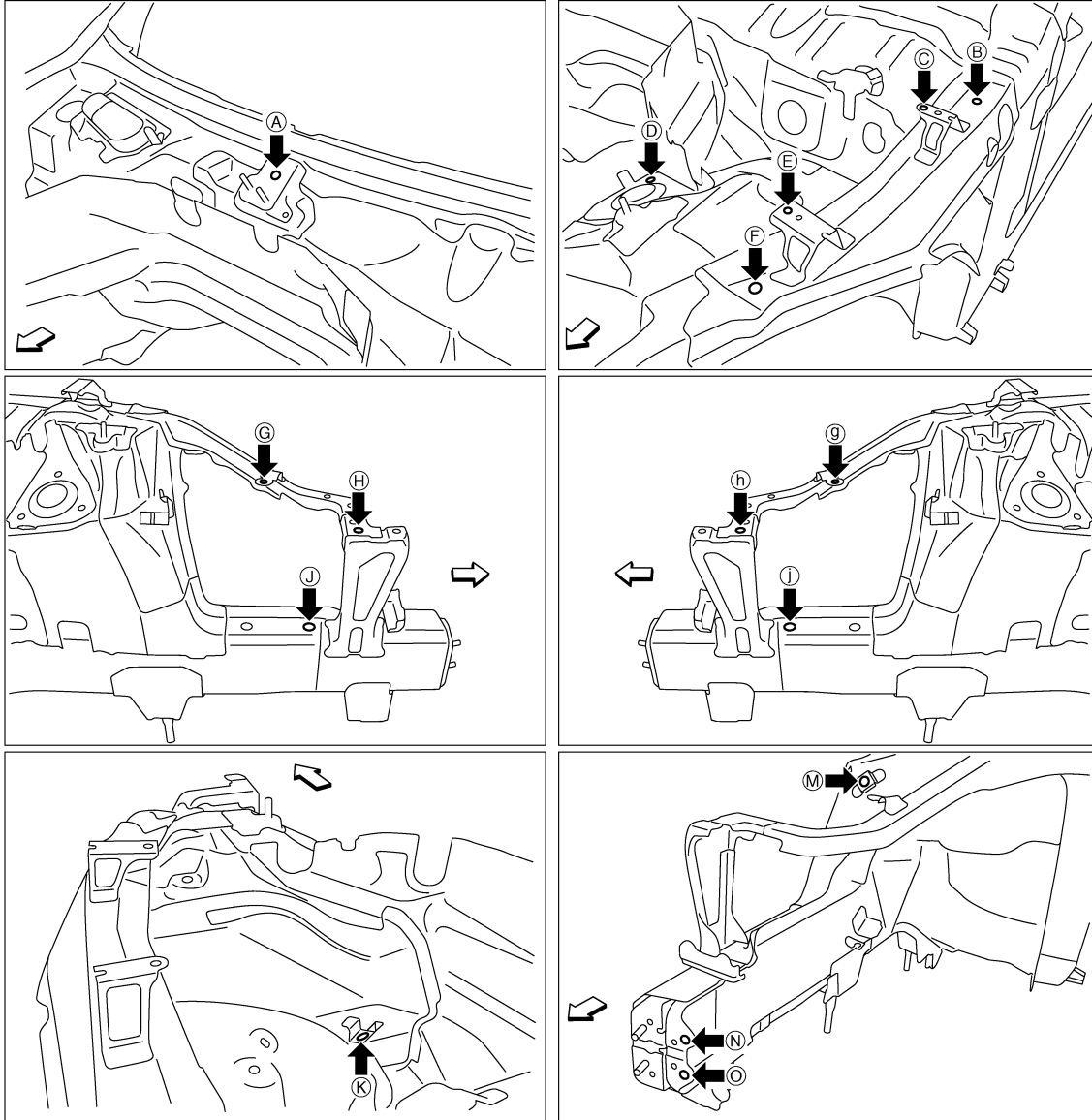
Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
A - C	735 (28.94)*		B - d	1197 (47.13)*		C - c	1423 (56.02)		F - h	1187 (46.73)*	
A - E	804 (31.65)*		B - E	381 (15.00)*		D - m	875 (34.45)*		G - g	1073 (42.24)	
A - G	967 (38.07)*		B - f	1509 (59.41)*		E - e	1349 (53.11)		K - k	903 (35.55)	
B - C	131 (5.16)*		B - G	767 (30.20)*		F - H	511 (20.12)*				

Measurement Points

BRM

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



JSKIA0885ZZ

↩ : Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Center wiper pivot bracket hole center of center positioning mark $\phi 8$ (0.31)	H, h	Radiator core support stay hole center $\phi 12$ (0.47)
B, b, F, f	Hoodedge reinforcement hole center 12×14 (0.47×0.55)	J, j	Front side member hole center $\phi 20$ (0.79)
C, c, E, e	Front fender installing hole center $\phi 7$ (0.28)	K, k, M, m	Nut holder hole center $\phi 16$ (0.63)
D, d	Front strut installing hole center $\phi 11$ (0.43)	N, n, O, o	Front bumper reinforcement installing hole center $\phi 11$ (0.43)
G, g	Rear air cleaner bracket hole center $\phi 7$ (0.28)		

Underbody

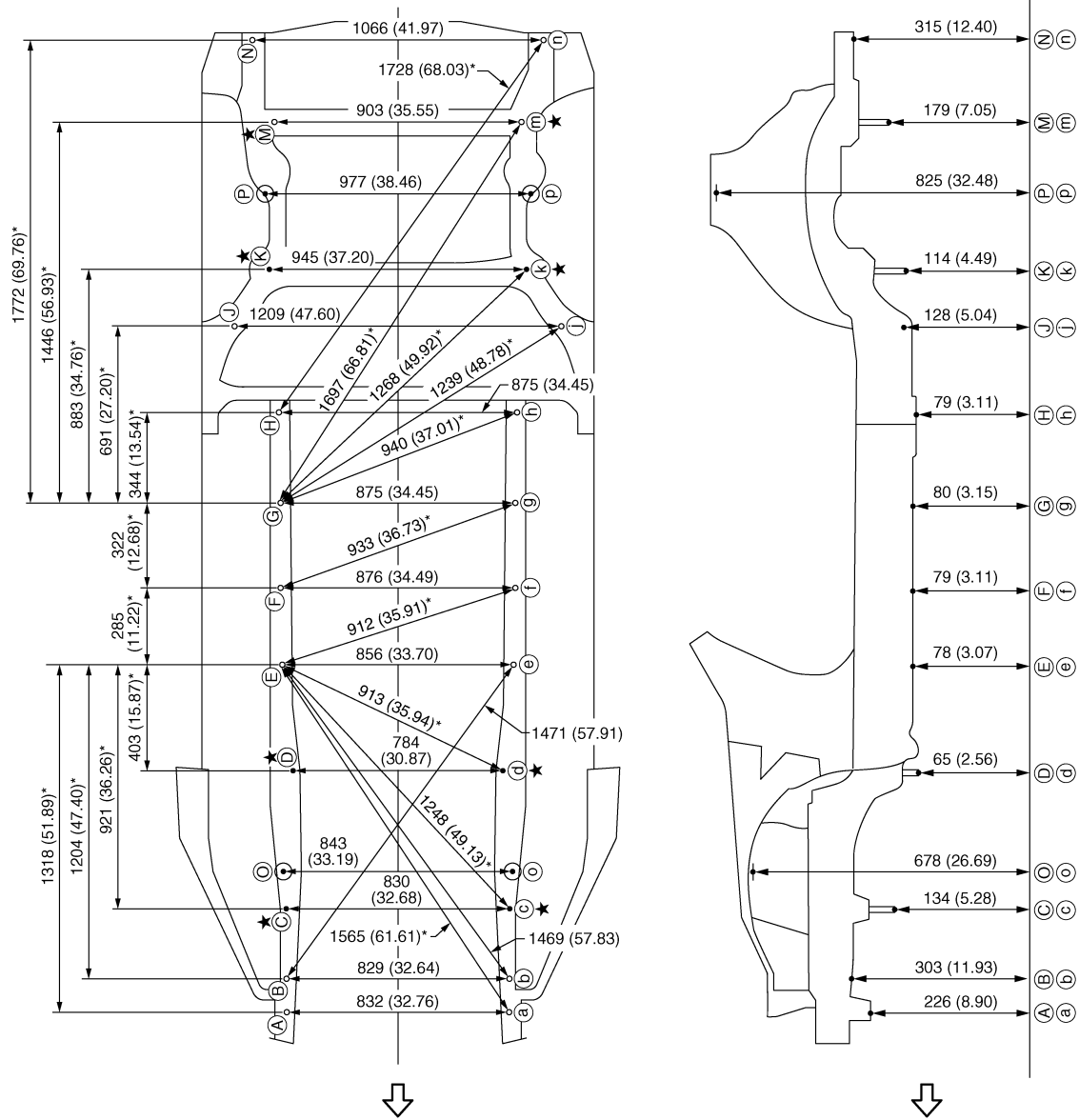
INFOID:000000004583862

Measurement

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >

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



Unit: mm (in)

⇨ : Vehicle front

★: Bolt head

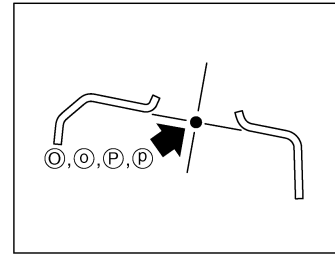
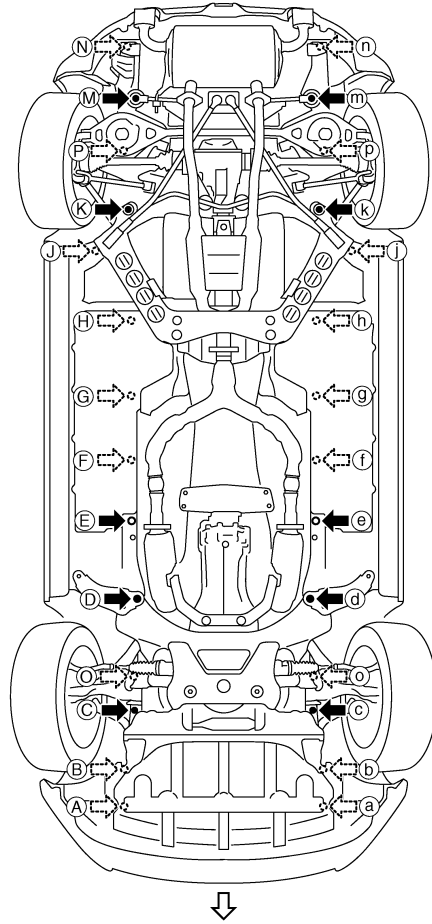
Measurement Points

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BRM

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



JSKIA0887ZZ

↩ : Vehicle front

Unit: mm (in)

Points	Coordinates			Remarks	Points	Coordinates			Remarks
	X	Y	Z			X	Y	Z	
A, a	±415.8 (±16.370)	-495.0 (-19.488)	225.6 (8.882)	Hole φ13 (0.51)	H, h	±437.5 (±17.224)	1765.5 (69.508)	79.0 (3.110)	Hole φ8 (0.31)
B	416.2 (16.386)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	J, j	±604.5 (±23.799)	2090.5 (82.303)	128.3 (5.051)	Hole φ16 (0.63)
b	-413.2 (-16.268)	-368.0 (-14.488)	303.2 (11.937)	Hole φ16 (0.63)	K, k	±472.6 (±18.606)	2303.8 (90.701)	114.0 (4.488)	Bolt head
C, c	±415.0 (±16.339)	-104.0 (-4.094)	133.5 (5.256)	Bolt head	M, m	±451.5 (±17.776)	2863.9 (112.752)	179.1 (7.051)	Bolt head
D, d	±392.0 (±15.433)	414.0 (16.299)	64.5 (2.539)	Bolt head	N, n	±533.0 (±20.984)	3175.0 (125.000)	315.4 (12.417)	Hole φ16 (0.63)
E, e	±428.0 (±16.850)	815.0 (32.087)	78.4 (3.087)	Hole 16×20 (0.63×0.79)	O, o	±421.6 (±16.598)	38.2 (1.504)	677.9 (26.689)	Hole φ50.1 (1.972)

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >

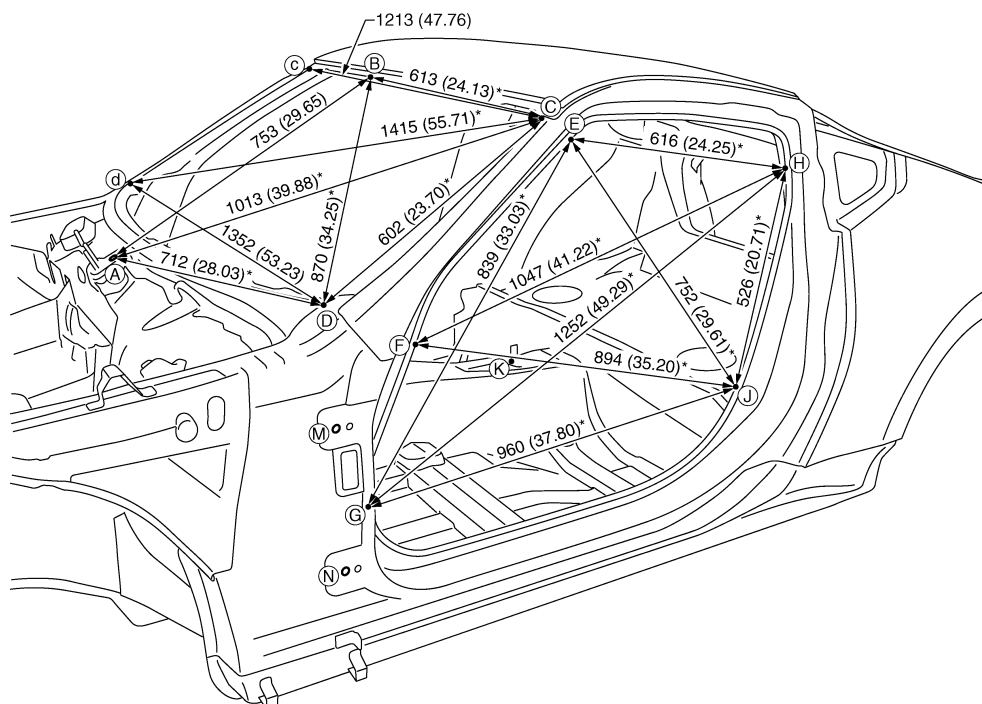
F, f	±438.0 (±17.244)	1100.0 (43.307)	79.0 (3.110)	Hole φ16 (0.63)	P, p	±488.4 (±19.228)	2591.7 (102.035)	825.0 (32.480)	Hole φ68 (2.68)
G, g	±437.5 (±17.224)	1421.8 (55.976)	80.0 (3.150)	Hole φ8 (0.31)					

Passenger Compartment

INFOID:000000004583863

Measurement

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



JSKIA0888GB

Unit: mm (in)

«The others»

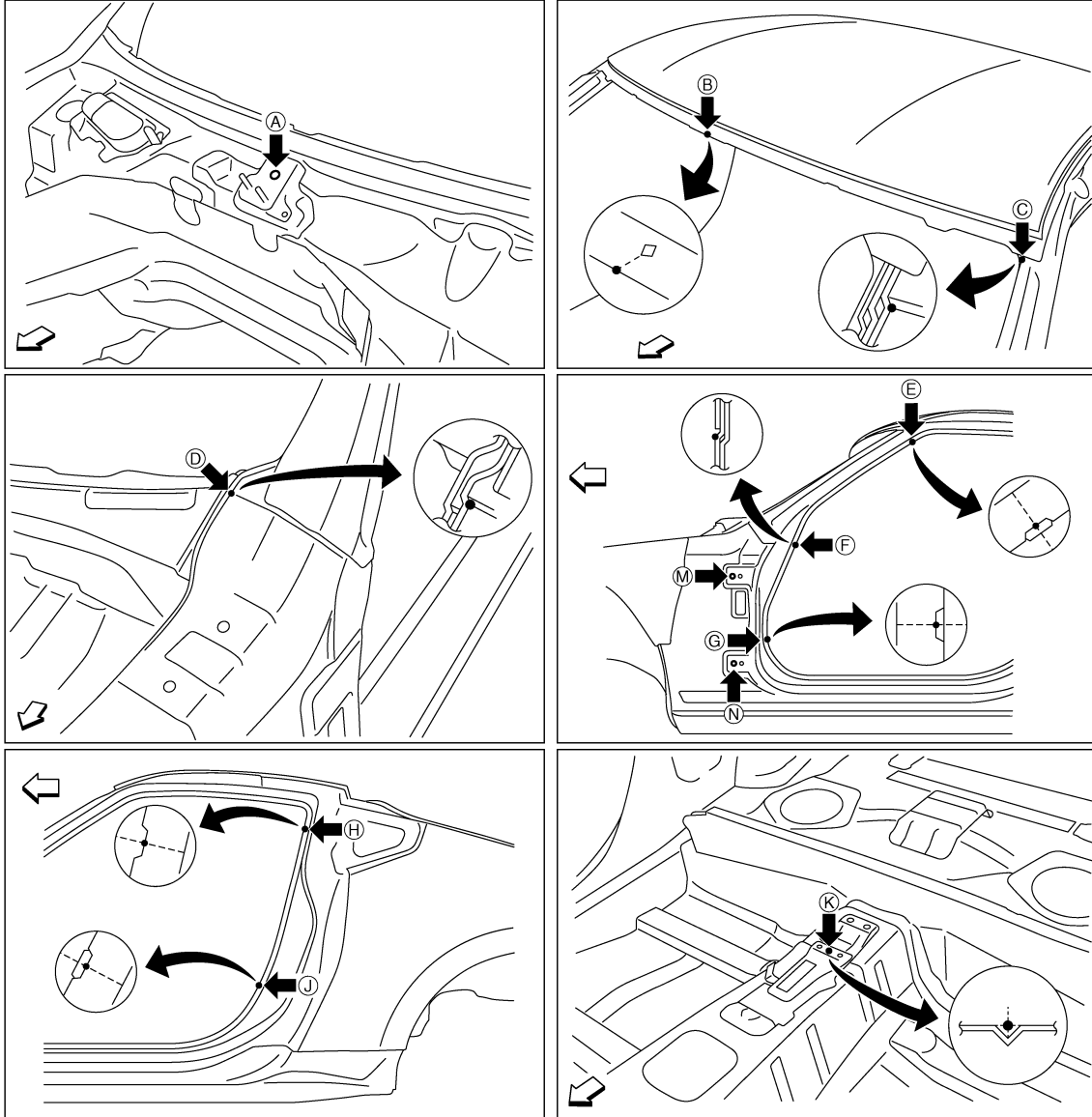
Unit: mm (in)

Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo	Point	Dimension	Memo
E - e	1276 (50.24)		F - j	1713 (67.44)*		J - j	1471 (57.91)		M - H	1273 (50.12)*	
E - g	1599 (62.95)*		G - g	1452 (57.17)		K - E	1024 (40.31)*		M - J	1074 (42.28)*	
E - h	1449 (57.05)*		G - h	1877 (73.90)*		K - F	1094 (43.07)*		N - H	1376 (54.17)*	
E - j	1563 (61.54)*		G - j	1749 (68.86)*		K - G	1095 (43.11)*		N - J	1071 (42.17)*	
F - f	1452 (57.17)		H - h	1348 (53.07)		K - H	978 (38.50)*				
F - h	1748 (68.82)*		H - j	1504 (59.21)*		K - J	763 (30.04)*				

Measurement Points

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



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↶ : Vehicle front

Unit: mm (in)

Point	Material	Point	Material
A	Center wiper pivot bracket hole center of center positioning mark $\phi 8$ (0.31)	G, g	Front pillar hinge brace indent
B	Roof flange end of center positioning mark	H, h, J, j	Rear fender indent
C, c	Front pillar joggle	K	Trans control reinforcement positioning mark of center positioning mark
D, d, F, f	Front pillar hinge brace joggle	M, m, N, n	Door hinge installing hole center $\phi 12$ (0.47)
E, e	Front pillar indent		

Rear Body

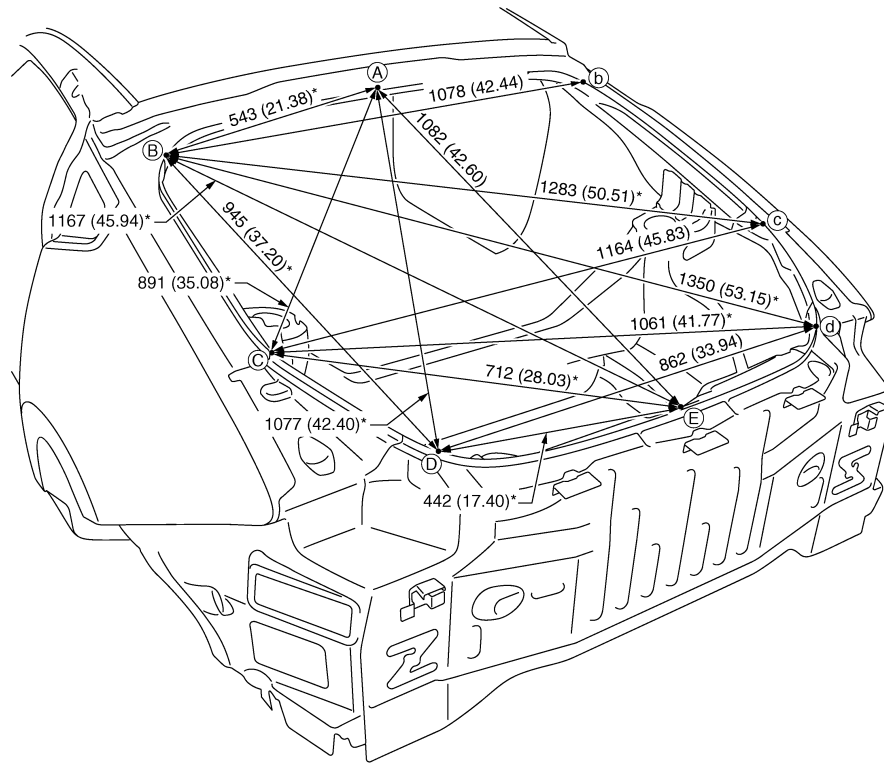
INFOID:000000004583865

Measurement

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

BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



JSKIA0890GB

Unit: mm (in)

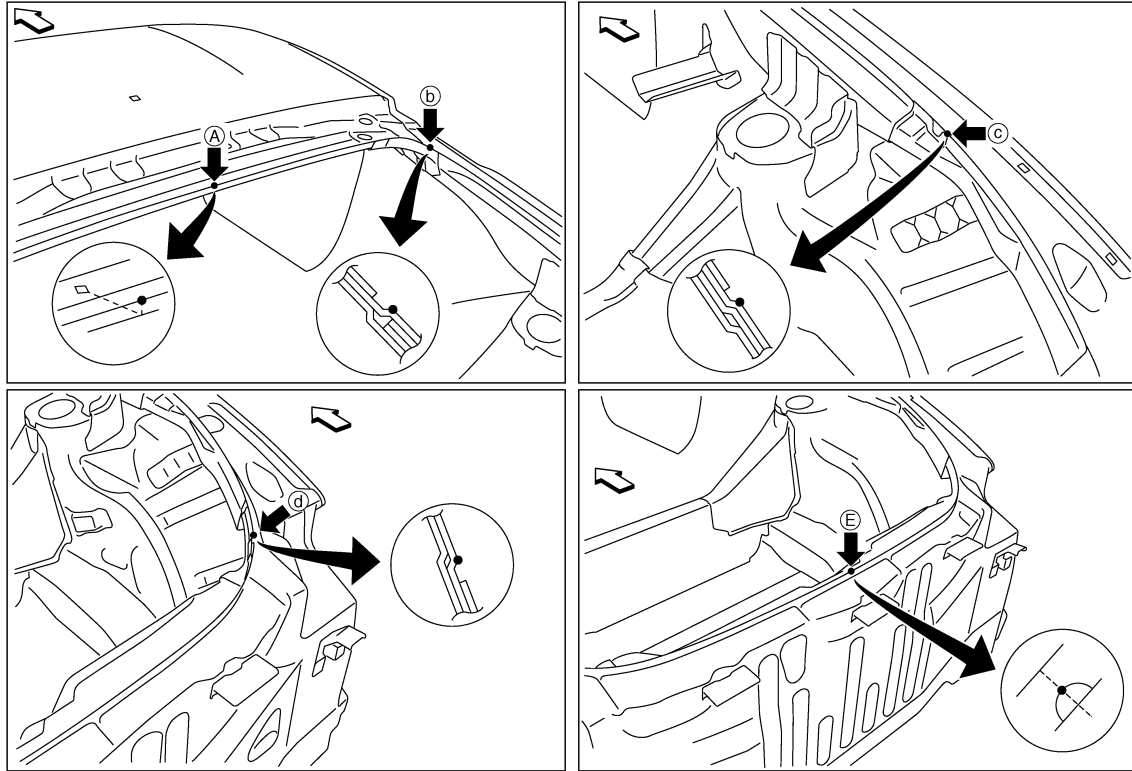
Measurement Points

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BODY ALIGNMENT

< ON-VEHICLE MAINTENANCE >



JSKIA0891ZZ

↩ : Vehicle front

Point	Material	Point	Material
A	Roof flange end of center positioning mark	D, d	Rear combination lamp base joggle
B, b	Rear fender joggle	E	Upper rear panel reinforcement indent of center positioning mark
C, c	Rear combination lamp base extension joggle		

HANDLING PRECAUTIONS

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

HANDLING PRECAUTIONS

Precautions for Plastics

INFOID:000000004609549

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

CAUTION:

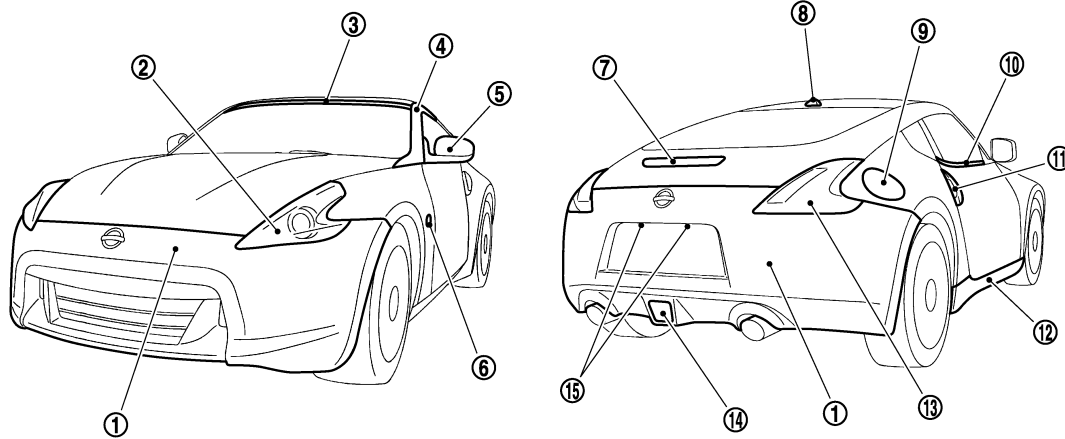
- When repairing and painting a portion of the body adjacent to plastic parts, consider their characteristics (influence of heat and solvent) and remove them if necessary or take suitable measures to protect them.
- Plastic parts should be repaired and painted using methods suiting the materials' characteristics.

HANDLING PRECAUTIONS

< ON-VEHICLE REPAIR >

Location of Plastic Parts

INFOID:000000004609550

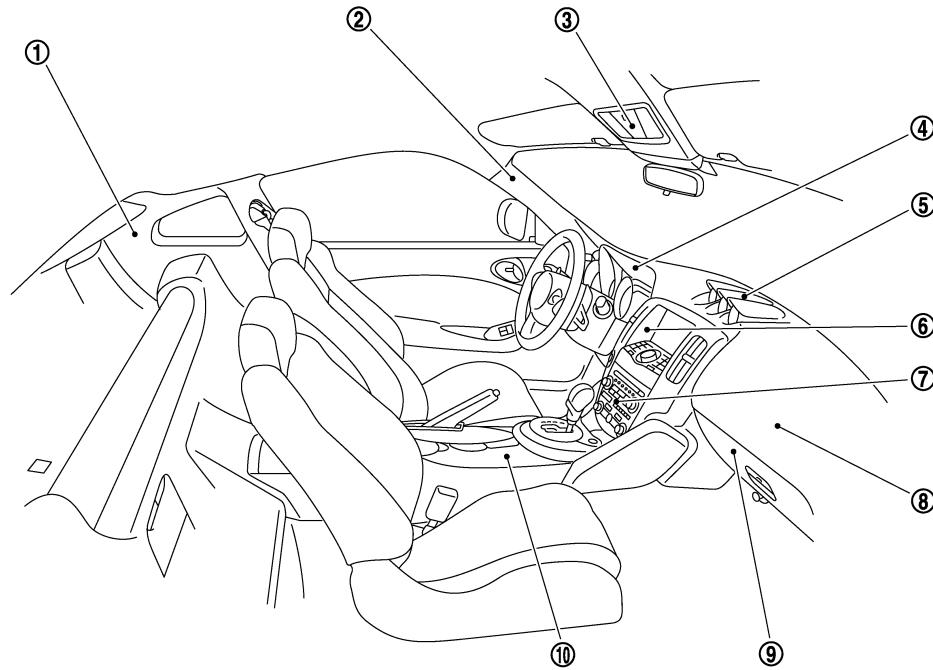


JSKIA0902ZZ

Component			Material	Component			Material
1	Bumper fascia		PP + EPM	8	Satellite radio antenna		ASA + PC
2	Front combination lamp	Lens	PC	9	Fuel filler lid		PA + PPE
		Housing	PP	10	Door outside molding		PVC + Stainless
3	Upper windshield molding		TPO	11	Door outside handle		PC + ABS
4	Front pillar finisher		PC + PET	12	Center mudguard		PP + EPM
5	Door outside mirror	Cover	ABS	13	Rear combination lamp	Lens	PMMA
		Housing	ASA			Housing	PP
		Base	PA + Glass fiber	14	Rear fog lamp	Lens	PMMA
6	Side turn signal lamp	Lens	PMMA			Housing	ASA
		Housing	ABS	15	License plate lamp	Lens	PMMA
7	High mount stop lamp	Lens	PMMA			Housing	PC
		Housing	ABS				

HANDLING PRECAUTIONS

< ON-VEHICLE REPAIR >



JSKIA0903ZZ

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

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CORROSION PROTECTION

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

CORROSION PROTECTION

Description

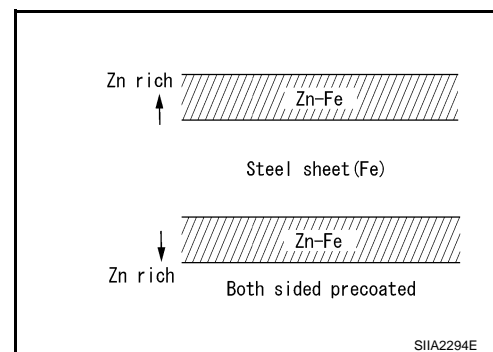
INFOID:000000004687069

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

Anti-Corrosive Precoated Steel (Galvannealed Steel)

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

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



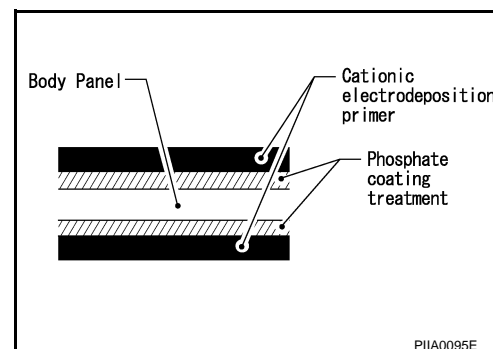
NISSAN genuine parts are fabricated from galvannealed steel. Therefore, it is recommended that NISSAN genuine parts or an equivalent be used for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

Phosphate Coating Treatment and Cationic Electrodeposition Primer

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

CAUTION:

Confine paint removal during welding operation to an absolute minimum.



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

Undercoating

INFOID:000000004609559

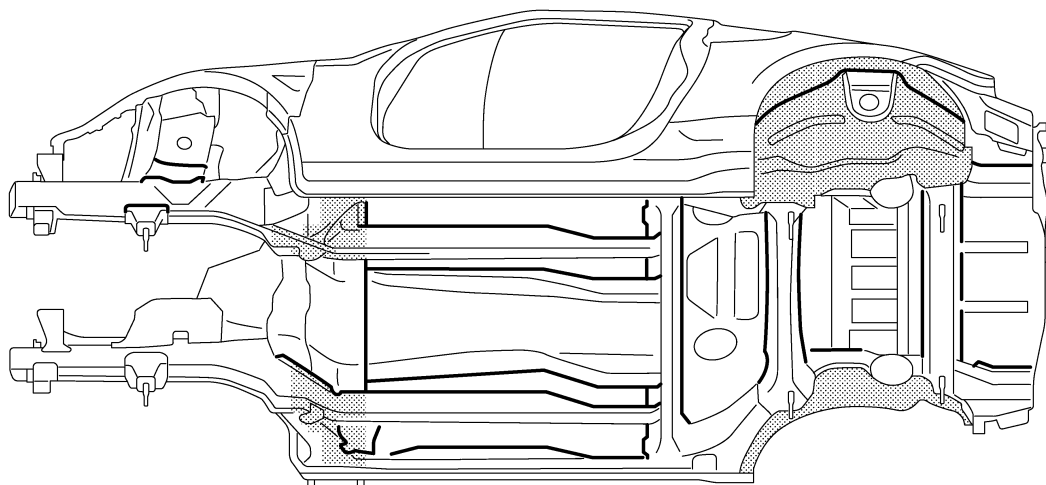
The underside of the floor and wheelhouse are undercoated to prevent rust, vibration, noise and stone chipping. Therefore, when such a panel is replaced or repaired, apply undercoating to that part. Use an undercoating which is rust resistant, soundproof, vibration-proof, shock-resistant, adhesive, and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



JSKIA0897ZZ

 Undercoated areas

 Sealed portions

Body Sealing

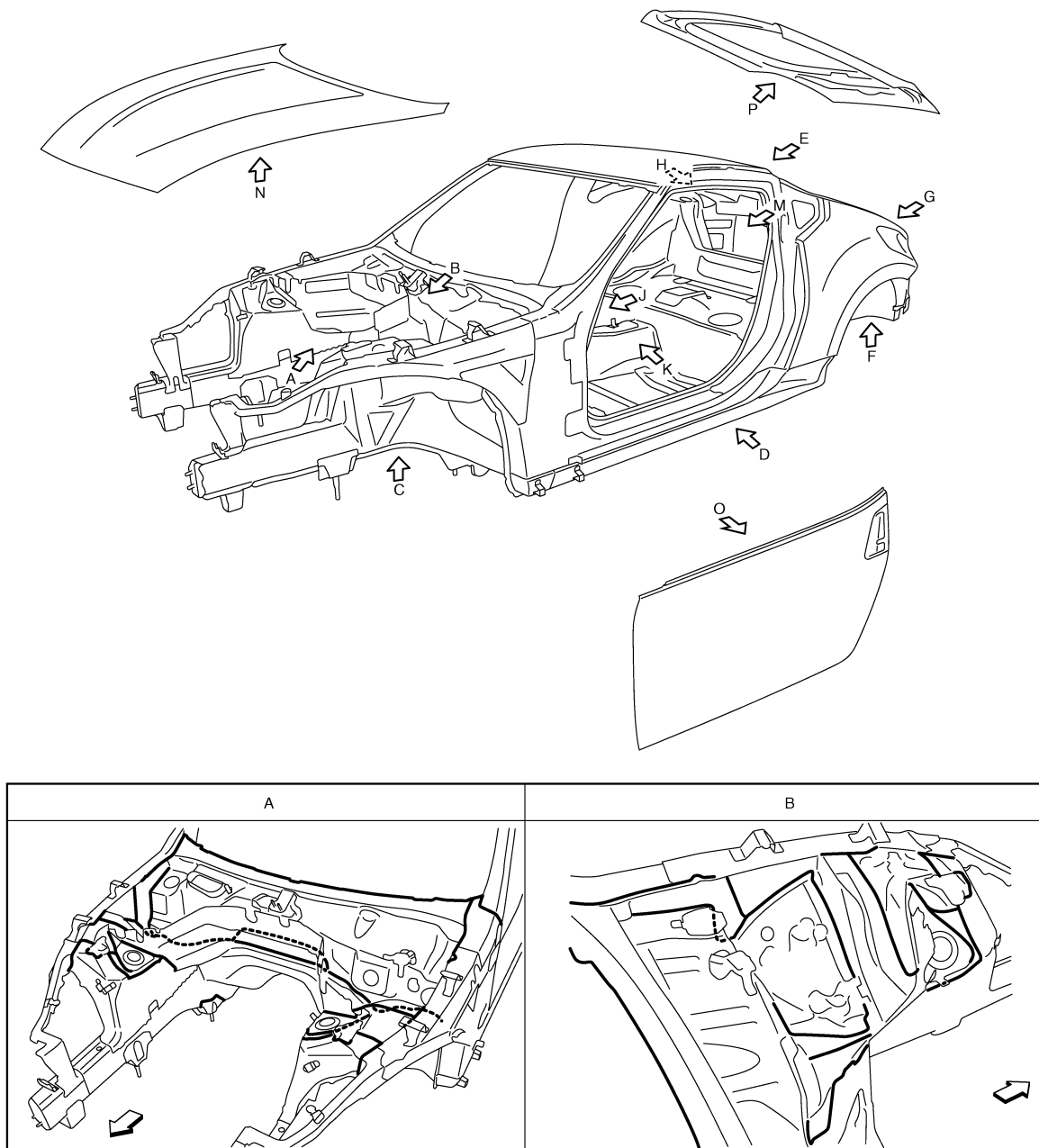
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The following figure shows the areas that are sealed at the factory. Sealant that is applied to these areas should be smooth and free from cuts or gaps. Care should be taken not to apply an excess amount of sealant and not to allow other unaffected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

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CORROSION PROTECTION

< REMOVAL AND INSTALLATION >



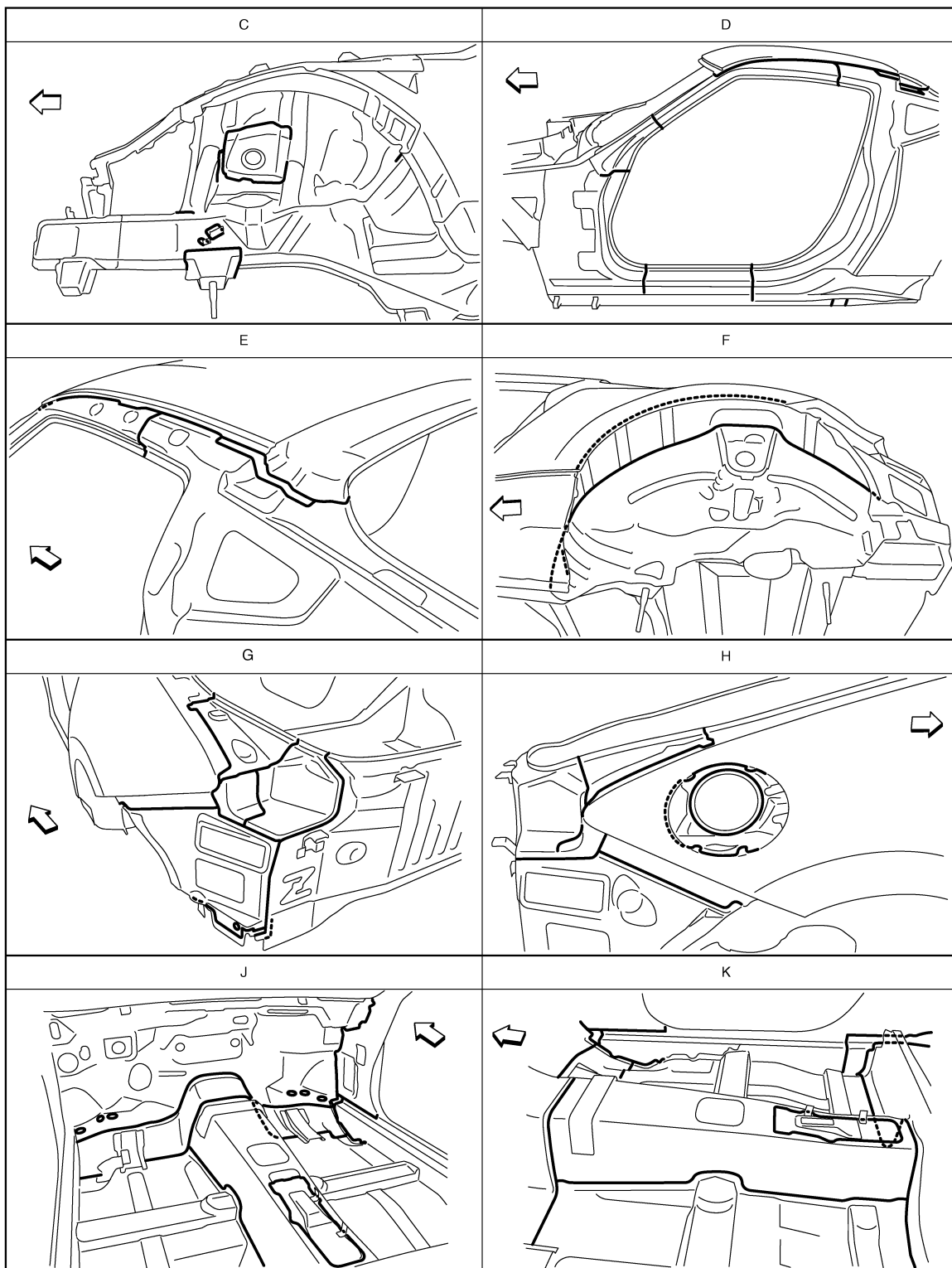
JSKIA0894ZZ

↩: Vehicle front

—: Sealed portions

CORROSION PROTECTION

< REMOVAL AND INSTALLATION >



JSKIA0895ZZ

↩: Vehicle front

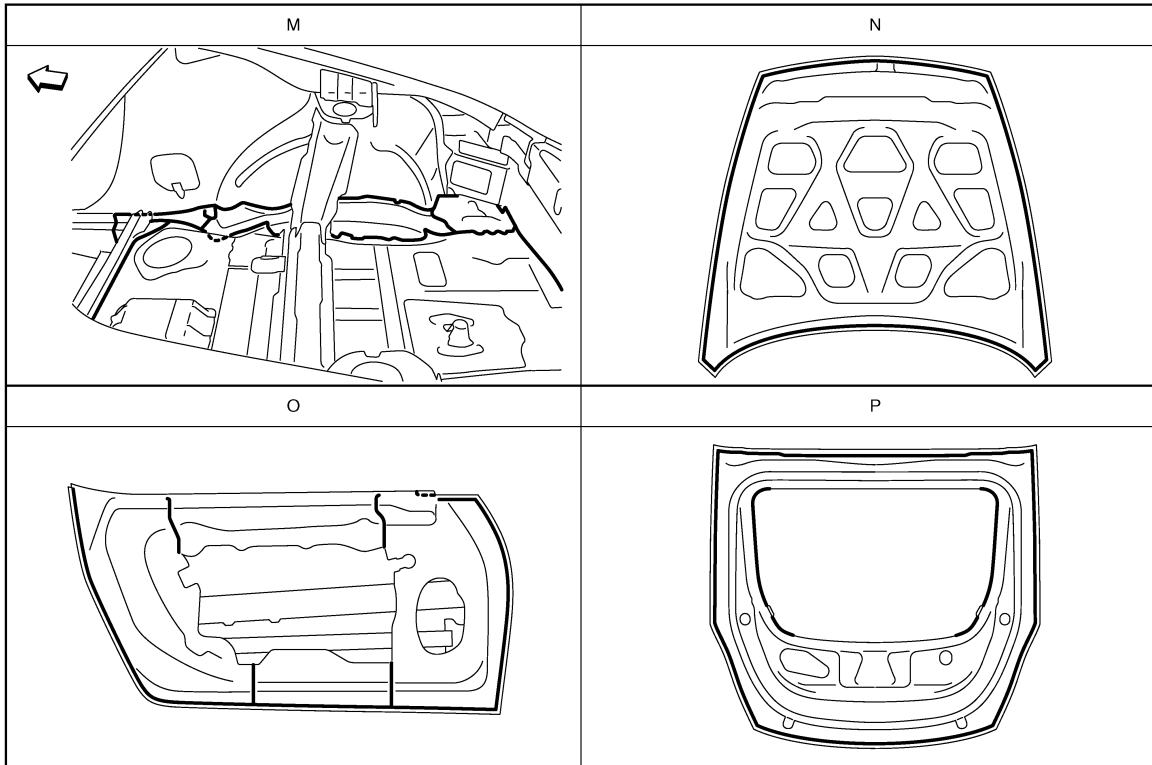
—: Sealed portions

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CORROSION PROTECTION

< REMOVAL AND INSTALLATION >



JSKIA0896ZZ

↩: Vehicle front

—: Sealed portions

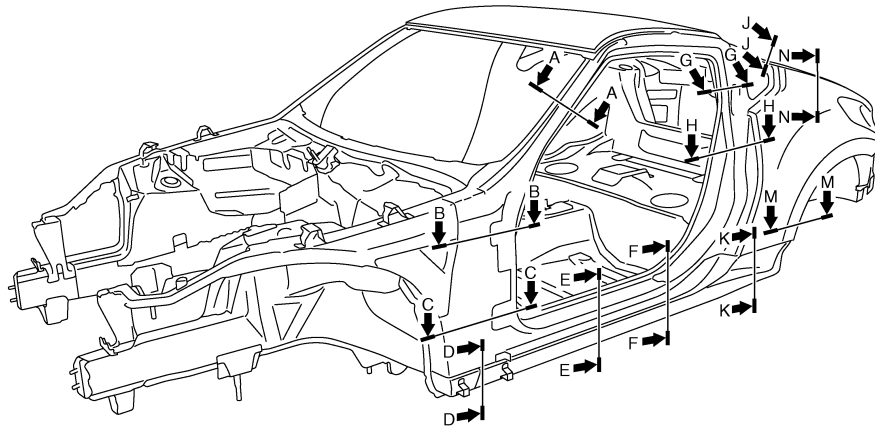
BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

BODY CONSTRUCTION

Body Construction

INFOID:000000004609561



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E - E	F - F	G - G	H - H
J - J	K - K	M - M	N - N

- | | | |
|--------------------------------|-------------------------------------|----------------------------------|
| 1. Upper outer front pillar | 2. Outer front pillar reinforcement | 3. Upper inner front pillar |
| 4. Front roof rail brace | 5. Front pillar hinge brace | 6. Hoodedge reinforcement gusset |
| 7. Rear hoodedge reinforcement | 8. Upper dash | 9. Upper rear hoodedge |

JSKIA0898ZZ

BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

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|--------------------------------------|--------------------------------------|---|
| 10. Upper front pillar reinforcement | 11. Weld nut | 12. Weld bolt |
| 13. Lower dash crossmember | 14. Lower hinge plate | 15. Outer sill reinforcement |
| 16. Outer front sill brace | 17. Lower front pillar reinforcement | 18. Front side member outrigger |
| 19. Lower dash | 20. Inner sill | 21. Outer sill brace |
| 22. Front floor | 23. Plate nut | 24. 2nd crossmember |
| 25. Center sill reinforcement | 26. Rear fender | 27. Lock pillar reinforcement |
| 28. Outer rear wheelhouse extension | 29. 3rd crossmember | 30. Inner rear sill reinforcement |
| 31. Lower inner lock pillar | 32. Upper inner lock pillar | 33. Upper inner lock pillar reinforcement |
| 34. Inner side panel | 35. Rear pillar reinforcement | 36. Inner rear pillar |
| 37. Rear roof rail brace | 38. Roof | 39. Upper rear roof rail |
| 40. Rear tie down hook bracket | 41. Rear side member front | 42. Rear side member front reinforcement |
| 43. Rear floor | 44. Calk nut | 45. Outer rear wheelhouse |
| 46. Inner rear wheelhouse | 47. Shock absorber mounting bracket | 48. Shock absorber bracket reinforcement |
| 49. Inner rear pillar reinforcement | | |

Rear Fender Hemming Process

INFOID:000000004686778

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:

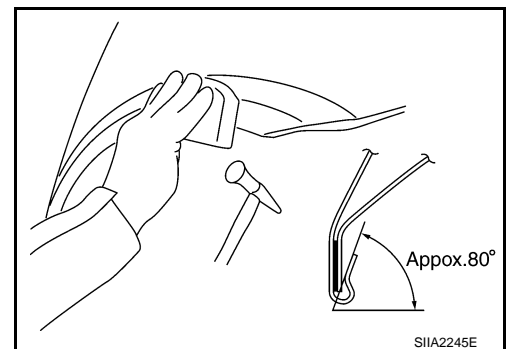
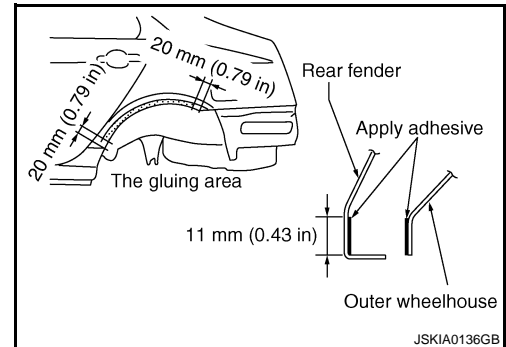
Ensure that the area that is to be glued around the outer wheelhouse is undamaged or defaced.

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

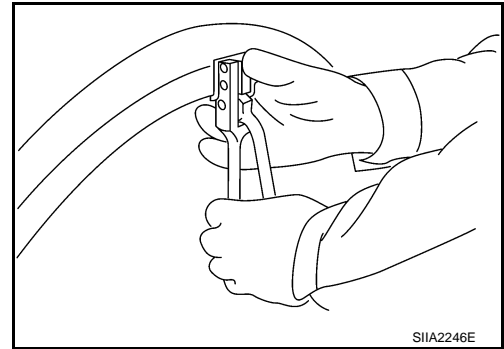
- Attach rear fender to the body of the car, and weld the required part except the hemming part.
- Bend the welded part starting from the center of the wheel arch gradually with a hammer and a dolly. (Also hem the end of the flange.)
- Hemming with a hammer is conducted to an approximate angle of 80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



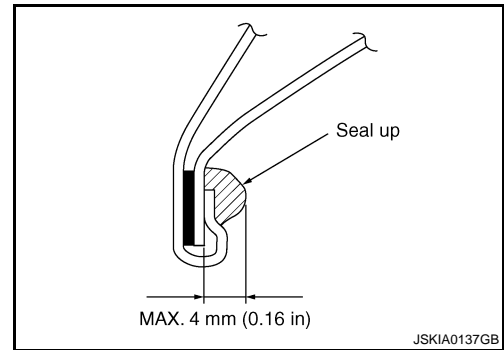
BODY CONSTRUCTION

< REMOVAL AND INSTALLATION >

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



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



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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

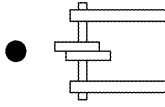
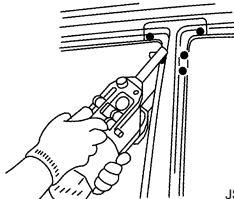
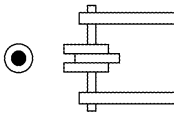
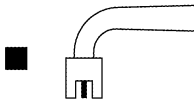
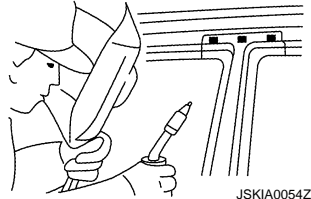


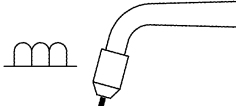
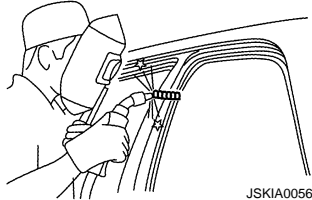
REPLACEMENT OPERATIONS

Description

INFOID:000000004687070

- 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.

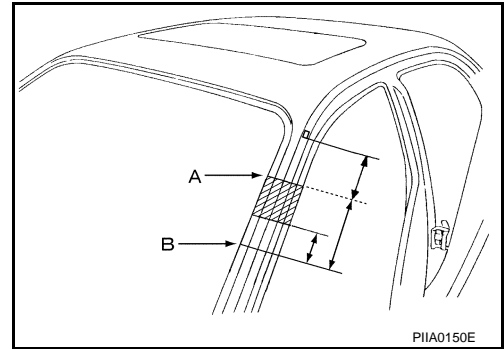
The symbols used in this section for welding operations are shown below.

Symbol marks	Description	
 JSKIA0049ZZ	2-spot welds	 JSKIA0053ZZ
 JSKIA0050ZZ	3-spot welds	
 JSKIA0051ZZ	MIG plug weld	 JSKIA0054ZZ For 3 panels plug weld method <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">■ A</div>  </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">■ B</div>  </div> JSKIA0055ZZ
 JSKIA0052ZZ	MIG seam weld / Point weld	 JSKIA0056ZZ

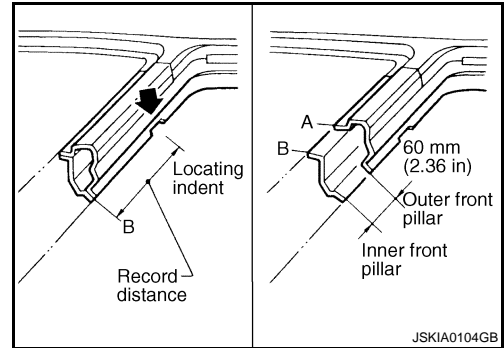
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

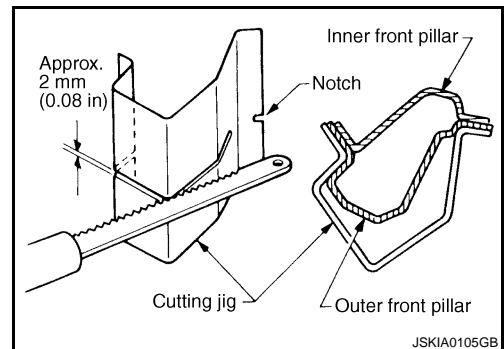
- Front pillar butt joint can be determined anywhere within shaded area as shown in the figure. The best location for the butt joint is at position A due to the construction of the vehicle.



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

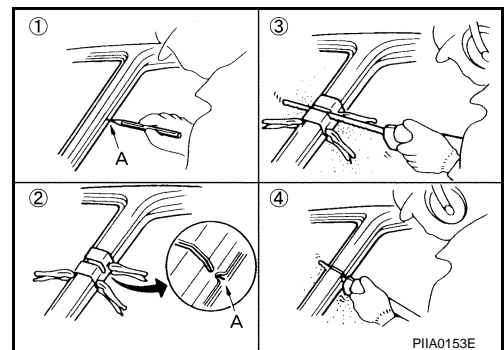


- Prepare a cutting jig to make outer pillar easier to cut. Also, this will permit the service part to be accurately cut at the joint position.



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

- 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.

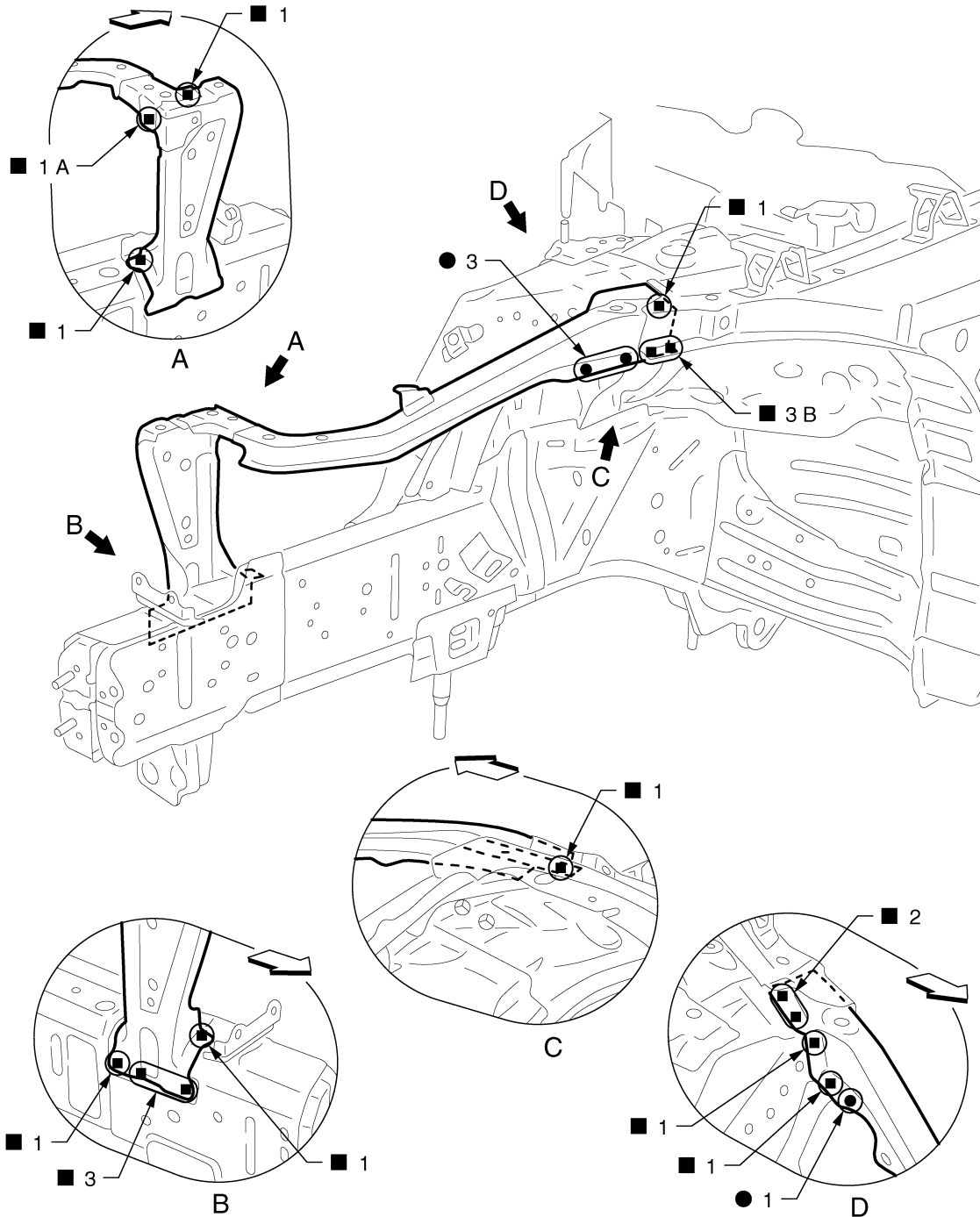


REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

Radiator Core Support

INFOID:000000004609576



JSKIA0904ZZ

← Vehicle front

Replacement parts

● Side radiator core support (LH)

● Front side member connector assembly (LH)

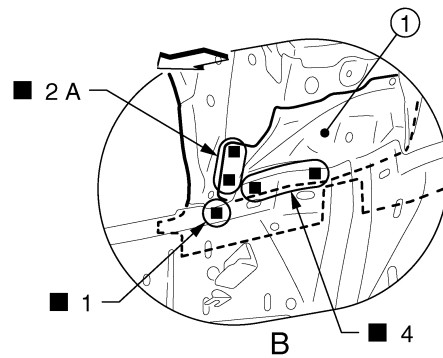
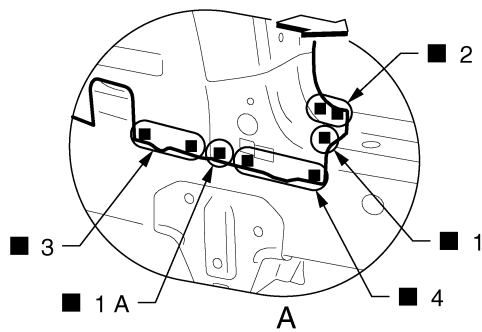
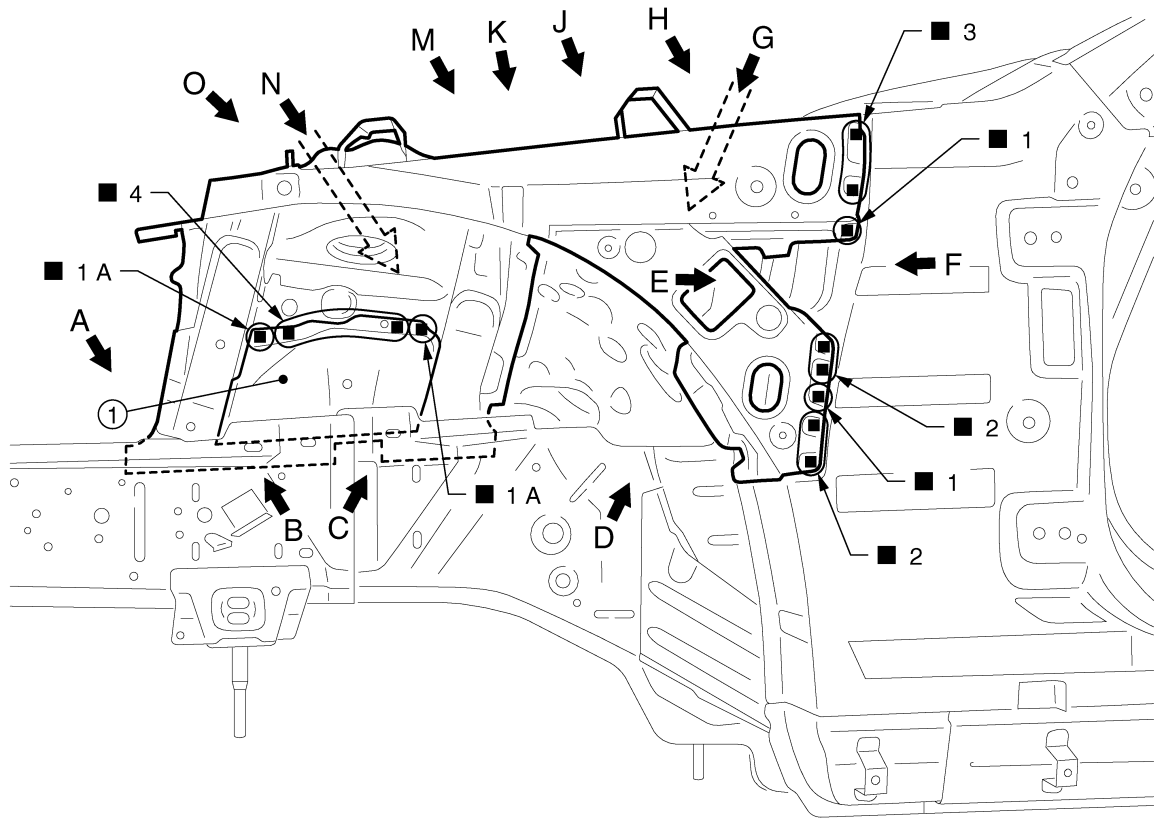
Hoodledge

INFOID:000000004609577

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

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



1. Front side member center closing plate

←: Vehicle front

Replacement parts

● Upper front hoodledge (LH)

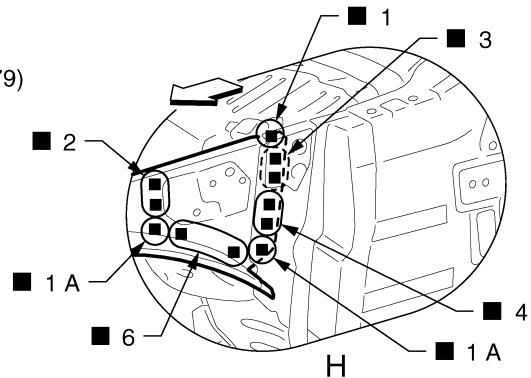
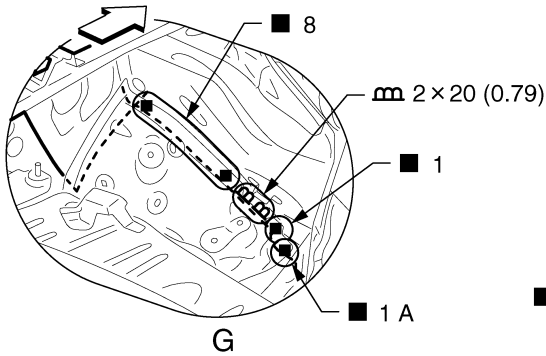
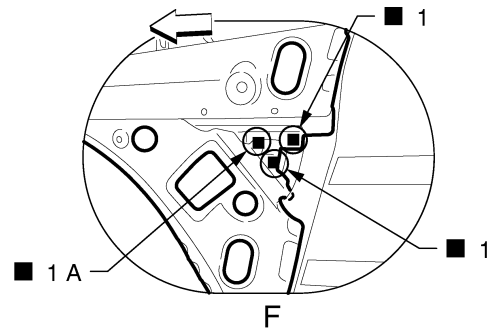
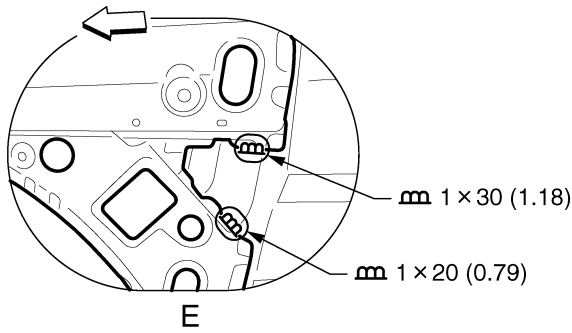
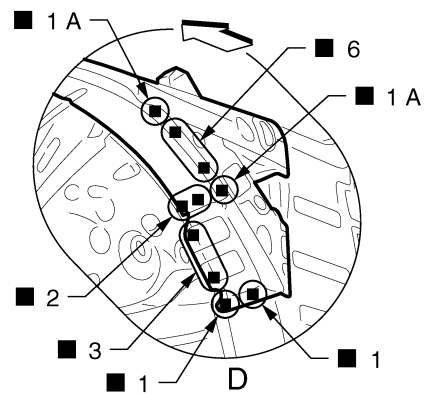
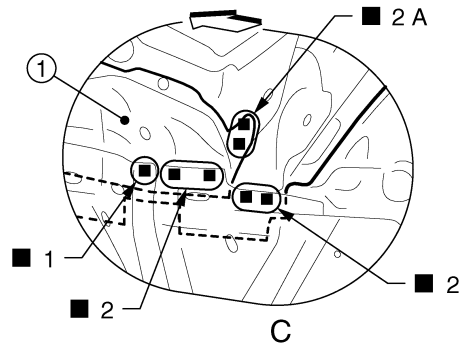
● Hoodledge reinforcement (LH)

● Front strut housing (LH)

JSKIA0905ZZ

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0906GB

1. Front side member center closing plate

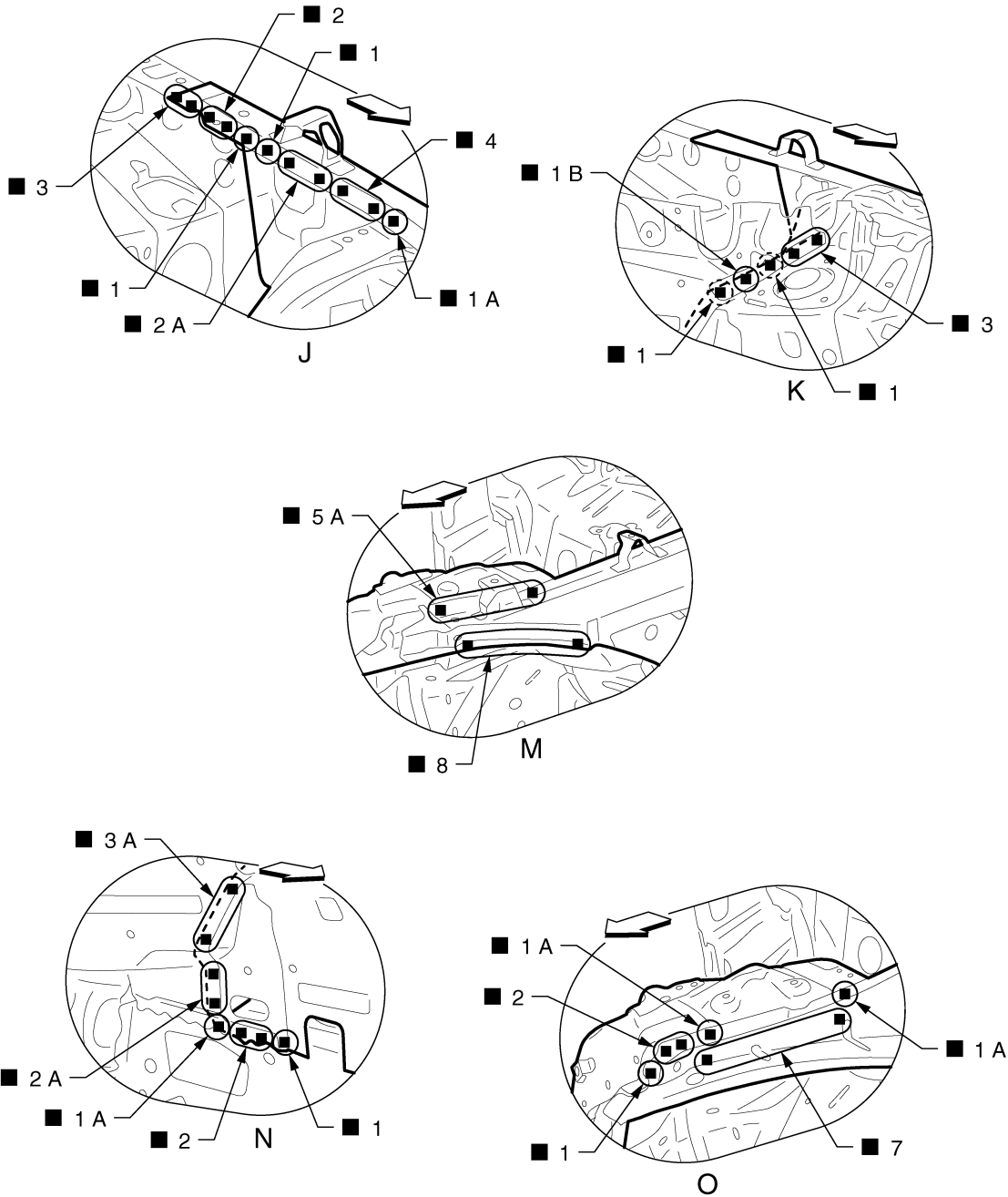
Unit: mm (in)

↔: Vehicle front

View H: Before installing hoodledge reinforcement

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0907ZZ

⇐: Vehicle front

View O: Before installing hoodedge reinforcement

Front Side Member

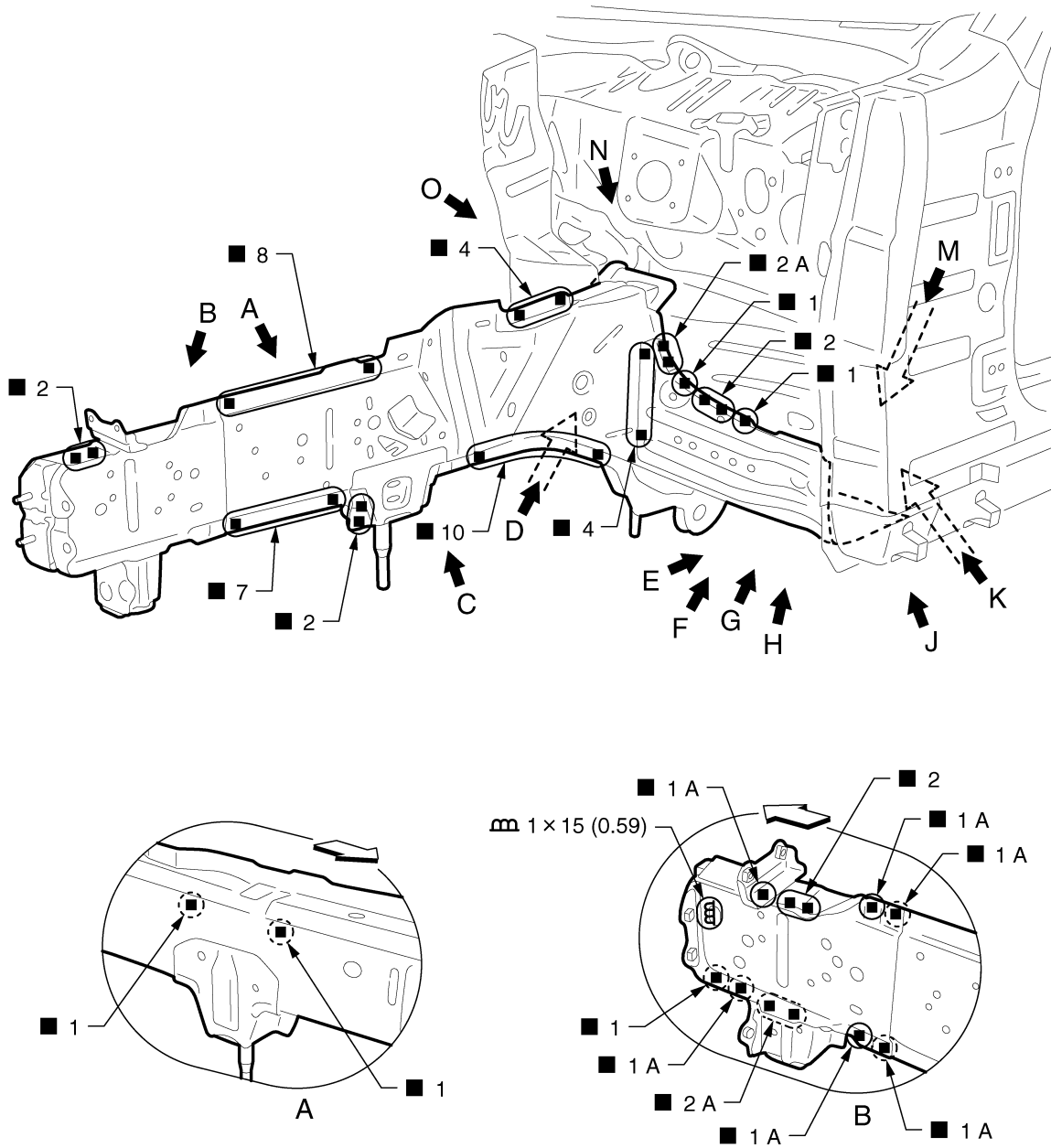
INFOID:000000004609578

Work after radiator core support and hoodedge are removed.

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

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0908GB

Unit: mm (in)

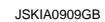
↔: Vehicle front

Replacement parts

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

View A: Before installing front side member closing plate assembly

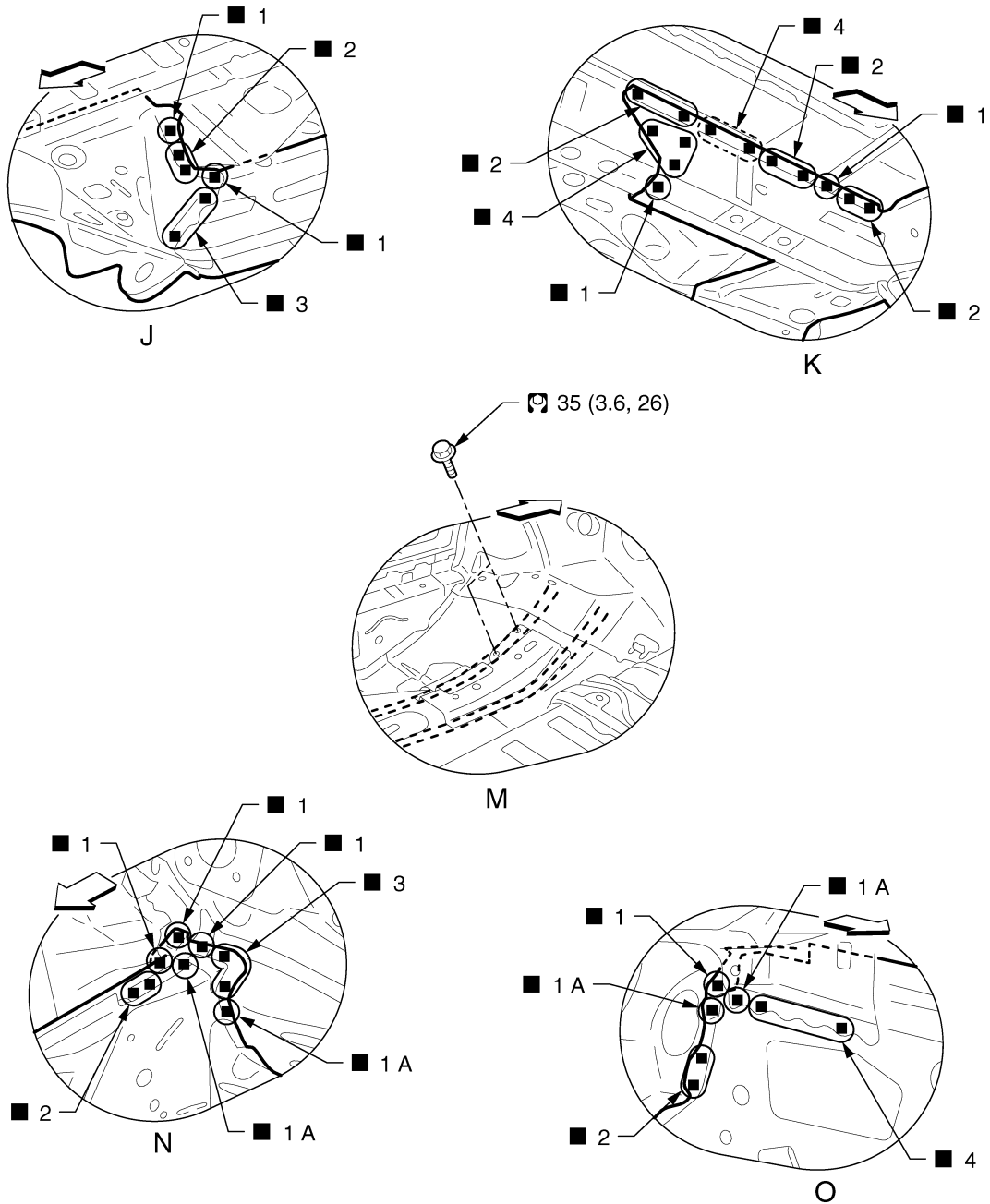
< REMOVAL AND INSTALLATION >



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

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0910GB

←: Vehicle front

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

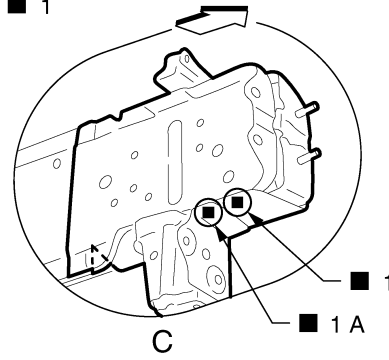
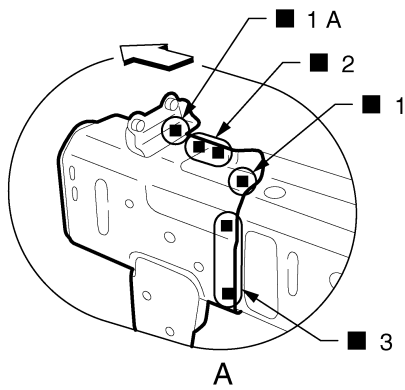
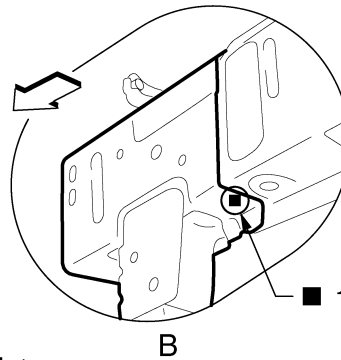
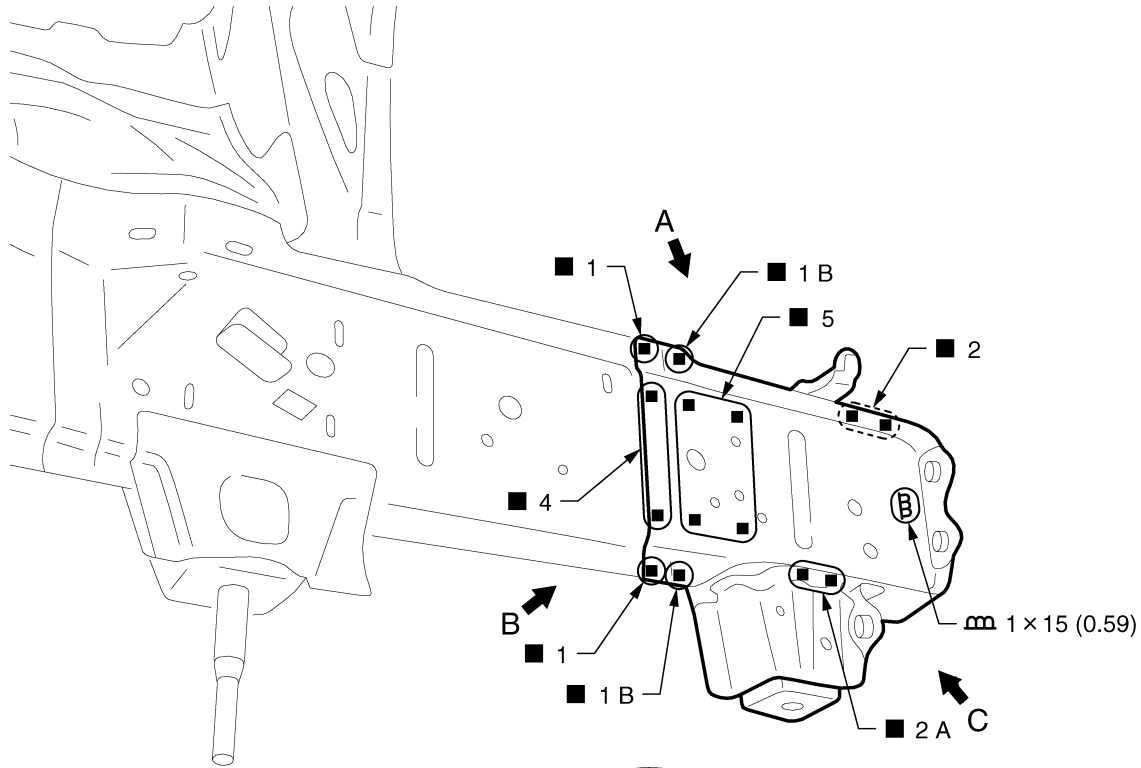
Front Side Member (Partial Replacement)

INFOID:000000004609580

Work after radiator core support is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0911GB

Unit: mm (in)

⇐: Vehicle front

Replacement parts

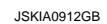
- Front side member front extension (RH)
- Front side member front closing plate (RH)
- Front side rear closing reinforcement (RH)

Front Pillar (Partial Replacement)

INFOID:000000004609581

Work after hoodledge reinforcement is removed.

< REMOVAL AND INSTALLATION >

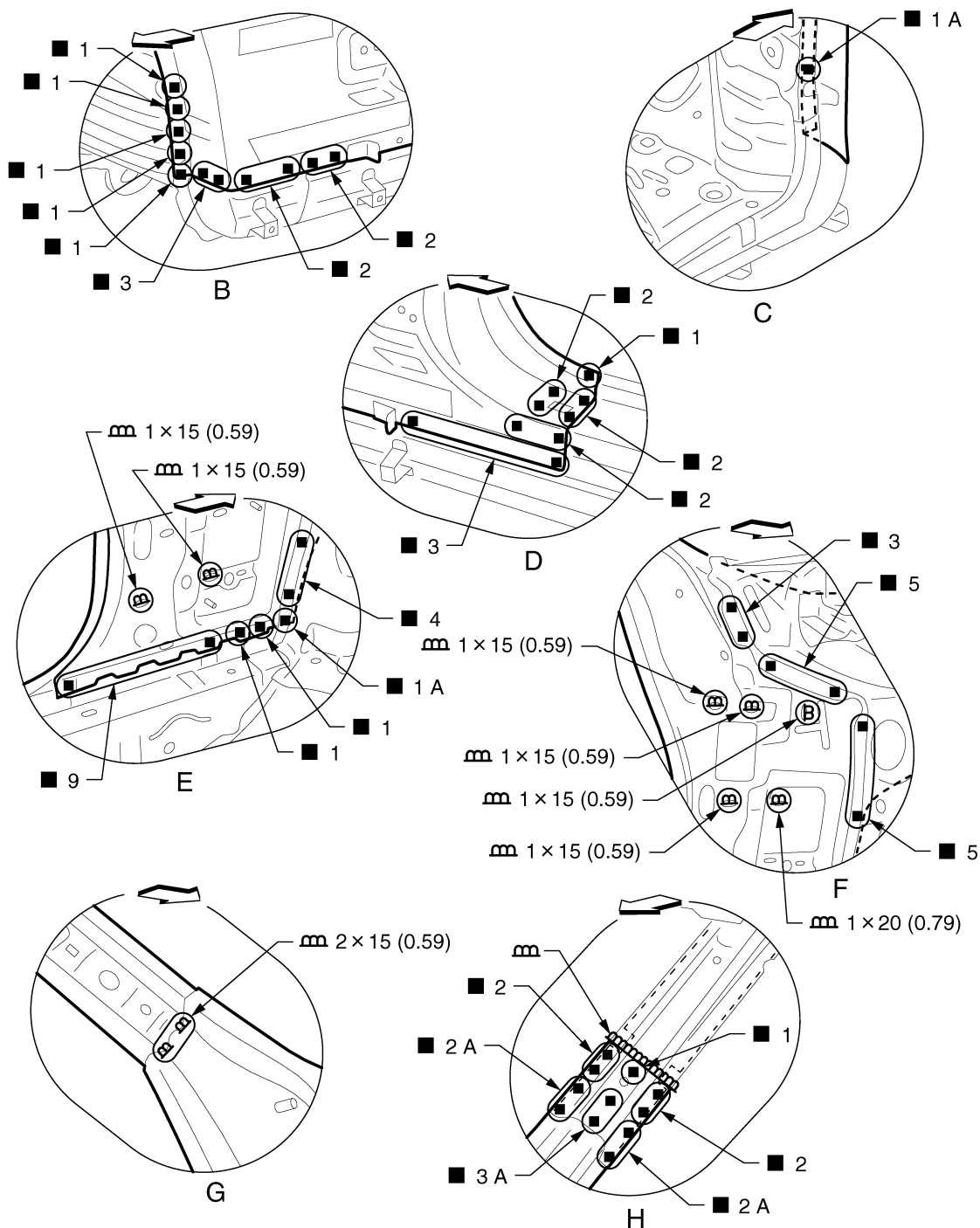


- Inner side roof rail (LH)

2009 370Z

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



Unit: mm (in)

⇐: Vehicle front

Front Pillar

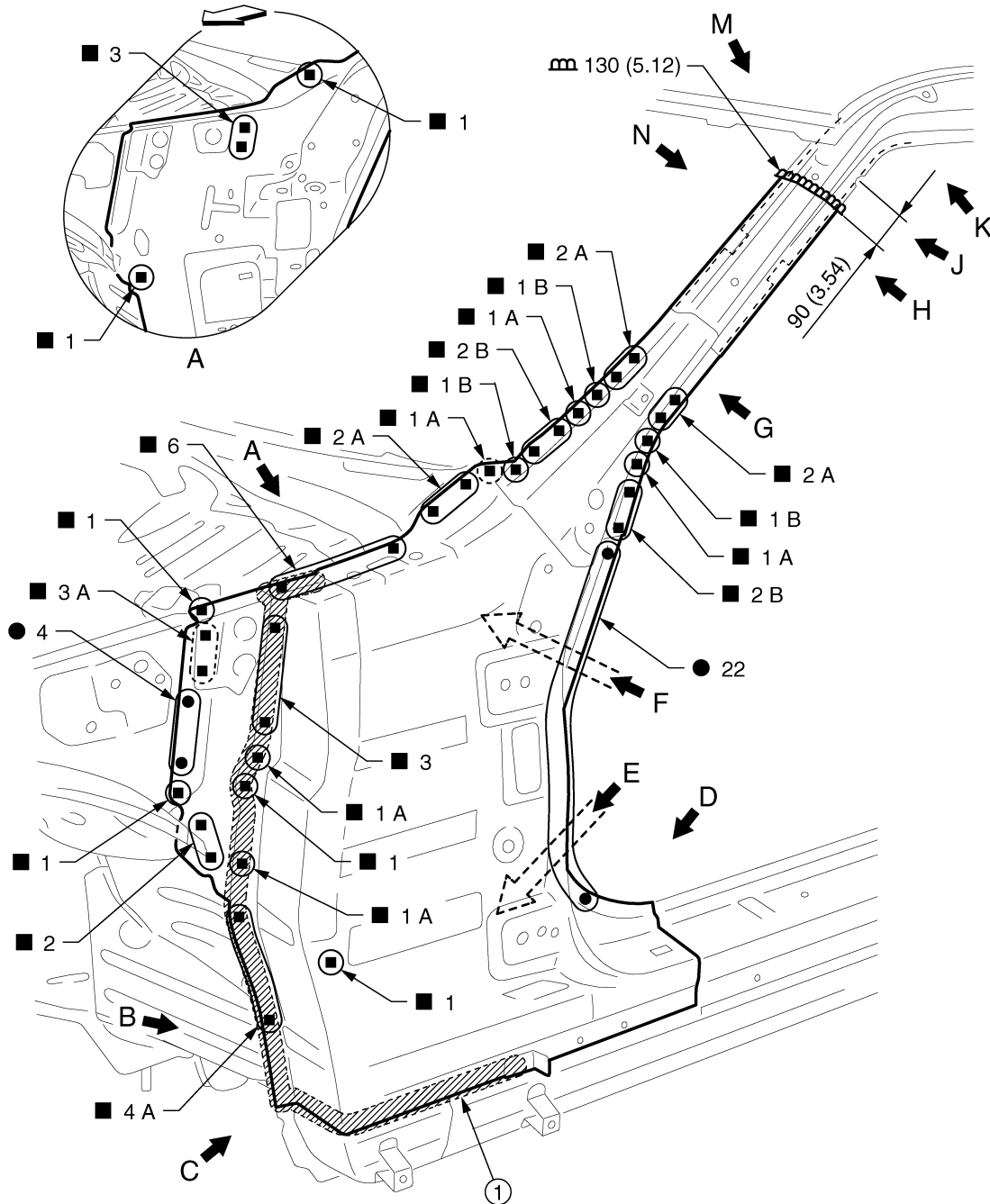
Work after hoodledge reinforcement is removed.
Remove the front roof rail brace (reusable).

JSKIA0913GB

INFOID:000000004675514

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0914GB

1. Body sealing

Unit: mm (in)

◀: Vehicle front

Replacement parts

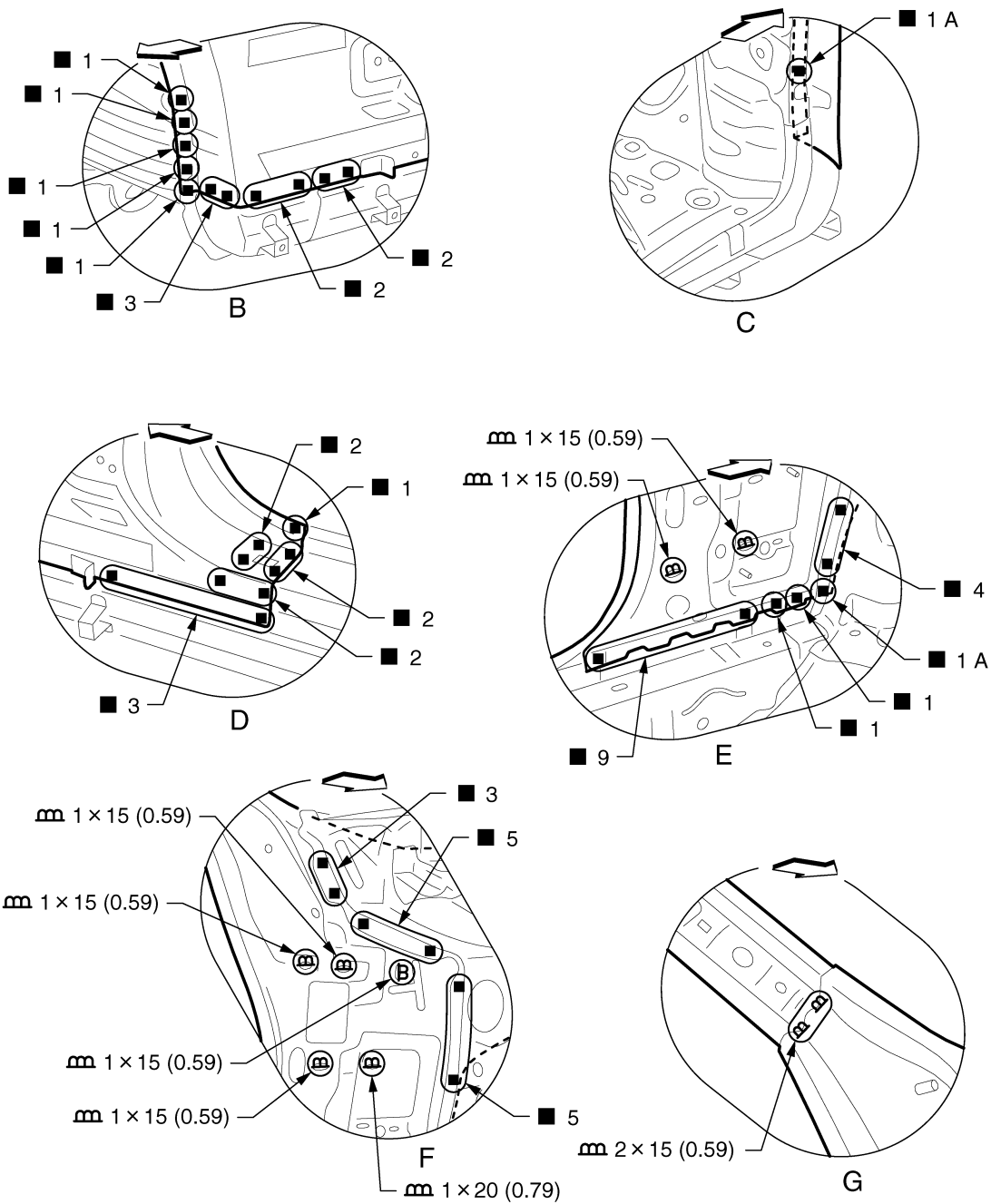
● Upper front pillar reinforcement (LH) ● Upper rear hoodledge (LH)

● Inner side roof rail (LH)

View A: Before installing upper front pillar reinforcement

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0915GB

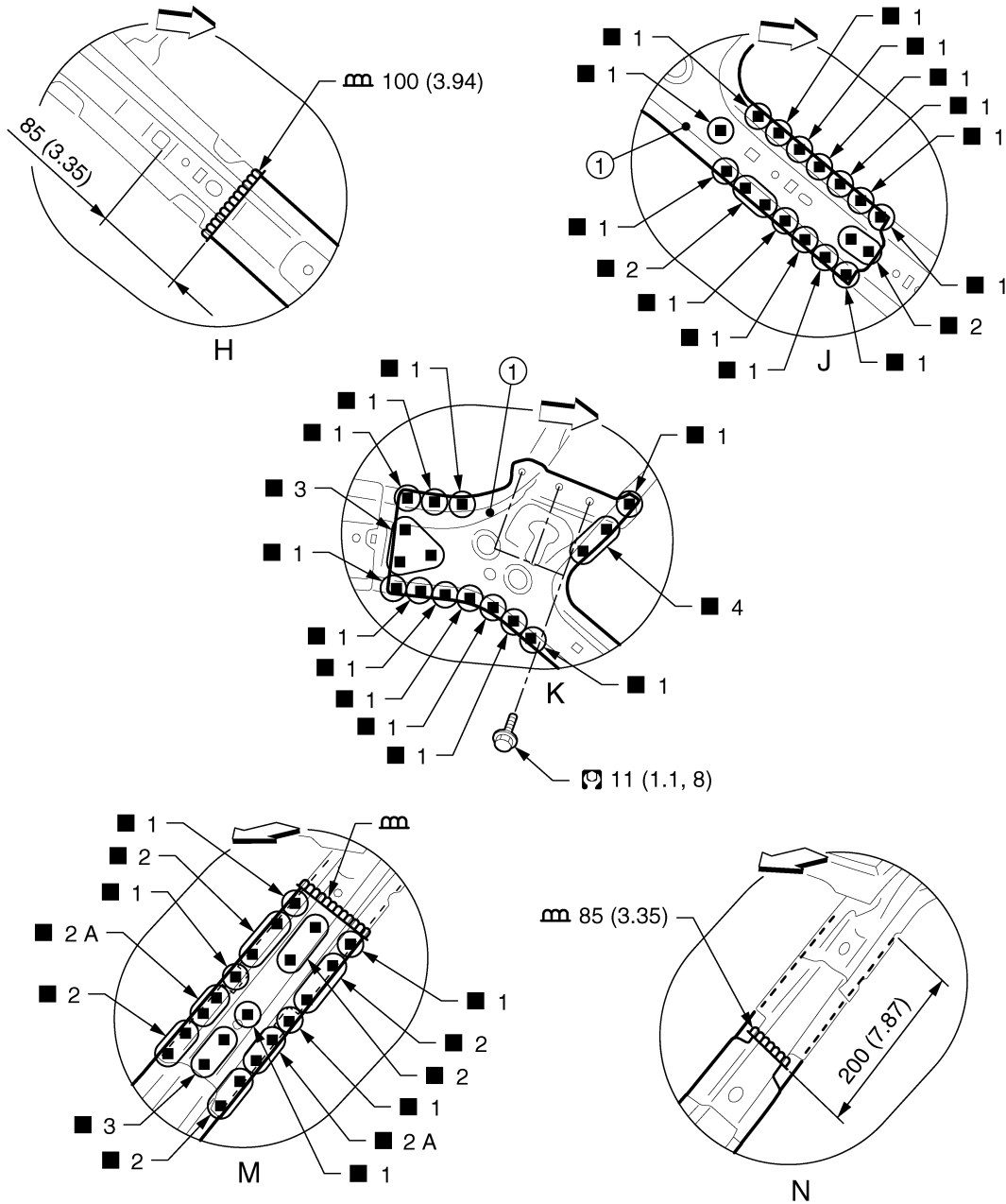
Unit: mm (in)

↔: Vehicle front

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0916GB

1. Front roof rail brace

Unit: mm (in)

↔: Vehicle front

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

View H: Before installing front roof rail brace

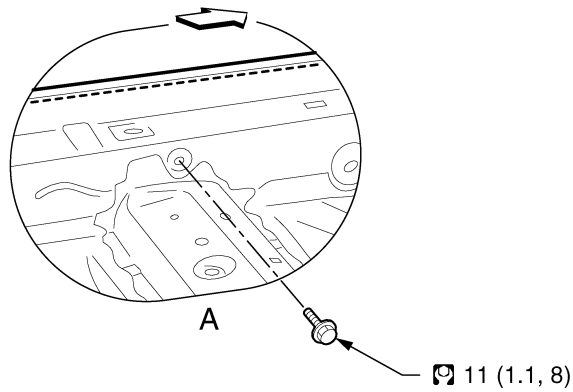
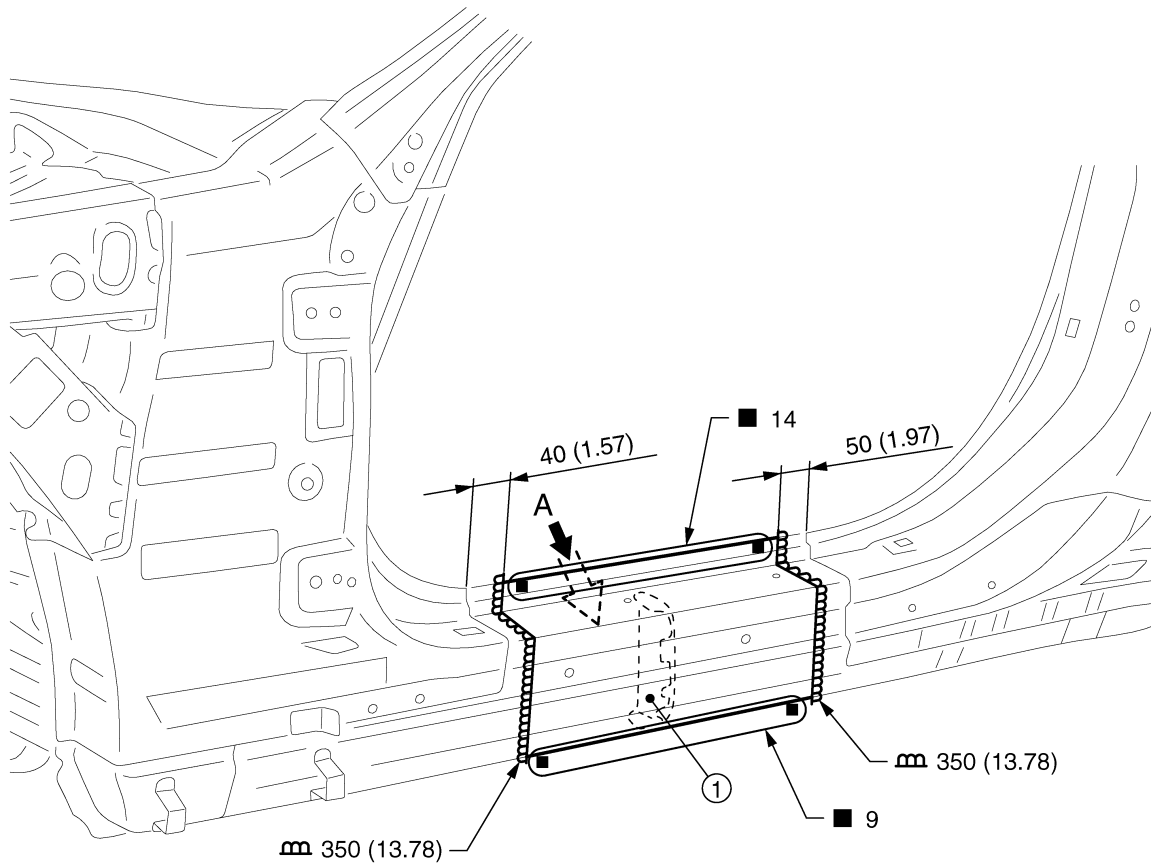
View N: Before installing upper outer front pillar

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

Outer Sill (Partial Replacement by Cutting)

INFOID:000000004609582



1. Outer sill brace

Unit: mm (in)

↔: Vehicle front

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

Replacement parts

- Outer sill reinforcement (LH)

JSKIA0917GB

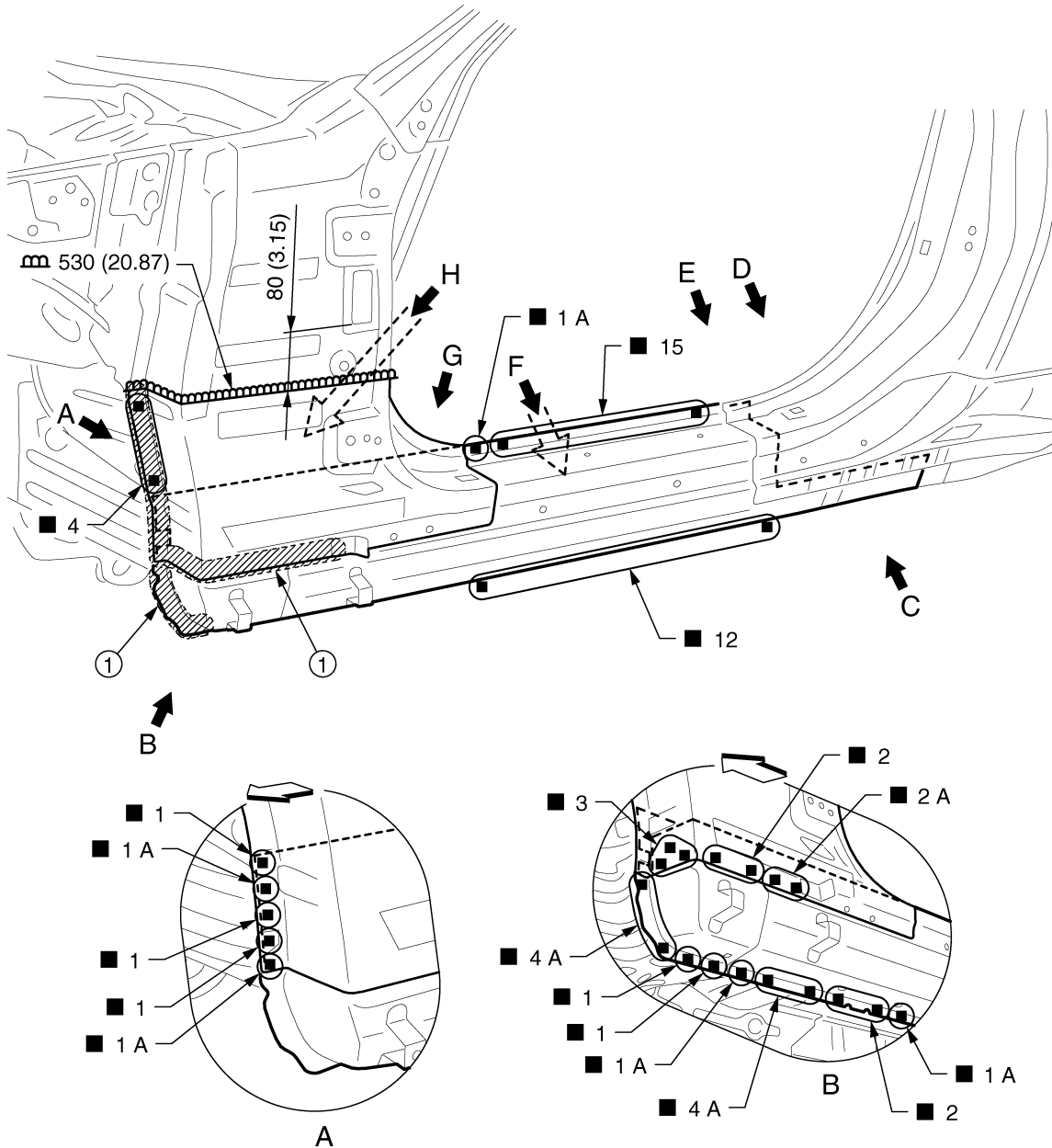
REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

Outer Sill (Partial Replacement by Piece)

INFOID:000000004675517

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



JSKIA0918GB

1. Body sealing

Unit: mm (in)

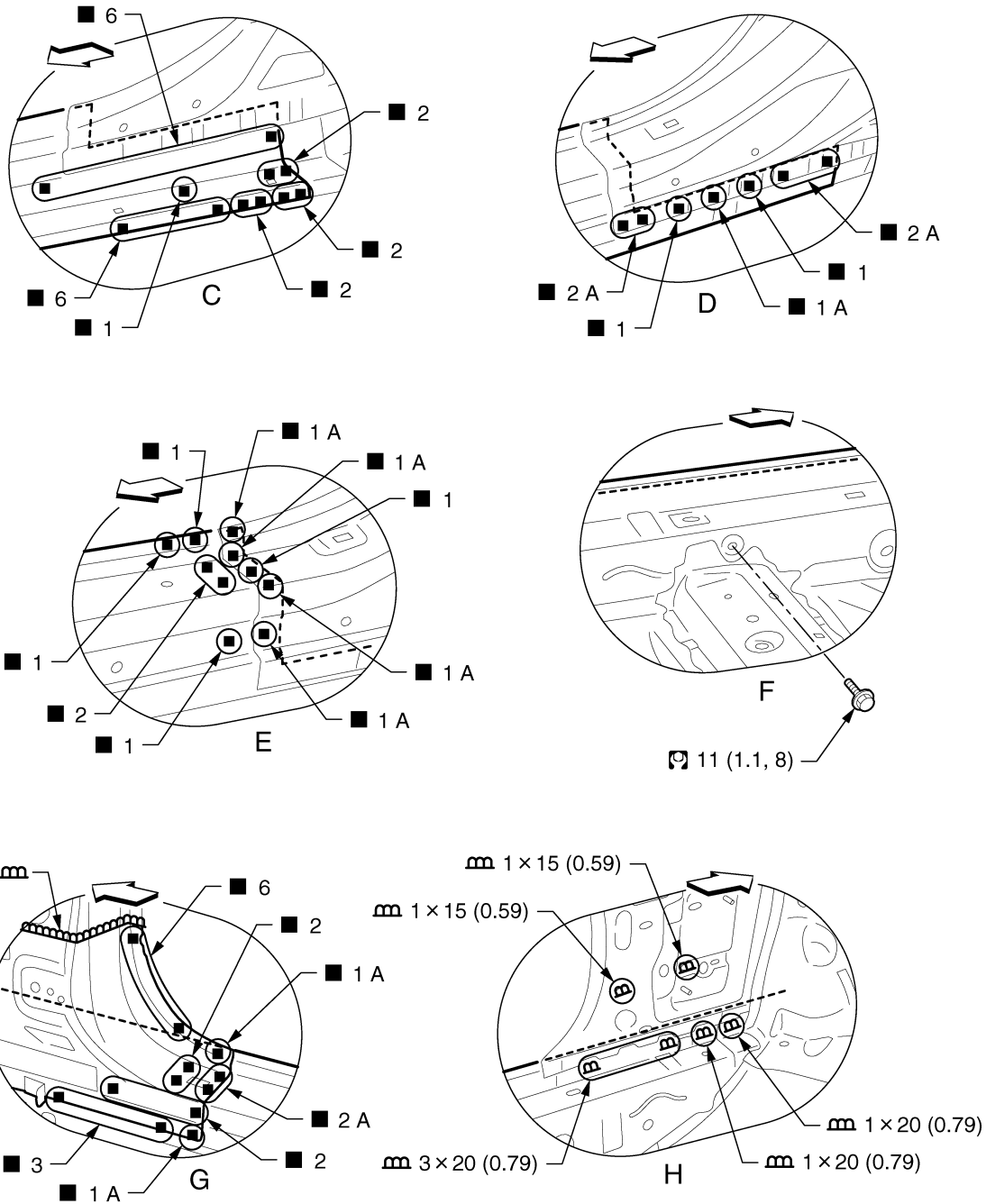
↖: Vehicle front

Replacement parts

- Outer sill reinforcement (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



Unit: mm (in)

⇐: Vehicle front

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

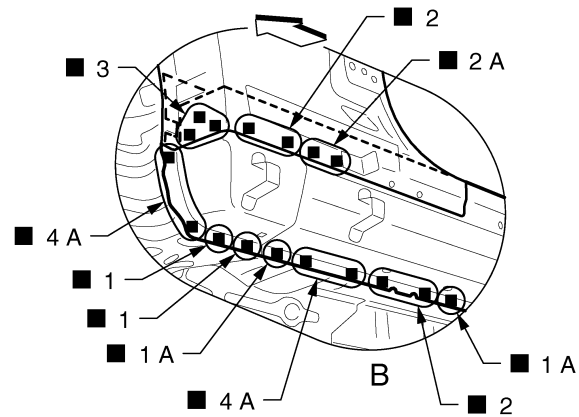
Outer Sill

Work after hoodledge reinforcement, rear fender, and lock pillar reinforcement are removed.
Remove the front pillar brace (reusable).

JSKIA0919GB

INFOID:000000004675518

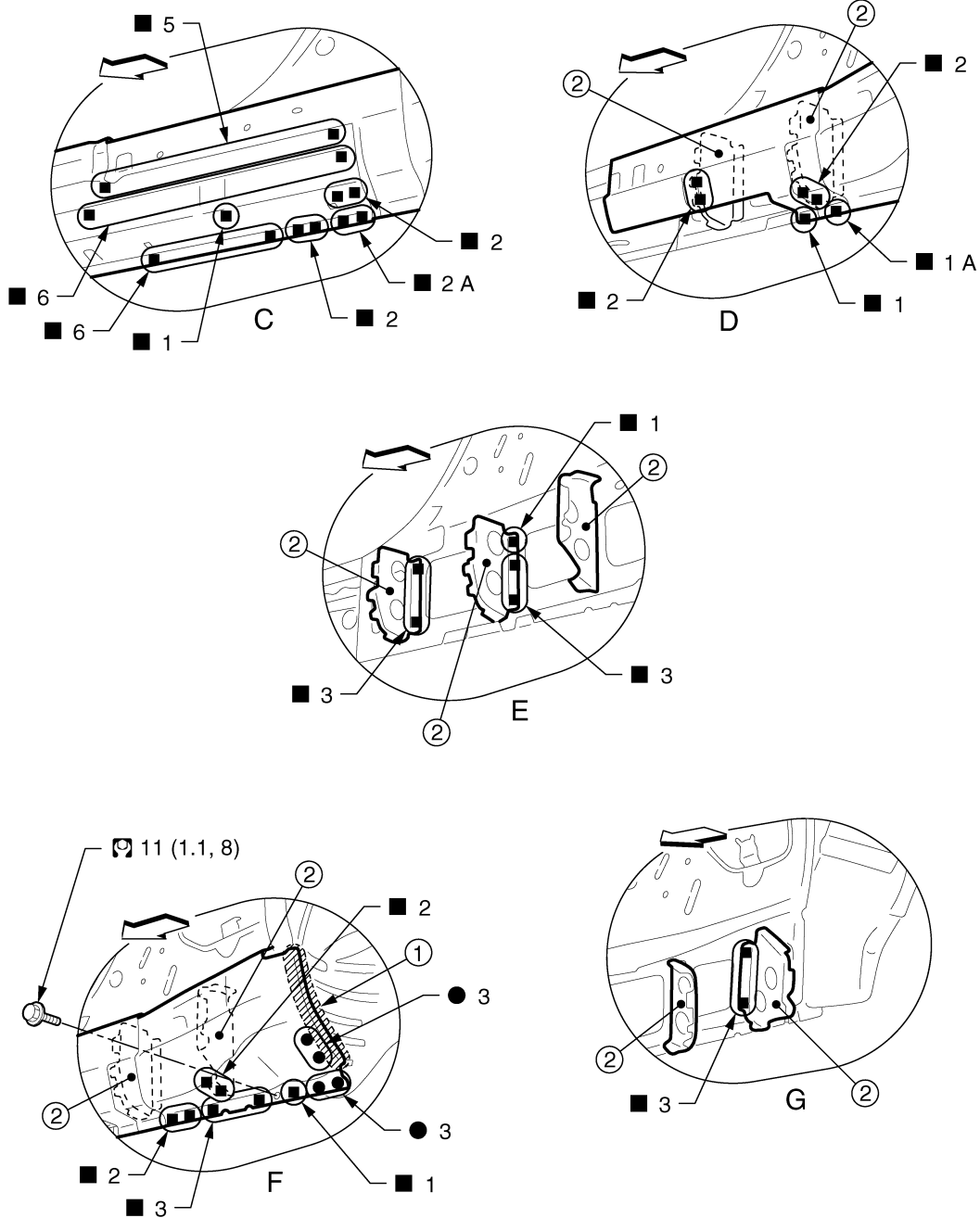
< REMOVAL AND INSTALLATION >



2009 370Z

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



1. Body sealing

2. Outer sill brace

Unit: mm (in)

⇐: Vehicle front

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

View D: Before installing outer sill reinforcement

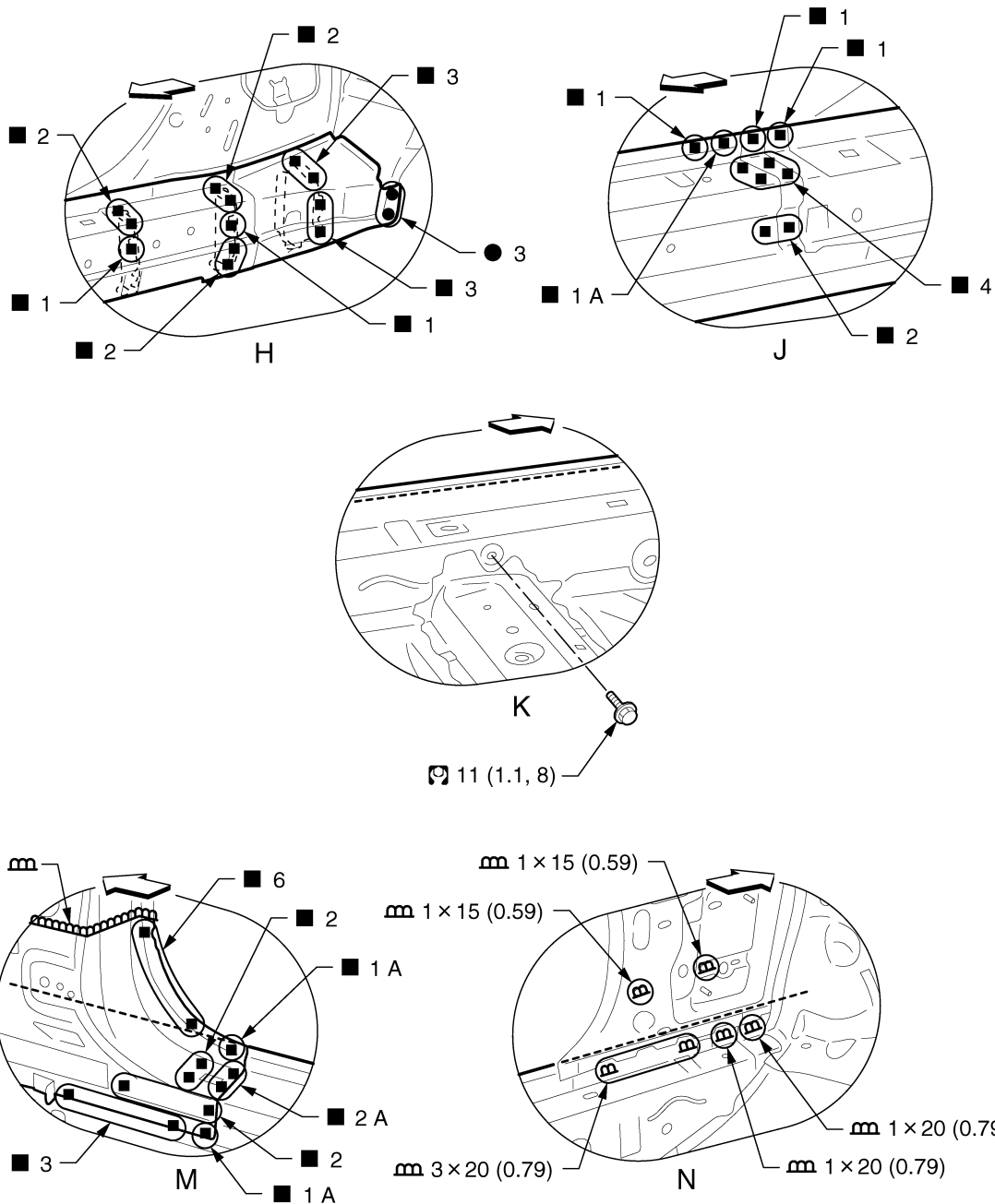
View E and G: Before installing outer rear wheelhouse extension

JSKIA0921GB

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0922GB

Unit: mm (in)

↔: Vehicle front

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

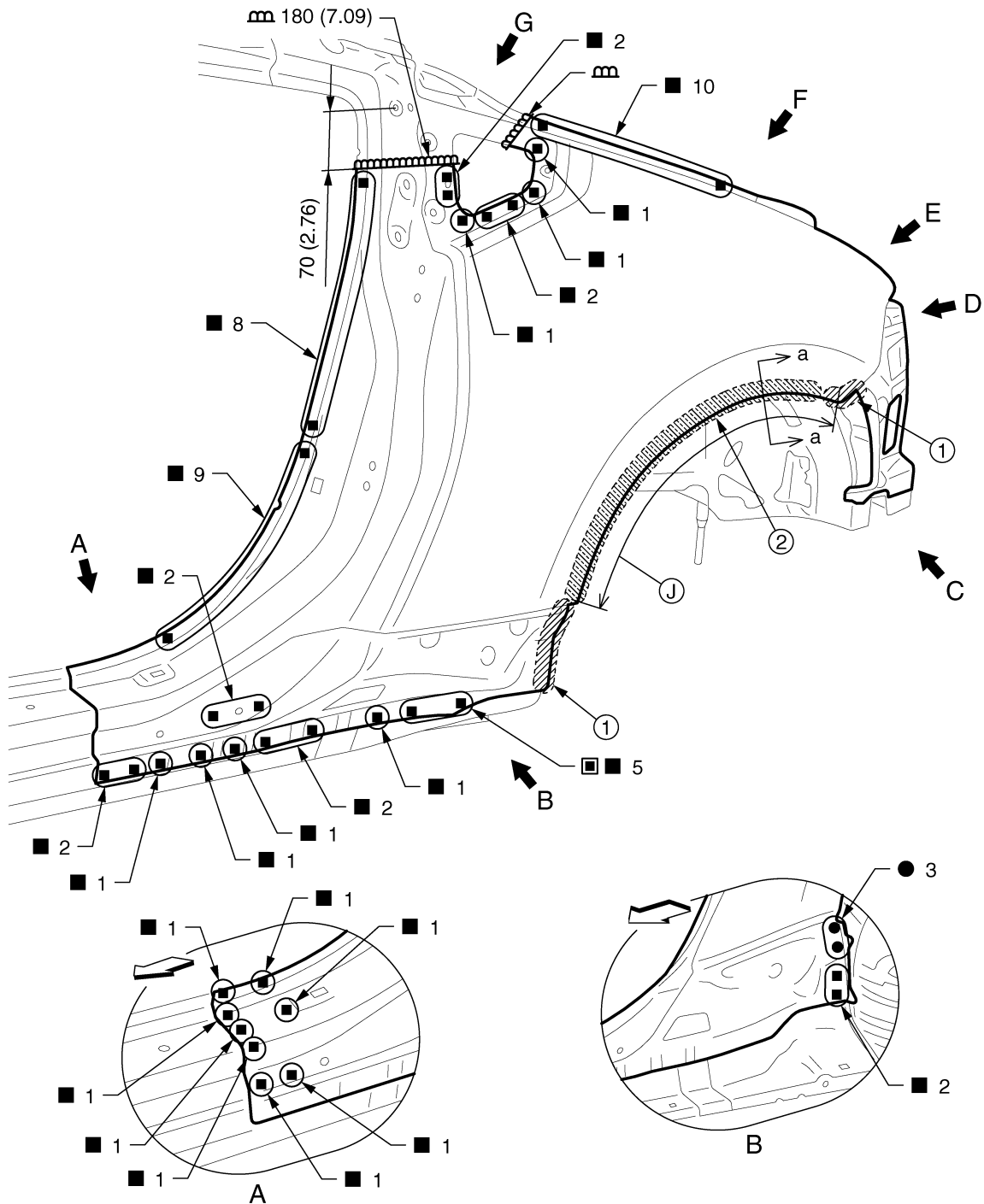
View H: Before installing outer sill reinforcement

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

Rear Fender

INFOID:000000004609583



- 1. Body sealing
- 2. Adhesive

J. Hemming portion

Unit: mm (in)

↔: Vehicle front

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

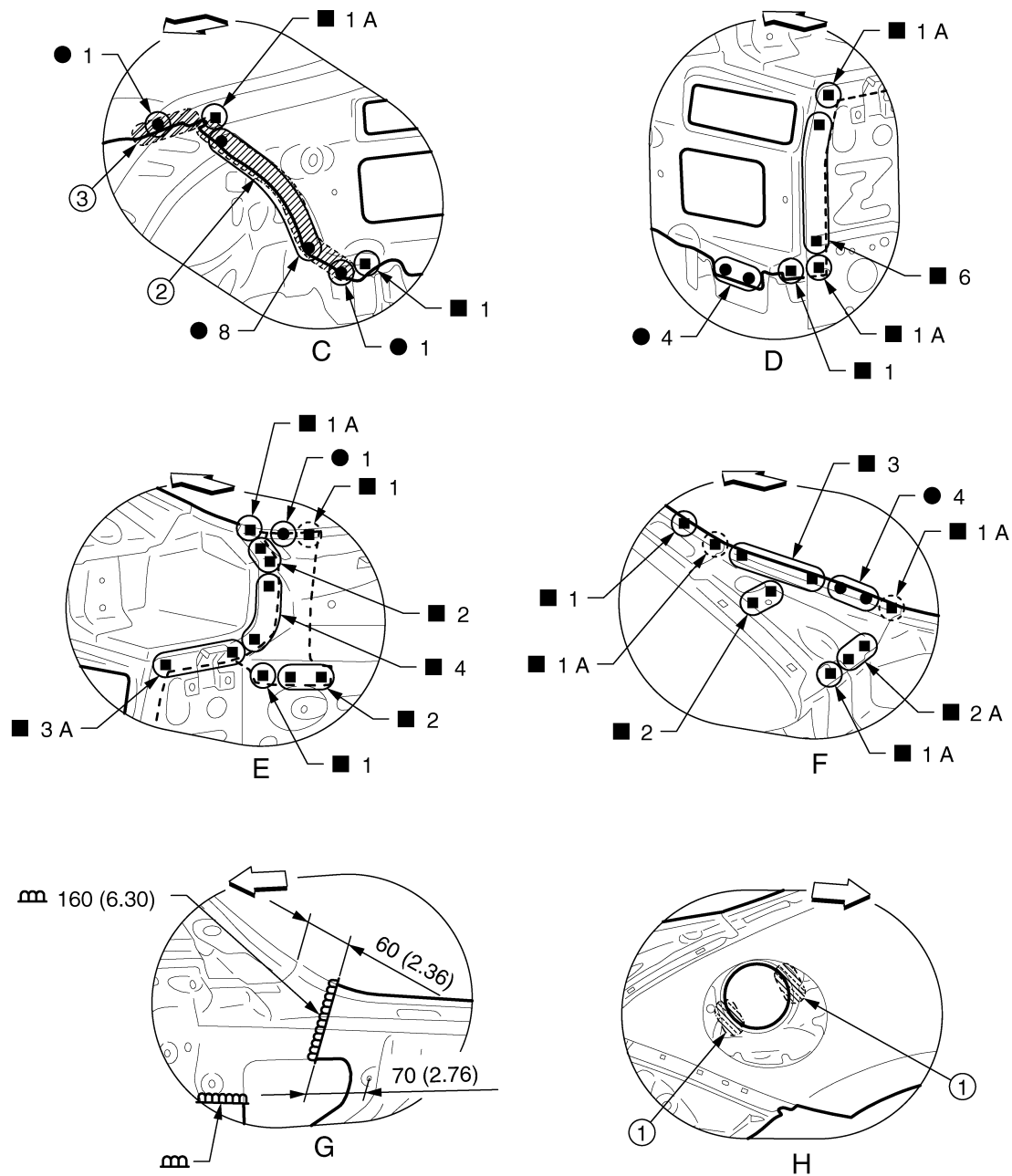
Replacement parts

- Rear fender assembly (LH)

JSKIA0923GB

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0924GB

1. Adhesive

2. Body sealing

3. Urethane foam

Unit: mm (in)

◀: Vehicle front

View H: Right side rear fender

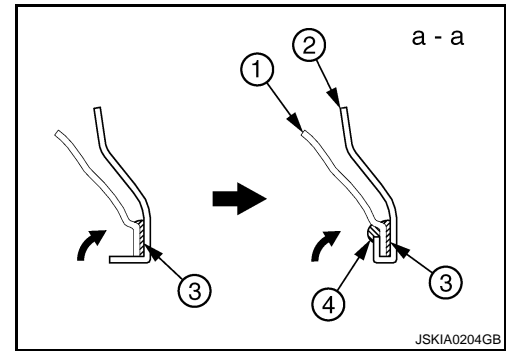
POINT

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

- Perform the hemming to the flange of wheelarch after applying the adhesive.
- Apply the sealing to the flange end.
- Refer to [BRM-32. "Rear Fender Hemming Process"](#).

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



Lock Pillar Reinforcement

Work after rear fender is removed.

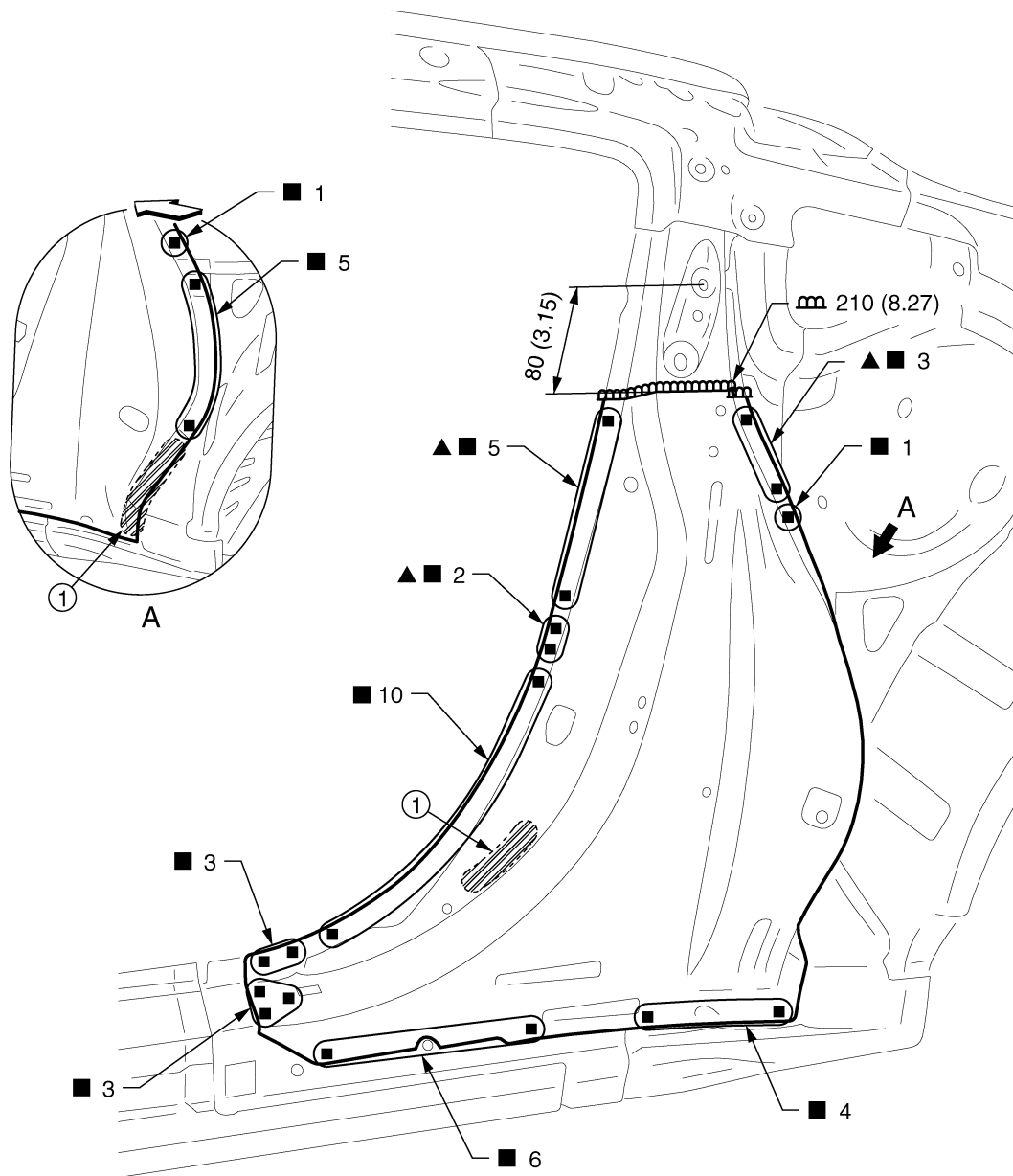
INFOID:000000004609584

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0925GB

1. Urethane foam

Unit: mm (in)

↖: Vehicle front

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

Replacement parts

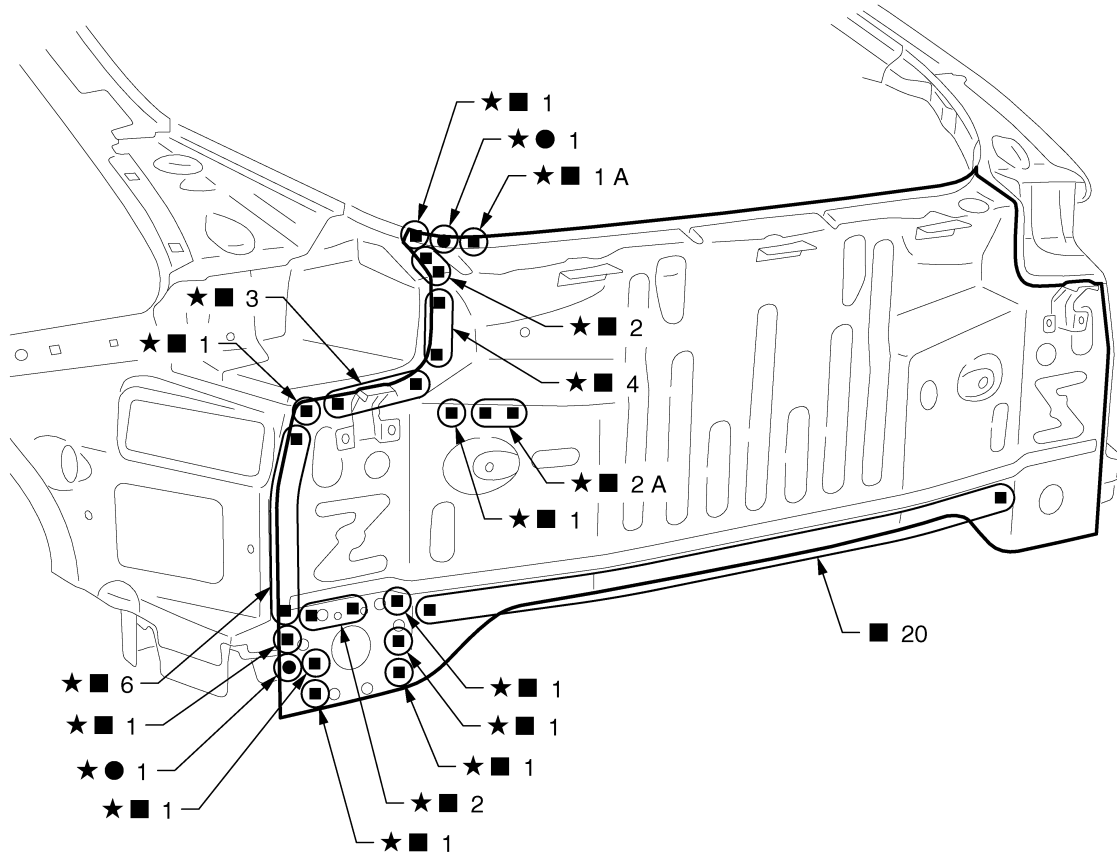
- Lock pillar reinforcement assembly (LH)

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >

Rear Panel

INFOID:000000004609587



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

Replacement parts

- Rear panel assembly

Rear Floor Rear

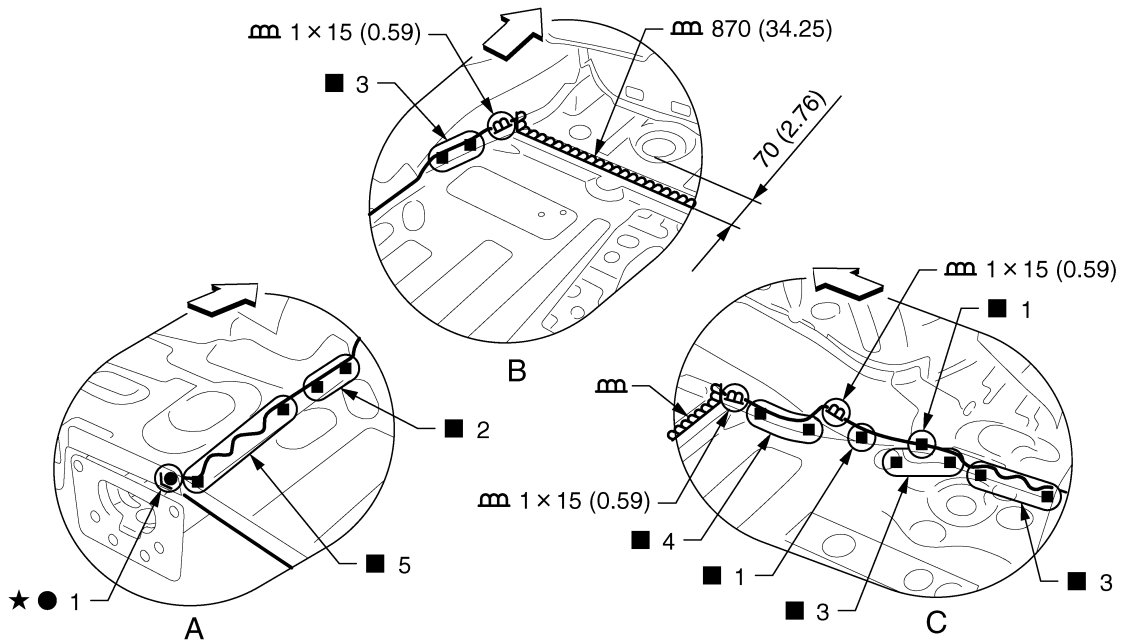
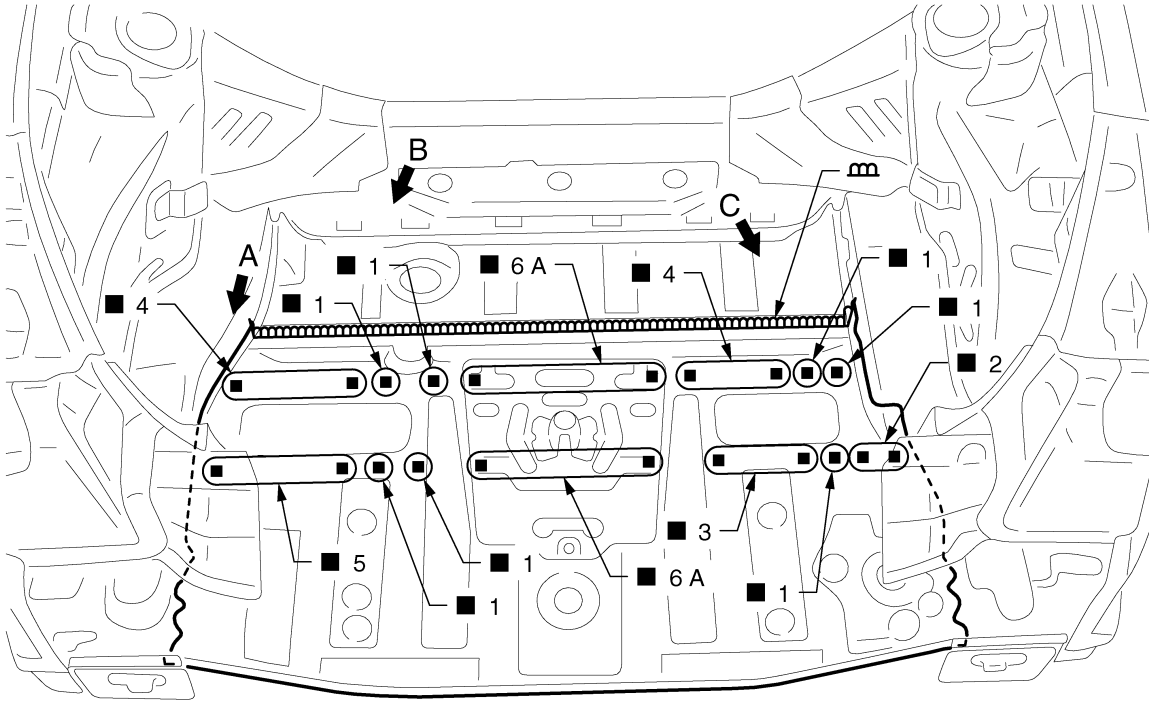
INFOID:000000004609588

Work after rear panel is removed.

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REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



JSKIA0927GB

Unit: mm (in)

↔: Vehicle front

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

Replacement parts

- Rear floor rear

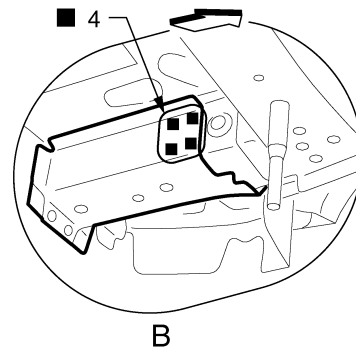
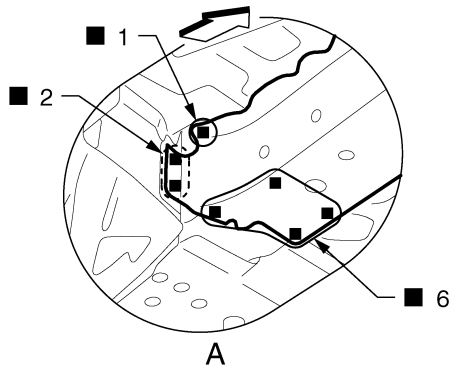
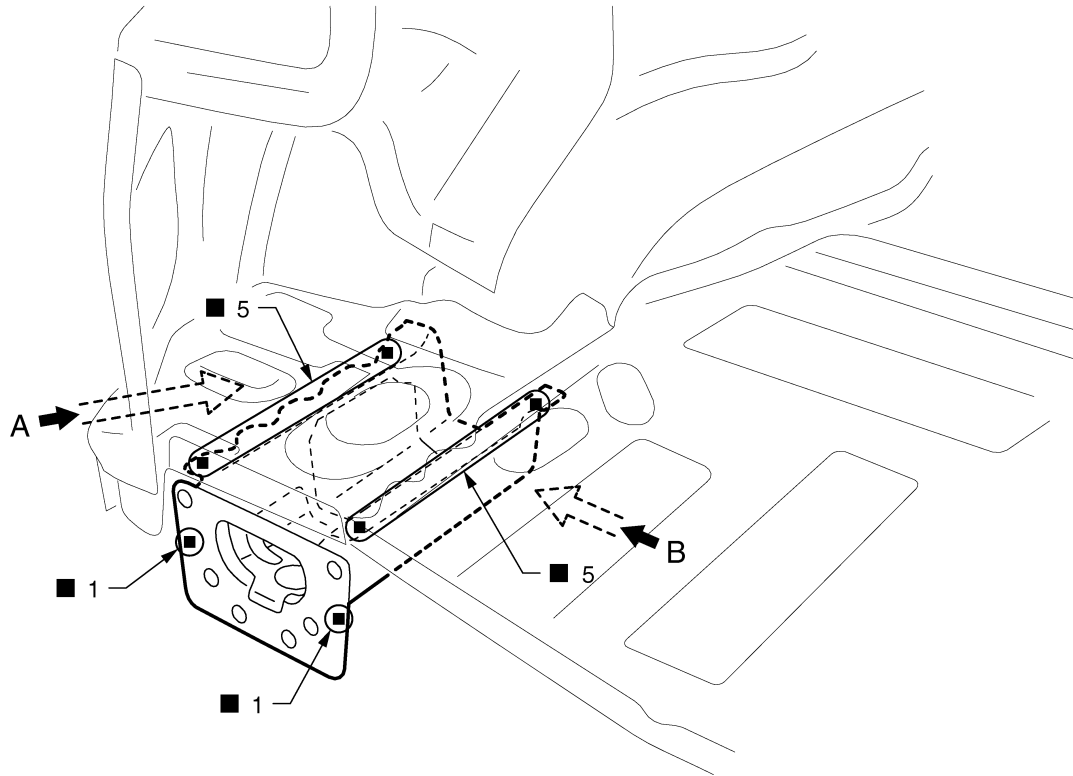
Rear Side Member Extension

INFOID:000000004609589

Work after rear panel is removed.

REPLACEMENT OPERATIONS

< REMOVAL AND INSTALLATION >



⇐: Vehicle front

Replacement parts

- Rear side member extension (LH)

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