

BODY REPAIR MANUAL

BS

	Page
1. Foreword	3
2. Assembly of Exterior Parts	12
3. Panel Components	15
4. Galvanized Sheet Metal	26
5. Body Construction	27
6. Body Reference Points	31
7. Measurement for Combined Parts	48
8. Panel Replacement	50
8-1. Radiator Panel (Total replacement)	50
8-2. Radiator Core Support (Total replacement)	60
8-3. Side Upper Frame (Total replacement)	68
8-4. Front Wheel Apron (Total replacement)	78
8-5. Toe Board Reinforcement (Total replacement)	88
8-6. Closing Plate LH (Partial replacement)	98
8-7. Closing Plate RH (Partial replacement)	102
8-8. Front Side Frame (Partial replacement)	106
8-9. Front Side Frame (Total replacement)	112
8-10. Front Pillar Outer (Partial replacement)	118
8-11. Front Pillar Reinforcement (Total replacement)	133
8-12. Front Pillar Reinforcement (Partial replacement)	141
8-13. Center Pillar Outer Panel (Partial replacement)	149
8-14. Center Pillar Reinforcement Outer (Total replacement)	151
8-15. Center Pillar Inner (Total replacement)	157
8-16. Side Sill Outer Panel (Partial replacement)	161
8-17. Side Sill Reinforcement Outer Rear (Total replacement)	167
8-18. Side Sill Reinforcement Outer (Total replacement)	173
8-19. Rear Quarter Panel (Partial replacement)	181
8-20. Rear Pillar Reinforcement Outer (Total replacement)	190
8-21. Arch Rear Inner LH (Total replacement)	192
8-22. Arch Rear Inner RH (Total replacement)	196
8-23. Rear Quarter Inner LH (Partial replacement)	200
8-24. Rear Quarter Inner RH (Partial replacement)	208
8-25. D Pillar Extension (Partial replacement)	218
8-26. Rear Quarter End Panel (Total replacement)	220
8-27. D Pillar Reinforcement LH (Partial replacement)	222
8-28. D Pillar Reinforcement RH (Partial replacement)	226
8-29. Rear Skirt (Total replacement)	230
8-30. Rear Side Frame Upper Rear (Total replacement)	234
8-31. Rear Floor Pan (Partial replacement)	238
8-32. Rear Floor Side (Total replacement)	242
8-33. Rear Side Frame Lower Rear (Total replacement)	246
8-34. Side sill inner Rear (Total replacement)	250
8-35. Rear Side Frame Upper (Total replacement)	258

8-36.	Rear Side Frame (Total replacement).....	262
8-37.	Roof panel (Total replacement)	272
9.	Body Sealing.....	280
10.	Anticorrosion Wax	283
11.	Undercoat	289
12.	Damping Seat	292
13.	Insulator	295
14.	Plastic Parts and Materials	297
15.	List of Plastic Material Notations.....	301

Foreword

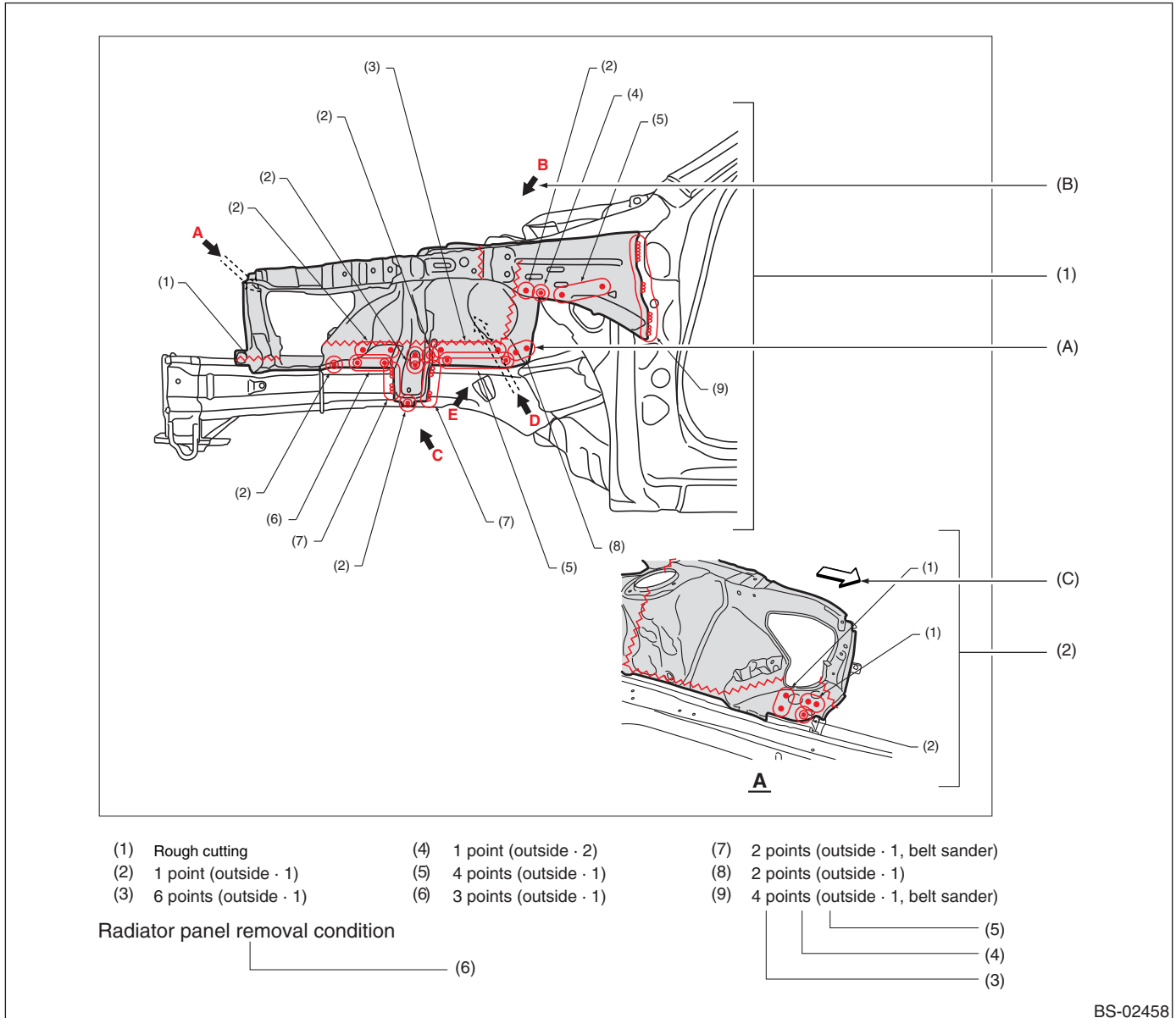
1. Foreword

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).

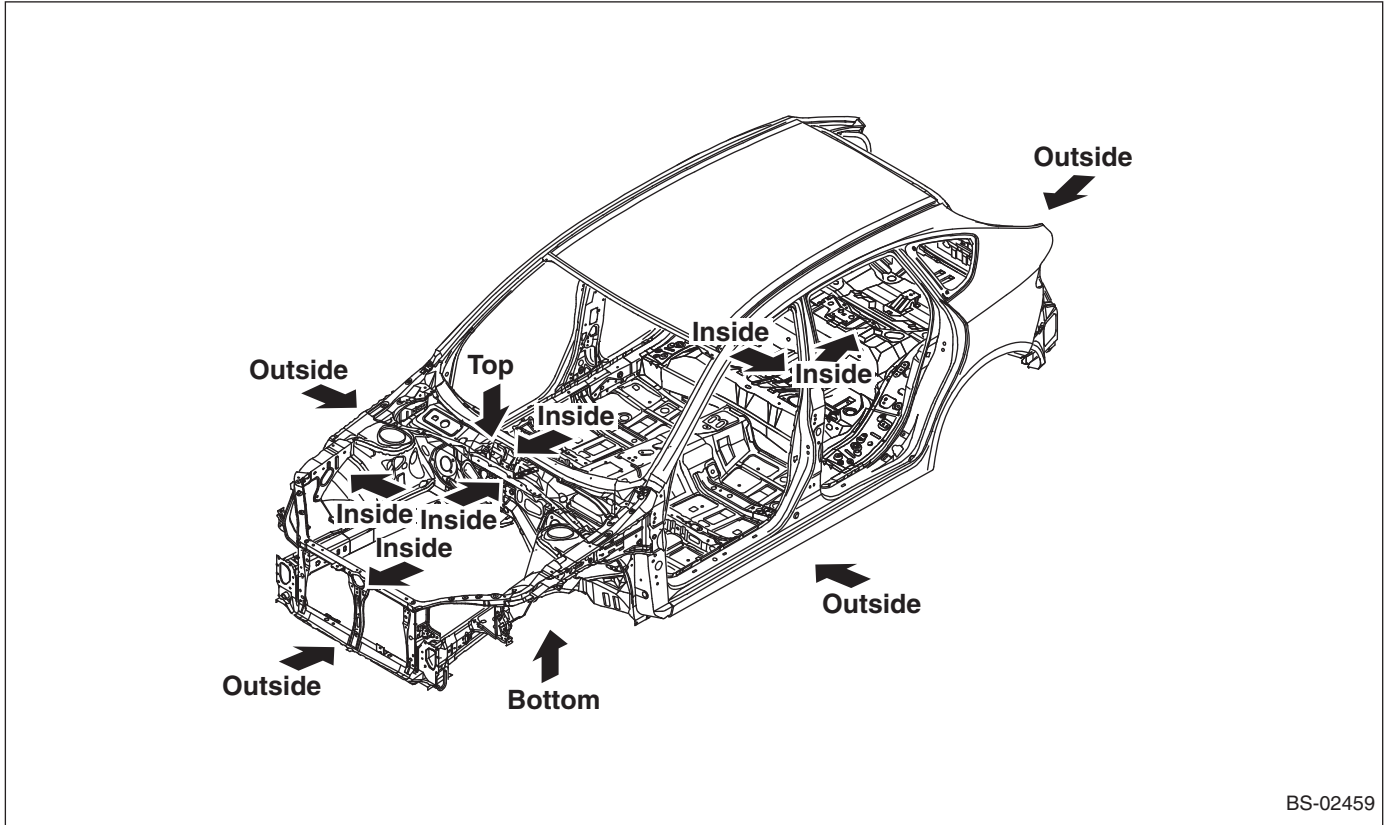


- | | |
|------------------------------------|--|
| (1) Overall view | (A) Welding method |
| (2) View | (B) View direction |
| (3) Number of welding points etc. | (C) Direction towards the front of the vehicle |
| (4) Removal direction | |
| (5) Number of plates to be drilled | |
| (6) Cautions for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

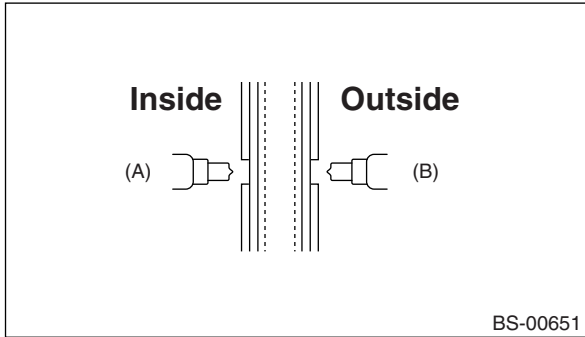


Foreword

3. NUMBER OF PANELS TO BE DRILLED

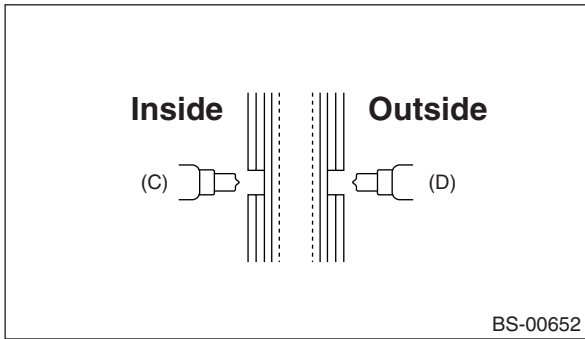
Depending on the number of panels, drilling is done through one panel or two panels, and this number is listed together with the removal direction.

(1) Drilling through one plate



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

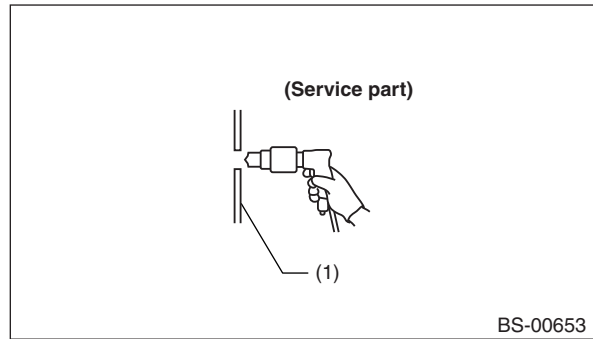
(2) Drilling through two plates



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

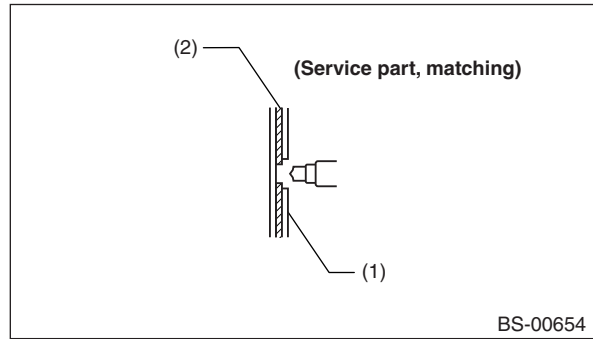
4. HOLE DRILLING FOR PLUG WELDING

(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


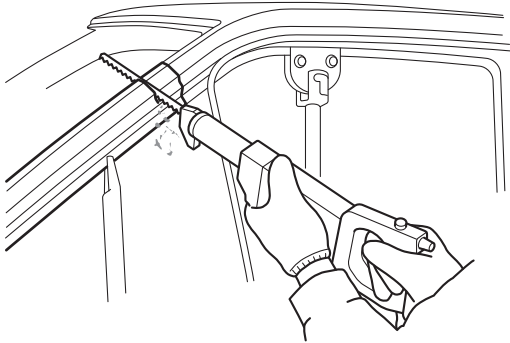


- (1) Vehicle side
- (2) Service part


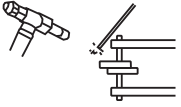
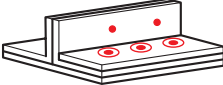
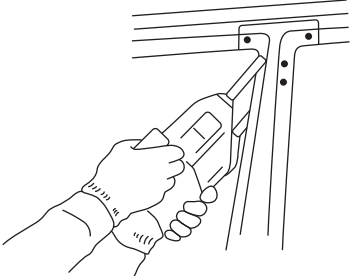


Foreword

5. MEANING OF SYMBOLS



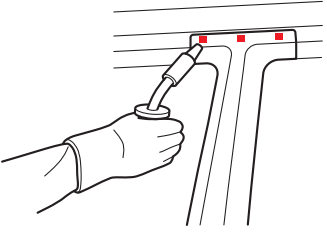


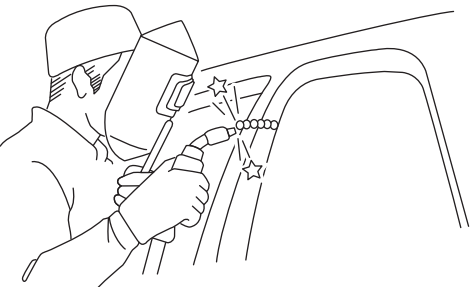
• Cutting

 <p style="text-align: right;">BS-00352</p>	 <p style="text-align: right;">BS-00267</p>
--	---

• Spot welding

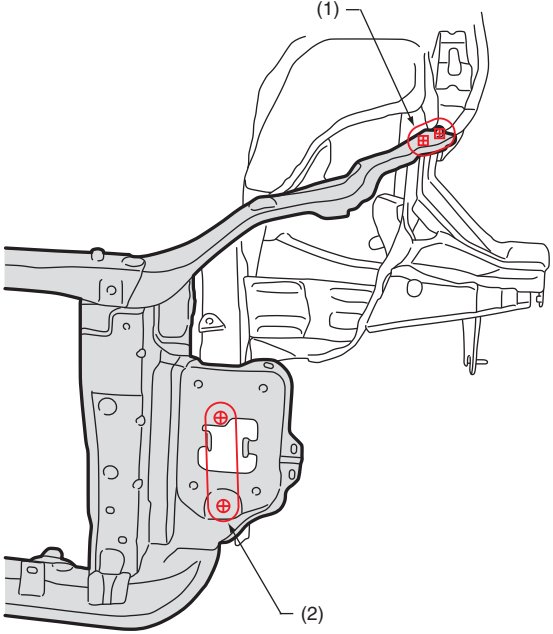
<p>Two over-lapping parts</p>	 <p style="text-align: center;">BS-00655</p>	 <p style="text-align: center;">BS-00656</p>	 <p style="text-align: center;">BS-00657</p>	 <p style="text-align: right;">BS-00658</p>
<p>Three or more over-lapping parts</p>	 <p style="text-align: center;">BS-00659</p>	 <p style="text-align: center;">BS-00660</p>		

• Carbon dioxide gas arc welding (MIG welding)

<p>Plug welding</p>	 <p style="text-align: center;">BS-00661</p>	 <p style="text-align: center;">BS-00662</p>	 <p style="text-align: right;">BS-00663</p>
<p>Continuous welding</p>	 <p style="text-align: center;">BS-00664</p>	 <p style="text-align: center;">BS-00665</p>	 <p style="text-align: right;">BS-00666</p>

Foreword

- Bolt, nut tightening portion

Bolt	☒ BS-04481	 <p>(1) Bolt (2) Nut</p> BS-04483
Nut	⊕ BS-04482	

B: CAUTION

Since there is a possibility that the required strength will not be obtained, an inverter welder must be used for spot-welding at locations where high-strength steel is used.

Foreword

C: NOTE

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

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 more hardness (e.g., C-20VR made by Cyuotokenzai).

It is recommended to perform the weldings using 980 MPa class and 1,500 MPa class high-strength steel under the following conditions.

- It is recommended to perform spot welding according to board thickness and number of overlapping sheets under the following conditions ([a] — [h]).
- When conditions can be met, it is recommended to use the plug welding method [y] — A or [y] — B as described below.

Spot welding	[a]	Compression	5.0 kN	Total number of 2 overlapping sheets	
		Current	7.5 kA		
		Welding time	18 cyc		
	[b]	Compression	2.6 kN		
		Current	6.0 kA		
		Welding time	17 cyc		
	[c]	Compression	4.4 kN		
		Current	7.5 kA		
		Welding time	16 cyc		
	[d]	Compression	4.0 kN		
		Current	8.0 kA		
		Welding time	14 cyc		
	[m]	Compression	3.5 kN		
		Current	7.5 kA		
		Welding time	25 cyc		
[f]	Compression	3.5 kN	Total number of 3 overlapping sheets		
	Current	8.0 kA			
	Welding time	25 cyc			
[g]	Compression	4.0 kN			
	Current	6.5 kA			
	Welding time	25 cyc			
[h]	Compression	4.0 kN			
	Current	8.5 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	CO2	
	B	Plug diameter	8.5 mm (0.33 in) or more		
		Wire	YGW16		
		Gas	Gas mixture (argon: 80 %, CO2: 20 %)		

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.
- 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.

Foreword

2. 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)	φ5.0 mm (0.20 in) or more
1.0 — 1.6 mm (0.04 — 0.06 in)	φ6.5 mm (0.26 in) or more
1.7 — 2.3 mm (0.07 — 0.09 in)	φ8.0 mm (0.31 in) or more
2.4 mm (0.09 in) or more	φ10.0 mm (0.39 in) or more

3. Repair work using foam

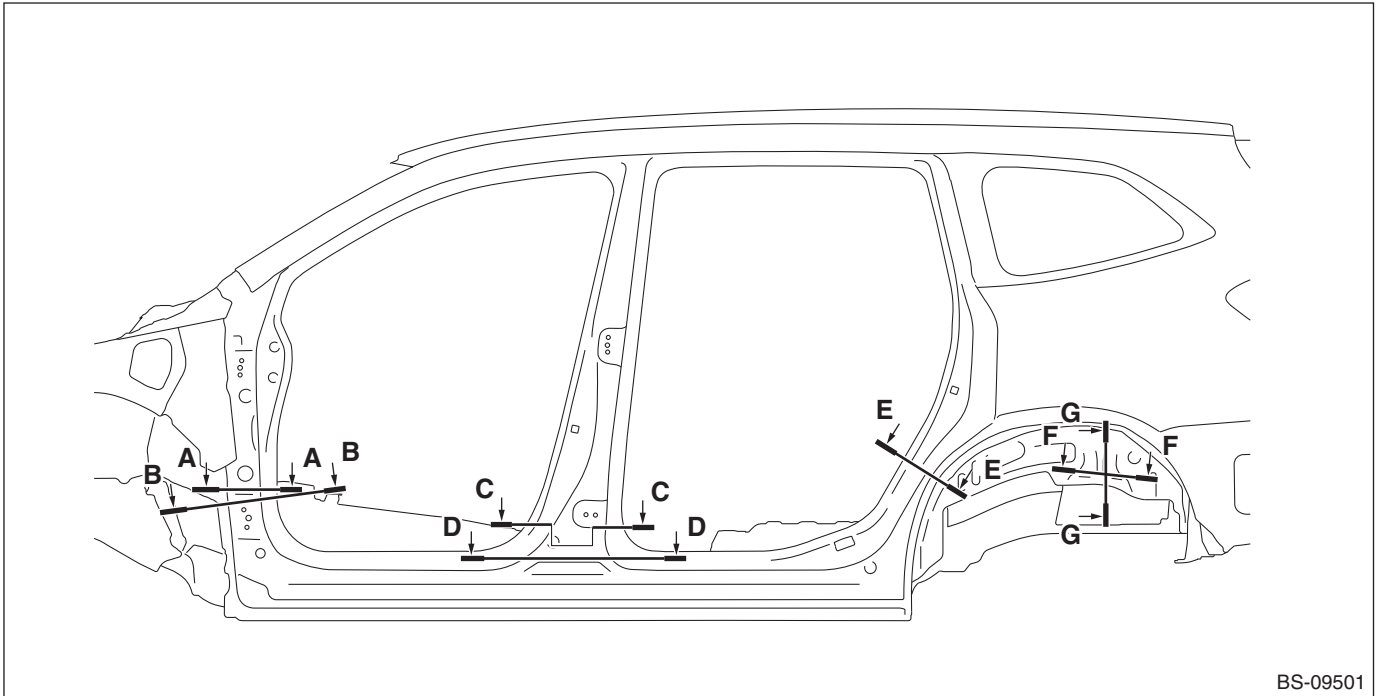
CAUTION:

- Do not perform welding or other work involving high temperatures.
- Do not use an open flame at the time of disassembly.
- Remove residual foam before injecting the new material.
- After completion of work, confirm that there is no danger of igniting the material.
- Spray cans that have been used once cannot be used again.
- Use a narrow nozzle.

Recommended materials: Equivalent to High Span Foam made by Cemedine

For a clip plate, reuse the plate and inject cold-setting foam.

- **Foam injection locations**

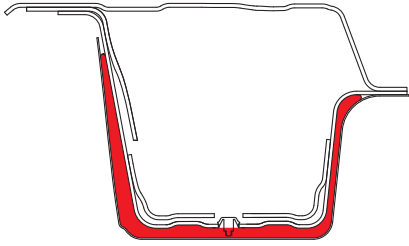


BS-09501

Foreword

Cross section A — A

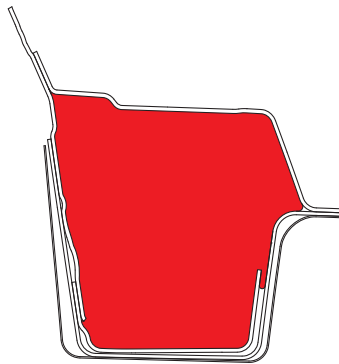
 : (a)



(a) Urethane foam injection locations

Cross section B — B

 : (a)

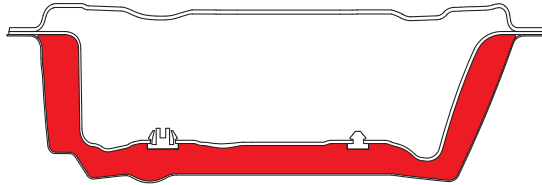


BS-09503

(a) Urethane foam injection locations

Cross section C — C

 : (a)

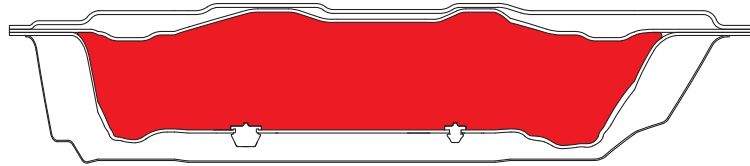


BS-09504

(a) Urethane foam injection locations

Cross section D — D

 : (a)



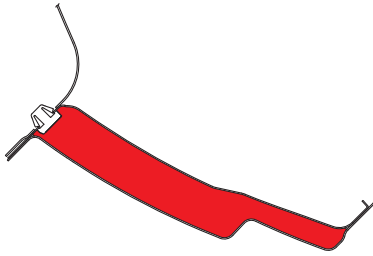
BS-09505

(a) Urethane foam injection locations

Foreword

Cross section E — E

 : (a)

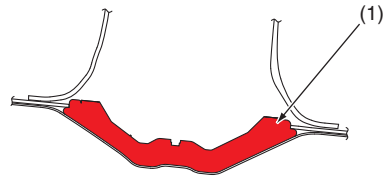


BS-09506

(a) Urethane foam injection locations

Cross section F — F

 : (a)



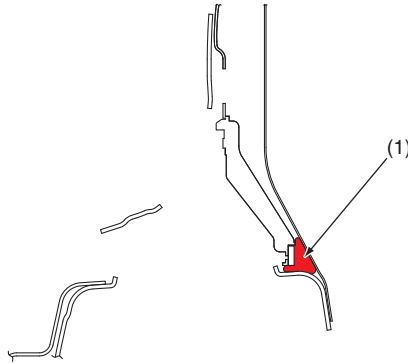
BS-09507

(a) Urethane foam injection locations

(1) Cut the foam to the shape of the body.

Cross section G — G

 : (a)



BS-09508

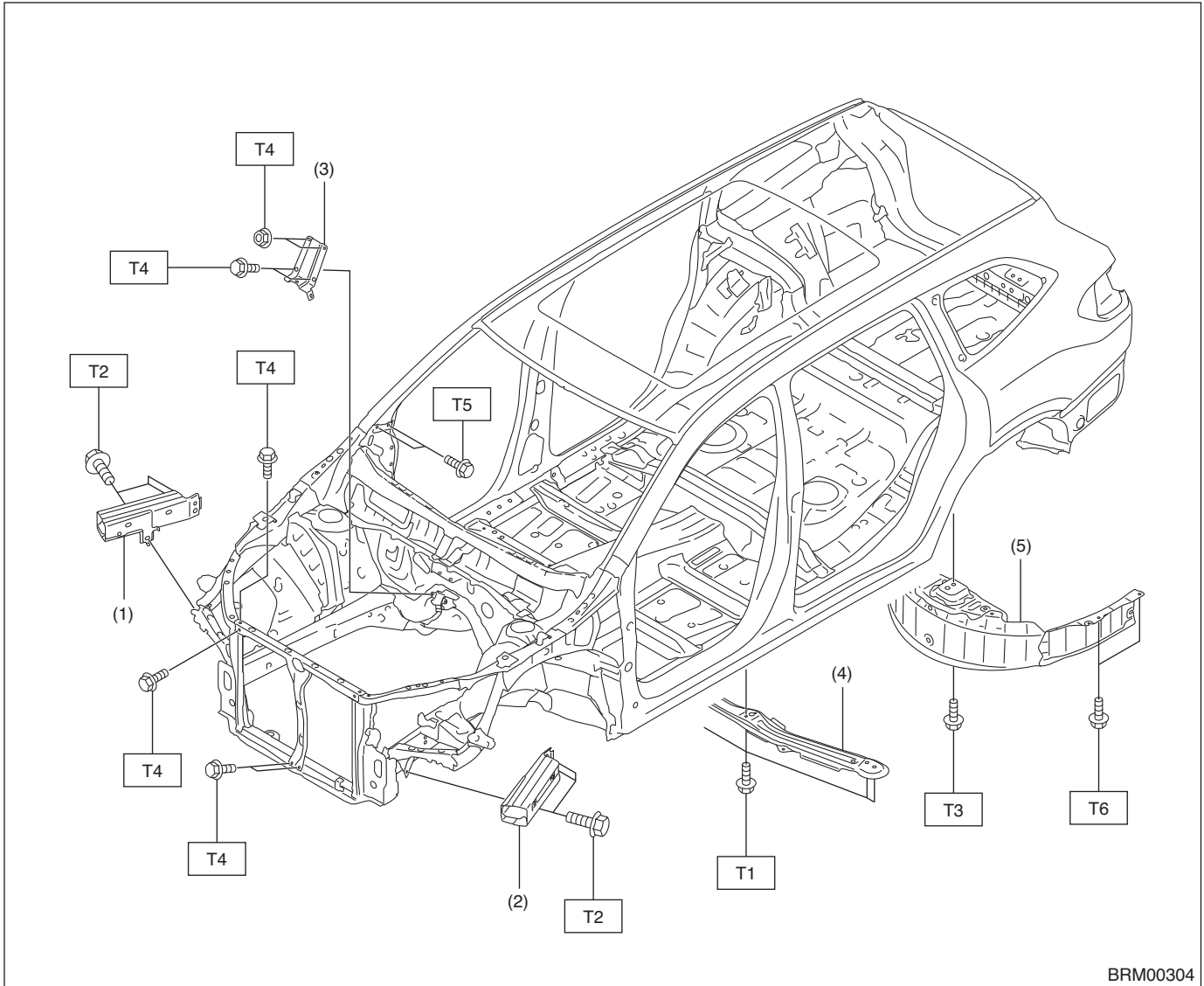
(a) Urethane foam injection locations

(1) Cut the foam to the shape of the body.

Assembly of Exterior Parts

2. Assembly of Exterior Parts

A: BODY REINFORCING PARTS



- (1) GUSSET CP FT SD RH
- (2) GUSSET CP FT SD LH
- (3) PLATE PTG STPR
- (4) BRACE FLR CTR CP
- (5) COVER SP TIRE CP

Tightening torque: N·m (kgf·m, ft·lb)

T1: 45 (4.59, 33.19)

T2: 37 (3.77, 27.29)

T3: 32 (3.27, 23.60)

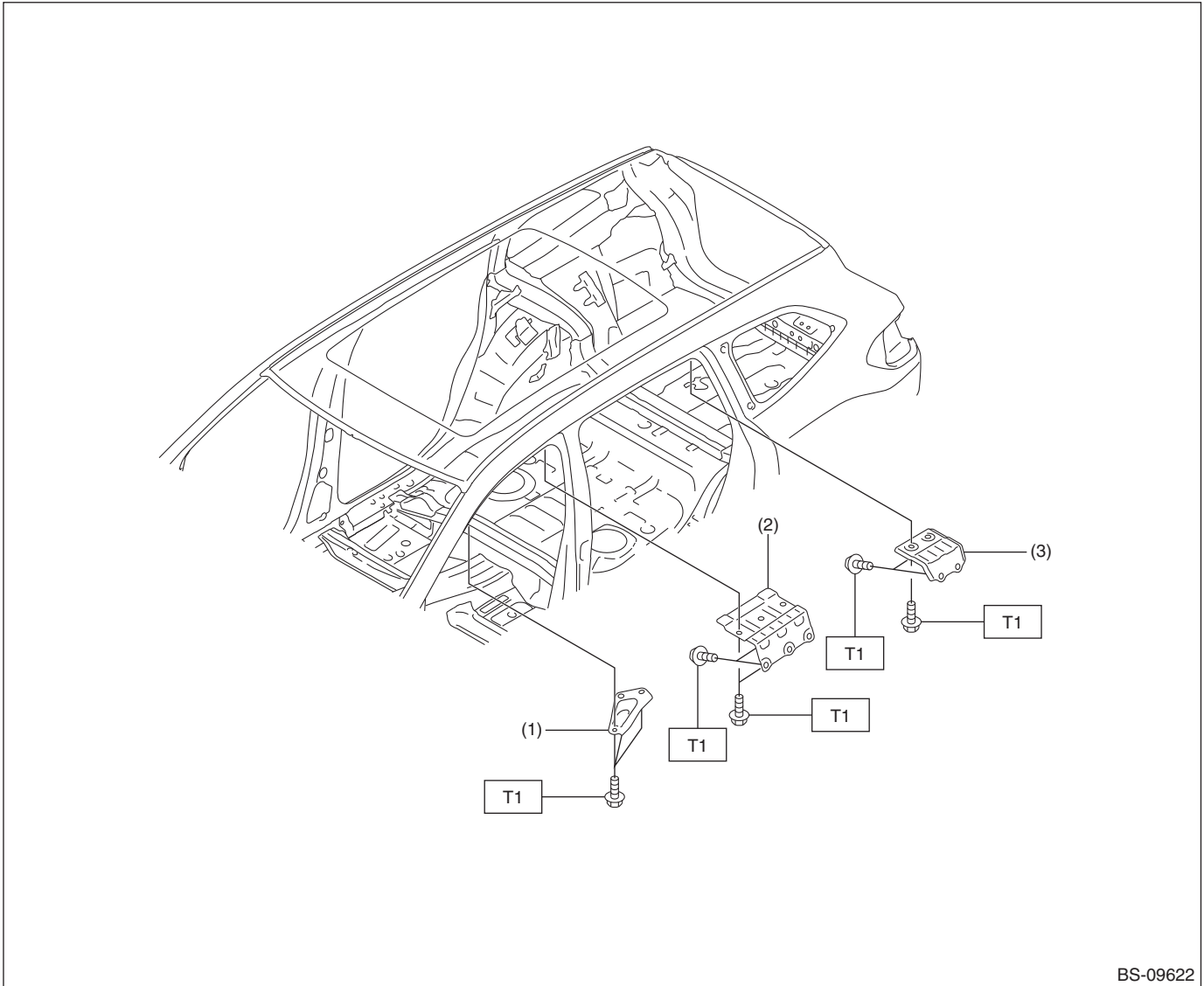
T4: 18 (1.84, 13.28)

**T5: Secure 18 (1.84, 13.28) or more.
The bolts should be seated and
not broken.**

T6: 10 (1.02, 7.38)

Assembly of Exterior Parts

B: Bracket brace (Model with sunroof)

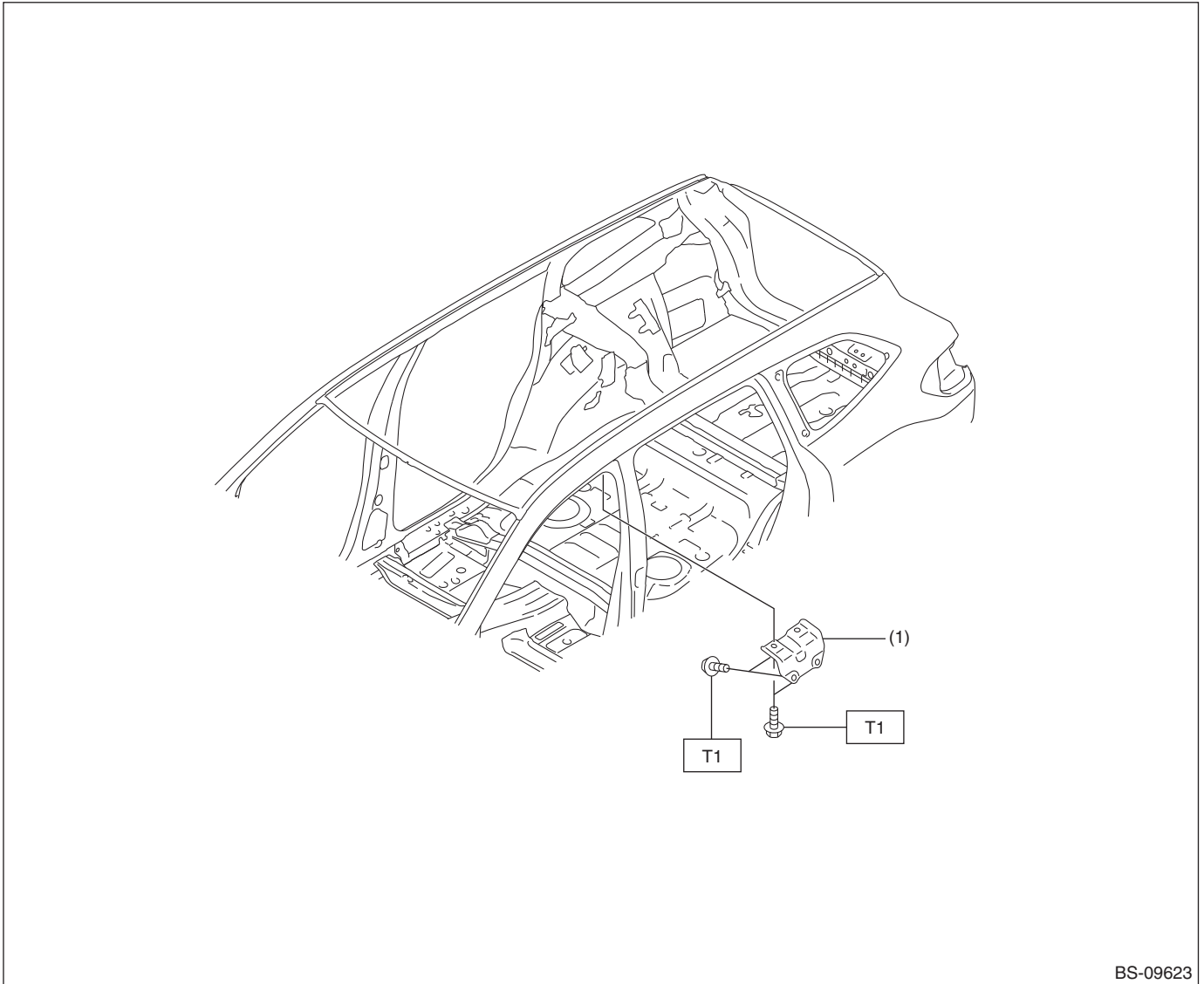


- (1) BRKT BRACE SR F
- (2) BRKT BRACE SR C
- (3) BRKT BRACE SR R

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

Assembly of Exterior Parts

C: Bracket brace (Model without sunroof)



BS-09623

(1) BRKT BRACE

Tightening torque: N·m (kgf·m, ft·lb)

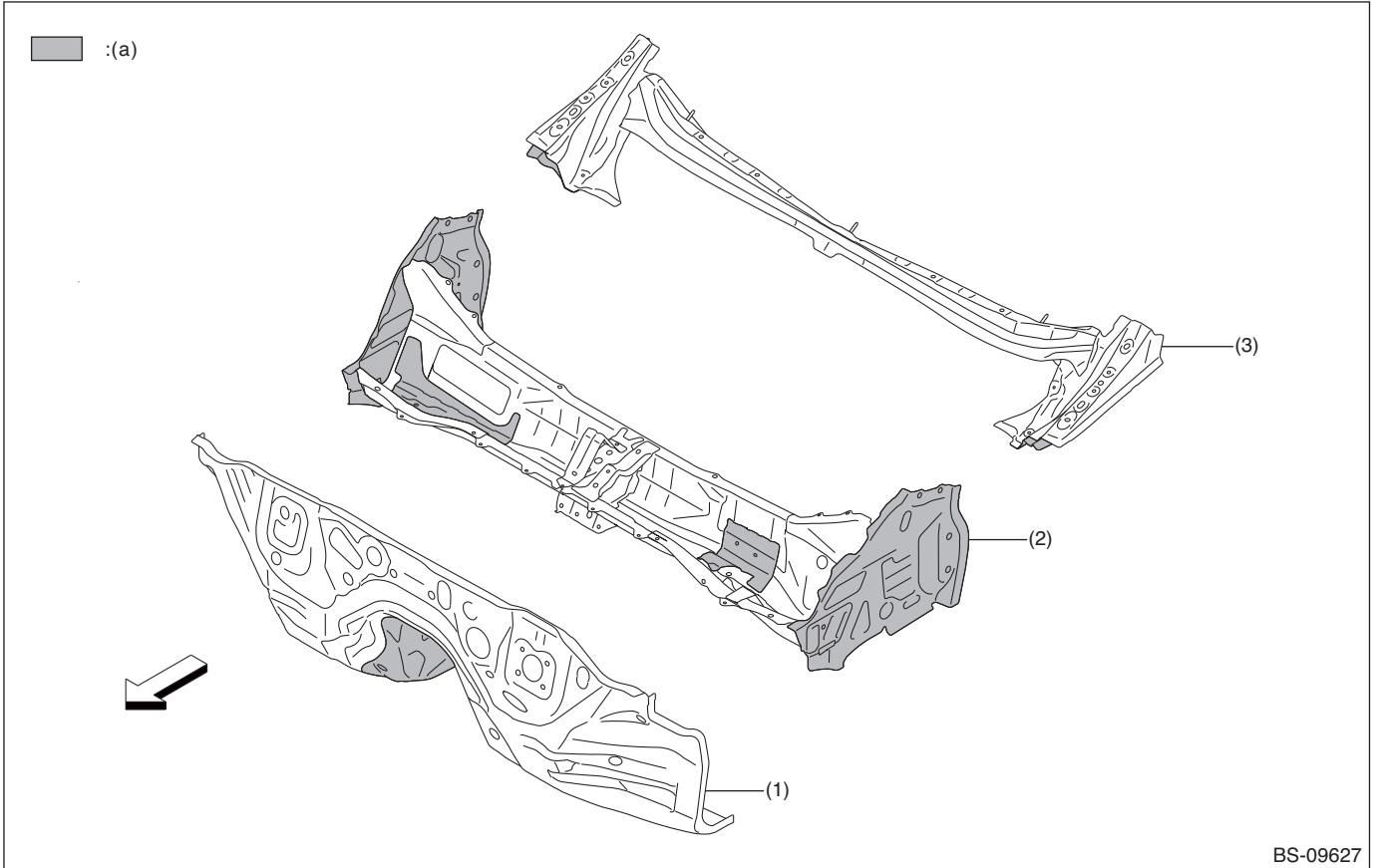
T1: 12.7 (1.29, 9.37)

Panel Components

3. Panel Components

A: COMPONENTS

1. TOE BOARD & FRONT PANEL



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

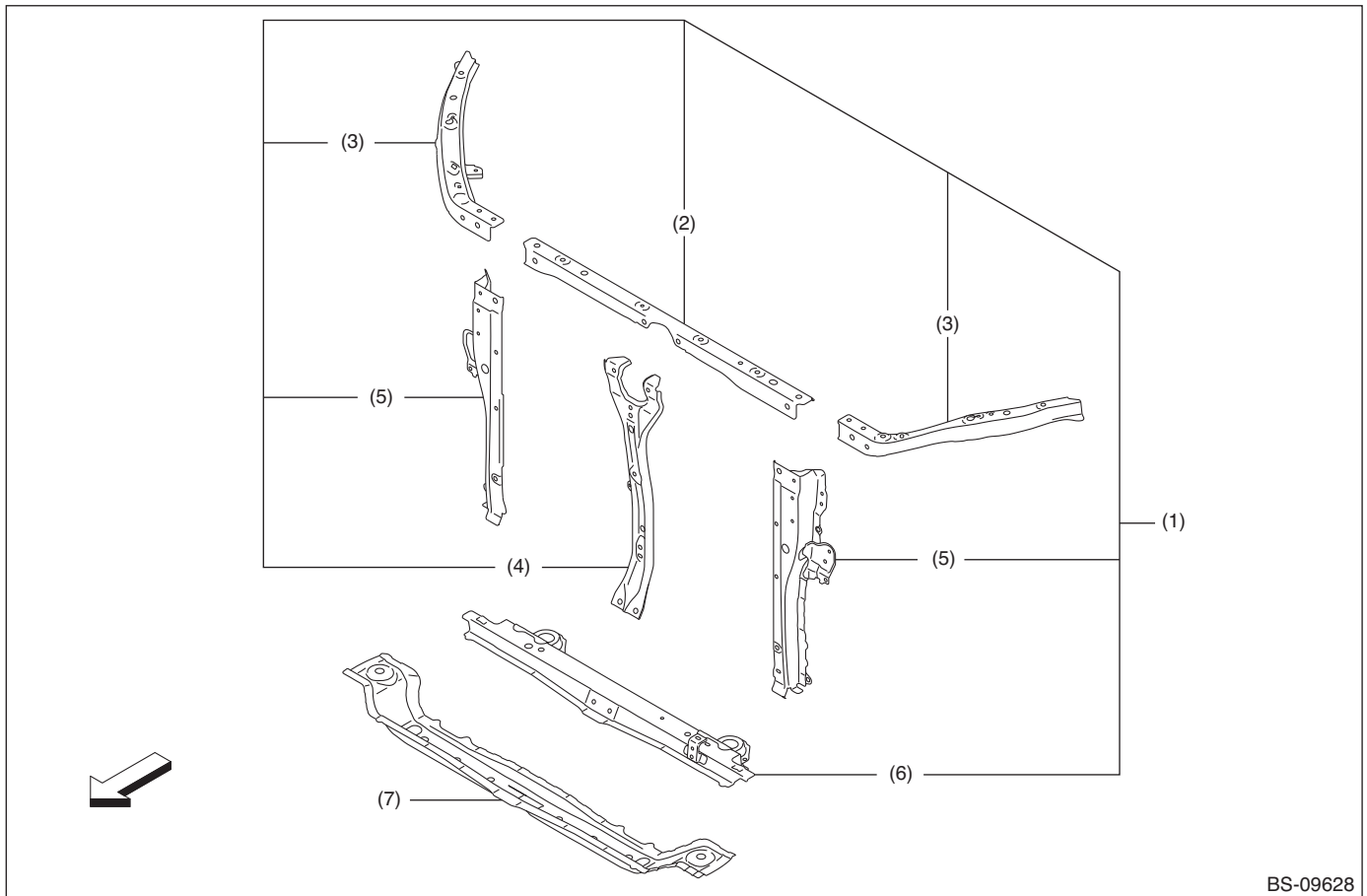
(1) Toe board complete

(2) Duct complete front panel

(3) Panel complete front

Panel Components

2. RADIATOR PANEL

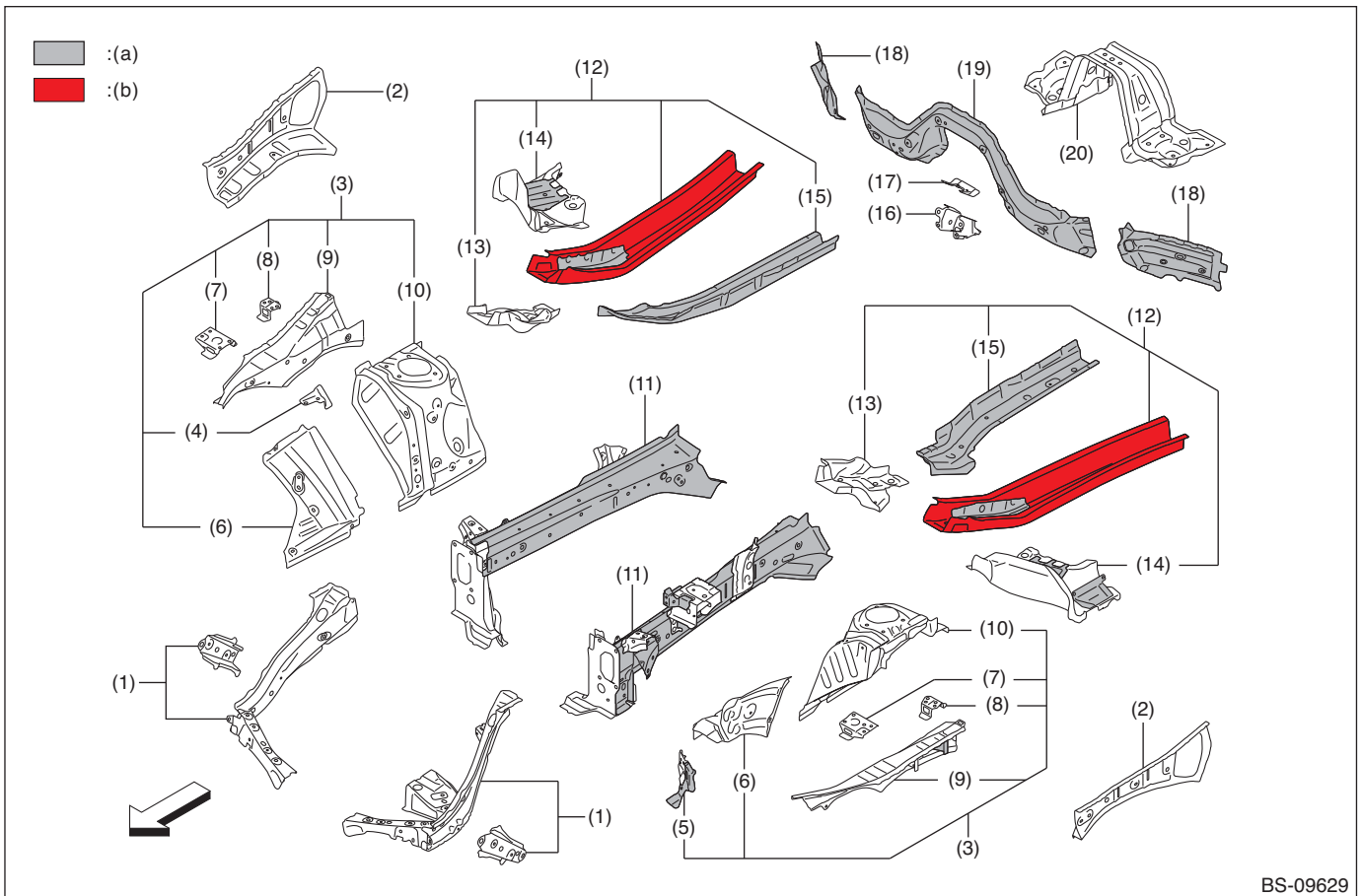


BS-09628

- | | | |
|-----------------------------------|---|-----------------------------------|
| (1) Panel complete radiator | (4) Stay complete hood lock | (7) Frame complete radiator lower |
| (2) Panel complete radiator upper | (5) Panel complete radiator side | |
| (3) Panel complete radiator upper | (6) Frame complete radiator panel lower | |

Panel Components

3. FRONT WHEEL APRON



BS-09629

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

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

(1) Wheel apron front

(8) Bracket complete front fender

(15) Frame tunnel side front complete

(2) Frame side upper

(9) Wheel apron complete front upper

(16) Bracket complete pitching stopper

(3) Wheel apron sub complete

(10) Bracket complete suspension front

(17) Plate pitching stopper

(4) Bracket complete VDC

(11) Front side frame front

(18) Frame complete toe board

(5) Bracket battery rod

(12) Frame side front complete rear

(19) Reinforcement tunnel toe board

(6) Wheel apron complete front

(13) Bracket sub frame

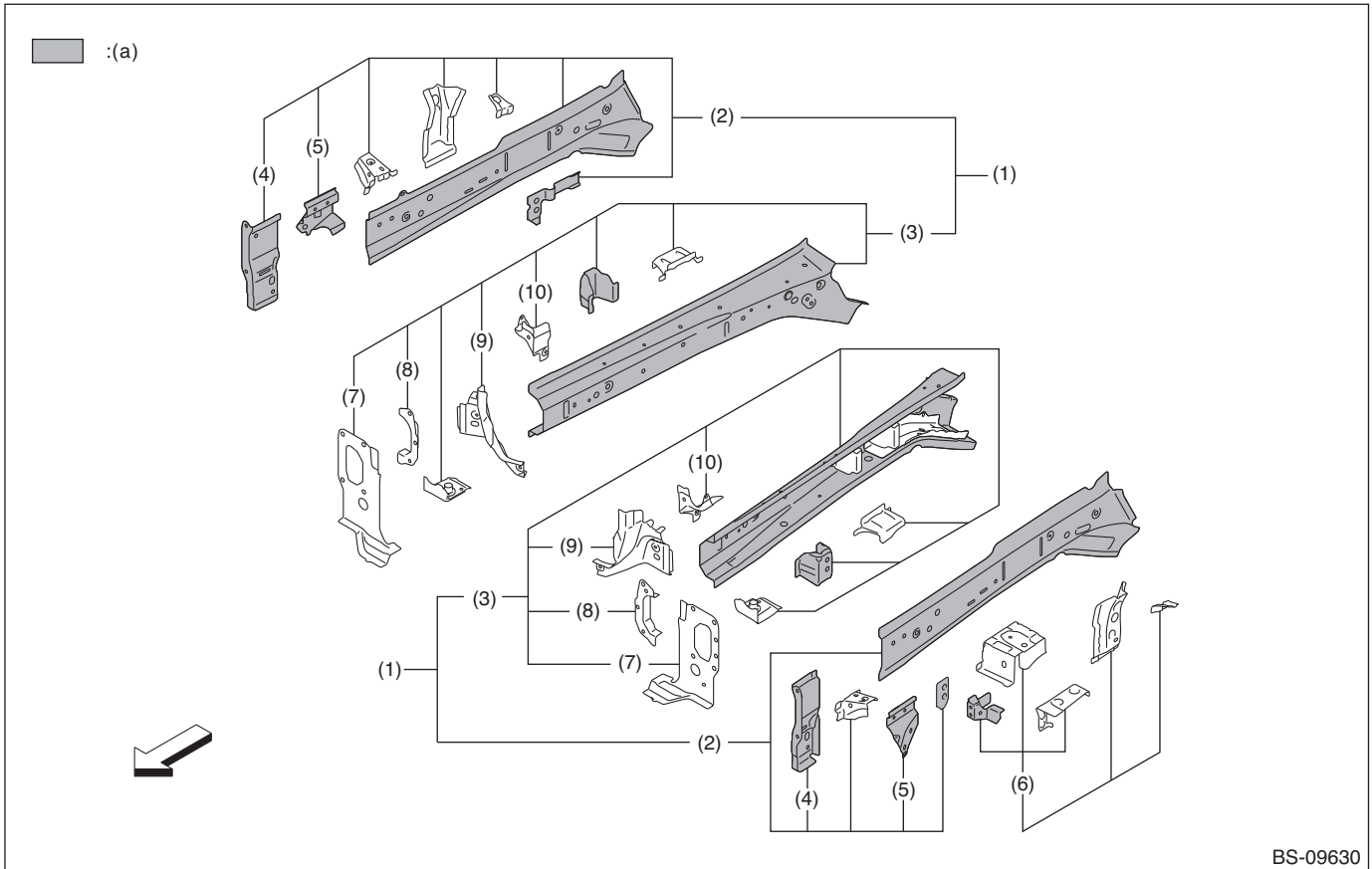
(20) Bracket complete crossmember rear

(7) Bracket complete front fender

(14) Reinforcement toe board

Panel Components

4. FRONT SIDE FRAME



BS-09630

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

(1) Frame side complete

(2) Closing plate

(3) Frame side front complete front

(4) Tie down complete front

(5) Reinforcement gusset

(6) Bracket complete battery

(7) Plate front frame front

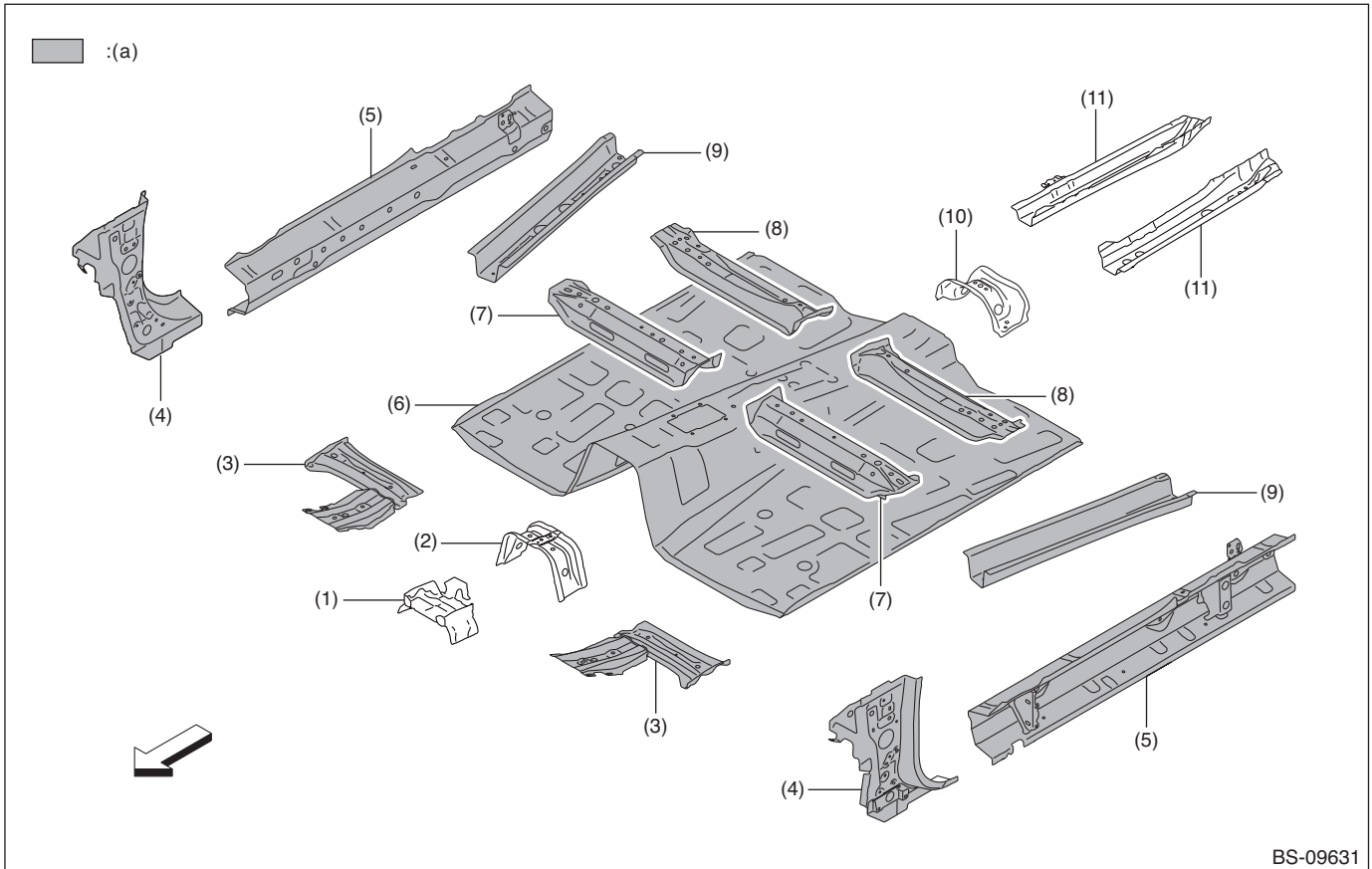
(8) Gusset complete front frame

(9) Gusset complete front frame

(10) Bracket complete beam

Panel Components

5. FRONT FLOOR PANEL



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

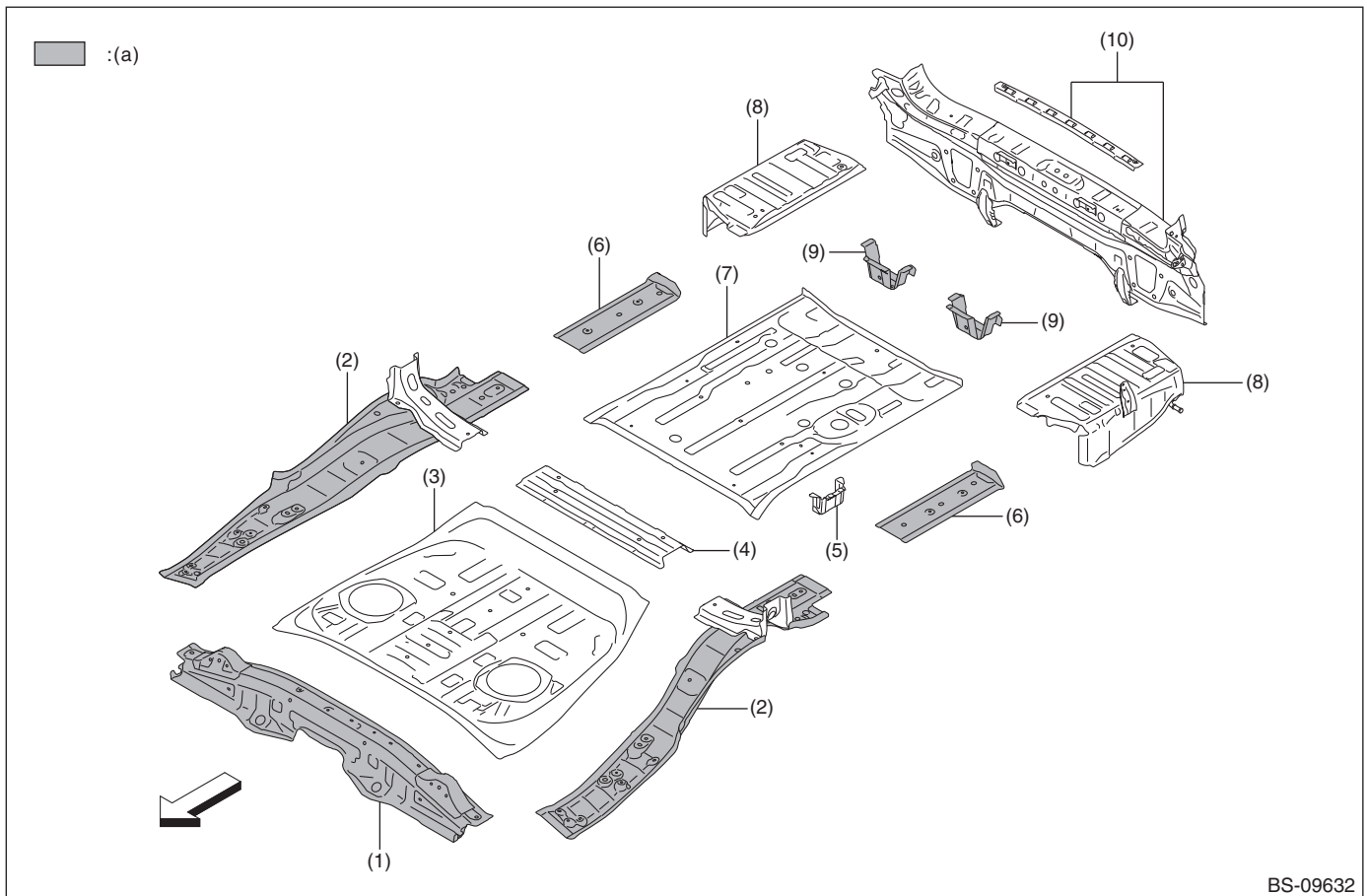
- (1) Bracket assembly instrument panel
- (2) Crossmember center floor
- (3) Frame front floor front
- (4) Pillar front inner lower

- (5) Side sill complete inner
- (6) Floor pan front
- (7) Crossmember complete filler front
- (8) Crossmember complete seat rear

- (9) Frame front floor front
- (10) Crossmember complete A
- (11) Frame front floor rear

Panel Components

6. REAR FLOOR PANEL & REAR SKIRT



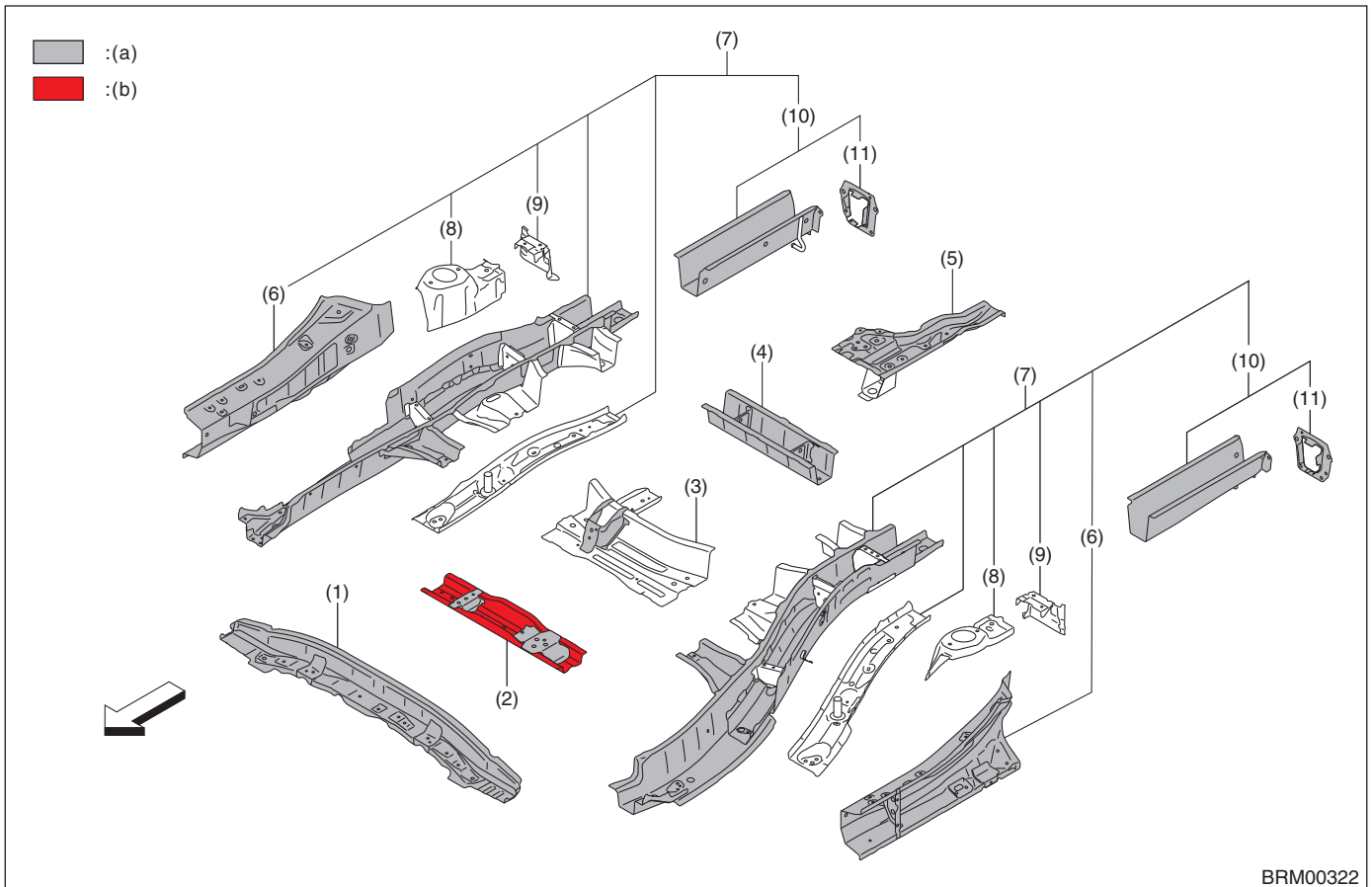
BS-09632

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

- | | | |
|-------------------------------|----------------------------------|--------------------------|
| (1) Crossmember complete | (5) Bracket canister | (9) Bracket spare tire |
| (2) Frame complete rear upper | (6) Frame side rear upper | (10) Skirt complete rear |
| (3) Floor pan complete rear | (7) Floor pan complete rear rear | |
| (4) Crossmember rear upper | (8) Floor side rear | |

Panel Components

7. REAR FLOOR SIDE FRAME



BRM00322

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

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

(1) Crossmember complete A

(5) Crossmember complete rear center

(9) Separator frame side rear

(2) Crossmember complete second

(6) Side sill complete inner rear

(10) Frame complete rear floor rear

(3) Crossmember B complete rear

(7) Frame complete floor side rear

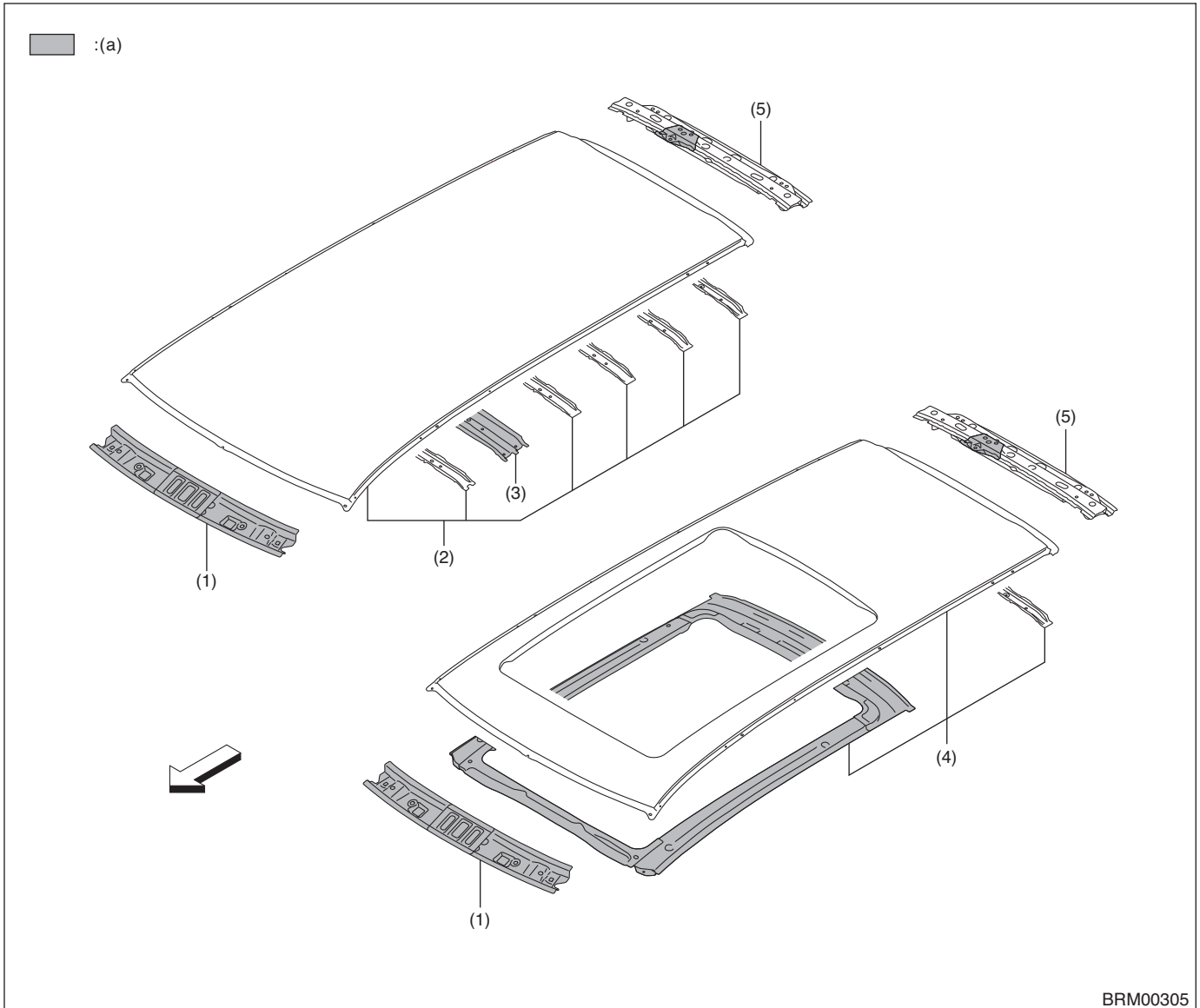
(11) Bracket bumper rear

(4) Crossmember C complete rear floor

(8) Bracket complete rear suspension

Panel Components

8. ROOF



BRM00305

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

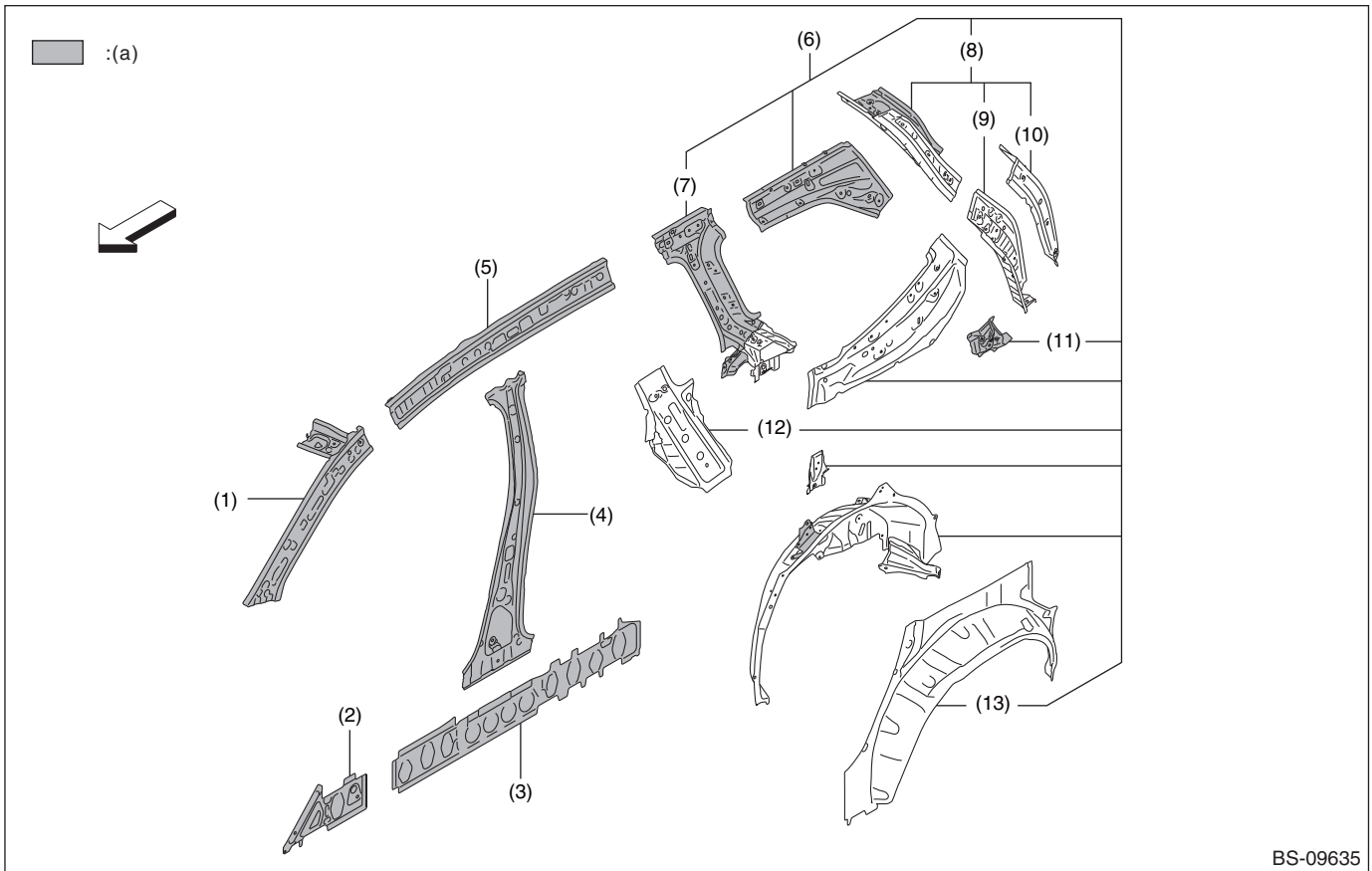
(1) Rail complete front roof
(2) Panel complete roof

(3) Brace complete roof center
(4) Panel complete roof

(5) Rail complete rear roof

Panel Components

9. SIDE PANEL INNER



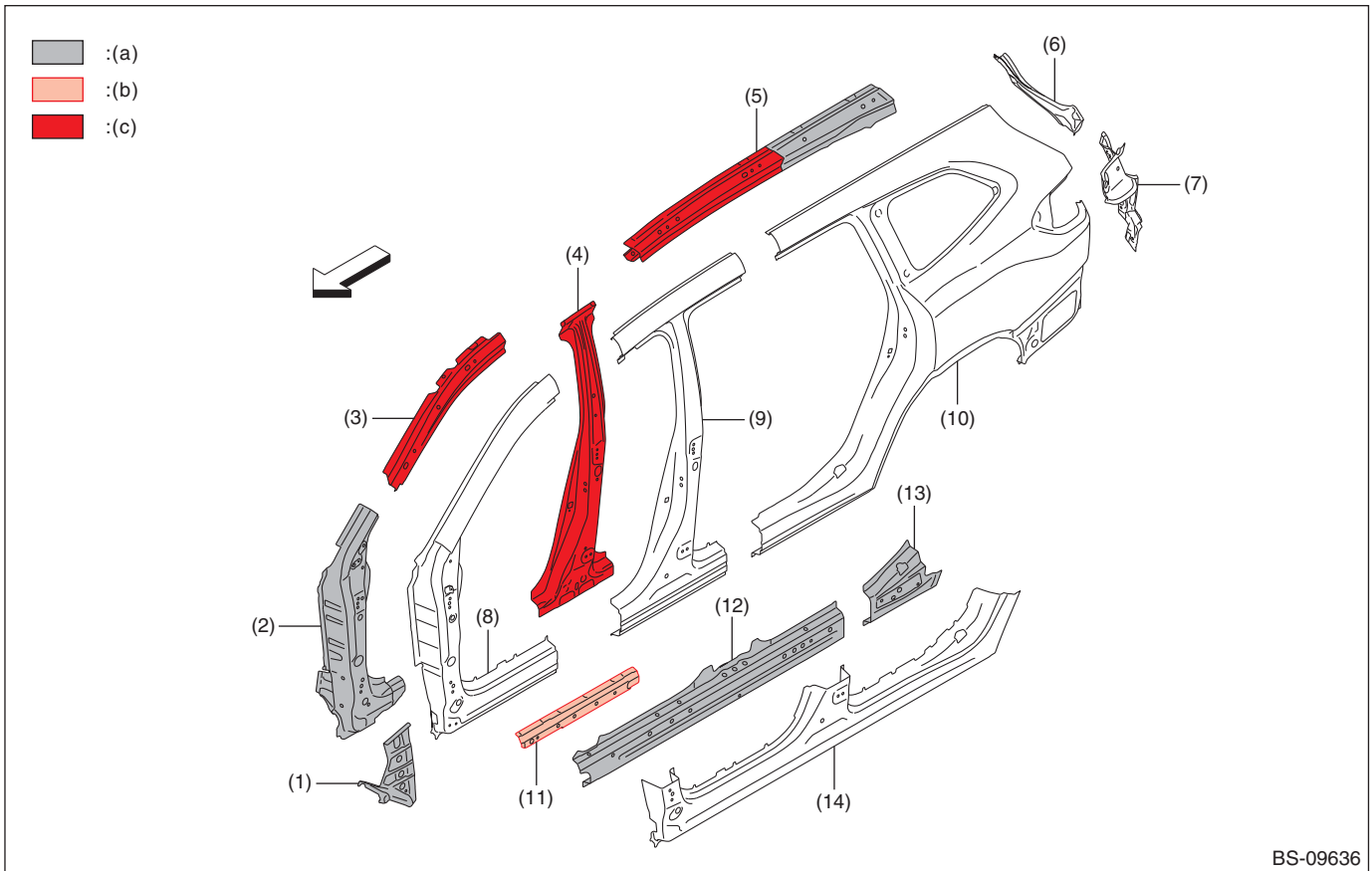
BS-09635

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

- | | | |
|---|--|---|
| (1) Pillar complete front inner upper | (6) Rear quarter complete inner | (11) Bracket retractor right
(right side only) |
| (2) Reinforcement side sill front outer | (7) Reinforcement complete rear
apron | (12) Reinforcement rear quarter inner |
| (3) Reinforcement side sill inner | (8) Reinforcement complete D pillar | (13) Rear arch inner |
| (4) Pillar complete center inner | (9) Pillar D inner lower | |
| (5) Side rail inner | (10) Reinforcement D pillar | |

Panel Components

10.SIDE PANEL OUTER



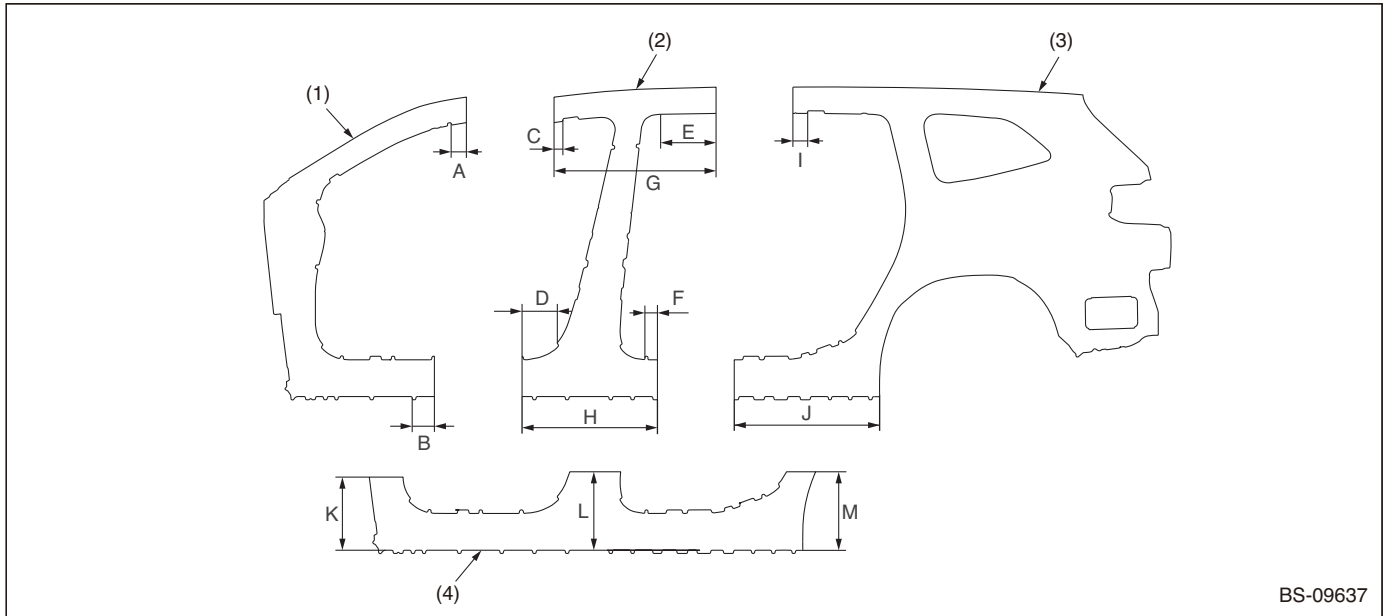
BS-09636

- | | | |
|--|--|--|
| (a) High-strength tensile steel
(440 - 590 MPa class) | (b) High-strength tensile steel
(980 MPa class) | (c) High-strength tensile steel
(1,500 MPa class) |
| (1) Gusset front pillar | (6) Extension complete D pillar | (11) Reinforcement side sill outer A |
| (2) Reinforcement complete front pillar lower | (7) Rear quarter complete outer | (12) Reinforcement side sill outer |
| (3) Reinforcement complete side rail | (8) Pillar complete front outer | (13) Reinforcement rear quarter catch |
| (4) Reinforcement complete center pillar | (9) Pillar complete center outer | (14) Side sill complete outer |
| (5) Reinforcement complete side rail | (10) Rear quarter complete outer | |

Panel Components

B: REPAIR PART SIZE

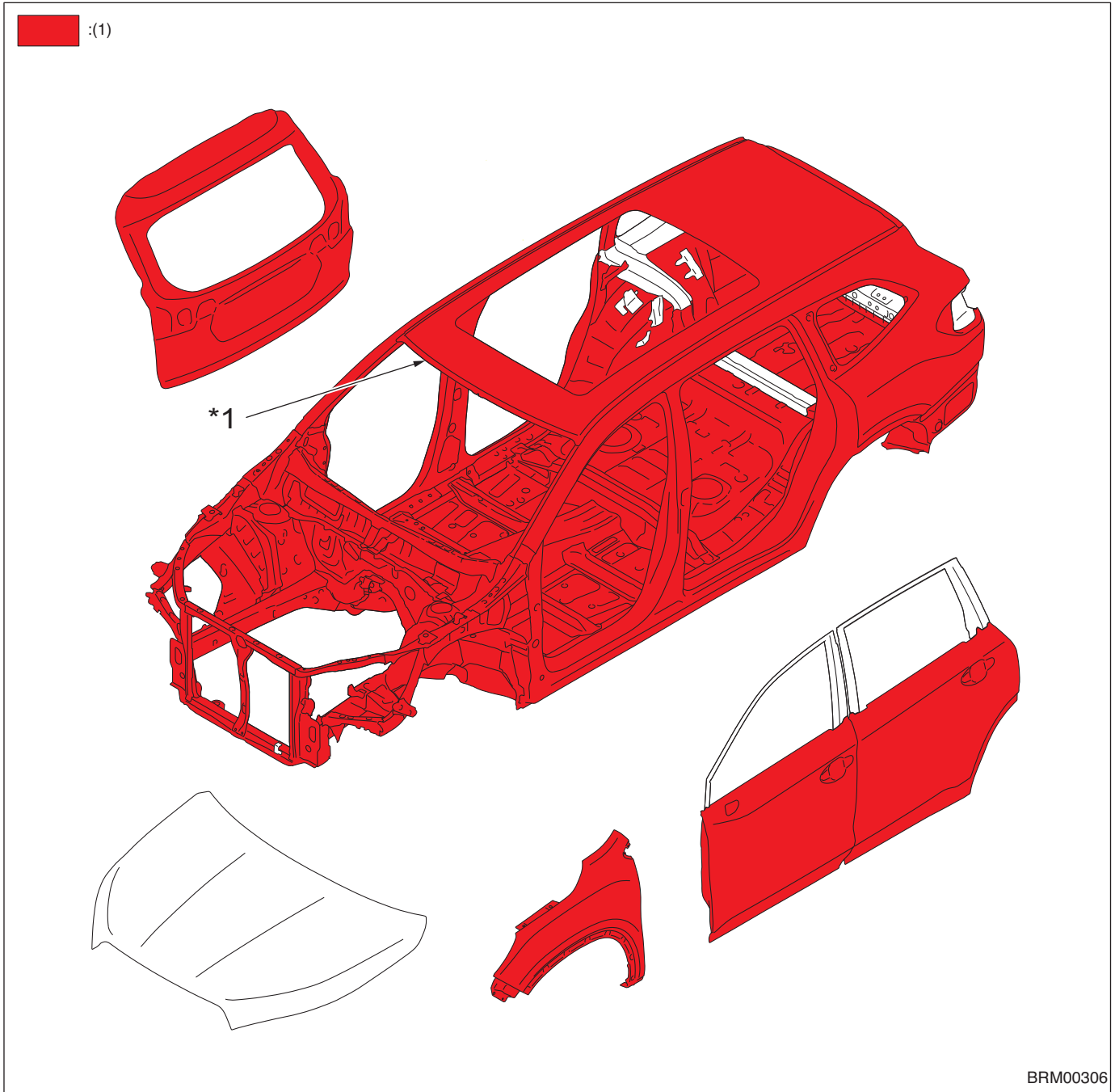
1. SIDE PANEL OUTER



No	Part name	Measuring point	Datum dimension mm (In)
(1)	Front Pillar Outer	A	71 (2.80)
		B	104 (4.09)
(2)	Center Pillar Outer	C	42 (1.65)
		D	166 (6.54)
		E	260 (10.24)
		F	59 (2.32)
		G	760 (29.92)
		H	635 (25.00)
		I	69 (2.72)
(3)	Rear quarter outer	J	682 (26.85)
		K	343 (13.50)
(4)	Side sill outer	L	368 (14.49)
		M	369 (14.53)

4. Galvanized Sheet Metal

A: SPECIFICATION



- (1) Galvanized sheet metal
(both sides)

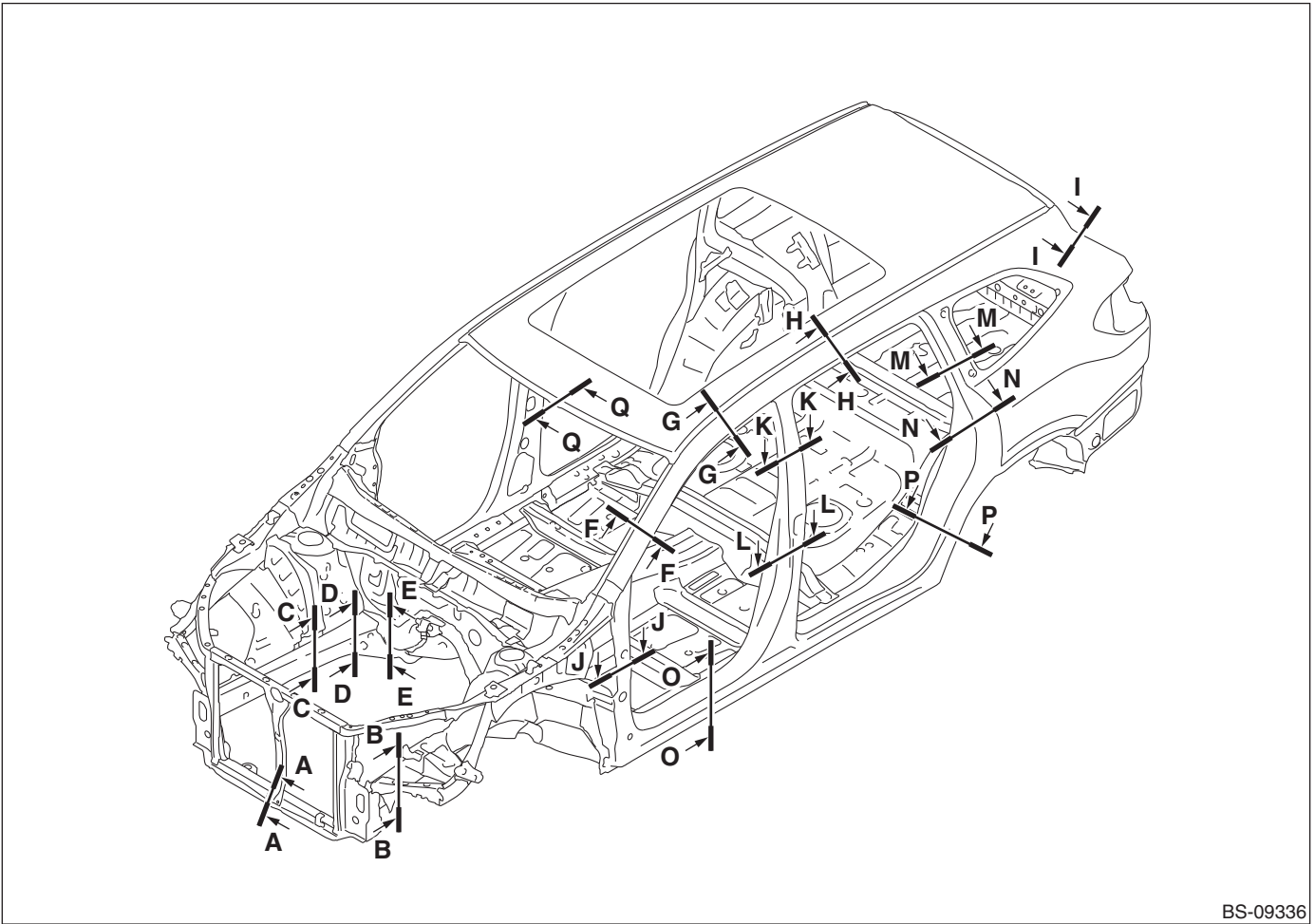
The fuel flap is made of plated sheet steel.

*1 For models without a sunroof, the roof panel should not be galvanized.

Body Construction

5. Body Construction

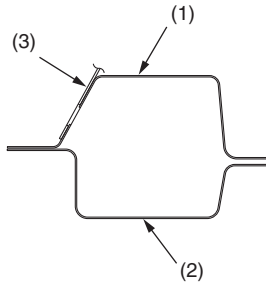
A: SPECIFICATIONS



BS-09336

Body Construction

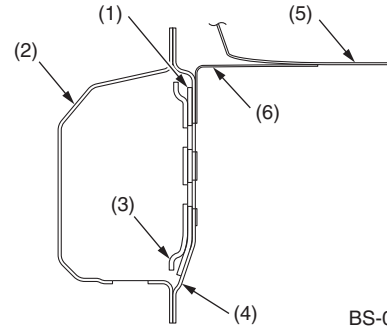
Cross section A — A



BS-09337

- (1) Frame radiator lower A
- (2) Frame radiator lower B
- (3) Stay hood lock

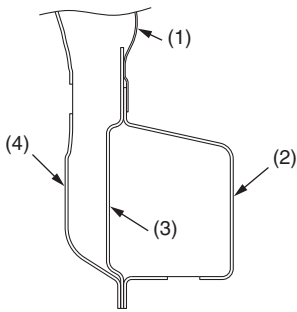
Cross section B — B



BS-09338

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

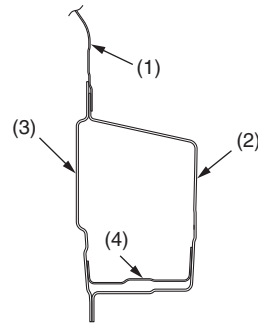
Cross section C — C



BS-09339

- (1) Reinforcement front suspension upper
- (2) Frame side FF
- (3) Closing plate FF
- (4) Reinforcement front suspension lower

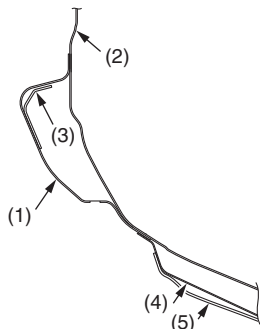
Cross section D — D



BS-09340

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

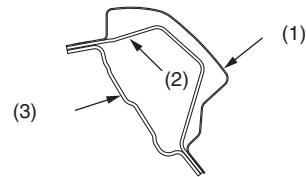
Cross section E — E



BS-09341

- (1) Crossmember toe board center
- (2) Toe board
- (3) Reinforcement crossmember toe board center
- (4) Frame tunnel side front
- (5) Bracket sub frame rear

Cross section F — F

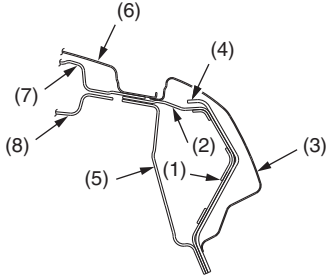


BS-09342

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

Body Construction

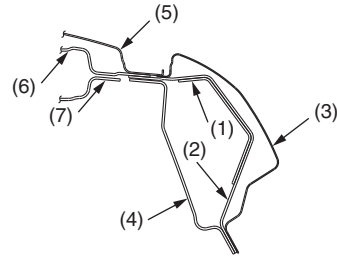
Cross section G — G



BRM00307

- (1) Reinforcement rail side outer center A
- (2) Reinforcement rail side outer center
- (3) Panel side outer
- (4) Reinforcement side rail outer front
- (5) Rail side inner
- (6) Roof panel
- (7) Frame sunroof side upper
- (8) Frame sunroof side lower

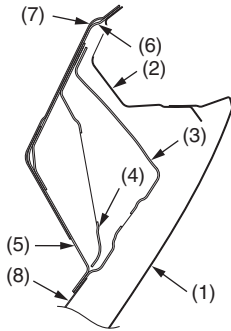
Cross section H — H



BRM00308

- (1) Reinforcement rail side outer center A
- (2) Reinforcement rail side outer center
- (3) Panel side outer
- (4) Rail side inner
- (5) Roof panel
- (6) Frame sunroof side upper
- (7) Frame sunroof side lower

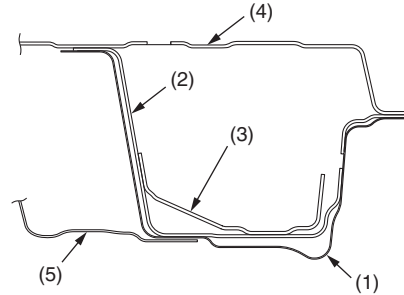
Cross section I — I



BS-09345

- (1) Panel side outer
- (2) Extension D pillar upper
- (3) Reinforcement D pillar upper
- (4) Reinforcement third belt side
- (5) Pillar D inner upper front
- (6) Pillar D inner upper rear
- (7) Pillar D inner lower
- (8) Quarter panel rear inner

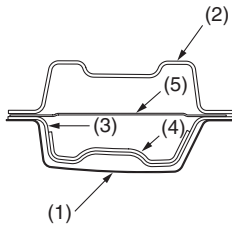
Cross section J — J



BS-09346

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

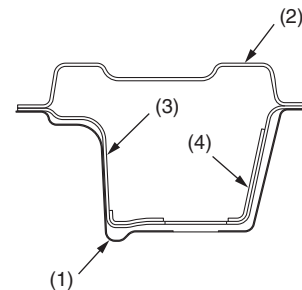
Cross section K—K



BS-09347

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

Cross section L — L

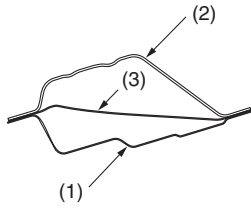


BS-09348

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

Body Construction

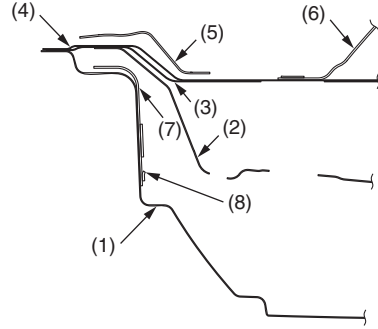
Cross section M — M



BS-09349

- (1) Panel side outer
- (2) Reinforcement C pillar upper
- (3) Reinforcement C pillar lower

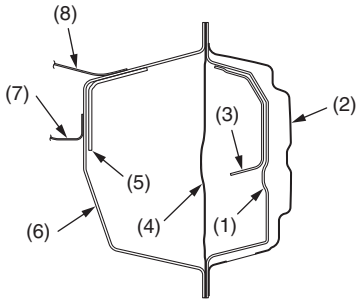
Cross section N — N



BS-09350

- (1) Panel side outer
- (2) Reinforcement C pillar lower
- (3) Quarter panel rear inner
- (4) Arch rear inner
- (5) Bracket second belt upper
- (6) Reinforcement rear apron
- (7) Reinforcement striker
- (8) Plate nut striker

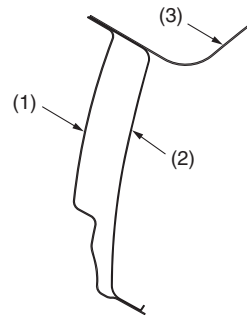
Cross section O — O



BS-09351

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

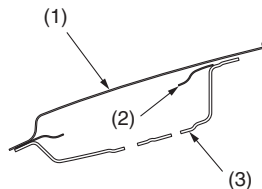
Cross section P — P



BS-09352

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

Cross section Q — Q



BS-09353

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

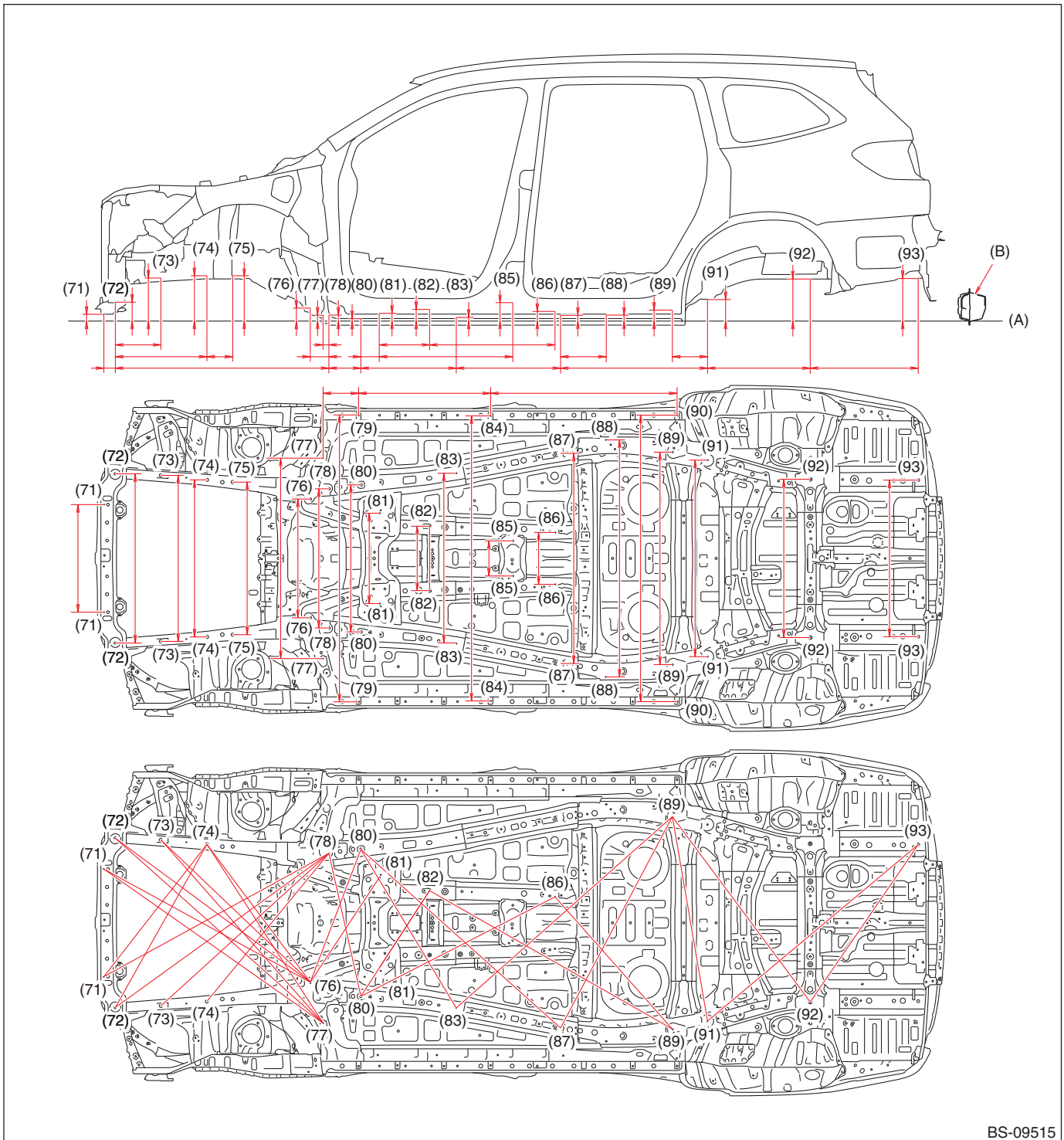
SUBARU.

Body Reference Points

6. Body Reference Points

A: DIMENSIONS

1. LOWER SURFACE



BS-09515

- The longitudinal dimensions are projected dimensions.
- The height dimensions are the vertical distances from the gauge point on the assumed horizontal line through the side sill flange joint (bending angle point).
- Diagonal dimensions are the actual dimensions between reference points.

Body Reference Points

(A) Standard line

(B) Side sill outer panel

- | | | |
|---|---|--|
| <p>(71) Bracket center lower mounting hole (symmetrical)</p> <p>(72) Sub frame mounting hole (symmetrical)</p> <p>(73) Gauge hole (symmetrical)</p> <p>(74) Front crossmember mounting hole (symmetrical), front side</p> <p>(75) Front crossmember mounting hole (symmetrical), rear side</p> <p>(76) Front arm plate mounting hole (symmetrical), inner side</p> <p>(77) Under cover rear mounting hole (symmetrical)</p> <p>(78) Sub frame mounting hole (symmetrical)</p> | <p>(79) Garnish side mounting hole (symmetrical)</p> <p>(80) Sub frame mounting hole (symmetrical)</p> <p>(81) Crossmember upper mounting hole (symmetrical)</p> <p>(82) Transportation hole (symmetrical)</p> <p>(83) Clearance hole for bolt (symmetrical)</p> <p>(84) Garnish side mounting hole (symmetrical)</p> <p>(85) Center mounting hole (symmetrical)</p> <p>(86) Brace floor center mounting hole (symmetrical)</p> | <p>(87) Under cover rear mounting hole (symmetrical)</p> <p>(88) Gauge hole (symmetrical)</p> <p>(89) Support sub frame mounting hole (symmetrical)</p> <p>(90) Garnish side mounting hole (symmetrical)</p> <p>(91) Sub frame rear mounting hole (symmetrical)</p> <p>(92) Sub frame rear mounting hole (symmetrical)</p> <p>(93) Trailer hitch mounting hole (symmetrical)</p> |
|---|---|--|

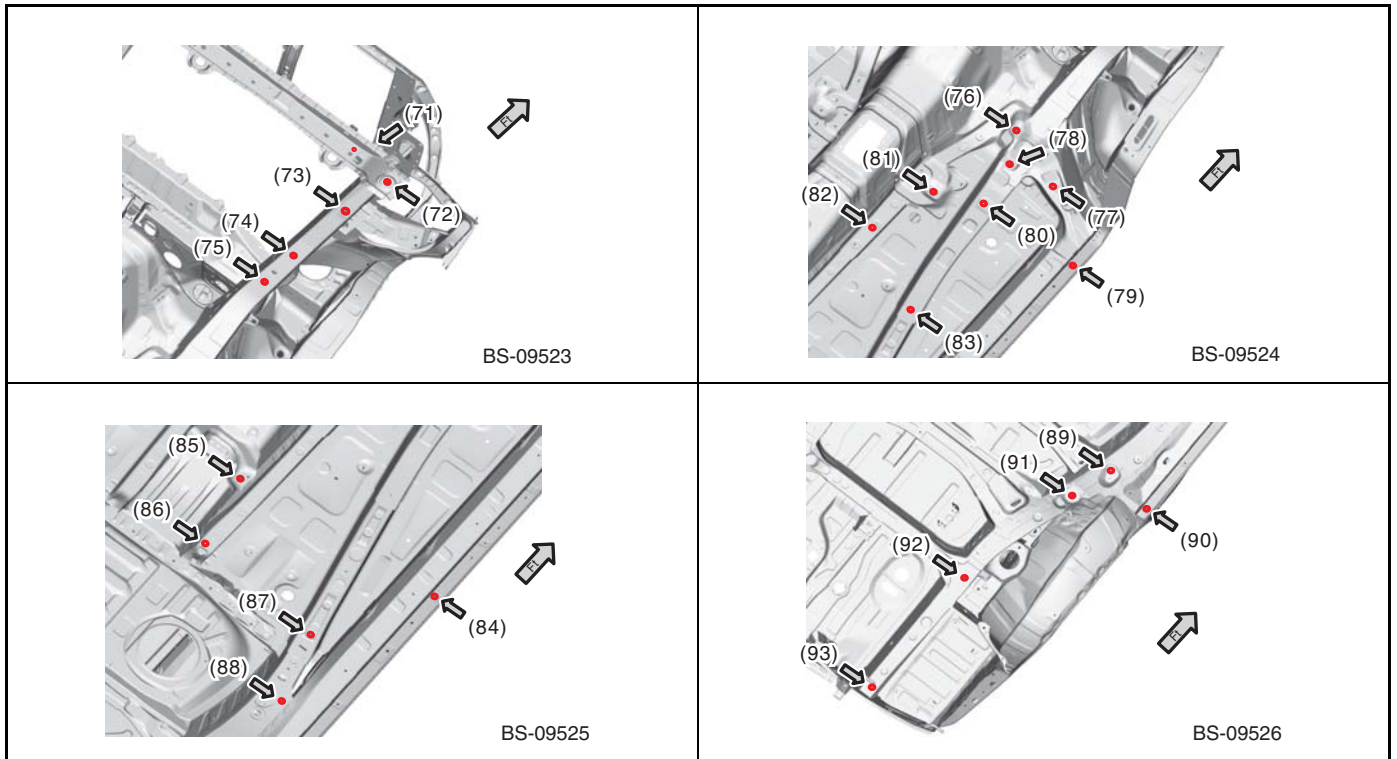
Measuring point	Datum dimension mm (in)	Projected dimensions mm (in)
Datum line — (71)	38 (1.50)	—
Datum line — (72)	105 (4.13)	—
Datum line — (73)	240 (9.45)	—
Datum line — (74)	253 (9.96)	—
Datum line — (75)	253 (9.96)	—
Datum line — (76)	73 (2.87)	—
Datum line — (77)	33 (1.30)	—
Datum line — (78)	34 (1.34)	—
Datum line — (80)	13 (0.51)	—
Datum line — (81)	44 (1.73)	—
Datum line — (82)	65 (2.56)	—
Datum line — (83)	21 (0.83)	—
Datum line — (85)	103 (4.06)	—
Datum line — (86)	54 (2.13)	—
Datum line — (87)	32 (1.26)	—
Datum line — (88)	33 (1.30)	—
Datum line — (89)	61 (2.40)	—
Datum line — (91)	120 (4.72)	—
Datum line — (92)	235 (9.25)	—
Datum line — (93)	237 (9.33)	—
(71) — (72)	64 (2.52)	—
(72) — (73)	254 (10.00)	—
(72) — (74)	511 (20.12)	—
(72) — (78)	1,192 (46.93)	—
(74) — (75)	144 (5.67)	—
(76) — (78)	104 (4.09)	—
(77) — (78)	33 (1.30)	—
(78) — (80)	179 (7.05)	—
(80) — (81)	103 (4.06)	—
(80) — (83)	532 (20.94)	—
(81) — (82)	281 (11.06)	—

Measuring point	Datum dimension mm (in)	Projected dimensions mm (in)
(81) — (85)	745 (29.33)	—
(82) — (86)	700 (27.56)	—
(83) — (87)	582 (22.91)	—
(87) — (88)	255 (10.04)	—
(87) — (91)	820 (32.28)	—
(89) — (91)	196 (7.72)	—
(91) — (92)	573 (22.56)	—
(92) — (93)	603 (23.74)	—
(77) — (79)	198 (7.80)	—
(79) — (84)	737 (29.02)	—
(84) — (90)	1,040 (40.94)	—
(71)R — (71)L	600 (23.62)	—
(72)R — (72)L	944 (37.17)	—
(73)R — (73)L	926 (36.46)	—
(74)R — (74)L	876 (34.49)	—
(75)R — (75)L	851 (33.50)	—
(76)R — (76)L	662 (26.06)	—
(77)R — (77)L	1,118 (44.02)	—
(78)R — (78)L	776 (30.55)	—
(79)R — (79)L	1,600 (62.99)	—
(80)R — (80)L	820 (32.28)	—
(81)R — (81)L	504 (19.84)	—
(82)R — (82)L	359 (14.13)	—
(83)R — (83)L	950 (37.40)	—
(84)R — (84)L	1,590 (62.60)	—
(85)R — (85)L	196 (7.72)	—
(86)R — (86)L	289 (11.38)	—
(87)R — (87)L	1,173 (46.18)	—
(88)R — (88)L	1,322 (52.05)	—
(89)R — (89)L	1,185 (46.65)	—
(90)R — (90)L	1,598 (62.91)	—

Body Reference Points

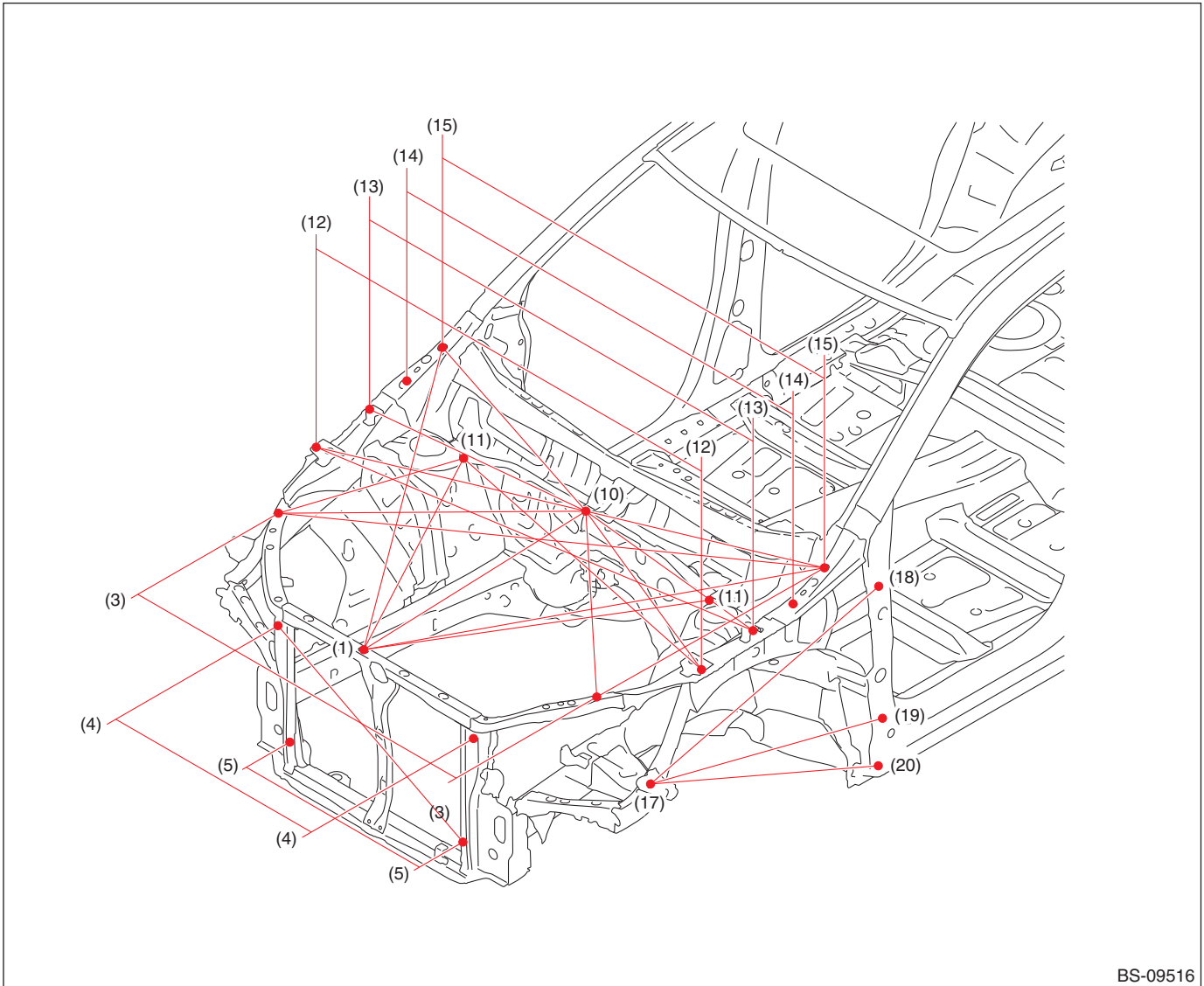
Measuring point	Datum dimension mm (in)	Projected dimensions mm (in)
(91)R — (91)L	1,096 (43.15)	—
(92)R — (92)L	883 (34.76)	—
(93)R — (93)L	873 (34.37)	—
(71)R — (74)L	960 (37.80)	936 (36.85)
(71)L — (76)R	1,314 (51.73)	1,313 (51.69)
(71)L — (77)R	1,495 (58.86)	1,495 (58.86)
(71)R — (78)L	1,432 (56.38)	1,432 (56.38)
(72)R — (74)L	1,054 (41.50)	1,044 (41.10)
(72)L — (76)R	1,352 (53.23)	1,352 (53.23)
(72)L — (77)R	1,553 (61.14)	1,551 (61.06)
(72)R — (78)L	1,471 (57.91)	1,469 (57.83)
(73)L — (76)R	1,163 (45.79)	1,151 (45.31)
(73)L — (77)R	1,381 (54.37)	1,365 (53.74)
(73)R — (78)L	1,283 (50.51)	1,266 (49.84)
(74)L — (76)R	978 (38.50)	961 (37.83)
(74)L — (77)R	1,209 (47.60)	1,189 (46.81)
(74)R — (78)L	1,092 (42.99)	1,070 (42.13)

Measuring point	Datum dimension mm (in)	Projected dimensions mm (in)
(76)R — (80)L	795 (31.30)	793 (31.22)
(76)R — (81)L	699 (27.52)	699 (27.52)
(78)L — (80)R	818 (32.20)	818 (32.20)
(80)R — (82)L	705 (27.76)	703 (27.68)
(80)L — (83)R	1,033 (40.67)	1,033 (40.67)
(80)R — (86)L	1,217 (47.91)	1,217 (47.91)
(80)L — (87)R	1,495 (58.86)	1,495 (58.86)
(81)R — (82)L	515 (20.28)	515 (20.28)
(82)L — (89)R	1,559 (61.38)	1,559 (61.38)
(83)R — (89)L	1,611 (63.43)	1,610 (63.39)
(86)L — (89)R	986 (38.82)	986 (38.82)
(87)R — (89)L	1,334 (52.52)	1,334 (52.52)
(89)L — (91)R	1,159 (45.63)	1,157 (45.55)
(89)L — (92)R	1,300 (51.18)	1,289 (50.75)
(91)R — (93)L	1,538 (60.55)	1,533 (60.35)
(92)R — (93)L	1,065 (41.93)	1,065 (41.93)



Body Reference Points

2. Front 1



BS-09516

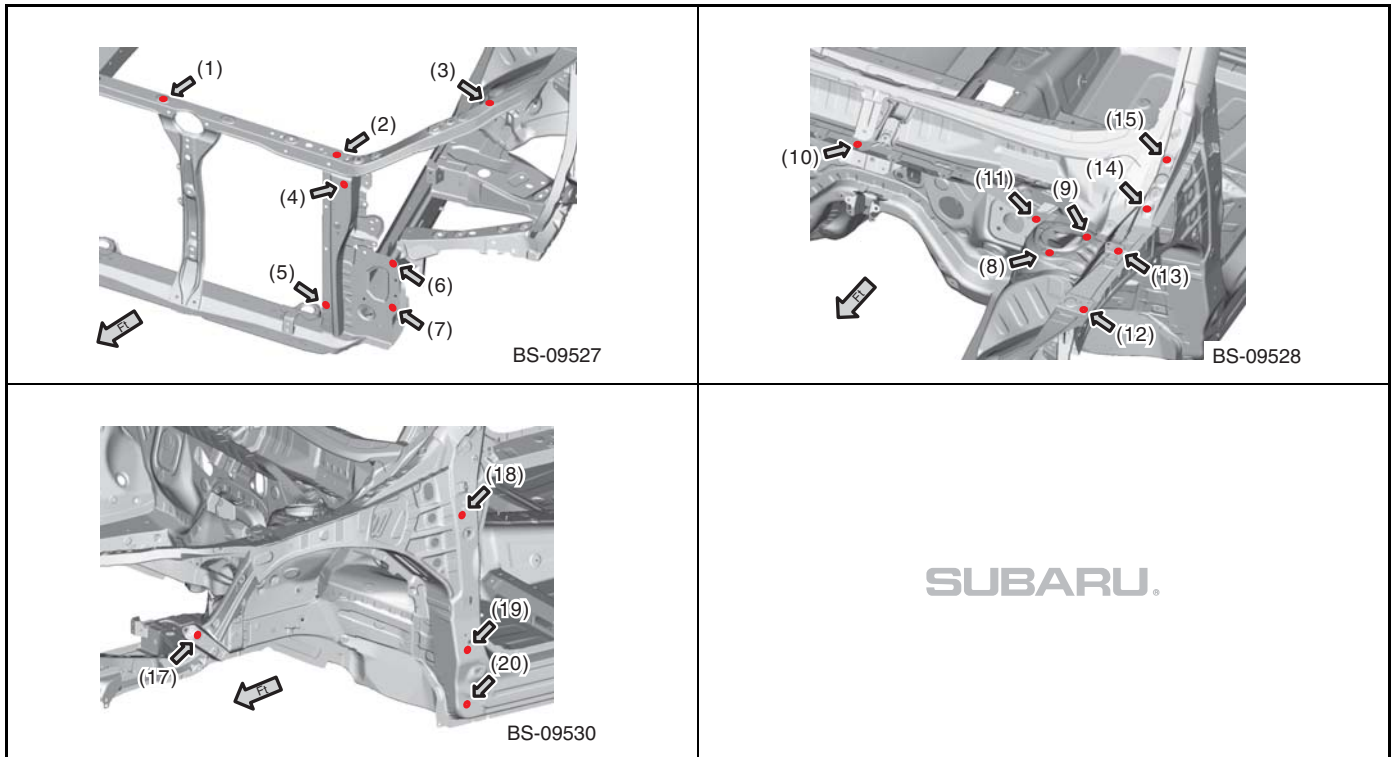
- | | | |
|---|---|---|
| (1) Duct air intake mounting hole (right side only) | (11) Cowl clip mounting hole (symmetrical) | (17) Fender mounting hole (symmetrical) |
| (3) Gauge hole (symmetrical) | (12) Headlight mounting hole (symmetrical) | (18) Front door hinge upper mounting hole (symmetrical), upper side |
| (4) Headlight mounting hole (symmetrical) | (13) Fender mounting hole (symmetrical) | (19) Front door hinge lower mounting hole (symmetrical), lower side |
| (5) BCL mounting hole (symmetrical) | (14) Gauge hole (symmetrical) | (20) Fender mounting hole (symmetrical), front side |
| (10) Gauge hole (right side only) | (15) Hood hinge mounting hole (symmetrical) | |

Body Reference Points

Measuring point	Datum dimension mm (in)
(1)R — (10)R	880 (34.65)
(1)R — (11)R	978 (38.50)
(1)R — (11)L	1,055 (41.54)
(1)R — (15)R	1,313 (51.69)
(1)R — (15)L	1,403 (55.24)
(3)R — (3)L	1,350 (53.15)
(3)R — (10)R	923 (36.34)
(3)L — (10)R	928 (36.54)
(3)R — (11)R	651 (25.63)
(3)R — (15)L	1,706 (67.17)
(3)L — (15)L	851 (33.50)
(4)R — (4)L	829 (32.64)
(4)R — (5)L	880 (34.65)
(5)R — (5)L	734 (28.90)
(10)R — (12)R	878 (34.57)

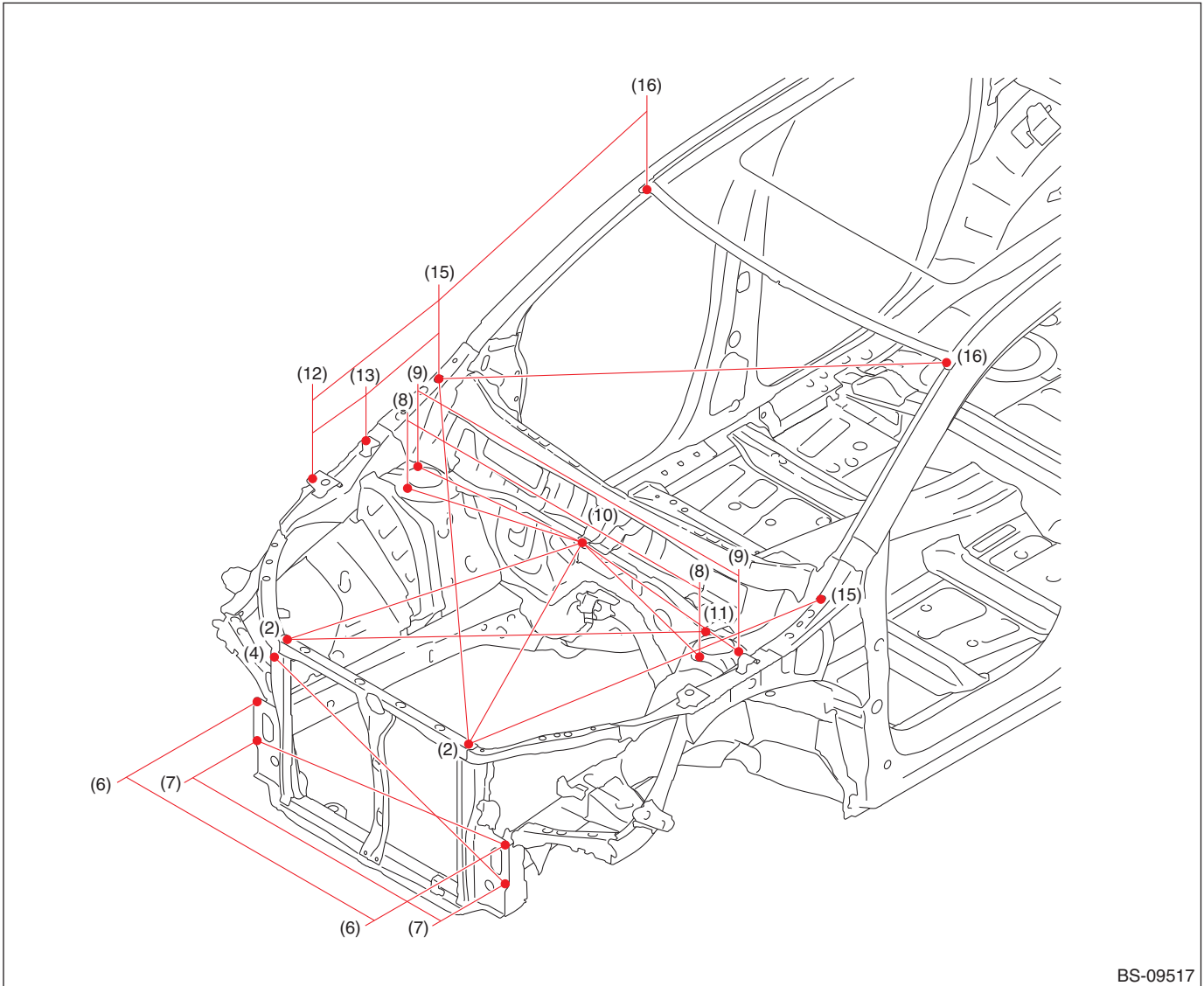
Measuring point	Datum dimension mm (in)
(10)R — (12)L	885 (34.84)
(10)R — (13)R	817 (32.17)
(10)R — (13)L	824 (32.44)
(10)R — (15)R	836 (32.91)
(10)R — (15)L	843 (33.19)
(11)R — (12)L	1,379 (54.29)
(12)R — (12)L	1,634 (64.33)
(12)R — (13)L	1,645 (64.76)
(13)R — (13)L	1,626 (64.02)
(14)R — (14)L	1,638 (64.49)
(15)R — (15)L	1,620 (63.78)
(17)L — (18)L	1,019 (40.12)
(17)L — (19)L	1,049 (41.30)
(17)L — (20)L	1,121 (44.13)

- Reference points (1) and (10) indicates a right side part. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.



Body Reference Points

3. Front 2



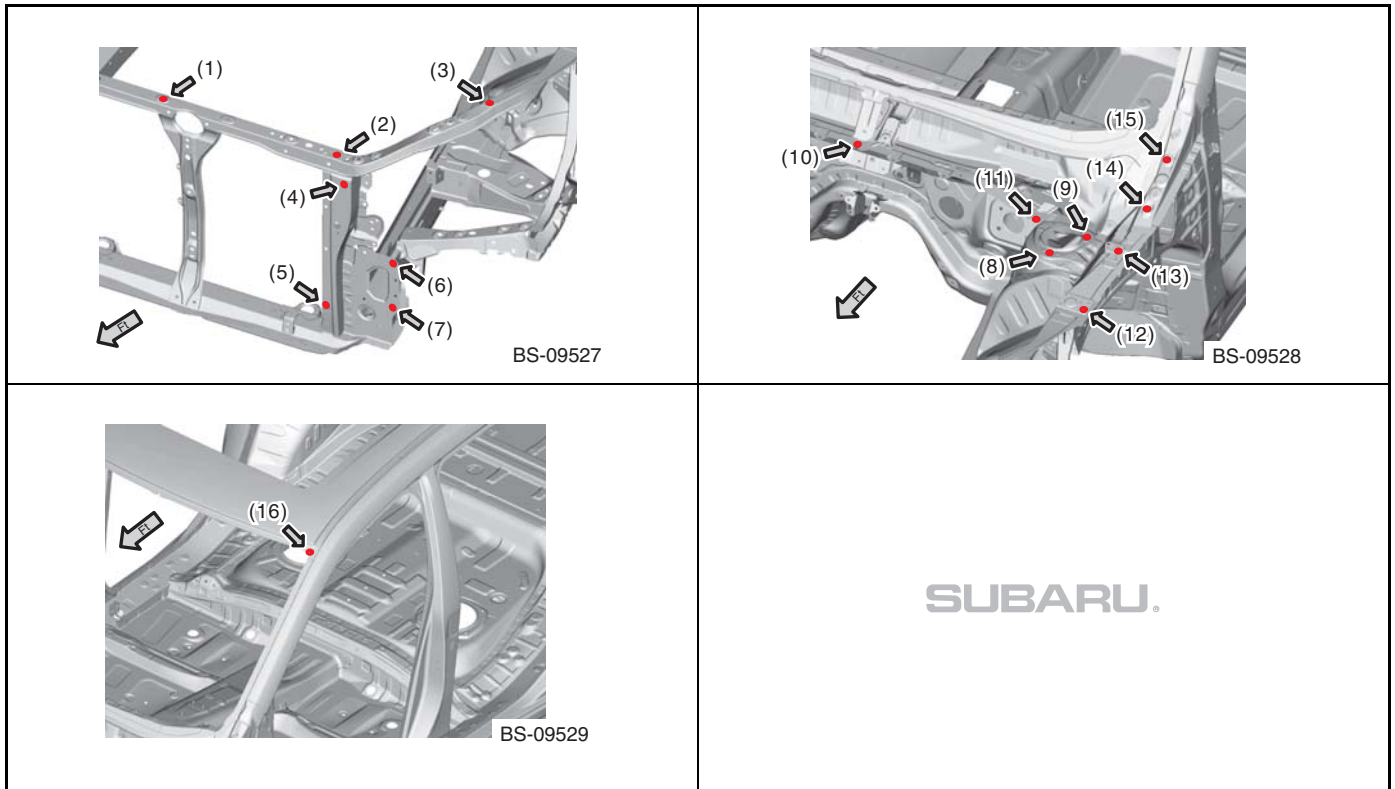
- | | | |
|---|--|--|
| (2) Bracket radiator upper mounting hole (symmetrical) | (9) Front suspension mounting hole (symmetrical), rear outside | (15) Hood hinge mounting hole (symmetrical) |
| (4) Headlight mounting hole (symmetrical) | (10) Gauge hole (right side only) | (16) Front glass installation reference hole (symmetrical) |
| (6) Front bumper beam mounting hole (symmetrical), upper side | (11) Cowl clip mounting hole (symmetrical) | |
| (7) Front bumper beam mounting hole (symmetrical), lower side | (12) Headlight mounting hole (symmetrical) | |
| (8) Front suspension mounting hole (symmetrical), front side | (13) Fender mounting hole (symmetrical) | |

Body Reference Points

Measuring point	Datum dimension mm (in)
(2)R — (10)R	956 (37.64)
(2)L — (10)R	959 (37.76)
(2)R — (11)L	1,256 (49.45)
(2)L — (15)R	1,616 (63.62)
(2)L — (15)L	1,169 (46.02)
(4)R — (7)L	1,016 (40.00)
(6)R — (6)L	1,052 (41.42)
(6)L — (7)R	1,062 (41.81)
(7)R — (7)L	1,052 (41.42)
(8)R — (8)L	1,239 (48.78)

Measuring point	Datum dimension mm (in)
(8)R — (10)R	630 (24.80)
(8)L — (10)R	637 (25.08)
(9)R — (9)L	1,360 (53.54)
(9)R — (10)R	679 (26.73)
(9)L — (10)R	686 (27.01)
(12)R — (13)R	225 (8.86)
(12)R — (15)R	539 (21.22)
(13)R — (15)R	315 (12.40)
(15)R — (16)R	845 (33.27)
(15)R — (16)L	1,665 (65.55)

- Reference points (1) and (10) indicates a right side part. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.



Body Reference Points

4. INSIDE 1



BS-09518

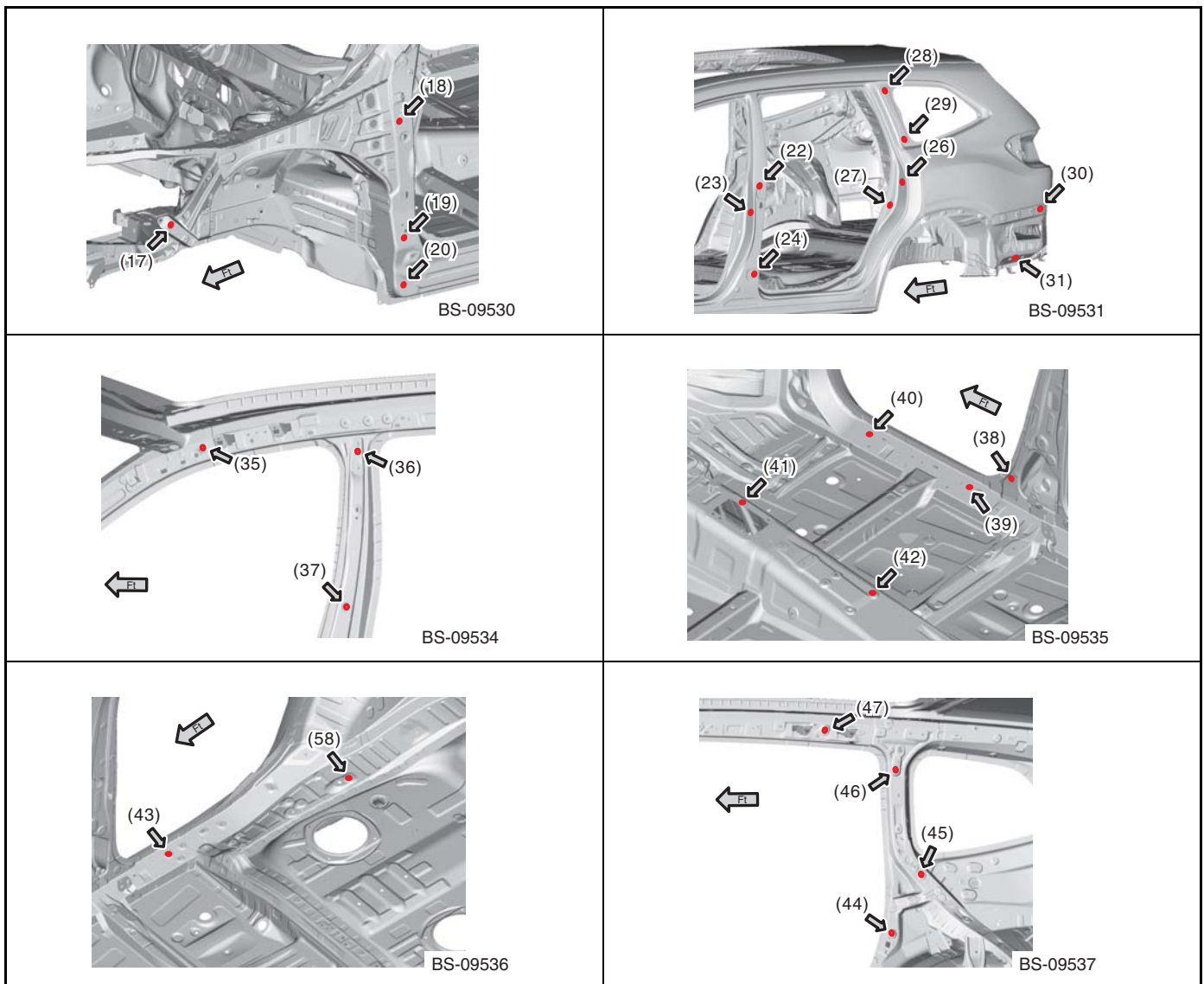
- | | | |
|---|--|---|
| (18) Front door hinge upper mounting hole (symmetrical), upper side | (29) Rear quarter glass mounting hole (symmetrical), front lower side | (43) Cover side sill mounting hole (symmetrical) |
| (19) Front door hinge lower mounting hole (symmetrical), lower side | (30) Rear bumper corner bracket mounting hole (symmetrical), rear side | (44) Apron trim mounting hole (symmetrical) |
| (22) Rear door hinge upper mounting hole (symmetrical), upper side | (31) Cover side lower mounting hole (symmetrical) | (45) C pillar trim mounting hole (symmetrical) |
| (23) Front door striker mounting hole (symmetrical), upper side | (36) Trim mounting hole (symmetrical) | (46) C pillar trim mounting hole (symmetrical) |
| (24) Rear door hinge lower mounting hole (symmetrical), front side | (37) Trim mounting hole (symmetrical) | (47) Air conditioner duct mounting hole (symmetrical) |
| (26) Rear door striker mounting hole (symmetrical), upper side | (38) Trim mounting hole (symmetrical) | (58) Second seat mounting hole (symmetrical) |
| (27) Rear door switch mounting hole (symmetrical) | (39) Floor mat mounting hole (symmetrical) | |
| (28) Rear quarter glass mounting hole (symmetrical), front upper side | (42) Bracket console mounting hole (symmetrical) | |

Body Reference Points

Measuring point	Datum dimension mm (in)
(18)L — (22)L	1,085 (42.72)
(18)L — (24)L	1,115 (43.90)
(19)L — (22)L	1,206 (47.48)
(19)L — (24)L	1,002 (39.45)
(22)L — (27)L	1,032 (40.63)
(22)L — (28)L	1,179 (46.42)
(22)L — (29)L	1,136 (44.72)
(22)L — (30)L	2,112 (83.15)
(22)L — (31)L	2,011 (79.17)
(23)R — (23)L	1,667 (65.63)
(24)L — (27)L	1,134 (44.65)
(24)L — (30)L	2,176 (85.67)
(24)L — (31)L	2,000 (78.74)
(26)R — (26)L	1,688 (66.46)

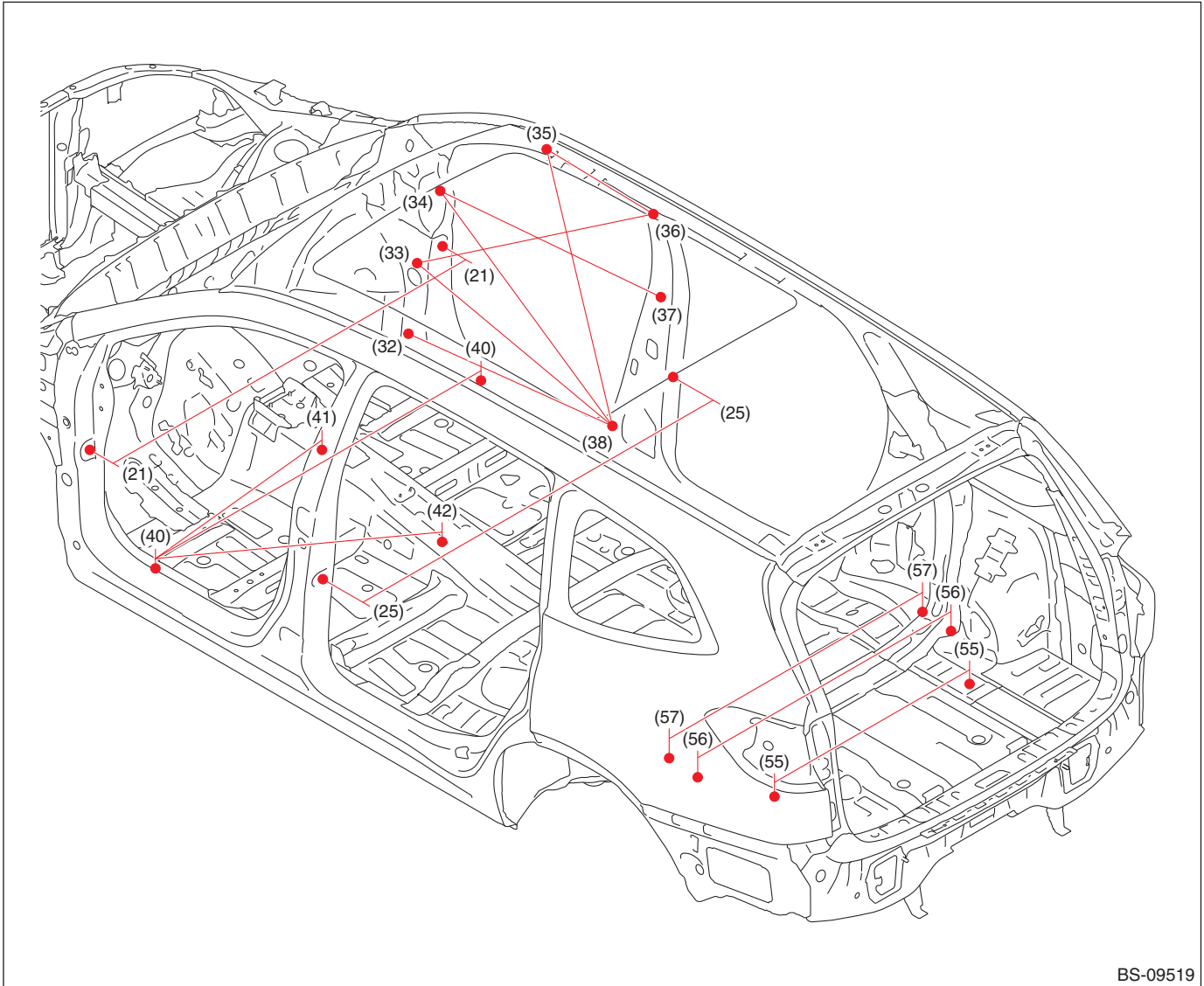
Measuring point	Datum dimension mm (in)
(27)L — (30)L	1,085 (42.72)
(27)L — (31)L	991 (39.02)
(36)R — (44)R	1,123 (44.21)
(36)R — (47)R	614 (24.17)
(37)R — (44)R	1,033 (40.67)
(37)R — (45)R	1,136 (44.72)
(37)R — (46)R	1,064 (41.89)
(37)R — (47)R	858 (33.78)
(38)R — (44)R	1,312 (51.65)
(38)R — (47)R	1,442 (56.77)
(39)R — (39)L	1,479 (58.23)
(39)R — (42)R	717 (28.23)
(42)R — (43)R	792 (31.18)
(58)R — (58)L	1,108 (43.62)

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



Body Reference Points

5. INSIDE 2



BS-09519

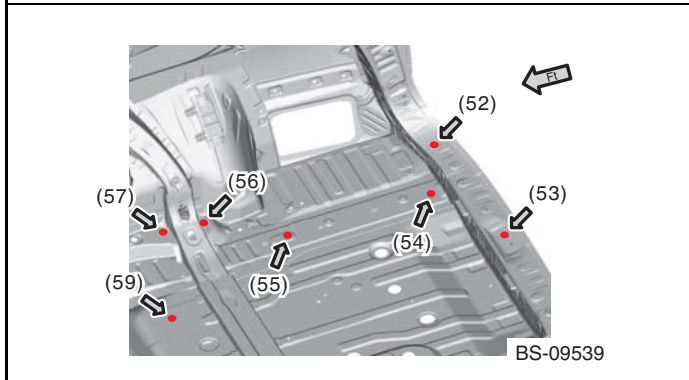
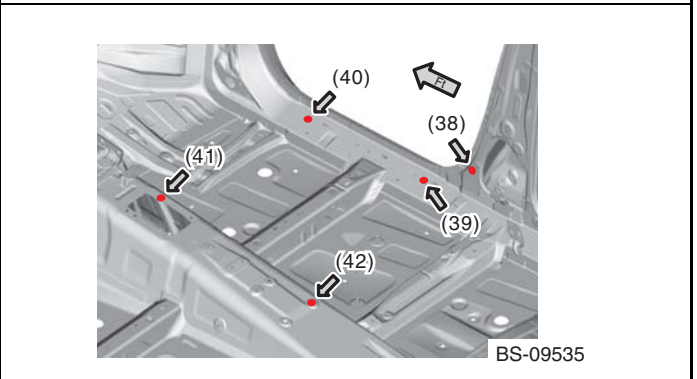
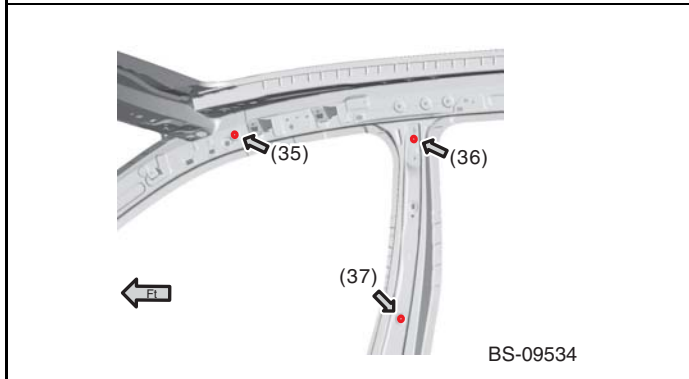
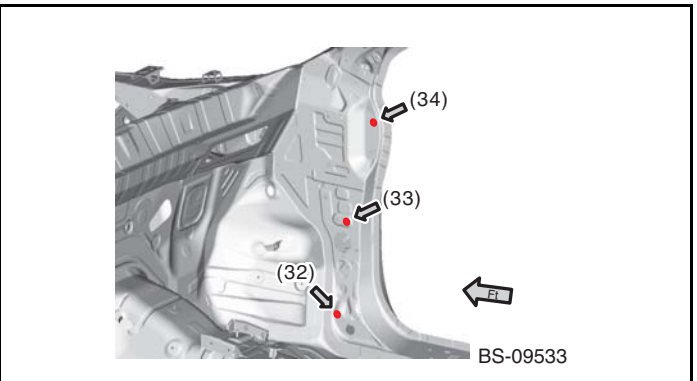
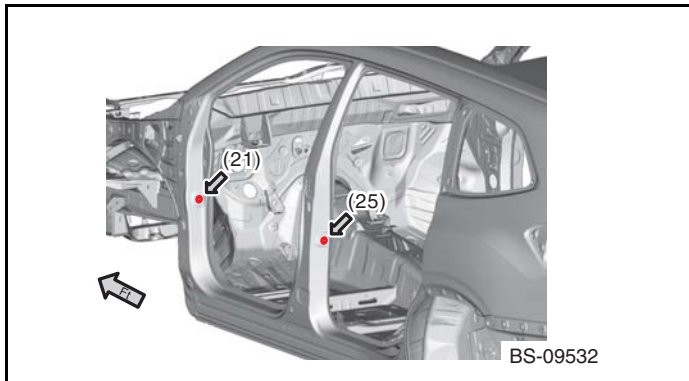
- | | | |
|--|--|--|
| (21) Front door checker mounting hole (symmetrical) | (36) Trim mounting hole (symmetrical) | (55) Third seat mounting hole (symmetrical) |
| (25) Rear door checker mounting hole (symmetrical) | (37) Trim mounting hole (symmetrical) | (56) Rear suspension mounting hole (symmetrical), rear side |
| (32) Ground mounting hole (symmetrical) | (38) Trim mounting hole (symmetrical) | (57) Rear suspension mounting hole (symmetrical), front side |
| (33) Harness Protector mounting hole (symmetrical), rear side | (40) Side sill trim clip mounting hole (symmetrical) | |
| (34) Steering support beam mounting hole (symmetrical), upper side | (41) Shift case mounting hole (symmetrical) | |
| (35) Pad A-pillar pad mounting hole (symmetrical) | (42) Bracket console mounting hole (symmetrical) | |

Body Reference Points

Measuring point	Datum dimension mm (in)
(21)R — (21)L	1,603 (63.11)
(25)R — (25)L	1,591 (62.64)
(32)R — (38)R	870 (34.25)
(33)R — (36)R	1,395 (54.92)
(33)R — (38)R	885 (34.84)
(34)R — (37)R	1,005 (39.57)
(34)R — (38)R	948 (37.32)
(35)R — (36)R	472 (18.58)

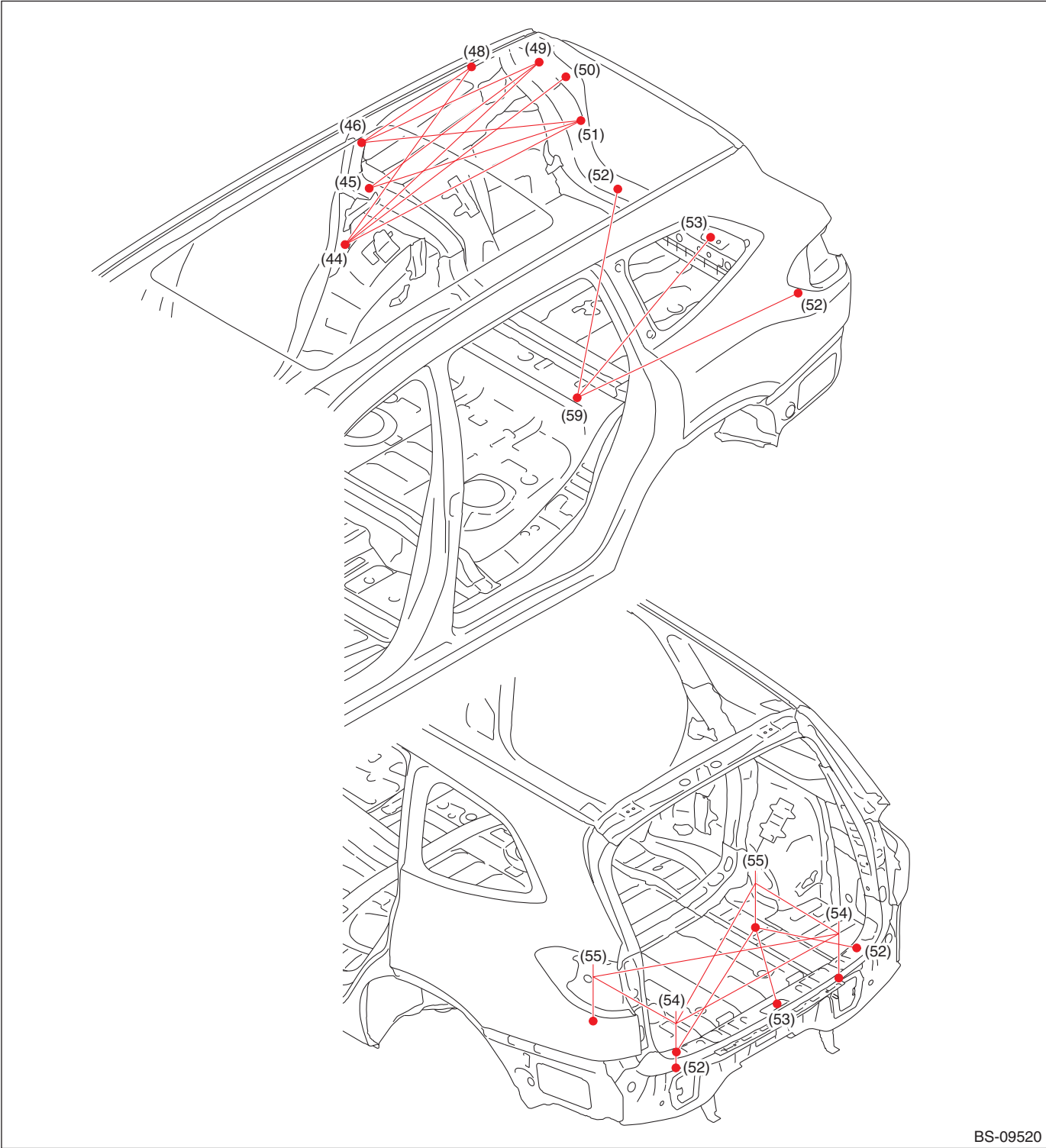
Measuring point	Datum dimension mm (in)
(35)R — (38)R	1,078 (42.44)
(40)R — (40)L	1,479 (58.23)
(40)L — (41)L	708 (27.87)
(40)L — (42)L	925 (36.42)
(55)R — (55)L	886 (34.88)
(56)R — (56)L	1,151 (45.31)
(57)R — (57)L	1,151 (45.31)

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



Body Reference Points

6. INSIDE & REAR



BS-09520

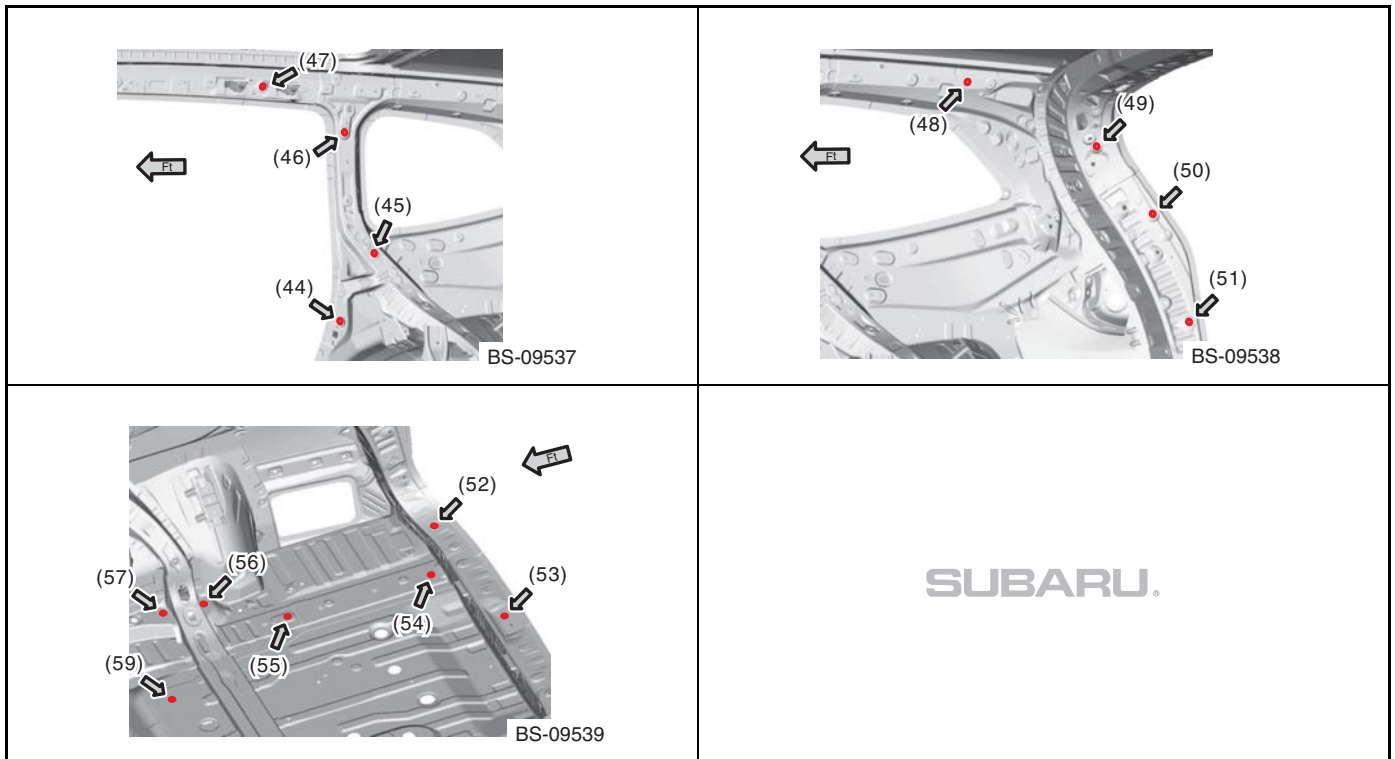
Body Reference Points

- | | | |
|--|--|---|
| (44) Apron trim mounting hole (symmetrical) | (50) D pillar trim mounting hole (symmetrical) | (54) Gauge hole (Only left side) L |
| (45) C pillar trim mounting hole (symmetrical) | (51) Apron trim mounting hole (symmetrical) | (55) Third seat mounting hole (symmetrical) |
| (46) C pillar trim mounting hole (symmetrical) | (52) Skirt trim mounting hole (symmetrical) | (59) Floor mat mounting hole (symmetrical) |
| (48) Curtain air bag mounting hole (symmetrical) | (53) Rear gate striker mounting hole (symmetrical) | |
| (49) D pillar trim mounting hole (symmetrical) | (54) Gauge hole (Only right side) R | |

Measuring point	Datum dimension mm (in)
(44)R — (48)R	871 (34.29)
(44)R — (49)R	1,031 (40.59)
(44)R — (50)R	1,106 (43.54)
(44)R — (51)R	1,148 (45.20)
(45)R — (49)R	829 (32.64)
(45)R — (51)R	1,032 (40.63)
(46)R — (48)R	551 (21.69)
(46)R — (49)R	894 (35.20)
(46)R — (51)R	1,252 (49.29)
(52)R — (55)R	523 (20.59)

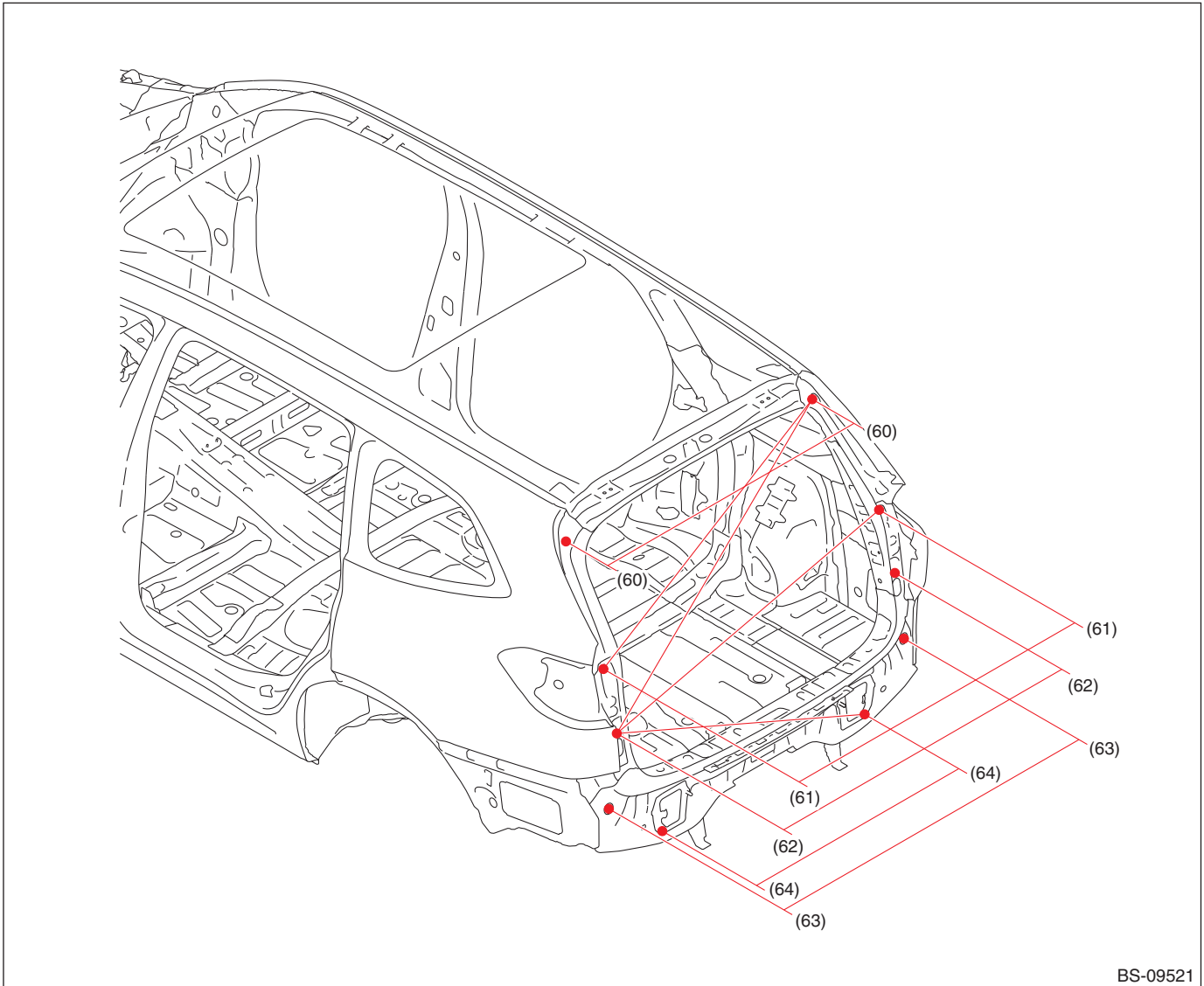
Measuring point	Datum dimension mm (in)
(52)L — (55)R	1,071 (42.17)
(52)R — (59)L	1,219 (47.99)
(52)L — (59)L	1,001 (39.41)
(53)R — (55)R	696 (27.40)
(53)R — (59)L	1,040 (40.94)
(54)R — (54)L	870 (34.25)
(54)R — (55)R	464 (18.27)
(54)R — (55)L	993 (39.09)
(54)L — (55)R	984 (38.74)
(54)L — (55)L	444 (17.48)

- The reference point (54) is the left-right asymmetry. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.



Body Reference Points

7. REAR



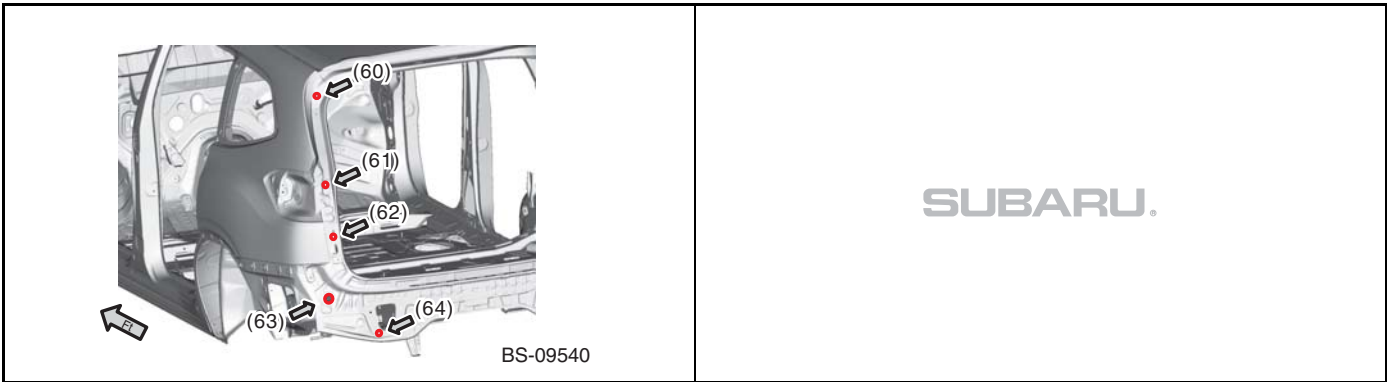
- | | | |
|---|---|---|
| (60) Rear gate stay mounting hole (symmetrical), upper side | (62) Buffer mounting hole (symmetrical), lower side | (64) Rear bumper beam mounting hole (symmetrical) |
| (61) Rear combination light mounting hole (symmetrical), upper side | (63) Harness through hole (symmetrical) | |

Measuring point	Datum dimension mm (in)
(60)R — (60)L	1,172 (46.14)
(60)R — (61)L	1,319 (51.93)
(60)R — (62)L	1,418 (55.83)
(61)R — (61)L	1,312 (51.65)
(61)R — (62)L	1,339 (52.72)

Measuring point	Datum dimension mm (in)
(62)R — (62)L	1,323 (52.09)
(62)L — (64)R	1,238 (48.74)
(63)R — (63)L	1,404 (55.28)
(64)R — (64)L	963 (37.91)

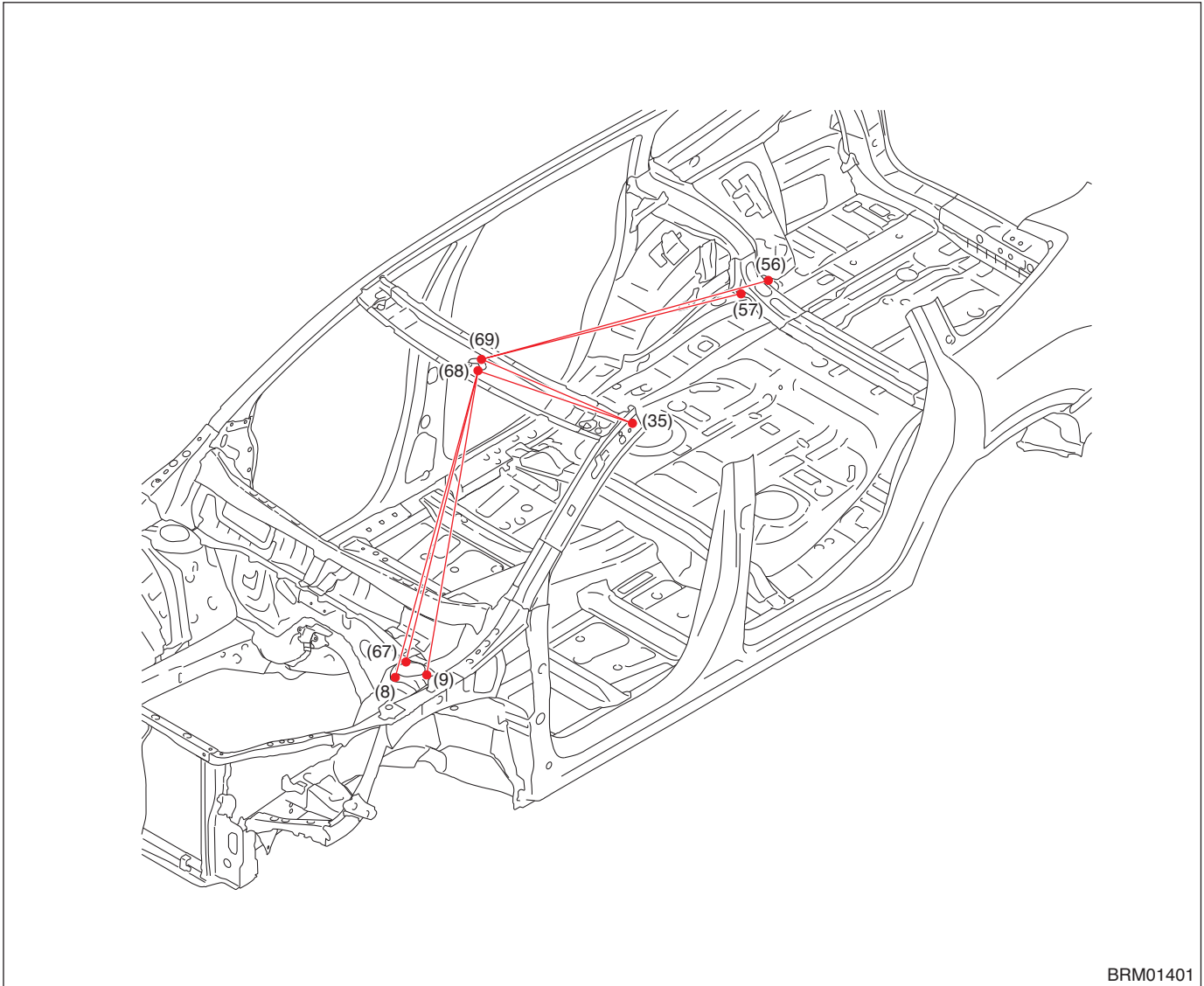
- All reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.

Body Reference Points



Body Reference Points

8. FRONT ROOF RAIL (CAMERA PLATE)



BRM01401

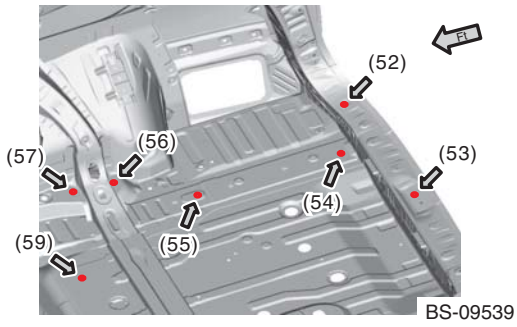
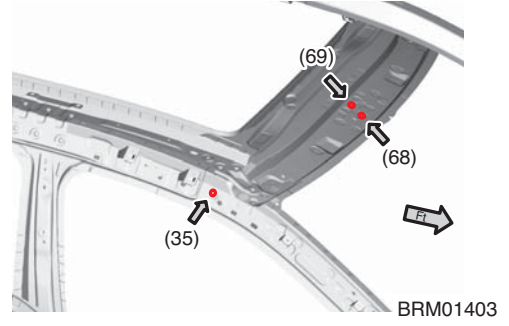
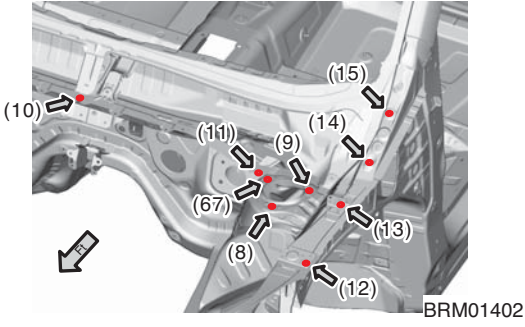
- | | | |
|--|--|---|
| (8) Front suspension mounting hole (symmetrical), front side | (56) Rear suspension mounting hole (symmetrical), rear side | (68) Stereo camera (camera plate) mounting hole (symmetrical), front side |
| (9) Front suspension mounting hole (symmetrical), rear outside | (57) Rear suspension mounting hole (symmetrical), front side | (69) Stereo camera (camera plate) mounting hole (body center), rear side |
| (35) Pad A-pillar pad mounting hole (symmetrical) | (67) Front suspension mounting hole (symmetrical), rear inside | |

Measuring point	Datum dimension mm (in)
(8)L — (68)L	1,320 (51.97)
(9)L — (68)L	1,272 (50.08)
(35)L — (68)L	644 (25.35)
(35)L — (69)	660 (25.98)

Measuring point	Datum dimension mm (in)
(56)R — (69)	2,330 (91.73)
(57)R — (69)	2,213 (87.13)
(67)L — (68)L	1,218 (47.95)

- Reference point (69) indicates a body center part. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.

Body Reference Points

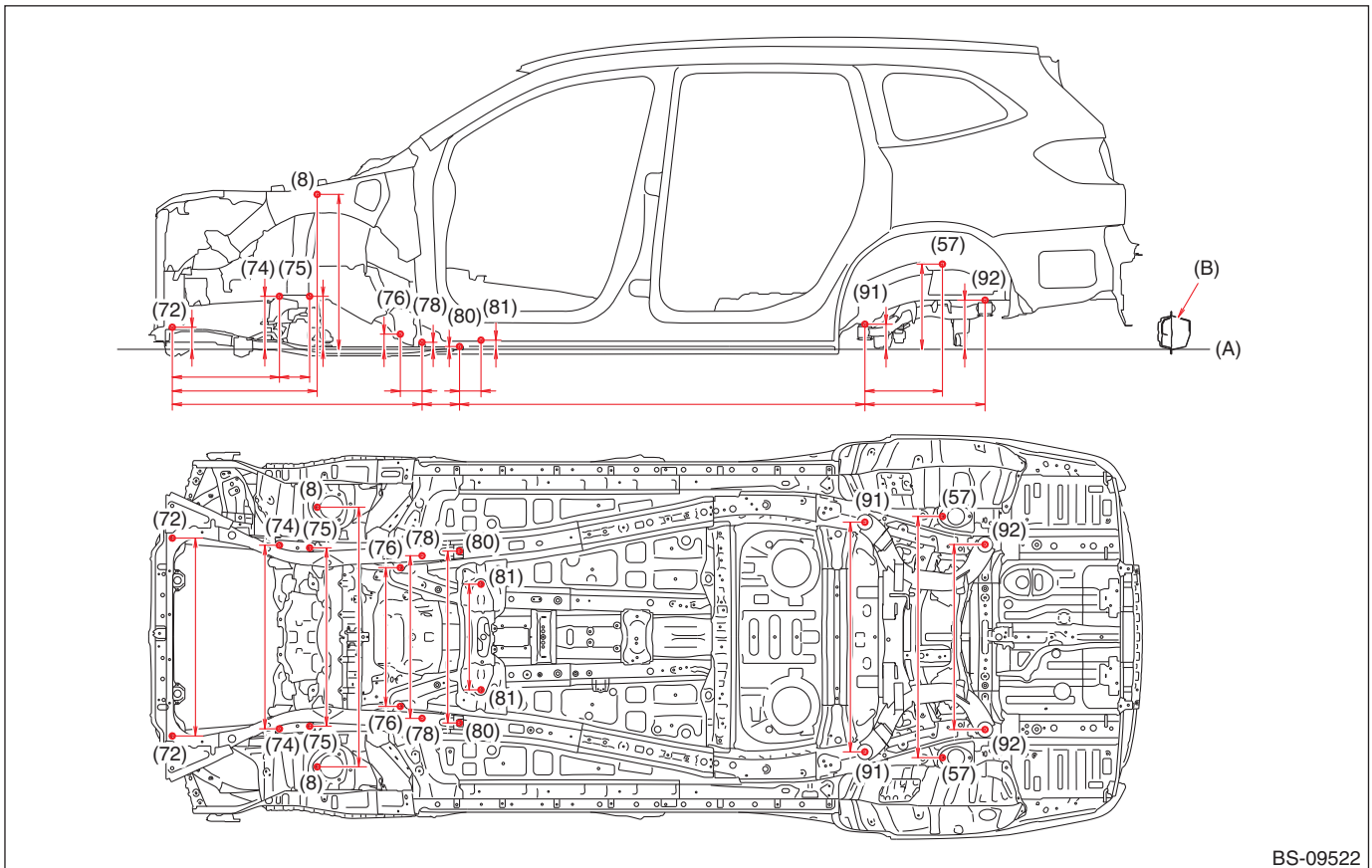


SUBARU.

7. Measurement for Combined Parts

A: DIMENSIONS

1. SUSPENSION MOUNT (SUB FRAME · SUSPENSION MOUNT) & ENGINE MOUNT



BS-09522

- The longitudinal dimensions are projected dimensions.
- The height dimensions are the vertical distances from the gauge point on the assumed horizontal line through the side sill flange joint (bending angle point).

(A) Standard line

(B) Side sill outer panel

(8) Front suspension mounting hole (symmetrical), front side

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

(81) Crossmember upper mounting hole (symmetrical)

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

(76) Front arm plate mounting hole (symmetrical), inner side

(91) Sub frame rear mounting hole (symmetrical)

(72) Sub frame mounting hole (symmetrical)

(78) Sub frame mounting hole (symmetrical)

(92) Sub frame rear mounting hole (symmetrical)

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

(80) Sub frame mounting hole (symmetrical)

Measurement for Combined Parts

Measuring point	Datum dimension mm (in)
Datum line — (8)	739 (29.09)
Datum line — (57)	409 (16.10)
Datum line — (72)	105 (4.13)
Datum line — (74)	253 (9.96)
Datum line — (75)	253 (9.96)
Datum line — (76)	73 (2.87)
Datum line — (78)	34 (1.34)
Datum line — (80)	13 (0.51)
Datum line — (81)	44 (1.73)
Datum line — (91)	120 (4.72)
Datum line — (92)	235 (9.25)
(8) — (72)	691 (27.20)
(57) — (91)	370 (14.57)
(72) — (74)	511 (20.12)
(72) — (78)	1,192 (46.93)
(74) — (75)	144 (5.67)

Measuring point	Datum dimension mm (in)
(76) — (78)	104 (4.09)
(78) — (80)	179 (7.05)
(80) — (81)	103 (4.06)
(80) — (91)	1,934 (76.14)
(91) — (92)	573 (22.56)
(8)R — (8)L	1,239 (48.78)
(57)R — (57)L	1,151 (45.31)
(72)R — (72)L	944 (37.17)
(74)R — (74)L	876 (34.49)
(75)R — (75)L	851 (33.50)
(76)R — (76)L	662 (26.06)
(78)R — (78)L	776 (30.55)
(80)R — (80)L	820 (32.28)
(81)R — (81)L	504 (19.84)
(91)R — (91)L	1,096 (43.15)
(92)R — (92)L	883 (34.76)

CAUTION:

For the reference points (8), refer to the figure "Front 2, DIMENSIONS, Body Reference Points" on page 36.

For the reference points (57), refer to the figure "INSIDE 2, DIMENSIONS, Body Reference Points" on page 40.

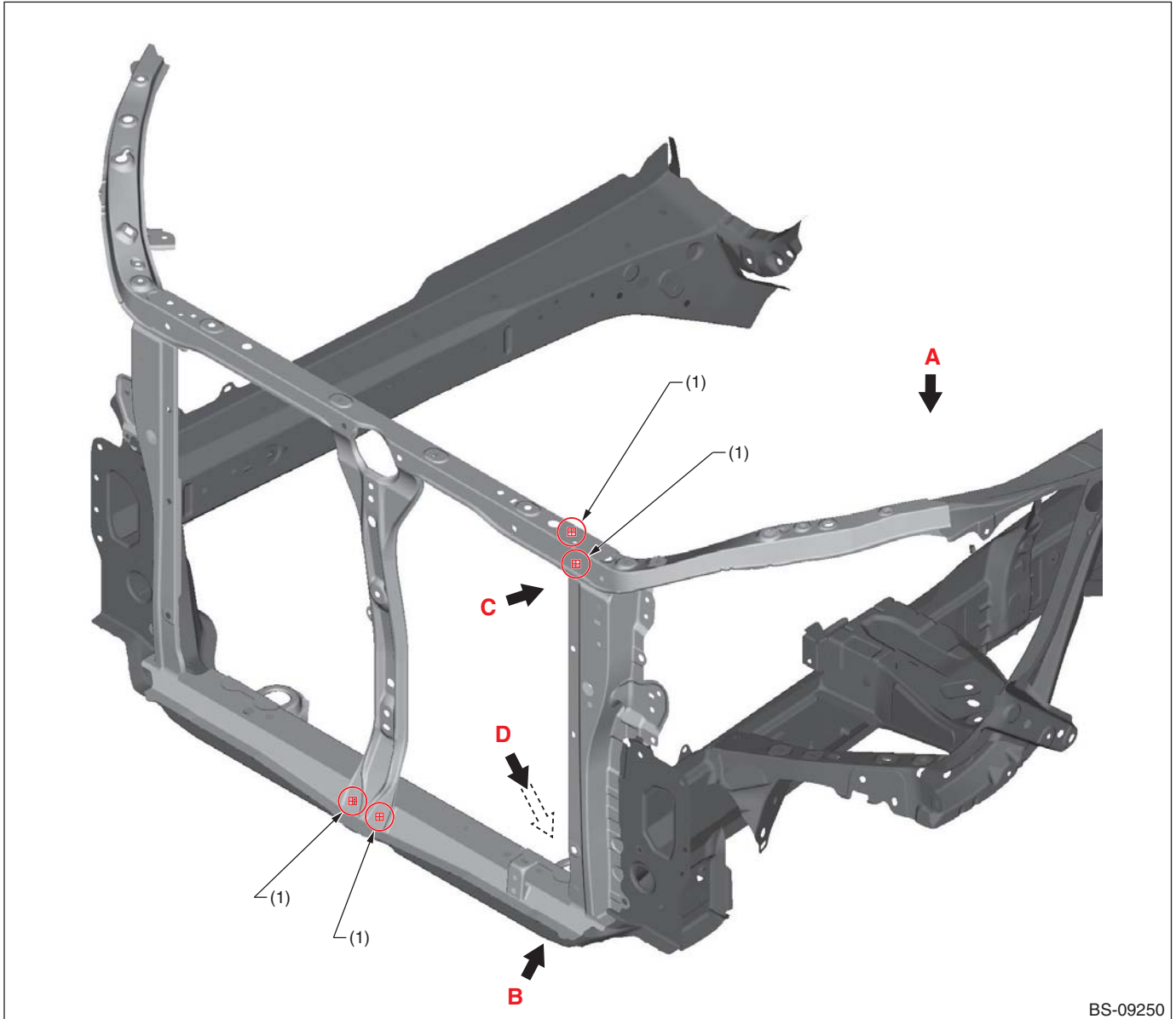
Except the reference points (8) and (57), refer to the figure "LOWER SURFACE, DIMENSIONS, Body Reference Points" on page 31.

8. Panel Replacement

8-1. Radiator Panel (Total replacement)

A: REMOVAL

- Overall view

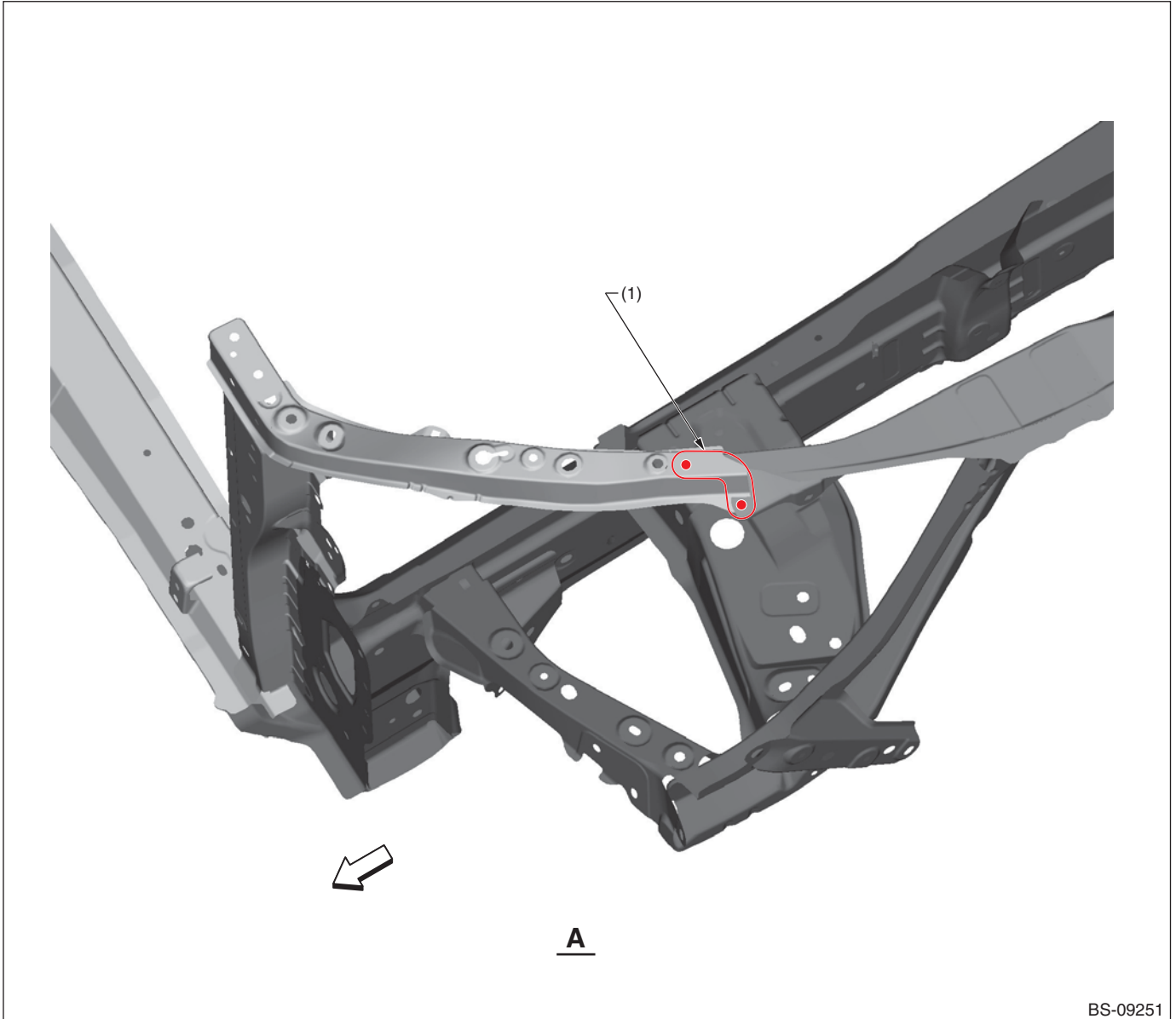


BS-09250

(1) 1 point (bolt)

Panel Replacement

• Views A

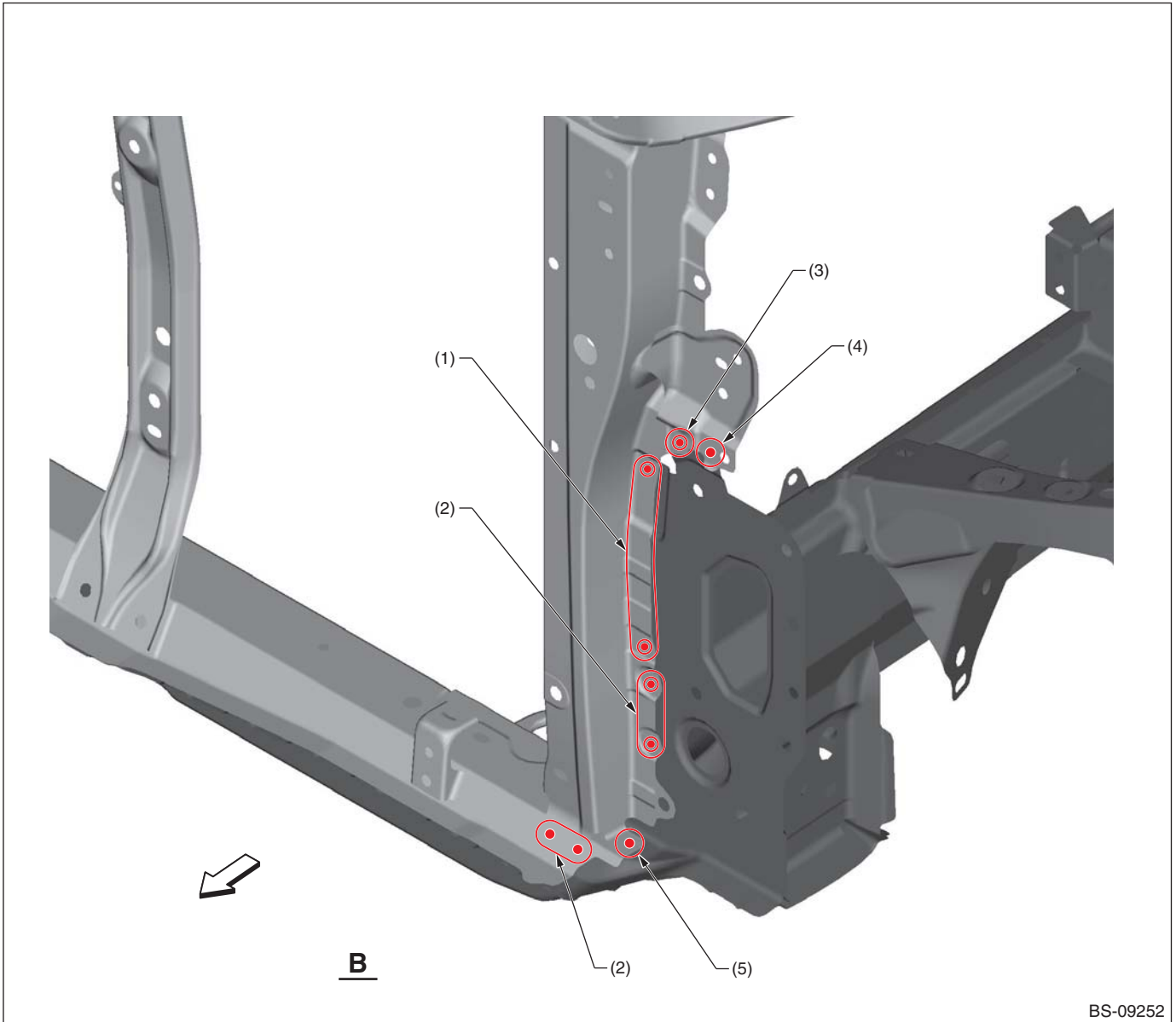


BS-09251

(1) 3 points (top · 1)

Panel Replacement

• Views B



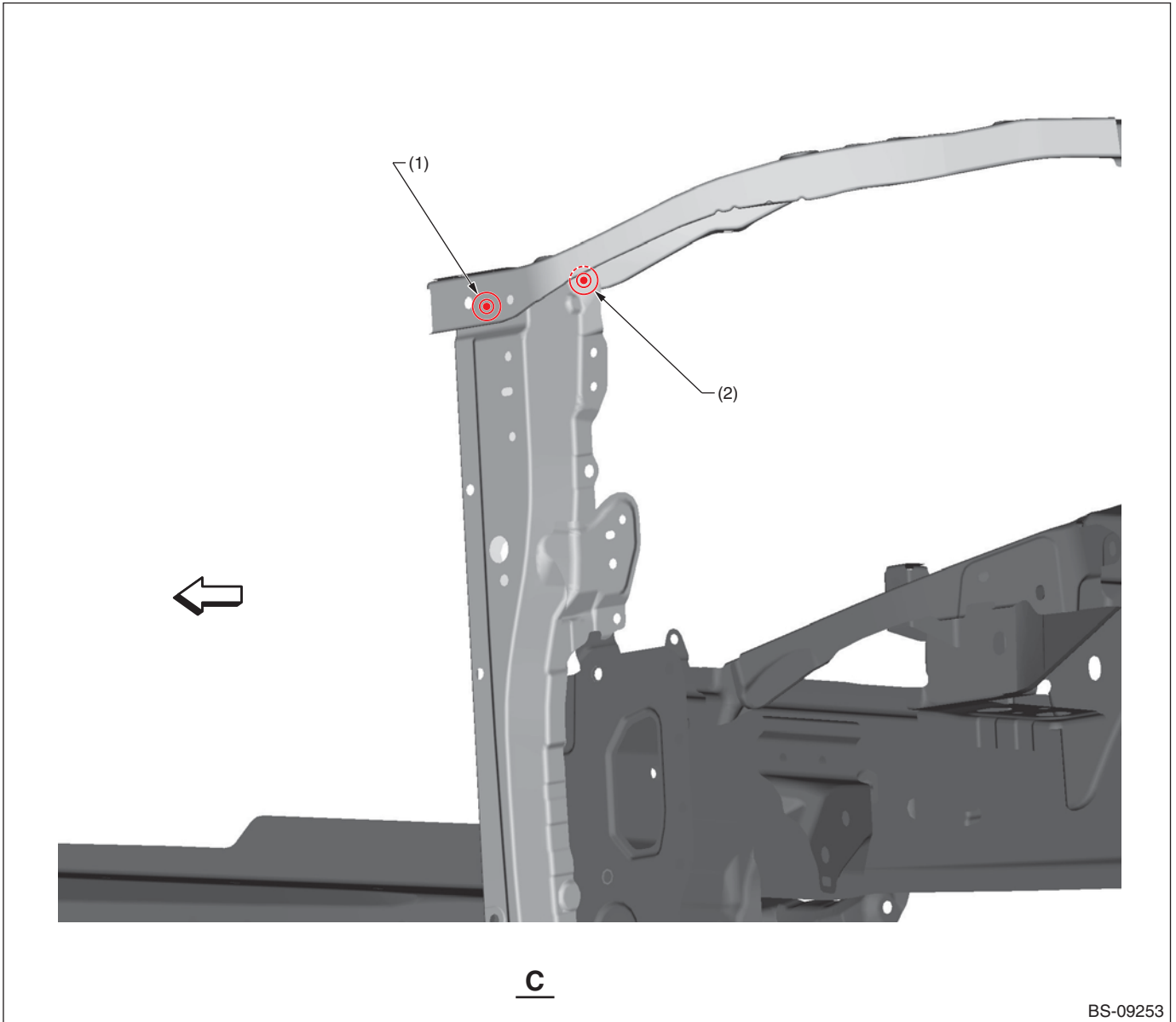
(1) 3 points (outside · 2)
(2) 2 points (outside · 1)

(3) 1 point (outside · 2)
(4) 1 point (outside · 1)

(5) 1 point (top · 1)

Panel Replacement

• Views C

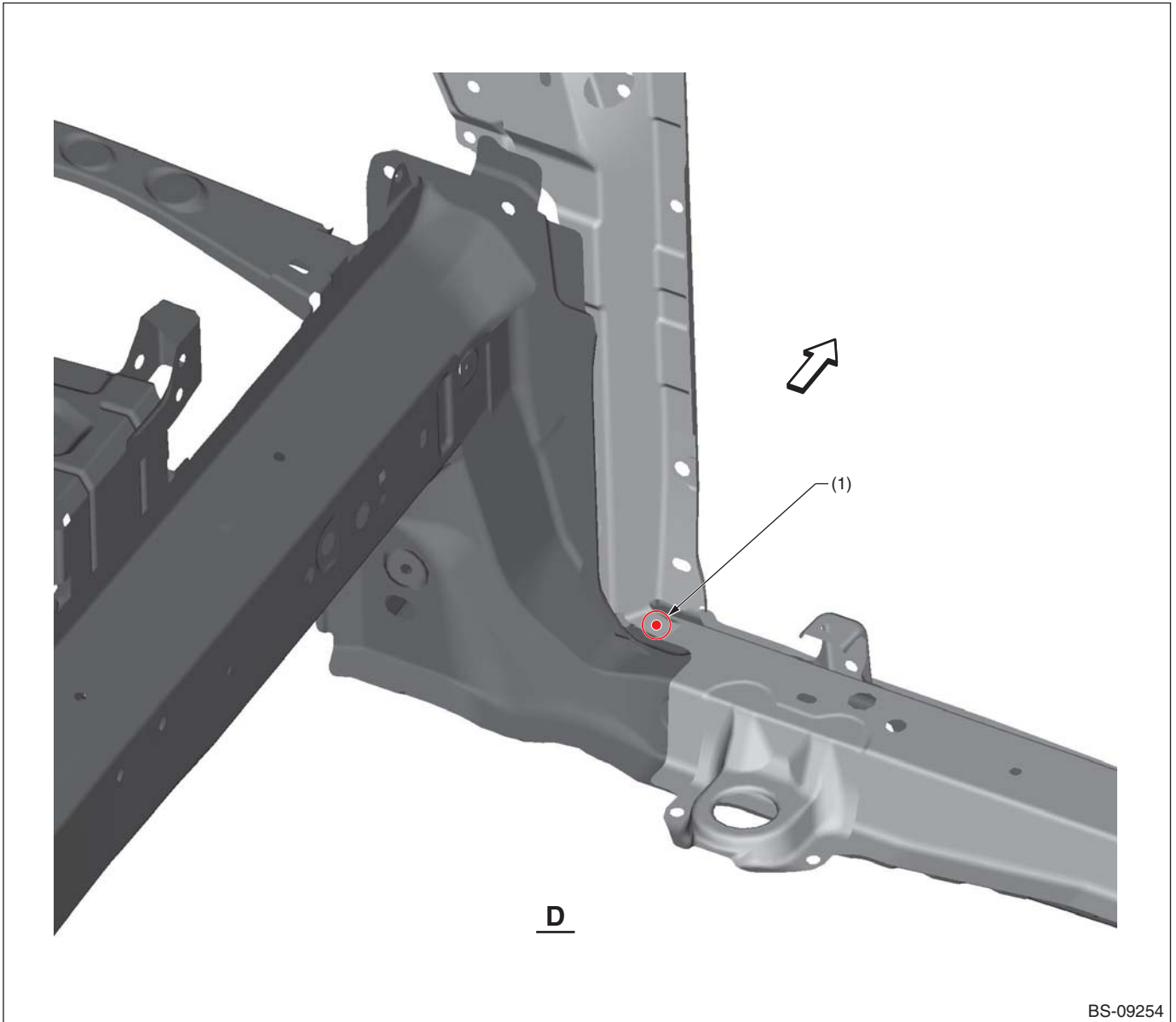


(1) 1 point (outside - 1)

(2) 1 point (inside - 1)

Panel Replacement

• Views D

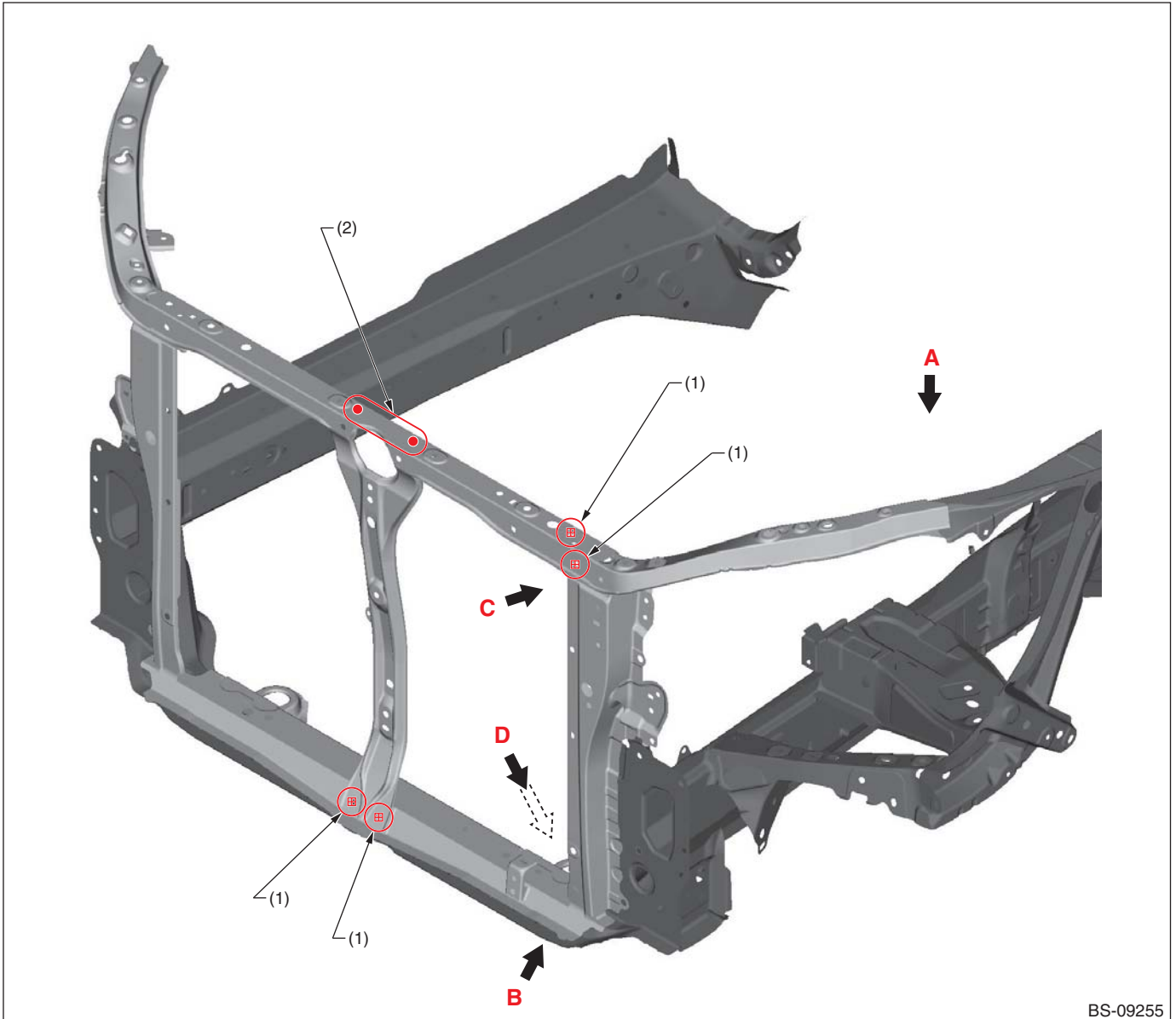


(1) 1 point (top · 1)

Panel Replacement

B: INSTALLATION

• Overall view



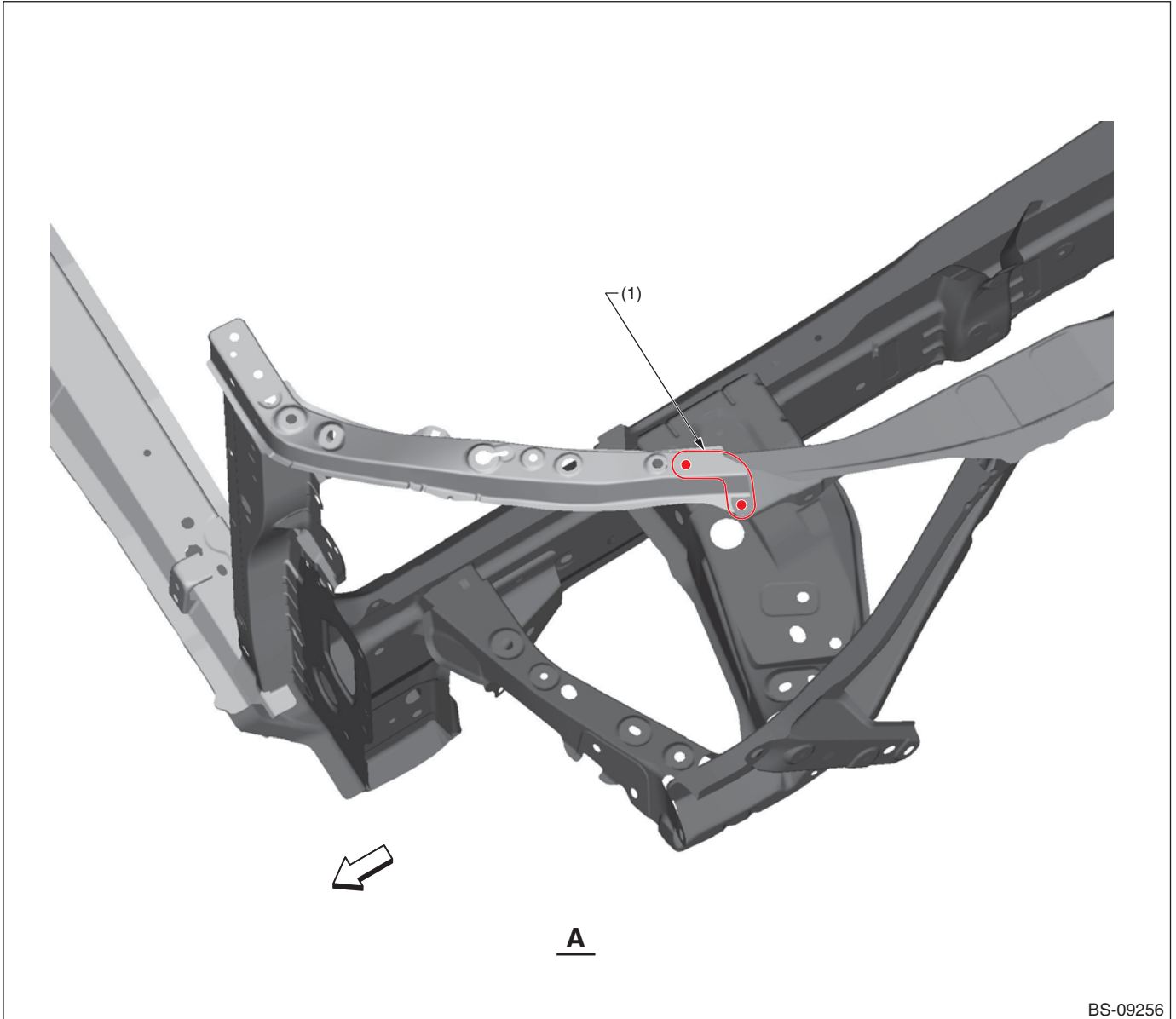
BS-09255

(1) 1 point (bolt)

(2) 2 points

Panel Replacement

• Views A

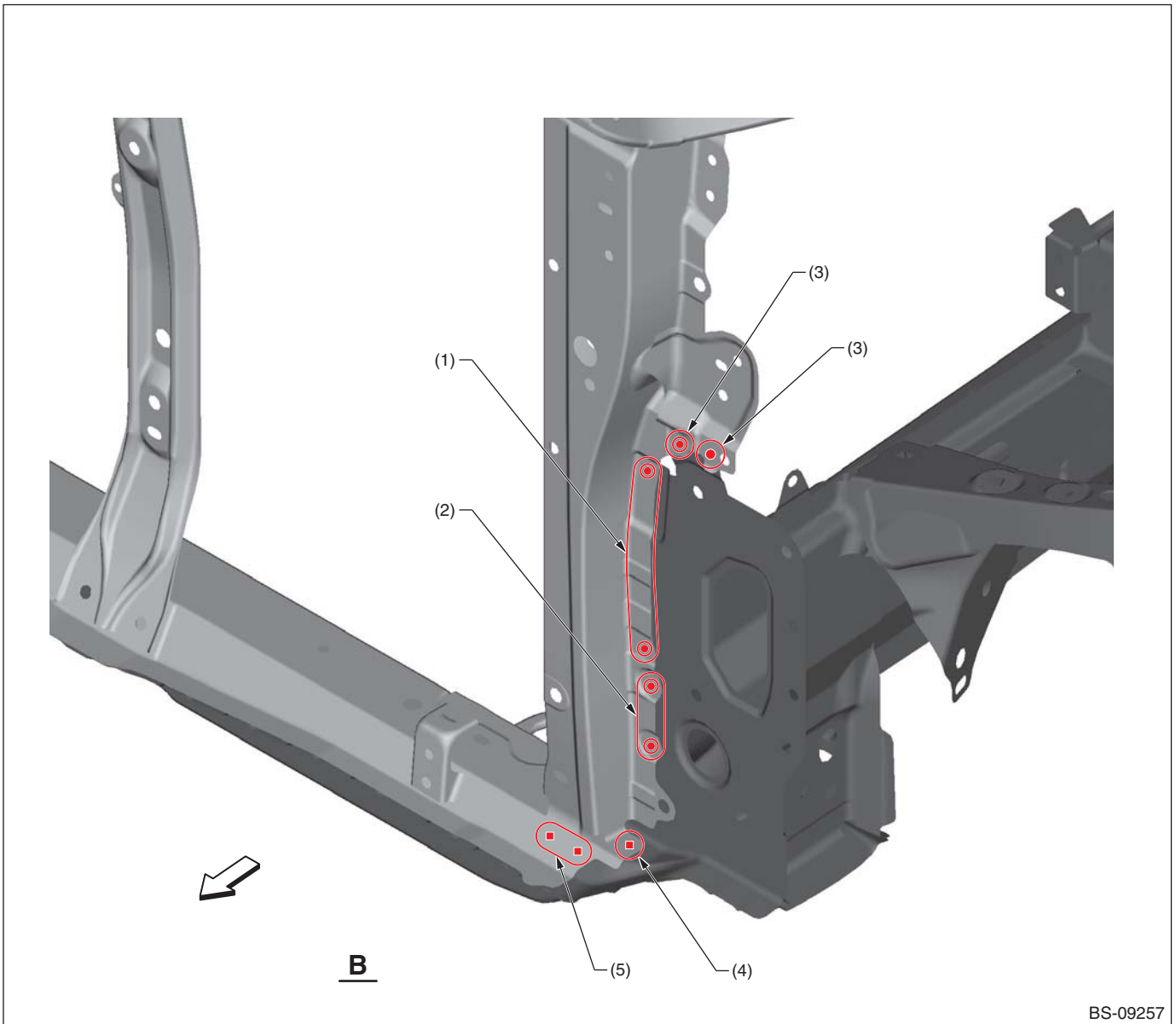


BS-09256

(1) 3 points

Panel Replacement

• Views B



BS-09257

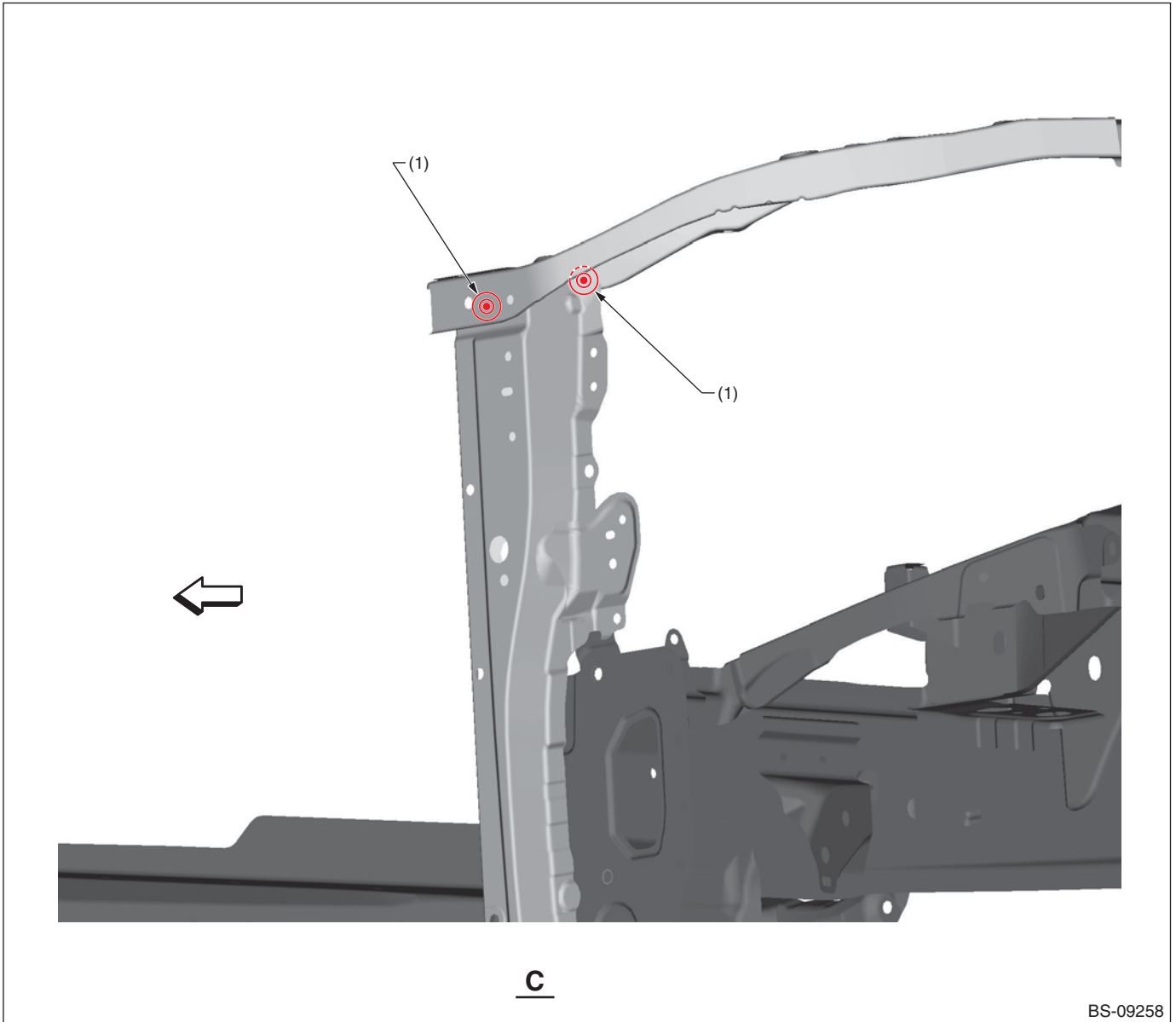
(1) 3 points
(2) 2 points

(3) 1 point
(4) 1 point (service)

(5) 2 points (service)

Panel Replacement

• Views C

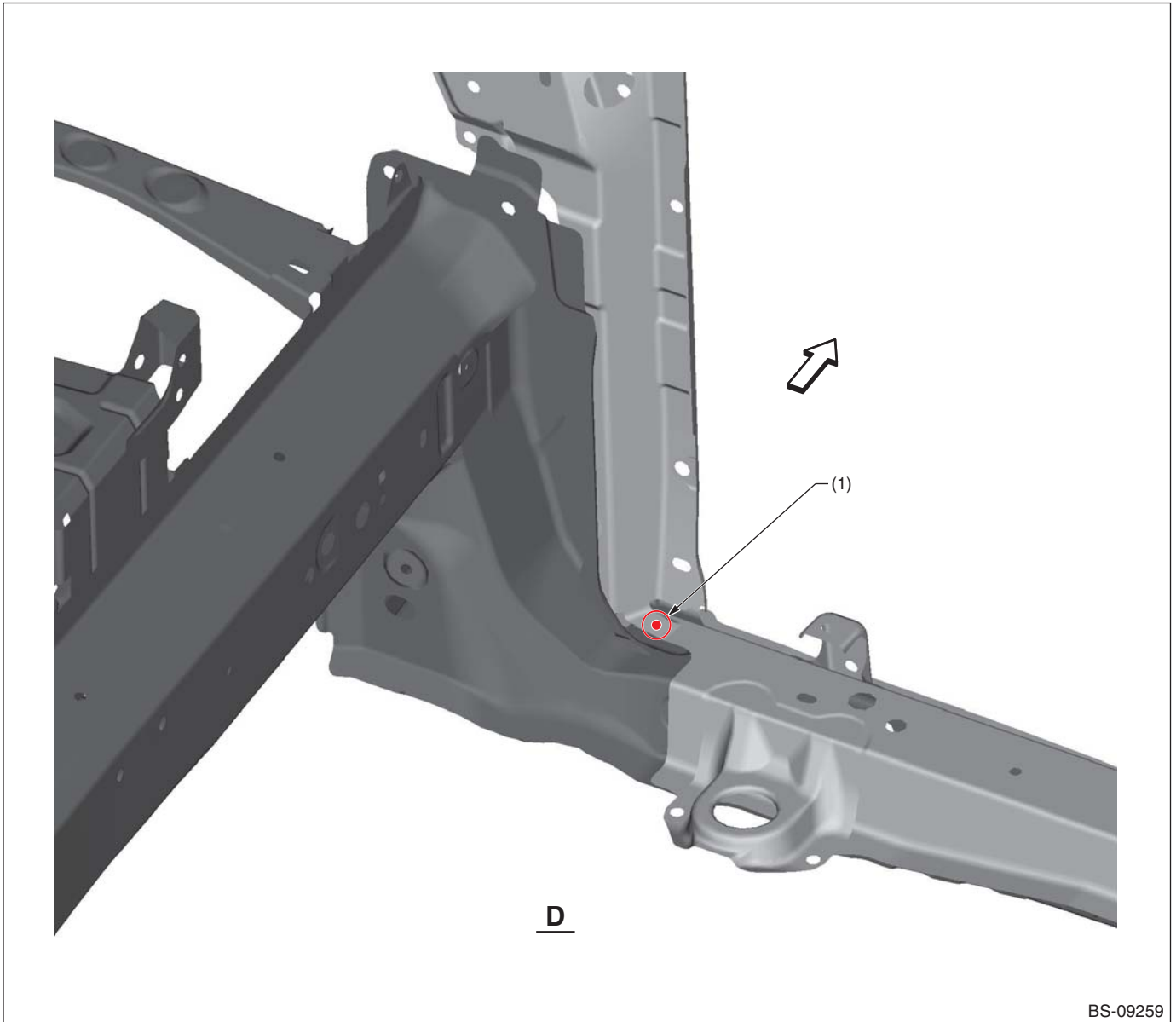


BS-09258

(1) 1 point

Panel Replacement

• Views D



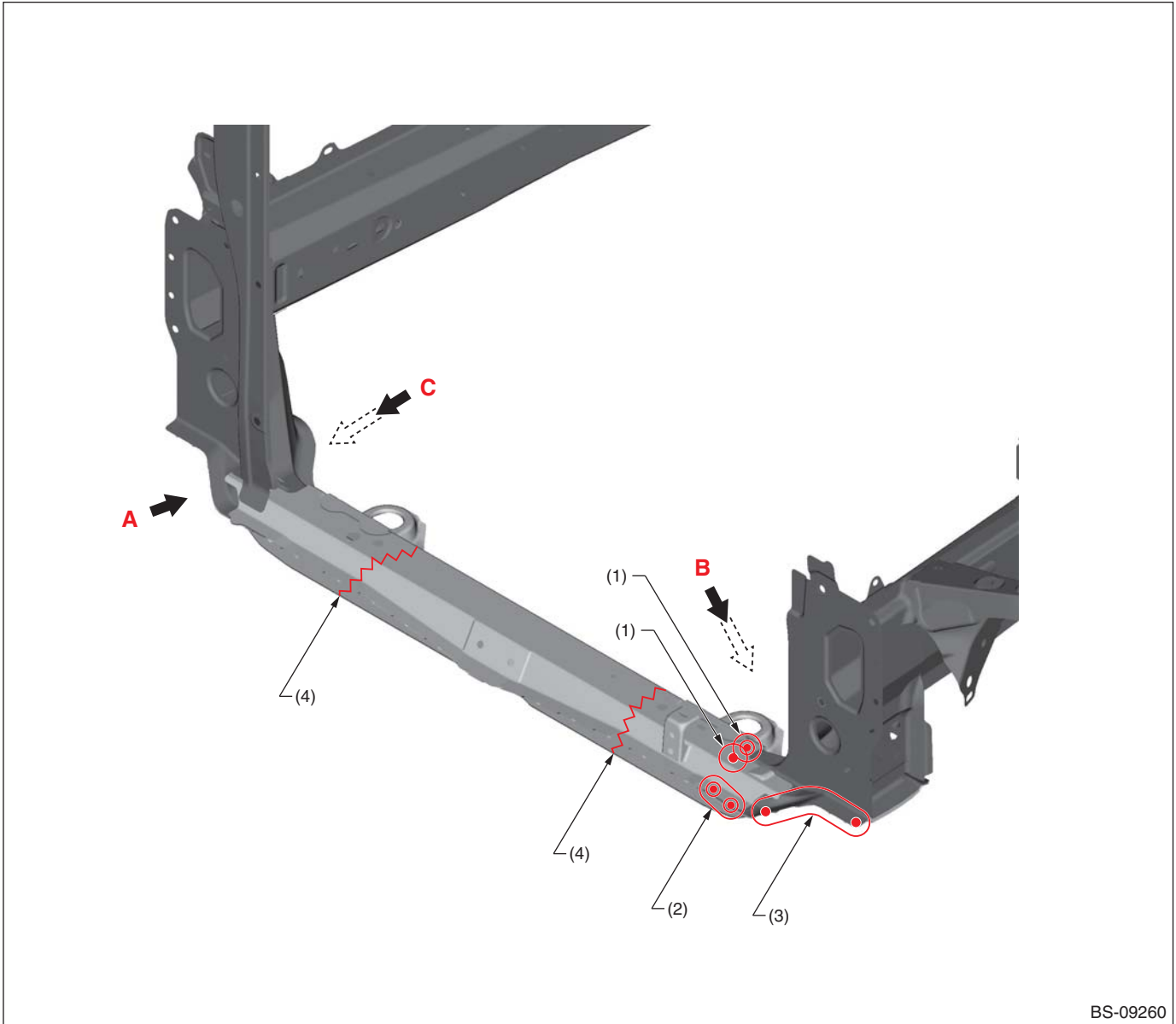
(1) 1 point (service)

Panel Replacement

8-2. Radiator Core Support (Total replacement)

A: REMOVAL

• Overall view



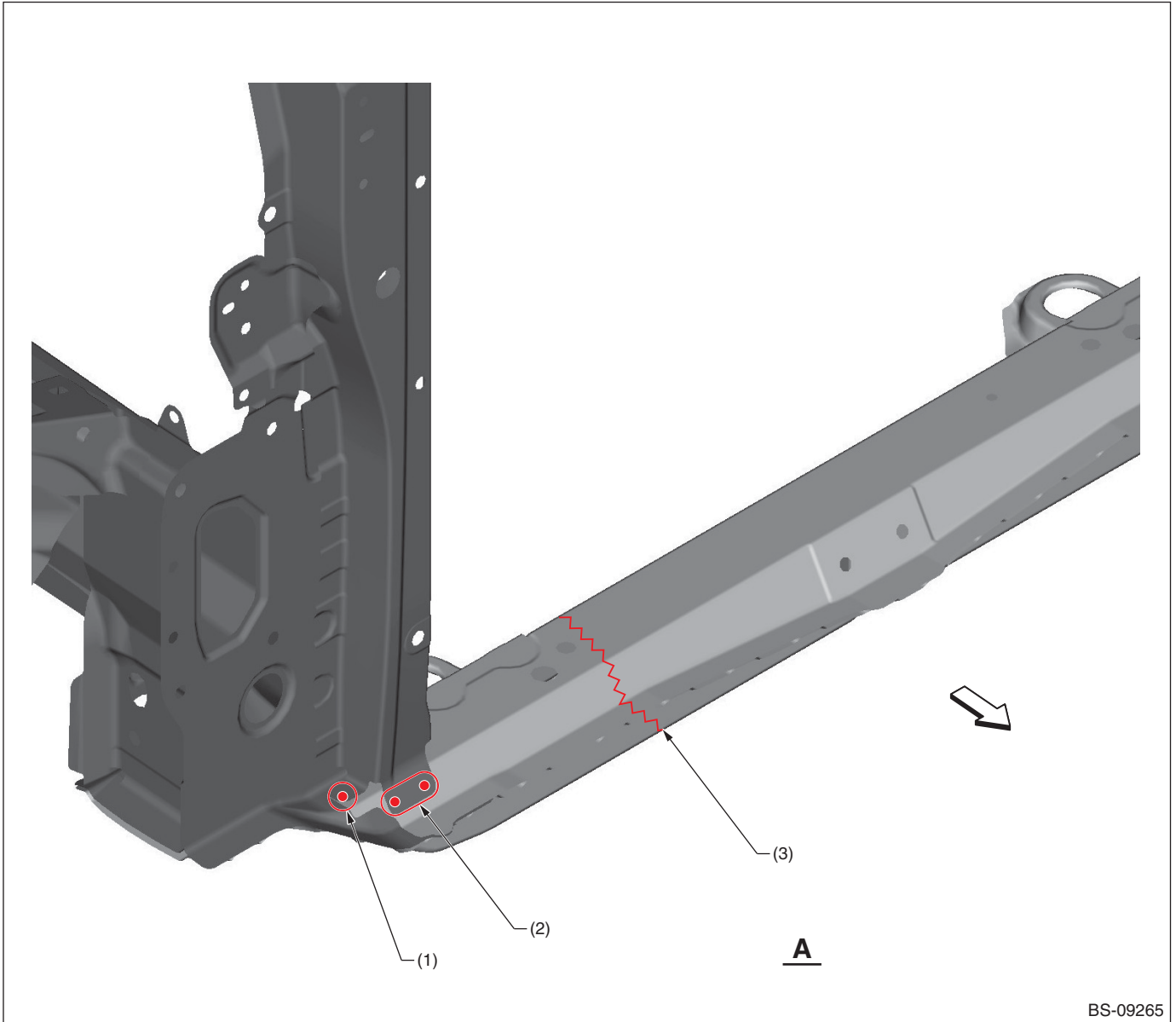
- (1) 1 point (top · 1)
- (2) 2 points (top · 1)

- (3) 5 points (top · 1)

- (4) Rough cutting

Panel Replacement

• Views A



BS-09265

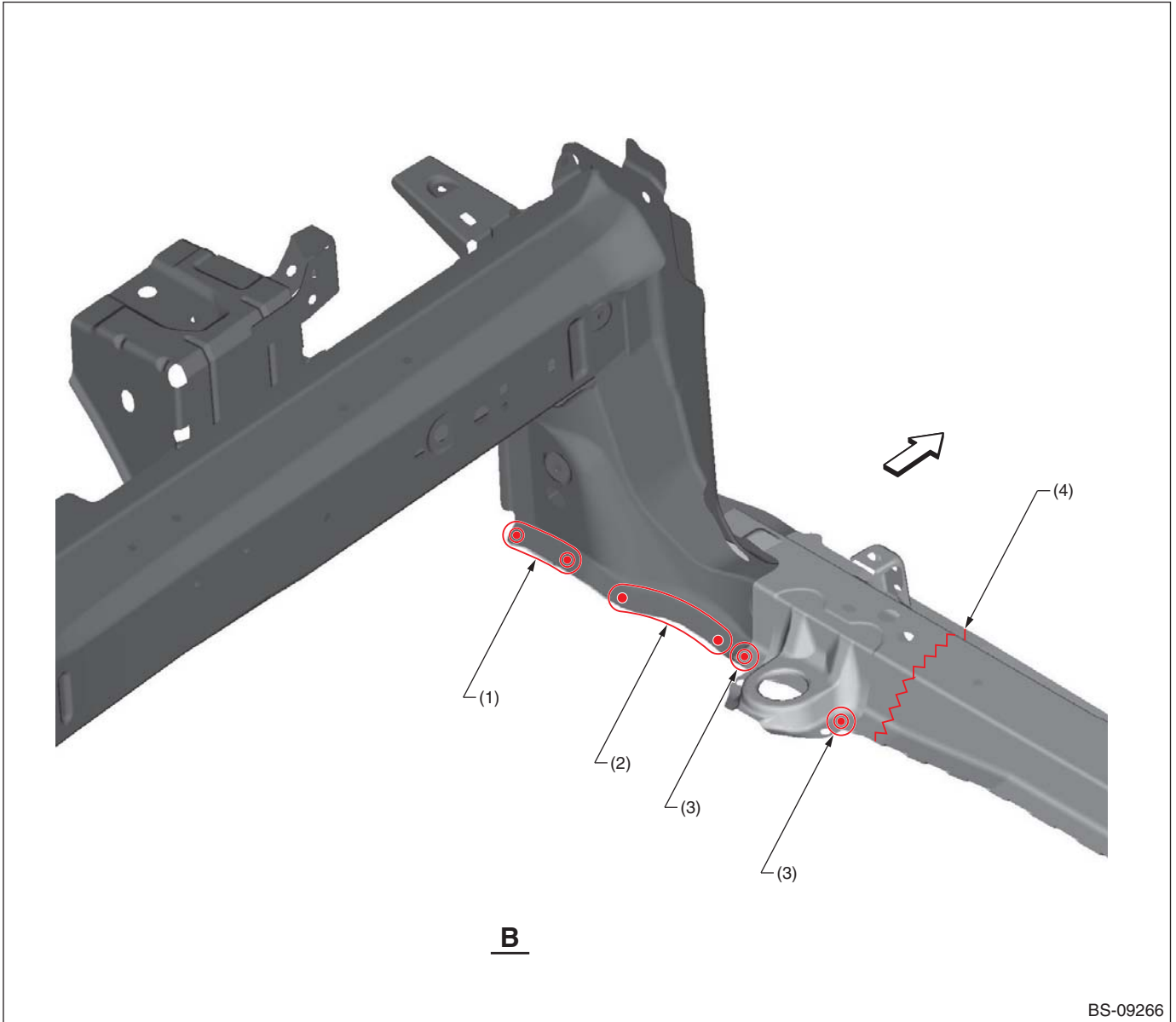
(1) 2 points (top · 1)

(2) 1 point (top · 1)

(3) Rough cutting

Panel Replacement

• Views B



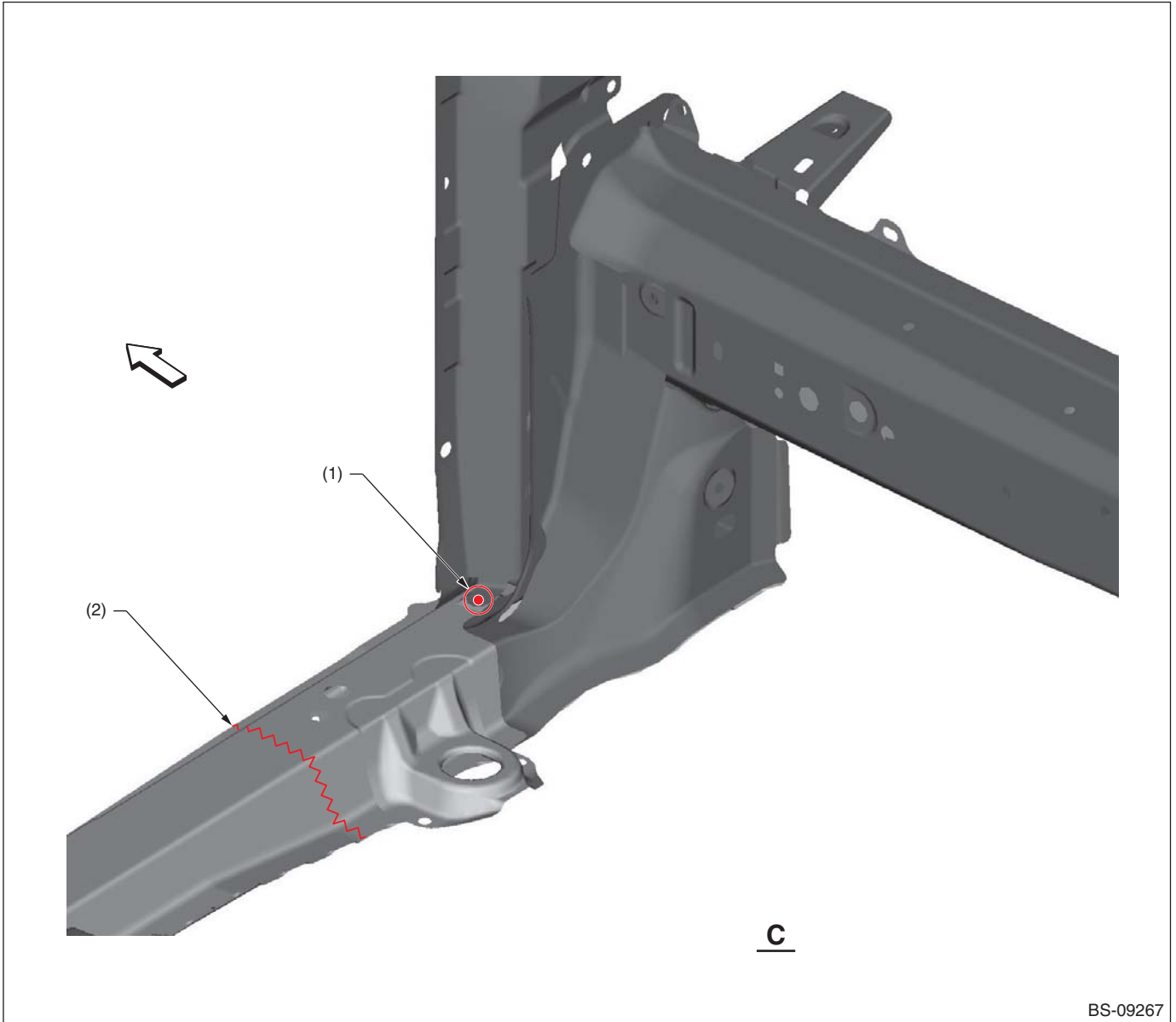
(1) 2 points (bottom · 1)
(2) 3 points (bottom · 1)

(3) 1 point (bottom · 1)

(4) Rough cutting

Panel Replacement

• Views C



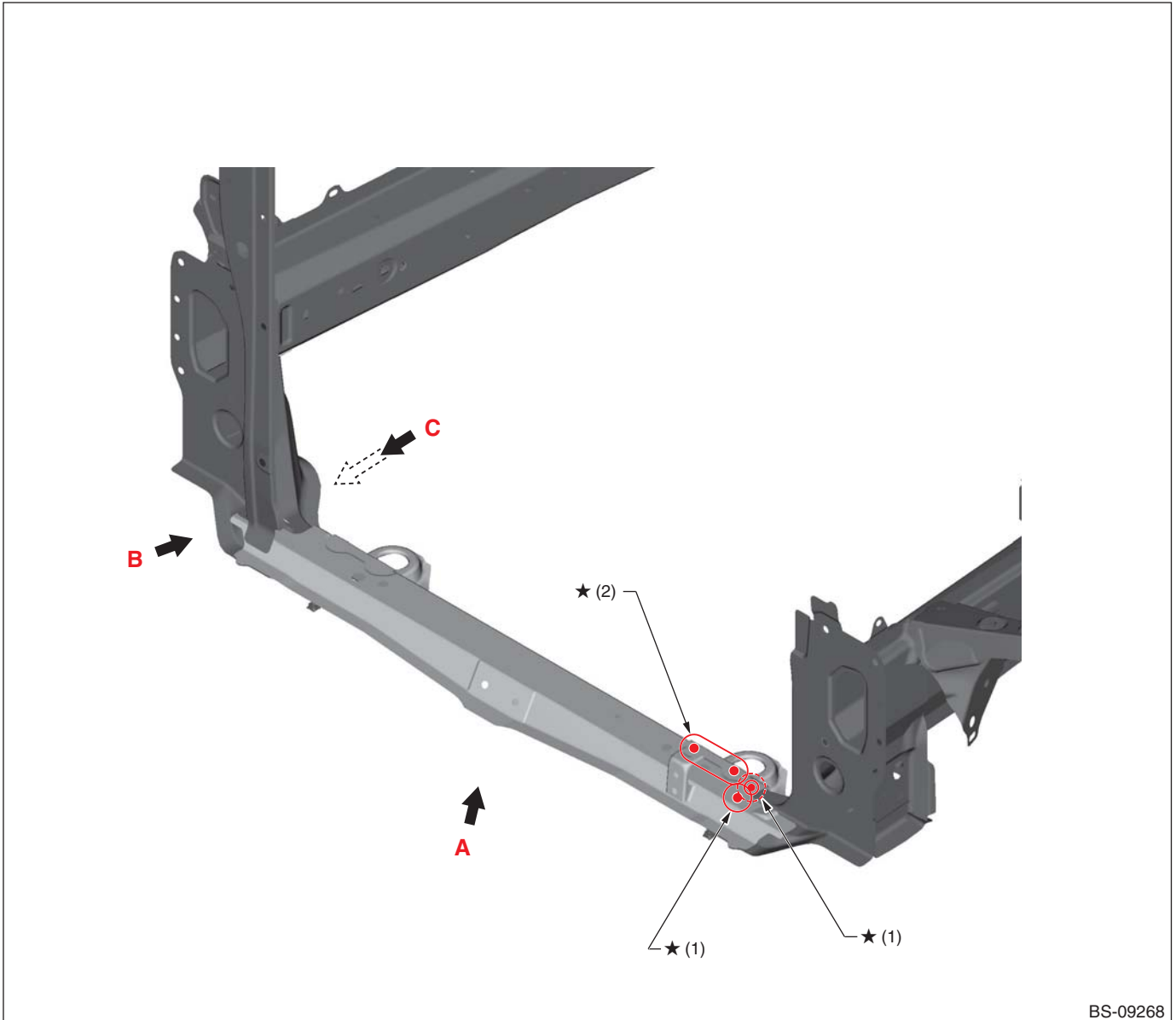
(1) 1 point (top · 1)

(2) Rough cutting

Panel Replacement

B: INSTALLATION

• Overall view



BS-09268

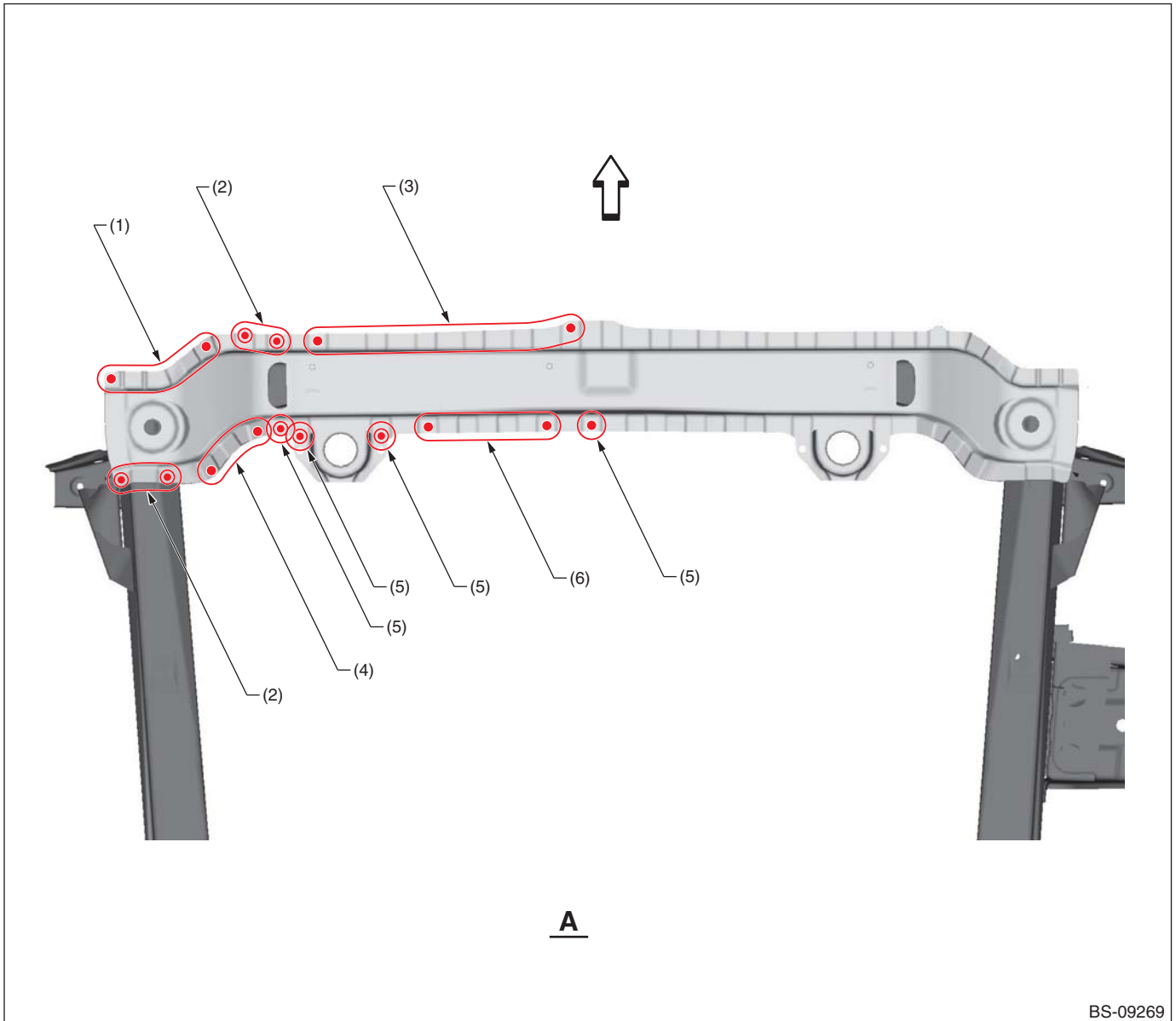
(1) 1 point

(2) 2 points

★: Before radiator B is installed, this point is welded.

Panel Replacement

• Views A



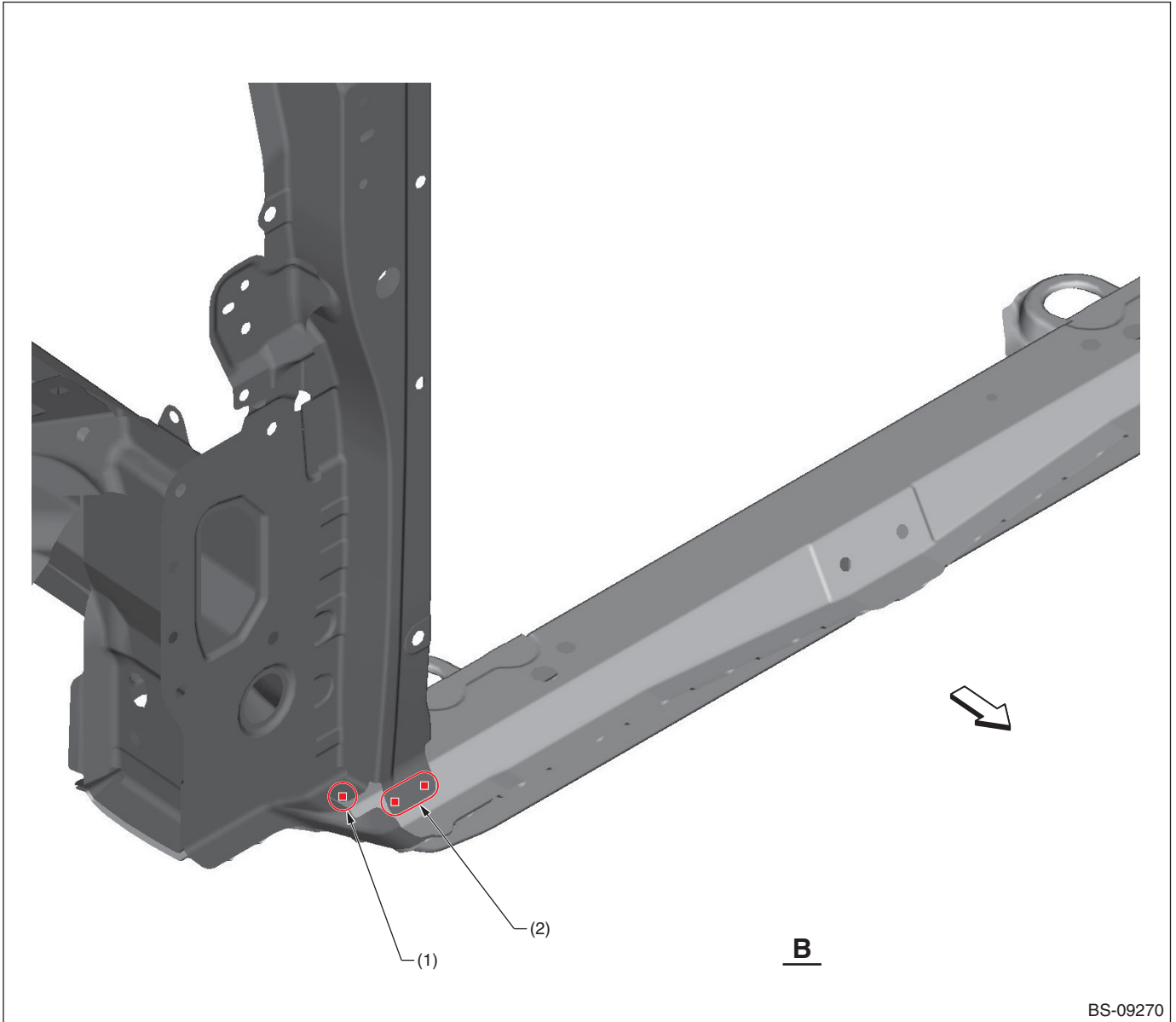
(1) 5 points
(2) 2 points

(3) 6 points
(4) 3 points

(5) 1 point
(6) 4 points

Panel Replacement

- Views B

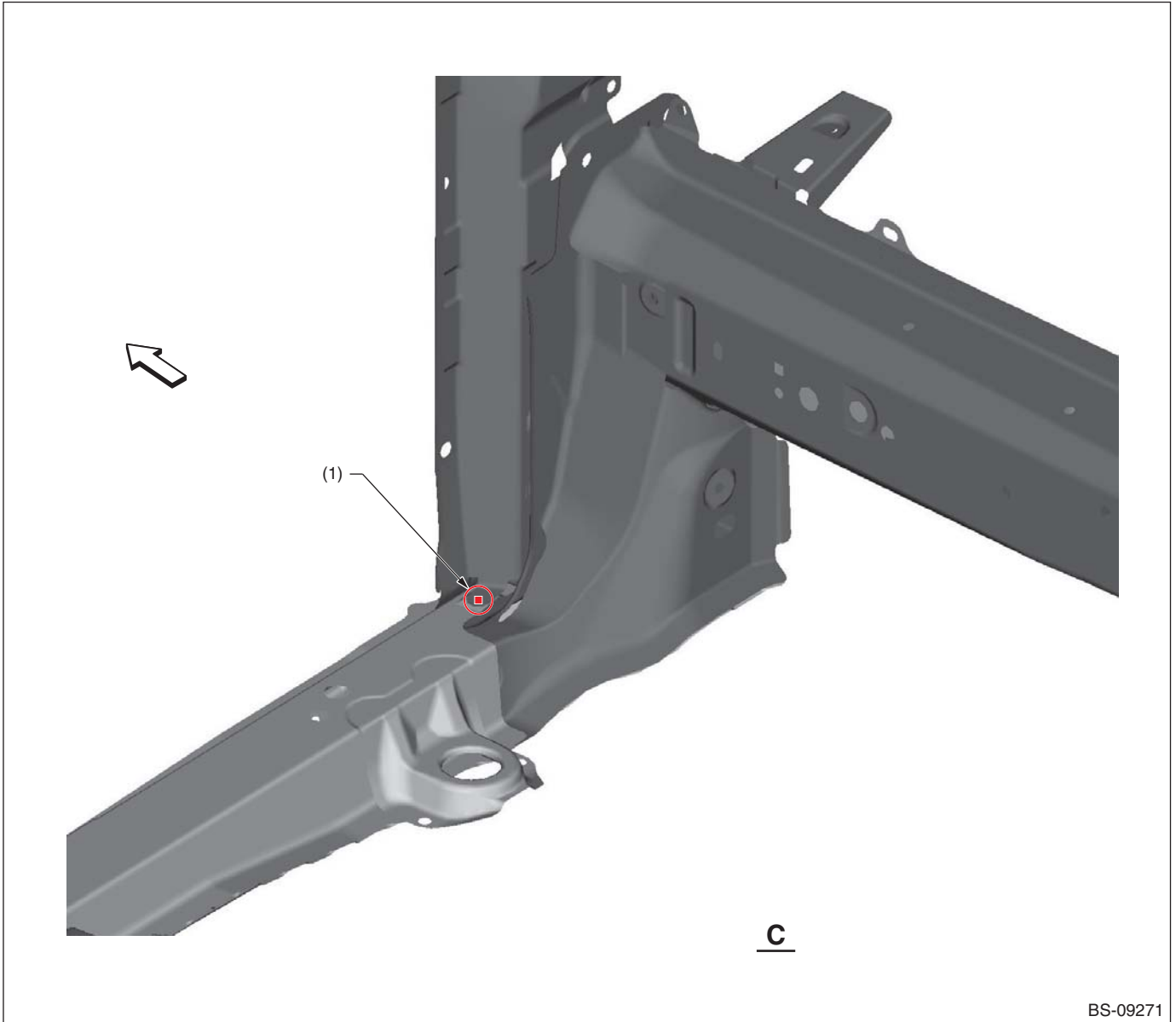


(1) 1 point (service)

(2) 2 points (service)

Panel Replacement

• Views C



BS-09271

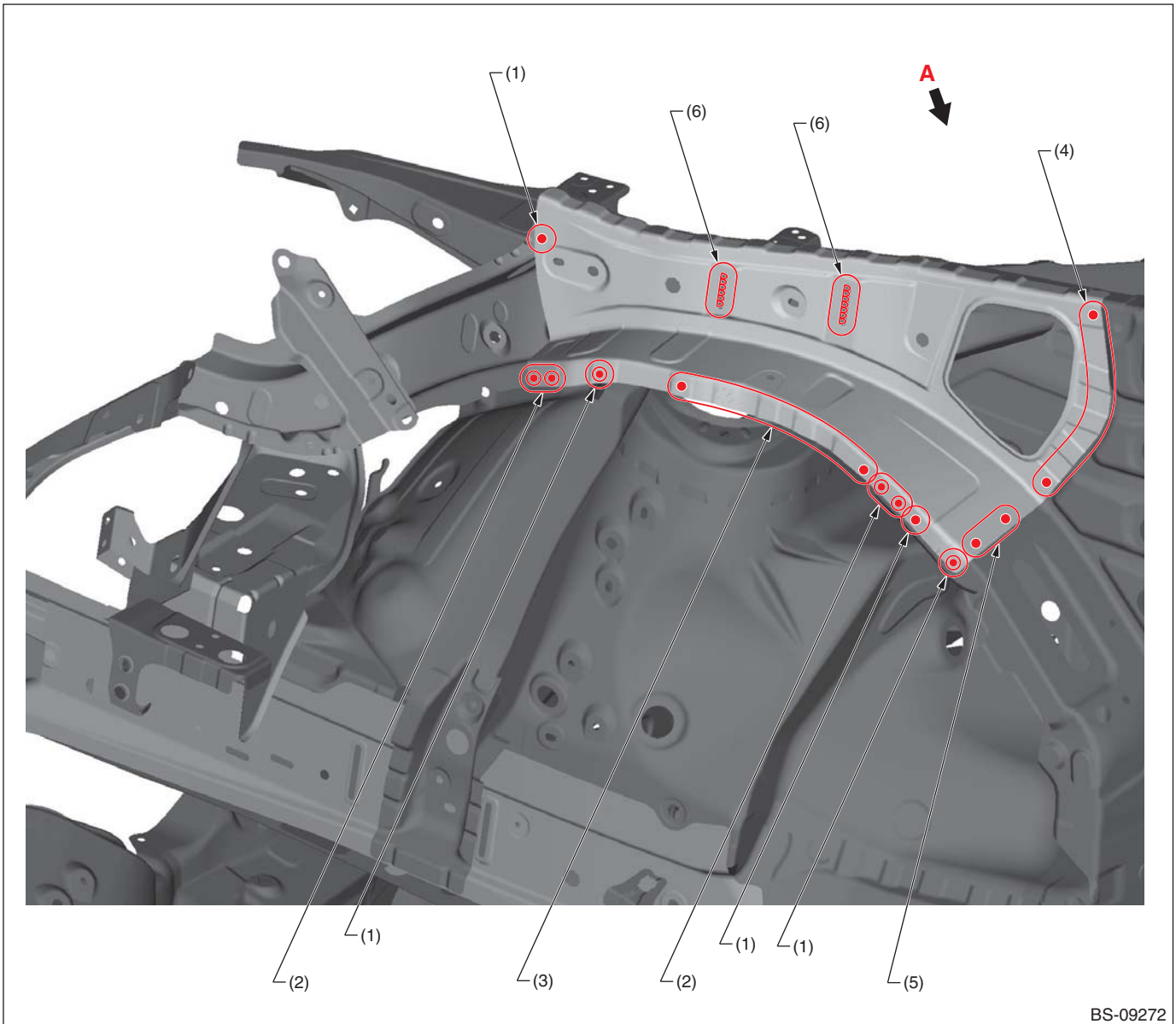
(1) 1 point (service)

Panel Replacement

8-3. Side Upper Frame (Total replacement)

A: REMOVAL

• Overall view 1



BS-09272

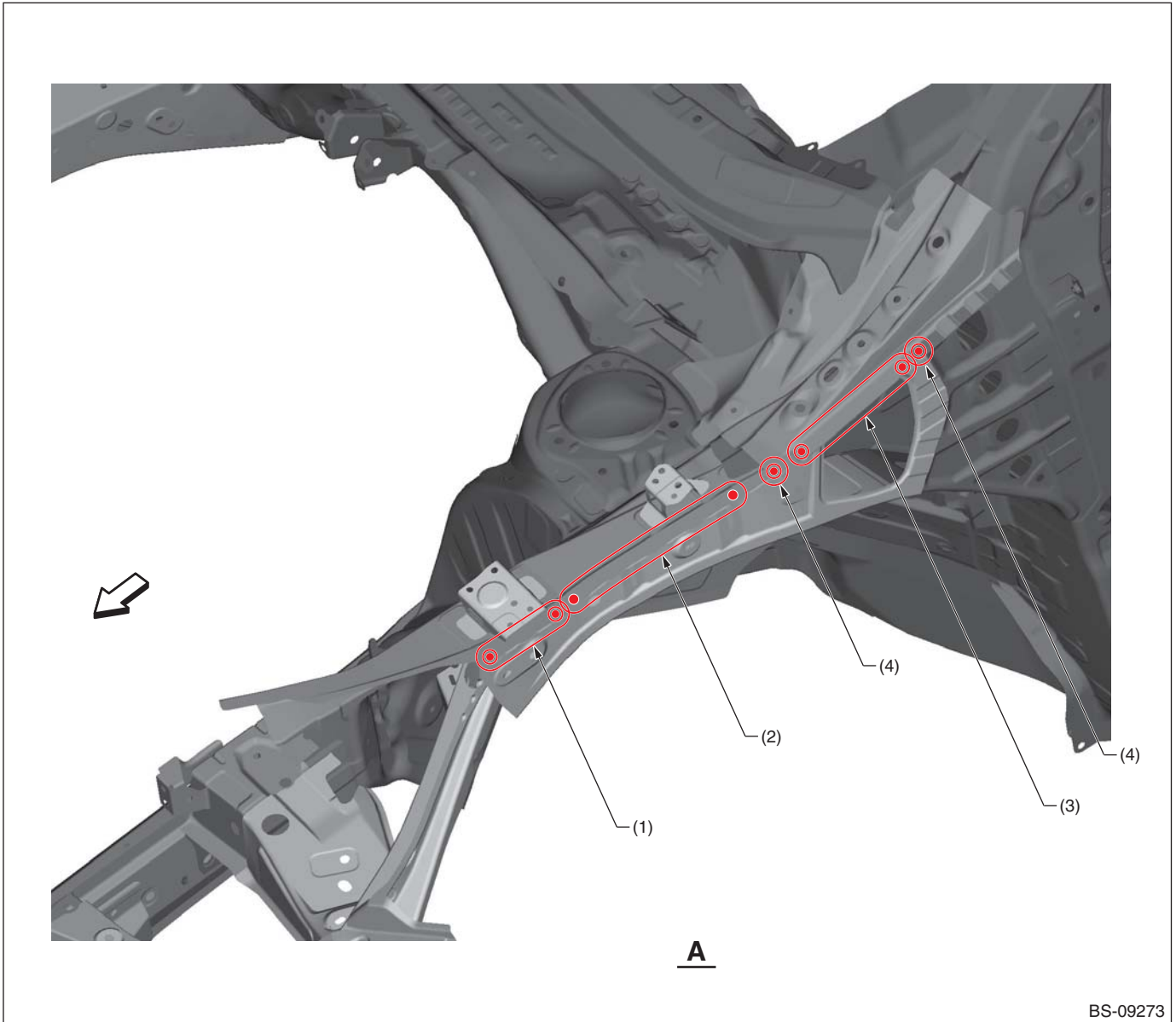
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

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

(5) 3 points (outside · 1)
(6) 1 point (outside · 1 belt sander)

Panel Replacement

• Views A



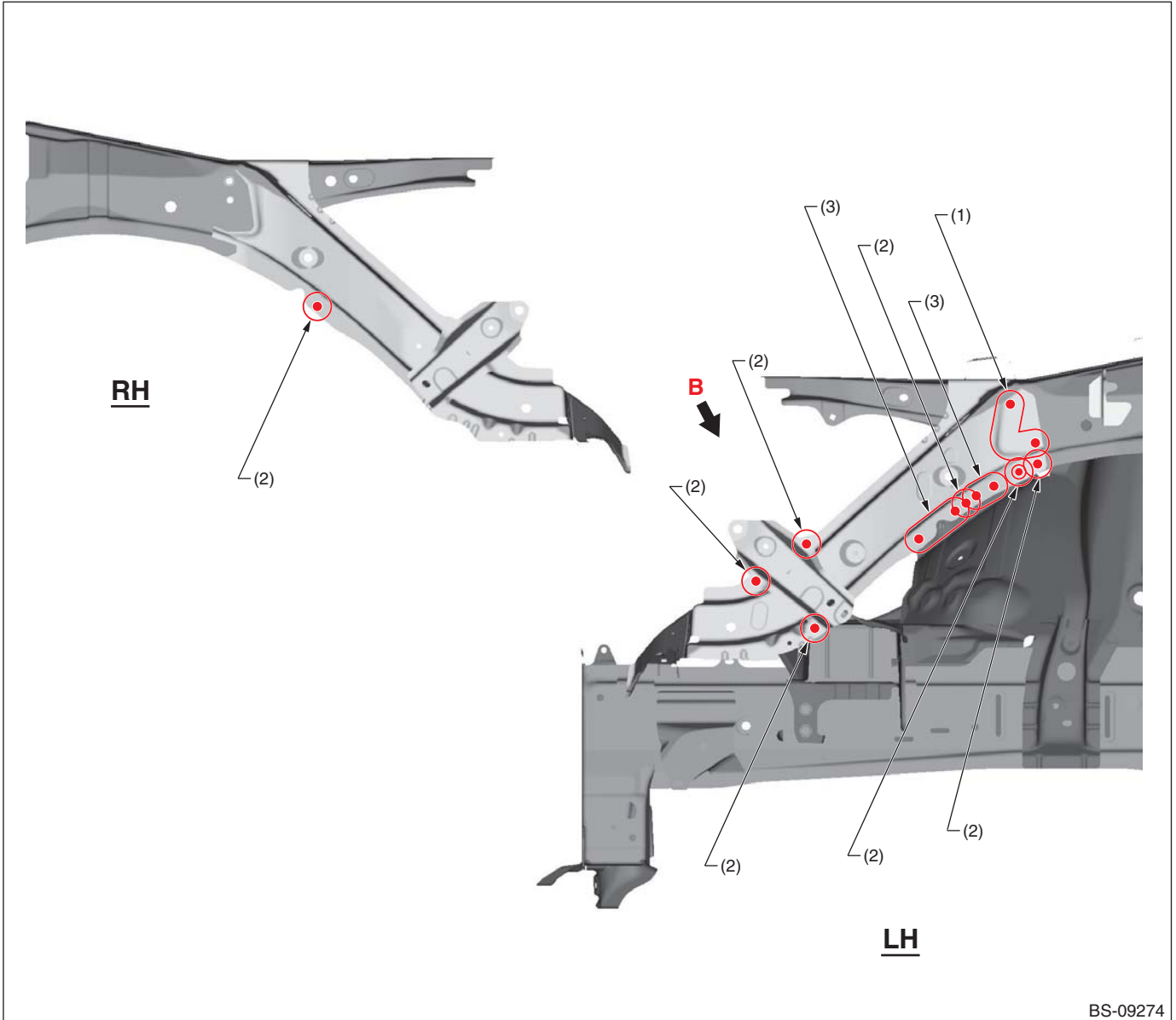
(1) 2 points (bottom · 1)
(2) 5 points (bottom · 1)

(3) 3 points (bottom · 1)

(4) 1 point (bottom · 1)

Panel Replacement

• Overall view 2



BS-09274

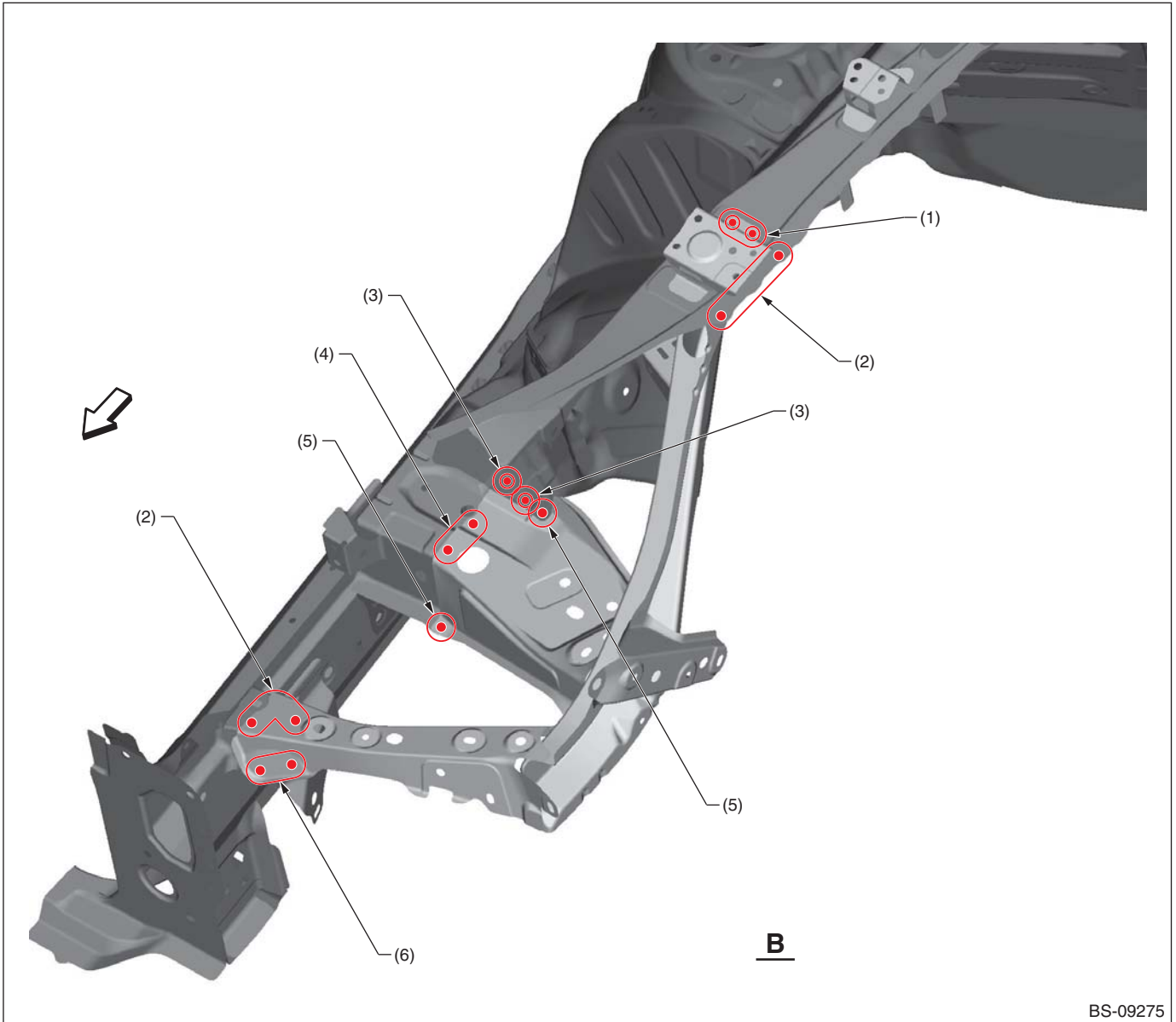
(1) 3 points (outside · 1)

(2) 1 point (outside · 1)

(3) 2 points (outside · 1)

Panel Replacement

• Views B (LH)



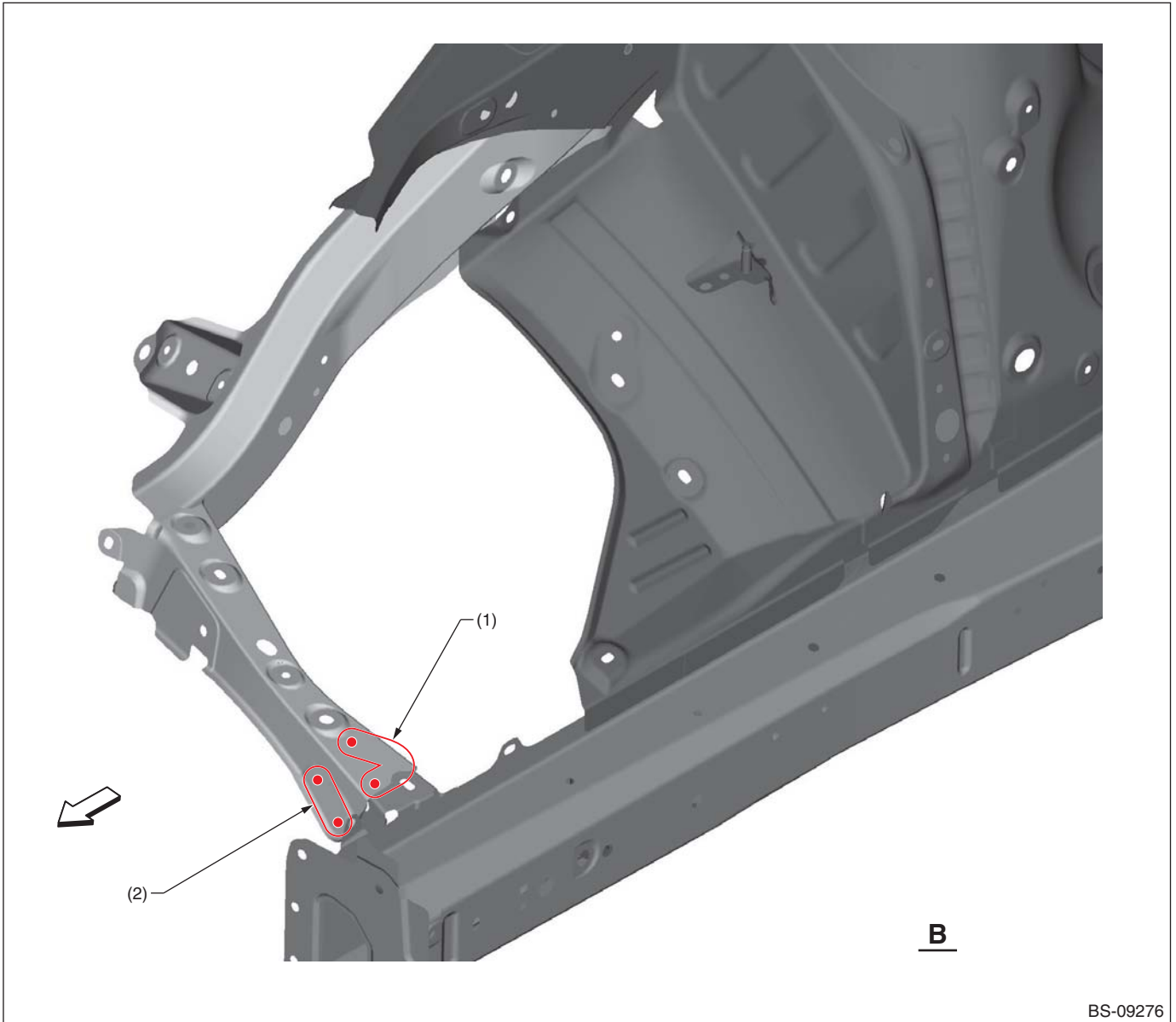
(1) 2 points (top · 2)
(2) 3 points (top · 1)

(3) 1 point (top · 2)
(4) 2 points (top · 1)

(5) 1 point (top · 1)
(6) 2 points (outside · 1)

Panel Replacement

- Views B (RH)



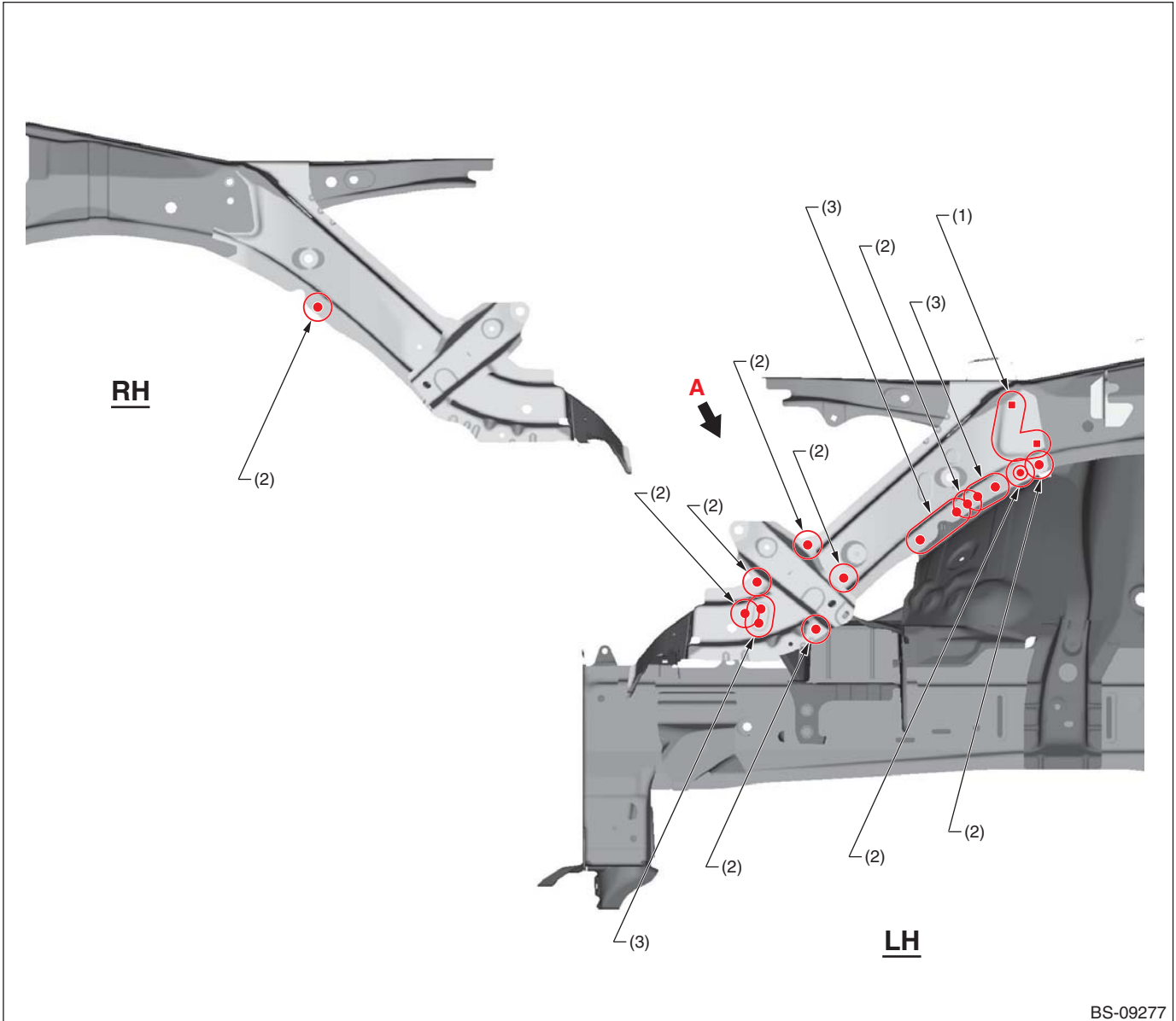
(1) 3 points (top · 1)

(2) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BS-09277

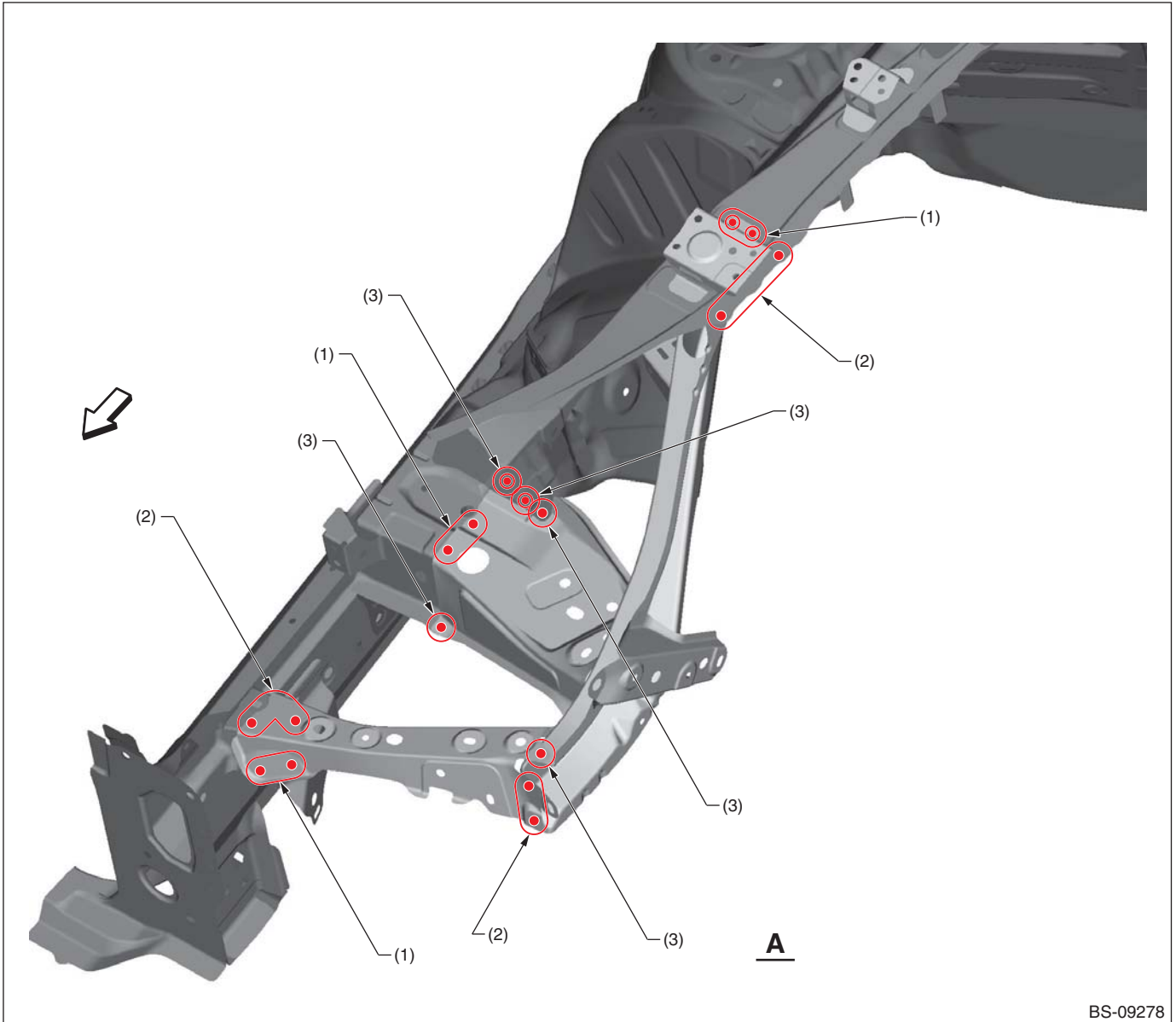
(1) 3 points (service)

(2) 1 point

(3) 2 points

Panel Replacement

• Views A (LH)



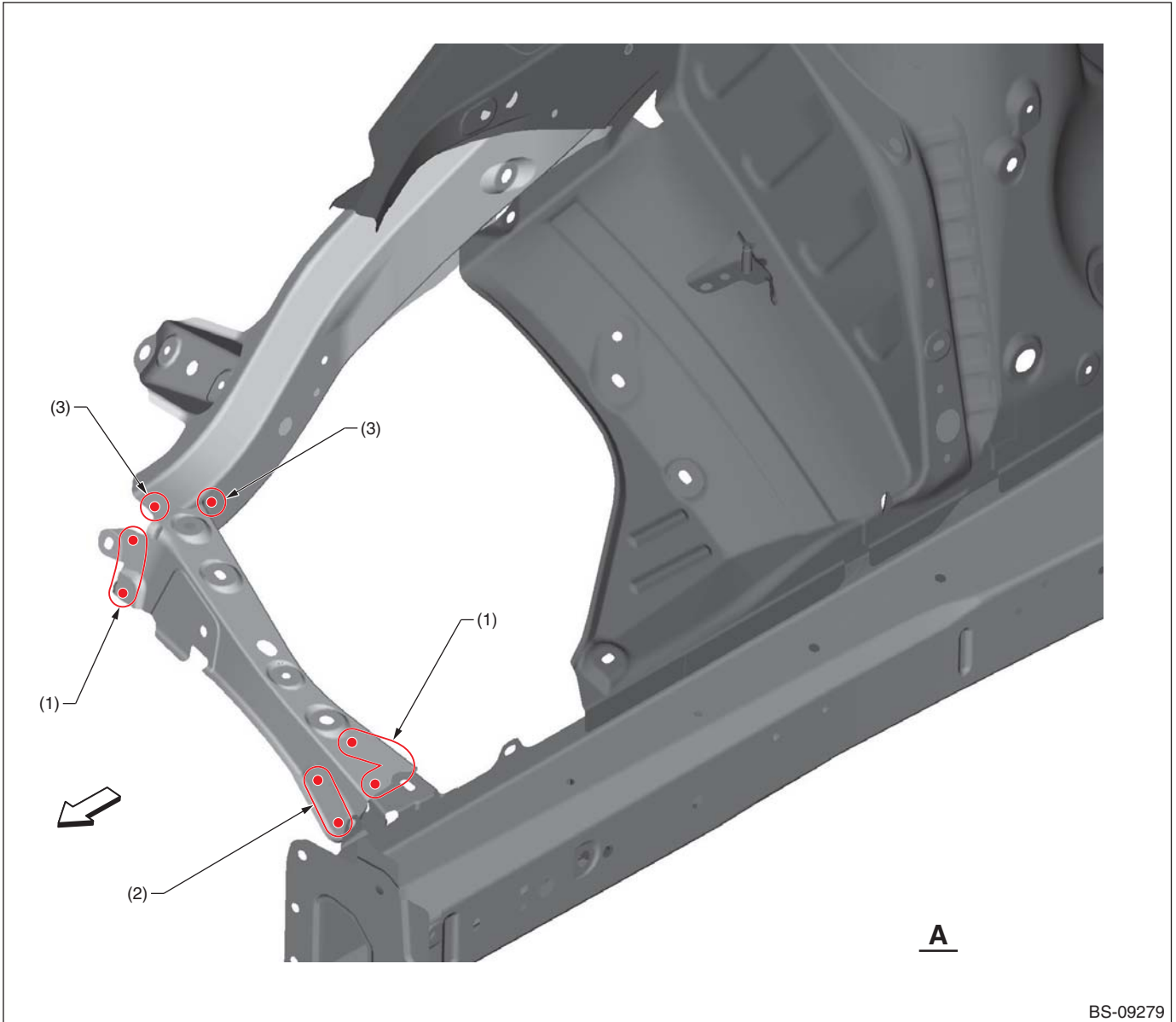
(1) 2 points

(2) 3 points

(3) 1 point

Panel Replacement

• Views A (RH)



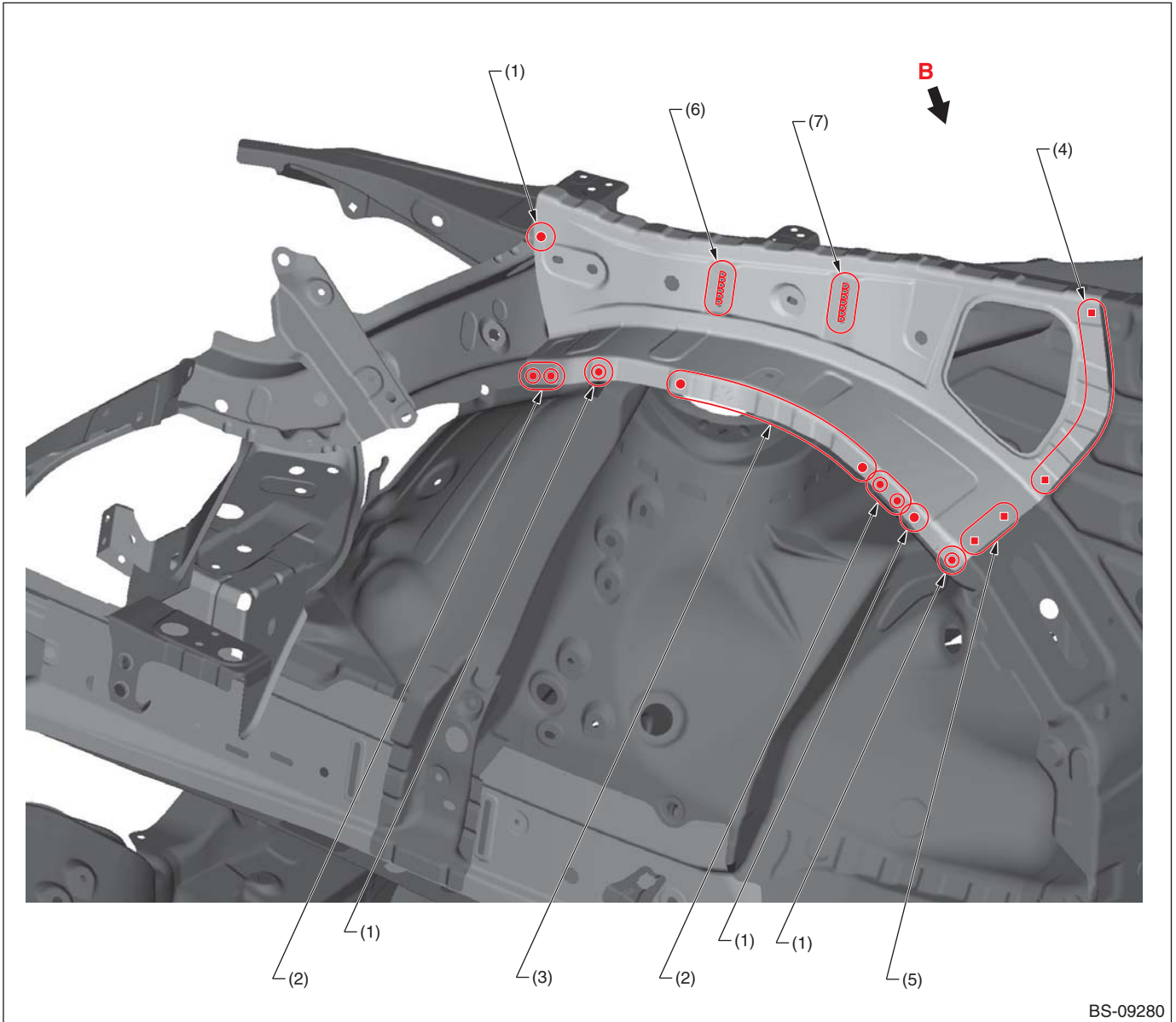
(1) 3 points

(2) 2 points

(3) 1 point

Panel Replacement

• Overall view 2



(1) 1 point

(2) 2 points

(3) 6 points

(4) 5 points (service)

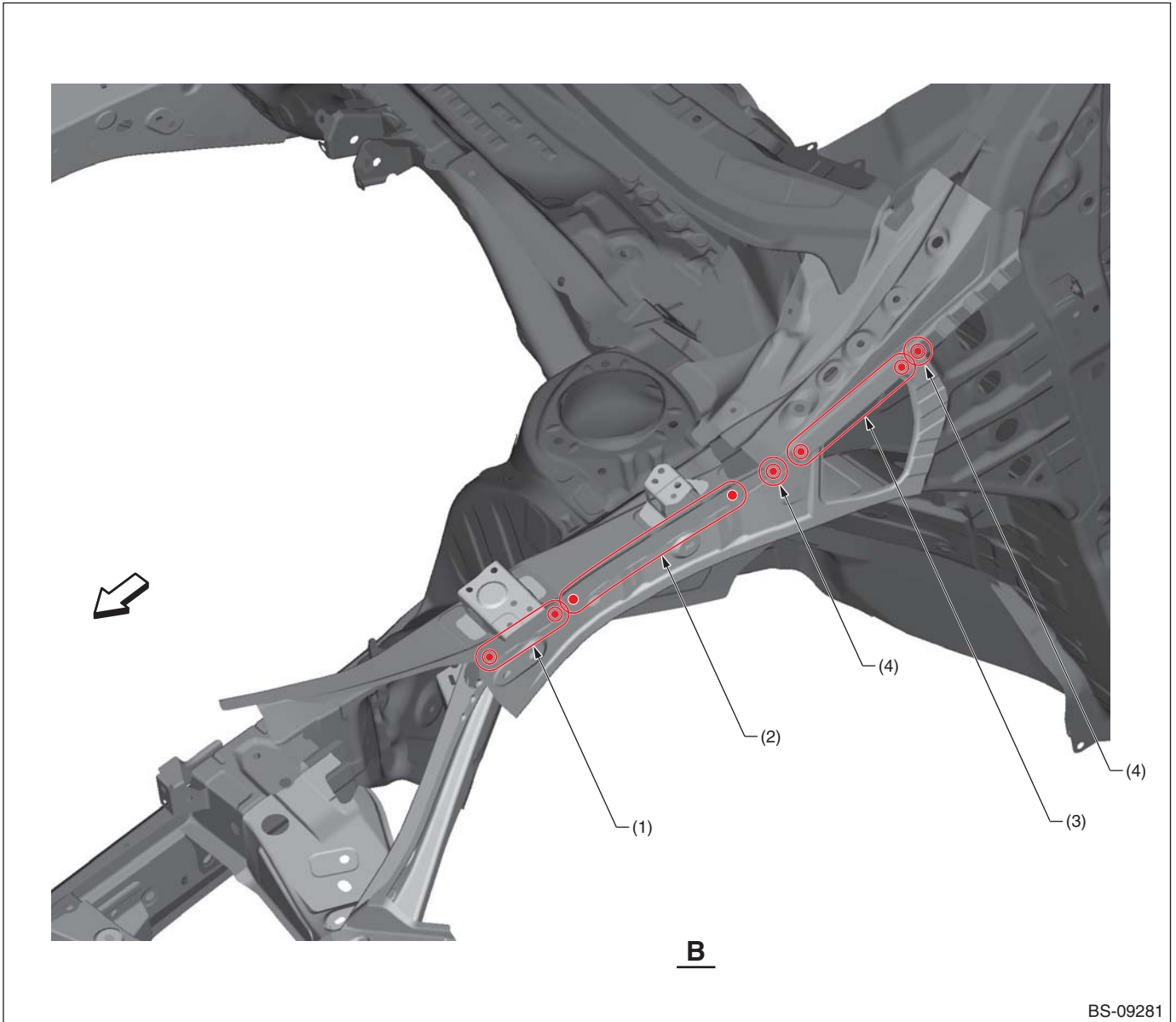
(5) 3 points (service)

(6) 1 point (Continuous welding)
(14 mm [0.55 in])

(7) 1 point (Continuous welding)
(19 mm [0.75 in])

Panel Replacement

• Views B



(1) 2 points
(2) 5 points

(3) 3 points

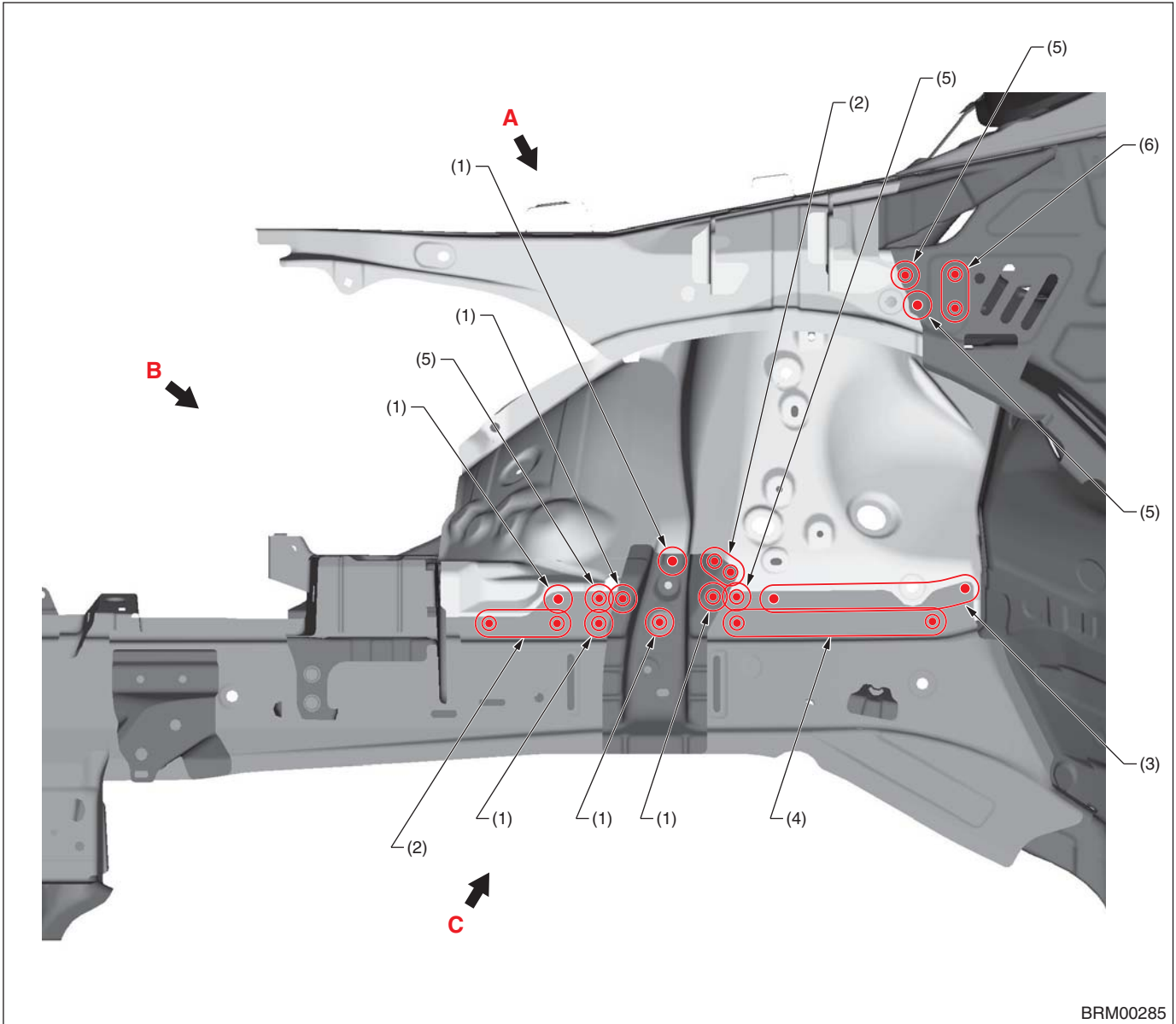
(4) 1 point

Panel Replacement

8-4. Front Wheel Apron (Total replacement)

A: REMOVAL

• Overall view



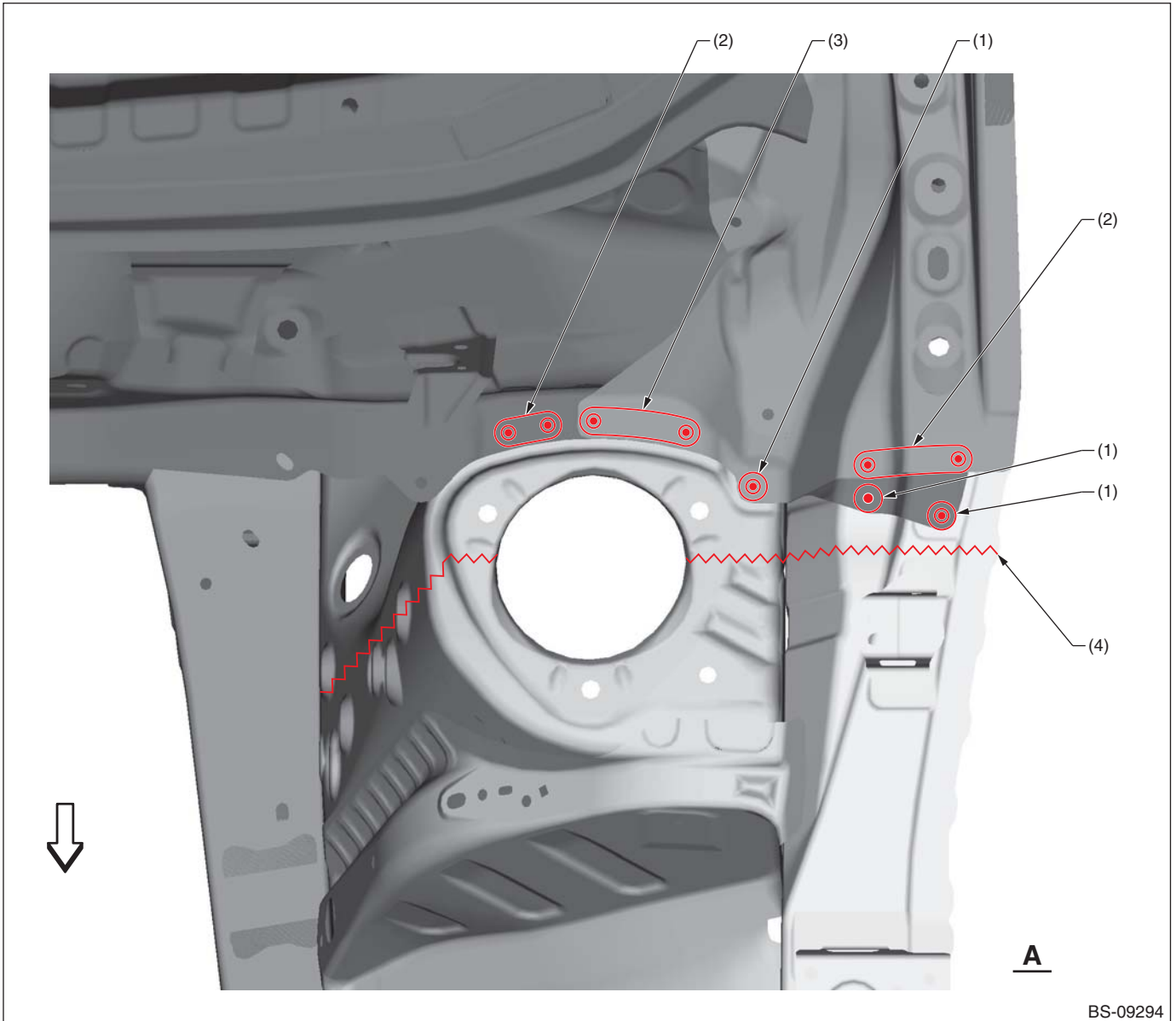
- (1) 1 point (inside · 1)
- (2) 2 points (inside · 1)

- (3) 6 points (inside · 1)
- (4) 4 points (inside · 1)

- (5) 1 point (outside · 1)
- (6) 2 points (outside · 1)

Panel Replacement

• Views A



BS-09294

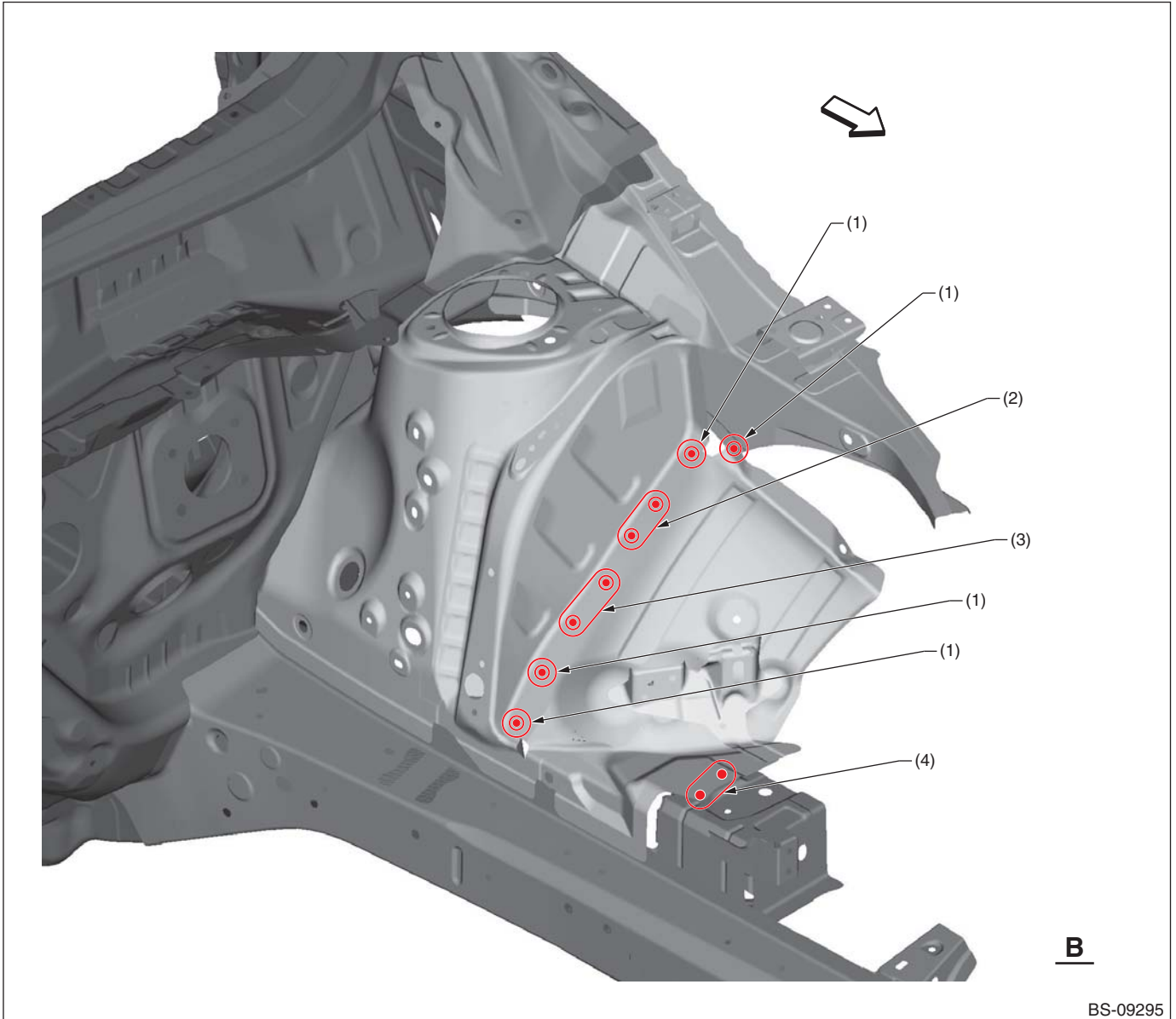
(1) 1 point (bottom · 1)
(2) 2 points (bottom · 1)

(3) 3 points (bottom · 1)

(4) Rough cutting

Panel Replacement

• Views B (LH)



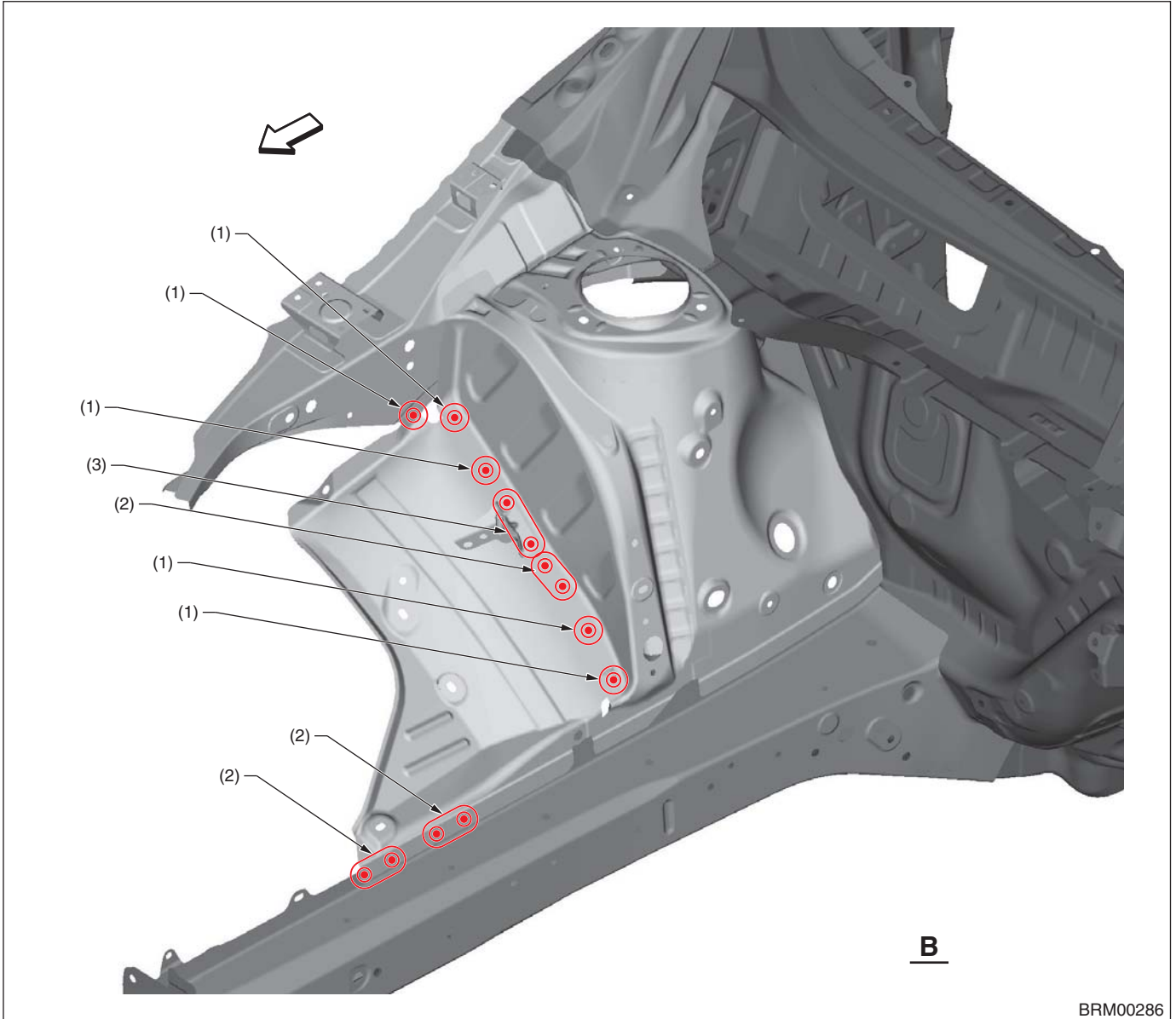
(1) 1 point (inside · 1)
(2) 2 points (inside · 1)

(3) 3 points (inside · 1)

(4) 2 points (top · 1)

Panel Replacement

• Views B (RH)



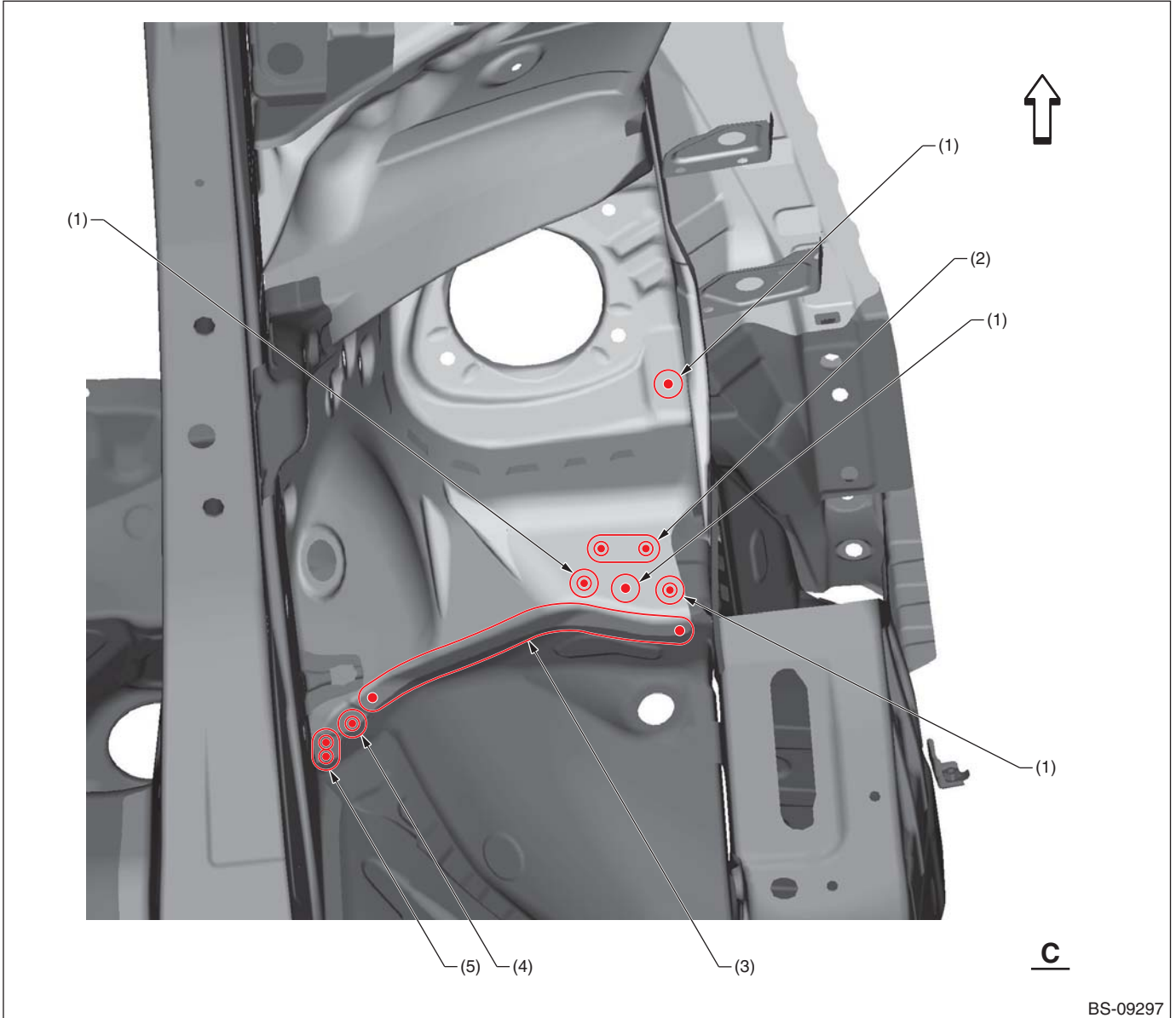
(1) 1 point (inside · 1)

(2) 2 points (inside · 1)

(3) 2 points (inside · 2)

Panel Replacement

• Views C



(1) 1 point (bottom · 1)
(2) 2 points (bottom · 1)

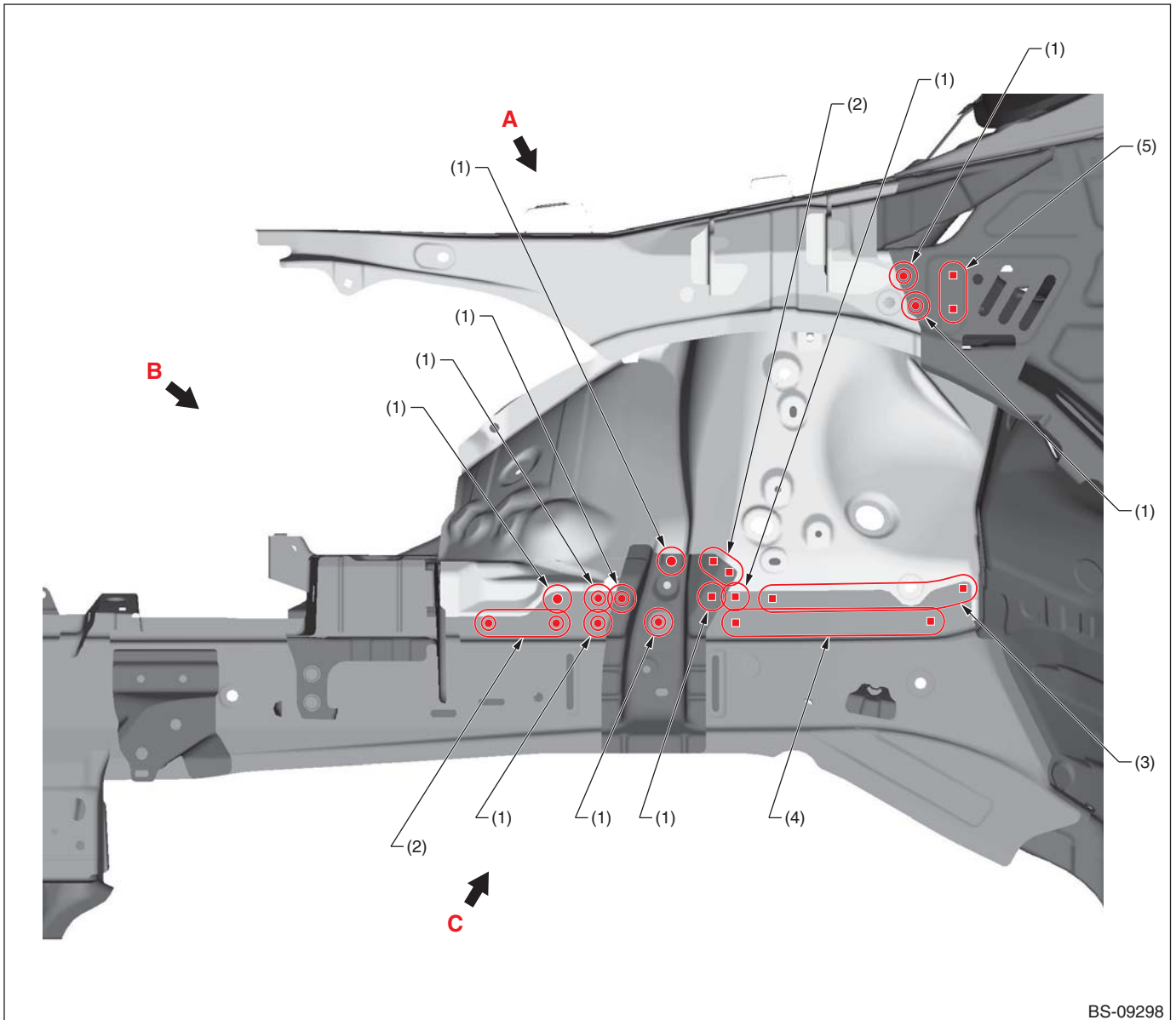
(3) 8 points (outside · 1)
(4) 1 point (outside · 1)

(5) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



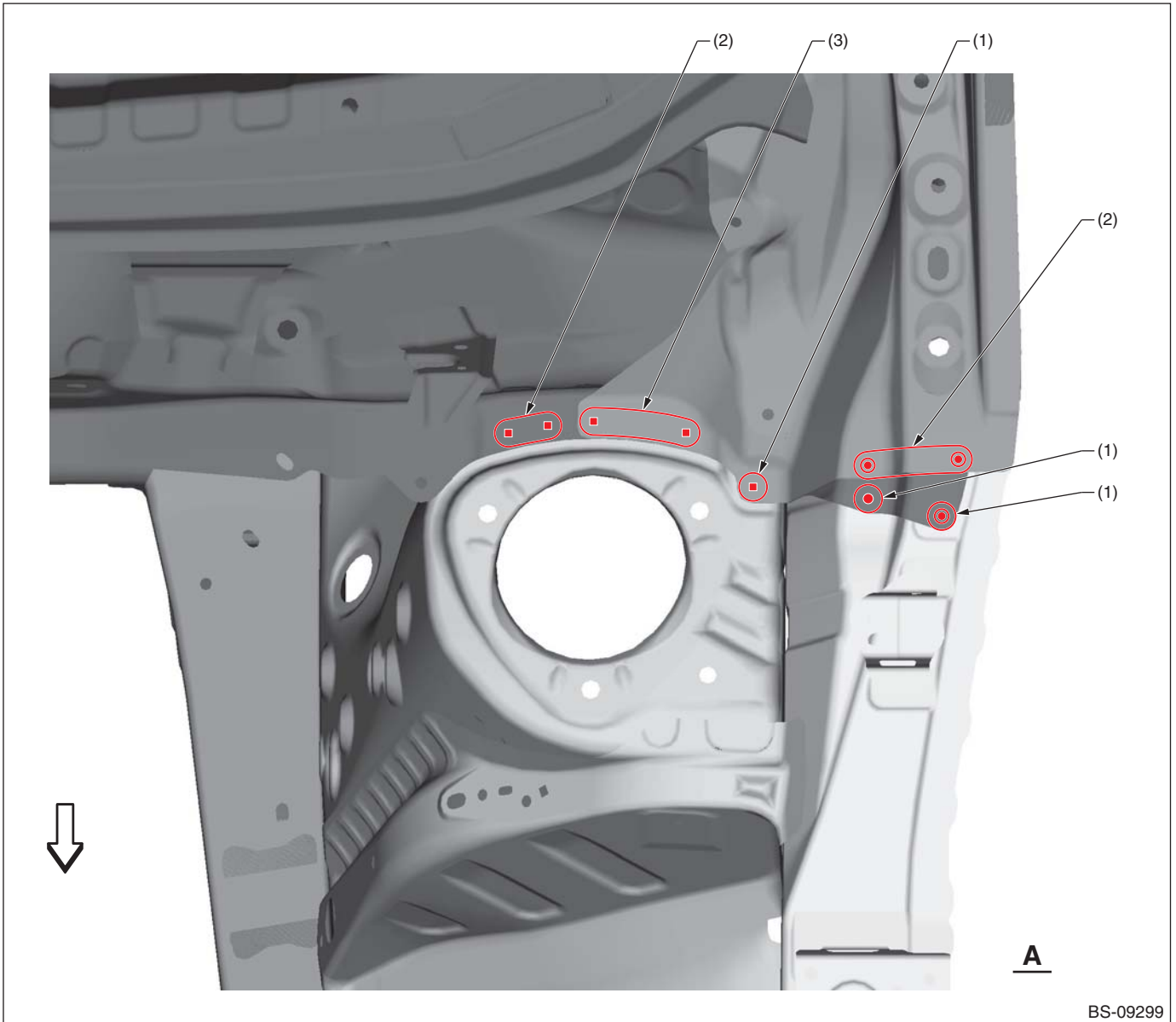
(1) 1 point
(2) 2 points

(3) 6 points
(4) 4 points

(5) 2 points (service · matching)

Panel Replacement

• Views A



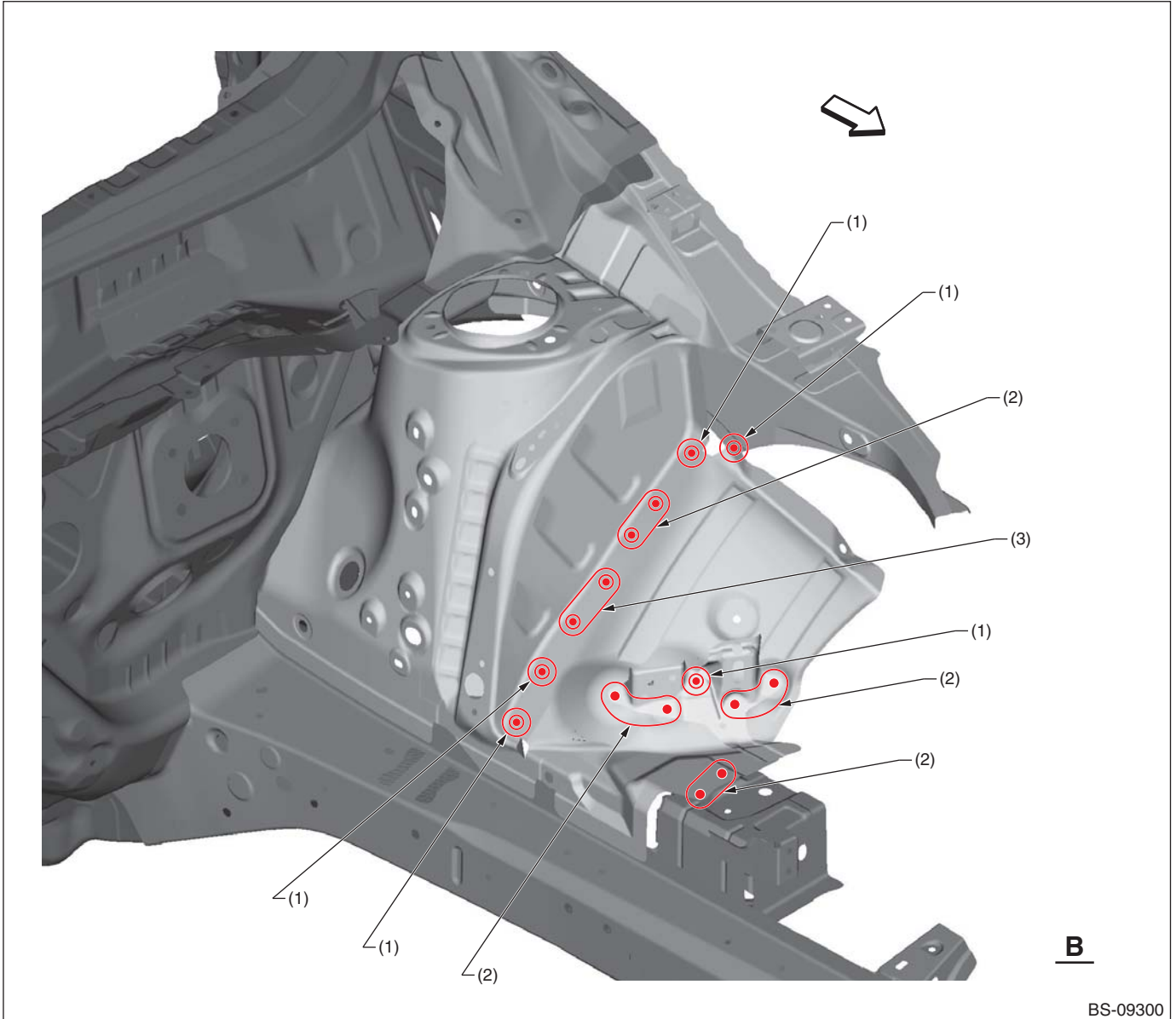
(1) 1 point

(2) 2 points

(3) 3 points

Panel Replacement

• Views B (LH)



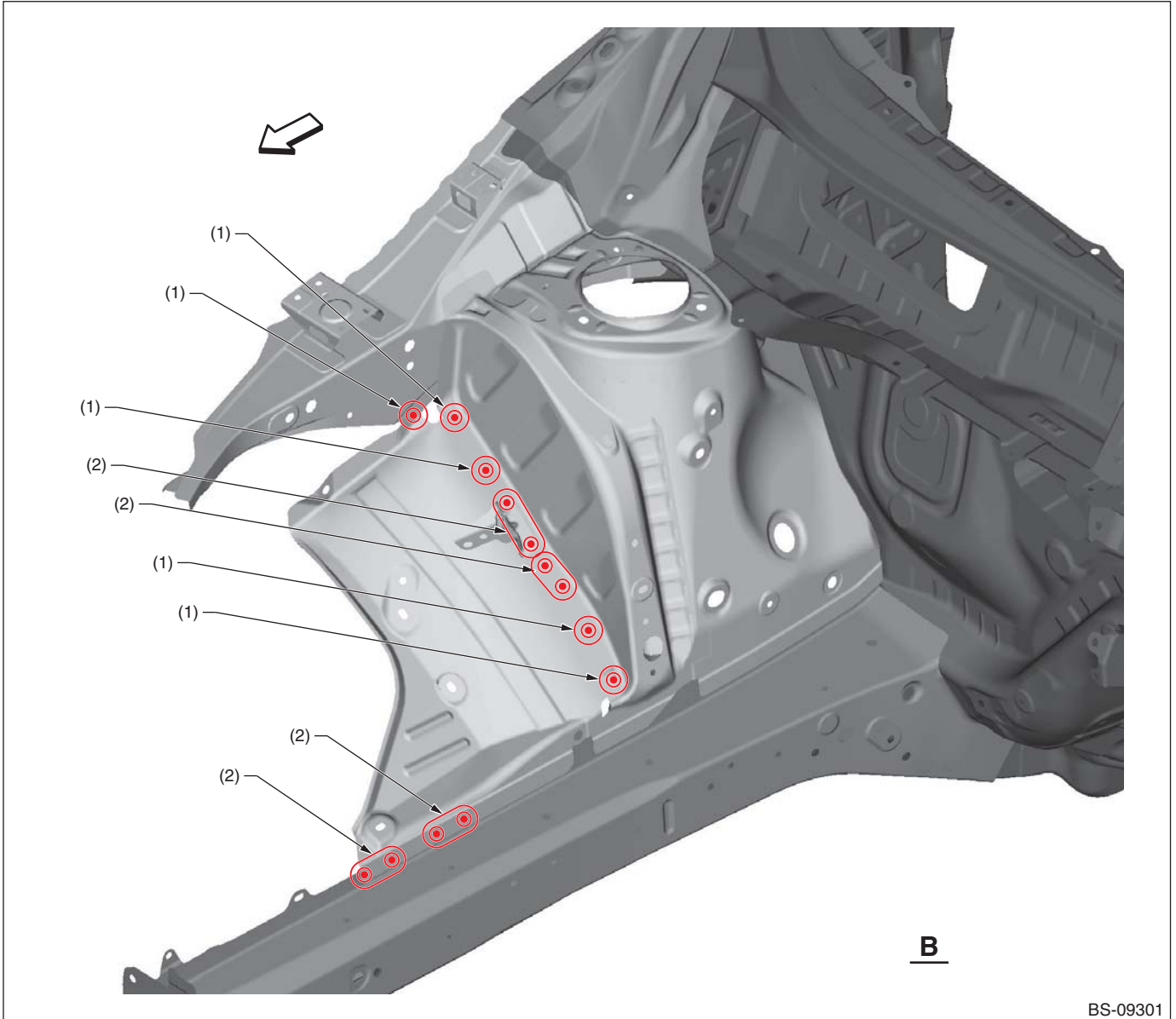
(1) 1 point

(2) 2 points

(3) 3 points

Panel Replacement

• Views B (RH)



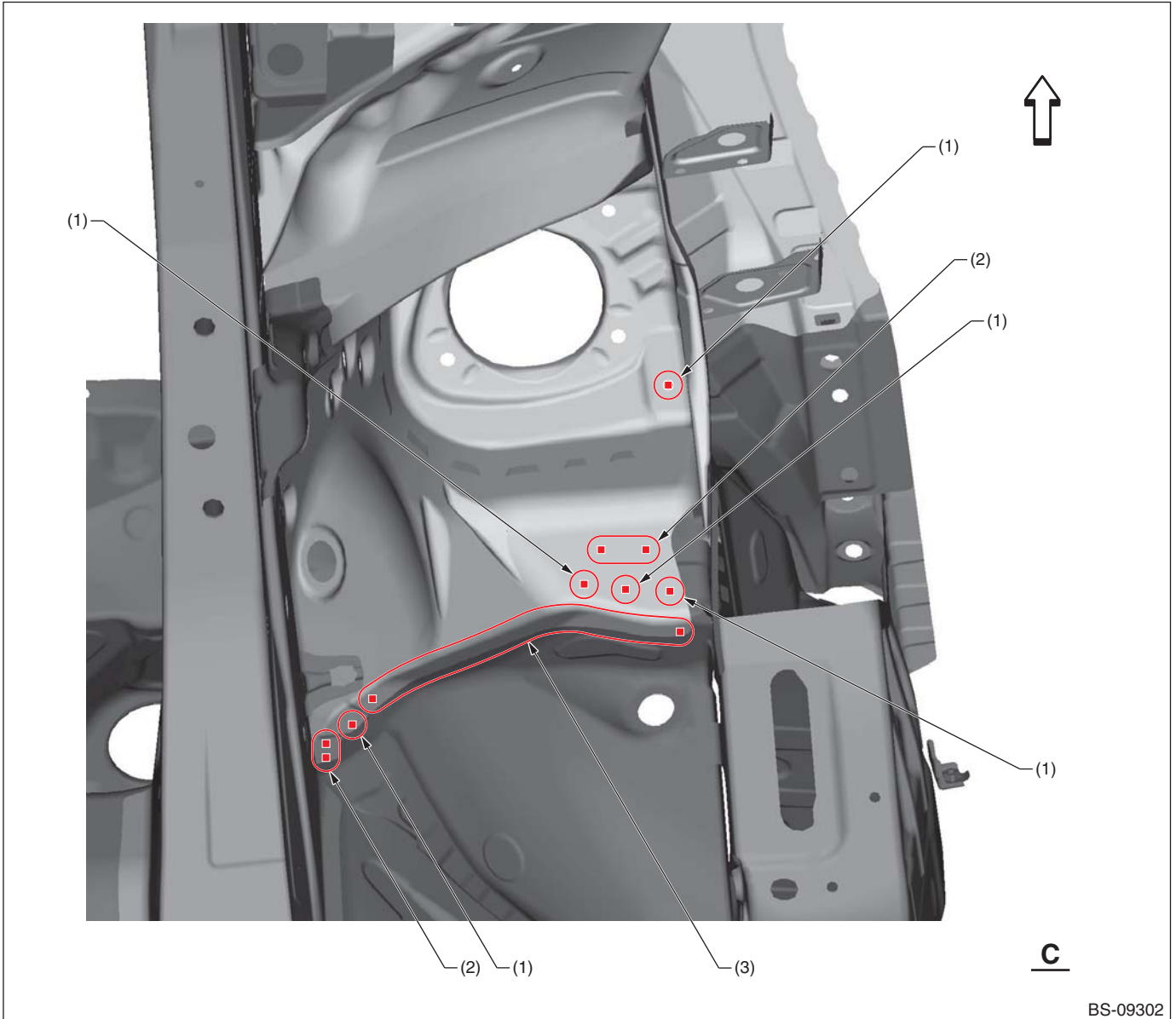
BS-09301

(1) 1 point

(2) 2 points

Panel Replacement

• Views C



(1) 1 point (service)

(2) 2 points (service)

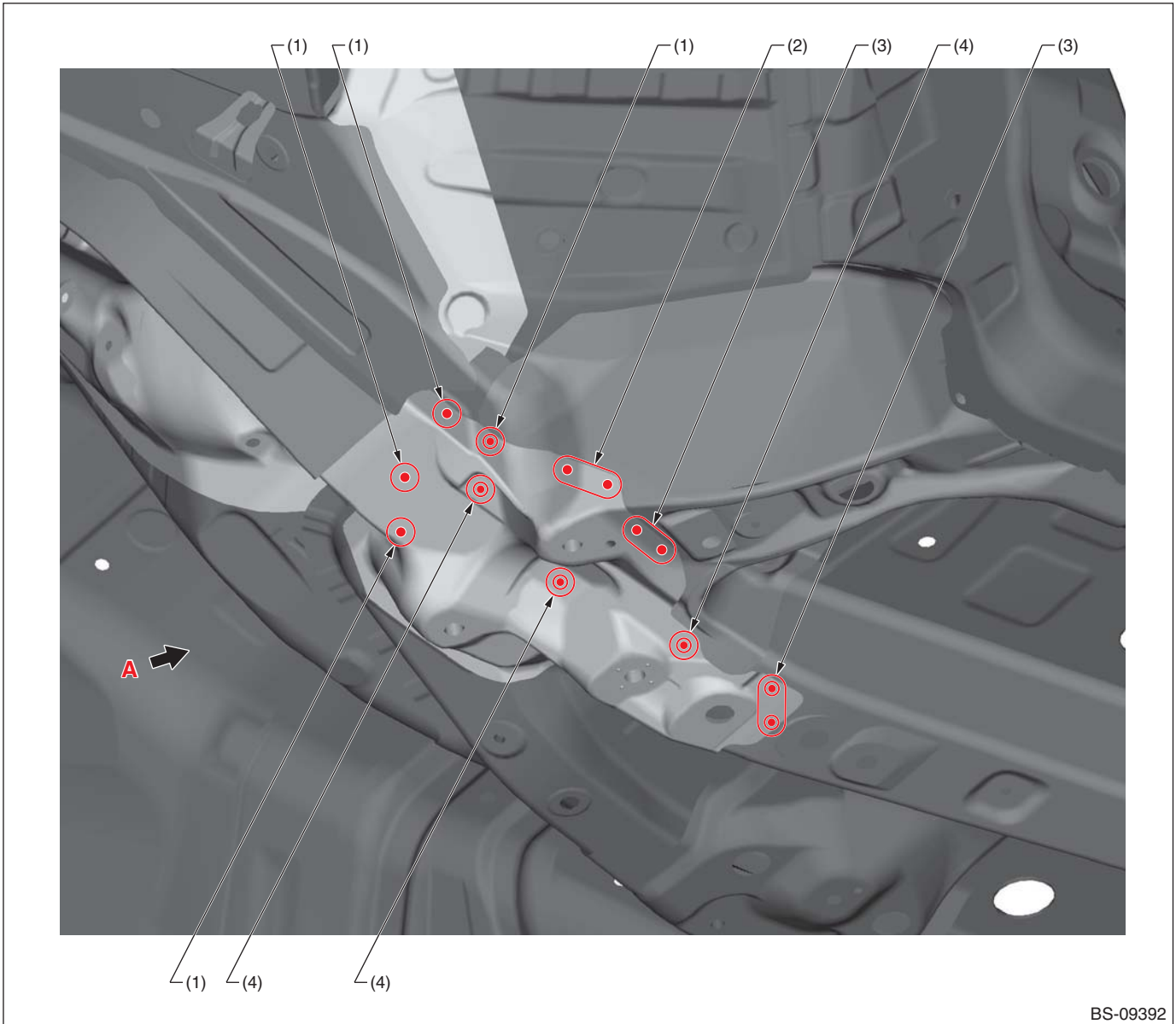
(3) 8 points (service)

Panel Replacement

8-5. Toe Board Reinforcement (Total replacement)

A: REMOVAL

• Overall view 1



BS-09392

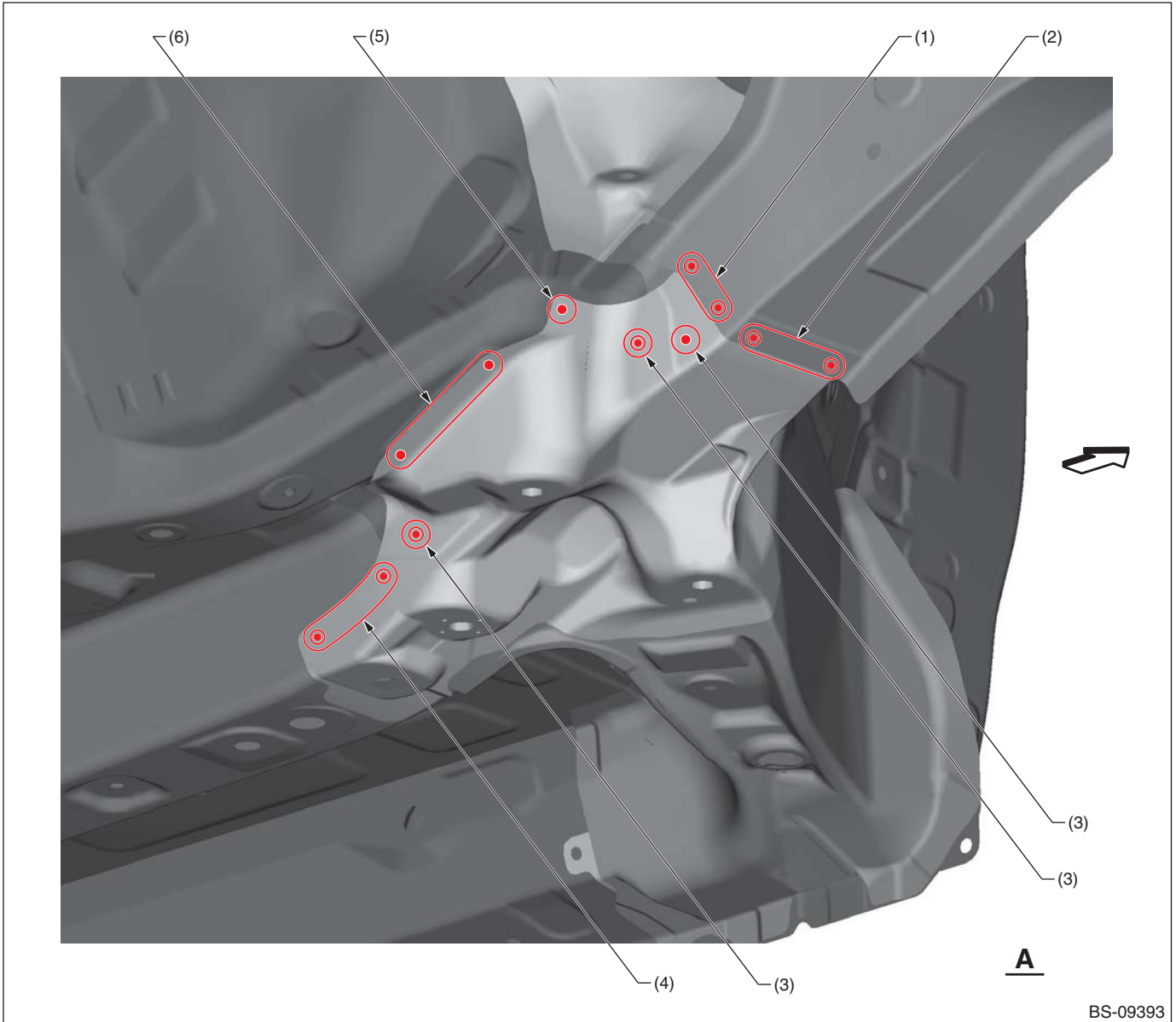
- (1) 1 point (outside · 1)
- (2) 2 points (outside · 1)

- (3) 2 points (bottom · 1)

- (4) 1 point (bottom · 1)

Panel Replacement

• Views A



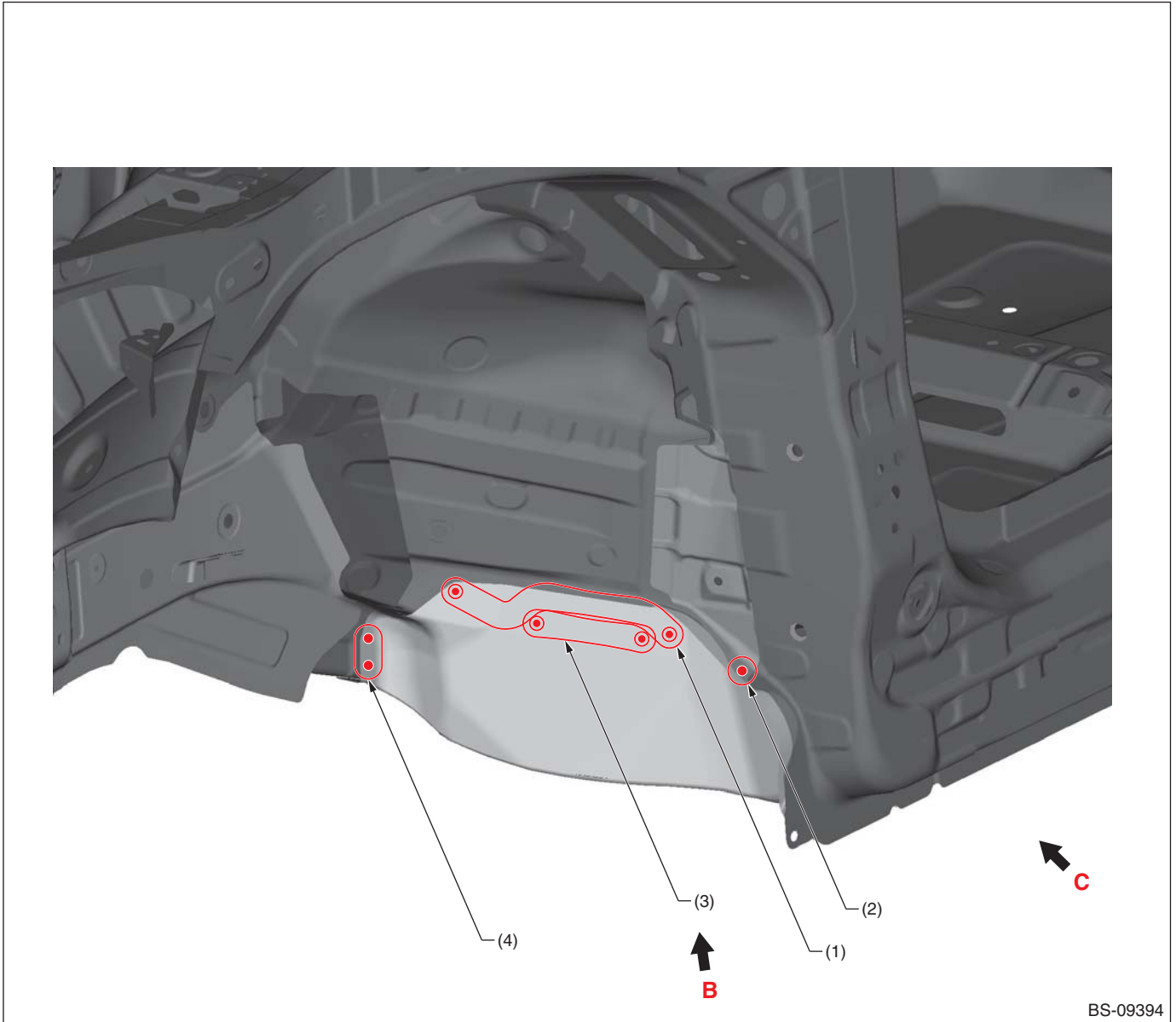
(1) 2 points (inside · 2)
(2) 3 points (outside · 2)

(3) 1 point (inside · 1)
(4) 3 points (inside · 1)

(5) 1 point (outside · 1)
(6) 3 points (outside · 1)

Panel Replacement

• Overall view 2



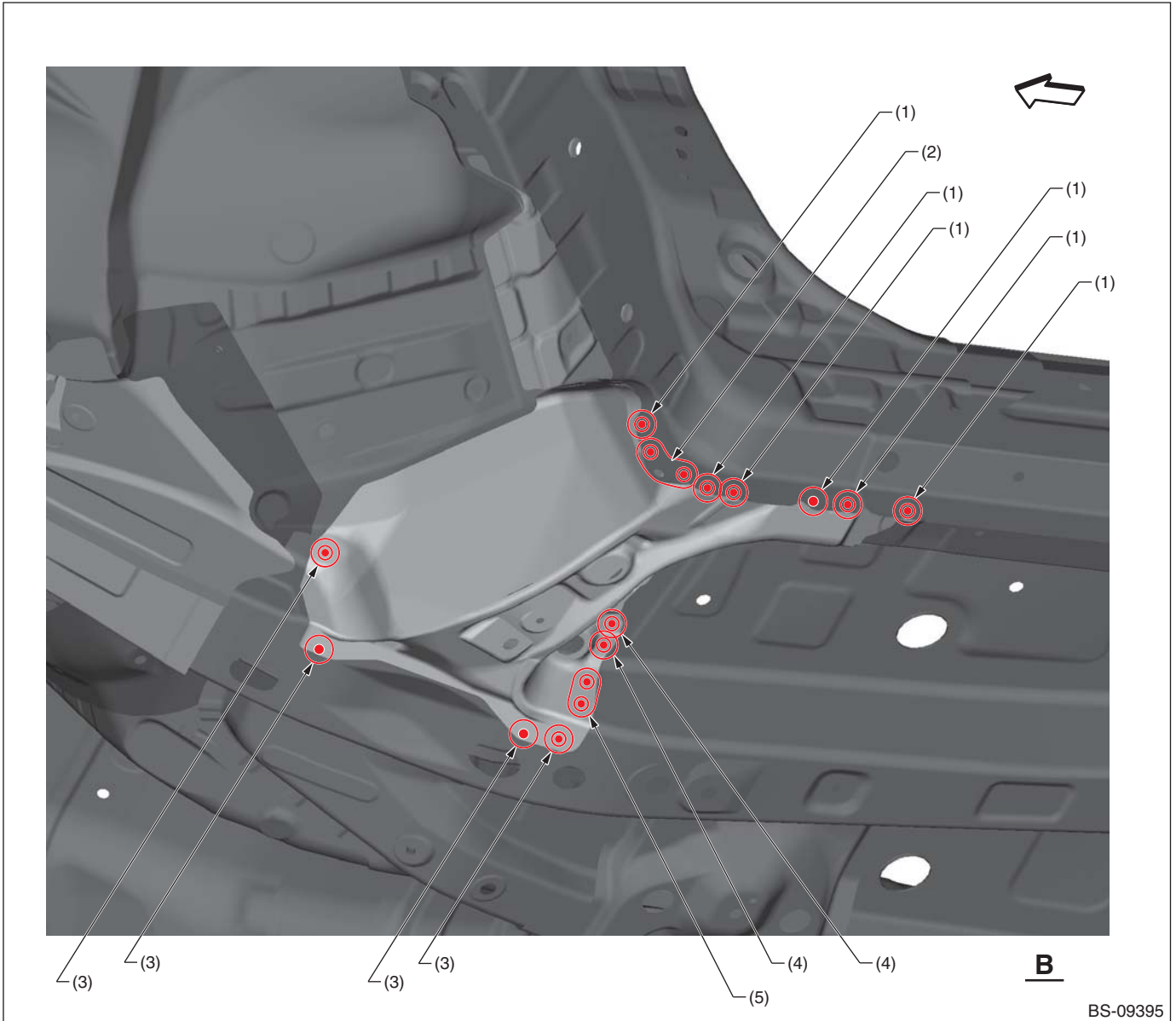
(1) 6 points (outside · 1)
(2) 1 point (outside · 1)

(3) 5 points (outside · 1)

(4) 2 points (outside · 1)

Panel Replacement

• Views B



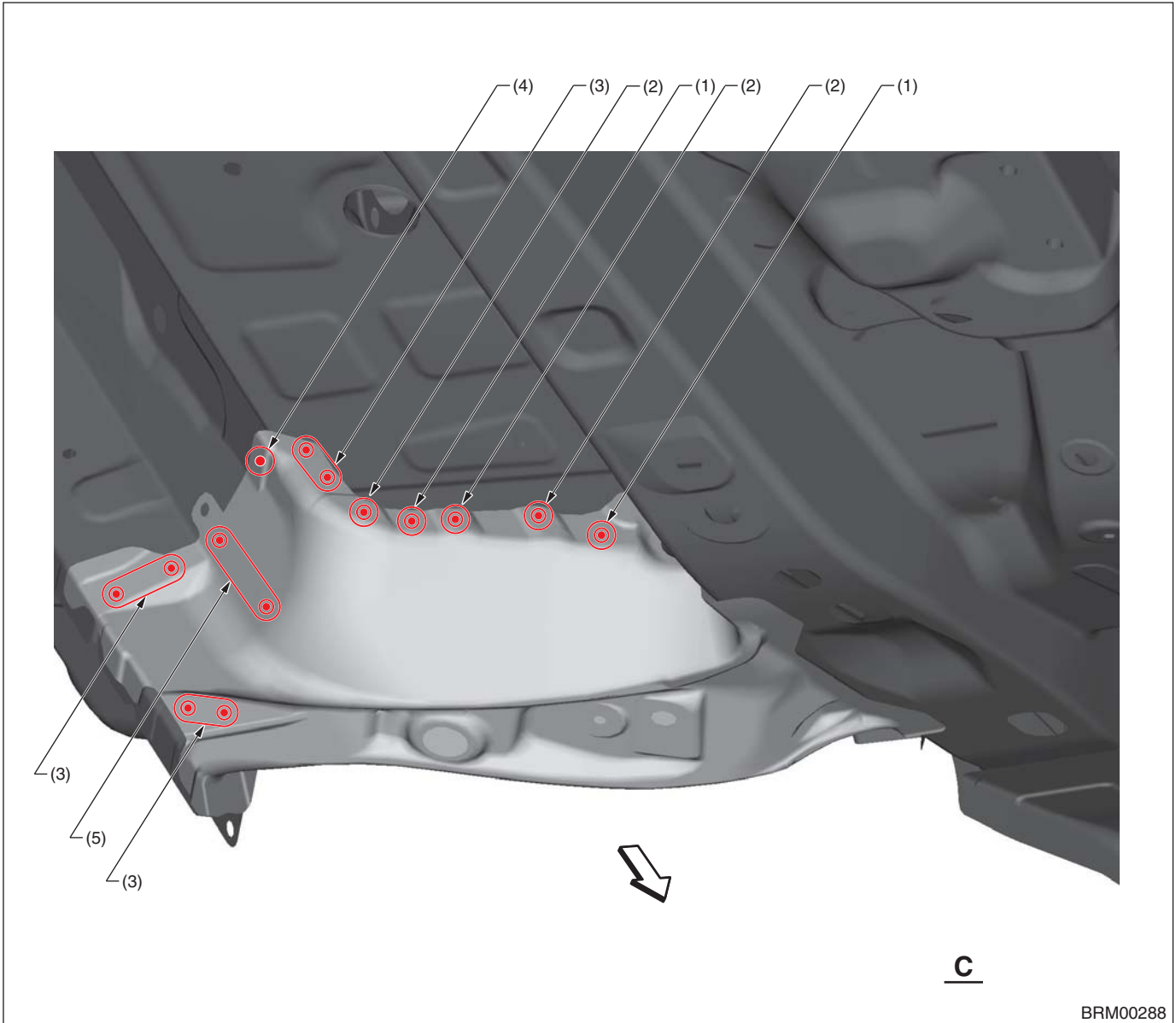
(1) 1 point (inside · 1)
(2) 2 points (inside · 1)

(3) 1 point (outside · 1)
(4) 1 point (bottom · 1)

(5) 2 points (outside · 1)

Panel Replacement

• Views C



BRM00288

(1) 1 point (bottom · 2)
(2) 1 point (bottom · 1)

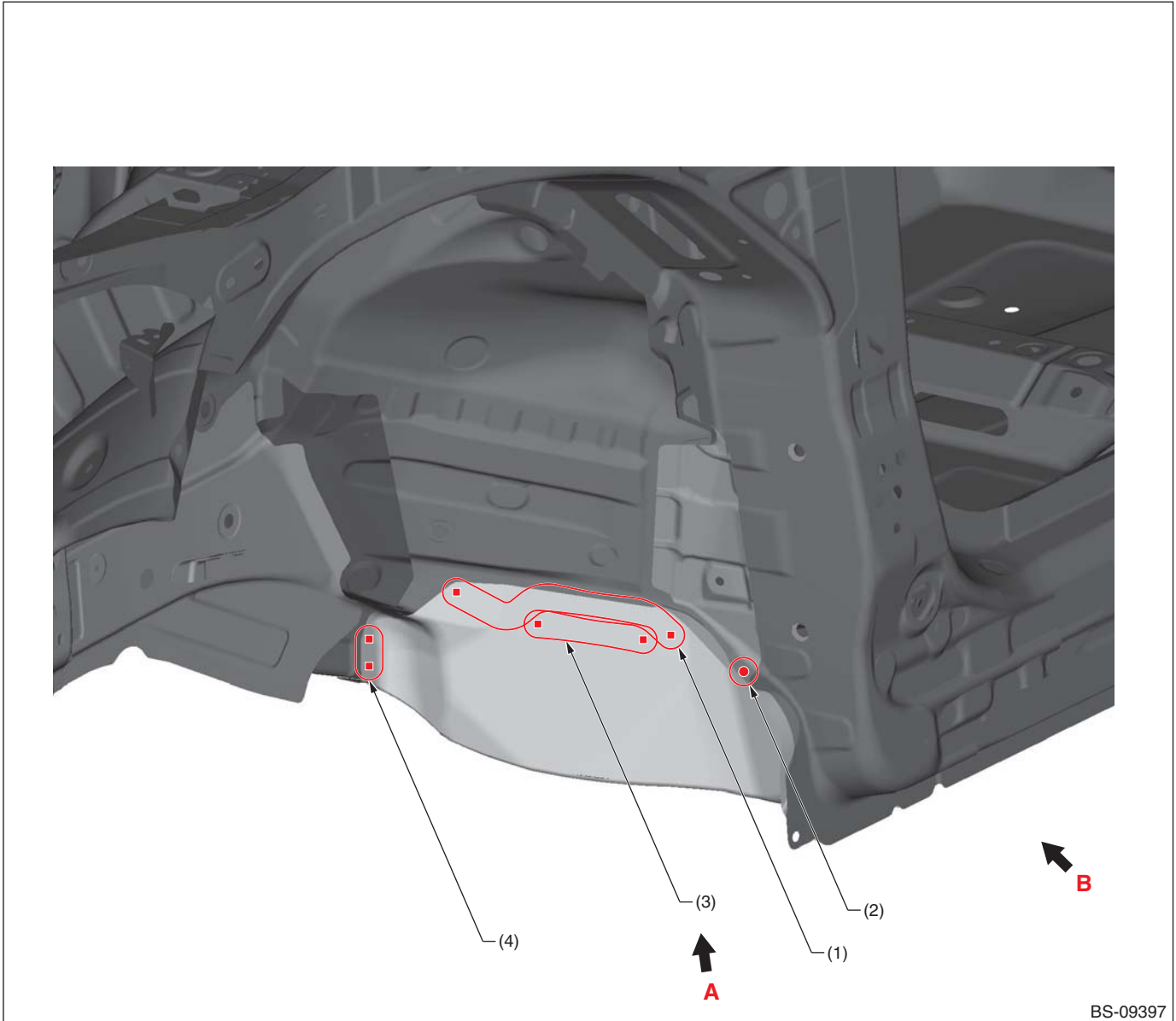
(3) 2 points (bottom · 1)
(4) 1 point (inside · 1)

(5) 2 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



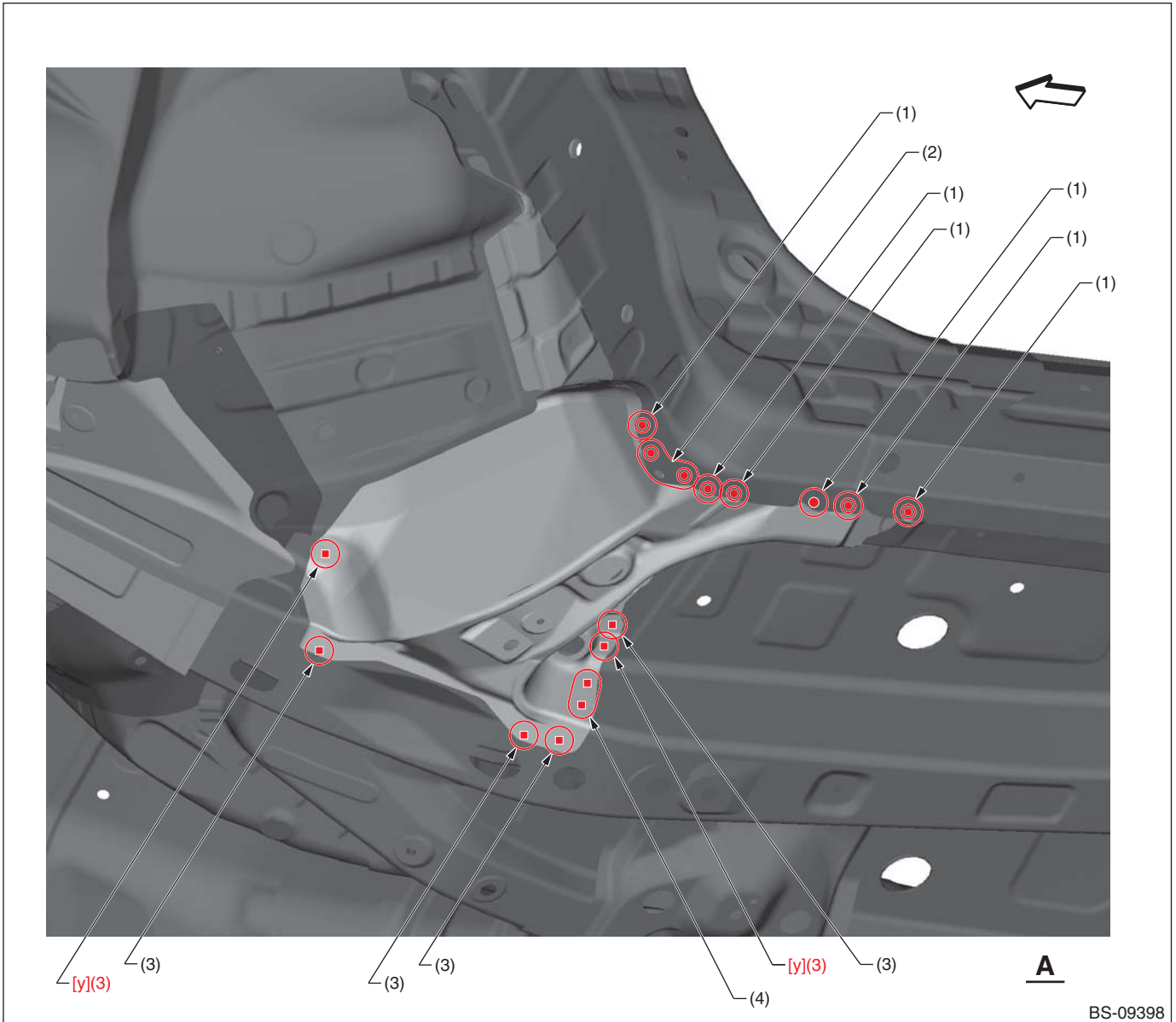
(1) 6 points (service)
(2) 1 point

(3) 5 points (service)

(4) 2 points (service)

Panel Replacement

• Views A



(1) 1 point
(2) 2 points

(3) 1 point (service)

(4) 2 points (service)

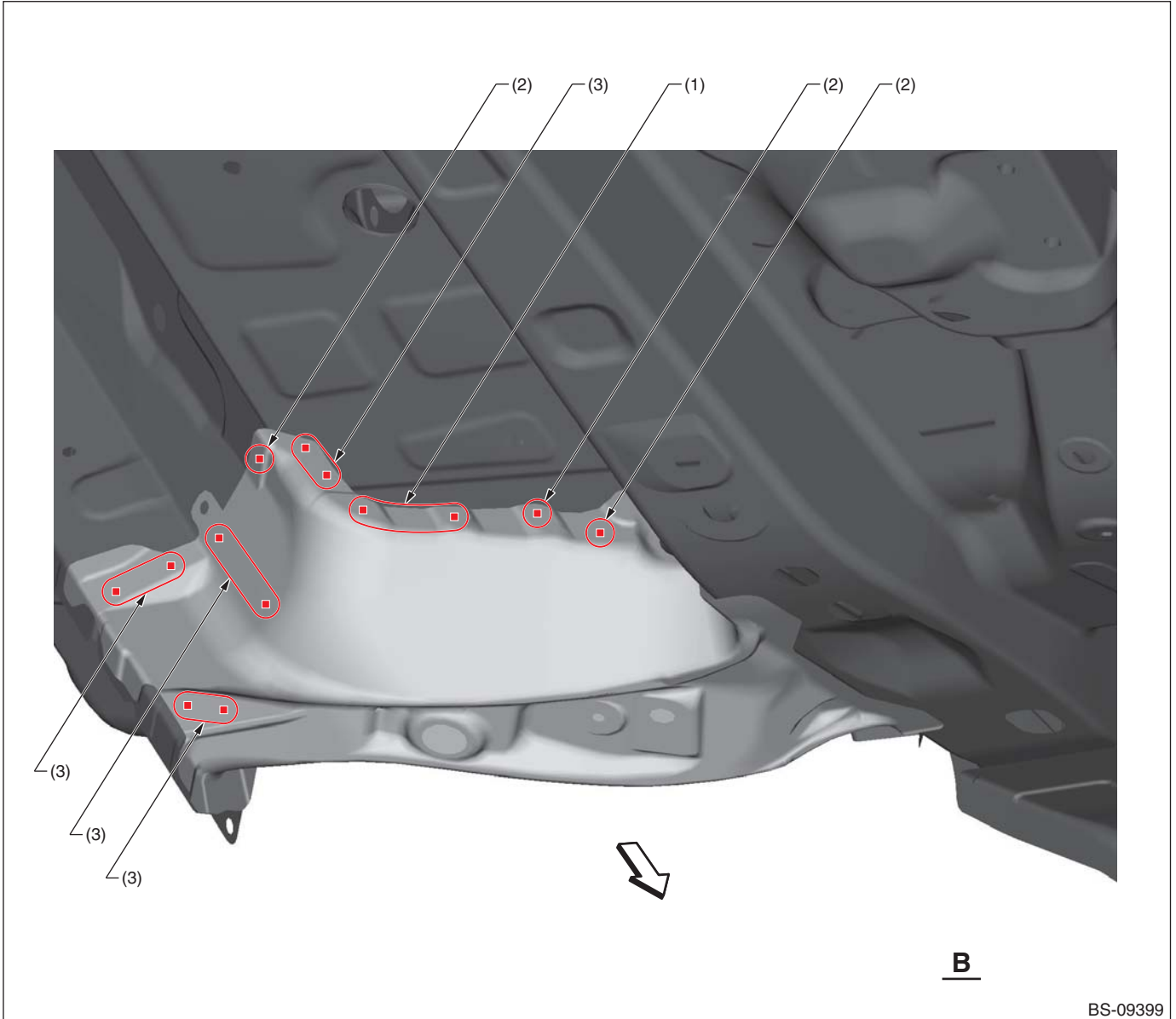
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views B



BS-09399

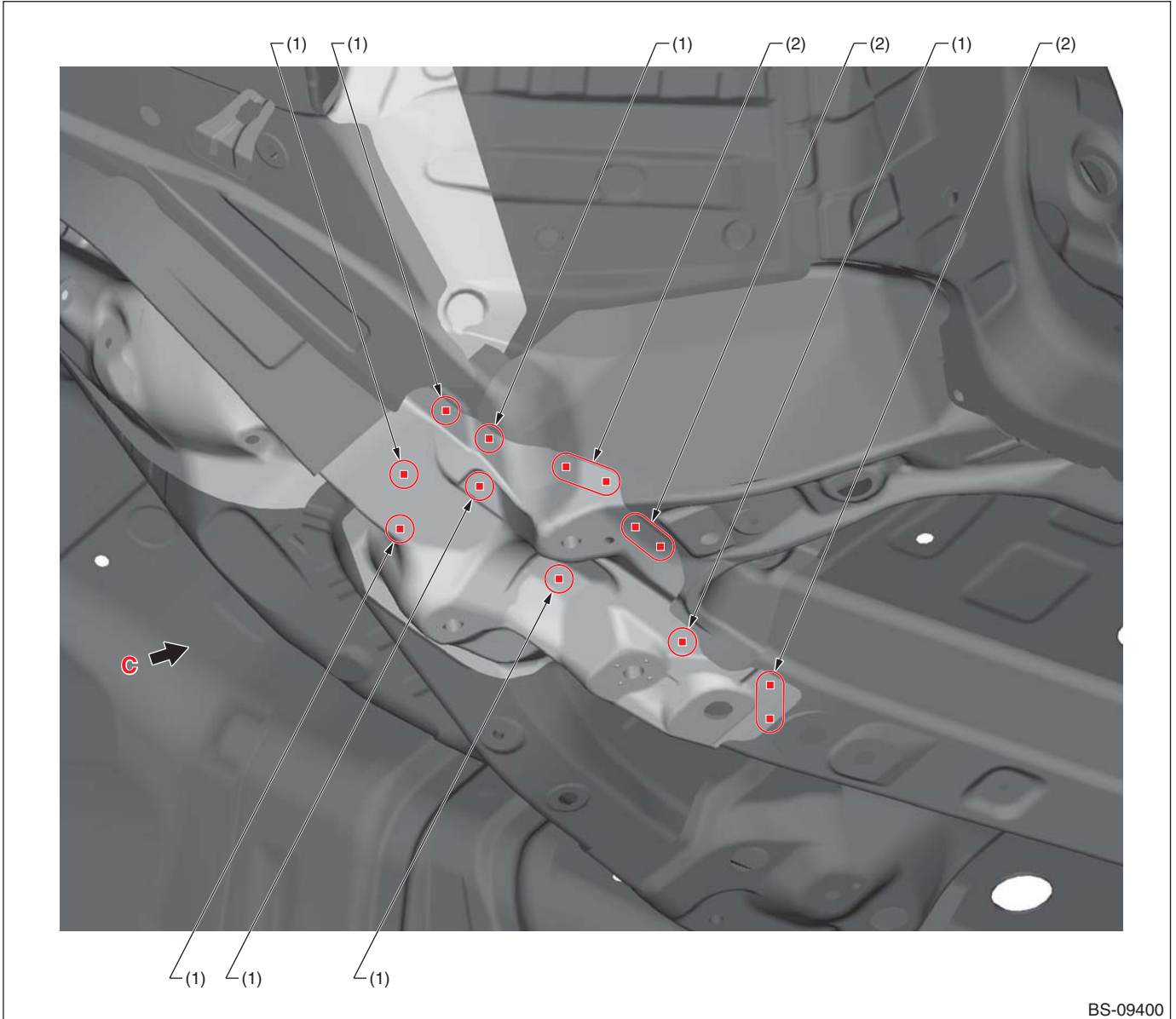
(1) 3 points (service)

(2) 1 point (service)

(3) 2 points (service)

Panel Replacement

• Overall view 2

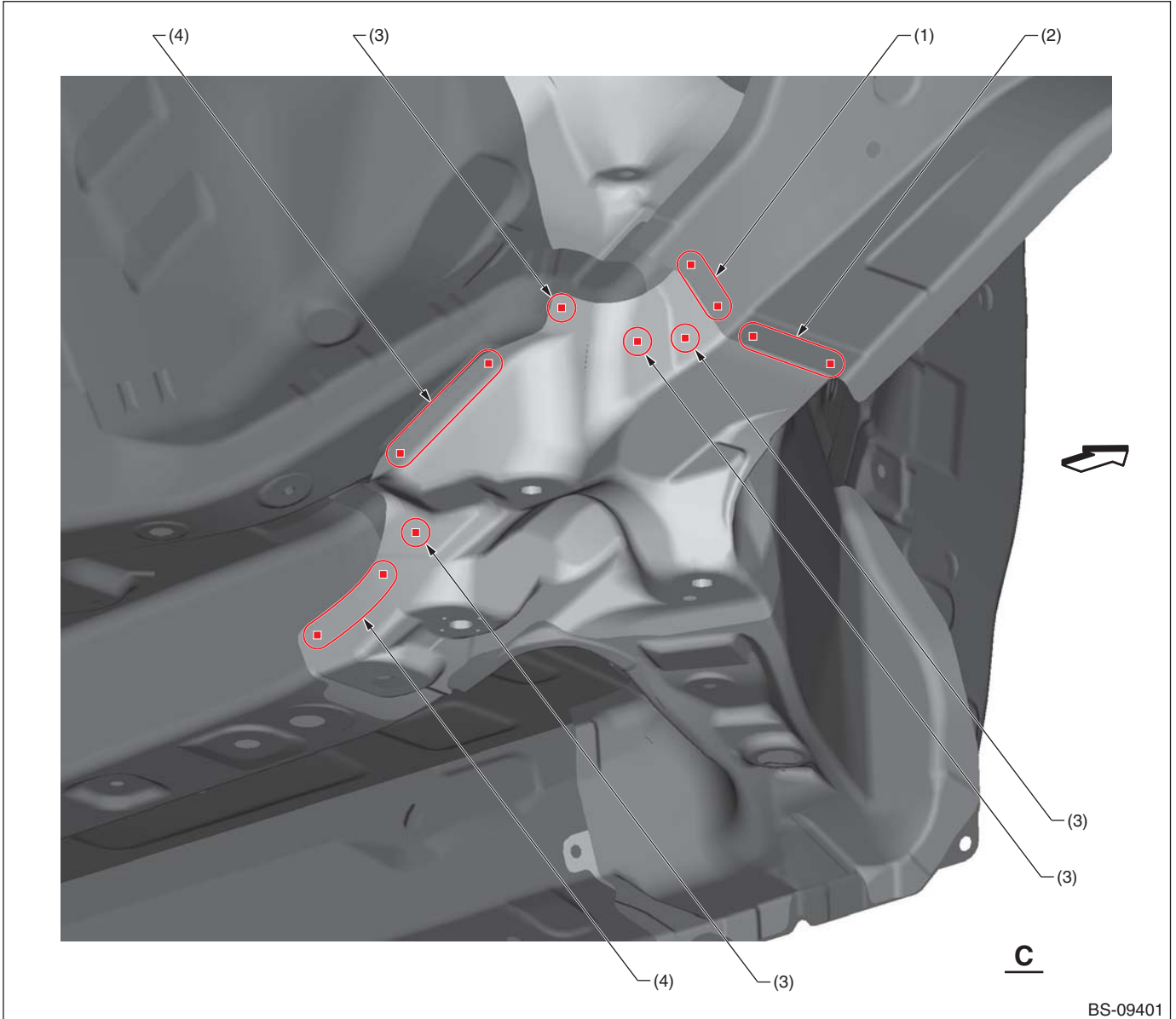


(1) 1 point (service)

(2) 2 points (service)

Panel Replacement

• Views C



(1) 2 points
(2) 3 points

(3) 1 point (service)

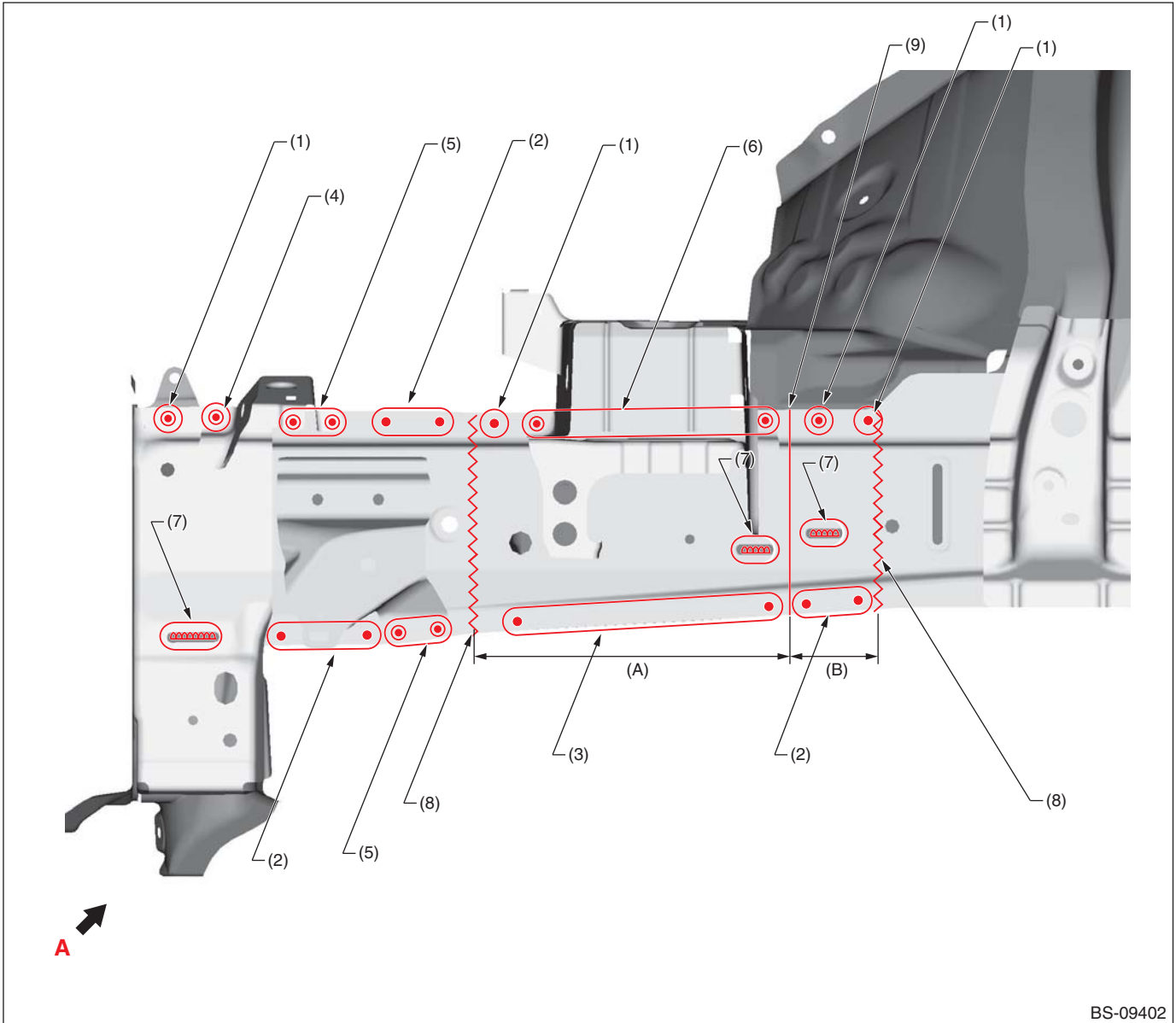
(4) 3 points (service)

Panel Replacement

8-6. Closing Plate LH (Partial replacement)

A: REMOVAL

• Overall view (The radiator panel has been removed. The wheel apron should be removed depending on level of damage.)



BS-09402

(A) 216 mm [8.50 in]

(B) 55 mm [2.17 in]

(1) 1 point (outside · 1)

(4) 1 point (outside · 2)

(7) 1 point (outside · 1 belt sander)

(2) 2 points (outside · 1)

(5) 2 points (outside · 2)

(8) Cut position

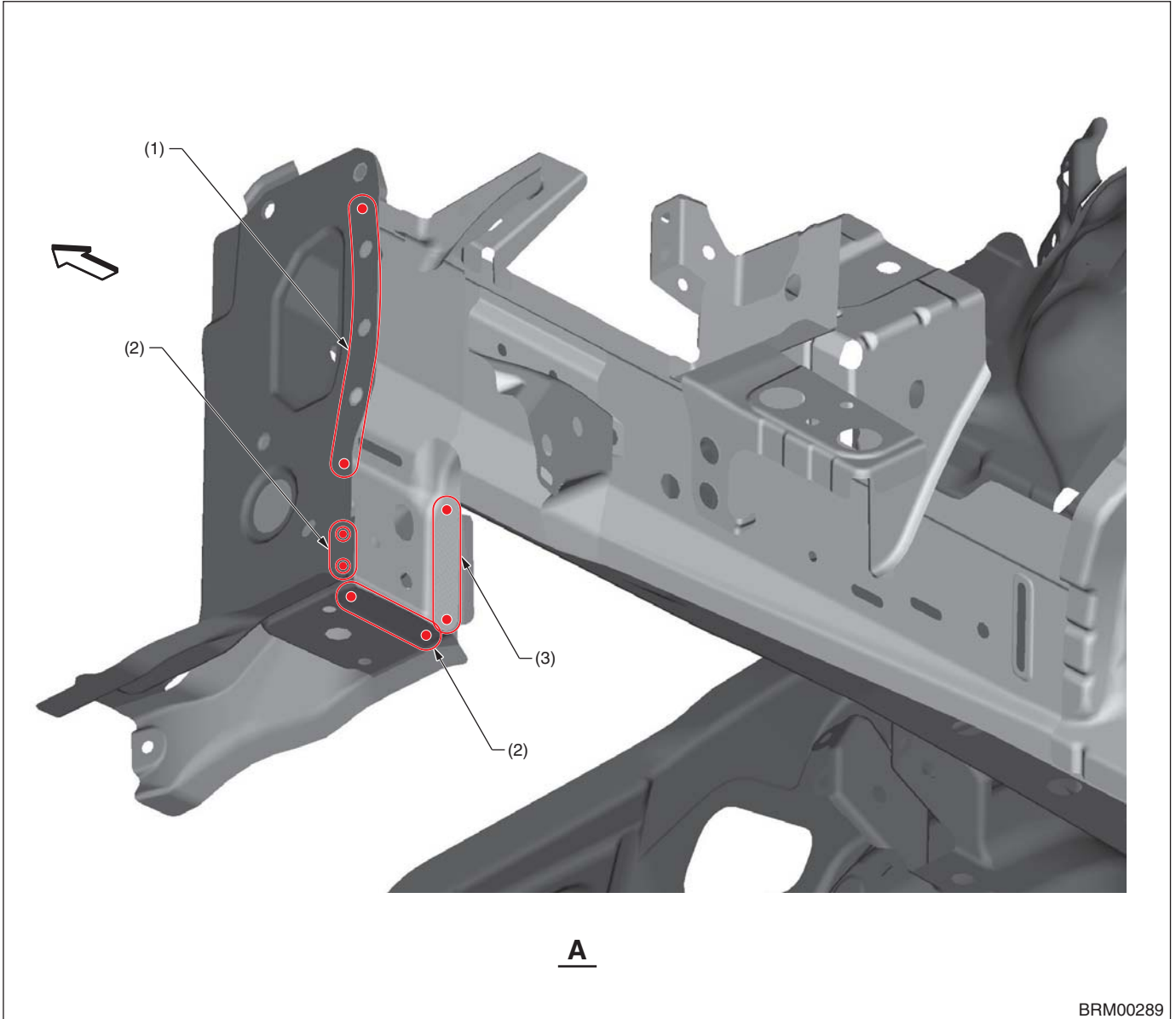
(3) 7 points (outside · 1)

(6) 6 points (outside · 2)

(9) Tailored line

Panel Replacement

• Views A



(1) 4 points (inside · 1)

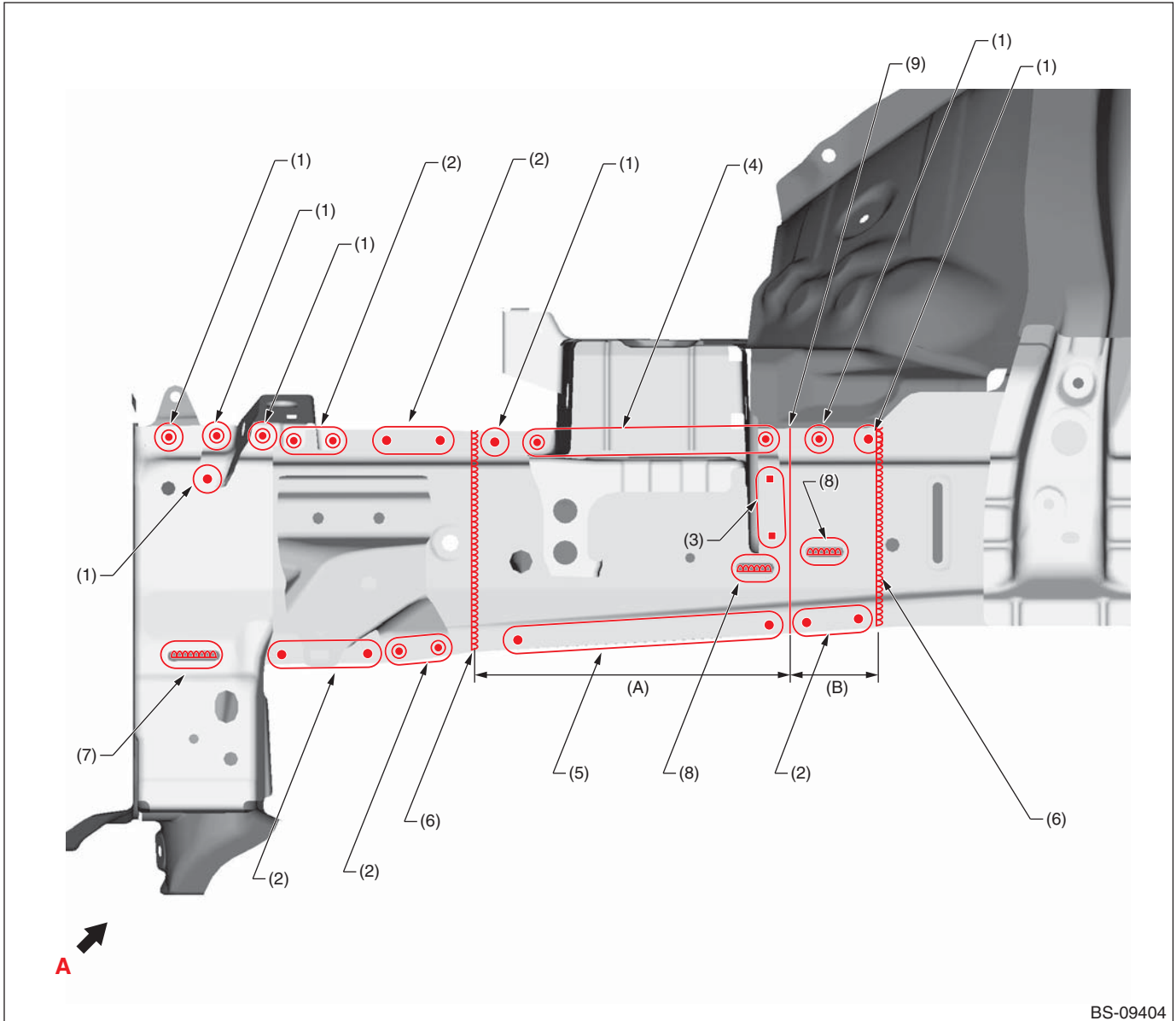
(2) 2 points (inside · 1)

(3) 4 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09404

(A) 216 mm [8.50 in]

(B) 55 mm [2.17 in]

(1) 1 point

(4) 6 points

(7) 1 point (Continuous welding)
(20 mm [0.79 in])

(2) 2 points

(5) 7 points

(8) 1 point (Continuous welding)
(10 mm [0.39 in])

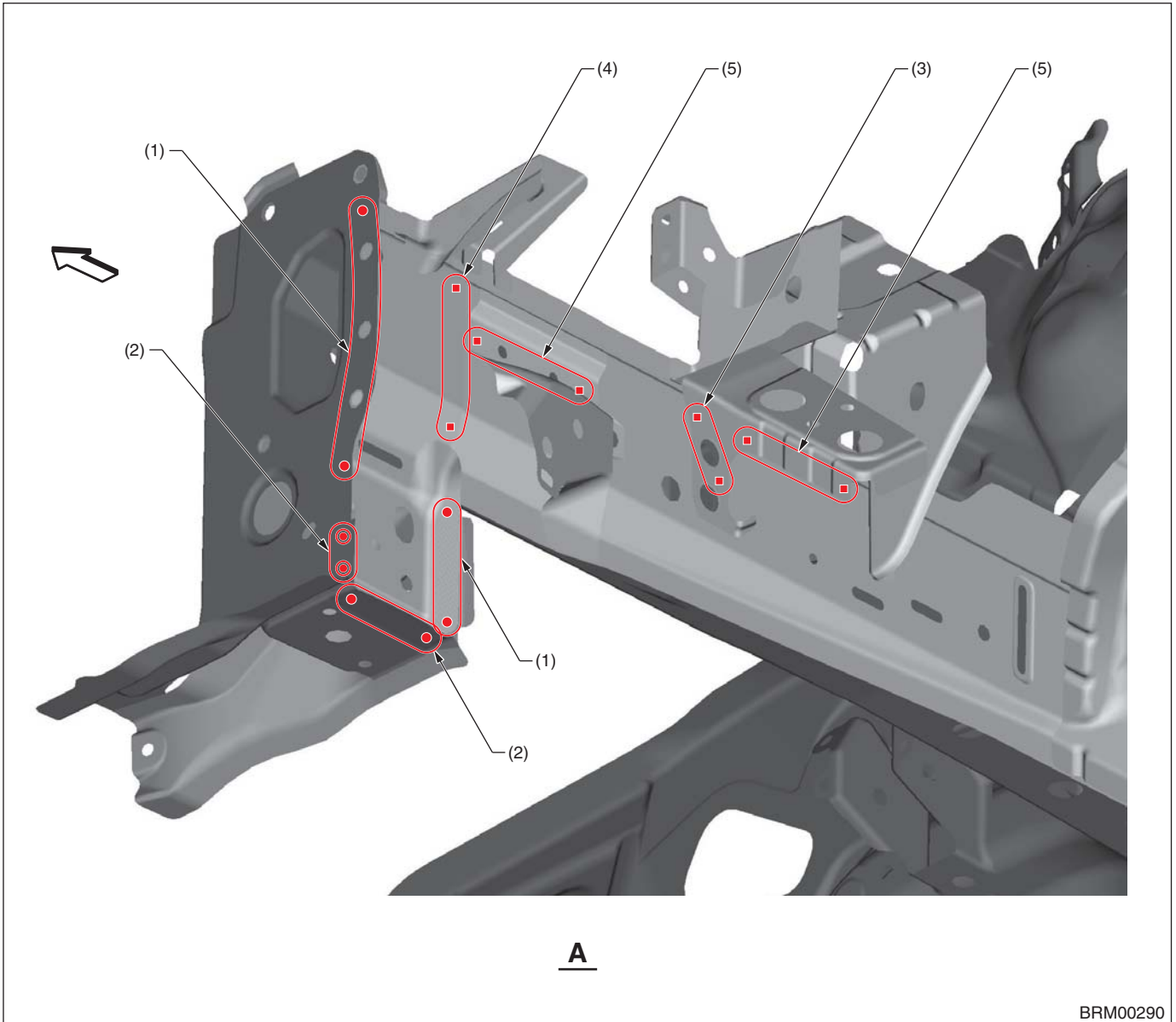
(3) 3 points (service)

(6) 1 point (Continuous welding)

(9) Tailored line

Panel Replacement

• Views A



BRM00290

(1) 4 points
(2) 2 points

(3) 2 points (service)
(4) 4 points (service)

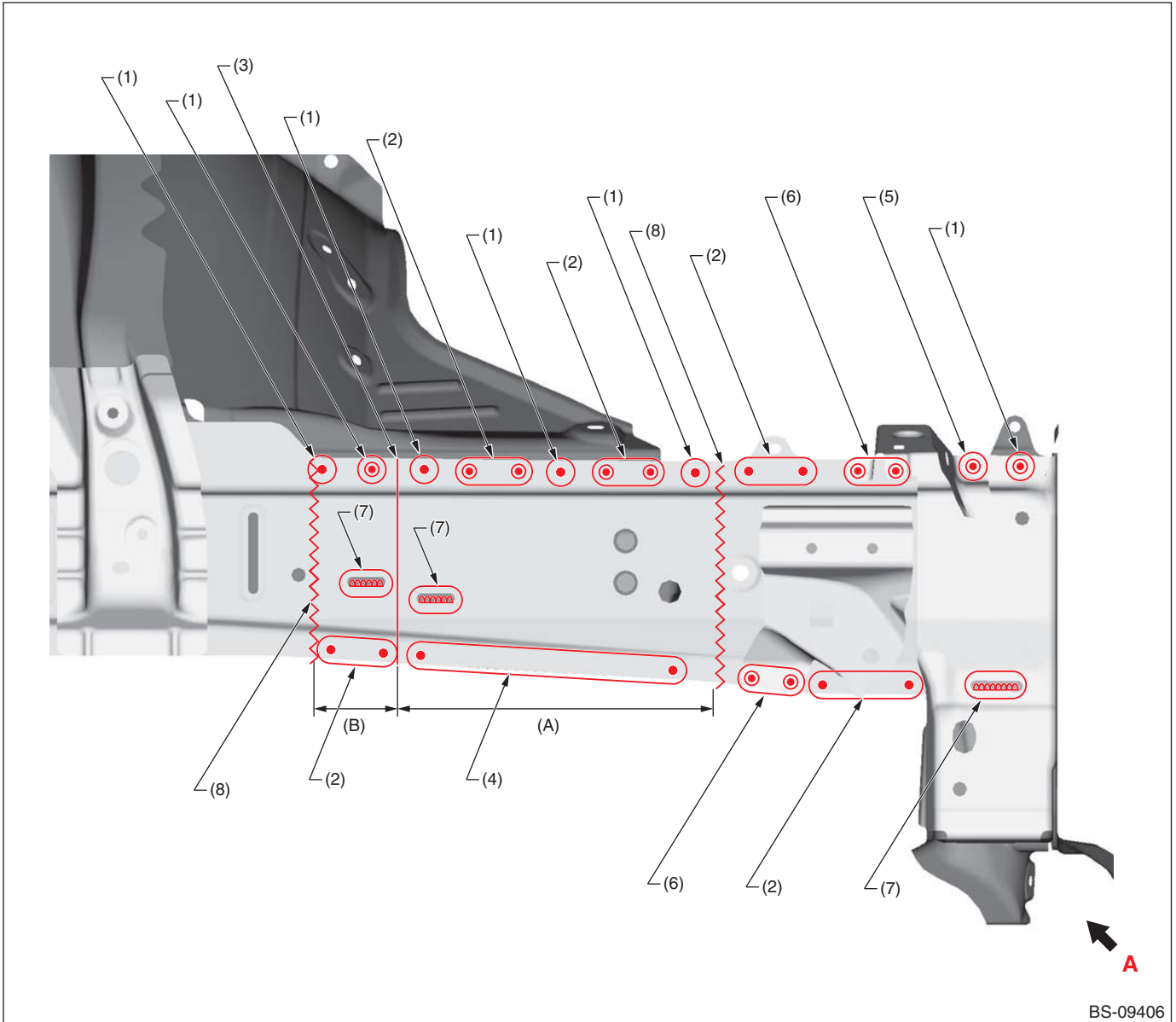
(5) 3 points (service)

Panel Replacement

8-7. Closing Plate RH (Partial replacement)

A: REMOVAL

• Overall view (The radiator panel has been removed. The wheel apron should be removed depending on level of damage.)



BS-09406

(A) 213 mm [8.39 in]

(B) 53 mm [2.09 in]

(1) 1 point (outside · 1)

(4) 7 points (outside · 1)

(7) 1 point (outside · 1 belt sander)

(2) 2 points (outside · 1)

(5) 1 point (outside · 2)

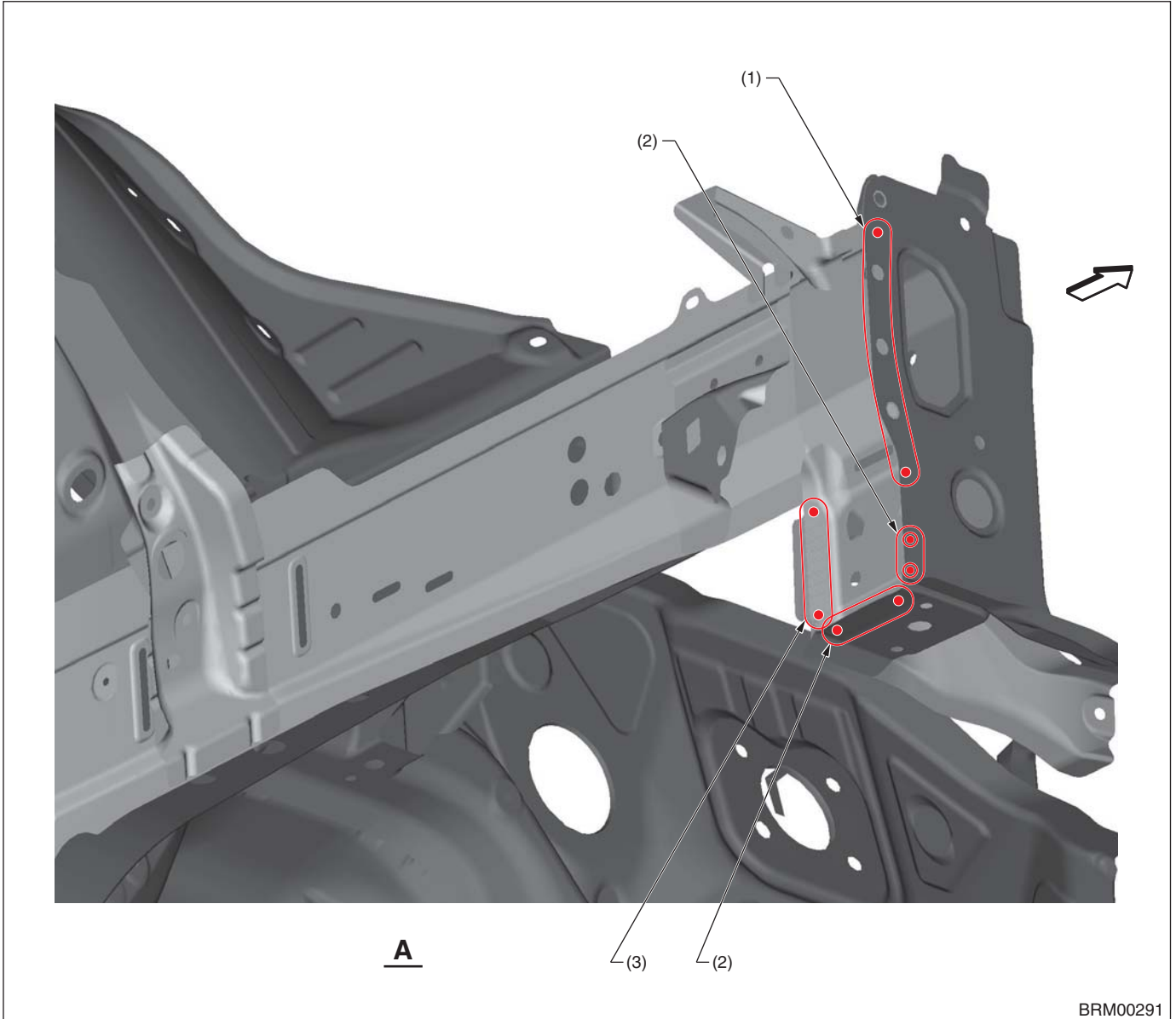
(8) Cut position

(3) Tailored line

(6) 2 points (outside · 2)

Panel Replacement

• Views A



(1) 4 points (inside · 1)

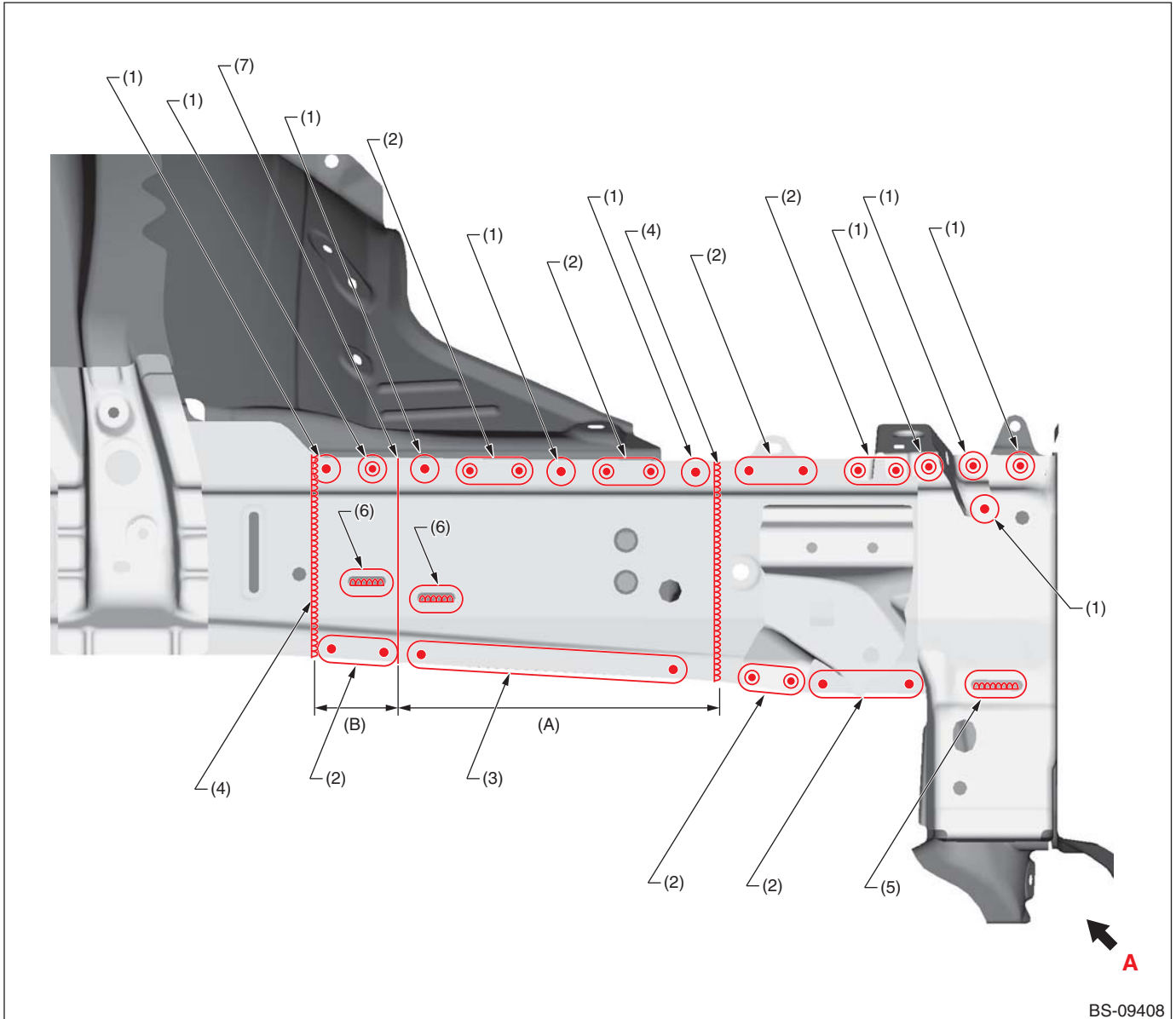
(2) 2 points (inside · 1)

(3) 4 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09408

(A) 213 mm [8.39 in]

(B) 53 mm [2.09 in]

(1) 1 point

(4) 1 point (Continuous welding)

(7) Tailored line

(2) 2 points

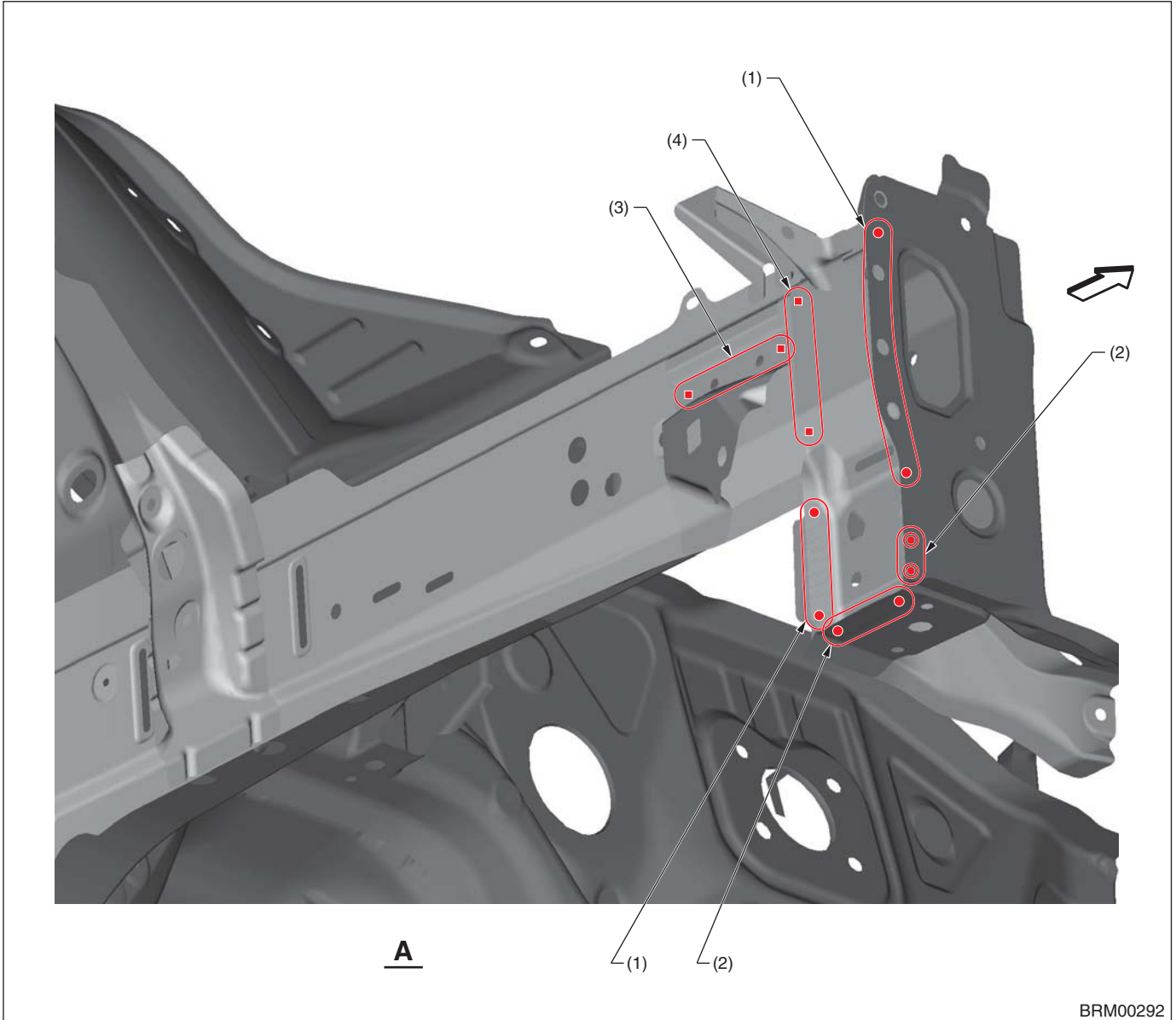
(5) 1 point (Continuous welding)
(20 mm [0.79 in])

(3) 7 points

(6) 1 point (Continuous welding)
(10 mm [0.39 in])

Panel Replacement

• Views A



(1) 4 points
(2) 2 points

(3) 3 points (service)

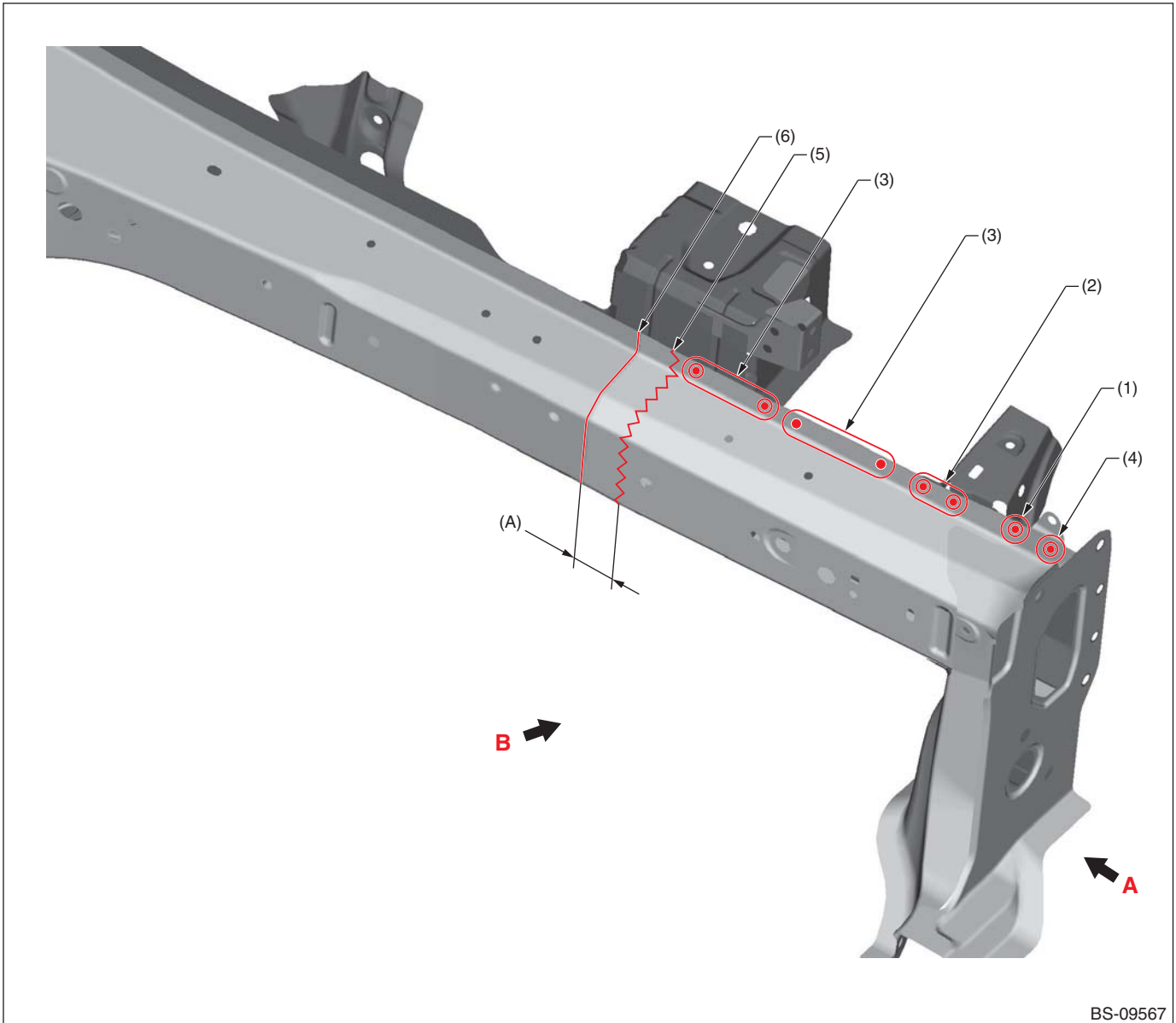
(4) 4 points (service)

Panel Replacement

8-8. Front Side Frame (Partial replacement)

A: REMOVAL

• Overall view (The radiator panel has been removed. The front wheel apron should be removed depending on level of damage.)



BS-09567

(A) 37 mm [1.46 in]

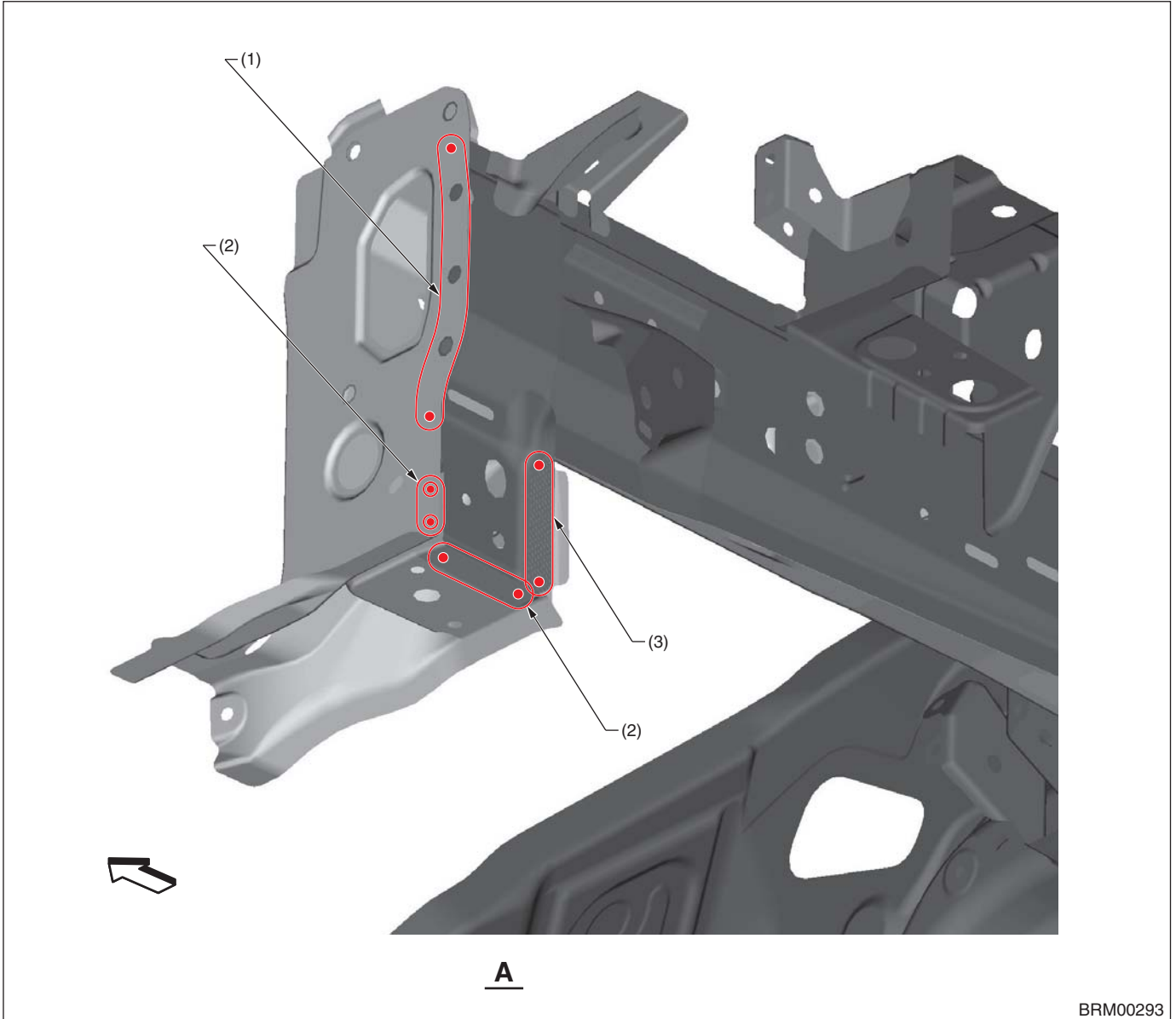
(1) 1 point (inside · 1)
(2) 2 points (inside · 1)

(3) 3 points (inside · 1)
(4) 1 point (inside · 2)

(5) Cut position
(6) Tailored line

Panel Replacement

• Views A



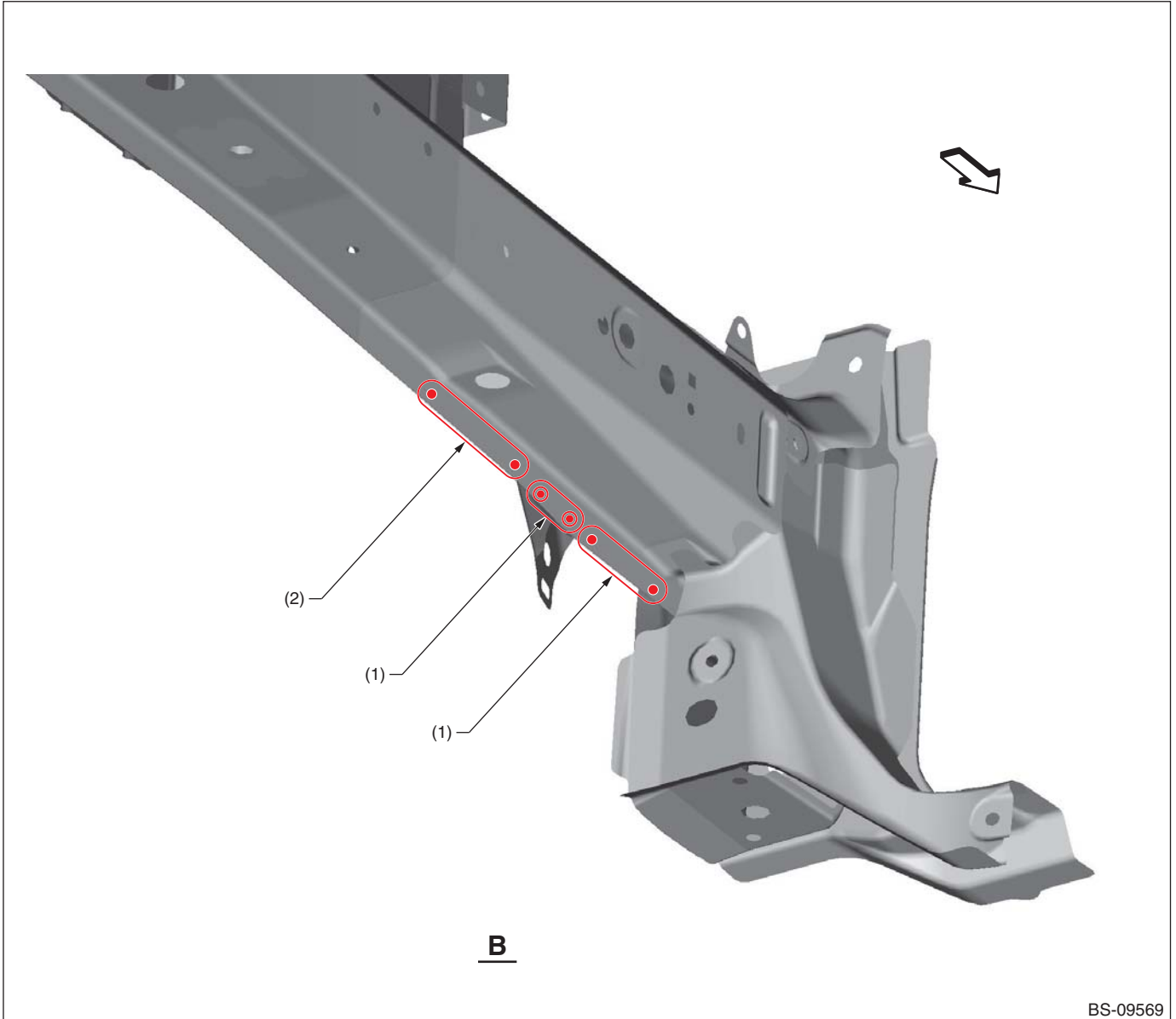
(1) 4 points (inside · 1)

(2) 2 points (inside · 1)

(3) 4 points (outside · 1)

Panel Replacement

• Views B



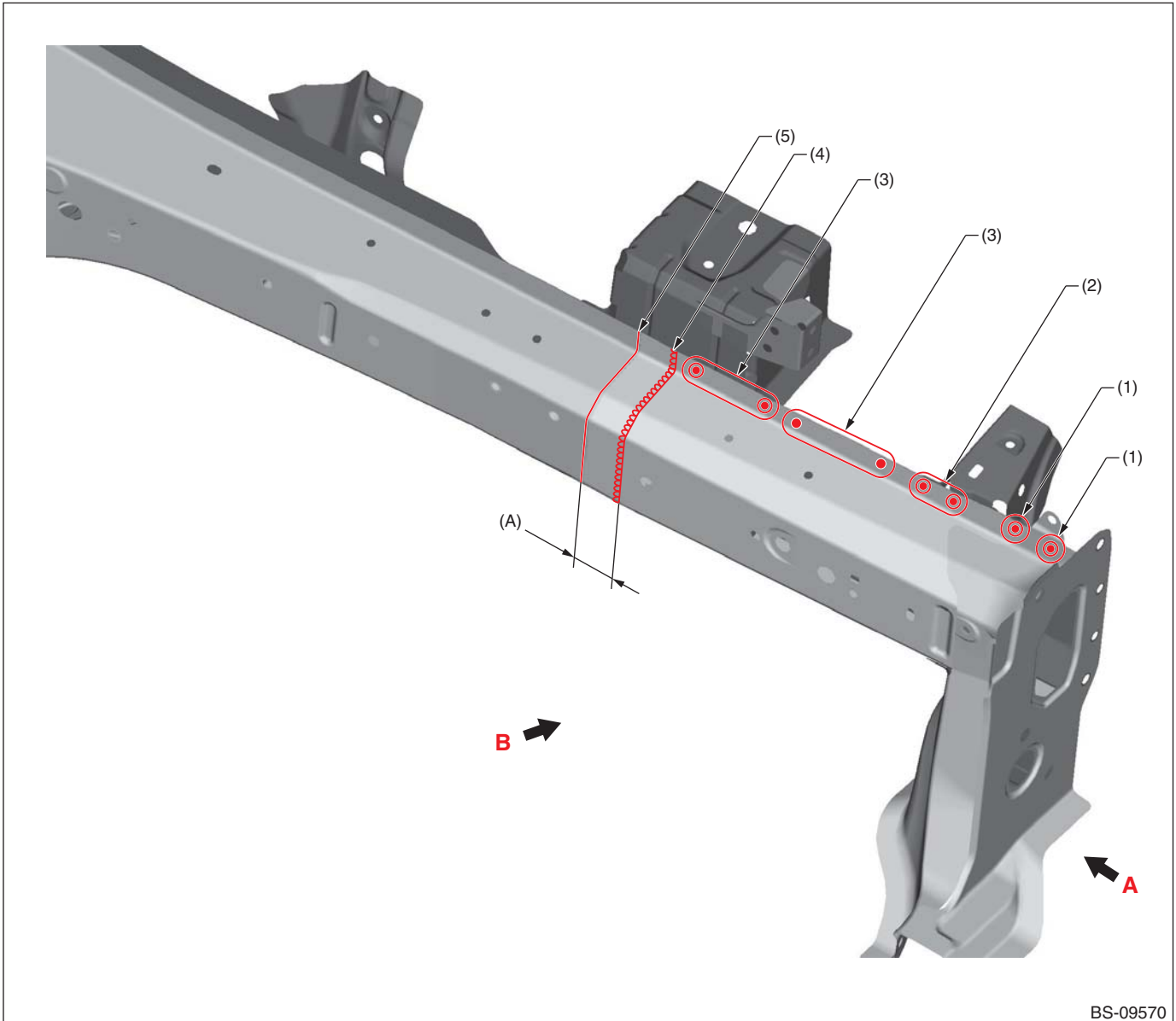
(1) 2 points (inside · 1)

(2) 4 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09570

(A) 37 mm [1.46 in]

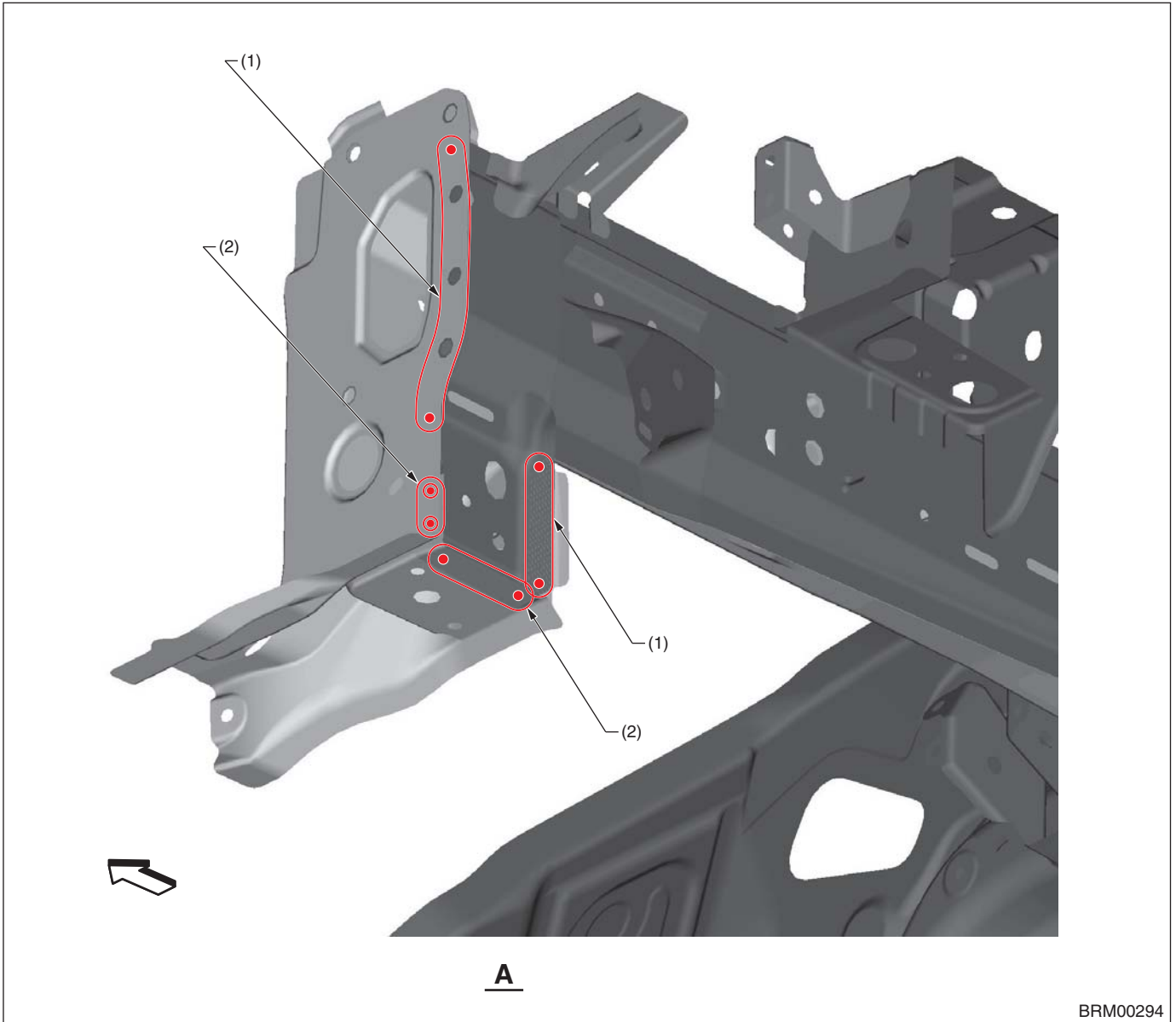
(1) 1 point
(2) 2 points

(3) 3 points
(4) 1 point (Continuous welding)

(5) Tailored line

Panel Replacement

• Views A



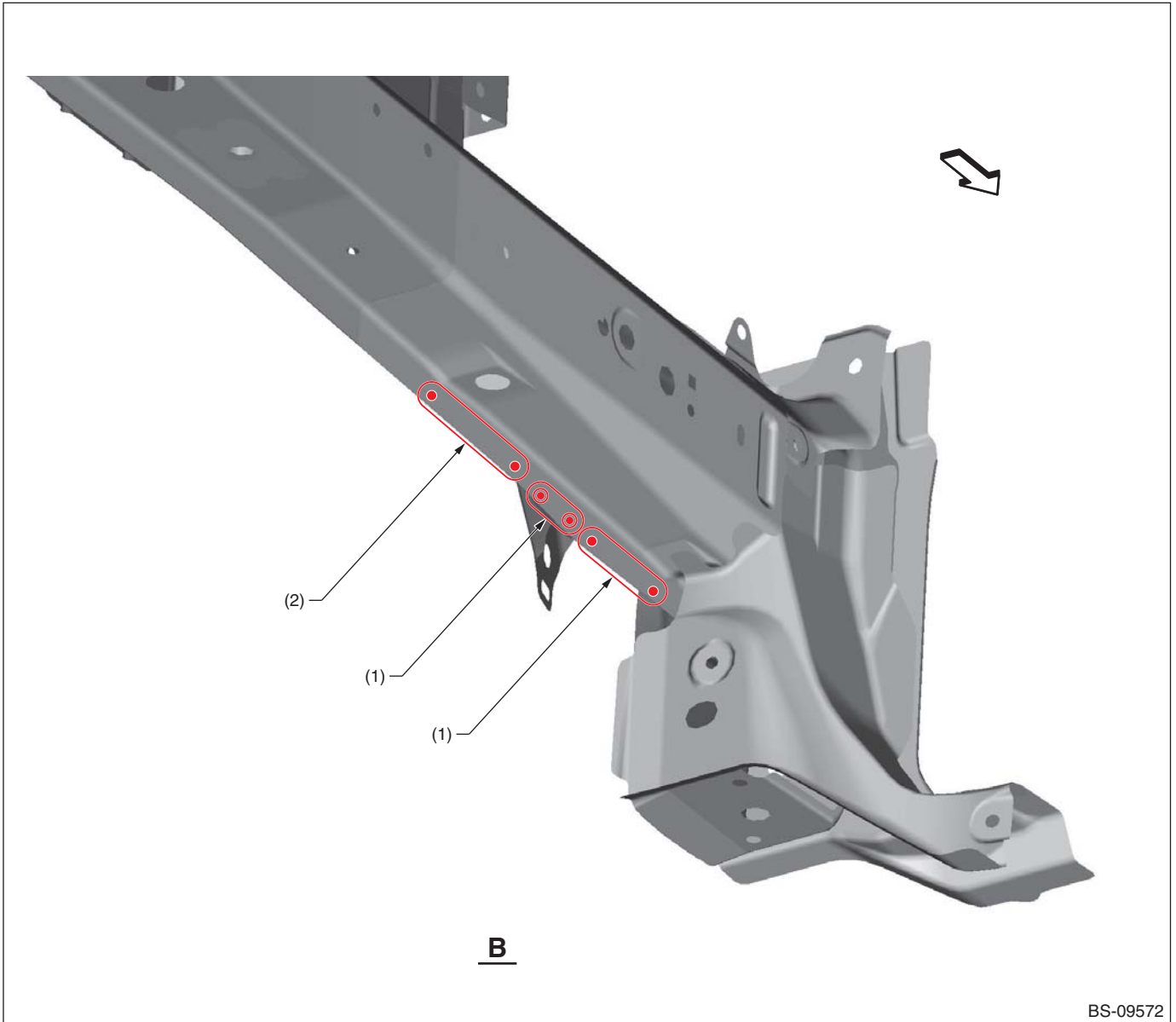
(1) 4 points

(2) 2 points

BRM00294

Panel Replacement

• Views B



BS-09572

(1) 2 points

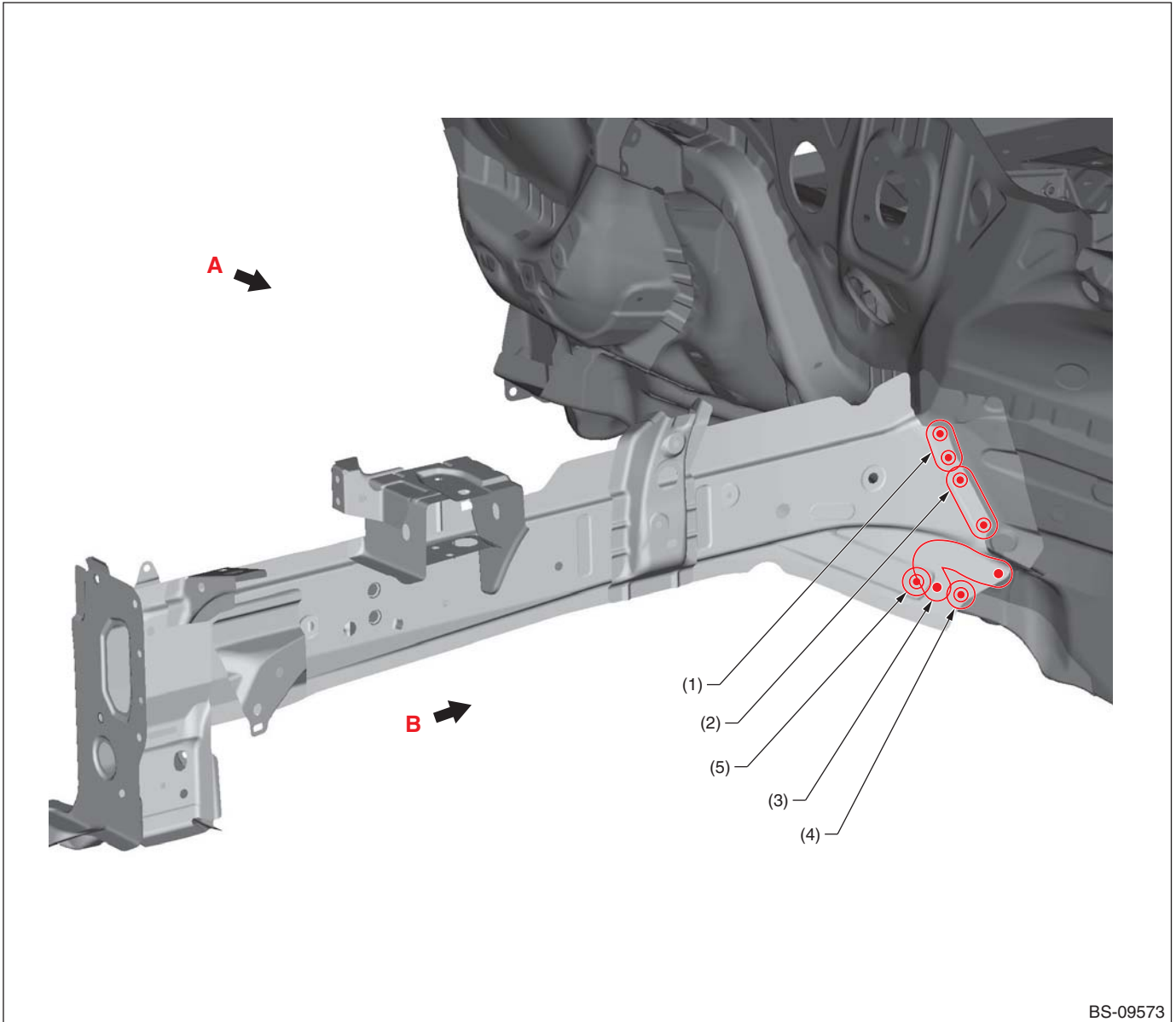
(2) 4 points

Panel Replacement

8-9. Front Side Frame (Total replacement)

A: REMOVAL

• Overall view (The radiator panel has been removed. The front wheel apron should be removed depending on level of damage.)



BS-09573

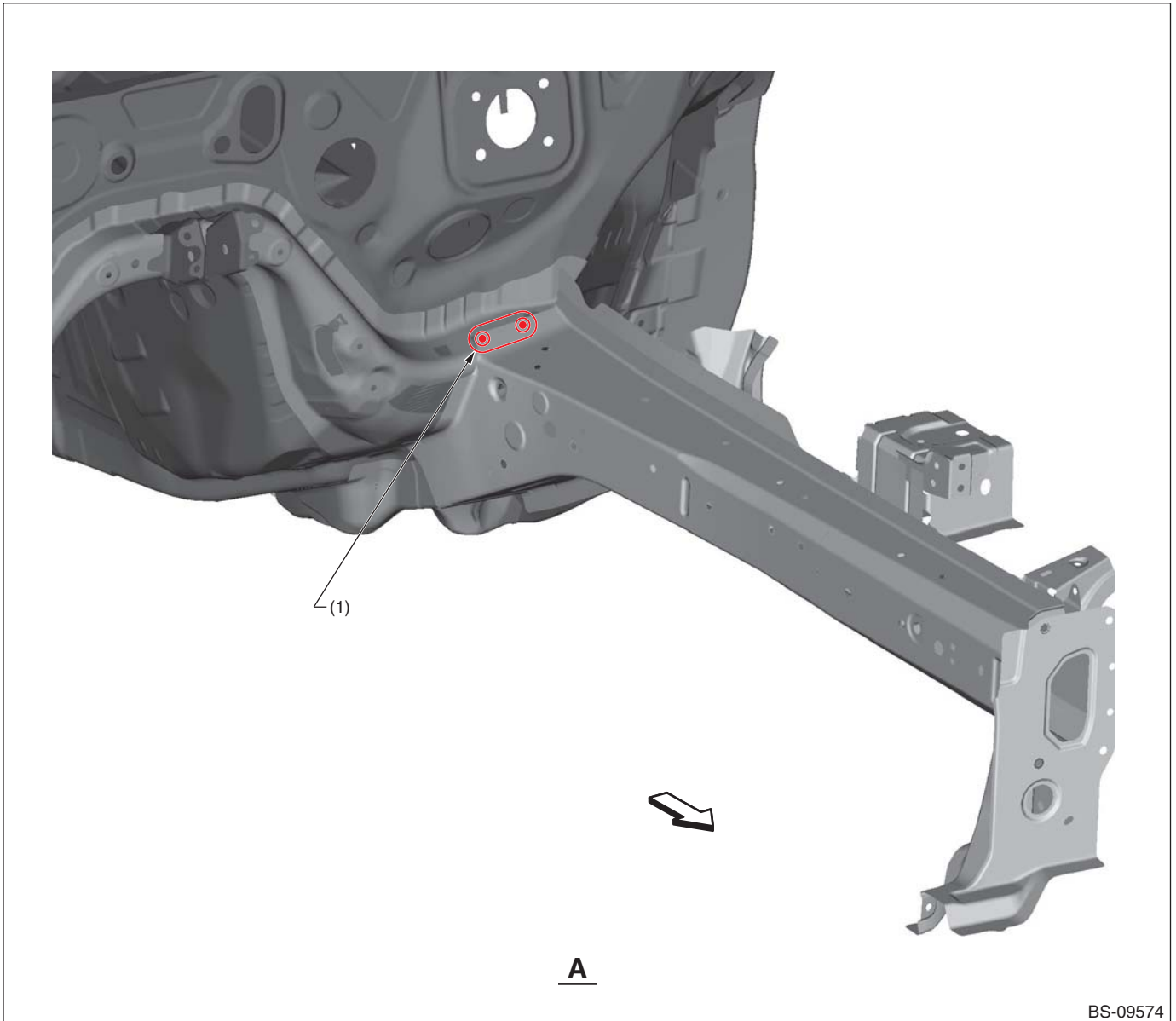
(1) 2 points (outside · 1)
(2) 3 points (outside · 1)

(3) 5 points (outside · 1)
(4) 1 point (outside · 1)

(5) 1 point (outside · 2)

Panel Replacement

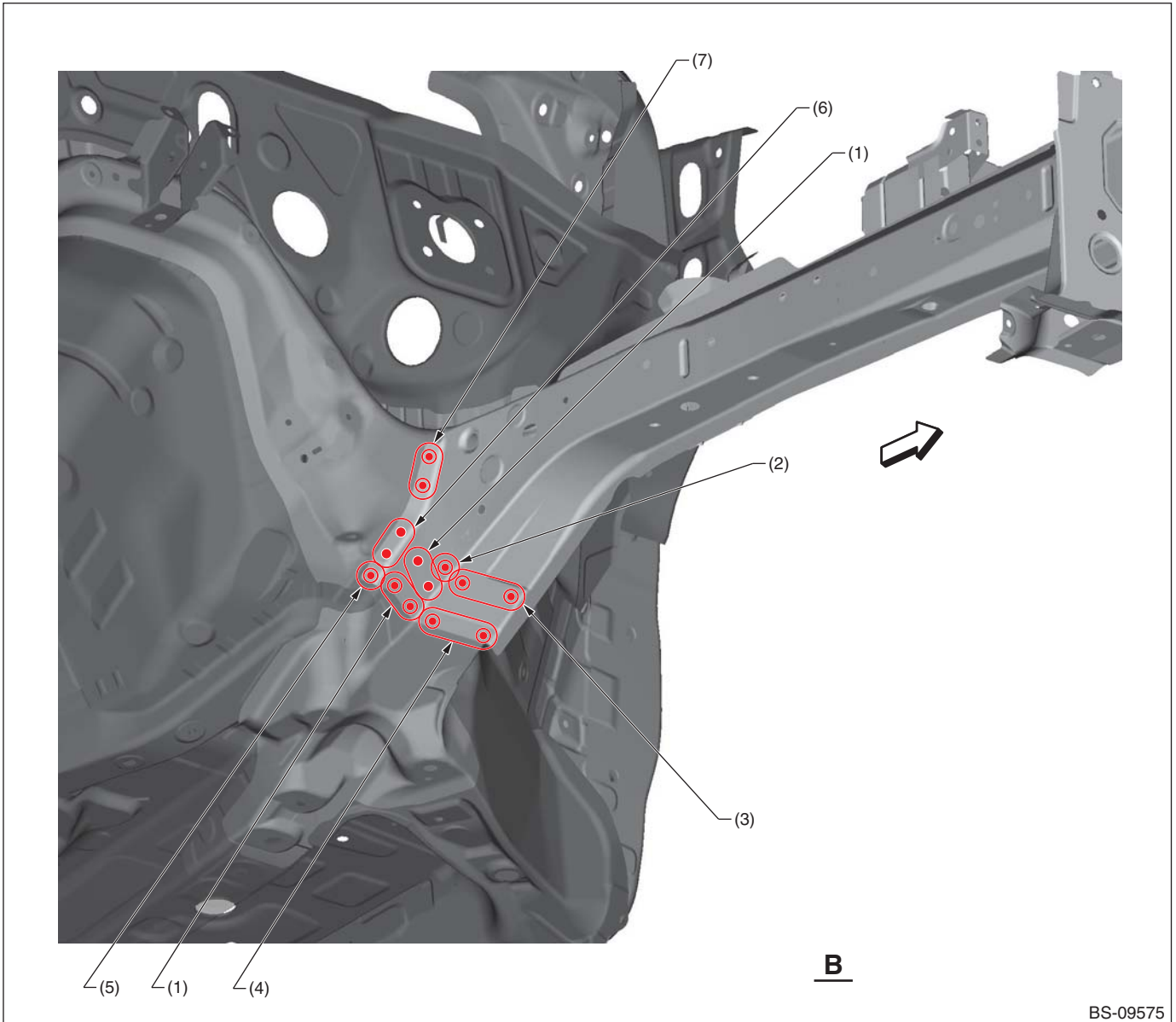
- Views A



(1) 3 points (top - 1)

Panel Replacement

• Views B



- (1) 2 points (inside · 1)
- (2) 1 point (inside · 2)
- (3) 3 points (bottom · 2)

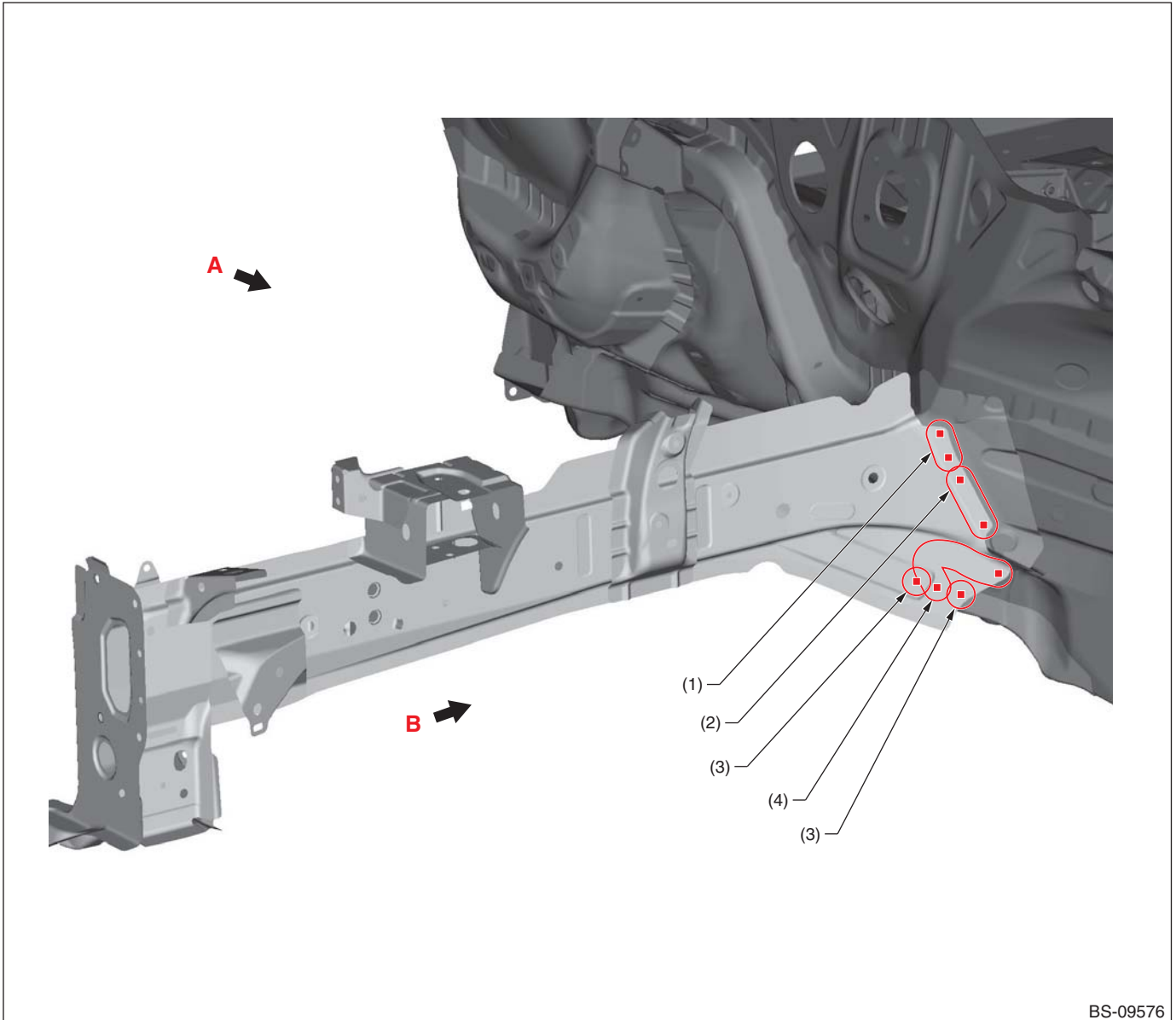
- (4) 3 points (bottom · 1)
- (5) 1 point (bottom · 1)
- (6) 2 points (bottom · 1)

- (7) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



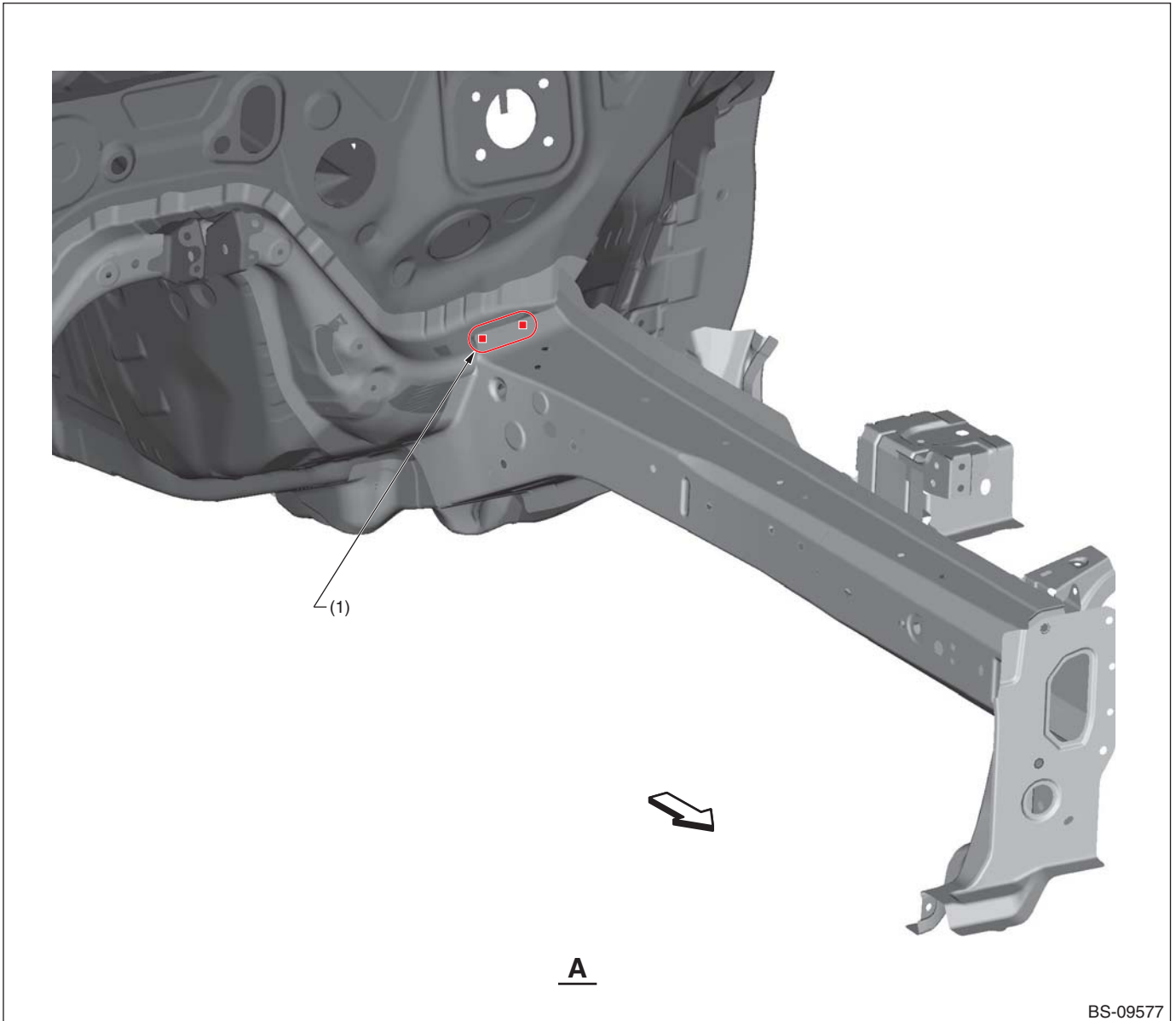
(1) 2 points (service)
(2) 3 points (service)

(3) 1 point (service)

(4) 5 points (service)

Panel Replacement

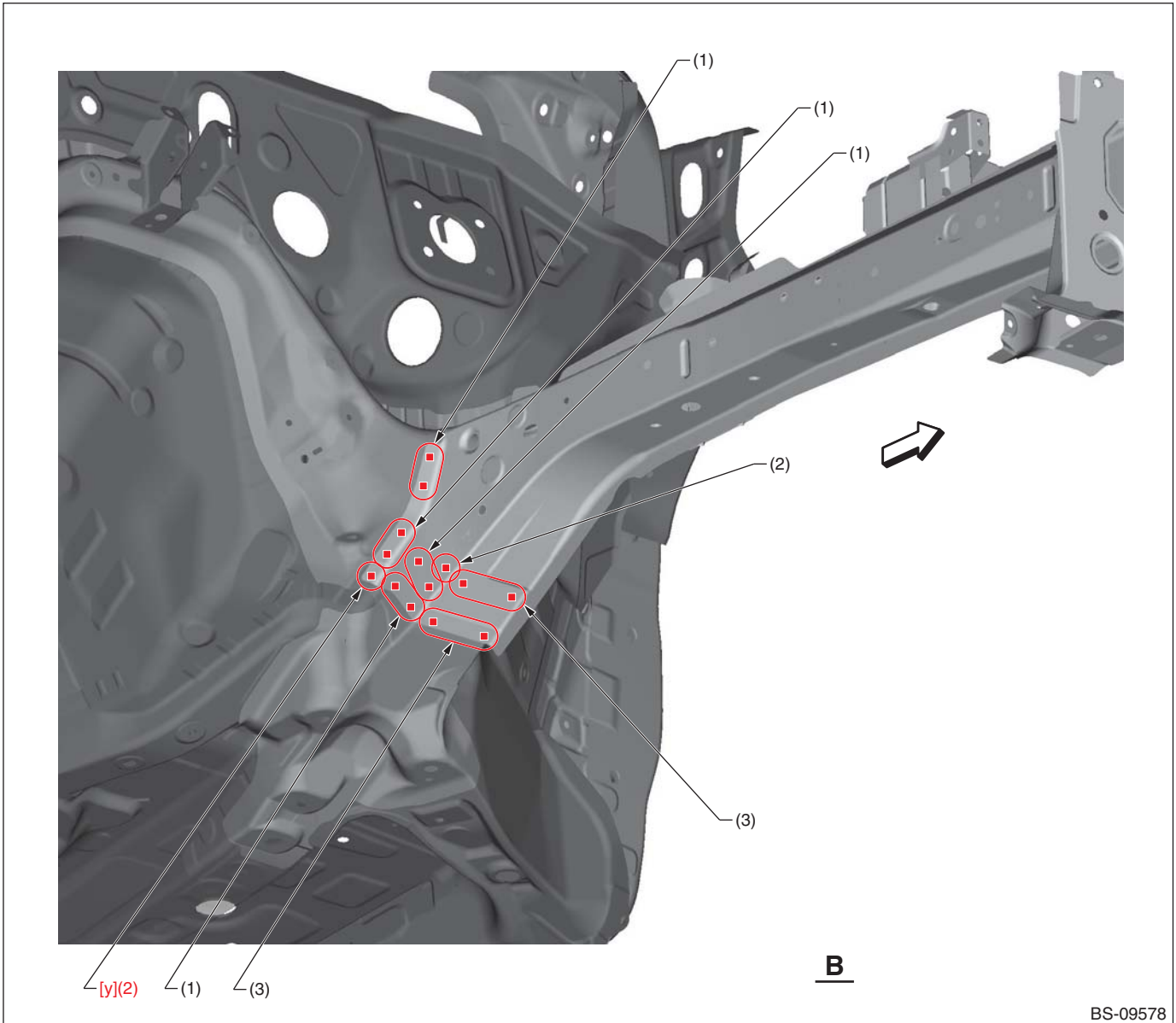
• Views A



(1) 3 points (service)

Panel Replacement

• Views B



BS-09578

(1) 2 points (service)

(2) 1 point (service)

(3) 3 points (service)

[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

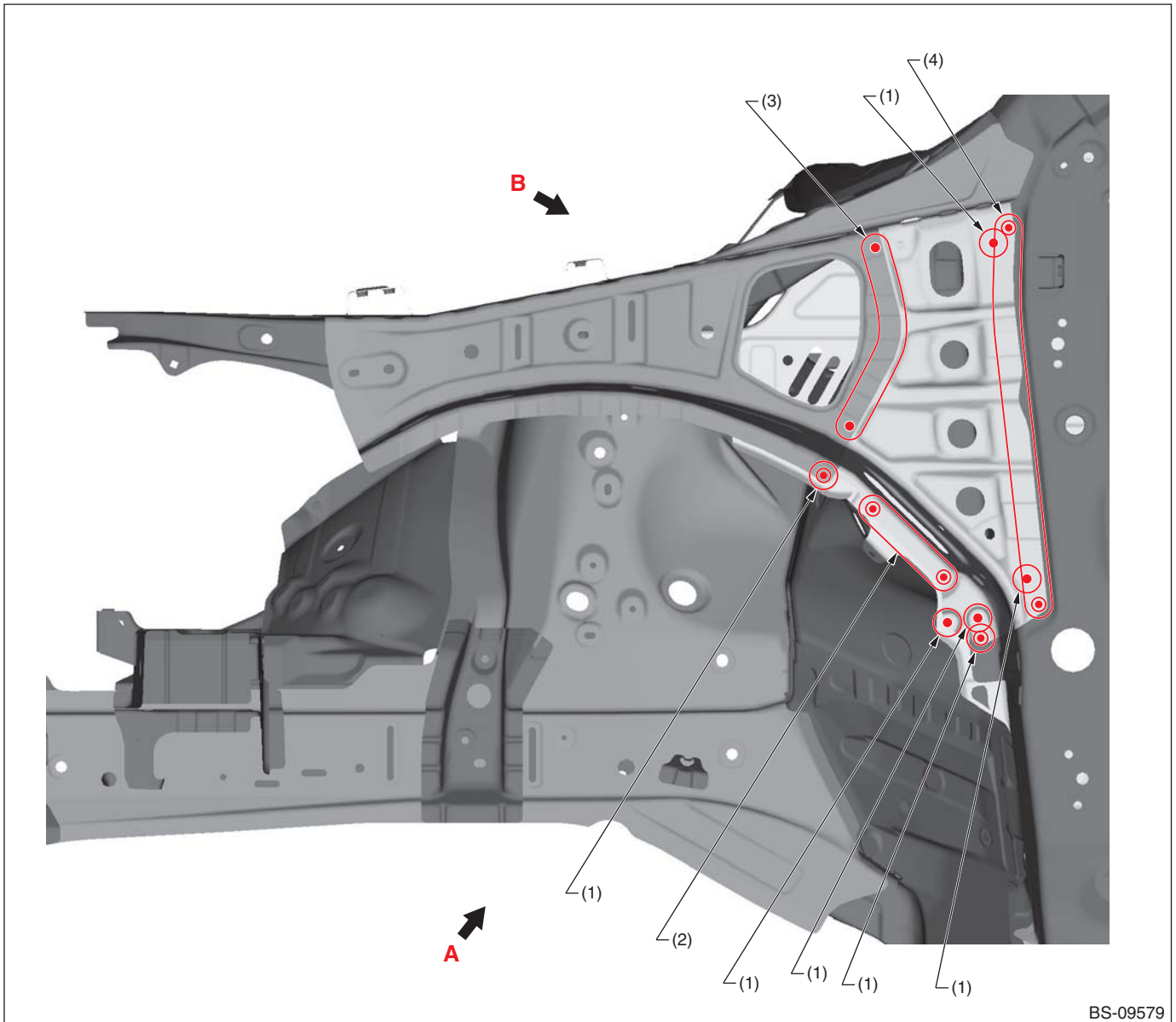
B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

8-10. Front Pillar Outer (Partial replacement)

A: REMOVAL

• Overall view 1



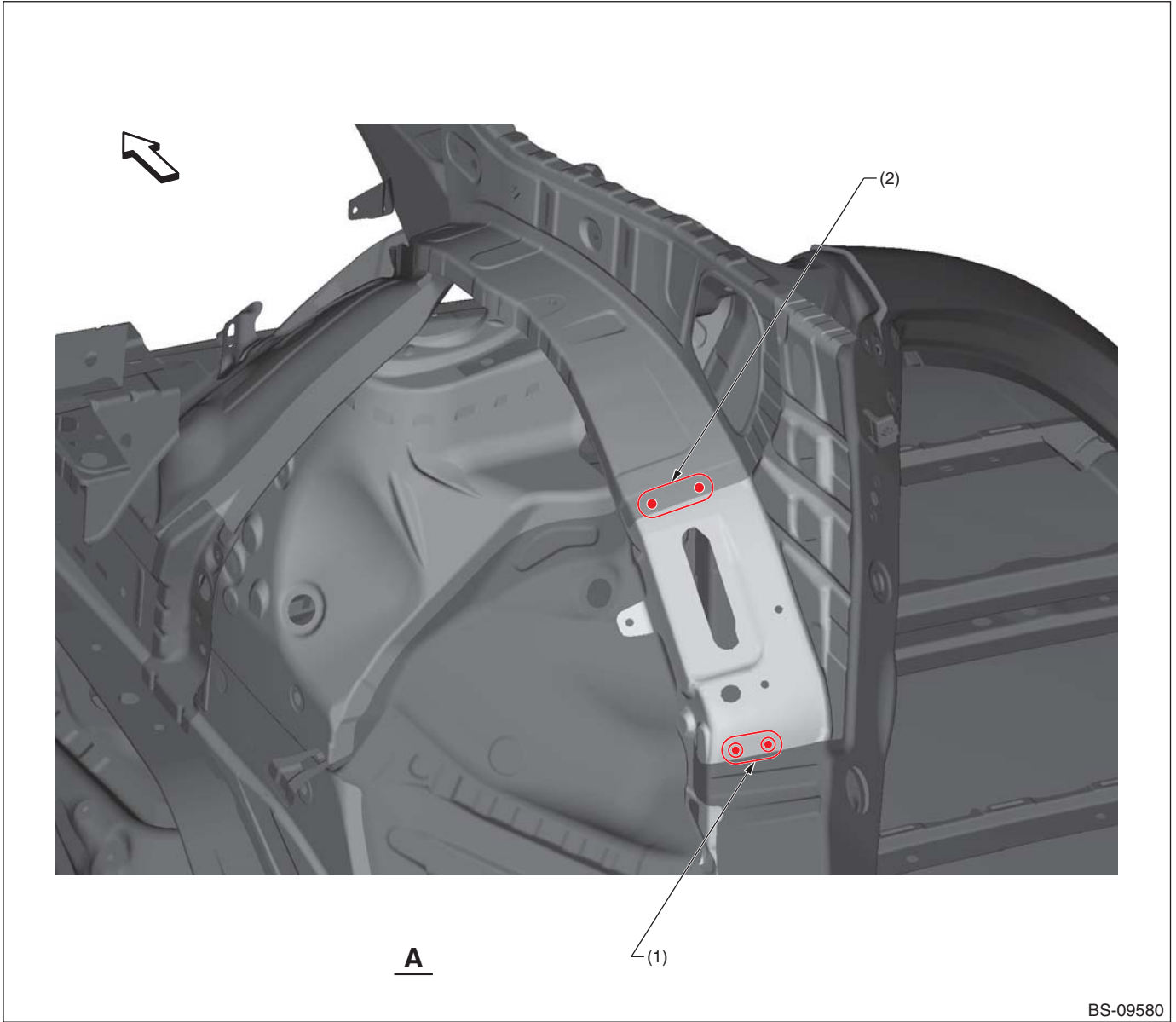
- (1) 1 point (outside · 1)
- (2) 4 points (outside · 1)

- (3) 5 points (outside · 1)

- (4) 7 points (outside · 1)

Panel Replacement

• Views A

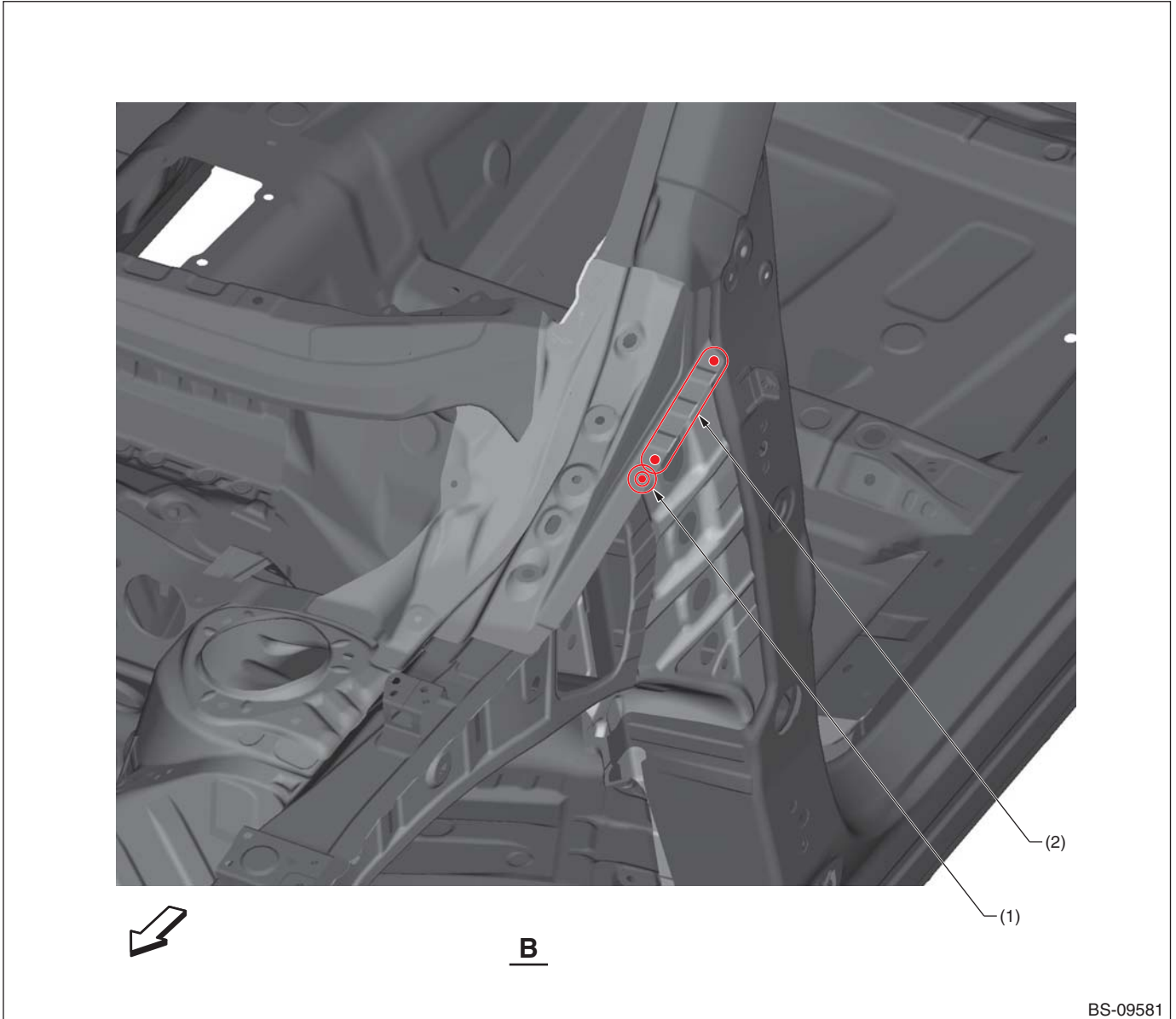


(1) 2 points (outside · 1)

(2) 3 points (outside · 1)

Panel Replacement

• Views B

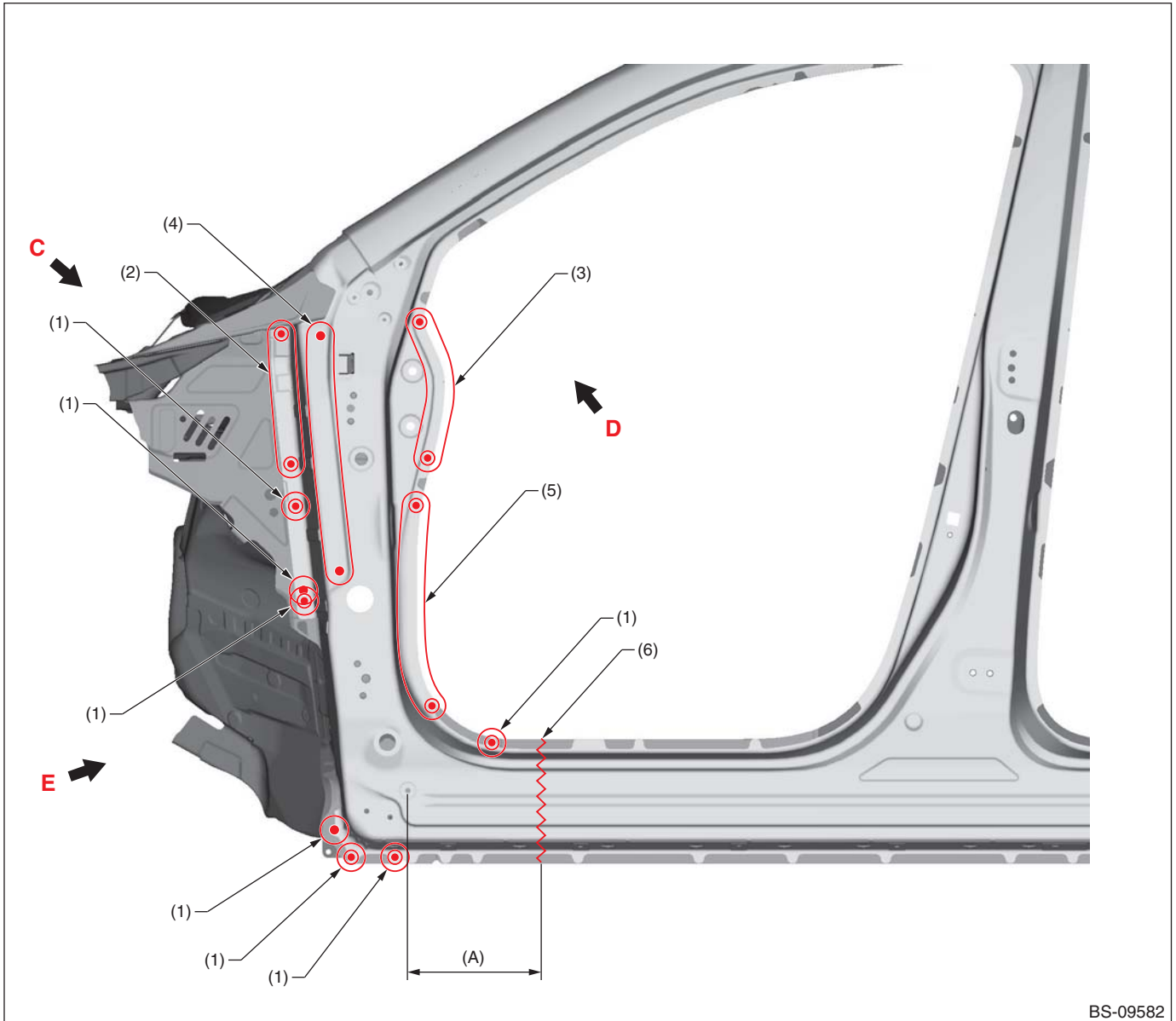


(1) 4 points (bottom · 1)

(2) 1 point (bottom · 2)

Panel Replacement

• Overall view 2



BS-09582

(A) 217 mm [8.54 in]

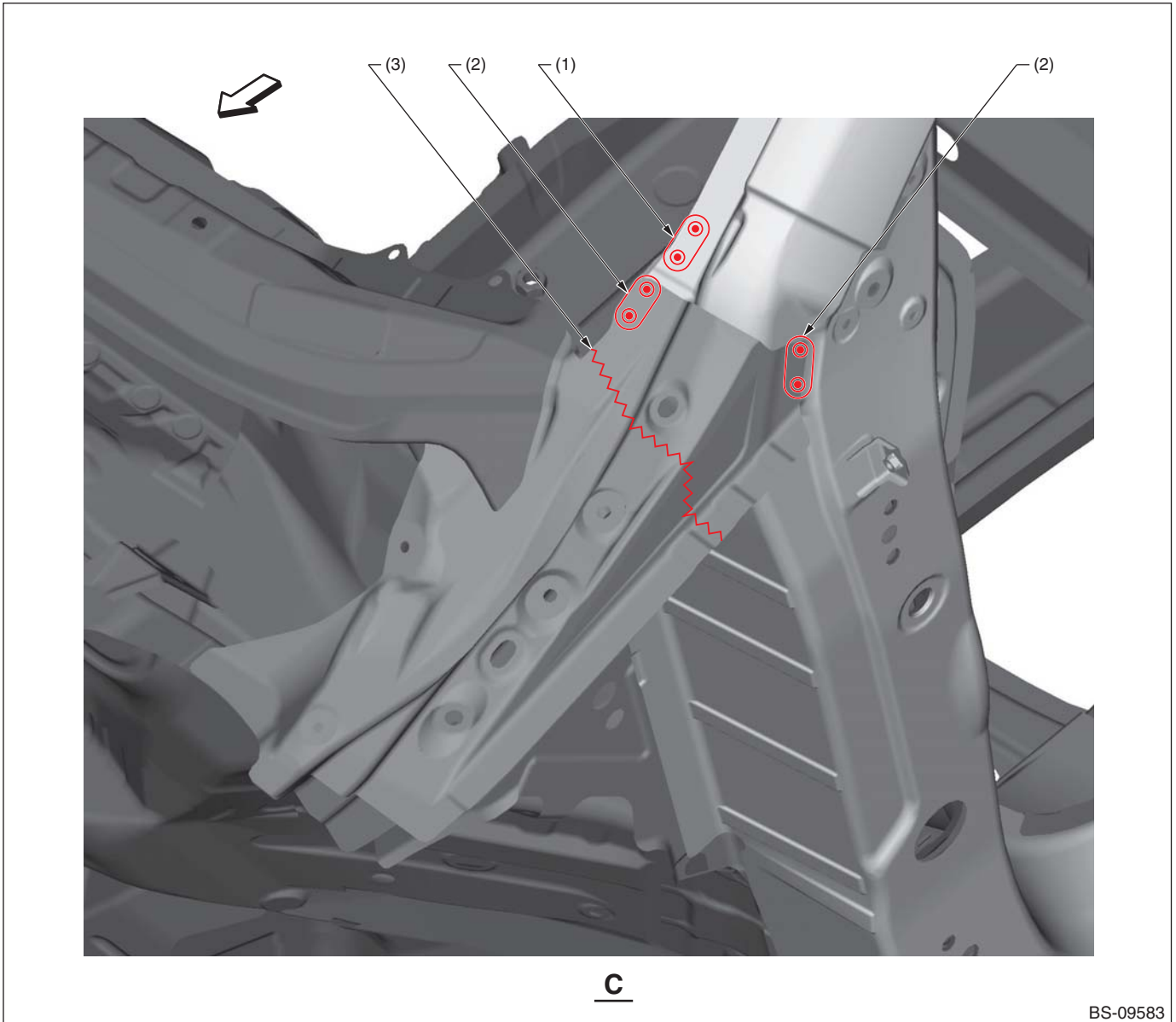
(1) 1 point (outside · 1)
 (2) 4 points (outside · 1)

(3) 6 points (outside · 1)
 (4) 7 points (outside · 1)

(5) 13 points (outside · 1)
 (6) Cut position

Panel Replacement

• Views C



BS-09583

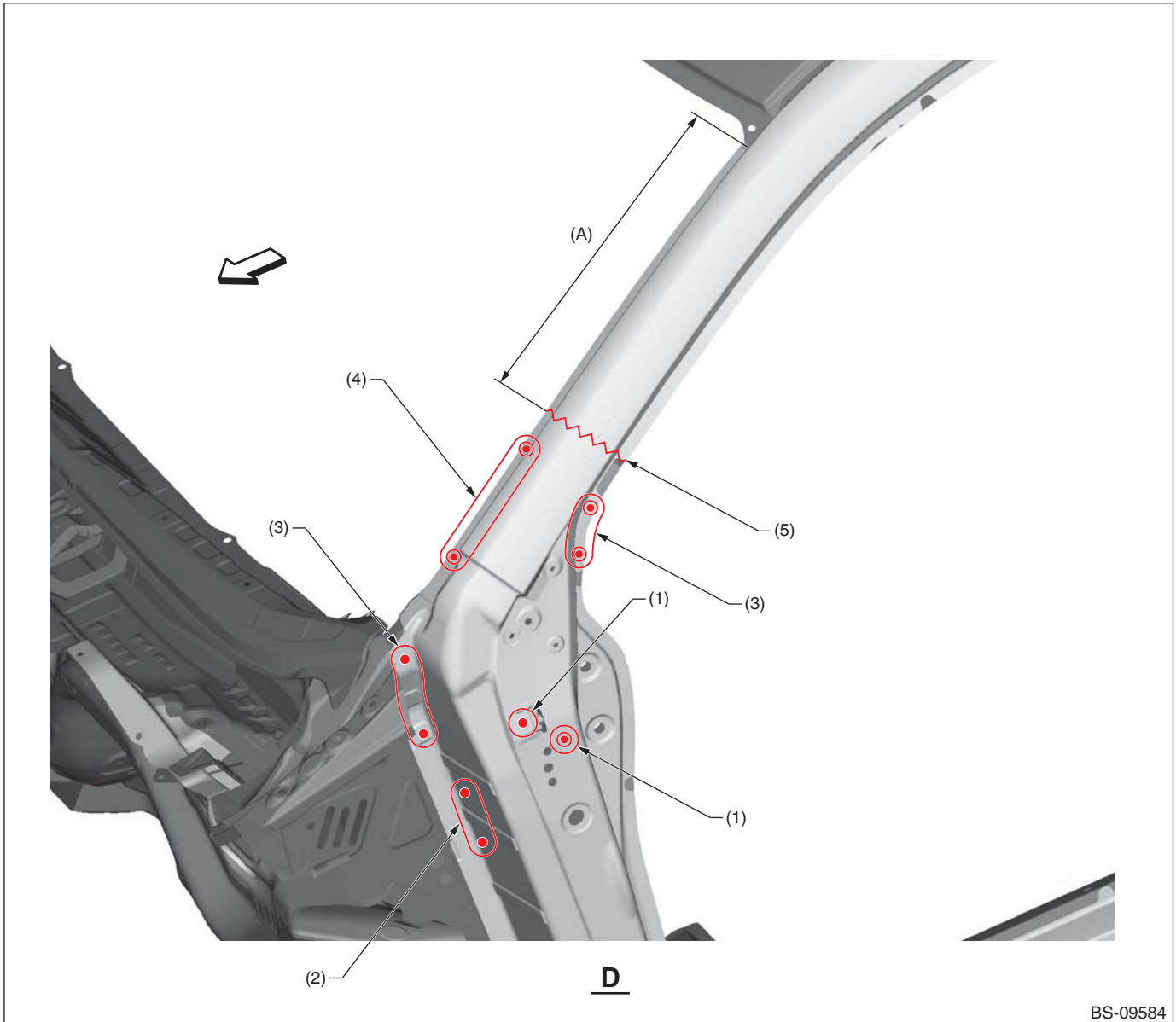
(1) 2 points (outside · 1)

(2) 2 points (outside · 2)

(3) Rough cutting

Panel Replacement

• Views D



(A) 416 mm [16.38 in]

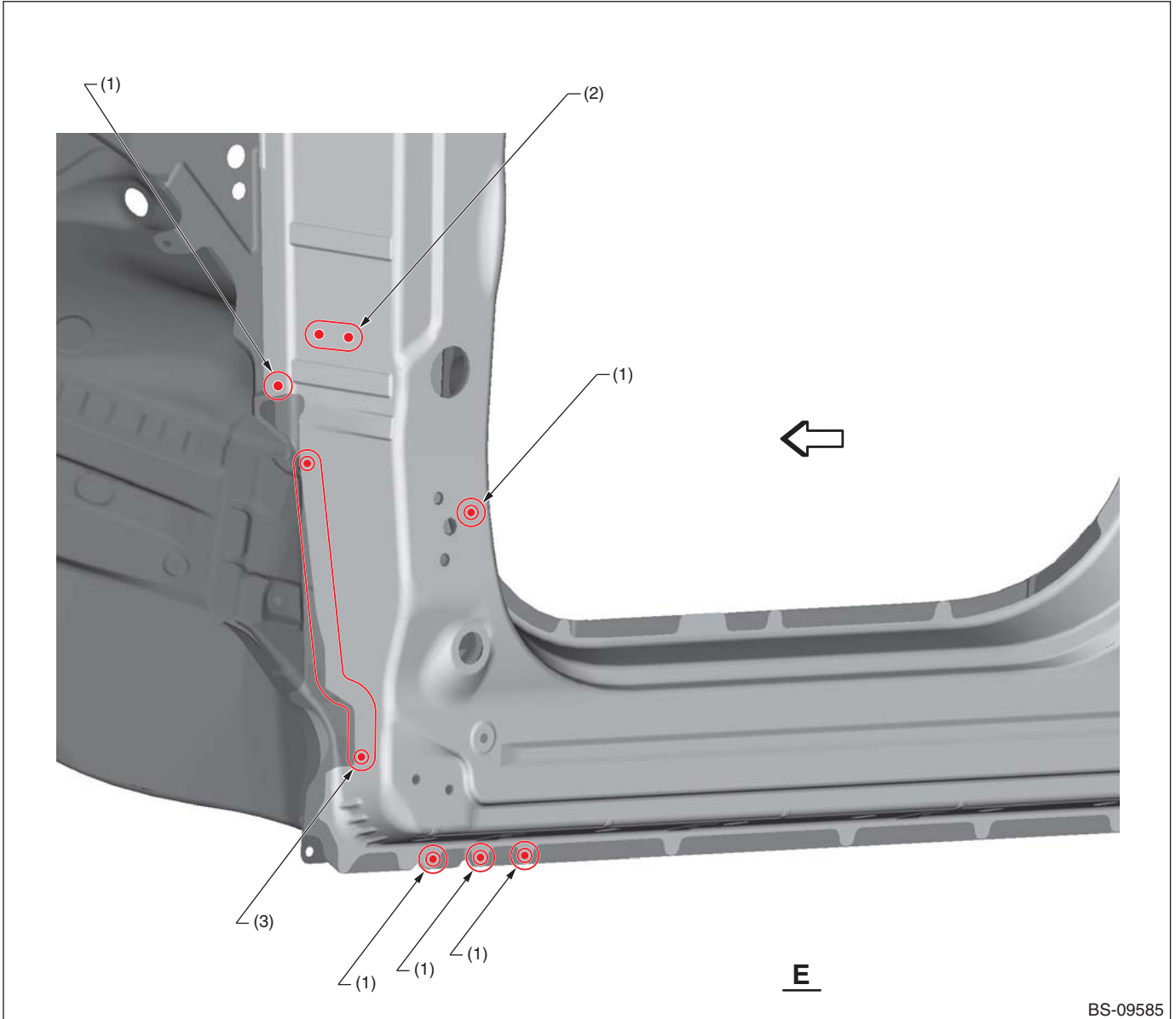
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

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

(5) Cut position

Panel Replacement

• Views E



(1) 1 point (outside · 1)

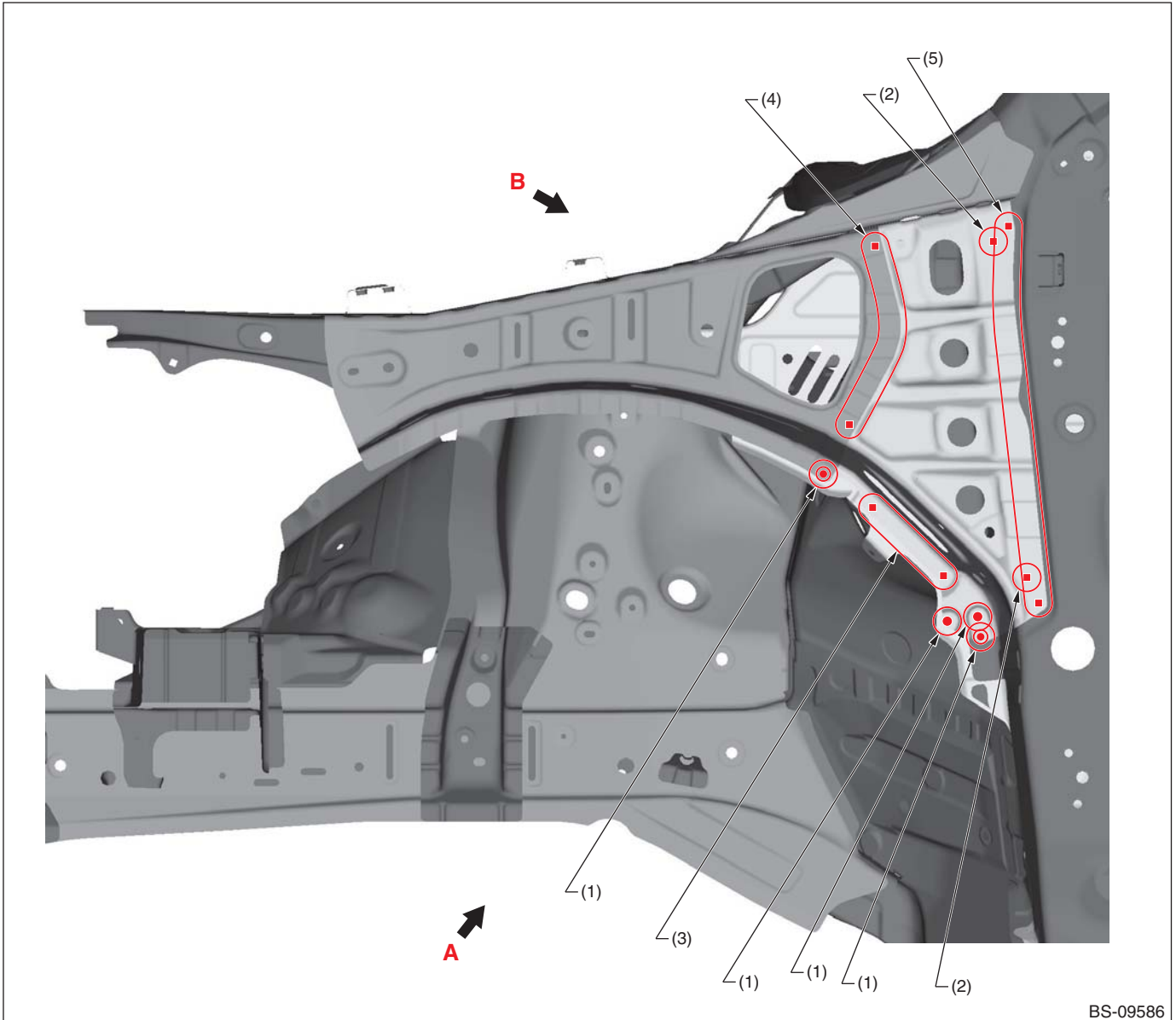
(2) 2 points (outside · 1)

(3) 5 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BS-09586

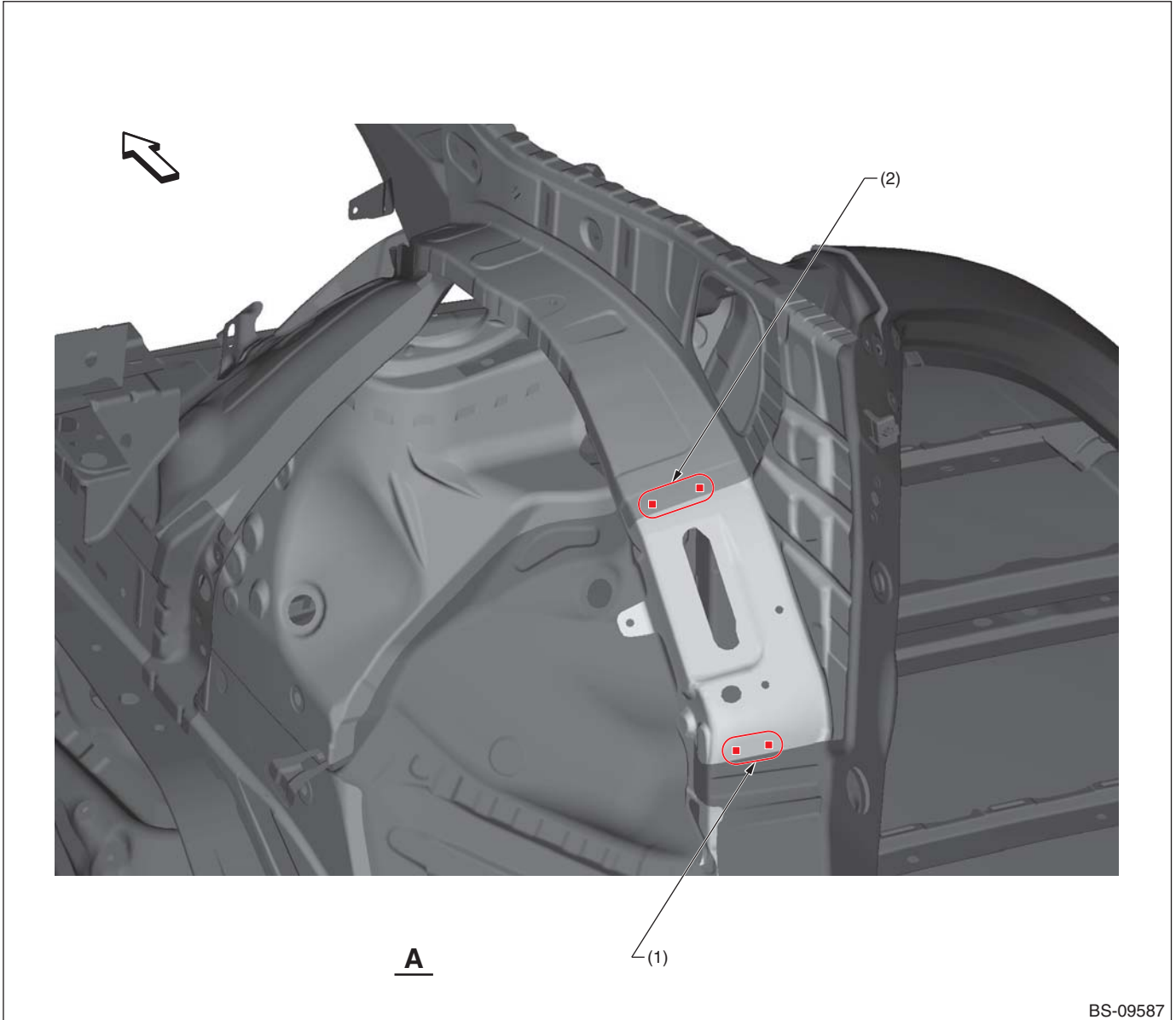
- (1) 1 point
- (2) 1 point (service)

- (3) 4 points (service)
- (4) 5 points (service)

- (5) 7 points (service)

Panel Replacement

• Views A



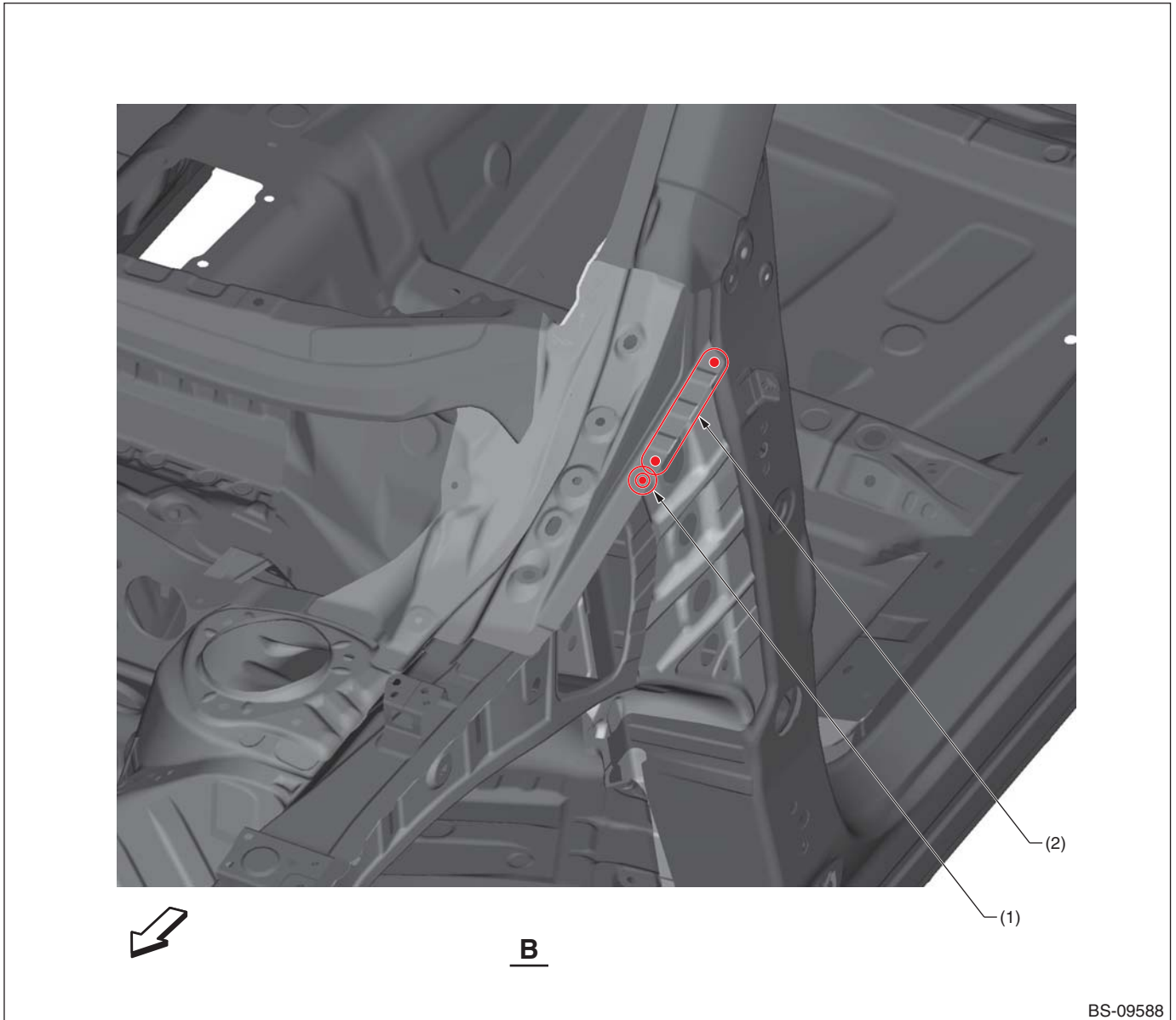
BS-09587

(1) 2 points (service)

(2) 3 points

Panel Replacement

• Views B



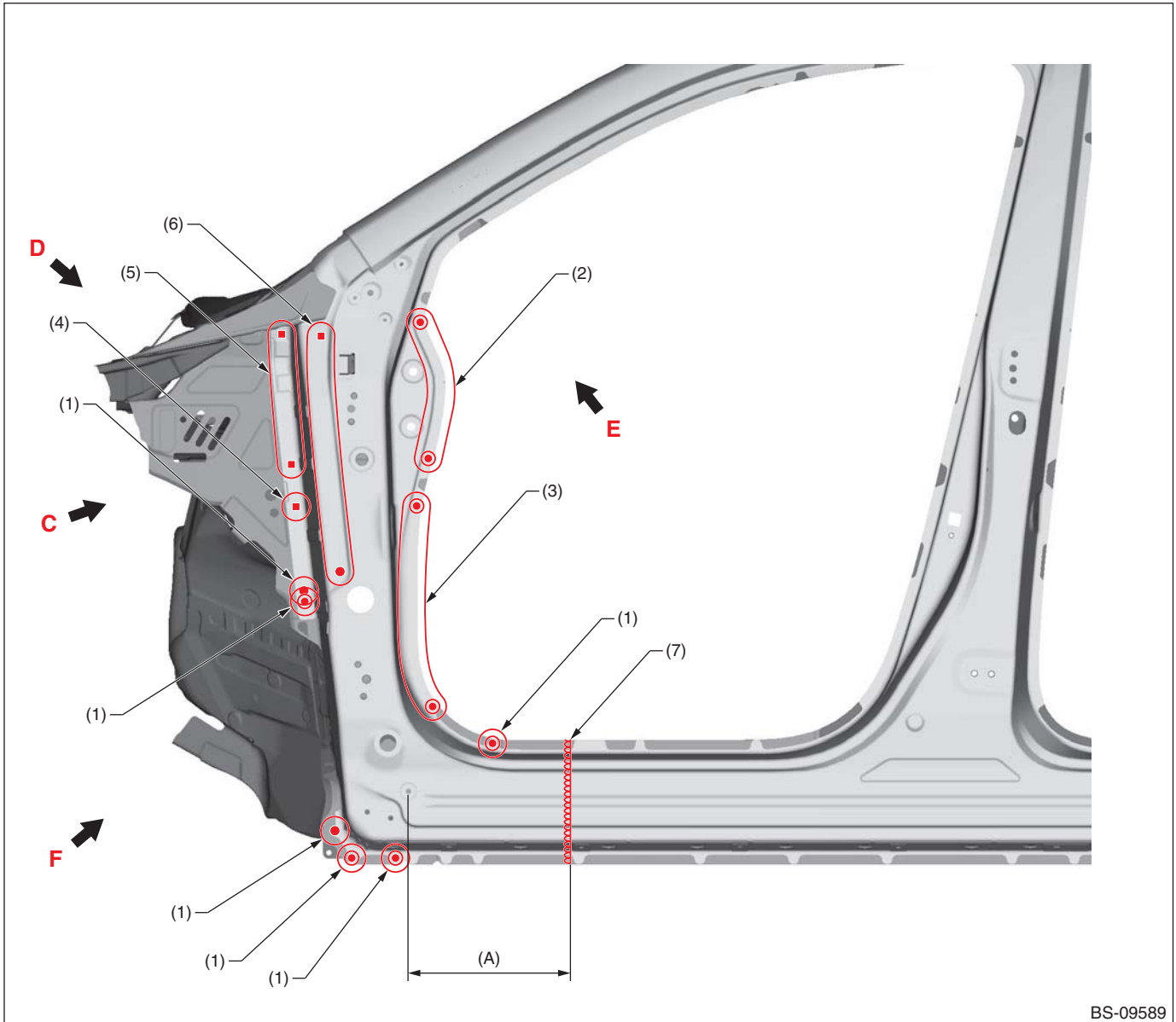
(1) 1 point

(2) 4 points

BS-09588

Panel Replacement

• Overall view 2



(A) 261 mm [10.28 in]

(1) 1 point

(2) 6 points

(3) 13 points

(4) 1 point (service)

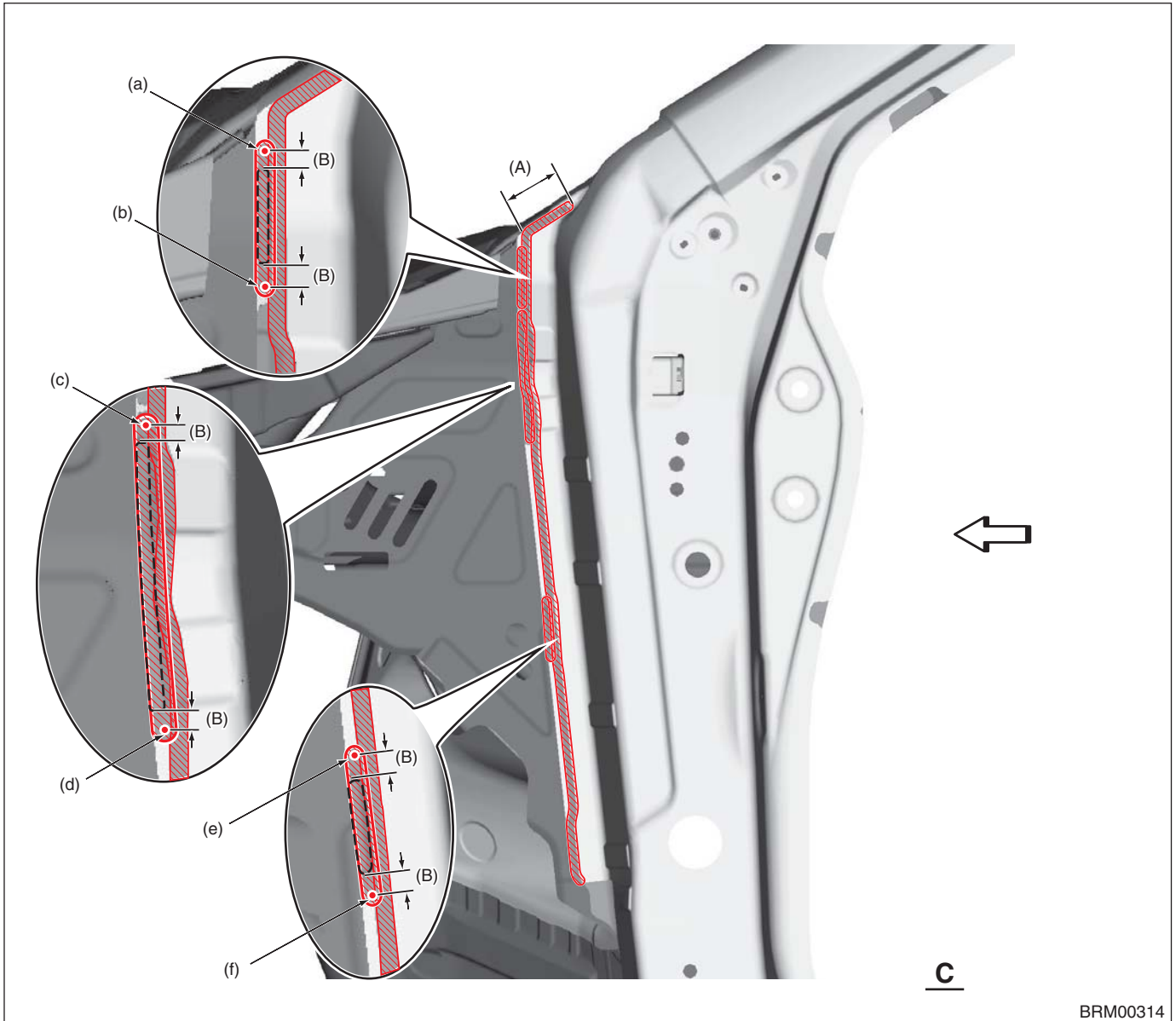
(5) 4 points (service)

(6) 7 points (service)

(7) 1 point (Continuous welding)

Panel Replacement

• Views C



BRM00314

(A) 50 mm [1.97 in]

(B) 5 mm [0.20 in]

(a) A point


(c) C point

(e) E point

(b) B point

(d) D point

(f) F point

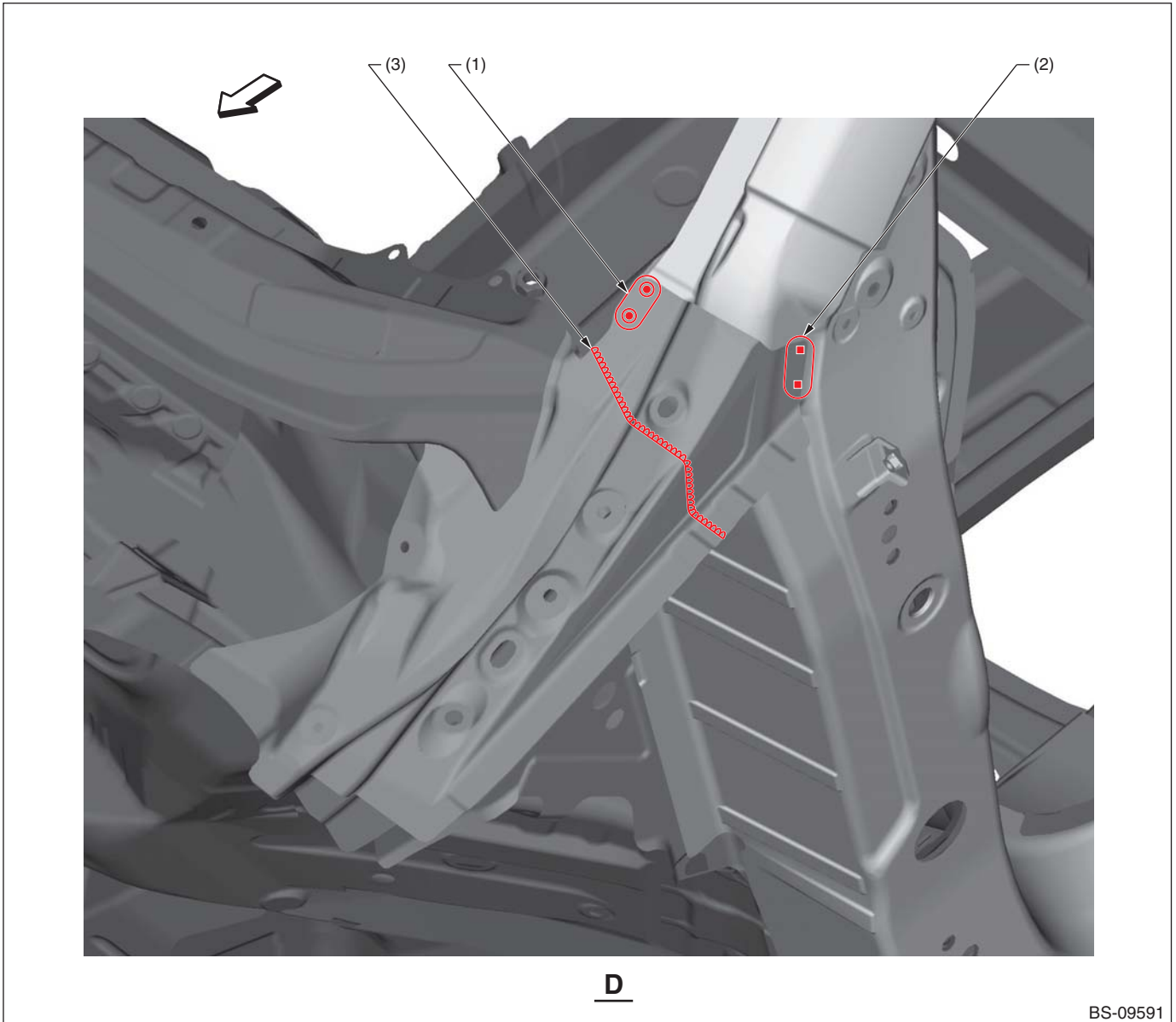
 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063)])

Note:

- For (a) — (b), (c) — (d) and (e) — (f), apply adhesive in two rows.
- For (a) — (b), (c) — (d) and (e) — (f), lay the first and second rows and apply adhesive.
- For the second row of (a) — (b), (c) — (d) and (e) — (f), apply adhesive to the side panel outer R tangent.

Panel Replacement

• Views D



BS-09591

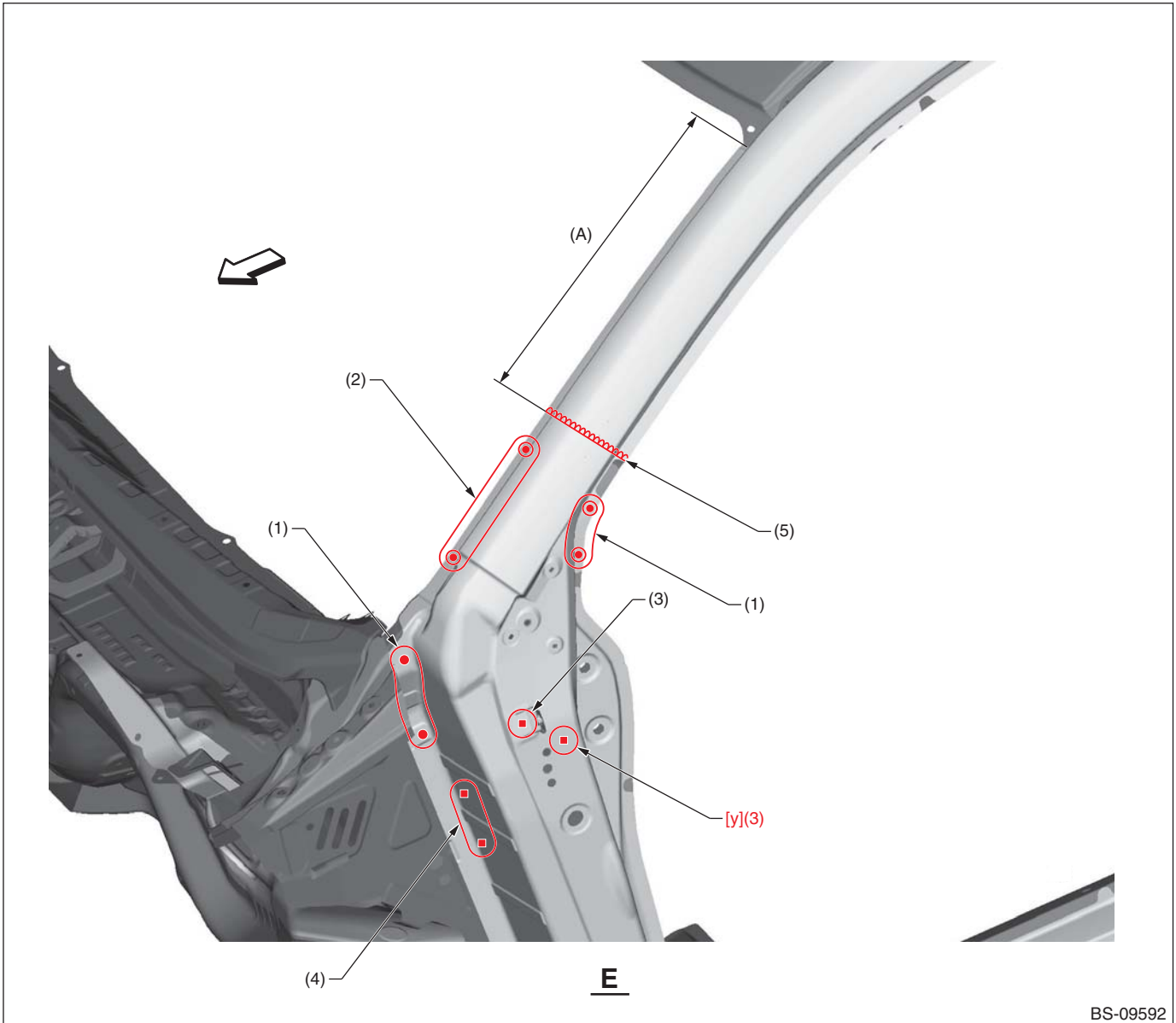
(1) 2 points

(2) 2 points (service)

(3) 1 point (Continuous welding)

Panel Replacement

• Views E



BS-09592

(A) 416 mm [16.38 in]

(1) 3 points

(3) 1 point (service)

(5) 1 point (Continuous welding)

(2) 5 points

(4) 2 points (service)

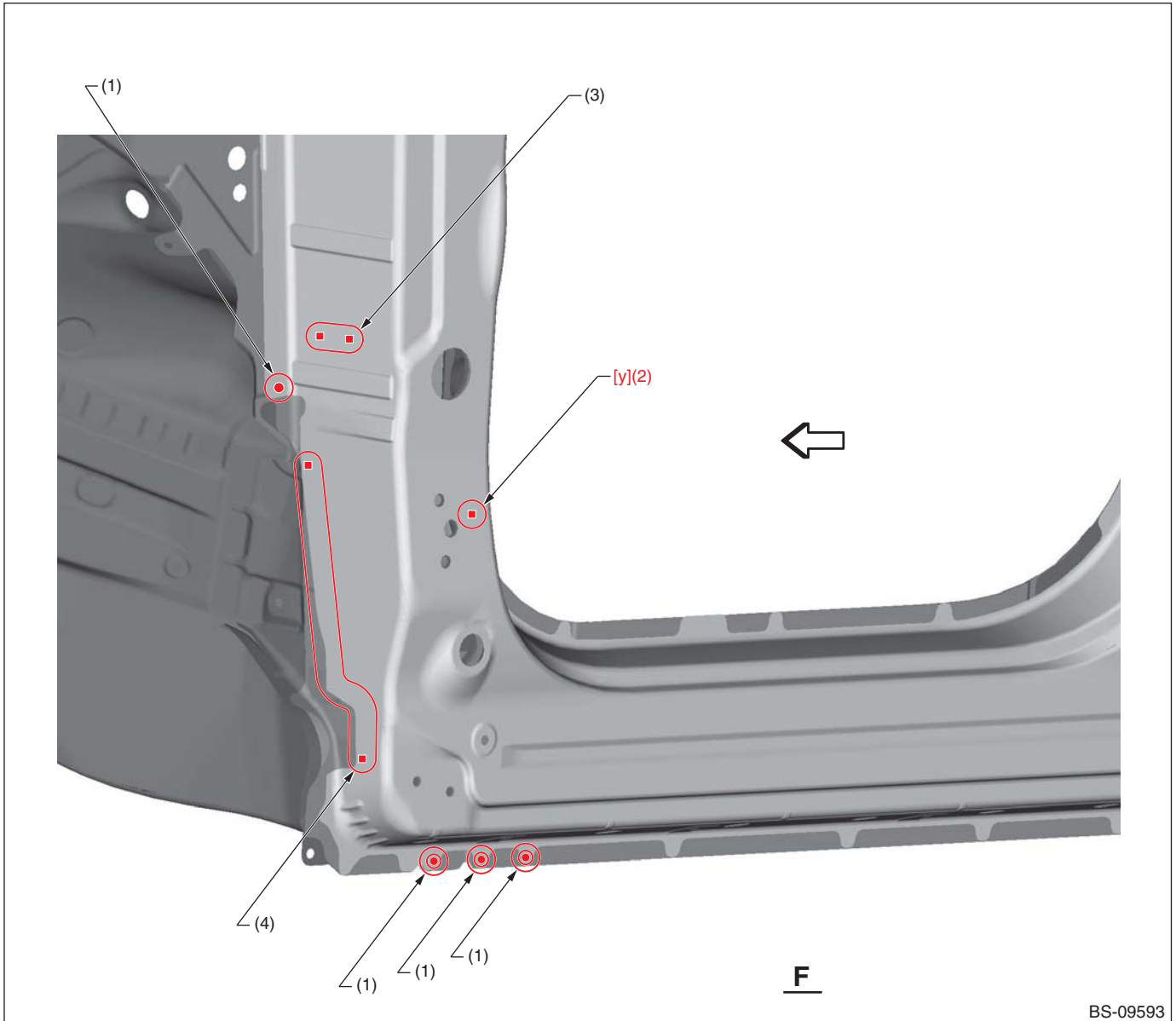
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views F



(1) 1 point

(2) 1 point (service)

(3) 2 points (service)

(4) 5 points (service)

[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

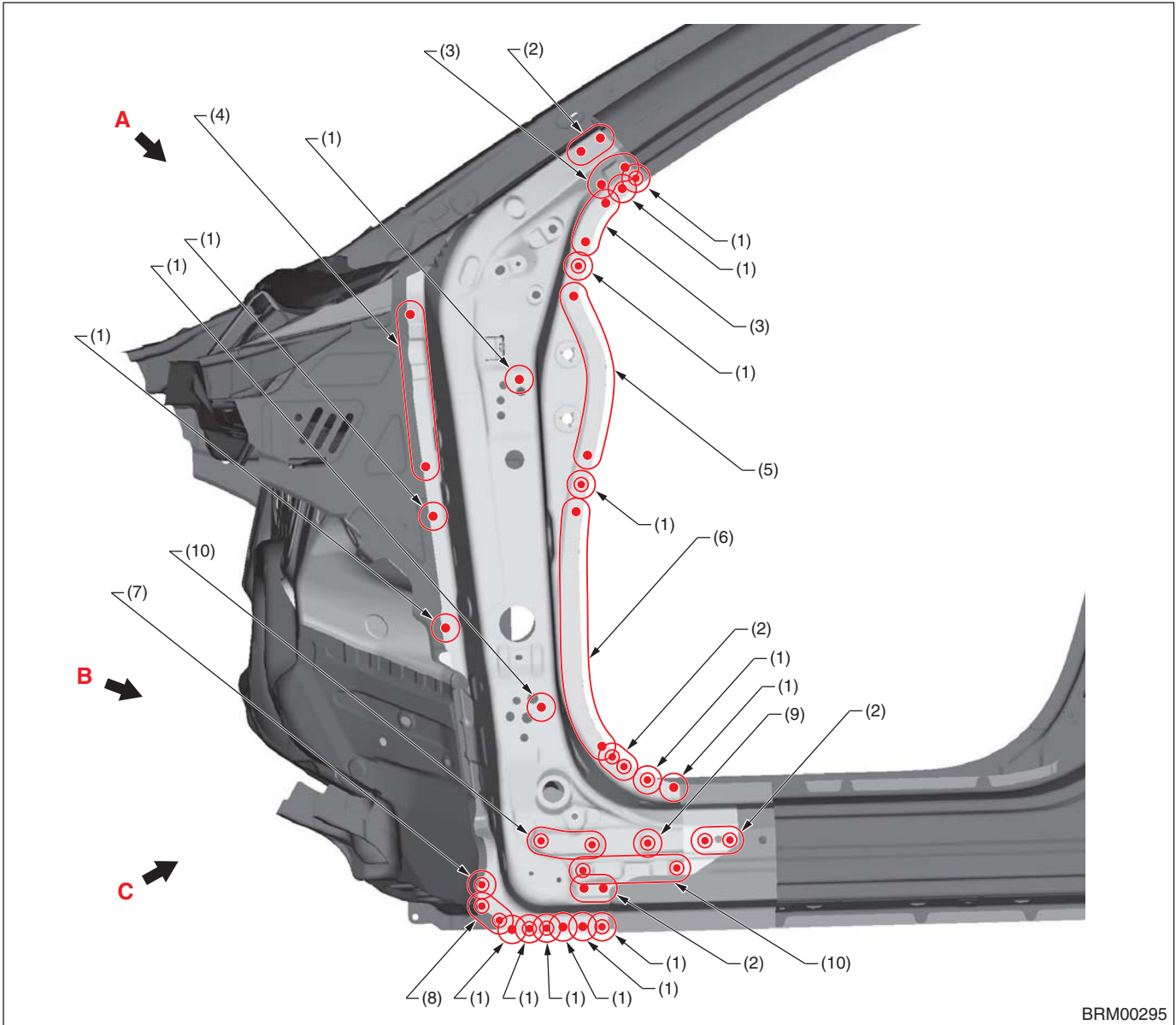
B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

8-11. Front Pillar Reinforcement (Total replacement)

A: REMOVAL

• Overall view

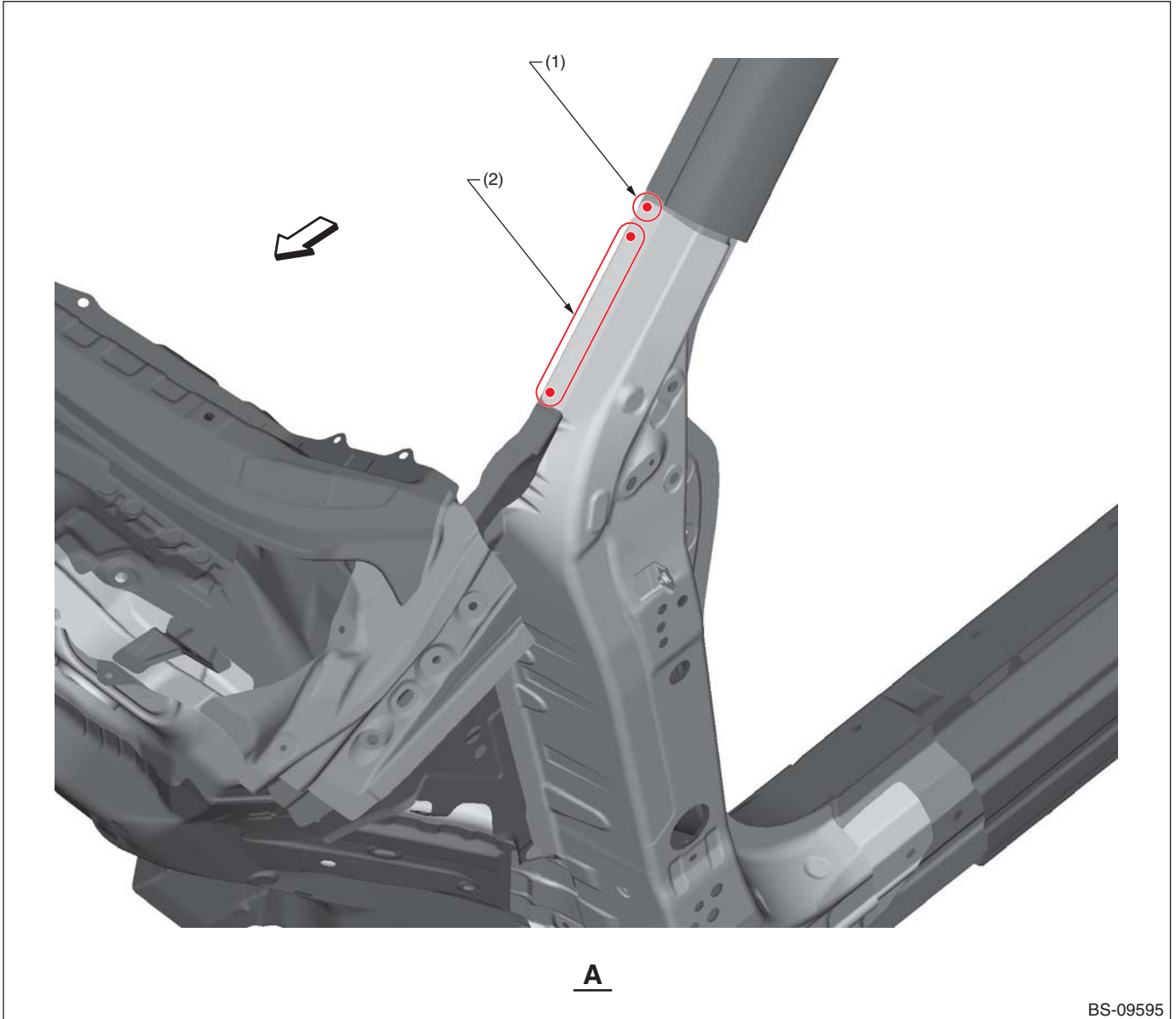


BRM00295

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| (1) 1 point (outside · 1) | (5) 6 points (outside · 1) | (9) 1 point (outside · 2) |
| (2) 2 points (outside · 1) | (6) 13 points (outside · 1) | (10) 3 points (outside · 2) |
| (3) 3 points (outside · 1) | (7) 1 point (inside · 1) | |
| (4) 4 points (outside · 1) | (8) 2 points (inside · 1) | |

Panel Replacement

• Views A

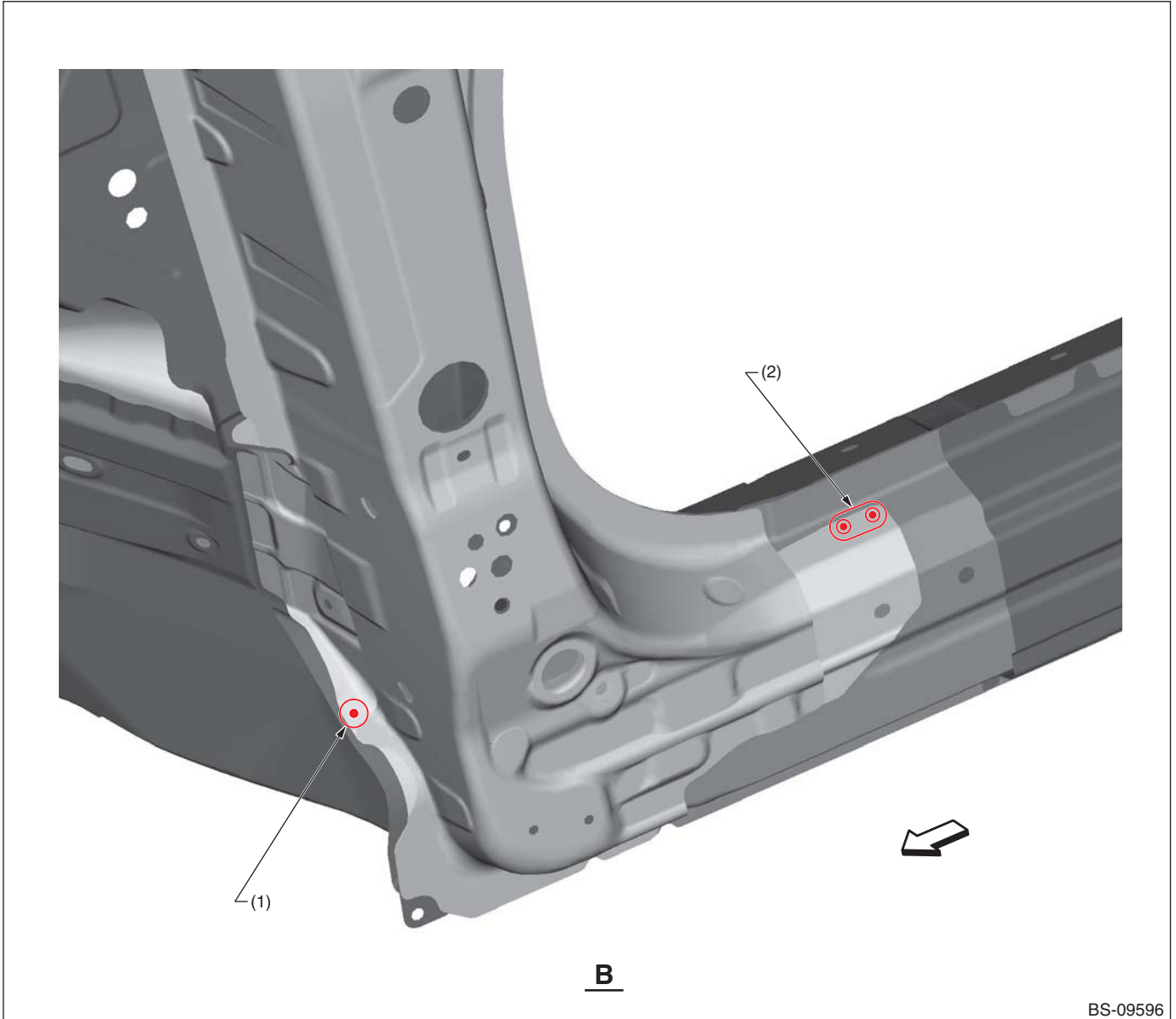


(1) 1 point (outside · 1)

(2) 5 points (outside · 1)

Panel Replacement

• Views B



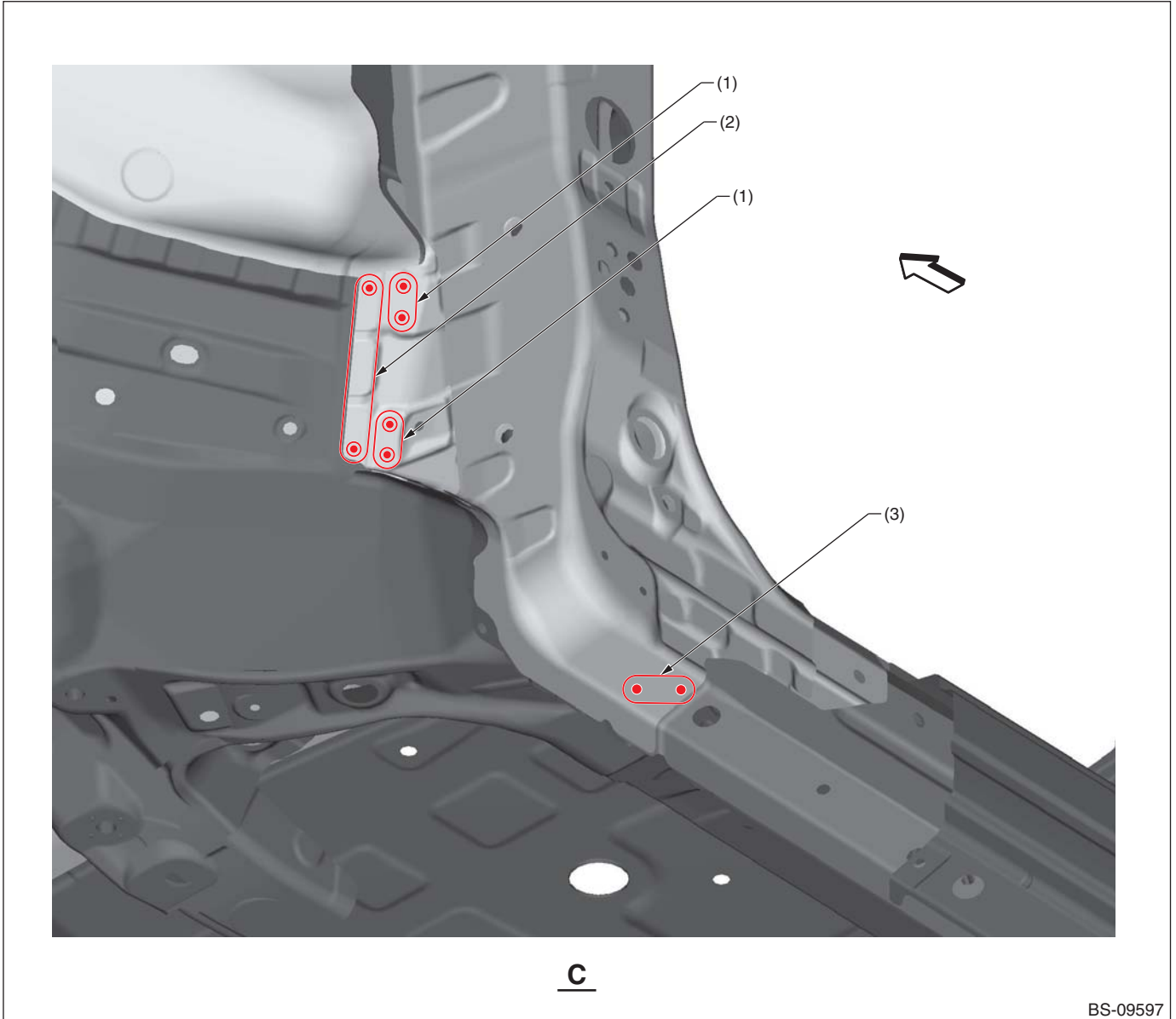
BS-09596

(1) 1 point (outside · 1)

(2) 2 points (top · 1)

Panel Replacement

• Views C



(1) 2 points (outside · 1)

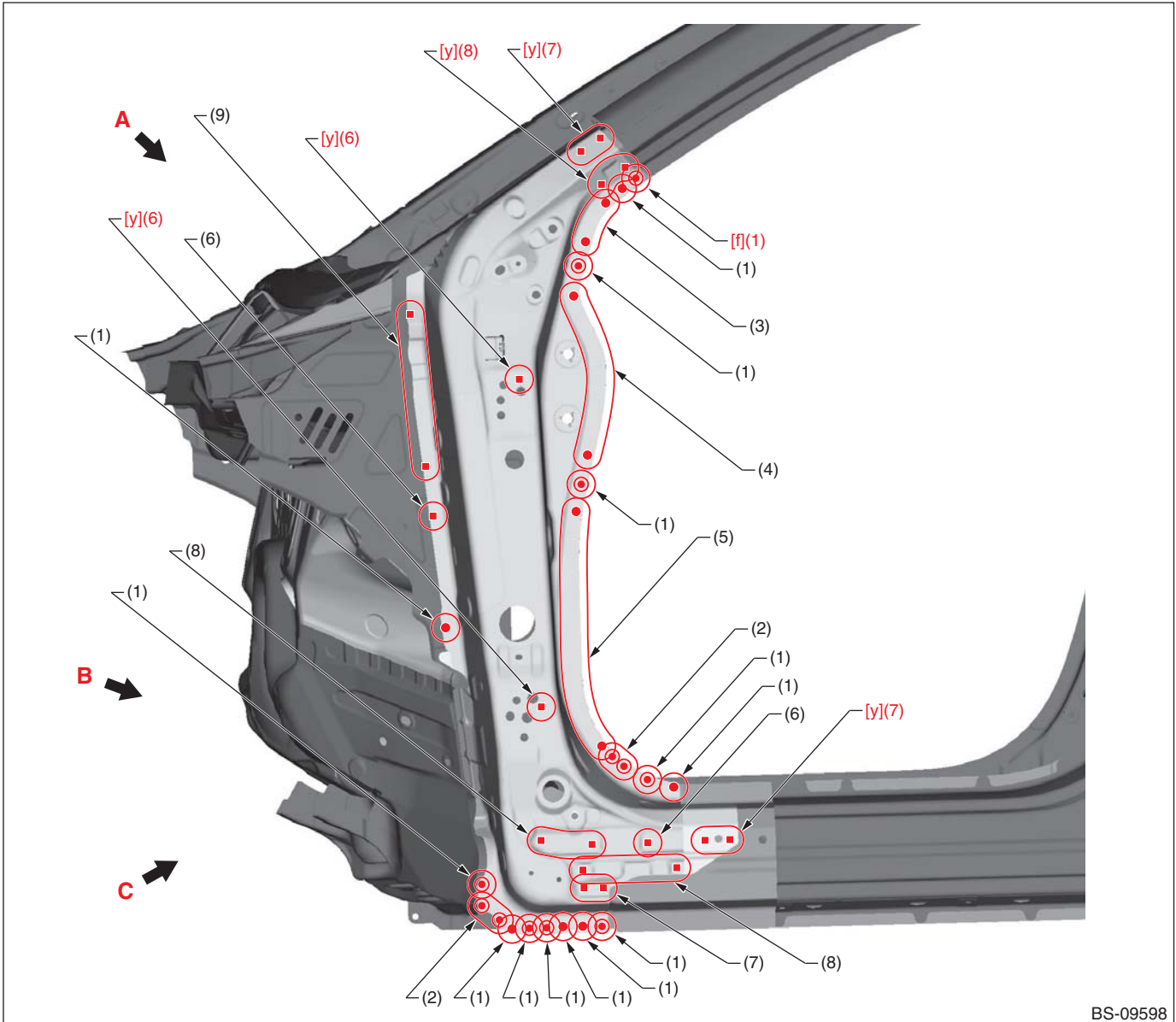
(2) 6 points (outside · 1)

(3) 2 points (bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09598

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

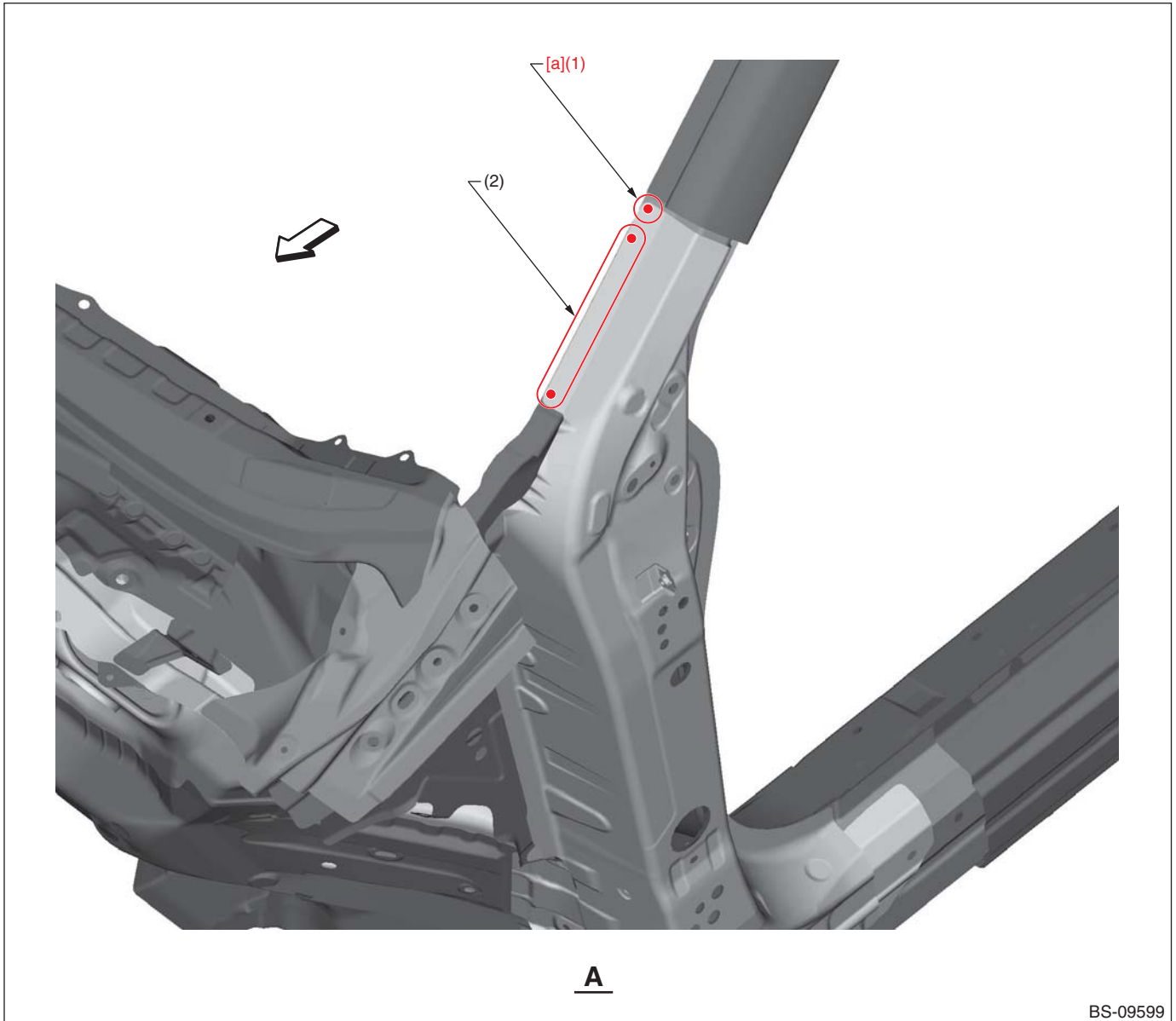
- (4) 6 points
- (5) 13 points
- (6) 1 point (service)

- (7) 2 points (service)
- (8) 3 points (service)
- (9) 4 points (service)

[f] Spot welding	Compression: 3.5 kN, Current: 8.0 kA, Welding time: 25 cyc
[y] Plug welding	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

• Views A



BS-09599

(1) 1 point

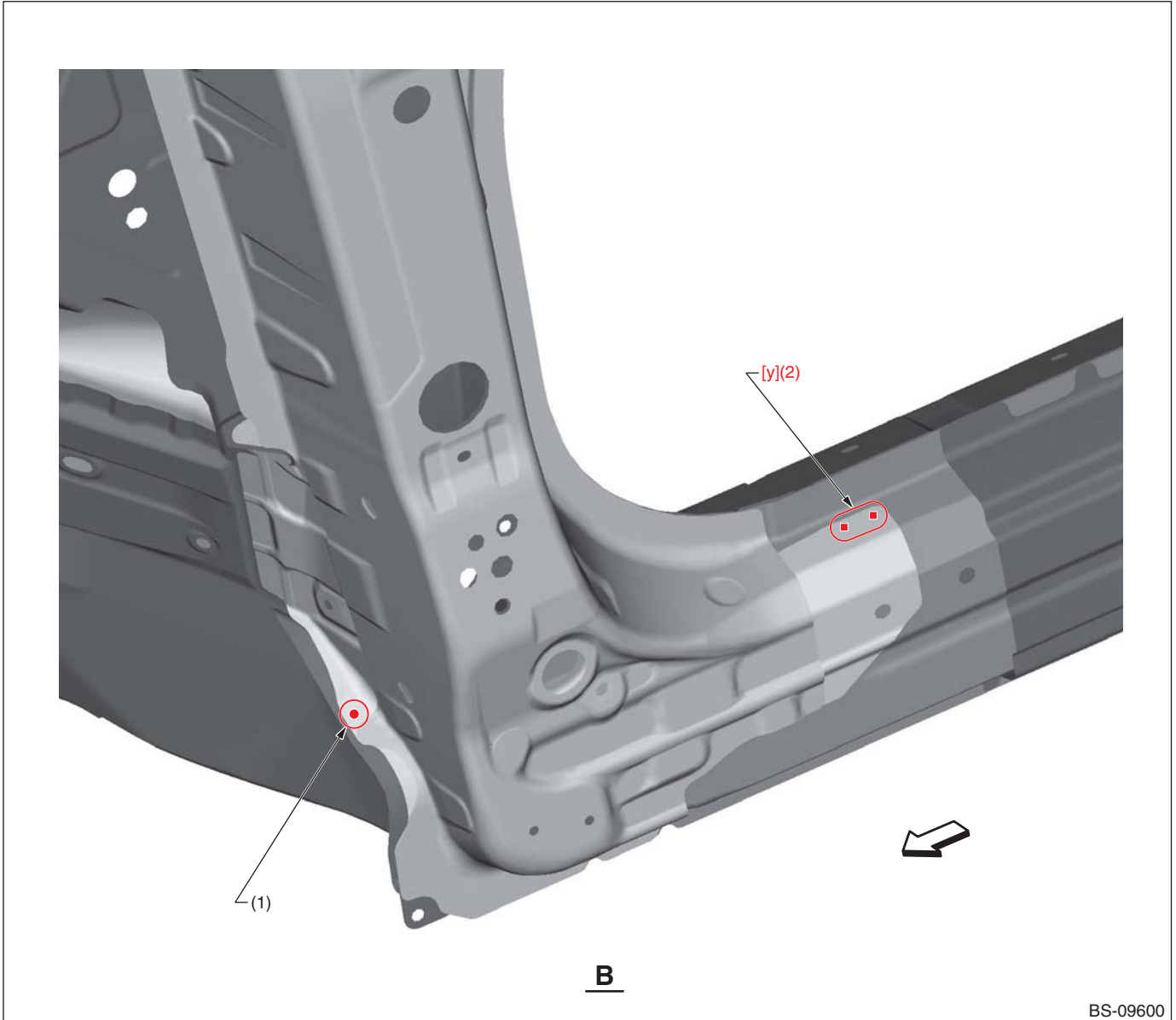
(2) 5 points

[a] Spot welding

Compression: 5.0 kN, Current: 7.5 kA, Welding time: 18 cyc

Panel Replacement

• Views B



(1) 1 point

(2) 2 points (service)

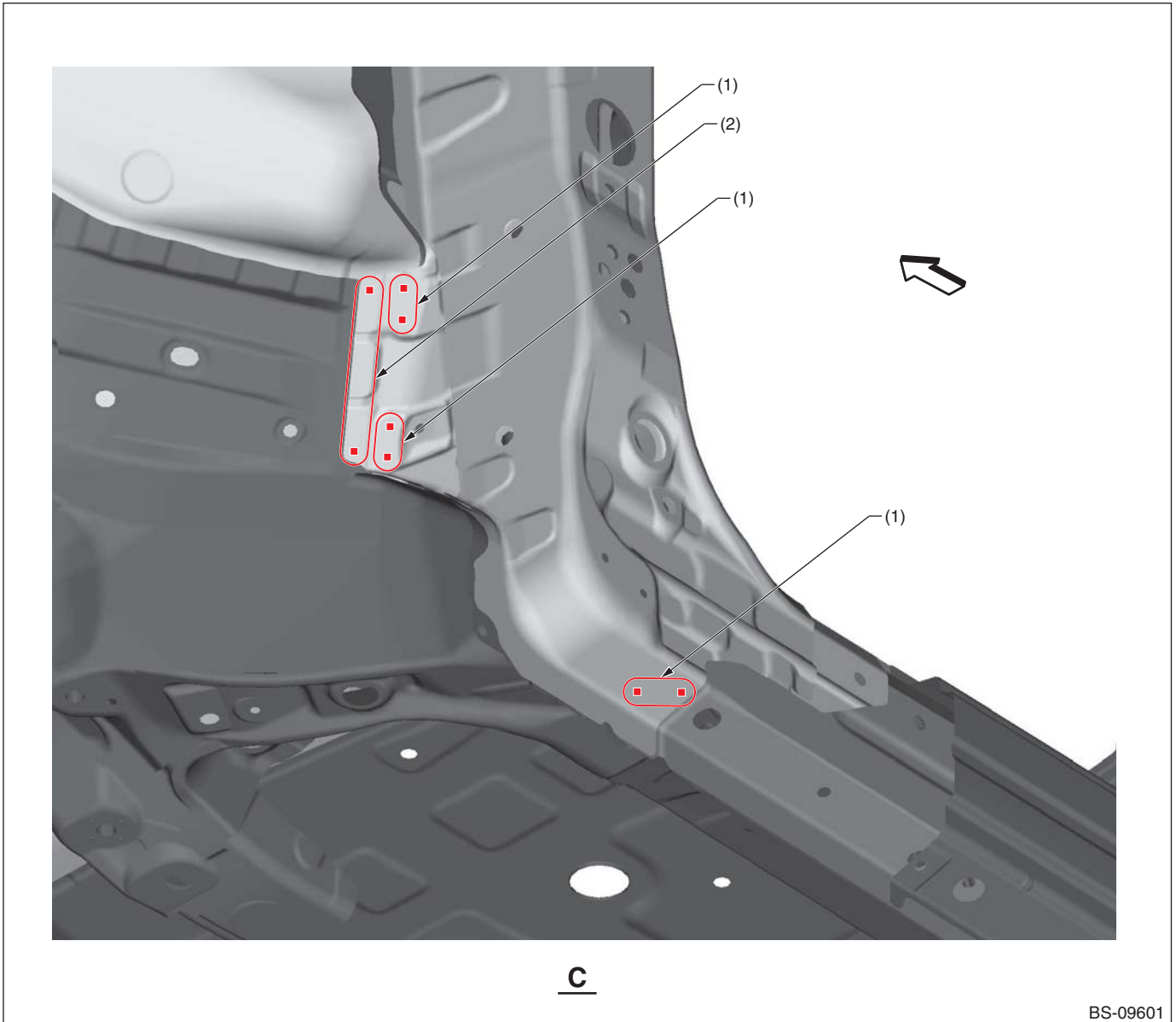
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views C



(1) 2 points (service)

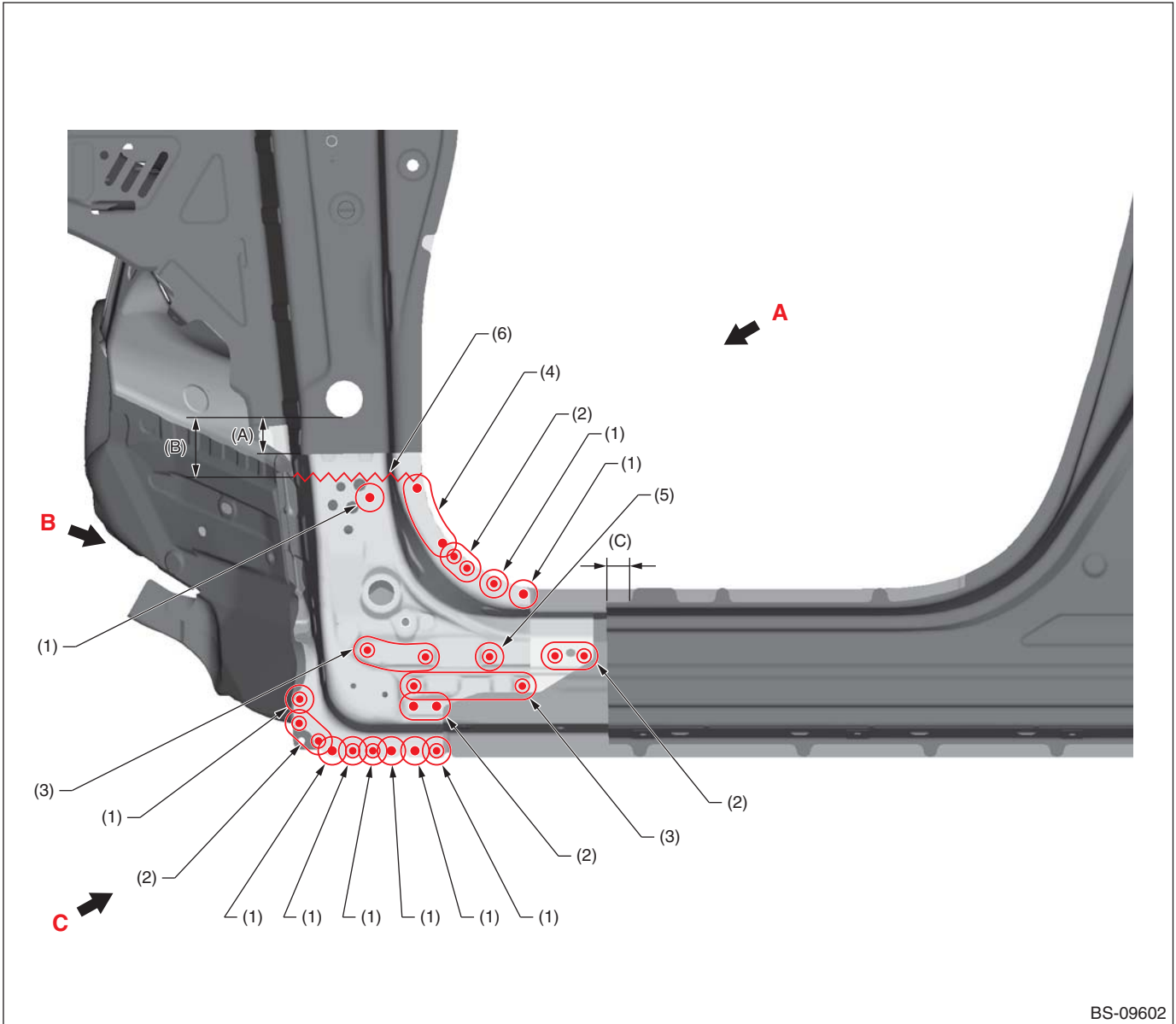
(2) 6 points (service)

Panel Replacement

8-12. Front Pillar Reinforcement (Partial replacement)

A: REMOVAL

• Overall view



BS-09602

(A) 40 mm [1.57 in]

(B) 60 mm [2.36 in]

(C) 27 mm [1.06 in]

(1) 1 point (outside · 1)

(3) 3 points (outside · 2)

(5) 1 point (outside · 2)

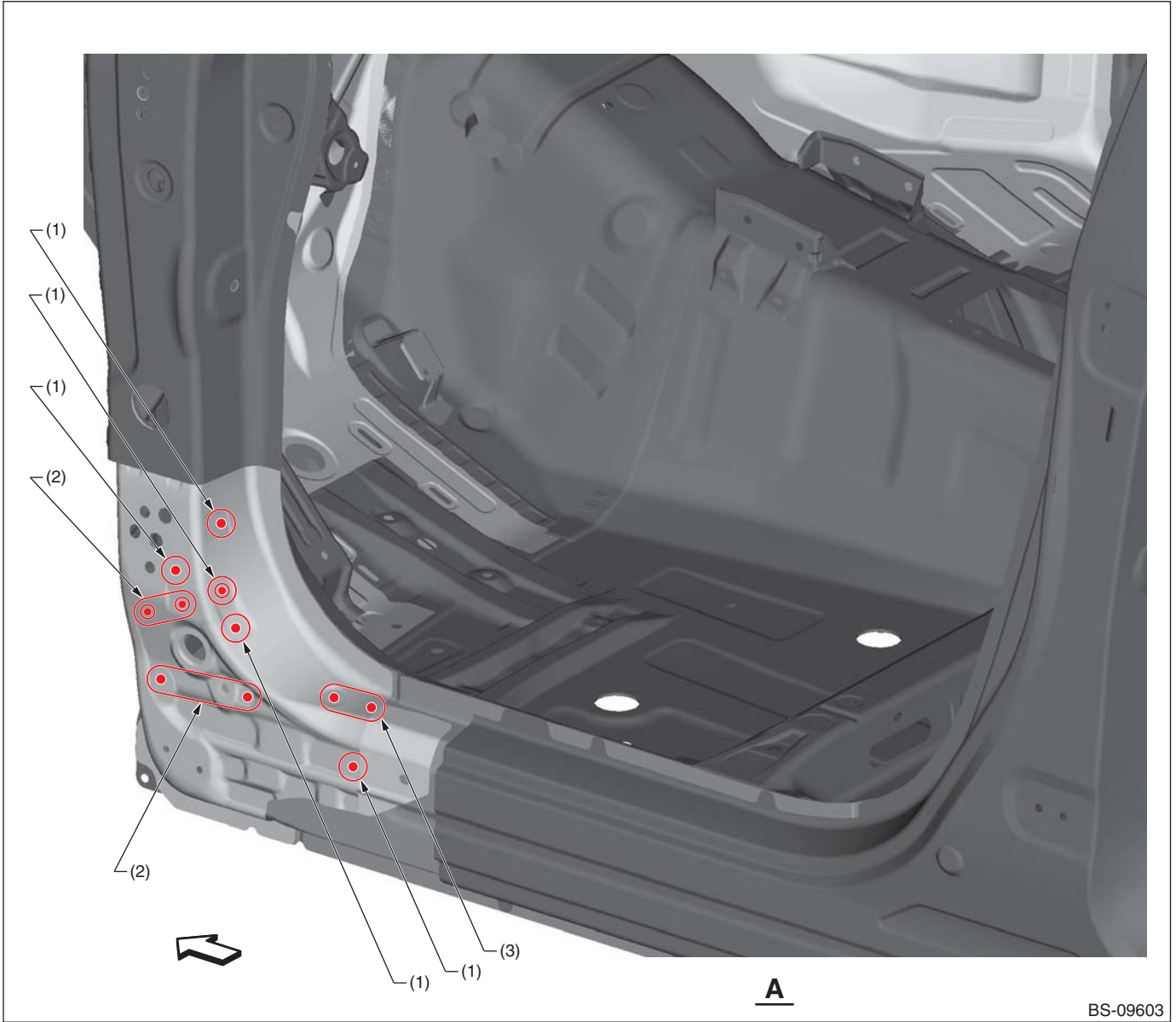
(2) 2 points (outside · 1)

(4) 4 points (outside · 1)

(6) Cut position

Panel Replacement

• Views A



BS-09603

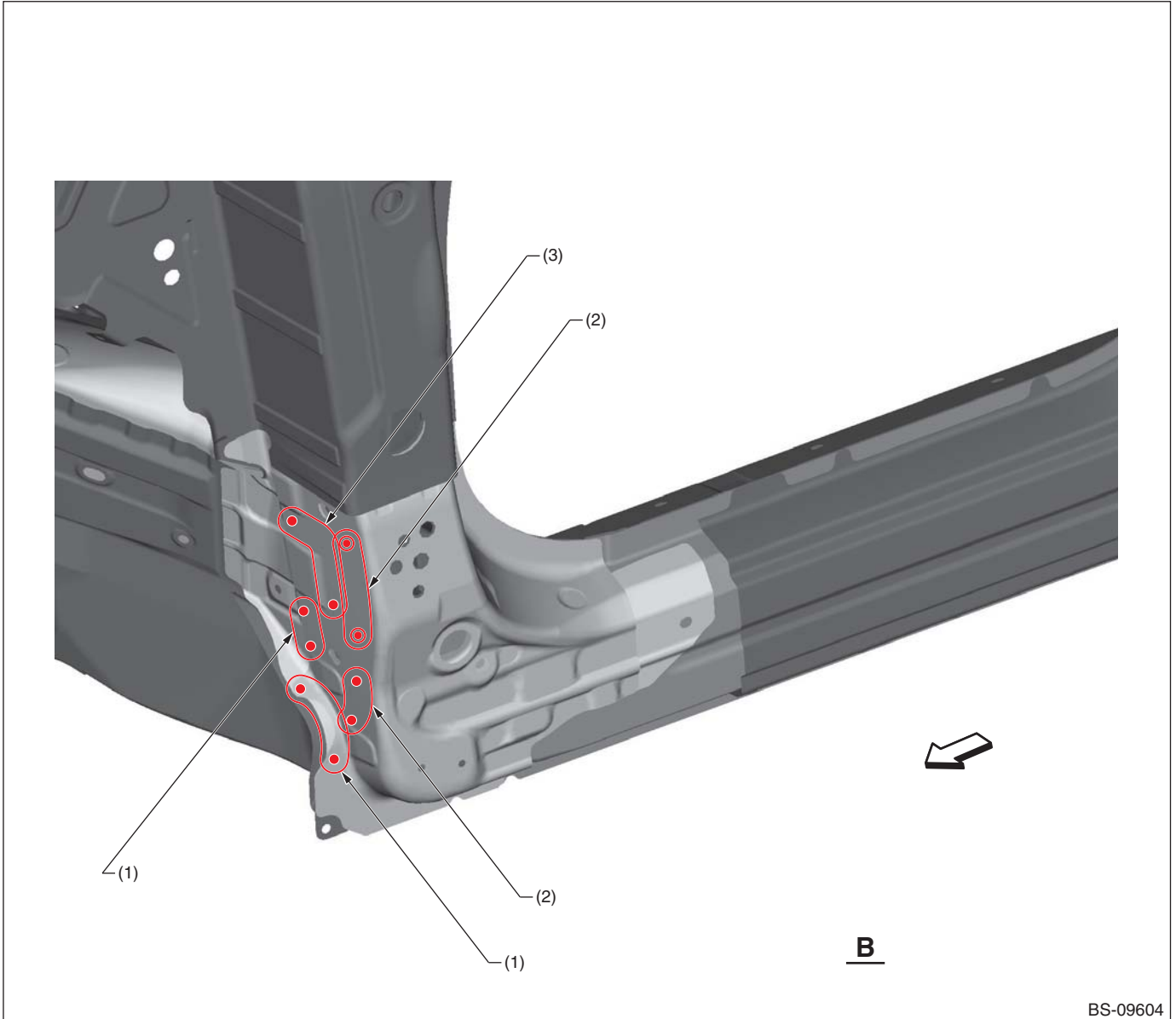
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

(3) 2 points (top · 1)

Panel Replacement

• Views B



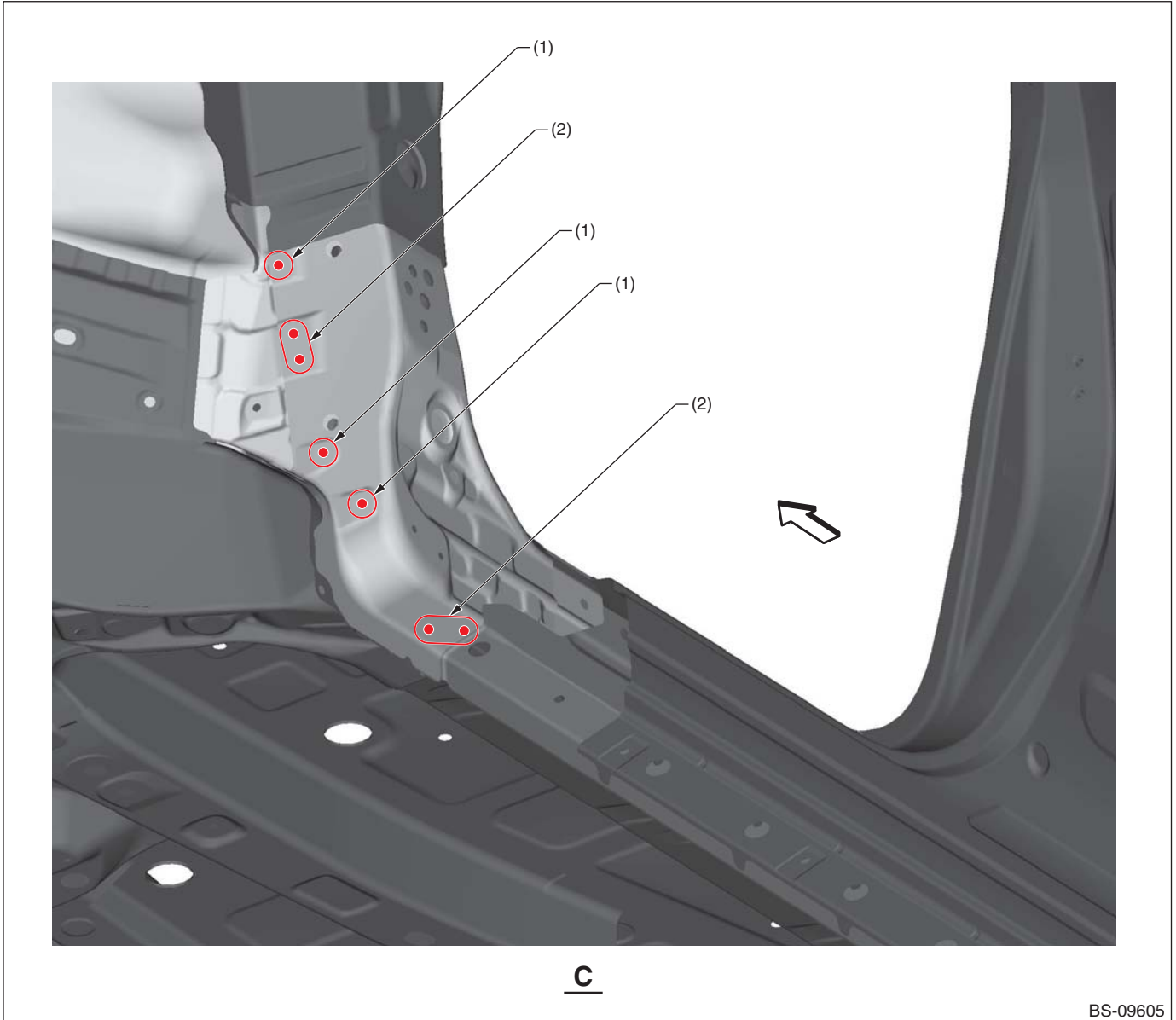
(1) 2 points (outside · 1)

(2) 3 points (outside · 1)

(3) 4 points (outside · 1)

Panel Replacement

• Views C



BS-09605

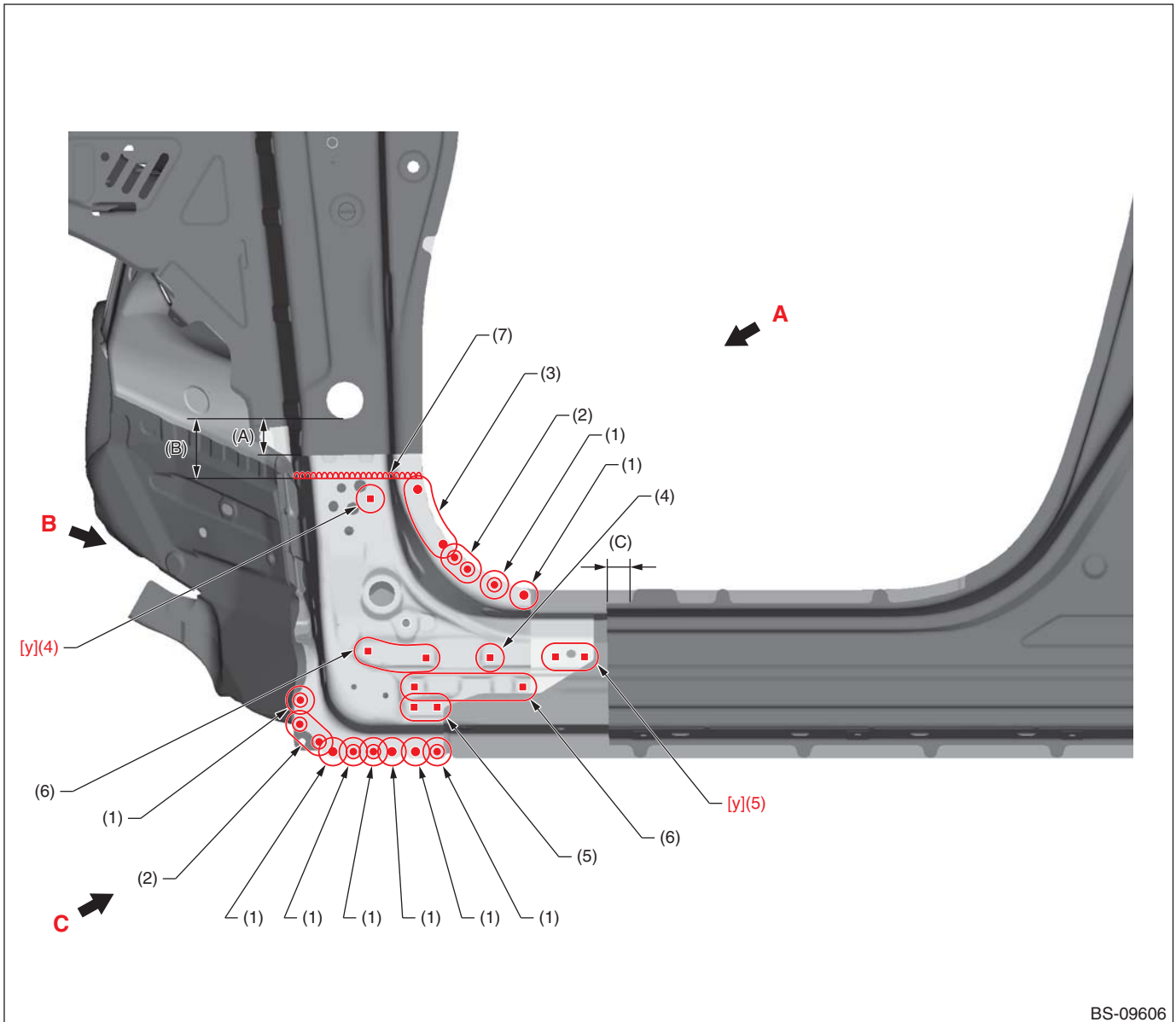
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09606

(A) 40 mm [1.57 in]

(B) 60 mm [2.36 in]

(C) 27 mm [1.06 in]

(1) 1 point

(4) 1 point (service)

(7) 1 point (Continuous welding)

(2) 2 points

(5) 2 points (service)

(3) 4 points

(6) 3 points (service)

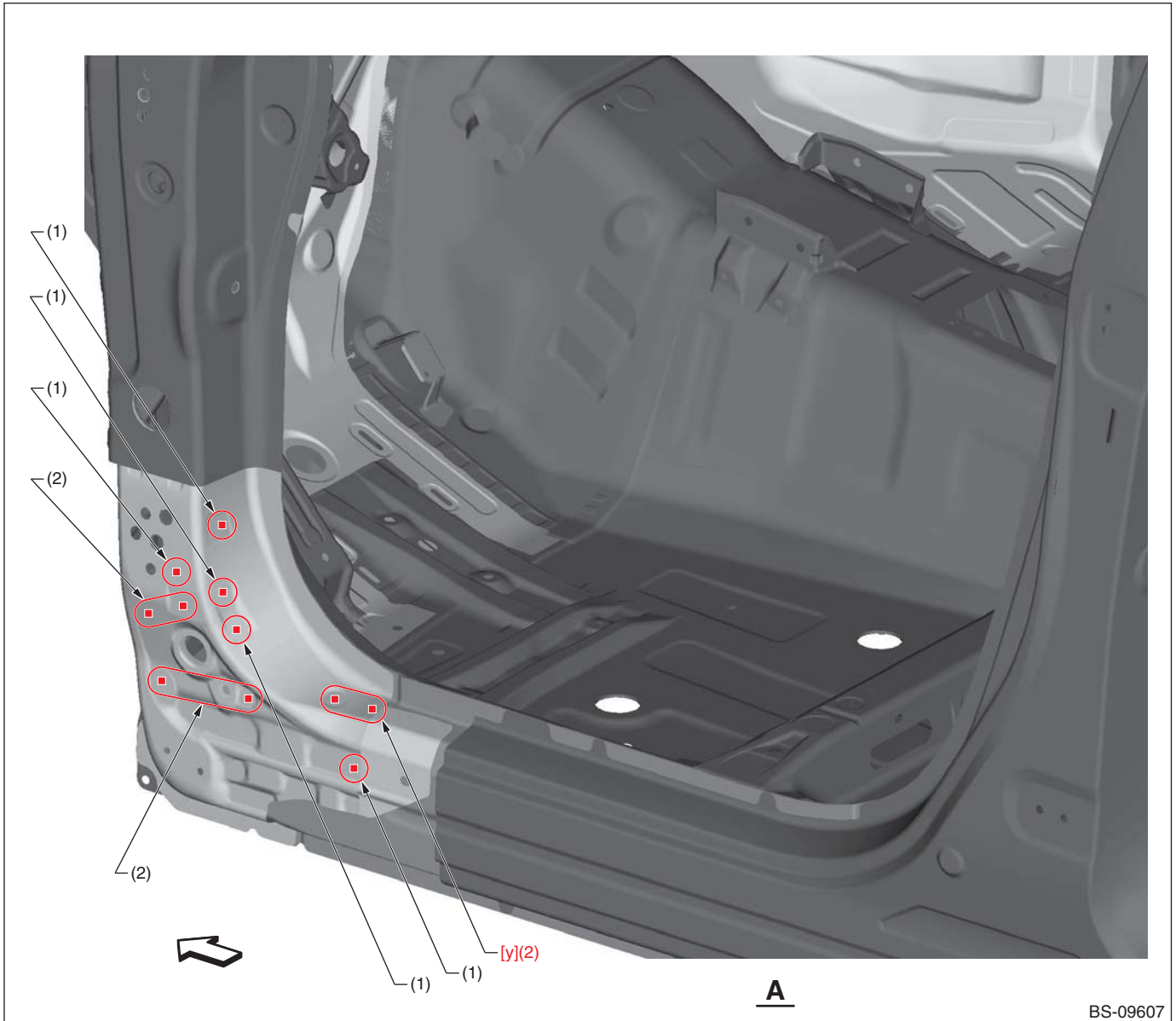
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views A



BS-09607

(1) 1 point (service)

(2) 2 points (service)

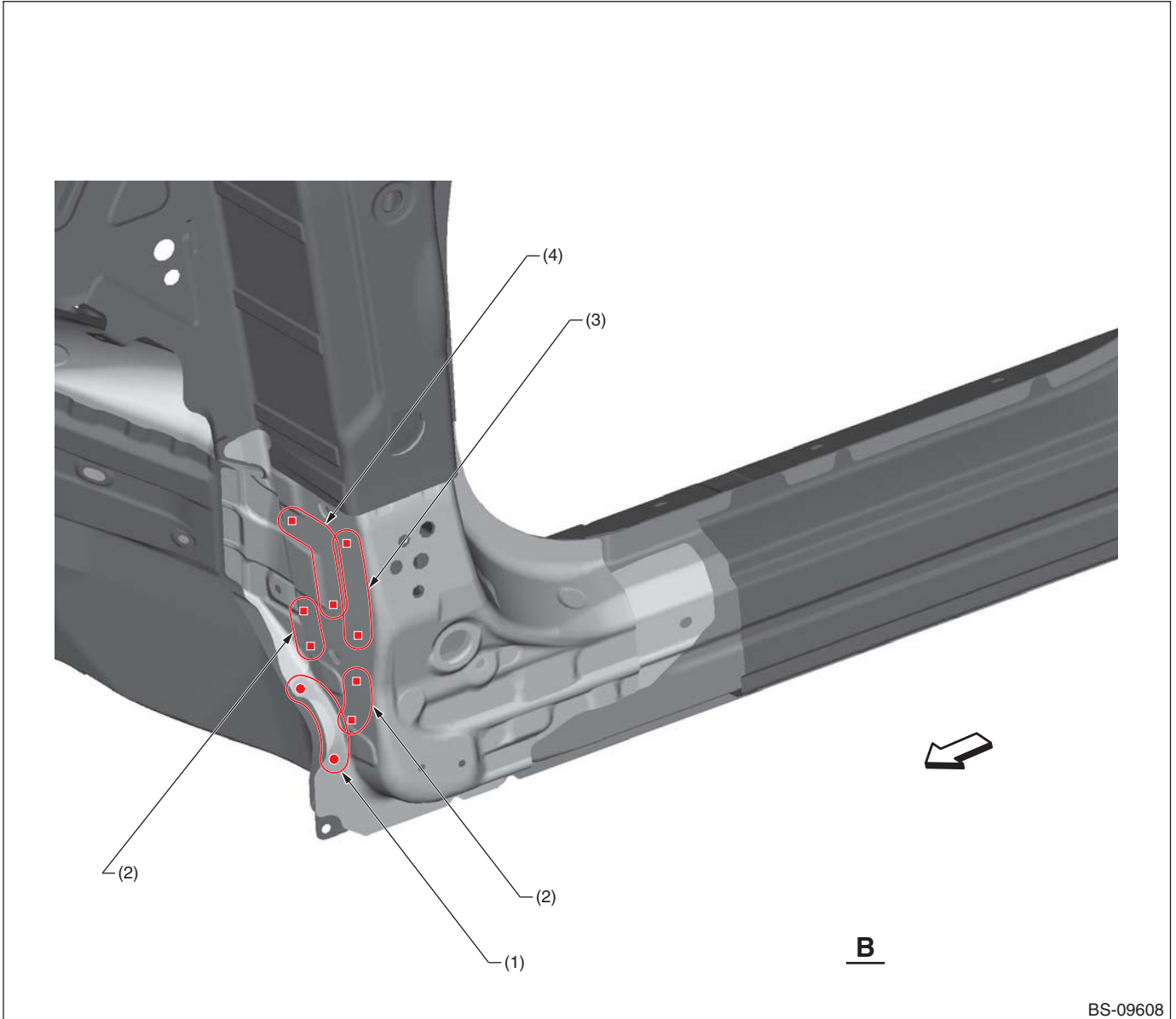
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views B



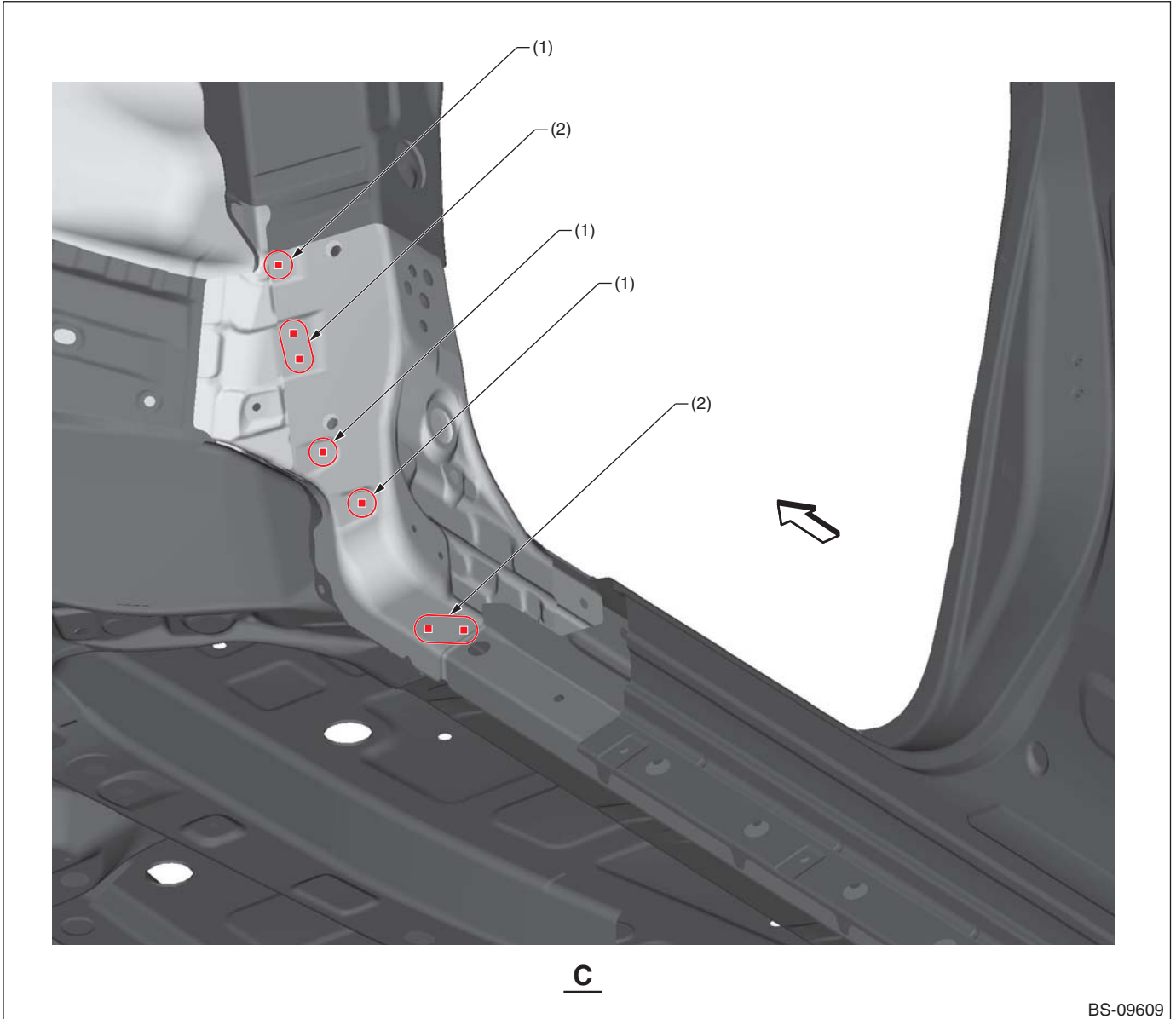
(1) 2 points
(2) 2 points (service)

(3) 3 points (service)

(4) 4 points (service)

Panel Replacement

• Views C



(1) 1 point (service)

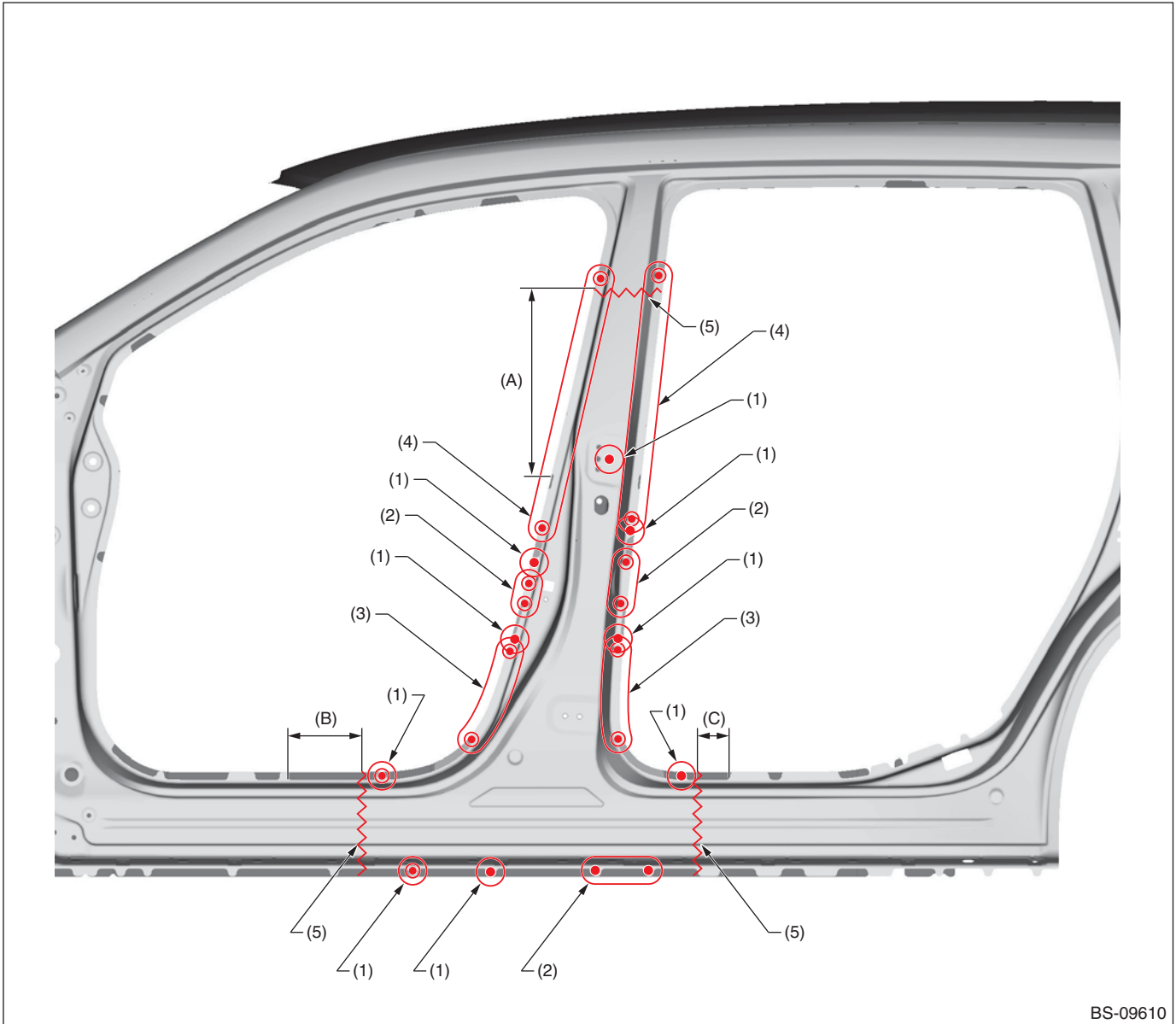
(2) 2 points (service)

Panel Replacement

8-13. Center Pillar Outer Panel (Partial replacement)

A: REMOVAL

• Overall view

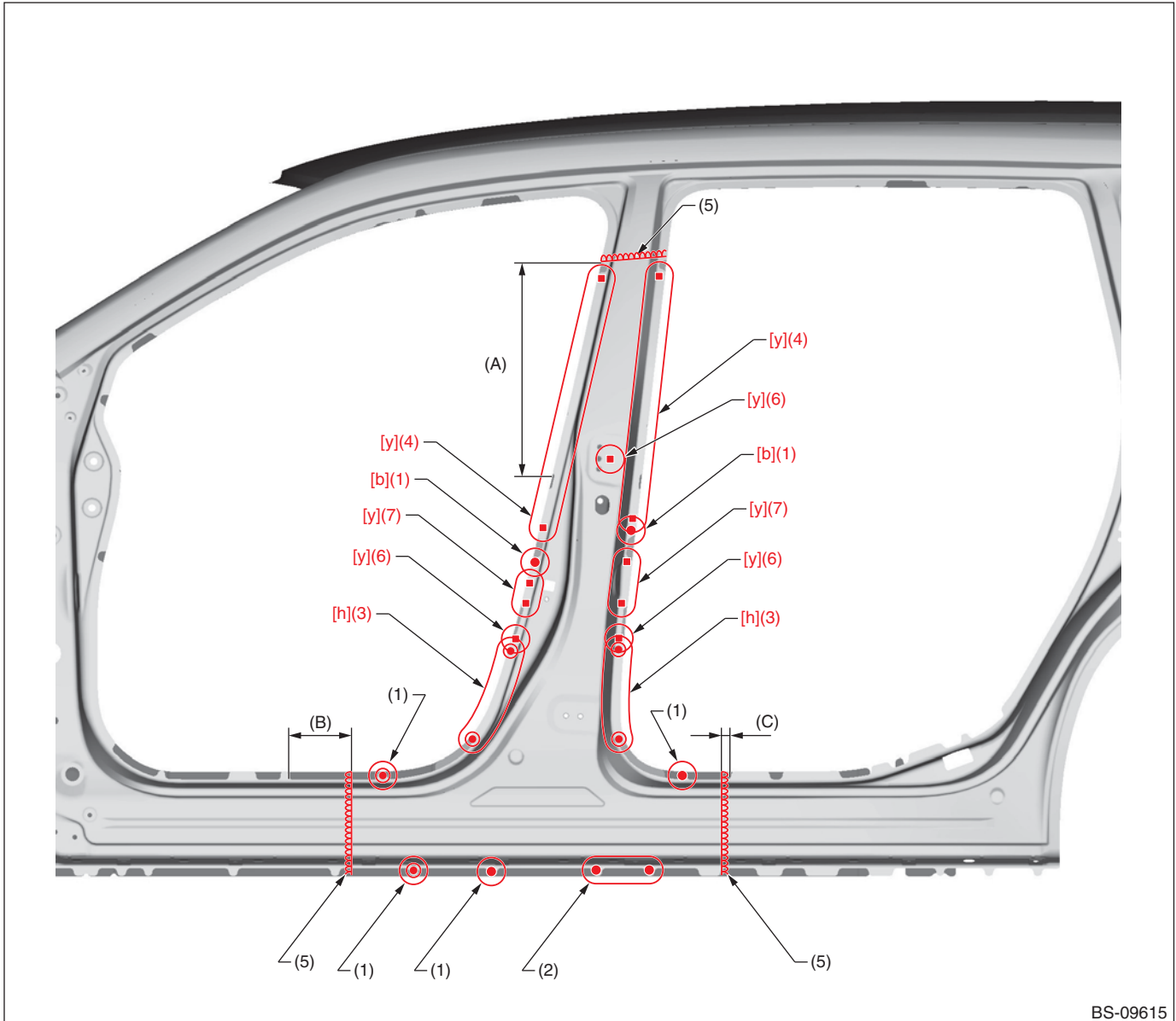


BS-09610

Panel Replacement

B: INSTALLATION

• Overall view



BS-09615

(A) 430 mm [16.93 in]

(B) 125 mm [4.92 in]

(C) 21 mm [0.83 in]

(1) 1 point

(4) 13 points (service)

(7) 2 points (service)

(2) 2 points

(5) 1 point (Continuous welding)

(3) 8 points

(6) 1 point (service)

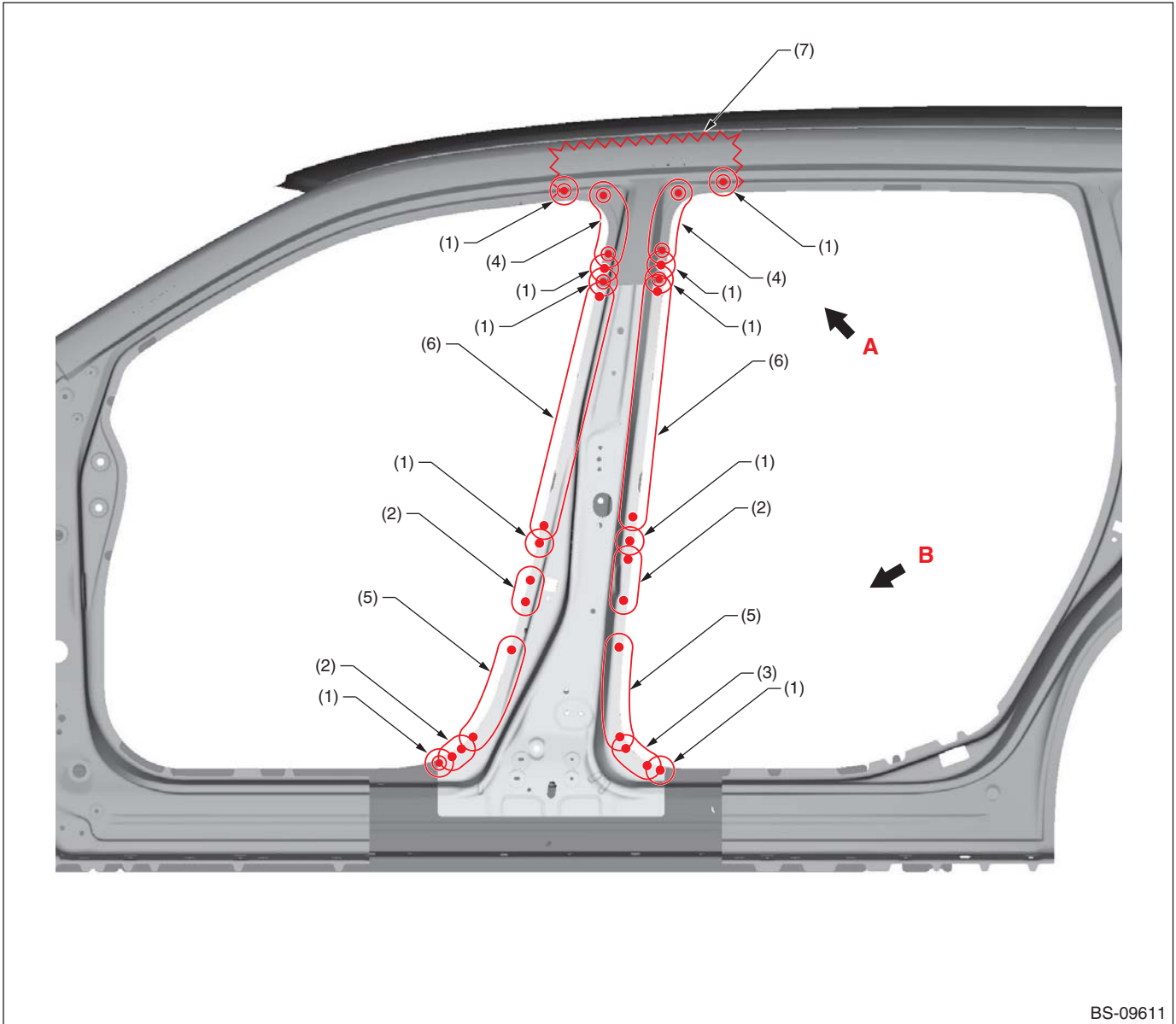
[b] Spot welding	Compression: 2.6 kN, Current: 6.0 kA, Welding time: 17 cyc
[h] Spot welding	Compression: 4.0 kN, Current: 8.5 kA, Welding time: 20 cyc
[y] Plug welding	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

8-14. Center Pillar Reinforcement Outer (Total replacement)

A: REMOVAL

• Overall view



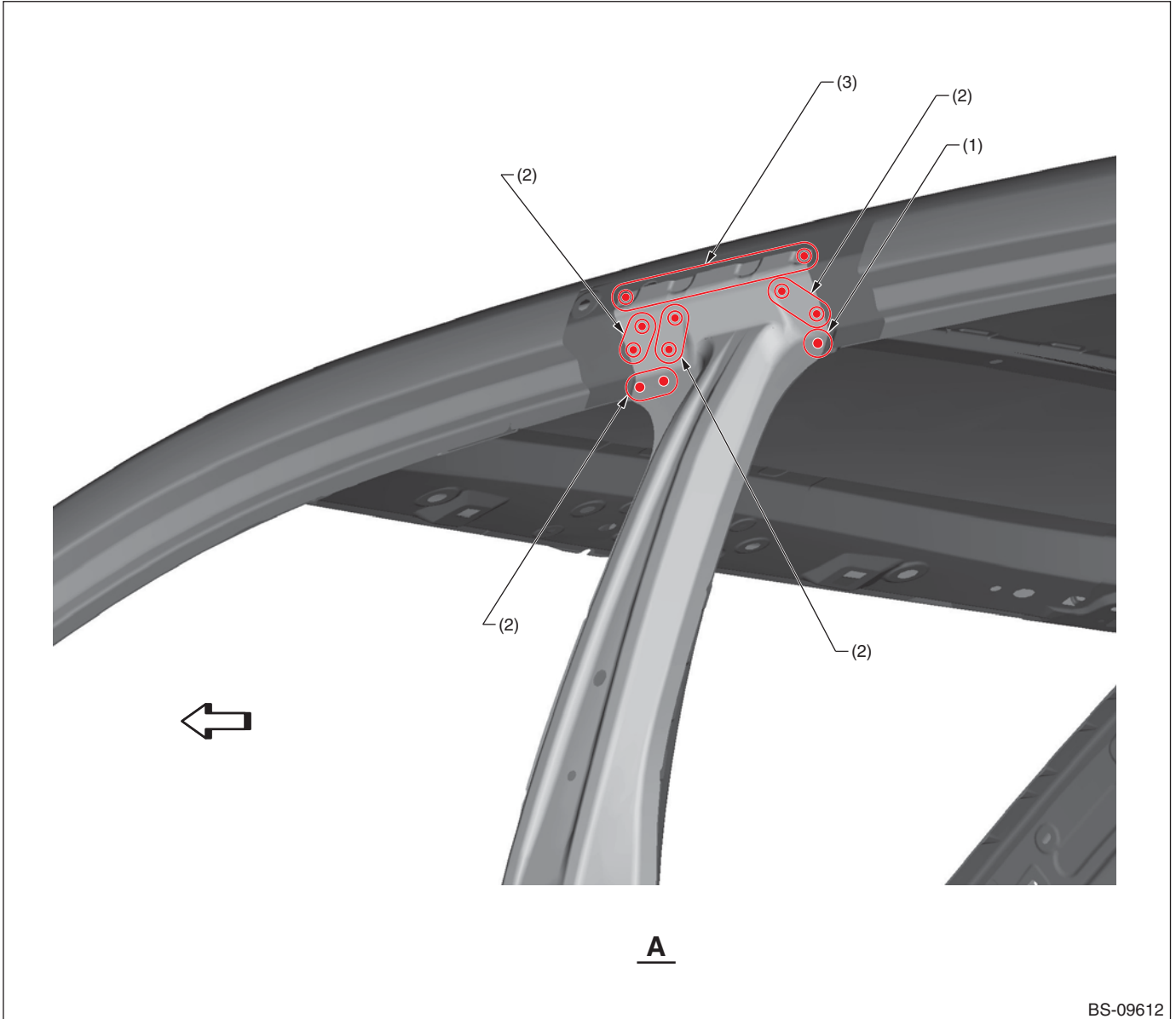
BS-09611

- | | | |
|----------------------------|-----------------------------|-------------------|
| (1) 1 point (outside · 1) | (4) 7 points (outside · 2) | (7) Rough cutting |
| (2) 2 points (outside · 1) | (5) 8 points (outside · 1) | |
| (3) 3 points (outside · 1) | (6) 12 points (outside · 1) | |

Note: The cut part can be reused depending on level of damage.

Panel Replacement

• Views A

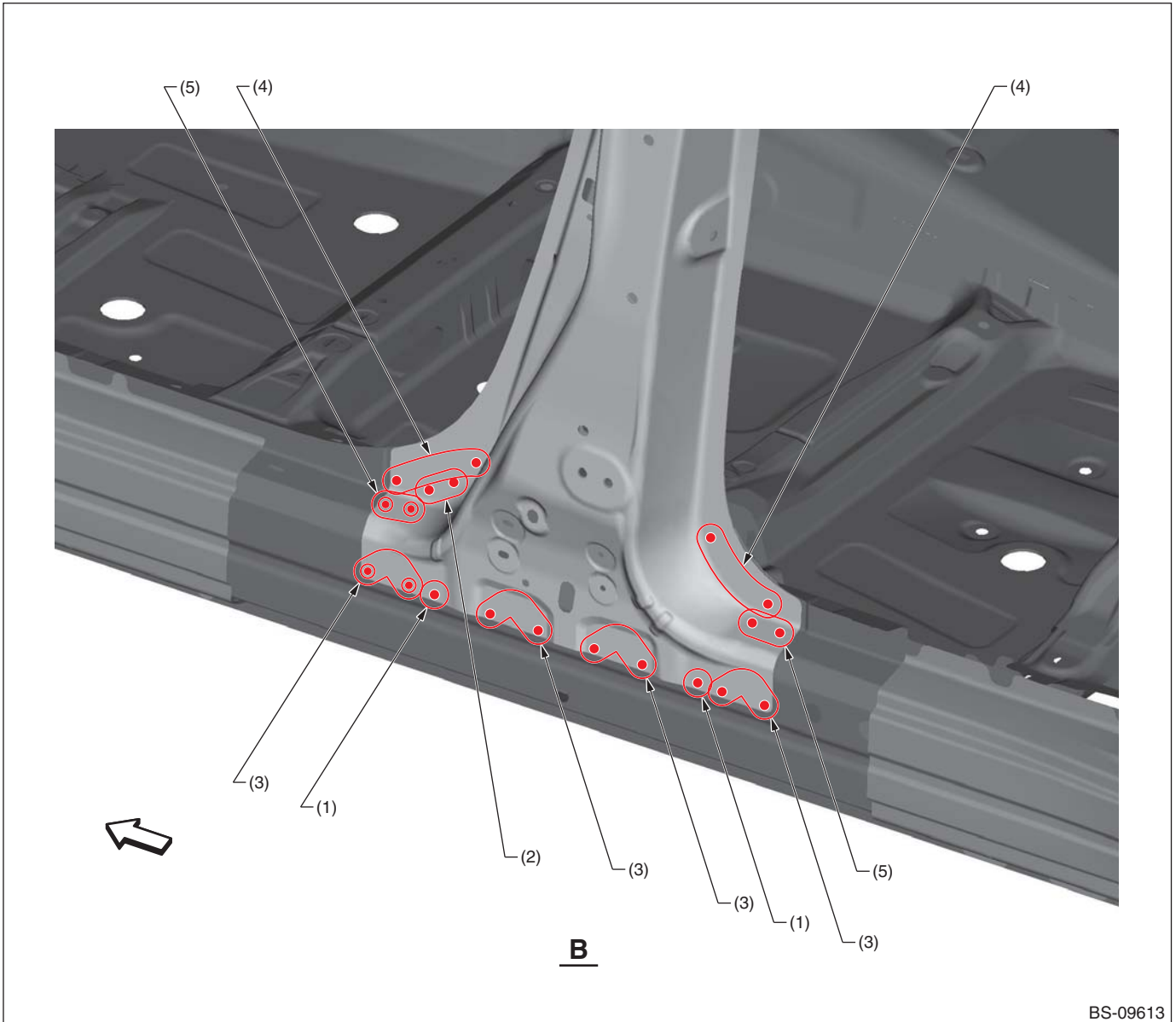


BS-09612

- (1) 1 point (outside · 1 belt sander) (2) 2 points (outside · 1 belt sander) (3) 4 points (outside · 1 belt sander)

Panel Replacement

• Views B



(1) 1 point (outside · 1 belt sander)
(2) 2 points (outside · 1 belt sander)

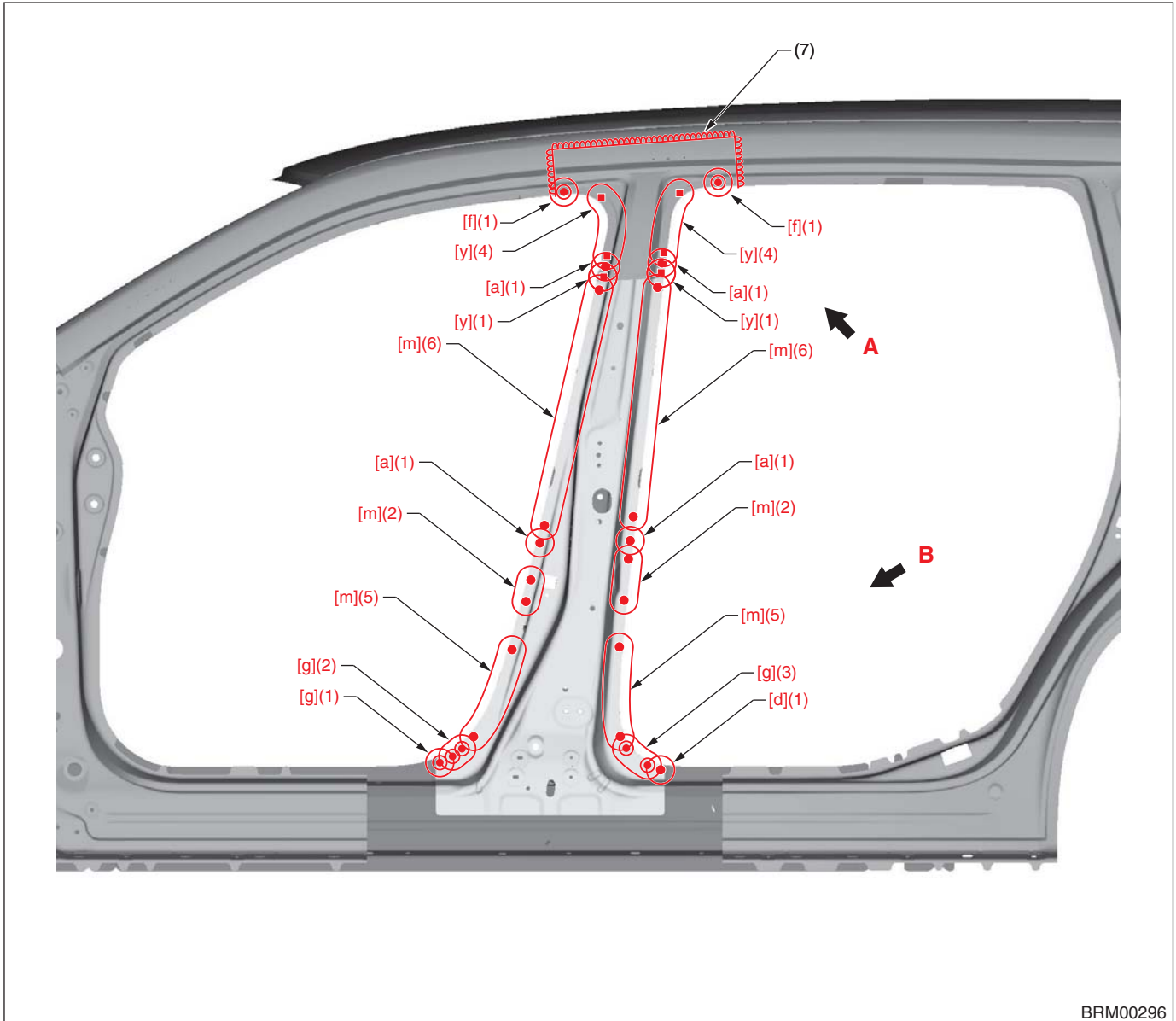
(3) 3 points (outside · 1 belt sander)
(4) 5 points (outside · 1 belt sander)

(5) 2 points (top · 1 belt sander)

Panel Replacement

B: INSTALLATION

• Overall view



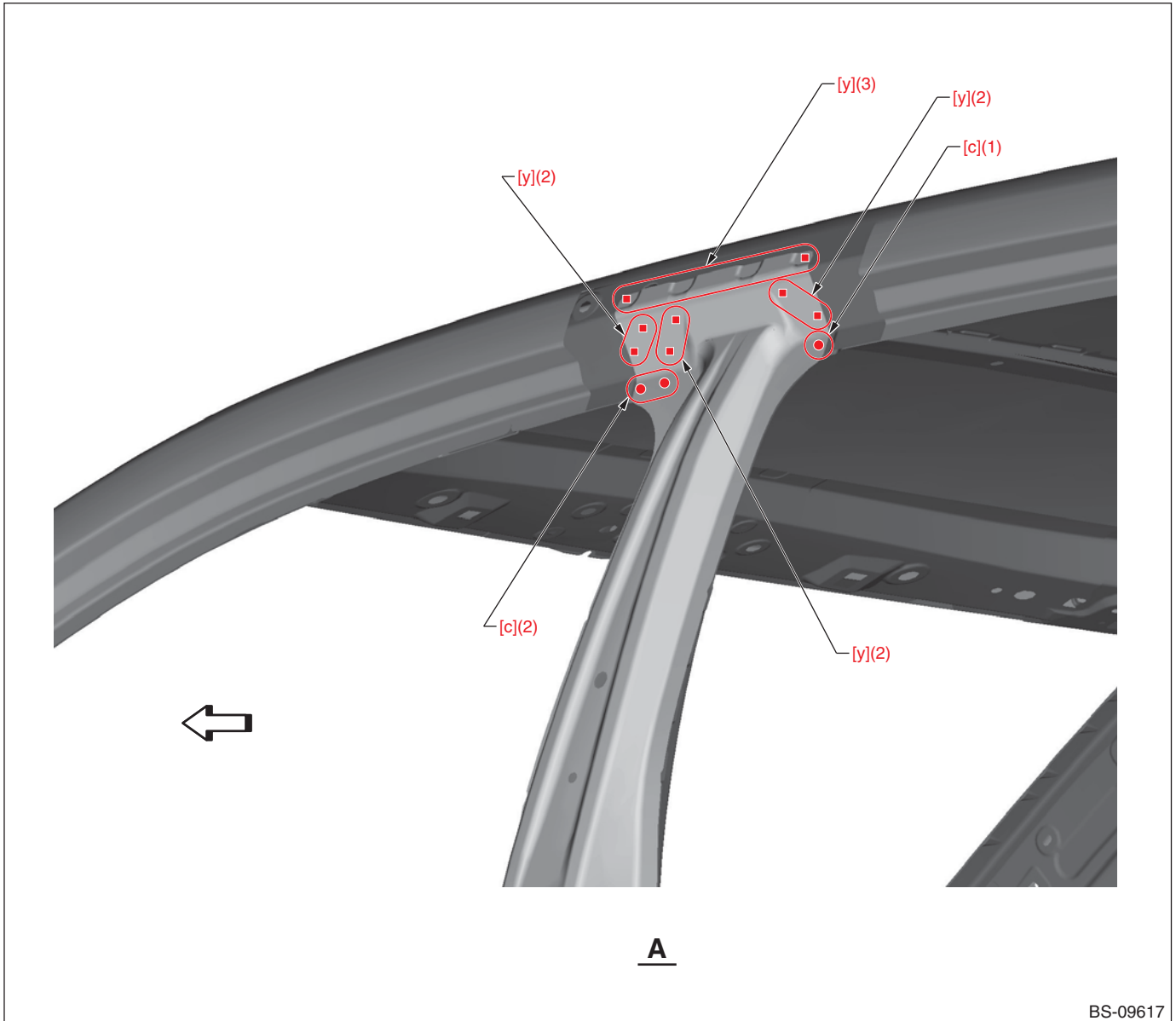
BRM00296

- | | | |
|--------------|---------------|----------------------------------|
| (1) 1 point | (4) 7 points | (7) 1 point (Continuous welding) |
| (2) 2 points | (5) 8 points | |
| (3) 3 points | (6) 12 points | |

[a] Spot welding	Compression: 5.0 kN, Current: 7.5 kA, Welding time: 18 cyc
[d] Spot welding	Compression: 4.0 kN, Current: 8.0 kA, Welding time: 14 cyc
[f] Spot welding	Compression: 3.5 kN, Current: 8.0 kA, Welding time: 25 cyc
[g] Spot welding	Compression: 4.0 kN, Current: 6.5 kA, Welding time: 25 cyc
[m] Spot welding	Compression: 3.5 kN, Current: 7.5 kA, Welding time: 25 cyc
[y] Plug welding	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

• Views A



BS-09617

(1) 1 point

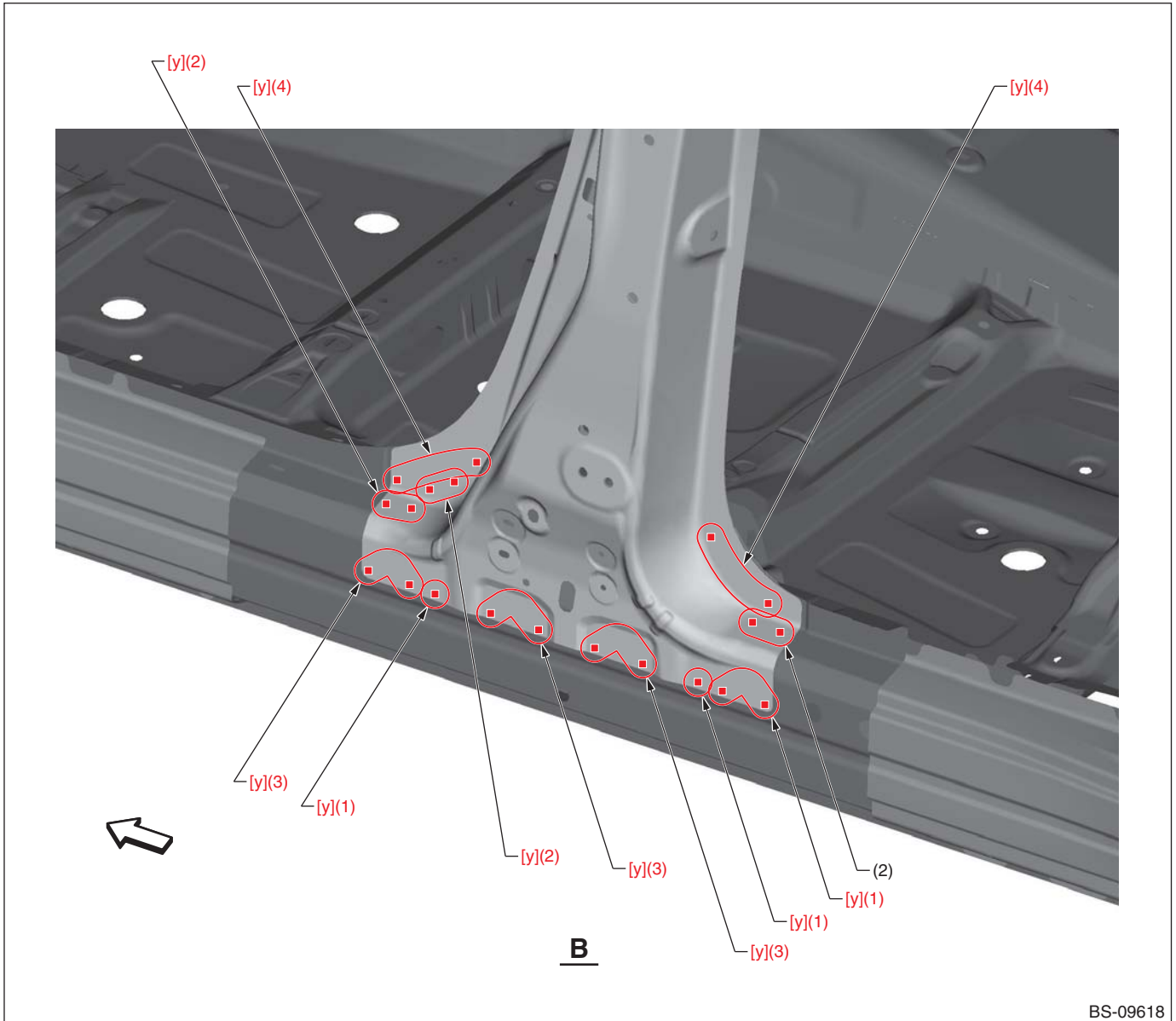
(2) 2 points

(3) 4 points

[c] Spot welding	Compression: 4.4 kN, Current: 7.5 kA, Welding time: 16 cyc
[y] Plug welding	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

• Views B



BS-09618

(1) 1 point
(2) 2 points

(3) 3 points

(4) 5 points

[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

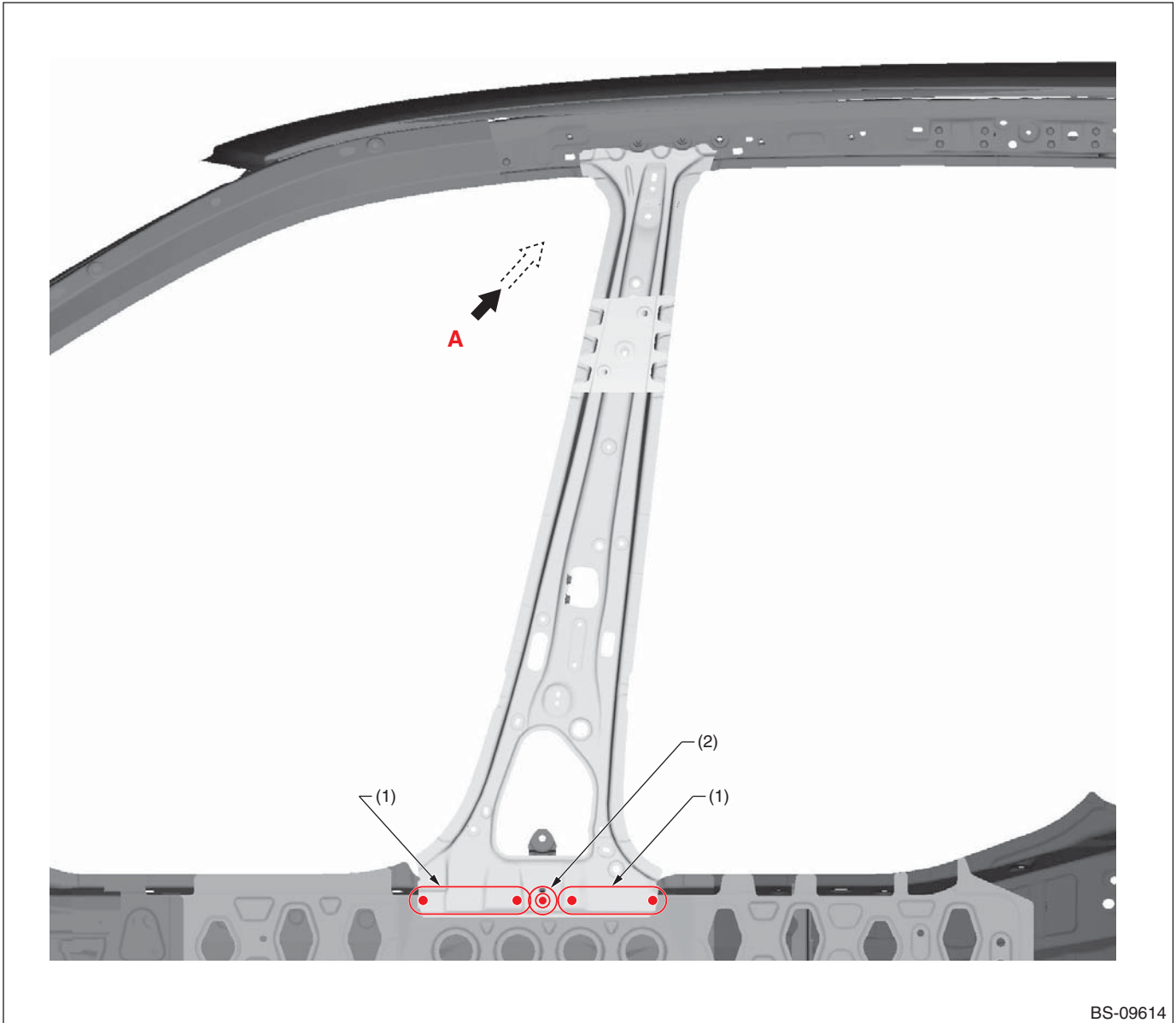
B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

8-15. Center Pillar Inner (Total replacement)

A: REMOVAL

• Overall view (Center pillar, center pillar reinforcement side sill and side sill reinforcement outer has been removed.)



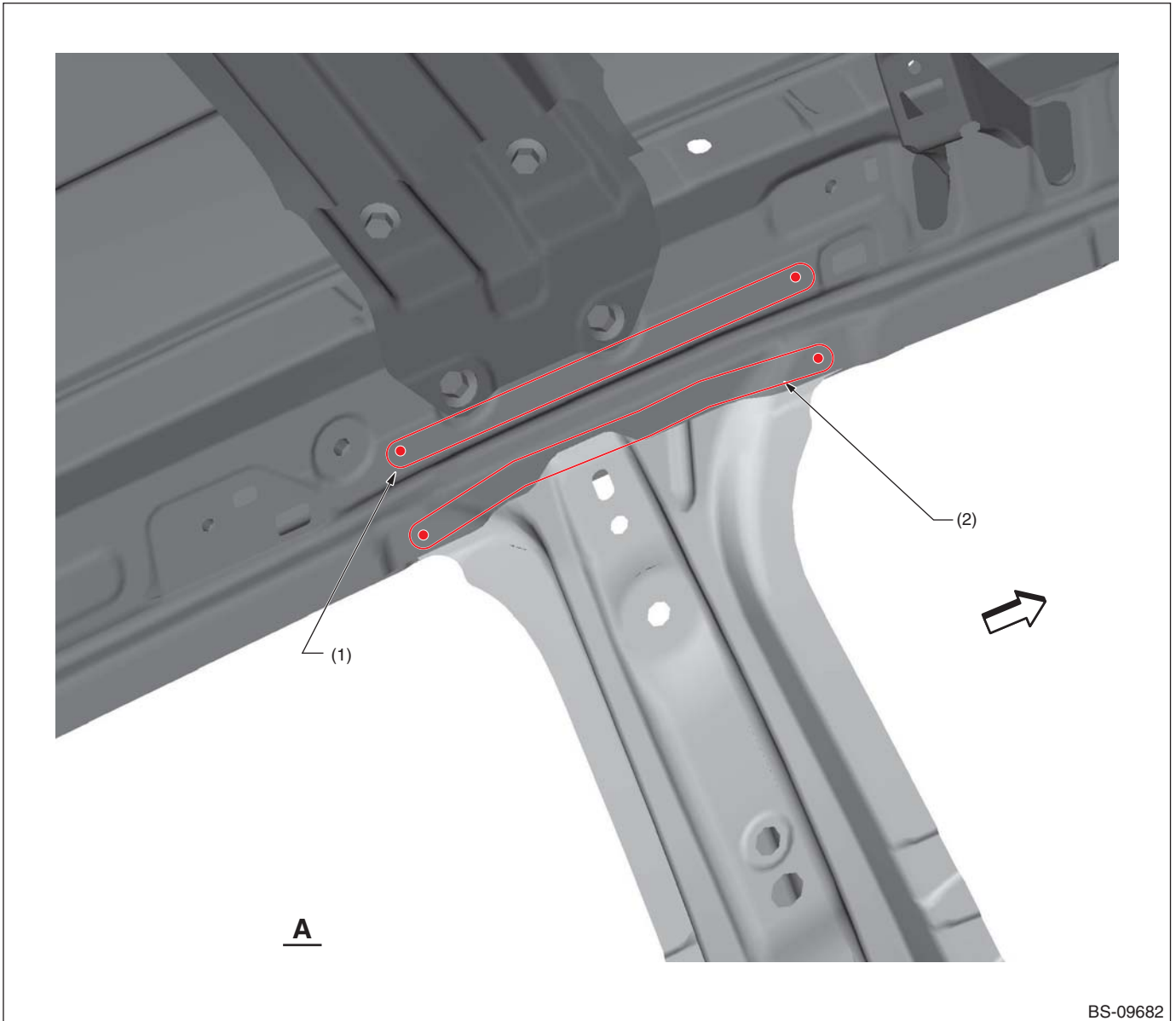
BS-09614

(1) 4 points (outside · 1)

(2) 1 point (outside · 2)

Panel Replacement

• Views A



BS-09682

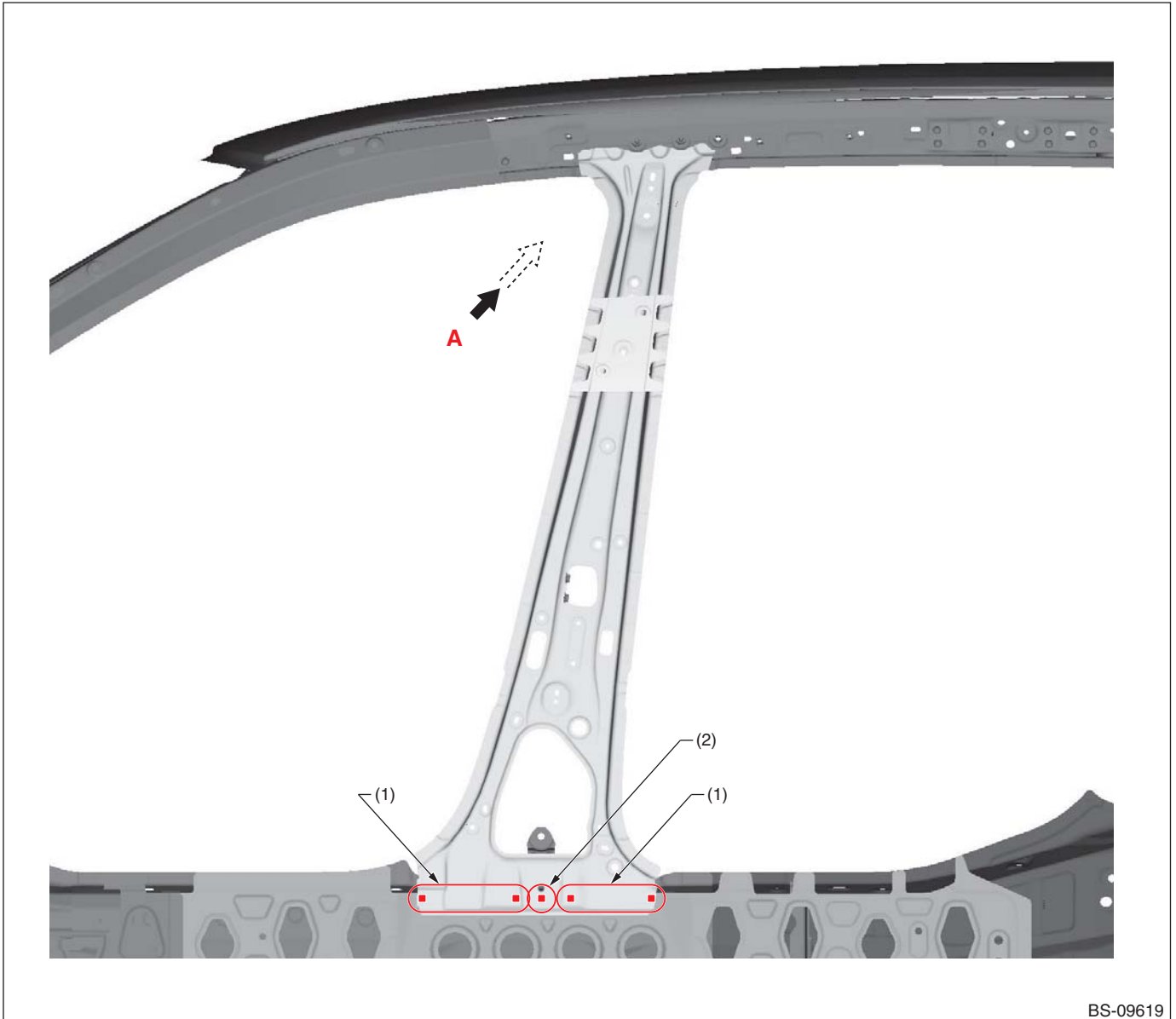
(1) 4 points (inside · 1)

(2) 5 points (inside · 1)

Panel Replacement

B: INSTALLATION

- Overall view



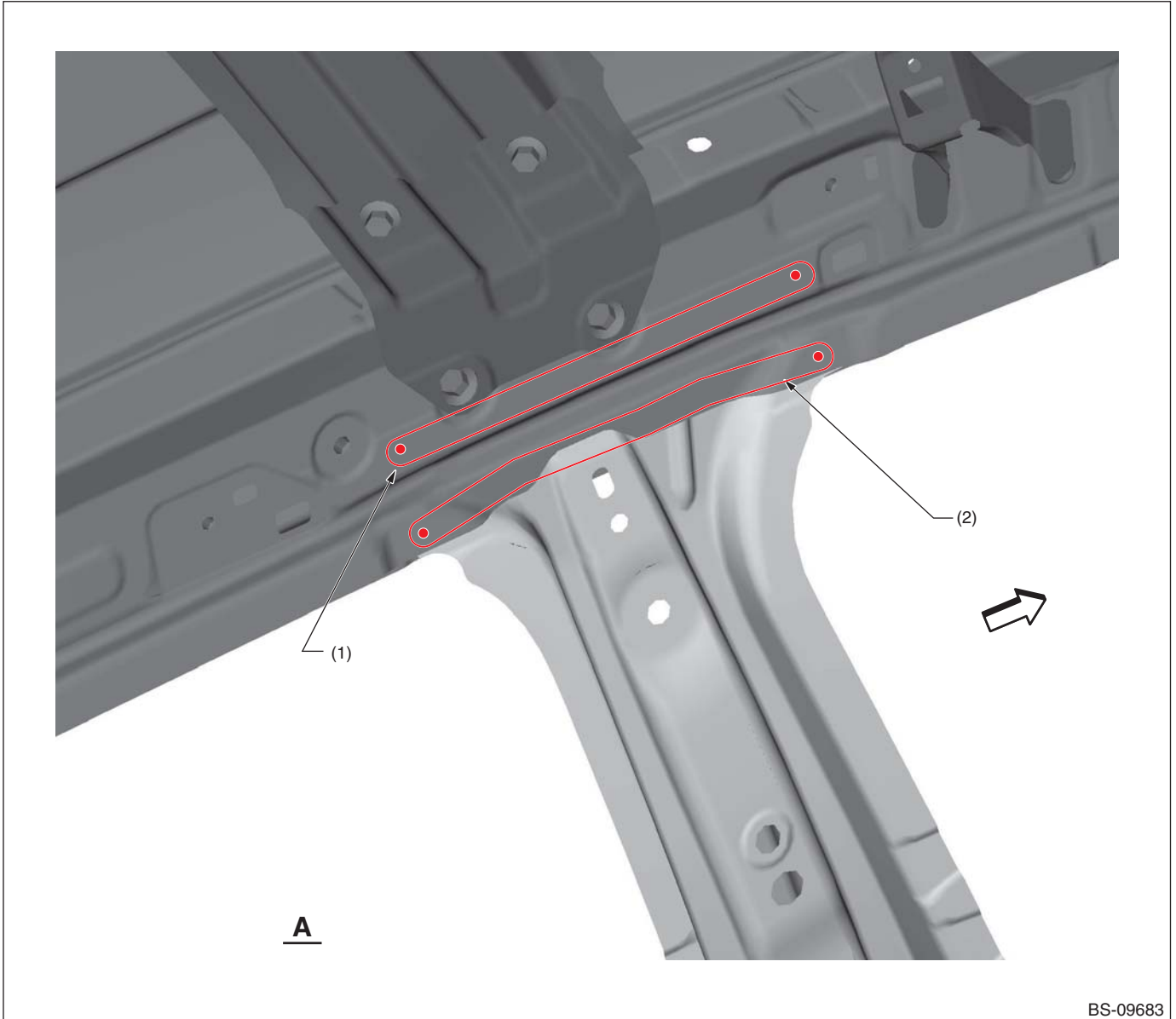
BS-09619

(1) 4 points

(2) 1 point

Panel Replacement

• Views A



(1) 4 points

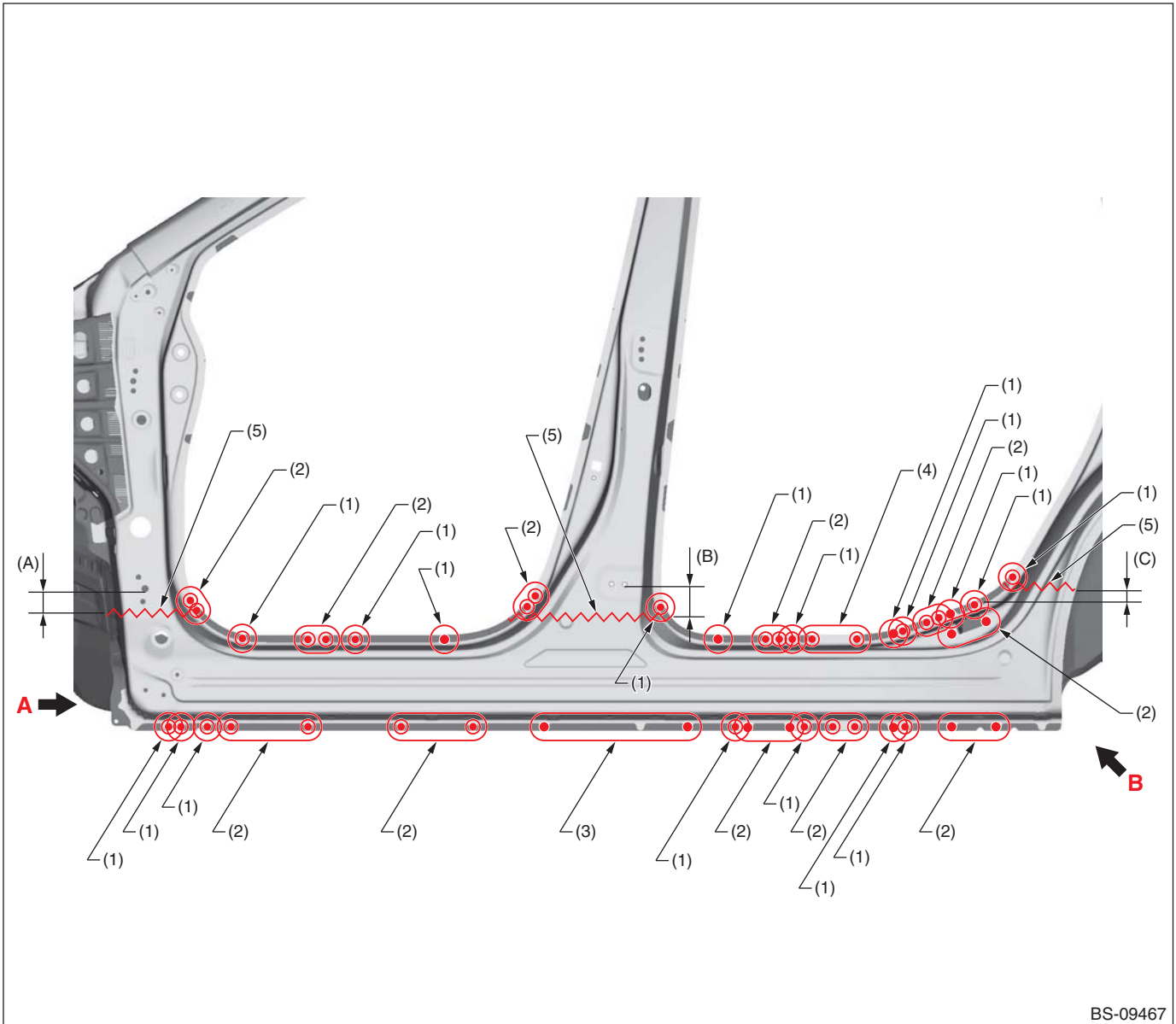
(2) 5 points

Panel Replacement

8-16. Side Sill Outer Panel (Partial replacement)

A: REMOVAL

• Overall view



BS-09467

(A) 40 mm [1.57 in]

(B) 70 mm [2.76 in]

(C) 10 mm [0.39 in]

(1) 1 point (outside · 1)

(3) 3 points (outside · 1)

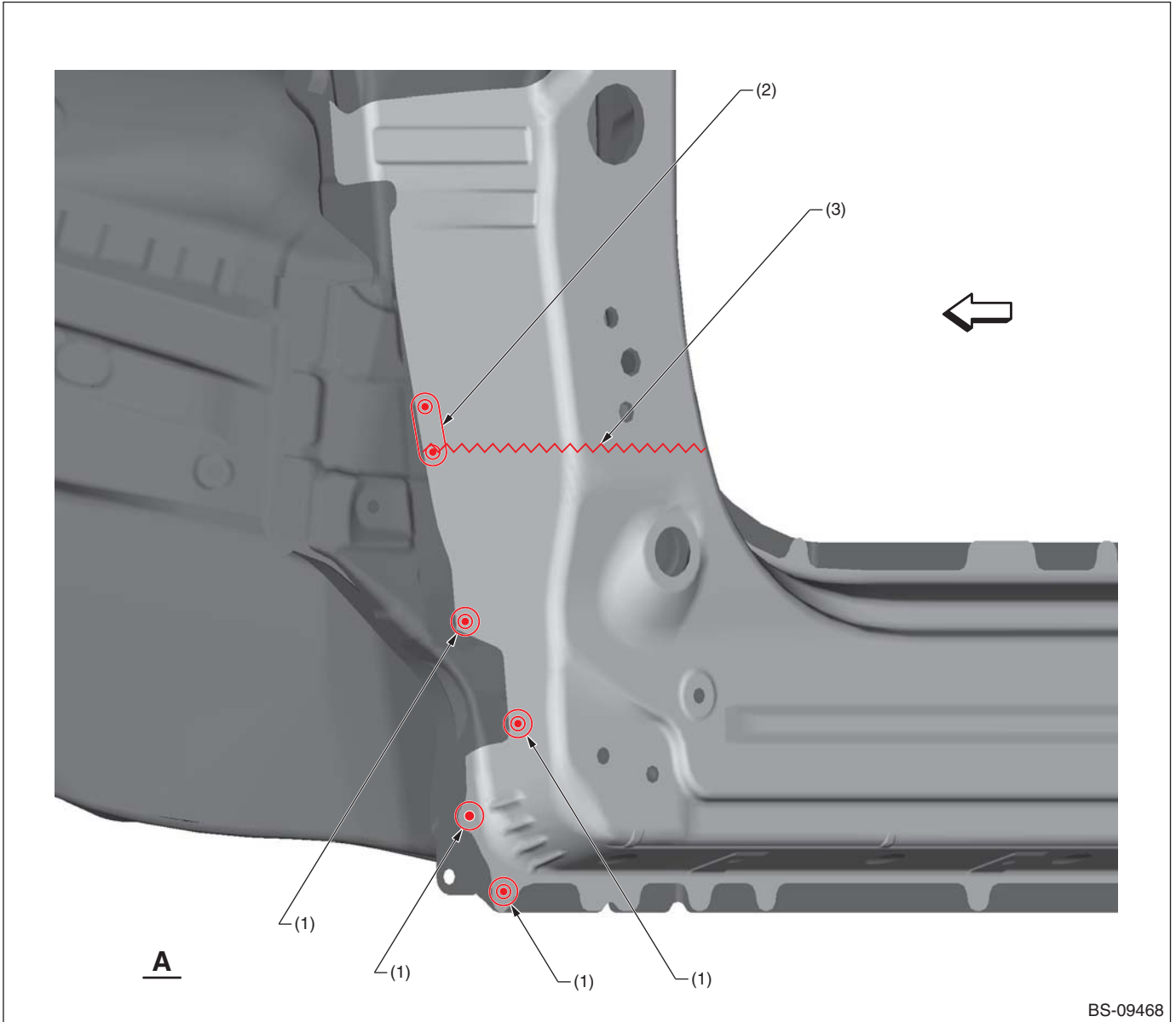
(5) Cut position

(2) 2 points (outside · 1)

(4) 4 points (outside · 1)

Panel Replacement

• Views A



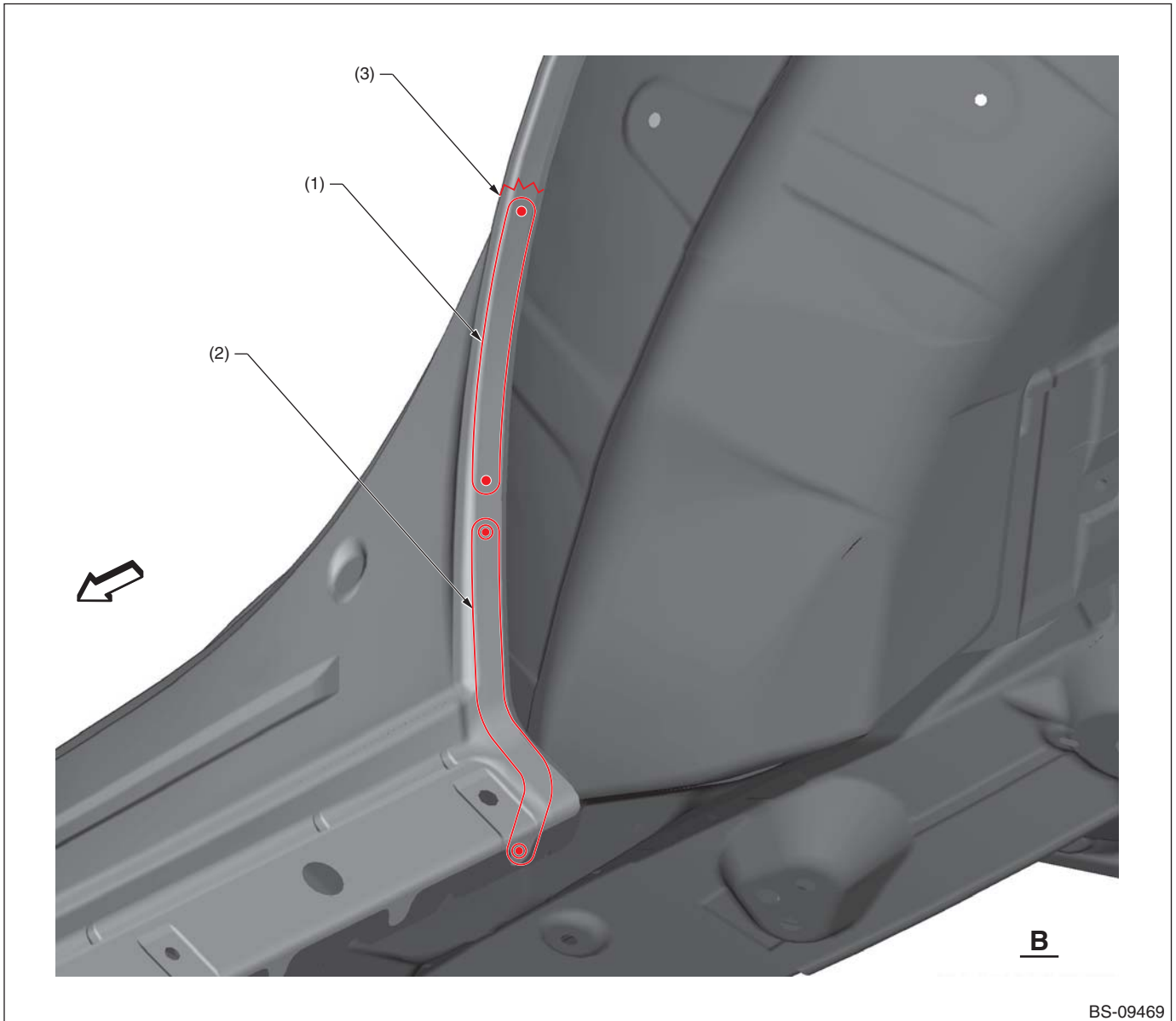
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

(3) Cut position

Panel Replacement

• Views B



BS-09469

(1) 3 points (outside · 1)

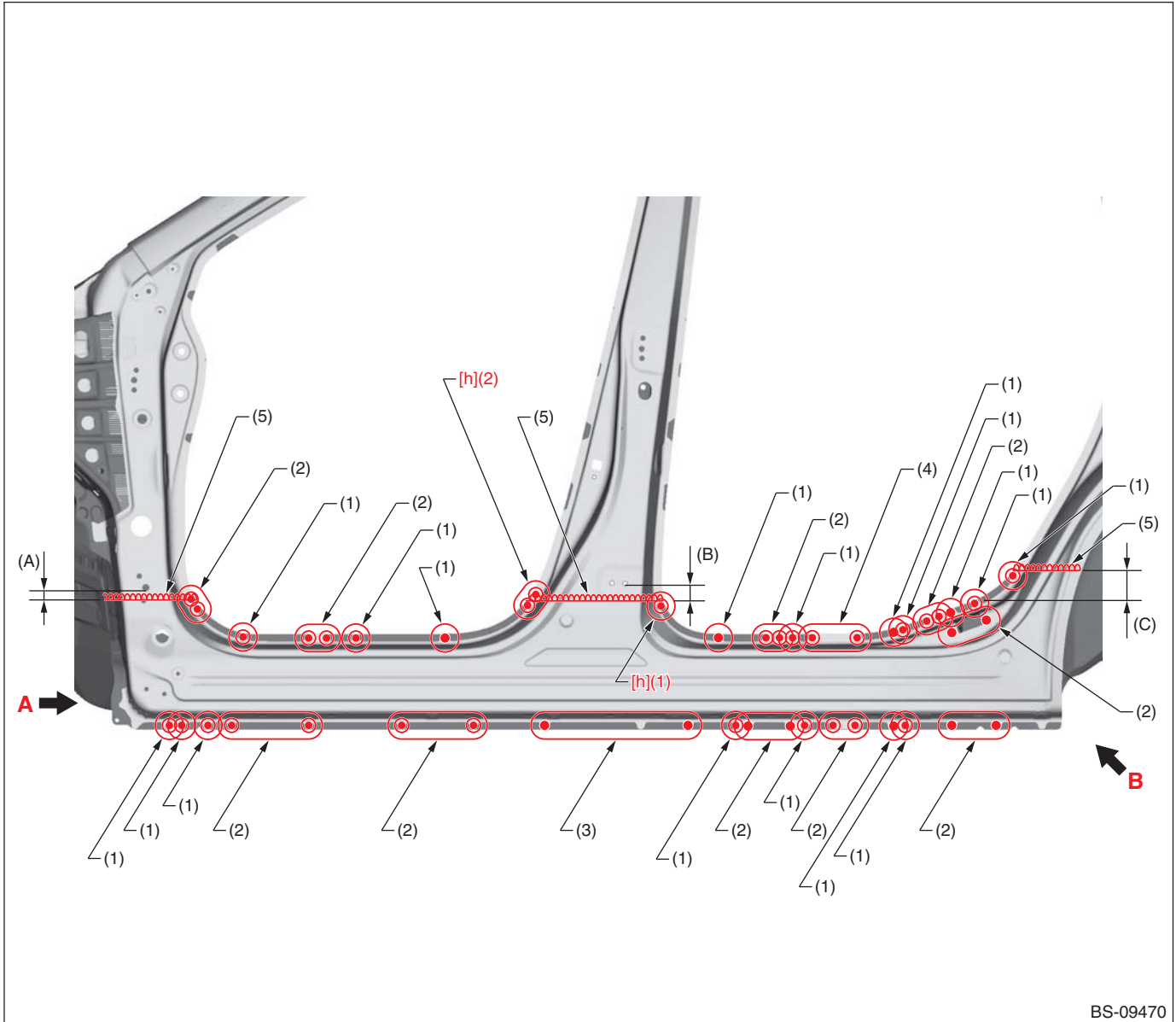
(2) 4 points (outside · 1)

(3) Cut position

Panel Replacement

B: INSTALLATION

• Overall view



BS-09470

(A) 15 mm [0.59 in]

(B) 50 mm [1.97 in]

(C) 90 mm [3.54 in]

(1) 1 point

(3) 3 points

(5) 1 point (Continuous welding)

(2) 2 points

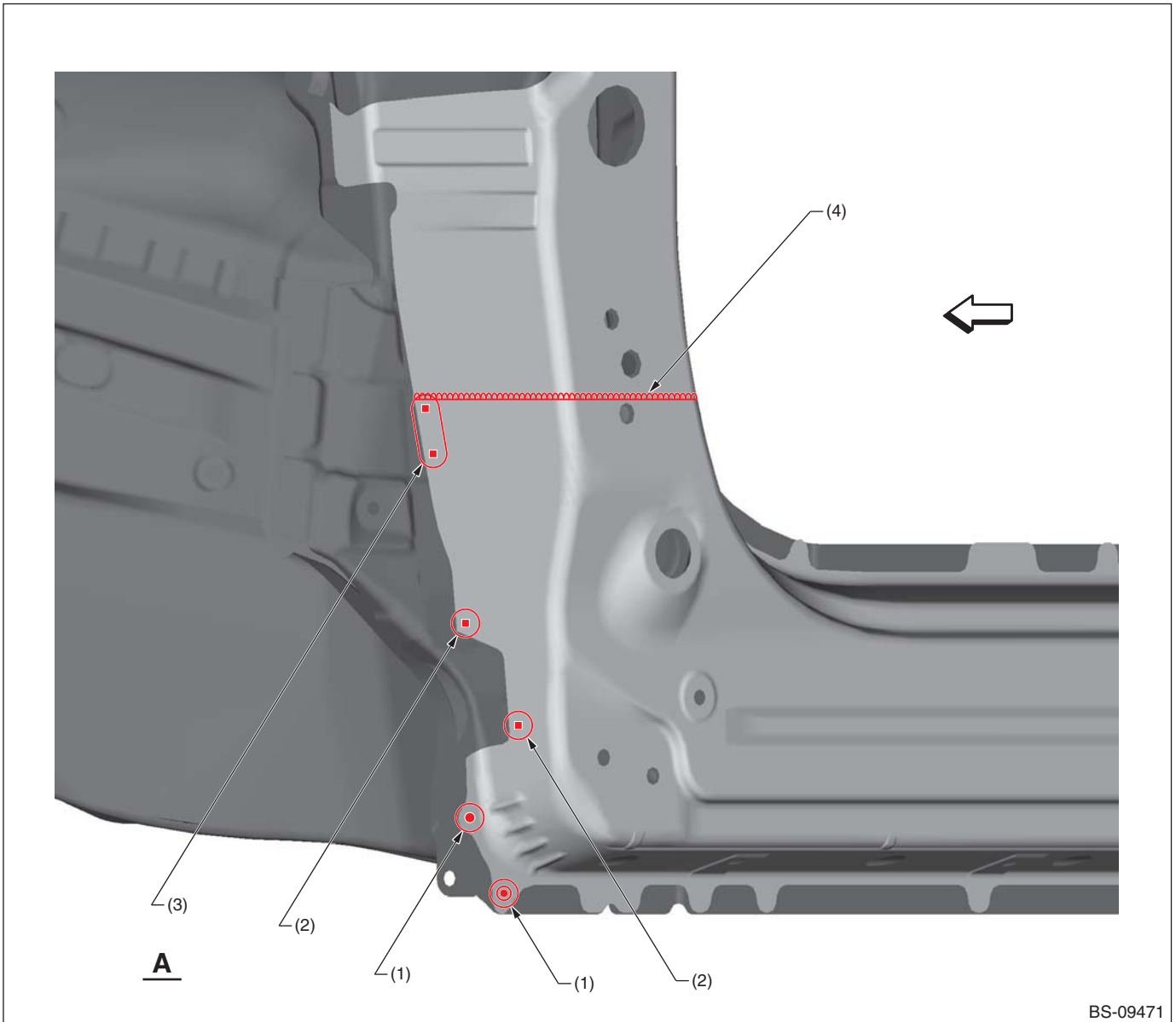
(4) 4 points

[h] Spot welding

Compression: 4.0 kN, Current: 8.5 kA, Welding time: 20 cyc

Panel Replacement

• Views A



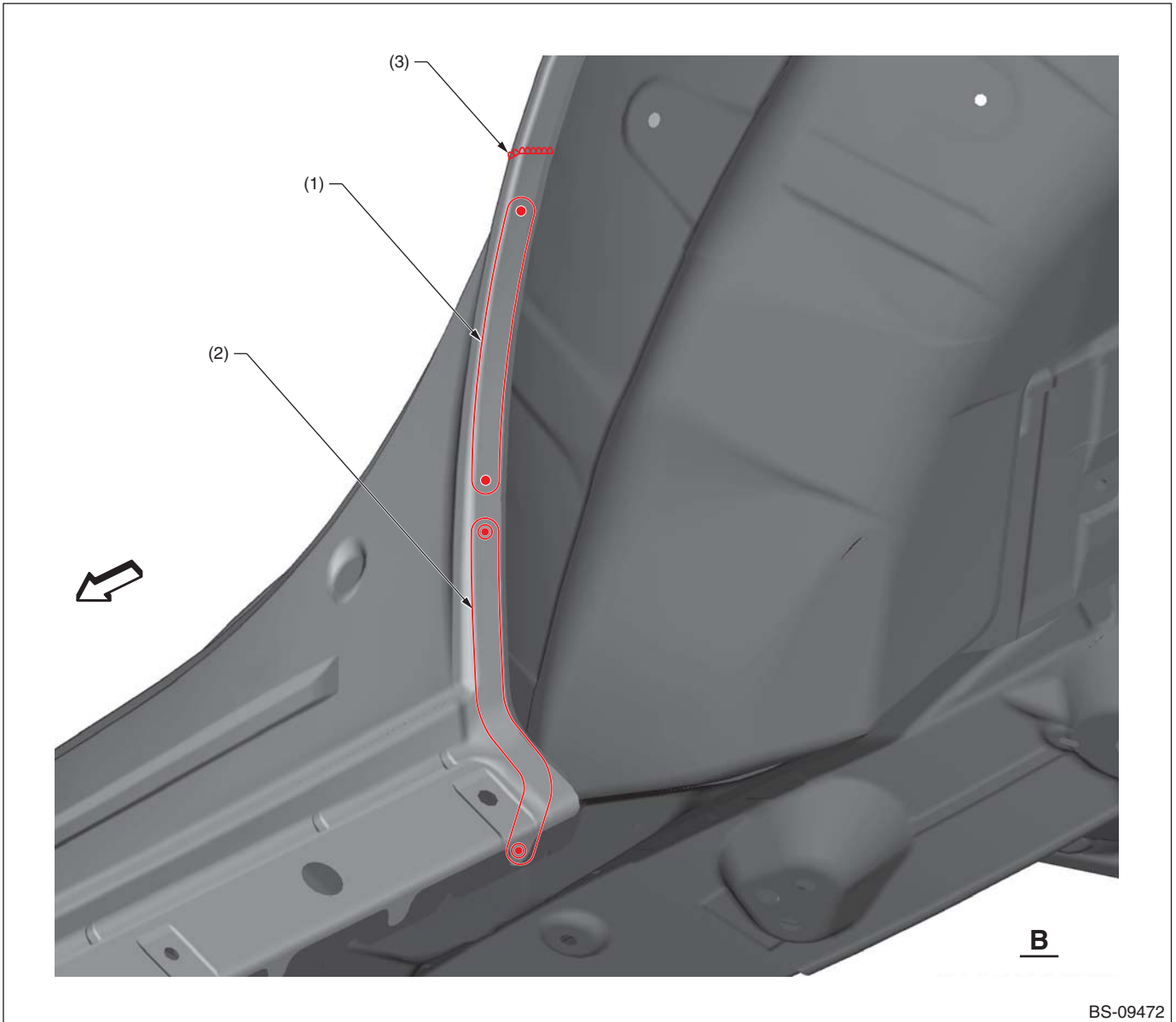
- (1) 1 point
- (2) 1 point (service)

- (3) 2 points (service)

- (4) 1 point (Continuous welding)

Panel Replacement

• Views B



(1) 3 points

(2) 4 points

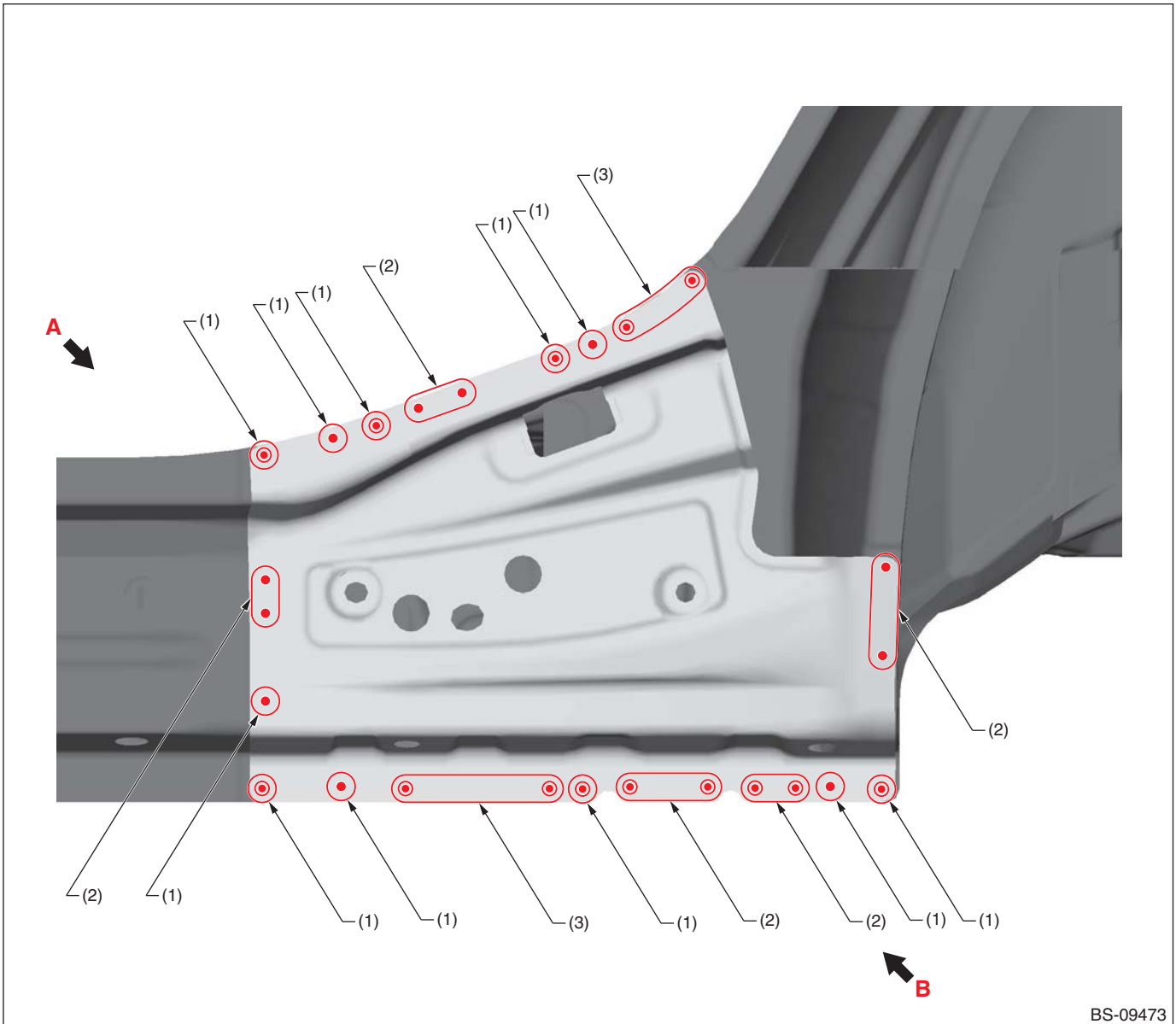
(3) 1 point (Continuous welding)

Panel Replacement

8-17. Side Sill Reinforcement Outer Rear (Total replacement)

A: REMOVAL

- Overall view



BS-09473

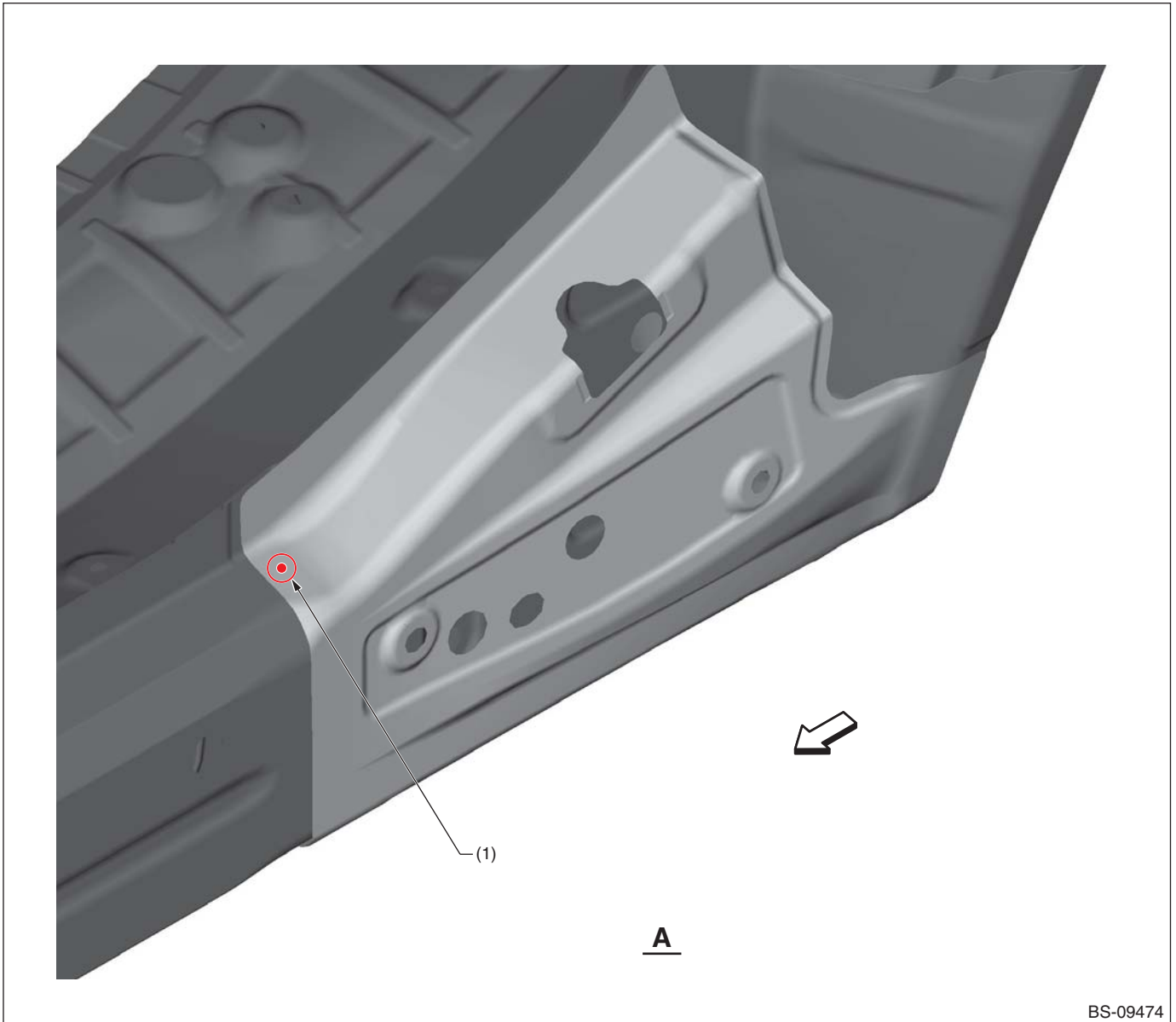
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

(3) 3 points (outside · 1)

Panel Replacement

• Views A

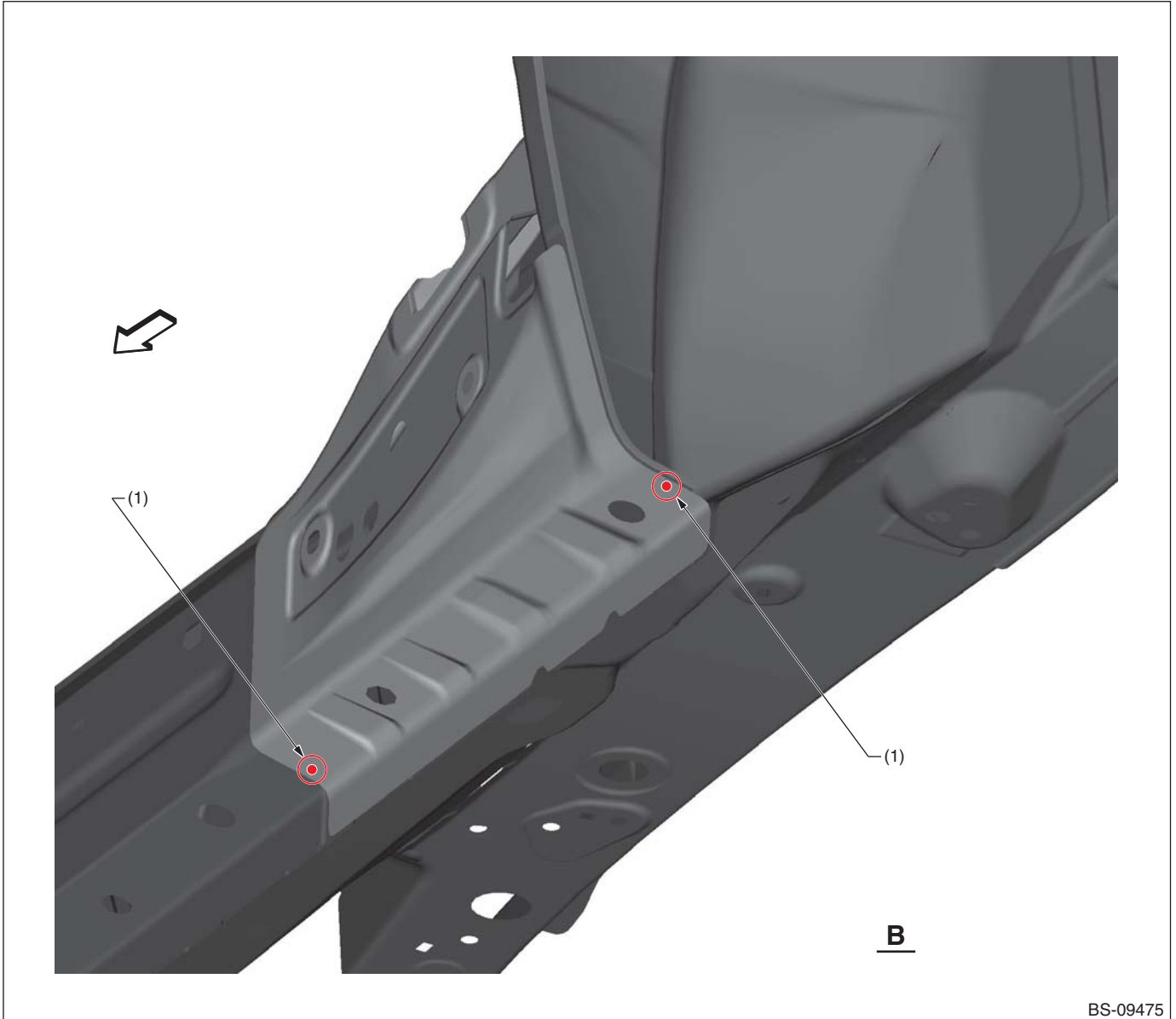


BS-09474

(1) 1 point (outside - 1)

Panel Replacement

• Views B



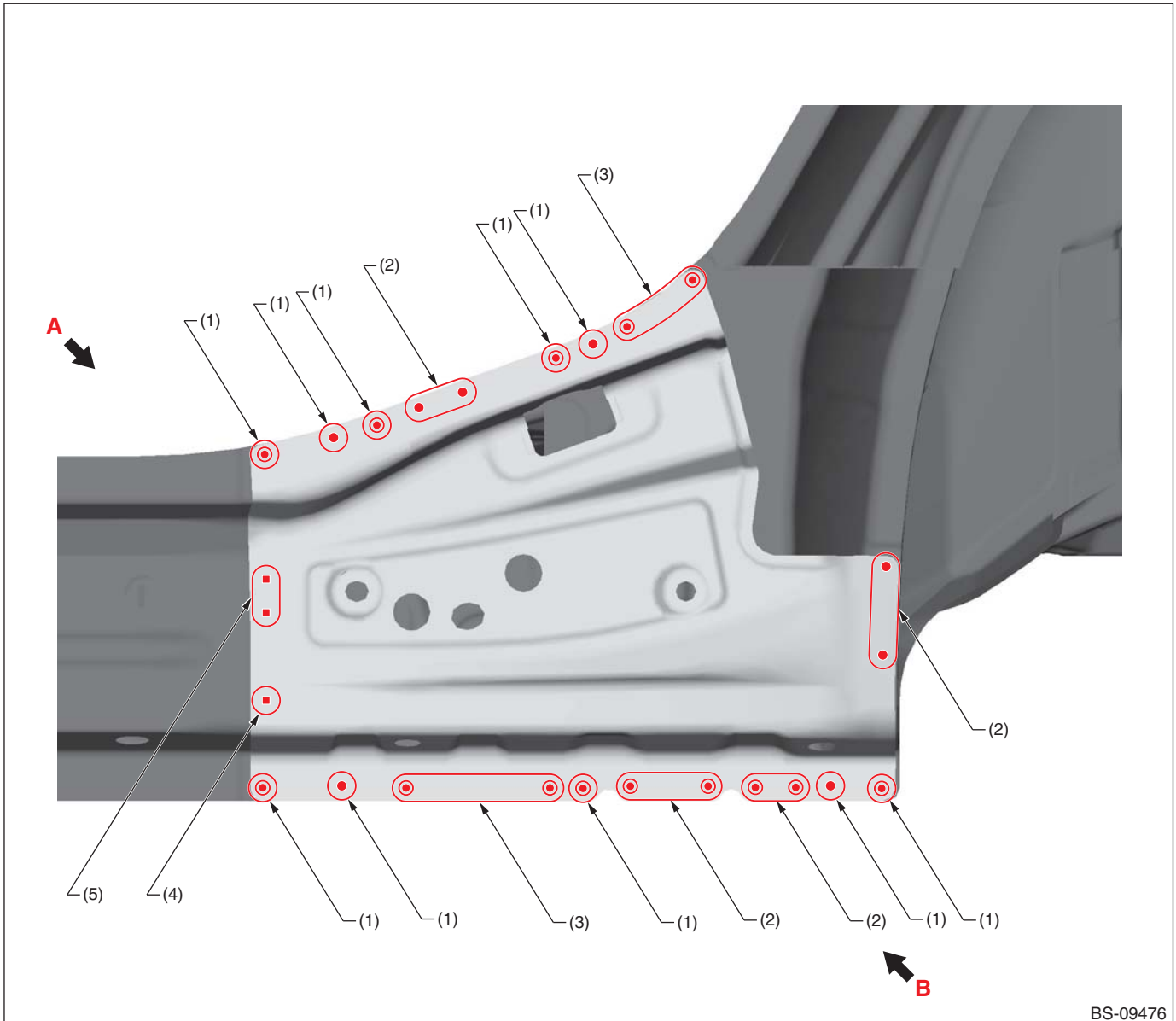
BS-09475

(1) 1 point (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09476

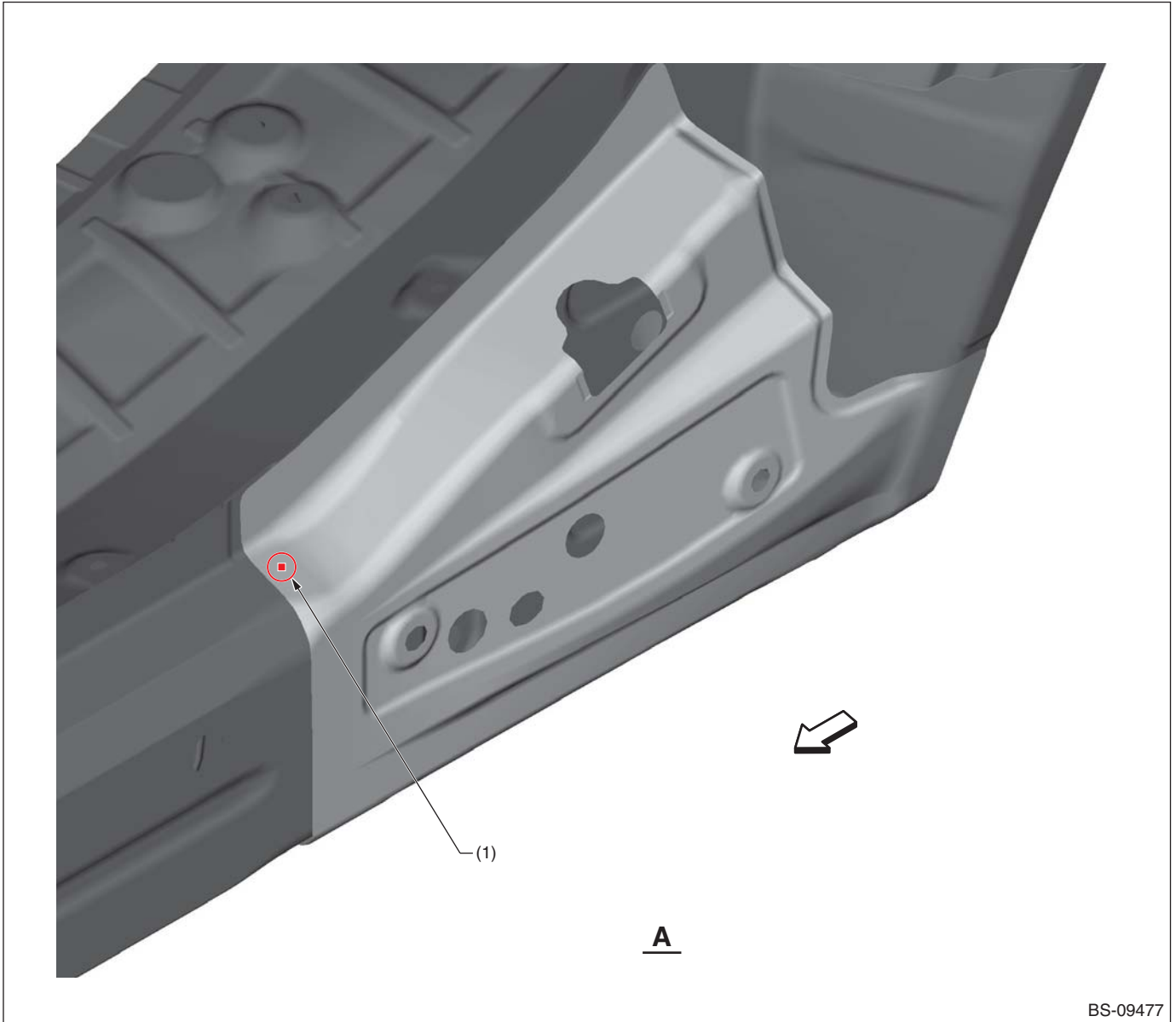
(1) 1 point
(2) 2 points

(3) 3 points
(4) 1 point (service)

(5) 2 points (service)

Panel Replacement

• Views A

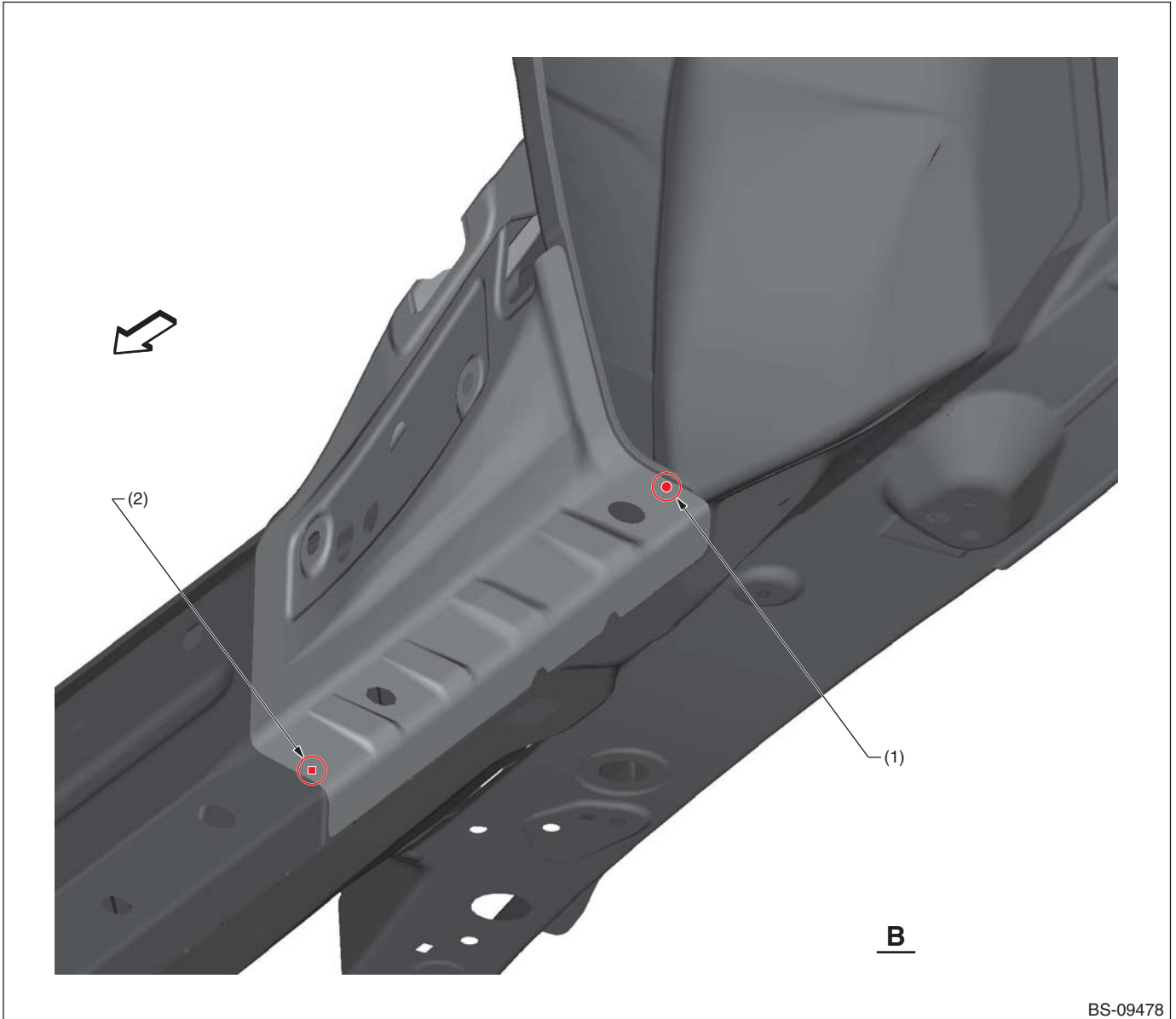


BS-09477

(1) 1 point (service)

Panel Replacement

• Views B



BS-09478

(1) 1 point

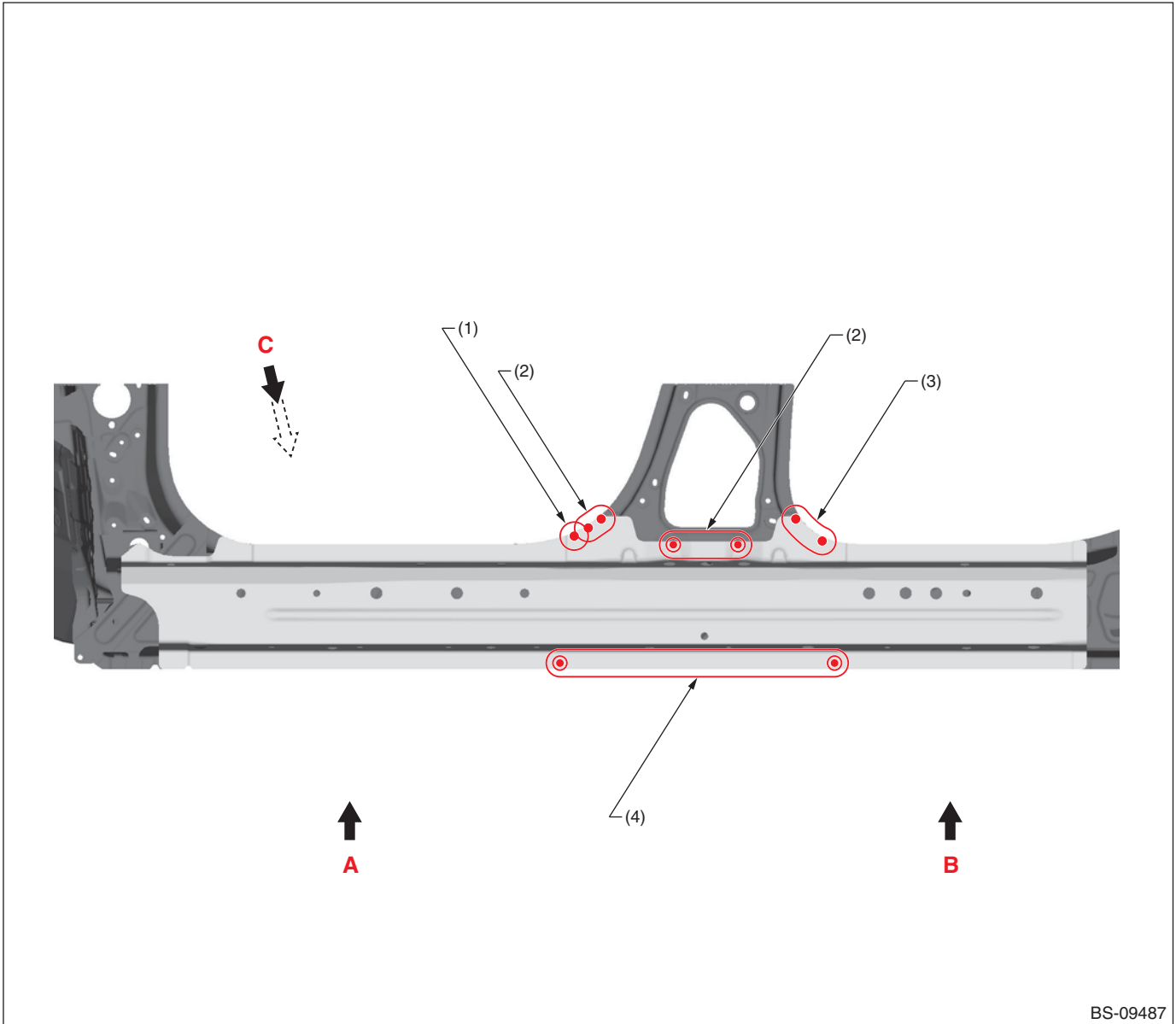
(2) 1 point (service)

Panel Replacement

8-18. Side Sill Reinforcement Outer (Total replacement)

A: REMOVAL

- Overall view



BS-09487

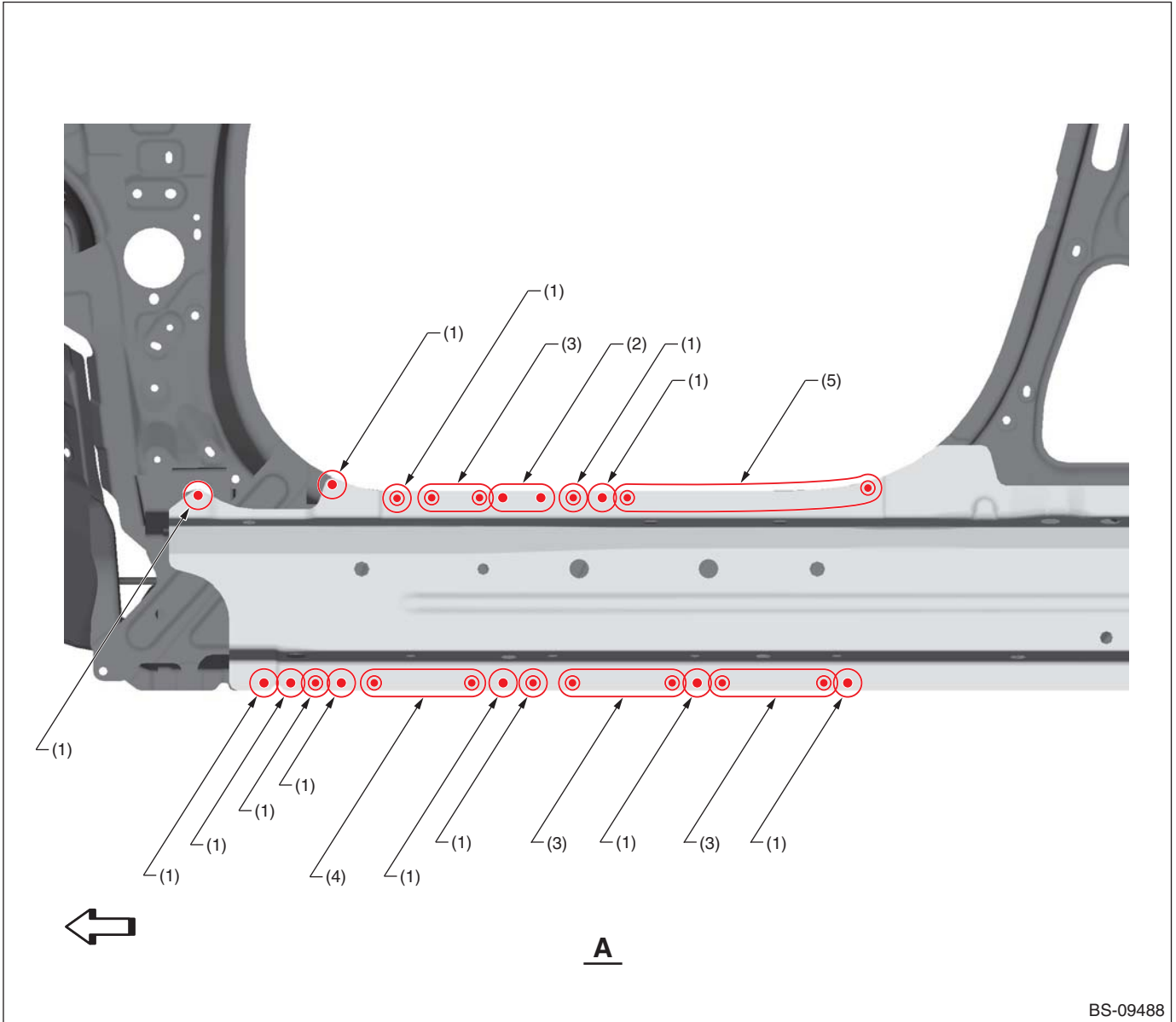
- (1) 1 point (outside · 1)
(2) 2 points (outside · 1)

- (3) 3 points (outside · 1)

- (4) 10 points (outside · 1)

Panel Replacement

• Views A



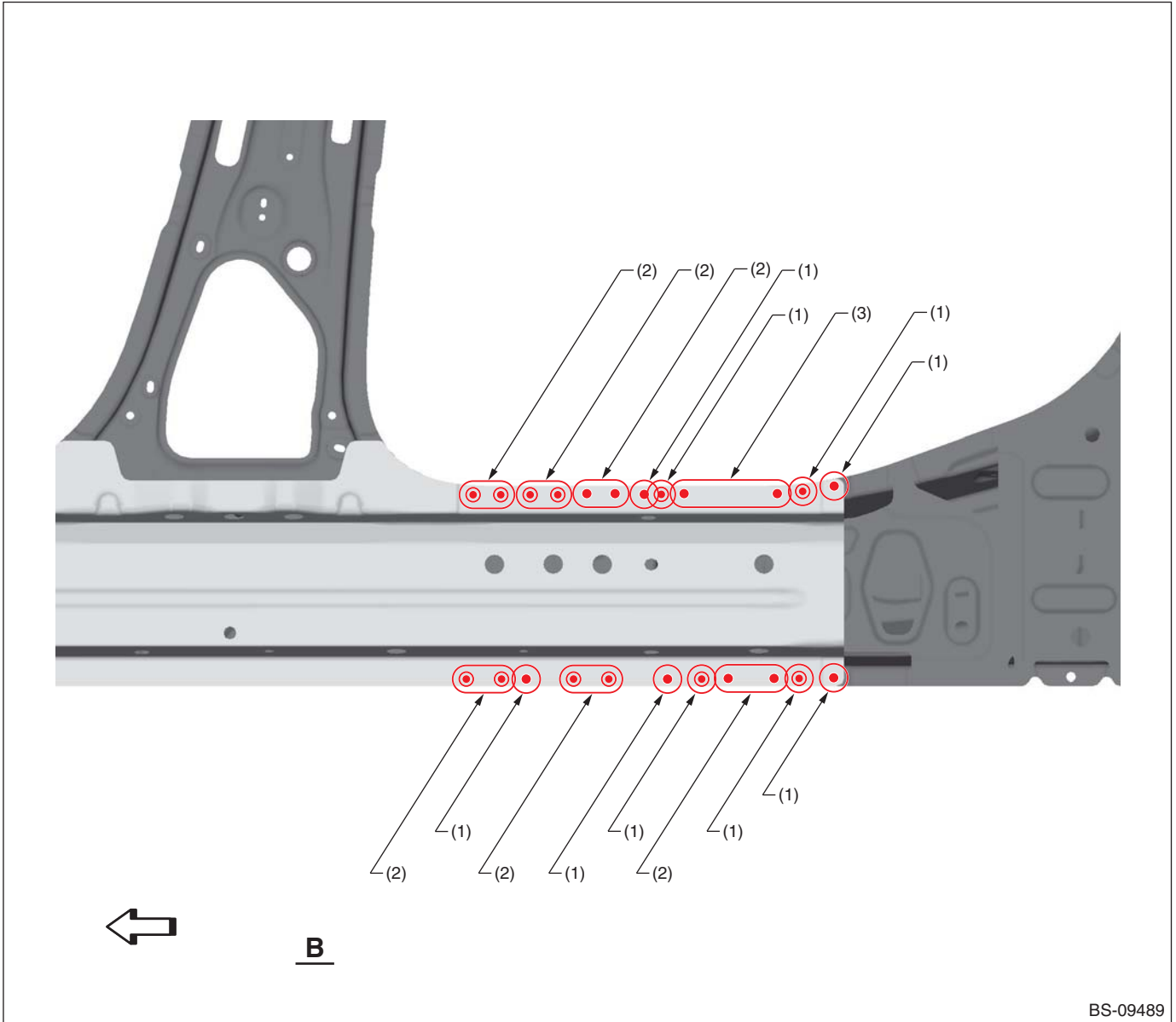
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)
(4) 4 points (outside · 1)

(5) 8 points (outside · 1)

Panel Replacement

• Views B



BS-09489

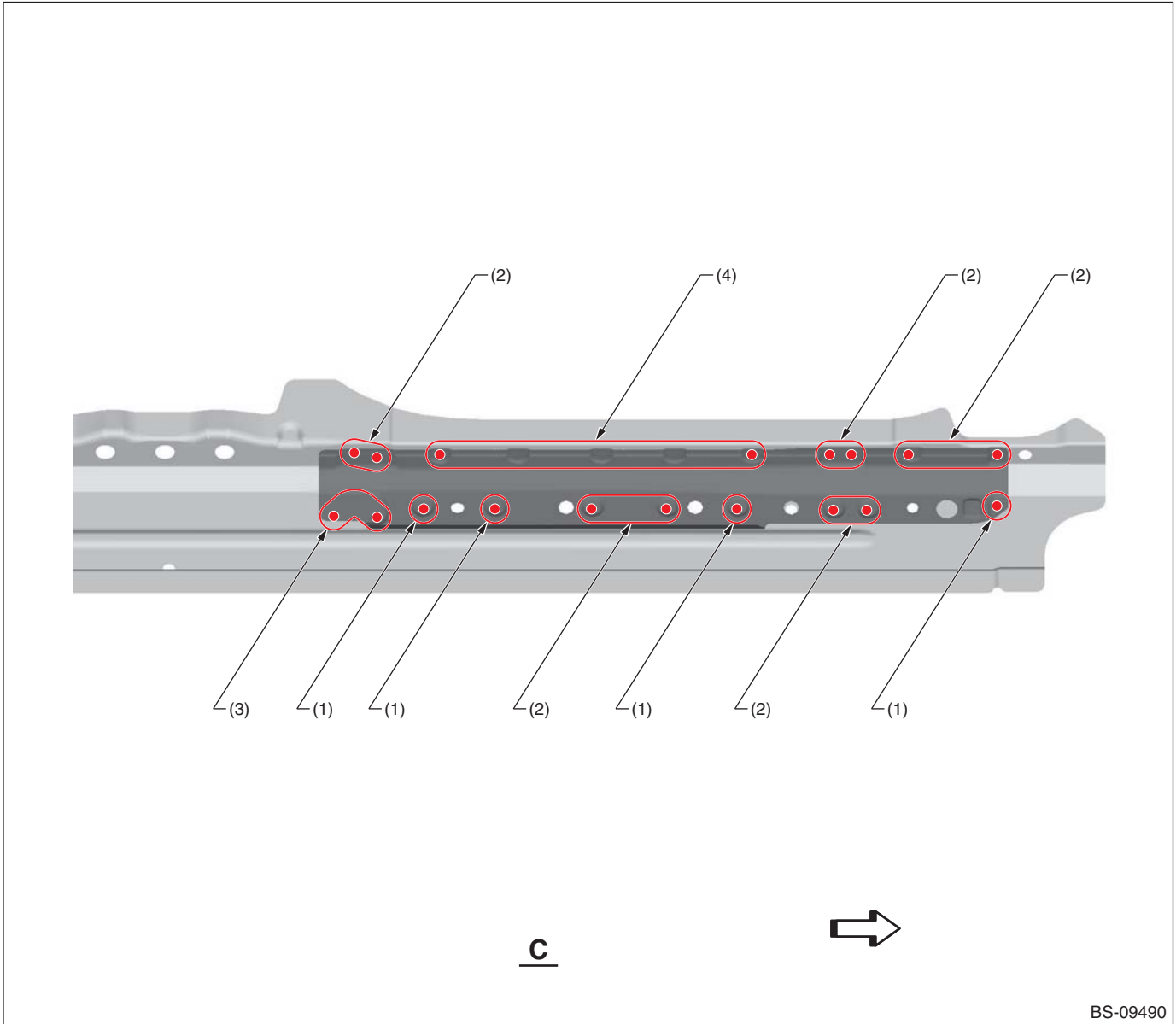
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

(3) 4 points (outside · 1)

Panel Replacement

• Views C



(1) 1 point (inside · 1)
(2) 2 points (inside · 1)

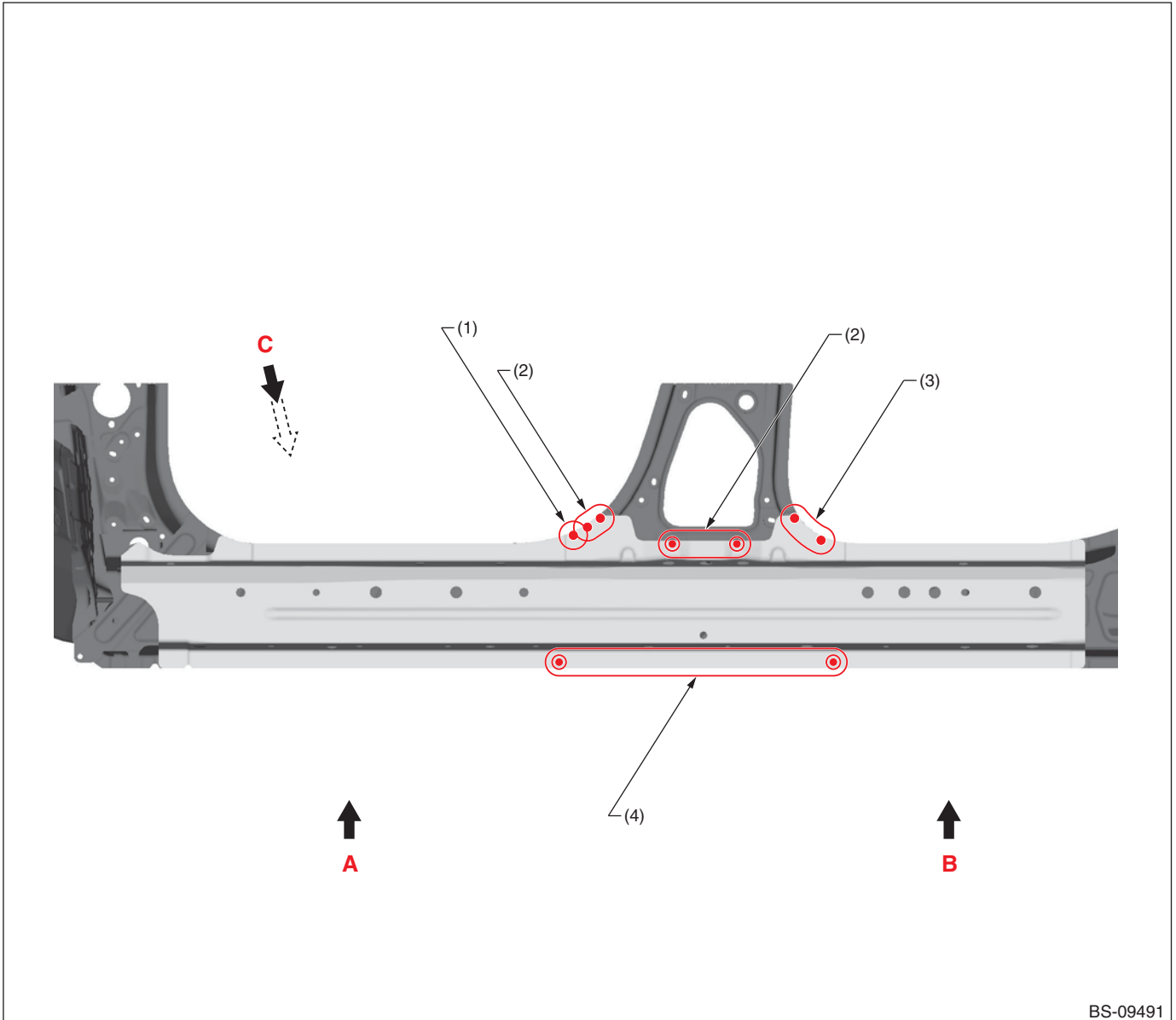
(3) 3 points (inside · 1)

(4) 5 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09491

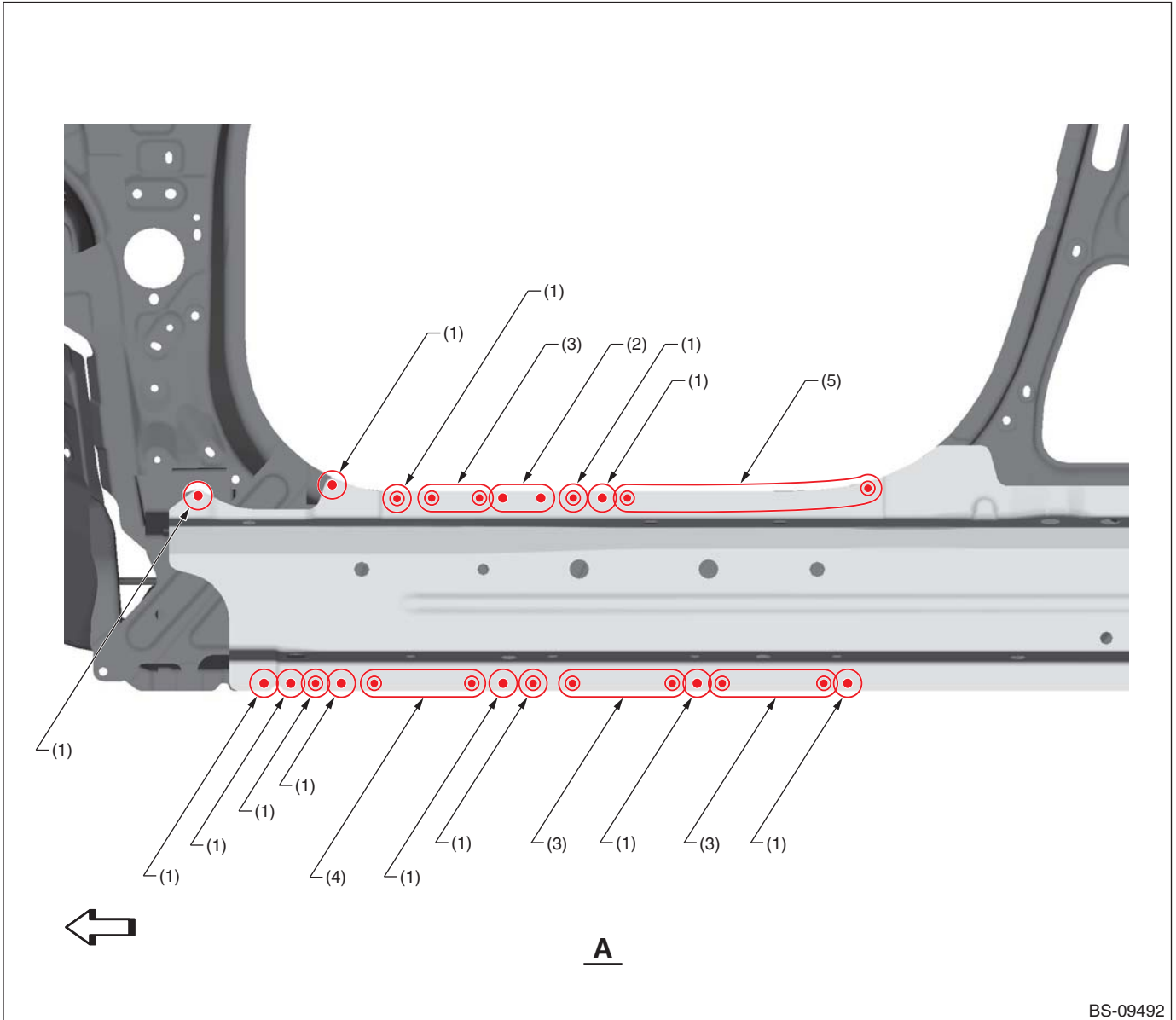
- (1) 1 point
- (2) 2 points

- (3) 3 points

- (4) 10 points

Panel Replacement

• Views A



BS-09492

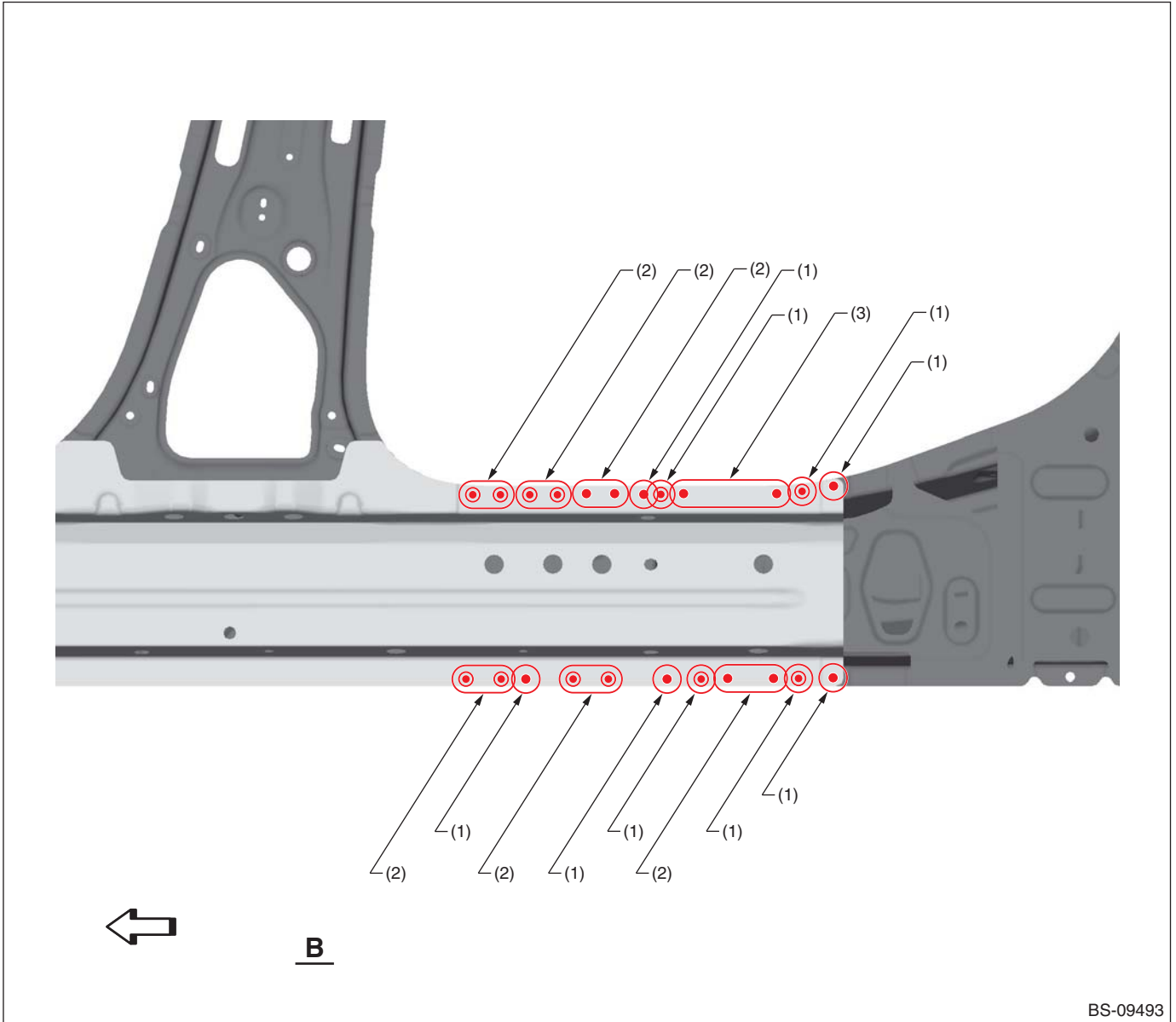
(1) 1 point
(2) 2 points

(3) 3 points
(4) 4 points

(5) 8 points

Panel Replacement

• Views B



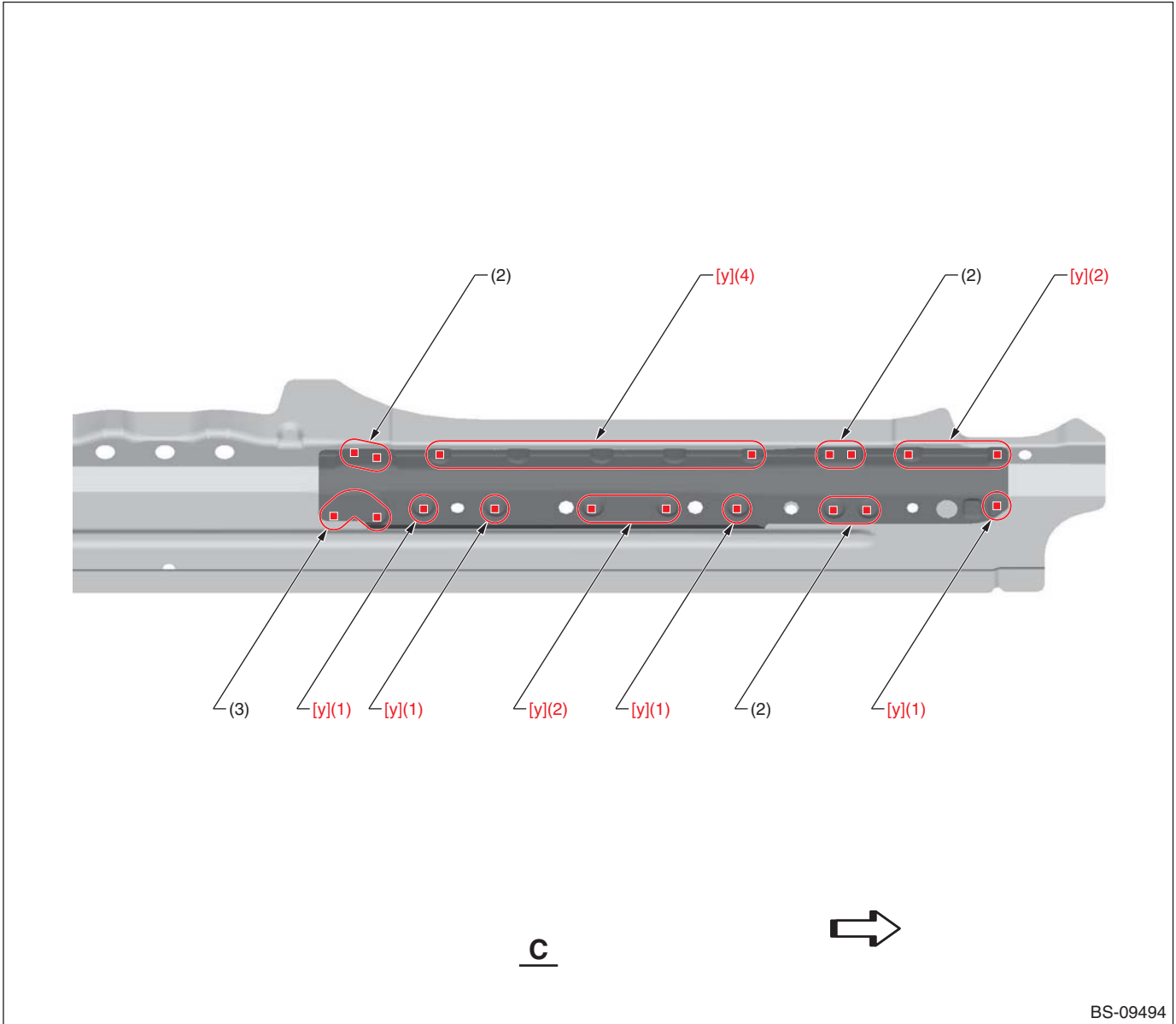
(1) 1 point

(2) 2 points

(3) 4 points

Panel Replacement

• Views C



(1) 1 point
(2) 2 points

(3) 3 points

(4) 5 points

[y] Plug welding

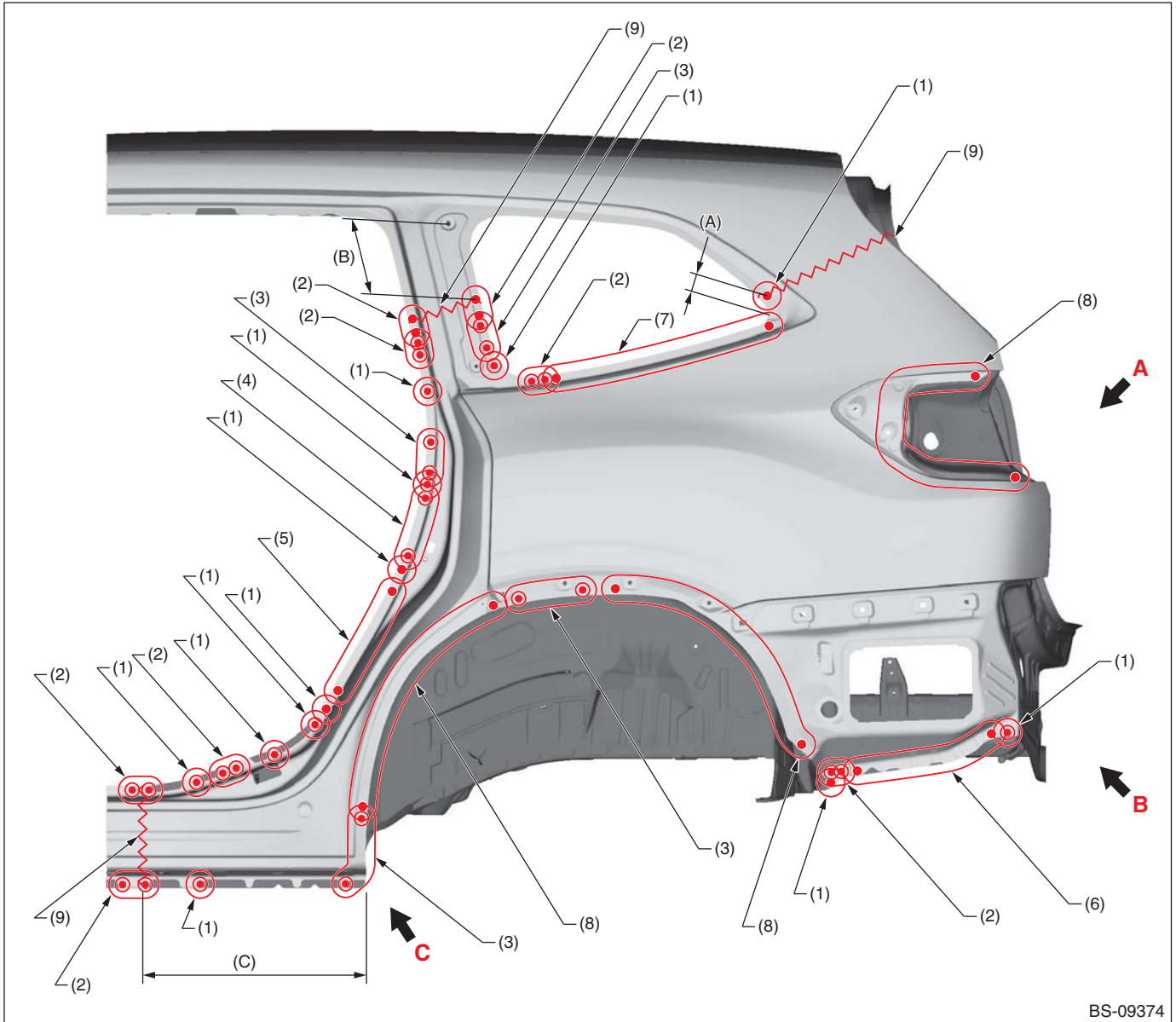
A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2
 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

8-19. Rear Quarter Panel (Partial replacement)

A: REMOVAL

• Overall view



(A) 30 mm [1.18 in]

(B) 180 mm [7.09 in]

(C) 450 mm [17.72 in]

(1) 1 point (outside · 1)

(4) 4 points (outside · 2)

(7) 8 points (outside · 1)

(2) 2 points (outside · 1)

(5) 5 points (outside · 1)

(8) 9 points (outside · 1)

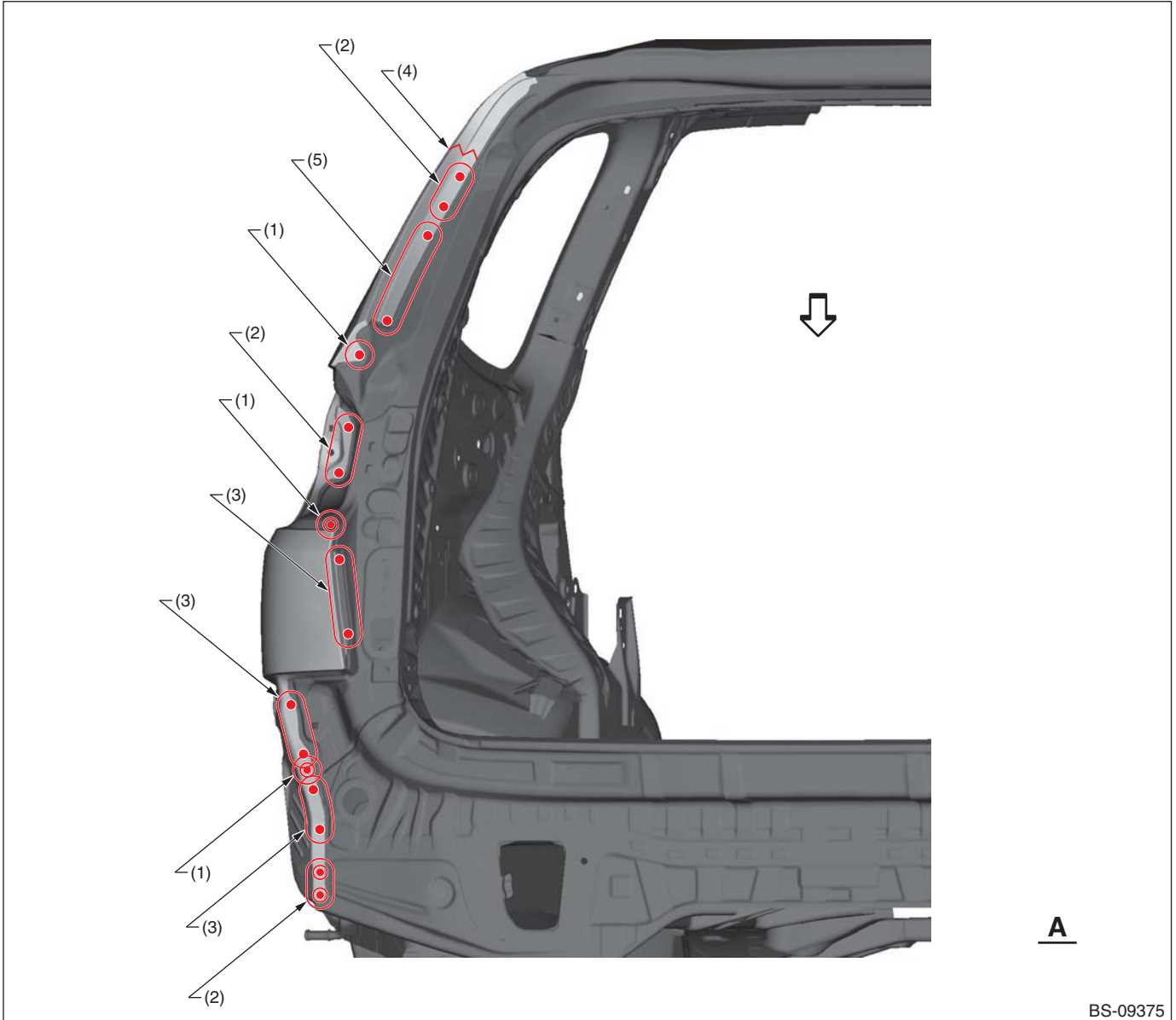
(3) 3 points (outside · 1)

(6) 7 points (outside · 1)

(9) Cut position

Panel Replacement

• Views A



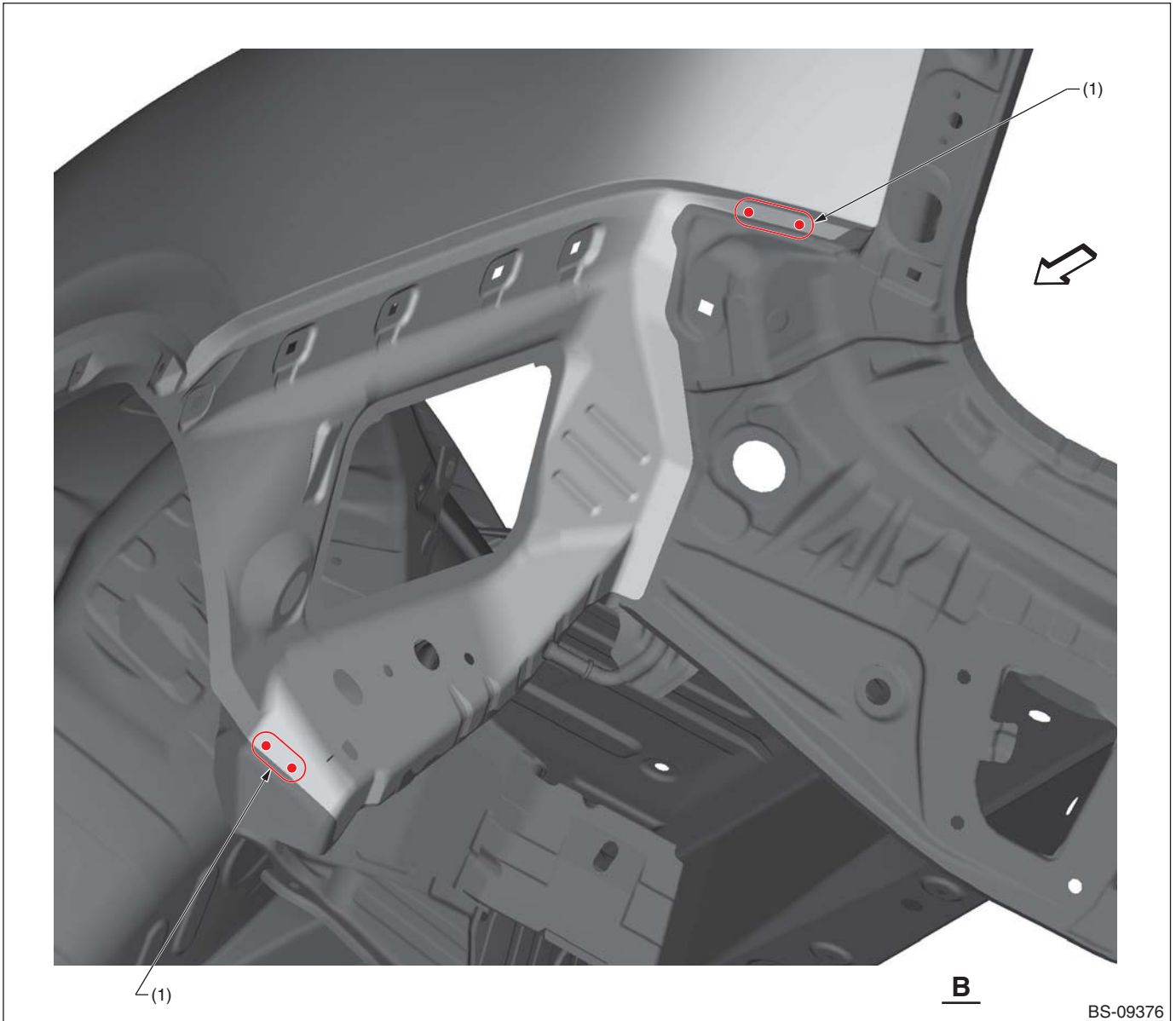
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

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

(5) 4 points (outside · 1)

Panel Replacement

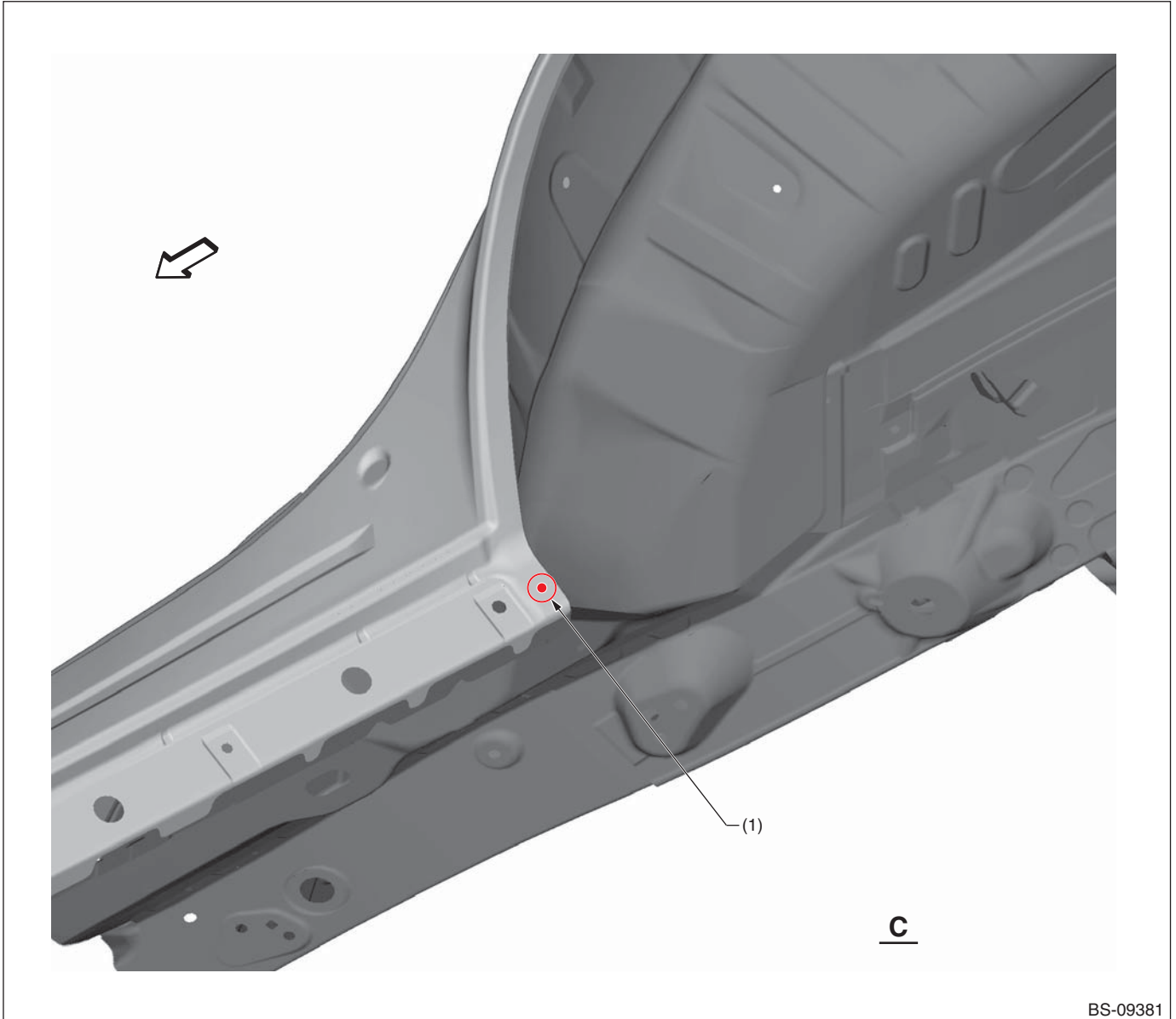
• Views B



(1) 2 points (outside · 1)

Panel Replacement

- Views C

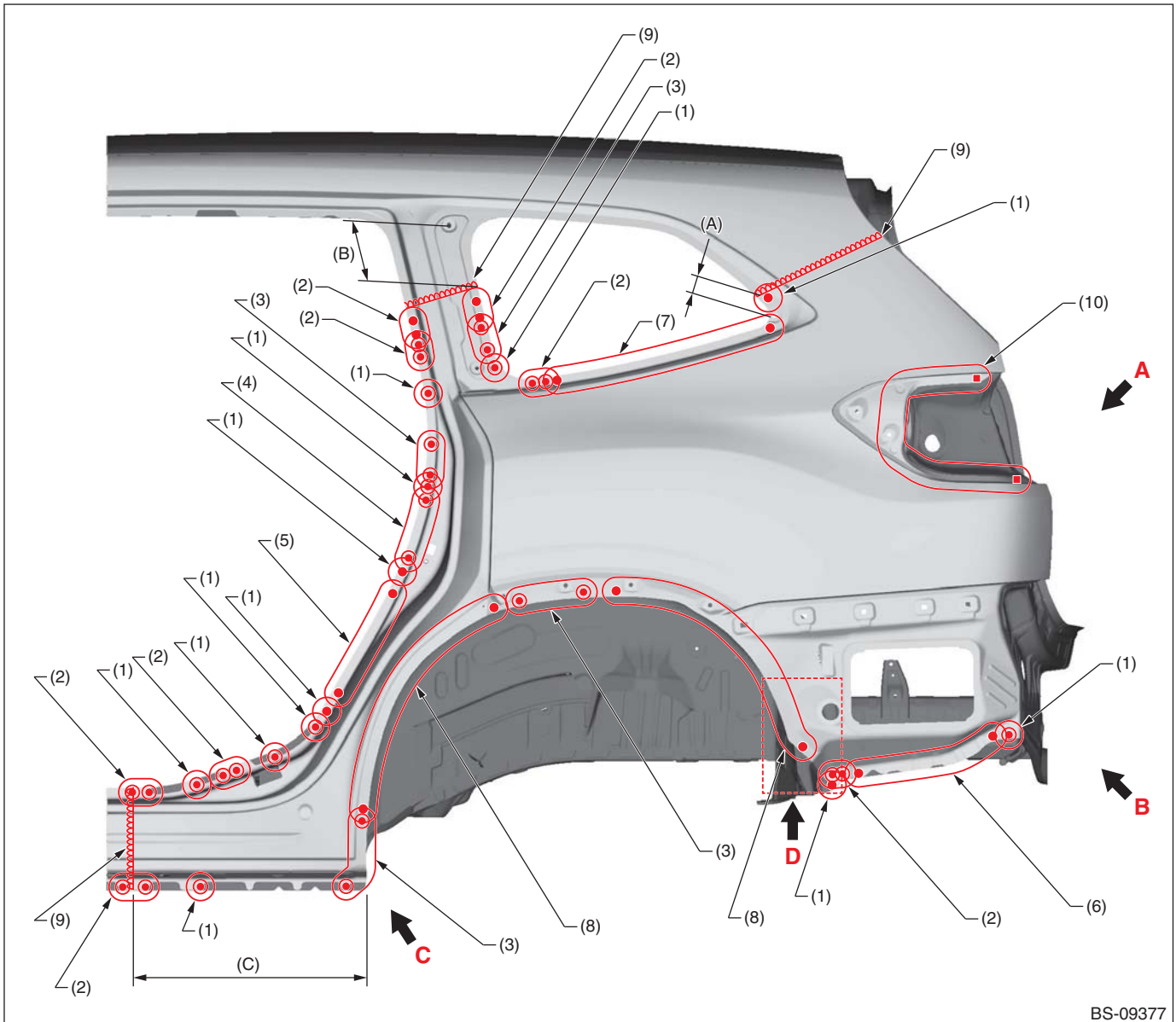


(1) 1 point (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09377

(A) 50 mm [1.97 in]

(B) 160 mm [6.30 in]

(C) 47 mm [1.85 in]

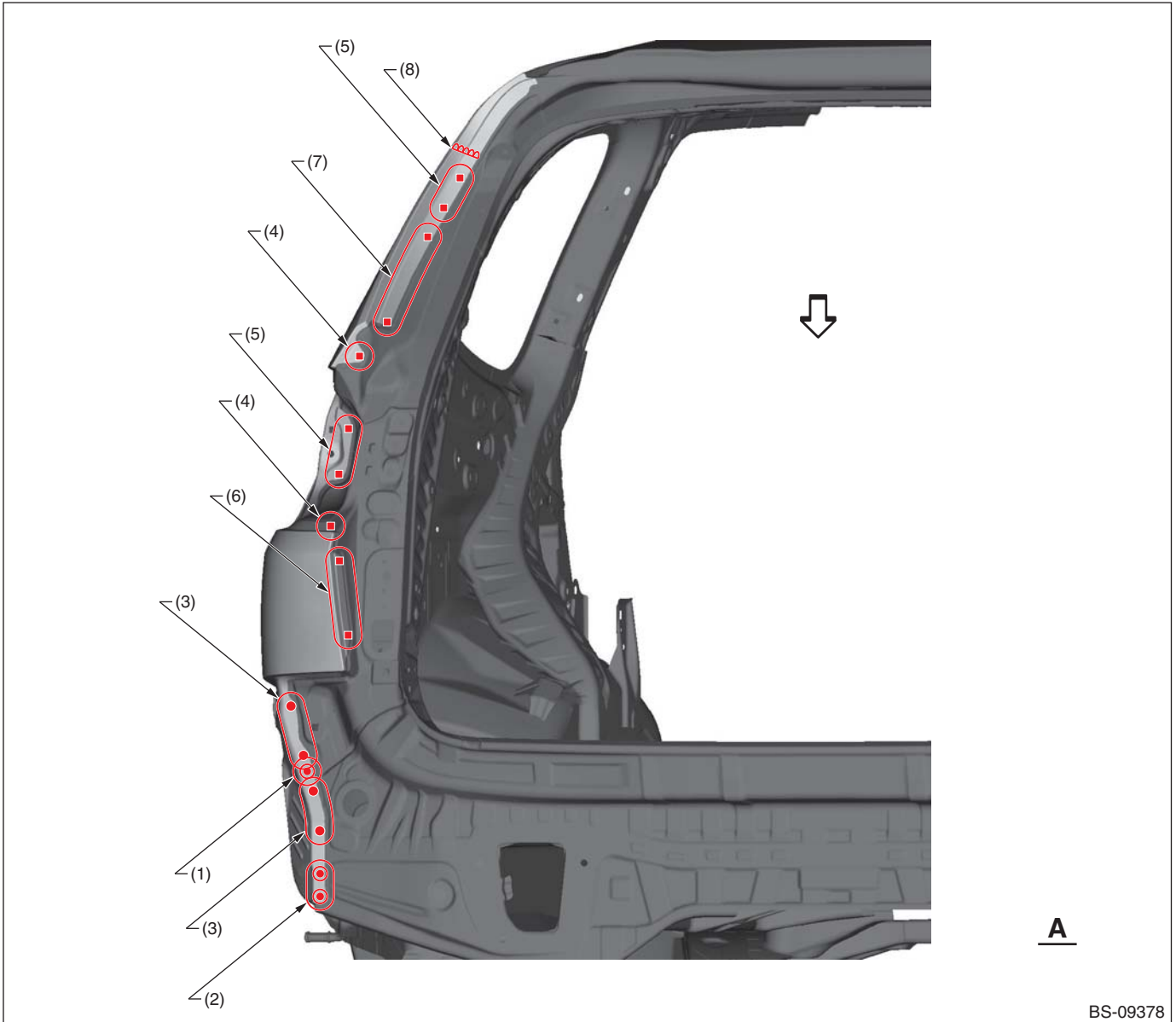
- (1) 1 point
- (2) 2 points
- (3) 3 points
- (4) 4 points

- (5) 5 points
- (6) 7 points
- (7) 8 points
- (8) 9 points

- (9) 1 point (Continuous welding)
- (10) 9 points (service)

Panel Replacement

• Views A



BS-09378

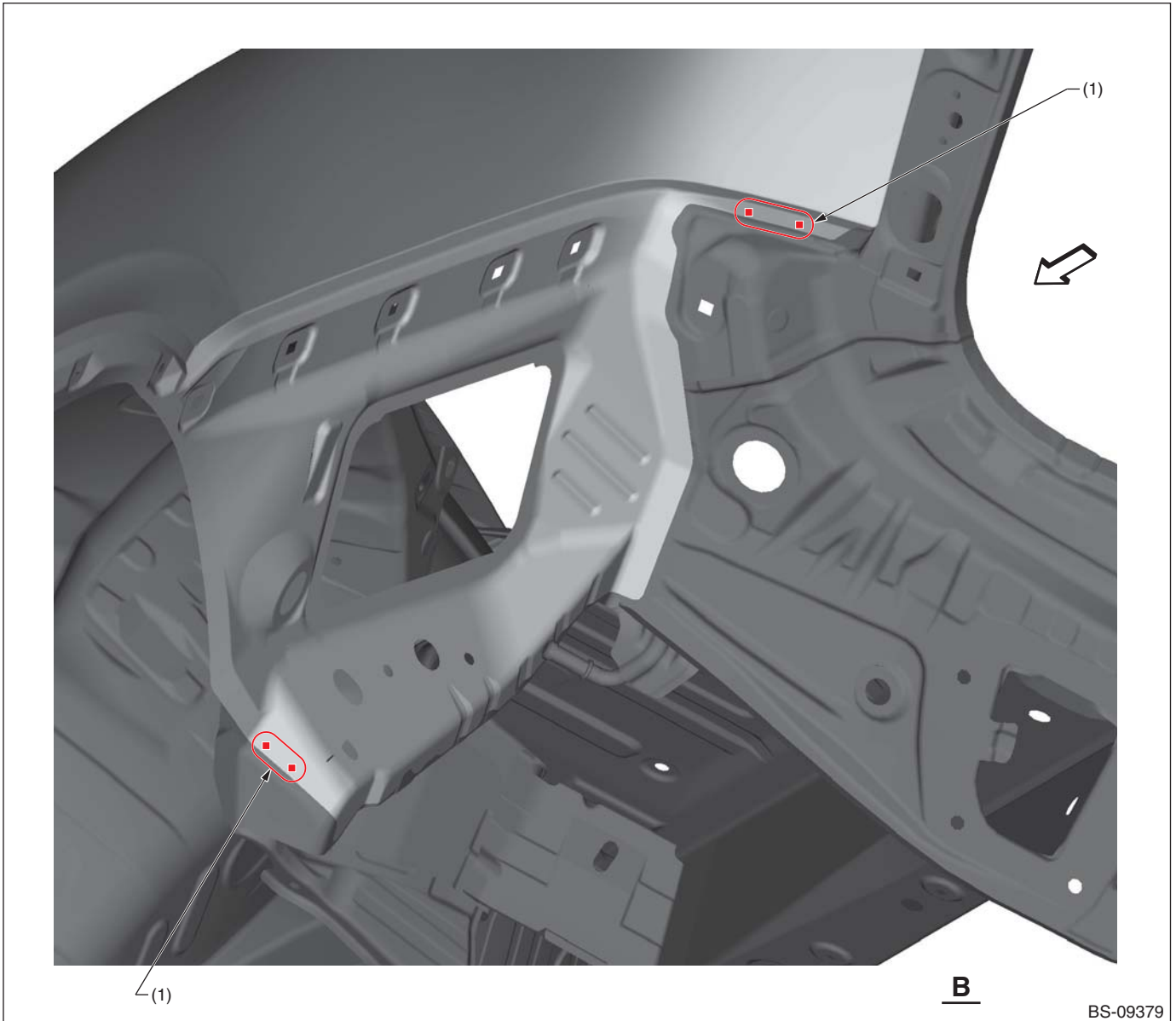
- (1) 1 point
- (2) 2 points
- (3) 3 points

- (4) 1 point (service)
- (5) 2 points (service)
- (6) 3 points (service)

- (7) 4 points (service)
- (8) 1 point (Continuous welding)

Panel Replacement

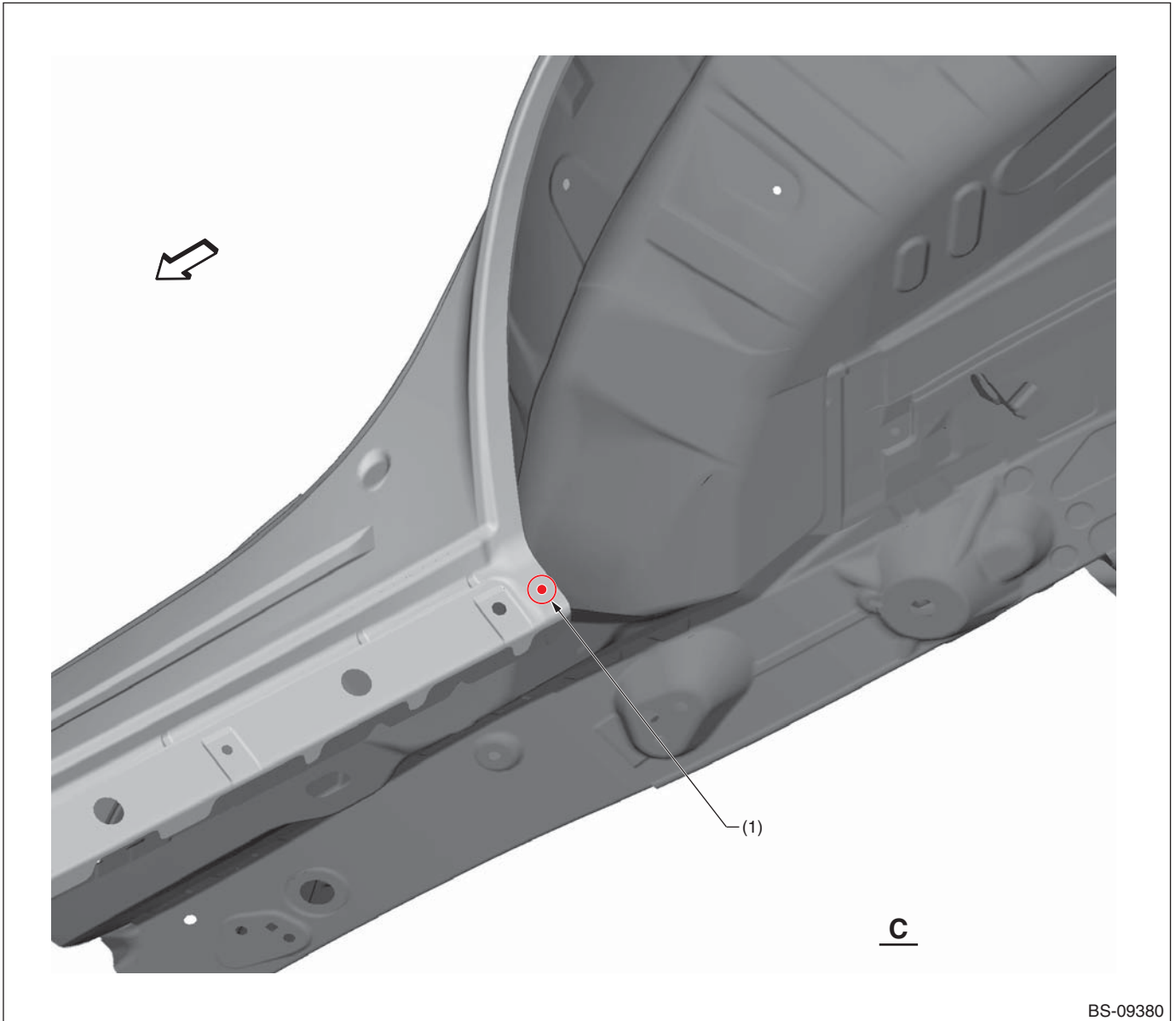
• Views B



(1) 2 points (service)

Panel Replacement

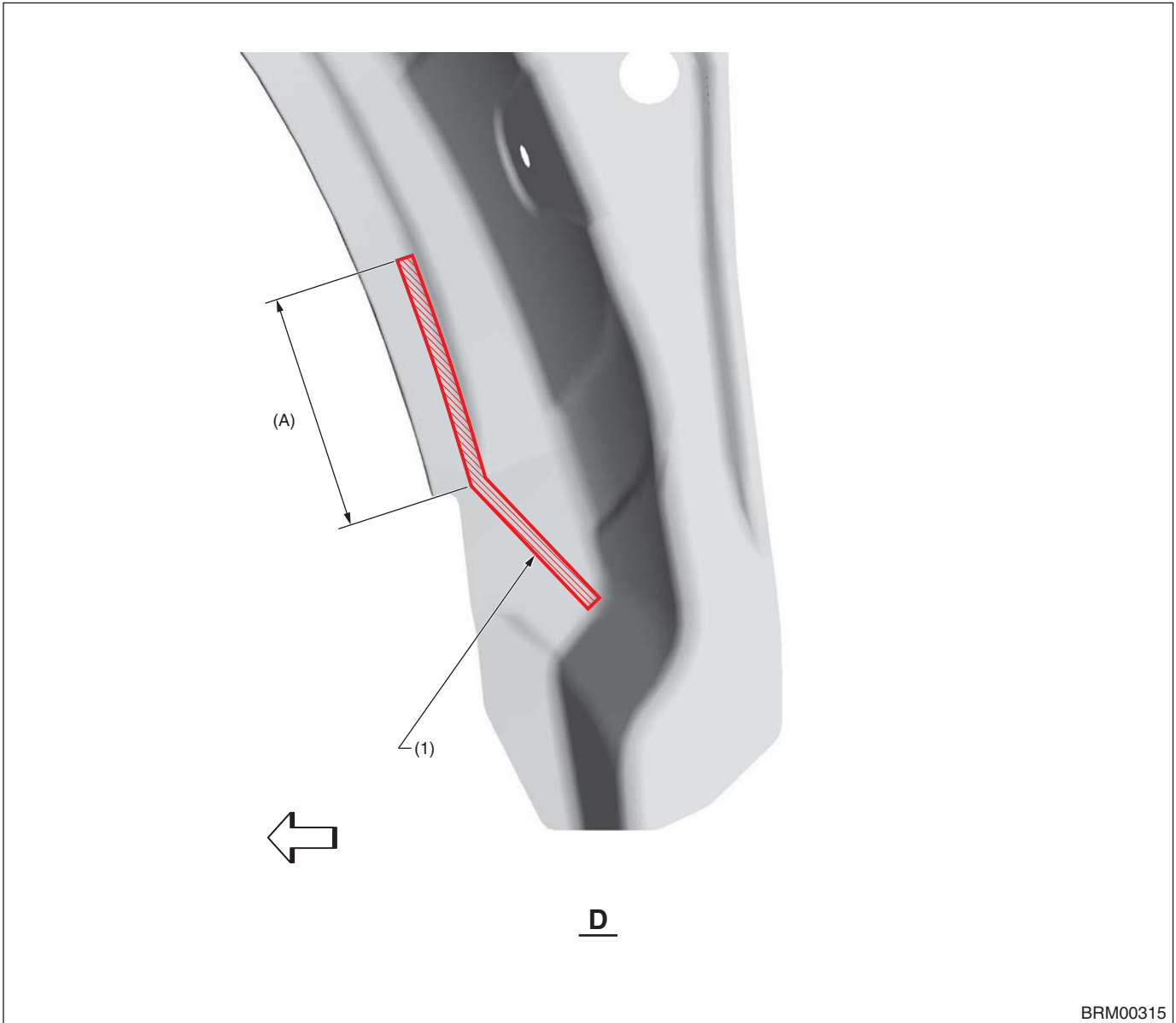
- Views C



(1) 1 point


Panel Replacement

• Views D



(A) 80 mm [3.15 in]

(1) Spotting sealer

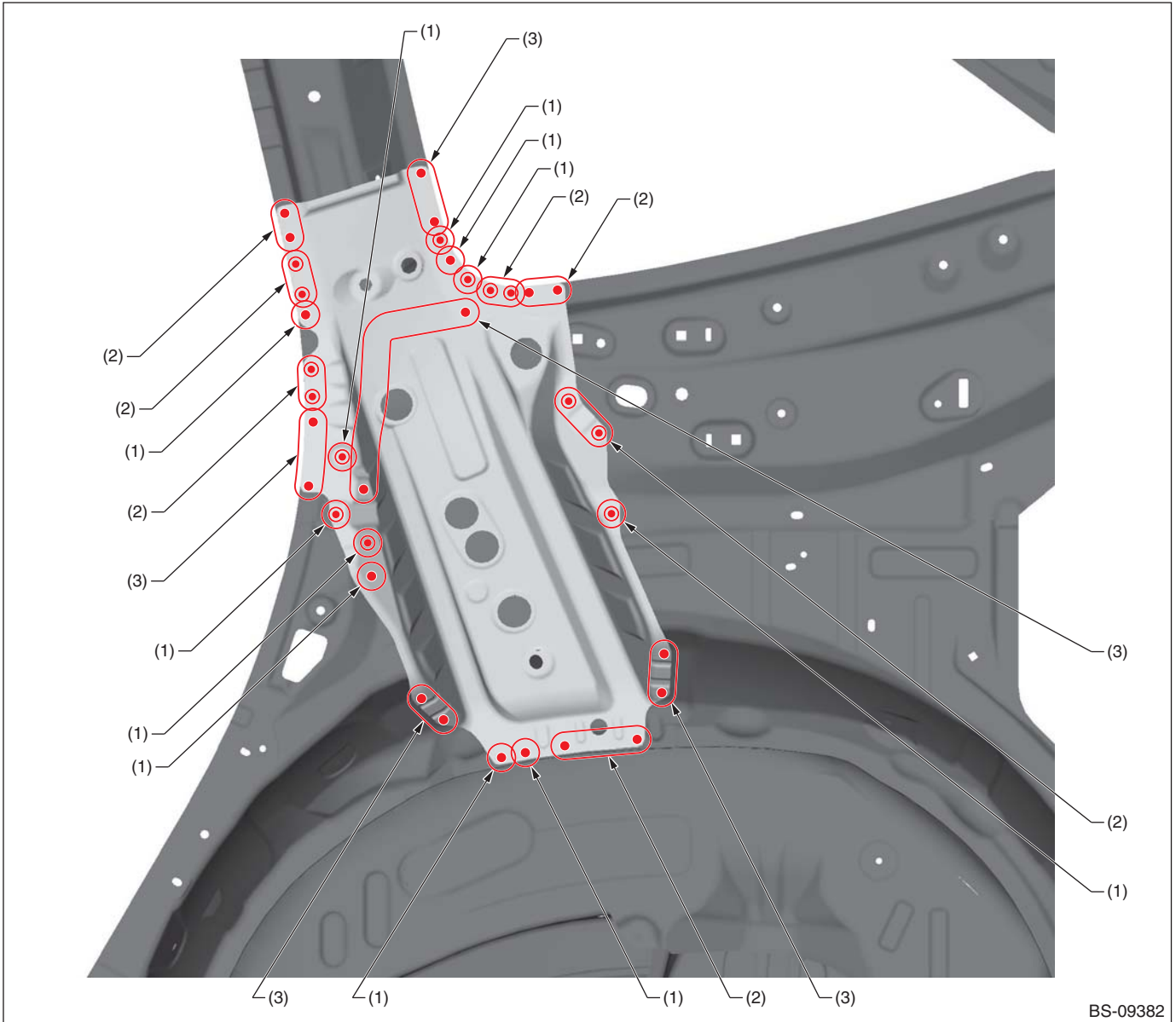
 : Spotting sealer application location (Spotting sealer or sealing [Three Bond 4101 (004403063)])
Note: Fill spotting sealer between the panel side out and arch rear inner.

Panel Replacement

8-20. Rear Pillar Reinforcement Outer (Total replacement)

A: REMOVAL

• Overall view



(1) 1 point (outside · 1)

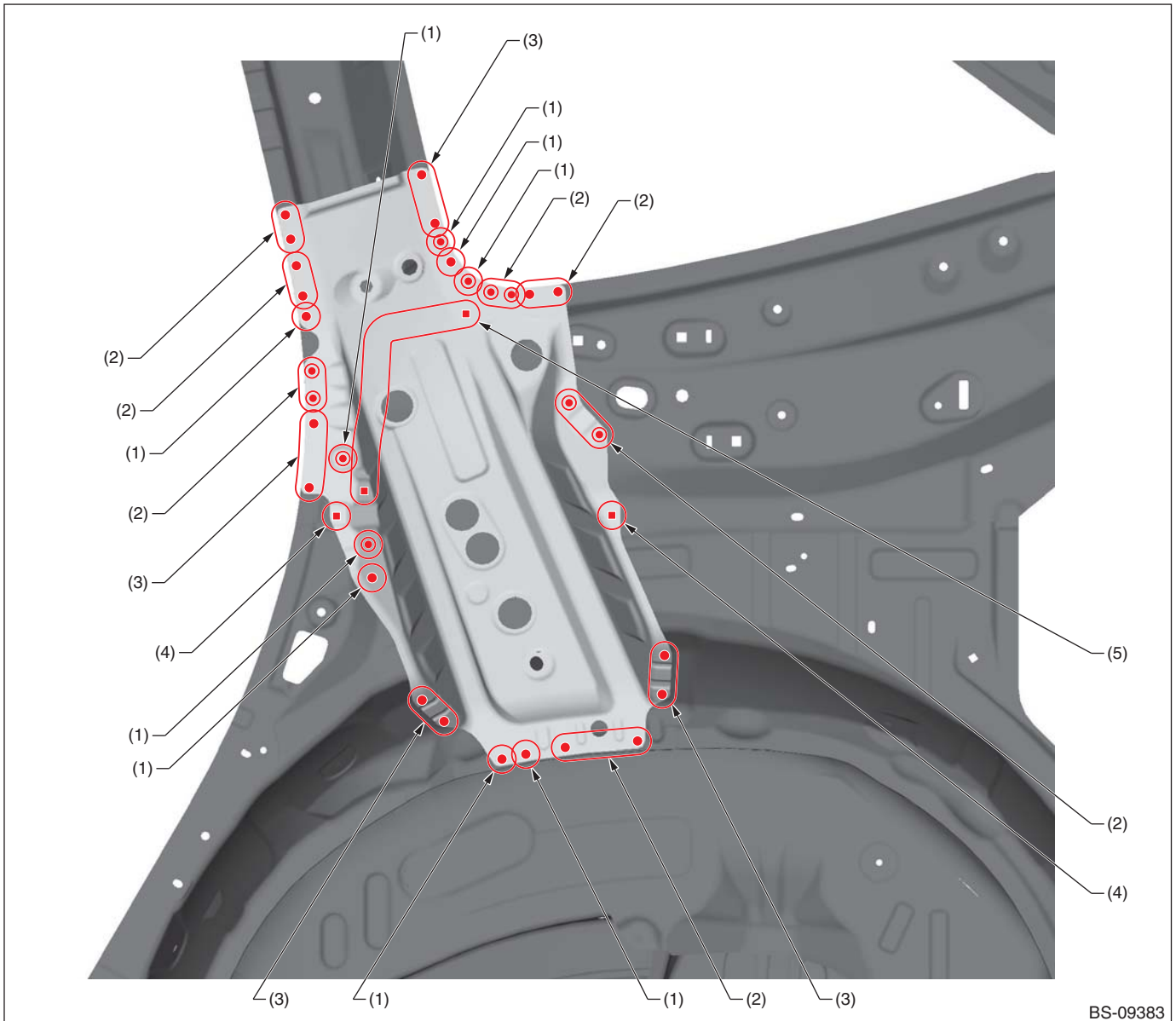
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09383

(1) 1 point
(2) 2 points

(3) 3 points
(4) 1 point (service)

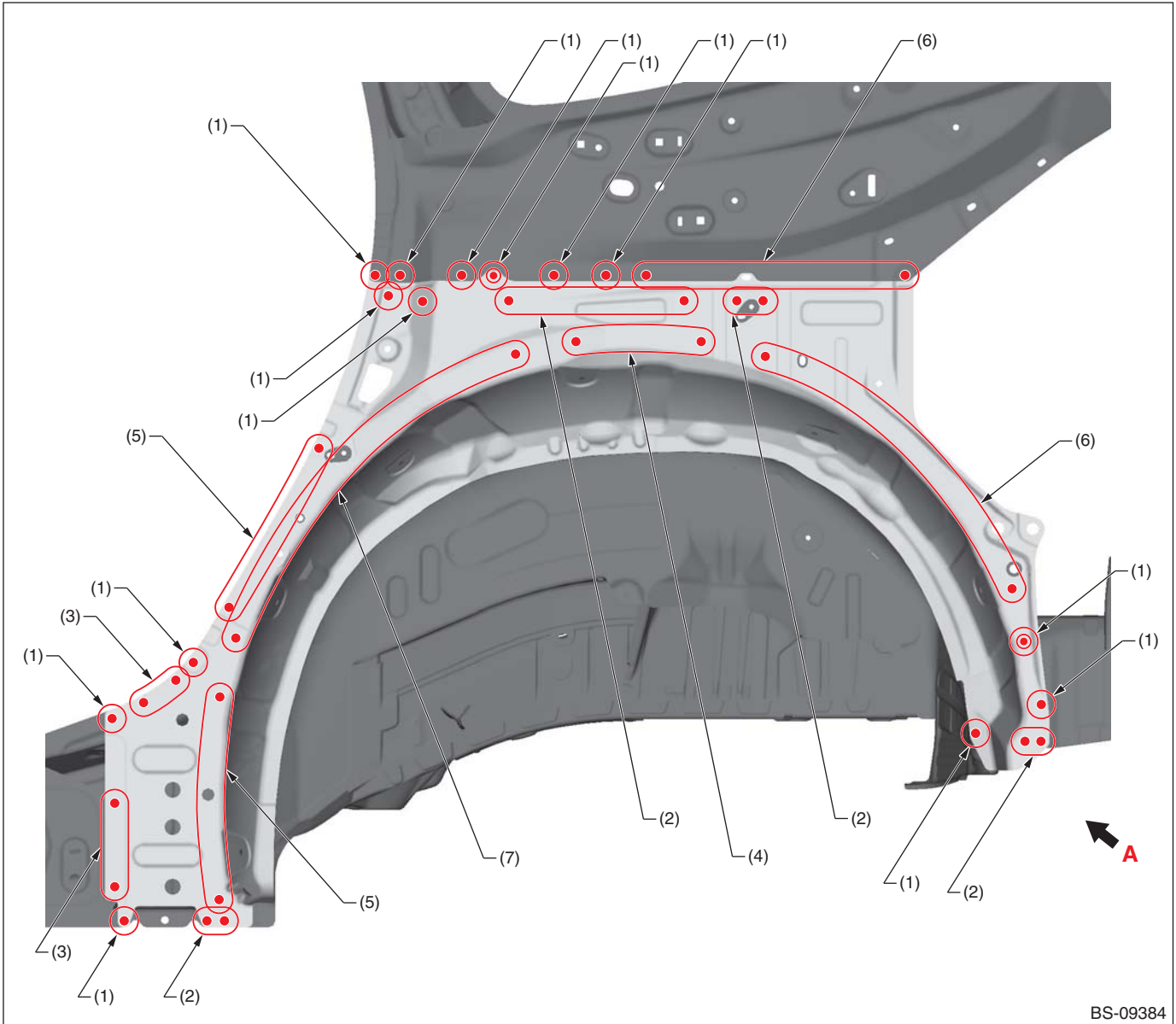
(5) 3 points (service)

Panel Replacement

8-21. Arch Rear Inner LH (Total replacement)

A: REMOVAL

• Overall view



BS-09384

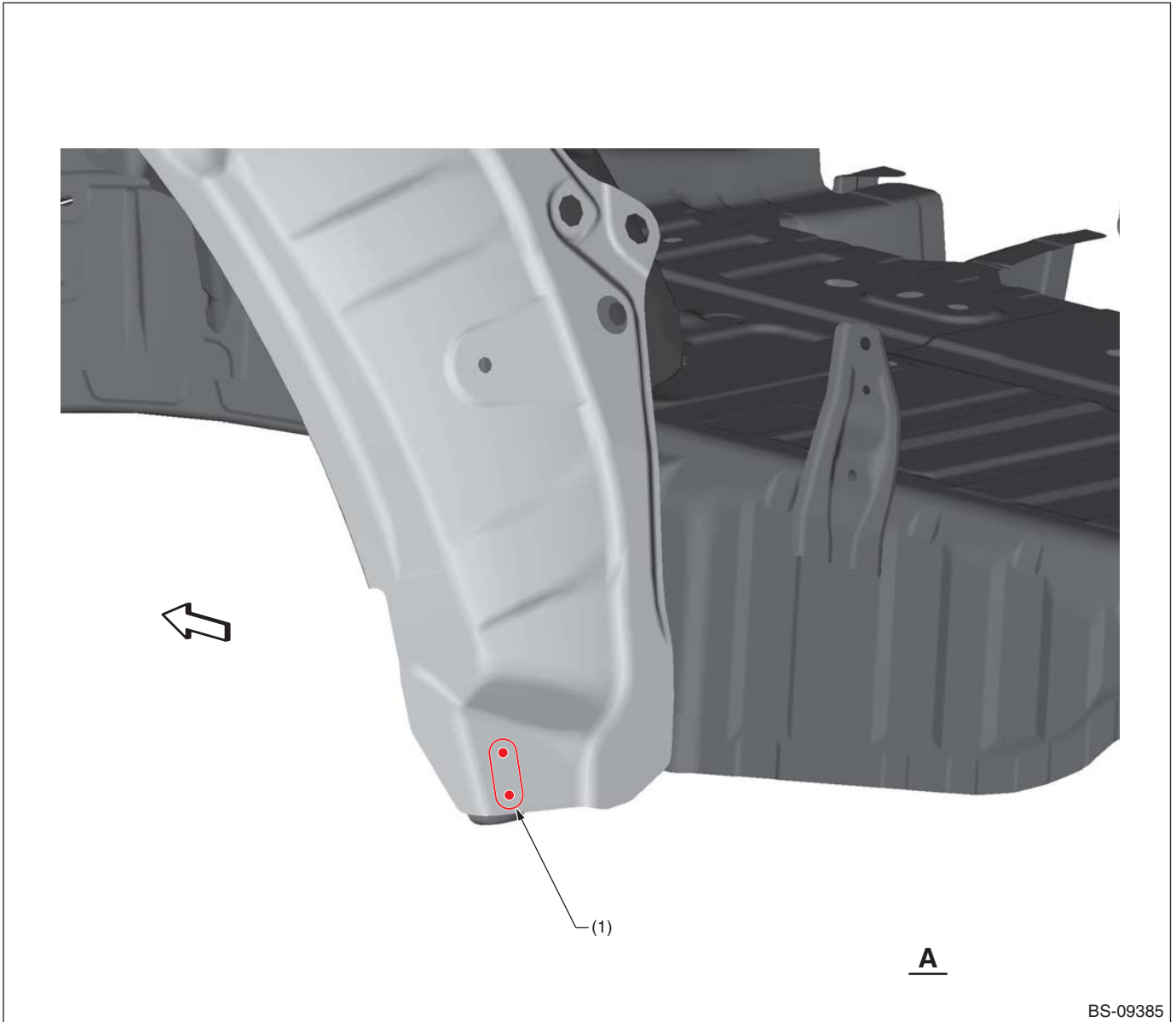
- (1) 1 point (outside · 1)
- (2) 2 points (outside · 1)
- (3) 3 points (outside · 1)

- (4) 4 points (outside · 1)
- (5) 5 points (outside · 1)
- (6) 6 points (outside · 1)

- (7) 8 points (outside · 1)

Panel Replacement

- Views A

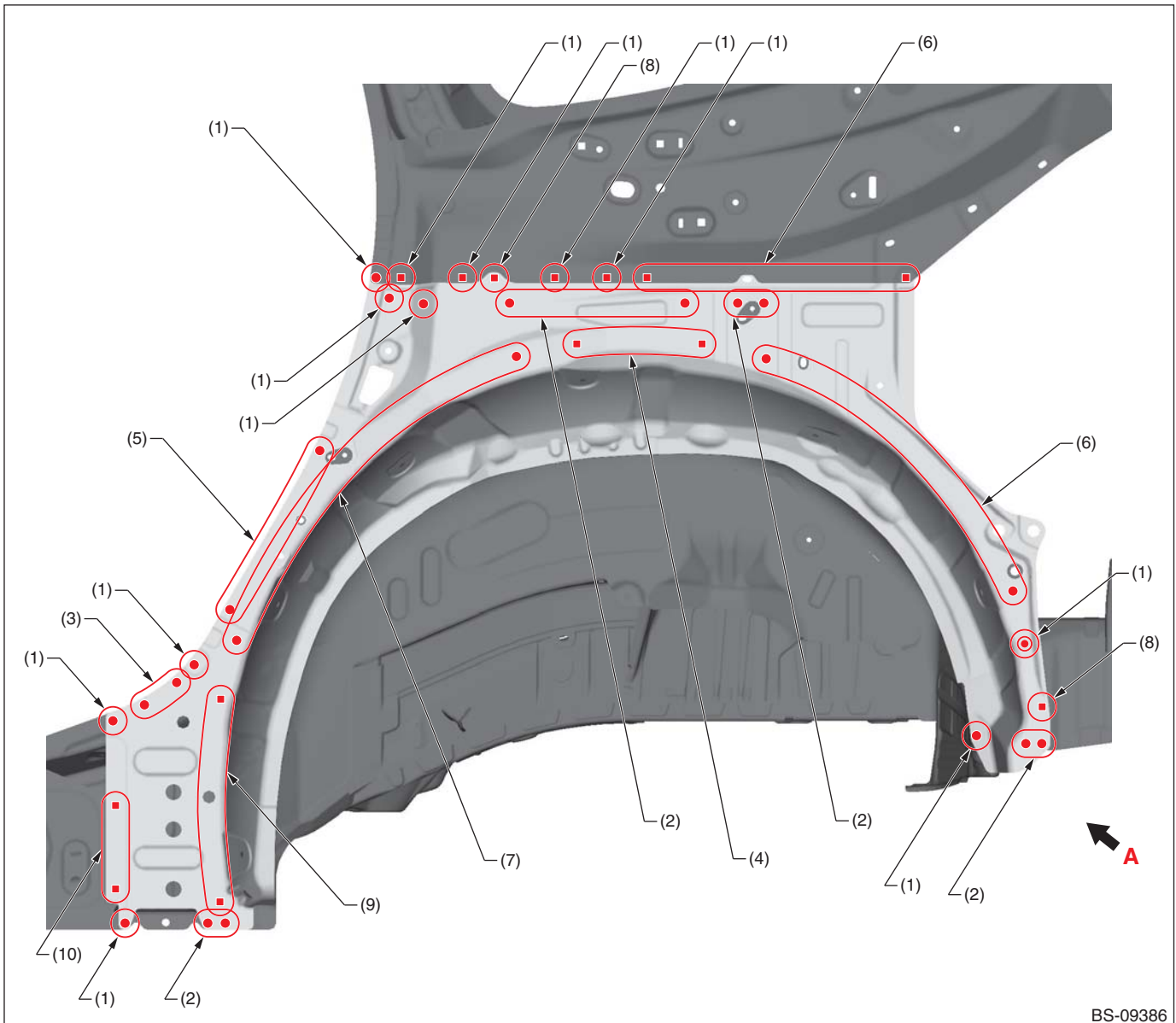


(1) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view

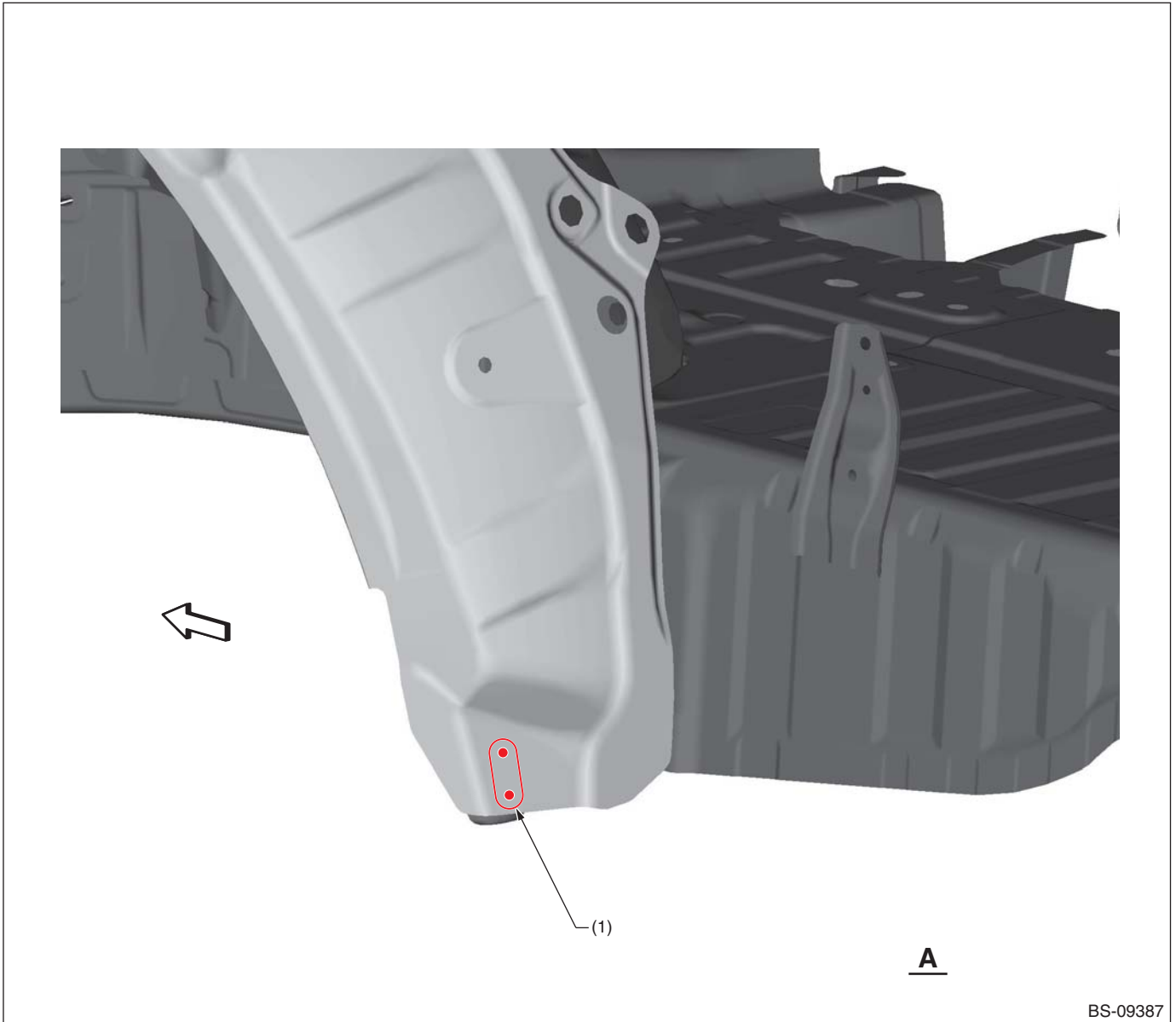


BS-09386

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

Panel Replacement

- Views A



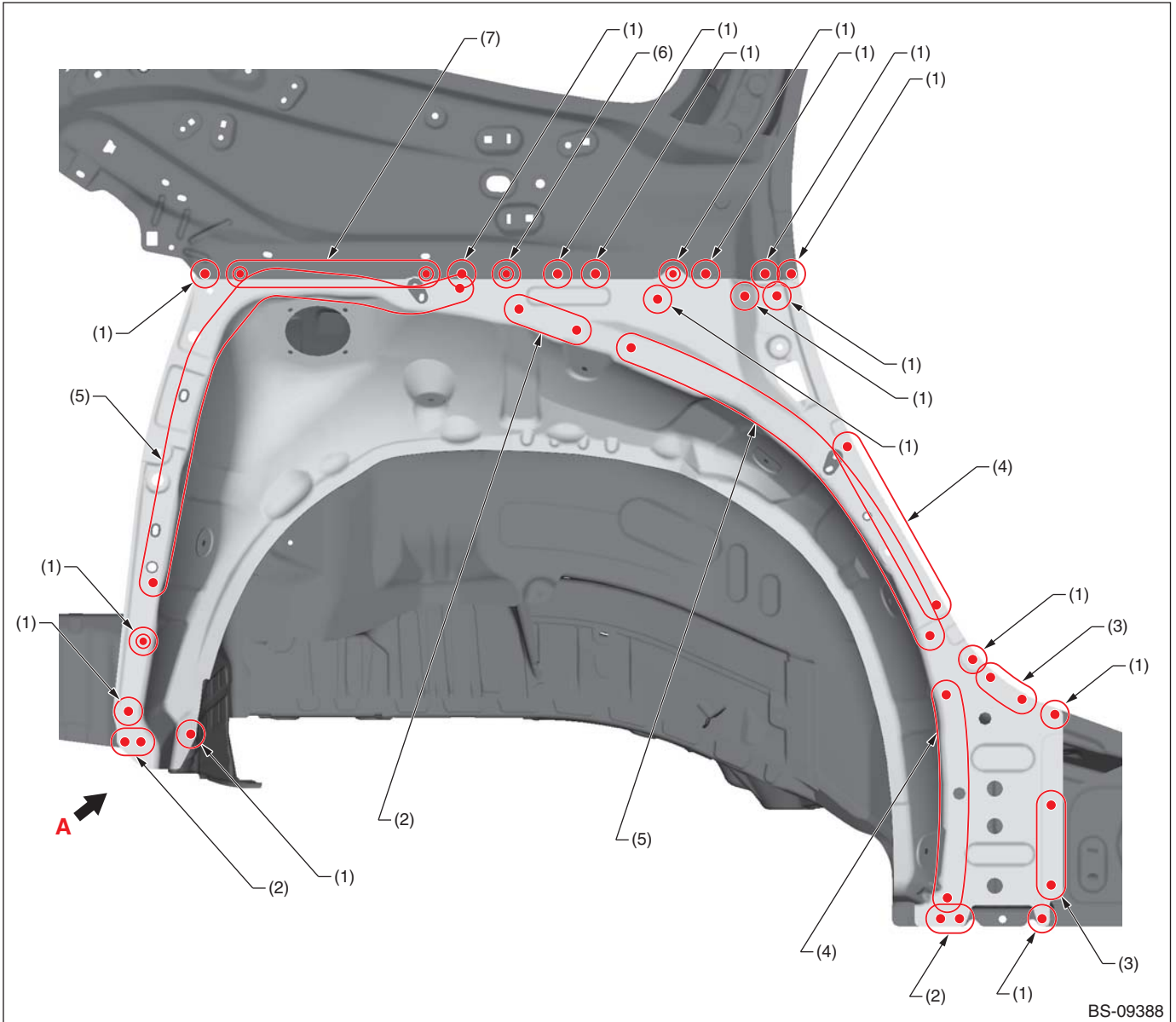
(1) 2 points

Panel Replacement

8-22. Arch Rear Inner RH (Total replacement)

A: REMOVAL

• Overall view



BS-09388

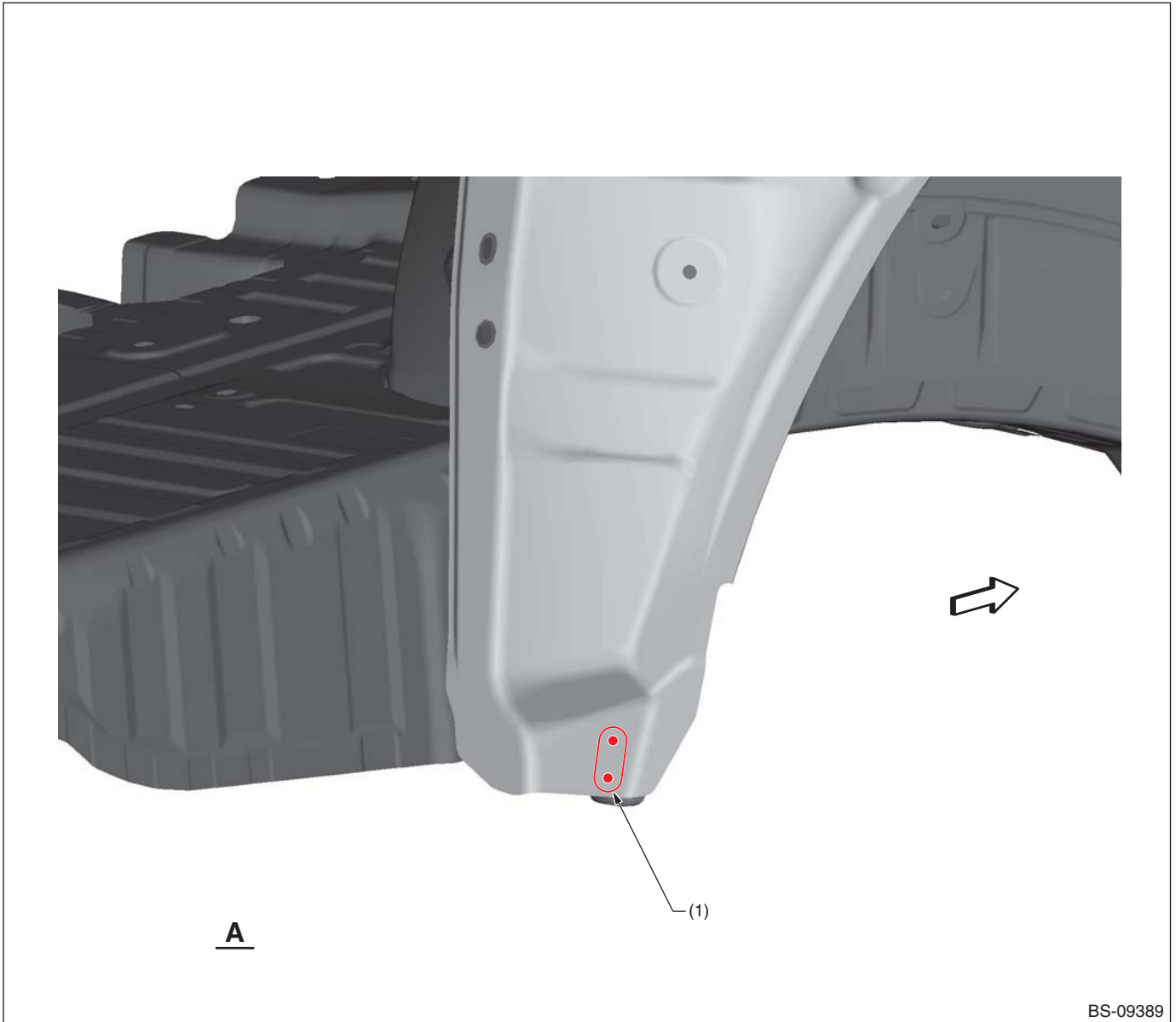
- (1) 1 point (outside · 1)
- (2) 2 points (outside · 1)
- (3) 3 points (outside · 1)

- (4) 5 points (outside · 1)
- (5) 8 points (outside · 1)
- (6) 1 point (outside · 2)

- (7) 5 points (outside · 2)

Panel Replacement

• Views A

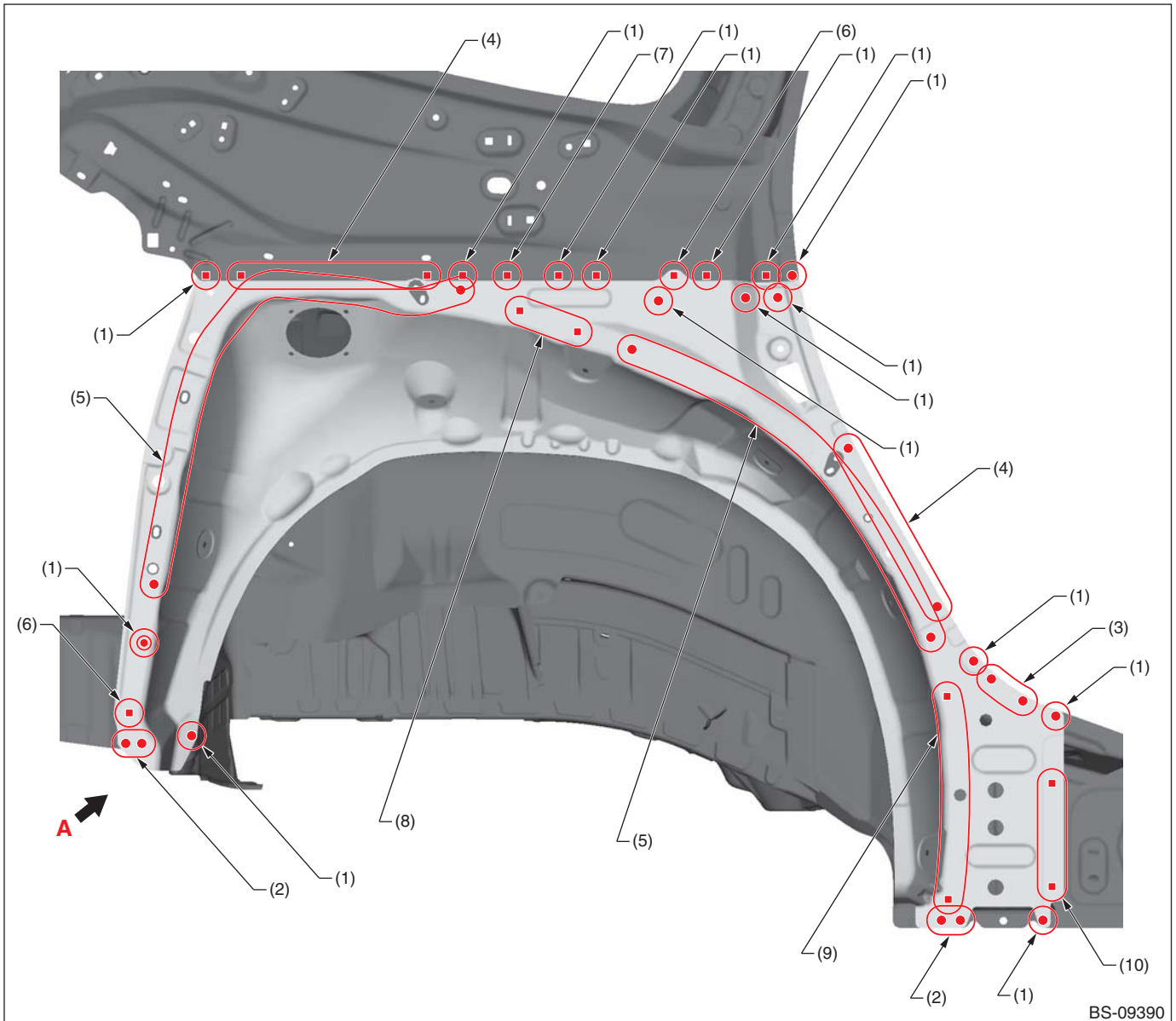


(1) 2 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



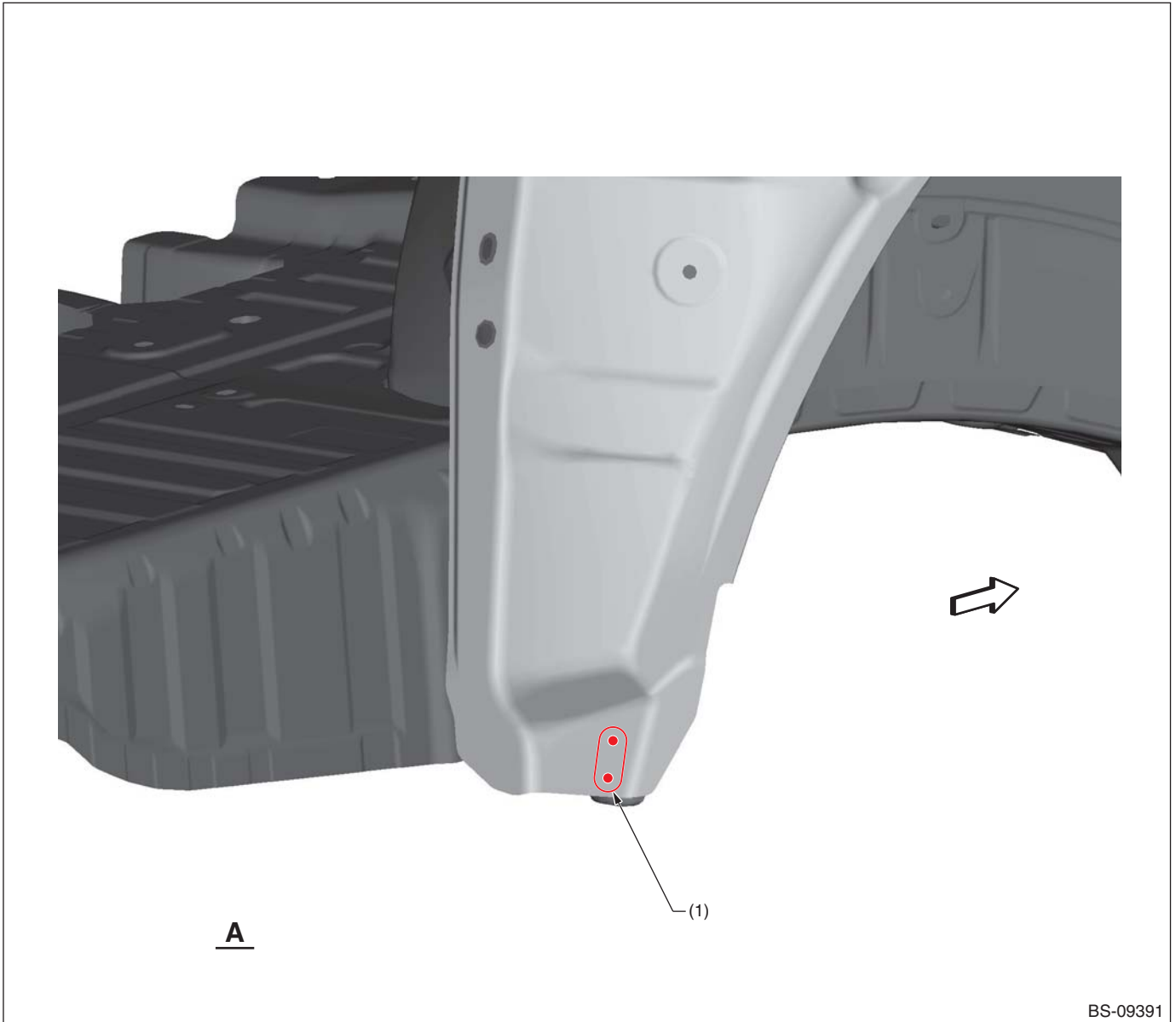
- (1) 1 point
- (2) 2 points
- (3) 3 points
- (4) 5 points

- (5) 8 points
- (6) 1 point (service)
- (7) 1 point (service · matching)
- (8) 2 points (service)

- (9) 5 points (service)
- (10) 3 points (service)

Panel Replacement

- Views A



BS-09391

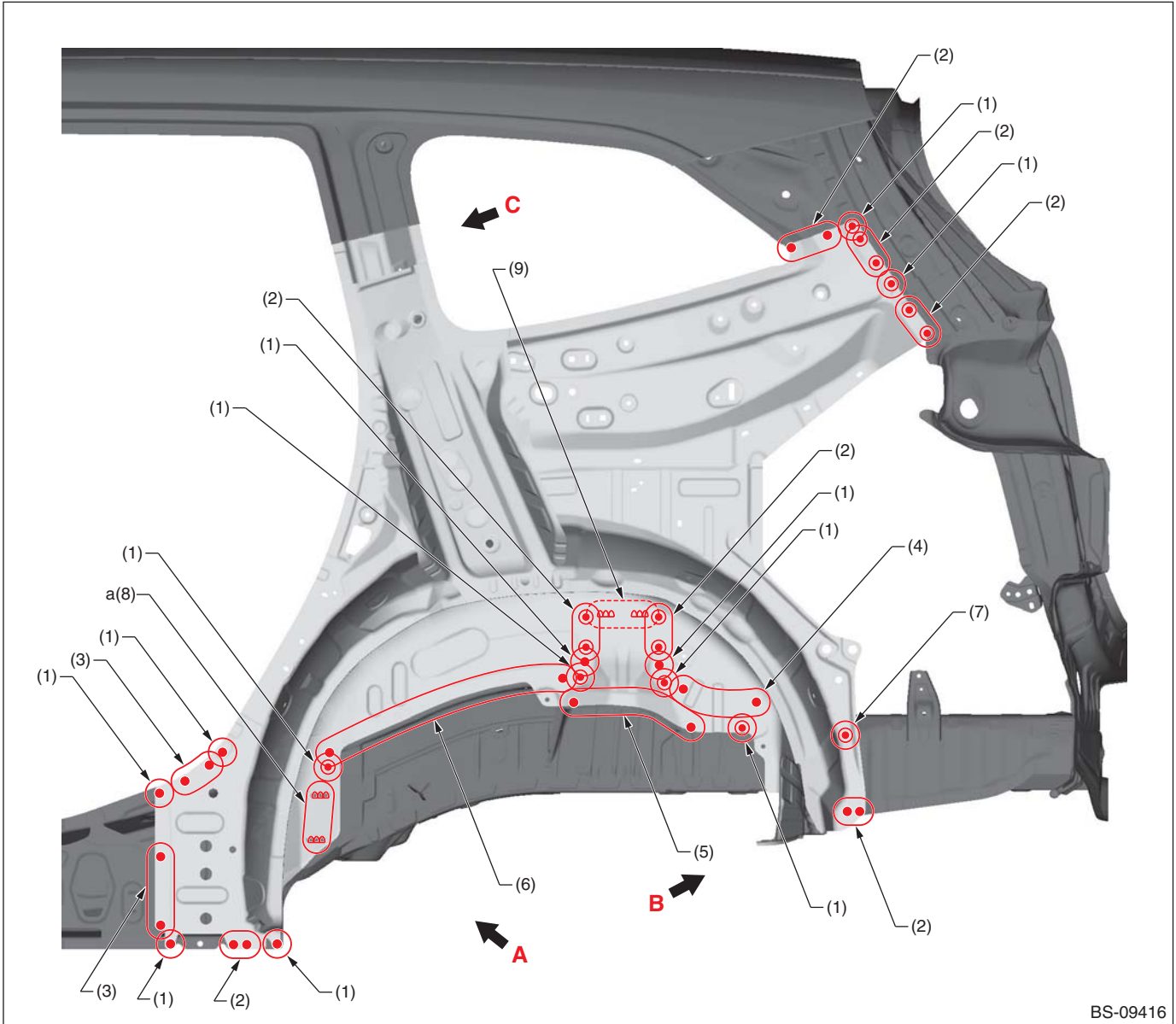
(1) 2 points

Panel Replacement

8-23. Rear Quarter Inner LH (Partial replacement)

A: REMOVAL

• Overall view

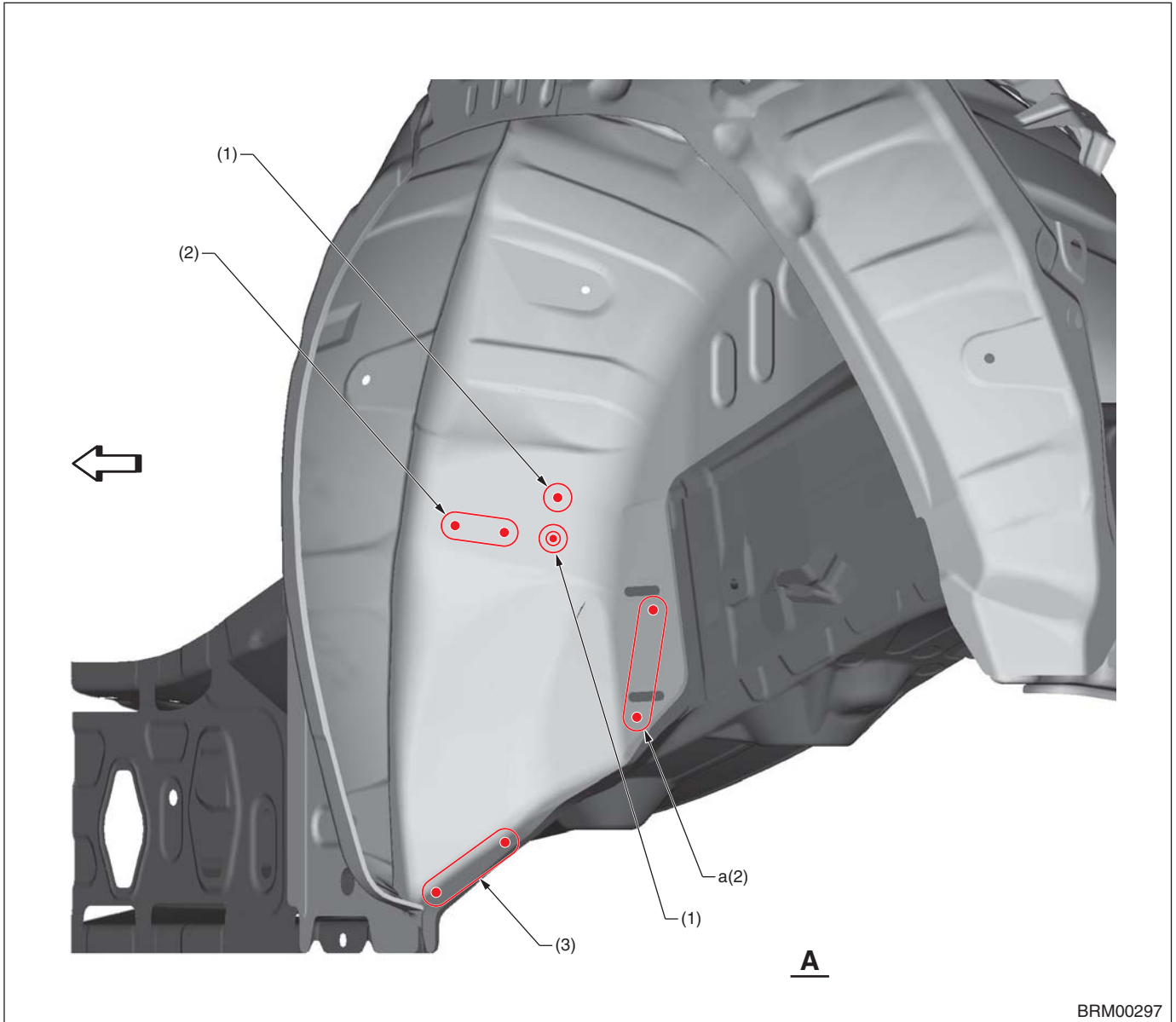


- | | | |
|----------------------------|----------------------------|--|
| (1) 1 point (outside · 1) | (4) 4 points (outside · 1) | (7) 1 point (outside · 2) |
| (2) 2 points (outside · 1) | (5) 6 points (outside · 1) | (8) 2 points (outside · 1 belt sander) |
| (3) 3 points (outside · 1) | (6) 9 points (outside · 1) | (9) 2 points (inside · 1 belt sander) |

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views A



BRM00297

(1) 1 point (outside · 1)

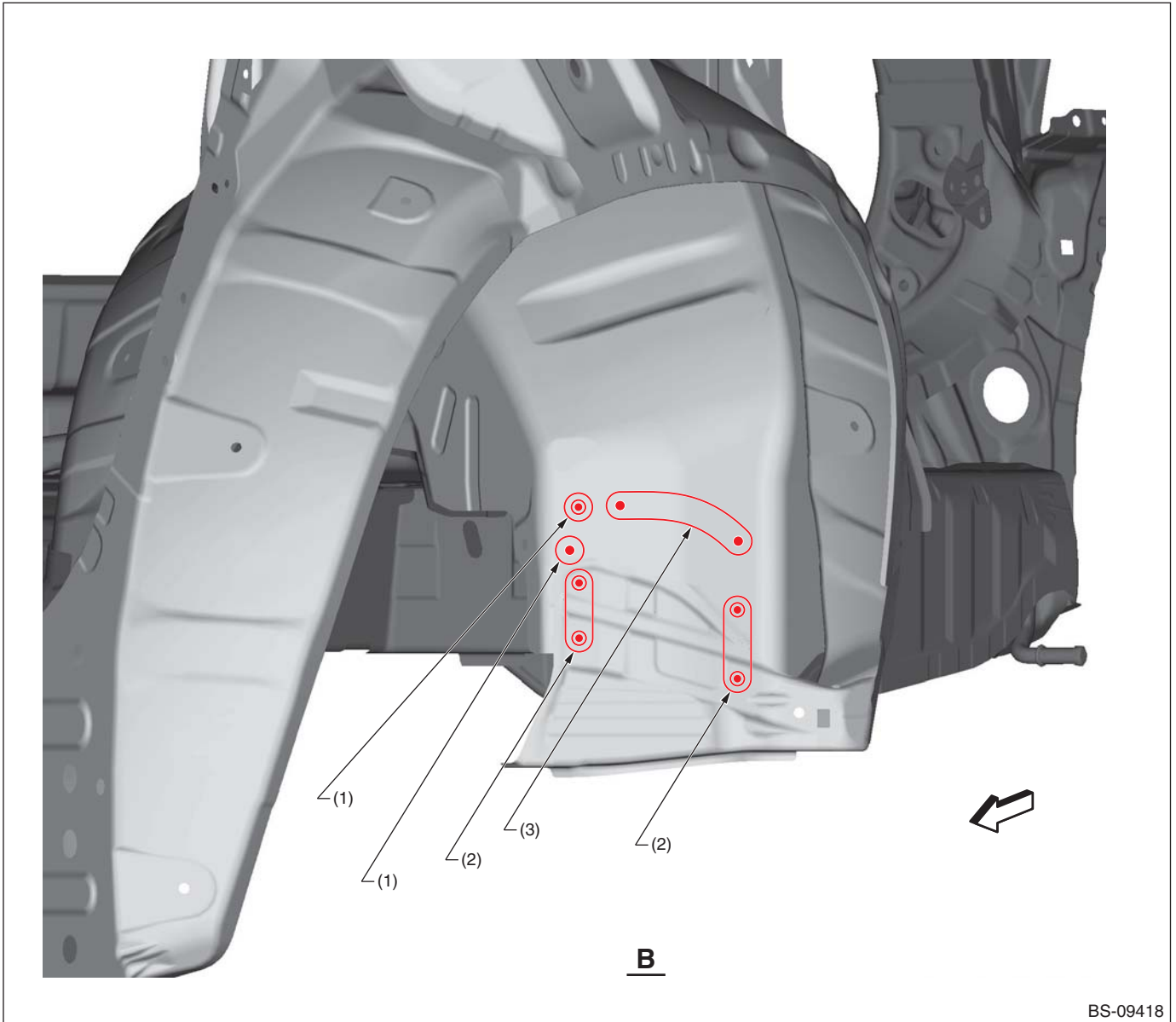
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views B



BS-09418

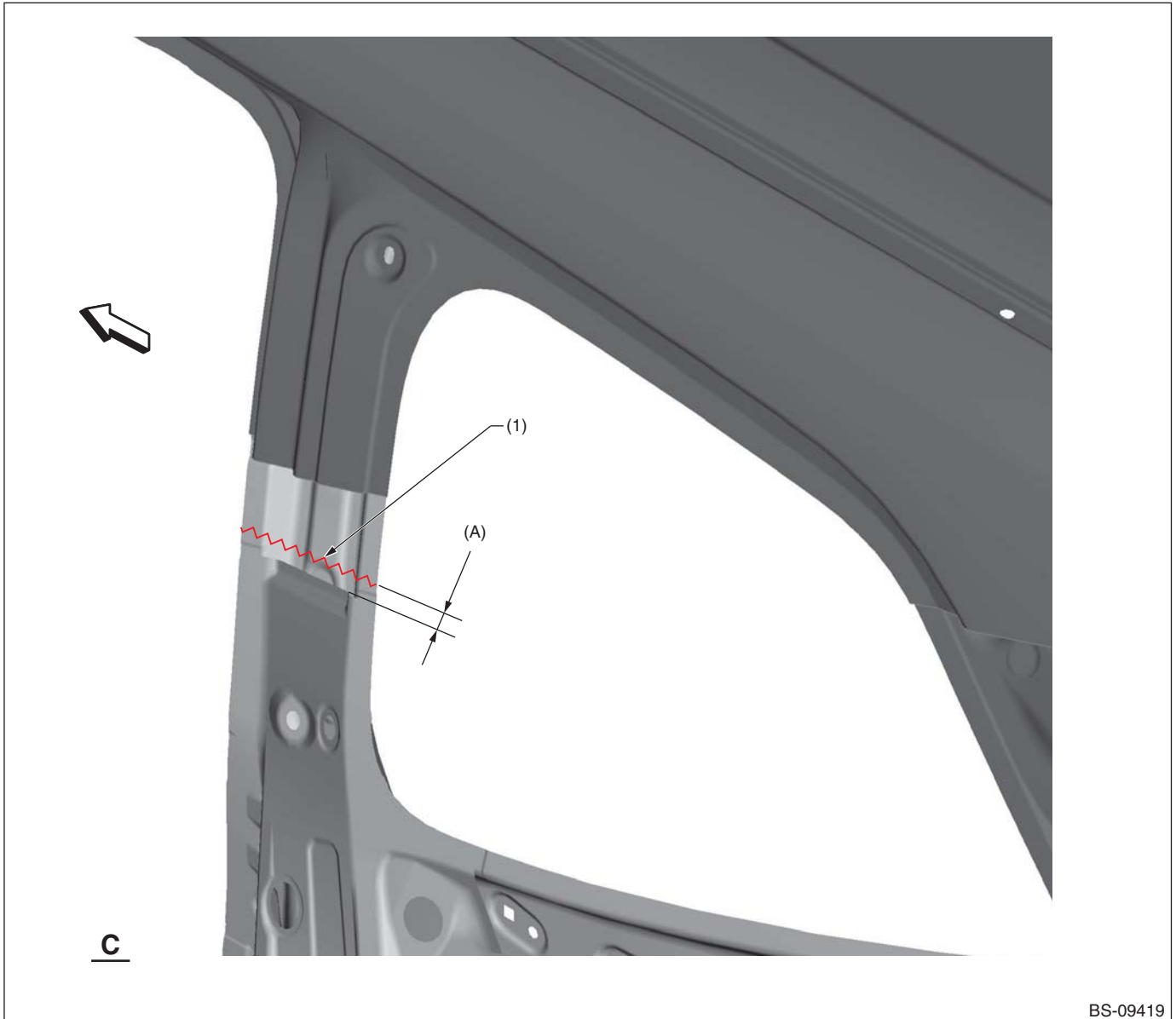
(1) 1 point (outside · 1)

(2) 2 points (outside · 2)

(3) 4 points (outside · 1)

Panel Replacement

• Views C



BS-09419

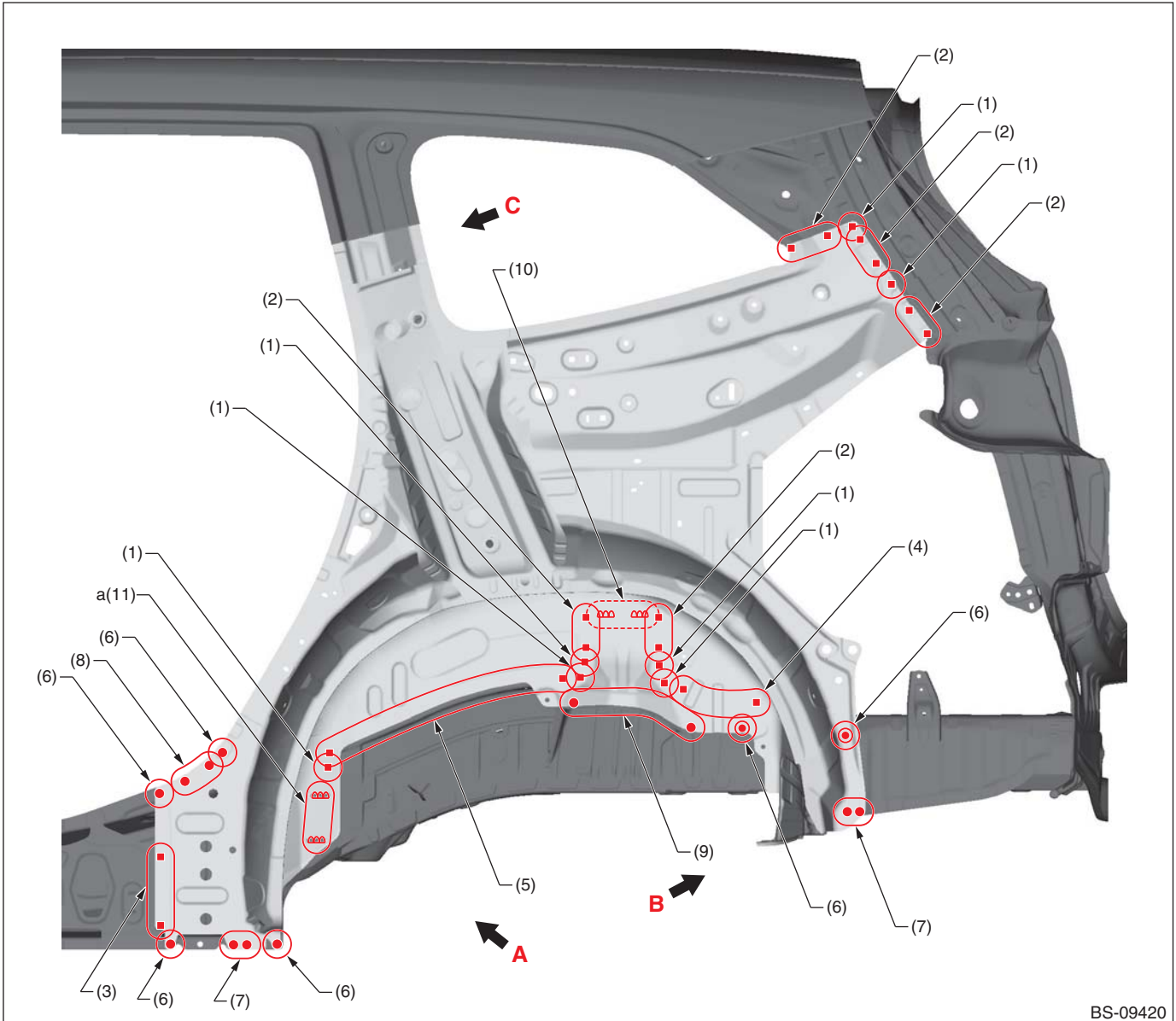
(A) 10 mm [0.39 in]

(1) Cut position

Panel Replacement

B: INSTALLATION

• Overall view



BS-09420

(1) 1 point (service)

(2) 2 points (service)

(3) 3 points (service)

(4) 4 points (service)

(5) 9 points (service)

(6) 1 point

(7) 2 points

(8) 3 points

(9) 6 points

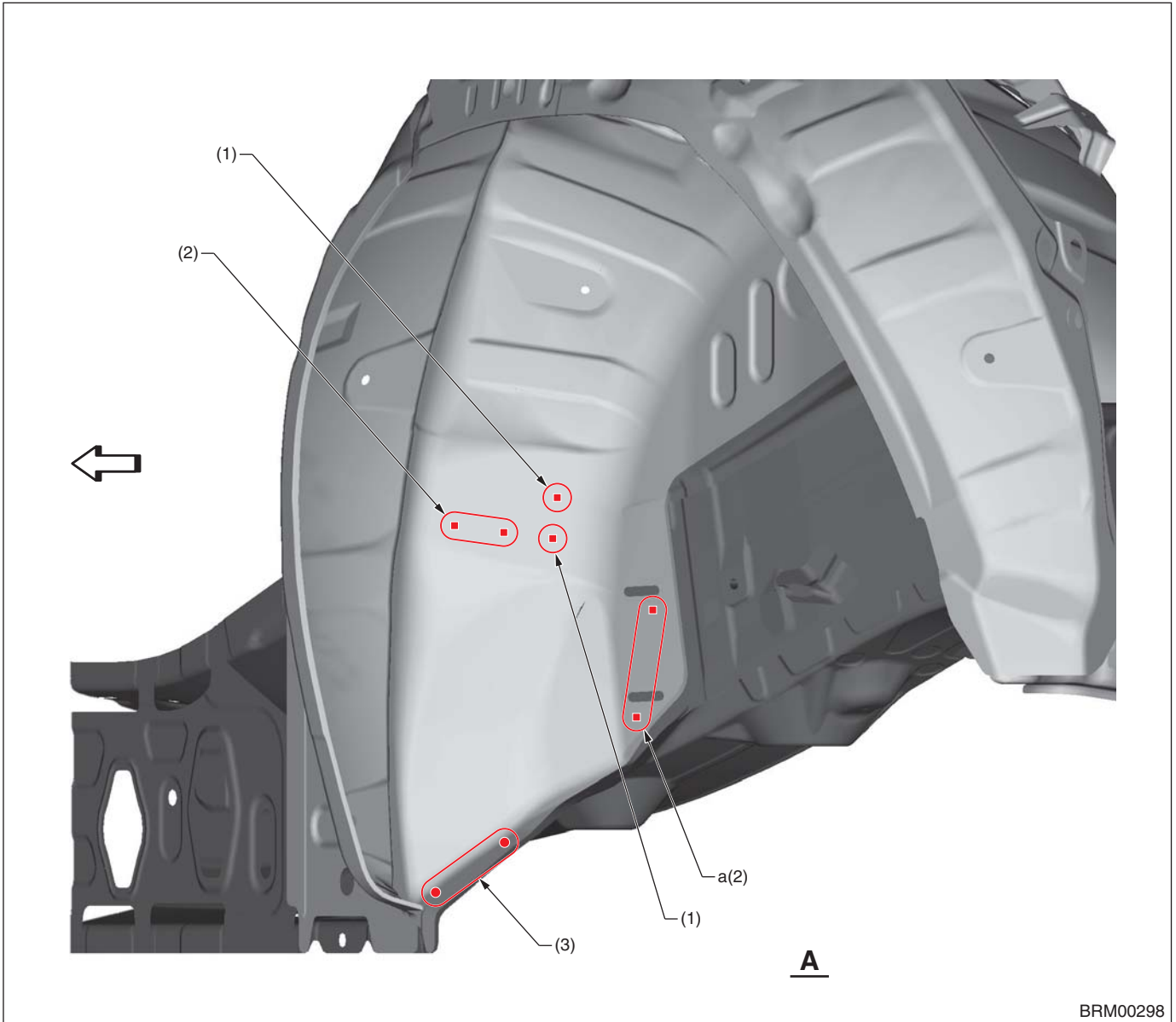
(10) 2 points (Continuous welding)
(5 mm [0.20 in])

(11) 2 points (Continuous welding)
(10 mm [0.39 in])

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views A



(1) 1 point (service)

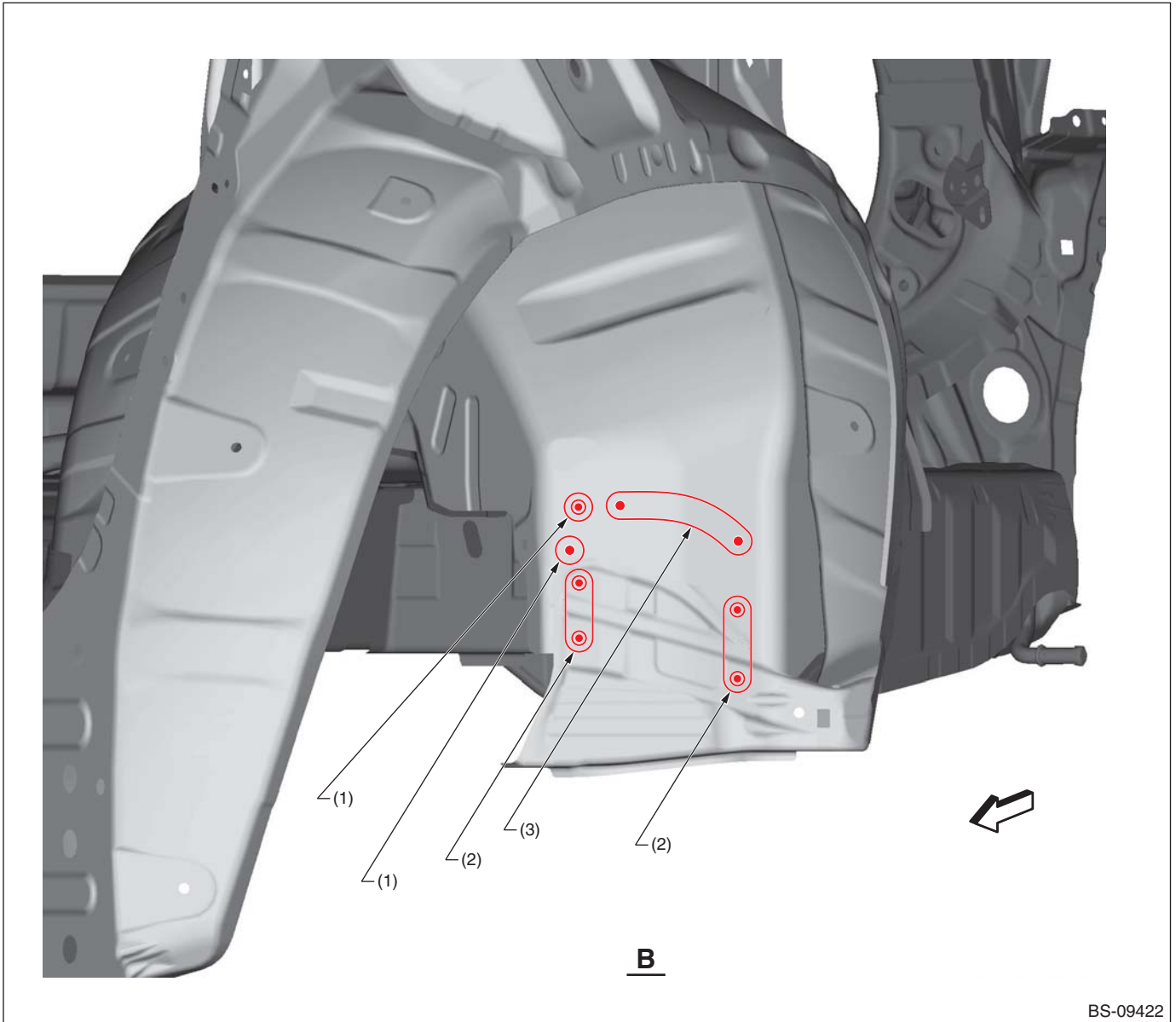
(2) 2 points (service)

(3) 3 points

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views B



BS-09422

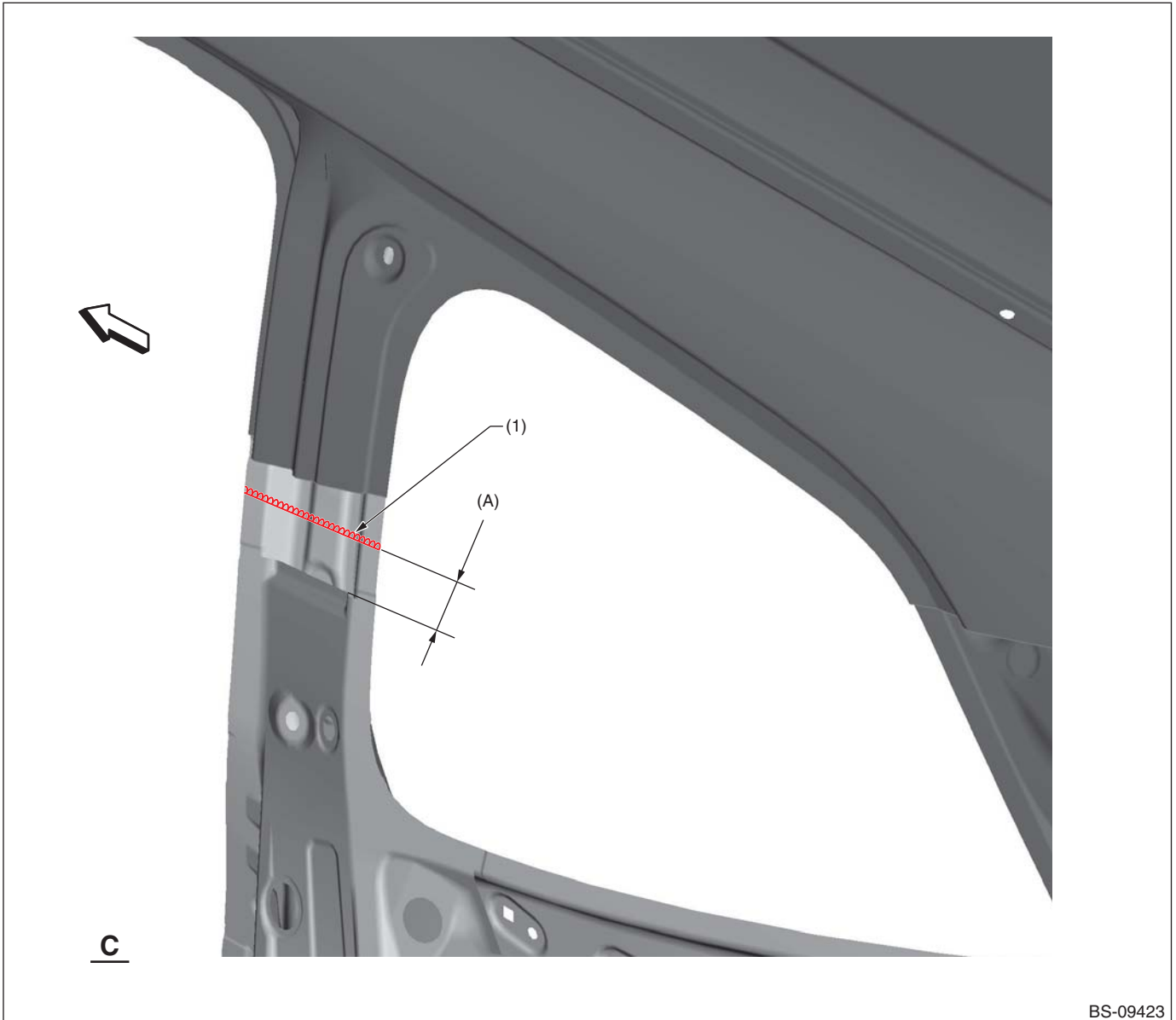
(1) 1 point

(2) 2 points

(3) 4 points

Panel Replacement

• Views C



(A) 30 mm [1.18 in]

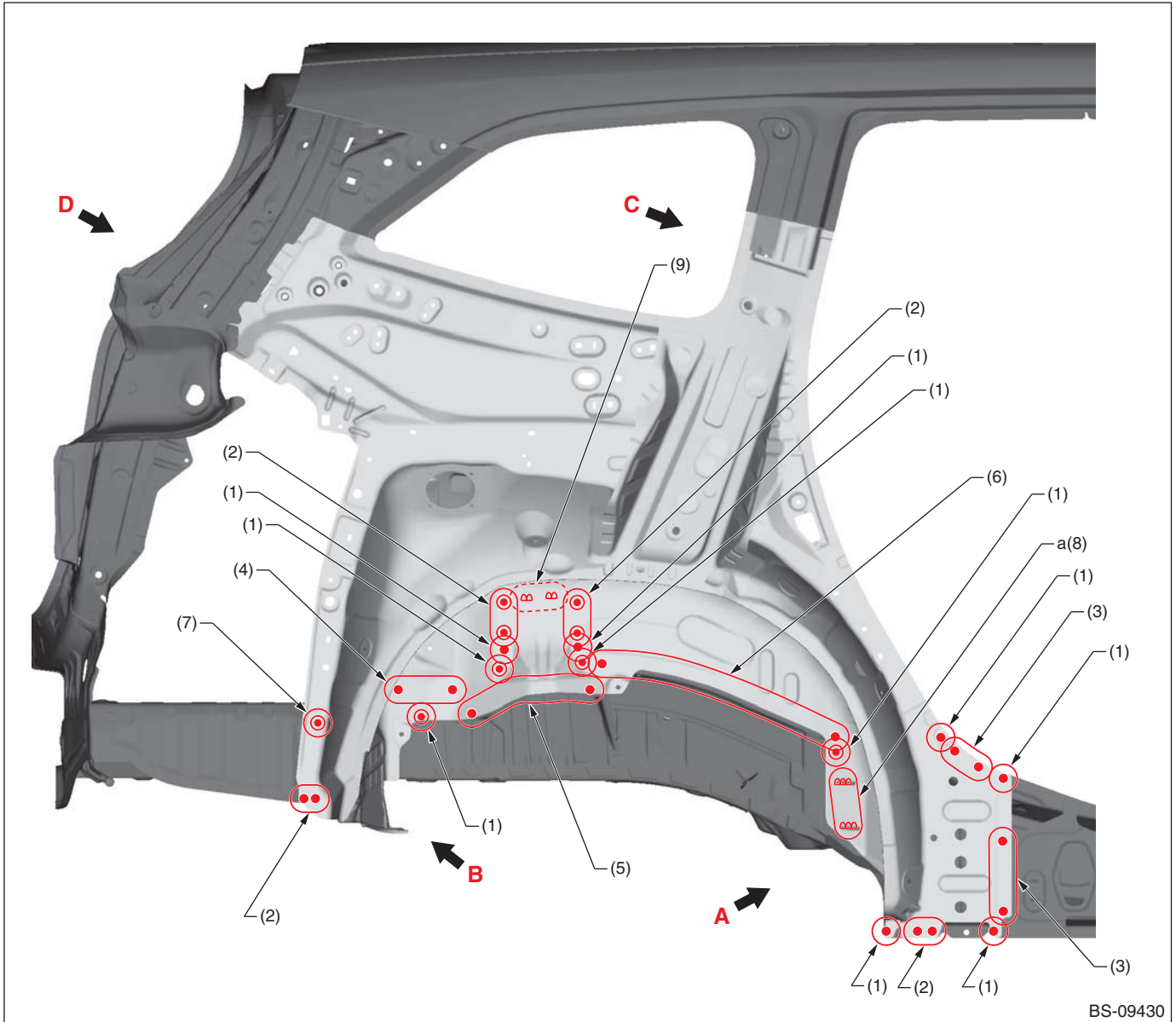
(1) 1 point (Continuous welding)

Panel Replacement

8-24. Rear Quarter Inner RH (Partial replacement)

A: REMOVAL

• Overall view

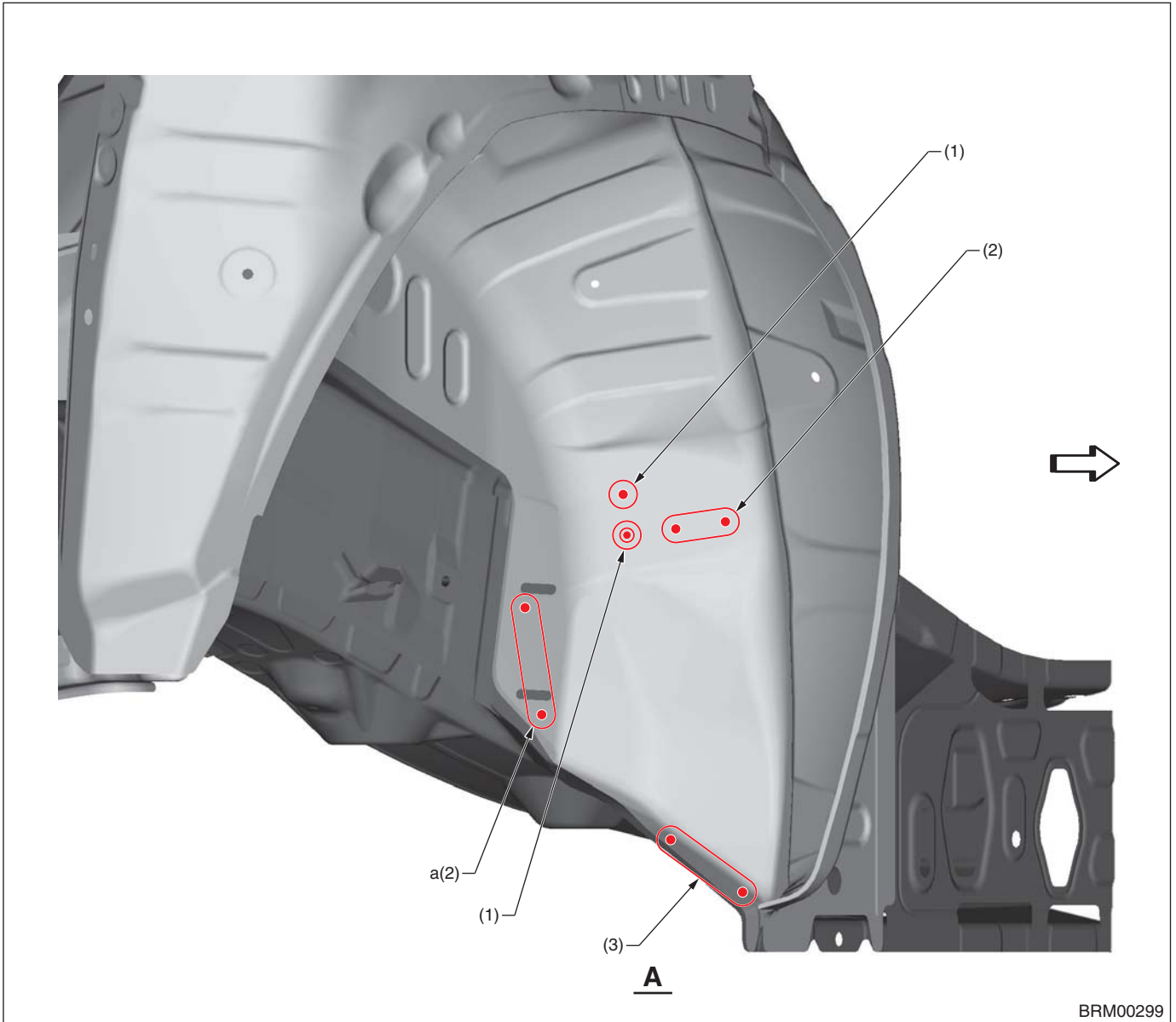


- | | | |
|----------------------------|----------------------------|--|
| (1) 1 point (outside · 1) | (4) 4 points (outside · 1) | (7) 1 point (outside · 2) |
| (2) 2 points (outside · 1) | (5) 6 points (outside · 1) | (8) 2 points (outside · 1 belt sander) |
| (3) 3 points (outside · 1) | (6) 9 points (outside · 1) | (9) 2 points (inside · 1 belt sander) |

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views A



BRM00299

(1) 1 point (outside · 1)

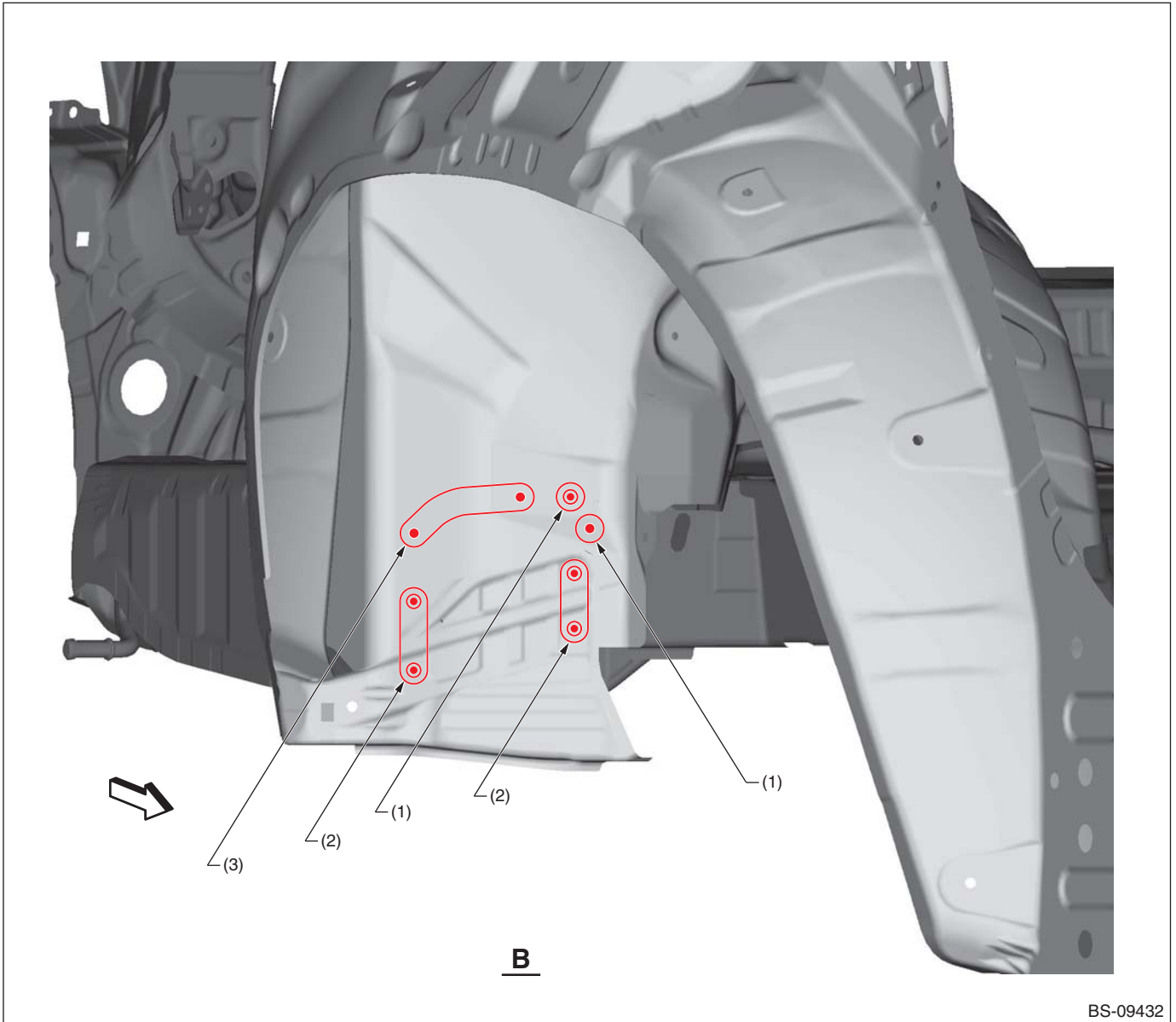
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views B



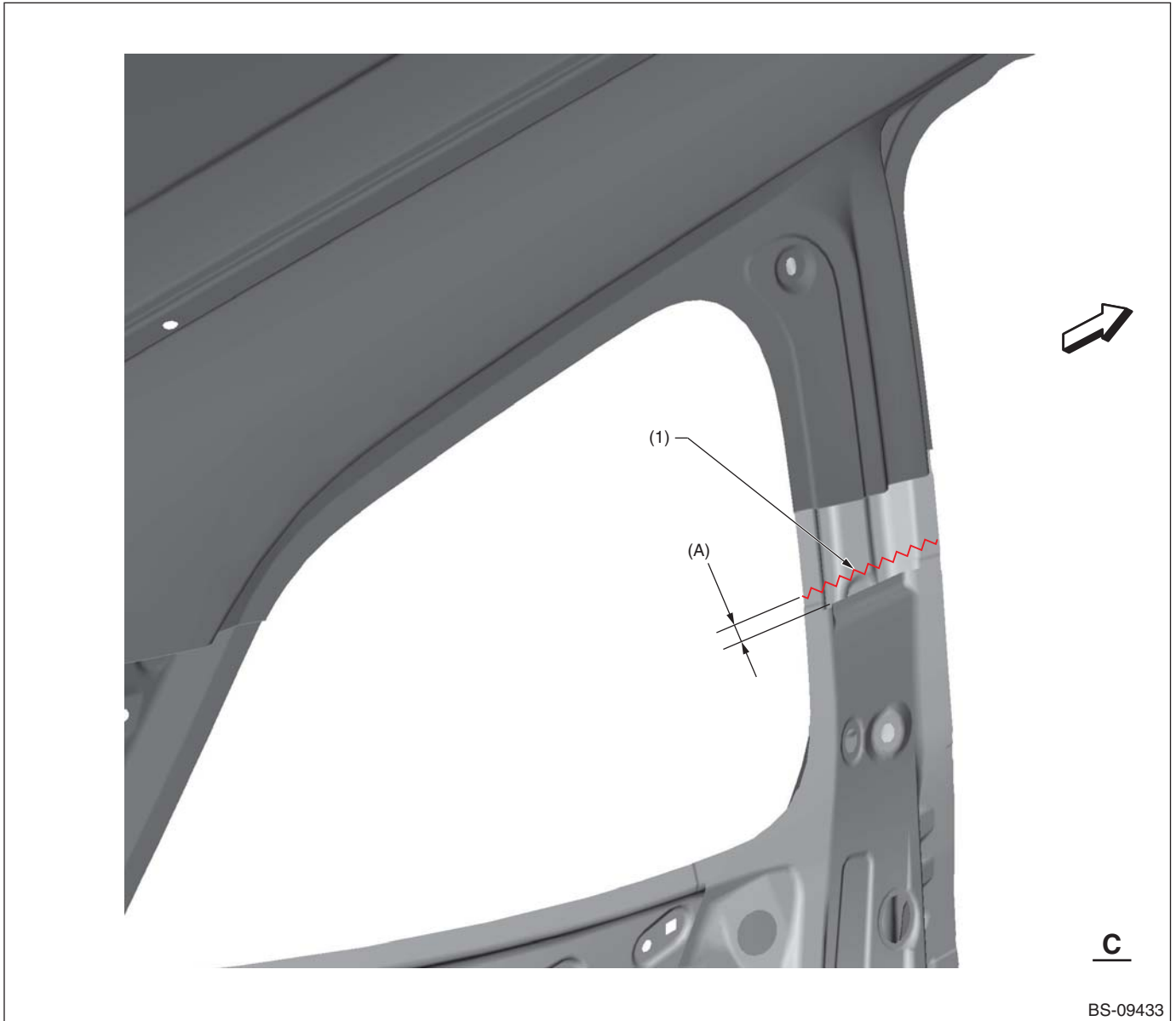
(1) 1 point (outside · 1)

(2) 2 points (outside · 1)

(3) 3 points (outside · 1)

Panel Replacement

• Views C

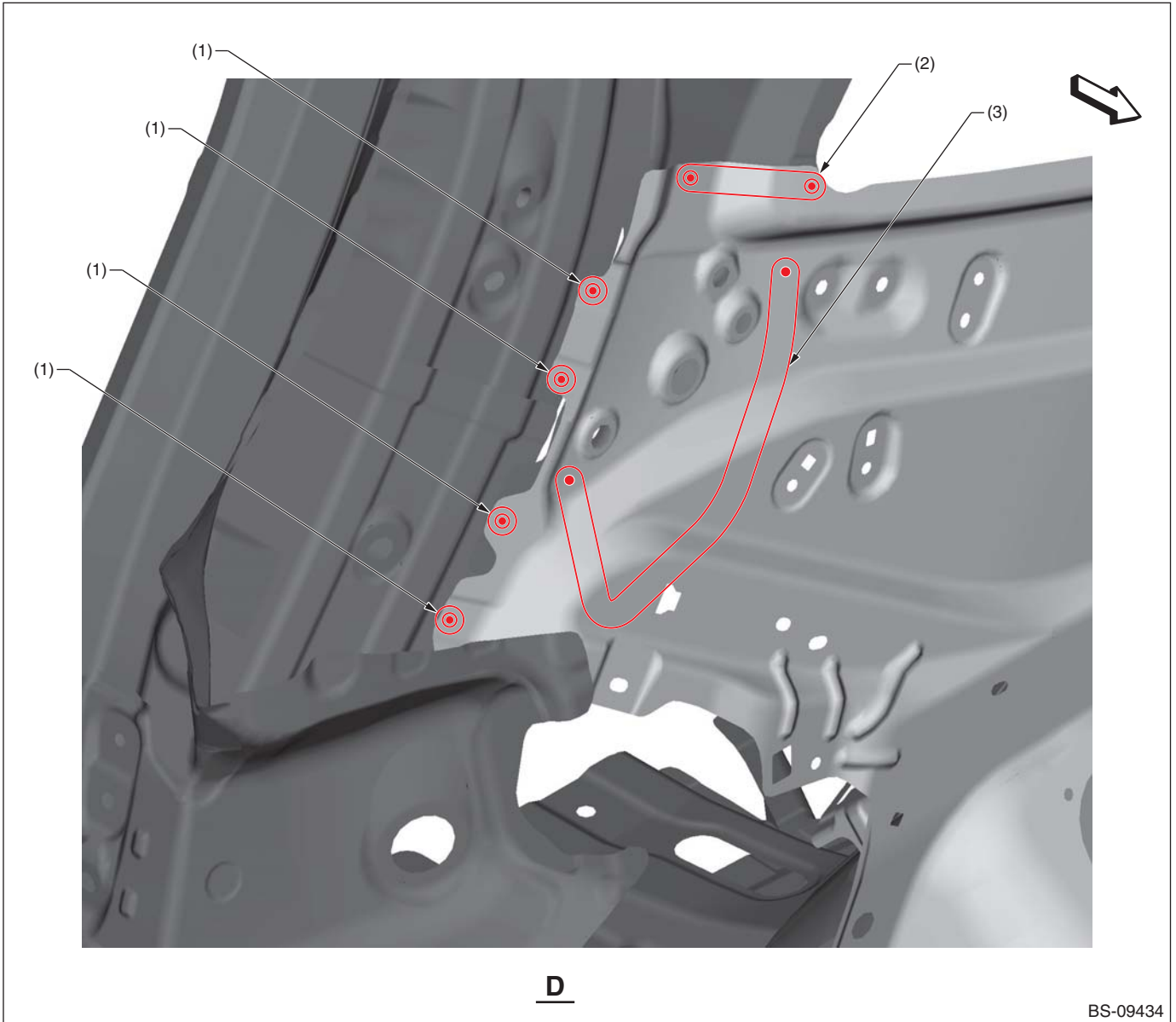


(A) 10 mm [0.39 in]

(1) Cut position

Panel Replacement

• Views D



(1) 1 point (inside · 2)

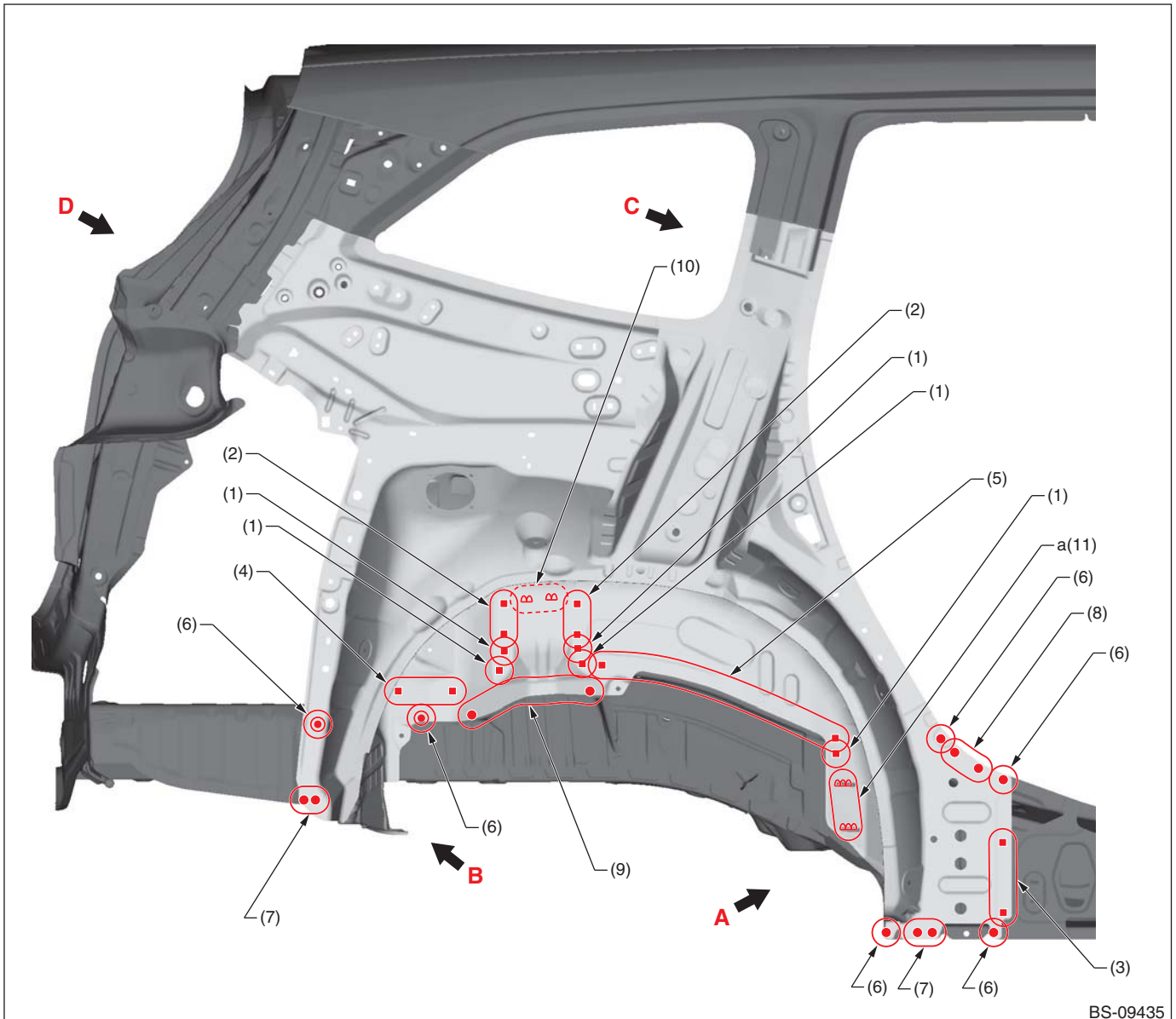
(2) 2 points (inside · 2)

(3) 5 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view

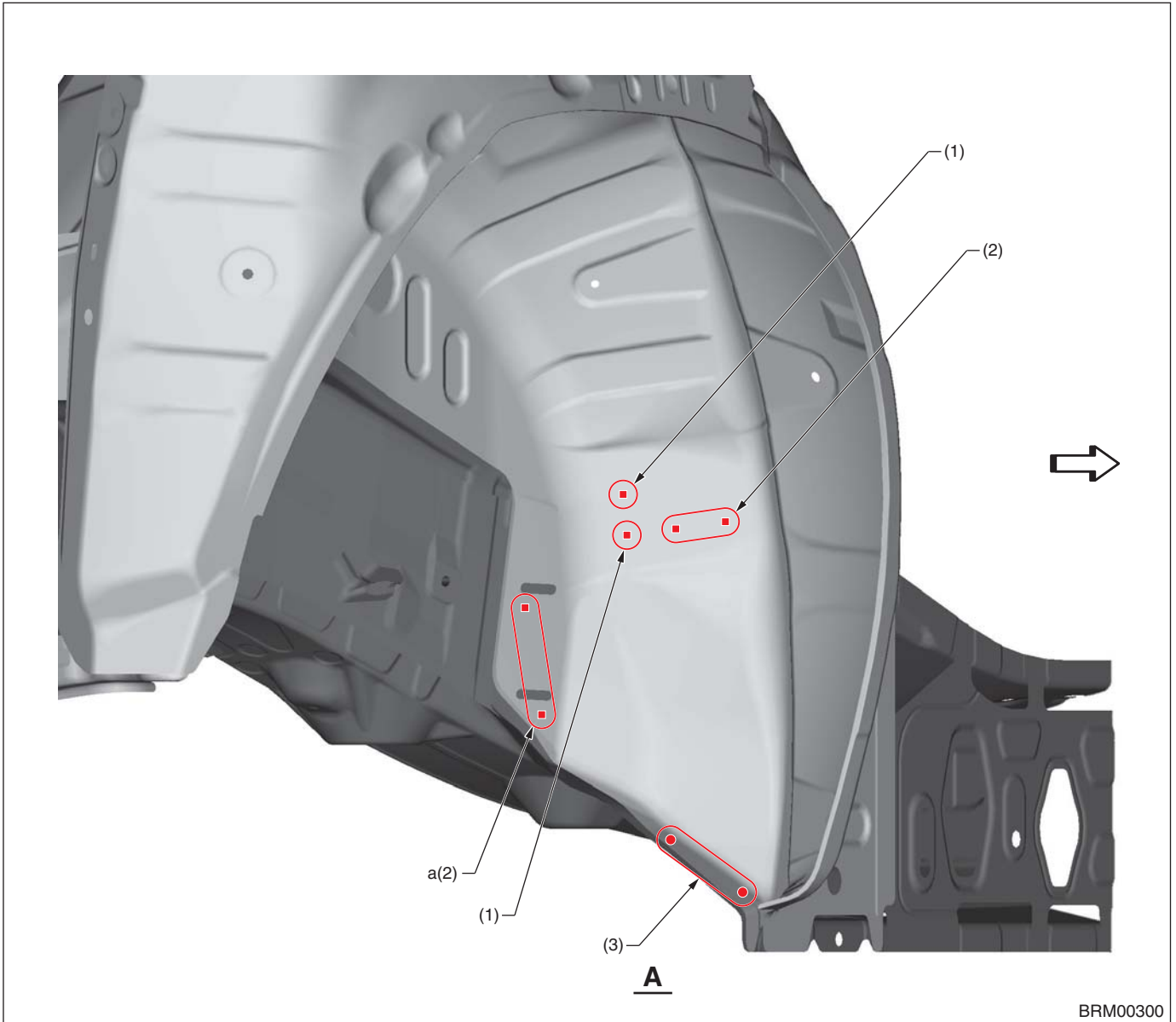


- | | | |
|------------------------|------------------------|---|
| (1) 1 point (service) | (5) 9 points (service) | (9) 6 points |
| (2) 2 points (service) | (6) 1 point | (10) 2 points (Continuous welding)
(5 mm [0.20 in]) |
| (3) 3 points (service) | (7) 2 points | (11) 2 points (Continuous welding)
(10 mm [0.39 in]) |
| (4) 4 points (service) | (8) 3 points | |

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views A



(1) 1 point (service)

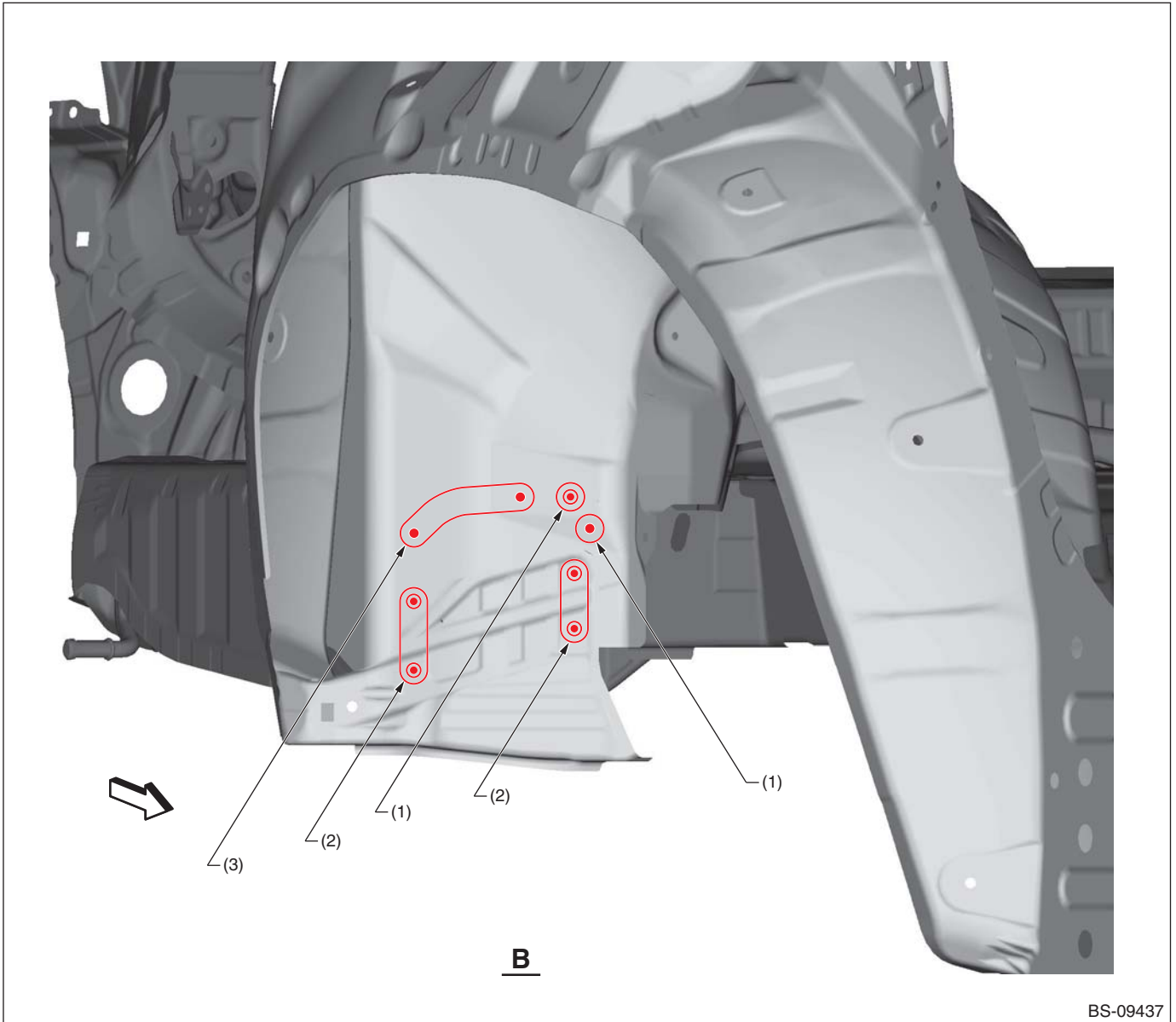
(2) 2 points (service)

(3) 3 points

Note: Welding points in part "a" vary depending on each vehicle model (spot or arc welding).

Panel Replacement

• Views B



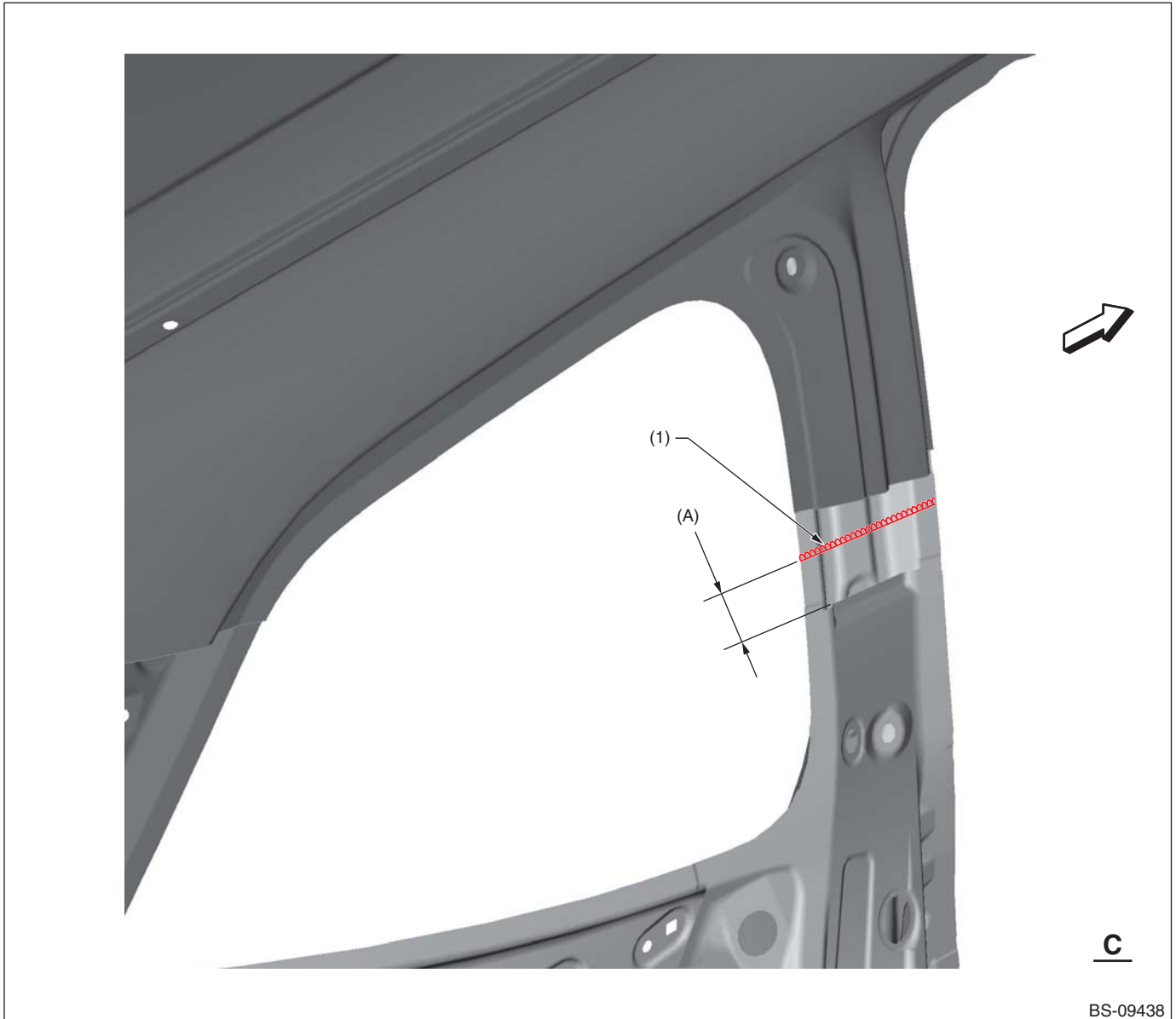
(1) 1 point

(2) 2 points

(3) 3 points

Panel Replacement

• Views C

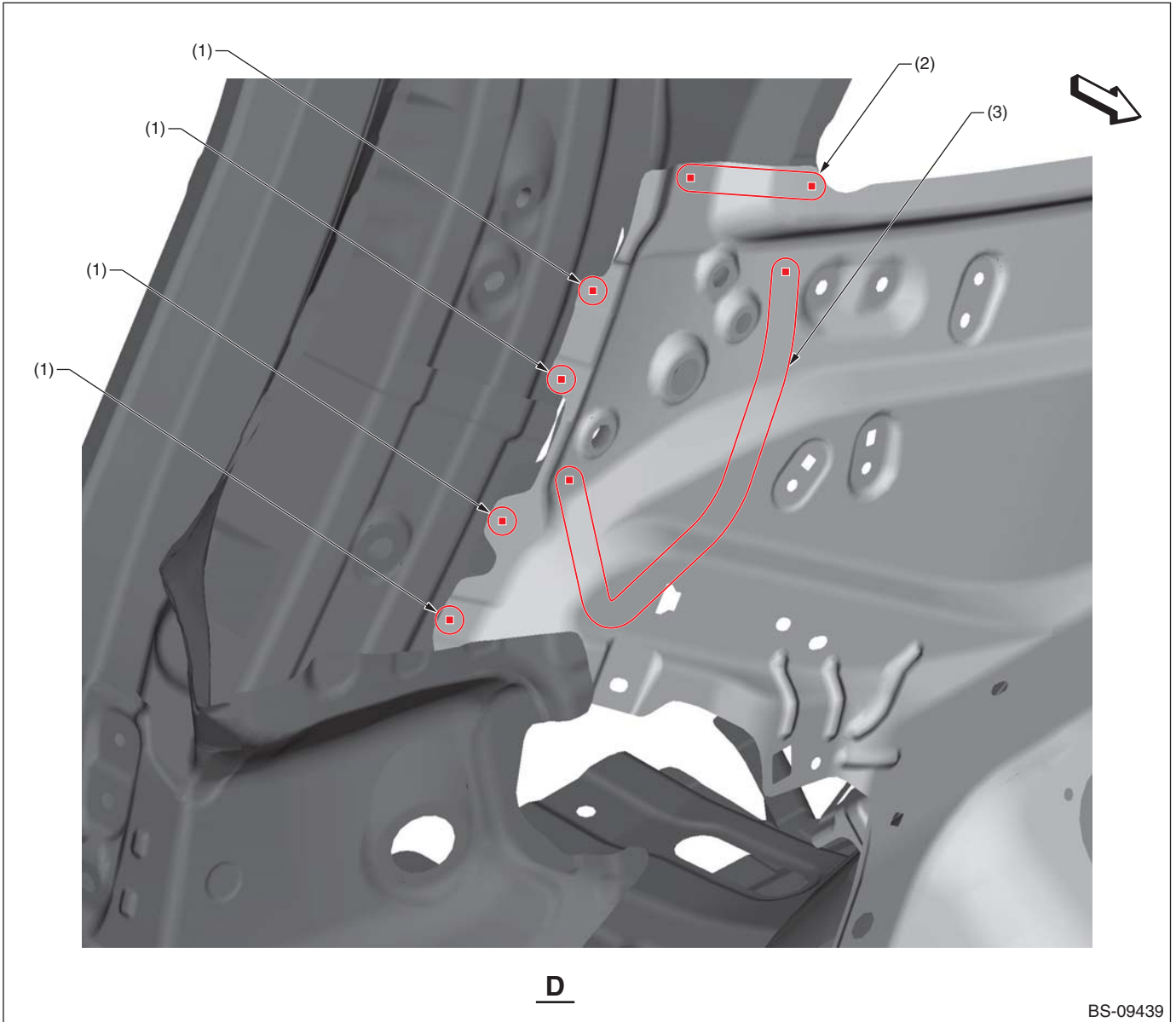


(A) 30 mm [1.18 in]

(1) 1 point (Continuous welding)

Panel Replacement

• Views D



(1) 1 point

(2) 2 points

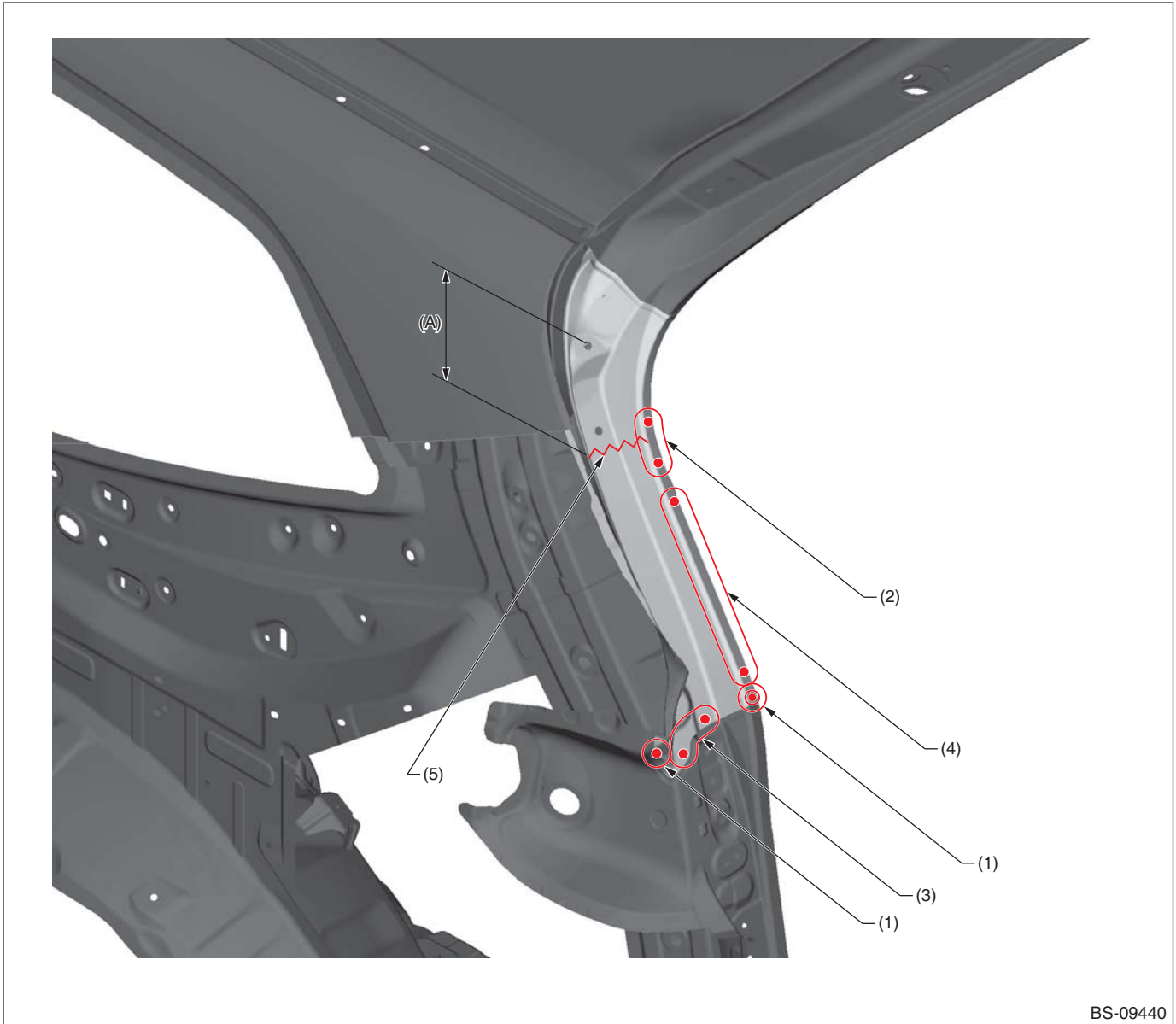
(3) 5 points

Panel Replacement

8-25. D Pillar Extension (Partial replacement)

A: REMOVAL

- Overall view



(A) 110 mm [4.33 in]

(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

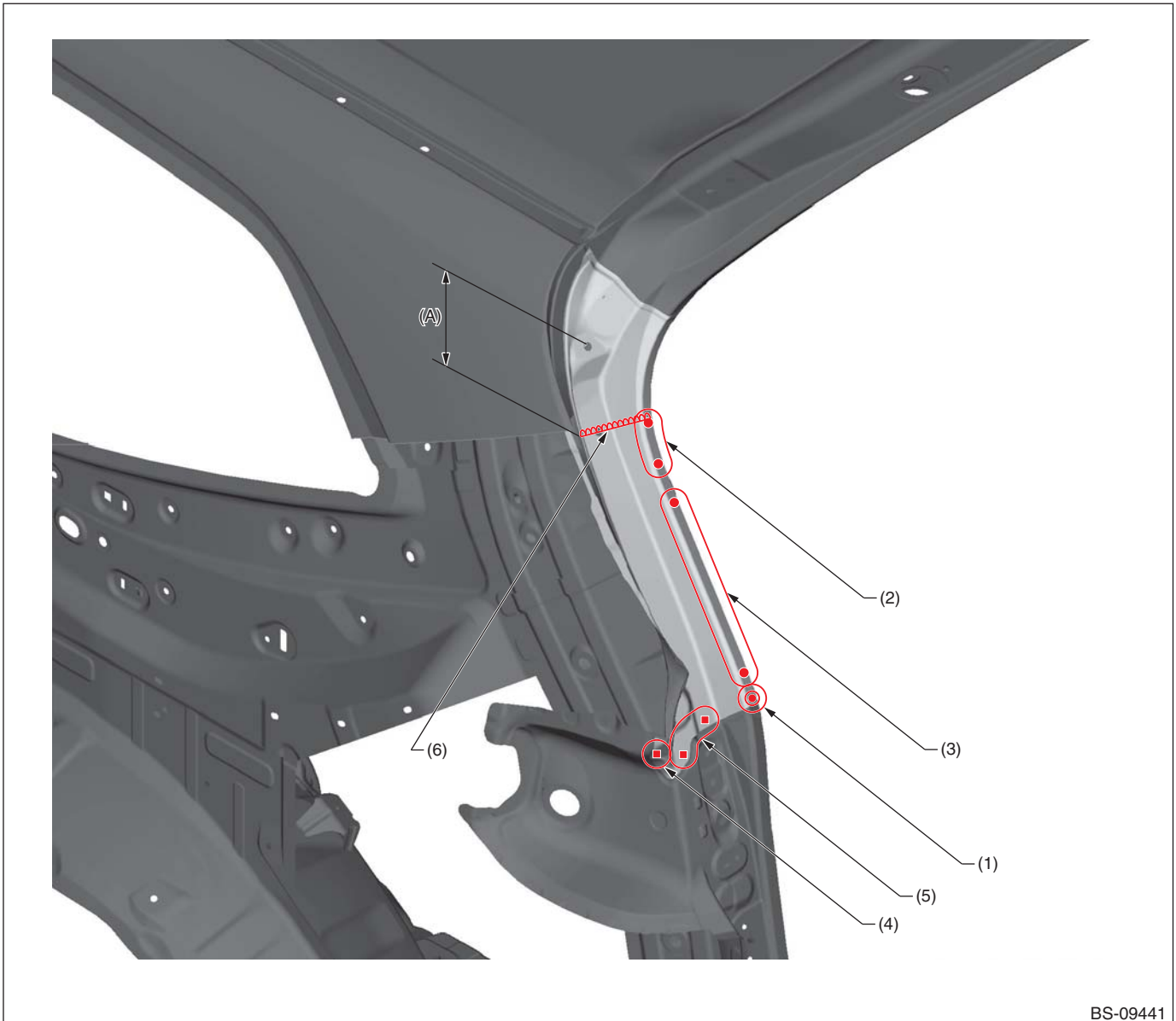
(3) 3 points (outside · 1)
(4) 5 points (outside · 1)

(5) Cut position

Panel Replacement

B: INSTALLATION

• Overall view



BS-09441

(A) 90 mm [3.54 in]

(1) 1 point

(2) 2 points

(3) 5 points

(4) 1 point (service)

(5) 3 points (service)

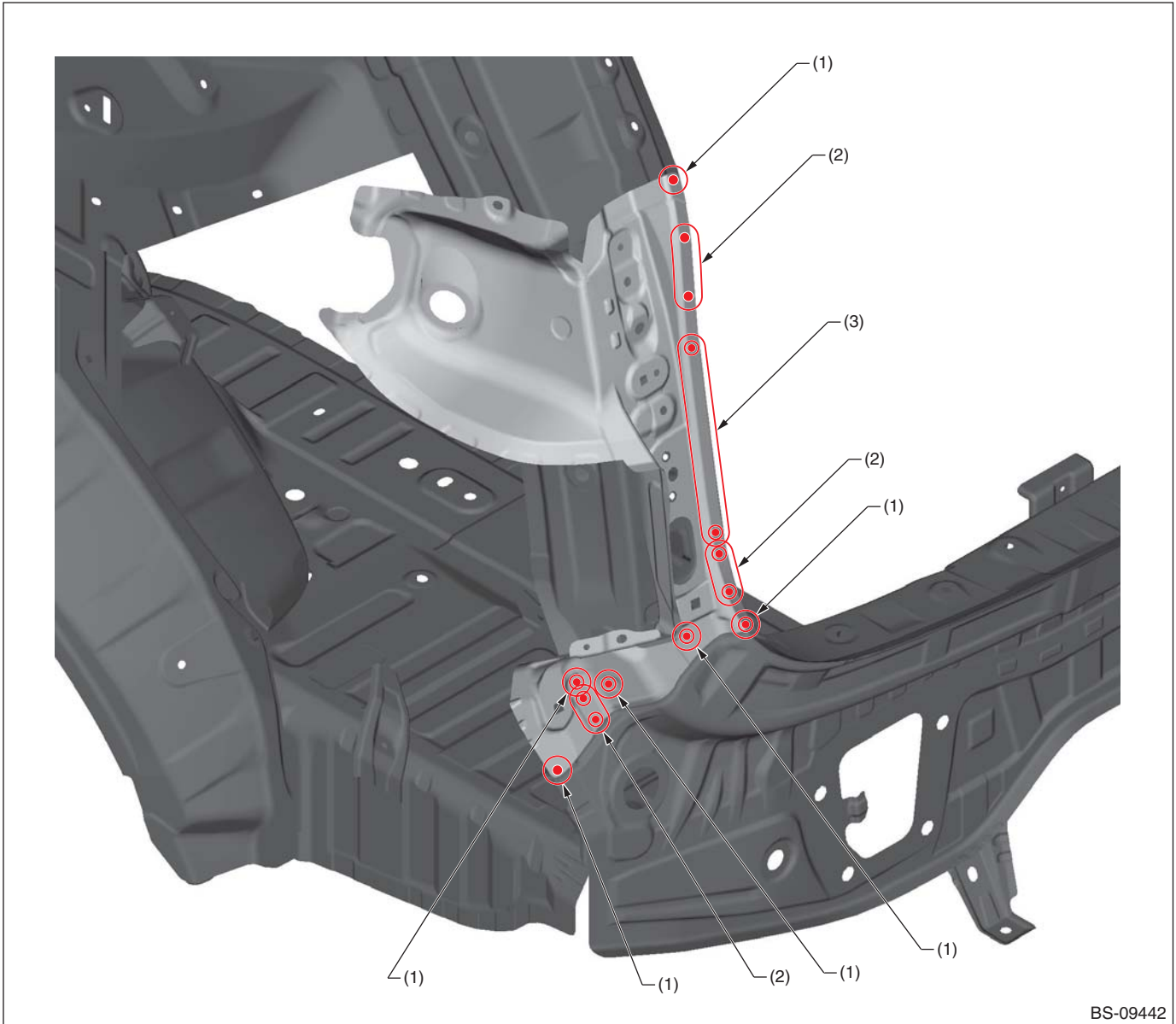
(6) 1 point (Continuous welding)

Panel Replacement

8-26. Rear Quarter End Panel (Total replacement)

A: REMOVAL

- Overall view



BS-09442

(1) 1 point (outside - 1)

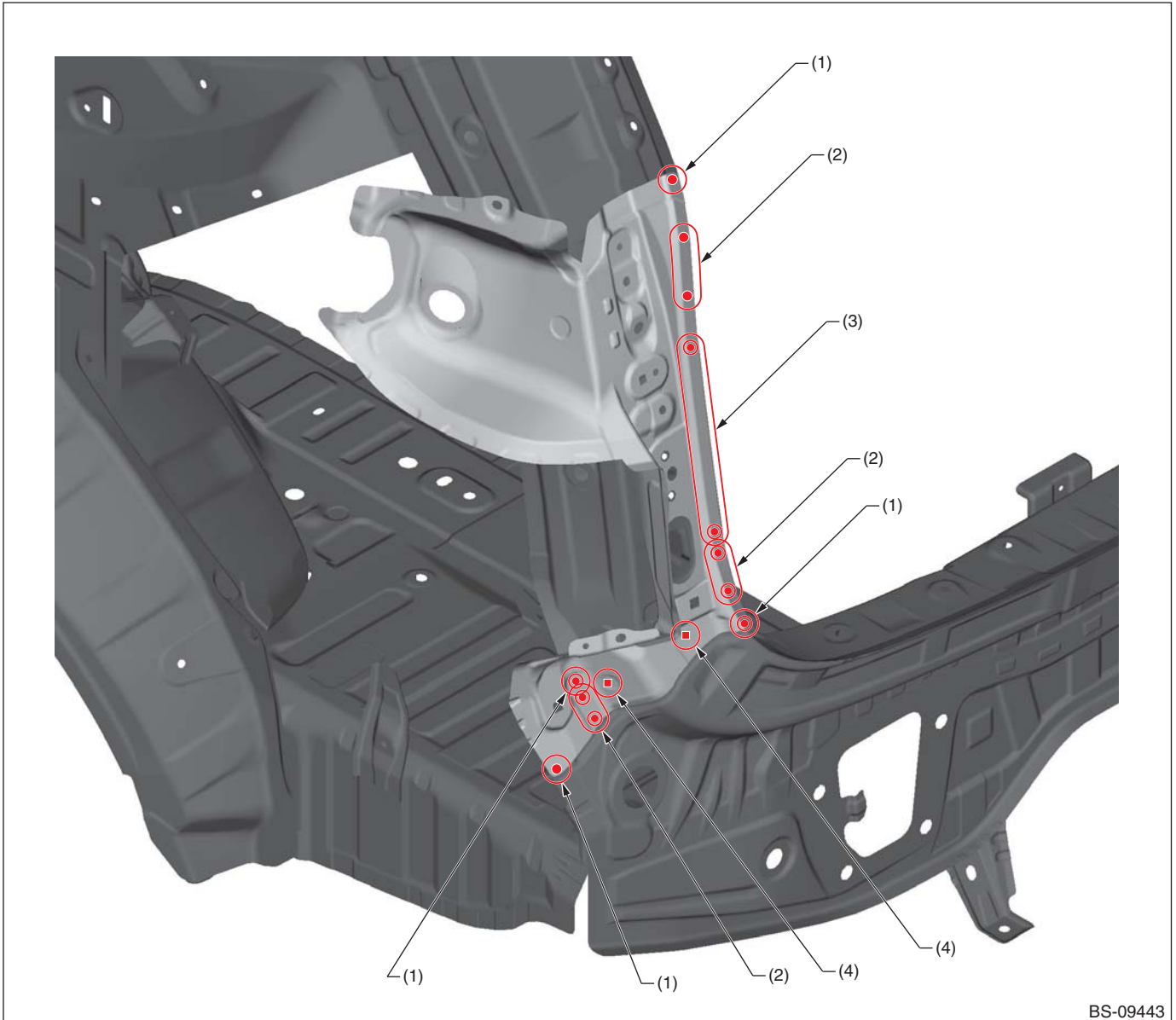
(2) 2 points (outside - 1)

(3) 5 points (outside - 1)

Panel Replacement

B: INSTALLATION

• Overall view



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

- (3) 5 points

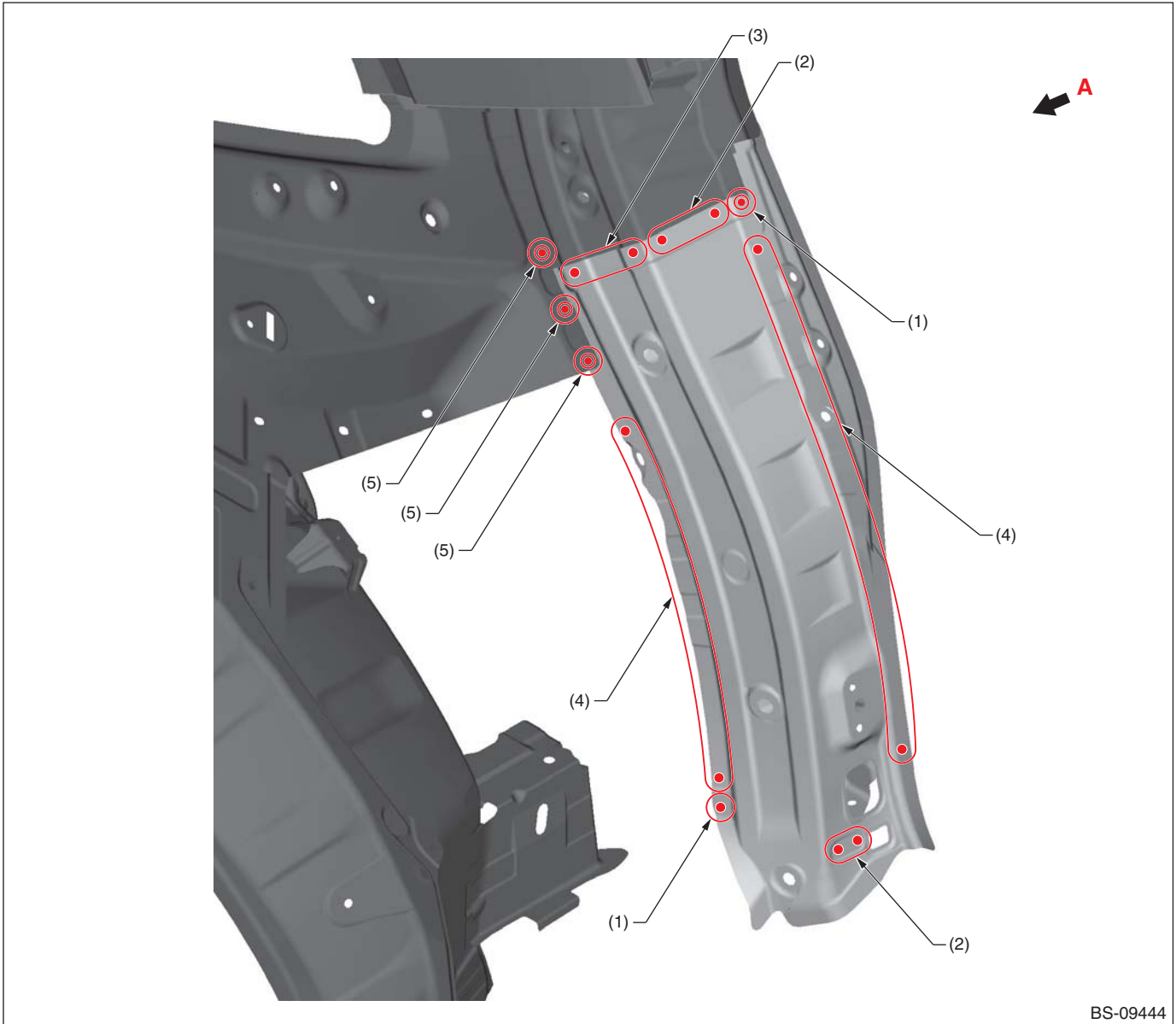
- (4) 1 point (service)

Panel Replacement

8-27. D Pillar Reinforcement LH (Partial replacement)

A: REMOVAL

• Overall view



BS-09444

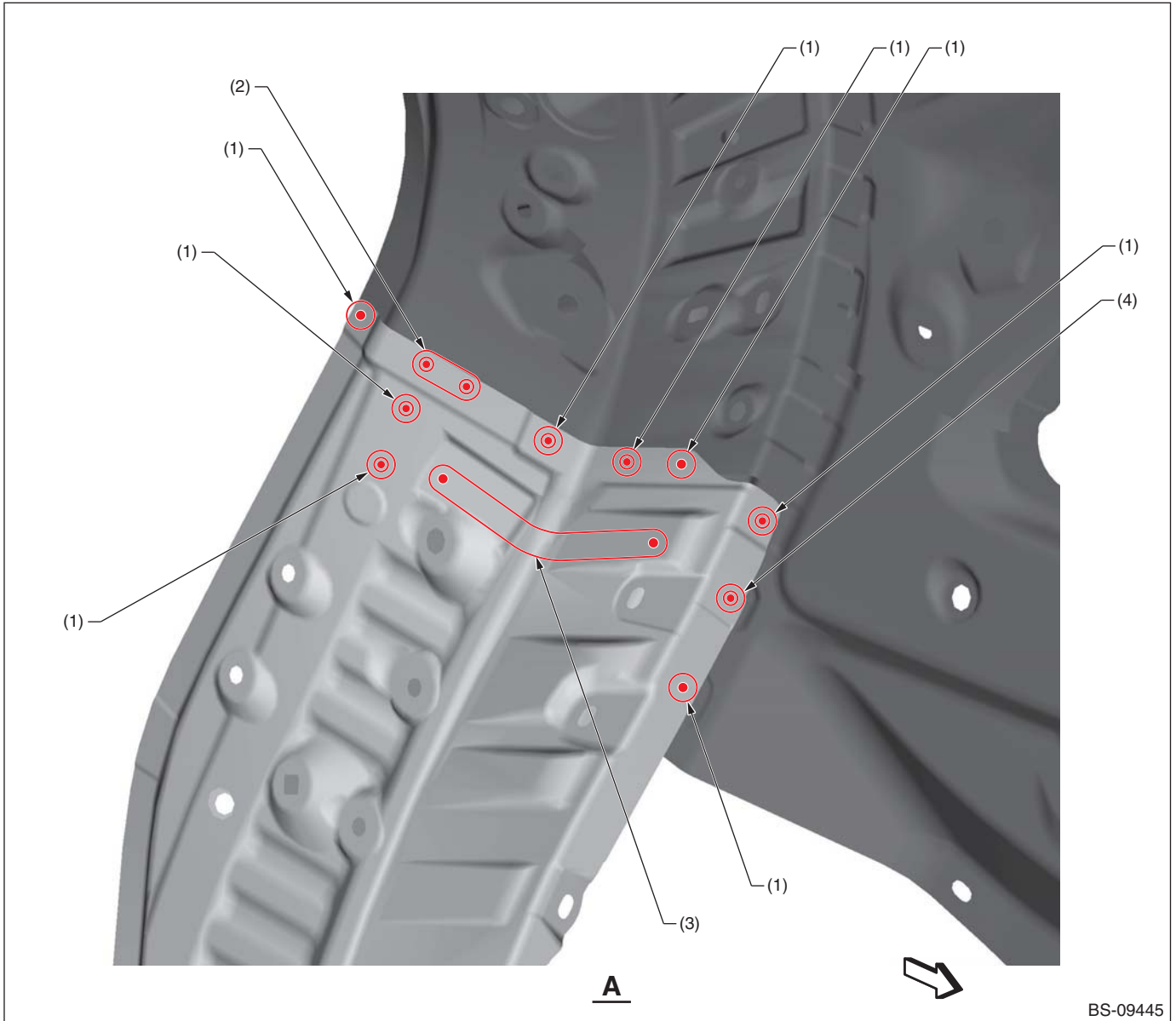
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)
(4) 7 points (outside · 1)

(5) 1 point (inside · 2)

Panel Replacement

• Views A



BS-09445

(1) 1 point (inside · 1)
(2) 2 points (inside · 1)

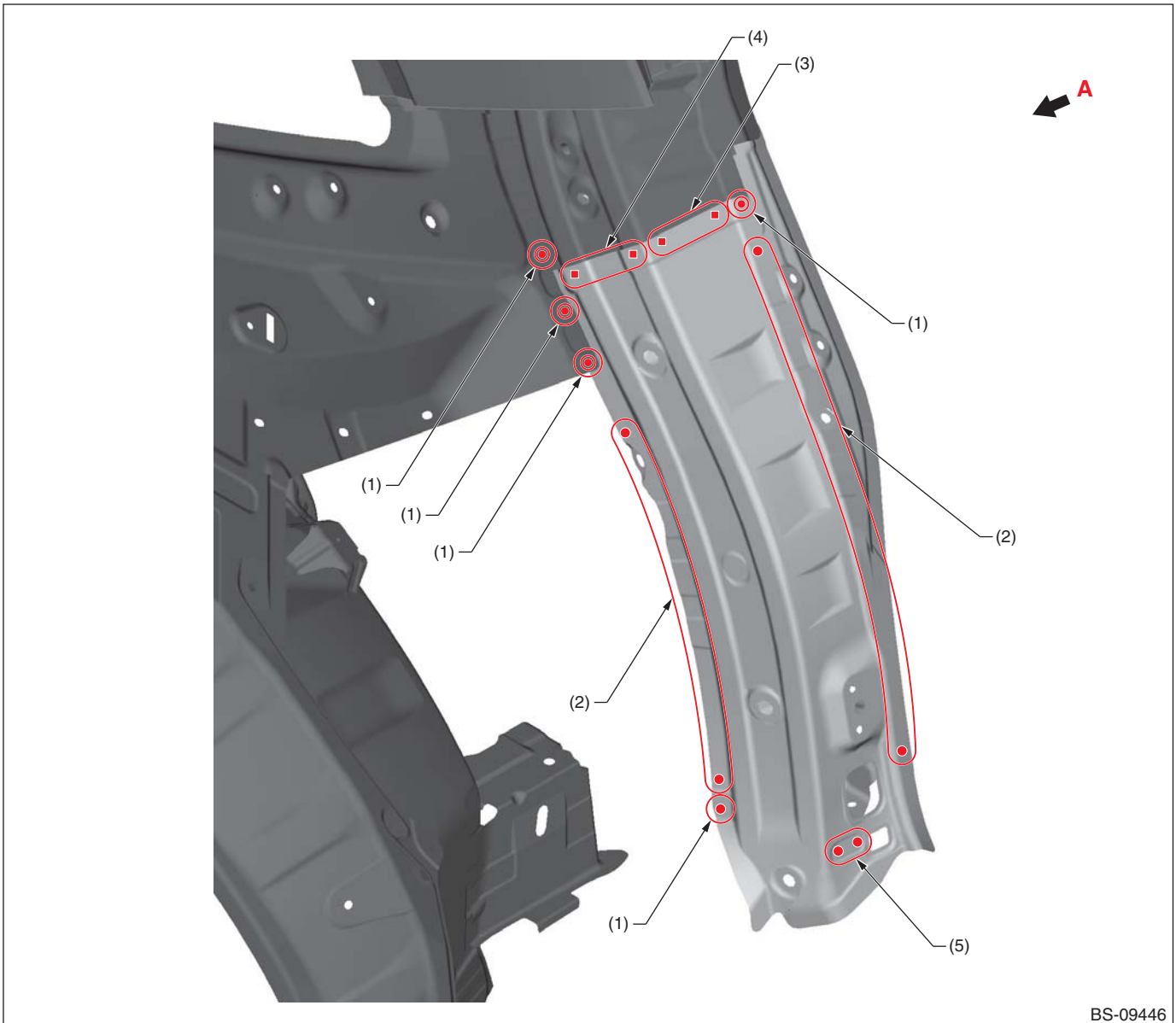
(3) 4 points (inside · 1)

(4) 1 point (inside · 2)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09446

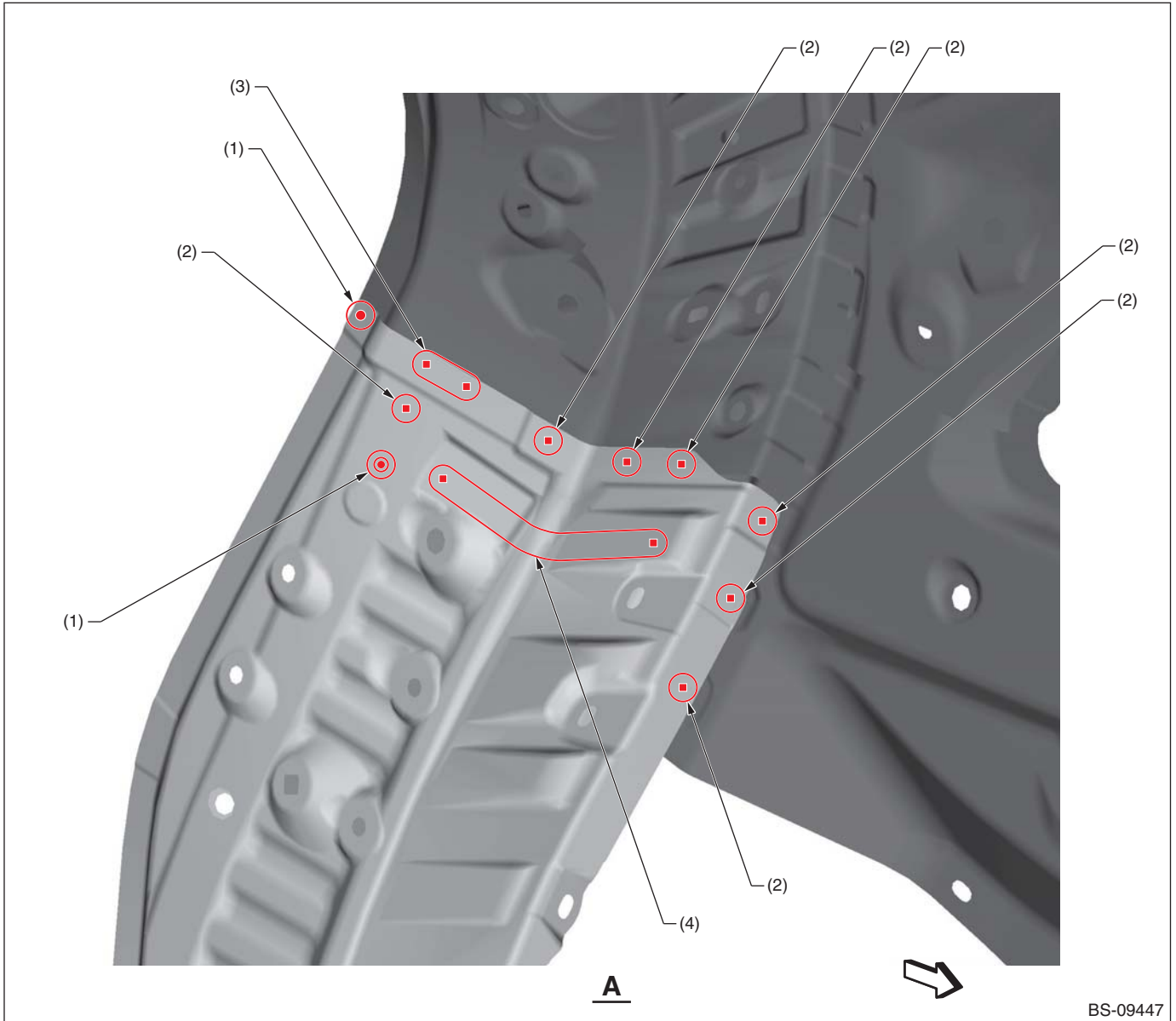
(1) 1 point
(2) 7 points

(3) 2 points (service)
(4) 3 points (service)

(5) 2 points

Panel Replacement

• Views A



(1) 1 point

(2) 1 point (service)

(3) 2 points (service)

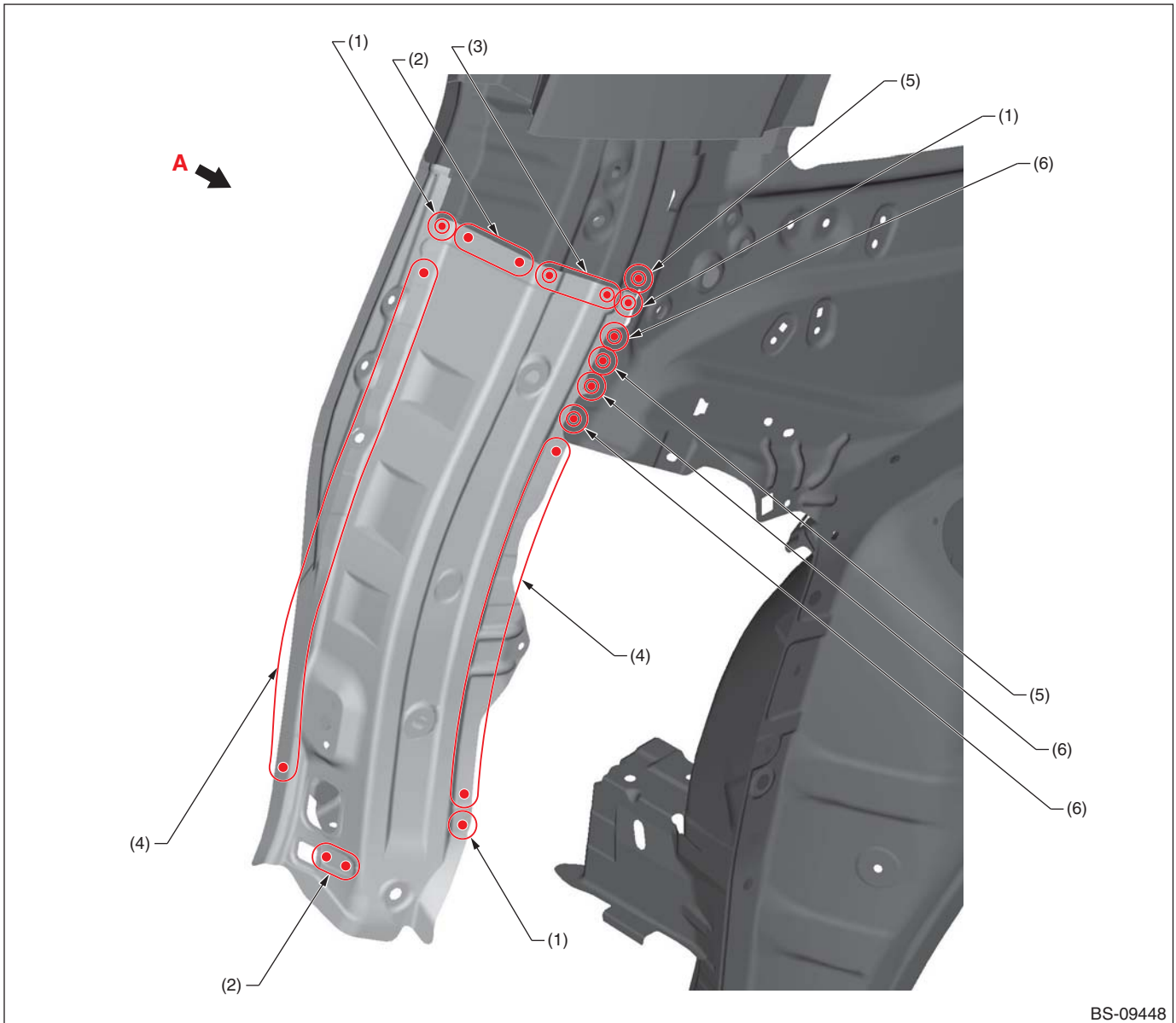
(4) 4 points (service)

Panel Replacement

8-28. D Pillar Reinforcement RH (Partial replacement)

A: REMOVAL

• Overall view



BS-09448

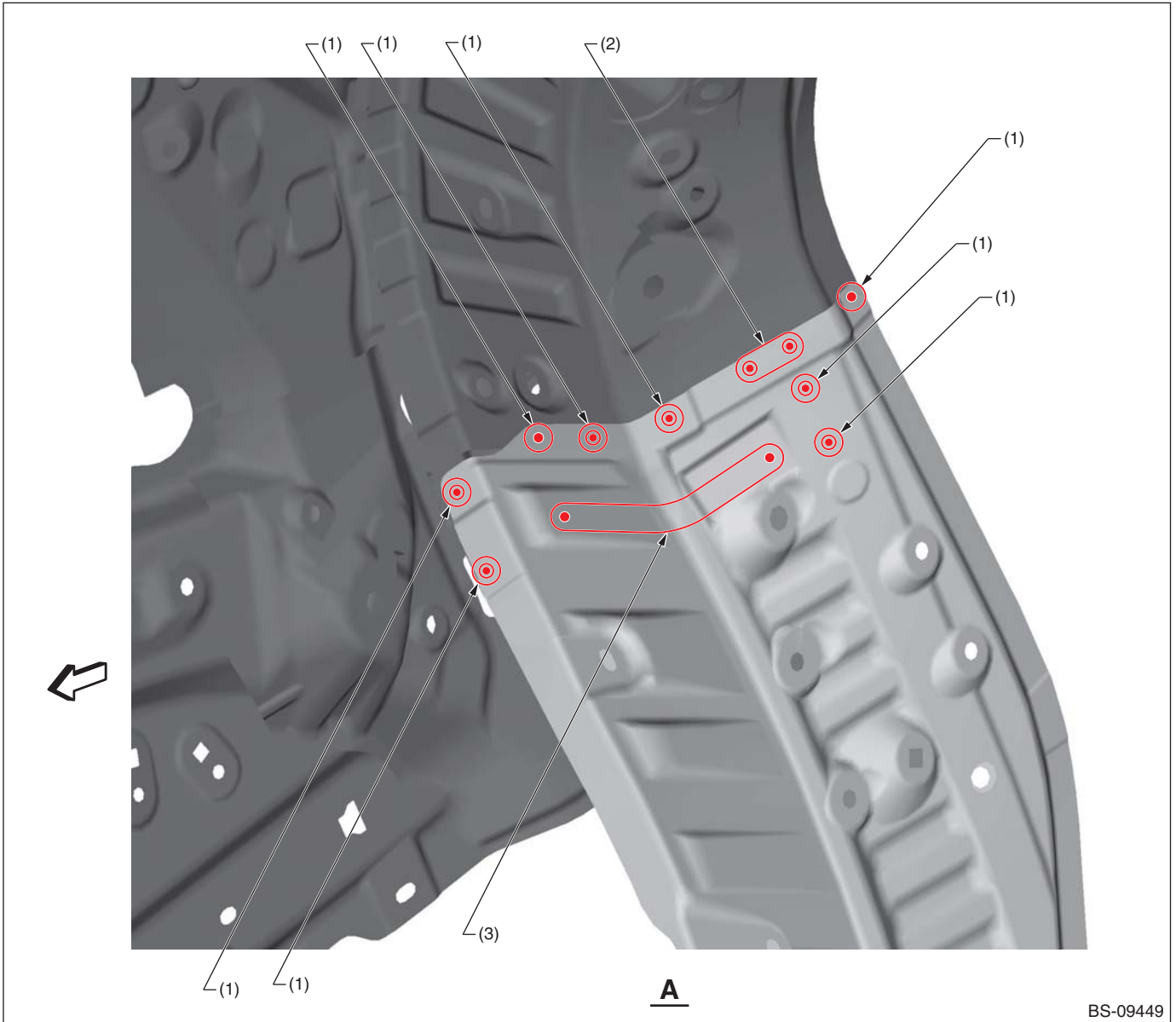
(1) 1 point (outside · 1)
(2) 2 points (outside · 1)

(3) 3 points (outside · 1)
(4) 7 points (outside · 1)

(5) 1 point (inside · 1)
(6) 1 point (inside · 2)

Panel Replacement

• Views A



(1) 1 point (inside · 1)

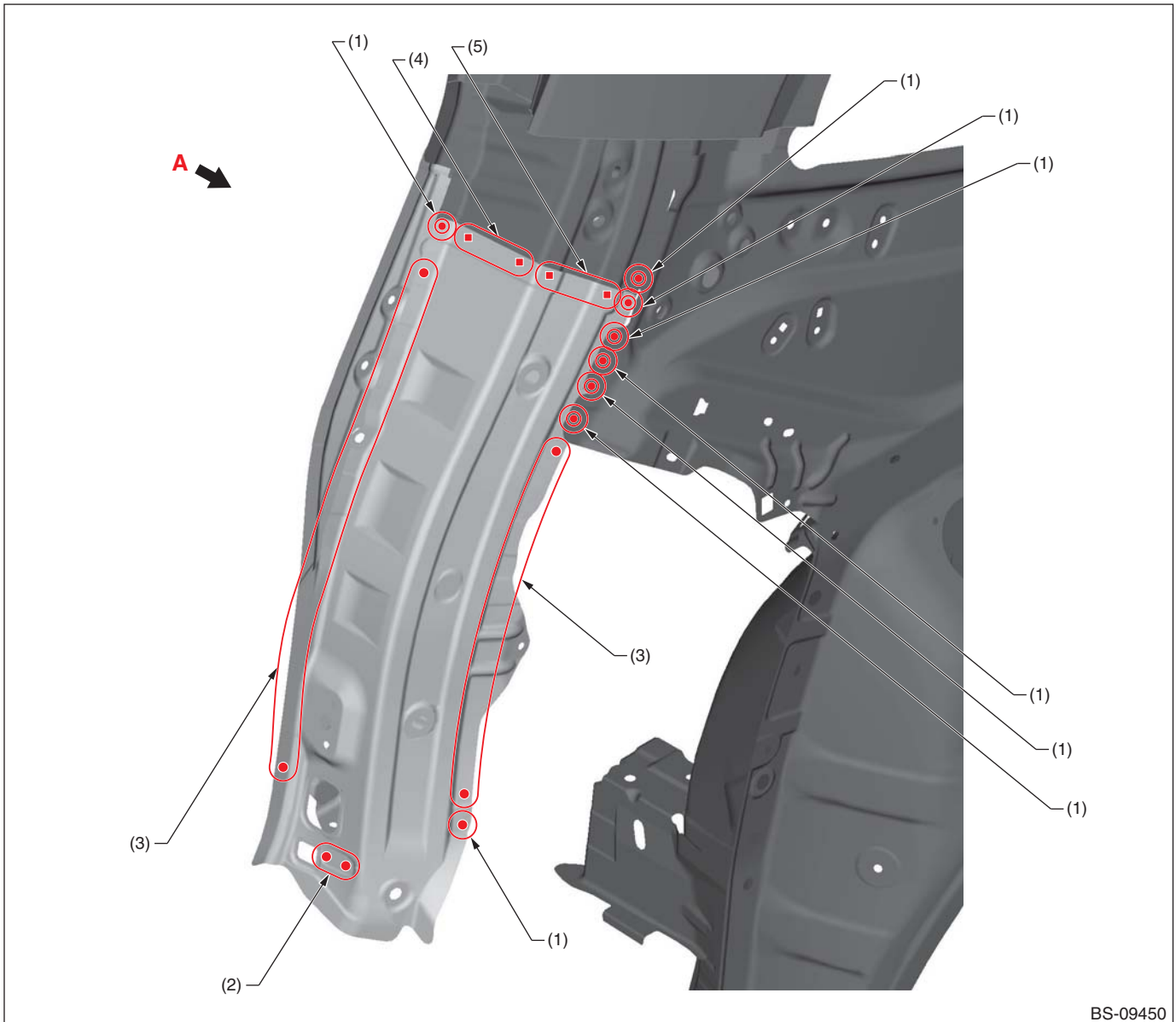
(2) 2 points (inside · 1)

(3) 4 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



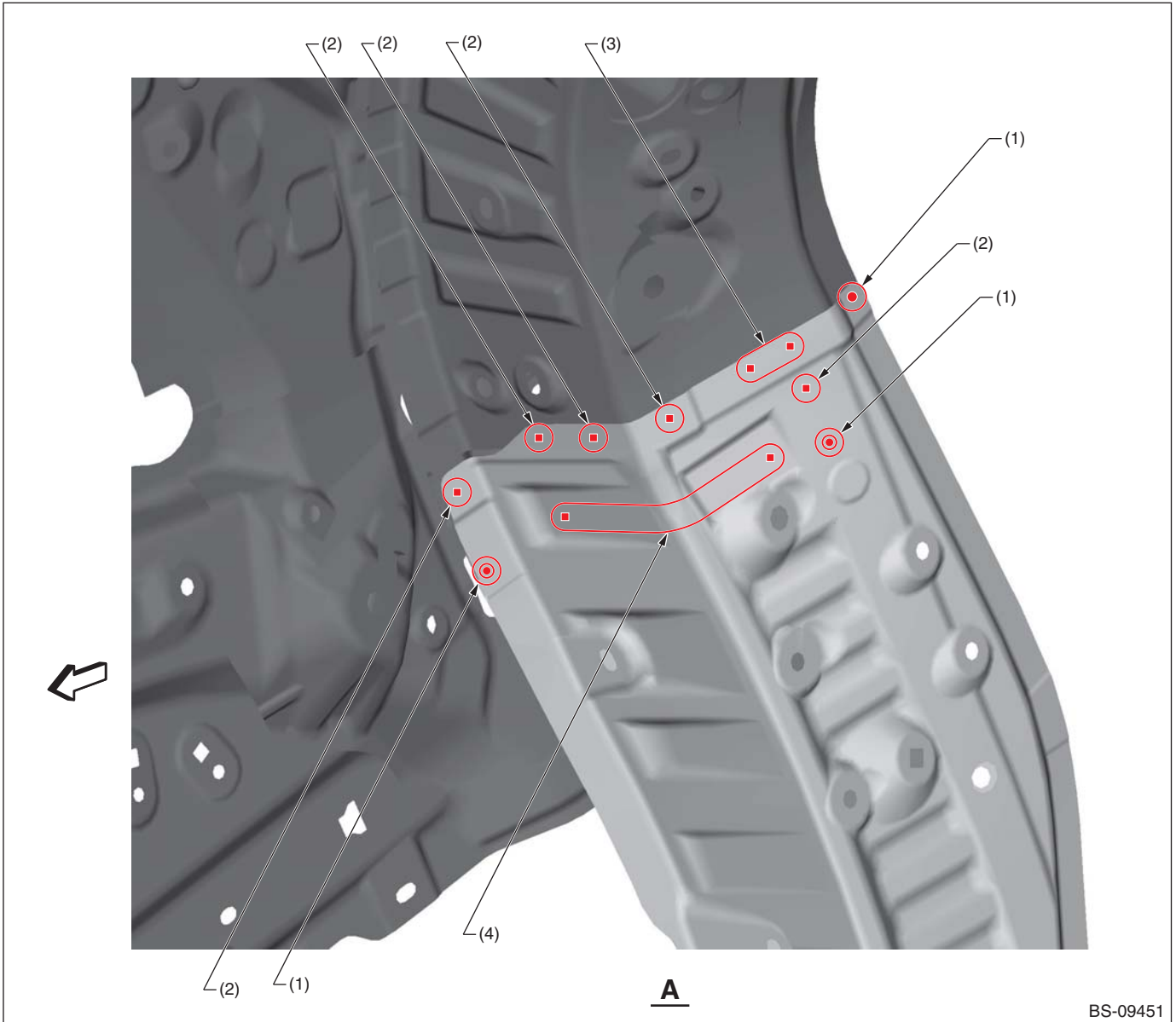
(1) 1 point
(2) 2 points

(3) 7 points
(4) 2 points (service)

(5) 3 points (service)

Panel Replacement

• Views A



(1) 1 point

(2) 1 point (service)

(3) 2 points (service)

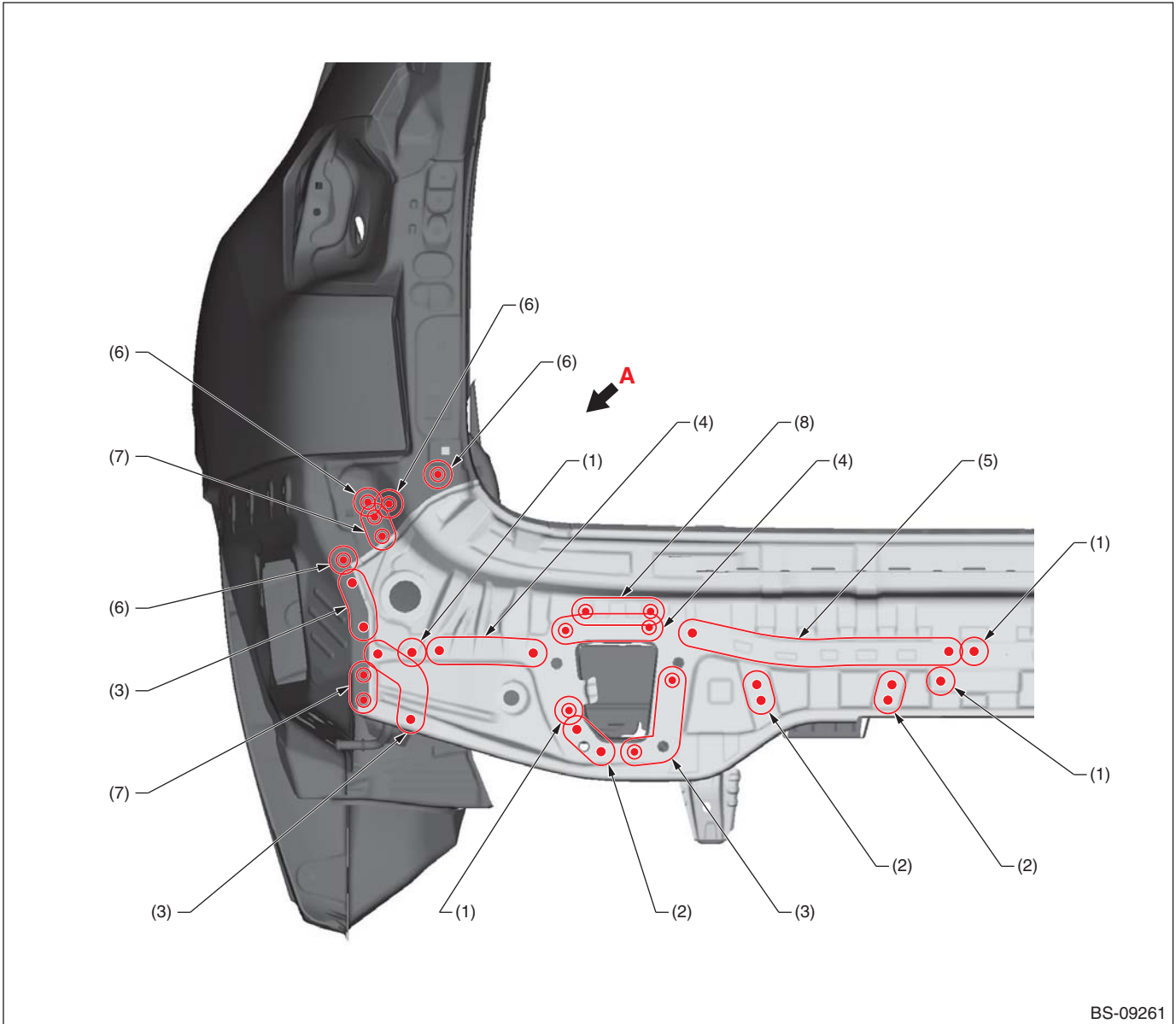
(4) 4 points (service)

Panel Replacement

8-29. Rear Skirt (Total replacement)

A: REMOVAL

• Overall view



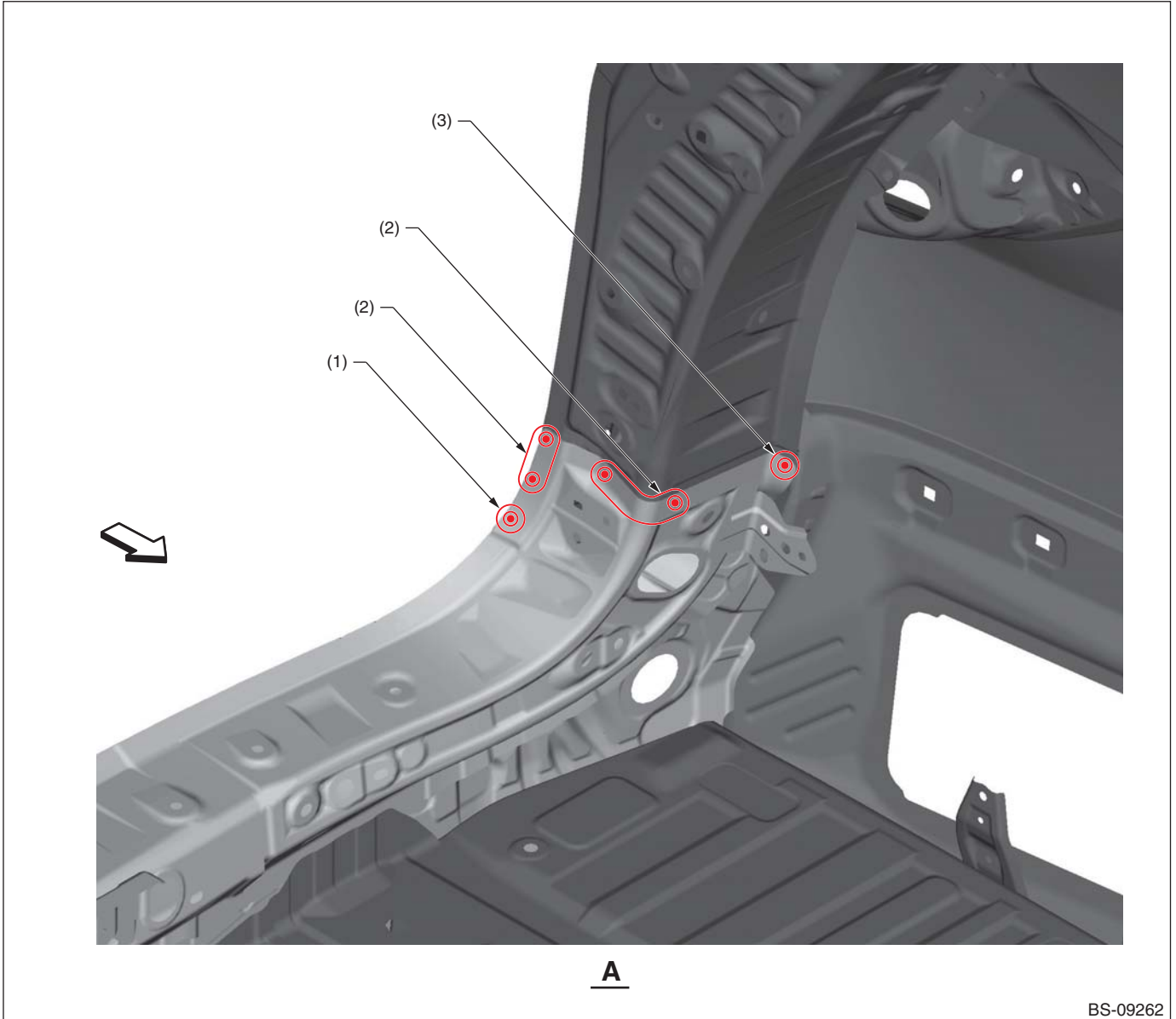
- (1) 1 point (outside · 1)
- (2) 2 points (outside · 1)
- (3) 3 points (outside · 1)

- (4) 4 points (outside · 1)
- (5) 8 points (outside · 1)
- (6) 1 point (outside · 2)

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

Panel Replacement

• Views A



BS-09262

(1) 1 point (inside · 2)

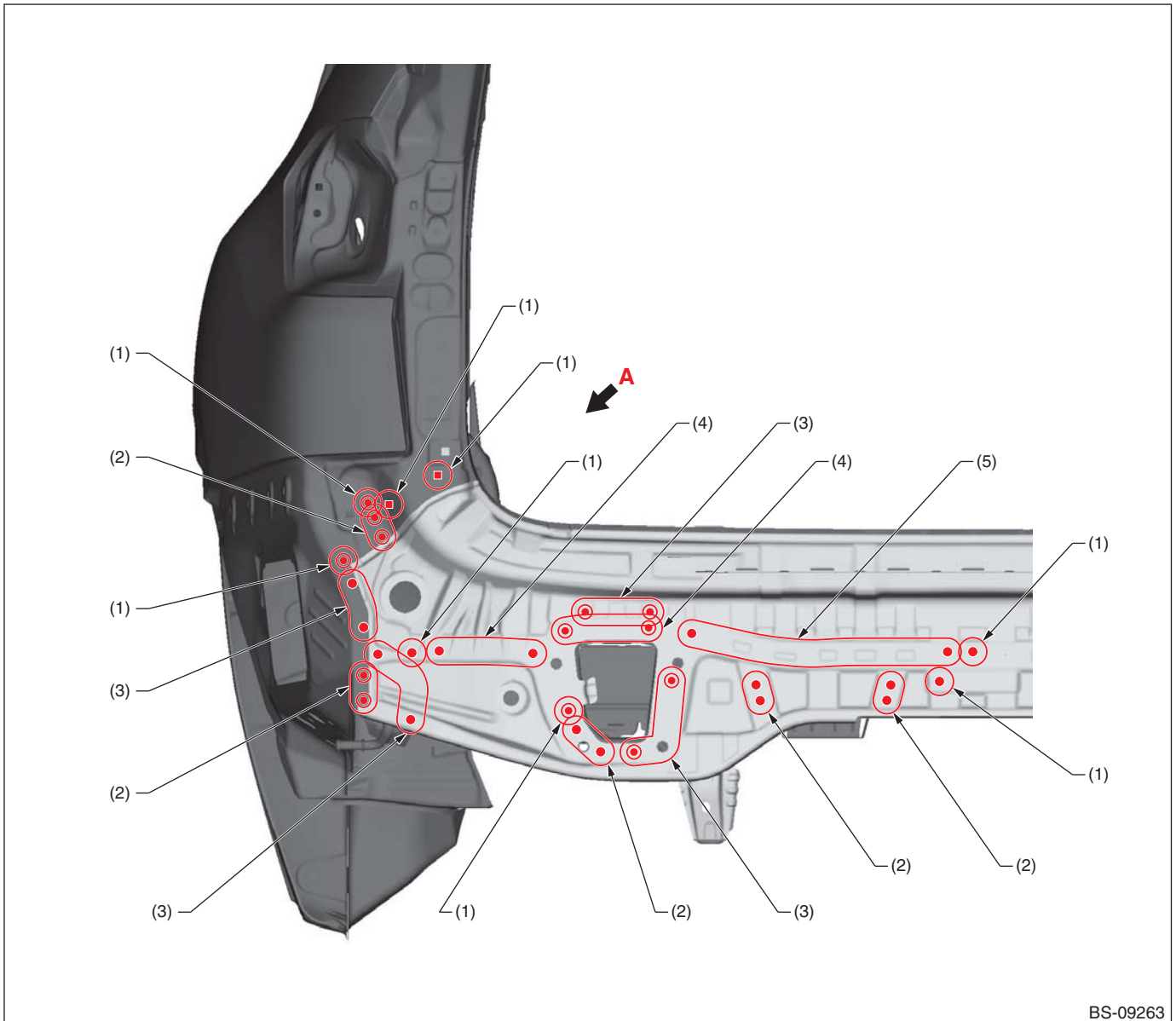
(2) 2 points (inside · 1)

(3) 1 point (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



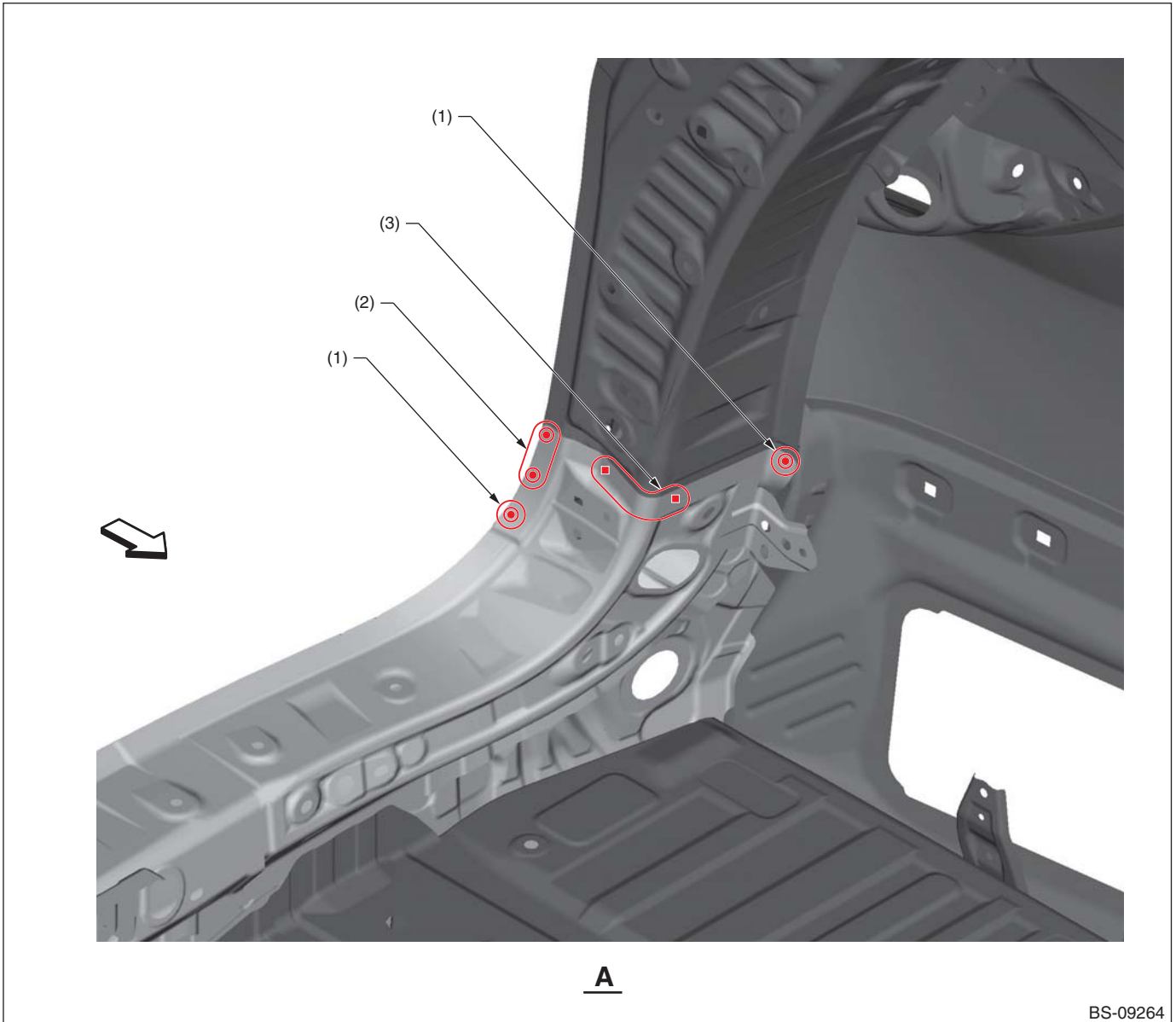
(1) 1 point
(2) 2 points

(3) 3 points
(4) 4 points

(5) 8 points

Panel Replacement

• Views A



(1) 1 point

(2) 2 points

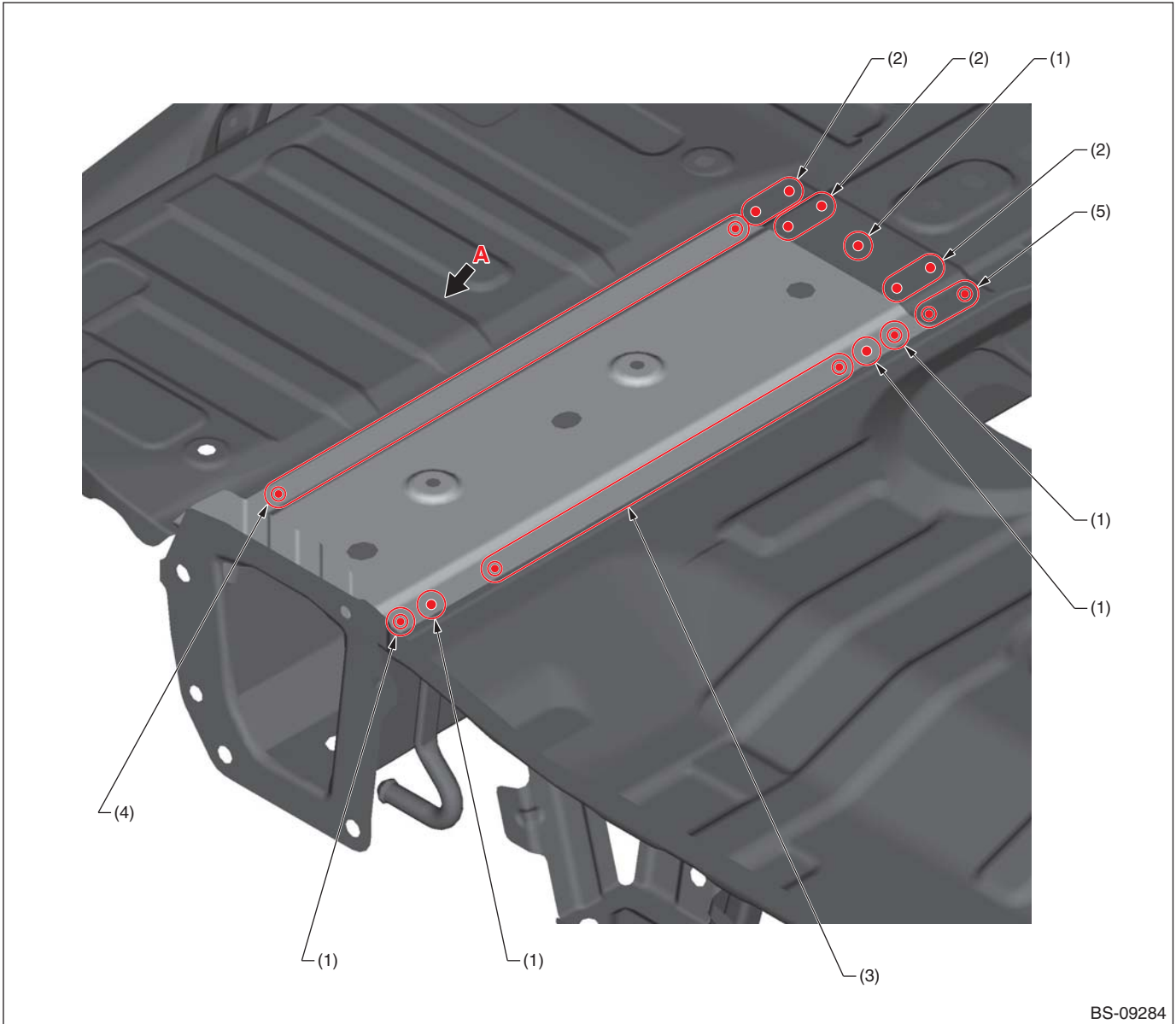
(3) 2 points (service)

Panel Replacement

8-30. Rear Side Frame Upper Rear (Total replacement)

A: REMOVAL

• Overall view



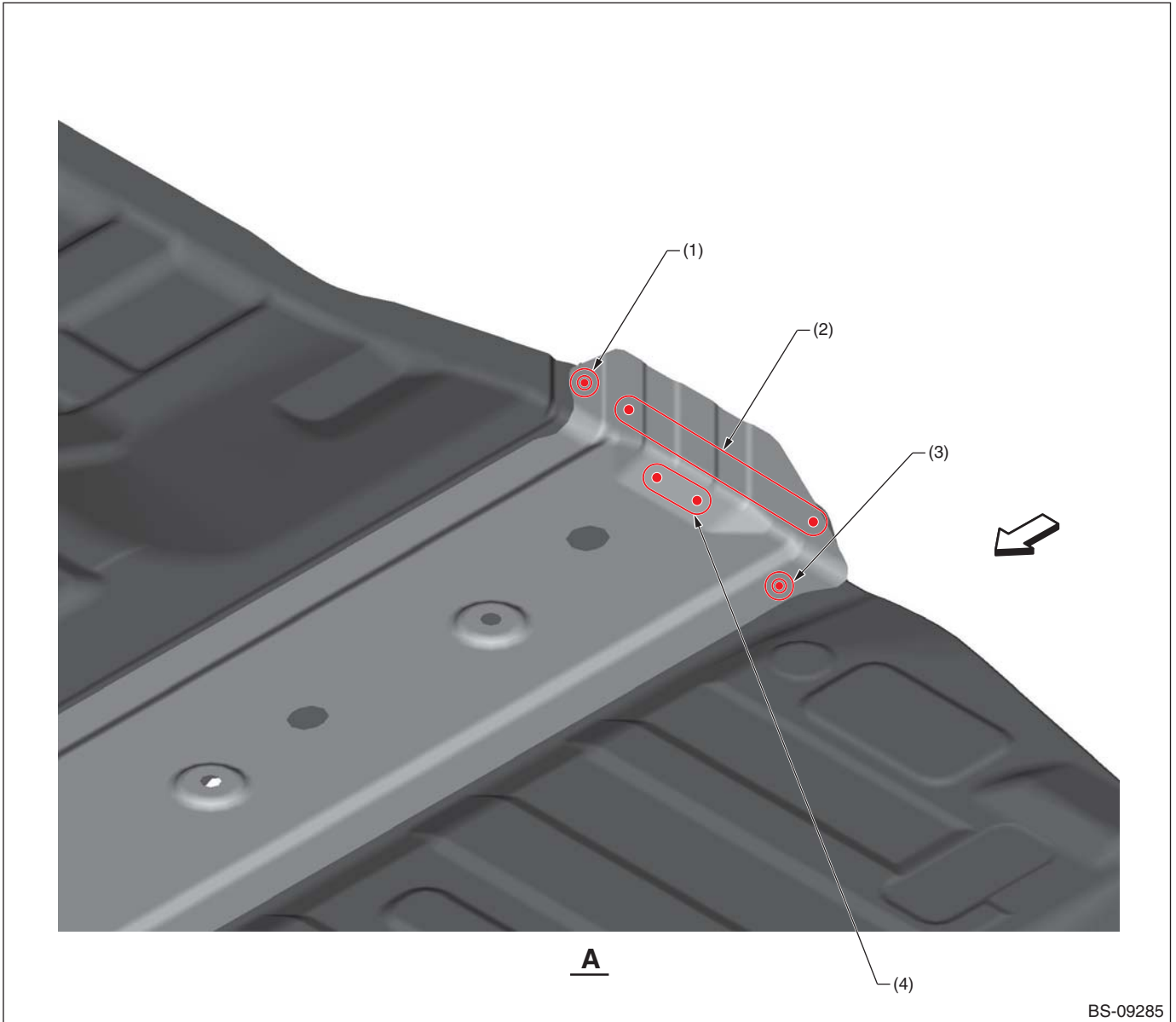
- (1) 1 point (top · 1)
- (2) 2 points (top · 1)

- (3) 7 points (top · 1)
- (4) 8 points (top · 1)

- (5) 2 points (top · 2)

Panel Replacement

• Views A



(1) 1 point (inside · 1)
(2) 4 points (inside · 1)

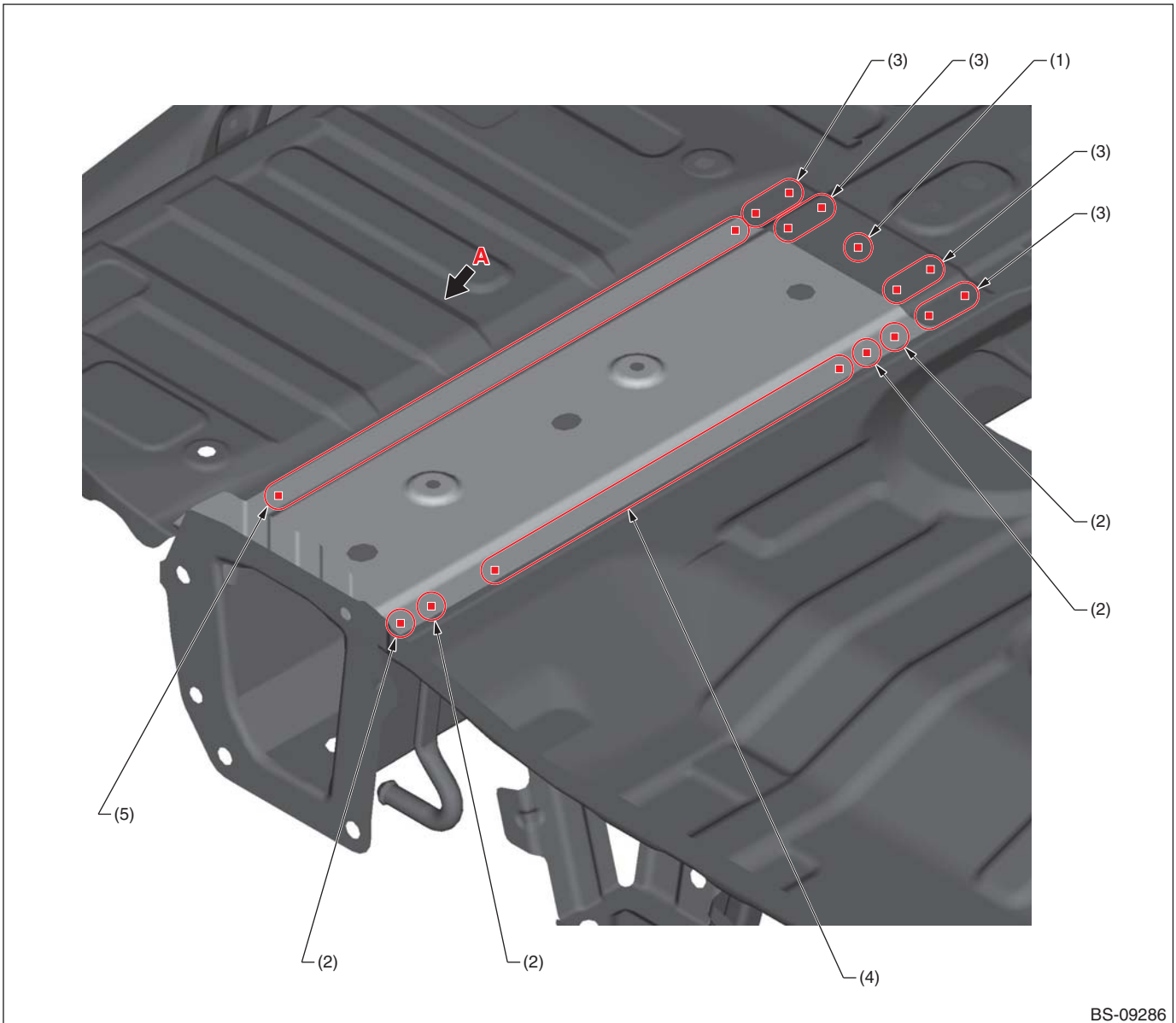
(3) 1 point (top · 1)

(4) 2 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09286

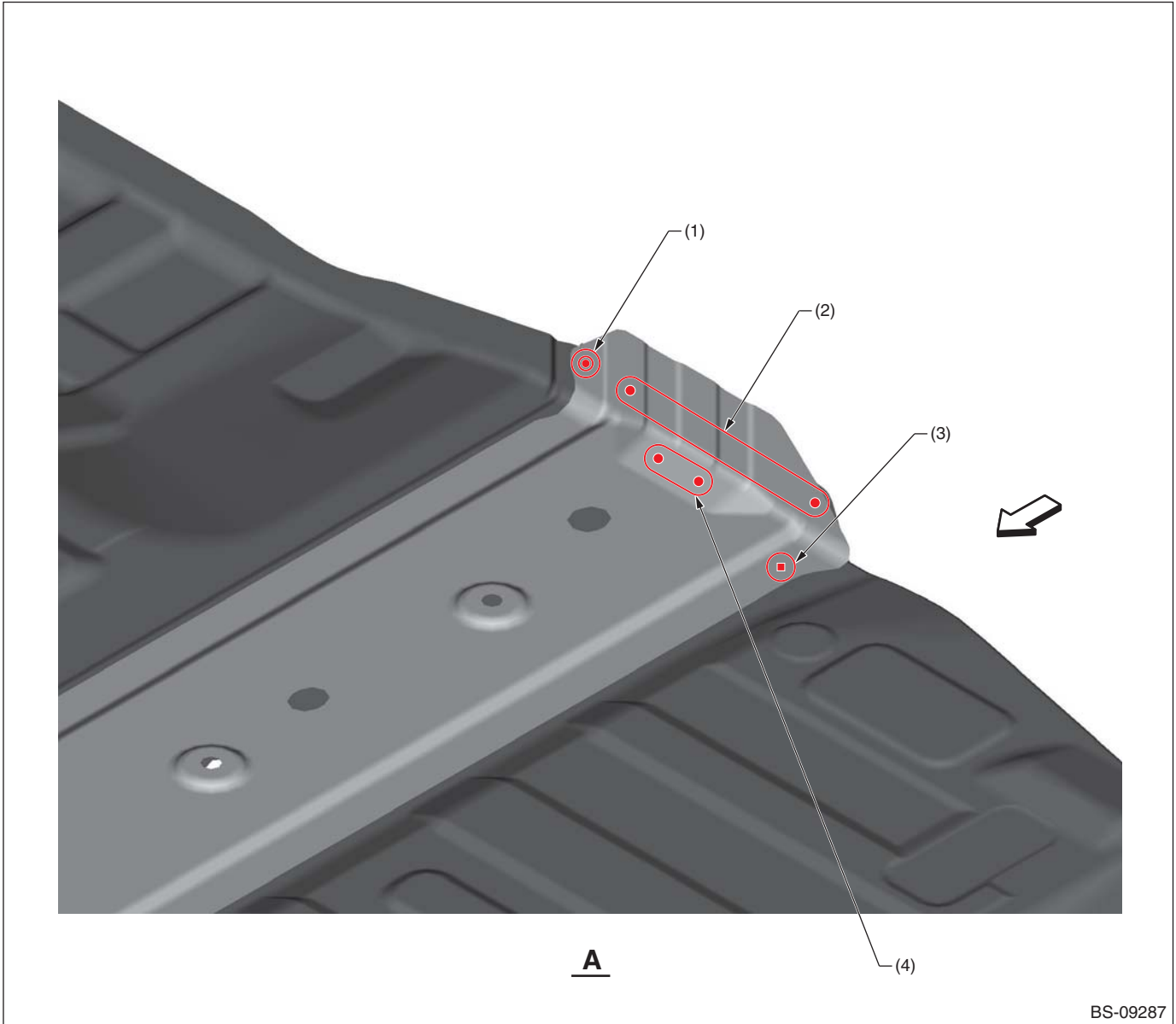
(1) 1 point
(2) 1 point (service)

(3) 2 points
(4) 7 points (service)

(5) 8 points (service)

Panel Replacement

• Views A



(1) 1 point
(2) 4 points

(3) 1 point (service)

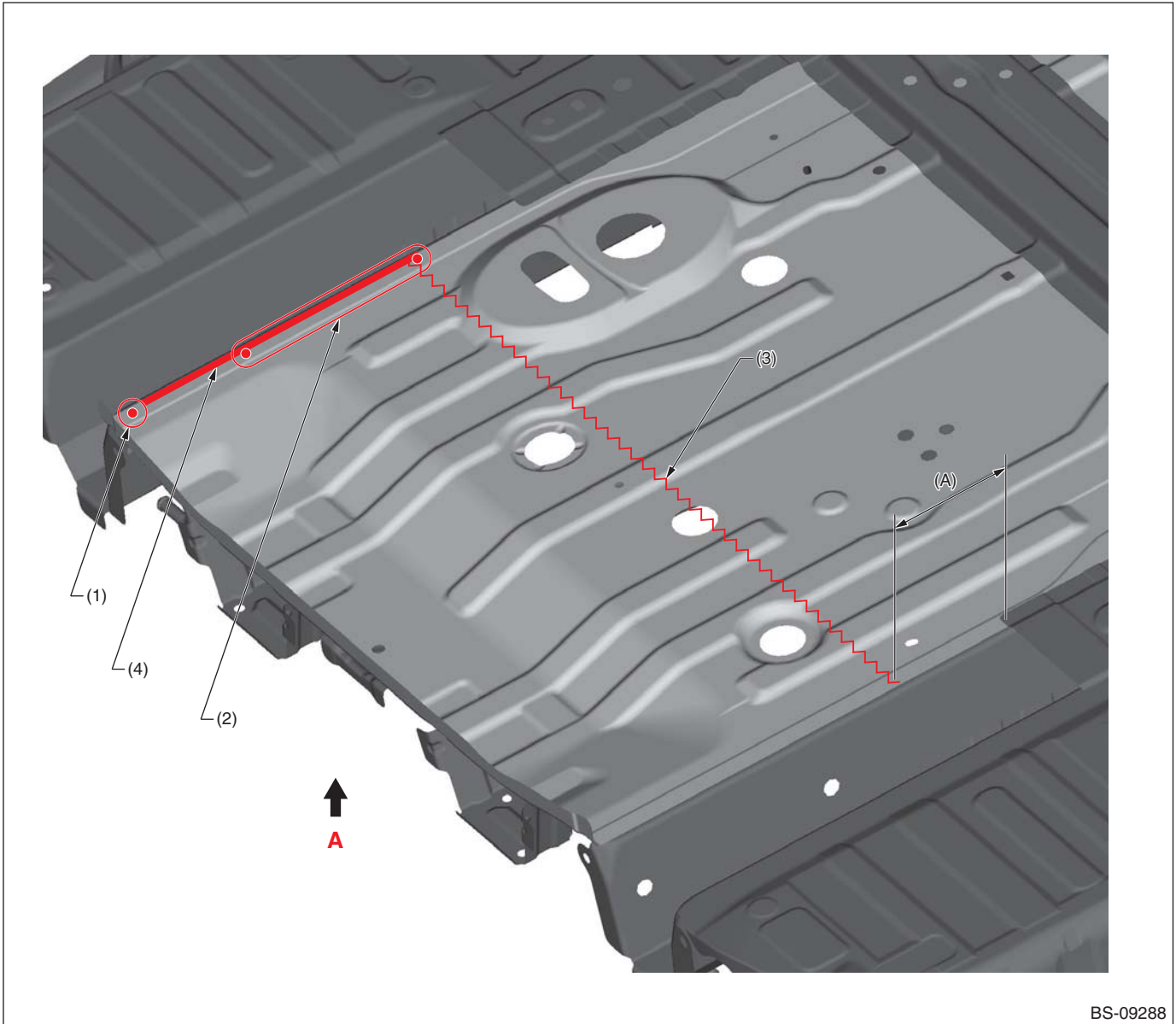
(4) 2 points

Panel Replacement

8-31. Rear Floor Pan (Partial replacement)

A: REMOVAL

• Overall view



BS-09288

(A) 110 mm [4.33 in]

(1) 1 point (top · 1)

(3) Cut position

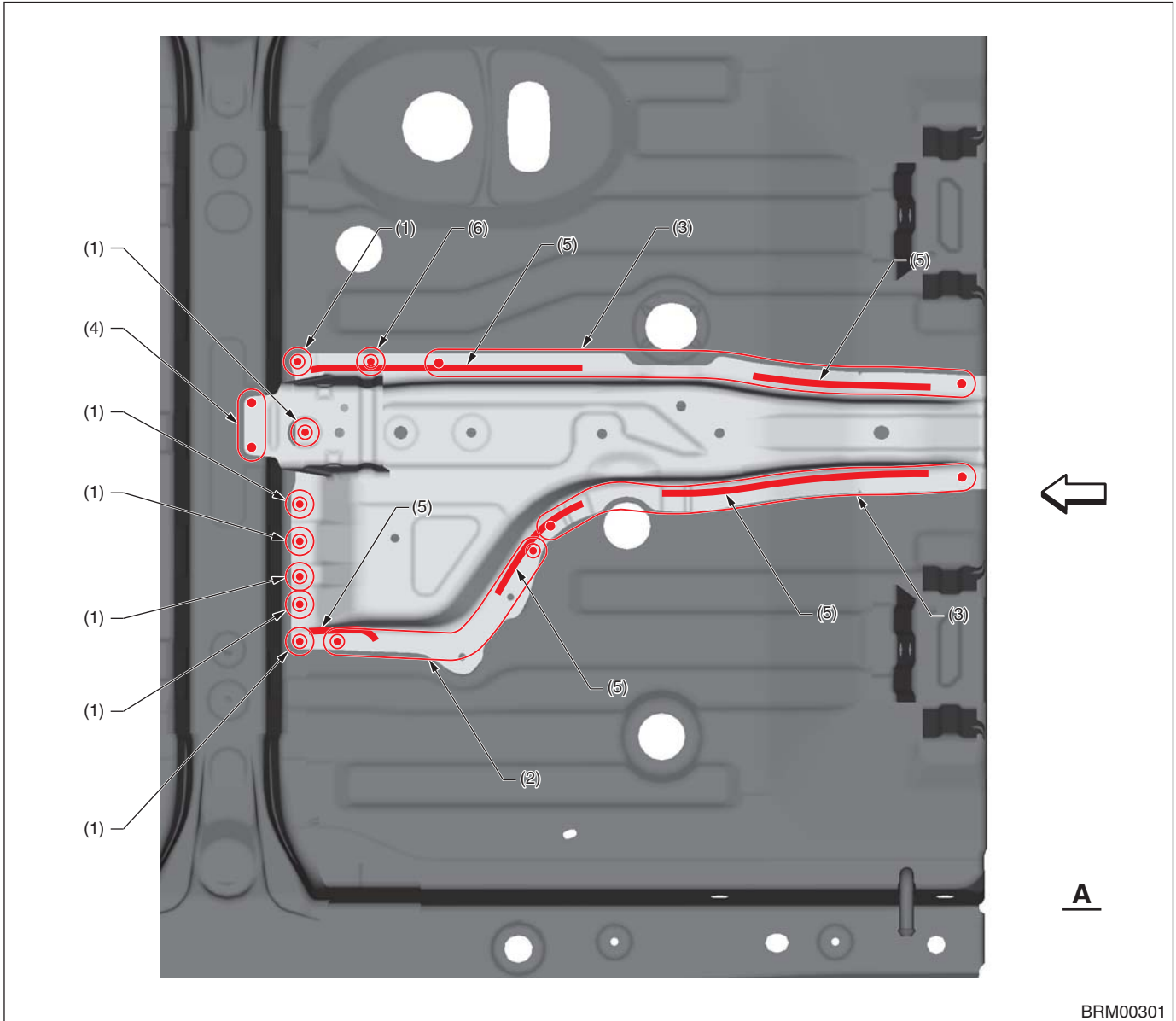
(4) Structural adhesive

(2) 6 points (top · 1)

— : Structural adhesive application location

Panel Replacement

• Views A



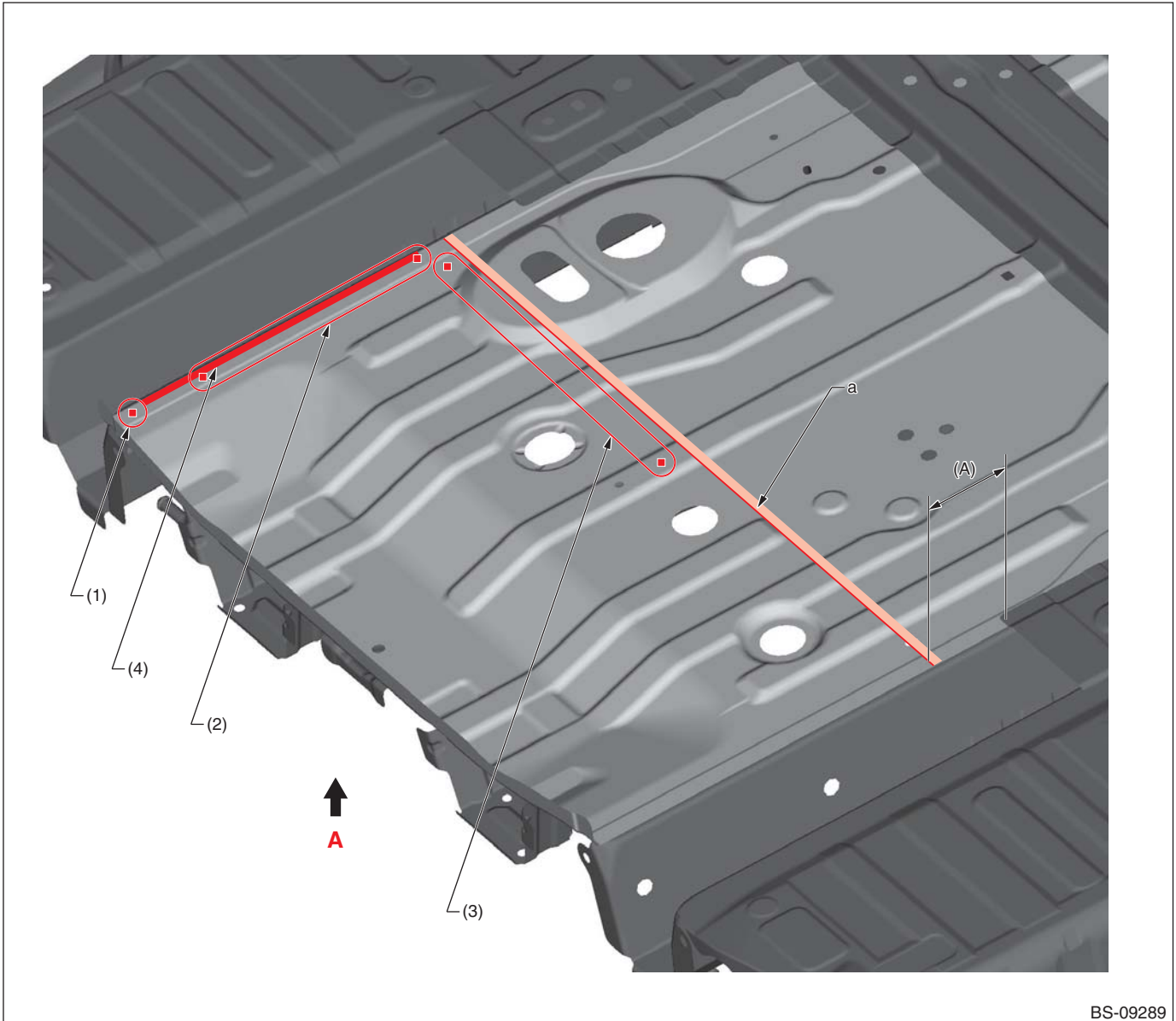
BRM00301

- | | | |
|---------------------------|---------------------------|--------------------------|
| (1) 1 point (bottom · 1) | (3) 8 points (bottom · 1) | (5) Structural adhesive |
| (2) 4 points (bottom · 1) | (4) 2 points (bottom · 1) | (6) 1 point (bottom · 2) |
- : Structural adhesive application location

Panel Replacement

B: INSTALLATION

• Overall view



BS-09289

(A) 85 mm [3.35 in]

(1) 1 point (service)

(3) 8 points (service)

(4) Structural adhesive

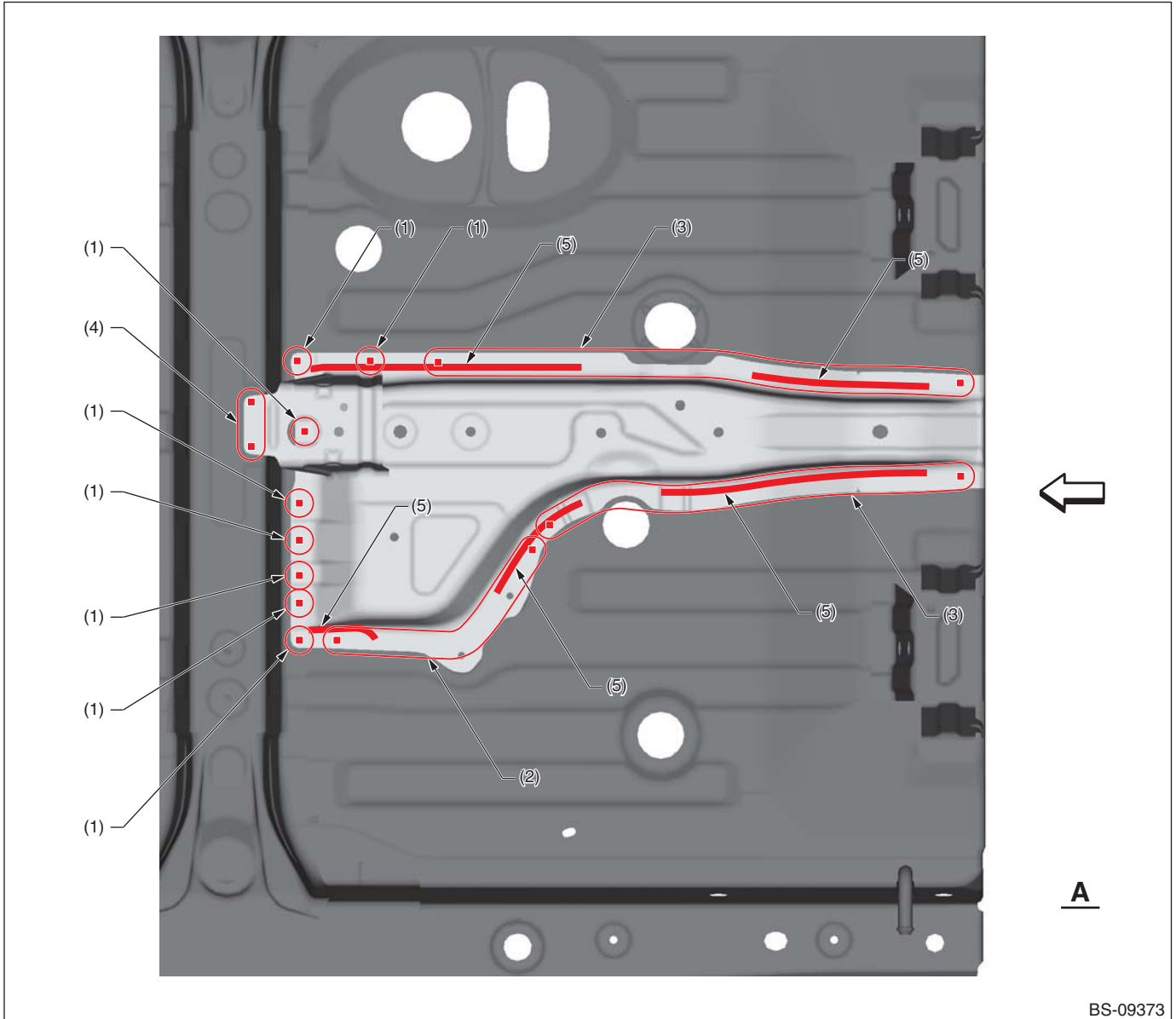
(2) 6 points (service)

— : Structural adhesive application location

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

Panel Replacement

• Views A



BS-09373

(1) 1 point (service)
(2) 4 points (service)

(3) 8 points (service)
(4) 2 points (service)

(5) Structural adhesive

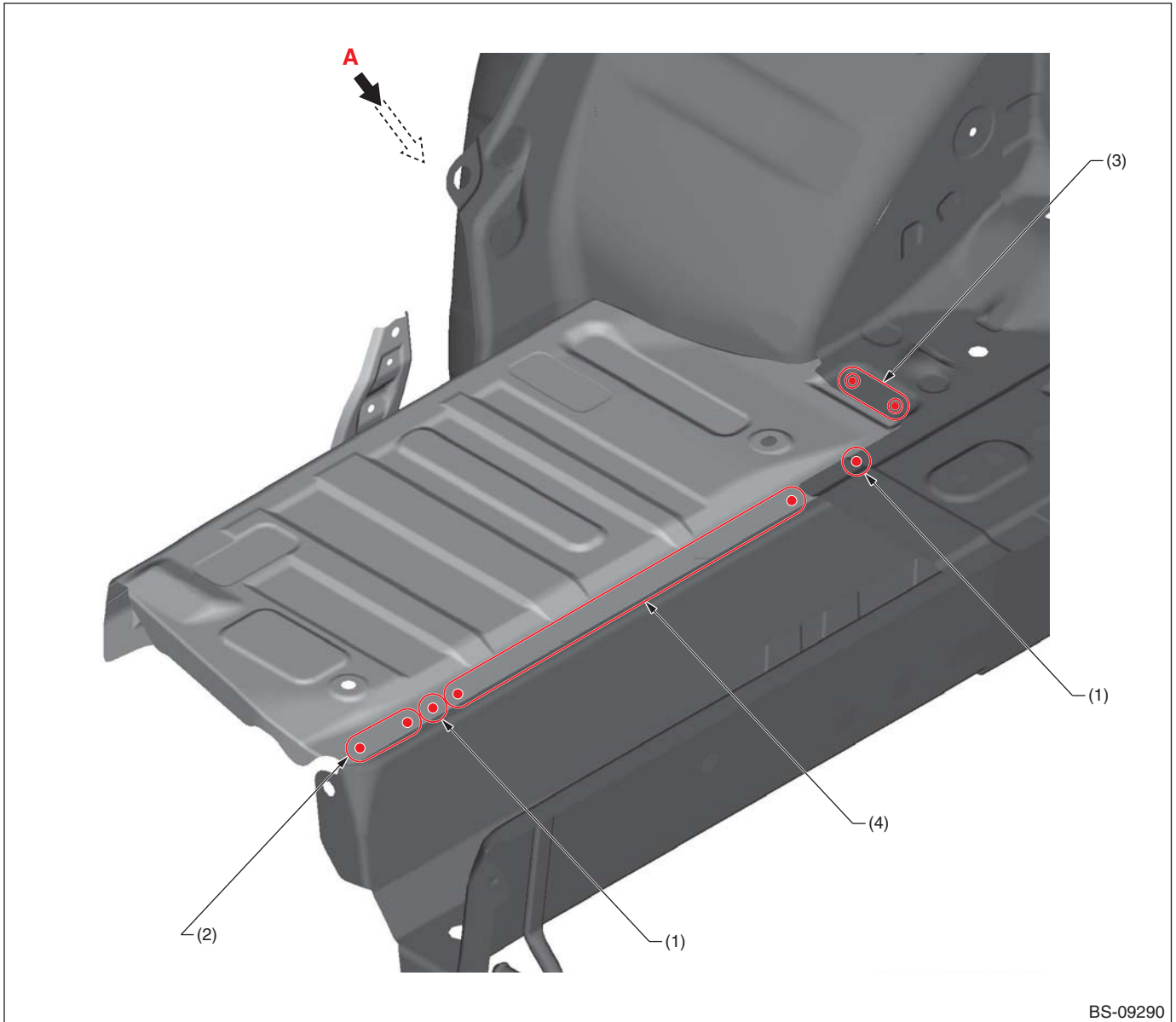
— : Structural adhesive application location

Panel Replacement

8-32. Rear Floor Side (Total replacement)

A: REMOVAL

- Overall view



BS-09290

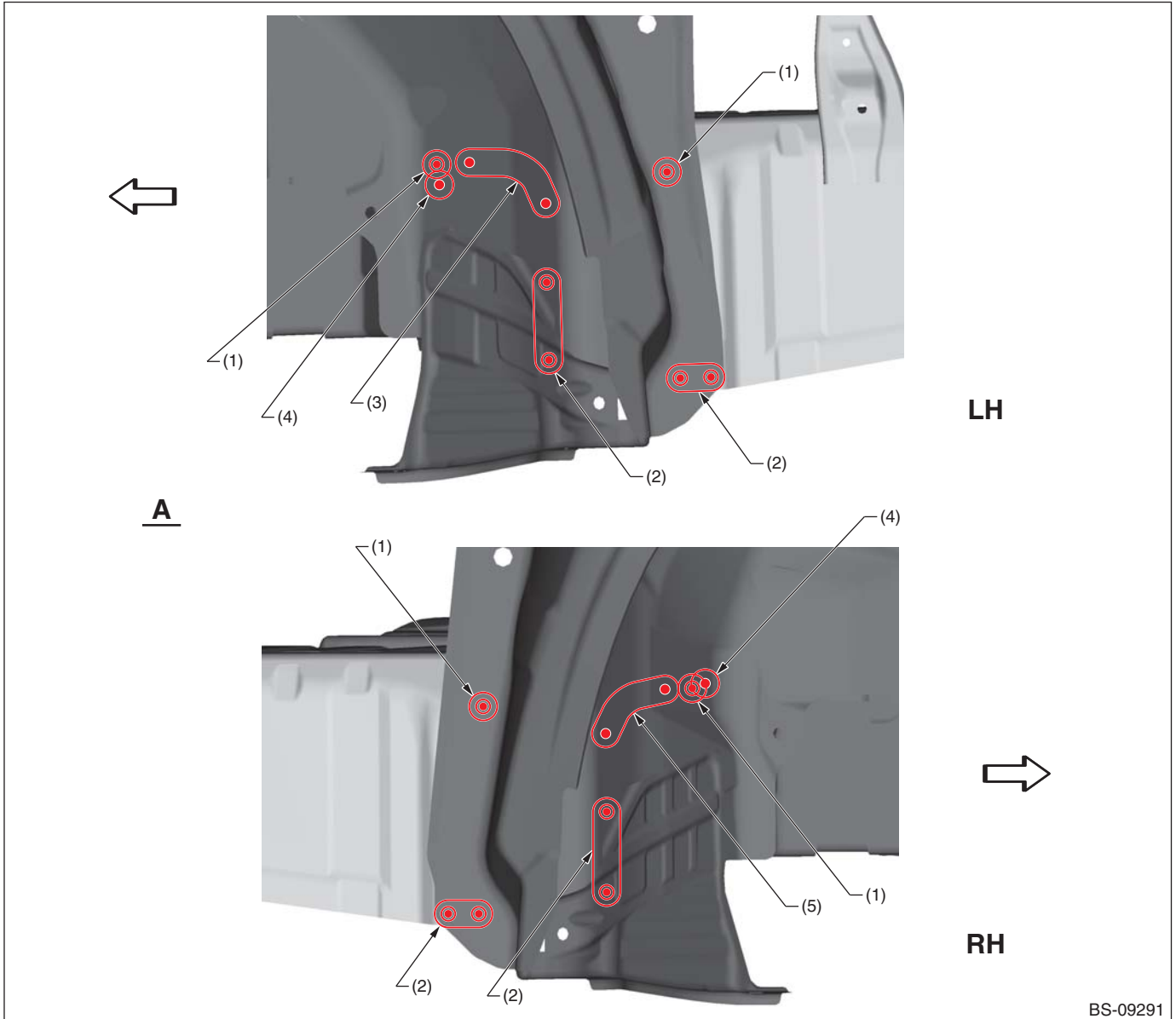
- (1) 1 point (top · 1)
- (2) 2 points (top · 1)

- (3) 2 points (top · 2)

- (4) 7 points (top · 1)

Panel Replacement

• Views A



BS-09291

(1) 1 point (outside · 2)
 (2) 2 points (inside · 1)

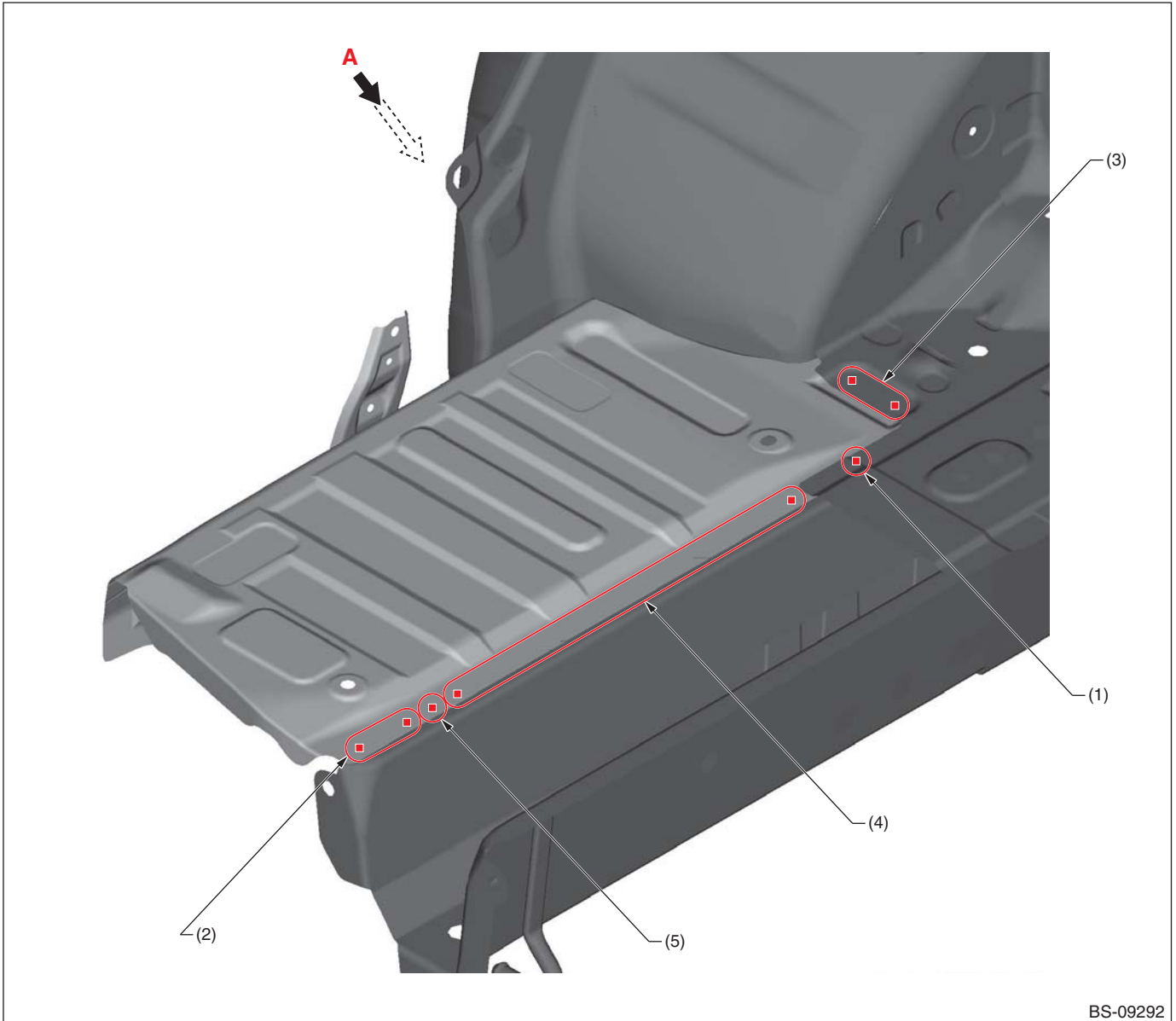
(3) 4 points (inside · 1)
 (4) 1 point (inside · 1)

(5) 3 points (inside · 1)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09292

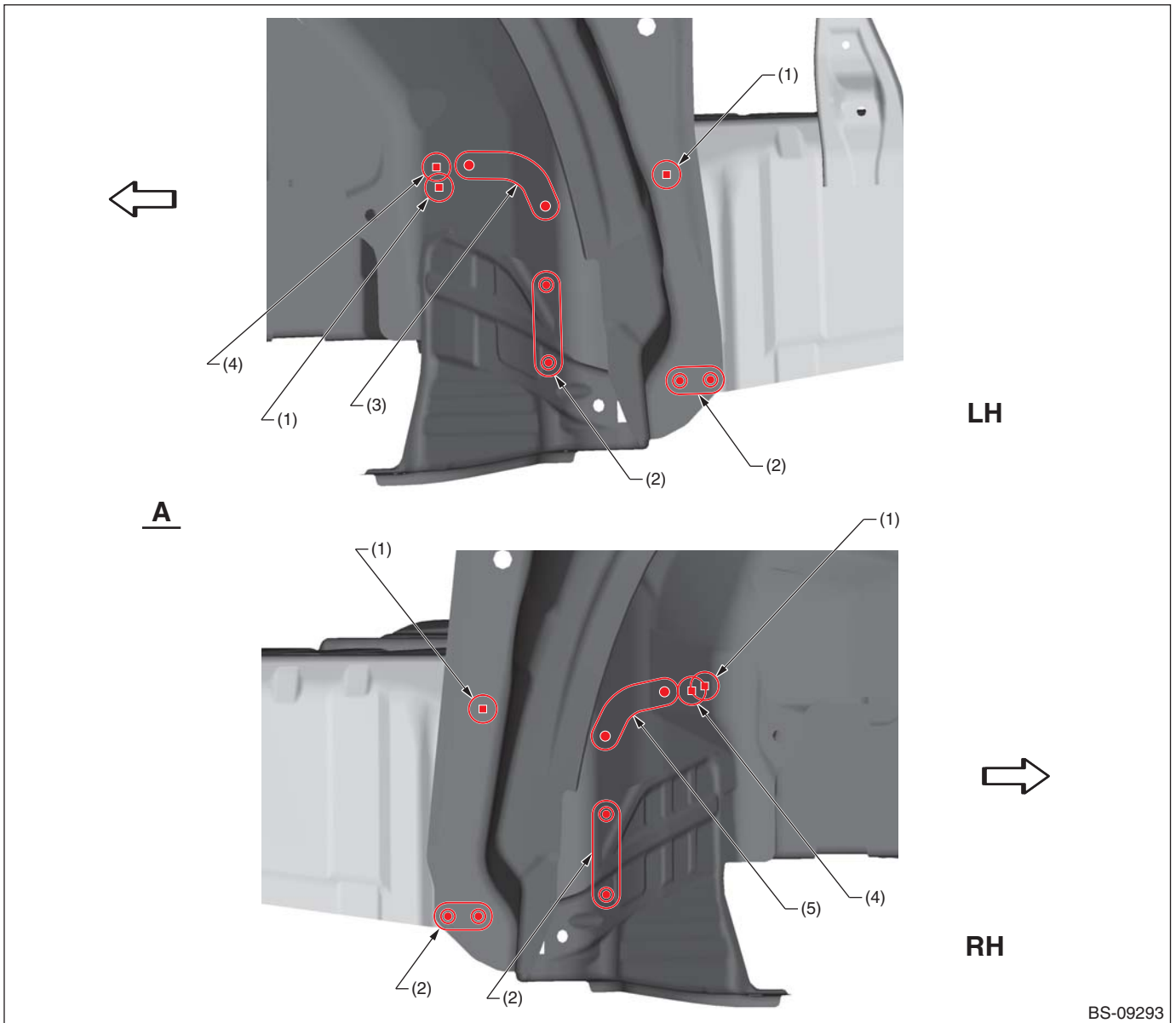
- (1) 1 point
- (2) 2 points (service)

- (3) 2 points
- (4) 7 points (service)

- (5) 1 point (service)

Panel Replacement

• Views A



BS-09293

(1) 1 point
(2) 2 points

(3) 4 points
(4) 1 point (service · matching)

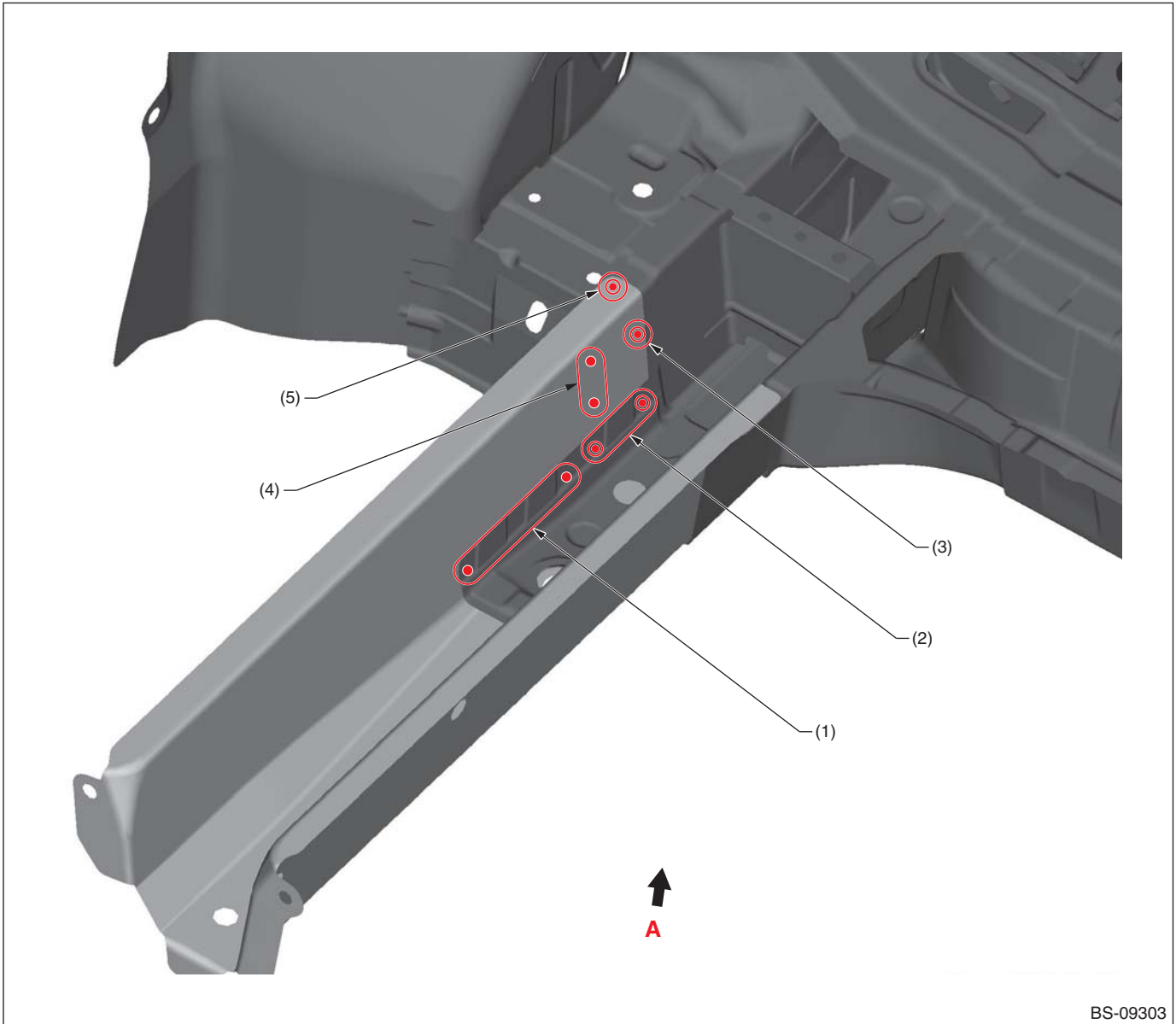
(5) 3 points

Panel Replacement

8-33. Rear Side Frame Lower Rear (Total replacement)

A: REMOVAL

• Overall view



BS-09303

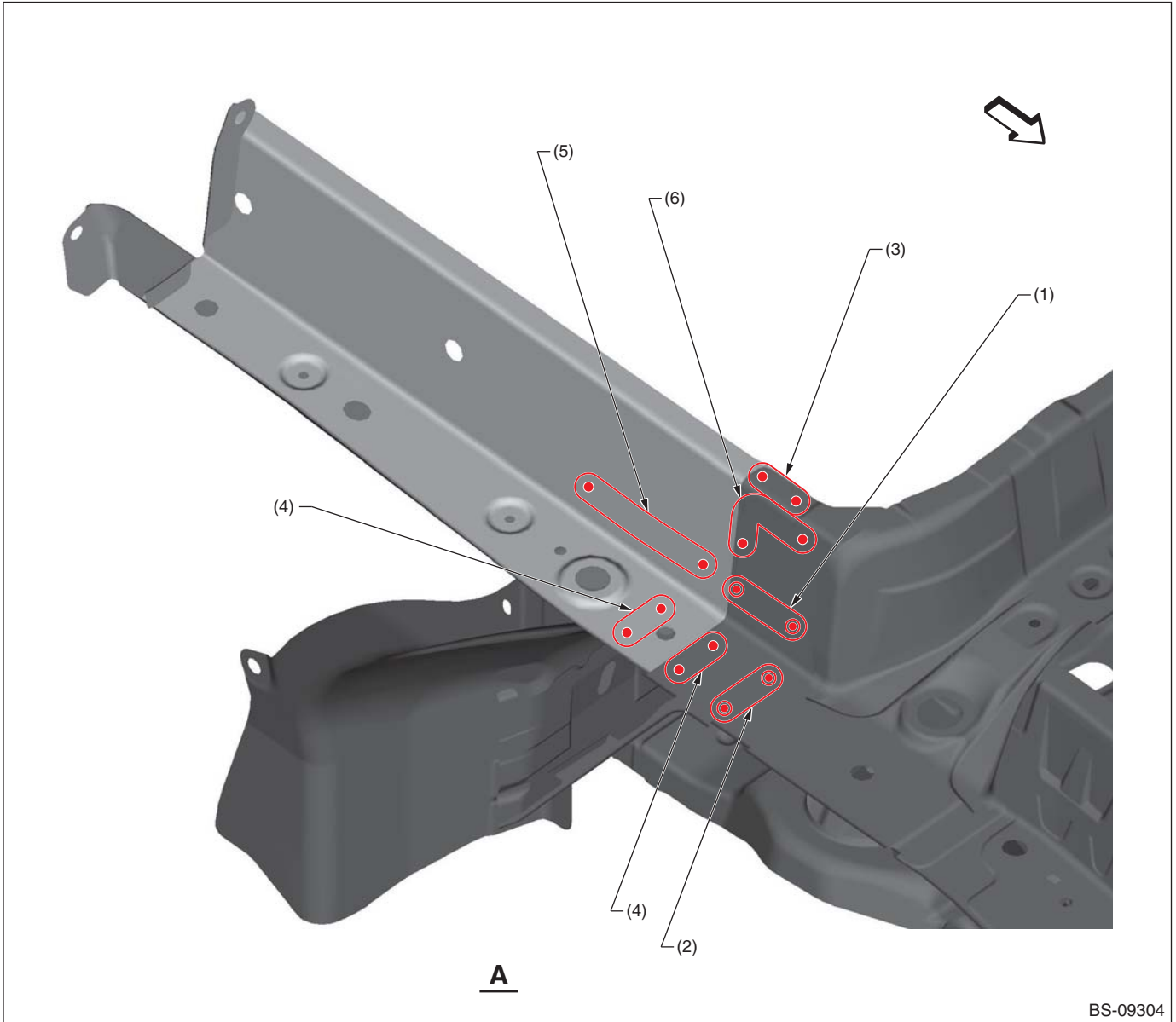
(1) 3 points (outside · 1)
(2) 2 points (outside · 2)

(3) 1 point (inside · 1 belt sander)
(4) 2 points (inside · 1 belt sander)

(5) 1 point (top · 1)

Panel Replacement

• Views A



BS-09304

(1) 2 points (outside · 2)
(2) 2 points (bottom · 2)

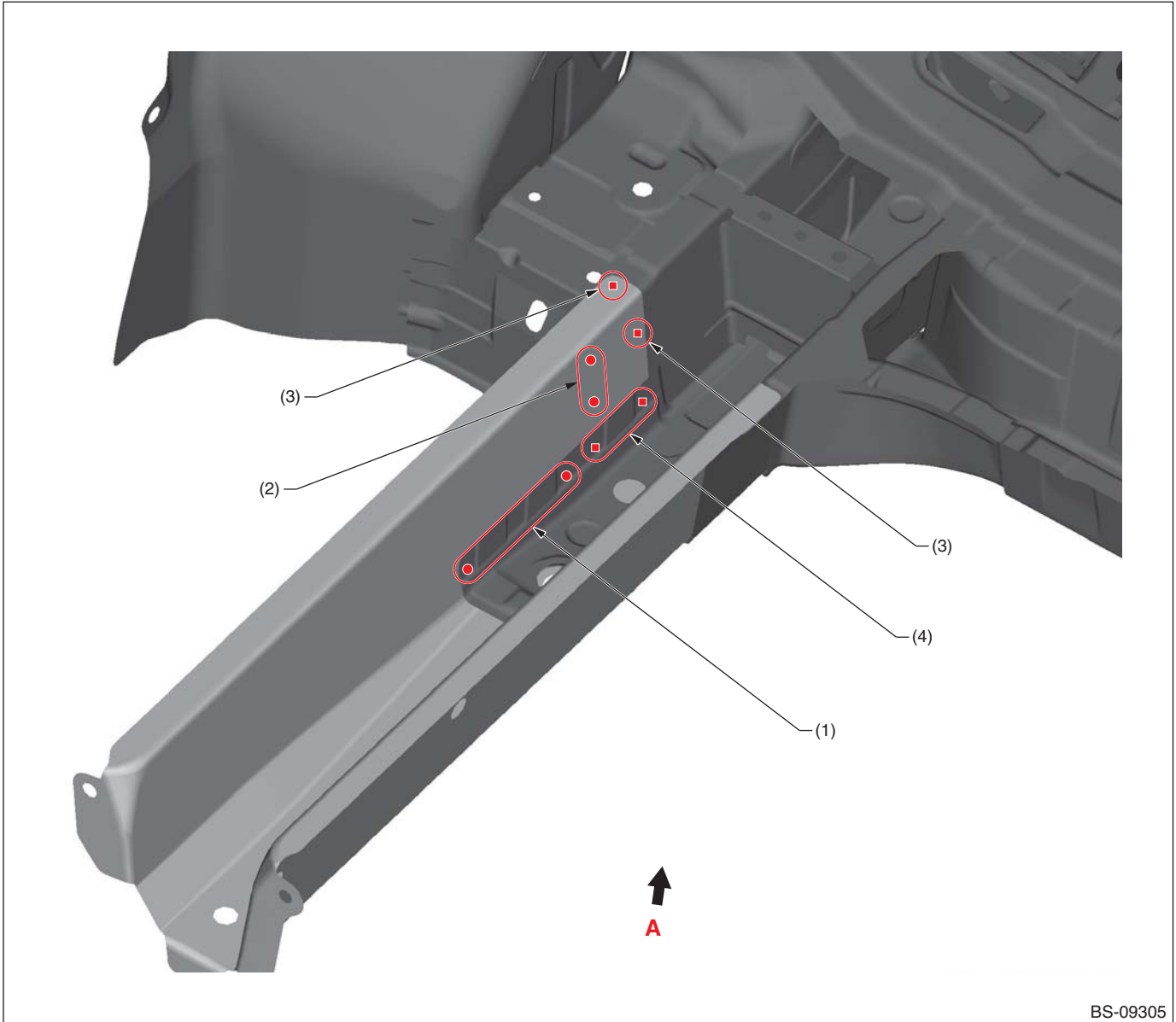
(3) 2 points (top · 1)
(4) 2 points (bottom · 1)

(5) 3 points (outside · 1)
(6) 3 points (inside · 1 belt sander)

Panel Replacement

B: INSTALLATION

• Overall view



BS-09305

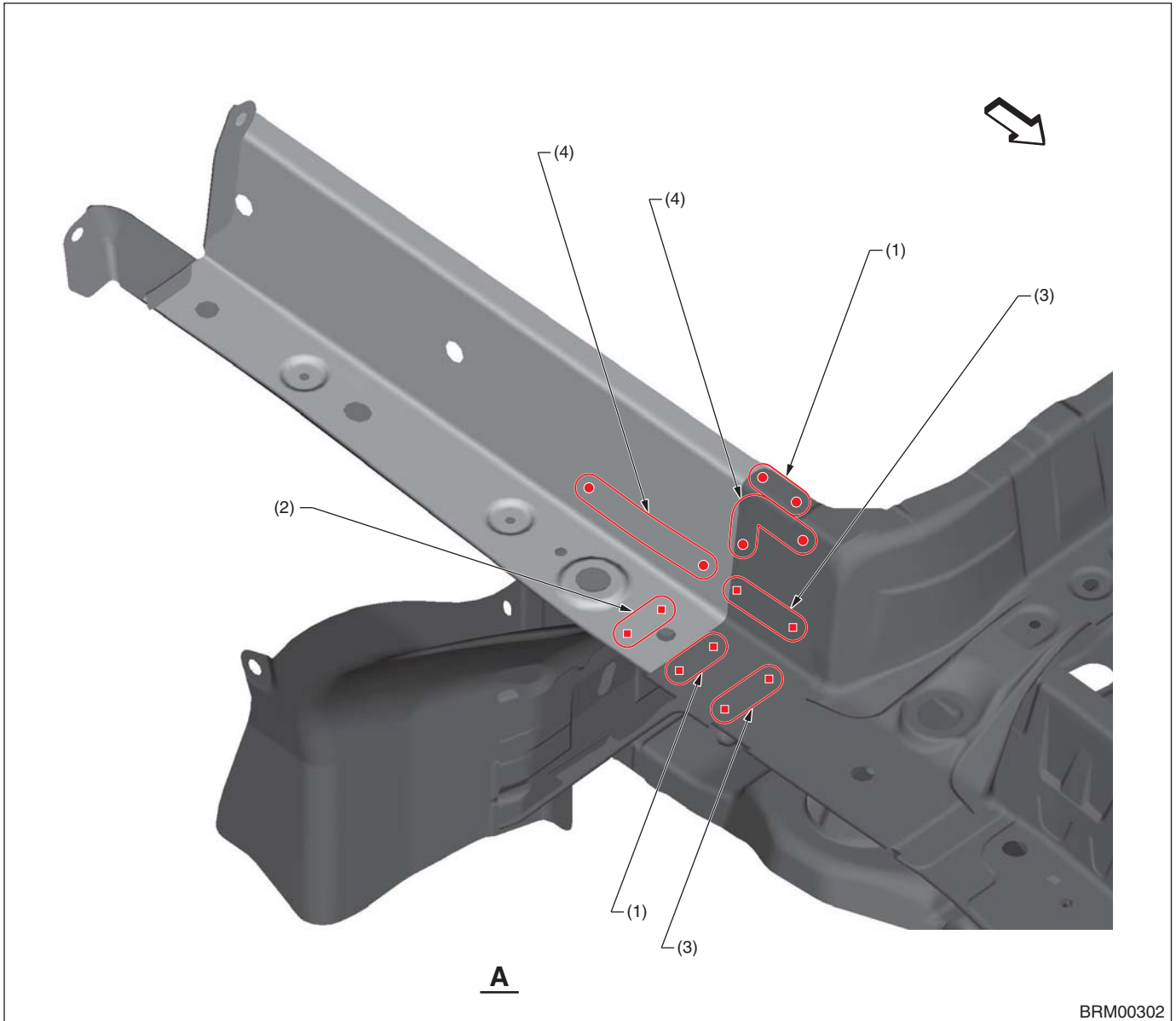
(1) 3 points
(2) 2 points

(3) 1 point (service)

(4) 2 points (service · matching)

Panel Replacement

• Views A



(1) 2 points

(2) 2 points (service)

(3) 2 points (service · matching)

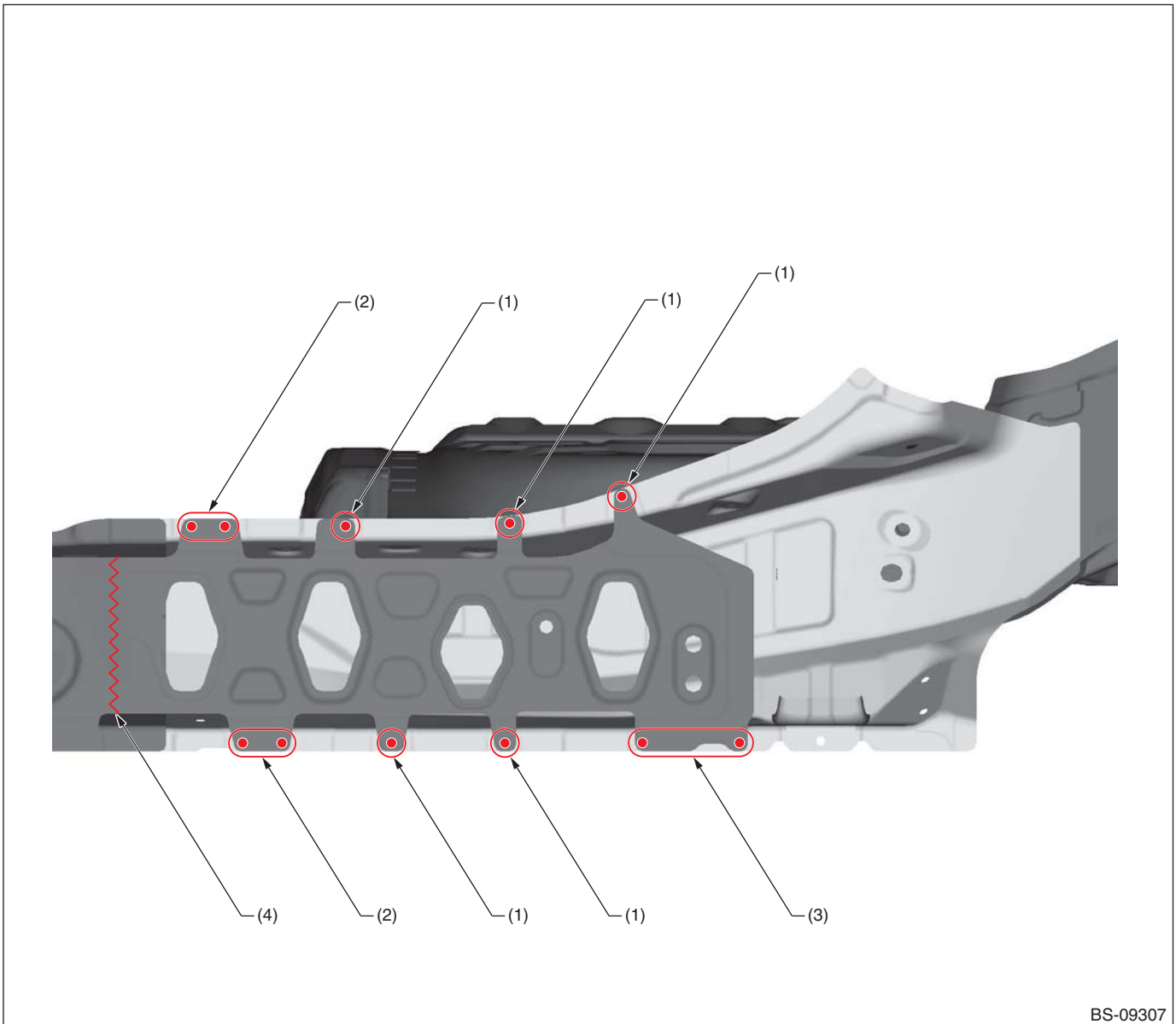
(4) 3 points

Panel Replacement

8-34. Side sill inner Rear (Total replacement)

A: REMOVAL

• Overall view 1



BS-09307

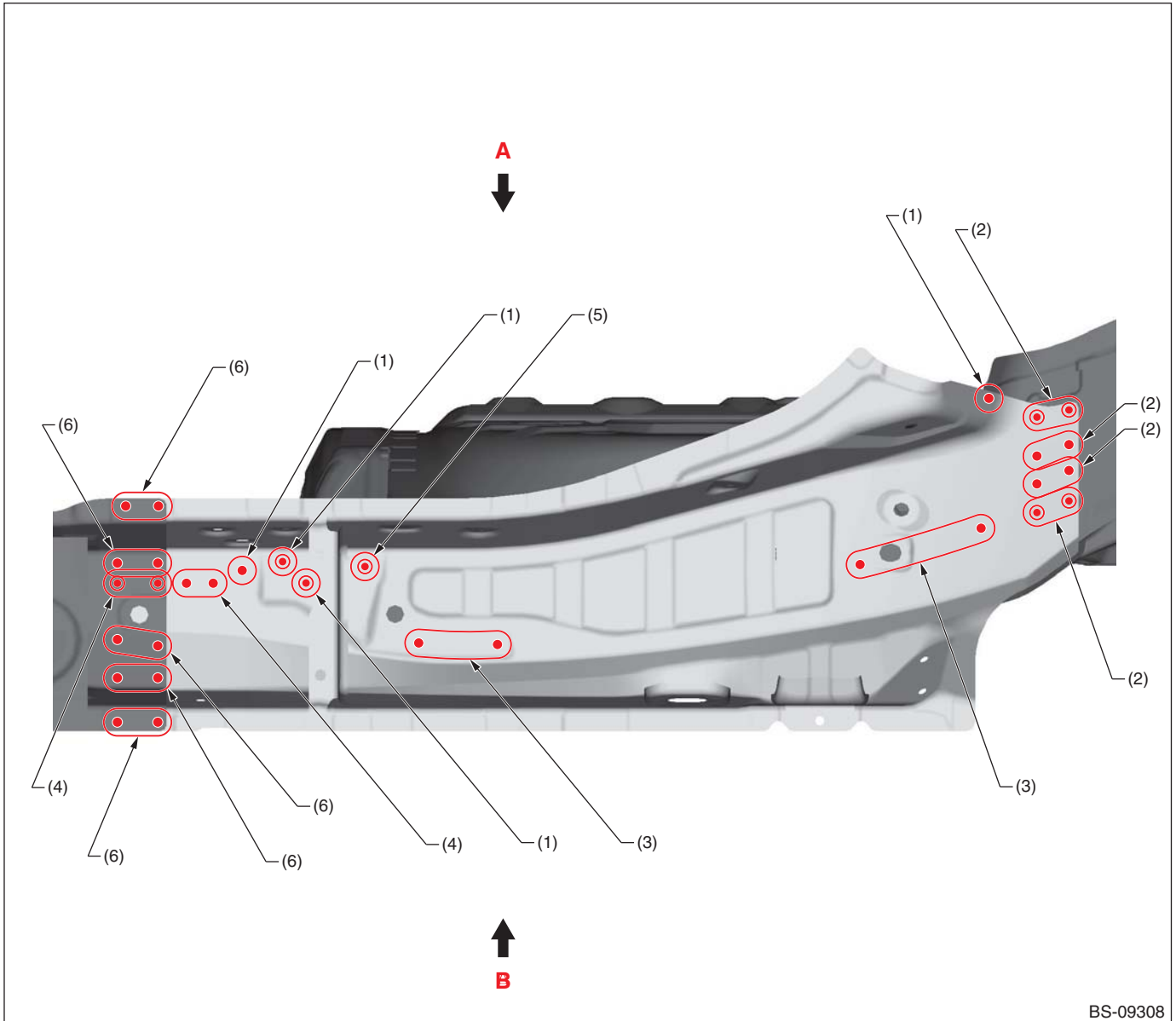
- (1) 1 point (outside · 1)
- (2) 2 points (outside · 1)

- (3) 3 points (outside · 1)

- (4) Rough cutting

Panel Replacement

• Overall view 2



BS-09308

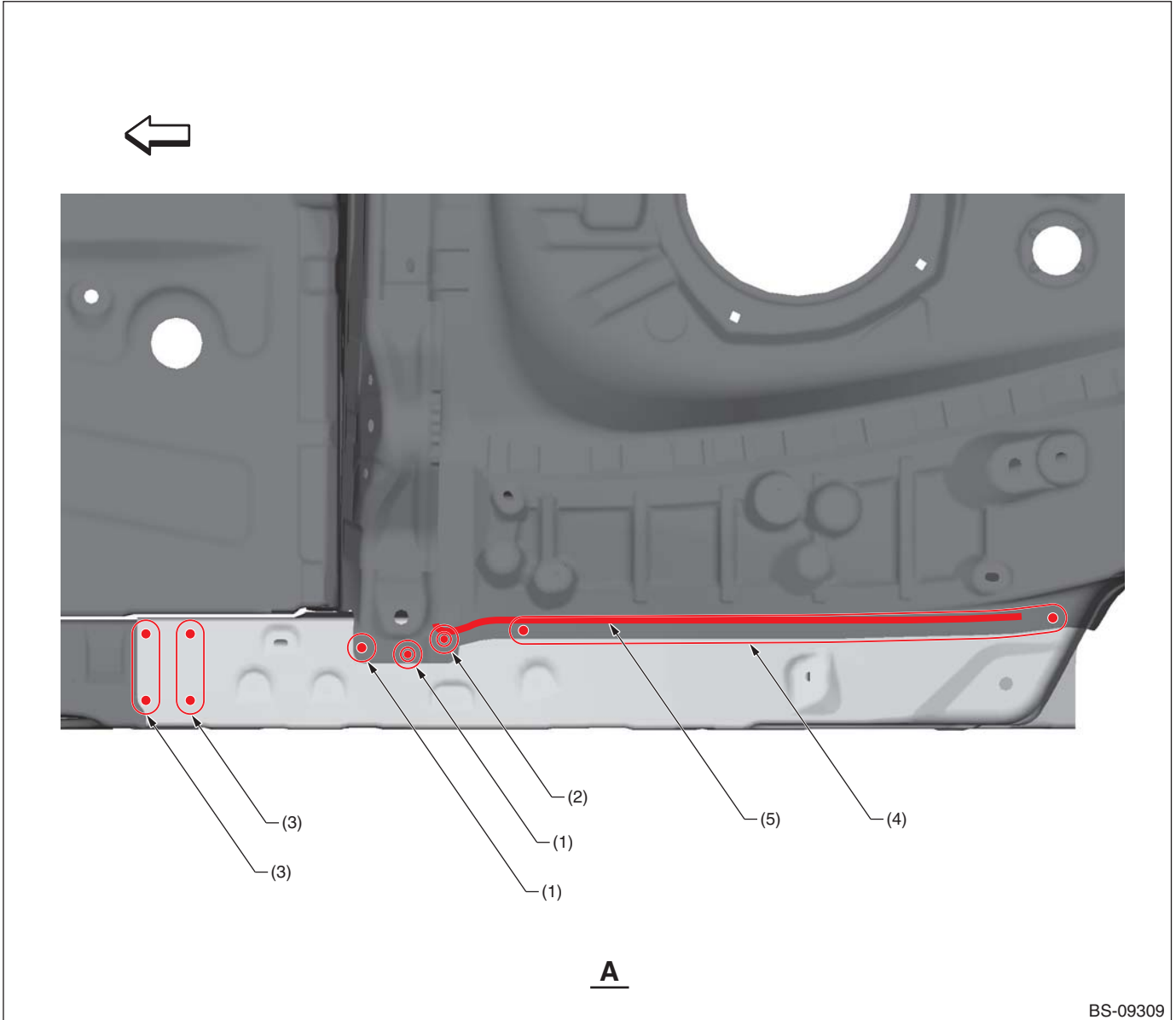
(1) 1 point (outside · 1)
 (2) 2 points (outside · 1)

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

(5) 1 point (outside · 2)
 (6) 2 points (inside · 1)

Panel Replacement

• Views A



(1) 1 point (top · 1)

(3) 2 points (top · 1)

(5) Structural adhesive

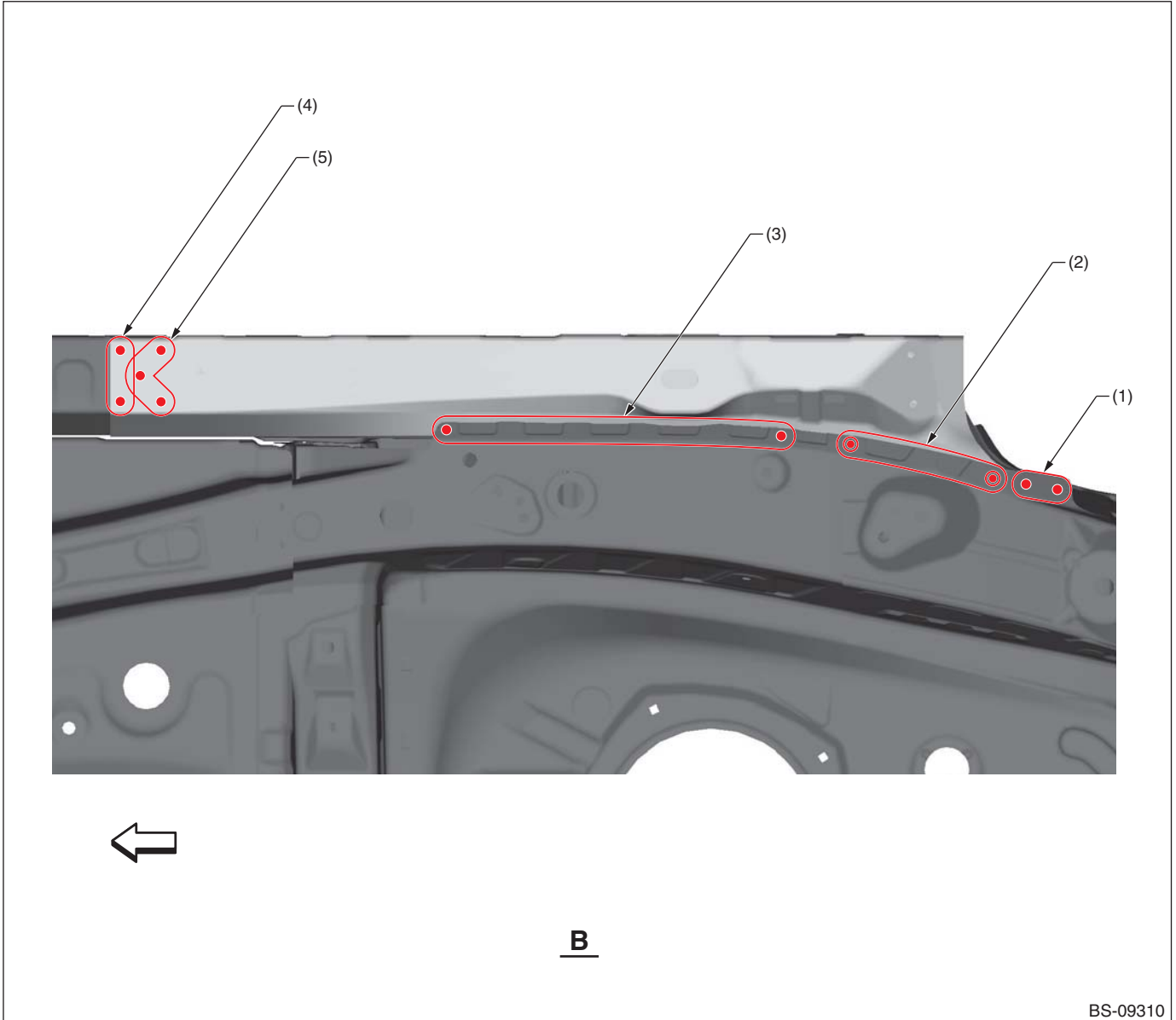
(2) 1 point (top · 2)

(4) 8 points (top · 1)

— : Structural adhesive application location

Panel Replacement

• Views B



BS-09310

(1) 2 points (outside · 1)
(2) 3 points (outside · 1)

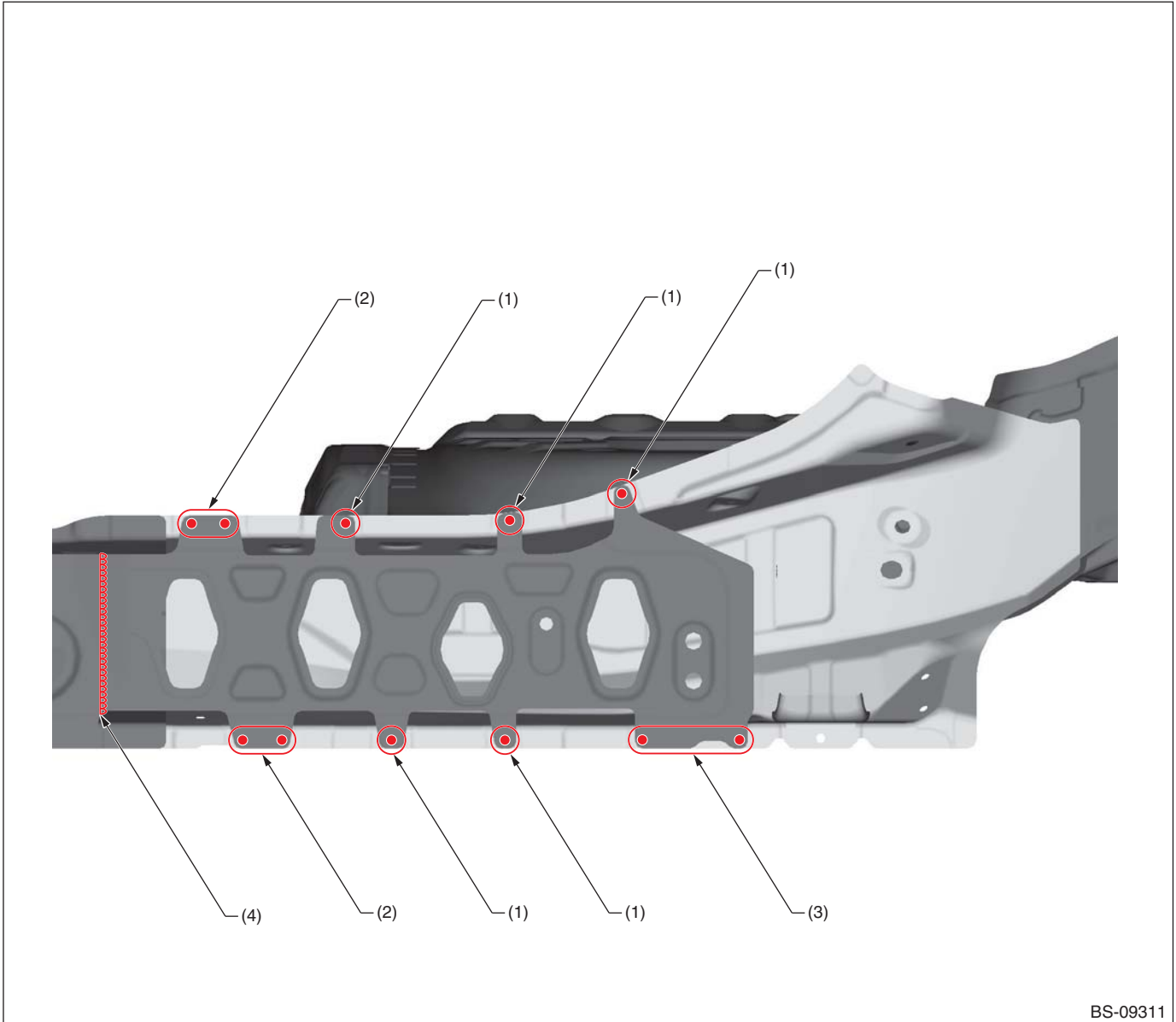
(3) 6 points (outside · 1)
(4) 2 points (bottom · 1)

(5) 3 points (bottom · 1)

Panel Replacement

B: INSTALLATION

• Overall view 1



BS-09311

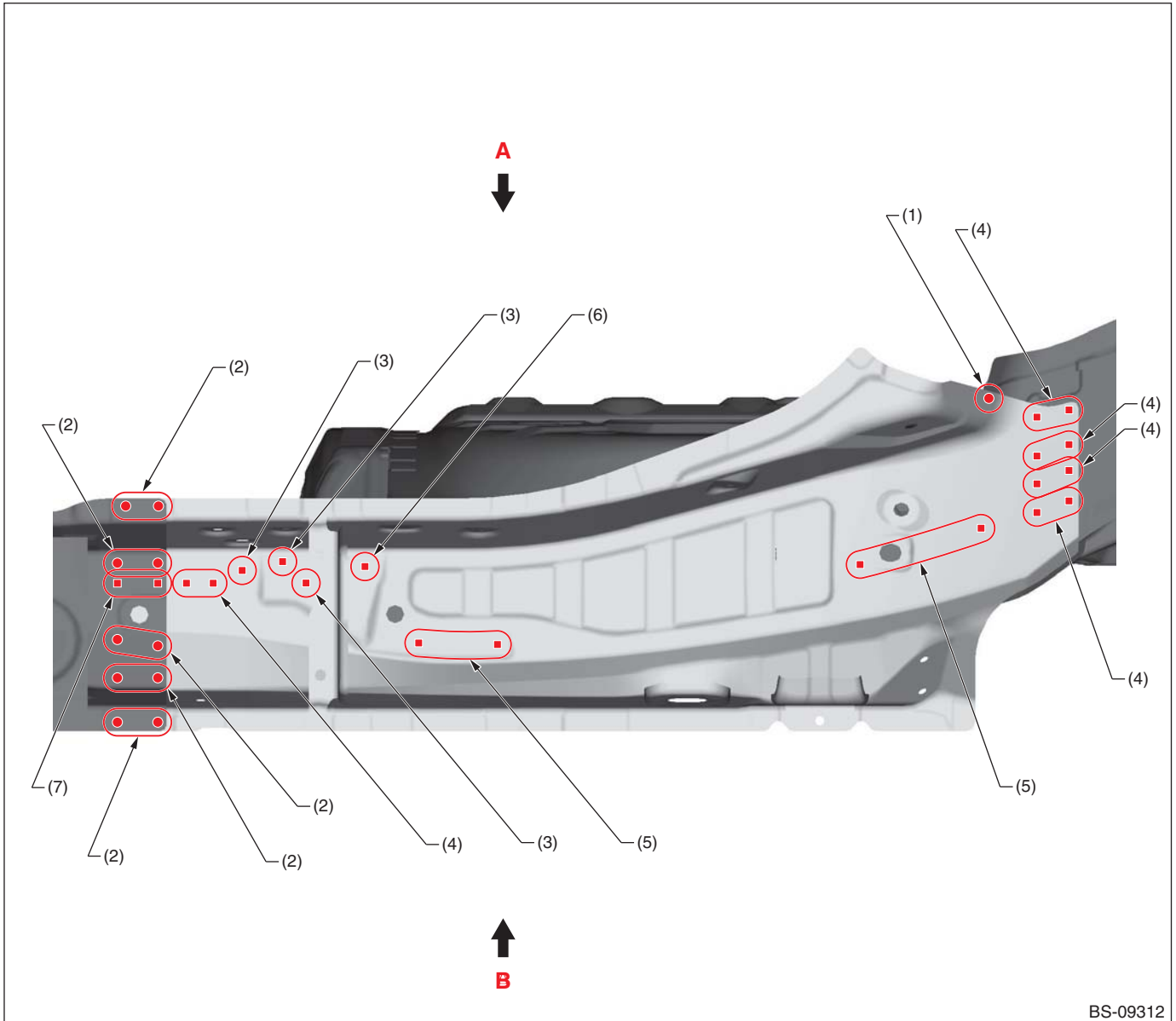
- (1) 1 point
- (2) 2 points

- (3) 3 points

- (4) 1 point (Continuous welding)

Panel Replacement

• Overall view 2

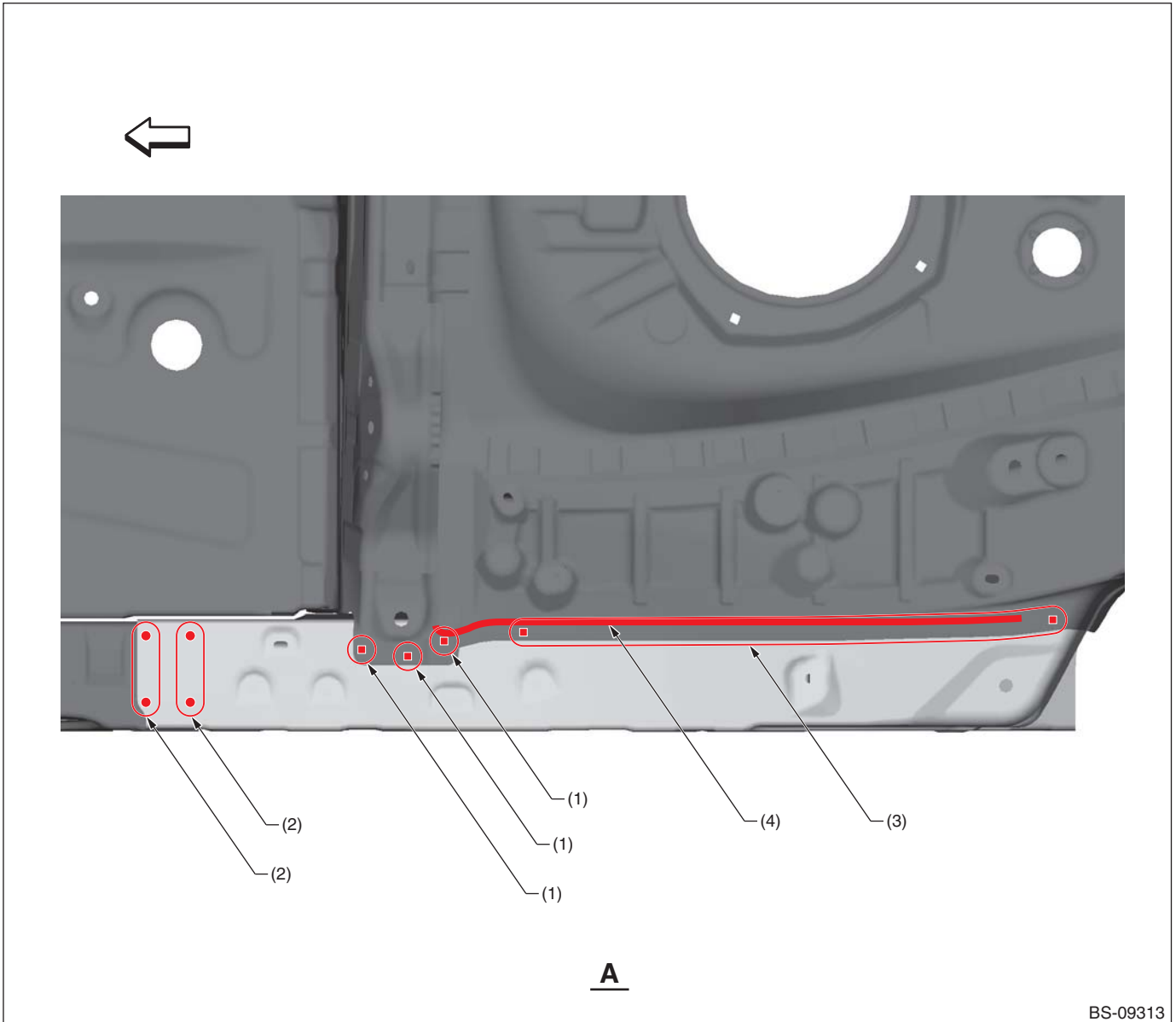


BS-09312

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

Panel Replacement

• Views A



BS-09313

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

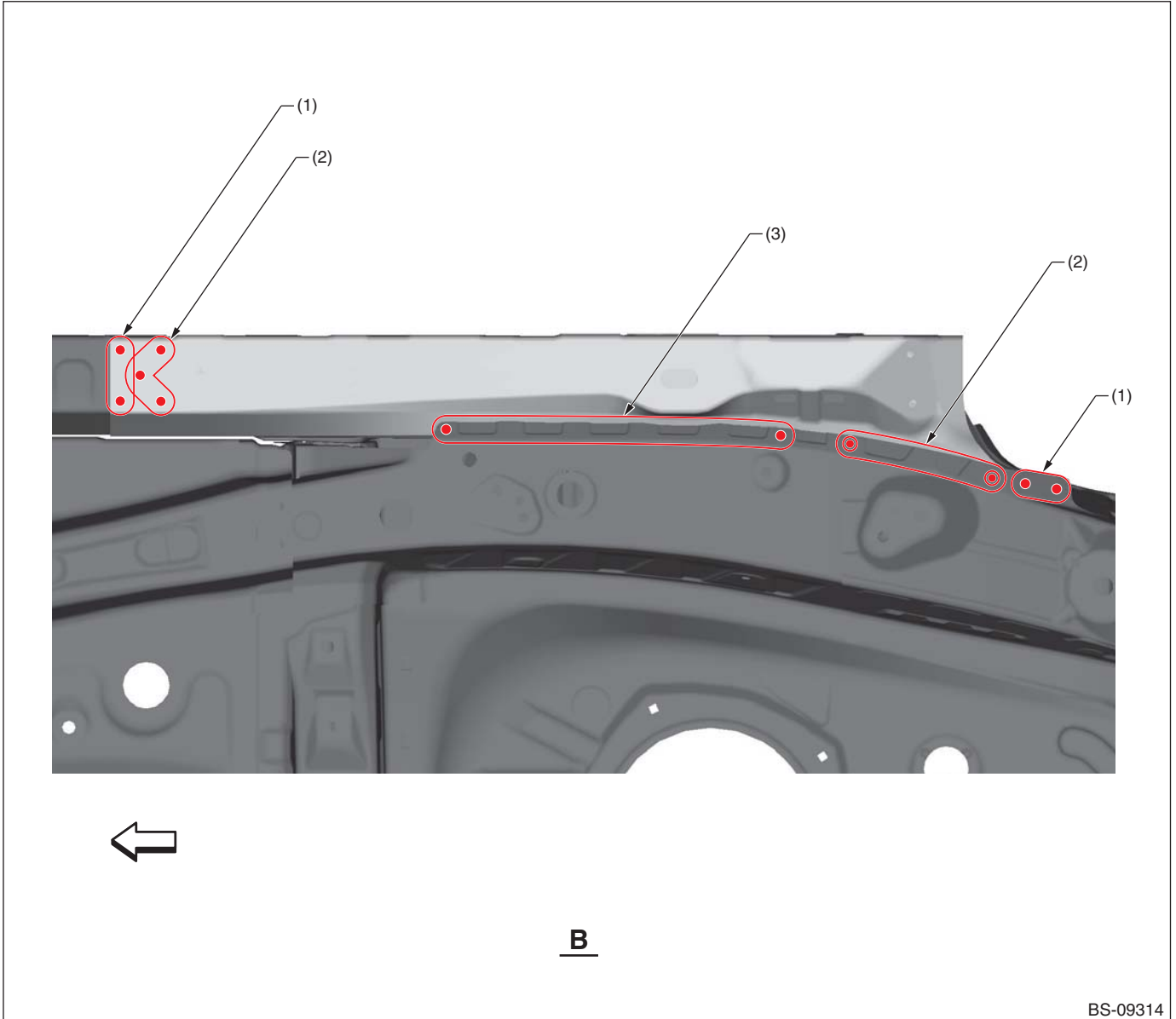
- (3) 8 points

- (4) Structural adhesive

— : Structural adhesive application location

Panel Replacement

• Views B



BS-09314

(1) 2 points

(2) 3 points

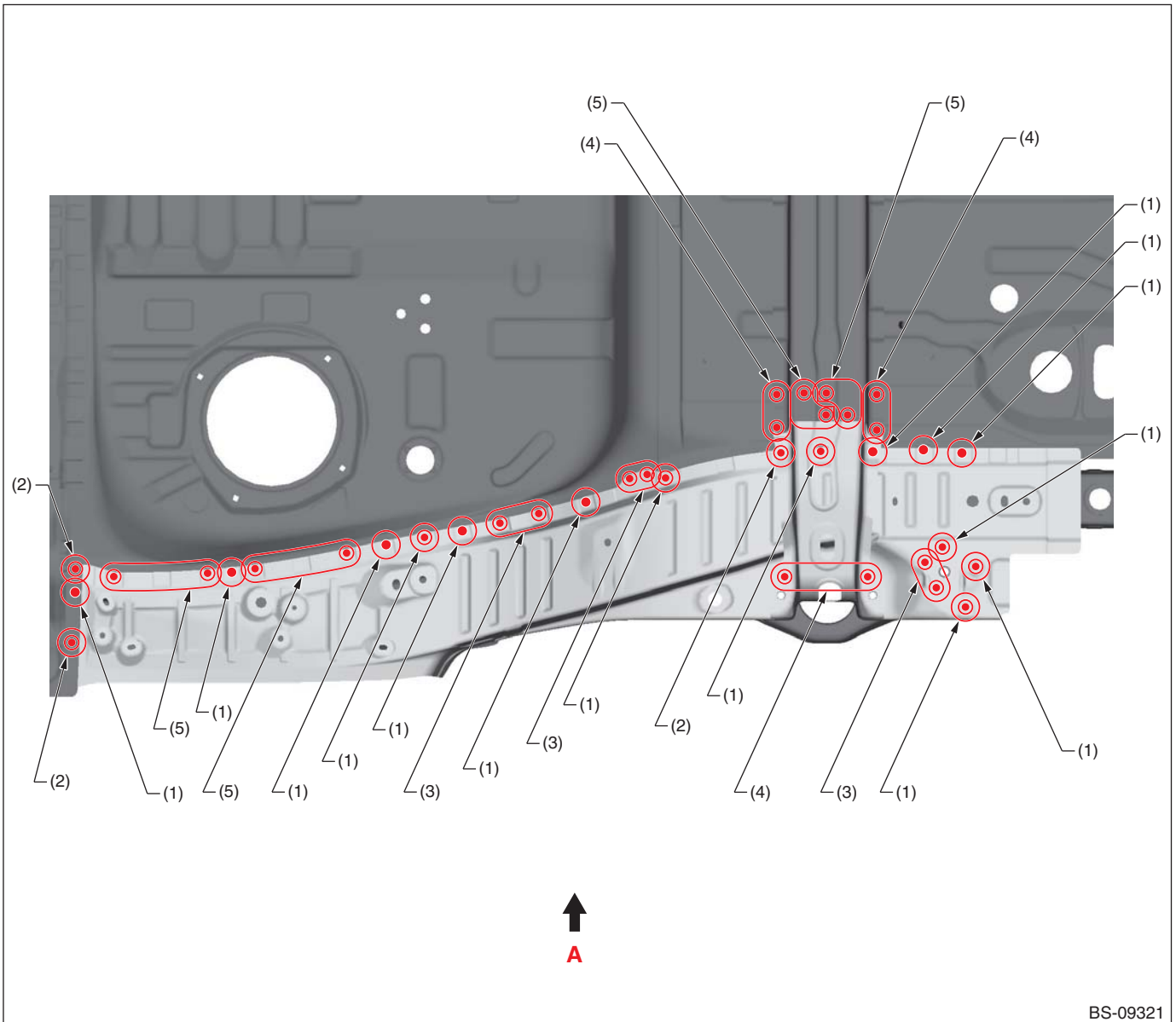
(3) 6 points

Panel Replacement

8-35. Rear Side Frame Upper (Total replacement)

A: REMOVAL

• Overall view



BS-09321

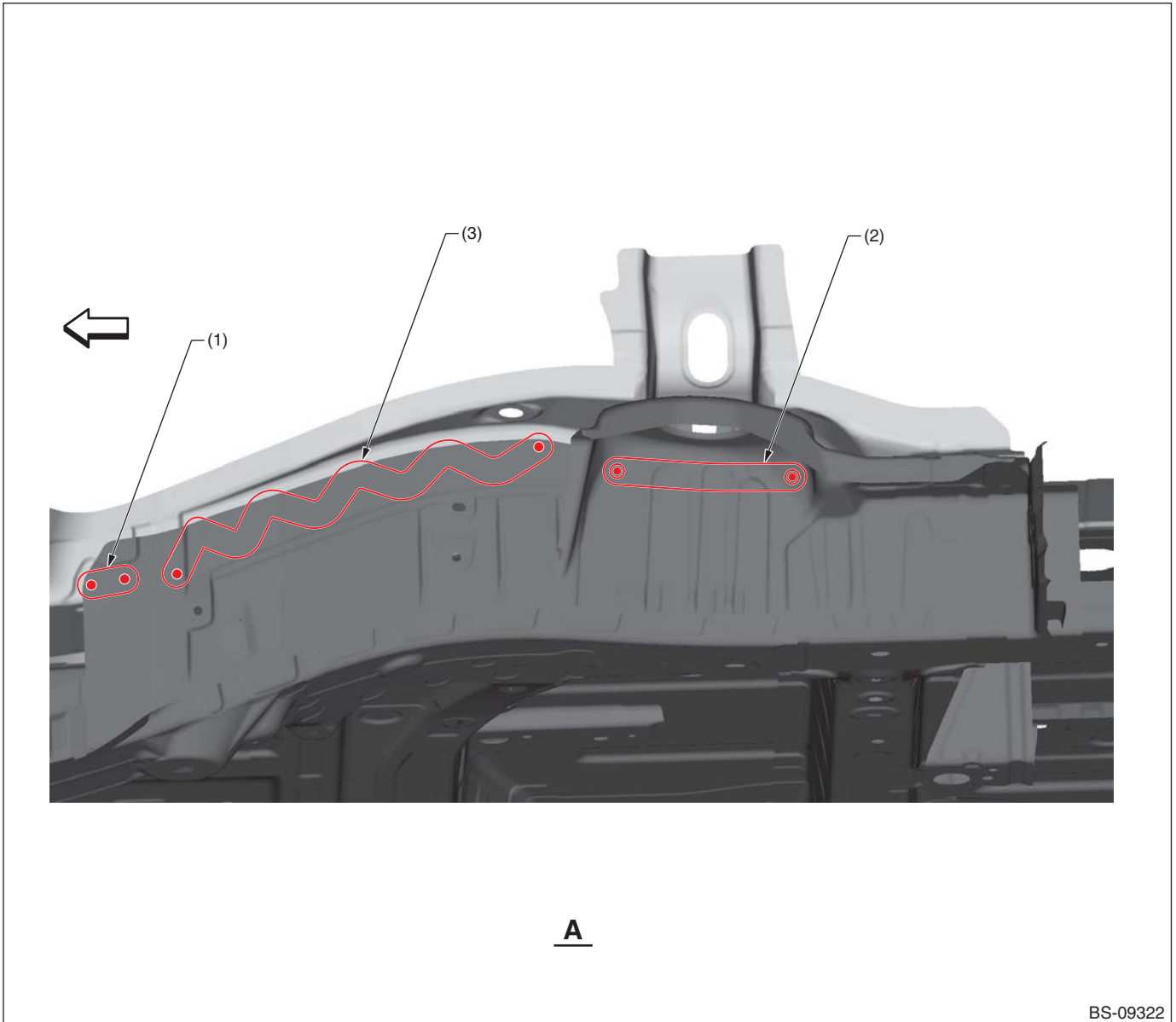
(1) 1 point (top · 1)
(2) 1 point (top · 2)

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

(5) 3 points (top · 1)

Panel Replacement

• Views A



BS-09322

(1) 2 points (inside · 1)

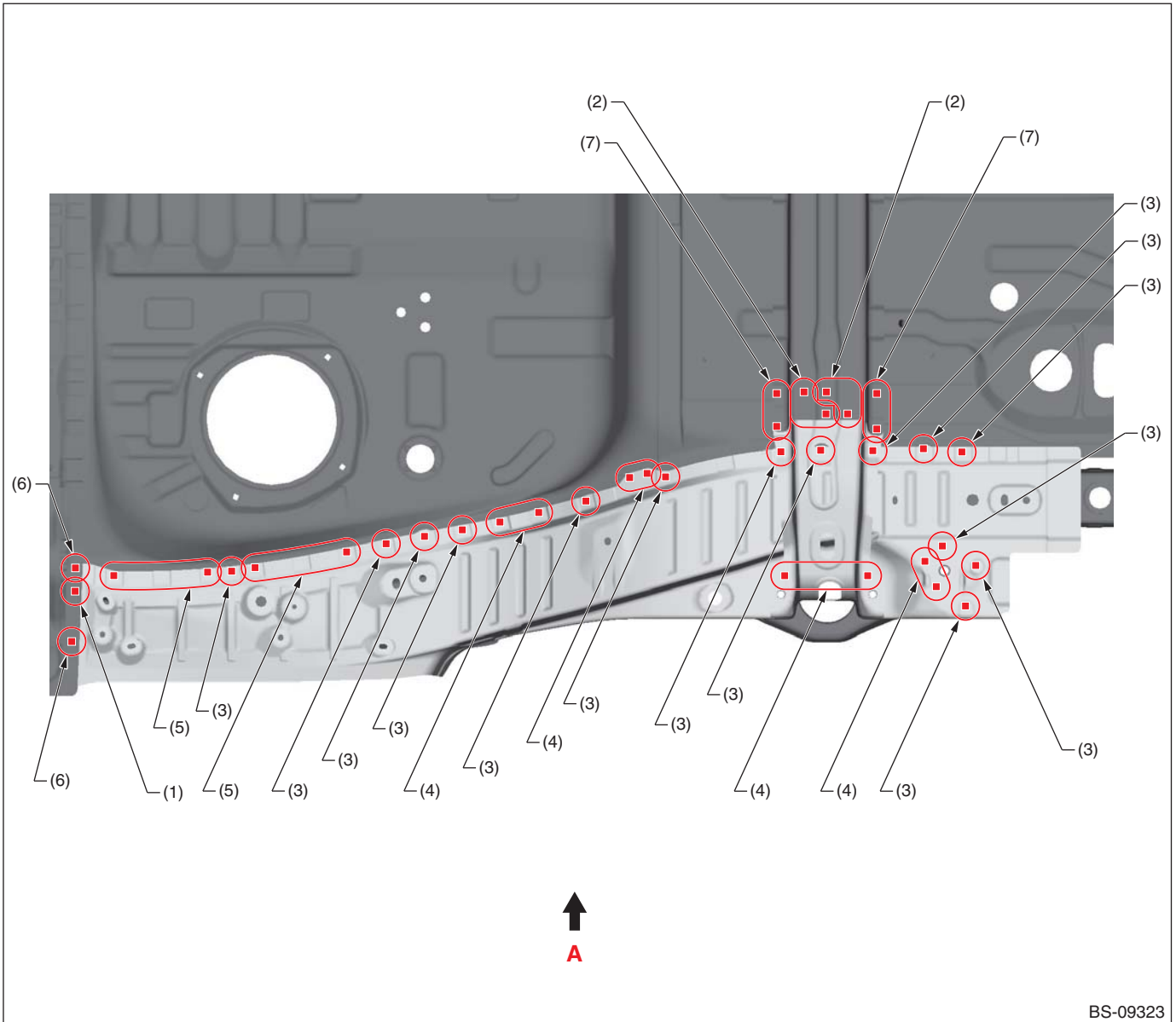
(2) 3 points (outside · 2)

(3) 10 points (outside · 1)

Panel Replacement

B: INSTALLATION

• Overall view

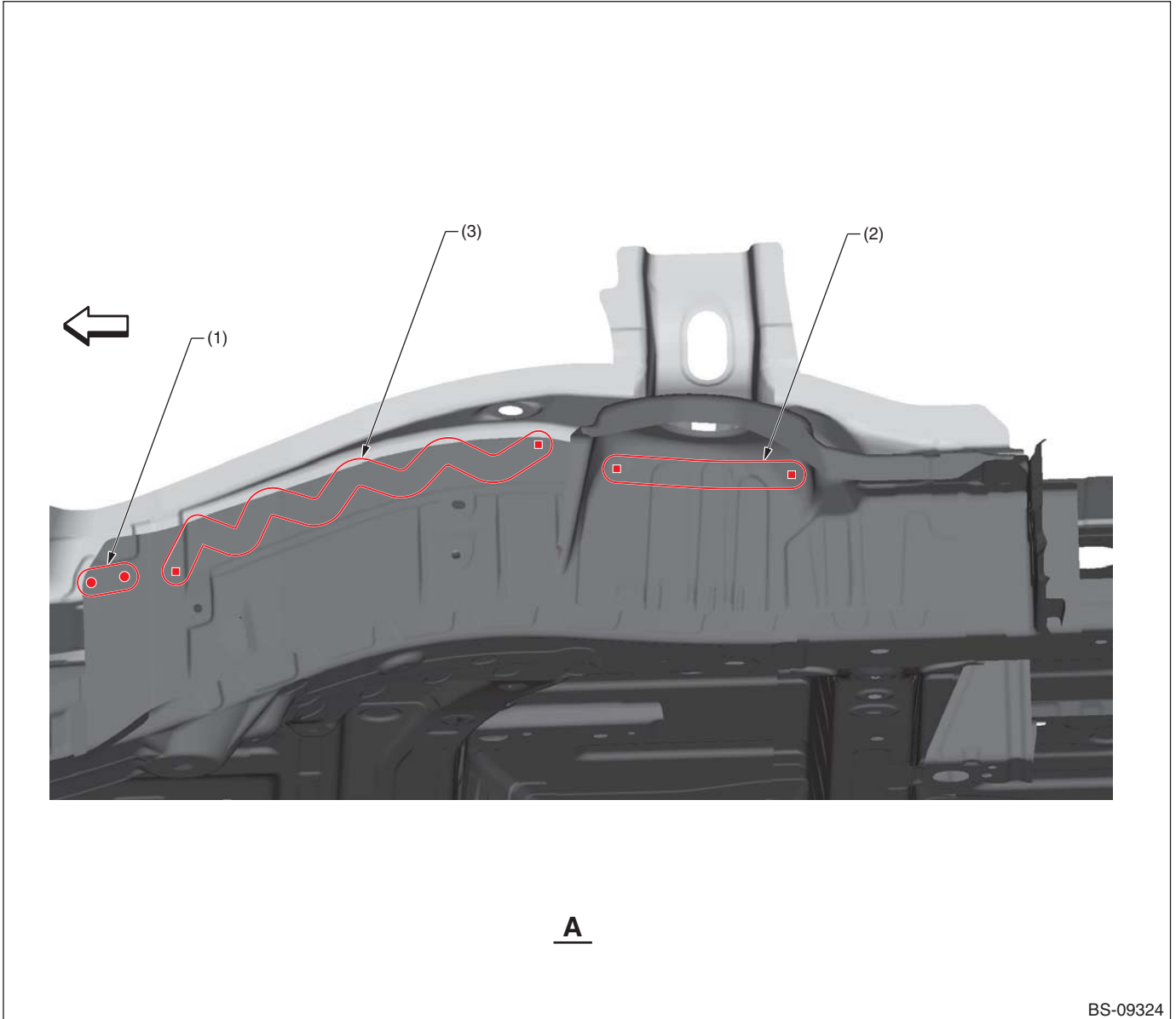


BS-09323

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

Panel Replacement

• Views A



BS-09324

(1) 2 points

(2) 3 points (service)

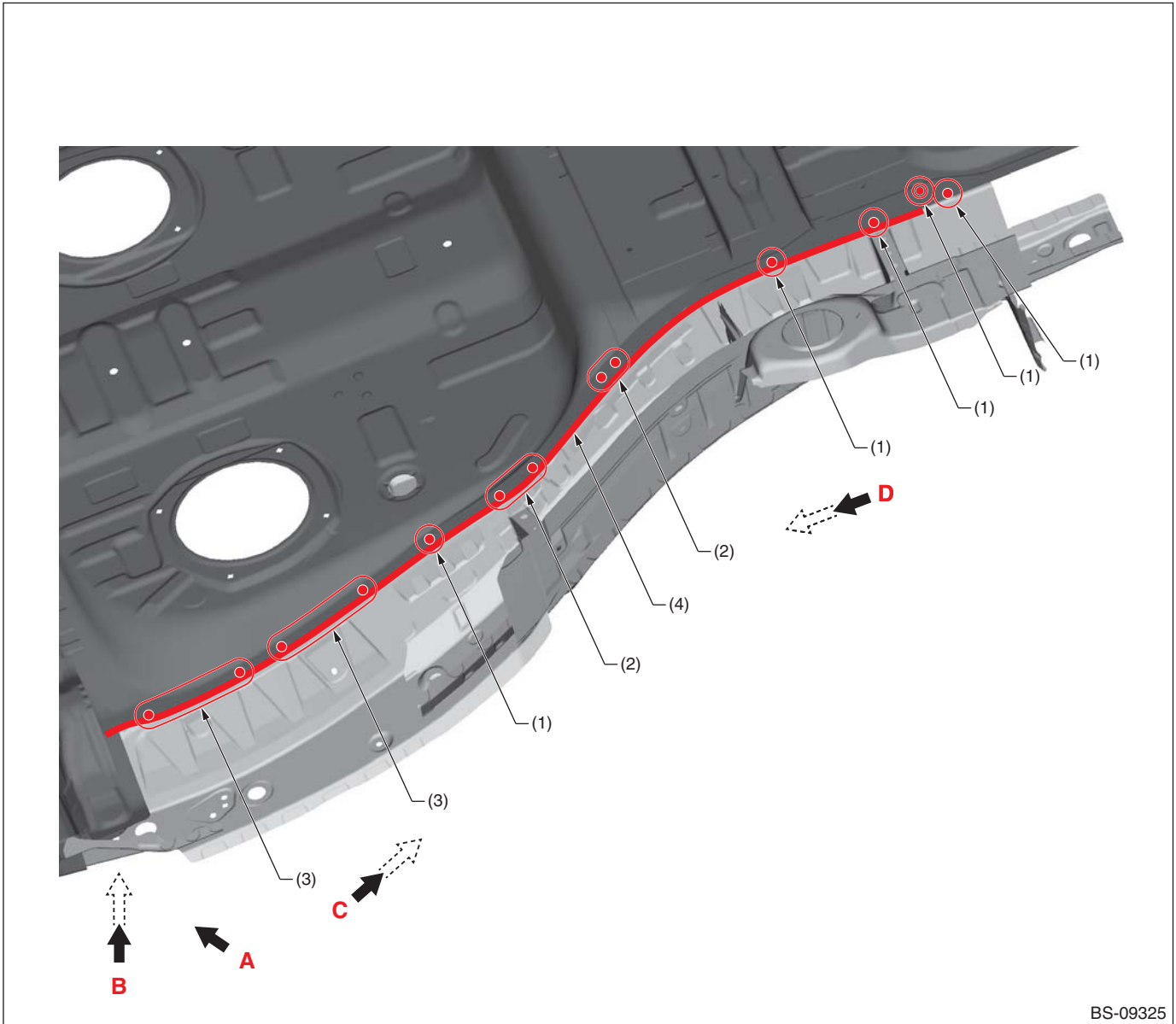
(3) 10 points (service)

Panel Replacement

8-36. Rear Side Frame (Total replacement)

A: REMOVAL

• Overall view



BS-09325

(1) 1 point (top · 1)

(3) 3 points (top · 1)

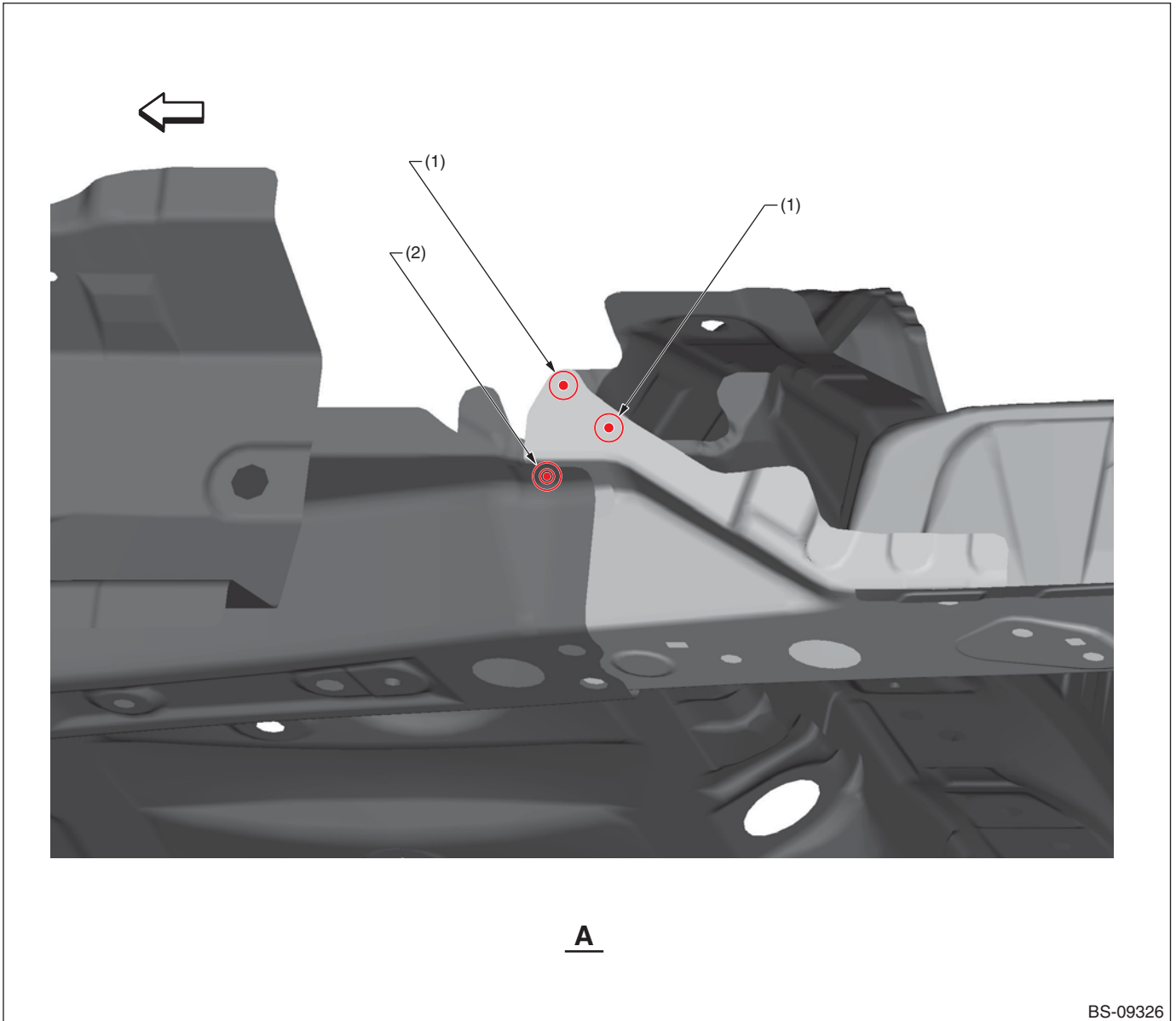
(4) Structural adhesive

(2) 2 points (top · 1)

— : Structural adhesive application location

Panel Replacement

• Views A

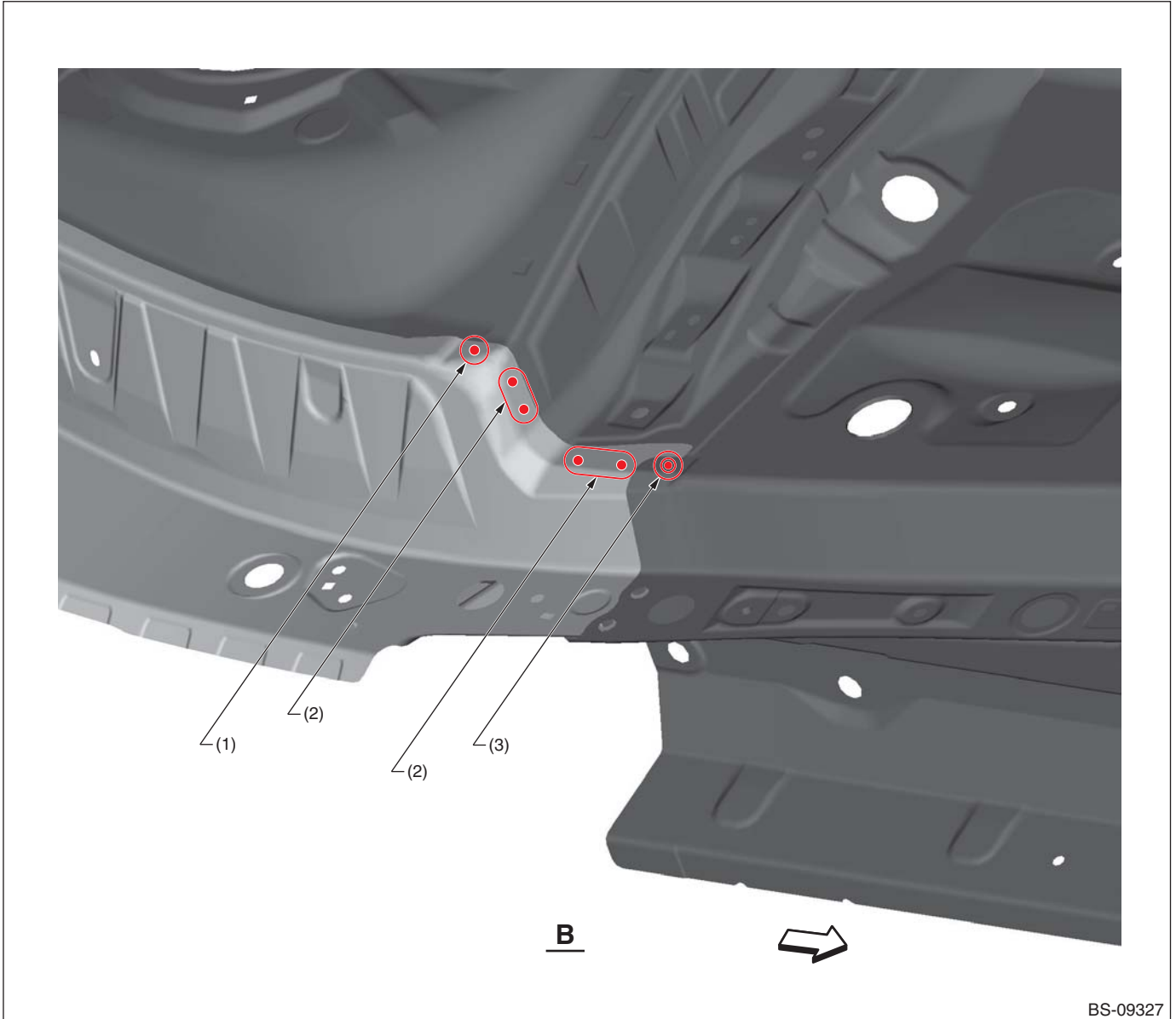


(1) 1 point (outside · 1)

(2) 1 point (top · 2)

Panel Replacement

• Views B



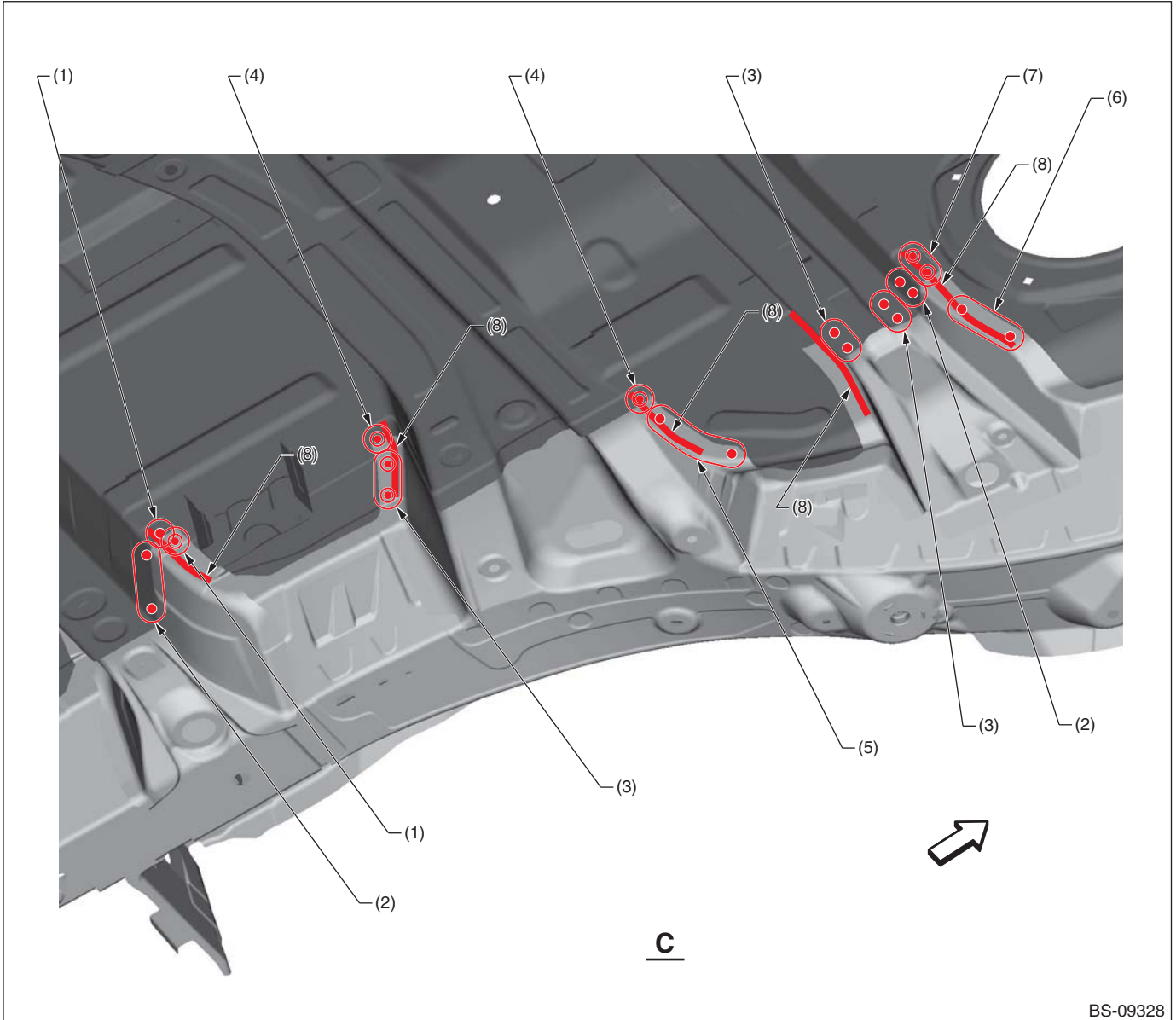
(1) 1 point (bottom · 1)

(2) 2 points (bottom · 1)

(3) 1 point (bottom · 2)

Panel Replacement

• Views C



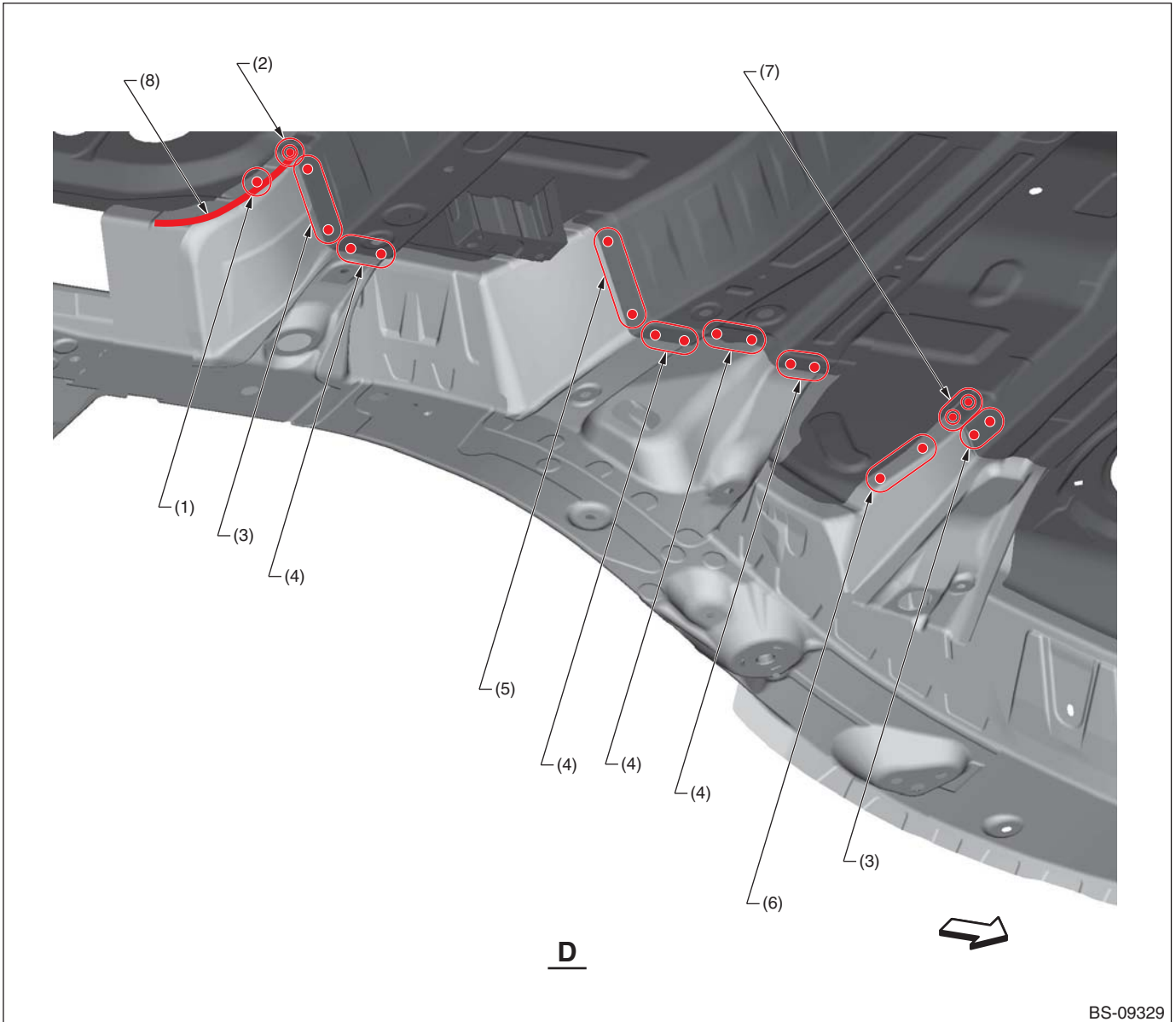
BS-09328

- | | | |
|----------------------------|---------------------------|---------------------------|
| (1) 1 point (bottom · 1) | (4) 1 point (bottom · 2) | (7) 2 points (bottom · 2) |
| (2) 2 points (outside · 1) | (5) 4 points (bottom · 1) | (8) Structural adhesive |
| (3) 2 points (bottom · 1) | (6) 3 points (bottom · 1) | |

— : Structural adhesive application location

Panel Replacement

• Views D



(1) 1 point (bottom · 1)

(2) 1 point (bottom · 2)

(3) 2 points (outside · 1)

(4) 2 points (bottom · 1)

(5) 3 points (outside · 1)

(6) 3 points (bottom · 1)

(7) 2 points (bottom · 2)

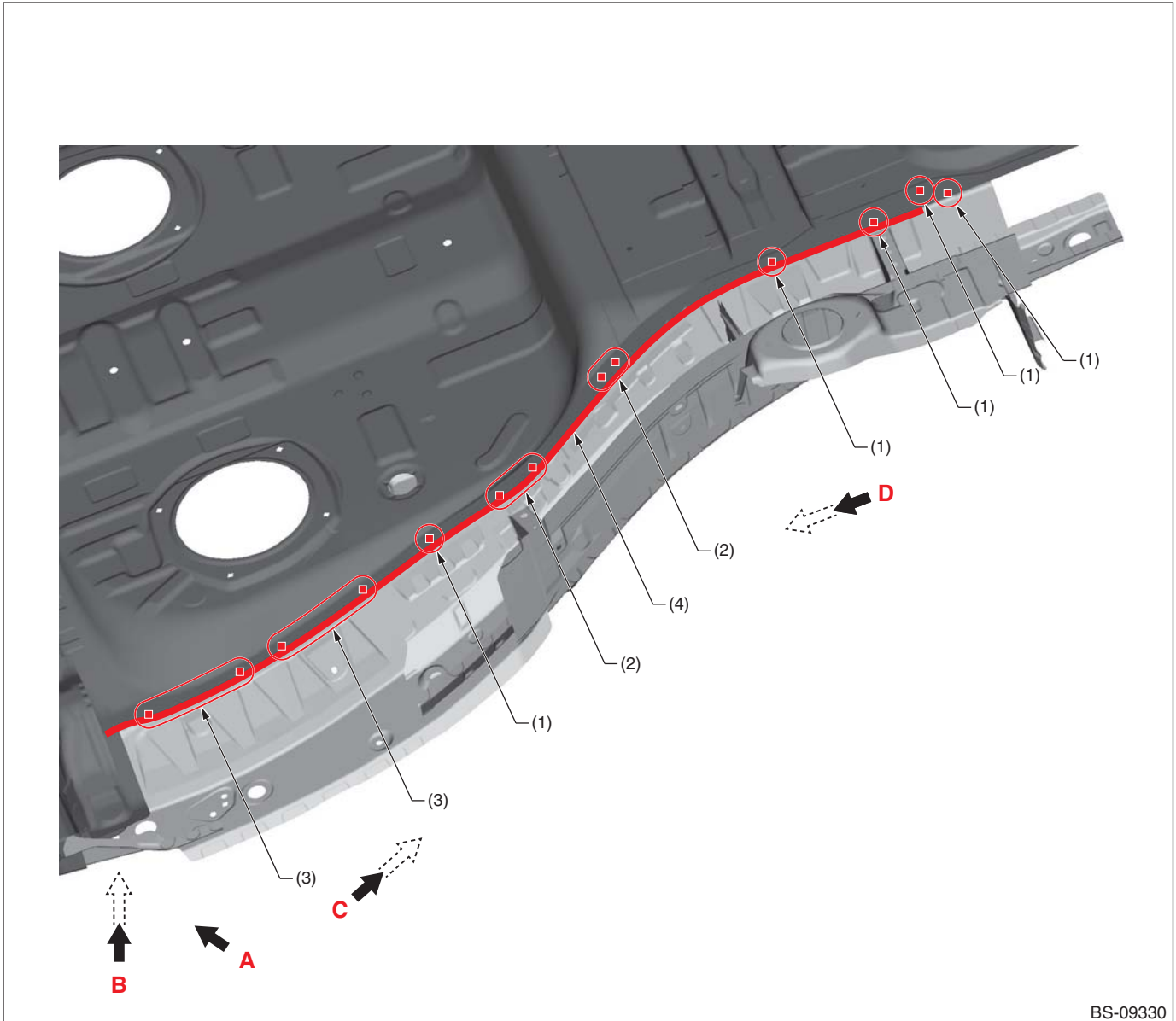
(8) Structural adhesive

— : Structural adhesive application location

Panel Replacement

B: INSTALLATION

• Overall view



BS-09330

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

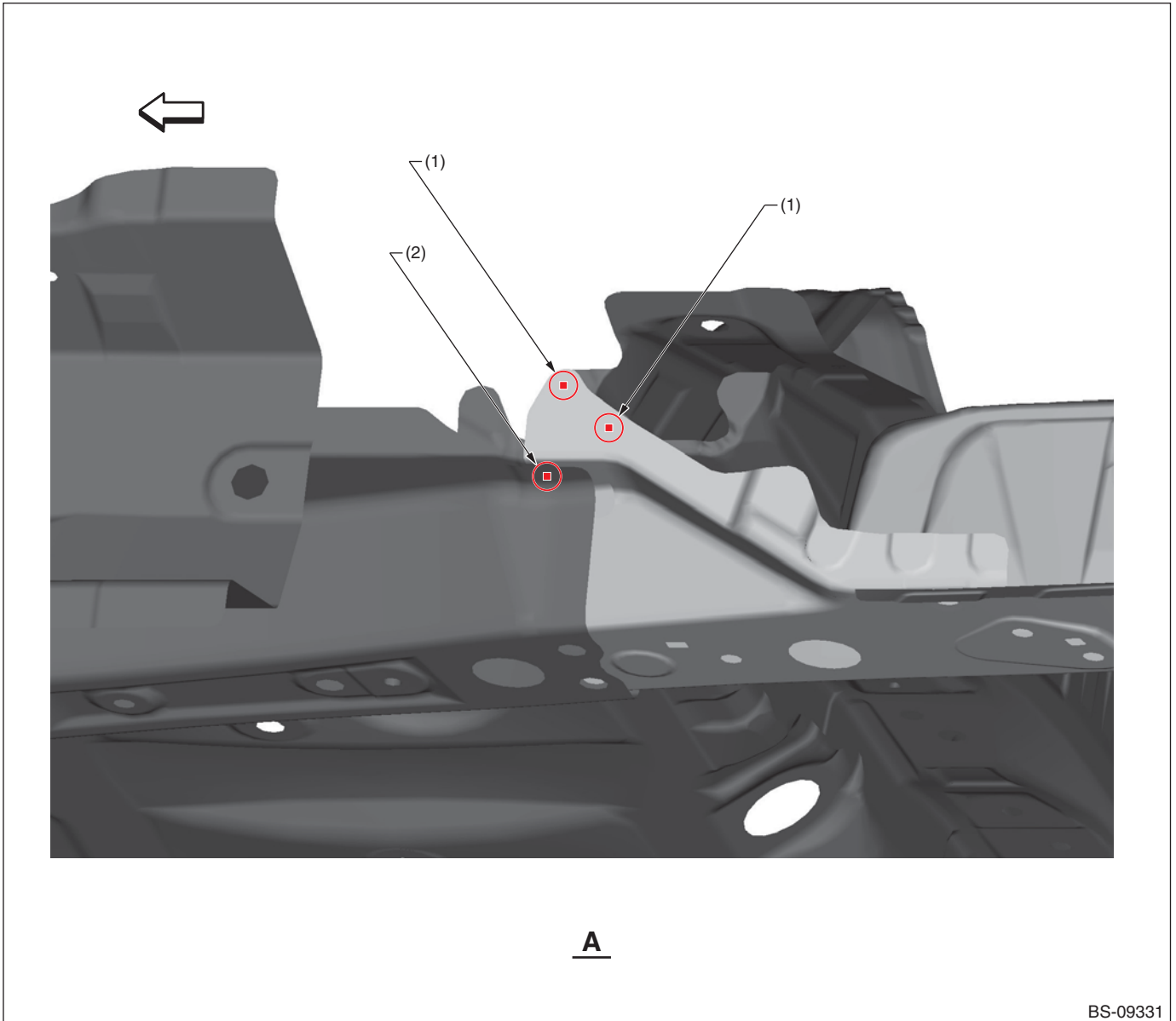
- (3) 3 points

- (4) Structural adhesive

— : Structural adhesive application location

Panel Replacement

• Views A

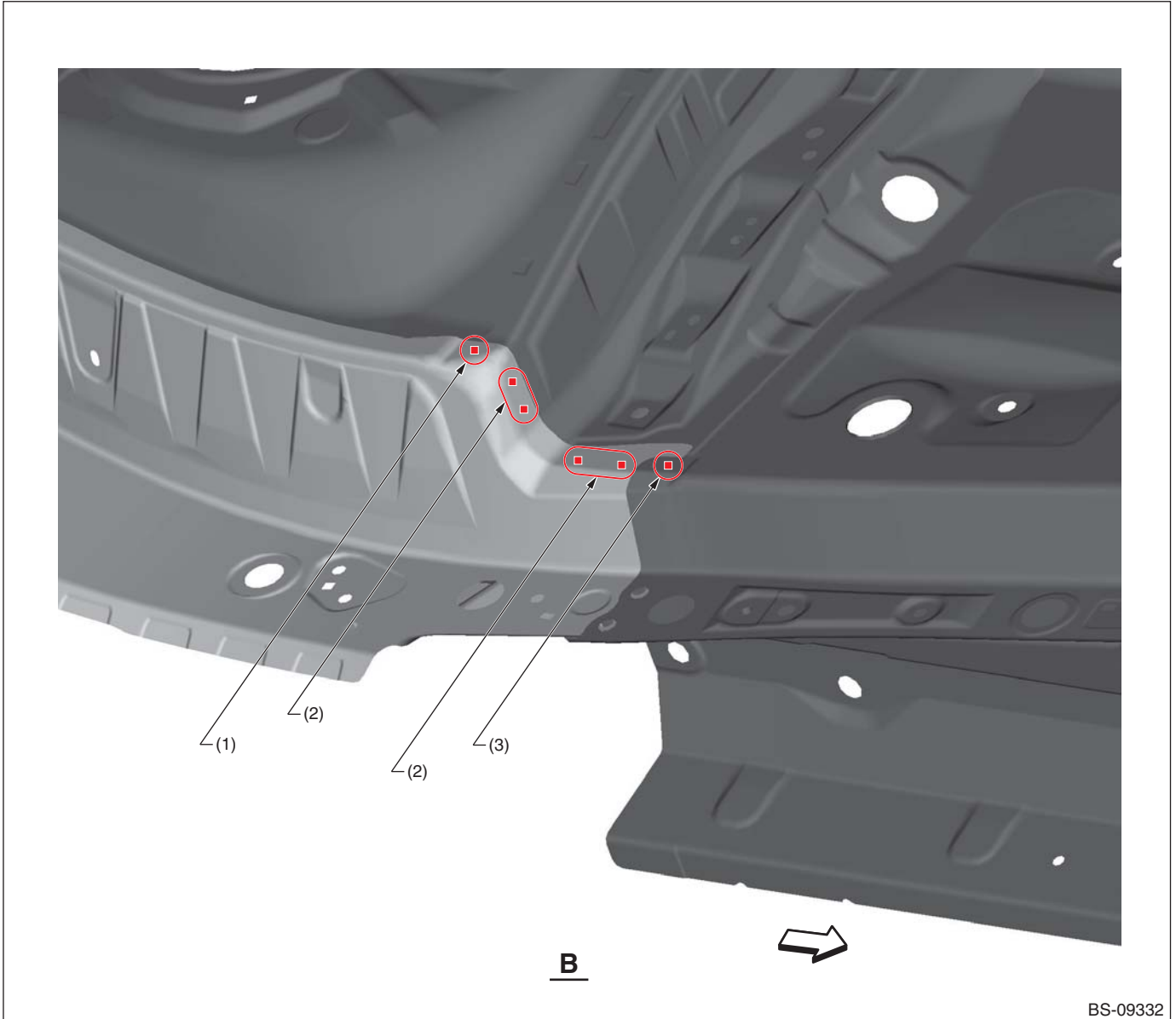


(1) 1 point (service)

(2) 1 point (service · matching)

Panel Replacement

• Views B



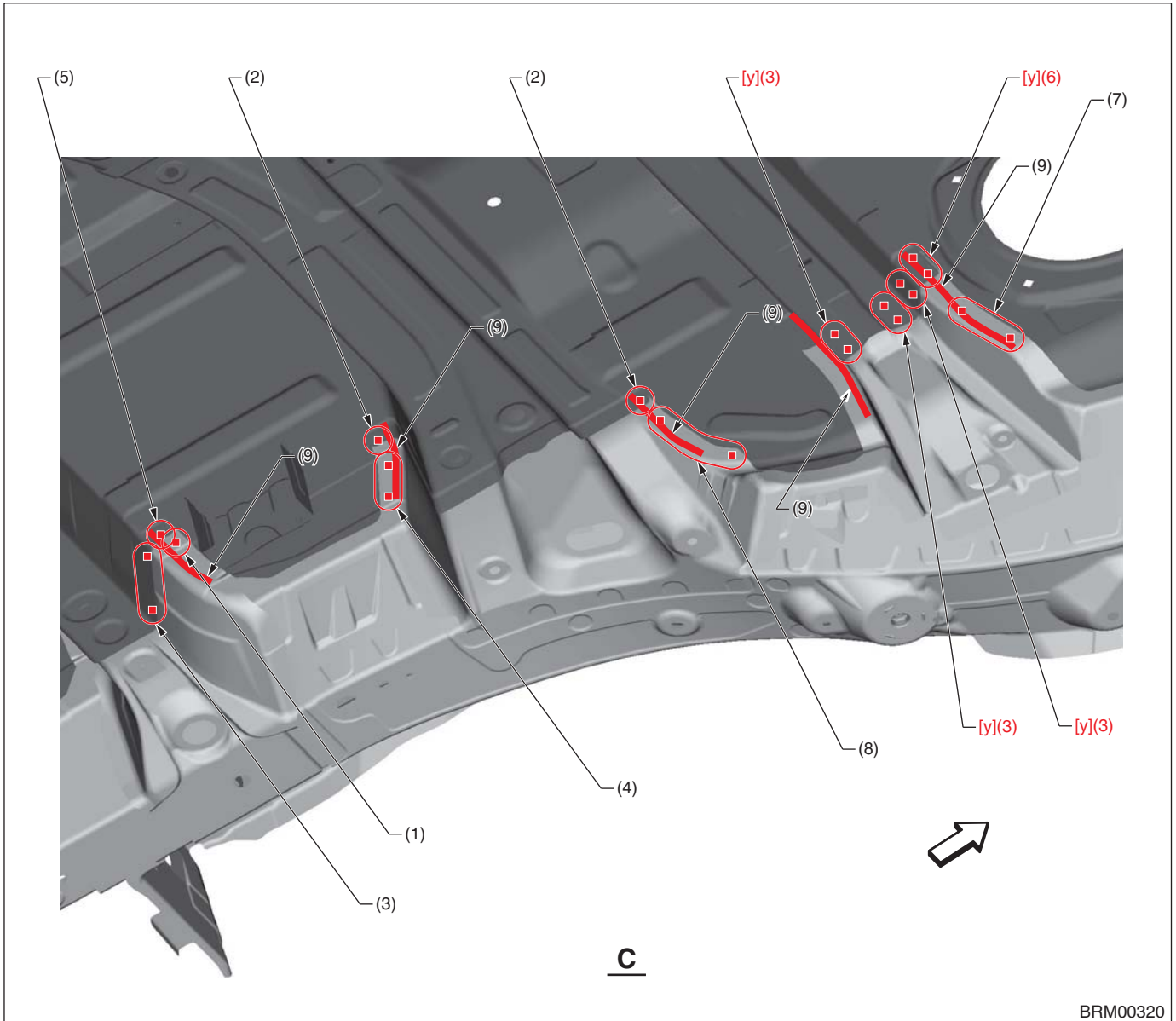
(1) 1 point (service)

(2) 2 points (service)

(3) 3 points (service · matching)

Panel Replacement

• Views C



BRM00320

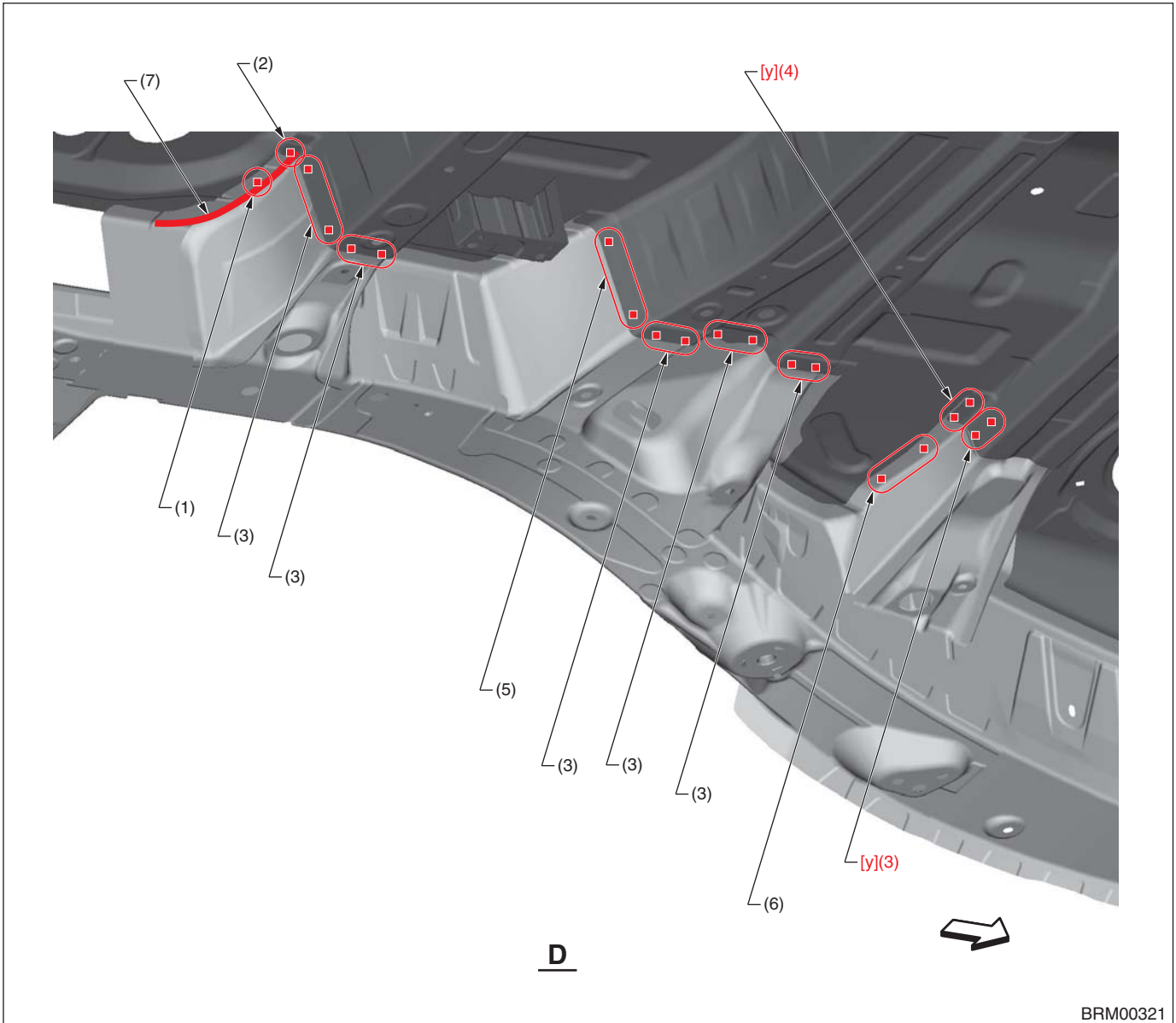
- | | | |
|----------------------------------|-----------------------------------|-------------------------|
| (1) 1 point (service) | (4) 2 points (service) | (7) 3 points (service) |
| (2) 1 point (service · matching) | (5) 1 point | (8) 4 points (service) |
| (3) 2 points | (6) 2 points (service · matching) | (9) Structural adhesive |

— : Structural adhesive application location

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

Panel Replacement

• Views D



- | | | |
|----------------------------------|-----------------------------------|-------------------------|
| (1) 1 point (service) | (4) 2 points (service · matching) | (7) Structural adhesive |
| (2) 1 point (service · matching) | (5) 3 points | |
| (3) 2 points | (6) 3 points (service) | |

— : Structural adhesive application location

[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO₂

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

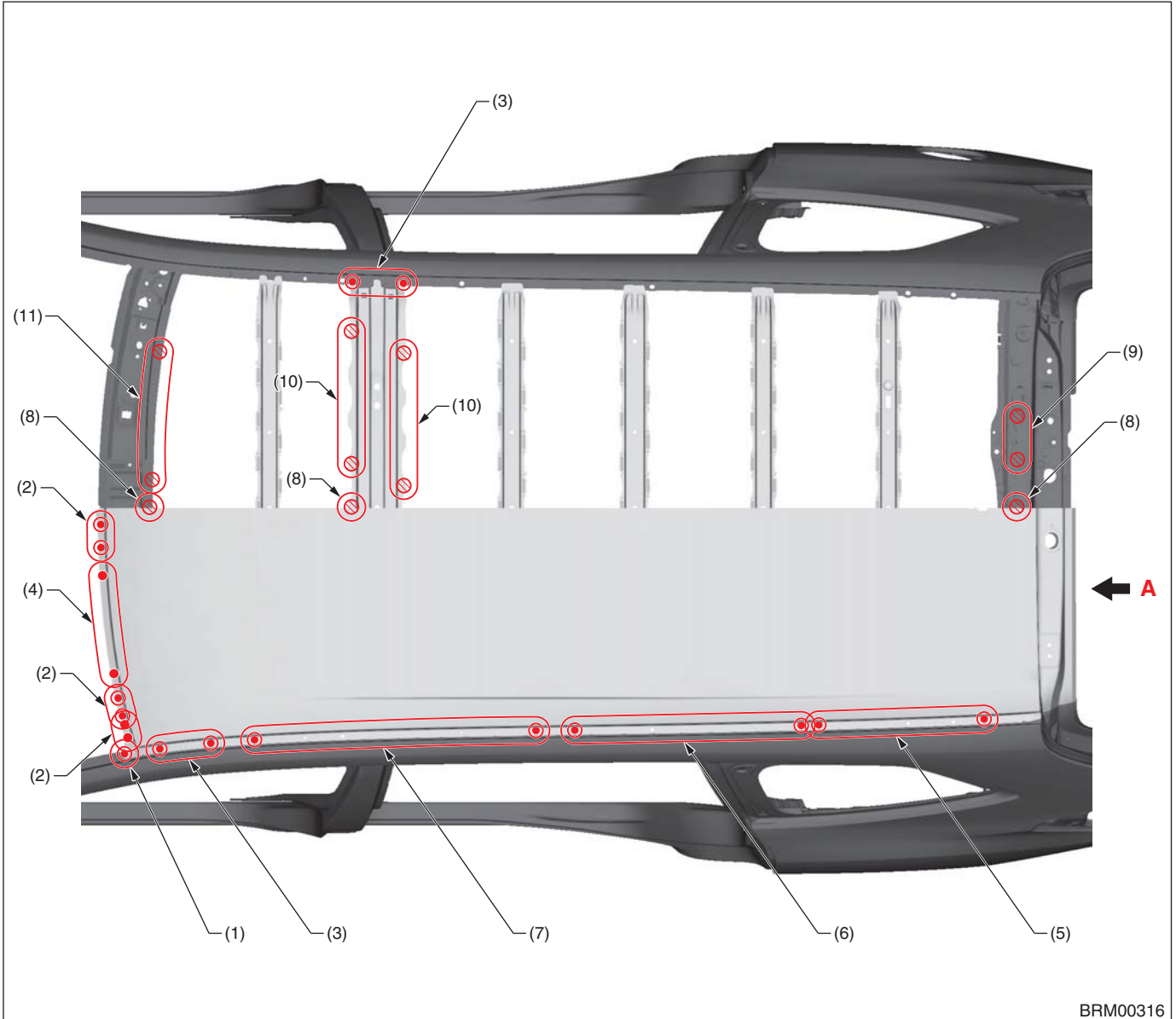
Panel Replacement

8-37. Roof panel (Total replacement)

Model without sunroof

A: REMOVAL

• Overall view



BRM00316

- (1) 1 point (top · 1)
- (2) 2 points (top · 1)
- (3) 3 points (top · 1)
- (4) 6 points (top · 1)

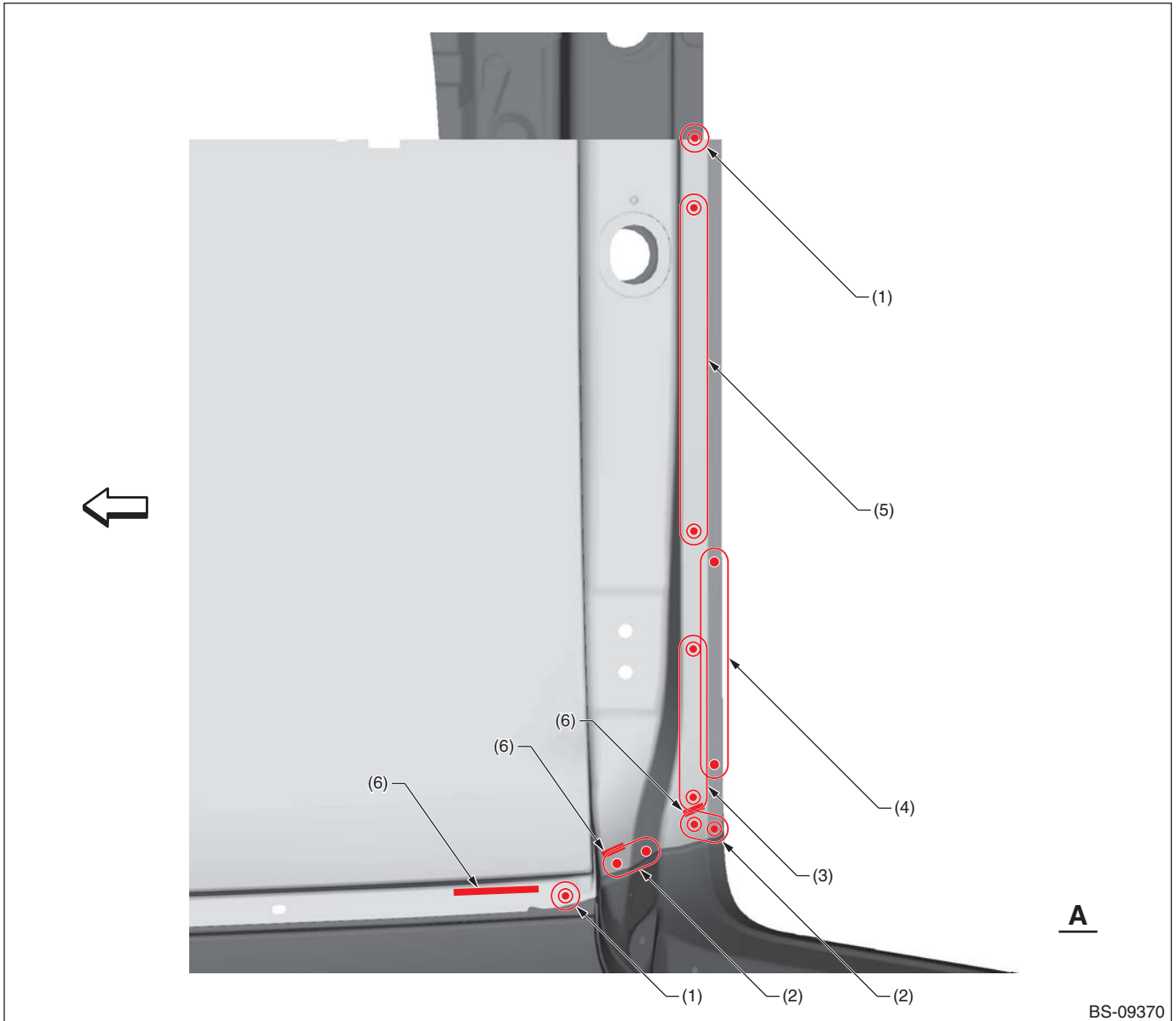
- (5) 7 points (top · 1)
- (6) 8 points (top · 1)
- (7) 10 points (top · 1)
- (8) 1 point

- (9) 2 points
- (10) 4 points
- (11) 5 points

 : Application of adhesive

Panel Replacement

• Views A



(1) 1 point (top · 1)
(2) 2 points (top · 1)

(3) 3 points (top · 1)
(4) 4 points (top · 1)

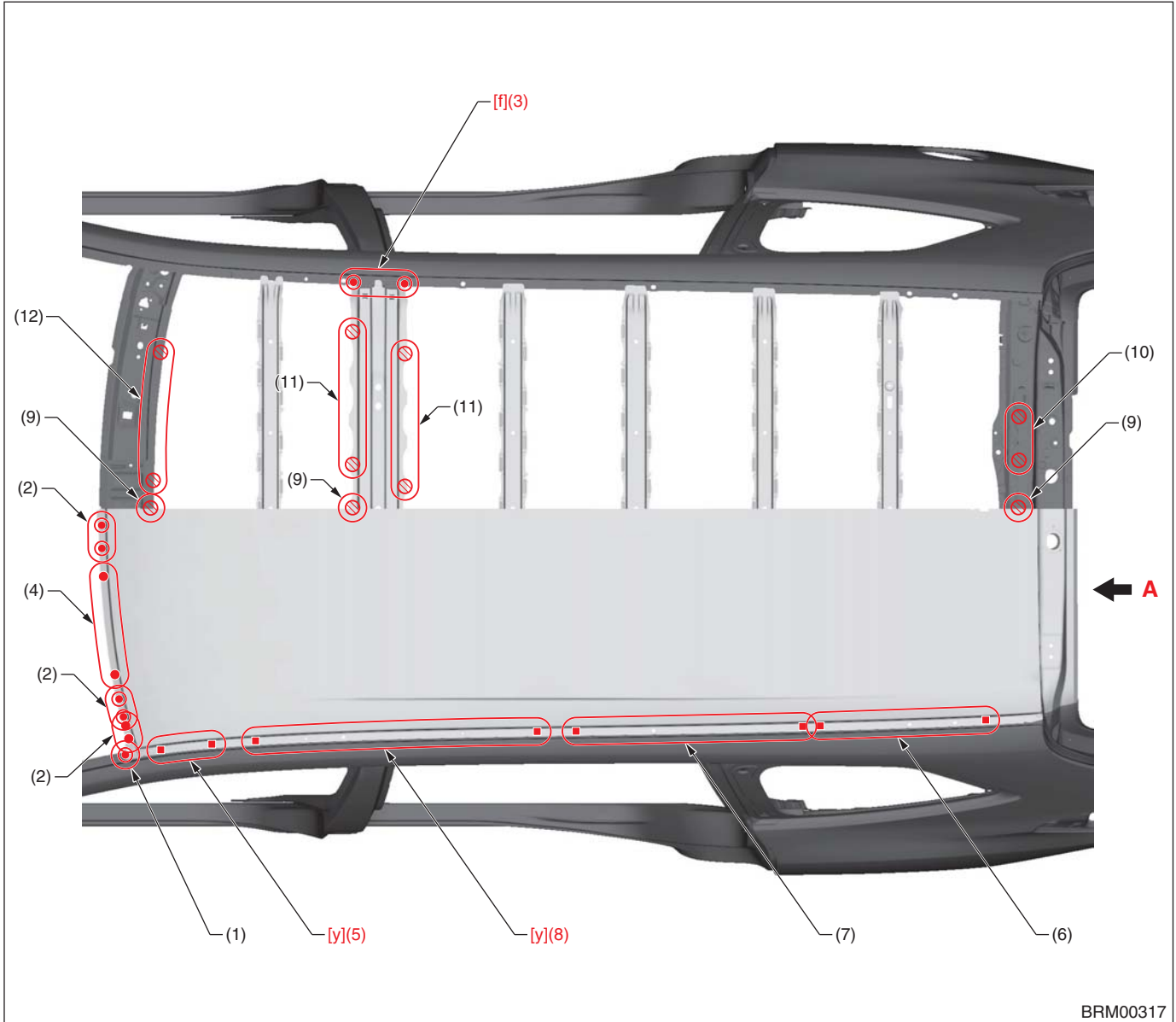
(5) 5 points (top · 1)
(6) Structural adhesive

— : Structural adhesive application location

Panel Replacement

B: INSTALLATION

• Overall view



BRM00317

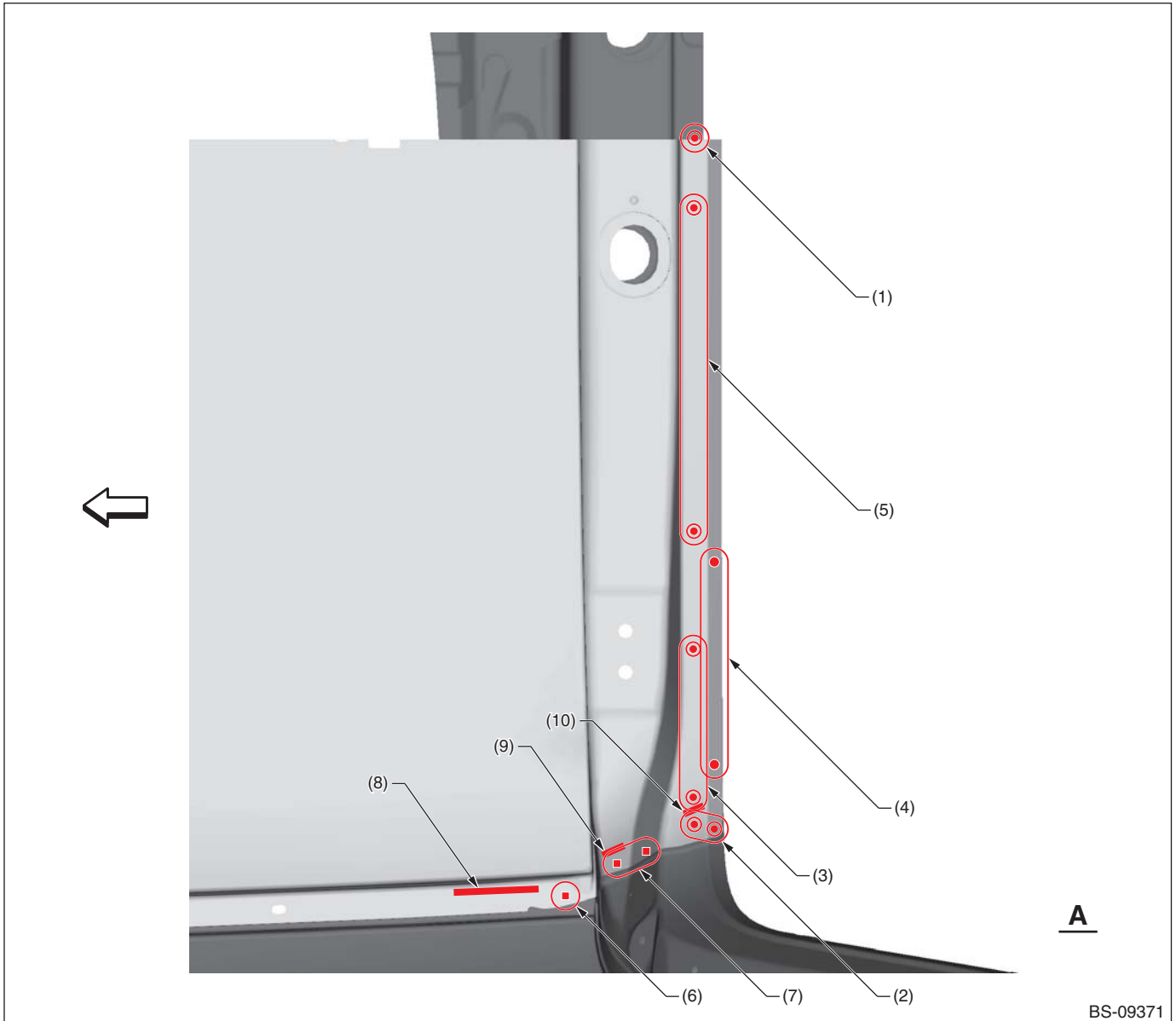
- | | | |
|--------------|-------------------------|---------------|
| (1) 1 point | (5) 3 points (service) | (9) 1 point |
| (2) 2 points | (6) 7 points (service) | (10) 2 points |
| (3) 3 points | (7) 8 points (service) | (11) 4 points |
| (4) 4 points | (8) 10 points (service) | (12) 5 points |

 : Application of adhesive

[f] Spot welding	Compression: 3.5 kN, Current: 8.0 kA, Welding time: 25 cyc
[y] Plug welding	A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2 B Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW16, Gas: Gas mixture (argon: 80 %, CO2: 20 %)

Panel Replacement

• Views A



- | | | |
|--------------|---|--|
| (1) 1 point | (5) 5 points | (9) Structural adhesive 18 mm [0.71 in] |
| (2) 2 points | (6) 1 point (service) | (10) Structural adhesive 15 mm [0.59 in] |
| (3) 3 points | (7) 2 points (service) | |
| (4) 4 points | (8) Structural adhesive 60 mm [2.36 in] | |

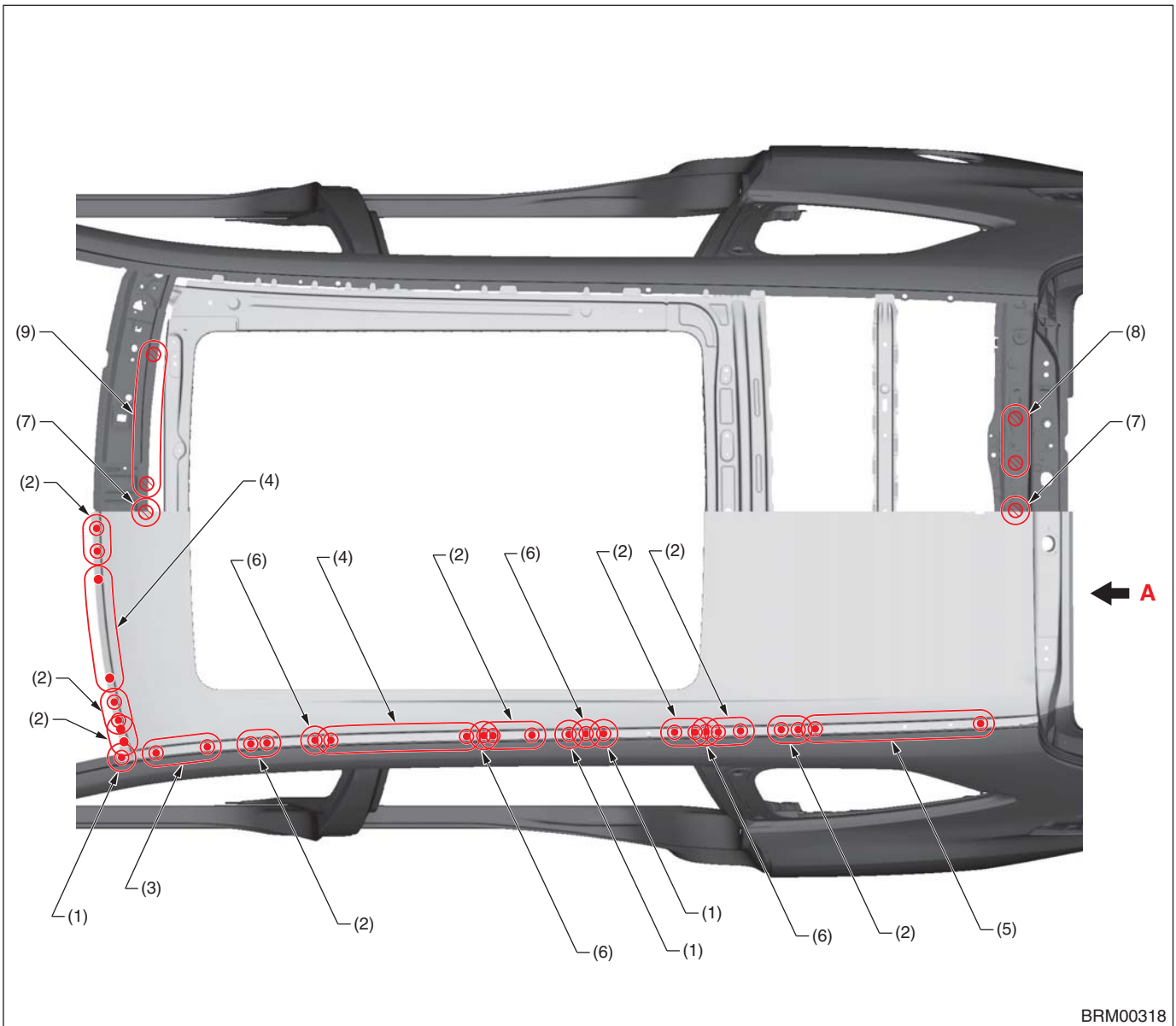
— : Structural adhesive application location

Panel Replacement

Model with sunroof

A: REMOVAL

• Overall view



BRM00318

(1) 1 point (top · 1)

(2) 2 points (top · 1)

(3) 3 points (top · 1)

(4) 6 points (top · 1)


(5) 7 points (top · 1)

(6) 1 point (top · 2)

(7) 1 point

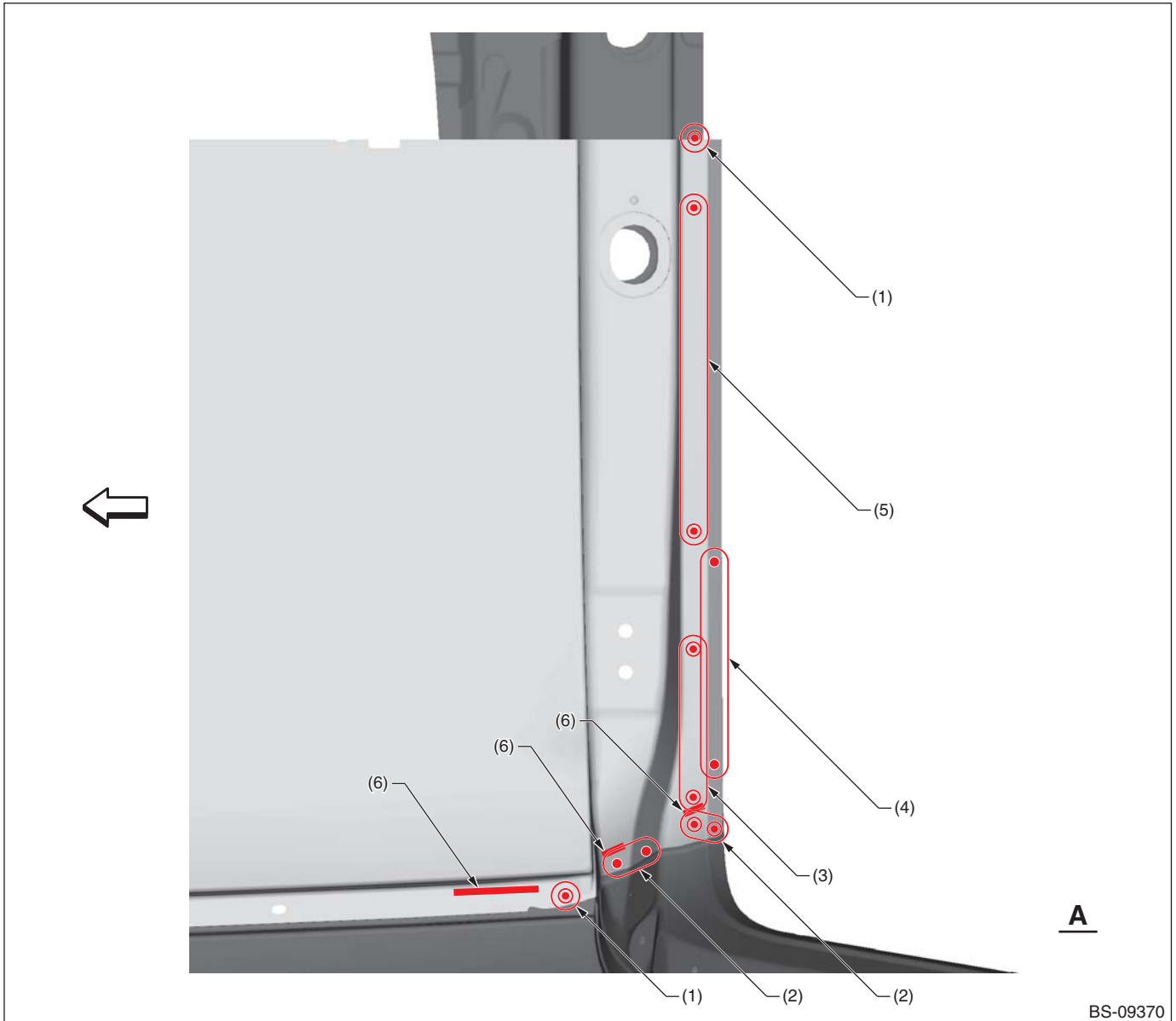
(8) 2 points

(9) 5 points

 : Application of adhesive

Panel Replacement

• Views A



(1) 1 point (top · 1)
(2) 2 points (top · 1)

(3) 3 points (top · 1)
(4) 4 points (top · 1)

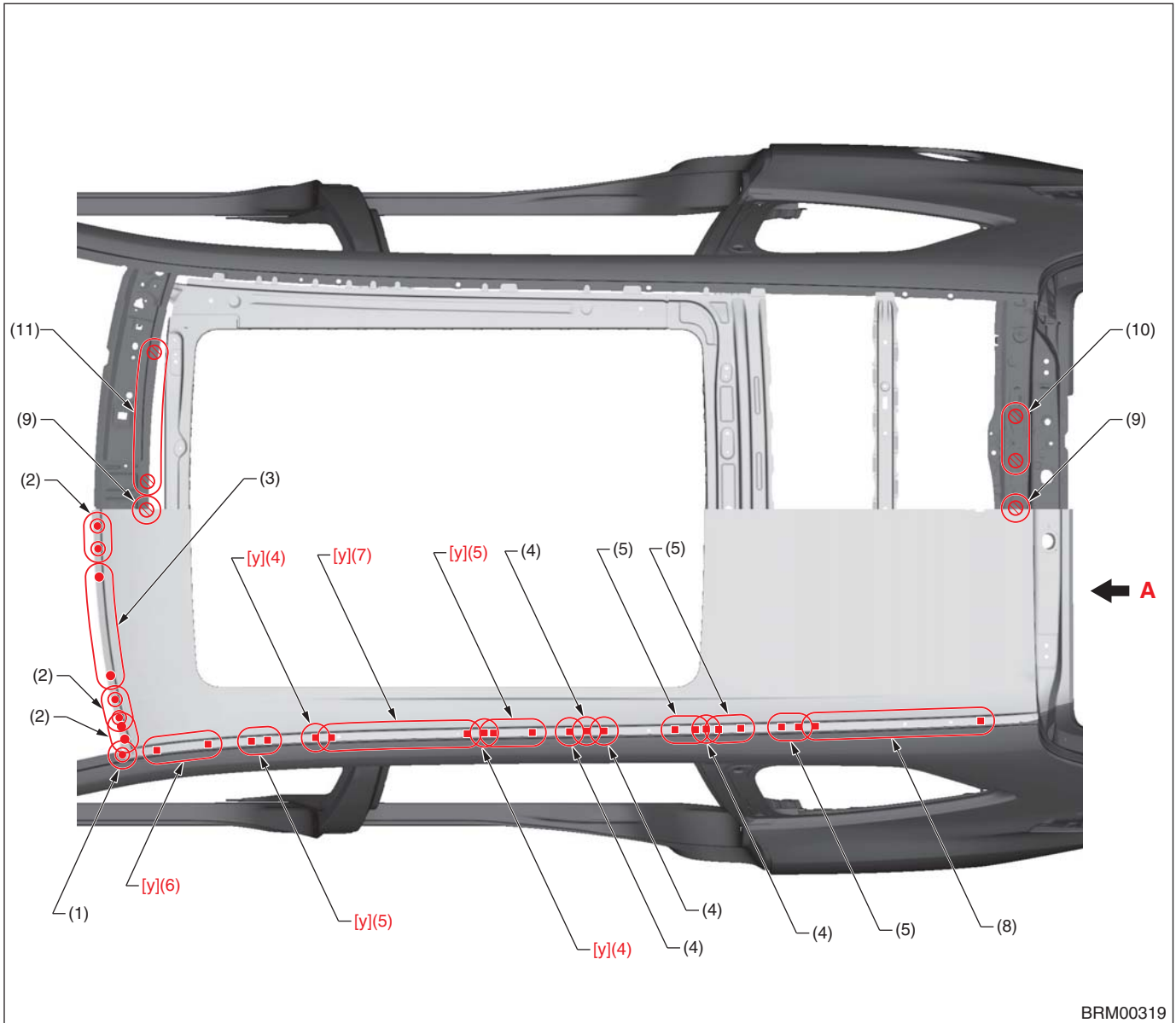
(5) 5 points (top · 1)
(6) Structural adhesive

— : Structural adhesive application location

Panel Replacement

B: INSTALLATION

• Overall view



BRM00319

- | | | |
|-----------------------|------------------------|---------------|
| (1) 1 point | (5) 2 points (service) | (9) 1 point |
| (2) 2 points | (6) 3 points (service) | (10) 2 points |
| (3) 6 points | (7) 6 points (service) | (11) 5 points |
| (4) 1 point (service) | (8) 7 points (service) | |

 : Application of adhesive

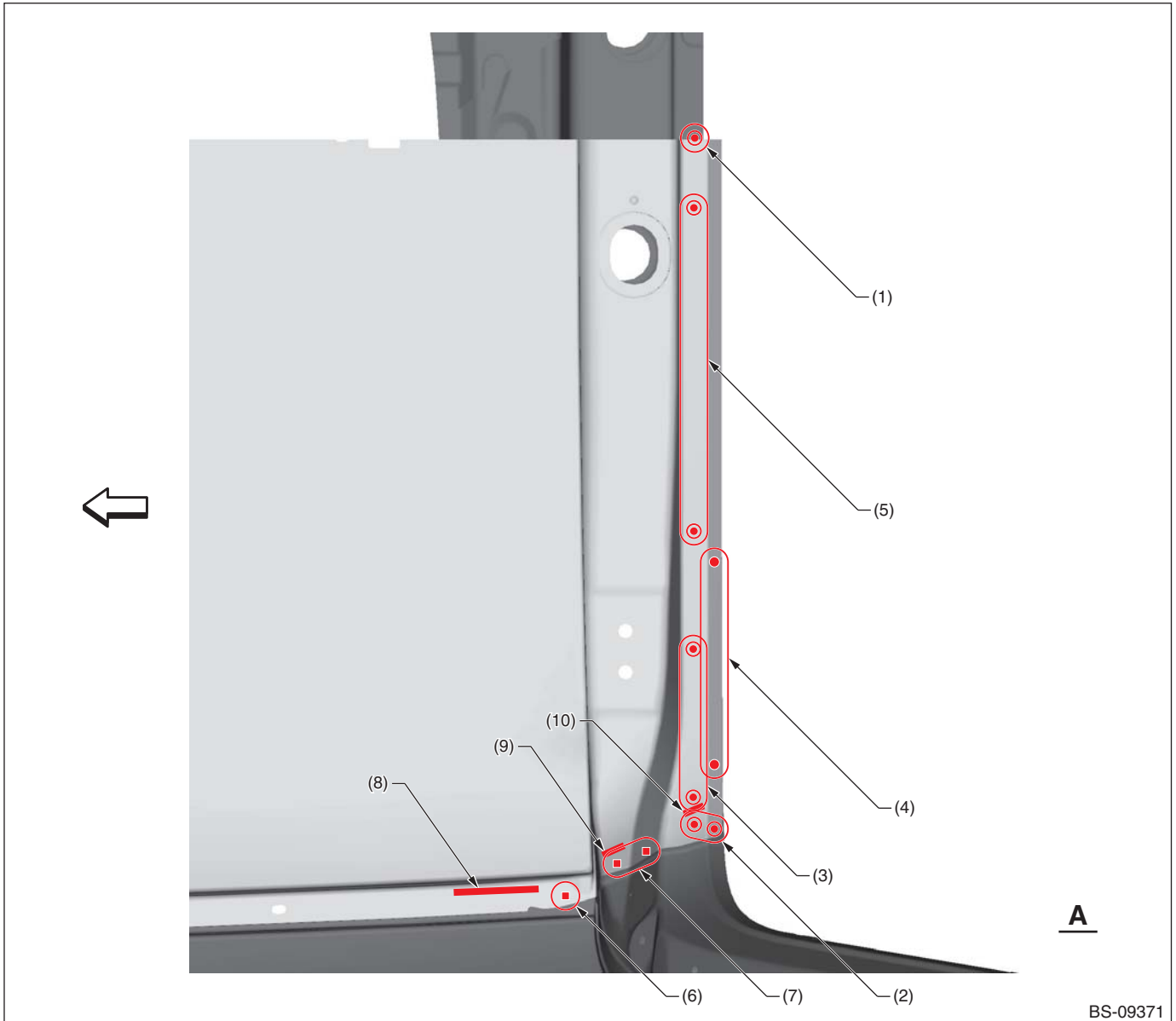
[y] Plug welding

A Plug diameter: 8.5 mm (0.33 in) or more, Wire: YGW12, Gas: CO2

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

Panel Replacement

• Views A



(1) 1 point

(2) 2 points

(3) 3 points

(4) 4 points

(5) 5 points

(6) 1 point (service)

(7) 2 points (service)

(8) Structural adhesive 60 mm [2.36 in]

(9) Structural adhesive 18 mm [0.71 in]

(10) Structural adhesive 15 mm [0.59 in]

— : Structural adhesive application location

Body Sealing

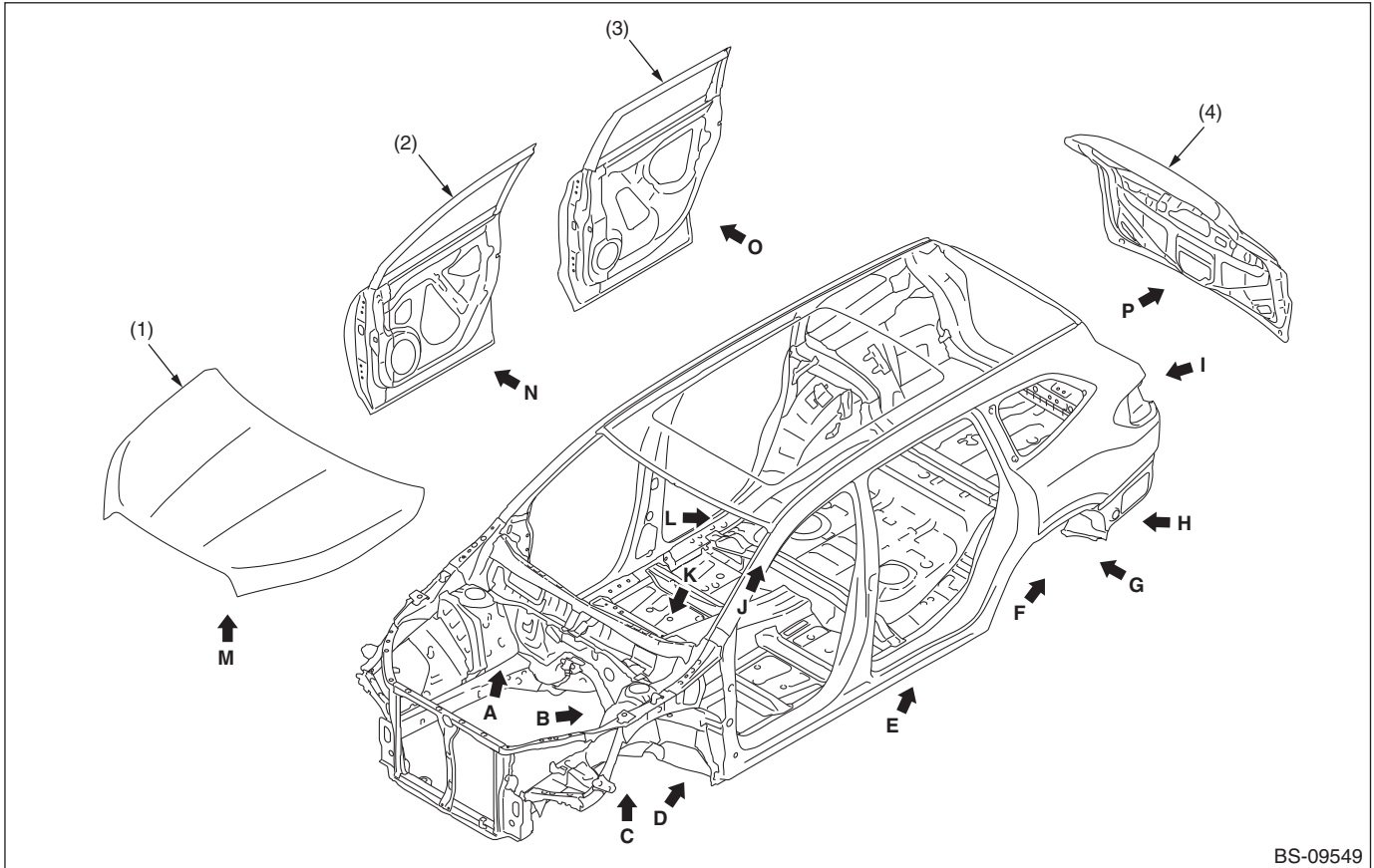
9. Body Sealing

A: SPECIFICATIONS

Used material: Three Bond 4101 (004403063)

— : Sealer application location

▨ : Sealer application location (Application of 50 μm thick wax is allowable.)



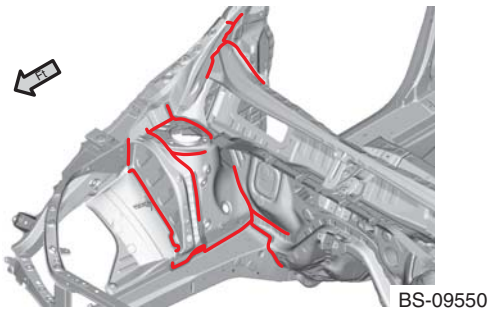
BS-09549

- (1) Front hood
- (2) Front door

- (3) Rear door

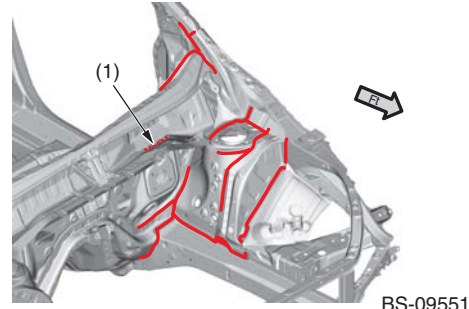
- (4) Rear gate

View A



BS-09550

View B

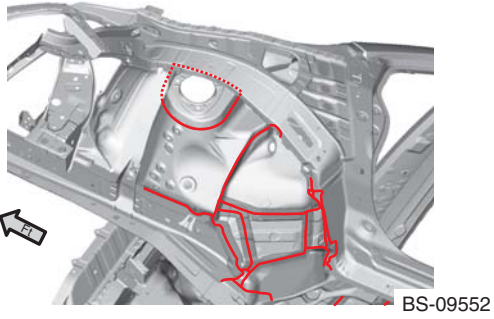


BS-09551

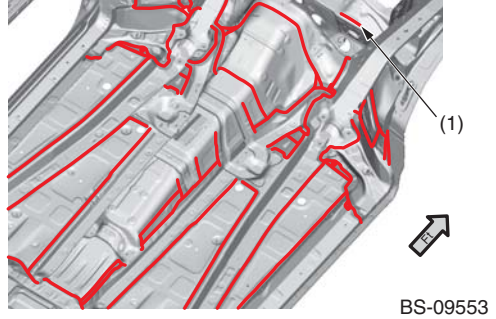
- (1) LH only

Body Sealing

View C

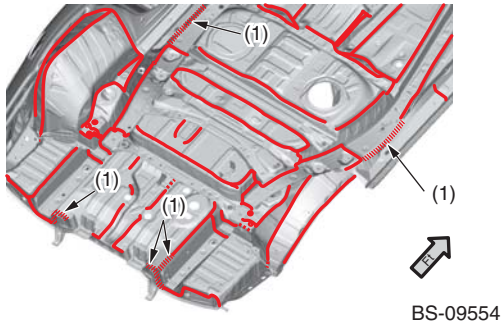


View D



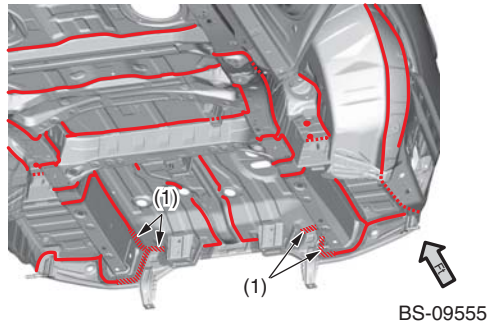
(1) LH only

View E



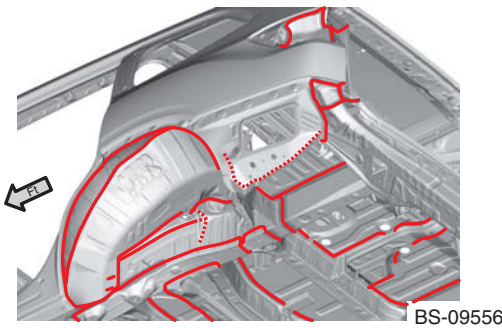
(1) Wax is allowable

View F

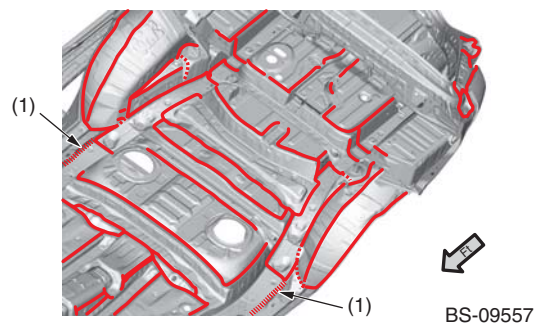


(1) Wax is allowable

View G

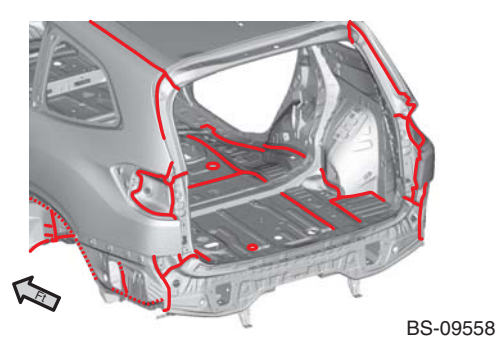


View H

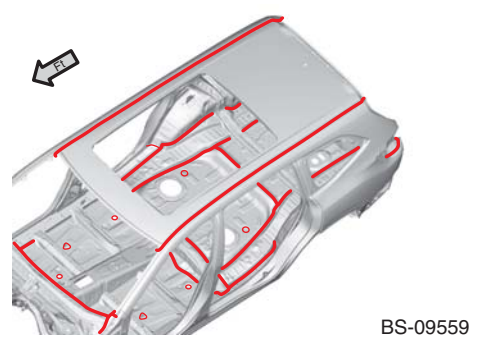


(1) Wax is allowable

View I

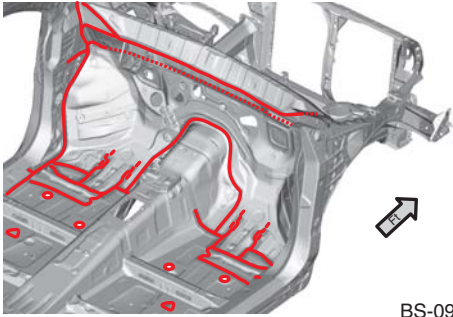


View J



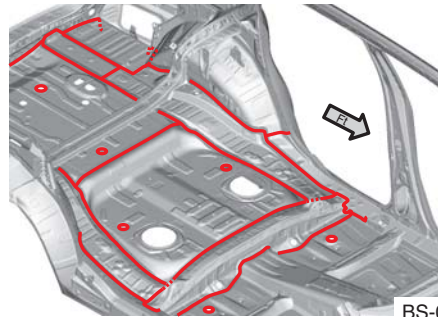
Body Sealing

View K



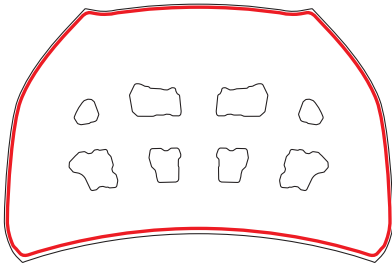
BS-09560

View L



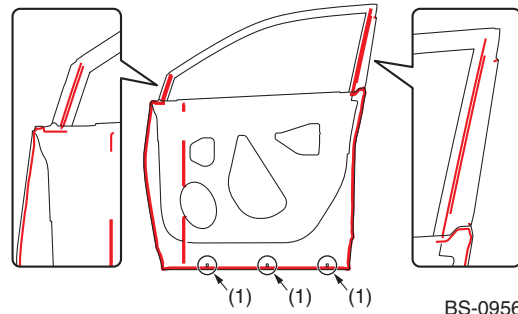
BS-09561

View M



BS-09562

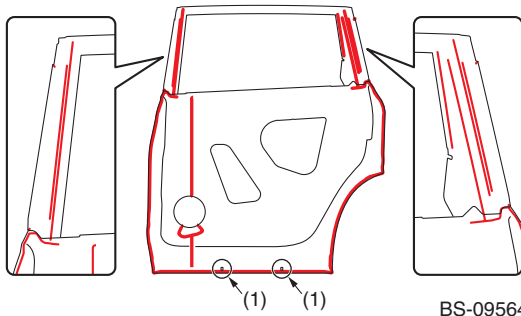
View N



BS-09563

(1) Do not block the water drain holes.

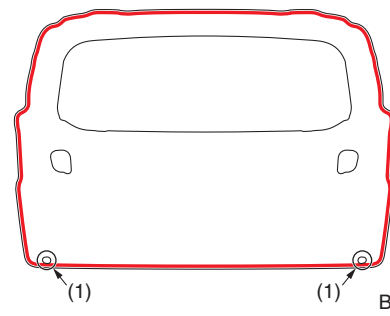
View O



BS-09564

(1) Do not block the water drain holes.

View P



BS-09565

(1) Do not block the water drain holes.

CAUTION:

Sealer has already been applied to hood, door and rear gate that are in replacement condition.

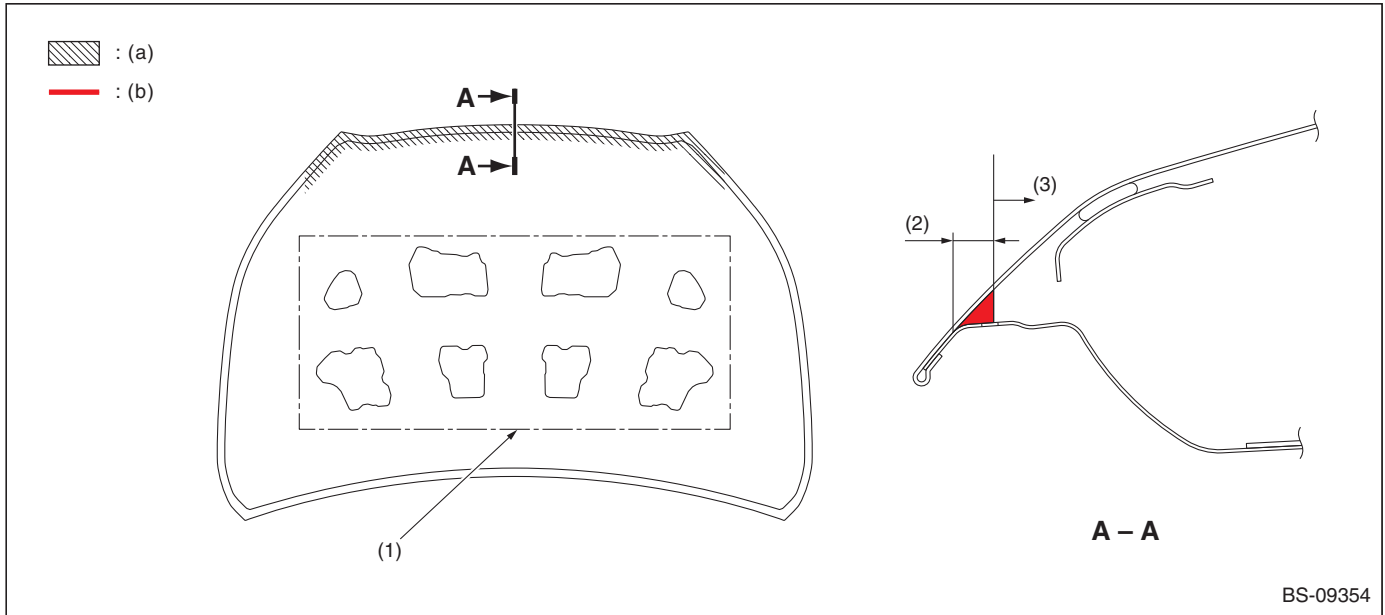
10. Anticorrosion Wax

A: SPECIFICATIONS

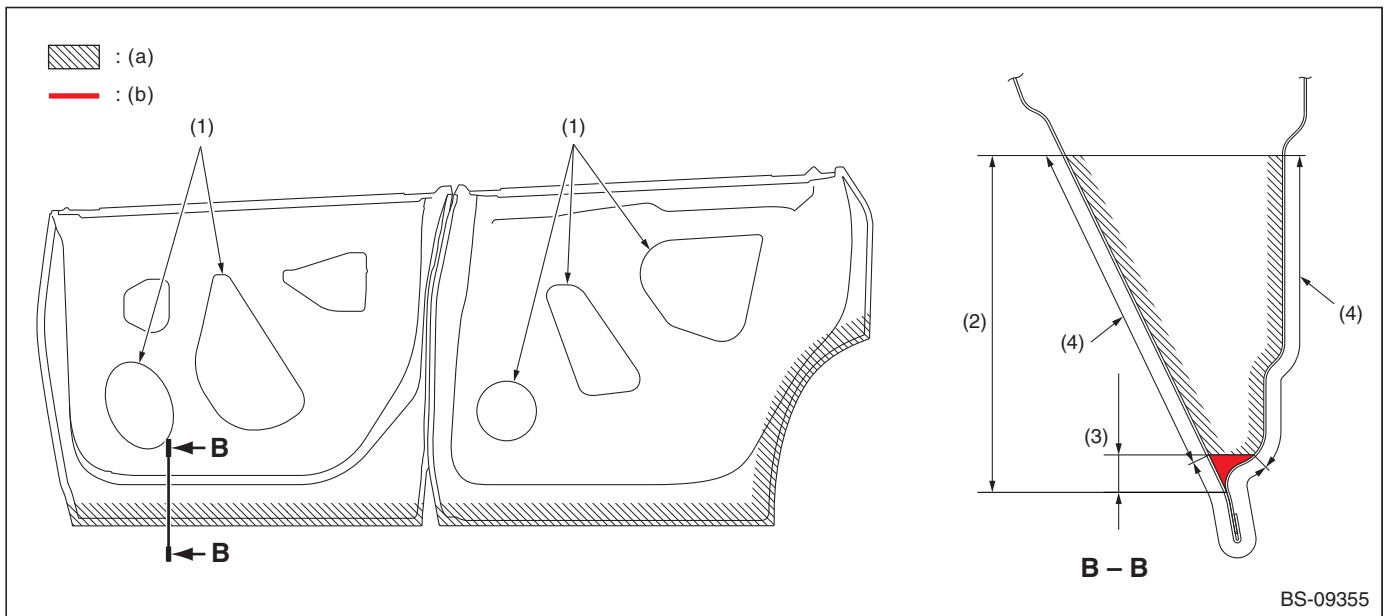
Used material: Rust-stop aerosol (K0877YA015)

— and ▨ : Application area

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

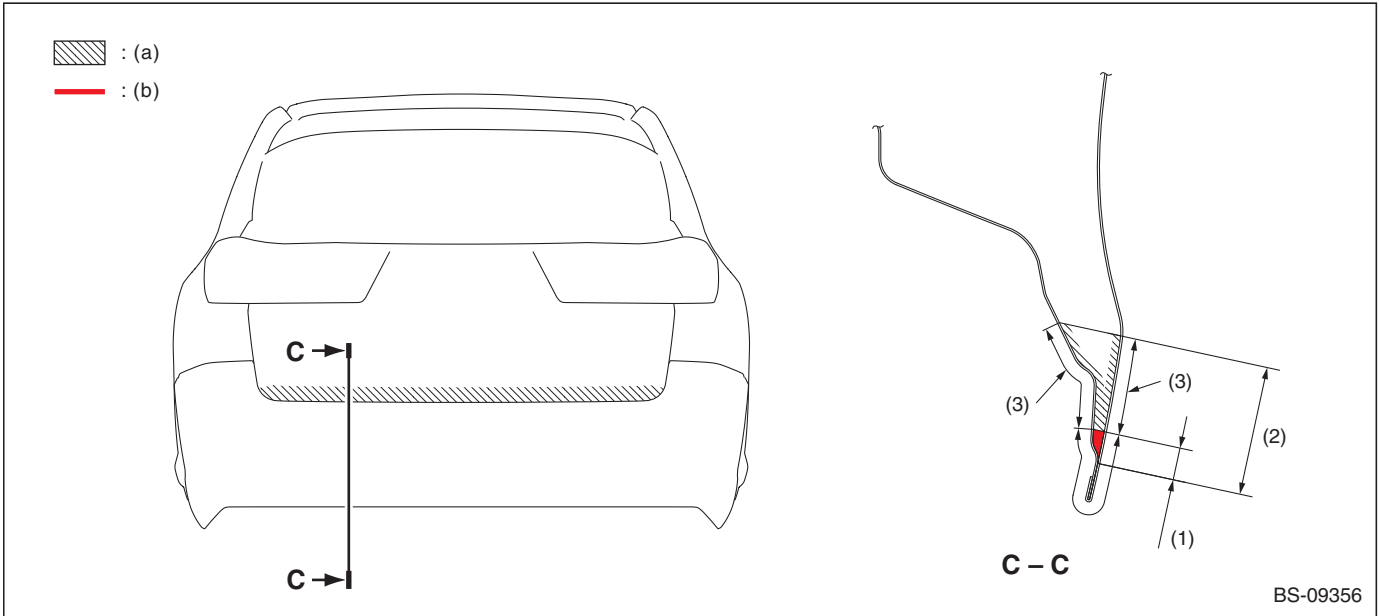


- Door (Application thickness = 50 μm or more)



Anticorrosion Wax

- Rear gate (Application thickness = 50 μm or more)



(a) Rust-stop aerosol

(b) To be filled into the plate joint

(1) 10 mm (0.39 in)

(2) 40 mm (1.57 in)

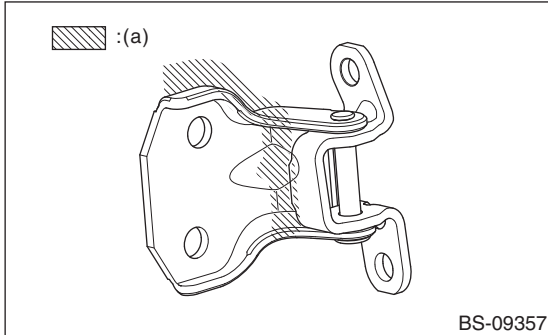
(3) Adherence of mist is allowable

Anticorrosion Wax

- Front door hinge Upper side

(Application thickness = 50 µm or more)

Apply to the contact surface (indicated range) on the body side in two locations on the left and right, and to the installation outer circumference (plate edges) on the door side.

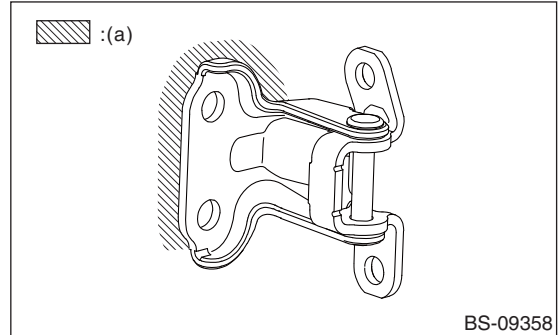


(a) Rust-stop aerosol

- Rear door hinge Upper side

(Application thickness = 50 µm or more)

Apply to the contact surface (indicated range) on the body side in two locations on the left and right, and to the installation outer circumference (plate edges) on the door side.

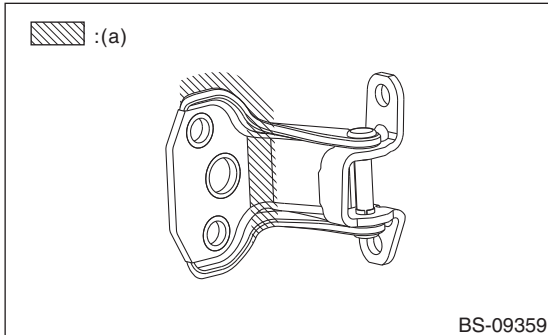


(a) Rust-stop aerosol

- Front door hinge Lower side

(Application thickness = 50 µm or more)

Apply to the contact surface (indicated range) on the body side in two locations on the left and right, and to the installation outer circumference (plate edges) on the door side.

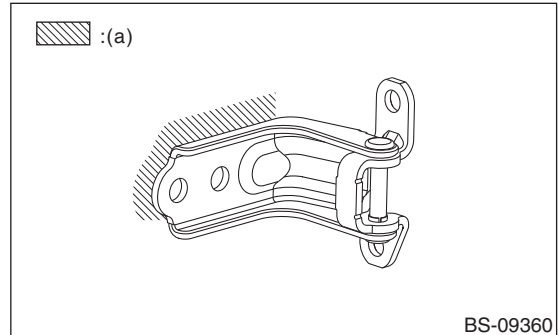


(a) Rust-stop aerosol

- Rear door hinge Lower side

(Application thickness = 50 µm or more)

Apply to the contact surface (indicated range) on the body side in two locations on the left and right, and to the installation outer circumference (plate edges) on the door side.

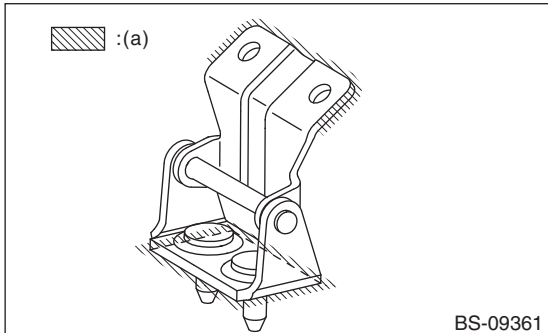


(a) Rust-stop aerosol

- Rear gate hinge

(Application thickness = 50 µm or more)

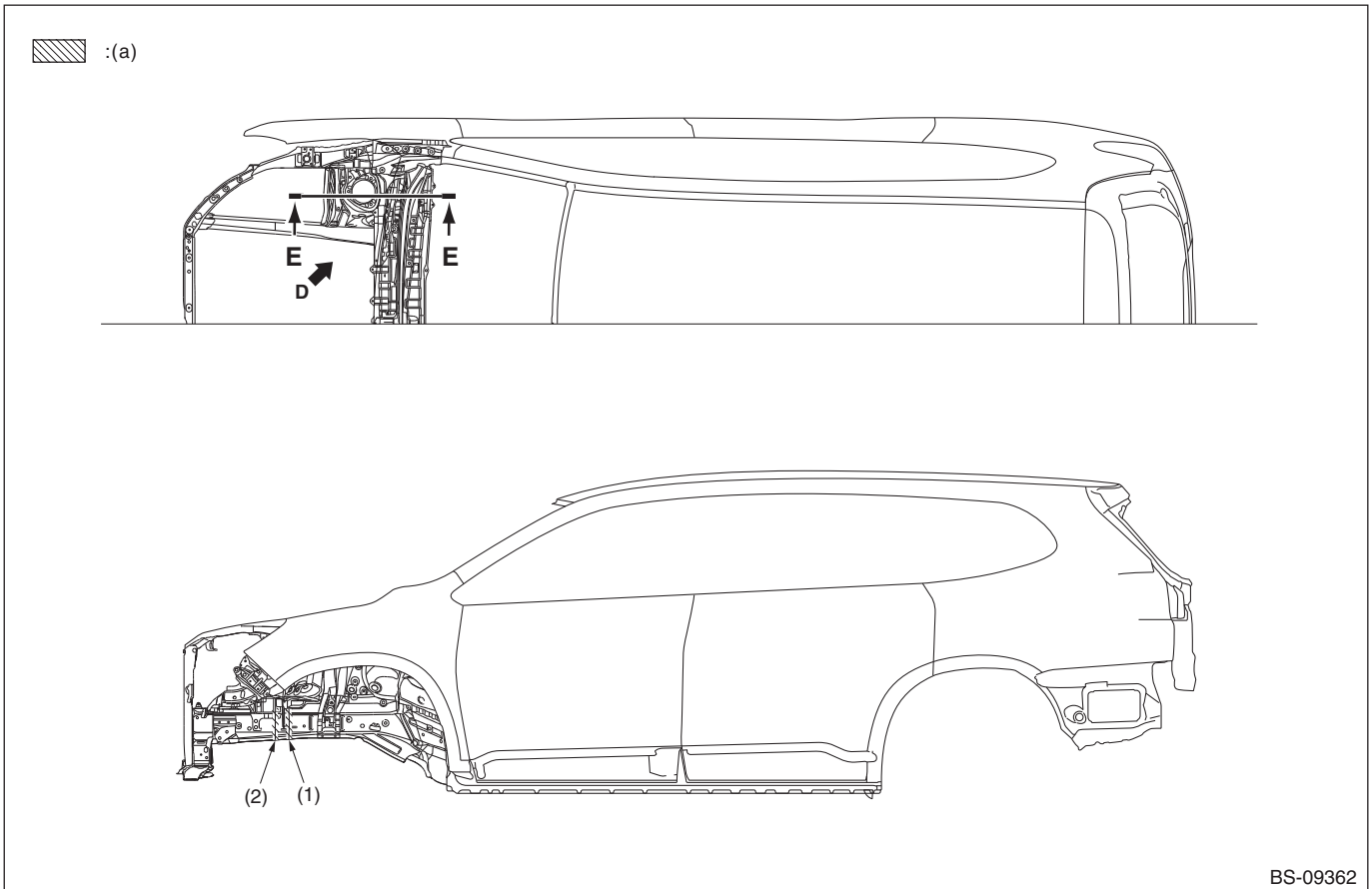
Apply to the contact surface on the body side at two locations on the left and right, and to installation outer circumference (indicated range, plate edges) on the rear gate side.



(a) Rust-stop aerosol

Anticorrosion Wax

- Overall view

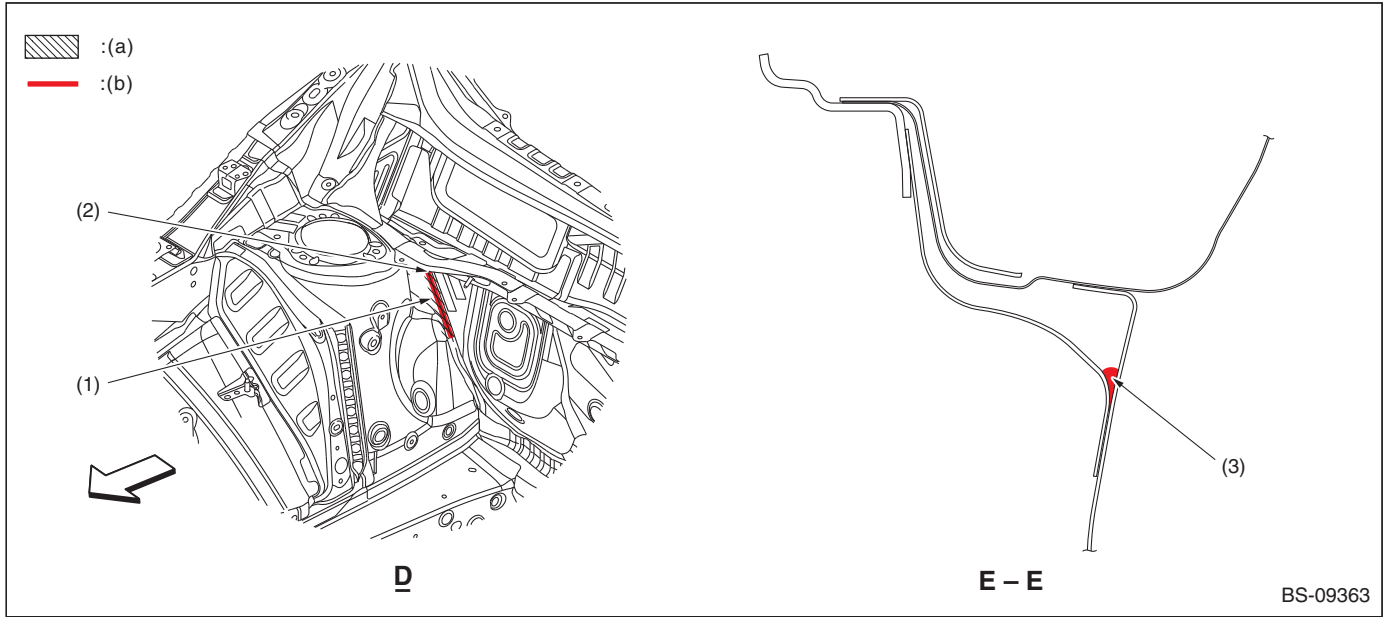


(a) Rust-stop aerosol
(Application thickness = 50 μm or more)

(1) The panel joints shall be covered (2) The panel joints on the inside of the engine compartment shall be covered

Anticorrosion Wax

• View / Cross section



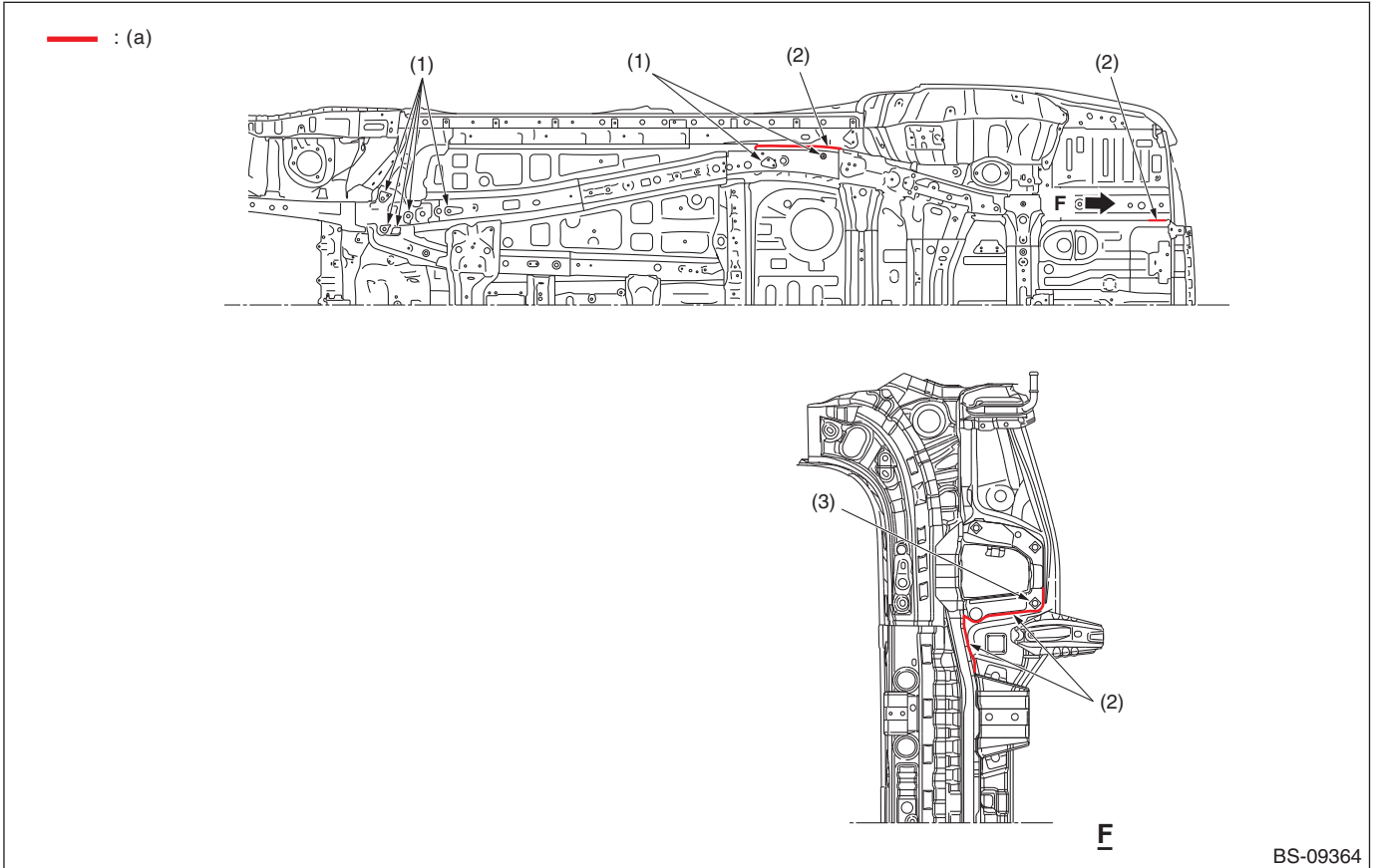
(a) Rust-stop aerosol (Application thickness = 50 μm or more)

(b) To be filled into the plate joint

- (1) Securely cover the contact surface of the toe board, front suspension bracket (Sealing is allowable), Wrap the sealing and wax securely.
- (2) Apply sealant and wax all the way inside as much as possible.
- (3) Sealing is allowable

Anticorrosion Wax

- Bottom view



BS-09364

- (a) Rust-stop aerosol
(Application thickness = 50 μm or more)
- (1) No wax is adhered to the seating surface and nut.
- (2) Apply wax only when sealing is not allowed.
- (3) No wax is adhered to the screw thread.

Undercoat

11.Undercoat

A: SPECIFICATIONS




Repair material: PVC (NT guardcoat 5900FL)

CAUTION:

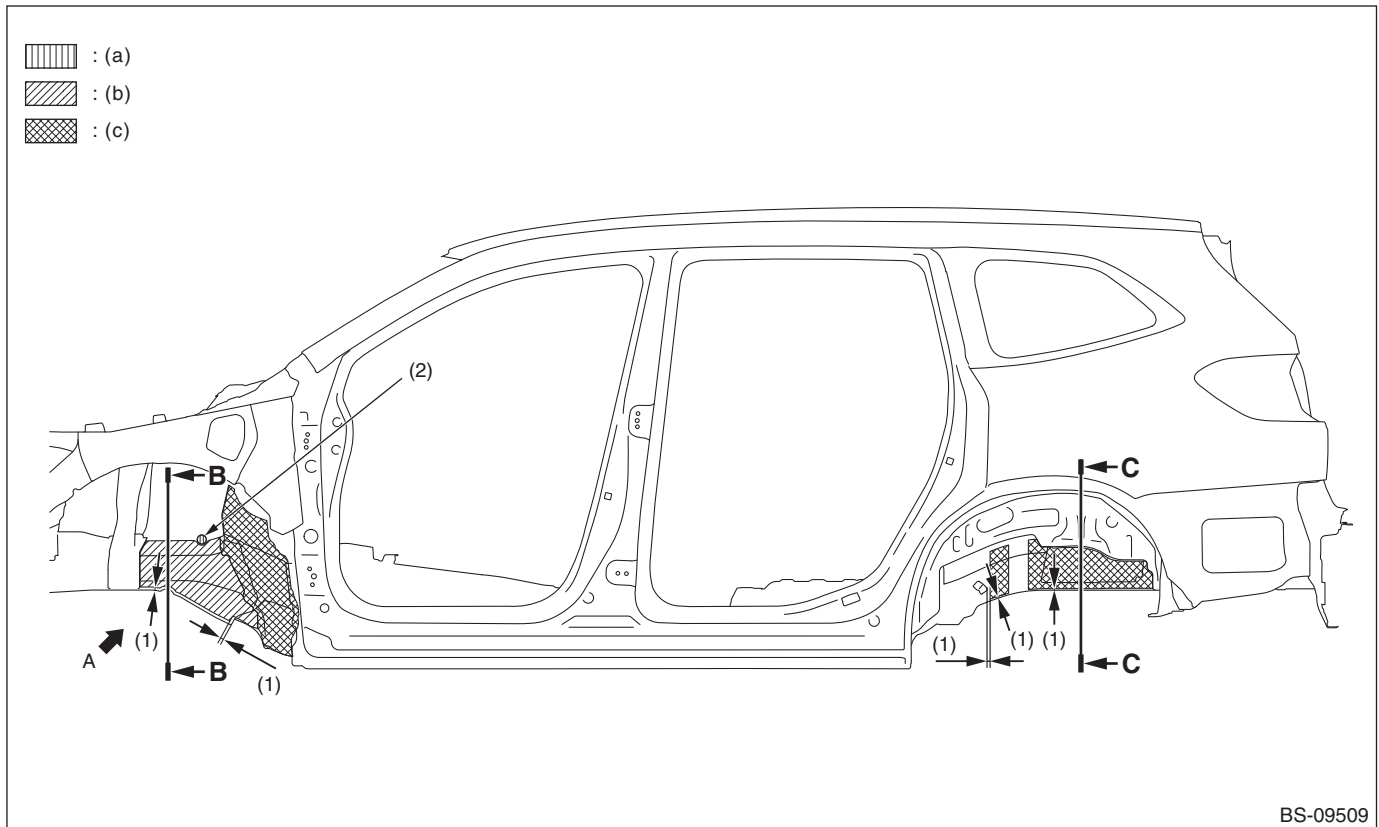
Be careful not to let the PVC be attached to any parts not indicated below and to the following locations.

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

1) Application area and application thickness

	200 μm or more
	Dry: 340 mm or more, Wet: 330 μm or more
	Dry: 780 mm or more, Wet: 630 μm or more

• Side view



(a) 200 μm or more

(b) Dry: 340 μm or more
Wet: 330 μm or more

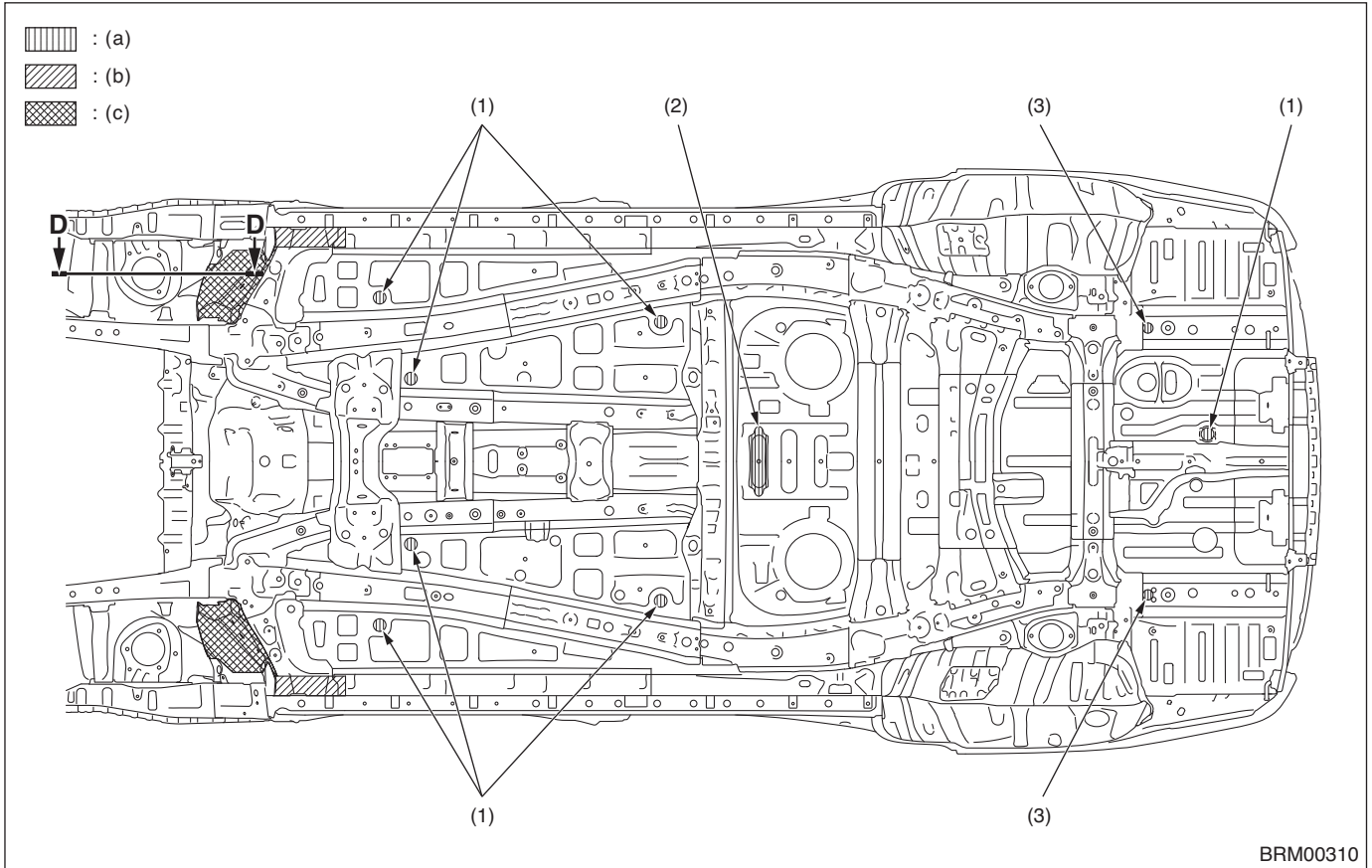
(c) Dry: 780 μm or more
Wet: 630 μm or more

(1) 10 mm (0.39 in) (Adherence of mist is allowable)

(2) Cover the grommet seat with the PVC.

Undercoat

• Bottom view



(a) 200 μm or more

(b) Dry: 340 μm or more
Wet: 330 μm or more

(c) Dry: 780 μm or more
Wet: 630 μm or more




(1) Plug must be covered with PVC

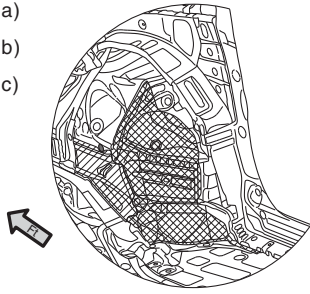
(2) Cover this area with the PVC.

(3) Cover the grommet seat with the PVC.

Undercoat

View A

-  : (a)
-  : (b)
-  : (c)

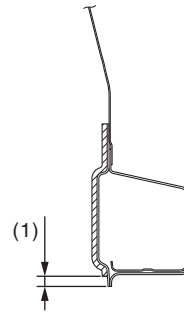


BS-09511

- (a) 200 μm or more
- (b) Dry: 340 μm or more, Wet: 330 μm or more
- (c) Dry: 780 μm or more, Wet: 630 μm or more

Cross section B — B

-  : (a)

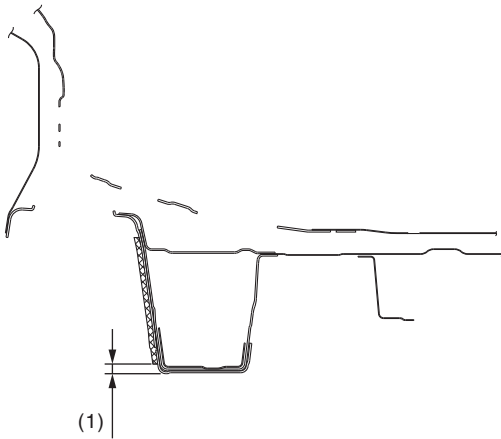


BS-09512

- (a) Dry: 340 μm or more, Wet: 330 μm or more
- (1) 10 mm (0.39 in) (Adherence of mist is allowable)

Cross section C — C

-  : (a)



BS-09513

- (a) Dry: 780 μm or more, Wet: 630 μm or more
- (1) 10 mm (0.39 in) (Adherence of mist is allowable)

Cross section D — D

-  : (a)



BS-09514

- (a) Dry: 780 μm or more, Wet: 630 μm or more

Damping Seat

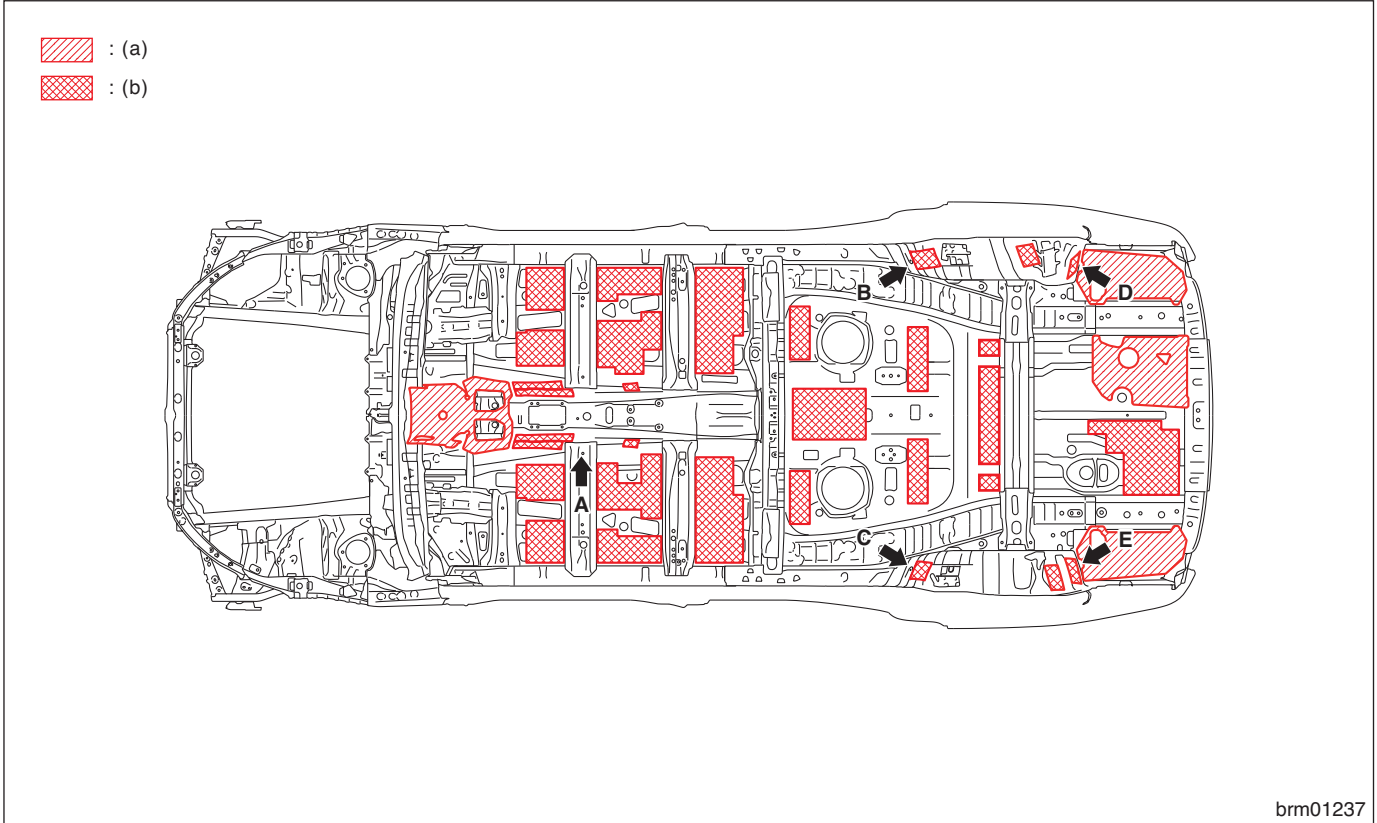
12. Damping Seat

A: SPECIFICATIONS

CAUTION:

- If the thickness of the silencer (b) does not meet the standard value, add silencer sheets one by one until the thickness meets the standard value.

1. UPPER VIEW





brm01237

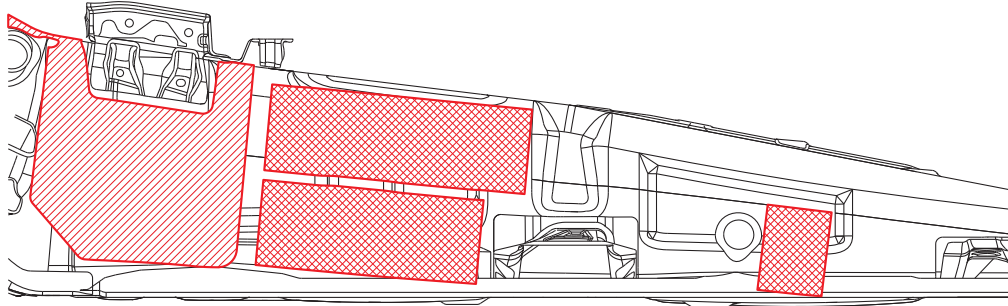
(a) Silencer

(b) Thickness of the silencer:
2.5 mm (0.10 in)

Damping Seat

View A

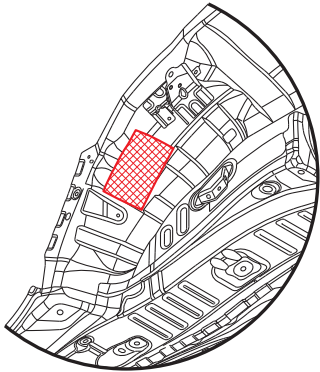
-  : (a)
-  : (b)



BRM01238

View B

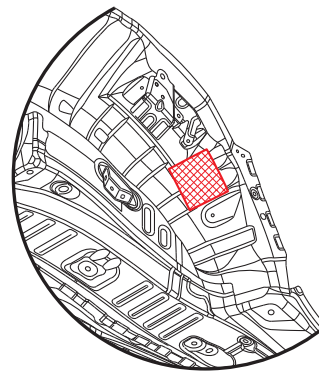
-  : (b)



BRM01239



View C

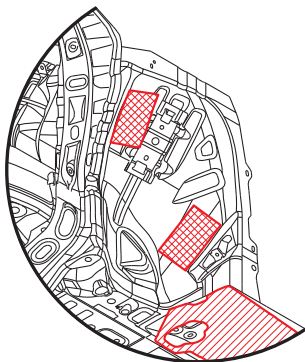
-  : (b)



BRM01240


View D

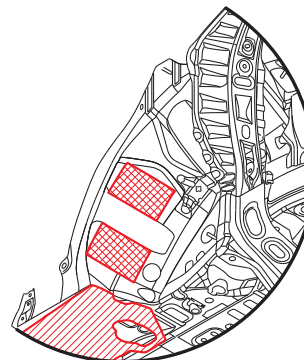
-  : (a)
-  : (b)



BRM01407

View E

-  : (a)
-  : (b)



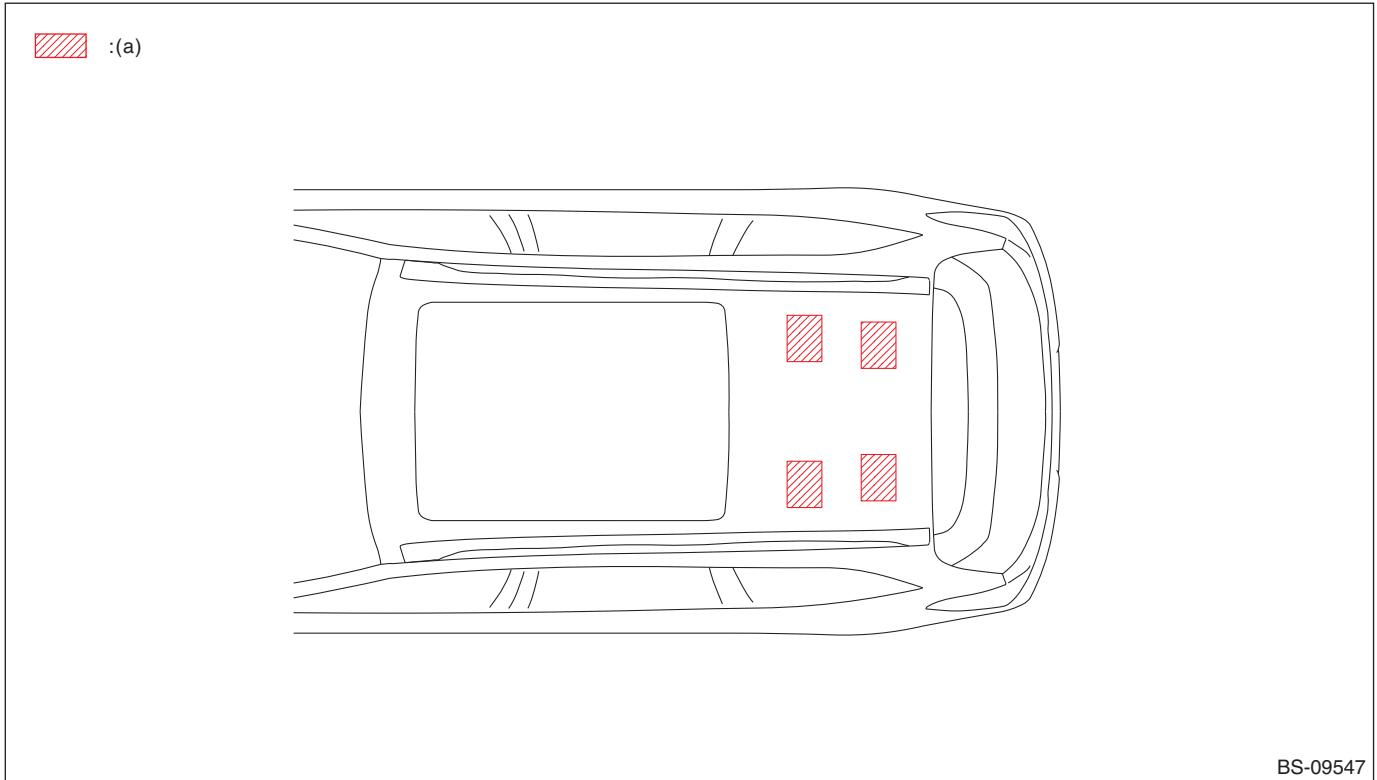
BRM01408

(a) Silencer

(b) Thickness of the silencer:
2.5 mm (0.10 in)

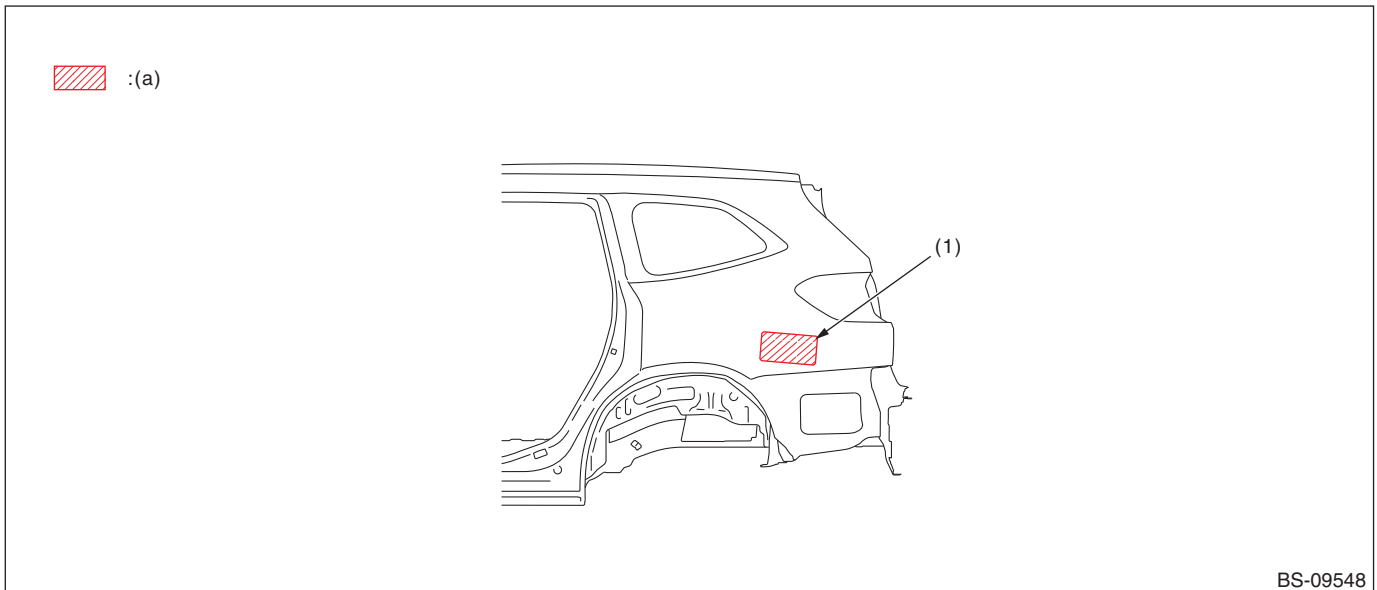
Damping Seat

2. ROOF PANEL



(a) Damping seat

3. SIDE PANEL



(a) Damping seat

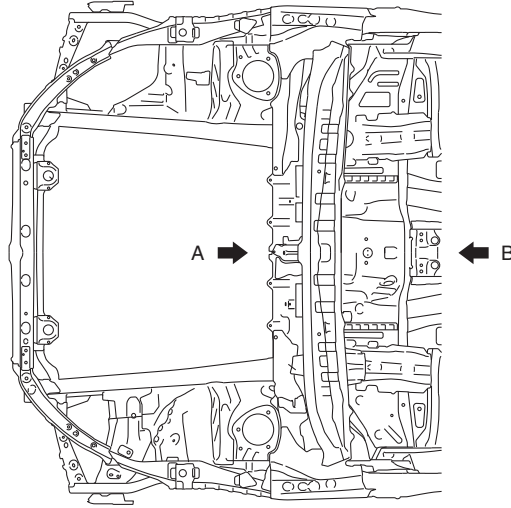
(1) right and left

Insulator

13. Insulator

A: SPECIFICATIONS

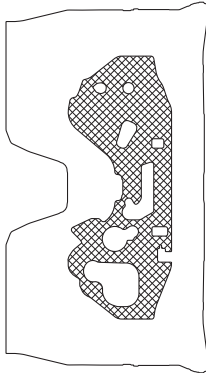
1. TOE BOARD



BS-09541

View A

 : (a)



BS-09542

View B

 : (a)

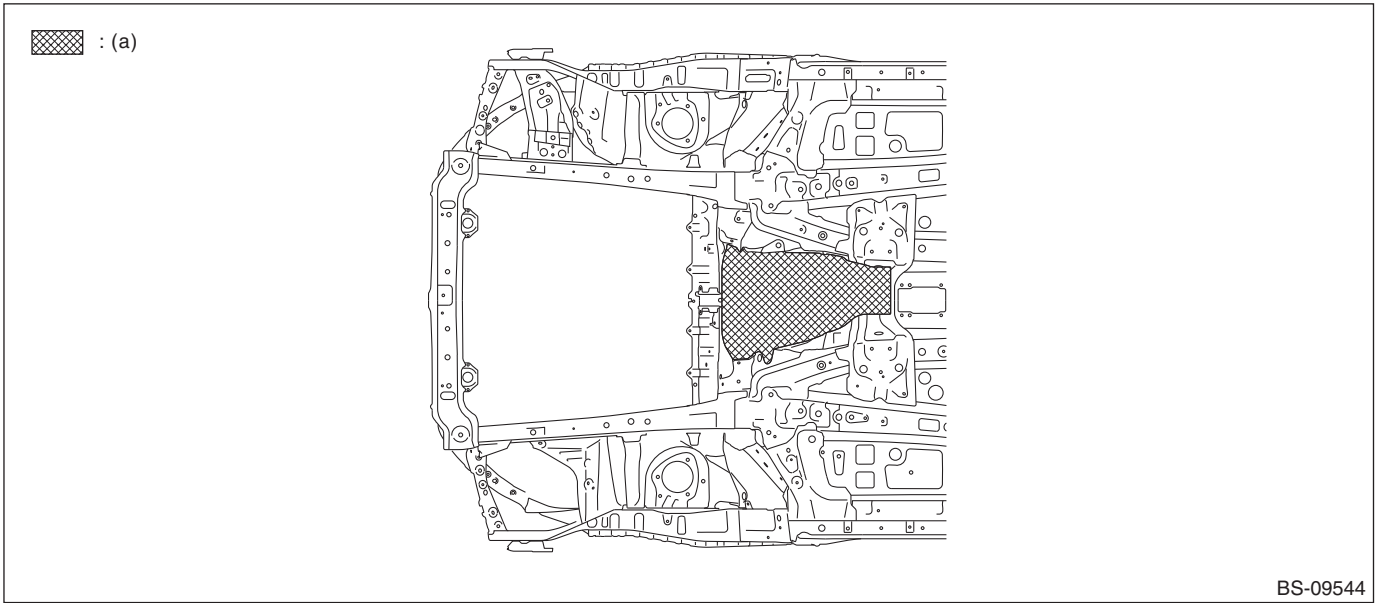


BS-09543

(a) Insulator

Insulator

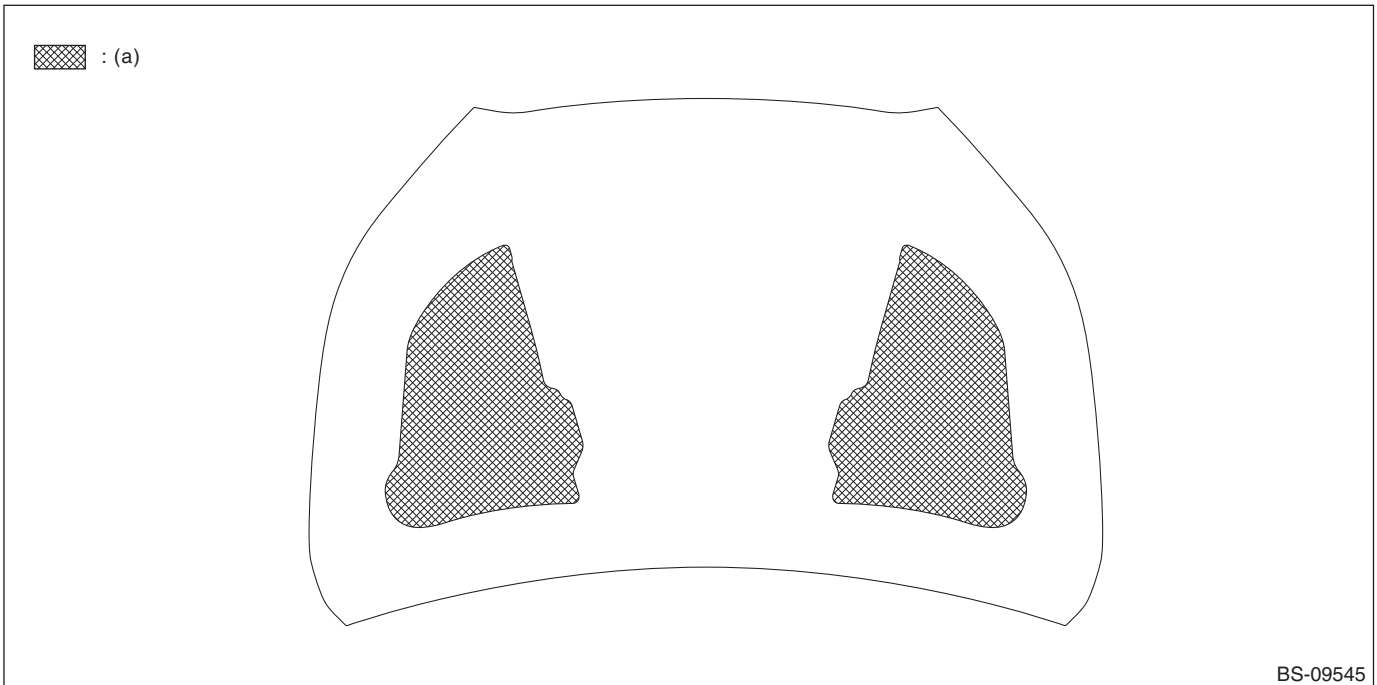
2. BOTTOM VIEW



BS-09544

(a) Insulator

3. FRONT HOOD

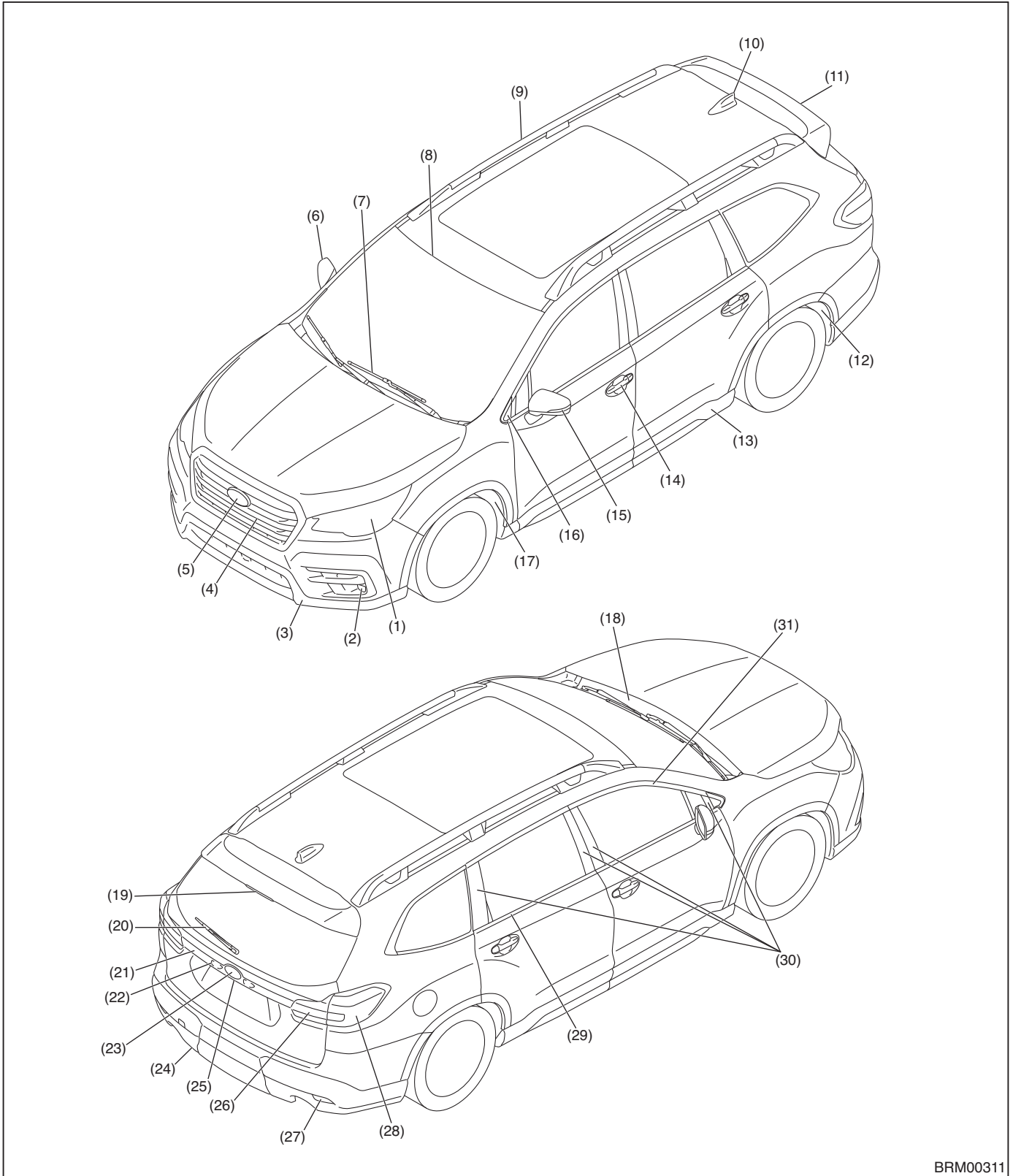


BS-09545

(a) Insulator

14. Plastic Parts and Materials

A: SPECIFICATIONS



BRM00311

Plastic Parts and Materials

(1) Headlight	(12) Rear mudguard	(23) Ornament rear
(2) Front fog light	(13) Side garnish	(24) Rear bumper
(3) Front bumper	(14) Door handle	(25) Rear gate opener switch
(4) Front grill	(15) Side turn light	(26) Rear finisher
(5) Ornament front	(16) A pillar cover	(27) Rear reflex reflector
(6) Door mirror	(17) Front mudguard	(28) Rear combination light
(7) Front wiper	(18) Cowl panel	(29) Waist outer
(8) Front window moulding	(19) High mount stop light	(30) Pillar cover
(9) Roof rail	(20) Rear wiper	(31) Sash mall
(10) Antenna	(21) Rear gate garnish	
(11) Roof spoiler	(22) License light	

No.	Part name	Material	
(1)	Headlight (Halogen)	Lens	PC
		Housing	PP-TD30
		Extension 1, 2	PBT
		Inner lens 1, 2, 3	PC
		Lens (Reflex reflector)	PMMA
		Retainer	PBT
		Reflector 1, 3	PBT
		Reflector HL	BMC
	Headlight (LED)	Lens	PC
		Housing	PP-TD30
		Extension 1	PBT
		Inner lens 1, 2, 3, 5	PC
		Reflector 1, 3	PBT
		Lens (Reflex reflector)	PMMA
Retainer	PBT		
(2)	Front fog light	Lens	PC
		Reflector	PC
		Bracket (Housing)	PP-GF40
(3)	Front bumper	Face	PP
		Fog light cover	PP+ABS
		Center lower bracket	PP
		Side bracket	POM
		Corner bracket	PP-GF30
		EA form	PS+PP
(4)	Front grill	Grille part	ABS
		Moulding	ABS
		Bracket	PP-TD30
(5)	Ornament front	Ornament	PMMA
		Base	ABS
(6)	Door mirror	Body	ASA
		Cover body	ASA
		Cover front	ABS
		Cover stay A	ASA
		Cover stay B	ASA
		Packing stay	TPO
(7)	Front wiper	Blade	PBT
			PBT-GF45
			PP+ELASTOMER
			NR+CR

Plastic Parts and Materials

No.	Part name			Material		
(8)	Front window moulding			PVC		
(9)	Roof rail	Bolt holder	Front & center & rear	PA6-GFM40		
		Bolt holder cover	Front & center & rear	ASA		
(10)	Antenna			PC+ASA		
(11)	Roof spoiler			ASA		
(12)	Rear mudguard	Body		PET+PP		
		Air flap		PP+EPDM		
(13)	Side garnish			PP		
(14)	Door handle	model with smart entry	Paint	Handle	PC+PBT	
				Handle cover	PC+PBT	
				Spacer	PP	
		model without smart entry	Paint	Front door	Handle	PC+PBT-MD10
					Handle cover	PC+PBT-MD10
				Spacer	PP	
	Rear door	Paint	Handle	PC+PBT		
			Handle cover	PC+PBT		
			Spacer	PP		
	Plating	Paint	Handle	PC+PBT-MD10		
Handle cover			PC+ABS			
Spacer			PP			
(15)	Side turn light	Housing		ABS		
		Lens		PMMA		
		Inner lens		PMMA		
(16)	A pillar cover			AES		
(17)	Front mudguard	Body		PE		
		Air flap		PP+EPDM		
(18)	Cowl panel			PP-TD10		
(19)	High mount stop light	Lens		PMMA		
		Housing		ABS		
(20)	Rear wiper	Blade		PBT-GF30		
		Arm		PET-GF45		
		Arm cover		PBT		
(21)	Rear gate garnish	Garnish outer		PC+PET		
		Garnish inner		PC+PET		
		Garnish lower		ASA		
		Garnish moulding		ABS		
		Protector upper		EPDM		
		Protector lower		TPO		
(22)	License light	Lens		PC		
		Housing		PC		
(23)	Ornament rear			PMMA		
(24)	Rear bumper	Face		PP		
		Hook cover		PP		
		Side bracket		POM		
		Corner bracket		POM		
		Cover hitch		PP		
		Cover side lower		PP		
		EA form		PS+PP		

Plastic Parts and Materials

No.	Part name		Material	
(25)	Rear gate opener switch	Operation part	TPE	
		Resin part	PP-F35	
(26)	Rear finisher	Outer lens	PMMA	
		Housing	ASA	
		Extension	ASA	
(27)	Rear reflex reflector	Lens	PMMA	
		Housing	PC	
(28)	Rear combination light	Outer lens	PMMA	
		Inner lens	Side reflex reflector	PMMA
		Extension		PBT
		Reflector		PBT
		Housing		ASA
		Bracket		ASA
		Cover		ASA
(29)	Waist outer	Seal area	PVC	
		End cap	PBT	
(30)	Pillar cover		AES	
(31)	Sash mall	Seal area	PVC	
		End cap	AES	
	Undercover	Front	PP	
		Rear	PET	
	Splash board		PP	

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	PET-GF45	Polyethylene terephthalate (45 % glass fiber content)
ASA	Acrylonitrile/styrene/acrylate	PMMA	Polymethyl methacrylate
BMC	Premix molding compound	POM	Polyacetal
CR	Chloroprene rubber	PP	Polypropylene
ELASTOMER	Elastomer	PP-F35	Polypropylene (Inorganic filler 35 %)
EPDM	Ethylene/propylene/dien rubber	PP-GF30	Polypropylene (30 % glass fiber content)
NR	Natural rubber	PP-GF40	Polypropylene (40 % glass fiber content)
PA6-GFM40	Polyamide (nylon6) (40 % glass fiber / mineral powder)	PP-TD10	Polypropylene (10 % talc content)
PBT	Polybutylene terephthalate	PP-TD30	Polypropylene (30 % talc content)
PBT-GF30	Polybutylene terephthalate (30 % glass fiber content)	PS	PolyStyrene
PBT-GF45	Polybutylene terephthalate (45 % glass fiber content)	PVC	Polyvinyl chloride
PBT-MD10	Polybutylene terephthalate (10 % mineral powder)	TPE	Thermoplastic elastomer
PC	Polycarbonate	TPO	Thermo polyolefin
PE	Polyethylene		