

This service manual has been prepared to provide SUBARU service personnel with the necessary information and data for the correct repair of SUBARU vehicles.

Please peruse and utilize this manual thoroughly and make the most of it to give better service to your customers.

When replacement of parts during repair work is needed, be sure to use SUBARU genuine parts.

All information, illustration and specifications contained in this manual are based on the latest product information available at the time of publication approval.

BODY STRUCTURE

BS

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1. Foreword

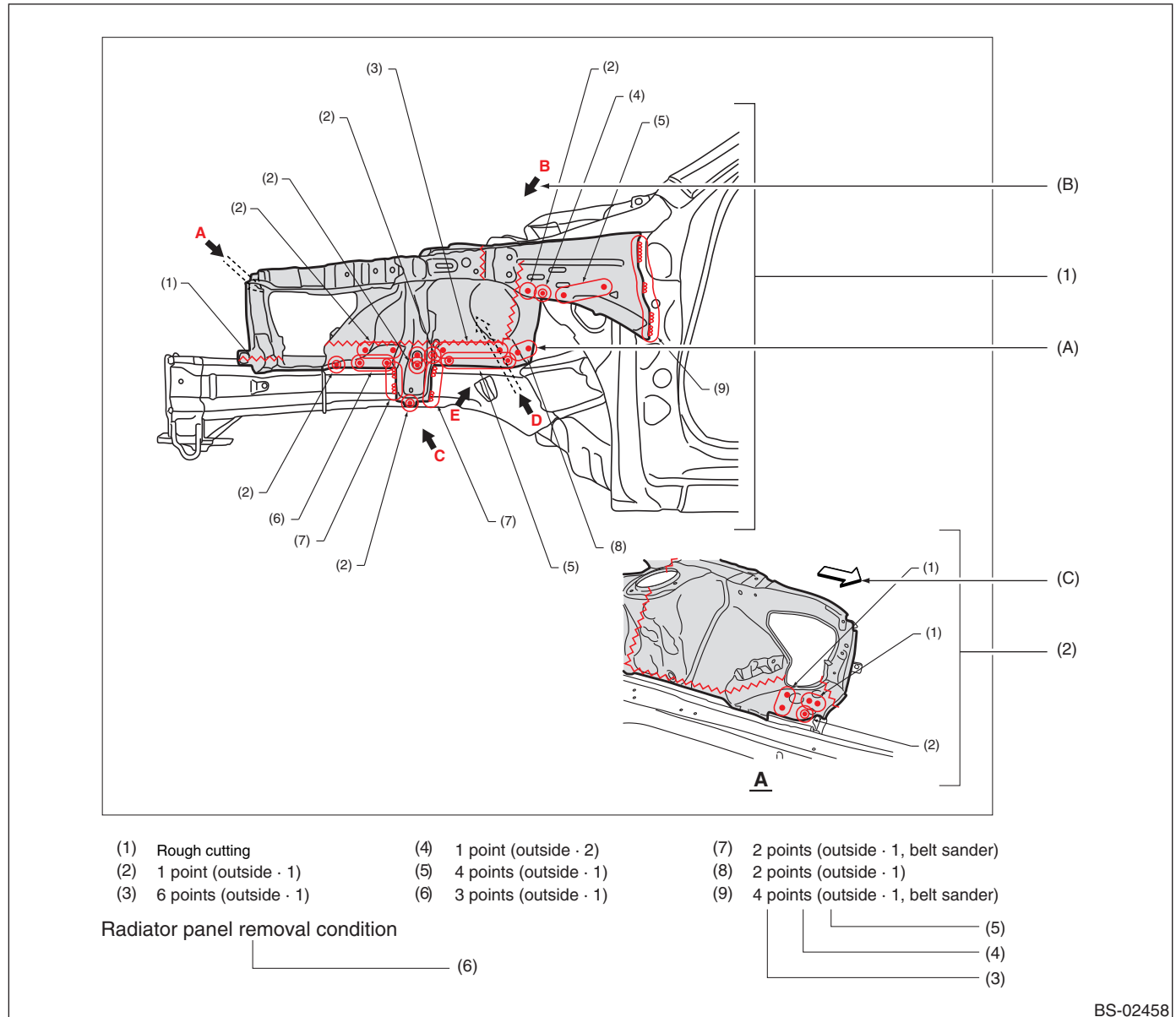
A: USE OF THIS MANUAL

- This manual explains the repair parts recommended for replacement by the manufacturer and body dimensions when the vehicle is damaged by accident.
- Replacing repair parts for which work procedures are not described in this manual is not recommended as it may reduce the body strength of the main skeleton of the vehicle, whose main purpose is to protect occupants.
- This manual was prepared for persons who have basic skills and knowledge in body repair and maintenance of SUBARU vehicles. Persons without these skills and knowledge may not be able to perform proper repair and maintenance even if they follow this manual.
- This manual is based on the assumption that all equipment and related parts have been removed. Refer to the service manual for instructions on how to detach and attach equipment and related parts.
- Some repair procedures in this manual include replacement work for repair parts that were removed from the repair parts complete. Therefore, the work may be different from the replacement work performed with repair parts complete.
- This manual explains the points to be observed during removal and installation of parts separately by location.

Foreword

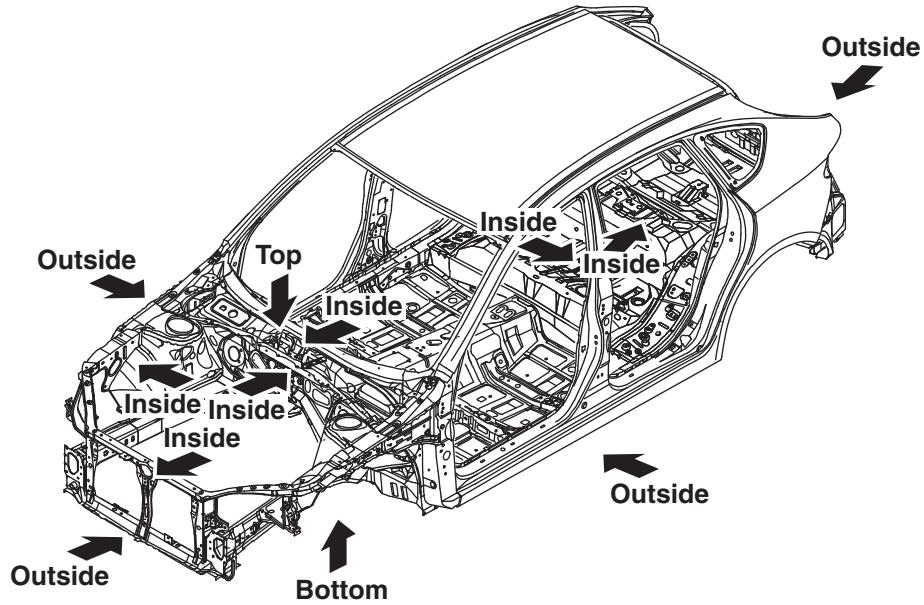
1. ILLUSTRATION EXAMPLE

- Symbols and number of points indicate the welding method and the number of welding points. Text in brackets indicates the direction for removal of welded parts, and numbers indicate the number of plates to be drilled in panels of welded parts to be removed.
- An enclosure by a broken line indicates work from the opposite side (Rear side).



2. REMOVAL DIRECTION

Division is made into the four groups of inside, outside, top, and bottom, and these directions are defined as shown in the following figure.

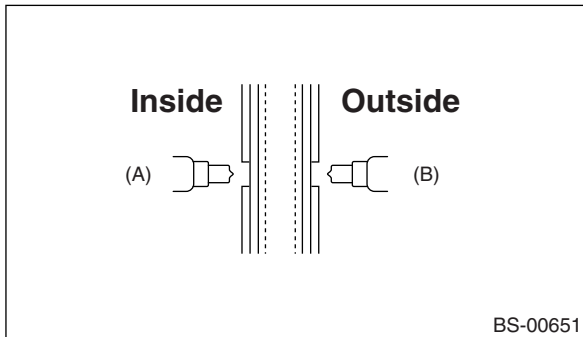


BS-02459

3. NUMBER OF PANELS TO BE DRILLED

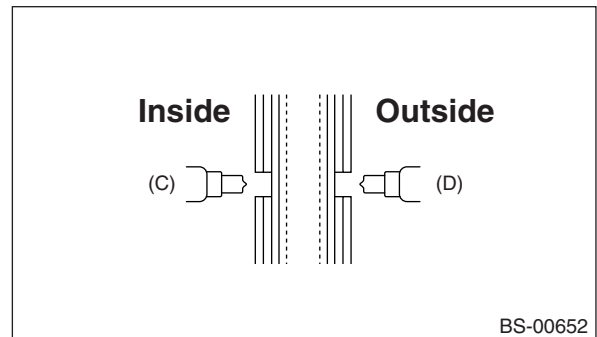
Depending on the number of panels, drilling is done through one panel or two panels, and this number is listed together with the removal direction.

(1) Drilling through one plate



- (A) (Inside · 1)
- (B) (Outside · 1)

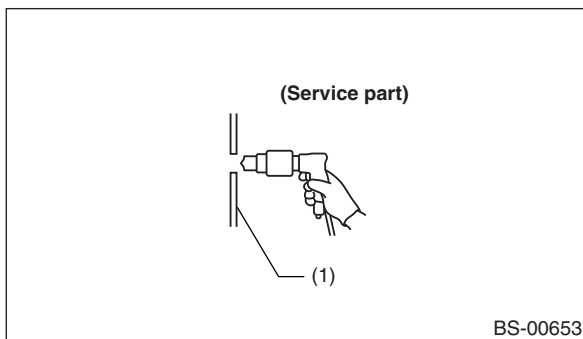
(2) Drilling through two plates



- (C) (Inside · 2)
- (D) (Outside · 2)

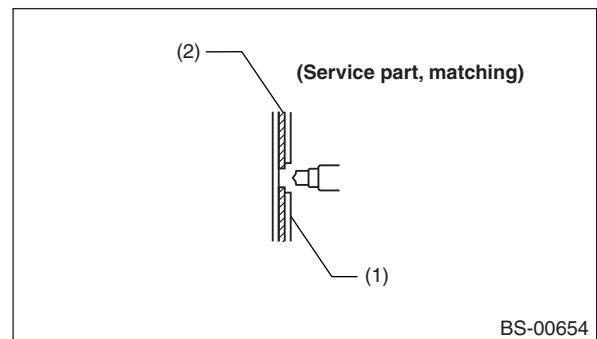
4. HOLE DRILLING FOR PLUG WELDING

(1) Drilling of holes for plug welding in service parts



- (1) Service part

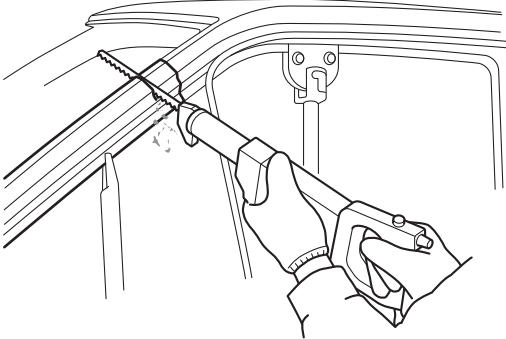
(2) Drilling of holes for plug welding in service parts, matching the holes on the vehicle side



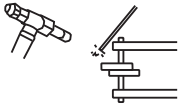
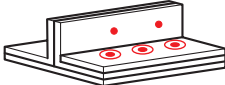
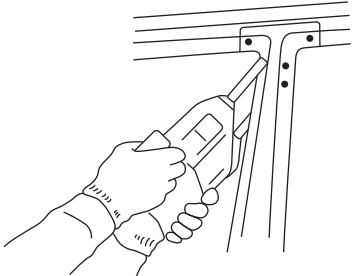
- (1) Vehicle side
- (2) Service part

5. MEANING OF SYMBOLS

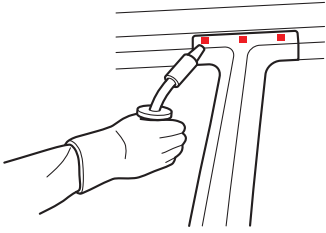
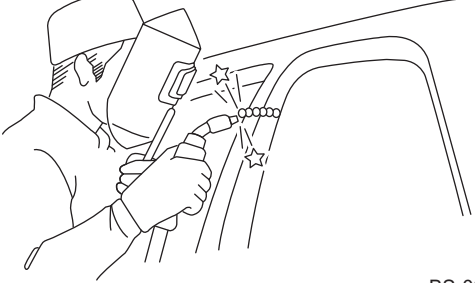
• Cutting

 BS-00352	 BS-00267
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• Spot welding

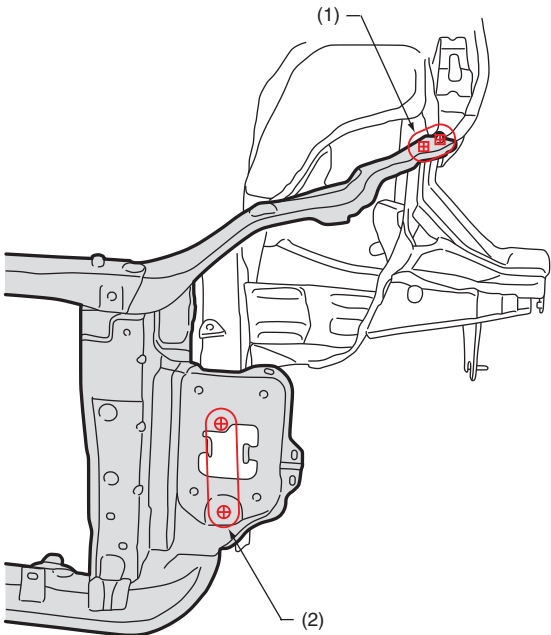
Two over-lapping parts	 BS-00655	 BS-00656	 BS-00657	 BS-00658
Three or more over-lapping parts	 BS-00659	 BS-00660		

• Carbon dioxide gas arc welding (MIG welding)

Plug welding	 BS-00661	 BS-00662	 BS-00663
Continuous welding	Butt Welding  BRM02854	 BS-00665	 BS-00666
	Fillet Welding  BRM02853		

Foreword

• Bolt, nut tightening portion

Bolt		
Nut		

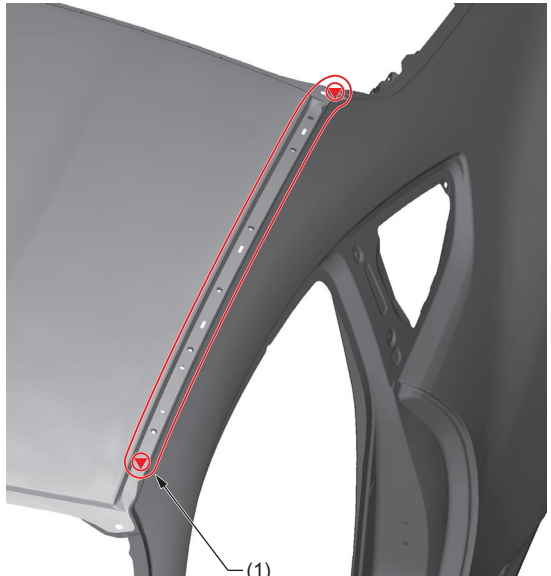
BS-04481

BS-04482

BS-04483

(1) Bolt
(2) Nut

• Rivet tightening portion

Rivet		

BRM01988

BRM01989

(1) Rivet

B: NOTE

1. About spot welding

CAUTION:

- For new spot welding, avoid previously welded locations.
- After spot welding, inspect the welding locations, and if the weld appears to be insufficient, perform plug welding.
- If the sealing is burned out by welding, be sure to take measures against water leakage in the burned area and the area around the burned area.

2. About high-tensile steel sheets of 980 MPa class or more

CAUTION:

- Shape correction by heating and splice welding shall not be performed for components using 980 MPa class or more higher-tensile steel; otherwise this may decrease the strength of the material.
- To drill high-strength steel sheets of 980 MPa class and 1,500 MPa class, use a tool that can machine objects of 500 Hv or greater hardness (e.g., C-20VR made by Chuotokenzai).
- Use a DC inverter welding machine for spot welding in places where high-strength steel plate is used so as to stably form nuggets when welding.
However, use an AC welding machine for joining plates of 1,500 MPa class high-strength steel.
- For welding conditions (welding pressure, current, energizing time, cooling time, UP slope time) other than squeeze time and hold time, refer to the condition table on the next page and set them as shown in [a] to [n] for the respective spot.
However, the squeeze time should be set appropriately to stabilize the welding pressure, and the hold time should be set appropriately to solidify the molten part.
- For the meaning of each term (welding pressure, squeeze time, current, energization time, cooling time, UP slope time, hold time), refer to the respective energization profiles described later.
- If the UP slope time is specified, gradually increase the current over the UP slope time.
- When conditions can't be met, it is recommended to use the plug welding method [y] — A or [y] — B as described below.

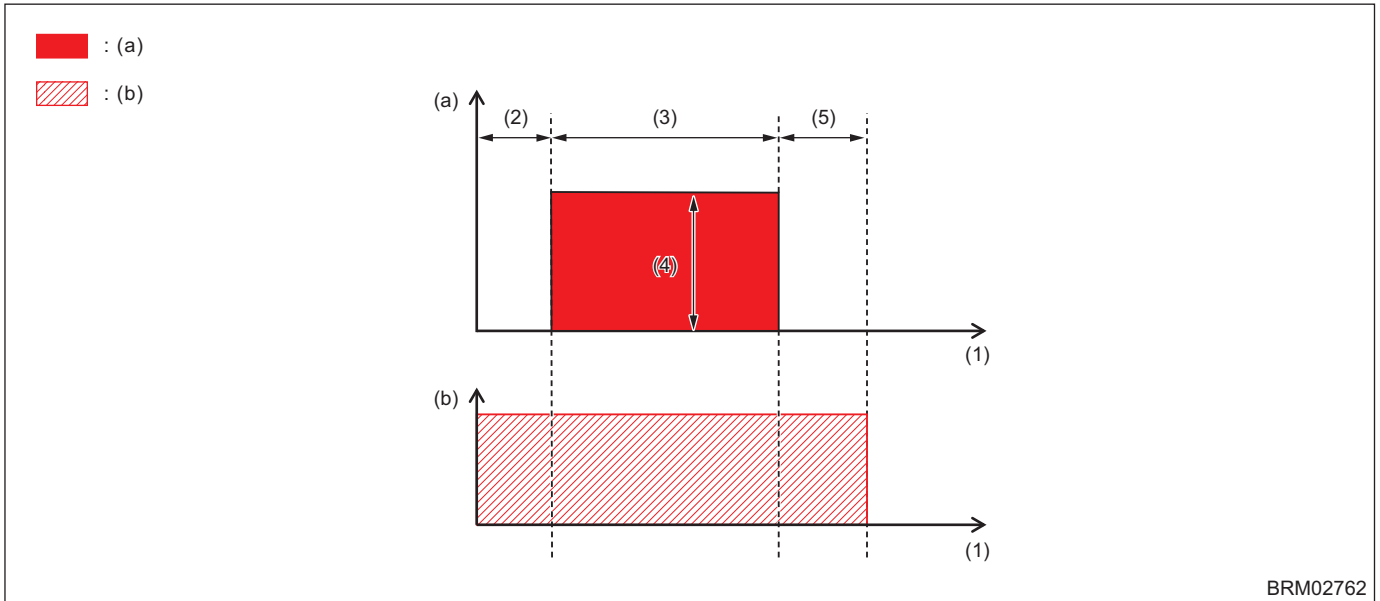
Foreword

Condition table

Spot welding	[a]	AC	Compression	3.0 kN	Total number of 2 overlapping sheets
			Current	8.0 kA	
			Welding time	18 cyc	
	[b]	AC	Compression	3.0 kN	
			Current	6.5 kA	
			Welding time	17 cyc	
	[c]	AC	Compression	3.0 kN	Total number of 3 overlapping sheets
			Current	7.0 kA	
			Welding time	22 cyc	
	[g]	AC	Compression	3.0 kN	
			Current	8.0 kA	
			Welding time	18 cyc	
	[h]	DC	Compression	3.0 kN	
			Current	7.5 kA	
			Welding time	20 cyc	
			Upslope time	5 cyc	
	[j]	DC	Compression	3.5 kN	
			Current	10.0 kA	
			Welding time	31 cyc	
			Upslope time	5 cyc	
	[k]	AC	Compression	3.0 kN	
			Current	7.0 kA	
			Welding time	22 cyc	
	[m]	AC	Compression	3.0 kN	
			Current	8.0 kA	
			Welding time	22 cyc	
Plug welding	[y]	A	Plug diameter	8.5 mm [0.33 in] or more	Total number of 2 or 3 overlapping sheets
			Wire	YGW12	
			Gas	CO ₂	
		B	Plug diameter	8.5 mm [0.33 in] or more	
			Wire	YGW16	
			Gas	Gas mixture (Argon: 80%, CO ₂ : 20%)	

Foreword

Energization profile: Single energization



(a) Current

(b) Compression

(1) Time

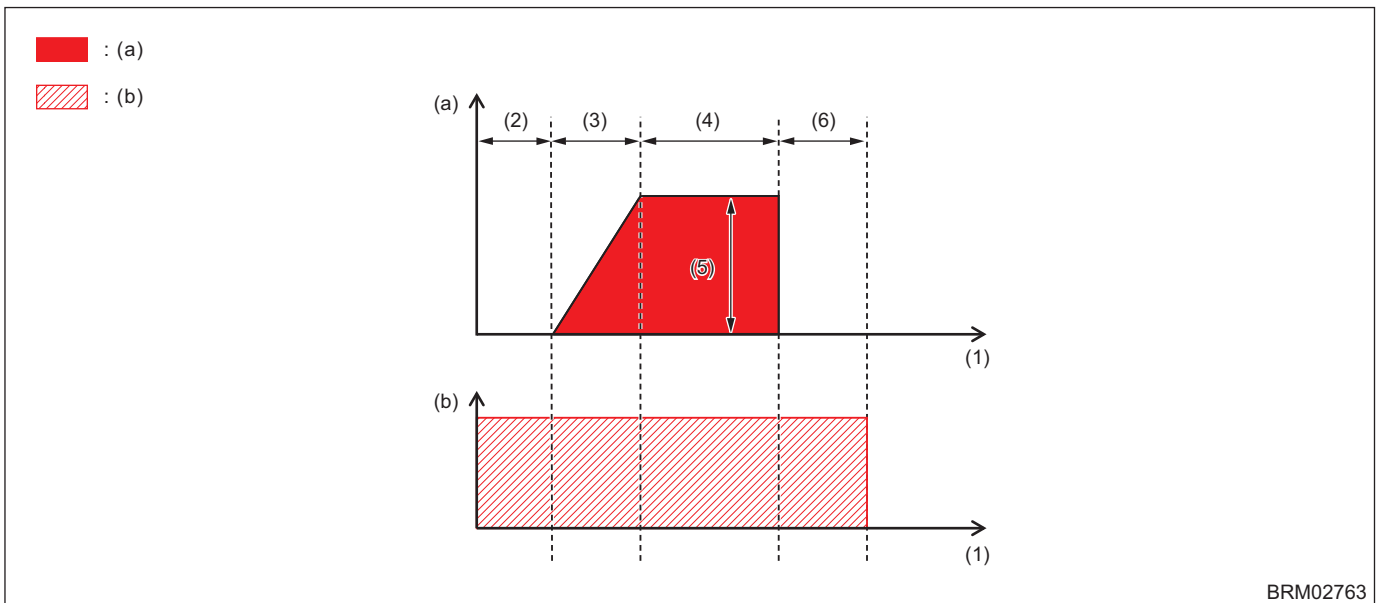
(3) Welding time

(5) Hold

(2) Squeeze time

(4) Current

Energization profile: Single energization + UP slope



(a) Current

(b) Compression

(1) Time

(3) Upslope time

(5) Current

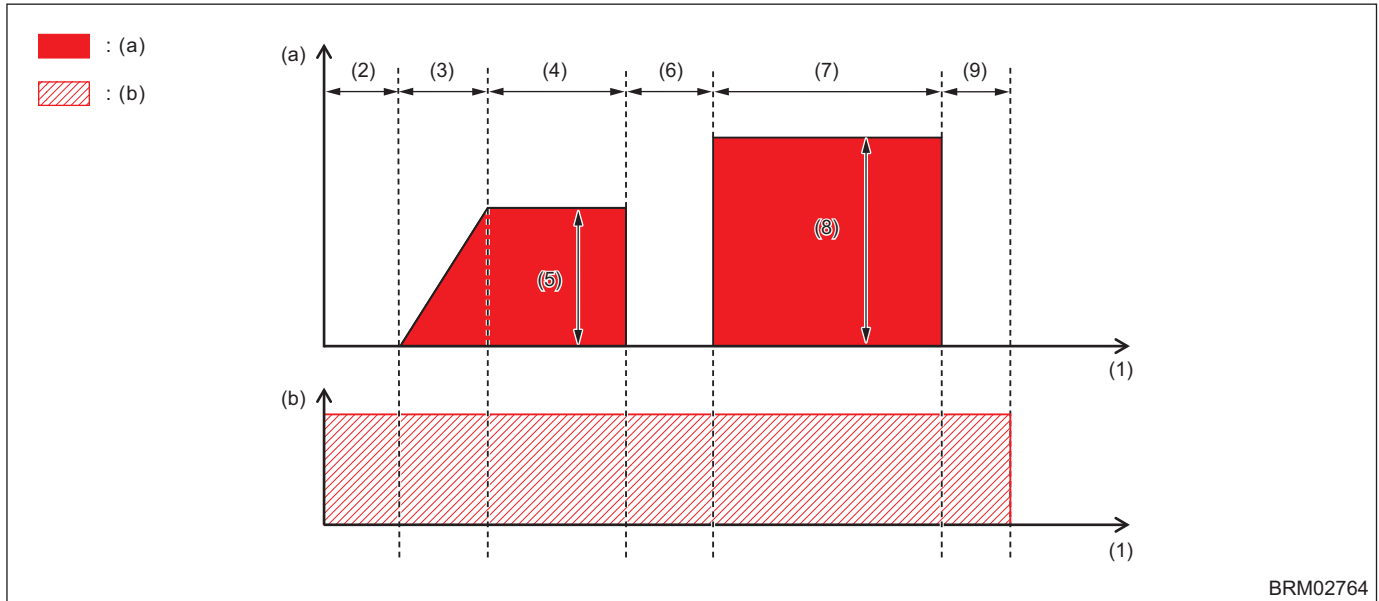
(2) Squeeze time

(4) Welding time

(6) Hold

Foreword

Energization profile: Multi-stage energization + UP slope



(a) Current

(b) Compression

(1) Time

(2) Squeeze time

(3) Upslope time

(4) Welding time 1

(5) Current 1

(6) Cooling time

(7) Welding time 2

(8) Current 2

(9) Hold

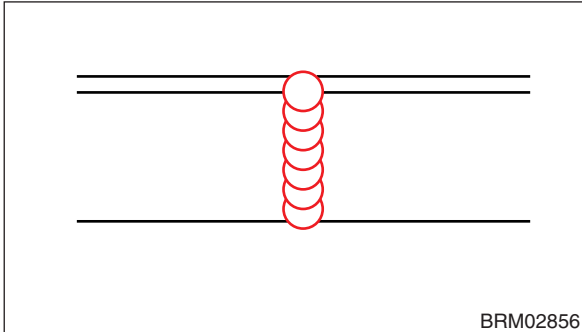
3. Drill holes for plug welding of steel sheet

At locations where spot welding is not possible, use a punch or a drill to open holes for plug welding according to the following table.

Plate thickness of the welding material	Plug welding hole diameter
Less than 1.0 mm (0.04 in)	φ 5.0 mm (0.20 in) or more
1.0 mm — 1.6 mm (0.04 — 0.06 in)	φ 6.5 mm (0.26 in) or more
1.7 mm — 2.3 mm (0.07 — 0.09 in)	φ 8.0 mm (0.31 in) or more
2.4 mm (0.09 in) or more	φ 10.0 mm (0.39 in) or more

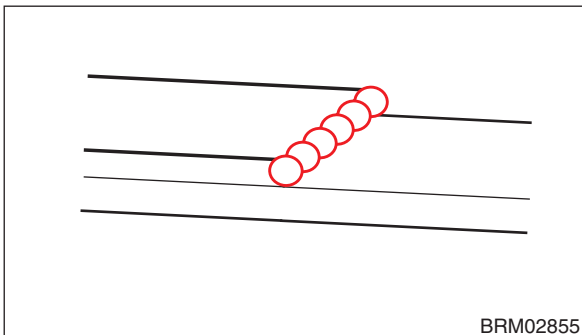
4. Butt Welding

- When splicing and replacing parts, use MIG (metallic inert gas) welding between the newly cut panel and the old panel on the body side.
- After welding the key points one by one, fill in the gaps between them so that the entire seam is welded.
- It is desirable that the seams have a gap of about the thickness of the air saw blade. Therefore, stack new and old panels and cut them, or measure the dimensions of each panel accurately and cut them.
- The difference in cut sections shown in the replacement of welded parts is to allow for difference in panel length variance from the replacement panel.
- Do Not cut off the old panel until the new panel has arrived to ensure the cut is made in the correct location.



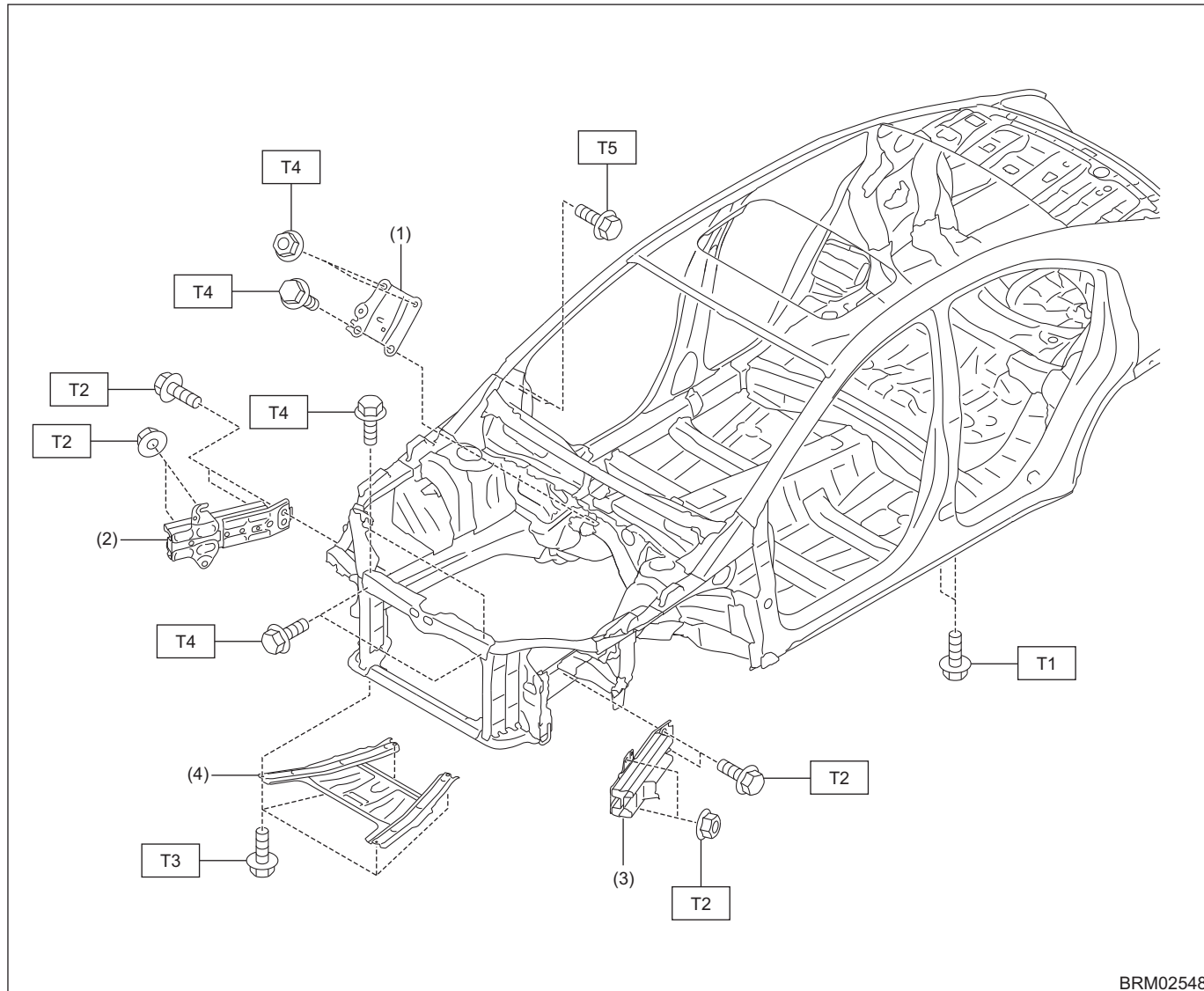
5. Fillet Welding

Weld the edges of two stacked panels.



2. Assembly of Exterior Parts

A: BODY REINFORCING PARTS



- (1) Plate pitching stopper complete
- (2) Gusset complete front side RH
- (3) Gusset complete front side LH
- (4) Under cover front guard

Tightening torque: N-m (kgf-m, ft-lb)

T1: 45 (4.59, 33.19)

T2: 37 (3.77, 27.29)

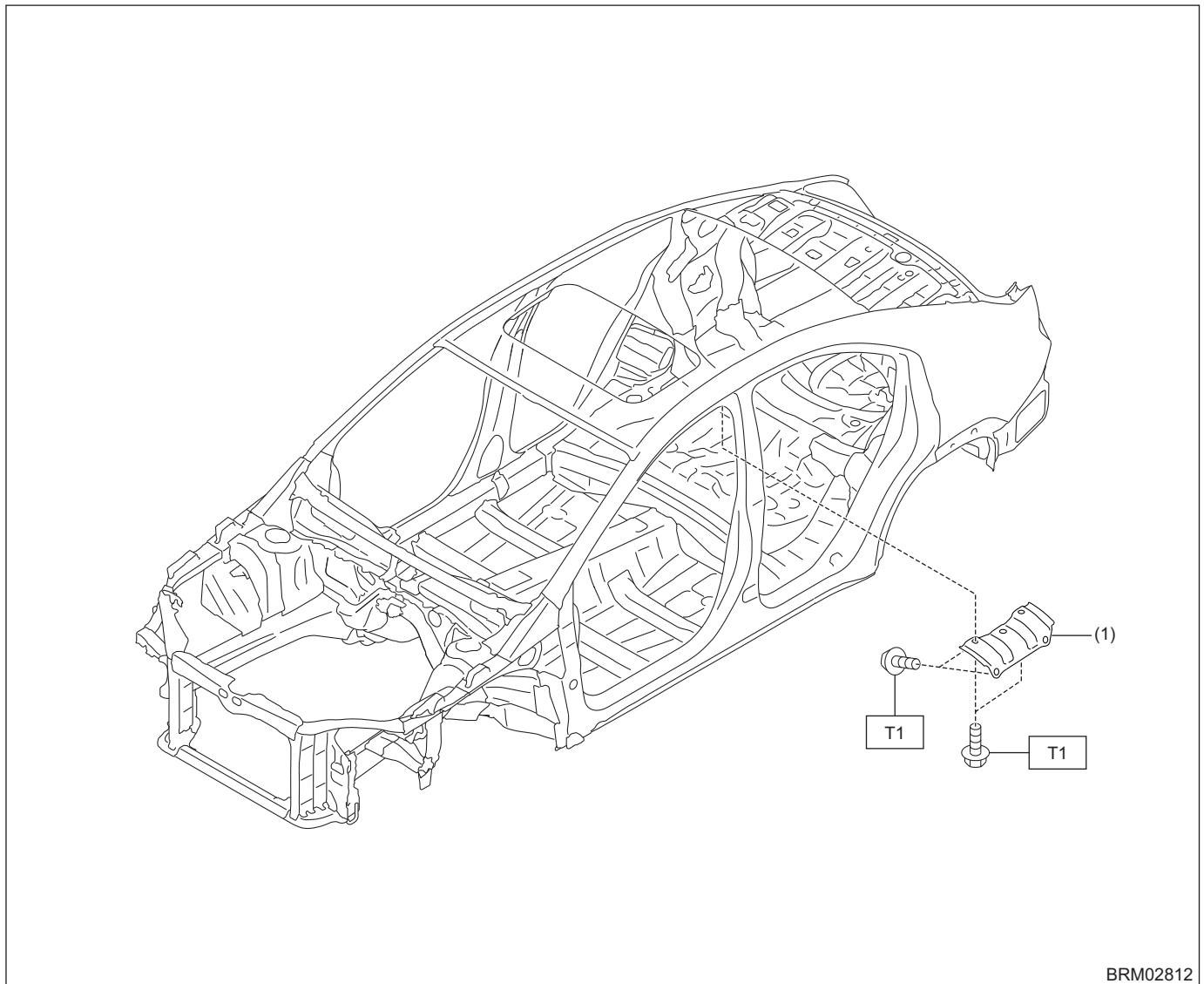
T3: 25 (2.55, 18.44)

T4: 18 (1.84, 13.28)

T5: Secure 18 (1.84, 13.28) or more.

The bolts should be seated and not broken.

B: BRACKET BRACE



BRM02812

(1) Bracket brace

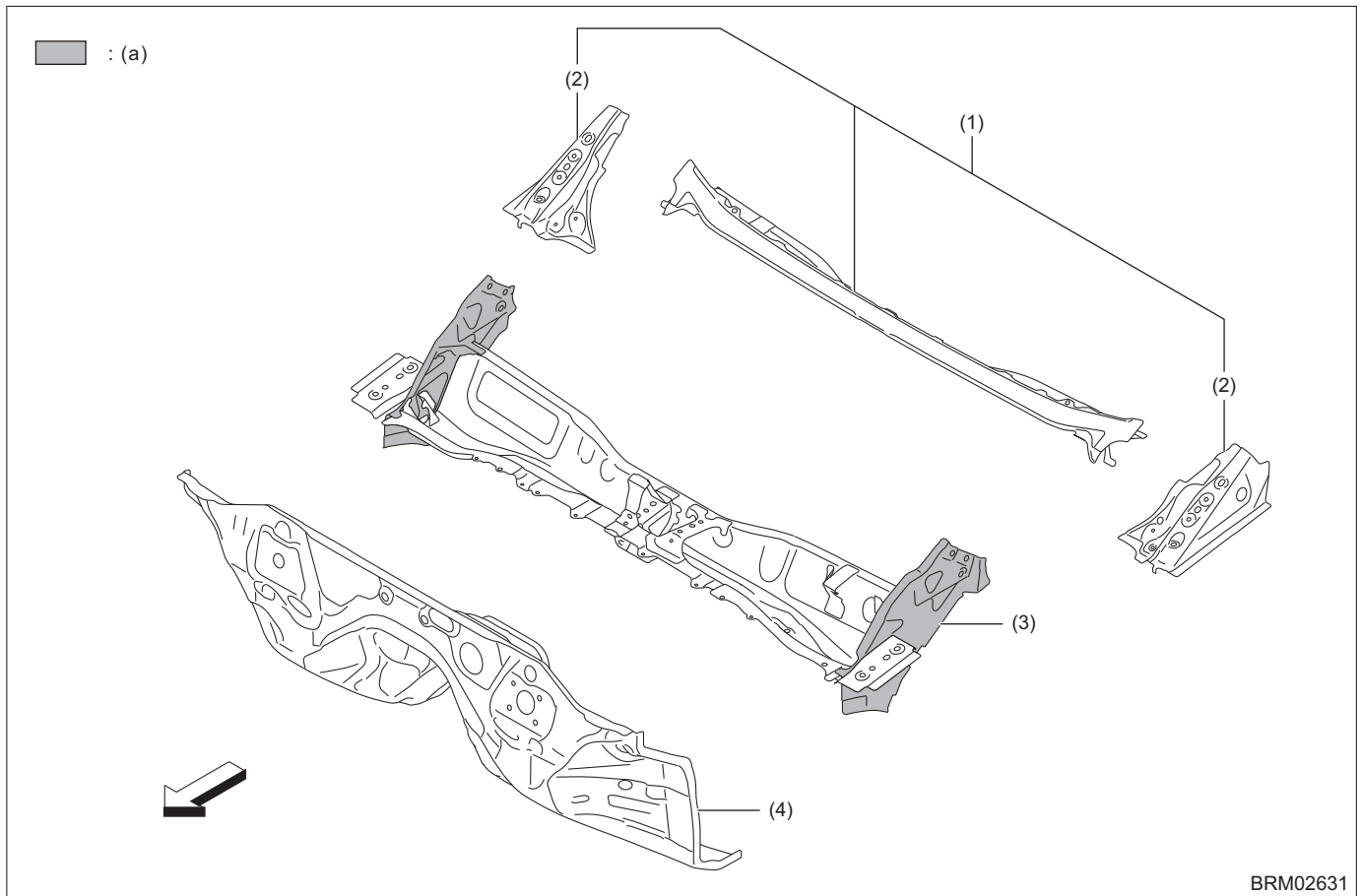
Tightening torque: N·m (kgf-m, ft-lb)

T1: 12.7 (1.29, 9.37)

3. Panel Components

A: COMPONENTS

1. TOE BOARD & FRONT PANEL



(a) High-strength tensile steel
(440 — 590 MPa class)

(1) Panel complete, front

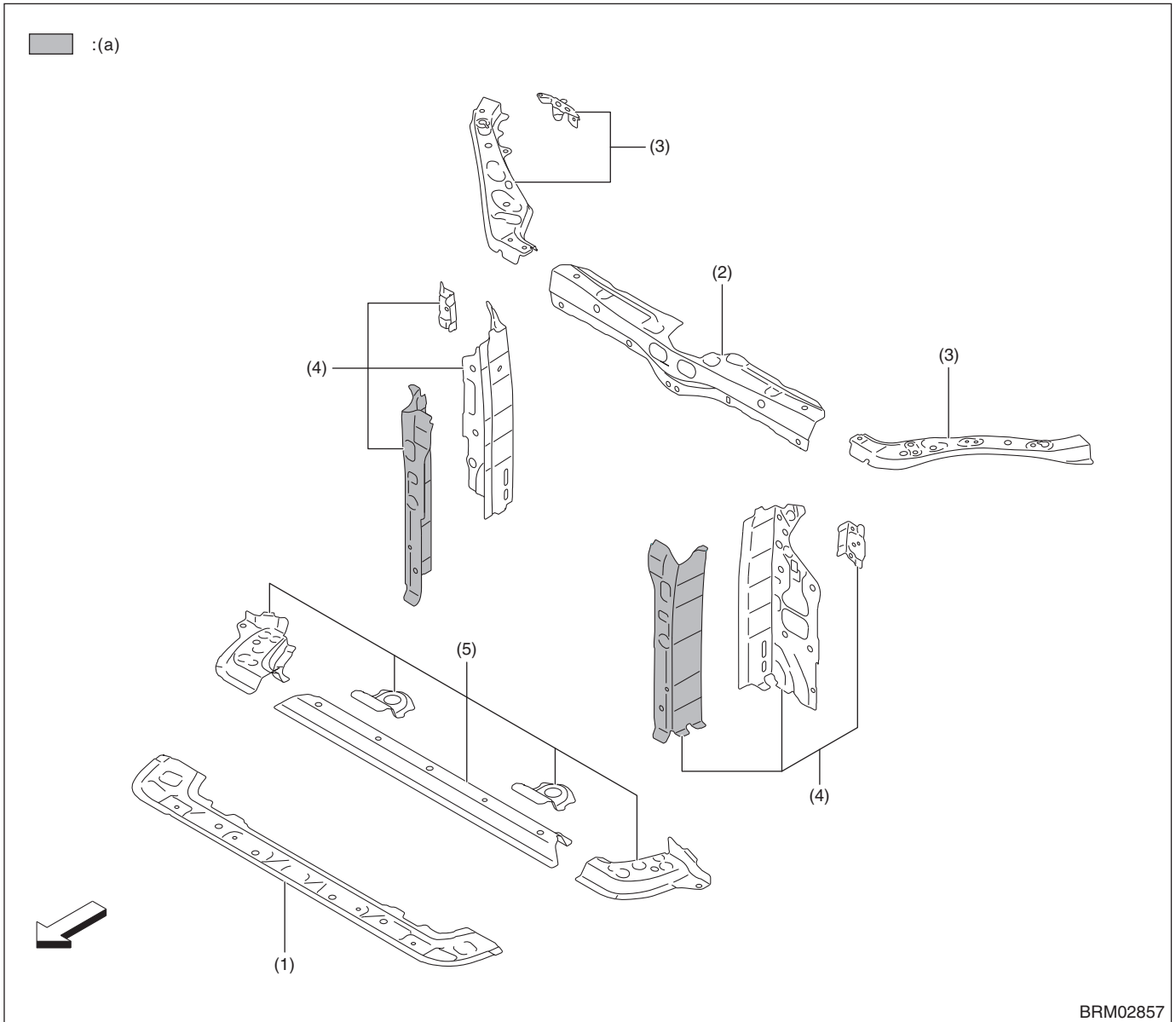
(3) Duct complete, front panel

(4) Toe board complete

(2) Reinforcement, front panel side

Panel Components

2. RADIATOR PANEL



BRM02857

(a) High-strength tensile steel
(440 — 590 MPa class)

(1) Frame complete, radiator lower

(3) Panel complete, radiator upper

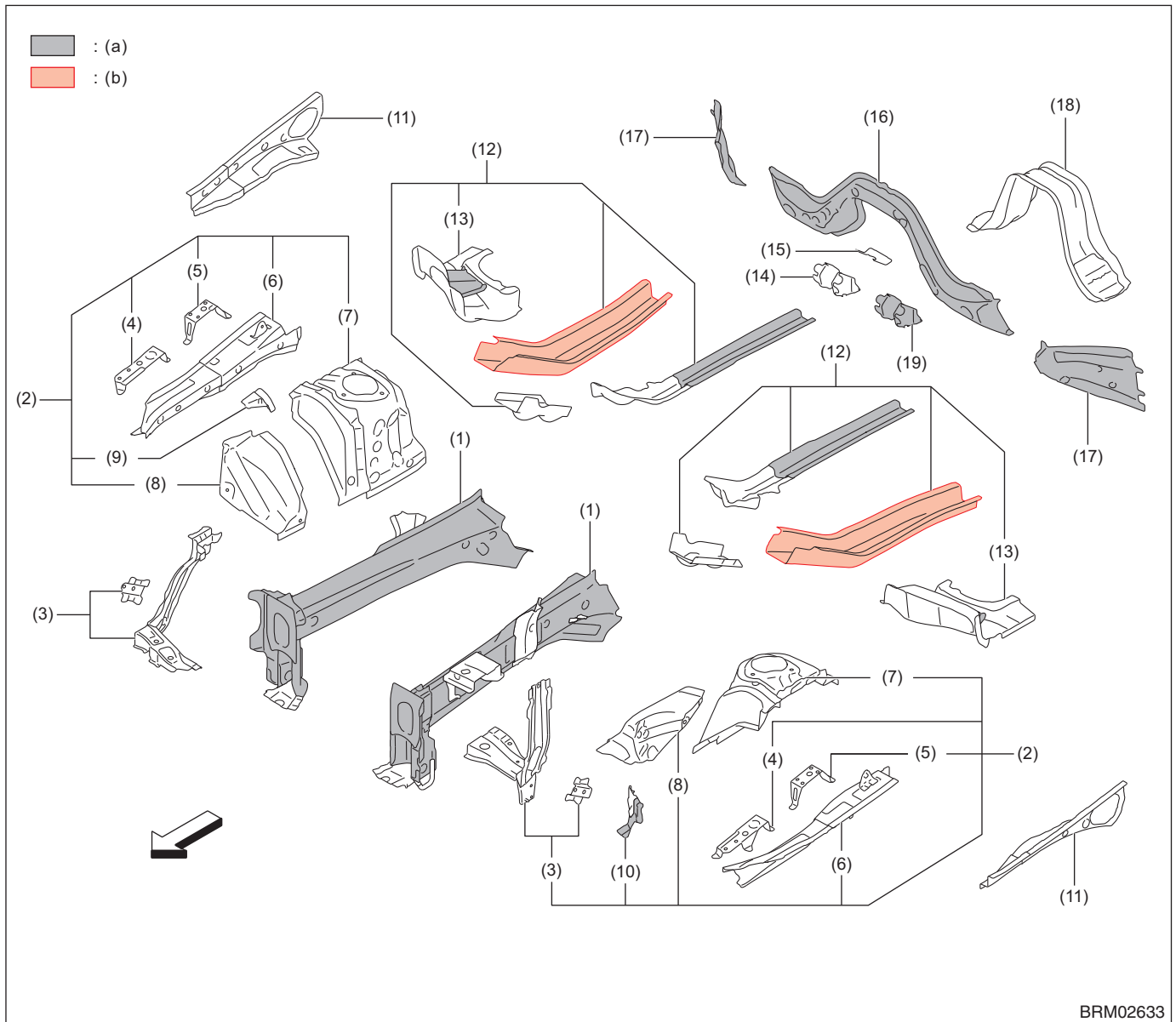
(5) Frame complete, radiator panel
lower

(2) Panel complete, radiator upper

(4) Panel complete, radiator side

Panel Components

3. FRONT WHEEL APRON



BRM02633

(a) High-strength tensile steel
(440 — 590 MPa class)

(b) High-strength tensile steel
(1,500 MPa class)

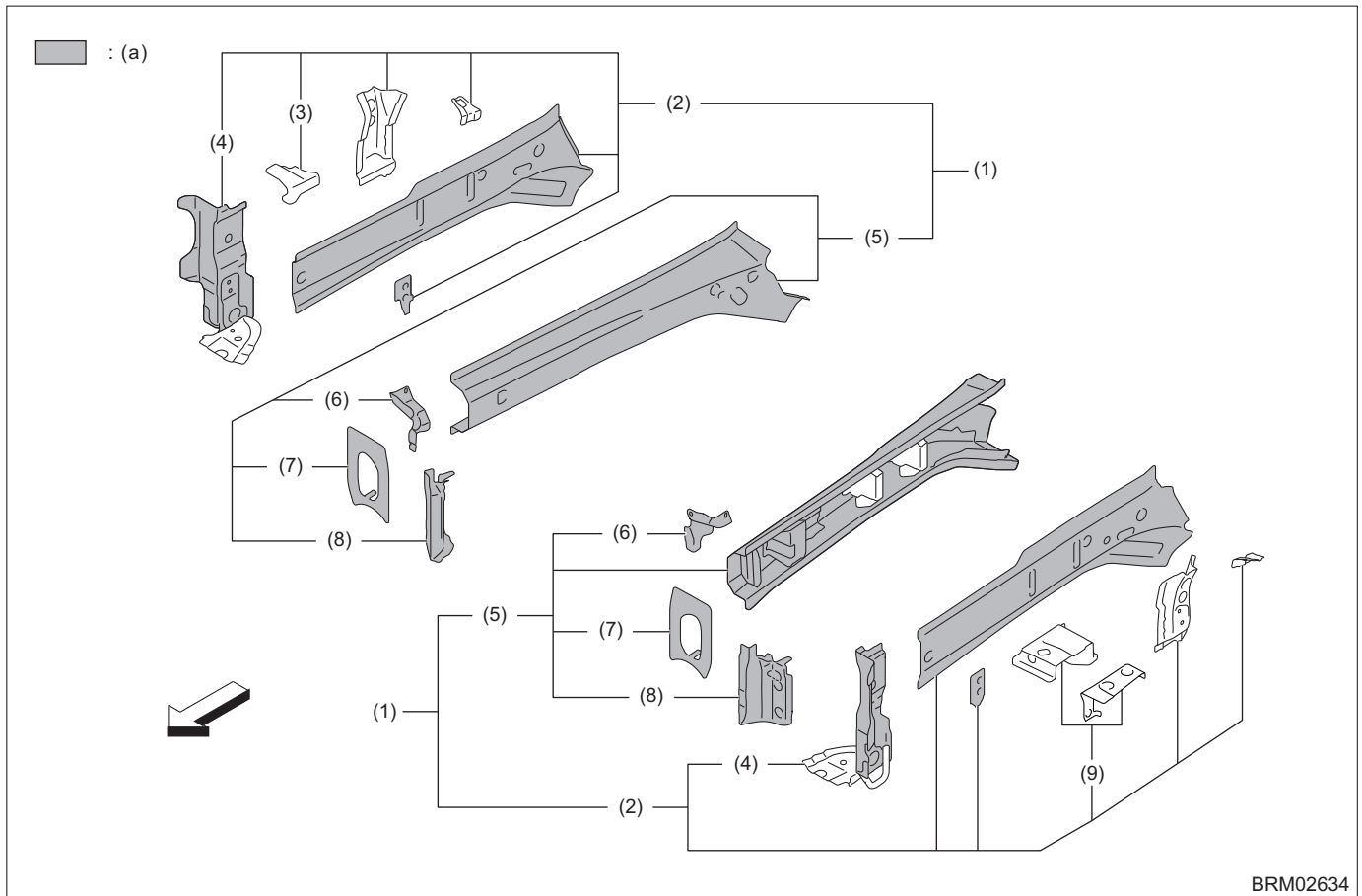
- (1) Frame side complete
- (2) Wheel apron sub complete
- (3) Wheel apron, front
- (4) Bracket complete, front fender
- (5) Bracket complete, front fender
- (6) Wheel apron complete, front upper
- (7) Bracket complete, suspension front

- (8) Wheel apron complete, front
- (9) Bracket complete, VDC
- (10) Bracket, battery rod
- (11) Frame, side upper
- (12) Frame side front complete, rear
- (13) Reinforcement, toe board
- (14) Bracket complete, pitching stopper (CVT)

- (15) Plate, pitching stopper
- (16) Reinforcement, tunnel toe board
- (17) Frame complete, toe board front
- (18) Bracket complete, crossmember rear
- (19) Bracket complete, pitching stopper (MT)

Panel Components

4. FRONT SIDE FRAME

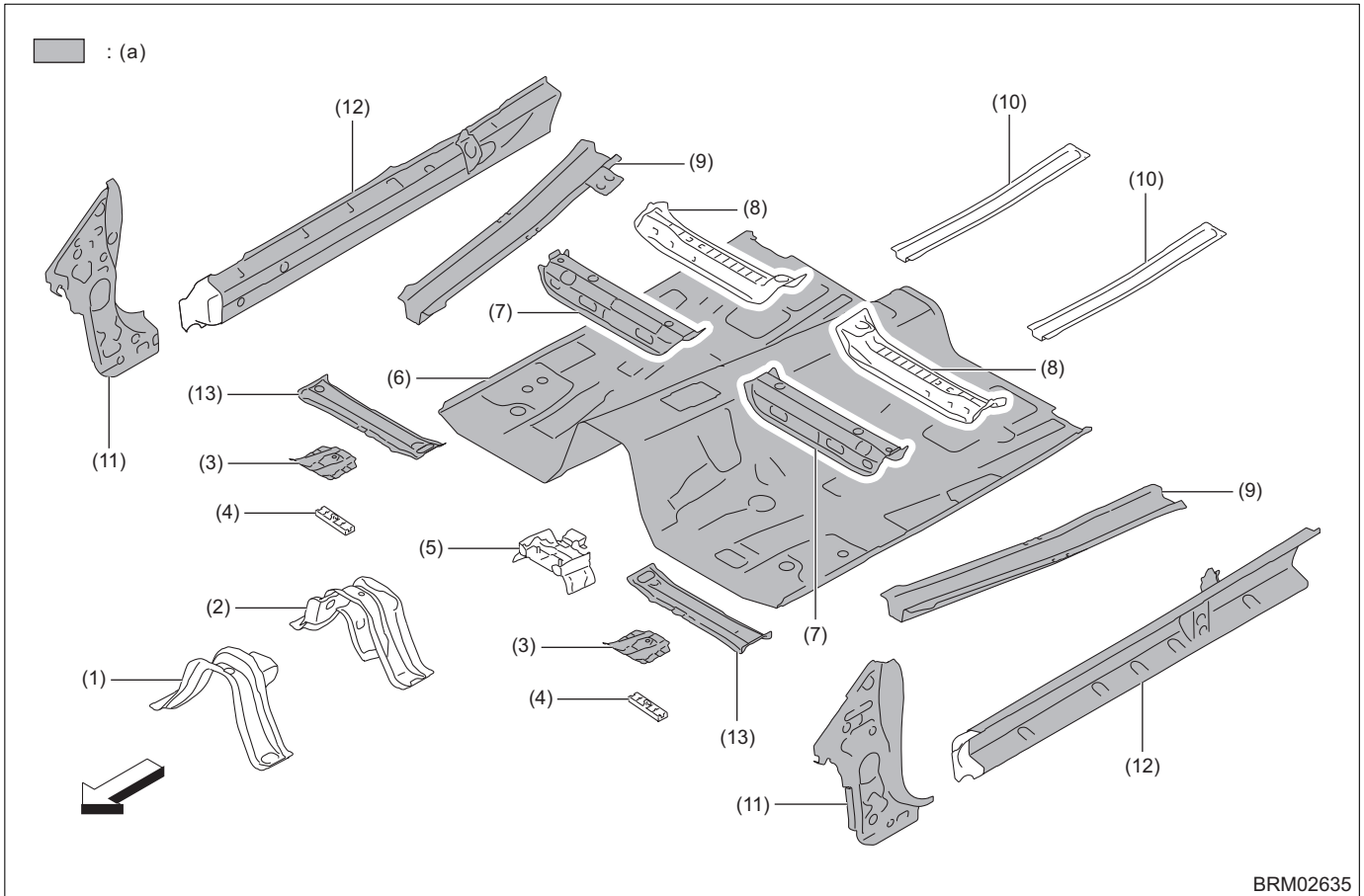


(a) High-strength tensile steel
(440 — 590 MPa class)

- | | | |
|----------------------------|--------------------------------------|----------------------------------|
| (1) Frame side complete | (4) Tie-down complete, front | (7) Plate, front frame front |
| (2) Closing plate | (5) Frame side front complete, front | (8) Gusset complete, front frame |
| (3) Wheel apron, extension | (6) Bracket complete, beam | (9) Bracket complete, battery |

Panel Components

5. FRONT FLOOR PANEL



BRM02635

(a) High-strength tensile steel
(440 — 590 MPa class)

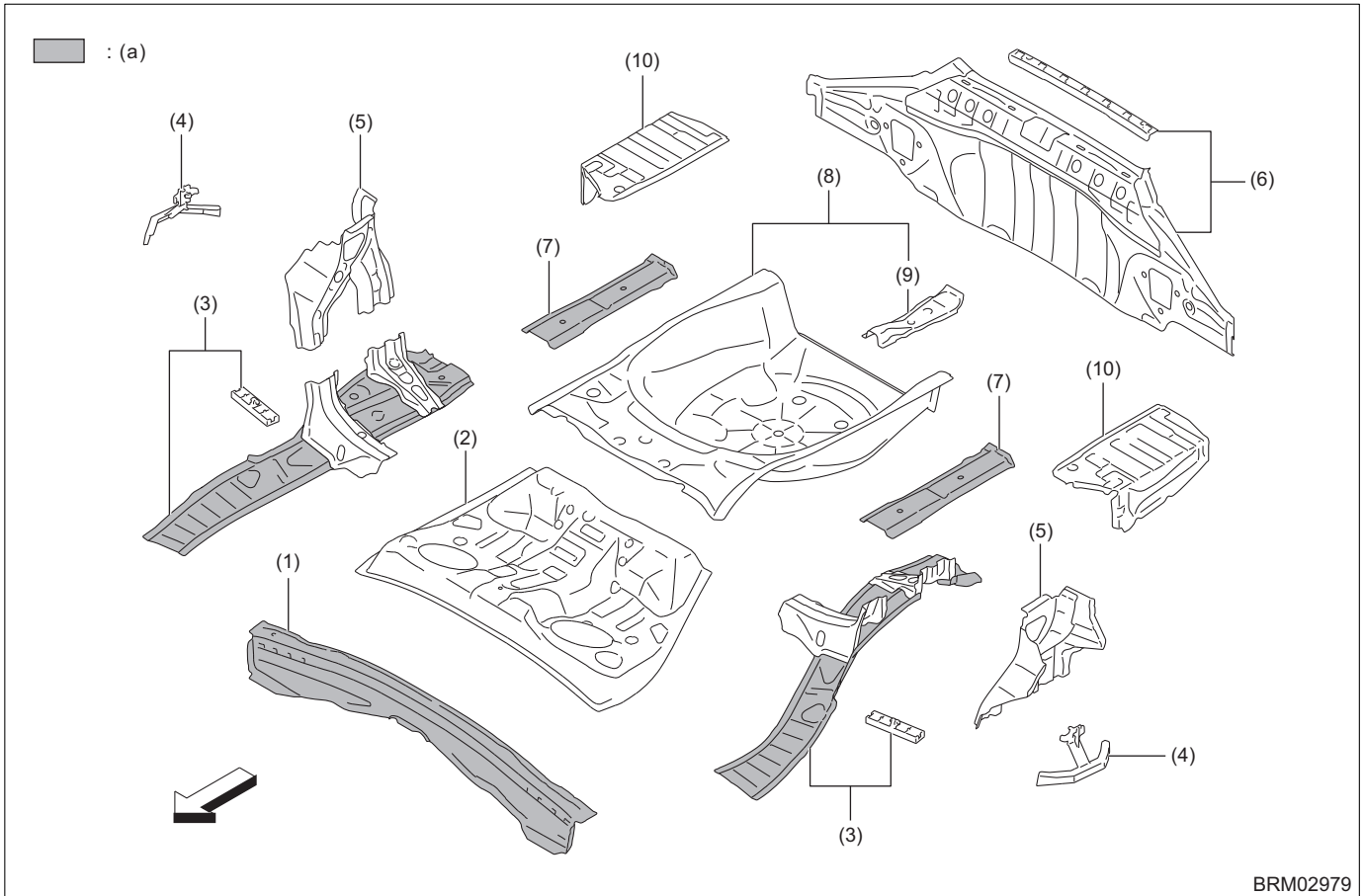
- (1) Crossmember, center floor
- (2) Crossmember complete, A
- (3) Frame, front floor front
- (4) Plug, front rear inner
- (5) Bracket assembly, instrument panel

- (6) Floor pan, front
- (7) Crossmember complete, filler front
- (8) Crossmember complete, seat rear
- (9) Frame, front floor rear
- (10) Frame, front floor rear

- (11) Pillar front inner lower
- (12) Side sill complete, inner
- (13) Crossmember, front floor front

Panel Components

6. REAR FLOOR PANEL & REAR SKIRT



(a) High-strength tensile steel
(440 — 590 MPa class)

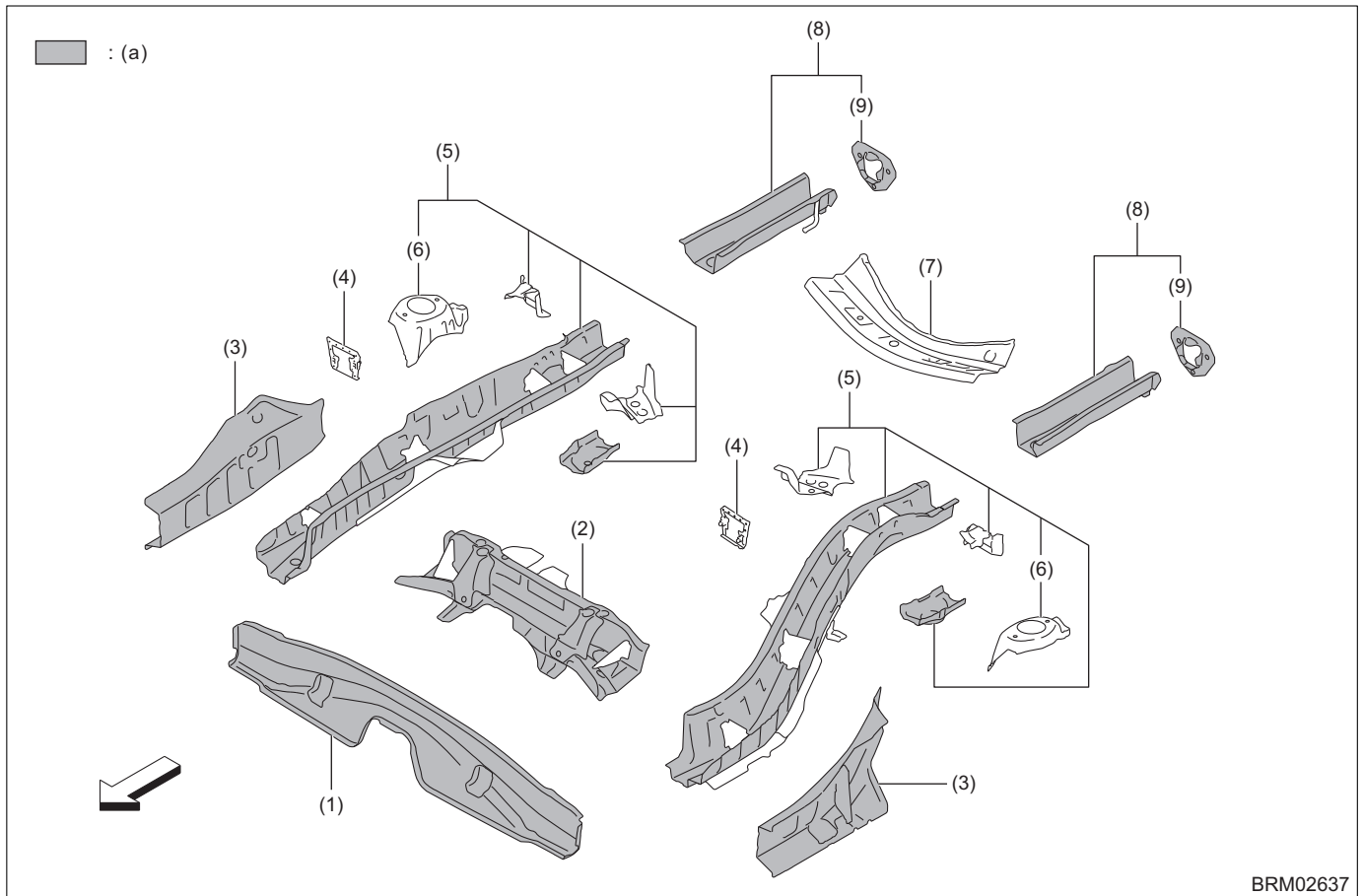
- (1) Crossmember complete
- (2) Floor pan complete, rear
- (3) Frame complete, rear upper
- (4) Reinforcement, damper

- (5) Frame complete, rear upper
- (6) Skirt complete, rear
- (7) Frame side, rear upper
- (8) Floor pan complete, rear rear

- (9) Bracket, spare tire
- (10) Floor side, rear

Panel Components

7. REAR FLOOR SIDE FRAME



(a) High-strength tensile steel
(440 — 590 MPa class)

(1) Crossmember complete, A

(4) Plug form rear

(7) Crossmember C complete, rear floor

(2) Crossmember B complete, rear floor

(5) Frame complete, floor side rear

(8) Frame complete, rear floor rear

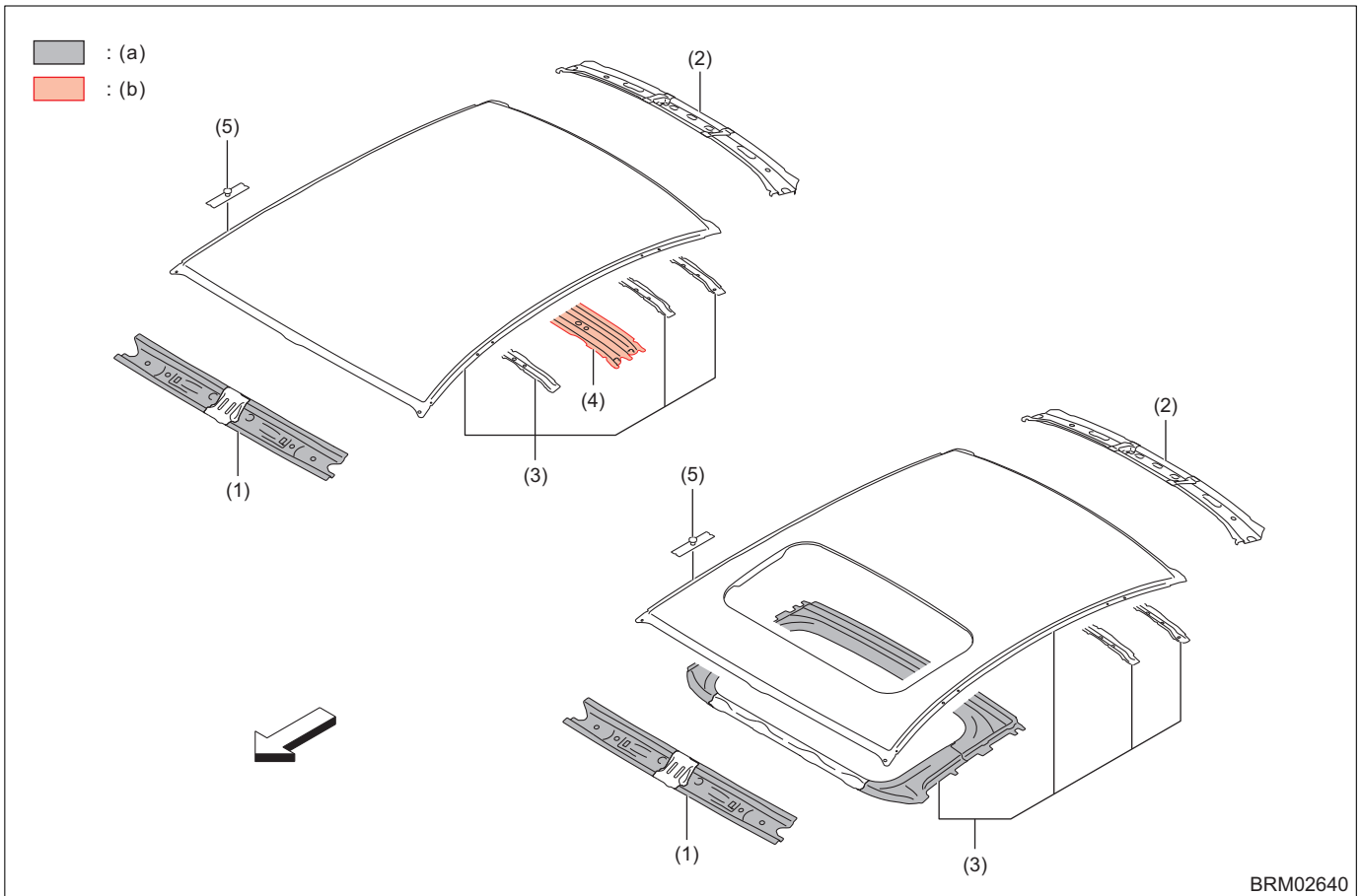
(3) Side sill complete, inner rear

(6) Bracket complete, rear suspension

(9) Bracket, bumper rear

Panel Components

8. ROOF



(a) High-strength tensile steel
(440 — 590 MPa class)

(b) High-strength tensile steel
(1,500 MPa class)

(1) Rail complete, front roof

(2) Panel complete, roof

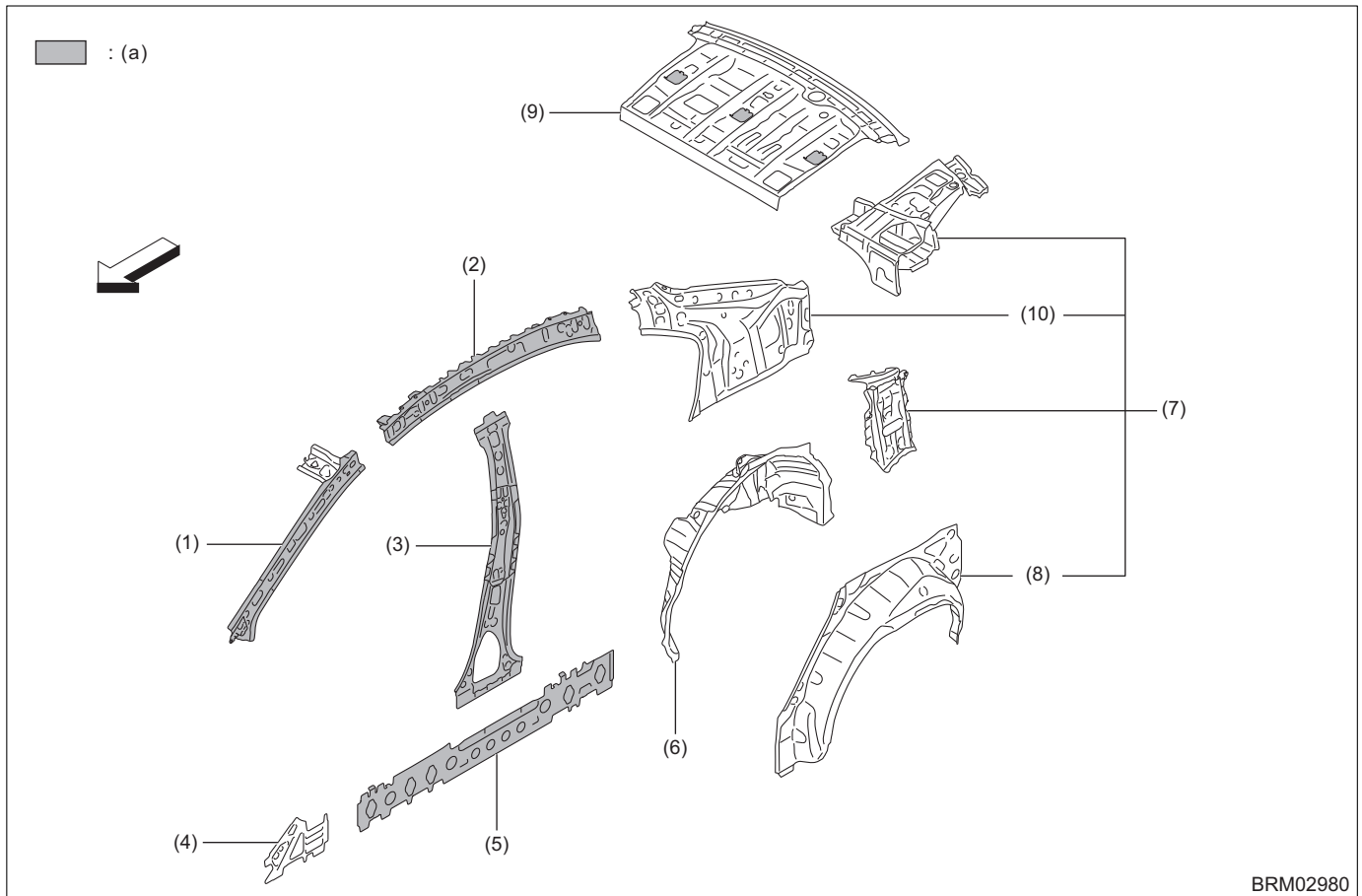
(3) Panel complete, roof

(4) Brace complete, roof center

(5) Plate complete, T stud

Panel Components

9. SIDE PANEL INNER

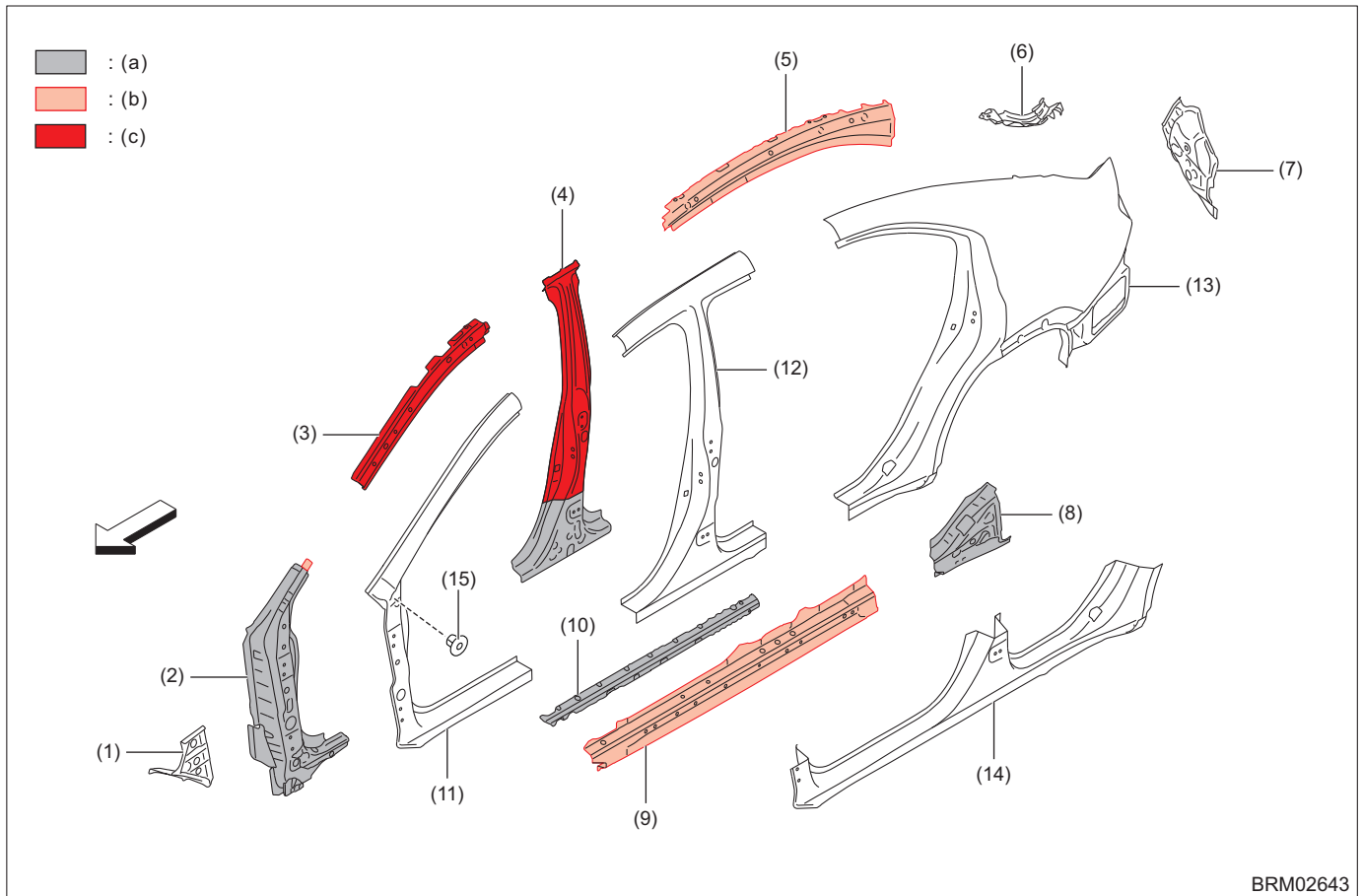


(a) High-strength tensile steel
(440 — 590 MPa class)

- | | | |
|--|------------------------------------|--------------------------|
| (1) Pillar complete, front inner upper | (5) Reinforcement, side sill inner | (9) Panel complete, rear |
| (2) Side rail, inner | (6) Wheel apron complete, rear | (10) Pillar, rear inner |
| (3) Pillar complete, center inner | (7) Rear quarter complete, inner | |
| (4) Reinforcement, side sill front outer | (8) Rear arch, inner | |

Panel Components

10.SIDE PANEL OUTER



BRM02643

(a) High-strength tensile steel
(440 — 590 MPa class)

(b) High-strength tensile steel
(980 MPa class)

(c) High-strength tensile steel
(1,500 MPa class)

(1) Gusset, front pillar

(2) Reinforcement complete, front
pillar lower

(3) Reinforcement complete, side rail

(4) Reinforcement complete, center
pillar

(5) Reinforcement complete, side rail

(6) Patch, rear pillar

(7) Rear quarter end complete

(8) Reinforcement, rear quarter catch

(9) Reinforcement, side sill outer

(10) Reinforcement, sill outer

(11) Pillar complete, front outer

(12) Pillar complete, center outer

(13) Rear quarter complete, outer

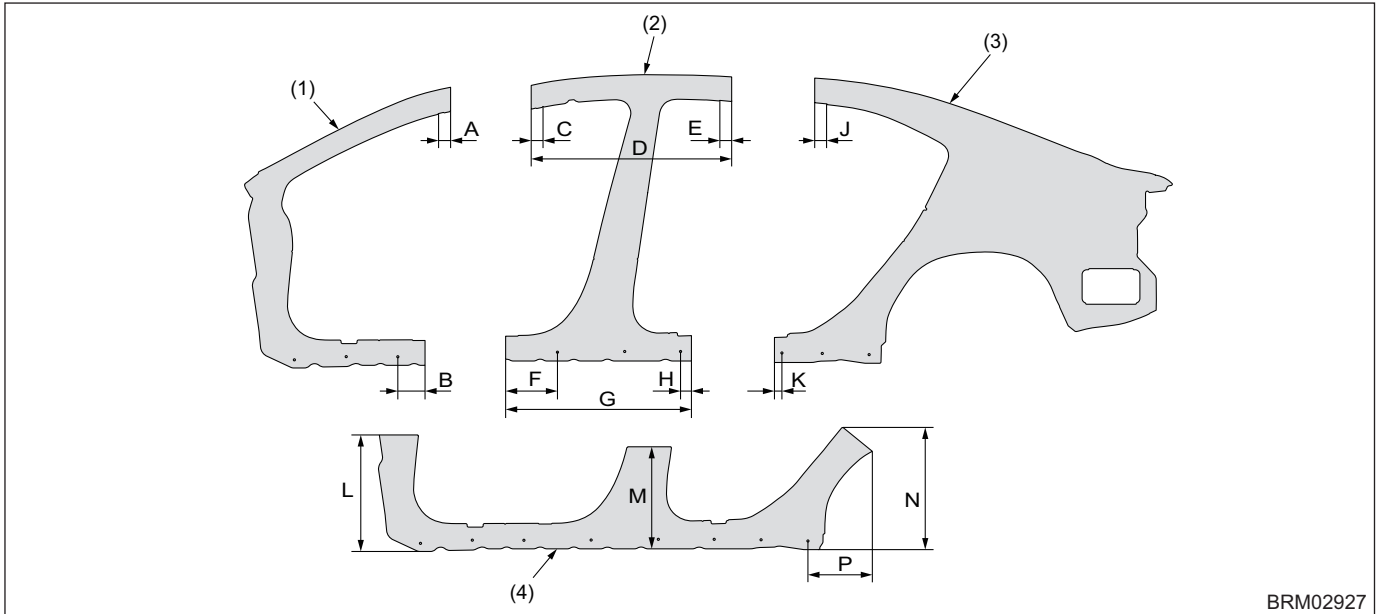
(14) Side sill complete, outer

(15) Nut Sert M6

Panel Components

B: REPAIR PART SIZE

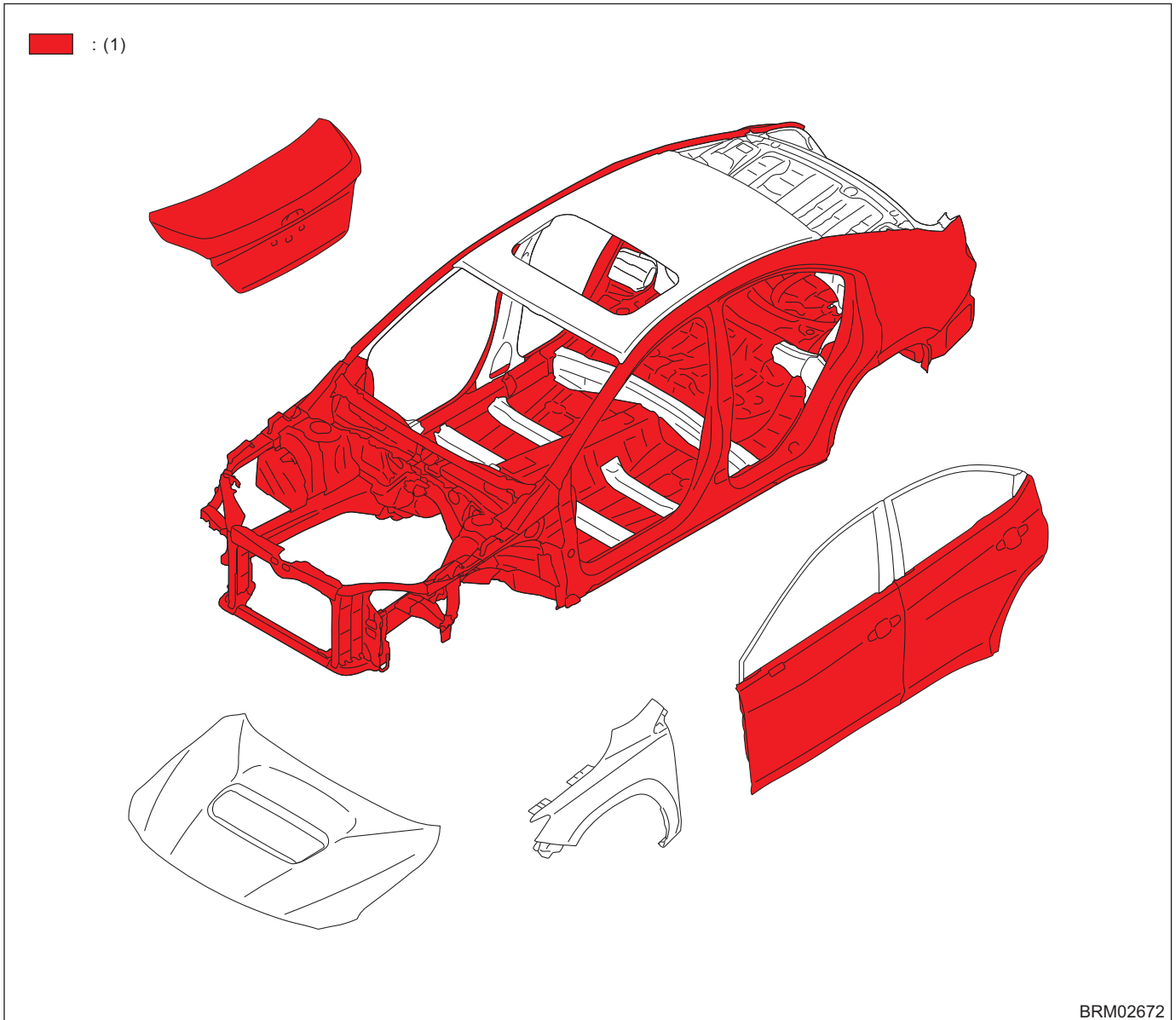
1. SIDE PANEL OUTER



No	Part name	Measurement position	Datum dimensions mm (in)
1	Front pillar outer	A	50 (1.97)
		B	115 (4.53)
2	Center pillar outer	C	50 (1.97)
		D	837 (32.95)
		E	50 (1.97)
		F	219 (8.62)
		G	785 (30.91)
3	Rear quarter outer	H	46 (1.81)
		J	50 (1.97)
4	Side sill outer	K	4 (0.16)
		L	492 (19.37)
		M	431 (16.97)
		N	516 (20.31)
		P	256 (10.08)

4. Galvanized Sheet Metal

A: SPECIFICATIONS

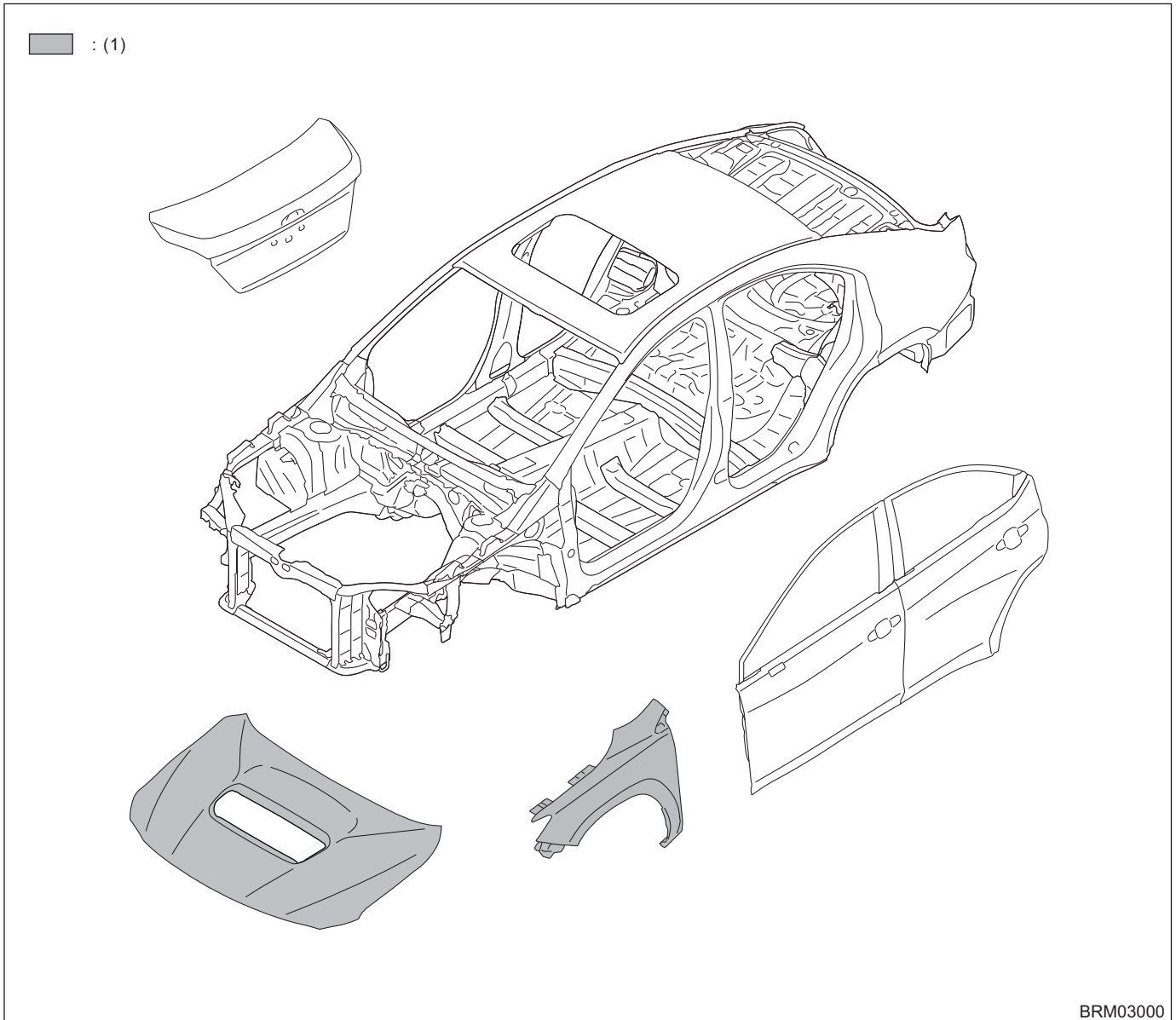


- (1) Galvanized sheet metal
(Both sides)

The fuel flap is made of plastic.

5. Aluminum Alloy

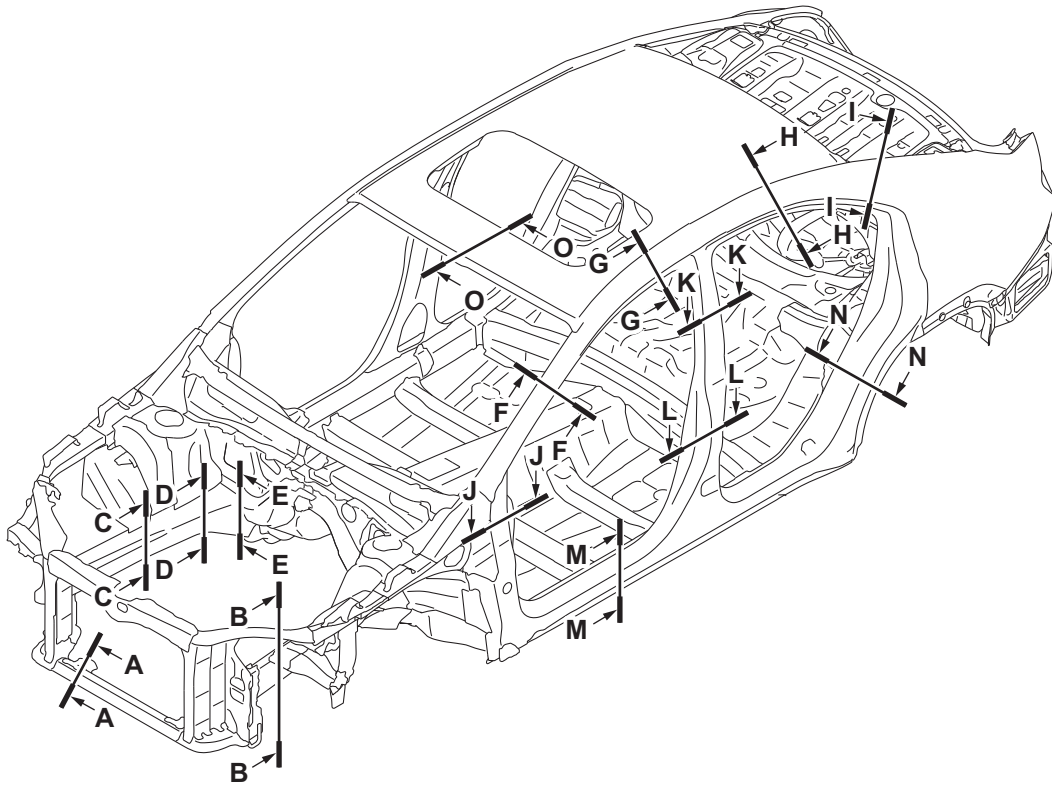
A: SPECIFICATIONS



(1) Aluminum alloy

6. Body Construction

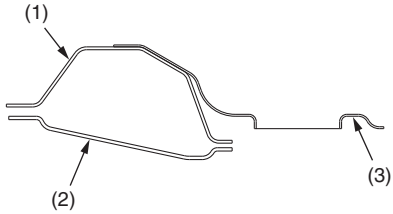
A: SPECIFICATIONS



BRM02492

Body Construction

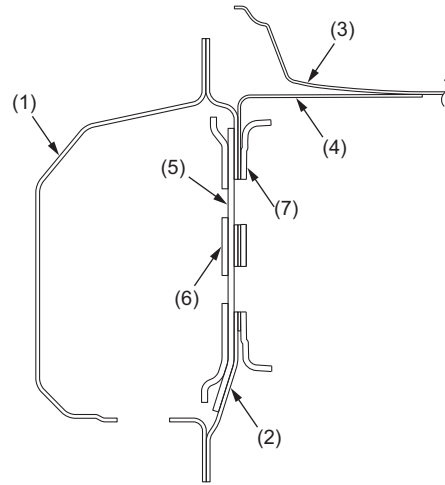
Cross section A — A



BRM01243

- (1) Frame lower A
- (2) Frame lower B
- (3) Bracket radiator lower

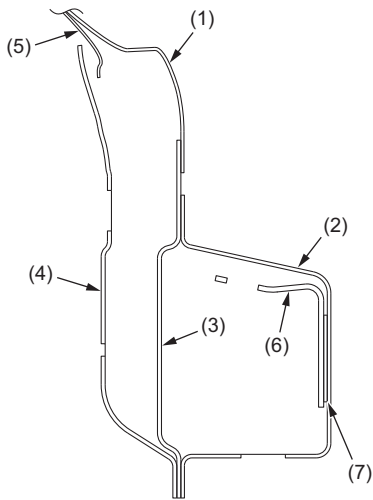
Cross section B — B



BRM02837

- (1) Frame side FF
- (2) Closing plate FF
- (3) Battery gusset
- (4) Battery gusset lower
- (5) Plate closing plate FF
- (6) Separator FF A
- (7) Bracket gusset front side rear

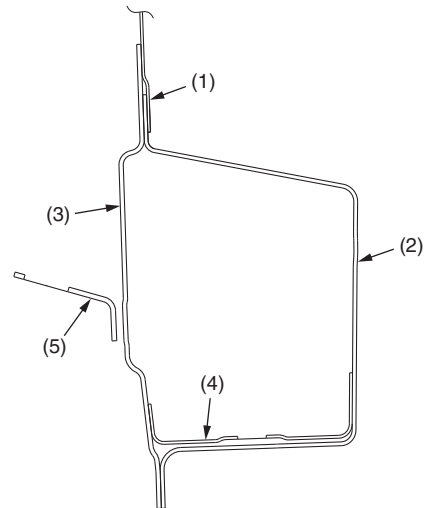
Cross section C — C



BRM02661

- (1) Reinforcement front suspension upper
- (2) Frame side FF
- (3) Closing plate FF
- (4) Reinforcement front suspension lower
- (5) Bracket front suspension lower
- (6) Reinforcement FF inner center
- (7) Separator front suspension rear

Cross section D — D

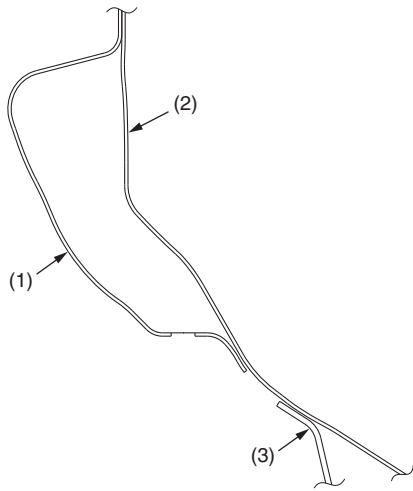


BRM01246

- (1) Bracket front suspension lower
- (2) Frame side FF
- (3) Closing plate FF
- (4) Reinforcement FF rear
- (5) Bracket Brake Hose

Body Construction

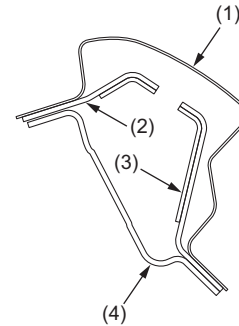
Cross section E — E



BRM01247

- (1) Crossmember toe board center
- (2) Toe board
- (3) Frame tunnel front A

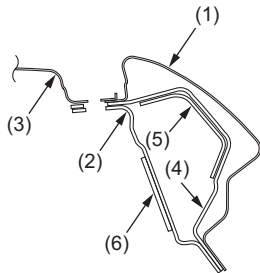
Cross section F — F



BRM02494

- (1) Panel side outer
- (2) Reinforcement rail side outer front
- (3) Reinforcement rail side outer front A
- (4) Pillar front inner upper

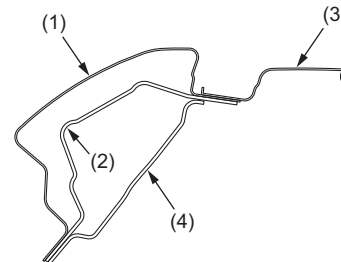
Cross section G — G



BRM02487

- (1) Panel side outer
- (2) Rail side inner
- (3) Roof panel
- (4) Reinforcement rail side outer rear
- (5) Reinforcement rail side outer A
- (6) Bracket assist rail front

Cross section H — H

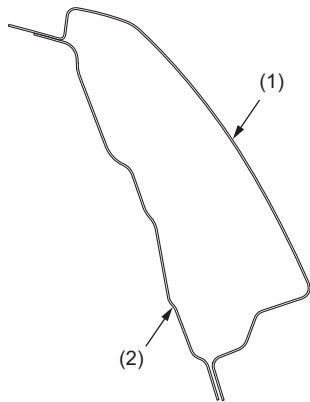


BRM02488

- (1) Panel side outer
- (2) Reinforcement rail side outer rear
- (3) Roof panel
- (4) Rail side inner

Body Construction

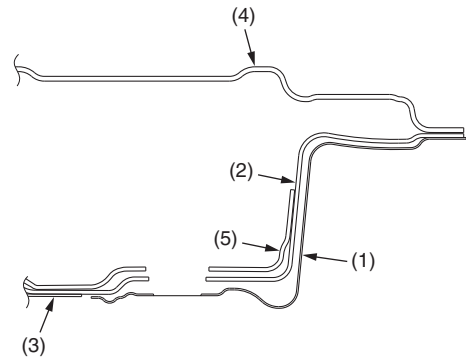
Cross section I — I



BRM02489

- (1) Panel side outer
- (2) Pillar rear inner

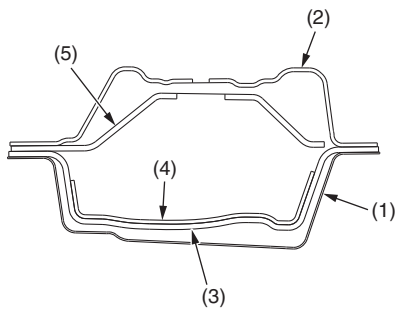
Cross section J — J



BRM02838

- (1) Panel side outer
- (2) Reinforcement pillar front outer
- (3) Gusset frame side upper
- (4) Pillar front inner lower
- (5) Reinforcement pillar front center

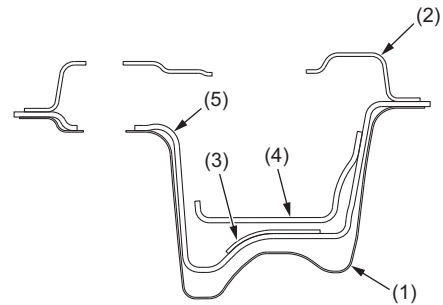
Cross section K — K



BRM01253

- (1) Panel side outer
- (2) Pillar center inner
- (3) Reinforcement pillar center outer upper
- (4) Reinforcement pillar center outer A
- (5) Doubler pillar center

Cross section L — L

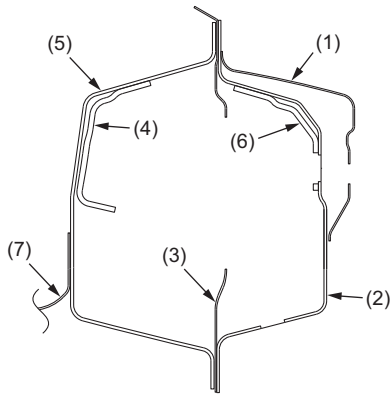


BRM02663

- (1) Panel side outer
- (2) Pillar center inner
- (3) Reinforcement pillar center outer A
- (4) Reinforcement pillar center outer B
- (5) Reinforcement pillar center outer upper

Body Construction

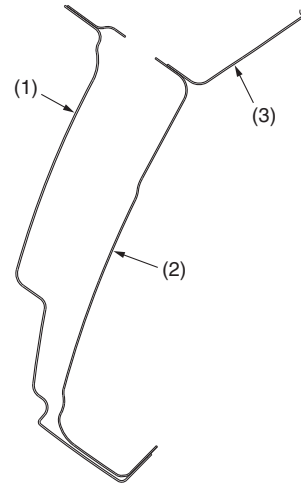
Cross section M — M



BRM02666

- (1) Panel side outer
- (2) Reinforcement side sill outer front
- (3) Reinforcement side sill rear
- (4) Reinforcement side sill inner
- (5) Side sill inner front
- (6) Reinforcement side sill outer A
- (7) Floor pan front

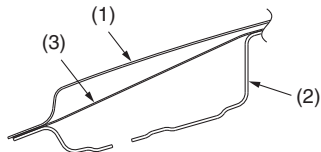
Cross section N — N



BRM01258

- (1) Panel side outer
- (2) Arch rear inner
- (3) Wheel apron rear

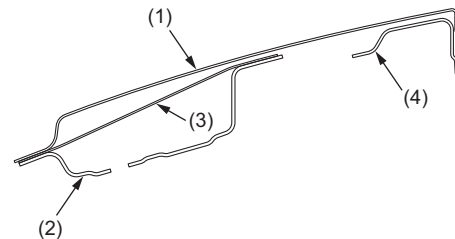
Cross section O — O (Model without sunroof)



BRM01259

- (1) Roof panel
- (2) Rail front lower
- (3) Rail front upper

Cross section O — O (Model with sunroof)



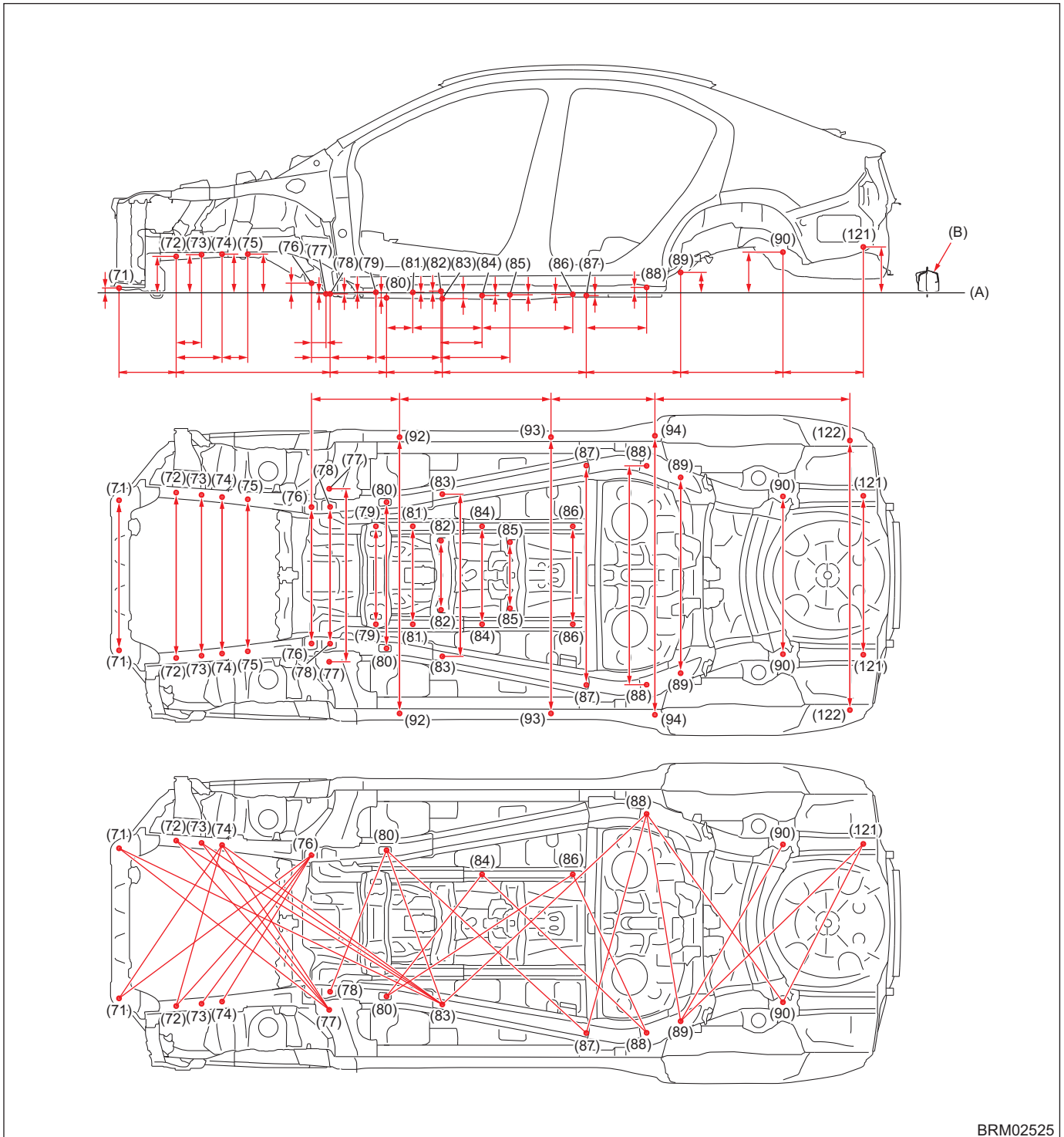
BRM02486

- (1) Roof panel
- (2) Rail front lower
- (3) Rail front upper
- (4) Frame sunroof front

7. Body Reference Points

A: DIMENSIONS

1. LOWER SURFACE



BRM02525

- The longitudinal dimensions are projected dimensions.
- The height dimension is the vertical distance from the virtual horizon to the reference point based on the side sill flange base (bending angle point).
- Diagonal dimensions are the actual dimensions between reference points.

Body Reference Points

(A) Datum line	(B) Side sill outer panel	
(71) Bracket center lower mounting hole (Symmetrical)	(79b) CVT crossmember upper mounting hole (Symmetrical)	(88) Rear suspension support sub frame mounting hole (Symmetrical), front side
(72) Gauge hole (Symmetrical)	(80) Under cover rear mounting hole (Symmetrical)	(89) Rear suspension crossmember mounting hole (Symmetrical), front side
(73) Radio ground mounting hole (Symmetrical)	(81) Under cover rear mounting hole (Symmetrical)	(90) Rear suspension crossmember mounting hole (Symmetrical), rear side
(74) Front crossmember mounting hole (Symmetrical), front side	(82) Exhaust cover mounting hole (Symmetrical)	(92) Side sill spoiler mounting hole (Symmetrical)
(75) Front crossmember mounting hole (Symmetrical), rear side	(83) Under cover rear mounting hole (Symmetrical)	(93) Side sill spoiler mounting hole (Symmetrical)
(76) Front suspension arm mounting hole (Symmetrical)	(84) Under cover rear mounting hole (Symmetrical)	(94) Side sill spoiler mounting hole (Symmetrical)
(77) Front suspension plate mounting hole (Symmetrical), outside	(85) Exhaust cover mounting hole (Symmetrical)	(121) Gauge hole (Symmetrical)
(78) Front suspension plate mounting hole (Symmetrical), inside	(86) Protector tank mounting hole (Symmetrical)	(122) Cover side lower mounting hole (Symmetrical), rear side
(79a) MT crossmember upper mounting hole (Symmetrical)	(87) Rear frame mounting hole (Symmetrical), outside	

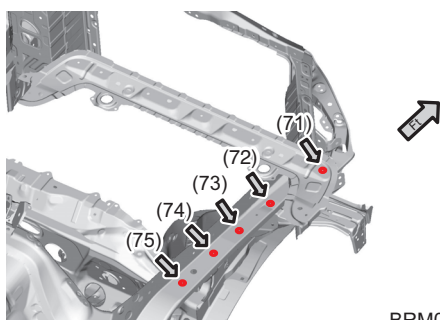
Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
Datum line — (71)	27 (1.06)	—
Datum line — (72)	204 (8.03)	—
Datum line — (73)	213 (8.39)	—
Datum line — (74)	216 (8.50)	—
Datum line — (75)	216 (8.50)	—
Datum line — (76)	54 (2.13)	—
Datum line — (77)	-6 (-0.24)	—
Datum line — (78)	-6 (-0.24)	—
Datum line — (79a)	3 (0.12)	—
Datum line — (79b)	3 (0.12)	—
Datum line — (80)	-28 (-1.10)	—
Datum line — (81)	3 (0.12)	—
Datum line — (82)	9 (0.35)	—
Datum line — (83)	-33 (-1.30)	—
Datum line — (84)	-16 (-0.63)	—
Datum line — (85)	-11 (-0.43)	—
Datum line — (86)	-9 (-0.35)	—
Datum line — (87)	-16 (-0.63)	—
Datum line — (88)	30 (1.18)	—
Datum line — (89)	114 (4.49)	—
Datum line — (90)	228 (8.98)	—
Datum line — (121)	257 (10.12)	—
(71) — (72)	320 (12.60)	—
(72) — (73)	142 (5.59)	—
(72) — (74)	257 (10.12)	—
(72) — (78)	862 (33.94)	—
(74) — (75)	144 (5.67)	—

Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(76) — (77)	99 (3.90)	—
(76) — (78)	104 (4.09)	—
(78) — (79a)	257 (10.12)	—
(78) — (79b)	367 (14.45)	—
(78) — (80)	316 (12.44)	—
(79a) — (82)	365 (14.37)	—
(79b) — (82)	255 (10.04)	—
(80) — (81)	147 (5.79)	—
(80) — (83)	313 (12.32)	—
(81) — (84)	388 (15.28)	—
(82) — (84)	230 (9.06)	—
(82) — (85)	386 (15.20)	—
(83) — (87)	806 (31.73)	—
(84) — (86)	508 (20.00)	—
(87) — (88)	338 (13.31)	—
(87) — (89)	528 (20.79)	—
(89) — (90)	573 (22.56)	—
(90) — (121)	450 (17.72)	—
(76) — (92)	493 (19.41)	—
(92) — (93)	848 (33.39)	—
(93) — (94)	582 (22.91)	—
(94) — (122)	1,092 (42.99)	—
(71)R — (71)L	840 (33.07)	—
(72)R — (72)L	926 (36.46)	—
(73)R — (73)L	900 (35.43)	—
(74)R — (74)L	876 (34.49)	—
(75)R — (75)L	851 (33.50)	—

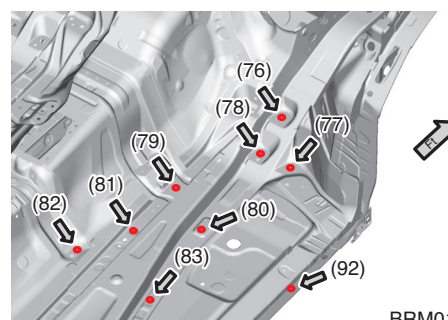
Body Reference Points

Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(76)R — (76)L	764 (30.08)	—
(77)R — (77)L	968 (38.11)	—
(78)R — (78)L	766 (30.16)	—
(79a)R — (79a)L	548 (21.57)	—
(79b)R — (79b)L	548 (21.57)	—
(80)R — (80)L	818 (32.20)	—
(81)R — (81)L	548 (21.57)	—
(82)R — (82)L	387 (15.24)	—
(83)R — (83)L	908 (35.75)	—
(84)R — (84)L	548 (21.57)	—
(85)R — (85)L	370 (14.57)	—
(86)R — (86)L	548 (21.57)	—
(87)R — (87)L	1,228 (48.35)	—
(88)R — (88)L	1,225 (48.23)	—
(89)R — (89)L	1,096 (43.15)	—
(90)R — (90)L	883 (34.76)	—
(92)R — (92)L	1,547 (60.91)	—
(93)R — (93)L	1,547 (60.91)	—
(94)R — (94)L	1,562 (61.50)	—
(121)R — (121)L	889 (35.00)	—
(122)R — (122)L	1,509 (59.41)	—
(71)R — (74)L	1,051 (41.38)	1,034 (40.71)
(71)R — (76)L	1,344 (52.91)	1,344 (52.91)
(71)L — (77)R	1,485 (58.46)	1,484 (58.43)
(71)L — (83)R	2,011 (79.17)	2,010 (79.13)

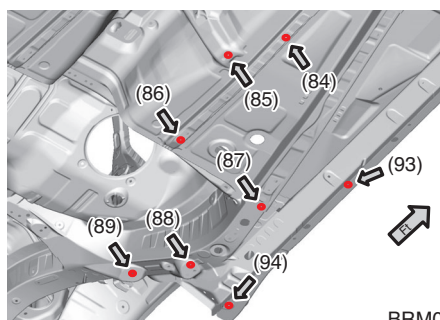
Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(72)R — (74)L	937 (36.89)	937 (36.89)
(72)R — (76)L	1,145 (45.08)	1,135 (44.68)
(72)L — (77)R	1,294 (50.94)	1,277 (50.28)
(72)L — (83)R	1,766 (69.53)	1750 (68.90)
(73)R — (76)L	1,047 (41.22)	1,035 (40.75)
(73)L — (77)R	1,197 (47.13)	1176 (46.30)
(73)L — (83)R	1,642 (64.65)	1623 (63.90)
(74)R — (76)L	975 (38.39)	961 (37.83)
(74)L — (77)R	1,122 (44.17)	1,100 (43.31)
(74)L — (83)R	1,543 (60.75)	1,522 (59.92)
(78)R — (80)L	853 (33.58)	853 (33.58)
(80)R — (84)L	868 (34.17)	868 (34.17)
(80)R — (86)L	1,247 (49.09)	1,247 (49.09)
(80)L — (83)R	918 (36.14)	918 (36.14)
(80)L — (87)R	1,516 (59.68)	1,516 (59.68)
(83)R — (88)L	1,565 (61.61)	1,564 (61.57)
(84)L — (88)R	1,280 (50.39)	1,279 (50.35)
(86)L — (88)R	979 (38.54)	978 (38.50)
(87)R — (88)L	1,273 (50.12)	1,272 (50.08)
(88)L — (89)R	1,179 (46.42)	1176 (46.30)
(88)L — (90)R	1,316 (51.81)	1,302 (51.26)
(89)R — (90)L	1,149 (45.24)	1143 (45.00)
(89)R — (121)L	1,432 (56.38)	1,425 (56.10)
(90)R — (121)L	994 (39.13)	994 (39.13)



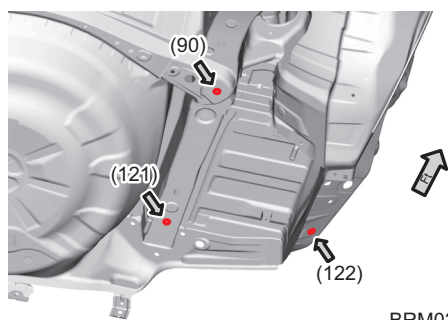
BRM02511



BRM01527



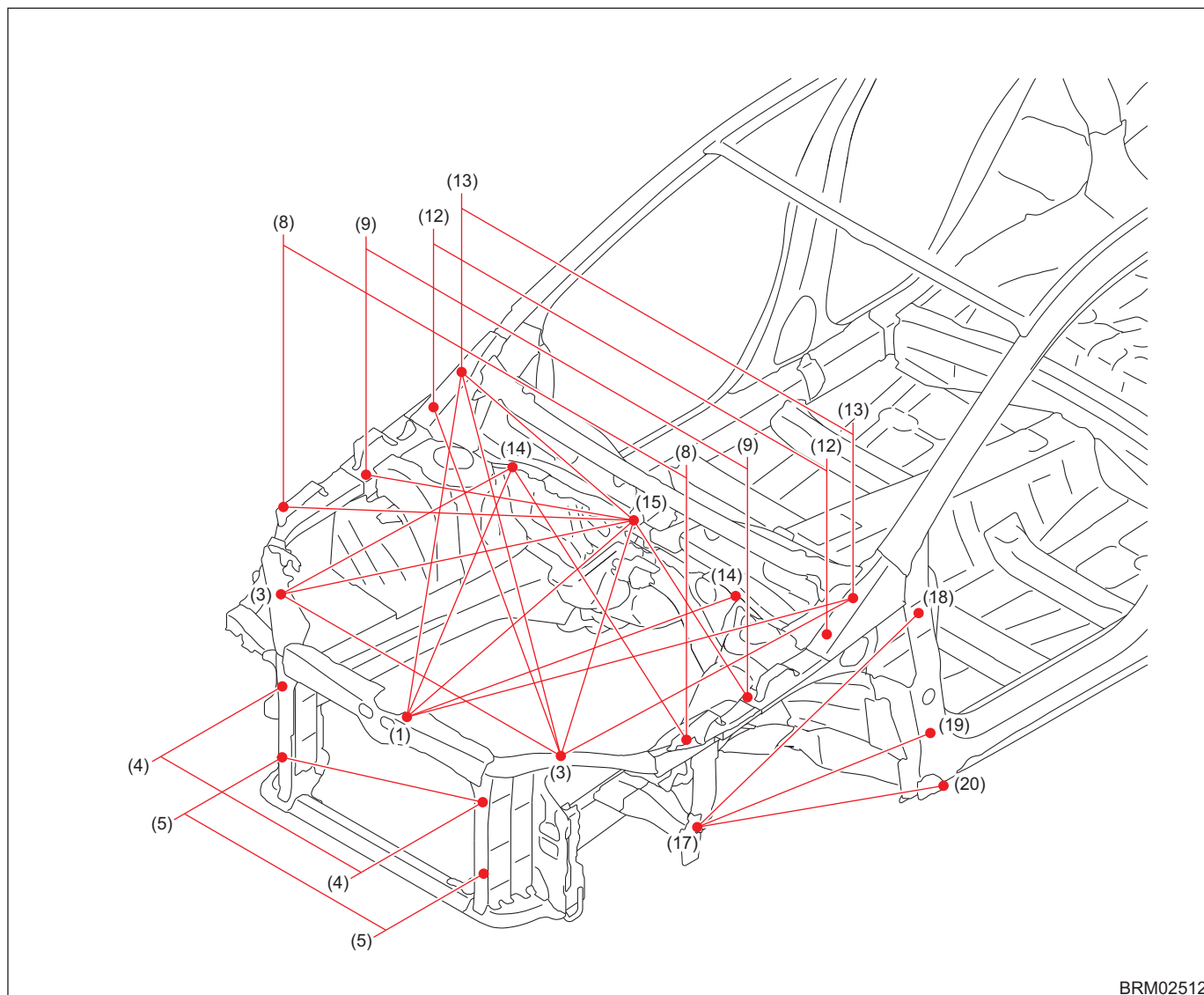
BRM01528



BRM02528

Body Reference Points

2. FRONT 1



BRM02512

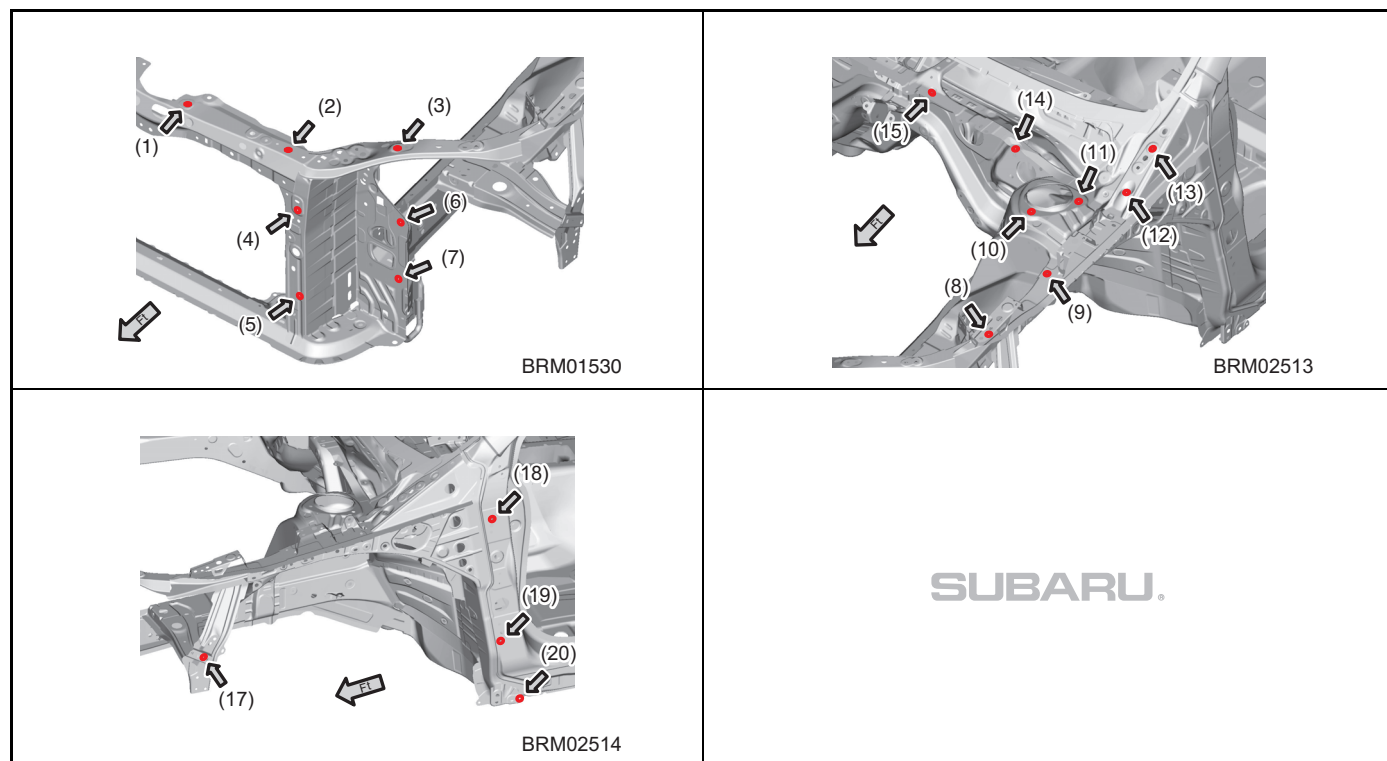
- | | | |
|---|--|---|
| (1) Energy absorber upper mounting hole (Symmetrical) | (9)L Main fuse box mounting hole (Left side) | (17)L Gauge hole (Left side) |
| (3) Headlight mounting hole (Symmetrical) | (12) Gauge hole (Symmetrical) | (18) Front door hinge upper mounting hole (Symmetrical), upper side |
| (4) Headlight mounting hole (Symmetrical) | (13) Hood hinge mounting hole (Symmetrical), rear side | (19) Front door hinge lower mounting hole (Symmetrical), lower side |
| (5) Air guide mounting hole (Symmetrical) | (14) Cowl panel mounting hole (Symmetrical) | (20) Gauge hole (Symmetrical) |
| (8) Gauge hole (Symmetrical) | (15) Gauge hole (Body center) | |
| (9)R Sub fuse box mounting hole (Right side) | (17)R Gauge hole (Right side) | |

Body Reference Points

Measuring point	Datum dimensions mm (in)
(1)L — (13)R	1,334 (52.52)
(1)L — (13)L	1,241 (48.86)
(1)L — (14)R	1,041 (40.98)
(1)L — (14)L	973 (38.31)
(1)L — (15)	954 (37.56)
(3)R — (3)L	1,061 (41.77)
(3)R — (14)R	783 (30.83)
(3)R — (15)	971 (38.23)
(3)L — (12)R	1,507 (59.33)
(3)L — (13)R	1,566 (61.65)
(3)L — (13)L	938 (36.93)
(3)L — (15)	971 (38.23)
(4)R — (4)L	760 (29.92)
(4)L — (5)R	797 (31.38)
(5)R — (5)L	764 (30.08)

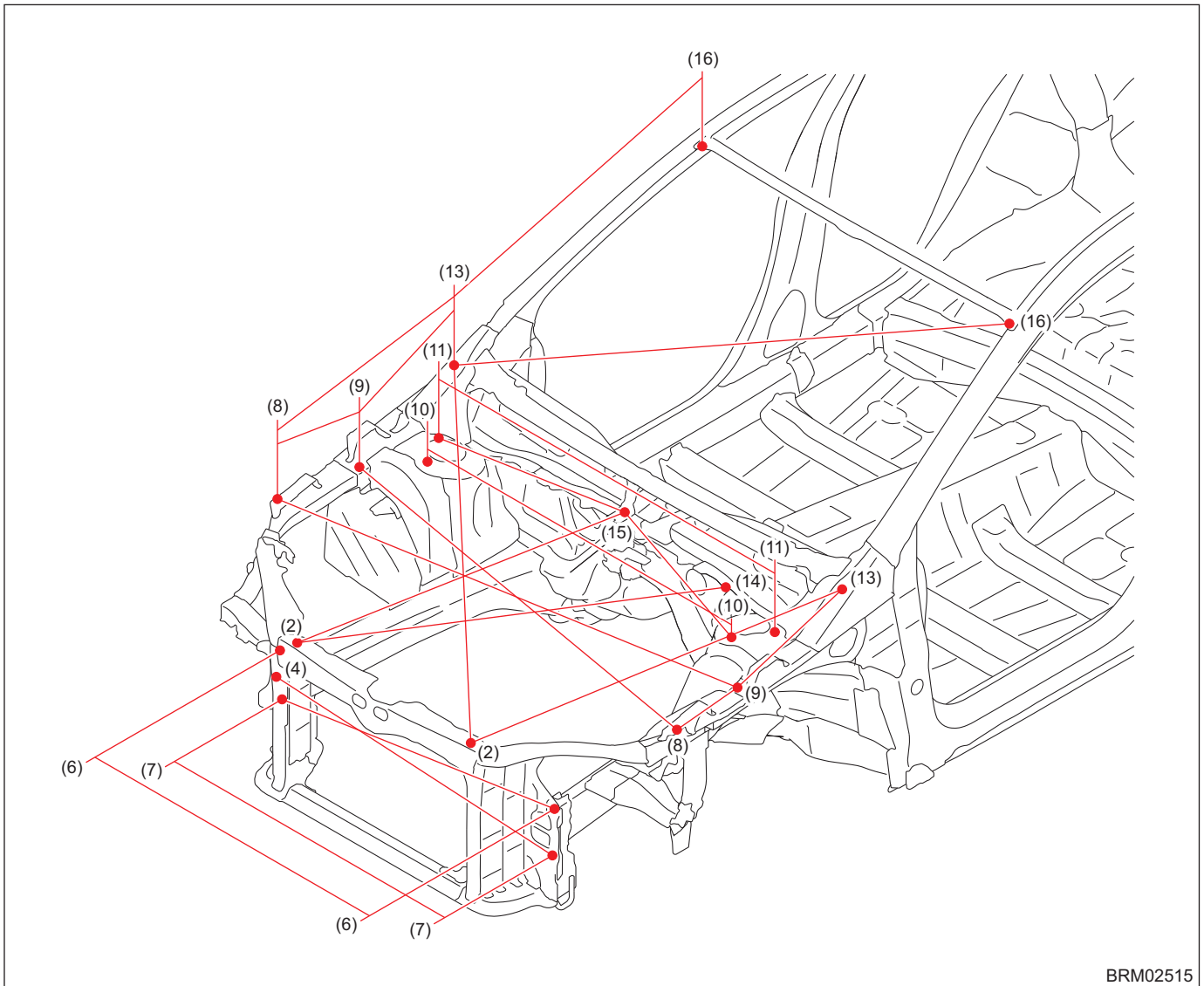
Measuring point	Datum dimensions mm (in)
(8)R — (8)L	1,528 (60.16)
(8)R — (15)	951 (37.44)
(8)L — (14)R	1,300 (51.18)
(9)R — (9)L	1,453 (57.20)
(9)R — (15)	782 (30.79)
(9)L — (15)	792 (31.18)
(12)R — (12)L	1,491 (58.70)
(13)R — (13)L	1,484 (58.43)
(13)R — (15)	751 (29.57)
(17)R — (18)R	907 (35.71)
(17)R — (19)R	903 (35.55)
(17)R — (20)R	1,015 (39.96)
(17)L — (18)L	908 (35.75)
(17)L — (19)L	904 (35.59)
(17)L — (20)L	1,016 (40.00)

- (15) indicates a body center part; (9) and (17) indicates left-right asymmetry; while all other reference points indicate left-right symmetry.
- The dimensions are the actual dimensions between the reference points.



Body Reference Points

3. FRONT 2



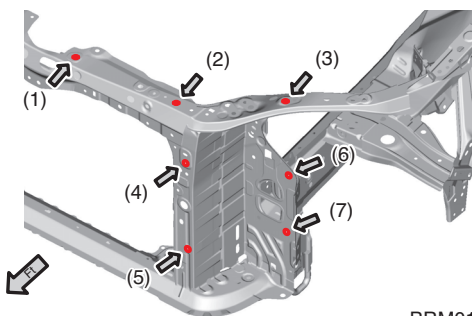
- | | | |
|---|---|--|
| (2) Bracket radiator mounting hole (Symmetrical) | (9)R Sub fuse box mounting hole (Right side) | (14) Cowl panel mounting hole (Symmetrical) |
| (4) Headlight mounting hole (Symmetrical) | (9)L Main fuse box mounting hole (Left side) | (15) Gauge hole (Body center) |
| (6) Front bumper beam mounting hole (Symmetrical), upper side | (10) Front suspension mounting hole (Symmetrical), front | (16) Front glass installation reference hole (Symmetrical) |
| (7) Front bumper beam mounting hole (Symmetrical), lower side | (11) Front suspension mounting hole (Symmetrical), rear outside | |
| (8) Gauge hole (Symmetrical) | (13) Hood hinge mounting hole (Symmetrical), rear side | |

Body Reference Points

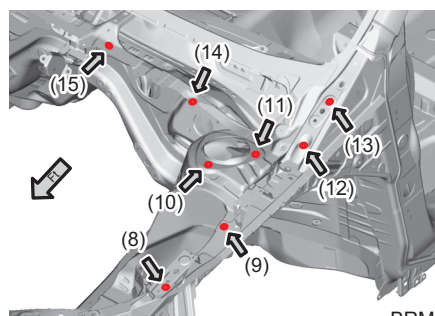
Measuring point	Datum dimensions mm (in)
(2)R — (14)L	1,169 (46.02)
(2)R — (15)	988 (38.90)
(2)L — (13)R	1,489 (58.62)
(2)L — (13)L	1,110 (43.70)
(4)R — (7)L	938 (36.93)
(6)R — (6)L	1,050 (41.34)
(6)L — (7)R	1,054 (41.50)
(7)R — (7)L	1,034 (40.71)
(8)R — (9)R	275 (10.83)
(8)R — (9)L	1,518 (59.76)
(8)R — (13)R	666 (26.22)

Measuring point	Datum dimensions mm (in)
(8)L — (9)R	1,511 (59.49)
(8)L — (9)L	267 (10.51)
(9)R — (13)R	406 (15.98)
(9)L — (13)L	412 (16.22)
(10)R — (10)L	1,163 (45.79)
(10)L — (15)	608 (23.94)
(11)R — (11)L	1,285 (50.59)
(11)R — (15)	648 (25.51)
(13)R — (16)R	905 (35.63)
(13)R — (16)L	1,601 (63.03)

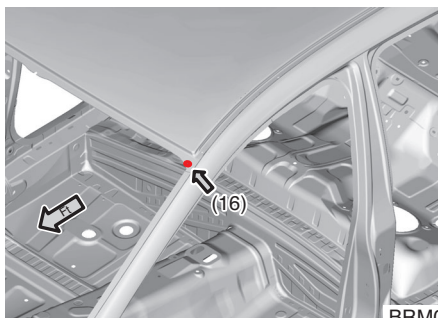
- (15) indicates a body center part; (9) indicates left-right asymmetry; while all other reference points indicate left-right symmetry.
- The dimensions are the actual dimensions between the reference points.



BRM01530



BRM02513

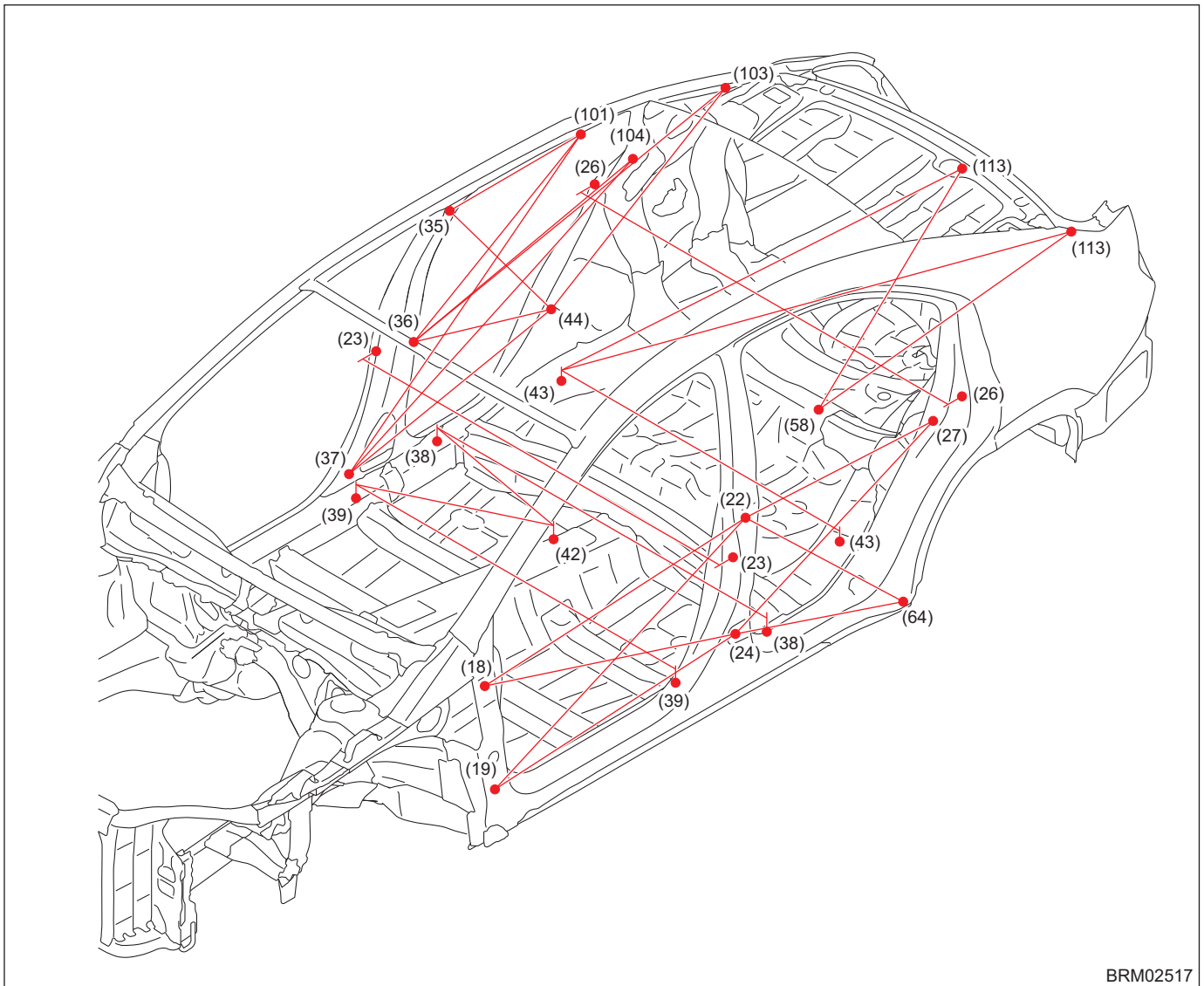


BRM01532

SUBARU.

Body Reference Points

4. INSIDE 1



BRM02517

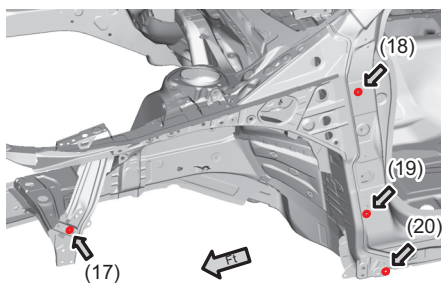
(18) Front door hinge upper mounting hole (Symmetrical), upper side	(35) B pillar trim mounting hole (Symmetrical)	(44) Gauge hole (Symmetrical)
(19) Front door hinge lower mounting hole (Symmetrical), lower side	(36) B pillar trim mounting hole (Symmetrical)	(58) Stay rear floor mounting hole (Symmetrical)
(22) Rear door hinge upper mounting hole (Symmetrical), upper side	(37) B pillar trim mounting hole (Symmetrical)	(64) Side spoiler mounting hole (Symmetrical)
(23) Front door striker mounting hole (Symmetrical), upper side	(38) Harness clip mounting hole (Symmetrical)	(101) Gauge hole (Symmetrical)
(24) Rear door hinge lower mounting hole (Symmetrical), front side	(39) Harness clip mounting hole (Symmetrical)	(103) C pillar upper trim mounting hole (Symmetrical)
(26) Rear door striker mounting hole (Symmetrical), upper side	(42) Bracket console mounting hole (Symmetrical)	(104) C pillar upper trim mounting hole (Symmetrical)
(27) Rear door switch mounting hole (Symmetrical)	(43) Side sill cover mounting hole (Symmetrical)	(113) Gauge hole (Symmetrical)

Body Reference Points

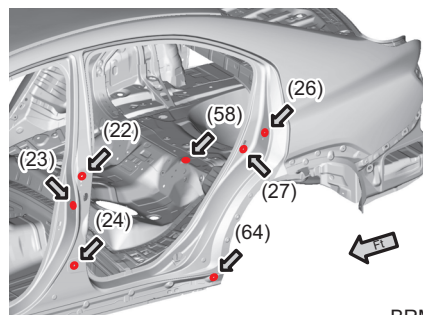
Measuring point	Datum dimensions mm (in)
(18)L — (22)L	1,145 (45.08)
(18)L — (24)L	1,134 (44.65)
(19)L — (22)L	1,214 (47.80)
(19)L — (24)L	1,065 (41.93)
(22)L — (27)L	872 (34.33)
(22)L — (64)L	884 (34.80)
(23)R — (23)L	1,570 (61.81)
(24)L — (27)L	981 (38.62)
(24)L — (64)L	727 (28.62)
(26)R — (26)L	1,585 (62.40)
(35)R — (44)R	948 (37.32)
(35)R — (101)R	548 (21.57)
(36)R — (44)R	671 (26.42)
(36)R — (101)R	831 (32.72)
(36)R — (103)R	1,329 (52.32)

Measuring point	Datum dimensions mm (in)
(36)R — (104)R	977 (38.46)
(37)R — (44)R	910 (35.83)
(37)R — (101)R	1,288 (50.71)
(37)R — (104)R	1,356 (53.39)
(38)R — (38)L	1,450 (57.09)
(38)R — (42)R	701 (27.60)
(39)R — (39)L	1,406 (55.35)
(39)R — (42)R	693 (27.28)
(43)R — (43)L	1,224 (48.19)
(43)R — (113)R	1,470 (57.87)
(43)R — (113)L	1,658 (65.28)
(44)R — (103)R	878 (34.57)
(58)L — (113)R	1,185 (46.65)
(58)L — (113)L	1,095 (43.11)

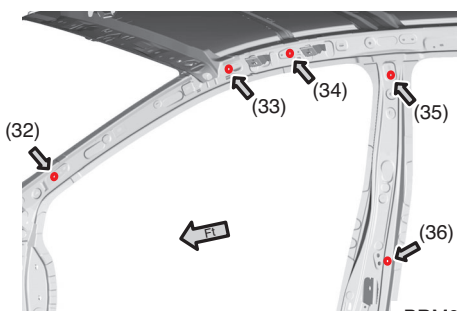
- All reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.



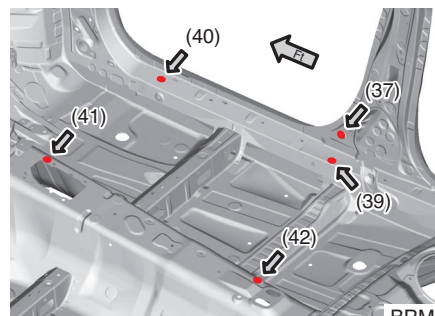
BRM02514



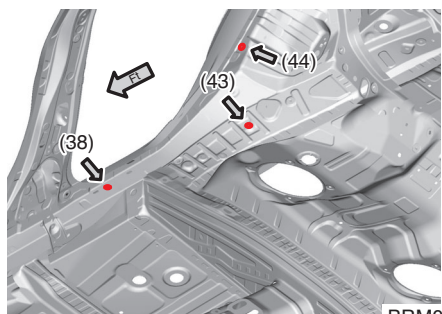
BRM02502



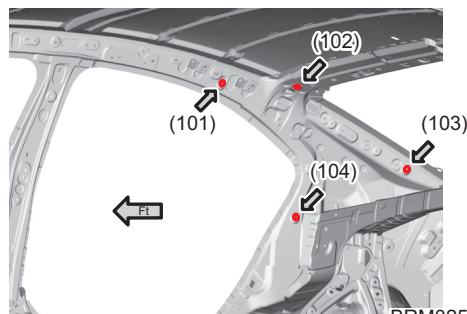
BRM01537



BRM01538

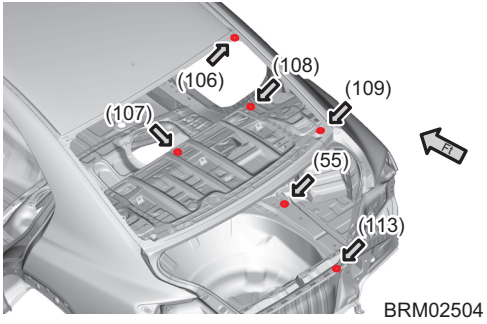


BRM01539



BRM02503

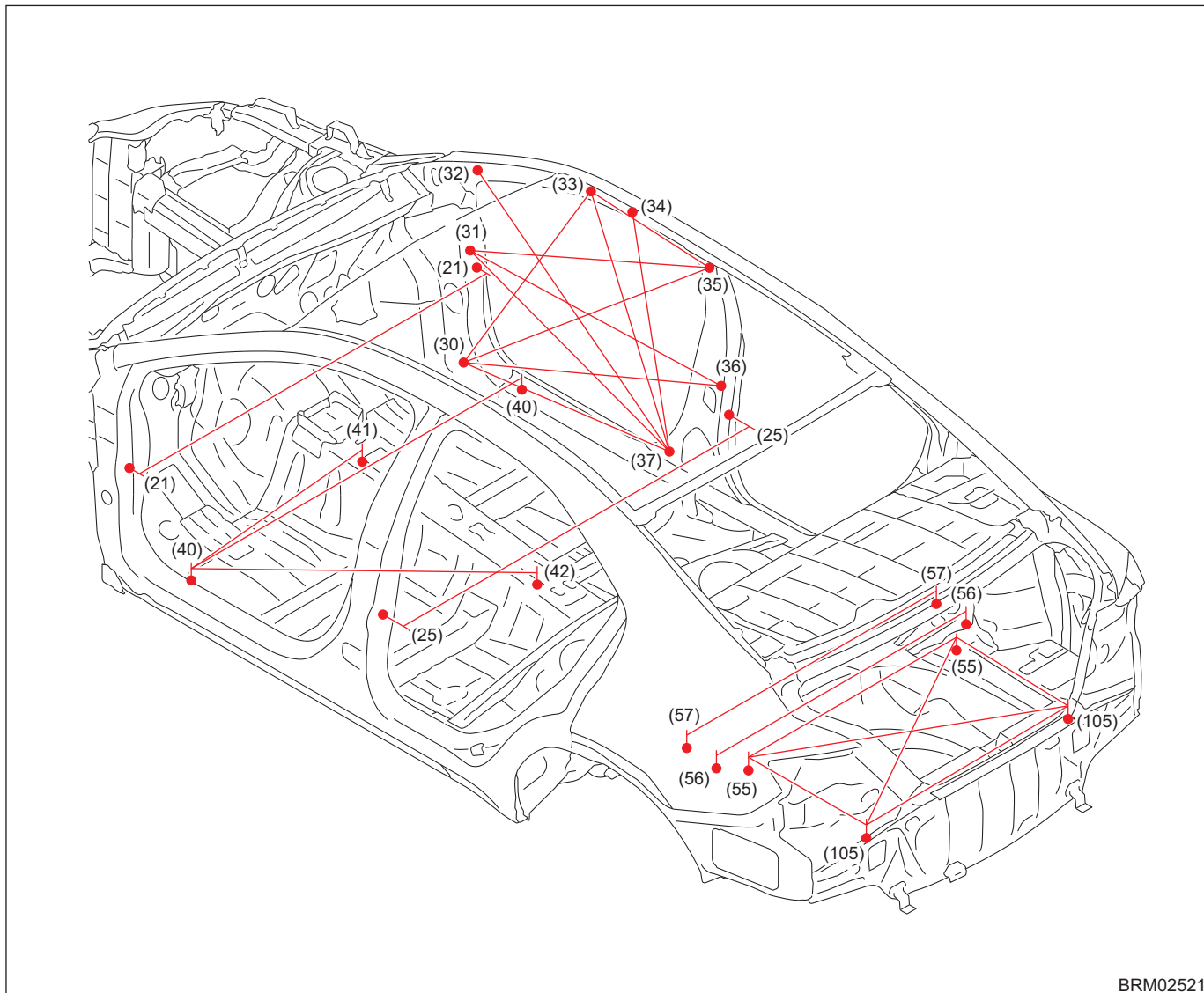
Body Reference Points



SUBARU.

Body Reference Points

5. INSIDE 2



BRM02521

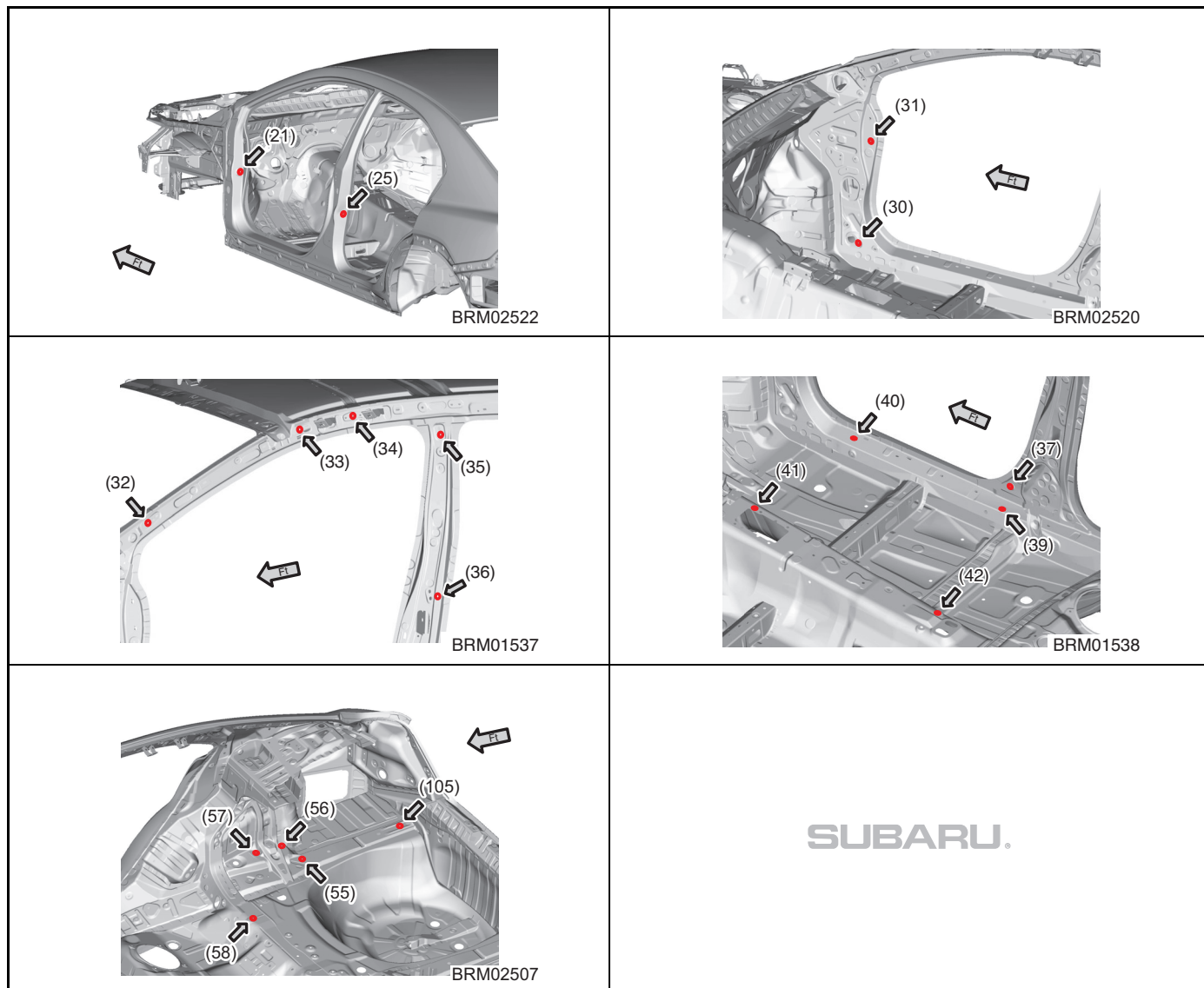
- | | | |
|--|---|--|
| (21) Front door checker mounting hole (Symmetrical) | (34) Curtain airbag mounting hole (Symmetrical) | (42) Bracket console mounting hole (Symmetrical) |
| (25) Rear door checker mounting hole (Symmetrical) | (35) B pillar trim mounting hole (Symmetrical) | (55) Gauge hole (Symmetrical) |
| (30) Harness holding clip mounting hole (Symmetrical) | (36) B pillar trim mounting hole (Symmetrical) | (56) Rear suspension mounting hole (Symmetrical), rear side |
| (31) Steering support beam mounting hole (Symmetrical), lower side | (37) B pillar trim mounting hole (Symmetrical) | (57) Rear suspension mounting hole (Symmetrical), front side |
| (32) Curtain airbag mounting hole (Symmetrical) | (40) Harness clip mounting hole (Symmetrical) | (105)R Gauge hole (Right side) |
| (33) Pad A pillar mounting hole (Symmetrical) | (41) Shift case mounting hole (Symmetrical) | (105)L Gauge hole (Left side) |

Body Reference Points

Measuring point	Datum dimensions mm (in)
(21)R — (21)L	1,513 (59.57)
(25)R — (25)L	1,508 (59.37)
(30)R — (33)R	1,219 (47.99)
(30)R — (35)R	1,520 (59.84)
(30)R — (36)R	1,195 (47.05)
(30)R — (37)R	853 (33.58)
(31)R — (35)R	1,290 (50.79)
(31)R — (36)R	1,100 (43.31)
(31)R — (37)R	914 (35.98)
(32)R — (37)R	1,050 (41.34)
(33)R — (35)R	505 (19.88)
(33)R — (37)R	989 (38.94)

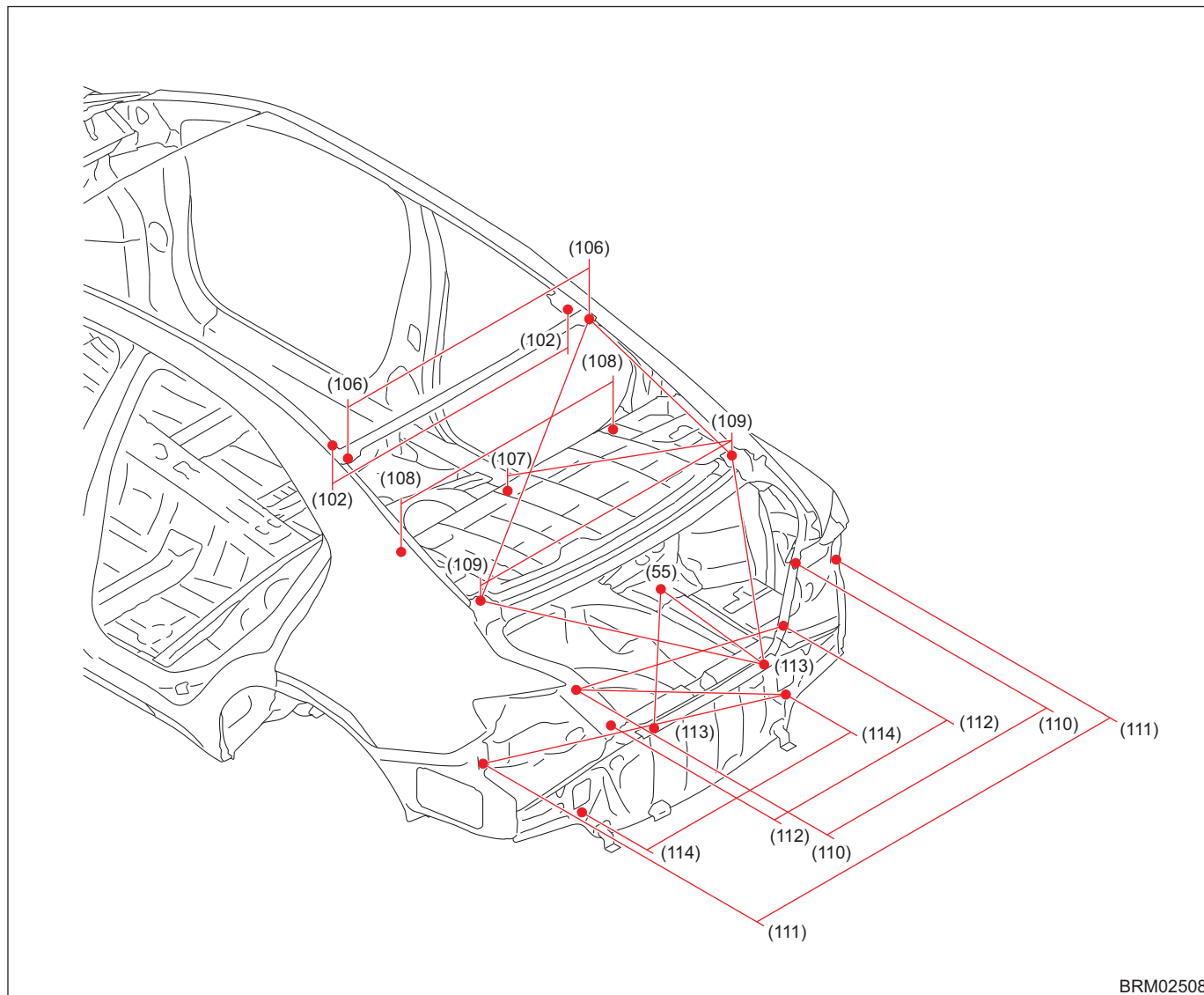
Measuring point	Datum dimensions mm (in)
(34)R — (37)R	1,006 (39.61)
(40)R — (40)L	1,440 (56.69)
(40)L — (41)L	689 (27.13)
(40)L — (42)L	1,073 (42.24)
(55)R — (55)L	906 (35.67)
(55)R — (105)R	495 (19.49)
(55)R — (105)L	1,030 (40.55)
(55)L — (105)R	1,025 (40.35)
(55)L — (105)L	505 (19.88)
(56)R — (56)L	1,088 (42.83)
(57)R — (57)L	1,087 (42.80)
(105)R — (105)L	889 (35.00)

- All reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.



Body Reference Points

6. INSIDE & REAR



BRM02508

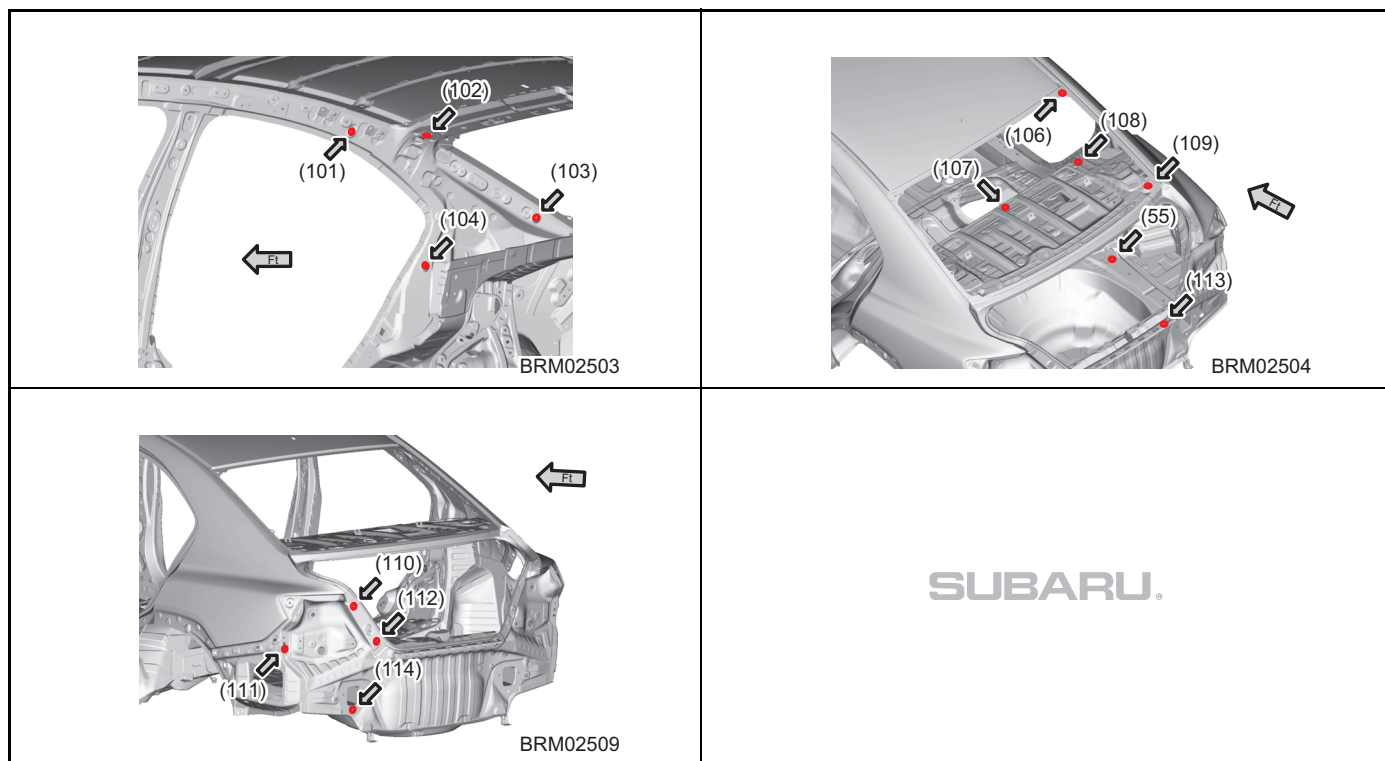
(55) Gauge hole (Symmetrical)	(108) Rear shelf mounting hole (Symmetrical)	(112) Bracket corner rear mounting hole (Symmetrical), inside
(102) Harness clip mounting hole (Symmetrical)	(109) Gauge hole (Symmetrical)	(113) Gauge hole (Symmetrical)
(106) Rear glass installation reference hole (Symmetrical)	(110) Rear combination light mounting hole (Symmetrical), upper side	(114) Rear bumper beam mounting hole (Symmetrical)
(107) Rear shelf mounting hole (Body center)	(111) Gauge hole (Symmetrical)	

Body Reference Points

Measuring point	Datum dimensions mm (in)
(55)R — (113)R	713 (28.07)
(55)R — (113)L	972 (38.27)
(102)R — (102)L	1,026 (40.39)
(106)R — (106)L	1,052 (41.42)
(106)R — (109)R	642 (25.28)
(106)R — (109)L	1,251 (49.25)
(107) — (109)R	701 (27.60)
(108)R — (108)L	924 (36.38)
(109)R — (109)L	1,096 (43.15)

Measuring point	Datum dimensions mm (in)
(109)R — (113)R	682 (26.85)
(109)L — (113)R	995 (39.17)
(110)R — (110)L	957 (37.68)
(110)L — (112)R	871 (34.29)
(110)L — (114)R	1,042 (41.02)
(111)R — (111)L	1,540 (60.63)
(111)L — (114)R	1,254 (49.37)
(112)R — (112)L	752 (29.61)
(114)R — (114)L	889 (35.00)

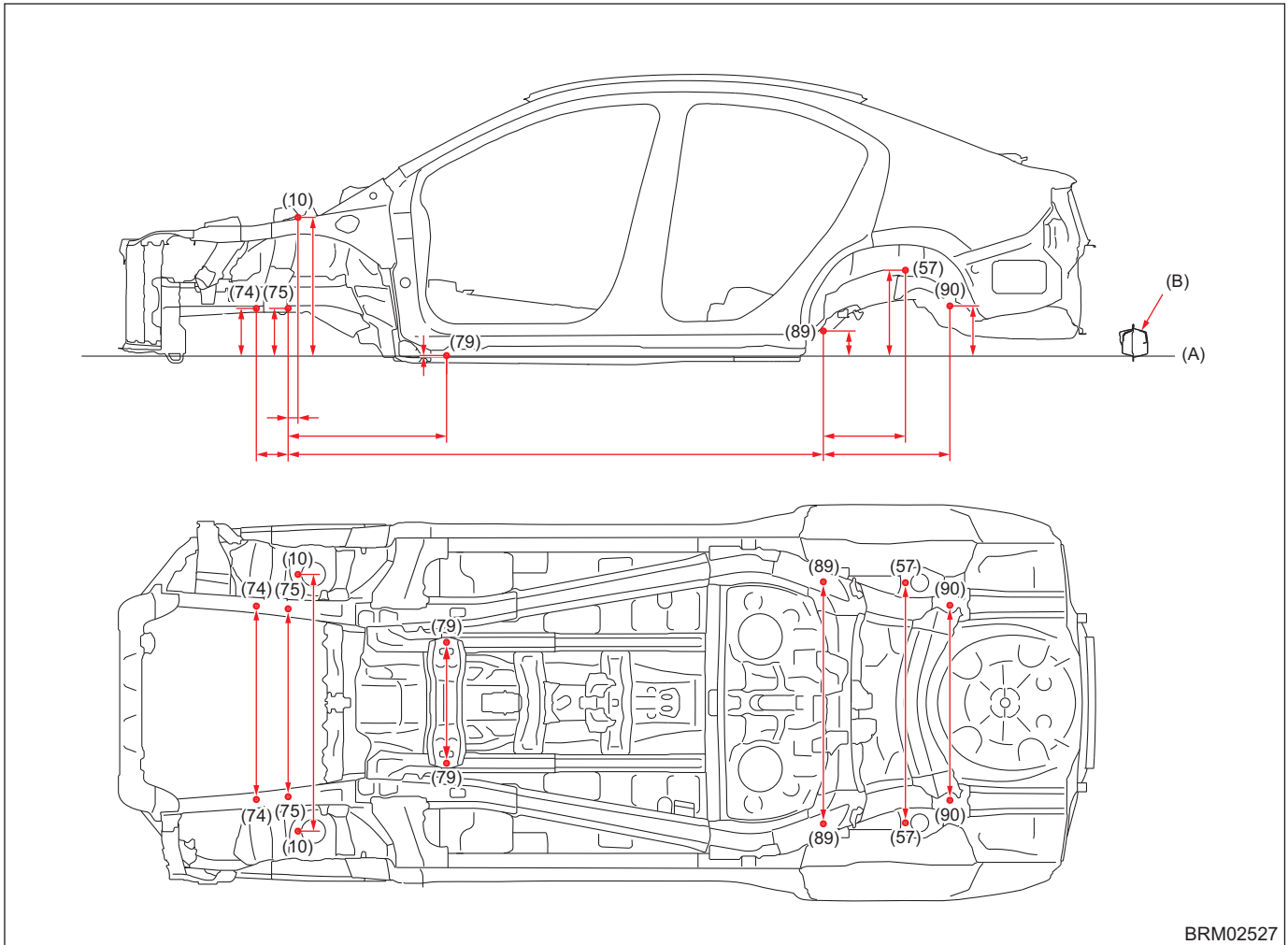
- Reference point (107) is the center of the vehicle body, while other reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.



8. Measurement for Combined Parts

A: DIMENSIONS

1. SUSPENSION MOUNT & ENGINE MOUNT



BRM02527

- The longitudinal dimensions are projected dimensions.
- The height dimension is the vertical distance from the virtual horizon to the reference point based on the side sill flange base (bending angle point).

(A) Datum line

(B) Side sill outer panel

(10) Front suspension mounting hole (Symmetrical), front

(75) Front crossmember mounting hole (Symmetrical), rear side

(89) Rear suspension crossmember mounting hole (Symmetrical), front side

(57) Rear suspension mounting hole (Symmetrical), front side

(79a) MT crossmember upper mounting hole (Symmetrical)

(90) Rear suspension crossmember mounting hole (Symmetrical), rear side

(74) Front crossmember mounting hole (Symmetrical), front side

(79b) CVT crossmember upper mounting hole (Symmetrical)

Measurement for Combined Parts

Measuring point	Datum dimensions mm (in)
Datum line — (10)	629 (24.76)
Datum line — (57)	389 (15.31)
Datum line — (74)	216 (8.50)
Datum line — (75)	216 (8.50)
Datum line — (79a)	3 (0.12)
Datum line — (79b)	3 (0.12)
Datum line — (89)	114 (4.49)
Datum line — (90)	228 (8.98)
(10) — (75)	45 (1.77)
(57) — (89)	372 (14.65)
(74) — (75)	144 (5.67)
(75) — (79a)	718 (28.27)

Measuring point	Datum dimensions mm (in)
(75) — (79b)	828 (32.60)
(75) — (89)	2,424 (95.43)
(89) — (90)	573 (22.56)
(10) — (10)	1,163 (45.79)
(57) — (57)	1,087 (42.80)
(74) — (74)	876 (34.49)
(75) — (75)	851 (33.50)
(79a) — (79a)	548 (21.57)
(79b) — (79b)	548 (21.57)
(89) — (89)	1,096 (43.15)
(90) — (90)	883 (34.76)

CAUTION:

For the reference point (10), refer to the figure "FRONT 2, DIMENSIONS, Body Reference Points" on page 39.

For the reference point (57), refer to the figure "INSIDE 2, DIMENSIONS, Body Reference Points" on page 44.

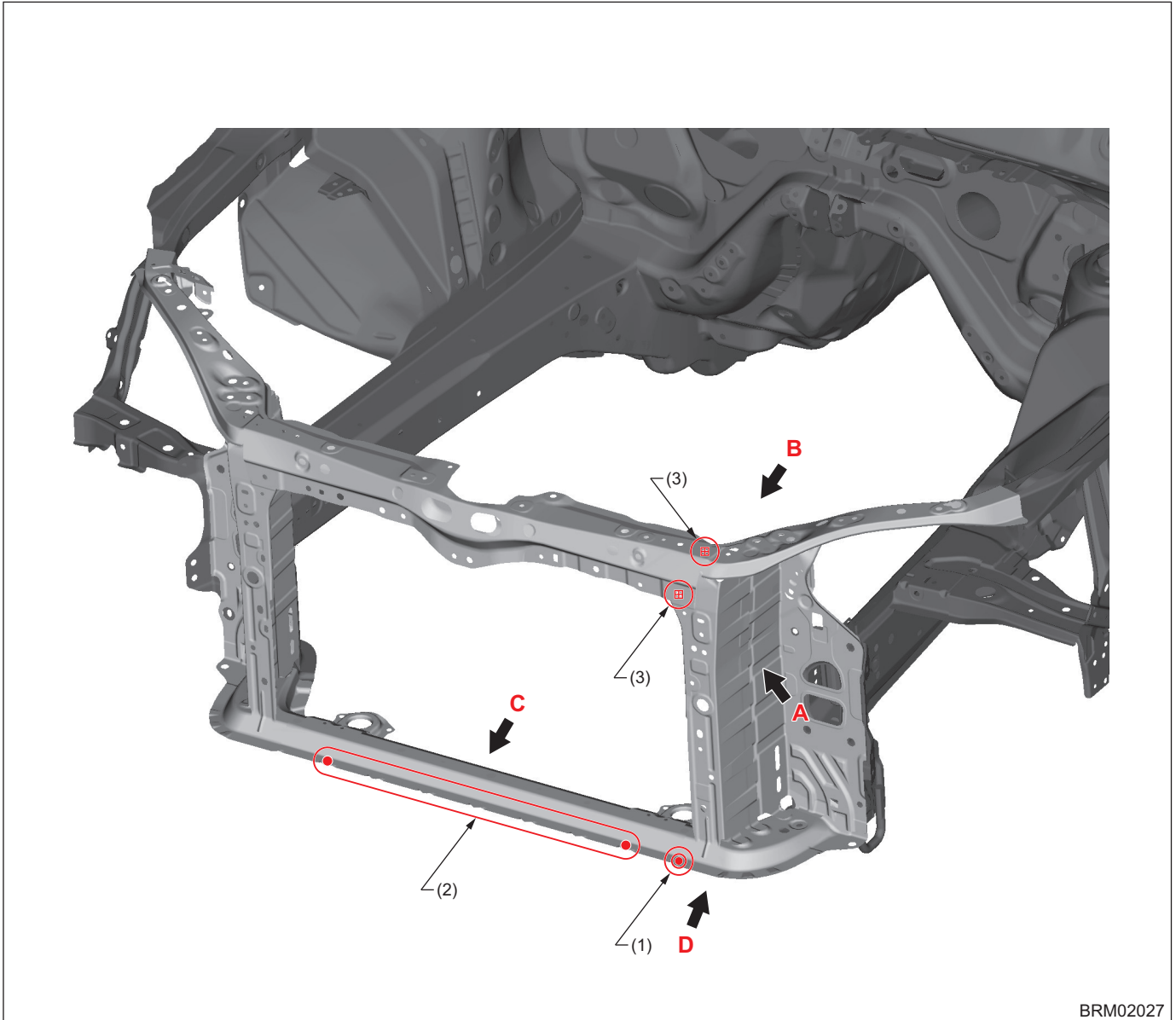
Except the reference points (10) and (57), refer to the figure "LOWER SURFACE, DIMENSIONS, Body Reference Points" on page 34.

9. Panel Replacement

9-1. Radiator Panel (Total replacement)

A: REMOVAL

• Overall view



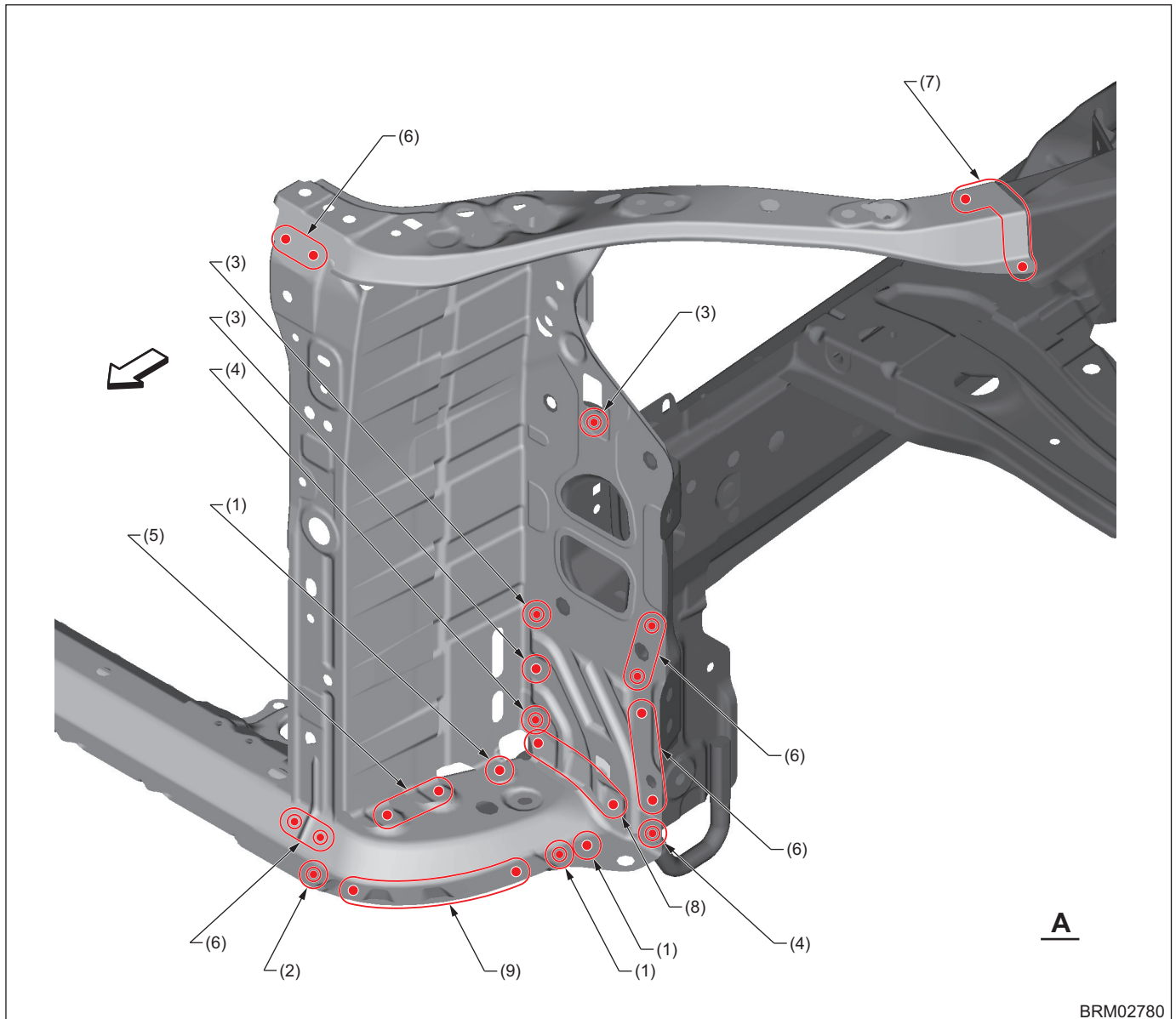
(1) 1 point (Top · 2)

(2) 7 points (Top · 1)

(3) 1 point (Bolt)

Panel Replacement

• View A

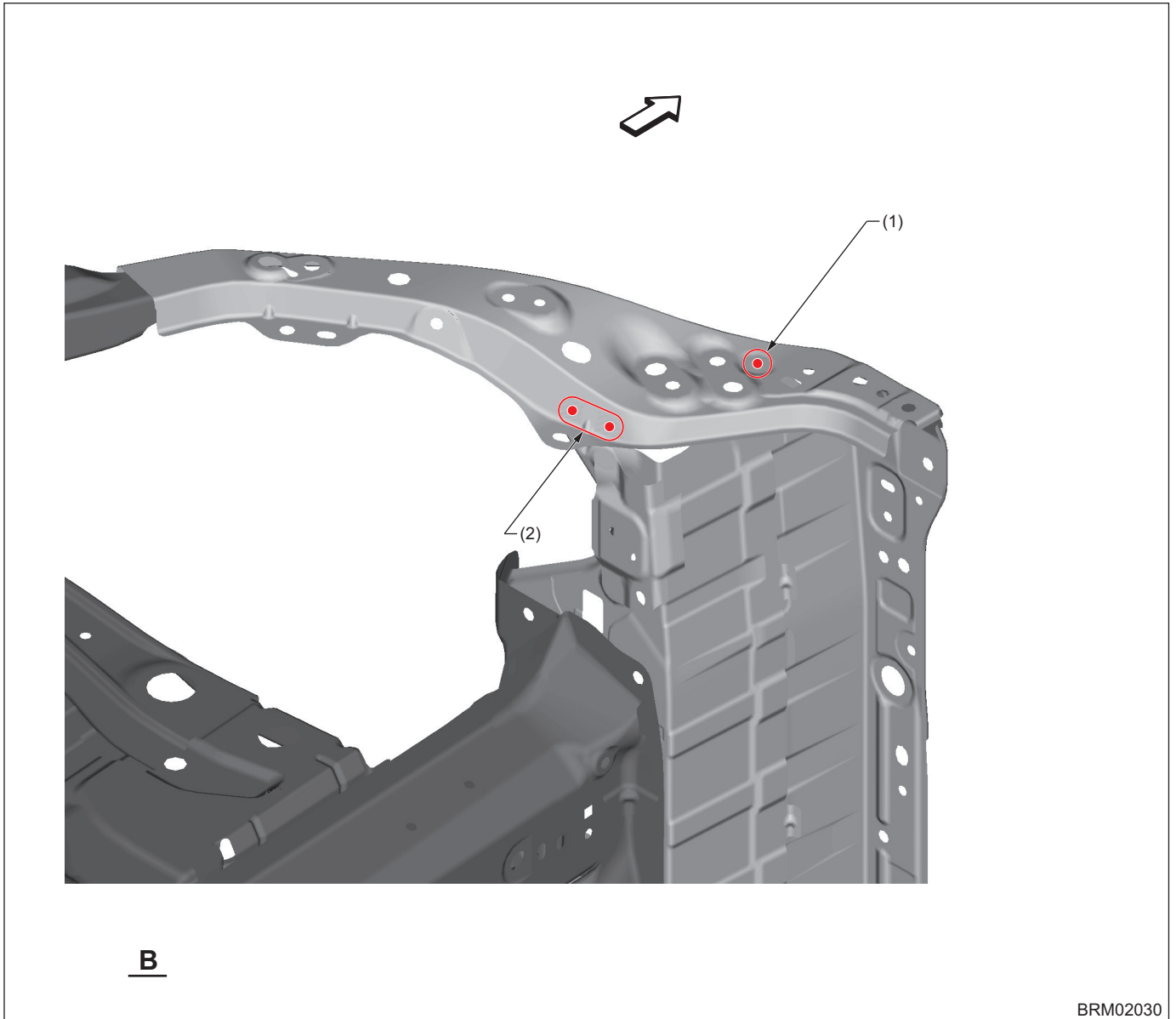


BRM02780

- | | | |
|---------------------------|----------------------------|----------------------------|
| (1) 1 point (Top · 1) | (4) 1 point (Outside · 2) | (7) 3 points (Top · 1) |
| (2) 1 point (Top · 2) | (5) 2 points (Top · 1) | (8) 3 points (Outside · 1) |
| (3) 1 point (Outside · 1) | (6) 2 points (Outside · 1) | (9) 4 points (Top · 1) |

Panel Replacement

• View B

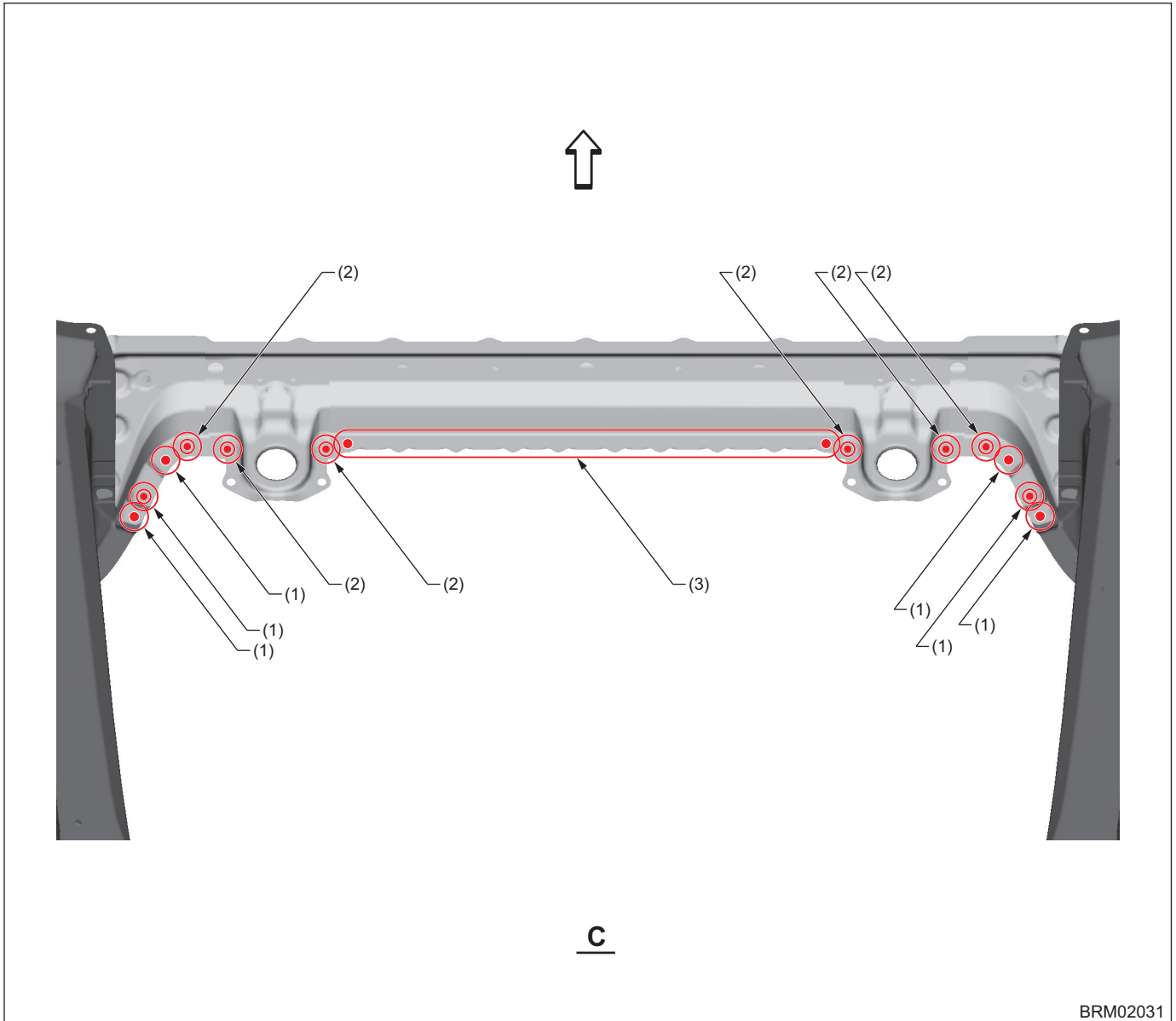


(1) 1 point (Top · 1)

(2) 2 points (Inside · 1)

Panel Replacement

• View C



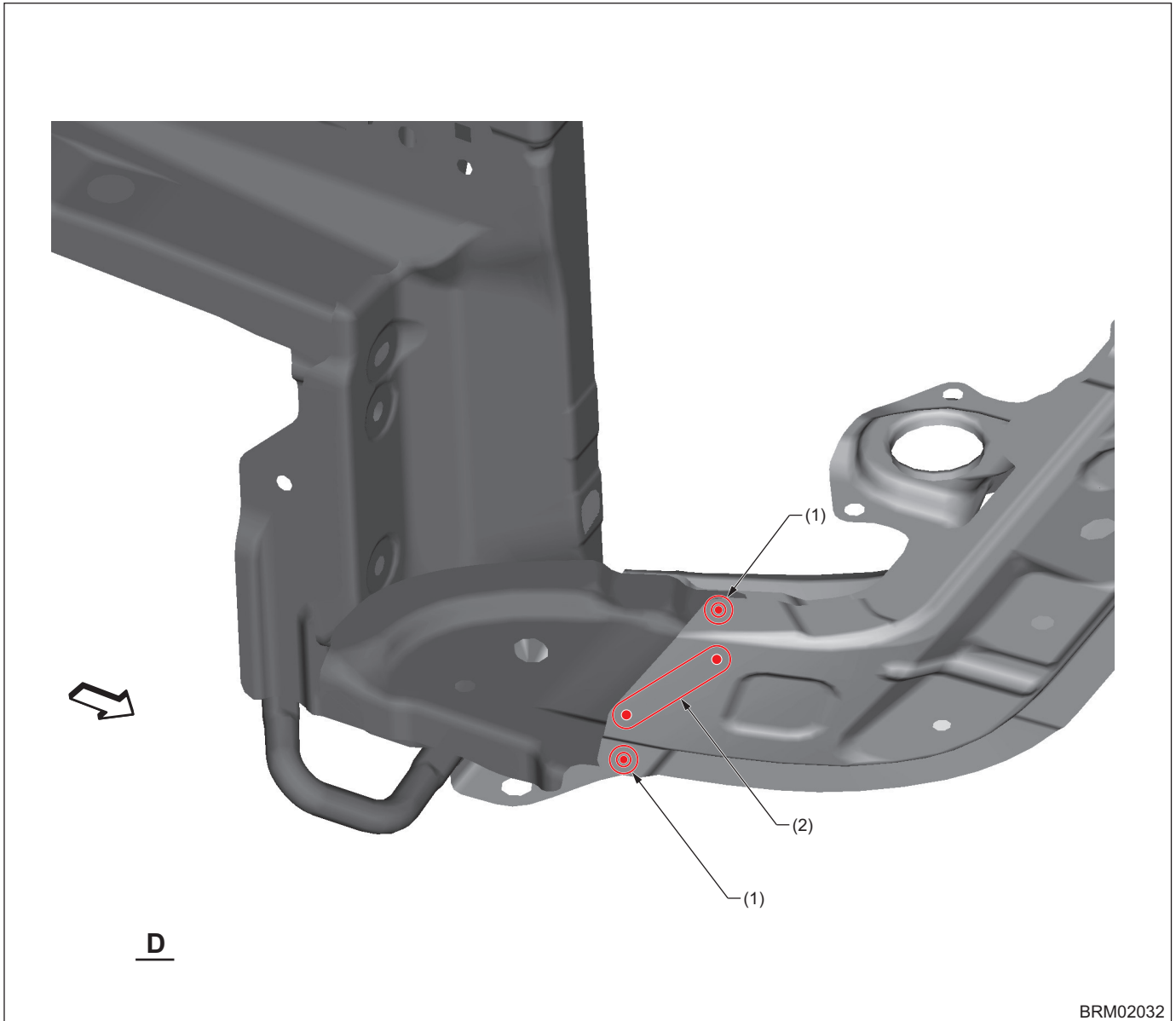
(1) 1 point (Top · 1)

(2) 1 point (Top · 2)

(3) 10 points (Top · 1)

Panel Replacement

• View D



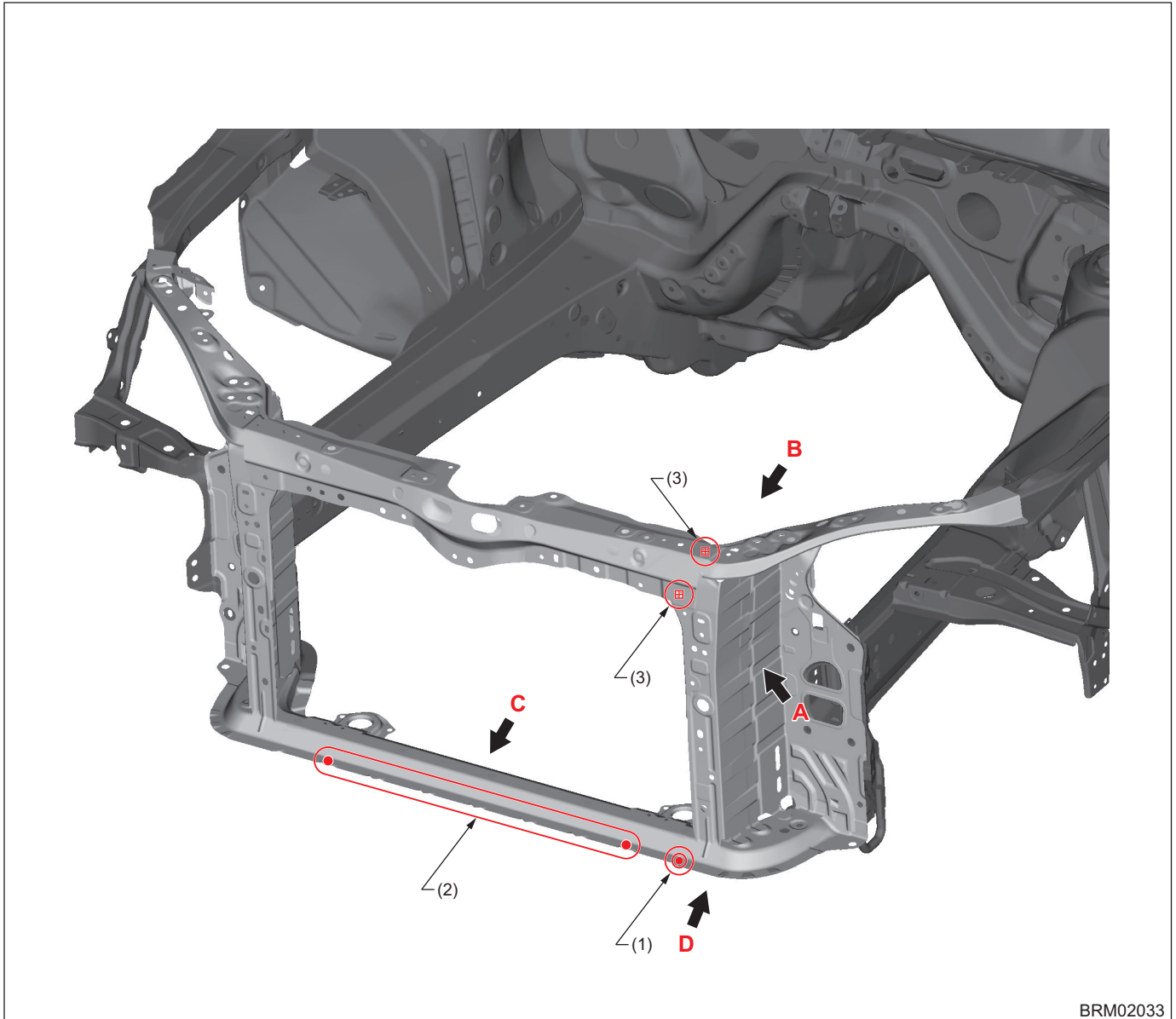
(1) 1 point (Bottom · 1)

(2) 2 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view



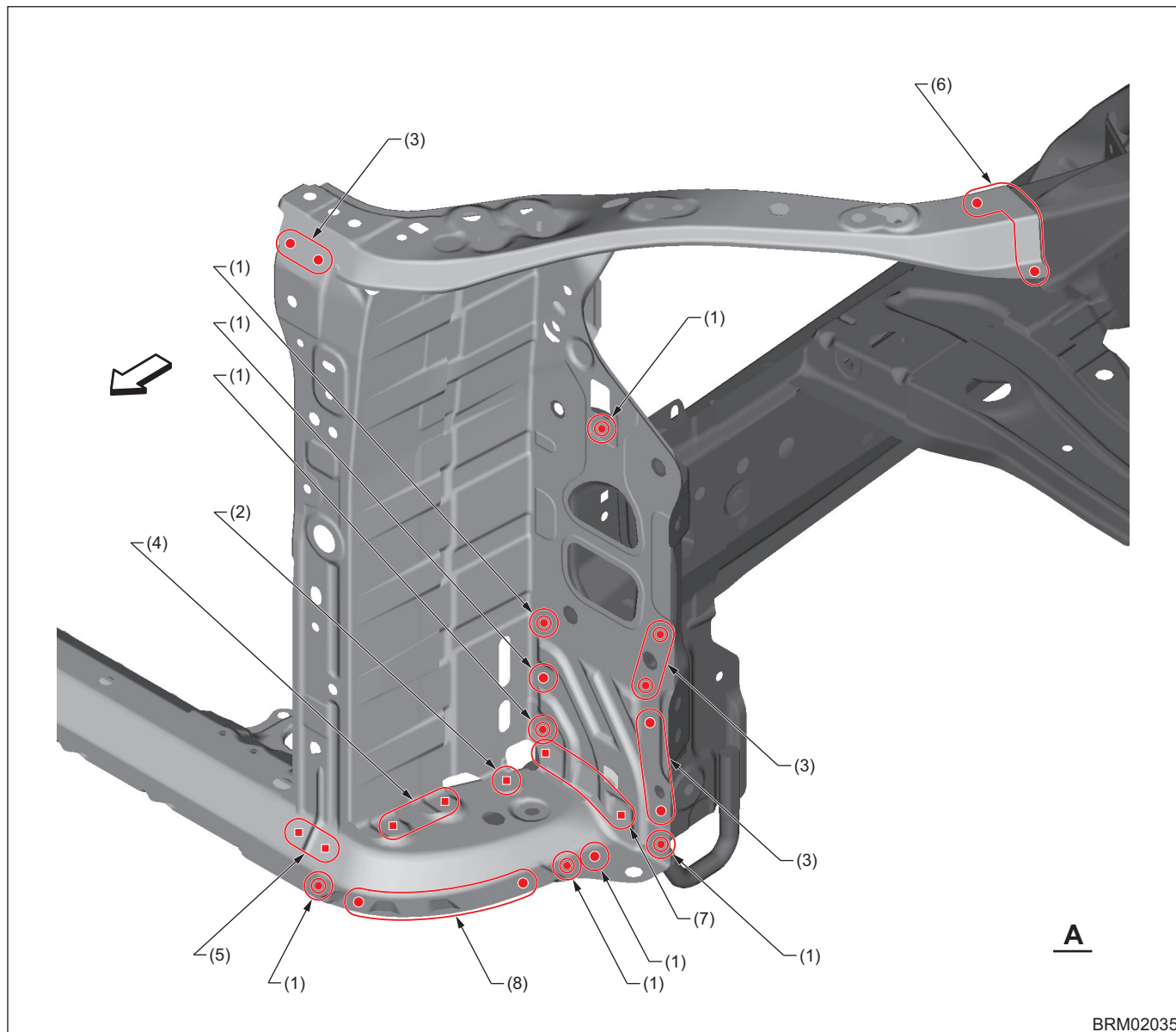
(1) 1 point

(2) 7 points

(3) 1 point (Bolt)

Panel Replacement

• View A

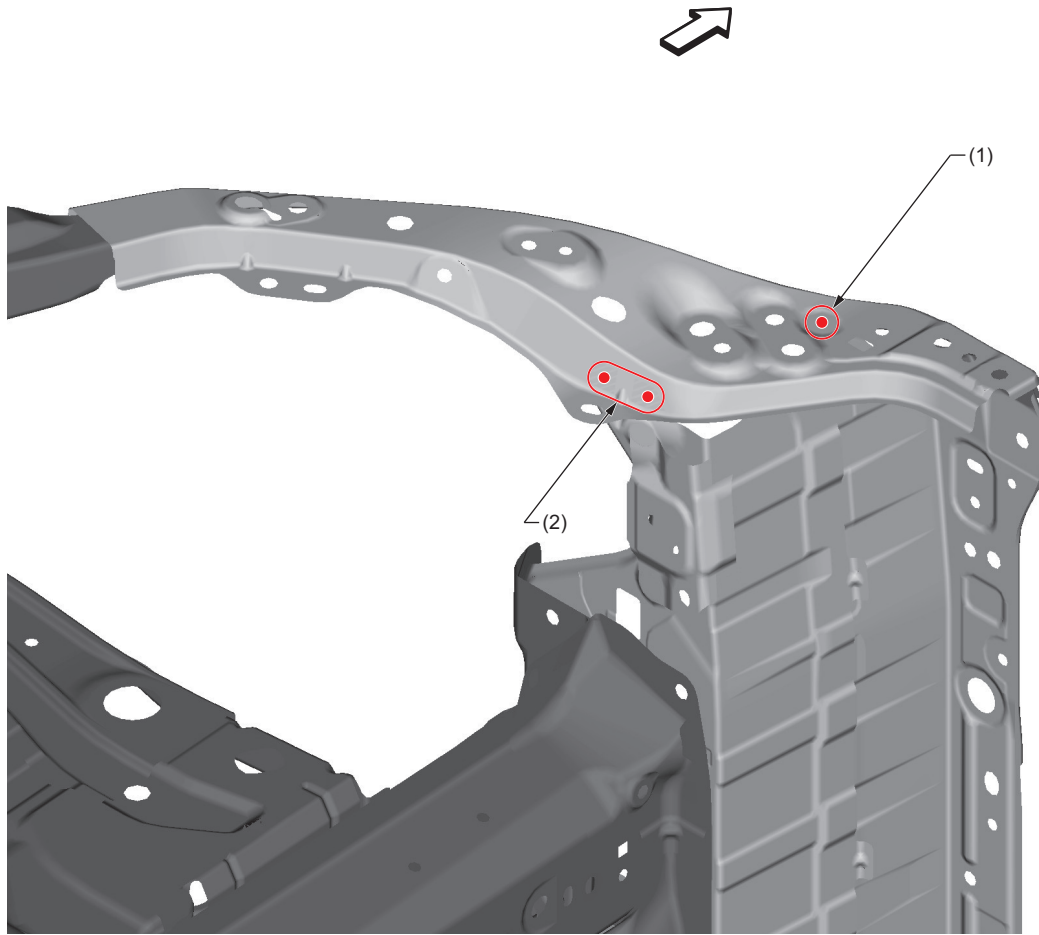


BRM02035

- | | | |
|----------------------------|--|-----------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 3 points (Service part) |
| (2) 1 point (Service part) | (5) 2 points (Service part - matching) | (8) 4 points |
| (3) 2 points | (6) 3 points | |

Panel Replacement

• View B



B

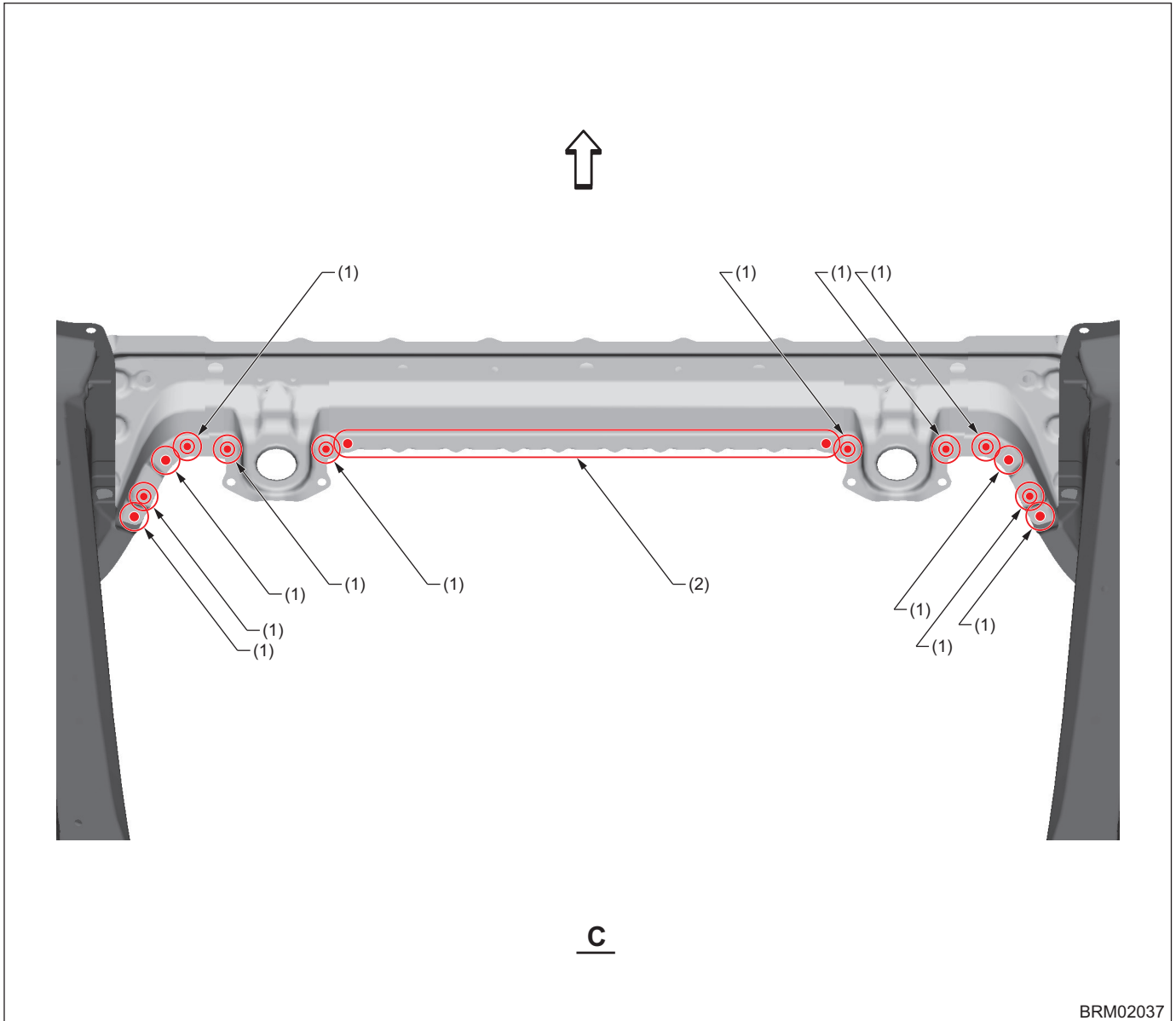
BRM02036

(1) 1 point

(2) 2 points

Panel Replacement

• View C

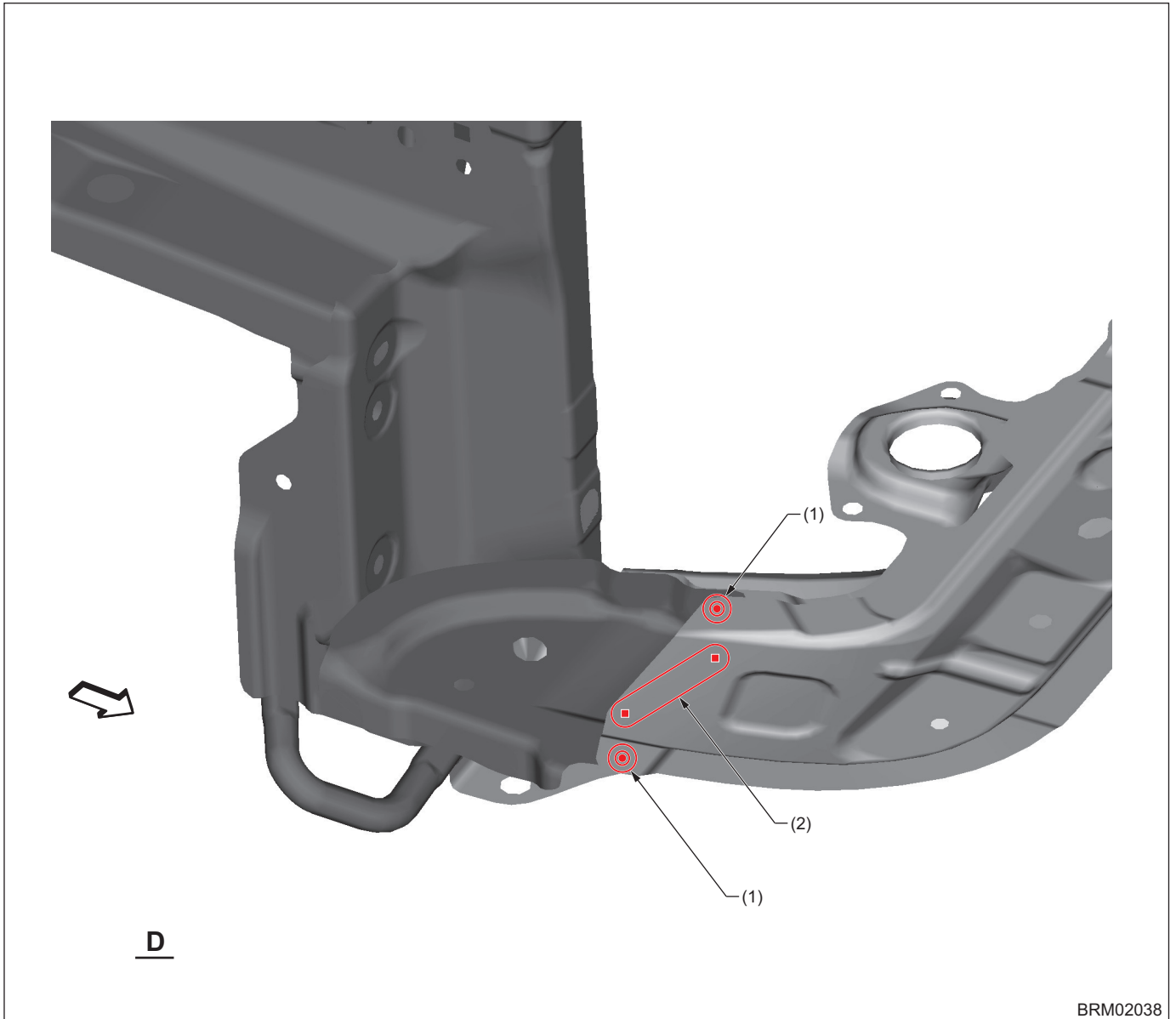


(1) 1 point

(2) 10 points

Panel Replacement

• View D



(1) 1 point

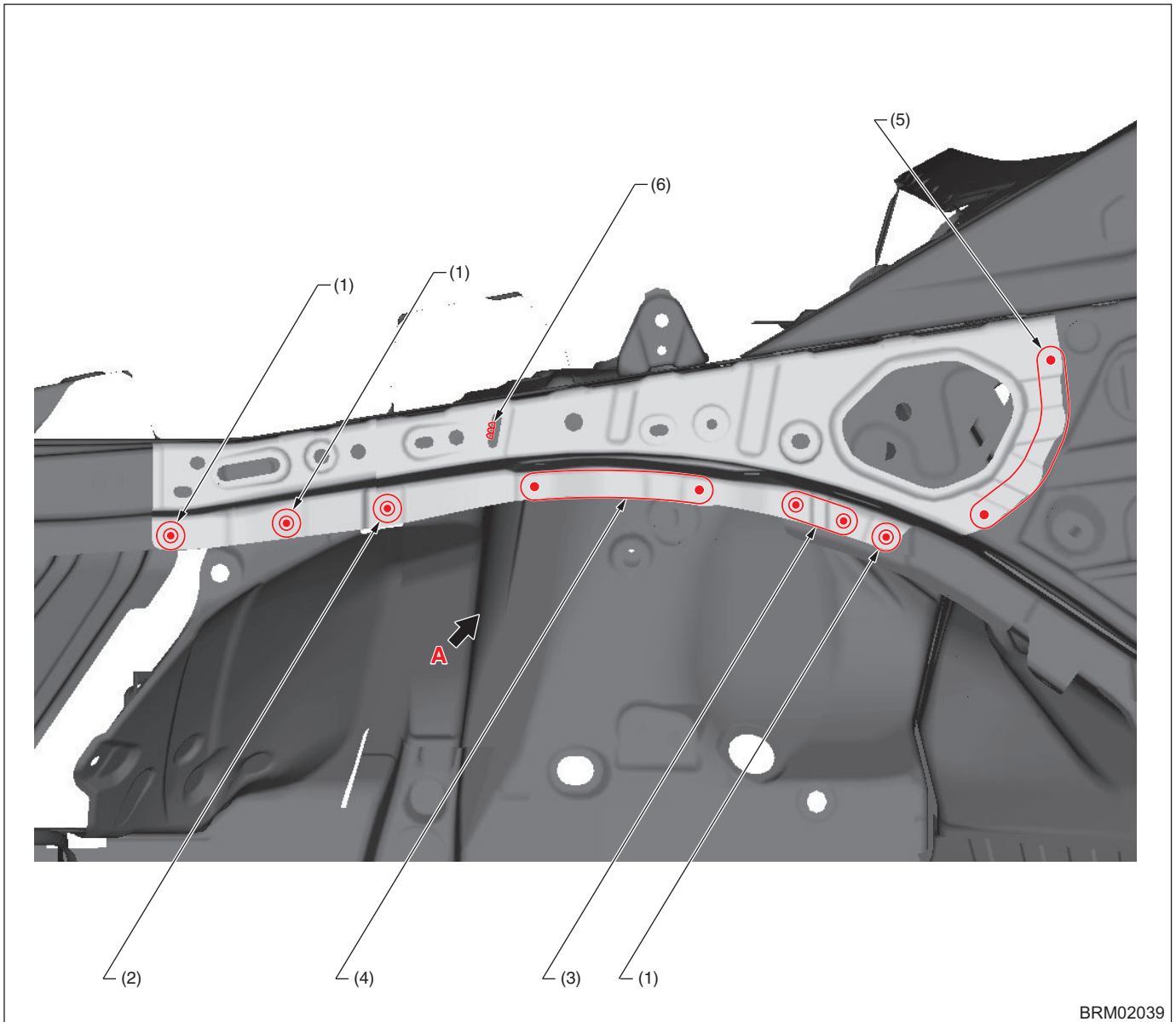
(2) 2 points (Service part)

Panel Replacement

9-2. Side Upper Frame (Total replacement)

A: REMOVAL

• Overall view (LH)



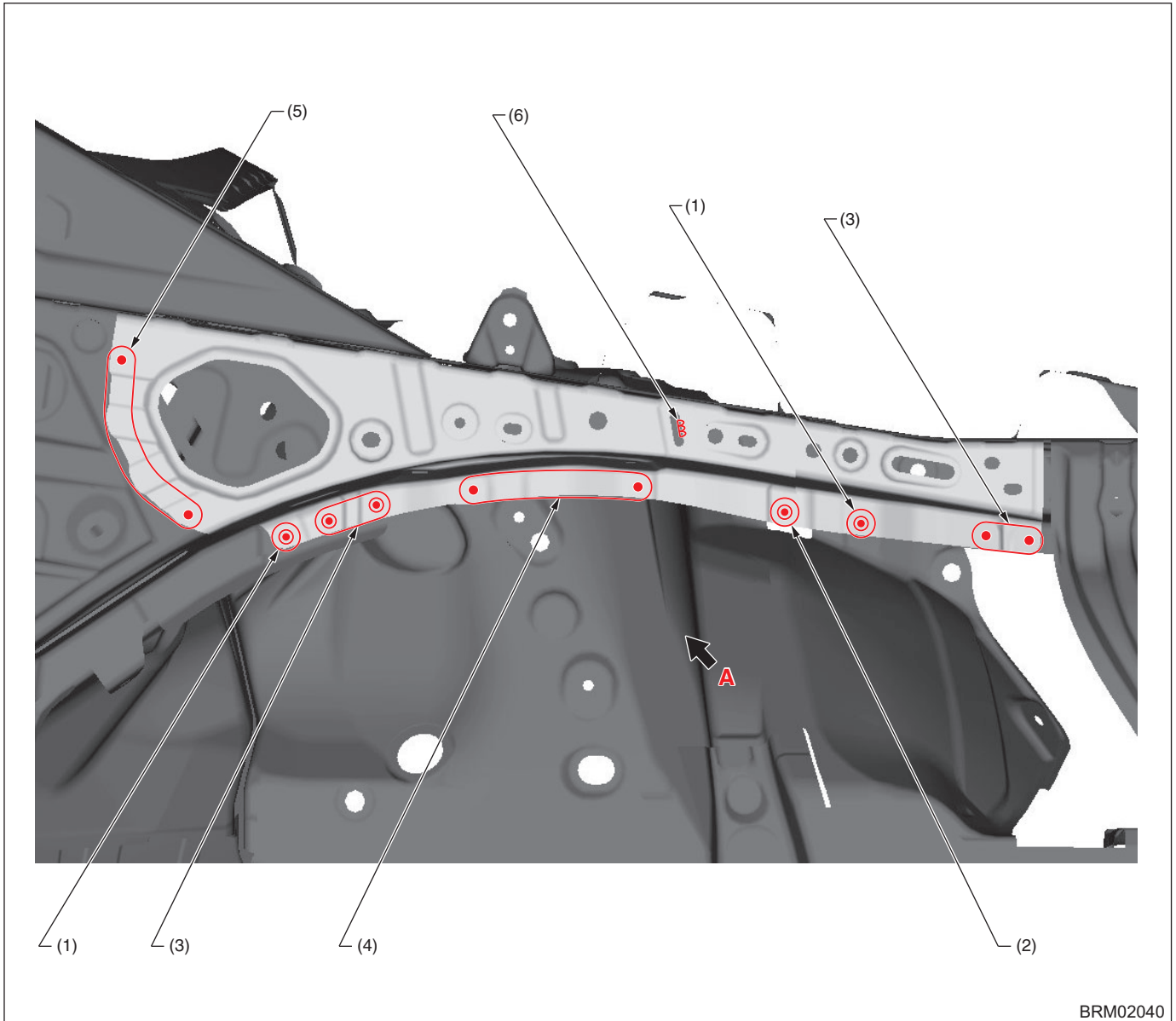
(1) 1 point (Outside · 1)
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)
(4) 3 points (Outside · 1)

(5) 4 points (Outside · 1)
(6) 1 point (Outside · 1, Belt Sander)

Panel Replacement

• Overall view (RH)



BRM02040

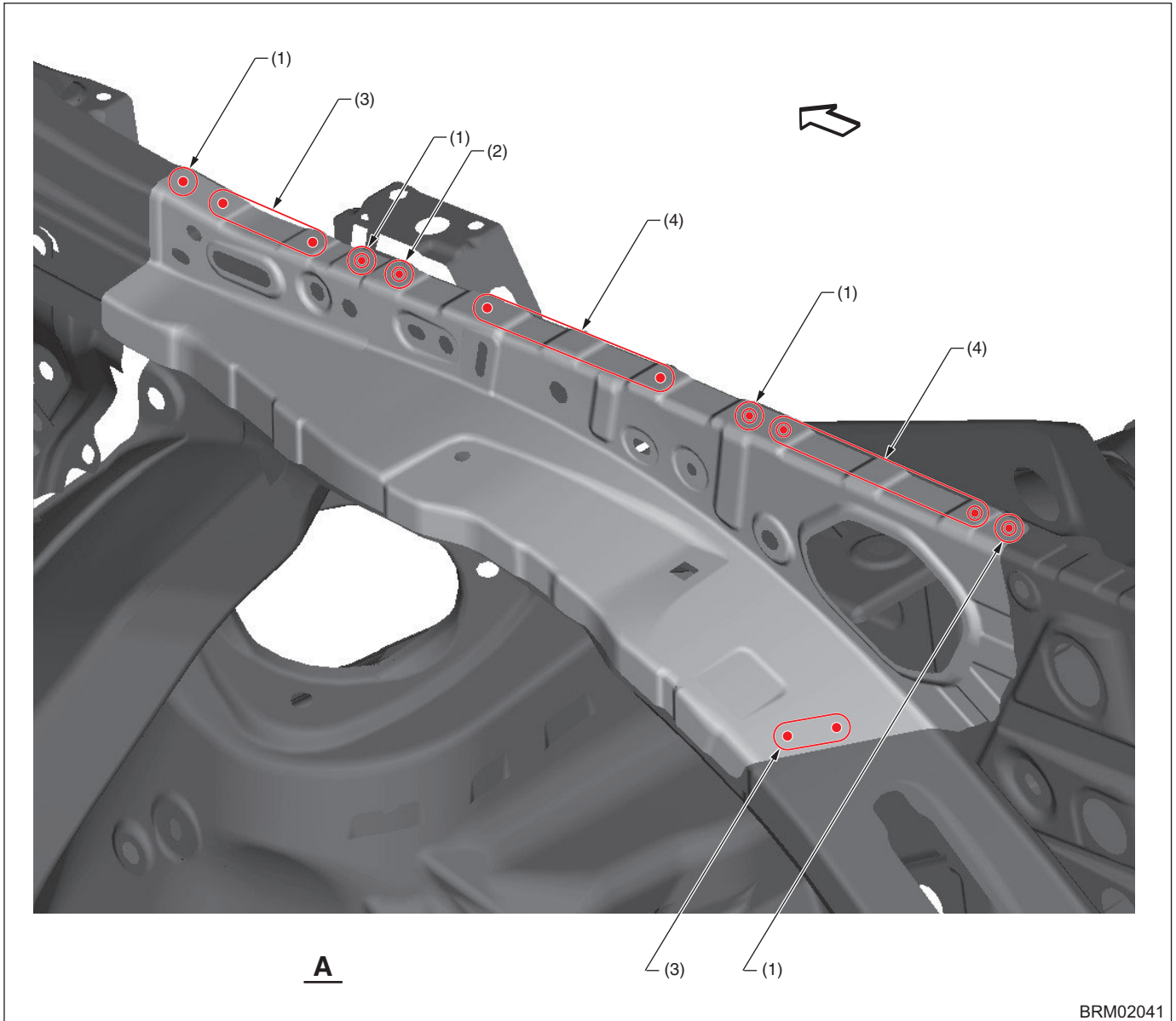
(1) 1 point (Outside · 1)
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)
(4) 3 points (Outside · 1)

(5) 4 points (Outside · 1)
(6) 1 point (Outside · 1, Belt Sander)

Panel Replacement

• View A



(1) 1 point (Bottom · 1)
(2) 1 point (Bottom · 2)

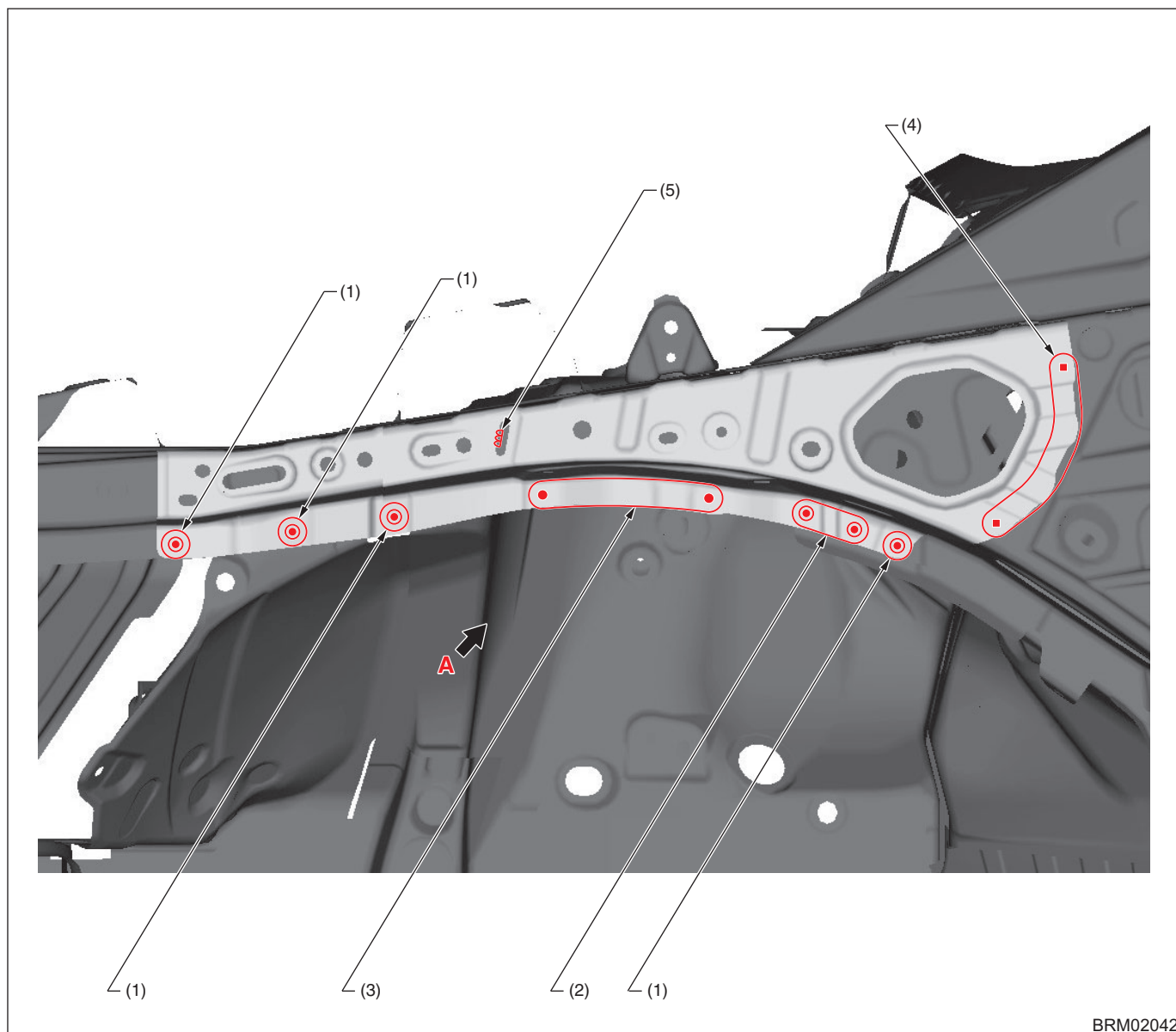
(3) 2 points (Bottom · 1)

(4) 3 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view (LH)



(1) 1 point

(3) 3 points

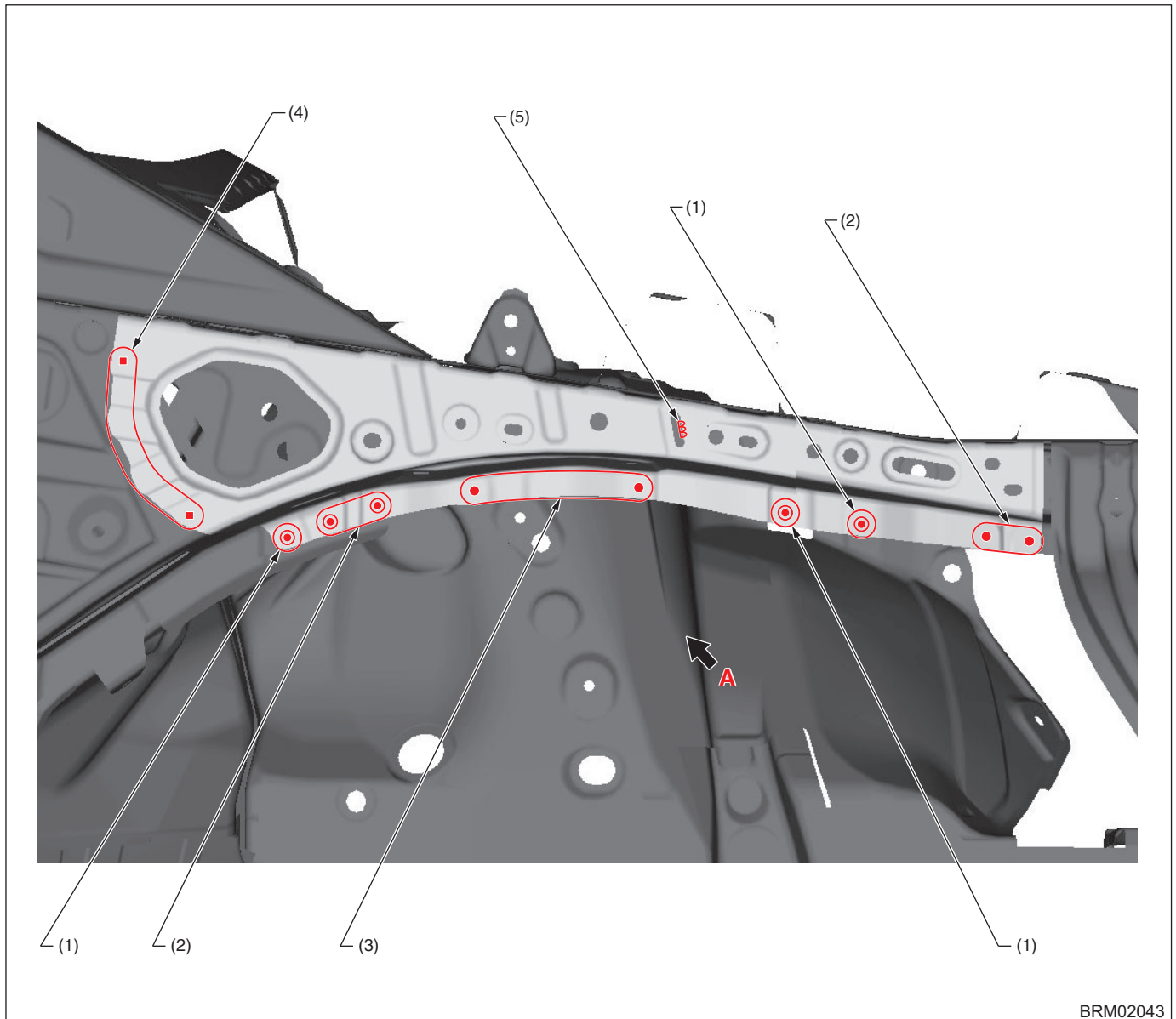
(5) 1 point (Continuous welding)
(6 mm [0.24 in])

(2) 2 points

(4) 4 points (Service part)

Panel Replacement

• Overall view (RH)



(1) 1 point

(2) 2 points

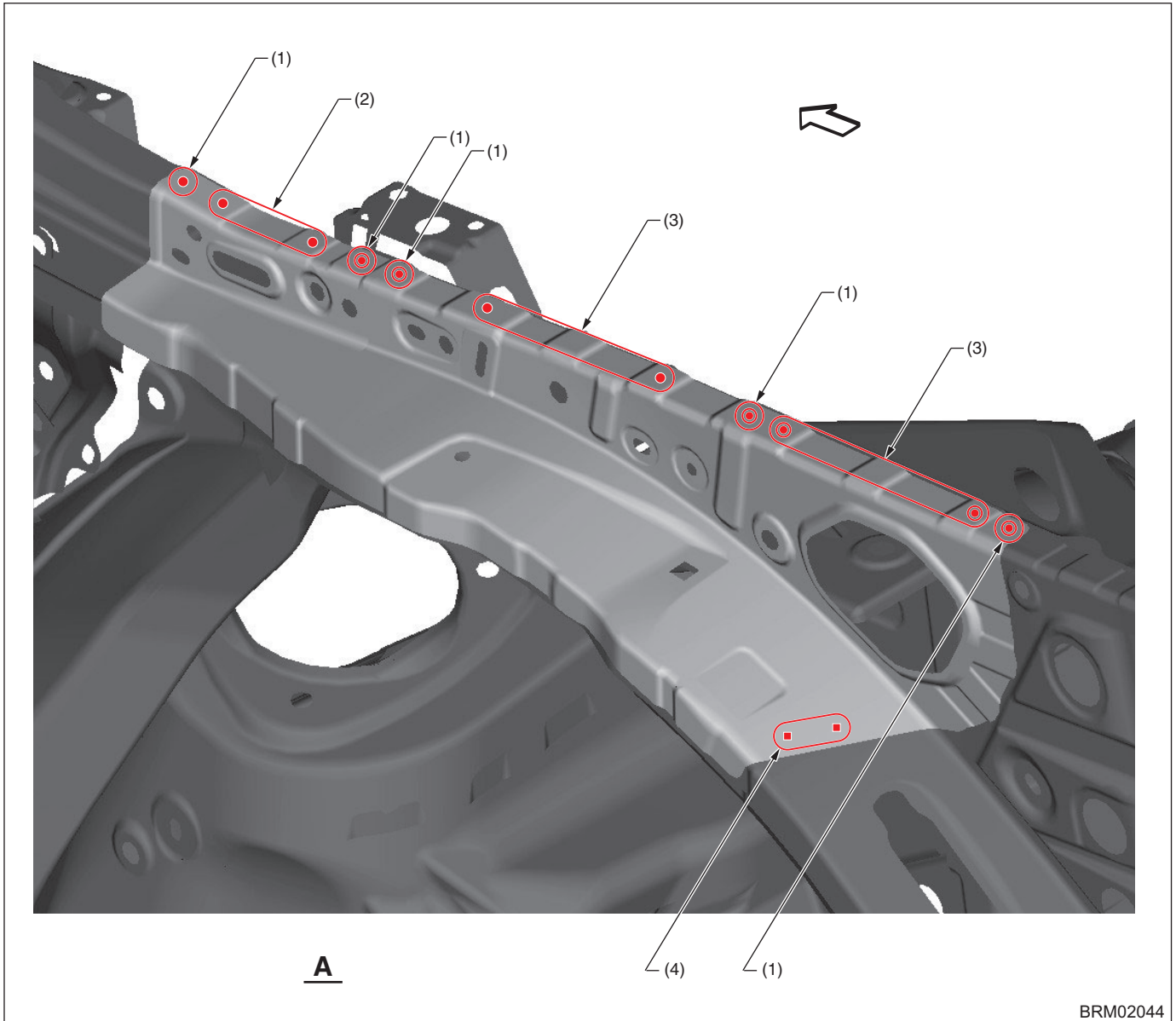
(3) 3 points

(4) 4 points (Service part)

(5) 1 point (Continuous welding)
(6 mm [0.24 in])

Panel Replacement

• View A



BRM02044

- (1) 1 point
- (2) 2 points

- (3) 3 points

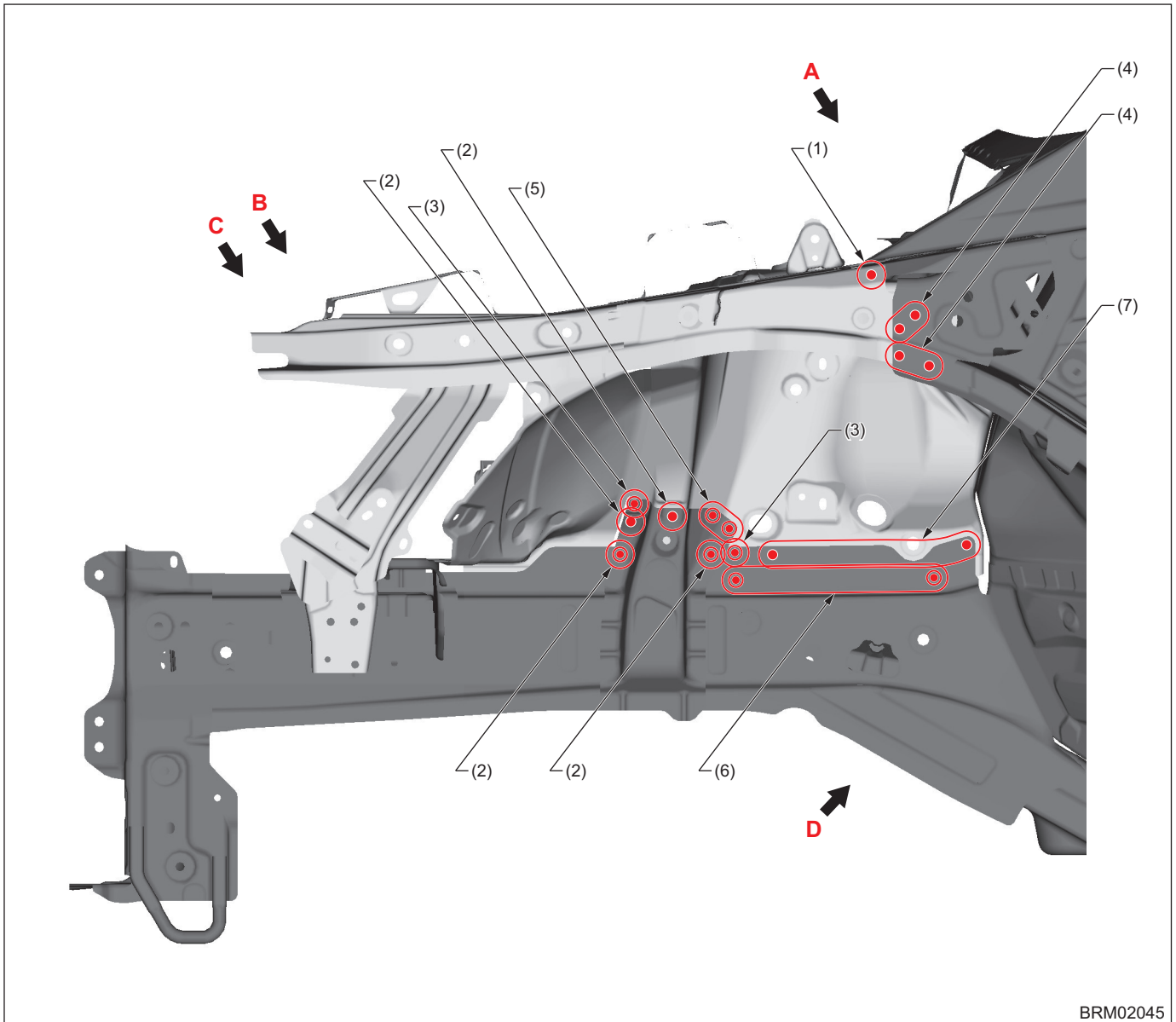
- (4) 2 points (Service part)

Panel Replacement

9-3. Front Wheel Apron (Total replacement)

A: REMOVAL

• Overall view



BRM02045

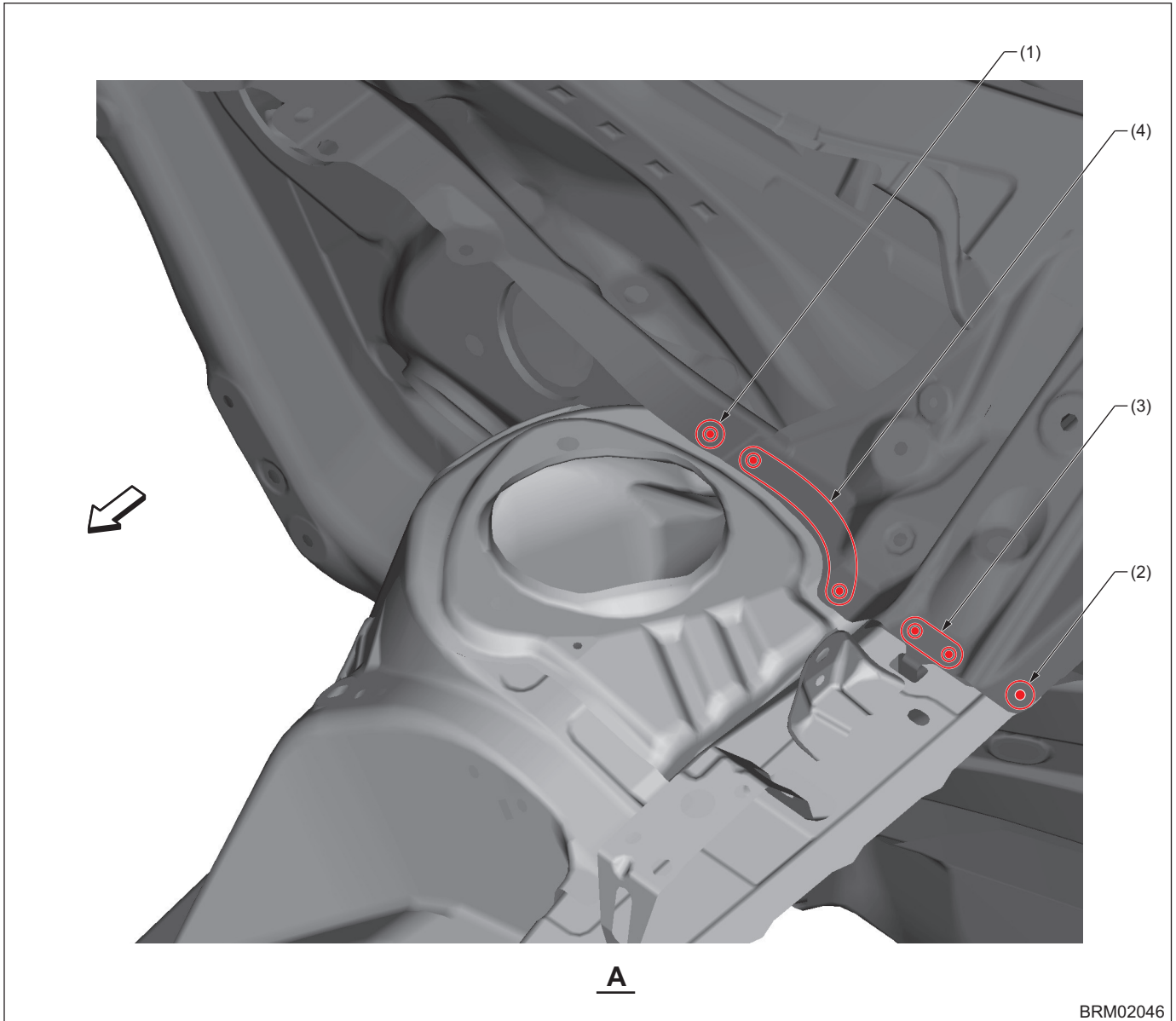
- (1) 1 point (Outside · 1)
- (2) 1 point (Inside · 1)
- (3) 1 point (Inside · 2)

- (4) 2 points (Outside · 1)
- (5) 2 points (Inside · 2)
- (6) 4 points (Inside · 1)

- (7) 6 points (Inside · 1)

Panel Replacement

• View A



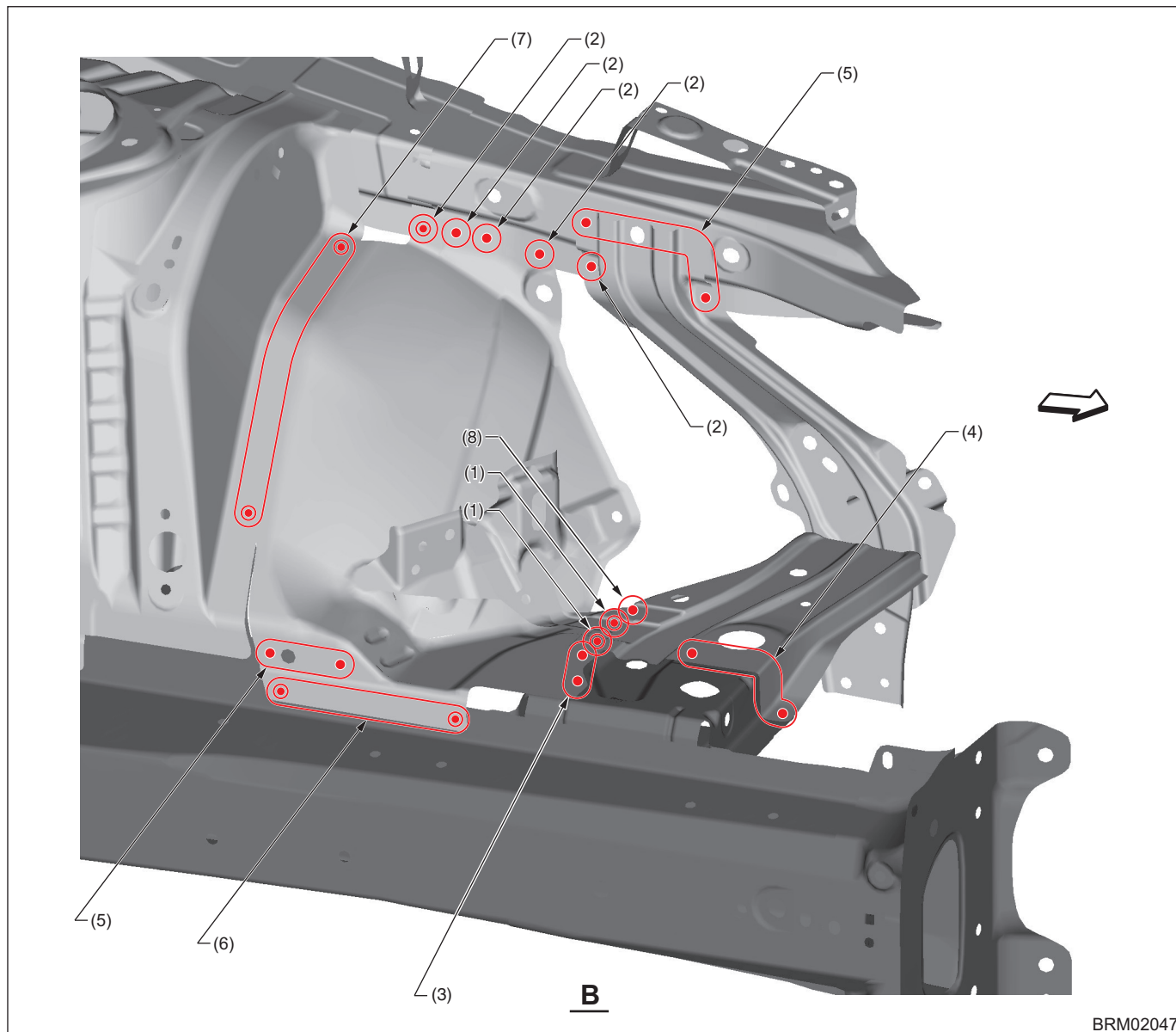
- (1) 1 point (Top · 2)
- (2) 1 point (Bottom · 1)

- (3) 2 points (Bottom · 1)

- (4) 4 points (Top · 2)

Panel Replacement

• View B (LH)

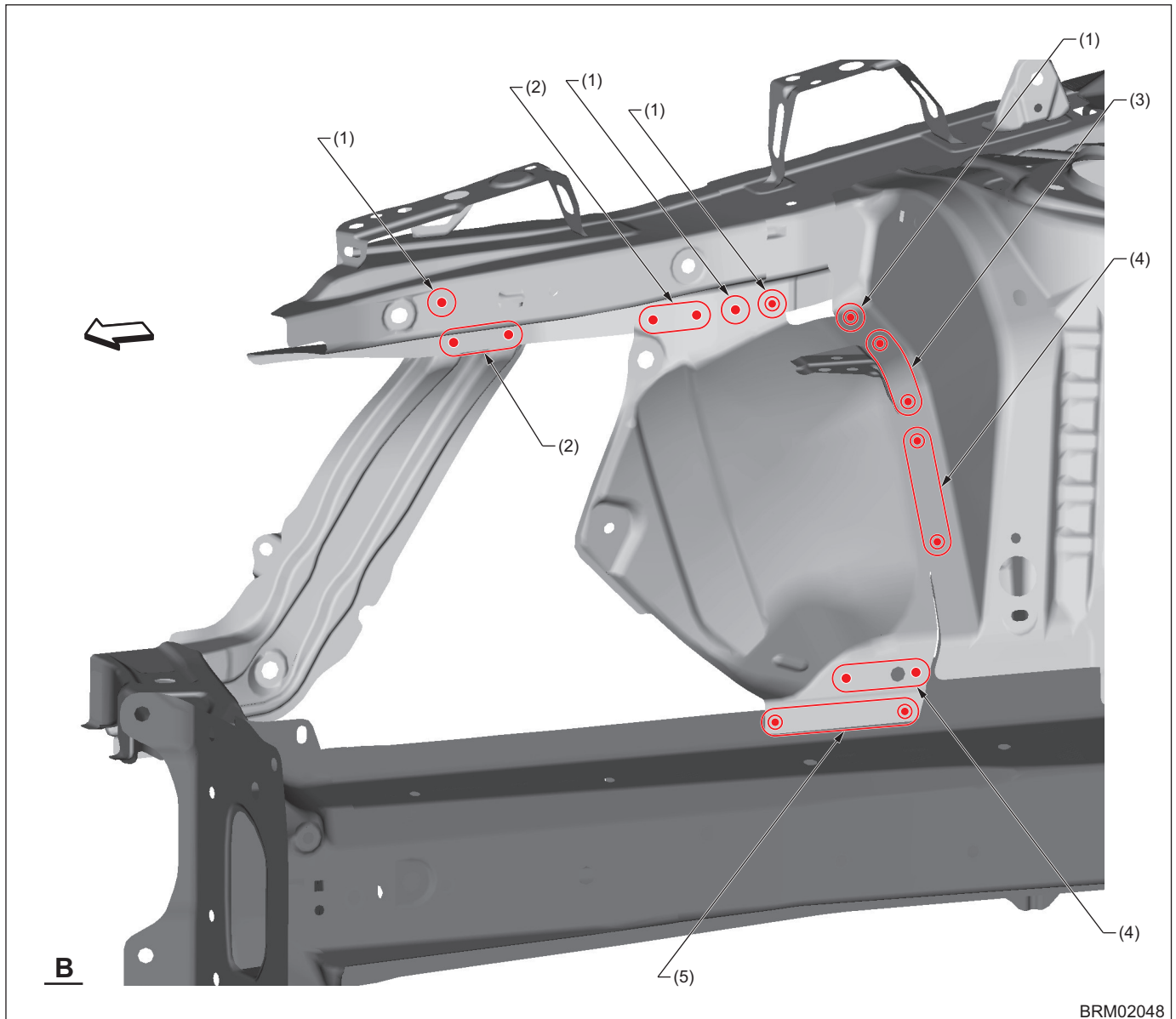


BRM02047

- | | | |
|--------------------------|---------------------------|---------------------------|
| (1) 1 point (Top · 2) | (4) 3 points (Top · 1) | (7) 5 points (Inside · 1) |
| (2) 1 point (Inside · 1) | (5) 3 points (Inside · 1) | (8) 1 point (Top · 1) |
| (3) 2 points (Top · 1) | (6) 4 points (Inside · 1) | |

Panel Replacement

• View B (RH)



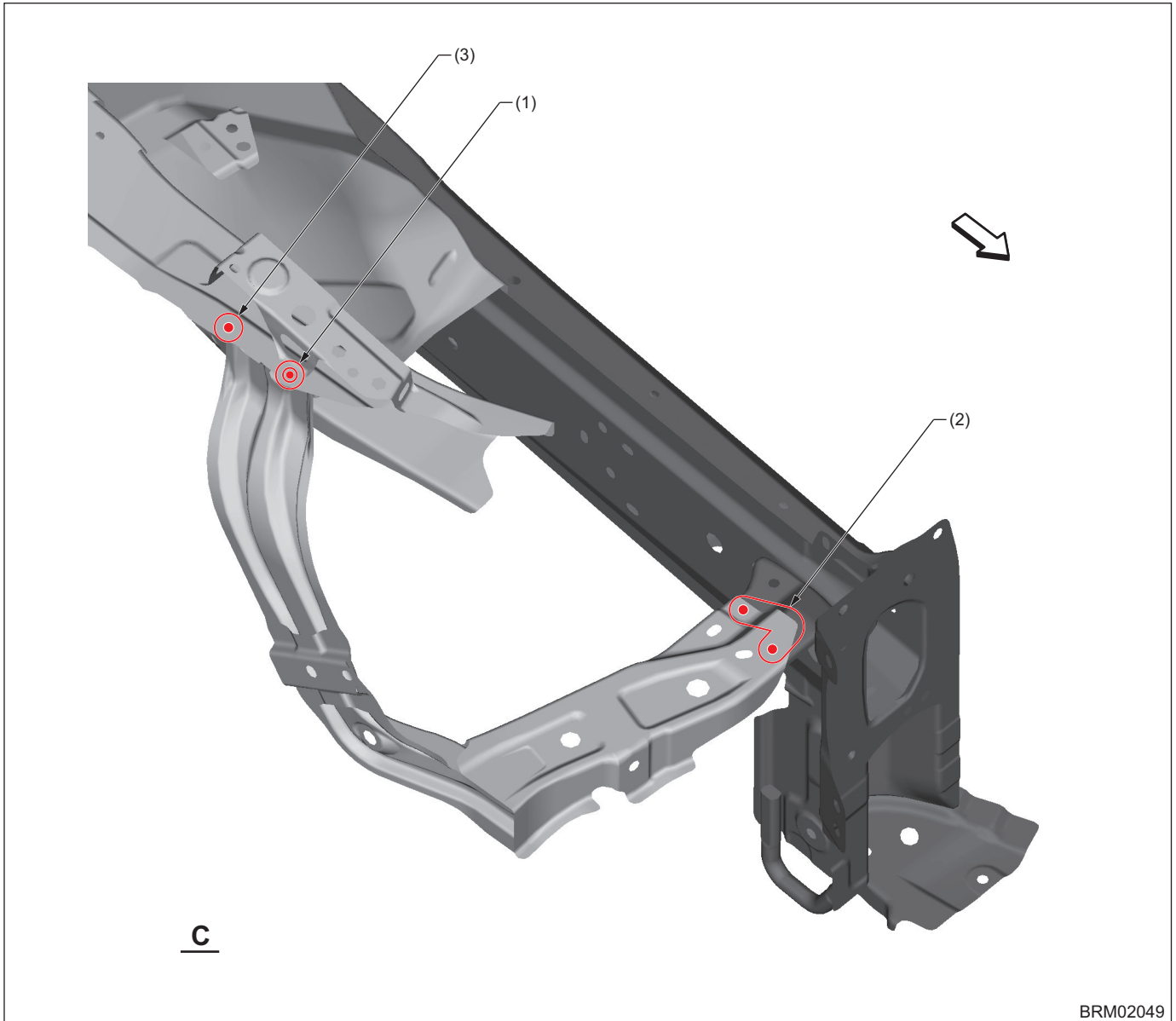
(1) 1 point (Inside · 1)
(2) 2 points (Inside · 1)

(3) 2 points (Inside · 2)
(4) 3 points (Inside · 1)

(5) 4 points (Inside · 1)

Panel Replacement

• View C (Only RH)



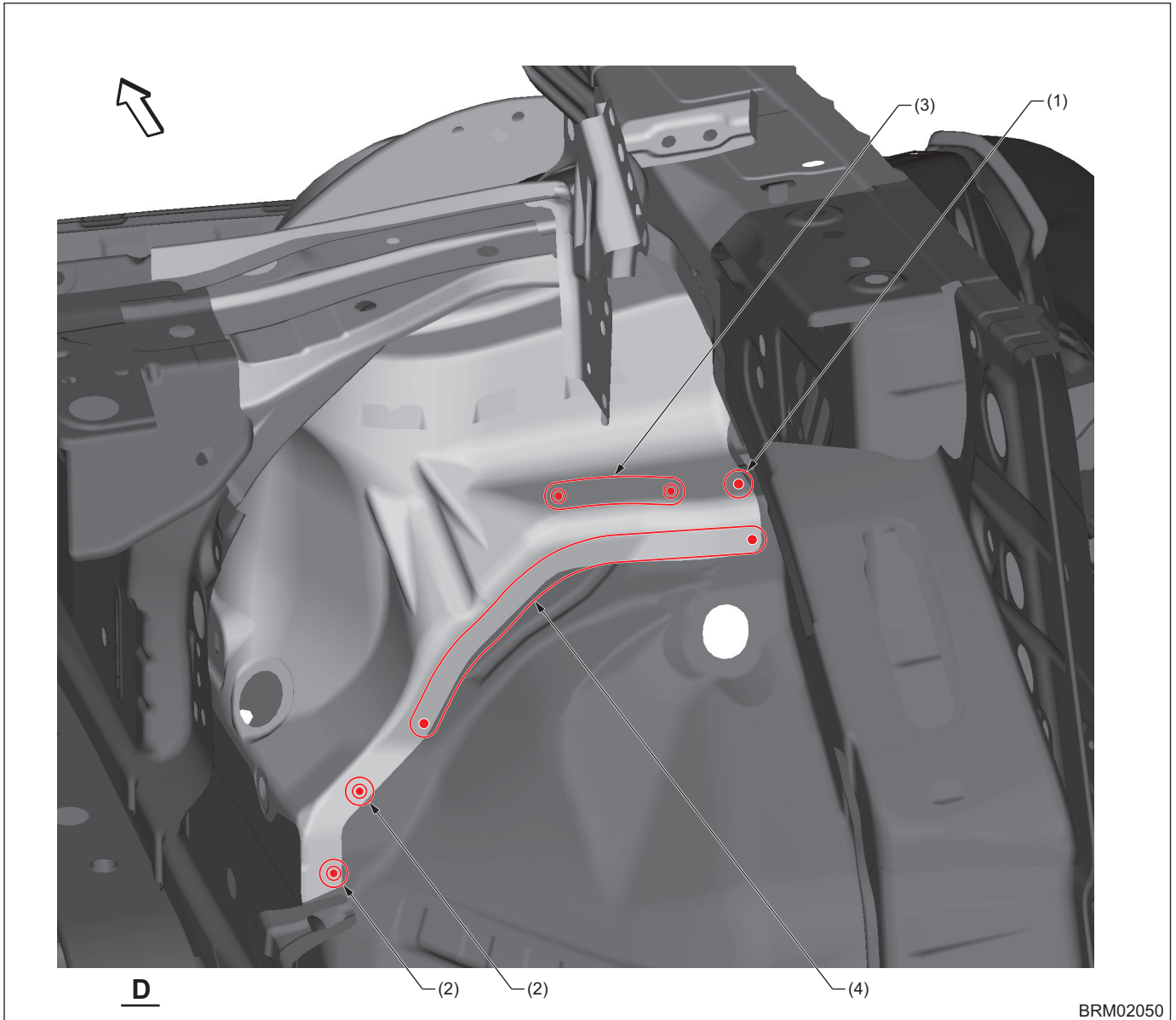
(1) 1 point (Top · 2)

(2) 3 points (Top · 1)

(3) 1 point (Top · 1)

Panel Replacement

• View D



- (1) 1 point (Bottom · 1)
(2) 1 point (Outside · 1)

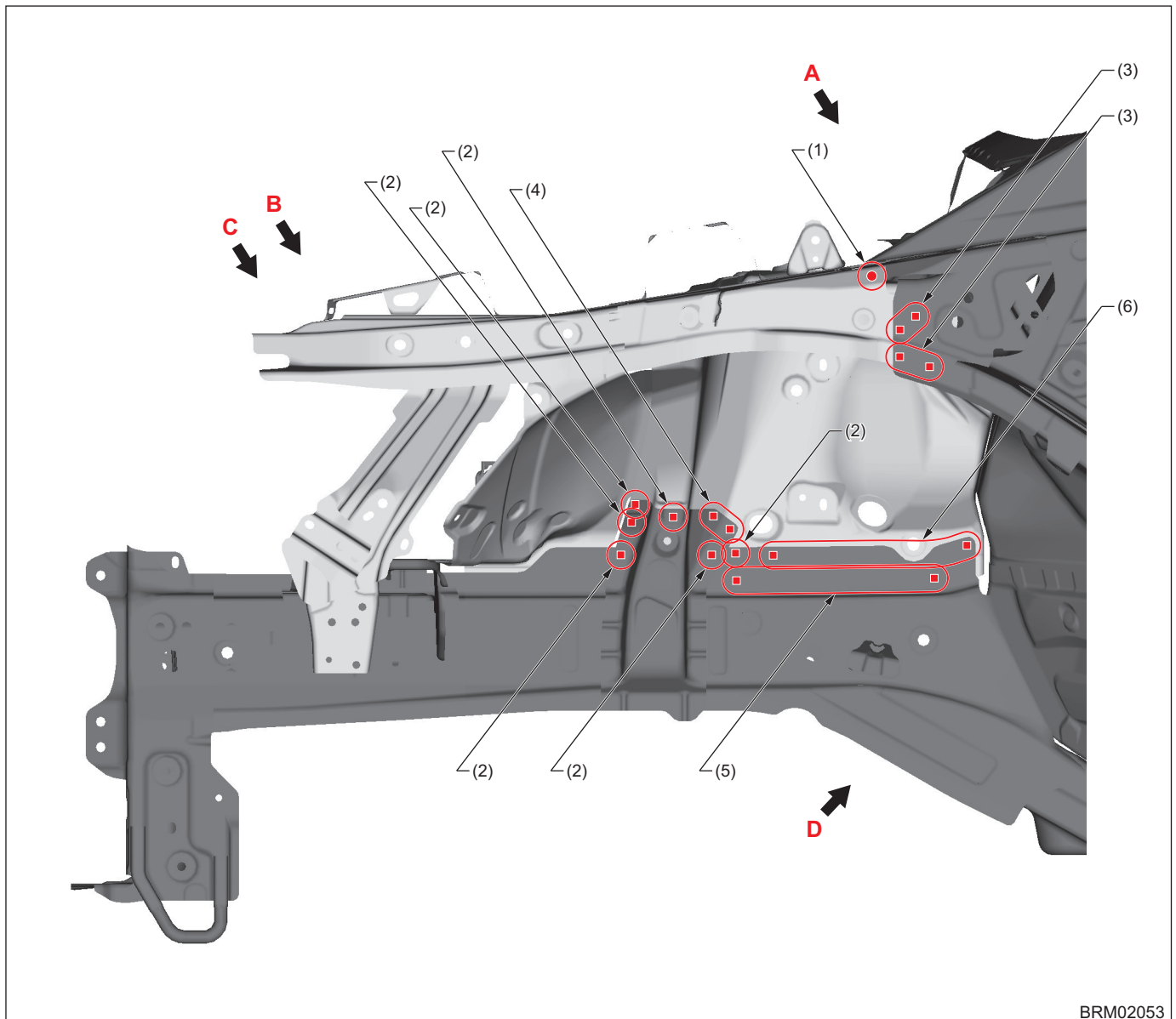
- (3) 3 points (Bottom · 1)

- (4) 7 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



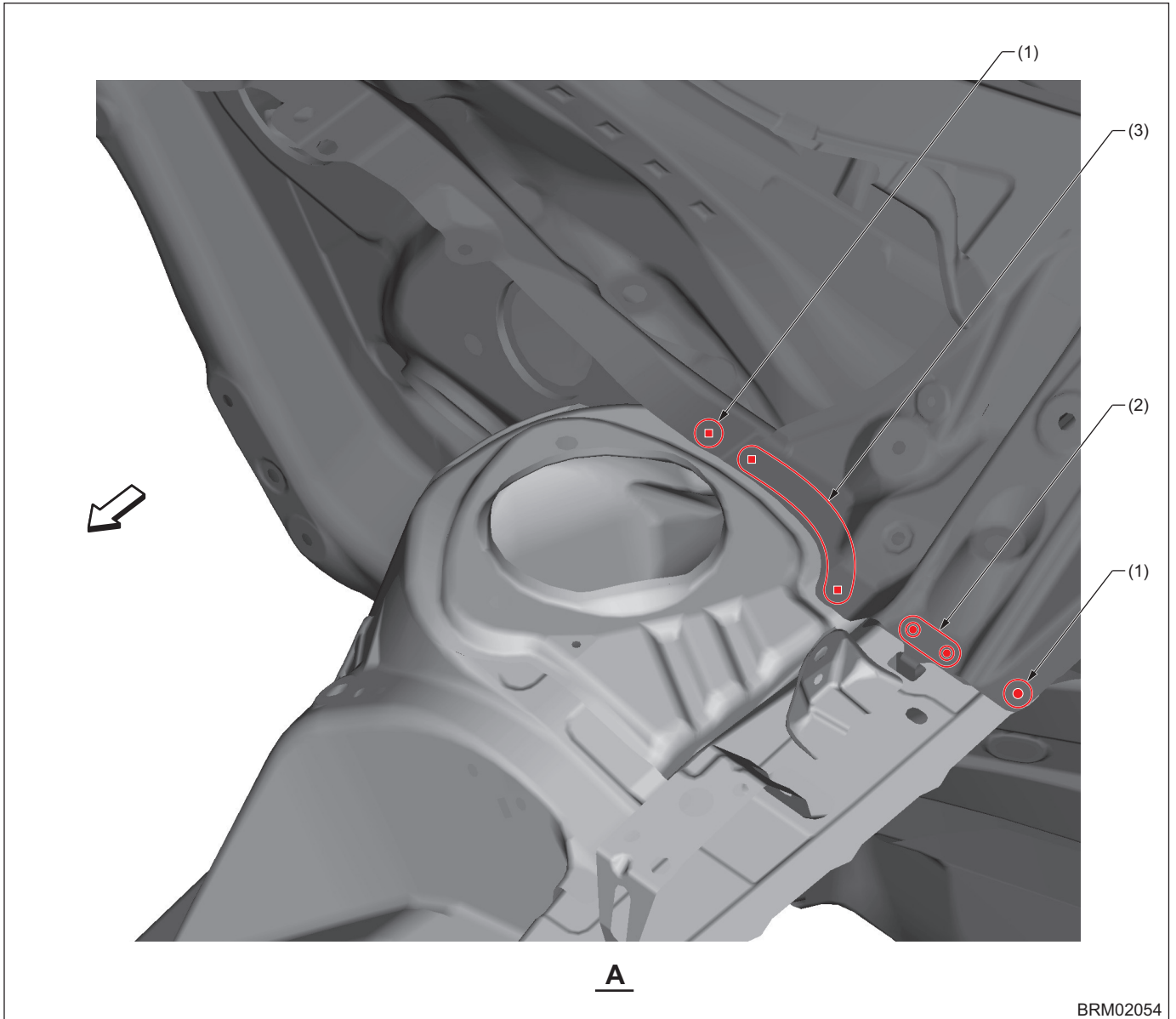
(1) 1 point
(2) 1 point (Service part)

(3) 2 points
(4) 2 points (Service part)

(5) 4 points (Service part)
(6) 6 points (Service part)

Panel Replacement

• View A



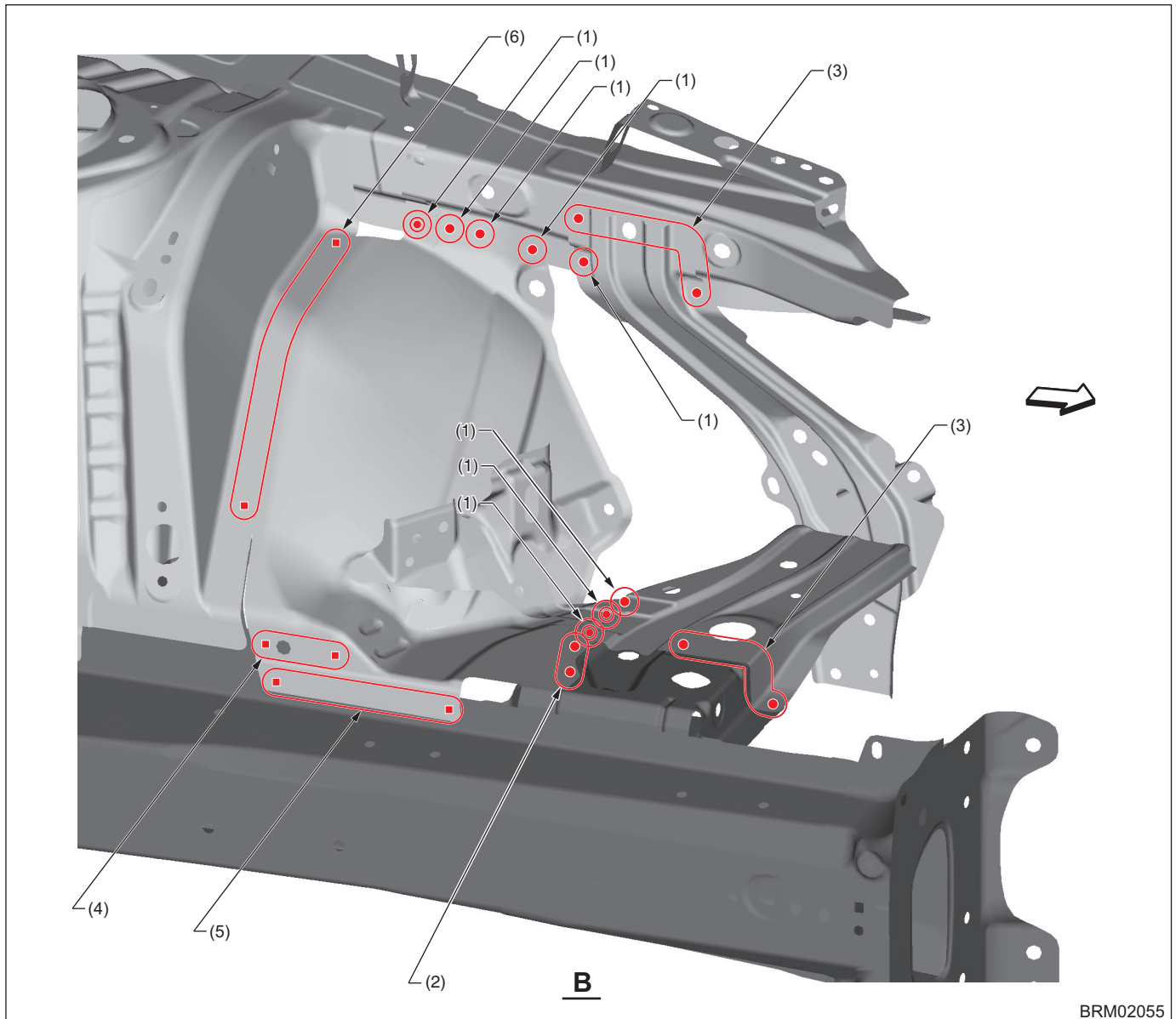
(1) 1 point

(2) 2 points

(3) 4 points

Panel Replacement

• View B (LH)



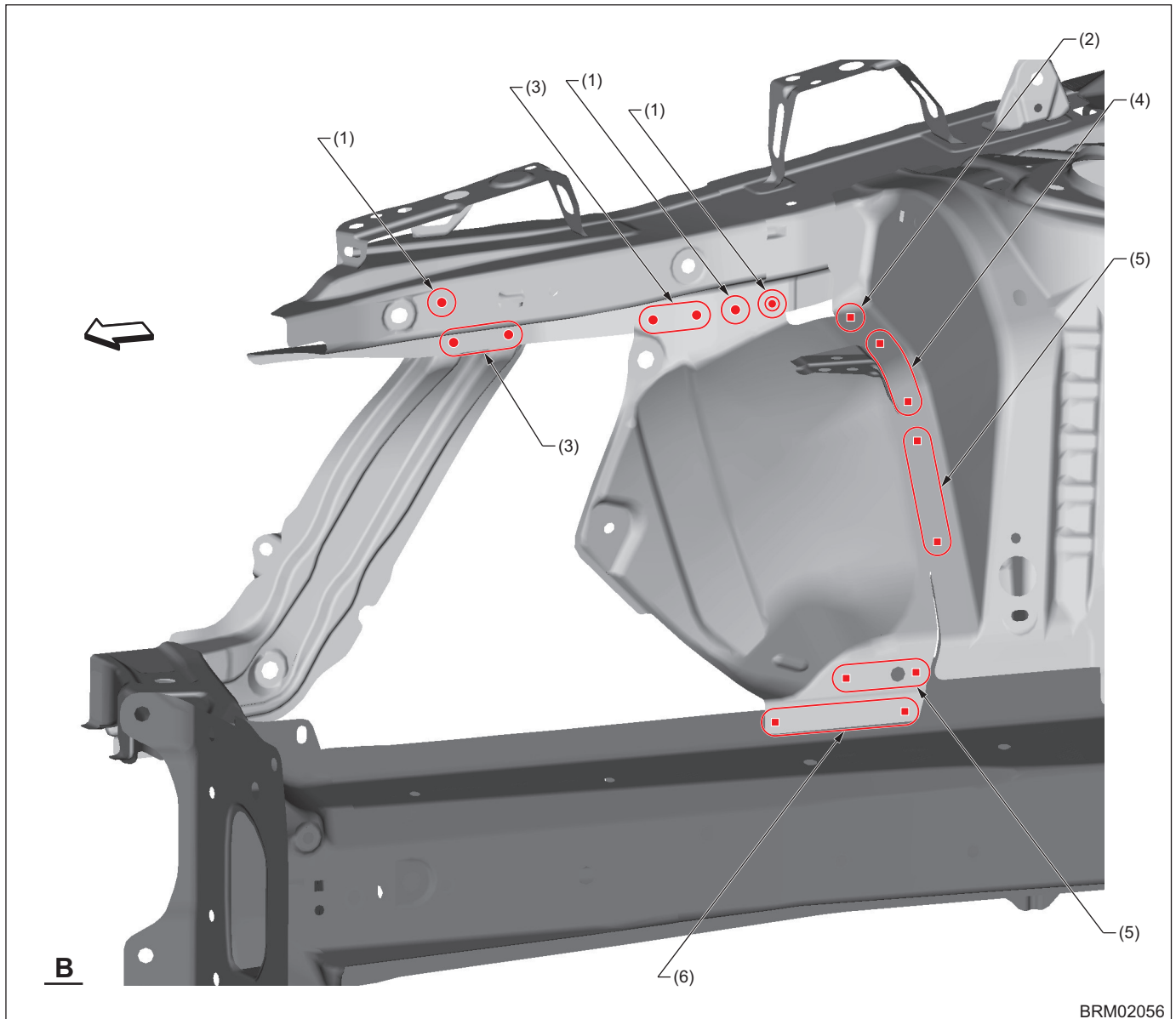
(1) 1 point
(2) 2 points

(3) 3 points
(4) 3 points (Service part)

(5) 4 points (Service part)
(6) 5 points (Service part)

Panel Replacement

• View B (RH)

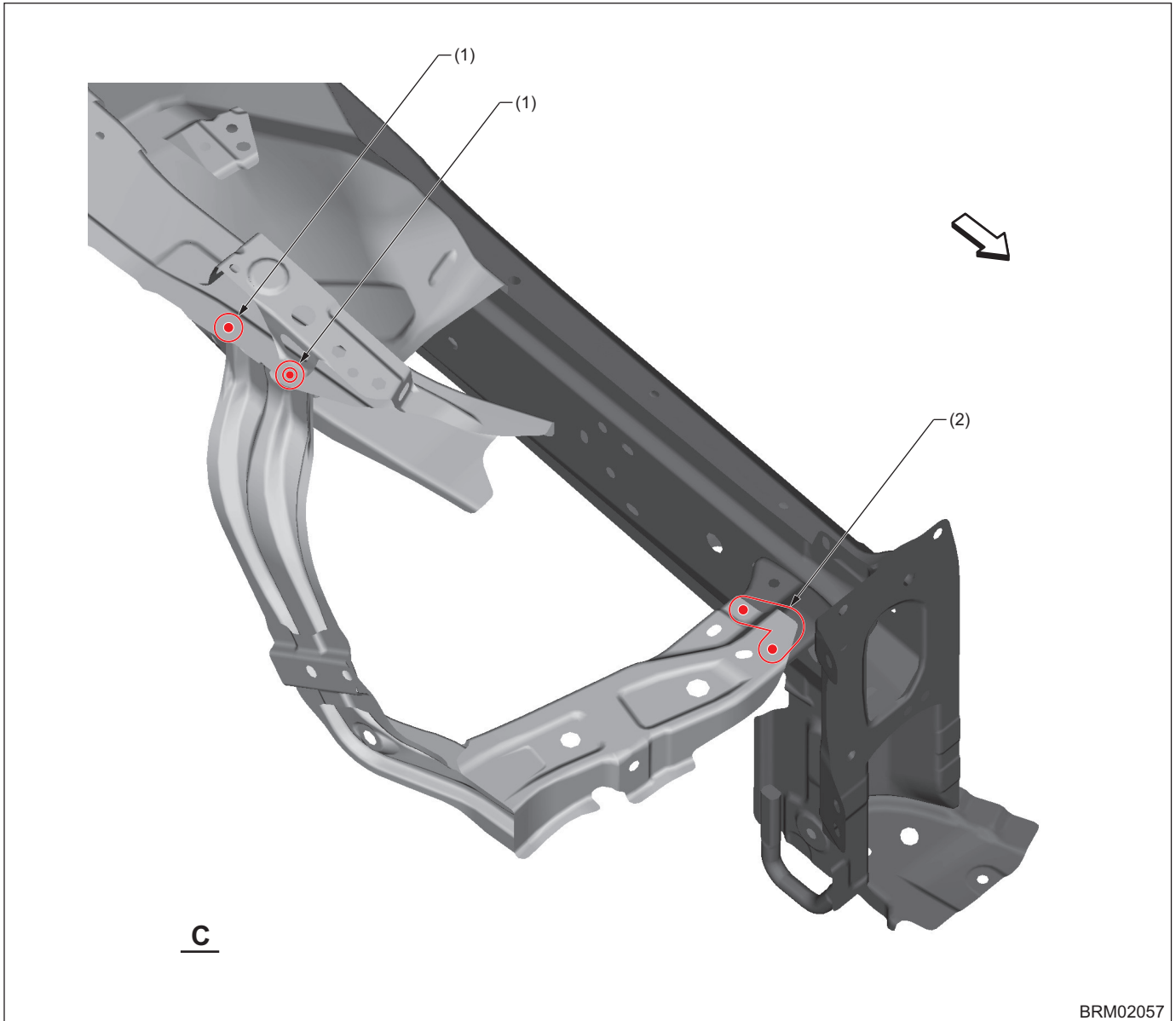


BRM02056

- | | | |
|----------------------------|--|-----------------------------|
| (1) 1 point | (3) 2 points | (5) 3 points (Service part) |
| (2) 1 point (Service part) | (4) 2 points (Service part - matching) | (6) 4 points (Service part) |

Panel Replacement

- View C (Only RH)

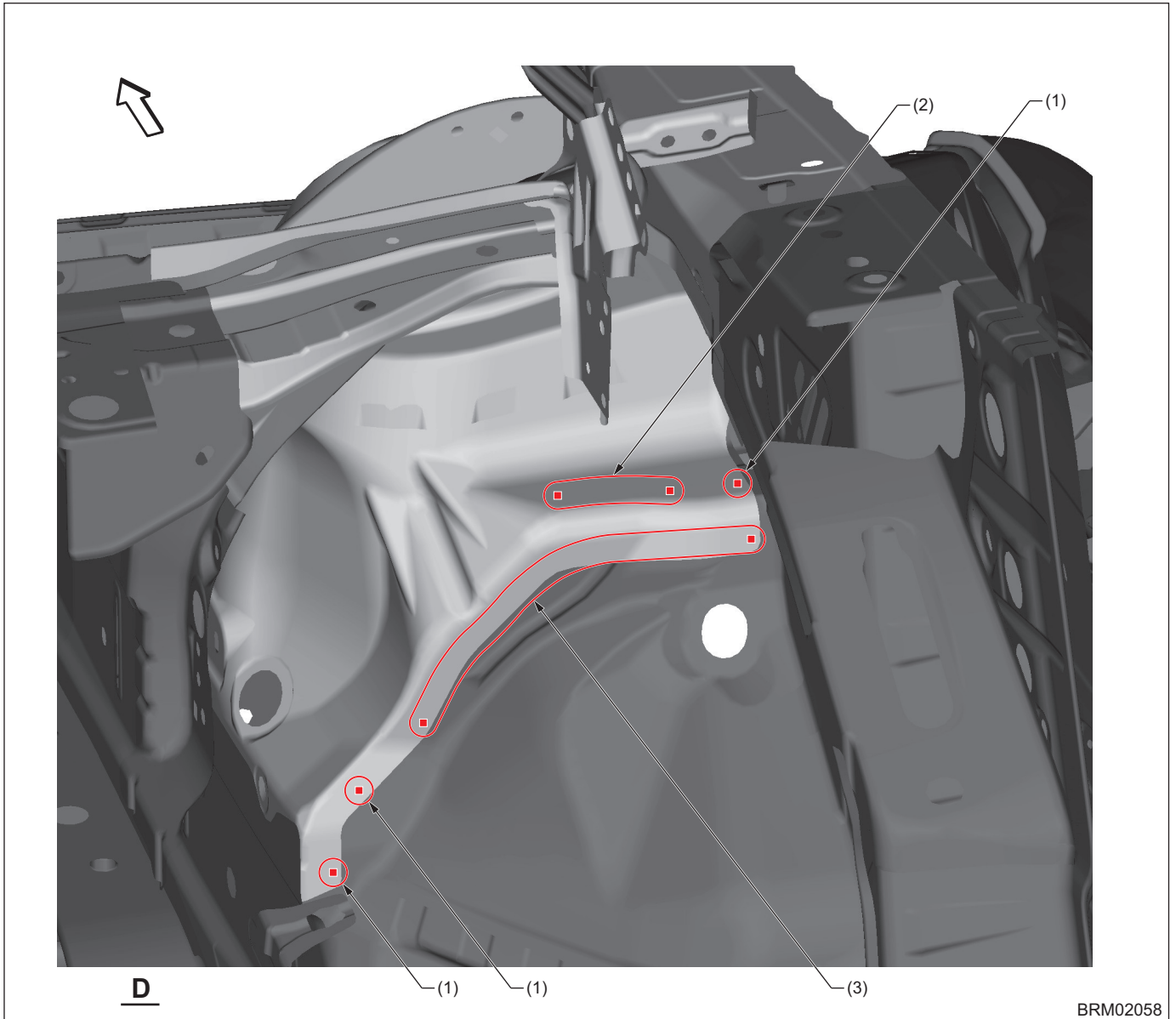


(1) 1 point

(2) 3 points

Panel Replacement

• View D



(1) 1 point (Service part)

(2) 3 points (Service part)

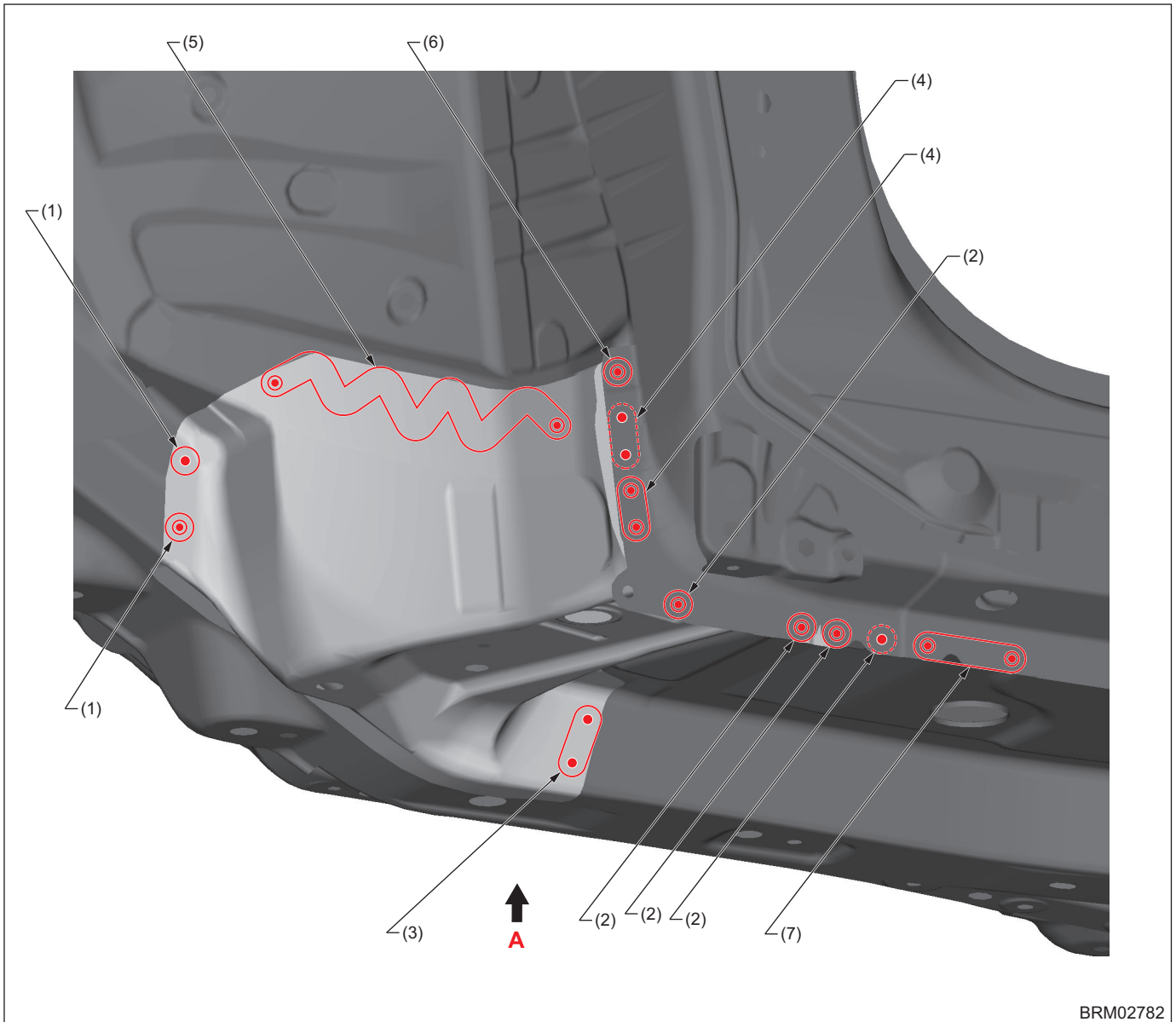
(3) 7 points (Service part)

Panel Replacement

9-4. Toe Board Reinforcement (Total replacement)

A: REMOVAL

• Overall view

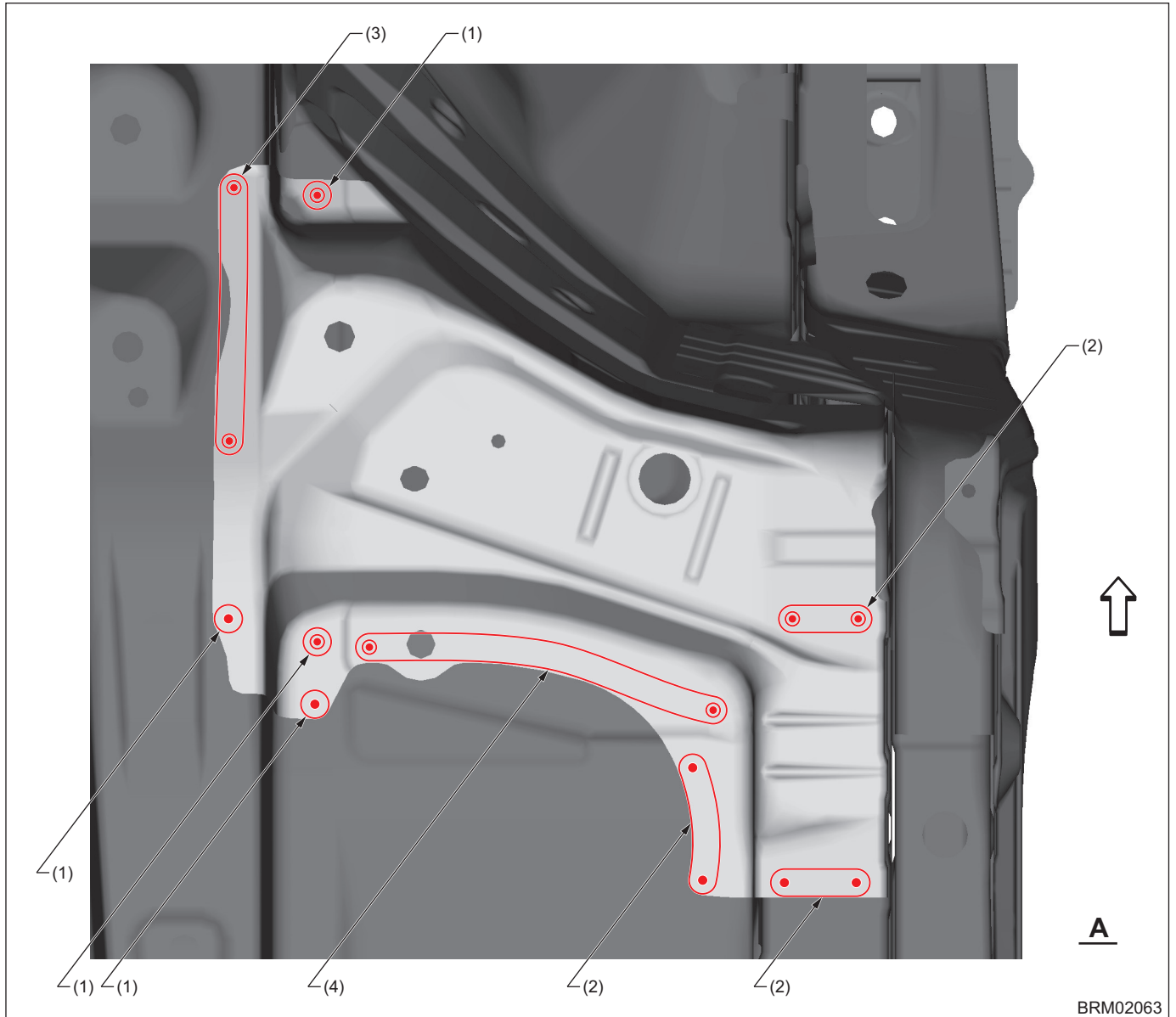


BRM02782

- | | | |
|----------------------------|--|---------------------------|
| (1) 1 point (Outside · 1) | (4) 2 points (Inside · 1, Belt Sander) | (7) 2 points (Inside · 1) |
| (2) 1 point (Inside · 1) | (5) 9 points (Outside · 1) | |
| (3) 2 points (Outside · 1) | (6) 1 point (Inside · 1, Belt Sander) | |

Panel Replacement

• View A



(1) 1 point (Bottom · 1)
(2) 2 points (Bottom · 1)

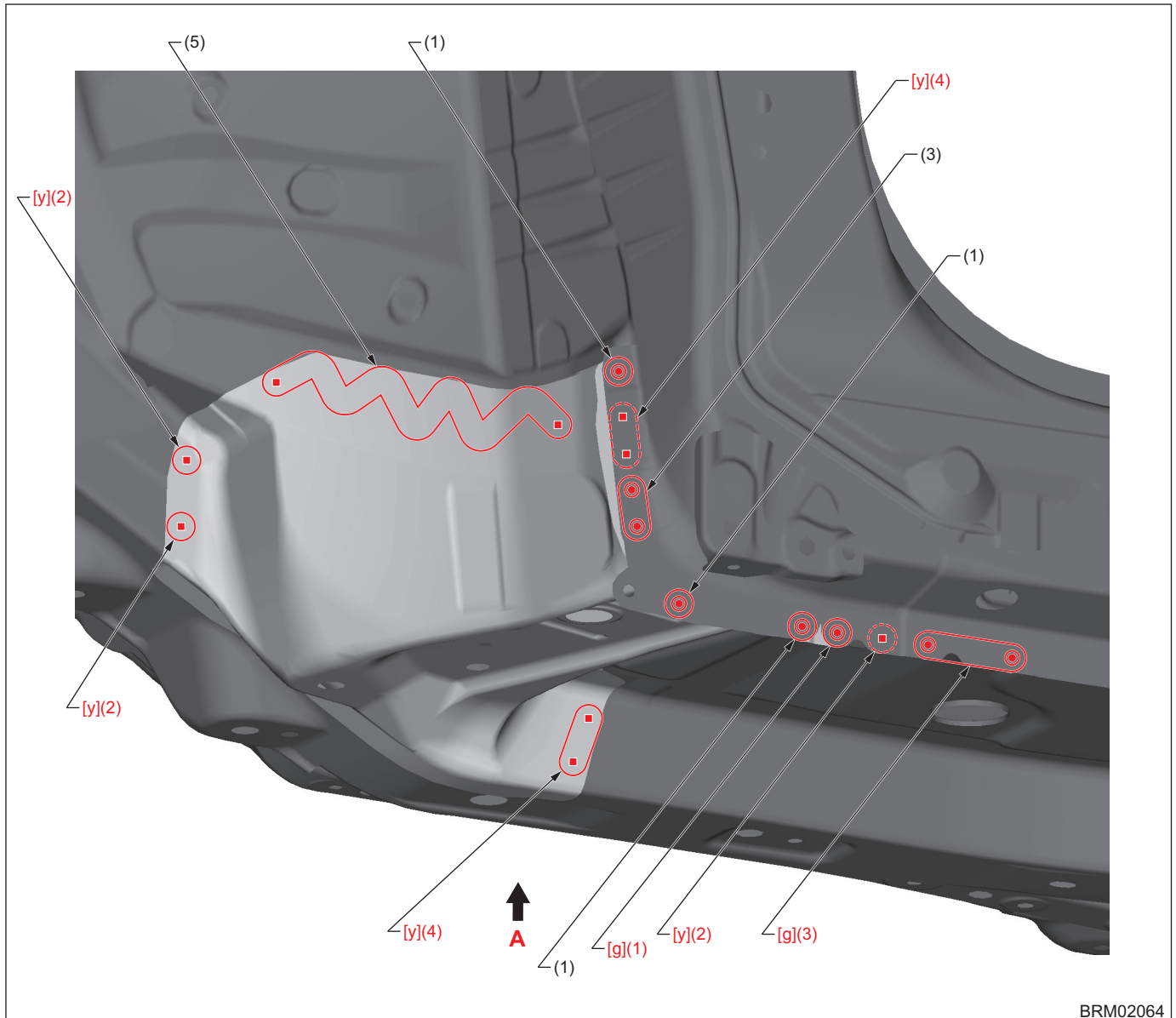
(3) 4 points (Bottom · 1)

(4) 5 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view



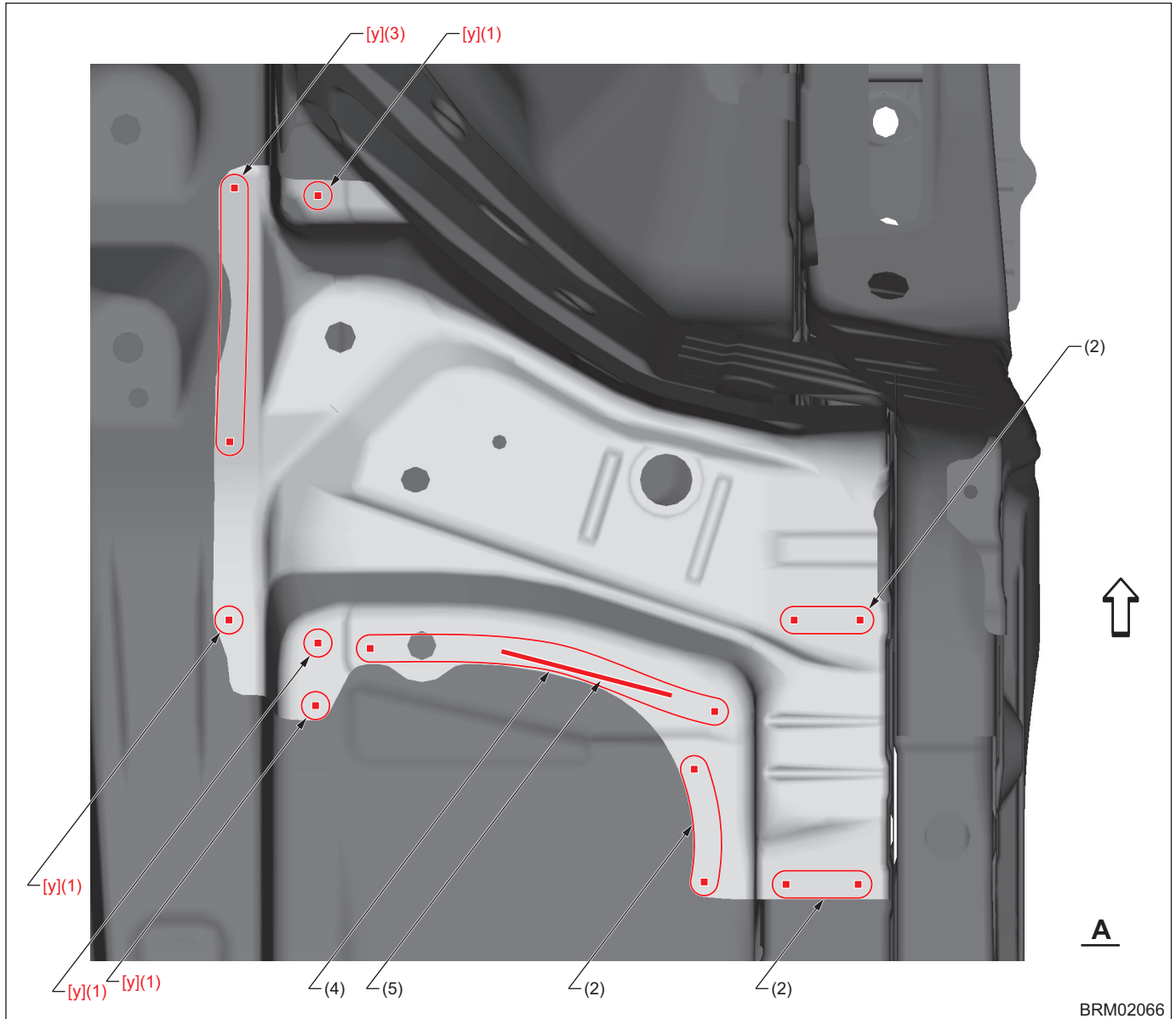
BRM02064

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (3) 2 points | (5) 9 points (Service part) |
| (2) 1 point (Service part) | (4) 2 points (Service part) | |

[g] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View A



- | | | |
|-----------------------------|-----------------------------|-------------------------|
| (1) 1 point (Service part) | (3) 4 points (Service part) | (5) Structural adhesive |
| (2) 2 points (Service part) | (4) 5 points (Service part) | |

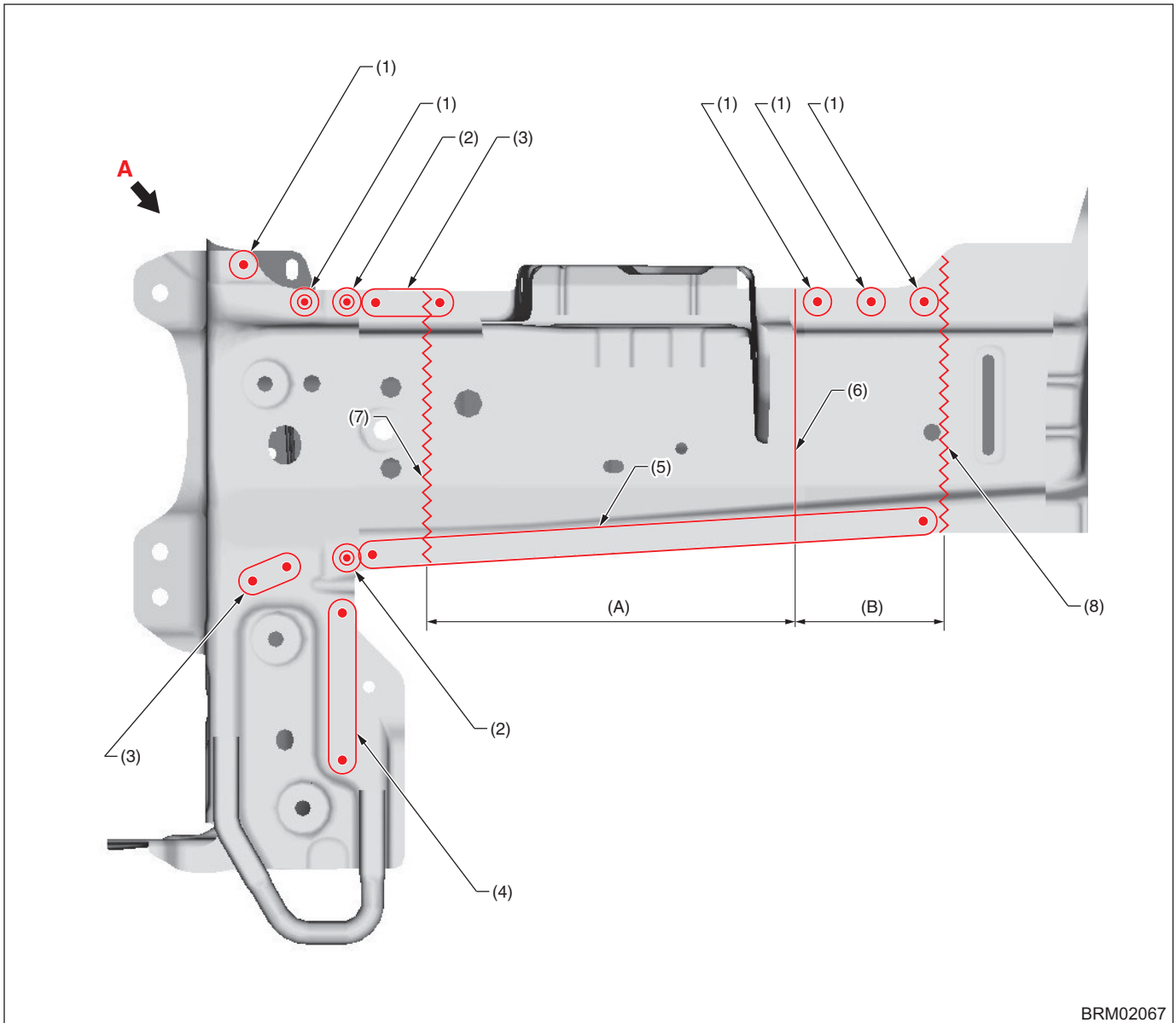
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)
-----------------------------	--

9-5. Closing Plate LH (Partial replacement)

A: REMOVAL

• Overall view



BRM02067

(A) 210 mm [8.27 in]

(B) 80 mm [3.15 in]

(1) 1 point (Outside · 1)

(4) 4 points (Outside · 1)

(7) Cut position where the damage is small

(2) 1 point (Outside · 2)

(5) 13 points (Outside · 1)

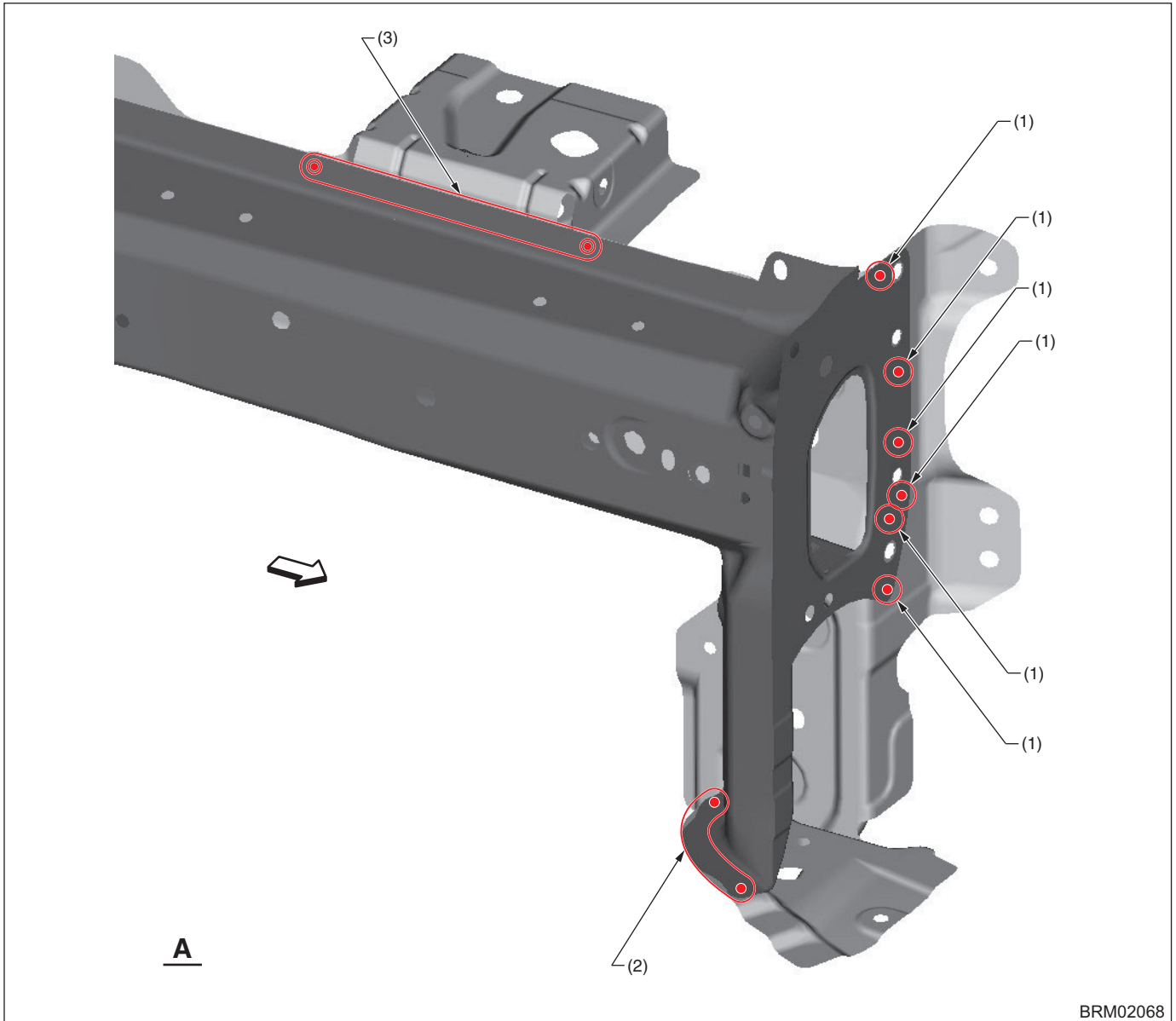
(8) Cut position where the damage is large

(3) 2 points (Outside · 1)

(6) Tailored line

Panel Replacement

• View A



(1) 1 point (Outside · 1)

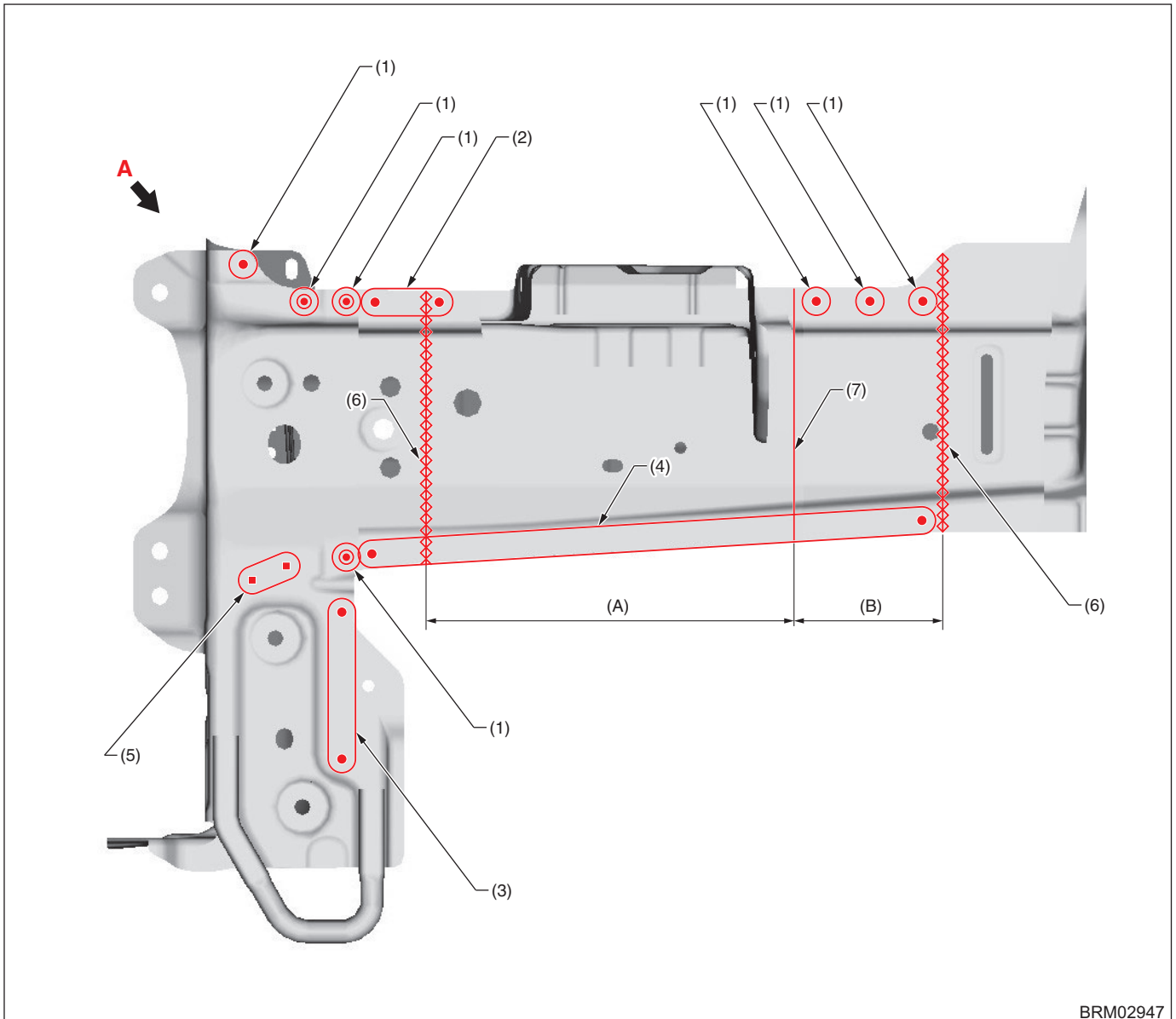
(2) 4 points (Bottom · 1)

(3) 6 points (Inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02947

(A) 210 mm [8.27 in]

(B) 80 mm [3.15 in]

(1) 1 point

(4) 13 points

(7) Tailored line

(2) 2 points

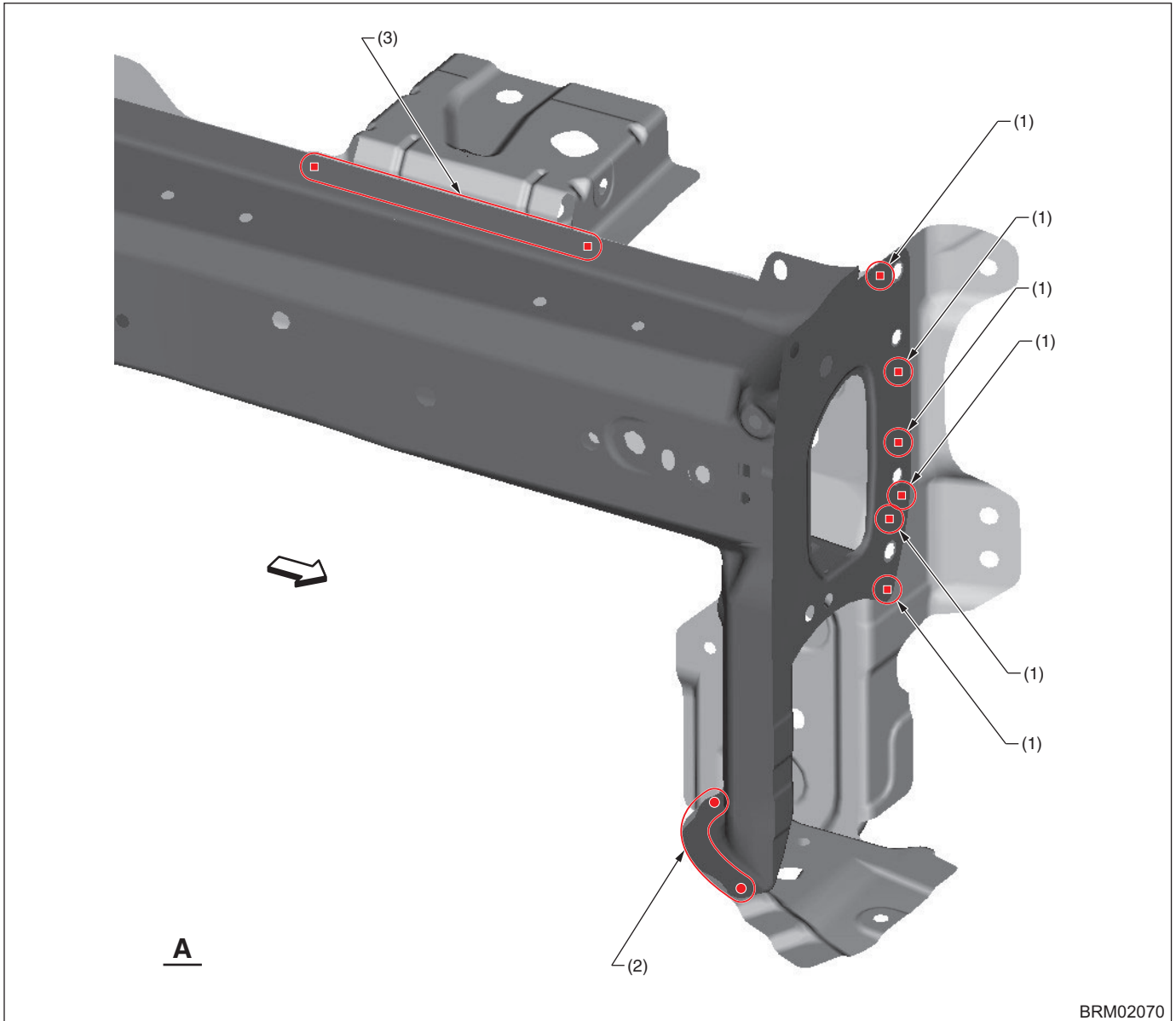
(5) 2 points (Service part)

(3) 4 points

(6) 1 point (Continuous welding)

Panel Replacement

• View A



(1) 1 point

(2) 4 points

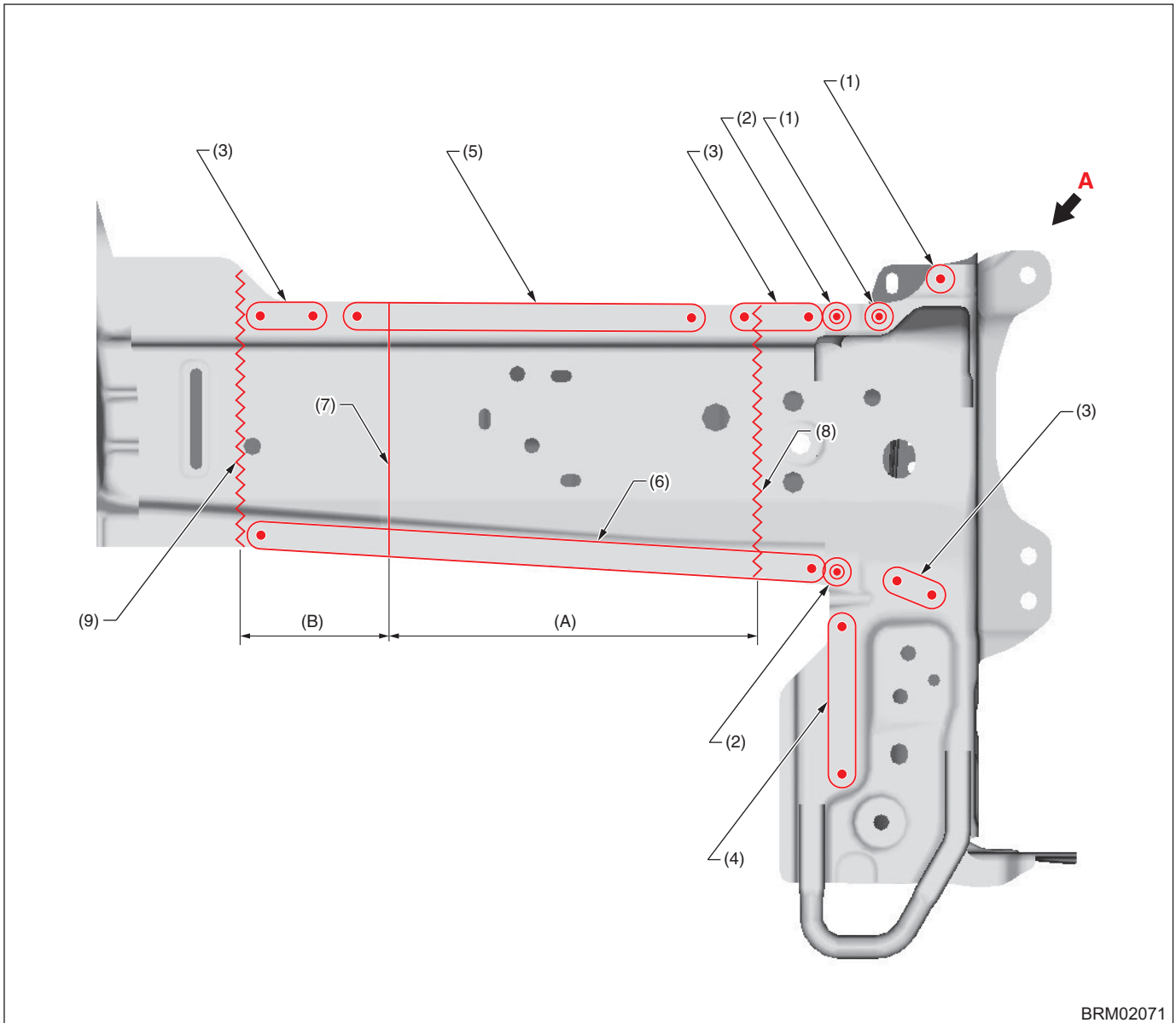
(3) 6 points (Service part · matching)

Panel Replacement

9-6. Closing Plate RH (Partial replacement)

A: REMOVAL

• Overall view



(A) 210 mm [8.27 in]

(B) 80 mm [3.15 in]

(1) 1 point (Outside · 1)

(4) 4 points (Outside · 1)

(7) Tailored line

(2) 1 point (Outside · 2)

(5) 7 points (Outside · 1)

(8) Cut position where the damage is small

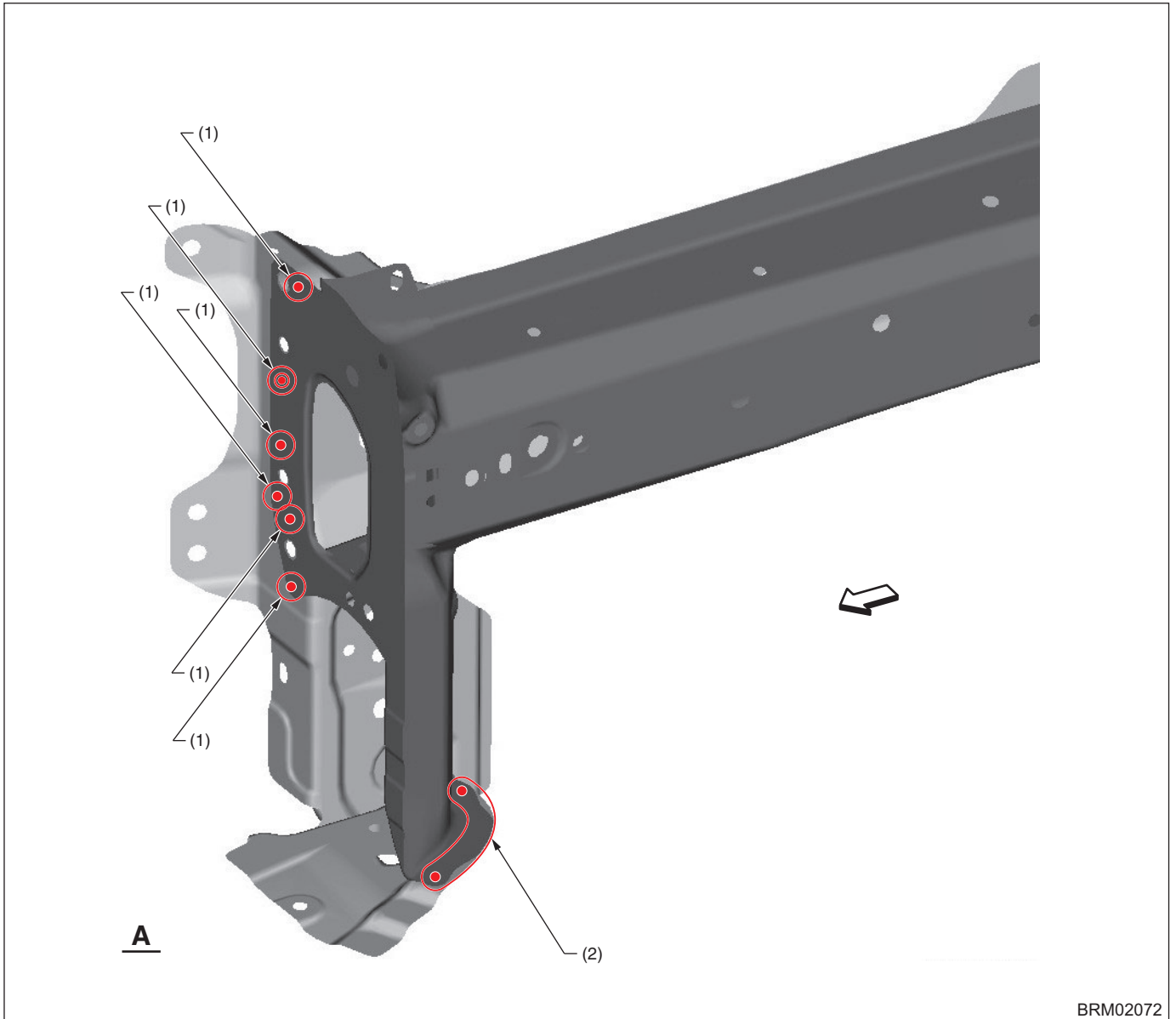
(3) 2 points (Outside · 1)

(6) 13 points (Outside · 1)

(9) Cut position where the damage is large

Panel Replacement

• View A



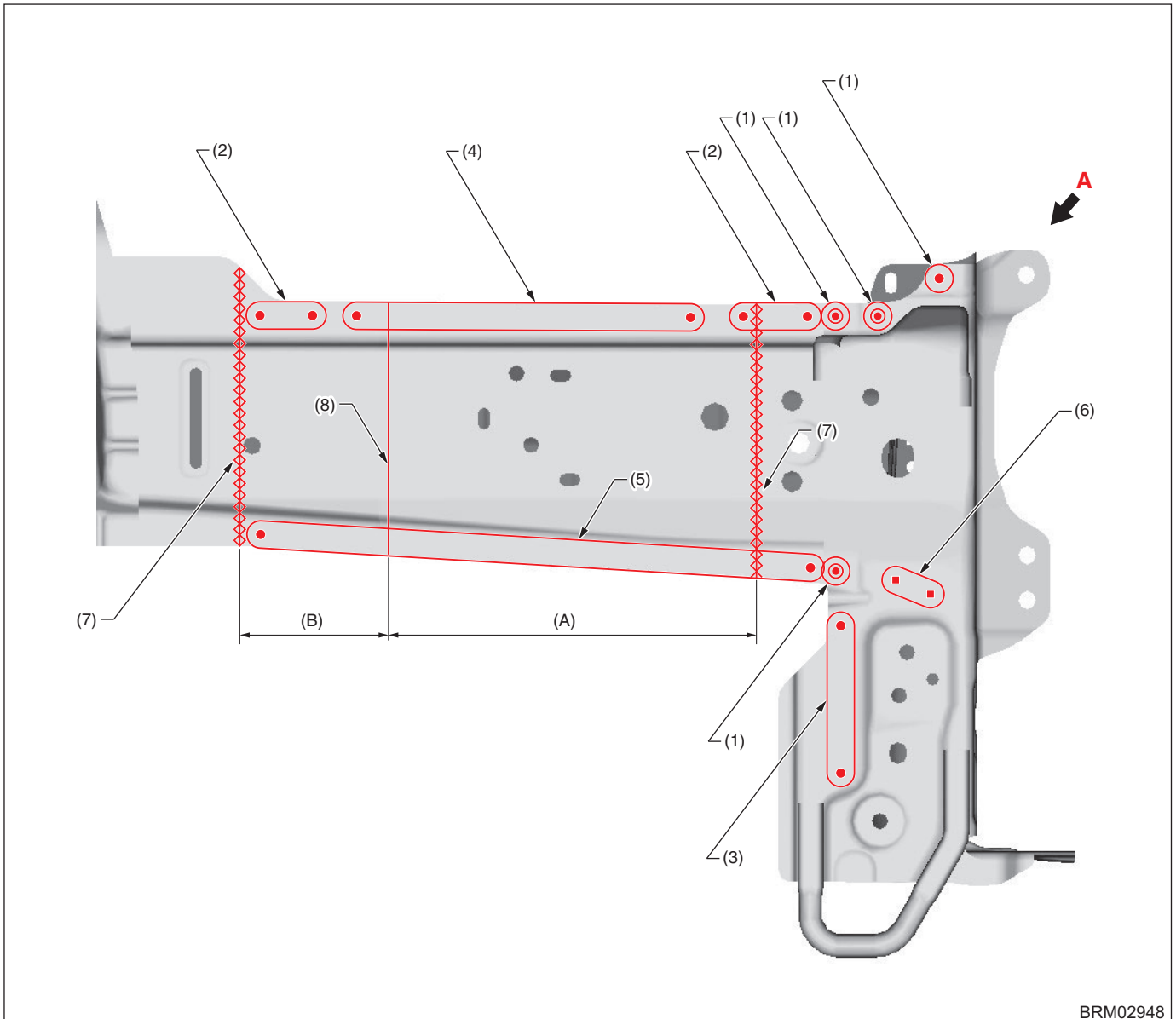
(1) 1 point (Outside · 1)

(2) 4 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view



(A) 210 mm [8.27 in]

(B) 80 mm [3.15 in]

(1) 1 point

(4) 7 points

(7) 1 point (Continuous welding)

(2) 2 points

(5) 13 points

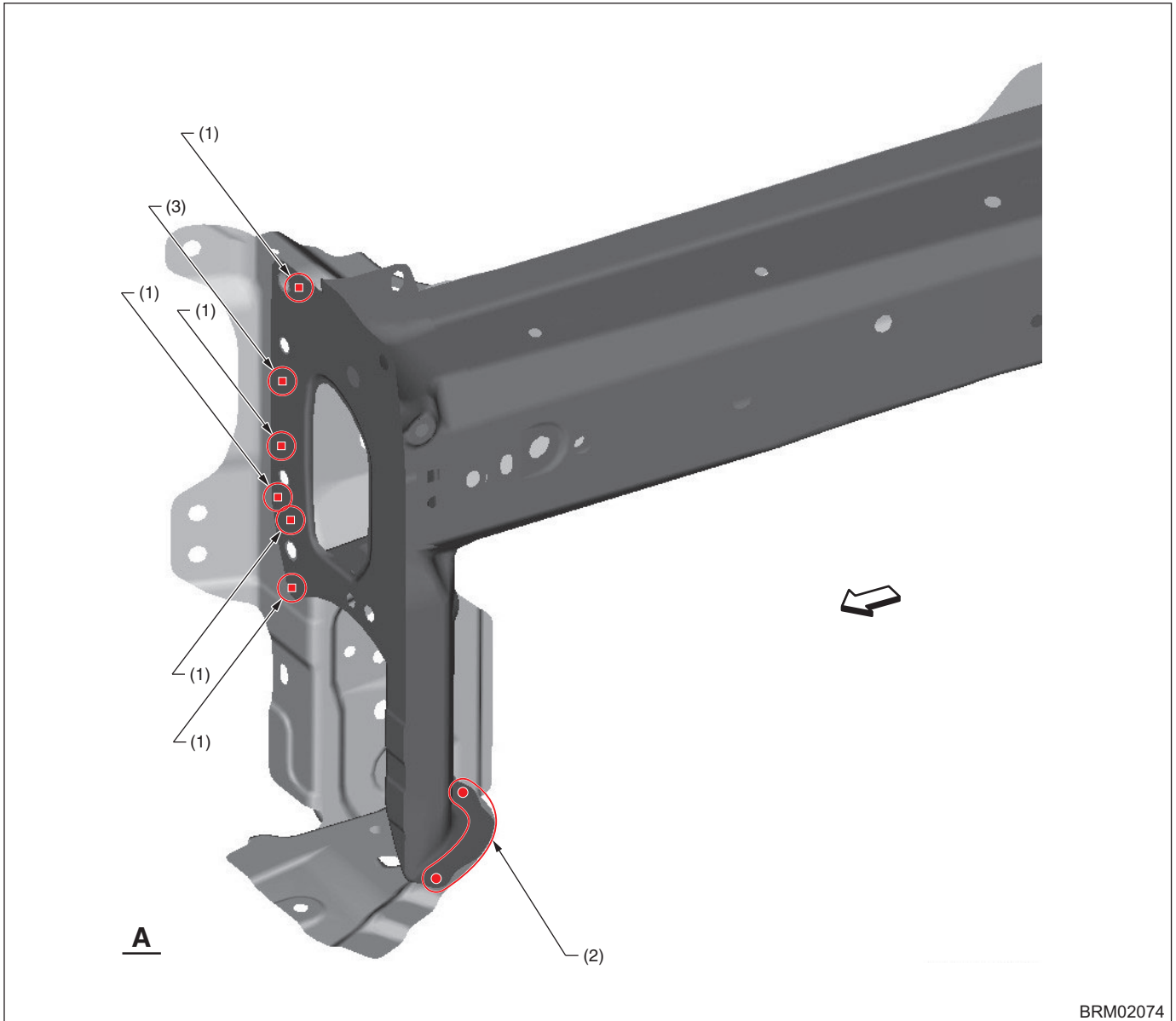
(8) Tailored line

(3) 4 points

(6) 2 points (Service part)

Panel Replacement

• View A



(1) 1 point

(2) 4 points

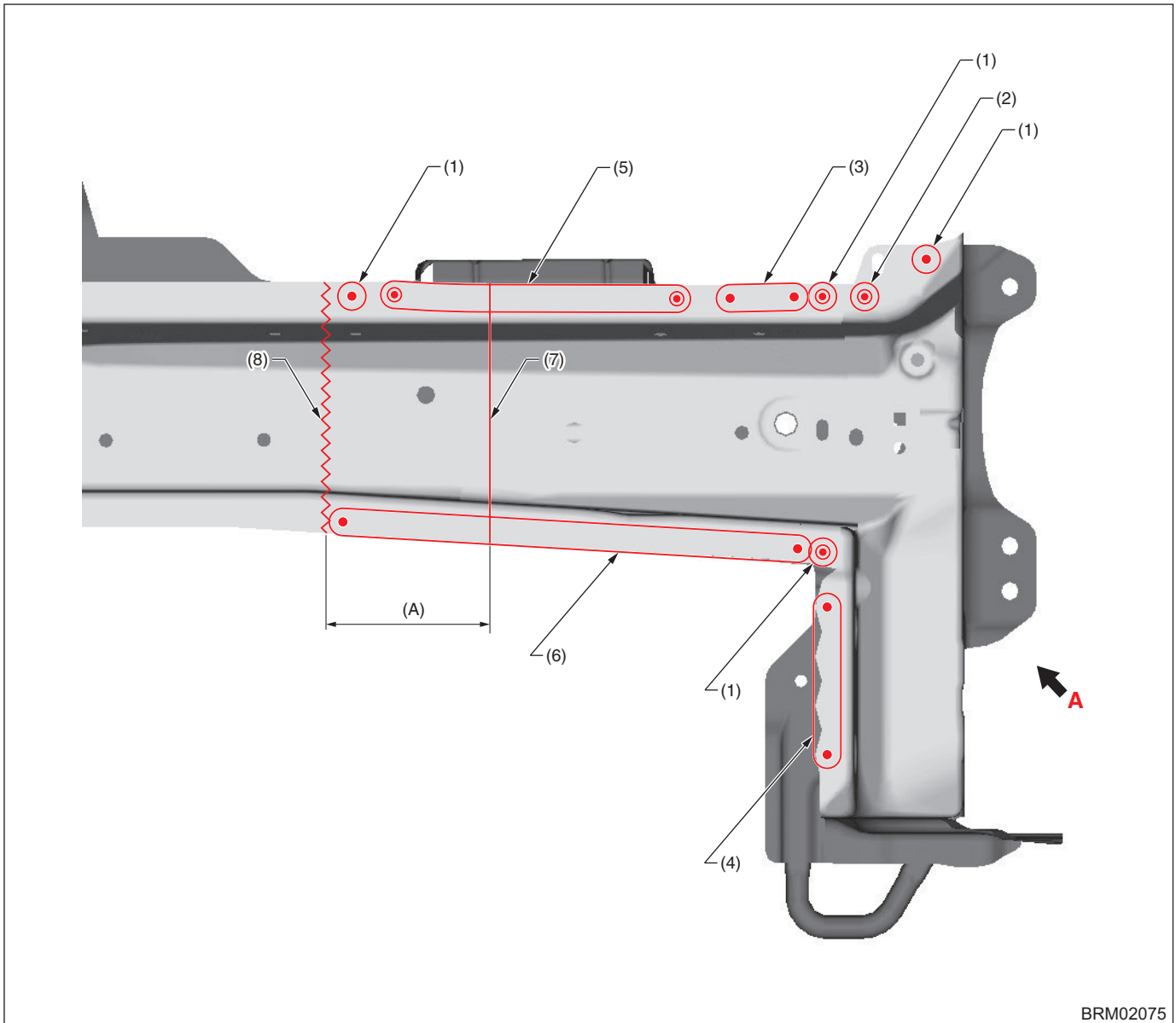
(3) 1 point (Service part · matching)

Panel Replacement

9-7. Front Side Frame LH (Partial replacement)

A: REMOVAL

• Overall view



(A) 90 mm [3.54 in]

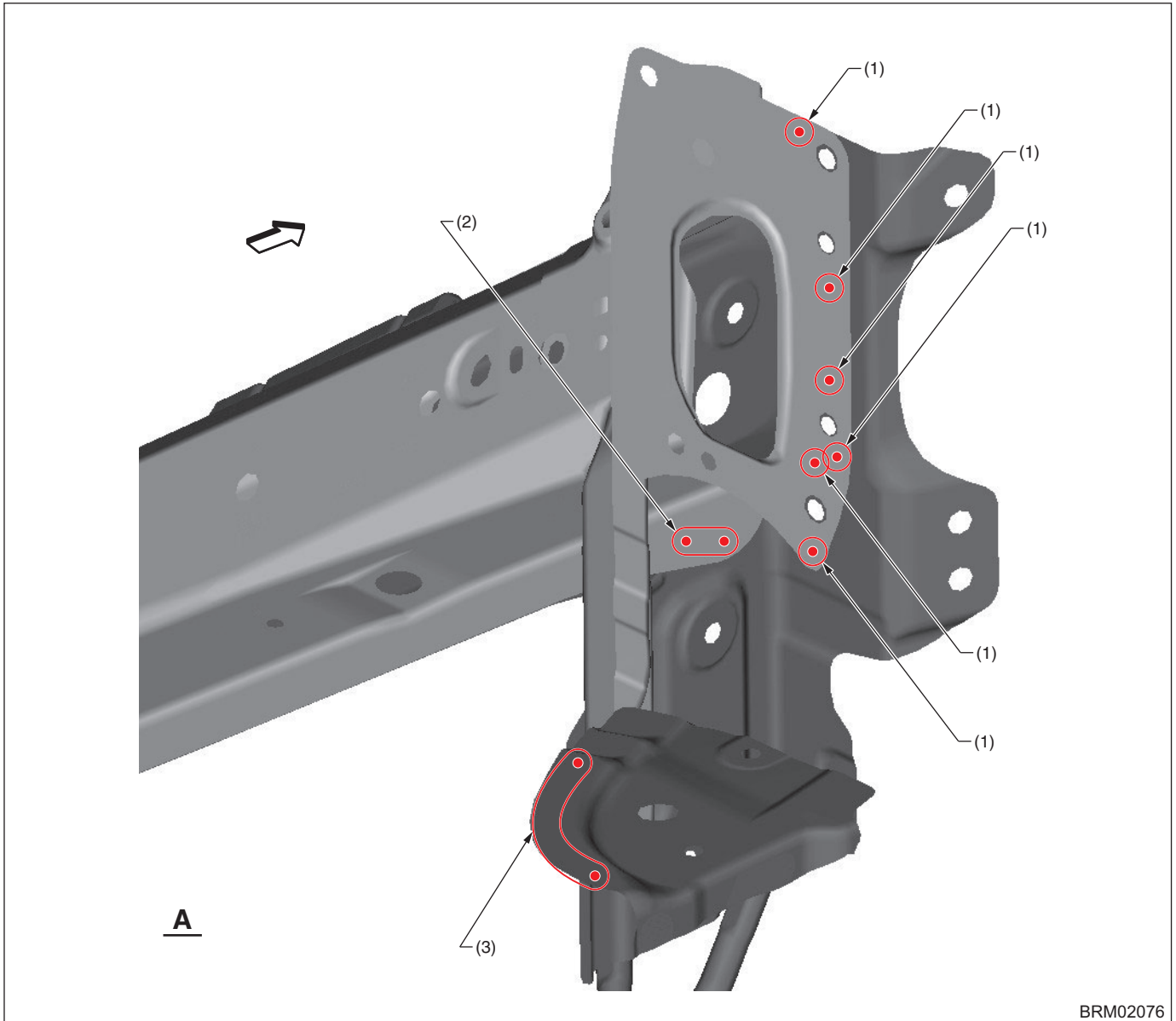
- (1) 1 point (Inside · 1)
- (2) 1 point (Inside · 2)
- (3) 2 points (Inside · 1)

- (4) 4 points (Inside · 1)
- (5) 6 points (Inside · 1)
- (6) 11 points (Inside · 1)

- (7) Tailored line
- (8) Cut position

Panel Replacement

• View A



(1) 1 point (Outside · 1)

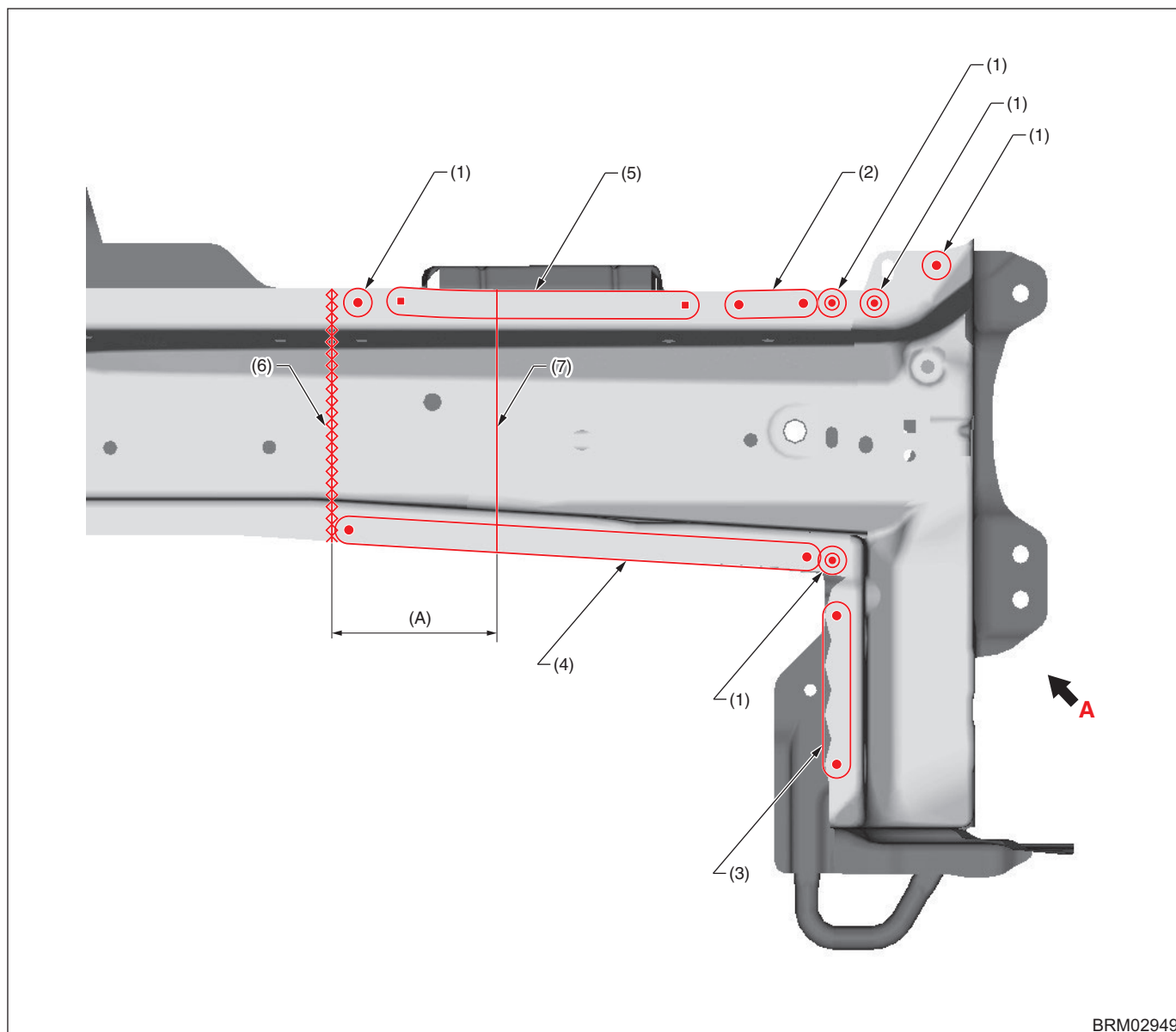
(2) 2 points (Outside · 1)

(3) 4 points (Top · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02949

(A) 90 mm [3.54 in]

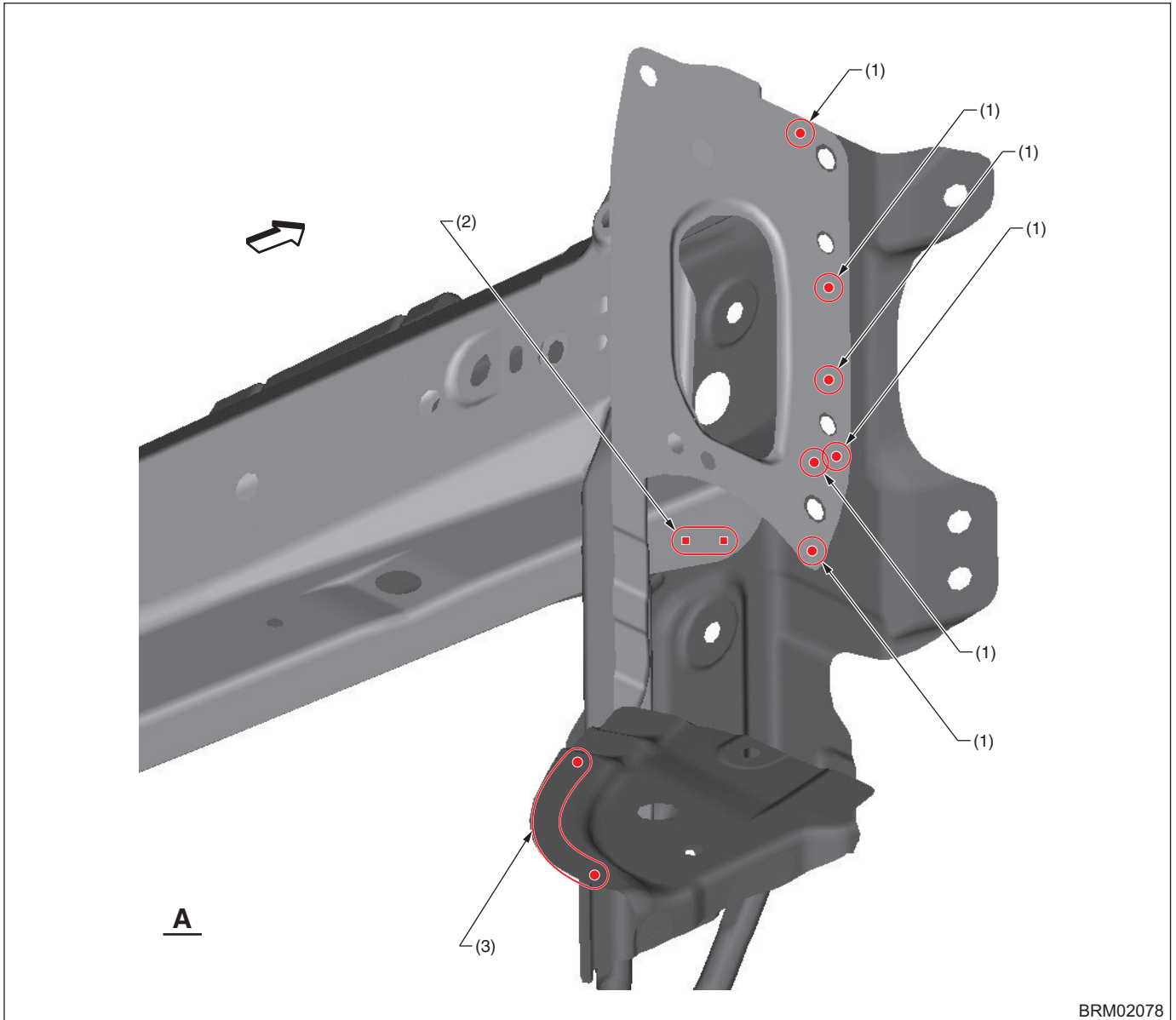
- (1) 1 point
- (2) 2 points
- (3) 4 points

- (4) 11 points
- (5) 6 points (Service part)
- (6) 1 point (Continuous welding)

(7) Tailored line

Panel Replacement

• View A



(1) 1 point

(2) 2 points

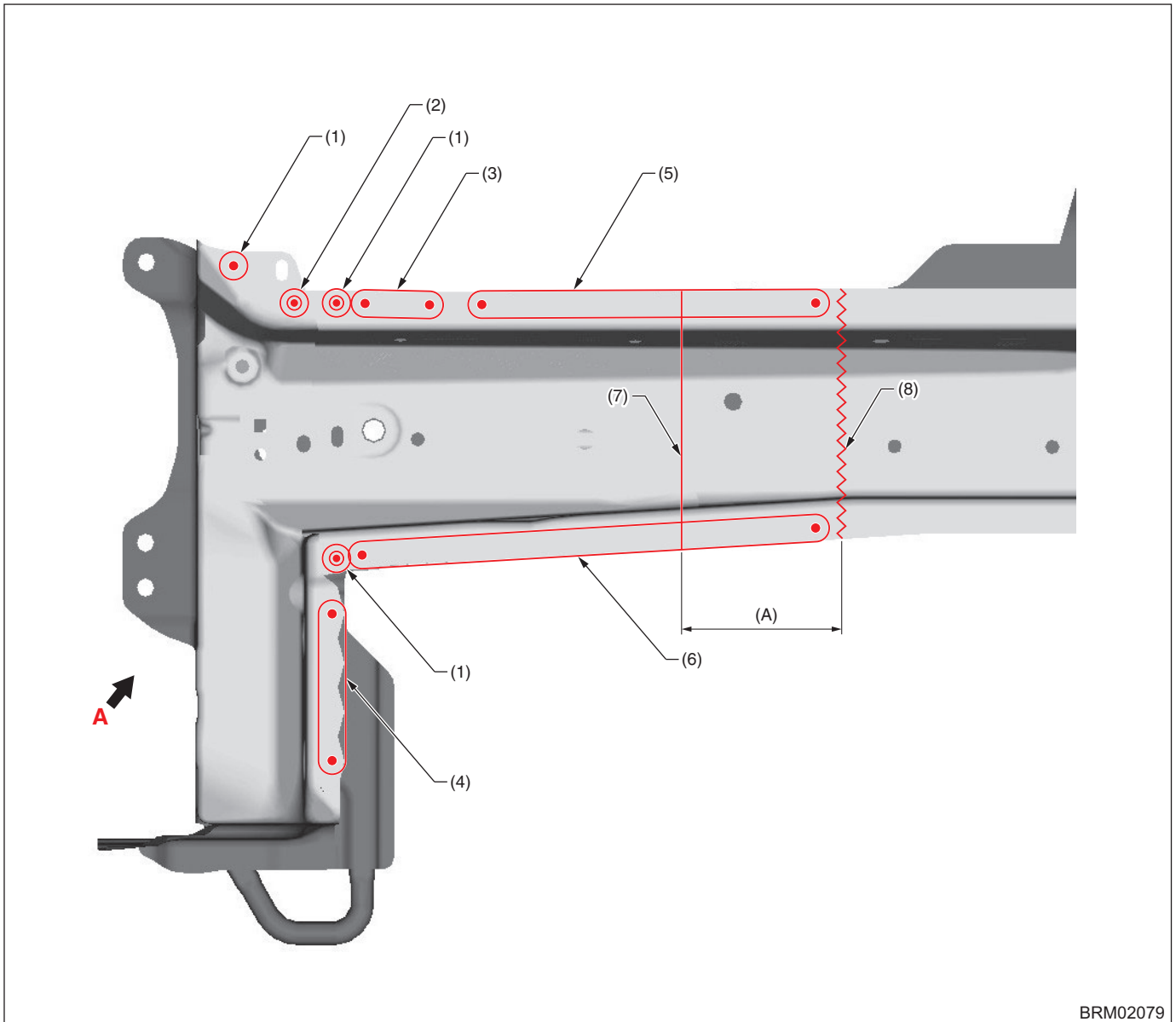
(3) 4 points

Panel Replacement

9-8. Front Side Frame RH (Partial replacement)

A: REMOVAL

• Overall view



BRM02079

(A) 90 mm [3.54 in]

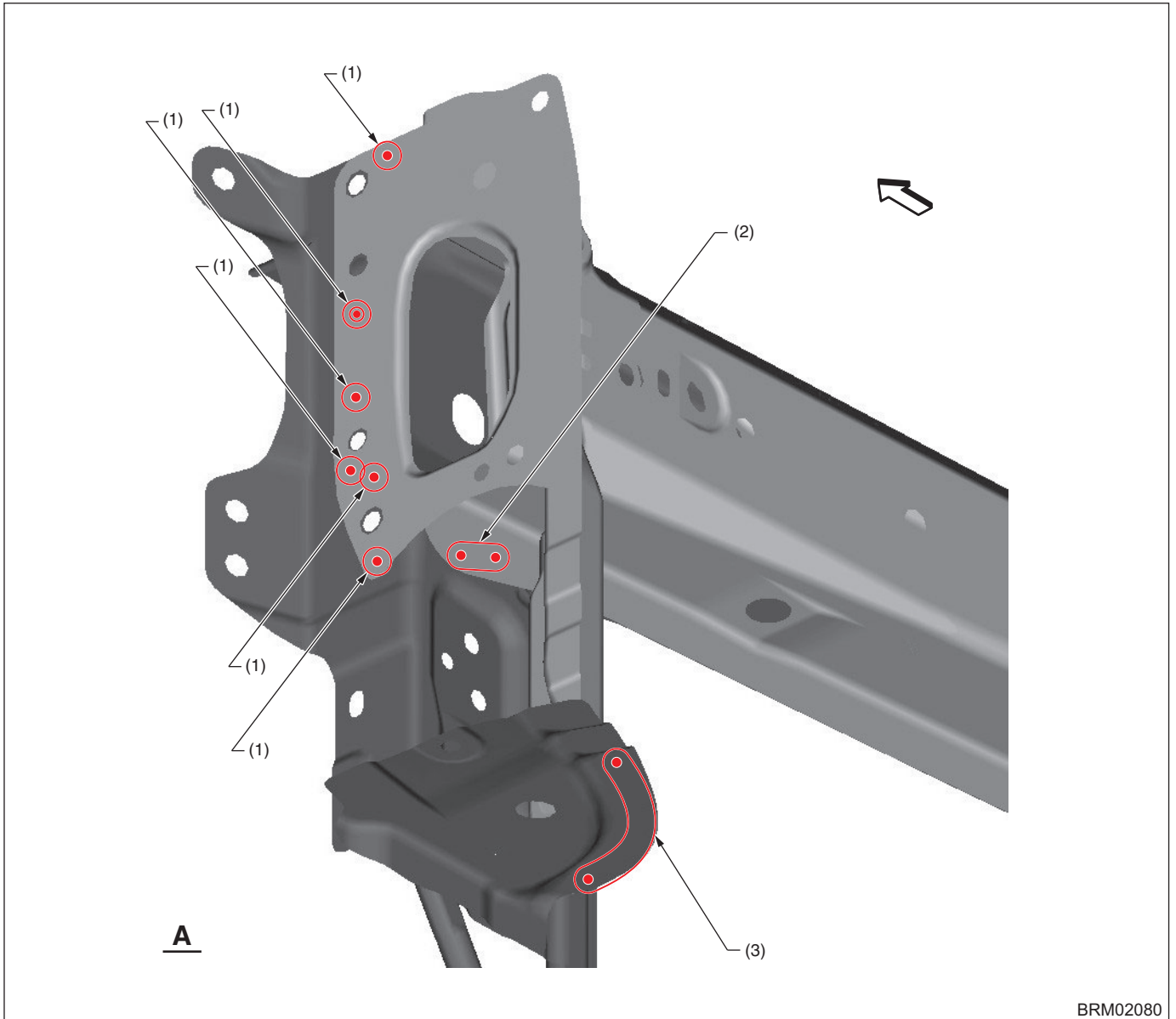
- (1) 1 point (Inside · 1)
- (2) 1 point (Inside · 2)
- (3) 2 points (Inside · 1)

- (4) 4 points (Inside · 1)
- (5) 7 points (Inside · 1)
- (6) 11 points (Inside · 1)

- (7) Tailored line
- (8) Cut position

Panel Replacement

• View A



(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 4 points (Top · 1)

B: INSTALLATION

Technical drawing of a vehicle chassis component, likely a rear cross-member or suspension bracket. The drawing shows various mounting points and structural features. Callouts (1) through (7) identify specific components or features:

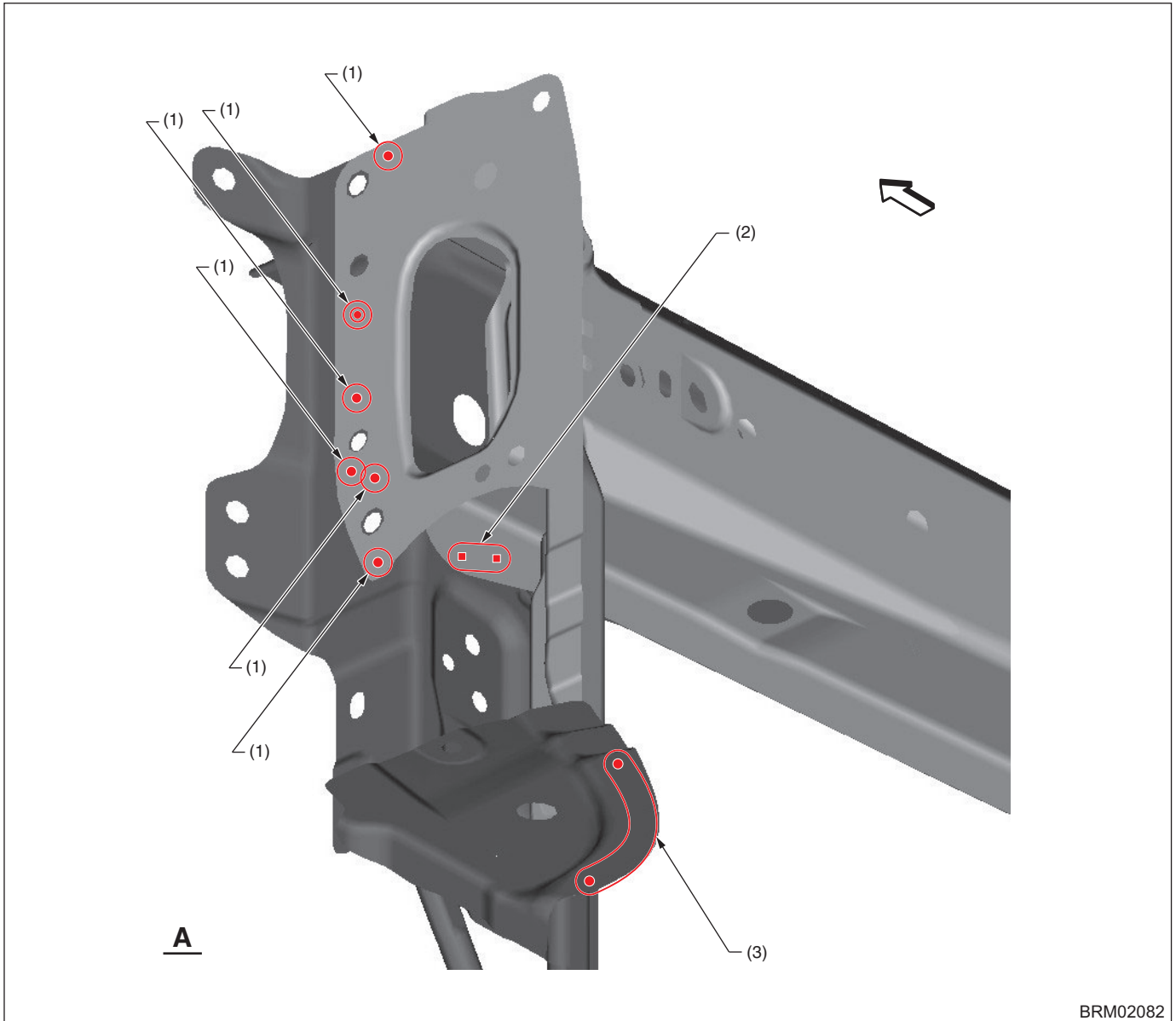
- (1) Points to mounting holes/bushings at the top and bottom left.
- (2) Points to a horizontal mounting bracket on the top.
- (3) Points to a vertical mounting bracket on the bottom left.
- (4) Points to a horizontal structural member on the top.
- (5) Points to a horizontal structural member on the bottom.
- (6) Points to a vertical structural member on the right.
- (7) Points to a horizontal structural member in the center.

Dimension (A) is indicated by a horizontal arrow pointing to the right, representing a distance or length.

BS - 96

Panel Replacement

• View A



BRM02082

(1) 1 point

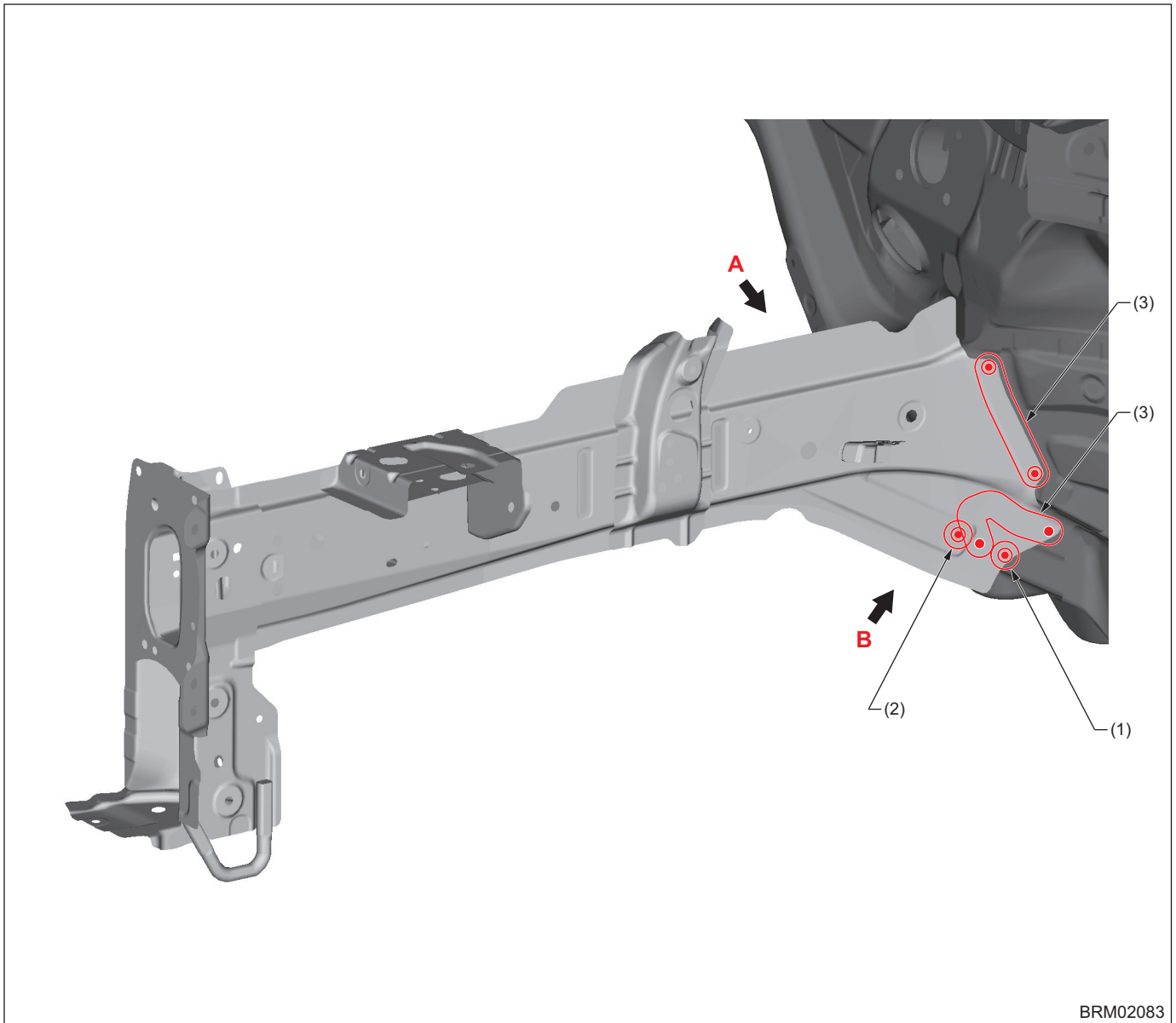
(2) 2 points

(3) 4 points

9-9. Front Side Frame (Total replacement)

A: REMOVAL

• Overall view



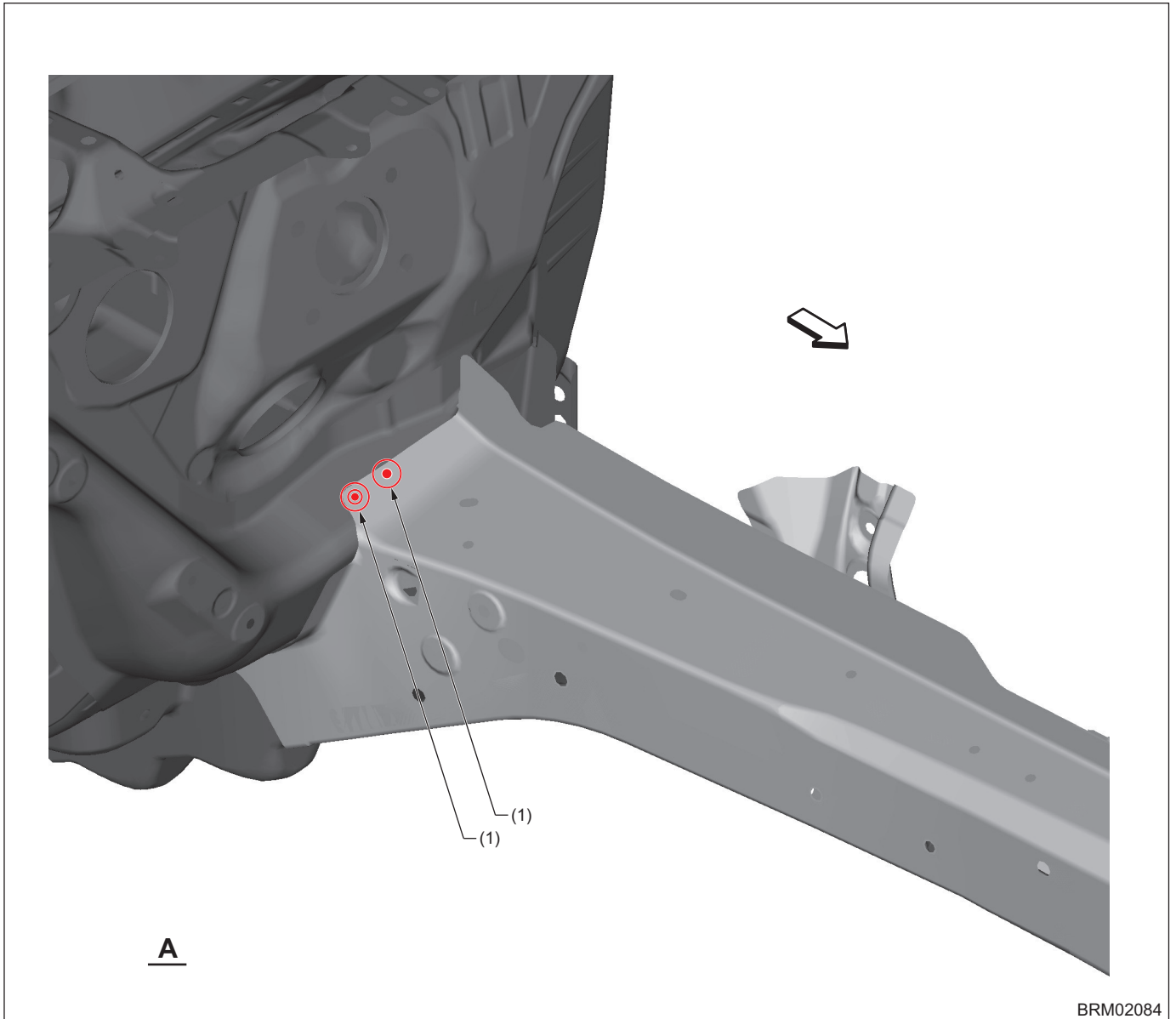
(1) 1 point (Outside · 1)

(2) 1 point (Outside · 2)

(3) 5 points (Outside · 1)

Panel Replacement

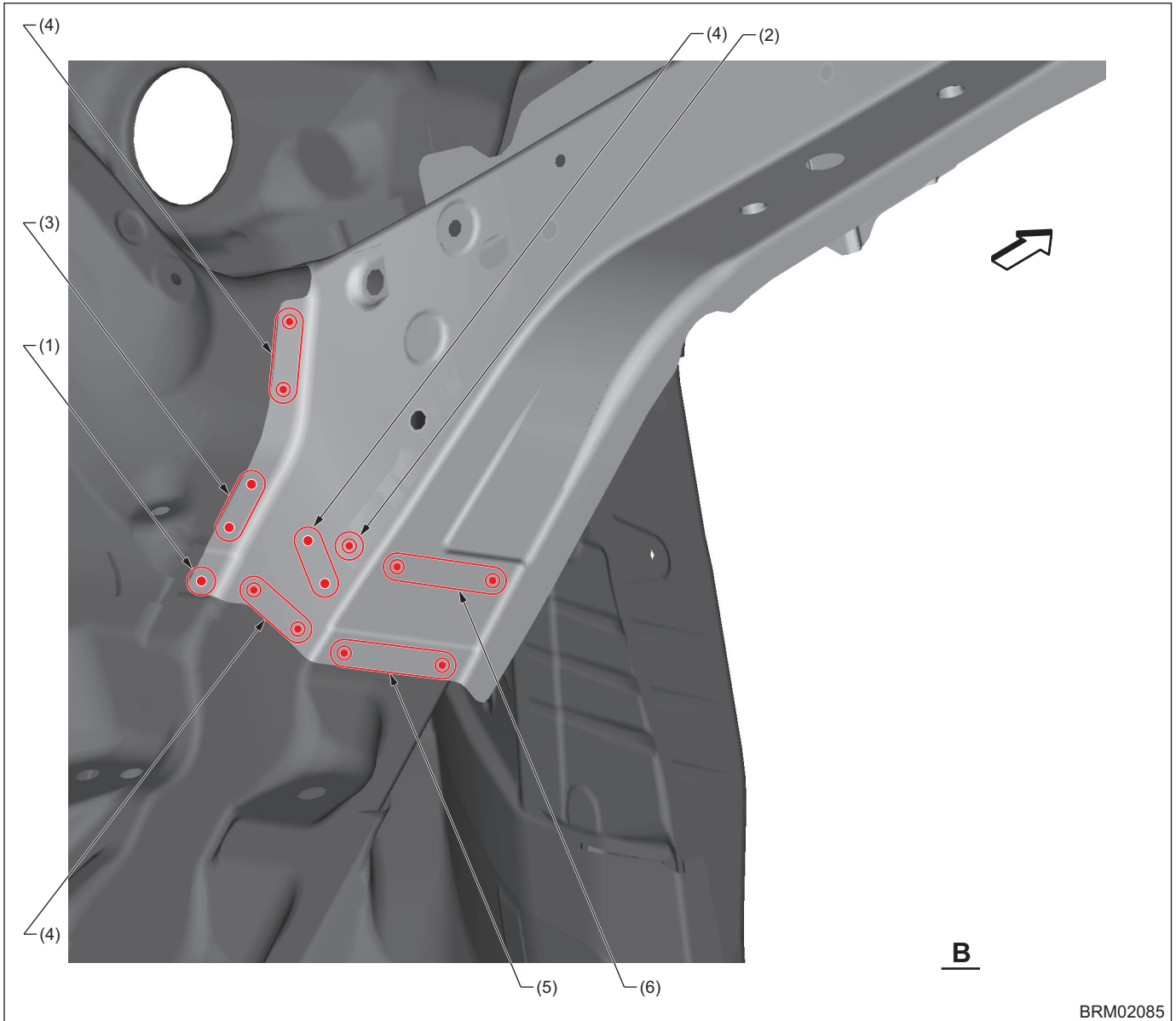
• View A



(1) 1 point (Top · 1)

Panel Replacement

• View B



BRM02085

(1) 1 point (Bottom · 1)
(2) 1 point (Inside · 2)

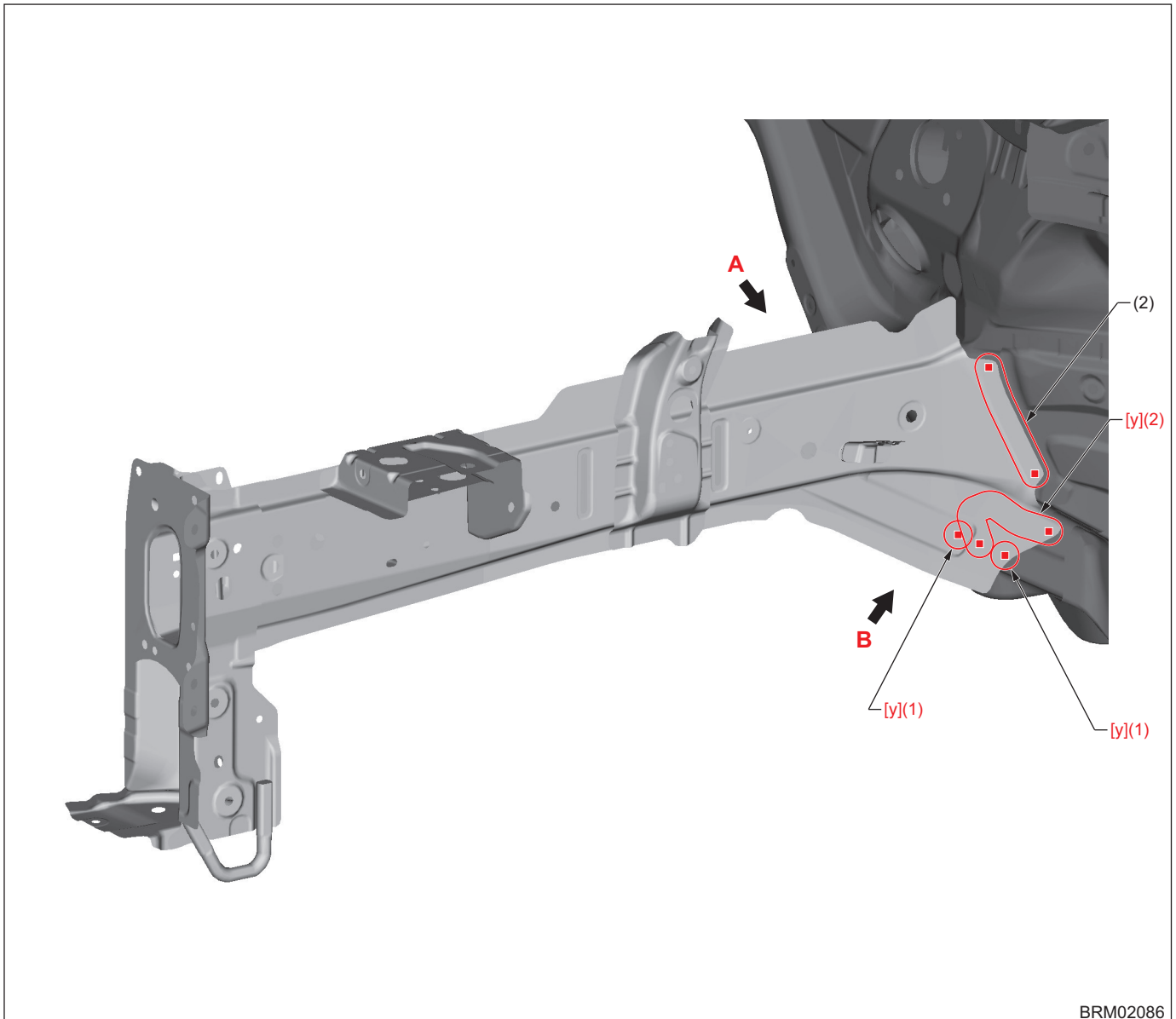
(3) 2 points (Bottom · 1)
(4) 2 points (Inside · 1)

(5) 3 points (Bottom · 1)
(6) 3 points (Bottom · 2)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02086

(1) 1 point (Service part)

(2) 5 points (Service part)

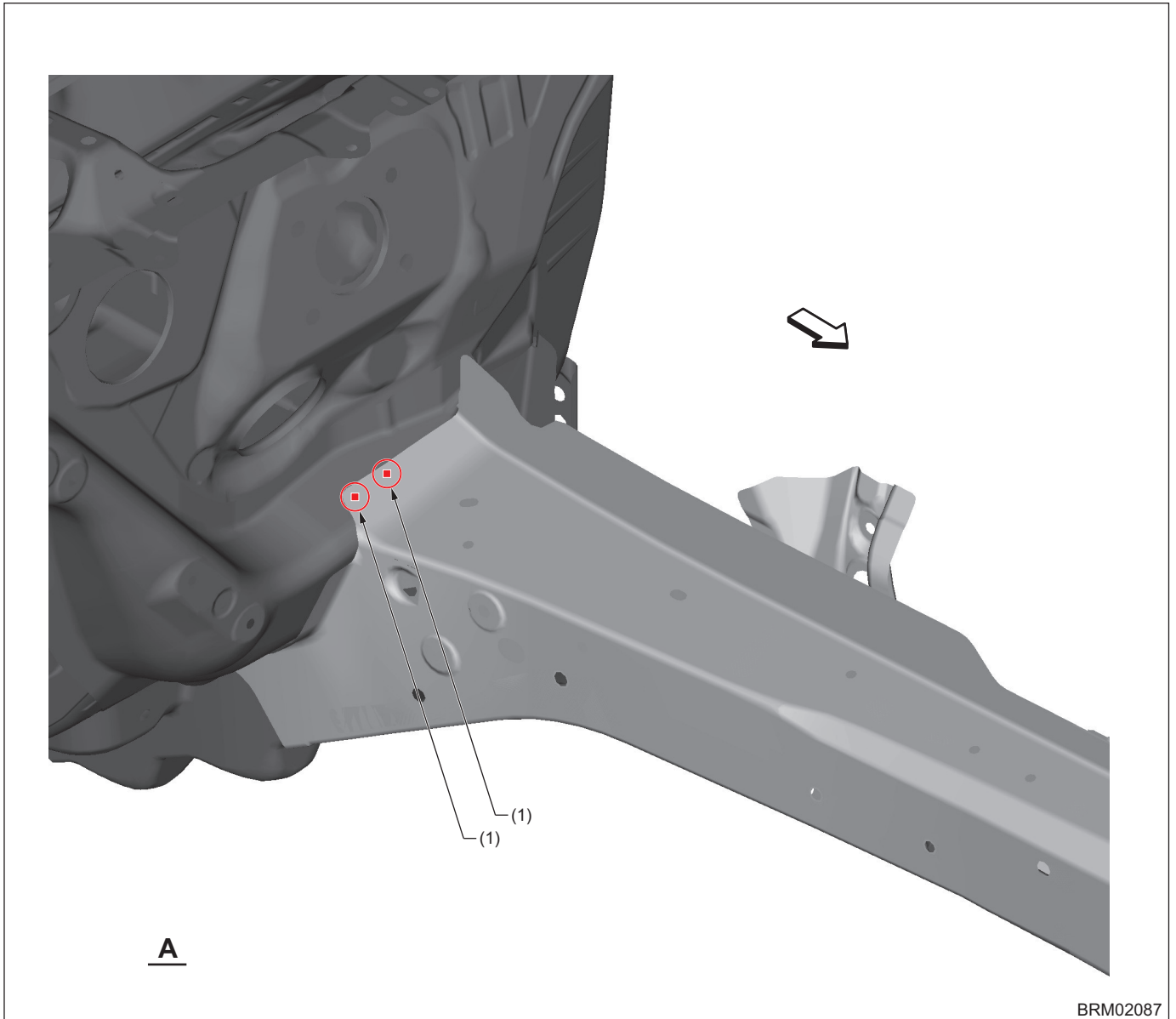
[y] Plug welding conditions

A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO₂

B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO₂: 20 %)

Panel Replacement

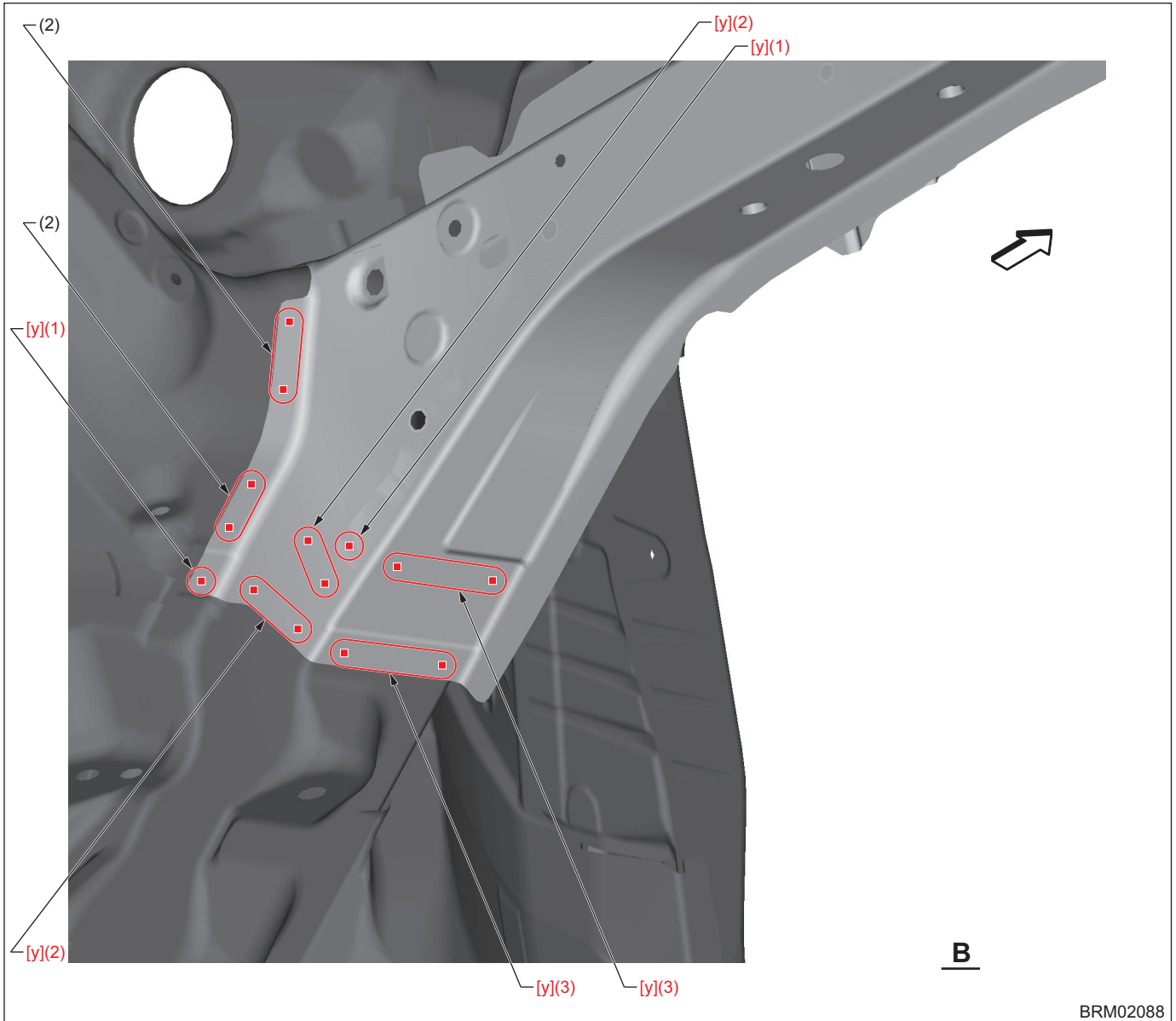
• View A



(1) 1 point (Service part)

Panel Replacement

• View B



BRM02088

(1) 1 point (Service part)

(2) 2 points (Service part)

(3) 3 points (Service part)

[y] Plug welding conditions

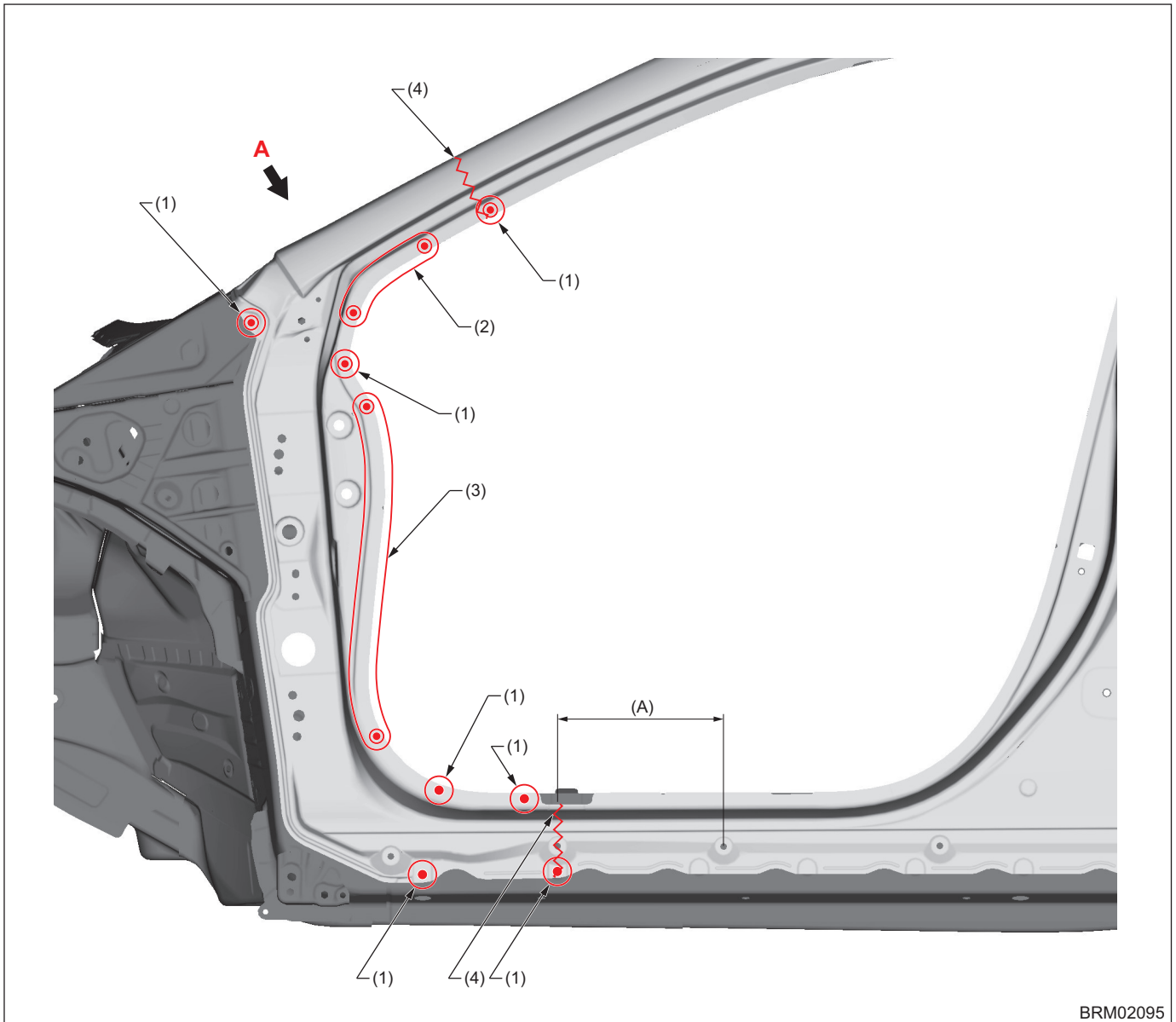
A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO₂

B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO₂: 20 %)

9-10. Front Pillar Outer (Partial replacement)

A: REMOVAL

• Overall view



BRM02095

(A) 220 mm [8.66 in]

(1) 1 point (Outside · 1)

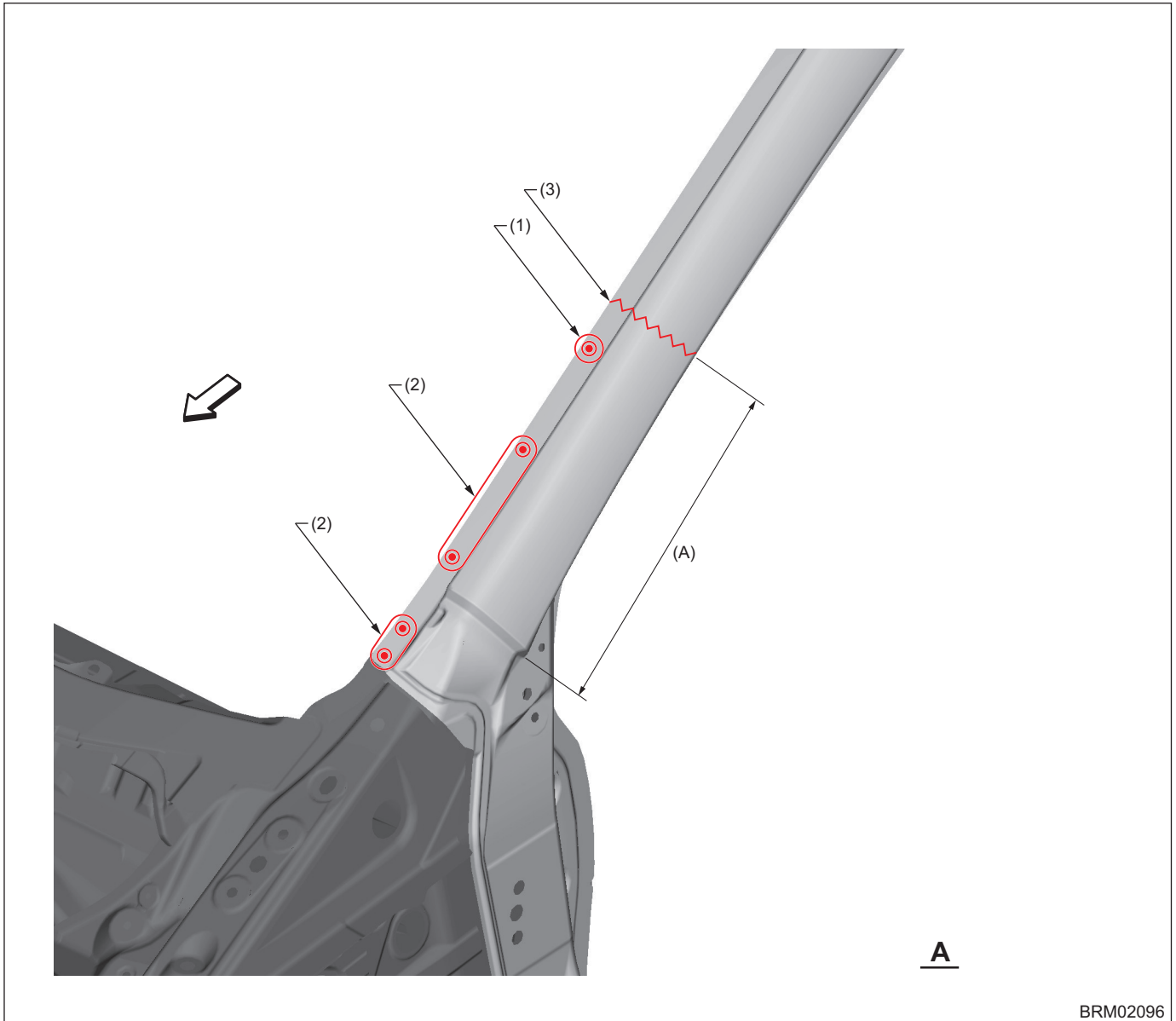
(2) 3 points (Outside · 1)

(3) 11 points (Outside · 1)

(4) Cut position

Panel Replacement

• View A



BRM02096

(A) 260 mm [10.24 in]

(1) 1 point (Top · 1)

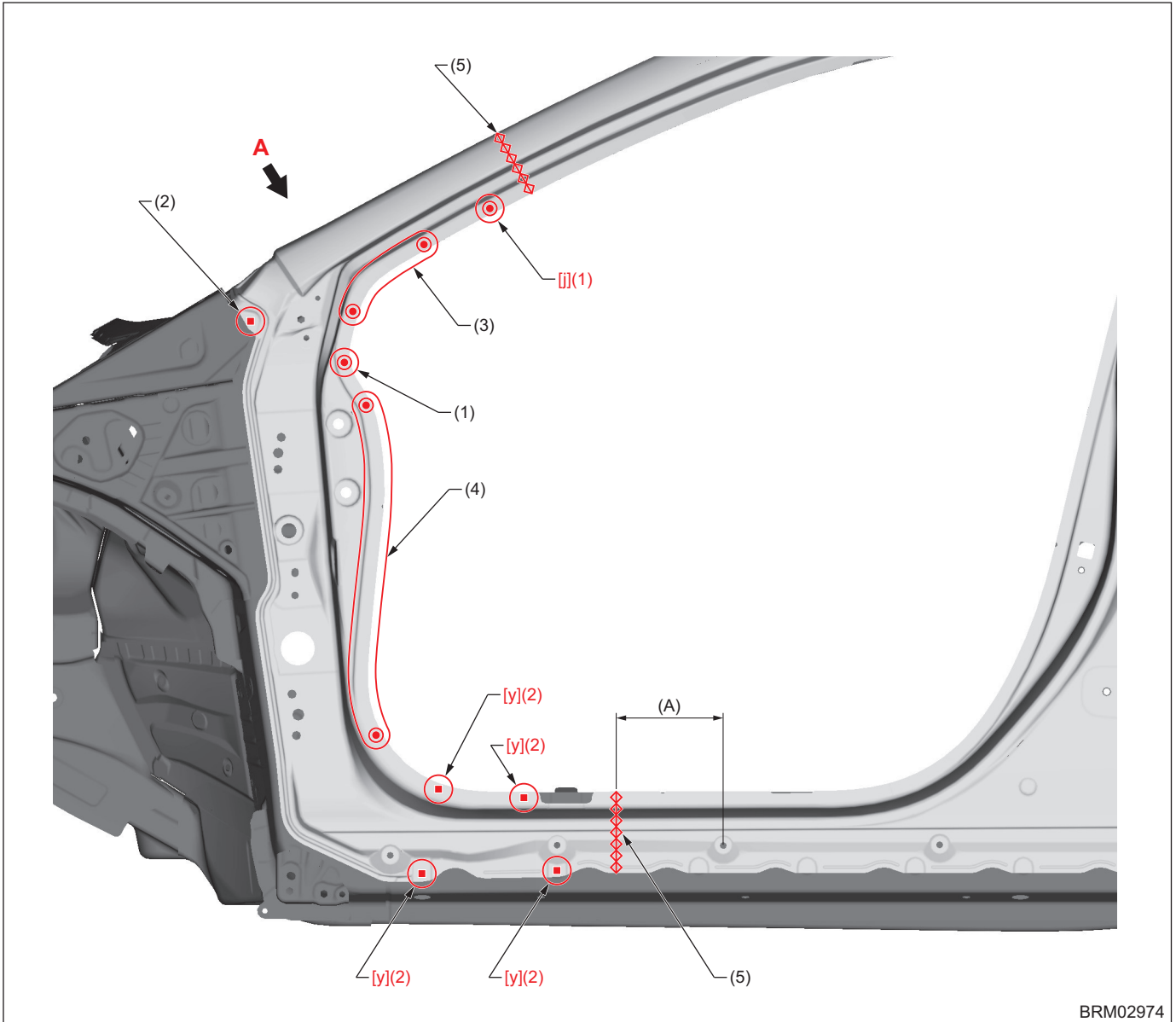
(2) 2 points (Top · 1)

(3) Cut position

Panel Replacement

B: INSTALLATION

• Overall view 1



BRM02974

(A) 150 mm [5.91 in]

(1) 1 point

(3) 3 points

(5) 1 point (Continuous welding)

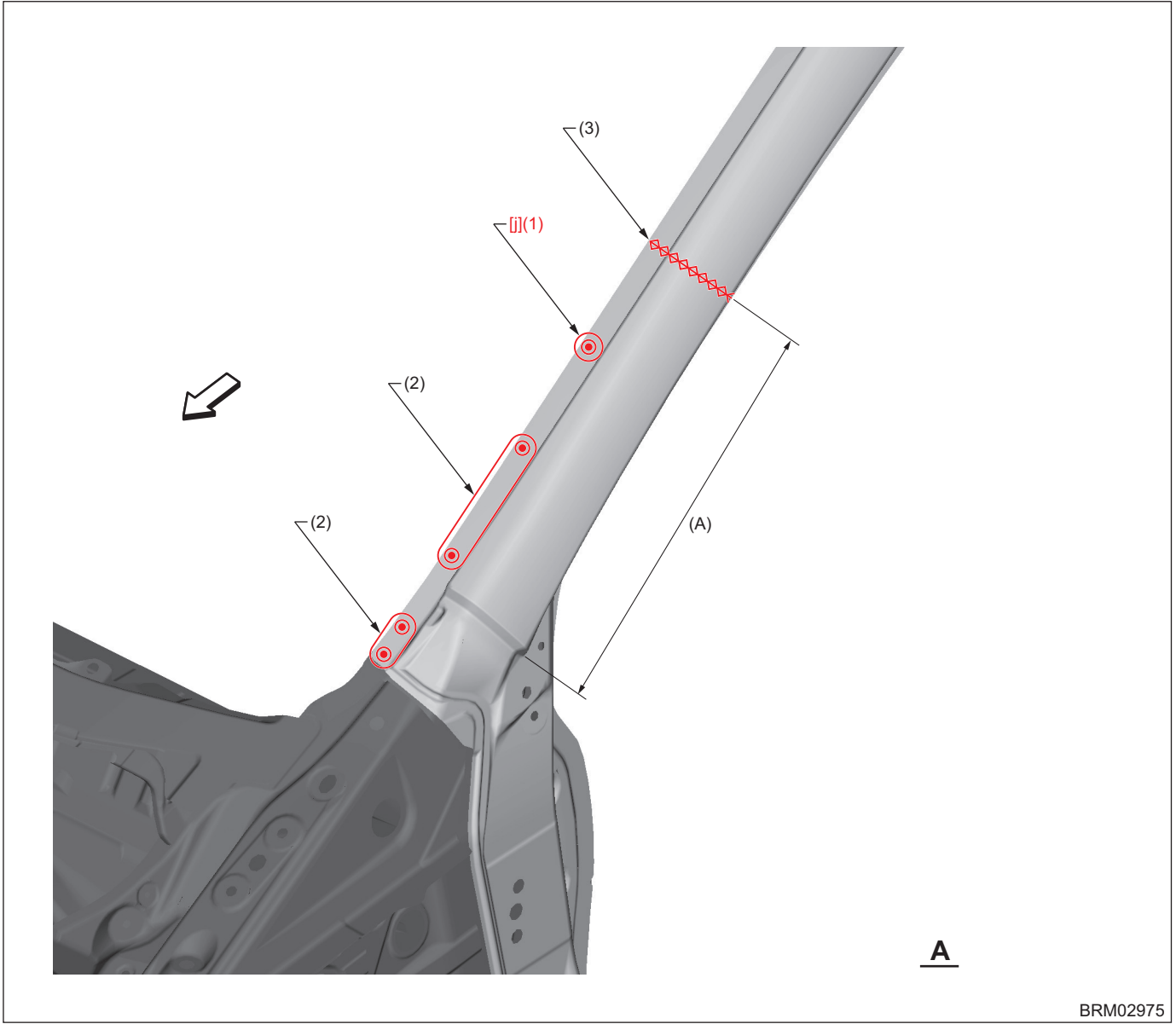
(2) 1 point (Service part)

(4) 11 points

[j] Spot welding conditions (DC)	Compression: 3.5 kN, Current: 10.0 kA, Welding time: 31 cyc, Upslope time: 5 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View A



BRM02975

(A) 310 mm [12.20 in]

(1) 1 point

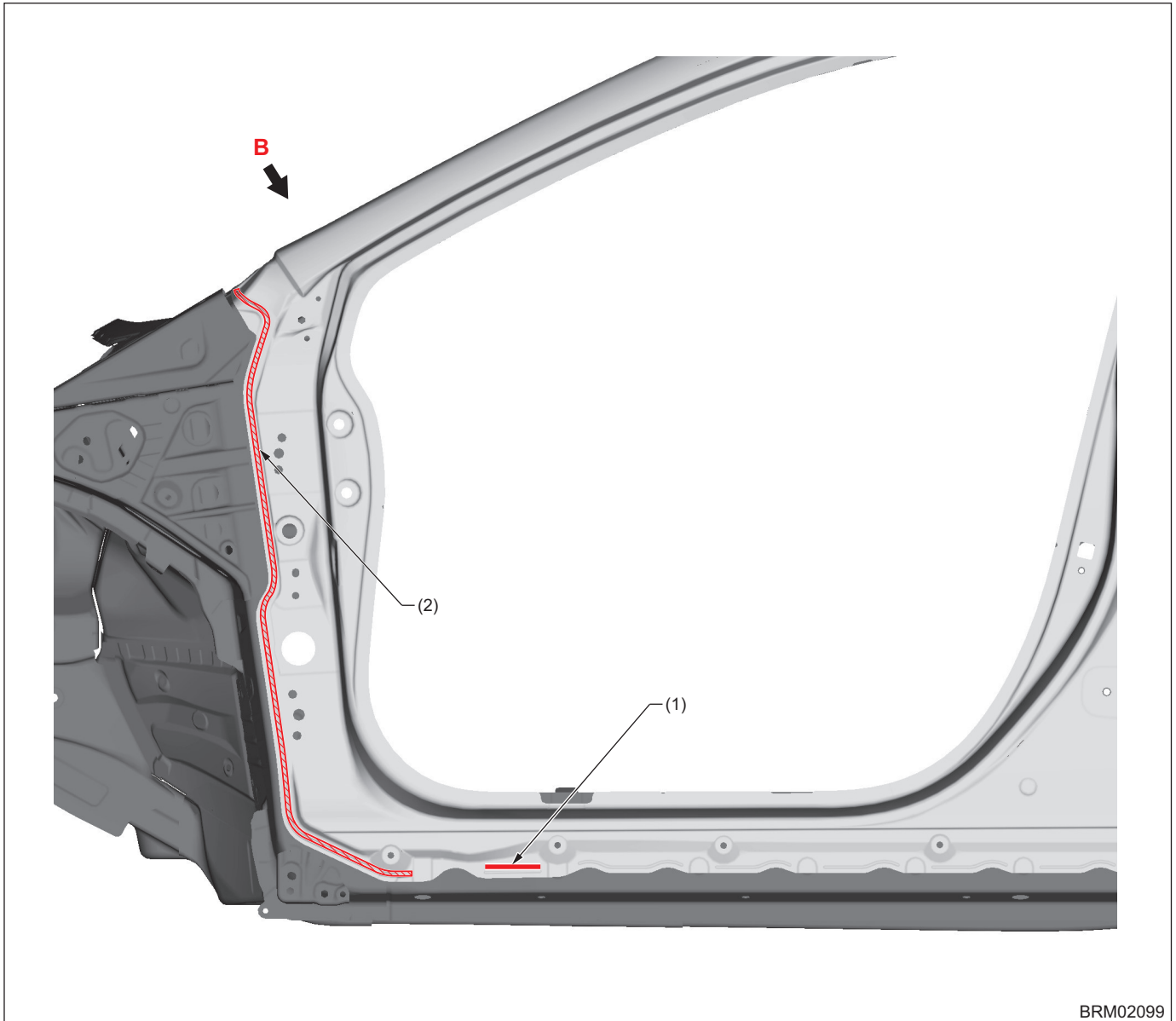
(2) 2 points

(3) 1 point (Continuous welding)

[j] Spot welding conditions (DC)	Compression: 3.5 kN, Current: 10.0 kA, Welding time: 31 cyc, Upslope time: 5 cyc
----------------------------------	--

Panel Replacement

• Overall view 2



(1) Structural adhesive

(2) Spotting sealer

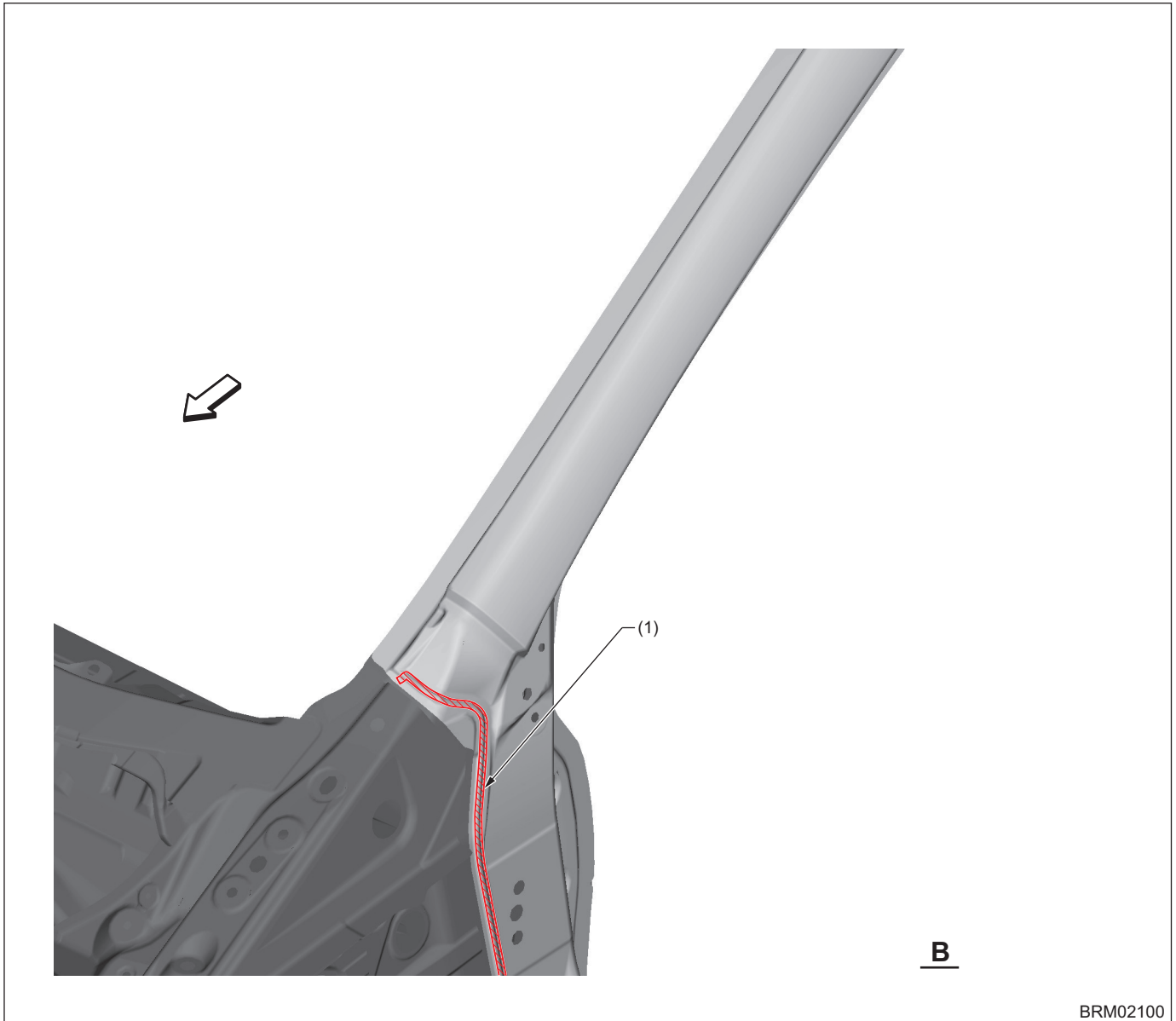
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

▨ : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

Note: Fill the space between the panels with spotting sealer.

Panel Replacement

• View B



BRM02100

(1) Spotting sealer

 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

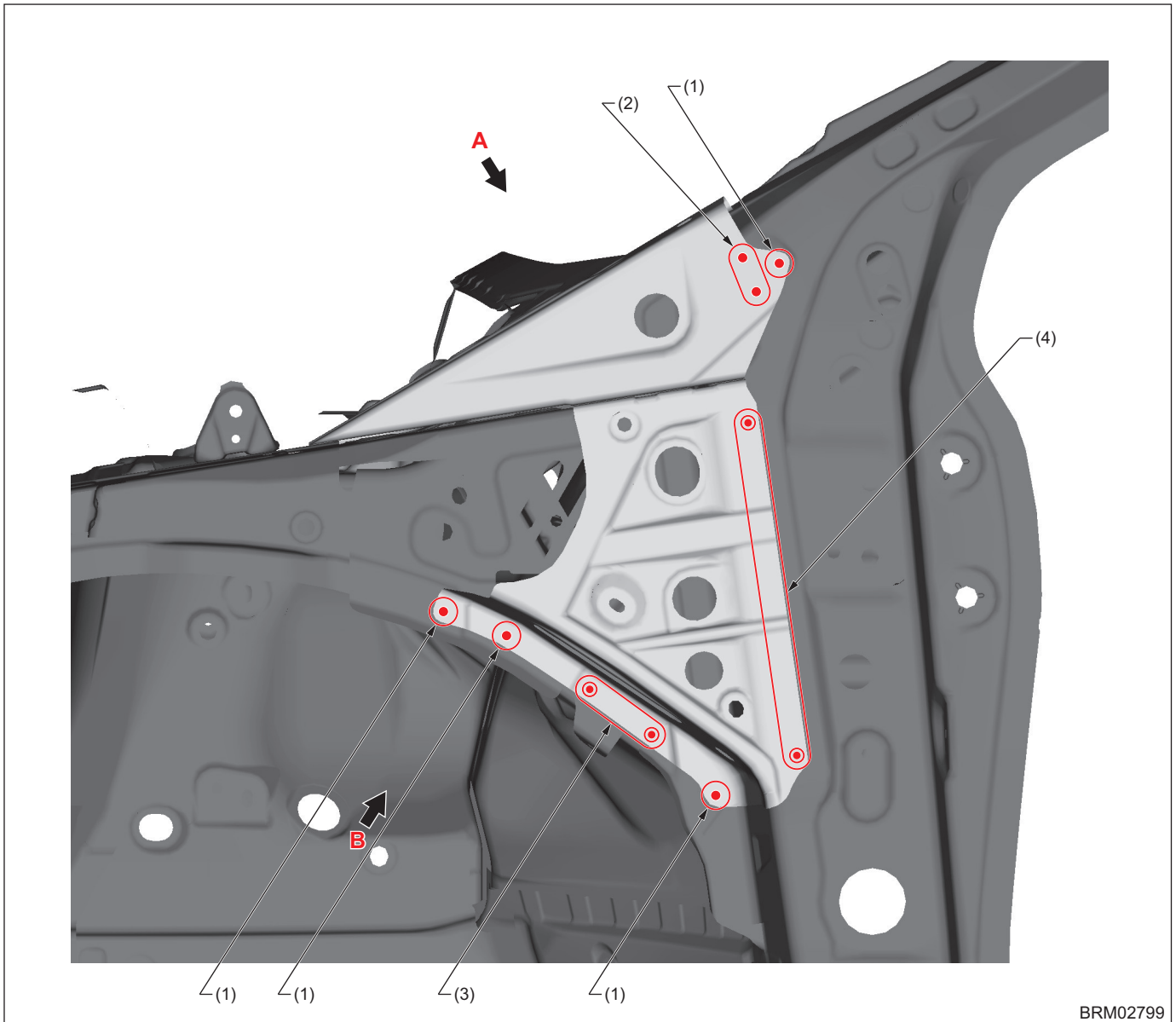
Note: Fill the space between the panels with spotting sealer.

Panel Replacement

9-11. Front Pillar Reinforcement (Total replacement)

A: REMOVAL

• Overall view 1



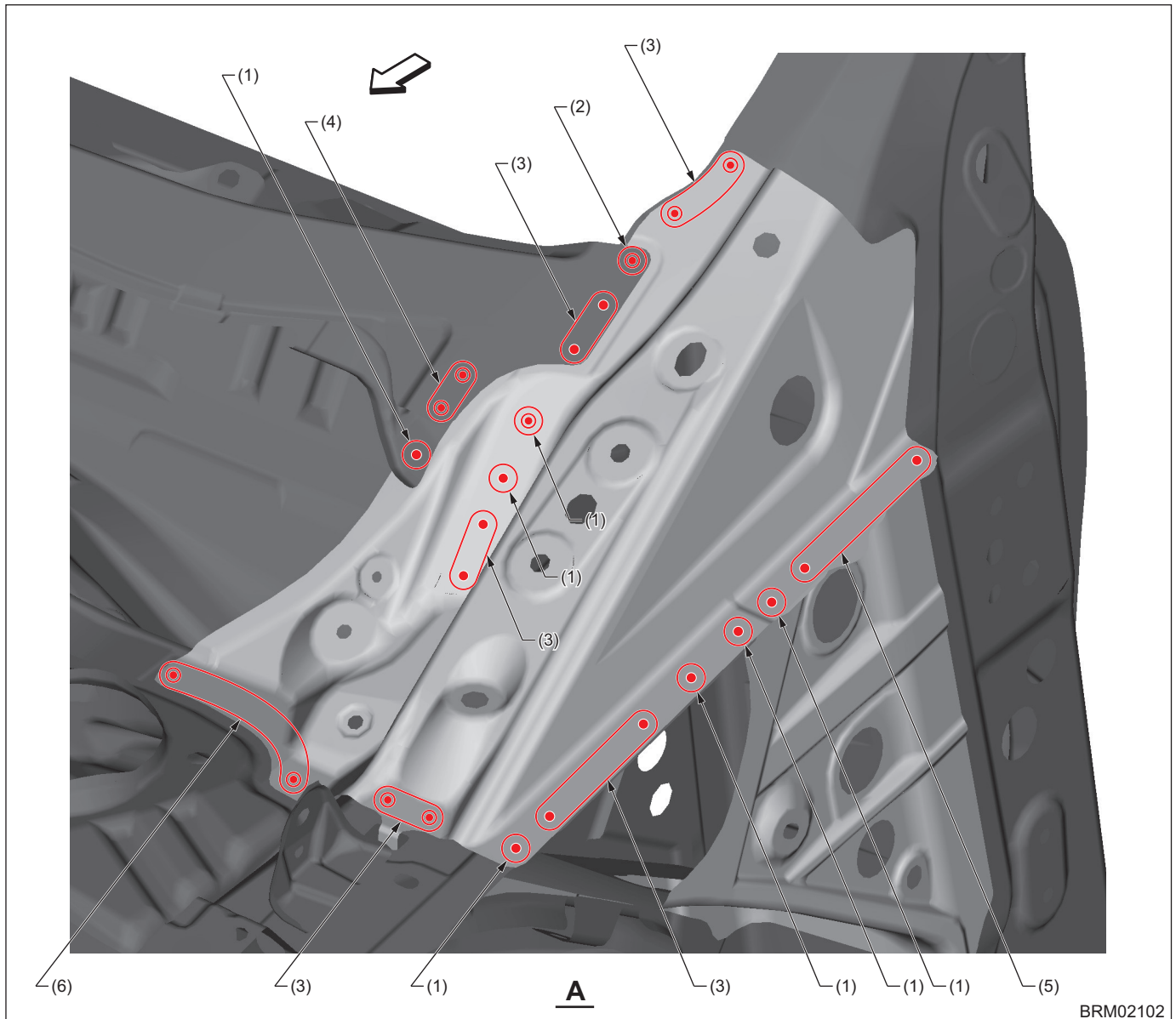
(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)

(4) 5 points (Outside · 1)

Panel Replacement

• View A



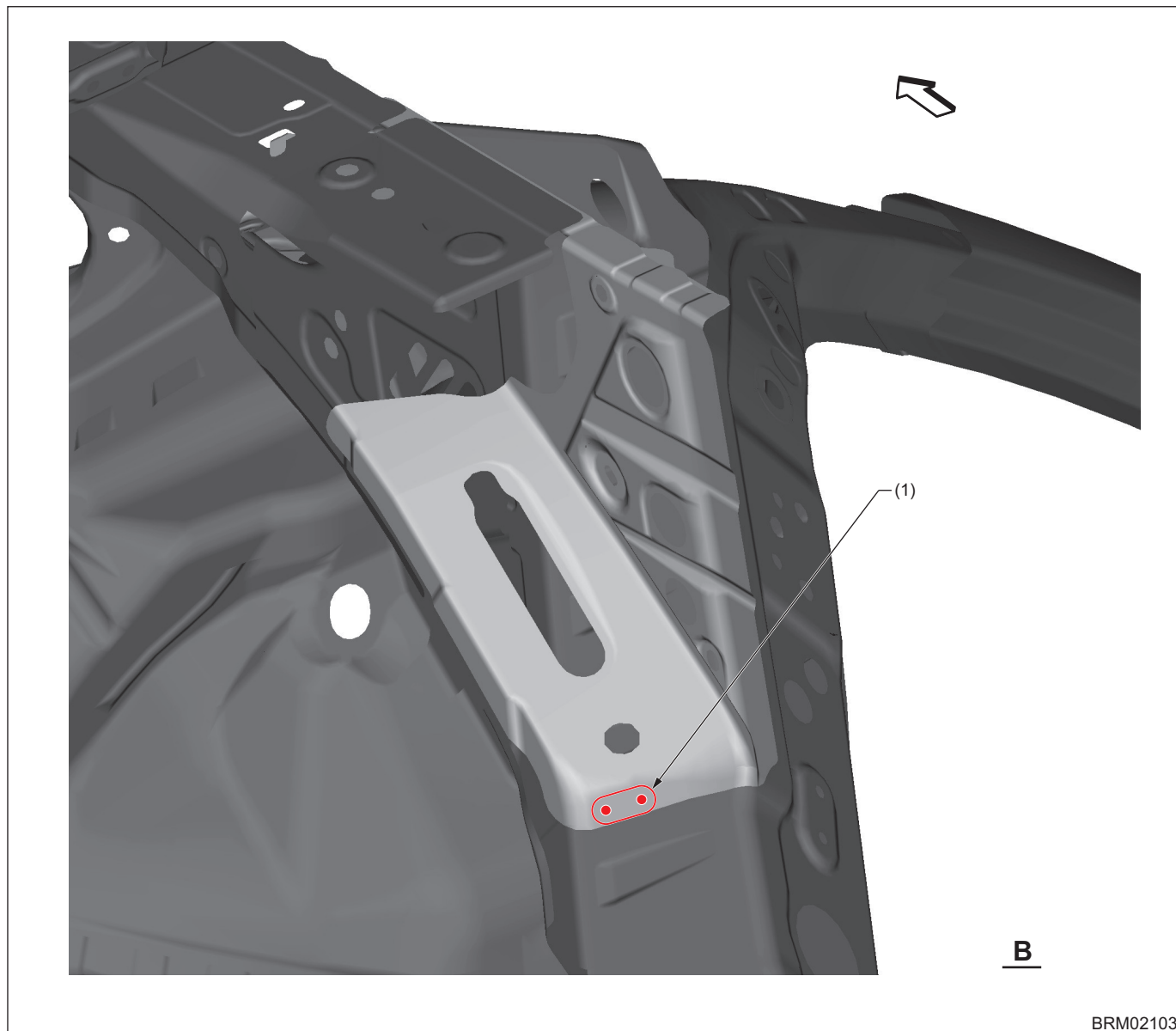
(1) 1 point (Top · 1)
(2) 1 point (Top · 2)

(3) 2 points (Top · 1)
(4) 2 points (Top · 2)

(5) 3 points (Top · 1)
(6) 4 points (Top · 1)

Panel Replacement

• View B

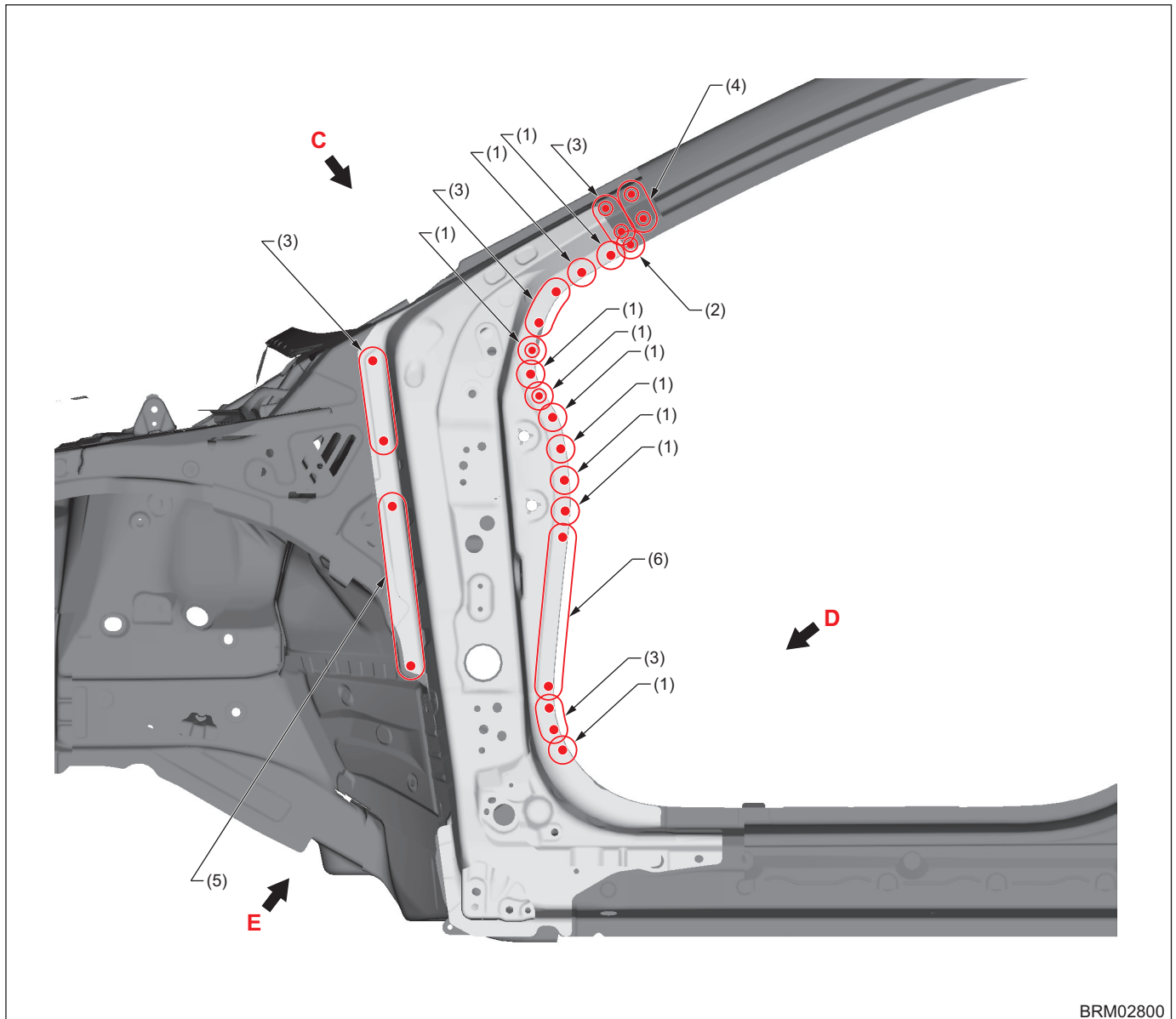


BRM02103

(1) 2 points (Outside · 1)

Panel Replacement

• Overall view 2



BRM02800

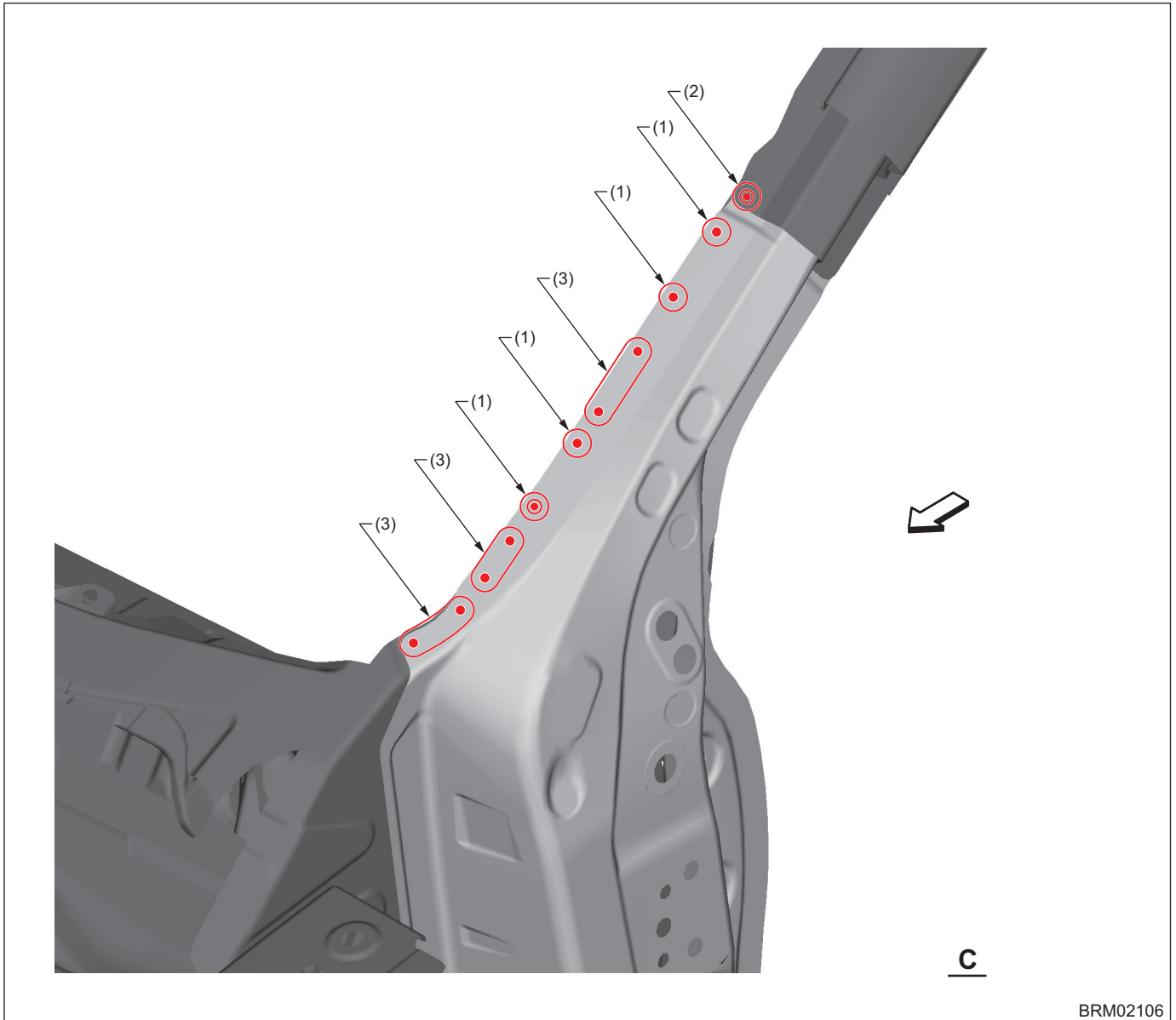
(1) 1 point (Outside · 1)
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)
(4) 2 points (Outside · 2)

(5) 4 points (Outside · 1)
(6) 8 points (Outside · 1)

Panel Replacement

• View C



BRM02106

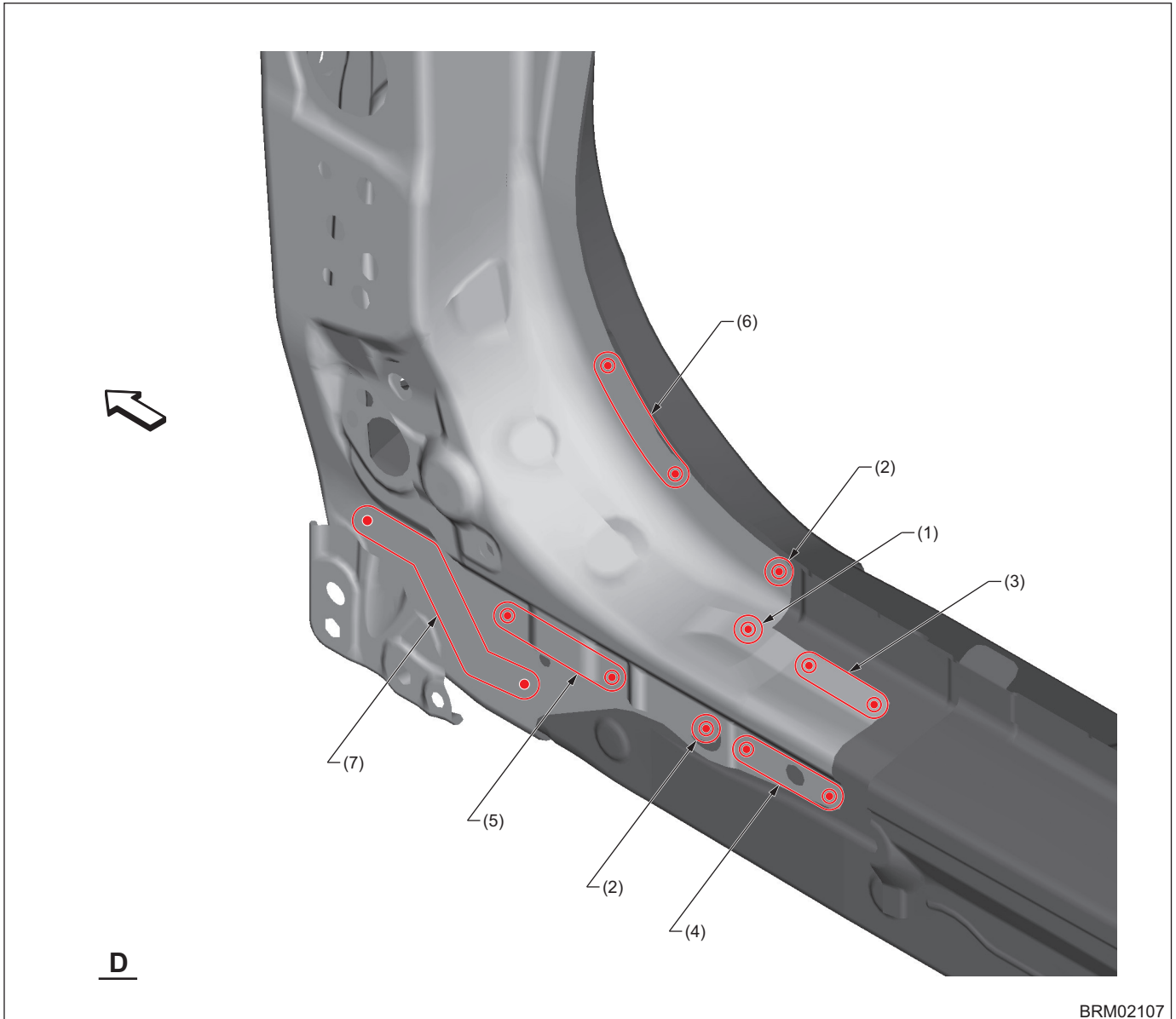
(1) 1 point (Top · 1)

(2) 1 point (Top · 2)

(3) 2 points (Top · 1)

Panel Replacement

• View D

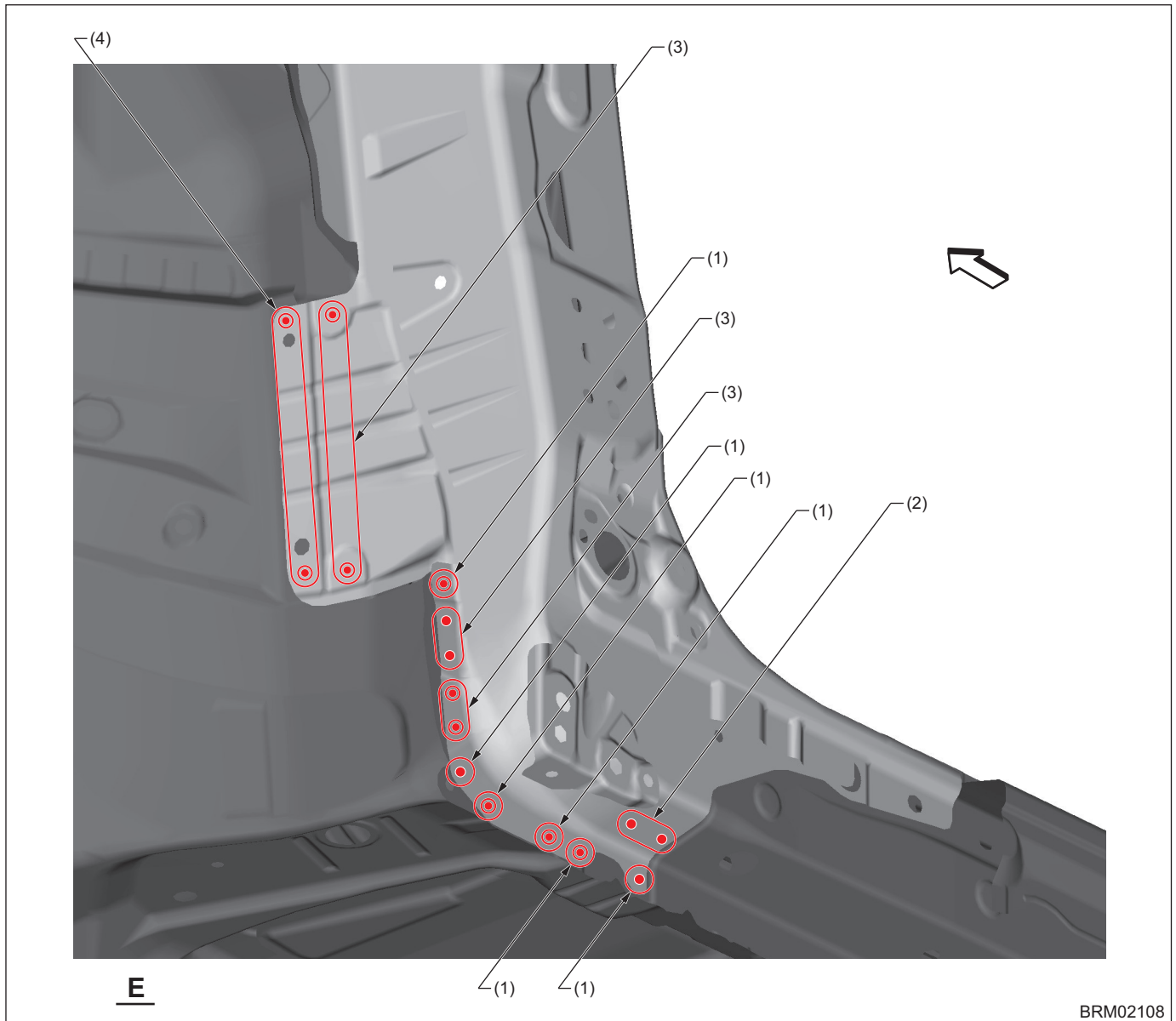


- (1) 1 point (Top · 2)
- (2) 1 point (Outside · 1)
- (3) 2 points (Top · 1)

- (4) 2 points (Outside · 1)
- (5) 2 points (Outside · 2)
- (6) 3 points (Outside · 1)

- (7) 4 points (Outside · 1)

- **View E**



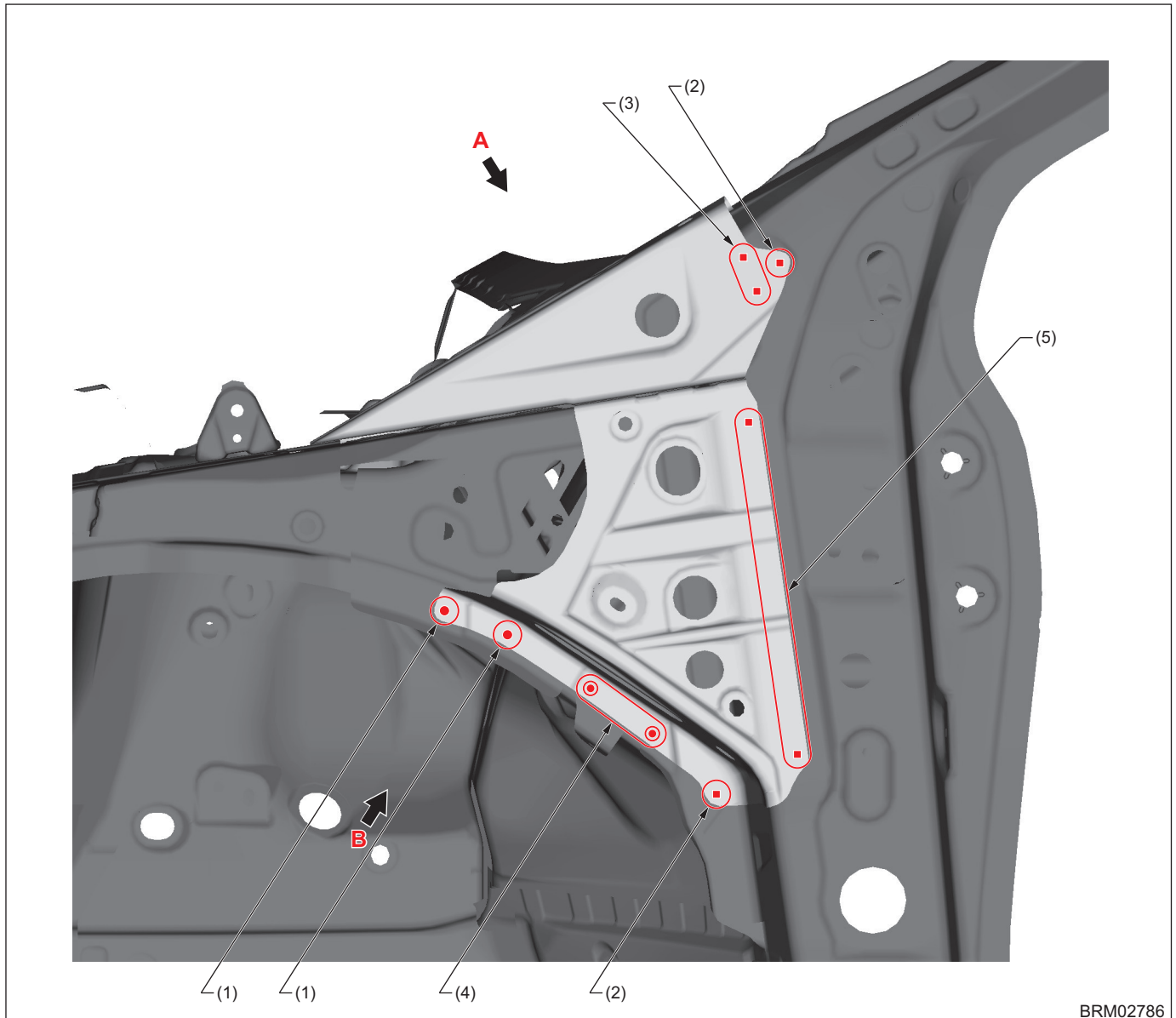
BRM02108

- (1) 1 point (Outside · 1) (3) 2 points (Outside · 1) (4) 6 points (Outside · 1)
- (2) 2 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BRM02786

(1) 1 point

(2) 1 point (Service part)

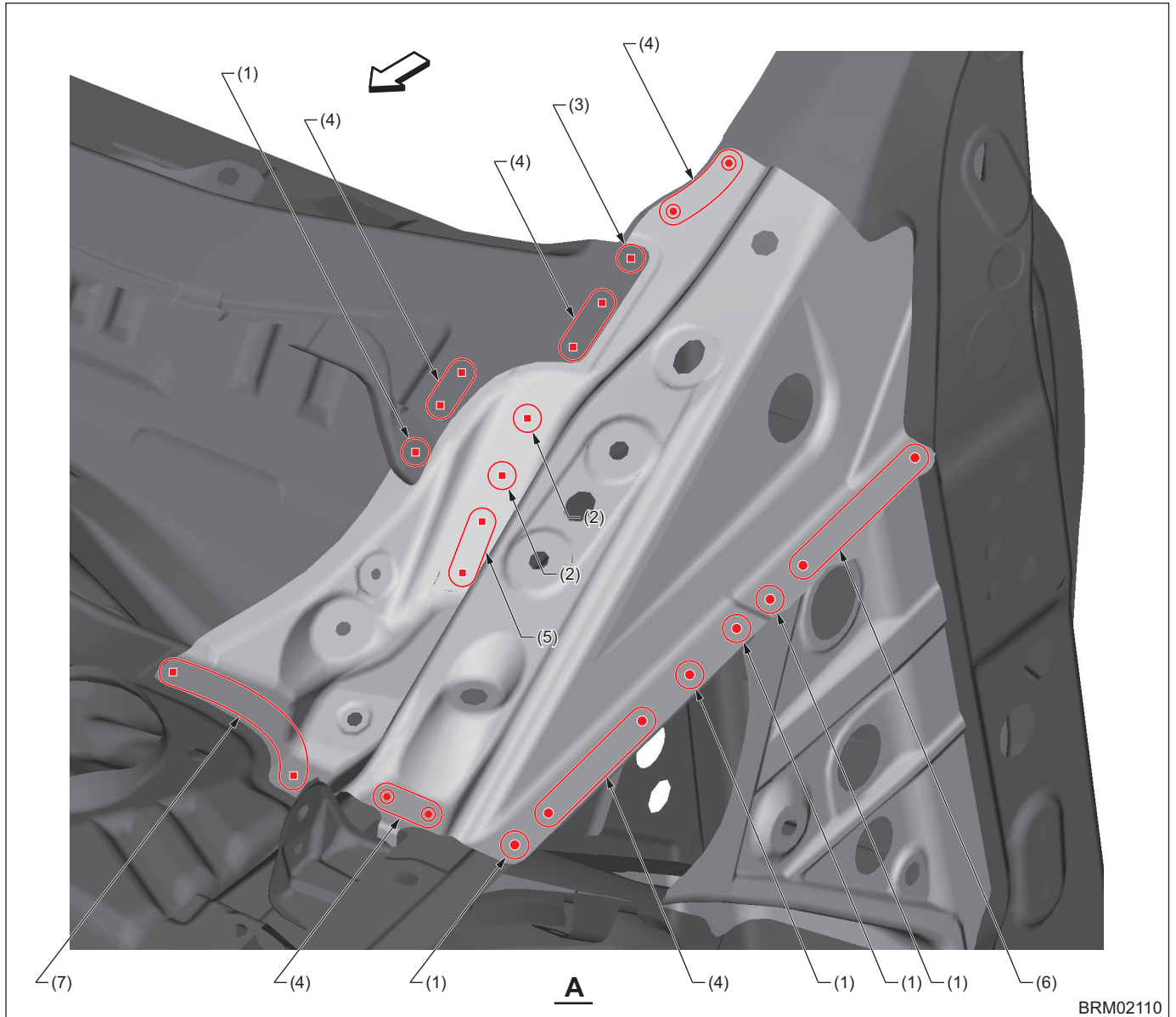
(3) 2 points (Service part)

(4) 3 points

(5) 5 points (Service part)

Panel Replacement

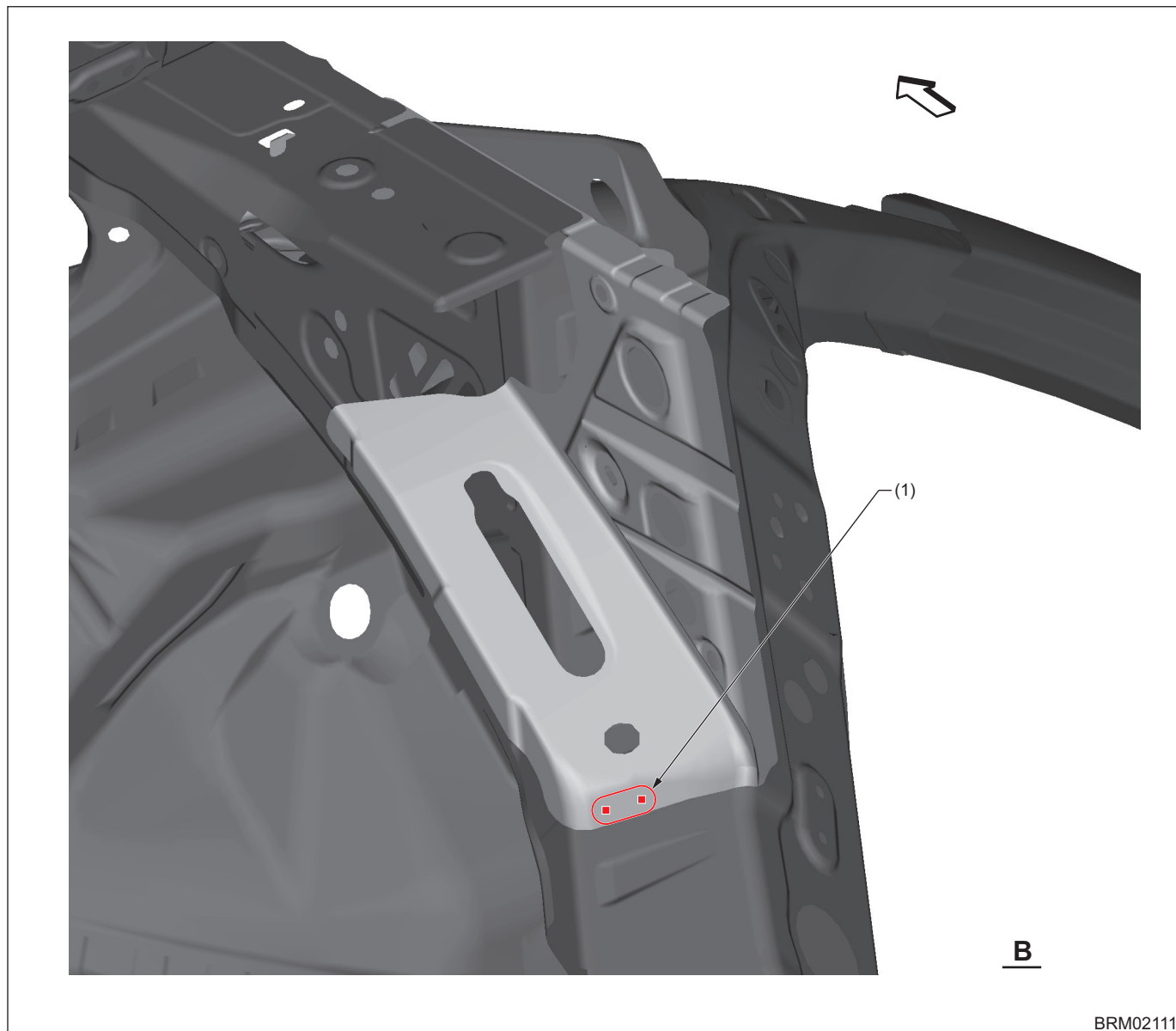
• View A



- | | | |
|---------------------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (4) 2 points | (7) 4 points (Service part) |
| (2) 1 point (Service part) | (5) 2 points (Service part) | |
| (3) 1 point (Service part · matching) | (6) 3 points | |

Panel Replacement

• View B

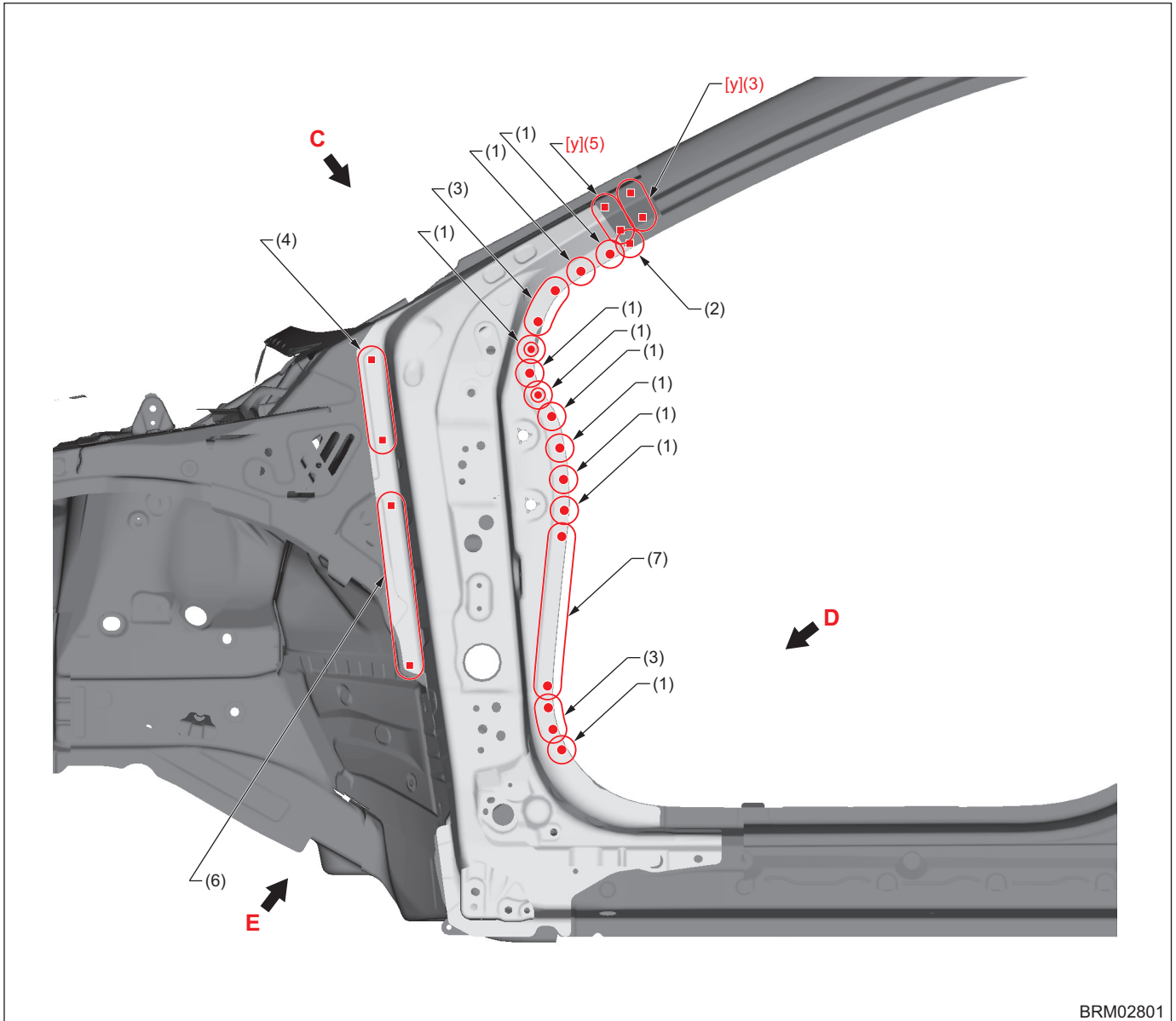


BRM02111

(1) 2 points (Service part)

Panel Replacement

• Overall view 2

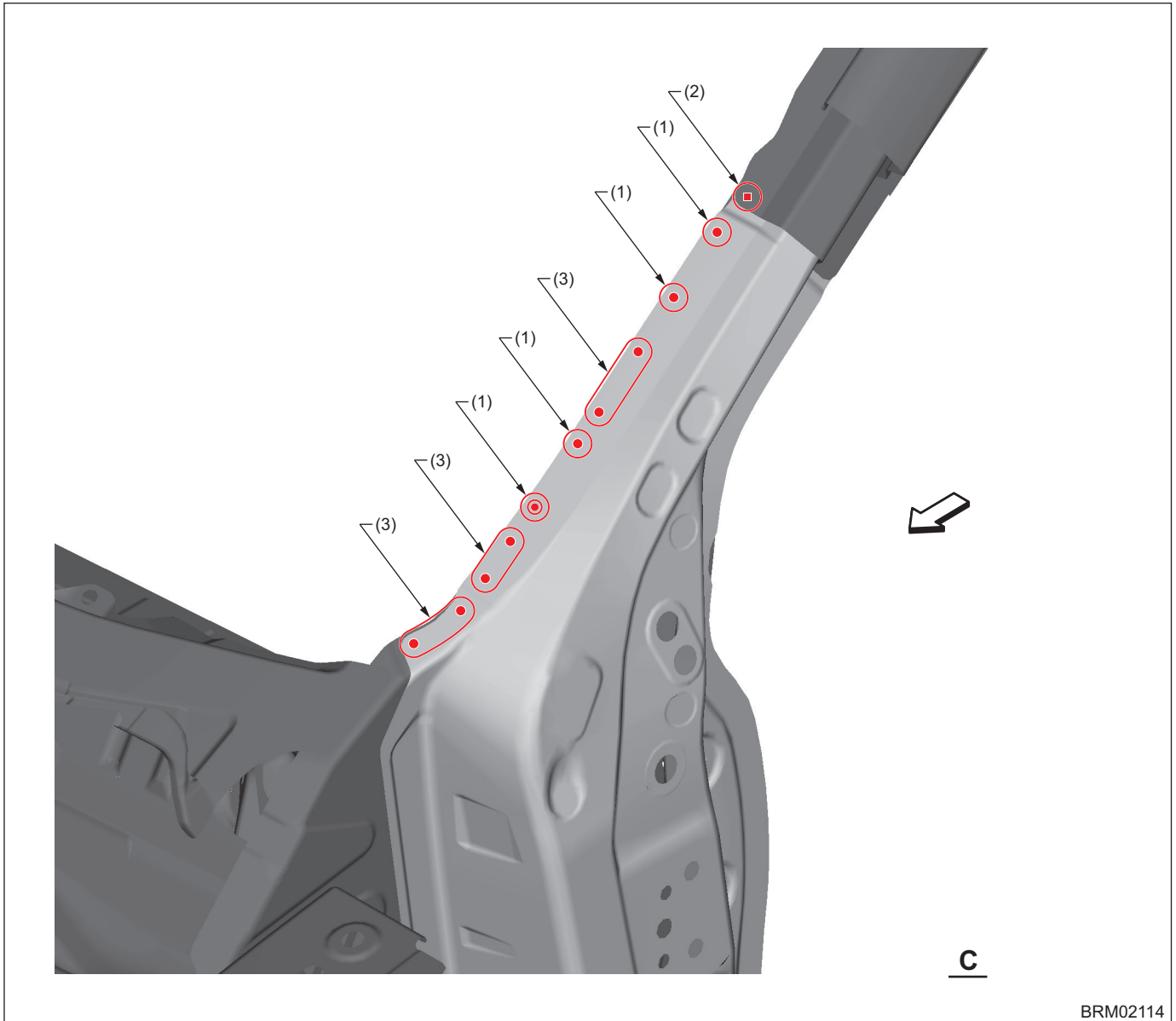


- | | | |
|---------------------------------------|--|--------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 8 points |
| (2) 1 point (Service part · matching) | (5) 2 points (Service part · matching) | |
| (3) 2 points | (6) 4 points (Service part) | |

[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)
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Panel Replacement

• View C



BRM02114

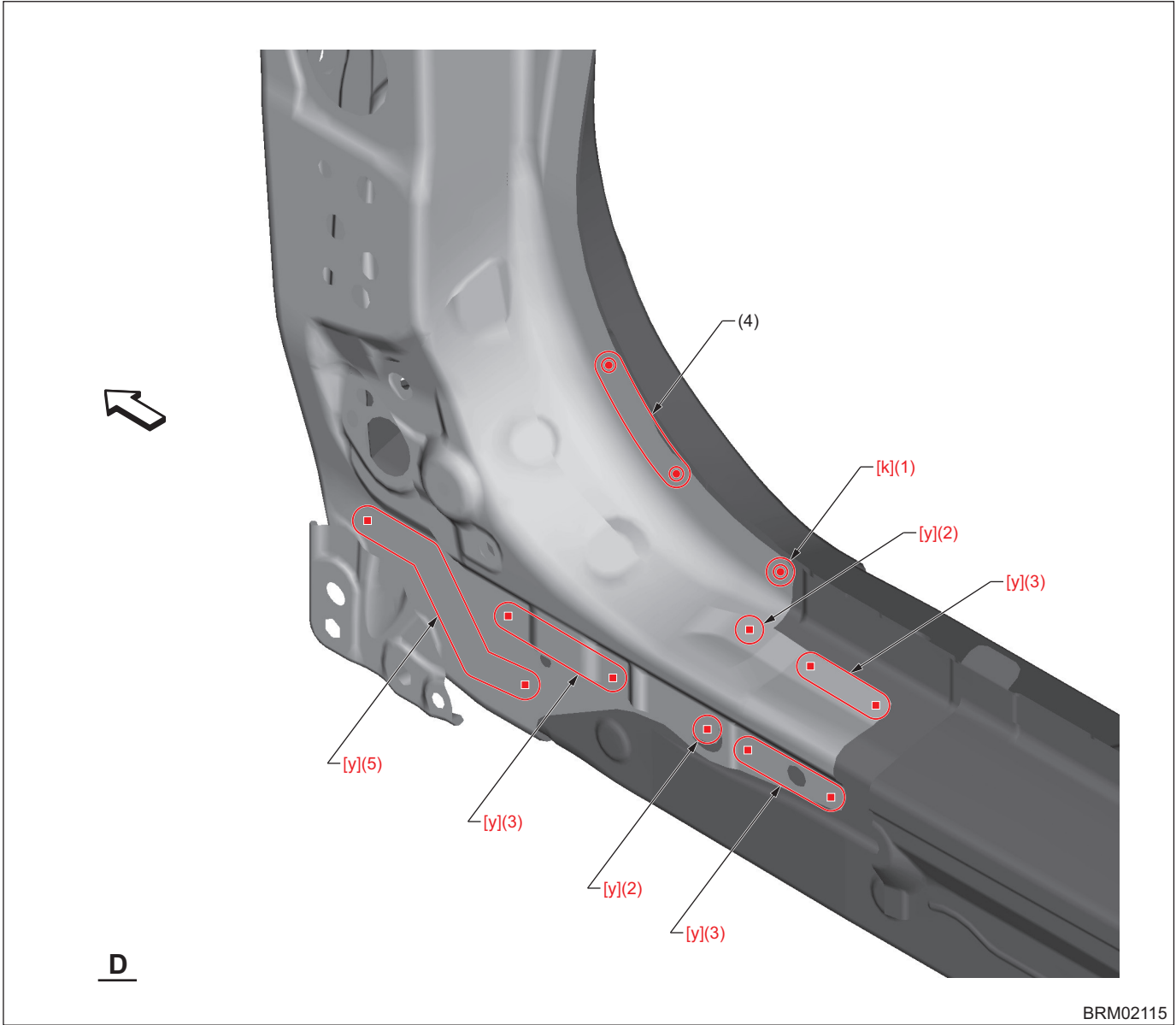
(1) 1 point

(2) 1 point (Service part · matching)

(3) 2 points

Panel Replacement

• View D



- (1) 1 point

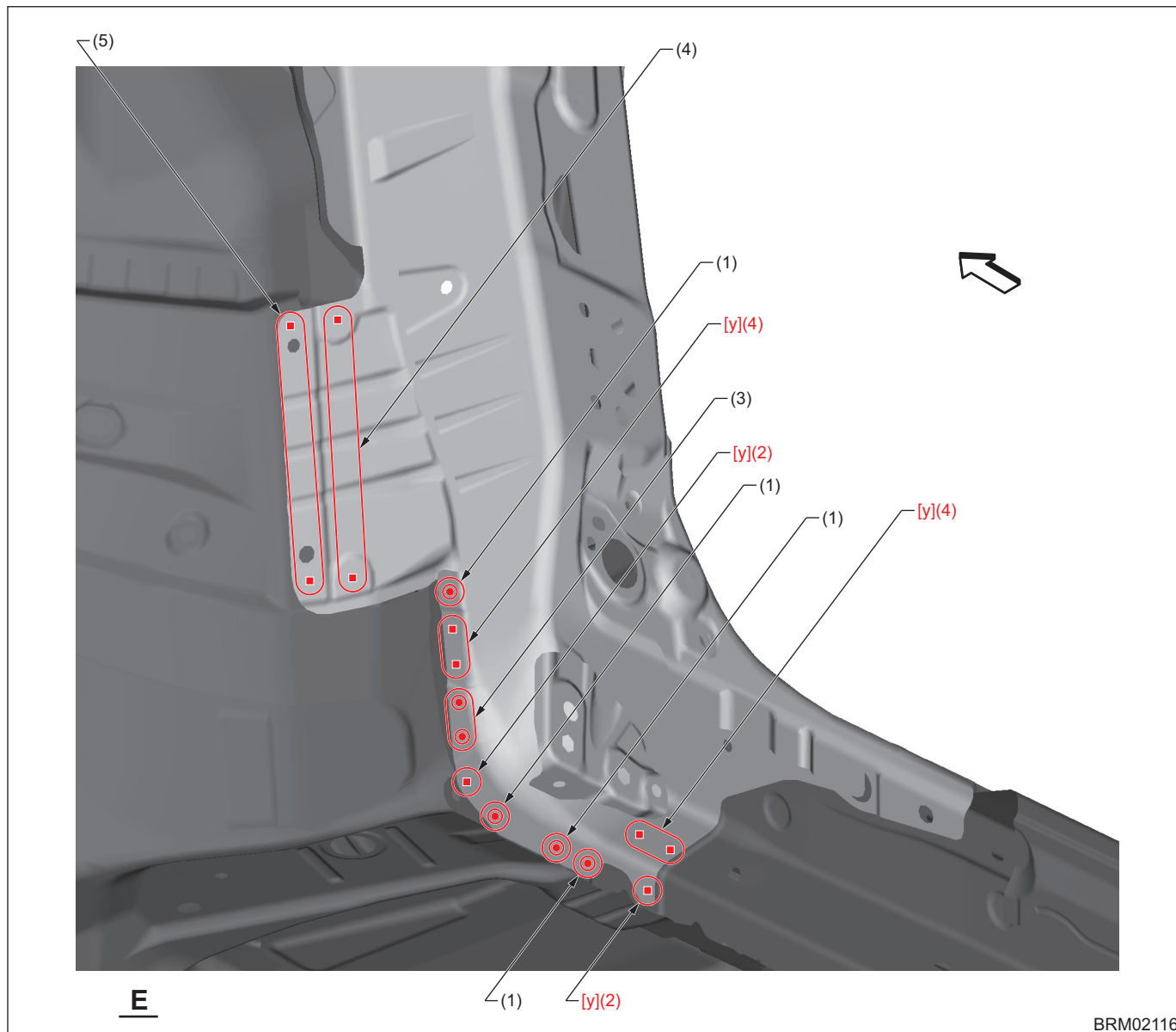
(2) 1 point (Service part)
- (3) 2 points (Service part)

(4) 3 points
- (5) 4 points (Service part)

[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View E



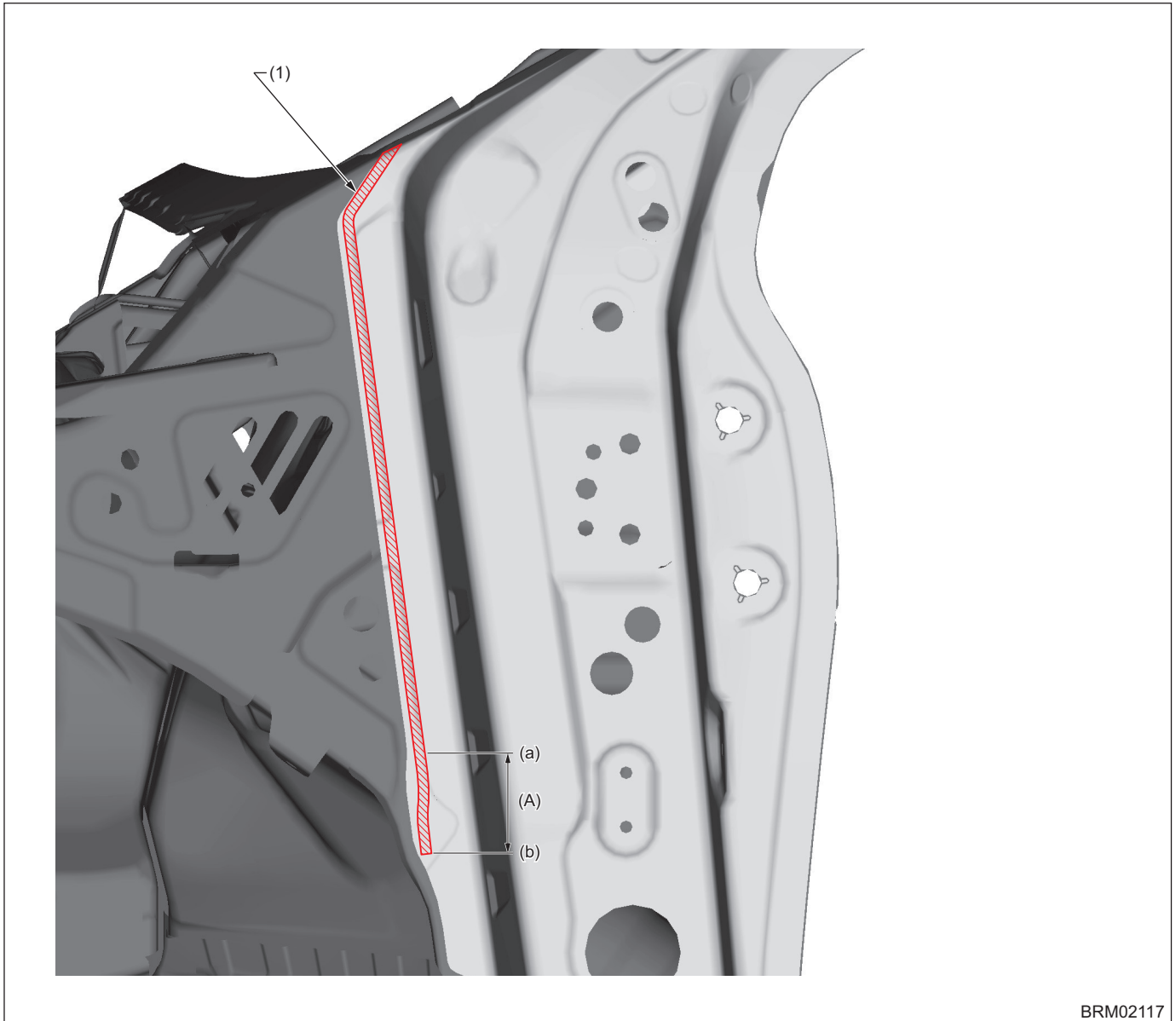
BRM02116

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (3) 2 points | (5) 6 points (Service part) |
| (2) 1 point (Service part) | (4) 2 points (Service part) | |

[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)
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Panel Replacement

• Overall view 3



(A) 55 mm [2.17 in]

(a) A point

(b) B point

(1) Spotting sealer

 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

Note:

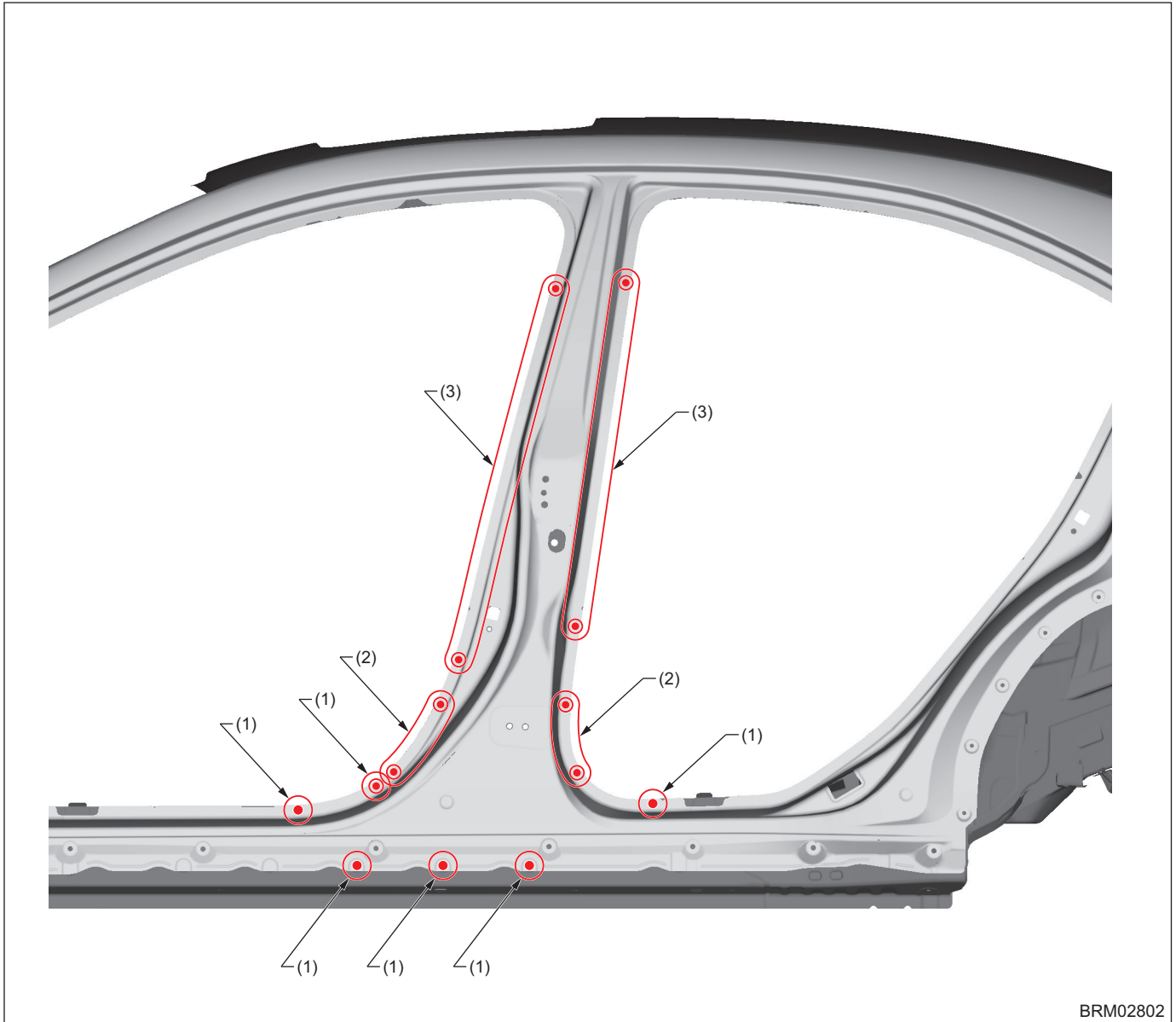
- Fill the space between the panels with spotting sealer.
- Check for stray sealer in between (a) and (b).

Panel Replacement

9-12. Center Pillar Outer Panel (Partial replacement)

A: REMOVAL

• Overall view 1



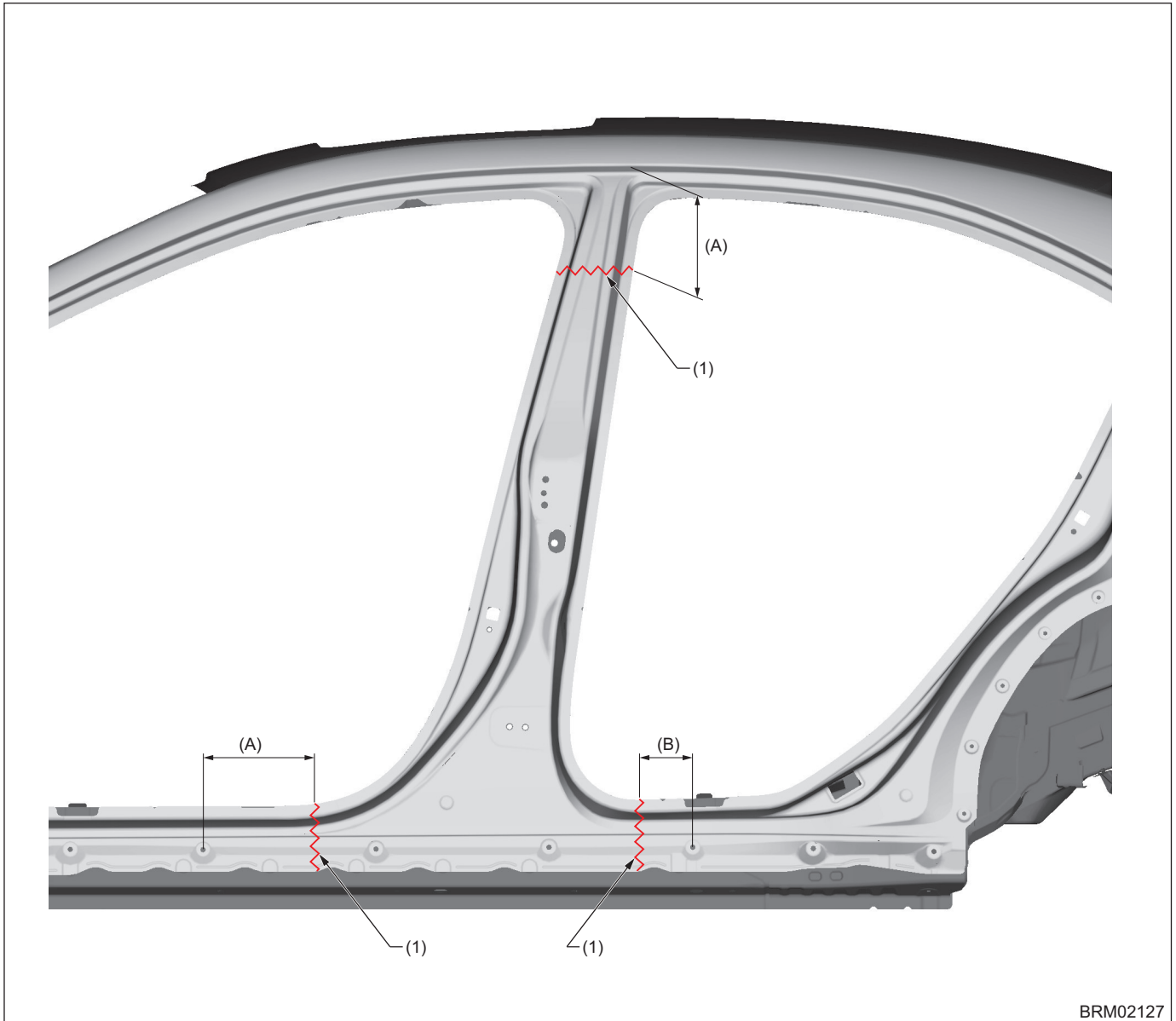
(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 7 points (Outside · 1)

Panel Replacement

- Overall view 2



(A) 180 mm [7.09 in]

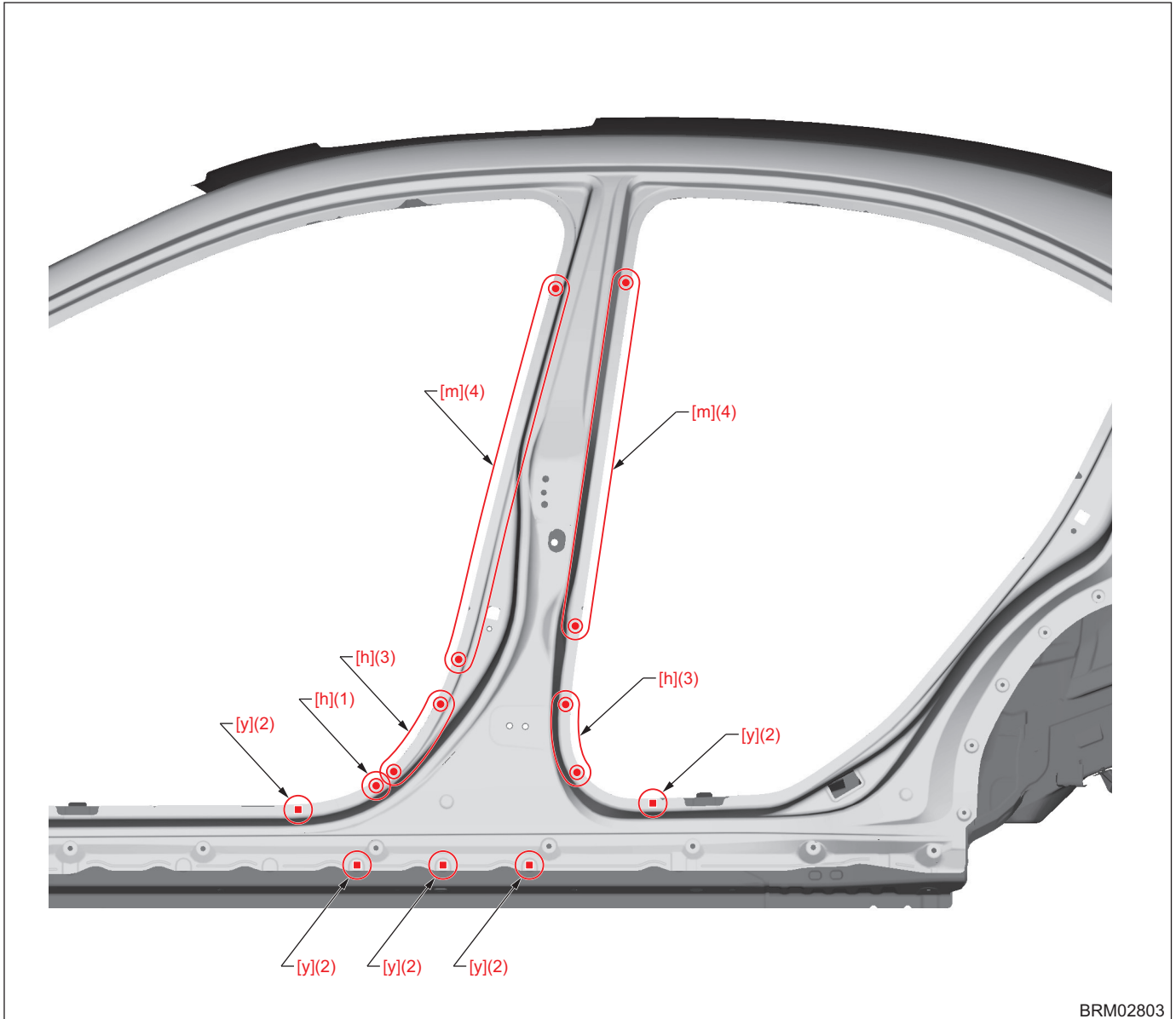
(B) 85 mm [3.35 in]

(1) Cut position

Panel Replacement

B: INSTALLATION

• Overall view 1



(1) 1 point

(2) 1 point (Service part)

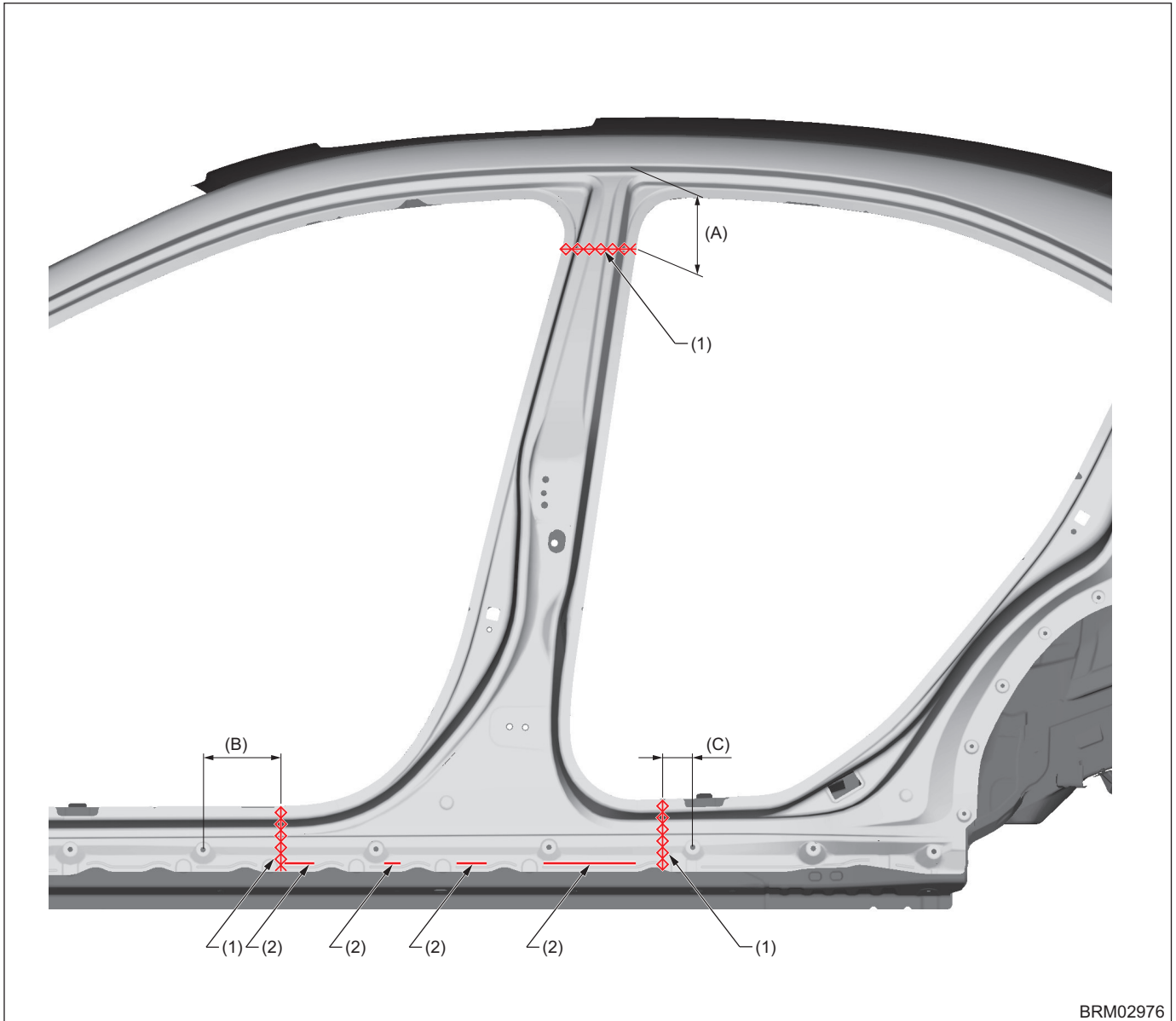
(3) 2 points

(4) 7 points

[h] Spot welding conditions (DC)	Compression: 3.0 kN, Current: 7.5 kA, Welding time: 20 cyc, Upslope time: 5 cyc
[m] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• Overall view 2



(A) 140 mm [5.51 in]

(B) 130 mm [5.12 in]

(C) 50 mm [1.97 in]

(1) 1 point (Continuous welding)

(2) Structural adhesive

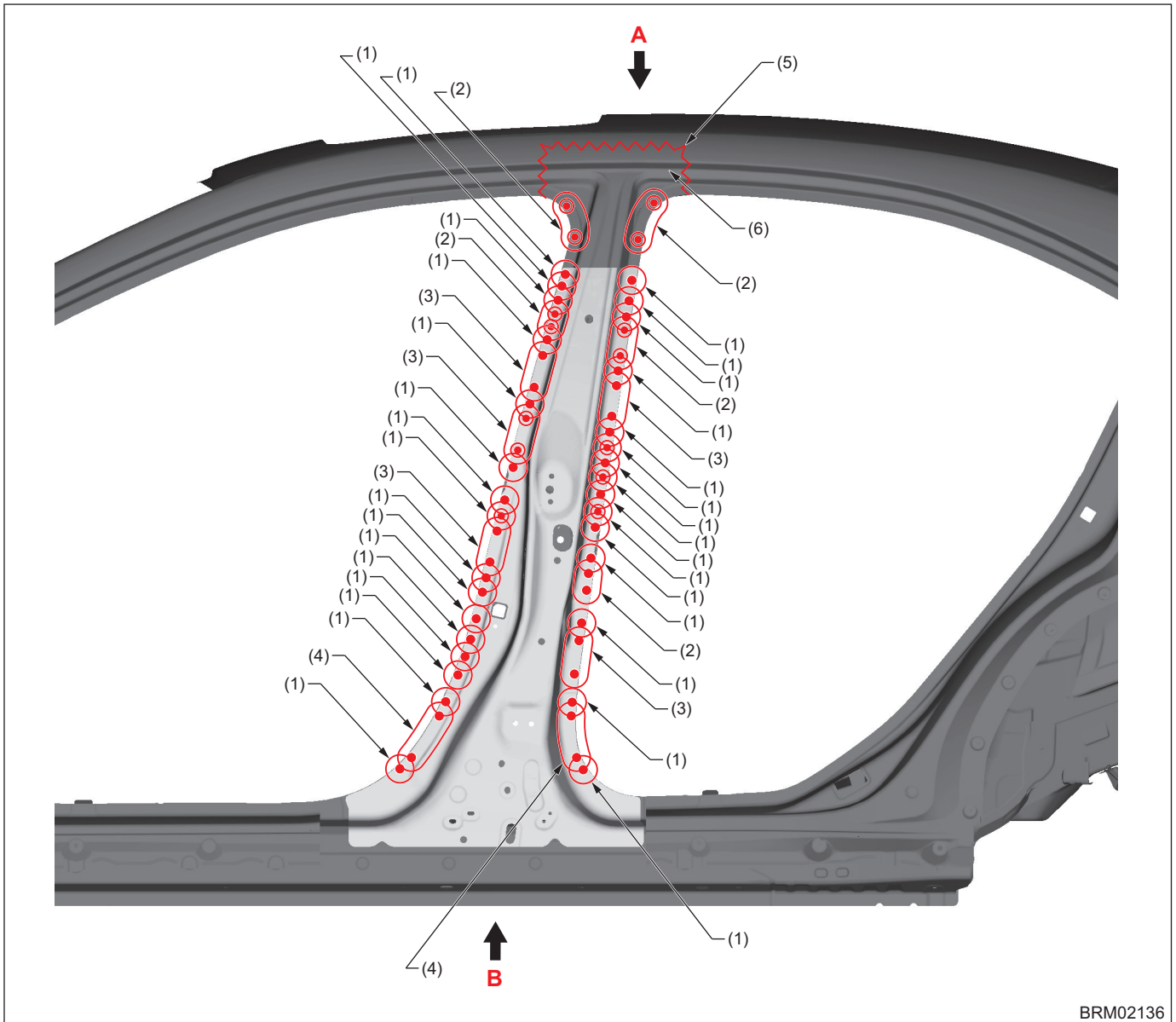
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-13. Center Pillar Reinforcement Outer (Partial replacement)

A: REMOVAL

• Overall view



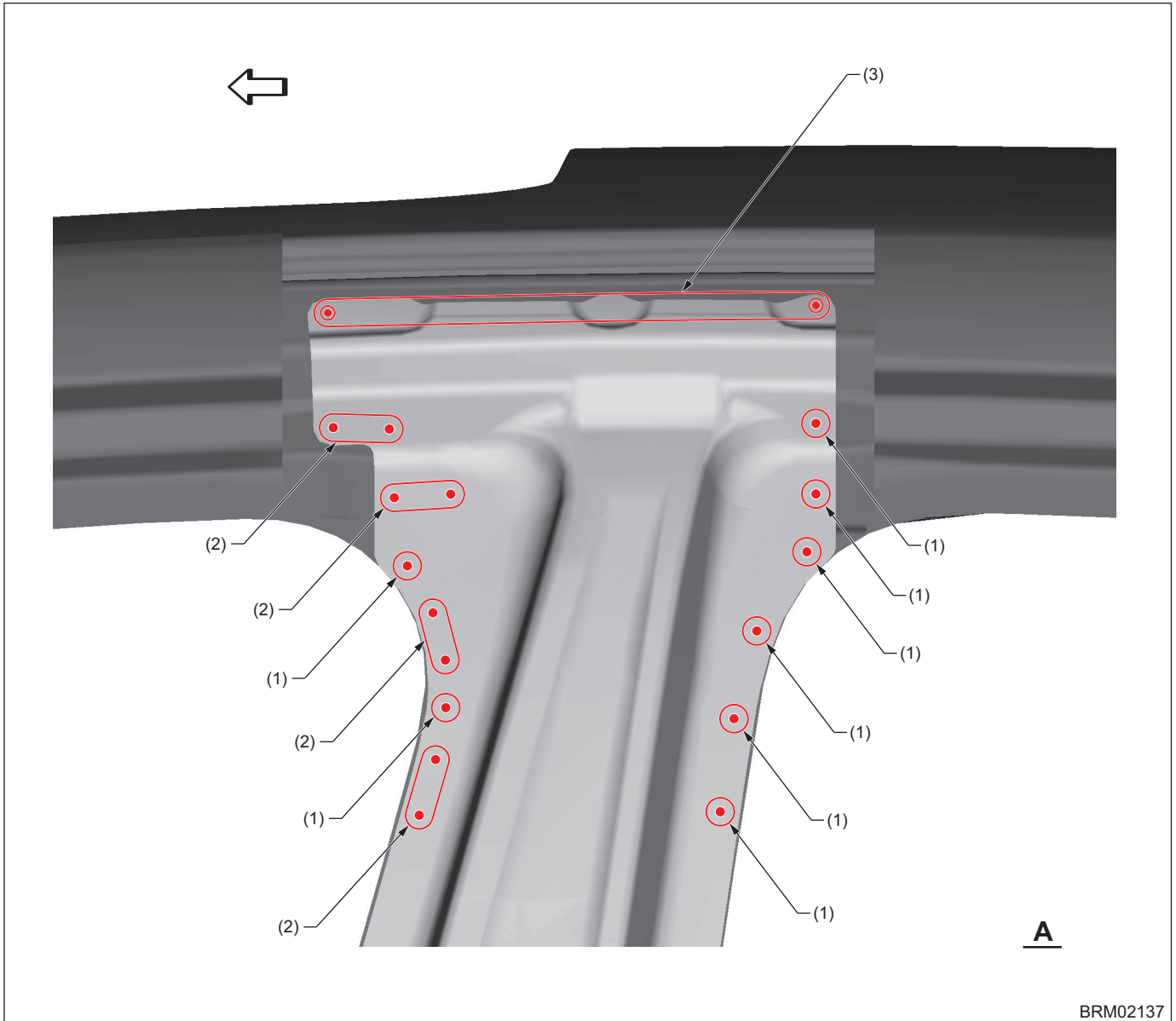
(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)
(4) 4 points (Outside · 1)

(5) Rough cutting
(6) The part that can be reused.

Panel Replacement

• View A



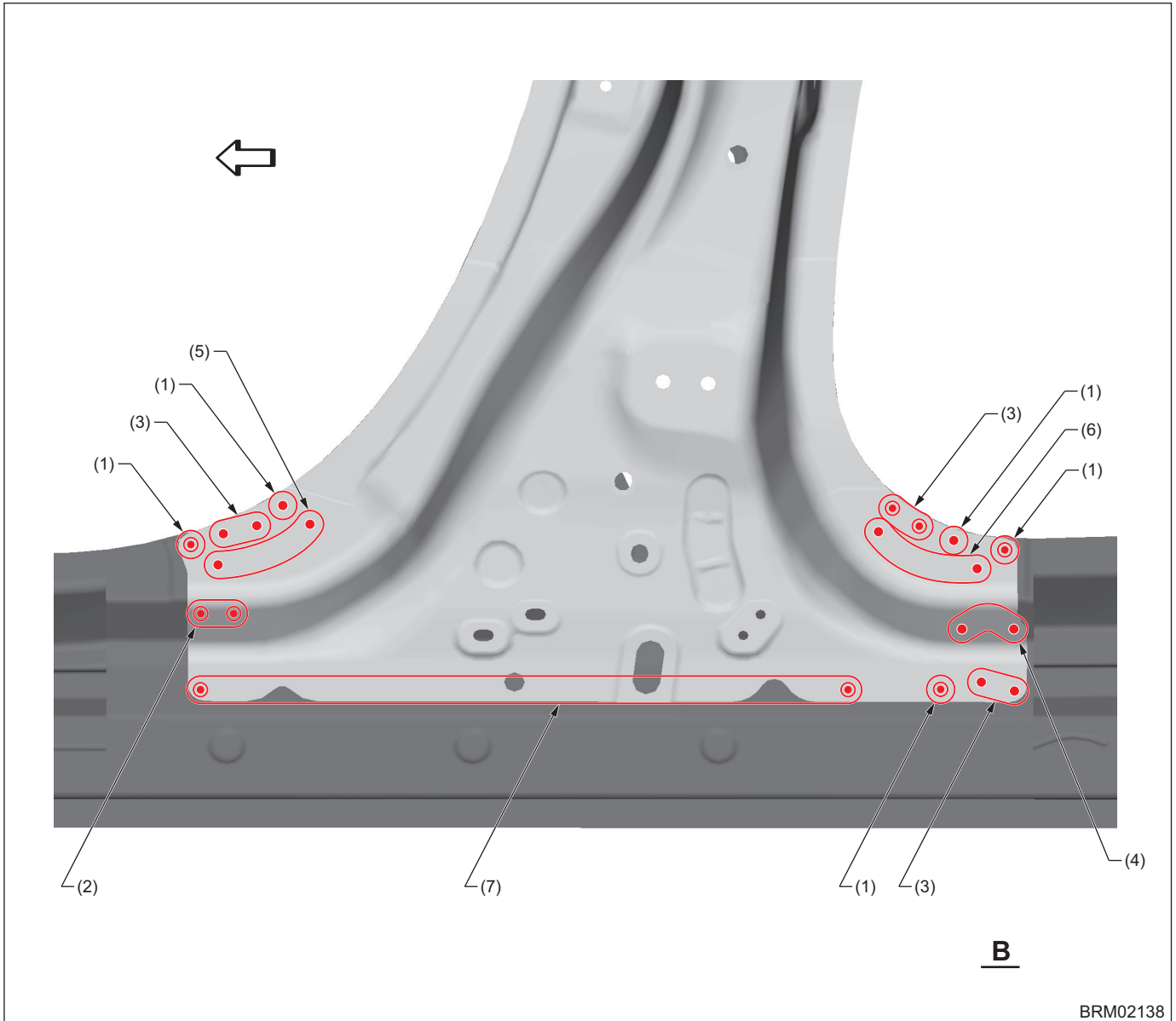
(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 4 points (Outside · 1)

Panel Replacement

• View B



- (1) 1 point (Outside · 1)
- (2) 2 points (Top · 1)
- (3) 2 points (Outside · 1)

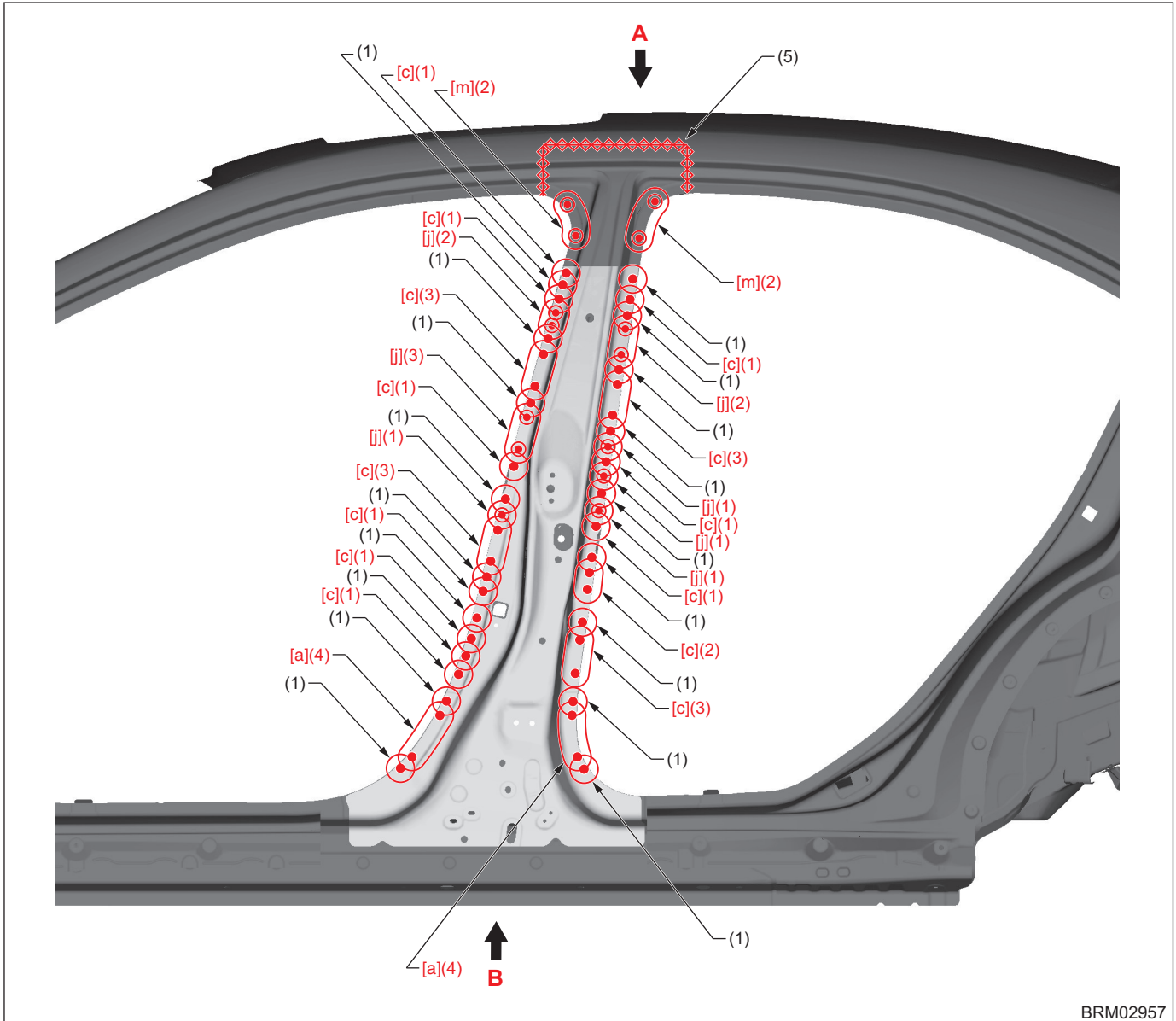
- (4) 3 points (Top · 1)
- (5) 4 points (Outside · 1)
- (6) 5 points (Outside · 1)

- (7) 10 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02957

(1) 1 point
(2) 2 points

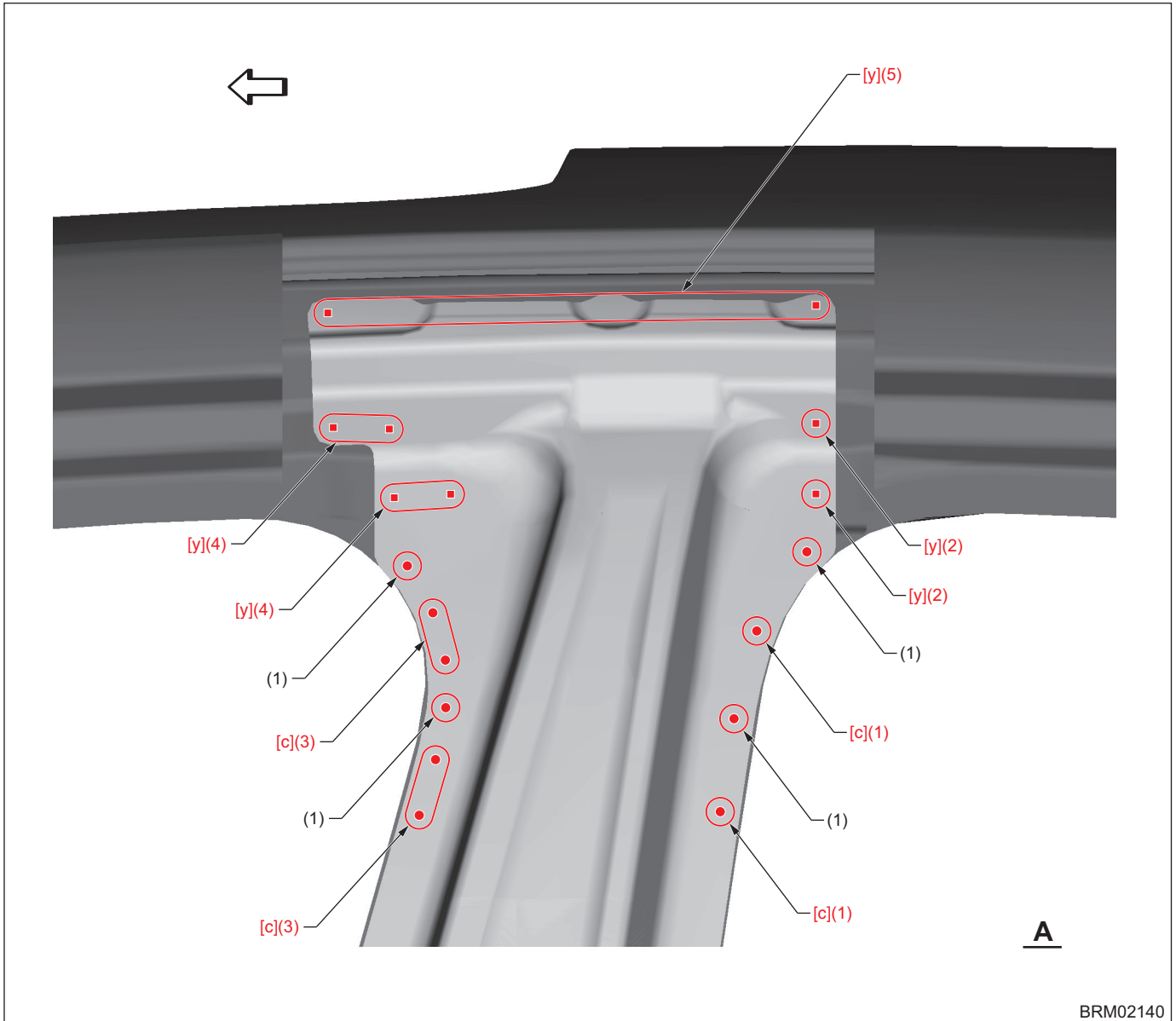
(3) 3 points
(4) 4 points

(5) 1 point (Continuous welding)

[a] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc
[c] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[j] Spot welding conditions (DC)	Compression: 3.5 kN, Current: 10.0 kA, Welding time: 31 cyc, Upslope time: 5 cyc
[m] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 22 cyc

Panel Replacement

• View A

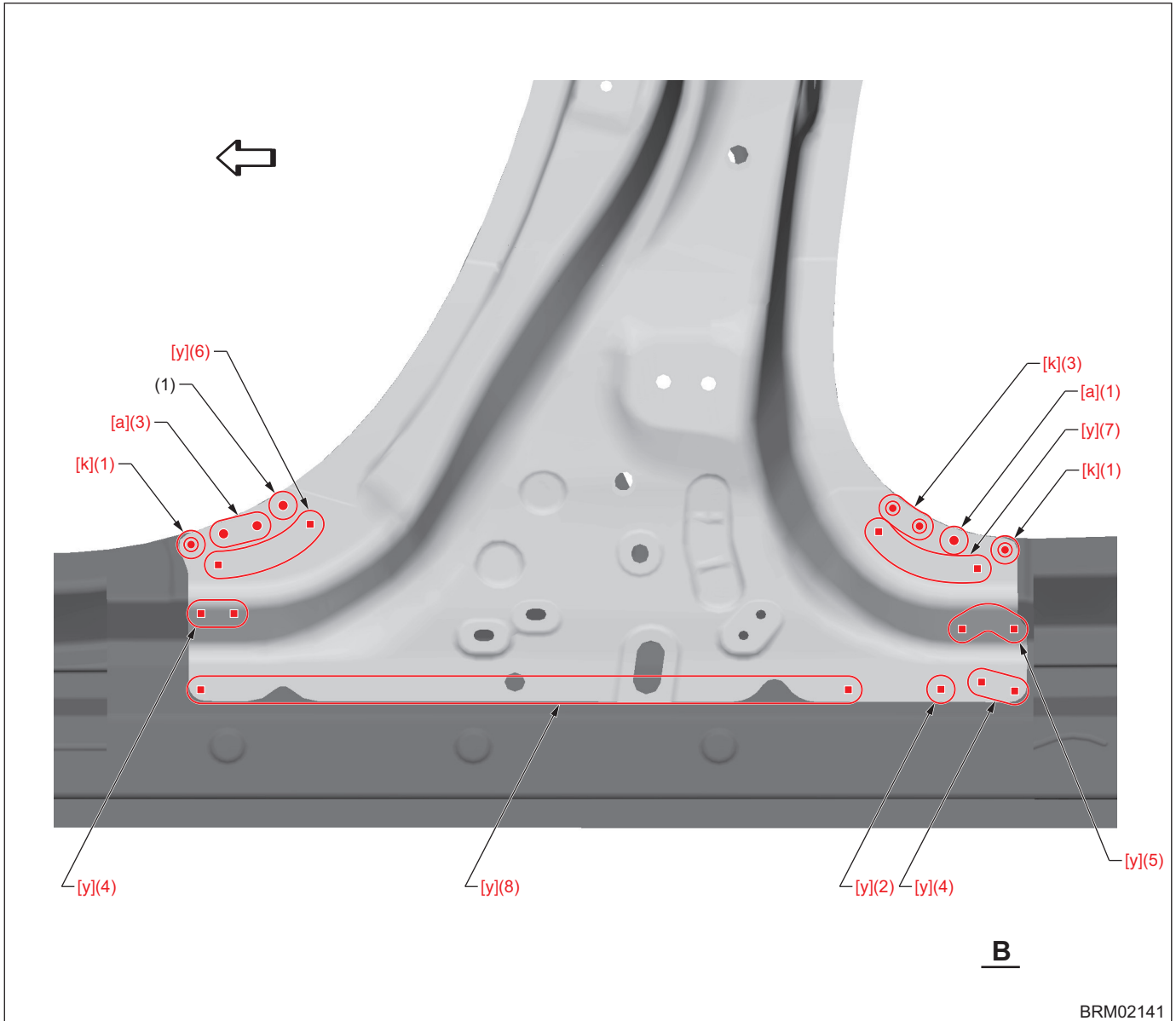


- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (3) 2 points | (5) 4 points (Service part) |
| (2) 1 point (Service part) | (4) 2 points (Service part) | |

[c] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View B



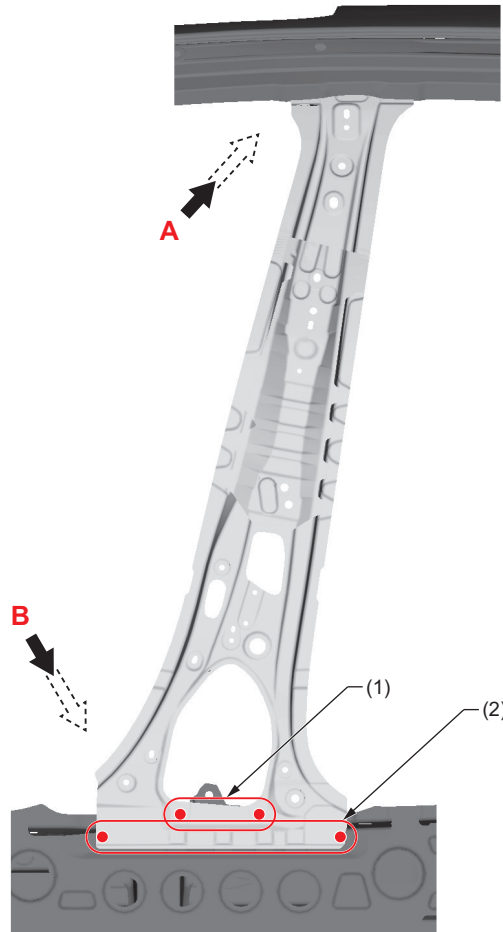
- | | | |
|----------------------------|-----------------------------|------------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 5 points (Service part) |
| (2) 1 point (Service part) | (5) 3 points (Service part) | (8) 10 points (Service part) |
| (3) 2 points | (6) 4 points (Service part) | |

[a] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc
[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

9-14. Center Pillar Inner (Total replacement)

A: REMOVAL

- Overall view



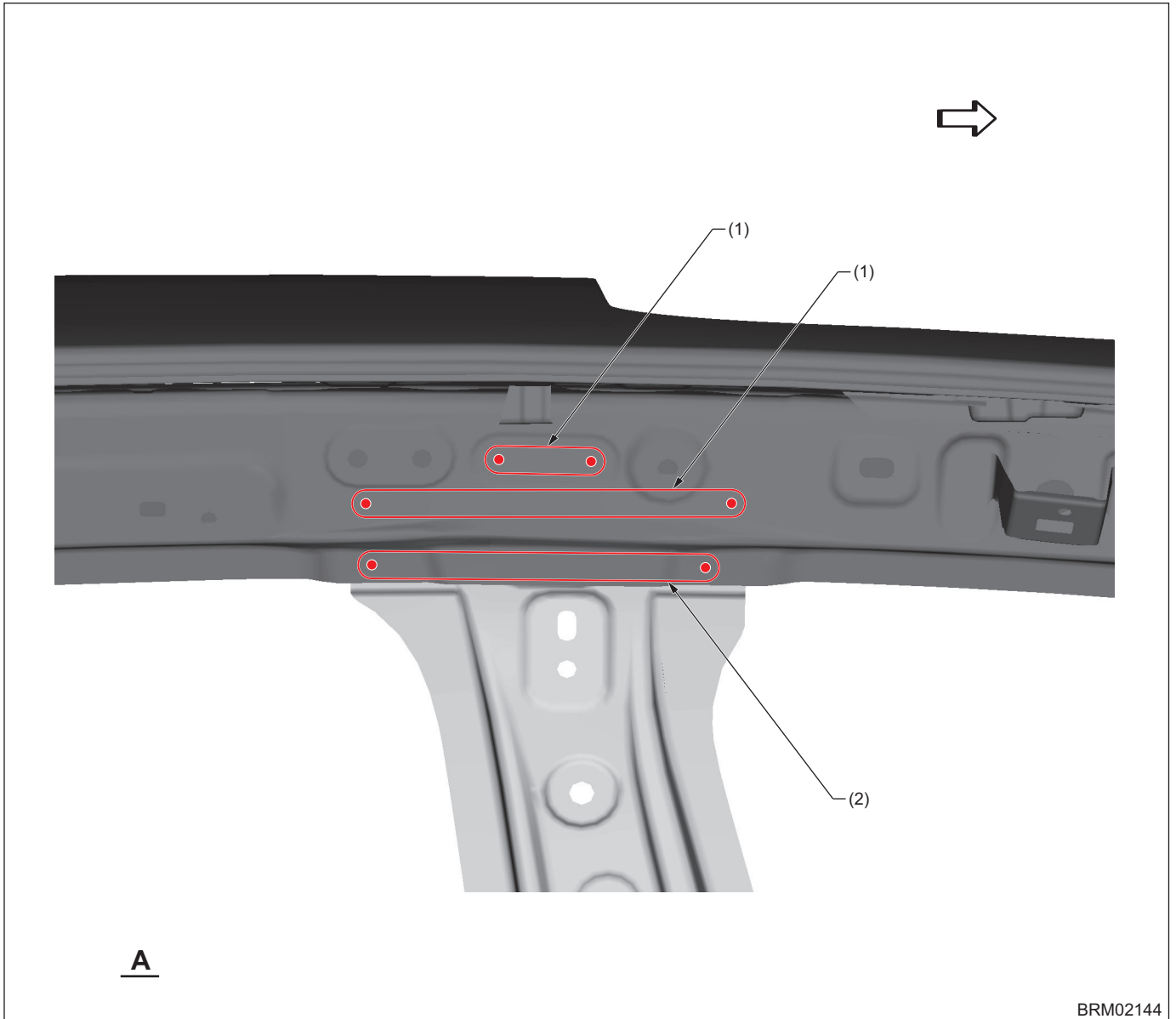
BRM02676

(1) 2 points (Outside · 1)

(2) 9 points (Outside · 1)

Panel Replacement

• View A

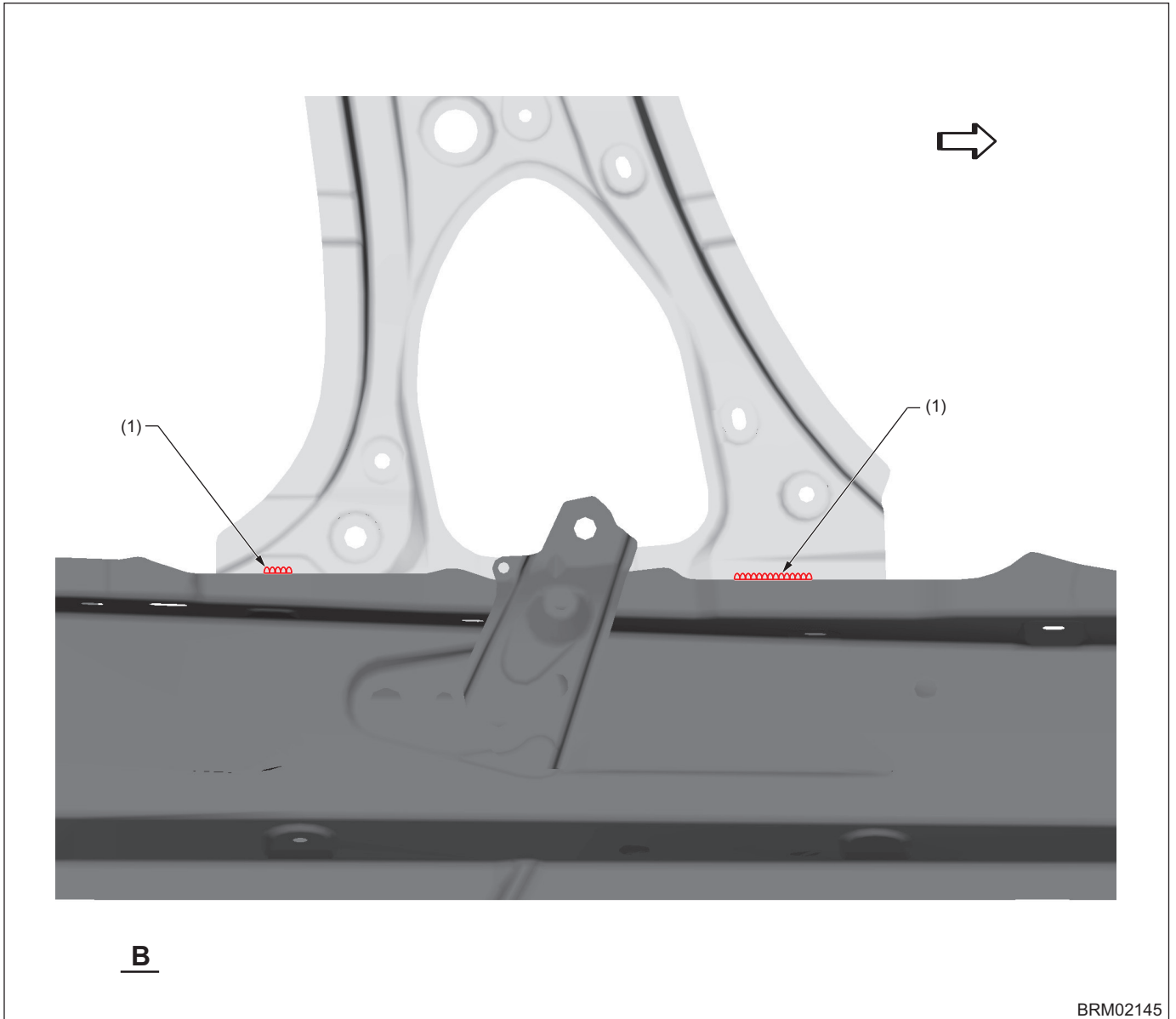


(1) 2 points (Inside · 1)

(2) 3 points (Inside · 1)

Panel Replacement

- View B



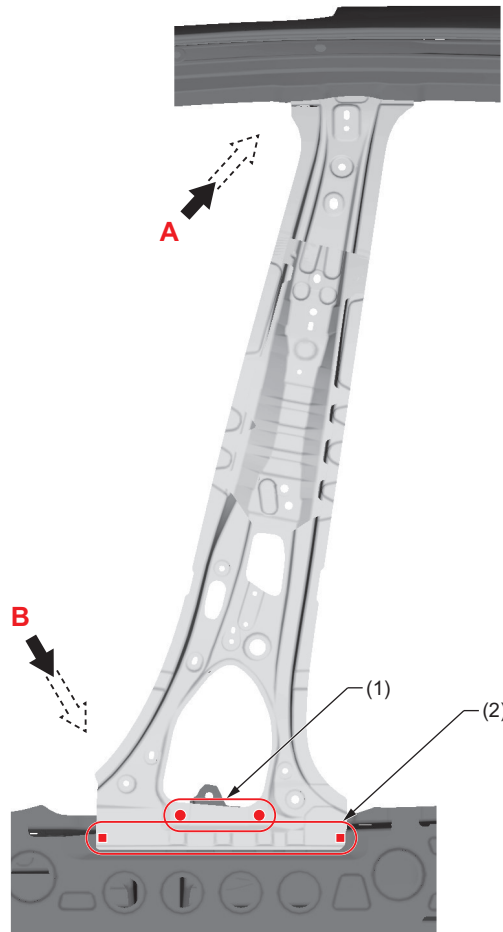
BRM02145

(1) 1 point (Inside · 1, Belt Sander)

Panel Replacement

B: INSTALLATION

• Overall view



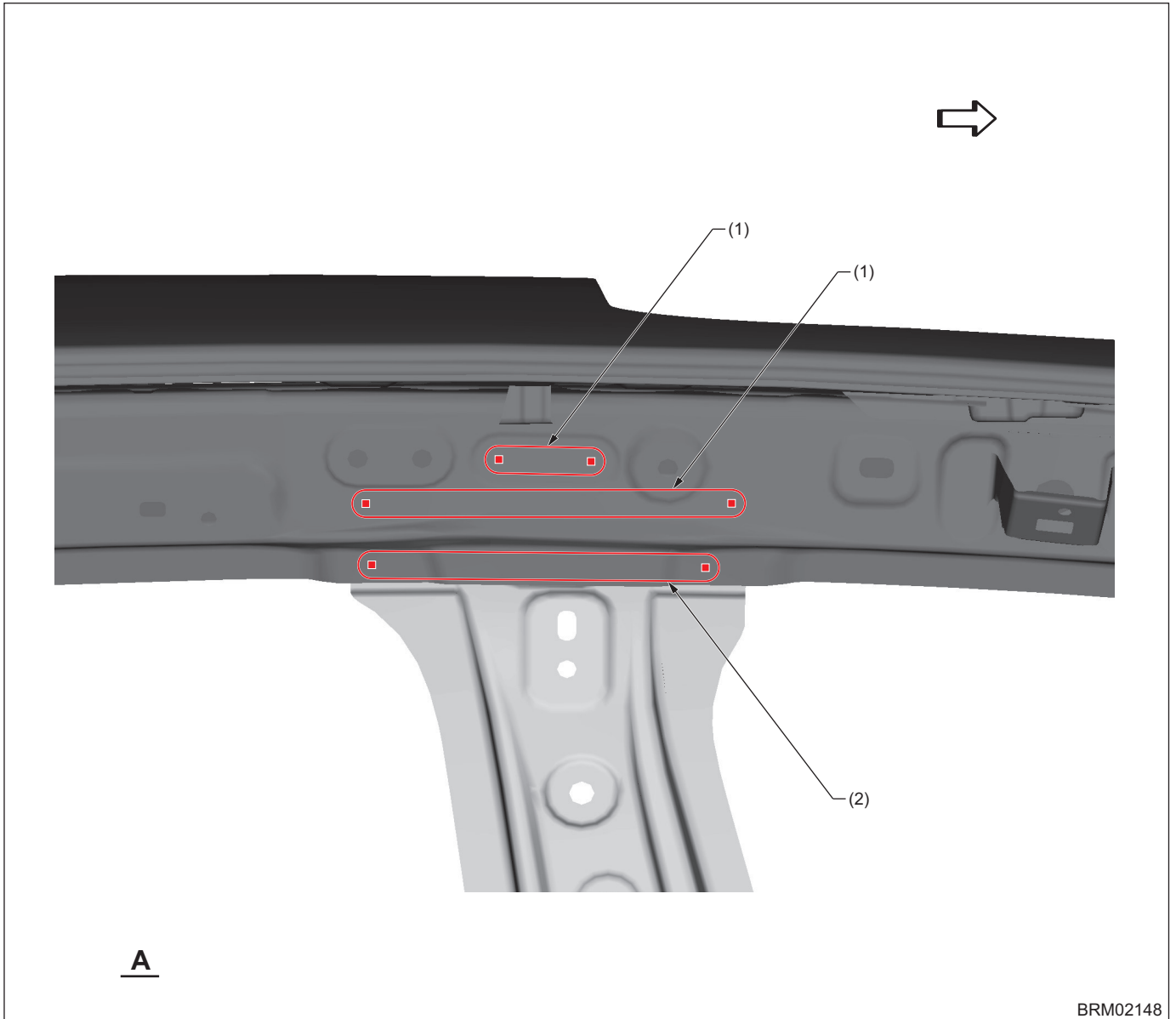
BRM02677

(1) 2 points

(2) 9 points (Service part)

Panel Replacement

• View A

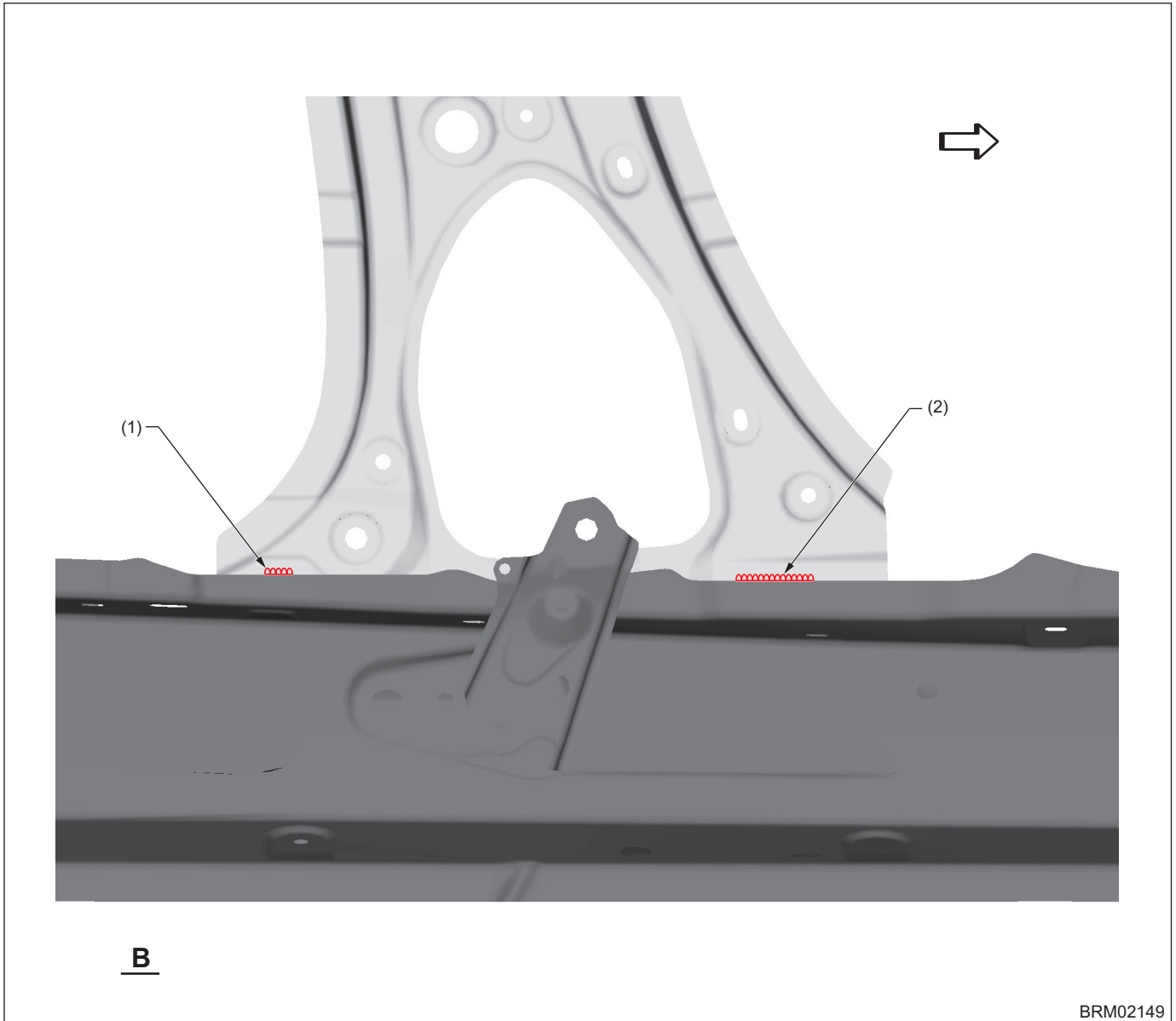


(1) 2 points

(2) 3 points

Panel Replacement

• View B



(1) 1 point (Continuous welding)
(15 mm [0.59 in])

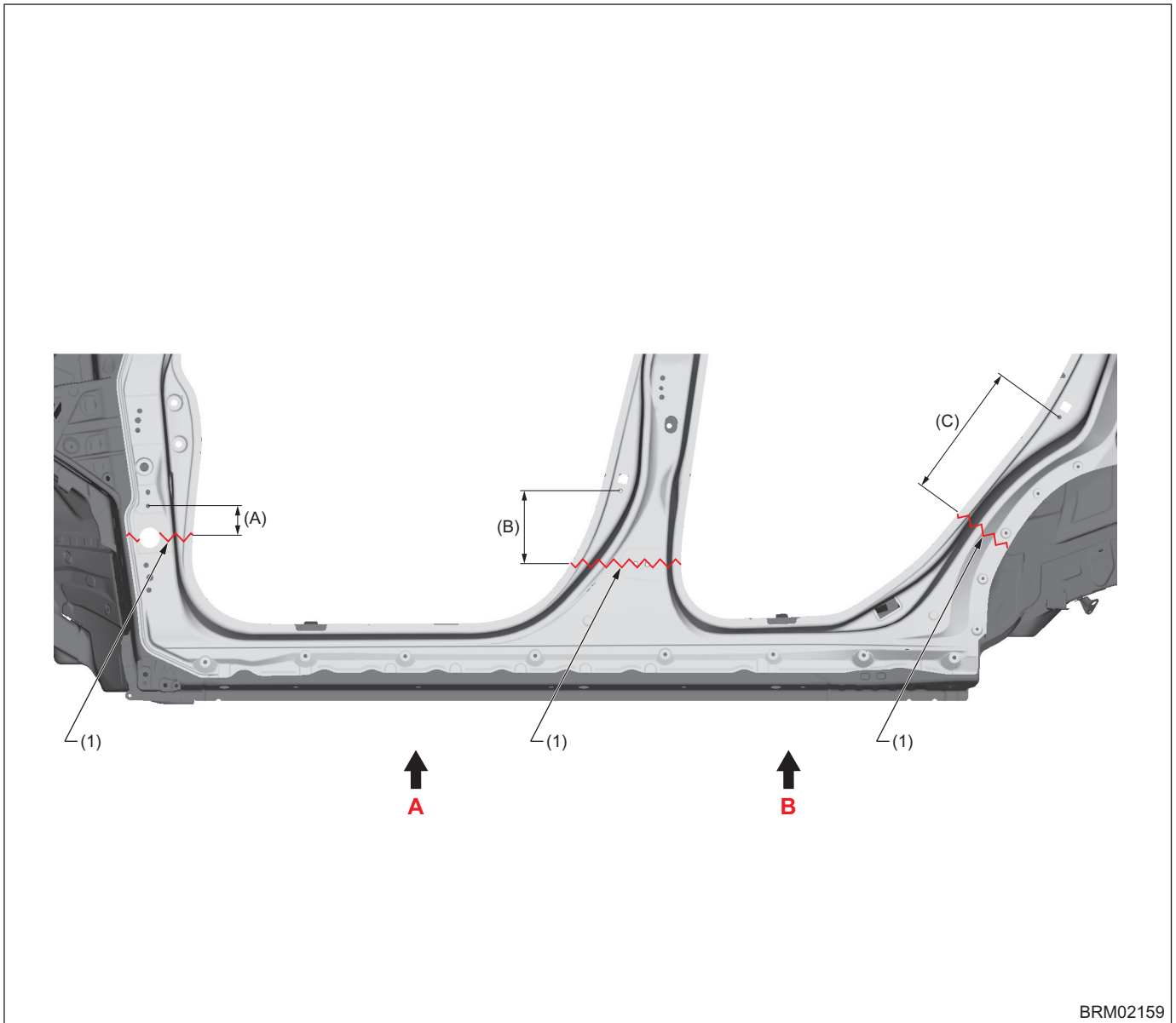
(2) 1 point (Continuous welding)
(40 mm [1.57 in])

Panel Replacement

9-15. Side Sill Outer Panel (Partial replacement)

A: REMOVAL

• Overall view



(A) 70 mm [2.76 in]

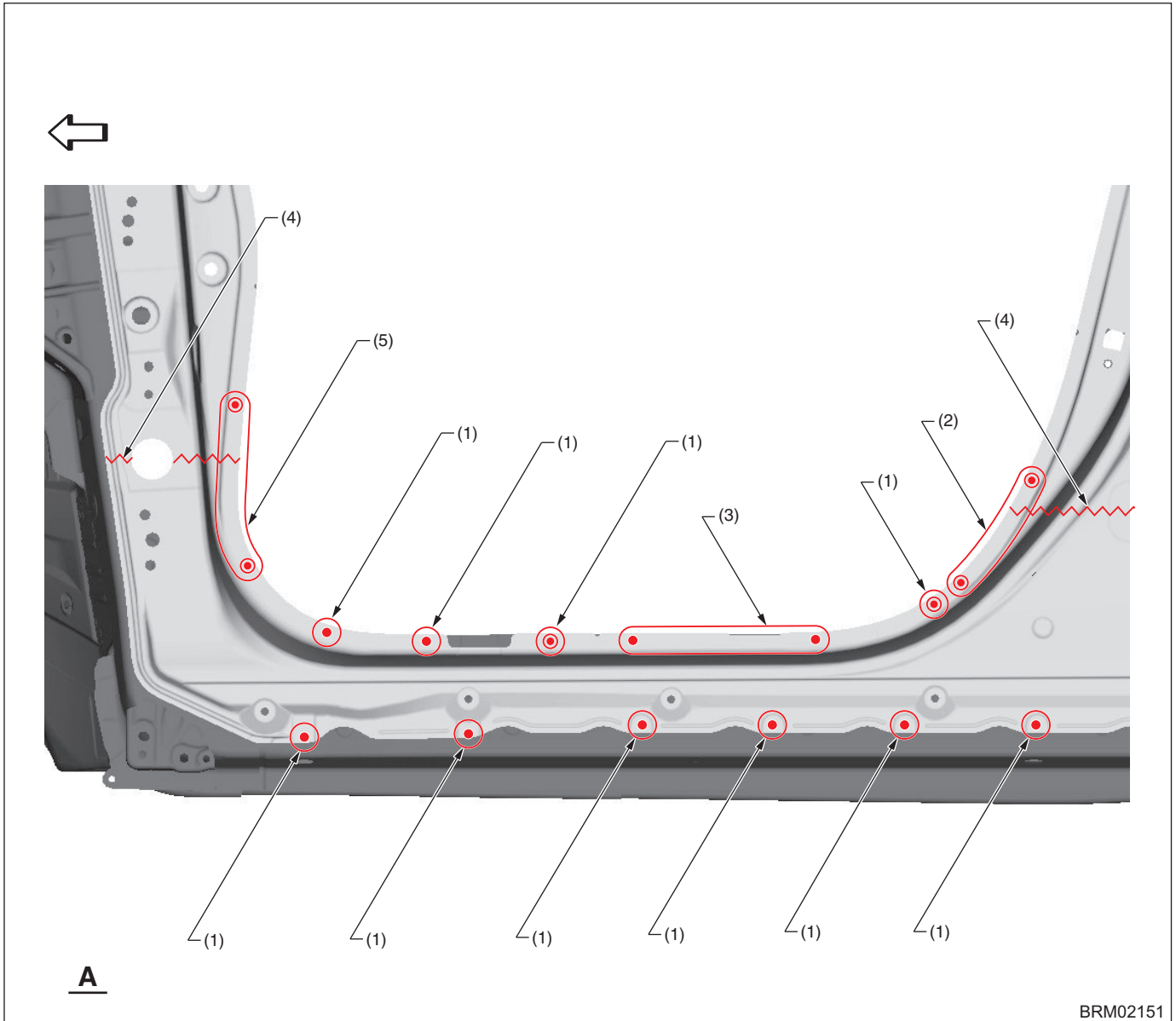
(B) 170 mm [6.69 in]

(C) 310 mm [12.20 in]

(1) Cut position

Panel Replacement

• View A



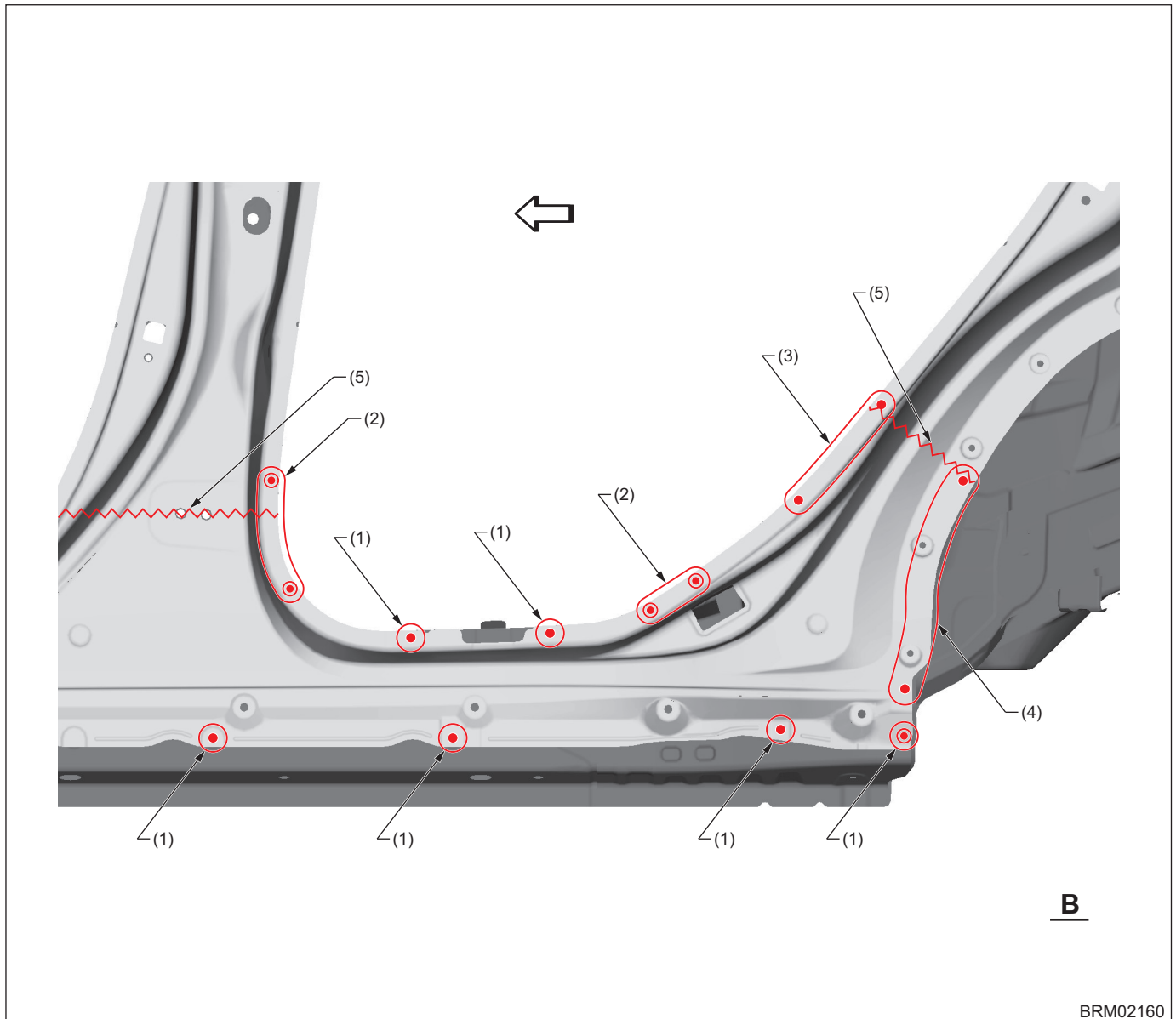
(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)
(4) Cut position

(5) 5 points (Outside · 1)

Panel Replacement

• View B



(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

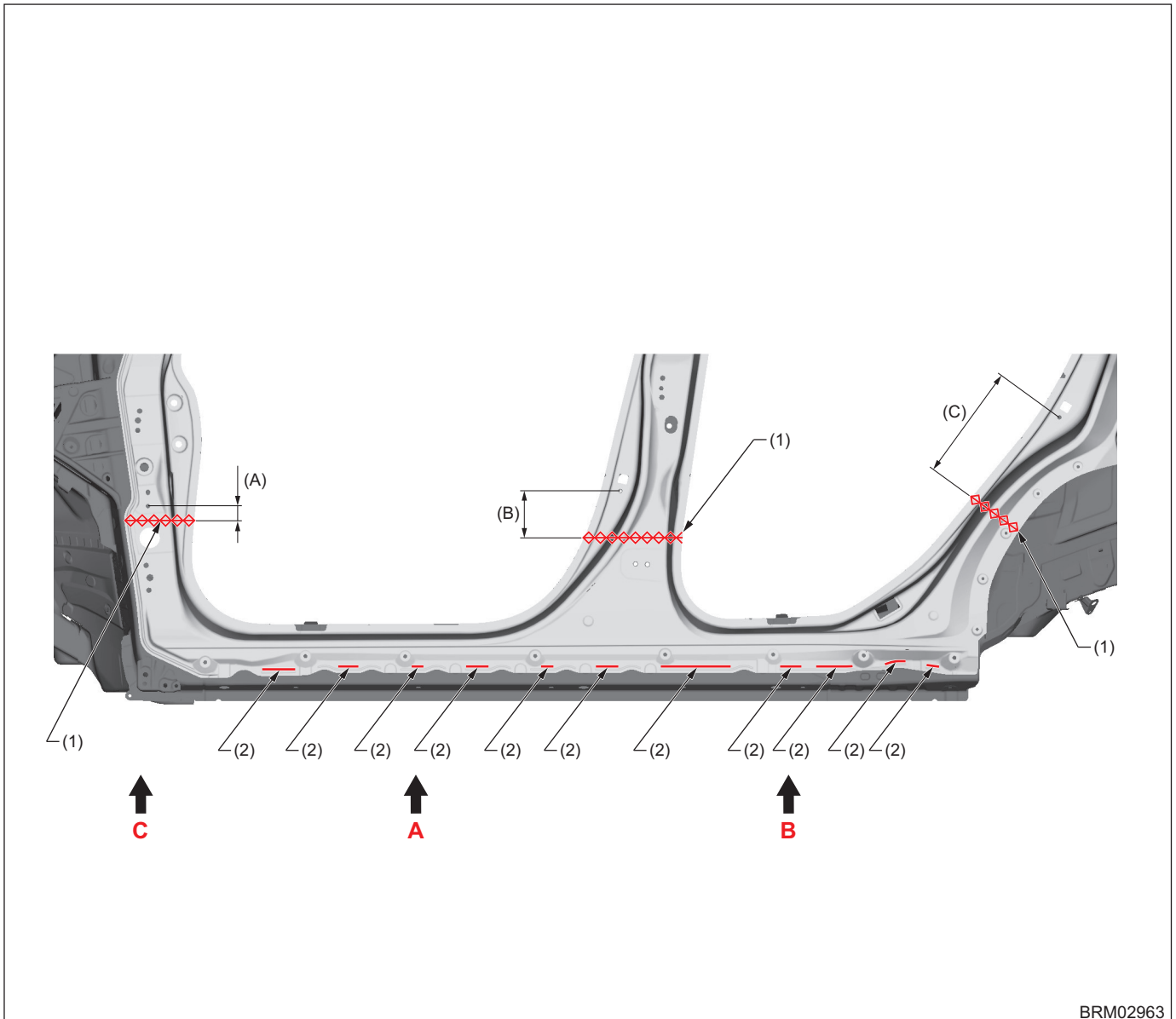
(3) 3 points (Outside · 1)
(4) 5 points (Outside · 1)

(5) Cut position

Panel Replacement

B: INSTALLATION

• Overall view



(A) 30 mm [1.18 in]

(B) 120 mm [4.72 in]

(C) 270 mm [10.63 in]

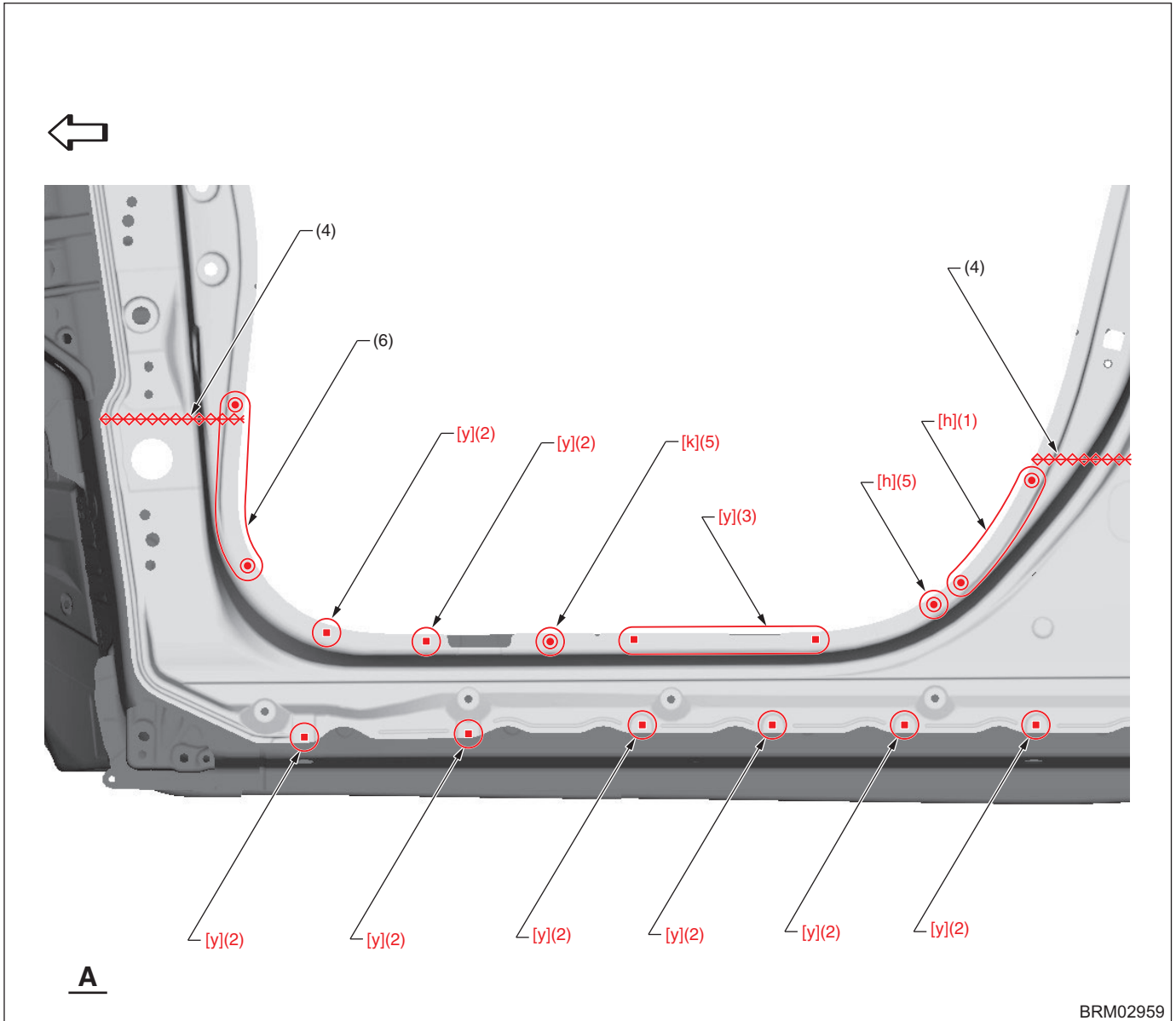
(1) 1 point (Continuous welding)

(2) Structural adhesive

— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

• View A

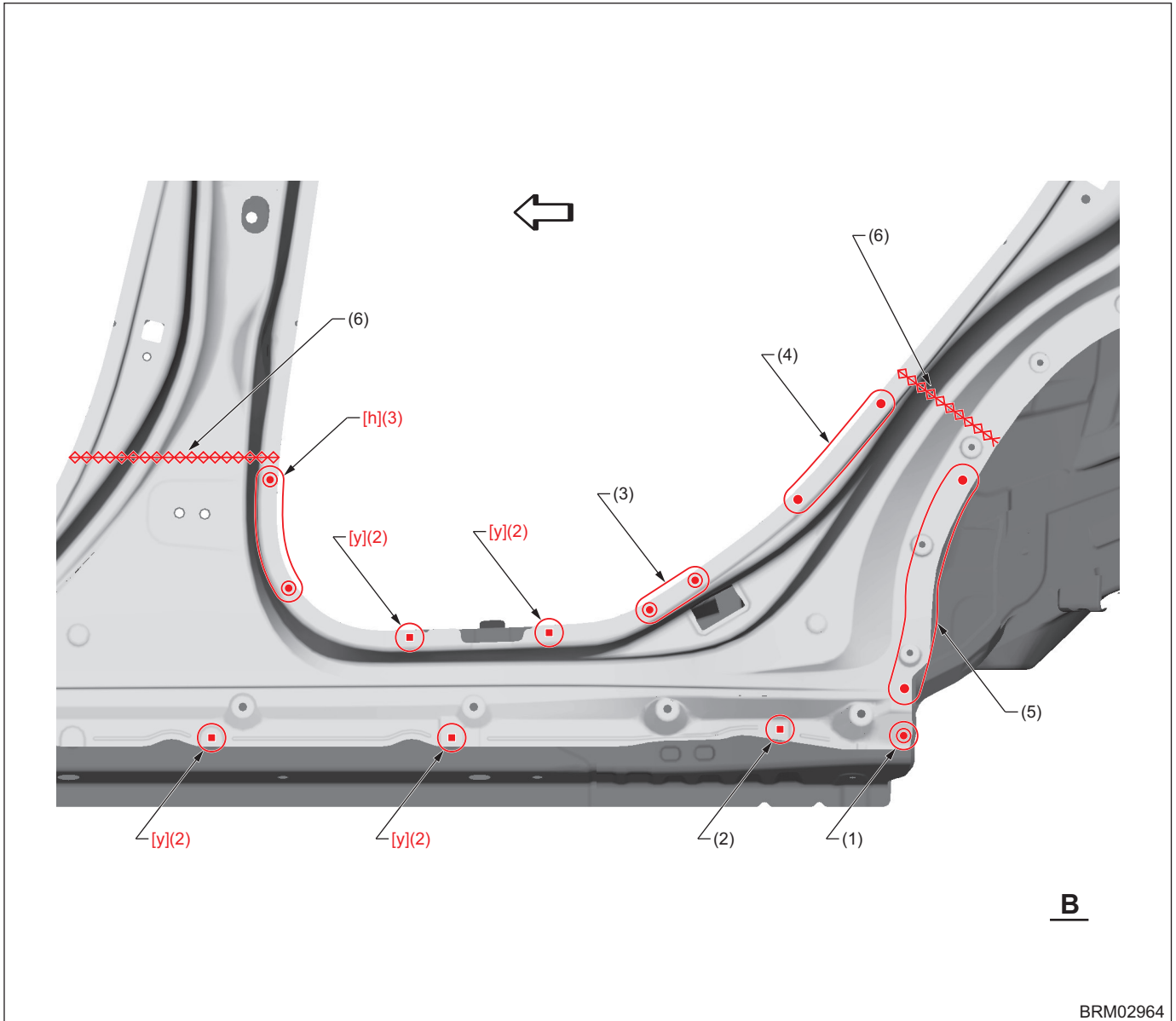


- | | | |
|----------------------------|----------------------------------|--------------|
| (1) 2 points | (3) 3 points (Service part) | (5) 1 point |
| (2) 1 point (Service part) | (4) 1 point (Continuous welding) | (6) 5 points |

[h] Spot welding conditions (DC)	Compression: 3.0 kN, Current: 7.5 kA, Welding time: 20 cyc, Upslope time: 5 cyc
[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View B

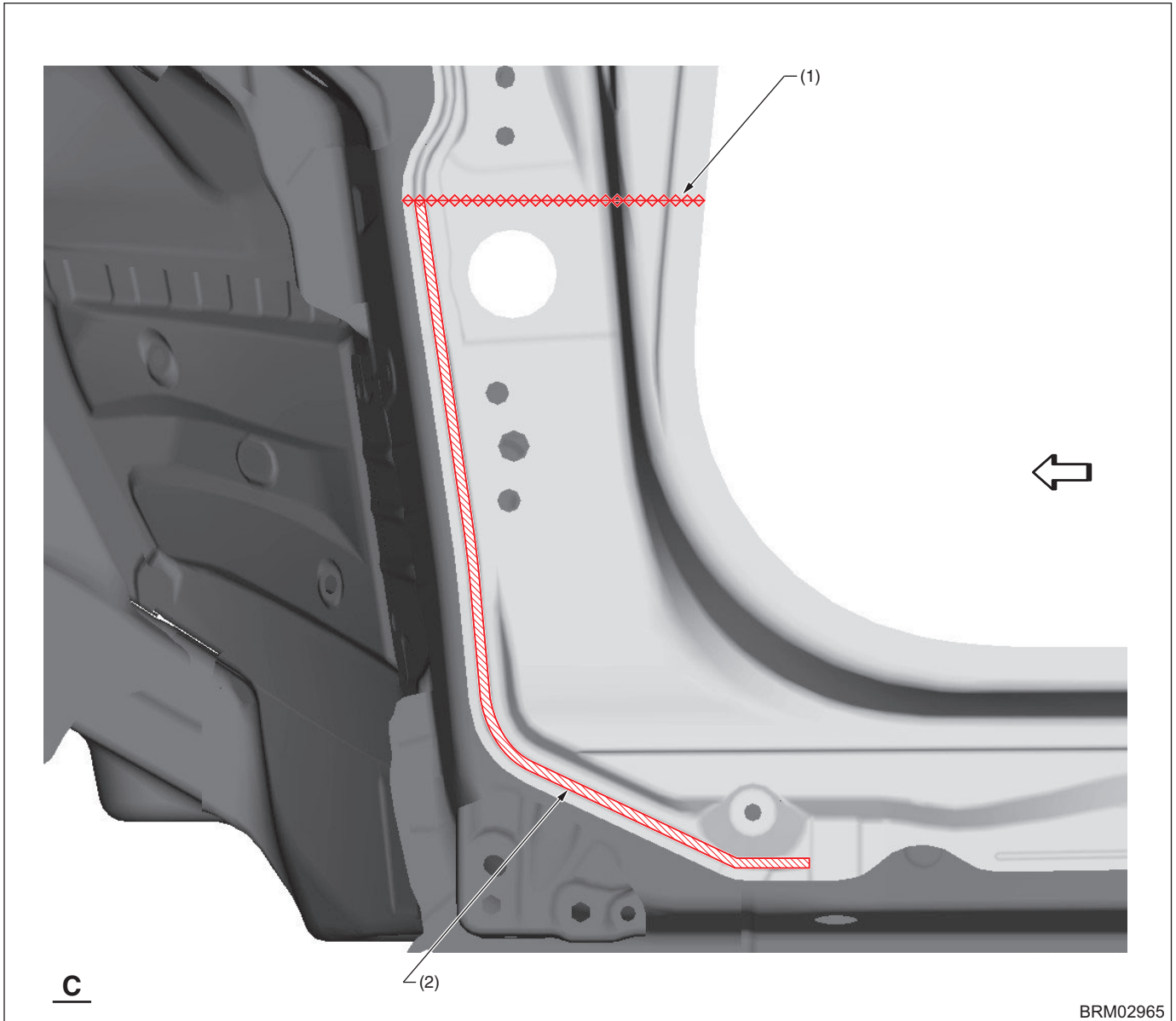


- | | | |
|----------------------------|--------------|----------------------------------|
| (1) 1 point | (3) 2 points | (5) 5 points |
| (2) 1 point (Service part) | (4) 3 points | (6) 1 point (Continuous welding) |

[h] Spot welding conditions (DC)	Compression: 3.0 kN, Current: 7.5 kA, Welding time: 20 cyc, Upslope time: 5 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View C



(1) 1 point (Continuous welding)

(2) Spotting sealer

 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

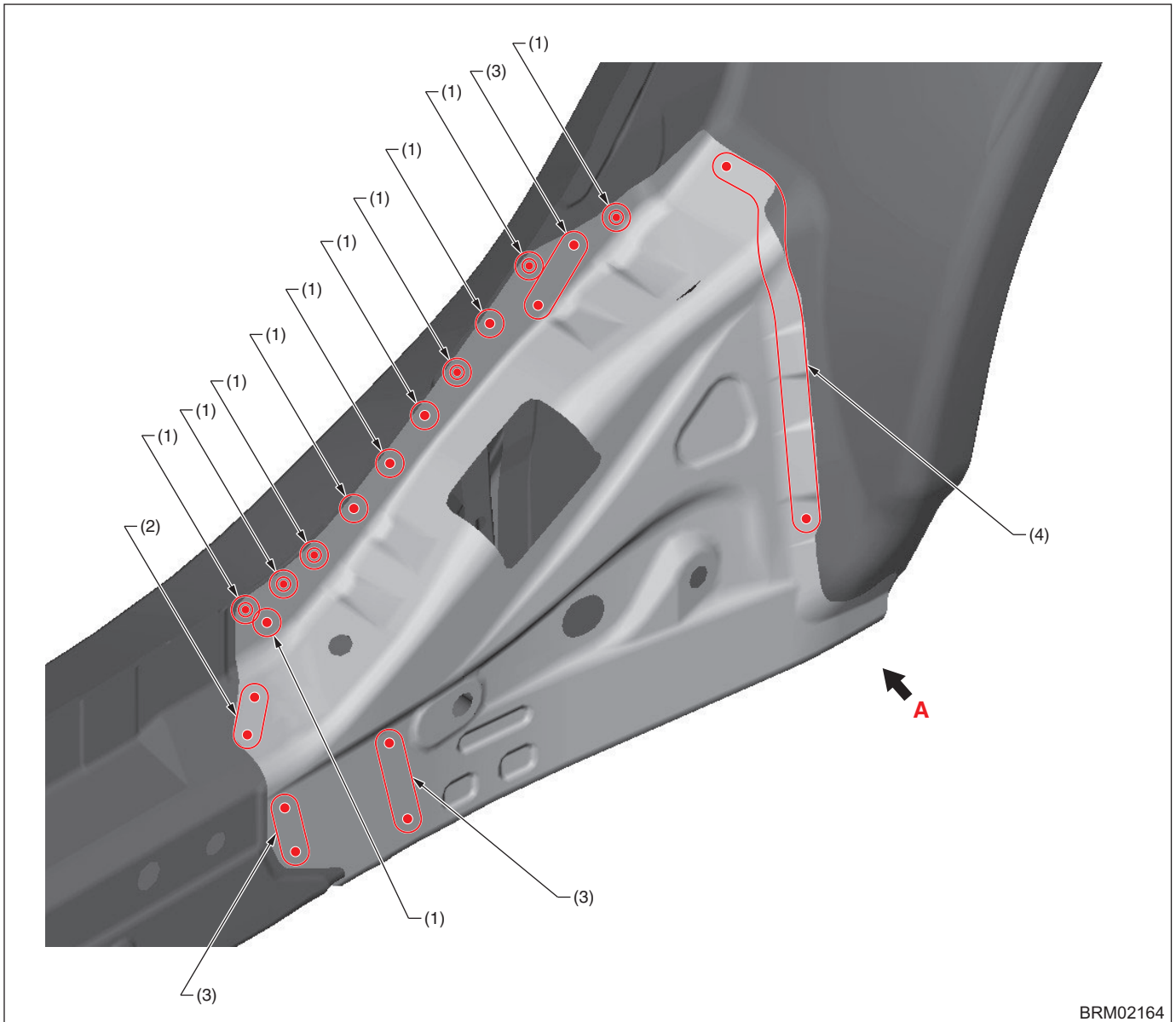
Note: Fill the space between the panels with spotting sealer.

Panel Replacement

9-16. Side Sill Reinforcement Outer Rear (Total replacement)

A: REMOVAL

• Overall view



(1) 1 point (Outside · 1)

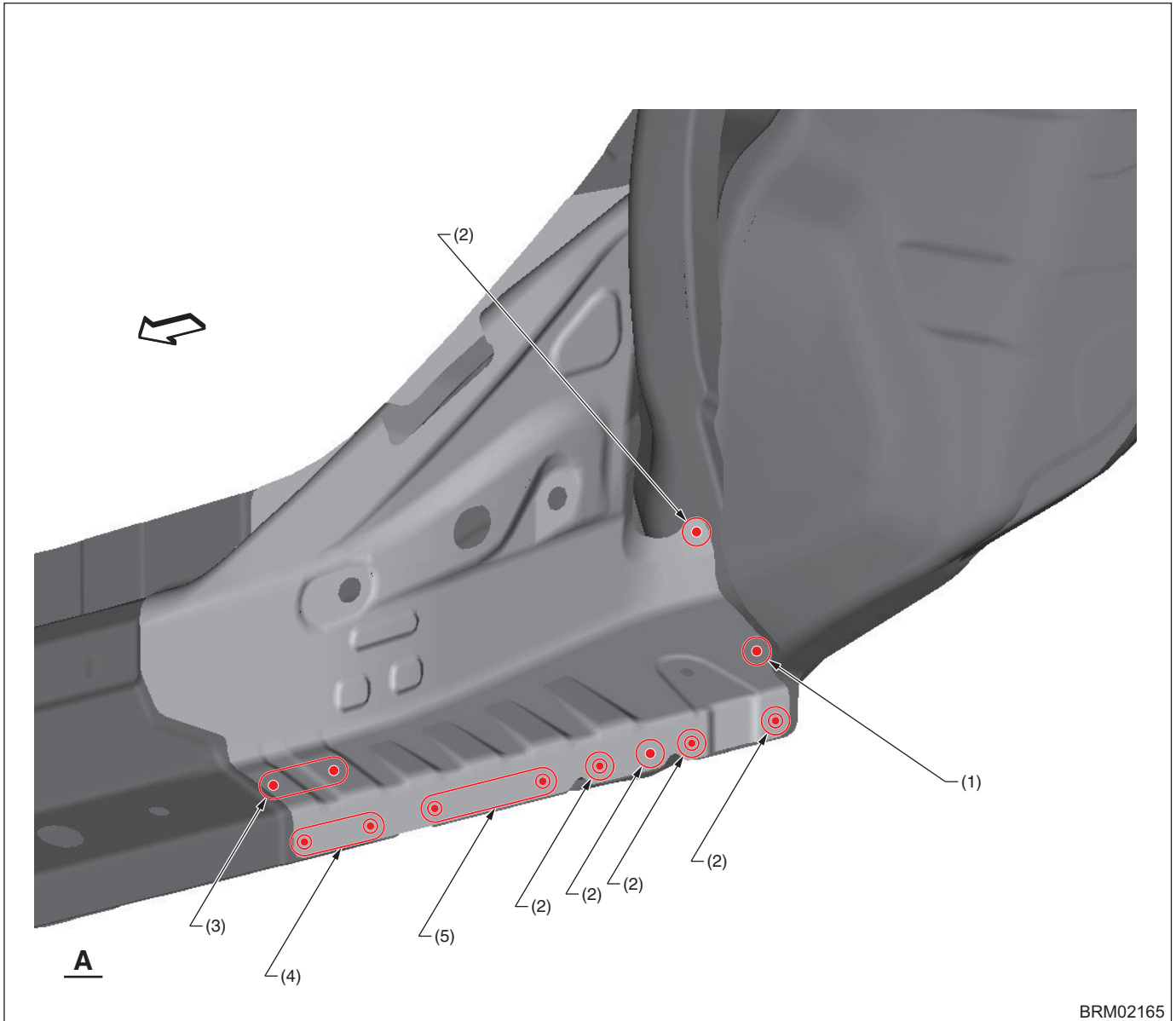
(2) 2 points (Top · 1)

(3) 2 points (Outside · 1)

(4) 5 points (Outside · 1)

Panel Replacement

• View A



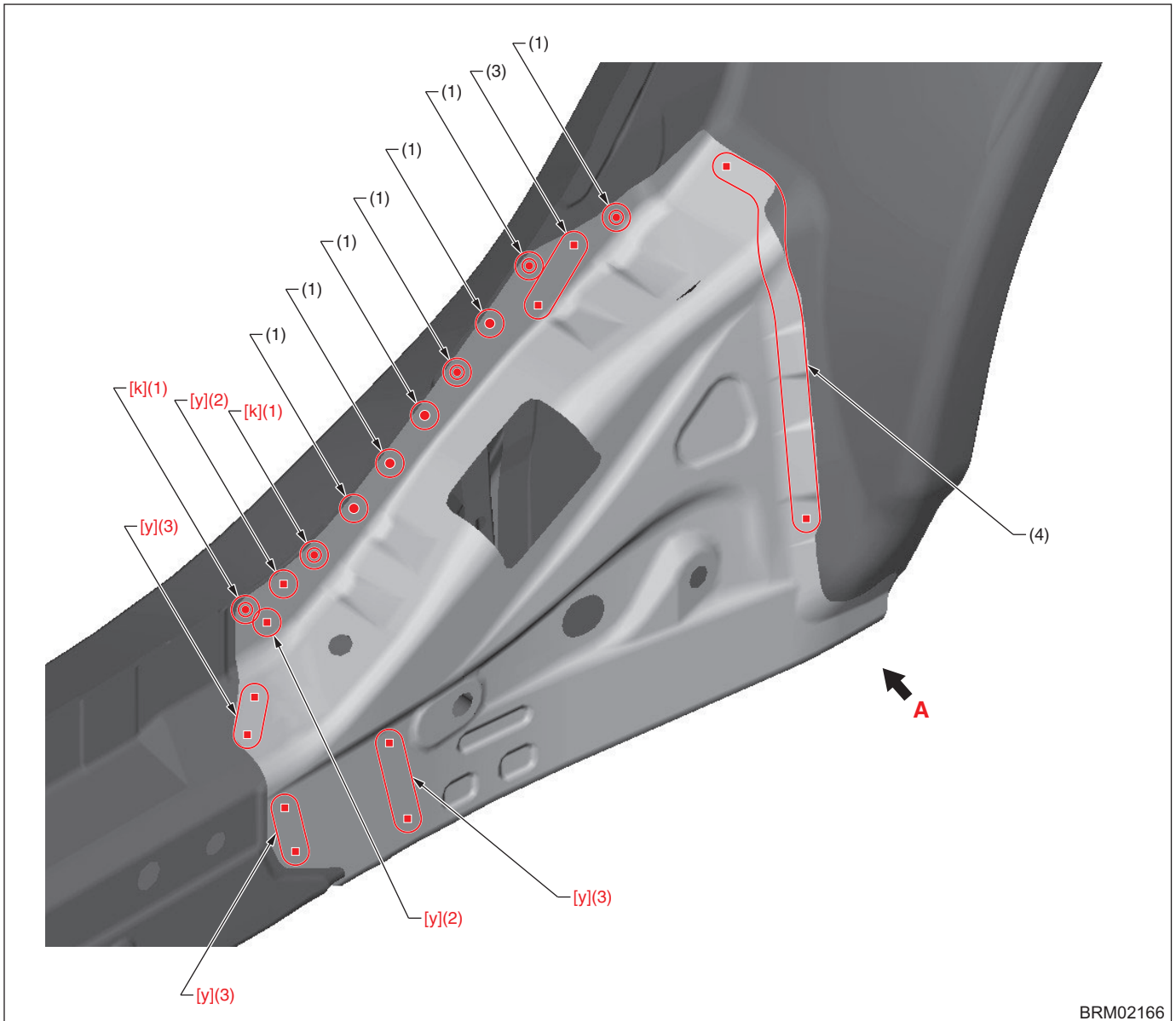
BRM02165

- | | | |
|---------------------------|----------------------------|----------------------------|
| (1) 1 point (Bottom · 1) | (3) 2 points (Bottom · 1) | (5) 3 points (Outside · 1) |
| (2) 1 point (Outside · 1) | (4) 2 points (Outside · 1) | |

Panel Replacement

B: INSTALLATION

• Overall view



- (1) 1 point
(2) 1 point (Service part)

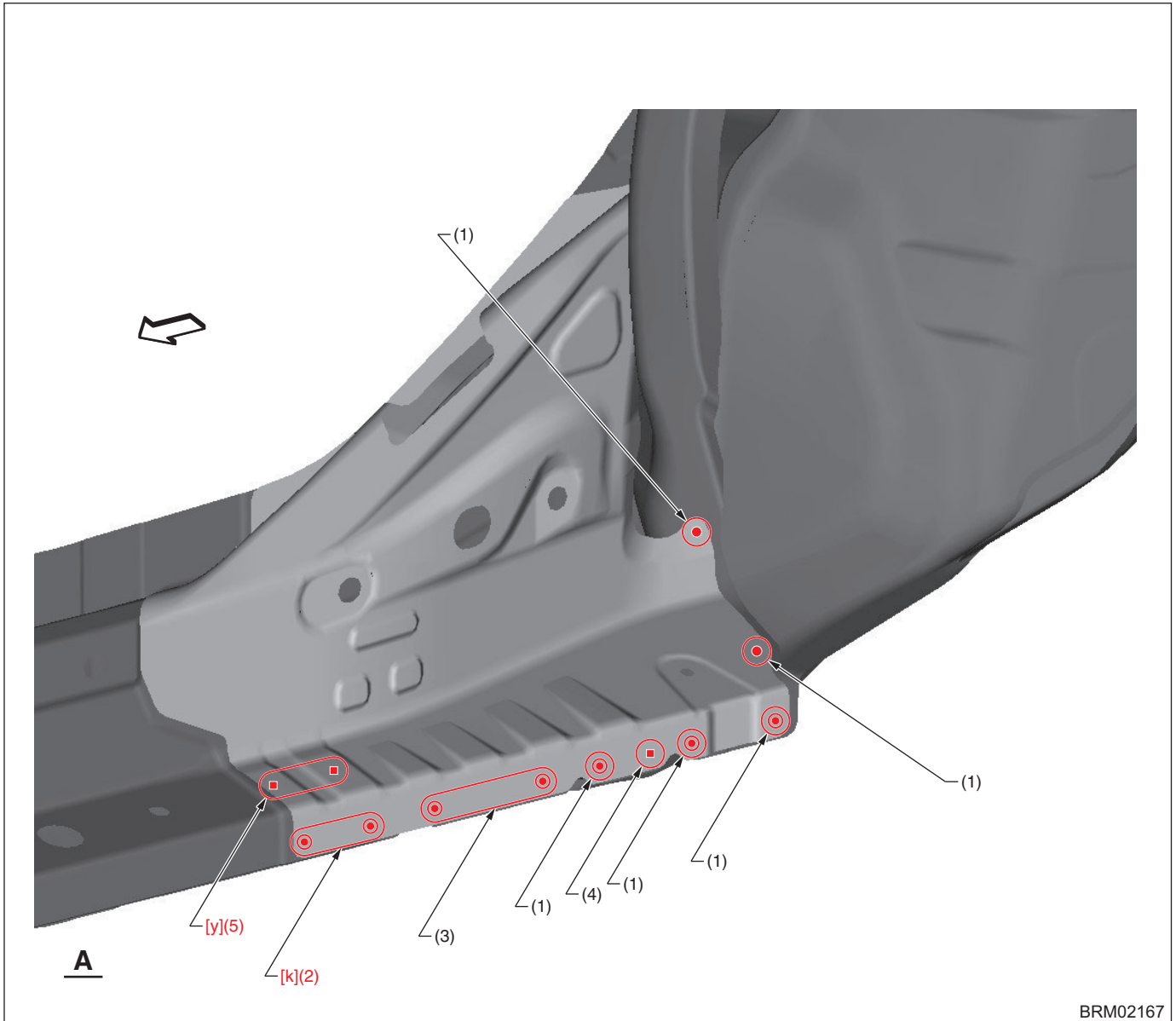
- (3) 2 points (Service part)

- (4) 5 points (Service part)

[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View A



- | | | |
|--------------|----------------------------|-----------------------------|
| (1) 1 point | (3) 3 points | (5) 2 points (Service part) |
| (2) 2 points | (4) 1 point (Service part) | |

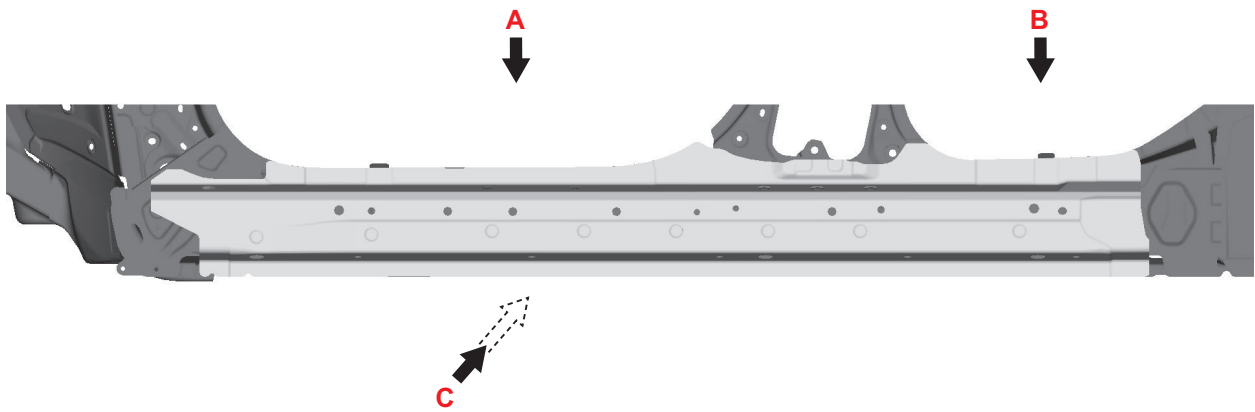
[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

9-17. Side Sill Reinforcement Outer (Total replacement)

A: REMOVAL

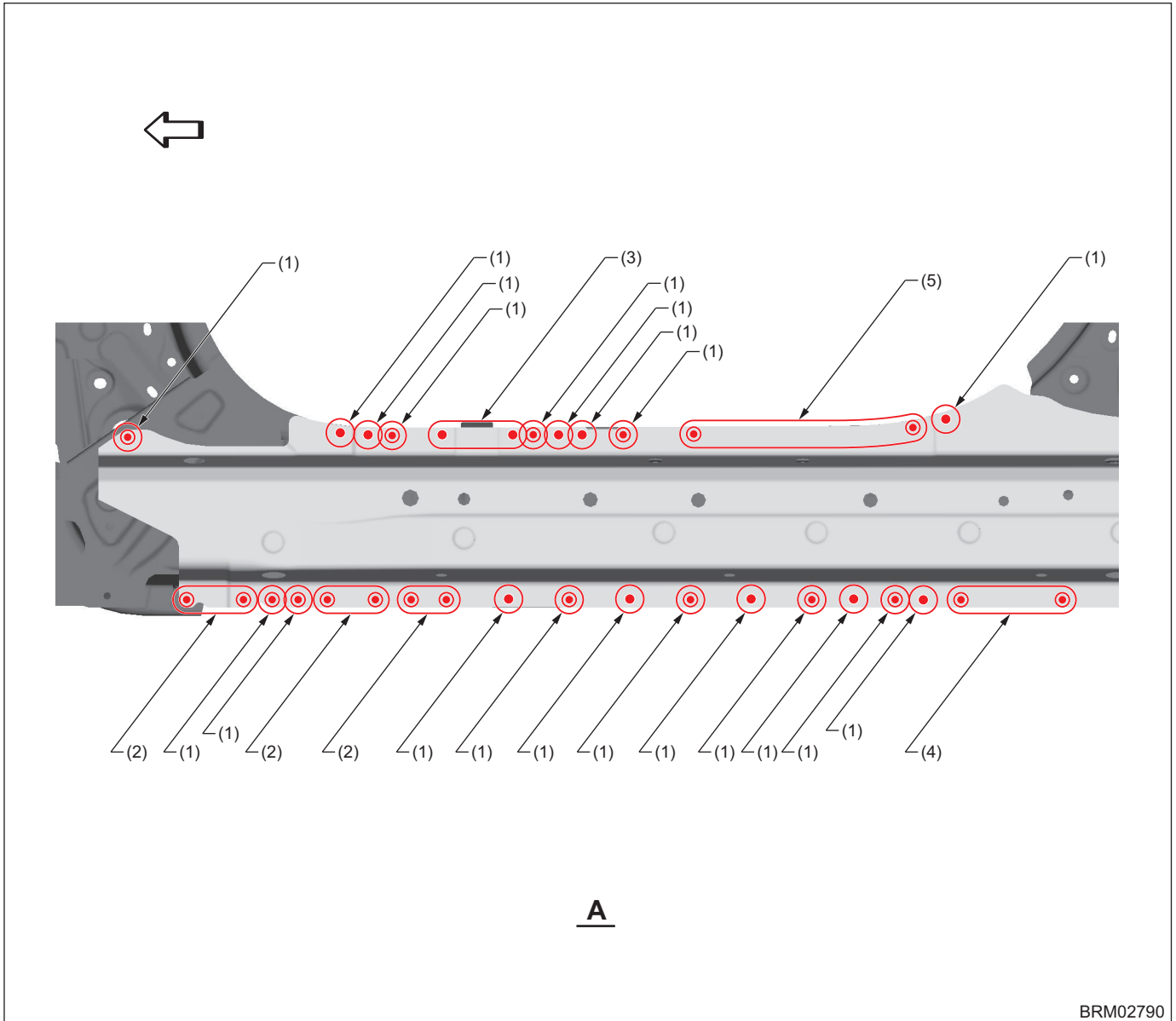
- Overall view



BRM02220

Panel Replacement

• View A



BRM02790

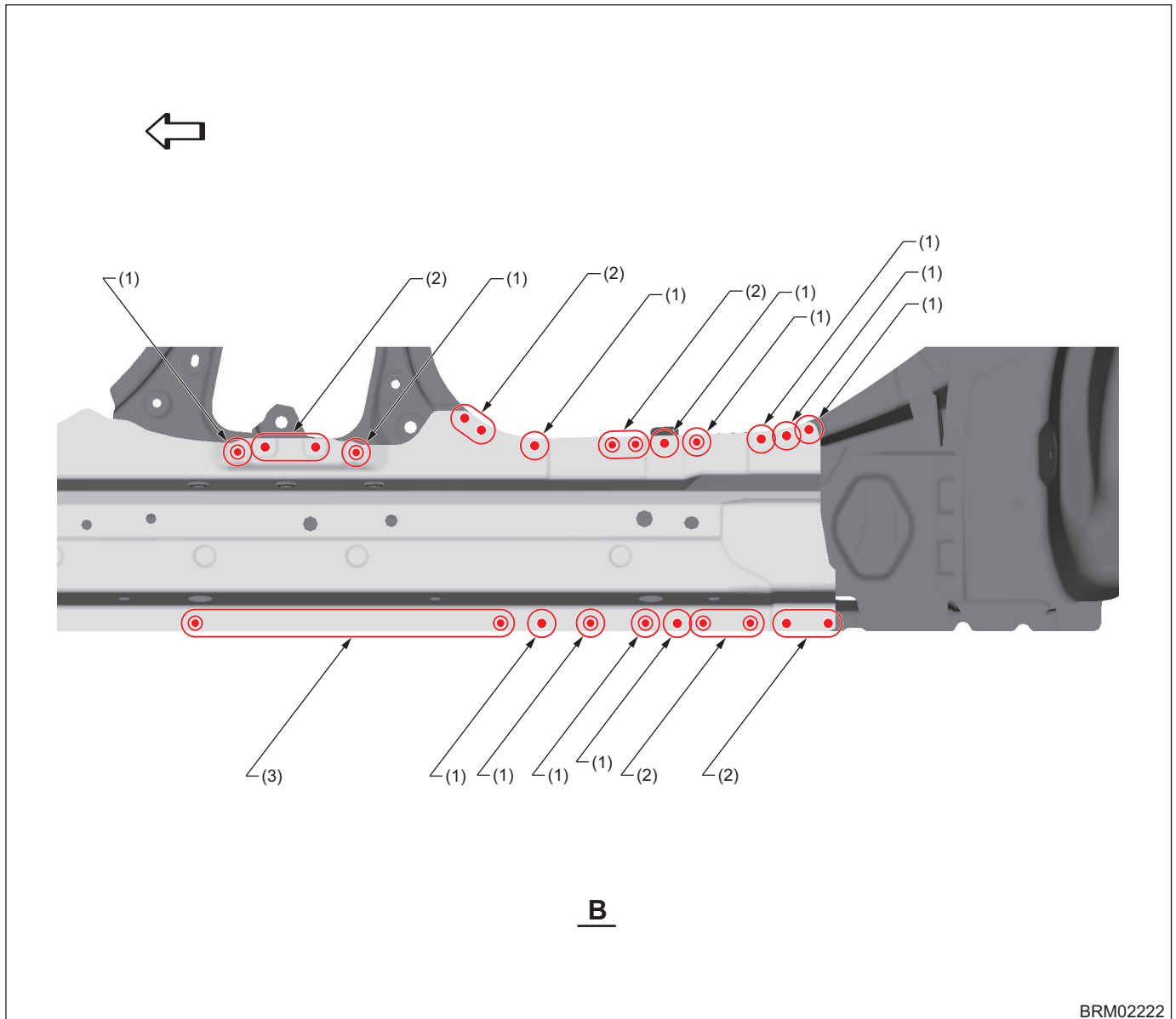
(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)
(4) 4 points (Outside · 1)

(5) 8 points (Outside · 1)

Panel Replacement

• View B



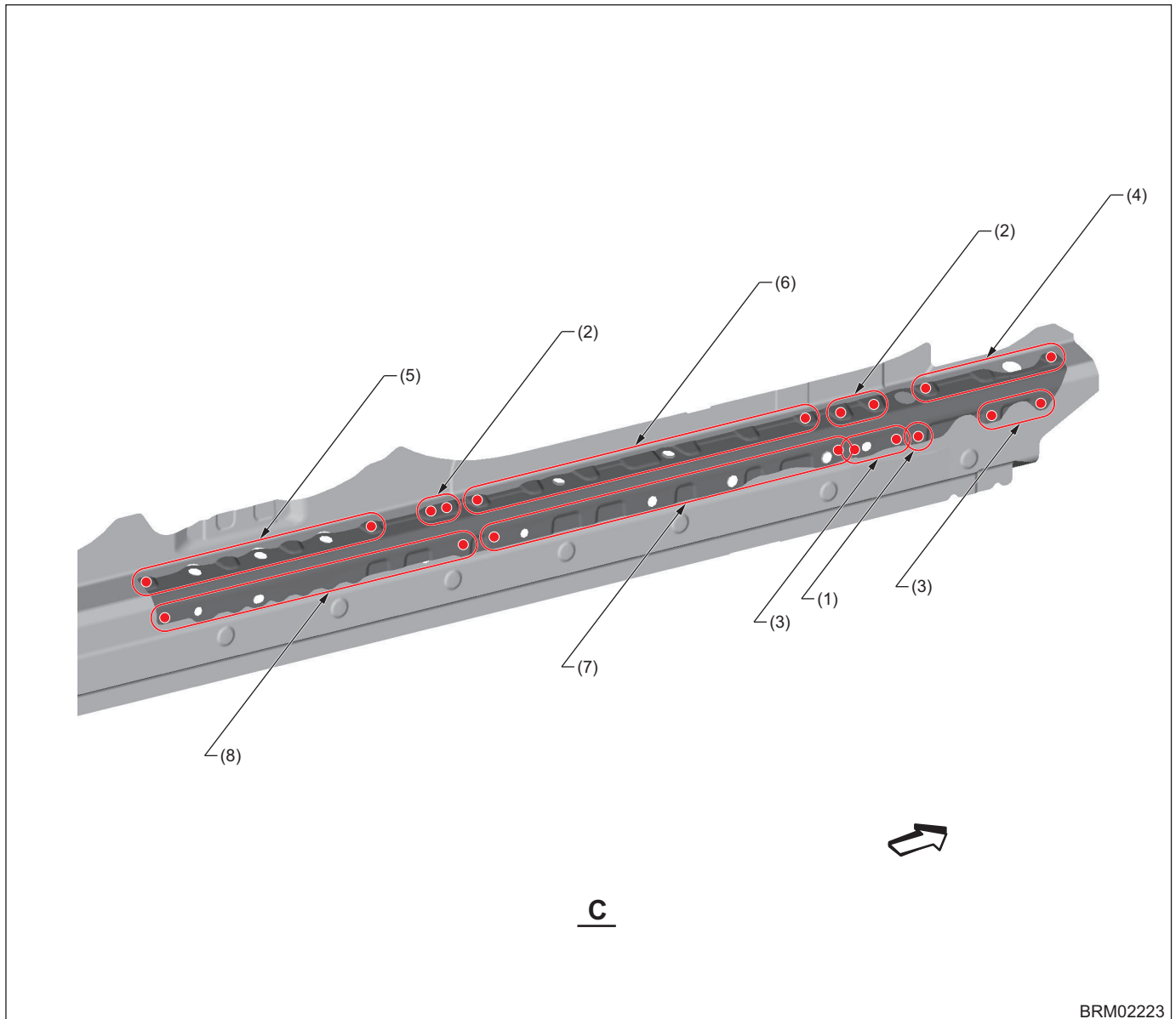
(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 7 points (Outside · 1)

Panel Replacement

• View C



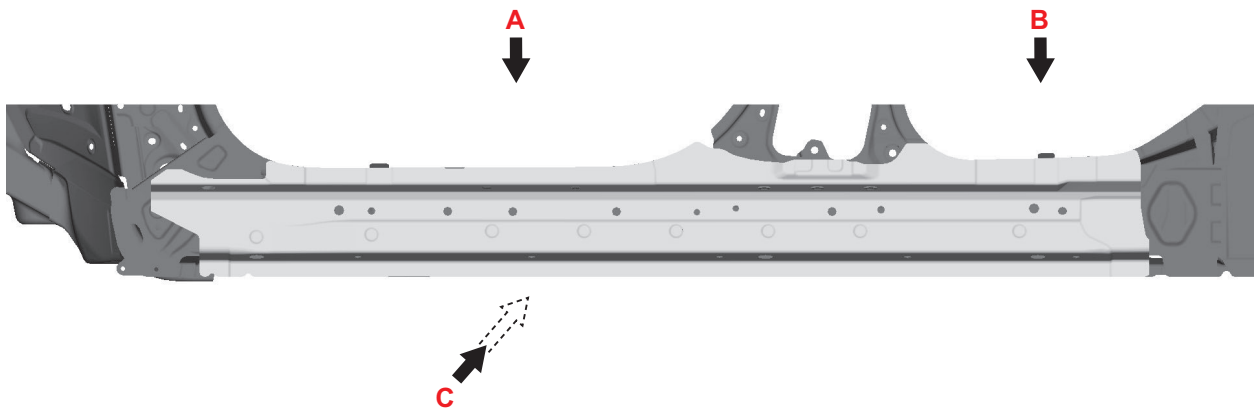
BRM02223

- | | | |
|---------------------------|---------------------------|----------------------------|
| (1) 1 point (Inside · 1) | (4) 3 points (Bottom · 1) | (7) 7 points (Inside · 1) |
| (2) 2 points (Bottom · 1) | (5) 4 points (Bottom · 1) | (8) 10 points (Inside · 1) |
| (3) 2 points (Inside · 1) | (6) 7 points (Bottom · 1) | |

Panel Replacement

B: INSTALLATION

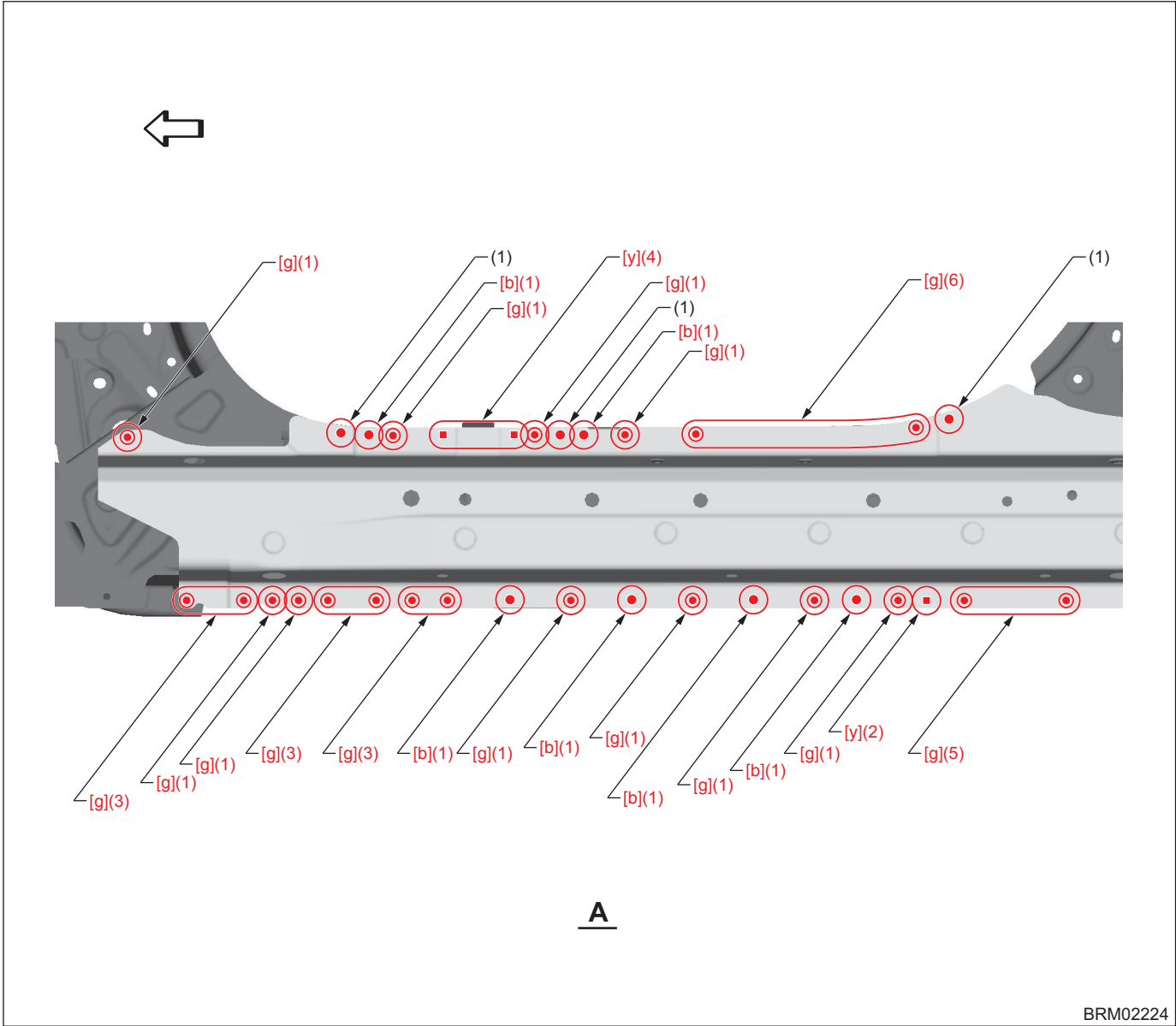
• Overall view



BRM02220

Panel Replacement

• View A

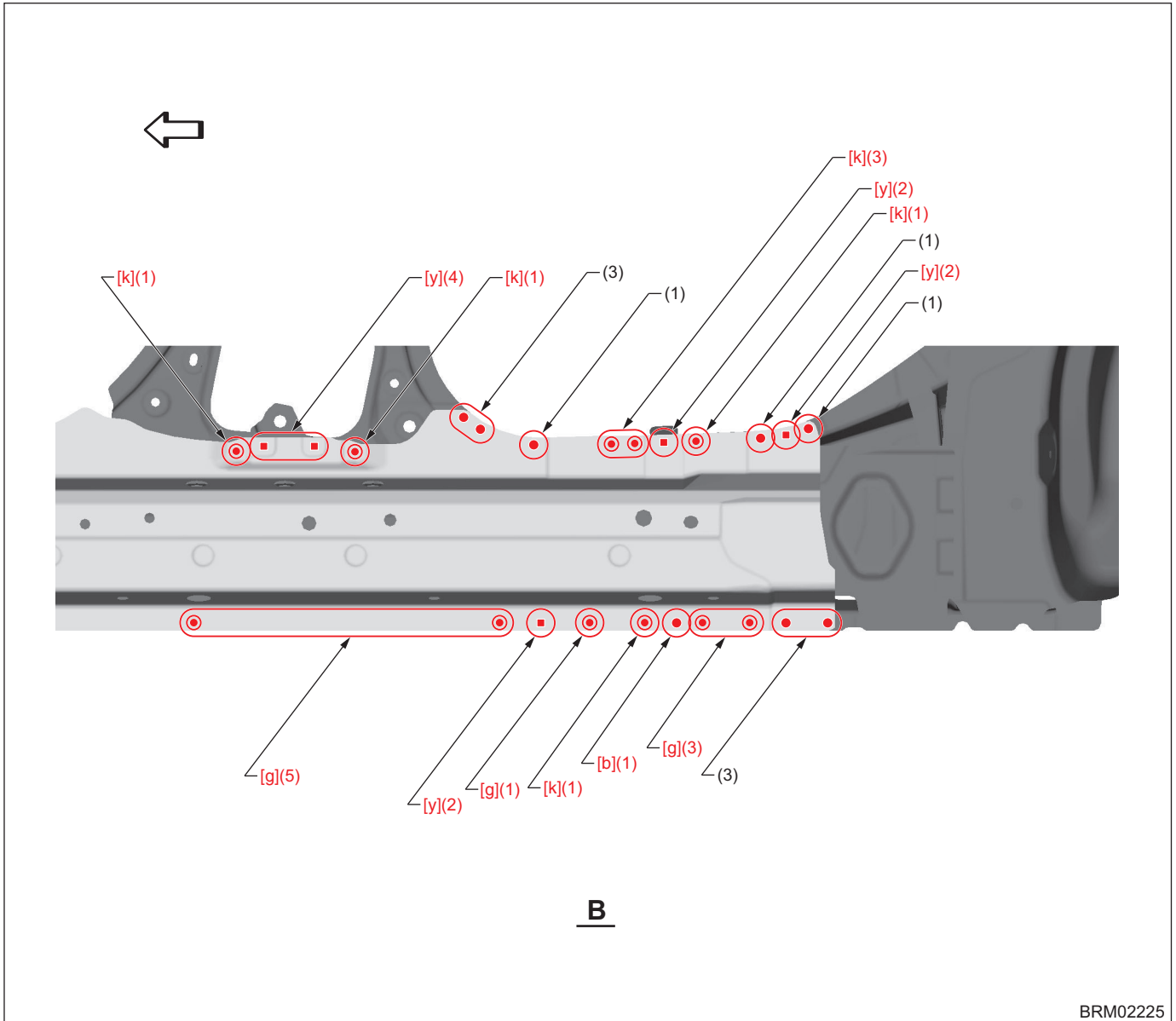


- | | | |
|----------------------------|-----------------------------|--------------|
| (1) 1 point | (3) 2 points | (5) 4 points |
| (2) 1 point (Service part) | (4) 3 points (Service part) | (6) 8 points |

[b] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 6.5 kA, Welding time: 17 cyc
[g] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View B

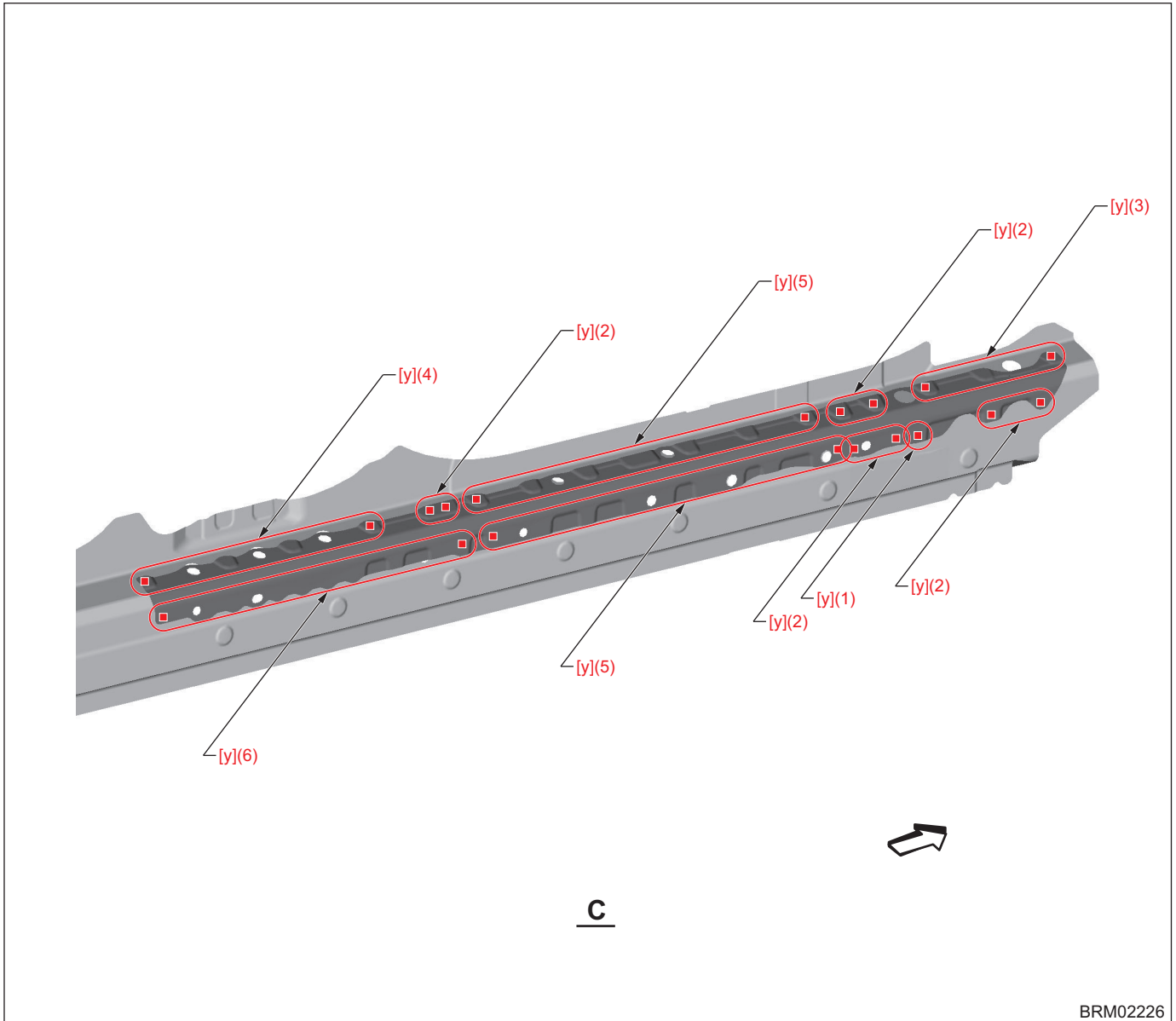


- | | | |
|----------------------------|-----------------------------|--------------|
| (1) 1 point | (3) 2 points | (5) 7 points |
| (2) 1 point (Service part) | (4) 2 points (Service part) | |

[b] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 6.5 kA, Welding time: 17 cyc
[g] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc
[k] Spot welding conditions (AC)	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 22 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)

Panel Replacement

• View C



(1) 1 point
(2) 2 points

(3) 3 points
(4) 4 points

(5) 7 points
(6) 10 points

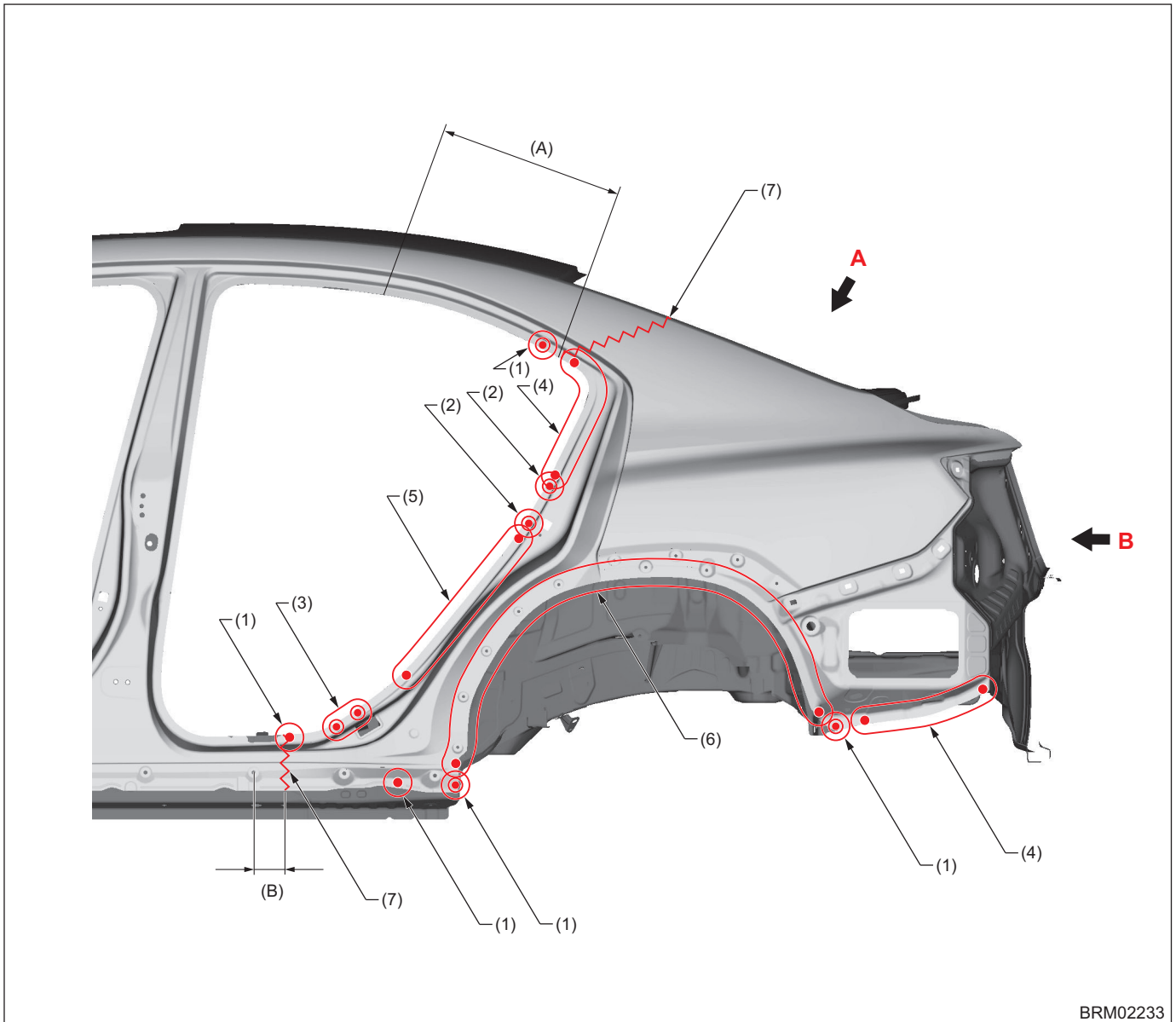
[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO₂: 20 %)
-----------------------------	--

Panel Replacement

9-18. Rear Quarter Panel (Partial replacement)

A: REMOVAL

• Overall view



BRM02233

(A) 410 mm [16.14 in]

(B) 65 mm [2.56 in]

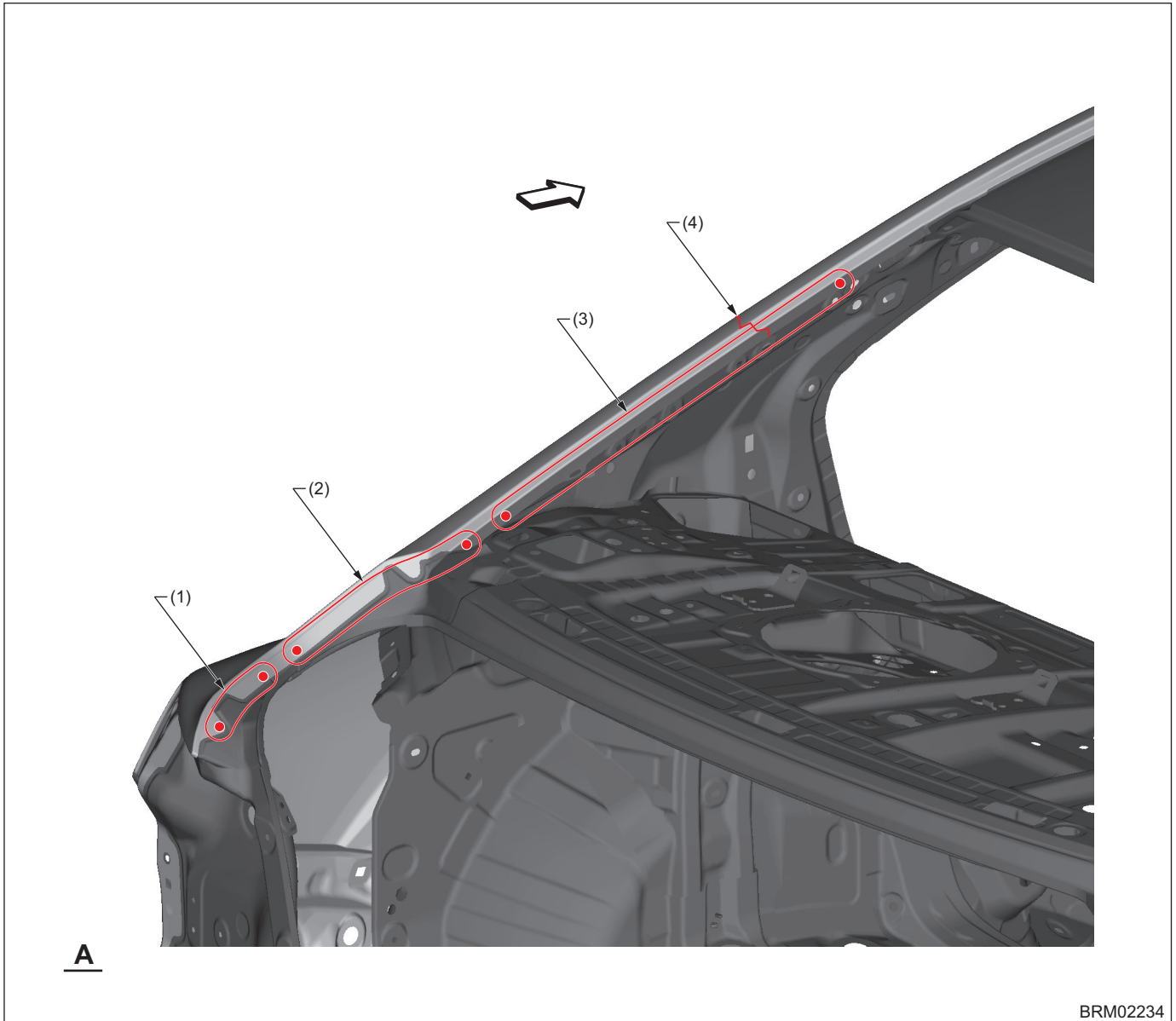
- (1) 1 point (Outside · 1)
- (2) 1 point (Outside · 2)
- (3) 2 points (Outside · 1)

- (4) 6 points (Outside · 1)
- (5) 7 points (Outside · 1)
- (6) 21 points (Outside · 1)

(7) Cut position

Panel Replacement

• View A



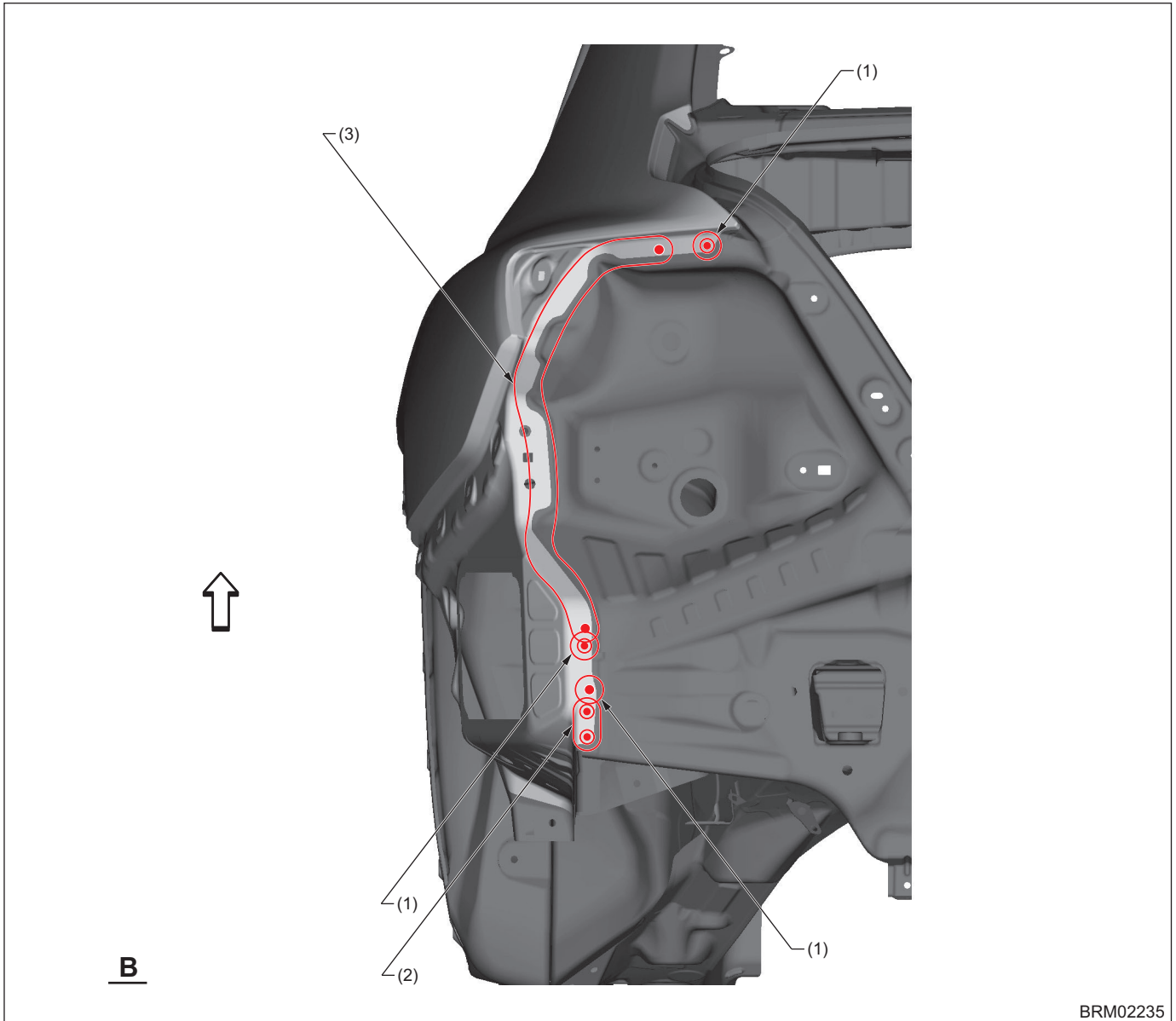
(1) 3 points (Top · 1)
(2) 5 points (Top · 1)

(3) 7 points (Top · 1)

(4) Cut position

Panel Replacement

• View B



BRM02235

(1) 1 point (Outside · 1)

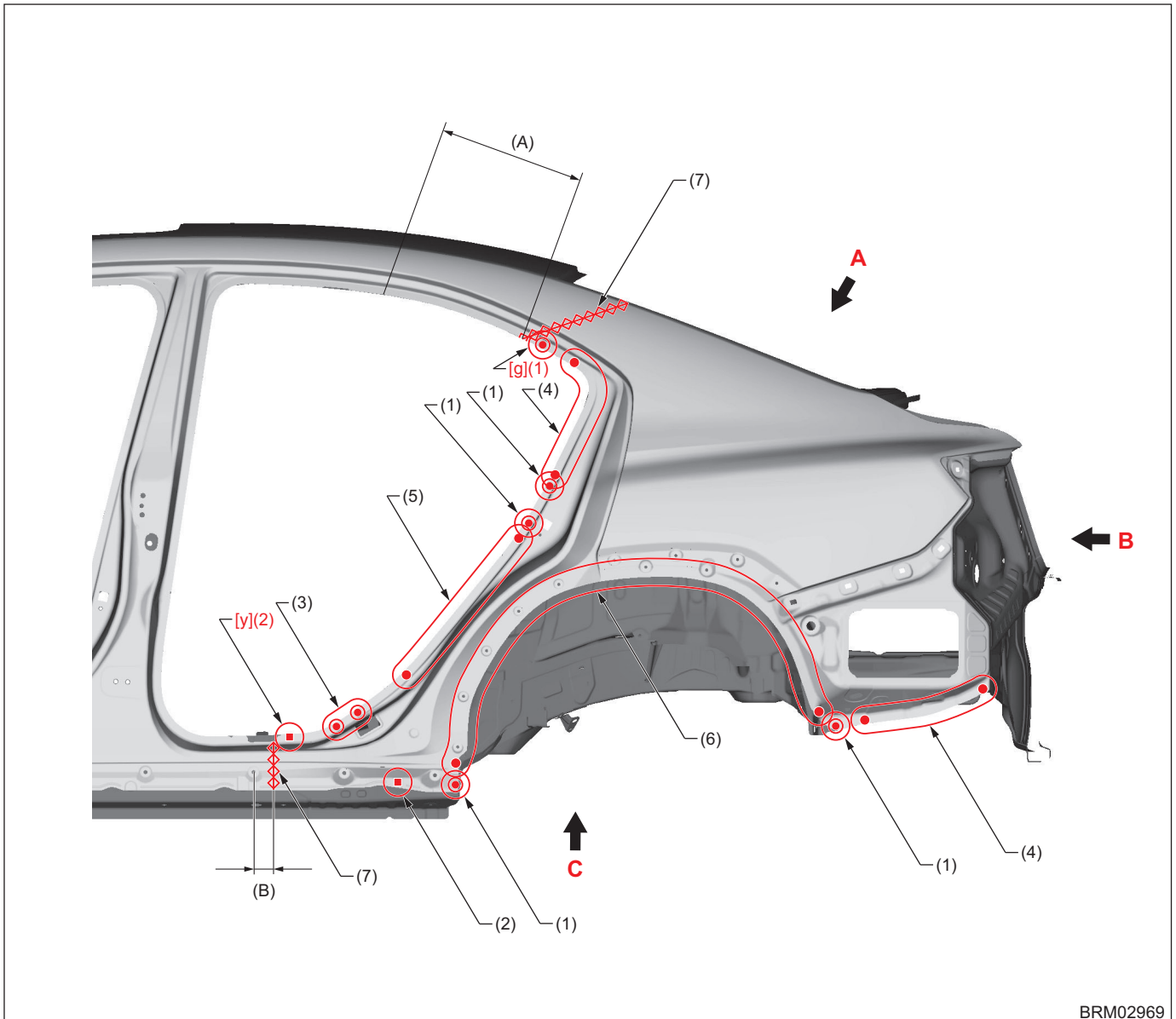
(2) 2 points (Outside · 1)

(3) 11 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02969

(A) 320 mm [12.60 in]

(B) 40 mm [1.57 in]

(1) 1 point

(4) 6 points

(7) 1 point (Continuous welding)

(2) 1 point (Service part)

(5) 7 points

(3) 2 points

(6) 21 points

[g] Spot welding conditions
(AC)

Compression: 3.0 kN, Current: 8.0 kA, Welding time: 18 cyc

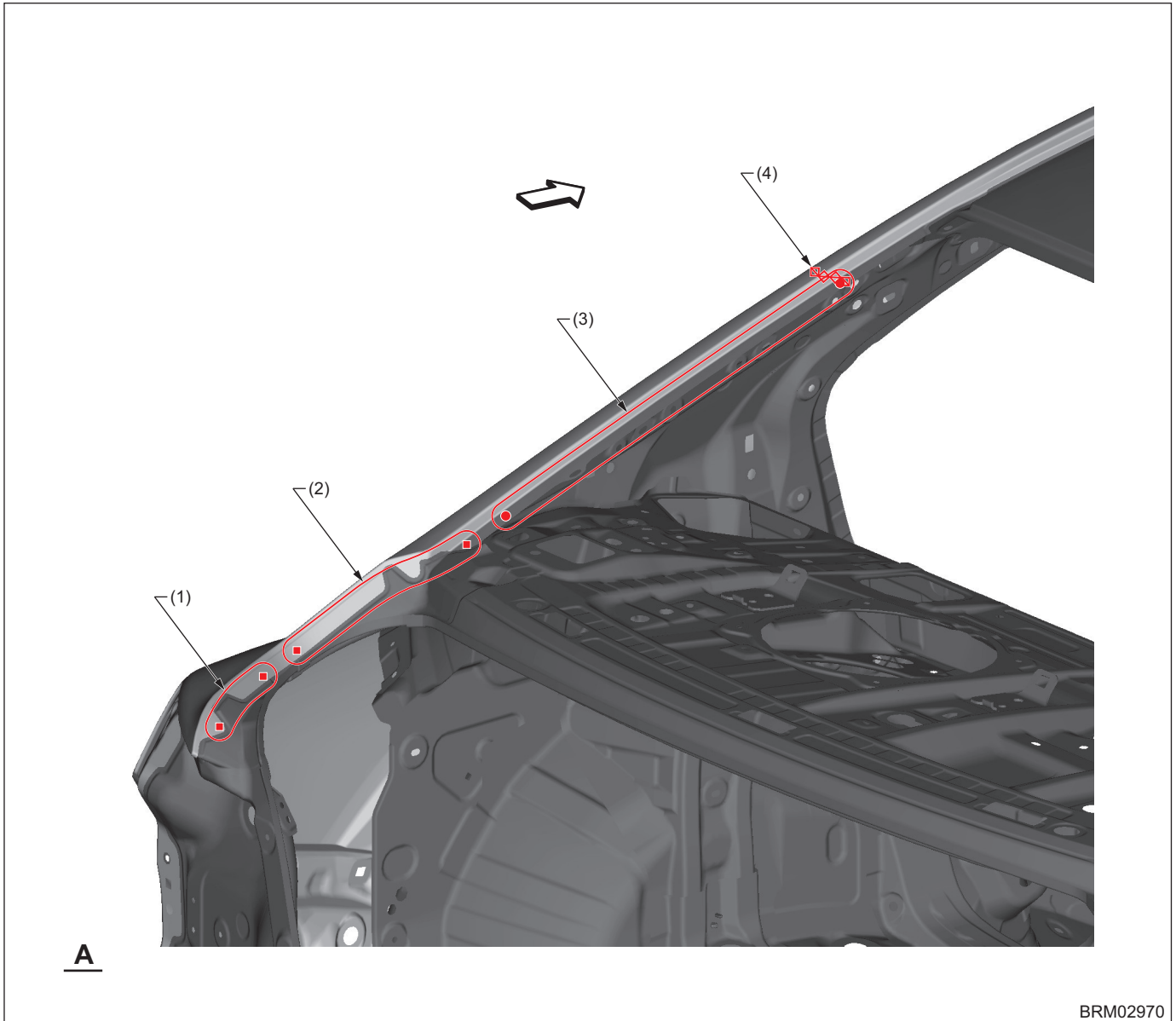
[y] Plug welding conditions

A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO₂

B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO₂: 20 %)

Panel Replacement

• View A



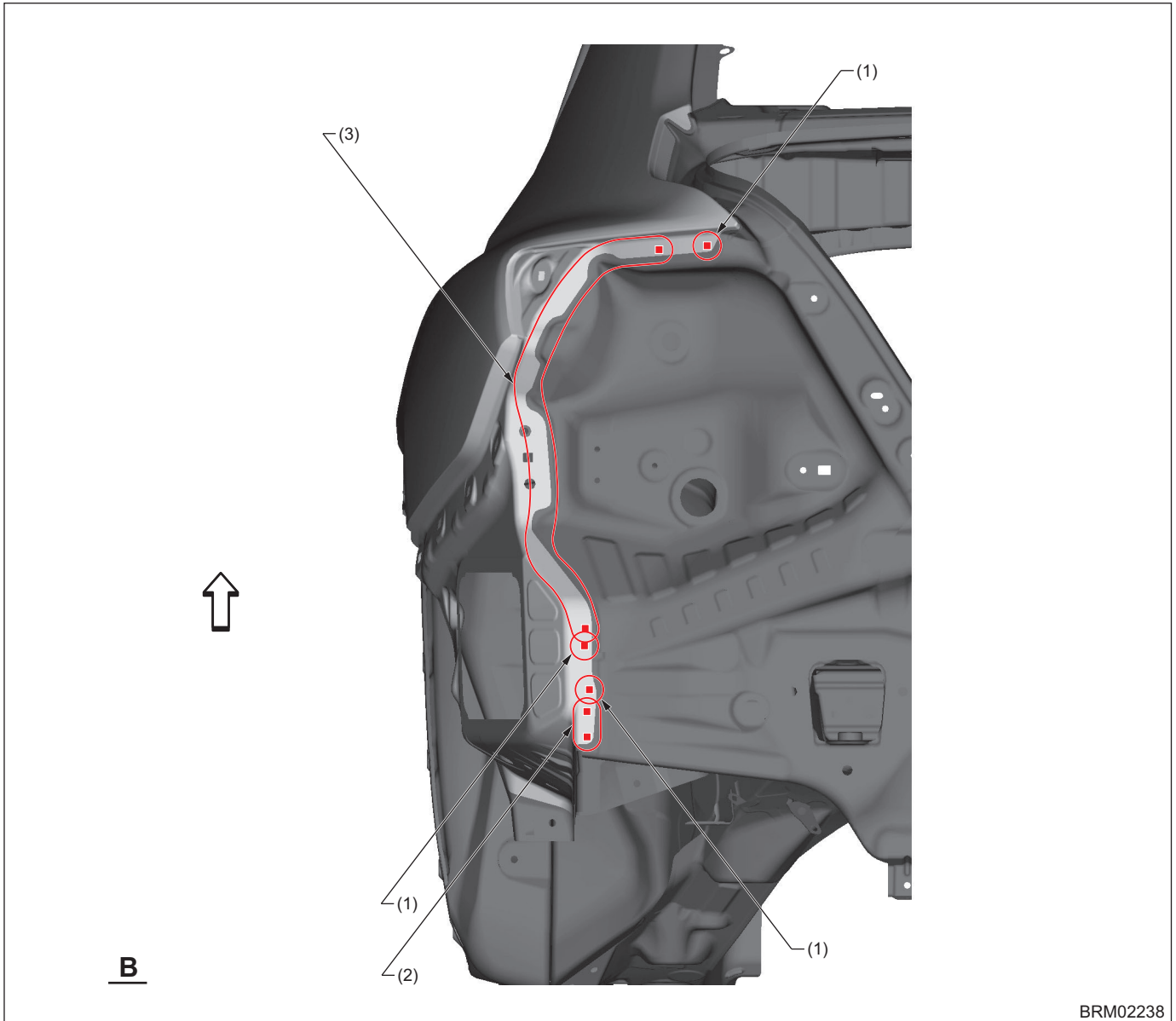
- (1) 3 points (Service part)
- (2) 5 points (Service part)

- (3) 7 points

- (4) 1 point (Continuous welding)

Panel Replacement

• View B



BRM02238

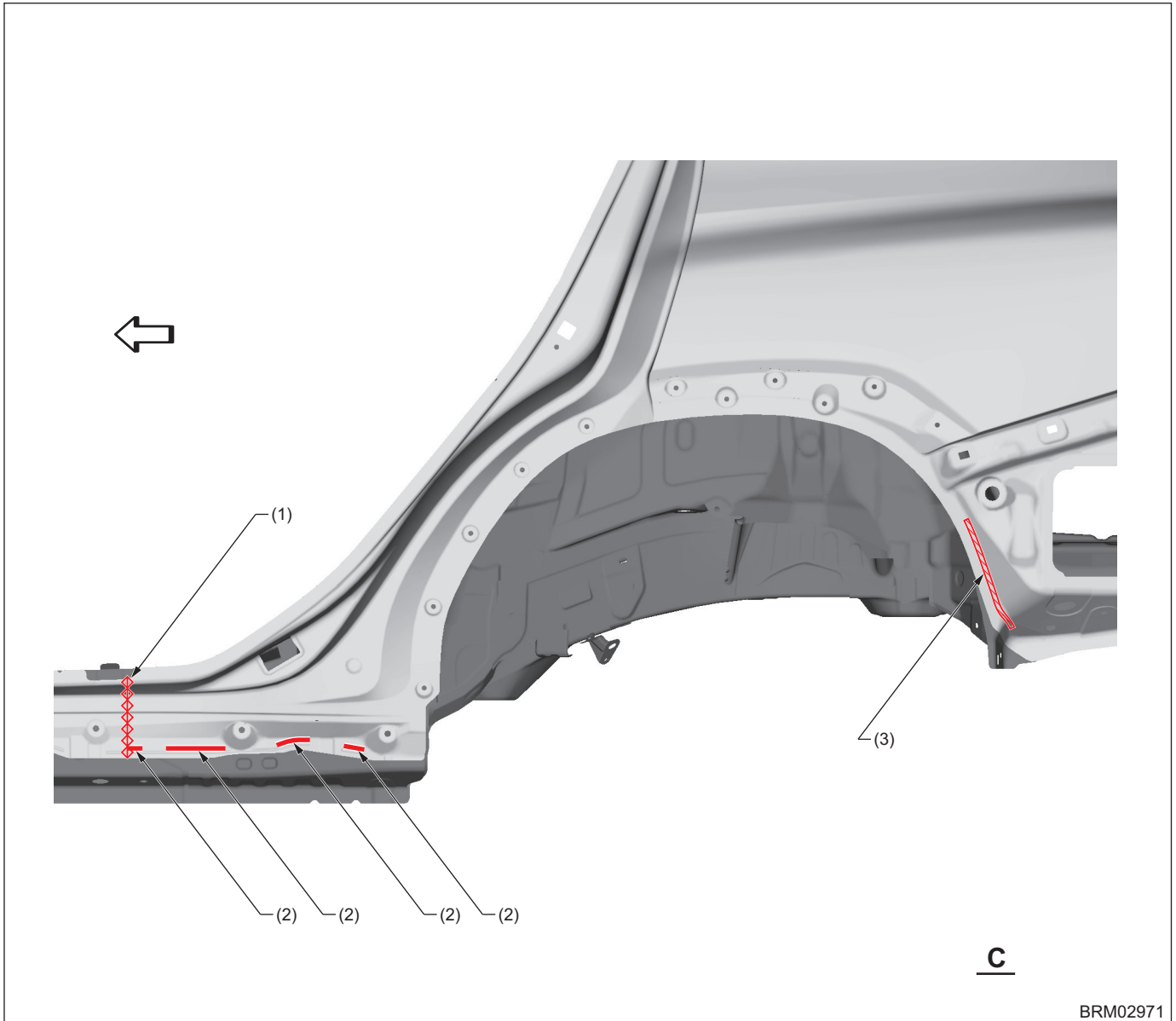
(1) 1 point (Service part)

(2) 2 points (Service part)

(3) 11 points (Service part)

Panel Replacement

• View C



BRM02971

(1) 1 point (Continuous welding)

(2) Structural adhesive

(3) Spotting sealer

— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

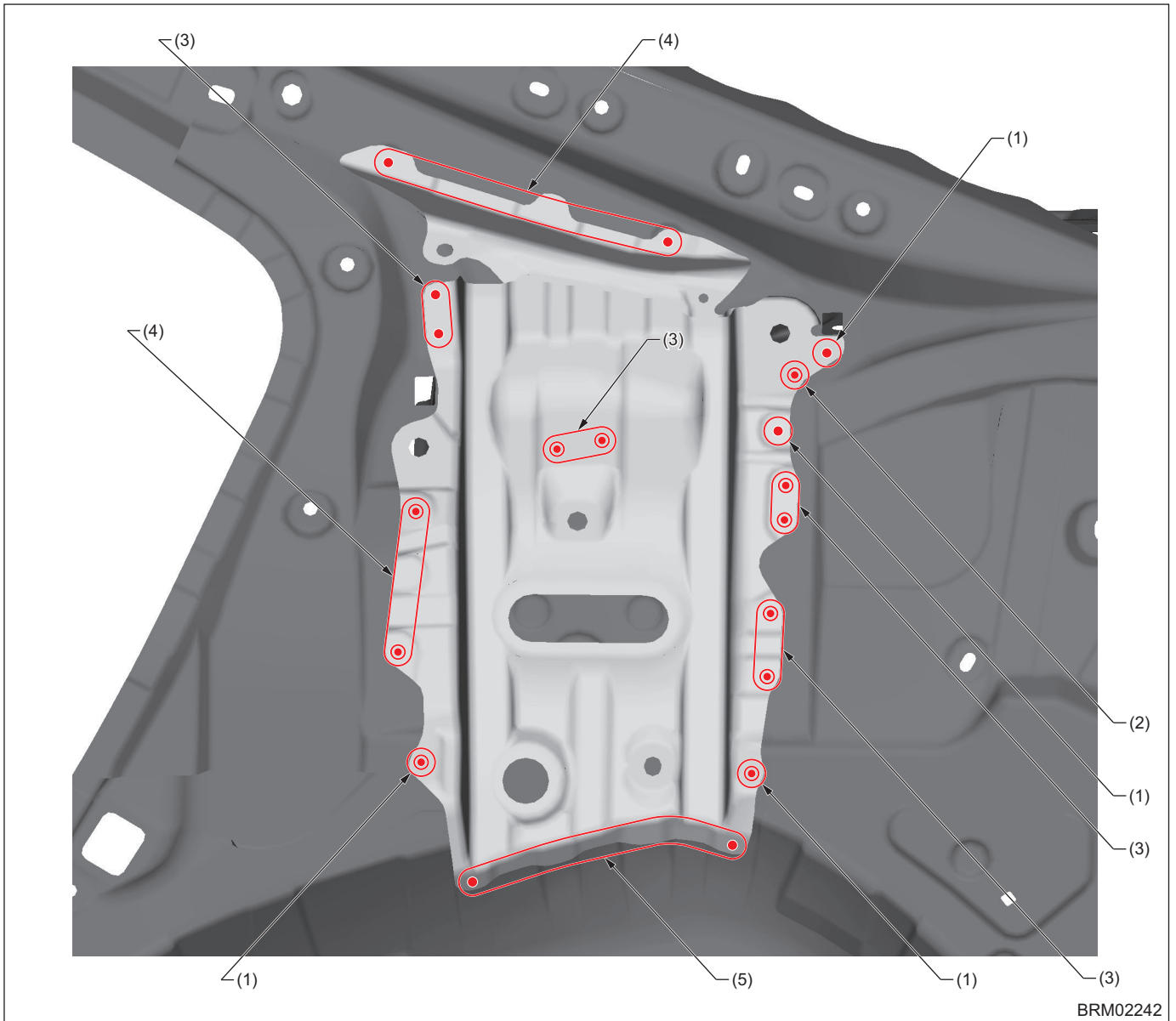
▨ : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

Panel Replacement

9-19. Rear Pillar Reinforcement Outer (Total replacement)

A: REMOVAL

• Overall view



BRM02242

(1) 1 point (Outside · 1)

(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)

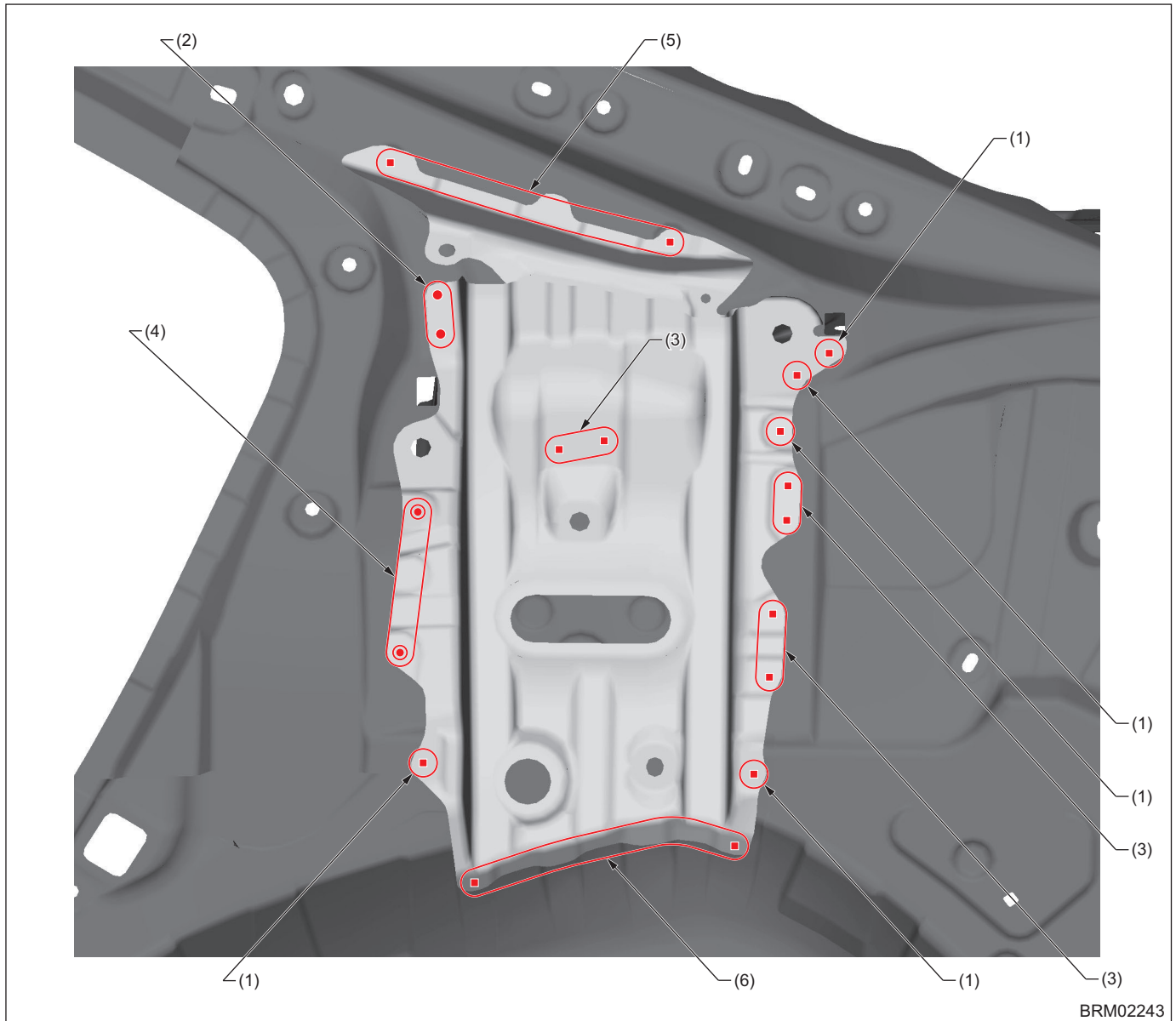
(4) 3 points (Outside · 1)

(5) 4 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02243

(1) 1 point (Service part)
(2) 2 points

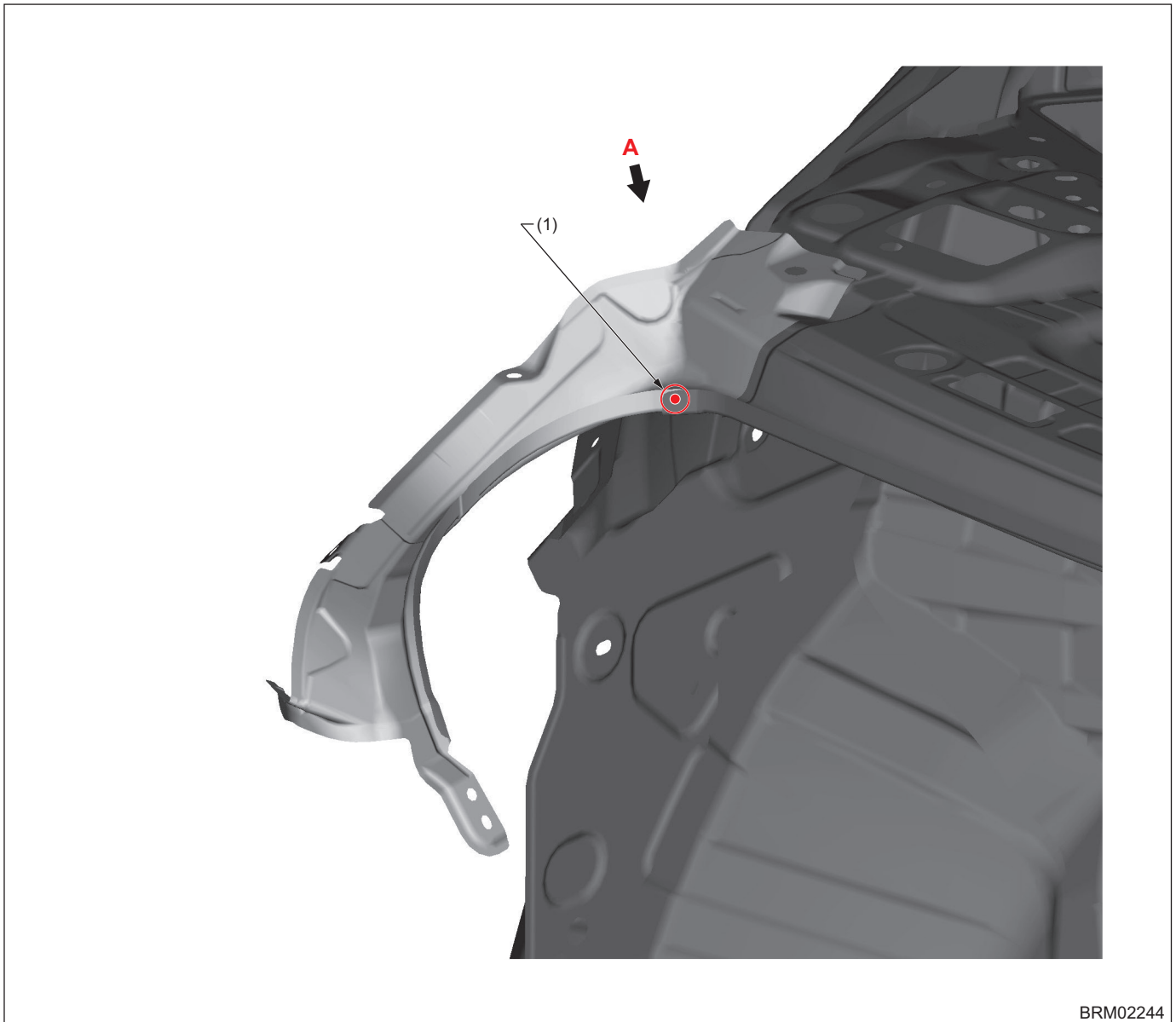
(3) 2 points (Service part)
(4) 3 points

(5) 3 points (Service part)
(6) 4 points (Service part)

9-20. Patch Rear Pillar · Corner Patch (Total replacement)

A: REMOVAL

- Overall view

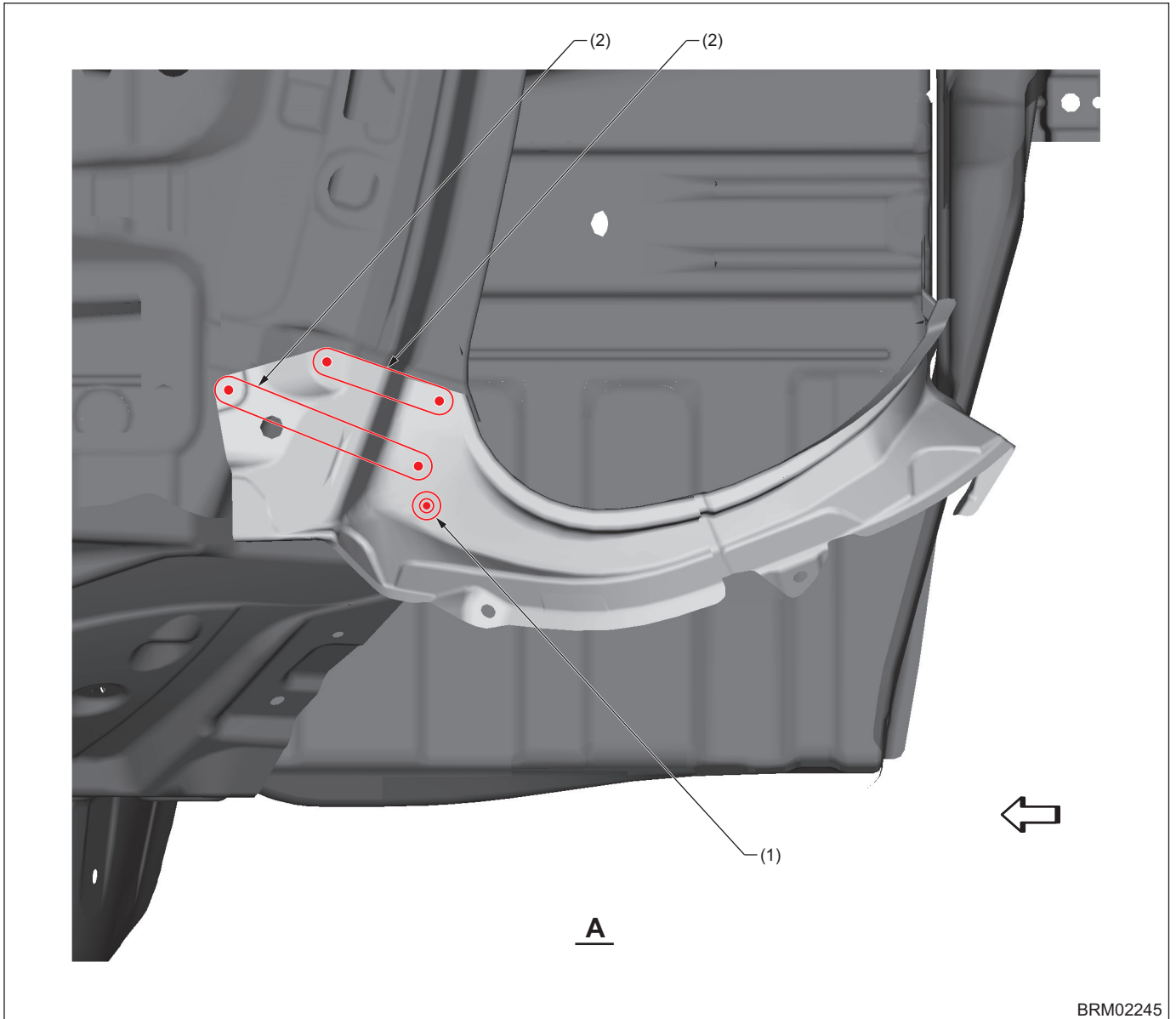


BRM02244

(1) 1 point (Outside · 1)

Panel Replacement

• View A

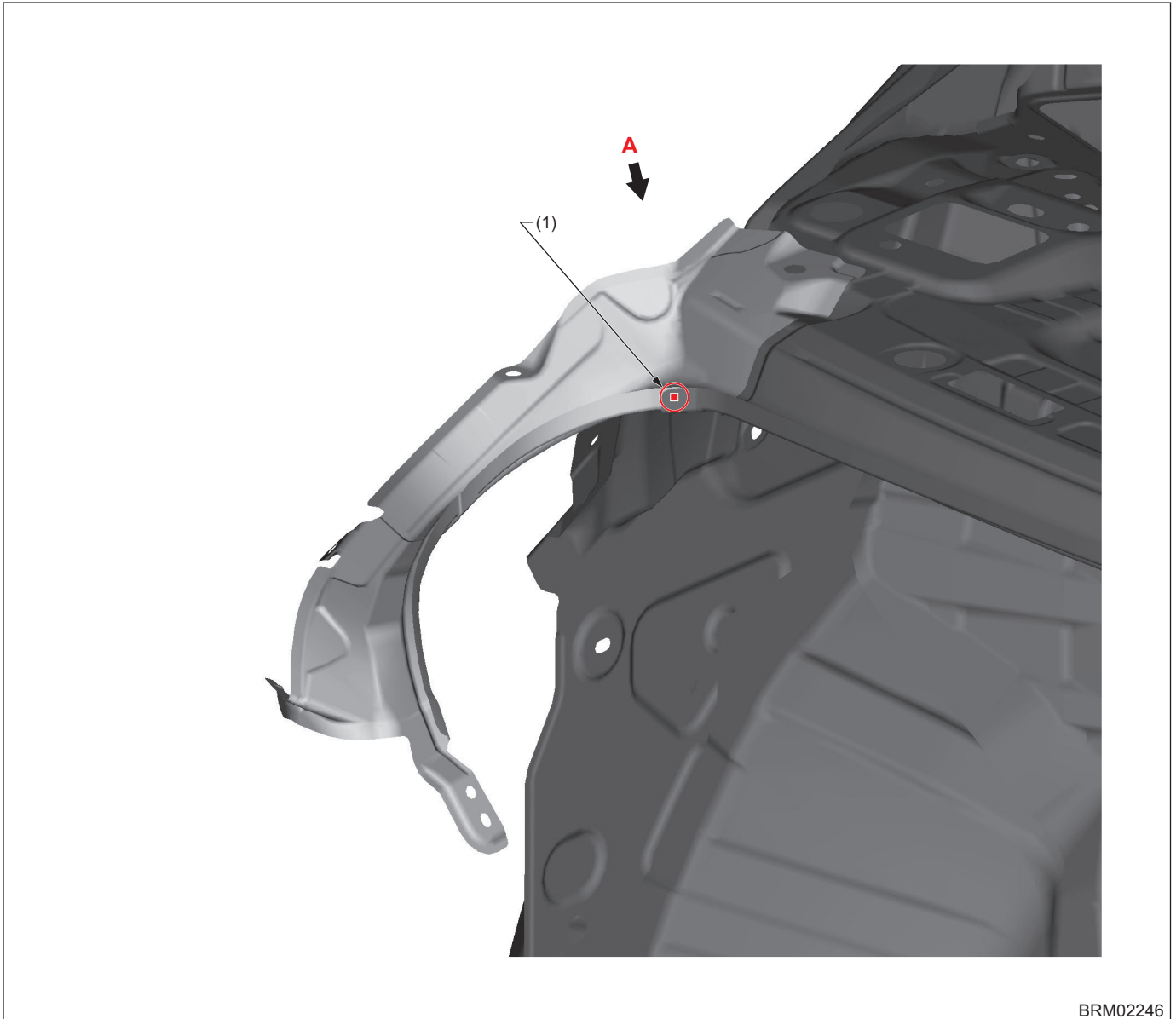


(1) 1 point (Top · 1)

(2) 2 points (Top · 1)

B: INSTALLATION

- Overall view

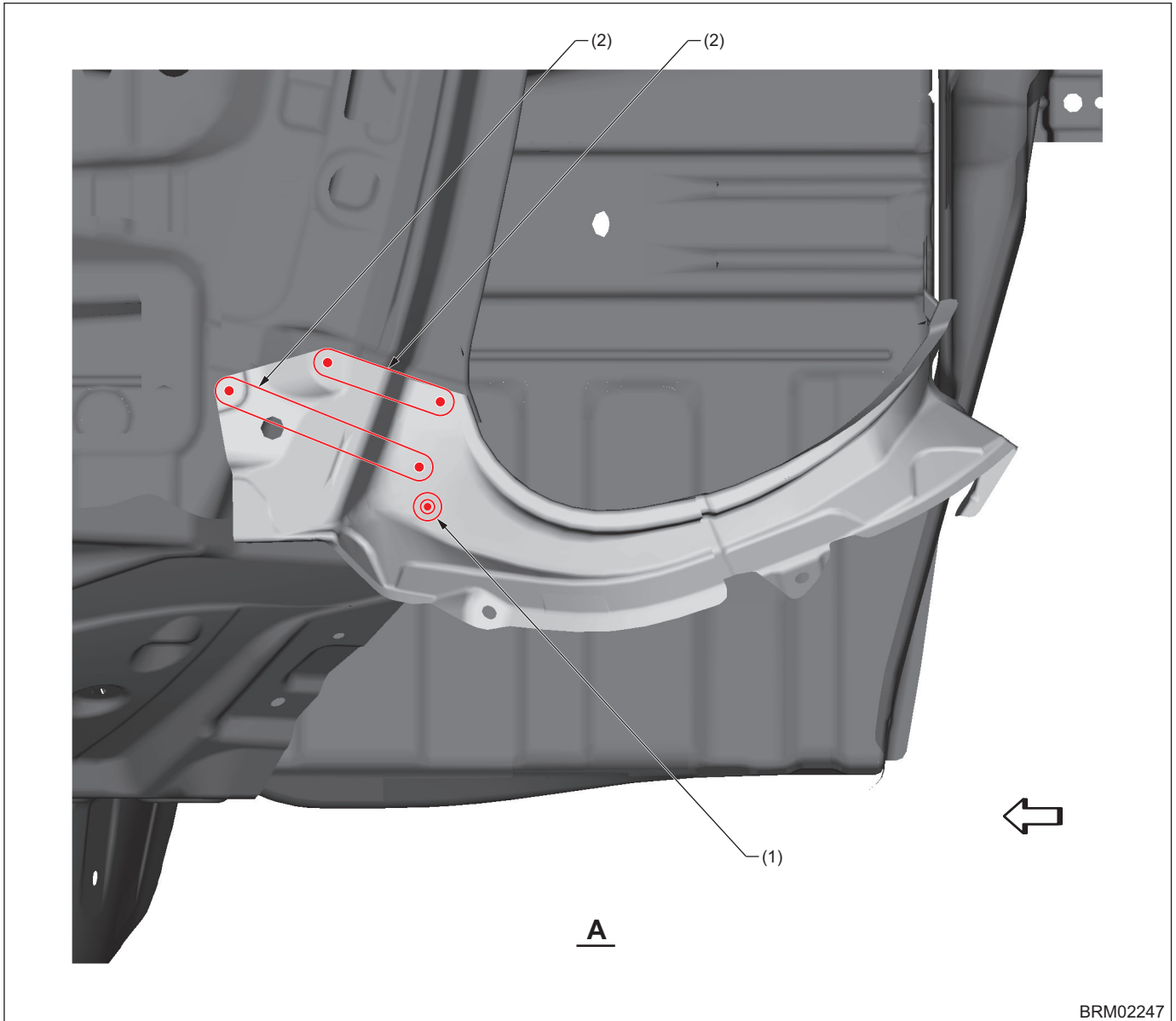


BRM02246

(1) 1 point

Panel Replacement

• View A



(1) 1 point

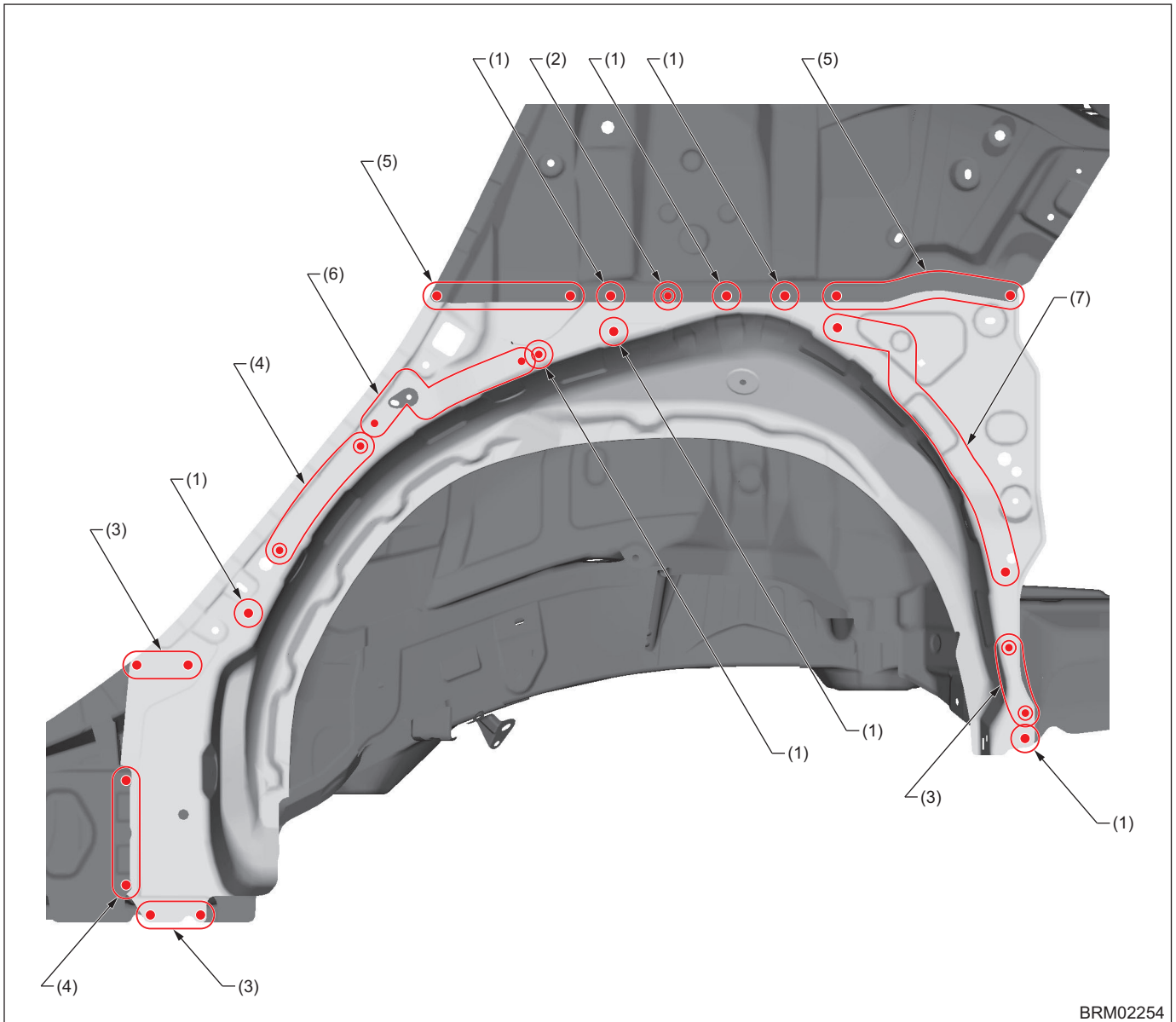
(2) 2 points

Panel Replacement

9-21. Arch Rear Inner LH (Total replacement)

A: REMOVAL

• Overall view



BRM02254

- (1) 1 point (Outside · 1)
- (2) 1 point (Outside · 2)
- (3) 2 points (Outside · 1)

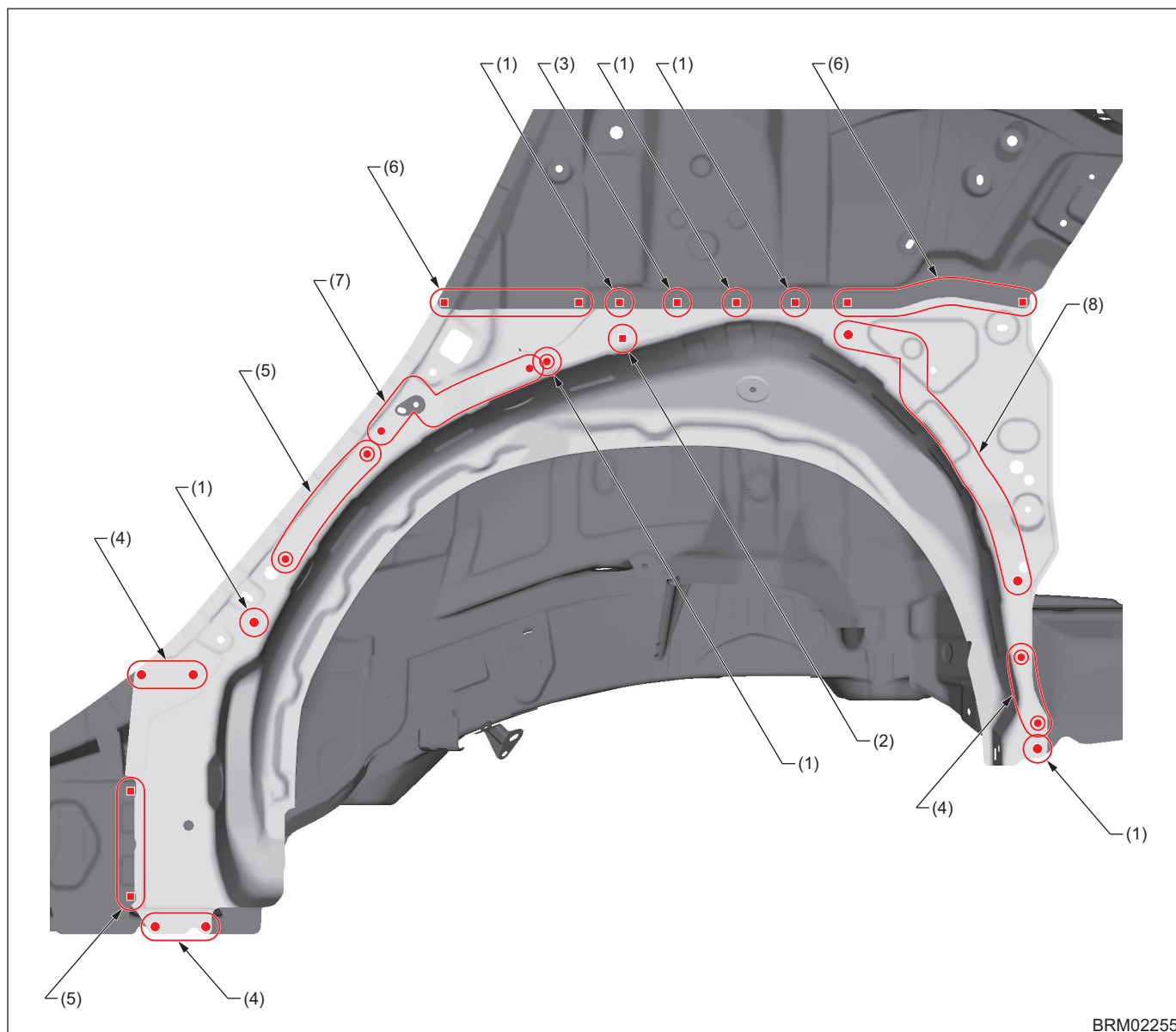
- (4) 3 points (Outside · 1)
- (5) 4 points (Outside · 1)
- (6) 5 points (Outside · 1)

- (7) 8 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BRM02255

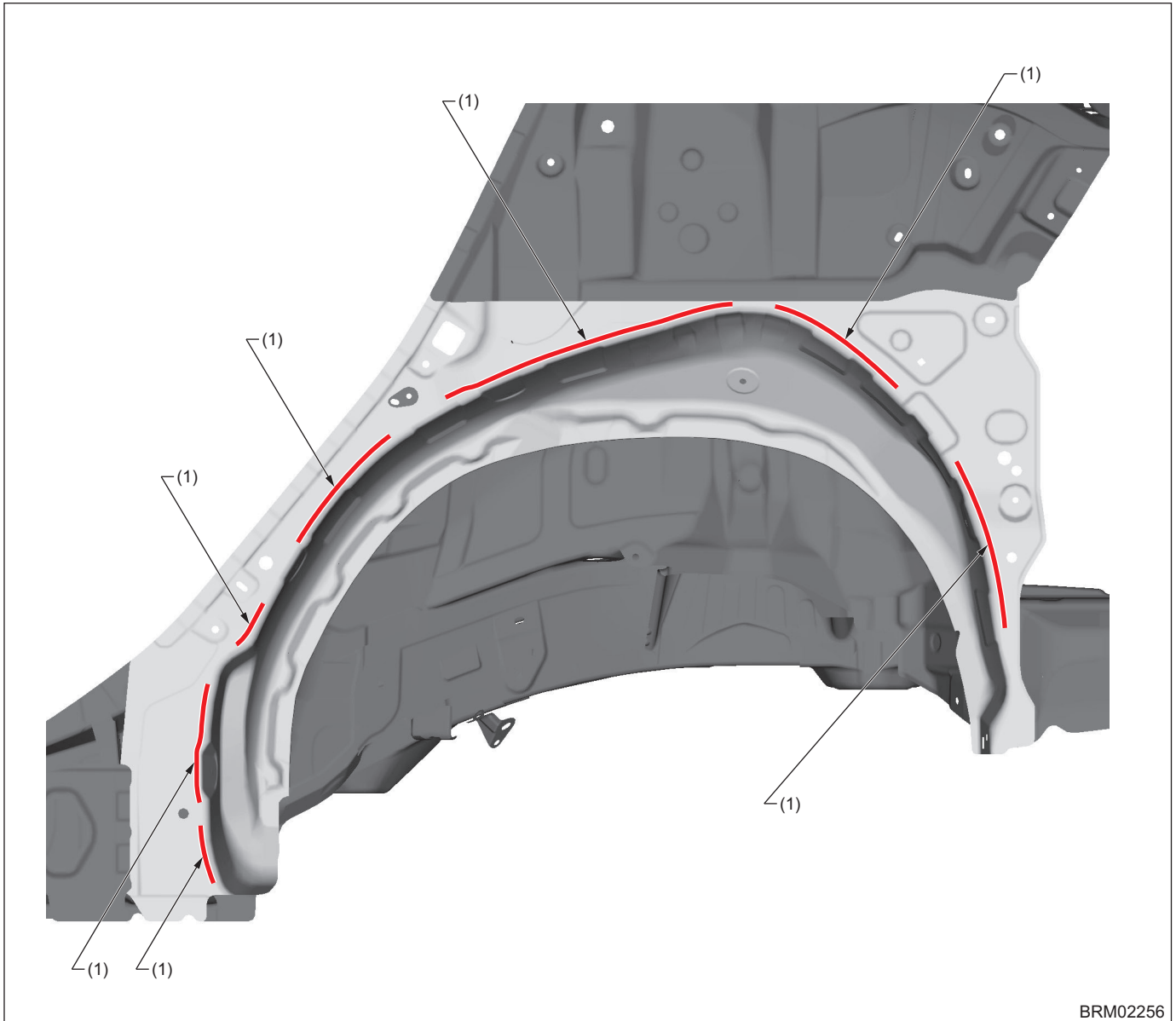
- (1) 1 point
- (2) 1 point (Service part)
- (3) 1 point (Service part · matching)

- (4) 2 points
- (5) 3 points
- (6) 4 points

- (7) 5 points
- (8) 8 points

Panel Replacement

• Overall view 2



(1) Structural adhesive

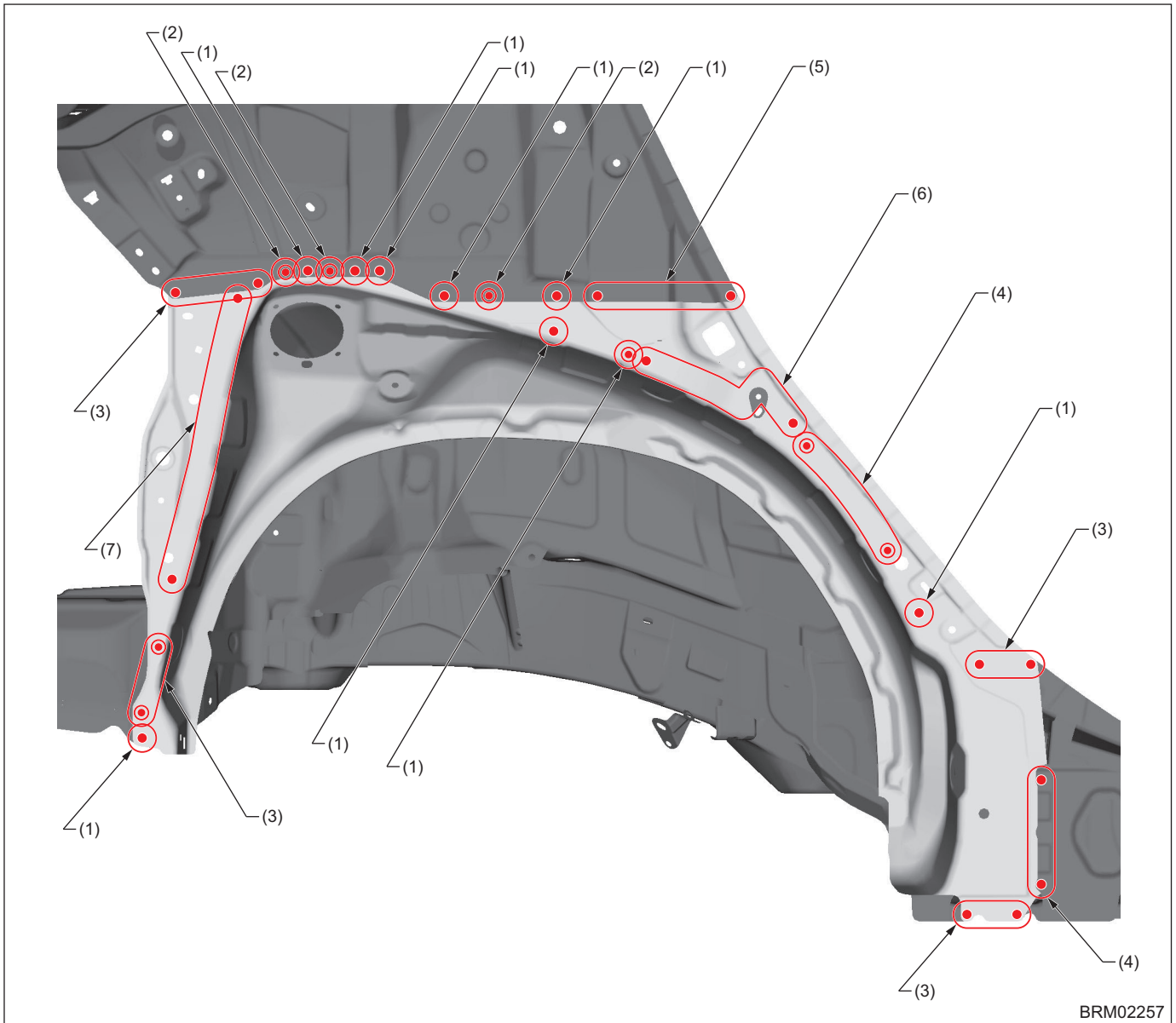
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-22. Arch Rear Inner RH (Total replacement)

A: REMOVAL

• Overall view



- (1) 1 point (Outside · 1)
- (2) 1 point (Outside · 2)
- (3) 2 points (Outside · 1)

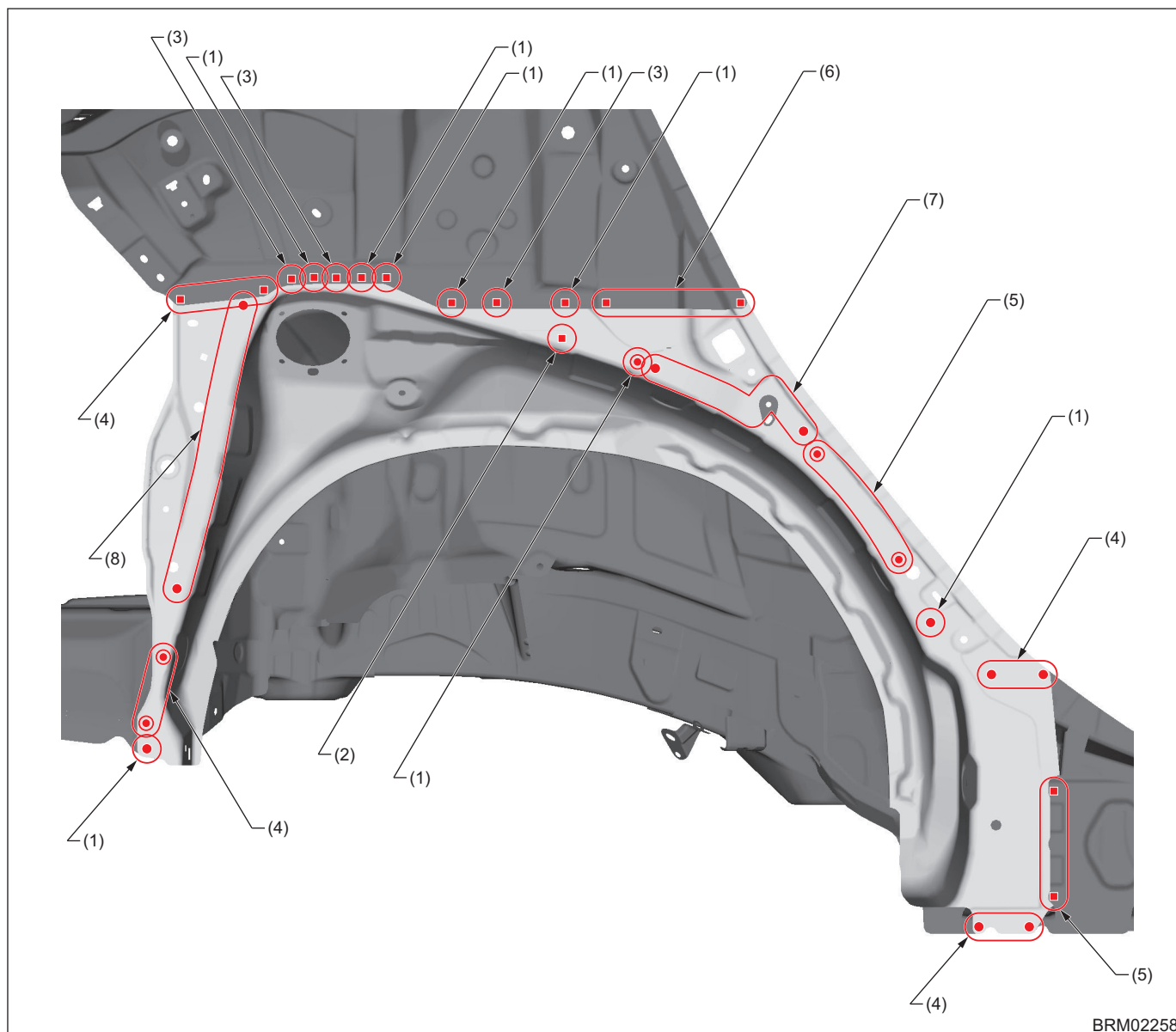
- (4) 3 points (Outside · 1)
- (5) 4 points (Outside · 1)
- (6) 5 points (Outside · 1)

- (7) 6 points (Outside · 1)

Panel Replacement

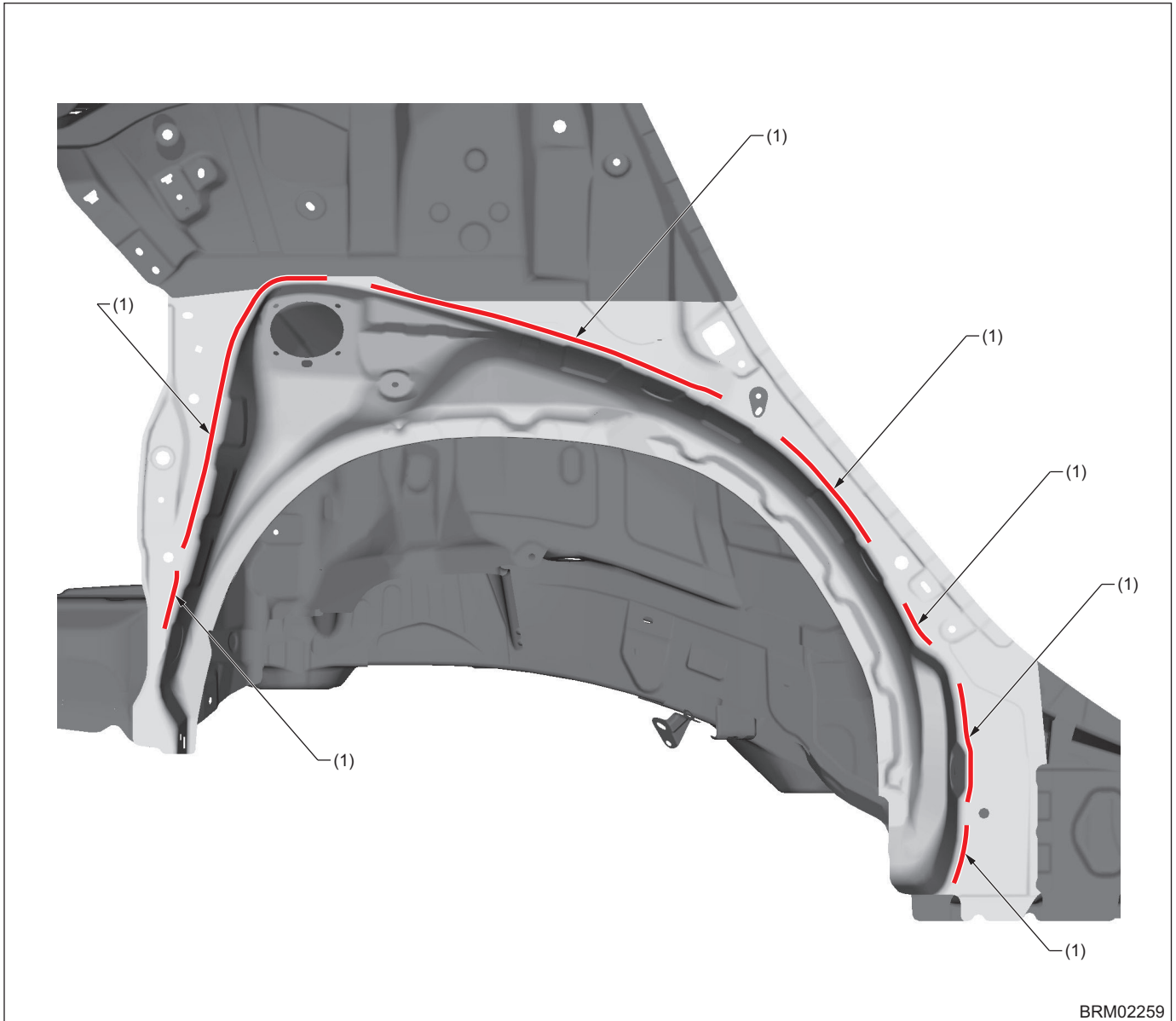
B: INSTALLATION

• Overall view 1



Panel Replacement

• Overall view 2



(1) Structural adhesive

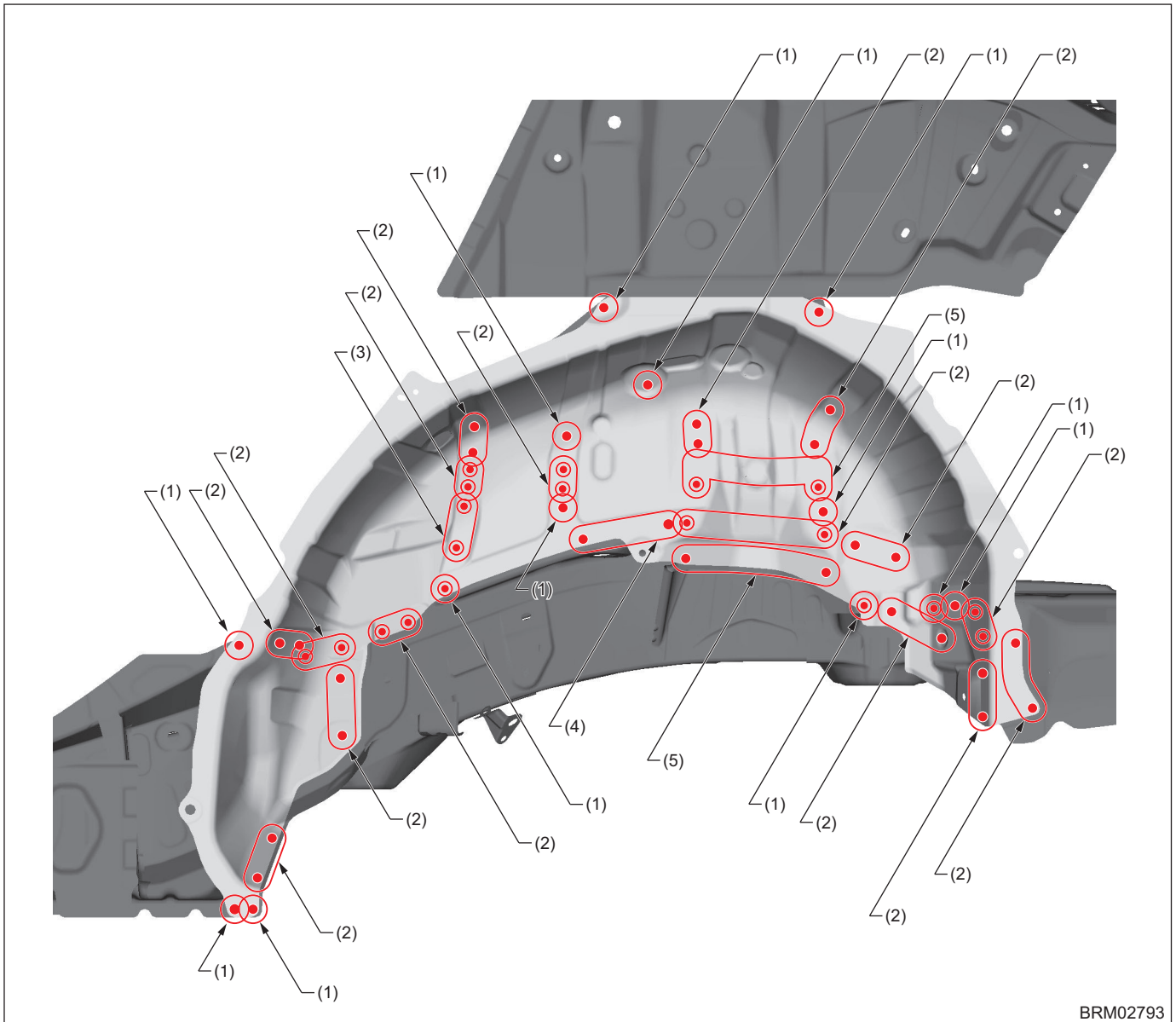
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-23. Wheel Apron LH (Total replacement)

A: REMOVAL

• Overall view



BRM02793

(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

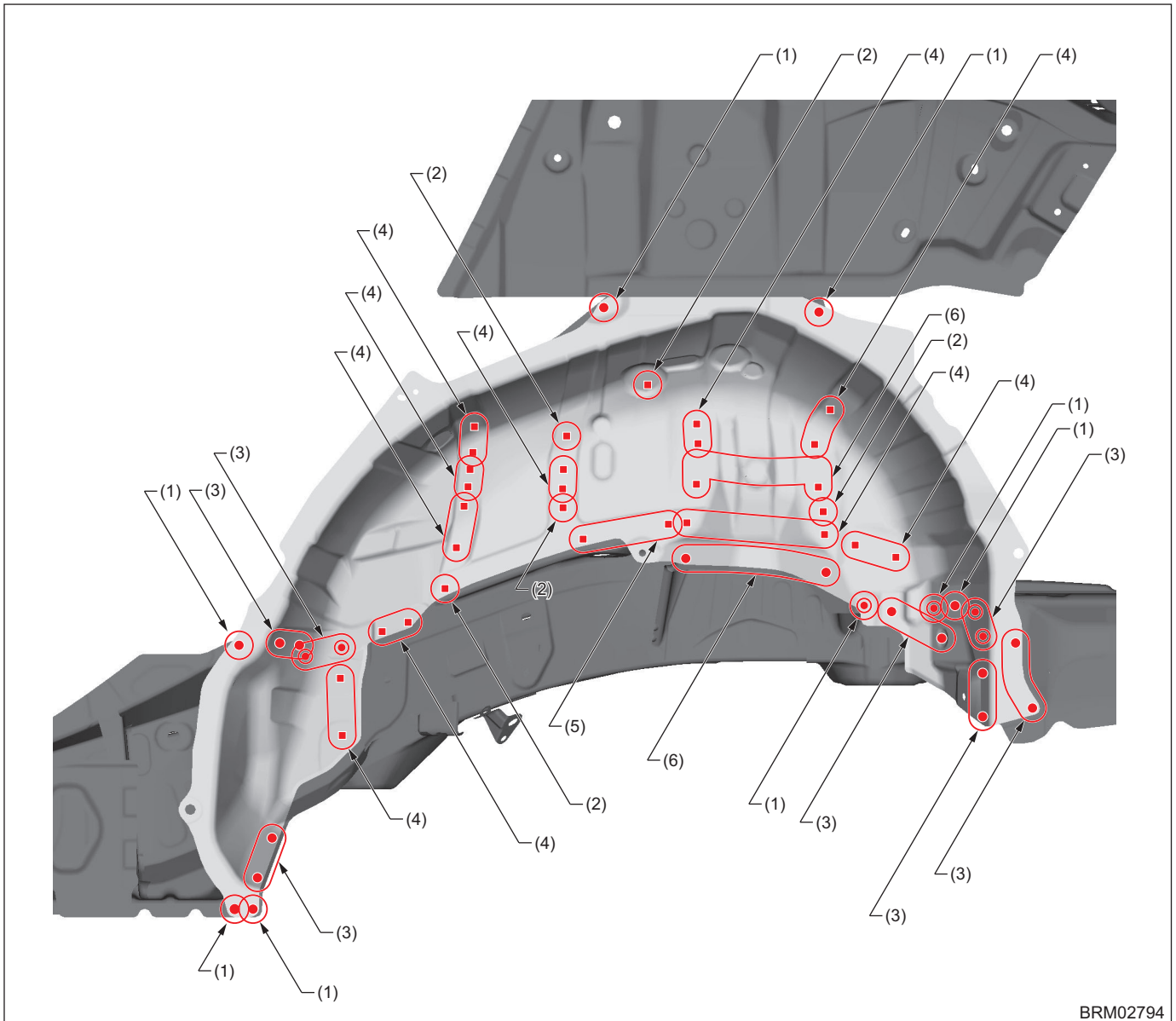
(3) 2 points (Outside · 2)
(4) 3 points (Outside · 1)

(5) 5 points (Outside · 1)

Panel Replacement

B: INSTALLATION

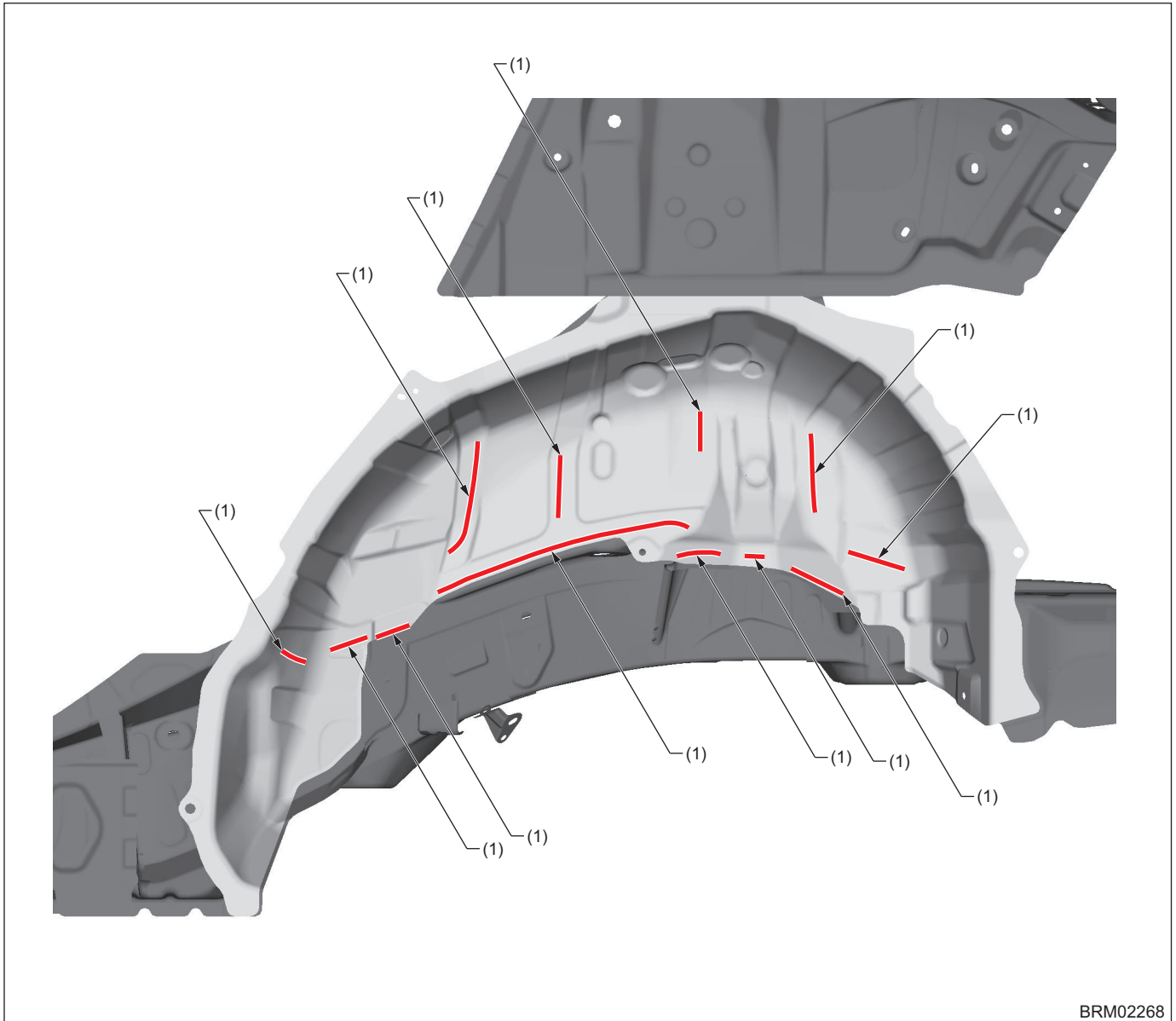
• Overall view 1



- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (3) 2 points | (5) 3 points (Service part) |
| (2) 1 point (Service part) | (4) 2 points (Service part) | (6) 5 points (Service part) |

Panel Replacement

• Overall view 2



(1) Structural adhesive

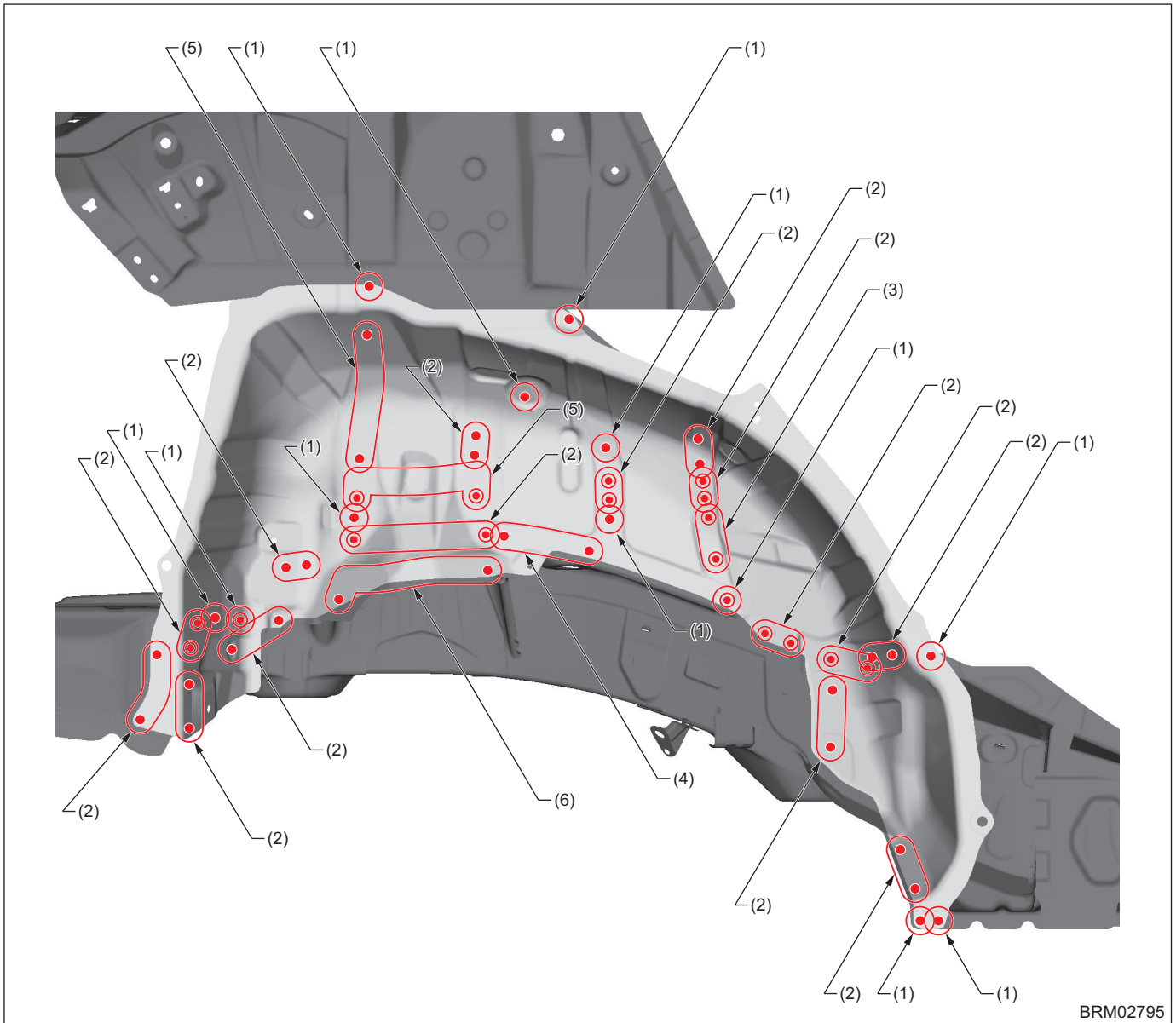
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-24. Wheel Apron RH (Total replacement)

A: REMOVAL

• Overall view



(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 2 points (Outside · 2)

(4) 3 points (Outside · 1)

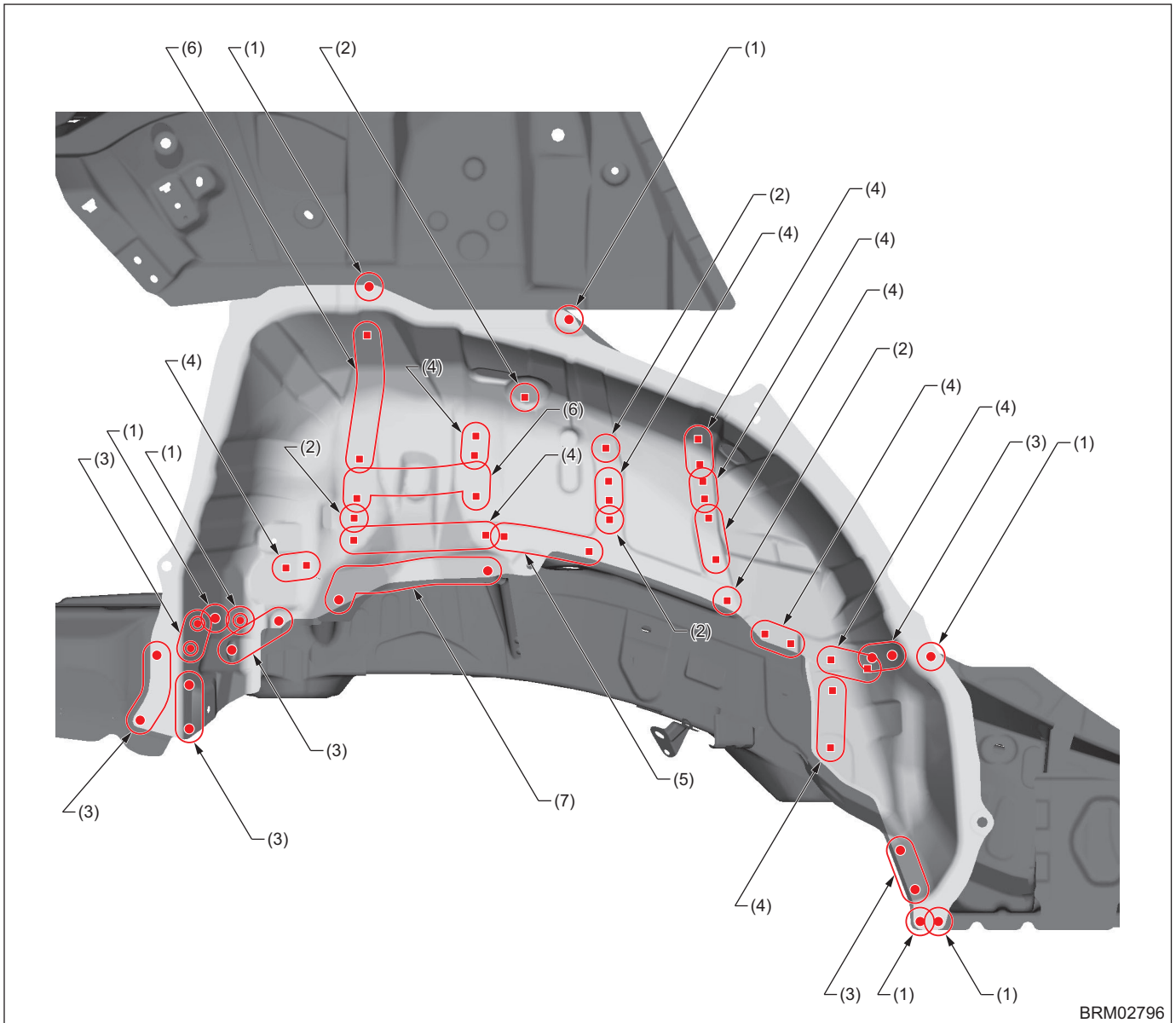
(5) 5 points (Outside · 1)

(6) 6 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1

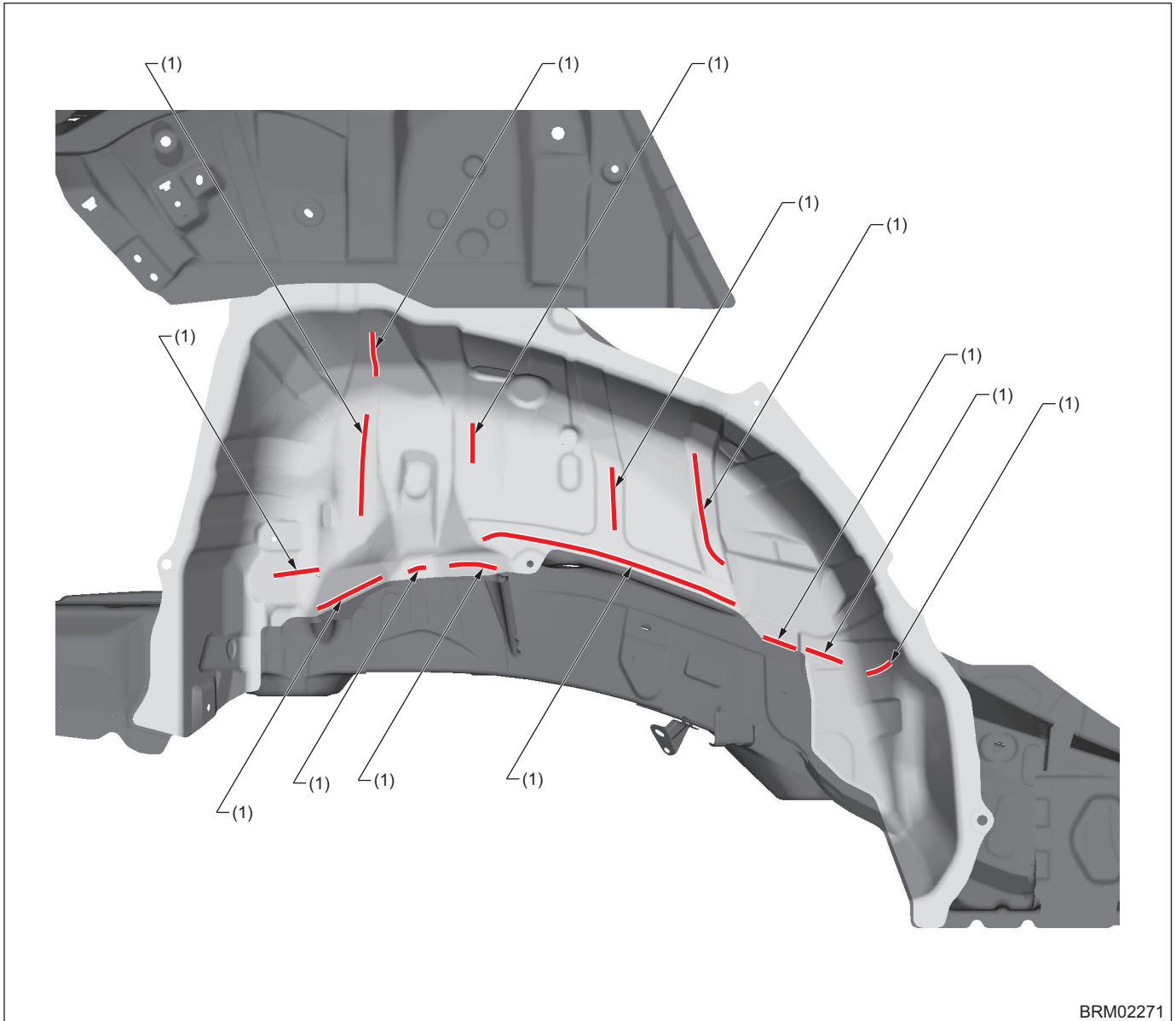


BRM02796

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 6 points (Service part) |
| (2) 1 point (Service part) | (5) 3 points (Service part) | |
| (3) 2 points | (6) 5 points (Service part) | |

Panel Replacement

• Overall view 2



(1) Structural adhesive

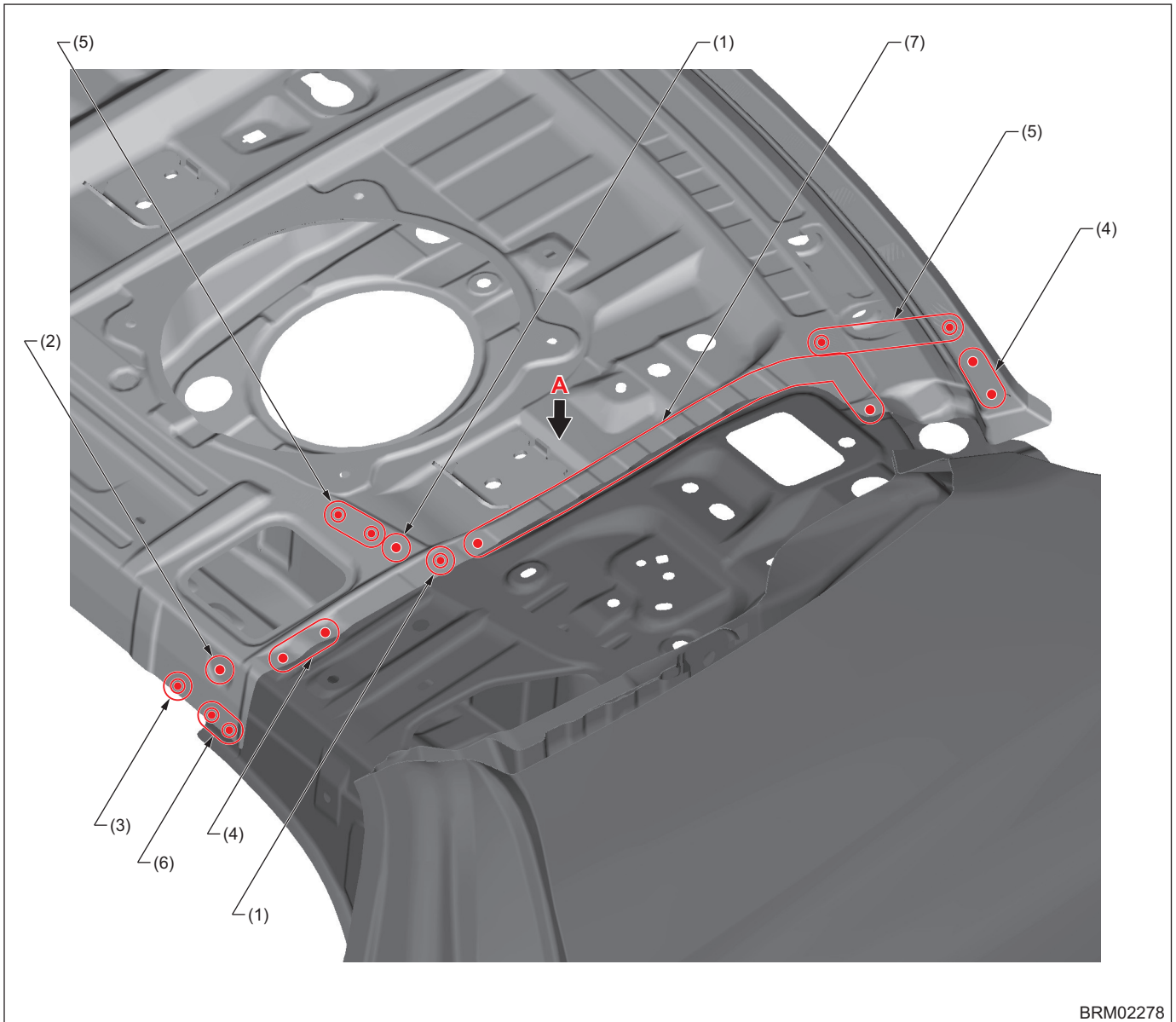
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-25. Rear Panel (Total replacement)

A: REMOVAL

• Overall view



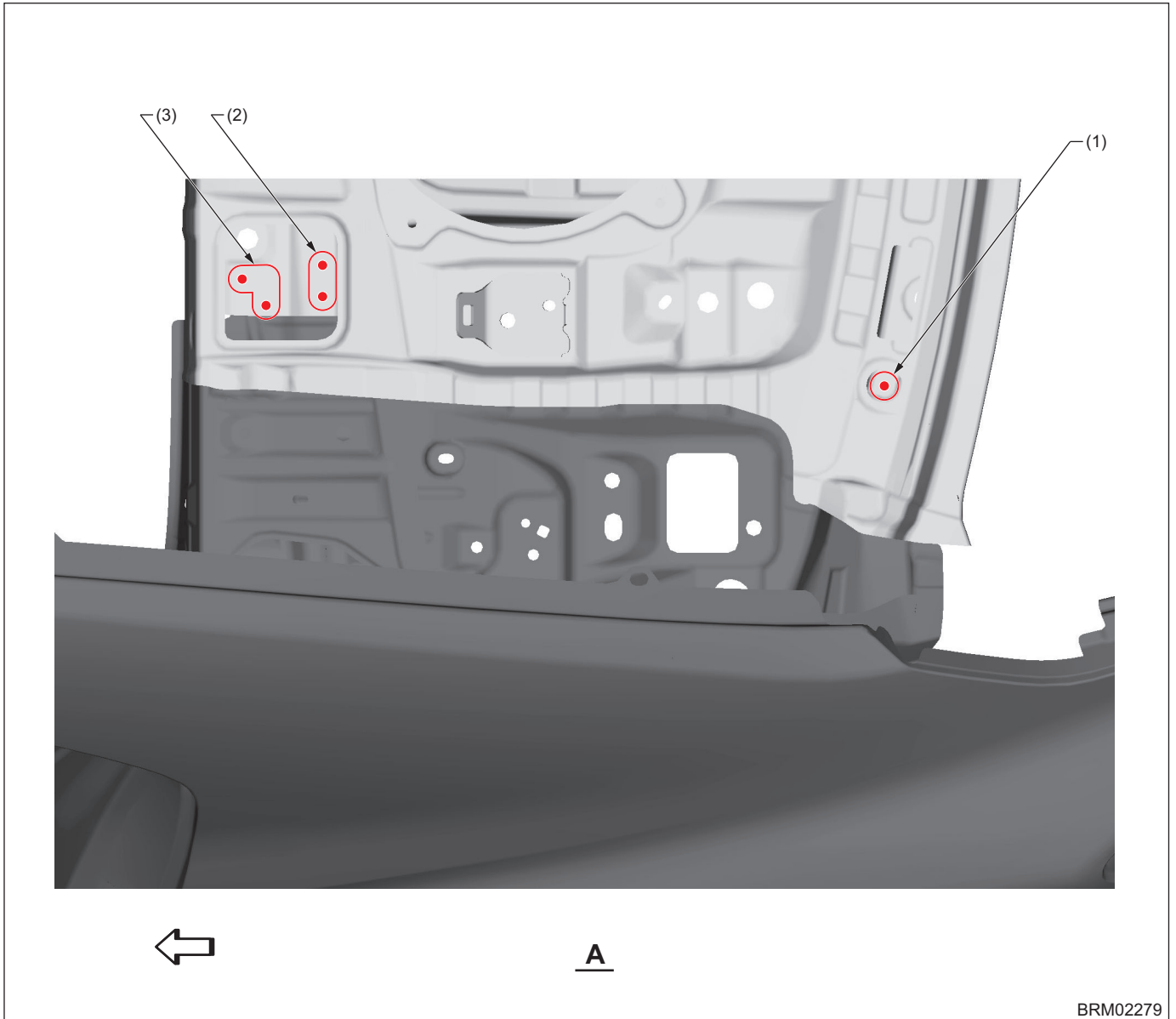
- (1) 1 point (Top · 1)
- (2) 1 point (Inside · 1)
- (3) 1 point (Inside · 2)

- (4) 2 points (Top · 1)
- (5) 2 points (Top · 2)
- (6) 2 points (Inside · 1)

- (7) 10 points (Top · 1)

Panel Replacement

• View A



(1) 1 point (Top · 1)

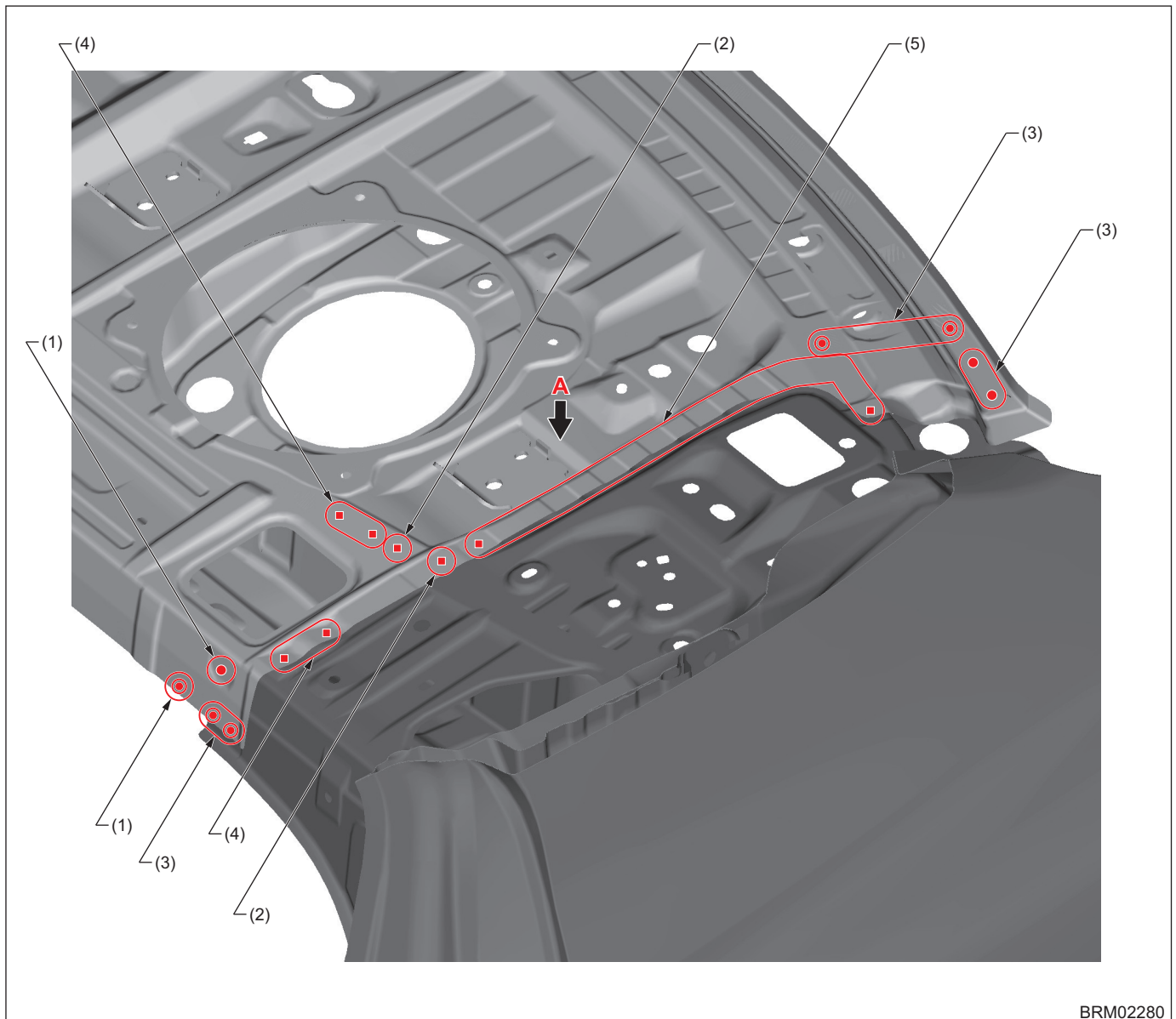
(2) 2 points (Top · 1)

(3) 3 points (Top · 1)

Panel Replacement

B: INSTALLATION

• Overall view



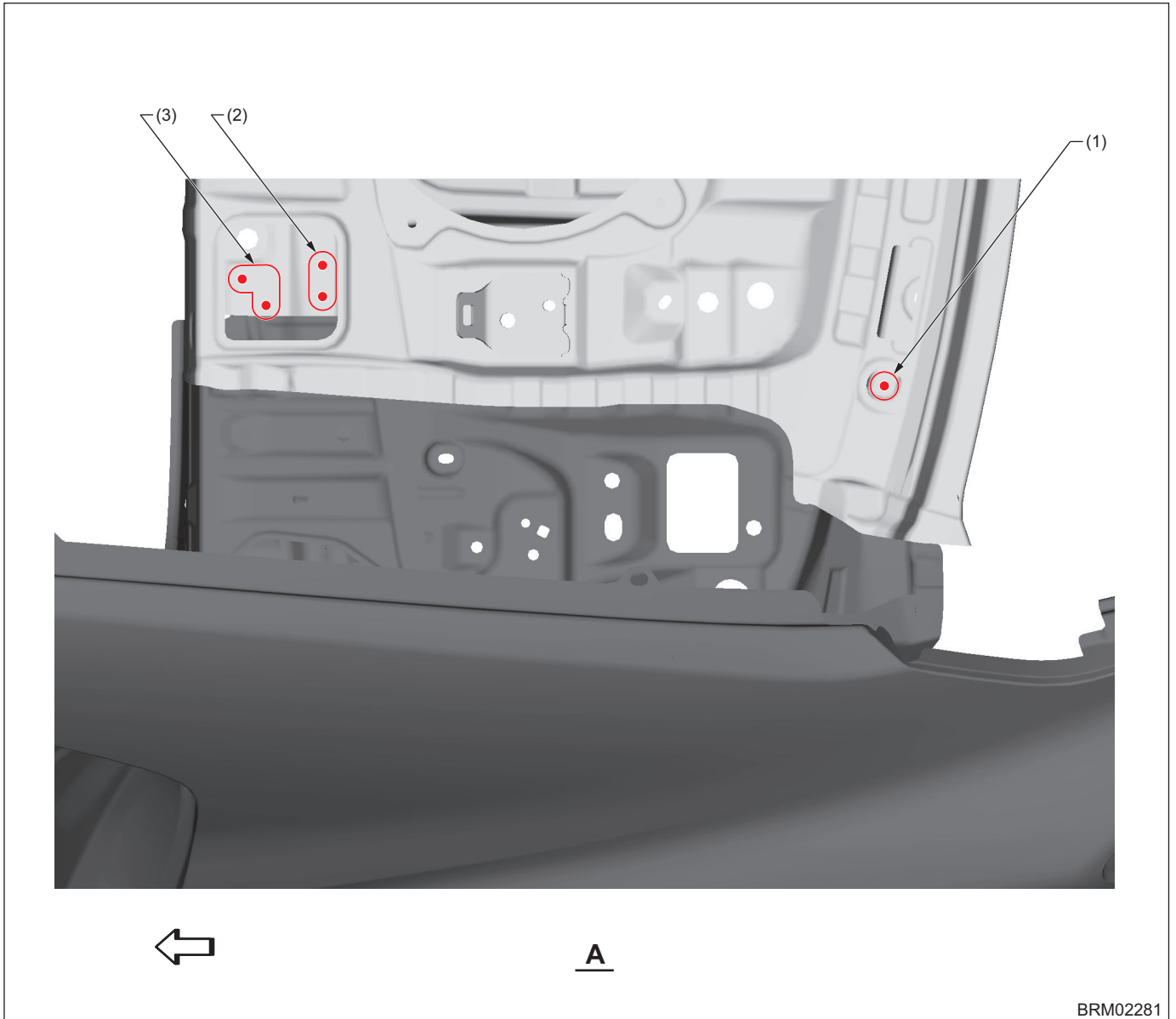
- (1) 1 point
- (2) 1 point (Service part)

- (3) 2 points
- (4) 2 points (Service part)

- (5) 10 points (Service part)

Panel Replacement

• View A



(1) 1 point

(2) 2 points

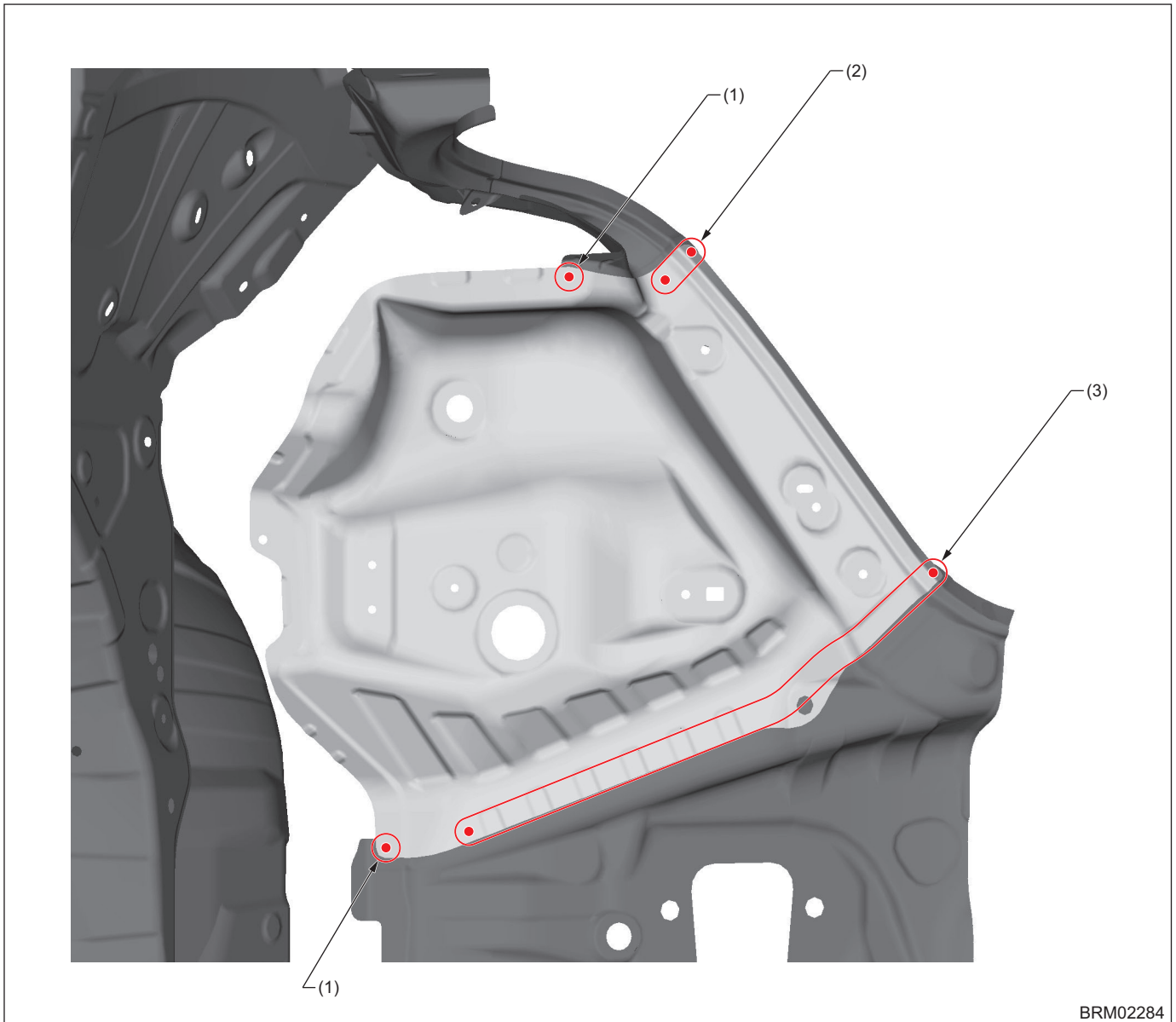
(3) 3 points

Panel Replacement

9-26. Rear Quarter End Panel (Total replacement)

A: REMOVAL

• Overall view



BRM02284

(1) 1 point (Outside · 1)

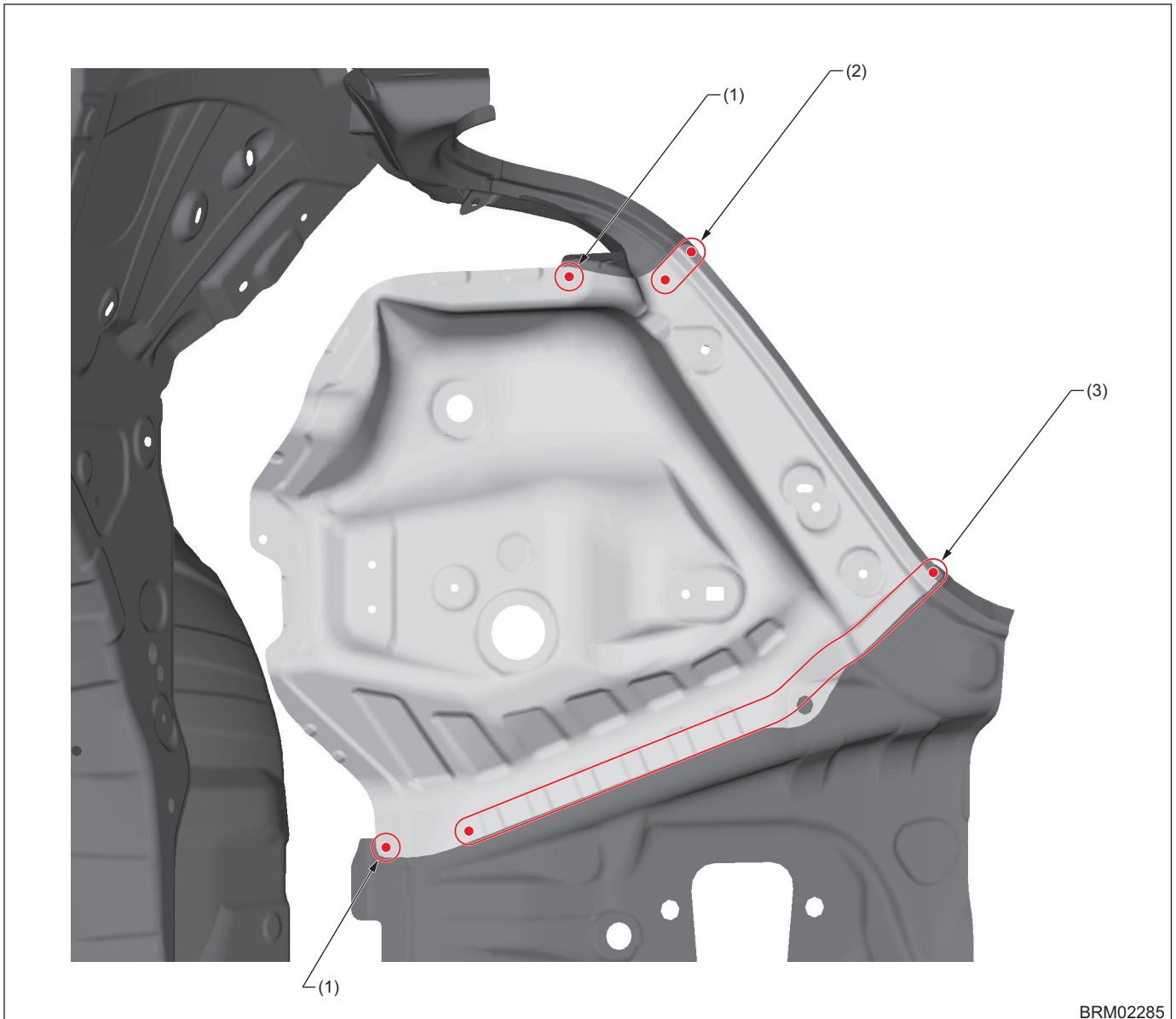
(2) 2 points (Outside · 1)

(3) 11 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



(1) 1 point

(2) 2 points

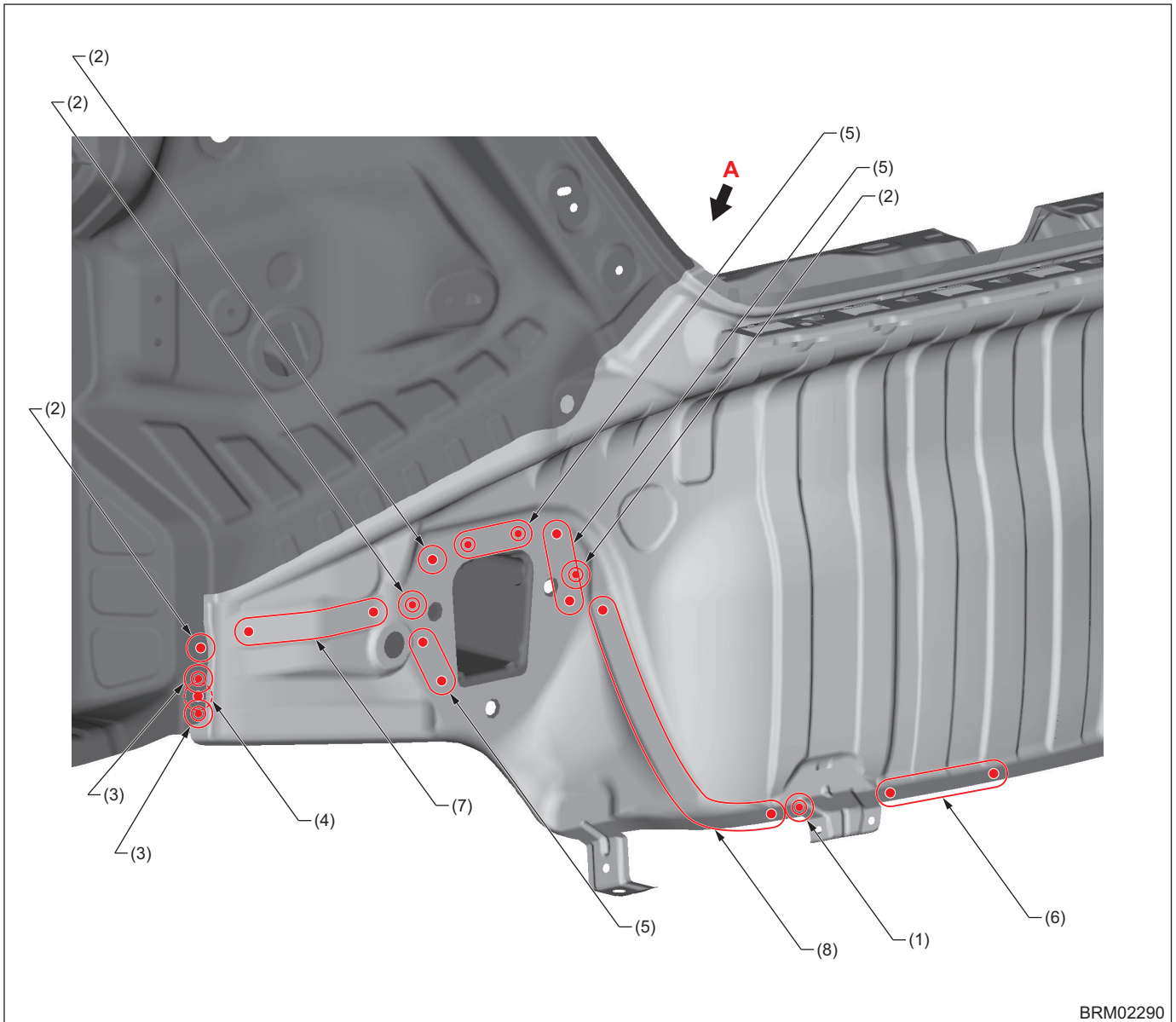
(3) 11 points

Panel Replacement

9-27. Rear Skirt (Total replacement)

A: REMOVAL

• Overall view

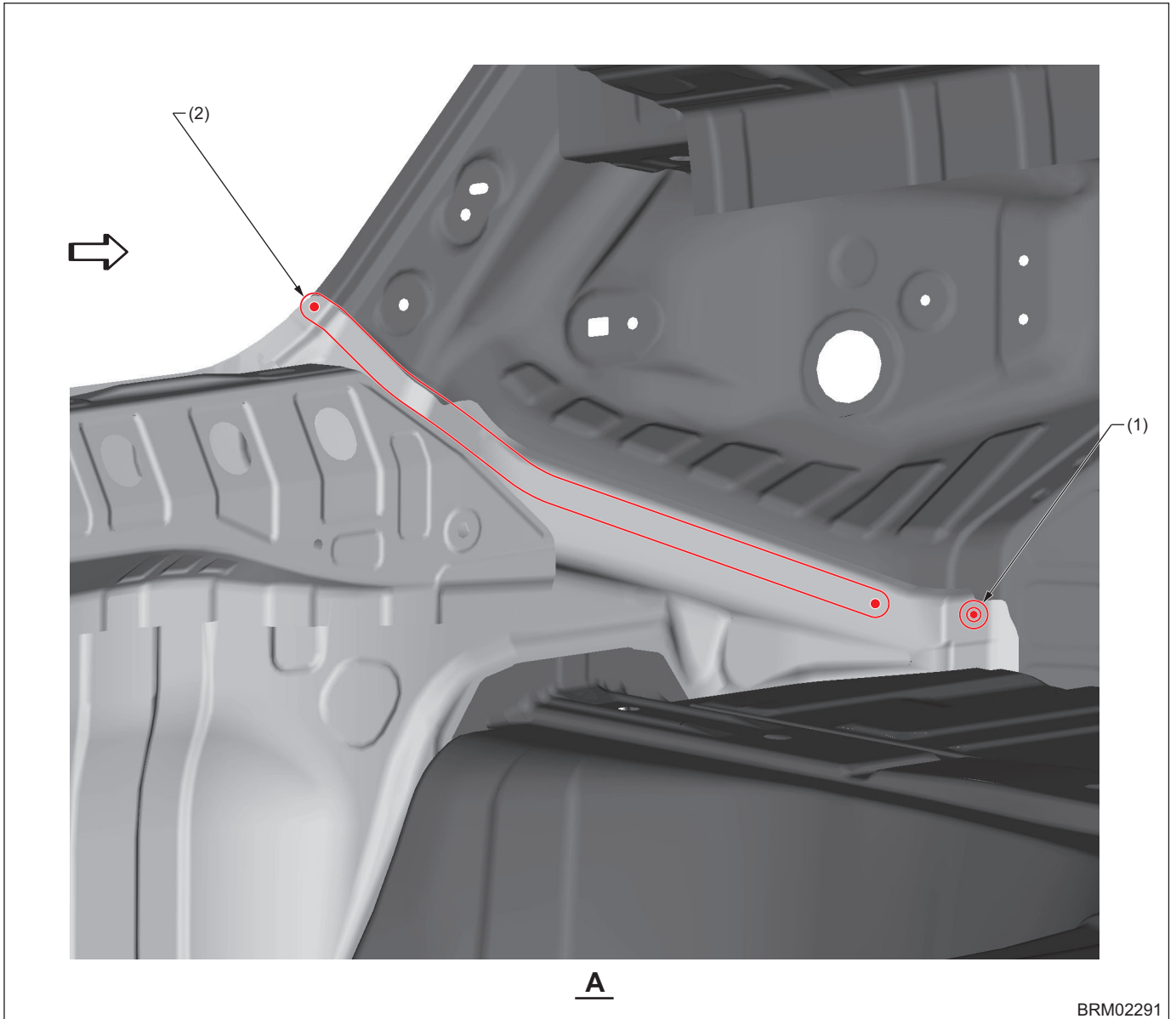


BRM02290

- | | | |
|---------------------------|----------------------------|----------------------------|
| (1) 1 point (Top · 2) | (4) 1 point (Inside · 1) | (7) 4 points (Outside · 1) |
| (2) 1 point (Outside · 1) | (5) 2 points (Outside · 1) | (8) 5 points (Outside · 1) |
| (3) 1 point (Outside · 2) | (6) 4 points (Top · 1) | |

Panel Replacement

• View A



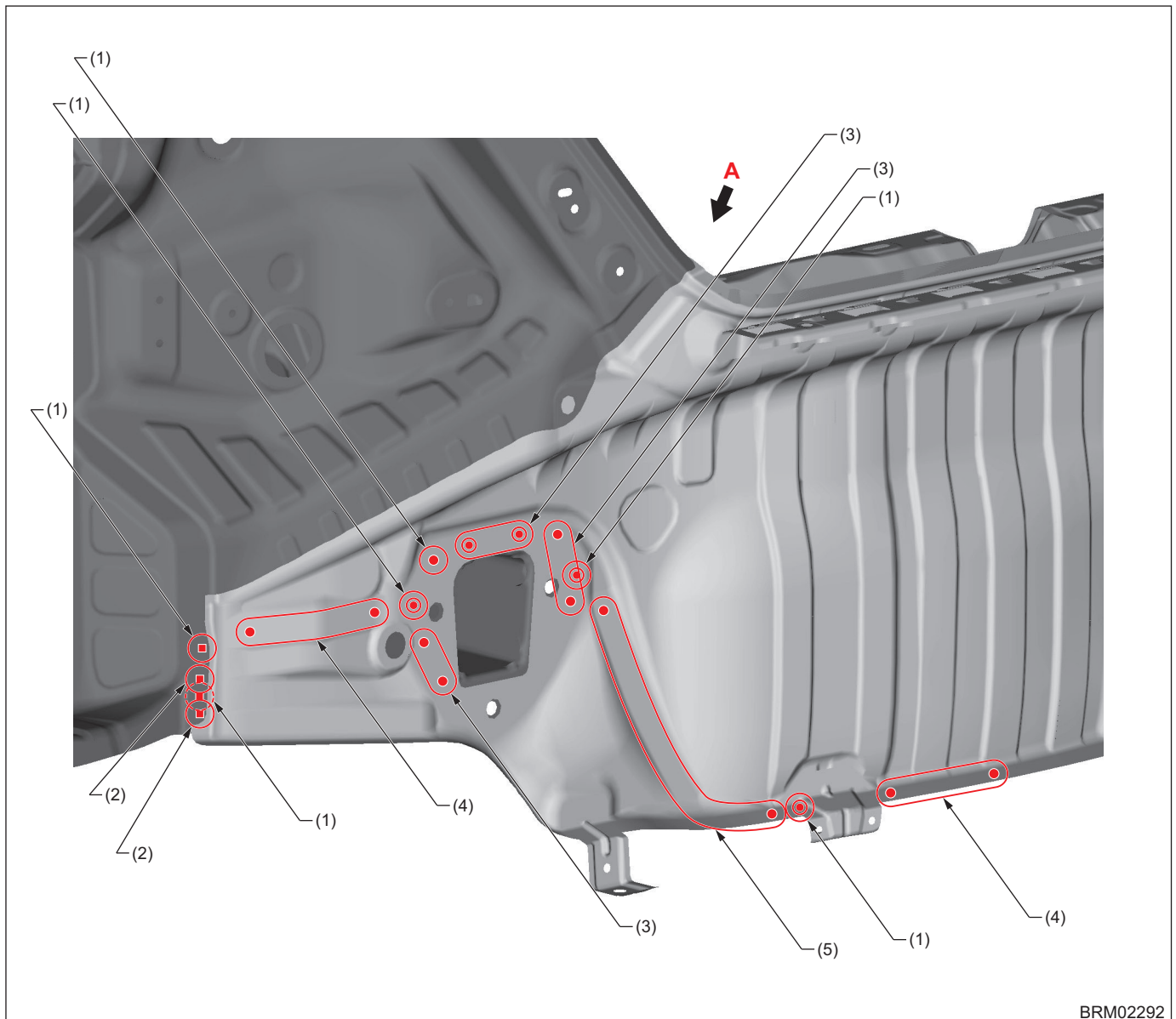
(1) 1 point (Inside · 1)

(2) 11 points (Inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



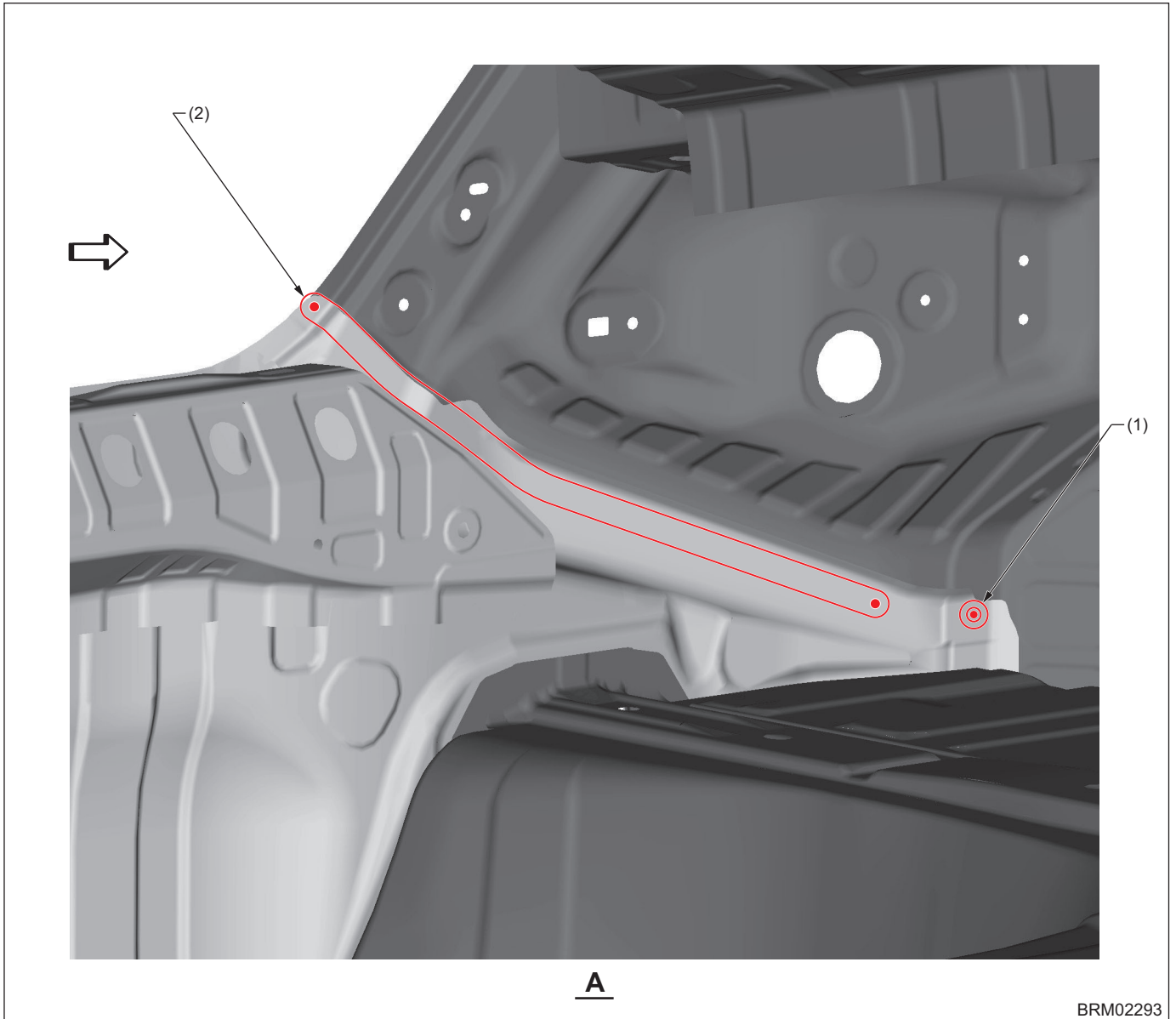
- (1) 1 point
- (2) 1 point (Service part · matching)

- (3) 2 points
- (4) 4 points

- (5) 5 points

Panel Replacement

• View A



(1) 1 point

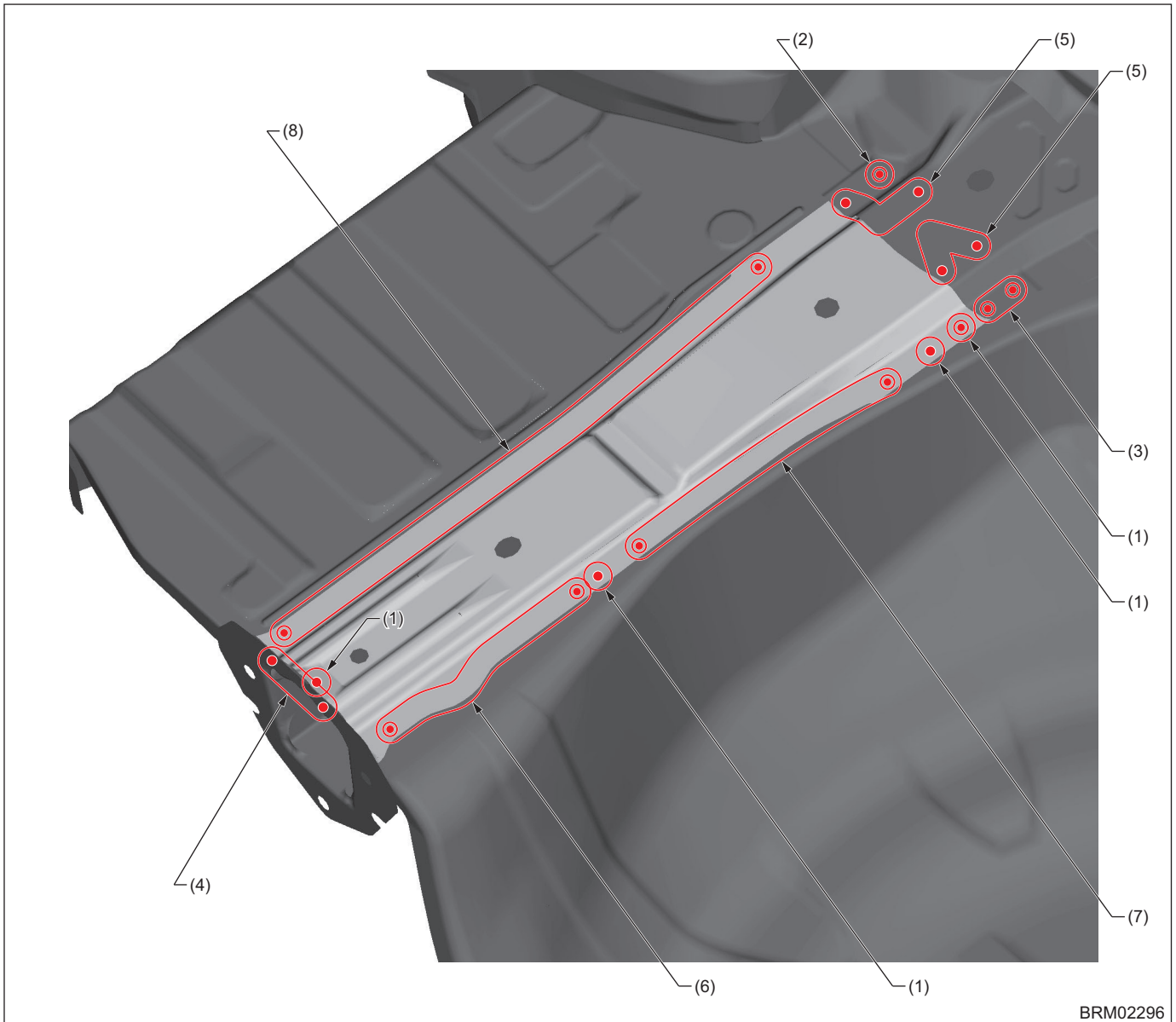
(2) 11 points

Panel Replacement

9-28. Rear Side Frame Upper Rear (Total replacement)

A: REMOVAL

• Overall view



- (1) 1 point (Top · 1)
- (2) 1 point (Top · 2)
- (3) 2 points (Top · 2)

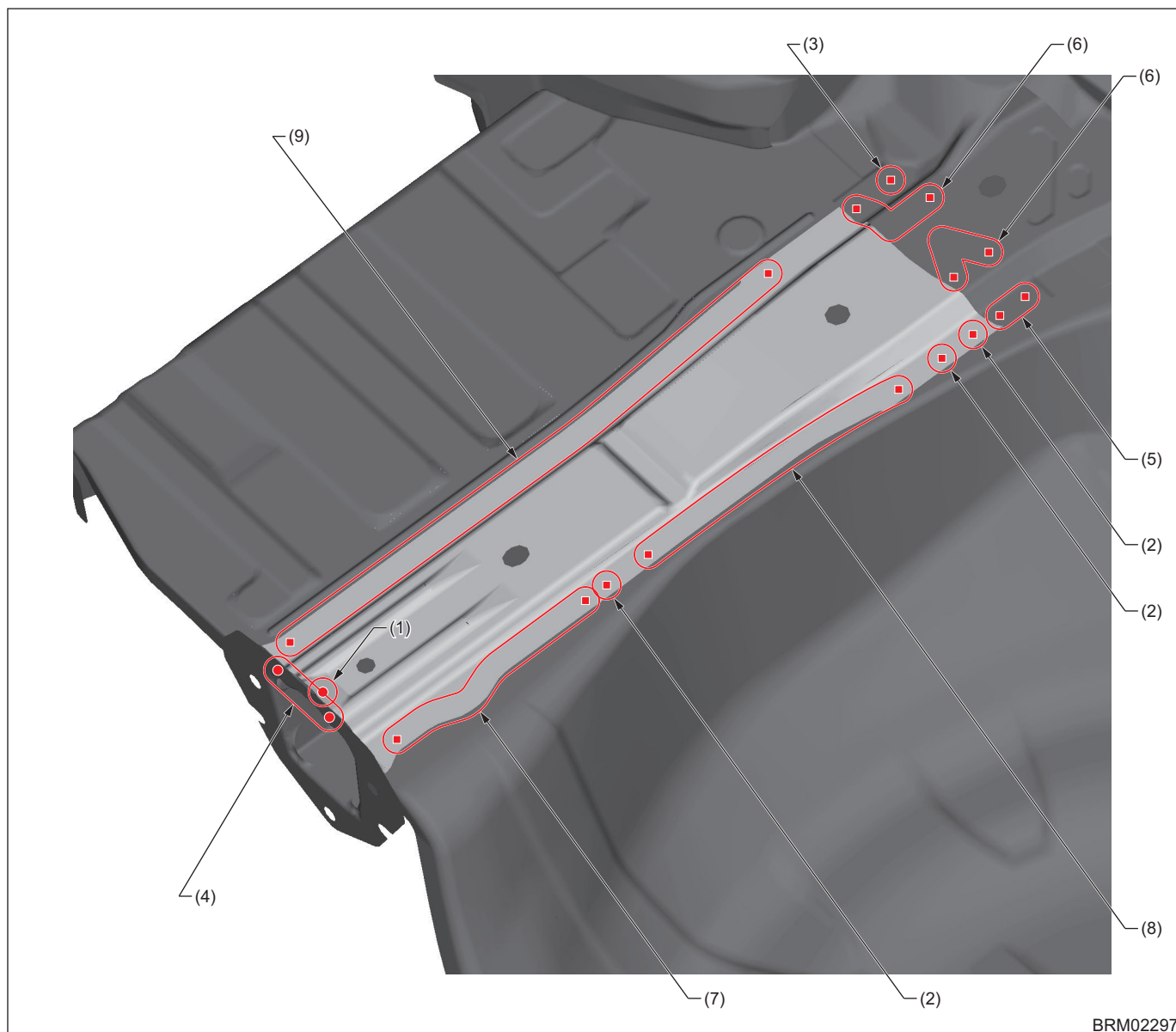
- (4) 2 points (Inside · 1)
- (5) 3 points (Top · 1)
- (6) 4 points (Top · 1)

- (7) 5 points (Top · 1)
- (8) 9 points (Top · 1)

Panel Replacement

B: INSTALLATION

• Overall view



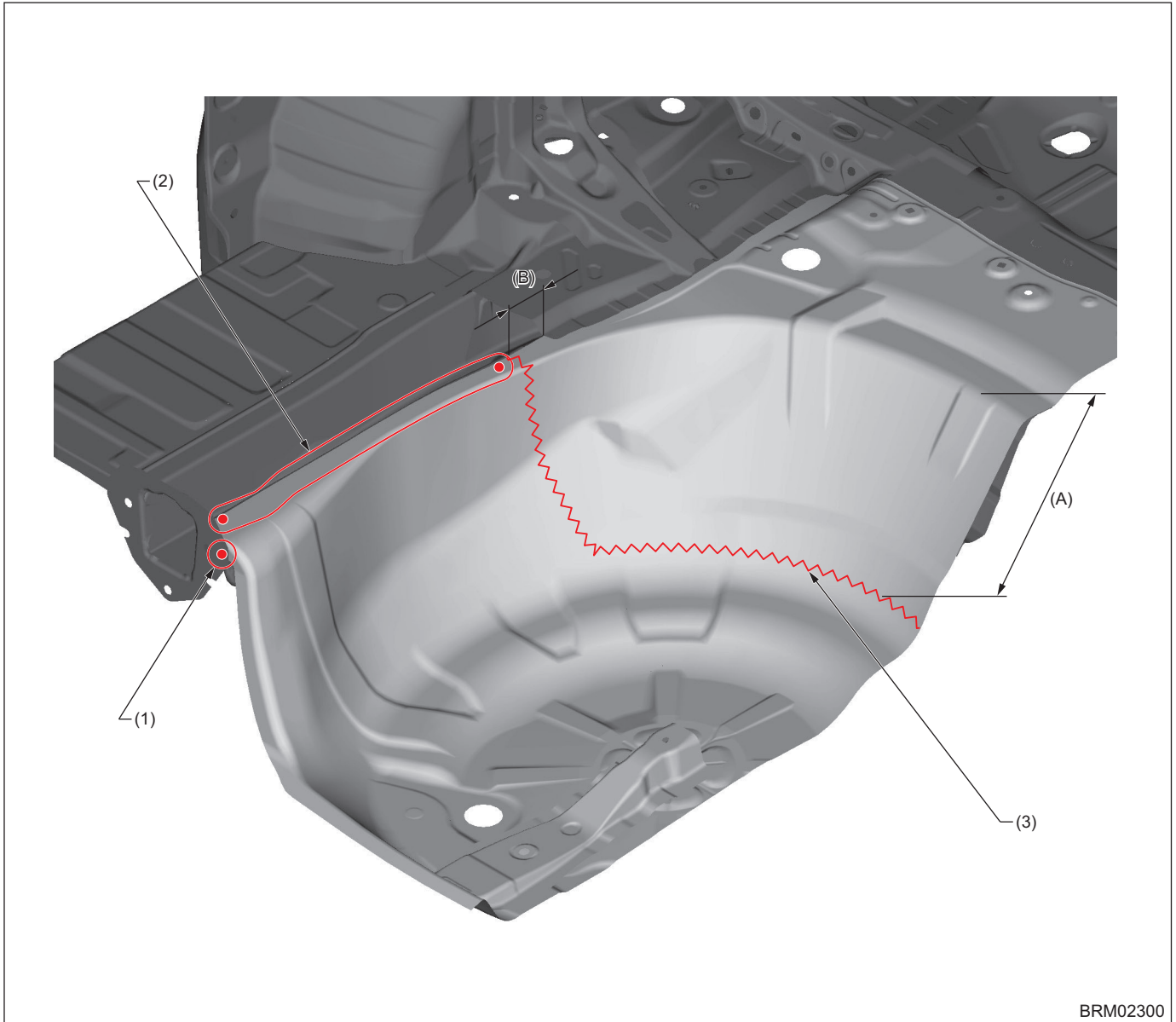
- | | | |
|---------------------------------------|--|-----------------------------|
| (1) 1 point | (4) 2 points | (7) 4 points (Service part) |
| (2) 1 point (Service part) | (5) 2 points (Service part · matching) | (8) 5 points (Service part) |
| (3) 1 point (Service part · matching) | (6) 3 points | (9) 9 points (Service part) |

Panel Replacement

9-29. Rear Floor Pan (Partial replacement)

A: REMOVAL

• Overall view



BRM02300

(A) 220 mm [8.66 in]

(B) 50 mm [1.97 in]

(1) 1 point (Outside · 1)

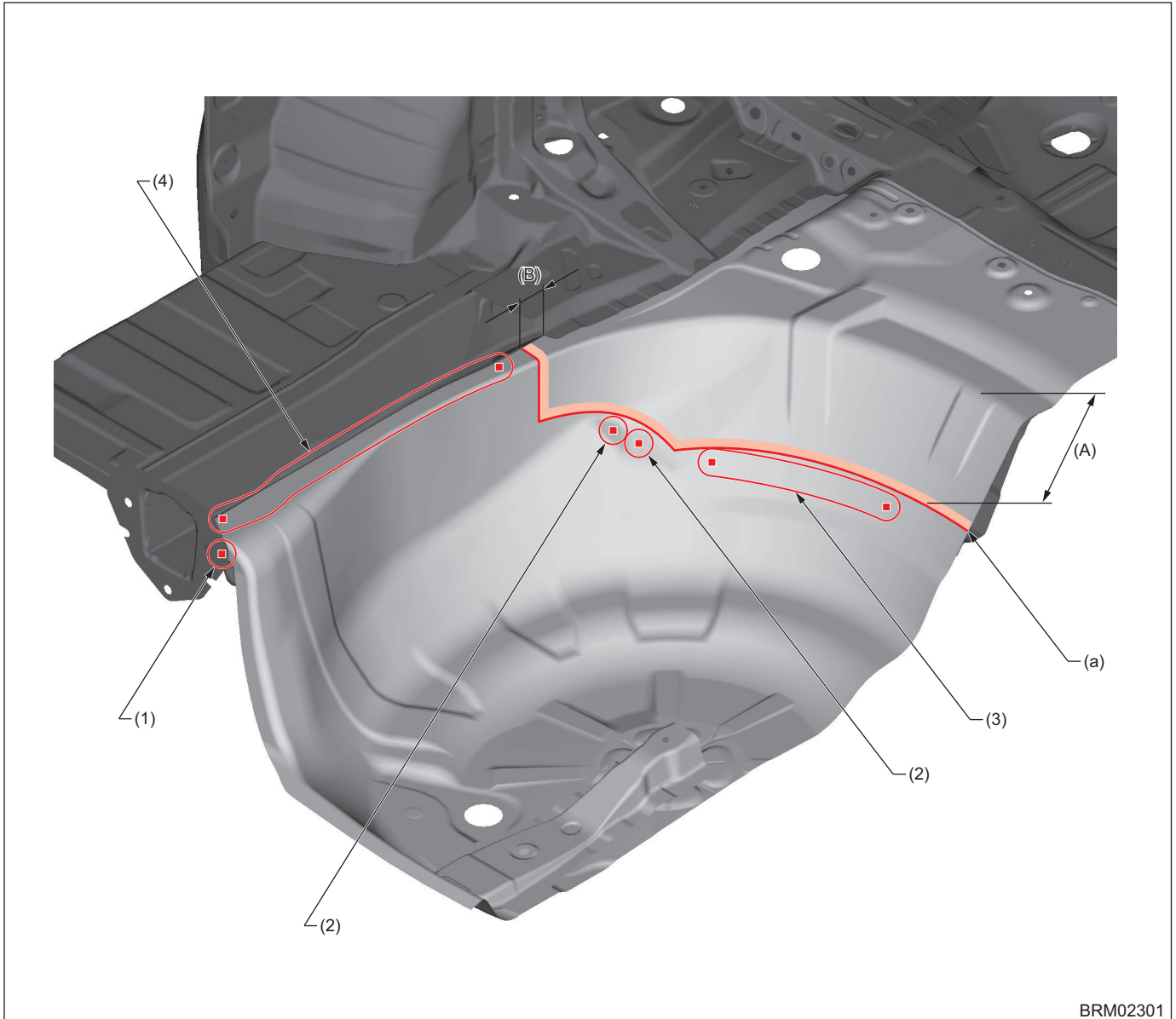
(2) 9 points (Top · 1)

(3) Cut position

Panel Replacement

B: INSTALLATION

• Overall view



BRM02301

(A) 100 mm [3.94 in]

(B) 30 mm [1.18 in]

(1) 1 point

(3) 4 points (Service part)

(4) 9 points (Service part)

(2) 1 point (Service part)

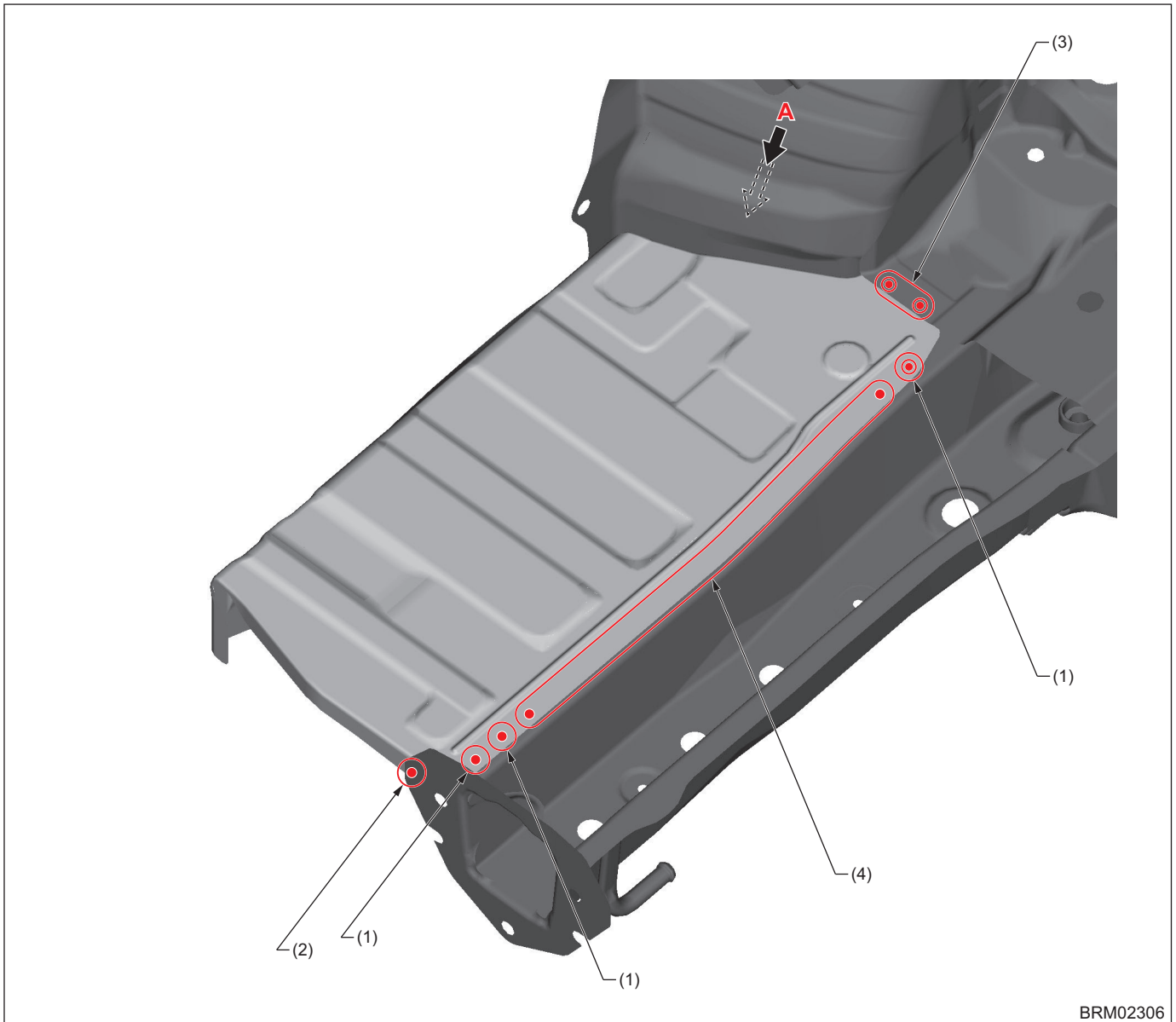
Note: Apply sealing agent to the floor pan fitting parts (front and rear) of section "a".

Panel Replacement

9-30. Rear Floor Side (Total replacement)

A: REMOVAL

• Overall view



BRM02306

(1) 1 point (Top · 1)

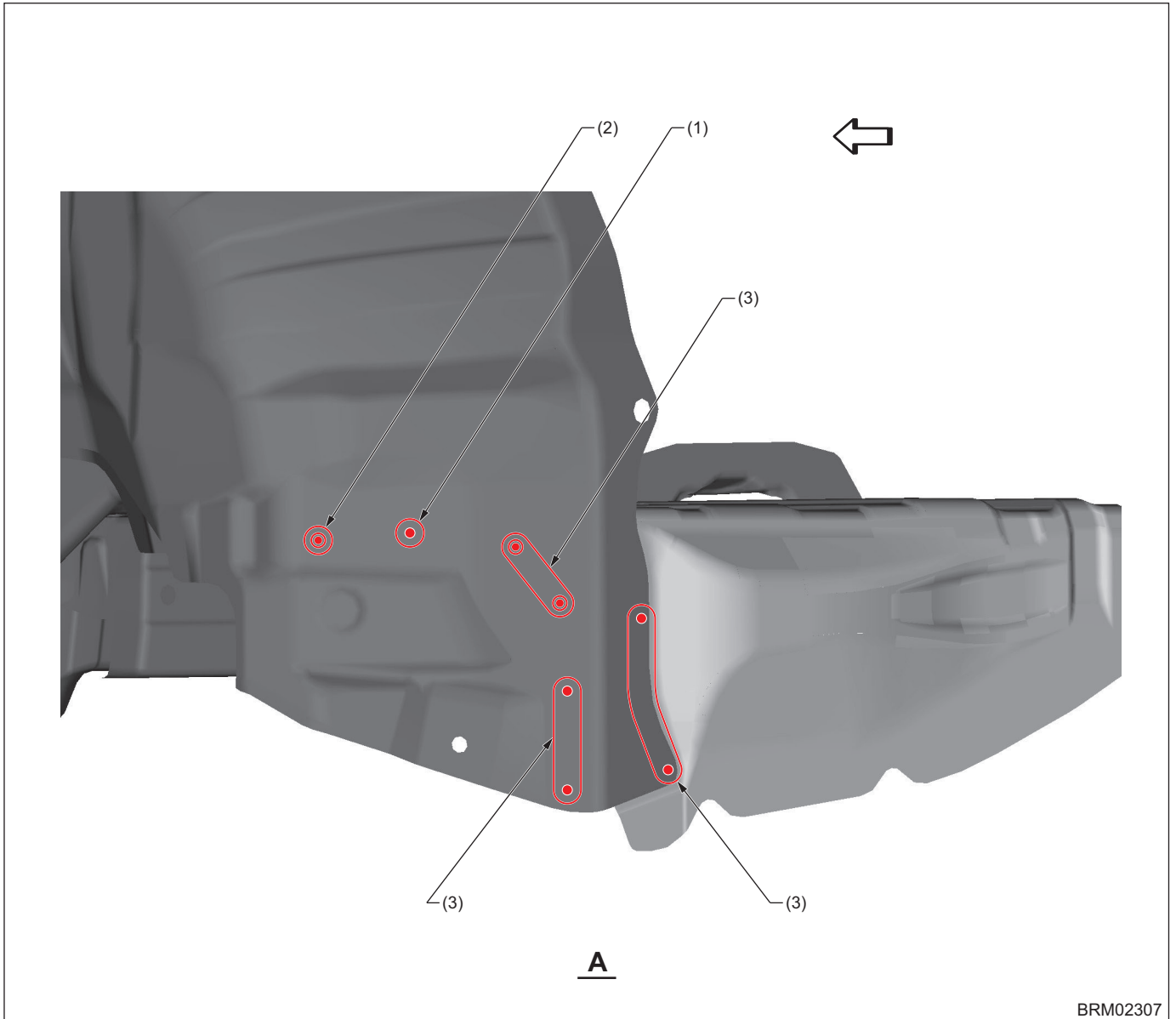
(3) LH: 2 points (Top · 2)
RH: 1 point (Top · 2)

(4) 8 points (Top · 1)

(2) 1 point (Outside · 1)

Panel Replacement

• View A



(1) 1 point (Outside · 1)

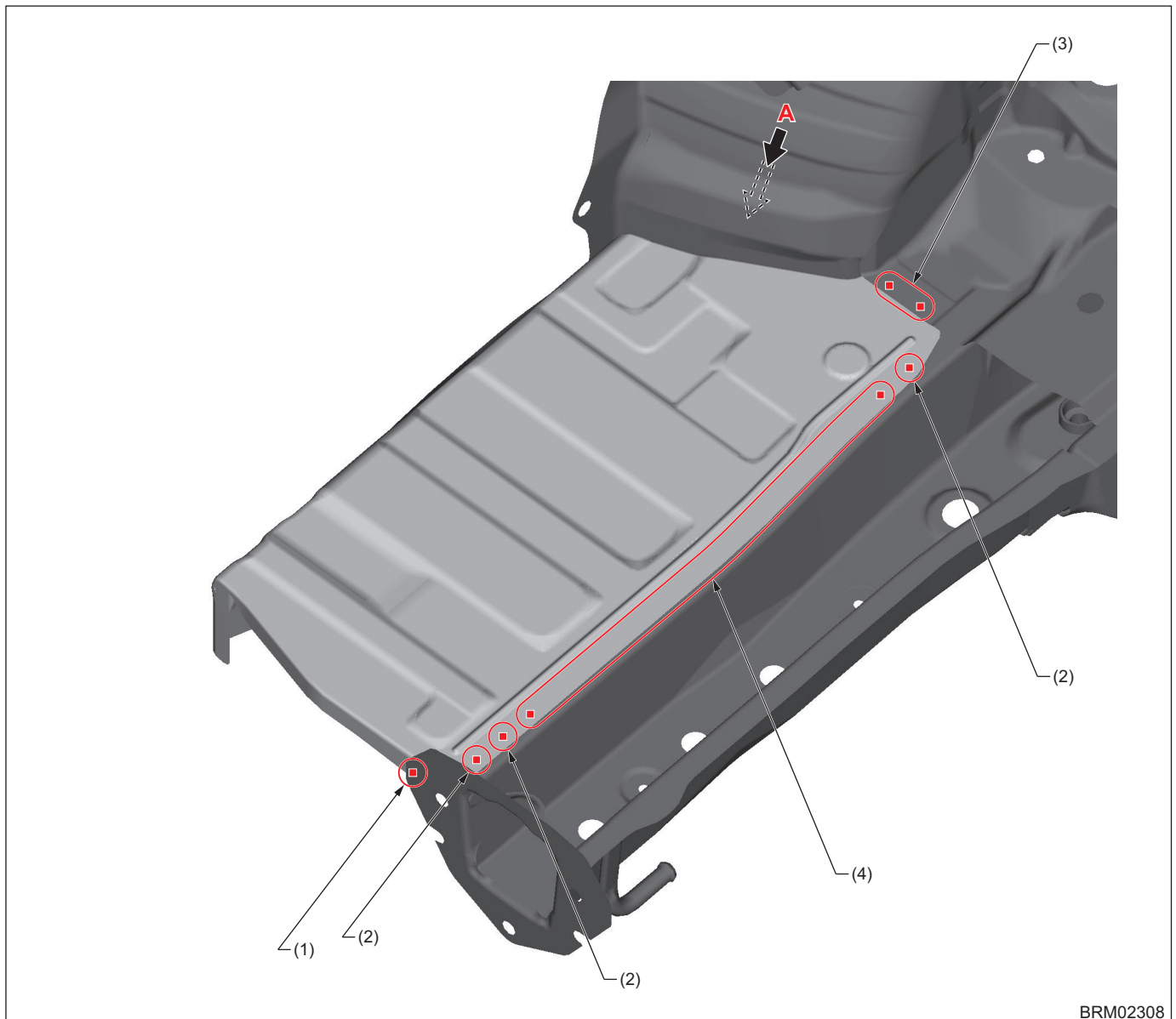
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02308

(1) 1 point

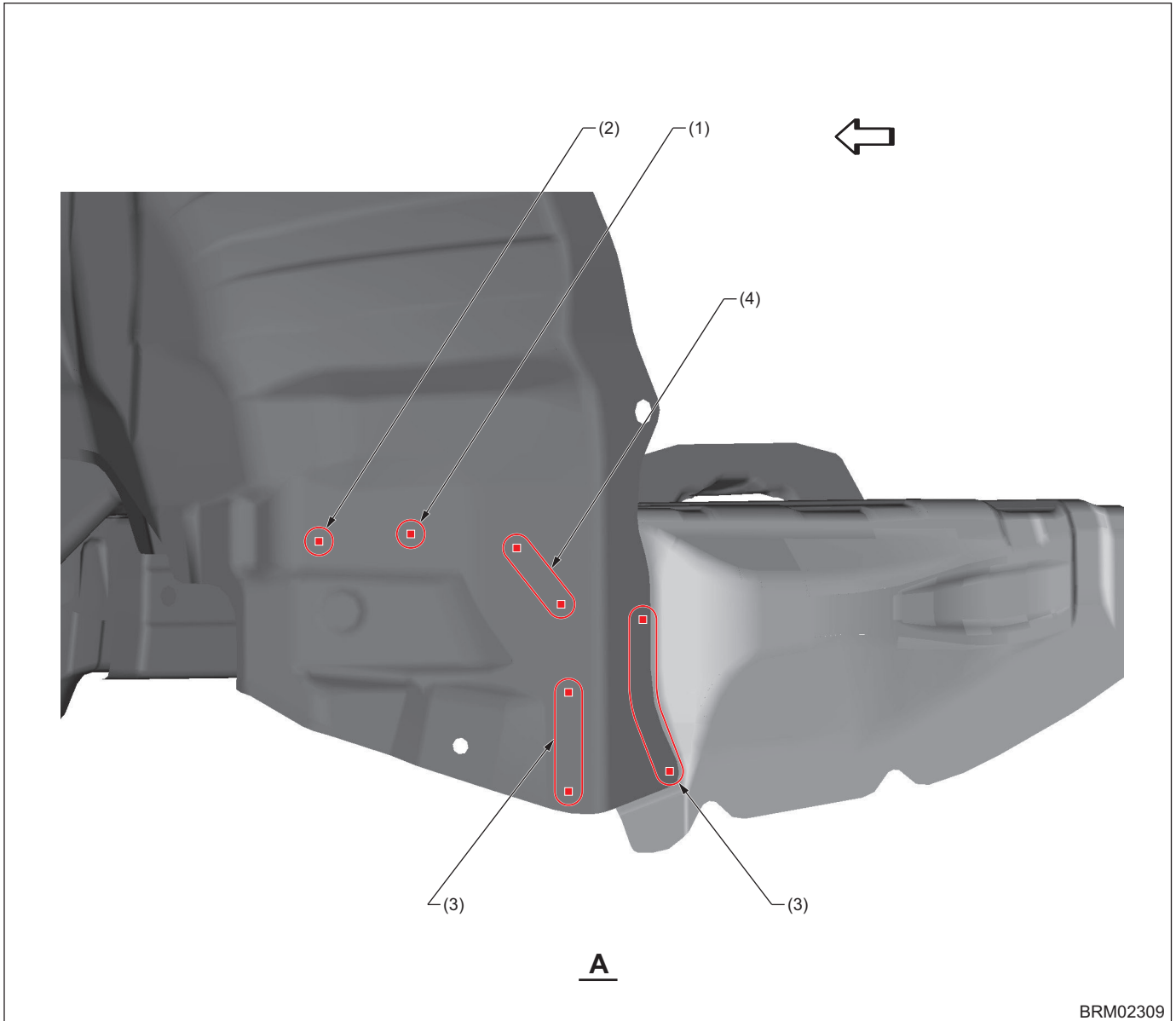
(2) 1 point (Service part)

(3) LH: 2 points (Service part · matching)
RH: 1 point (Service part · matching)

(4) 8 points (Service part)

Panel Replacement

• View A

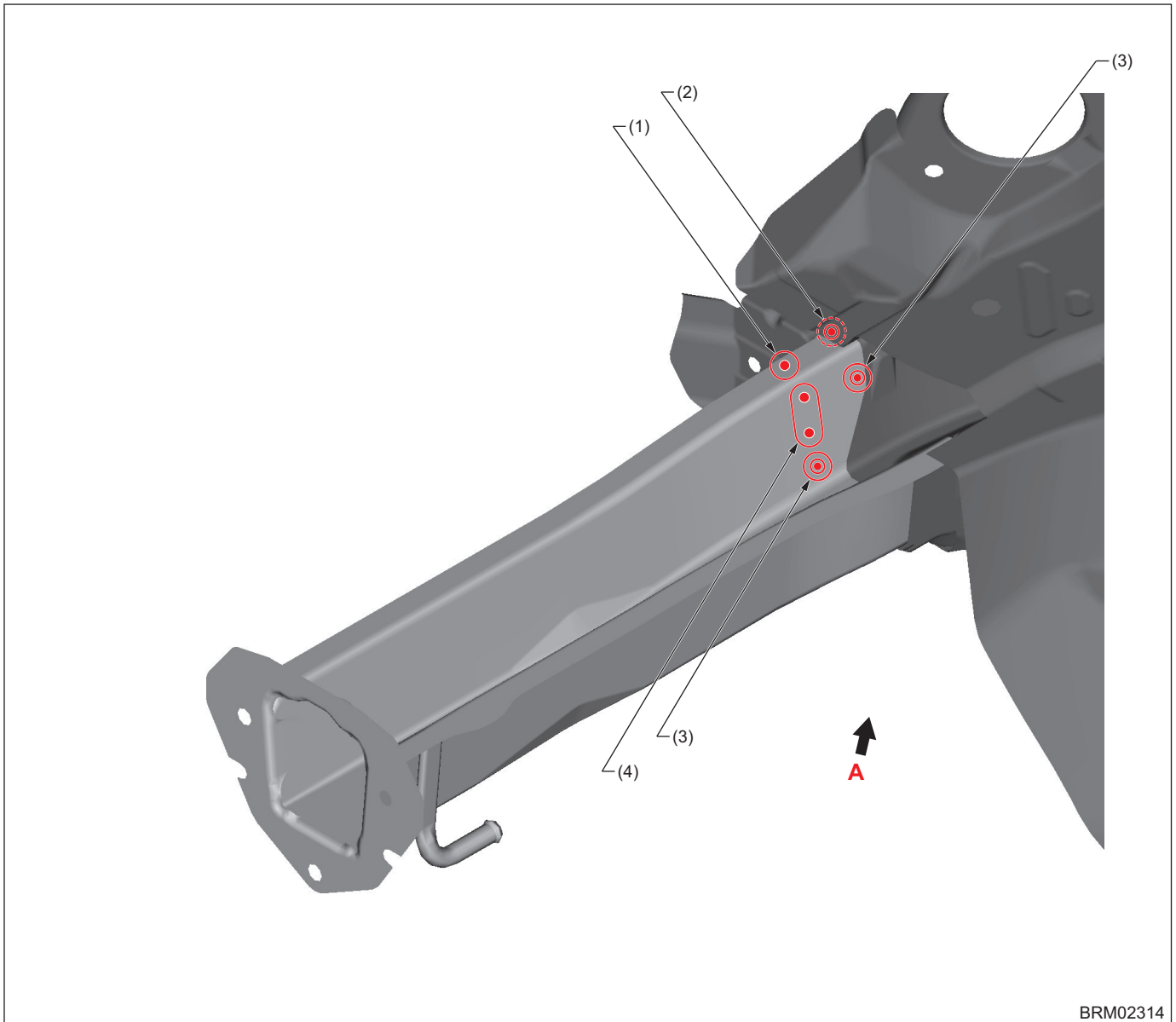


Panel Replacement

9-31. Rear Side Frame Lower Rear (Total replacement)

A: REMOVAL

• Overall view



BRM02314

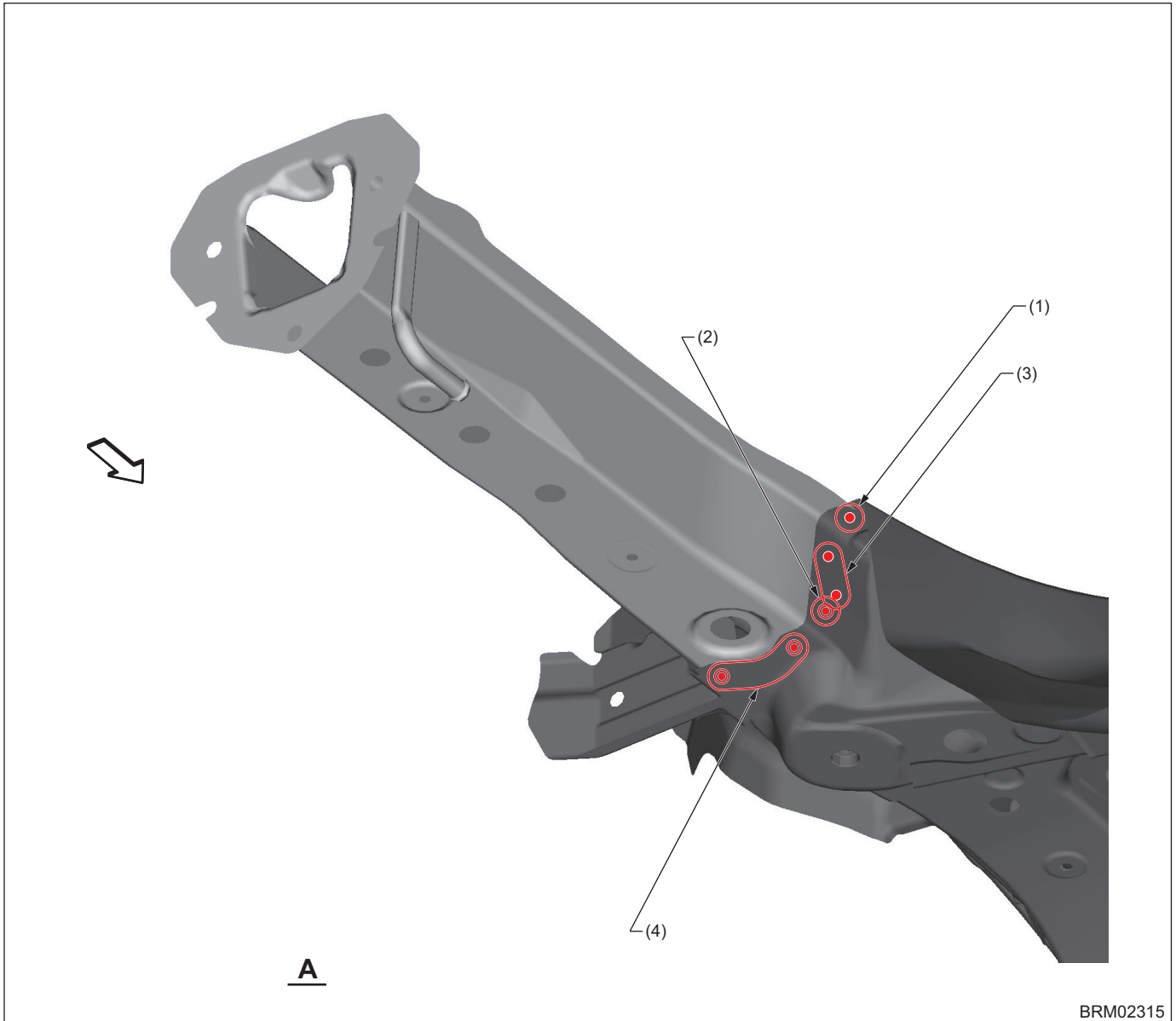
(1) 1 point (Top · 1)
(2) 1 point (Bottom · 2)

(3) 1 point (Inside · 1, Belt Sander)

(4) 2 points (Inside · 1, Belt Sander)

Panel Replacement

• View A



(1) 1 point (Bottom · 1)

(3) 2 points (Inside · 1, Belt Sander)

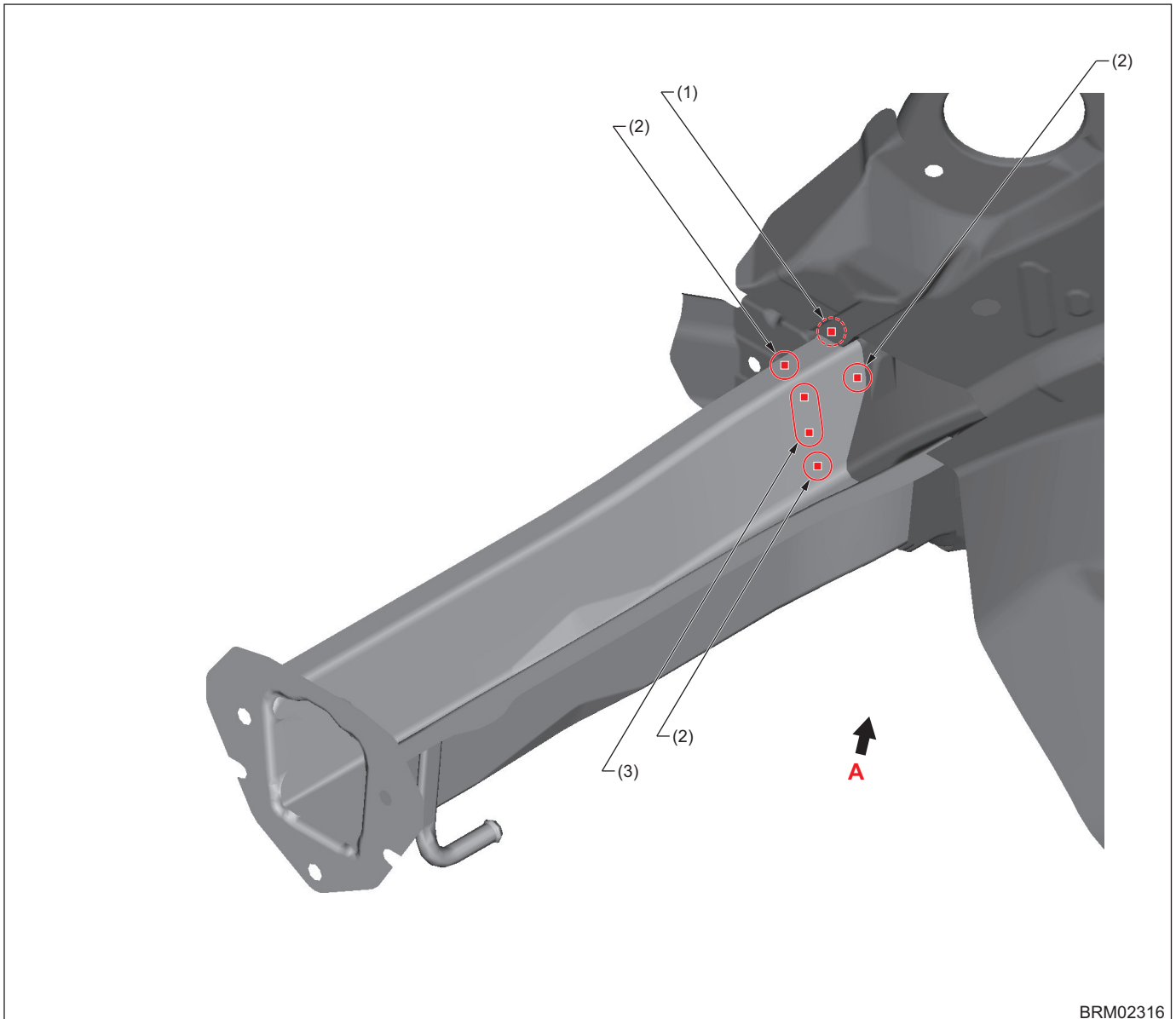
(4) 3 points (Inside · 1, Belt Sander)

(2) 1 point (Inside · 1, Belt Sander)

Panel Replacement

B: INSTALLATION

• Overall view



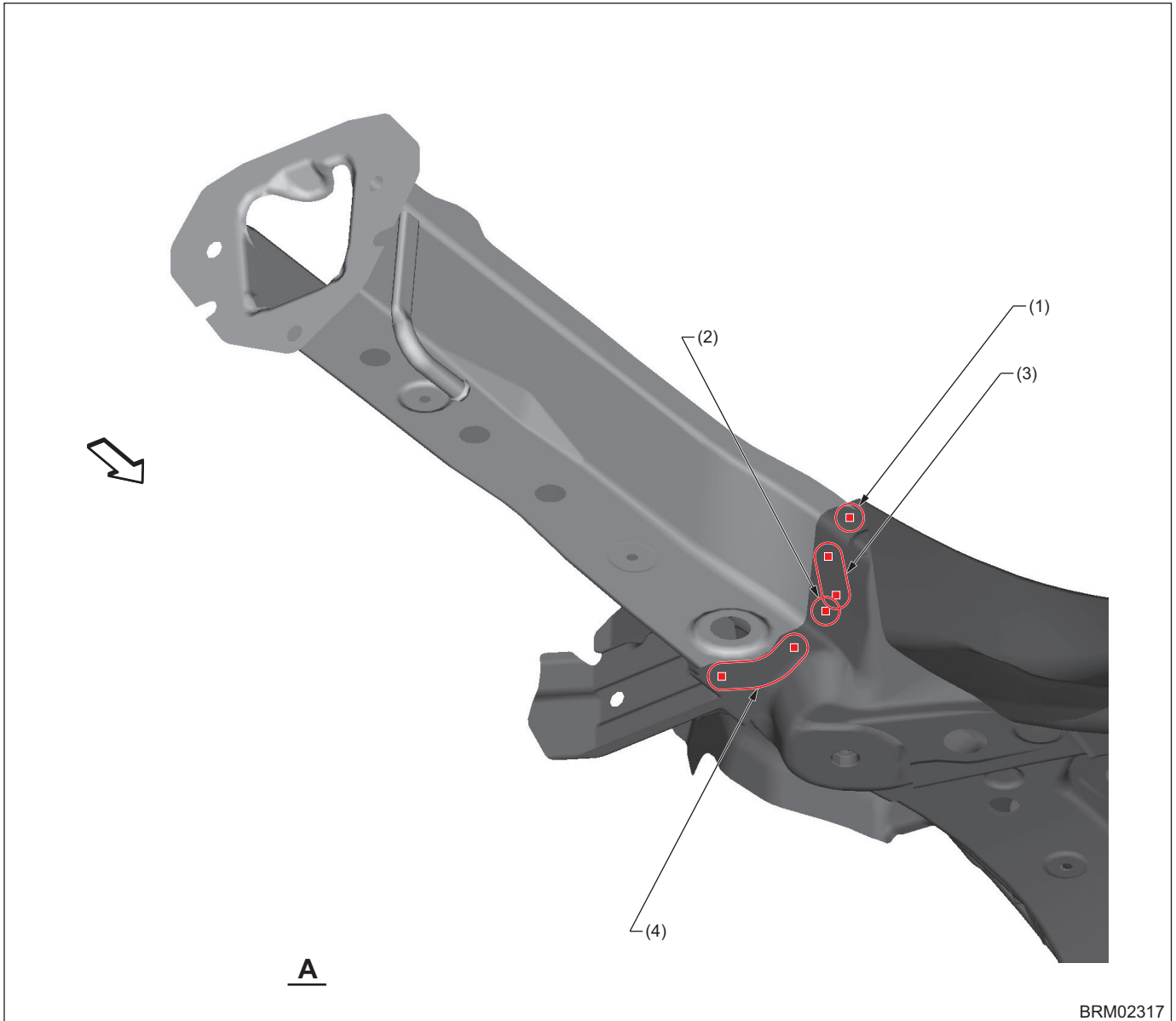
(1) 1 point

(2) 1 point (Service part)

(3) 2 points (Service part)

Panel Replacement

• View A



(1) 1 point
(2) 1 point (Service part)

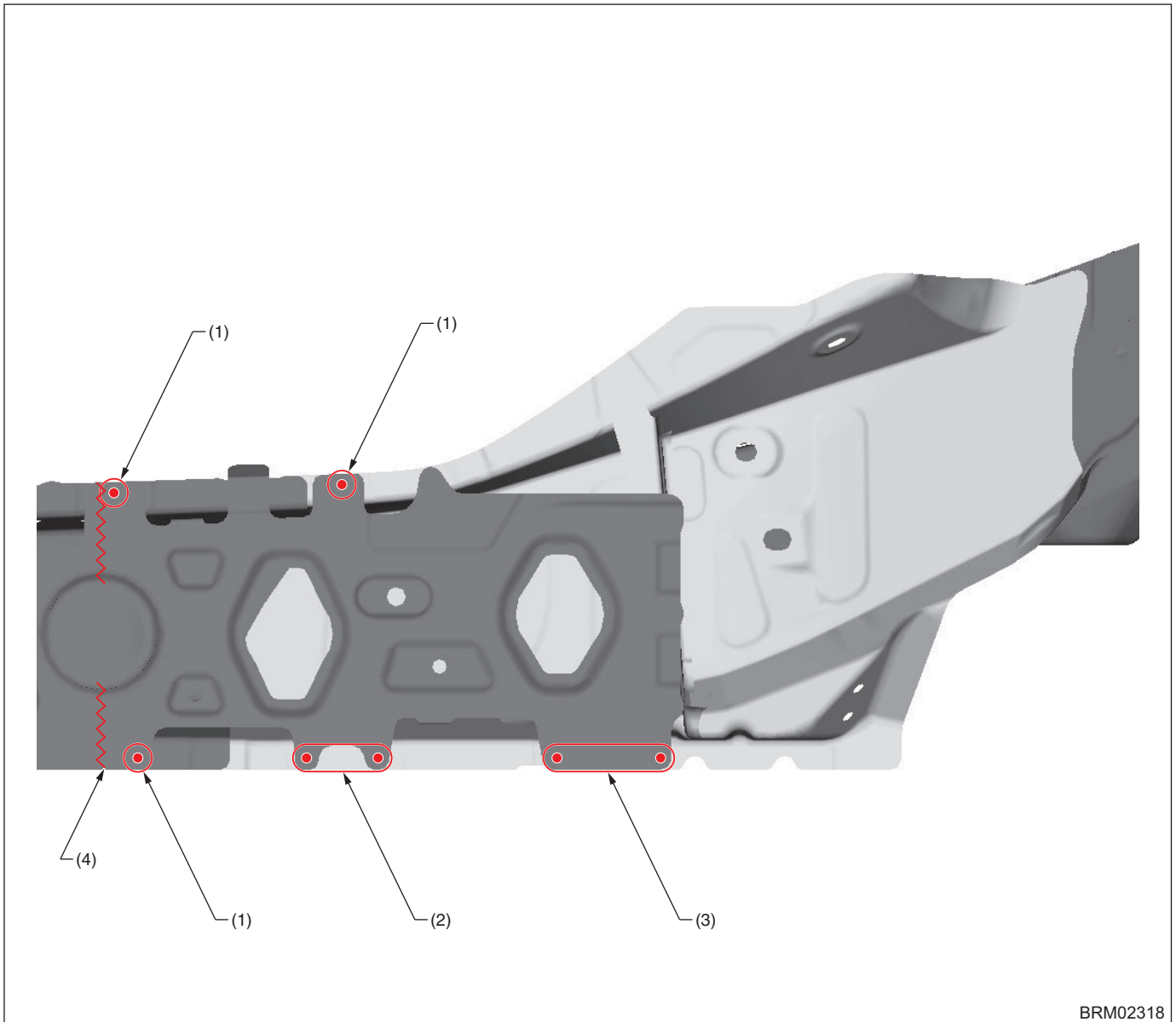
(3) 2 points (Service part)

(4) 3 points (Service part)

9-32. Side Sill Inner Rear (Total replacement)

A: REMOVAL

• Overall view 1



BRM02318

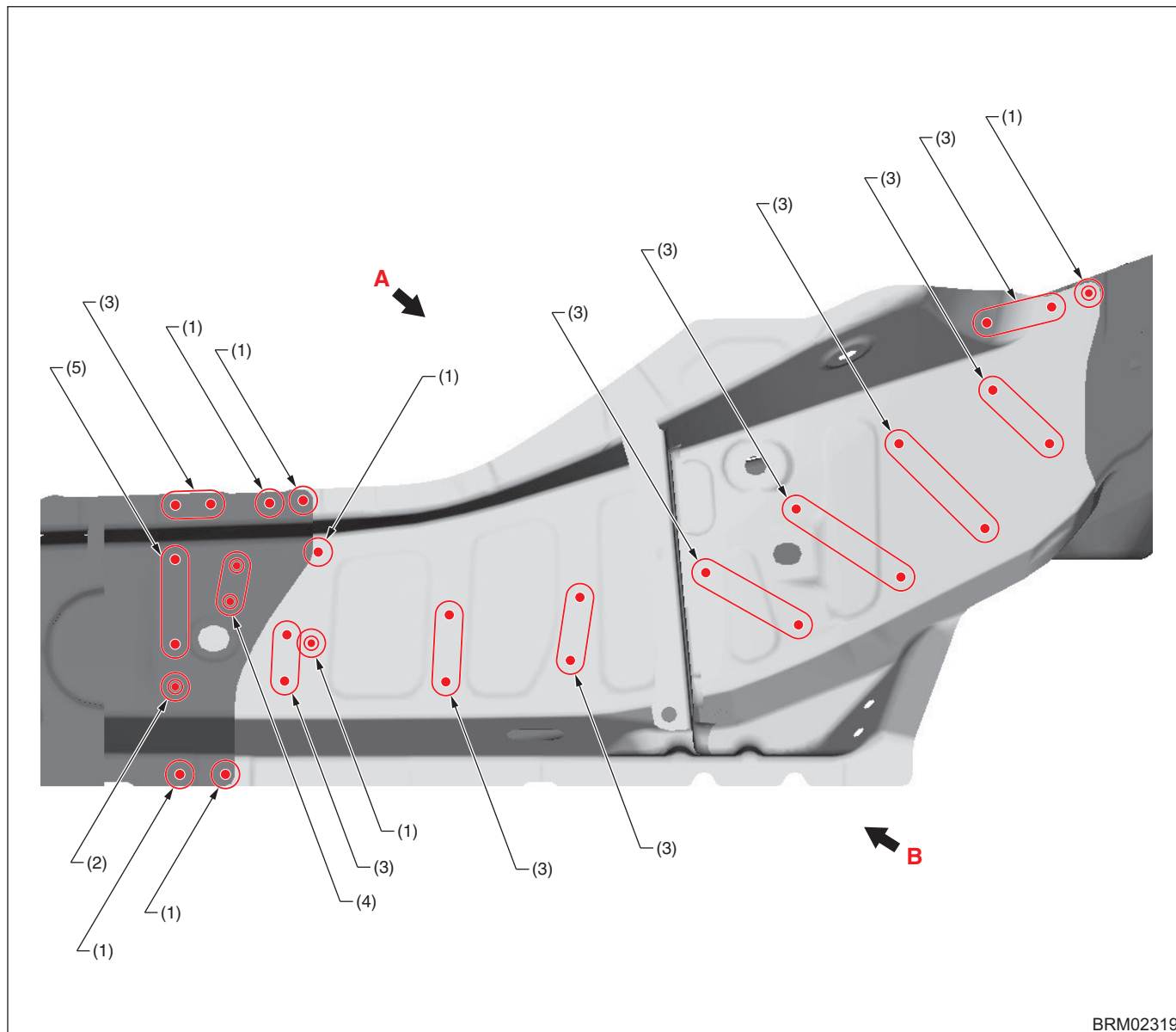
(1) 1 point (Outside · 1)
(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)

(4) Rough cutting

Panel Replacement

• Overall view 2



BRM02319

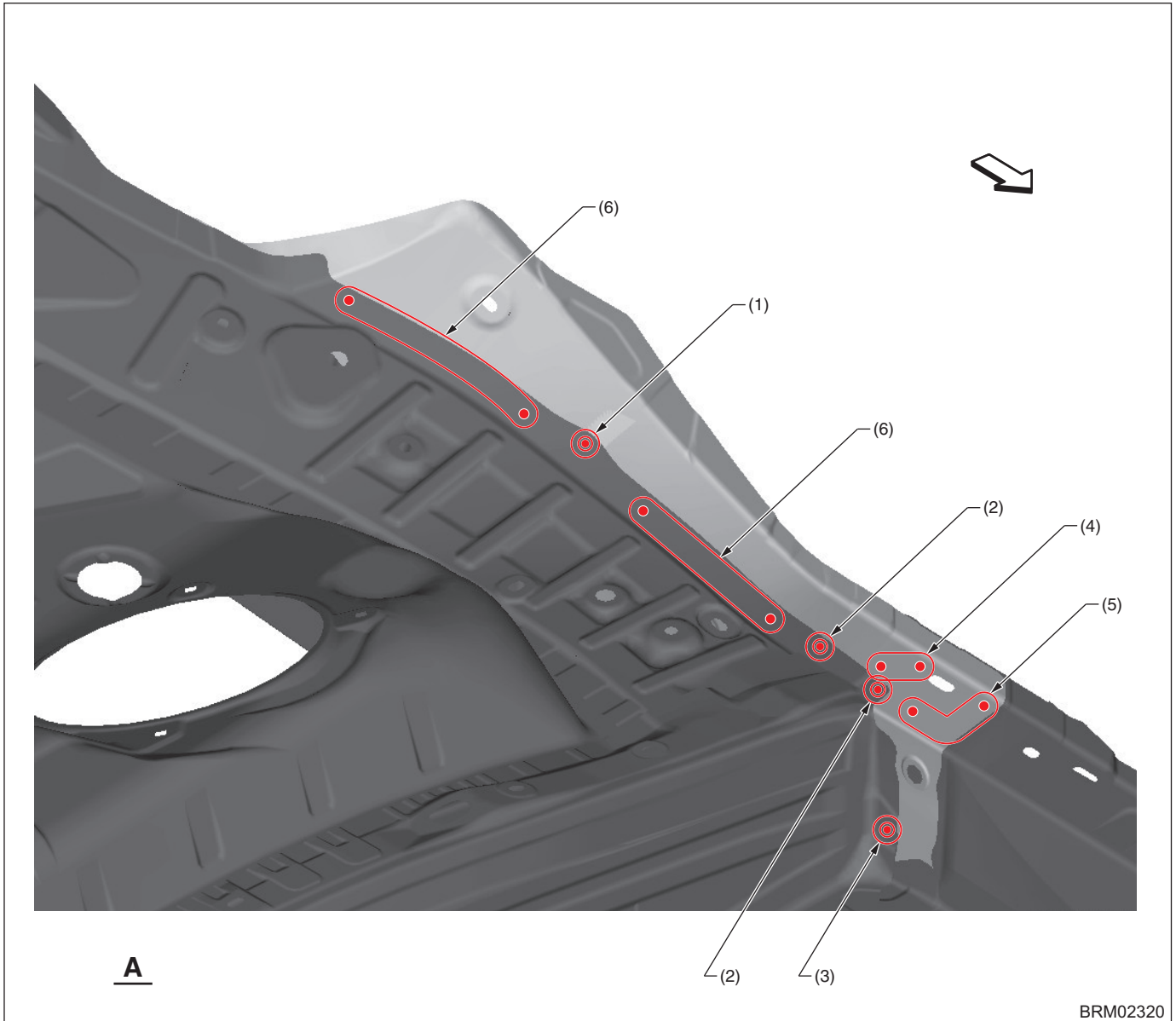
(1) 1 point (Outside · 1)
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)
(4) 2 points (Outside · 2)

(5) 3 points (Outside · 1)

Panel Replacement

• View A



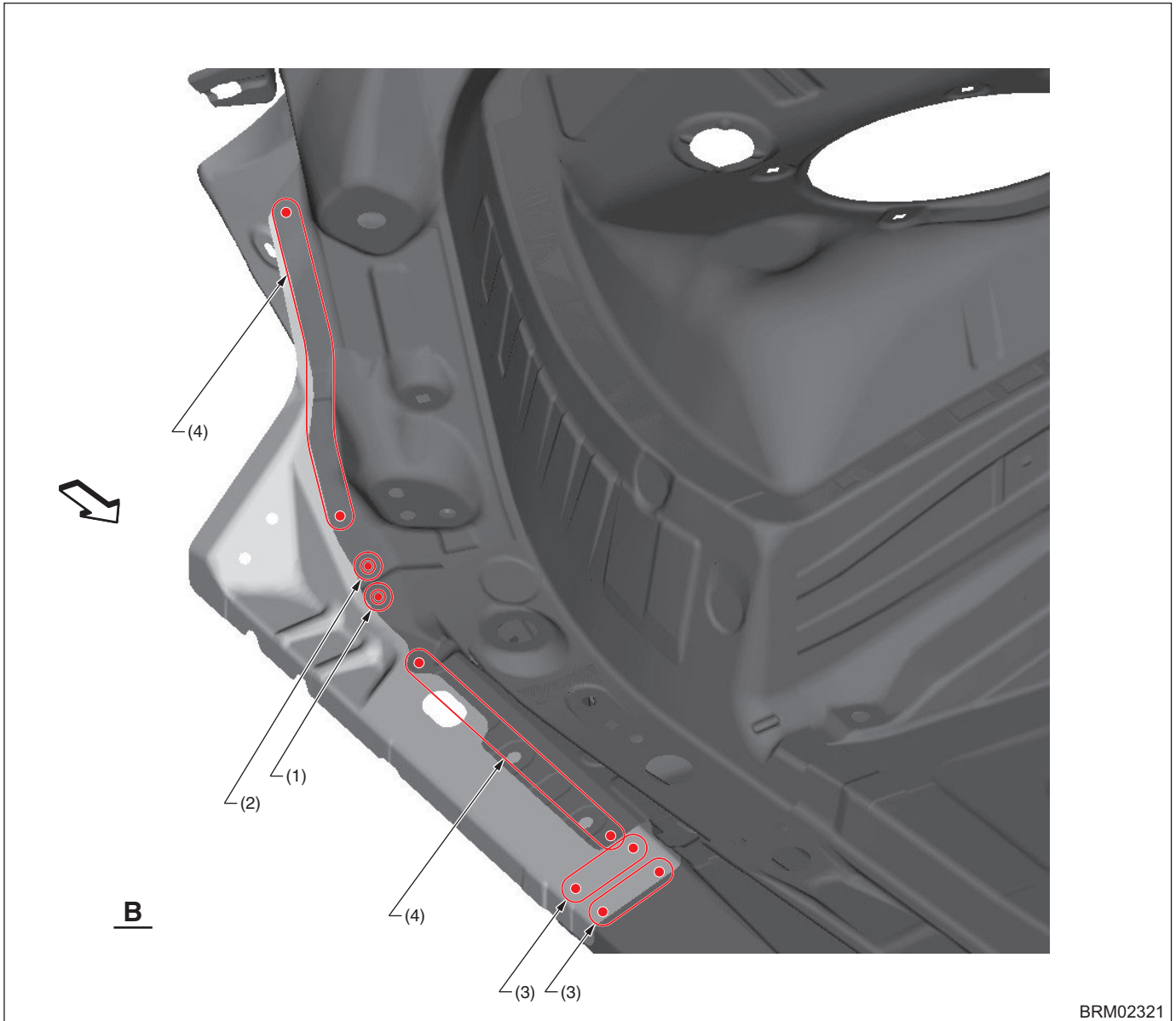
(1) 1 point (Top · 1)
(2) 1 point (Top · 2)

(3) 1 point (Inside · 2)
(4) 2 points (Top · 1)

(5) 3 points (Top · 1)
(6) 4 points (Top · 1)

Panel Replacement

• View B



BRM02321

- (1) 1 point (Bottom · 1)
(2) 1 point (Bottom · 2)

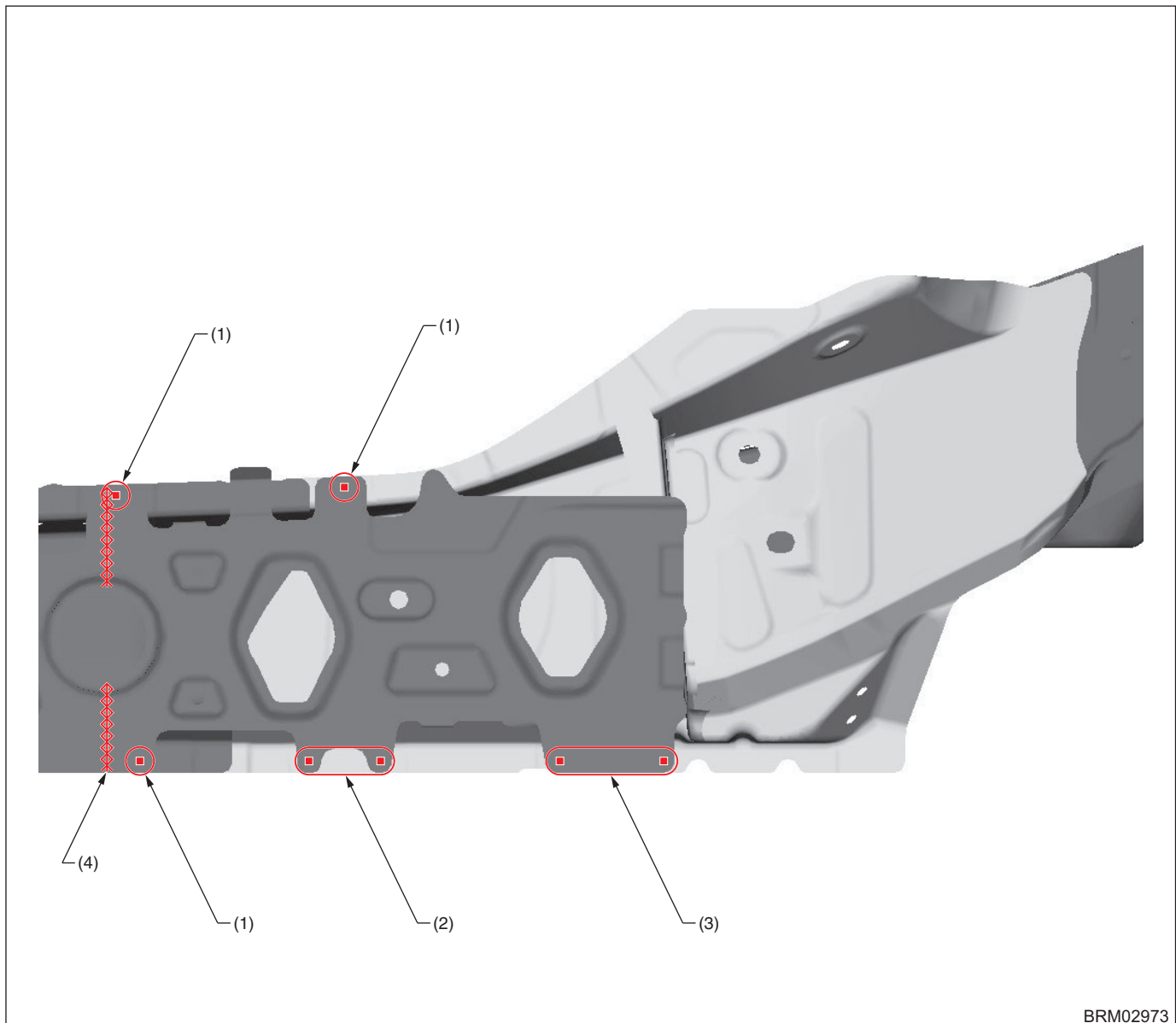
- (3) 2 points (Bottom · 1)

- (4) 5 points (Bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BRM02973

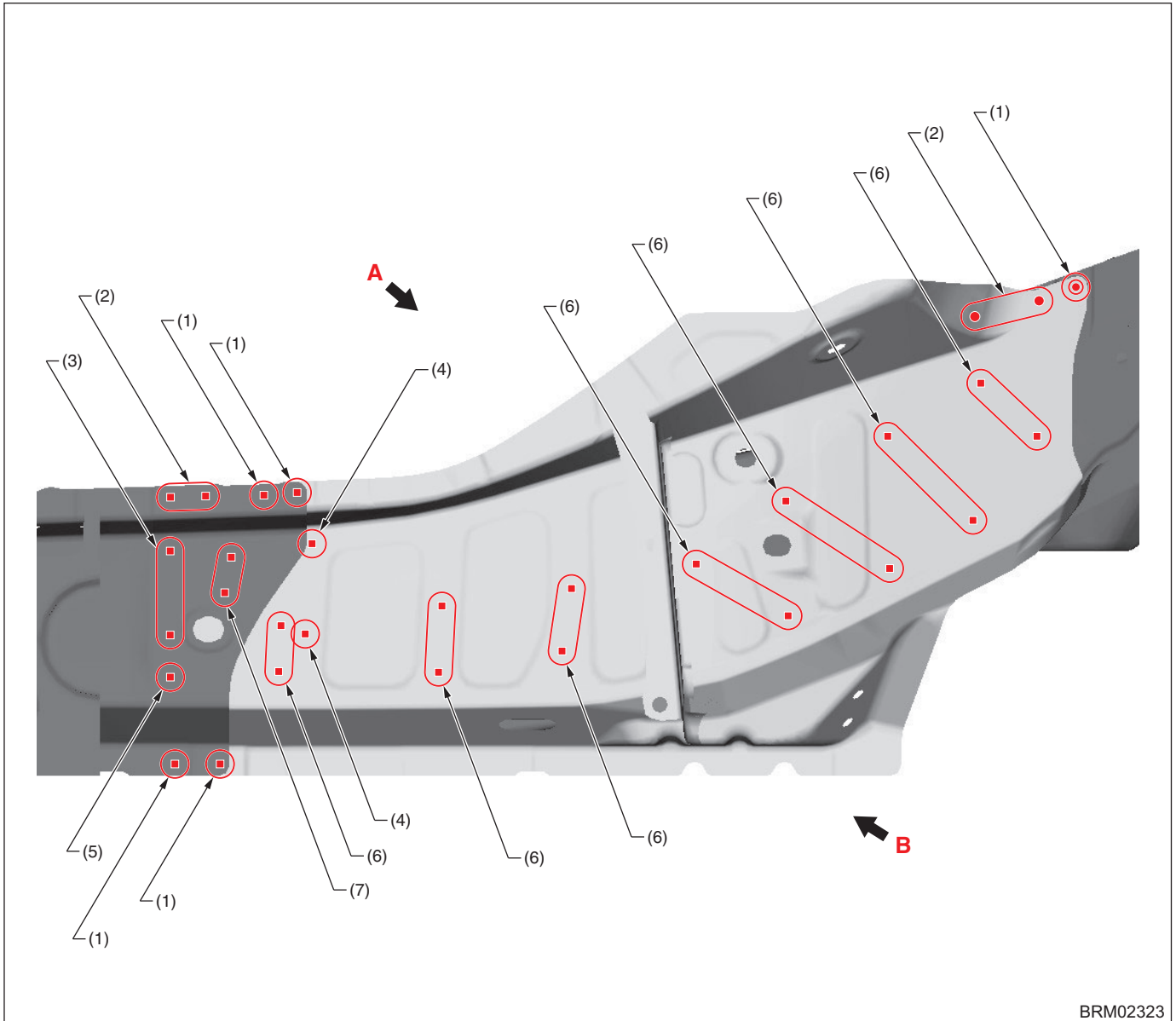
(1) 1 point
(2) 2 points

(3) 3 points

(4) 1 point (Continuous welding)

Panel Replacement

• Overall view 2

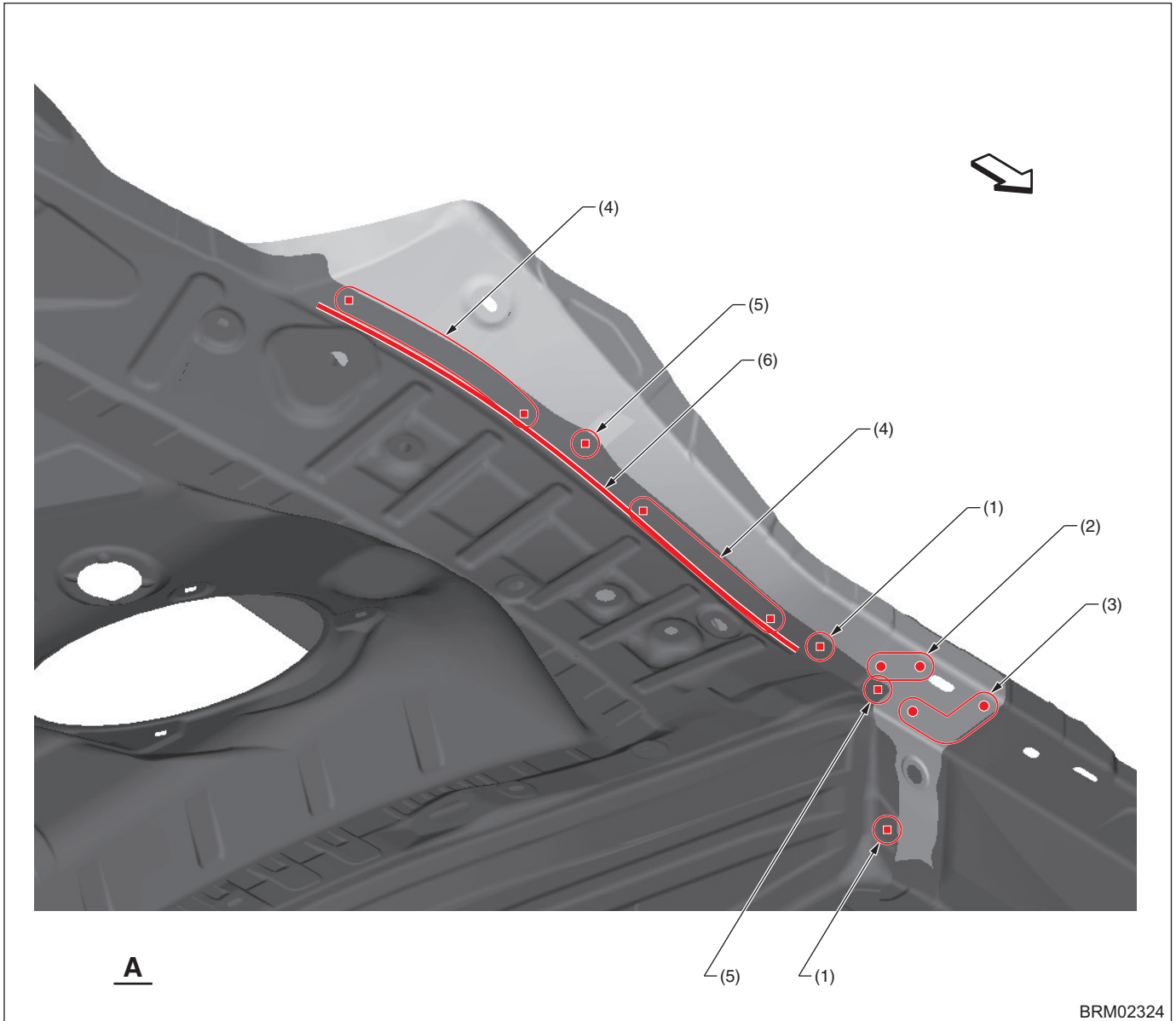


BRM02323

- | | | |
|--------------|---------------------------------------|--|
| (1) 1 point | (4) 1 point (Service part) | (7) 2 points (Service part · matching) |
| (2) 2 points | (5) 1 point (Service part · matching) | |
| (3) 3 points | (6) 2 points (Service part) | |

Panel Replacement

• View A



(1) 1 point
(2) 2 points

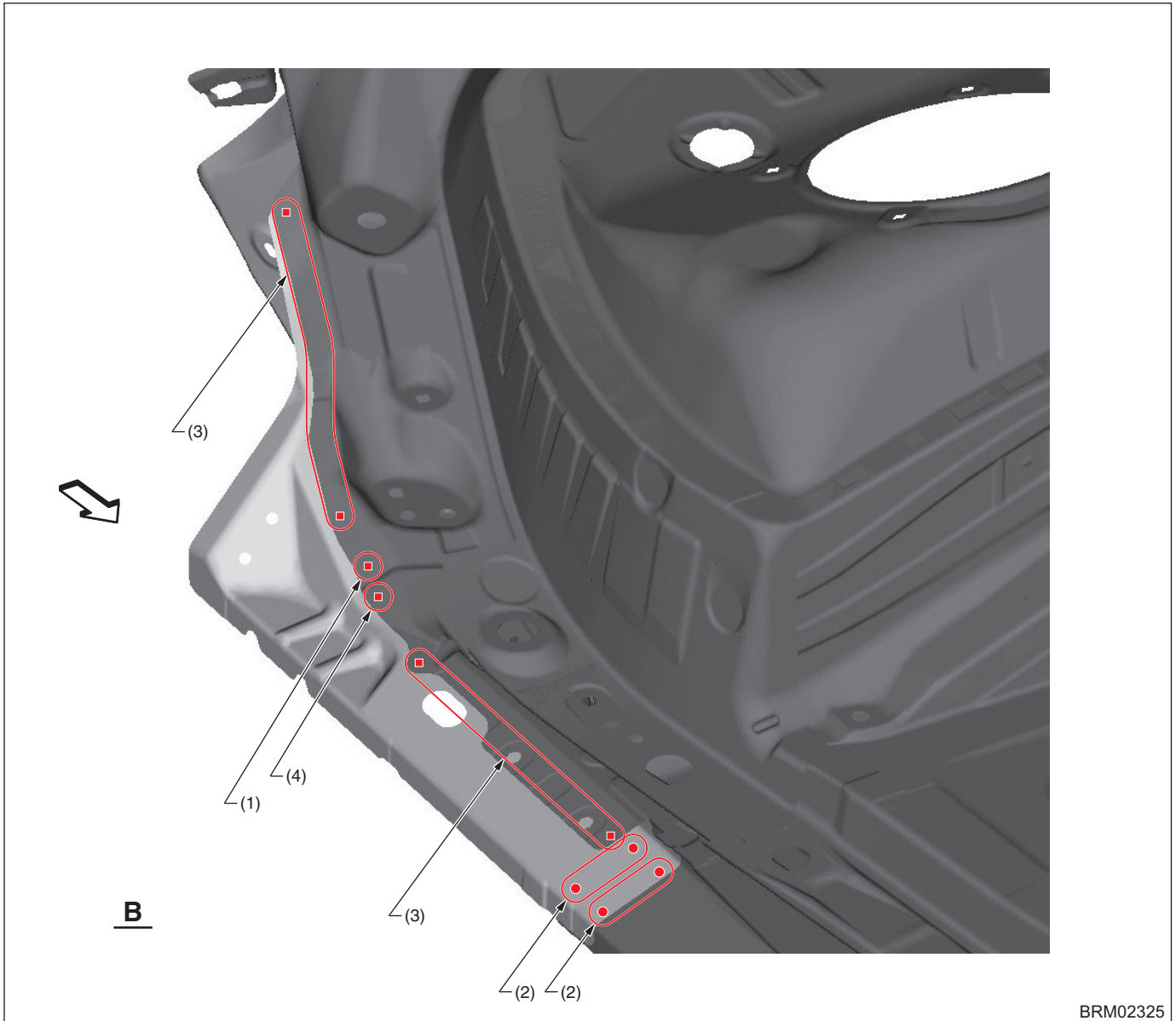
(3) 3 points
(4) 4 points

(5) 1 point (Service part · matching)
(6) Structural adhesive

— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

• View B



- (1) 1 point
- (2) 2 points

- (3) 5 points

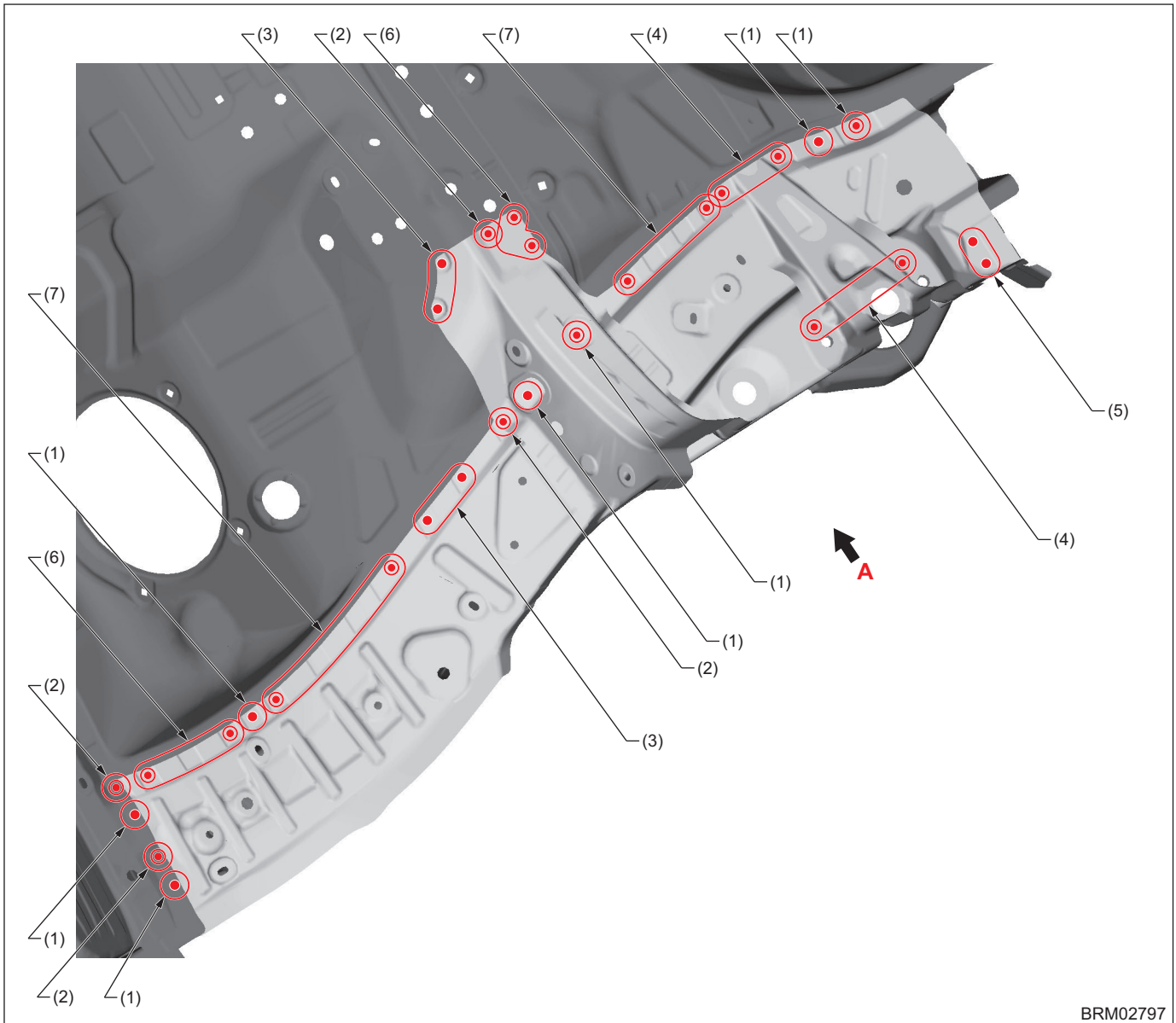
- (4) 1 point (Service part · matching)

Panel Replacement

9-33. Rear Side Frame Upper (Total replacement)

A: REMOVAL

• Overall view



(1) 1 point (Top · 1)

(2) 1 point (Top · 2)

(3) 2 points (Top · 1)

(4) 2 points (Top · 2)

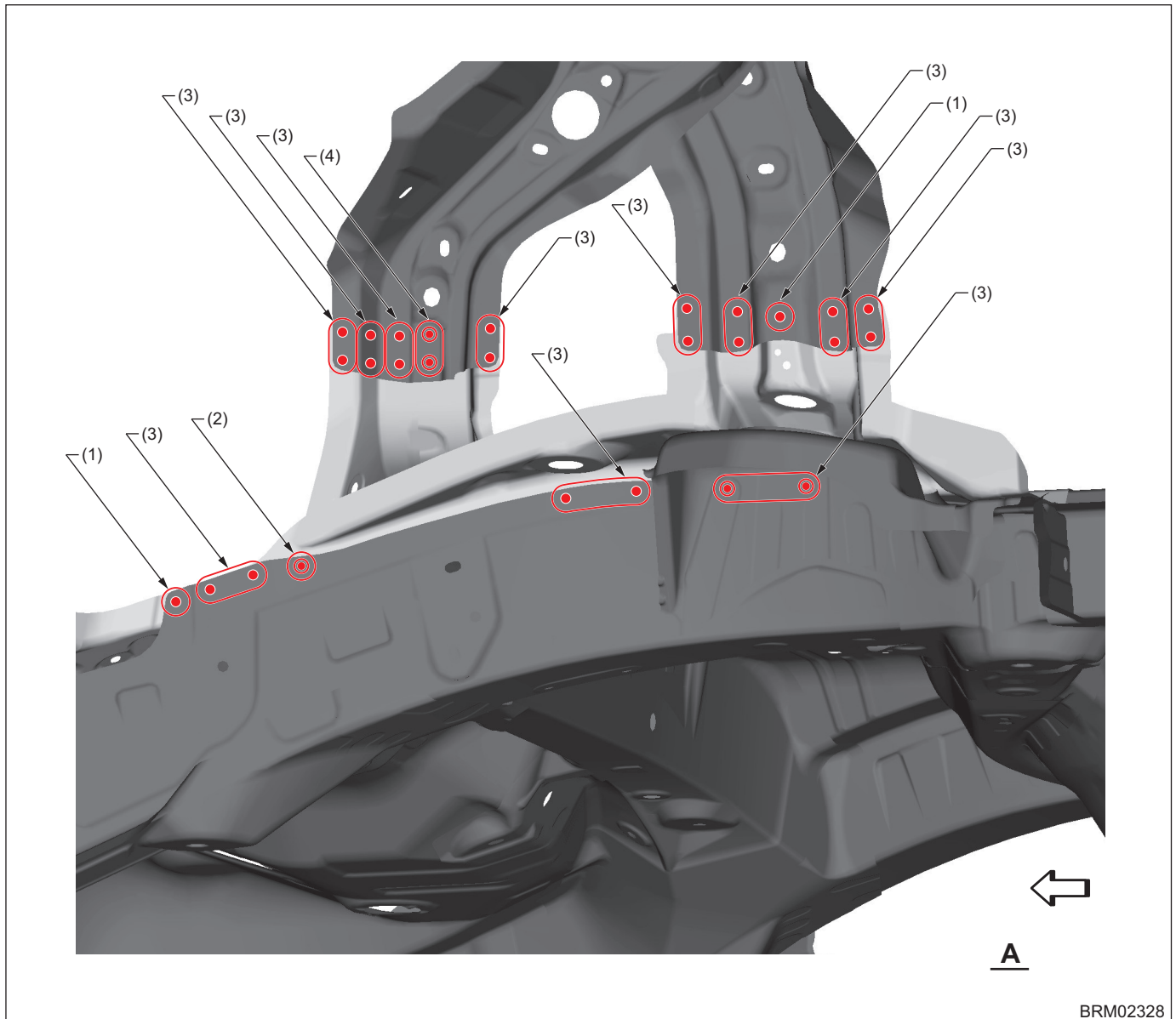
(5) LH: 2 points (Top · 2)
RH: 1 point (Top · 2)

(6) 3 points (Top · 1)

(7) 4 points (Top · 1)

Panel Replacement

• View A



(1) 1 point (Inside · 1)
(2) 1 point (Inside · 2)

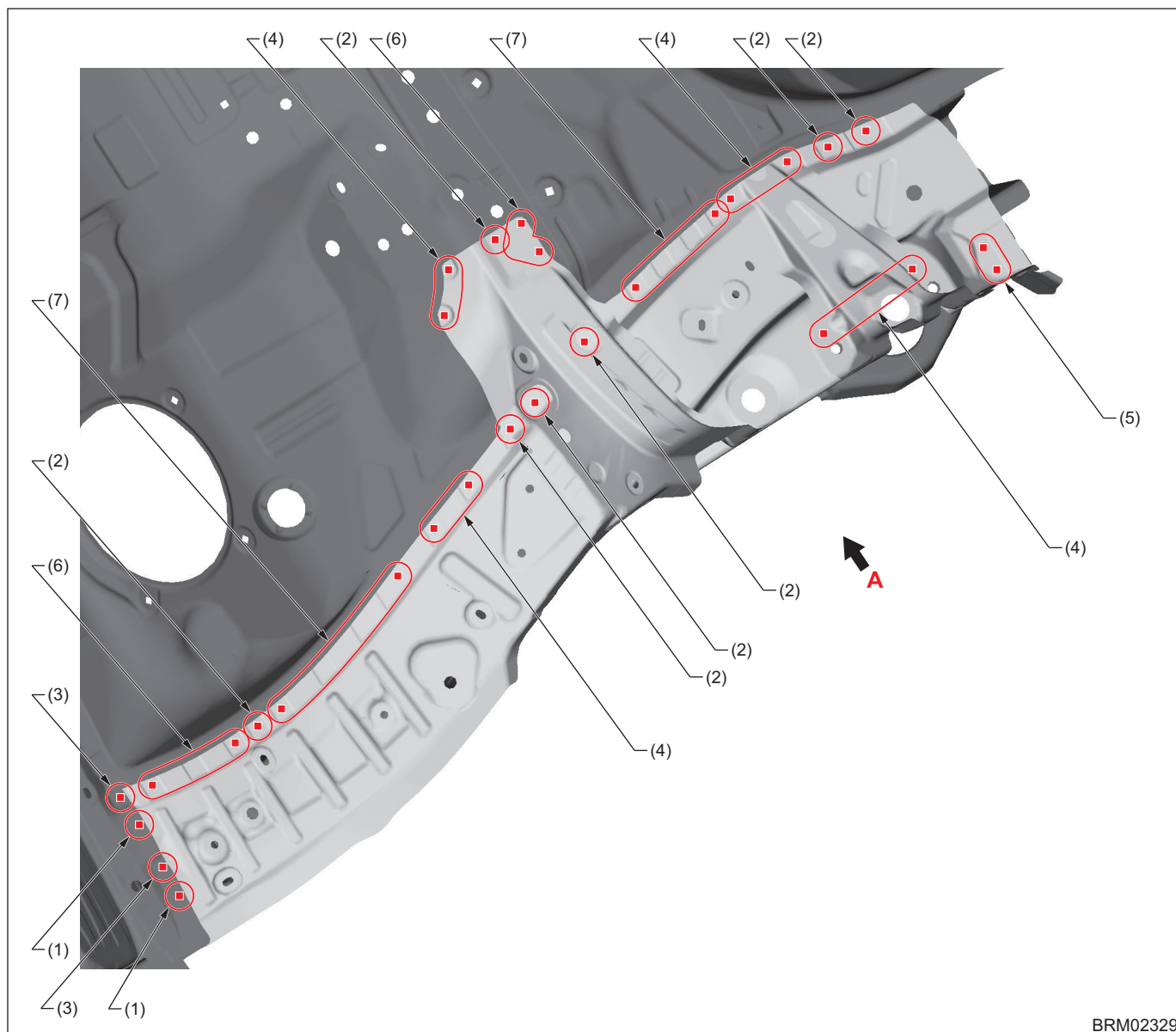
(3) 2 points (Inside · 1)

(4) 2 points (Inside · 2)

Panel Replacement

B: INSTALLATION

• Overall view

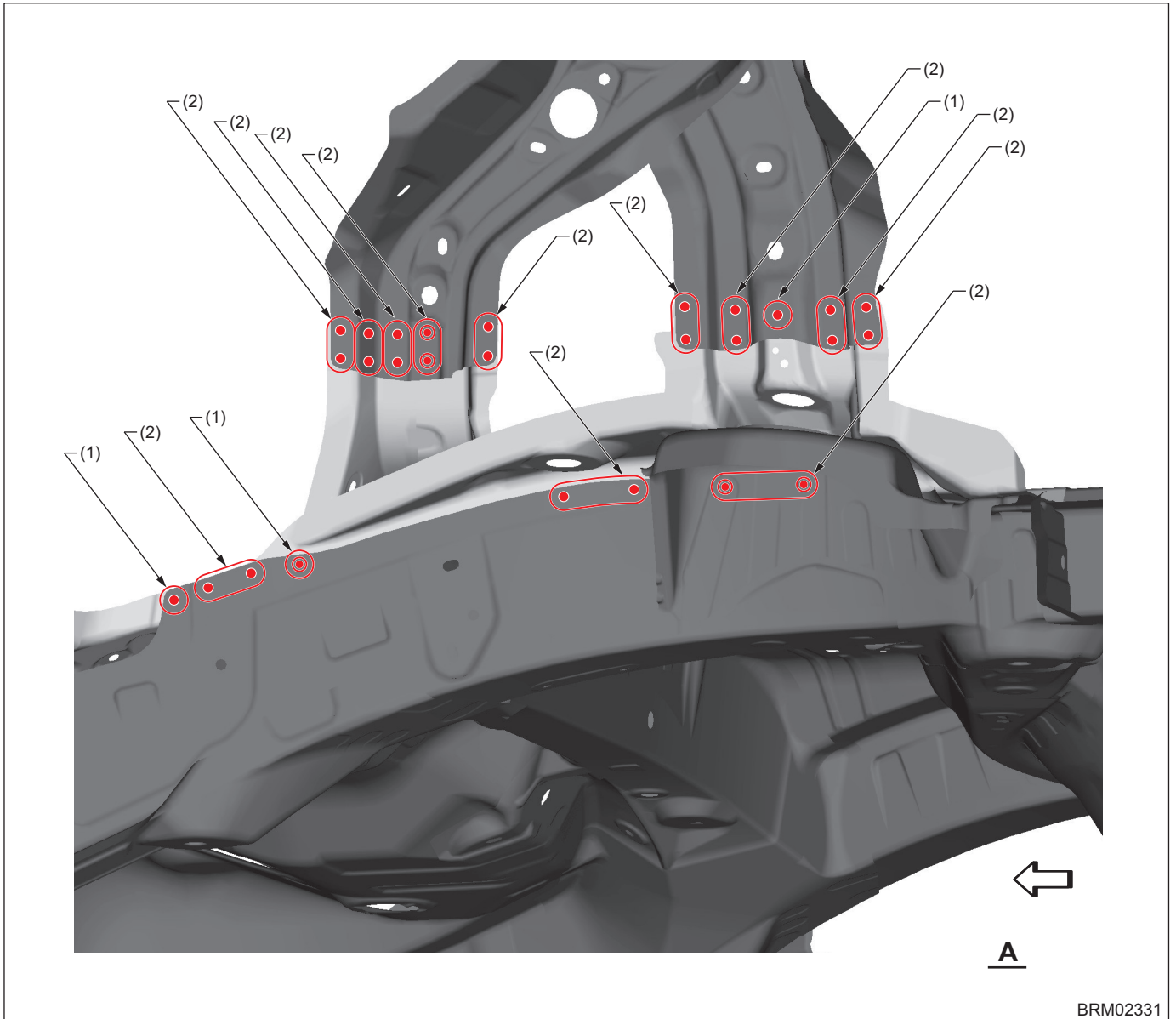


BRM02329

- | | | |
|---------------------------------------|---|-----------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 4 points (Service part) |
| (2) 1 point (Service part) | (5) LH: 2 points (Service part)
RH: 1 point (Service part) | |
| (3) 1 point (Service part · matching) | (6) 3 points (Service part) | |

Panel Replacement

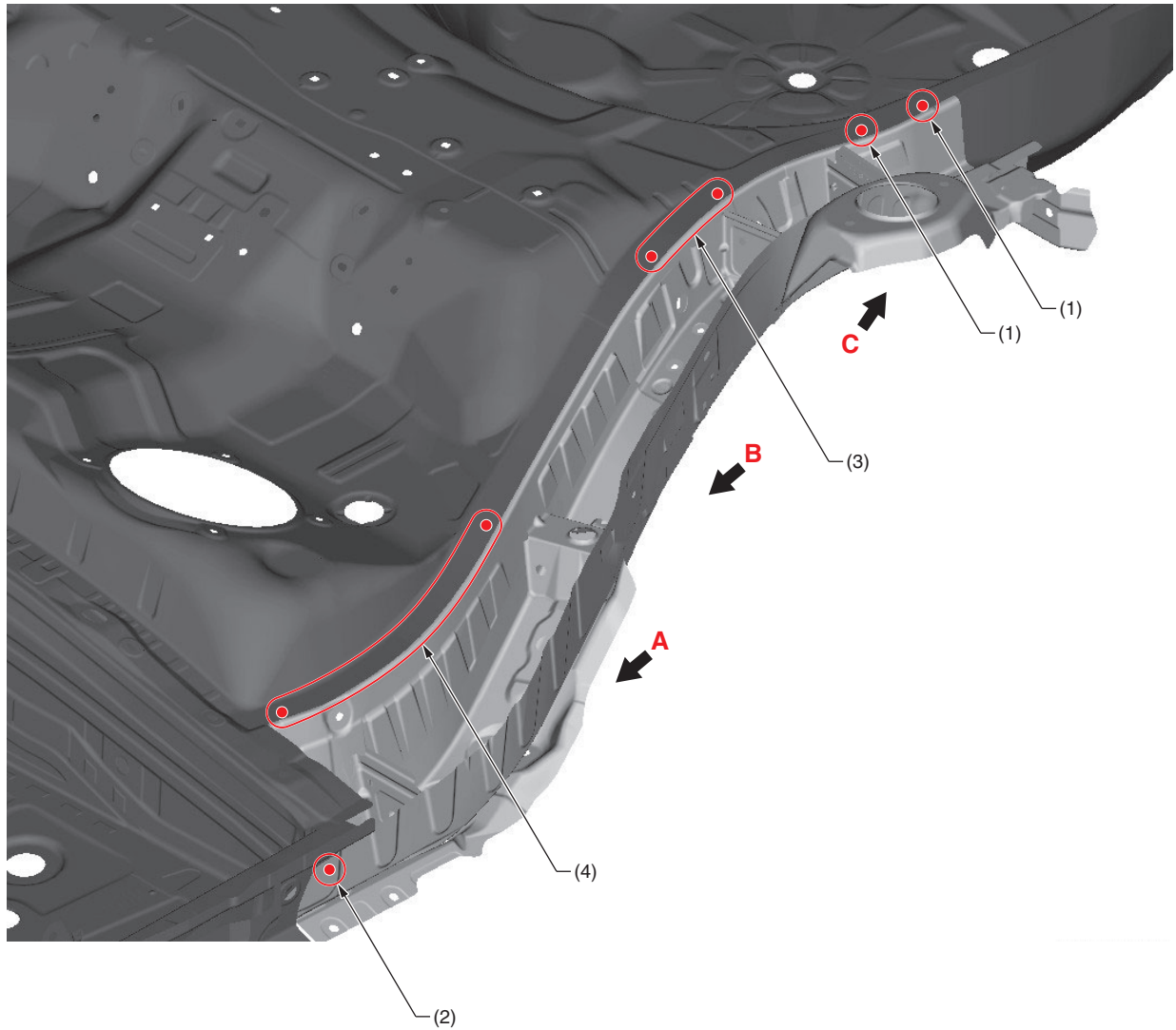
• View A



9-34. Rear Side Frame (Total replacement)

A: REMOVAL

• Overall view



BRM02332

(1) 1 point (Top · 1)

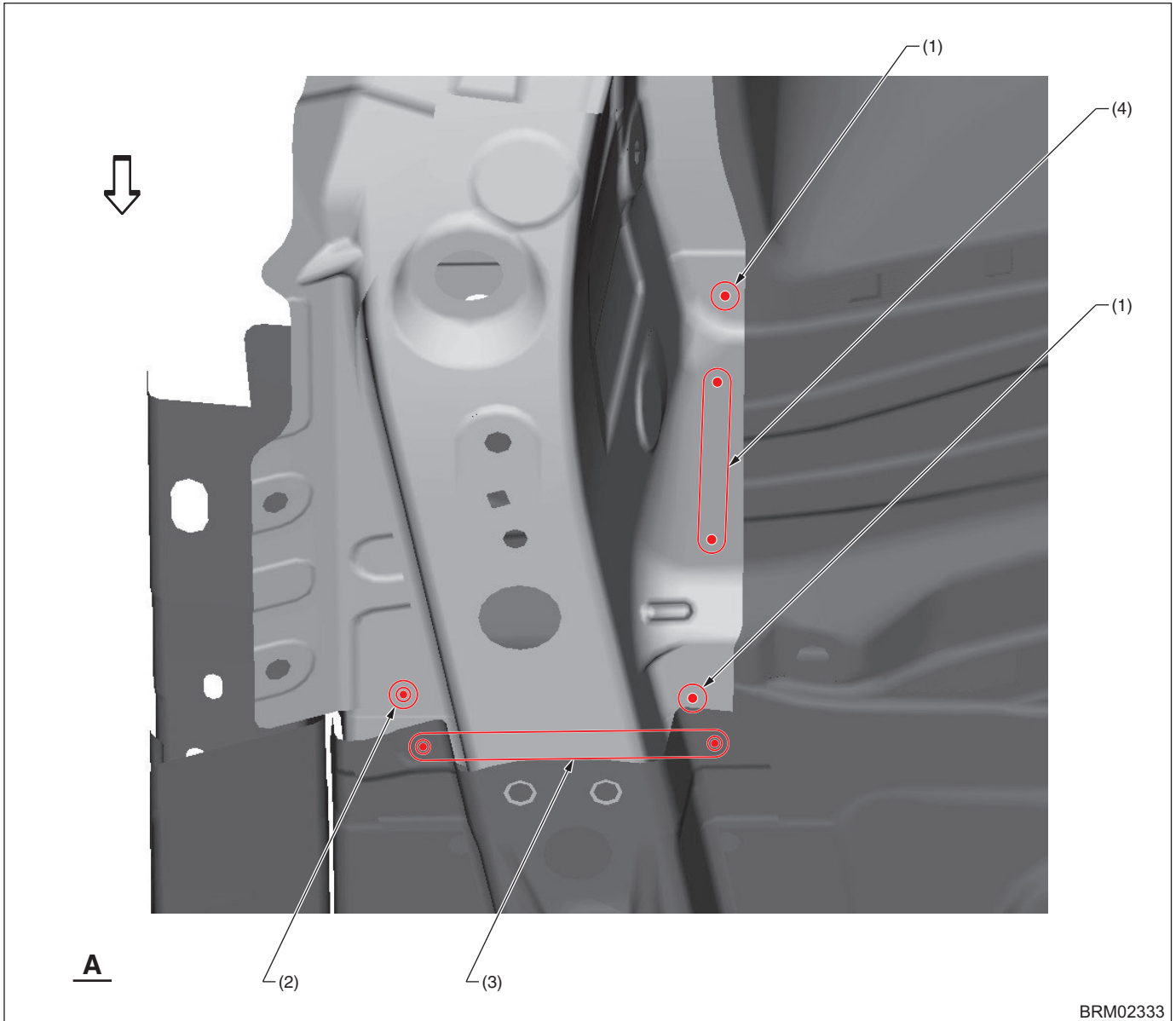
(2) 1 point (Outside · 1)

(3) 4 points (Top · 1)

(4) 7 points (Top · 1)

Panel Replacement

• View A



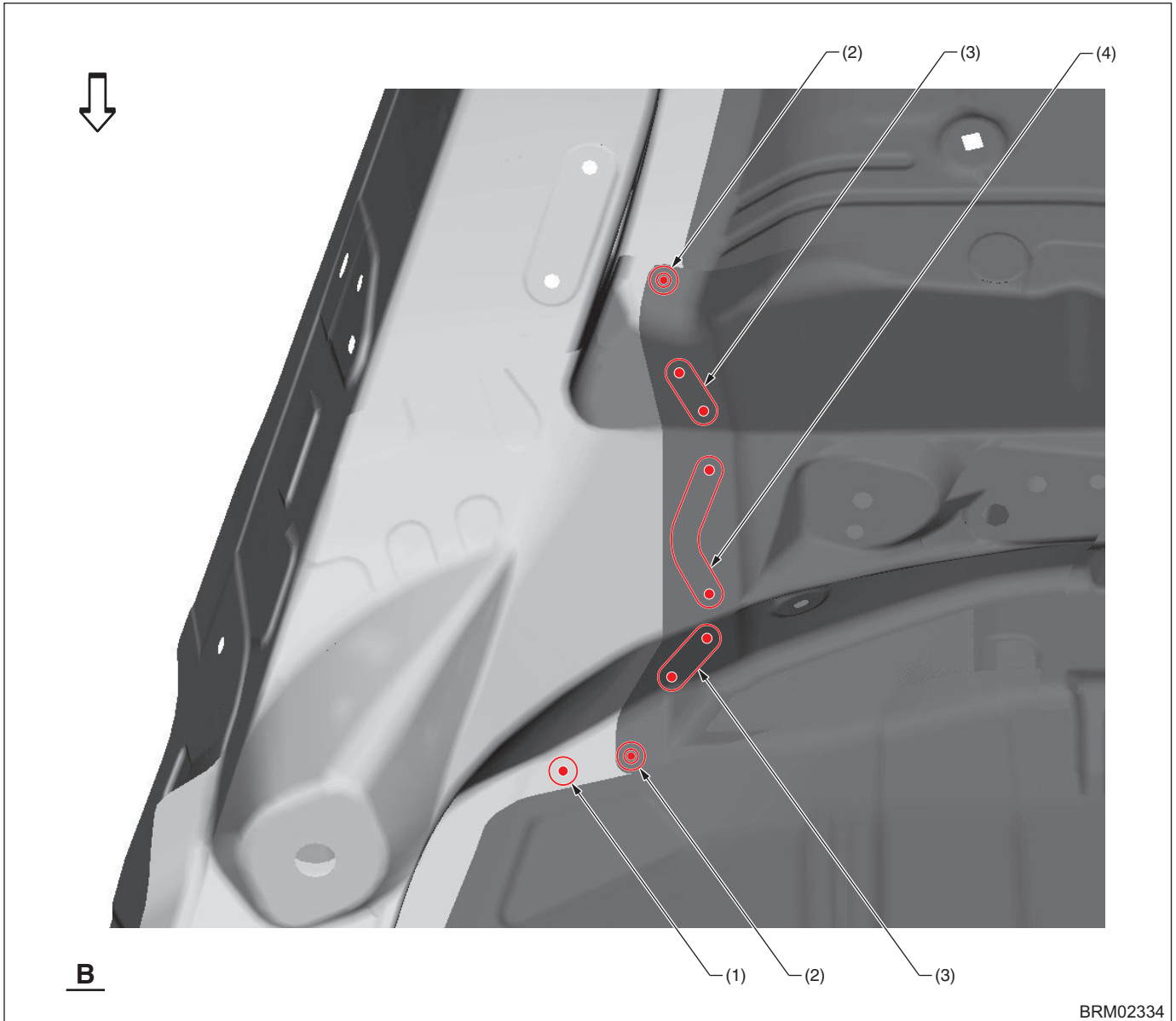
(1) 1 point (Bottom · 1)
(2) 1 point (Bottom · 2)

(3) 2 points (Bottom · 2)

(4) 3 points (Outside · 1)

Panel Replacement

• View B



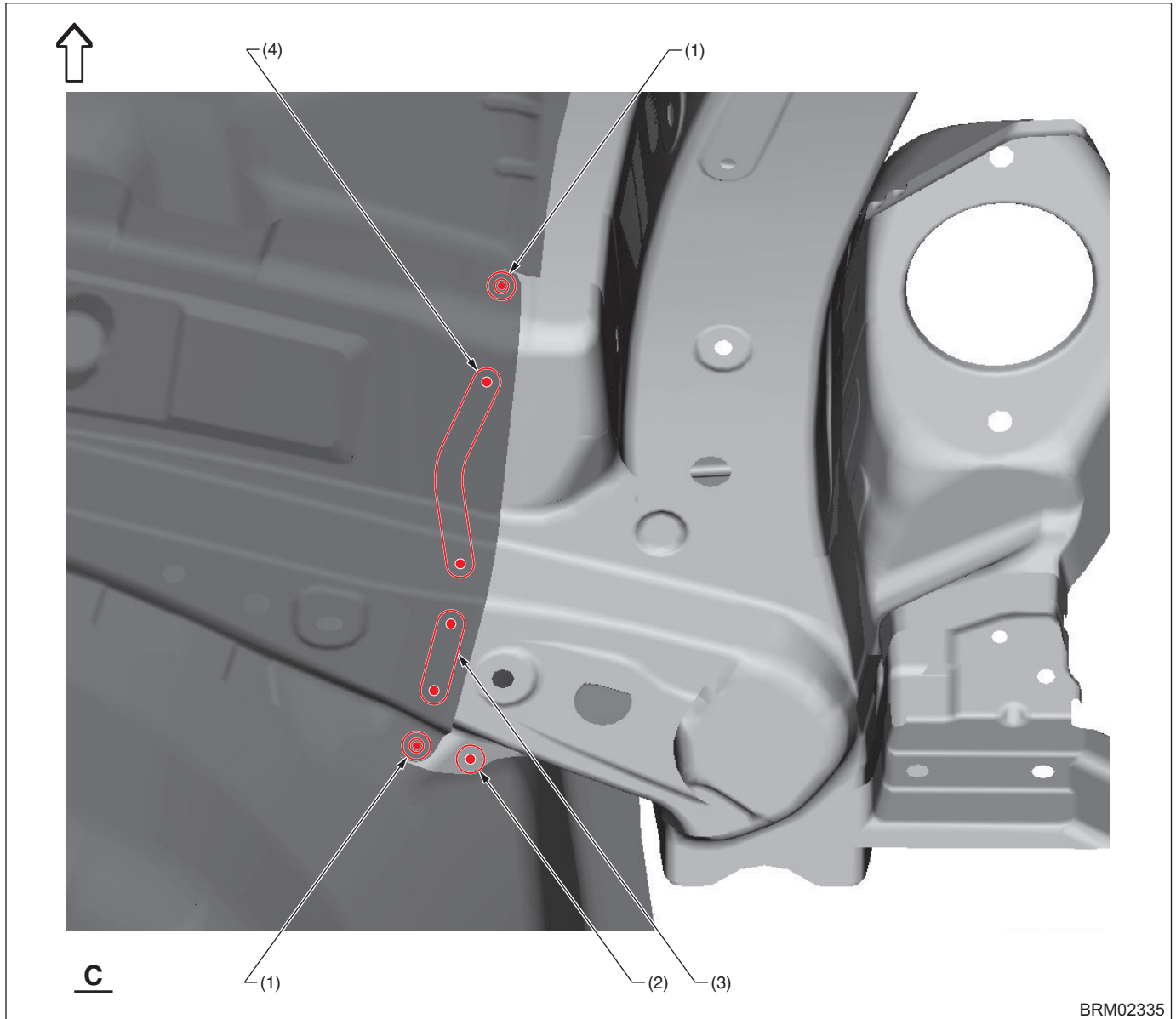
(1) 1 point (Bottom · 1)
(2) 1 point (Bottom · 2)

(3) 2 points (Outside · 1)

(4) 3 points (Bottom · 1)

Panel Replacement

• View C



BRM02335

(1) 1 point (Bottom · 2)
(2) 1 point (Outside · 1)

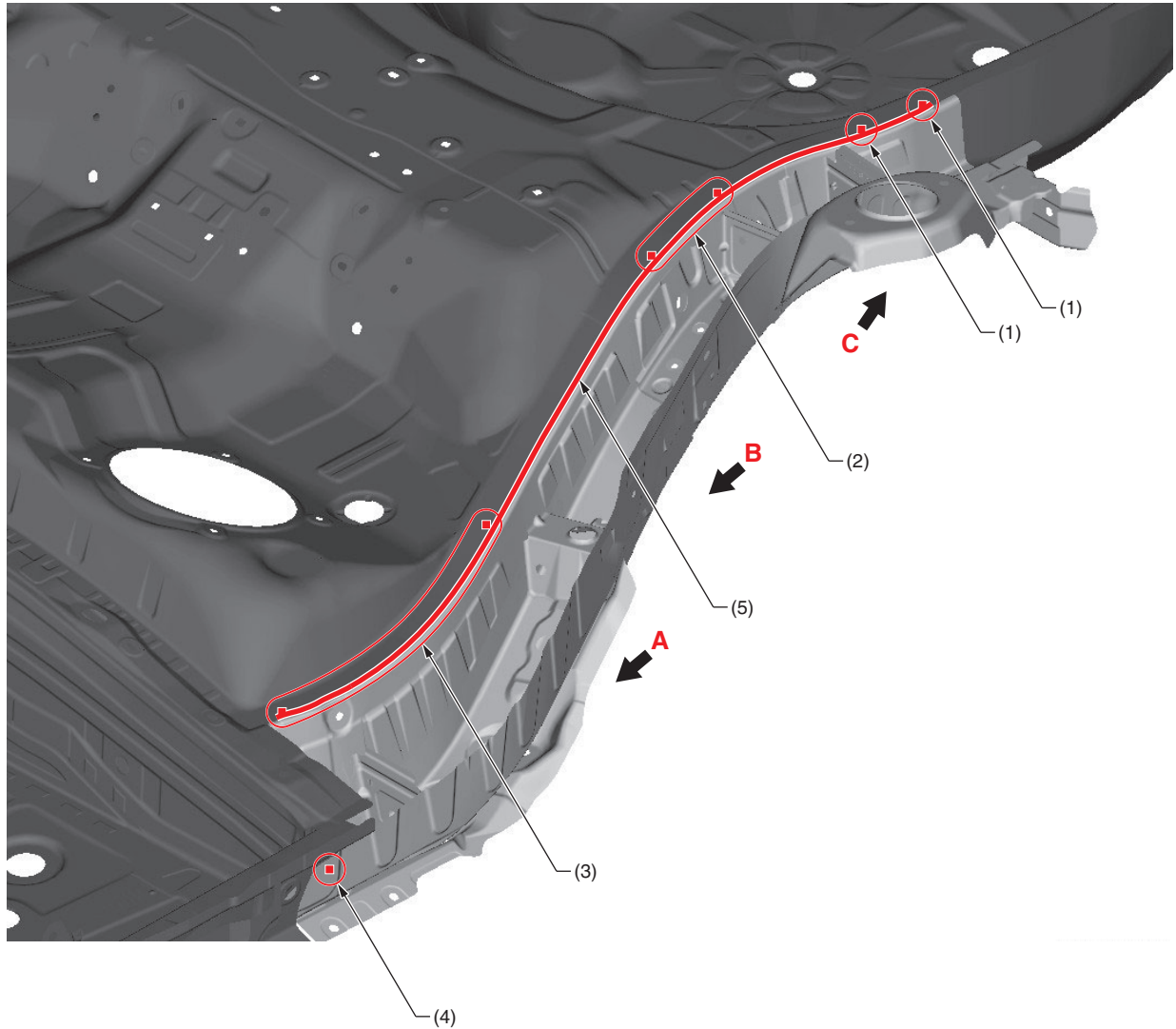
(3) 2 points (Bottom · 1)

(4) 3 points (Outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BRM02336

- (1) 1 point
- (2) 4 points

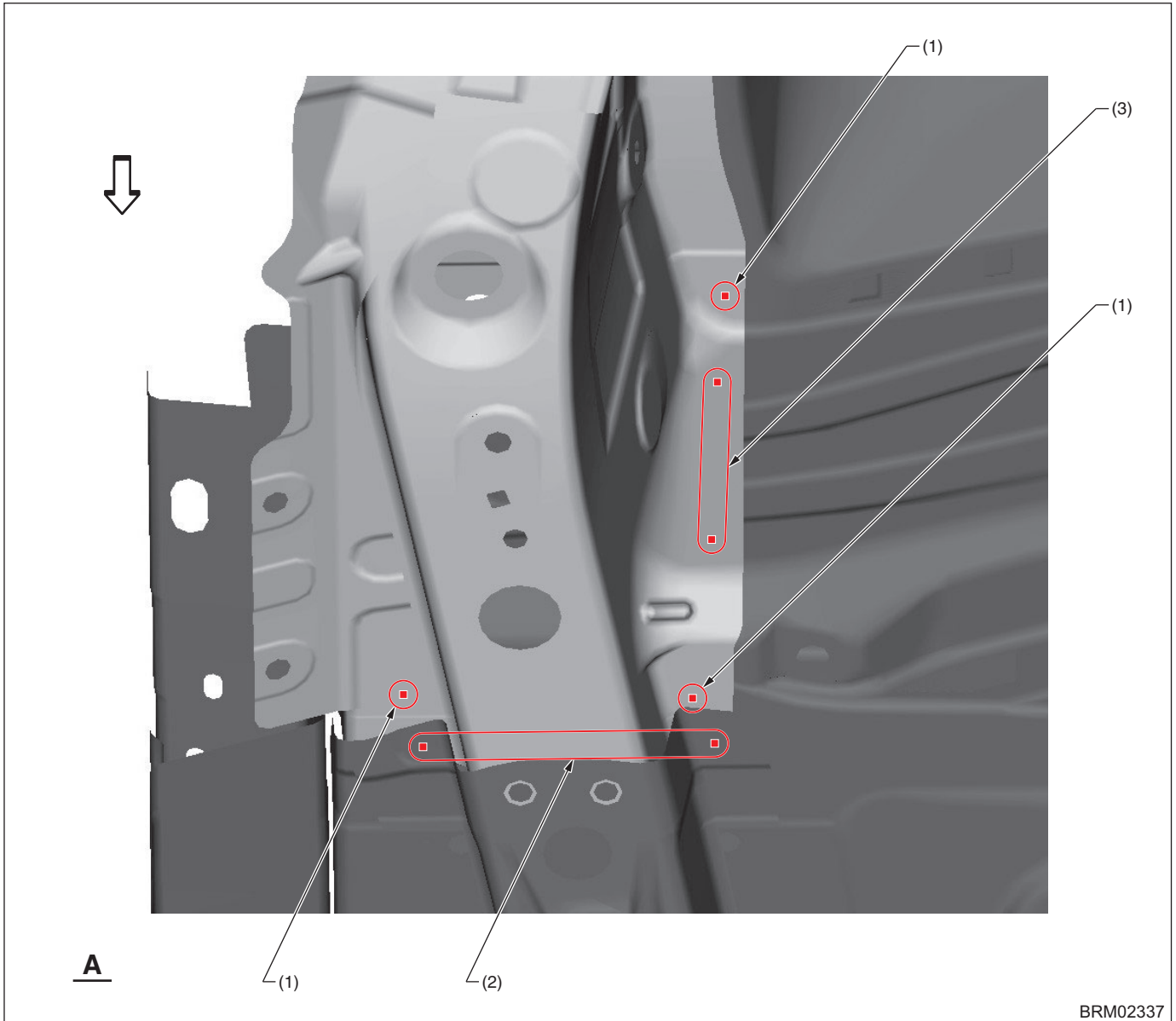
- (3) 7 points
- (4) 1 point (Service part)

- (5) Structural adhesive

— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

• View A



BRM02337

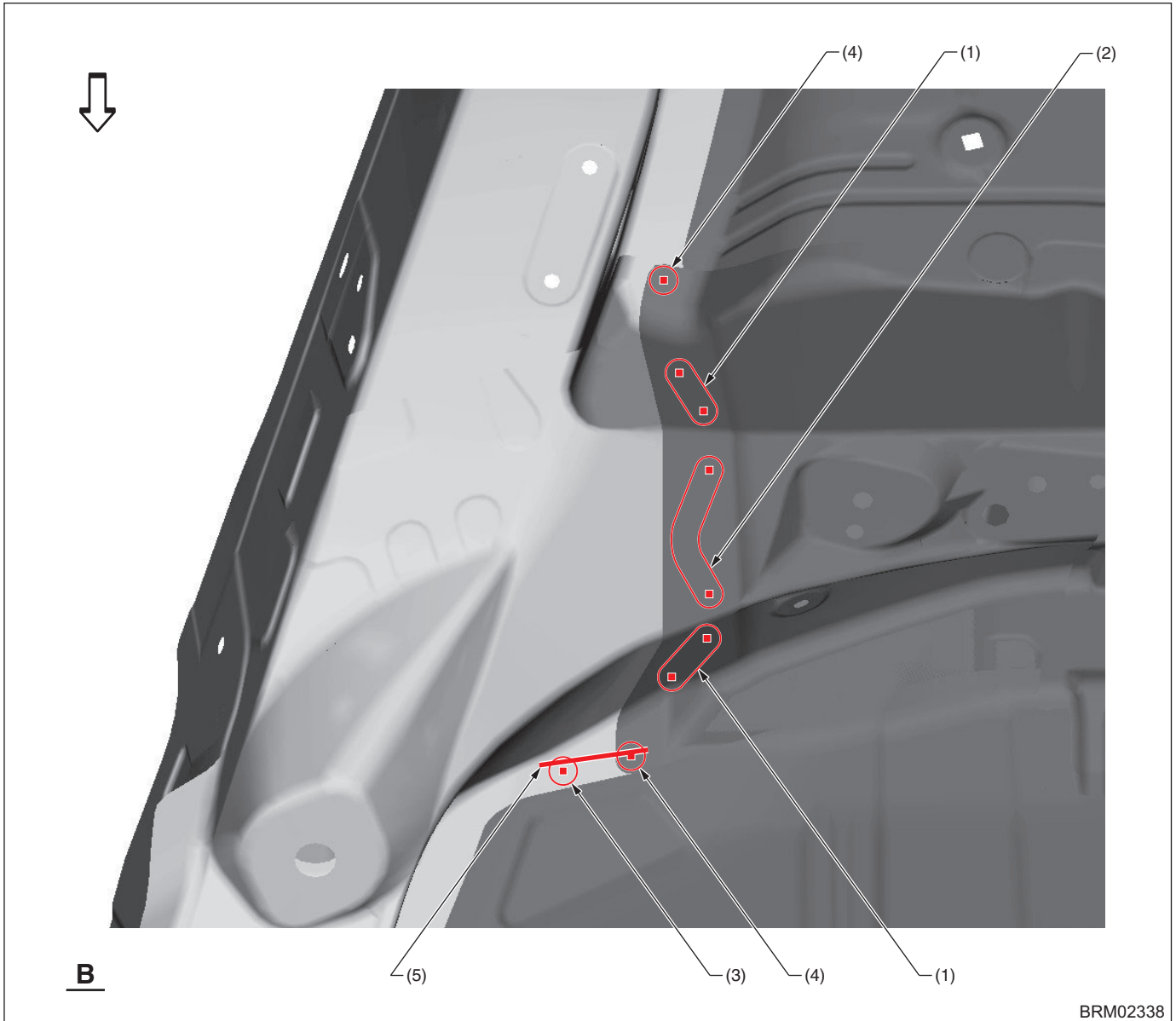
(1) 1 point (Service part)

(2) 2 points (Service part · matching)

(3) 3 points (Service part)

Panel Replacement

• View B



(1) 2 points
(2) 3 points

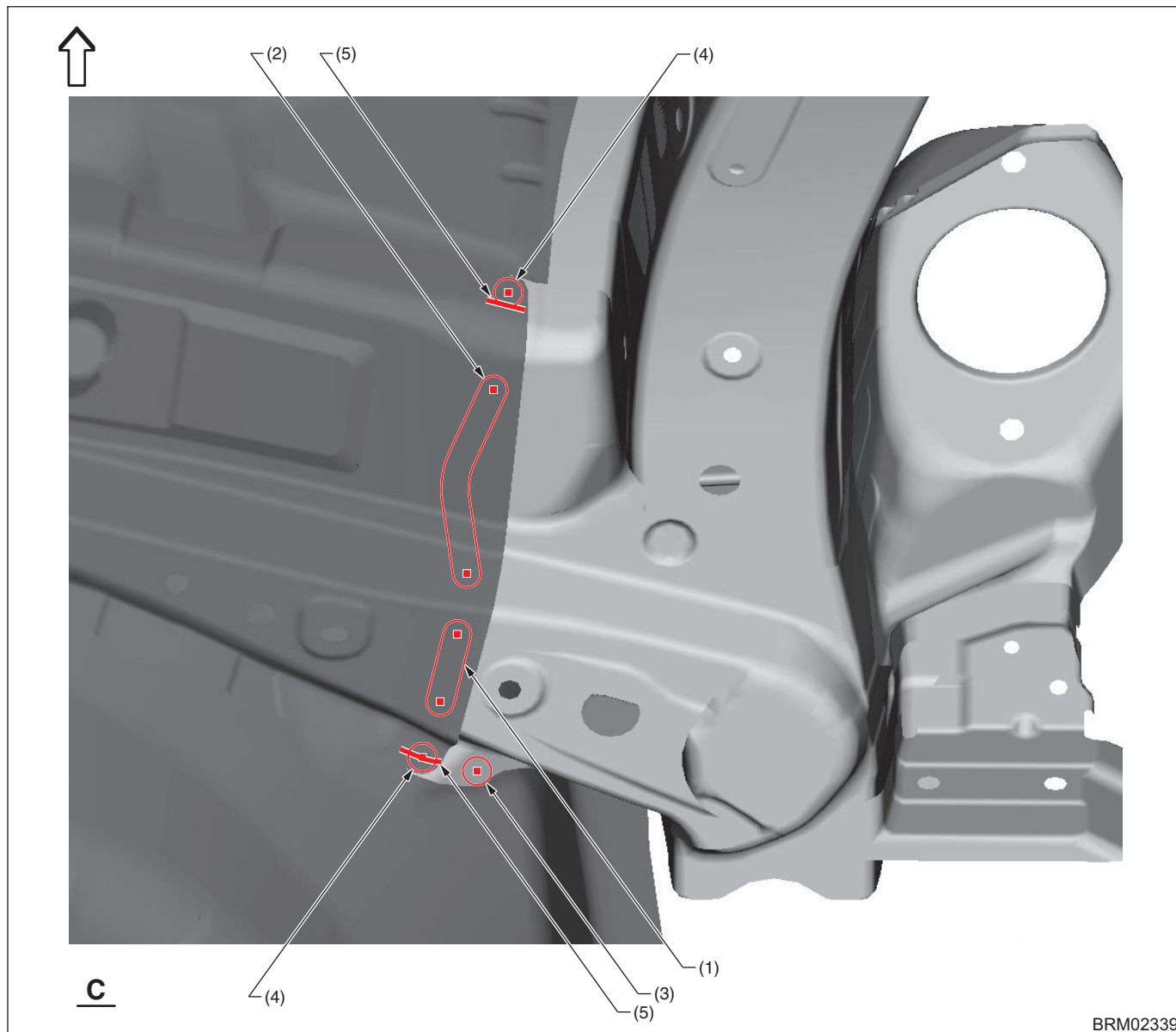
(3) 1 point (Service part)
(4) 1 point (Service part · matching)

(5) Structural adhesive

— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

• View C



BRM02339

- (1) 2 points
- (2) 3 points

- (3) 1 point (Service part)
- (4) 1 point (Service part - matching)

- (5) Structural adhesive

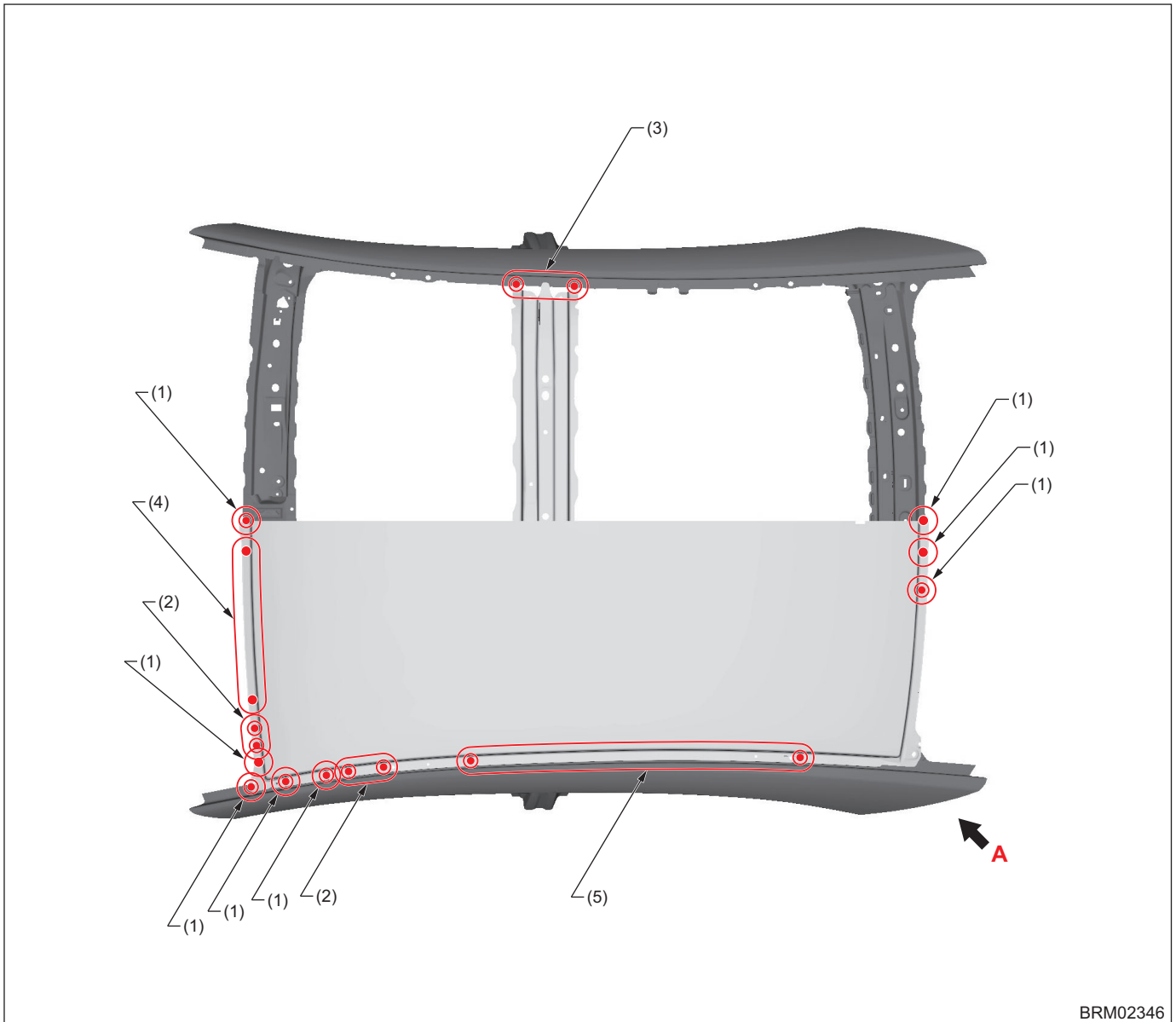
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

Panel Replacement

9-35. Roof Panel (Total replacement)

A: REMOVAL

- Overall view (Model without sunroof)



BRM02346

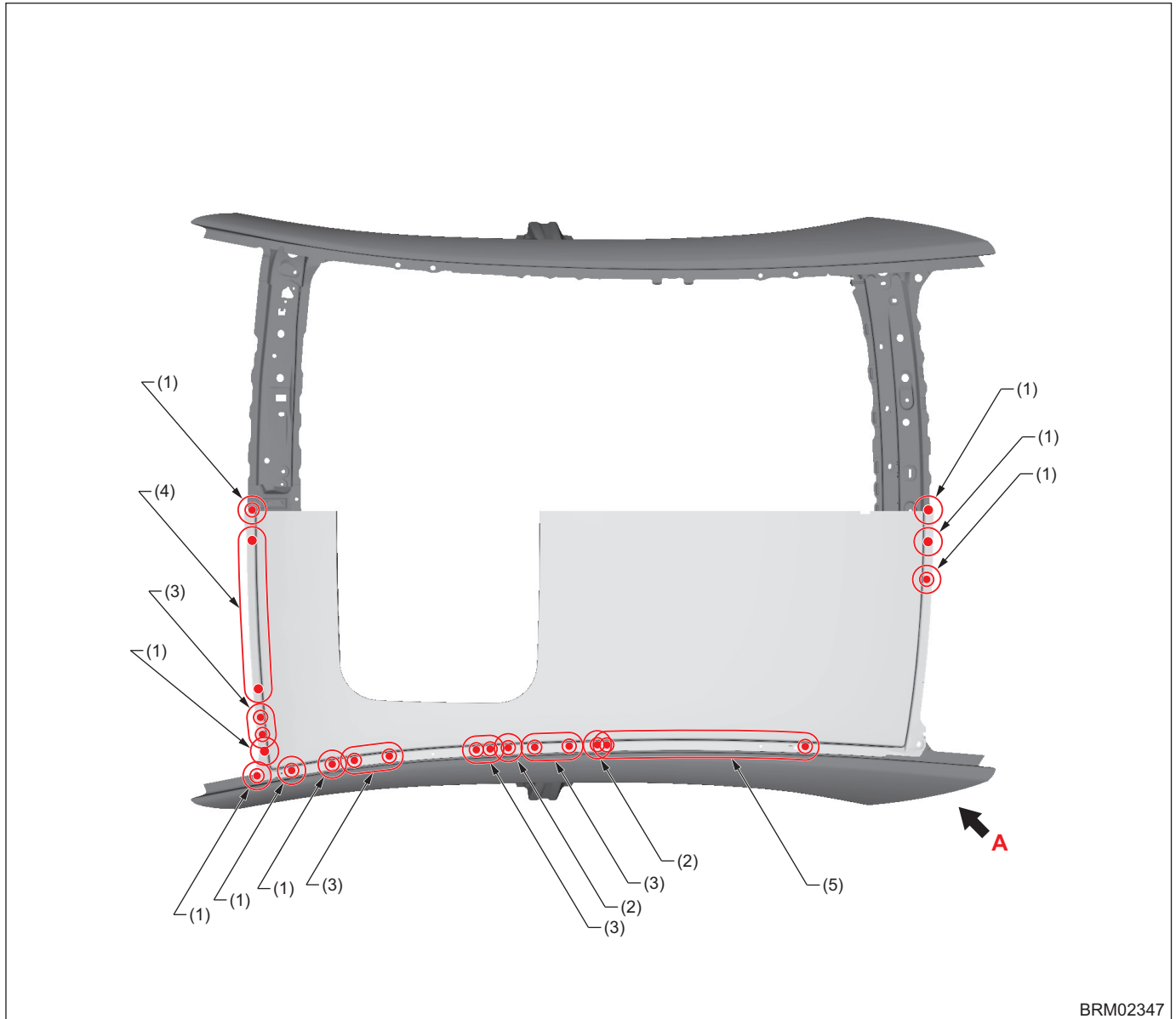
(1) 1 point (Top - 1)
(2) 2 points (Top - 1)

(3) 3 points (Top - 1)
(4) 5 points (Top - 1)

(5) 10 points (Top - 1)

Panel Replacement

• Overall view (Model with sunroof)



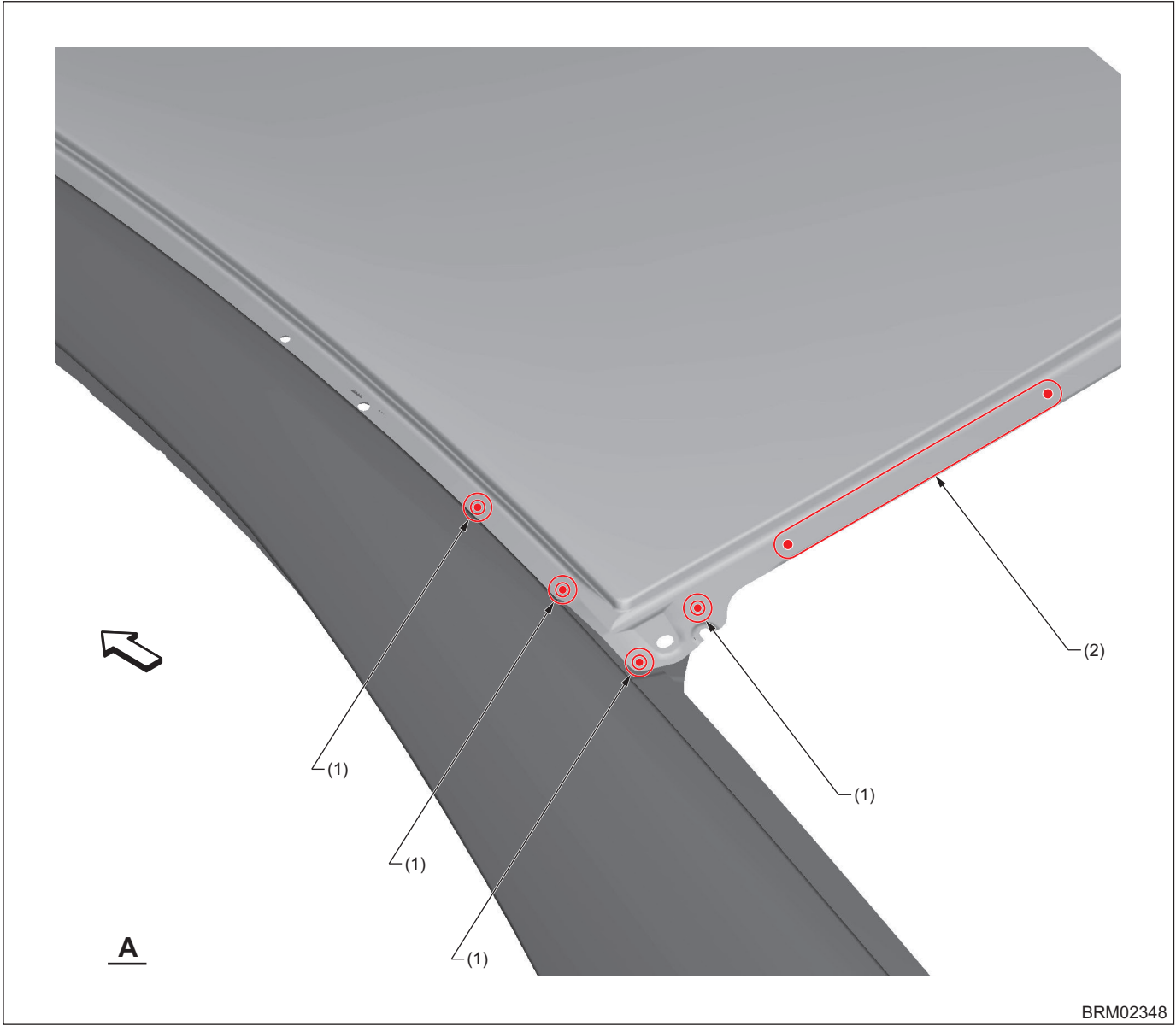
(1) 1 point (Top · 1)
(2) 1 point (Top · 2)

(3) 2 points (Top · 1)
(4) 5 points (Top · 1)

(5) 6 points (Top · 1)

Panel Replacement

• View A



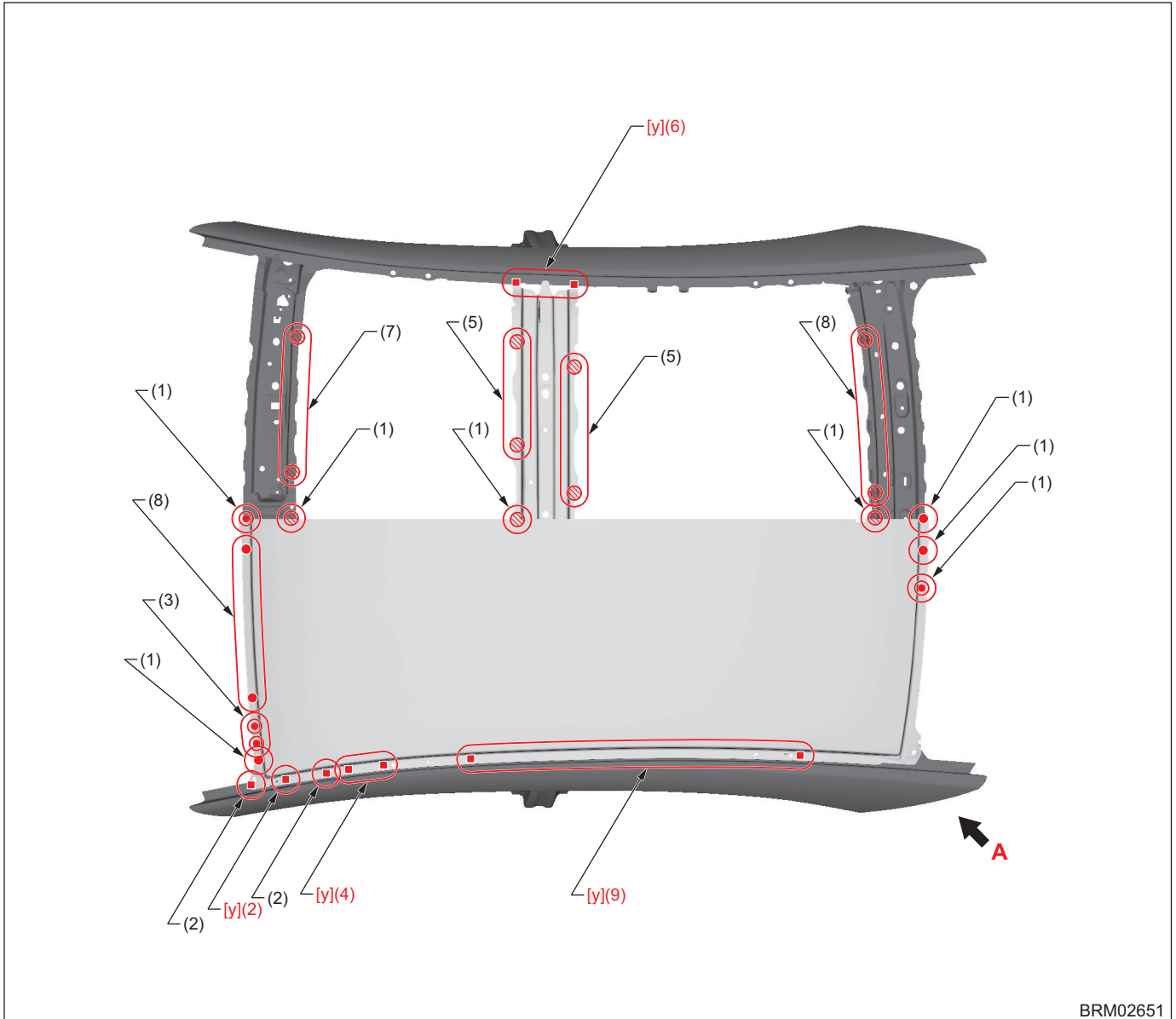
(1) 1 point (Top · 1)

(2) 4 points (Top · 1)

Panel Replacement

B: INSTALLATION

• Overall view (Model without sunroof)



BRM02651

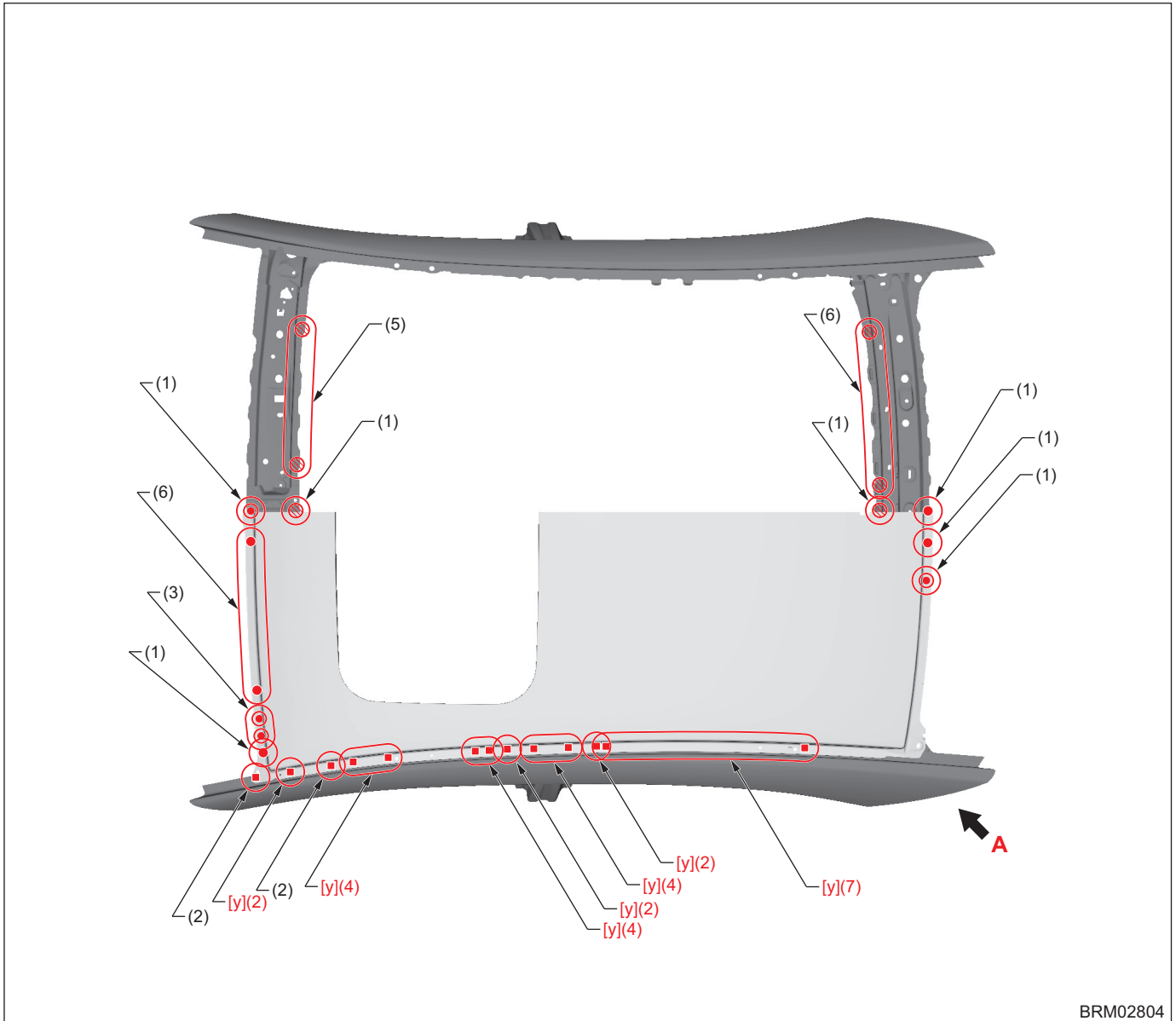
- | | | |
|----------------------------|-----------------------------|------------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 4 points |
| (2) 1 point (Service part) | (5) 3 points | (8) 5 points |
| (3) 2 points | (6) 3 points (Service part) | (9) 10 points (Service part) |

 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)
-----------------------------	--

Panel Replacement

• Overall view (Model with sunroof)



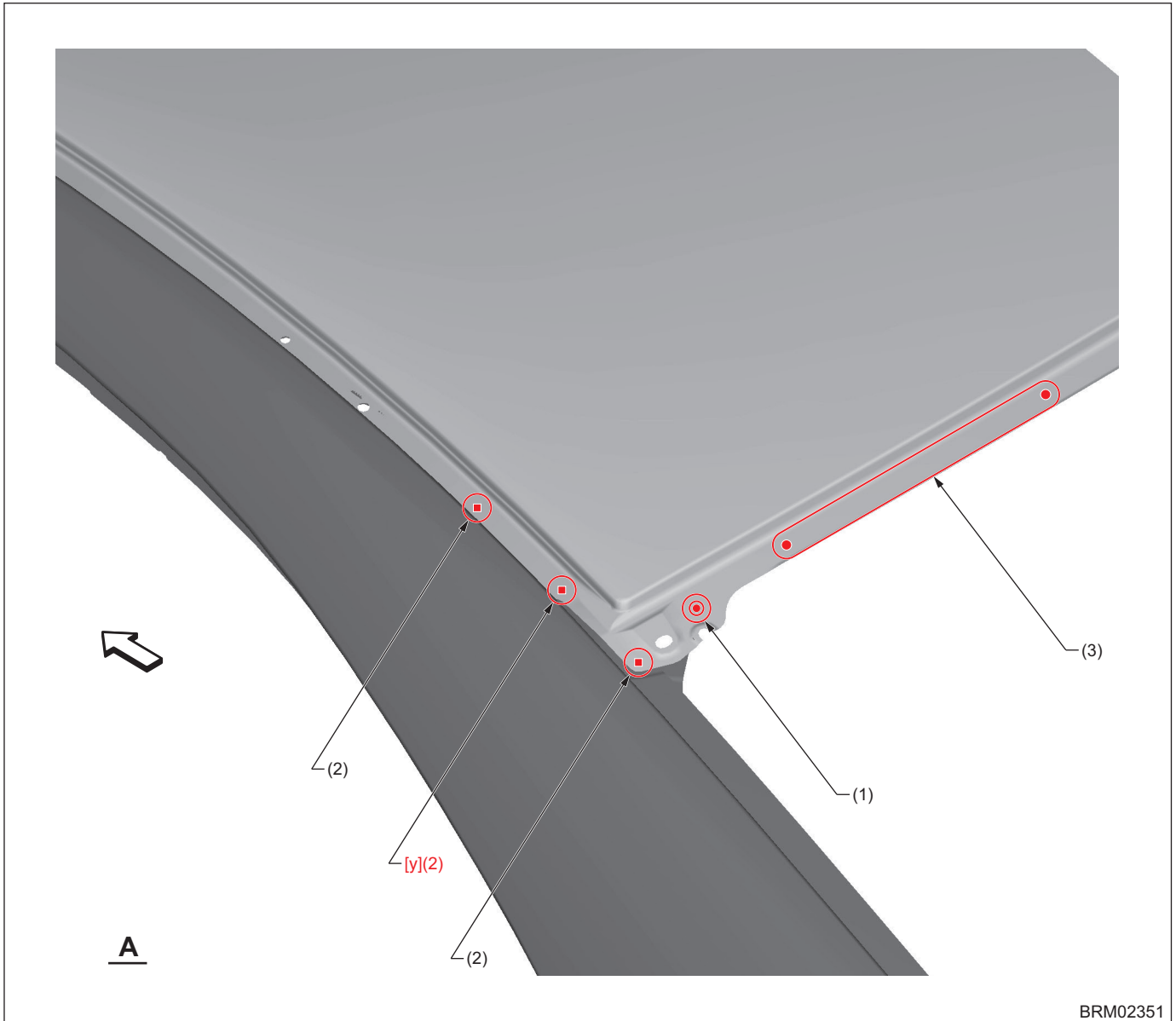
- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point | (4) 2 points (Service part) | (7) 6 points (Service part) |
| (2) 1 point (Service part) | (5) 4 points | |
| (3) 2 points | (6) 5 points | |

 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

[y] Plug welding conditions	A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO ₂ B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO ₂ : 20 %)
-----------------------------	--

Panel Replacement

• View A



(1) 1 point

(2) 1 point (Service part)

(3) 4 points

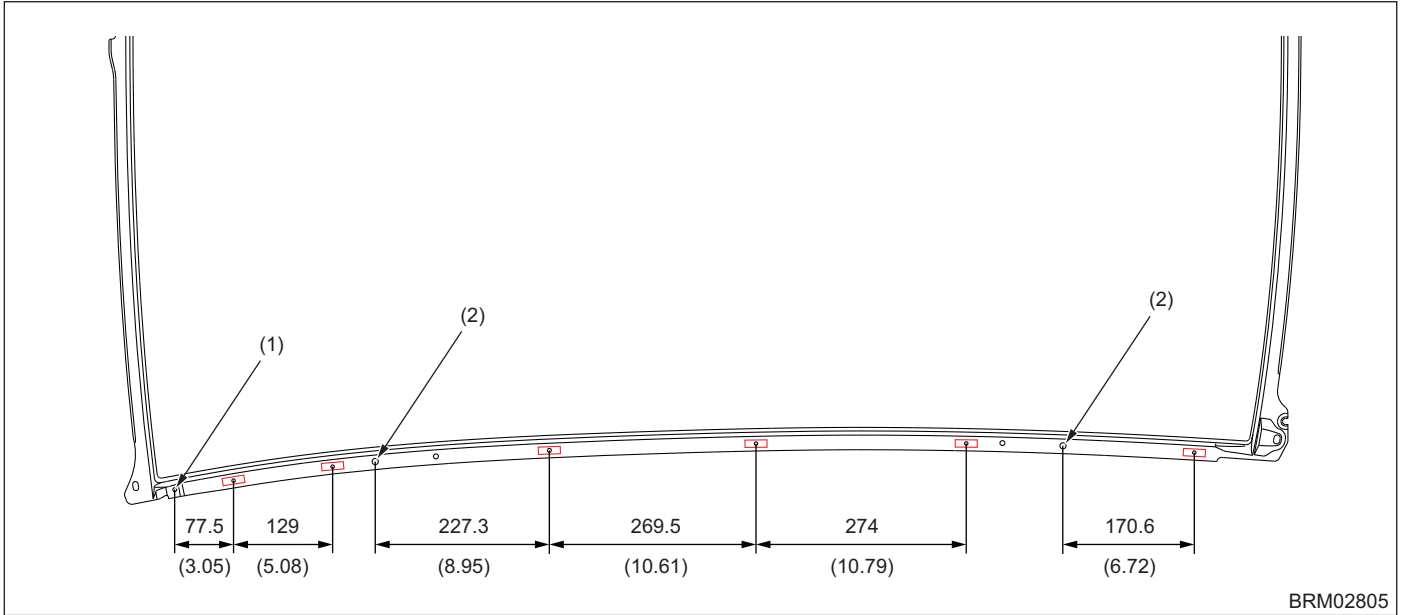
[y] Plug welding conditions

A Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW12, Gas: CO₂

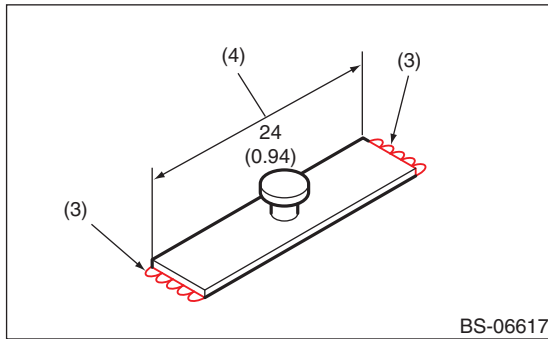
B Plug diameter: 8.5 mm [0.33 in] or more, Wire: YGW16, Gas: Gas mixture (Argon: 80 %, CO₂: 20 %)

Panel Replacement

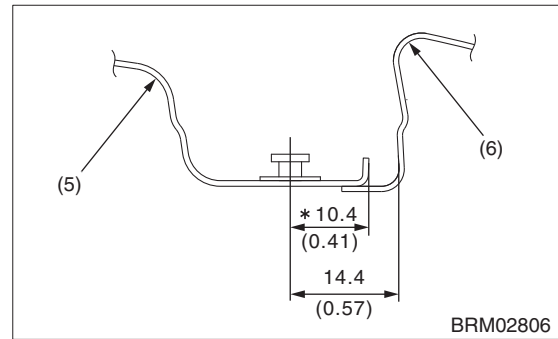
9-36. T Stud Installation



• T stud welding



• T stud basic cross section



- | | | |
|---|--|----------------------|
| (1) $\phi 5.2$ mm [0.20 in] hole (For roof mole, standard pop rivet hole) | (3) Arc welding for both plate ends | (5) Roof panel |
| (2) $\phi 8.1$ mm [0.32 in] hole (For carrier bracket installation) | (4) This surface shall be kept flat as it becomes the mating face with the clip. | (6) Side panel outer |

* Indicates dimensions for reference.

10.Body Sealing

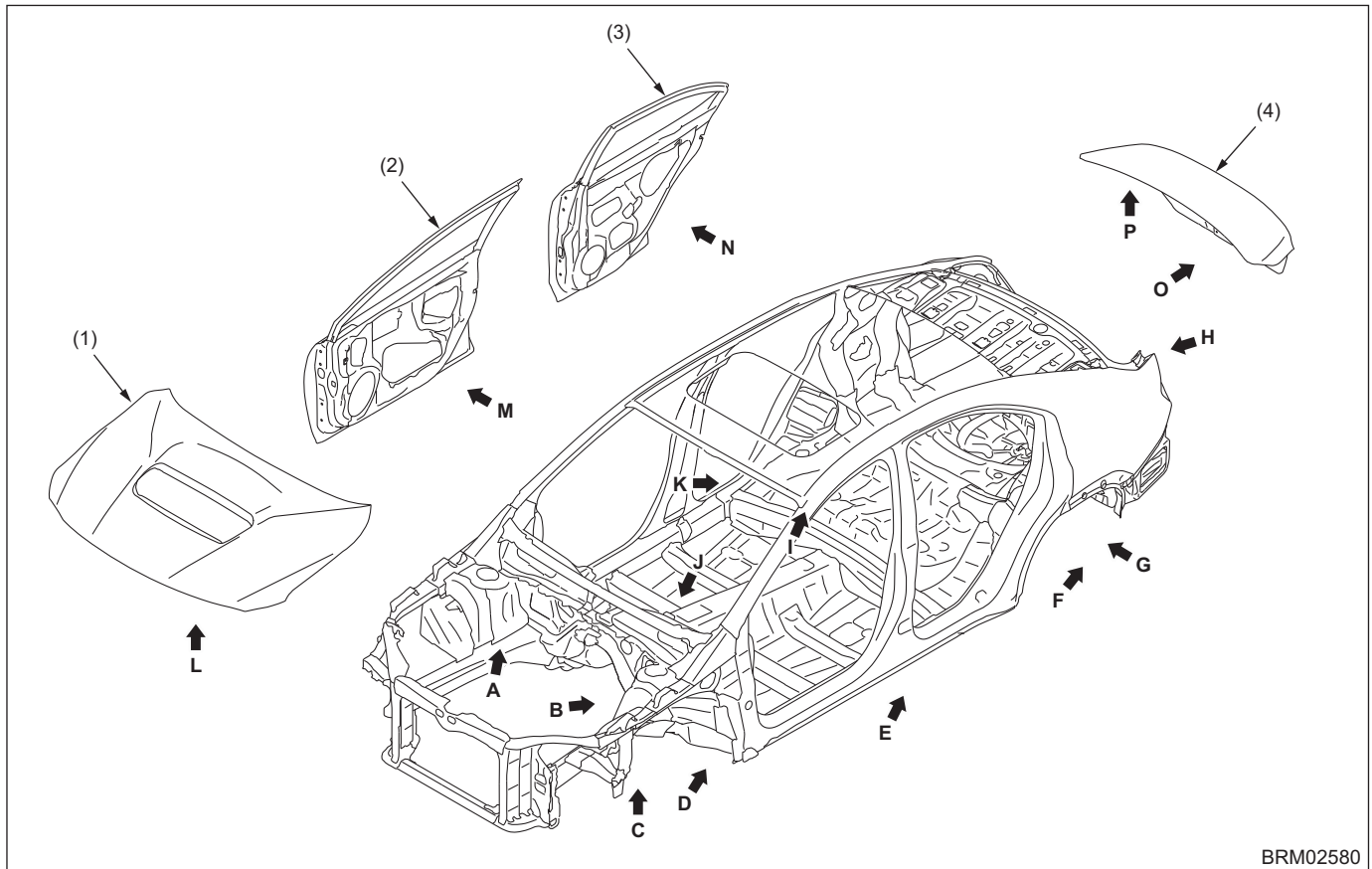
A: SPECIFICATIONS

CAUTION:

- Apply sealer to the seams and hemmed sections of the body panel.
- If the sealer is burned off by welding or other work, be sure to take measures against water leakage at and around the burned-out area.
- A hood, doors and trunk come sealed and can be used as repair parts.

Used material: Three Bond 4101 (004403063) or equivalent

— : Sealer application location



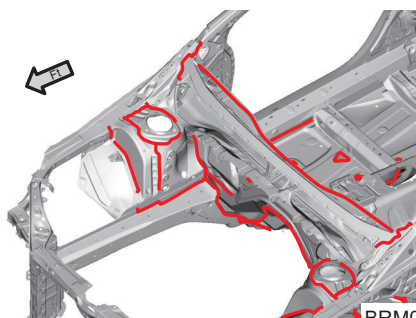
BRM02580

- (1) Front hood
(2) Front door

- (3) Rear door

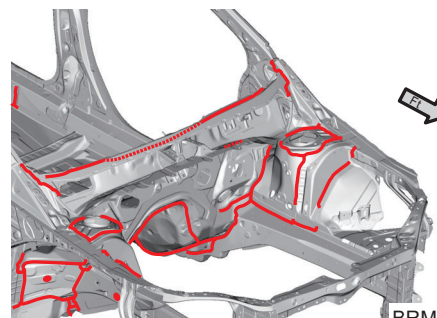
- (4) Trunk

View A



BRM02833

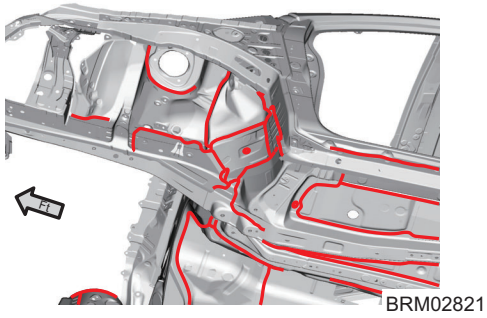
View B



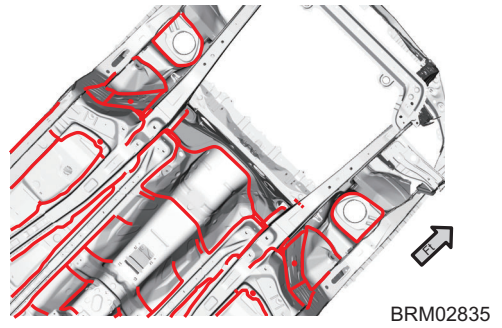
BRM02834

Body Sealing

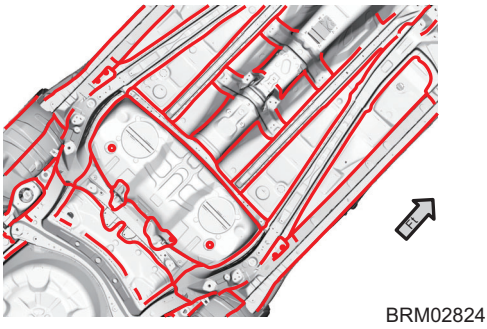
View C



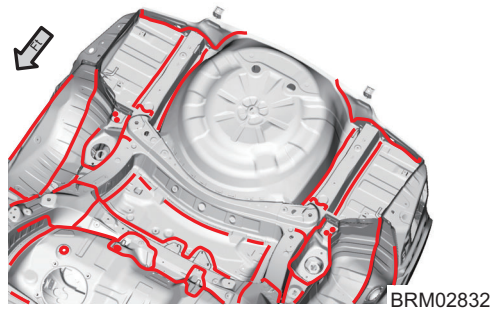
View D



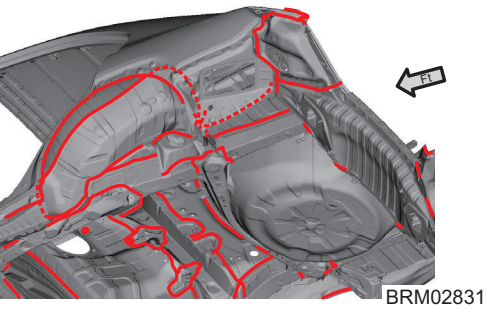
View E



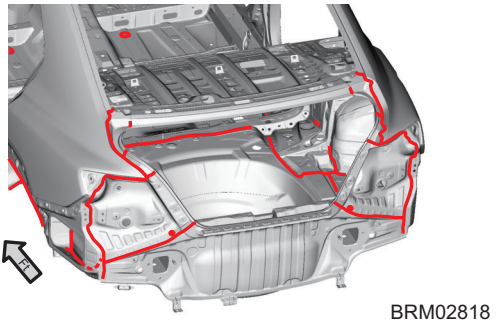
View F



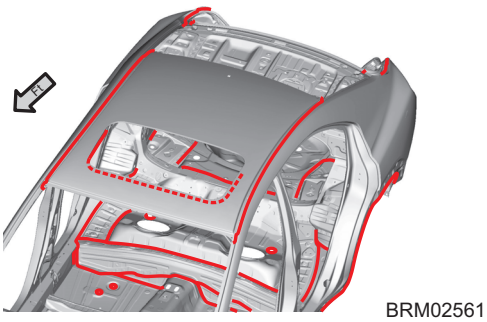
View G



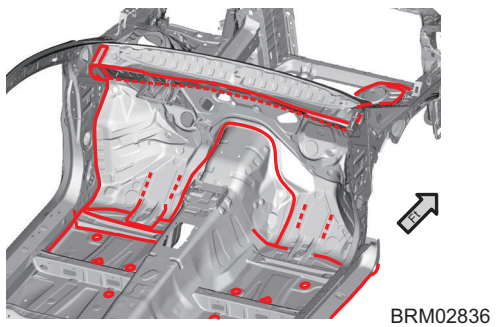
View H



View I

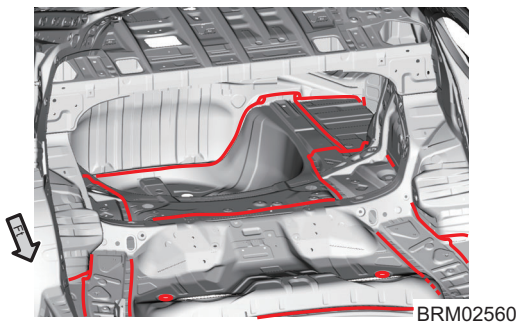


View J

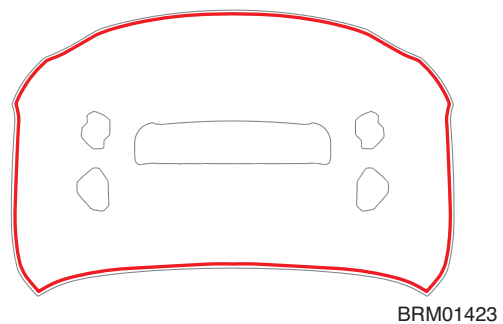


Body Sealing

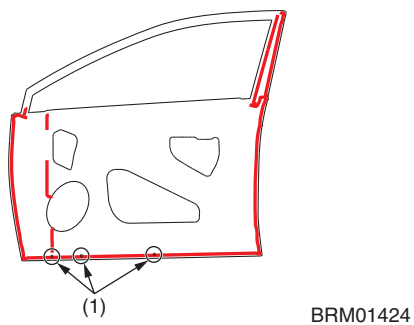
View K



View L

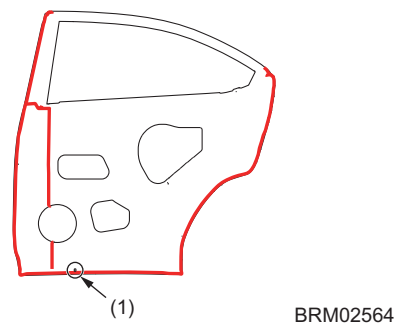


View M



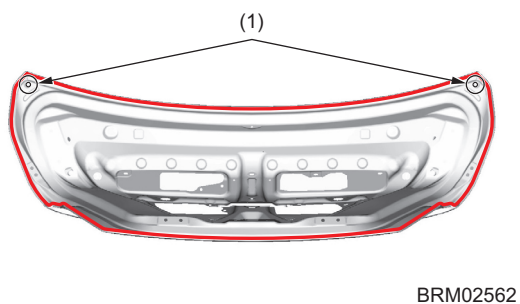
(1) Do not block drain holes.

View N



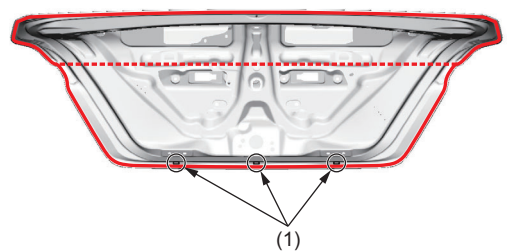
(1) Do not block drain holes.

View O



(1) Cover air vent holes.

View P



(1) Do not block drain holes.

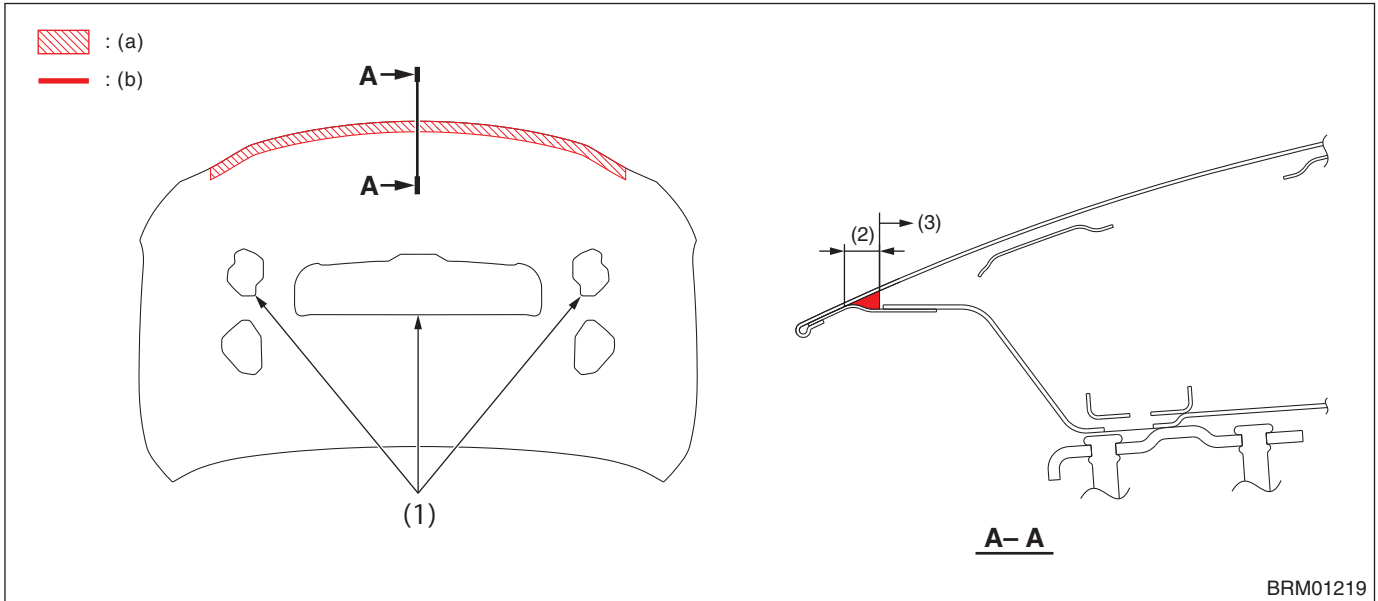
11. Anticorrosion Wax

A: SPECIFICATIONS

Used material: Rust-stop aerosol (K0877YA015)

— and    : Application area

- **Front hood area** (Application thickness = 50 μm or more)



(a) Rust-stop aerosol

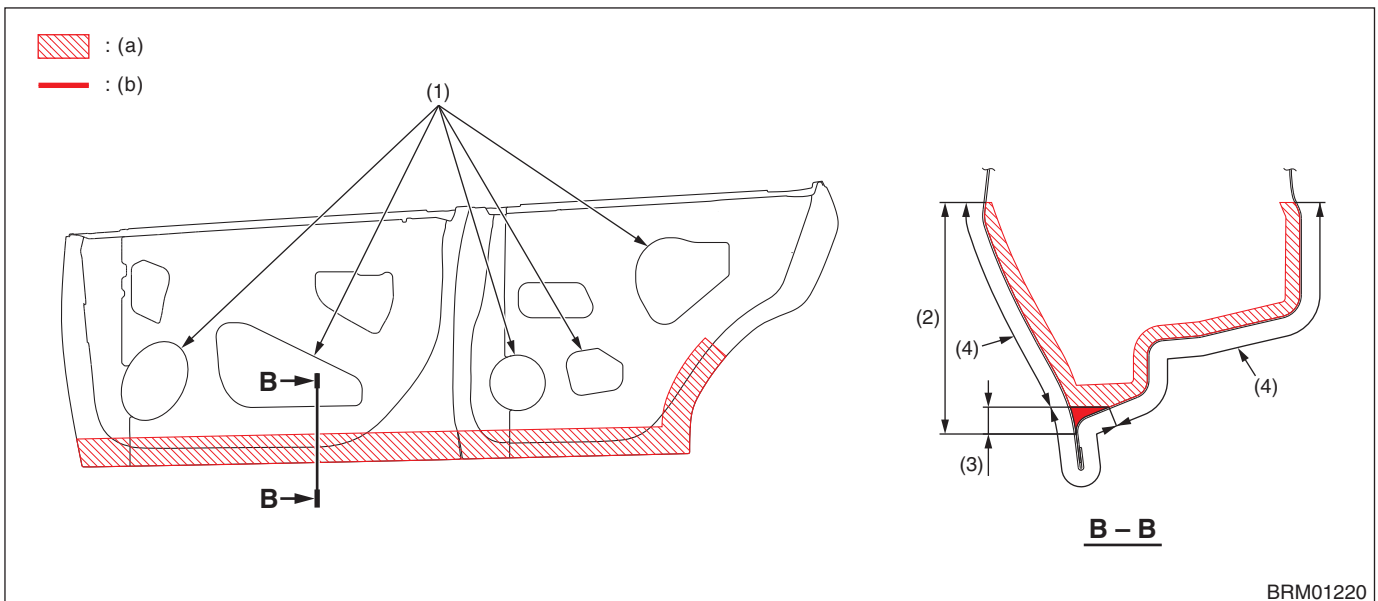
(b) Fill in the plate joint.

(1) Wax application work openings

(2) 10 mm (0.39 in)

(3) Adherence of mist is allowable.

- **Door area** (Application thickness = 50 μm or more)



(a) Rust-stop aerosol

(b) Fill in the plate joint.

(1) Wax application work openings

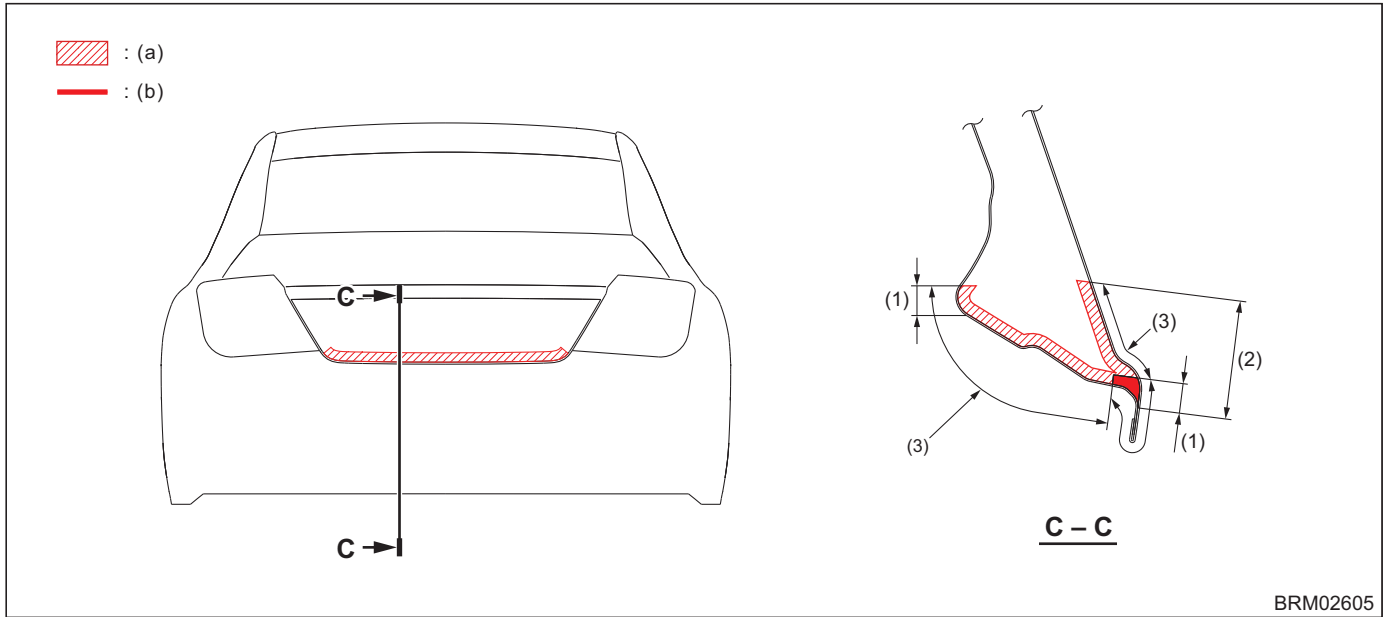
(3) 10 mm (0.39 in)

(4) Adherence of mist is allowable.

(2) 90 mm (3.54 in)

Anticorrosion Wax

- **Trunk lid area** (Application thickness = 50 μm or more)



(a) Rust-stop aerosol

(b) Fill in the plate joint.

(1) 10 mm (0.39 in)

(2) 40 mm (1.57 in)

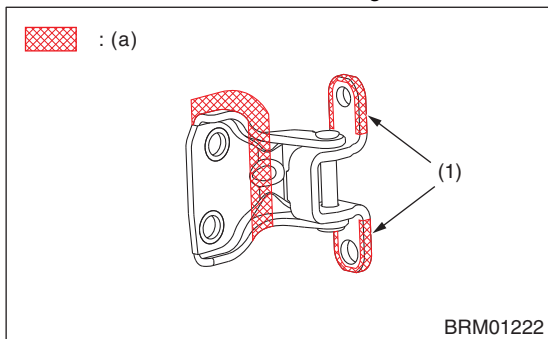
(3) Adherence of mist is allowable.

Anticorrosion Wax

• Front door hinge upper side

(Application thickness = 15 μm or more)

Apply to the contact surface (Indicated area) on the body side in two locations on the left and right.



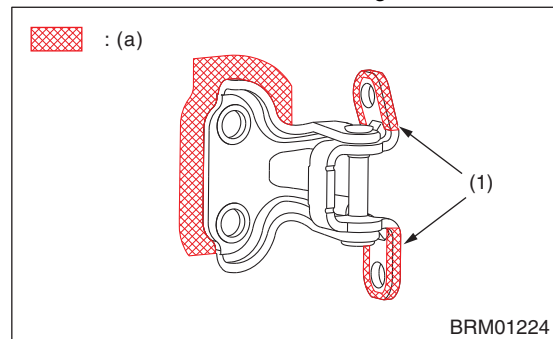
(a) Rust-stop aerosol

- (1) Cover the touch surface of the hinge plate, bolt head and plate edges completely. A small amount of mist to the circumference is allowable.

• Rear door hinge upper side

(Application thickness = 15 μm or more)

Apply to the contact surface (Indicated area) on the body side in two locations on the left and right.



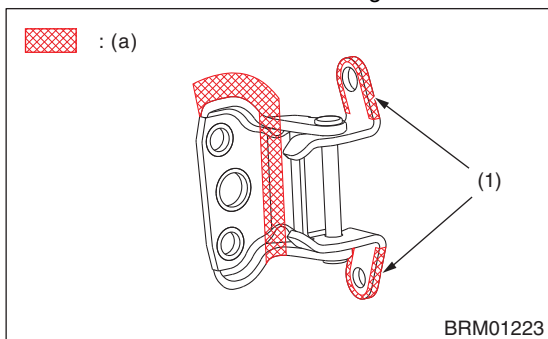
(a) Rust-stop aerosol

- (1) Cover the touch surface of the hinge plate, bolt head and plate edges completely. A small amount of mist to the circumference is allowable.

• Front door hinge lower side

(Application thickness = 15 μm or more)

Apply to the contact surface (Indicated area) on the body side in two locations on the left and right.



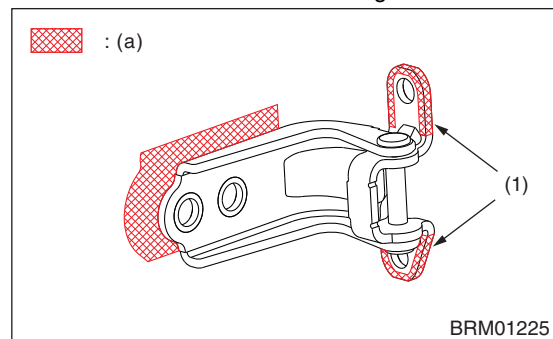
(a) Rust-stop aerosol

- (1) Cover the touch surface of the hinge plate, bolt head and plate edges completely. A small amount of mist to the circumference is allowable.

• Rear door hinge lower side

(Application thickness = 15 μm or more)

Apply to the contact surface (Indicated area) on the body side in two locations on the left and right.



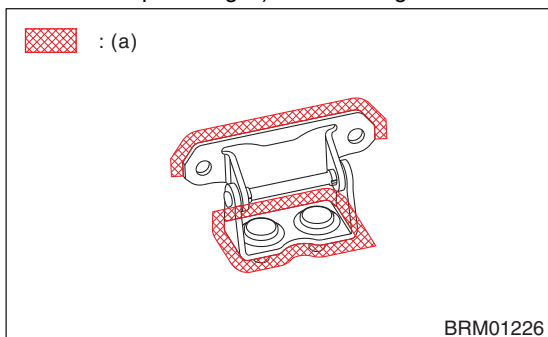
(a) Rust-stop aerosol

- (1) Cover the touch surface of the hinge plate, bolt head and plate edges completely. A small amount of mist to the circumference is allowable.

• Rear gate hinge area

(Application thickness = 15 μm or more)

Apply to the contact surface on the body side in two locations on the left and right, and to the installation outer circumference (Indicated area: plate edges) on the rear gate side.

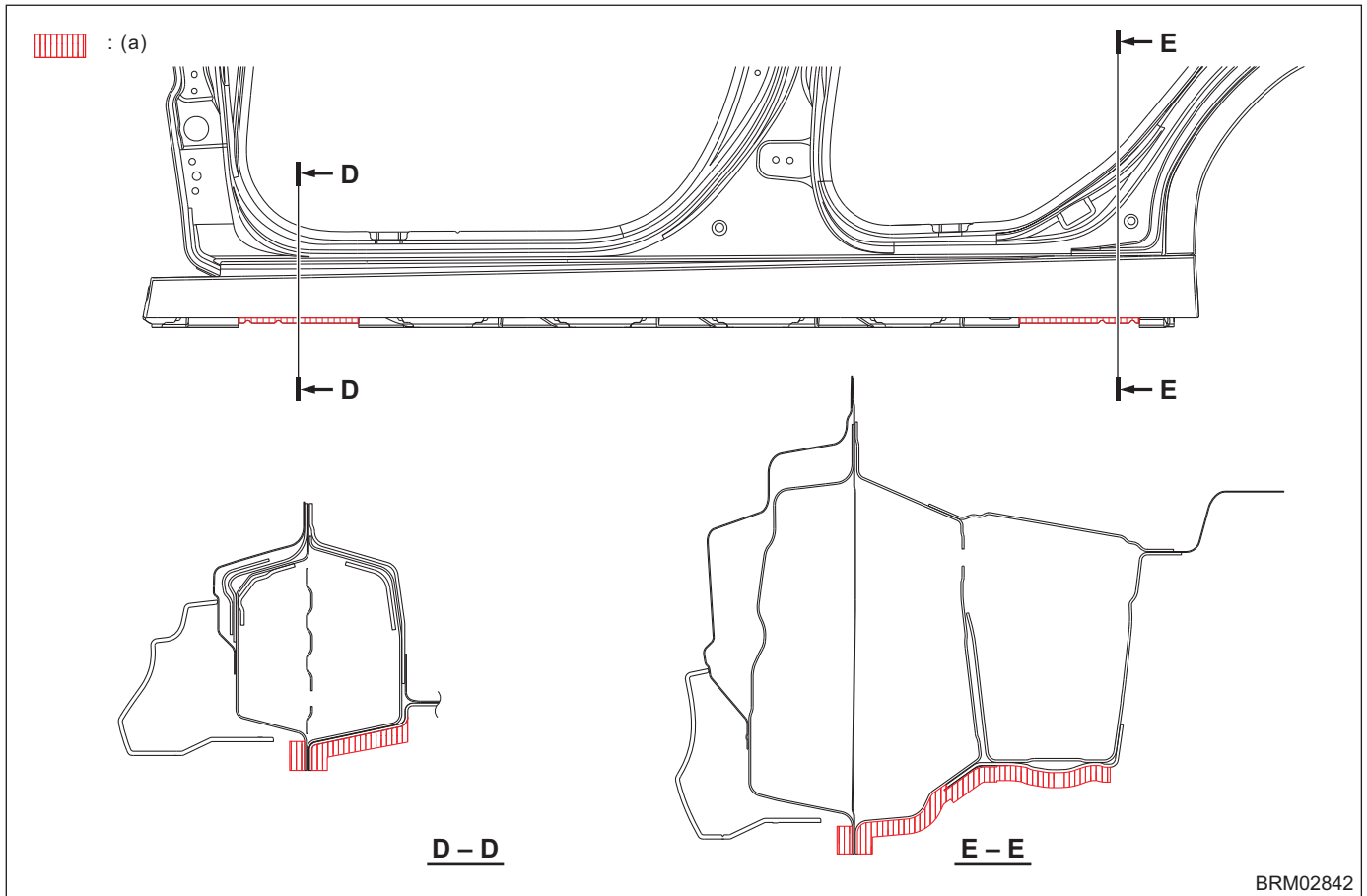


(a) Rust-stop aerosol

Anticorrosion Wax

- **Jack-up point area** (Application thickness = 150 μm or more)

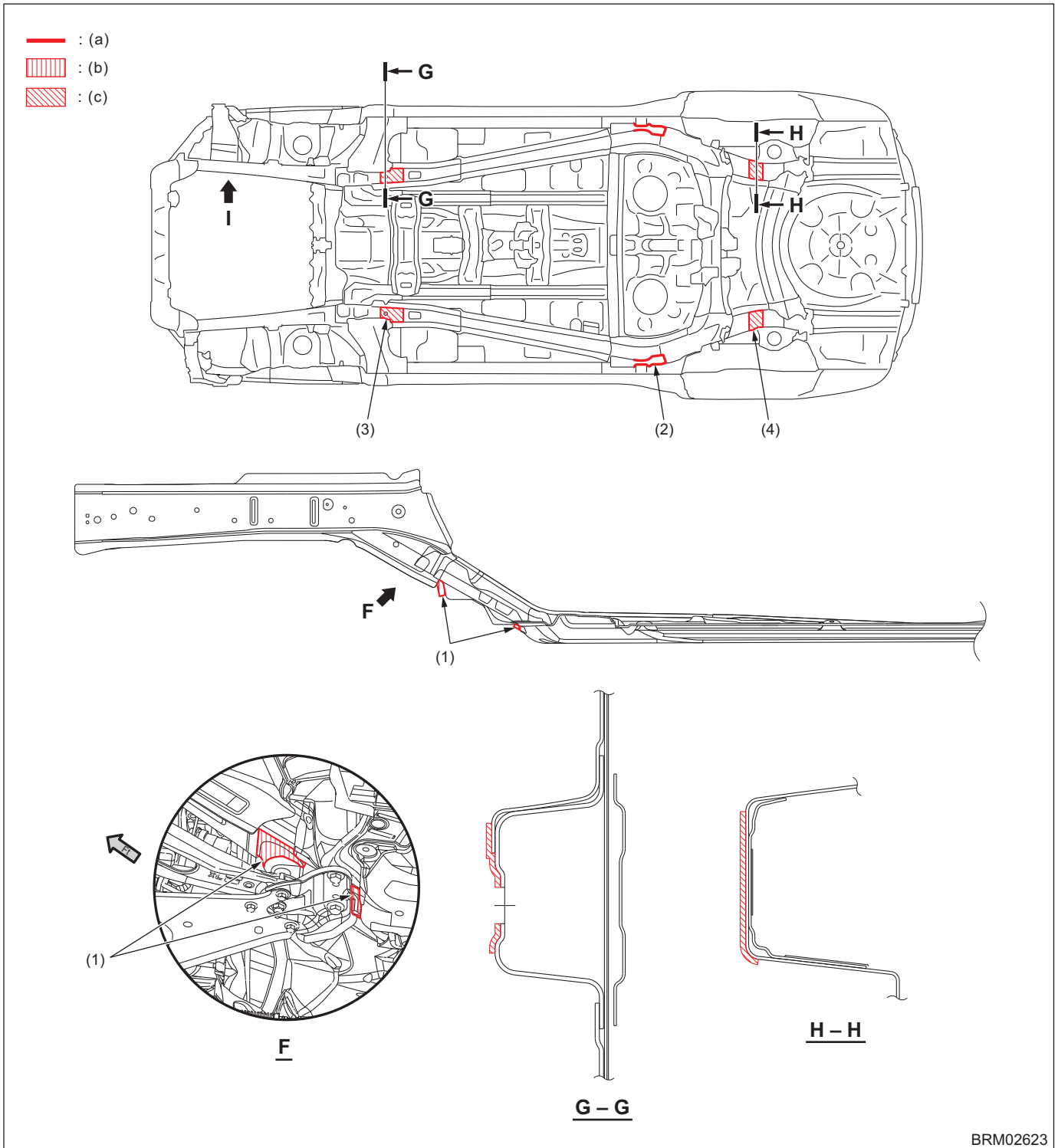
Apply as much wax as possible to the side sill flange area from the helical groove of the side sill spoiler.



(a) Rust-stop aerosol

Anticorrosion Wax

• Bottom view 1



(a) Rust-stop aerosol (Application thickness = 150 μm or more)

(b) Rust-stop aerosol (Application thickness = 150 μm or more)

(c) Rust-stop aerosol (Application thickness = 50 μm or more)

(1) Application shall be done without the transverse link bush coated.

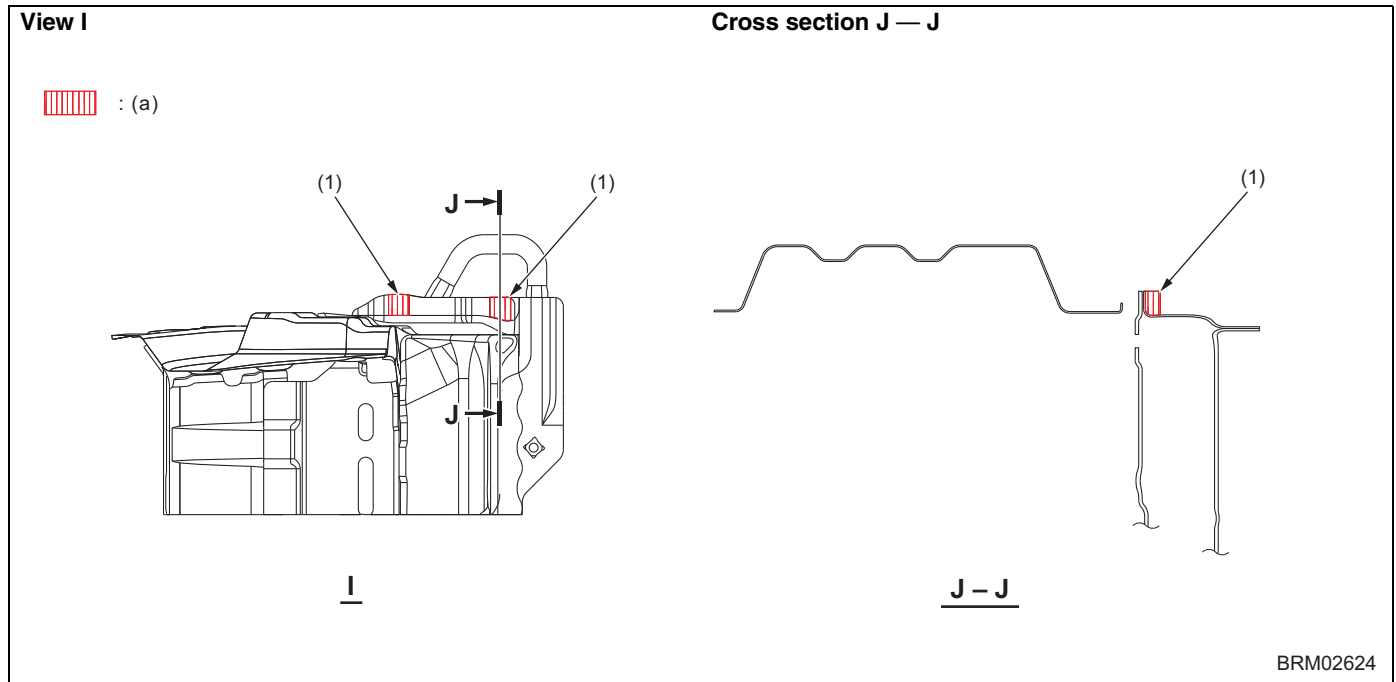
(2) Apply wax to cover the combined boards and the cross-sectional area of the boards, and wrap them with the paint sealer.

(3) Completely cover the scratch marks on the non-electroplated area and the underfloor trolley contact area, and wrap them with the paint sealer.

(4) Completely cover the scratch marks on the non-electroplated area and the underfloor trolley contact area.

Anticorrosion Wax

- View / Cross section

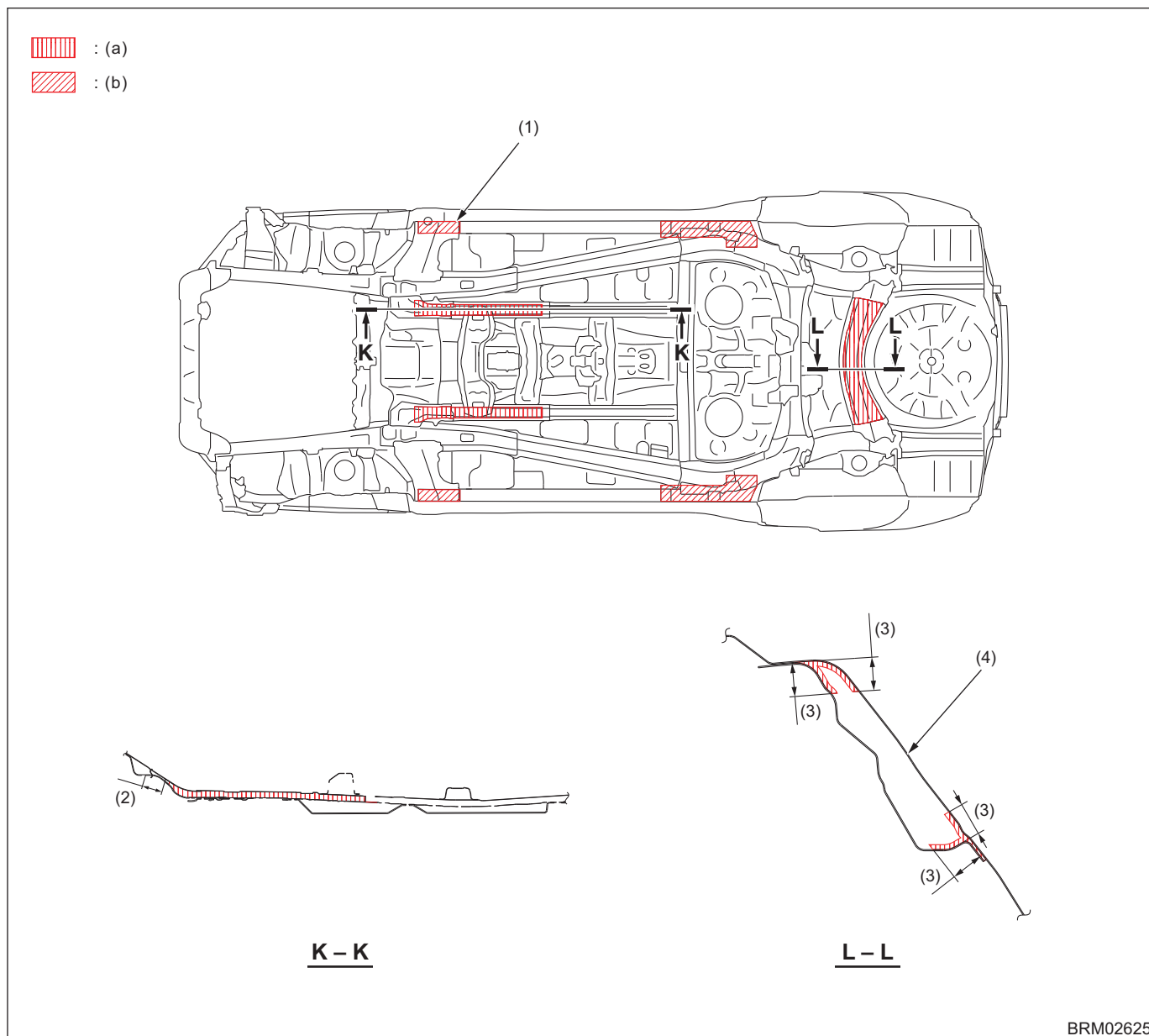


(a) Rust-stop aerosol
(Application thickness = 150 μm
or more)

(1) Apply to the SPW section.

Anticorrosion Wax

• Bottom view 2



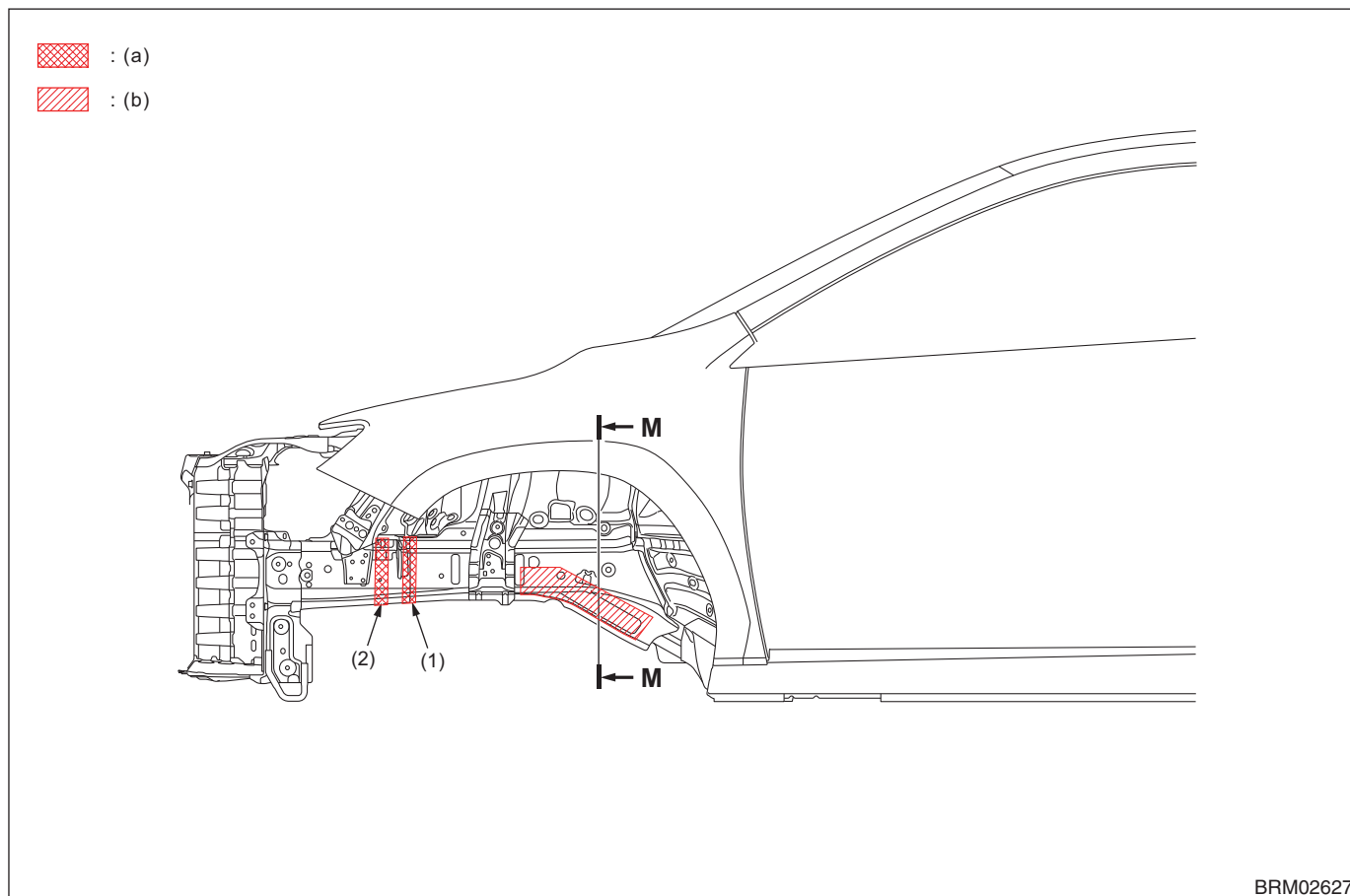
(a) Rust-stop aerosol
(Application thickness = 50 µm or more)

(b) Rust-stop aerosol
(Application thickness = 150 µm or more)

- (1) Do not block drain beads.
- (2) 65 mm (2.56 in)
- (3) 20 mm (0.79 in)
- (4) Wax can be applied outside the application area in the bag structure.

Anticorrosion Wax

- Side view



BRM02627

(a) Rust-stop aerosol
(Application thickness = 15 μm or more)

(b) Rust-stop aerosol
(Application thickness = 50 μm or more)

(1) Cover the panel joints.

(2) Cover the panel joints on the inside of the engine compartment.

Anticorrosion Wax

• Cross section

Cross section M — M

M — M

BRM02626

(a) Rust-stop aerosol (Application thickness = 50 μm or more)

(1) 20 mm (0.79 in)

(2) Adherence of mist is allowable.

• Overall view / Cross section

N — N

N — N

BRM02843

(a) Apply wax to the wheel nuts.

(1) Waxing is not OK.

12.Undercoat

A: SPECIFICATIONS

Repair material: PVC (NT guardcoat 5900FL)

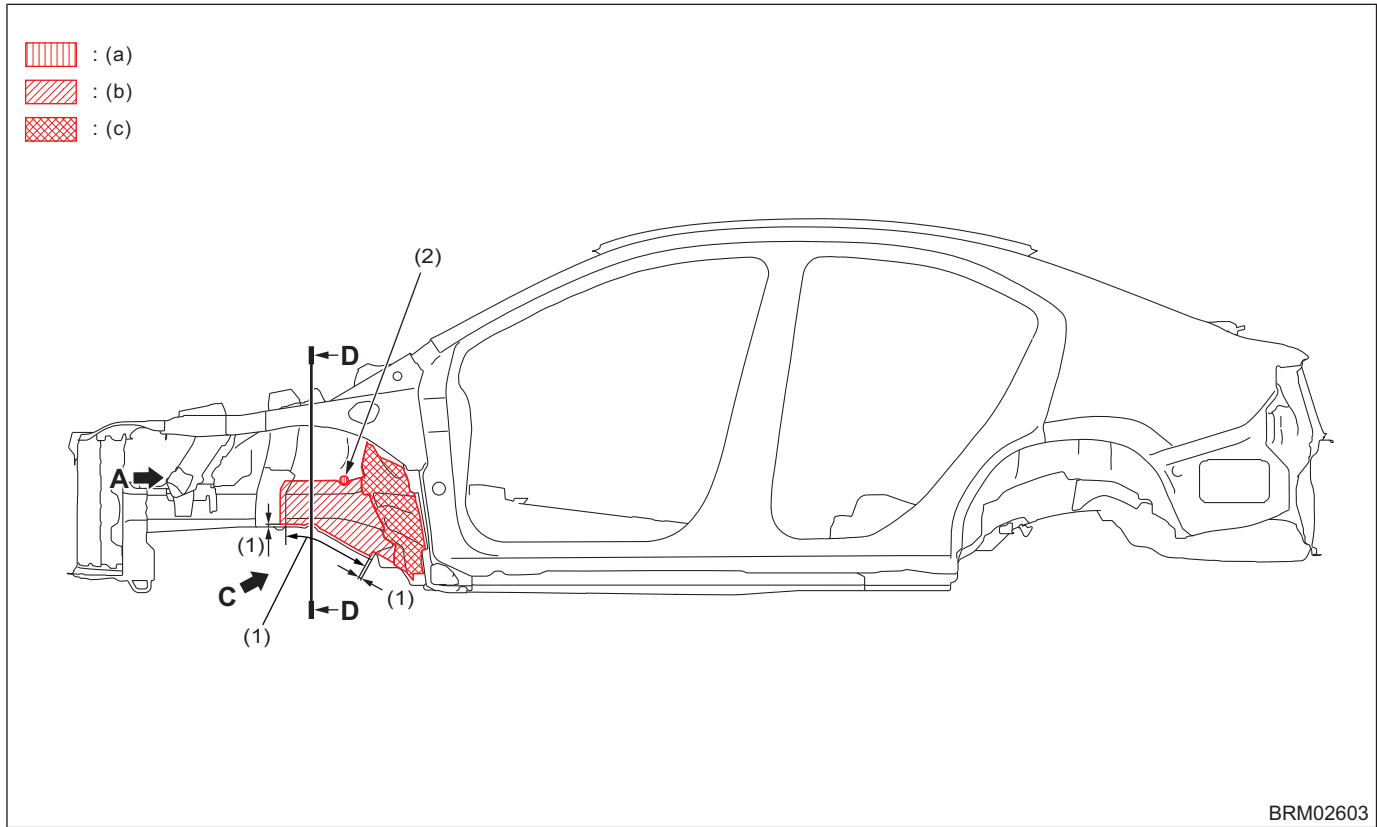
CAUTION:
Be careful not to let the PVC be attached to any parts not indicated below and to the following locations.

- High-temperature parts related to the exhaust pipe
- Hoses, tubes and harness parts
- Installation surfaces of rear suspension, transmission, subframe, etc.

1) Application area and application thickness

	200 μm or more
	300 μm — 500 μm
	600 μm — 800 μm

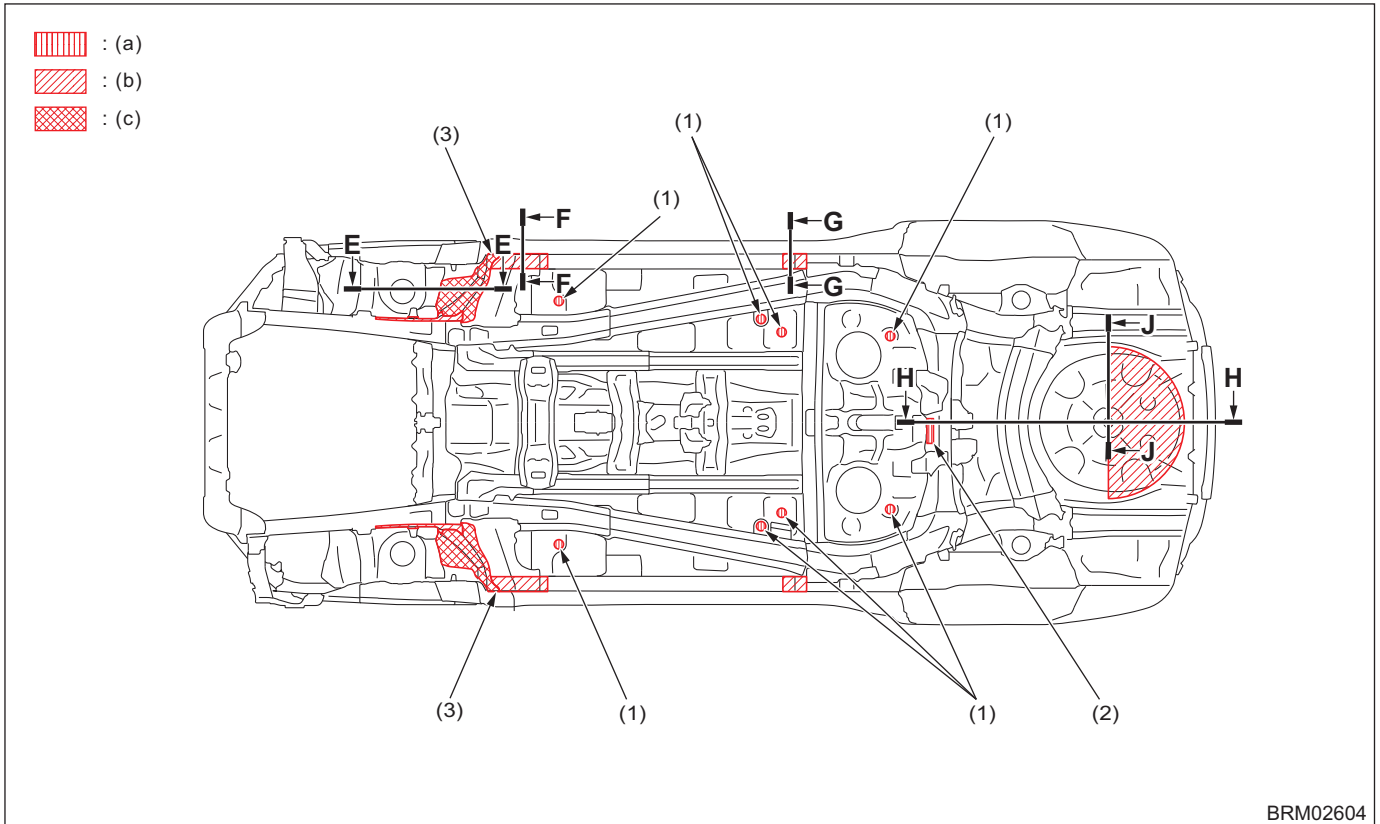
• Side view



- (a) 200 μm or more (b) 300 μm — 500 μm (c) 600 μm — 800 μm
- (1) 10 mm (0.39 in)
(Adherence of mist is allowable.) (2) Cover the grommet seat with PVC.

Undercoat

• Bottom view



(a) 200 μm or more

(b) 300 μm — 500 μm

(c) 600 μm — 800 μm

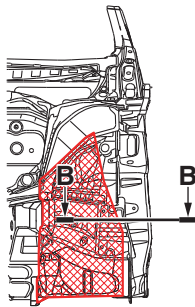
(1) Cover the plug with PVC.

(2) Apply PVC to the air pocket area.

(3) Do not block drain beads.

View A

(c) 600 μm — 800 μm

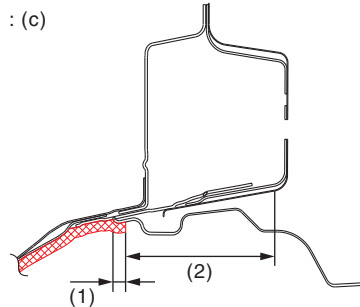


BRM01207

(c) 600 μm — 800 μm

Cross section B — B

(c) 600 μm — 800 μm



BRM01208

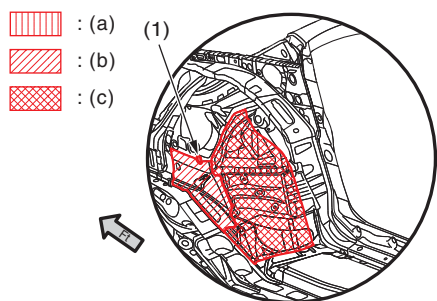
(c) 600 μm — 800 μm

(1) 10 mm (0.39 in)

(2) Adherence of mist is allowable.

Undercoat

View C

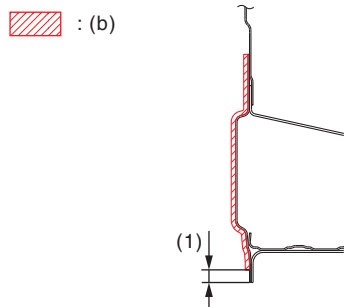


BRM01209

- (a) 200 μm or more
- (b) 300 μm — 500 μm
- (c) 600 μm — 800 μm

(1) Cover the grommet seat with PVC.

Cross section D — D



BRM01210

- (b) 300 μm — 500 μm
- (1) 10 mm (0.39 in) (Adherence of mist is allowable.)

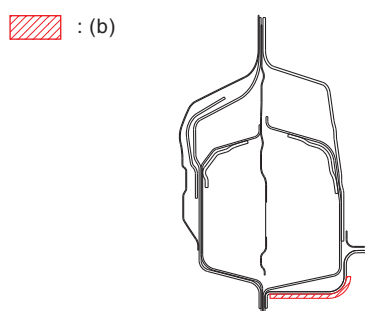
Cross section E — E



BRM01211

- (c) 600 μm — 800 μm

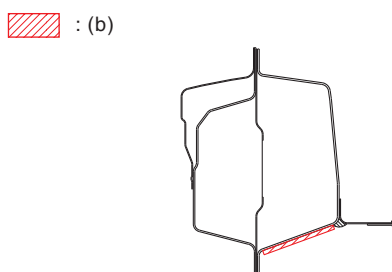
Cross section F — F



BRM01212

- (b) 300 μm — 500 μm

Cross section G — G

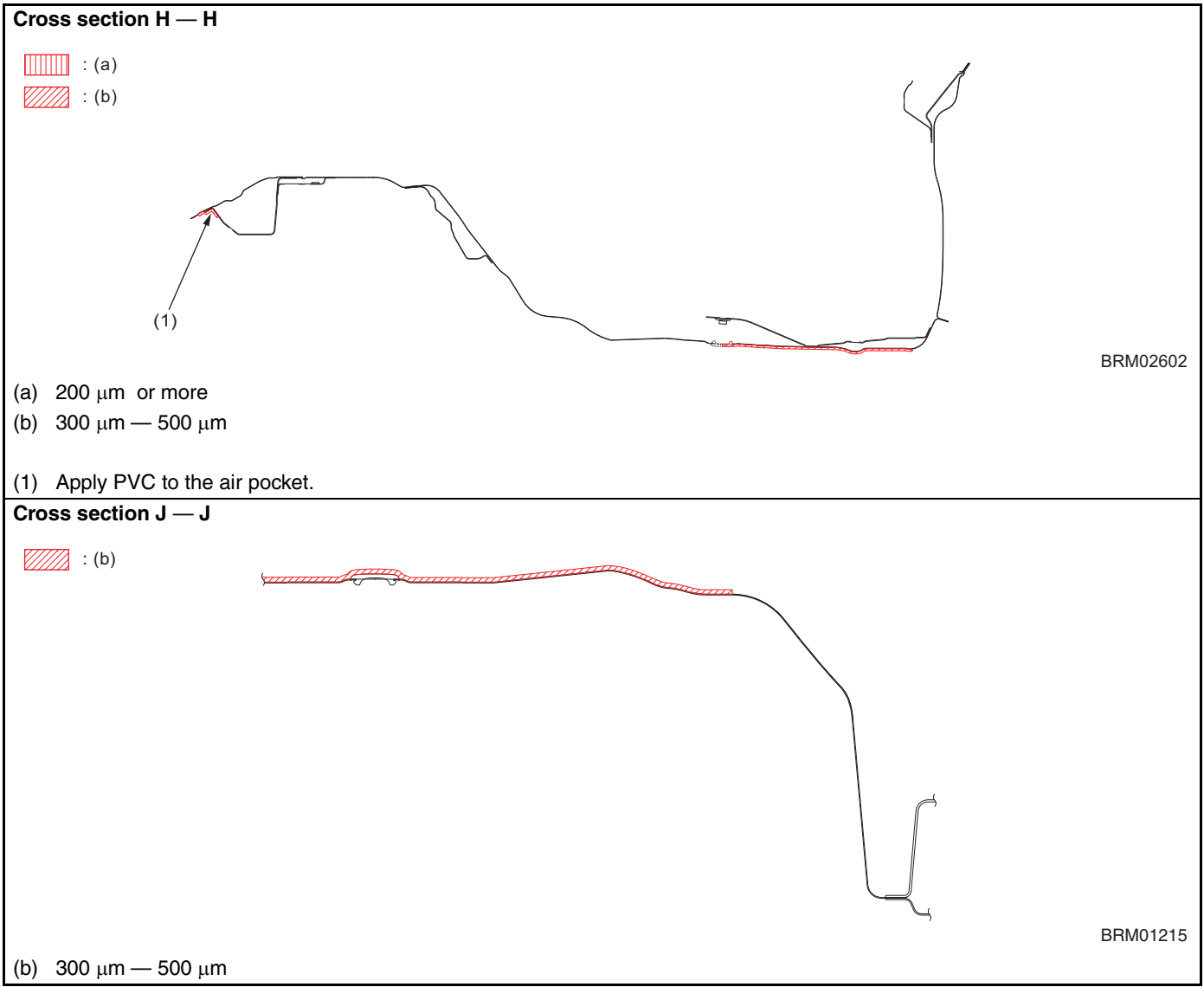


BRM01213

- (b) 300 μm — 500 μm

SUBARU.

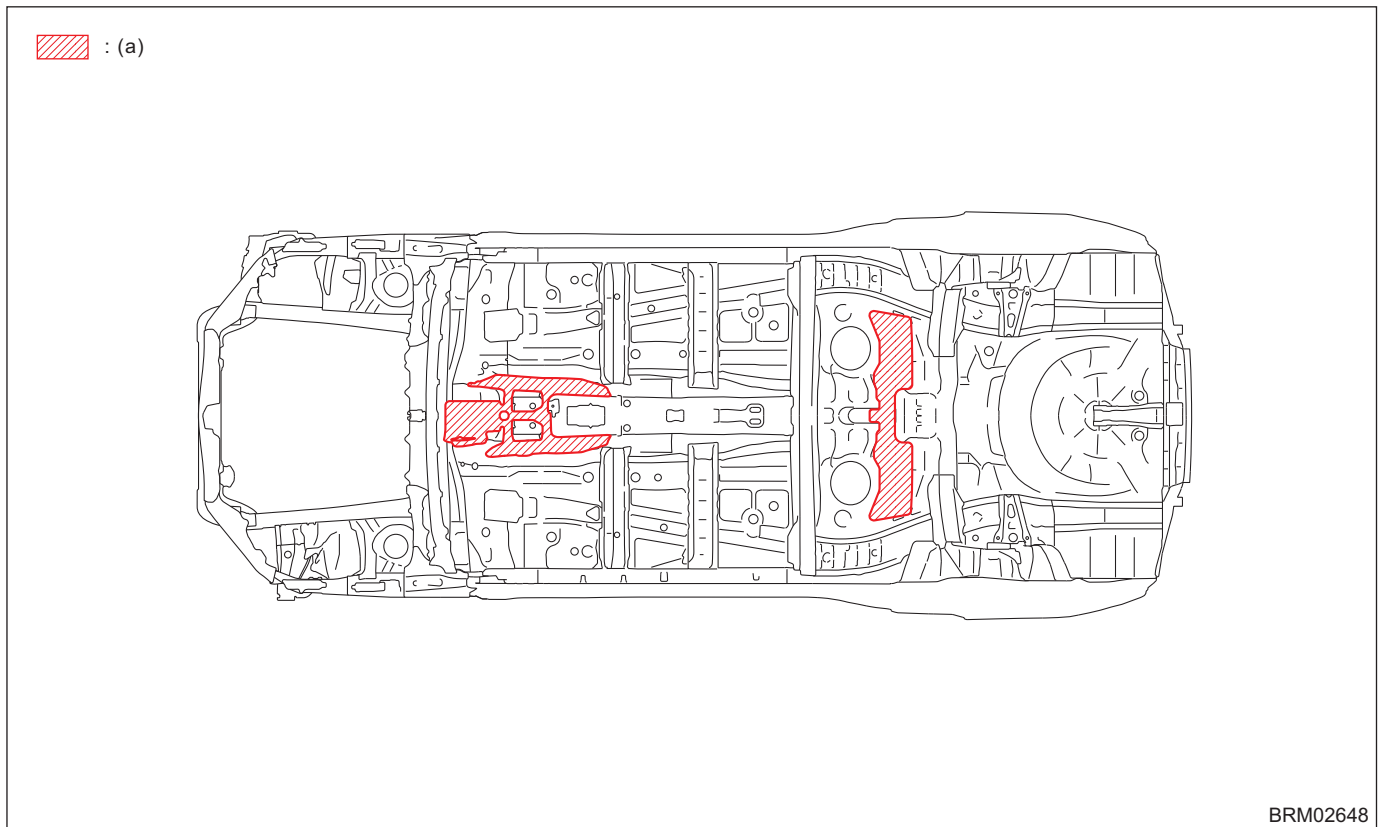
Undercoat



13.Damping Seat

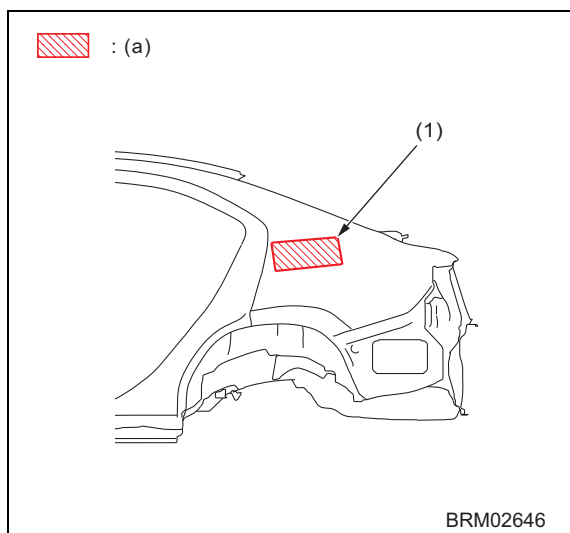
A: SPECIFICATIONS

• Upper view



(a) Silencer

• Side view



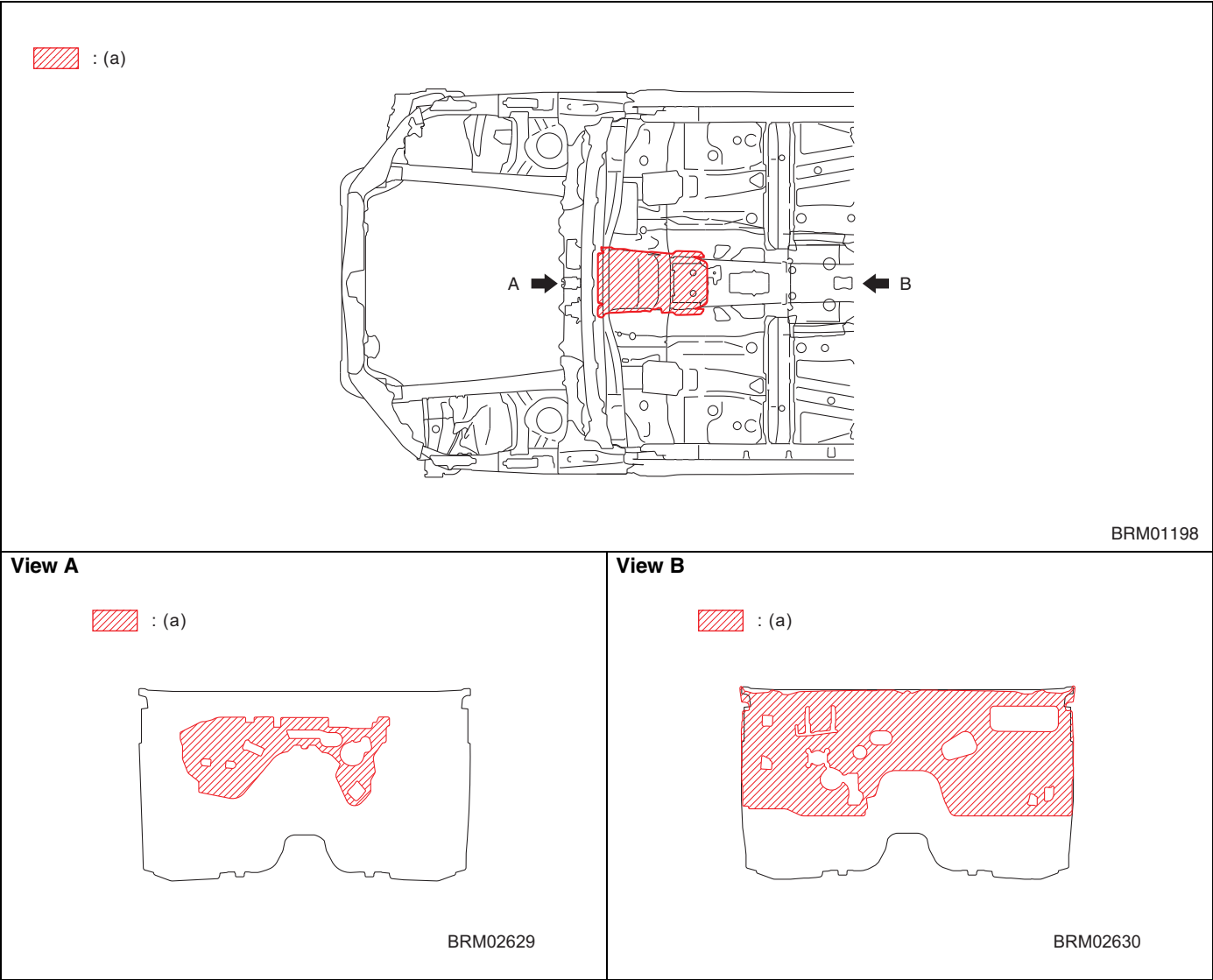
(a) Damping seat

(1) Both left and right sides

14.Insulator

A: SPECIFICATIONS

1. Upper view

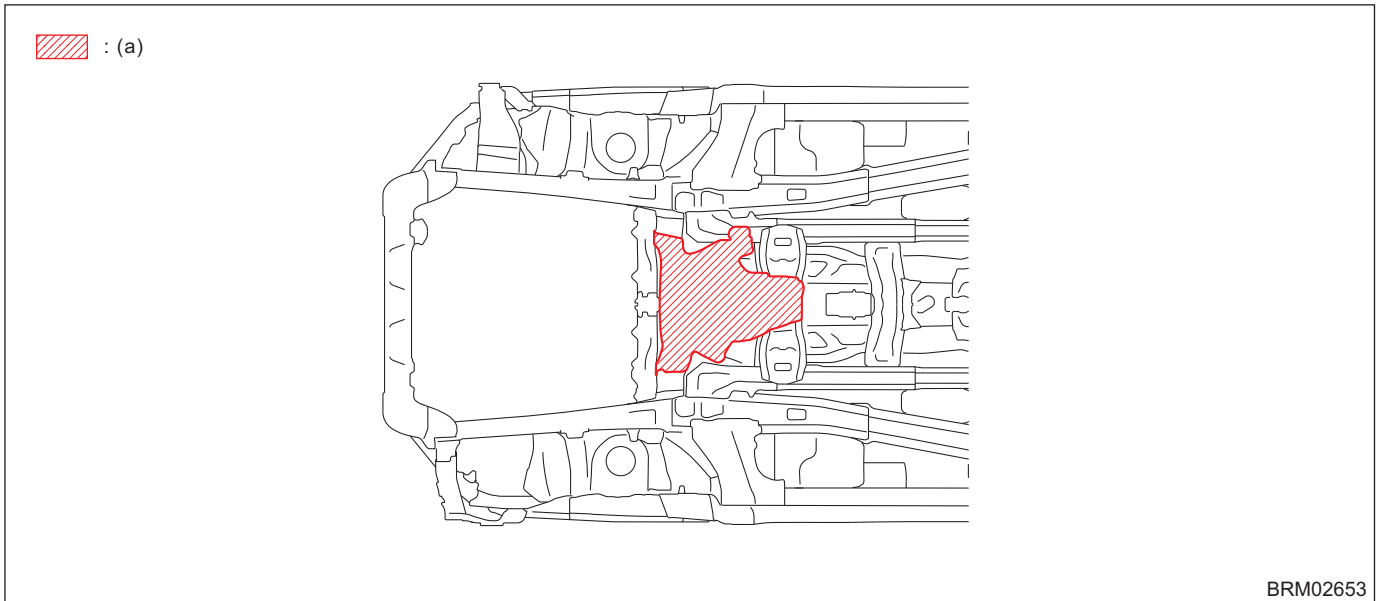


(a) Insulator

Insulator

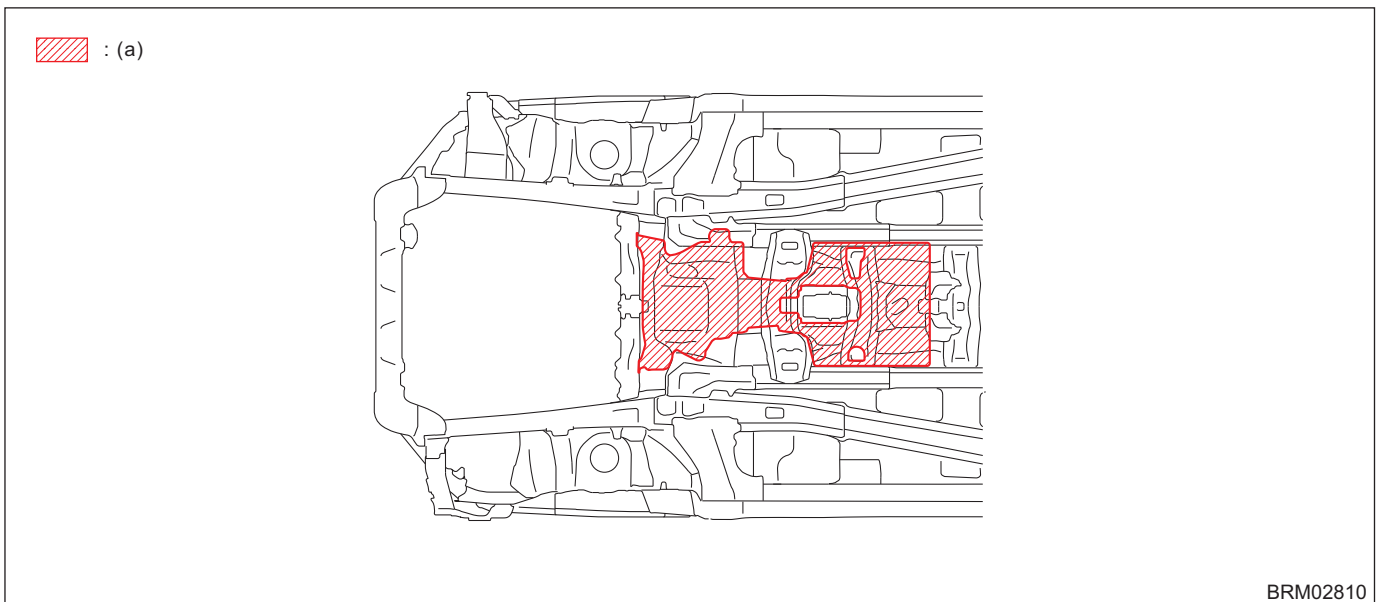
2. Bottom view

• MT model



(a) Insulator

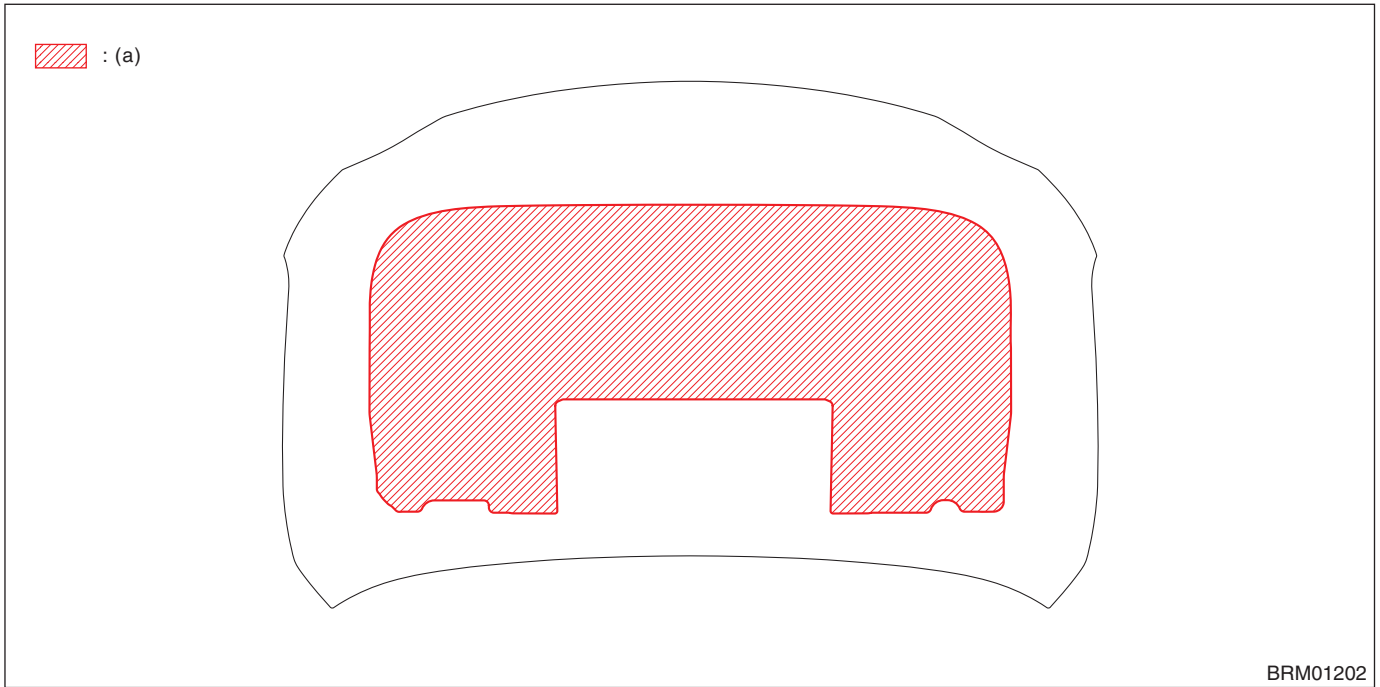
• CVT model



(a) Insulator

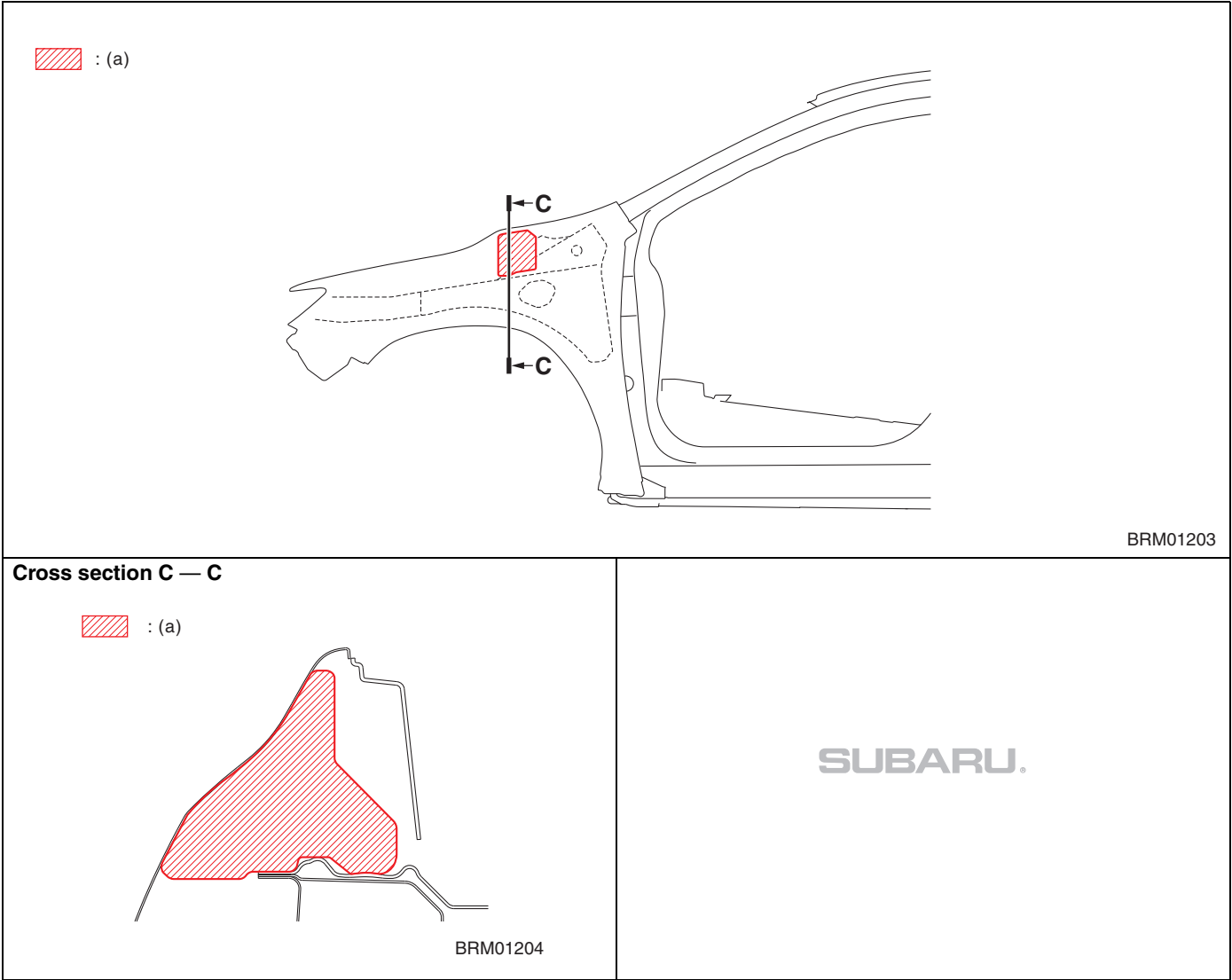
Insulator

3. Front hood



(a) Insulator

4. Fender rear



(a) Insulator

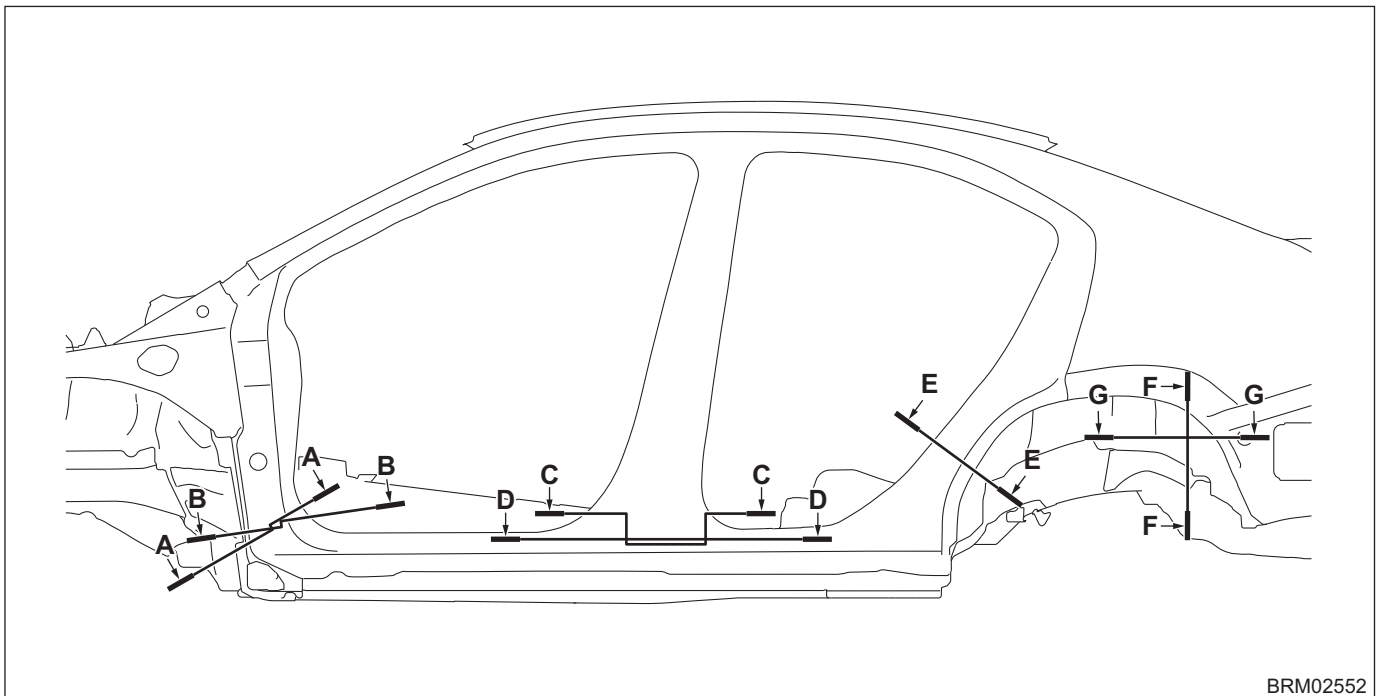
15.Foam

A: SPECIFICATIONS

CAUTION:

- Do not perform welding or other work involving high temperatures.
- Do not use an open flame at the time of disassembly.
- Remove residual foam before injecting the new material.
- After completion of work, confirm that there is no danger of igniting the material.
- Spray cans that have been used once cannot be used again.
- Use a narrow nozzle.
- For a clip plate, reuse the plate and inject cold-setting foam.
- If the part cannot be reused due to damage or deterioration, replace the part with a new one.

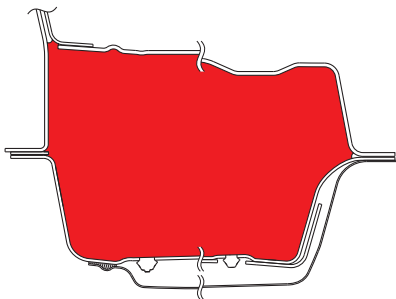
Recommended materials: Equivalent to High Span Foam made by Cemedine



BRM02552

Cross section A — A

 : (a)

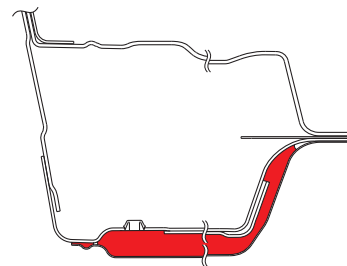


BRM01190

(a) Urethane foam injection locations

Cross section B — B

 : (a)



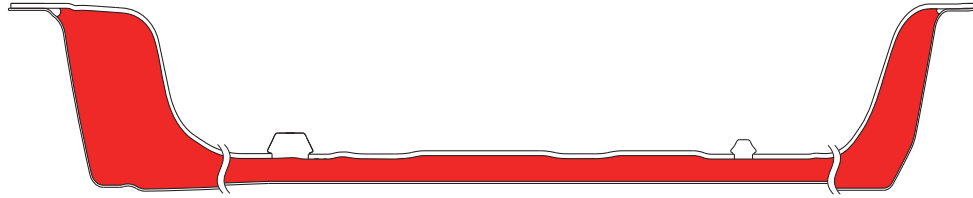
BRM01191

(a) Urethane foam injection locations

Foam

Cross section C — C

 : (a)

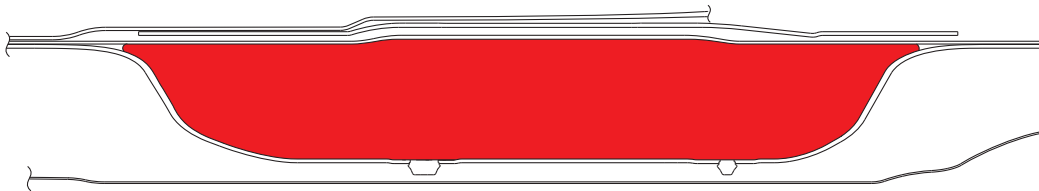


BRM02658

(a) Urethane foam injection locations

Cross section D — D

 : (a)

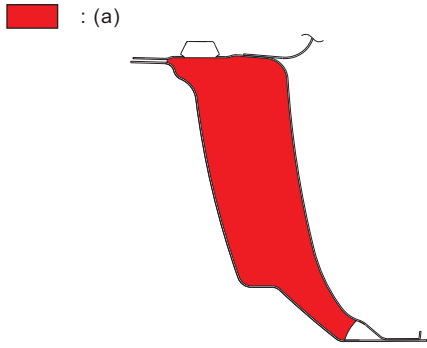


BRM02659

(a) Urethane foam injection locations

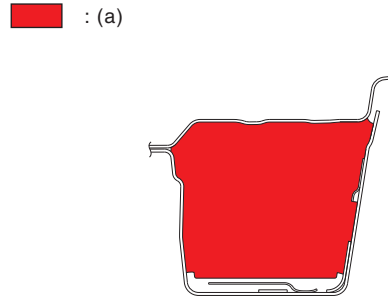
Foam

Cross section E — E



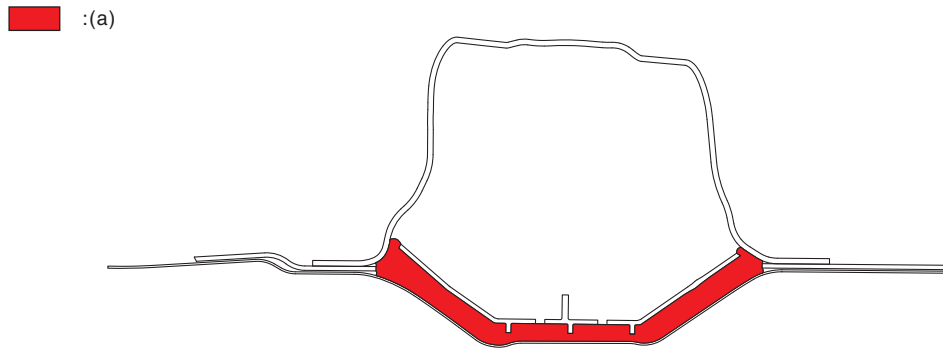
(a) Urethane foam injection locations

Cross section F — F



(a) Urethane foam injection locations

Cross section G — G



(a) Urethane foam injection locations

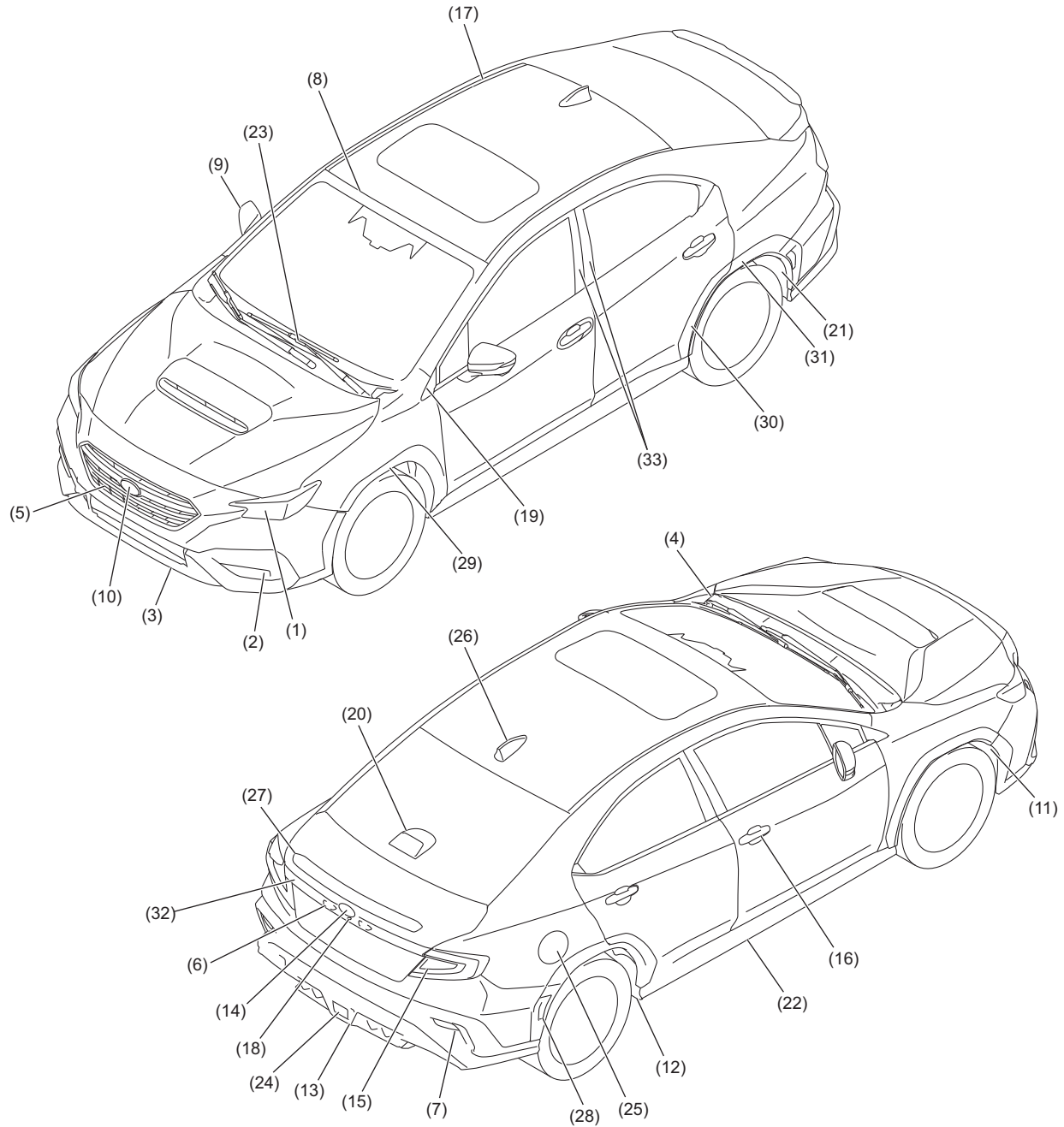
16. Plastic Parts and Materials

A: SPECIFICATIONS

NOTE:

The following illustration is a typical example.

The shape and material may vary with some models.



BRM02852

Plastic Parts and Materials

- | | | |
|---------------------------|-----------------------------|----------------------------|
| (1) Headlight | (13) Rear bumper | (25) Fuel flap |
| (2) Front fog light | (14) Ornament rear | (26) Antenna |
| (3) Front bumper | (15) Rear combination light | (27) Rear spoiler |
| (4) Cowl panel | (16) Door handle | (28) Side reflex reflector |
| (5) Front grill | (17) Roof molding | (29) Fender garnish |
| (6) License light | (18) Request switch | (30) Rear door garnish |
| (7) Rear reflex reflector | (19) A pillar cover | (31) Rear quarter garnish |
| (8) Front window molding | (20) High mount stop light | (32) Trunk garnish |
| (9) Door mirror | (21) Rear mudguard | (33) Cover pillar outer |
| (10) Ornament front | (22) Side spoiler | |
| (11) Front mudguard | (23) Front wiper | |
| (12) Air flap | (24) Rear fog light | |

No	Part name		Material
(1)	Headlight (Base specification)	Outer lens	PC
		Housing	PP-TD30
		Extension	PBT
		Reflector	PPS-MD20
		Inner lens A	PC
		Cover	PESU
		Bracket A	PAMXD6-GF50
		Bracket B	PP-GF40
		Reflex reflector	PMMA
		Base	PP-TD20
		Hood seal rubber	EPDM
	Headlight (High-grade specification)	Outer lens	PC
		Housing	PP-TD30
		Extension A	PBT
		Extension B	PBT
		Extension C	PC
		Extension D	PP-TD20
		Reflector	PC-MD10
		Inner lens A	PC
		Inner lens B	PC
		Inner lens C	PMMA
		Inner lens D	PMMA
		Cover	PESU
		Bracket A	PAMXD6-GF50
		Bracket B	PP-GF40
		Bracket C	PA9T-GF30
		Bracket D	PP-TD20
		Reflex reflector	PMMA
		Base	PP-TD20
		Hood seal rubber	EPDM
(2)	Front fog light	Lens	PC
		Housing	PC
		Bracket	PP-GF40

Plastic Parts and Materials

No	Part name		Material	
(3)	Front bumper	Face	PP	
		Hook cover	PP	
		Intake cover	PP	
		Fog light cover	PP	
		Sealing bumper	EPDM	
		EA form	PP	
		Corner bracket	PP-GF30	
		Side bracket	POM	
		Center lower bracket	PP	
		Upper cover	PP	
		Arch garnish front	PP	
		License bracket	PP	
		(4)	Cowl panel	Cowl panel center
Cowl panel	PP-TD10			
Cowl panel side	PP-TD10			
(5)	Front grill	Base	ABS	
		Cap	ABS	
(6)	License light	Lens	PC	
		Housing	PC	
		Gasket	SUPER SEAT H6	
(7)	Rear reflex reflector	Lens	PMMA	
		Housing	PC	
(8)	Front window molding	Molding	PVC	
(9)	Door mirror	Body	ASA or AES	
		Body cover A	ASA or AES	
		Body cover B	ASA or AES	
		Cover cap, outside	ABS	
		Cover stay A	ASA or AES	
		Cover stay B	ASA or AES	
		Packing stay	TPE	
		Packing stay B	EPDM	
		Packing support	ABS	
		Packing camera	TPE	
		Side turn light	Housing	ABS
			Lens	PMMA
			Inner lens	PMMA
		Indicator light	ABS	
		Cover indicator	ASA or AES	
		Support indicator	ABS	
(10)	Ornament front	Base	ABS	
		Ornament front	PMMA	
(11)	Front mudguard	Mudguard	PE	
		Plate air flap	PE	
		Duct mud guard	PP	
		Insulator	EE1010 or equivalent	
(12)	Air flap	Plate air flap rear	PP+EPDM	

Plastic Parts and Materials

No	Part name		Material
(13)	Rear bumper	Face	PP
		Cover rear bumper	PP
		Bracket corner rear	PP-GF30
		Bracket side rear	POM
		Cover hook rear	PP
		Cover side lower	PP
		Cover muffler	PP
		Cover fog rear	PP
		Cover duct	PP
		Holder sonar	PP
(14)	Ornament rear	Ornament rear	PMMA
		Base	ABS
(15)	Rear combination light	Outer lens	PMMA
		Inner lens A	PMMA
		Inner lens B	PC
		Inner housing A	PC
		Housing	ASA
(16)	Door handle	Frame handle outer	PA6-GF30
		Handle outer	PC+PBT-MD10
		Cover handle outer	PC+PBT-MD10
(17)	Roof molding	Molding	PVC
		Clip	POM
		E-cap, front	PVC
		E-cap, rear	PVC
		Molding cover	PBT
(18)	Request switch		PP-F35
(19)	A pillar cover	Body	ASA
(20)	High mount stop light	Lens	PC
		Housing	PP-TD20
(21)	Rear mudguard	Body	PET+PP
(22)	Side spoiler	Spoiler ASSY side	Body
		Holder	PP
(23)	Front wiper	Wiper	Cushion wiper
		Arm	Arm side blade joint area
			Blade joint area
			Blade
(24)	Rear fog light	Lens	PC
		Housing	PC
(25)	Fuel flap		PPE+PA
(26)	Antenna		PC+ASA
(27)	Rear spoiler	Spoiler outer	PC+PET
		Spoiler inner	PC+PET
		Spoiler inner center	PC+PET
(28)	Side reflex reflector	Lens	PMMA
		Housing	PC
(29)	Fender garnish		PP-TD29
(30)	Rear door garnish		PP
(31)	Rear quarter garnish		PP

Plastic Parts and Materials

No	Part name		Material
(32)	Trunk garnish	Garnish trunk	PC+PET
		Inner cover	ASA
		Protector	EPDM
		Cushion lower	E-4388
		Cushion inner	Equivalent to Lucilla G
		Cushion cover	E-4388
		Garnish cover (without camera specification)	ASA
(33)	Cover pillar outer		AES
	Under cover	Under cover rear	PET
	Mud flap		TPU

List of Plastic Material Notations

17. List of Plastic Material Notations

A: SPECIFICATIONS

Notation symbol	Material name	Notation symbol	Material name
ABS	ABS resin (Acrylonitrile/Butadiene/Styrene resin)	PET	Polyethylene terephthalate
AES	Acrylonitrile/Ethylene/Styrene	PET-GF45	Polyethylene terephthalate (45 % glass fiber)
ASA	Acrylonitrile/Styrene/Acrylate	PMMA	Polymethyl methacrylate
E-4388	Ethylene/Propylene/Diene rubber	POM	Polyacetal
EE1010 or equivalent	Ethylene/Propylene/Diene rubber	PP	Polypropylene
EPDM	Ethylene/Propylene/Diene rubber	PP-F35	Polypropylene (35 % inorganic filler)
ELASTOMER	Elastomer	PP-GF30	Polypropylene (30 % glass fiber)
PA	Polyamide	PP-GF40	Polypropylene (40 % glass fiber)
PAMXD6-GF50	Polyamide (Nylon) (50 % glass fiber) MXD6	PP-TD10	Polypropylene (10 % talc)
PA6-GF30	Polyamide (Nylon) (30 % glass fiber)	PP-TD20	Polypropylene (20 % talc)
PA9T-GF30	Polyamide (Nylon) (30 % glass fiber)	PP-TD29	Polypropylene (29 % talc)
PBT	Polybutylene terephthalate	PP-TD30	Polypropylene (30 % talc)
PBT-GF30	Polybutylene terephthalate (30 % glass fiber)	PPE	Polyphenylene ether
PBT-GF45	Polybutylene terephthalate (45 % glass fiber)	PPS-MD20	Polyphenylene sulfide (20 % mineral powder)
PBT-MD10	Polybutylene terephthalate (10 % mineral powder)	PVC	Polyvinyl chloride
PC	Polycarbonate	SUPER SHEET H6	Super sheet H6
PC-MD10	Polycarbonate (10 % mineral powder)	TPE	Thermoplastic elastomer
PE	Polyethylene	TPU	Thermoplastic polyurethane
PESU	PolyEtherSulfone	Equivalent to Lucilla G	Ethylene/Propylene/Diene rubber