

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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	<b>Page</b>
1. Foreword .....	3
2. Assembly of Exterior Parts .....	13
3. Panel Components .....	16
4. Galvanized Sheet Metal .....	27
5. Body Construction .....	28
6. Body Reference Points .....	33
7. Measurement for Combined Parts .....	50
8. Panel Replacement .....	52
8-1. Radiator Panel (Total replacement) .....	52
8-2. Reinforcement Apron Front (Total replacement) .....	62
8-3. Front Wheel Apron (Total replacement) .....	68
8-4. Front Side Frame (Partial replacement) .....	80
8-5. Front Side Frame (Total replacement) .....	84
8-6. Toe Board Reinforcement Lower (Total replacement) .....	90
8-7. Front Pillar Outer (Partial replacement) .....	94
8-8. Reinforcement Front Panel Side (Total replacement) .....	99
8-9. Gusset Frame Guide Upper (Total replacement) .....	101
8-10. Front Pillar Reinforcement (Total replacement) .....	109
8-11. Rear Quarter Panel (Partial replacement) .....	126
8-12. Center Pillar Reinforcement Outer (Total replacement) .....	134
8-13. Center Pillar Inner (Total replacement) .....	138
8-14. Side Sill Outer Panel (Partial replacement) .....	144
8-15. Side Sill Reinforcement Outer (Total replacement) .....	148
8-16. Rear Pillar Reinforcement LH (Total replacement) .....	152
8-17. Rear Pillar Reinforcement RH (Total replacement) .....	154
8-18. Patch Rear Pillar (Total replacement) .....	156
8-19. Arch Rear Inner (Total replacement) .....	158
8-20. Wheel Apron LH (Total replacement) .....	168
8-21. Wheel Apron RH (Total replacement) .....	171
8-22. Rear Panel (Total replacement) .....	174
8-23. Rear Quarter End Panel (Total replacement) .....	178
8-24. Rear Skirt (Total replacement) .....	180
8-25. Rear Side Frame Upper Rear (Total replacement) .....	182
8-26. Rear Floor Pan (Partial replacement) .....	184
8-27. Rear Side Floor (Total replacement) .....	186
8-28. Rear Side Frame Lower Rear (Total replacement) .....	190
8-29. Roof Panel (Total replacement) .....	194
8-30. Center Brace (Total replacement) .....	201
9. Body Sealing .....	205
10. Anticorrosion Wax .....	208
11. Undercoat .....	217
12. Damping Seat .....	222
13. Insulator .....	223

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14. Plastic Parts and Materials .....	225
15. List of Plastic Material Notations.....	229

# Foreword

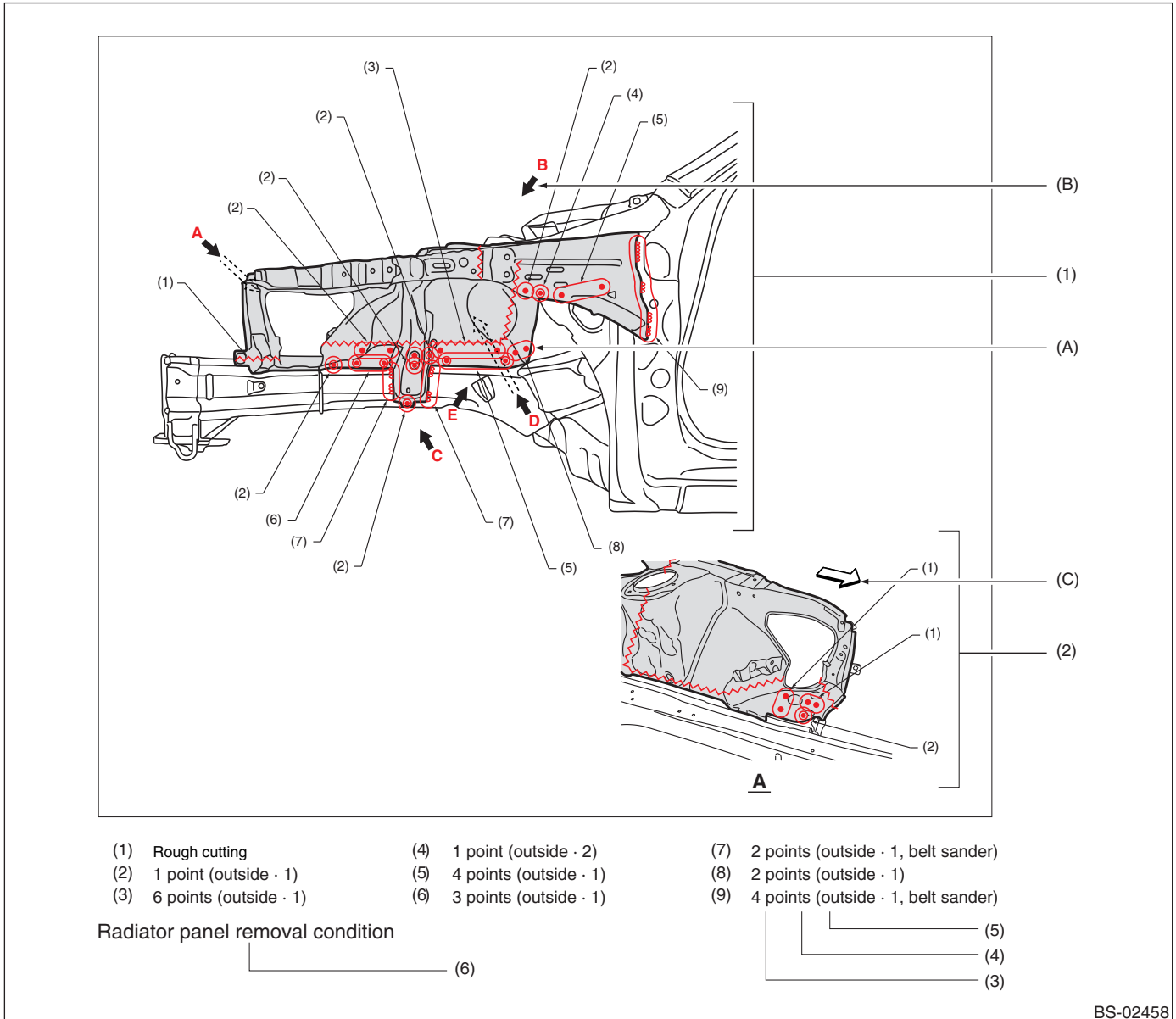
## 1. Foreword

### A: USE OF THIS MANUAL

This manual explains the points to be observed during removal and installation of parts separately by location.

### 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).

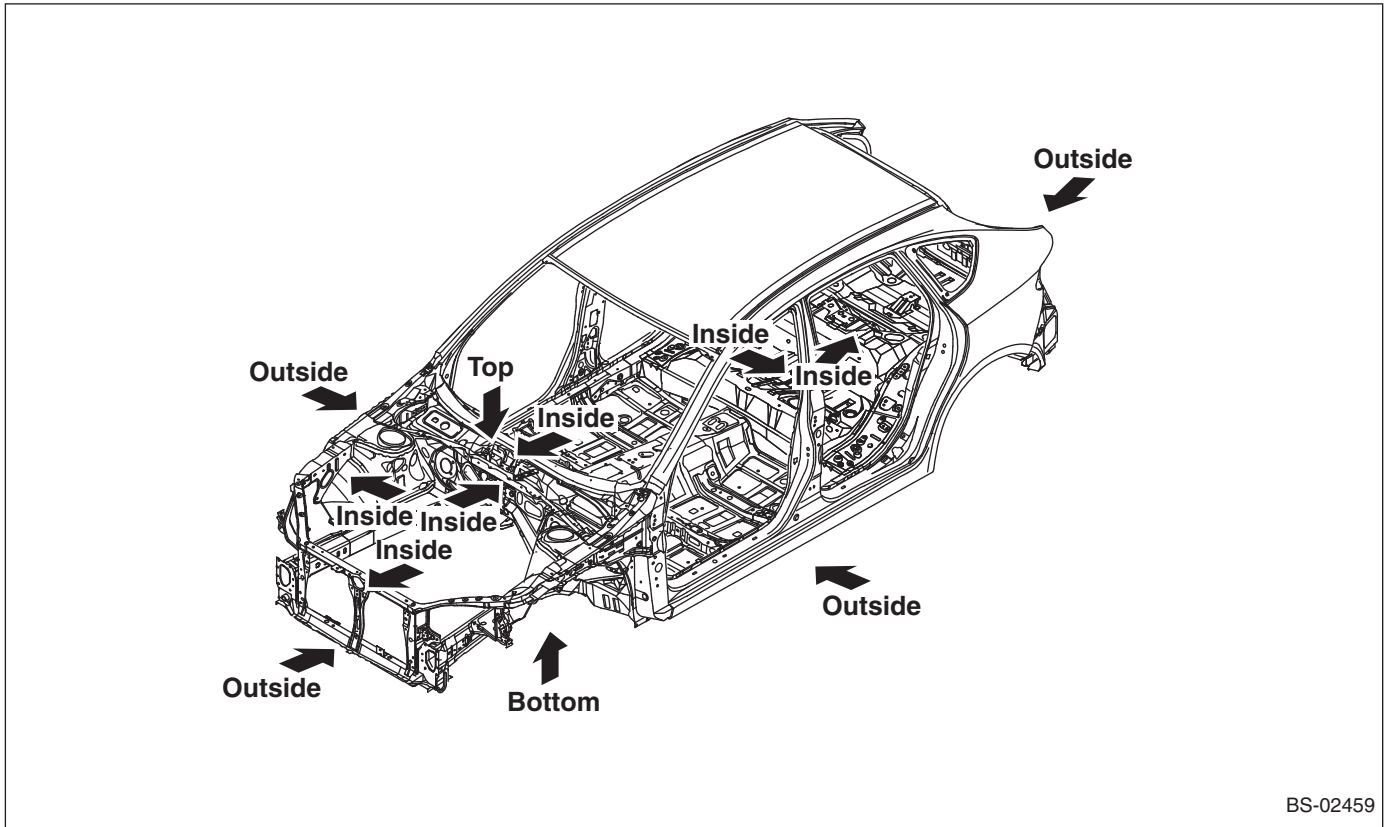


- |                                    |  |
|------------------------------------|--|
| (1) Overall view                   | (A) Welding method                             |
| (2) View                           | (B) View direction                             |
| (3) Number of welding points etc.  | (C) Direction towards the front of the vehicle |
| (4) Removal direction              |  |
| (5) Number of plates to be drilled |  |
| (6) Cautions for the work etc.     |  |

# Foreword

## 2. REMOVAL DIRECTION

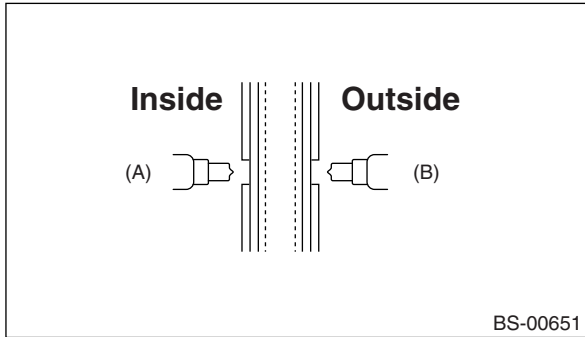
Division is made into the four groups of inside, outside, top, and bottom, and these directions are defined as shown in the following figure.



## 3. NUMBER OF PANELS TO BE DRILLED

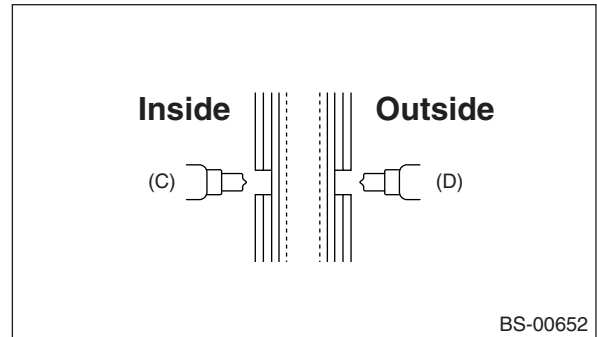
Depending on the number of panels, drilling is done through one panel or two panels, and this number is listed together with the removal direction.

### (1) Drilling through one plate



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

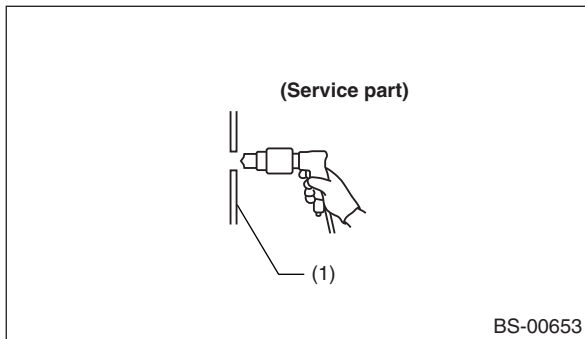
### (2) Drilling through two plates



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

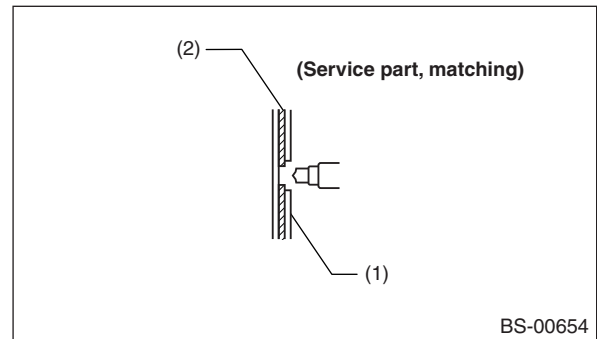
## 4. HOLE DRILLING FOR PLUG WELDING

### (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

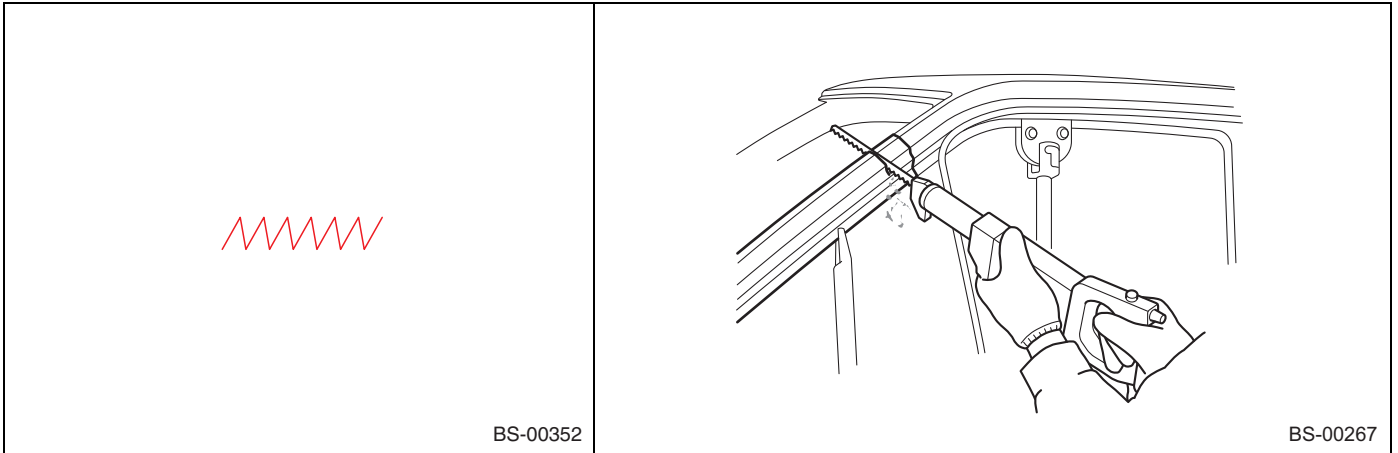


- (1) Vehicle side
- (2) Service part

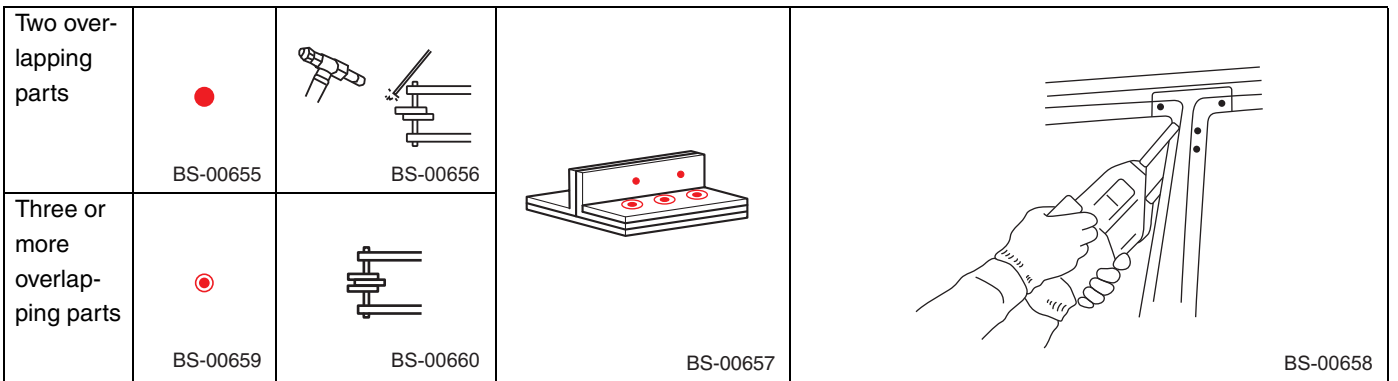
# Foreword

## 5. MEANING OF SYMBOLS

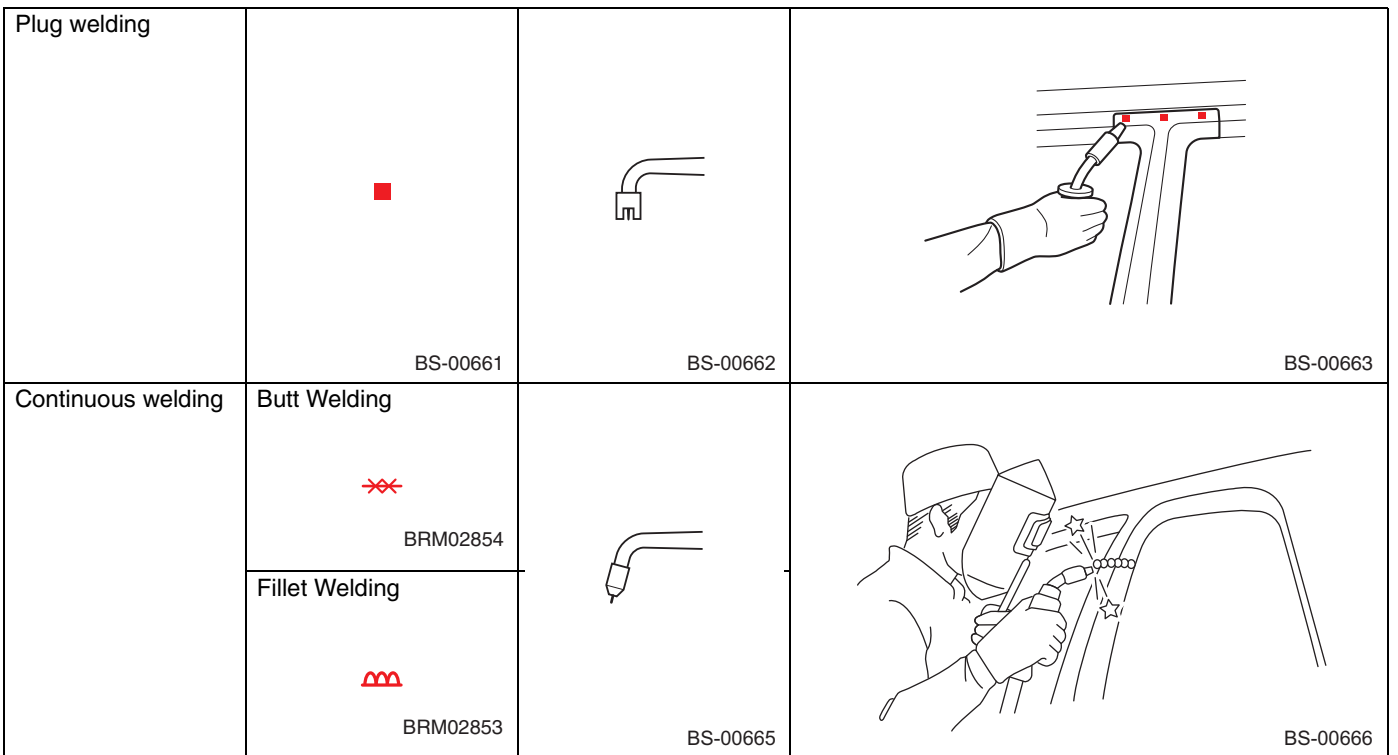
### • Cutting



### • Spot welding


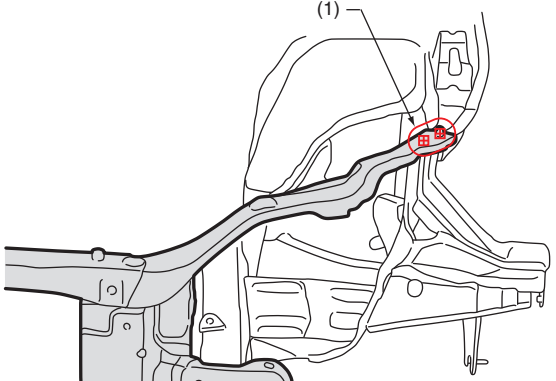

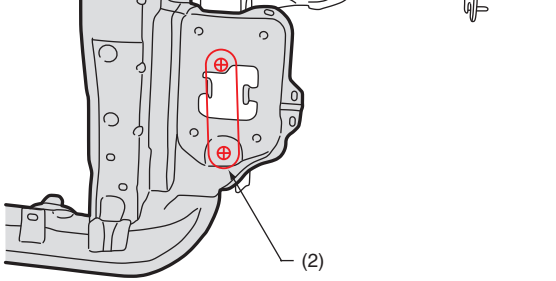


### • Carbon dioxide gas arc welding (MIG welding)



# Foreword

## • Bolt, nut tightening portion

Bolt		
Nut		 <p data-bbox="1393 890 1487 911">BS-04483</p>


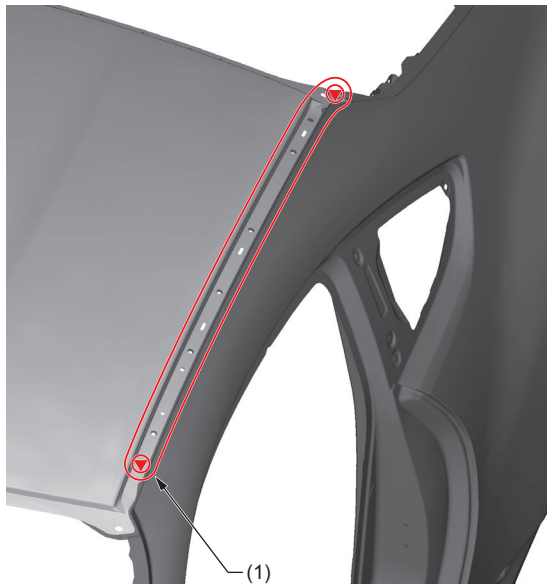
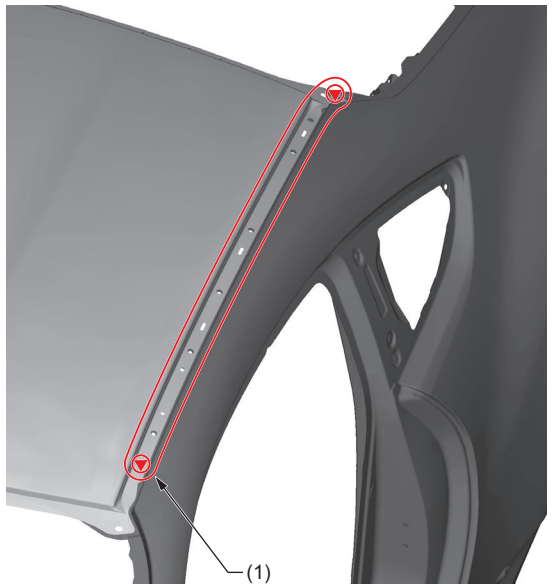
BS-04481

BS-04482

(1) Bolt

(2) Nut

## • Rivet tightening portion

Rivet		
		 <p data-bbox="1382 1745 1487 1766">BRM01989</p>

BRM01988

(1) Rivet



### **B: REFERENCE**

#### **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.

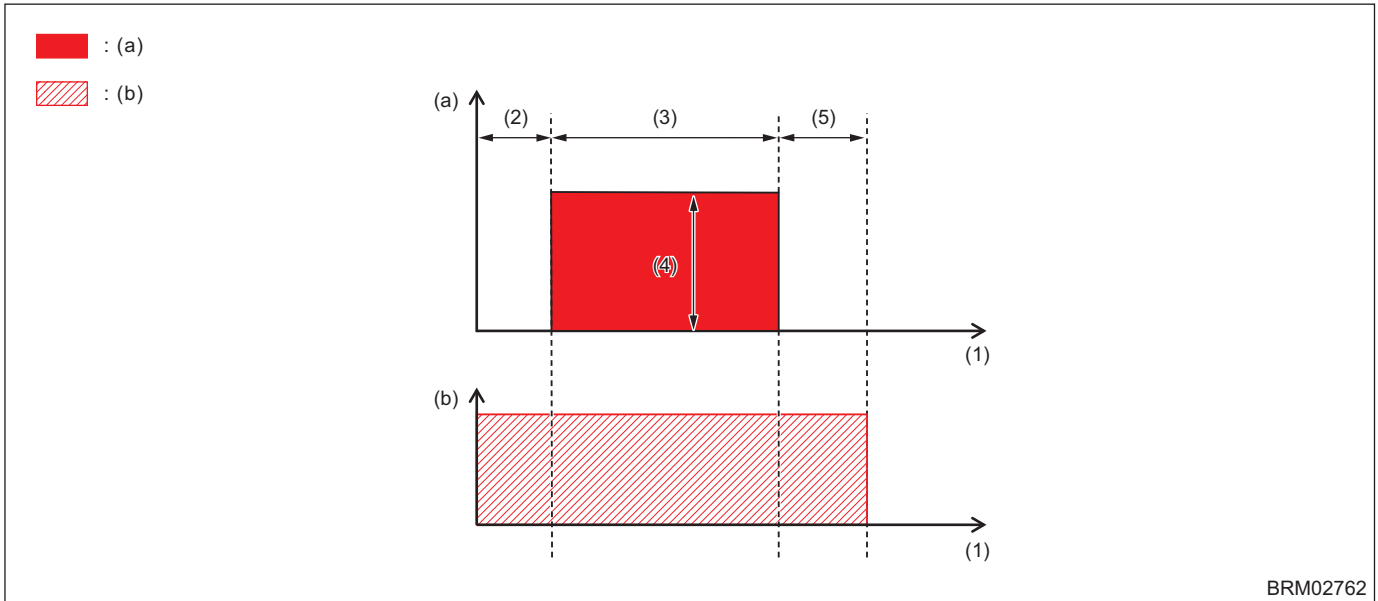
# Foreword

## Condition table

Spot welding	[a]	AC	Compression	3.0 kN	Total number of 2 overlapping sheets
			Current	7.0 kA	
			Welding time	17 cyc	
	[b]	AC	Compression	4.0 kN	
			Current	8.0 kA	
			Welding time	15 cyc	
	[f]	AC	Compression	3.0 kN	Total number of 3 overlapping sheets
			Current	7.0 kA	
			Welding time	17 cyc	
	[g]	AC	Compression	4.0 kN	
			Current	8.0 kA	
			Welding time	15 cyc	
	[h]	DC (multi-stage energization)	Compression	4.0 kN	
			Current 1	9.0 kA	
			Welding time 1	2 cyc	
			Cooling time	1 cyc	
			Current 2	8.0 kA	
			Welding time 2	20 cyc	
	[j]	DC (multi-stage energization)	Compression	4.0 kN	
			Current 1	8.0 kA	
			Welding time 1	10 cyc	
Cooling time			1 cyc		
Current 2			7.5 kA		
Welding time 2			20 cyc		
[k]	DC	Compression	3.0 kN		
		Current	7.0 kA		
		Welding time	30 cyc		
		Upslope time	2 cyc		
[m]	DC	Compression	4.0 kN		
		Current	7.0 kA		
		Welding time	20 cyc		
		Upslope time	3 cyc		
[n]	AC	Compression	4.0 kN		
		Current	8.0 kA		
		Welding time	20 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 <sub>2</sub>	
	B	Plug diameter	8.5 mm [0.33 in] or more		
		Wire	YGW16		
		Gas	Gas mixture (Argon: 80%, CO <sub>2</sub> : 20%)		

# Foreword

## Energization profile: Single energization



(a) Current

(b) Compression

(1) Time

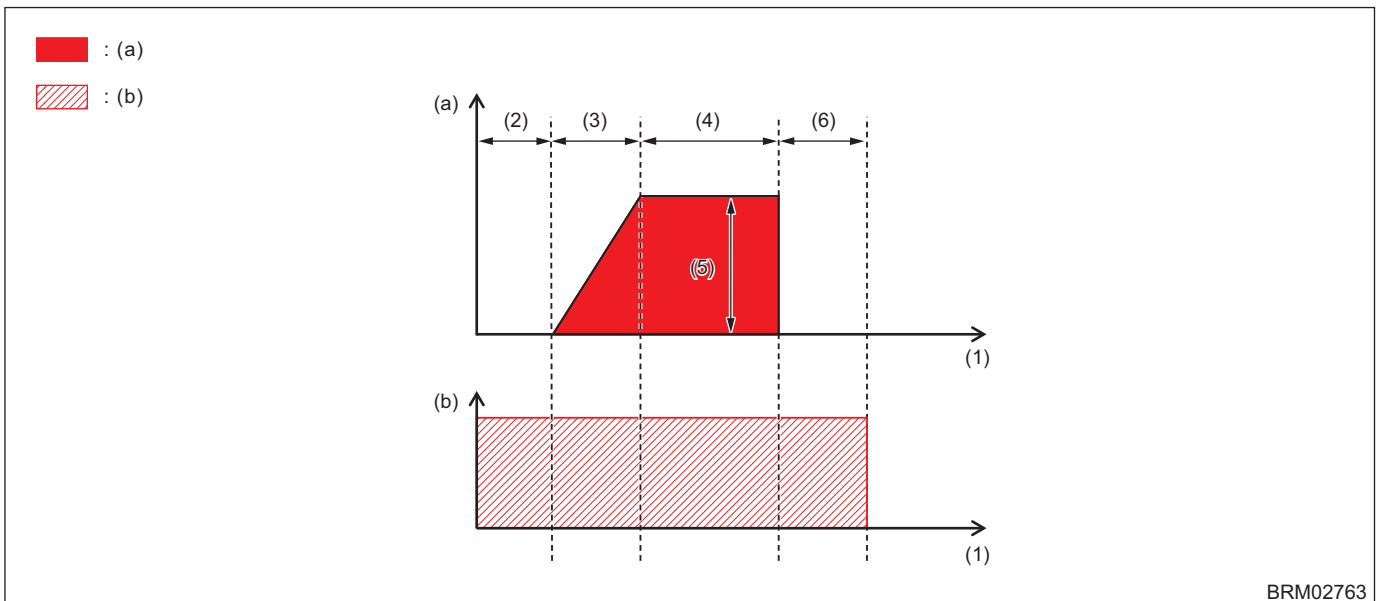
(3) Welding time

(5) Hold

(2) Squeeze time

(4) Current

## Energization profile: Single energization + UP slope



(a) Current

(b) Compression

(1) Time

(3) Upslope time

(5) Current

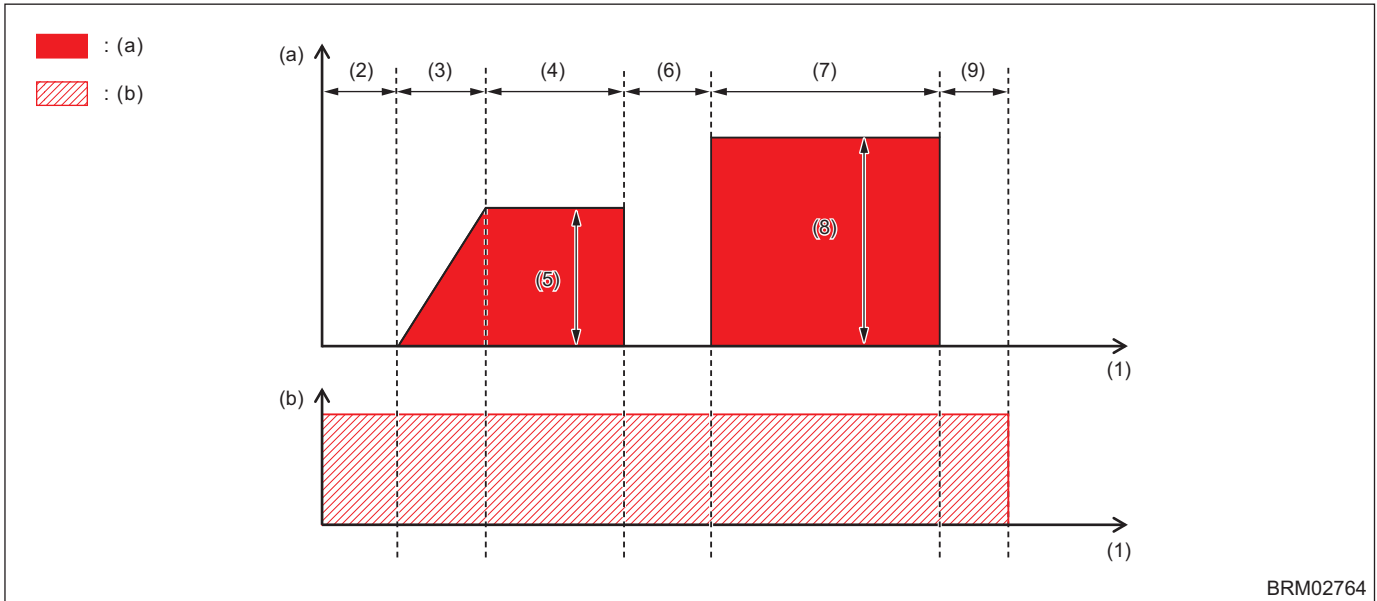
(2) Squeeze time

(4) Welding time

(6) Hold

# Foreword

## Energization profile: Multi-stage energization + UP slope



(a) Current

(b) Compression

(1) Time

(4) Welding time 1

(7) Welding time 2

(2) Squeeze time

(5) Current 1

(8) Current 2

(3) Upslope time

(6) Cooling time

(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.

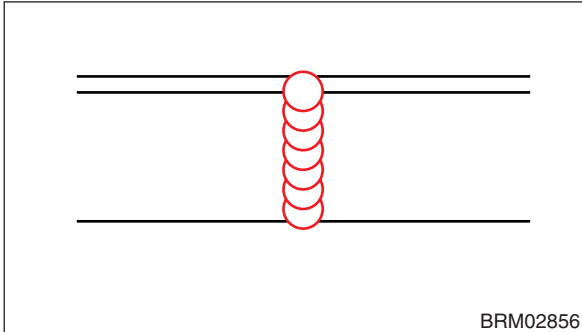
Plate thickness of the welding material	Plug welding hole diameter
Less than 1.0 mm [0.04 in]	$\phi$ 5.0 mm [0.2 in] or more
1.0 mm — 1.6 mm [0.04 — 0.06 in]	$\phi$ 6.5 mm [0.26 in] or more
1.7 mm — 2.3 mm [0.07 — 0.09 in]	$\phi$ 8.0 mm [0.31 in] or more
2.4 mm [0.09 in] or more	$\phi$ 10.0 mm [0.39 in] or more

# Foreword

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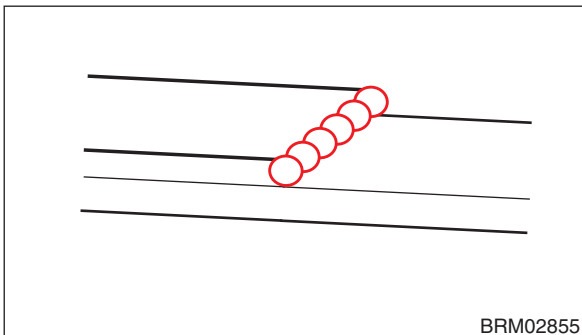
## 4. Butt Welding

- 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

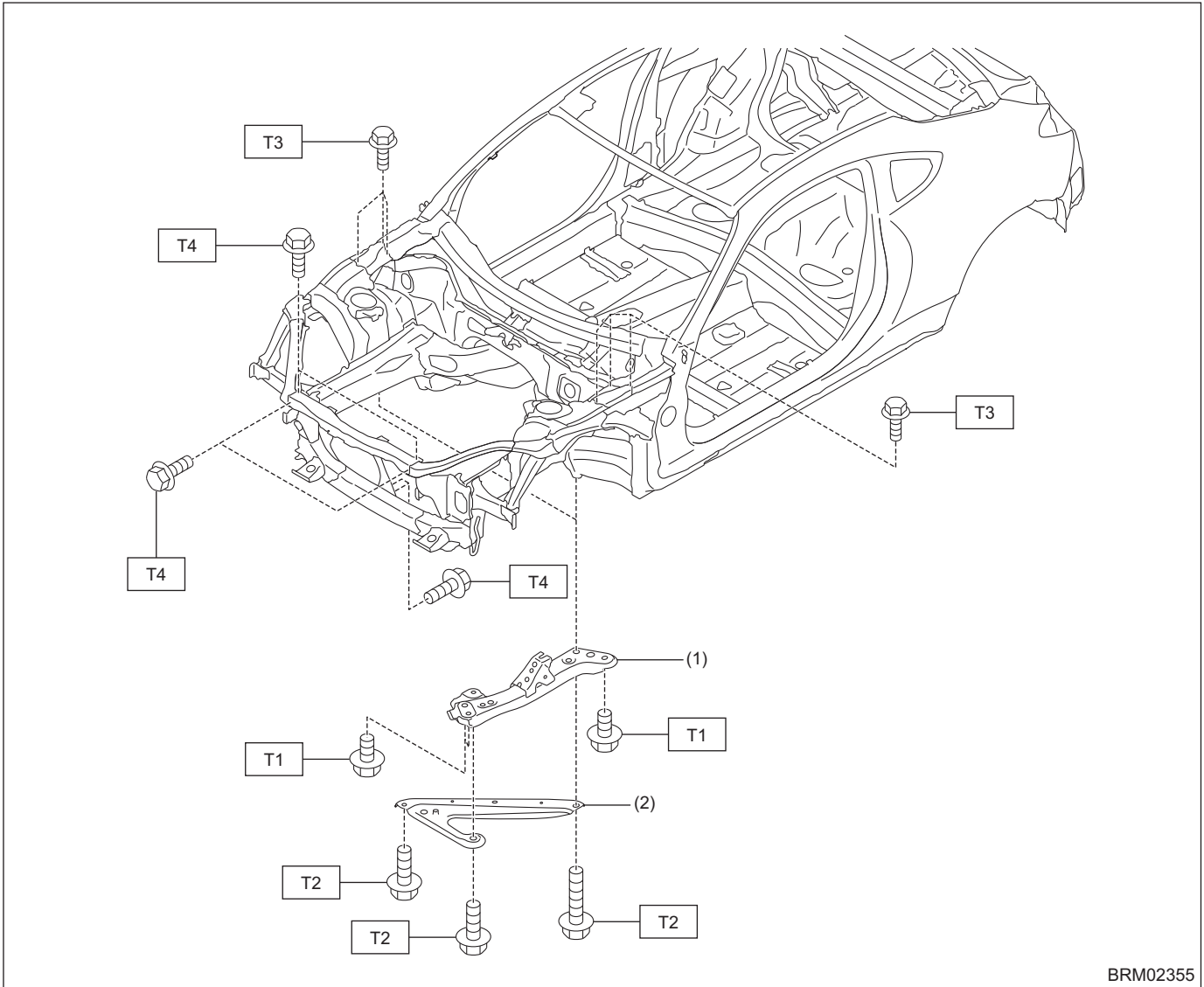
Weld the edges of two stacked panels.



# Assembly of Exterior Parts

## 2. Assembly of Exterior Parts

### A: BODY REINFORCING PARTS 1



- (1) Sub frame complete
- (2) Sub frame front lower C complete

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

**T1: 60 (6.12, 44.25)**

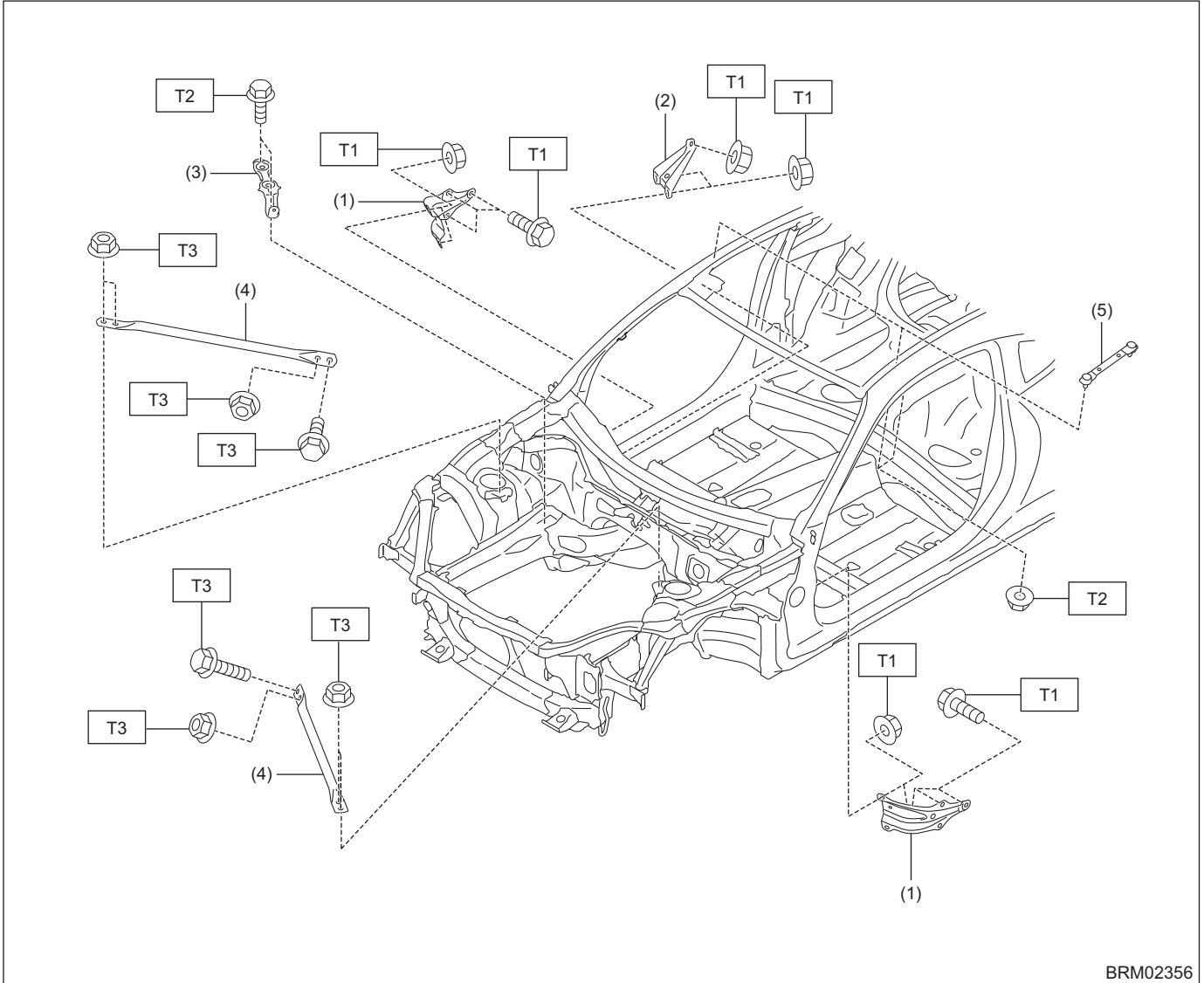
**T2: 70 (7.14, 51.63)**

**T3: 7.5 (0.76, 5.53)**

**T4: 18 (1.84, 13.28)**

# Assembly of Exterior Parts

## B: BODY REINFORCING PARTS 2



- (1) Gusset toe board inner side
- (2) Reinforcement battery
- (3) Bracket battery
- (4) Stay strut
- (5) Bracket roof complete (This part and mounting nut are non-reusable)

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

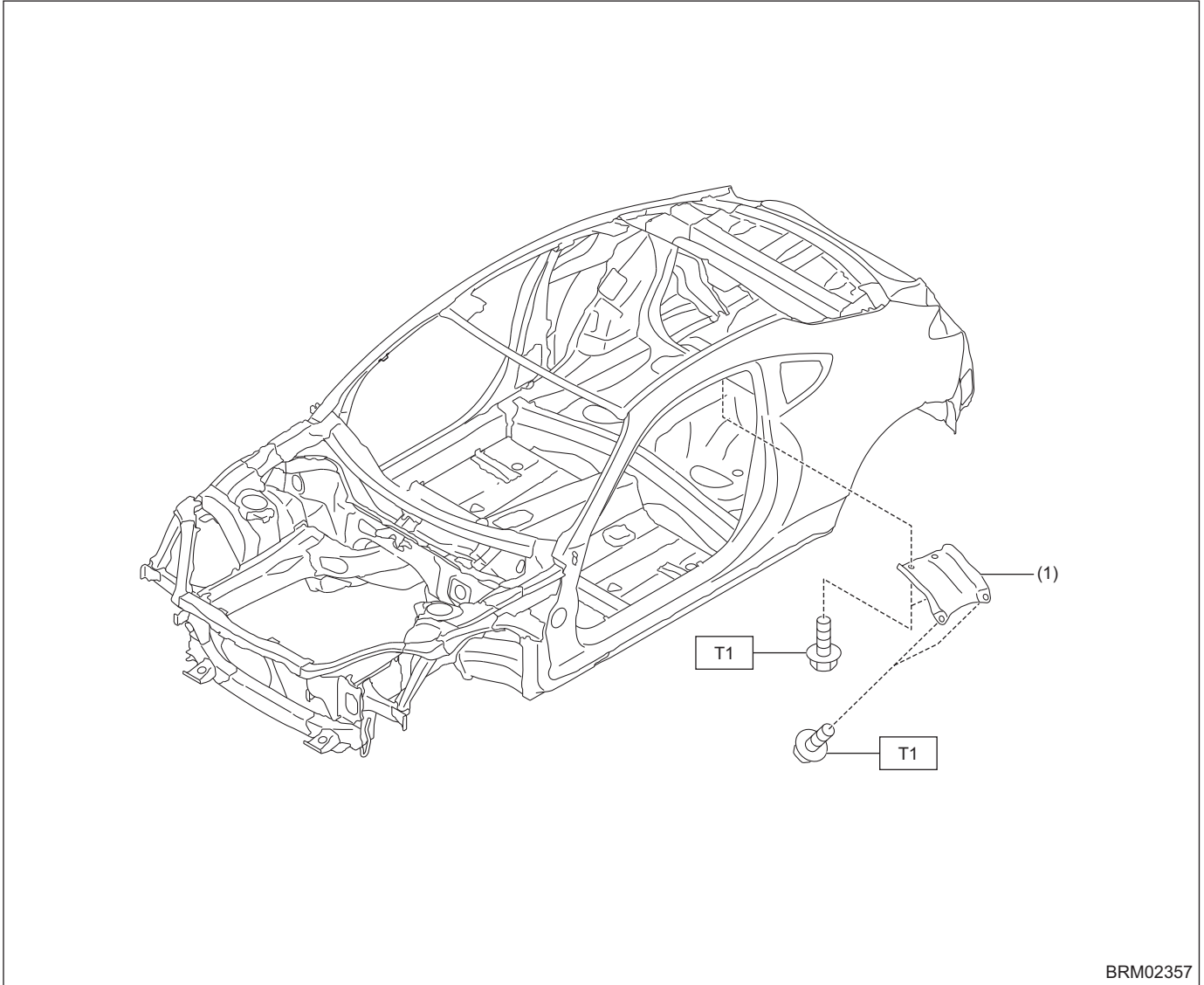
**T1: 18 (1.84, 13.28)**

**T2: 7.5 (0.76, 5.53)**

**T3: 16 (1.63, 11.8)**

# Assembly of Exterior Parts

## C: BRACKET BRACE



(1) Bracket brace

**Tightening torque: N·m (kgf·m, ft·lb)**  
**T1: 12.7 (1.29, 9.37)**

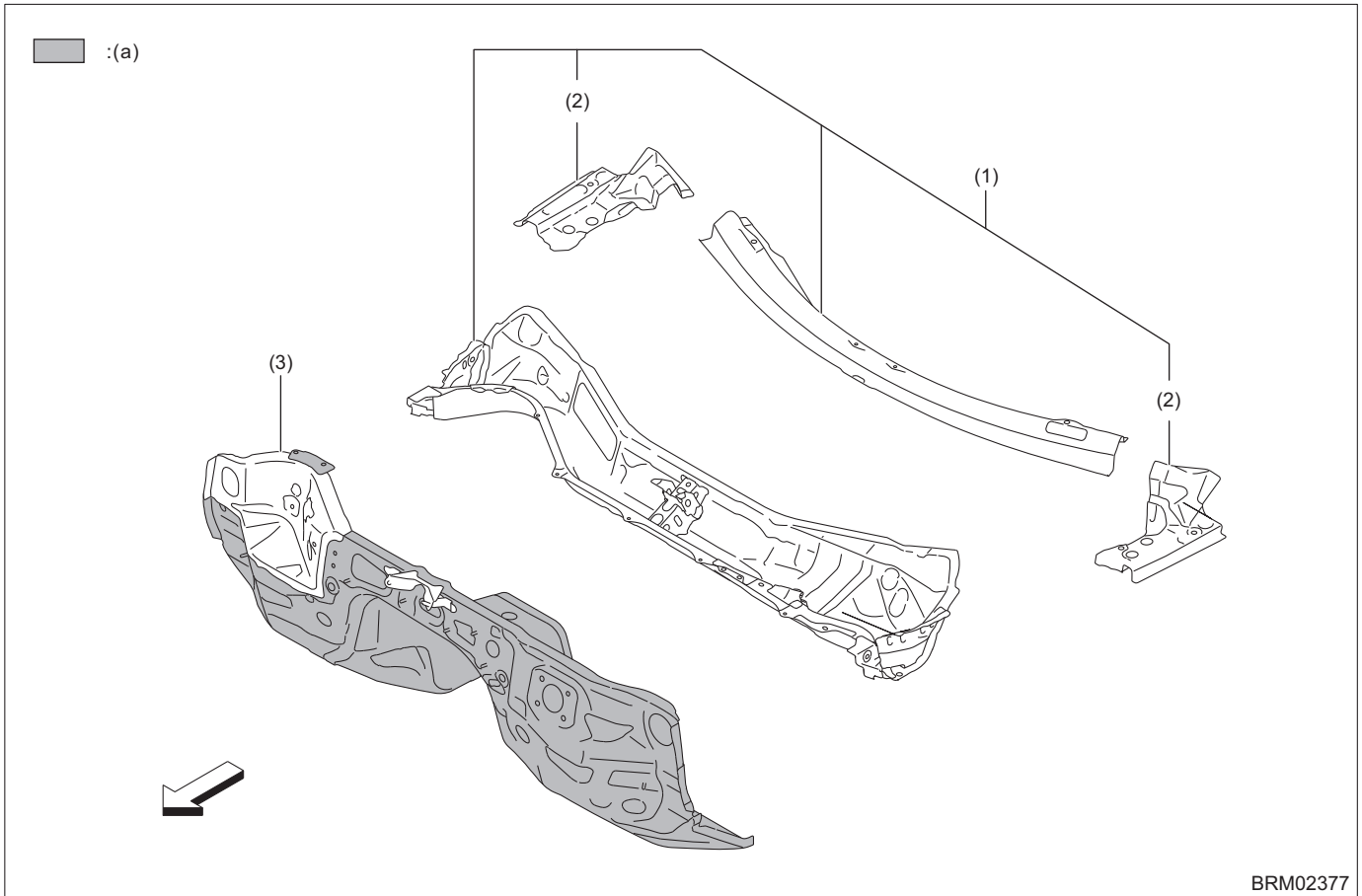


# Panel Components

## 3. Panel Components

### A: COMPONENTS

#### 1. TOE BOARD & FRONT PANEL



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

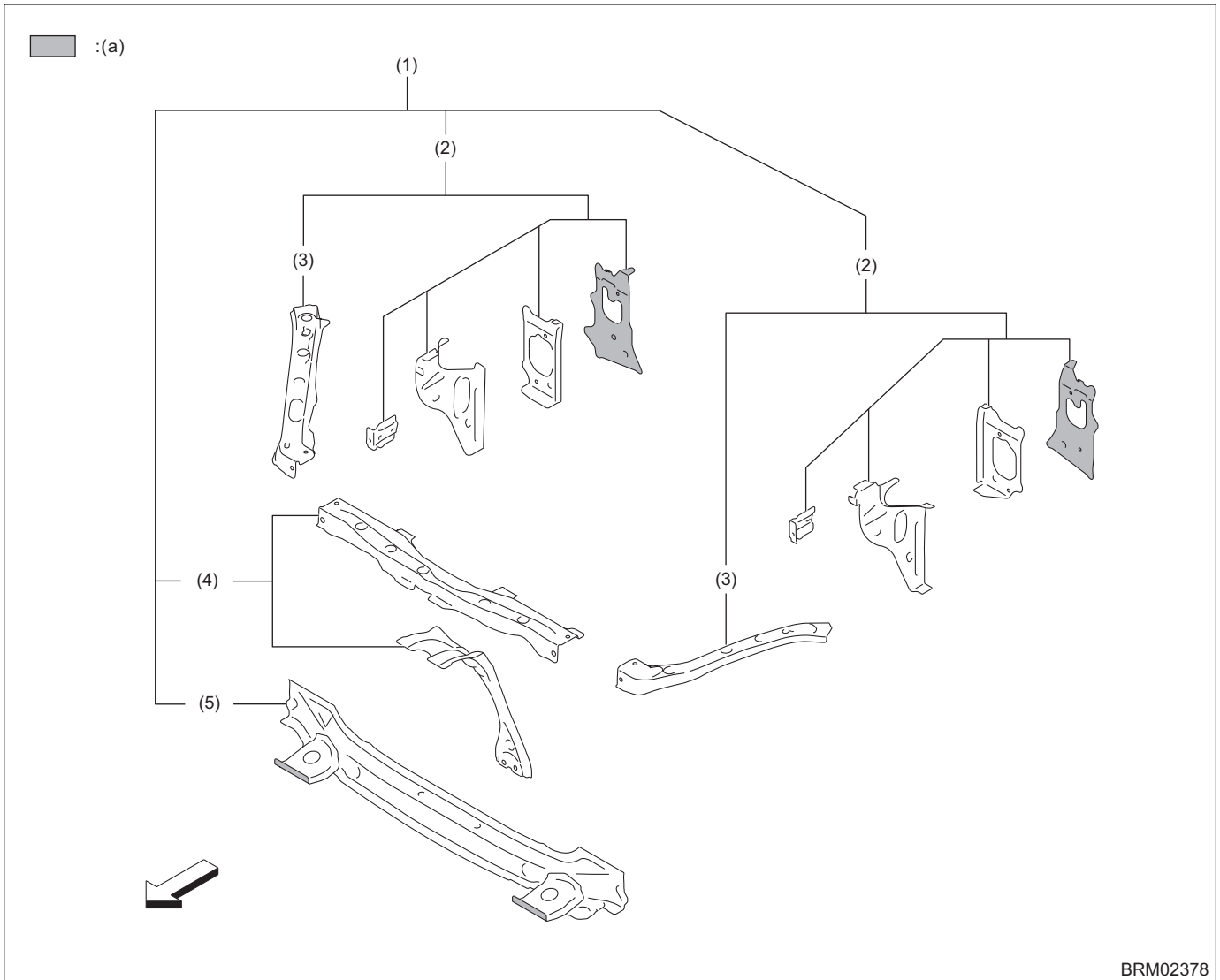
(1) Duct complete, front panel

(2) Duct complete

(3) Toe board complete

# Panel Components

## 2. RADIATOR PANEL



BRM02378

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

(1) Panel complete, radiator

(3) Panel complete, radiator front

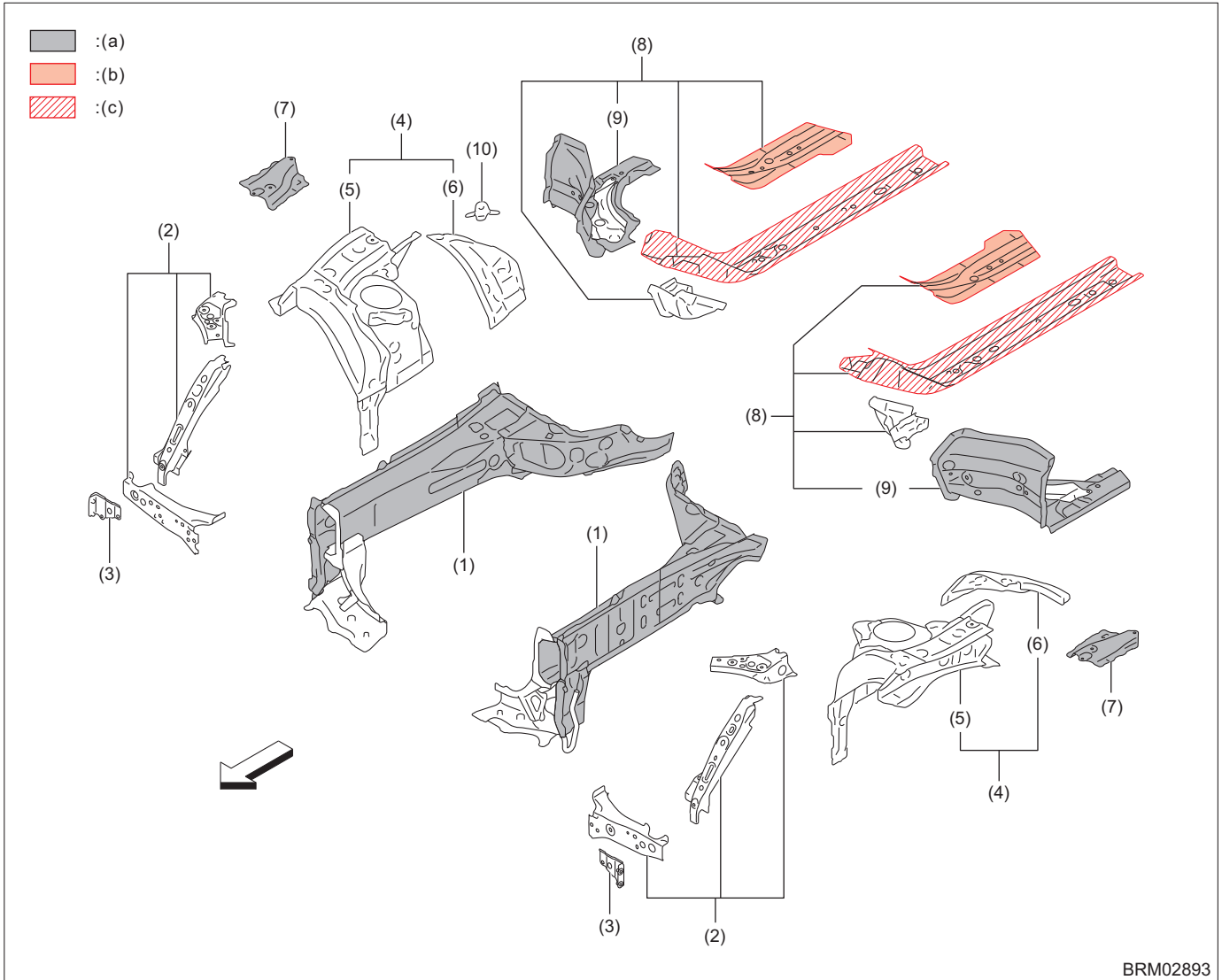
(5) Frame complete, radiator panel  
lower

(2) Panel complete, radiator side

(4) Panel complete, radiator center

# Panel Components

## 3. FRONT WHEEL APRON



BRM02893

(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) Frame side complete

(2) Reinforcement, apron lower

(3) Bracket complete, fender

(4) Bracket complete, suspension front

(5) Bracket sub complete, suspension

(6) Wheel apron, front

(7) Patch, frame side upper

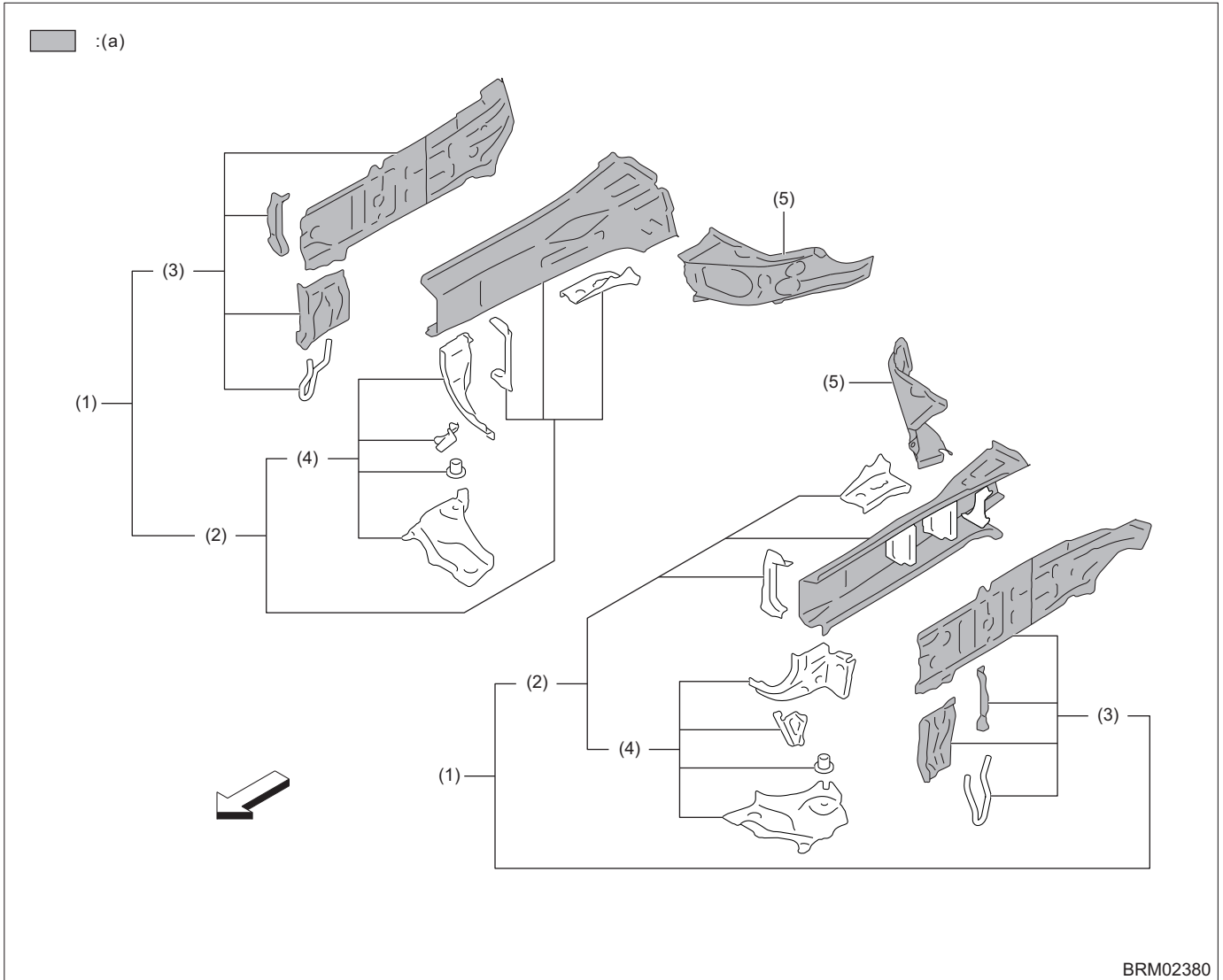
(8) Frame side front complete, rear

(9) Frame complete, toe board front

(10) Bracket, battery rod

# Panel Components

## 4. FRONT SIDE FRAME



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

(1) Frame side complete

(3) Closing plate

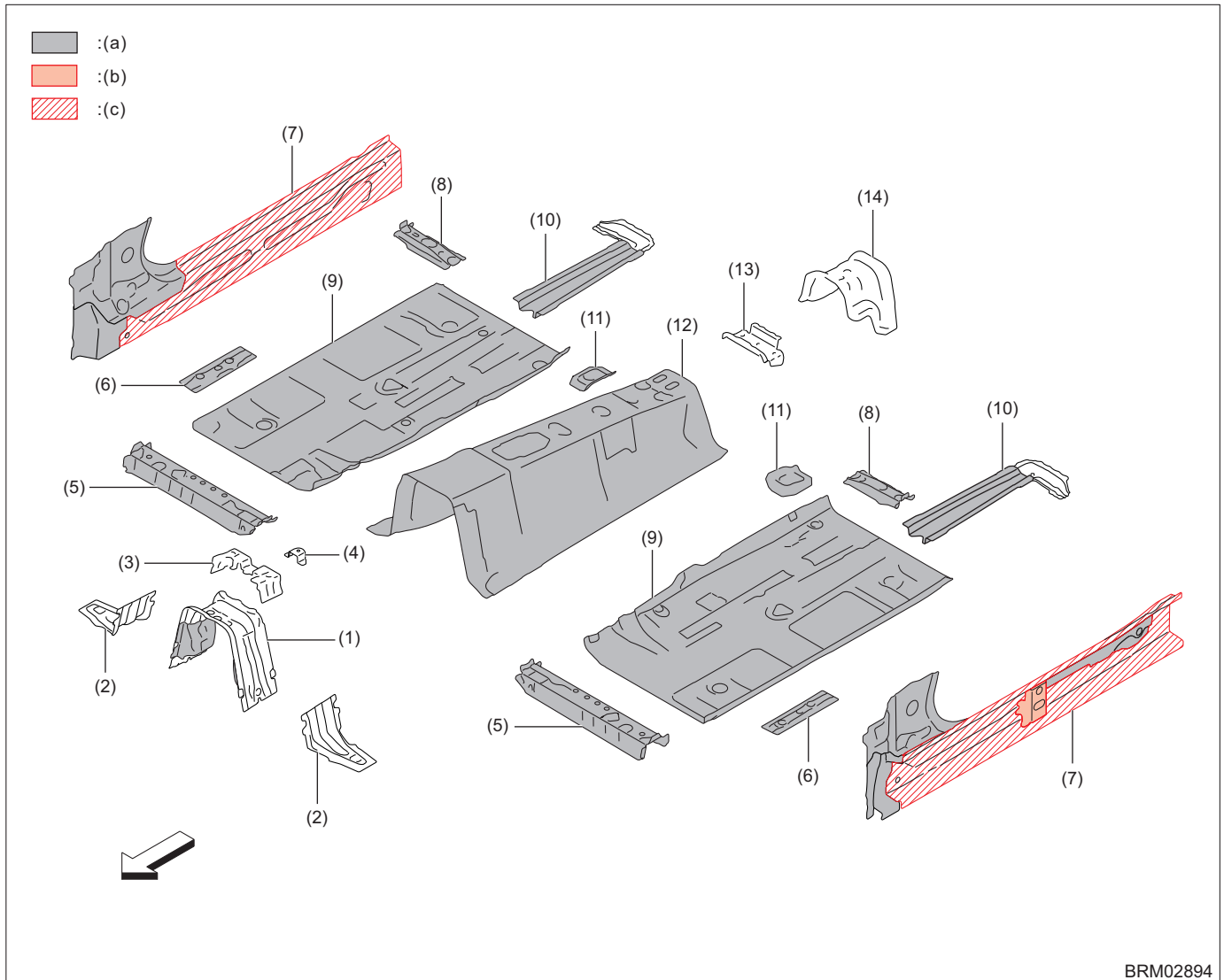
(5) Reinforcement, toe board

(2) Frame side front complete, front

(4) Gusset complete, front frame

# Panel Components

## 5. FRONT FLOOR PANEL

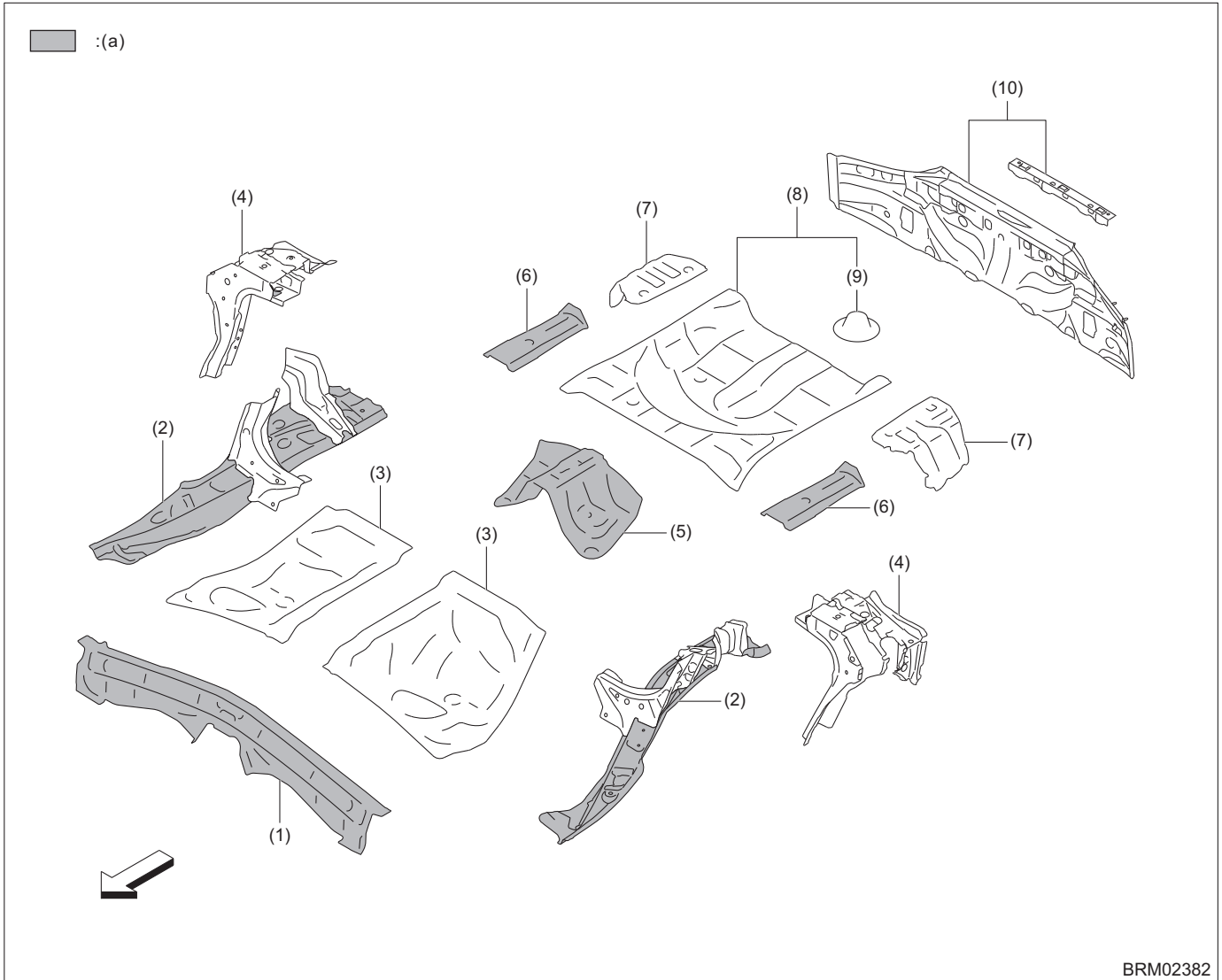


BRM02894

- |  |  |  |
|--|--|--|
| (a) High-strength tensile steel<br>(440 — 590 MPa class) | (b) High-strength tensile steel<br>(980 MPa class) | (c) High-strength tensile steel<br>(1,500 MPa class) |
| (1) Crossmember, front floor front                       | (6) Doubler, floor front                           | (11) Crossmember, front seat rear                    |
| (2) Reinforcement, crossmember                           | (7) Side sill complete, front                      | (12) Floor pan, front center                         |
| (3) Bracket assembly, instrument panel                   | (8) Crossmember, front seat rear                   | (13) Bracket, floor center                           |
| (4) Bracket  | (9) Floor pan, front                               | (14) Crossmember, front floor rear                   |
| (5) Crossmember complete, filler front                   | (10) Frame, front floor rear                       |  |

# Panel Components

## 6. REAR FLOOR PANEL & REAR SKIRT



BRM02382

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

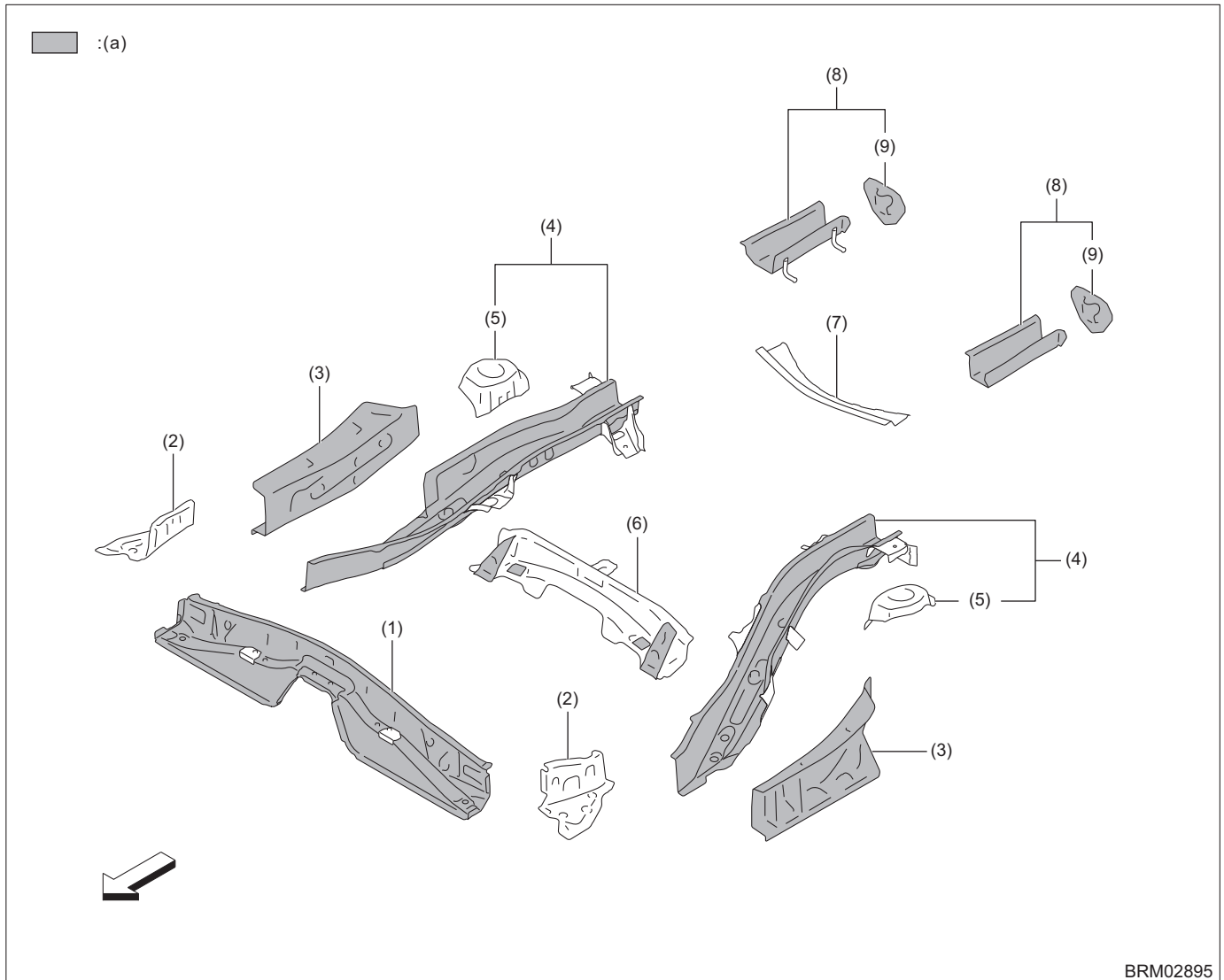
(1) Crossmember complete  
(2) Frame complete, rear upper  
(3) Floor pan complete, rear  
(4) Bulkhead complete, rear

(5) Reinforcement, rear floor  
(6) Frame side, rear upper  
(7) Floor side, rear  
(8) Floor pan complete, rear rear

(9) Bracket, spare tire  
(10) Skirt complete, rear

# Panel Components

## 7. REAR FLOOR SIDE FRAME



BRM02895

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

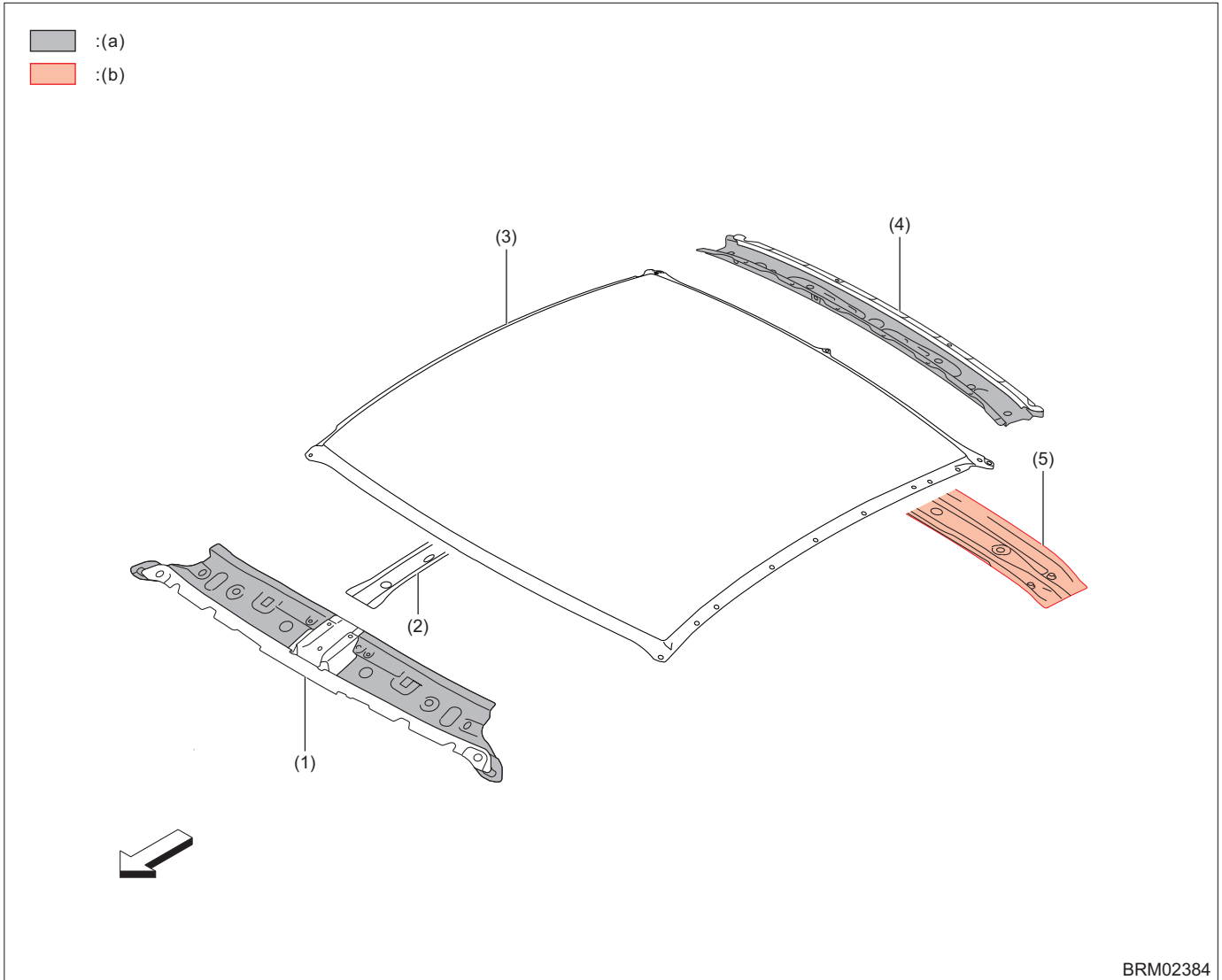
(1) Crossmember complete, A  
(2) Gusset complete, frame side  
(3) Side sill complete, inner rear

(4) Frame complete, floor side rear  
(5) Bracket complete, rear suspension  
(6) Crossmember B complete, rear floor

(7) Crossmember C complete, rear floor  
(8) Frame complete, rear floor rear  
(9) Bracket, bumper rear

# Panel Components

## 8. ROOF



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

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

(1) Rail complete, front roof

(3) Panel complete, roof

(5) Brace complete, roof center

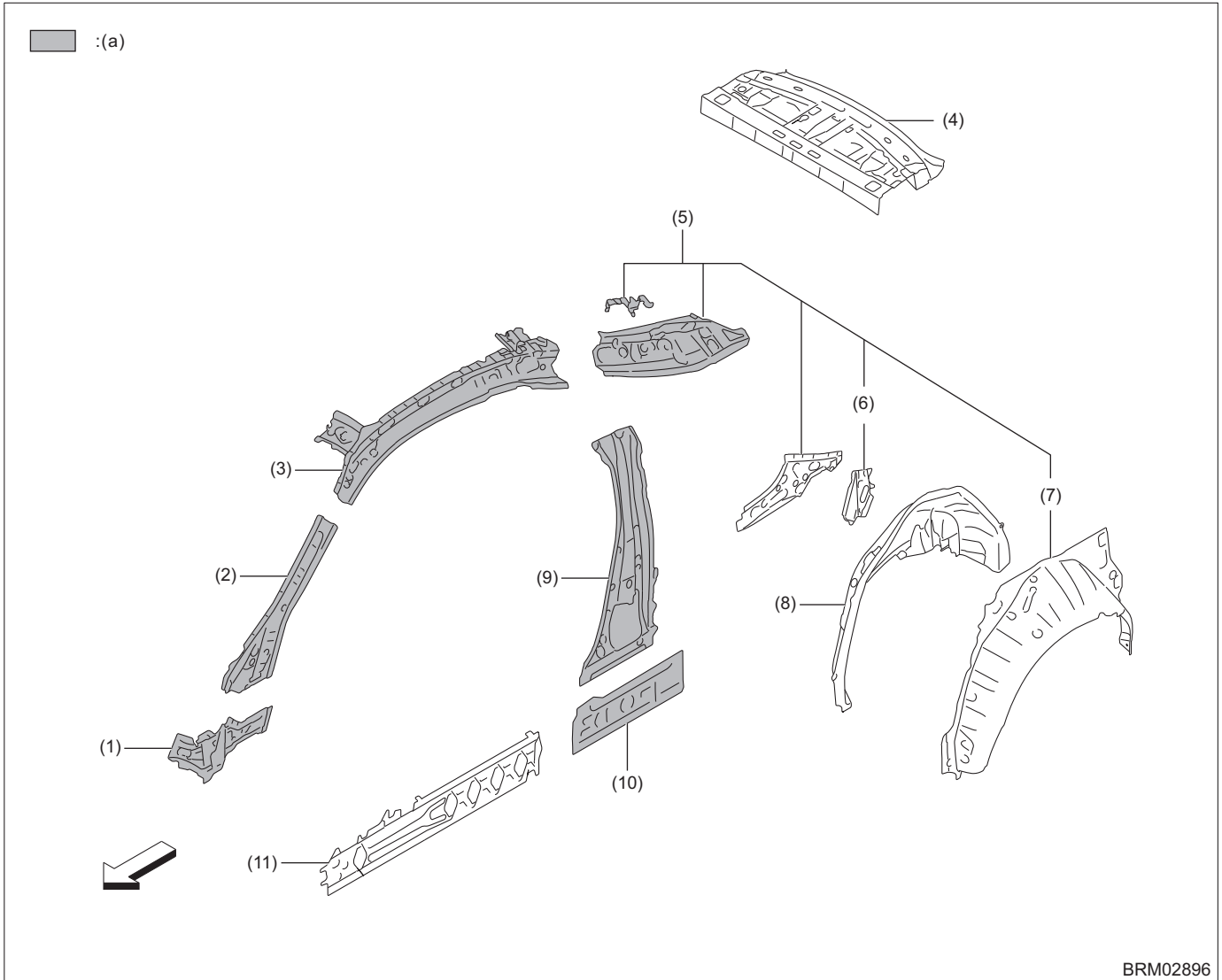
(2) Brace, roof

(4) Rail complete, rear roof



# Panel Components

## 9. SIDE PANEL INNER



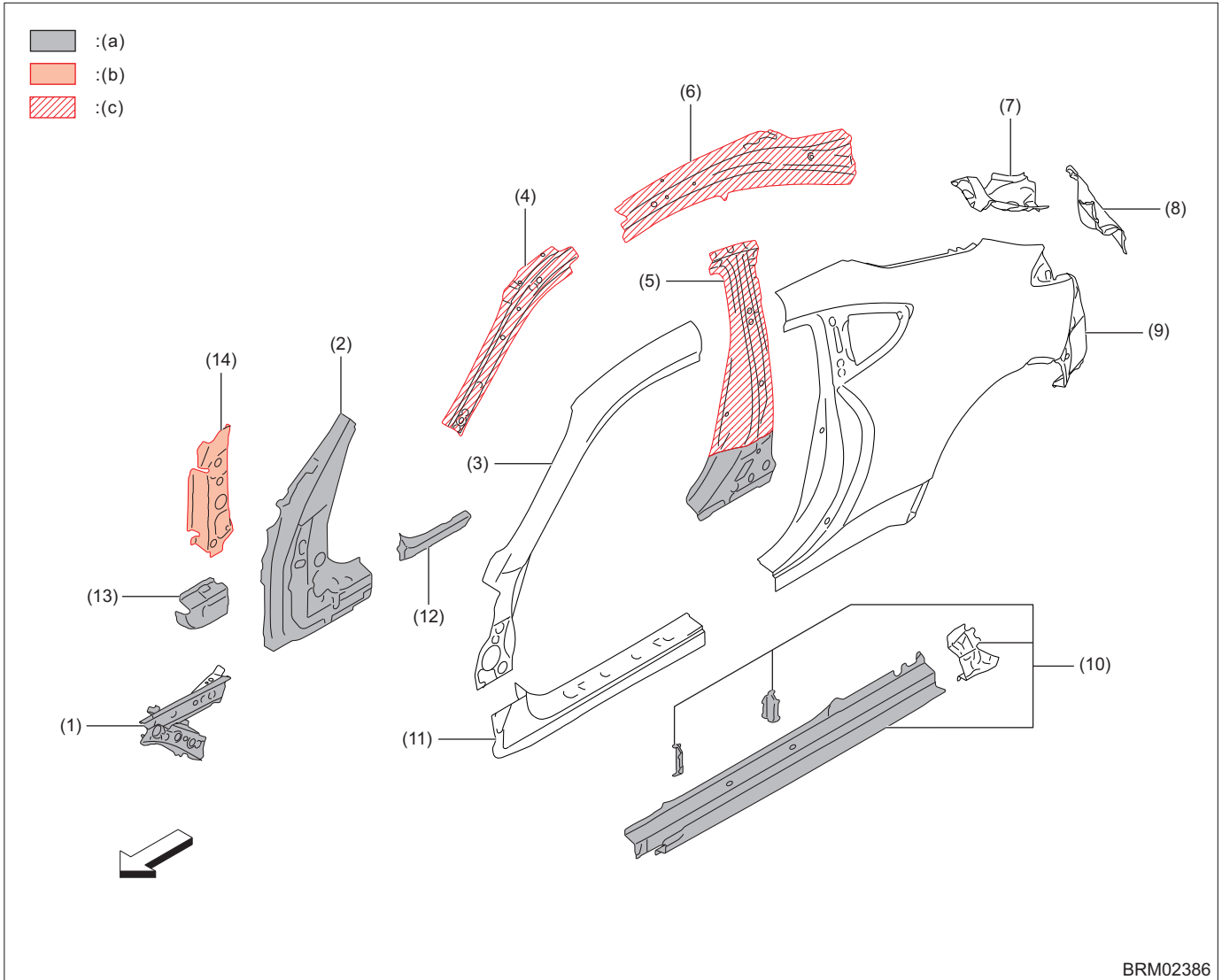
BRM02896

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

- |  |                                       |   |
|--|---------------------------------------|---|
| (1) Patch, pillar front inner          | (5) Rear quarter complete, inner      | (9) Pillar complete, center inner         |
| (2) Pillar complete, front inner upper | (6) Reinforcement, rear quarter inner | (10) Reinforcement, side sill inner       |
| (3) Side rail, inner                   | (7) Rear arch, inner                  | (11) Reinforcement, side sill front outer |
| (4) Panel complete, rear               | (8) Wheel apron complete, rear        |   |

# Panel Components

## 10. SIDE PANEL OUTER

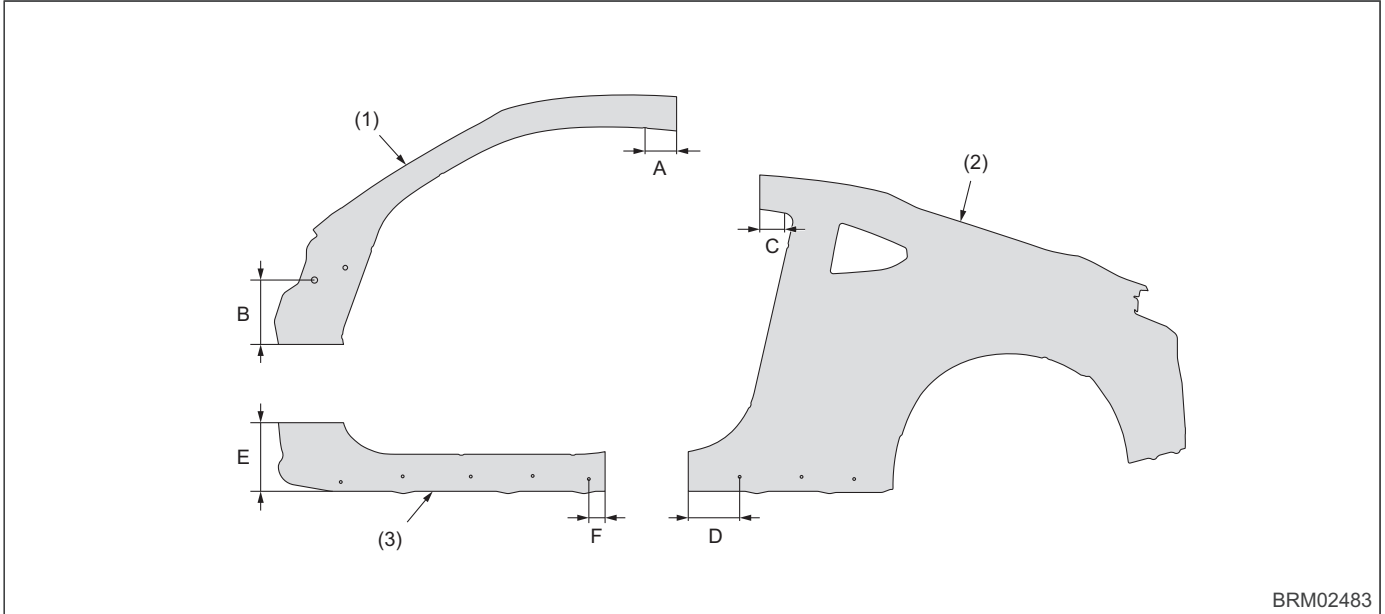


- |  |  |  |
|--|--|--|
| (a) High-strength tensile steel<br>(440 — 590 MPa class) | (b) High-strength tensile steel<br>(980 MPa class) | (c) High-strength tensile steel<br>(1,500 MPa class) |
| (1) Gusset, front pillar                                 | (6) Reinforcement complete, side rail              | (11) Side sill complete, outer                       |
| (2) Reinforcement, front pillar outer lower              | (7) Patch, rear pillar left                        | (12) Reinforcement, front pillar lower               |
| (3) Pillar complete, front outer                         | (8) Rear quarter end complete                      | (13) Reinforcement, extension sill outer             |
| (4) Reinforcement complete, center pillar                | (9) Rear quarter complete, outer                   | (14) Reinforcement hinge front pillar                |
| (5) Reinforcement complete, center pillar                | (10) Reinforcement, side sill outer                |  |

# Panel Components

## B: REPAIR PART SIZE

### 1. SIDE PANEL OUTER

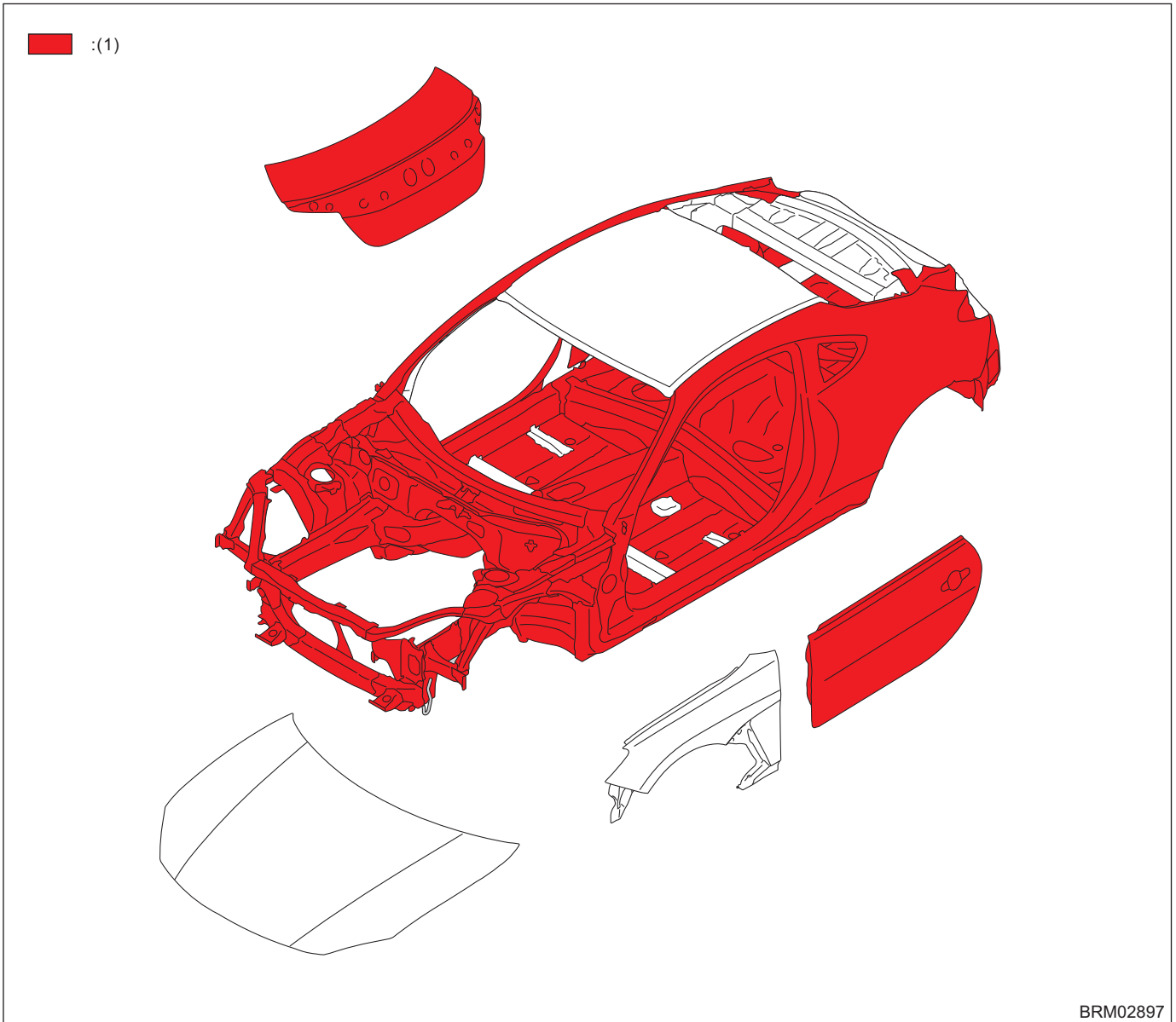


BRM02483

No	Part name	Measurement position	Datum dimensions mm (in)
1	Front pillar outer	A	102 (4.02)
		B	208 (8.19)
2	Rear quarter outer	C	80 (3.15)
		D	166 (6.54)
3	Side sill outer	E	222 (8.74)
		F	34 (1.34)

## 4. Galvanized Sheet Metal

### A: SPECIFICATIONS

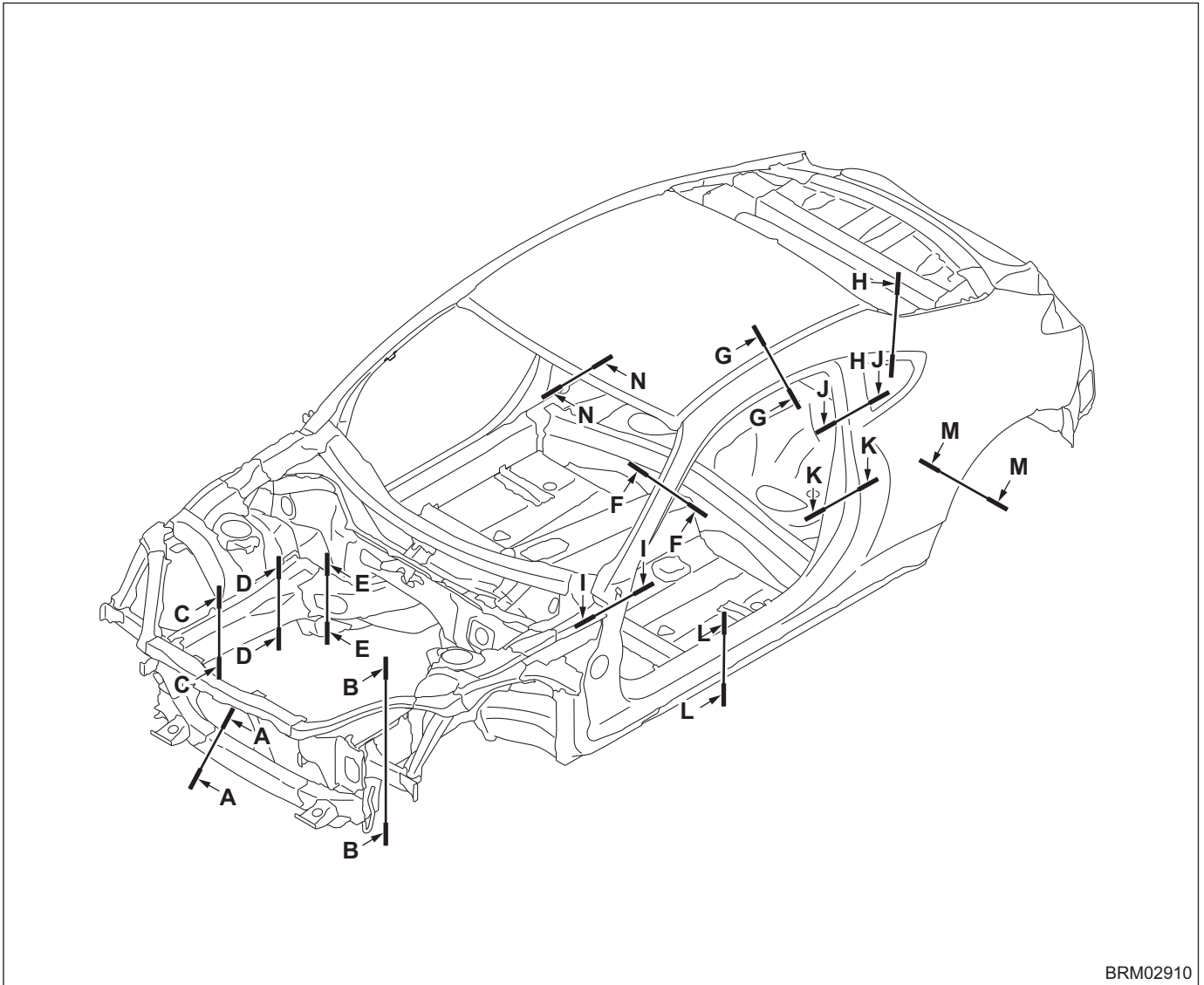


- (1) Galvanized sheet metal  
(Both sides)

The fuel flap is made of plastic.

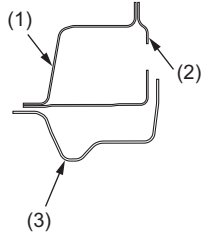
## 5. Body Construction

### A: SPECIFICATIONS



# Body Construction

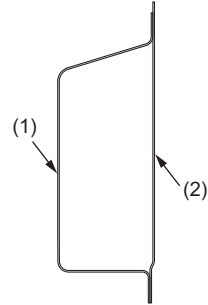
**Cross section A — A**



BRM02360

- (1) Frame lower A
- (2) Frame lower B
- (3) Reinforcement guard

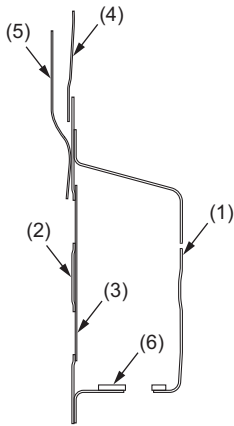
**Cross section B — B**



BRM02361

- (1) Frame side FF
- (2) Closing plate FF

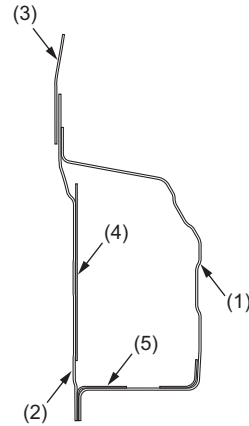
**Cross section C — C**



BRM02362

- (1) Frame side FF
- (2) Closing plate FF
- (3) Separator F suspension F
- (4) Reinforcement F suspension upper
- (5) Reinforcement F suspension lower
- (6) Doubler FF inner lower

**Cross section D — D**

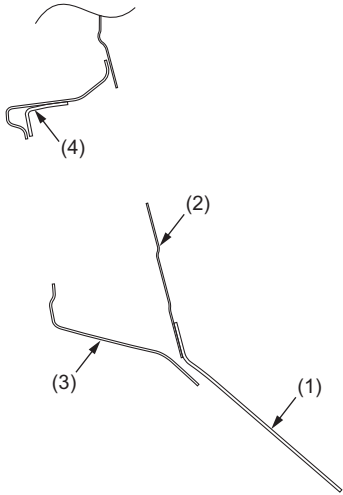


BRM02363

- (1) Frame side FF
- (2) Closing plate FR
- (3) Bracket F suspension lower
- (4) Separator F suspension rear
- (5) Reinforcement FF rear

# Body Construction

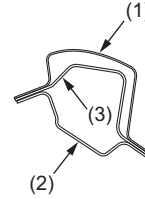
**Cross section E — E**



BRM02364

- (1) Extension F floor
- (2) Toe board
- (3) Reinforcement toe board center
- (4) Patch toe board center

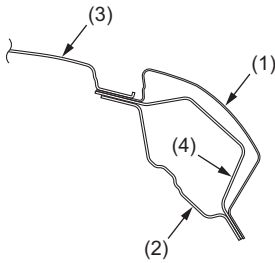
**Cross section F — F**



BRM02365

- (1) Panel side outer
- (2) Pillar front inner upper
- (3) Reinforcement pillar front upper

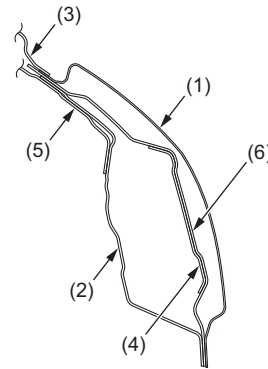
**Cross section G — G**



BRM02366

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

**Cross section H — H**

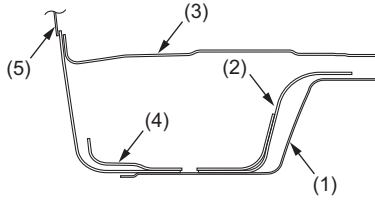


BRM02367

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

# Body Construction

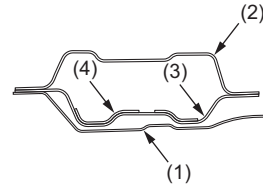
**Cross section I — I**



BRM02368

- (1) Panel side outer
- (2) Reinforcement pillar F outer lower
- (3) Pillar F inner upper
- (4) Reinforcement hinge F pillar
- (5) Bulkhead F

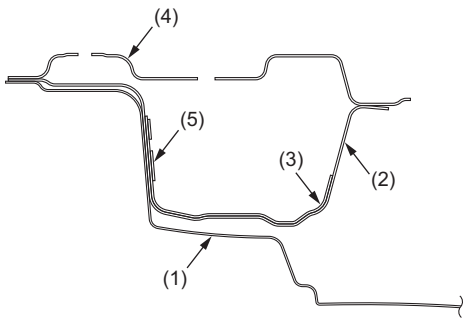
**Cross section J — J**



BRM02369

- (1) Panel side outer
- (2) Pillar center inner
- (3) Reinforcement pillar C outer upper
- (4) Reinforcement pillar C patch

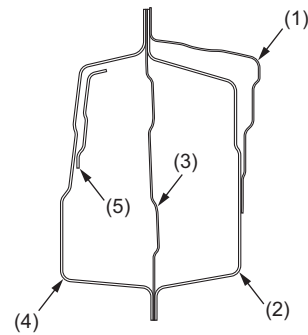
**Cross section K — K**



BRM02370

- (1) Panel side outer
- (2) Reinforcement pillar C outer upper
- (3) Reinforcement pillar C patch
- (4) Pillar center inner
- (5) Plate nut striker

**Cross section L — L**



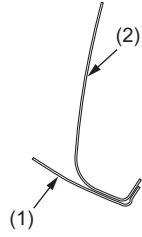
BRM02371

- (1) Panel side outer
- (2) Reinforcement side sill outer F
- (3) Reinforcement side sill F
- (4) Side sill inner front
- (5) Reinforcement side sill patch



# Body Construction

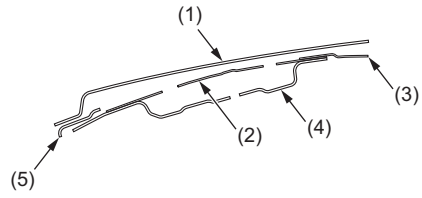
Cross section M — M



BRM02372

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

Cross section N — N



BRM02373

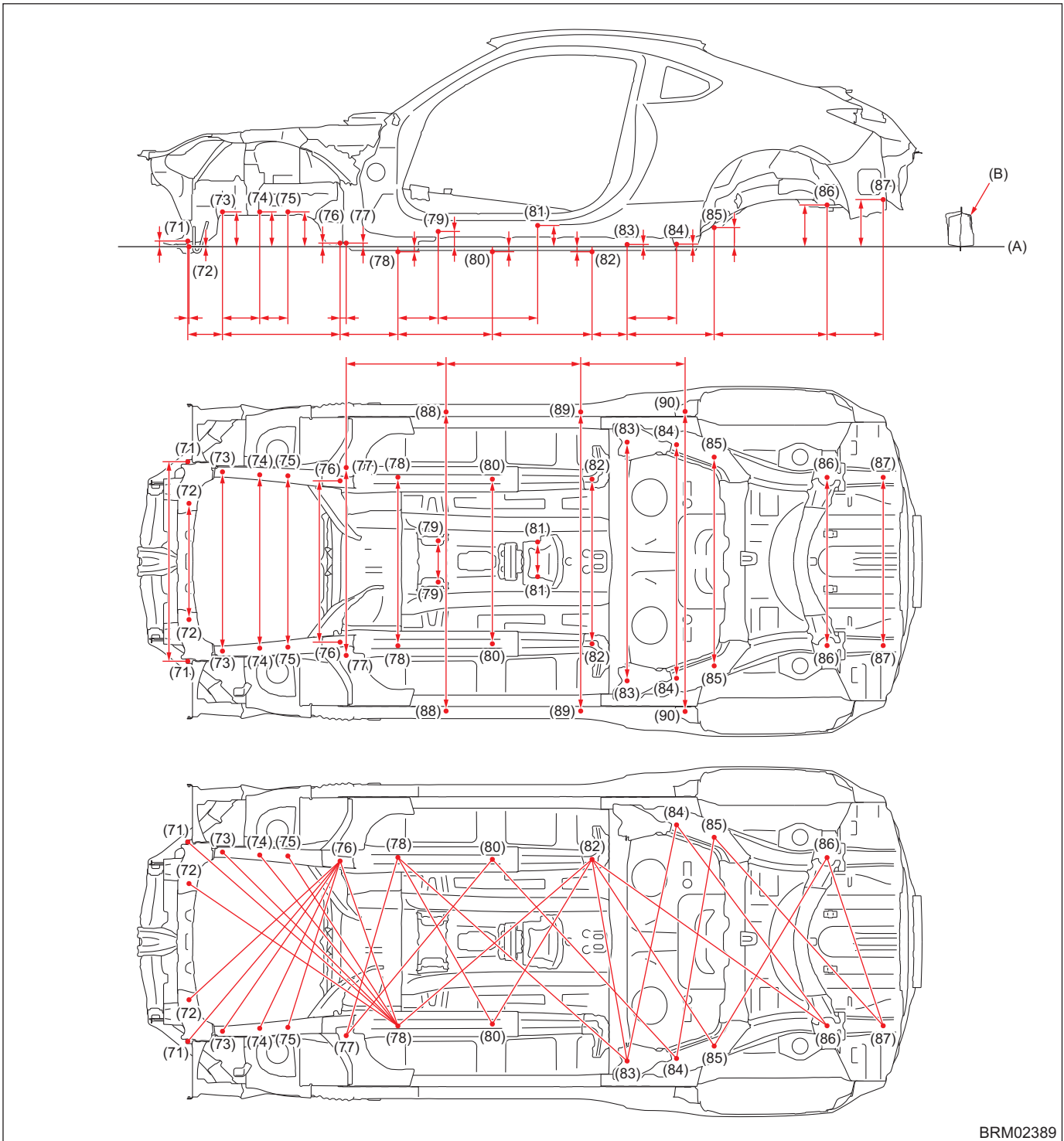
- (1) Roof panel
- (2) Rail F upper
- (3) Brace A
- (4) Rail F
- (5) Plate rail F

# Body Reference Points

## 6. Body Reference Points

### A: DIMENSIONS

#### 1. LOWER SURFACE



- 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.
- Reference points (79) and (81) are left-right asymmetrical, while other reference points are left-right symmetrical.

# Body Reference Points

- |   |  |  |
|---|--|--|
| (A) Datum line  | (B) Side sill outer panel  |  |
| (71) Gauge hole (Symmetrical)   | (79)R Transmission crossmember mounting hole (Right side)                      | (85) Rear suspension crossmember mounting hole (Symmetrical), front side |
| (72) Under cover mounting hole (Symmetrical)                              | (79)L Transmission crossmember mounting hole (Left side)                       | (86) Rear suspension crossmember mounting hole (Symmetrical), rear side  |
| (73) Gauge hole (Symmetrical)   | (80) Gauge hole (Symmetrical)  | (87) Gauge hole (Symmetrical)  |
| (74) Front suspension crossmember mounting hole (Symmetrical), front side | (81)R Propeller shaft mounting hole (Right side)                               | (88) Side spoiler mounting hole (Symmetrical)                            |
| (75) Front suspension crossmember mounting hole (Symmetrical), rear side  | (81)L Propeller shaft mounting hole (Left side)                                | (89) Side spoiler mounting hole (Symmetrical)                            |
| (76) Front suspension subframe mounting hole (Symmetrical), inside        | (82) Gauge hole (Symmetrical)  | (90) Side spoiler mounting hole (Symmetrical)                            |
| (77) Front suspension subframe mounting hole (Symmetrical), outside       | (83) Gauge hole (Symmetrical)  |  |
| (78) Gauge hole (Symmetrical)   | (84) Rear suspension support sub frame mounting hole (Symmetrical), front side |  |

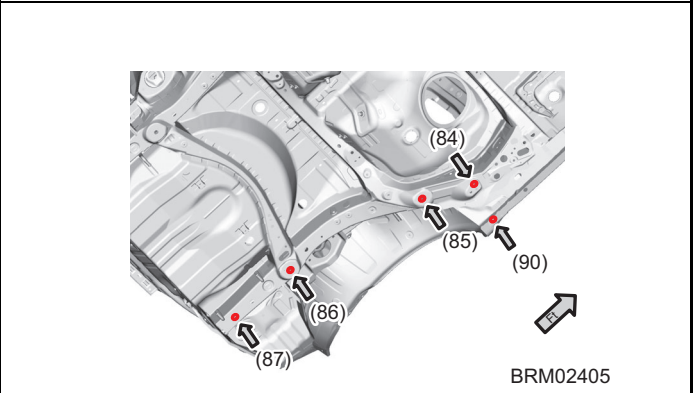
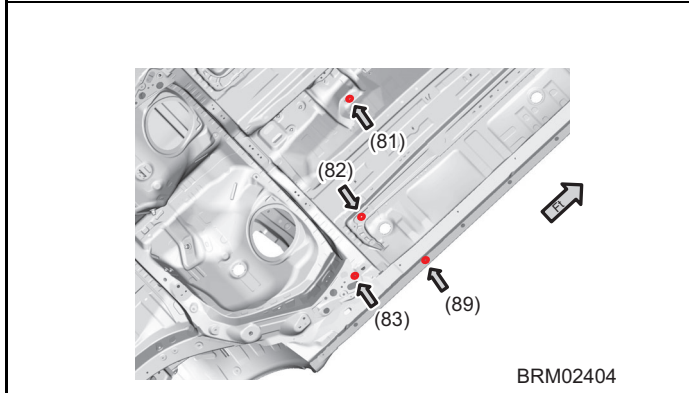
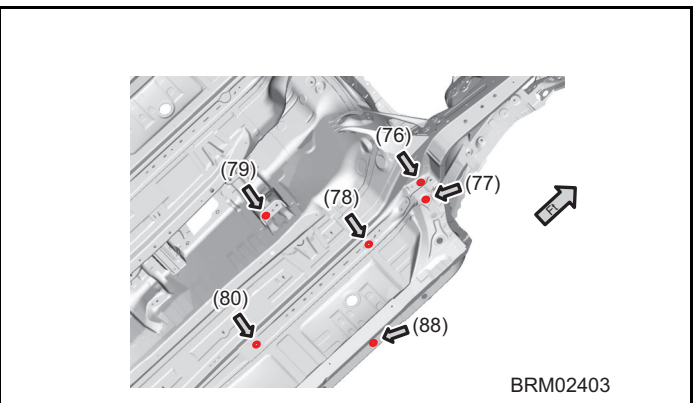
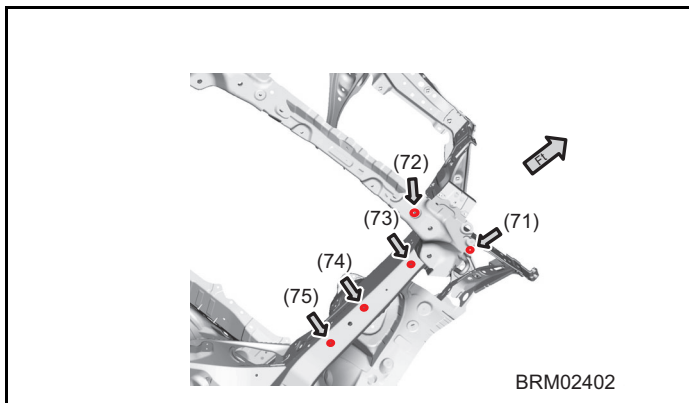
Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
Datum line — (71)	29 (1.14)	—
Datum line — (72)	0 (0.00)	—
Datum line — (73)	177 (6.97)	—
Datum line — (74)	177 (6.97)	—
Datum line — (75)	177 (6.97)	—
Datum line — (76)	18 (0.71)	—
Datum line — (77)	18 (0.71)	—
Datum line — (78)	-26 (-1.02)	—
Datum line — (79)R	77 (3.03)	—
Datum line — (79)L	77 (3.03)	—
Datum line — (80)	-26 (-1.02)	—
Datum line — (81)R	64 (2.52)	—
Datum line — (81)L	108 (4.25)	—
Datum line — (82)	-26 (-1.02)	—
Datum line — (83)	11 (0.43)	—
Datum line — (84)	13 (0.51)	—
Datum line — (85)	97 (3.82)	—
Datum line — (86)	212 (8.35)	—
Datum line — (87)	239 (9.41)	—
(71) — (72)	6 (0.24)	—
(71) — (73)	176 (6.93)	—
(73) — (74)	189 (7.44)	—
(73) — (76)	597 (23.50)	—
(74) — (75)	143 (5.63)	—
(76) — (77)	31 (1.22)	—
(76) — (78)	294 (11.57)	—
(78) — (79)R	205 (8.07)	—
(78) — (79)L	205 (8.07)	—

Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(78) — (80)	480 (18.90)	—
(79)R — (81)R	505 (19.88)	—
(79)R — (81)L	505 (19.88)	—
(79)L — (81)R	505 (19.88)	—
(79)L — (81)L	505 (19.88)	—
(80) — (82)	506 (19.92)	—
(82) — (83)	178 (7.01)	—
(83) — (84)	251 (9.88)	—
(83) — (85)	442 (17.40)	—
(85) — (86)	573 (22.56)	—
(86) — (87)	285 (11.22)	—
(77) — (88)	507 (19.96)	—
(88) — (89)	684 (26.93)	—
(89) — (90)	530 (20.87)	—
(71)R — (71)L	1,013 (39.88)	—
(72)R — (72)L	590 (23.23)	—
(73)R — (73)L	910 (35.83)	—
(74)R — (74)L	880 (34.65)	—
(75)R — (75)L	870 (34.25)	—
(76)R — (76)L	819 (32.24)	—
(77)R — (77)L	954 (37.56)	—
(78)R — (78)L	856 (33.70)	—
(79)R — (79)L	210 (8.27)	—
(80)R — (80)L	836 (32.91)	—
(81)R — (81)L	176 (6.93)	—
(82)R — (82)L	836 (32.91)	—
(83)R — (83)L	1,212 (47.72)	—
(84)R — (84)L	1,186 (46.69)	—

## Body Reference Points

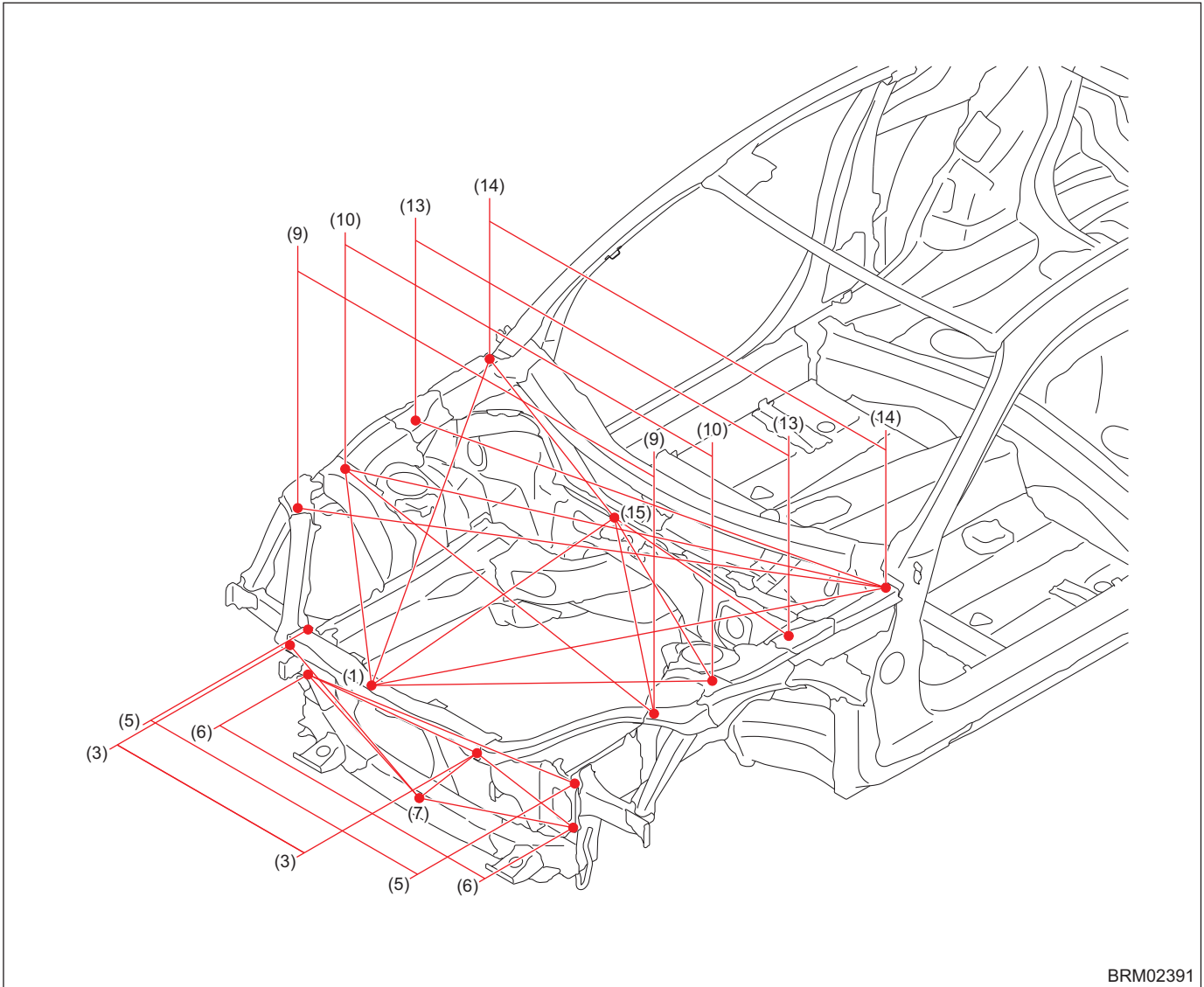
Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(85)R — (85)L	1,060 (41.73)	—
(86)R — (86)L	854 (33.62)	—
(87)R — (87)L	854 (33.62)	—
(88)R — (88)L	1,519 (59.80)	—
(89)R — (89)L	1,519 (59.80)	—
(90)R — (90)L	1,523 (59.96)	—
(71)R — (76)L	1,199 (47.20)	1,199 (47.20)
(71)L — (78)R	1,419 (55.87)	1,418 (55.83)
(72)R — (76)L	1,042 (41.02)	1,041 (40.98)
(72)L — (78)R	1,284 (50.55)	1,283 (50.51)
(73)R — (76)L	1,063 (41.85)	1,051 (41.38)
(73)L — (78)R	1,270 (50.00)	1,254 (49.37)
(74)R — (76)L	956 (37.64)	942 (37.09)
(74)L — (78)R	1,134 (44.65)	1,116 (43.94)
(75)R — (76)L	899 (35.39)	885 (34.84)
(75)L — (78)R	1,048 (41.26)	1,028 (40.47)
(76)L — (78)R	888 (34.96)	887 (34.92)

Measuring point	Datum dimensions mm (in)	Projected dimensions mm (in)
(77)R — (78)L	943 (37.13)	942 (37.09)
(77)R — (80)L	1,163 (45.79)	1,163 (45.79)
(78)R — (82)L	1,299 (51.14)	1,299 (51.14)
(78)L — (80)R	972 (38.27)	972 (38.27)
(78)L — (83)R	1,557 (61.30)	1,556 (61.26)
(80)R — (82)L	977 (38.46)	977 (38.46)
(80)L — (84)R	1,378 (54.25)	1,377 (54.21)
(82)L — (83)R	1,040 (40.94)	1,039 (40.91)
(82)L — (85)R	1,139 (44.84)	1,133 (44.61)
(82)L — (86)R	1,481 (58.31)	1,462 (57.56)
(83)R — (84)L	1,225 (48.23)	1,225 (48.23)
(84)R — (85)L	1,142 (44.96)	1,139 (44.84)
(84)L — (86)R	1,290 (50.79)	1,274 (50.16)
(85)R — (86)L	1,121 (44.13)	1,115 (43.90)
(85)L — (87)R	1,293 (50.91)	1,285 (50.59)
(86)L — (87)R	901 (35.47)	900 (35.43)



# Body Reference Points

## 2. FRONT 1



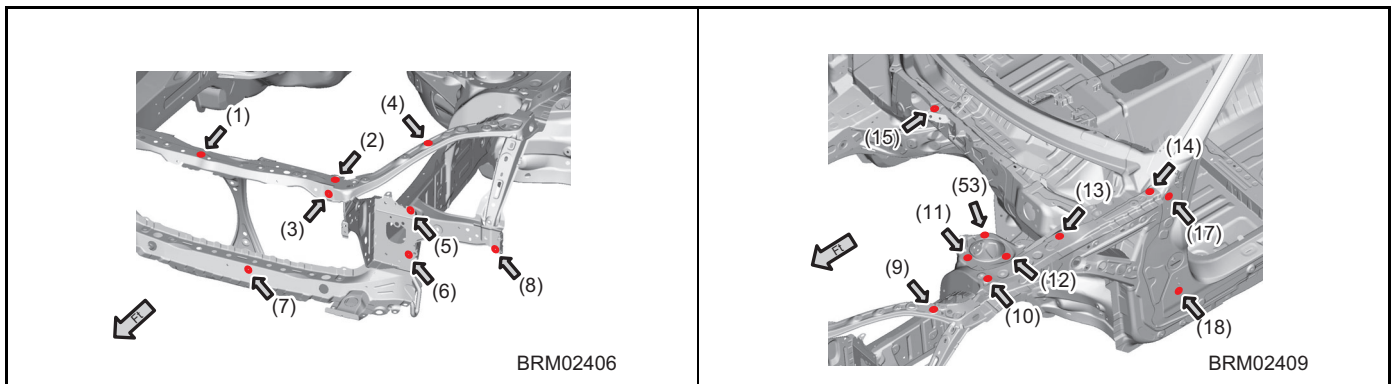
- |   |  |  |
|---|--|--|
| (1) Front bumper mounting hole (Right side)                   | (7) Stay bumper lower center mounting hole (Symmetrical) | (14) Hood hinge mounting hole (Symmetrical), rear side |
| (3) Frame upper side mounting hole (Symmetrical)              | (9) Headlight mounting hole (Symmetrical)                | (15) Cowl panel mounting hole (Body center)            |
| (5) Front bumper beam mounting hole (Symmetrical), upper side | (10) Extension fender mounting hole (Symmetrical)        |  |
| (6) Front bumper beam mounting hole (Symmetrical), lower side | (13) Extension fender mounting hole (Symmetrical)        |  |

## Body Reference Points

Measuring point	Datum dimensions mm (in)
(1)R — (10)R	876 (34.49)
(1)R — (10)L	933 (36.73)
(1)R — (14)R	1,380 (54.33)
(1)R — (14)L	1,420 (55.91)
(1)R — (15)	900 (35.43)
(3)R — (3)L	714 (28.11)
(3)R — (7)R	563 (22.17)
(3)L — (6)R	933 (36.73)
(3)L — (6)L	385 (15.16)
(3)L — (7)R	602 (23.70)
(5)R — (5)L	1,018 (40.08)
(5)L — (6)R	1,025 (40.35)
(6)R — (6)L	1,012 (39.84)
(6)R — (7)R	499 (19.65)

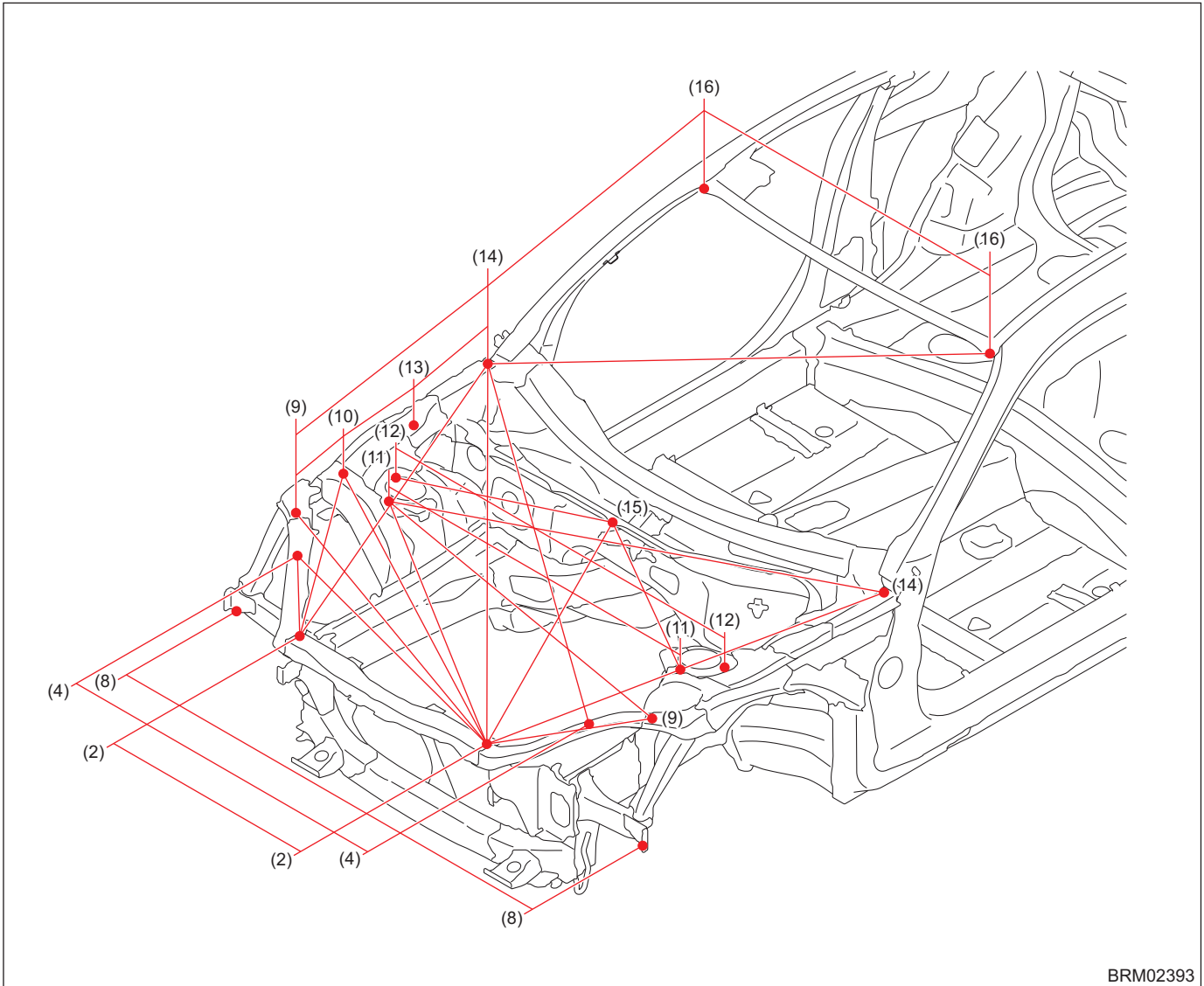
Measuring point	Datum dimensions mm (in)
(6)L — (7)R	560 (22.05)
(9)R — (9)L	1,360 (53.54)
(9)R — (14)L	1,649 (64.92)
(9)L — (10)R	1,395 (54.92)
(9)L — (15)	862 (33.94)
(10)R — (10)L	1,401 (55.16)
(10)R — (14)L	1,578 (62.13)
(10)L — (15)	773 (30.43)
(13)R — (13)L	1,424 (56.06)
(13)R — (14)L	1,504 (59.21)
(13)L — (15)	714 (28.11)
(14)R — (14)L	1,512 (59.53)
(14)R — (15)	806 (31.73)

- (1) indicates a right side part; (15) indicates a body center part; 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



BRM02393

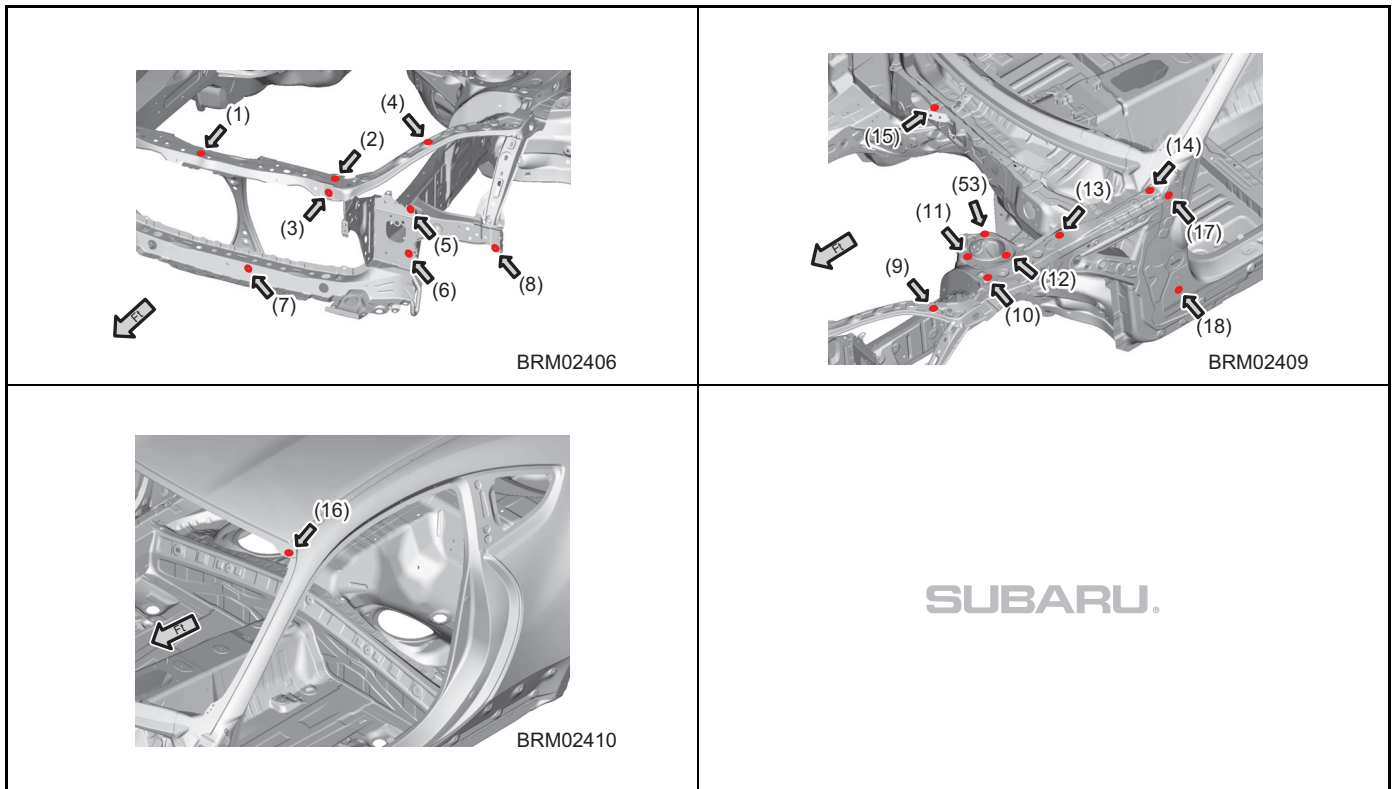
- |  |   |  |
|--|---|--|
| (2) Frame upper side mounting hole (Symmetrical) | (10) Extension fender mounting hole (Symmetrical)               | (14) Hood hinge mounting hole (Symmetrical), rear side     |
| (4) Opener cable mounting hole (Symmetrical)     | (11) Gauge hole (Symmetrical)                                   | (15) Cowl panel mounting hole (Body center)                |
| (8) Gauge hole (Symmetrical)                     | (12) Front suspension mounting hole (Symmetrical), rear outside | (16) Front glass installation reference hole (Symmetrical) |
| (9) Headlight mounting hole (Symmetrical)        | (13) Extension fender mounting hole (Symmetrical)               |  |

## Body Reference Points

Measuring point	Datum dimensions mm (in)
(2)R — (2)L	714 (28.11)
(2)R — (4)R	285 (11.22)
(2)R — (10)R	625 (24.61)
(2)R — (14)R	1,194 (47.01)
(2)L — (4)R	936 (36.85)
(2)L — (9)R	1,086 (42.76)
(2)L — (10)R	1,179 (46.42)
(2)L — (11)R	1,063 (41.85)
(2)L — (14)R	1,583 (62.32)
(2)L — (15)	920 (36.22)
(2)L — (9)L	456 (17.95)
(2)L — (11)L	580 (22.83)
(4)R — (4)L	1,113 (43.82)
(4)L — (14)R	1,608 (63.31)
(8)R — (8)L	1,550 (61.02)

Measuring point	Datum dimensions mm (in)
(9)R — (10)R	204 (8.03)
(9)R — (14)R	813 (32.01)
(9)L — (11)R	1,257 (49.49)
(10)R — (13)R	281 (11.06)
(11)R — (11)L	1,112 (43.78)
(11)R — (14)L	1,435 (56.50)
(11)L — (14)L	615 (24.21)
(11)L — (15)	634 (24.96)
(12)R — (12)L	1,254 (49.37)
(12)R — (15)	662 (26.06)
(13)R — (14)R	330 (12.99)
(14)R — (16)R	751 (29.57)
(14)R — (16)L	1,488 (58.58)
(16)R — (16)L	1,091 (42.95)

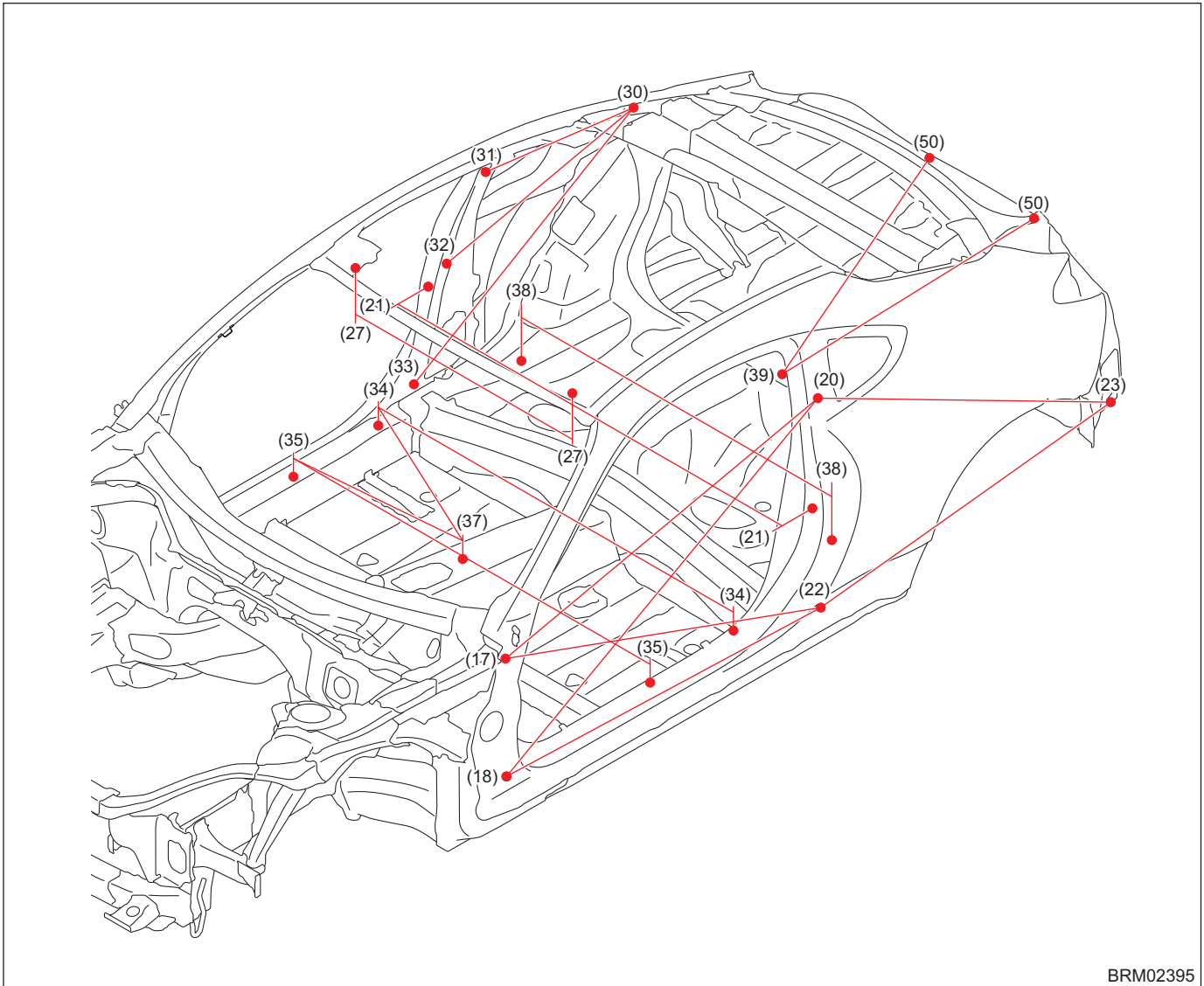
- Reference point (15) is the center of the vehicle body, while other reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.





# Body Reference Points

## 4. INSIDE 1



BRM02395

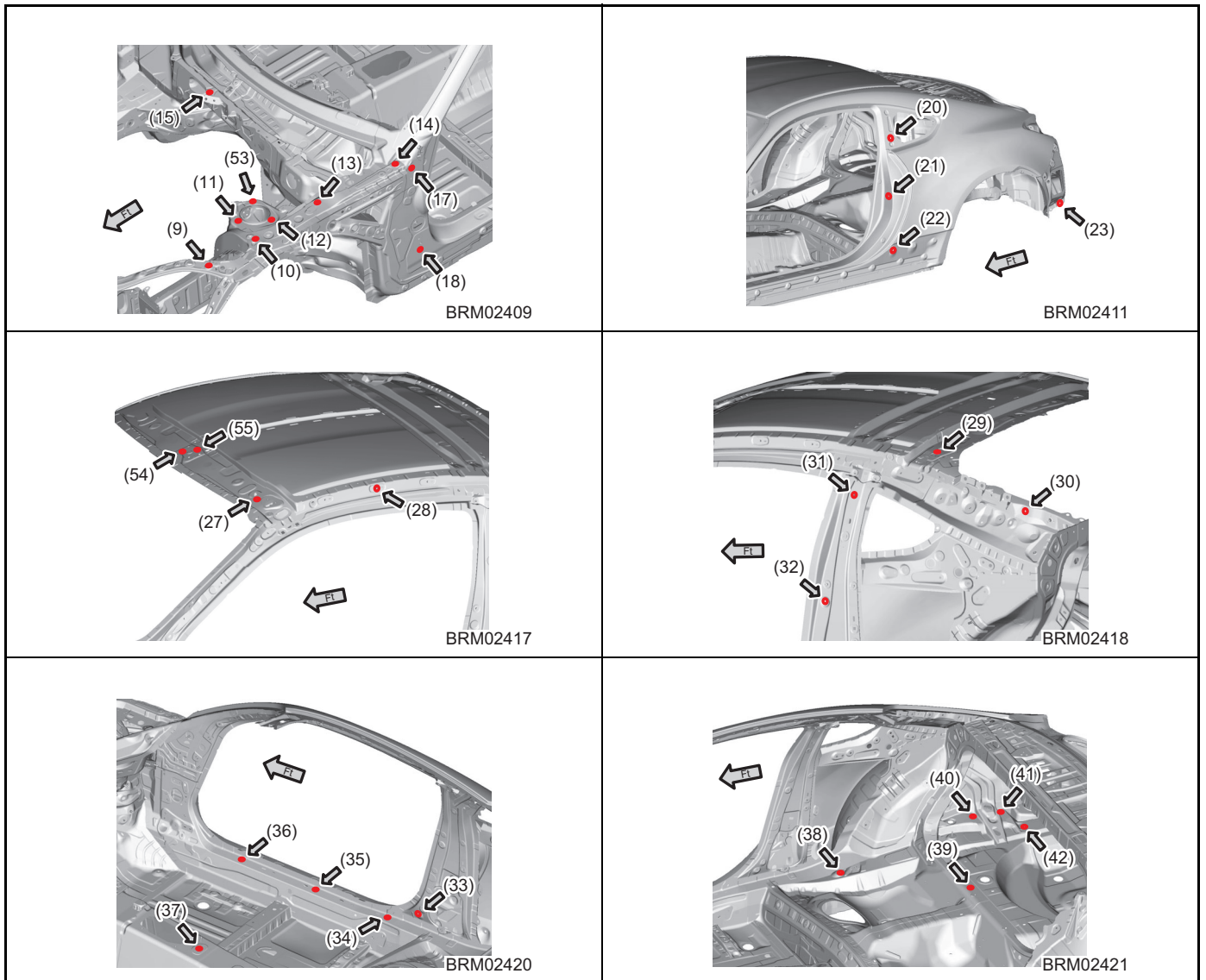
(17) Door hinge top mounting hole (Symmetrical), upper side	(27) Gauge hole (Symmetrical)	(35) Harness mounting hole (Symmetrical)
(18) Door hinge bottom mounting hole (Symmetrical), lower side	(30) C pillar trim rear mounting hole (Symmetrical)	(37) Hand brake mounting hole (Body center), front side
(20) Gauge hole (Symmetrical)	(31) Belt anchor mounting hole (Symmetrical)	(38) Gauge hole (Symmetrical)
(21) Door striker mounting hole (Symmetrical), upper side	(32) Trim mounting hole (Symmetrical)	(39) Gauge hole (Symmetrical)
(22) Side spoiler mounting hole (Symmetrical), front side	(33) Trim mounting hole (Symmetrical)	(50) Gauge hole (Symmetrical)
(23) Cover side lower mounting hole (Symmetrical), rear side	(34) Harness mounting hole (Symmetrical)	

## Body Reference Points

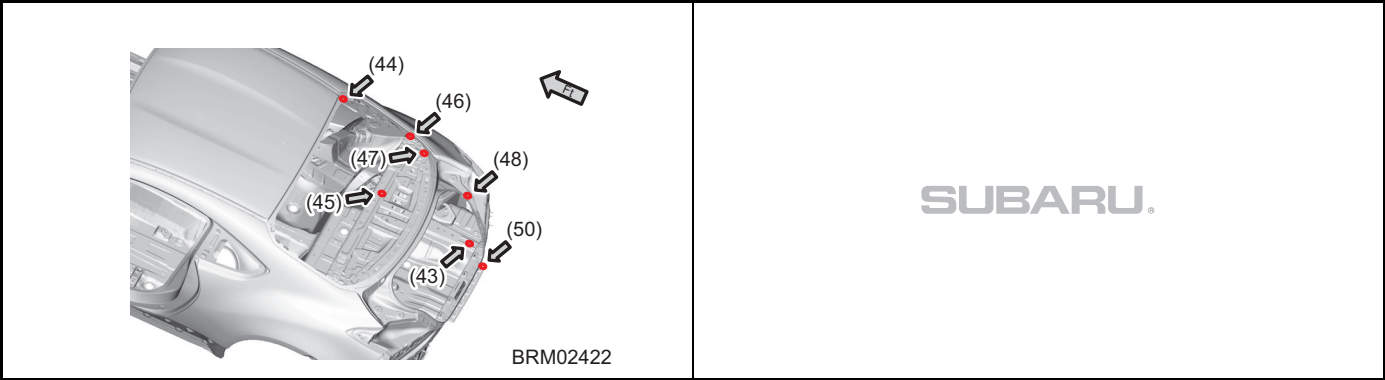
Measuring point	Datum dimensions mm (in)
(17)L — (20)L	1,337 (52.64)
(17)L — (22)L	1,286 (50.63)
(18)L — (20)L	1,463 (57.60)
(18)L — (22)L	1,229 (48.39)
(20)L — (23)L	1,329 (52.32)
(21)R — (21)L	1,539 (60.59)
(22)L — (23)L	1,287 (50.67)
(27)R — (27)L	869 (34.21)
(30)R — (31)R	564 (22.20)

Measuring point	Datum dimensions mm (in)
(30)R — (32)R	710 (27.95)
(30)R — (33)R	1,001 (39.41)
(34)R — (34)L	1,423 (56.02)
(34)R — (37)	807 (31.77)
(35)R — (35)L	1,429 (56.26)
(35)R — (37)	721 (28.39)
(38)R — (38)L	1,244 (48.98)
(39)L — (50)R	962 (37.87)
(39)L — (50)L	918 (36.14)

- Reference point (37) 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.

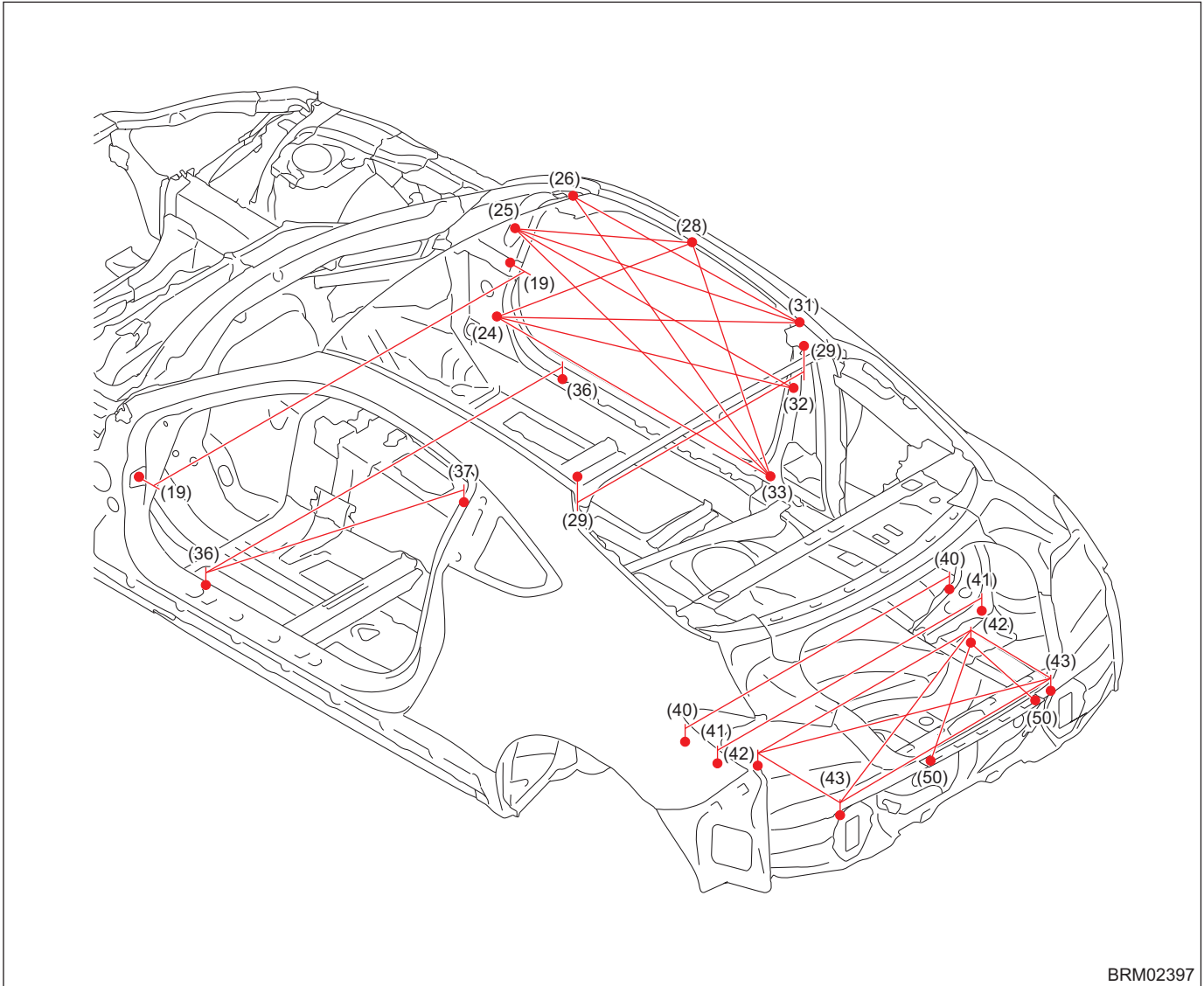


# Body Reference Points



# Body Reference Points

## 5. INSIDE 2



BRM02397

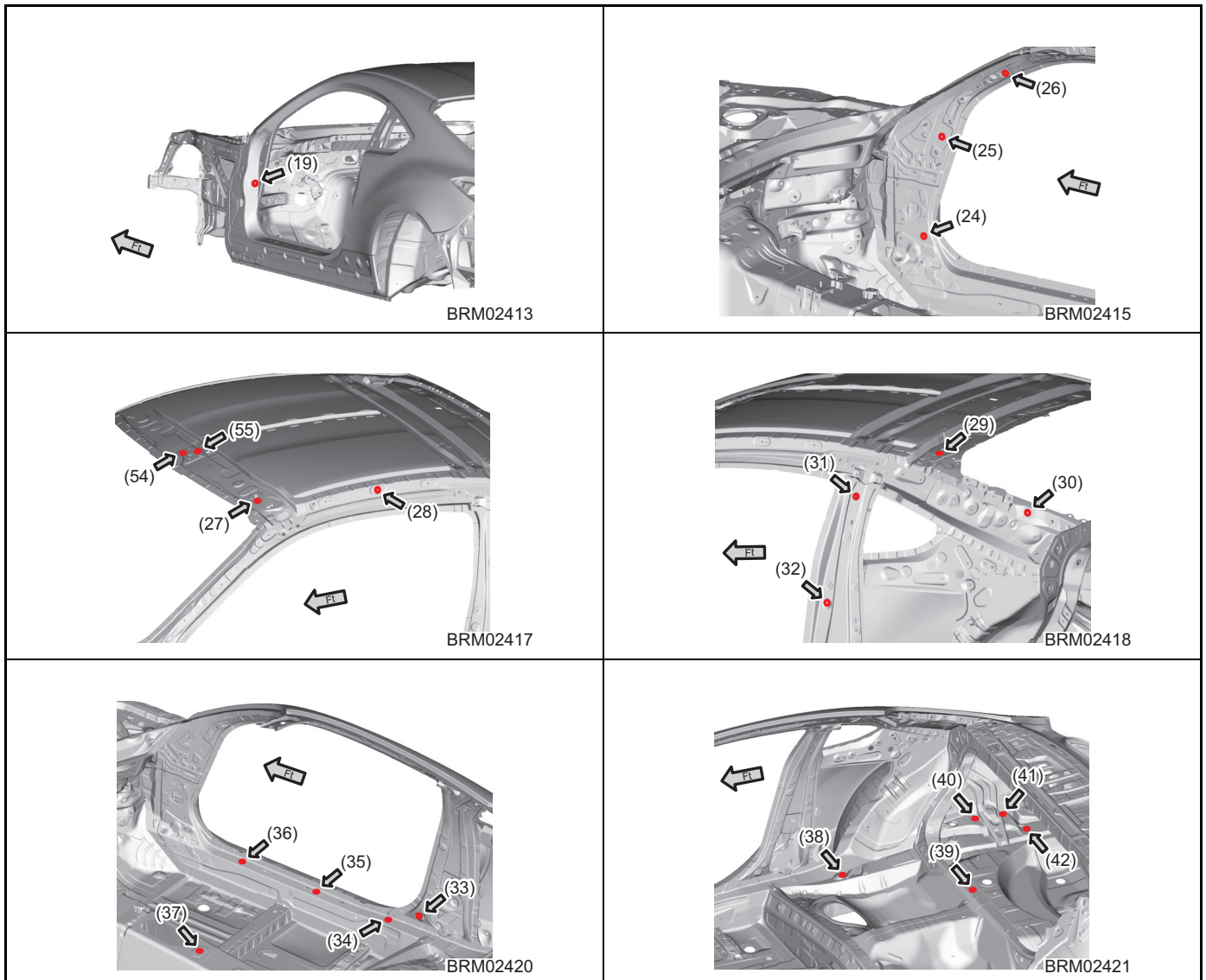
- |  |  |   |
|--|--|---|
| (19) Door checker mounting hole (Symmetrical)                | (31) Belt anchor mounting hole (Symmetrical)                 | (41) Rear suspension mounting hole (Symmetrical), rear side |
| (24) Gusset toe board inner side mounting hole (Symmetrical) | (32) Trim mounting hole (Symmetrical)                        | (42) Gauge hole (Symmetrical)                               |
| (25) Gauge hole (Symmetrical)                                | (33) Trim mounting hole (Symmetrical)                        | (43R) Gauge hole (Right side)                               |
| (26) Curtain airbag mounting hole (Symmetrical)              | (36) Harness mounting hole (Symmetrical)                     | (43L) Gauge hole (Left side)                                |
| (28) Curtain airbag mounting hole (Symmetrical)              | (37) Hand brake mounting hole (Body center), front side      | (50) Gauge hole (Symmetrical)                               |
| (29) Gauge hole (Symmetrical)                                | (40) Rear suspension mounting hole (Symmetrical), front side |   |

## Body Reference Points

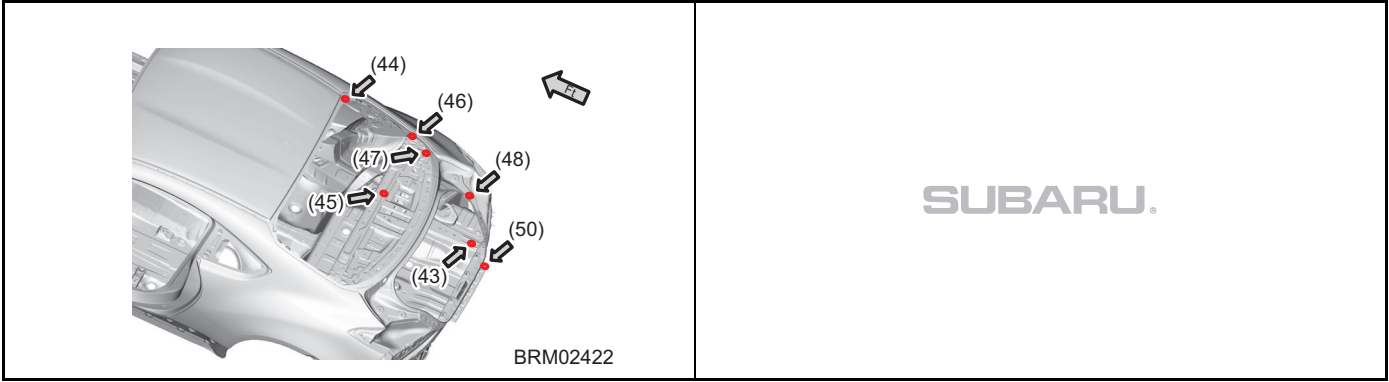
Measuring point	Datum dimensions mm (in)
(19)R — (19)L	1,487 (58.54)
(24)R — (28)R	1,252 (49.29)
(24)R — (31)R	1,460 (57.48)
(24)R — (32)R	1,258 (49.53)
(24)R — (33)R	1,093 (43.03)
(25)R — (28)R	1,000 (39.37)
(25)R — (31)R	1,269 (49.96)
(25)R — (32)R	1,133 (44.61)
(25)R — (33)R	1,080 (42.52)
(26)R — (31)R	944 (37.17)
(26)R — (33)R	973 (38.31)
(28)R — (33)R	848 (33.39)
(29)R — (29)L	908 (35.75)

Measuring point	Datum dimensions mm (in)
(36)R — (36)L	1,429 (56.26)
(36)L — (37)	788 (31.02)
(40)R — (40)L	1,059 (41.69)
(41)R — (41)L	1,059 (41.69)
(42)R — (42)L	854 (33.62)
(42)R — (43)R	320 (12.60)
(42)R — (43)L	916 (36.06)
(42)R — (50)R	543 (21.38)
(42)R — (50)L	808 (31.81)
(42)L — (43)R	912 (35.91)
(42)L — (43)L	330 (12.99)
(43)R — (43)L	854 (33.62)

- (37) indicates a body center part; (43) indicates left-right asymmetry; while all other reference points indicate left-right symmetry.
- The dimensions are the actual dimensions between the reference points.

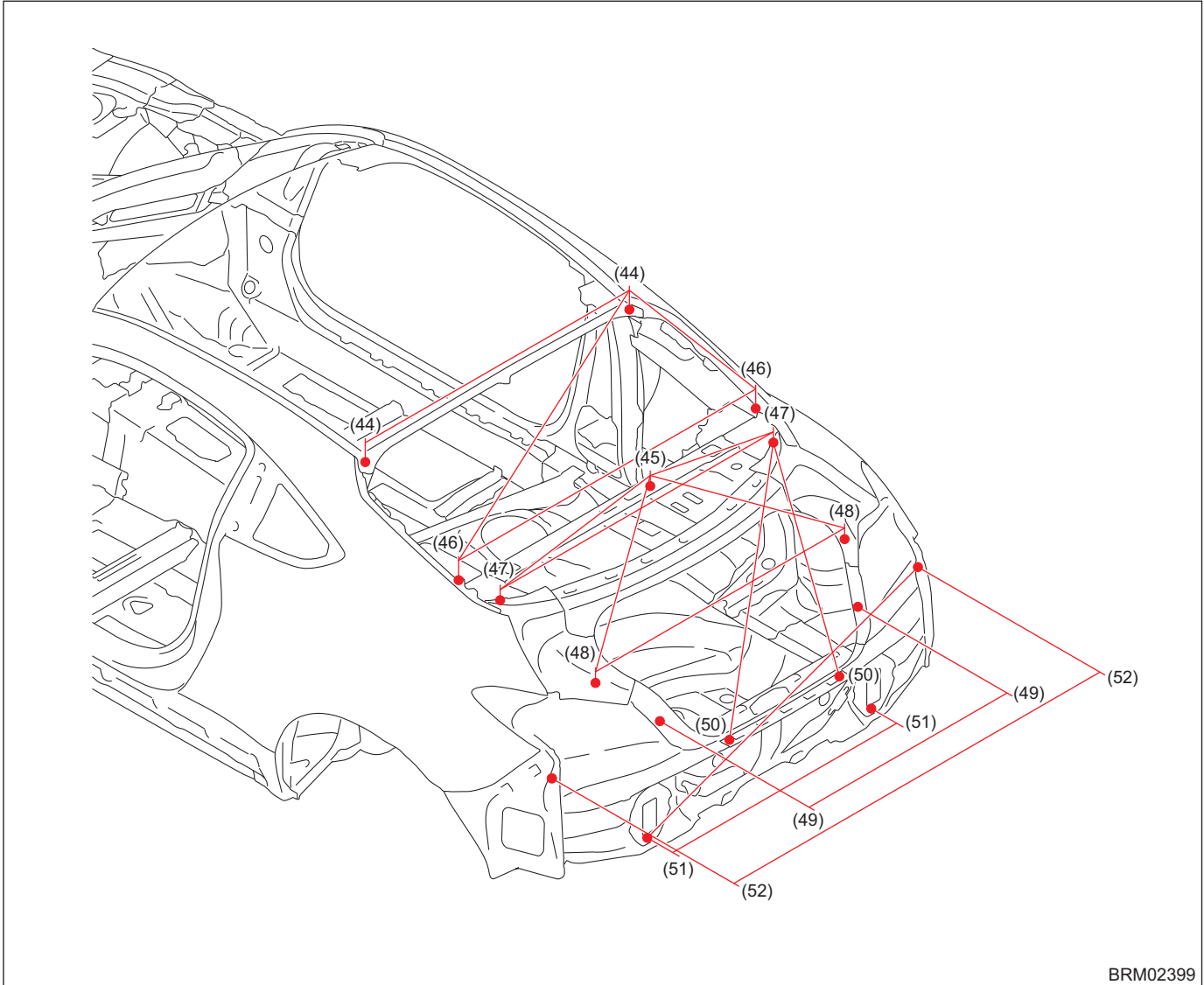


# Body Reference Points



# Body Reference Points

## 6. INSIDE & REAR



BRM02399

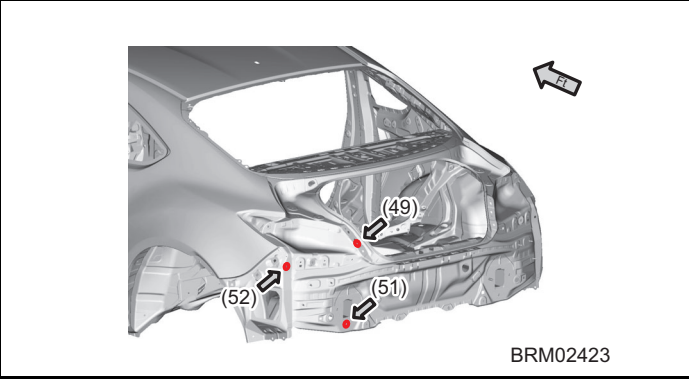
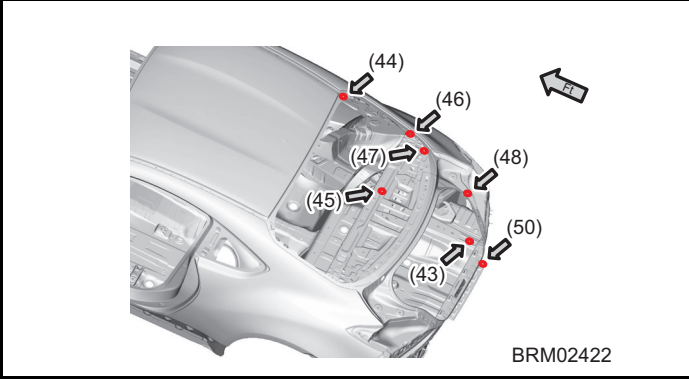
- |   |   |   |
|---|---|---|
| (44) Rear glass installation reference hole (Symmetrical) | (47) Gauge hole (Symmetrical)                                       | (50) Gauge hole (Symmetrical)                                 |
| (45) Rear shelf mounting hole (Symmetrical)               | (48) Trunk hinge mounting hole (Symmetrical), rear side             | (51) Rear bumper beam mounting hole (Symmetrical), lower side |
| (46) Gauge hole (Symmetrical)                             | (49) Rear combination light mounting hole (Symmetrical), lower side | (52) Gauge hole (Symmetrical)                                 |

Measuring point	Datum dimensions mm (in)
(44)R — (44)L	1,007 (39.65)
(44)R — (46)R	449 (17.68)
(44)R — (46)L	1,159 (45.63)
(45)R — (47)R	384 (15.12)
(45)R — (47)L	678 (26.69)
(45)R — (48)R	544 (21.42)
(45)R — (48)L	762 (30.00)
(46)R — (46)L	1,134 (44.65)

Measuring point	Datum dimensions mm (in)
(47)R — (47)L	1,042 (41.02)
(47)R — (50)R	725 (28.54)
(47)R — (50)L	981 (38.62)
(48)R — (48)L	950 (37.40)
(49)R — (49)L	755 (29.72)
(51)R — (51)L	854 (33.62)
(51)L — (52)R	1,164 (45.83)
(52)R — (52)L	1,396 (54.96)

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

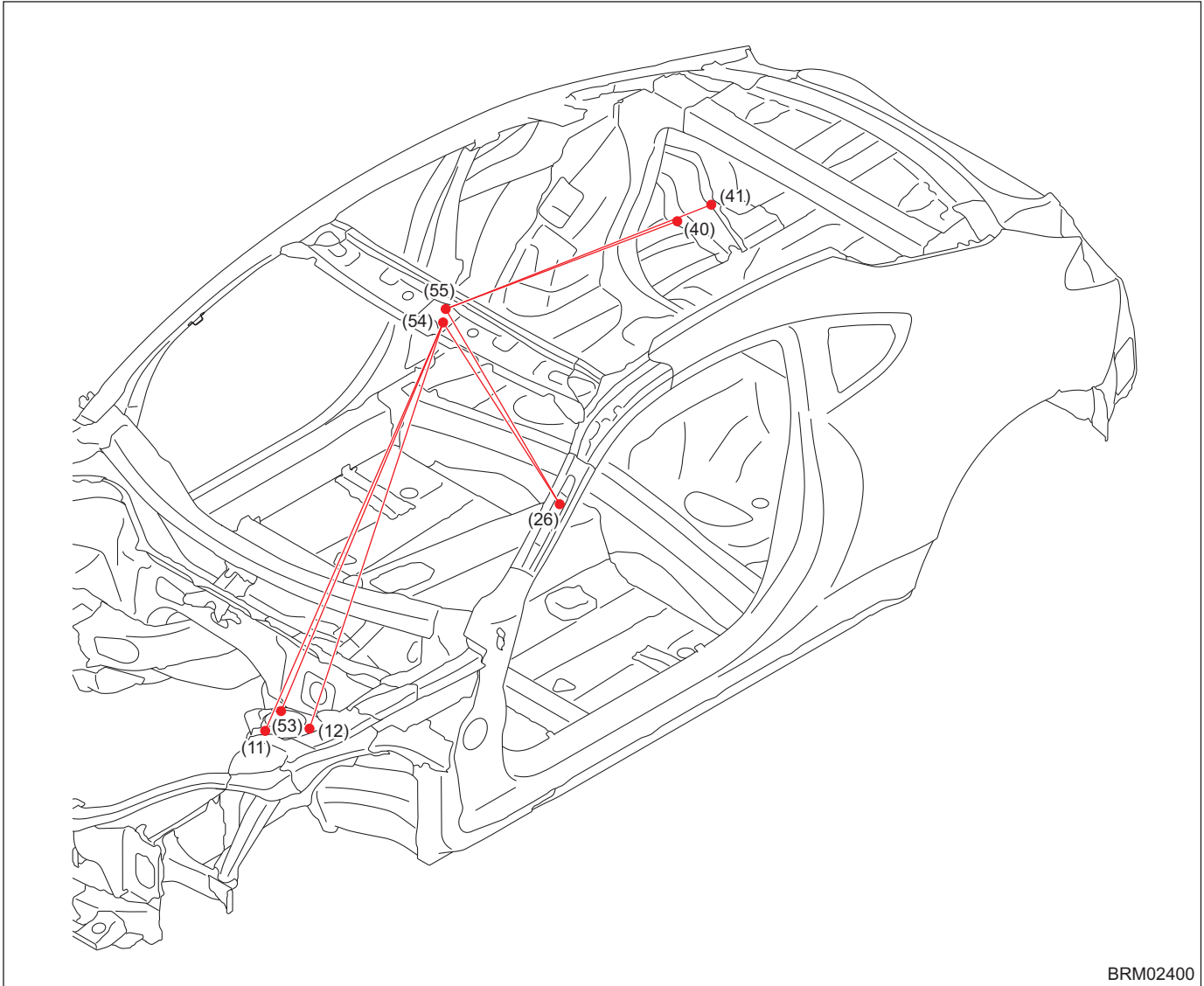
# Body Reference Points





# Body Reference Points

## 7. Front roof rail (Camera plate)



BRM02400

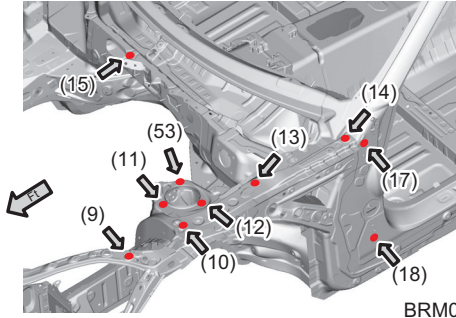
- |   |  |  |
|---|--|--|
| (11) Gauge hole (Symmetrical)                                   | (40) Rear suspension mounting hole (Symmetrical), front side   | (54) EyeSight camera mounting hole (Symmetrical), front side |
| (12) Front suspension mounting hole (Symmetrical), rear outside | (41) Rear suspension mounting hole (Symmetrical), rear side    | (55) EyeSight camera mounting hole (Body center), rear side  |
| (26) Curtain airbag mounting hole (Symmetrical)                 | (53) Front suspension mounting hole (Symmetrical), rear inside |  |

Measuring point	Datum dimensions mm (in)
(11)L — (54)L	1,403 (55.24)
(12)L — (54)L	1,352 (53.23)
(53)L — (54)L	1,296 (51.02)
(26)L — (54)L	687 (27.05)

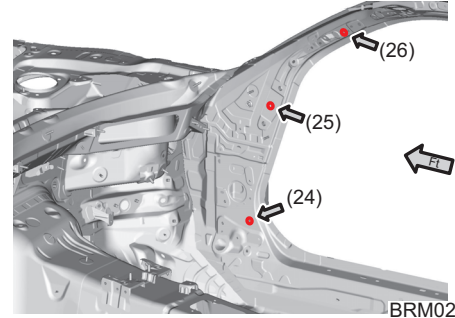
Measuring point	Datum dimensions mm (in)
(26)L — (55)	728 (28.66)
(40)R — (55)	1,656 (65.20)
(41)R — (55)	1,772 (69.76)

- Reference point (55) 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.

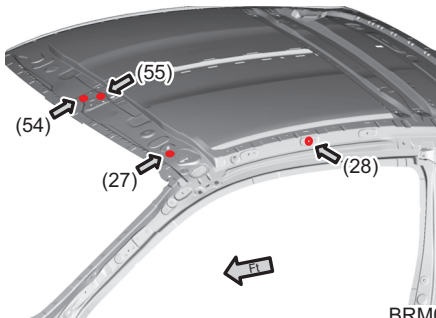
# Body Reference Points



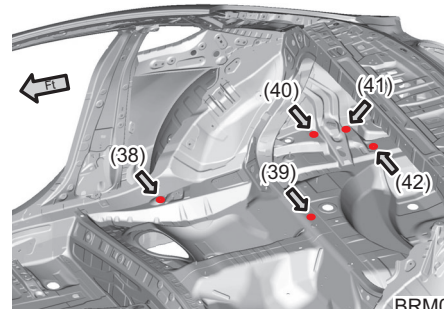
BRM02409



BRM02415



BRM02417



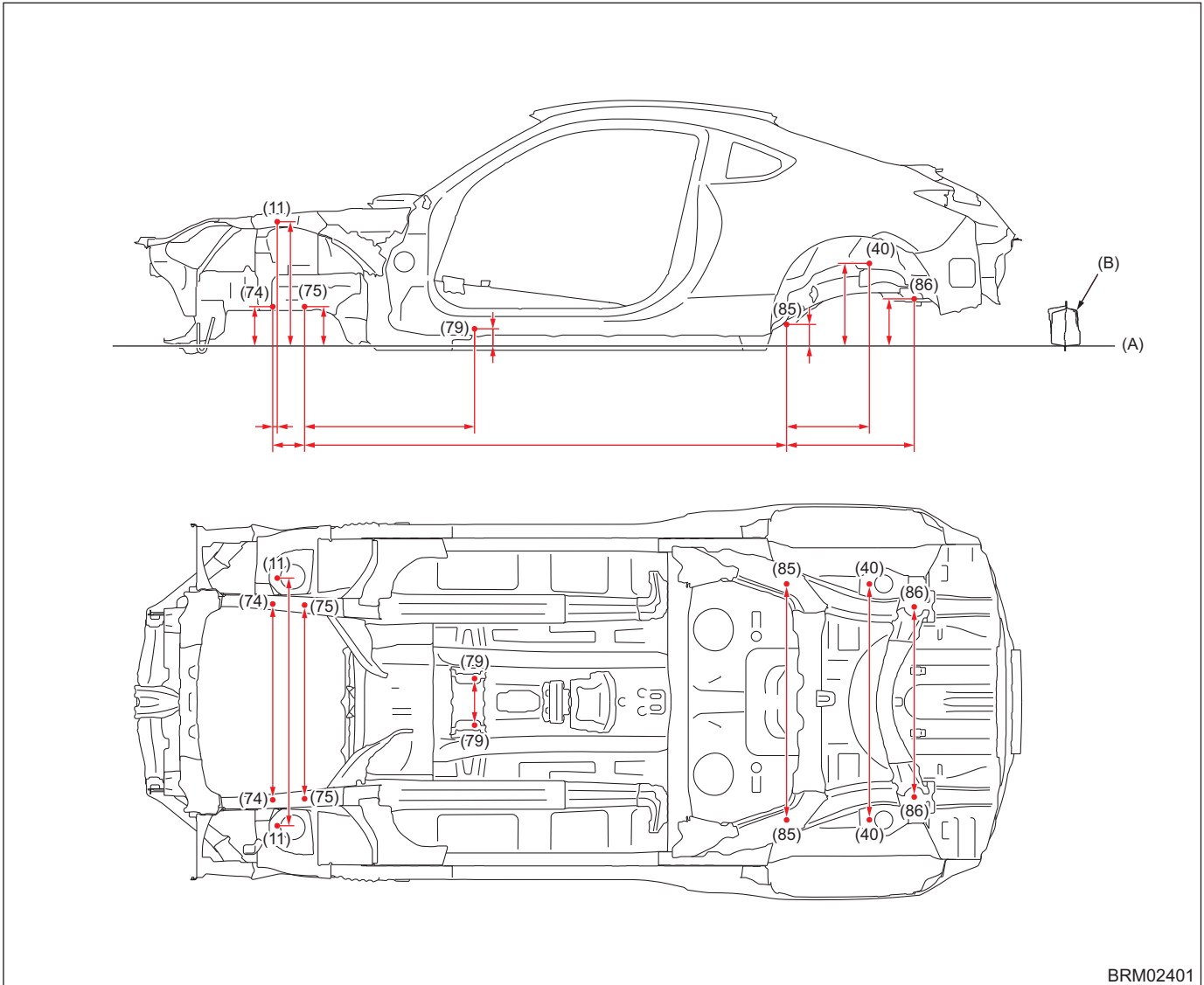
BRM02421

# Measurement for Combined Parts

## 7. Measurement for Combined Parts

### A: DIMENSIONS

#### 1. SUSPENSION MOUNT & ENGINE MOUNT



BRM02401

- 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).
- Reference point (79) is left-right asymmetrical, while other reference points are left-right symmetrical.

(A) Datum line

(B) Side sill outer panel

(11) Gauge hole (Symmetrical)

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

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

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

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

(79)R Transmission crossmember mounting hole (Right side)

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

(79)L Transmission crossmember mounting hole (Left side)

## Measurement for Combined Parts

Measuring point	Datum dimensions mm (in)
Datum line — (11)	558 (21.97)
Datum line — (40)	371 (14.61)
Datum line — (74)	177 (6.97)
Datum line — (75)	177 (6.97)
Datum line — (79)R	77 (3.03)
Datum line — (79)L	77 (3.03)
Datum line — (85)	97 (3.82)
Datum line — (86)	212 (8.35)
(11) — (74)	20 (0.79)
(40) — (85)	371 (14.61)
(74) — (75)	143 (5.63)

Measuring point	Datum dimensions mm (in)
(75) — (79)R	763 (30.04)
(75) — (79)L	763 (30.04)
(75) — (85)	2,164 (85.20)
(85) — (86)	573 (22.56)
(11) — (11)	1,112 (43.78)
(40) — (40)	1,059 (41.69)
(74) — (74)	880 (34.65)
(75) — (75)	870 (34.25)
(79) — (79)	210 (8.27)
(85) — (85)	1,060 (41.73)
(86) — (86)	854 (33.62)

**CAUTION:**

For the reference point (11), refer to the figure "FRONT 2, DIMENSIONS, Body Reference Points" on page 38.

For the reference point (40), refer to the figure "INSIDE 2, DIMENSIONS, Body Reference Points" on page 43.

Except the reference points (11) and (40), refer to the figure "LOWER SURFACE, DIMENSIONS, Body Reference Points" on page 33.

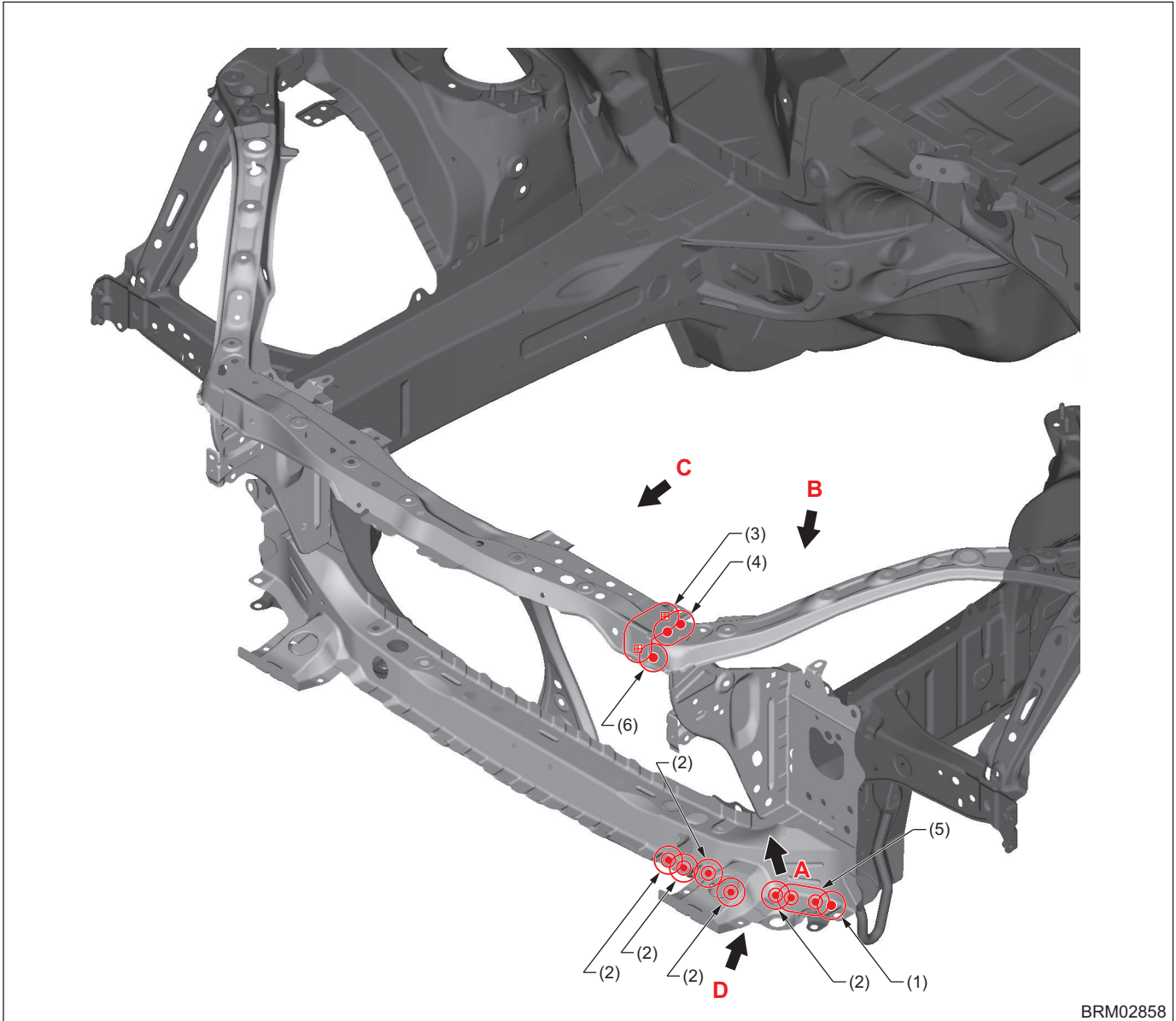
# Panel Replacement

## 8. Panel Replacement

### 8-1. Radiator Panel (Total replacement)

#### A: REMOVAL

##### • Overall view



BRM02858

(1) 1 point (Top · 1)

(3) 2 points (Bolt)

(5) 2 points  
(LH: Three plates, Top · 2)  
(RH: Two plates, Top · 1)

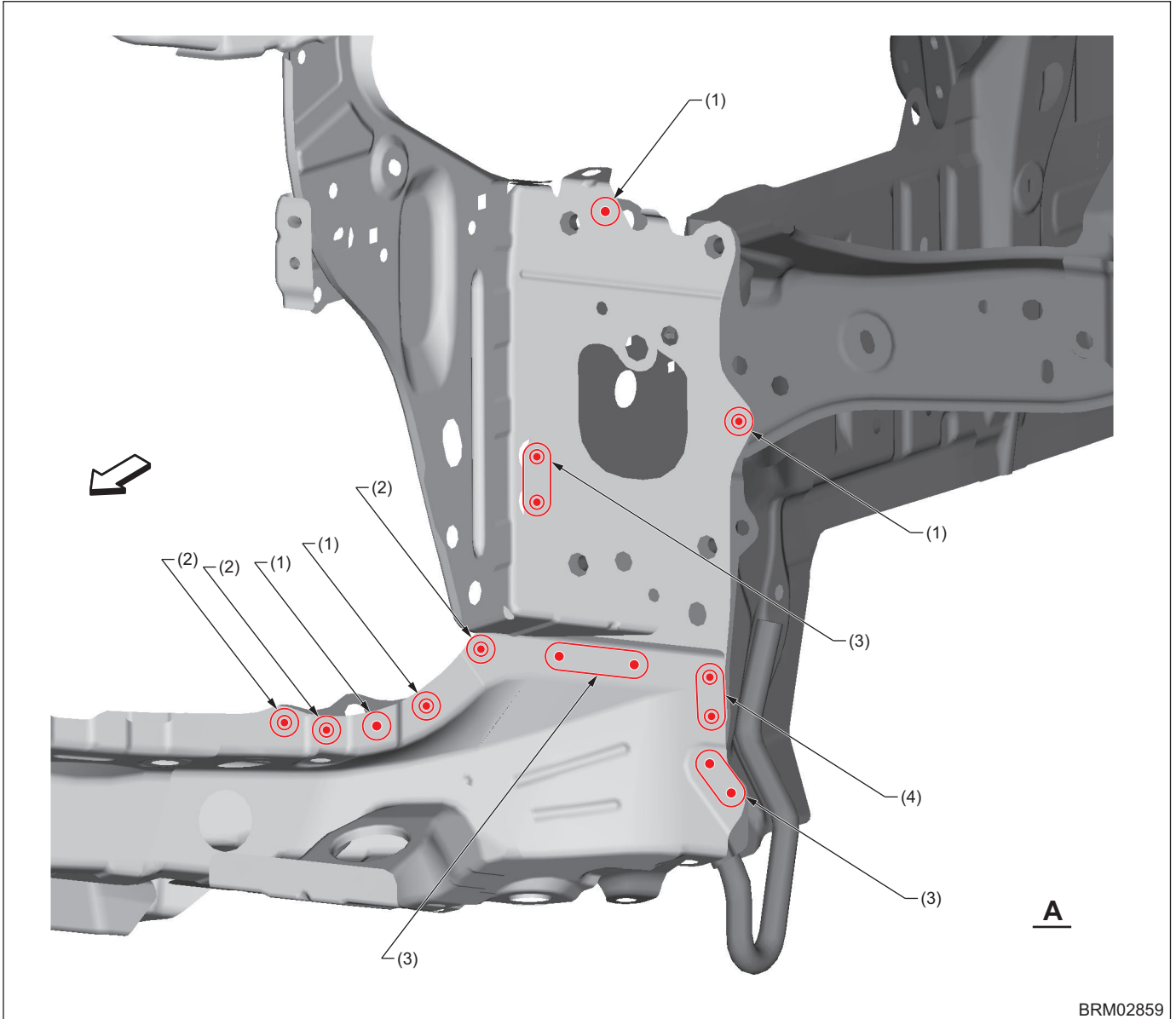
(2) 1 point (Top · 2)

(4) 2 points (Top · 1)

(6) 1 point (Outside · 1)

# Panel Replacement

## • View A



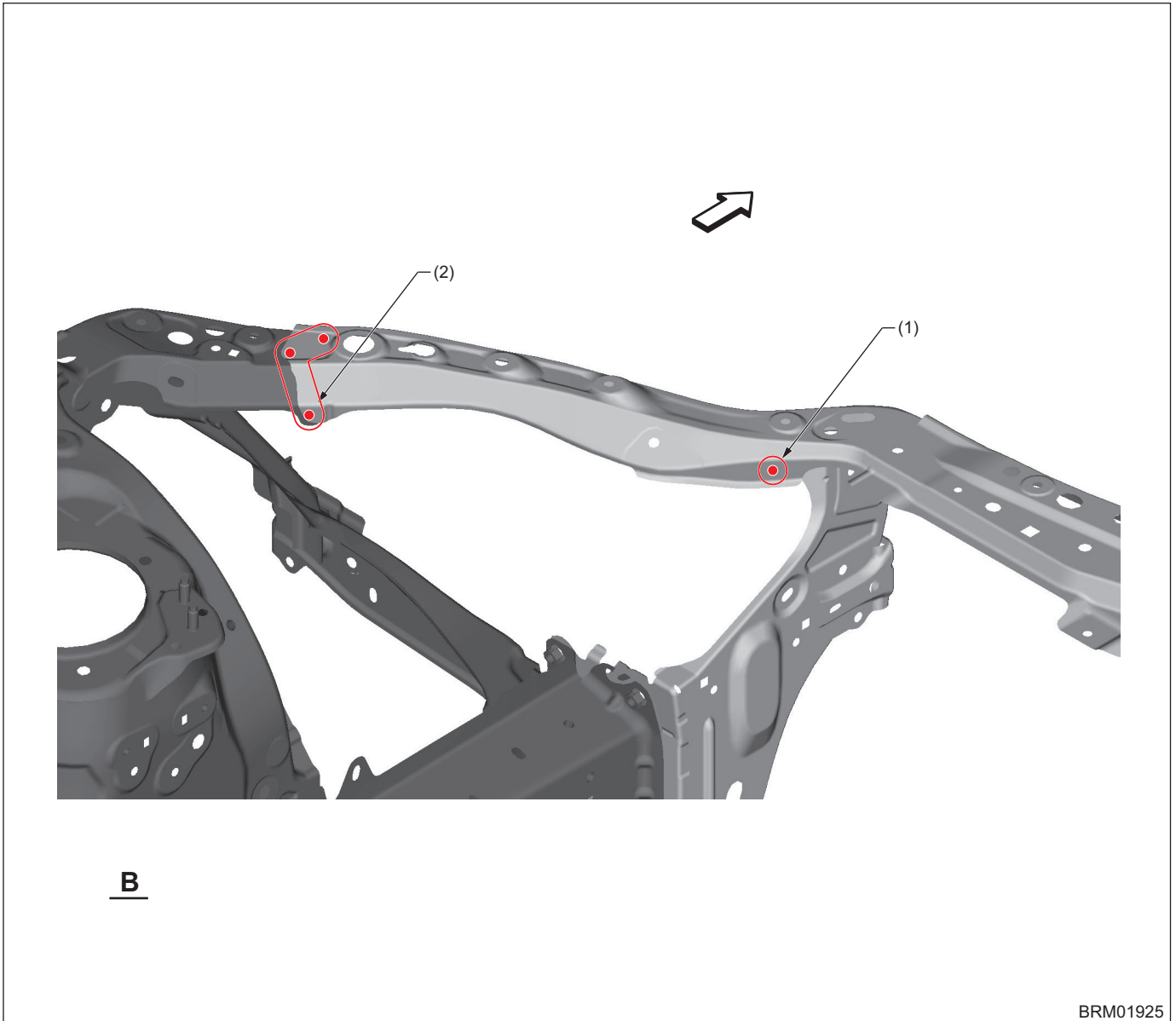
(1) 1 point (Outside · 1)  
(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)

(4) 2 points (Outside · 2)

# Panel Replacement

## • View B

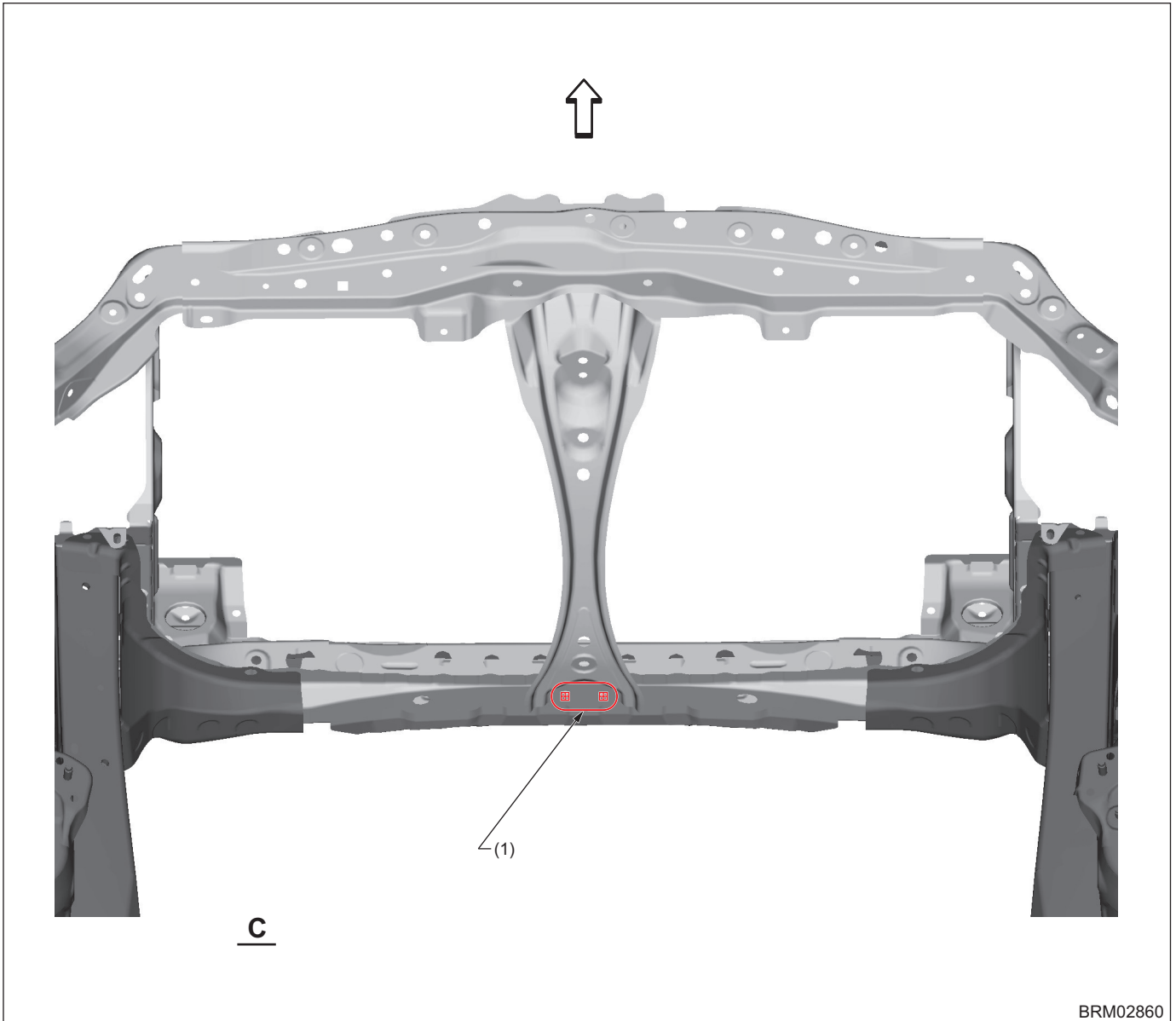


(1) 1 point (Top · 1)

(2) 3 points (Top · 1)

# Panel Replacement

## • View C

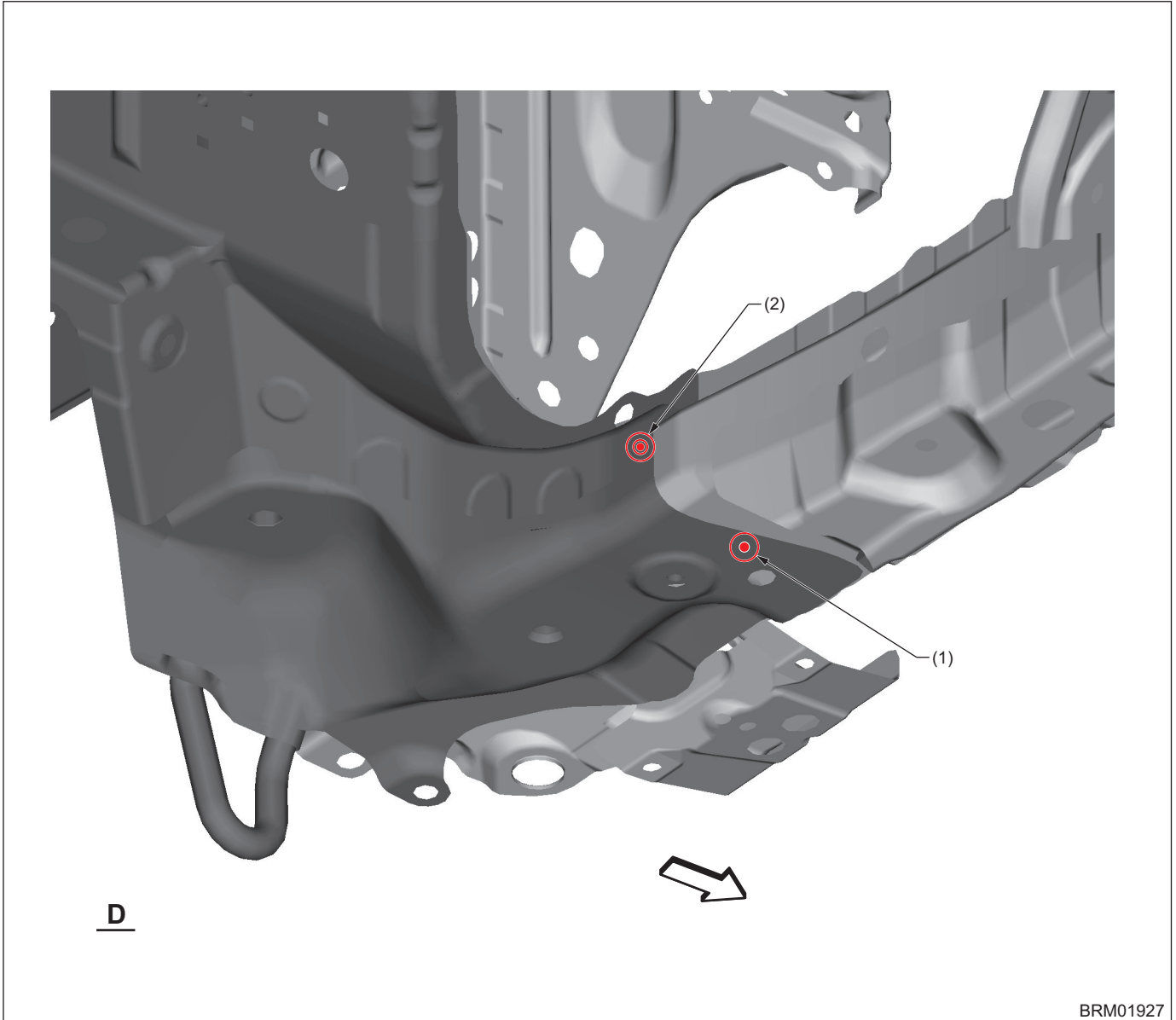


(1) 2 points (Bolt)



# Panel Replacement

## • View D



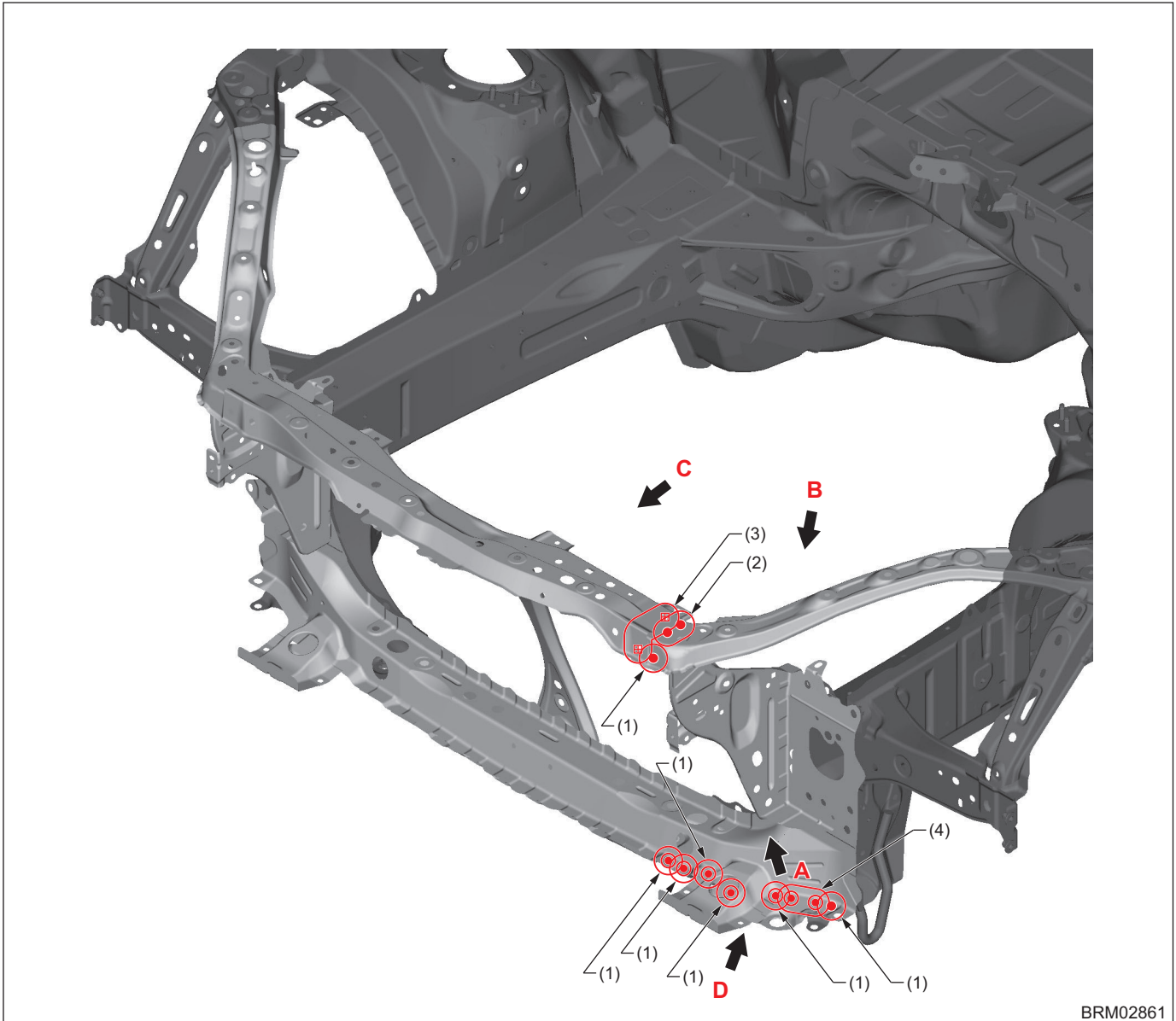
(1) 1 point (Top · 1)

(2) 1 point (Outside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02861

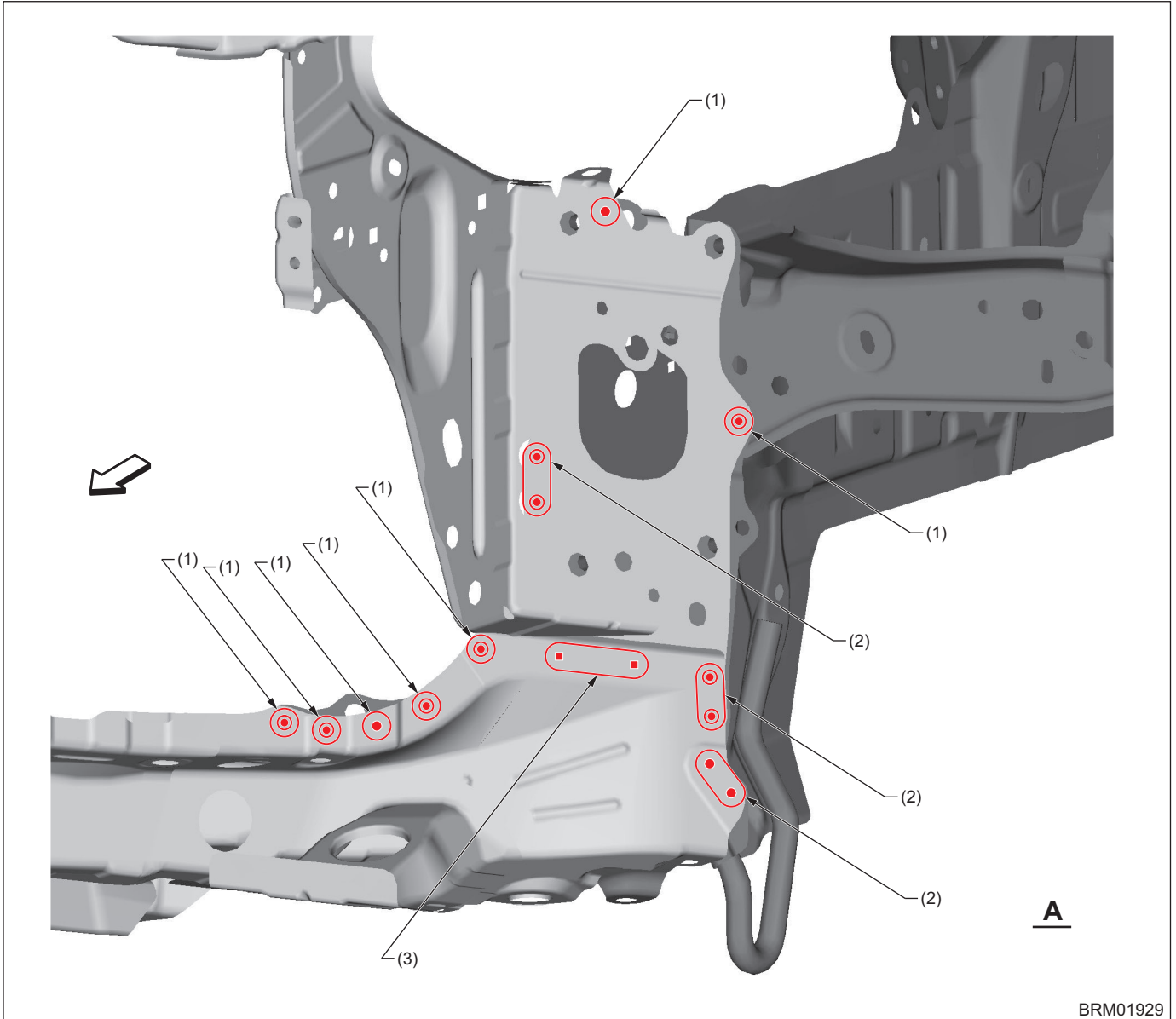
- (1) 1 point
- (2) 2 points

- (3) 2 points (Bolt)

- (4) 2 points  
(LH: Three plates)  
(RH: Two plates)

# Panel Replacement

## • View A



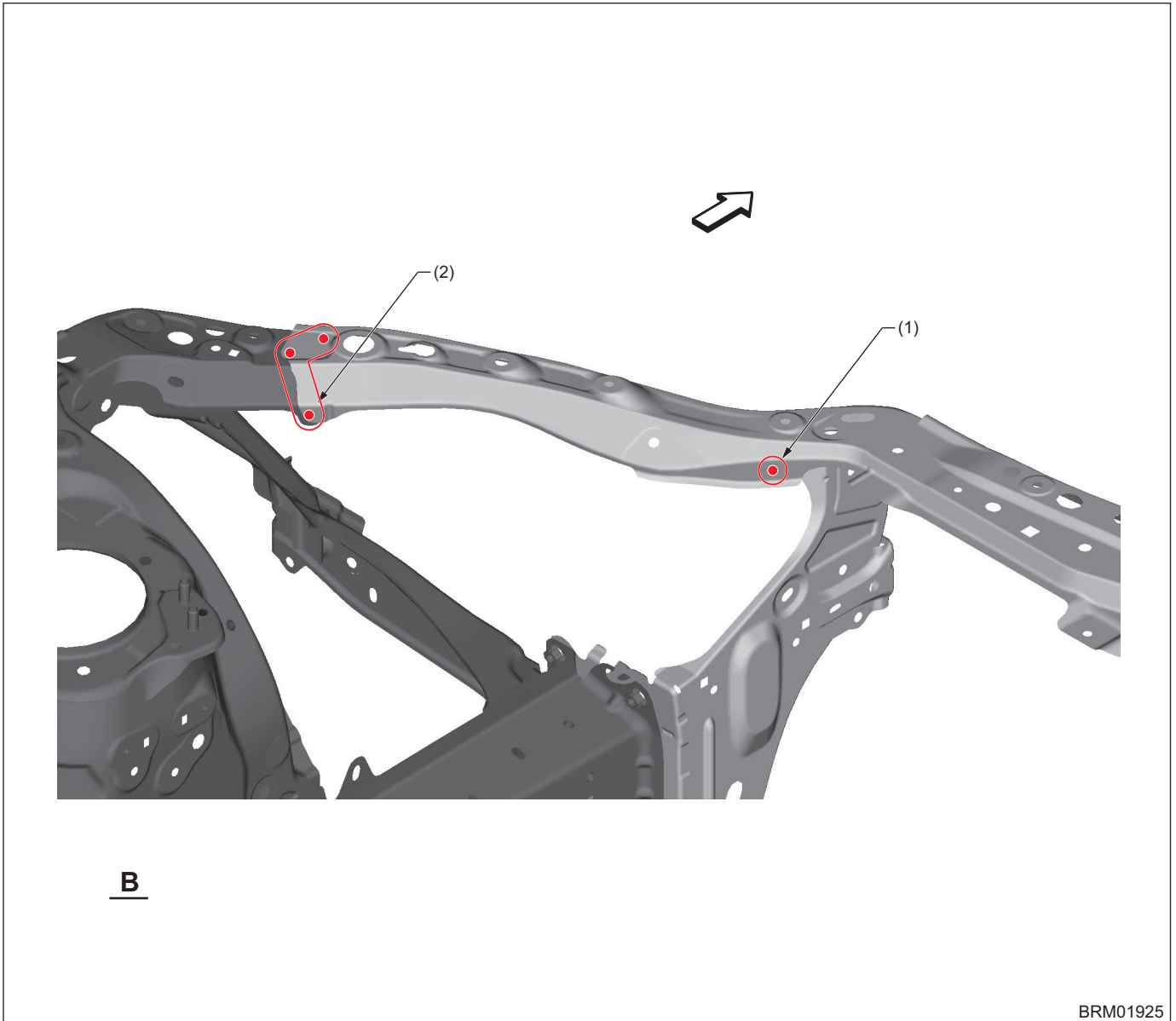
(1) 1 point

(2) 2 points

(3) 2 points (Service part)

# Panel Replacement

## • View B

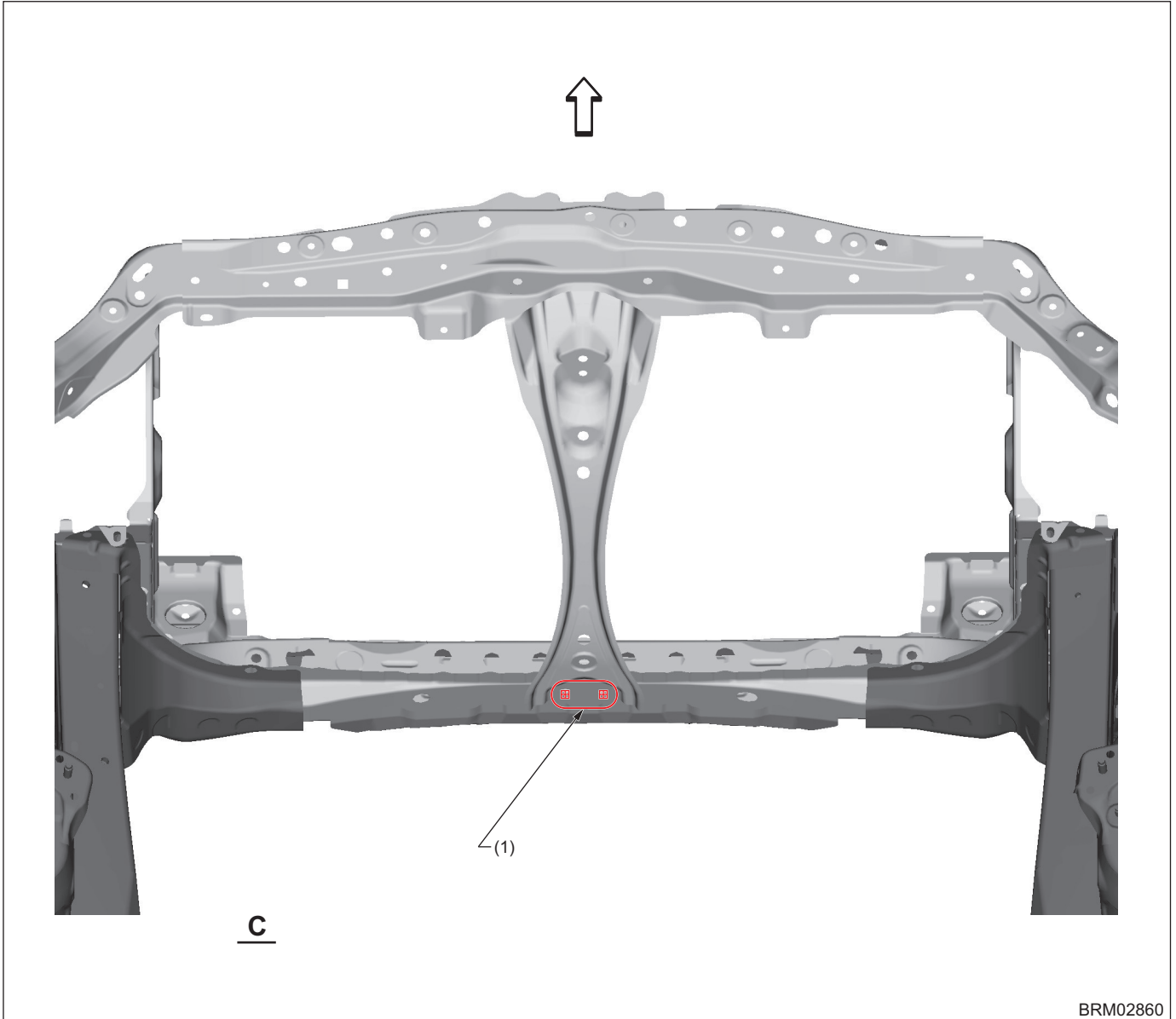


(1) 1 point

(2) 3 points

# Panel Replacement

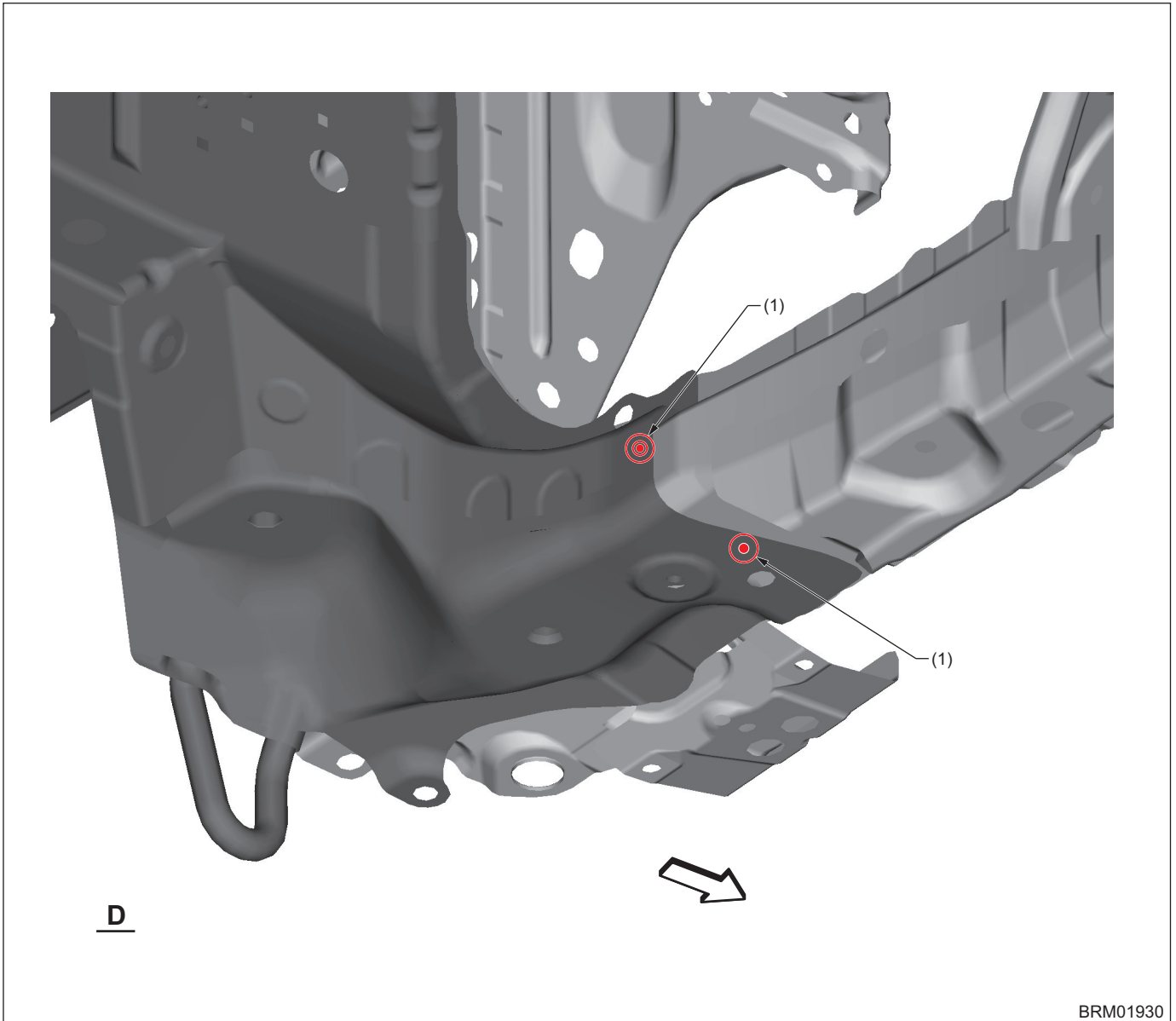
## • View C



(1) 2 points (Bolt)

# Panel Replacement

## • View D



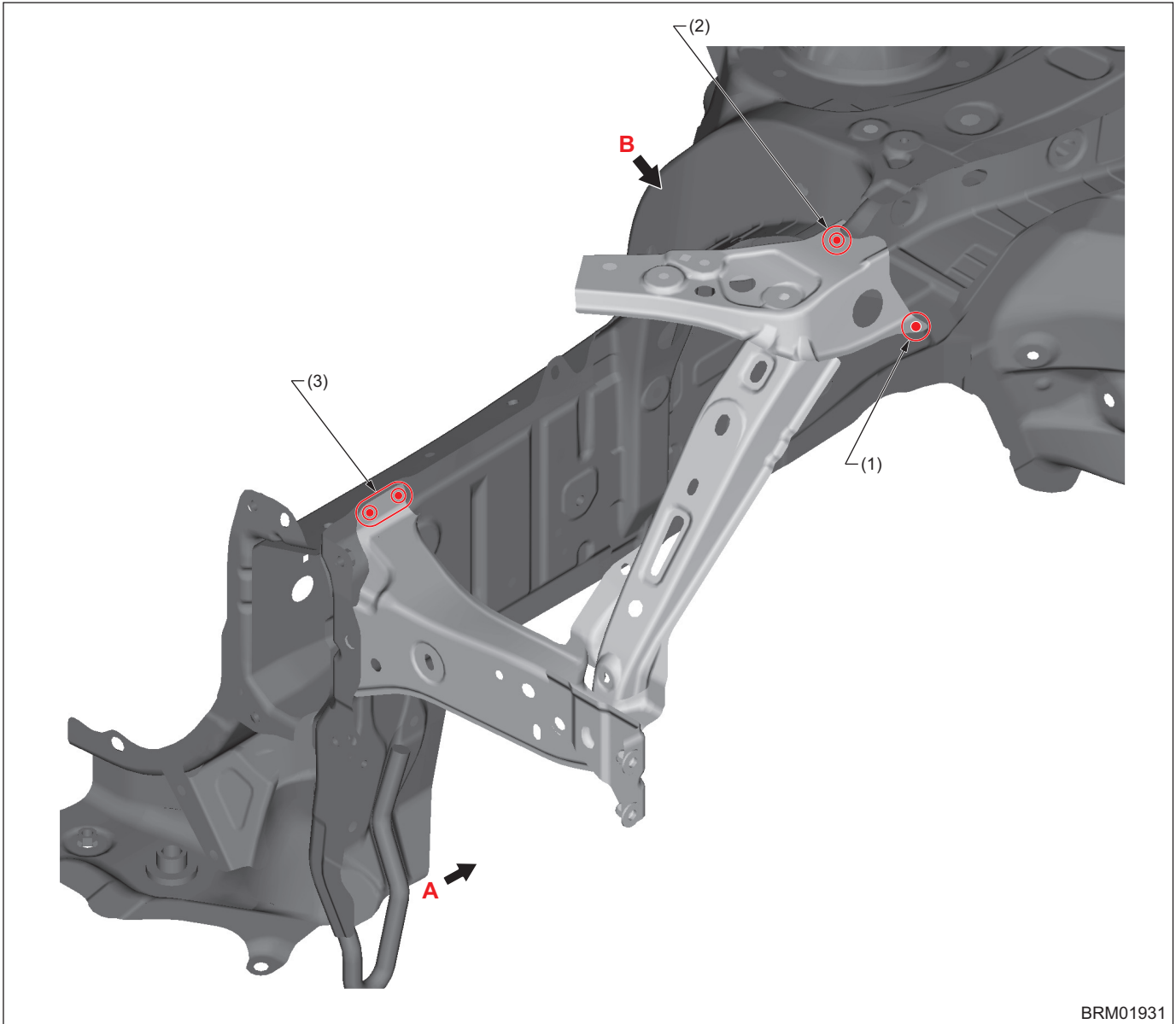
(1) 1 point

# Panel Replacement

## 8-2. Reinforcement Apron Front (Total replacement)

### A: REMOVAL

- Overall view



BRM01931

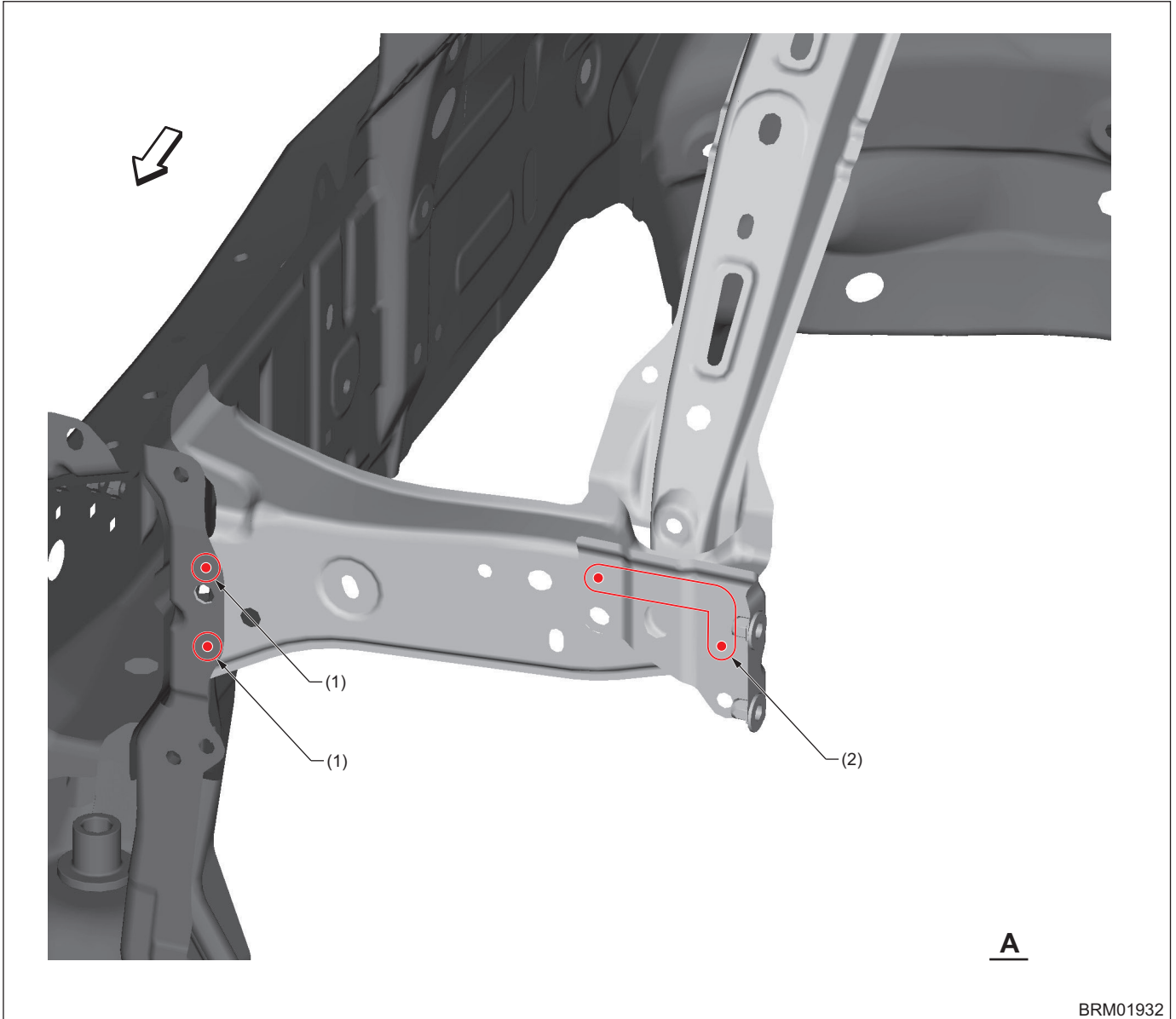
(1) 1 point (Top - 1)

(2) 1 point (Top - 2)

(3) 2 points (Outside - 1, belt sander)

# Panel Replacement

## • View A



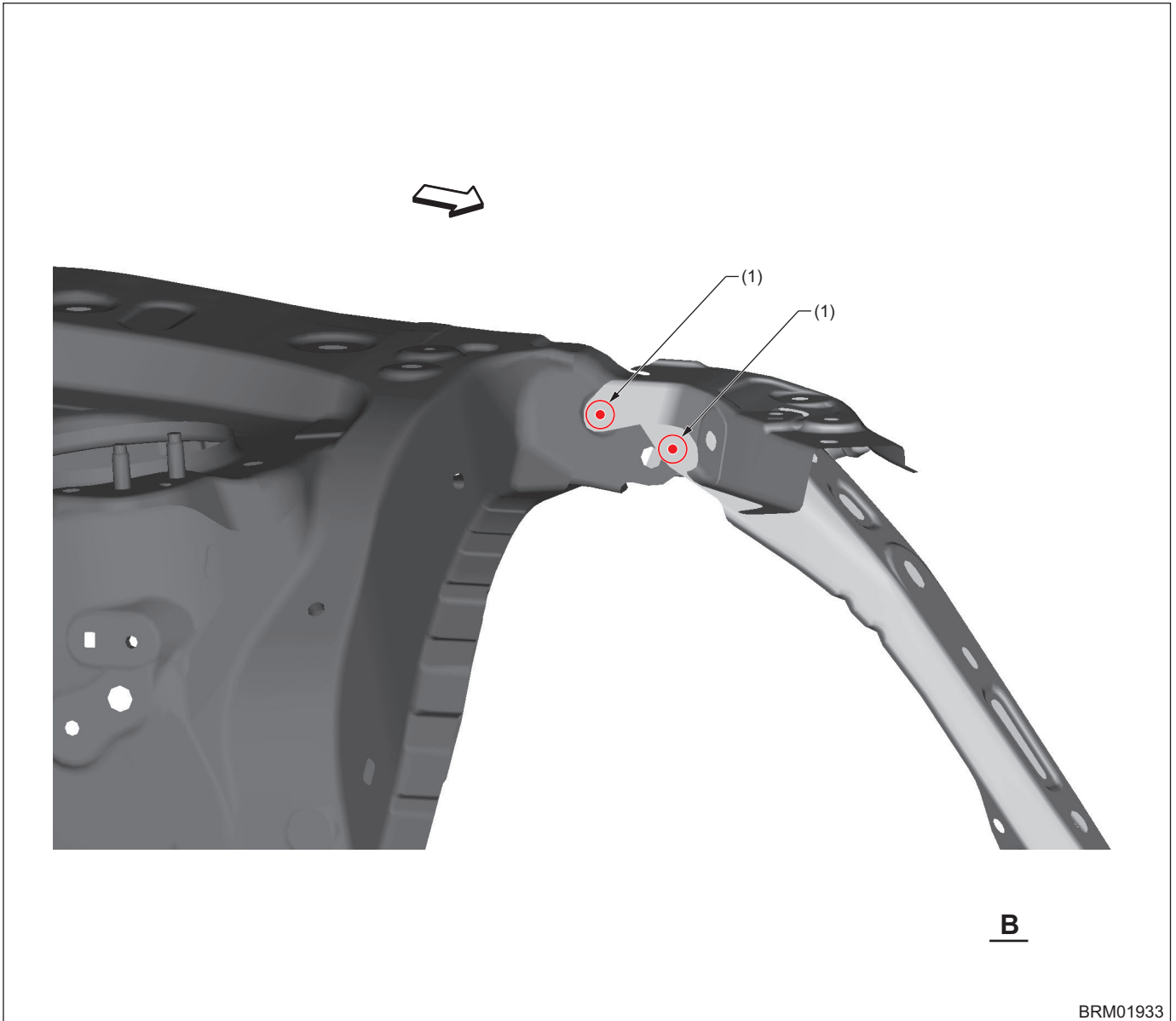
(1) 1 point (Inside · 1)

(2) 3 points (Outside · 1)



# Panel Replacement

## • View B

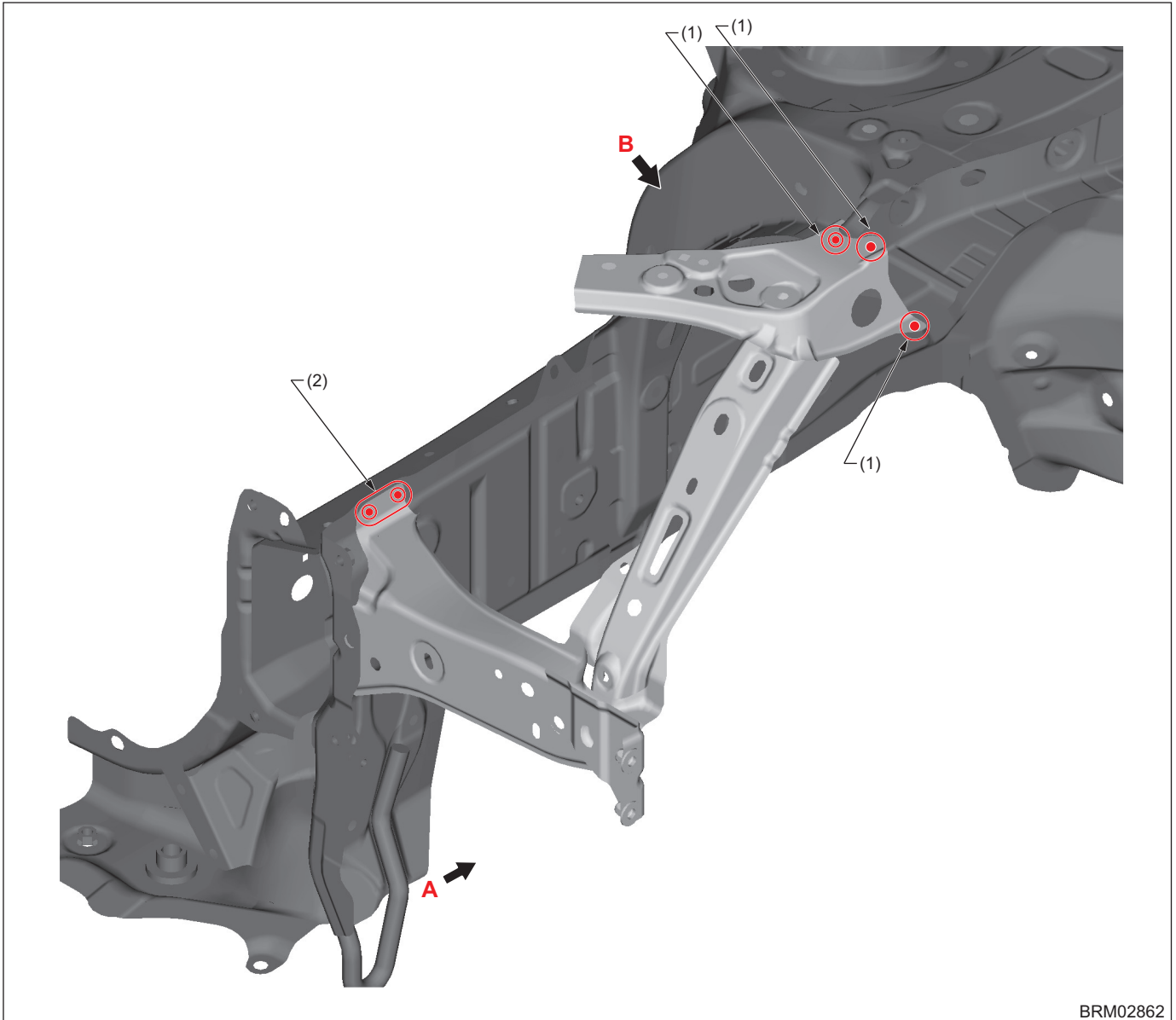


(1) 1 point (Inside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



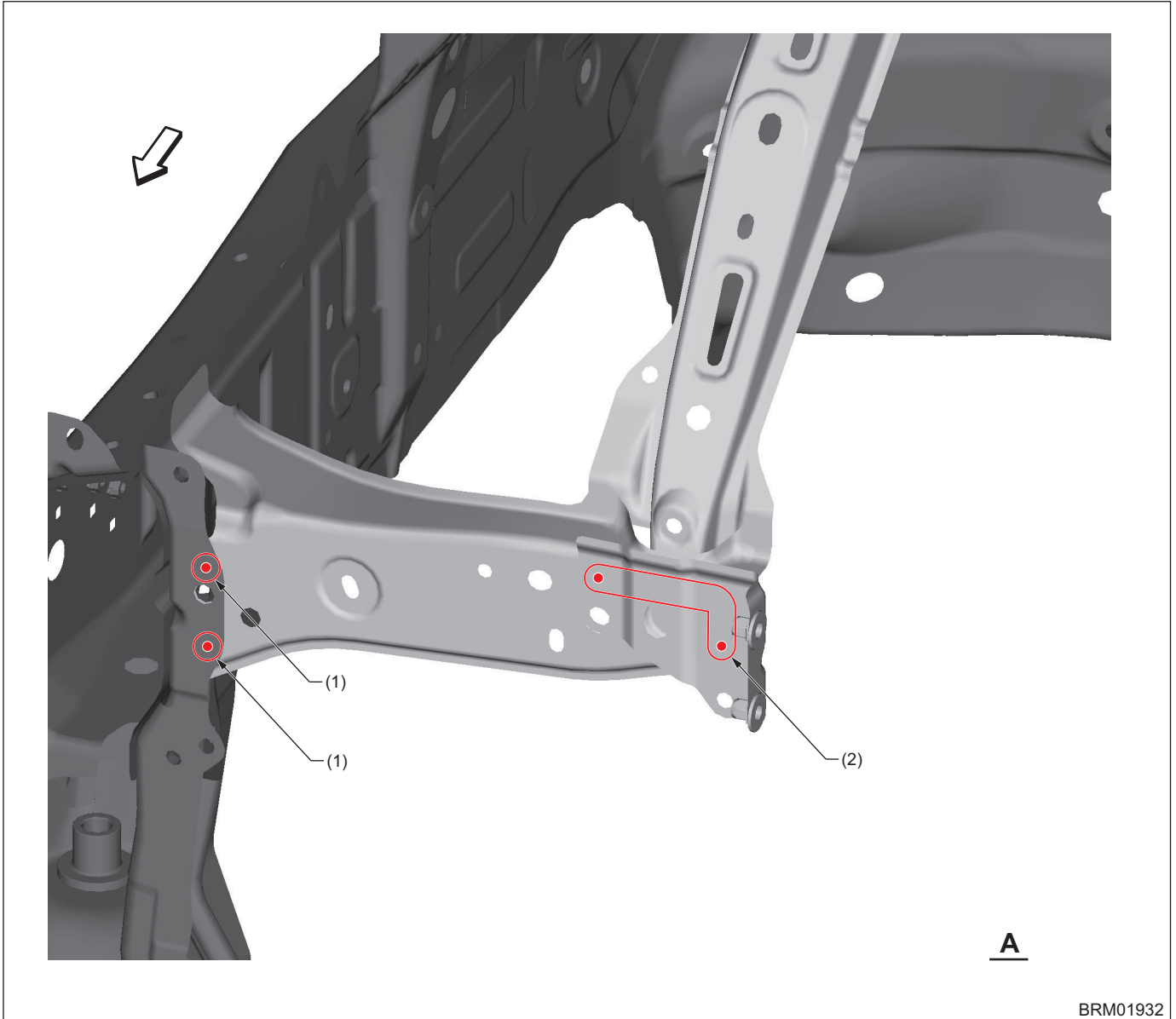
BRM02862

(1) 1 point

(2) 2 points

# Panel Replacement

## • View A



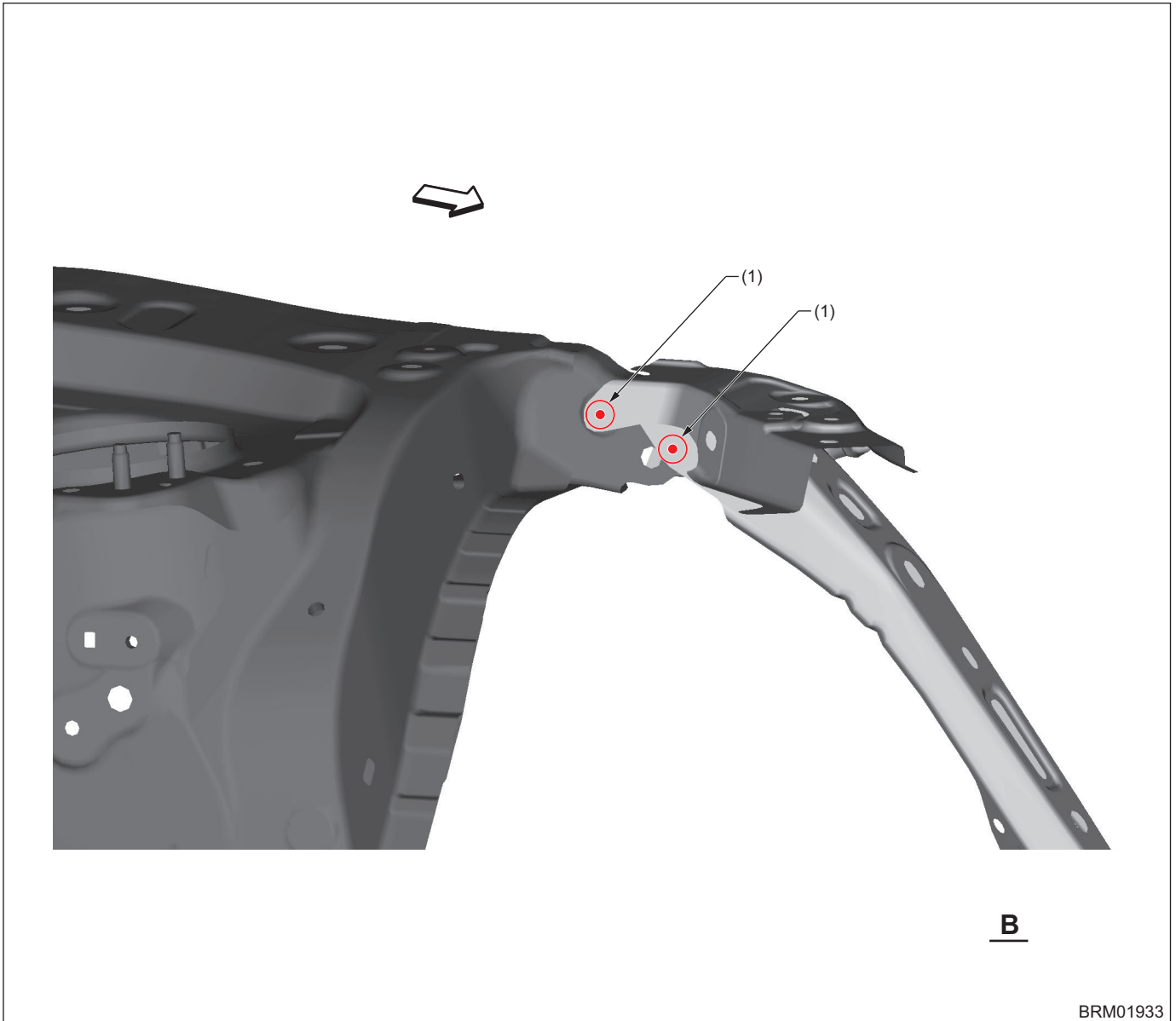
BRM01932

(1) 1 point

(2) 3 points

# Panel Replacement

## • View B



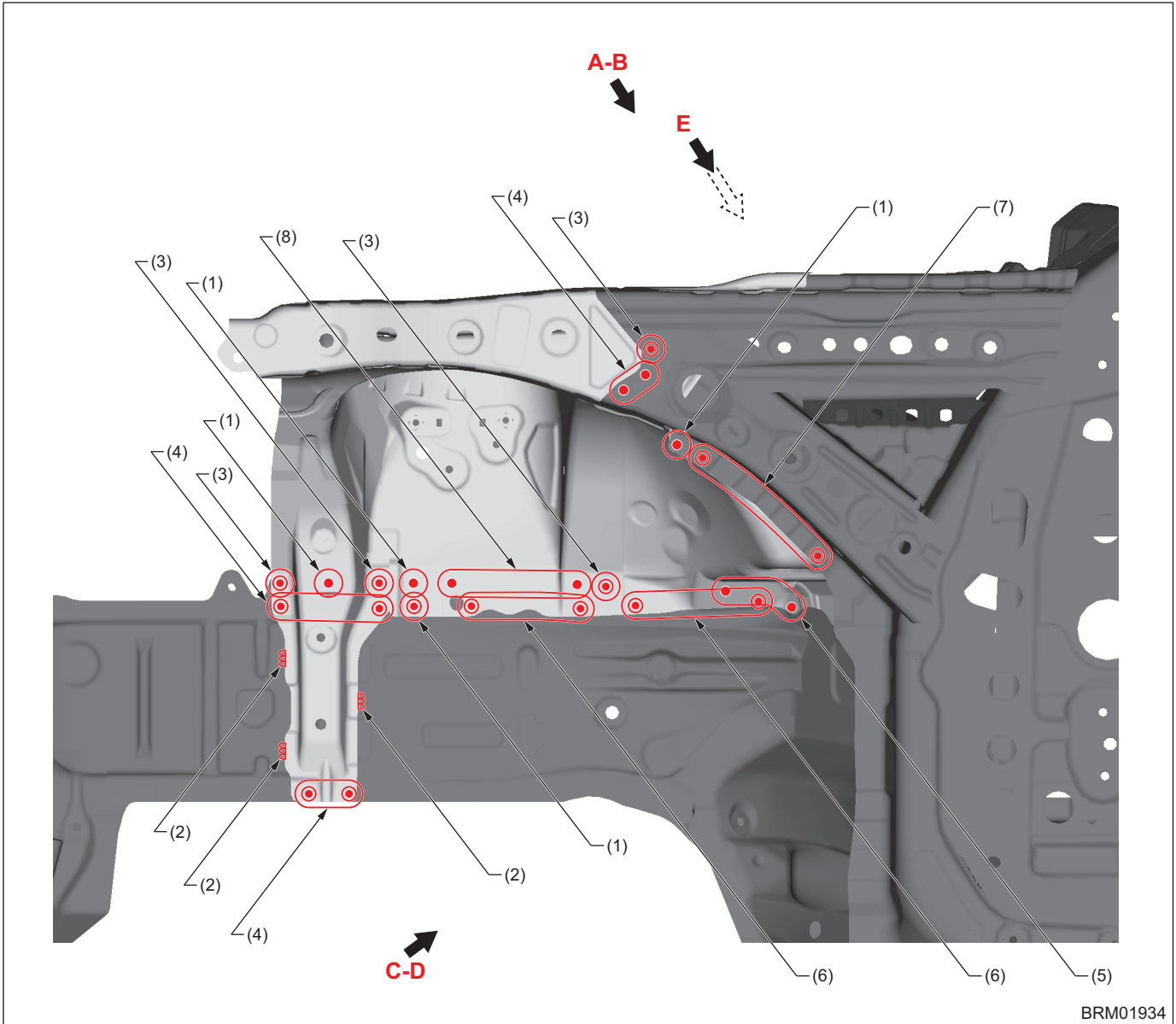
(1) 1 point

# Panel Replacement

## 8-3. Front Wheel Apron (Total replacement)

### A: REMOVAL

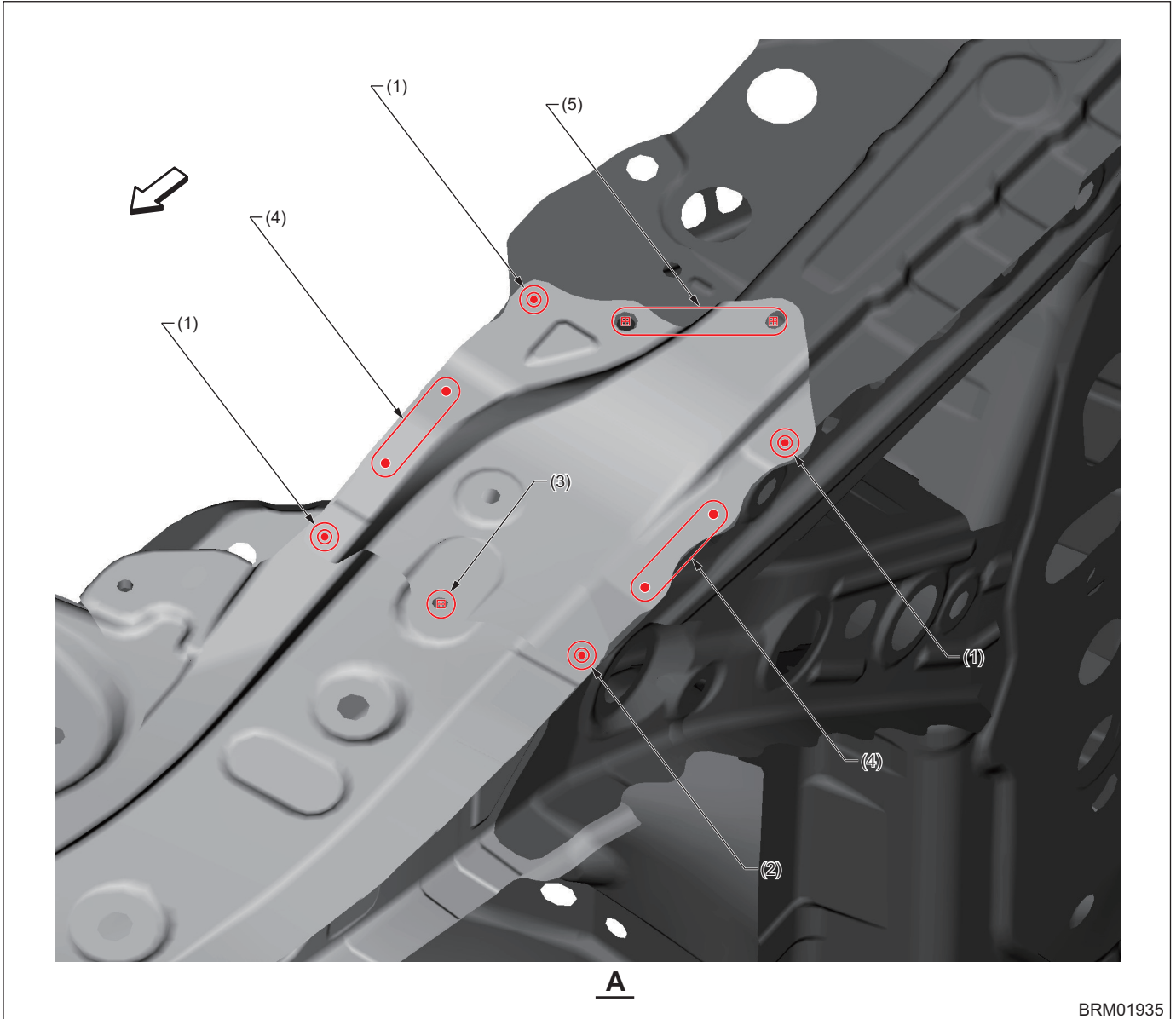
• Overall view



- |  |                            |                            |
|--|----------------------------|----------------------------|
| (1) 1 point (Outside · 1)              | (4) 2 points (Outside · 1) | (7) 4 points (Outside · 2) |
| (2) 1 point (Outside · 1, belt sander) | (5) 3 points (Outside · 1) | (8) 5 points (Outside · 1) |
| (3) 1 point (Outside · 2)              | (6) 4 points (Outside · 1) |                            |

# Panel Replacement

## • View A



BRM01935

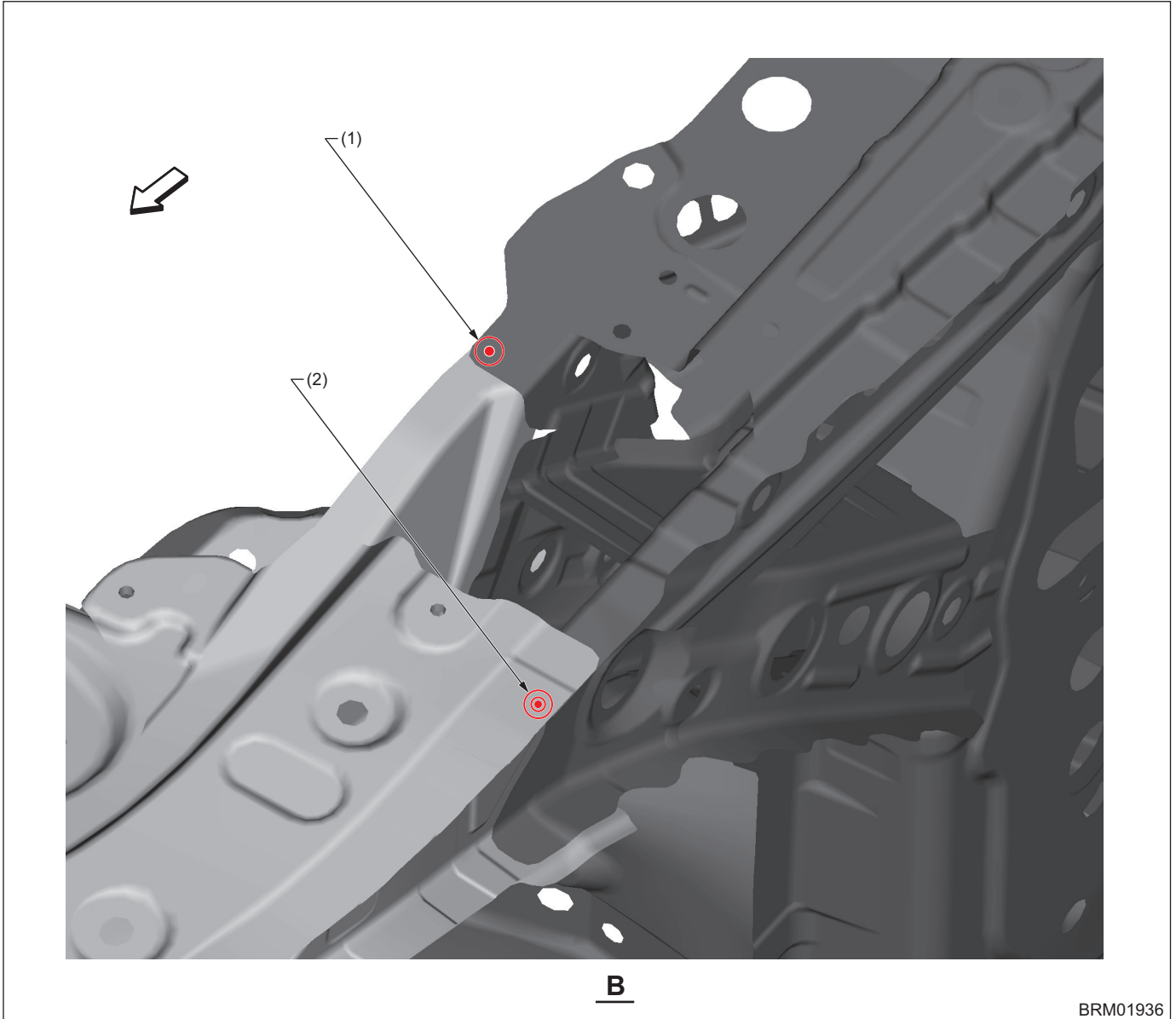
- (1) 1 point (Top · 1)
- (2) 1 point (Top · 2)

- (3) 1 point (Bolt)
- (4) 2 points (Top · 1)

- (5) 2 points (Bolt)

# Panel Replacement

## • View B



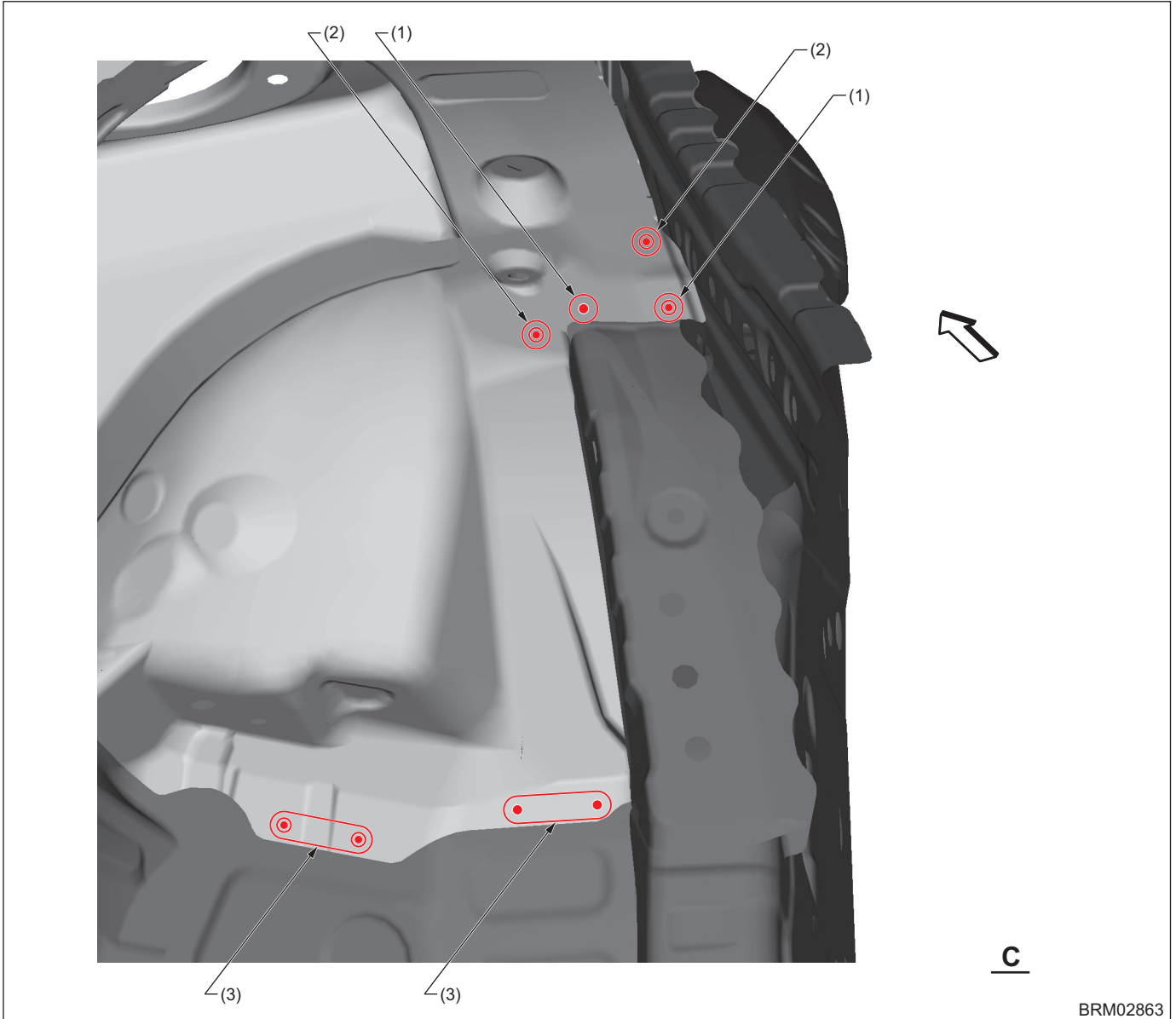
BRM01936

(1) 1 point (Top · 1)

(2) 1 point (Top · 2)

# Panel Replacement

## • View C



BRM02863

(1) 1 point (Bottom · 1)

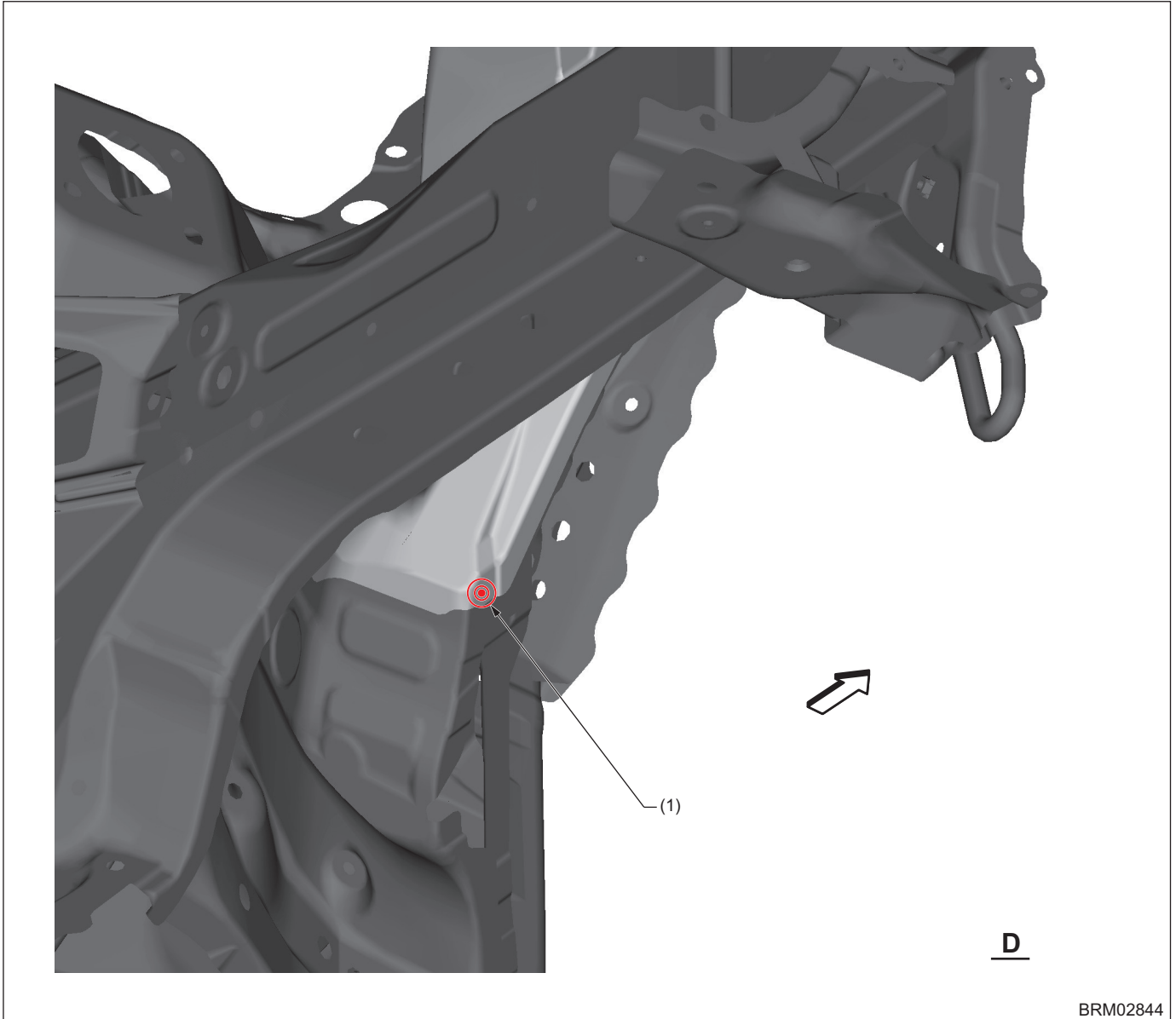
(2) 1 point (Bottom · 2)

(3) 2 points (Outside · 1)



# Panel Replacement

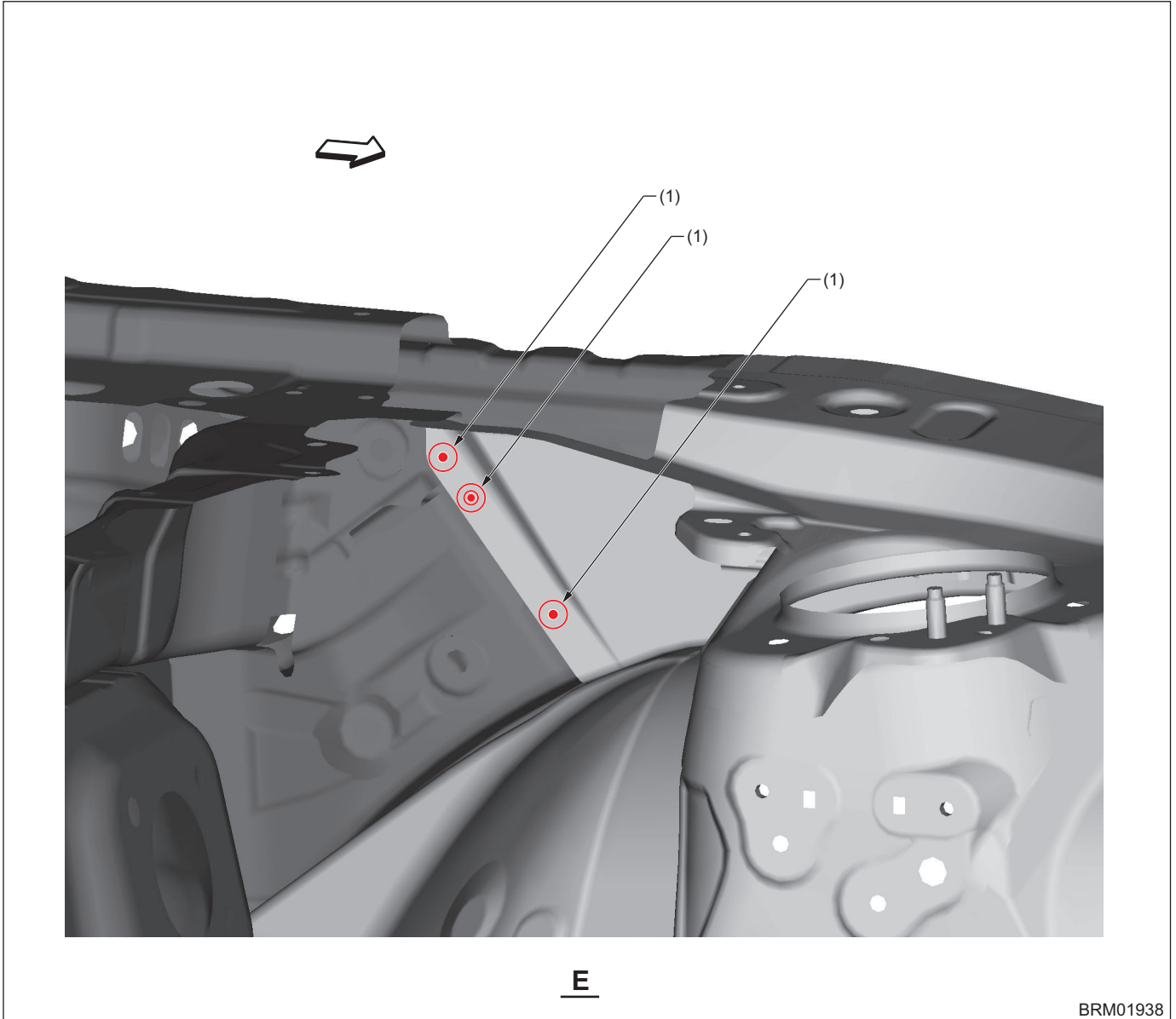
## • View D



(1) 1 point (Inside · 1, belt sander)

# Panel Replacement

## • View E

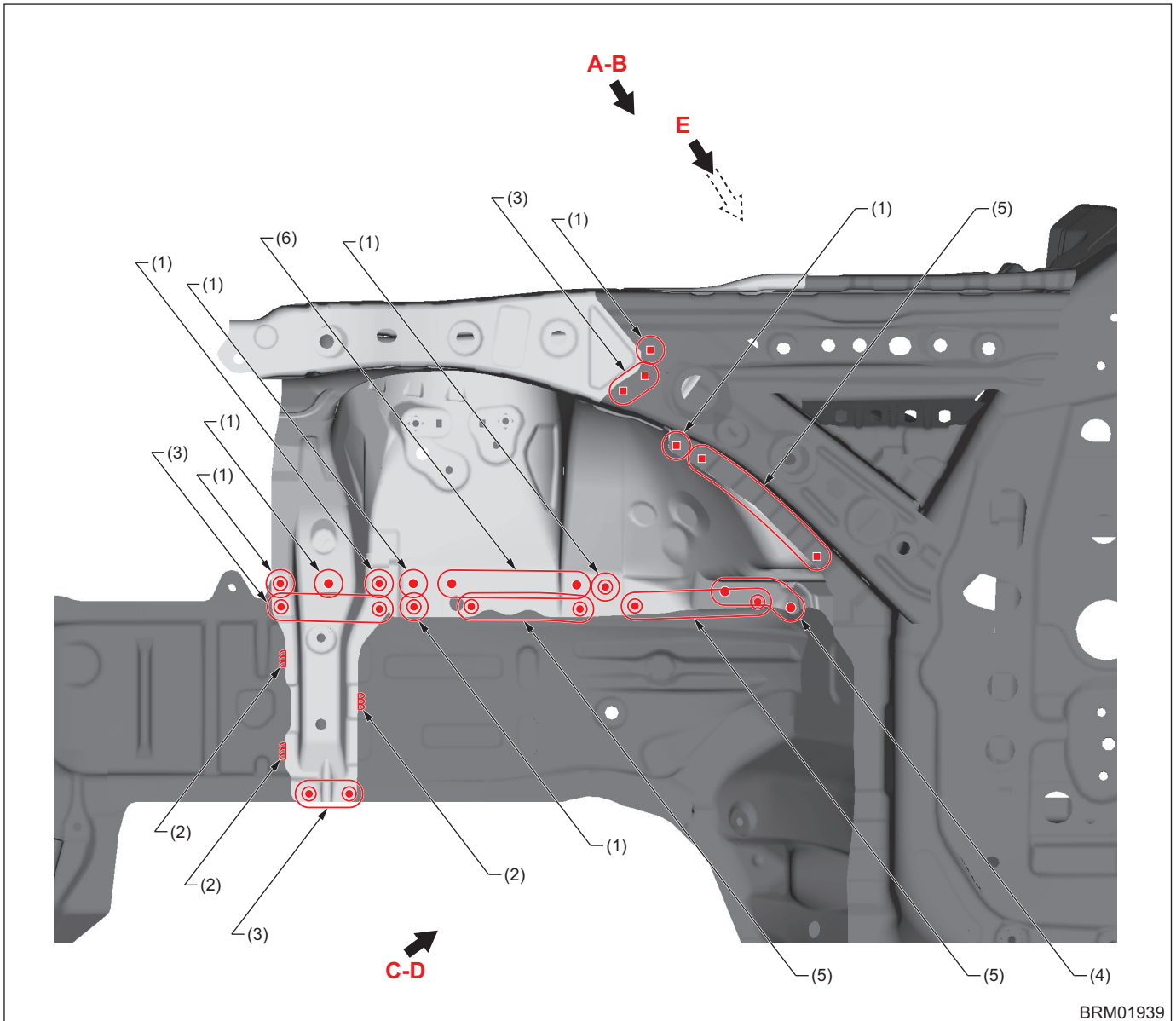


(1) 1 point (Inside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view

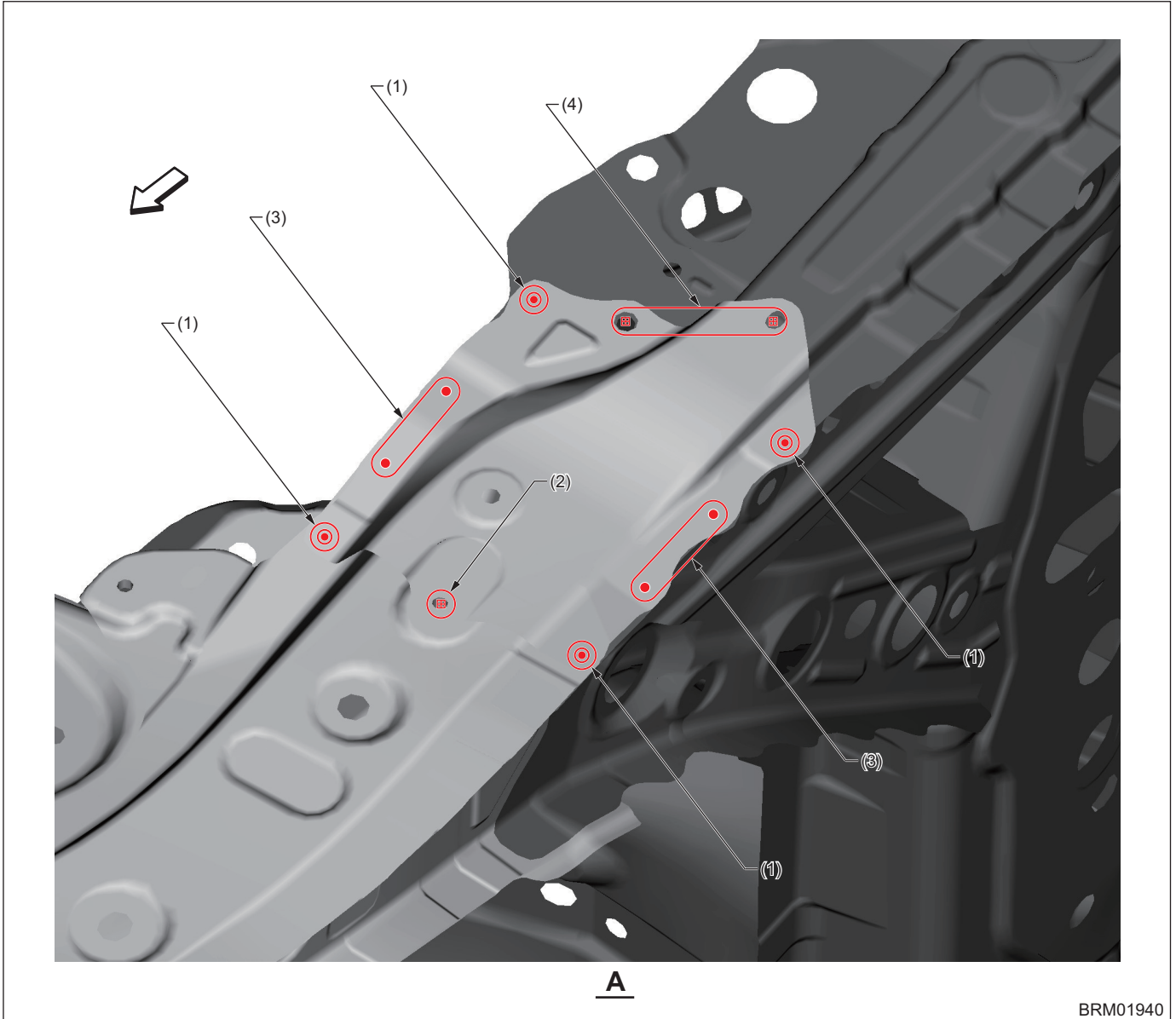


BRM01939

- |   |              |              |
|---|--------------|--------------|
| (1) 1 point   | (3) 2 points | (5) 4 points |
| (2) 1 point (Continuous welding)<br>(15 mm [0.59 in]) | (4) 3 points | (6) 5 points |

# Panel Replacement

## • View A



BRM01940

(1) 1 point

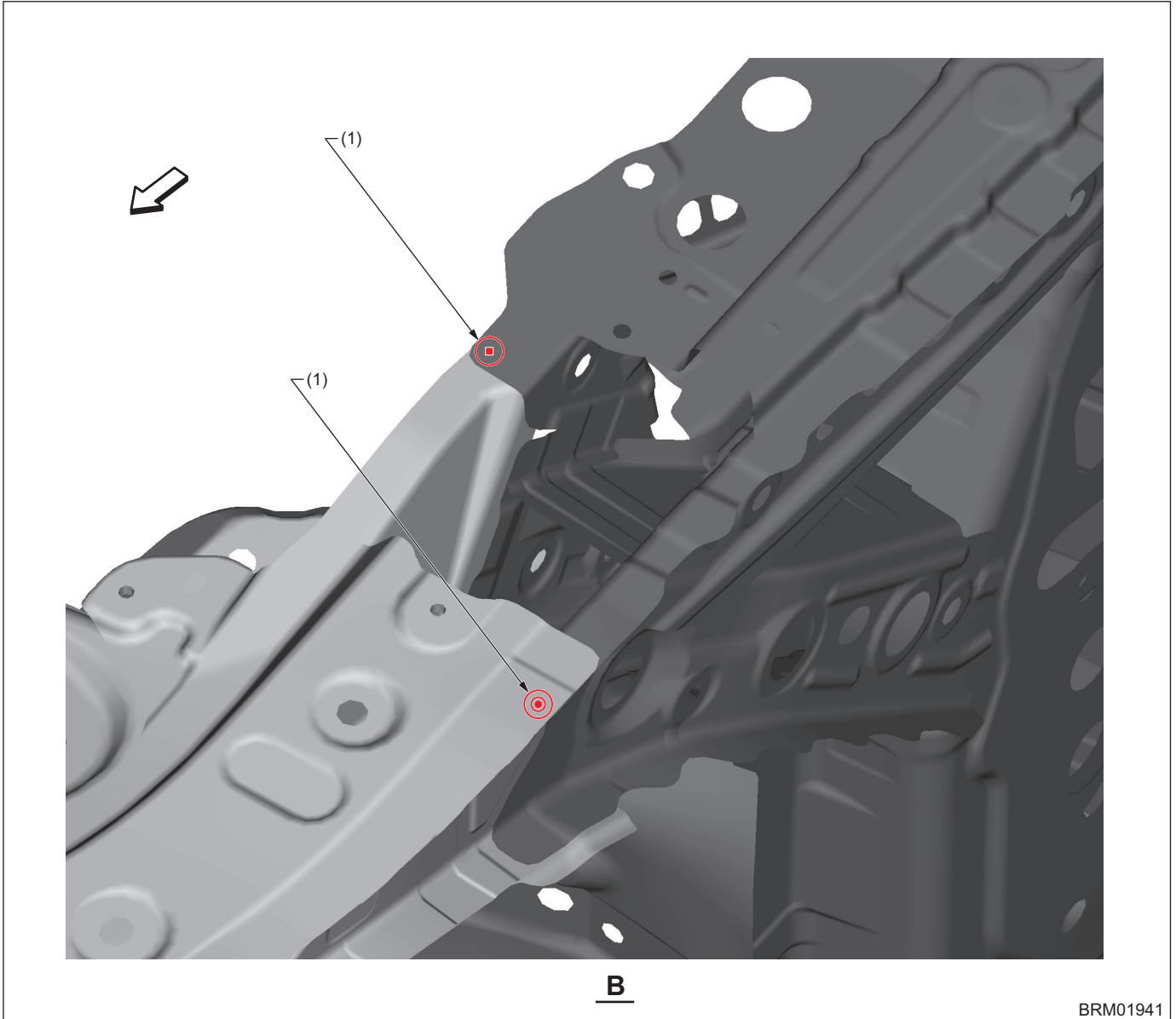
(3) 2 points

(4) 2 points (Bolt)

(2) 1 point (Bolt)

# Panel Replacement

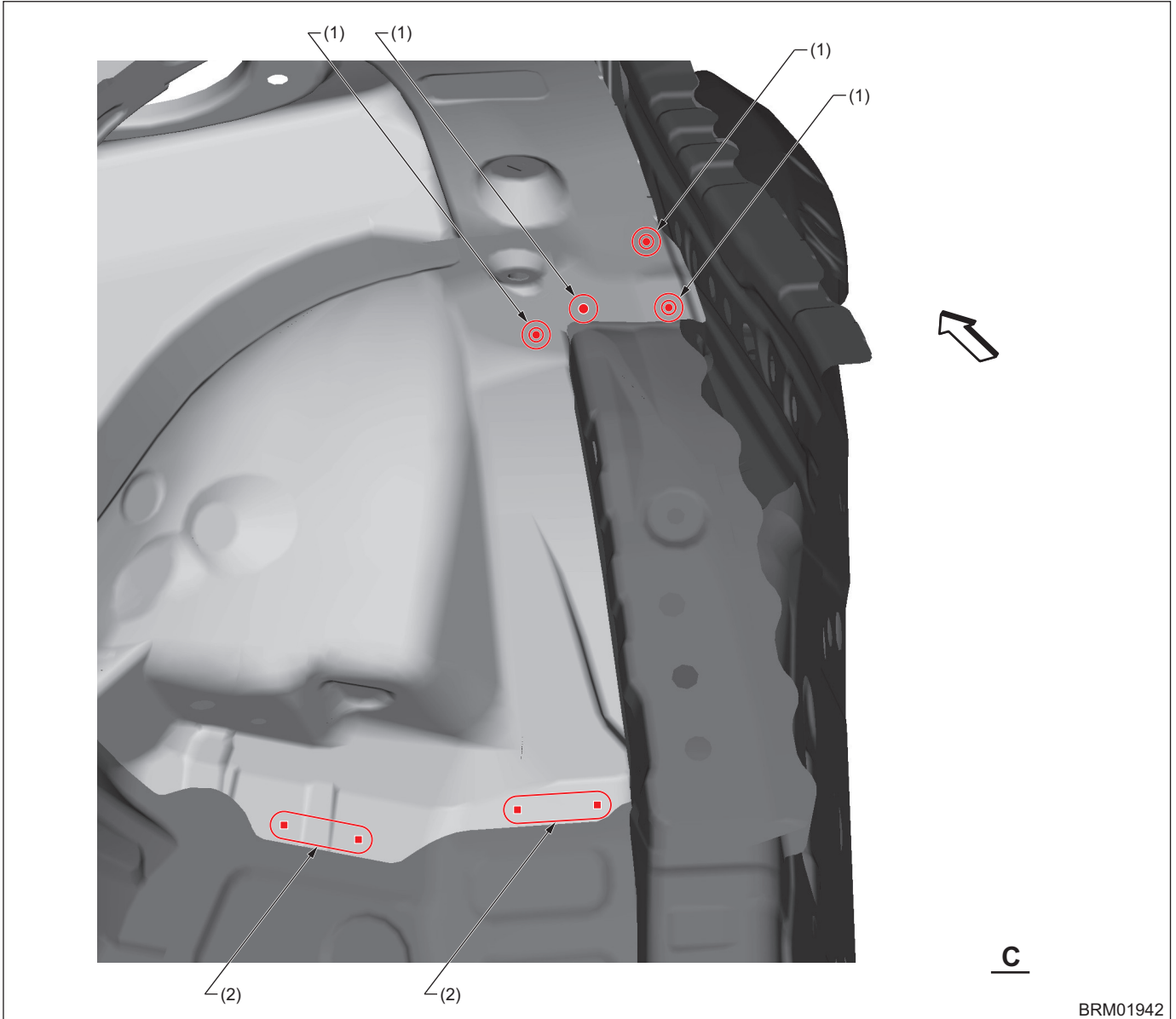
## • View B



(1) 1 point

# Panel Replacement

## • View C

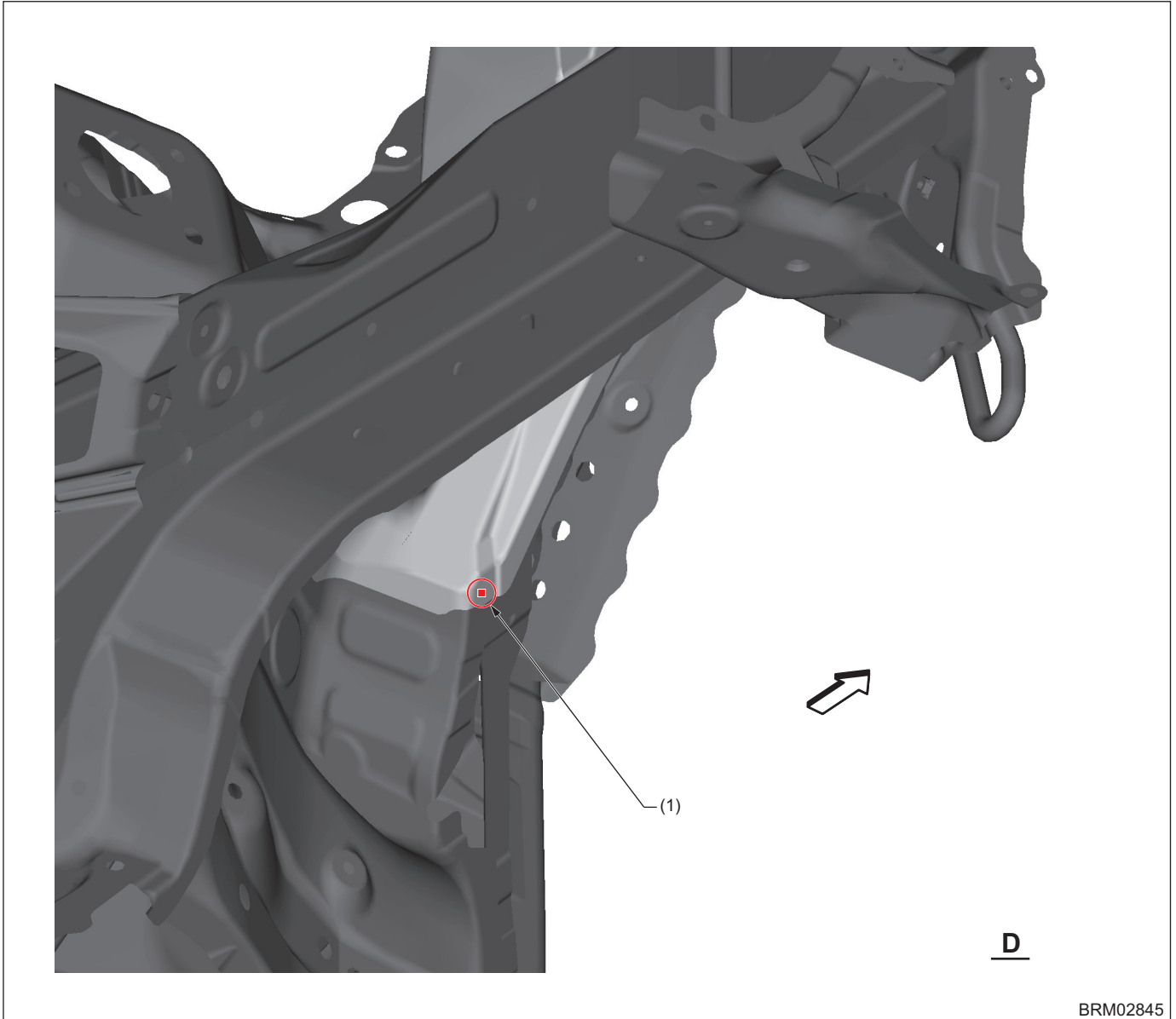


(1) 1 point

(2) 2 points (Service part)

# Panel Replacement

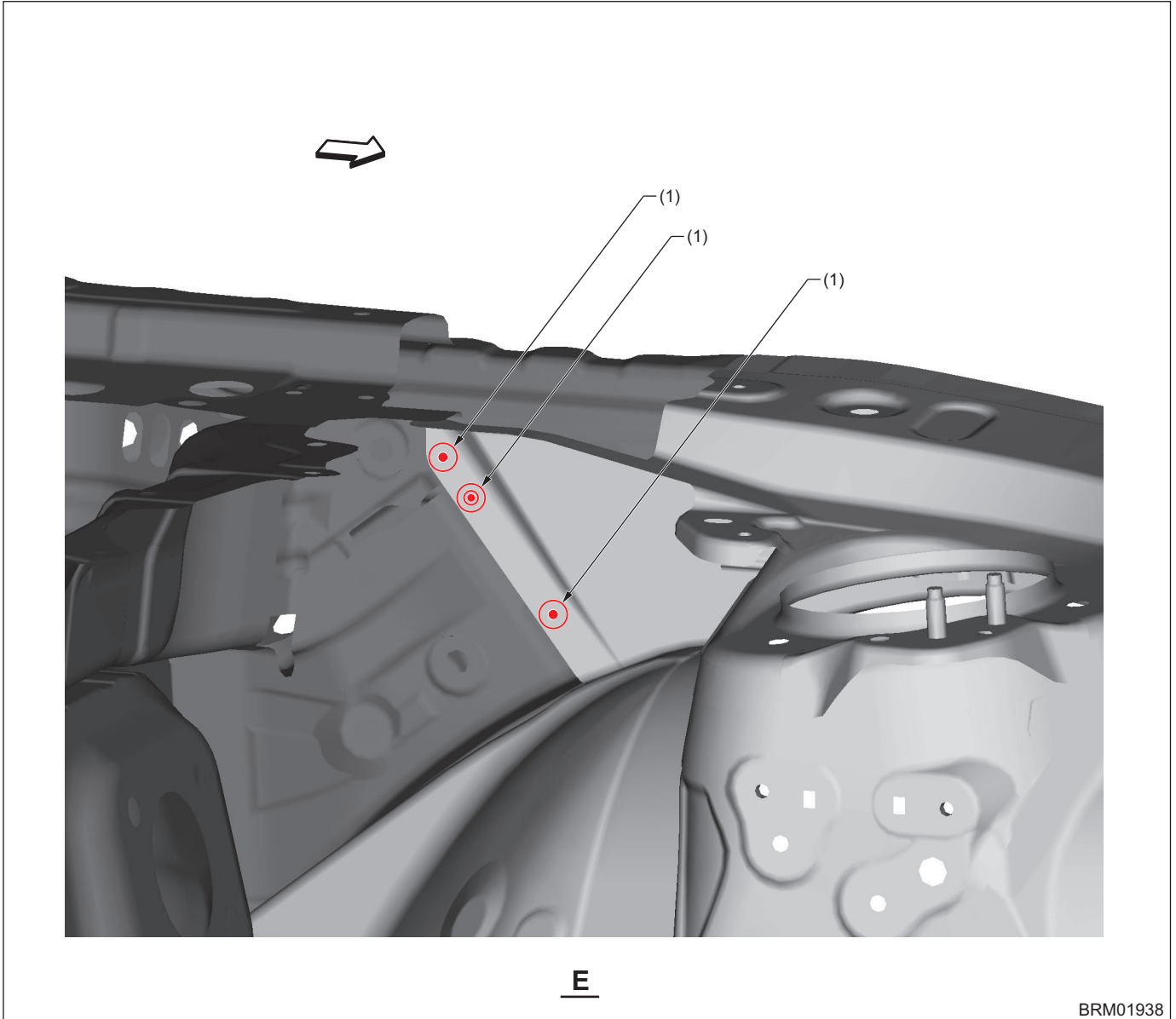
## • View D



(1) 1 point (Service part)

# Panel Replacement

## • View E



(1) 1 point

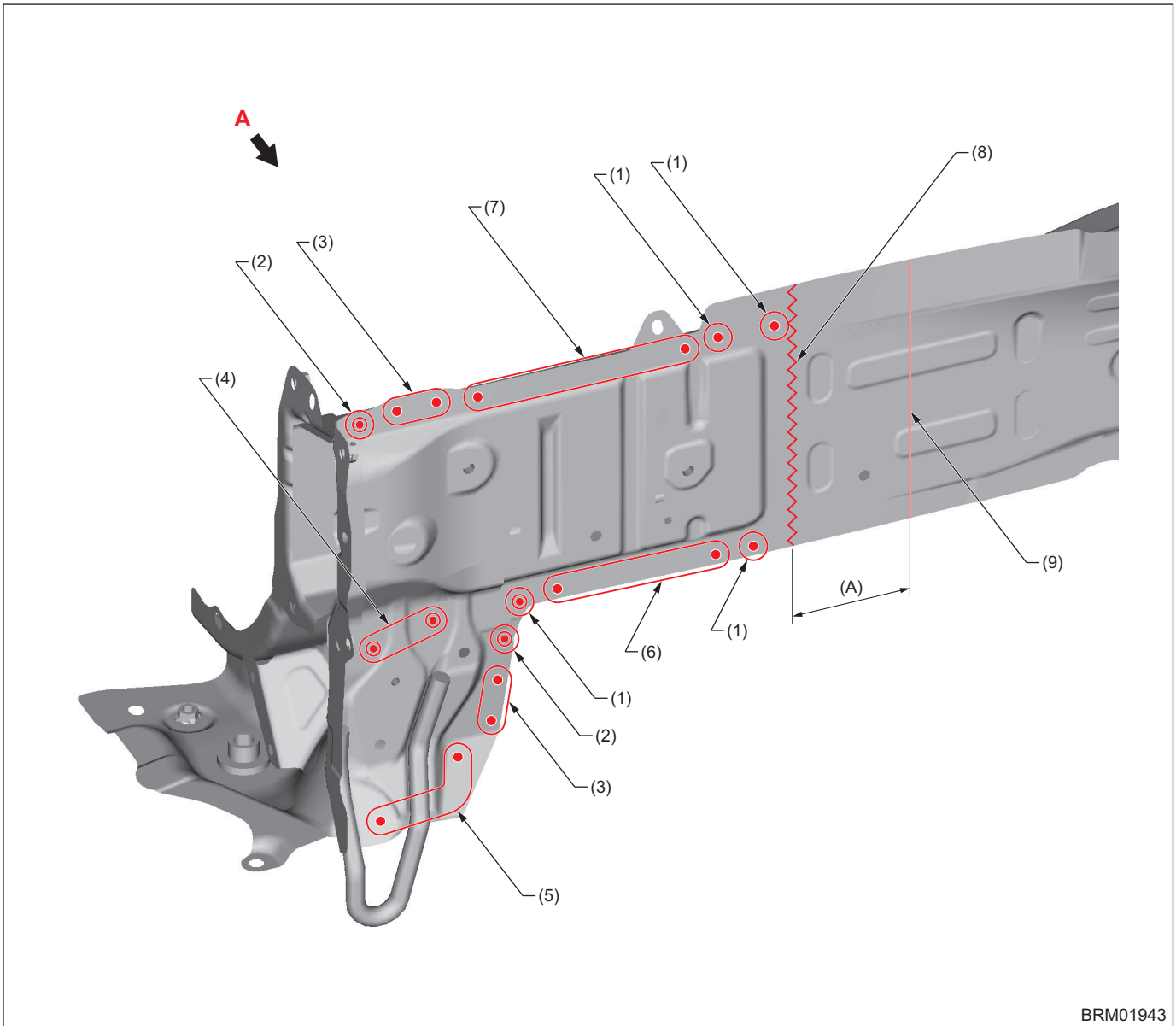


# Panel Replacement

## 8-4. Front Side Frame (Partial replacement)

### A: REMOVAL

#### • Overall view



BRM01943

(A) 80 mm [3.15 in]

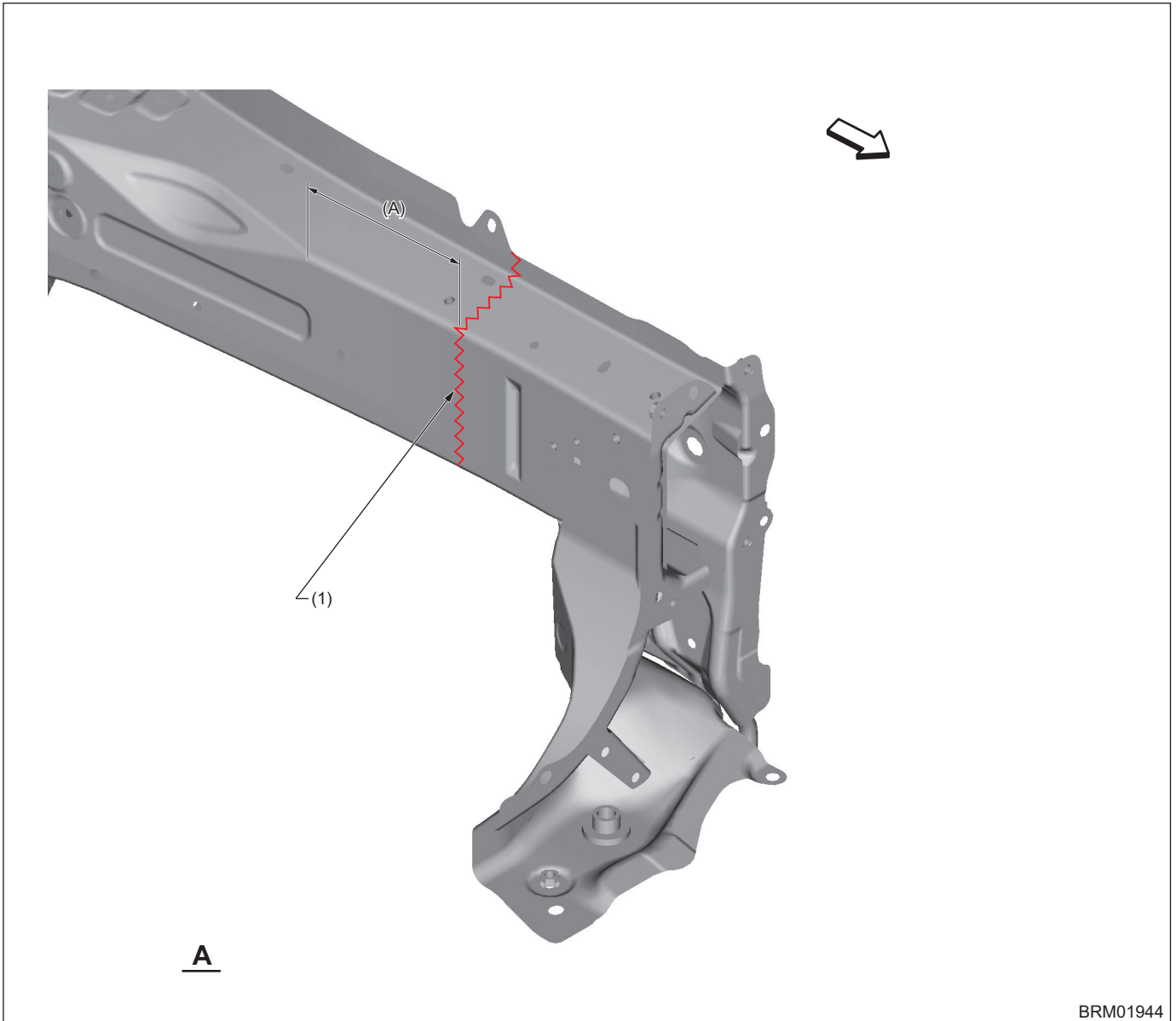
(1) 1 point (Outside · 1)  
(2) 1 point (Outside · 2)  
(3) 2 points (Outside · 1)

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

(7) 6 points (Outside · 1)  
(8) Cut position  
(9) Tailored line

# Panel Replacement

## • View A



BRM01944

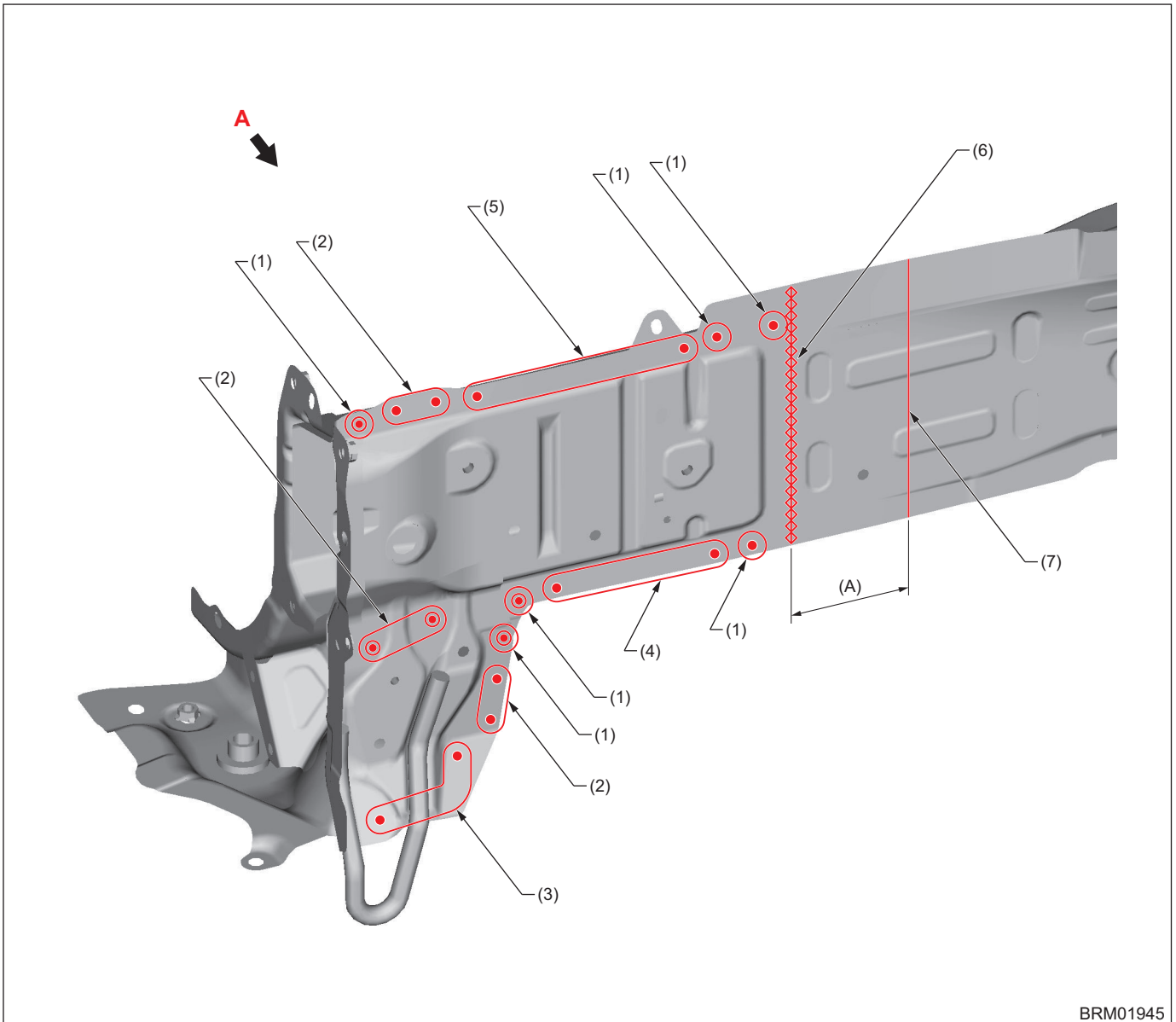
(A) 135 mm [5.31 in]

(1) Cut position

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01945

(A) 80 mm [3.15 in]

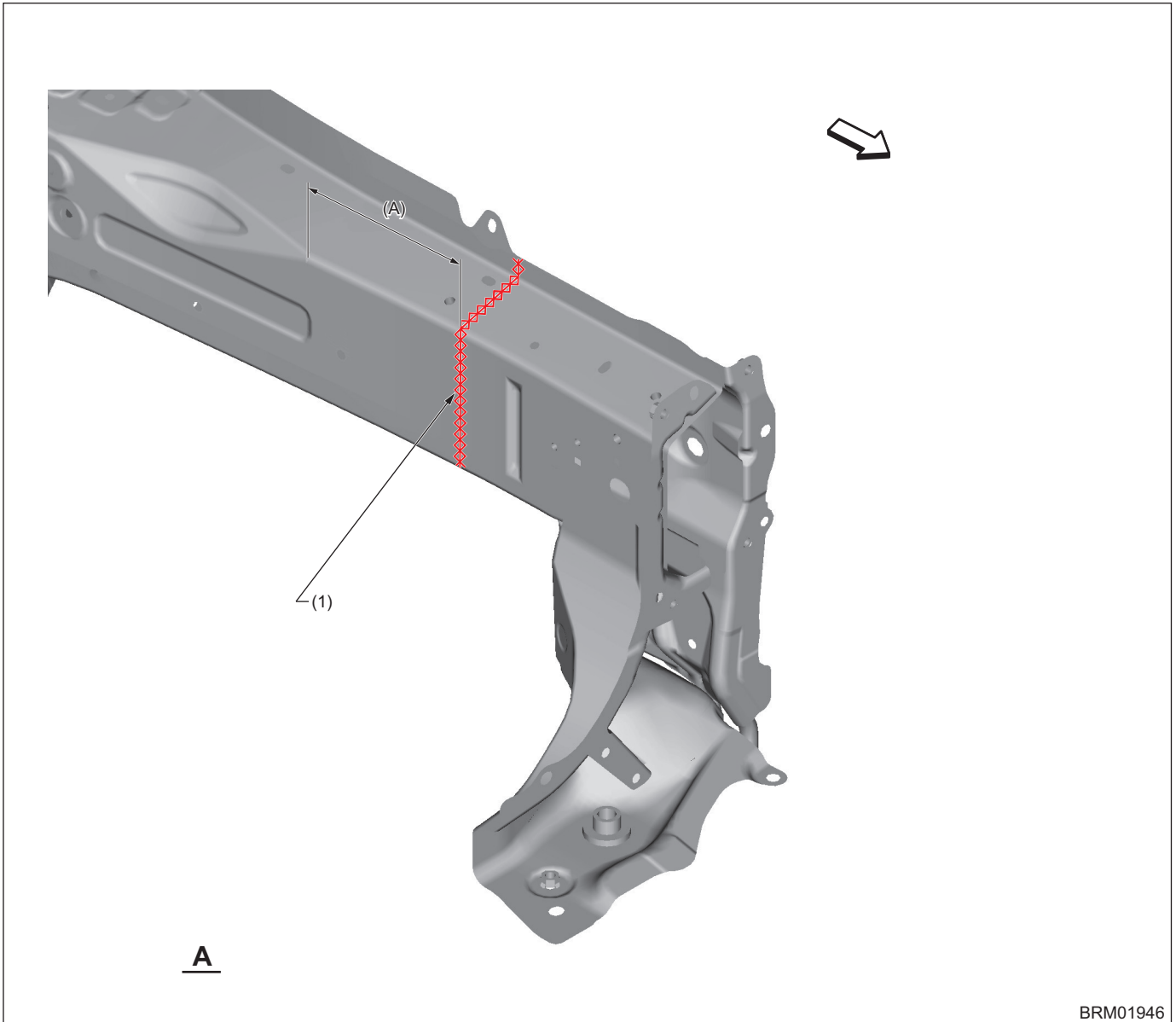
- (1) 1 point
- (2) 2 points
- (3) 3 points

- (4) 5 points
- (5) 6 points
- (6) 1 point (Continuous welding)

(7) Tailored line

# Panel Replacement

## • View A



(A) 135 mm [5.31 in]

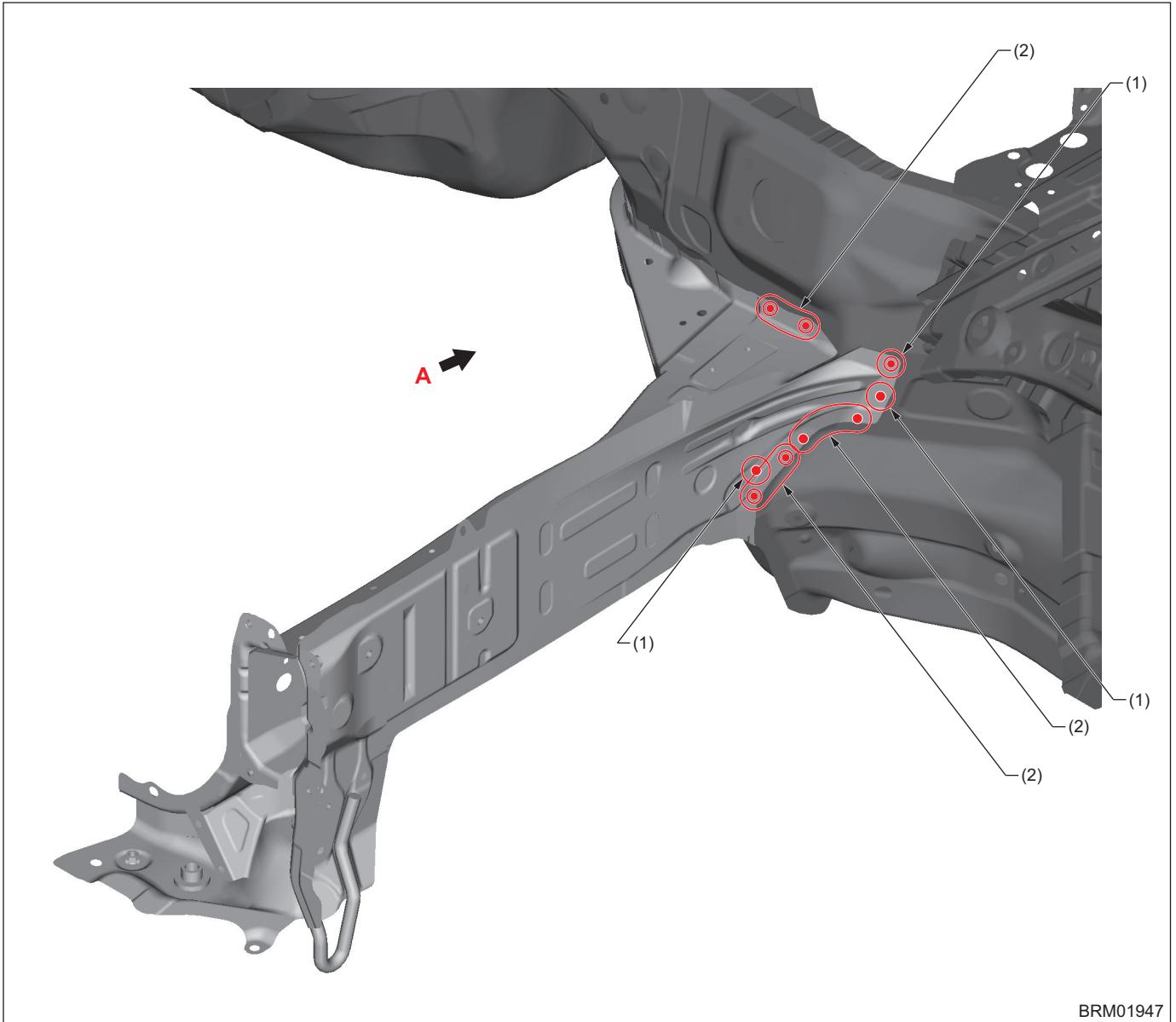
(1) 1 point (Continuous welding)

# Panel Replacement

## 8-5. Front Side Frame (Total replacement)

### A: REMOVAL

- Overall view



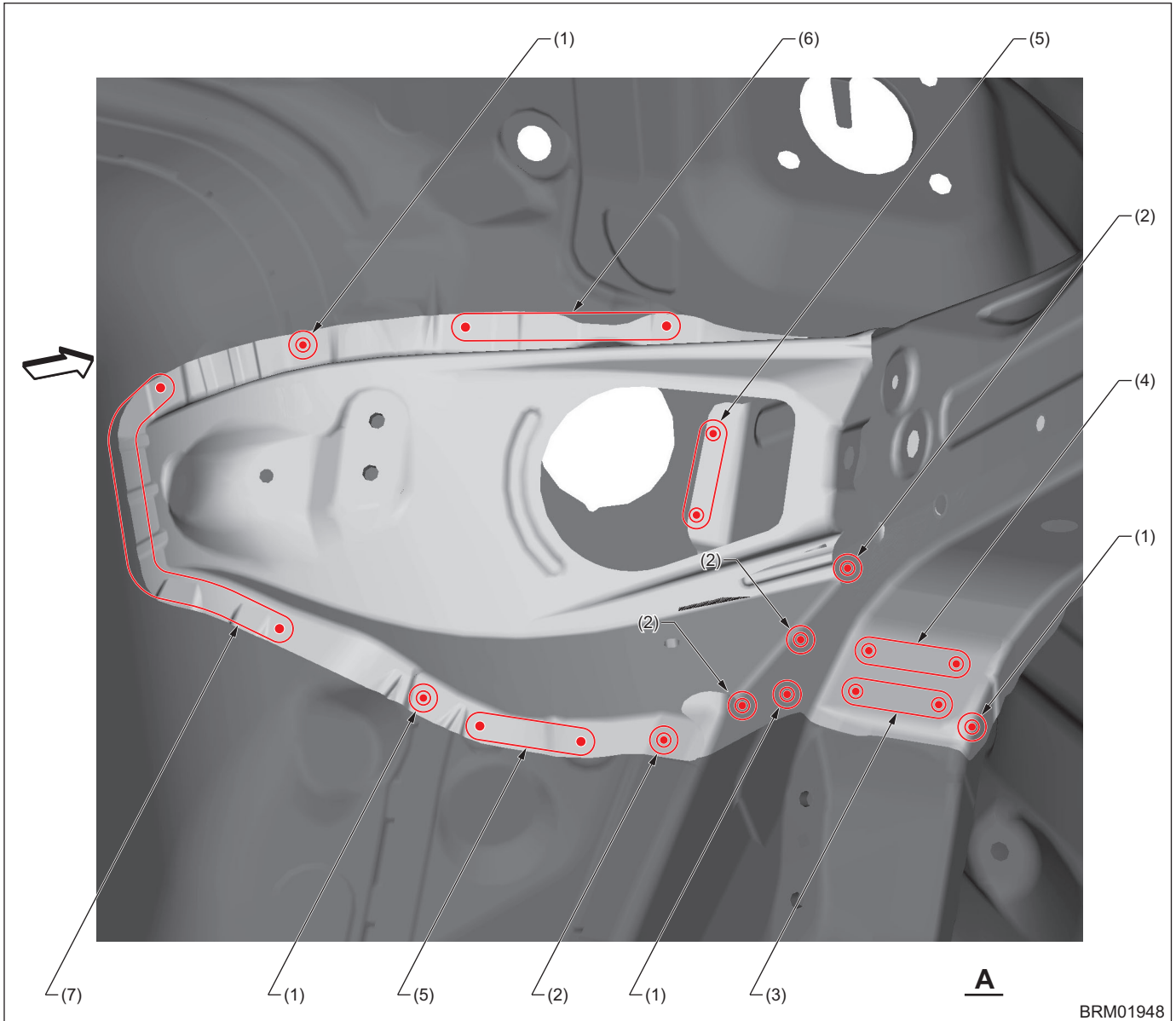
BRM01947

(1) 1 point (Outside · 1)

(2) 3 points (Outside · 1)

# Panel Replacement

## • View A (LH)



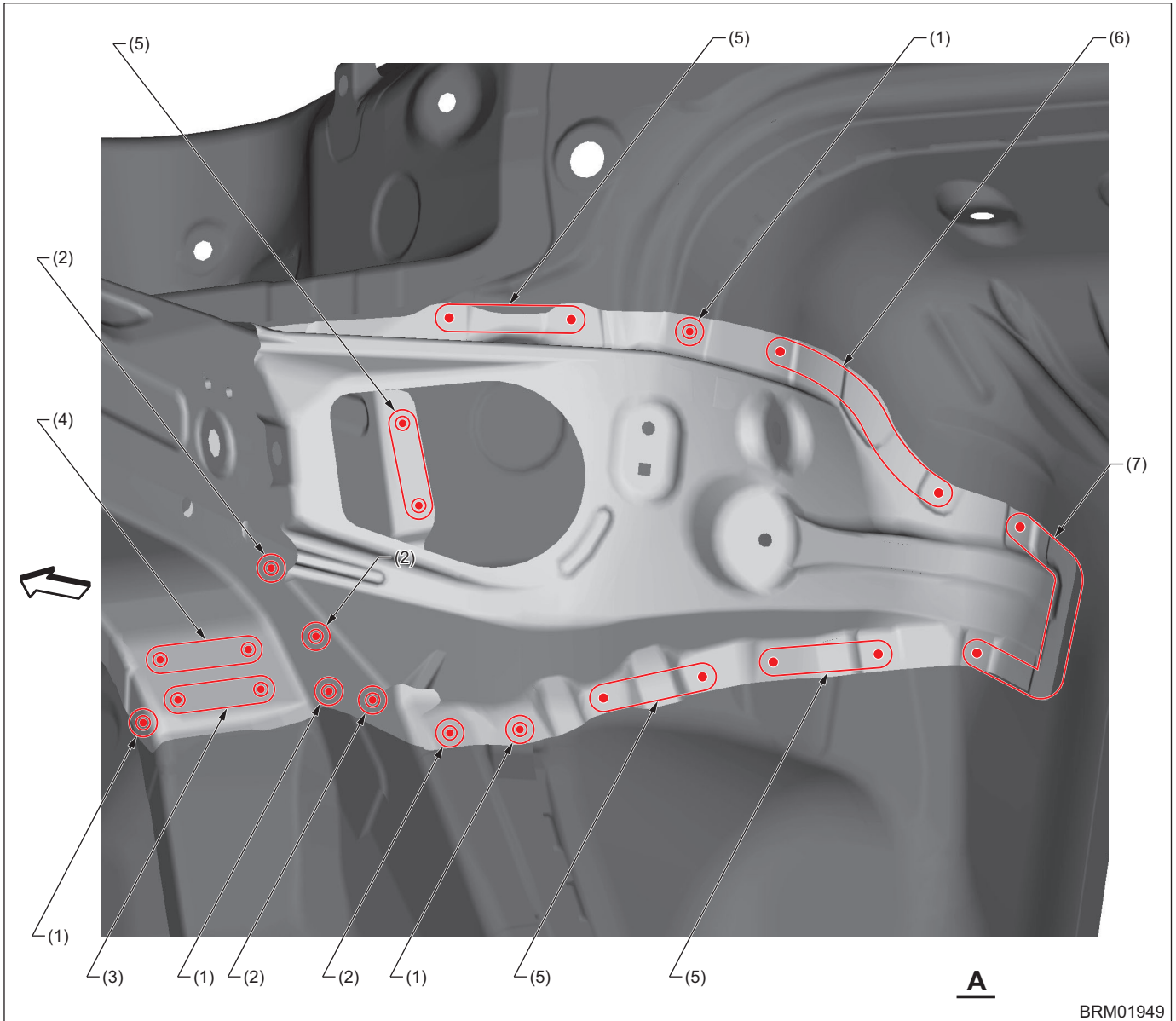
- (1) 1 point (Inside · 1)
- (2) 1 point (Inside · 2)
- (3) 2 points (Bottom · 1)

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

- (7) 6 points (Inside · 1)

# Panel Replacement

## • View A (RH)



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

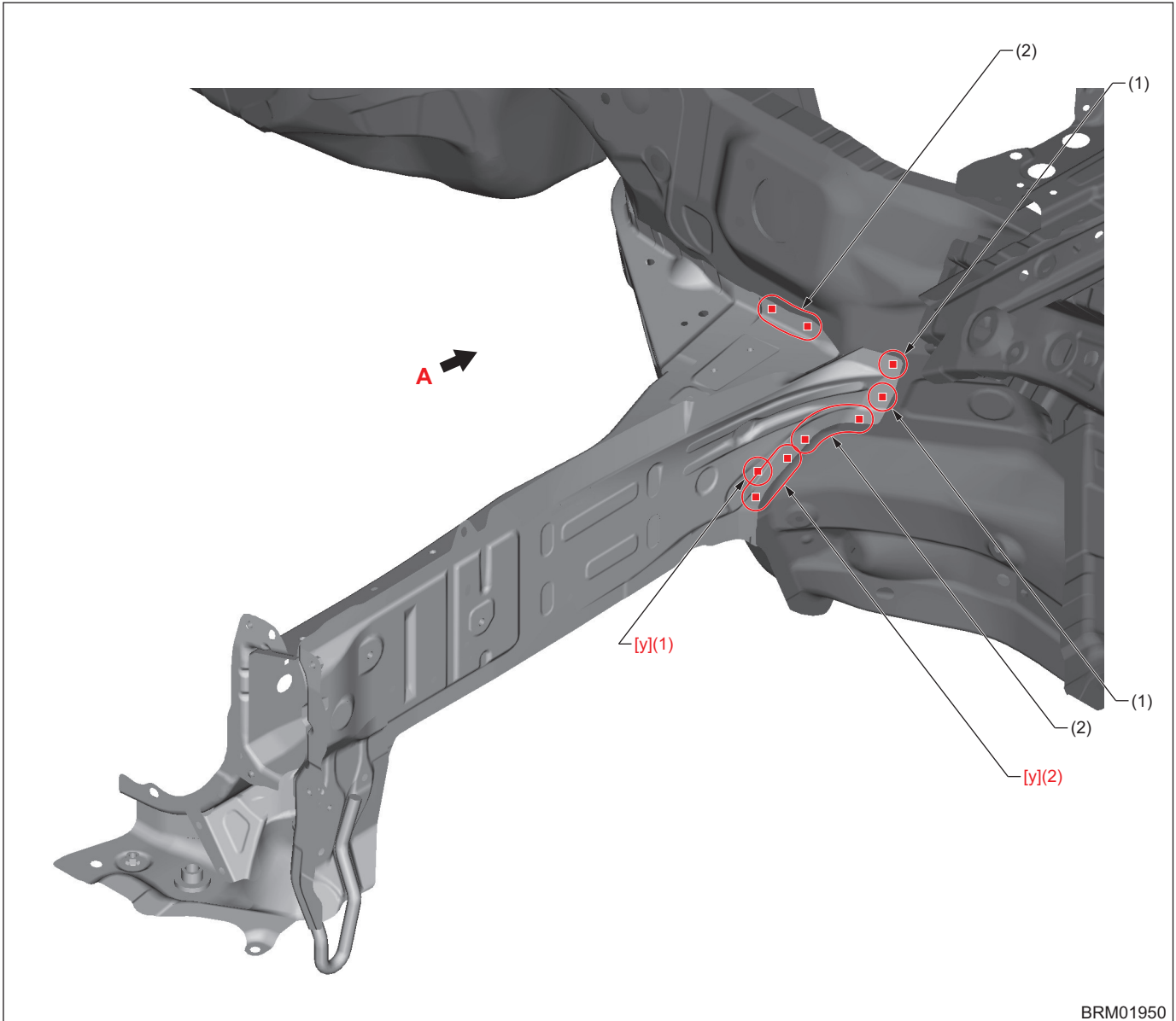
- (4) 2 points (Bottom · 2)
- (5) 2 points (Inside · 1)
- (6) 3 points (Inside · 1)

- (7) 5 points (Inside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01950

(1) 1 point (Service part)

(2) 3 points (Service part)

[y] Plug welding conditions

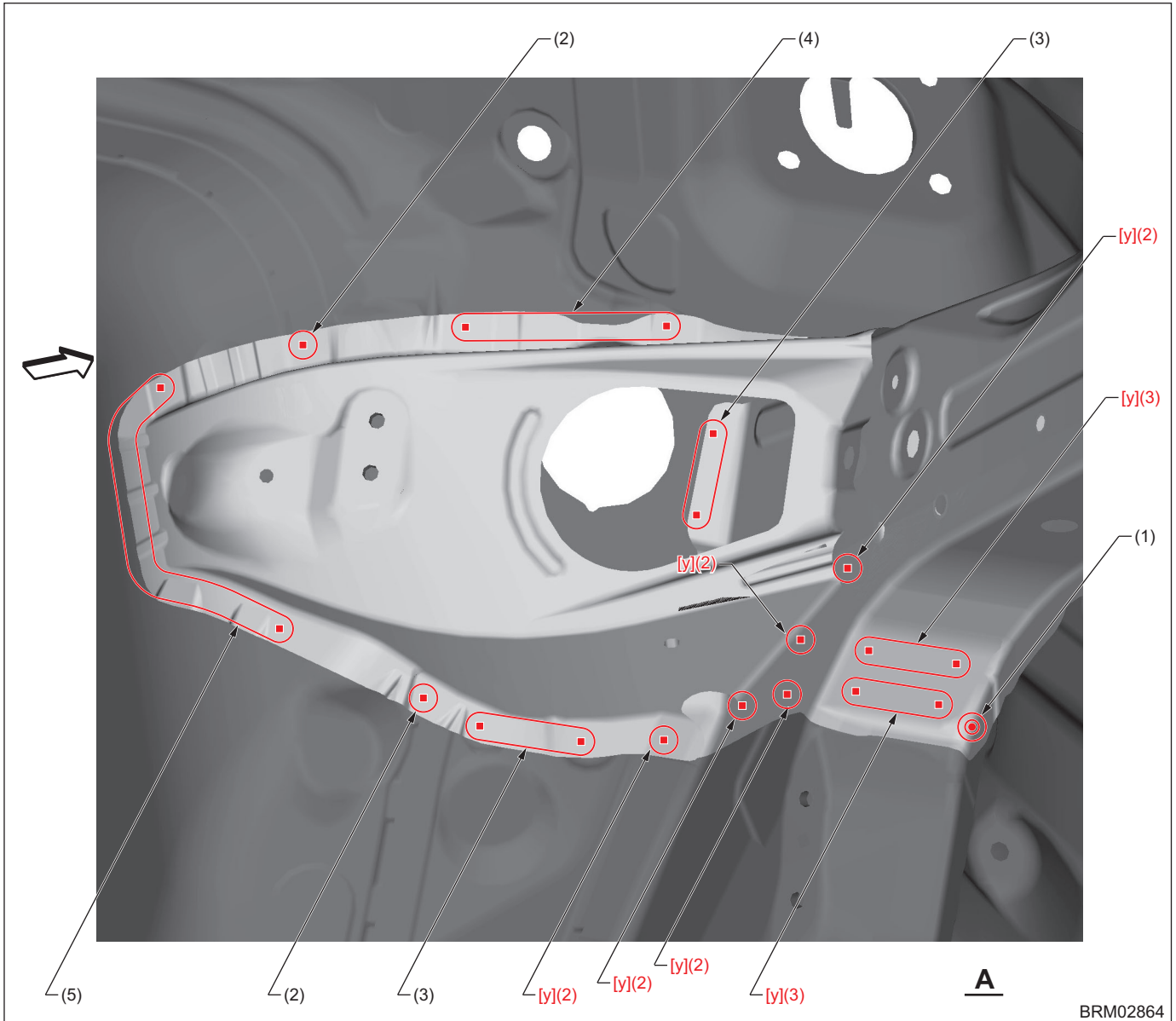
A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO<sub>2</sub>

B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO<sub>2</sub>: 20 %)



# Panel Replacement

## • View A (LH)



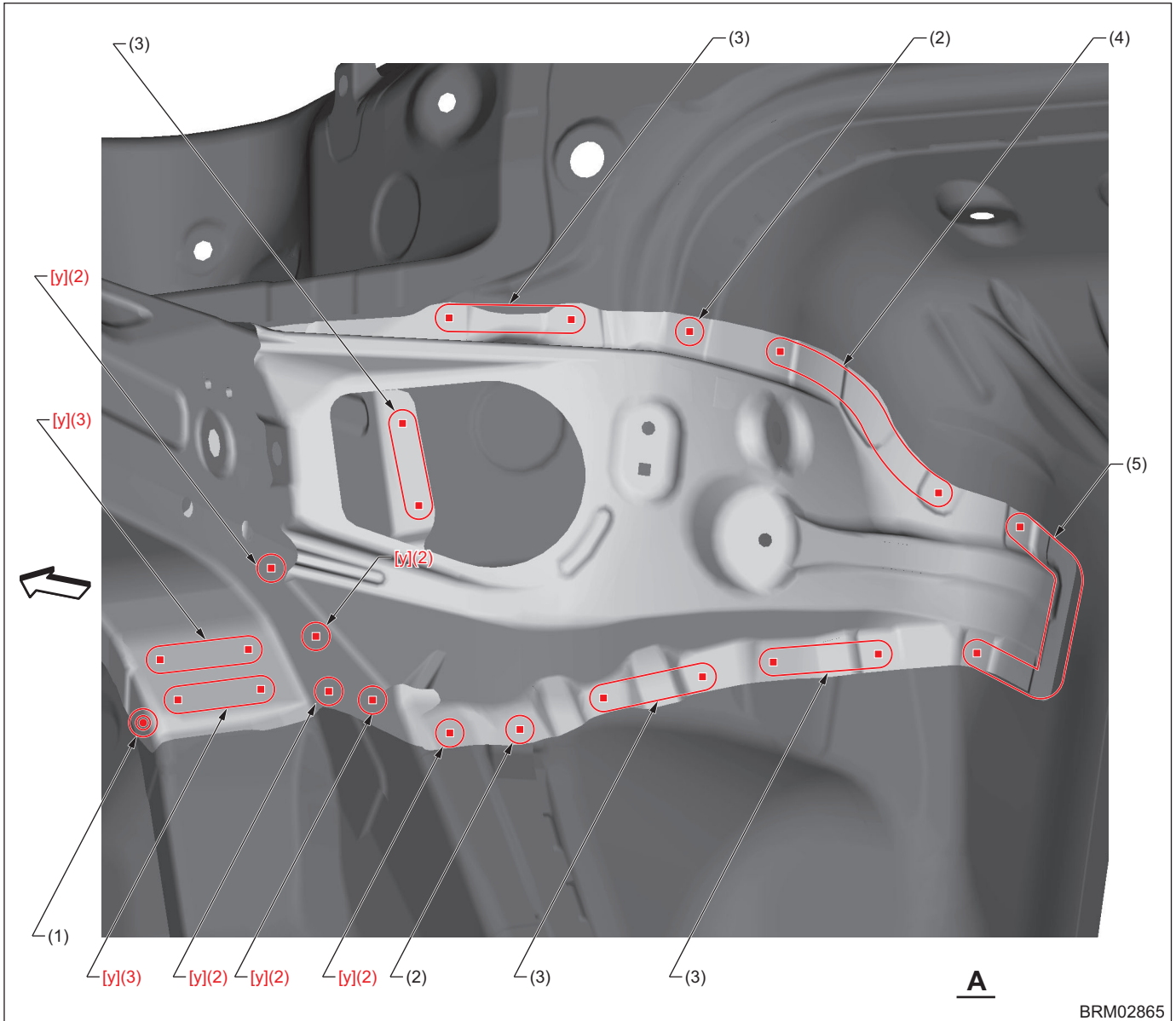
BRM02864

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

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

## • View A (RH)



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

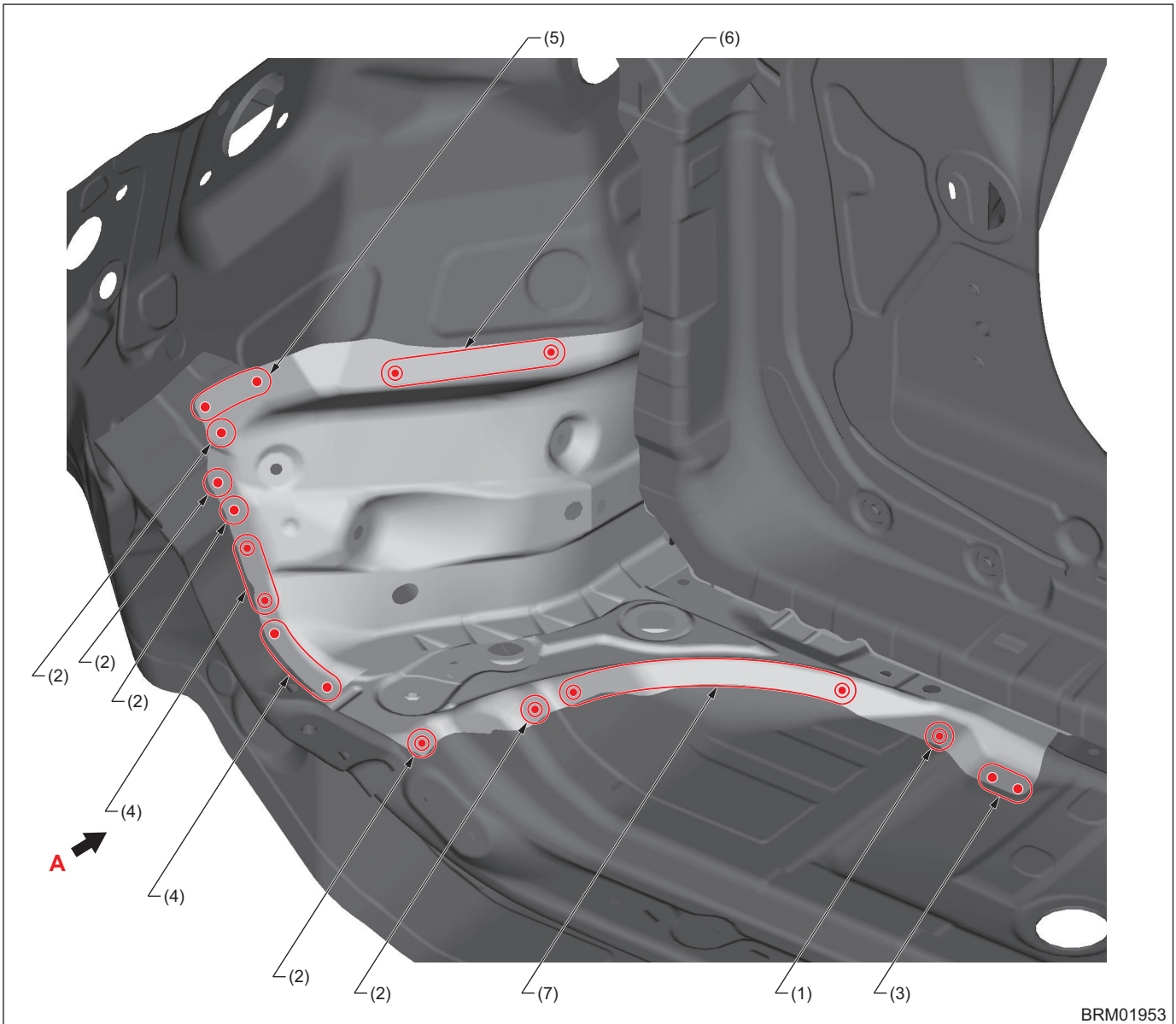
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)
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# Panel Replacement

## 8-6. Toe Board Reinforcement Lower (Total replacement)

### A: REMOVAL

• Overall view

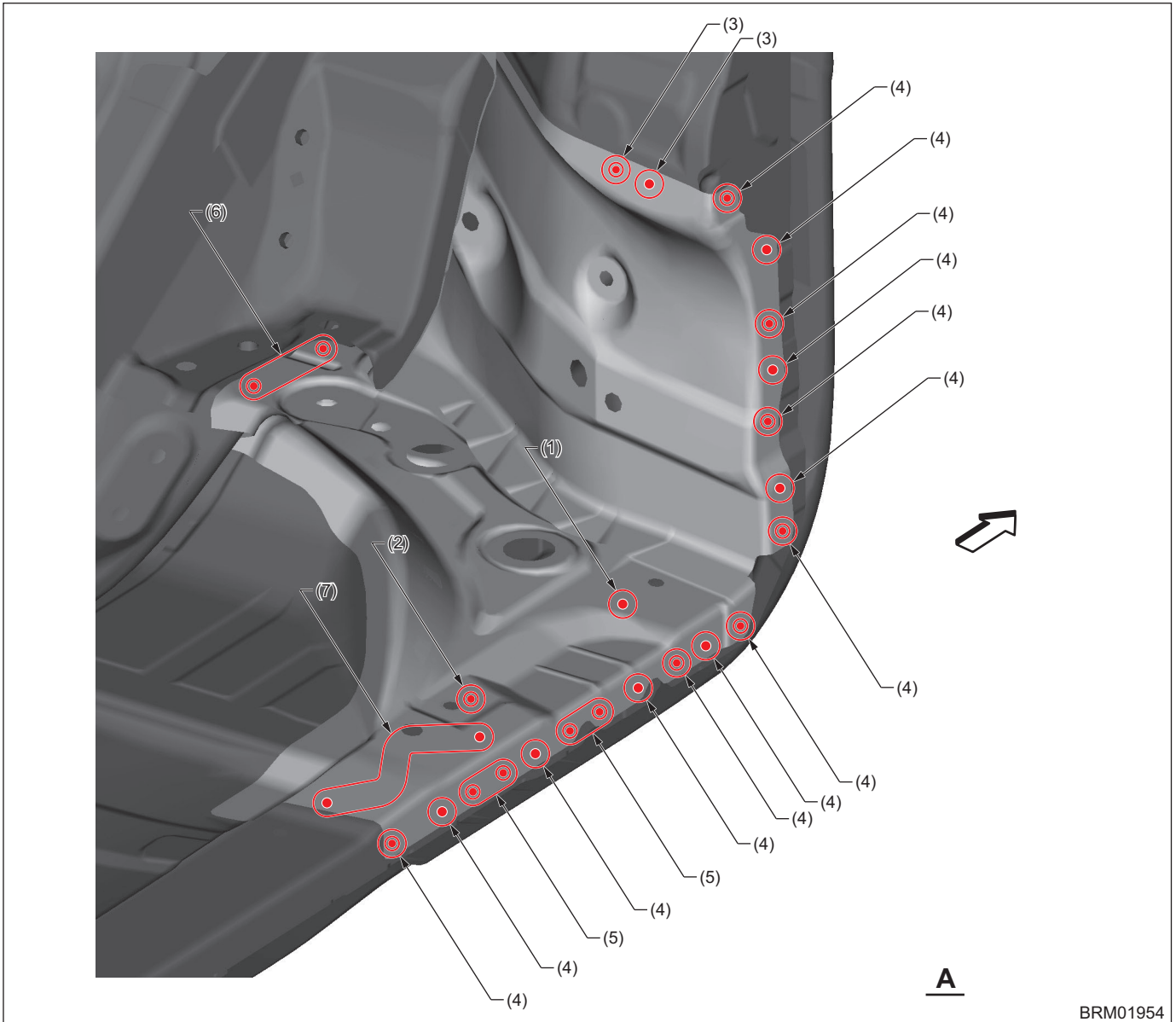


BRM01953

- |                           |                            |                            |
|---------------------------|----------------------------|----------------------------|
| (1) 1 point (Bottom · 1)  | (4) 2 points (Outside · 1) | (7) 6 points (Outside · 1) |
| (2) 1 point (Outside · 1) | (5) 3 points (Outside · 1) |                            |
| (3) 2 points (Bottom · 1) | (6) 4 points (Outside · 1) |                            |

# Panel Replacement

## • View A



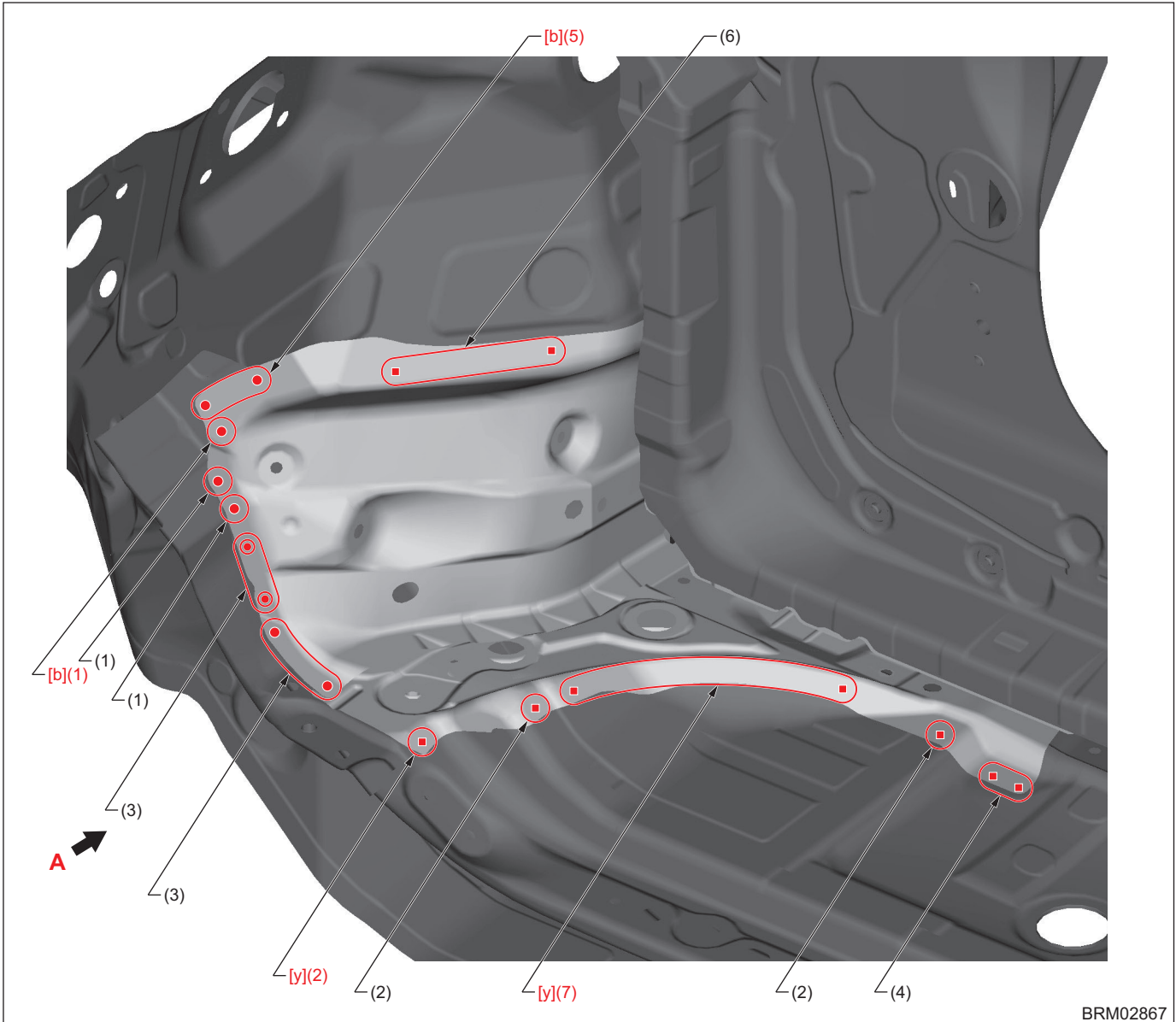
BRM01954

- |                           |  |                           |
|---------------------------|--|---------------------------|
| (1) 1 point (Bottom · 1)  | (4) 1 point (Inside · 1, belt sander)  | (7) 4 points (Bottom · 1) |
| (2) 1 point (Bottom · 2)  | (5) 2 points (Inside · 1, belt sander) |                           |
| (3) 1 point (Outside · 1) | (6) 3 points (Bottom · 1)              |                           |

# Panel Replacement

## B: INSTALLATION

### • Overall view

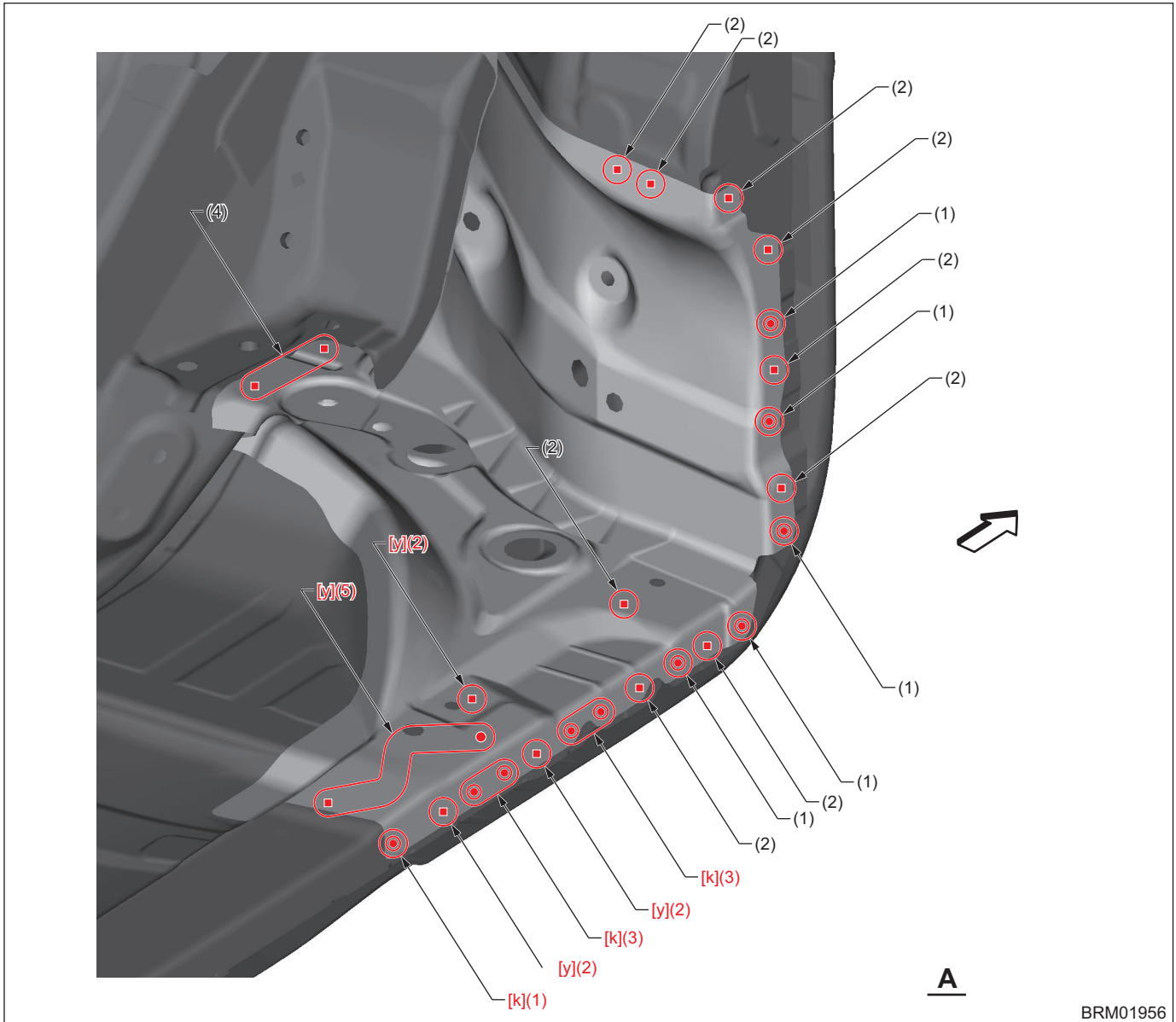


- |                            |                             |                             |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point                | (4) 2 points (Service part) | (7) 6 points (Service part) |
| (2) 1 point (Service part)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

[b] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 15 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## • View A



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

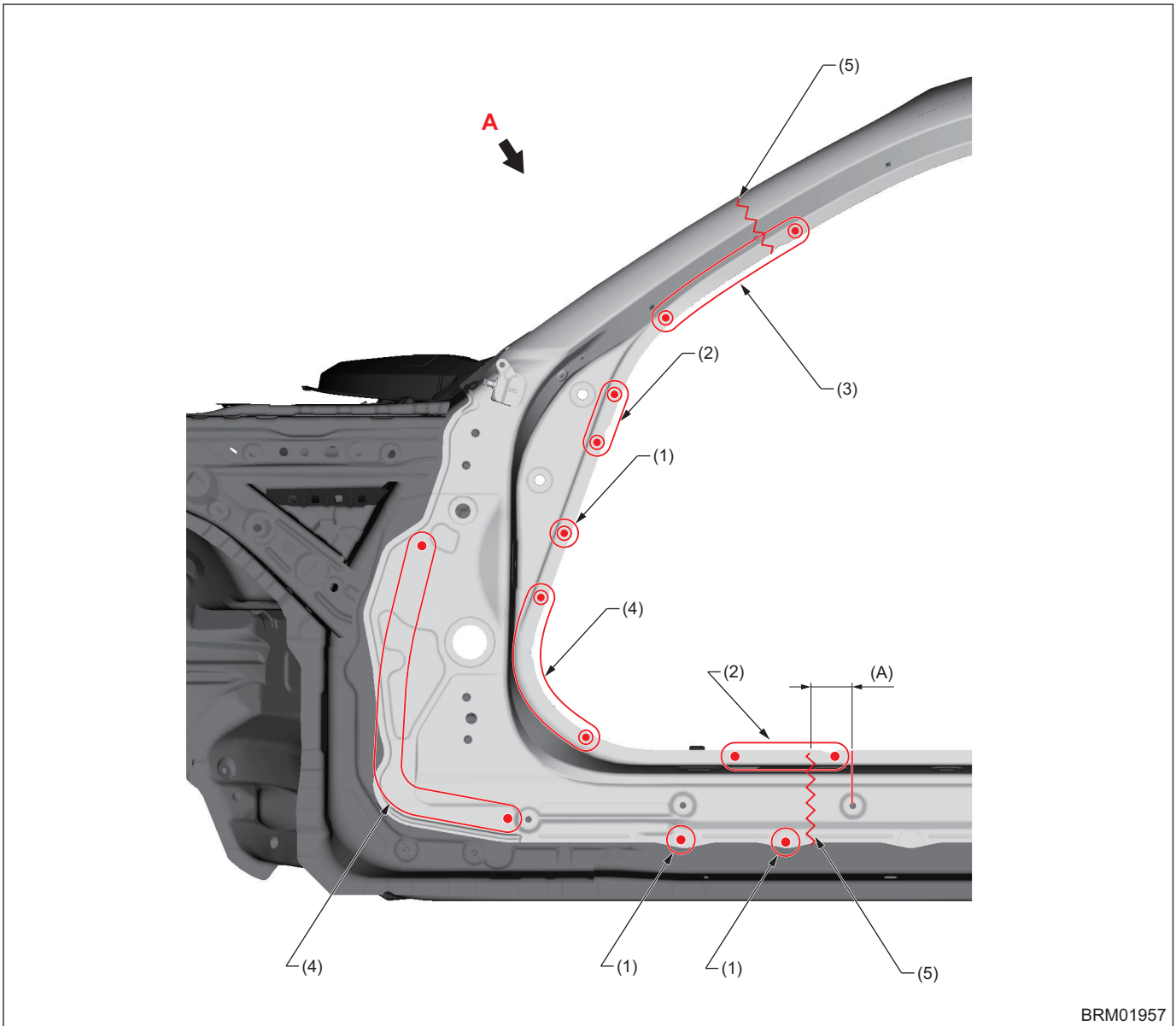
[k] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 30 cyc, Upslope time: 2 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## 8-7. Front Pillar Outer (Partial replacement)

### A: REMOVAL

#### • Overall view



BRM01957

(A) 50 mm [1.97 in]

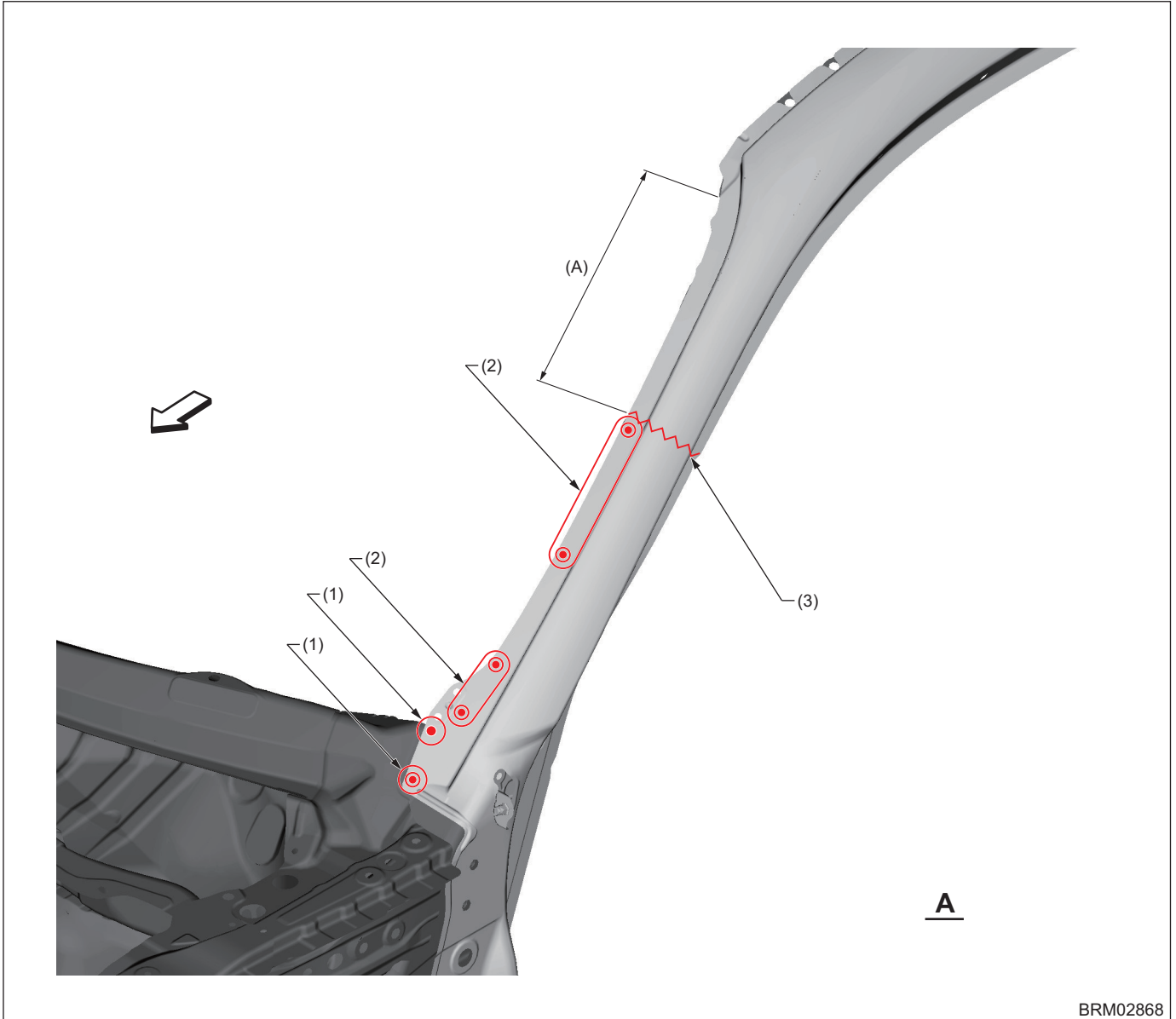
(1) 1 point (Outside · 1)  
(2) 2 points (Outside · 1)

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

(5) Cut position

# Panel Replacement

## • View A



BRM02868

(A) 250 mm [9.84 in]

(1) 1 point (Top · 1)

(2) 2 points (Top · 1)

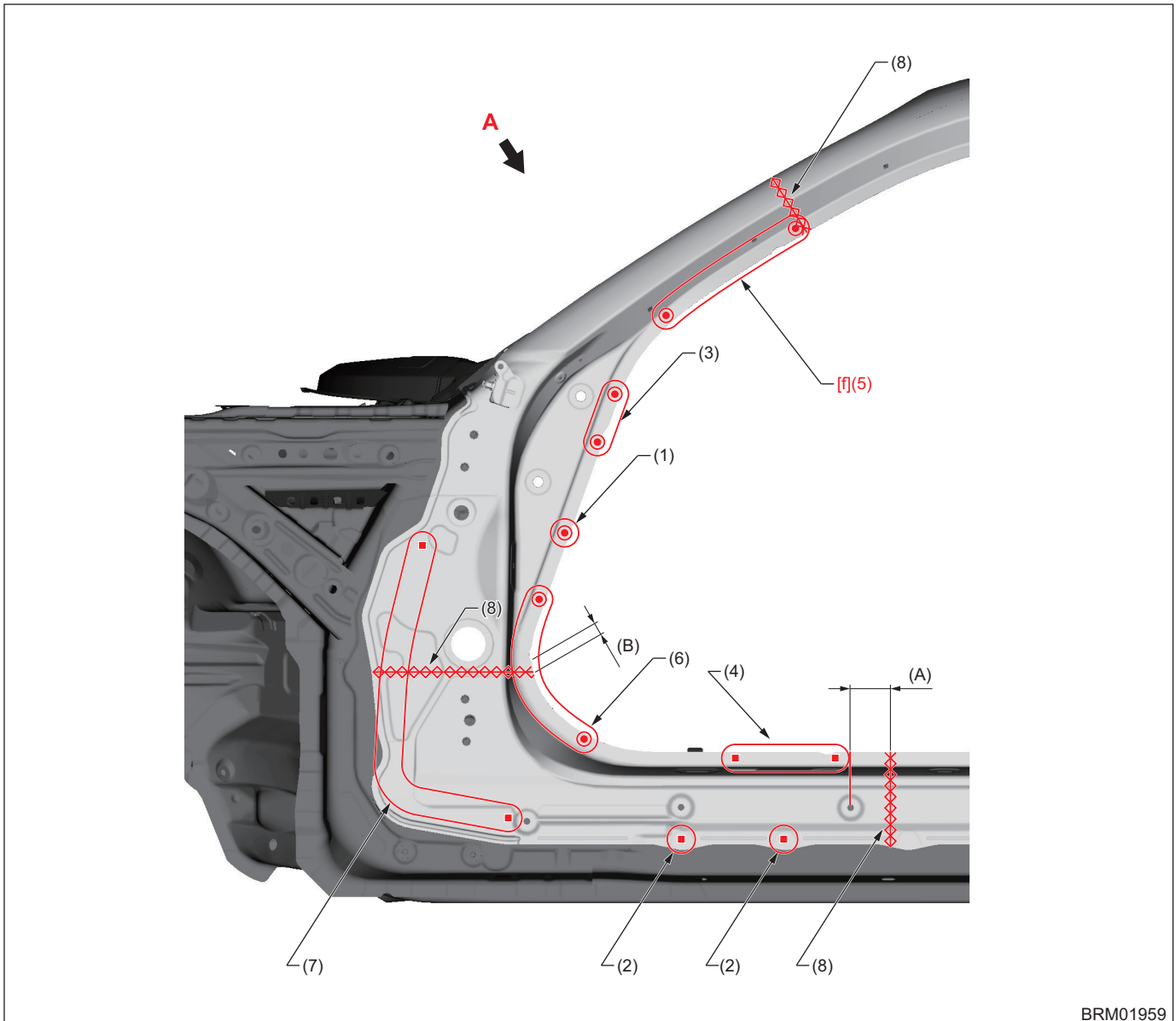
(3) Cut position



# Panel Replacement

## B: INSTALLATION

### • Overall view 1



(A) 50 mm [1.97 in]

(B) 14 mm [0.55 in]

(1) 1 point

(4) 2 points (Service part)

(7) 4 points (Service part)

(2) 1 point (Service part)

(5) 3 points

(8) 1 point (Continuous welding)

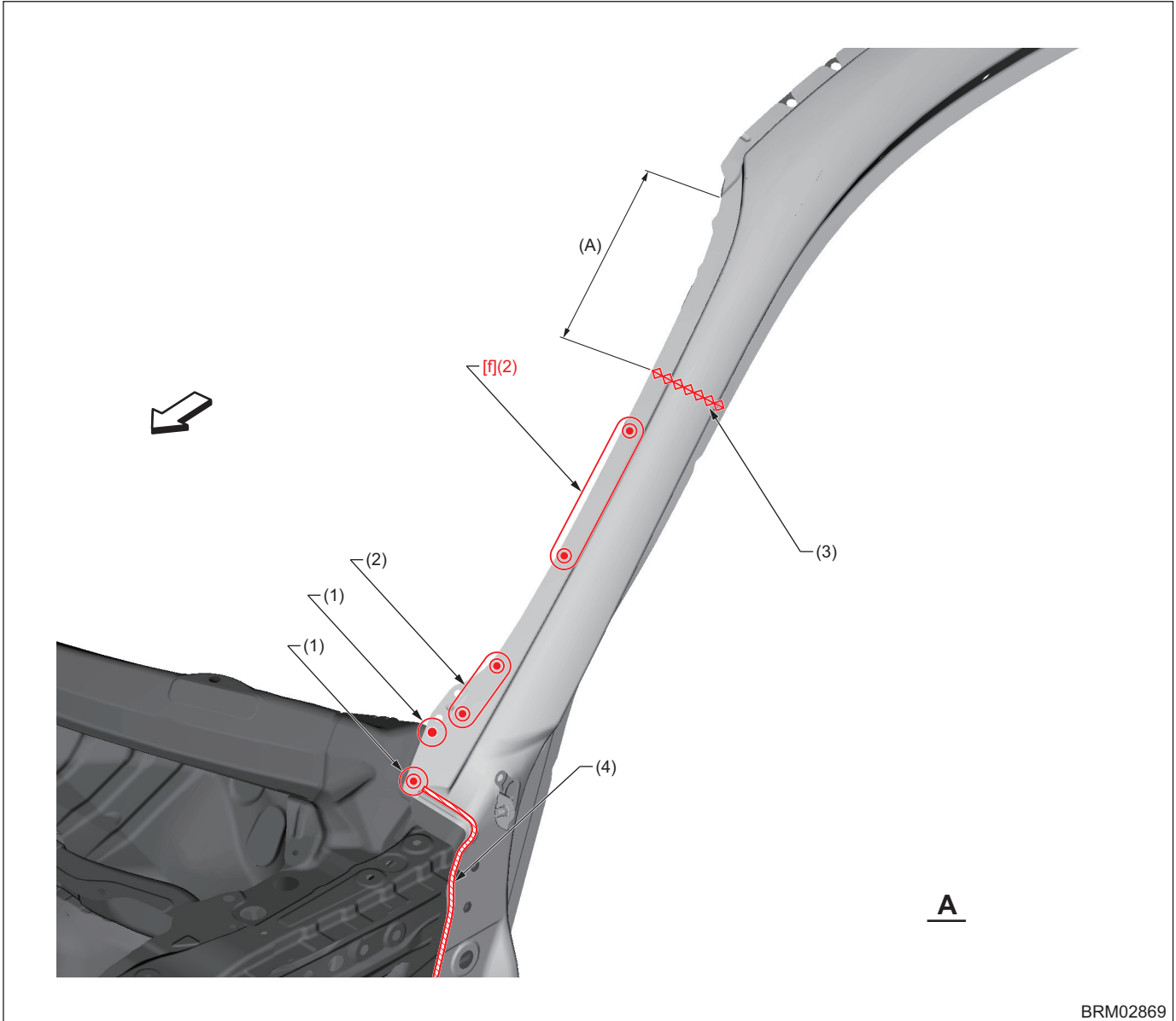
(3) 2 points

(6) 4 points

[f] Spot welding conditions | Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc

# Panel Replacement

## • View A




(A) 200 mm [7.87 in]

(1) 1 point

(3) 1 point (Continuous welding)

(4) Spotting sealer

(2) 2 points

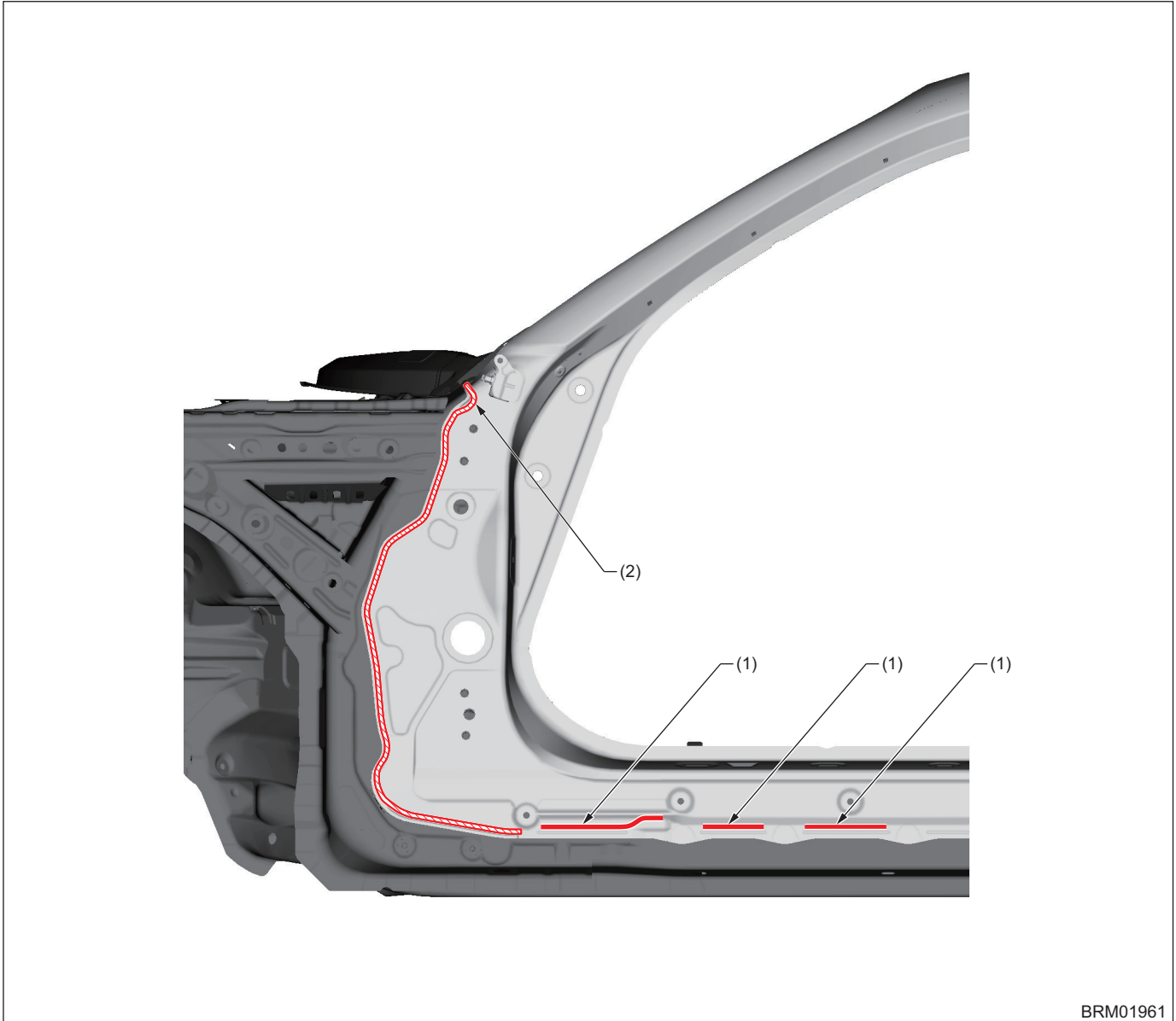
 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063) or equivalent])

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

[f] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc
-----------------------------	--

# Panel Replacement

## • Overall view 2



BRM01961

(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])

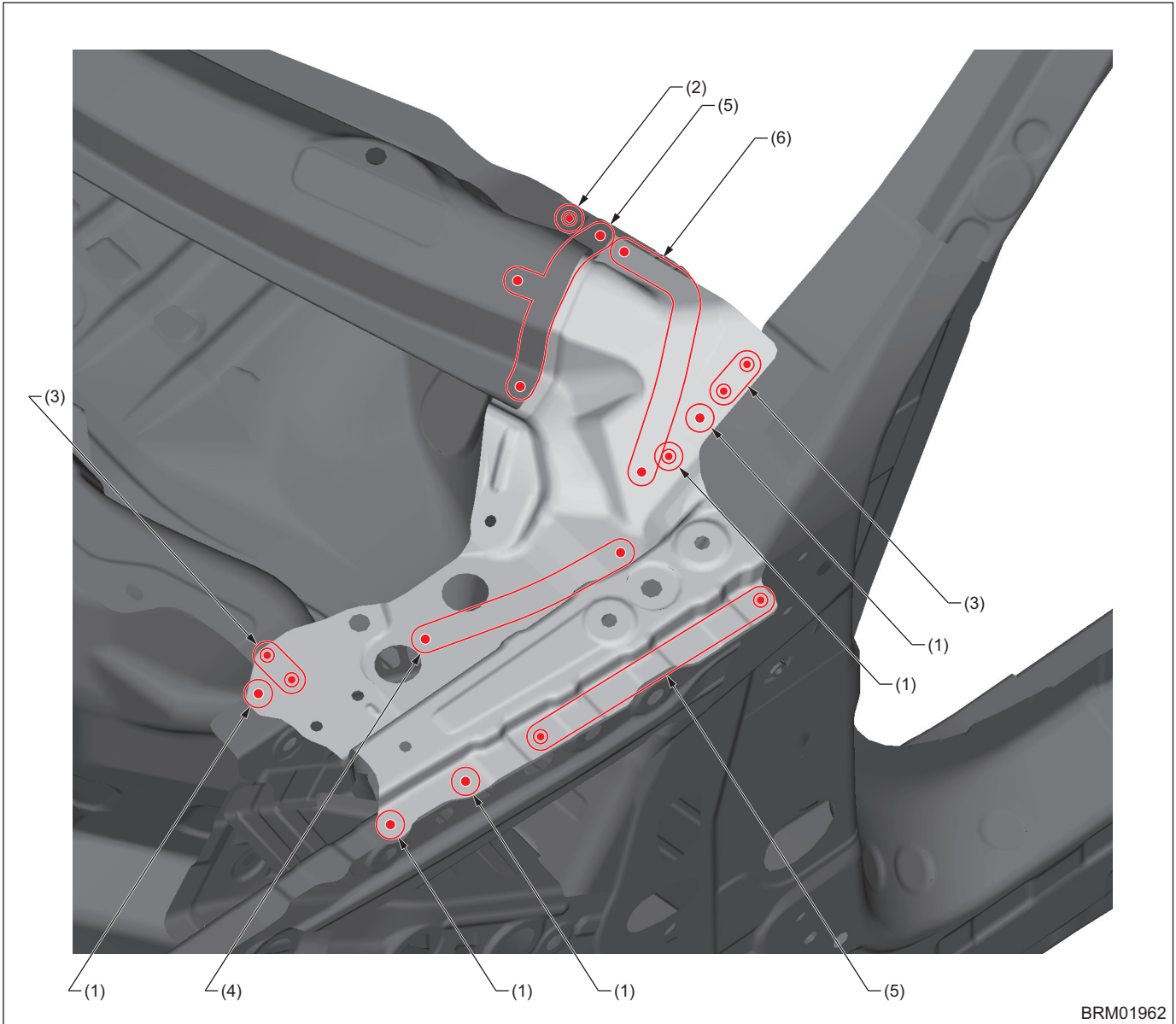
Note: Fill the space between the panels with spotting sealer.

# Panel Replacement

## 8-8. Reinforcement Front Panel Side (Total replacement)

### A: REMOVAL

• Overall view



BRM01962

(1) 1 point (Top · 1)

(2) 1 point (Top · 2)

(3) 2 points (Top · 1)

(4) 3 points (Top · 1)

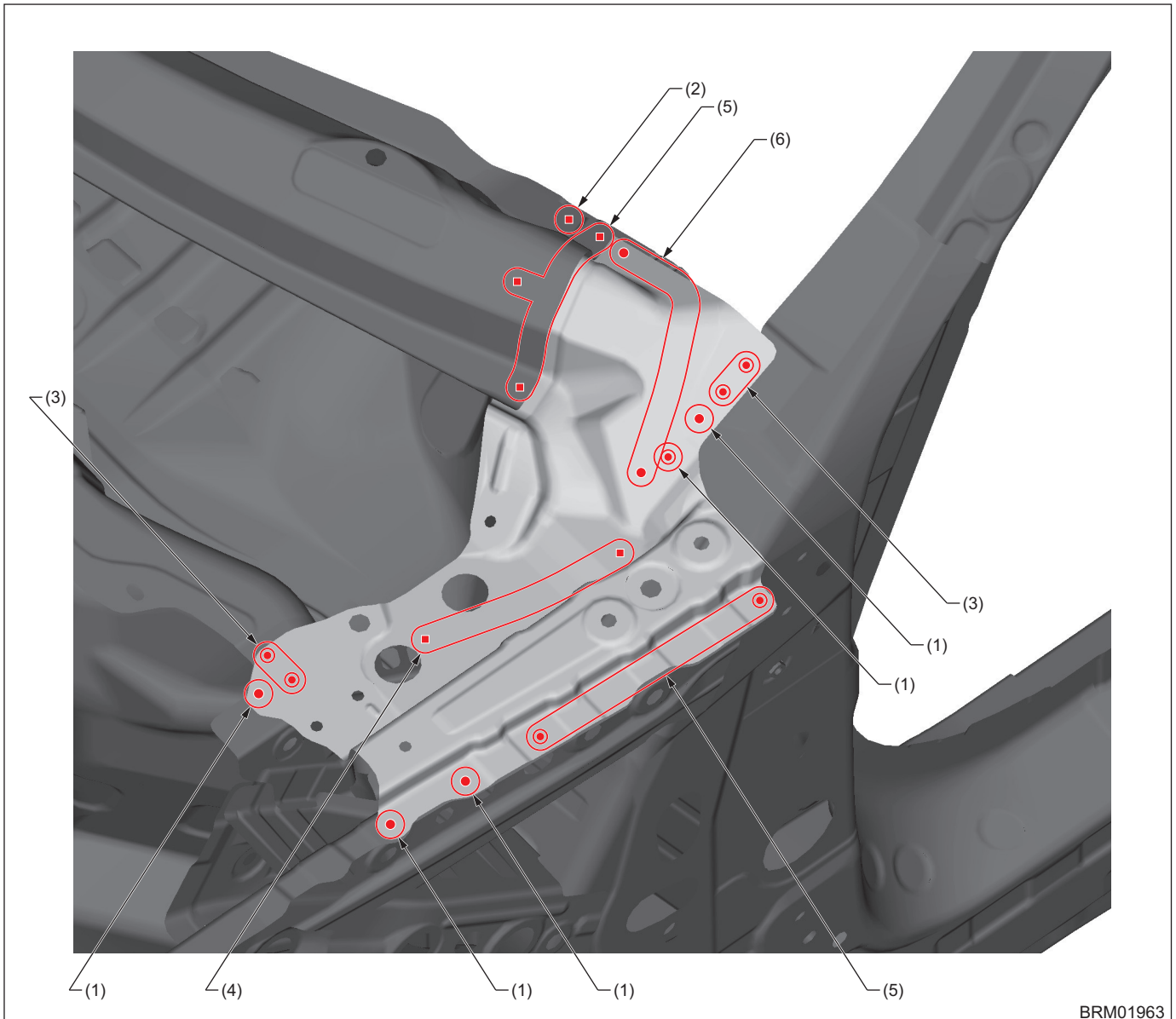
(5) 4 points (Top · 1)

(6) 5 points (Top · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01963

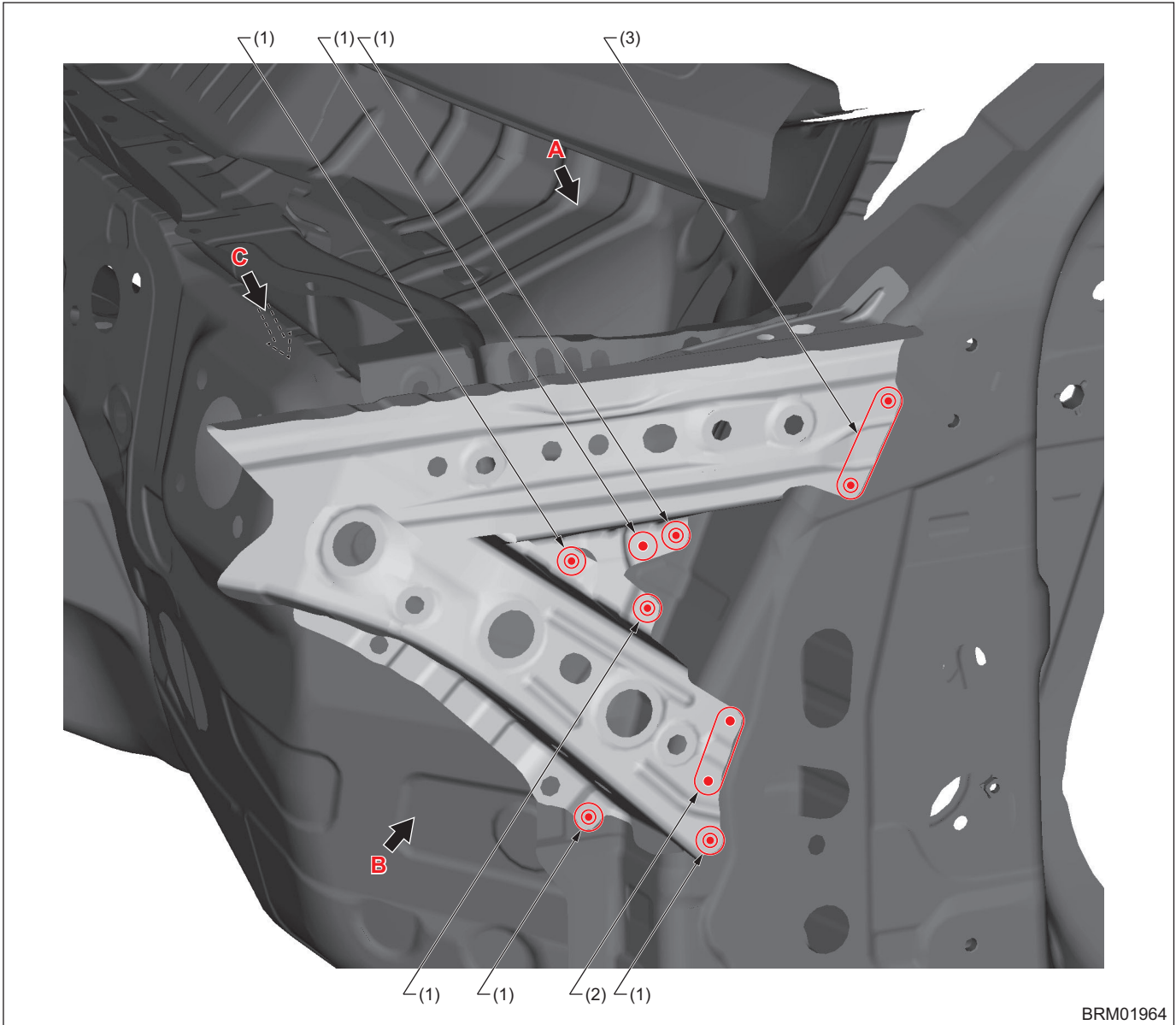
- |                                       |                             |              |
|---------------------------------------|-----------------------------|--------------|
| (1) 1 point                           | (3) 2 points                | (5) 4 points |
| (2) 1 point (Service part · matching)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

# Panel Replacement

## 8-9. Gusset Frame Guide Upper (Total replacement)

### A: REMOVAL

- Overall view



BRM01964

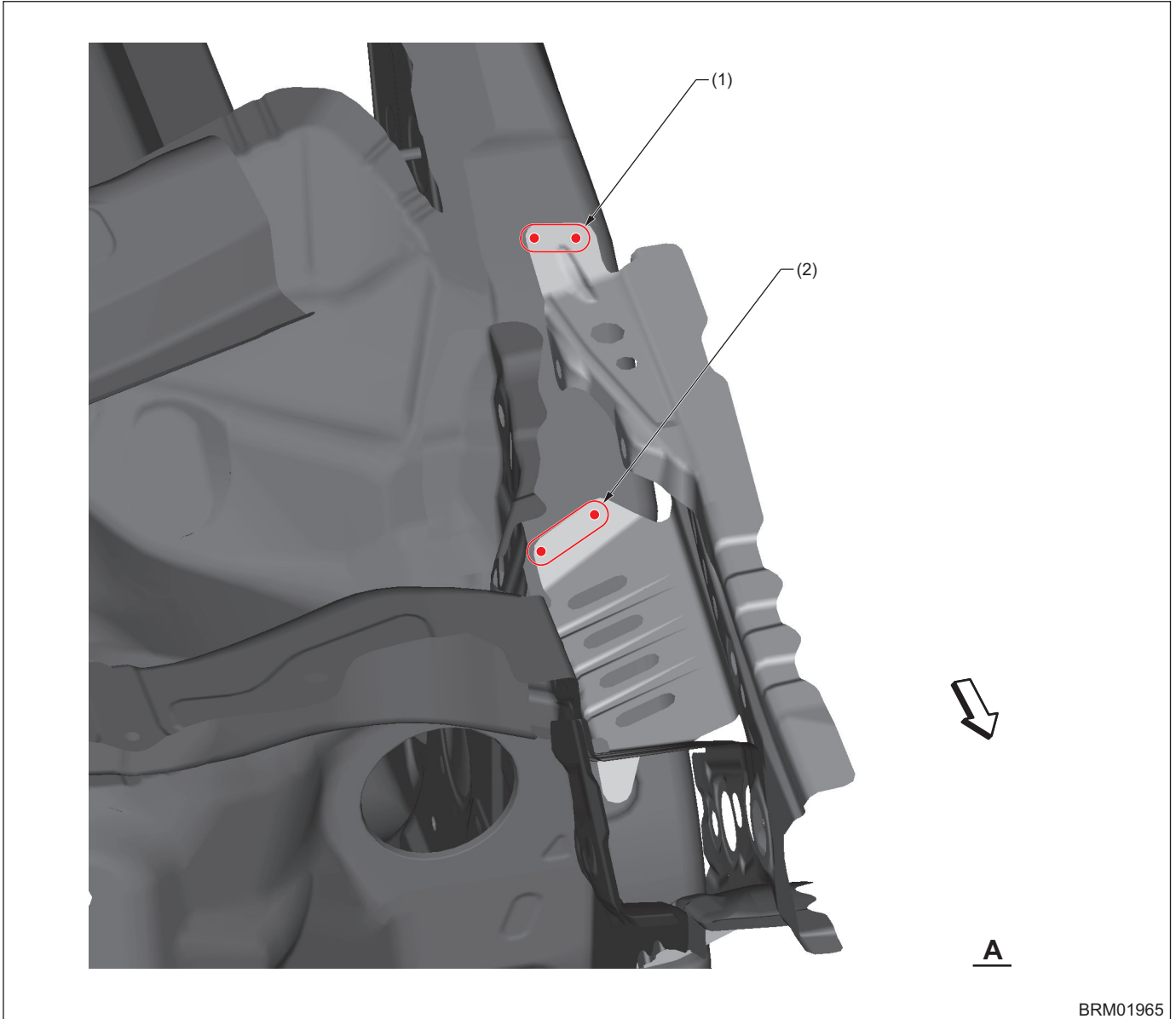
(1) 1 point (Outside · 1)

(2) 2 points (Outside · 1)

(3) 3 points (Outside · 1)

# Panel Replacement

## • View A

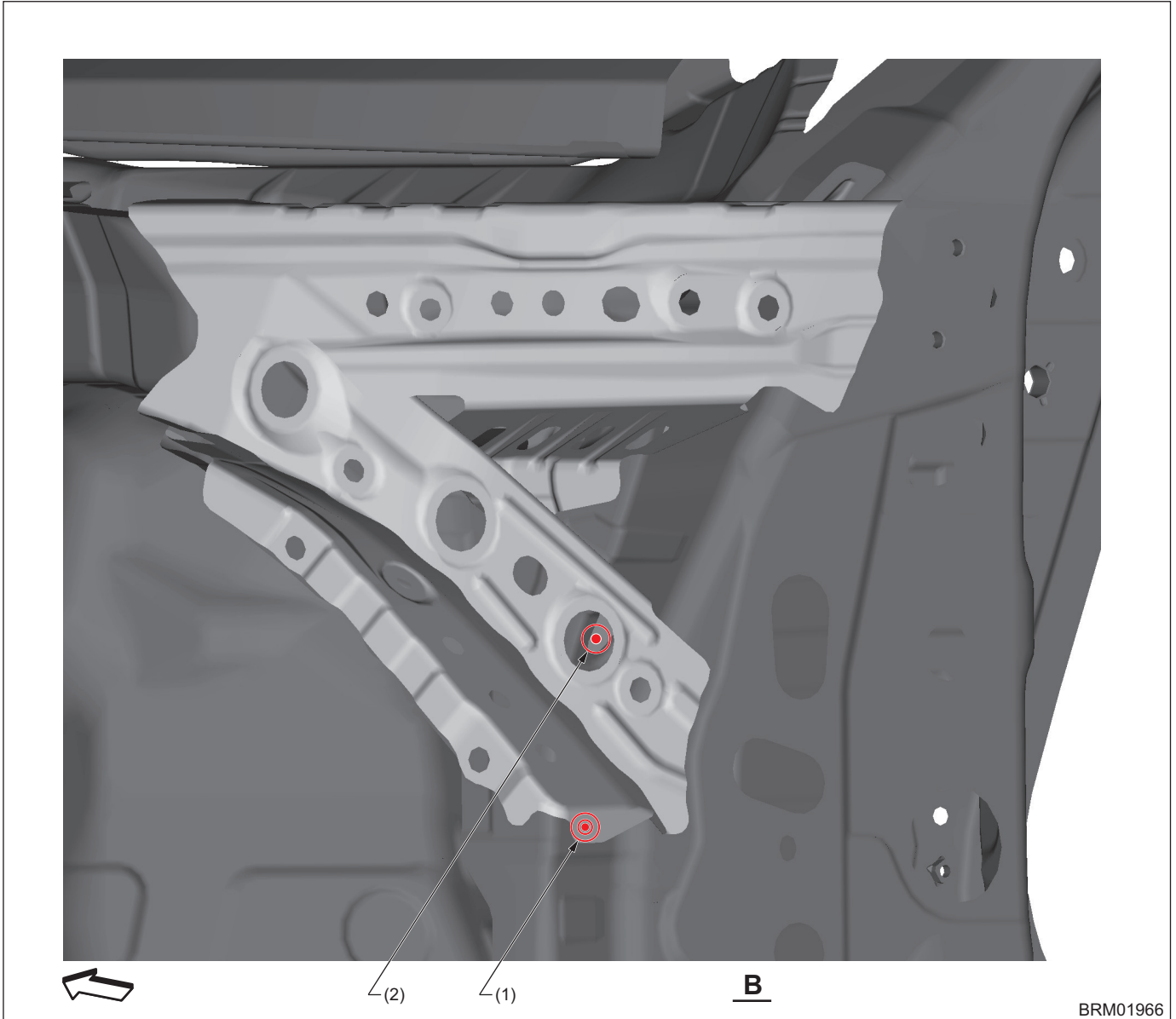


(1) 2 points (Top · 1)

(2) 2 points (Top · 1, belt sander)

# Panel Replacement

## • View B



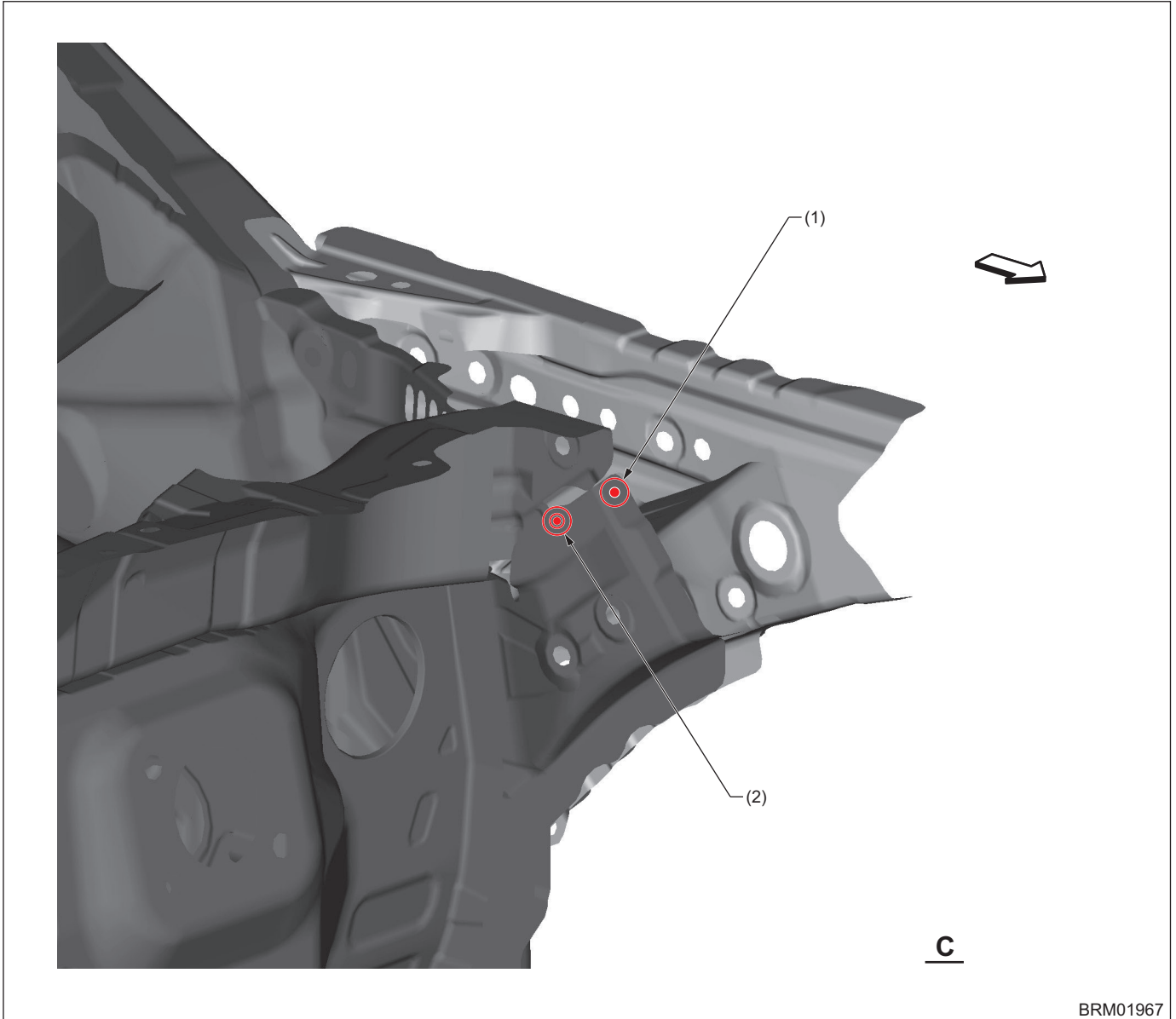
(1) 1 point (Outside · 1)

(2) 1 point (Outside · 1, belt sander)



# Panel Replacement

## • View C



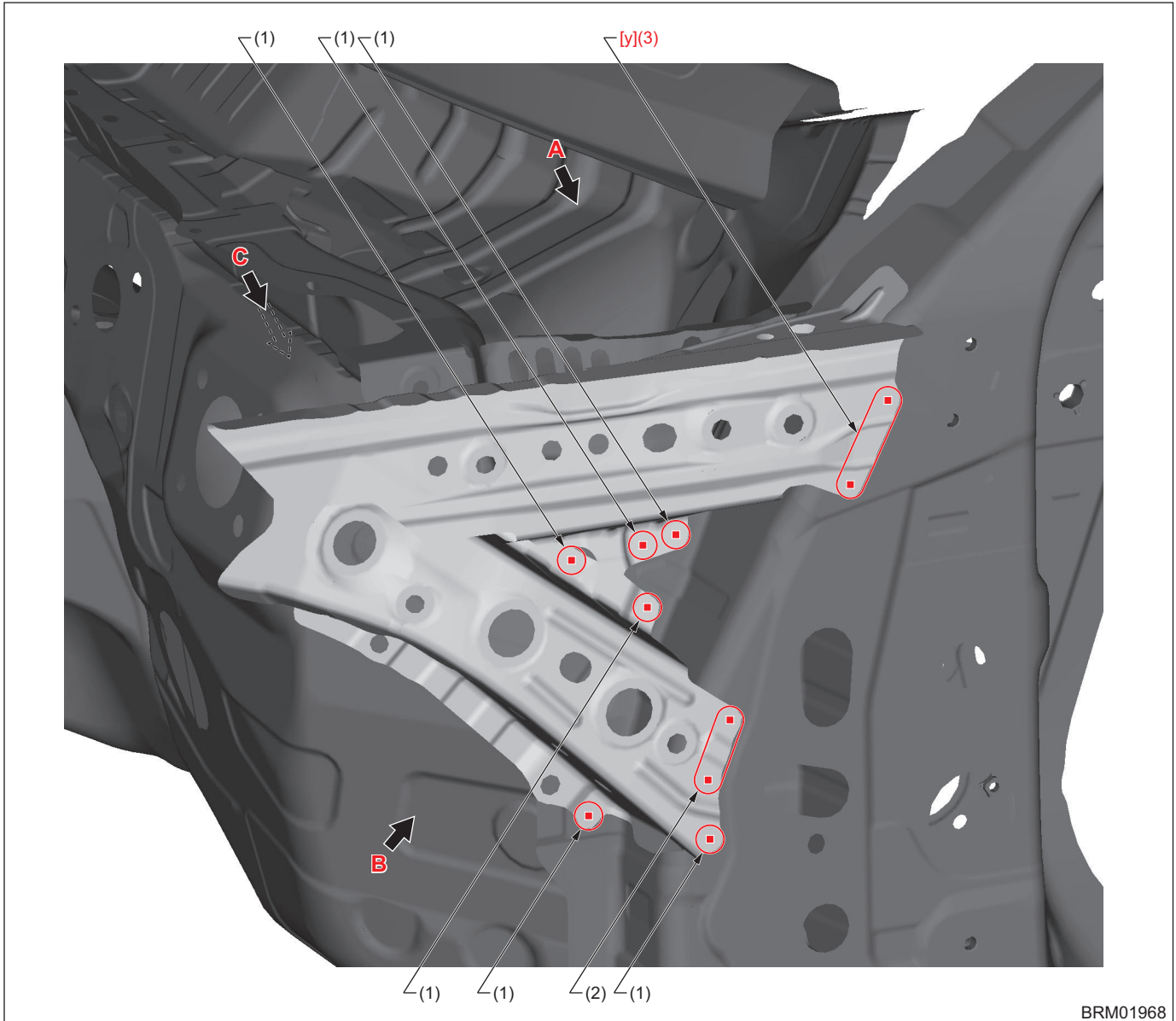
(1) 1 point (Inside · 1)

(2) 1 point (Inside · 2)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01968

(1) 1 point (Service part)

(2) 2 points (Service part)

(3) 3 points (Service part)

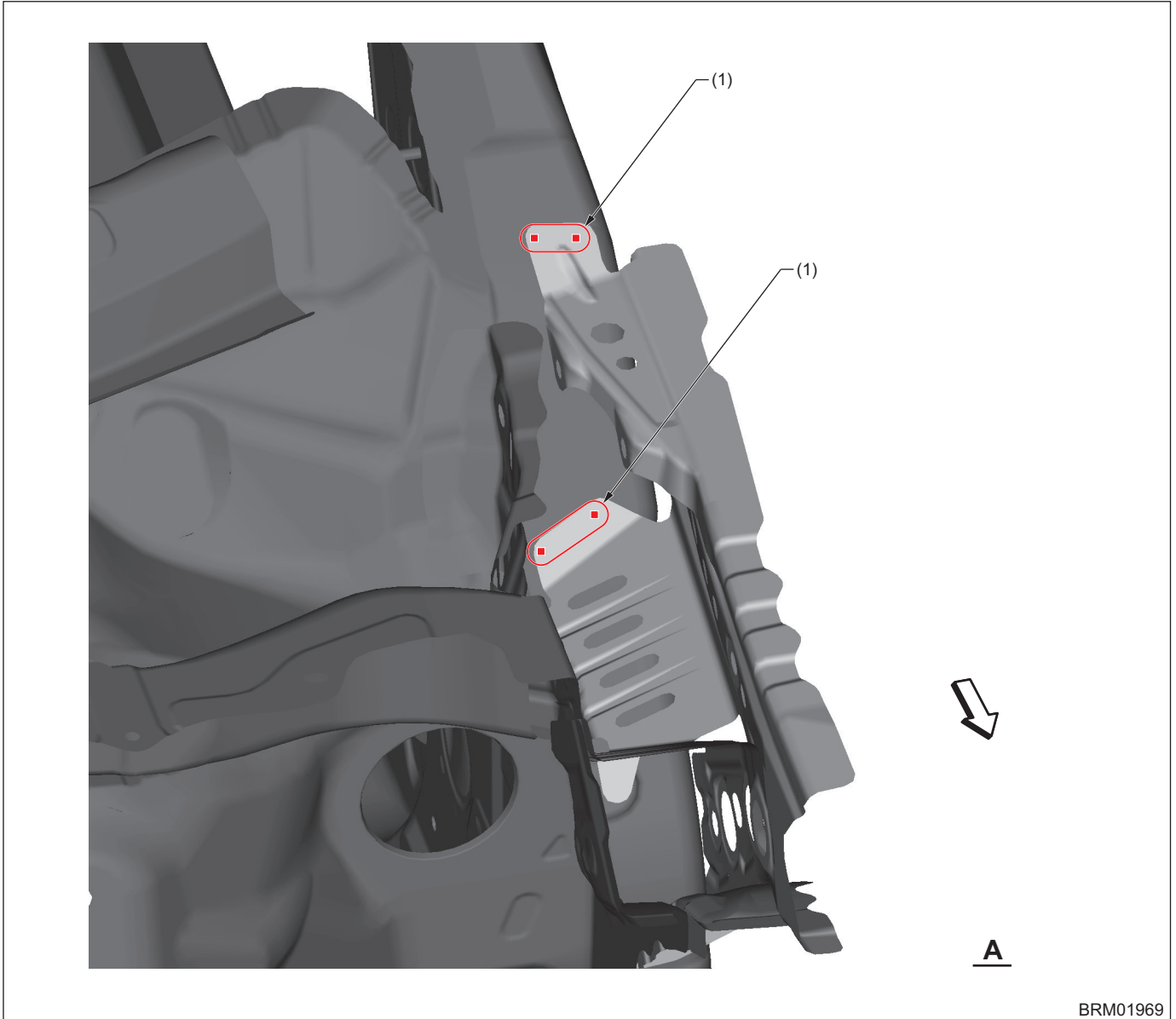
[y] Plug welding conditions

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO<sub>2</sub>

B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO<sub>2</sub>: 20 %)

# Panel Replacement

## • View A

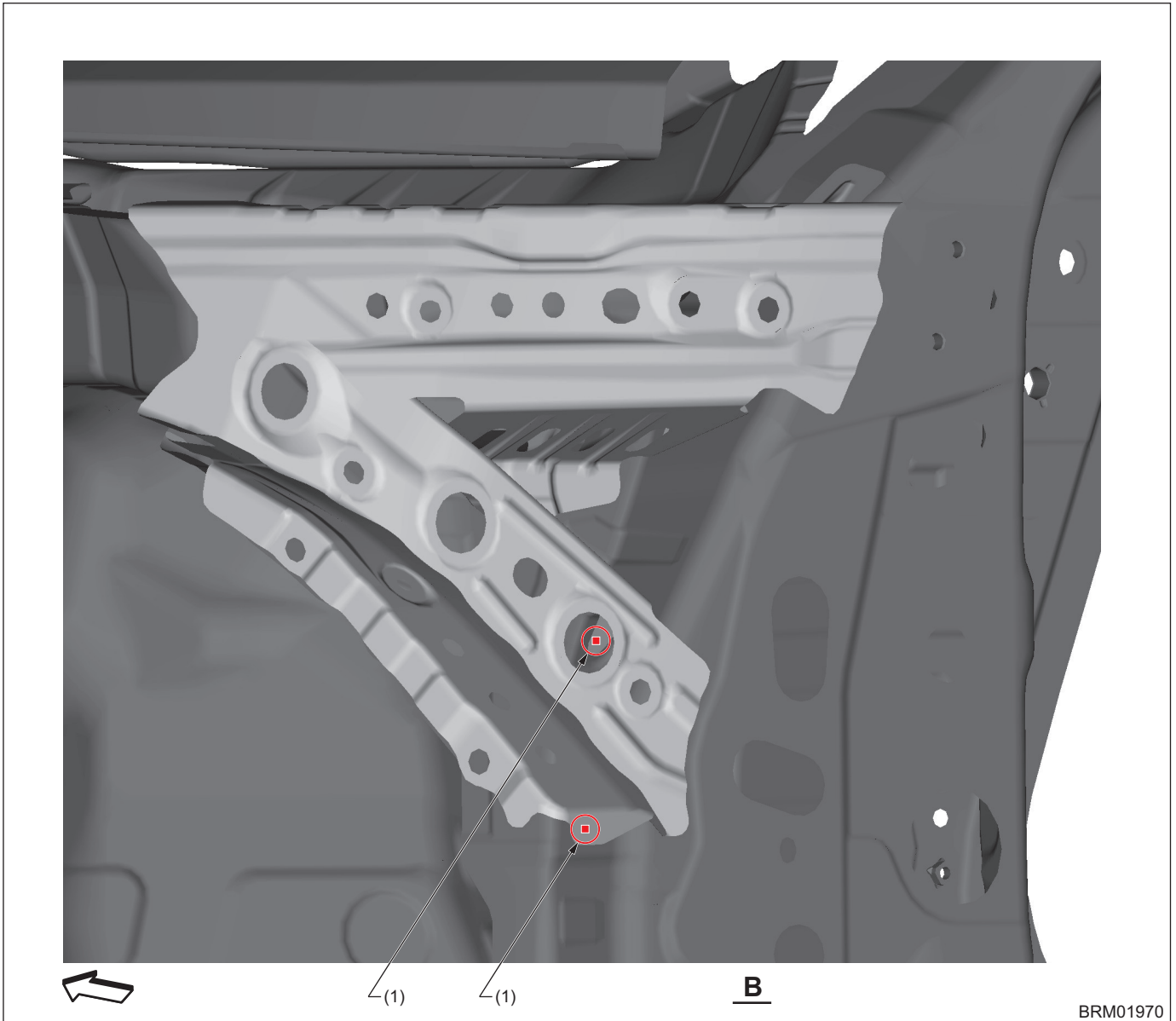


BRM01969

(1) 2 points (Service part)

# Panel Replacement

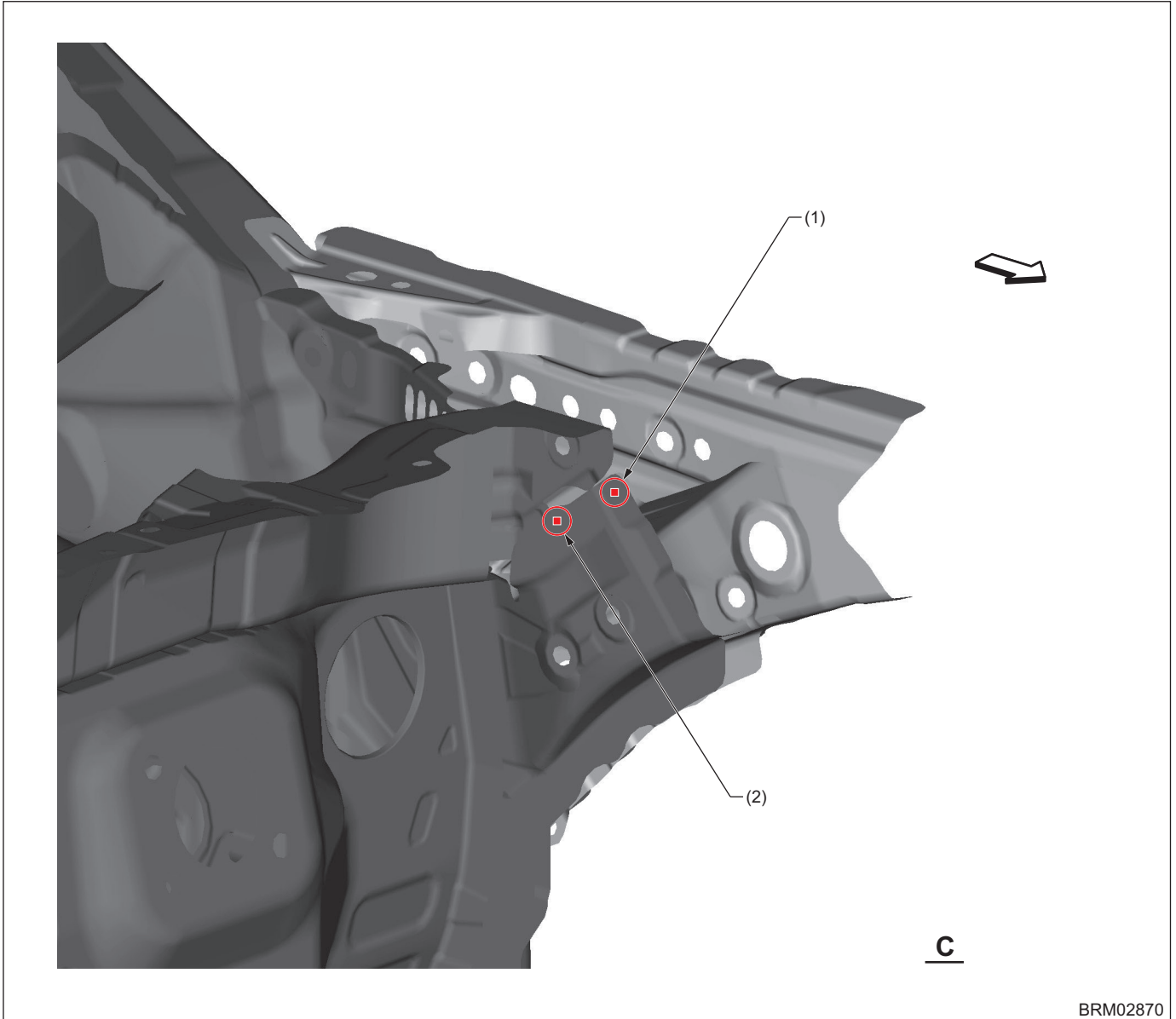
## • View B



(1) 1 point (Service part)

# Panel Replacement

## • View C



(1) 1 point

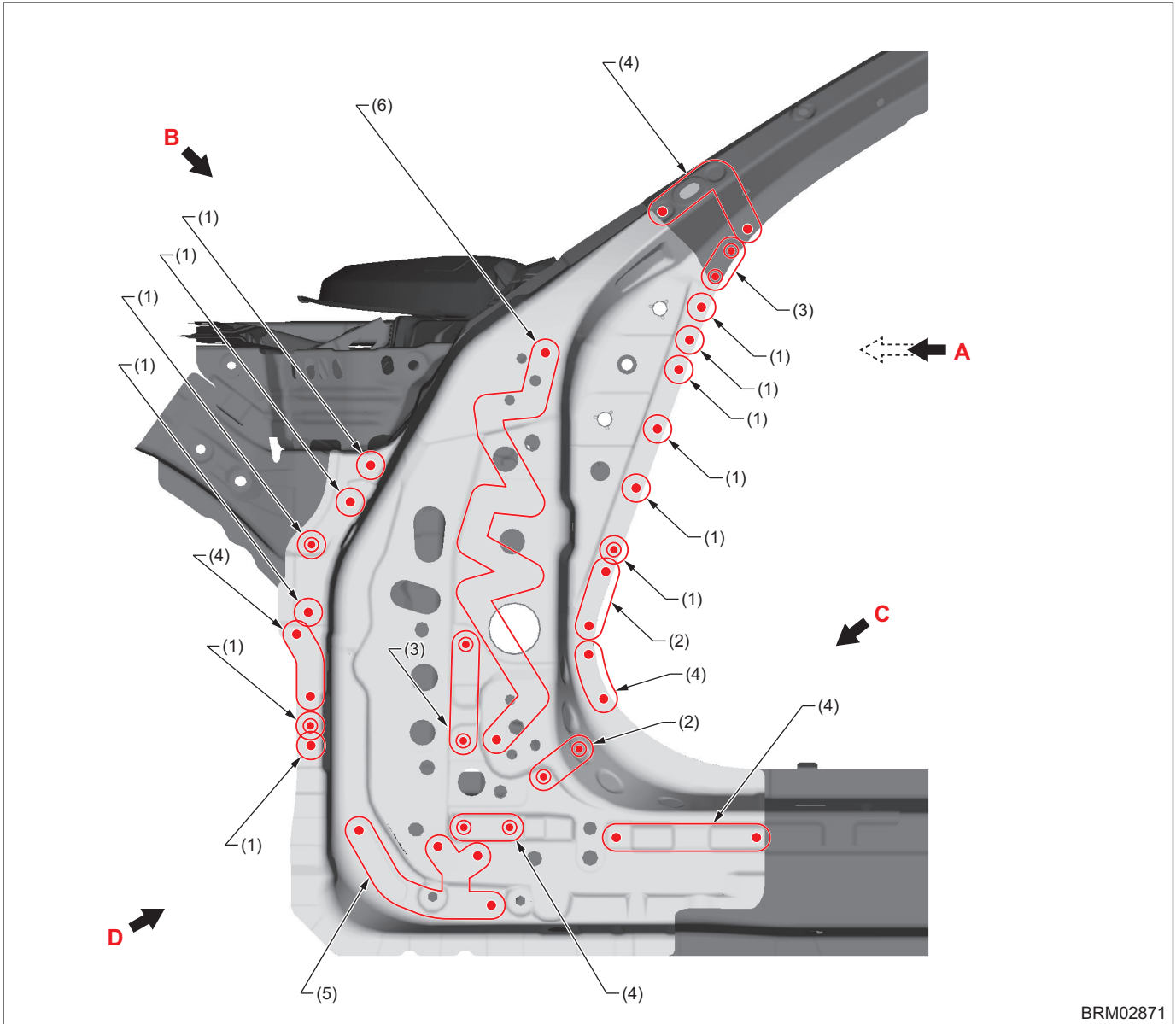
(2) 1 point (Service part · matching)

# Panel Replacement

## 8-10. Front Pillar Reinforcement (Total replacement)

### A: REMOVAL

• Overall view 1



BRM02871

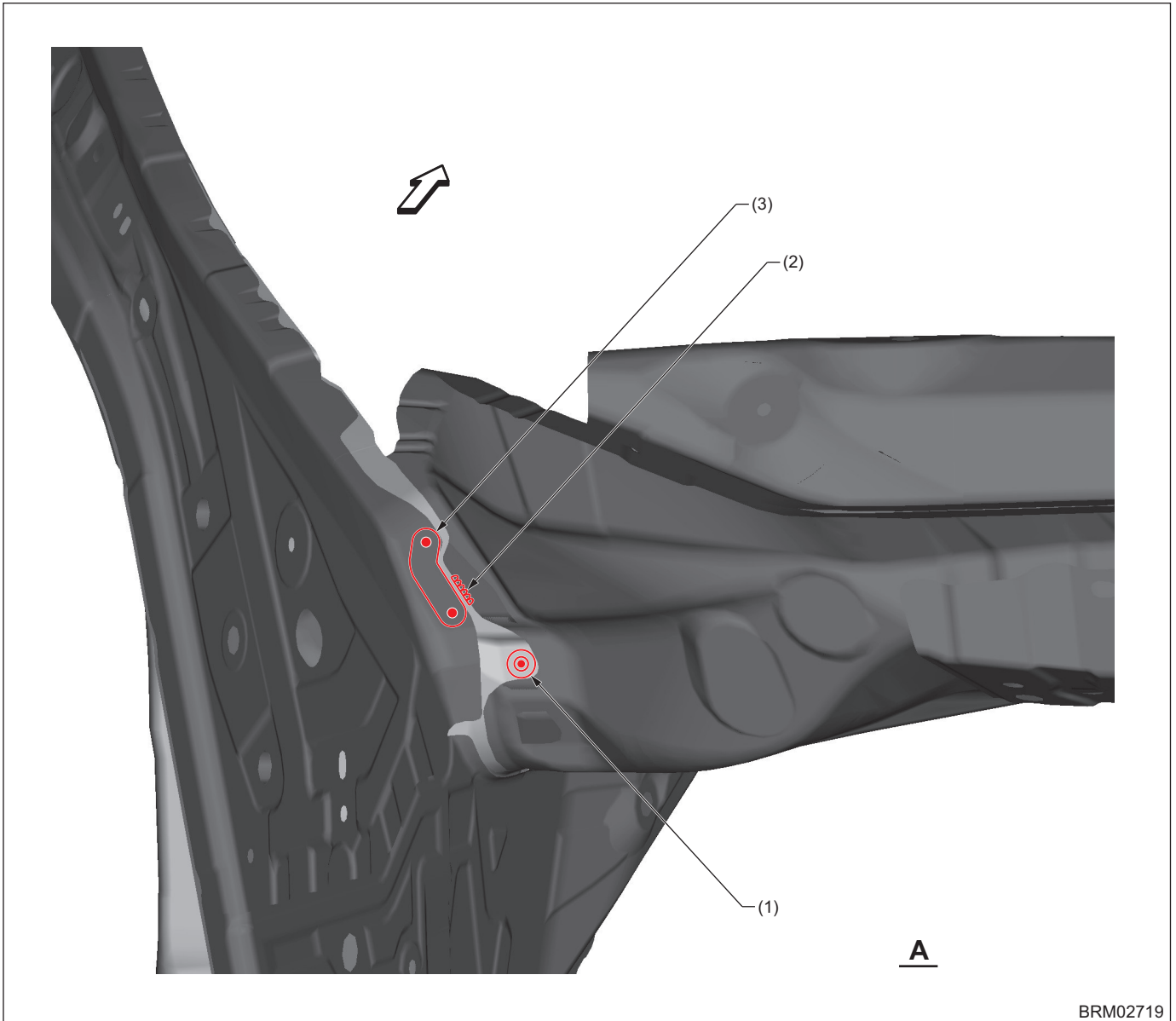
(1) 1 point (Outside · 1)  
 (2) 2 points (Outside · 1)

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

(5) 8 points (Outside · 1)  
 (6) 10 points (Outside · 1)

# Panel Replacement

## • View A



BRM02719

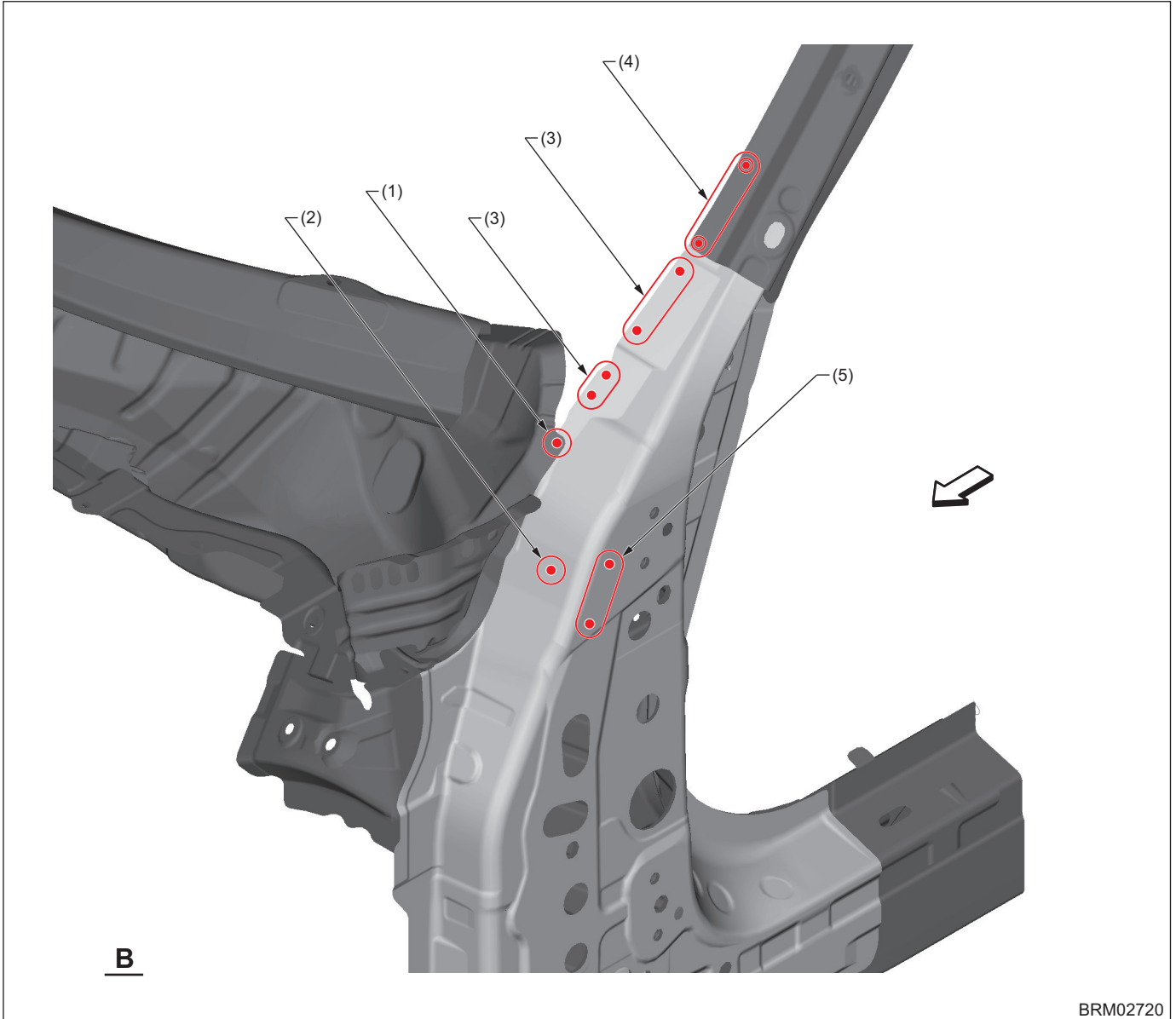
(1) 1 point (Inside · 1)

(2) 1 point (Inside · 1, belt sander)

(3) 2 points (Inside · 1)

# Panel Replacement

## • View B



BRM02720

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

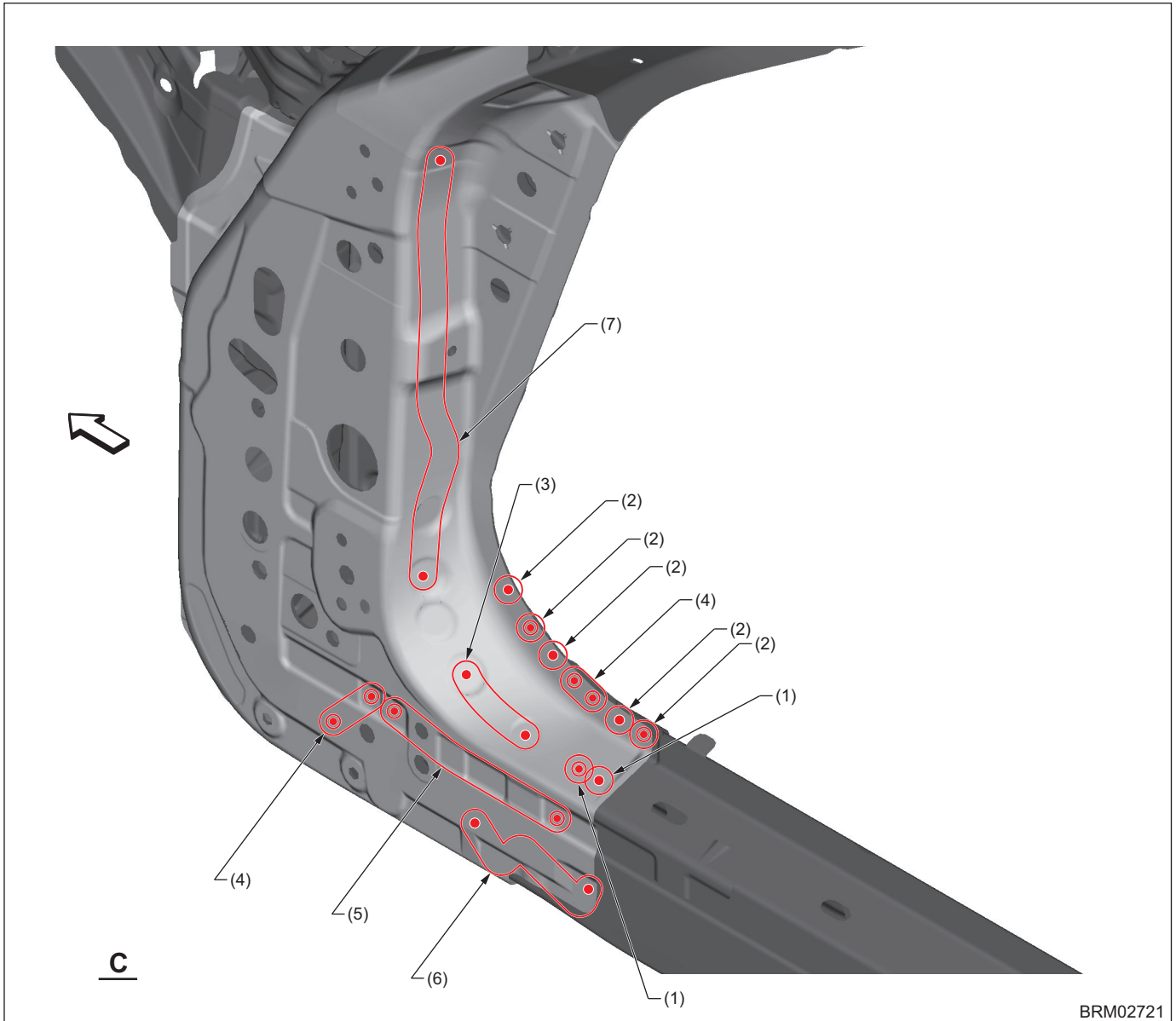
- (3) 2 points (Top · 1)
- (4) 3 points (Top · 2)

- (5) 3 points (Outside · 1)



# Panel Replacement

## • View C



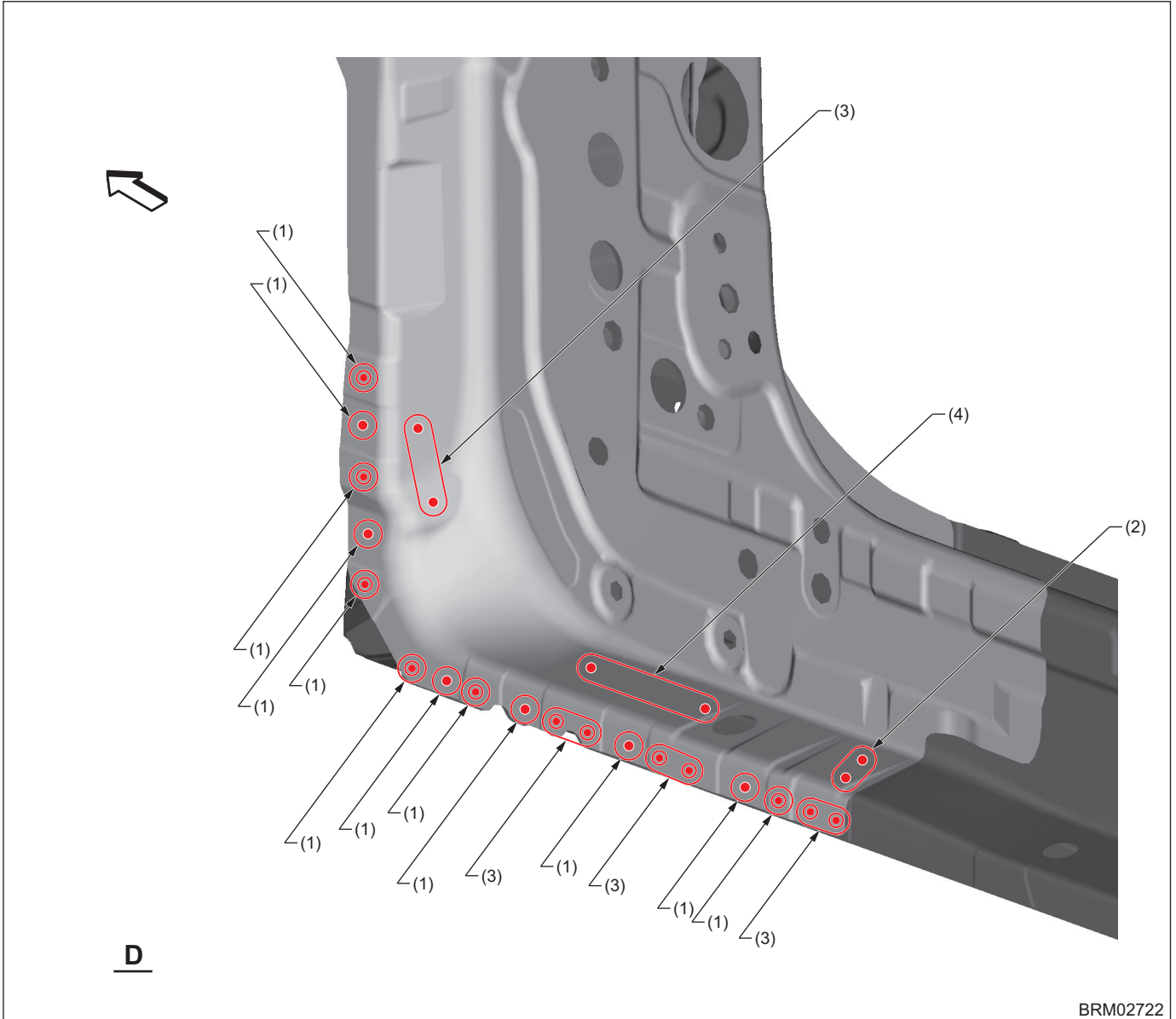
- (1) 1 point (Top · 1)
- (2) 1 point (Outside · 1)
- (3) 2 points (Top · 1)

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

- (7) 7 points (Outside · 1)

# Panel Replacement

## • View D



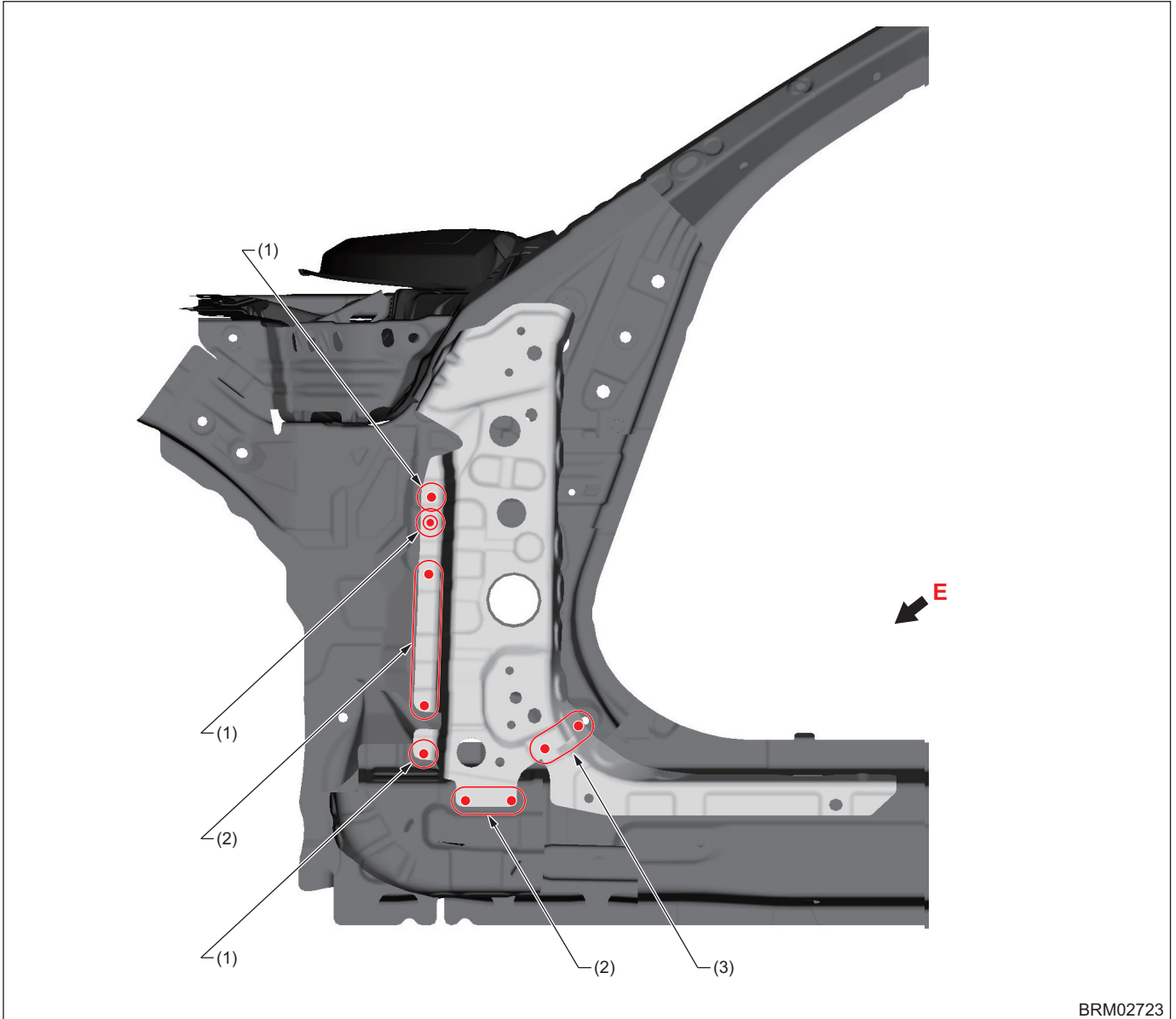
- (1) 1 point (Outside · 1)
- (2) 2 points (Bottom · 1)

- (3) 2 points (Outside · 1)

- (4) 4 points (Bottom · 1)

# Panel Replacement

## • Overall view 2



BRM02723

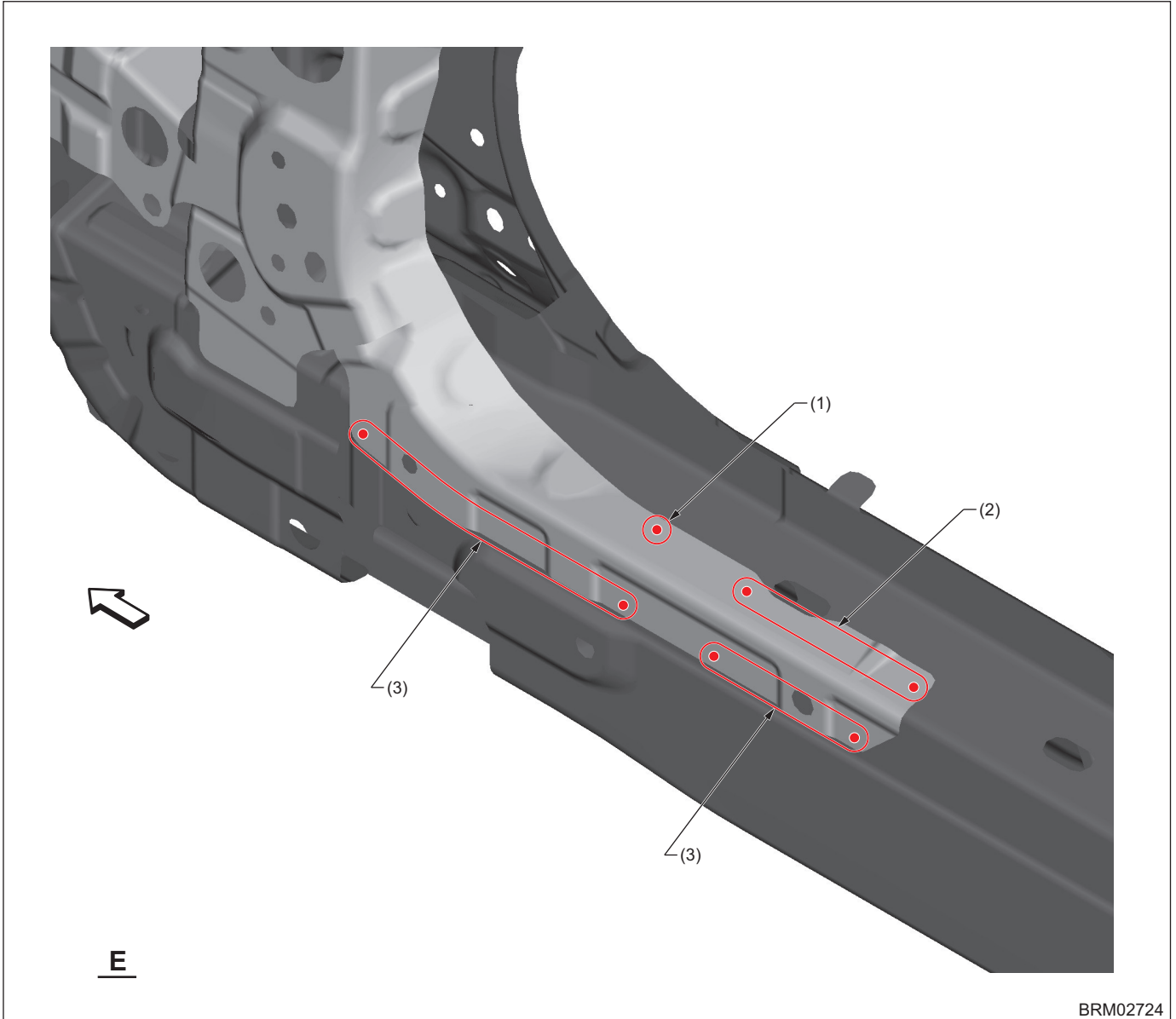
(1) 1 point (Outside · 1)

(2) 3 points (Outside · 1)

(3) 2 points (Outside · 1)

# Panel Replacement

## • View E



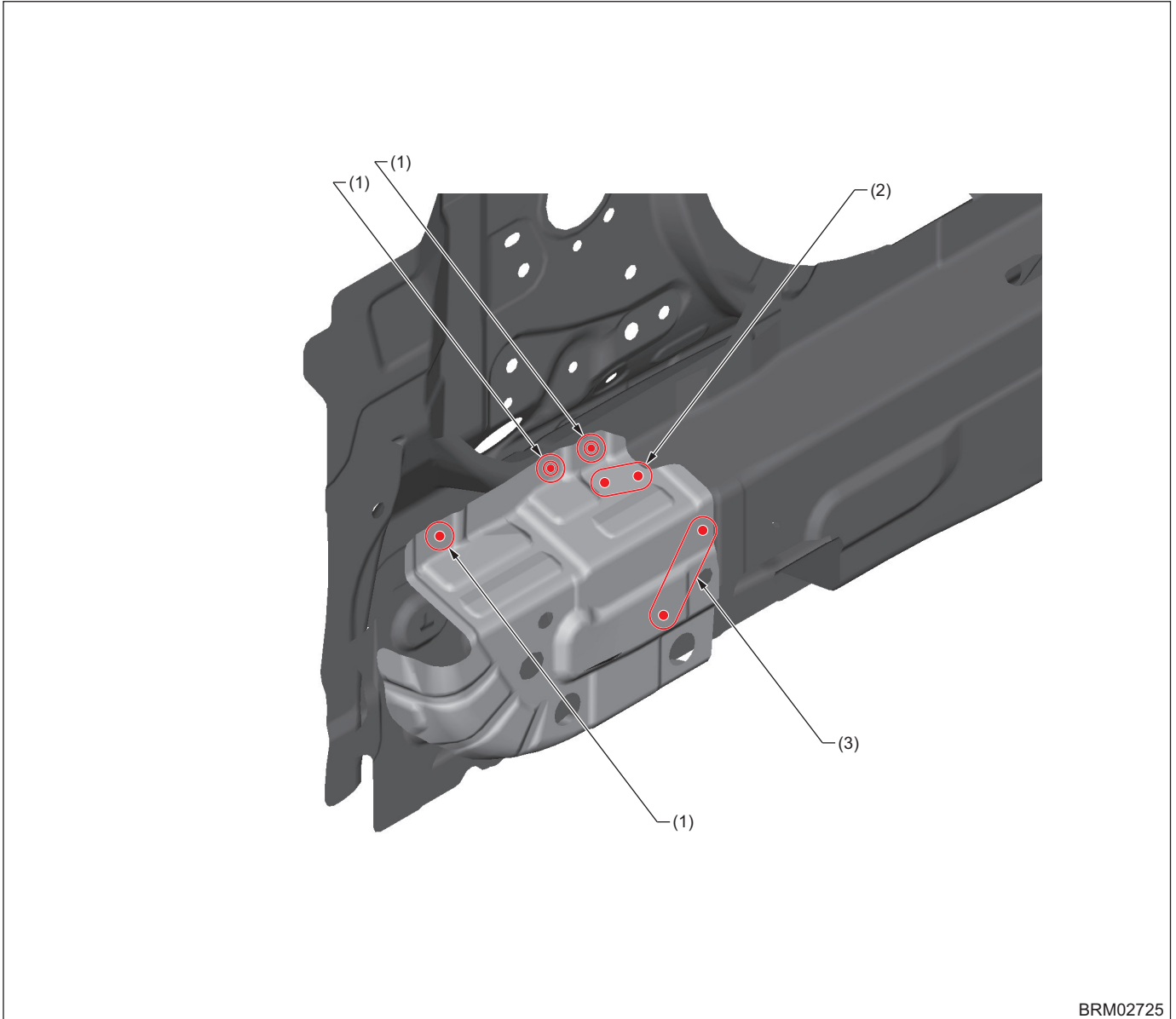
(1) 1 point (Top · 1)

(2) 3 points (Top · 1)

(3) 3 points (Outside · 1)

# Panel Replacement

## • Overall view 3



BRM02725

(1) 1 point (Outside · 1)

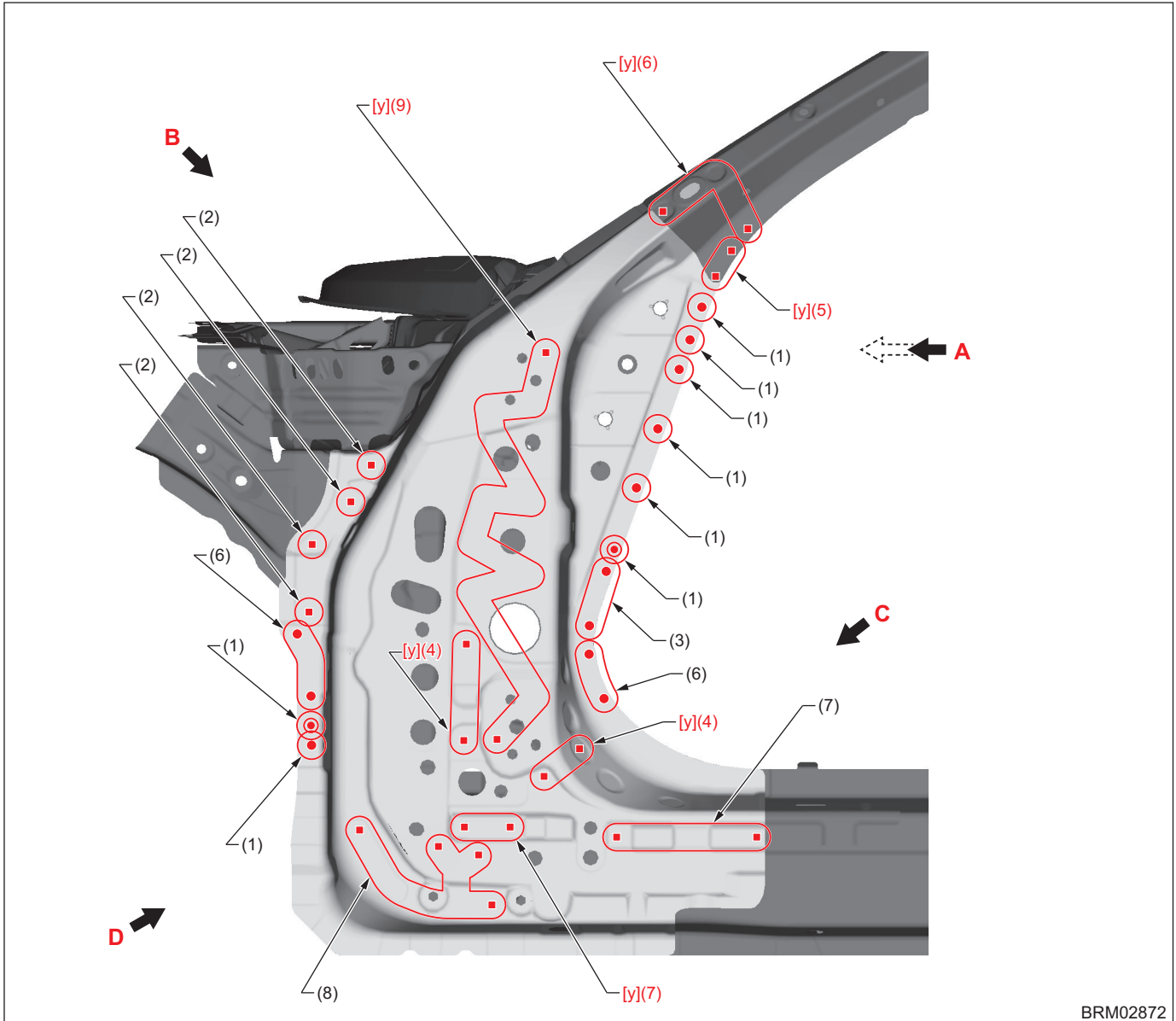
(2) 2 points (Top · 1)

(3) 2 points (Outside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view 1



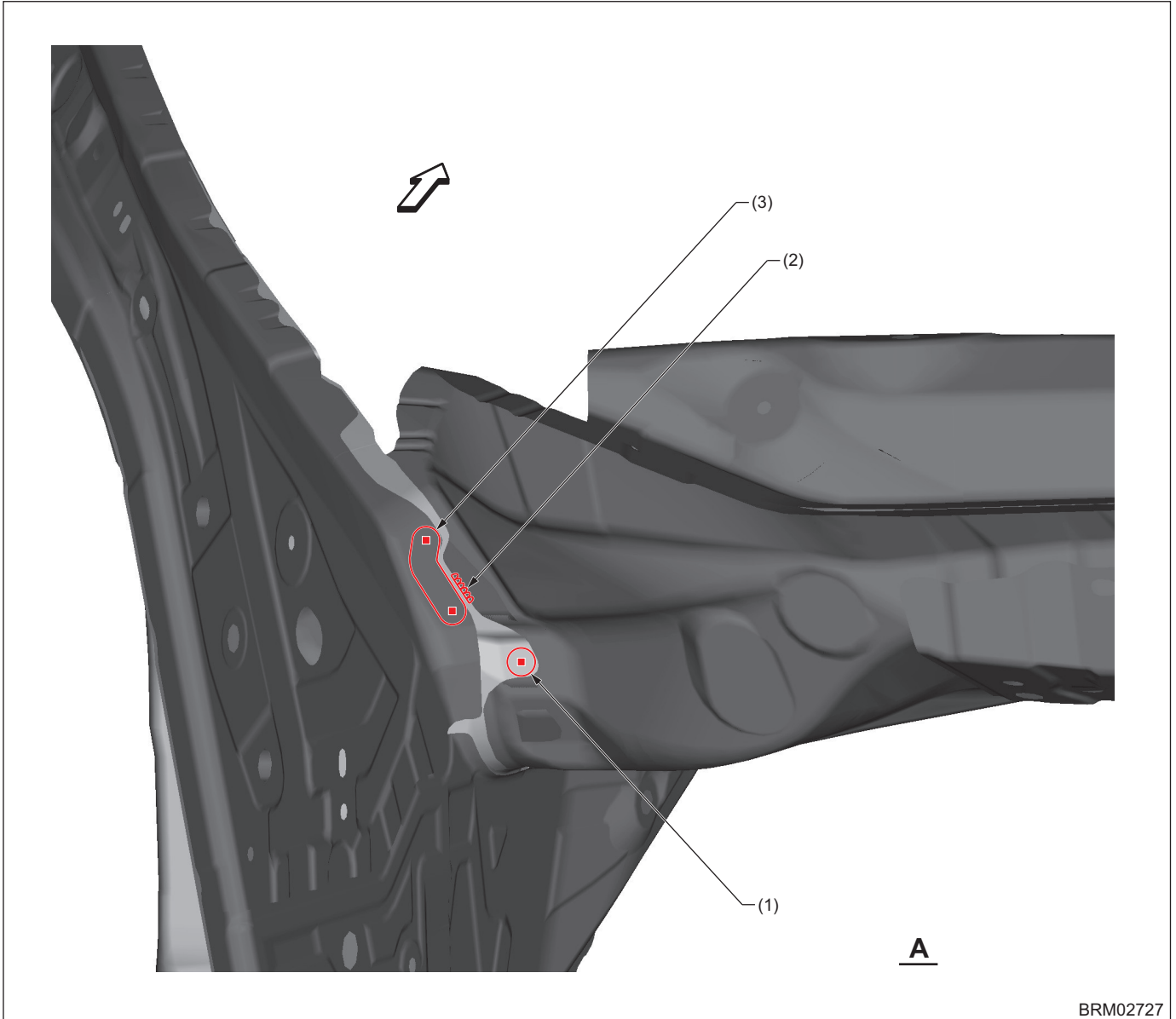
BRM02872

- |                            |  |                              |
|----------------------------|--|------------------------------|
| (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) 8 points (Service part)  |
| (3) 2 points               | (6) 3 points                           | (9) 10 points (Service part) |

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

## • View A



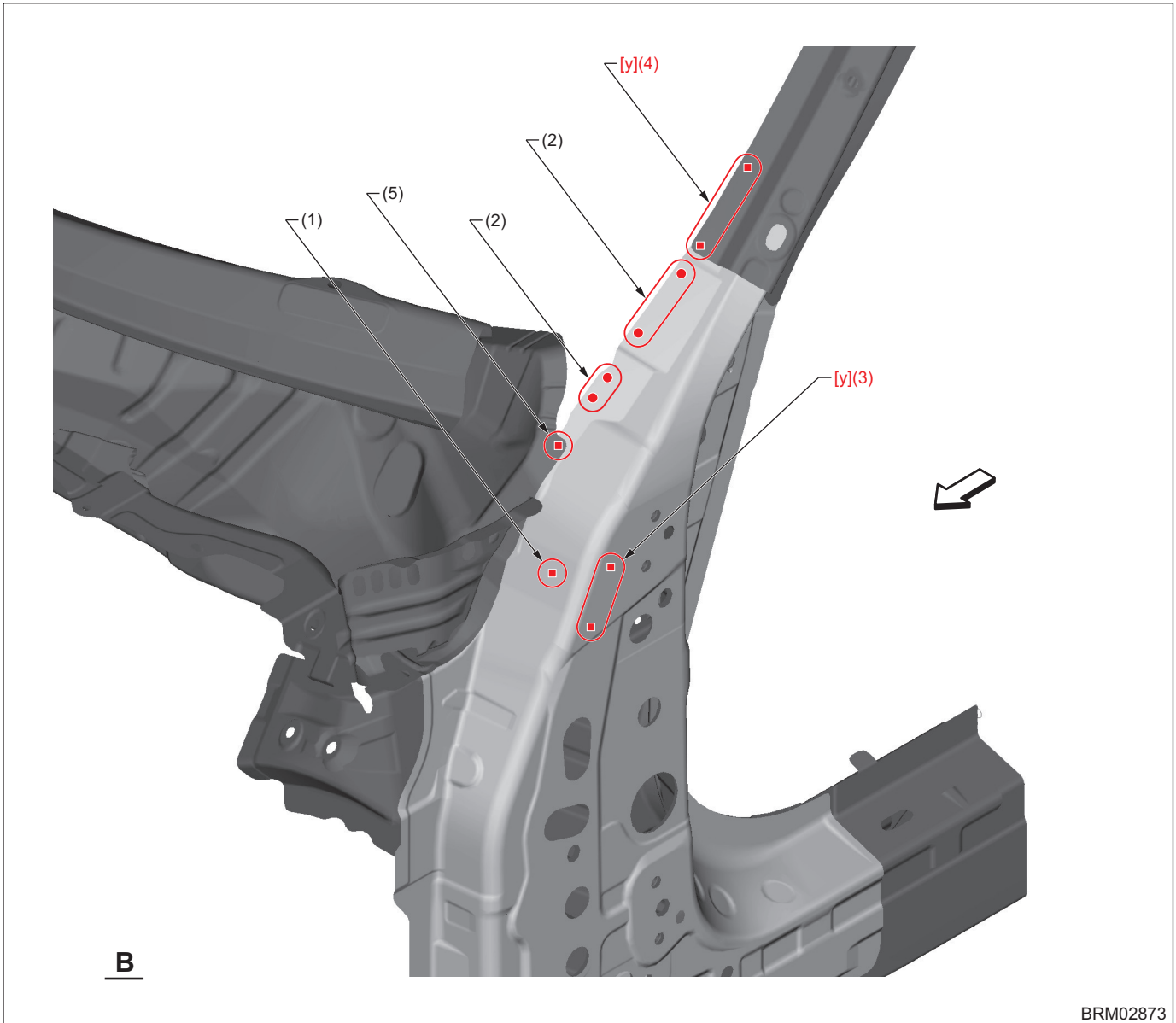
(1) 1 point (Service part)

(2) 1 point (Continuous welding)  
(15 mm [0.59 in])

(3) 2 points

# Panel Replacement

## • View B



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

(3) 3 points (Service part)  
(4) 3 points (Service part · matching)

(5) 1 point

[y] Plug welding conditions

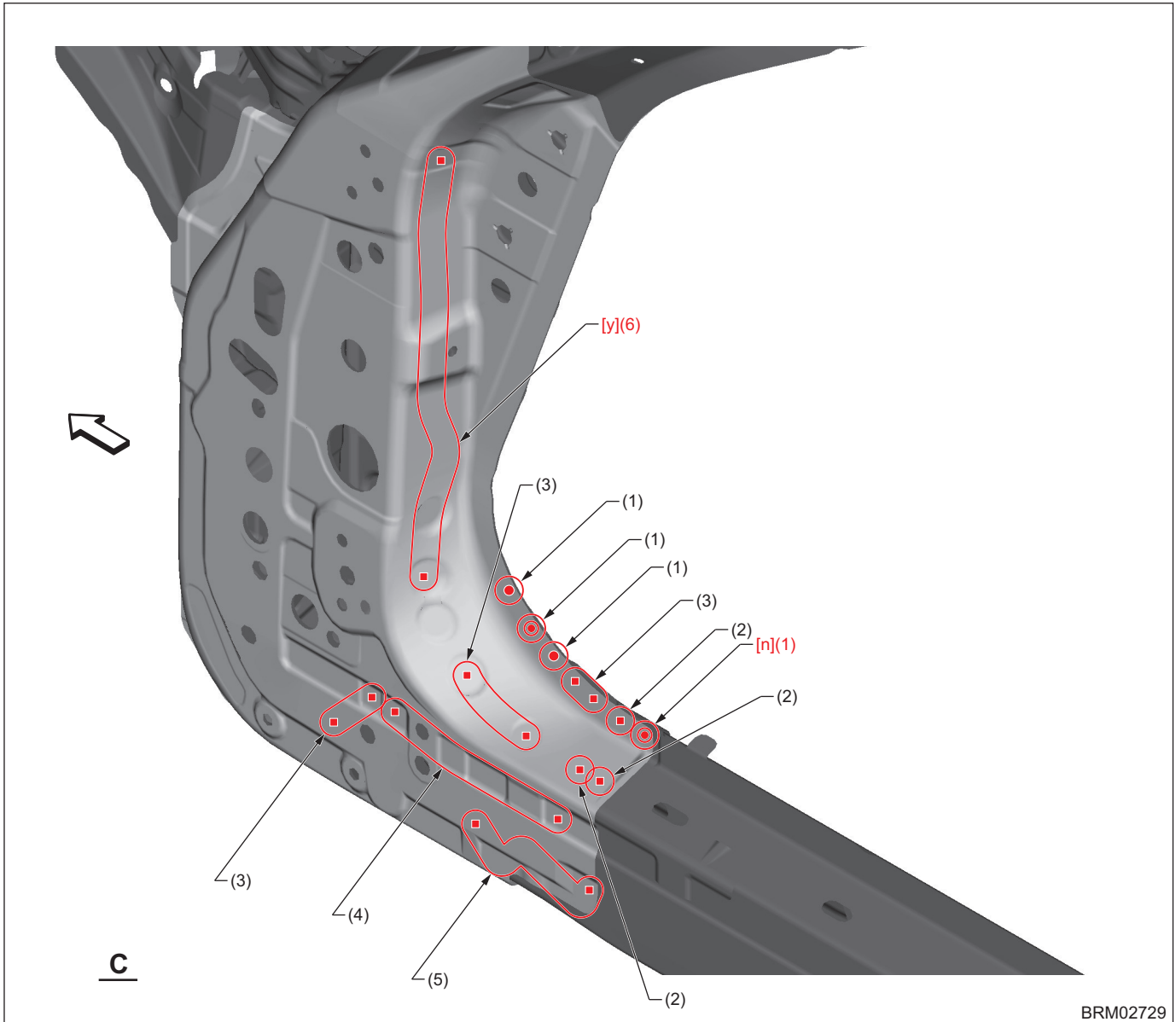
A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO<sub>2</sub>

B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO<sub>2</sub>: 20 %)



# Panel Replacement

## • View C

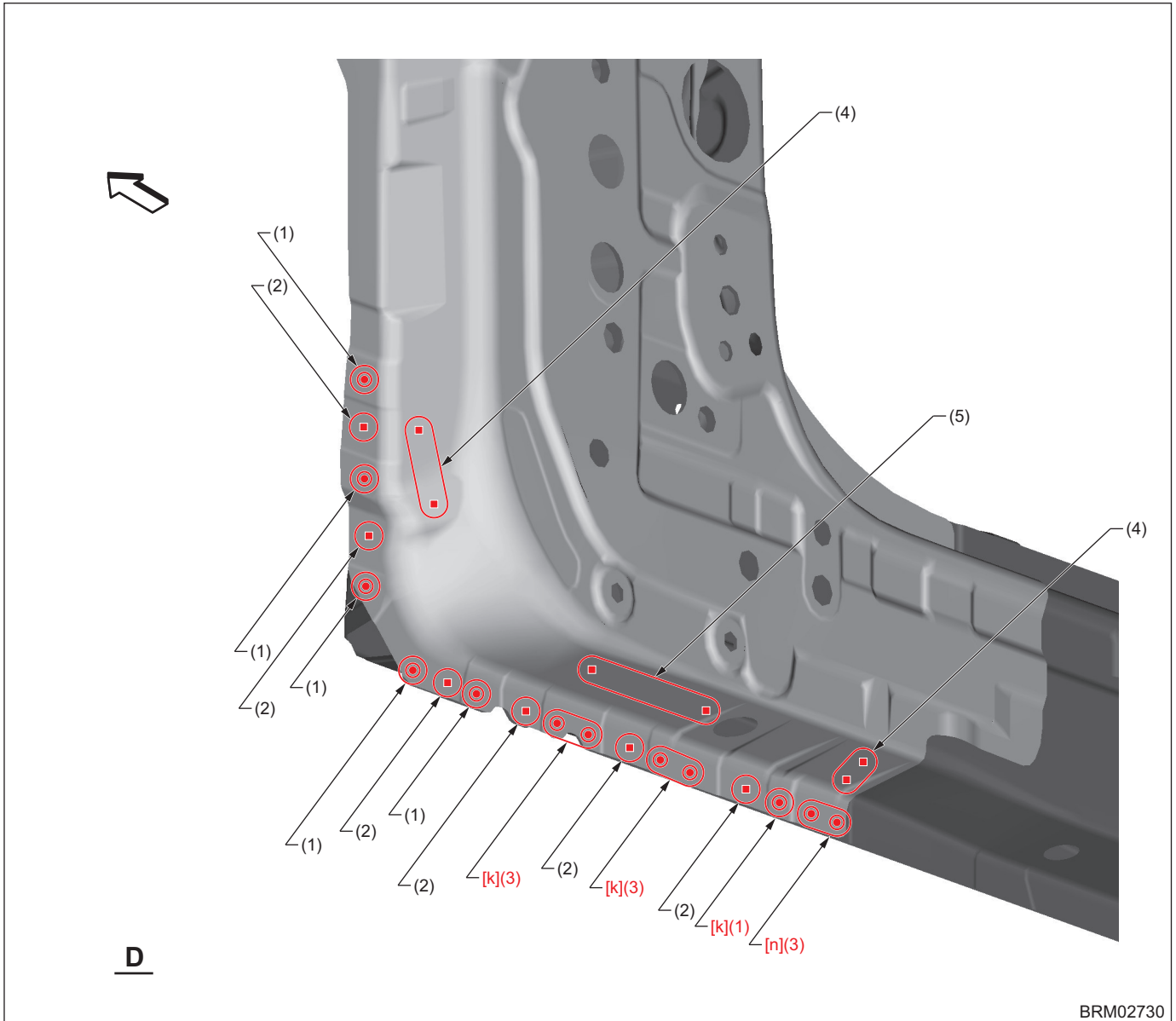


- |                            |                             |                             |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point                | (3) 2 points (Service part) | (5) 5 points (Service part) |
| (2) 1 point (Service part)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

[n] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 20 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## • View D

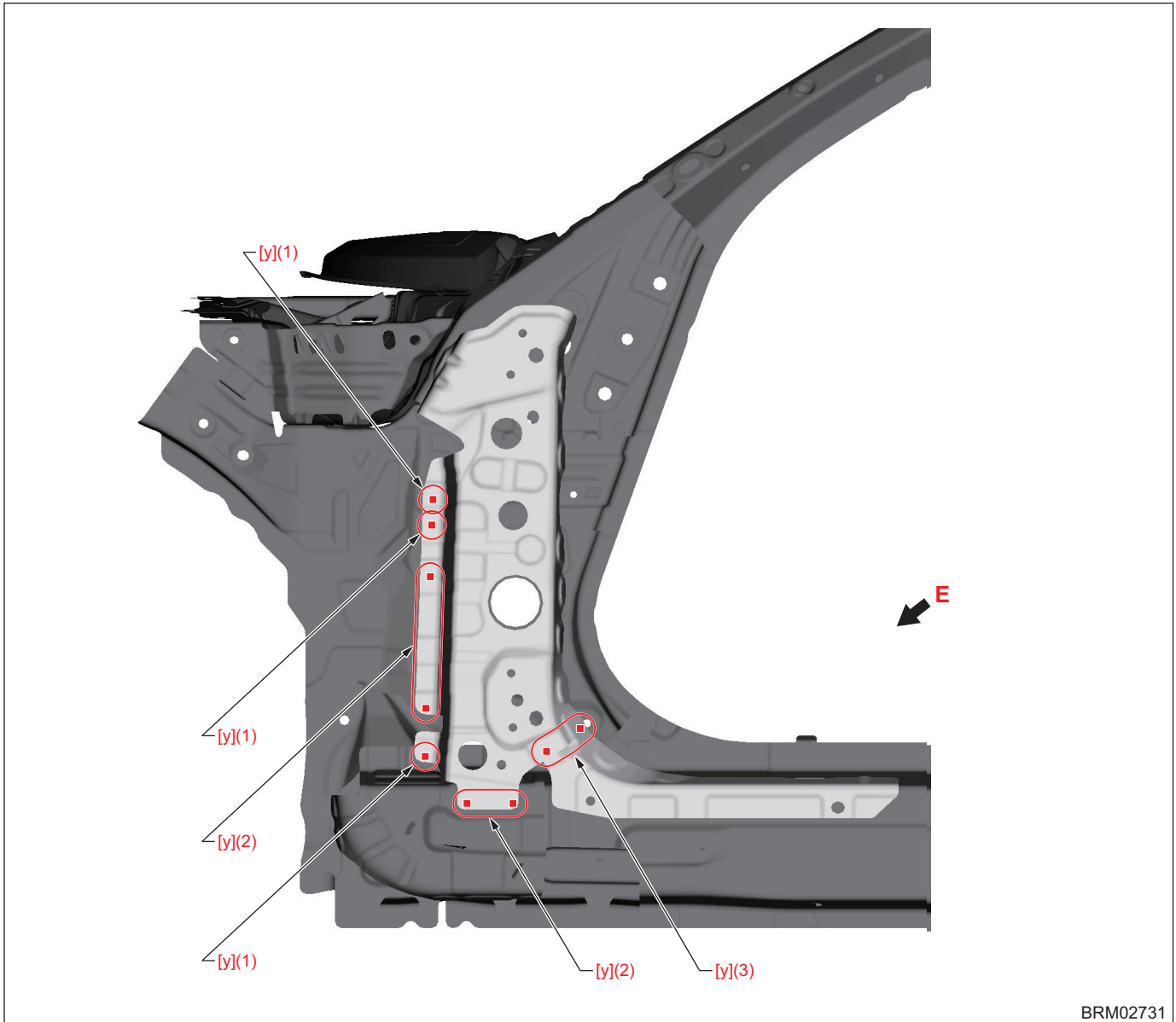


- |                            |                             |                             |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point                | (3) 2 points                | (5) 4 points (Service part) |
| (2) 1 point (Service part)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

[k] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 30 cyc, Upslope time: 2 cyc
[n] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 20 cyc

# Panel Replacement

## • Overall view 2



BRM02731

(1) 1 point (Service part)

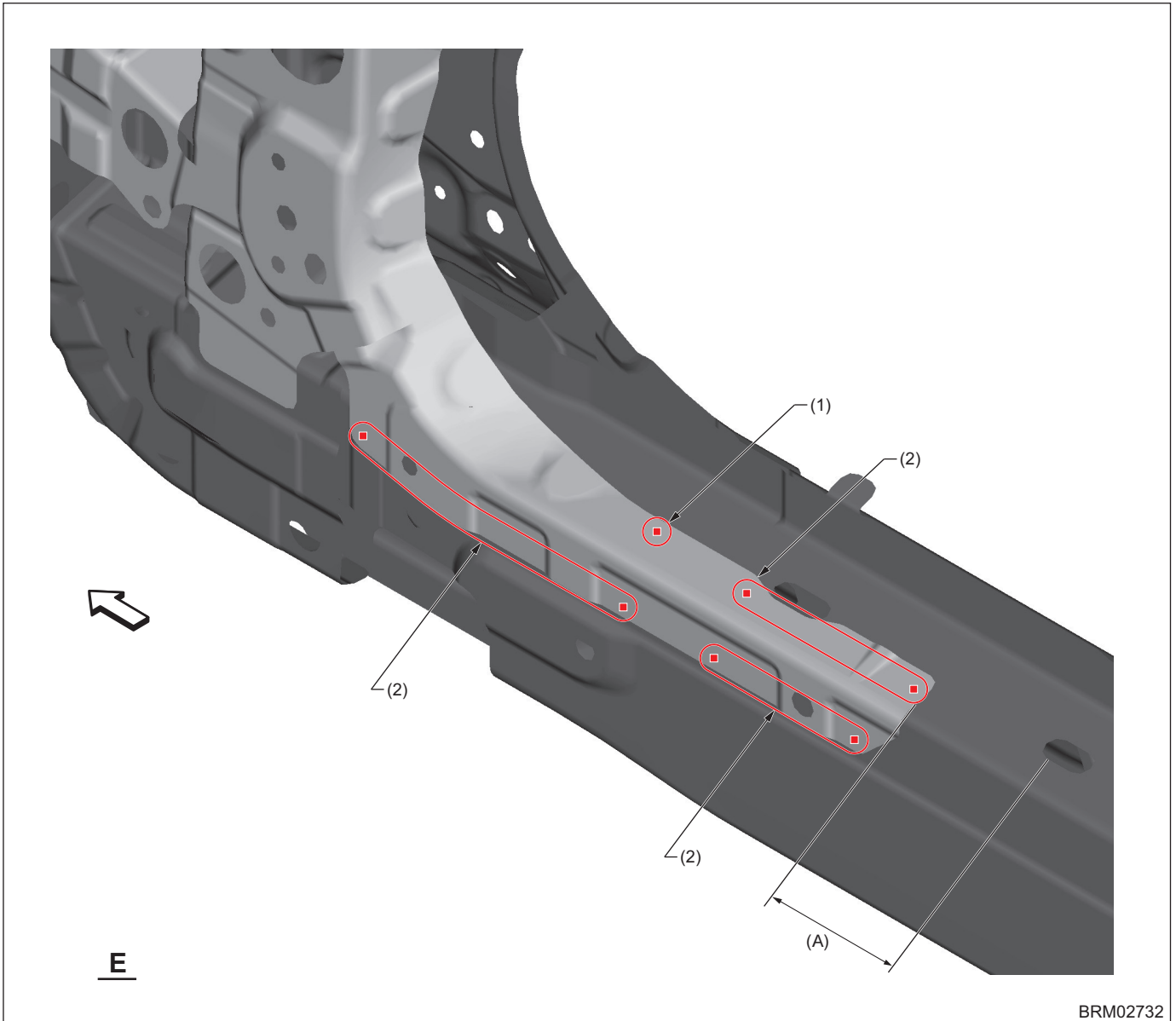
(2) 3 points (Service part)

(3) 2 points (Service part)

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

# Panel Replacement

## • View E



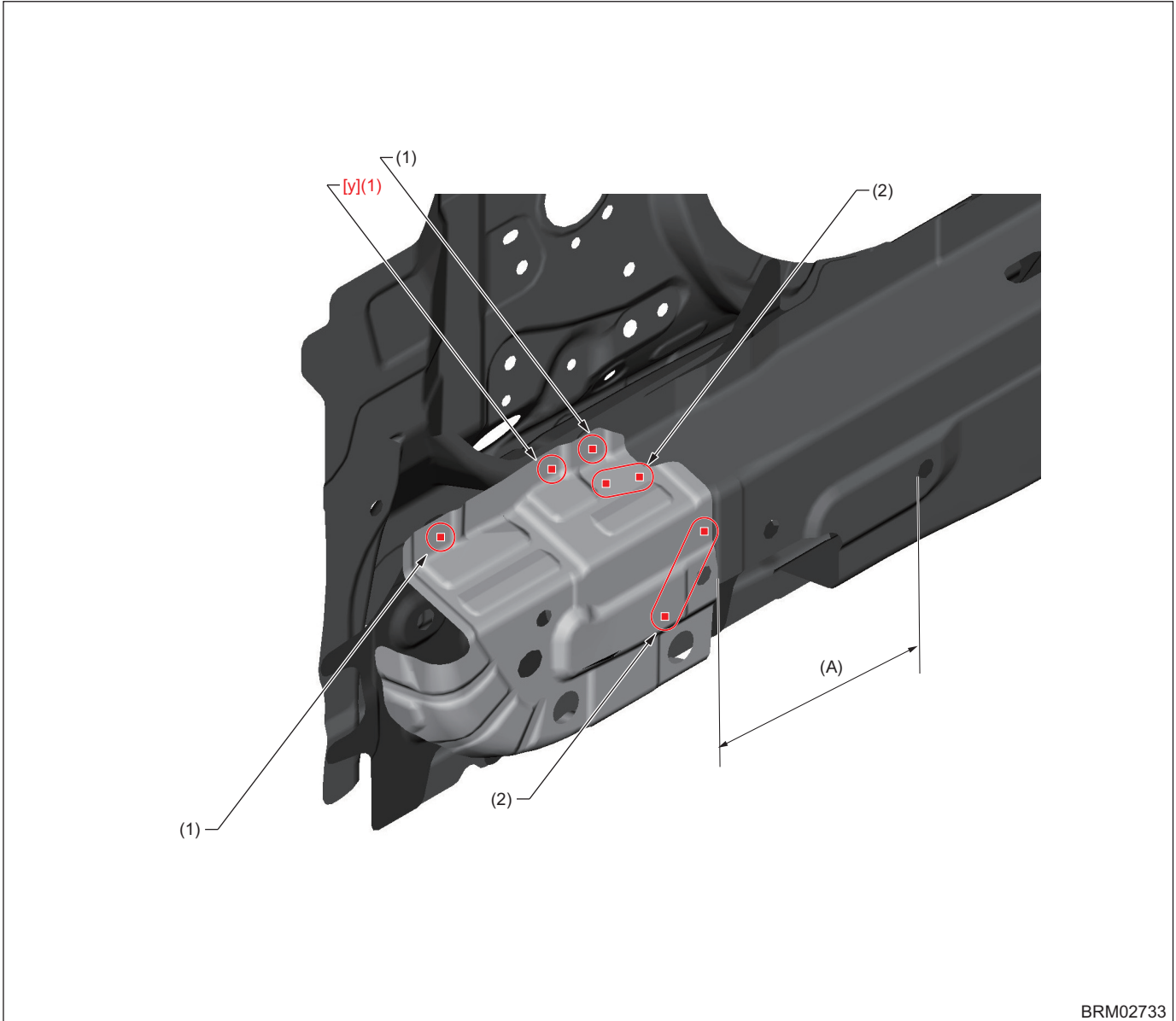
(A) 72 mm [2.83 in]

(1) 1 point (Service part)

(2) 3 points (Service part)

# Panel Replacement

## • Overall view 3



BRM02733

(A) 153 mm [6.02 in]

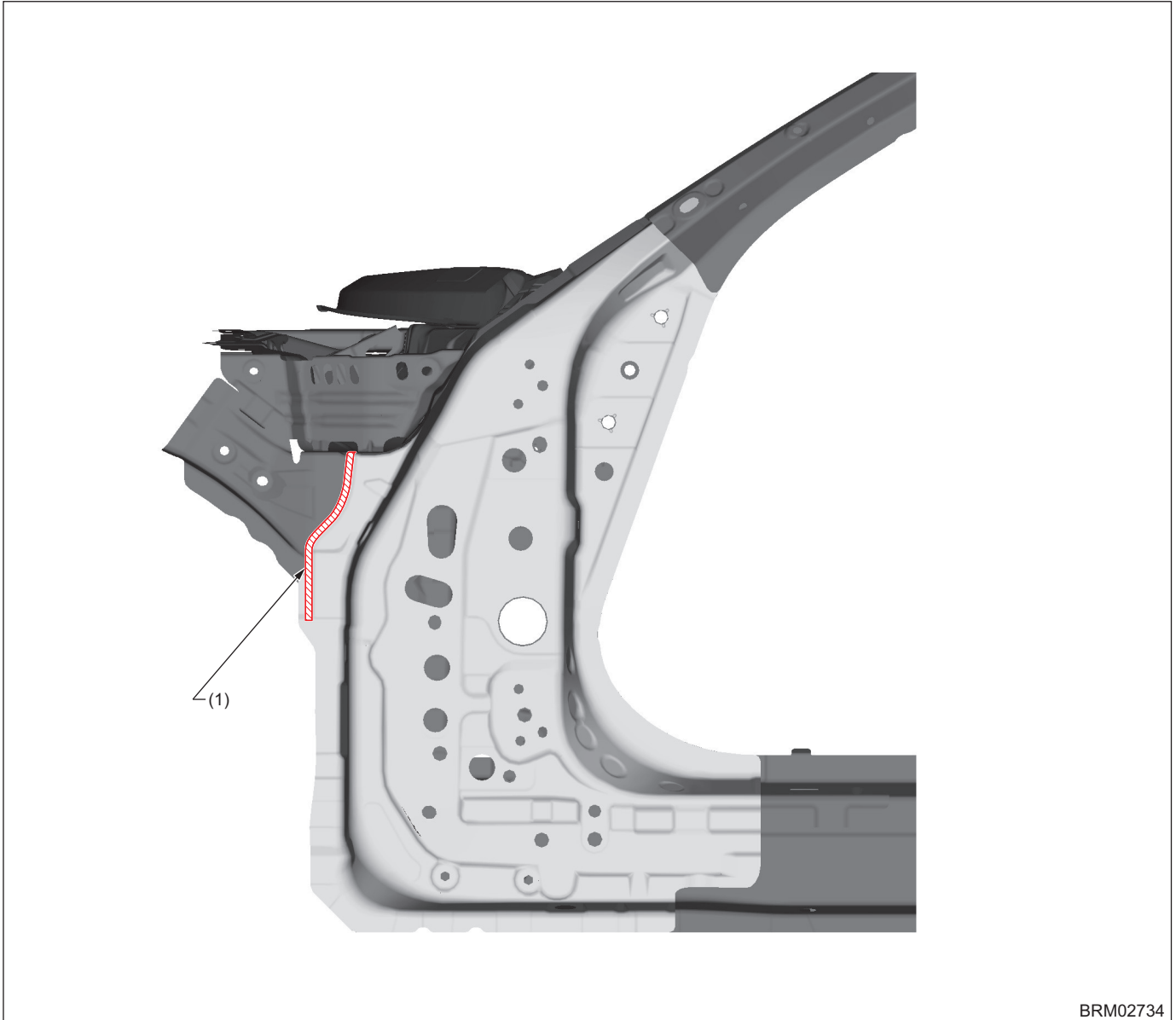
(1) 1 point (Service part)

(2) 2 points (Service part)


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

## • Overall view 4



(1) Spotting sealer

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

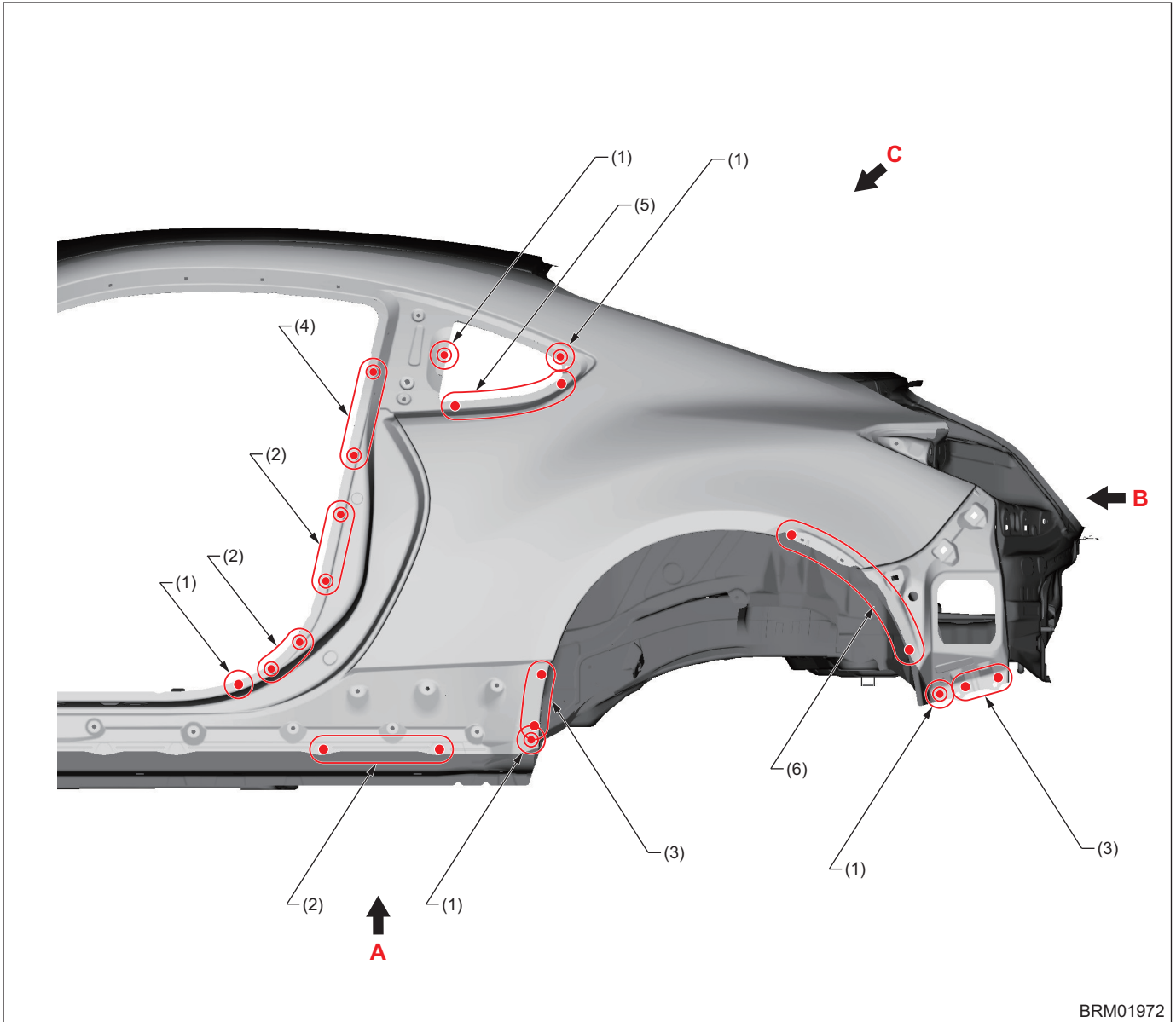
Note: Fill the space between the panels with spotting sealer.

# Panel Replacement

## 8-11. Rear Quarter Panel (Partial replacement)

### A: REMOVAL

• Overall view



BRM01972

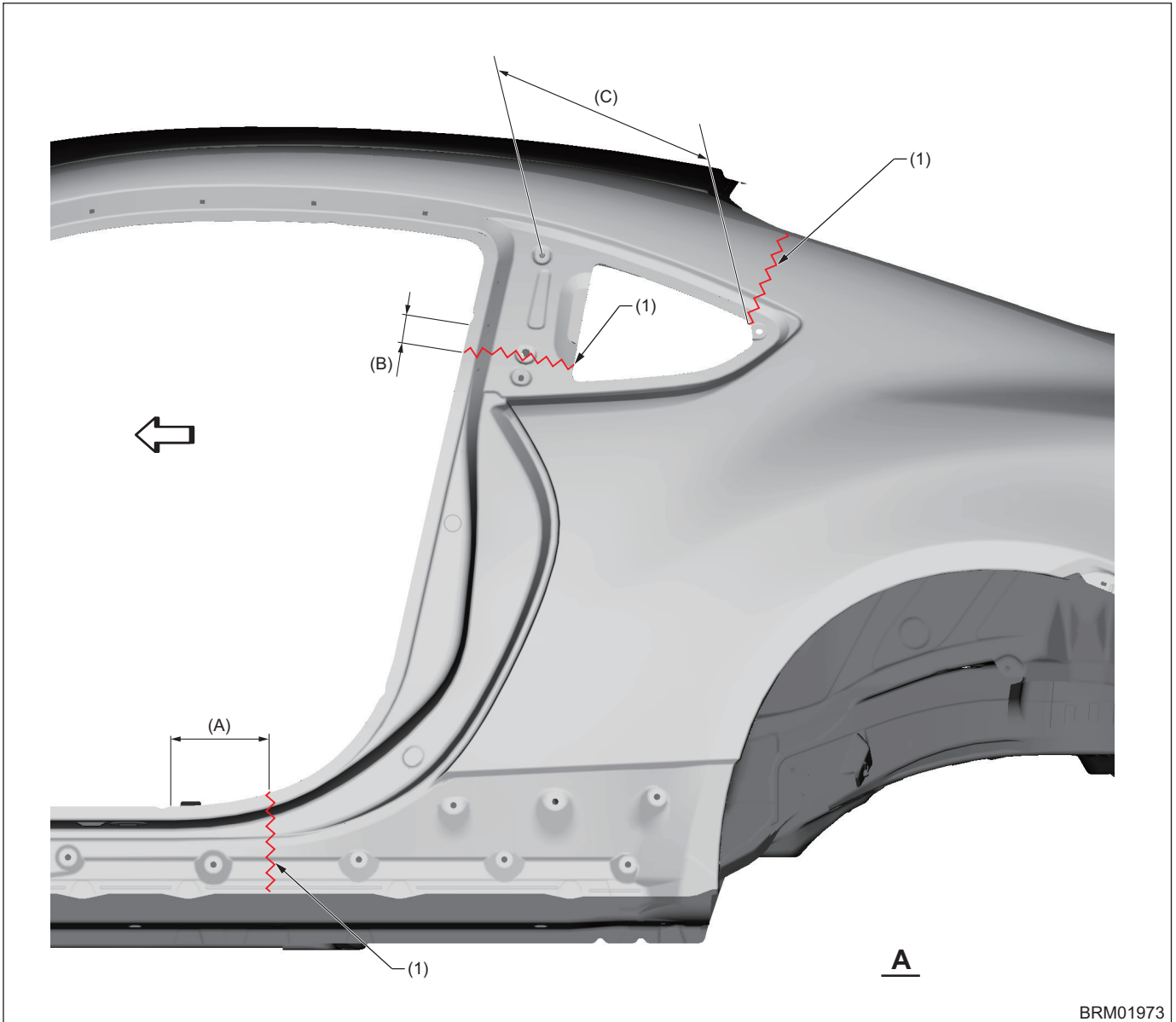
(1) 1 point (Outside · 1)  
(2) 2 points (Outside · 1)

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

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

# Panel Replacement

## • View A



(A) 130 mm [5.12 in]

(B) 40 mm [1.75 in]

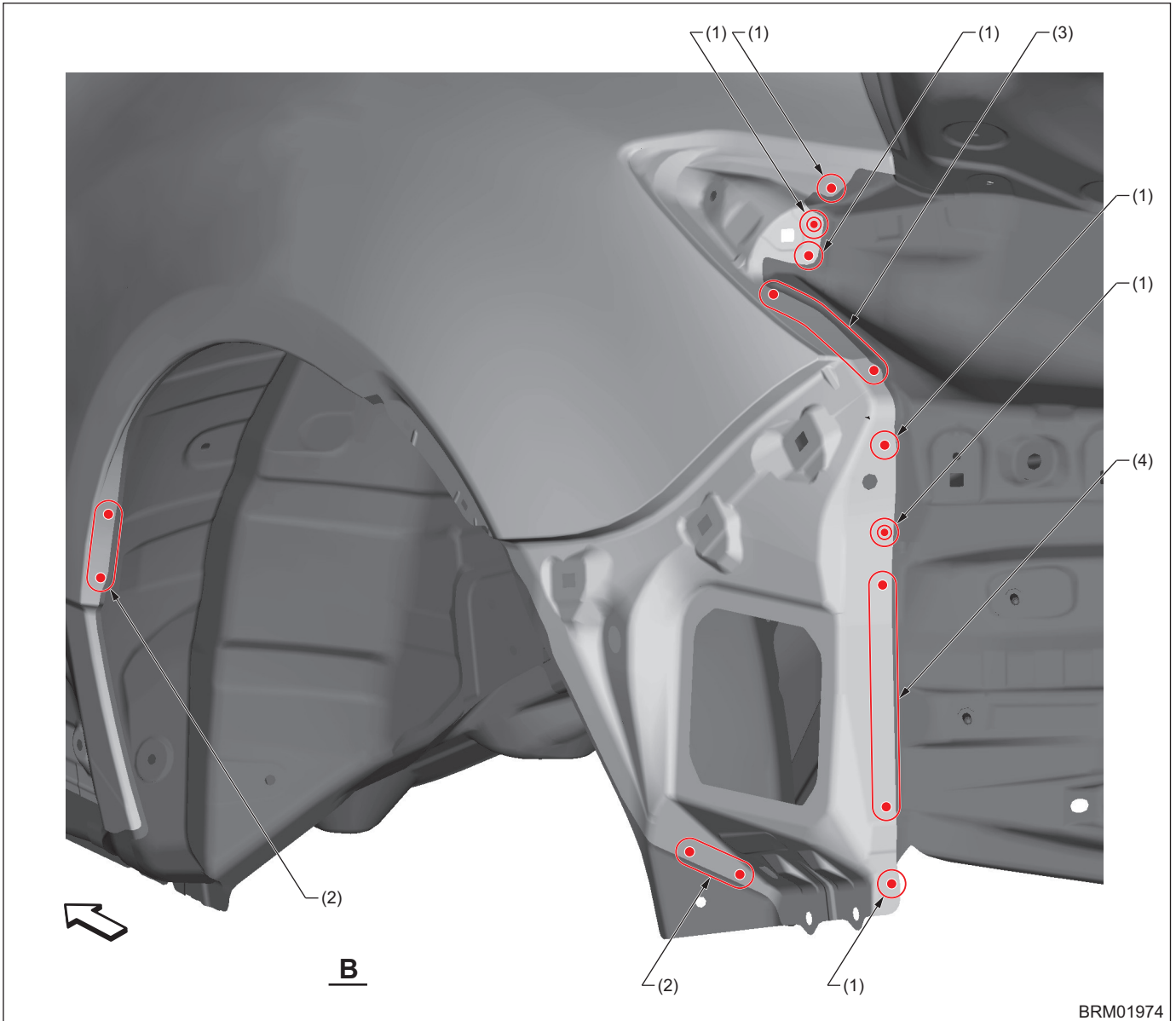
(C) 300 mm [11.81 in]

(1) Cut position



# Panel Replacement

## • View B



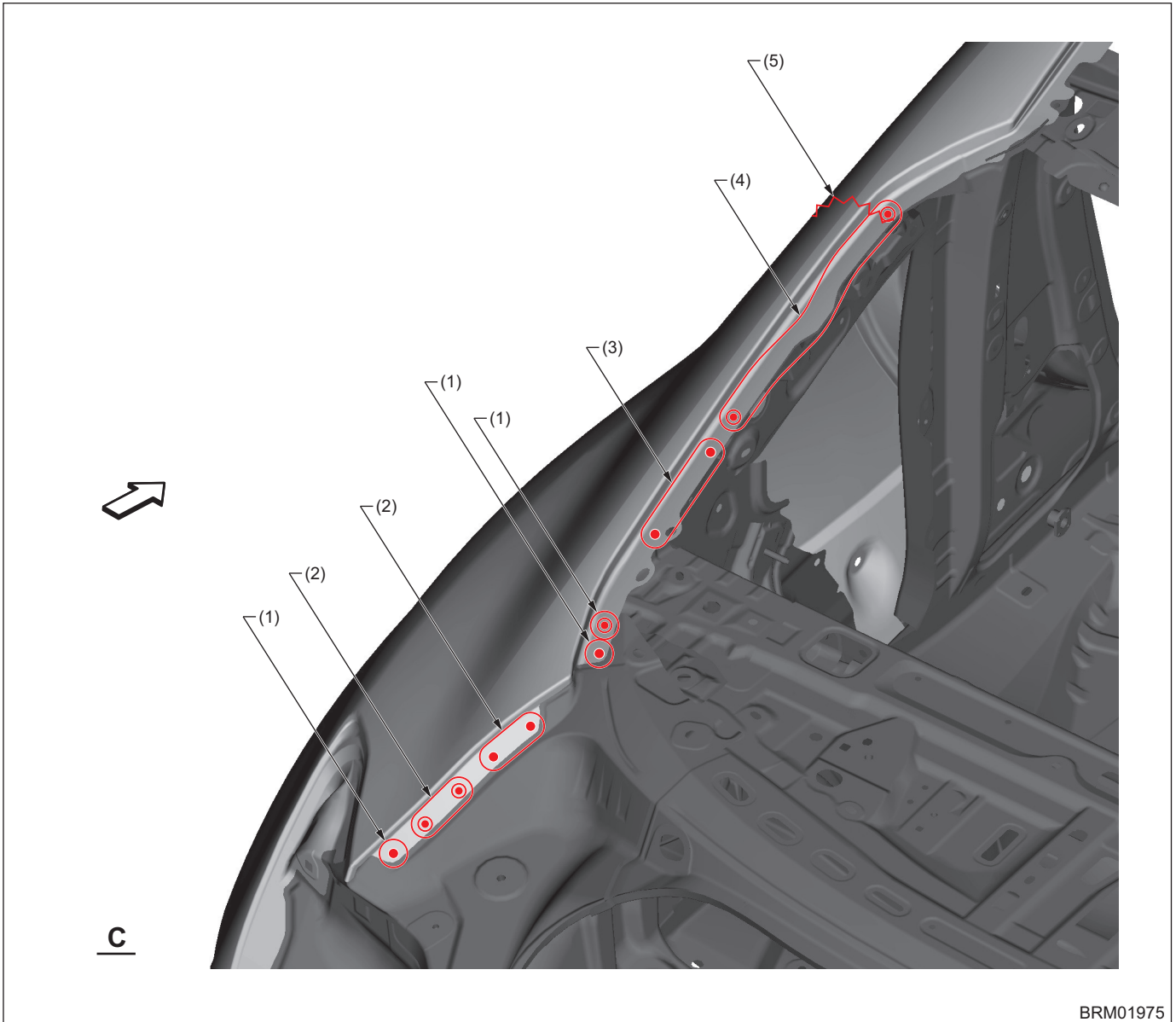
(1) 1 point (Outside · 1)  
(2) 2 points (Outside · 1)

(3) 4 points (Top · 1)

(4) 5 points (Outside · 1)

# Panel Replacement

## • View C



BRM01975

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

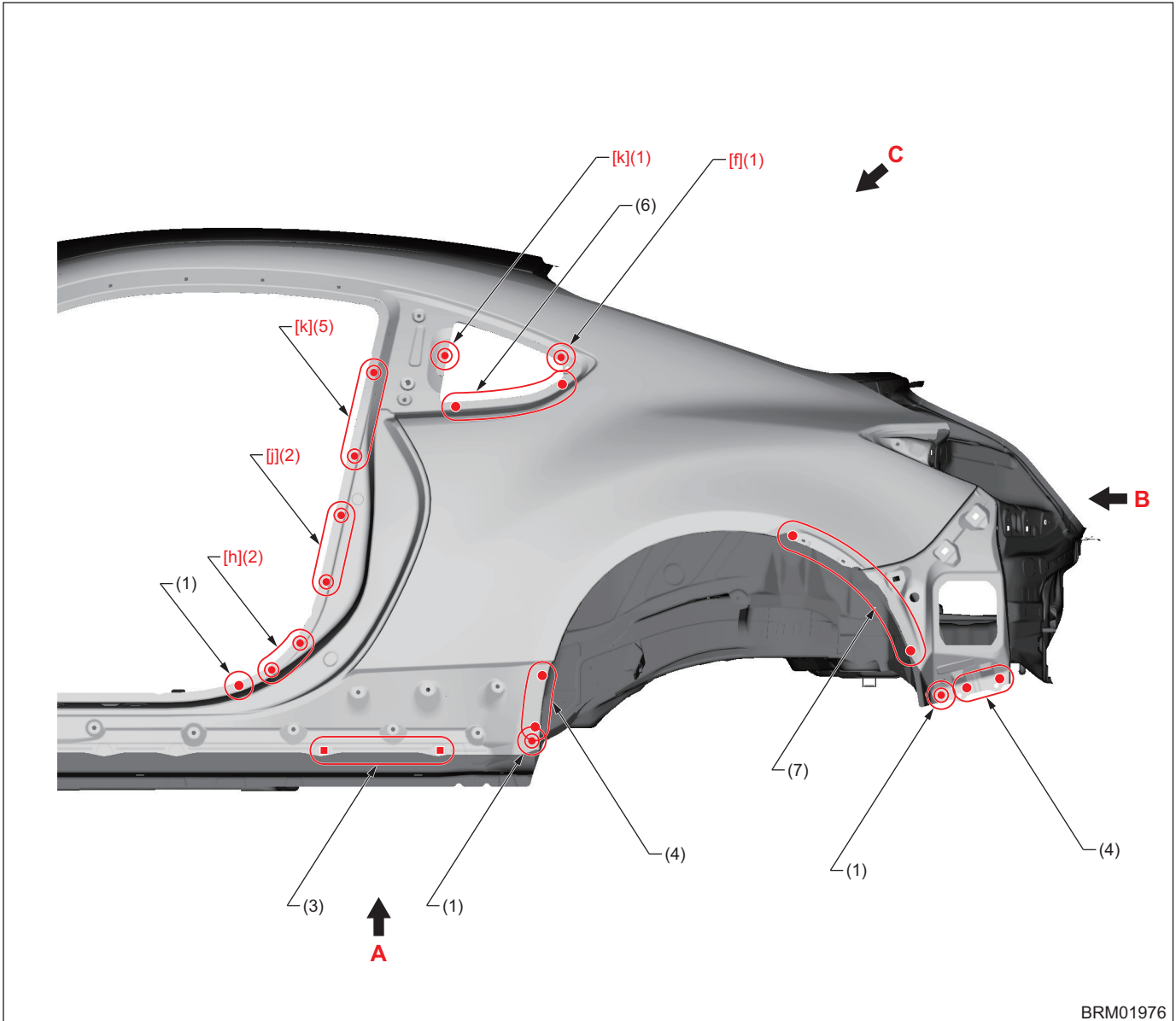
(3) 3 points (Top · 1)  
(4) 5 points (Top · 1)

(5) Cut position

# Panel Replacement

## B: INSTALLATION

### • Overall view



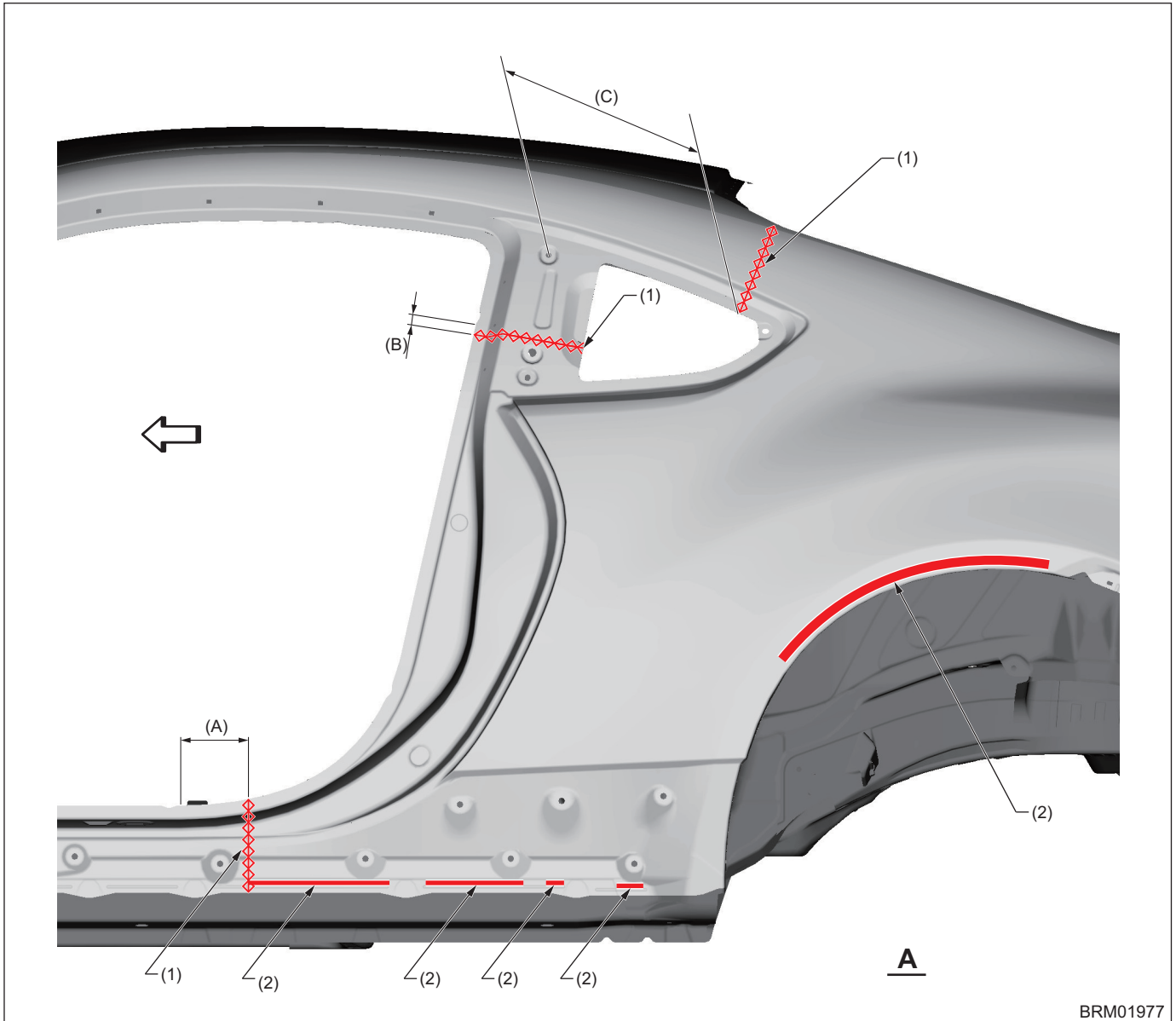
BRM01976

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

[f] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc
[h] Spot welding conditions	Compression: 4.0 kN, Current 1: 9.0 kA, Welding time 1: 2 cyc, Cooling time: 1 cyc, Current 2: 8.0 kA, Welding time 2: 20 cyc
[i] Spot welding conditions	Compression: 4.0 kN, Current 1: 8.0 kA, Welding time 1: 10 cyc, Cooling time: 1 cyc, Current 2: 7.5 kA, Welding time 2: 20 cyc
[k] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 30 cyc, Upslope time: 2 cyc

# Panel Replacement

## • View A



(A) 110 mm [4.33 in]

(B) 15 mm [0.59 in]

(C) 275 mm [10.83 in]

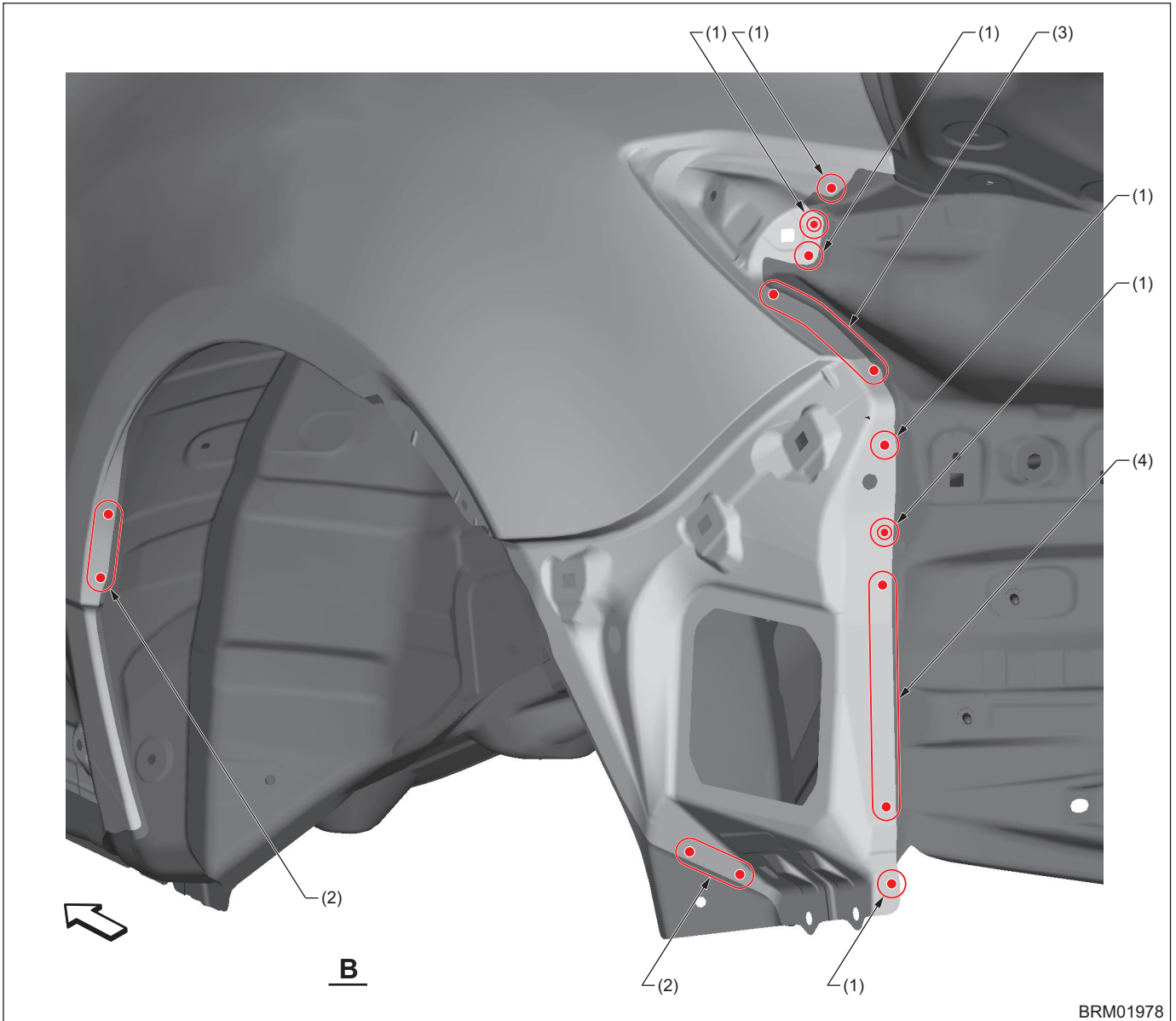
(1) 1 point (Continuous welding)

(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 B



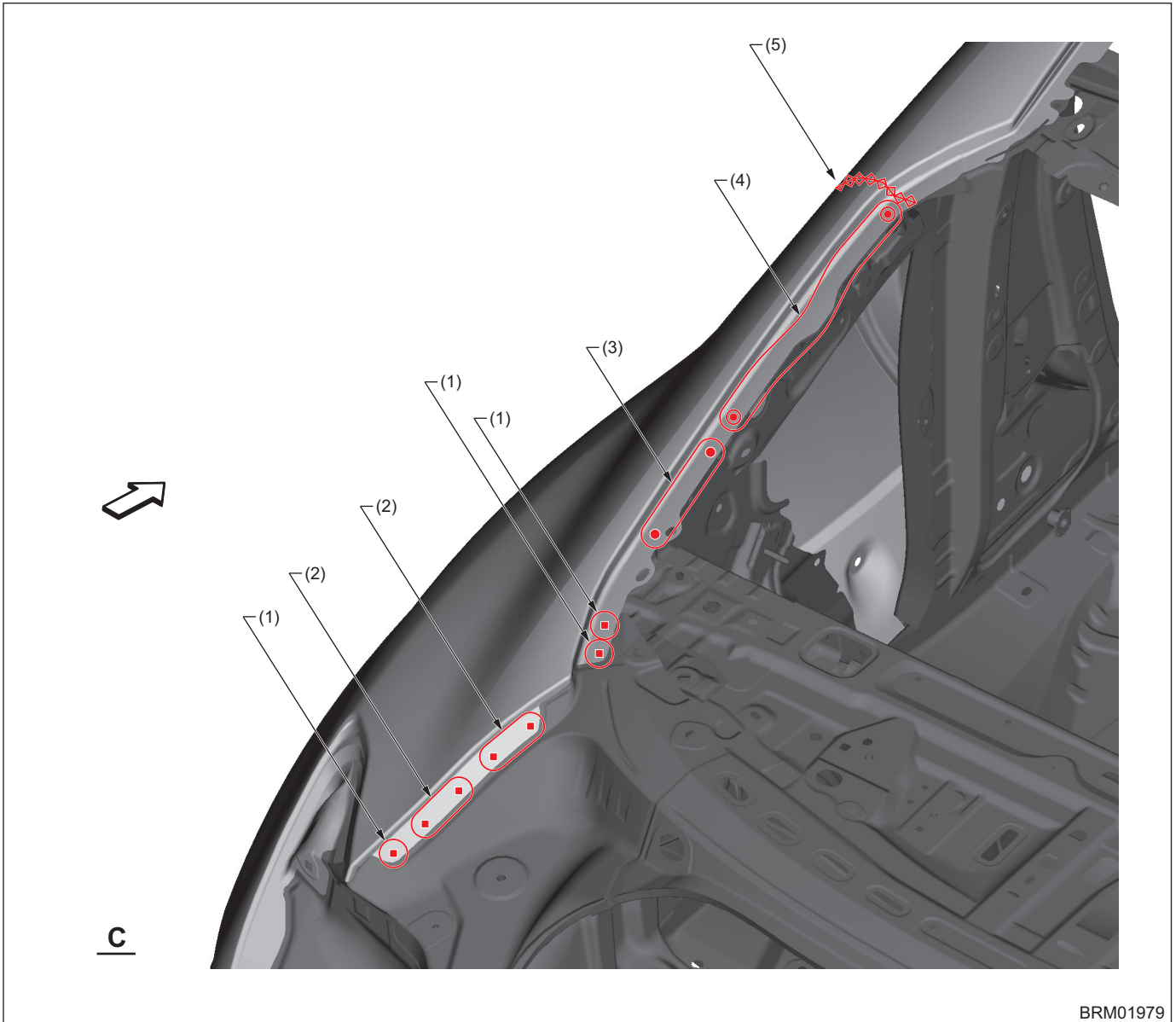
- (1) 1 point
- (2) 2 points

- (3) 4 points

- (4) 5 points

# Panel Replacement

## • View C



BRM01979

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

(3) 3 points  
(4) 5 points

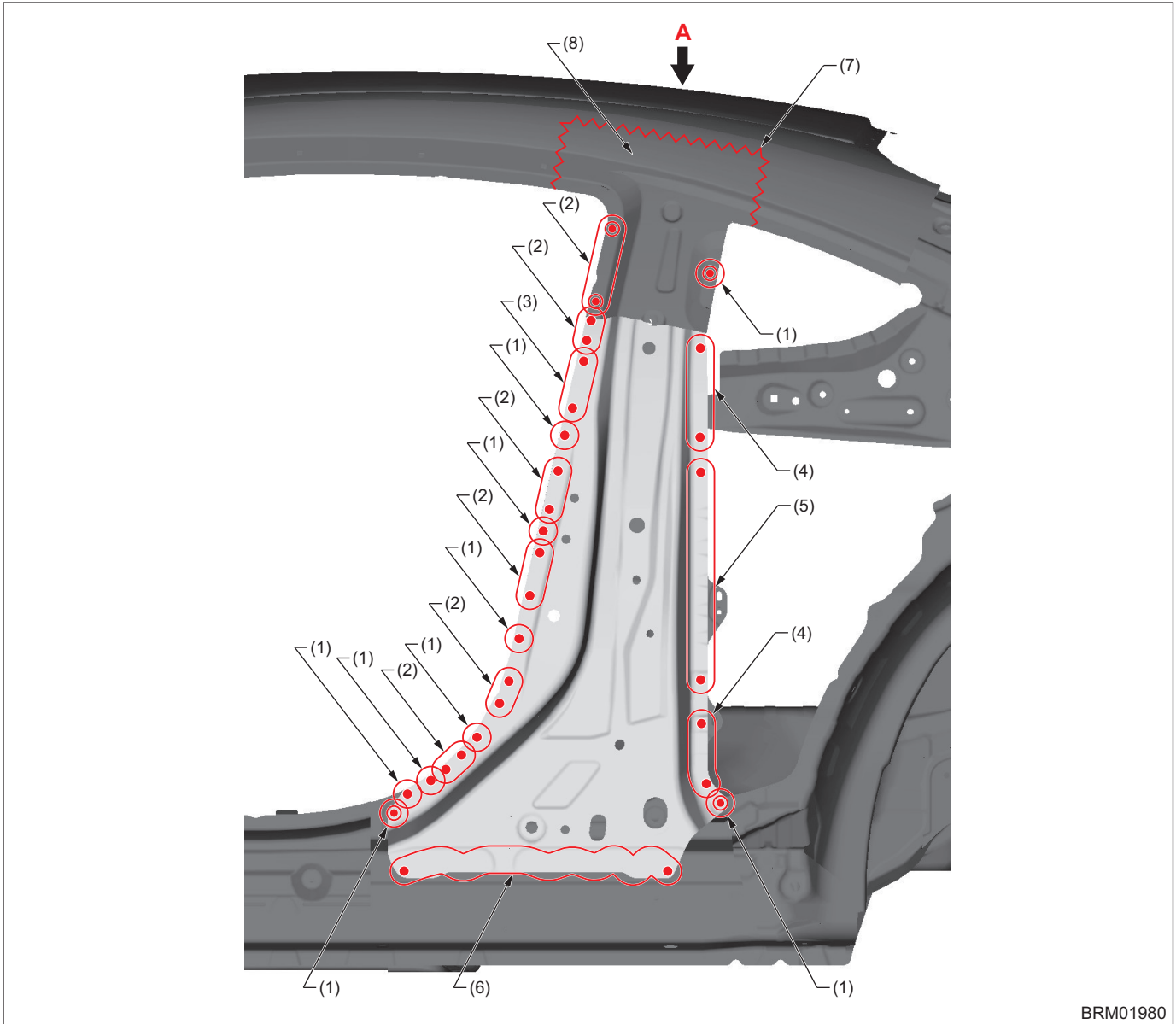
(5) 1 point (Continuous welding)

# Panel Replacement

## 8-12. Center Pillar Reinforcement Outer (Total replacement)

### A: REMOVAL

#### • Overall view



BRM01980

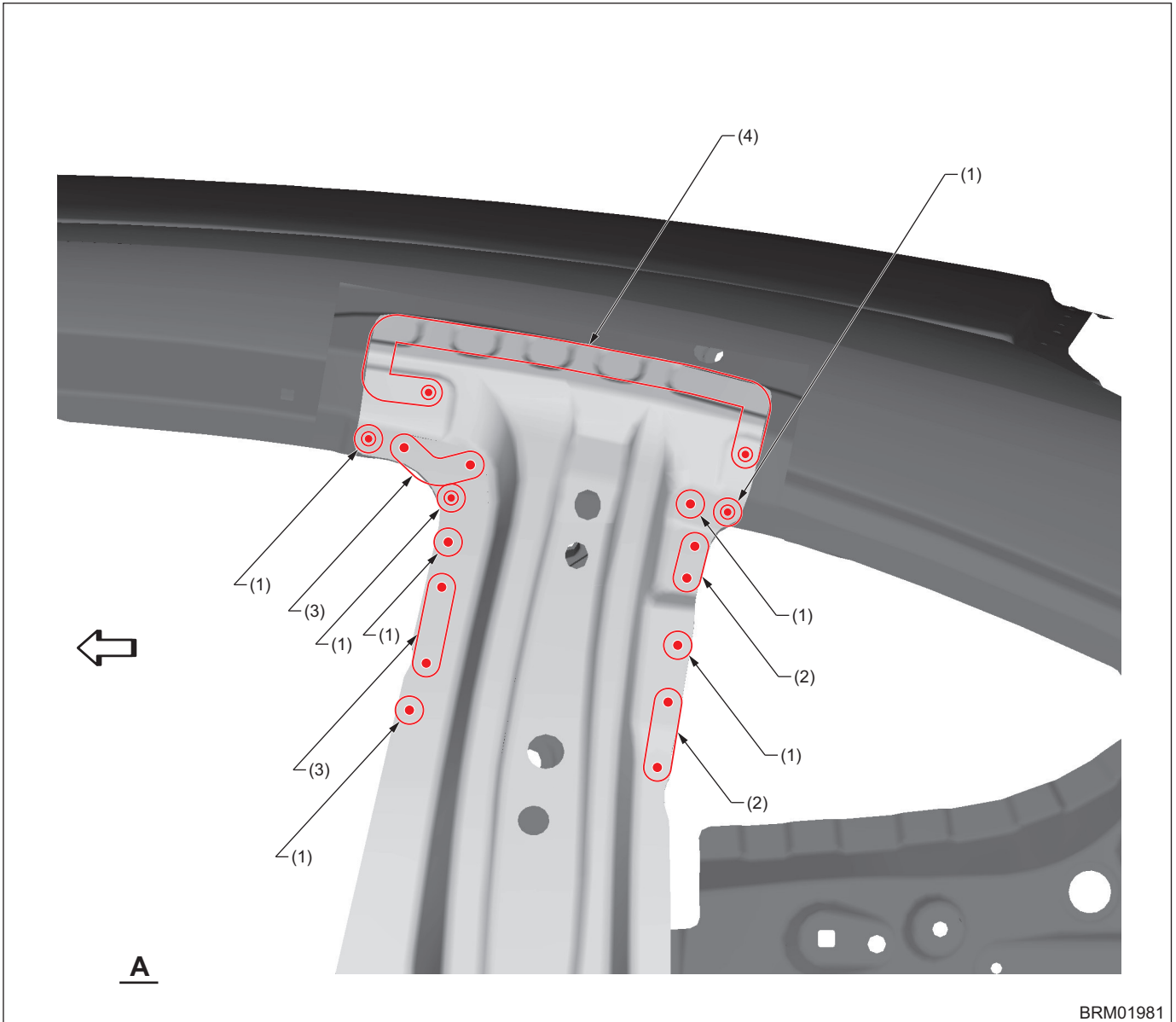
- (1) 1 point (Outside · 1)
- (2) 2 points (Outside · 1)
- (3) 3 points (Outside · 1)

- (4) 4 points (Outside · 1)
- (5) 8 points (Outside · 1)
- (6) 13 points (Outside · 1)

- (7) Rough cutting
- (8) The part that can be reused.

# Panel Replacement

## • View A



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

(3) 3 points (Outside · 1)

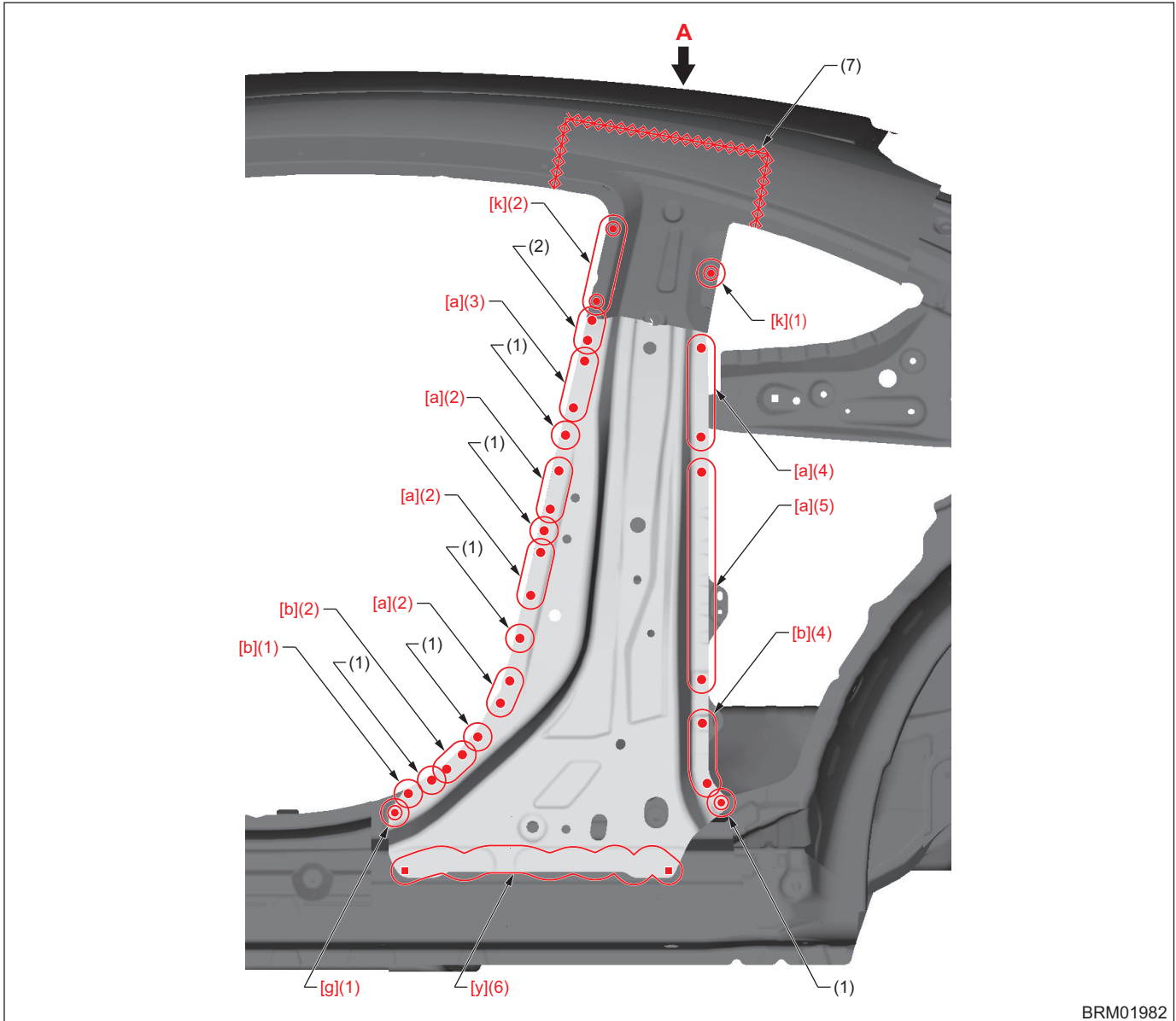
(4) 9 points (Outside · 1)



# Panel Replacement

## B: INSTALLATION

### • Overall view

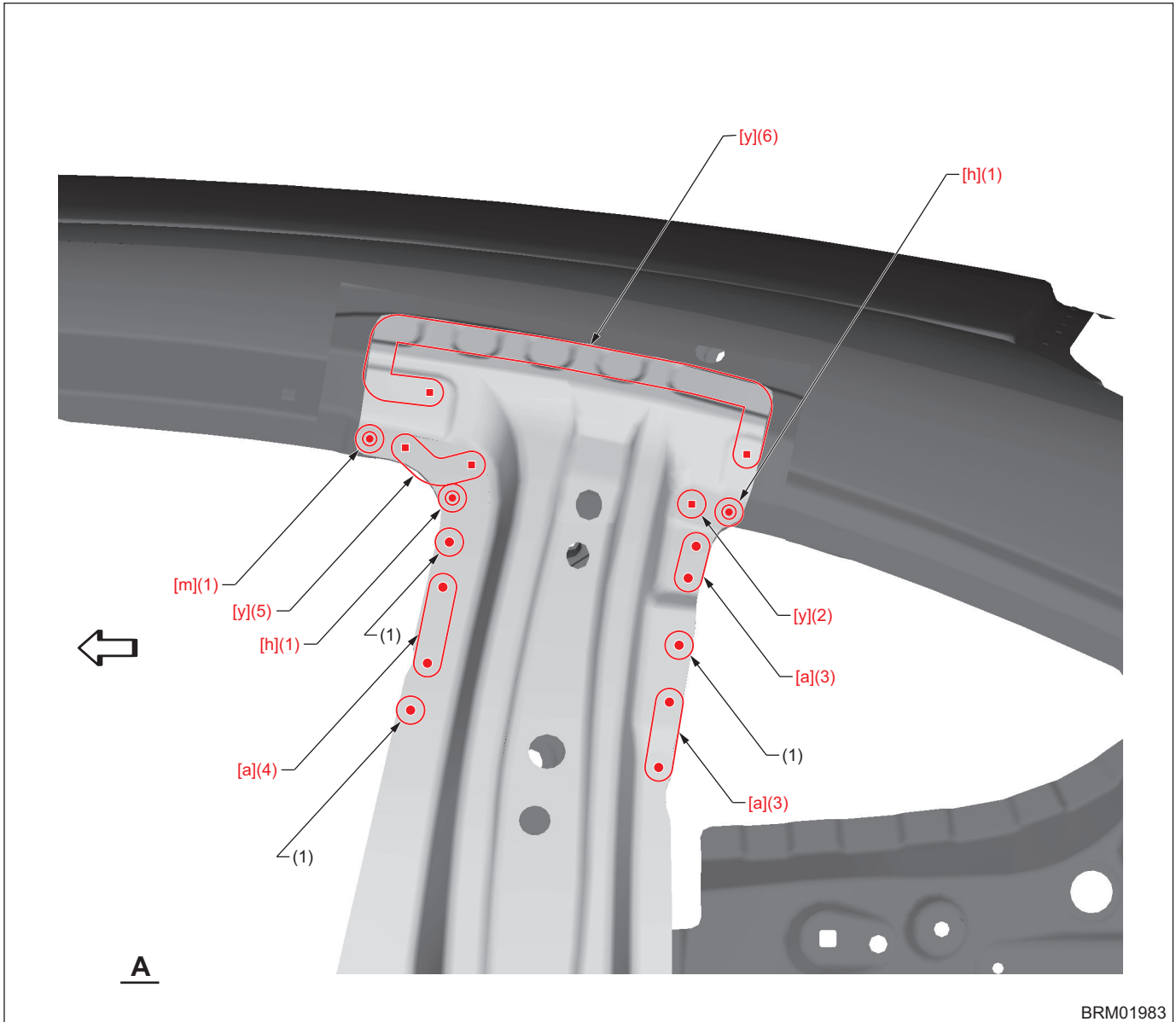


- |              |                              |                                  |
|--------------|------------------------------|----------------------------------|
| (1) 1 point  | (4) 4 points                 | (7) 1 point (Continuous welding) |
| (2) 2 points | (5) 8 points                 |                                  |
| (3) 3 points | (6) 13 points (Service part) |                                  |

[a] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc
[b] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 15 cyc
[g] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 15 cyc
[k] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 30 cyc, Upslope time: 2 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## • View A



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

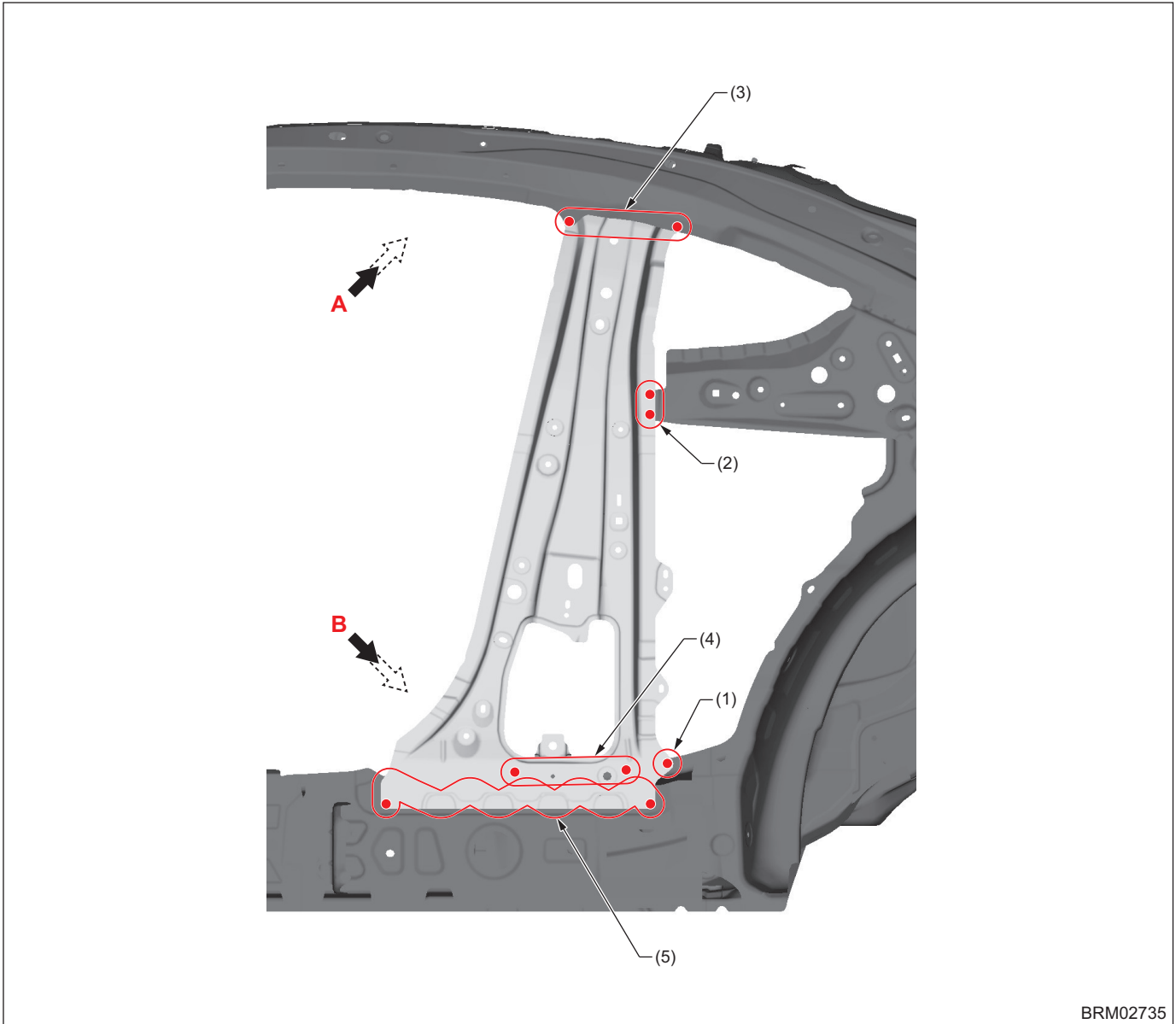
[a] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc
[h] Spot welding conditions	Compression: 4.0 kN, Current 1: 9.0 kA, Welding time 1: 2 cyc, Cooling time: 1 cyc, Current 2: 8.0 kA, Welding time 2: 20 cyc
[m] Spot welding conditions	Compression: 4.0 kN, Current: 7.0 kA, Welding time: 20 cyc, Upslope time: 3 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## 8-13. Center Pillar Inner (Total replacement)

### A: REMOVAL

- Overall view



BRM02735

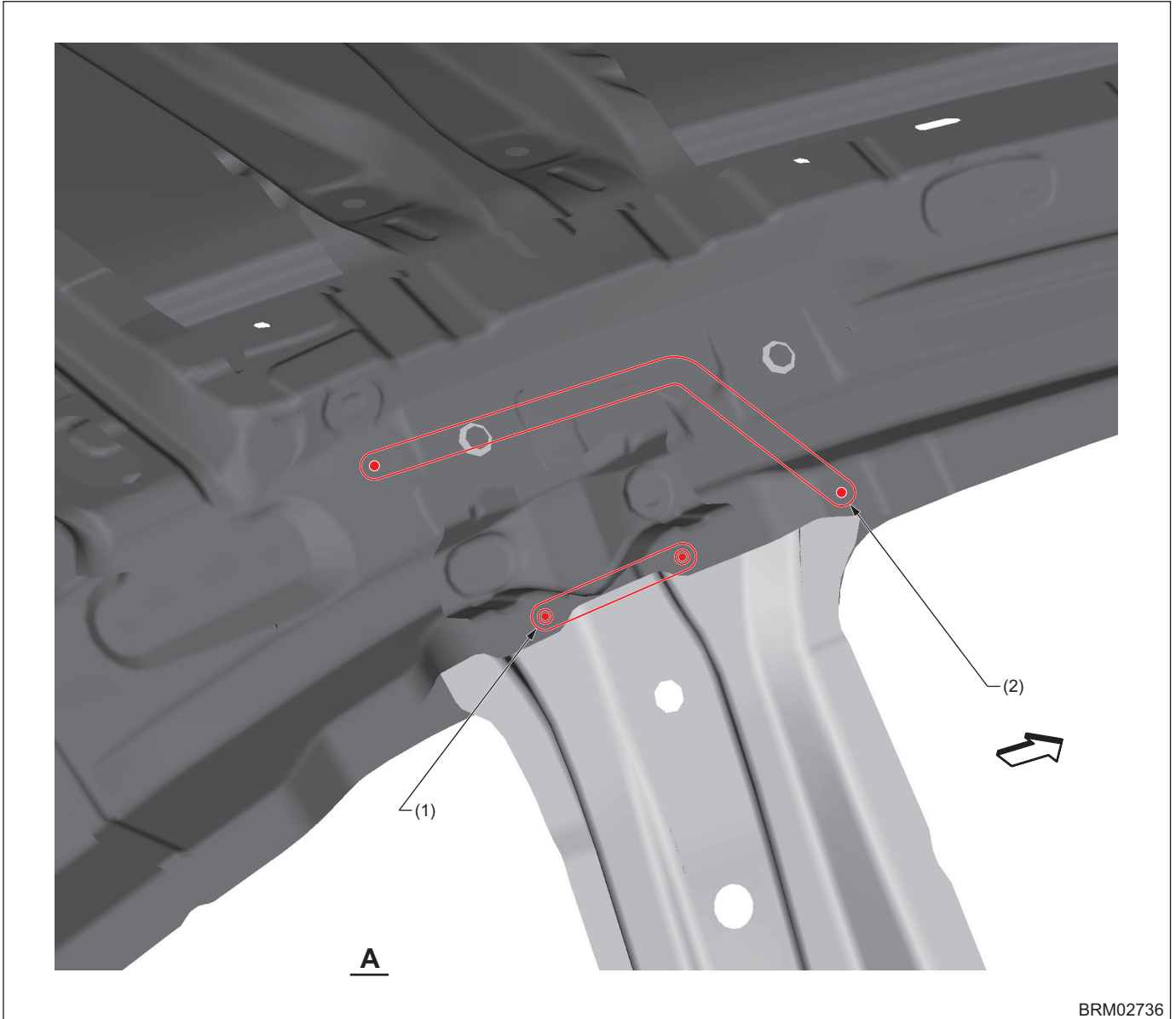
- (1) 1 point (Outside · 1)
- (2) 2 points (Outside · 1)

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

- (5) 12 points (Outside · 1)

# Panel Replacement

## • View A

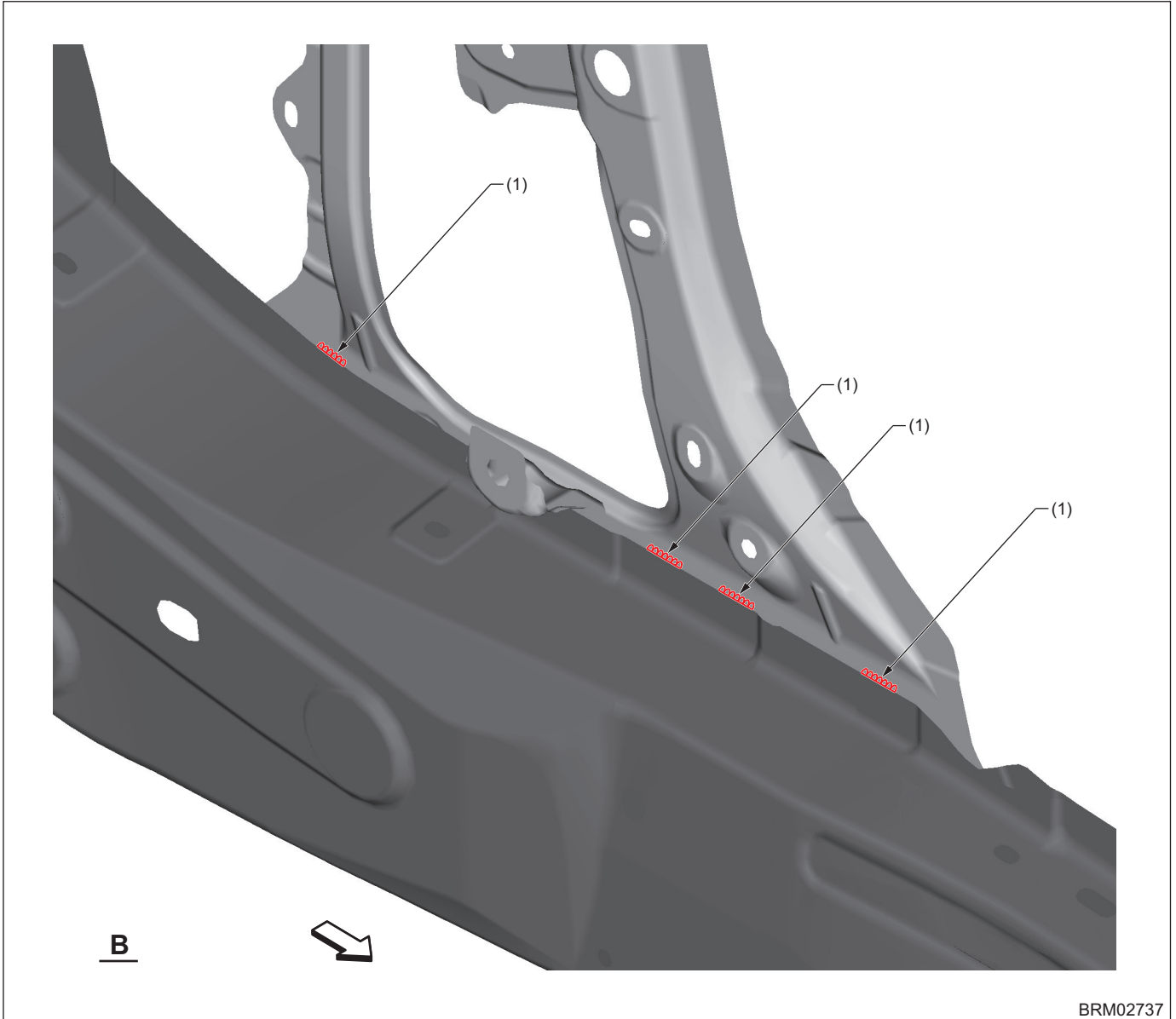


(1) 2 points (Inside · 2)

(2) 3 points (Inside · 1)

# Panel Replacement

## • View B

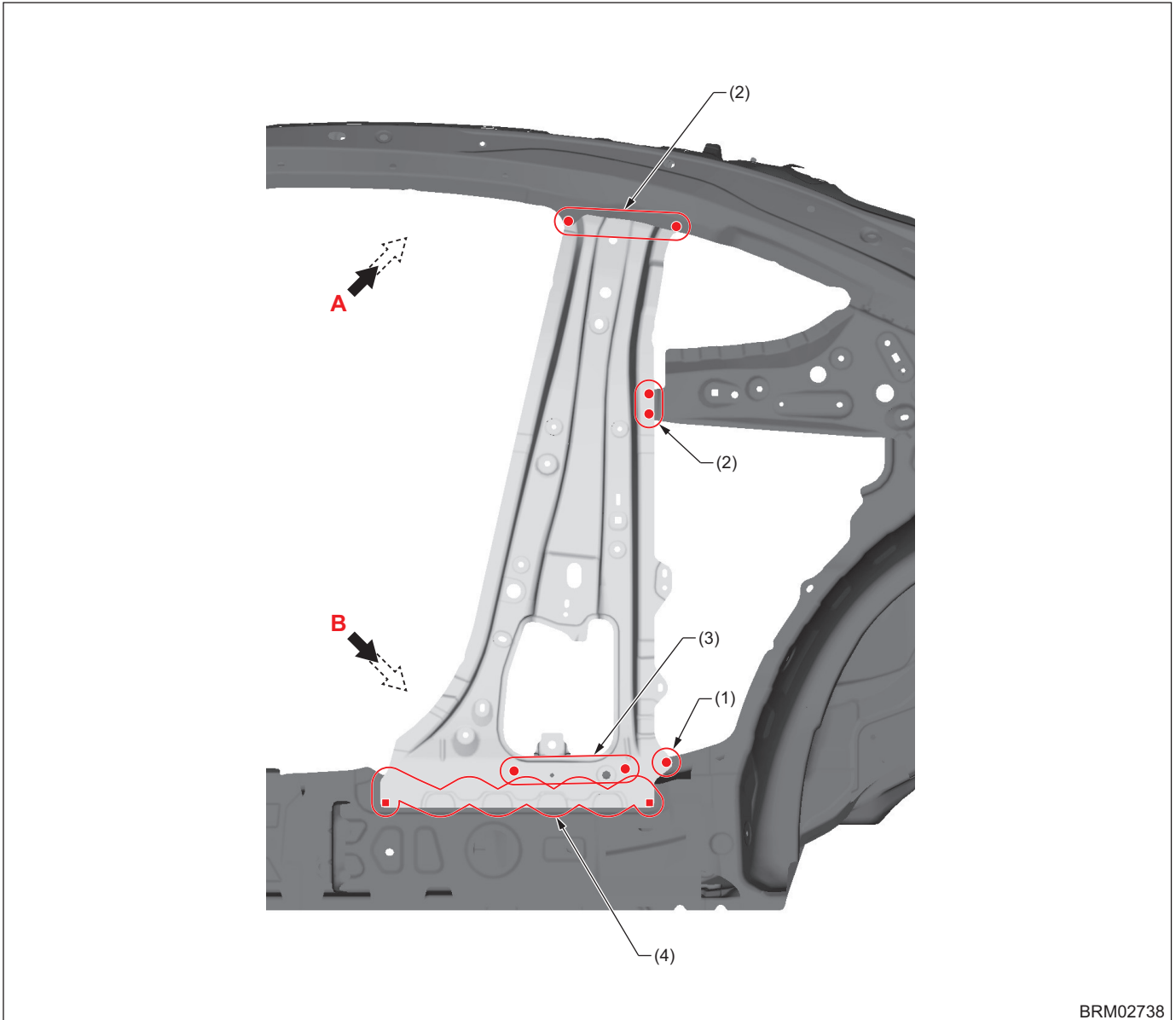


(1) 1 point (Inside · 1, belt sander)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02738

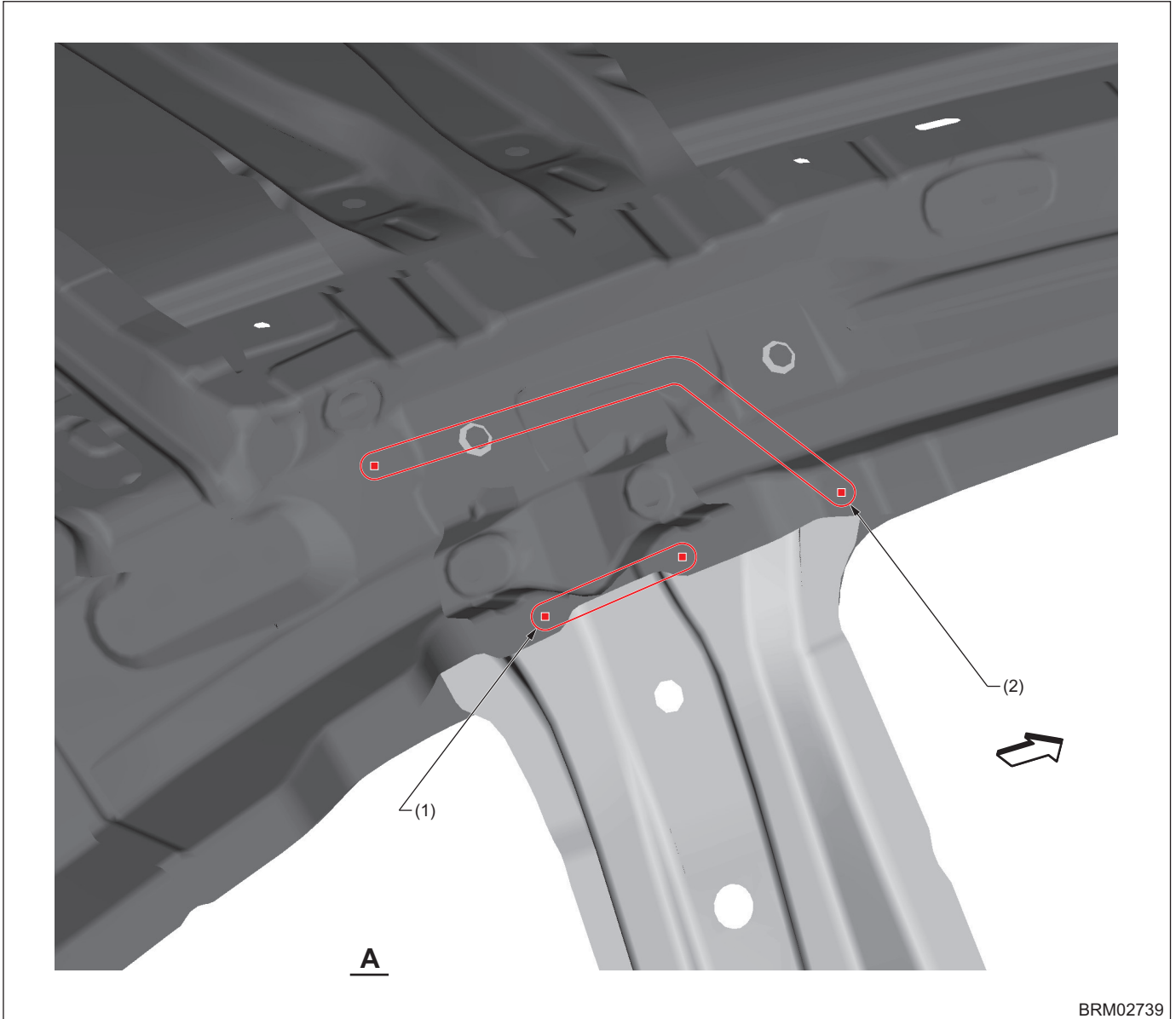
(1) 1 point  
(2) 2 points

(3) 3 points

(4) 12 points (Service part)

# Panel Replacement

## • View A

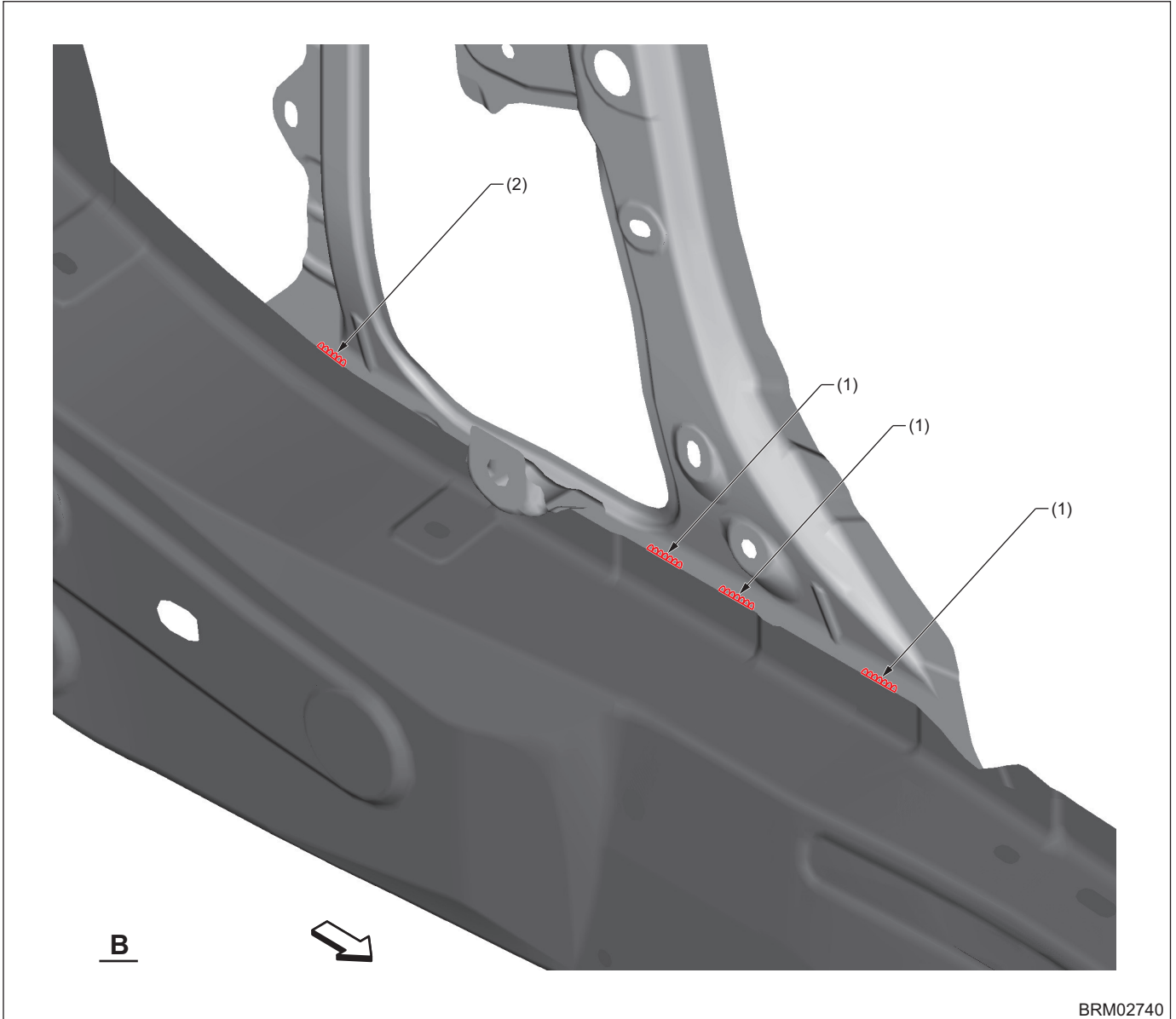


(1) 2 points

(2) 3 points

# Panel Replacement

## • View B



(1) 1 point (Continuous welding)  
(20 mm [0.79 in])

(2) 1 point (Continuous welding)  
(15 mm [0.59 in])

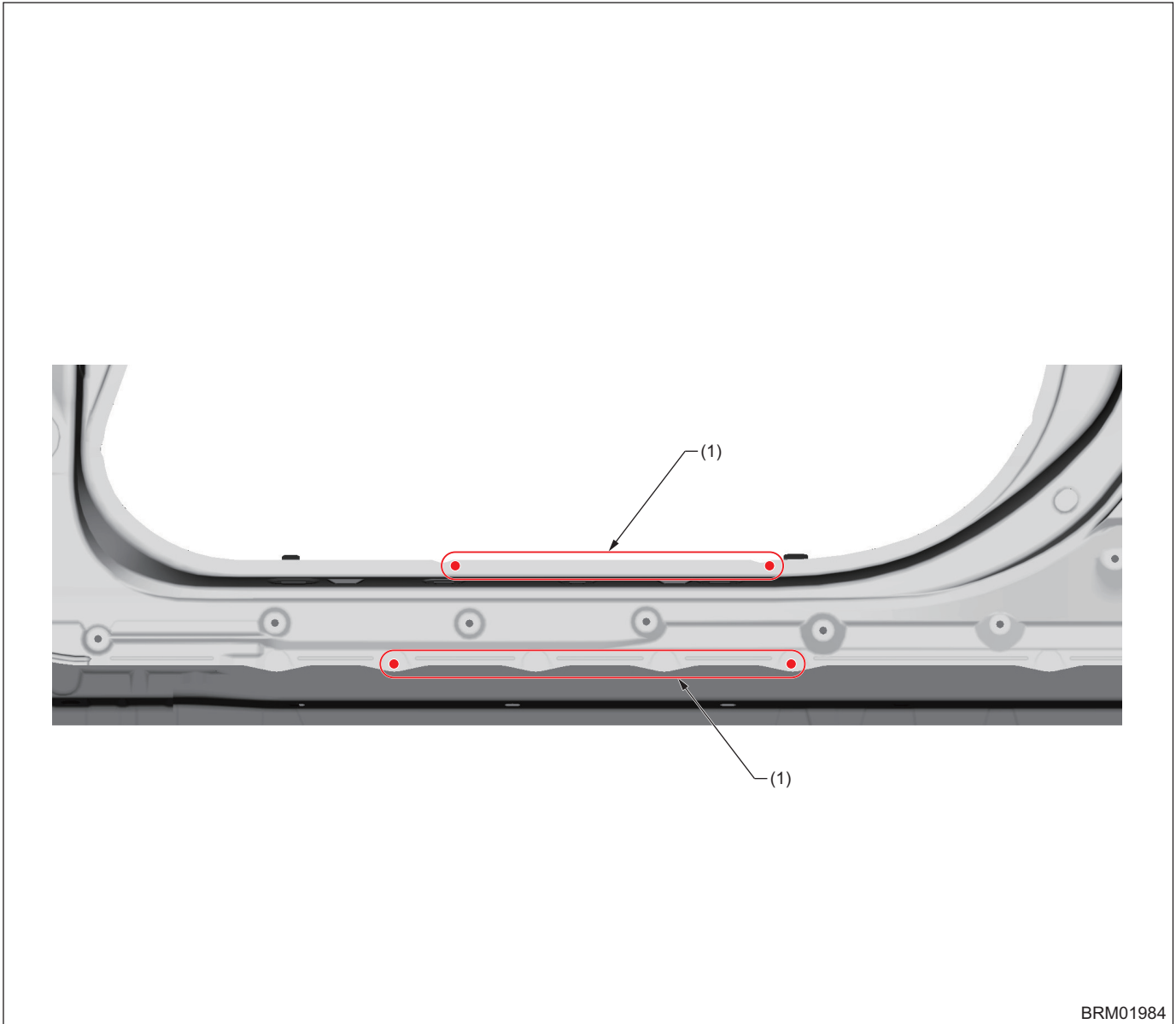


# Panel Replacement

## 8-14. Side Sill Outer Panel (Partial replacement)

### A: REMOVAL

- Overall view 1

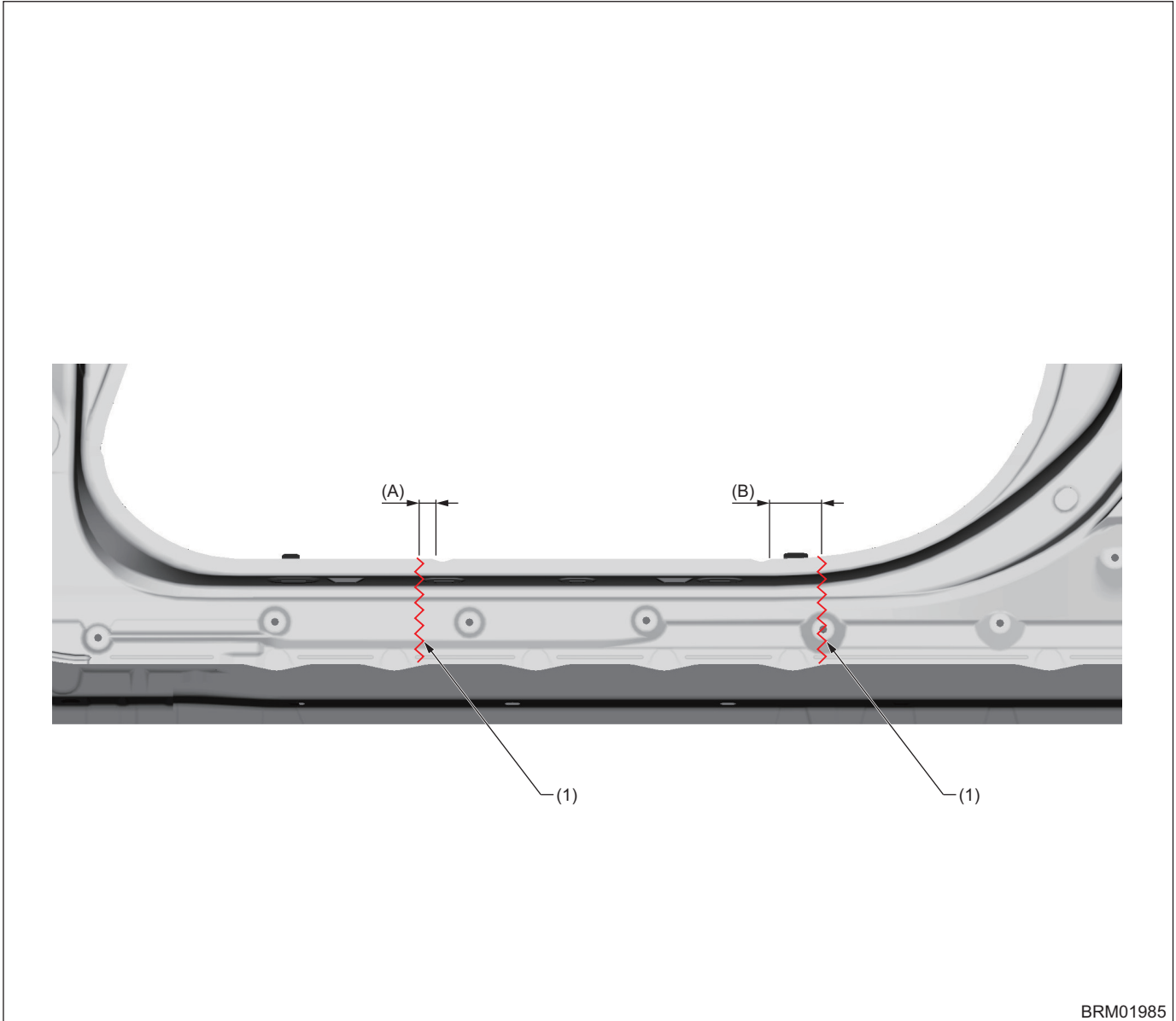


BRM01984

(1) 4 points (Outside · 1)

# Panel Replacement

- Overall view 2



BRM01985

(A) 20 mm [0.79 in]

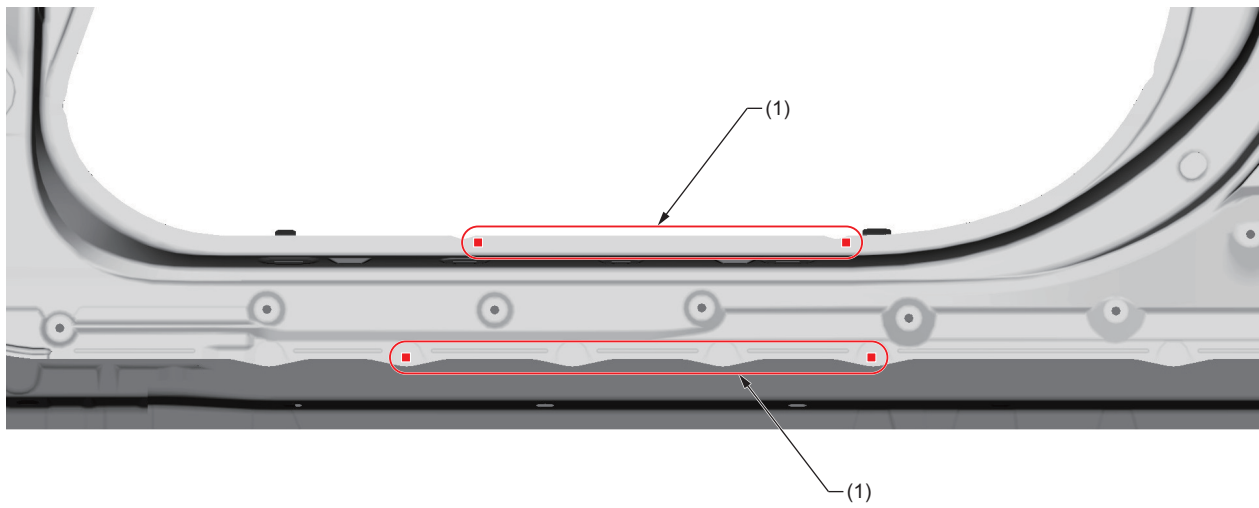
(B) 60 mm [2.36 in]

(1) Cut position

# Panel Replacement

## B: INSTALLATION

### • Overall view 1

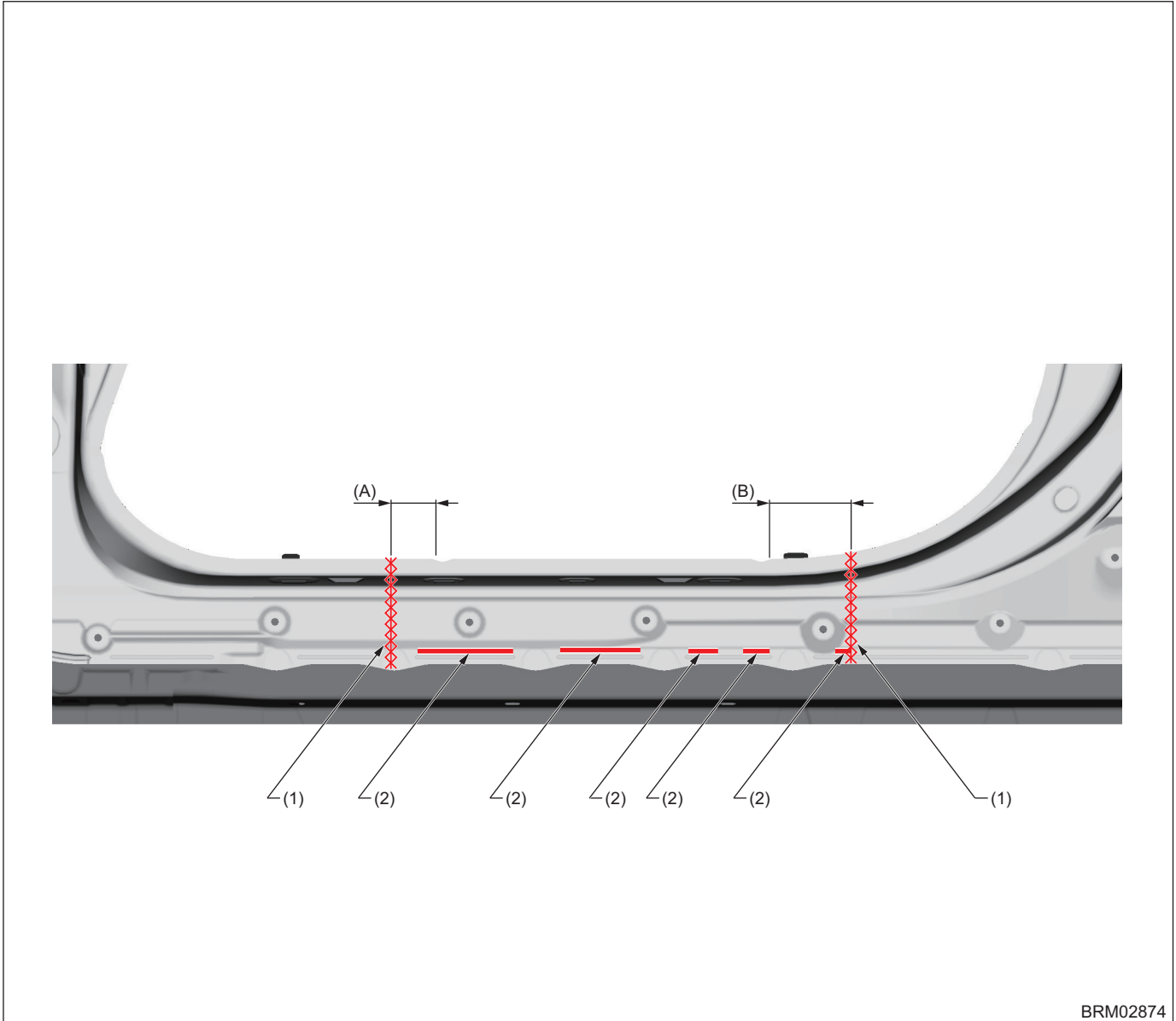


BRM01986

(1) 4 points (Service part)

# Panel Replacement

## • Overall view 2



BRM02874

(A) 50 mm [1.97 in]

(B) 94 mm [3.70 in]

(1) 1 point (Continuous welding)

(2) Structural adhesive

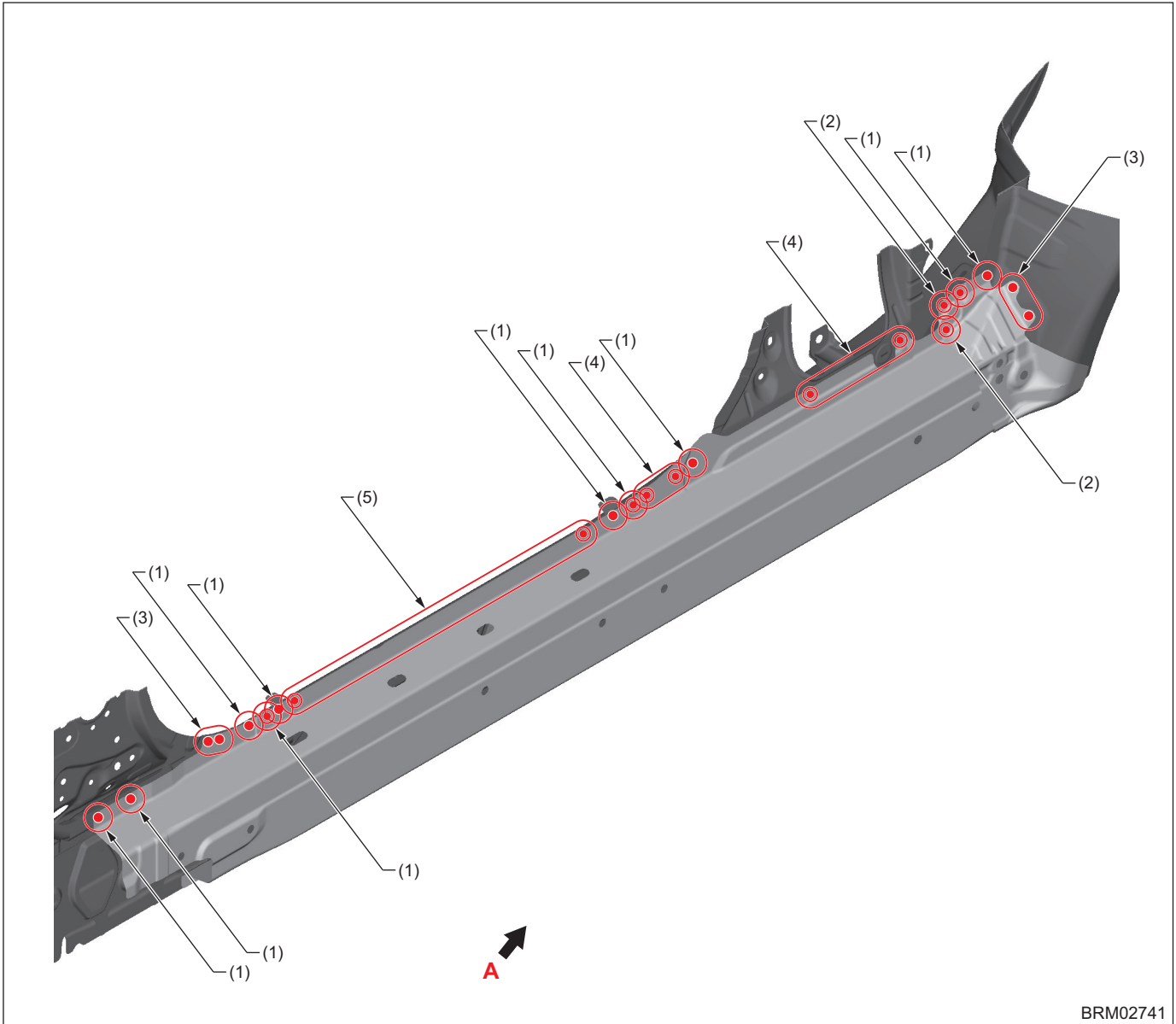
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

# Panel Replacement

## 8-15. Side Sill Reinforcement Outer (Total replacement)

### A: REMOVAL

#### • Overall view



BRM02741

(1) 1 point (Outside · 1)

(2) 1 point (Outside · 2)

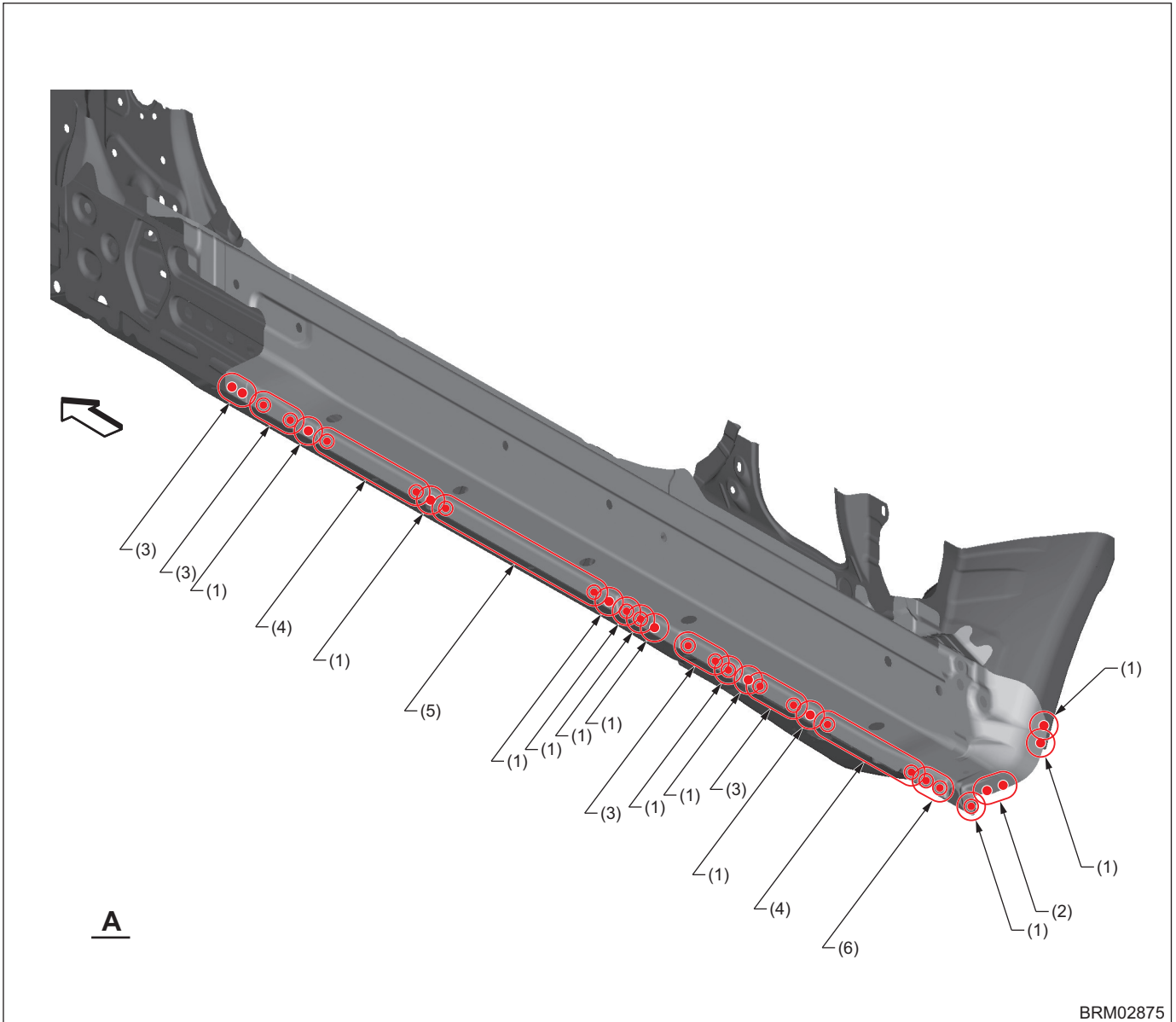
(3) 2 points (Outside · 1)

(4) 3 points (Outside · 1)

(5) 13 points (Outside · 1)

# Panel Replacement

## • View A



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

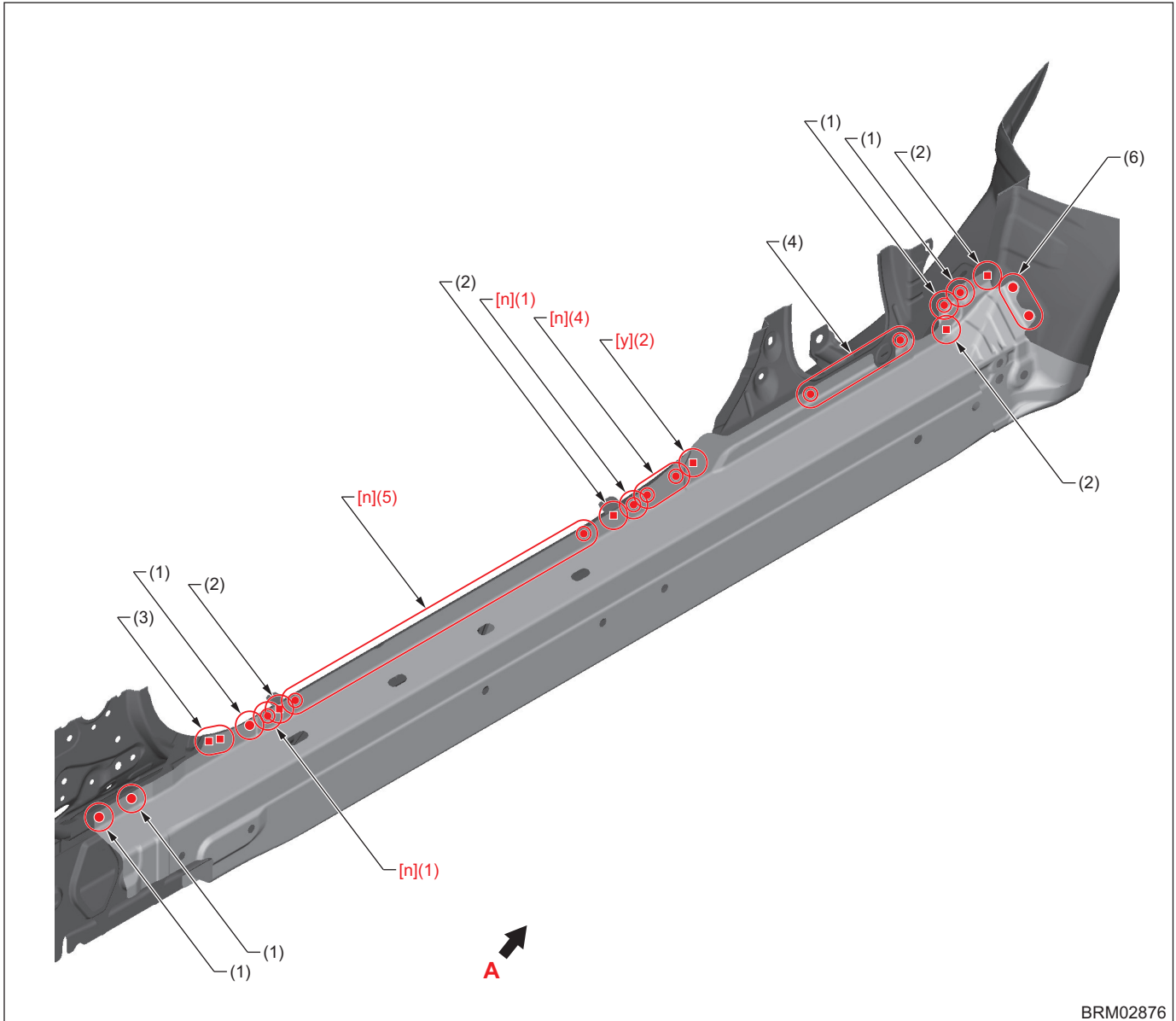
(3) 2 points (Outside · 1)  
(4) 4 points (Outside · 1)

(5) 6 points (Outside · 1)  
(6) 2 points (Outside · 2)

# Panel Replacement

## B: INSTALLATION

### • Overall view



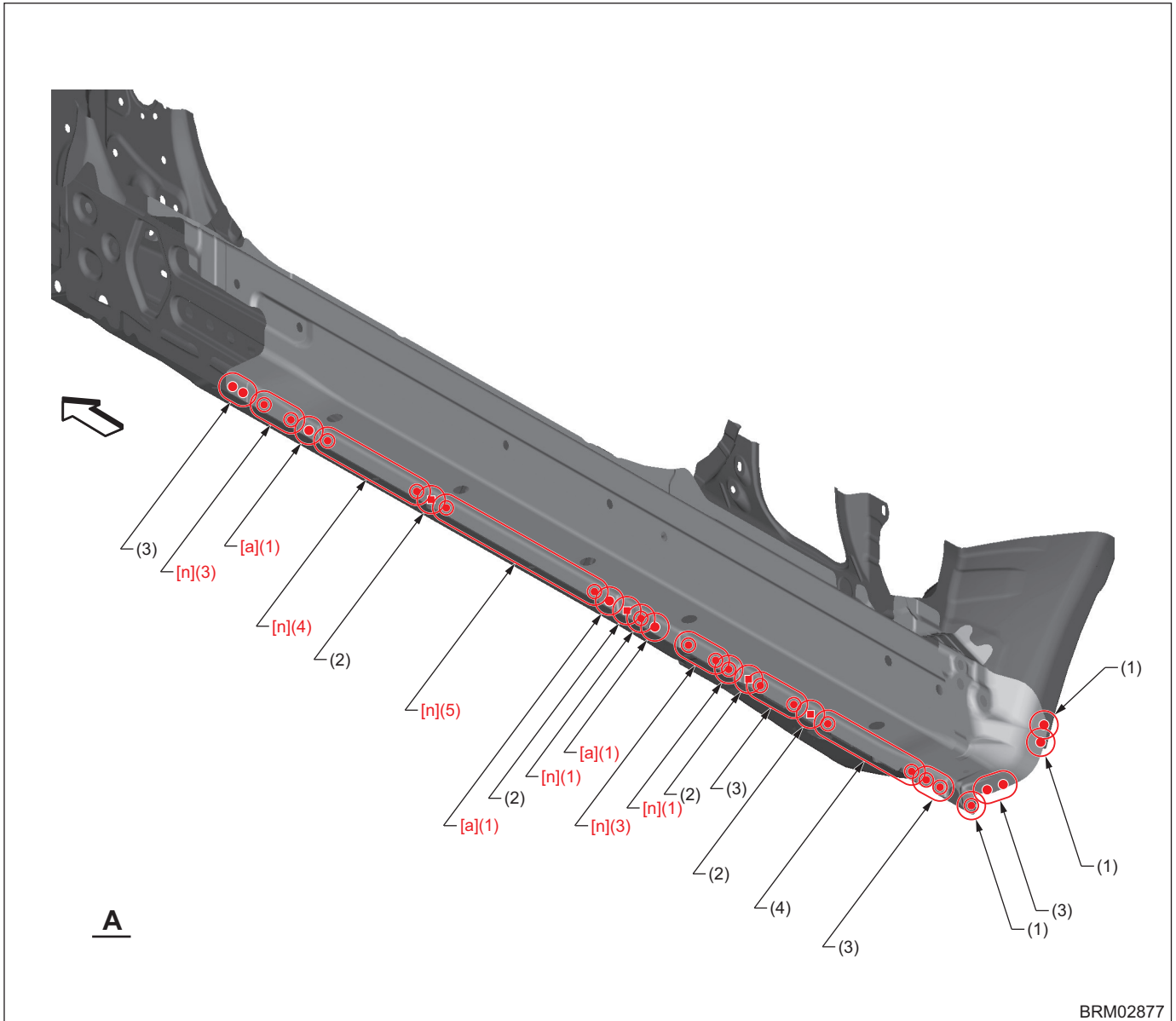
BRM02876

- |                            |                             |               |
|----------------------------|-----------------------------|---------------|
| (1) 1 point                | (3) 2 points (Service part) | (5) 13 points |
| (2) 1 point (Service part) | (4) 3 points                | (6) 2 points  |

[n] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 20 cyc
[y] Plug welding conditions	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO <sub>2</sub> B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO <sub>2</sub> : 20 %)

# Panel Replacement

## • View A



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

[a] Spot welding conditions	Compression: 3.0 kN, Current: 7.0 kA, Welding time: 17 cyc
[n] Spot welding conditions	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 20 cyc

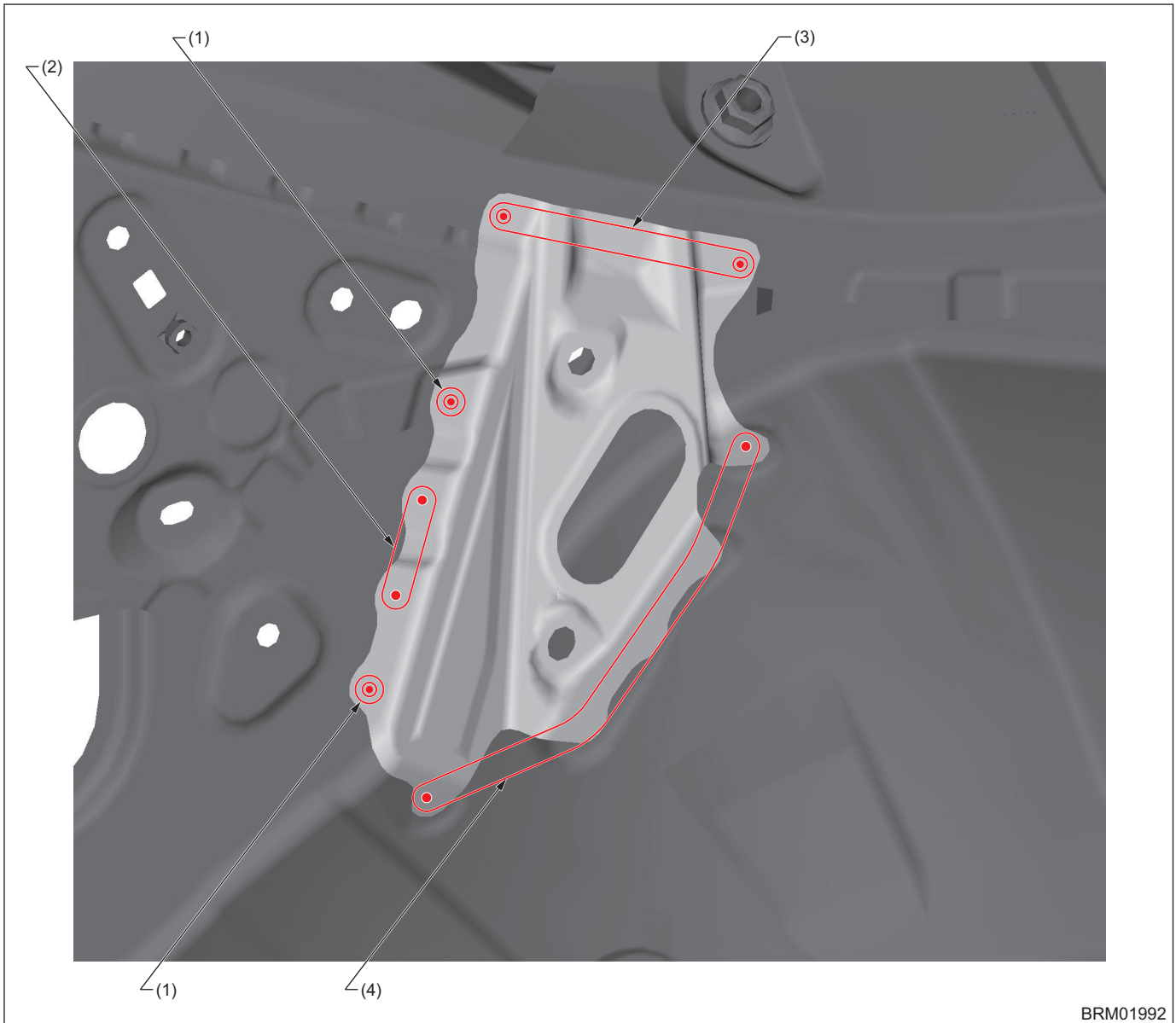


# Panel Replacement

## 8-16. Rear Pillar Reinforcement LH (Total replacement)

### A: REMOVAL

#### • Overall view



BRM01992

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

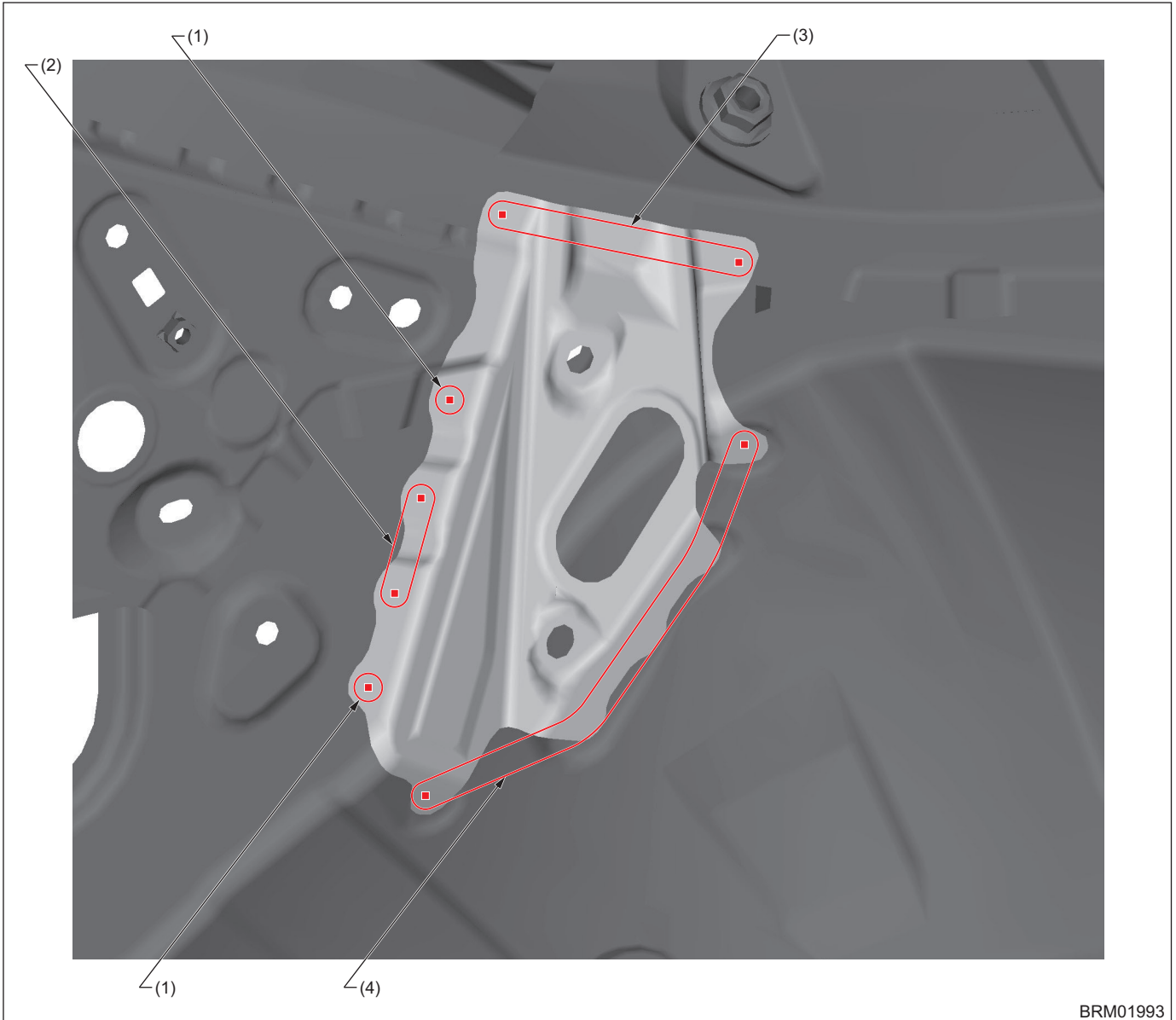
(3) 3 points (Outside · 1)

(4) 5 points (Top · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01993

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

(3) 3 points (Service part)

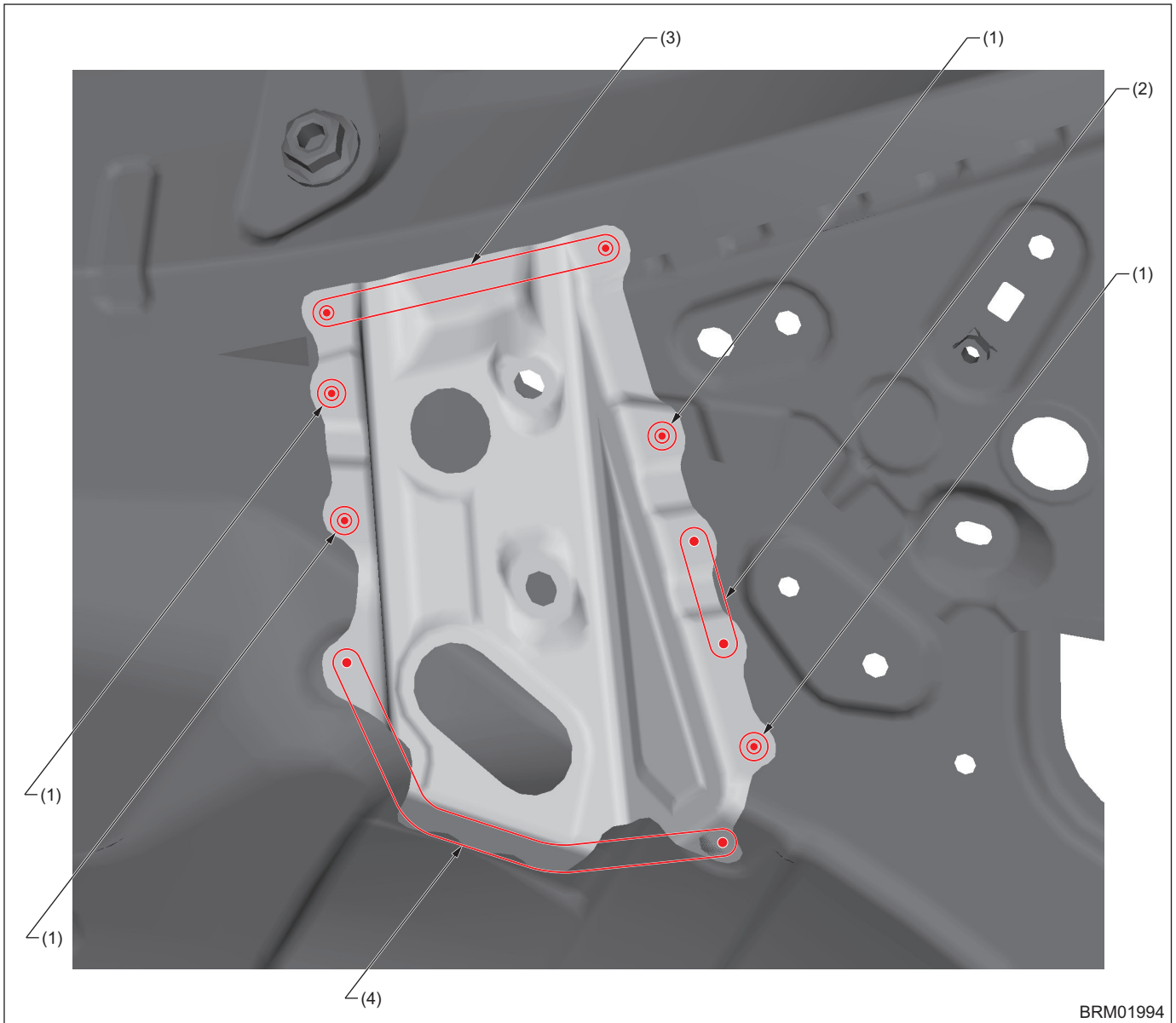
(4) 5 points (Service part)

# Panel Replacement

## 8-17. Rear Pillar Reinforcement RH (Total replacement)

### A: REMOVAL

#### • Overall view



BRM01994

(1) 1 point (Outside · 1)

(3) 3 points (Outside · 1)

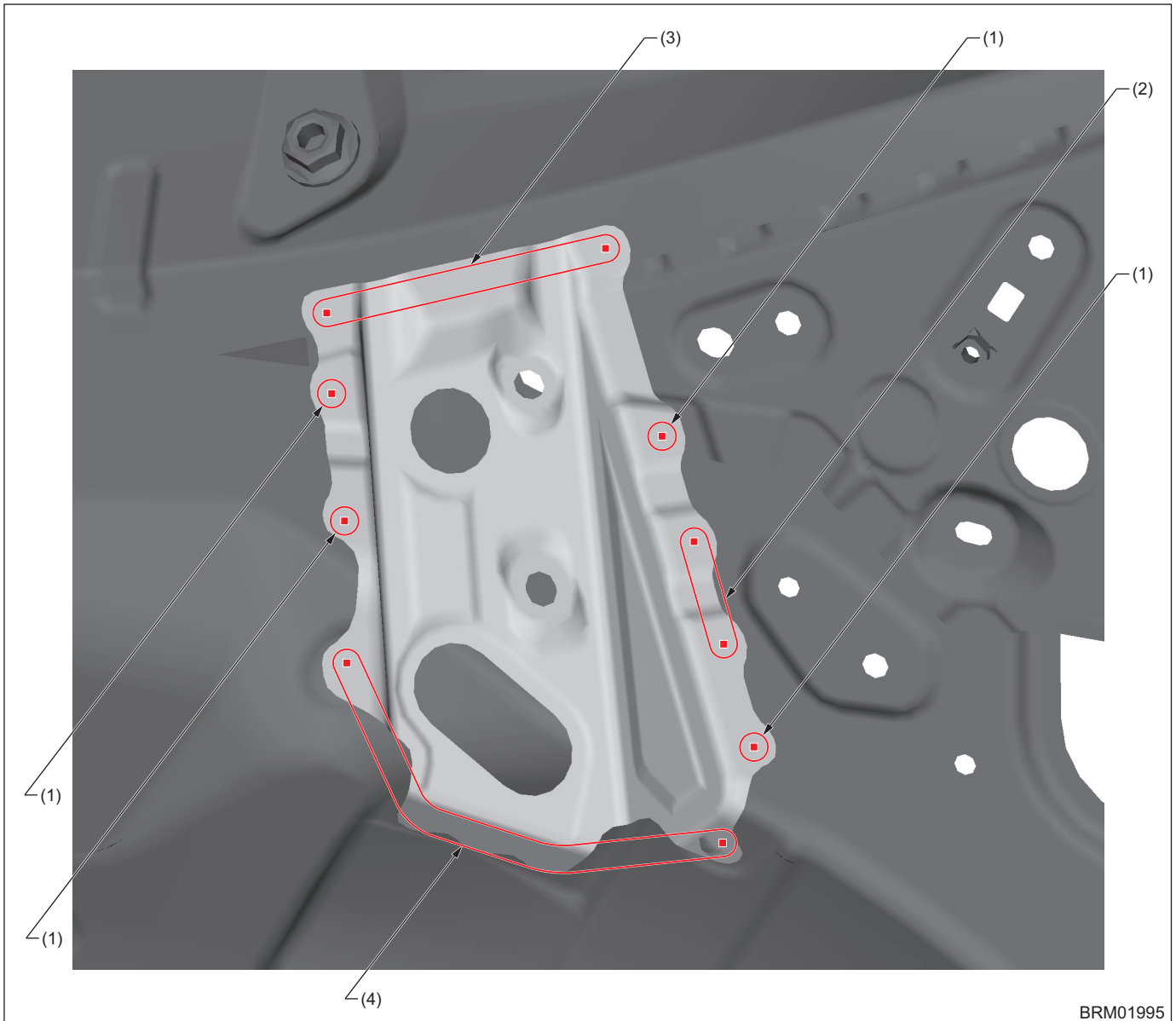
(4) 5 points (Top · 1)

(2) 2 points (Outside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01995

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

(3) 3 points (Service part)

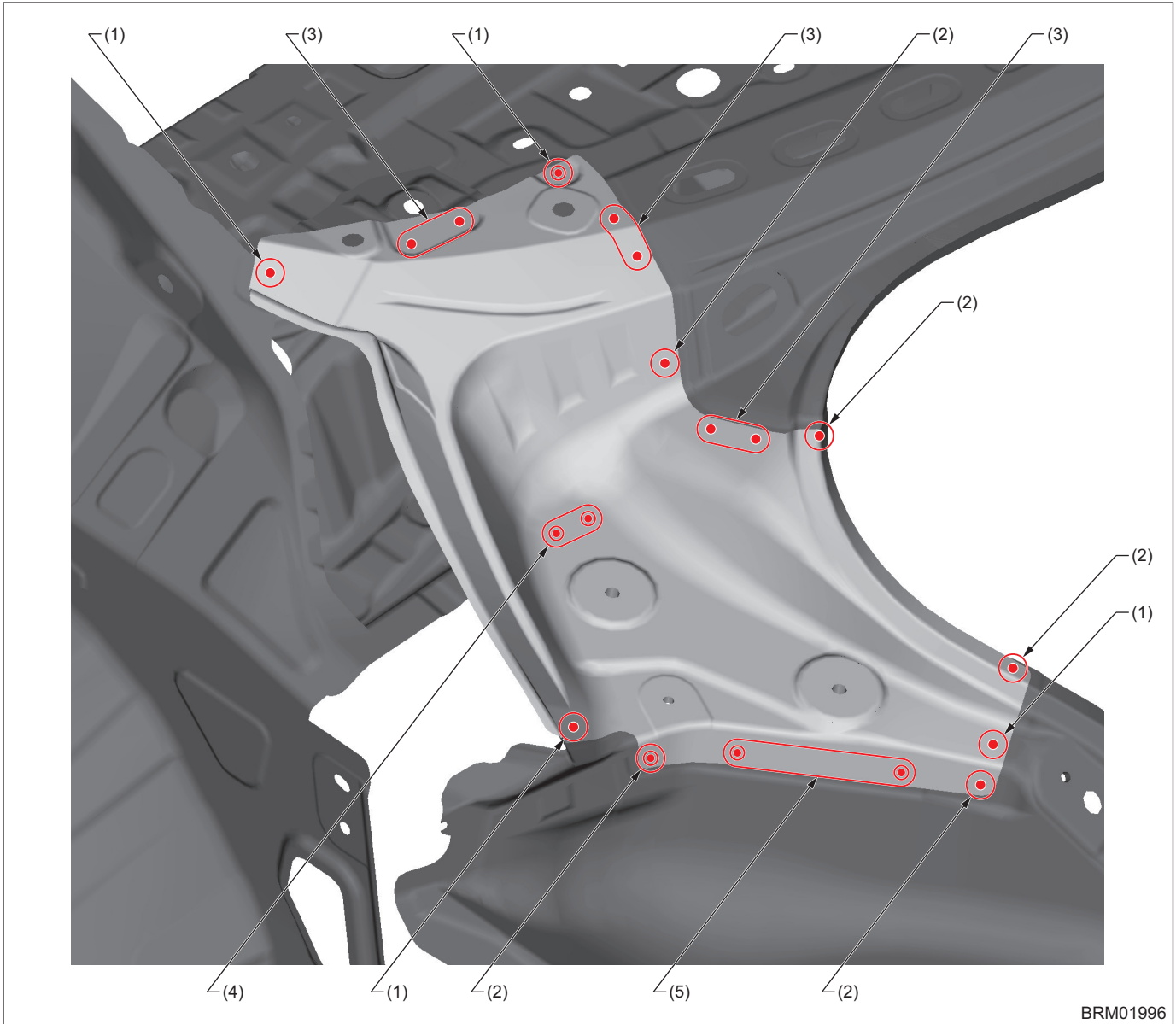
(4) 5 points (Service part)

# Panel Replacement

## 8-18. Patch Rear Pillar (Total replacement)

### A: REMOVAL

#### • Overall view



BRM01996

(1) 1 point (Top - 1)  
(2) 1 point (Outside - 1)

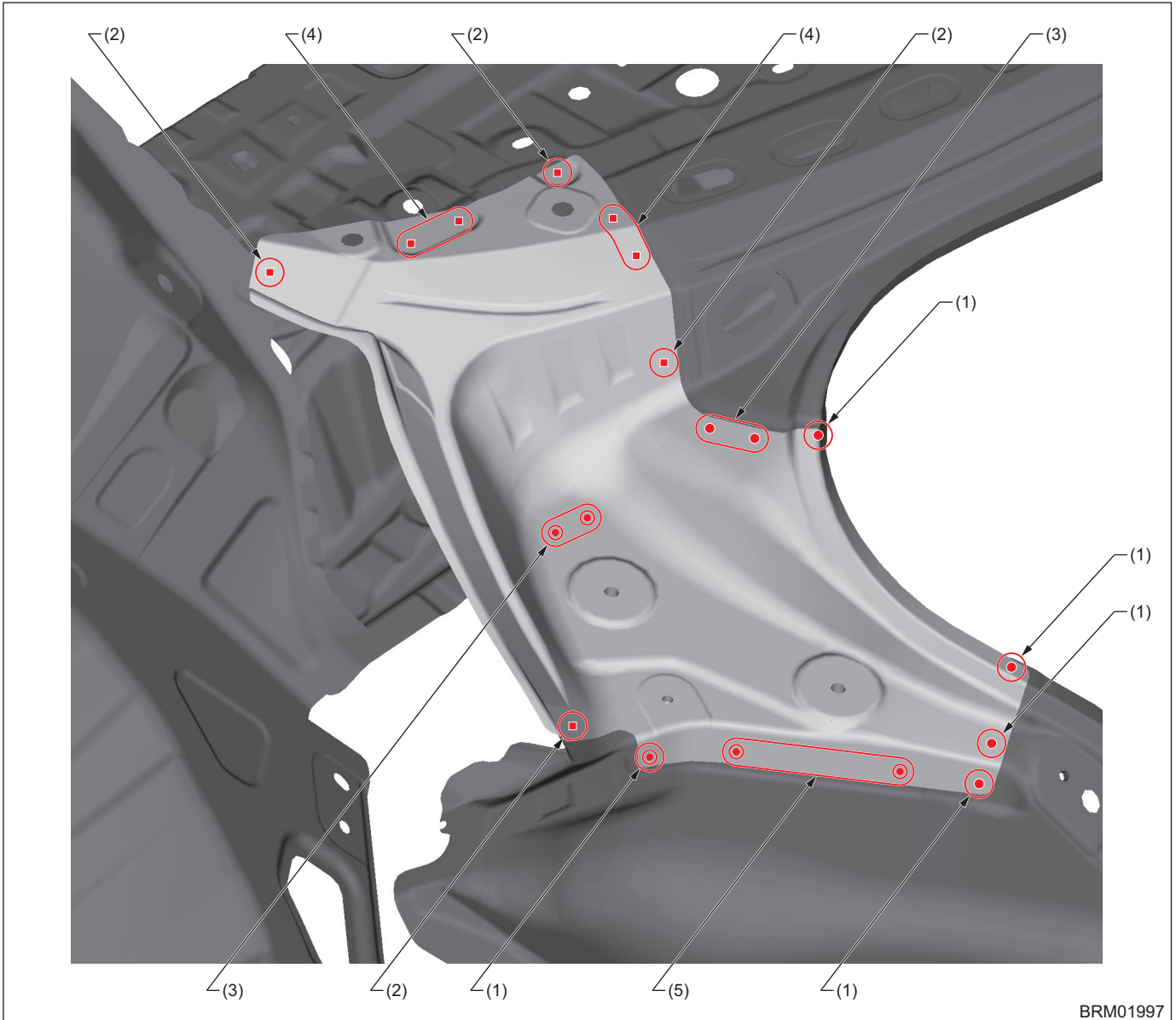
(3) 2 points (Top - 1)  
(4) 2 points (Top - 2)

(5) 3 points (Outside - 2)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM01997

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

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

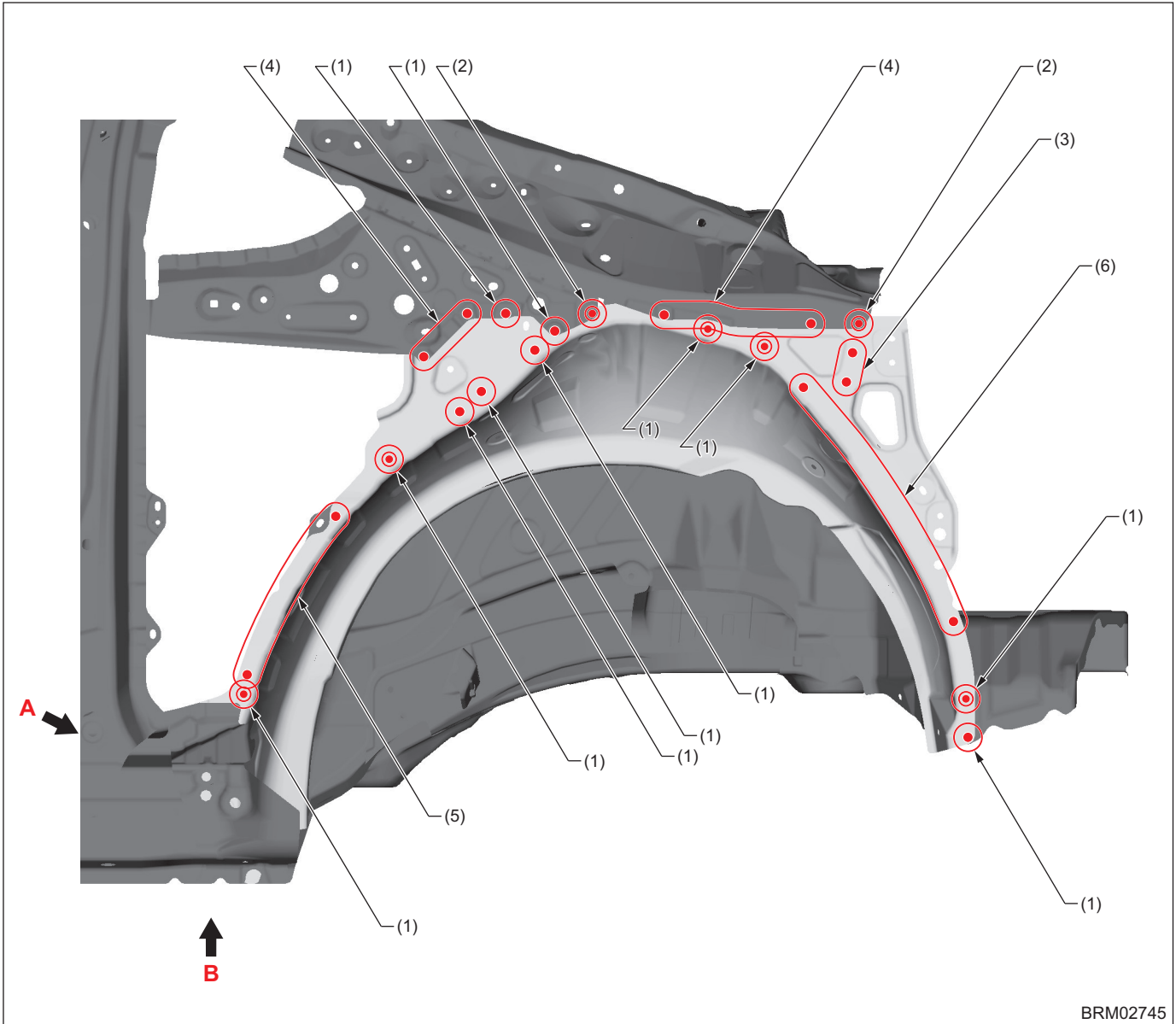
- (5) 3 points

# Panel Replacement

## 8-19. Arch Rear Inner (Total replacement)

### A: REMOVAL

• Overall view (LH)



(1) 1 point (Outside · 1)

(2) 1 point (Outside · 2)

(3) 2 points (Outside · 1)

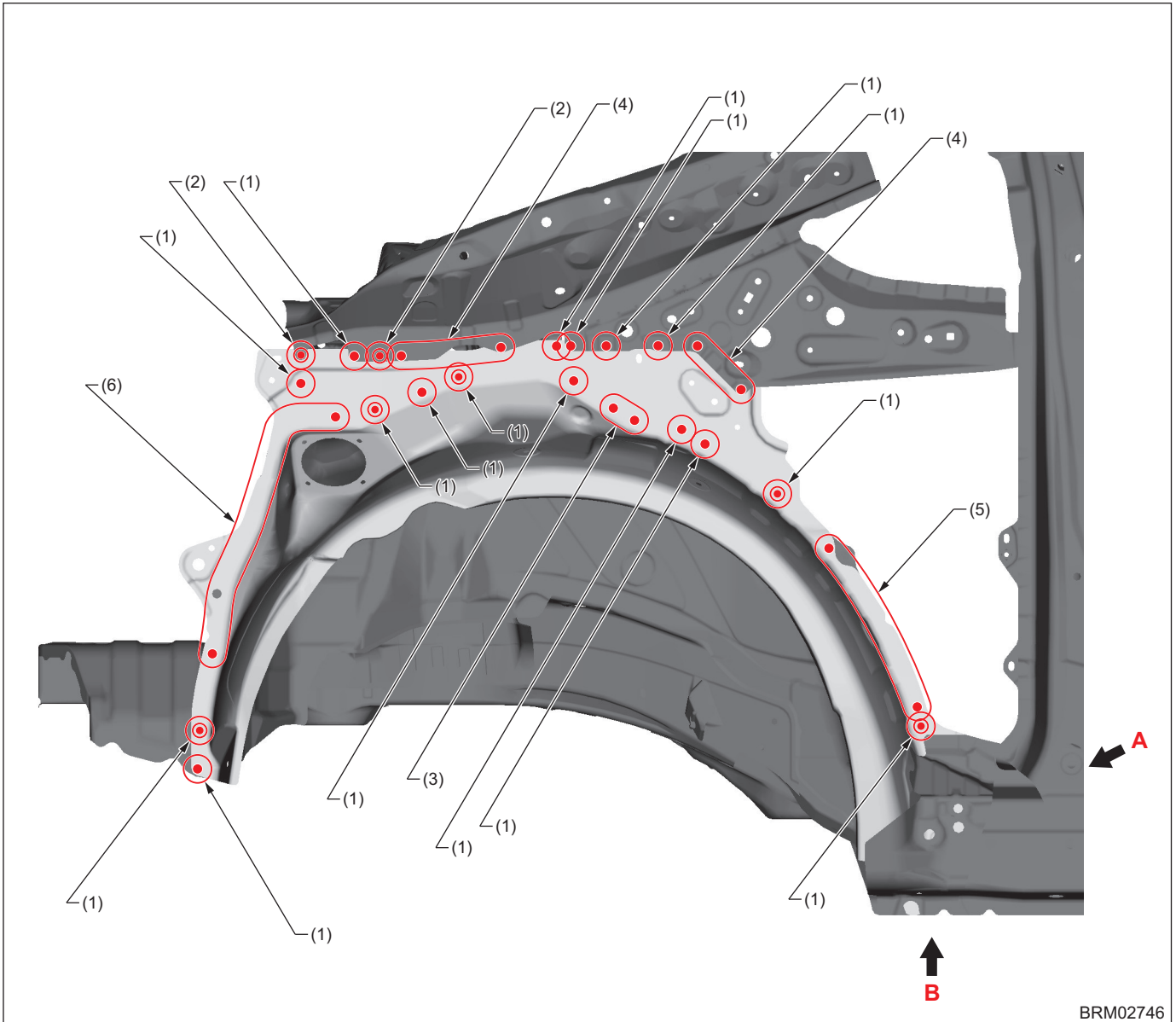
(4) 3 points (Outside · 1)

(5) 5 points (Outside · 1)

(6) 7 points (Outside · 1)

# Panel Replacement

## • Overall view (RH)



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

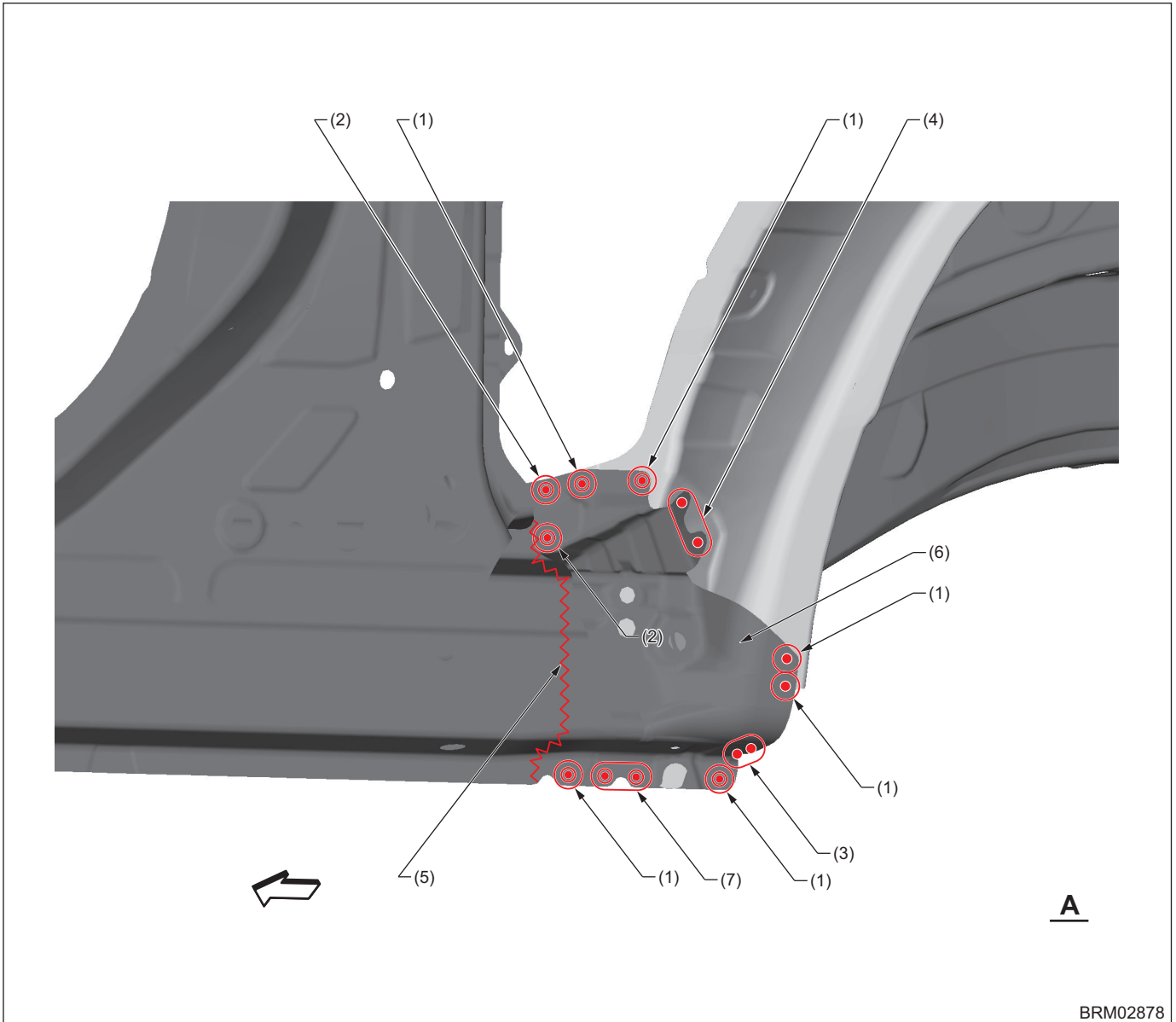
(3) 2 points (Outside · 1)  
 (4) 3 points (Outside · 1)

(5) 5 points (Outside · 1)  
 (6) 7 points (Outside · 1)



# Panel Replacement

## • View A



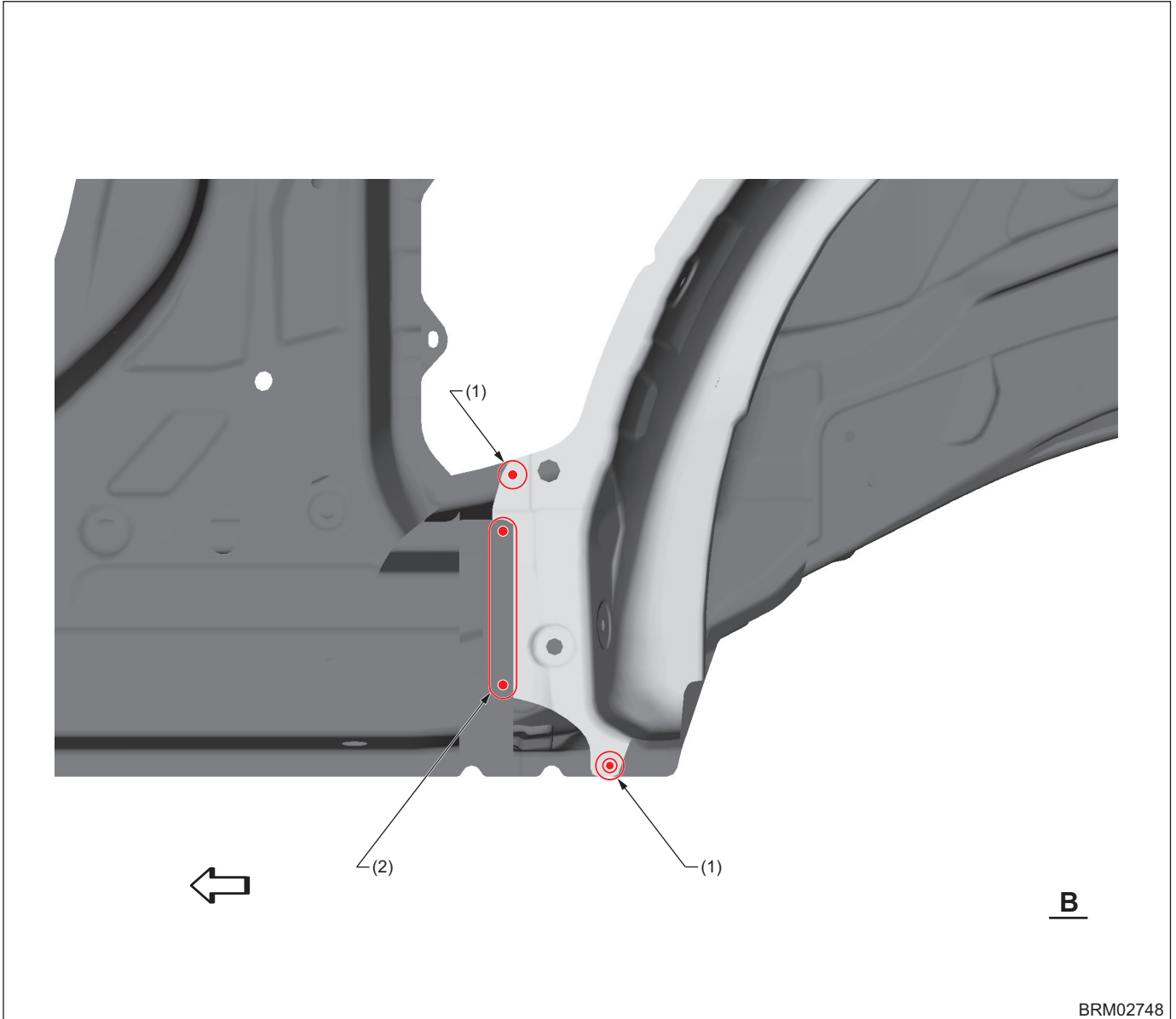
- (1) 1 point (Outside · 1)
- (2) 1 point (Outside · 2)
- (3) 2 points (Bottom · 1)

- (4) 2 points (Outside · 1)
- (5) Rough cutting
- (6) The part that can be reused.

- (7) 2 points (Outside · 1)

# Panel Replacement

## • View B



BRM02748

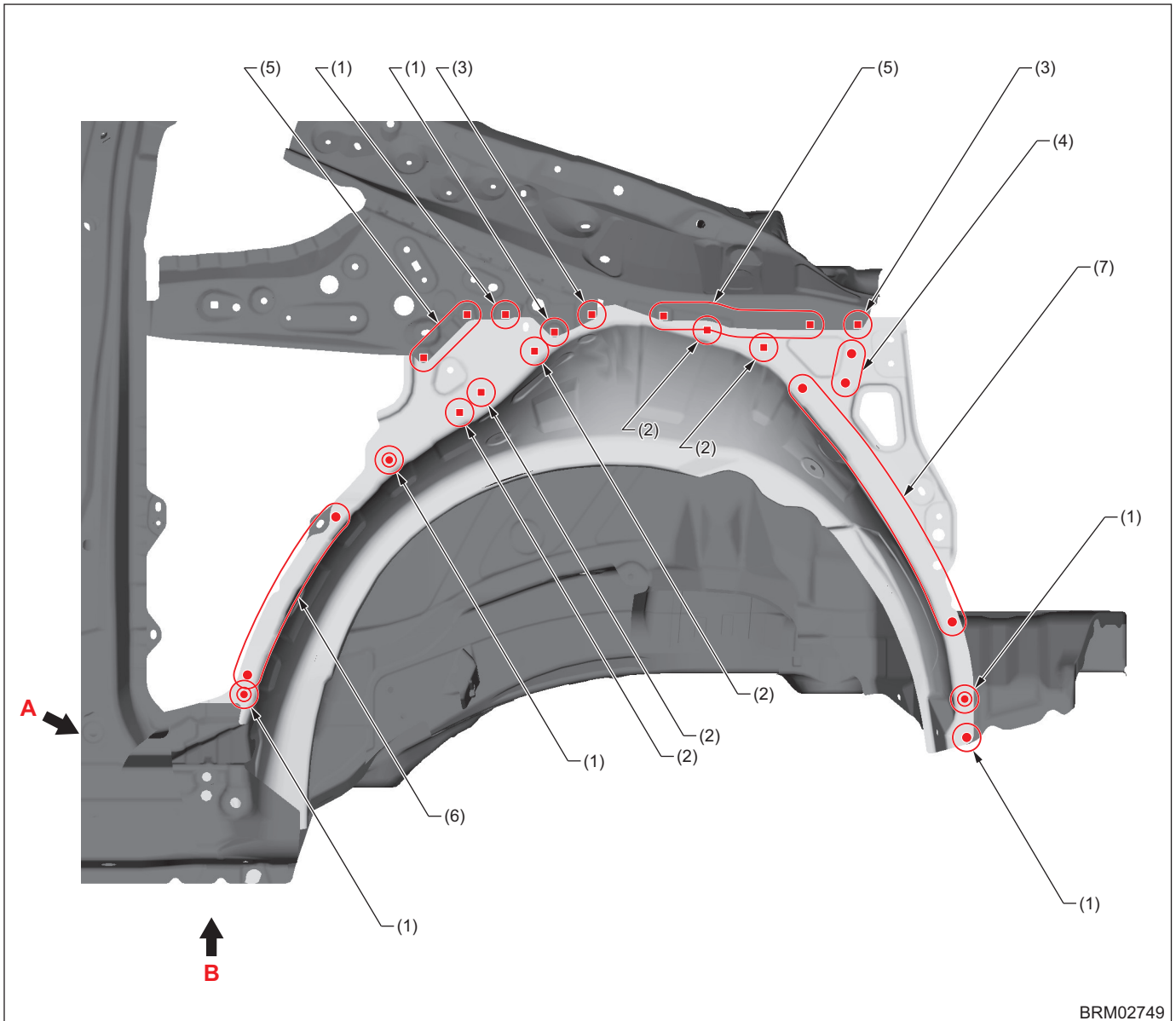
(1) 1 point (Outside · 1)

(2) 3 points (Outside · 1)

# Panel Replacement

## B: INSTALLATION

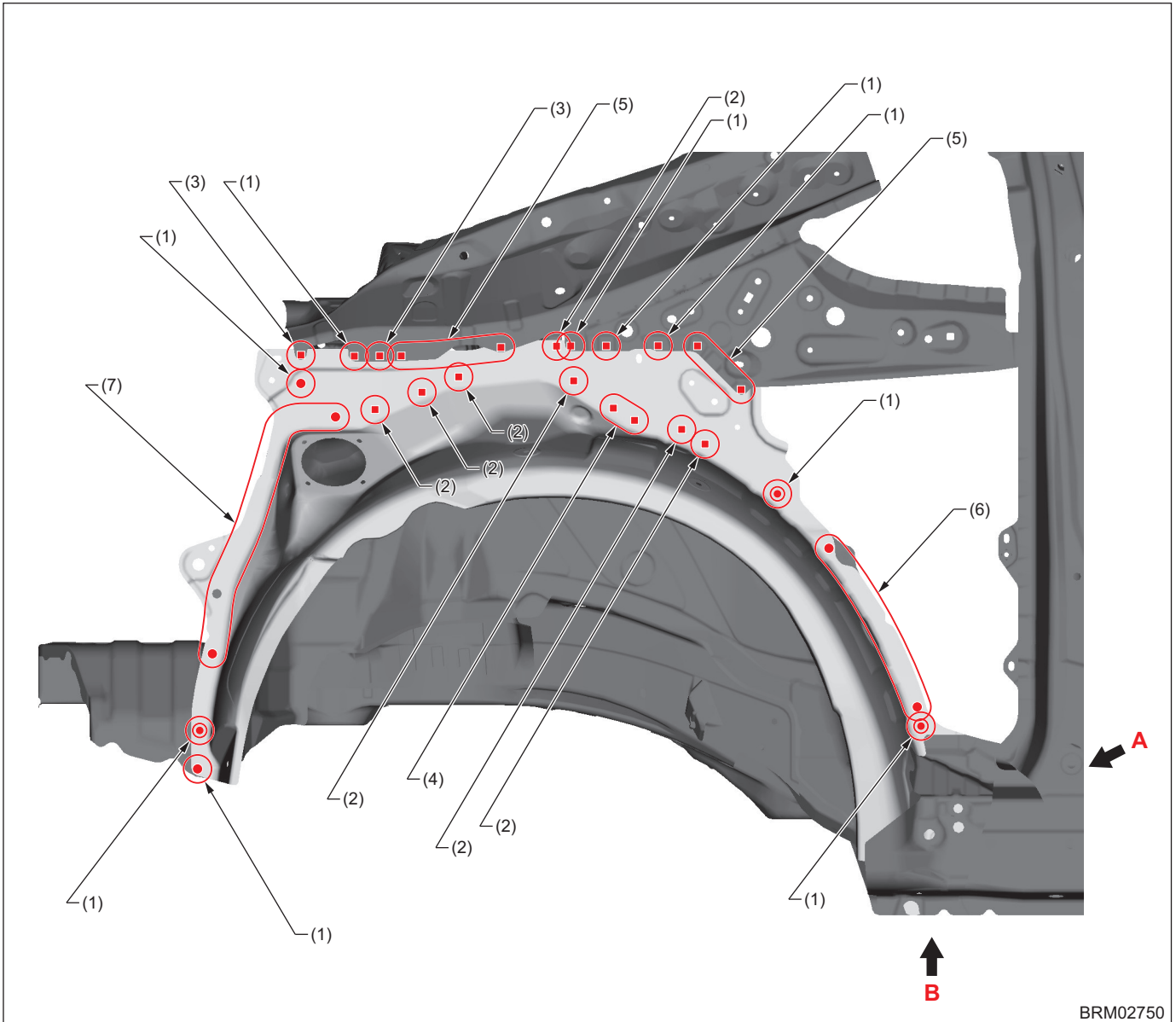
### • Overall view 1 (LH)



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

# Panel Replacement

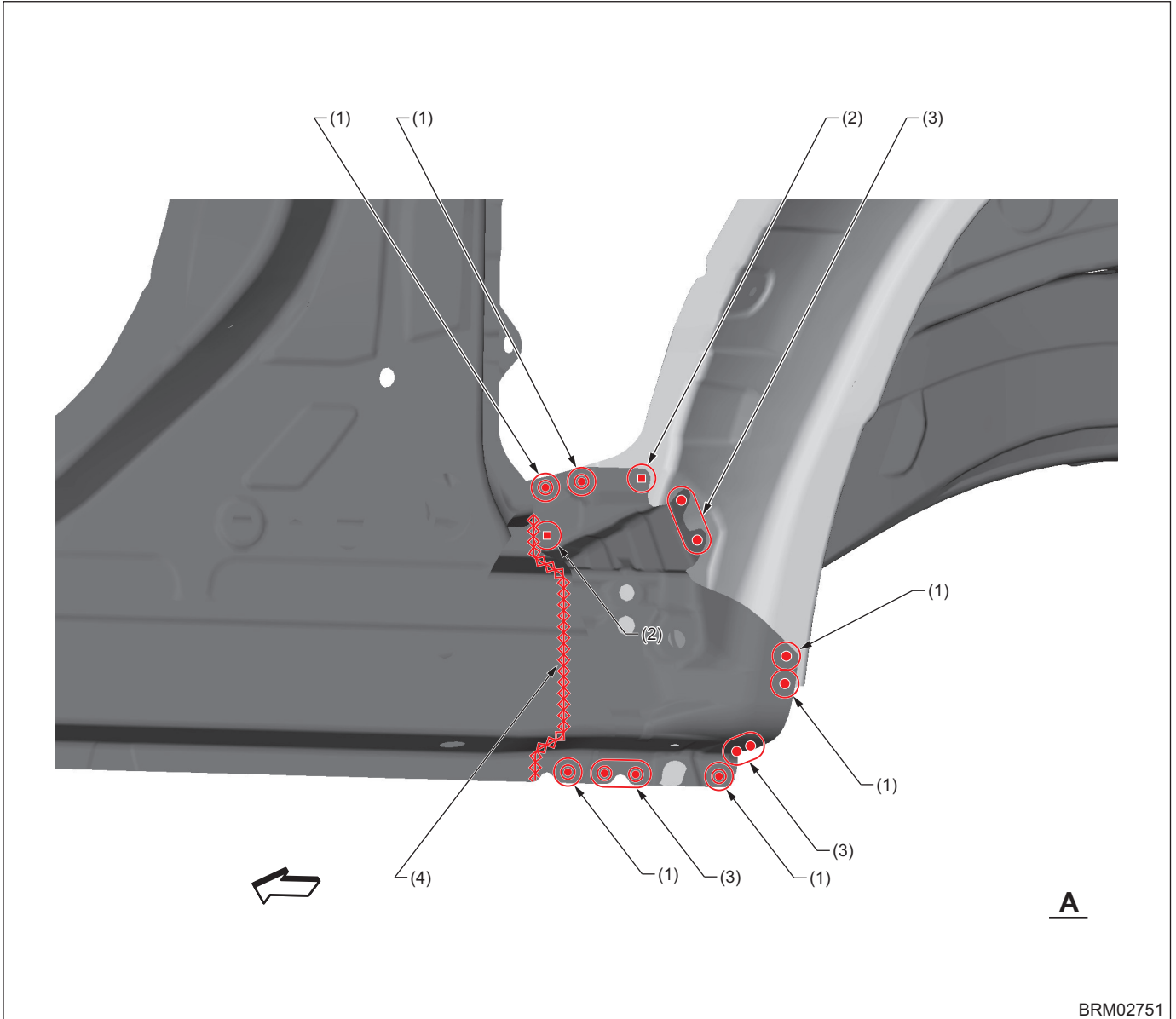
## • Overall view 1 (RH)



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

# Panel Replacement

## • View A



(1) 1 point

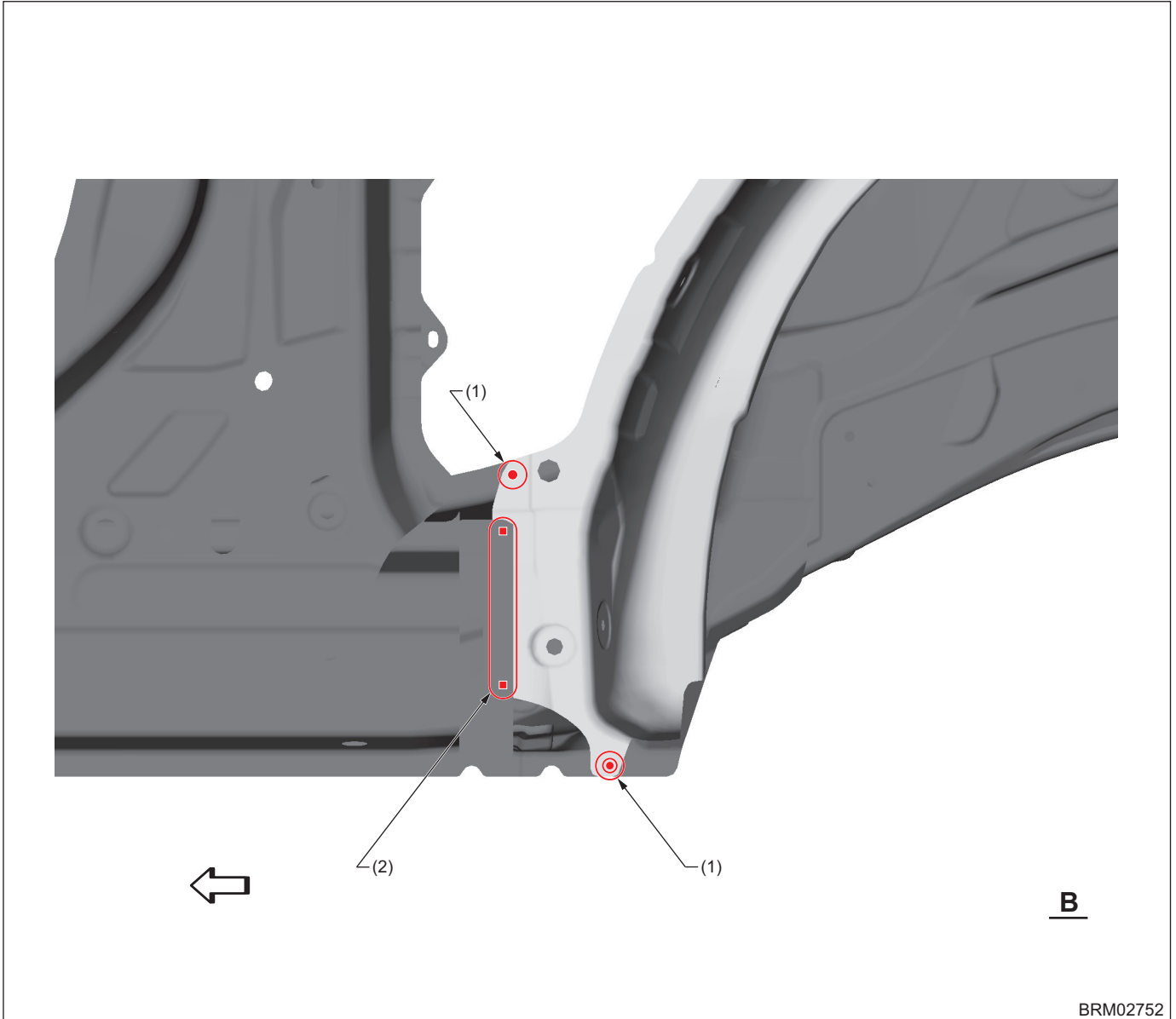
(2) 1 point (Service part)

(3) 2 points

(4) 1 point (Continuous welding)

# Panel Replacement

## • View B



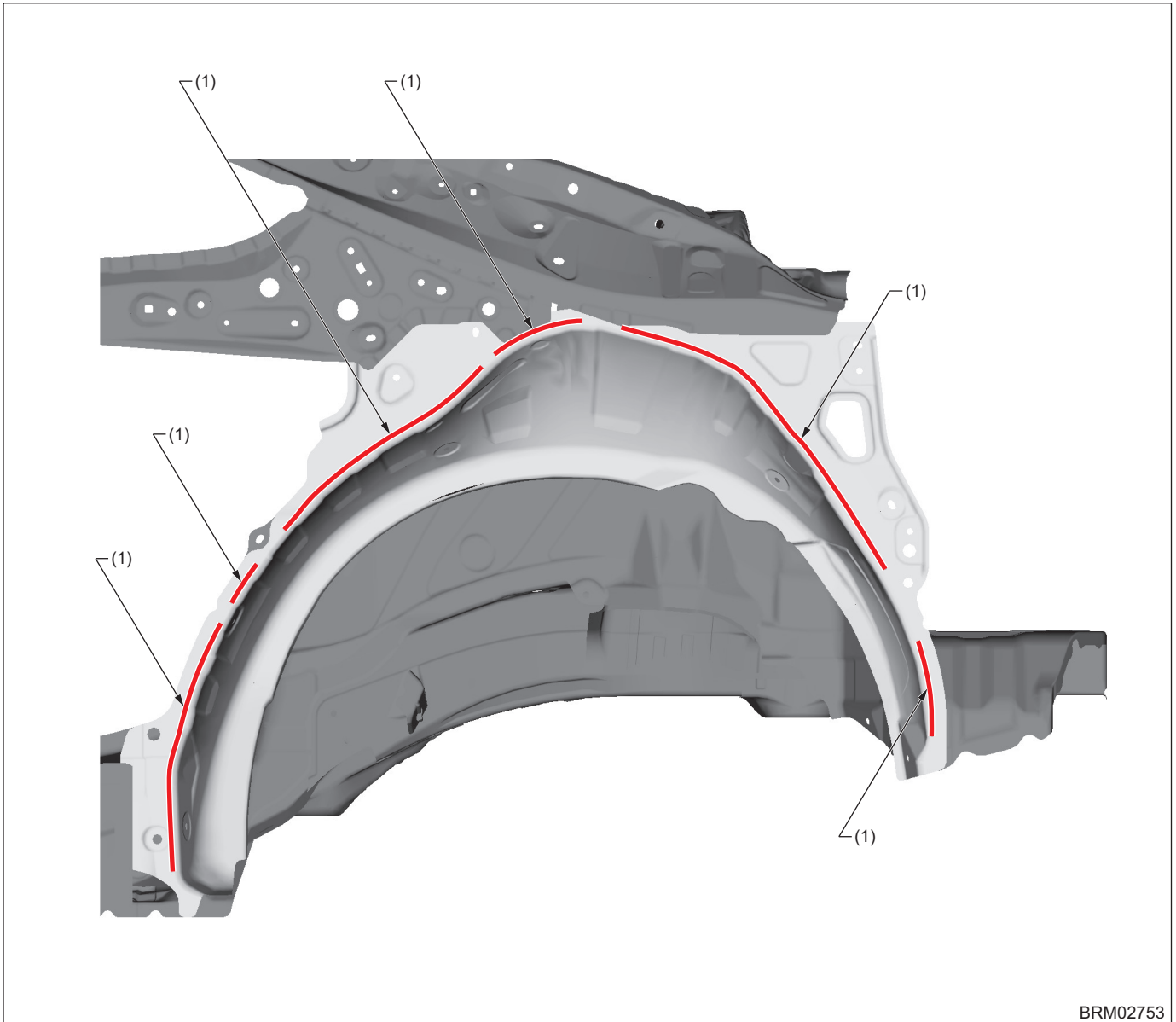
BRM02752

(1) 1 point

(2) 3 points

# Panel Replacement

## • Overall view 2 (LH)

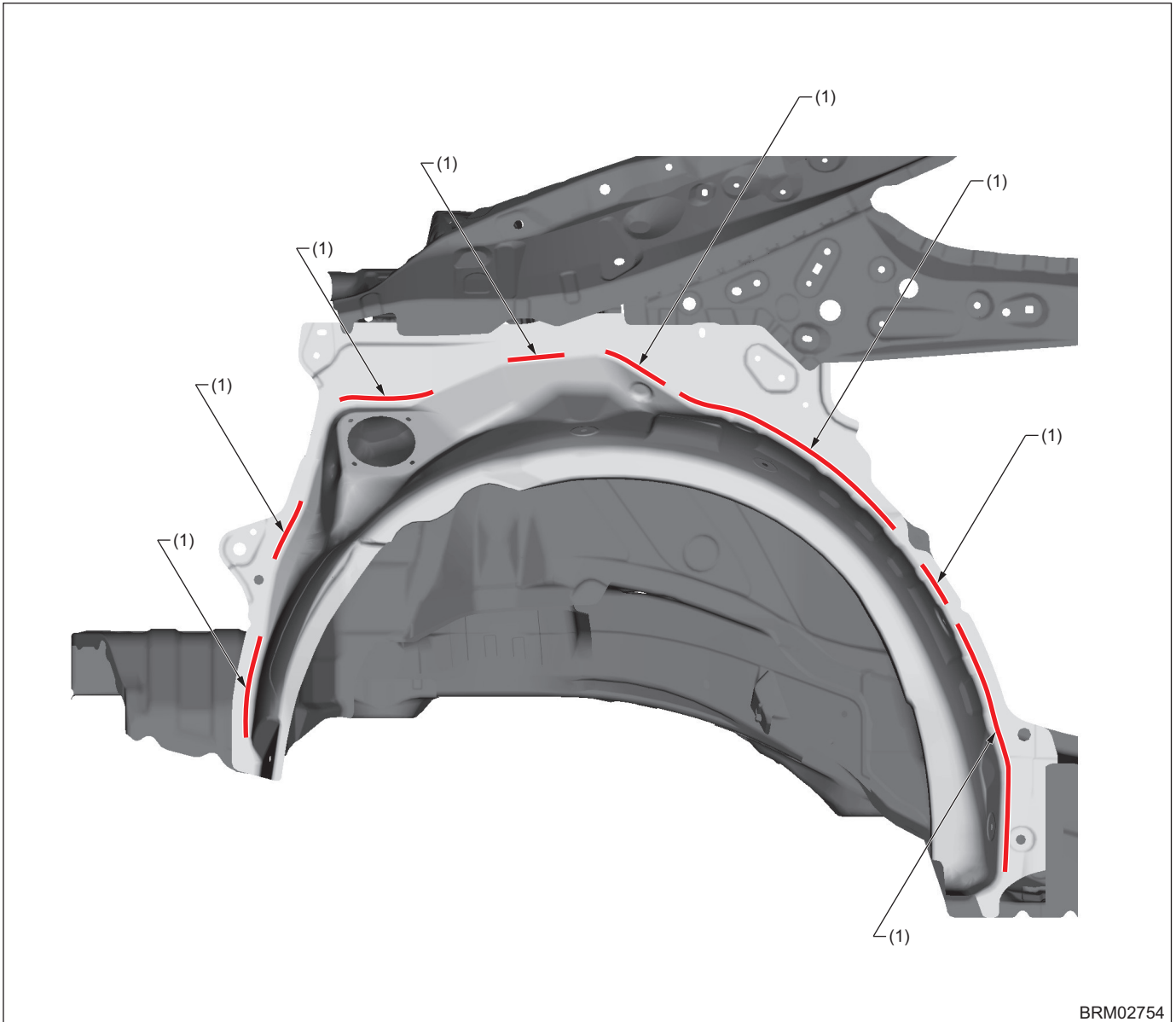


(1) Structural adhesive

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

# Panel Replacement

## • Overall view 2 (RH)



(1) Structural adhesive

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

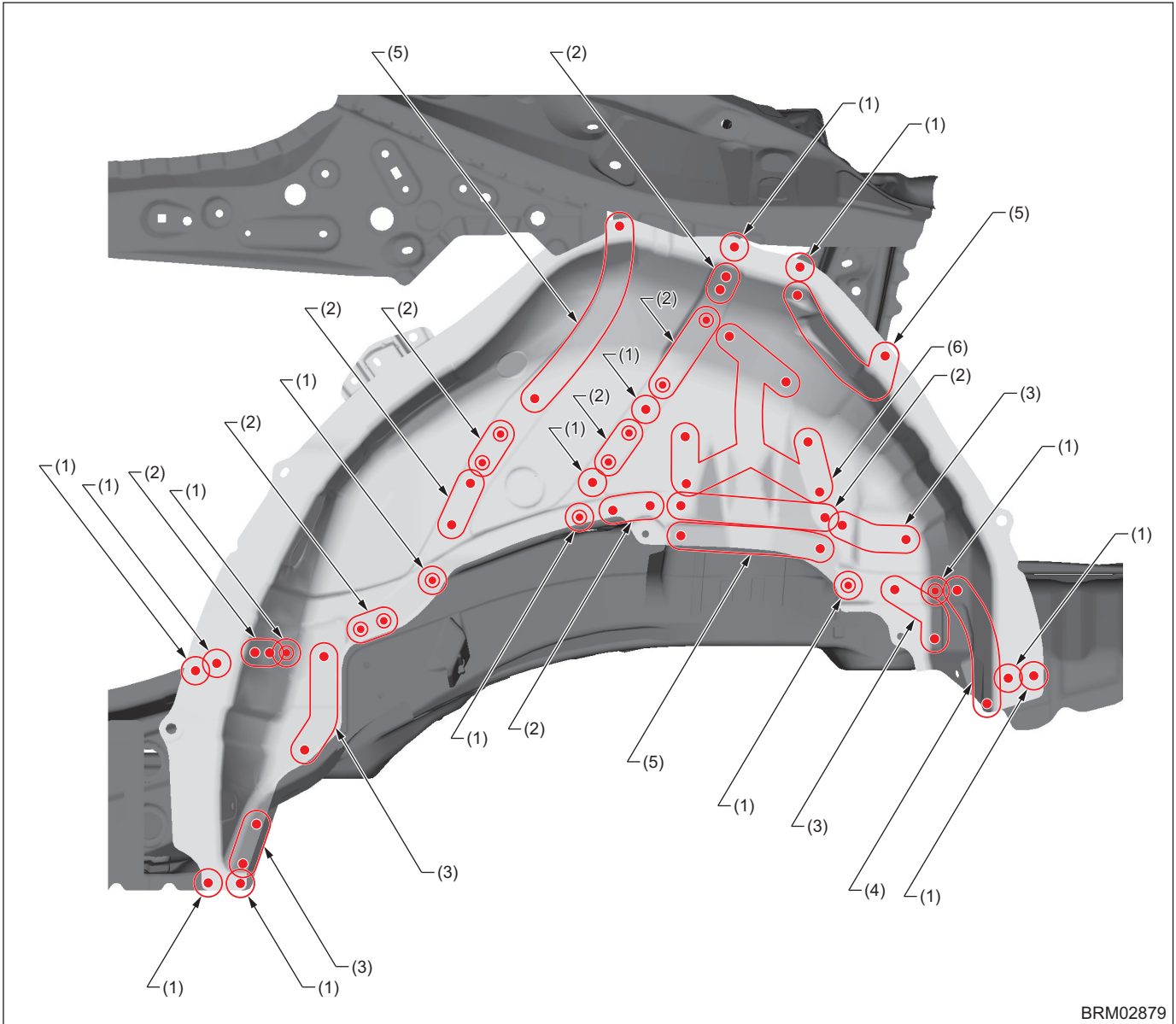


# Panel Replacement

## 8-20. Wheel Apron LH (Total replacement)

### A: REMOVAL

#### • Overall view



BRM02879

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

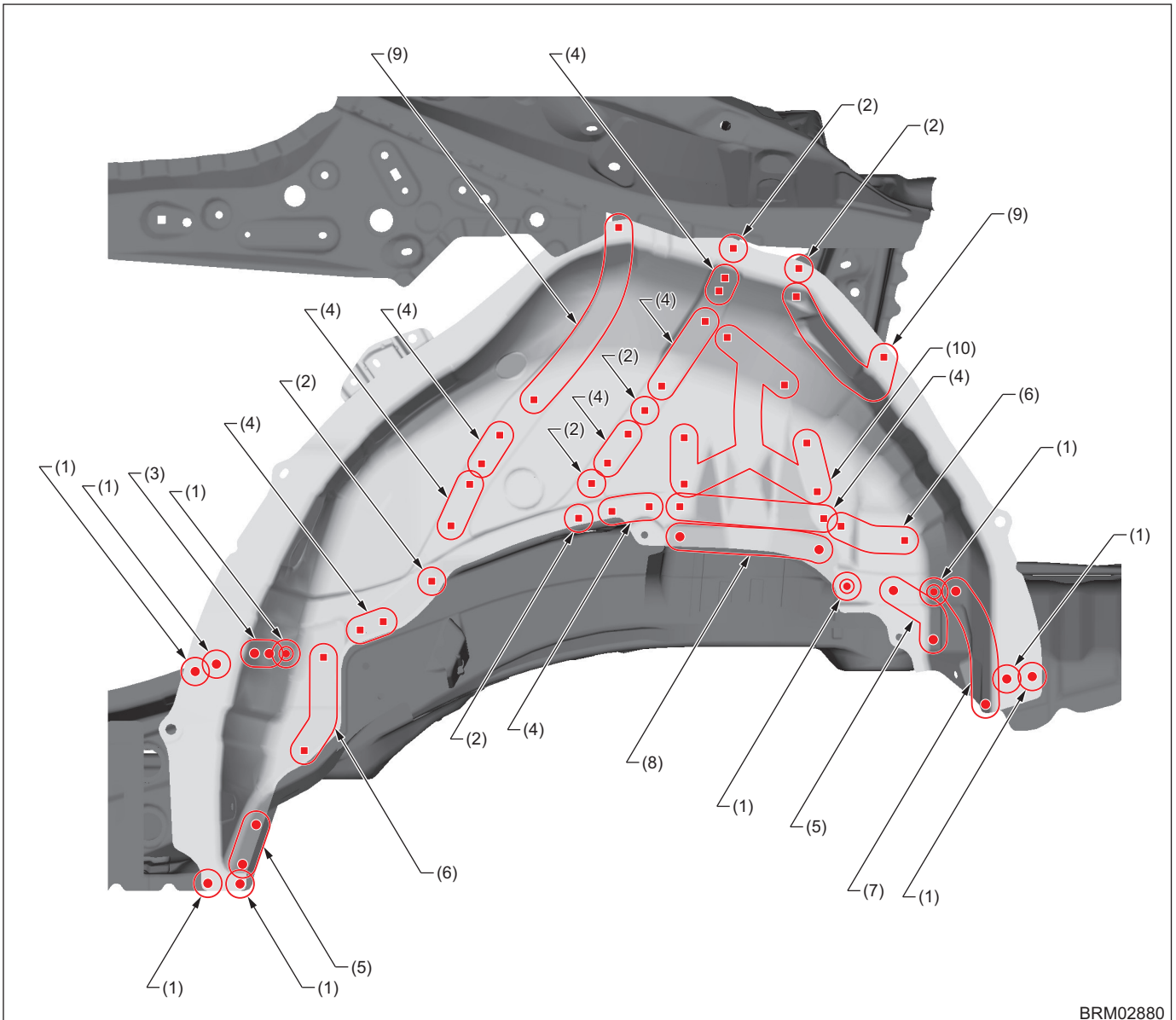
(3) 3 points (Outside · 1)  
(4) 4 points (Outside · 1)

(5) 5 points (Outside · 1)  
(6) 9 points (Outside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view 1

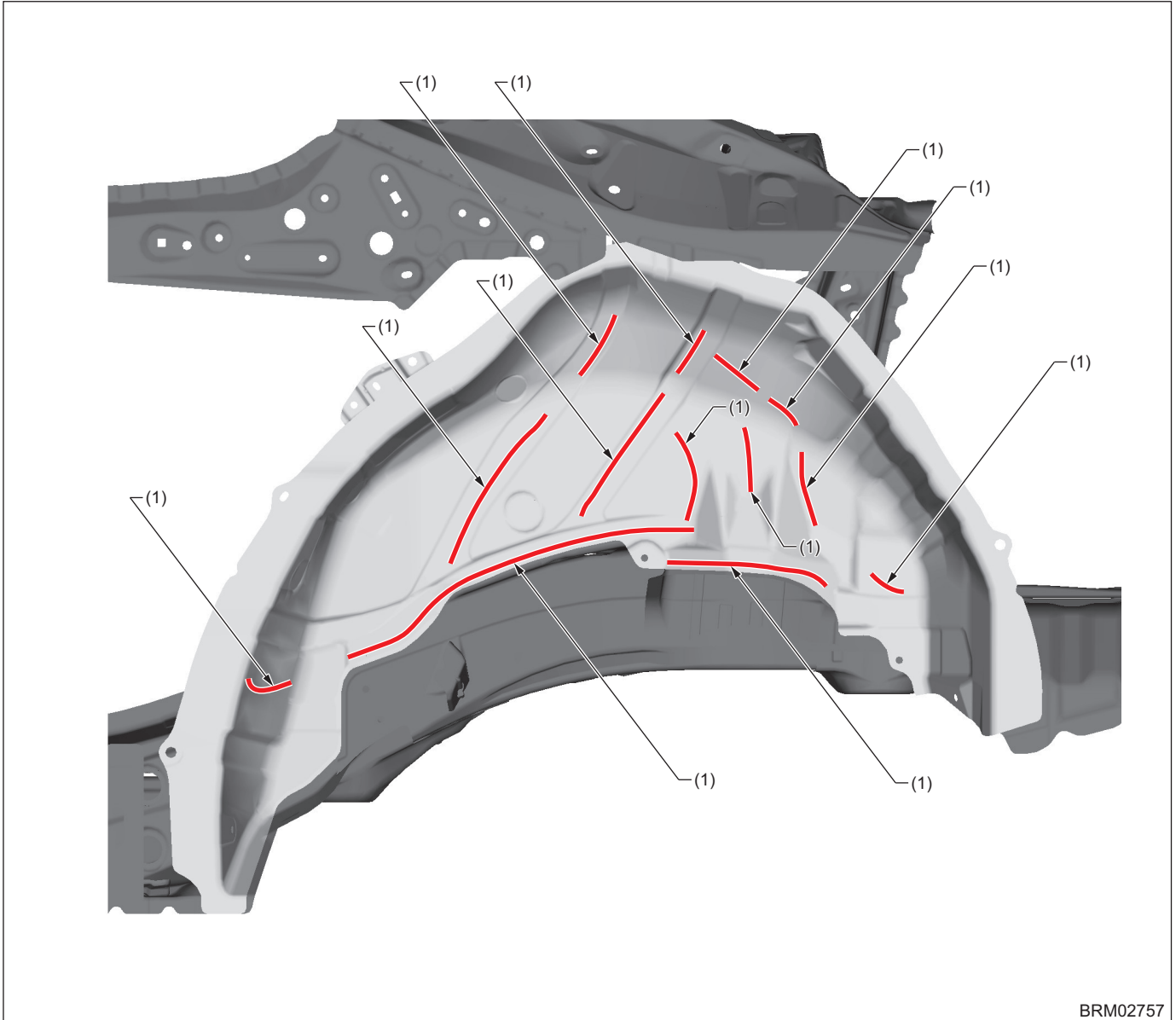


BRM02880

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

# Panel Replacement

## • Overall view 2



BRM02757

(1) Structural adhesive

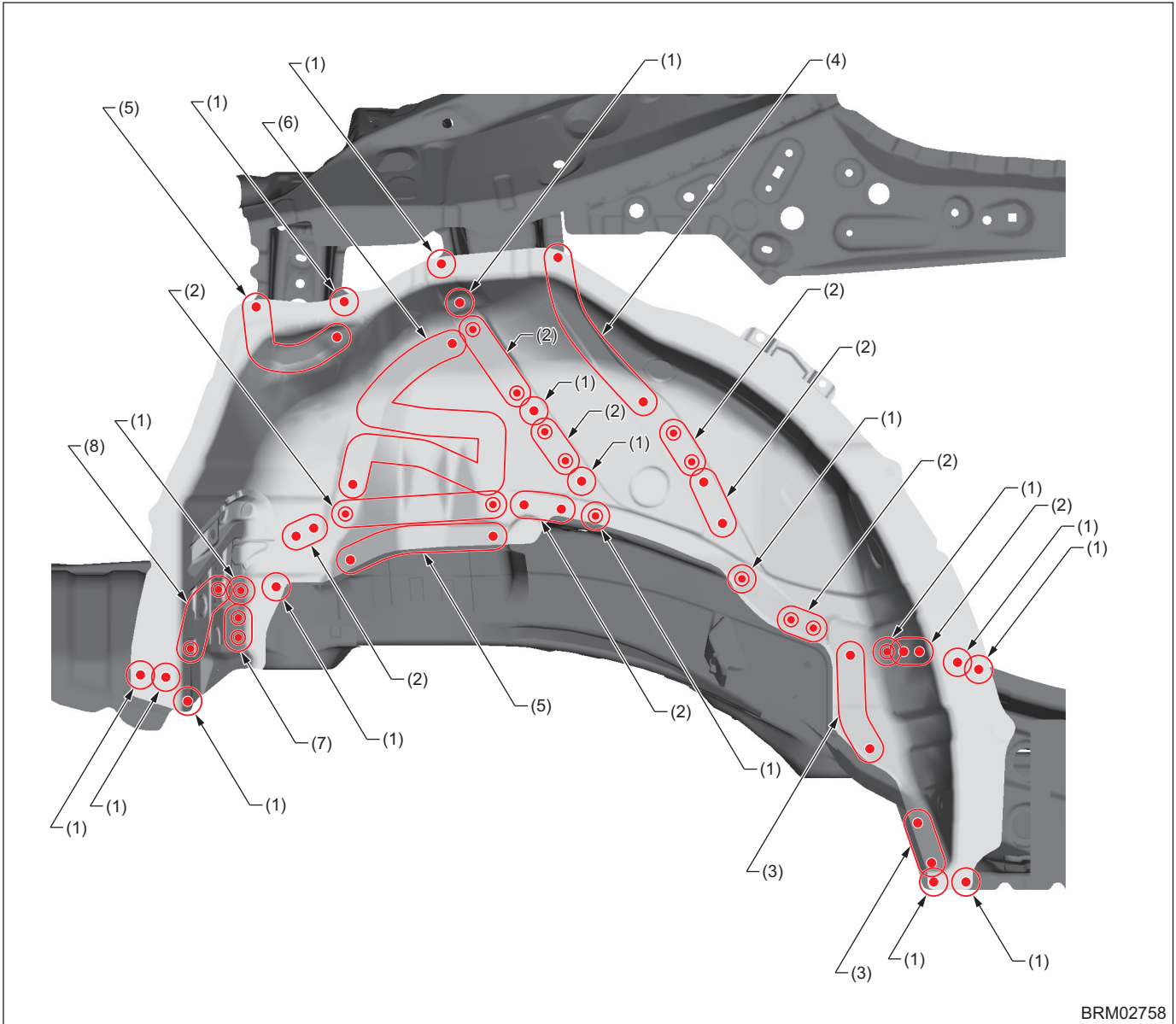
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

# Panel Replacement

## 8-21. Wheel Apron RH (Total replacement)

### A: REMOVAL

#### • Overall view



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

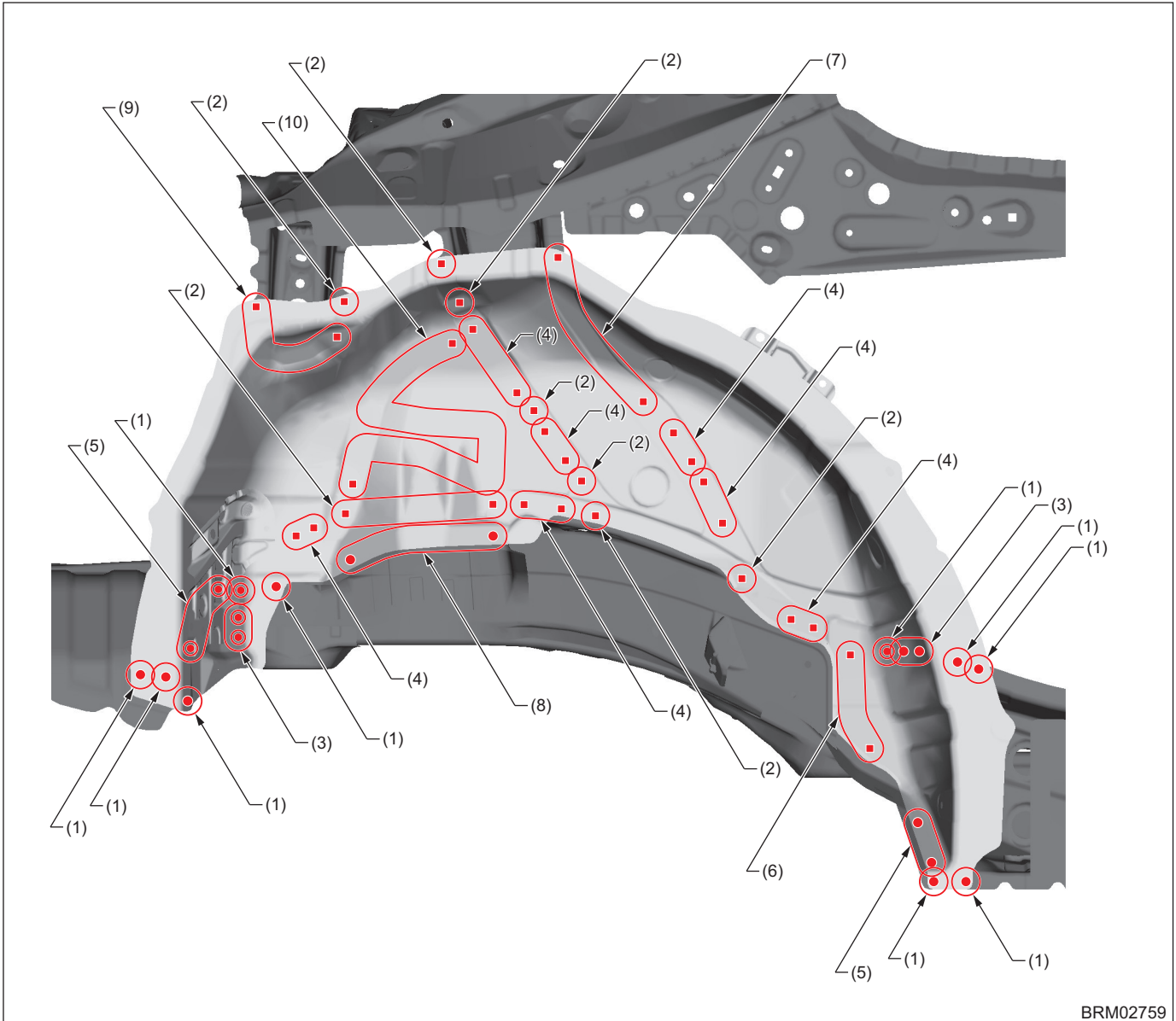
- (4) 4 points (Outside · 1)
- (5) 5 points (Outside · 1)
- (6) 9 points (Outside · 1)

- (7) 2 points (Outside · 2)
- (8) 3 points (Outside · 2)

# Panel Replacement

## B: INSTALLATION

### • Overall view 1

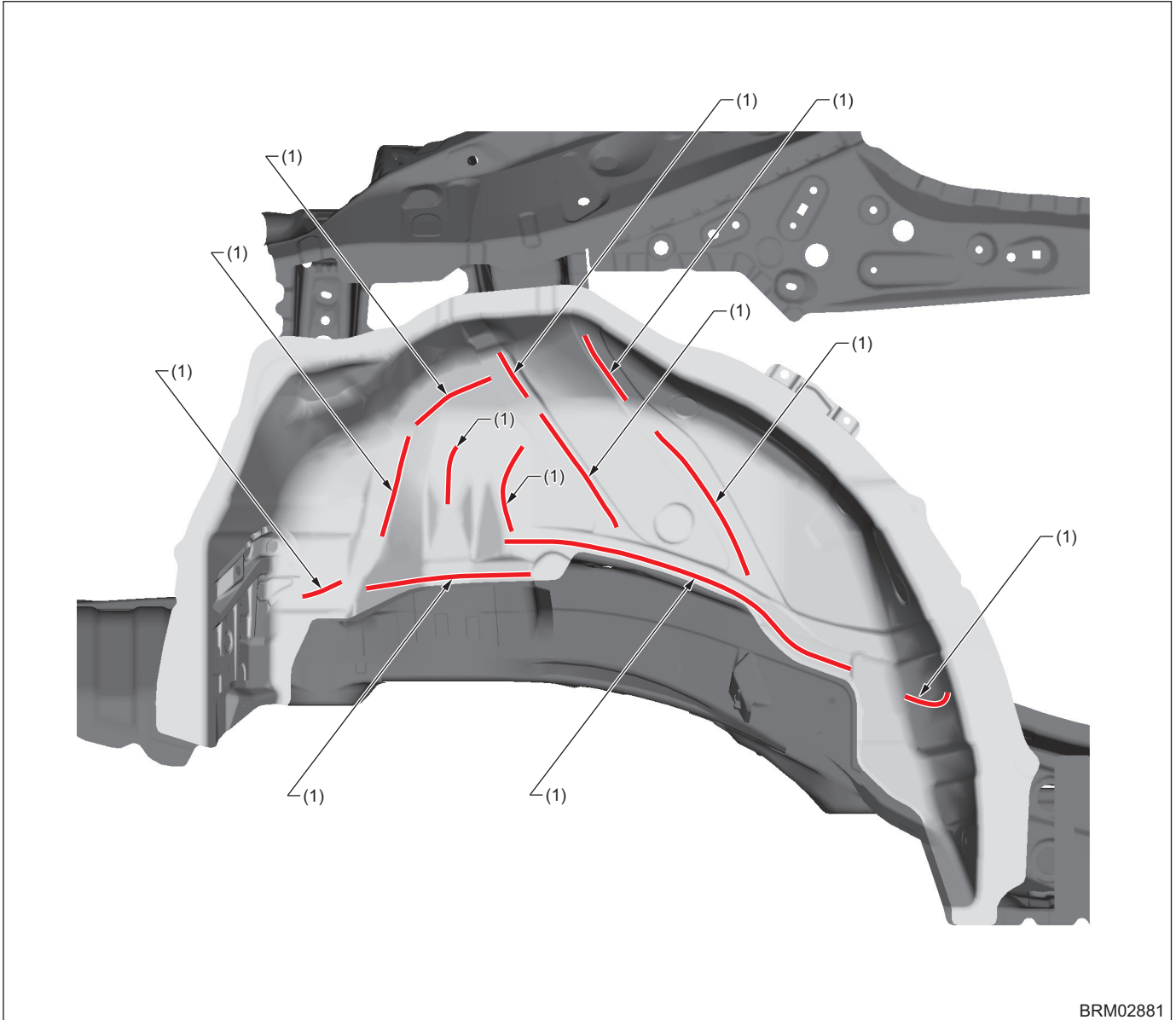


BRM02759

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

# Panel Replacement

## • Overall view 2



BRM02881

(1) Structural adhesive

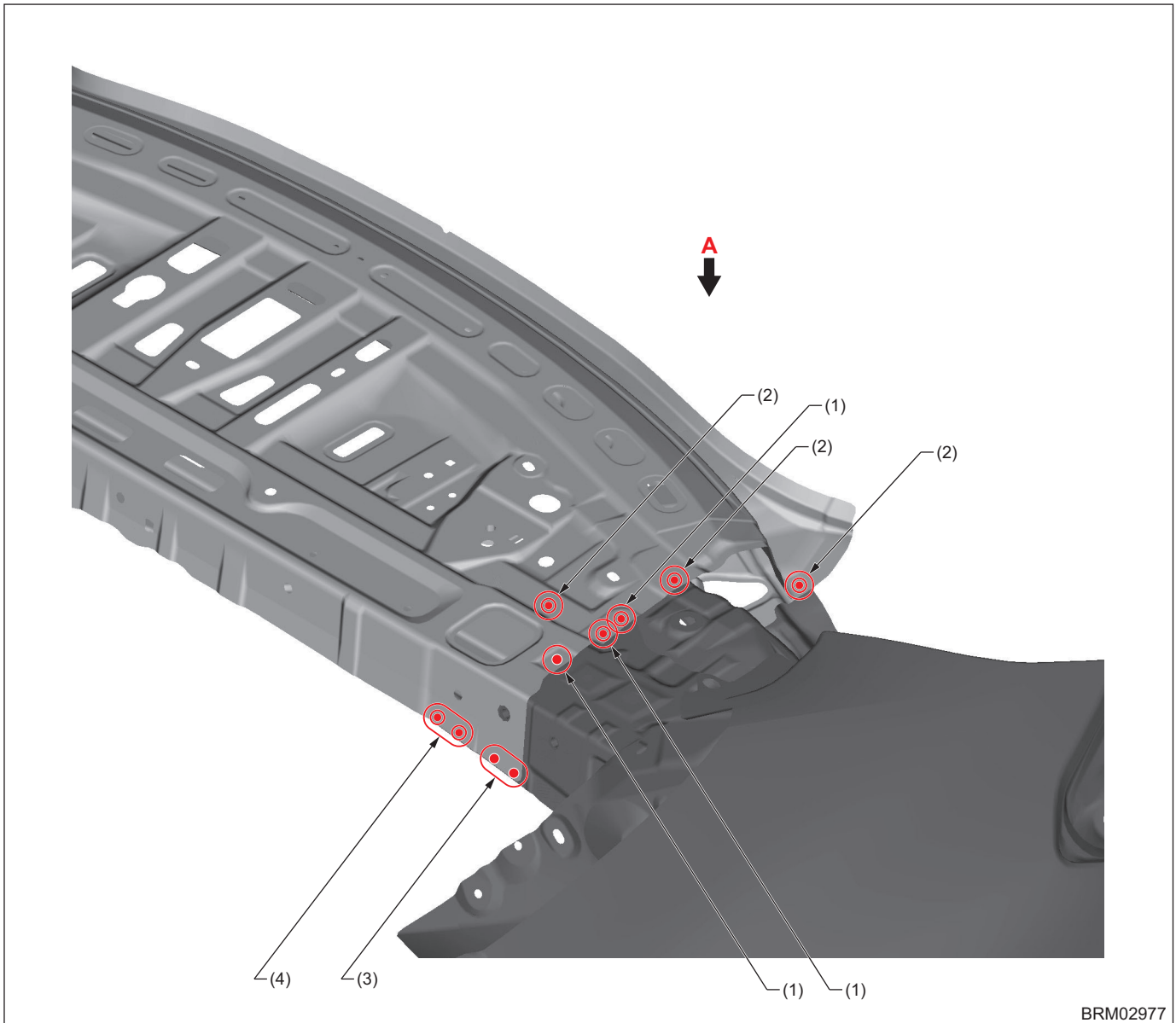
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

# Panel Replacement

## 8-22. Rear Panel (Total replacement)

### A: REMOVAL

#### • Overall view



BRM02977

(1) 1 point (Top - 1)

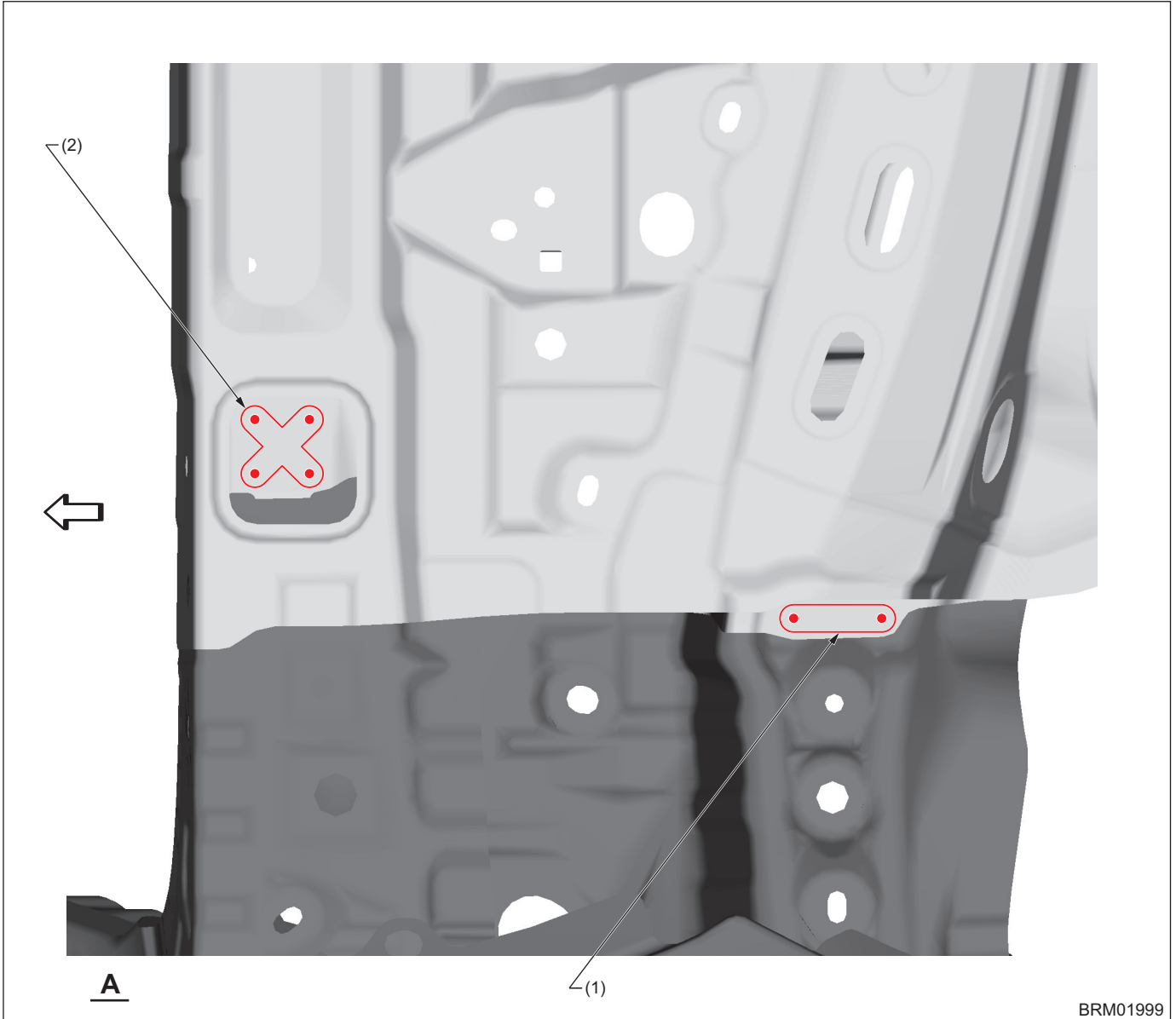
(2) 1 point (Top - 2)

(3) 2 points (Inside - 1)

(4) 2 points (Inside - 2)

# Panel Replacement

## • View A



(1) 2 points (Top · 1)

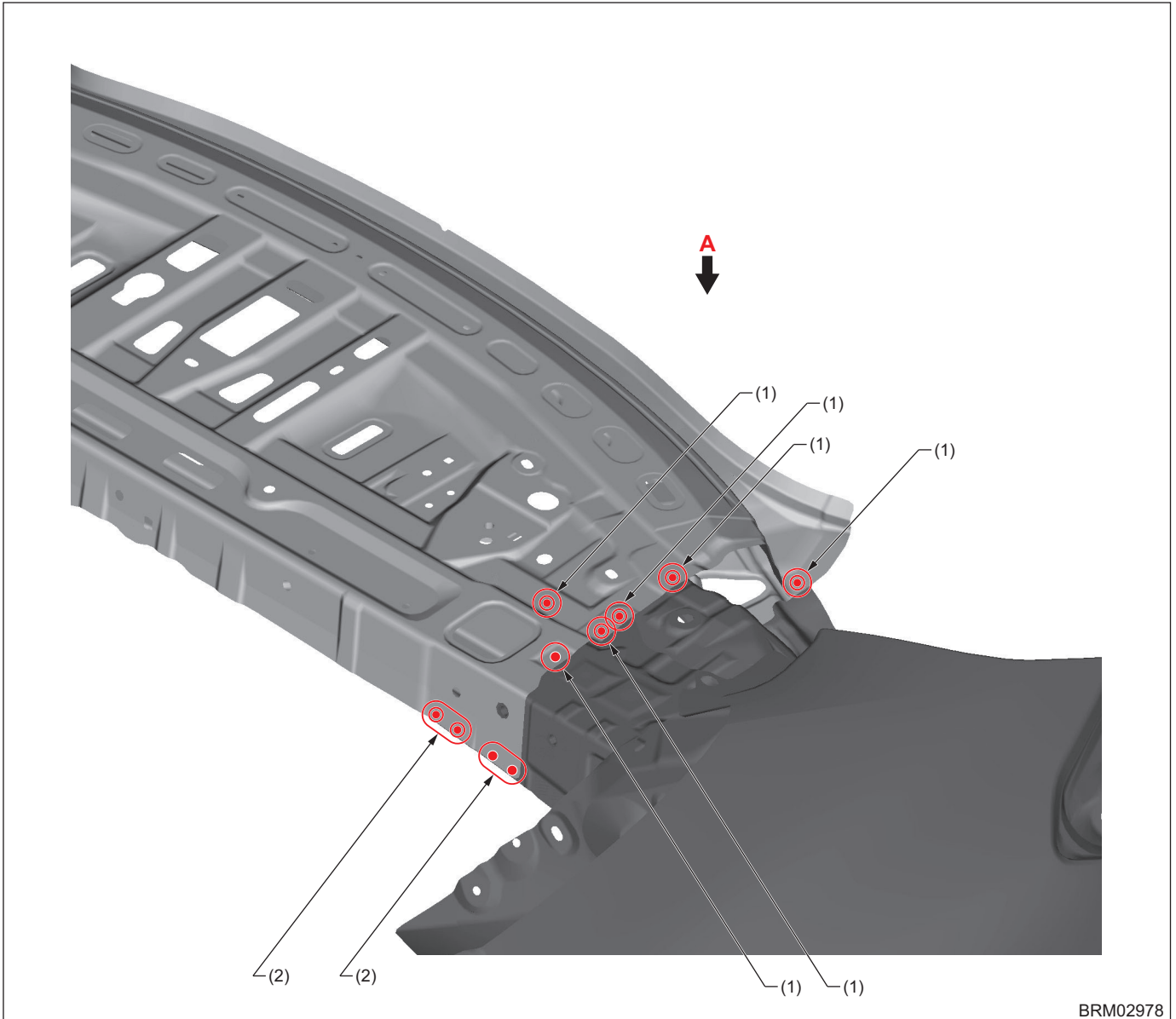
(2) 5 points (Top · 1)



# Panel Replacement

## B: INSTALLATION

### • Overall view



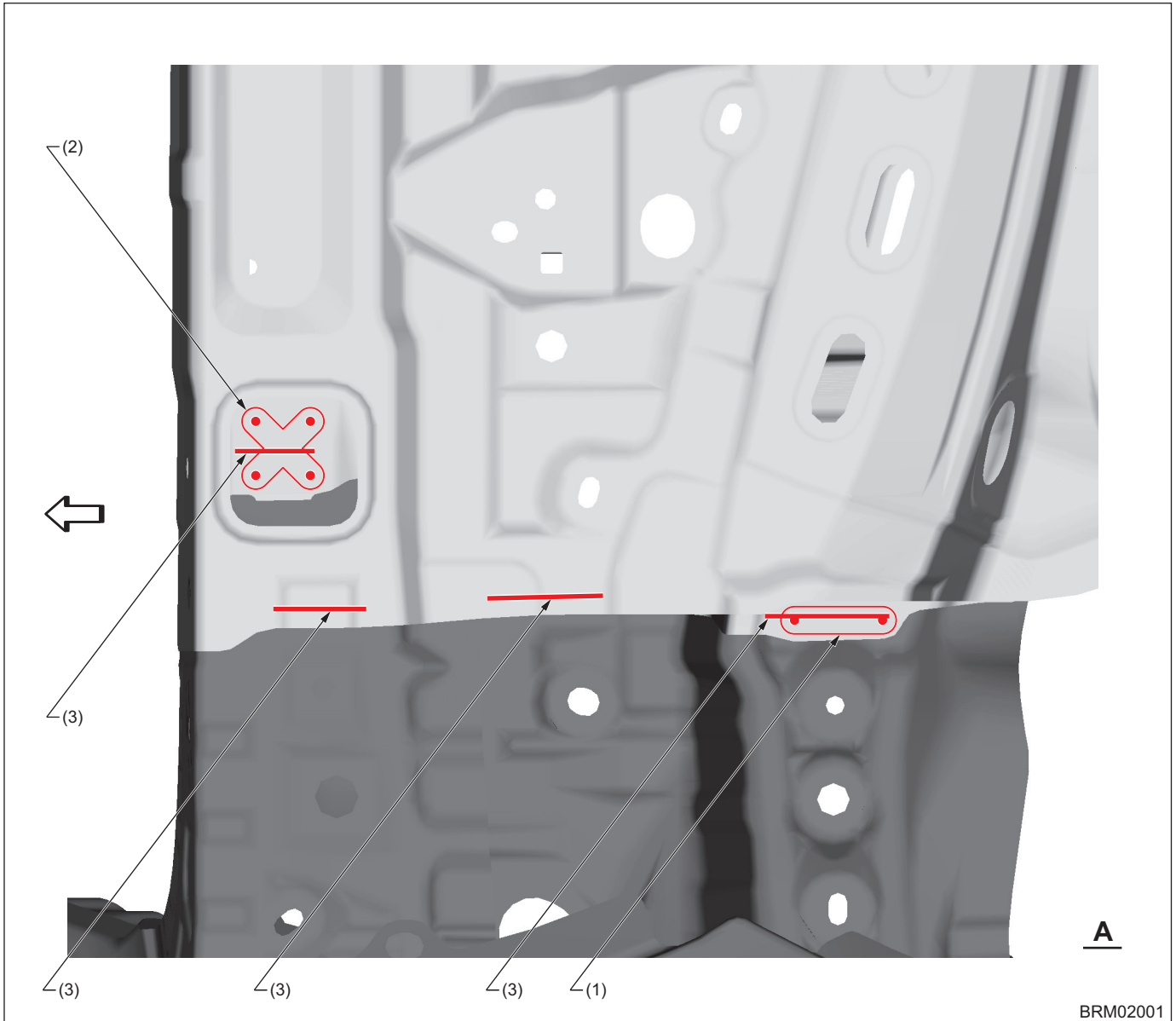
BRM02978

(1) 1 point

(2) 2 points

# Panel Replacement

## • View A



(1) 2 points

(2) 5 points

(3) Structural adhesive

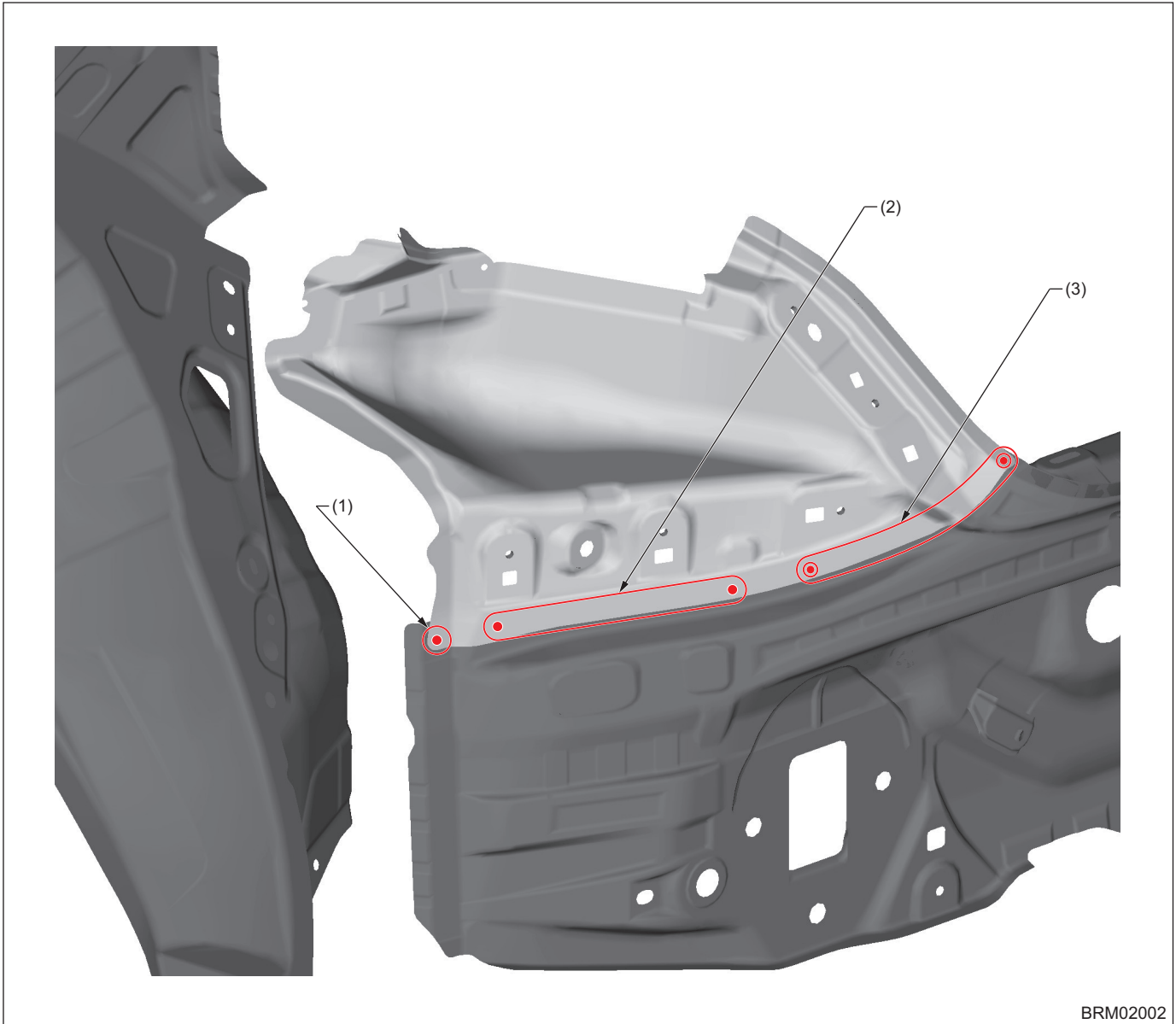
— : Structural adhesive application location (Panel bond mini 38315 made by 3M, Panel bond #8115 made by 3M or equivalent)

# Panel Replacement

## 8-23. Rear Quarter End Panel (Total replacement)

### A: REMOVAL

- Overall view



BRM02002

(1) 1 point (Outside · 1)

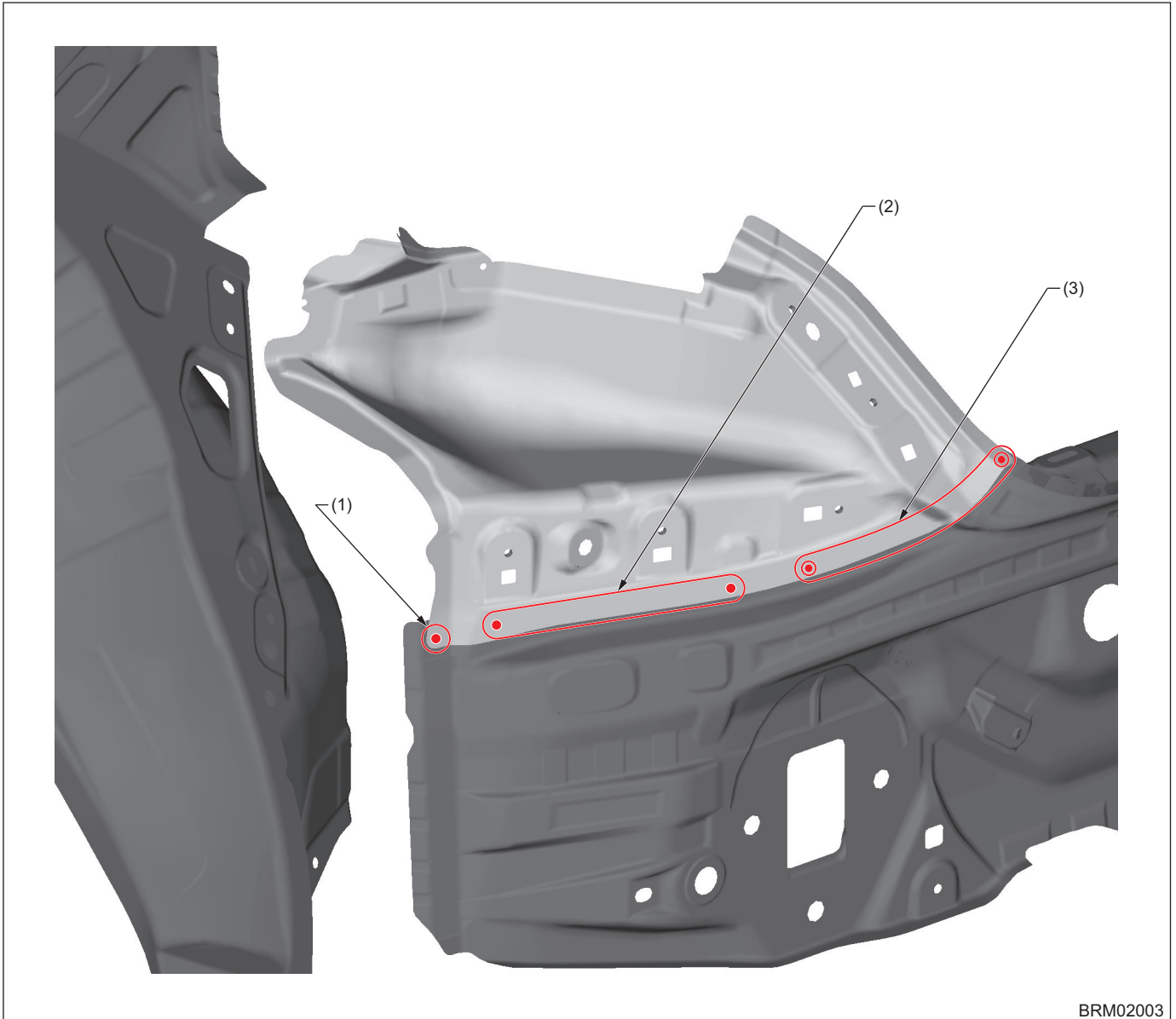
(2) 4 points (Outside · 1)

(3) 5 points (Outside · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



(1) 1 point

(2) 4 points

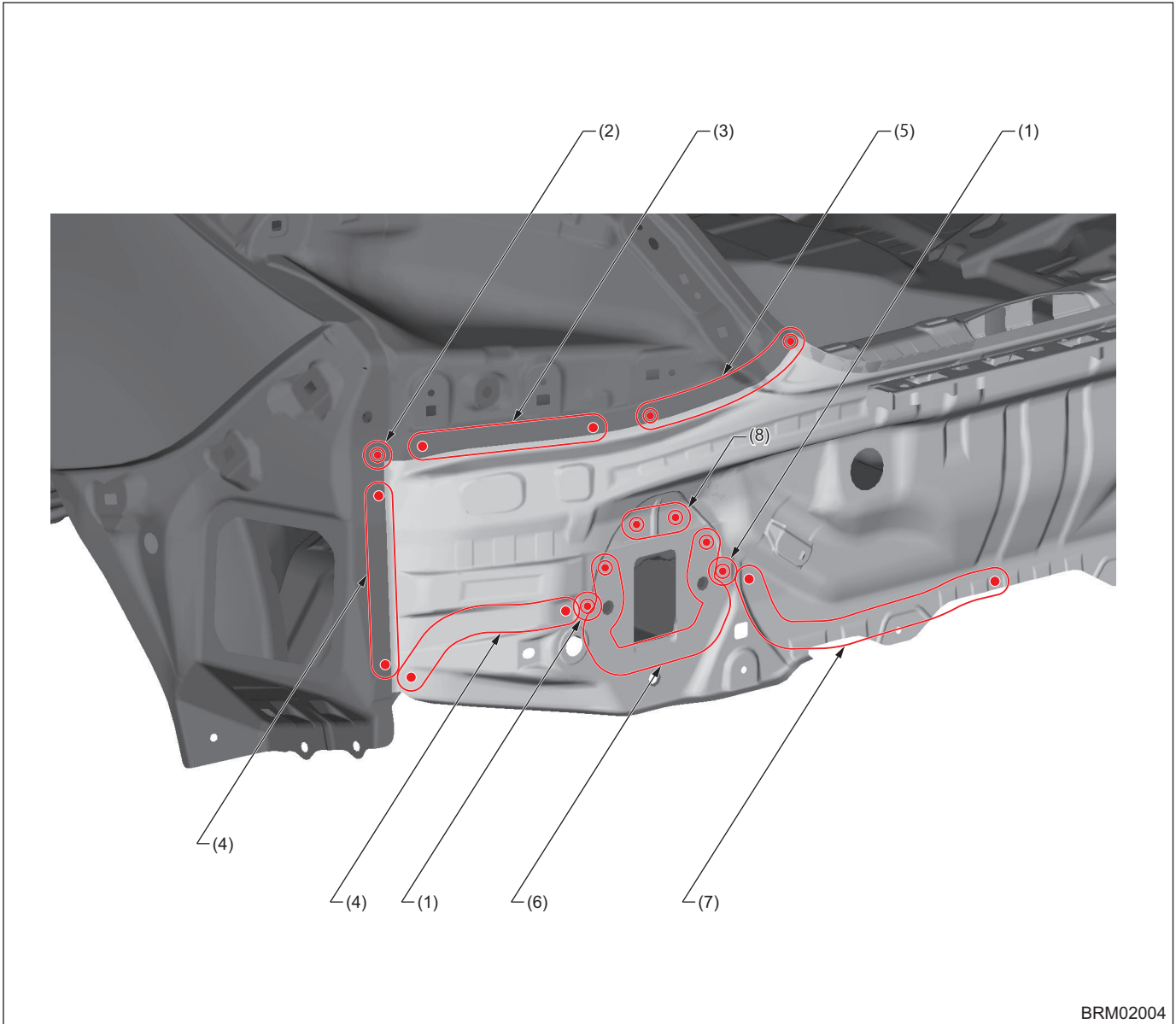
(3) 5 points

# Panel Replacement

## 8-24. Rear Skirt (Total replacement)

### A: REMOVAL

#### • Overall view



- (1) 1 point (Outside · 1)
- (2) 1 point (Inside · 1)
- (3) 4 points (Inside · 1)

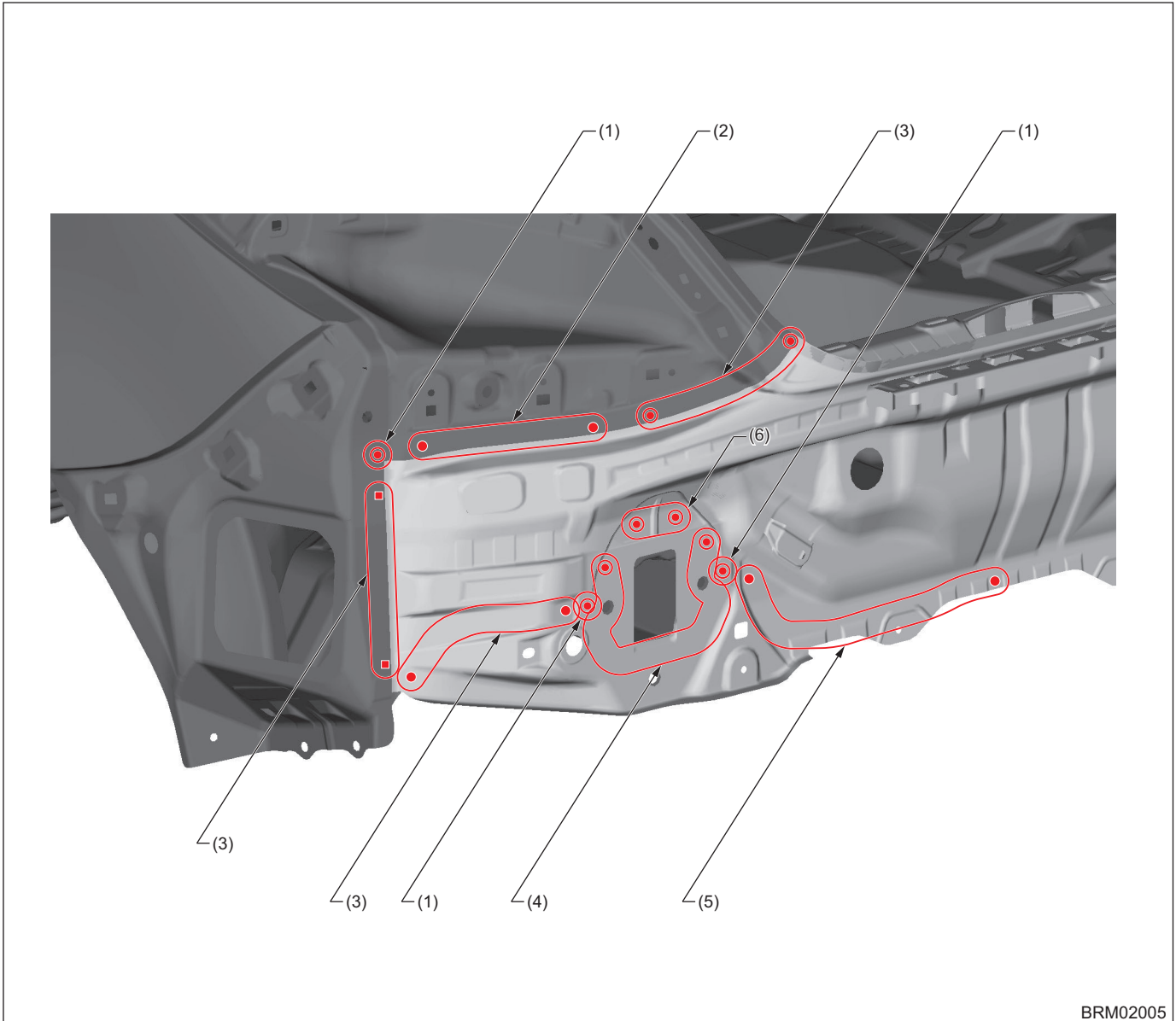
- (4) 5 points (Outside · 1)
- (5) 5 points (Inside · 2)
- (6) 6 points (Outside · 2)

- (7) 8 points (Outside · 1)
- (8) 2 points (Outside · 2)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02005

(1) 1 point  
(2) 4 points

(3) 5 points  
(4) 6 points

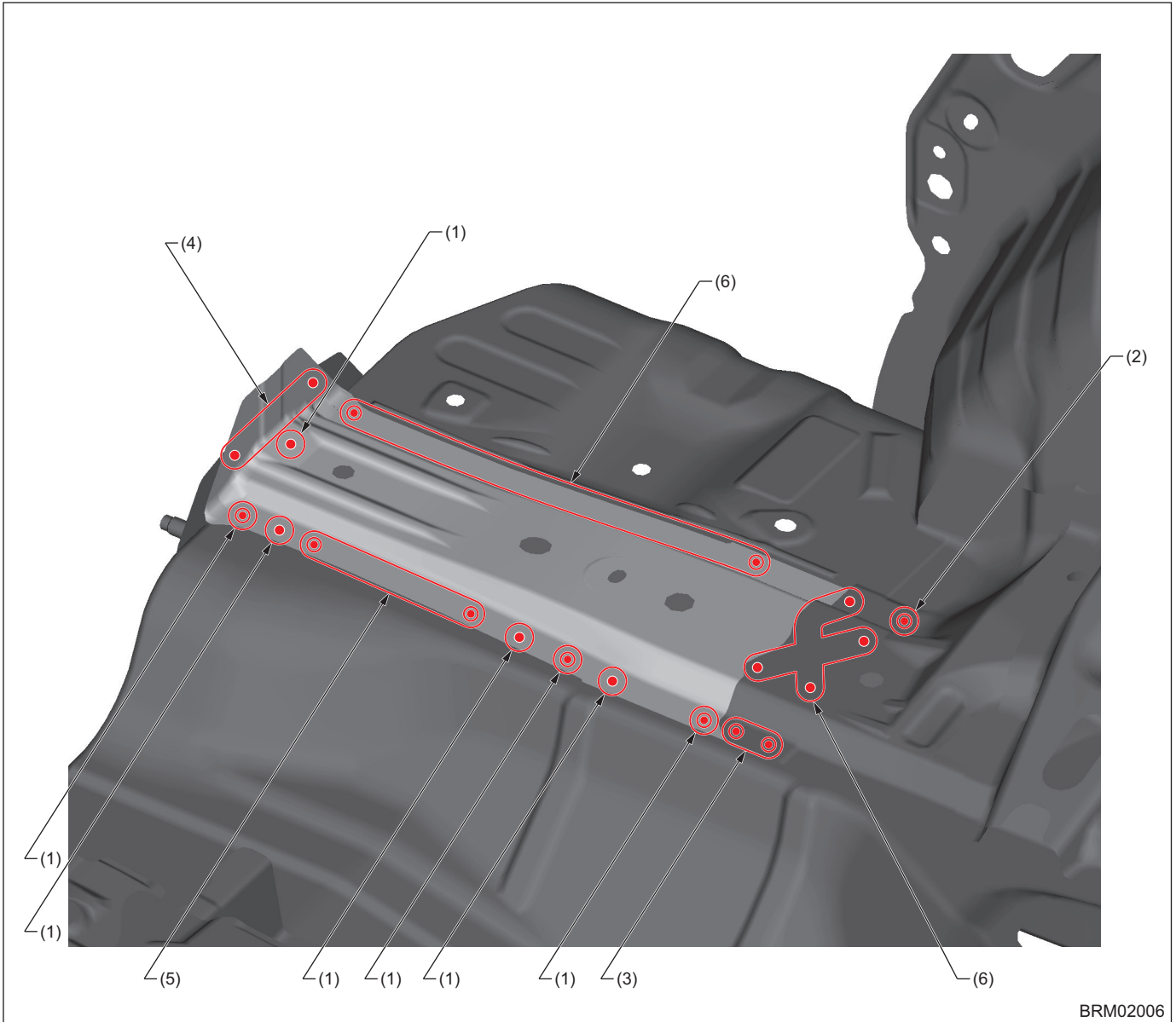
(5) 8 points  
(6) 2 points

# Panel Replacement

## 8-25. Rear Side Frame Upper Rear (Total replacement)

### A: REMOVAL

#### • Overall view



BRM02006

(1) 1 point (Top - 1)

(2) 1 point (Top - 2)

(3) 2 points (Top - 2)

(4) 2 points (Inside - 1)

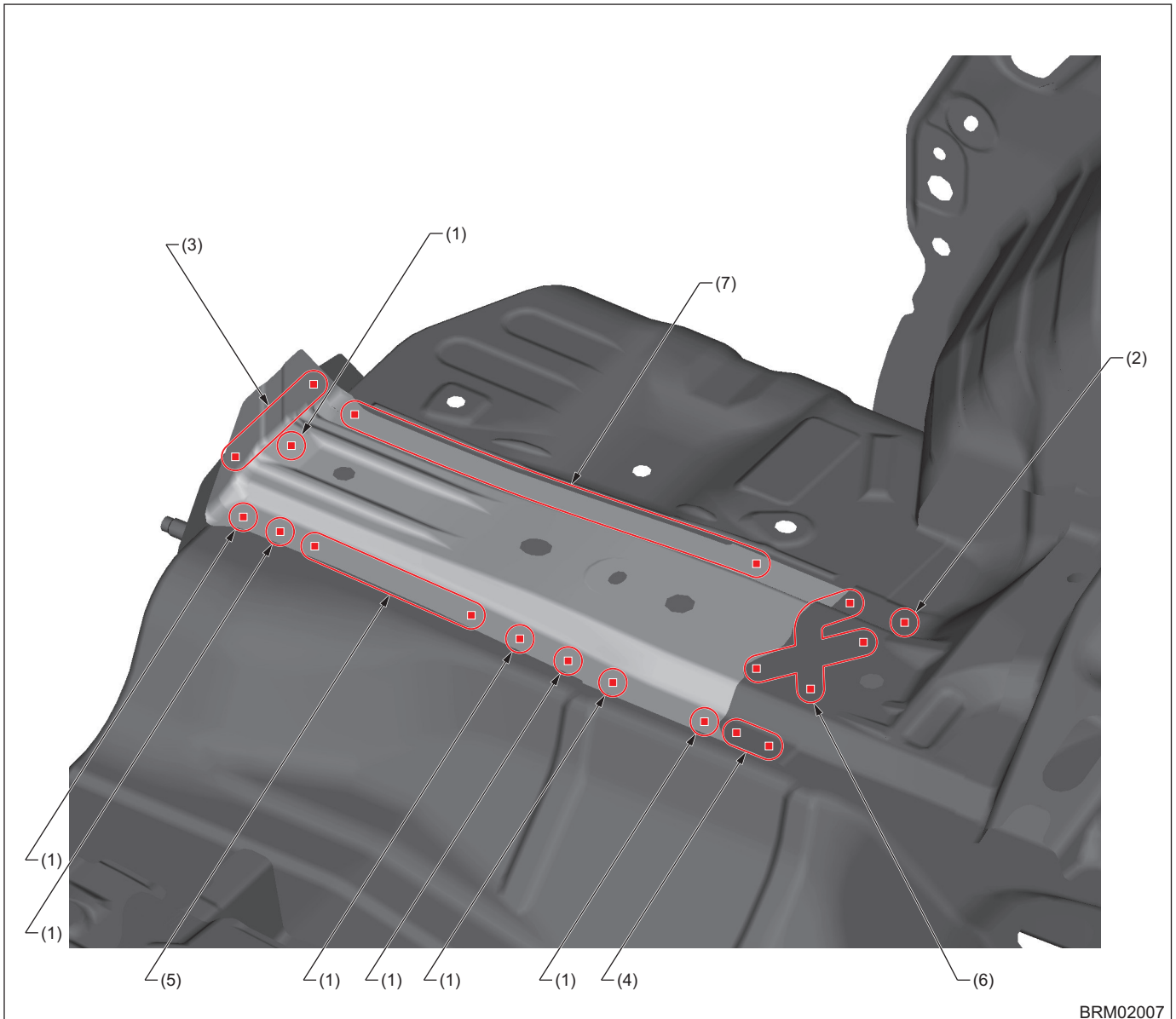
(5) 3 points (Top - 1)

(6) 6 points (Top - 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02007

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

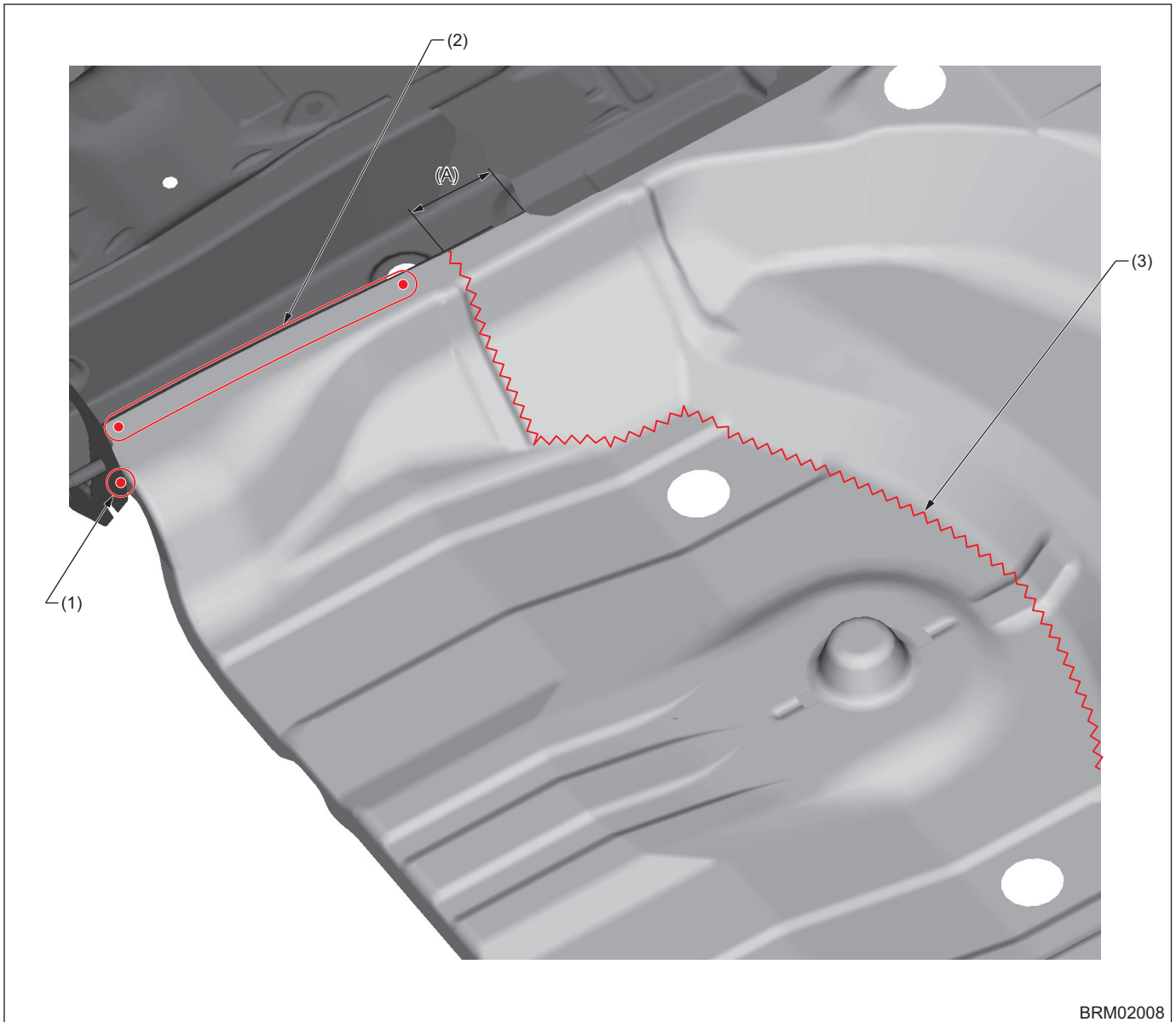


# Panel Replacement

## 8-26. Rear Floor Pan (Partial replacement)

### A: REMOVAL

#### • Overall view



BRM02008

(A) 60 mm [2.36 in]

(1) 1 point (Outside · 1)

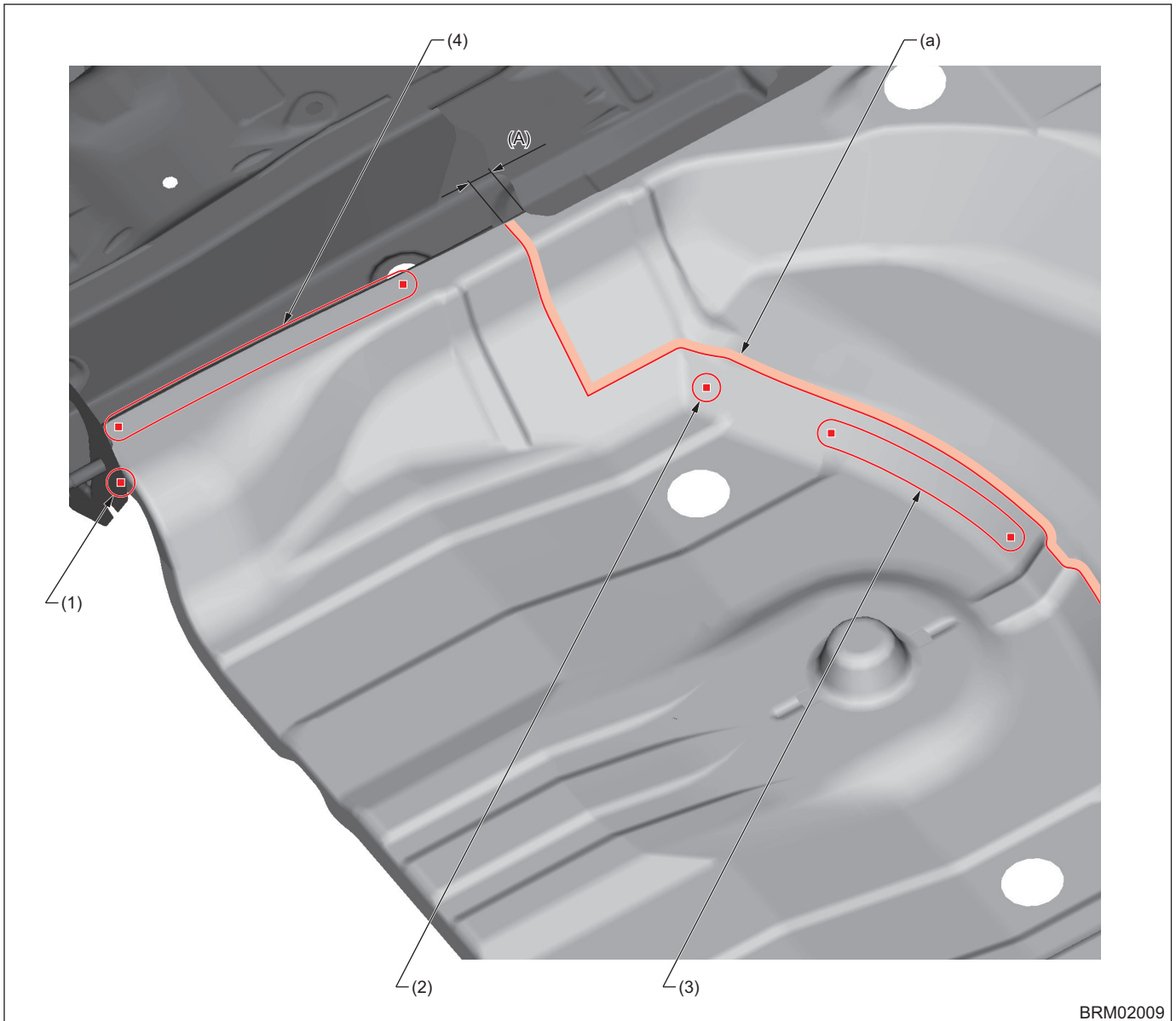
(2) 5 points (Top · 1)

(3) Cut position

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02009

(A) 25 mm [0.98 in]

(1) 1 point

(3) 3 points (Service part)

(4) 5 points (Service part)

(2) 1 point (Service part)

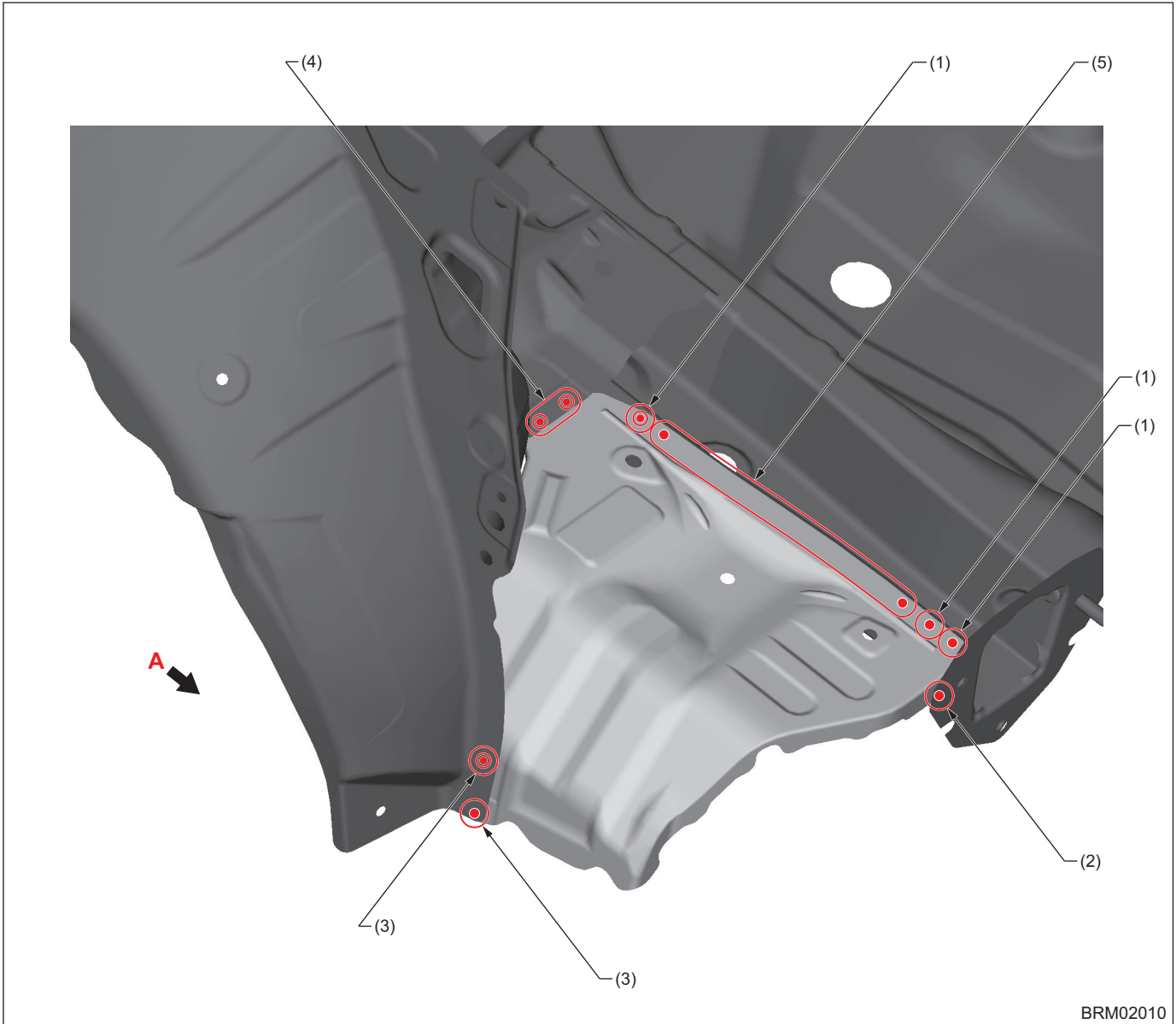
Note: Apply sealing agent to the floor pan fitting parts (front and rear) of section "a".

# Panel Replacement

## 8-27. Rear Side Floor (Total replacement)

### A: REMOVAL

#### • Overall view



BRM02010

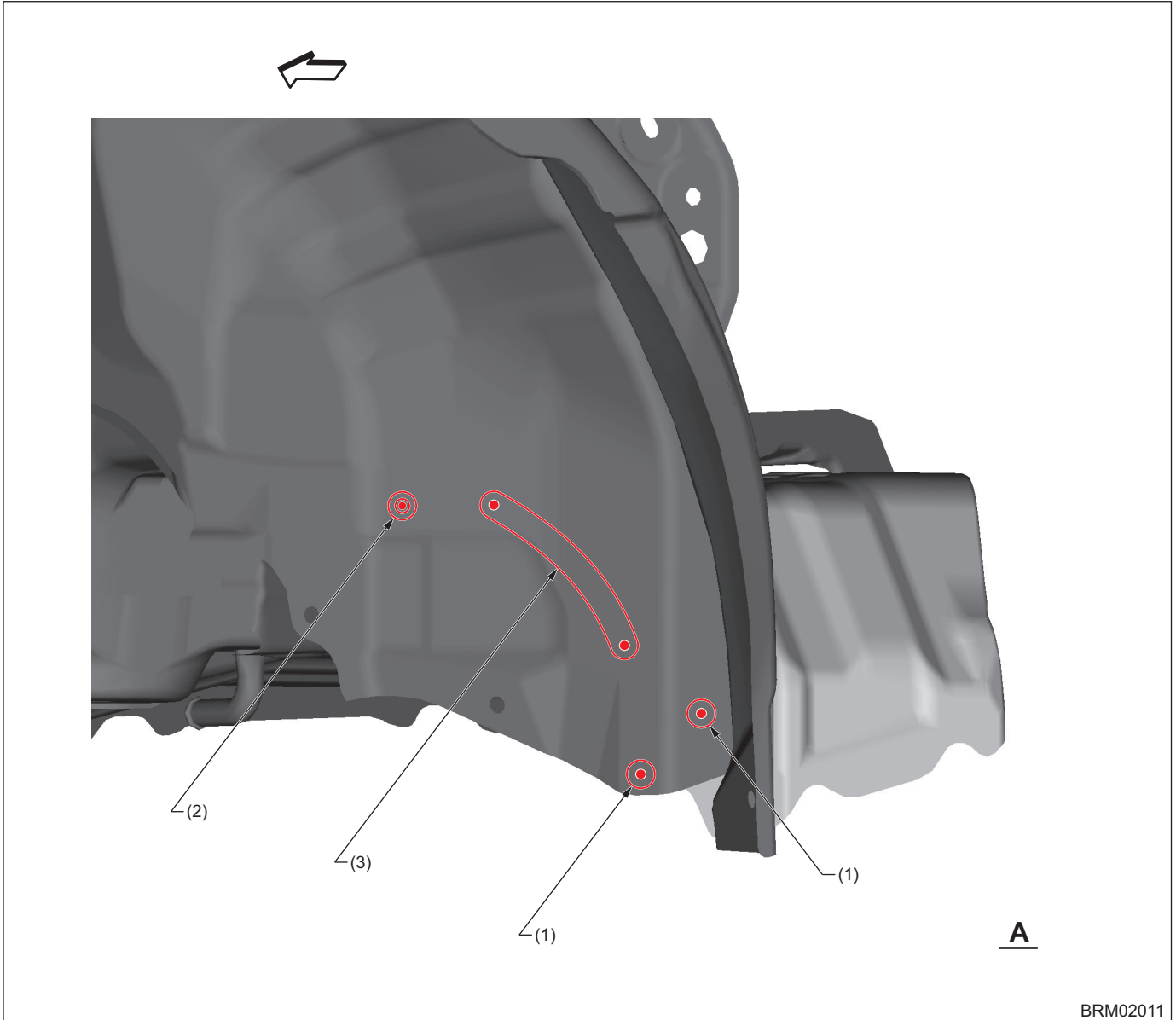
- (1) 1 point (Top · 1)
- (2) 1 point (Outside · 1)

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

- (5) 5 points (Top · 1)

# Panel Replacement

## • View A



BRM02011

(1) 1 point (Inside · 1)

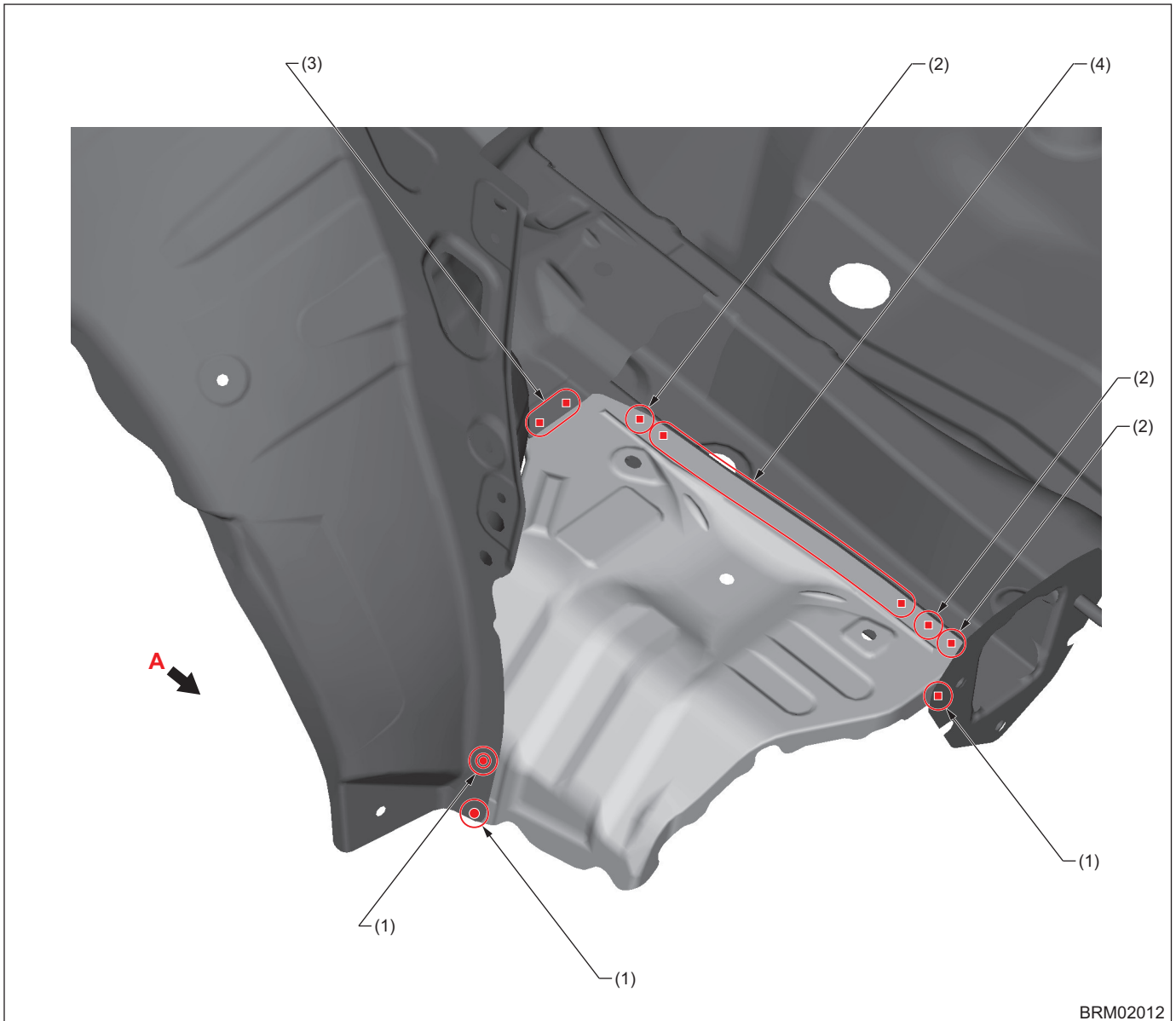
(2) 1 point (Inside · 2)

(3) 3 points (Inside · 1)  
(LH: Two plates)  
(RH: Three plates)

# Panel Replacement

## B: INSTALLATION

### • Overall view



BRM02012

(1) 1 point

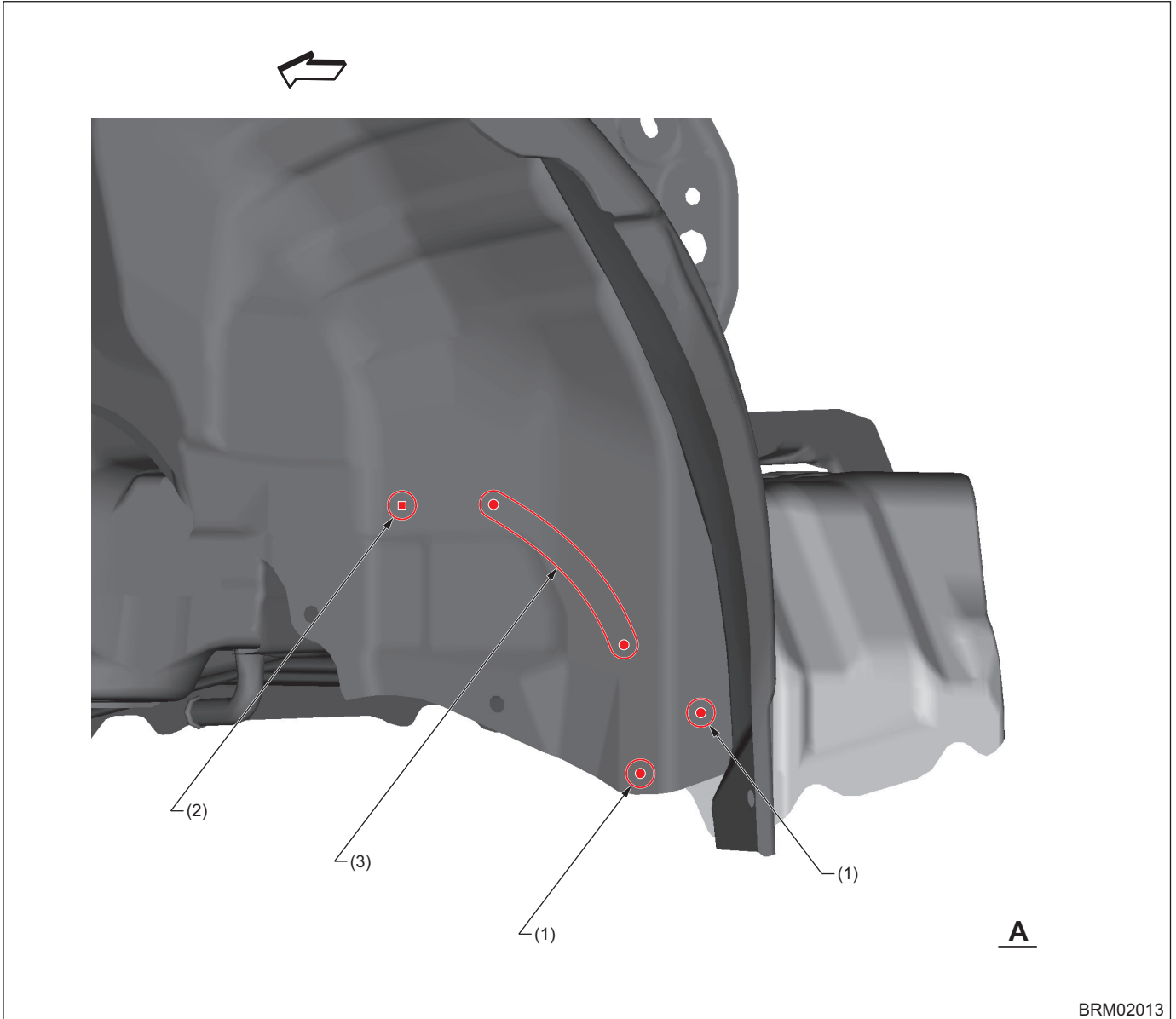
(3) LH: 2 points (Service part · matching)  
RH: 1 point (Service part · matching)

(4) 5 points (Service part)

(2) 1 point (Service part)

# Panel Replacement

## • View A



(1) 1 point

(2) 1 point (Service part · matching)

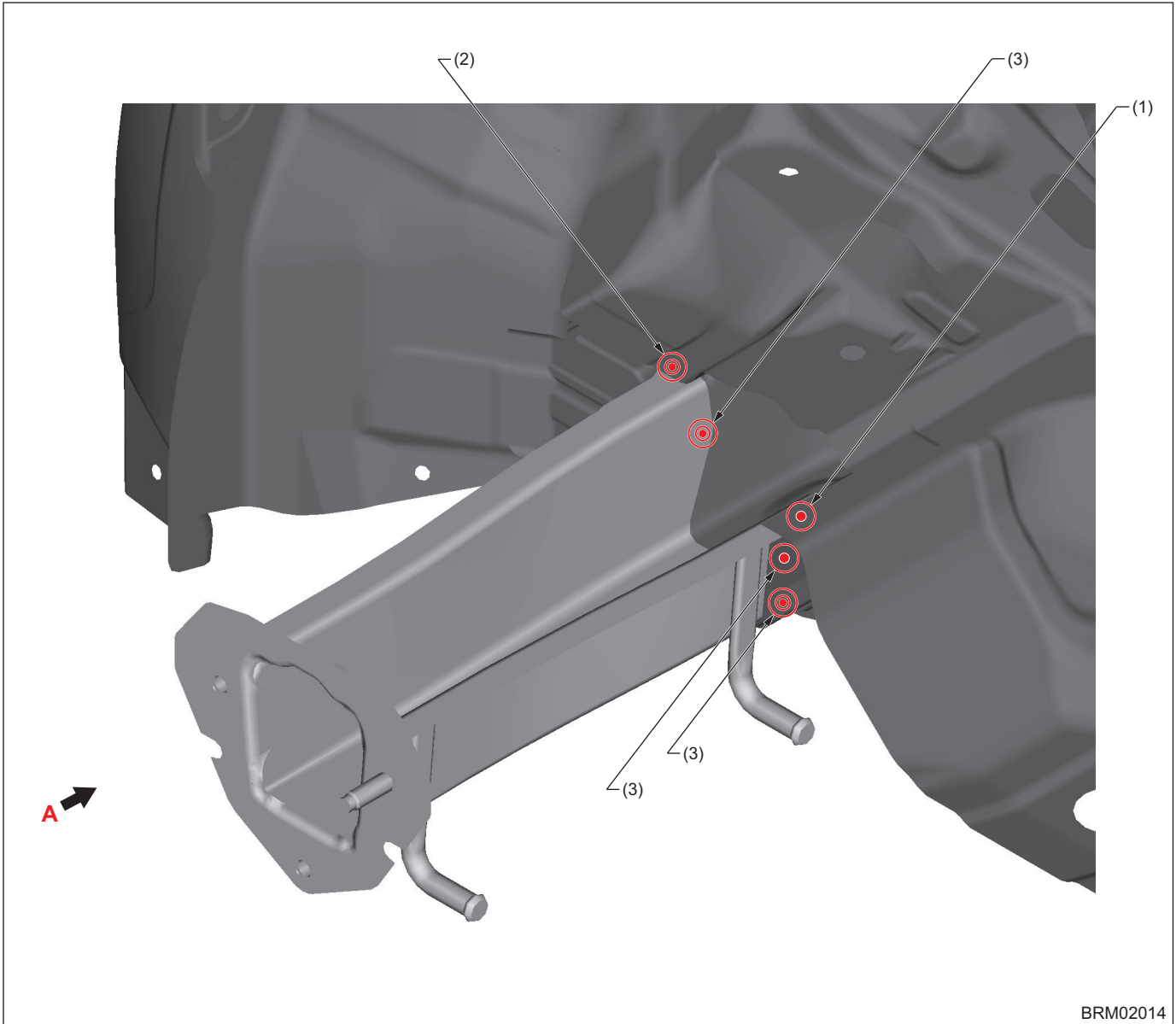
(3) 3 points  
(LH: Two plates)  
(RH: Three plates)

# Panel Replacement

## 8-28. Rear Side Frame Lower Rear (Total replacement)

### A: REMOVAL

- Overall view



BRM02014

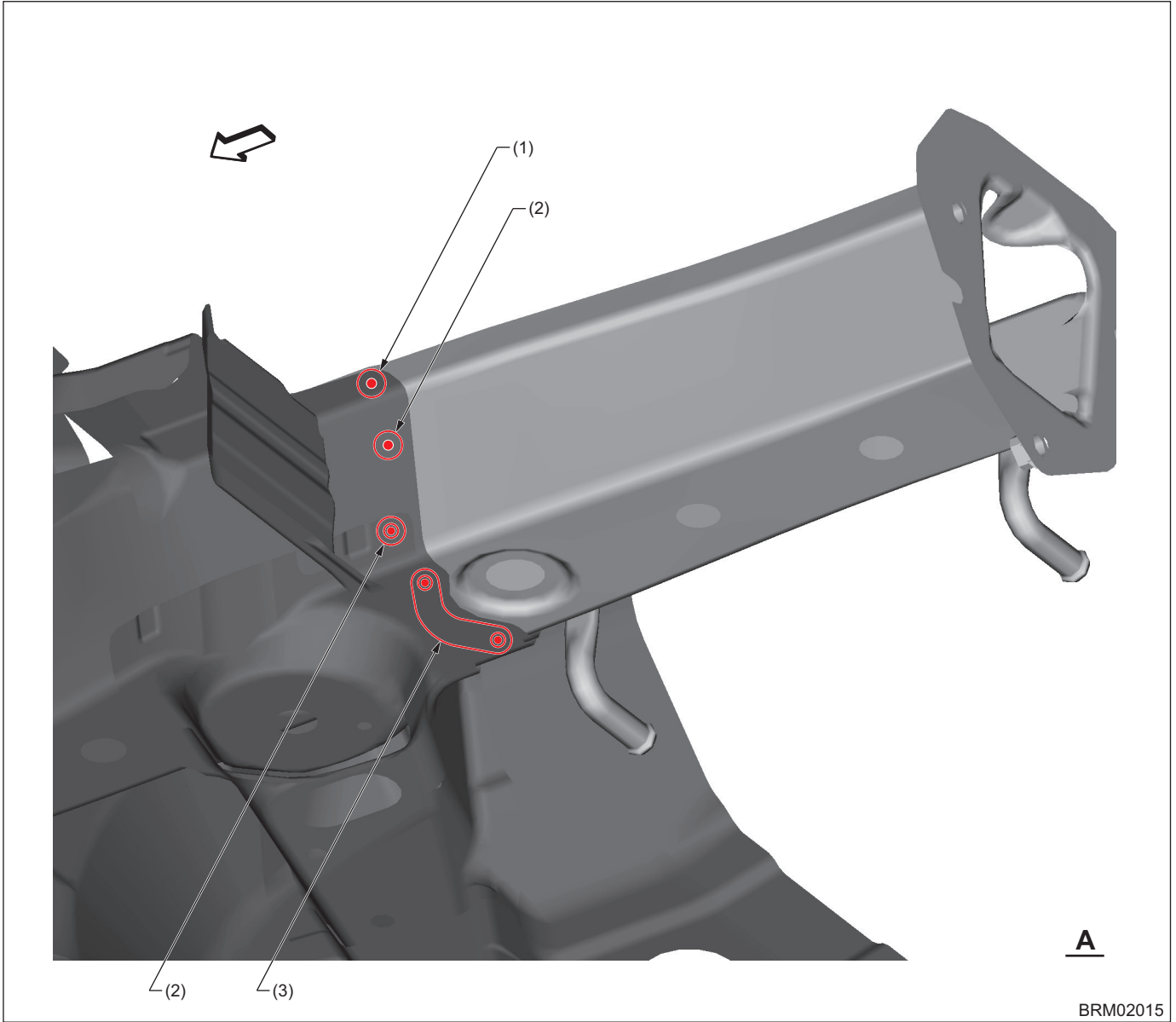
(1) 1 point (Bottom · 1)

(2) 1 point (Bottom · 2)

(3) 1 point (Inside · 1, belt sander)

# Panel Replacement

## • View A



(1) 1 point (Top · 1)

(2) 1 point (Inside · 1, belt sander)

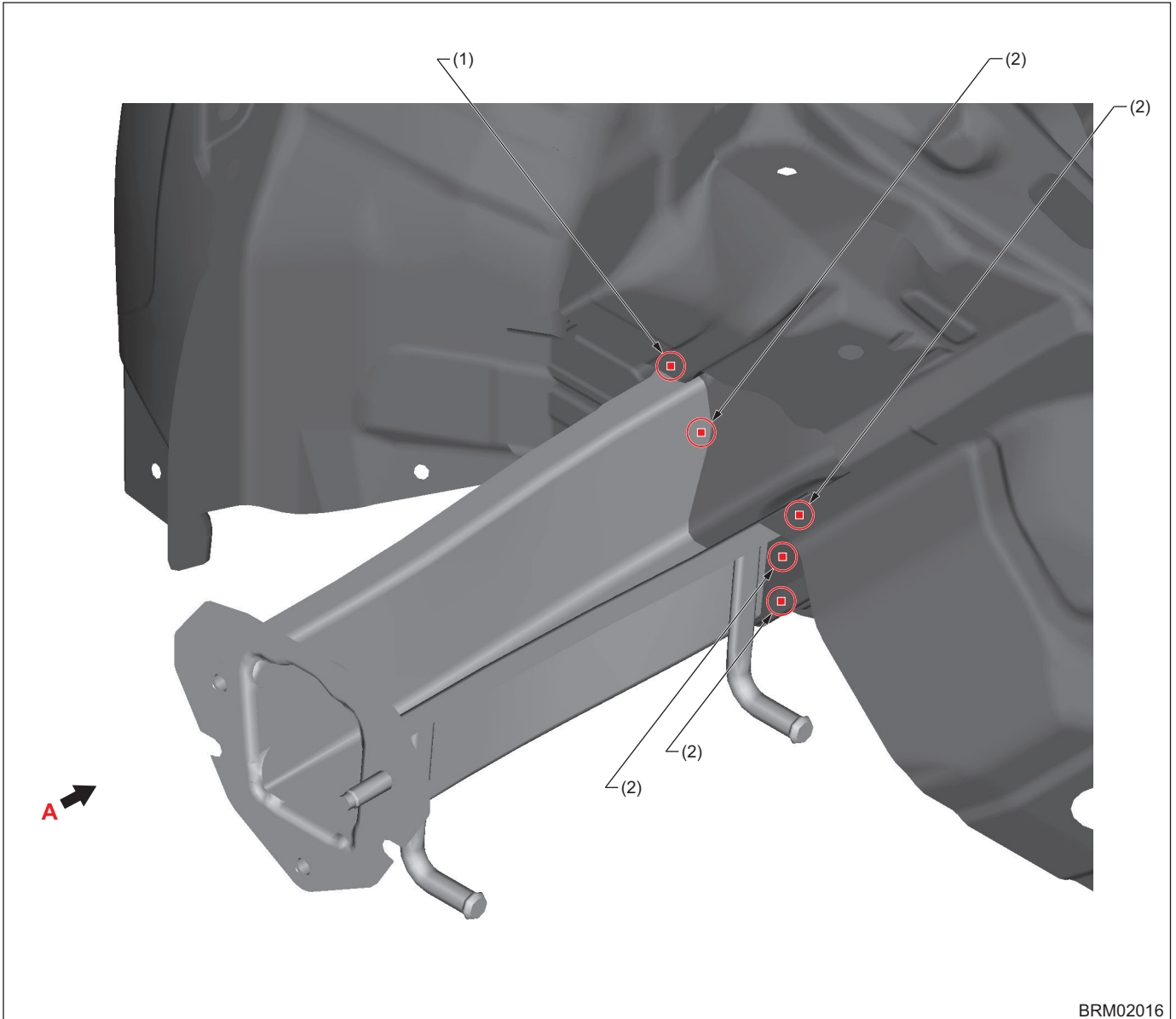
(3) 3 points (Top · 1, belt sander)



# Panel Replacement

## B: INSTALLATION

### • Overall view

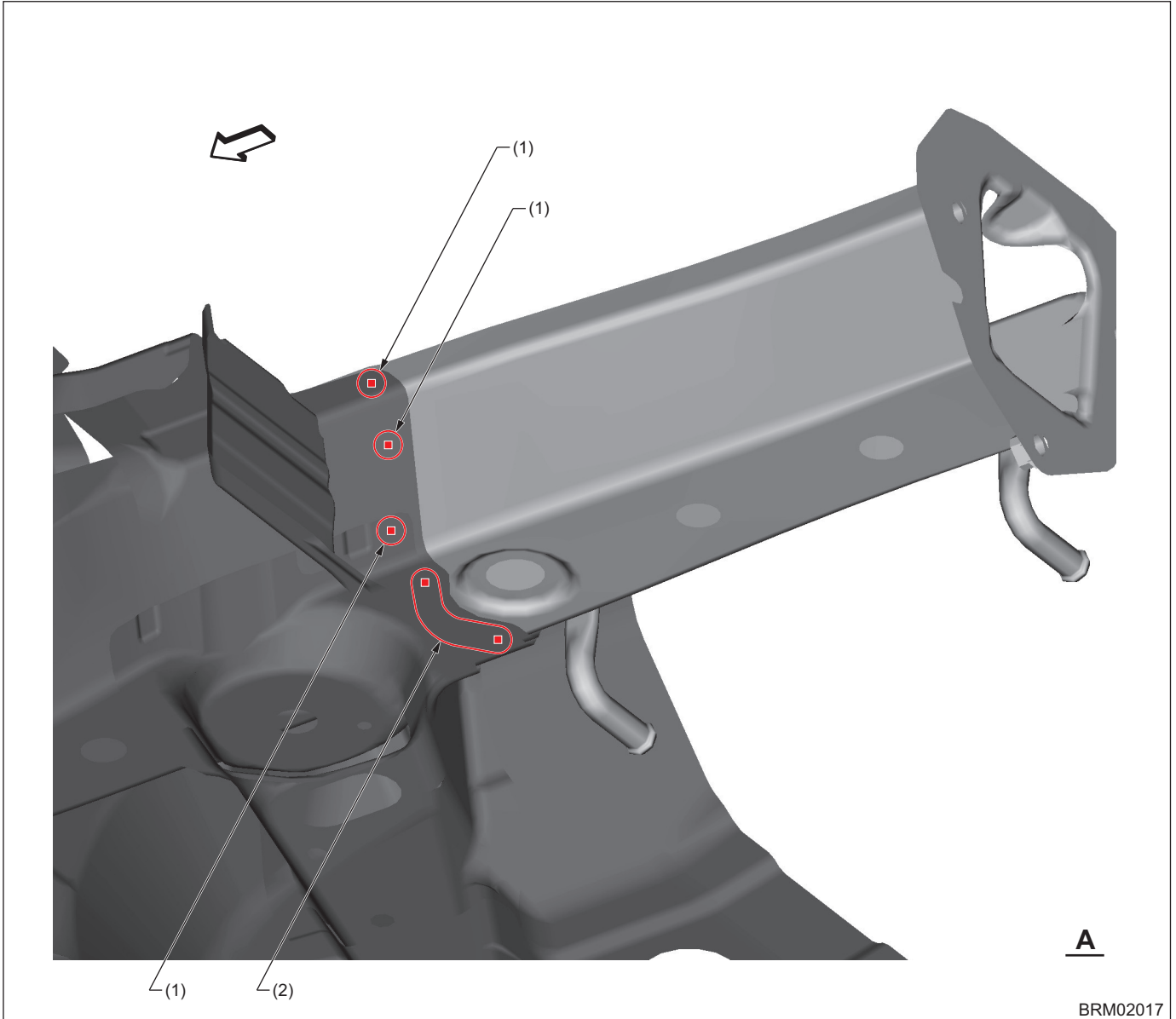


(1) 1 point

(2) 1 point (Service part)

# Panel Replacement

## • View A



(1) 1 point (Service part)

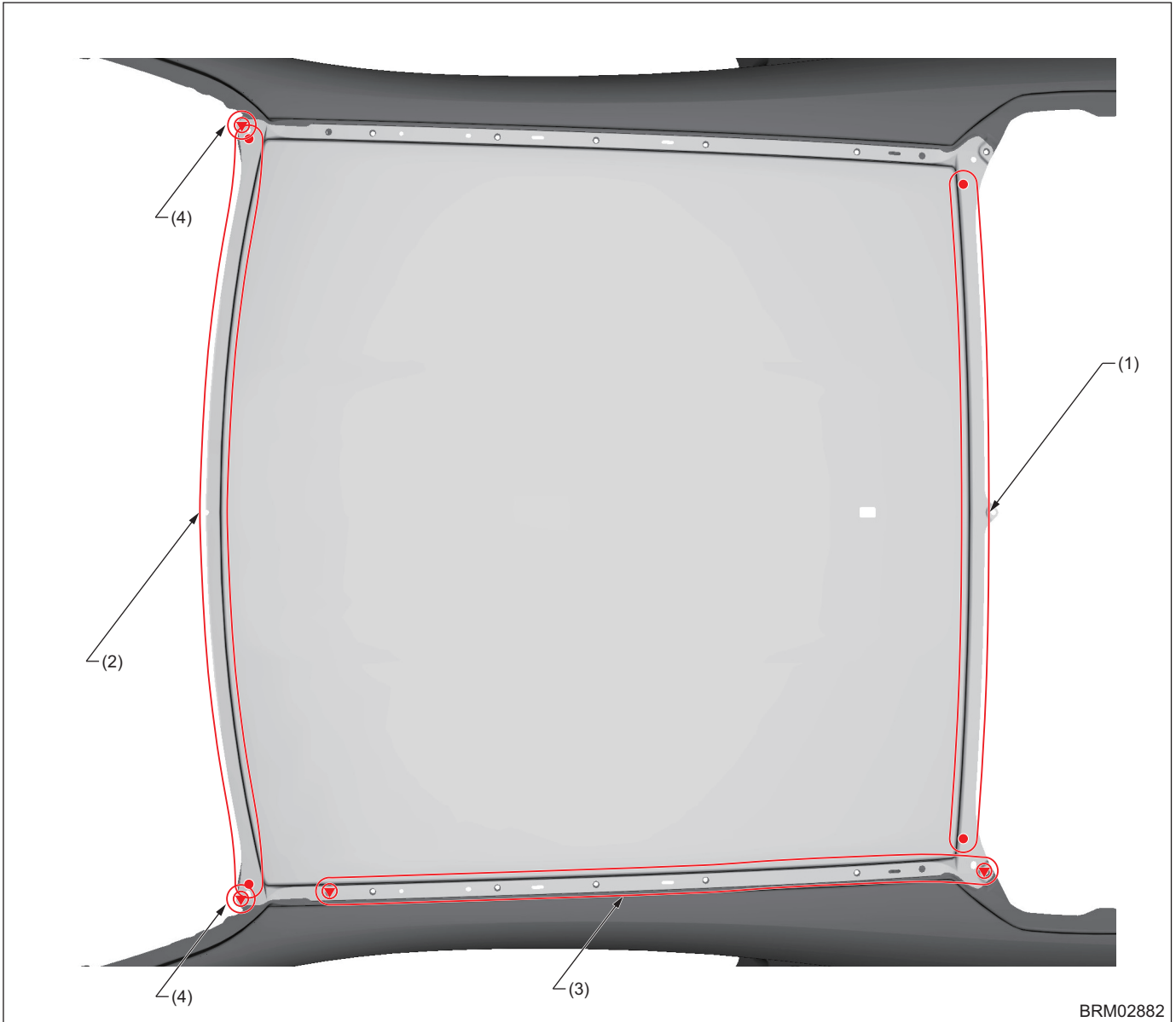
(2) 3 points (Service part)

# Panel Replacement

## 8-29. Roof Panel (Total replacement)

### A: REMOVAL

#### • Overall view



(1) 10 points (Top · 1, belt sander)

(3) 8 points

(4) 1 point (Top · 1, belt sander)

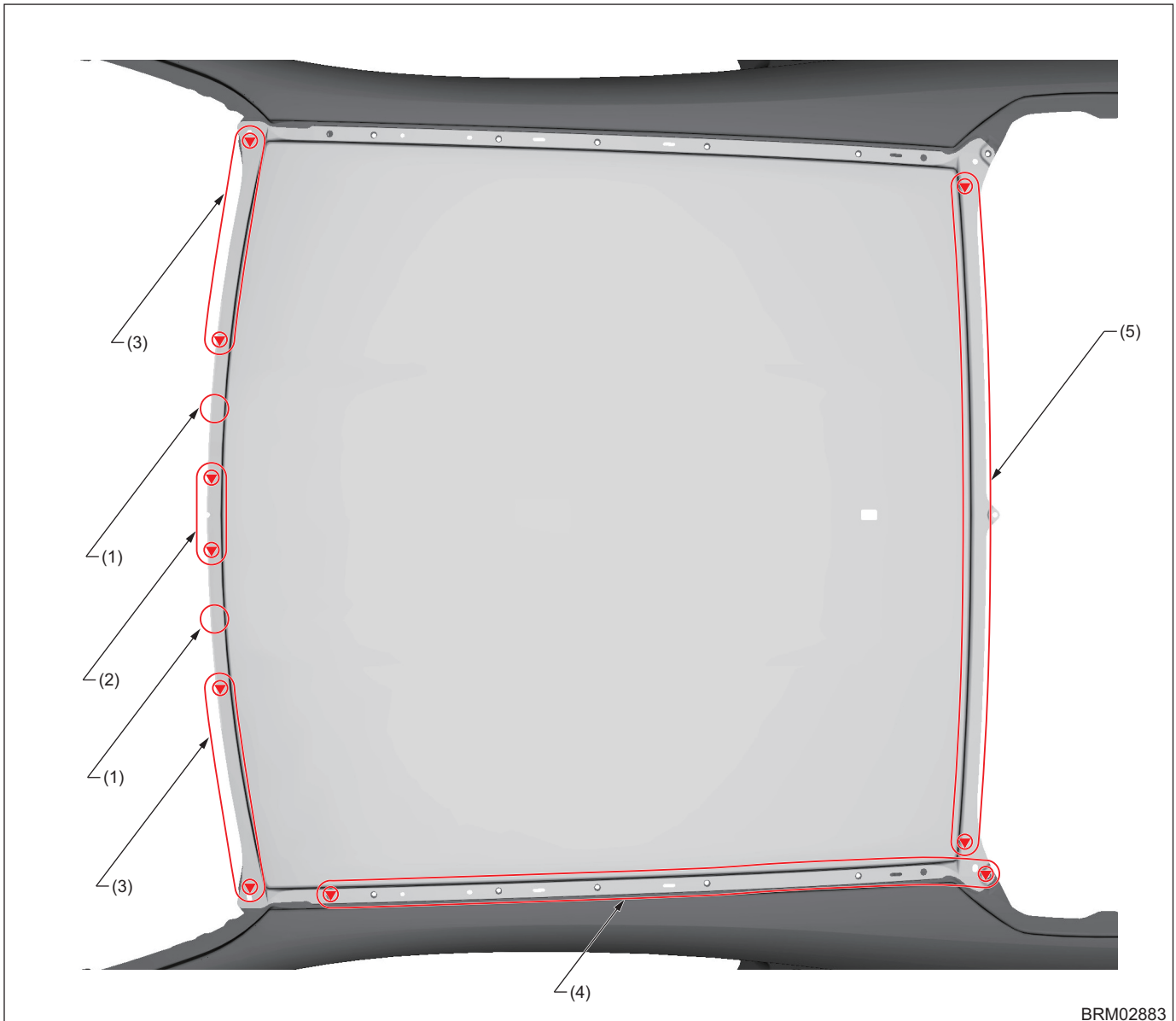
(2) 12 points (Top · 1, belt sander)

Note: The rivet in (4) does not have to be completely removed, but when installing the roof panel, handle it so that the roof panel and the remaining rivets do not interfere with each other, and do not fasten with rivets.

# Panel Replacement

## B: INSTALLATION

### • Overall view 1



BRM02883

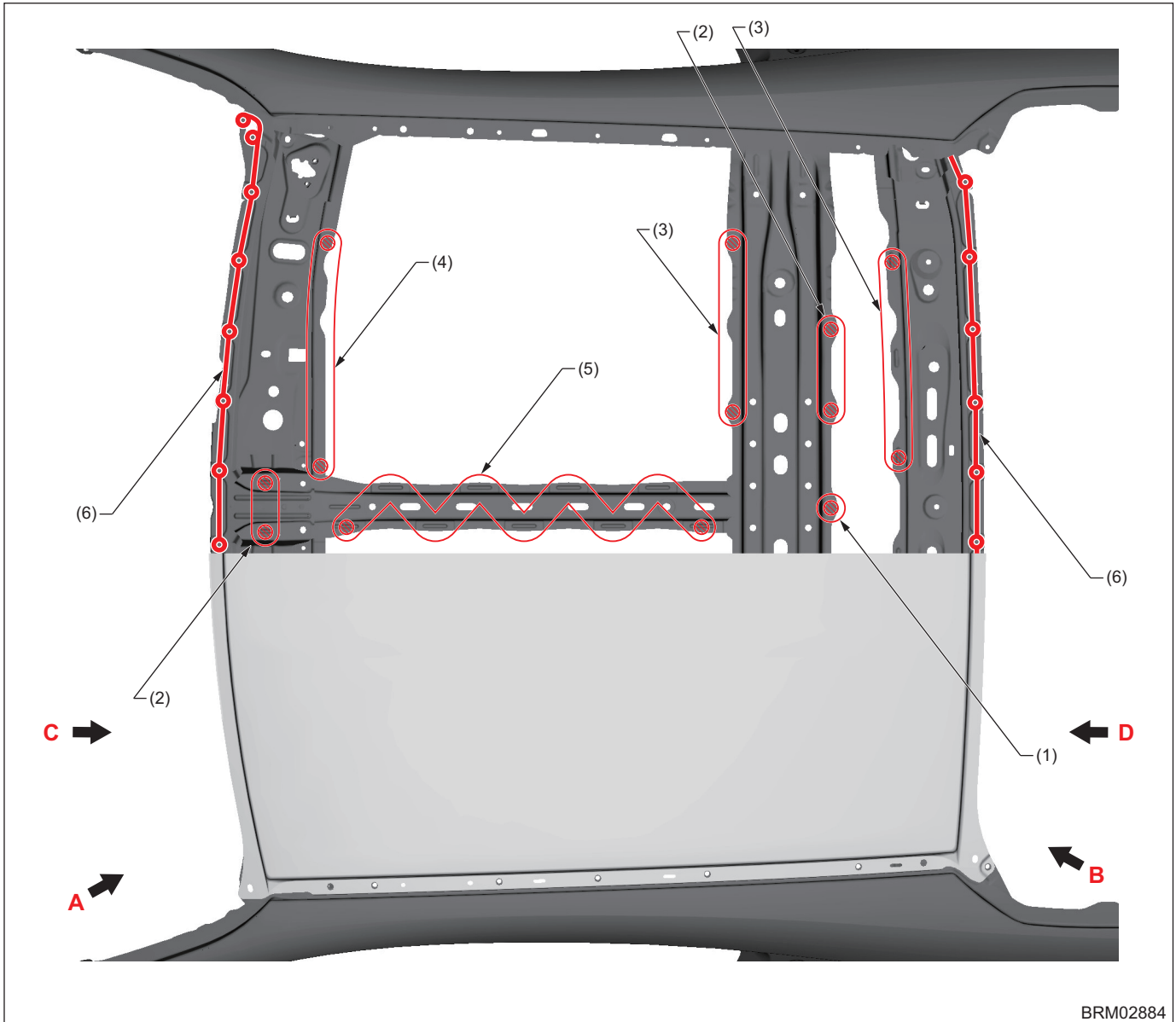
- |                                  |                                  |                                   |
|----------------------------------|----------------------------------|-----------------------------------|
| (1) 1 point (Clamp)              | (3) 4 points (Countersunk rivet) | (5) 10 points (Countersunk rivet) |
| (2) 2 points (Countersunk rivet) | (4) 8 points (Blind rivet)       |                                   |

#### Note:

- In locations where using countersunk rivets, drill a pilot hole of  $\phi 6.5$  mm [0.26 in] in diameter and then taper the hole to a diameter of  $\phi 12$  mm [0.47 in] with a taper of  $120^\circ$  so that the rivet head does not protrude from the roof panel.
- Treat the cut shaft so that it does not protrude from the rivet head.
- Install the roof panel so that the gap between the plate rail and roof panel in the structural adhesive application location is 2 mm [0.08 in] or less.
- The clamp shown in (1) should be removed after the structural adhesive is completely cured.

# Panel Replacement

## • Overall view 2



BRM02884

- |              |              |                         |
|--------------|--------------|-------------------------|
| (1) 1 point  | (3) 3 points | (5) 9 points            |
| (2) 2 points | (4) 5 points | (6) Structural adhesive |

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

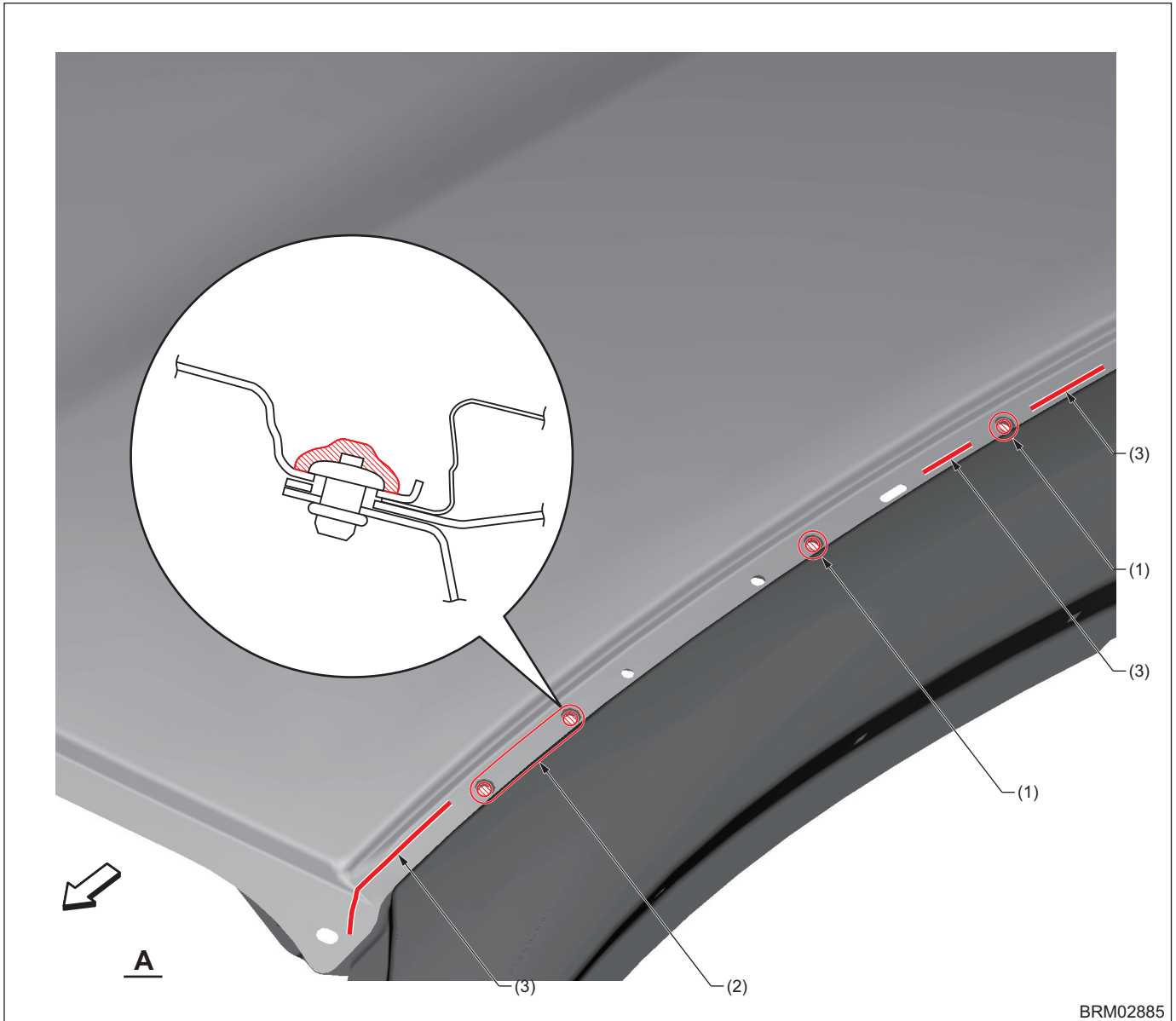
▨ : Sealer application location (Spotting sealer)

Note:

- Fill the gap between the plate rail and roof panel with structural adhesive.
- Apply structural adhesive to the outer circumference of the rivet mounting holes.

# Panel Replacement

## • View A



BRM02885

(1) 1 point

(2) 2 points

(3) Structural adhesive

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

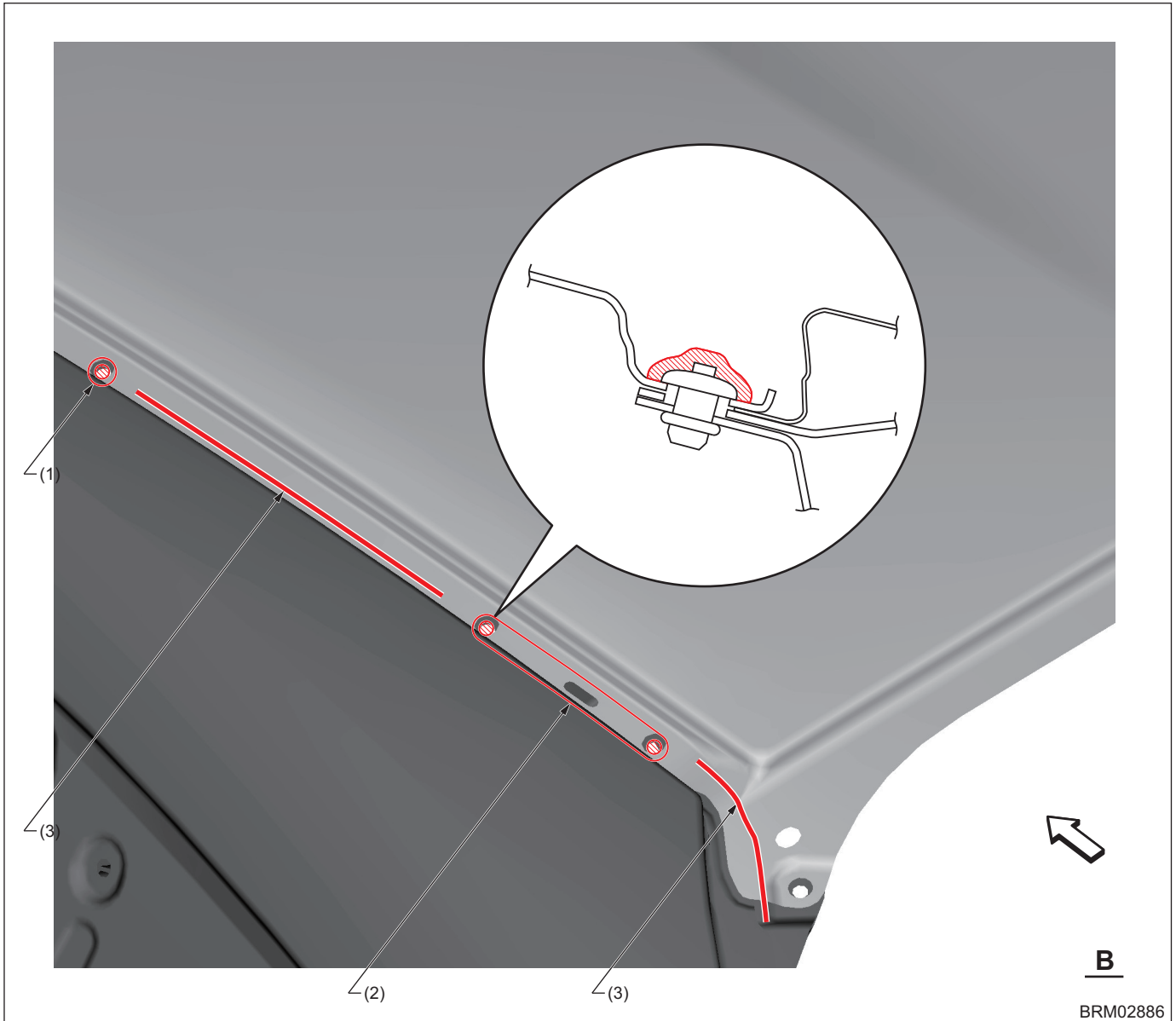
▨ : Sealer application location (Sealing [Three Bond 4101 (004403063) or equivalent])

Note:

- Fill the space between the roof panel and the rivet with sealer.
- Make sure to cover the entire circumference with sealer so that the rivets are not exposed.
- Structural adhesive can continuously be applied to the neighboring spots.
- If the holes on the roof are exposed, fill them with sealer.

# Panel Replacement

## • View B



(1) 1 point

(2) 2 points

(3) Structural adhesive

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

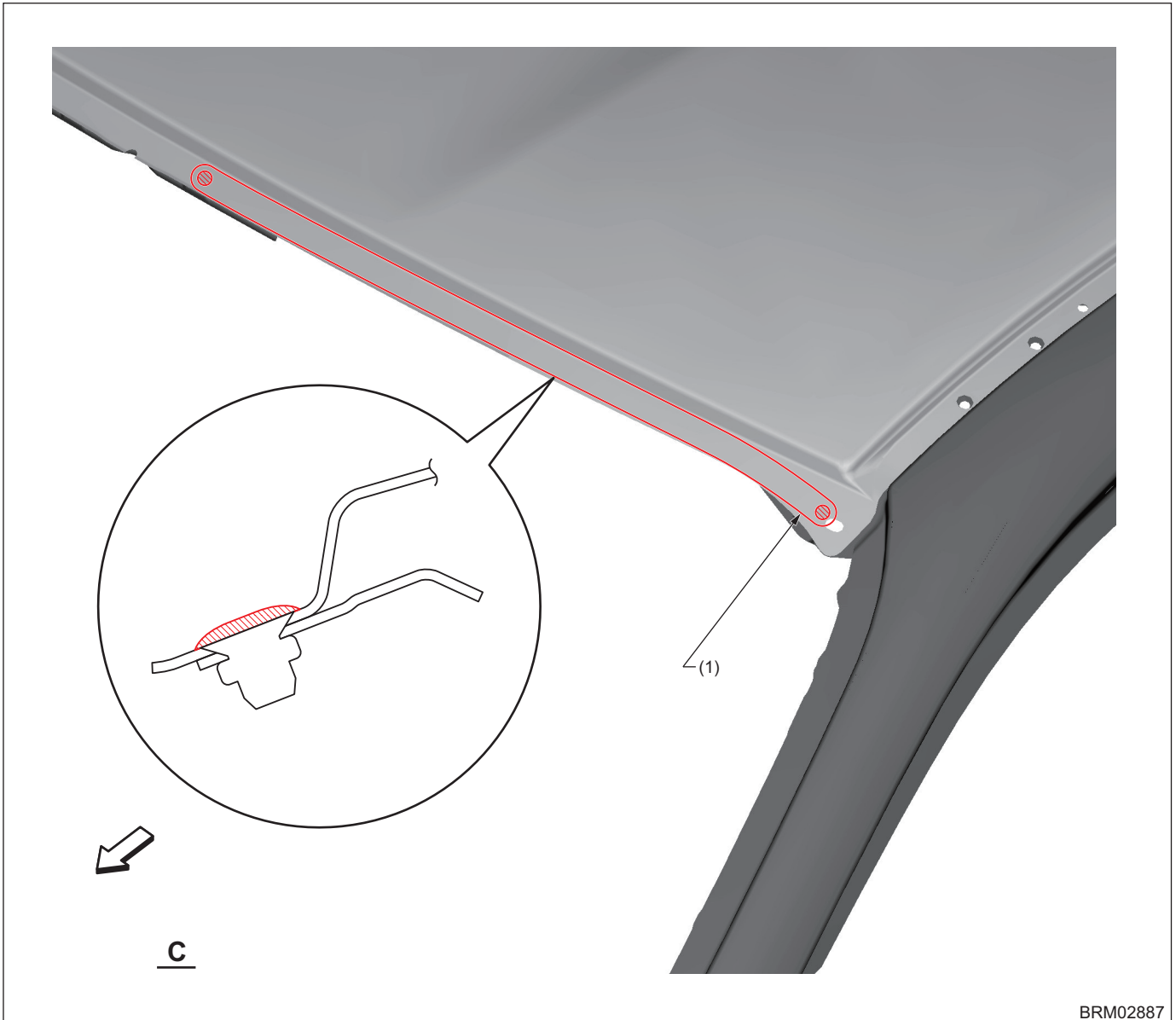
▨ : Sealer application location (Sealing [Three Bond 4101 (004403063) or equivalent])

Note:

- Fill the space between the roof panel and the rivet with sealer.
- Make sure to cover the entire circumference with sealer so that the rivets are not exposed.
- Structural adhesive can continuously be applied to the neighboring spots.
- If the holes on the roof are exposed, fill them with sealer.

# Panel Replacement

## • View C



(1) 5 points

 : Sealer application location (Sealing [Three Bond 4101 (004403063) or equivalent])

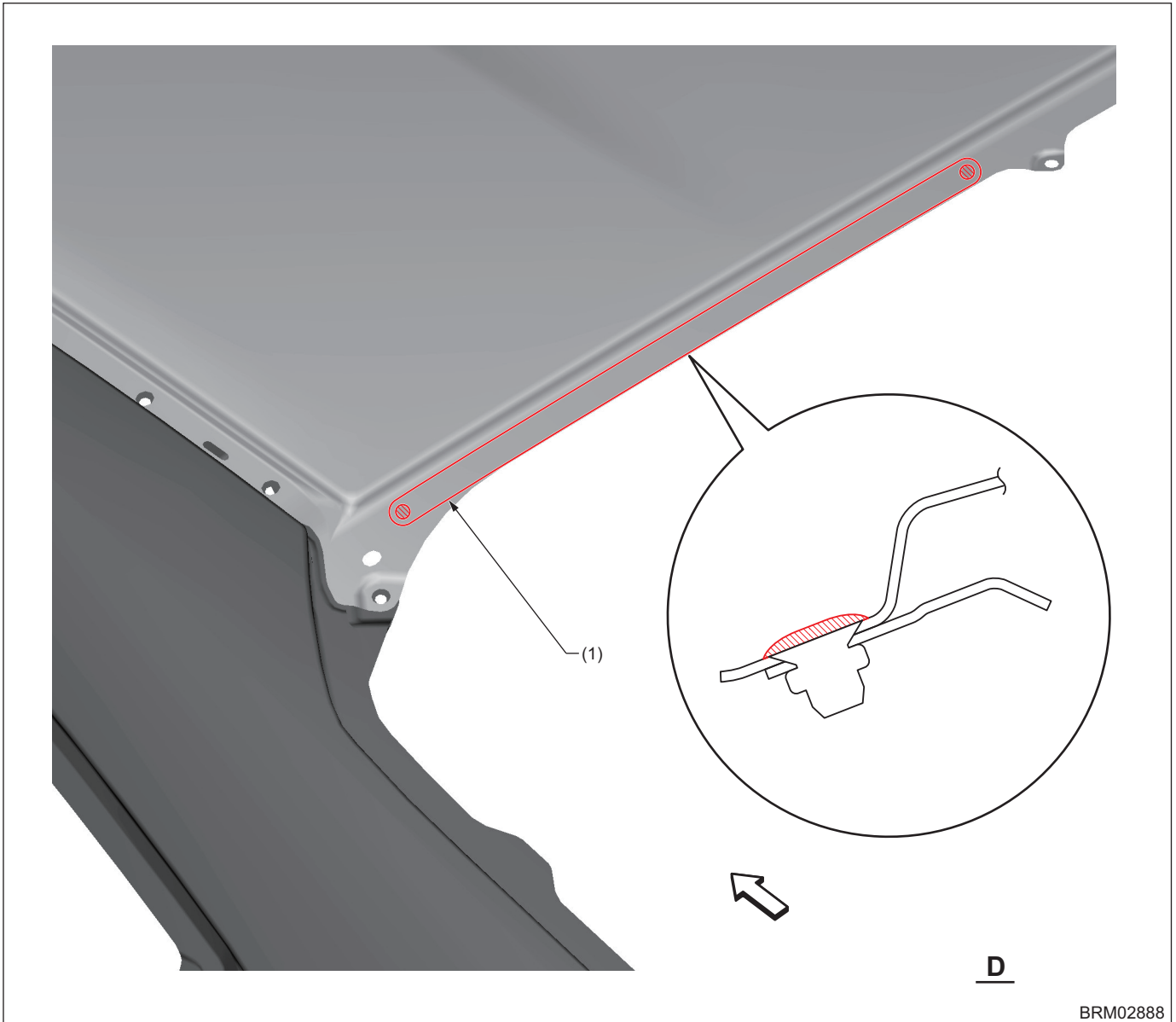
Note:

- Fill the space between the roof panel and the rivet with sealer.
- Make sure to cover the entire circumference with sealer so that the rivets are not exposed.
- Flatten the sealer so that it does not affect glass mounting.
- If the holes on the roof are exposed, fill them with sealer.



# Panel Replacement

## • View D



(1) 5 points

 : Sealer application location (Sealing [Three Bond 4101 (004403063) or equivalent])

Note:

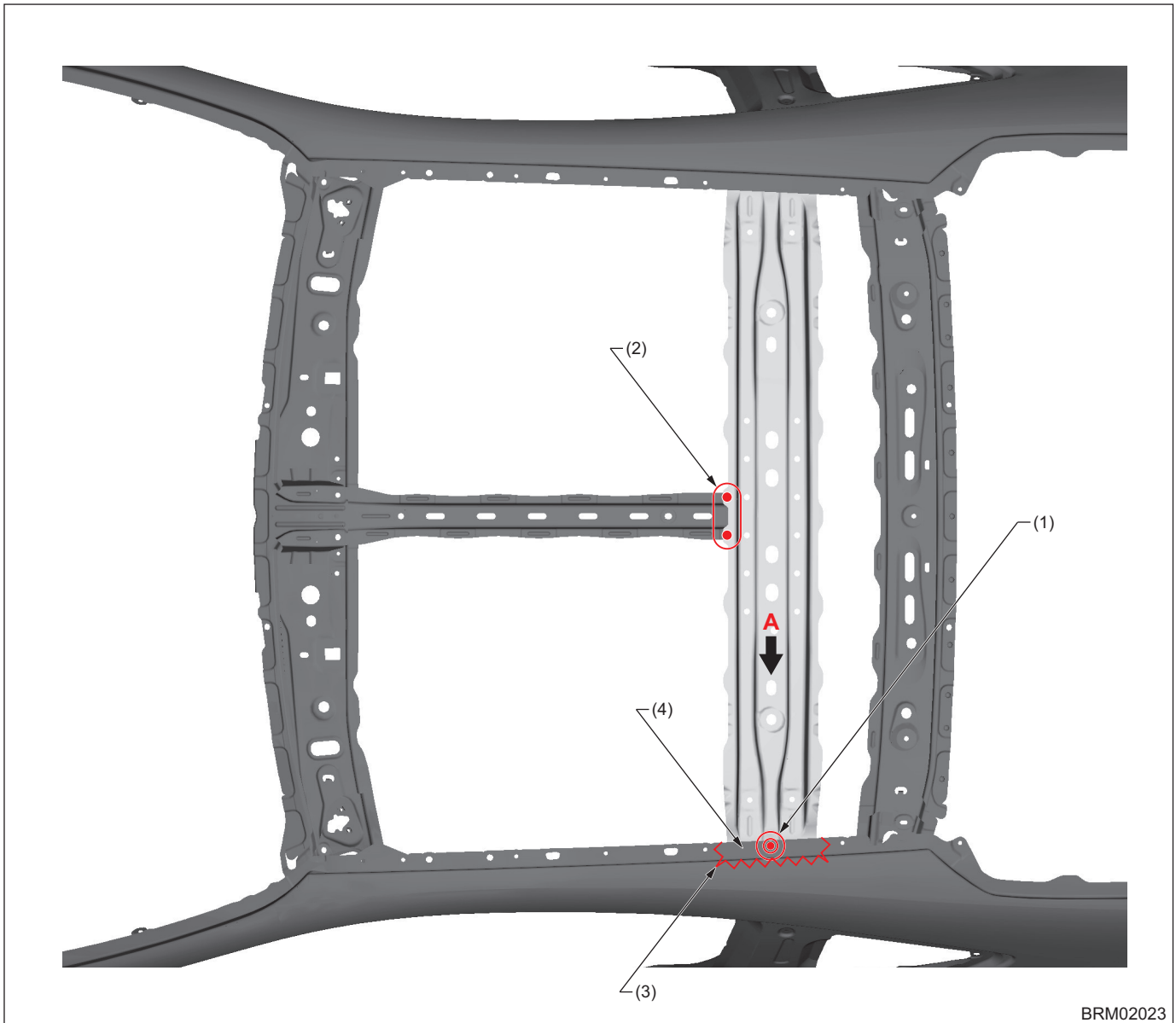
- Fill the space between the roof panel and the rivet with sealer.
- Make sure to cover the entire circumference with sealer so that the rivets are not exposed.
- Flatten the sealer so that it does not affect glass mounting.
- If the holes on the roof are exposed, fill them with sealer.

# Panel Replacement

## 8-30. Center Brace (Total replacement)

### A: REMOVAL

- Overall view



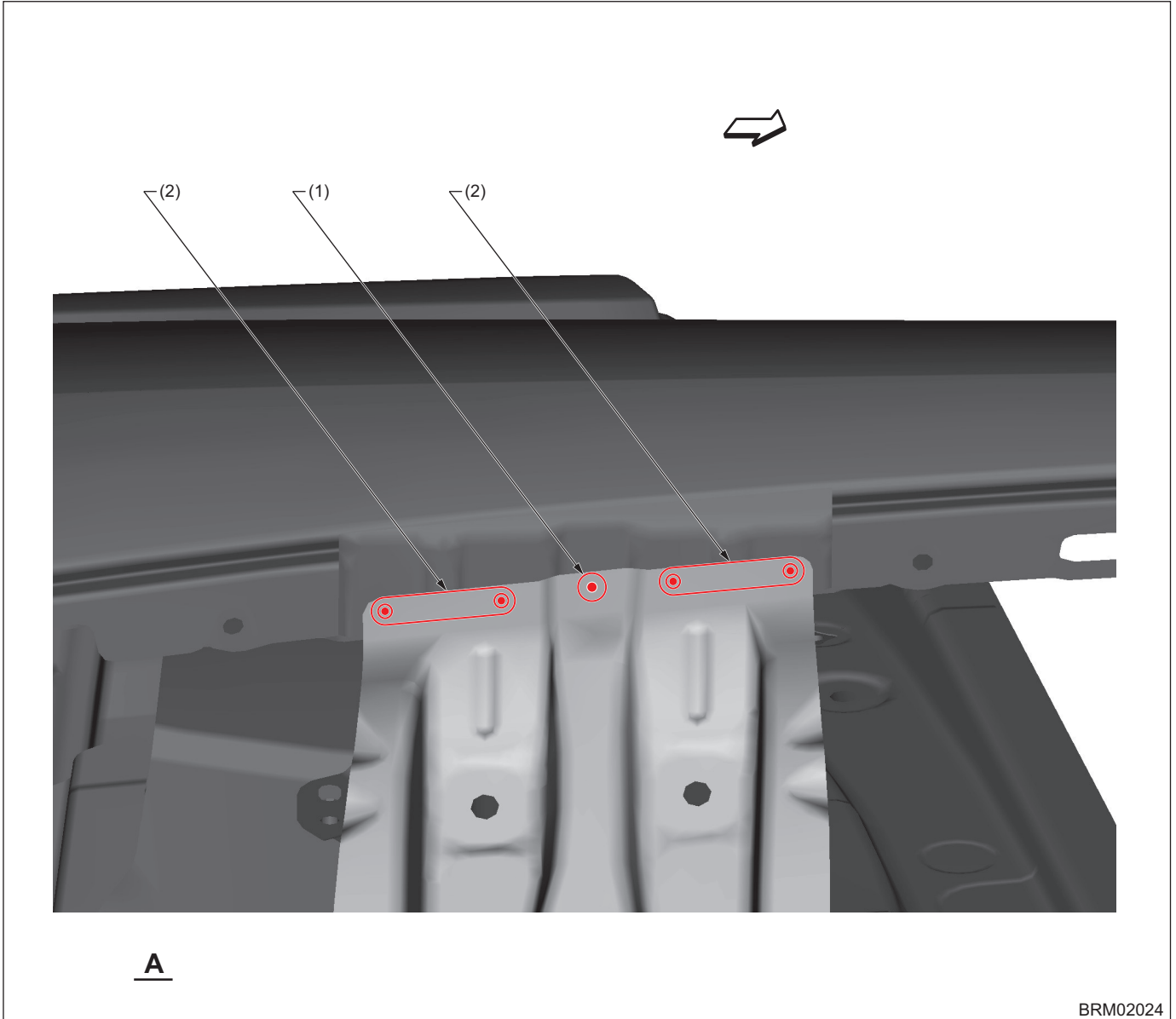
- (1) 1 point (Top · 1)
- (2) 2 points (Top · 1)

- (3) Rough cutting

- (4) The part that can be reused.

# Panel Replacement

## • View A



BRM02024

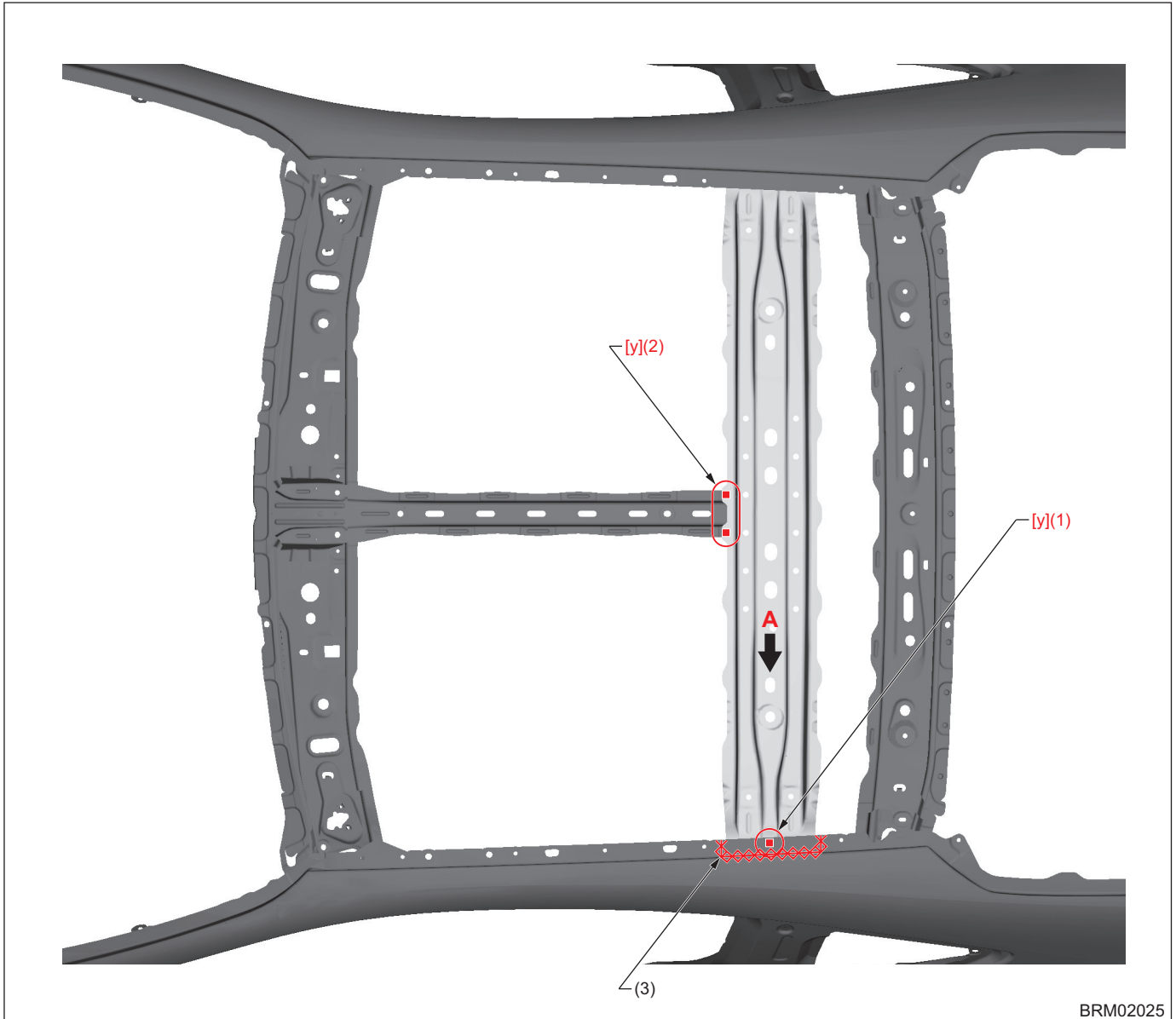
(1) 1 point (Top · 1)

(2) 2 points (Top · 1)

# Panel Replacement

## B: INSTALLATION

### • Overall view



(1) 1 point (Service part)

(2) 2 points (Service part)

(3) 1 point (Continuous welding)

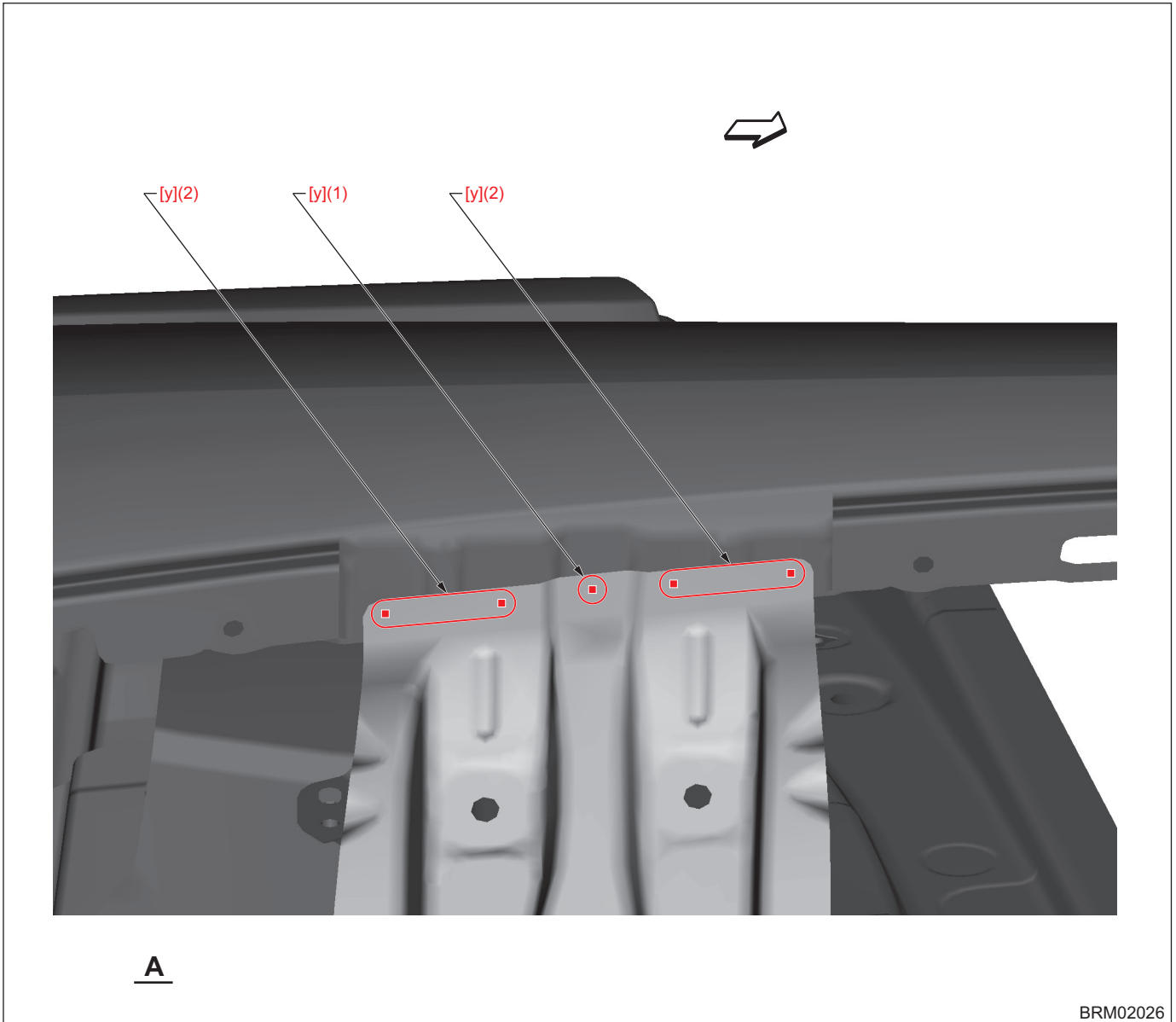
[y] Plug welding conditions

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO<sub>2</sub>

B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO<sub>2</sub>: 20 %)

# Panel Replacement

## • View A



BRM02026

(1) 1 point (Service part)

(2) 2 points (Service part)

[y] Plug welding conditions

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO<sub>2</sub>

B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO<sub>2</sub>: 20 %)

# Body Sealing

## 9. Body Sealing

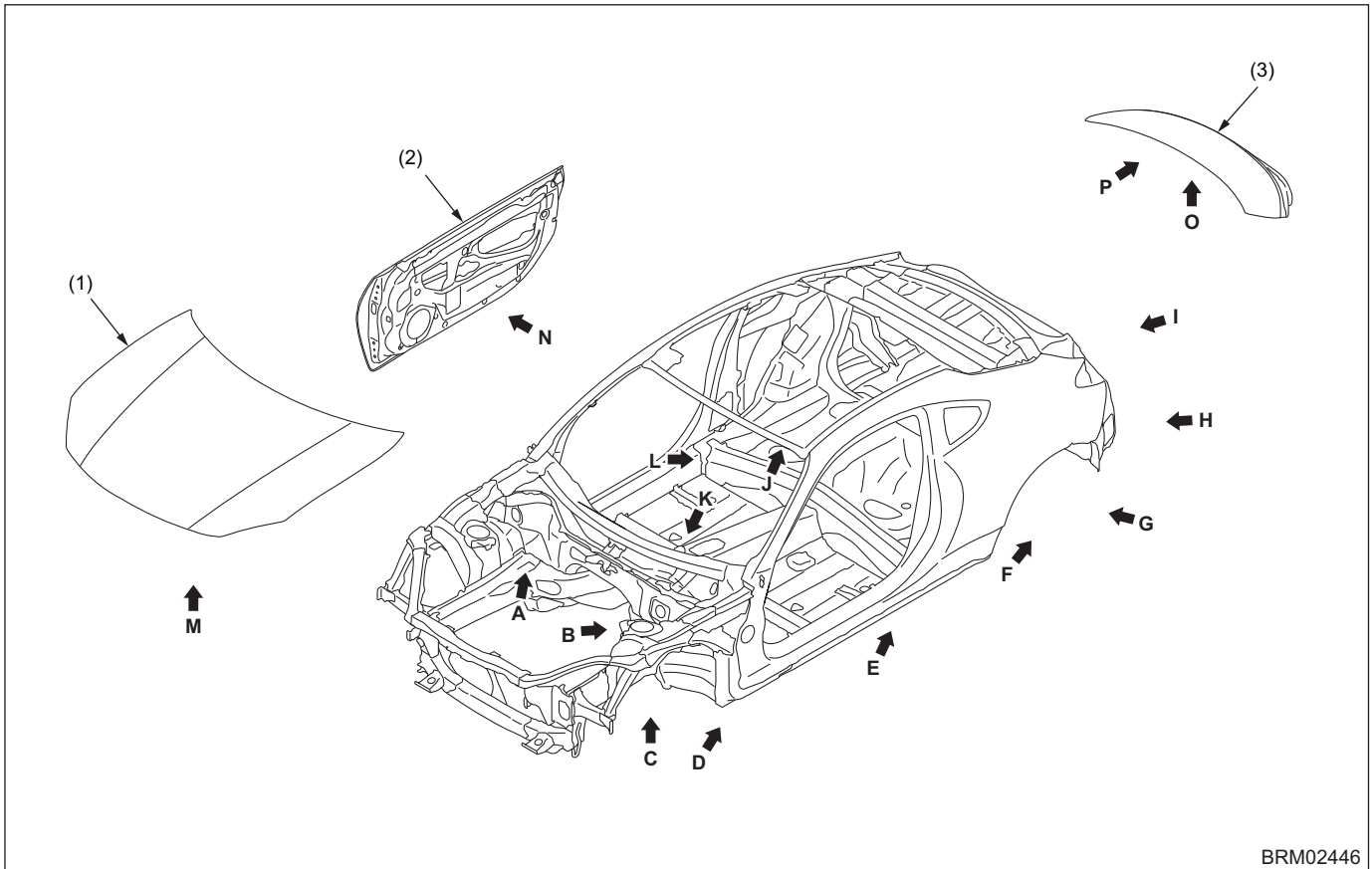
### A: SPECIFICATIONS

#### CAUTION:

- Apply sealing to the hemming area, the seam of the body panel.
- If the sealing is burnt out due to welding, etc., be sure to take measures against water leakage at the burned-out part and around the burned-out part.
- Sealer has already been applied to the replacement hood, door and trunk.

Used material: Three Bond 4101 (004403063) or equivalent

— : Sealer application location



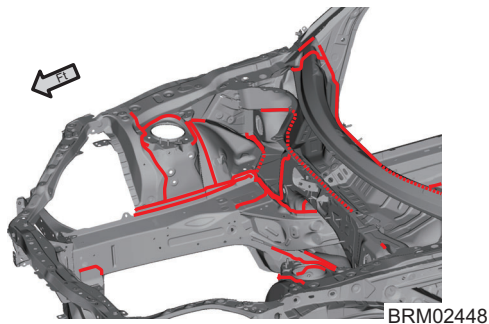
BRM02446

(1) Front hood

(2) Front door

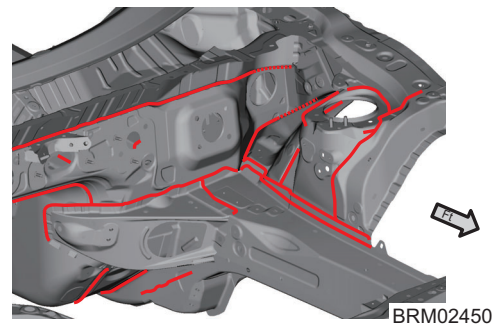
(3) Trunk

View A



BRM02448

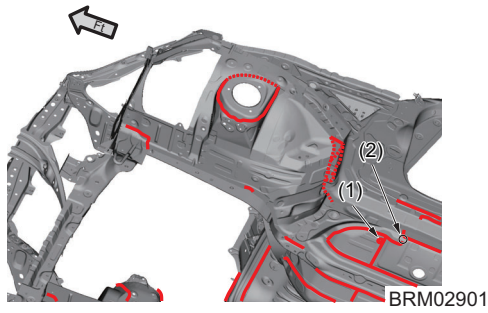
View B



BRM02450

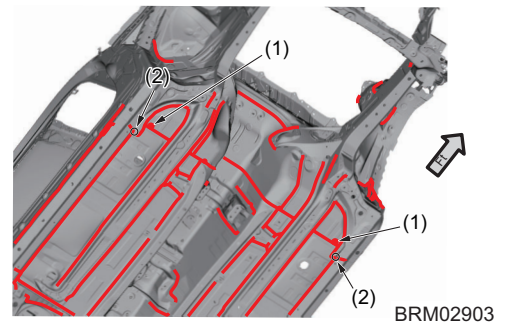
# Body Sealing

View C



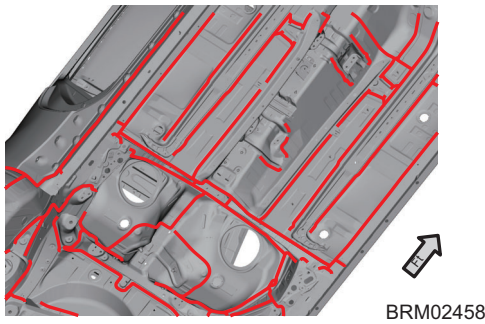
- (1) Be sure to fill the hole.
- (2) Do not block drain holes.

View D

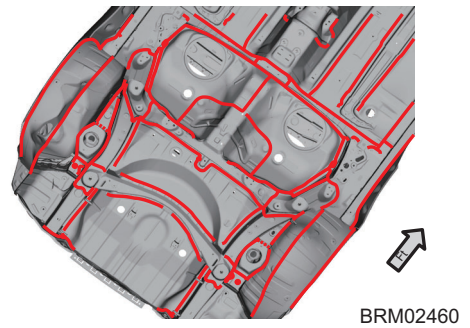


- (1) Be sure to fill the hole.
- (2) Do not block drain holes.

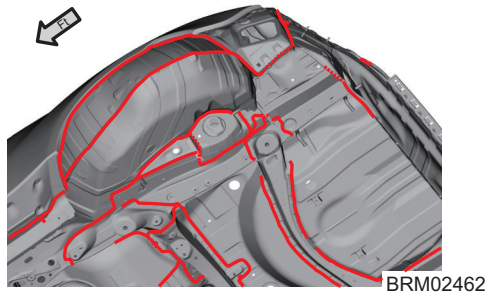
View E



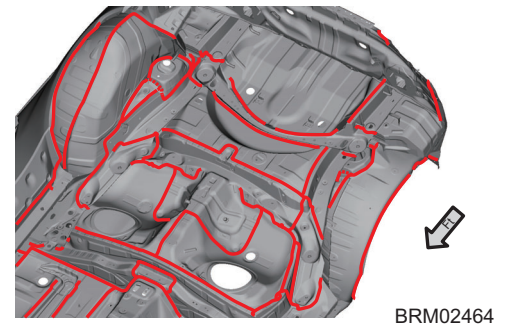
View F



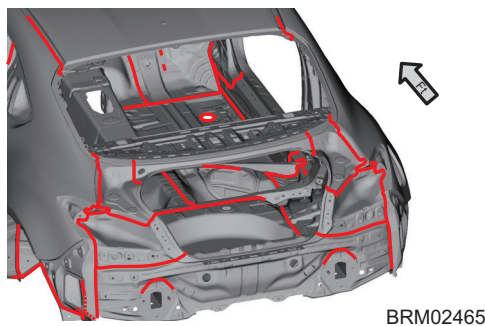
View G



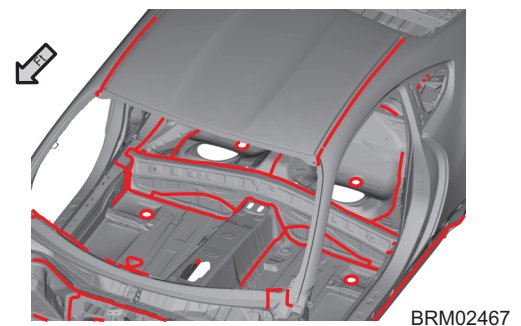
View H



View I

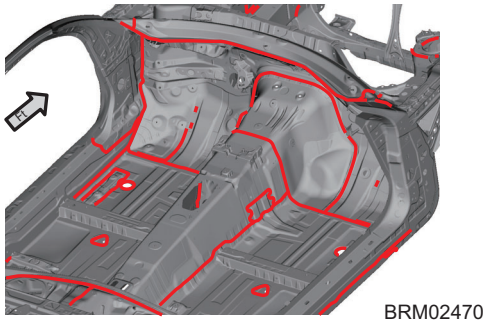


View J

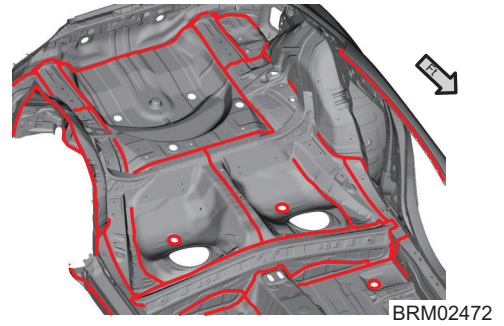


# Body Sealing

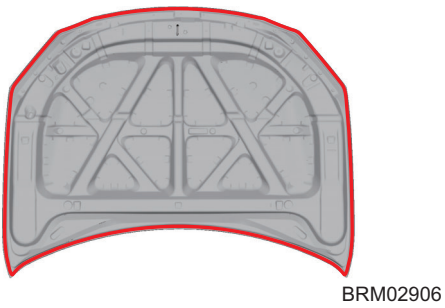
View K



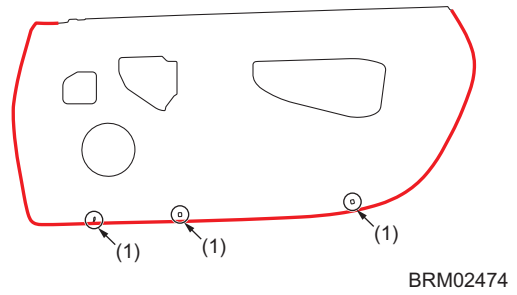
View L



View M

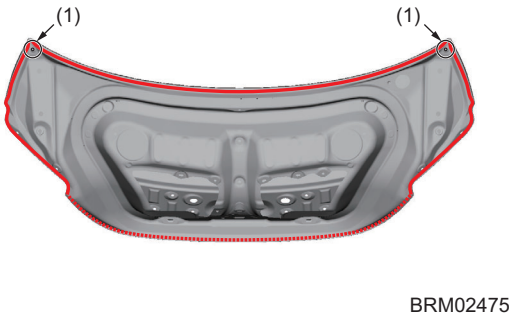


View N



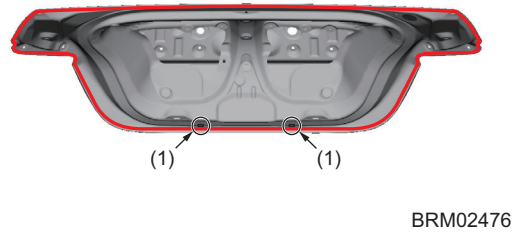
(1) Do not block drain holes.

View O



(1) Make sure to close the electrodeposition holes.

View P



(1) Do not block drain holes.



# Anticorrosion Wax

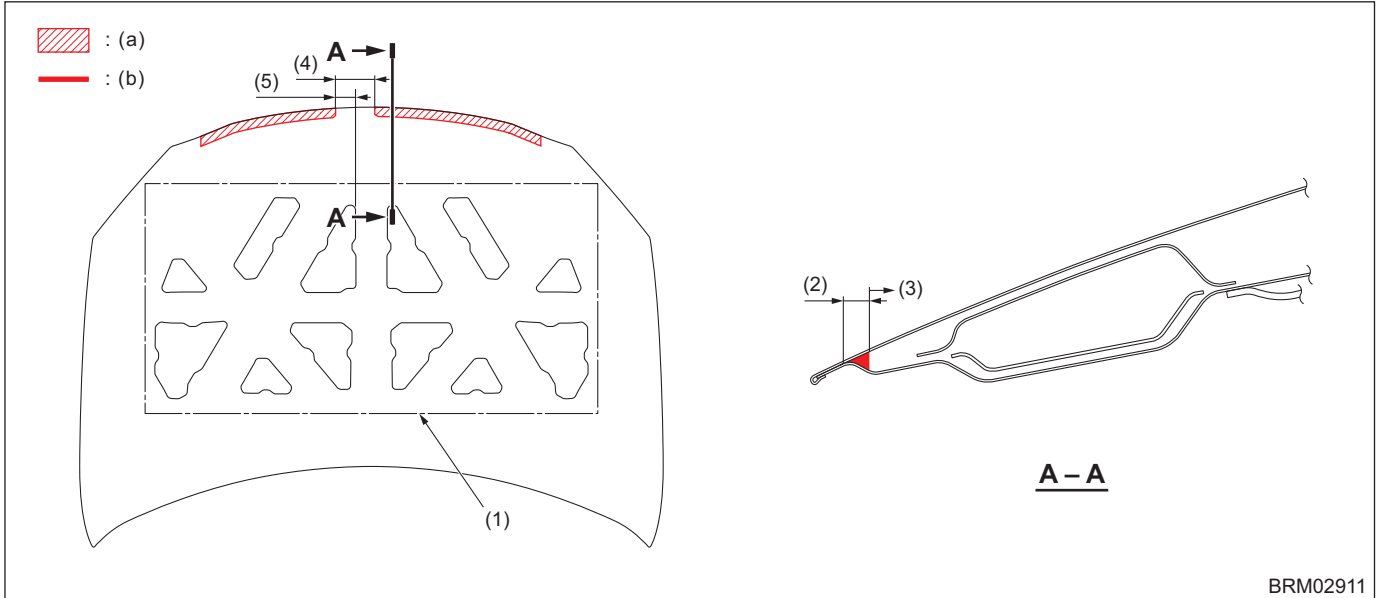
## 10. Anticorrosion Wax

### A: SPECIFICATIONS

Used material: Rust-stop aerosol (K0877YA015)

— and    : Application area

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



BRM02911

(a) Rust-stop aerosol

(b) Fill in the plate joint.

(1) Wax application work openings

(3) Adherence of mist is allowable.

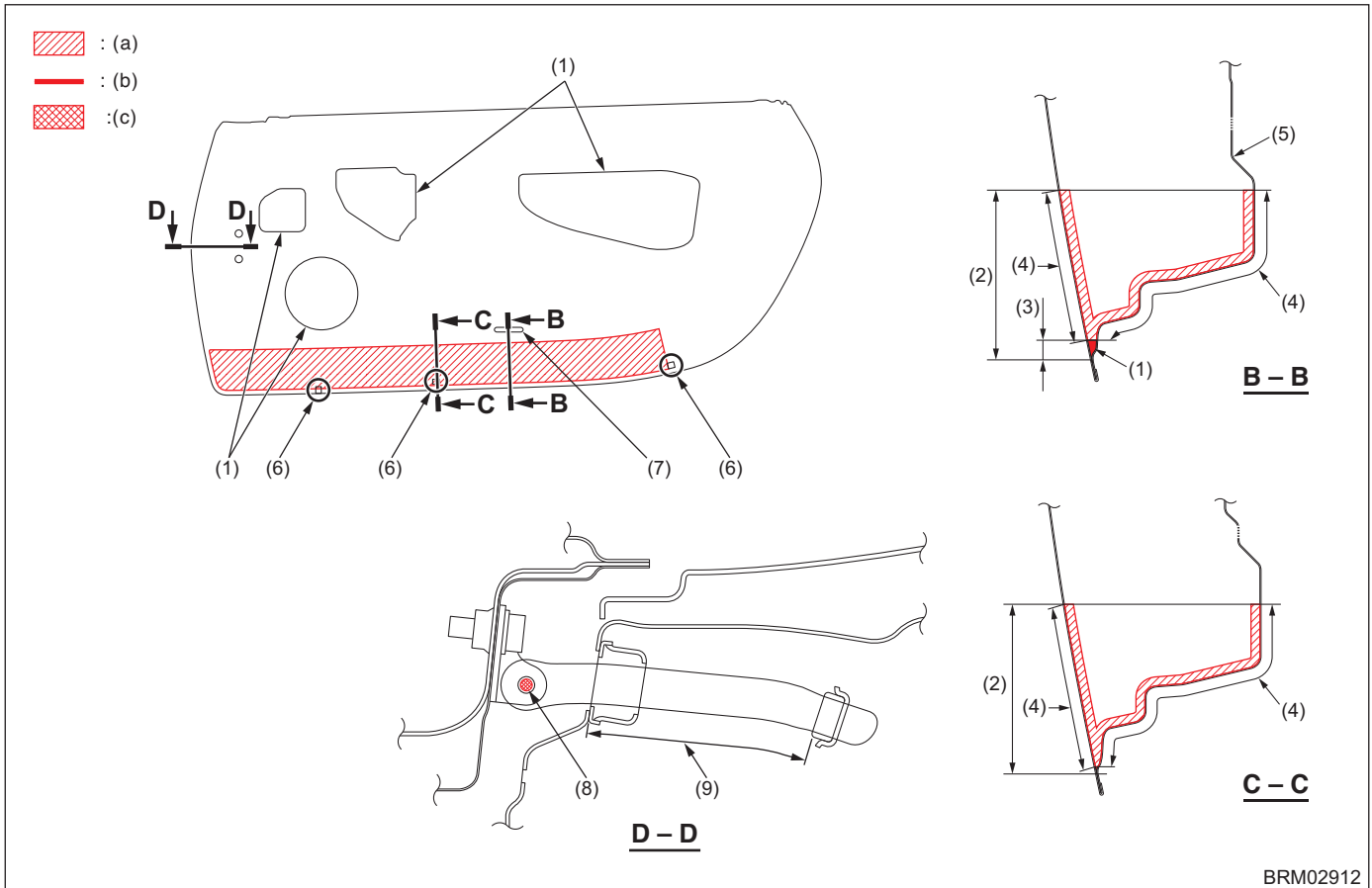
(5) 51 mm [2.01 in]

(2) 10 mm [0.39 in]

(4) 103 mm [4.03 in] Wax can adhere to this range.

# Anticorrosion Wax

## • Door area



(a) Application of rust-stop aerosol.  
(Application thickness = 50  $\mu\text{m}$  or more)

(b) Fill in the plate joint.

(c) Application of rust-stop aerosol.  
(Application thickness = 8  $\mu\text{m}$  or more)

(1) Wax application work openings

(3) 10 mm [0.39 in]

(2) 90 mm [3.54 in]

(4) Adherence of mist is allowable.

(5) No mist adheres to the butyl tape sticking surface through the drain hole.

(6) Do not block the drain holes (3 places).

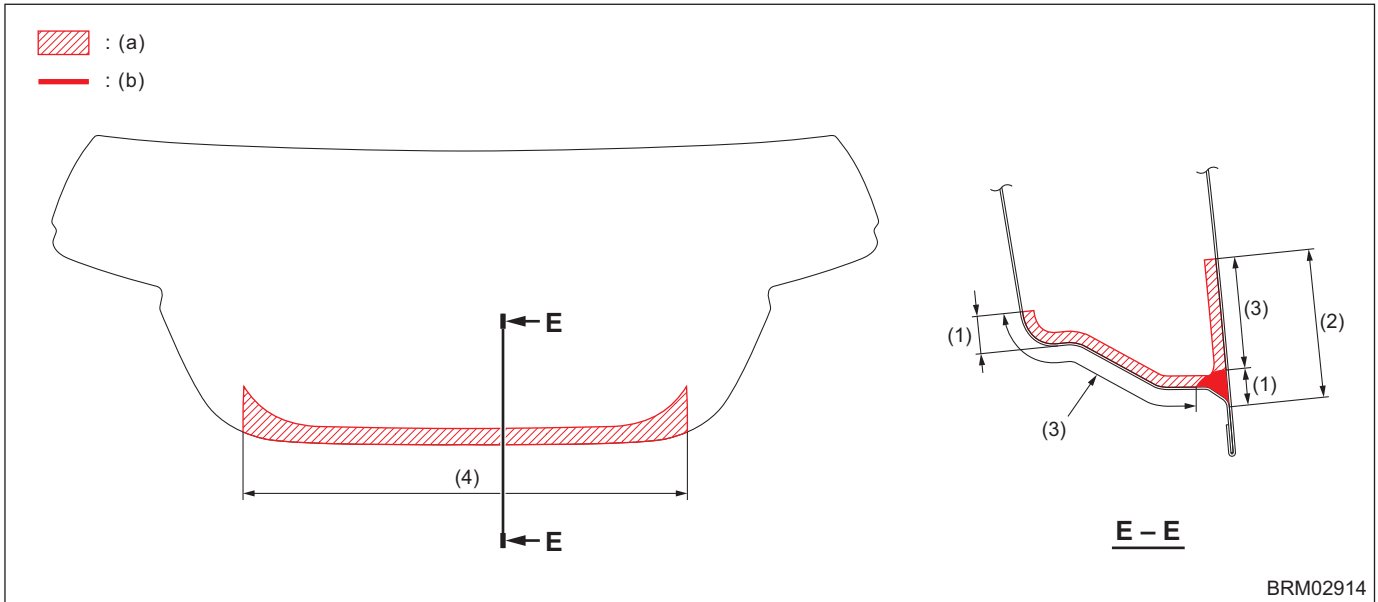
(7) Drain hole

(8) Apply from the top to the checker pin caulking part. A small amount of mist to the circumference is allowable.

(9) No wax adhesion. A small amount of mist that does not affect the door checker mechanism is allowed.

# Anticorrosion Wax

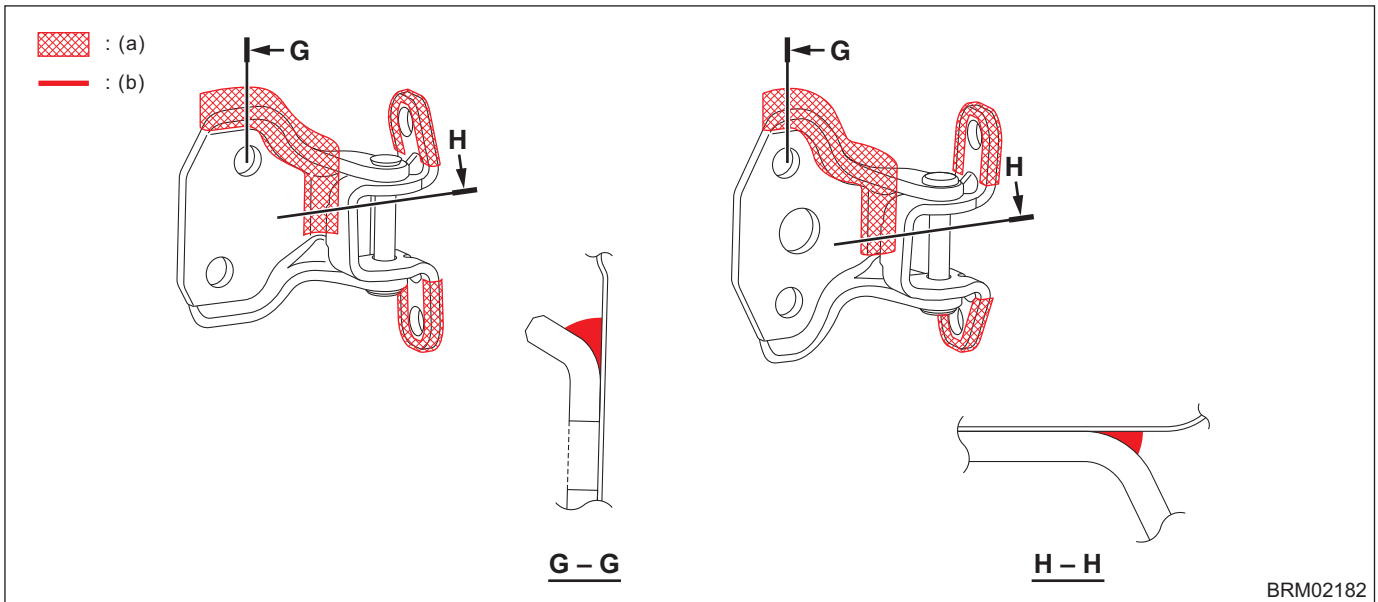
- **Trunk area** (Application thickness = 50  $\mu\text{m}$  or more)



- (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.
- (4) 660 mm [25.98 in]

- **Door hinge area** (Application thickness = 15  $\mu\text{m}$  or more)

Apply to the two left and right sides of the body and the outer periphery of the door (Application area: Plate edges), and fill the mating surfaces on the body side.

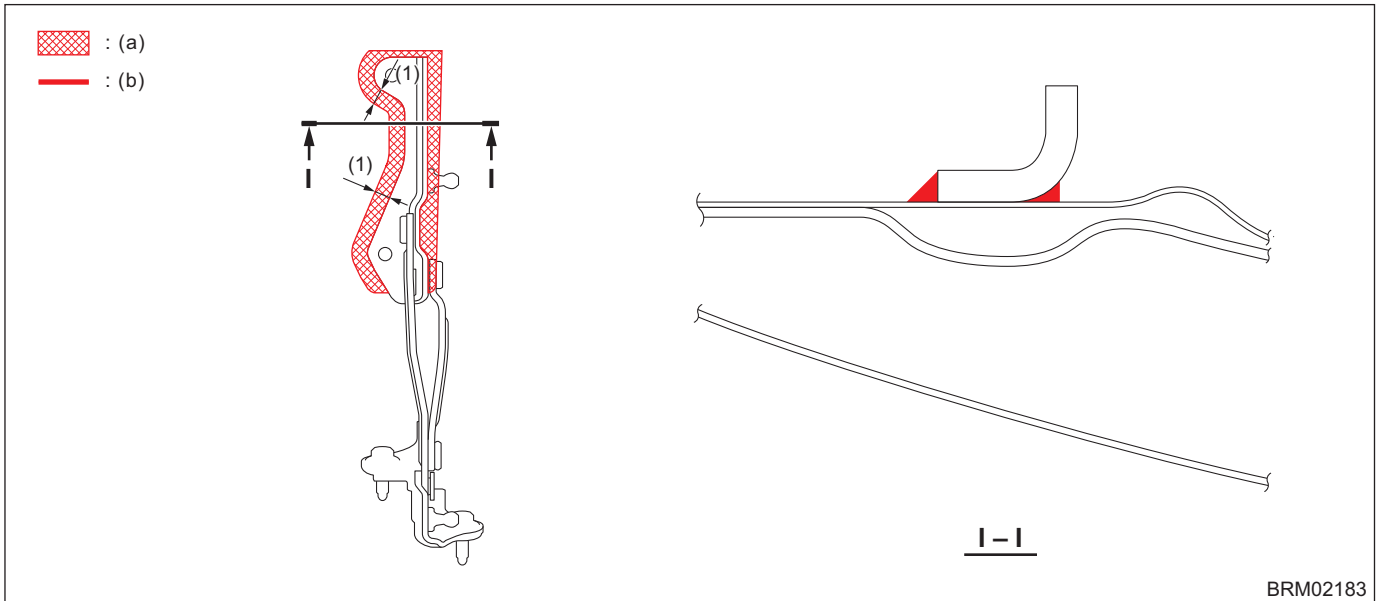


- (a) Rust-stop aerosol
- (b) Fill the mating surface.
- (1) Upper side
- (2) Lower side

# Anticorrosion Wax

- **Trunk hinge area** (Application thickness = 15  $\mu\text{m}$  or more)

Apply to the outer circumference (Application area: Plate edges) on the trunk lid side in two locations on the left and right, and fill the mating surfaces.

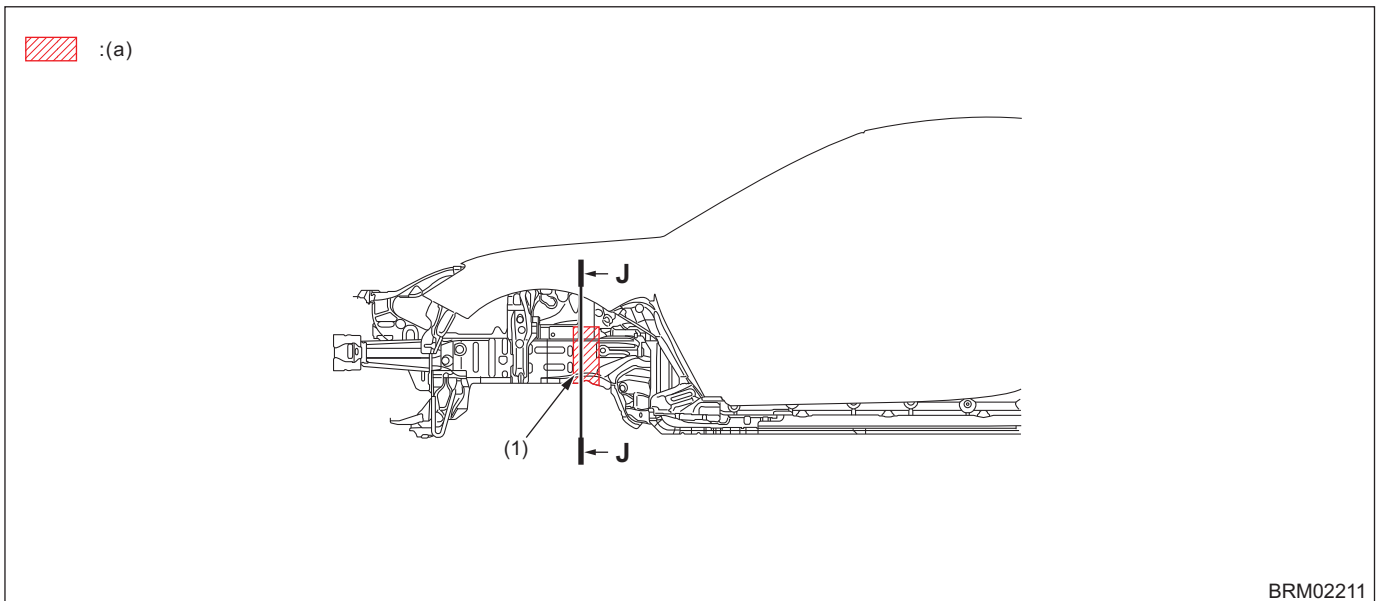


(a) Rust-stop aerosol

(b) Fill the mating surface.

(1) 10 mm [0.39 in]

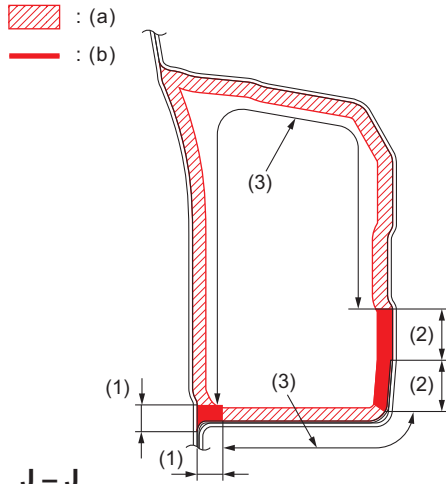
- **Overall view**



(a) Application of rust-stop aerosol. (Application thickness = 50  $\mu\text{m}$  or more)

(1) Apply wax between the separator front suspension rear and the separator FF rear.

# Anticorrosion Wax



BRM02916

(a) Application of rust-stop aerosol. (Application thickness = 50  $\mu\text{m}$  or more)

(b) Fill in the plate joint.

(1) 10 mm [0.39 in]

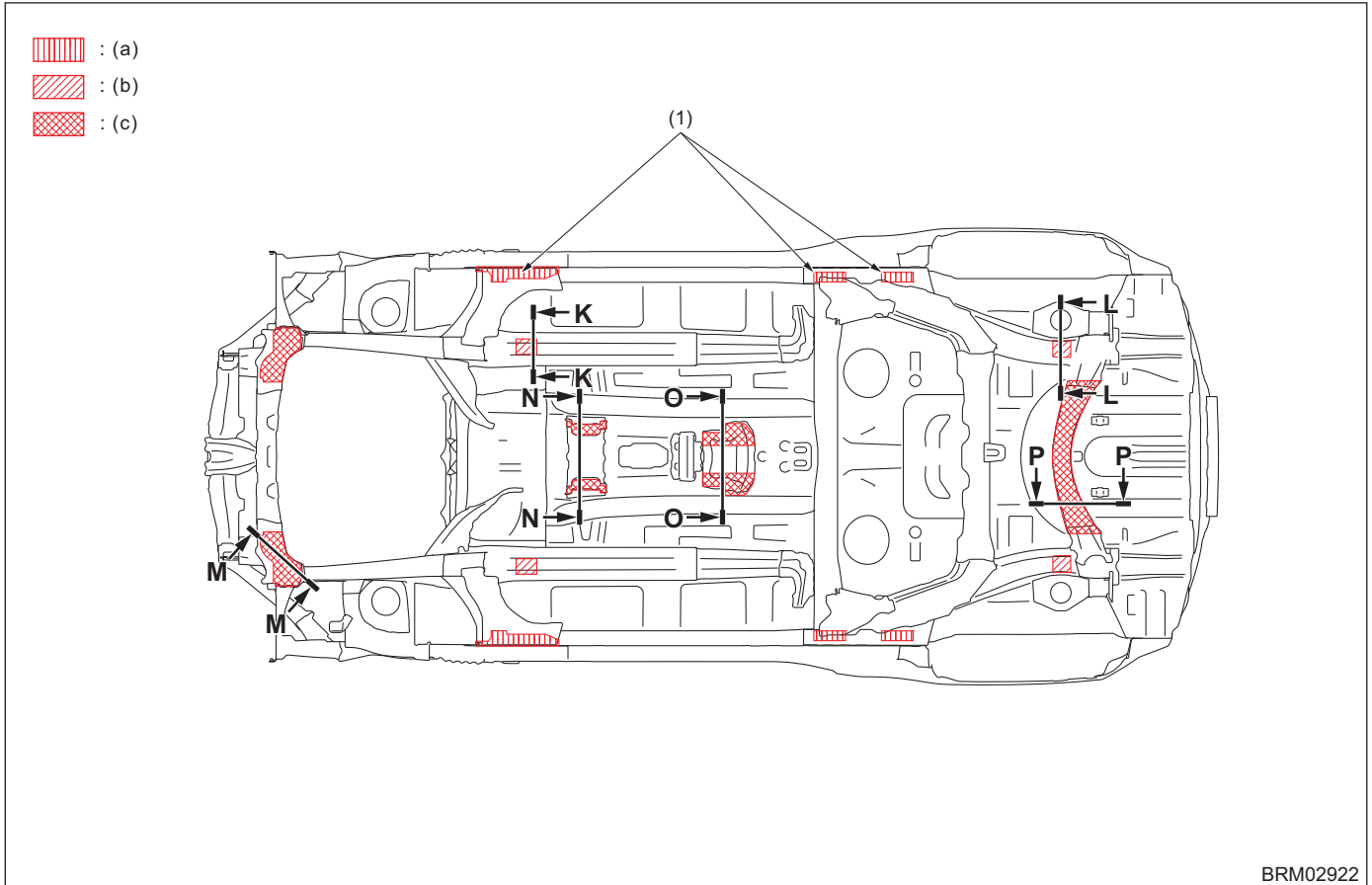
(2) 20 mm [0.79 in] (Be sure to apply aerosolized agent here.)

(3) Adherence of mist is allowable.

SUBARU.

# Anticorrosion Wax

## • Bottom view



(a) Rust-stop aerosol  
(Application thickness = 150  $\mu\text{m}$   
or more)

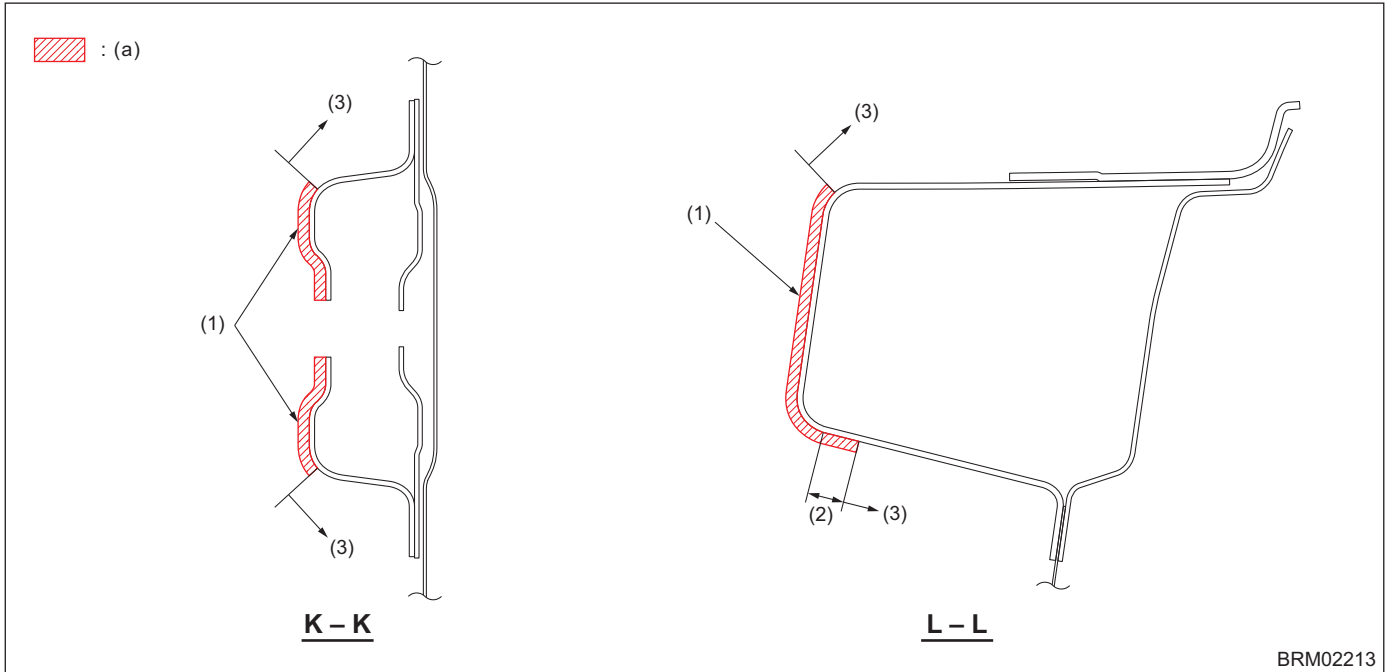
(b) Rust-stop aerosol  
(Application thickness = 50  $\mu\text{m}$  or  
more)

(c) Application of rust-stop aerosol.  
(Application thickness = 20  $\mu\text{m}$  or  
more)

(1) Securely apply wax to areas where electrocoating has not been performed or scratches are found.

# Anticorrosion Wax

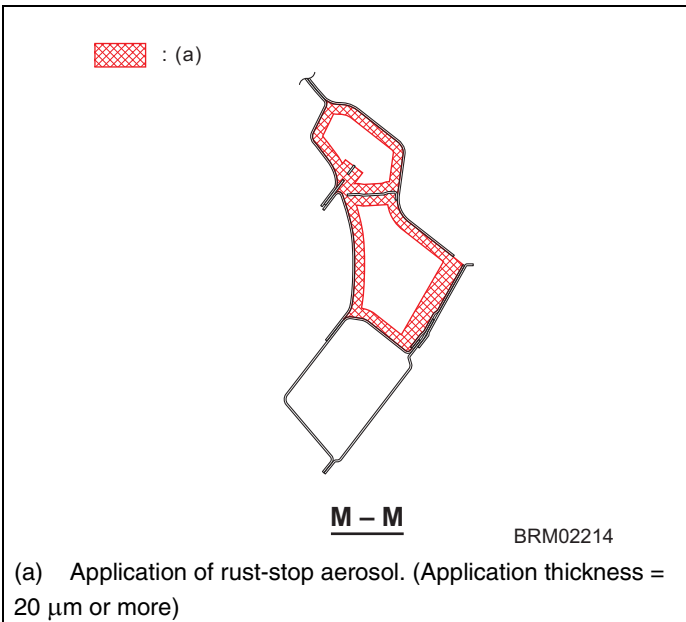
## • View / Cross section



BRM02213

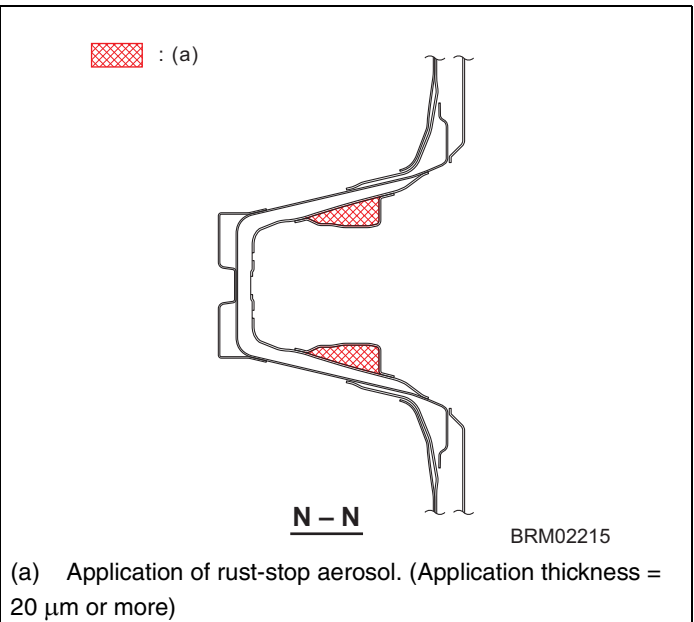
(a) Application of rust-stop aerosol.  
(Application thickness = 50  $\mu\text{m}$  or more)

- (1) Securely apply wax to areas where electrocoating has not been performed or scratches are found.
- (2) 10 mm [0.39 in]
- (3) Adherence of mist is allowable.



BRM02214

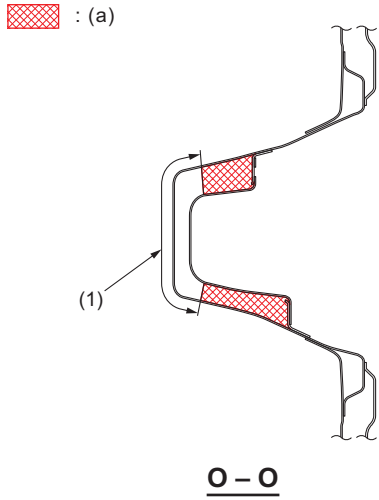
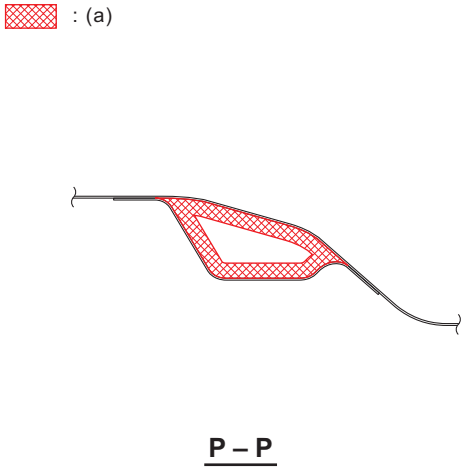
(a) Application of rust-stop aerosol. (Application thickness = 20  $\mu\text{m}$  or more)



BRM02215

(a) Application of rust-stop aerosol. (Application thickness = 20  $\mu\text{m}$  or more)

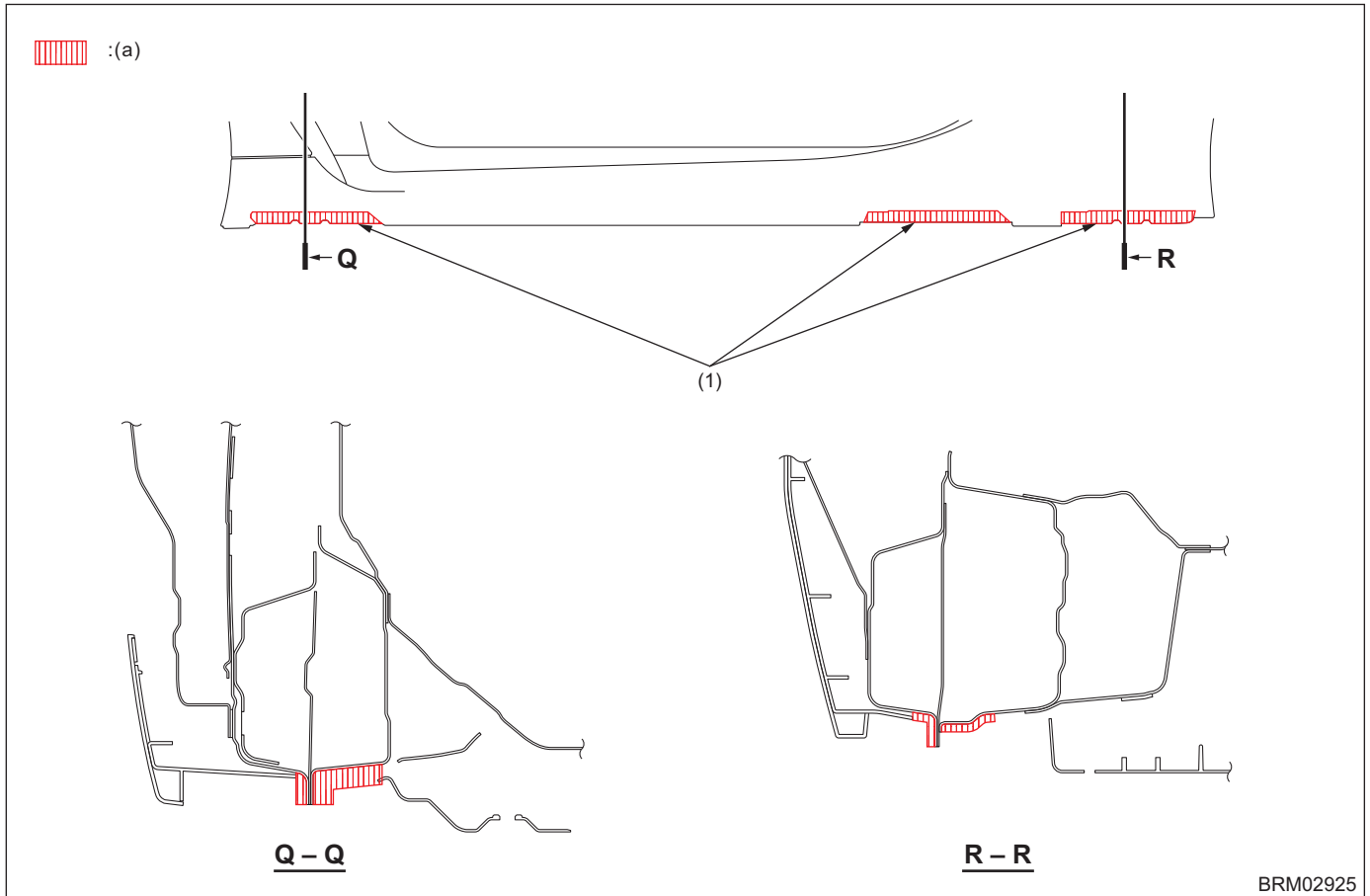
# Anticorrosion Wax

 <p>BRM02216</p> <p>(a) Application of rust-stop aerosol. (Application thickness = 20 μm or more)</p> <p>(1) Adherence of mist is allowable.</p>	 <p>BRM02217</p> <p>(a) Application of rust-stop aerosol. (Application thickness = 20 μm or more)</p>
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# Anticorrosion Wax

- **Jack-up point area** (Application thickness = 150  $\mu\text{m}$  or more)



(a) Rust-stop aerosol

(1) Apply wax to the side still flange area of the notch in the side sill spoiler.

# Undercoat

## 11.Undercoat

### A: SPECIFICATIONS





Repair material: PVC (NT guardcoat 5900FL)

#### CAUTION:

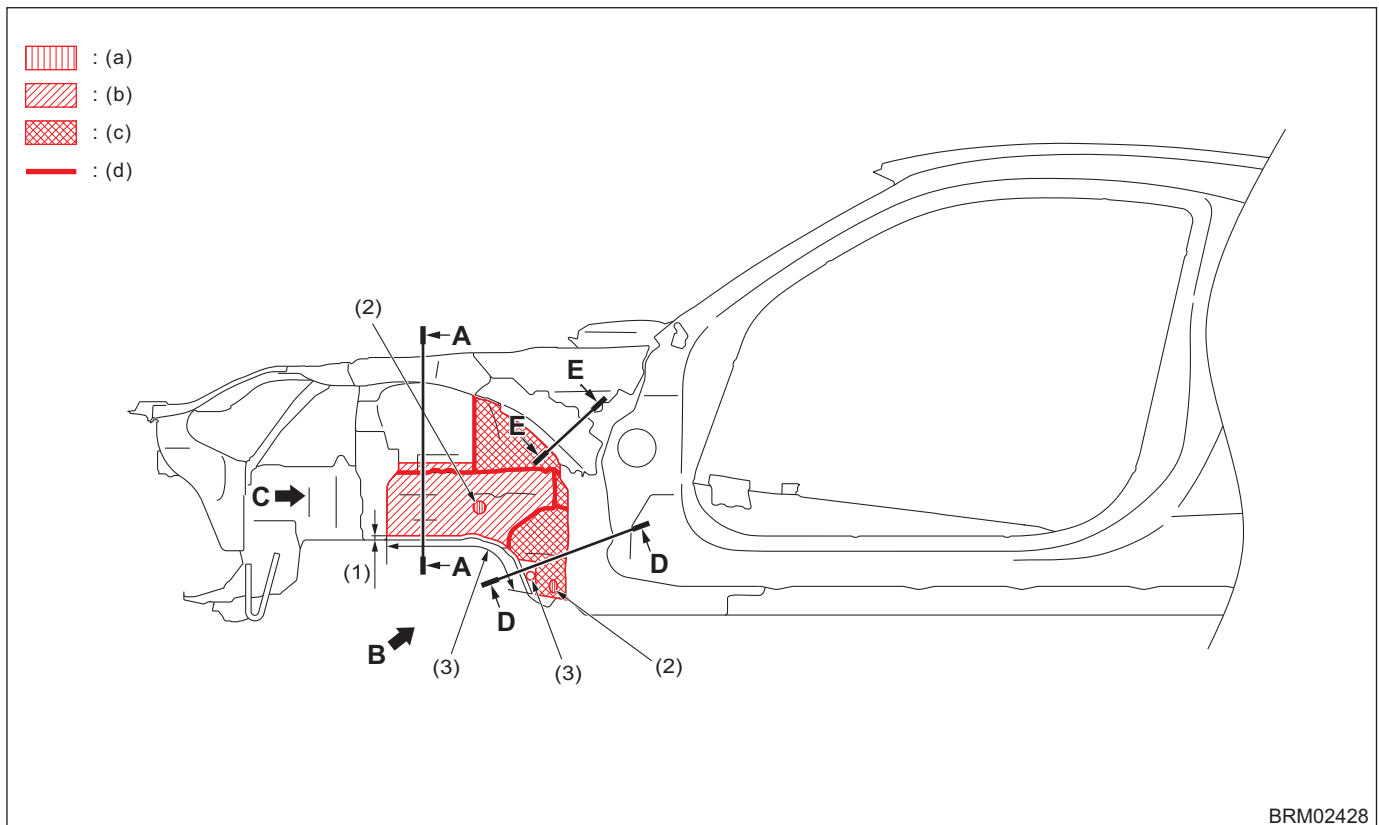
Be careful not to let the undercoating be attached to any parts not indicated below and to the following locations.

- 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 $\mu\text{m}$ or more
	300 $\mu\text{m}$ — 500 $\mu\text{m}$
	600 $\mu\text{m}$ — 800 $\mu\text{m}$
	Cover the plate edges with PVC.

#### • Side view



BRM02428

(a) 200  $\mu\text{m}$  or more  
 (b) 300  $\mu\text{m}$  — 500  $\mu\text{m}$

(c) 600  $\mu\text{m}$  — 800  $\mu\text{m}$

(d) Cover the plate edges with PVC.

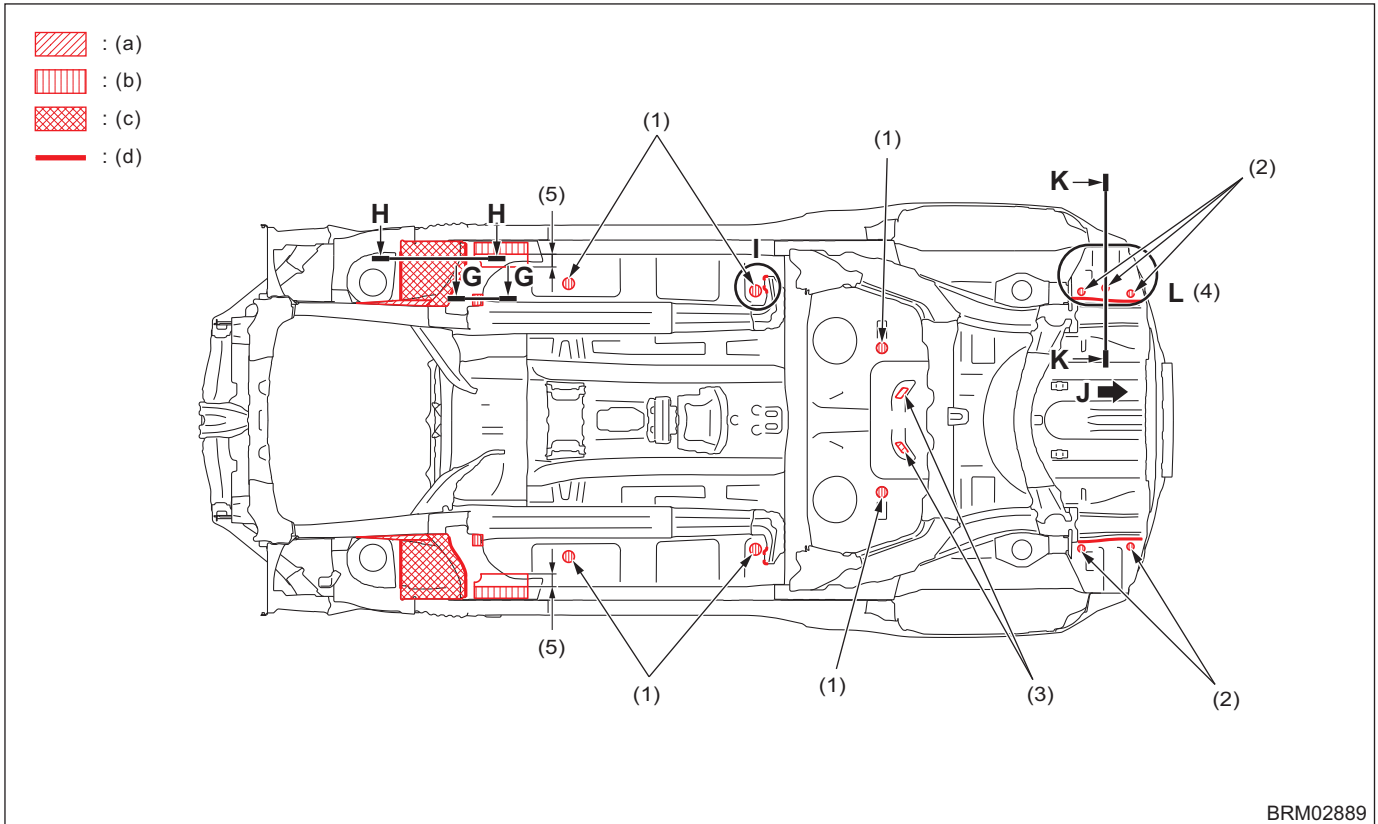
(1) 10 mm [0.39 in]

(2) Cover the grommet seat with PVC.

(3) Adherence of mist is allowable.

# Undercoat

## • Bottom view



(a) 200  $\mu\text{m}$  or more  
(b) 300  $\mu\text{m}$  — 500  $\mu\text{m}$

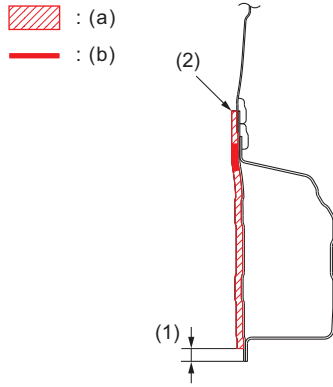
(c) 600  $\mu\text{m}$  — 800  $\mu\text{m}$

(d) Cover the plate edges with PVC.

- (1) Cover the plug with PVC.
- (2) Cover the grommet seat with PVC.
- (3) Cover the plate nut belt, plate edges and holes with PVC.
- (4) Same on the left and right.
- (5) 53 mm [2.09 in] Adherence of mist is allowable.

# Undercoat

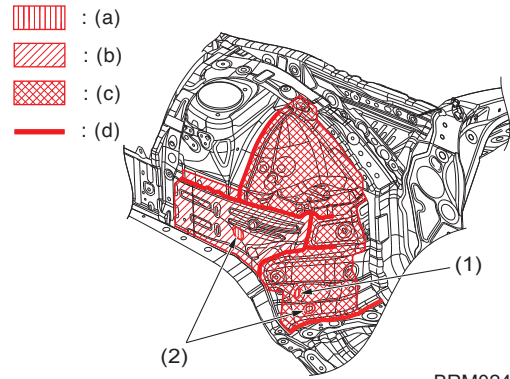
## Cross section A — A



BRM02890

- (a) 300  $\mu\text{m}$  — 500  $\mu\text{m}$
- (b) Cover the plate edges with PVC.
- (1) 10 mm [0.39 in] (Adherence of mist is allowable.)
- (2) Apply coating agent to a height that covers the BRKT F SUS LWR G.H.

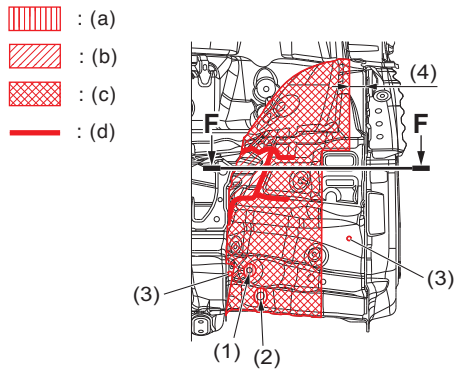
## View B



BRM02432

- (a) 200  $\mu\text{m}$  or more
- (b) 300  $\mu\text{m}$  — 500  $\mu\text{m}$
- (c) 600  $\mu\text{m}$  — 800  $\mu\text{m}$
- (d) Cover the plate edges with PVC.
- (1) Cover the plug with PVC.
- (2) Cover the grommet seat with PVC.

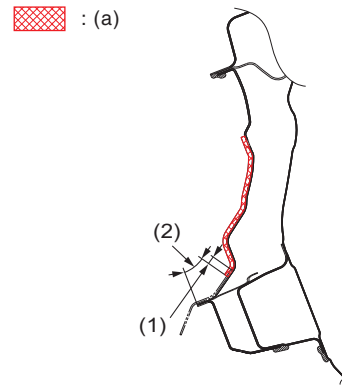
## View C



BRM02433

- (a) 200  $\mu\text{m}$  or more
- (b) 300  $\mu\text{m}$  — 500  $\mu\text{m}$
- (c) 600  $\mu\text{m}$  — 800  $\mu\text{m}$
- (d) Cover the plate edges with PVC.
- (1) Cover the plug with PVC.
- (2) Cover the grommet seat with PVC.
- (3) Adherence of mist is allowable.
- (4) 30 mm [1.18 in]

## Cross section D — D



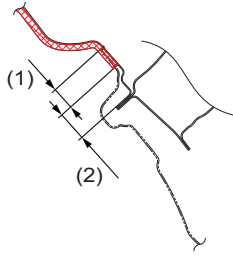
BRM02434

- (a) 600  $\mu\text{m}$  — 800  $\mu\text{m}$
- (1) 10 mm [0.39 in]
- (2) Adherence of mist is allowable.

# Undercoat

## Cross section E — E

 : (a)



BRM02435

(a) 600  $\mu\text{m}$  — 800  $\mu\text{m}$

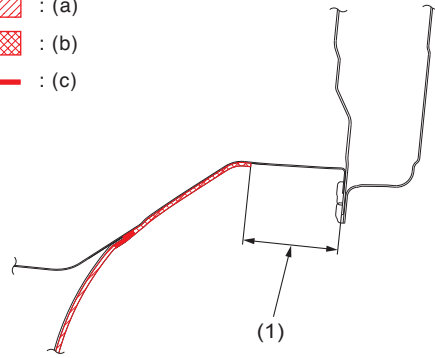
- (1) 20 mm [0.79 in] Wrap the mud guard front.
- (2) 25 mm [0.98 in] (Adherence of mist is allowable.)

## Cross section F — F

 : (a)

 : (b)

 : (c)



BRM02436

(a) 300  $\mu\text{m}$  — 500  $\mu\text{m}$

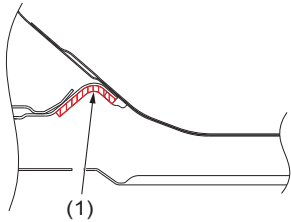
(b) 600  $\mu\text{m}$  — 800  $\mu\text{m}$

(c) Cover the plate edges with PVC.

- (1) 82 mm [3.23 in] (Adherence of mist is allowable.)

## Cross section G — G

 : (a)



BRM02437

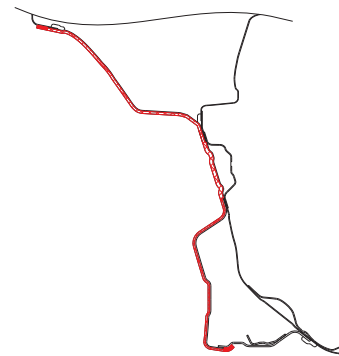
(a) 200  $\mu\text{m}$  or more

- (1) Cover the air pocket area with PVC.

## Cross section H — H

 : (a)

 : (b)



BRM02438

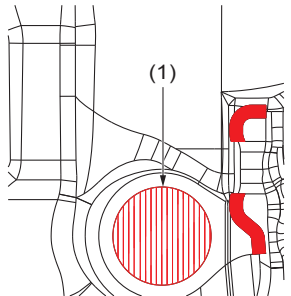
(a) 600  $\mu\text{m}$  — 800  $\mu\text{m}$

(b) Cover the plate edges with PVC.

## I Enlarged view

 : (a)

 : (b)



BRM02439

(a) 200  $\mu\text{m}$  or more

(b) Cover the plate edges with PVC.

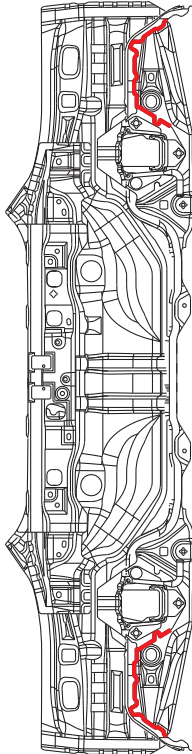
- (1) Cover the plug with PVC.

SUBARU.

# Undercoat

**View J**

— : (a)



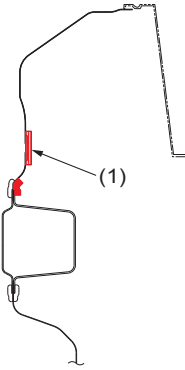
BRM02441

(a) Cover the plate edges with PVC.

**Cross section K — K**

▨ : (a)

— : (b)



BRM02442

(a) 200 μm or more

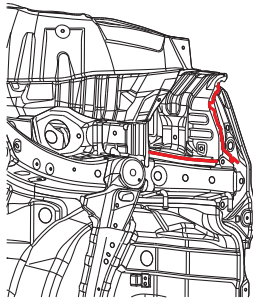
(b) Cover the plate edges with PVC.

(1) Cover the grommet seat with PVC.

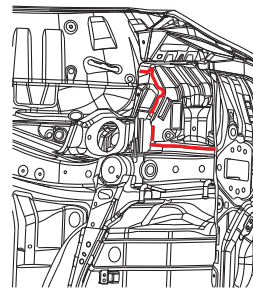
**L Enlarged view**

— : (a)

(1)



(2)



BRM02443

(a) Cover the plate edges with PVC.

(1) Front view

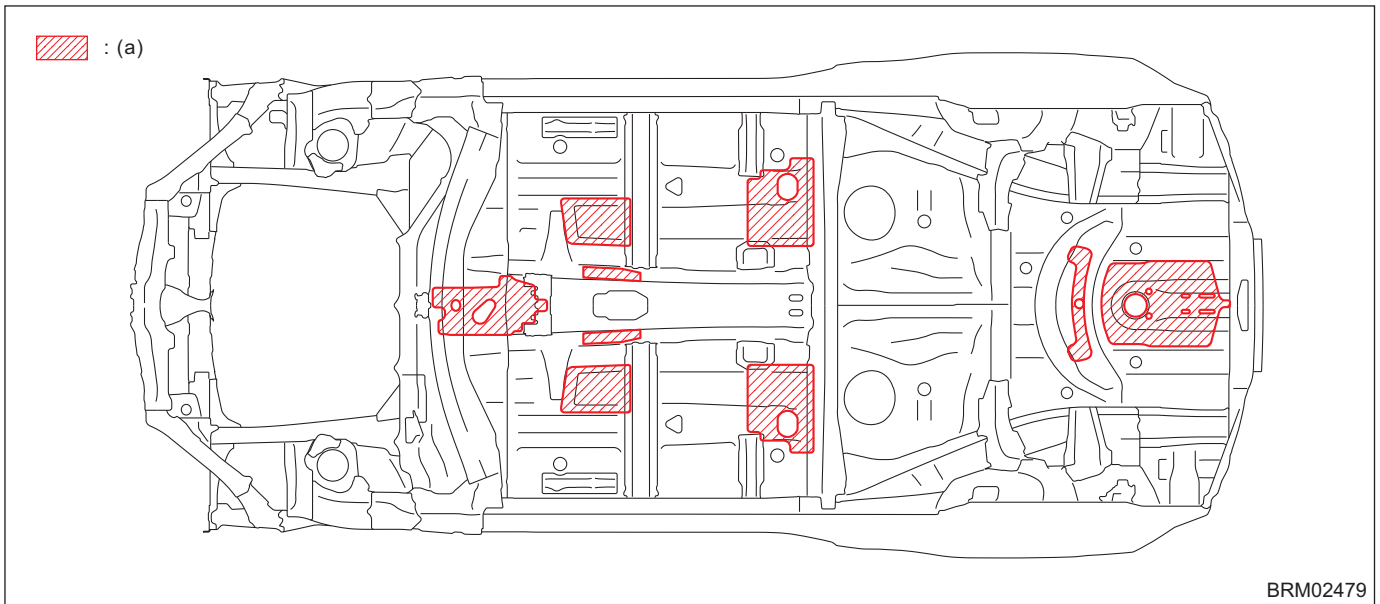
(2) Rear view

# Damping Seat

## 12.Damping Seat

### A: SPECIFICATIONS

#### • Upper view



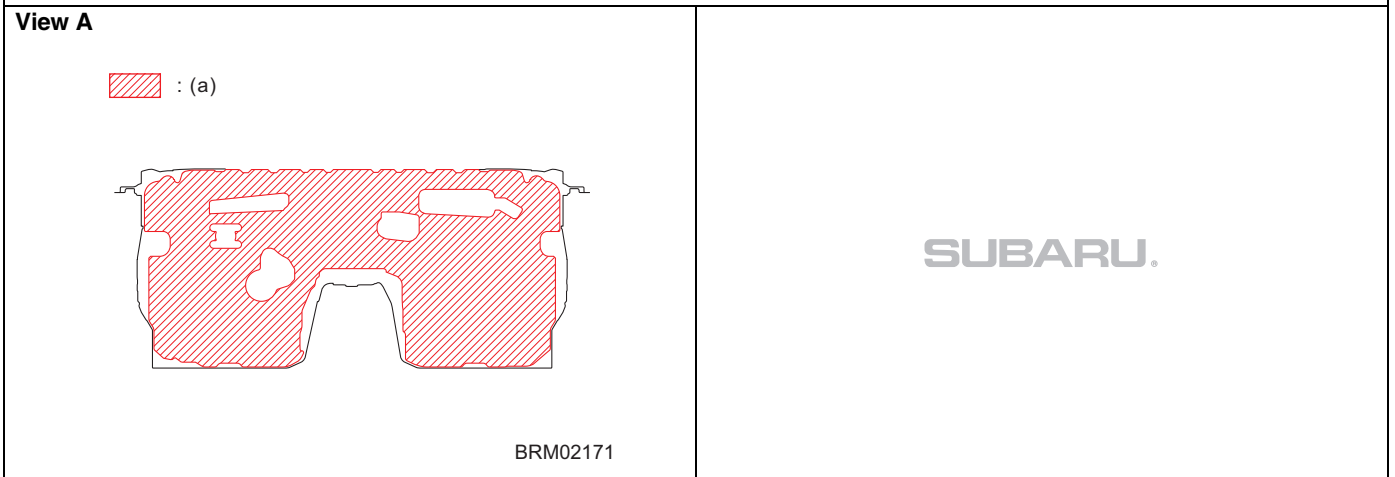
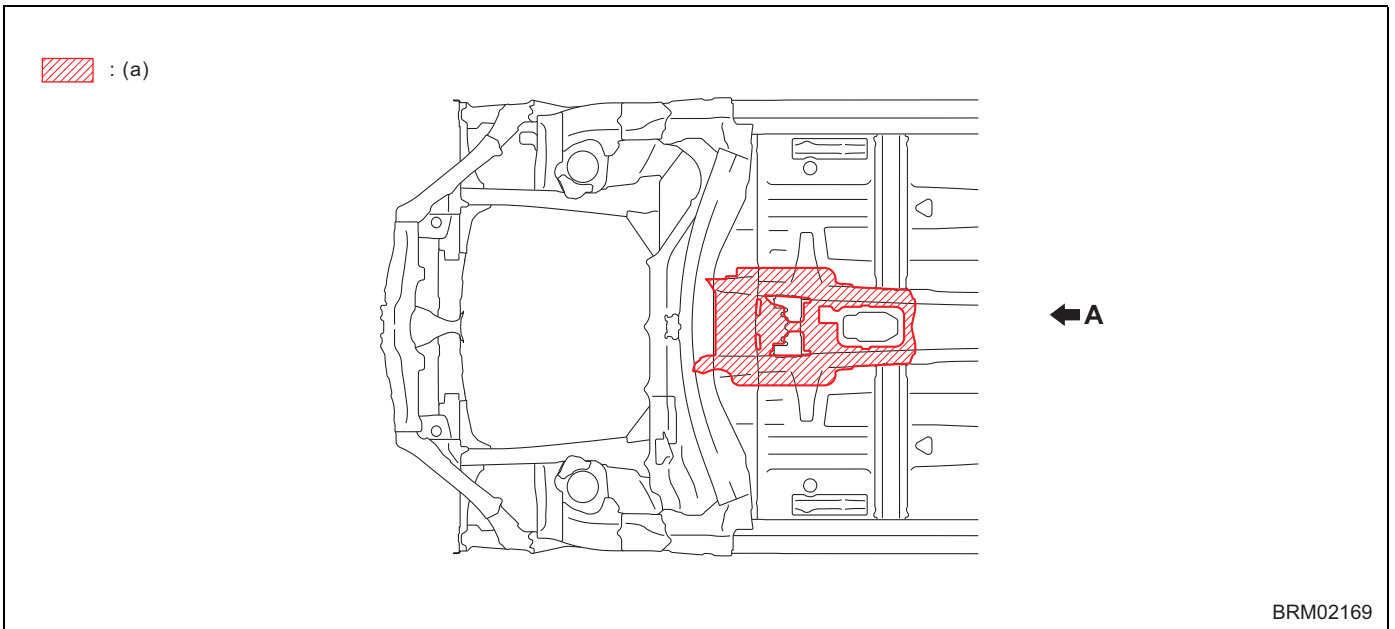
(a) Silencer

# Insulator

## 13. Insulator

### A: SPECIFICATIONS

#### 1. Upper view

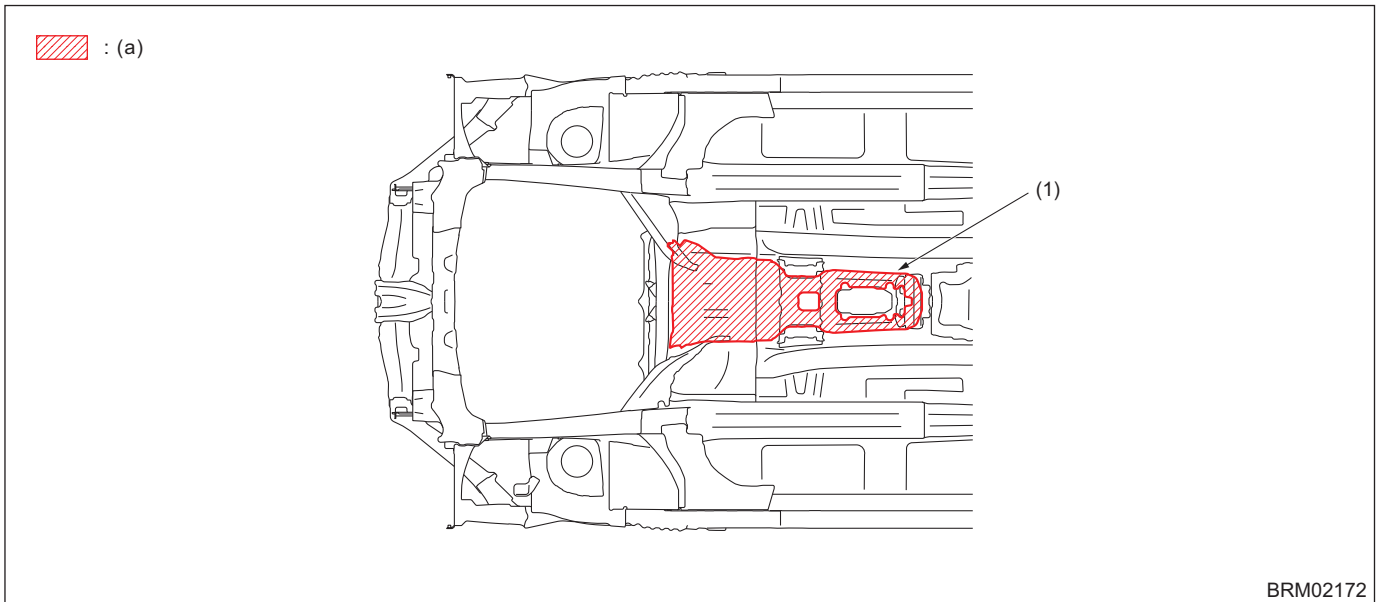


(a) Insulator



# Insulator

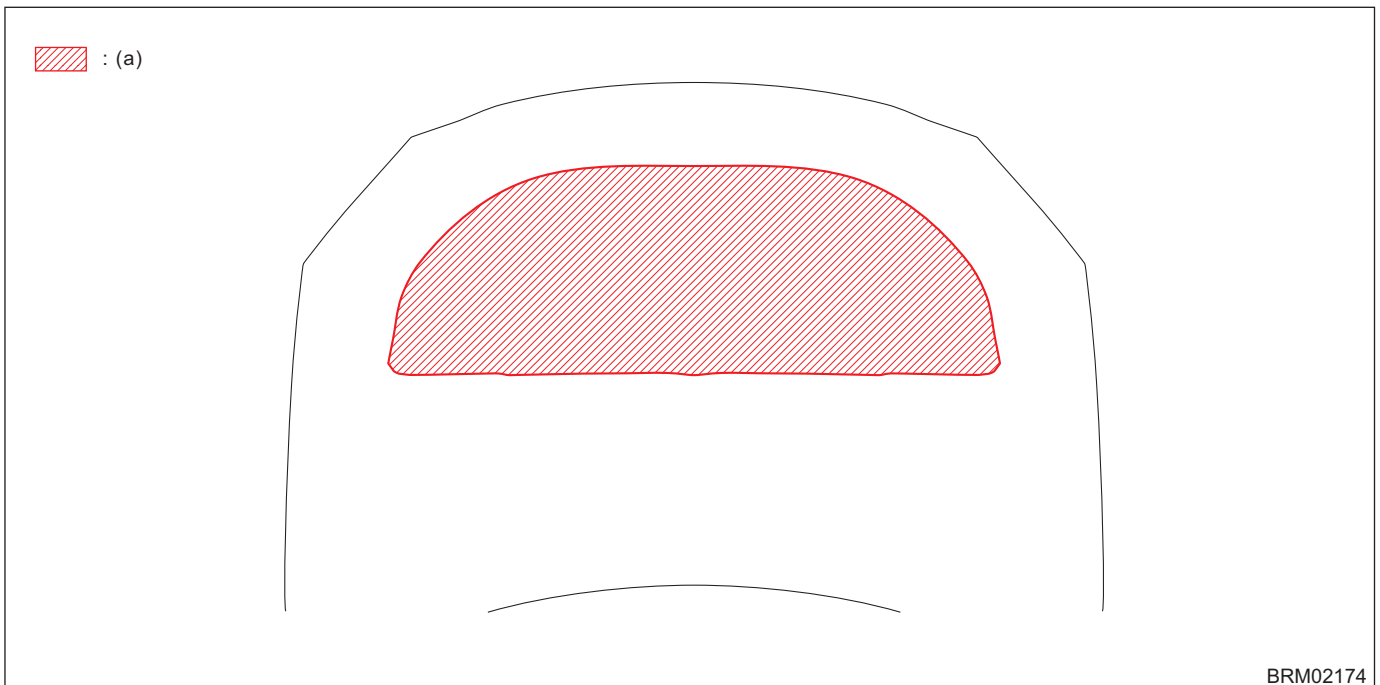
## 2. Bottom view



(a) Insulator

(1) Only MT model

## 3. Front hood



(a) Insulator

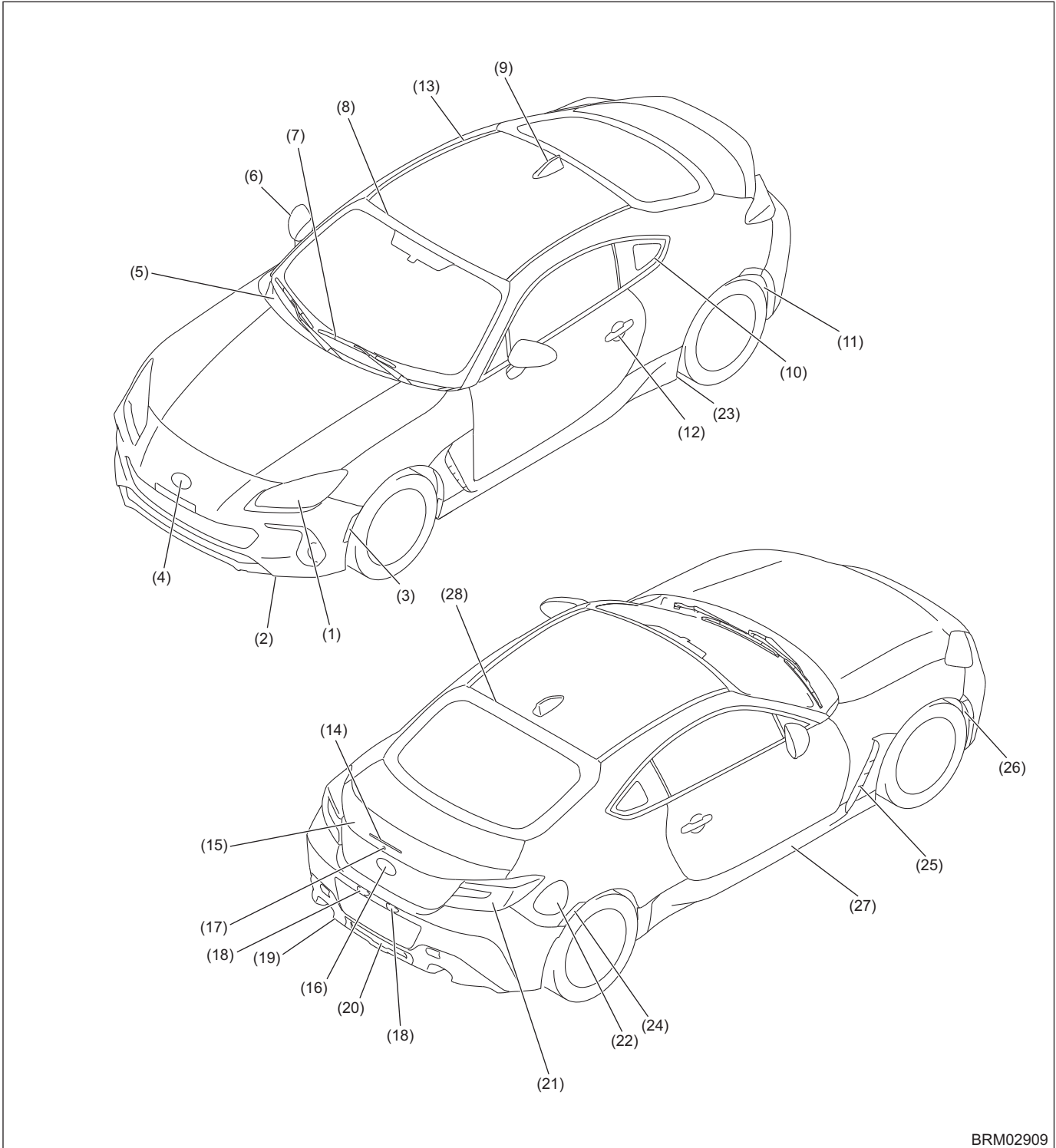
# 14. Plastic Parts and Materials

## A: SPECIFICATIONS

NOTE:

The following illustration is a typical example.

The shape and material may vary with some models.



BRM02909

## Plastic Parts and Materials

(1) Headlight	(11) Rear mudguard	(21) Rear combination light
(2) Front bumper	(12) Door handle	(22) Fuel flap
(3) Side marker light	(13) Roof molding	(23) Plate air flap rear
(4) Ornament front	(14) High mount stop light	(24) Rear quarter garnish
(5) Cowl panel	(15) Trunk garnish	(25) Fender garnish
(6) Door mirror	(16) Ornament rear	(26) Front mudguard
(7) Front wiper	(17) Request switch	(27) Side spoiler
(8) Front window molding	(18) License light	(28) Rear window molding
(9) Antenna	(19) Rear bumper	
(10) Rear quarter molding	(20) Backup lamp	

No	Part name	Material	
(1)	Headlight	Outer lens	PC
		Housing	PP-TD30
		Extension A	PBT
		Extension B	PBT
		Extension C	PBT
		Inner lens A	PMMA
		Inner lens B	PMMA
		Inner lens C	PMMA
		Inner lens D	PMMA
		Reflector A	PC-MD10
		Reflector B	PC-MD10
		Reflector C	PC
		Cover	PC
		Bracket	PAMXD6-GF50
Shaft	PAMXD6-GF30		
Joint	PAMXD6-GF30		
(2)	Front bumper	Face	PP
		Side bracket	POM
		Corner bracket	PP-GF30
		Center bracket lower	PP
		EA form	PP
		Hook cover	PP
		Bumper cover lower	PP
		Sealing bumper	PP+EPDM
		Duct cover	PP
		Intake cover	PP
		Duct	PP
		Bumper duct side	PP
		EA lower	PP
(3)	Side marker light	Housing	ASA
		Lens	PMMA
(4)	Ornament front	Base	AES
		Ornament	PMMA
(5)	Cowl panel	Cowl panel	PP-TD10
		Cowl panel lower	PP-TD10
		Cowl panel bracket	PP-TD10

## Plastic Parts and Materials

No	Part name		Material	
(6)	Door mirror	Body	ASA	
		Cover base upper	ASA	
		Cover outer	ASA	
		Cover body	ASA	
		Gasket	PVC	
		Hook	PP	
		Indicator light	Housing	ASA
			Outer lens	PMMA
			Inner lens	PMMA
		Cover	ABS	
Cover base lower	ASA			
(7)	Front wiper	Wiper	Cushion wiper	EPDM
		Arm	Arm side blade joint area	PBT
			Blade joint area	PET
(8)	Front window molding	Molding	PVC	
(9)	Antenna		PC+ASA	
(10)	Rear quarter molding	Molding	PVC	
(11)	Rear mudguard	Body	PE	
(12)	Door handle	Frame handle outer	PA6-GF30	
		Handle outer	PC+PBT-MD10	
		Cover handle outer	PC+PBT-MD10	
		Spacer handle outer	PP	
(13)	Roof molding	Molding	PVC	
		Clip	POM	
		E-cap, front	PVC	
		E-cap, rear	PVC	
(14)	High mount stop light	Lens	PMMA	
		Housing	ABS	
(15)	Trunk garnish	Garnish outer	PC+PET	
		Garnish inner center	PC+PET	
		Garnish inner side	PC+PET	
		Garnish reinforcement	PC+PET	
		Garnish bracket	PC+PET	
		Garnish molding	PC+PET	
(16)	Ornament rear	Base	AES	
		Ornament rear	PMMA	
(17)	Request switch	Body	PP-F35	
		Button	TPE	
(18)	License light	Lens	PMMA	
		Housing	PC	
(19)	Rear bumper	Face	PP	
		Bracket corner rear	PP-GF30	
		Bracket side rear	POM	
		Bracket lower rear	PP-GF30	
		Cover side lower	PP	
		Cover hook rear	PP	
		Holder sonar rear center	PP	
		Holder sonar rear	PP	
		Holder harness rear	PP	
		Cover fog rear	PP	
		Protector bumper	EE1010	

## Plastic Parts and Materials

No	Part name	Material
(20)	Lens	PC
	Housing	PET+PBT
	Inner lens	PC
(21)	Outer lens	PMMA
	Inner panel	PC
	Inner lens A	PMMA
	Inner lens B	PC
	Inner lens C	PMMA
	Inner lens D	PMMA
	Inner lens F	PMMA
	Inner lens G	PMMA
	Inner lens H	PMMA
	Base	PC
	Bracket	PC
	Housing	ASA
	Cover A	ASA
	Cover B	ASA
	Inner housing A	PC
	Inner housing B	PC
End rubber	EPDM	
(22)	Fuel flap	PPE+PA
(23)	Plate air flap rear	PP+EPDM
(24)	Rear quarter garnish	PP
(25)	Outer	PC+ABS
	Inner A	PC+ASA
	Inner B	PC+ASA
	Inner C	PC+ASA
(26)	Mudguard	PE
	Plate air flap	PP+EPDM
(27)	Side outer	PP
	Inner front	PP
	Inner rear	PP
(28)	Rear window molding	PVC
	Under cover rear	PP+GF45
	Under cover rear front	PP
	Under cover front side RH	PP
	Under cover front side	PP
	Under cover front side rear	PP
	Splash board	TPO

## List of Plastic Material Notations

### 15. 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	PMMA	Polymethyl methacrylate
ASA	Acrylonitrile/Styrene/Acrylate	POM	Polyacetal
EPDM	Ethylene/Propylene/Diene rubber	PP	Polypropylene
EE1010	Ethylene/Propylene/Diene rubber	PP-F35	Polypropylene (35 % inorganic filler)
PA	Polyamide (Nylon)	PP-GF30	Polypropylene (30 % glass fiber)
PA6-GF30	Polyamide (Nylon) (30 % glass fiber)	PP-GF45	Polypropylene (45 % glass fiber)
PAMXD6-GF30	Polyamide (Nylon) (30 % glass fiber) MXD6	PP-TD10	Polypropylene (10 % talc)
PAMXD6-GF50	Polyamide (Nylon) (50 % glass fiber) MXD6	PP-TD30	Polypropylene (30 % talc)
PBT	Polybutylene terephthalate	PPE	Polyphenylene ether
PBT-MD10	Polybutylene terephthalate (10 % mineral powder)	PVC	Polyvinyl chloride
PC	Polycarbonate	TPE	Thermoplastic elastomer
PC-MD10	Polypropylene (10 % mineral powder)	TPO	Thermopolyolefin
PE	Polyethylene		