# **BODY REPAIR MANUAL**

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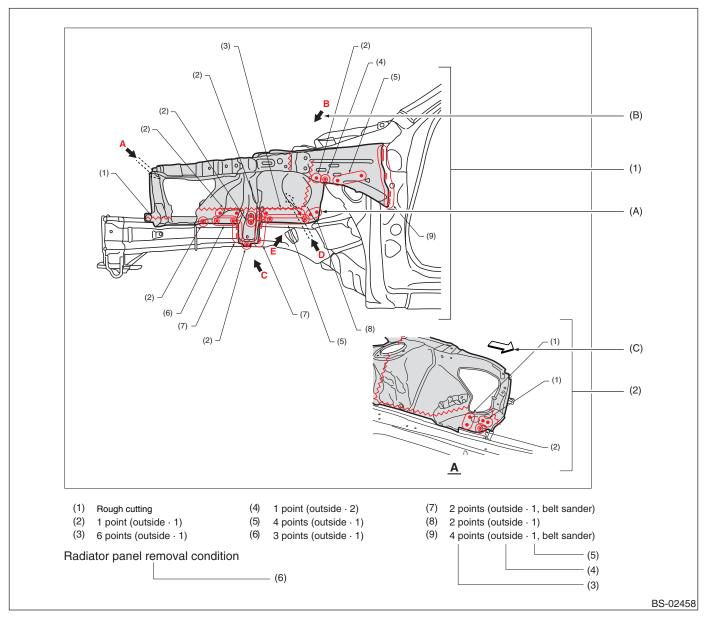
### 1. Foreword

### 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).



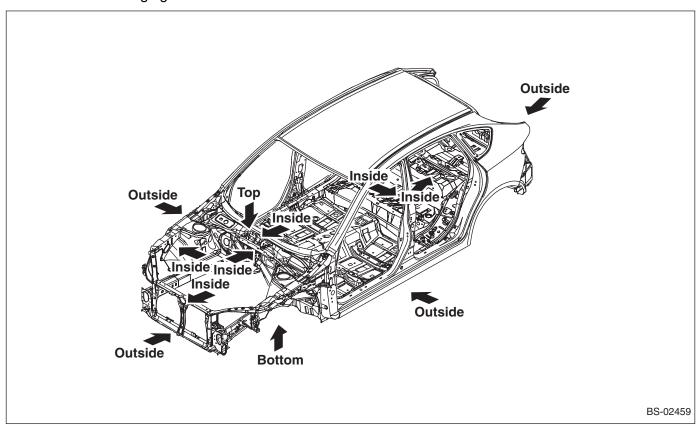
- (1) Overall view
- (2) View
- (3) Number of welding points etc.
- (4) Removal direction
- (5) Number of plates to be drilled
- (6) Cautions for the work etc.

- (A) Welding method
- (B) View direction
- (C) Direction towards the front of the vehicle

### **Foreword**

### 2. REMOVAL DIRECTION

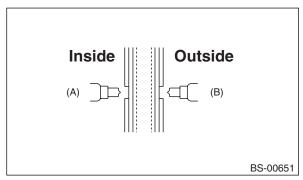
Division is made into the four groups of inside, outside, top, and bottom, and these directions are defined as shown in the following figure.



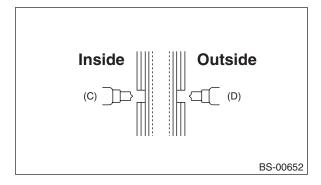
### 3. NUMBER OF PANELS TO BE DRILLED

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

(1) Drilling through one plate



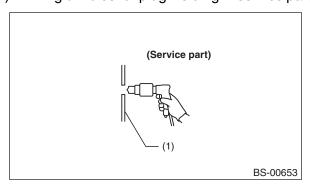
- (A) (Inside · 1)
- (B) (Outside · 1)
- (2) Drilling through two plates



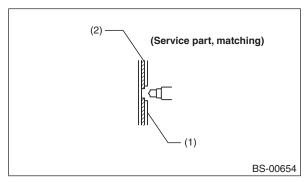
- (C) (Inside · 2)
- (D) (Outside · 2)

### 4. HOLE DRILLING FOR PLUG WELDING

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



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

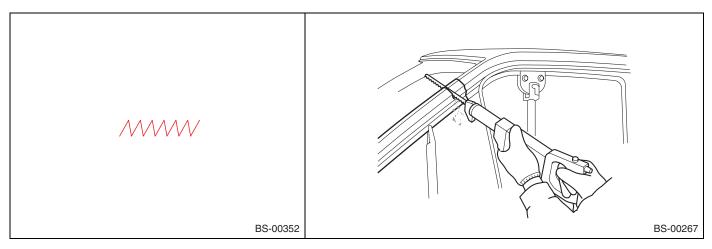


- (1) Vehicle side
- (2) Service part

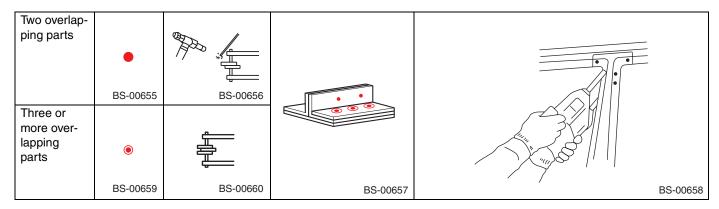
### **Foreword**

### 5. MEANING OF SYMBOLS

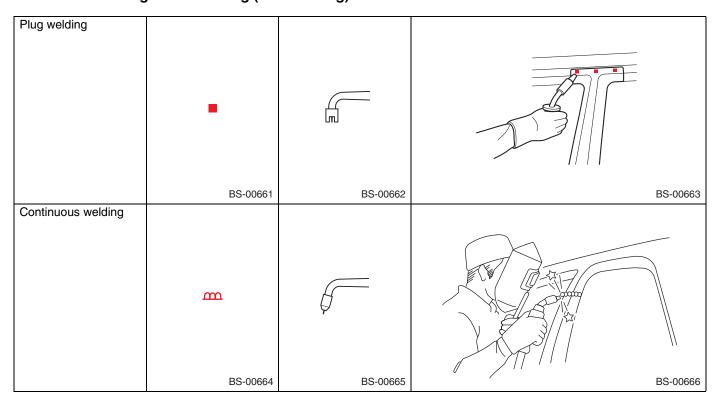
### • Cutting



# • Spot welding

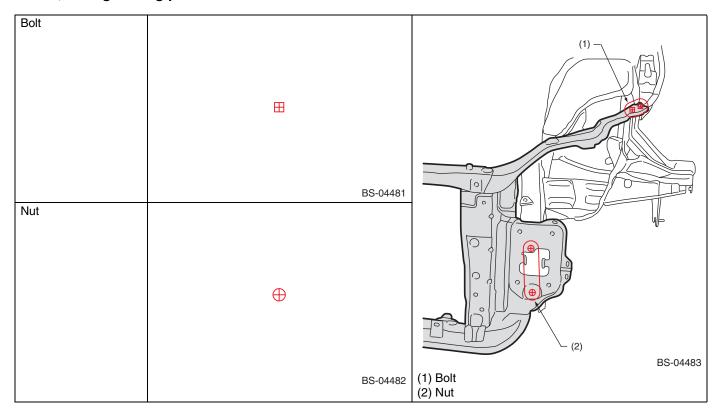


# • Carbon dioxide gas arc welding (MIG welding)



### **Foreword**

# • Bolt, nut tightening portion



# **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.

### C: NOTE

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

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] [e])
- When conditions can't be met, it is recommended to use the plug welding method [f] or [g] as described below.

Spot welding	[a]	Compression	4.0 kN	Total number of 2 overlapping sheets
		Current	8.0 kA	
		Welding time	15 cyc	
	[b]	Compression	4.0 kN	
		Current	6.5 kA	
		Welding time	15 cyc	
	[c]	Compression	3.5 kN	Total number of 3 overlapping sheets
		Current	7.5 kA	
		Welding time	25 cyc	
	[d]	Compression	4.4 kN	
		Current	8.0 kA	
		Welding time	25 cyc	
	[e]	Compression	4.4 kN	
		Current	8.0 kA	
		Welding time	20 cyc	
Plug welding	[f]	Plug diameter	8.5 mm (0.31 in) or more	Total number of 2 or 3 overlap-
		Wire	YGW12	ping sheets
		Gas	CO2	
	[g]	Plug diameter	8.5 mm (0.31 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.

### 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:**

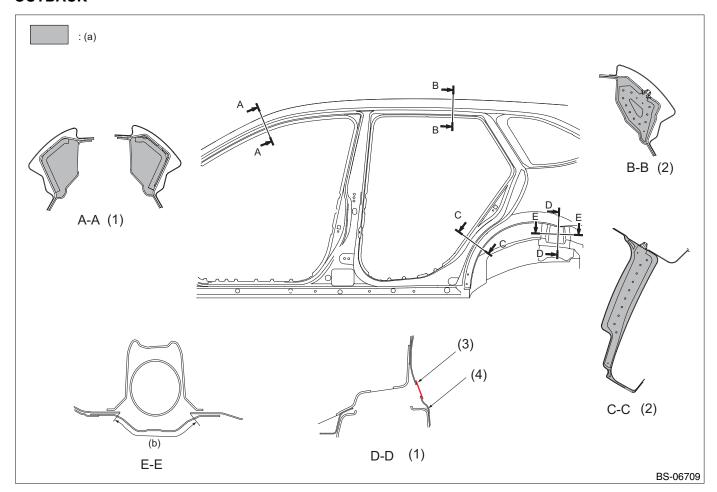
- Do not perform welding or other work involving high temperatures.
- Do not use an open flame at the time of disassembly.
- Remove residual foam before injecting the new material.
- · After completion of work, confirm that there is no danger of igniting the material.
- Spray cans that have been used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

### Recommended materials: Equivalent to High Span Foam made by Cemedine

For a clip type plate, reuse the plate and inject cold-setting foam. For a clipless type, inject cold-setting foam as is.

### • Foam injection locations

### **OUTBACK**



- (a) Urethane foam injection locations
- (b) Application area of forming agent

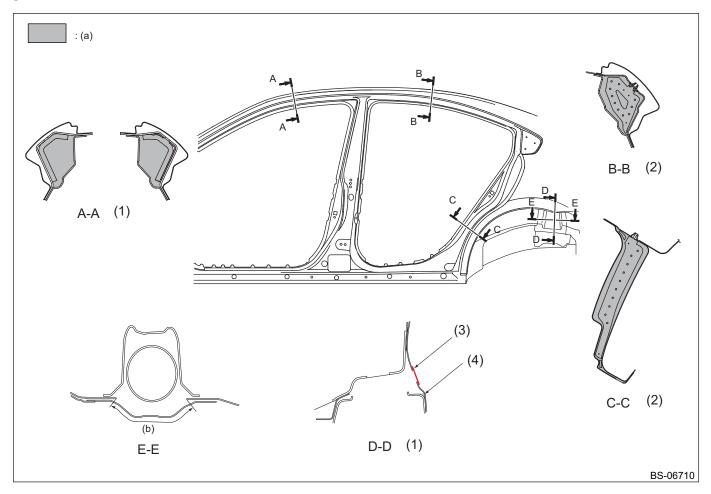
(1) Clipless type

- (3) After applying the foaming agent, cover this hole with a grommet sheet.
- (4) Apply foaming agent in area (b) of figure E E.

(2) Clip type

### **Foreword**

### **SEDAN**



- (a) Urethane foam injection locations
- (b) Application area of forming agent

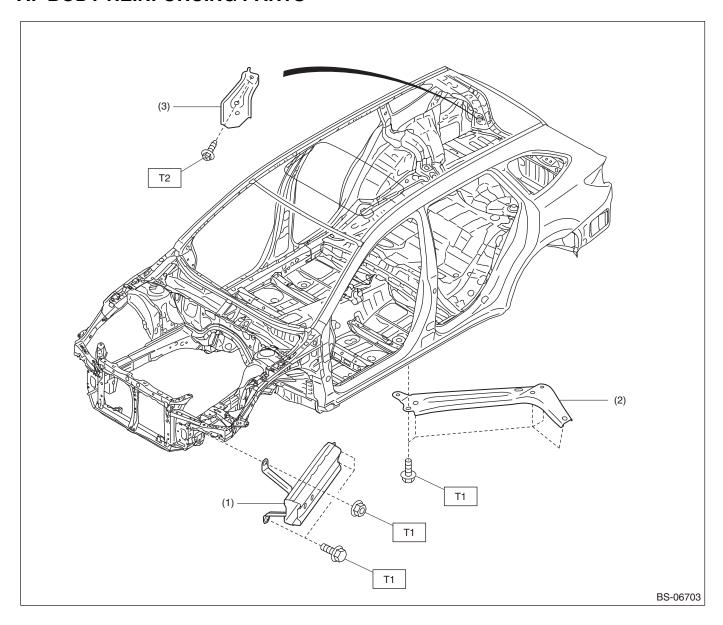
(1) Clipless type

- (3) After applying the foaming agent, cover this hole with a grommet sheet.
- (4) Apply foaming agent in area (b) of figure E E.

(2) Clip type

# 2. Structure of Installed Exterior Parts

# **A: BODY REINFORCING PARTS**

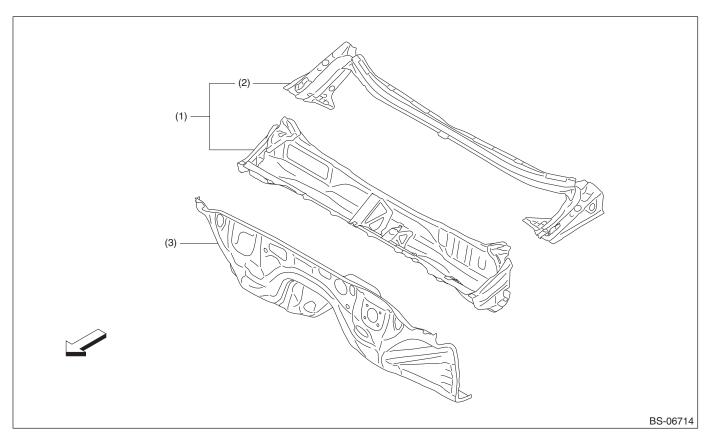


- (1) GUSSET CP FT SD
- (2) STAY R FRAME CP
- (3) BRACKET LJGG HK D CP (OUTBACK)
- Tightening torque:N·m (kgf-m, ft-lb)
  - T1: 37 (3.77, 27.3) T2: 7.5 (0.76, 5.5)

# 3. Panel Components

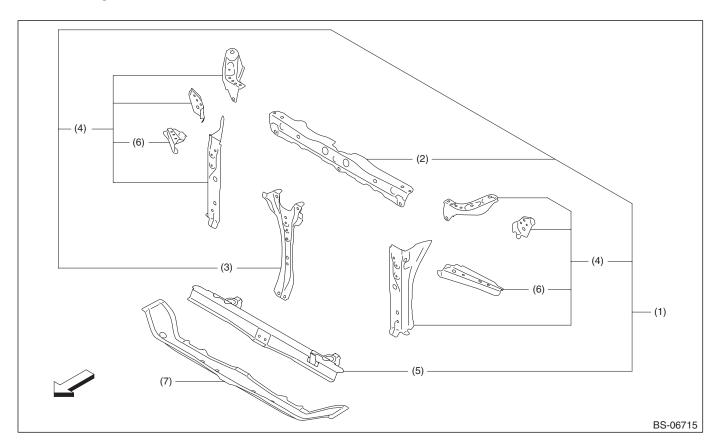
# A: COMPONENTS

### 1. TOE BOARD & FRONT PANEL



- (1) Front panel & Duct
- (2) Front panel side reinforcement
- (3) Toe board

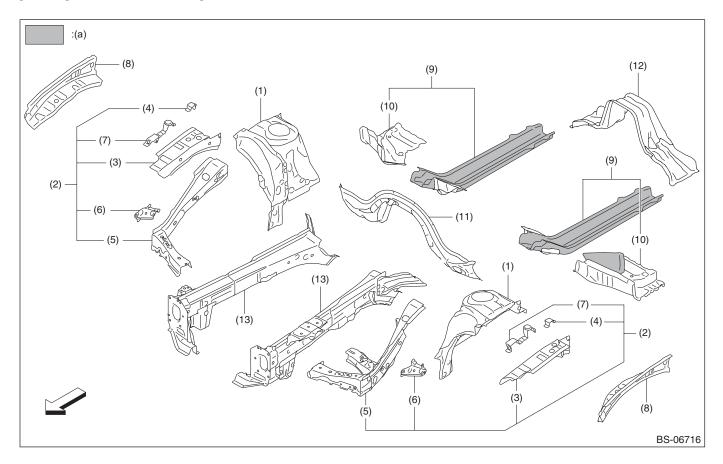
# 2. RADIATOR PANEL



- (1) Radiator panel
- (2) Frame radiator upper
- (3) Stay hood lock

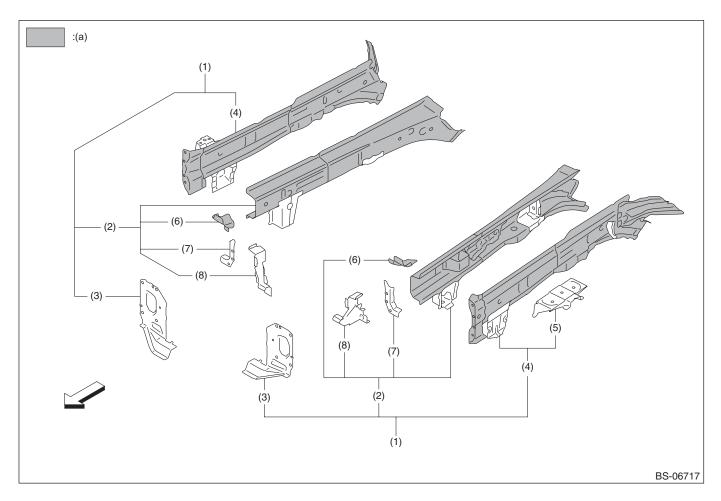
- (4) Radiator panel side
- (5) Frame radiator lower A
- (6) Frame radiator panel side
- (7) Frame radiator lower lower

### 3. FRONT WHEEL APRON



- (a) High-strength tensile steel (440 590 MPa class)
- (1) Front suspension bracket
- (2) Wheel apron
- (3) Side upper inner frame
- (4) Bracket fender upper rear
- (5) Front apron reinforcement
- (6) Bracket headlight side
- (7) Bracket fender upper front
- (8) Frame side upper outer
- (9) Front side frame rear
- (10) Toe board reinforcement
- (11) Crossmember toe board center
- (12) Floor crossmember front
- (13) Front side frame front

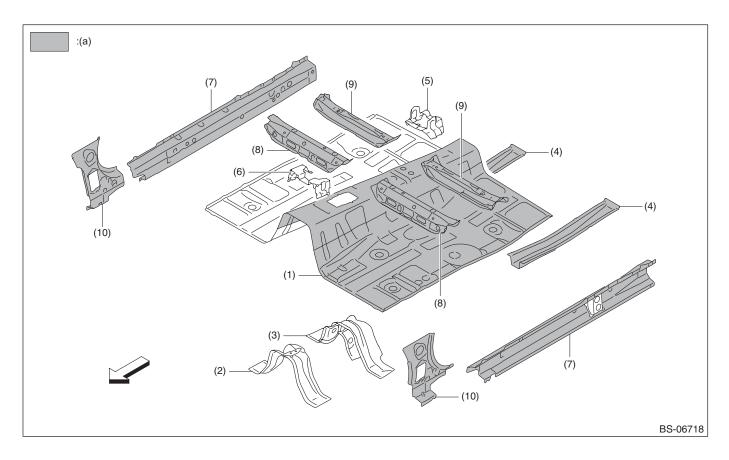
# 4. FRONT SIDE FRAME



- (a) High-strength tensile steel (440 590 MPa class)
- (1) Front side frame front
- (2) Front side sub frame front
- (3) Plate FF

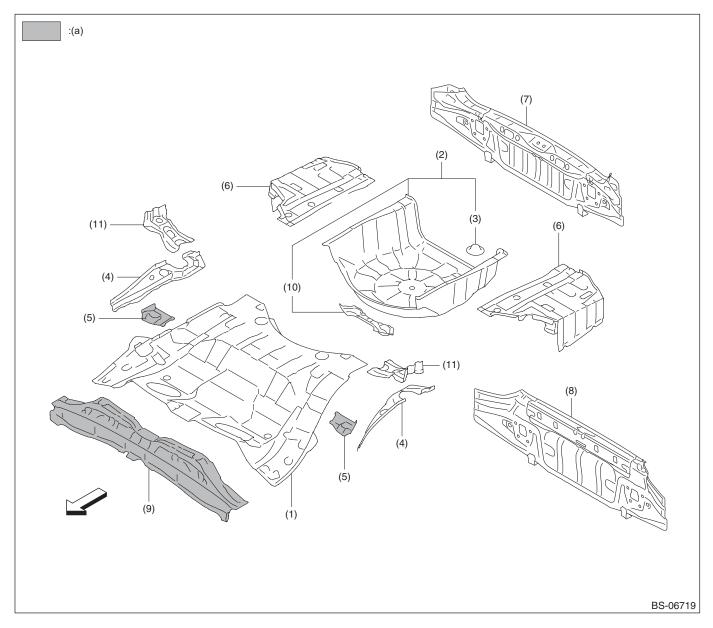
- (4) Closing plate
- (5) Battery reinforcement gusset
- (6) Bracket beam front inner upper
- (7) Bracket beam front inner
- (8) Gusset FF A

### 5. FRONT FLOOR PANEL



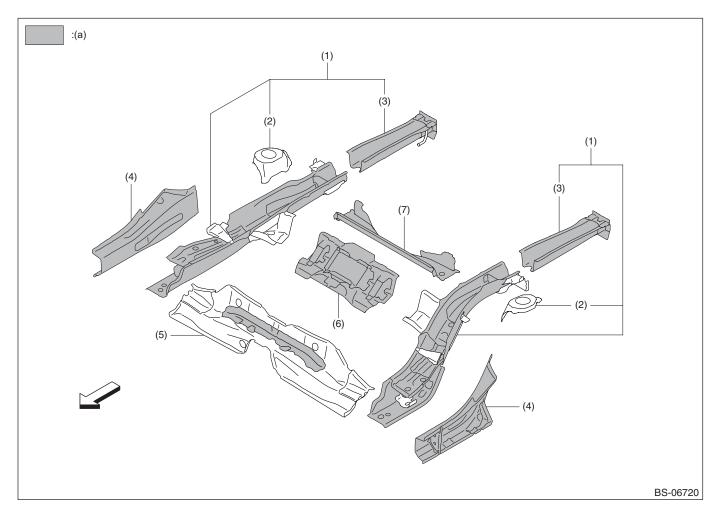
- (a) High-strength tensile steel (440 590 MPa class)
- (1) Floor pan front
- (2) Crossmember floor center
- (3) Crossmember floor rear
- (4) Frame side F rear rear
- (5) Bracket Air bag
- (6) Bracket Instrument panel
- (7) Side sill inner front
- (8) Crossmember front seat front
- (9) Crossmember front seat rear
- (10) Pillar front inner lower

### 6. REAR FLOOR PANEL & REAR SKIRT



- (a) High-strength tensile steel (440 590 MPa class)
- (1) Floor pan rear front
- (2) Floor pan rear rear
- (3) Bracket spare tire
- (4) Bracket damper floor
- (5) Bracket rear seat side
- (6) Floor side rear
- (7) Skirt rear outer (OUTBACK)
- (8) Skirt rear outer (SEDAN)
- (9) Crossmember A front
- (10) Bracket support rear
- (11) Gusset rear apron

# 7. REAR FLOOR SIDE FRAME

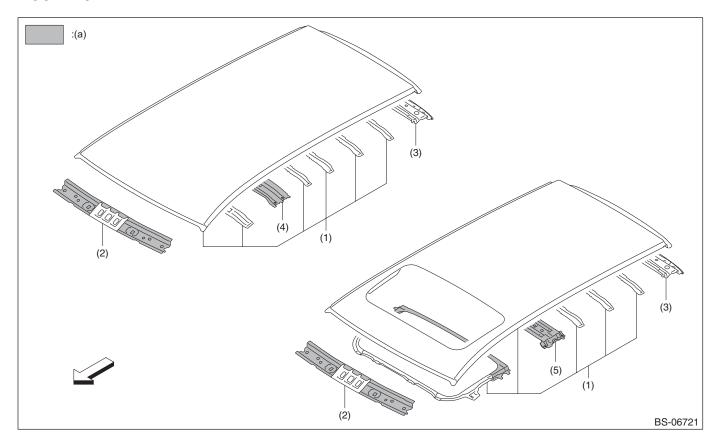


- (a) High-strength tensile steel (440 590 MPa class)
- (1) Frame rear floor side COMPL.
- (2) Bracket damper lower
- (3) Frame side rear lower rear
- (4) Side sill inner rear
- (5) Crossmember A rear
- (6) Crossmember B

(7) Crossmember C

# 8. ROOF

# • OUTBACK

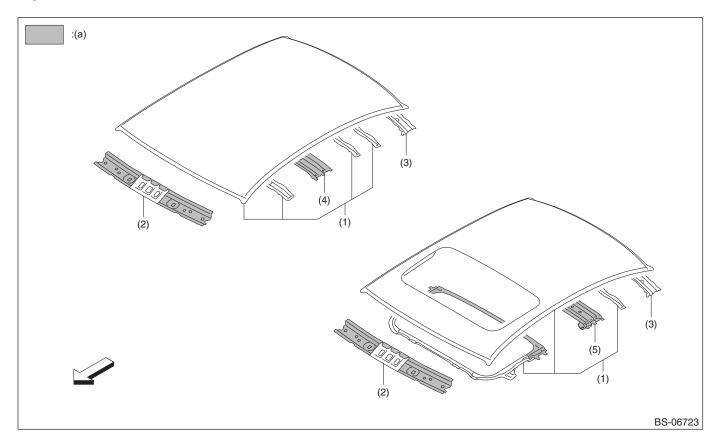


- (a) High-strength tensile steel (440 590 MPa class)
- (1) Roof panel
- (2) Rail front

- (3) Rail rear
- (4) Brace center

(5) Brace center (sunroof)

### • SEDAN



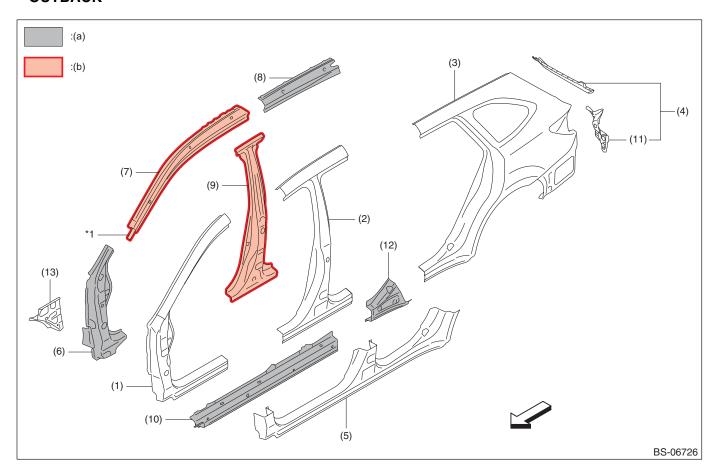
- (a) High-strength tensile steel (440 590 MPa class)
- (1) Roof panel
- (2) Rail front

- (3) Rail rear
- (4) Brace center

(5) Brace center (sunroof)

### 9. SIDE PANEL OUTER

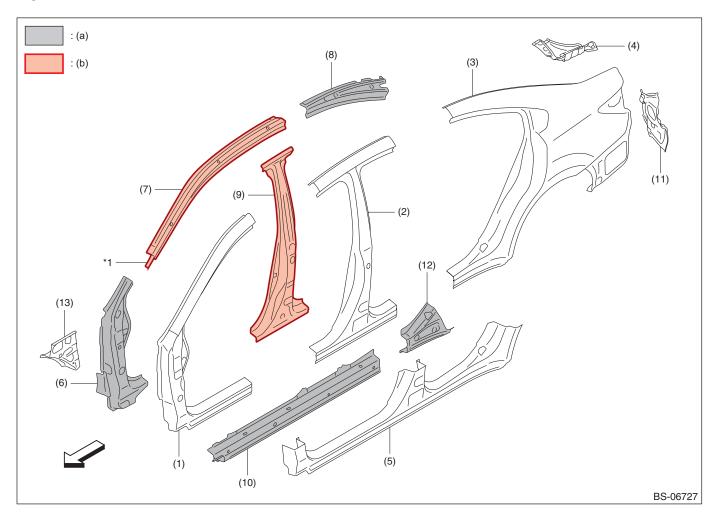
### OUTBACK



- (a) High-strength tensile steel (440 590 MPa class)
- \*1: Only LH
- (1) Front pillar outer
- (2) Center pillar outer
- (3) Rear quarter outer
- (4) Rear quarter end COMPL.
- (5) Side sill outer

- (b) High-strength tensile steel (1,500 MPa class)
- (6) Reinforcement pillar front outer
- (7) Reinforcement rail side outer front
- (8) Reinforcement rail side outer rear
- (9) Reinforcement pillar center outer
- (10) Reinforcement sill side outer front
- (11) Quarter panel rear end
- (12) Reinforcement sill side outer rear
- (13) Gusset frame side upper A

### SEDAN

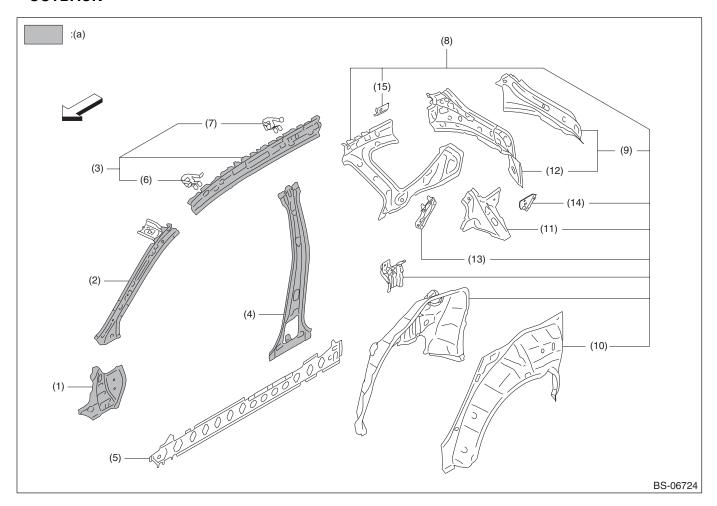


- (a) High-strength tensile steel (440 590 MPa class)
- \*1: Only LH
- (1) Front pillar outer
- (2) Center pillar outer
- (3) Rear quarter outer
- (4) Patch rear pillar
- (5) Side sill outer

- (b) High-strength tensile steel (1,500 MPa class)
- (6) Reinforcement pillar front outer
- (7) Reinforcement rail side outer front
- (8) Reinforcement rail side outer rear
- (9) Reinforcement pillar center outer
- (10) Reinforcement sill side outer front
- (11) Quarter panel rear end
- (12) Reinforcement sill side outer rear
- (13) Gusset frame side upper A

### **10.SIDE PANEL INNER**

### • OUTBACK

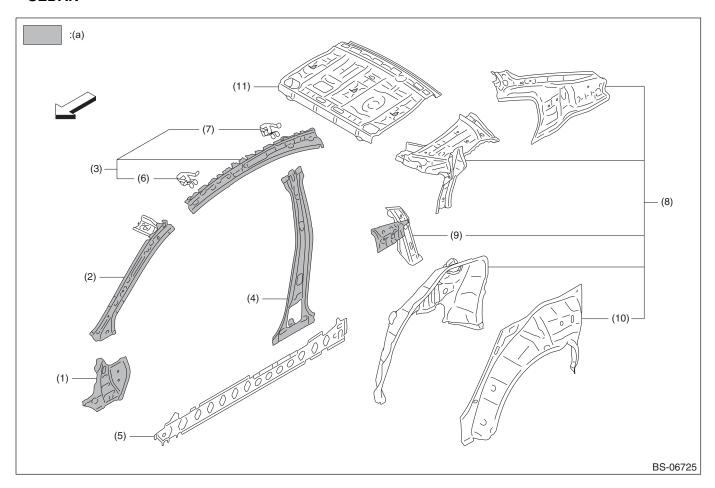


- (a) High-strength tensile steel (440 590 MPa class)
- (1) Pillar front inner center
- (2) Pillar front inner upper
- (3) Rail side inner
- (4) Pillar center inner
- (5) Reinforcement sill side

- (6) Bracket assist front
- (7) Bracket assist rear
- (8) Rear quarter inner
- (9) Reinforcement D pillar
- (10) Arch rear inner

- (11) Reinforcement C pillar
- (12) Pillar D inner lower
- (13) Reinforcement power rear gate front
- (14) Reinforcement power rear gate rear
- (15) Plate nut rear belt

### SEDAN



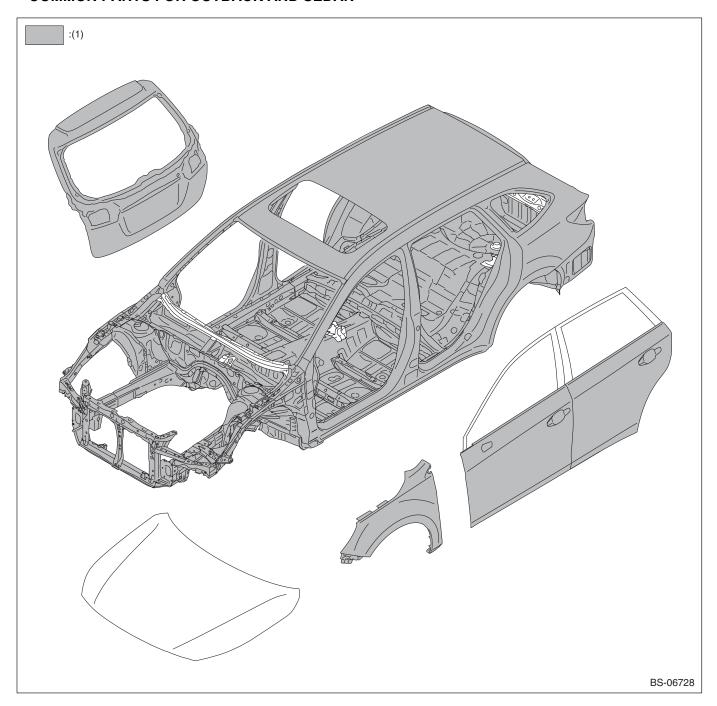
- (a) High-strength tensile steel (440 590 MPa class)
- (1) Pillar front inner center
- (2) Pillar front inner upper
- (3) Rail side inner
- (4) Pillar center inner

- (5) Reinforcement sill side
- (6) Bracket assist front
- (7) Bracket assist rear
- (8) Rear quarter inner
- (9) Reinforcement rear pillar
- (10) Arch rear inner
- (11) Panel rear

# 4. Galvanized Sheet Metal

# **A: SPECIFICATION**

• COMMON PARTS FOR OUTBACK AND SEDAN

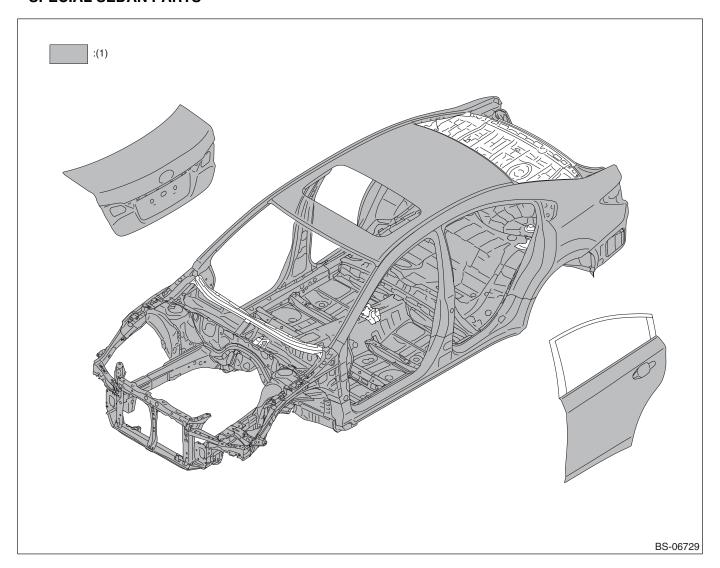


(1) Galvanized sheet metal (both sides)

The fuel flap consists of galvanized sheet metal.

# **Galvanized Sheet Metal**

### • SPECIAL SEDAN PARTS



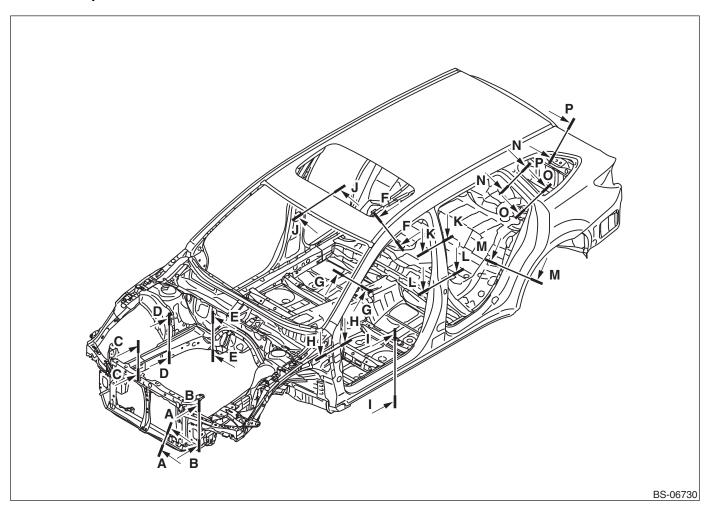
(1) Galvanized sheet metal (both sides)

The fuel flap consists of galvanized sheet metal.

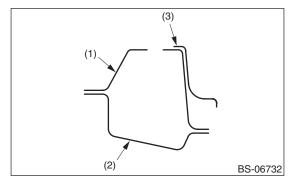
# 5. Body Construction

# **A: SPECIFICATIONS**

• Common parts for OUTBACK and SEDAN

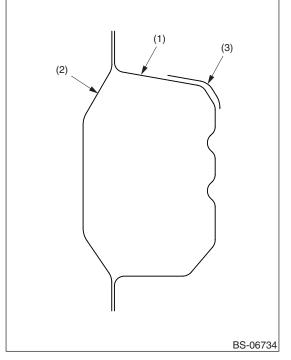


### Cross section A — A

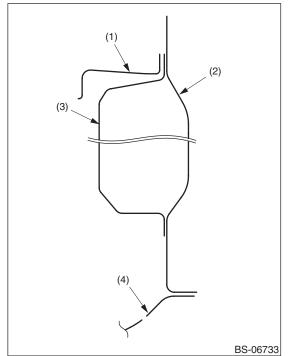


- (1) Frame radiator lower A
- (2) Frame radiator lower lower
- (3) Bracket radiator

### Cross section C — C



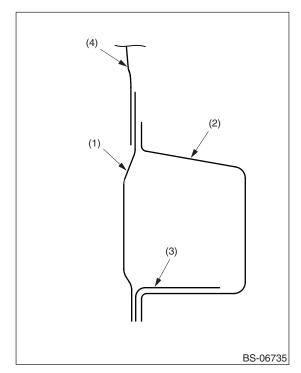
Cross section B — B



- (1) Bracket beam front inner upper
- (2) Bracket beam front outer
- (3) Frame side FF A
- (4) Frame radiator lower lower

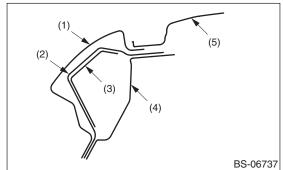
- (1) Frame side FF A
- (2) Closing plate FF A
- (3) Bracket battery rod (Only LH)

### Cross section D — D



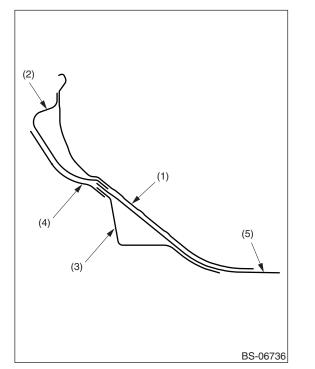
- (1) Closing plate FF B
- (2) Frame side FF B
- (3) Reinforcement cradle center
- (4) Bracket front suspension lower

### Cross section F — F



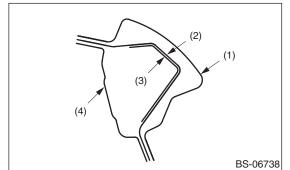
- (1) Panel side outer
- (2) Reinforcement rail side outer front
- (3) Patch rail side outer front
- (4) Pillar front inner upper
- (5) Roof panel

### Cross section E — E



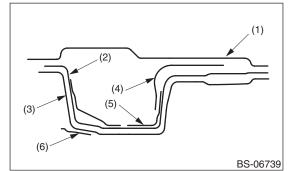
- (1) Toe board
- (2) Crossmember toe board center
- (3) Bracket cradle rear
- (4) Frame side FF B
- (5) Frame side F rear

### Cross section G — G



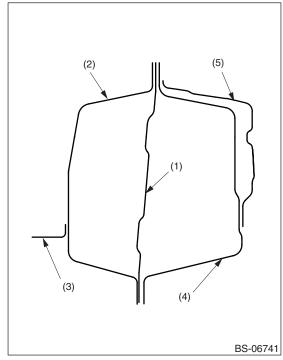
- (1) Panel side outer
- (2) Reinforcement rail side outer front
- (3) Patch rail side outer front
- (4) Pillar front inner upper

### Cross section H — H (LH)



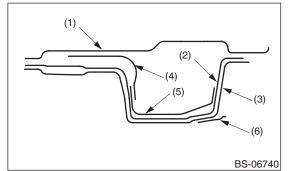
- (1) Pillar front inner center
- (2) Reinforcement pillar front outer
- (3) Panel side outer
- (4) Reinforcement steering support
- (5) Reinforcement pillar front outer A
- (6) Gusset frame side upper A

### Cross section I — I



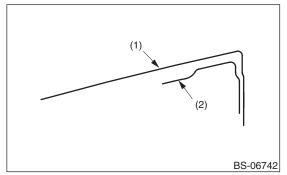
- (1) Reinforcement sill side
- (2) Side sill inner front
- (3) Floor pan front B
- (4) Reinforcement sill side outer front
- (5) Panel side outer

### Cross section H — H (RH)



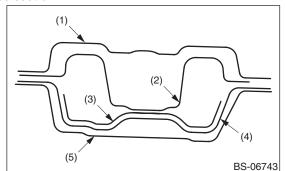
- (1) Pillar front inner center
- (2) Reinforcement pillar front outer
- (3) Panel side outer
- (4) Reinforcement steering support
- (5) Reinforcement hinge front pillar upper
- (6) Gusset frame side upper A

### Cross section J — J



- (1) Roof panel
- (2) Frame sunroof front

### Cross section K— K

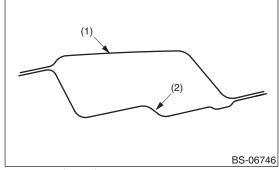


- (1) Pillar center inner
- (2) Reinforcement pillar center outer upper A
- (3) Reinforcement pillar center outer B
- (4) Reinforcement pillar center outer
- (5) Panel side outer

# Cross section L — L (1) (2) (3) (4) BS-06744

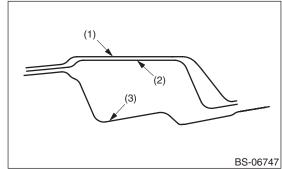
- (1) Pillar center inner
- (2) Reinforcement pillar center outer upper A
- (3) Reinforcement pillar center outer
- (4) Panel side outer

### Cross section N — N



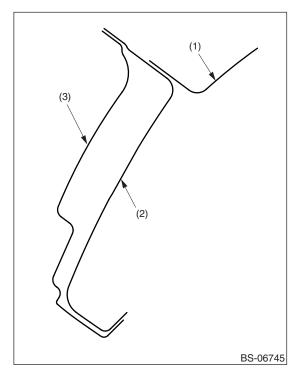
- (1) Quarter panel rear inner
- (2) Panel side outer

### Cross section O — O



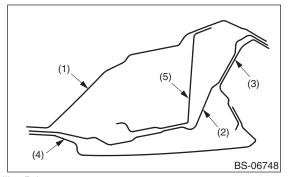
- (1) Quarter panel rear inner
- (2) Reinforcement C pillar
- (3) Panel side outer

### Cross section M —M



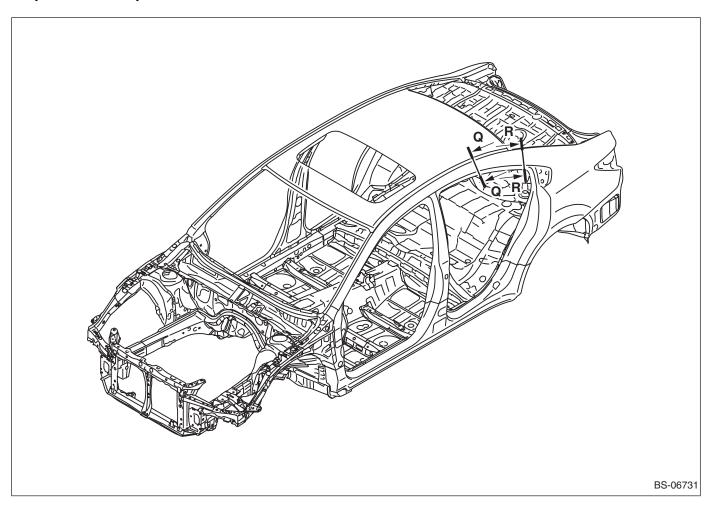
- (1) Wheel apron rear
- (2) Arch rear inner
- (3) Panel side outer

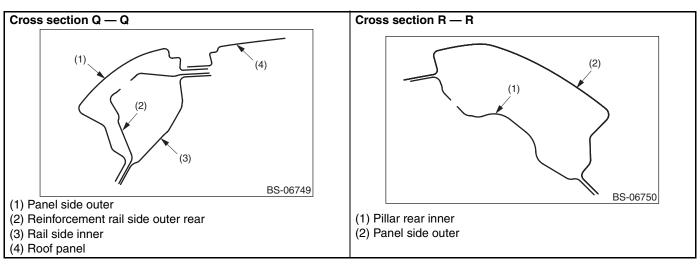
### Cross section P — P



- (1) Pillar D inner upper
- (2) Reinforcement D pillar
- (3) Extension D pillar
- (4) Panel side outer
- (5) Separator D pillar

# Special SEDAN parts

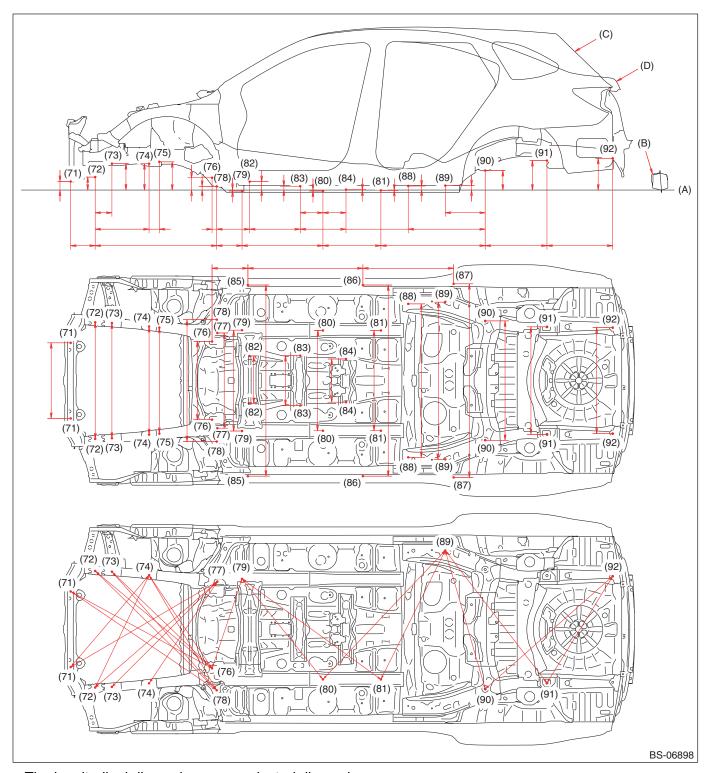




# 6. Body Reference Points

### **A: DIMENSIONS**

### 1. LOWER SURFACE



- 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 reinforcement flange joint (bending angle point).
- Diagonal dimensions are the actual dimensions between reference points.

# **Body Reference Points**

(A) Standard line (C) **OUTBACK** (D) SEDAN (B) Side sill reinforcement (71) Bracket center lower mounting (80)Under cover mounting hole (86)Side sill spoiler mounting hole hole (symmetrical) (symmetrical) (symmetrical) Cradleframe mounting hole (81) Under cover mounting hole Garnish side mounting hole (symmetrical), front (symmetrical) (symmetrical) Earth mounting hole (82)MT & CFT-CVT crossmember Fuel tank Protector mounting hole (symmetrical) (symmetrical) aR mounting hole, right side (74)Engine mounting bracket mount-(82)MT & CFT-CVT crossmember (89)Rear suspension support sub ing hole (symmetrical), front aL mounting hole, left side frame mounting hole (symmetrical), front (82)Engine mounting bracket mount-HT-CVT crossmember mounting (90)Rear suspension crossmember bR ing hole (symmetrical), rear hole, right side mounting hole (symmetrical), front (76)Crossmember mounting hole (82)HT-CVT crossmember mounting (91) Rear suspension crossmember (symmetrical) bL hole, left side mounting hole (symmetrical), rear Cradleframe mounting hole (83)Gauge hole (symmetrical) (92)Gauge hole (symmetrical) (symmetrical), rear inside Cradleframe mounting hole Exhaust cover mounting hole (symmetrical), rear outside (symmetrical) (79)Stiffener mounting hole (85)Side sill spoiler mounting hole

(symmetrical)

	Datum	Projected
Measuring point	dimension mm (in)	dimensions for reference mm (in)
Datum line — (71)	68 (2.67)	_
Datum line — (72)	103 (4.05)	_
Datum line — (73)	210 (8.25)	_
Datum line — (74)	209 (8.23)	_
Datum line — (75)	224 (8.82)	_
Datum line — (76)	98 (3.84)	_
Datum line — (78)	29 (1.14)	_
Datum line — (79)	-8 (-0.31)	_
Datum line — (80)	-8 (-0.31)	_
Datum line — (81)	-3 (-0.12)	_
Datum line — (82)aR	67 (2.65)	_
Datum line — (82)aL	62 (2.43)	_
Datum line — (82)bR	67 (2.65)	_
Datum line — (82)bL	62 (2.43)	_
Datum line — (83)	30 (1.19)	_
Datum line — (84)	3 (0.13)	_
Datum line — (88)	33 (1.29)	_
Datum line — (89)	35 (1.39)	_
Datum line — (90)	155 (6.10)	_
Datum line — (91)	234 (9.21)	_
Datum line — (92)	252 (9.91)	_
(71) — (72)	195 (7.68)	
(72) — (73)	133 (5.24)	_

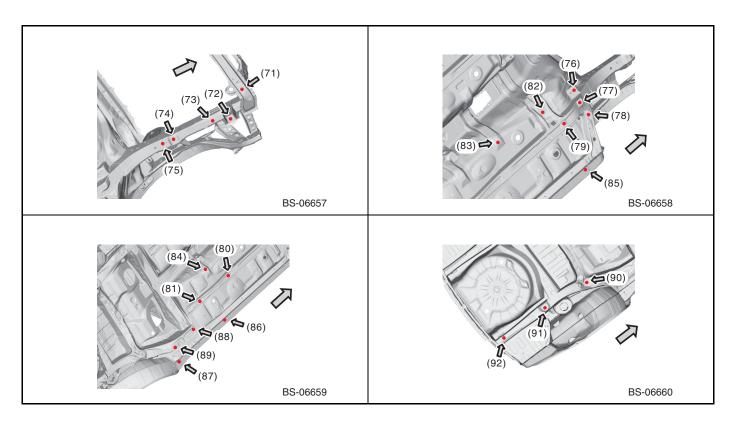
(symmetrical)

	Datum	Projected
Measuring point	dimension mm	dimensions for
	(in)	reference mm
	. ,	(in)
(72) — (74)	428 (16.85)	_
(72) — (78)	965 (37.99)	_
(74) — (75)	82 (3.23)	_
(76) — (78)	37 (1.46)	_
(76) — (85)	284 (11.18)	_
(78) — (79)	201 (7.91)	_
(78) — (82)aR	262 (10.31)	_
(78) — (82)aL	262 (10.31)	_
(78) — (82)bR	362 (14.25)	_
(78) — (82)bL	362 (14.25)	_
(79) — (80)	642 (25.28)	_
(80) — (81)	460 (18.11)	_
(80) — (83)	180 (7.09)	_
(80) — (84)	183 (7.20)	_
(82)aR — (83)	402 (15.83)	_
(82)aL — (83)	402 (15.83)	_
(82)bR — (83)	302 (11.89)	_
(82)bL — (83)	302 (11.89)	_
(83) — (84)	363 (14.29)	_
(81) — (90)	828 (32.60)	_
(85) — (86)	913 (35.94)	_
(86) — (87)	721 (28.37)	_
(88) — (90)	611 (24.06)	_
(89) — (90)	317 (12.48)	_
(90) — (91)	490 (19.29)	_
(91) — (92)	522 (20.55)	_
(71)R — (71)L	600 (23.62)	_

# **Body Reference Points**

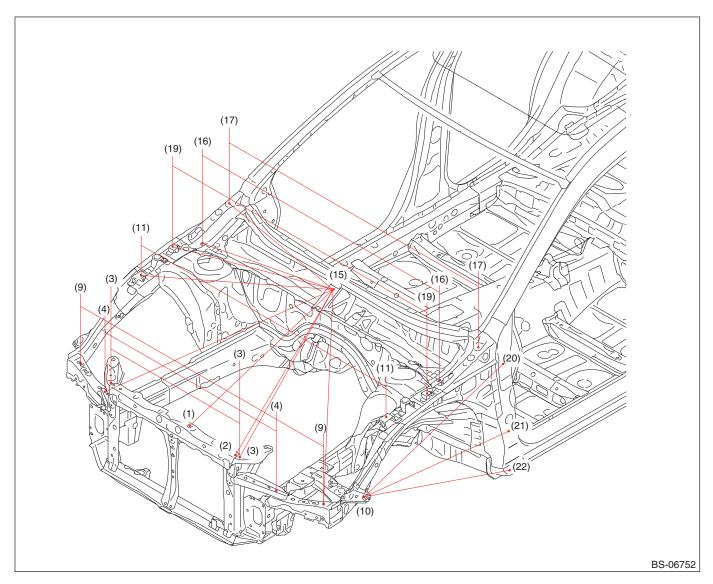
Measuring point	Datum dimension mm (in)	Projected dimensions for reference mm (in)
(72)R — (72)L	914 (35.98)	_
(73)R — (73)L	862 (33.94)	_
(74)R — (74)L	840 (33.07)	_
(75)R — (75)L	746 (29.37)	_
(76)R — (76)L	968 (38.11)	_
(77)R — (77)L	756 (29.76)	_
(78)R — (78)L	376 (14.80)	_
(79)R — (79)L	361 (14.21)	_
(80)R — (80)L	800 (31.50)	_
(81)R — (81)L	796 (31.34)	_
(82)aR — (82)aL	796 (31.34)	_
(82)bR — (82)bL	1,525 (60.05)	_
(83)R — (83)L	1,525 (60.05)	_
(84)R — (84)L	1,516 (59.67)	_
(85)R — (85)L	396 (15.59)	_
(86)R — (86)L	343(13.51)	_
(87)R — (87)L	1,220 (48.02)	_
(88)R — (88)L	1,186 (46.69)	_
(89)R — (89)L	1,060 (41.73)	_
(90)R — (90)L	854 (33.62)	_
(91)R — (91)L	854 (33.62)	_
(92)R — (92)L	1,108 (43.61)	_
(71)R — (74)L	969 (38.14)	958 (37.73)

	Detrum	Projected	
Manageria a maint	Datum	dimensions for	
Measuring point	dimension mm	reference mm	
	(in)	(in)	
(71)L — (76)R	1,278 (50.30)	1,277 (50.29)	
(72)R — (74)L	994 (39.15)	989 (38.93)	
(72)L — (76)R	1,207 (47.52)	1,207 (47.52)	
(73)L — (76)R	1,110 (43.71)	1,105 (43.49)	
(74)L — (76)R	899 (35.40)	892 (35.13)	
(76)R — (79)L	756 (29.77)	749 (29.48)	
(79)L — (80)R	1024 (40.32)	1024 (40.32)	
(79)L — (81)R	1,361 (53.57)	1,361 (53.57)	
(80)R — (89)L	1,411 (55.55)	1,410 (55.53)	
(81)R — (89)L	1,144 (45.04)	1,144 (45.04)	
(89)L — (90)R	1,150 (45.28)	1,144 (45.04)	
(89)L — (91)R	1,341 (52.78)	1,326 (52.20)	
(90)R — (92)L	1,354 (53.32)	1,351 (53.19)	
(91)R — (92)L	996 (39.21)	996 (39.21)	
(71)R — (77)L	1,348 (53.07)	1,347 (53.03)	
(71)L — (78)R	1,400 (55.12)	1,399 (55.08)	
(72)R — (77)L	1,285 (50.59)	1,283 (50.51)	
(72)L — (78)R	1,353 (53.27)	1,351 (53.19)	
(73)R — (77)L	1,196 (47.09)	1,182 (46.54)	
(73)L — (78)R	1,269 (49.96)	1,256 (49.45)	
(74)R — (77)L	989 (38.94)	972 (38.27)	
(74)L — (78)R	1,074 (42.28)	1,059 (41.69)	



# **Body Reference Points**

### 2. FRONT 1



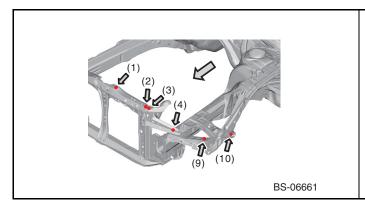
- (1) Bracket grill mounting hole (body left side)
- (2) Radiator panel sub COMPL mounting hole (symmetrical)
- (3) Manufacturer's collection hole (symmetrical)
- (4) Manufacturer's collection hole (symmetrical)
- (9) Manufacturer's collection hole (symmetrical)

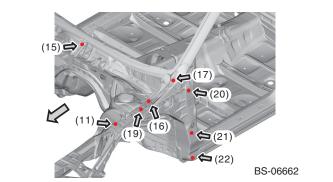
- (10) Fender front mounting hole (symmetrical)
- (11) Gauge hole (symmetrical)
- (15) Manufacturer's collection hole (body center)
- (16) Cowl clip mounting hole (symmetrical)
- (17) Hood hinge rear mounting hole (symmetrical)
- (19) Fender front mounting hole (symmetrical)
- (20) Front door hinge upper mounting hole (symmetrical), upper side
- (21) Front door hinge lower mounting hole (symmetrical), upper side
- (22) Fender mounting hole (symmetrical), front side

Measuring point	Datum dimension mm (in)
(1)L — (15)	999 (39.32)
(2)L — (15)	1,062 (41.80)
(3)L — (15)	1,065 (41.95)
(3)R — (3)L	790 (31.10)
(4)R — (4)L	1,050 (41.34)
(4)R — (15)	1,084 (42.67)
(9)R — (9)L	1,490 (58.66)
(9)L — (15)	1,154 (45.45)
(10)L — (20)L	909 (35.79)
(10)L — (21)L	896 (35.26)

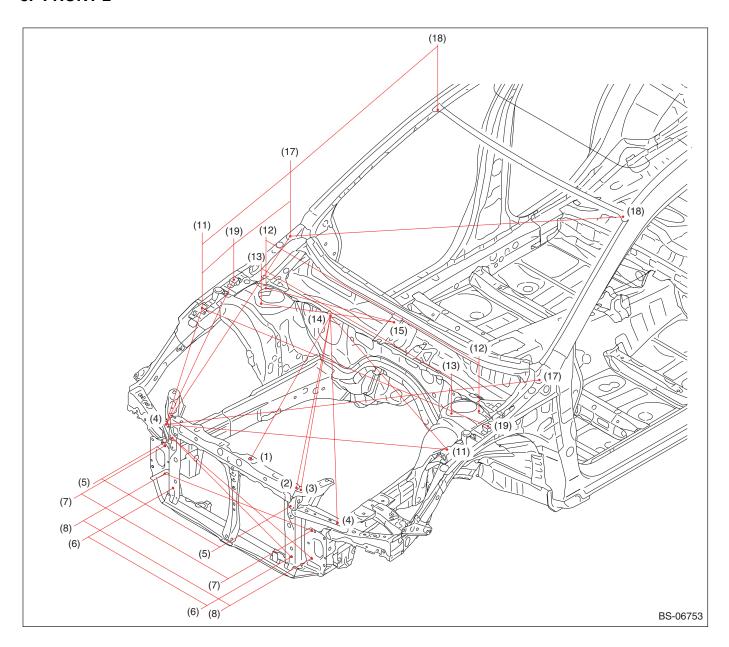
Measuring point	Datum dimension mm (in)
(10)L — (22)L	974 (38.33)
(11)R — (11)L	1,502 (59.13)
(11)R — (15)	868 (34.17)
(15) — (16)R	735 (28.95)
(15) — (17)R	775 (30.49)
(15) — (19)R	808 (31.81)
(16)R — (16)L	1,454 (57.24)
(17)R — (17)L	1,528 (60.16)
(19)R — (19)L	1,559 (61.38)

- Reference point (1) indicates a left-side part. Reference point (15) indicates a body center part. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.





#### 3. FRONT 2



- (1) Bracket grill mounting hole (body left side)
- (2) Radiator panel sub COMPL mounting hole (symmetrical)
- (3) Manufacturer's collection hole (symmetrical)
- (4) Manufacturer's collection hole (symmetrical)
- (5) Headlight mounting hole (symmetrical)
- (6) Manufacturer's collection hole (symmetrical)

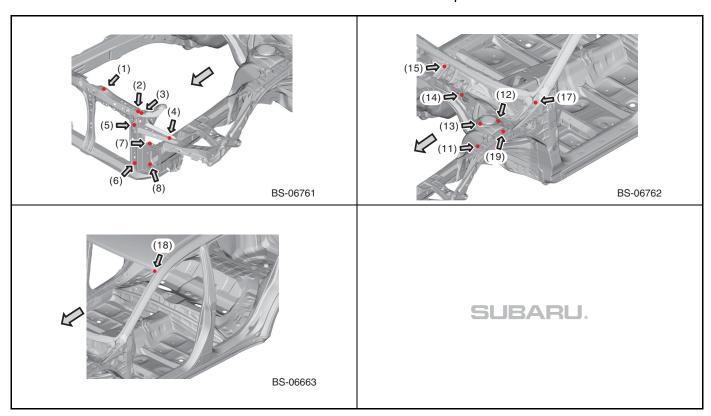
- (7) Beam front mounting hole (symmetrical), upper side
- (8) Beam front mounting hole (symmetrical), lower side
- (11) Gauge hole (symmetrical)
- (12) Front suspension mounting hole (symmetrical), rear outside
- (13) Front suspension mounting hole (symmetrical), front
- (14) Cowl clip mounting hole (symmetrical)

- (15) Manufacturer's collection hole (body center)
- (17) Hood hinge rear mounting hole (symmetrical)
- (18) Front glass installation reference hole (symmetrical)
- (19) Fender front mounting hole (symmetrical)

Measuring point	Datum dimension mm (in)
(1)L — (14)R	896 (35.26)
(2)L — (14)R	1,093 (43.02)
(3)L — (14)R	1,102 (43.40)
(4)L — (14)R	1,154 (45.44)
(4)R — (11)R	575 (22.62)
(4)R — (11)L	1,381 (54.37)
(4)R — (17)R	1,097 (43.18)
(4)R — (17)L	1,675 (65.96)
(4)R — (19)R	780 (30.71)
(5)R — (5)L	725 (28.54)
(5)R — (7)L	820 (32.30)
(5)R — (8)L	852 (33.55)
(6)R — (6)L	728 (28.66)
(6)L — (7)R	831 (32.72)

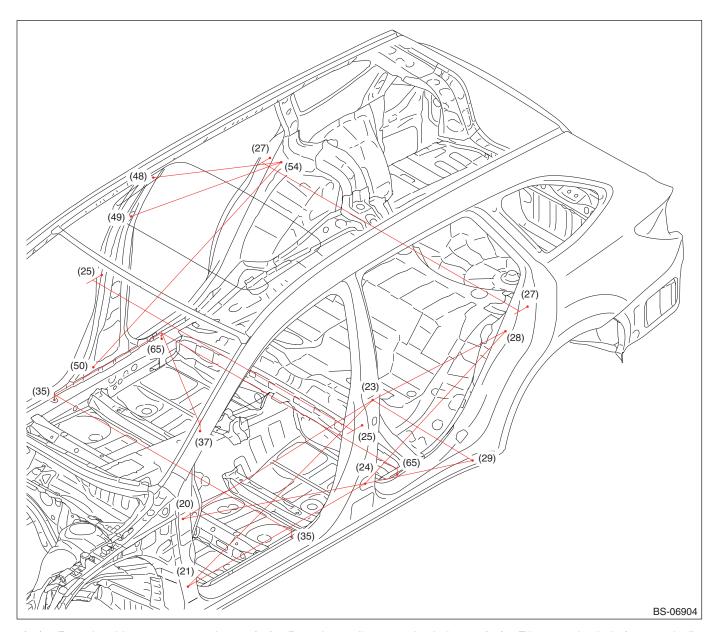
Measuring point	Datum dimension mm (in)
(7)R — (7)L	900 (35.43)
(8)R — (8)L	900 (35.43)
(11)L — (14)R	1,079 (42.48)
(11)R — (17)R	562 (22.13)
(11)R — (19)R	226 (8.90)
(11)R — (19)L	1,547 (60.90)
(12)R — (12)L	1,307 (51.44)
(12)R — (15)	671 (26.43)
(13)R — (13)L	1,167 (45.95)
(13)R — (15)	633 (24.91)
(17)R — (18)L	1,565 (61.62)
(17)R — (18)R	844 (33.24)
(17)R — (19)R	339 (13.34)

- Reference point (1) indicates a left-side part. Reference point (15) indicates a body center part. All other reference points indicate left-right symmetrical parts.
- The dimensions are the actual dimensions between the reference points.



#### 4. INSIDE 1

#### Common for OUTBACK and SEDAN



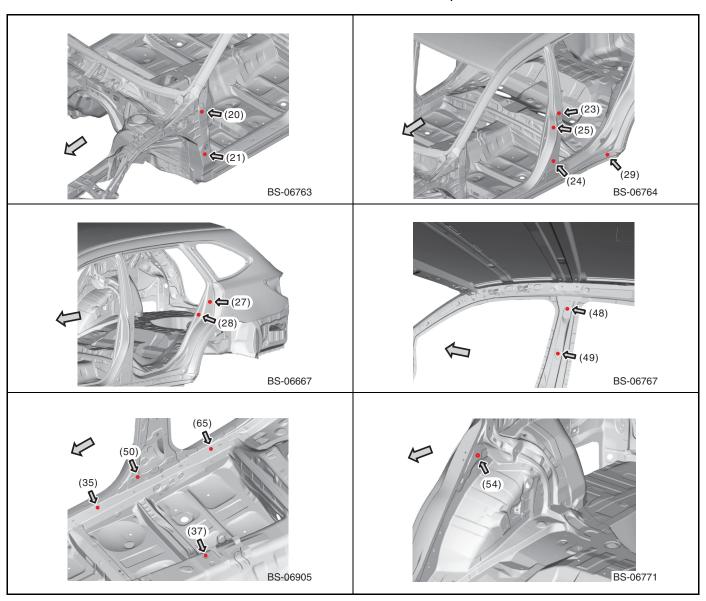
- (20) Front door hinge upper mounting hole (symmetrical), upper side
- (21) Front door hinge lower mounting hole (symmetrical), upper side
- (23) Rear door hinge upper mounting hole (symmetrical), upper side
- (24) Rear door hinge lower mounting hole (symmetrical), front
- (25) Front door striker mounting hole (symmetrical), upper side
- (27) Rear door striker mounting hole (symmetrical), upper side
- (28) Rear door switch mounting hole (symmetrical)
- (29) Side sill spoiler mounting hole (symmetrical)
- (35) Cover sill side mounting hole (symmetrical)
- (37) Harness holding clip attachment hole (symmetrical)

- (48) Trim mounting hole (symmetrical)
- (49) Adjust rail mounting hole (symmetrical)
- (50) Trim mounting hole (symmetrical)
- (54) Striker bracket mounting hole (symmetrical)
- (65) Cover sill side mounting hole (symmetrical)

Measuring point	Datum dimension mm (in)
(20)L — (23)L	1,167 (45.94)
(20)L — (24)L	1,161 (45.71)
(21)L — (23)L	1,218 (47.94)
(21)L — (24)L	1,085 (42.71)
(23)L — (28)L	883 (34.78)
(23)L — (29)L	844 (33.22)
(24)L — (28)L	988 (38.88)
(24)L — (29)L	680 (26.77)
(25)R — (25)L	1,598 (62.91)

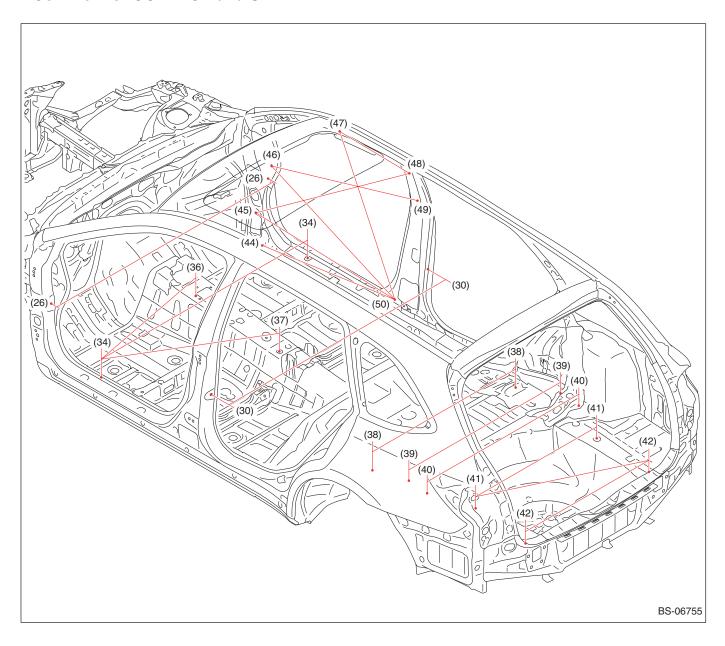
Measuring point	Datum dimension mm (in)
(27)R — (27)L	1580 (62.20)
(35)R — (35)L	1,456 (57.32)
(48)R — (54)R	1,020 (40.18)
(49)R — (54)R	974 (38.36)
(50)R — (54)R	1,259 (49.55)
(35)R — (65)R	653 (25.71)
(37)R — (65)R	834 (32.83)
(65)R — (65)L	1,444 (56.85)

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



#### 5. INSIDE 2

#### Common for OUTBACK and SEDAN



- (26) Front door checker mounting hole (symmetrical)
- (30) Rear door checker mounting hole (symmetrical)
- (34) Cover sill side mounting hole (symmetrical)
- (36) Shift case mounting hole (symmetrical)
- (37) Harness holding clip mounting hole (symmetrical)
- (38) Seat hinge mounting hole (symmetrical)

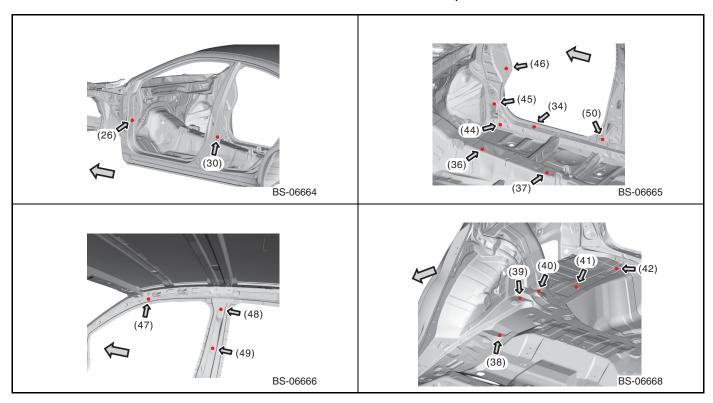
- (39) Rear suspension mounting hole (symmetrical), front
- (40) Rear suspension mounting hole (symmetrical), rear
- (41) Gauge hole (symmetrical)
- (42) Gauge hole (symmetrical)
- (44) Fuel pipe mounting hole (symmetrical)
- (45) Connector box mounting hole (symmetrical)

- (46) Steering support beam mounting hole (symmetrical)
- (47) Gauge hole mounting hole (symmetrical)
- (48) Trim mounting hole (symmetrical)
- (49) Adjust rail mounting hole (symmetrical)
- (50) Trim mounting hole (symmetrical)

Measuring point	Datum dimension mm (in)
(26)R — (26)L	1,529 (60.20)
(30)R — (30)L	1,529 (60.20)
(34)R — (34)L	1,457 (57.36)
(34)L — (36)L	693 (27.28)
(34)L — (37)L	898 (35.36)
(38)R — (38)L	1,010 (39.76)
(39)R — (39)L	1,069 (42.07)
(40)R — (40)L	1,070 (42.13)
(41)R — (41)L	854 (33.62)

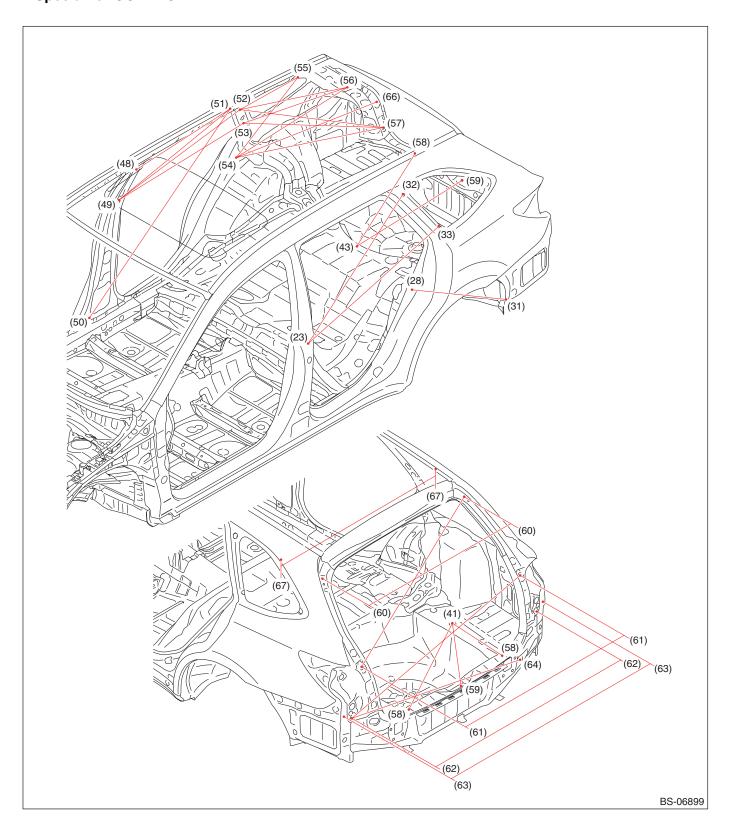
Measuring point	Datum dimension mm (in)			
(41)L — (42)R	935 (36.79)			
(42)R — (42)L	870 (34.25)			
(44)R — (50)R	889 (34.99)			
(45)R — (48)R	1,487 (58.54)			
(45)R — (50)R	956 (37.62)			
(46)R — (49)R	1,112 (43.78)			
(46)R — (50)R	947 (37.27)			
(47)R — (48)R	478 (18.81)			
(47)R — (50)R	1,021 (40.21)			

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



#### 6. INSIDE & REAR 1

#### • Special for OUTBACK



- (23) Rear door hinge upper mounting hole (symmetrical), upper side
   (28) Rear door switch mounting hole (symmetrical)
- (31) Mudguard mounting hole (symmetrical)
- (32) Rear quarter glass mounting hole (symmetrical), front upper side
- (33) Rear quarter glass mounting hole (symmetrical), front lower side
- (41) Gauge hole (symmetrical)
- (43) Smart antenna mounting hole (body center )
- (48) Trim mounting hole (symmetrical)
- (49) Adjust rail mounting hole (symmetrical)

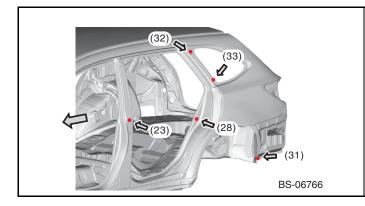
- (50) Trim mounting hole (symmetrical)
- (51) Sunroof drain hose mounting hole (symmetrical)
- (52) Trim mounting hole (symmetrical)
- (53) Trim mounting hole (symmetrical)
- (54) Striker bracket mounting hole (symmetrical)
- (55) Gauge hole (symmetrical)
- (56) Gauge hole (symmetrical)
- (57) Manufacturer's collection hole (symmetrical)
- (58) Edge floor mounting hole (symmetrical)

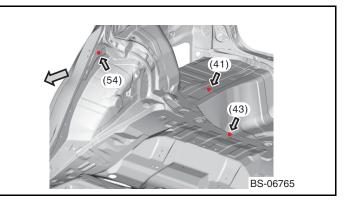
- (59) Striker mounting hole (symmetrical)
- (60) Rear gate stay mounting hole (symmetrical), upper side
- (61) Rear combination light mounting hole (symmetrical), upper side
- (62) Radar bracket mounting hole (symmetrical)
- (63) Gauge hole (symmetrical)
- (64) Gauge hole (symmetrical)
- (66) Folding lever bracket mounting hole (symmetrical)
- (67) Trim mounting hole (symmetrical)

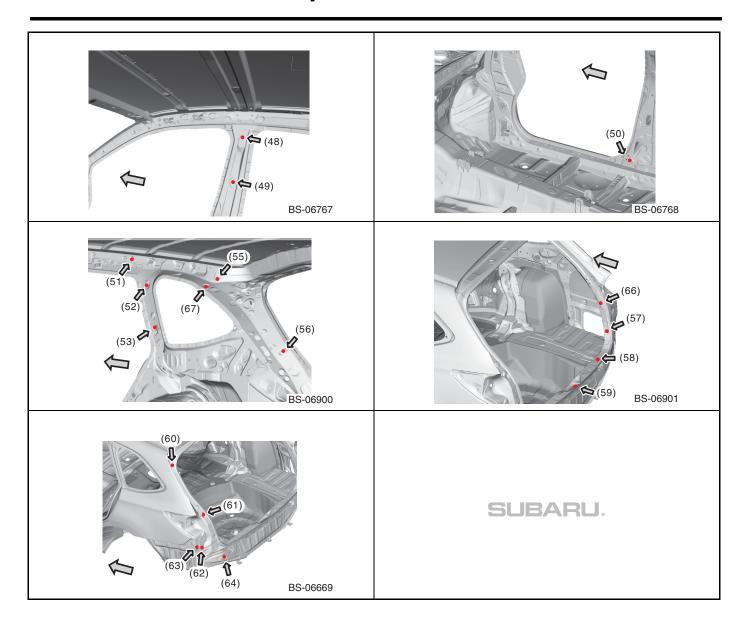
Measuring point	Datum dimension mm (in)
(23)L — (32)L	1,048 (41.24)
(23)L — (33)L	1,115 (43.88)
(28)L — (31)L	868 (34.19)
(43)R — (58)R	902 (35.52)
(43)R — (59)R	846 (33.30)
(48)R — (51)R	679 (26.75)
(49)R — (51)R	804 (31.66)
(49)R — (52)R	889 (34.99)
(49)R — (53)R	967 (38.07)
(50)R — (51)R	1,413 (55.63)
(52)R — (55)R	406 (15.97)
(52)R — (56)R	899 (35.39)
(52)R — (57)R	1,270 (50.02)
(53)R — (56)R	749 (29.48)
(53)R — (57)R	1,086 (42.75)
·	·

Measuring point	Datum dimension mm (in)
(54)R — (55)R	601 (23.66)
(54)R — (56)R	779 (30.68)
(54)R — (57)R	1,026 (40.40)
(41)R — (58)R	458 (18.01)
(41)R — (58)L	914 (35.97)
(41)R — (59)R	624 (24.55)
(60)R — (60)L	1,110 (43.70)
(60)R — (61)L	1,291 (50.84)
(61)R — (61)L	1,243 (48.92)
(61)R — (62)L	1,376 (54.18)
(62)R — (62)L	1,450 (57.09)
(62)L — (64)R	1,270 (49.99)
(63)R — (63)L	1,562 (61.50)
(54)R — (66)R	956 (37.64)
(67)R — (67)L	1,212 (47.72)

- The reference point (43) is at the body center, while the other reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.

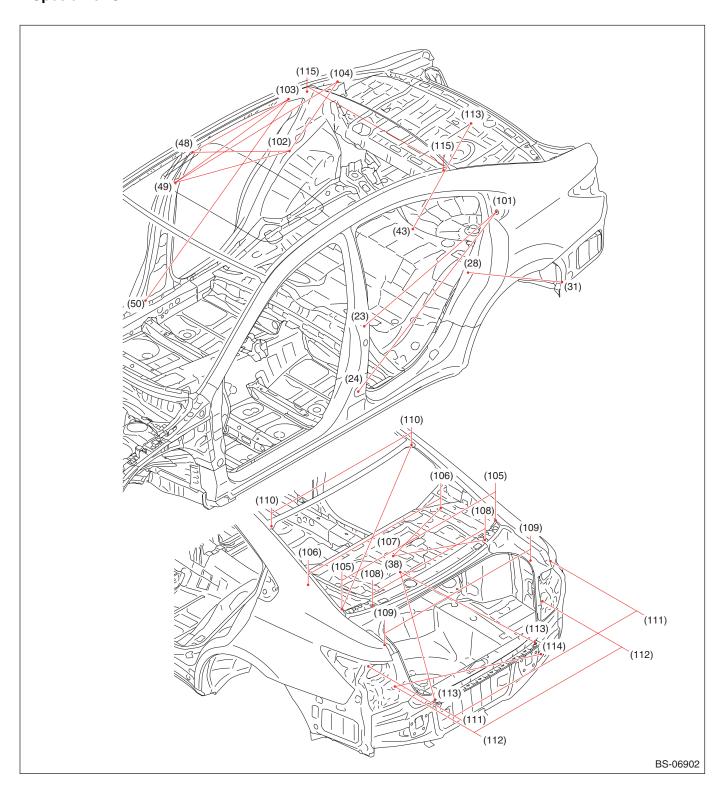






#### 7. INSIDE & REAR 2

#### • Special for SEDAN

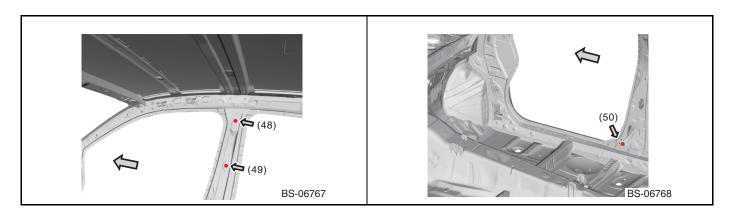


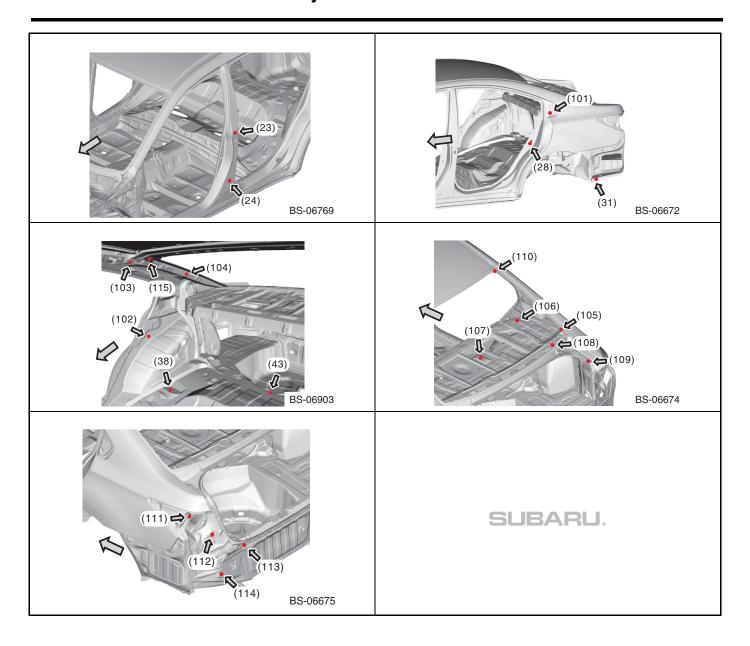
(23)	Rear door hinge upper mounting hole (symmetrical), upper side	(50)	Trim mounting hole (symmetrical)	(108)	Gauge hole (symmetrical)
(24)	Rear door hinge lower mounting hole (symmetrical), front	(101)	Cover C pillar mounting hole (symmetrical)	(109)	Trunk hinge mounting hole (symmetrical)
(28)	Rear door switch mounting hole (symmetrical)	(102)	Seat bracket relief hole (symmetrical)	(110)	Rear glass installation reference hole (symmetrical)
(31)	Mudguard mounting hole (symmetrical)	(103)	Gauge hole (symmetrical)	(111)	Rear combination light mounting hole (symmetrical)
(38)	Seat hinge mounting hole (symmetrical)	(104)	Trim mounting hole (symmetrical)	(112)	Bracket corner rear mounting hole (symmetrical)
(43)	Smart antenna mounting hole (body center)	(105)	Trunk mounting hole (symmetrical)	(113)	Manufacturer's collection hole (symmetrical)
(48)	Trim mounting hole (symmetrical)	(106)	Rear shelf mounting hole (symmetrical)	(114)	Gauge hole (symmetrical)
(49)	Adjust rail mounting hole (symmetrical)	(107)	Child anchor mounting hole (body center)	(115)	Harness mounting hole (symmetrical)

Measuring point	Datum dimension mm (in)
(23)L — (101)L	1,120 (44.09)
(24)L — (101)L	1,311 (51.62)
(28)L — (31)L	868 (34.19)
(38)R — (113)R	1,170(46.06)
(38)R — (113)L	1,469(57.83)
(43)R — (113)R	964 (37.95)
(48)R — (102)R	1,042 (41.01)
(48)R — (103)R	762 (29.98)
(49)R — (102)R	979 (38.54)
(49)R — (103)R	833 (32.80)
(49)R — (104)R	1,197 (47.11)
(50)R — (103)R	1,371 (53.96)
(102)R — (104)R	497(19.58)

Measuring point	Datum dimension mm (in)
(105)R — (105)L	1,205 (47.44)
(105)L — (110)R	1,319 (51.93)
(106)R — (106)L	1,040 (40.94)
(106)R — (107)	540 (21.27)
(107) — (108)R	523 (20.59)
(108)R — (108)L	882 (34.72)
(109)R — (109)L	1,144 (45.04)
(110)R — (110)L	1,093 (43.02)
(111)R — (111)L	1,428 (56.22)
(112)R — (112)L	1,157 (45.55)
(112)L — (114)R	1,151 (45.30)
(115)R — (115)L	1,071 (42.17)

- The reference points (43) and (107) are at the body center, while the other reference points are left-right symmetrical.
- The dimensions are the actual dimensions between the reference points.

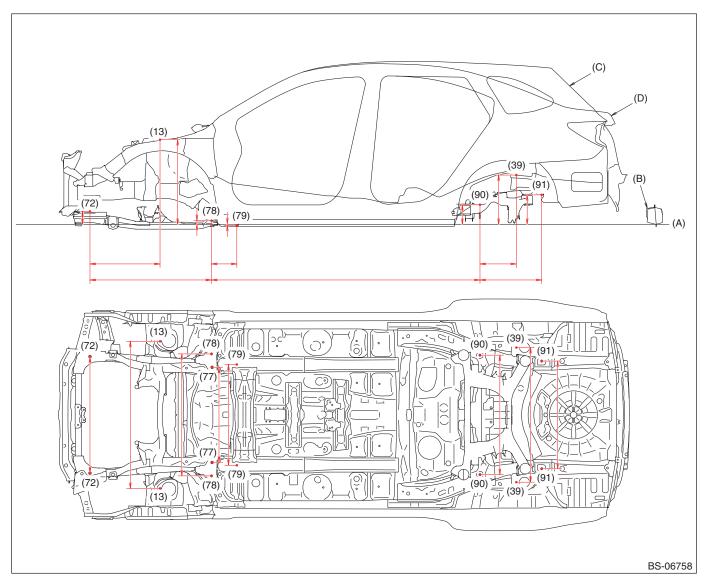




### 7. Measurement for Combined Parts

#### A: DIMENSIONS

#### 1. SUSPENSION MOUNT (CRADLE FRAME, SUSPENSION MOUNT)



- 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 reinforcement flange joint (bending angle point).

(A) (B)	Standard line Side sill reinforcement	(C)	OUTBACK	(D)	SEDAN
(13)	Front suspension mounting hole (symmetrical), front	(77)	Cradleframe mounting hole (symmetrical), rear inside	(90)	Rear suspension crossmember mounting hole (symmetrical), front
(39)	Rear suspension mounting hole (symmetrical), front	(78)	Cradleframe mounting hole (symmetrical), rear outside	(91)	Rear suspension crossmember mounting hole (symmetrical), rear
(72)	Cradleframe mounting hole (symmetrical), front	(79)	Stiffener mounting hole (symmetrical)		

#### **Measurement for Combined Parts**

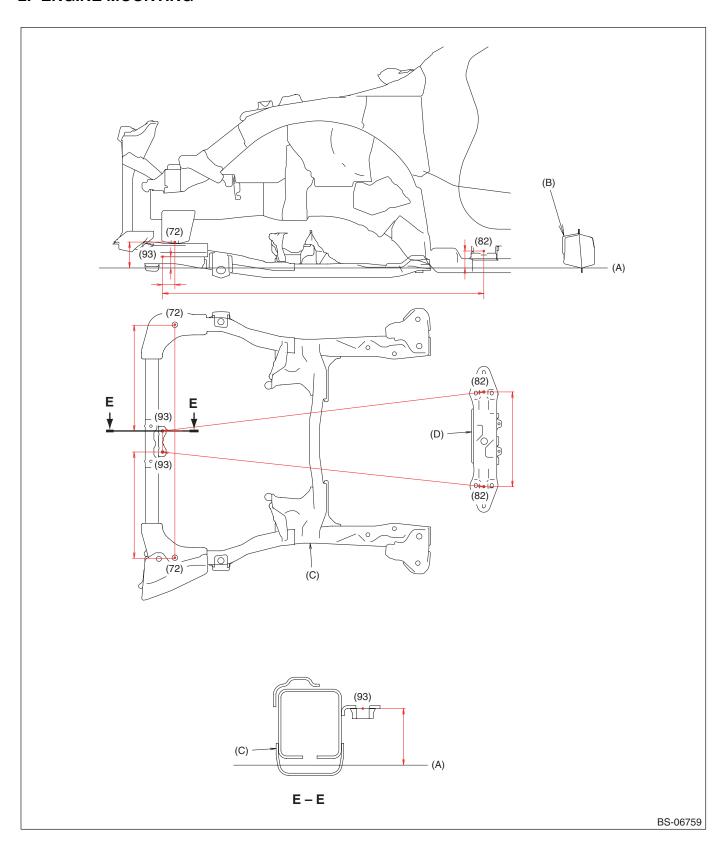
Measuring point	Datum dimension mm (in)
Datum line — (13)	672 (26.44)
Datum line — (39)	391 (15.39)
Datum line — (72)	103 (4.05)
Datum line — (78)	29 (1.14)
Datum line — (79)	-8 (-0.31)
Datum line — (90)	155 (6.10)
Datum line — (91)	234 (9.21)
(13)R — (72)R	556 (21.89)
(39)R — (90)R	288 (11.35)
(72)R — (78)R	965 (37.97)
(78)R — (79)R	201 (7.91)

Measuring point	Datum dimension mm (in)
(78)R — (90)R	2,131 (83.90)
(90)R — (91)R	490 (19.29)
(13)R — (13)L	1,167 (45.95)
(39)R — (39)L	1,069 (42.07)
(72)R — (72)L	925 (36.42)
(77)R — (77)L	756 (29.76)
(78)R — (78)L	968 (38.11)
(79)R — (79)L	800 (31.50)
(90)R — (90)L	948 (37.32)
(91)R — (91)L	854 (33.62)

#### **CAUTION:**

- For the reference points (13), refer to the figure "FRONT 1, DIMENSIONS, Body Reference Points" on page 36.
- For the reference points (39), refer to the figure "INSIDE 2, DIMENSIONS, Body Reference Points" on page 42.
- Except the reference points (13) and (39), refer to the figure "LOWER SURFACE, DIMENSIONS, Body Reference Points" on page 33.

#### 2. ENGINE MOUNTING



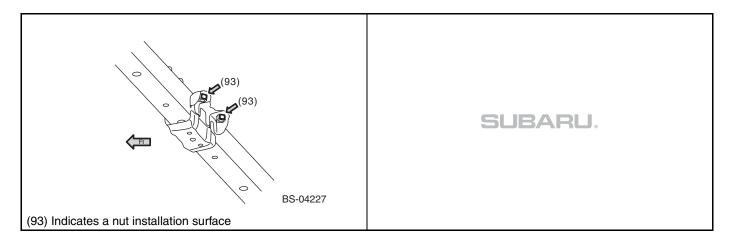
#### **Measurement for Combined Parts**

- Front-rear dimensions and left-right dimensions are projected dimensions.
- The height dimensions are the vertical distances from the gauge point on the assumed horizontal line through the side sill reinforcement flange joint (bending angle point).
- Diagonal dimensions are the actual dimensions between reference points.
- (A) Standard line (C) Cradle frame (D) Rear crossmember rear (B) Side sill reinforcement (72) Cradle frame mounting hole (82) HT-CVT crossmember mounting (93)Front engine mounting bracket mounting hole, right side (symmetrical), front bR hole, right side R MT & CFT-CVT crossmember (82)HT-CVT crossmember mounting (93)Front engine mounting bracket (82) mounting hole, left side aR mounting hole, right side bL hole, left side (82) MT & CFT-CVT crossmember

Measuring point	Datum dimension mm (in)	Projected dimensions for reference mm (in)
Datum line — (72)	103 (4.05)	
Datum line — (82)aR	67 (2.65)	_
Datum line — (82)aL	62 (2.43)	_
Datum line — (82)bR	67 (2.65)	_
Datum line — (82)bL	62 (2.43)	_
Datum line — (93)R	45 (1.77)	_
(72)R — (93)R	49 (1.92)	_
(82)aR — (93)R	1,275 (50.19)	_
(82)bR — (93)R	1,375 (54.12)	_

mounting hole, left side

Measuring point	Datum dimension mm (in)	Projected dimensions for reference mm (in)
(72)R — (93)R	422 (16.61)	_
(72)L — (93)L	420 (16.54)	_
(82)aR — (82)aL	376 (14.80)	_
(82)bR — (82)bL	361 (14.21)	_
(82)aR — (93)R	1,284 (50.56)	1,284 (50.55)
(82)bR — (93)R	1,382 (54.41)	1,382 (54.40)
(82)aL — (93)L	1,294 (50.95)	1,282 (50.48)
(82)bL — (93)L	1,382 (54.40)	1,382 (54.39)



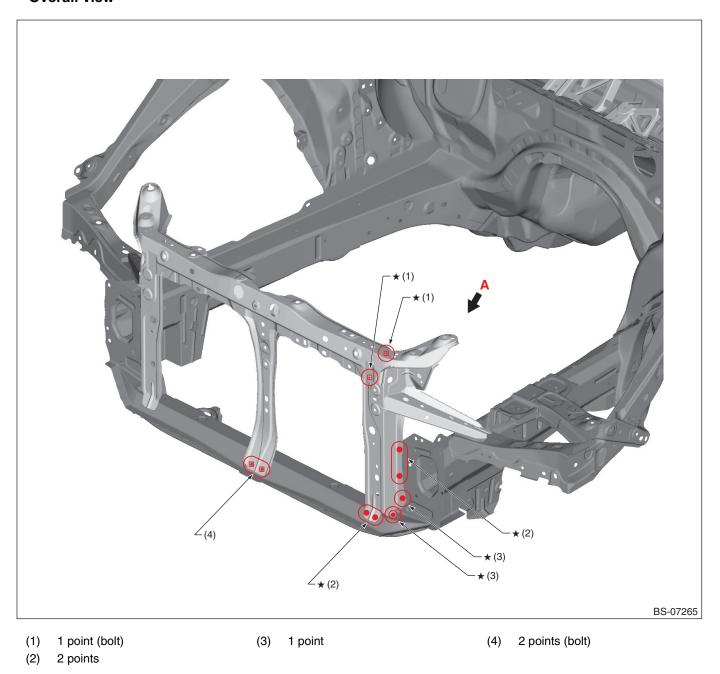
#### **CAUTION:**

For the reference points (72) and (82), refer to the figure "LOWER SURFACE, DIMENSIONS, Body Reference Points" on page 33.

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

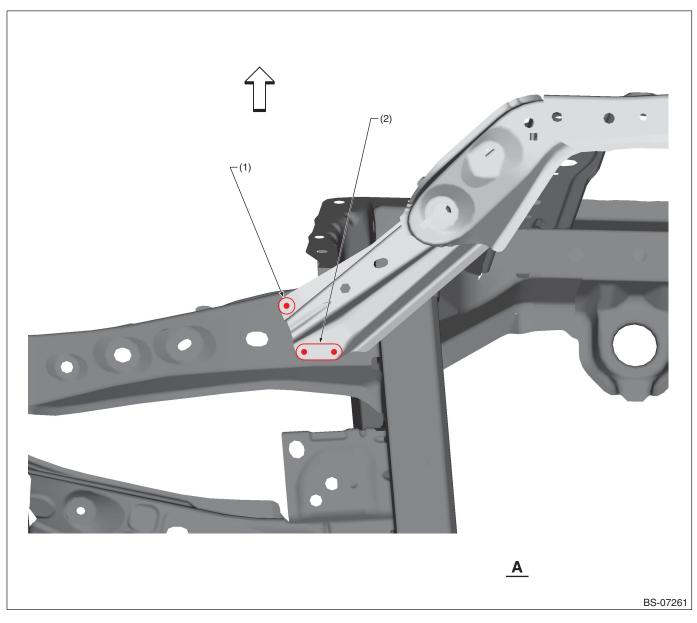
#### A: REMOVAL

Overall view



For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

### • View A

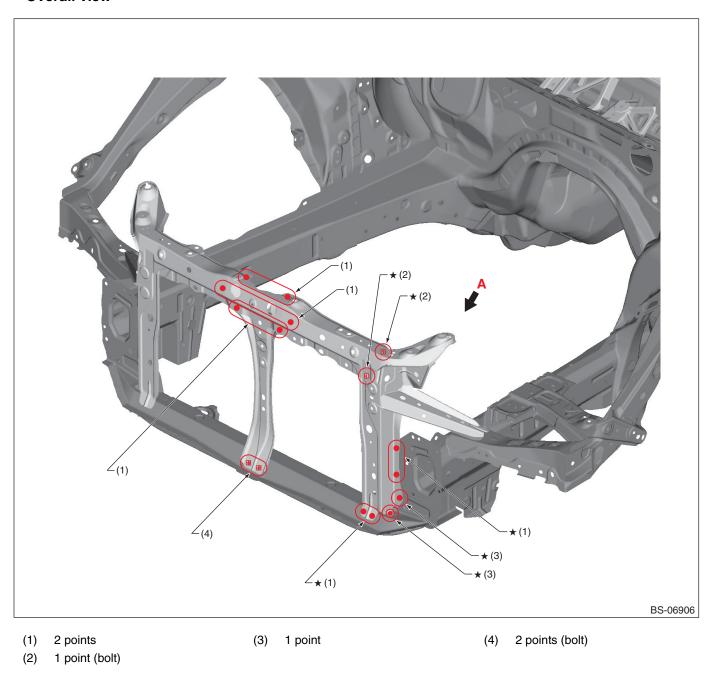


(1) 1 point

(2) 2 points

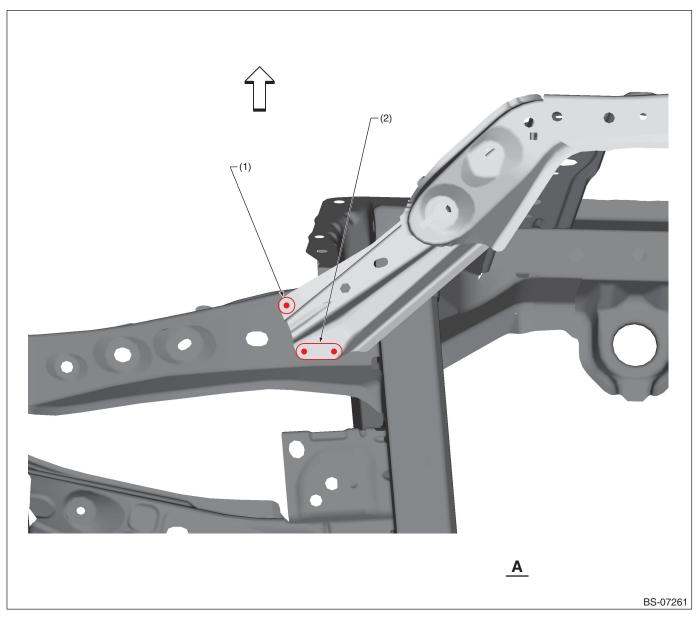
### **B: INSTALLATION**

#### Overall view



For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

### • View A



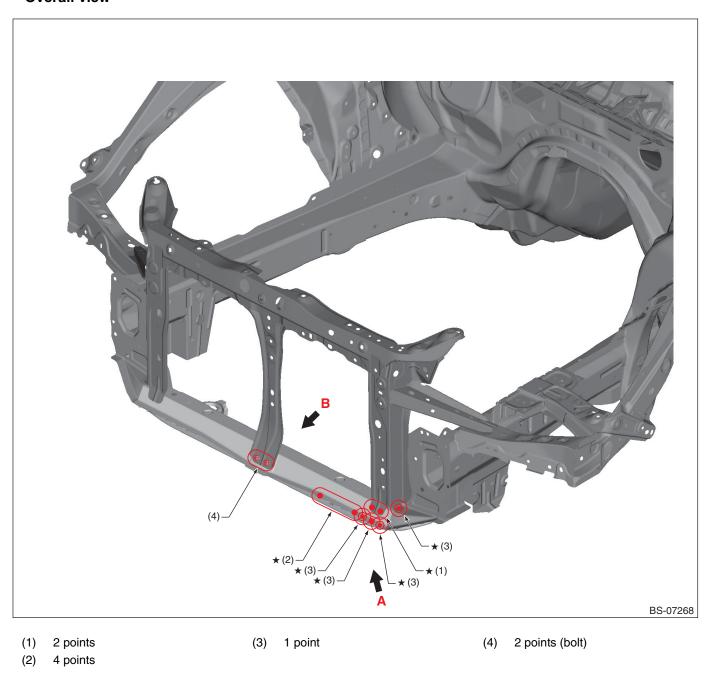
(1) 1 point

(2) 2 points

## 8-2. Radiator Core Support (Total replacement)

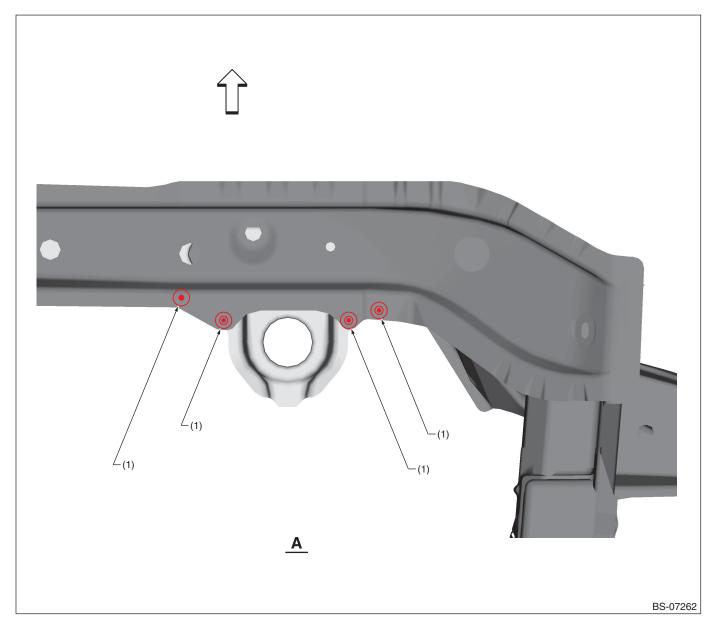
#### A: REMOVAL

• Overall view



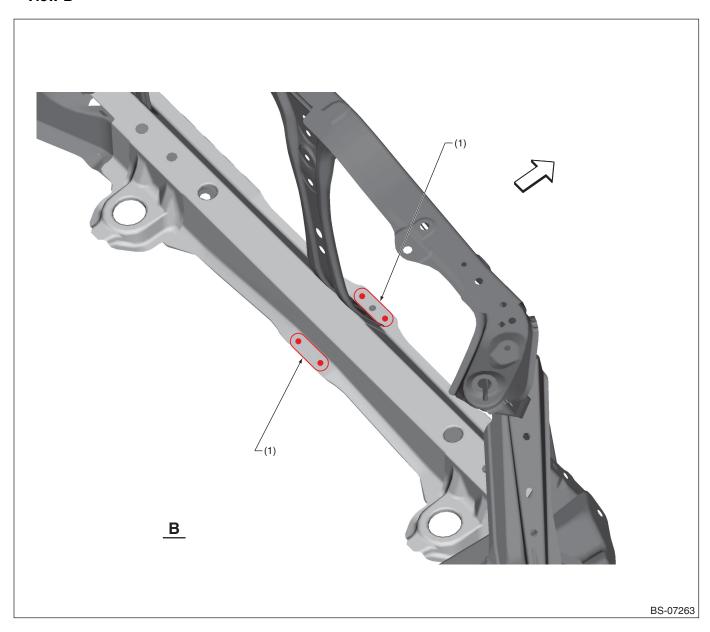
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

### • View A



(1) 1 point

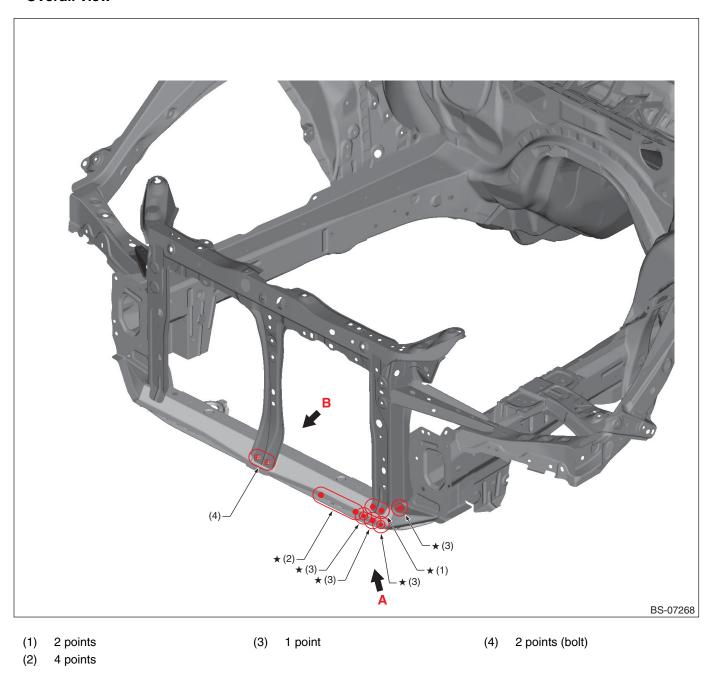
### • View B



(1) 2 points

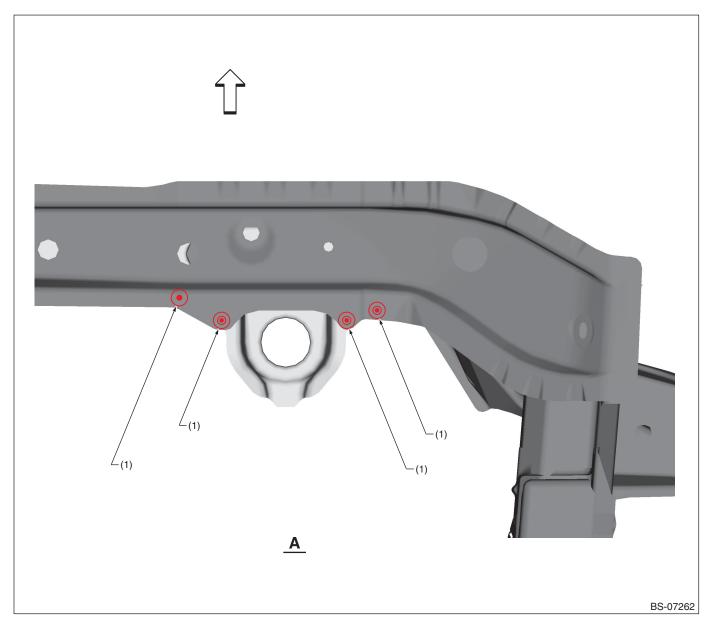
### **B: INSTALLATION**

#### Overall view



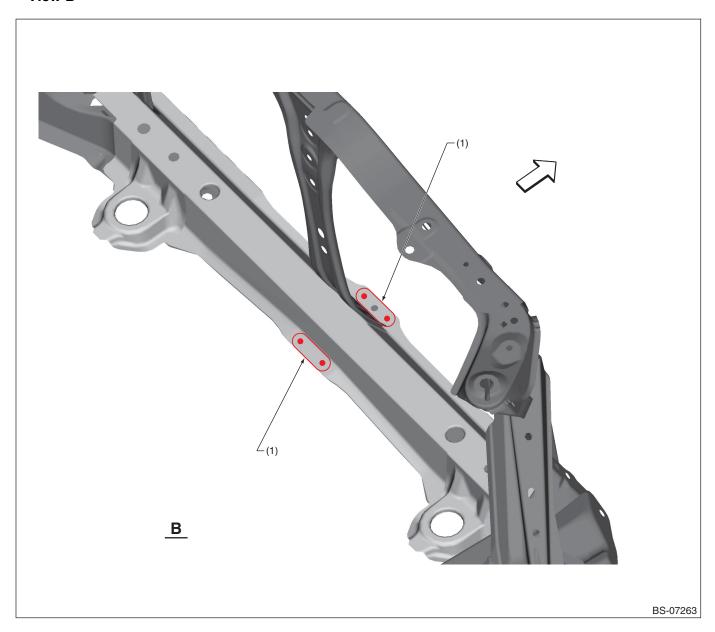
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

### • View A



(1) 1 point

### • View B

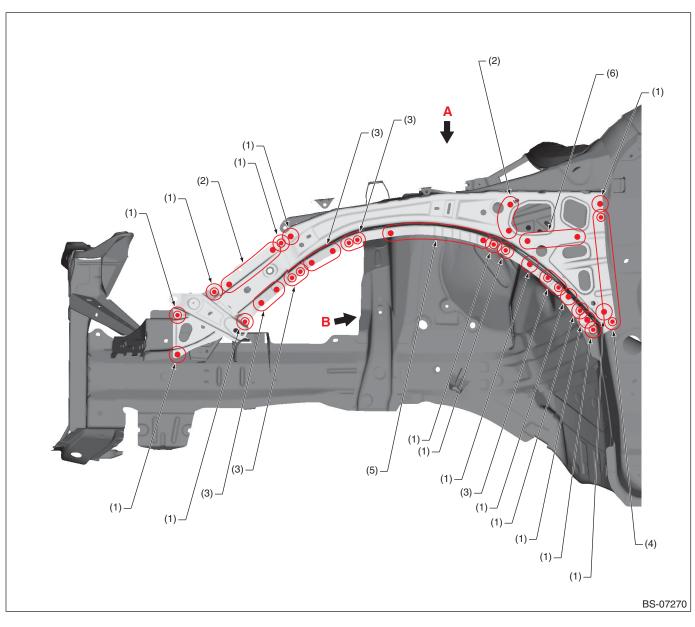


(1) 2 points

## 8-3. Side Upper Frame (Total replacement)

#### A: REMOVAL

Overall view

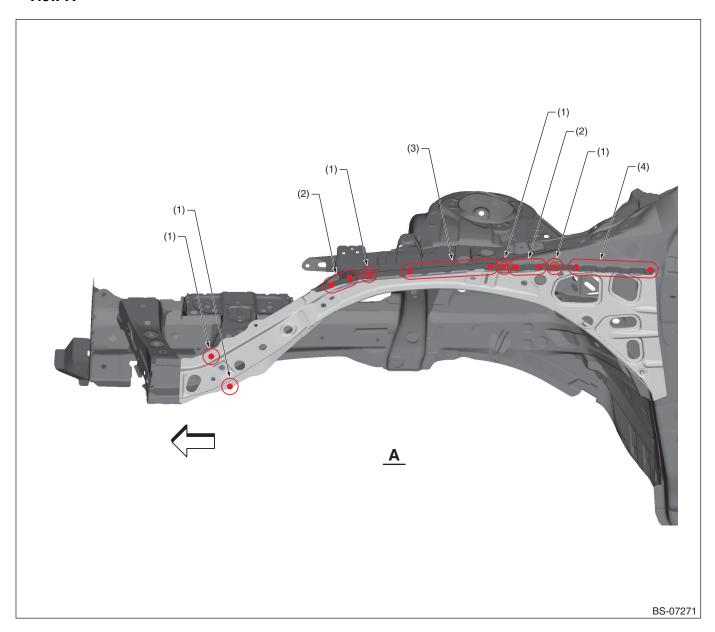


- (1) 1 point
- (2) 3 points

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

- (5) 5 points
- (6) 4 points

### • View A

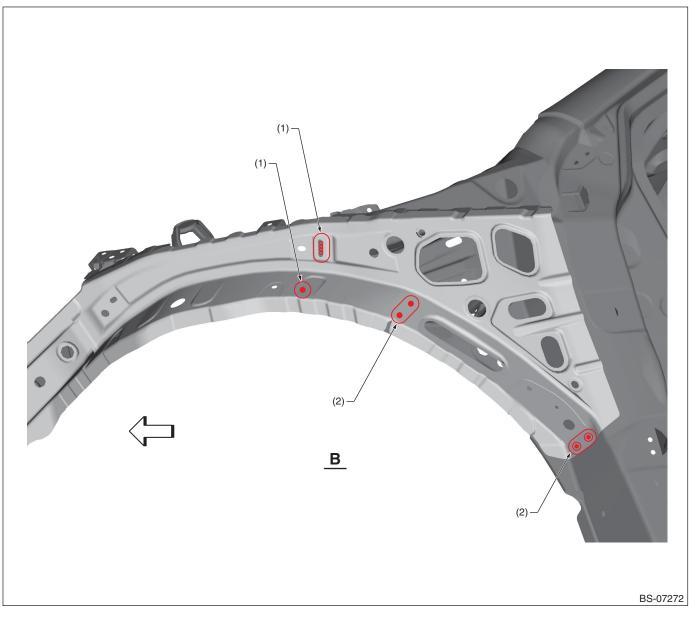


(1) 1 point(2) 2 points

(3) 5 points

(4) 4 points

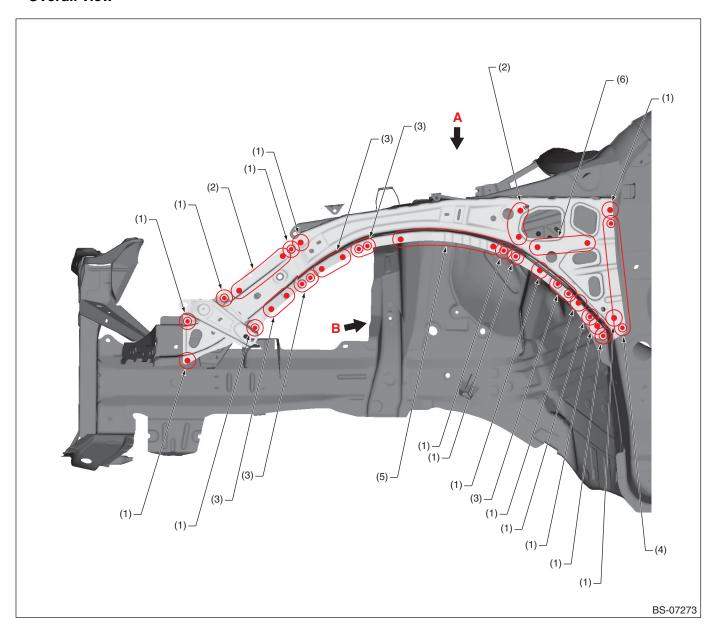
### • View B



(1) 1 point (2) 2 points

### **B: INSTALLATION**

#### Overall view

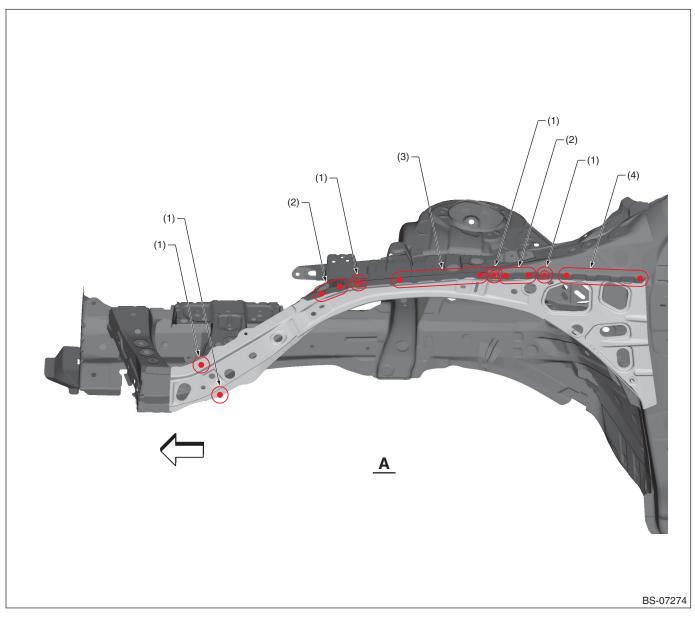


- (1) 1 point
- (2) 3 points

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

- (5) 5 points
- (6) 4 points

### • View A



(1) 1 point

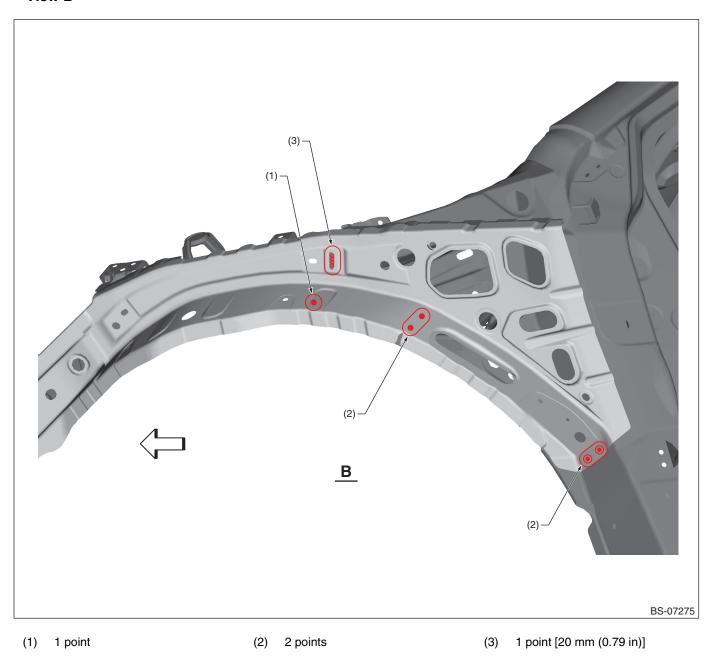
2 points

(2)

(3) 5 points

(4) 4 points

### • View B

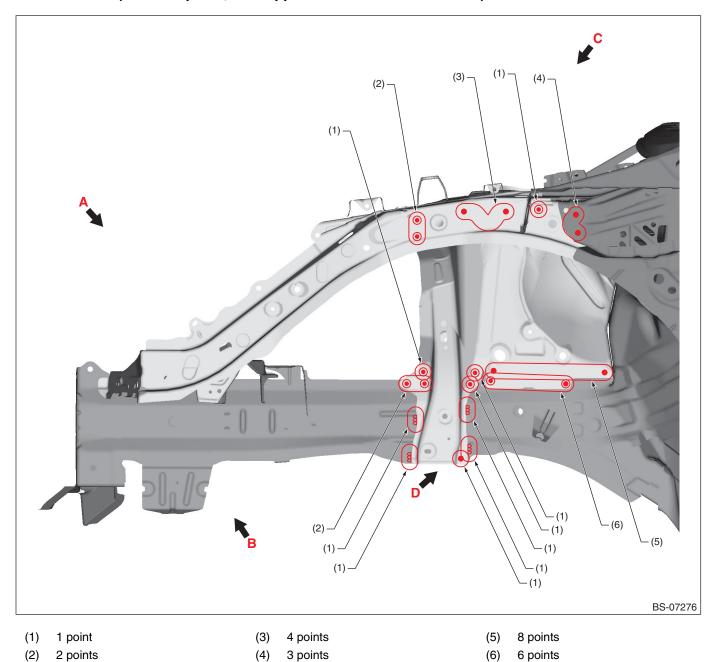


**BS - 69** 

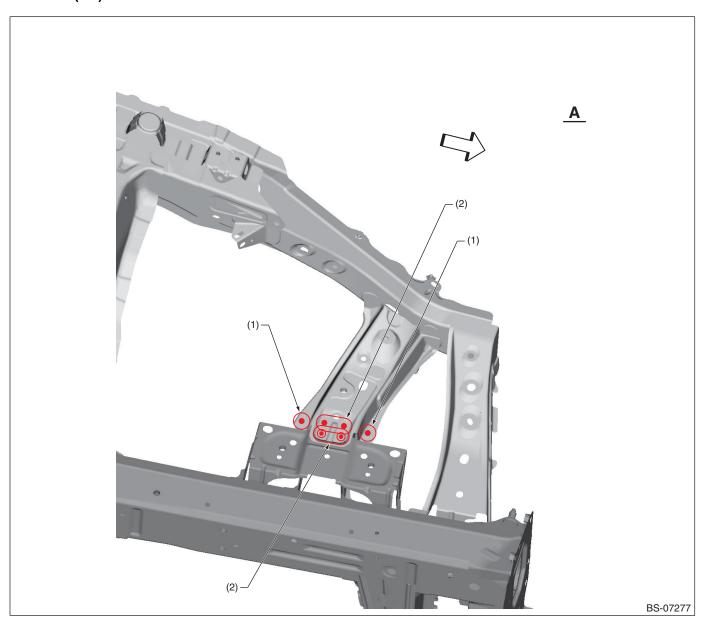
## 8-4. Front Wheel Apron (Total replacement)

#### A: REMOVAL

• Overall view (Radiator panel, side upper frame removal condition)



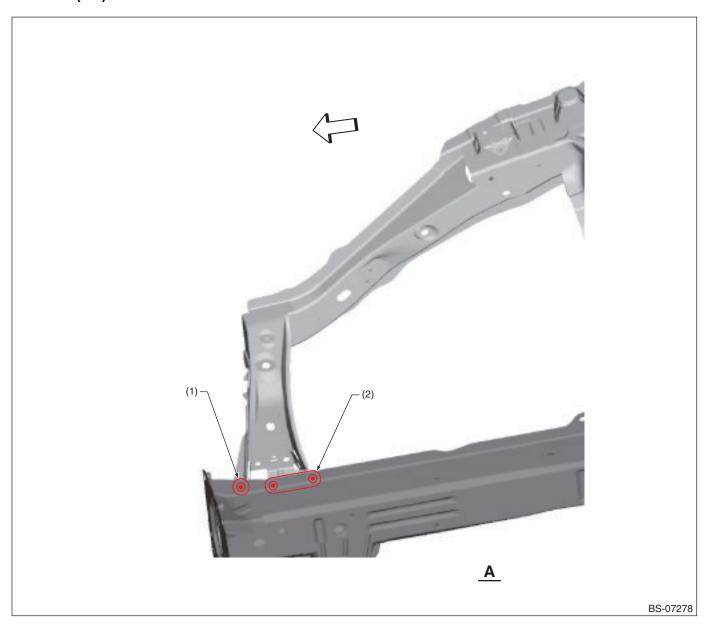
## • View A (LH)



(1) 1 point

(2) 2 points

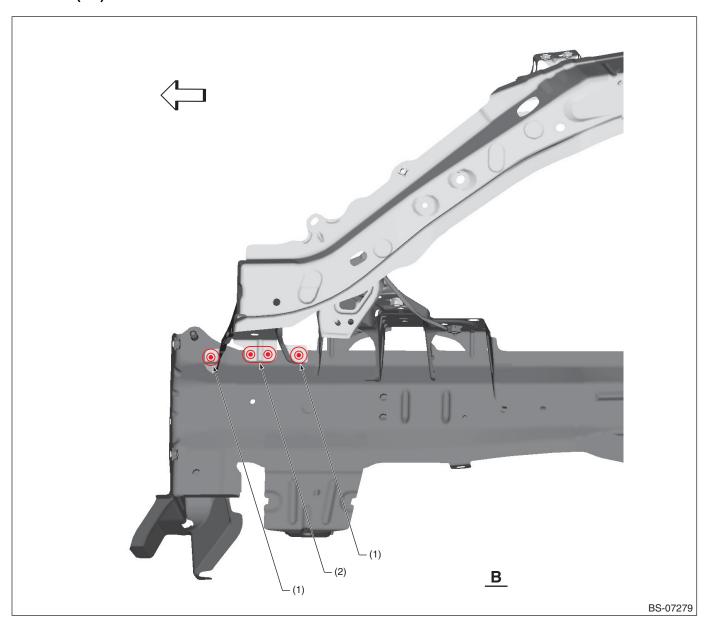
## • View A (RH)



(1) 1 point

(2) 3 points

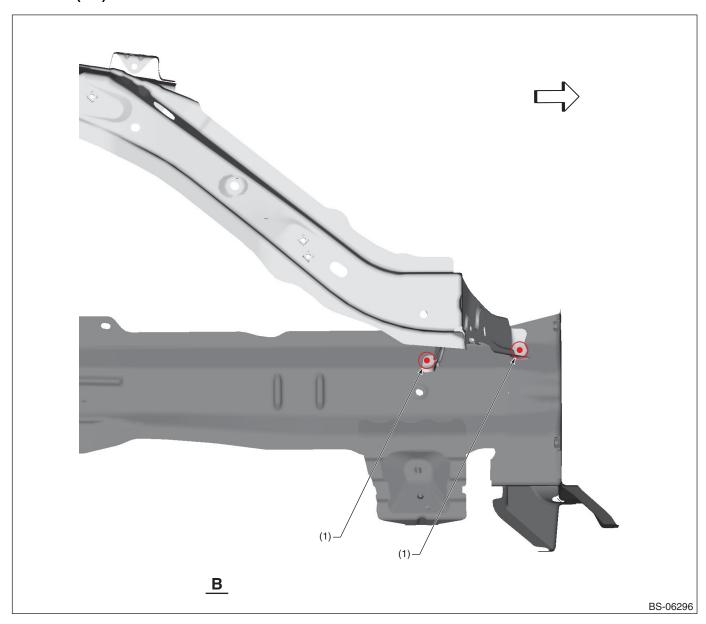
### • View B (LH)



(1) 1 point

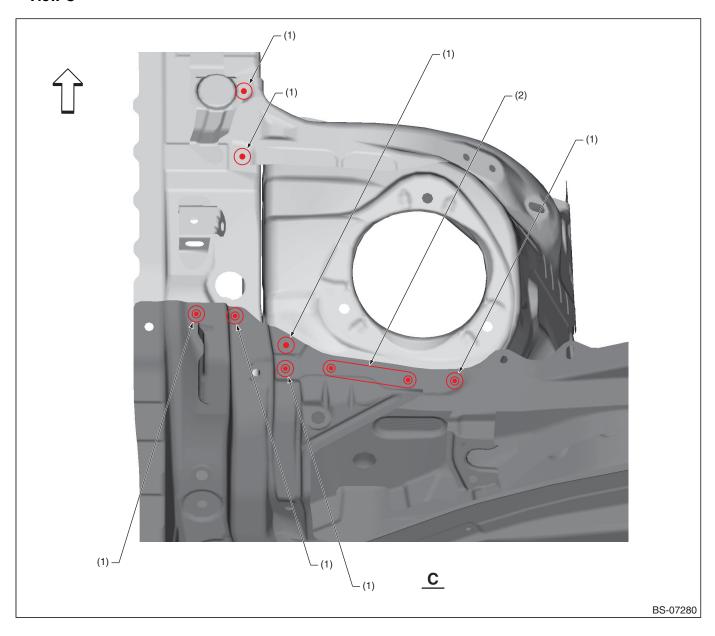
(2) 2 points

### • View B (RH)



(1) 1 point

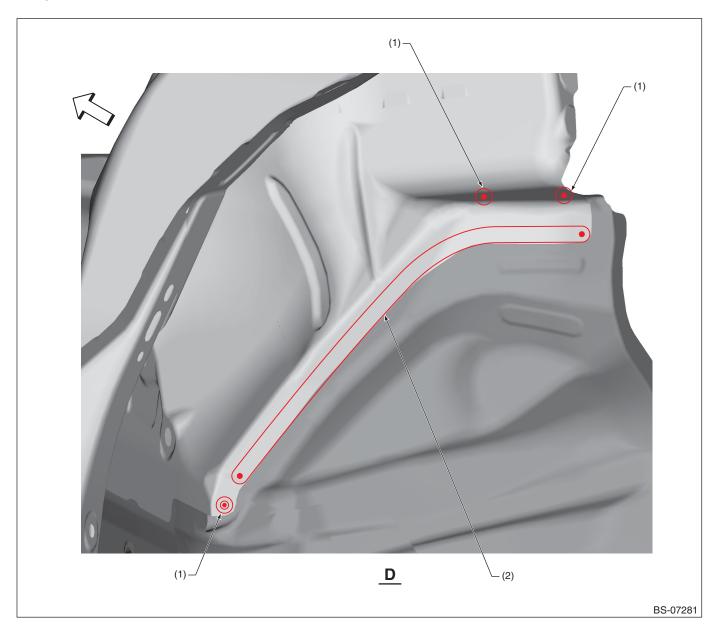
#### • View C



(1) 1 point

(2) 3 points

#### • View D

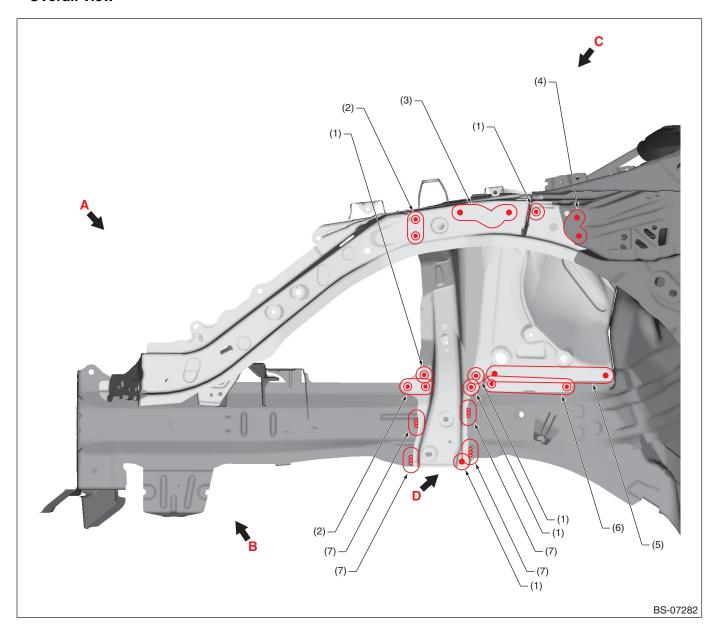


(1) 1 point

(2) 10 points

#### **B: INSTALLATION**

#### Overall view

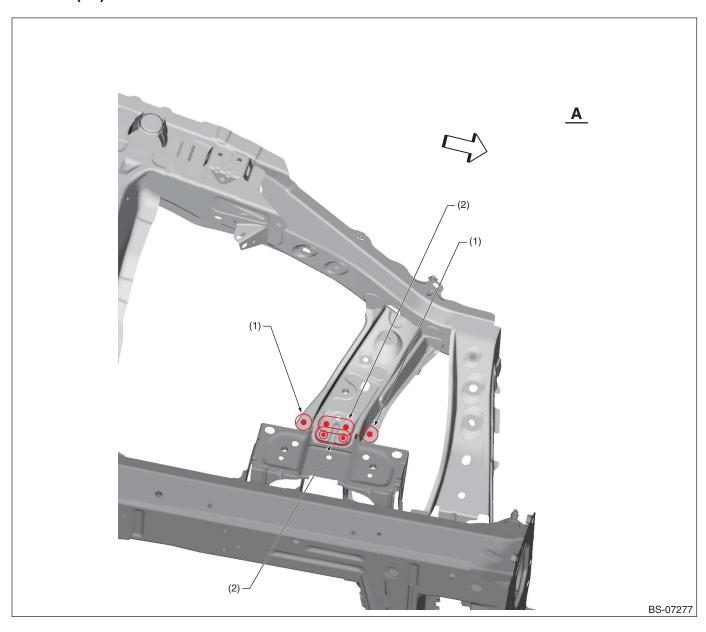


- (1) 1 point
- (2) 2 points
- (3) 4 points

- (4) 3 points
- (5) 8 points
- (6) 6 points

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

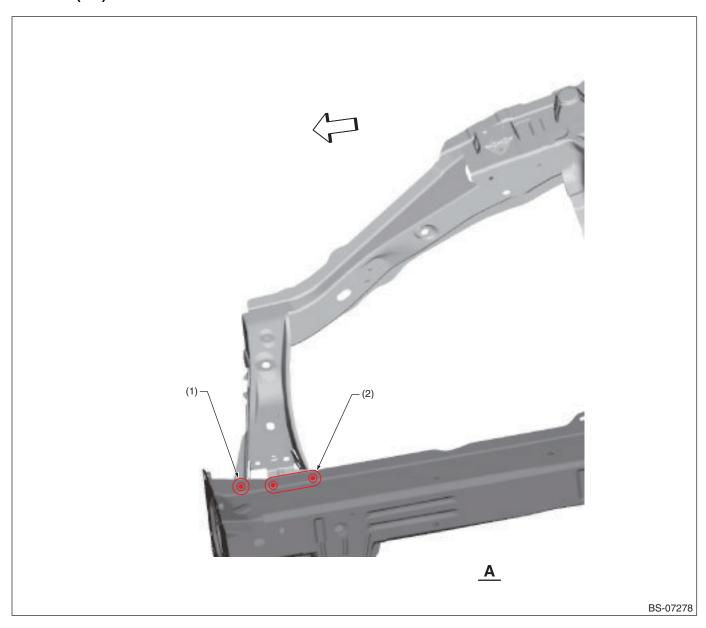
### • View A (LH)



(1) 1 point

(2) 2 points

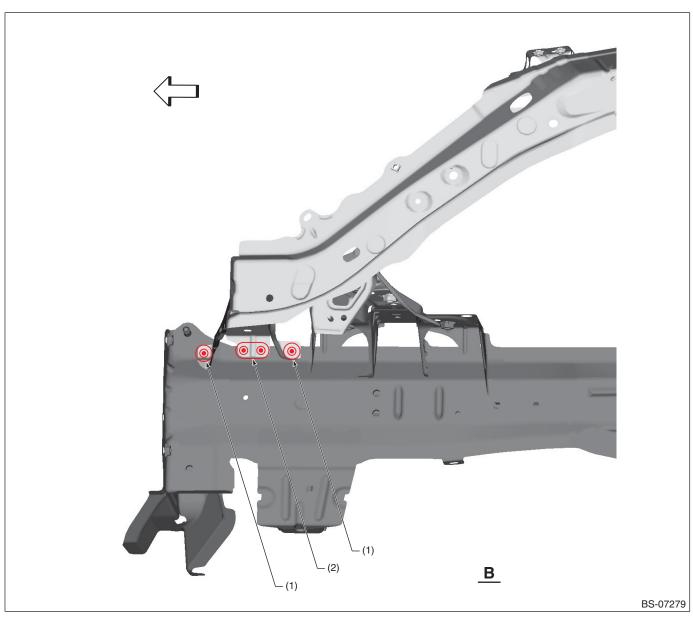
### • View A (RH)



(1) 1 point

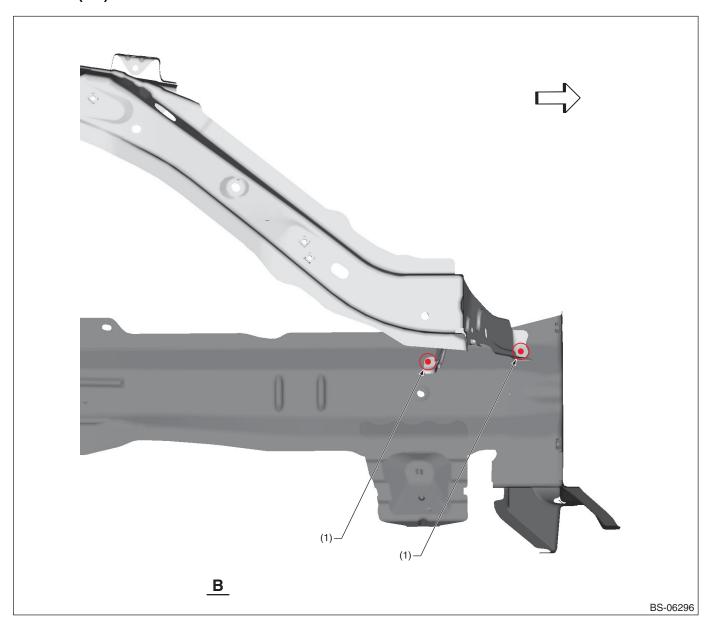
(2) 3 points

### • View B (LH)



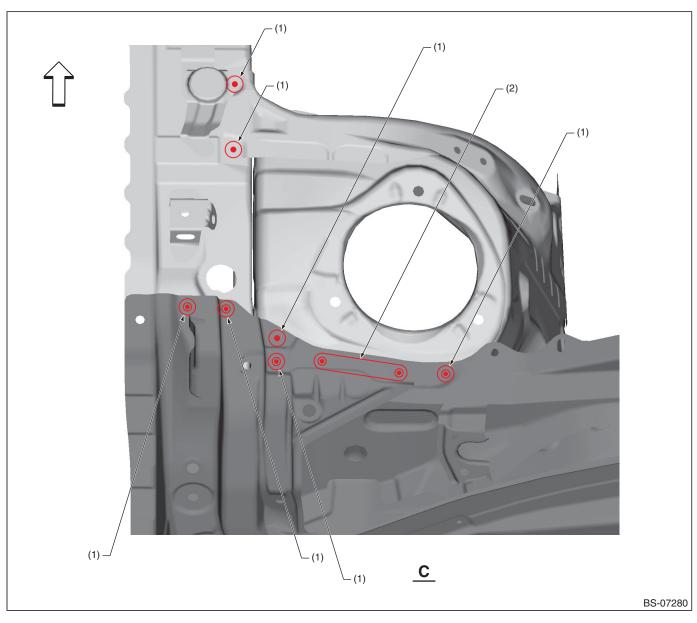
(1) 1 point (2) 2 points

### • View B (RH)



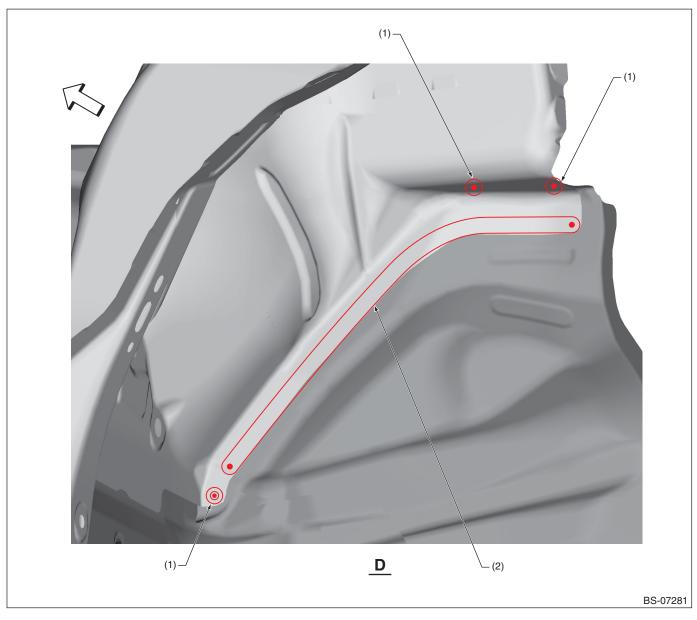
(1) 1 point

#### • View C



(1) 1 point (2) 3 points

#### • View D

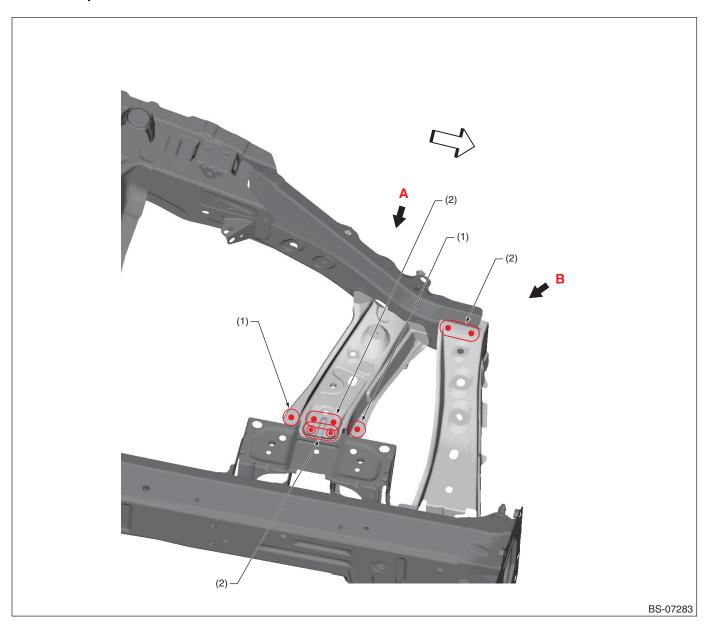


(1) 1 point (2) 10 points

### 8-5. Front Wheel Apron LH (Partial replacement)

#### A: REMOVAL

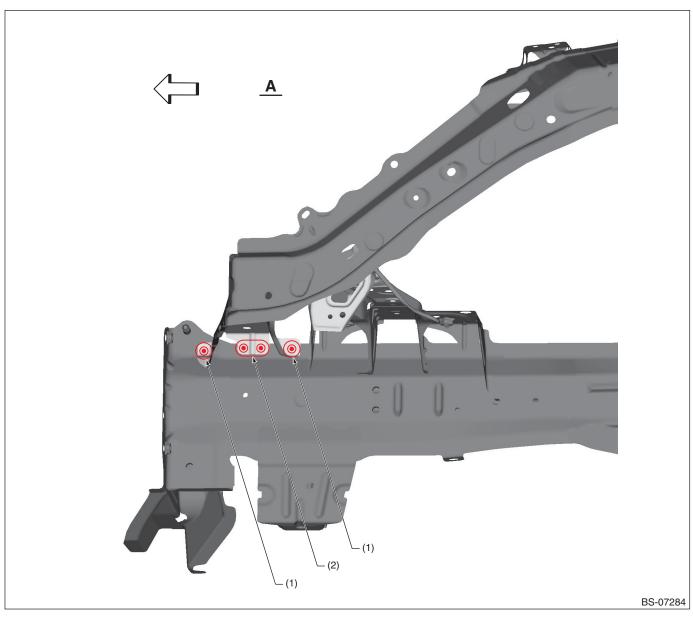
• Radiator panel removal condition



(1) 1 point

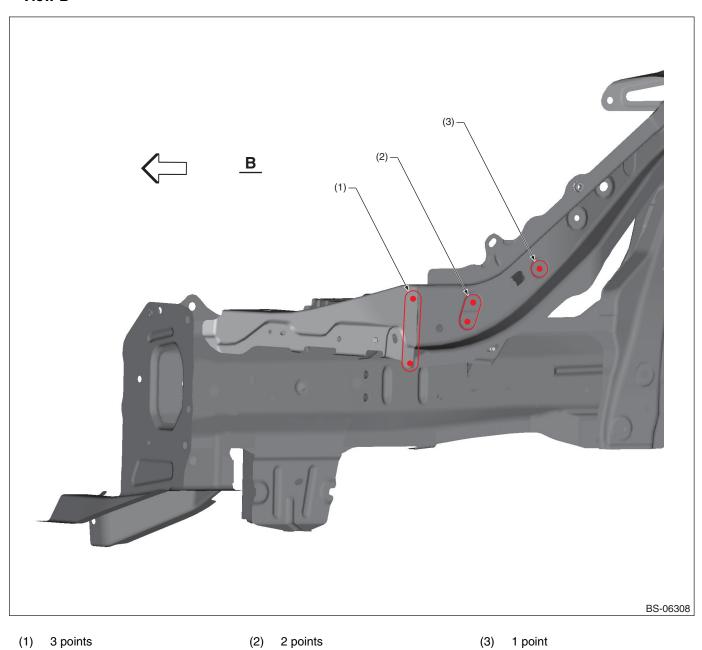
(2) 2 points

#### • View A

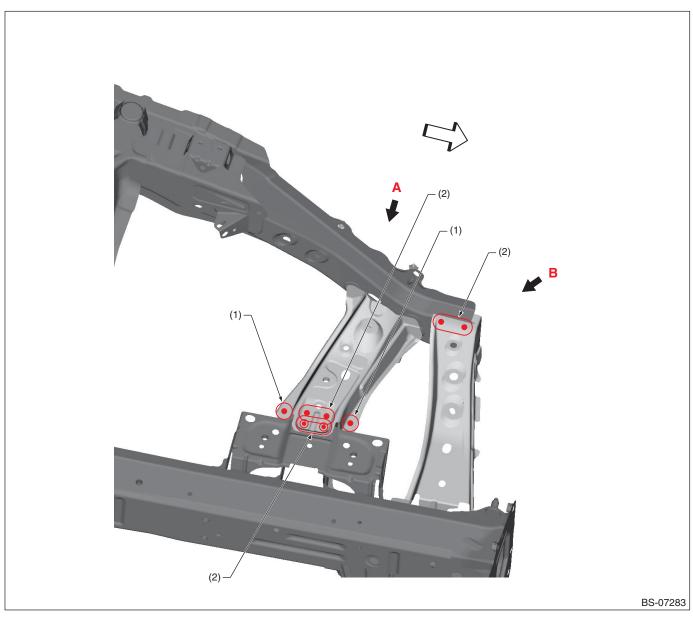


(1) 1 point (2) 2 points

#### • View B

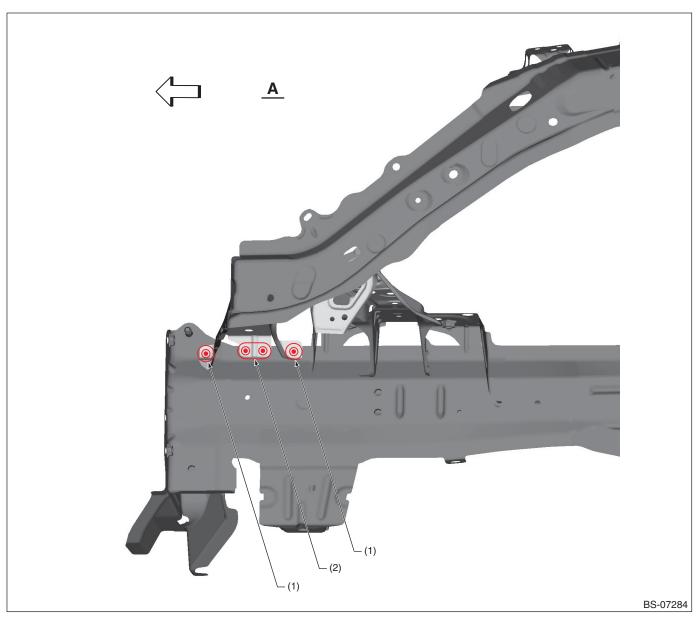


### **B: INSTALLATION**



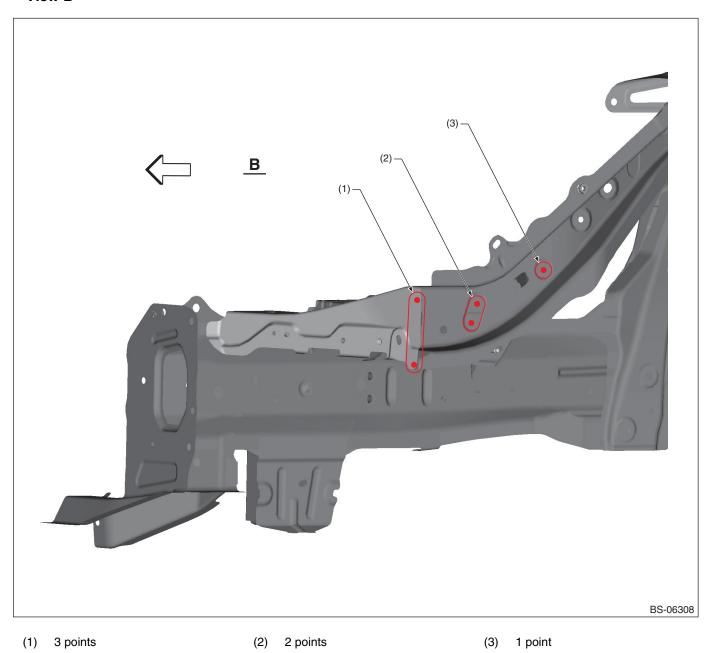
(1) 1 point (2) 2 points

#### • View A



(1) 1 point (2) 2 points

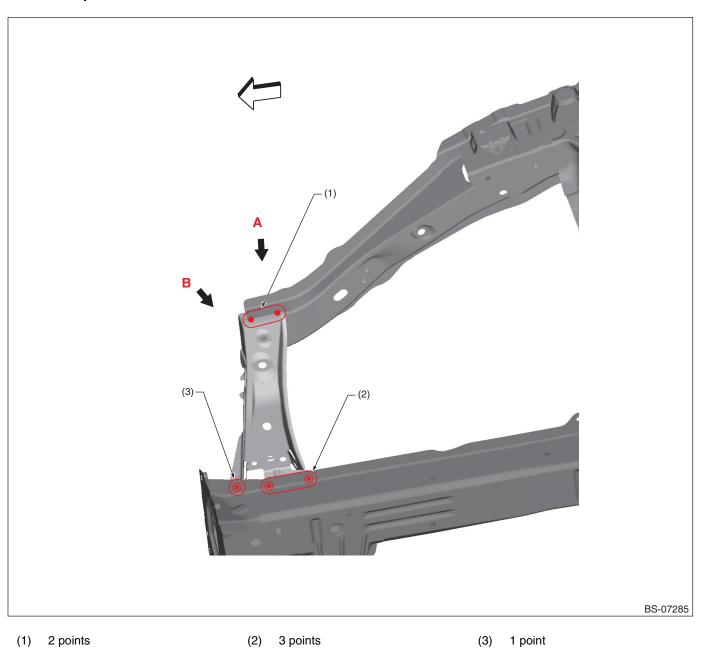
#### • View B



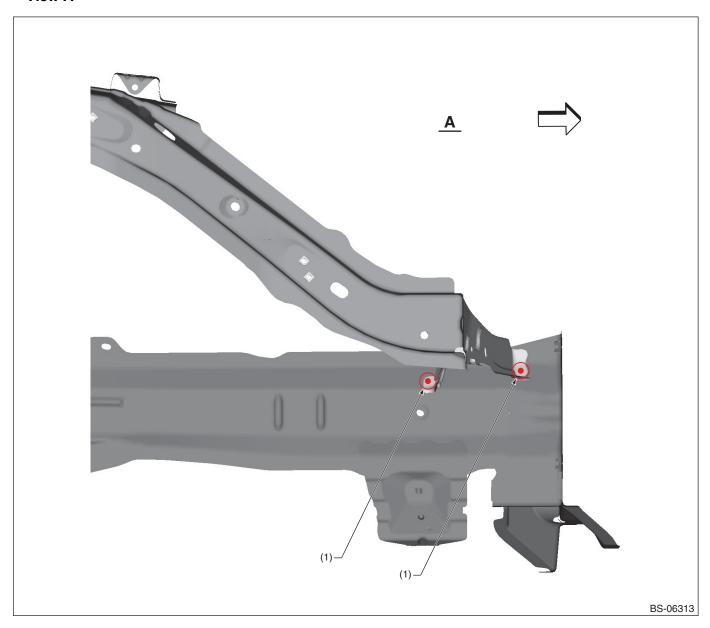
### 8-6. Front Wheel Apron RH (Partial replacement)

#### A: REMOVAL

• Radiator panel removal condition

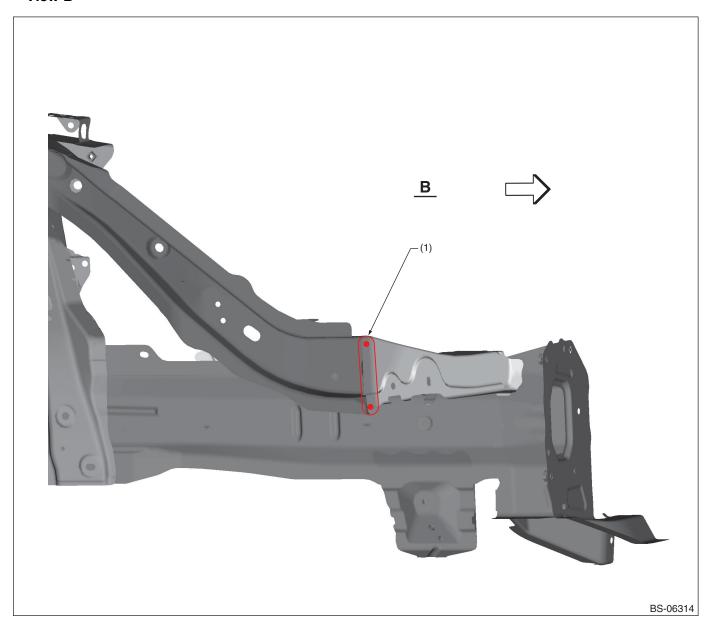


#### • View A



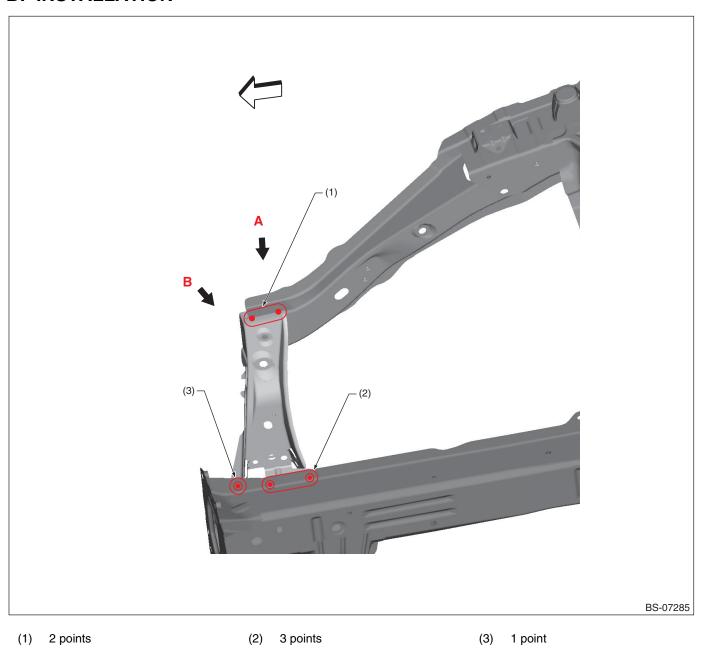
(1) 1 point

#### • View B

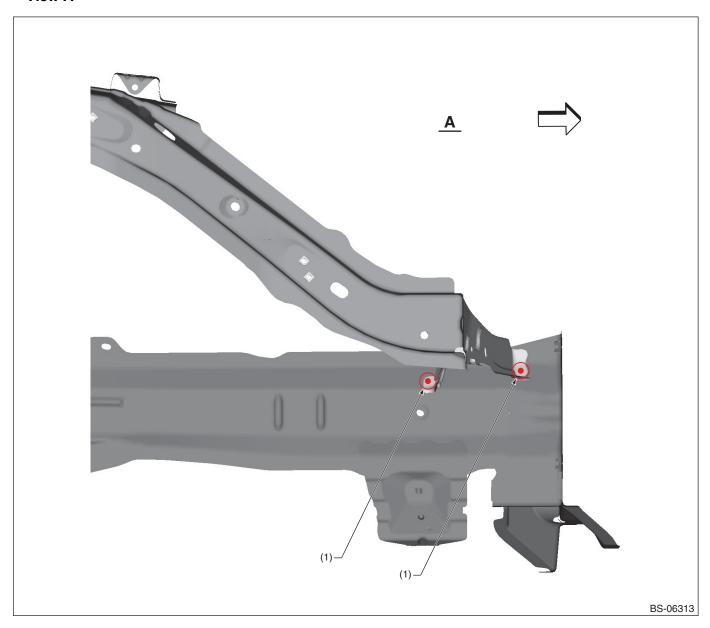


(1) 3 points

### **B: INSTALLATION**

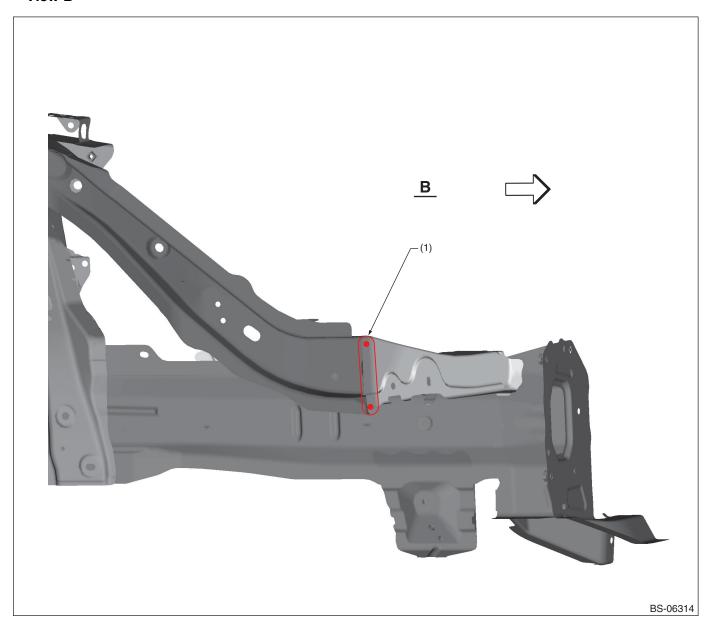


#### • View A



(1) 1 point

#### • View B

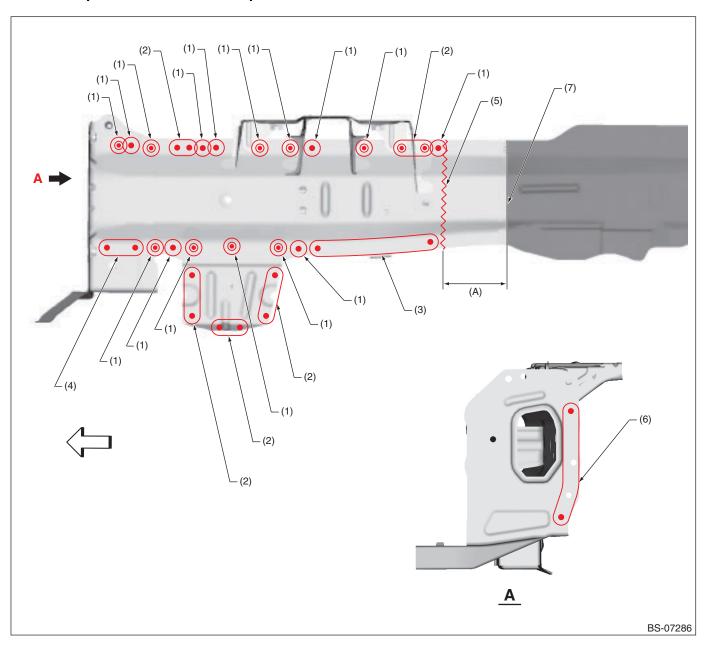


(1) 3 points

#### 8-7. Closing Plate LH (Partial replacement)

#### A: REMOVAL

• Radiator panel and front wheel apron removal condition

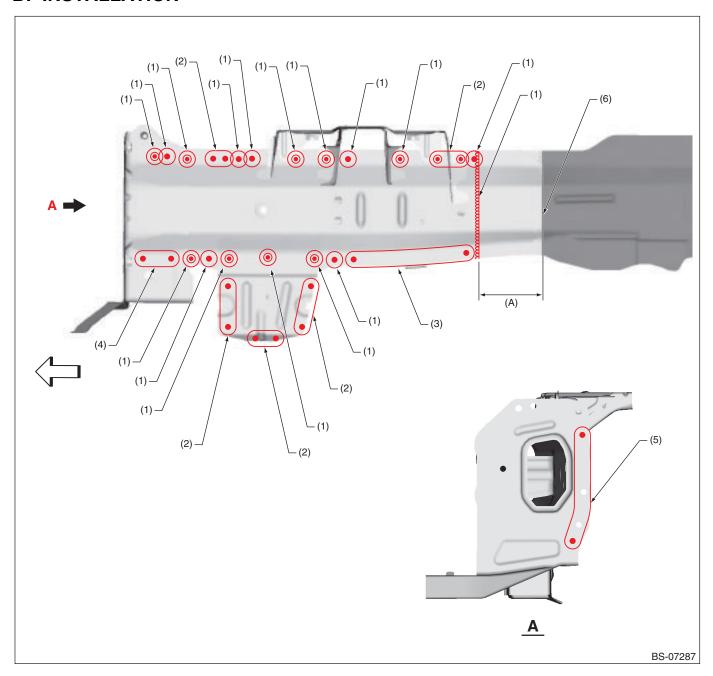


- (A) 85 mm (3.35 in)
- (1) 1 point
- (2) 2 points
- (3) 5 points

- (4) 3 points
- (5) Cut position

- (6) 4 points
- (7) Tailored line

#### **B: INSTALLATION**



(A) 85 mm (3.35 in)

2 points

(1) 1 point

(2)

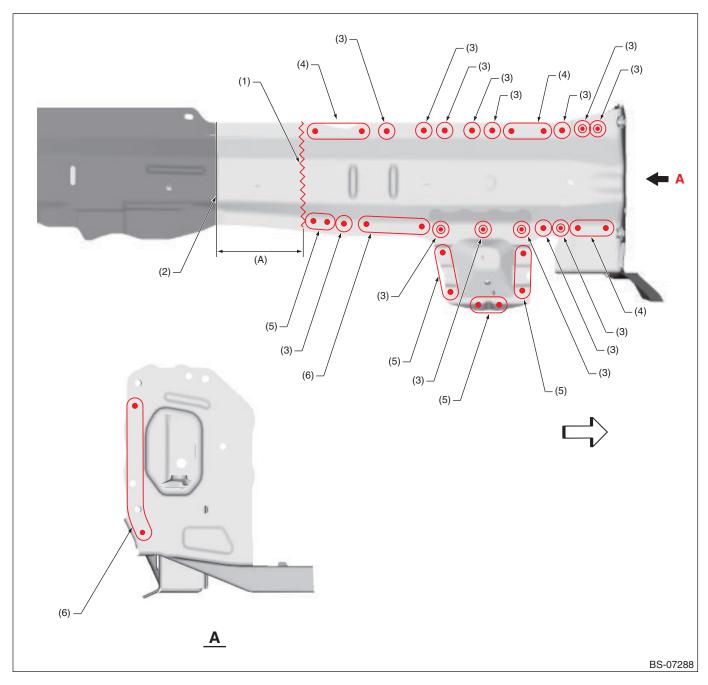
- (3) 5 points
- (4) 3 points

- (5) 4 points
- (6) Tailored line

#### 8-8. Closing Plate RH (Partial replacement)

#### A: REMOVAL

• Radiator panel and front wheel apron removal condition



- (A) 110 mm (4.33 in)
- (1) Cut position

(3) 1 point

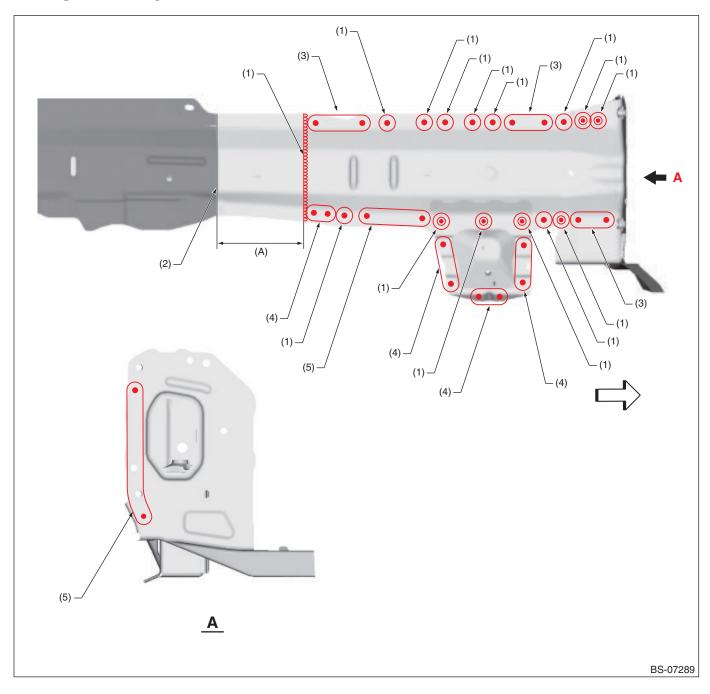
(5) 2 points

(2) Tailored line

(4) 3 points

(6) 4 points

#### **B: INSTALLATION**



- (A) 110 mm (4.33 in)
- (1) 1 point

(3) 3 points

(5) 4 points

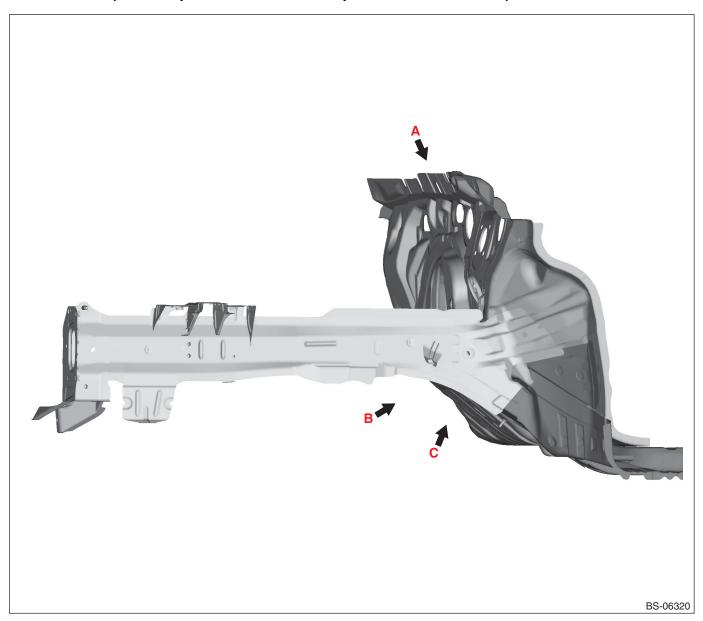
(2) Tailored line

(4) 2 points

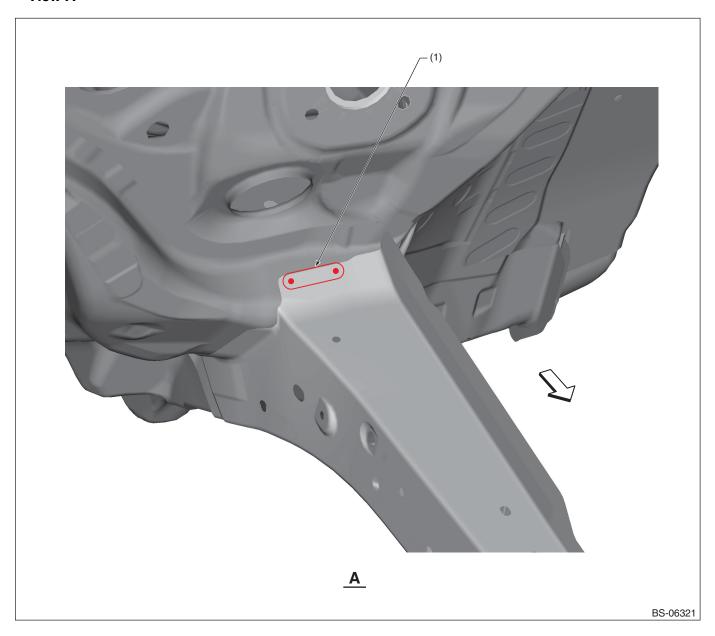
### 8-9. Front Side Frame (Total replacement)

#### A: REMOVAL

• Overall view (Radiator panel and front wheel apron removal condition)

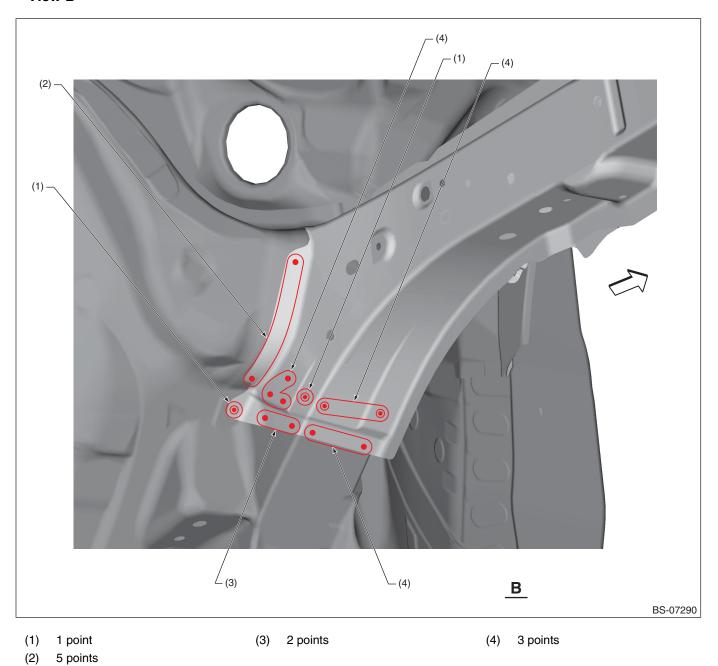


#### • View A

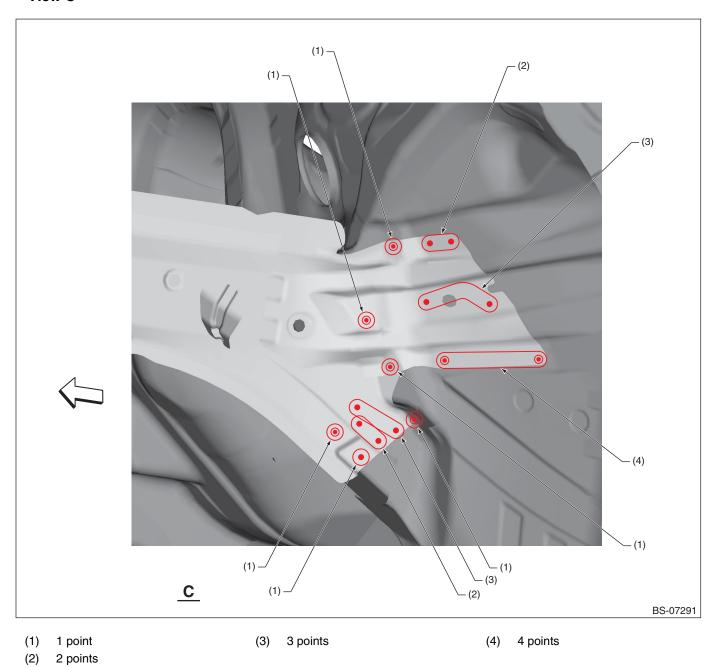


(1) 2 points

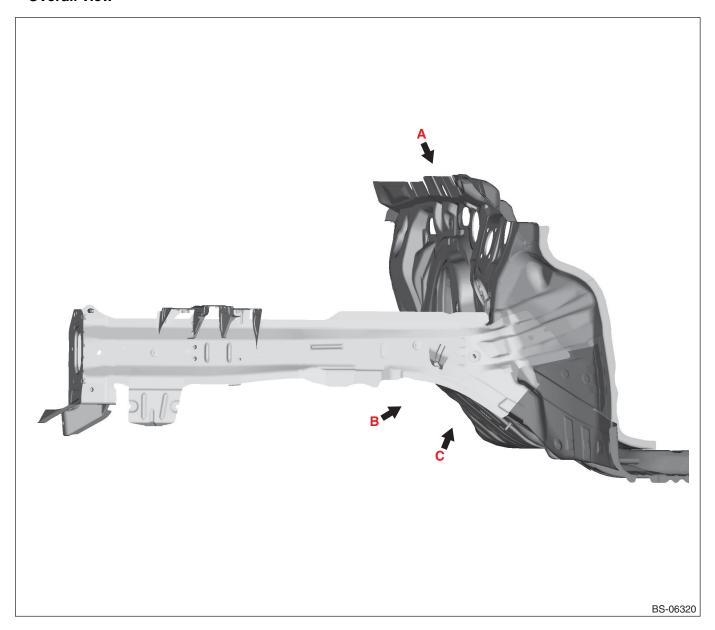
#### • View B



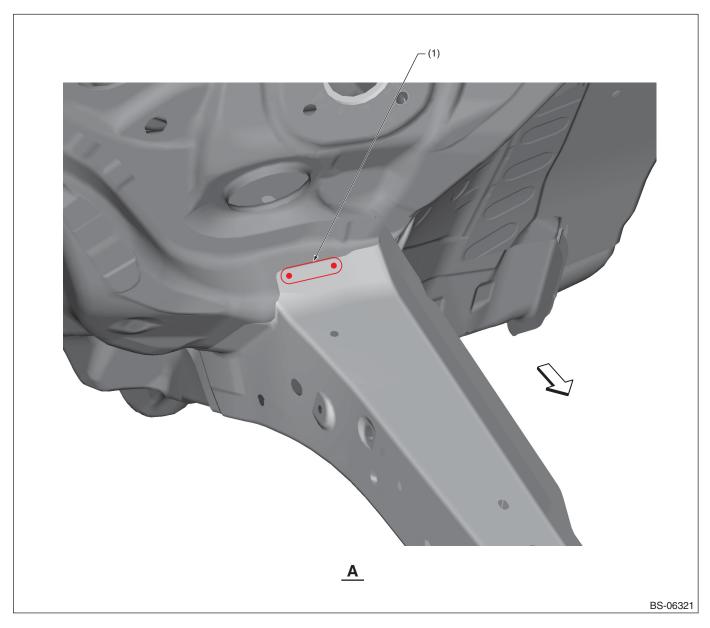
#### • View C



# B: INSTALLATION • Overall view

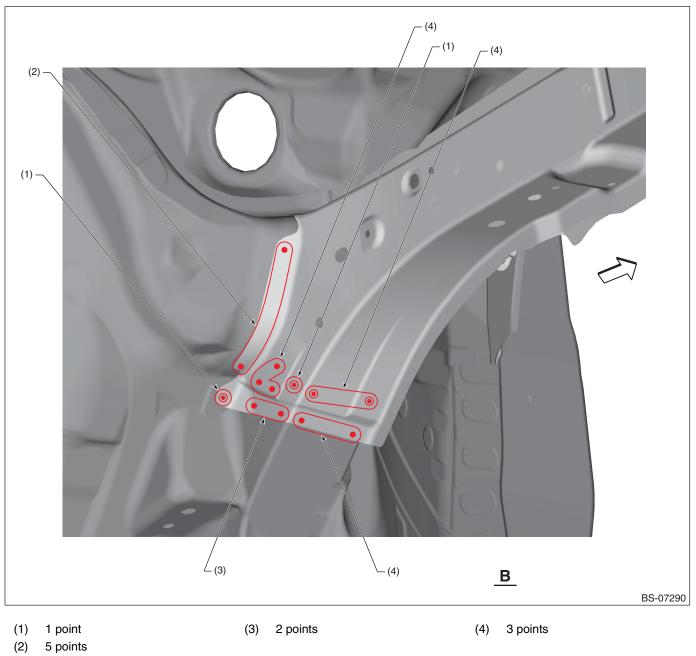


#### • View A



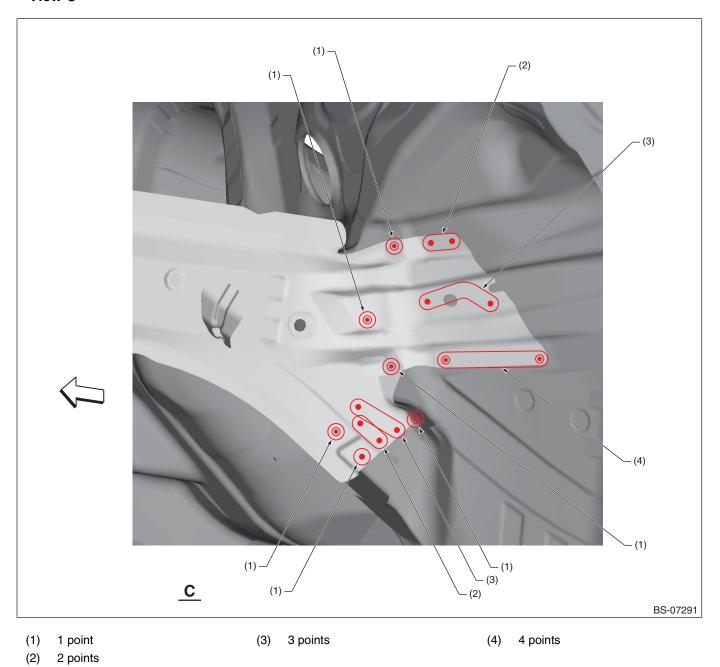
(1) 2 points

#### • View B



5 points

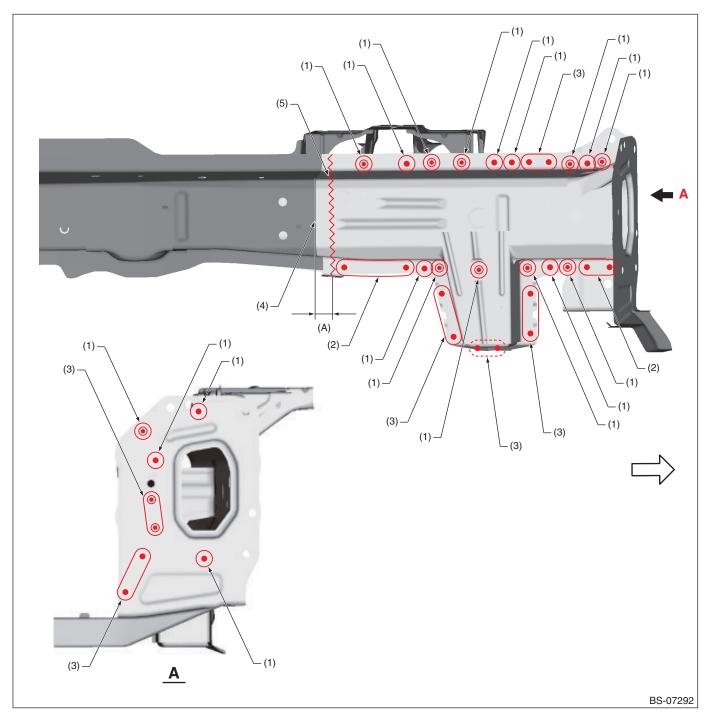
#### • View C



#### 8-10. Front Side Frame LH (Partial replacement)

#### A: REMOVAL

• Radiator panel and front wheel apron removal condition



- (A) 10 mm (0.39 in)
- (1) 1 point

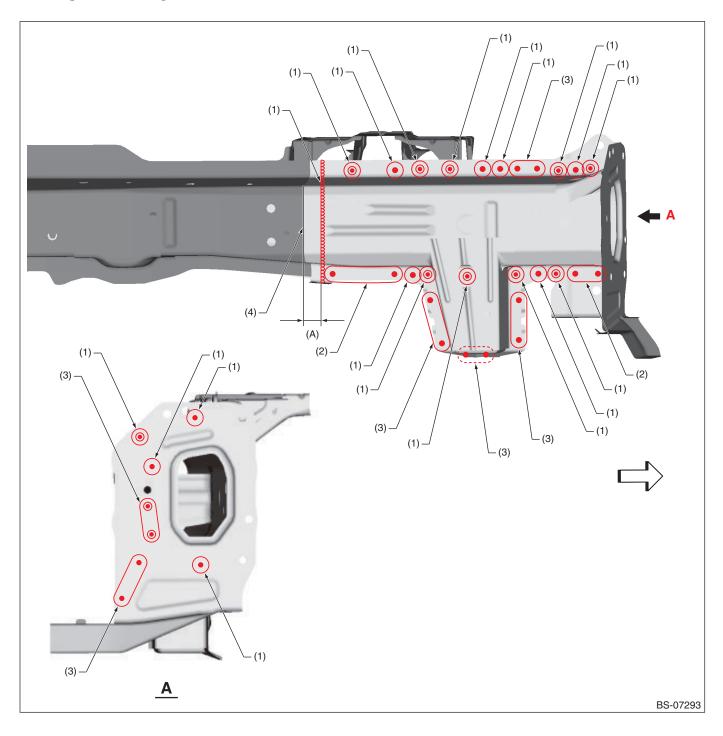
(3) 2 points

(5) Cut position

(2) 3 points

(4) Tailored line

### **B: INSTALLATION**



(A) 10 mm (0.39 in)

3 points

(1) 1 point

(2)

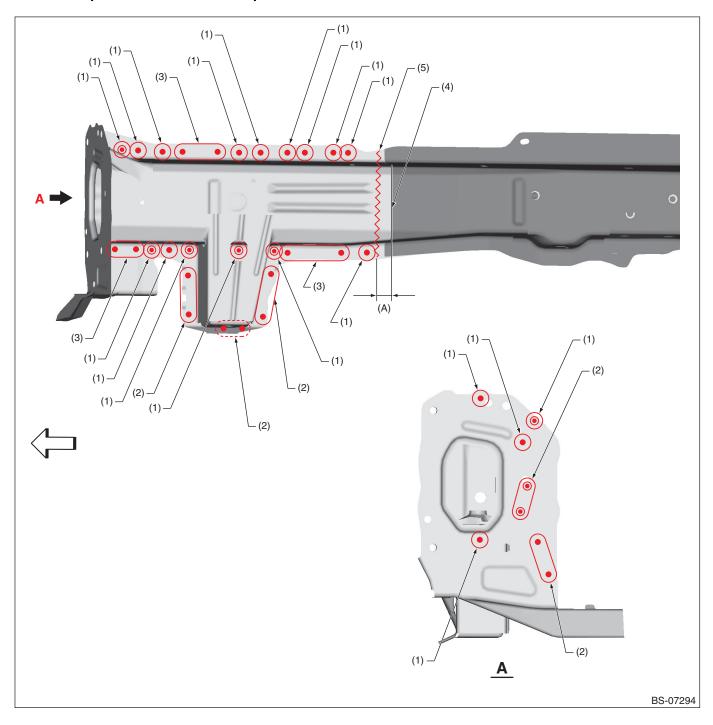
(3) 2 points

(4) Tailored line

### 8-11. Front Side Frame RH (Partial replacement)

#### A: REMOVAL

• Radiator panel and front wheel apron removal condition



(A) 10 mm (0.39 in)

2 points

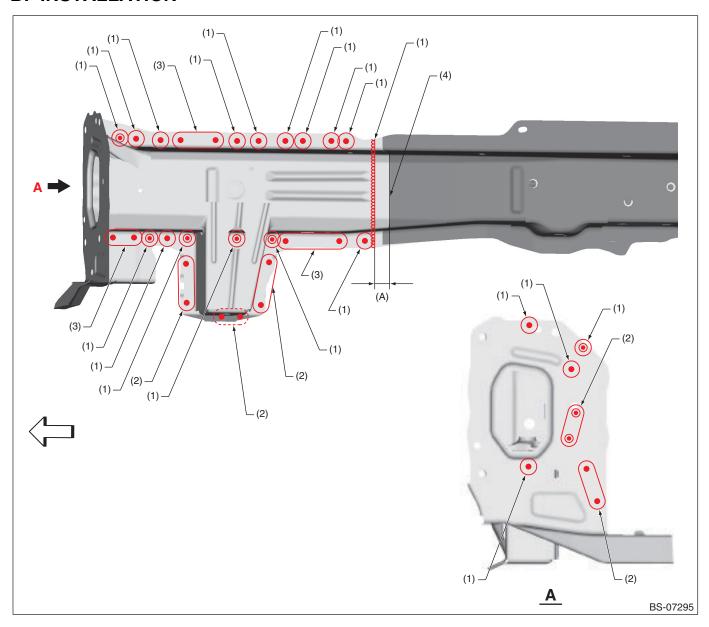
(1) 1 point

(2)

- (3) 3 points
- (4) Tailored line

(5) Cut position

### **B: INSTALLATION**



(A) 10 mm (0.39 in)

2 points

(1) 1 point

(2)

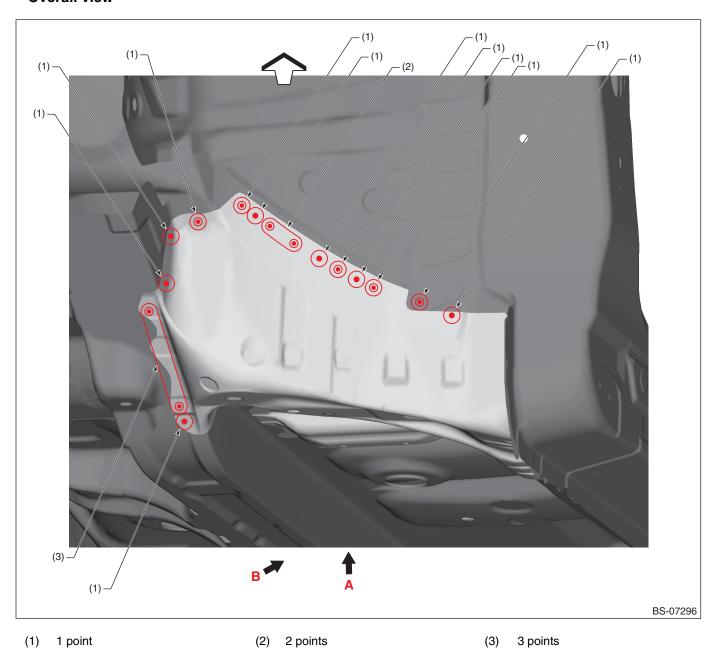
(3) 3 points

(4) Tailored line

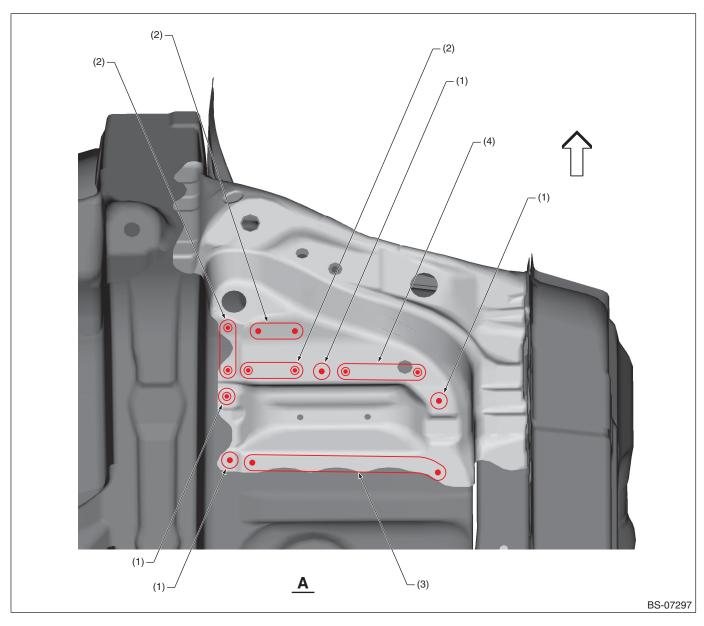
### 8-12. Toe Board Lower Reinforcement (Total replacement)

#### A: REMOVAL

• Overall view



#### • View A



(1) 1 point

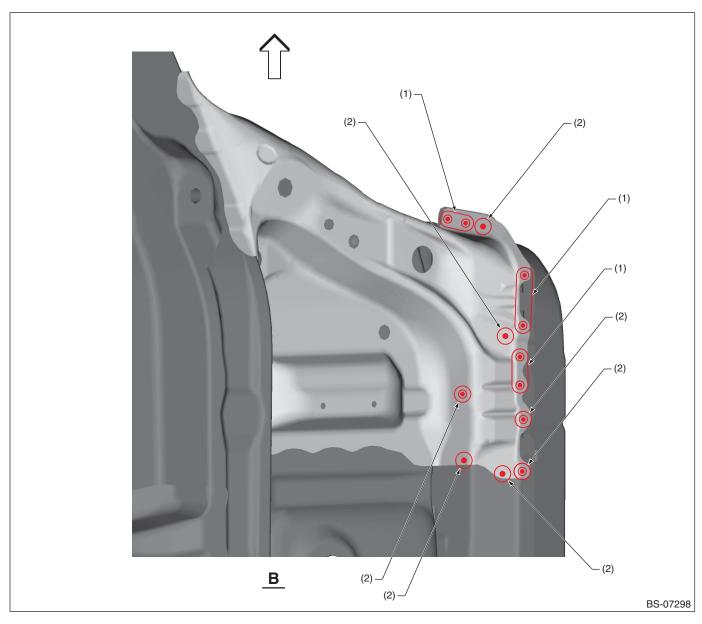
2 points

(2)

(3) 5 points

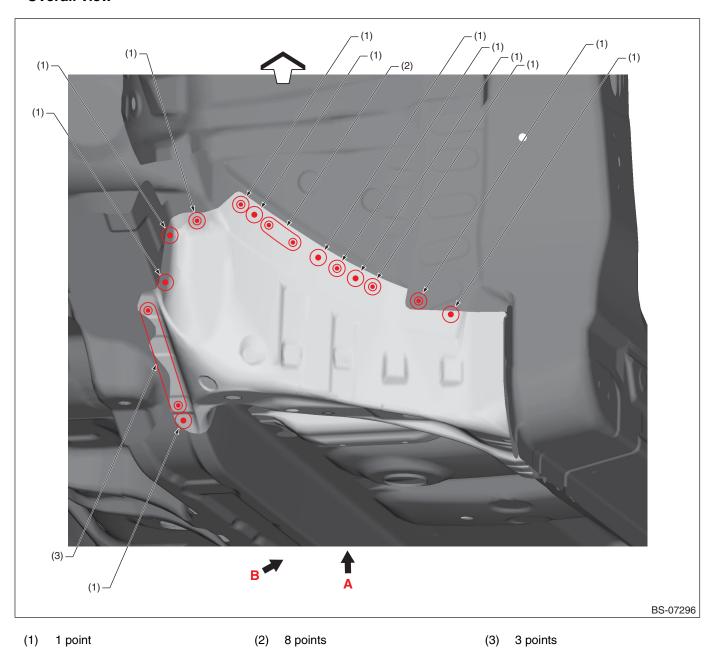
(4) 3 points

#### • View B

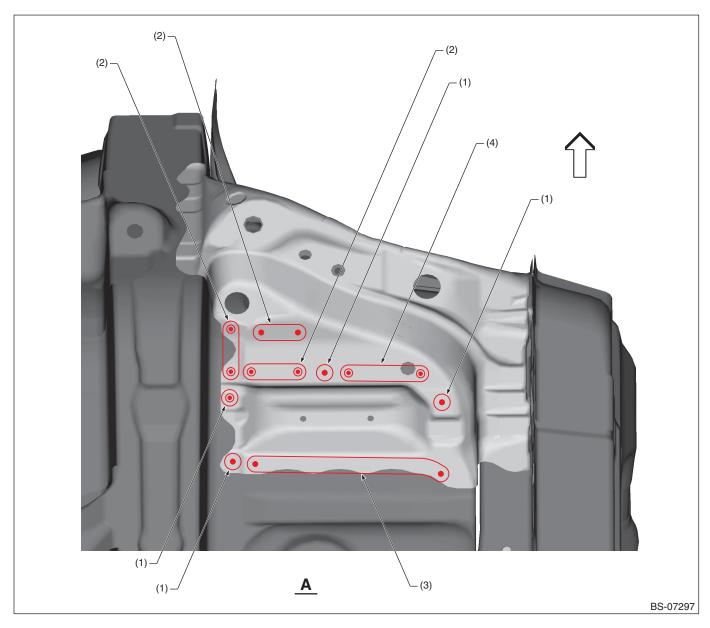


(1) 2 points (2) 1 point

## B: INSTALLATION • Overall view



#### • View A

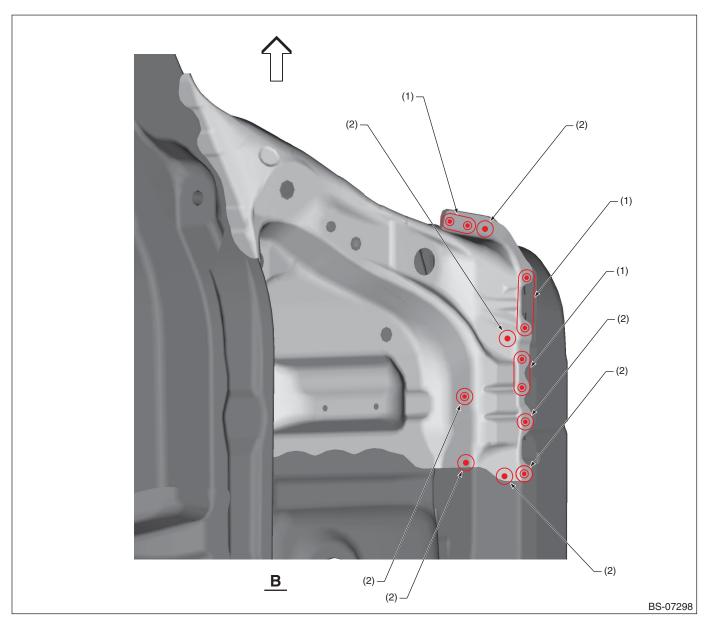


- (1) 1 point
- (2) 2 points

(3) 5 points

(4) 3 points

#### • View B



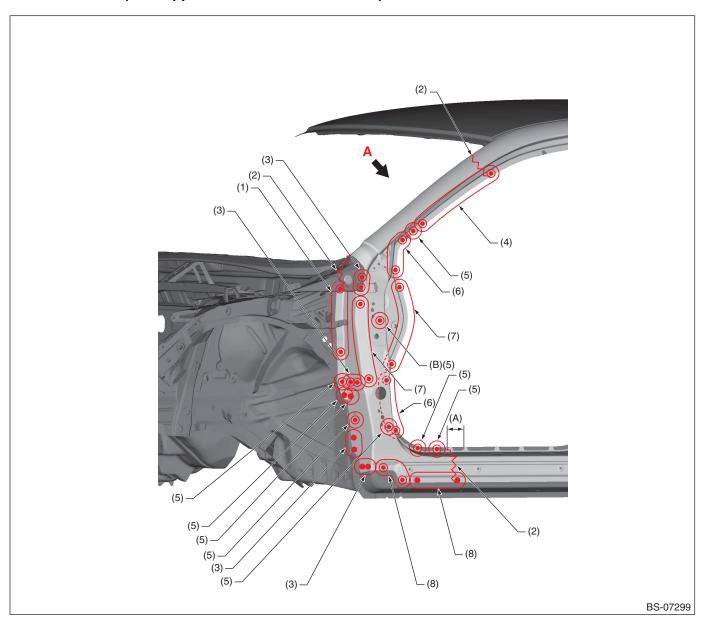
(1) 2 points

(2) 1 point

### 8-13. Front Pillar (Partial replacement)

#### A: REMOVAL

• Overall view 1 (Side upper frame removal condition)



(A) 70 mm (2.76 in)

(B) Only LH

(1) 6 points

(4) 11 points

(7) 7 points

(2) Cut position

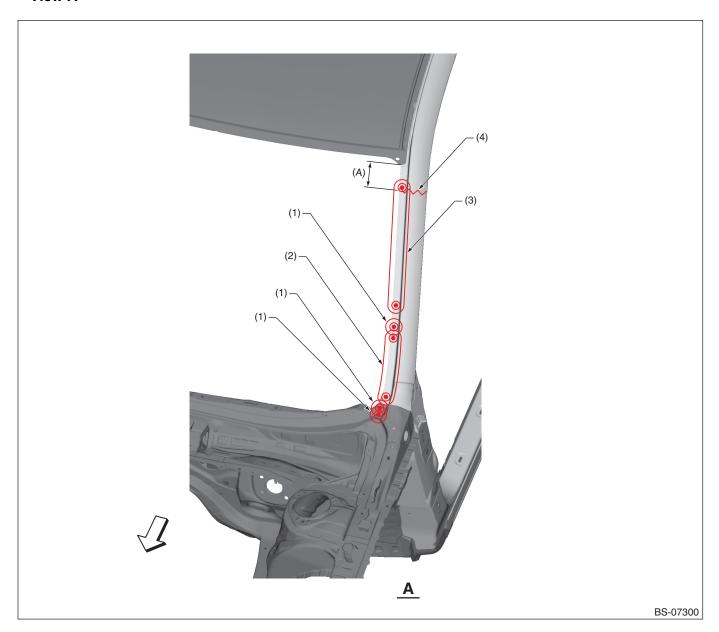
(5) 1 point

8) 3 points

(3) 2 points

(6) 5 points

#### • View A



(A) 100 mm (3.94 in)

6 points

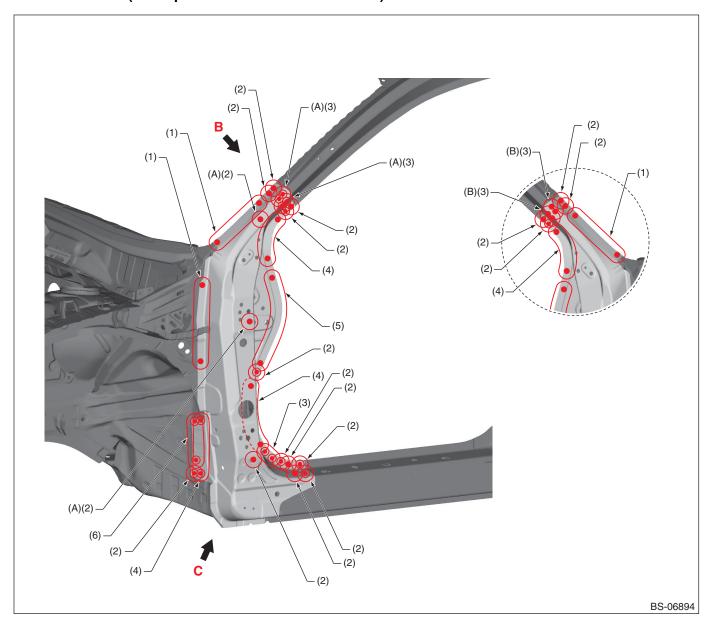
(1) 1 point

(2)

(3) 12 points

(4) Cut position

### • Overall view 2 (Front pillar outer removal condition)



(A) Only LH

(B) Only RH

(1) 6 points

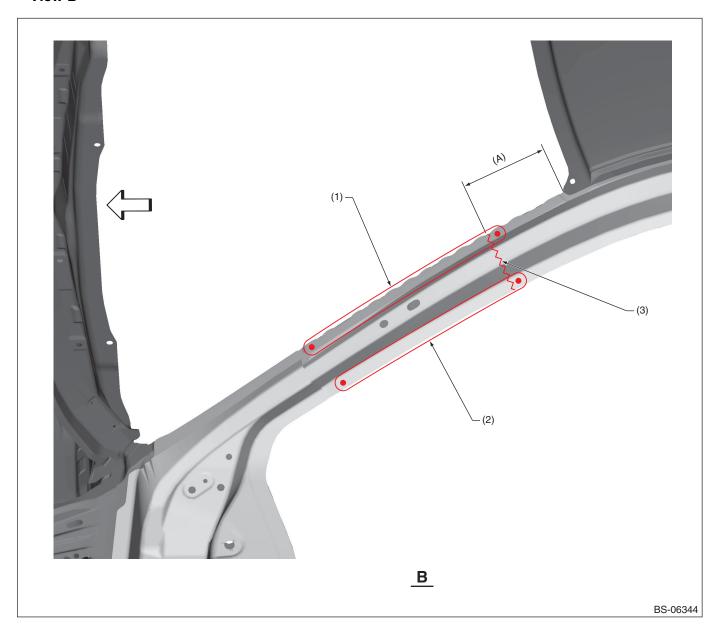
(3) 2 points

(2) 1 point

(4) 5 points

- (5) 7 points
- (6) 4 points

#### • View B

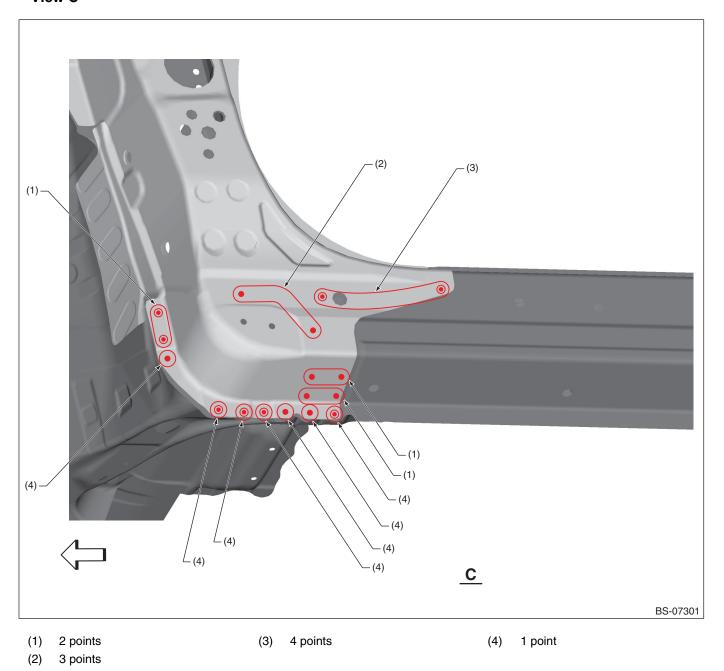


- (A) 130 mm (5.12 in)
- (1) 11 points

(2) 10 points

(3) Cut position

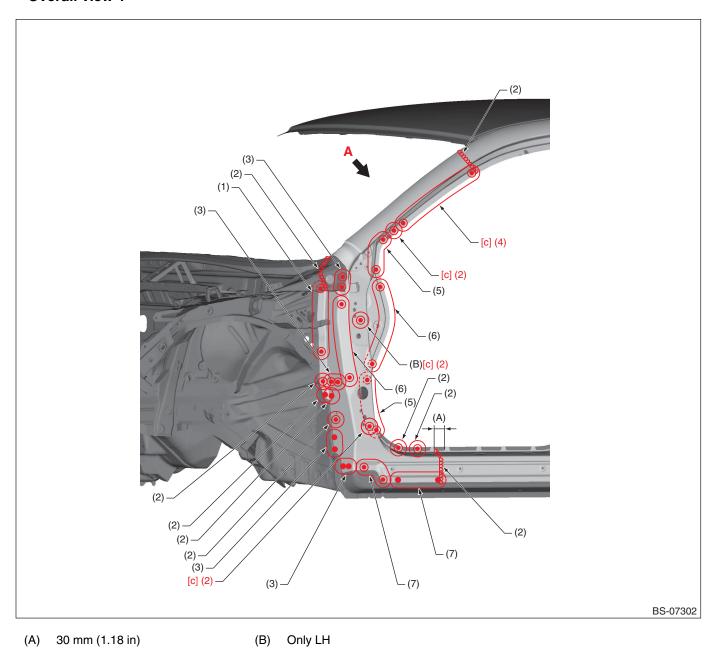
#### • View C



BS - 122

#### **B: INSTALLATION**

#### Overall view 1



(1) 6 points

(2)

- (4) 11 points

7 points (6)

2 points

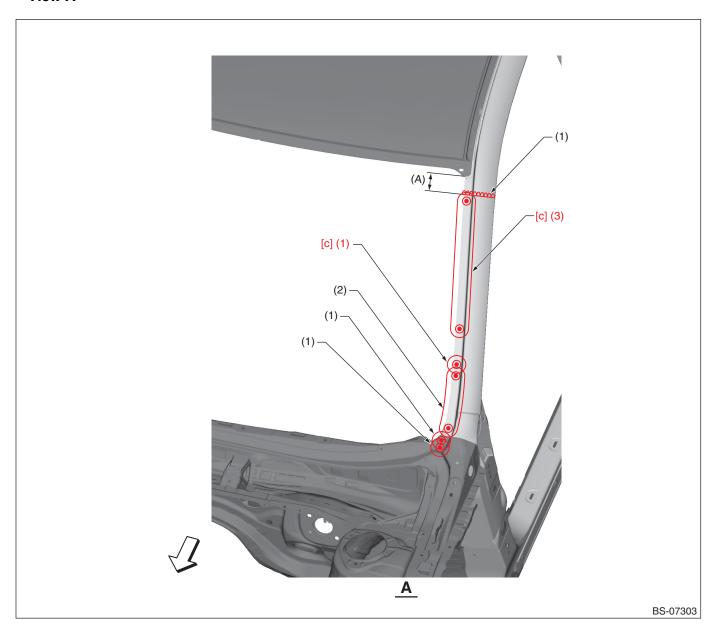
1 point

(5) 5 points (7) 3 points

[c] Spot welding

Compression: 3.5 kN, Current: 7.5 kA, Welding time: 25 cyc

#### View A



- (A) 60 mm (2.36 in)
- (1) 1 point

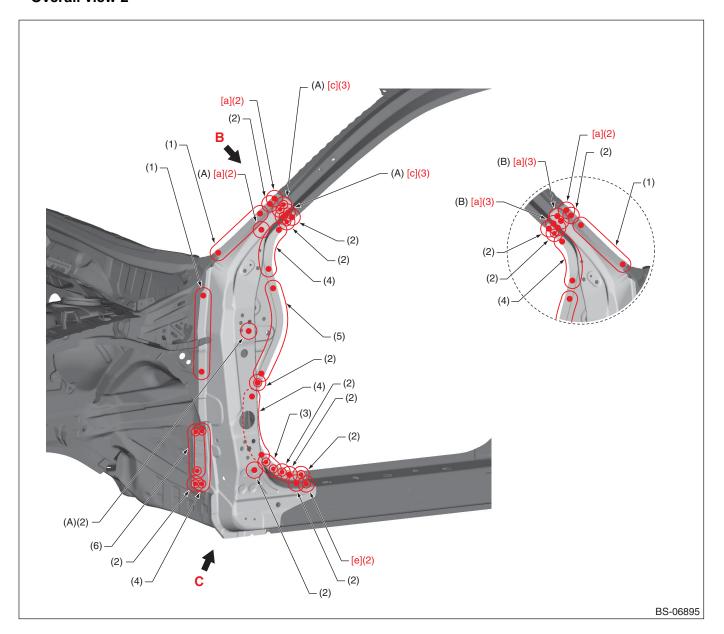
(2) 6 points

(3) 12 points

[c] Spot welding

Compression: 3.5 kN, Current: 7.5 kA, Welding time: 25 cyc

#### Overall view 2



(A) Only LH

(B) Only RH

(1) 6 points

[c] Spot welding

1 point

(2)

(3) 2 points

(4) 5 points

(5) 7 points

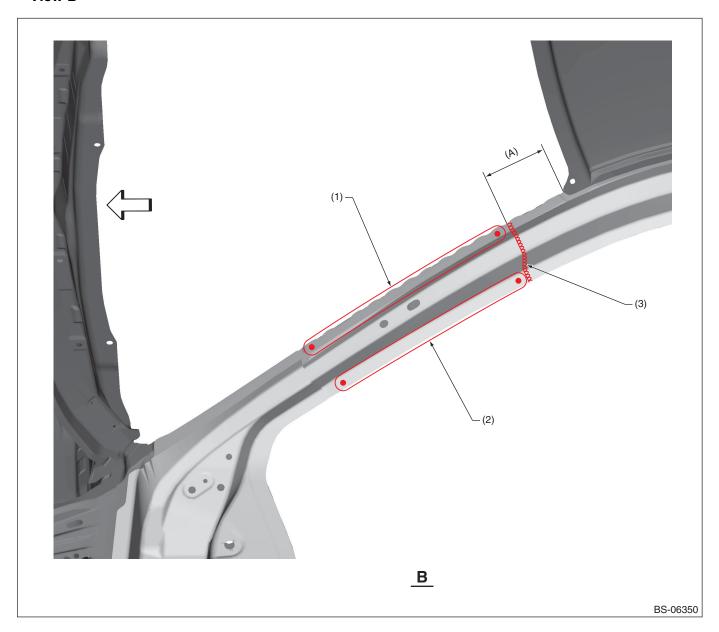
4 points

[a] Spot welding Compression: 4.0 kN, Current: 8.0 kA, Welding time: 15 cyc

[e] Spot welding Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

Compression: 3.5 kN, Current: 7.5 kA, Welding time: 25 cyc

#### • View B

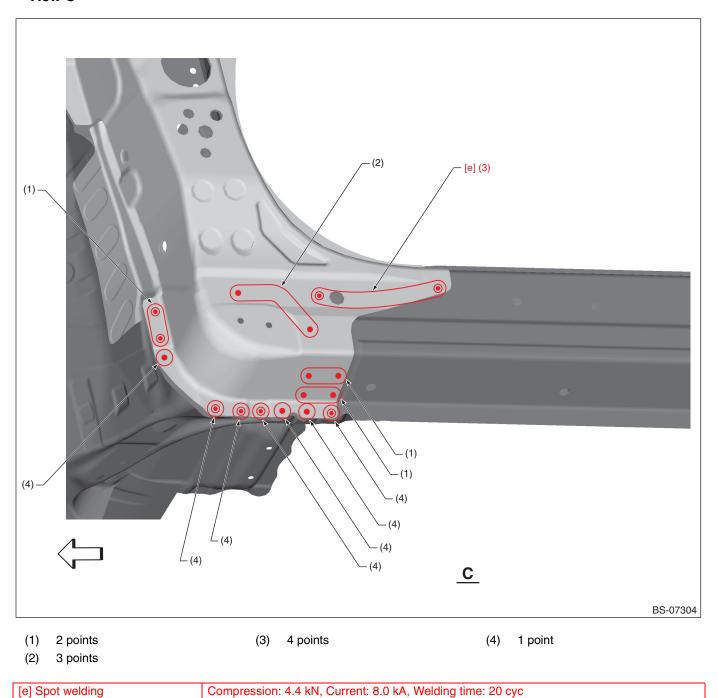


- (A) 100 mm (3.94 in)
- (1) 11 points

(2) 10 points

(3) 1 point

#### • View C

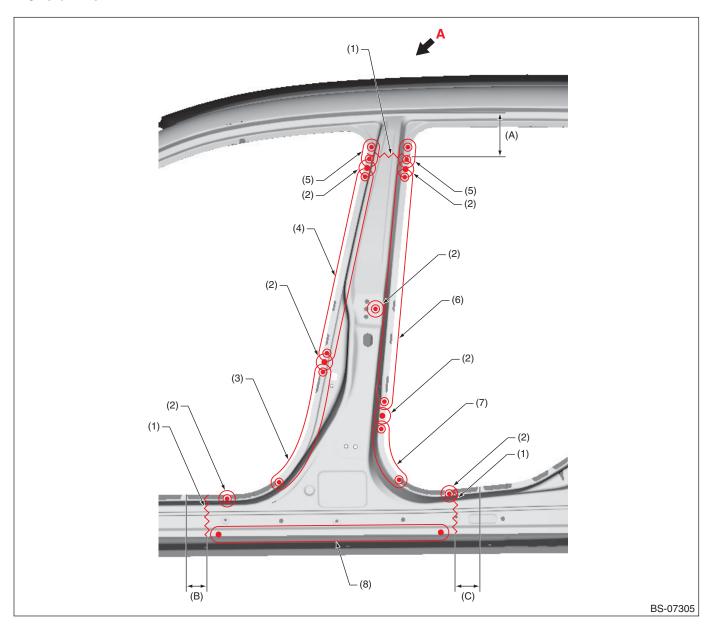


BS - 127

### 8-14. Center Pillar Outer (Partial replacement)/OUTBACK

#### A: REMOVAL

• Overall view

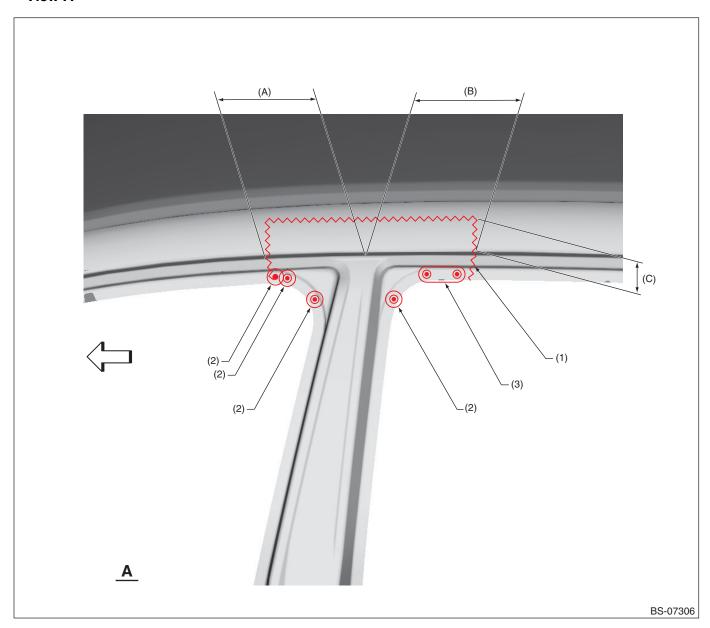


- (A) 115 mm (4.53 in)
- (1) Cut position
- (2) 1 point
- (3) 11 points

- (B) 70 mm (2.76 in)
- (4) 12 points
- (5) 2 points
- (6) 13 points

- (C) 80 mm (3.15 in)
- (7) 7 points
- 8) 9 points

#### View A



- (A) 160 mm (6.30 in)
- (B) 170 mm (6.69 in)

(C) 50 mm (1.97 in)

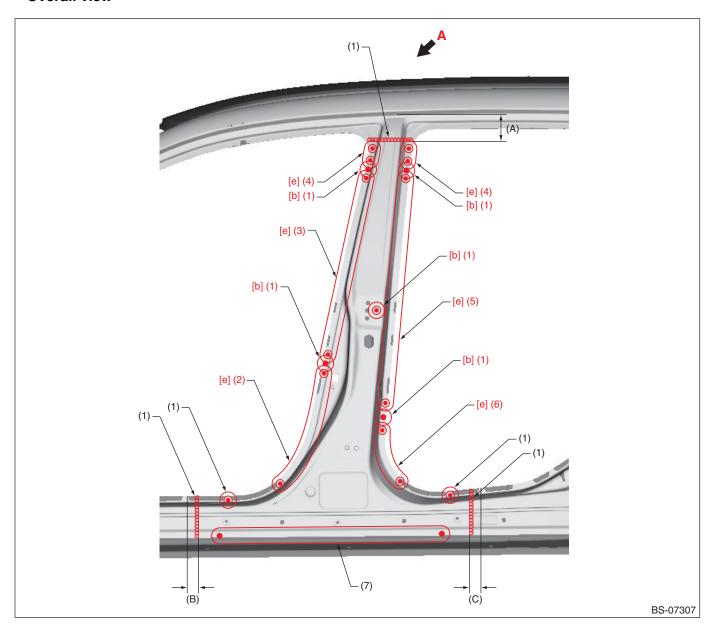
(1) Cut position

(2) 1 point

3) 2 points

#### **B: INSTALLATION**

#### Overall view



(A) 80 mm (3.15 in)

(B) 30 mm (1.18 in)

(C) 40 mm (1.57 in)

(1) 1 point

(4) 2 points

(6) 7 points

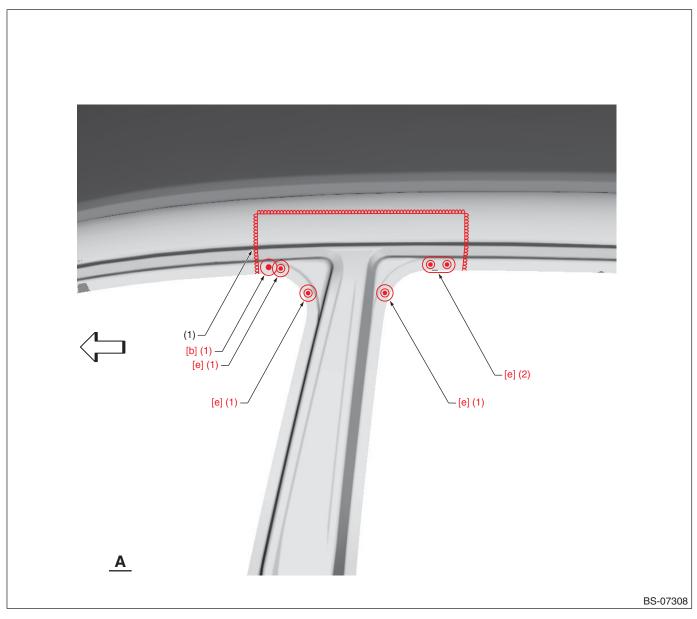
(2) 11 points(3) 12 points

(5) 13 points

(7) 9 points

[b] Spot welding	Compression: 4.0 kN, Current: 6.5 kA, Welding time: 15 cyc
[e] Spot welding	Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cvc

#### • View A



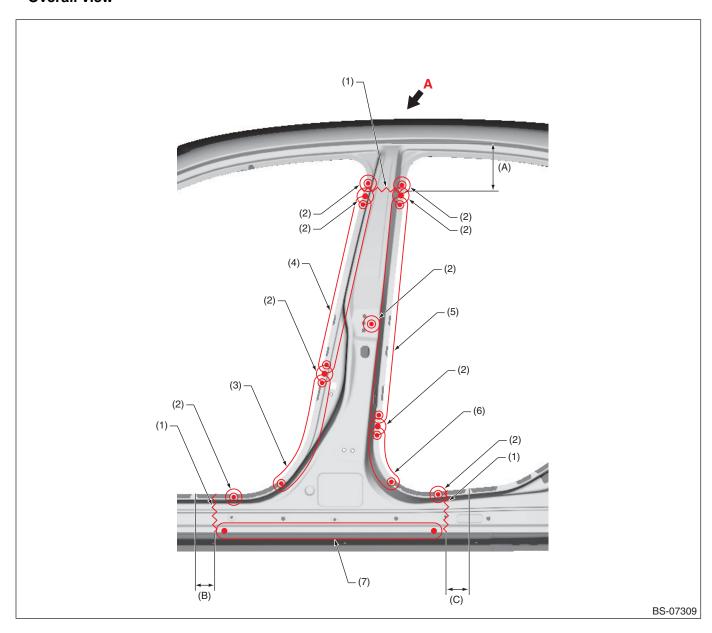
(1) 1 point (2) 2 points

[b] Spot welding	Compression: 4.0 kN, Current: 6.5 kA, Welding time: 15 cyc
[e] Spot welding	Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

### 8-15. Center Pillar Outer (Partial replacement)/SEDAN

#### A: REMOVAL

Overall view

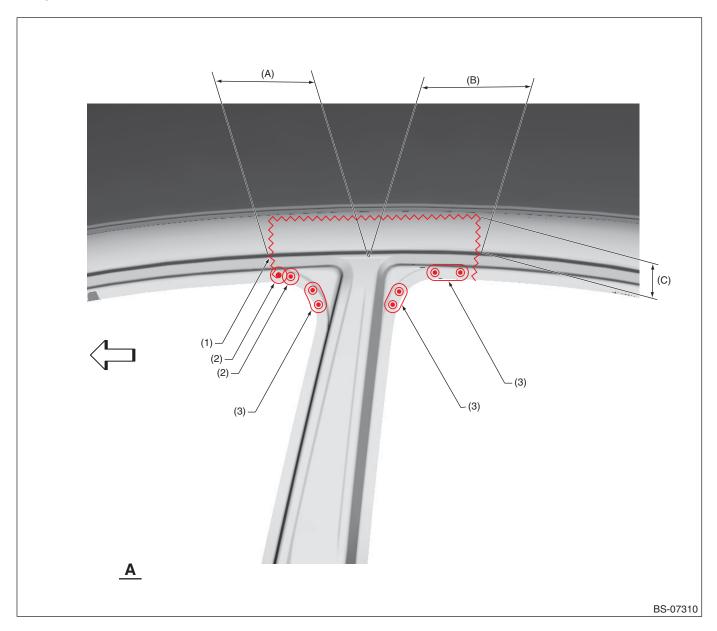


- (A) 150 mm (5.91 in)
- (1) Cut position
- (2) 1 point
- (3) 11 points

- (B) 70 mm (2.76 in)
- (4) 12 points
- (5) 13 points

- (C) 80 mm (3.15 in)
- (6) 7 points
- (7) 9 points

#### View A



- (A) 160 mm (6.30 in)
- (B) 160 mm (6.30 in)

(C) 50 mm (1.97 in)

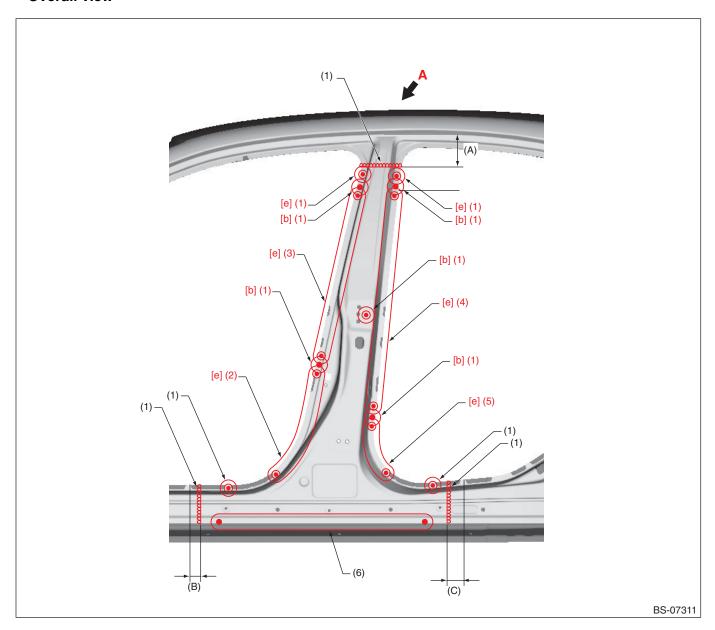
(1) Cut position

(2) 1 point

3) 2 points

#### **B: INSTALLATION**

#### Overall view



(A) 110 mm (4.33 in)

(B) 30 mm (1.18 in)

(C) 40 mm (1.57 in)

(1) 1 point

(3) 12 points

(5) 7 points

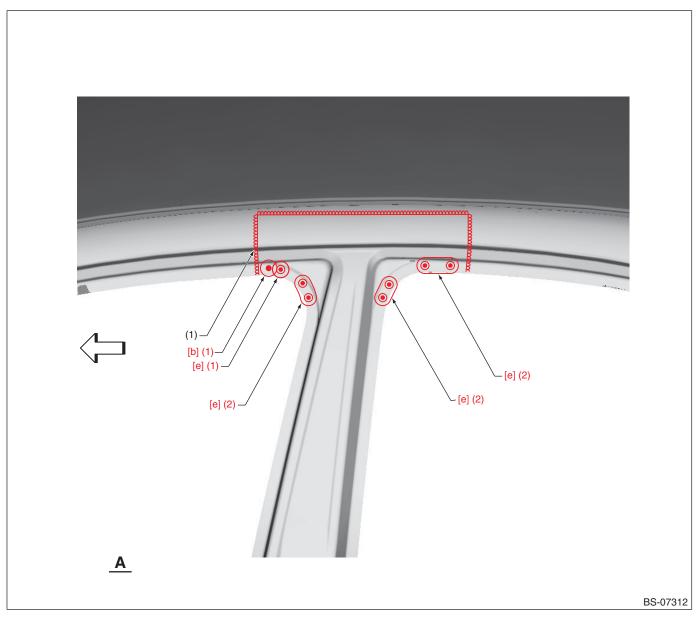
(2) 11 points

(4) 13 points

(6) 9 points

[b] Spot welding	Compression: 4.0 kN, Current: 6.5 kA, Welding time: 15 cyc
[e] Spot welding	Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

#### • View A

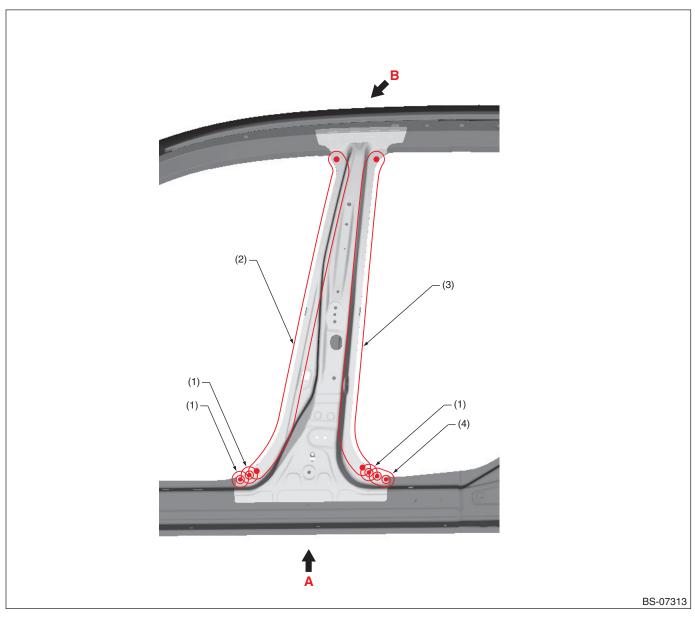


(1) 1 point (2) 2 points

[b] Spot welding	Compression: 4.0 kN, Current: 6.5 kA, Welding time: 15 cyc
[e] Spot welding	Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

# 8-16. Center Pillar Reinforcement (Total replacement)/OUTBACK A: REMOVAL

• Overall view (Center pillar outer removal condition)

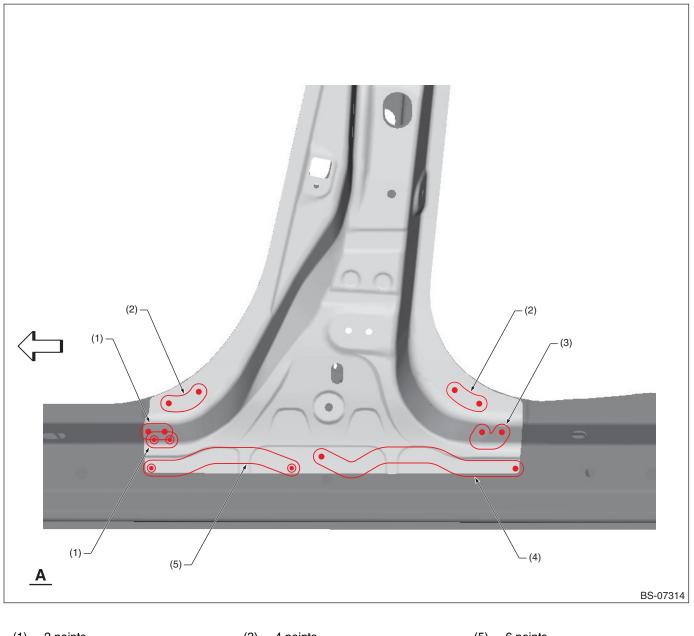


- (1) 1 point
- (2) 26 points

(3) 23 points

(4) 2 points

#### • View A

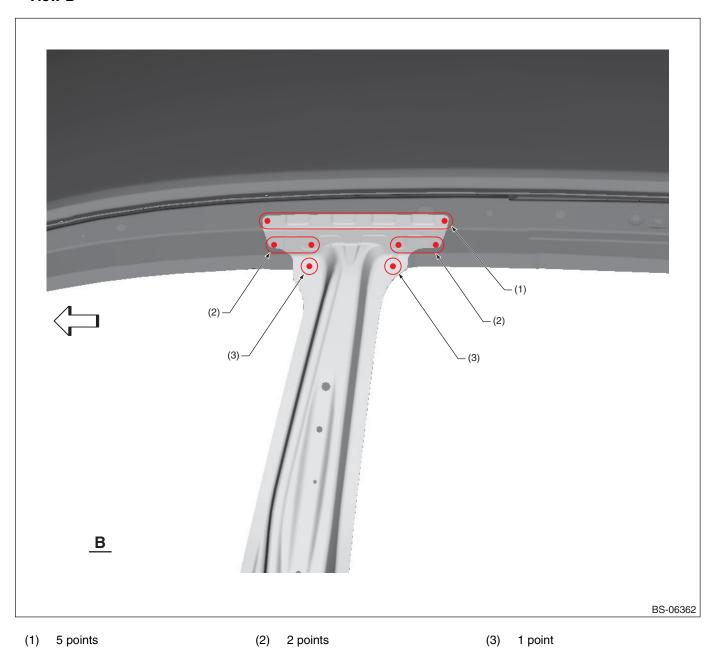


- 2 points (1)
- 3 points (2)

- 4 points (3)
- 8 points (4)

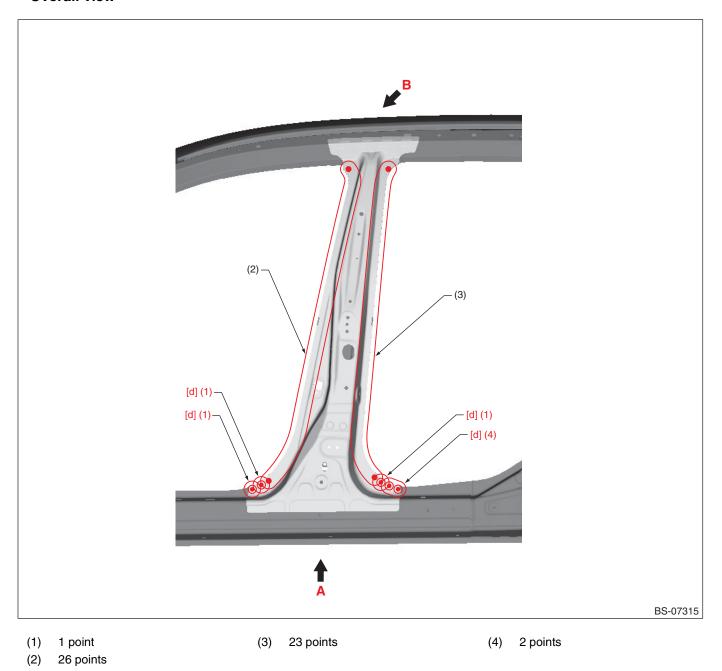
(5) 6 points

#### • View B



### **B: INSTALLATION**

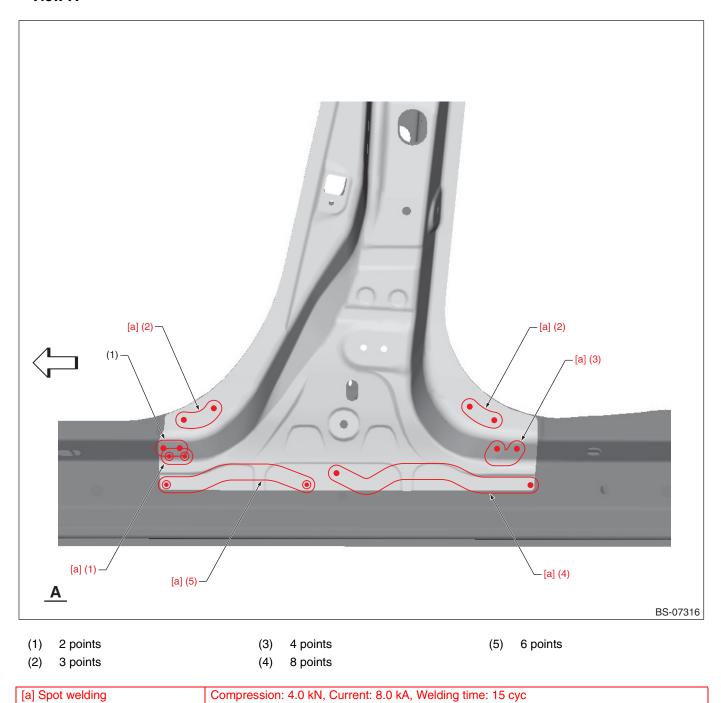
#### Overall view



[d] Spot welding

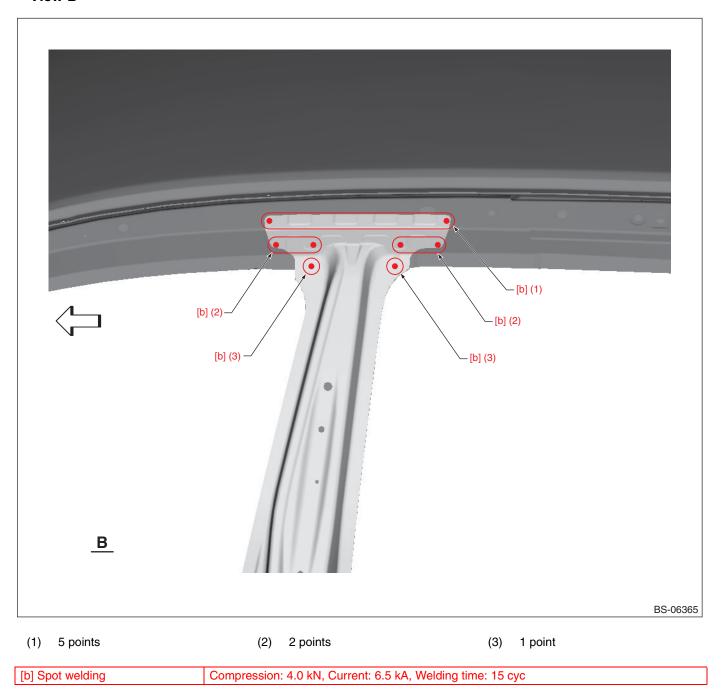
Compression: 4.4 kN, Current: 8.0 kA, Welding time: 25 cyc

#### View A



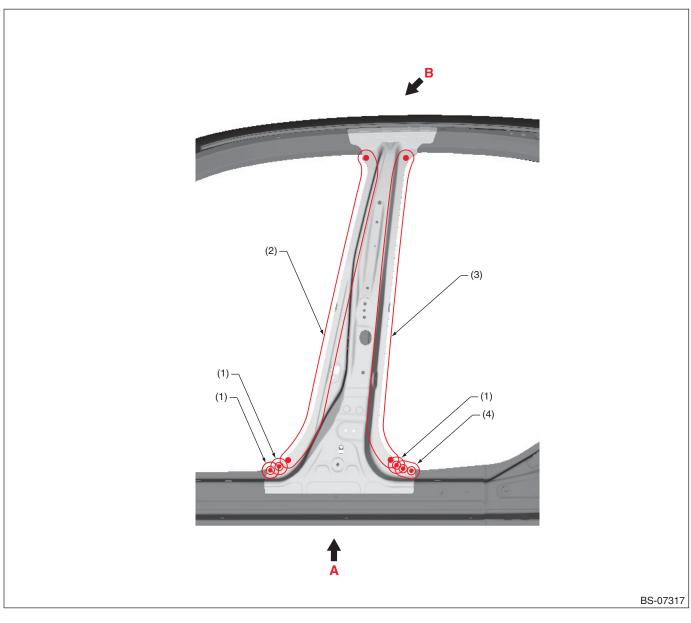
**BS - 140** 

#### View B



# 8-17. Center Pillar Reinforcement (Total replacement)/SEDAN A: REMOVAL

• Overall view (Center pillar outer removal condition)

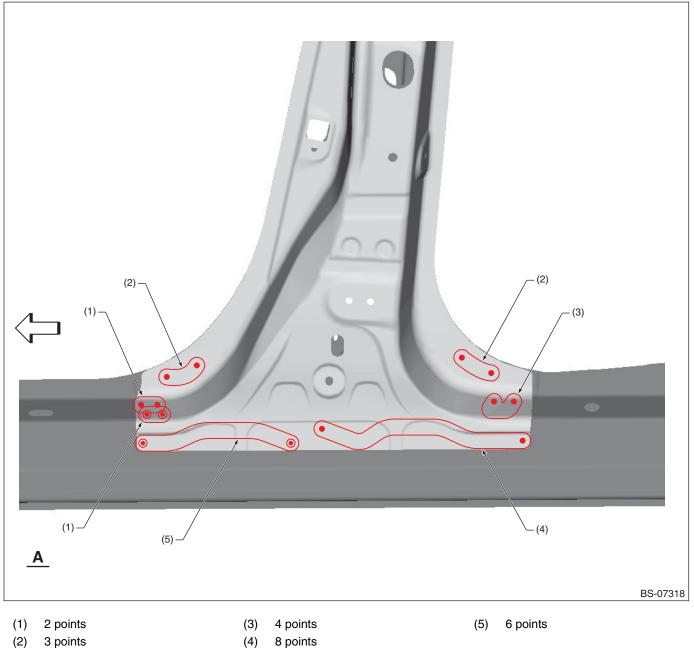


- (1) 1 point
- (2) 26 points

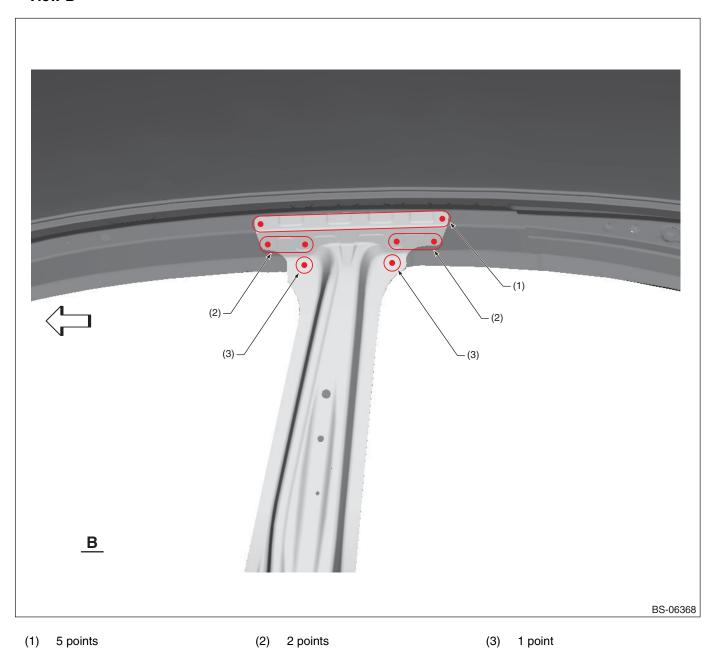
(3) 23 points

(4) 2 points

#### • View A

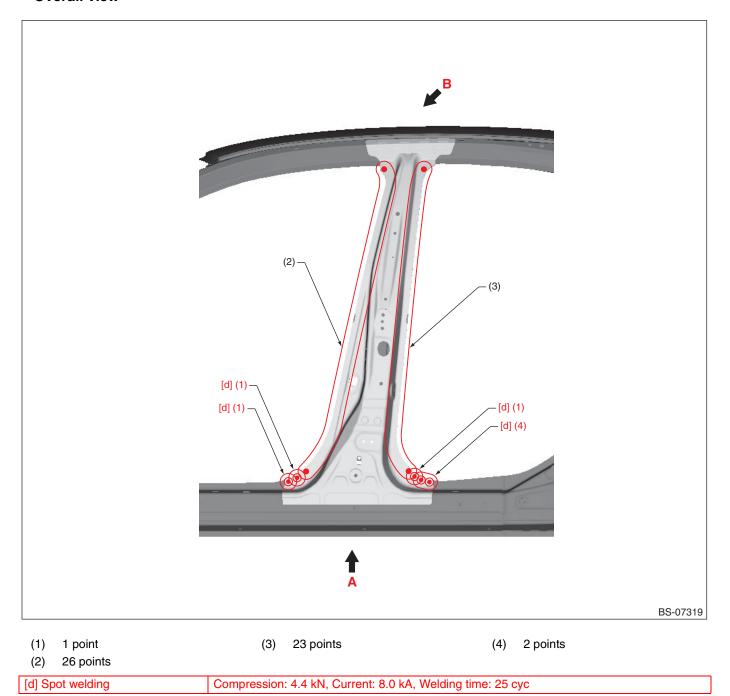


#### • View B

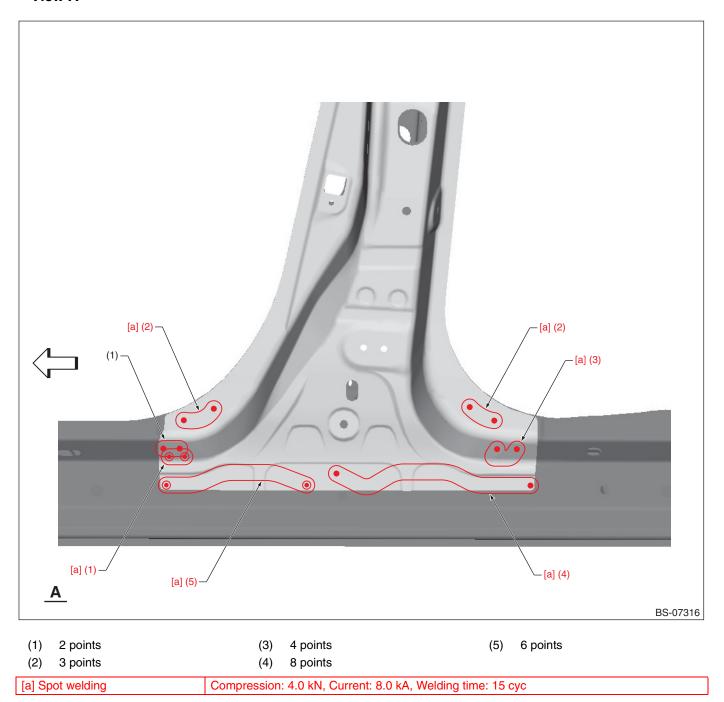


## **B: INSTALLATION**

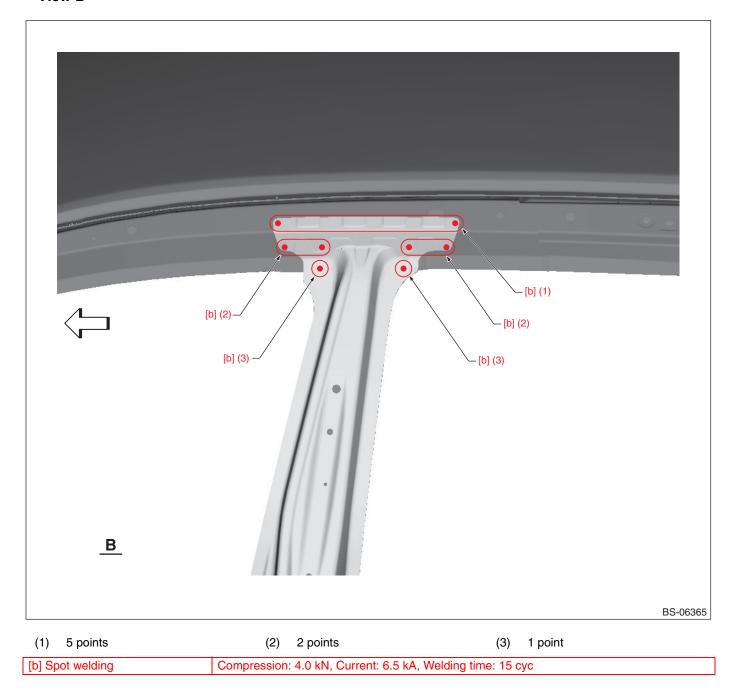
#### Overall view



#### View A



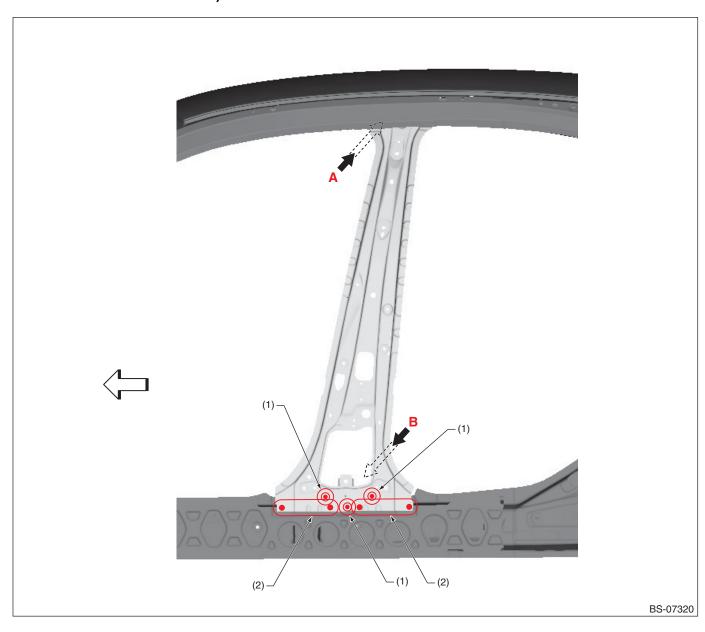
#### View B



## 8-18. Center Pillar Inner (Total replacement)

#### A: REMOVAL

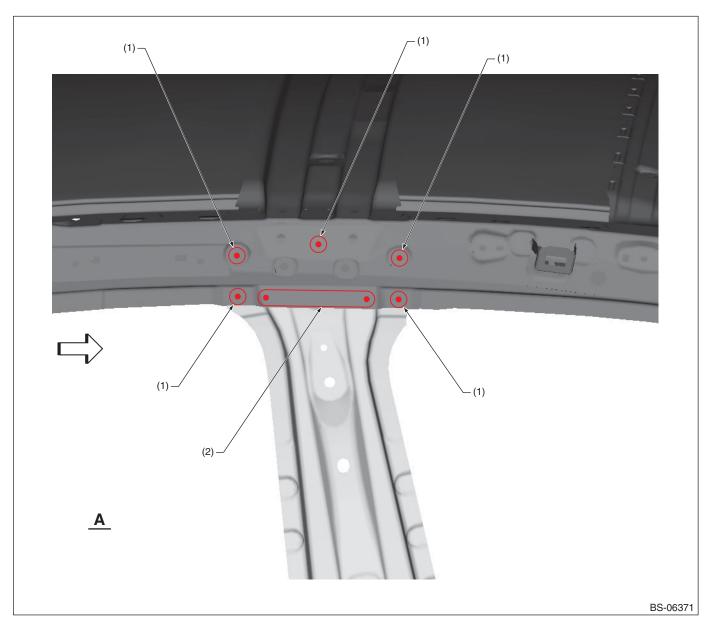
• Overall view (Center pillar outer, center pillar renforcement, side sill outer and side sill reinforcement outer removal condition)



(1) 1 point

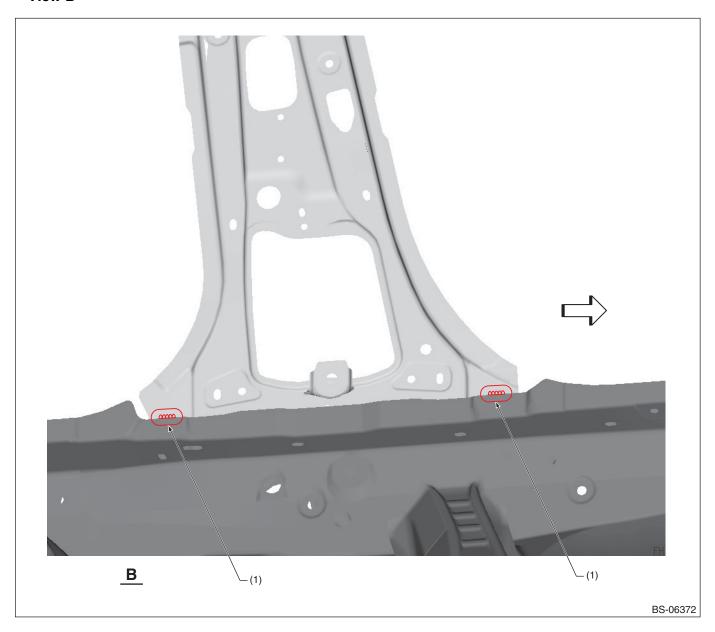
(2) 5 points

## • View A



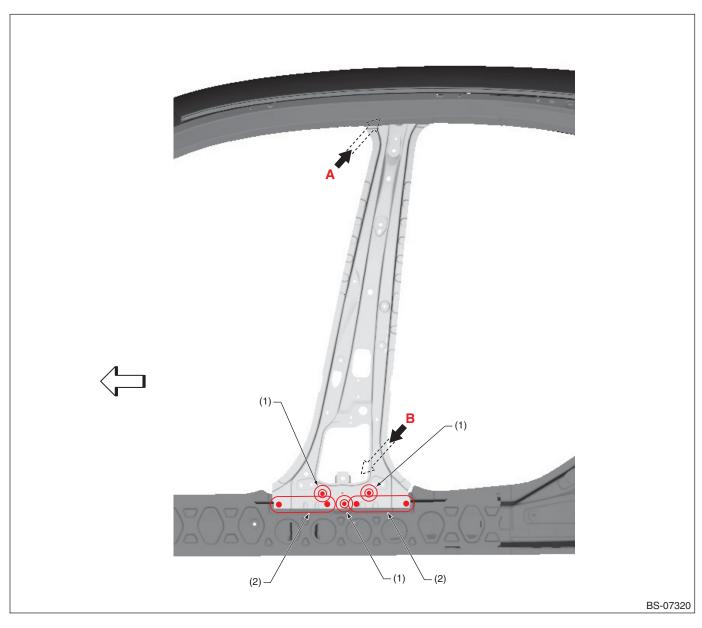
(1) 1 point (2) 3 points

## • View B



(1) 1 point

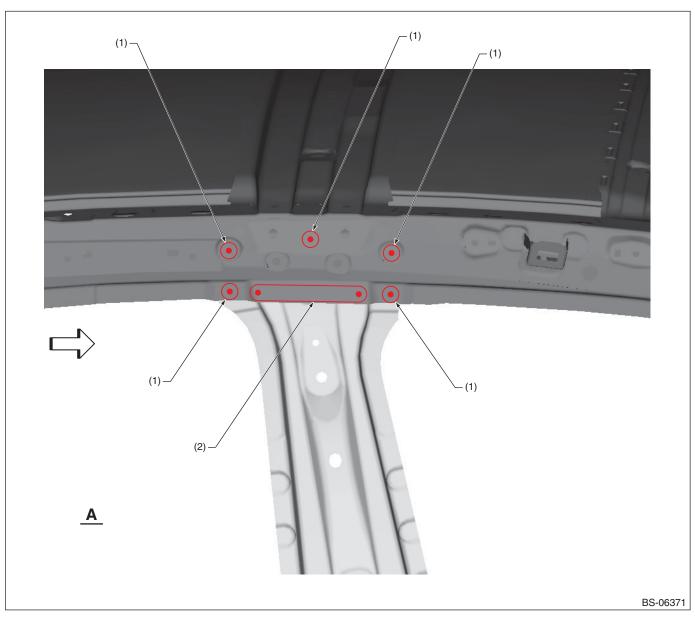
# B: INSTALLATION • Overall view



(1) 1 point

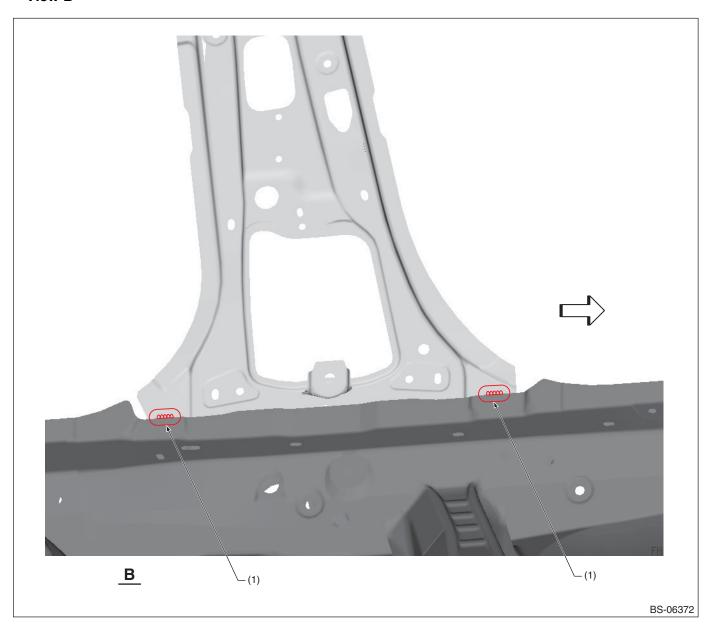
5 points

## • View A



(1) 1 point (2) 3 points

## • View B

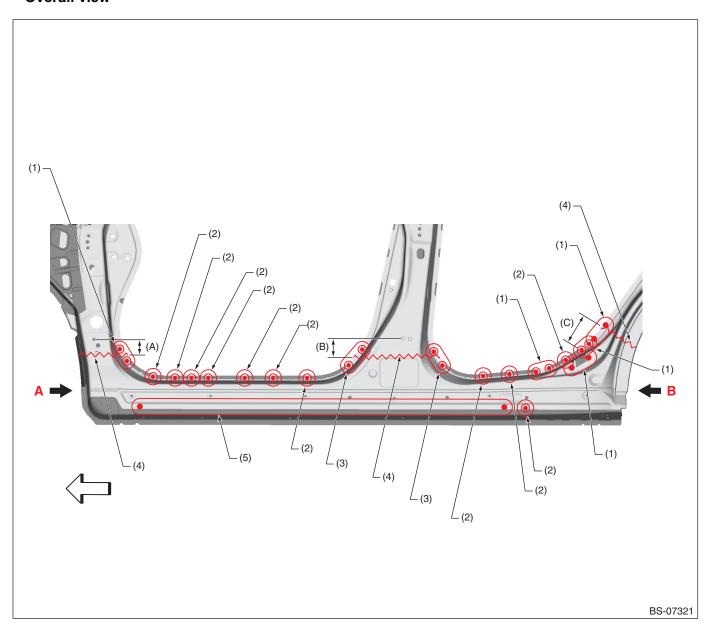


(1) 1 point [25 mm (0.98 in)]

## 8-19. Side Sill Outer (Partial replacement)

#### A: REMOVAL

Overall view



(A) 55 mm (2.17 in)

(B) 70 mm (2.76 in)

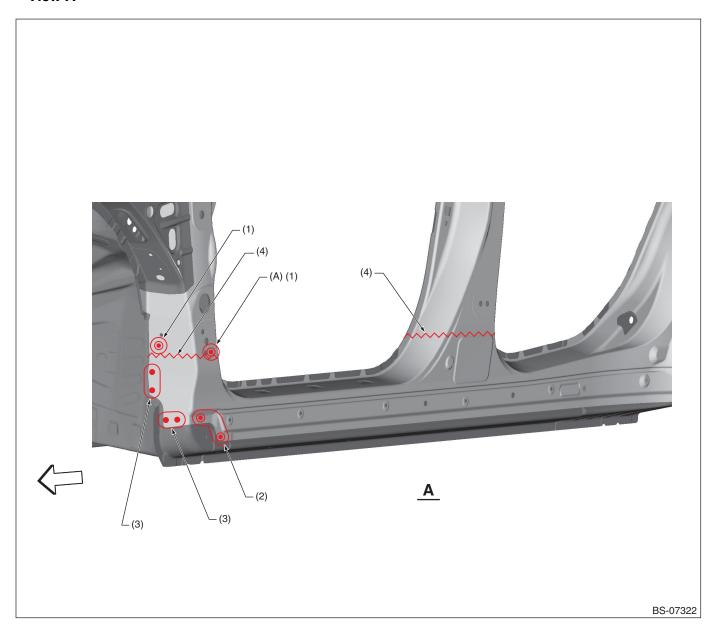
(C) 120 mm (4.72 in)

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

- (3) 3 points
- (4) Cut position

(5) 17 points

## • View A



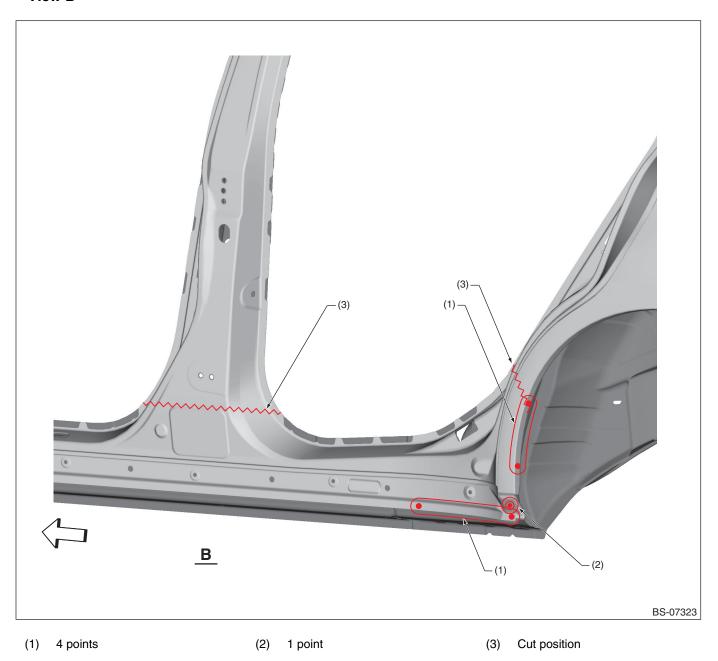
- (A) Only LH
- (1) 1 point

3 points

(3) 2 points

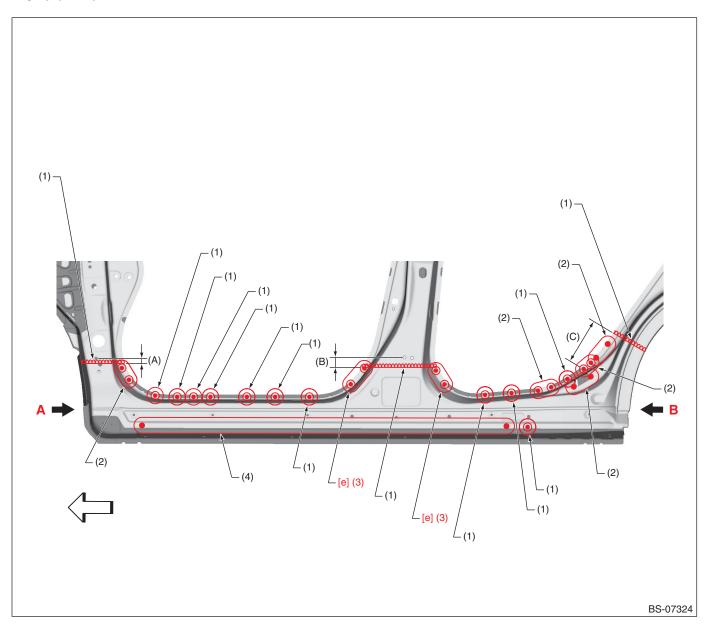
(4) Cut position

## • View B



## **B: INSTALLATION**

#### Overall view



(A) 15 mm (0.59 in)

2 points

(B) 30 mm (1.18 in)

(C) 140 mm (5.51 in)

(1) 1 point

(2)

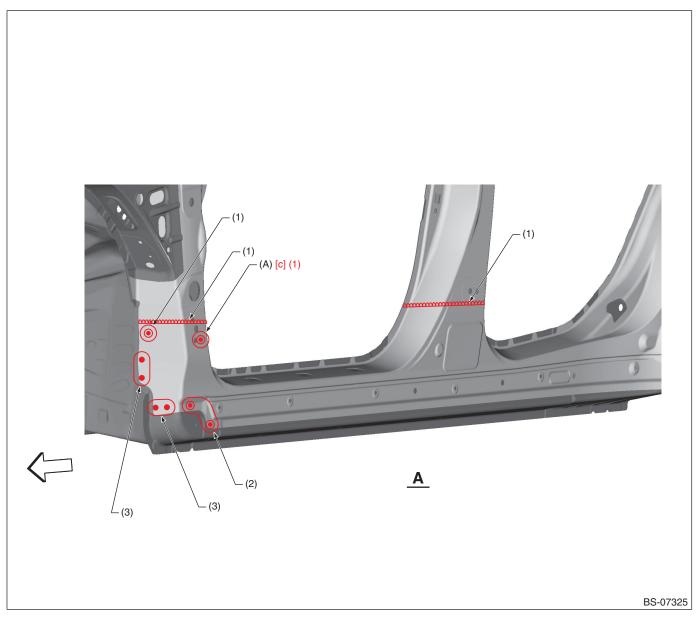
(3) 3 points

(4) 17 points

[e] Spot welding

Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

#### View A



- (A) Only LH
- (1) 1 point

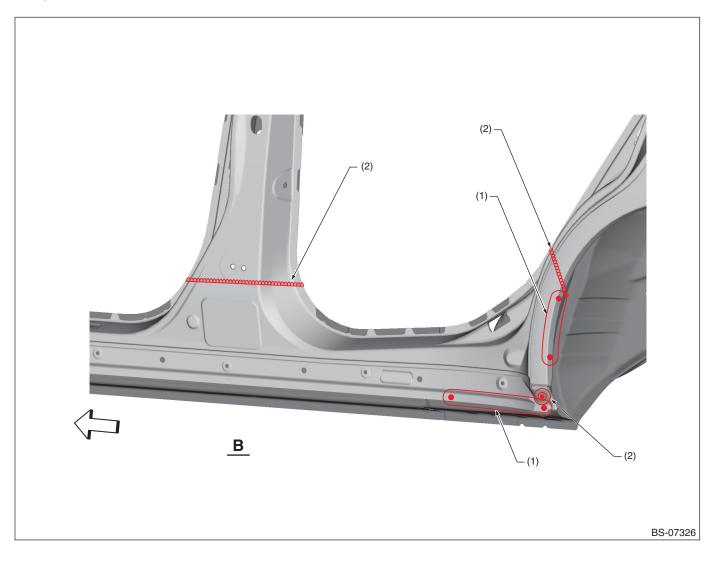
(2) 3 points

(3) 2 points

[c] Spot welding

Compression: 3.5 kN, Current: 7.5 kA, Welding time: 25 cyc

## • View B



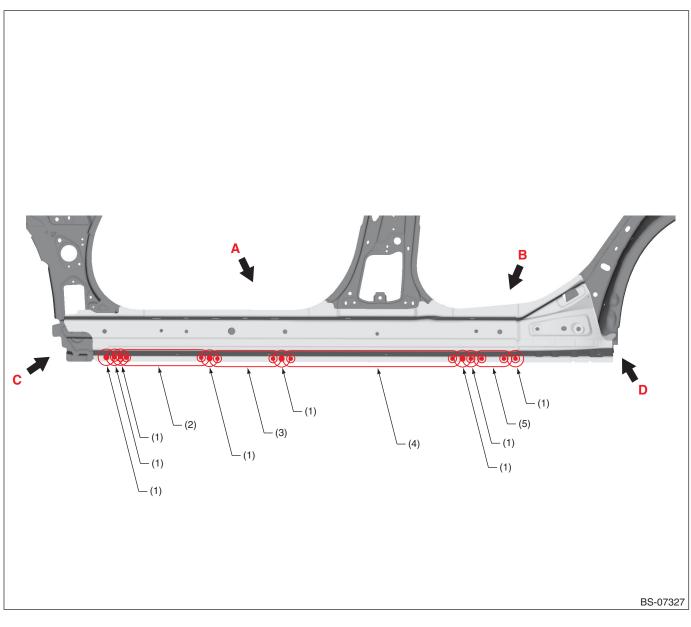
(1) 4 points

(2) 1 point

## 8-20. Side Sill Reinforcement Outer (Total replacement)

#### A: REMOVAL

• Overall view (Side sill outer removal condition)

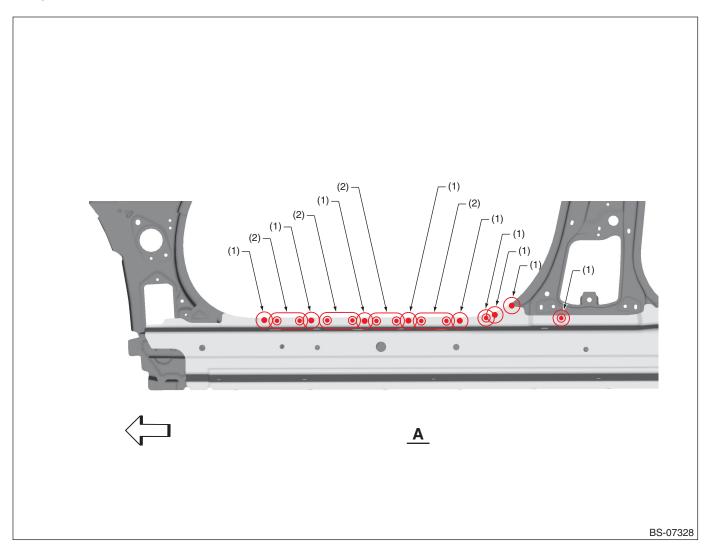


- (1) 1 point
- (2) 5 points

- (3) 4 points
- (4) 10 points

(5) 3 points

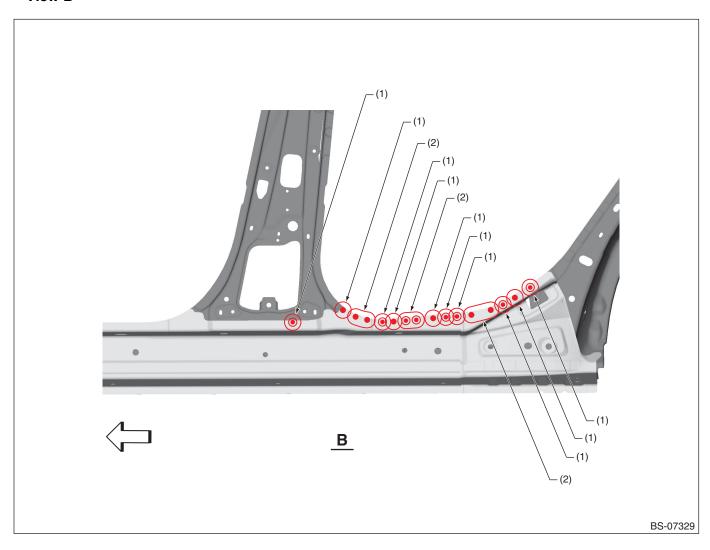
## • View A



(1) 1 point

(2) 2 points

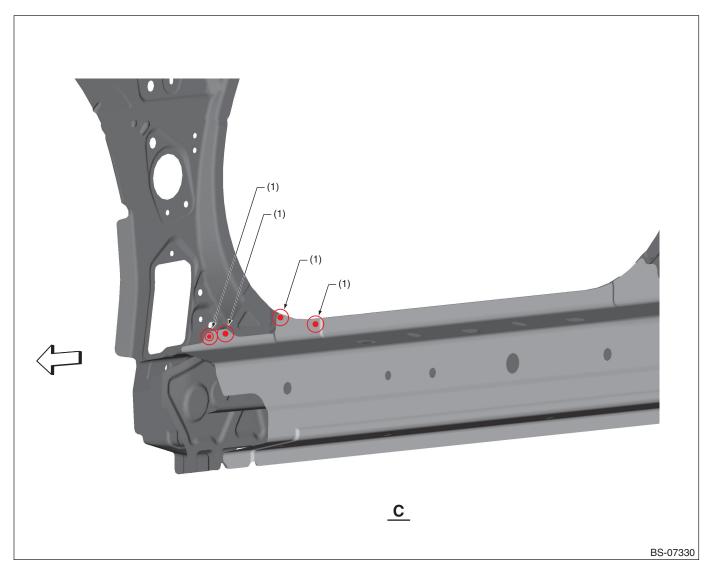
## • View B



(1) 1 point

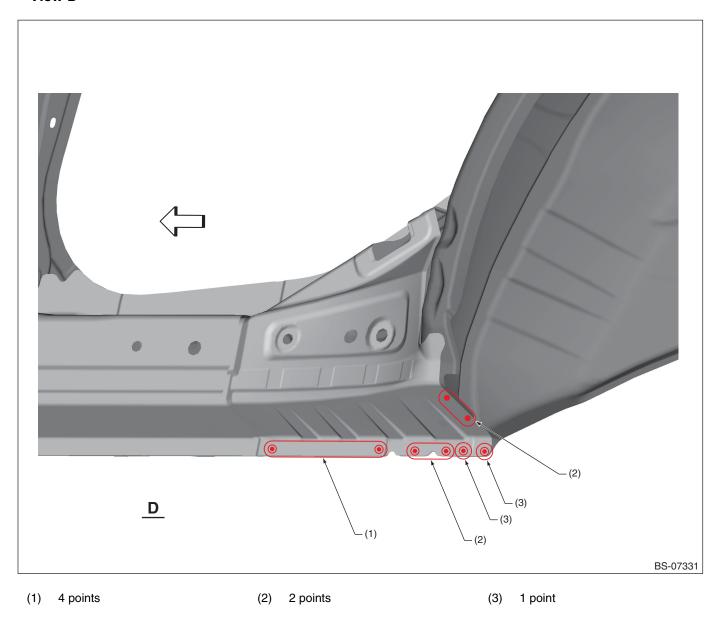
(2) 2 points

## • View C

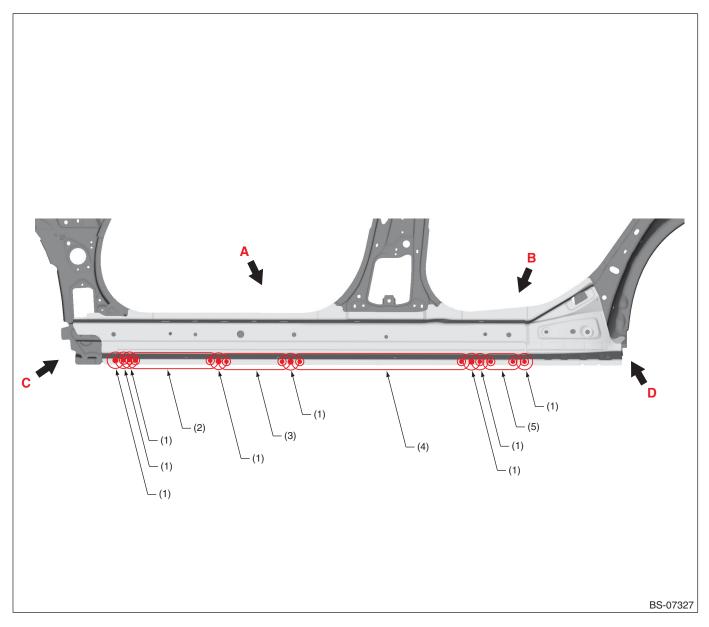


(1) 1 point

## • View D



# B: INSTALLATION • Overall view

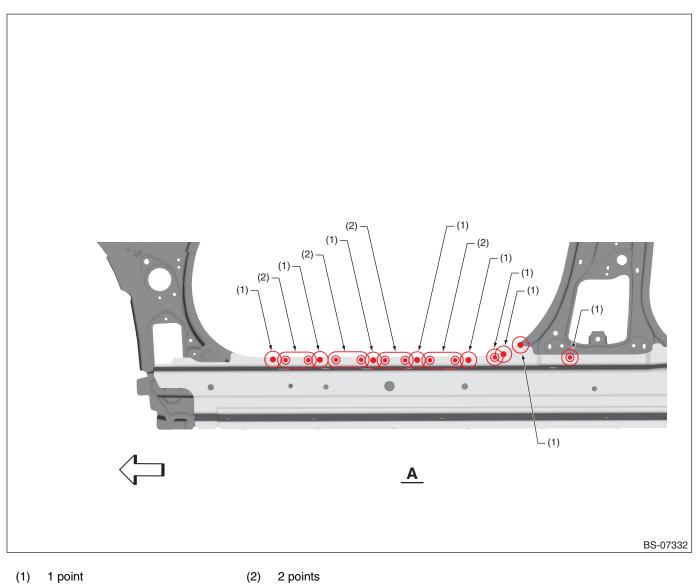


- 1 point (1)
- (2) 5 points

- (3) 4 points
- 10 points (4)

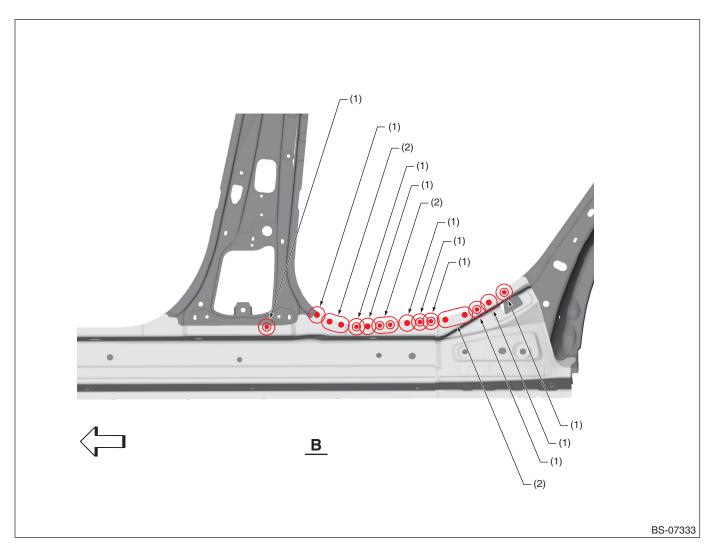
(5) 3 points

## • View A



(1) 1 point

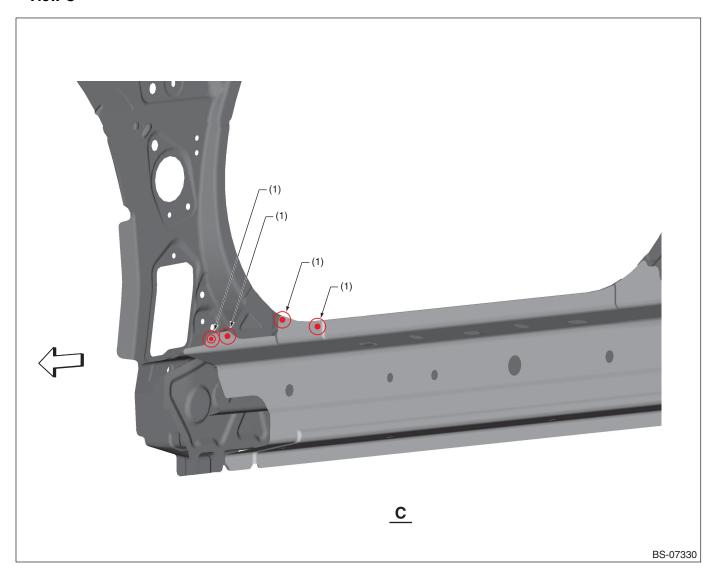
## • View B



(1) 1 point

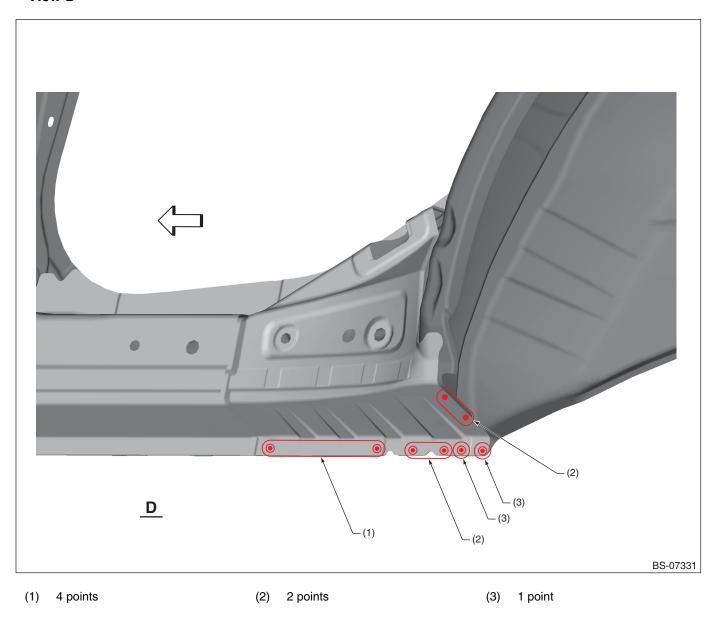
(2) 2 points

## • View C



(1) 1 point

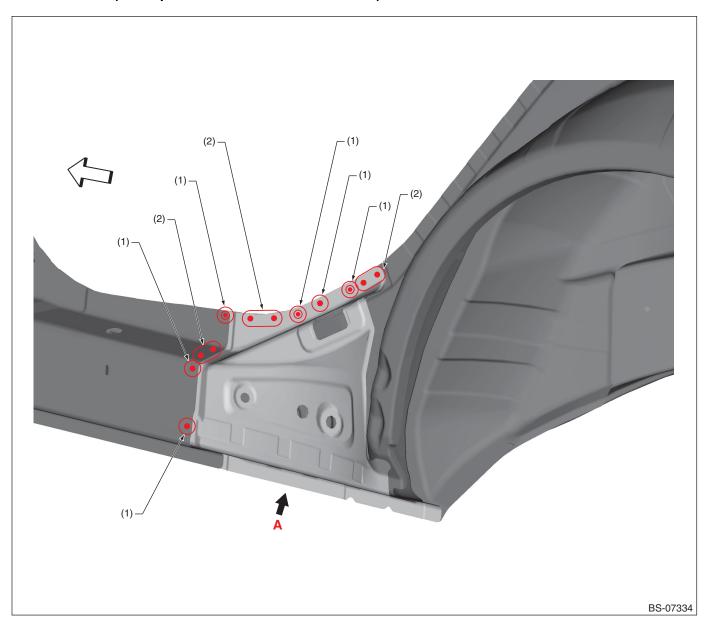
## • View D



## 8-21. Side Sill Reinforcement Outer Rear (Total replacement)

#### A: REMOVAL

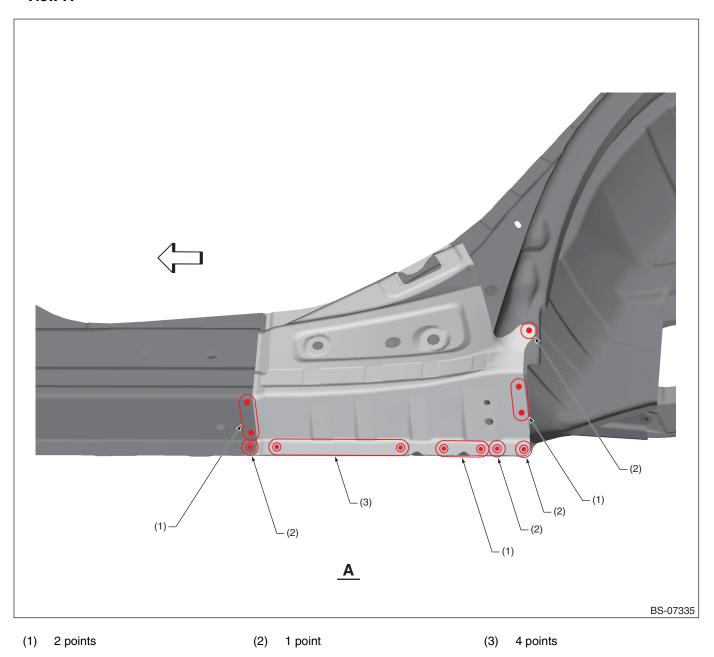
• Overall view (Rear quarter outer removal condition)



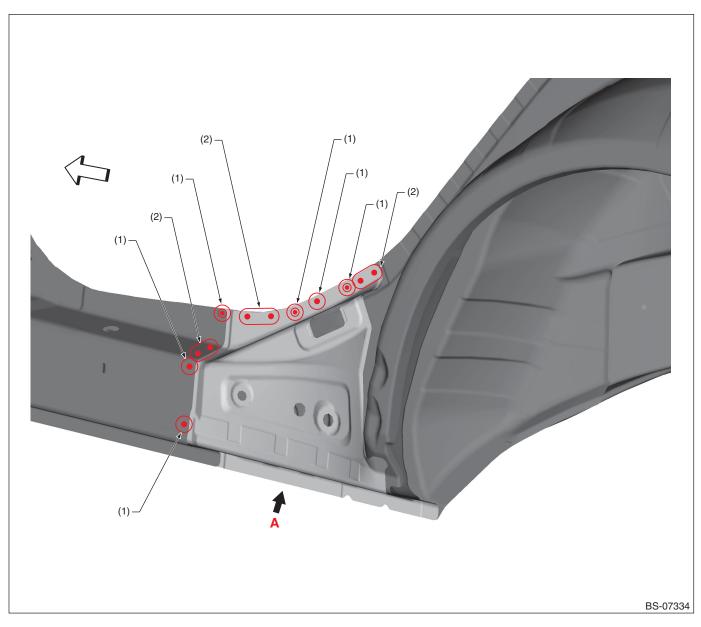
(1) 1 point

(2) 2 points

## • View A



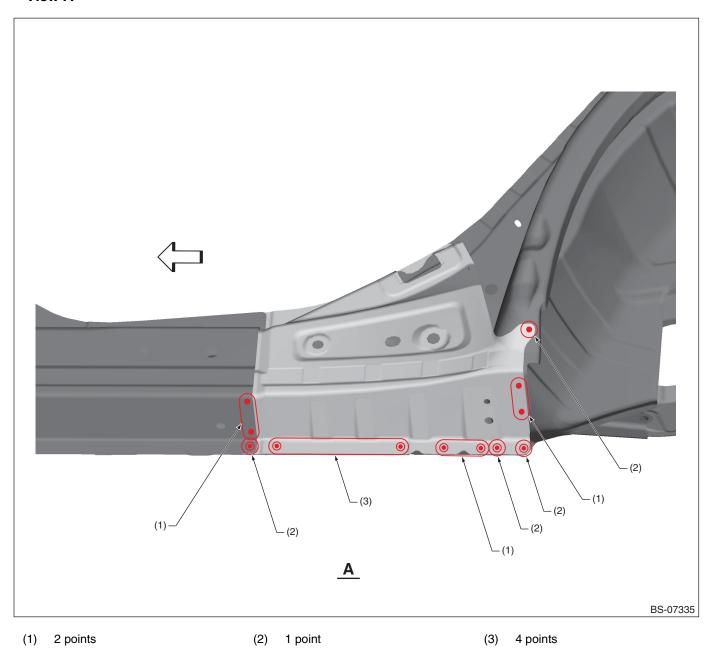
# B: INSTALLATION • Overall view



(1) 1 point

(2) 2 points

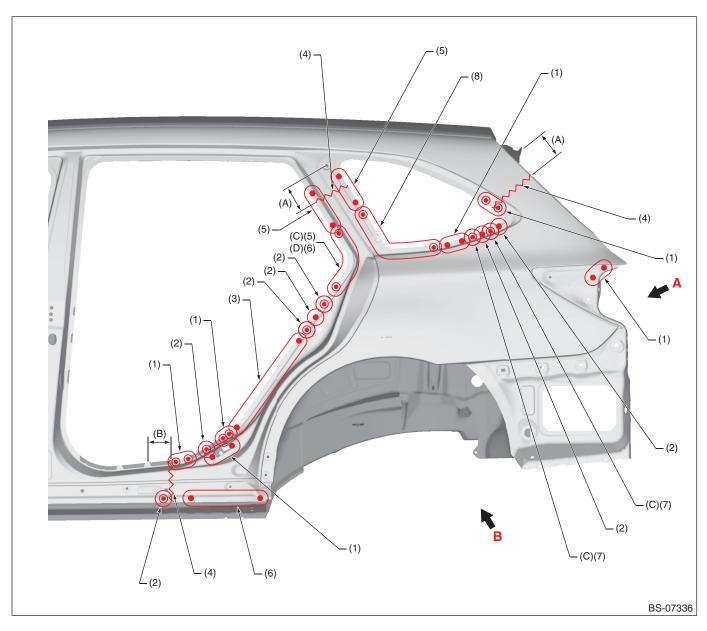
## • View A



## 8-22. Rear Quarter (Partial replacement)/OUTBACK

#### A: REMOVAL

Overall view

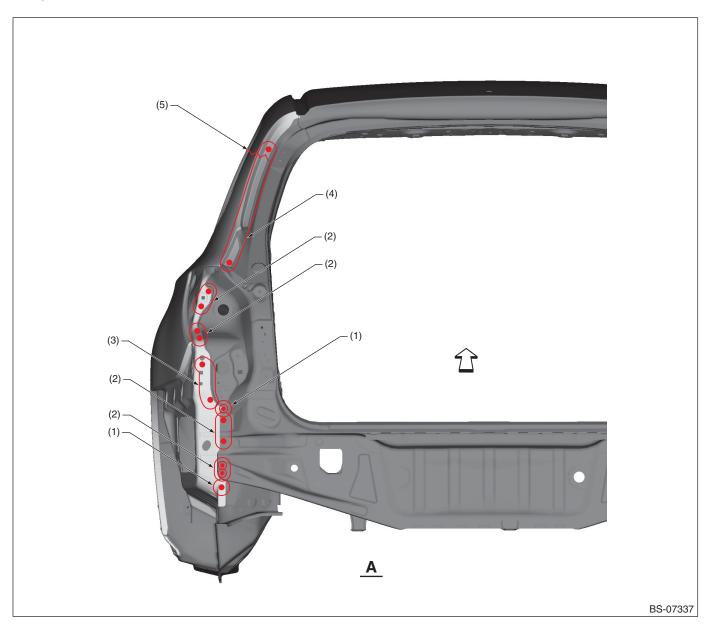


- (A) 100 mm (3.94 in)
- (B) 90 mm (3.54 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

- (C) Only LH
- (4) Cut position
- (5) 3 points
- (6) 4 points

- (D) Only RH
- (7) 1 point (only Power rear gate models)
- (8) 5 points

#### • View A

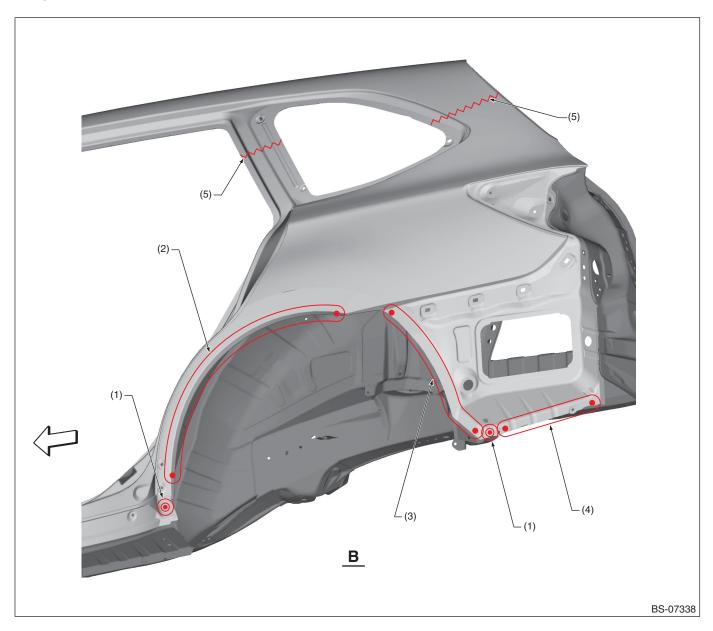


- (1) 1 point
- (2) 2 points

- (3) 3 points
- (4) 9 points

(5) Cut position

## • View B



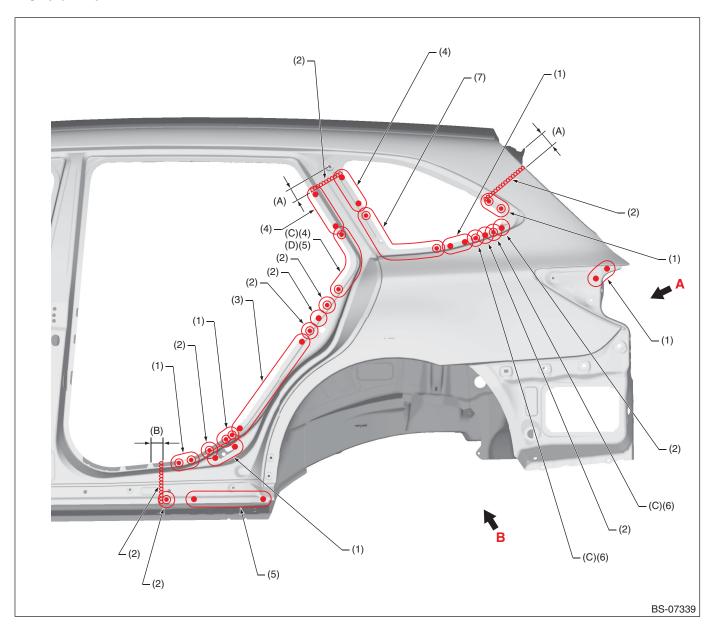
- (1) 1 point
- (2) 12 points

- (3) 8 points
- (4) 6 points

(5) Cut position

## **B: INSTALLATION**

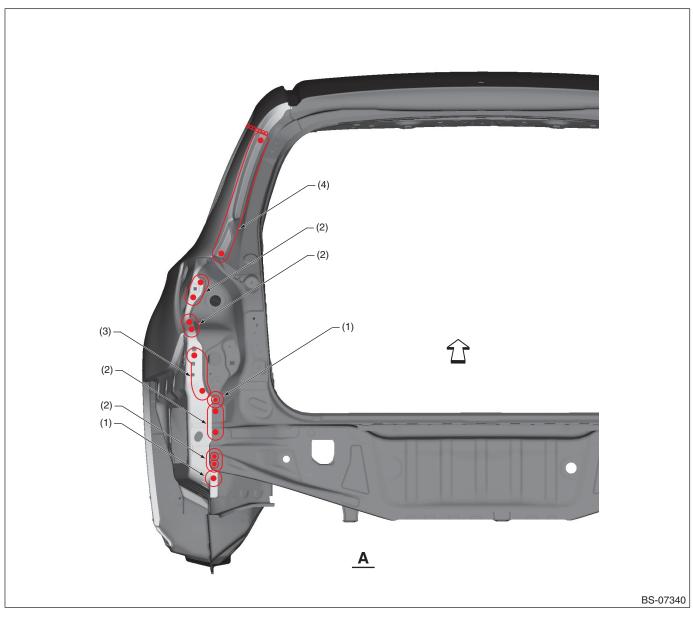
#### Overall view



- (A) 60 mm (2.36 in)
- (B) 50 mm (1.97 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

- (C) Only LH
- (4) 3 points
- (5) 4 points
- (6) 1 point (only Power rear gate models)
- (D) Only RH
- (7) 5 points

## • View A



(1) 1 point

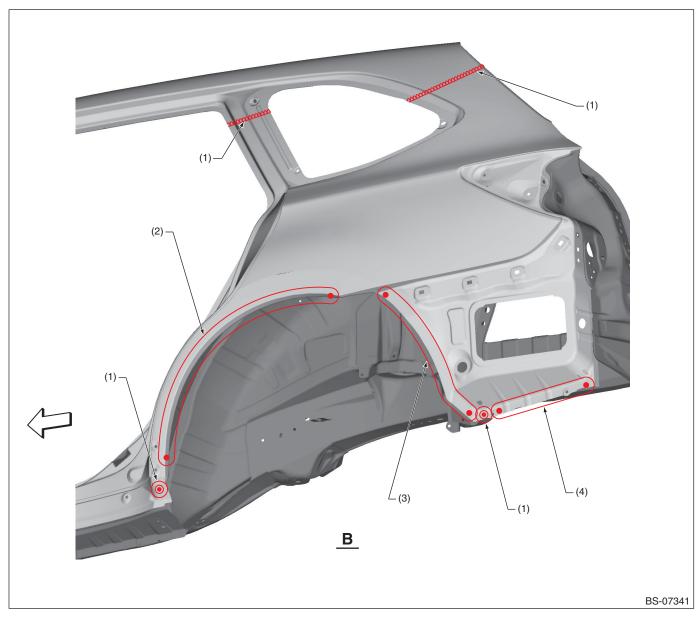
2 points

(2)

(3) 3 points

(4) 9 points

## • View B



- (1) 1 point
- (2) 12 points

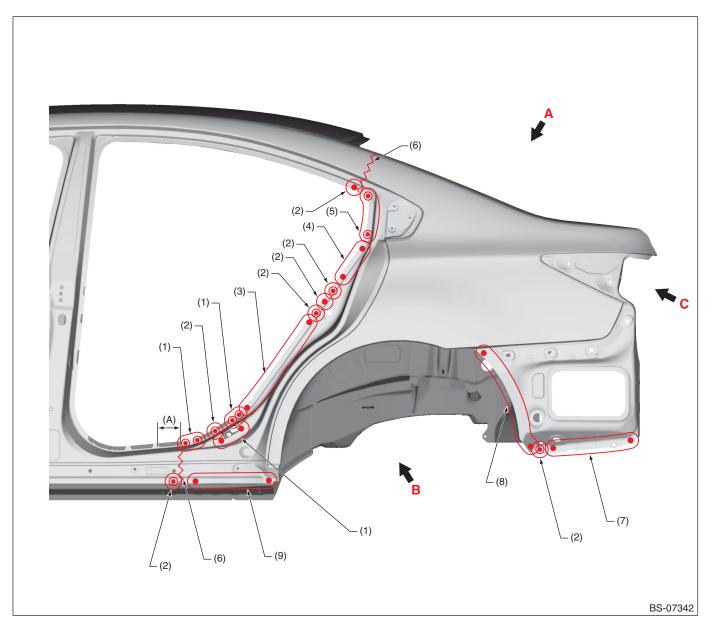
(3) 8 points

(4) 6 points

## 8-23. Rear Quarter (Partial replacement)/SEDAN

#### A: REMOVAL

Overall view

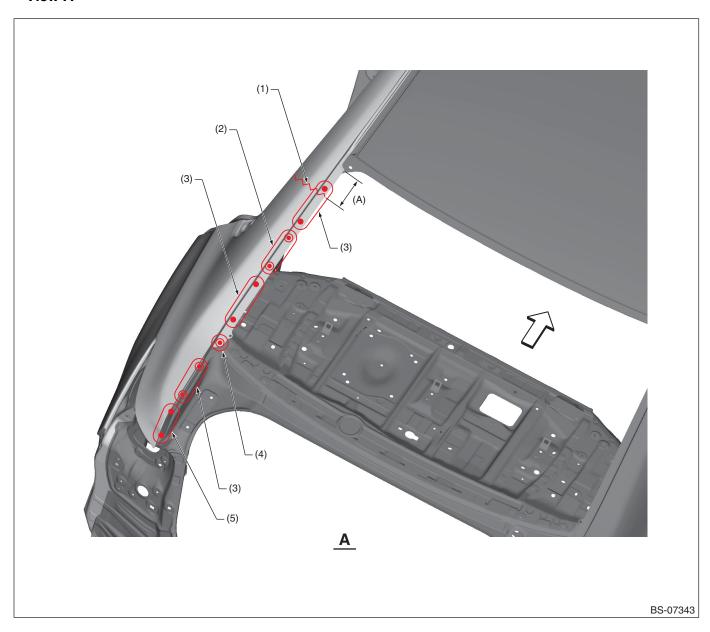


- (A) 90 mm (3.54 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

- (4) 3 points
- (5) 5 points
- (6) Cut position

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

#### • View A



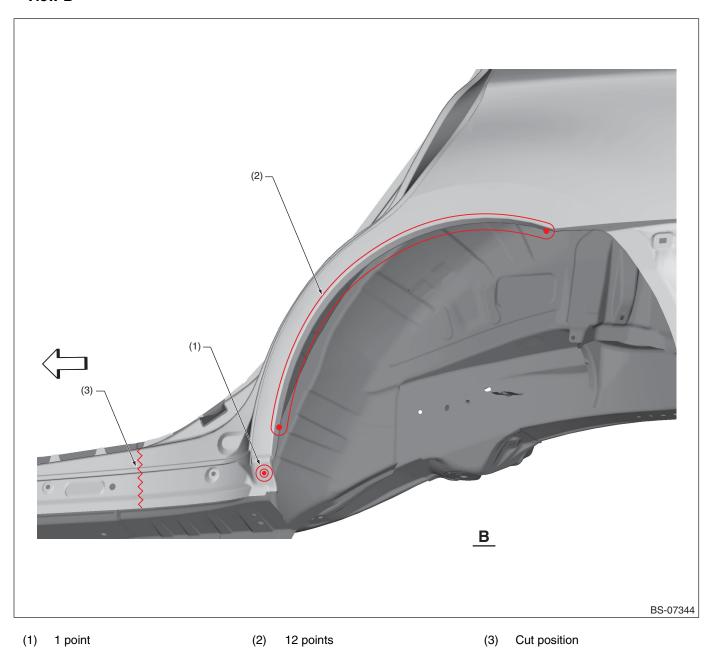
- (A) 100 mm (3.94 in)
- Cut position (1) 4 points

(2)

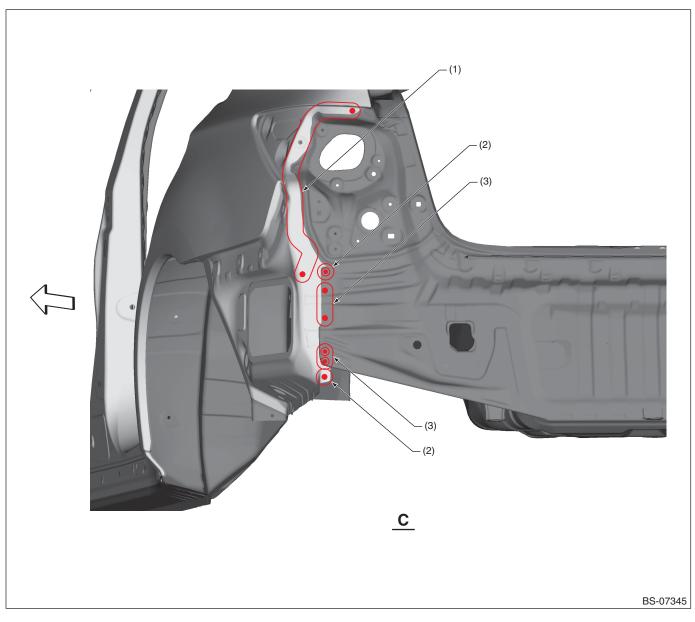
- 3 points (3)
- (4) 1 point

(5) 2 points

#### • View B



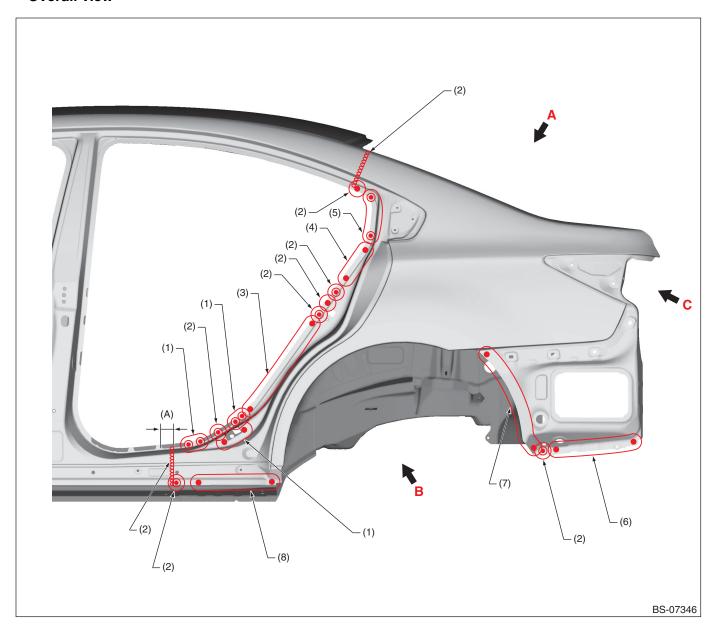
#### • View C



(1) 13 points (2) 1 point (3) 2 points

#### **B: INSTALLATION**

#### Overall view

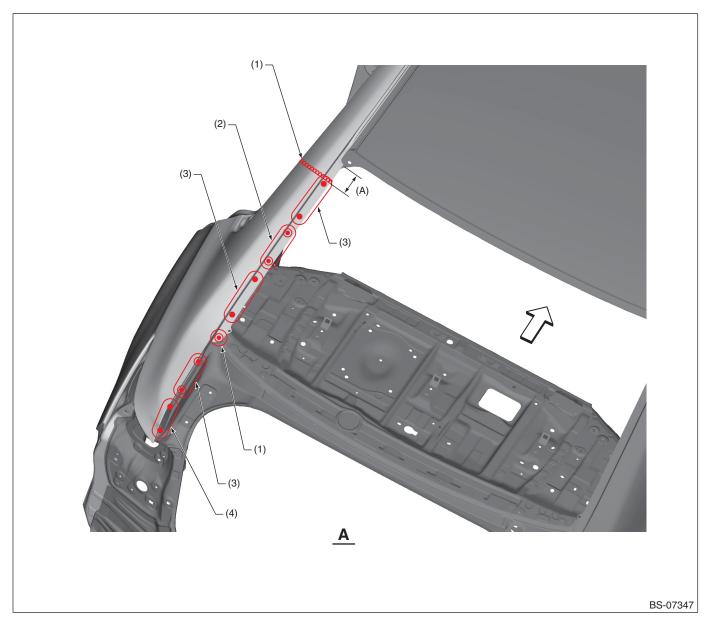


- (A) 50 mm (1.97 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

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

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

#### • View A

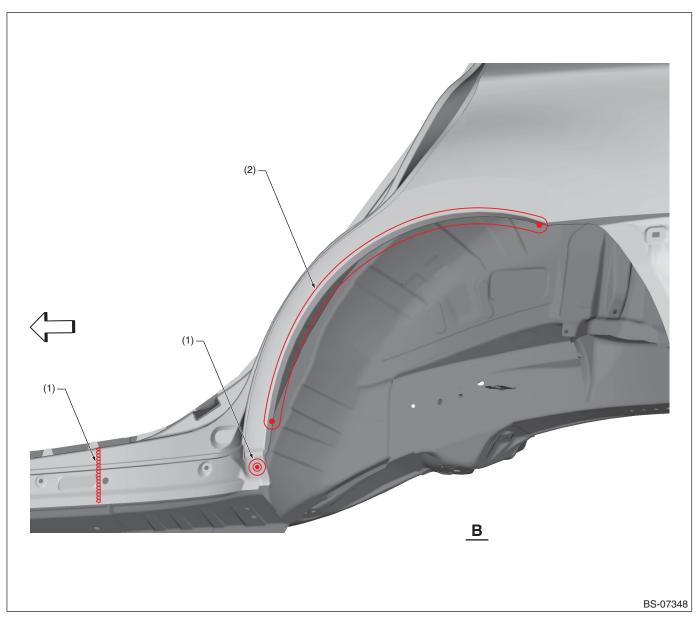


- (A) 60 mm (2.36 in)
- (1) 1 point

(3) 3 points

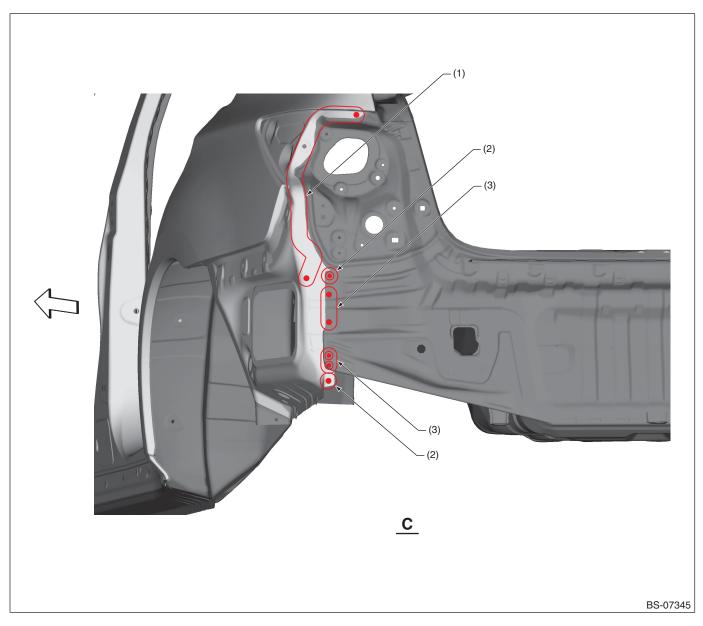
(4) 2 points

#### • View B



(1) 1 point (2) 12 points

#### • View C

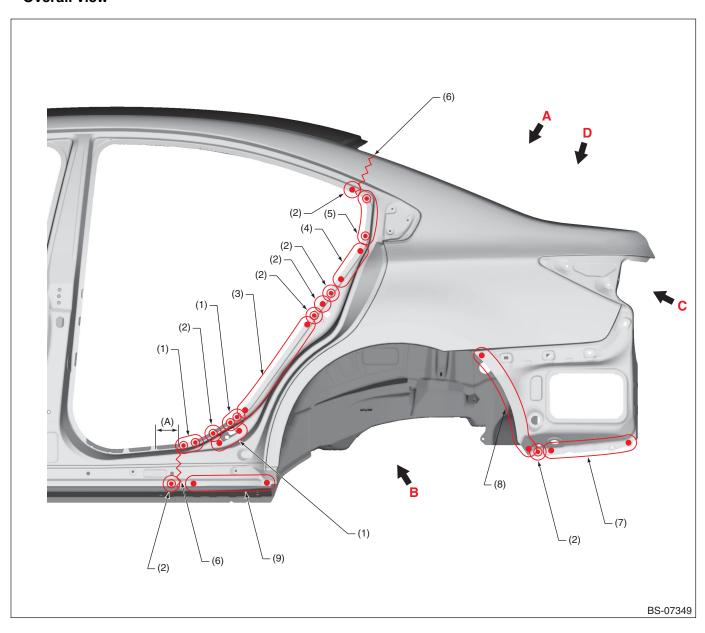


(1) 13 points (2) 1 point (3) 2 points

#### 8-24. Rear Quarter (Partial replacement including rear pillar patch)/SEDAN

#### A: REMOVAL

Overall view

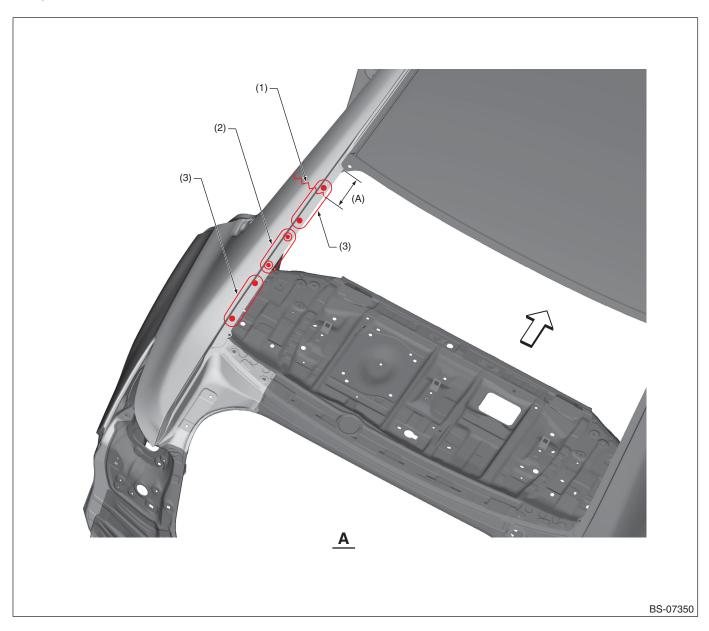


- (A) 90 mm (3.54 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

- (4) 3 points
- (5) 5 points
- (6) Cut position

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

#### View A

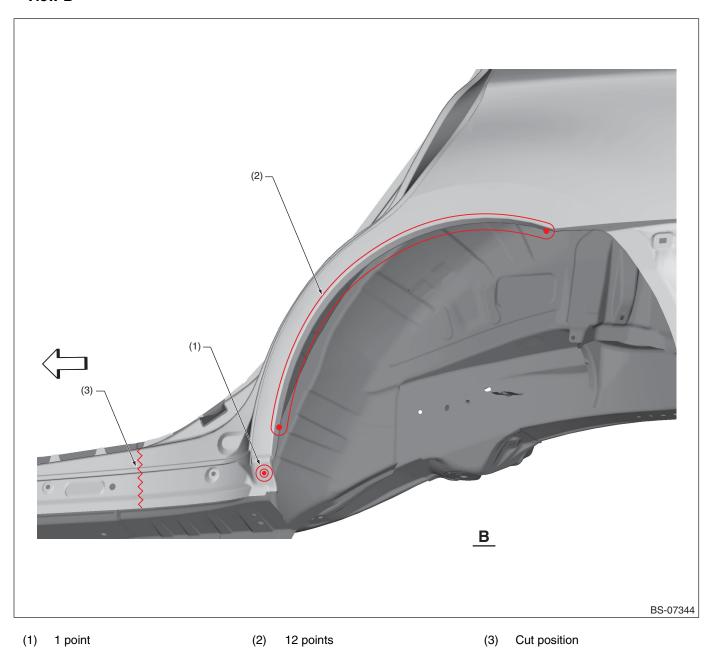


- (A) 100 mm (3.94 in)
- (1) Cut position

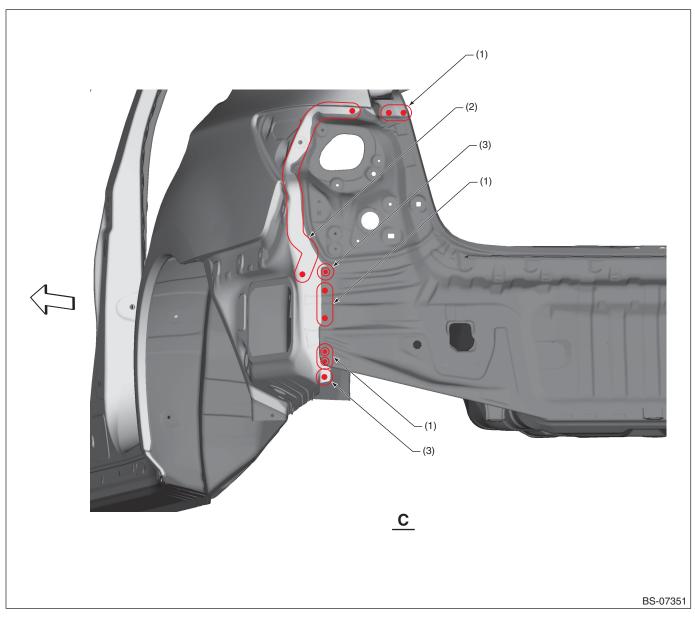
(2) 4 points

(3) 3 points

#### • View B

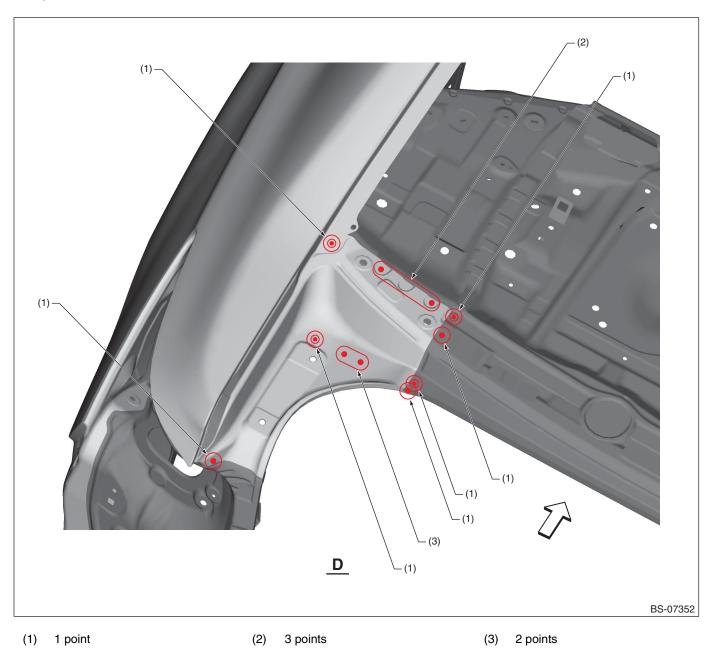


#### • View C



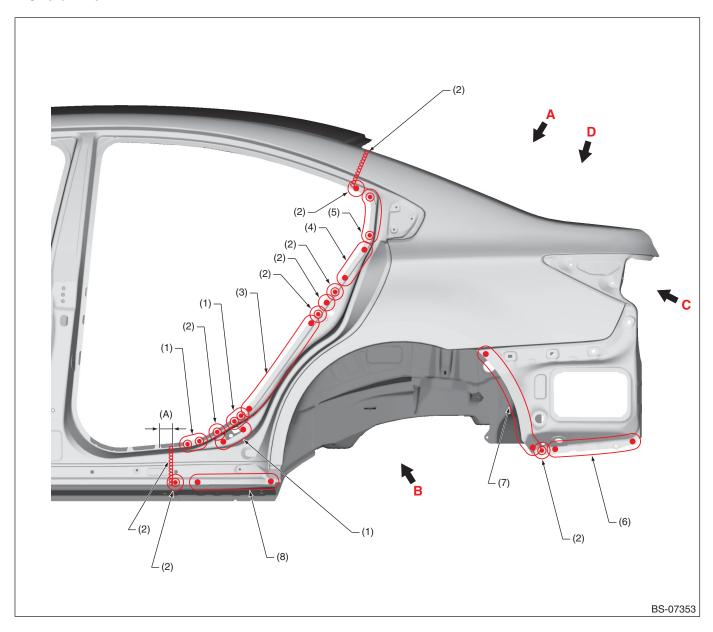
(1) 2 points (2) 13 points (3) 1 point

#### • View D



#### **B: INSTALLATION**

#### Overall view

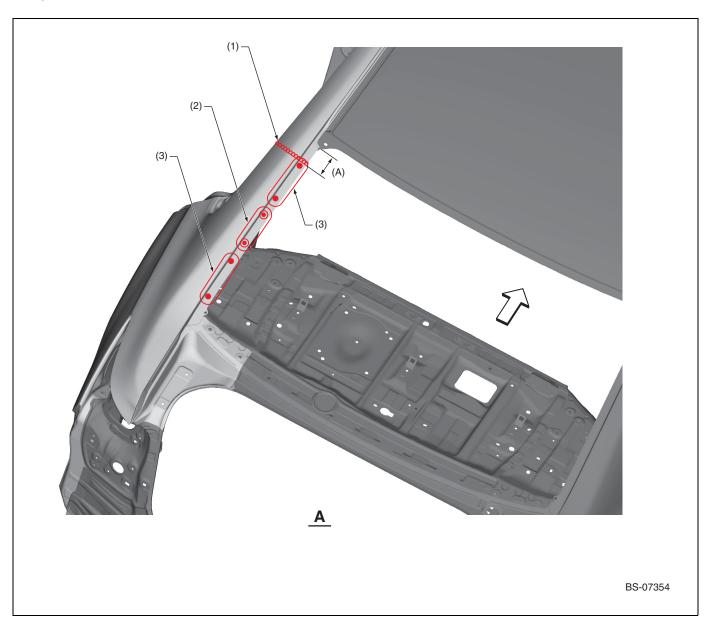


- (A) 50 mm (1.97 in)
- (1) 2 points
- (2) 1 point
- (3) 7 points

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

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

#### • View A

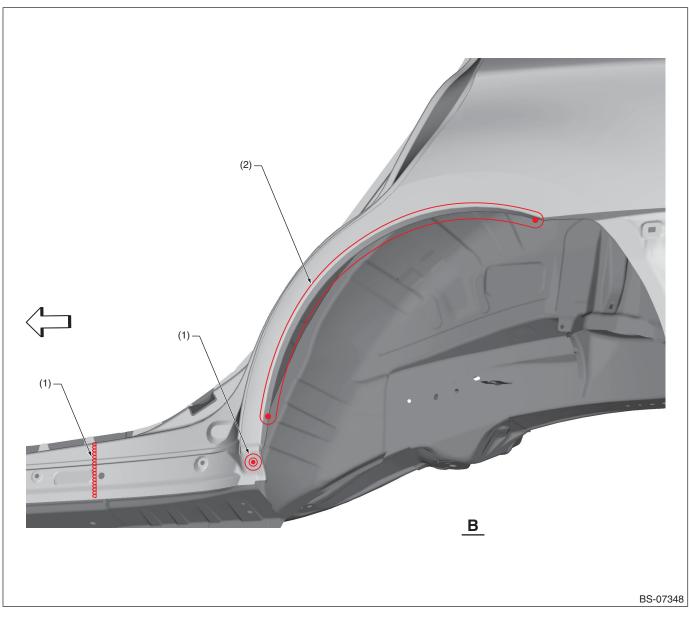


- (A) 60 mm (2.36 in)
- (1) 1 point

(2) 4 points

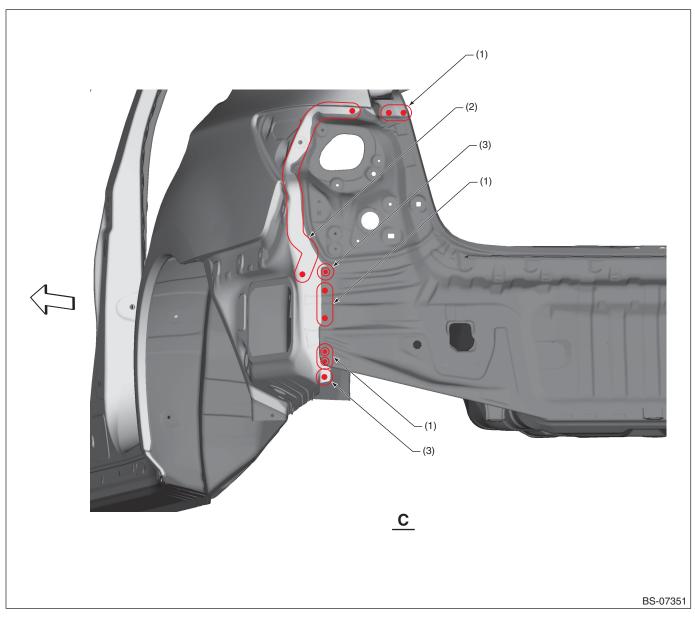
(3) 3 points

#### • View B



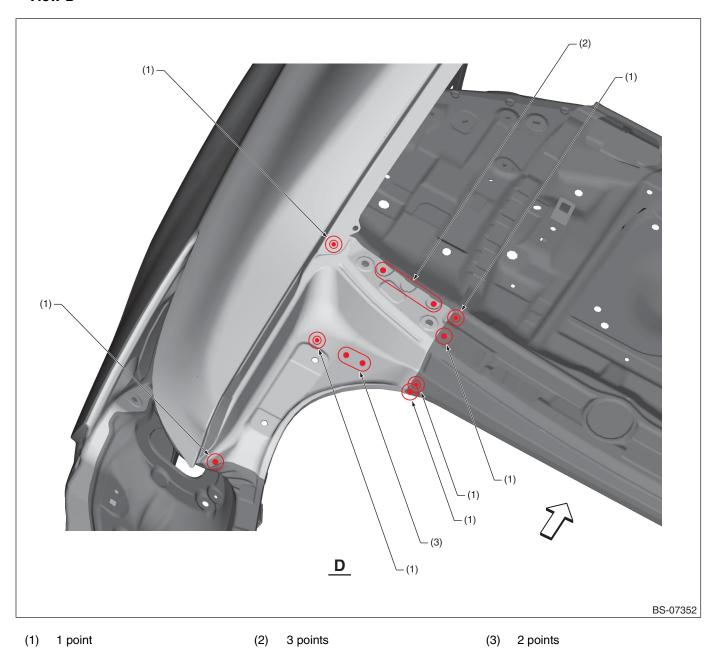
(1) 1 point (2) 12 points

#### • View C



(1) 2 points (2) 13 points (3) 1 point

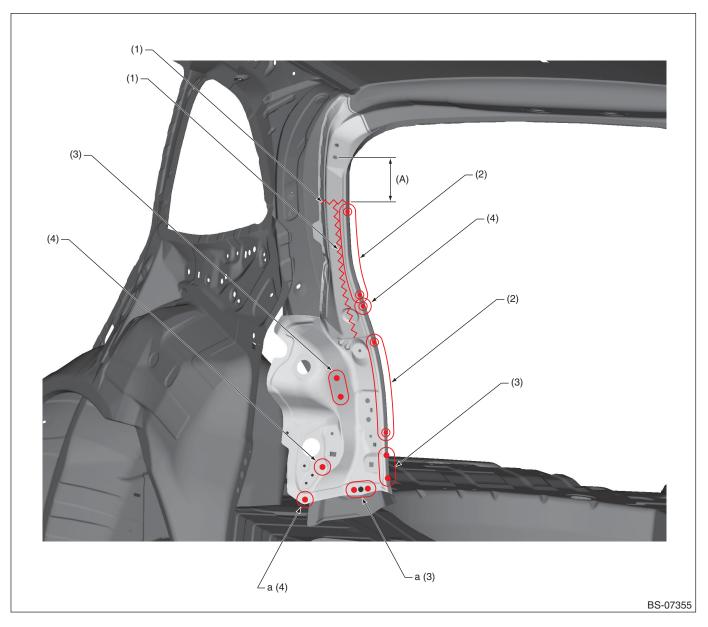
#### • View D



#### 8-25. Rear Quarter End (Partial replacement)/OUTBACK

#### A: REMOVAL

• Rear quarter outer removal condition



- (A) 80 mm (3.15 in)
- (1) Cut position

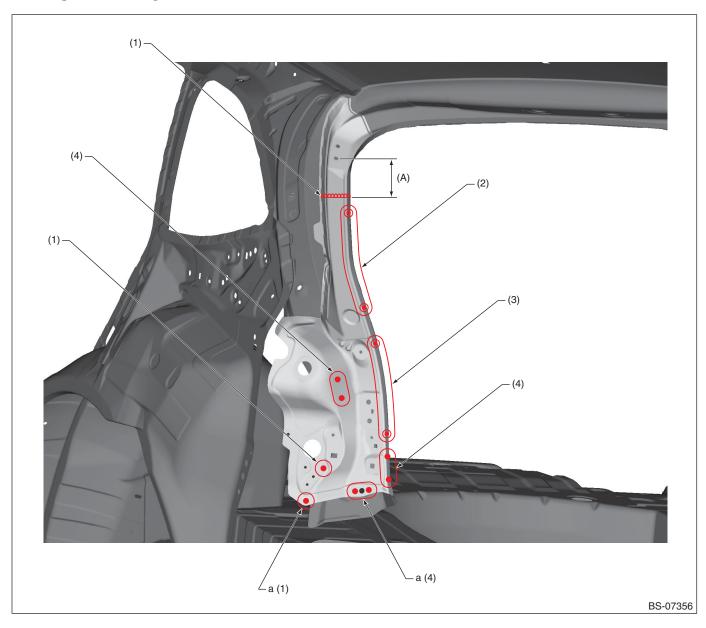
(3) 2 points

(4) 1 point

(2) 5 points

Note: "a" is not required when the rear skirt is removed.

#### **B: INSTALLATION**



- (A) 50 mm (1.97 in)
- (1) 1 point

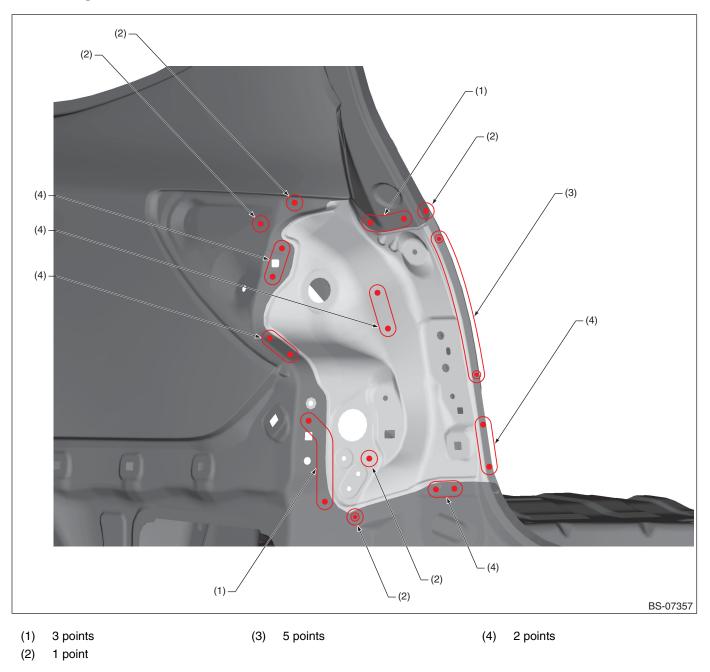
(3) 5 points

(4) 2 points

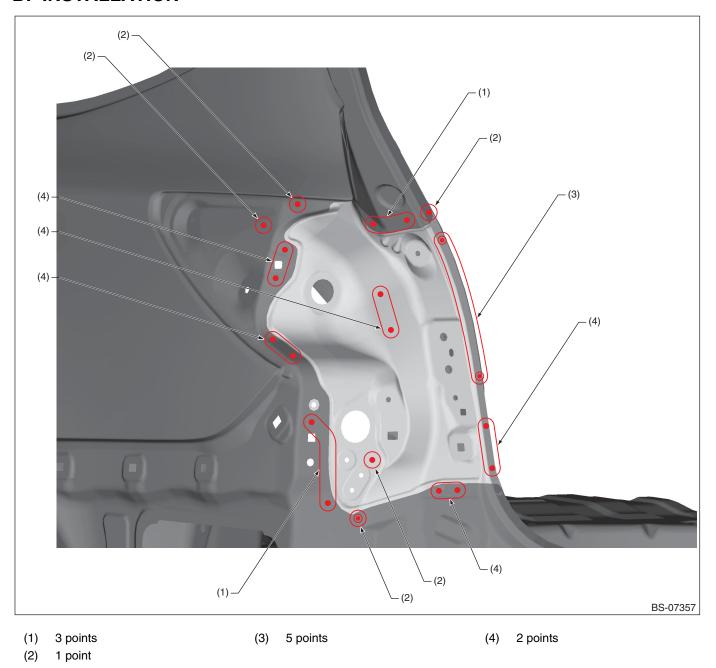
(2) 6 points

Note: "a" is not required when the rear skirt is removed.

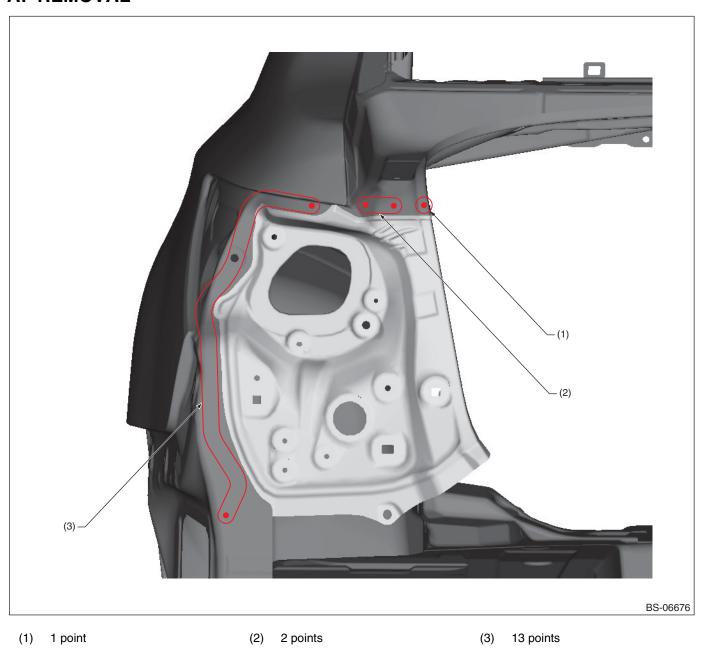
# 8-26. Rear Quarter End Panel (Replacement of only the part)/OUTBACK A: REMOVAL



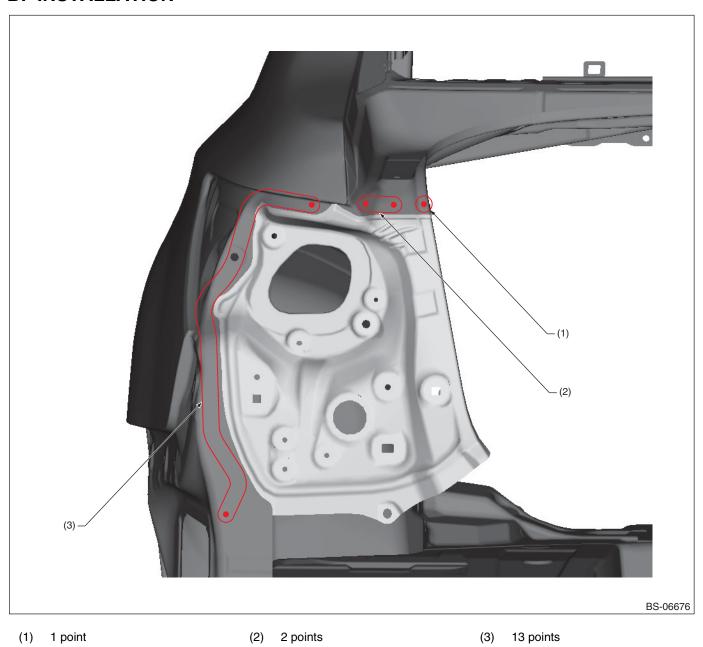
### **B: INSTALLATION**



# 8-27. Rear Quarter End Panel (Total replacement)/SEDAN A: REMOVAL

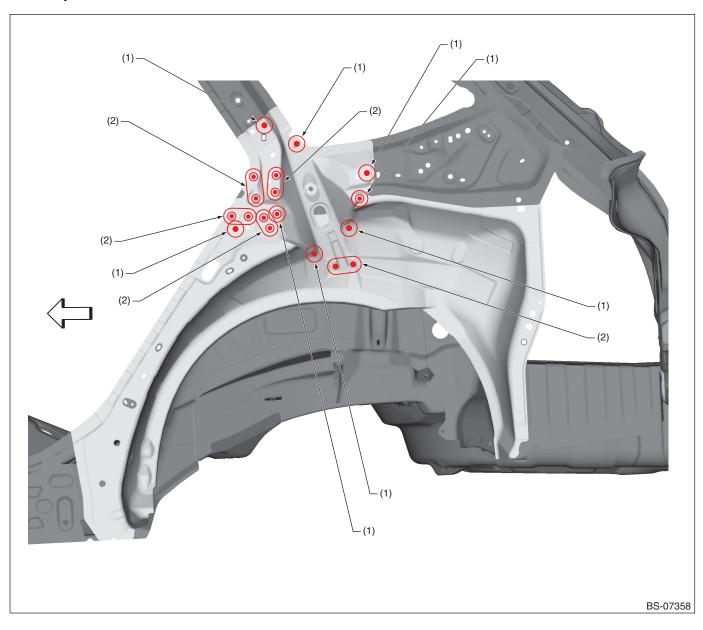


### **B: INSTALLATION**



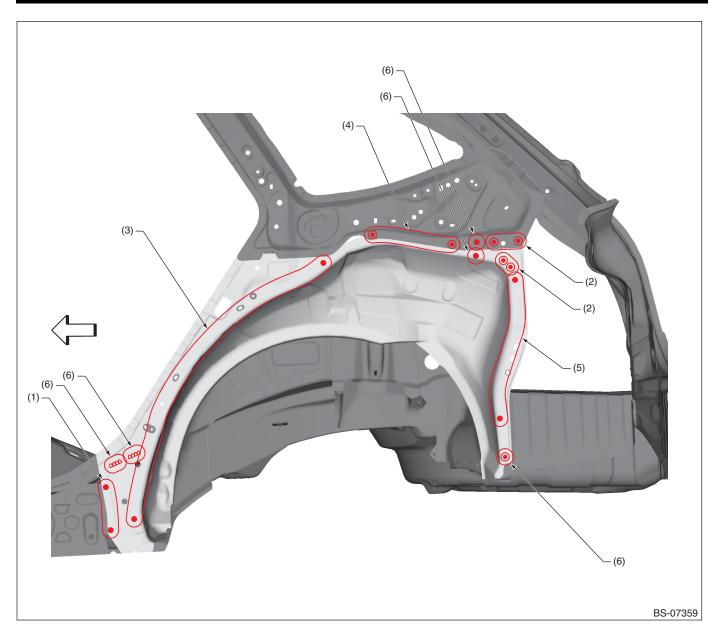
# 8-28. Rear Wheel Apron LH (Total replacement)/OUTBACK A: REMOVAL

• Rear quarter outer and side sill reinforcement outer removal condition



(1) 1 point

(2) 2 points

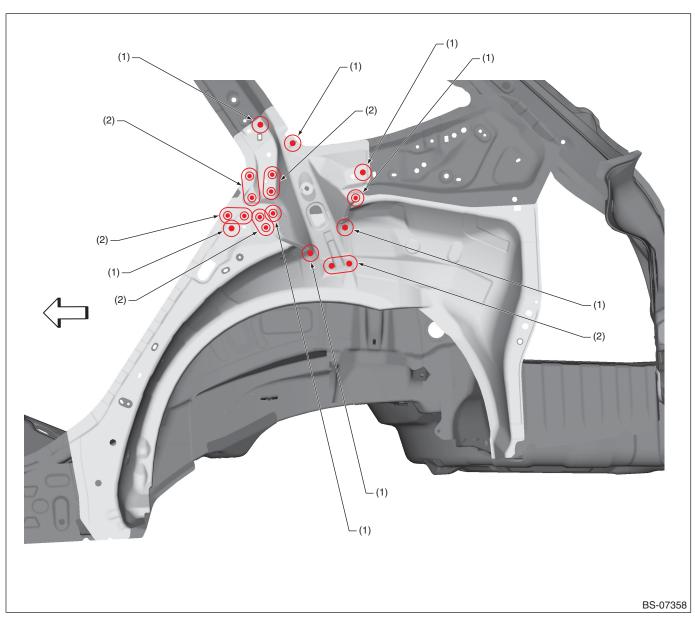


- (1) 3 points
- (2) 2 points

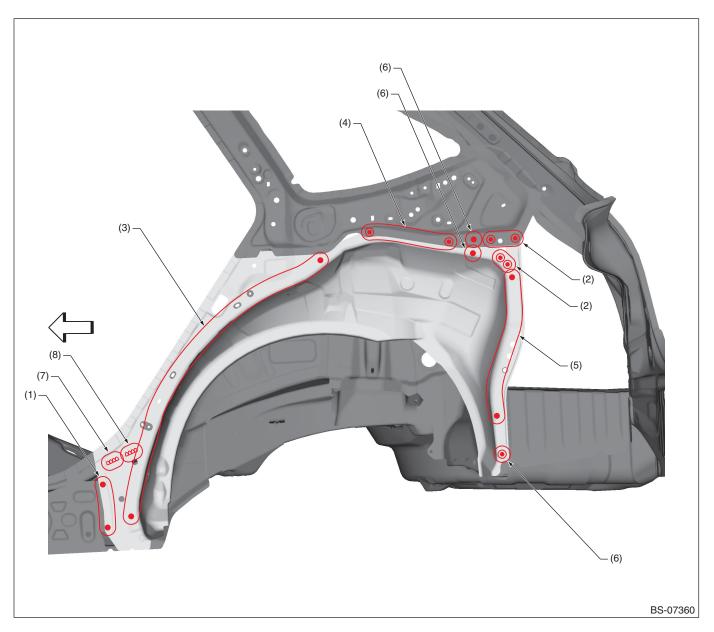
- (3) 14 points
- (4) 4 points

- (5) 8 points
- (6) 1 point

### **B: INSTALLATION**



(1) 1 point (2) 2 points



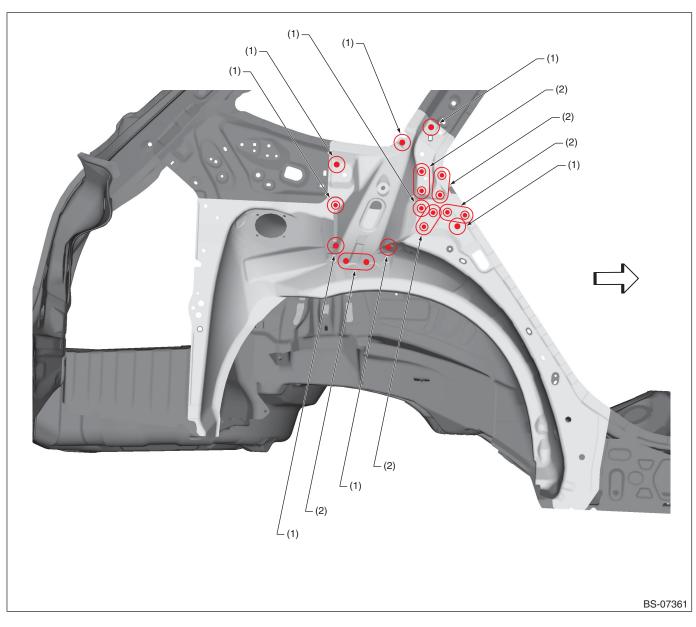
- (1) 3 points
- (2) 2 points
- (3) 14 points

- (4) 4 points
- (5) 8 points
- (6) 1 point

- (7) 1 point [30 mm (1.18 in)]
- (8) 1 point [28 mm (1.10 in)]

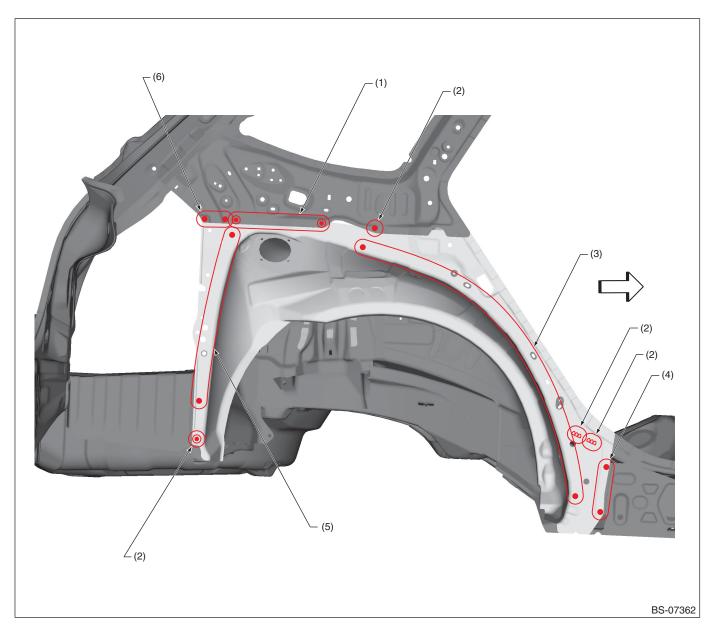
# 8-29. Rear Wheel Apron RH (Total replacement)/OUTBACK A: REMOVAL

• Rear quarter outer and side sill reinforcement outer removal condition



(1) 1 point

(2) 2 points

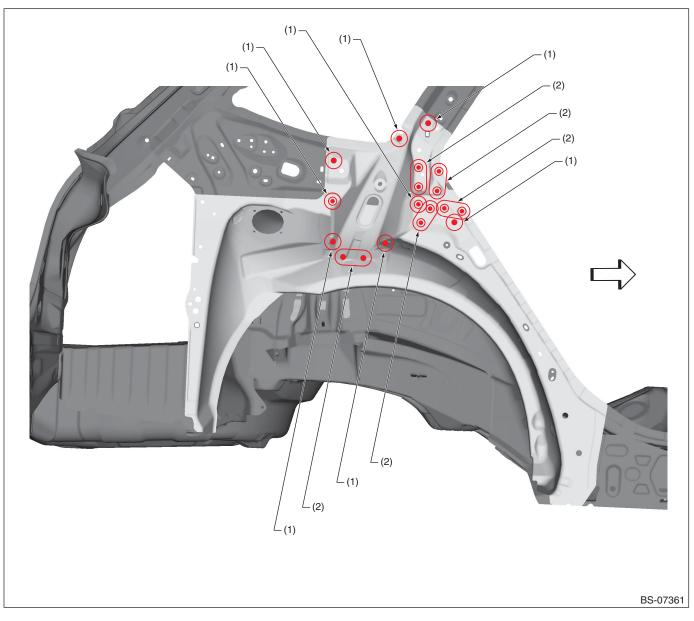


- (1) 5 points
- (2) 1 point

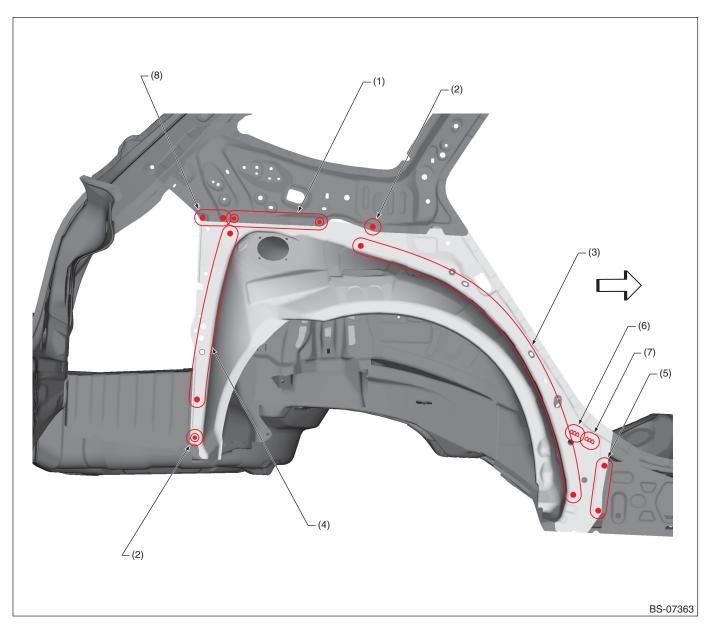
- (3) 14 points
- (4) 3 points

- (5) 7 points
- (6) 2 points

### **B: INSTALLATION**



(1) 1 point (2) 2 points

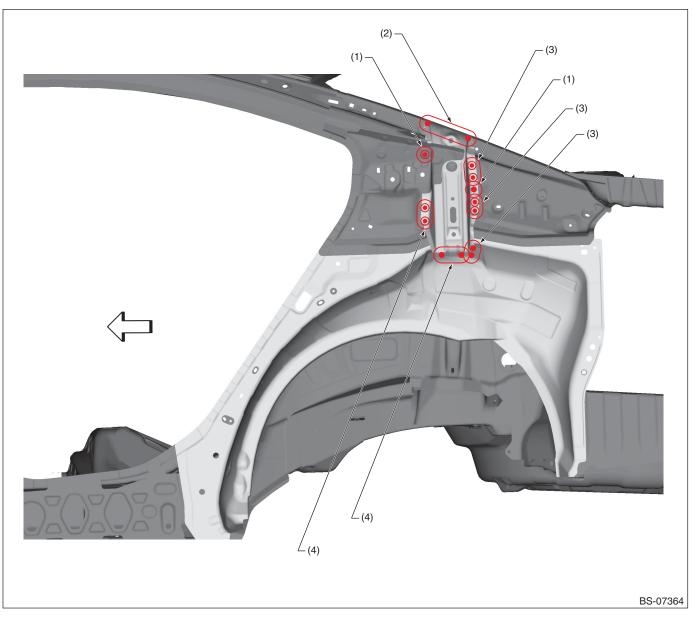


- (1) 5 points
- (2) 1 point
- (3) 14 points

- (4) 7 points
- (5) 3 points
- (6) 1 point [28 mm (1.10 in)]
- (7) 1 point [30 mm (1.18 in)]
- (8) 2 points

# 8-30. Rear Wheel Apron LH (Total replacement)/SEDAN A: REMOVAL

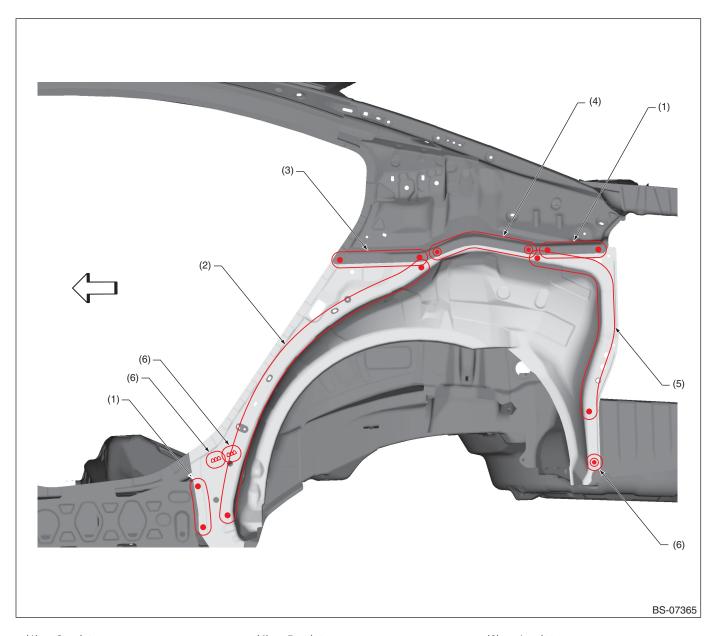
• Rear quarter outer and side sill reinforcement outer removal condition



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

(3) 2 points

(4) 3 points

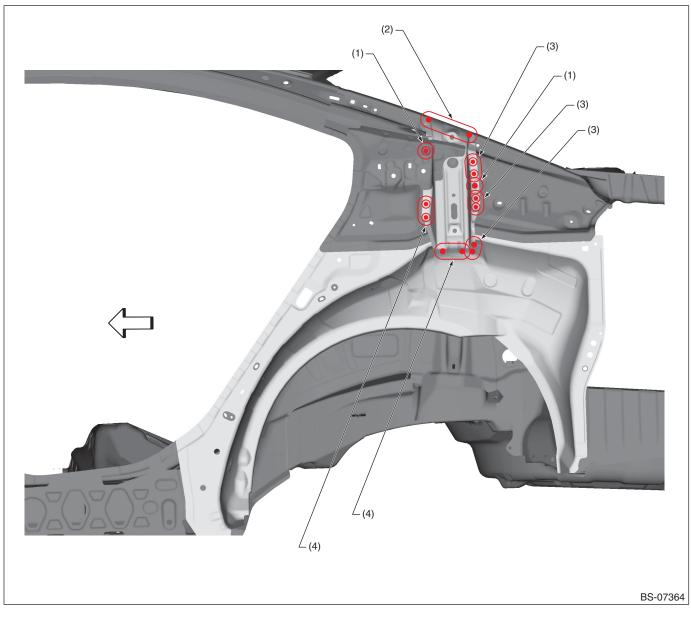


- (1) 3 points
- (2) 15 points
- (3) 6 points

- (4) 5 points
- (5) 11 points

(6) 1 point

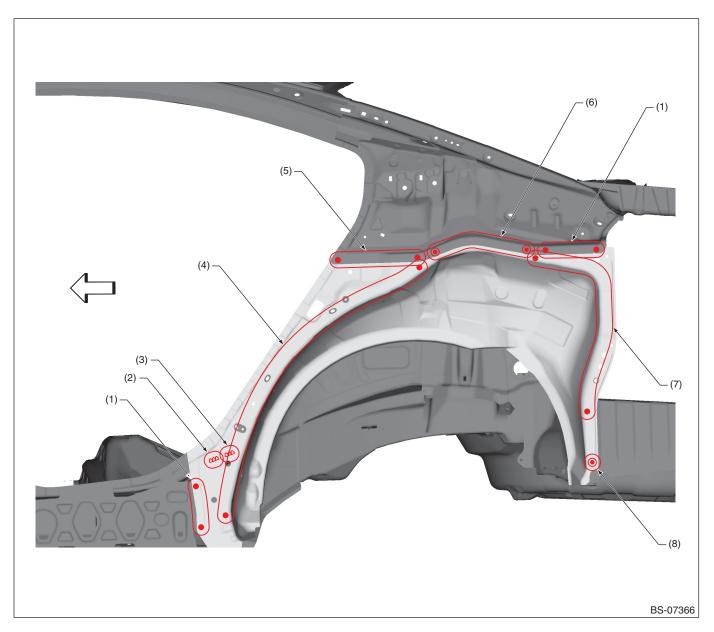
## **B: INSTALLATION**



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

(3) 2 points

(4) 3 points

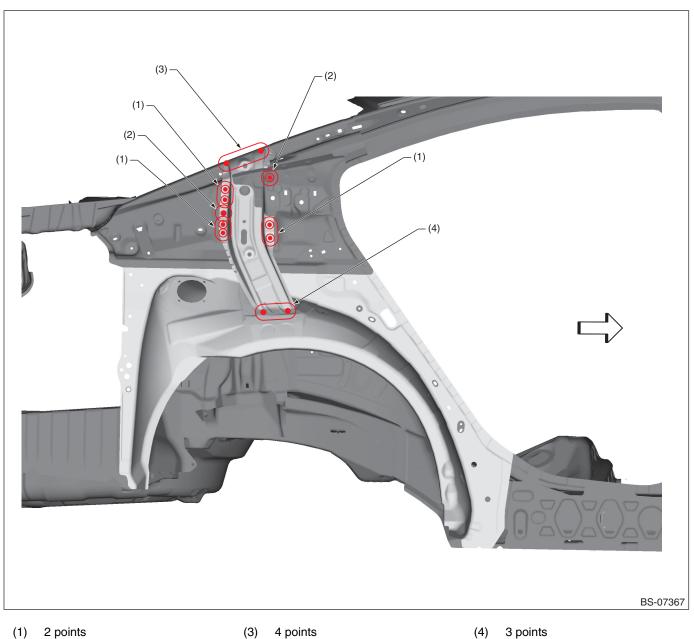


- (1) 3 points
- (2) 1 point [30 mm (1.18 in)]
- (3) 1 point [28 mm (1.10 in)]
- (4) 15 points
- (5) 6 points
- (6) 5 points

- (7) 11 points
- (8) 1 point

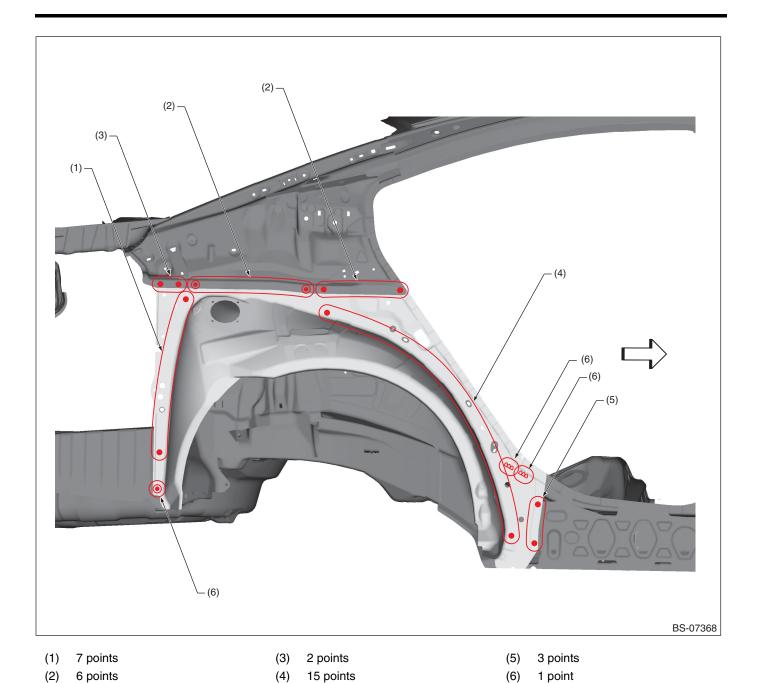
#### Rear Wheel Apron RH (Total replacement)/SEDAN 8-31. A: REMOVAL

• Rear quarter outer and side sill reinforcement outer removal condition

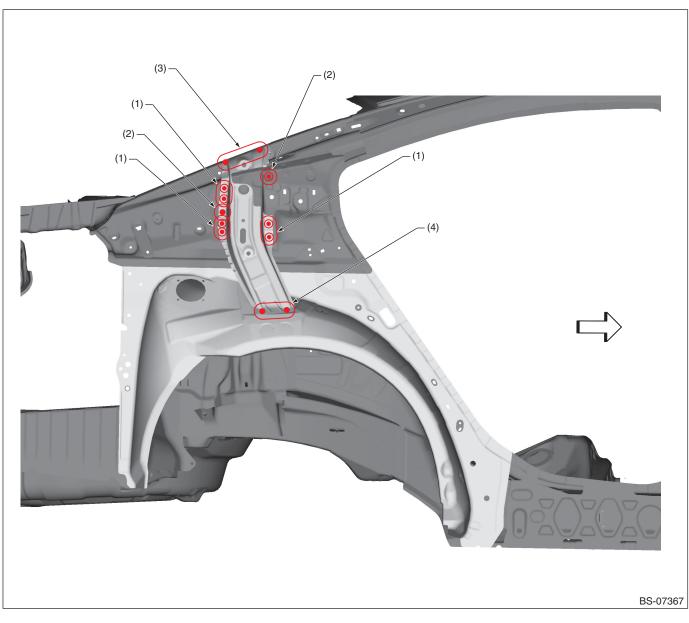


(2)

1 point



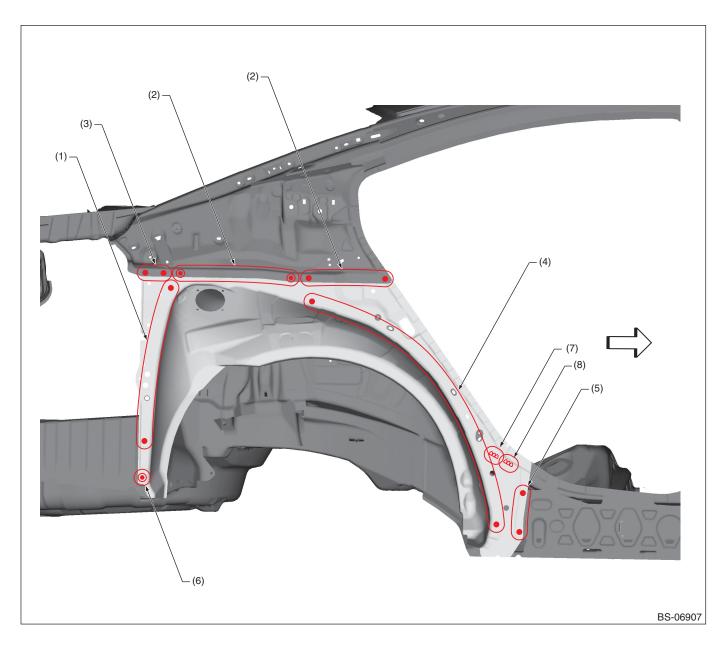
## **B: INSTALLATION**



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

(3) 4 points

(4) 3 points



- (1) 7 points
- (2) 6 points
- (3) 2 points

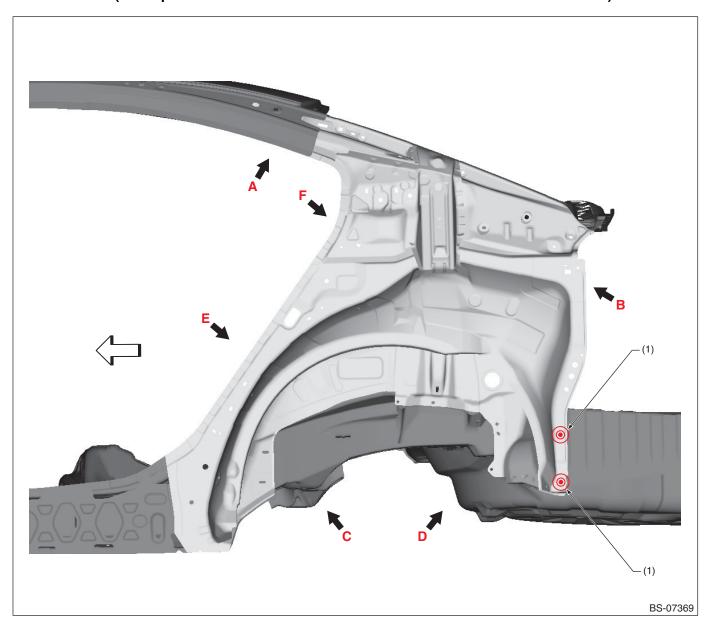
- (4) 15 points
- (5) 3 points
- (6) 1 point

- (7) 1 point [28 mm (1.10 in)]
- (8) 1 point [30 mm (1.18 in)]

## 8-32. Rear Quarter Inner (Total replacement)/SEDAN

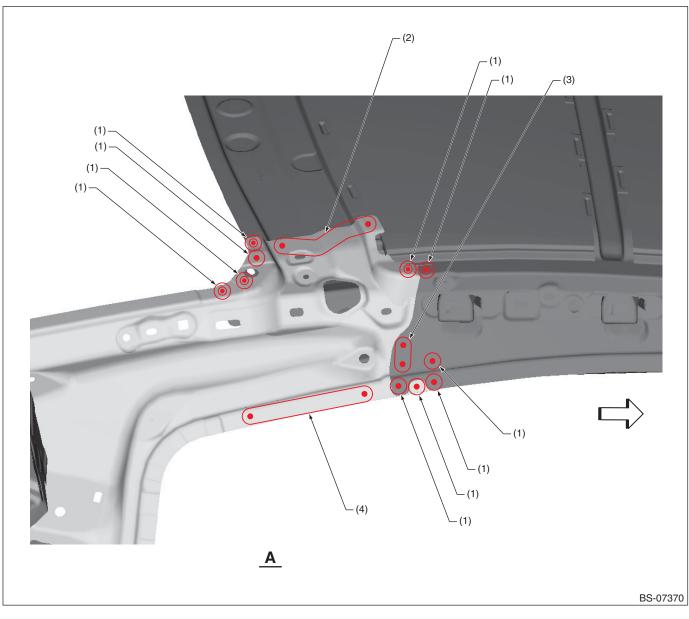
#### A: REMOVAL

• Overall view (Rear quarter outer and side sill reinforcement outer removal condition)



(1) 1 point

## • View A

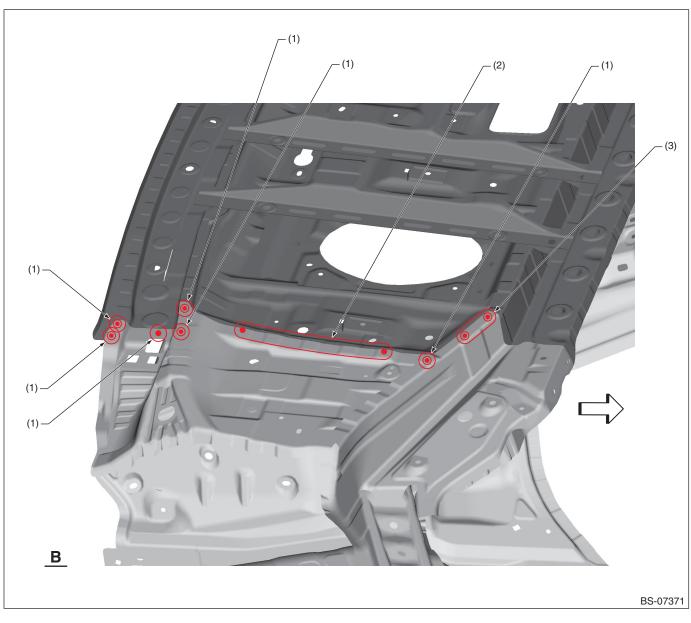


(1) 1 point(2) 4 points

(3) 2 points

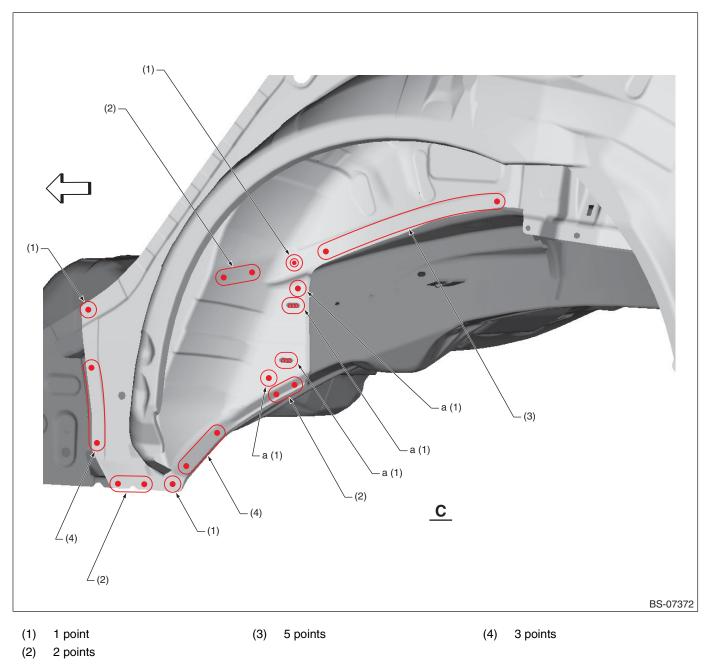
(4) 3 points

## • View B



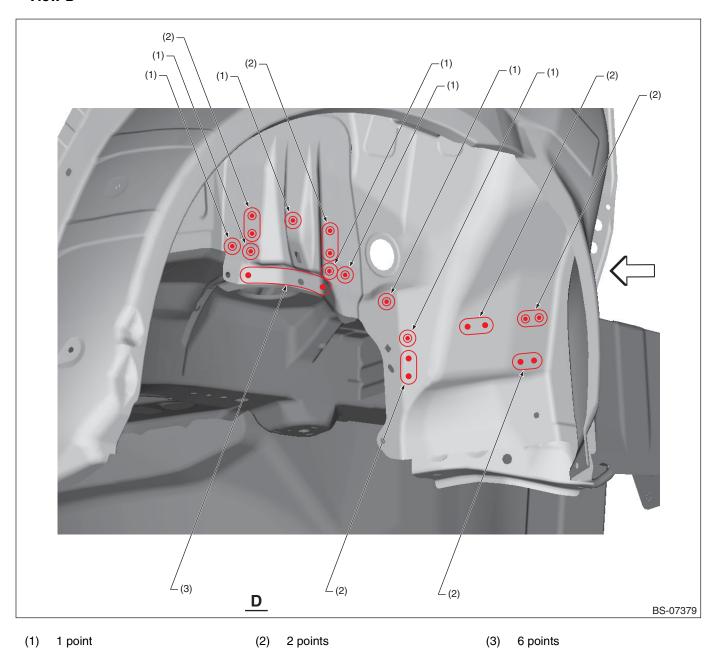
(1) 1 point (2) 5 points (3) 3 points

## • View C

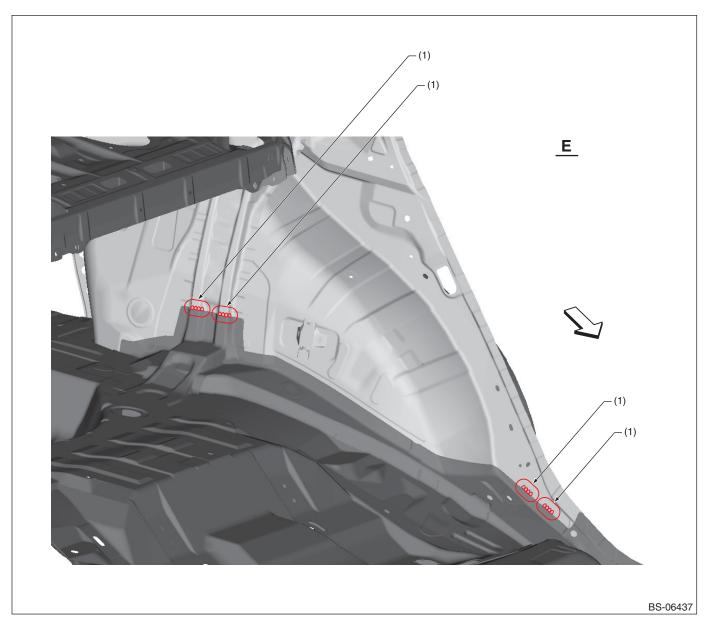


Note: Part "a" may or may not have welding points, depending on the vehicle model.

## • View D

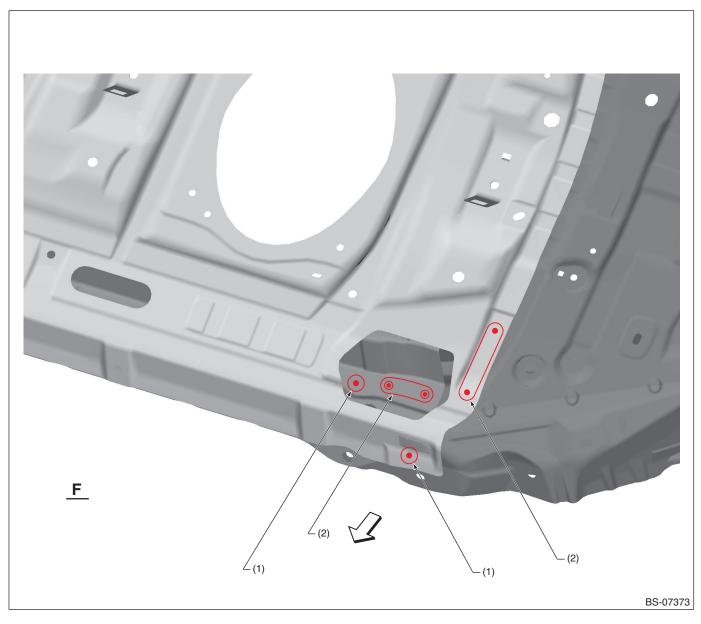


## • View E



(1) 1 point

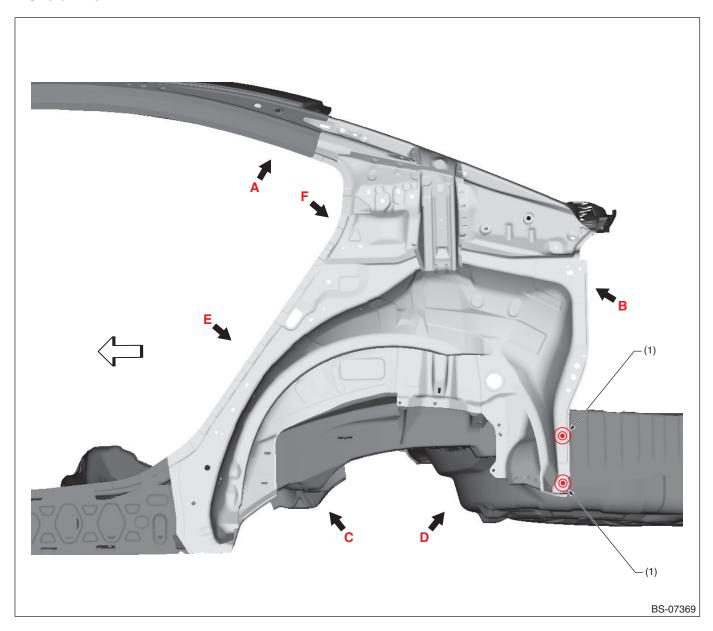
## • View F



(1) 1 point

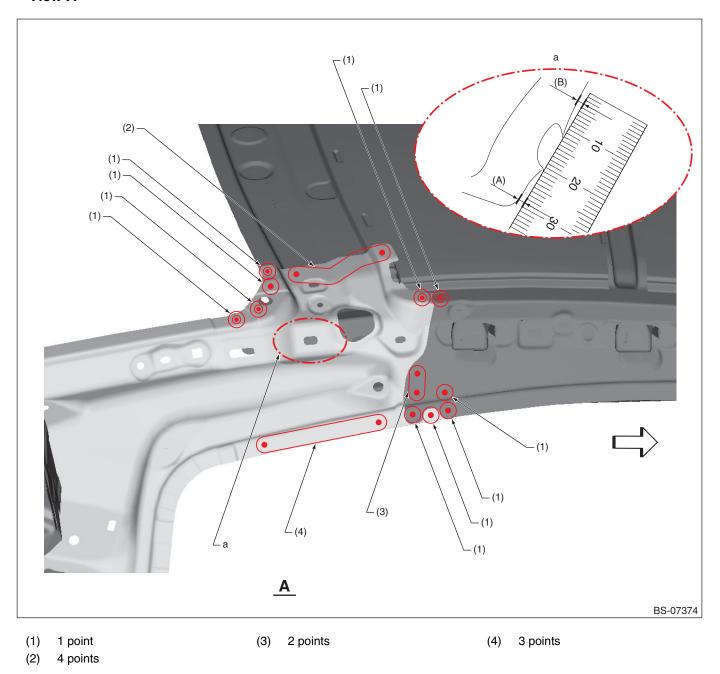
(2) 2 points

# B: INSTALLATION • Overall view



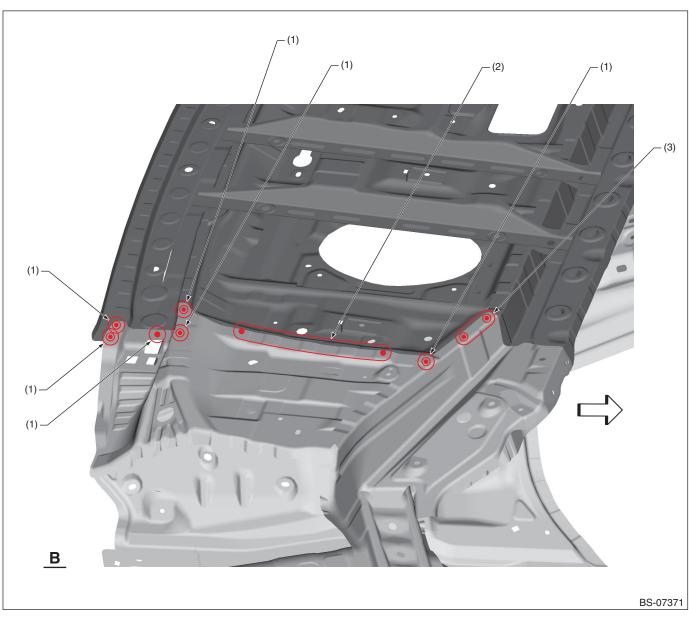
(1) 1 point

#### View A



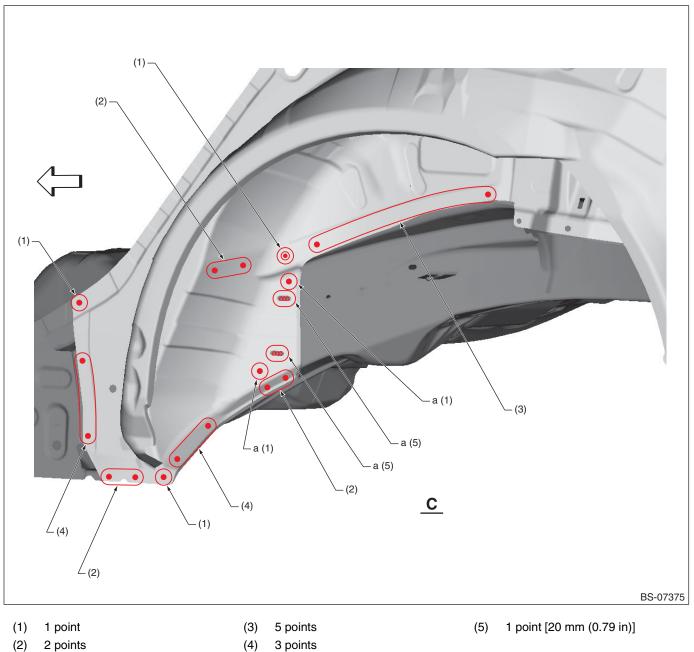
a: Measure hole deformation dimensions (A) and (B) when the curtain air bag is deployed. When the hole deformation is 0.5 mm (0.02 in) or greater or 1 mm (0.04 in) or less, hit the deformed part to restore it to its original shape. If the hole deformation is greater than 1 mm (0.04 in), replace the part.

## • View B



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

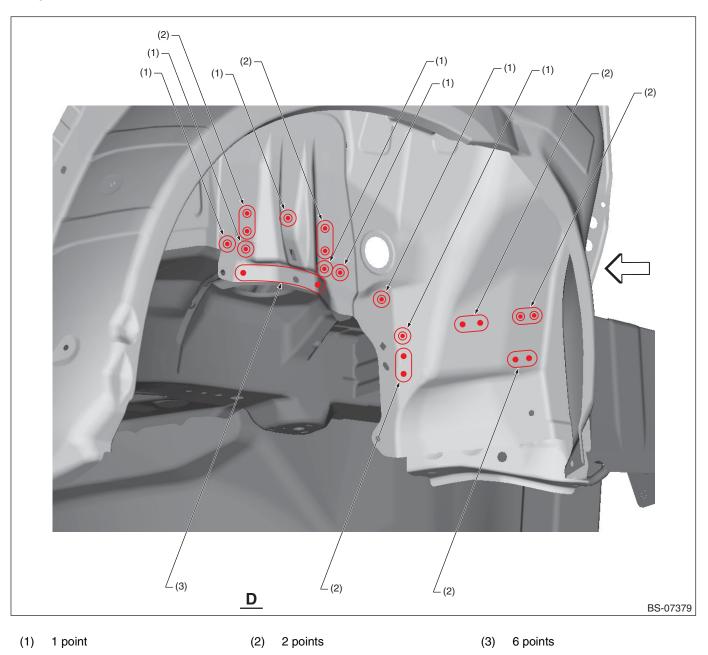
## View C



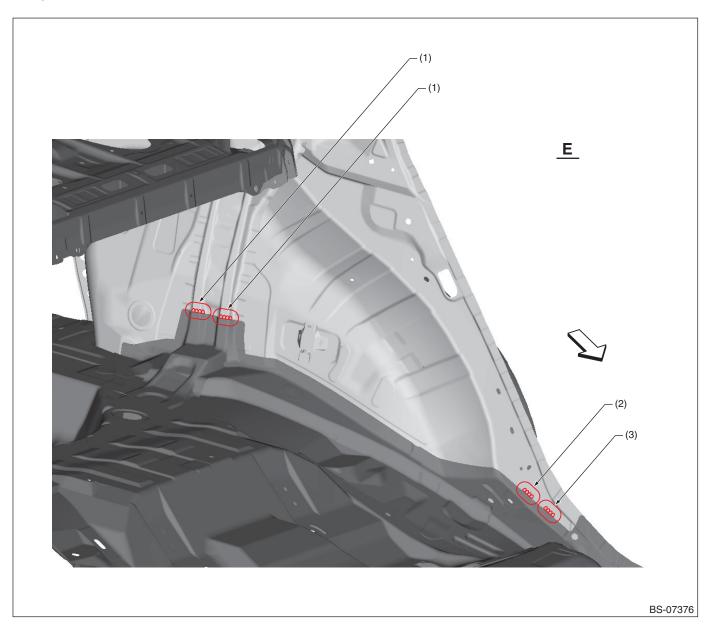
(2) 2 points (4) 3 points

Note: Part "a" may or may not have welding points, depending on the vehicle model.

## • View D

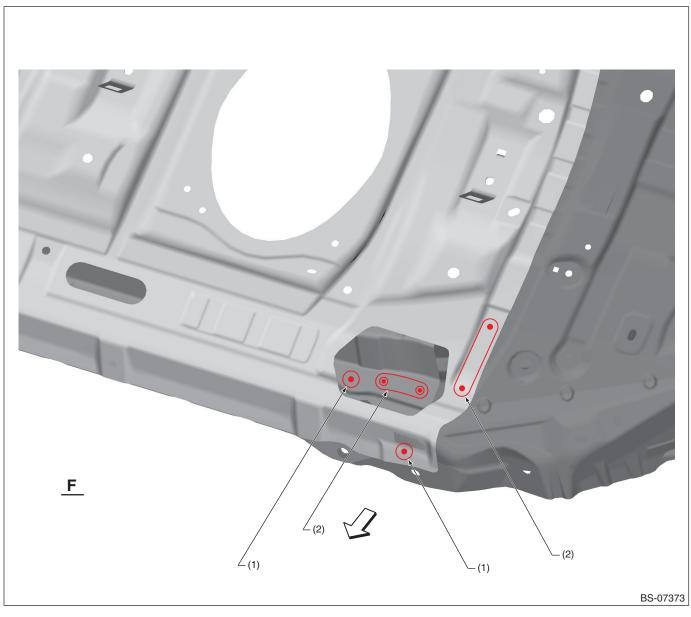


## • View E



- (1) 1 point [20 mm (0.79 in)]
- (2) 1 point [28 mm (1.10 in)]
- (3) 1 point [30 mm (1.18 in)]

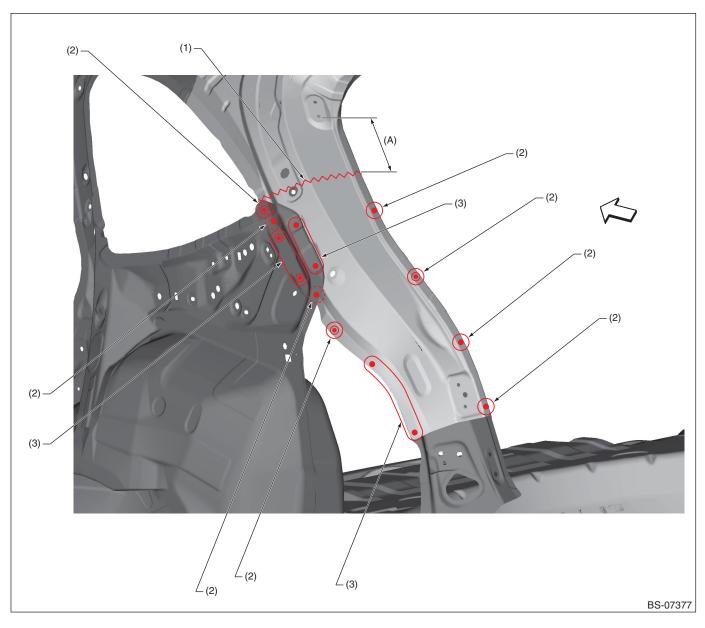
## • View F



(1) 1 point (2) 2 points

# 8-33. D-Pillar Reinforcement (Partial replacement)/OUTBACK A: REMOVAL

• Rear quarter outer, rear quarter end and rear skirt removal condition

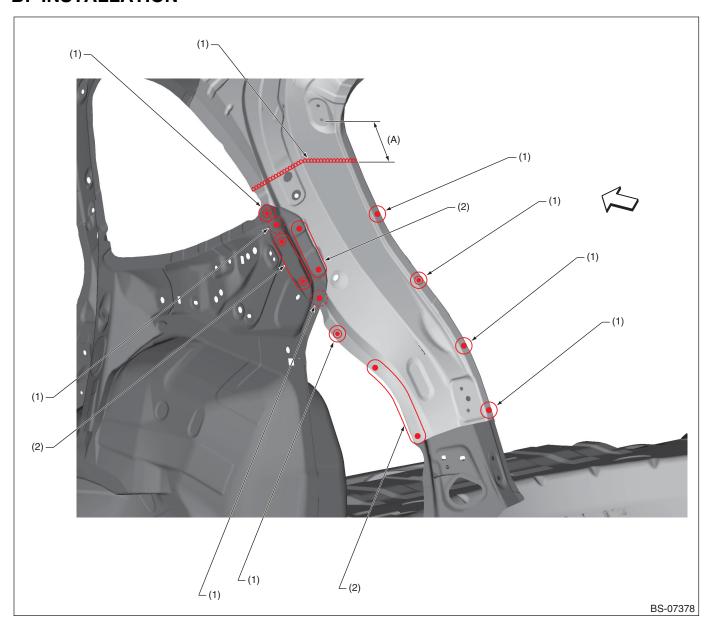


- (A) 120 mm (4.72 in)
- (1) Cut position

(2) 1 point

(3) 3 points

## **B: INSTALLATION**



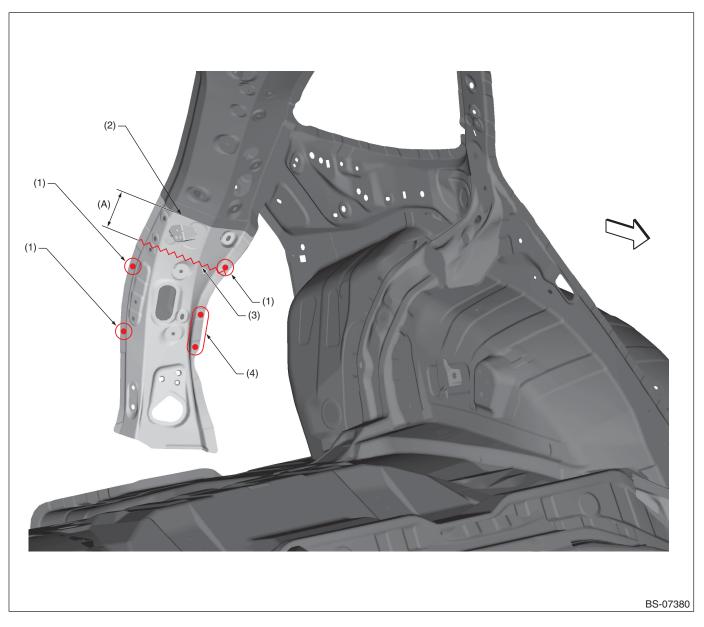
- (A) 90 mm (3.54 in)
- (1) 1 point

(2) 3 points

# 8-34. D-Pillar Inner (Partial replacement)/OUTBACK

#### A: REMOVAL

• Rear quarter outer, rear quarter end and rear skirt removal condition



(A) 80 mm (3.15 in)

Trim line

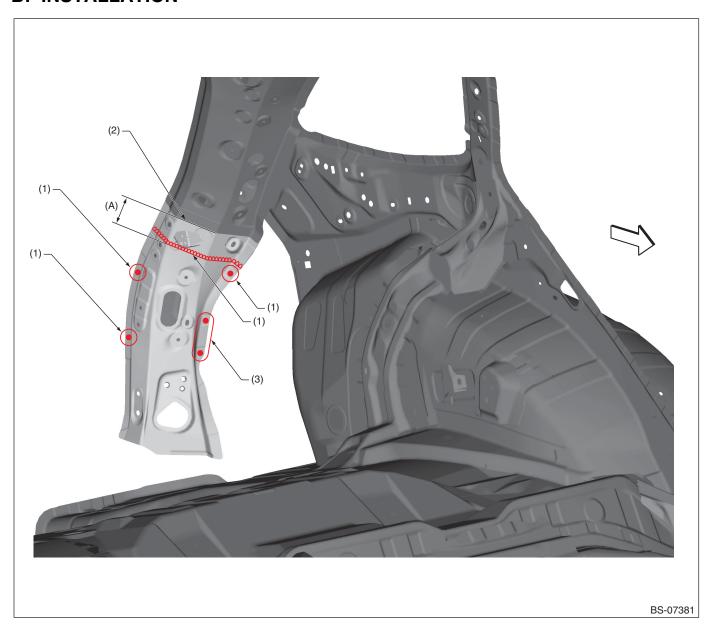
(1) 1 point

(2)

(3) Cut position

(4) 2 points

## **B: INSTALLATION**



- (A) 60 mm (2.36 in)
- (1) 1 point

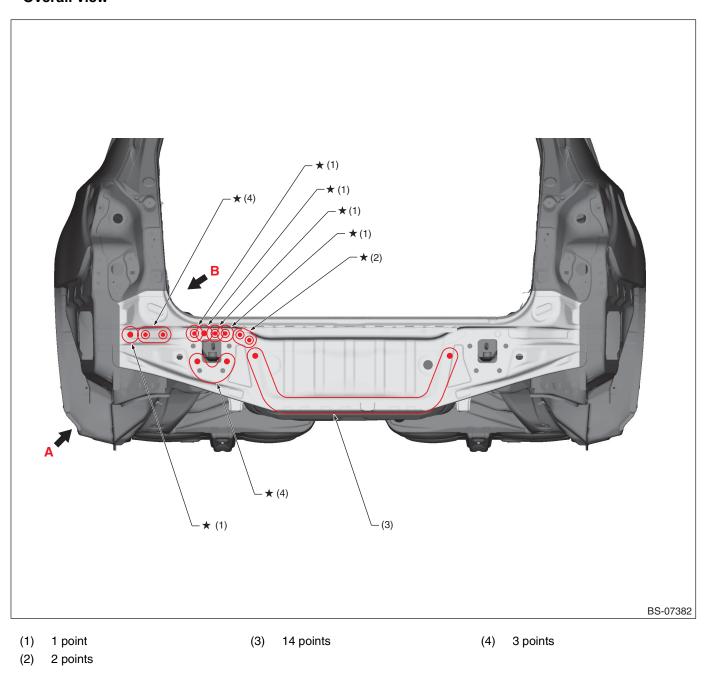
(2) Trim line

(3) 2 points

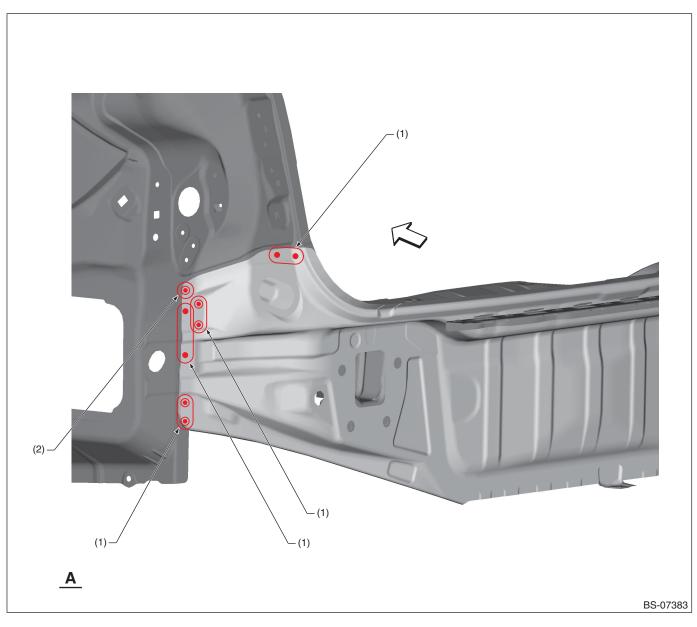
## 8-35. Rear Skirt (Total replacement)/OUTBACK

## A: REMOVAL

Overall view



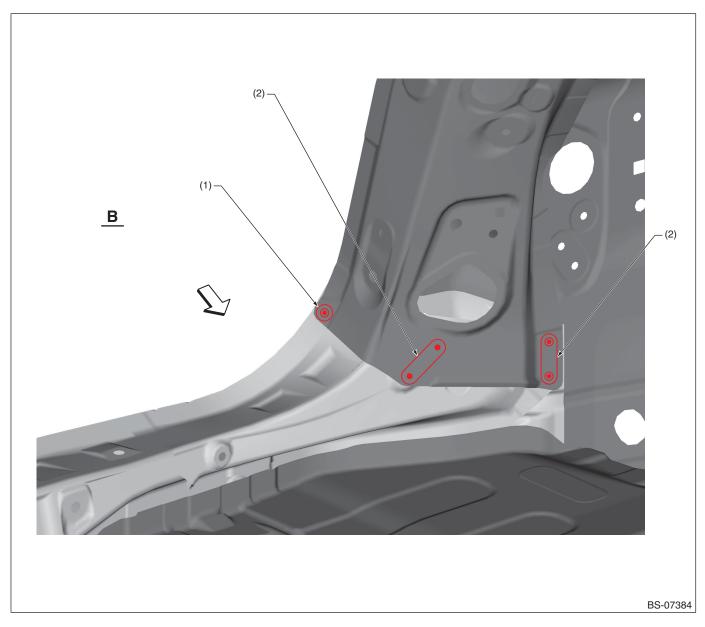
## • View A



(1) 2 points

(2) 1 point

## • View B

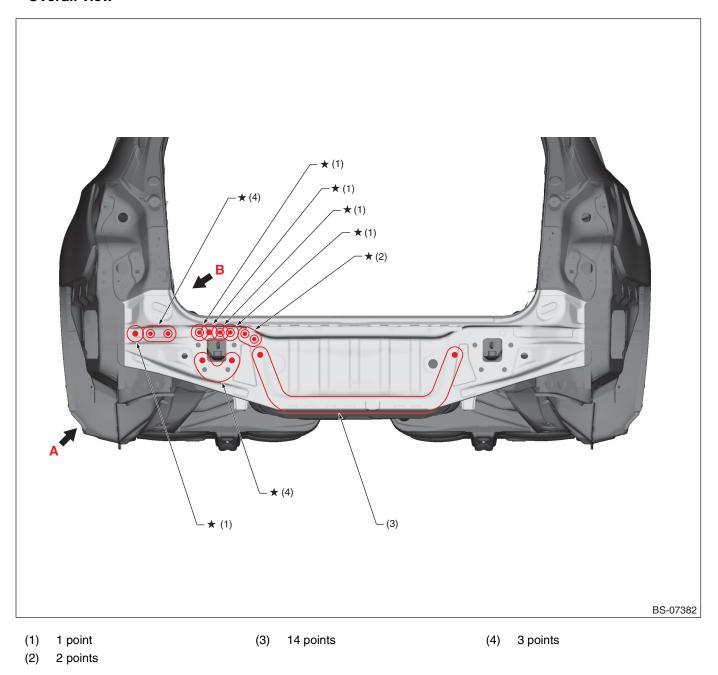


(1) 1 point

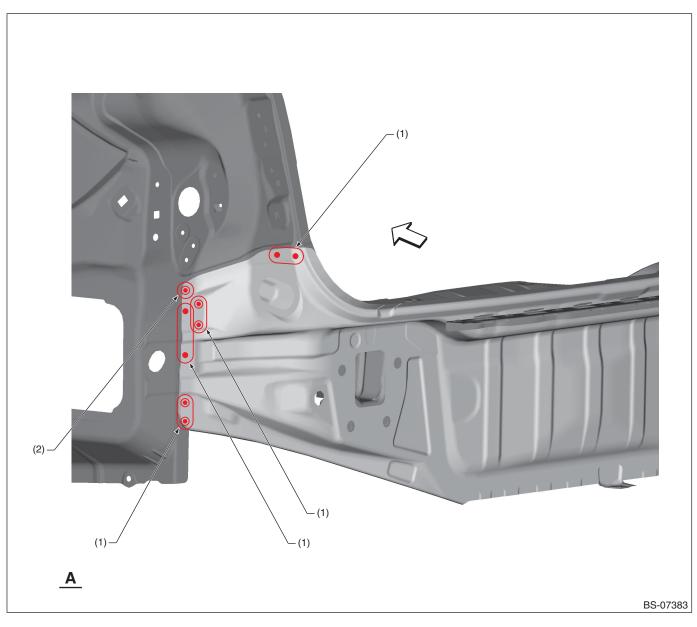
(2) 2 points

## **B: INSTALLATION**

#### Overall view



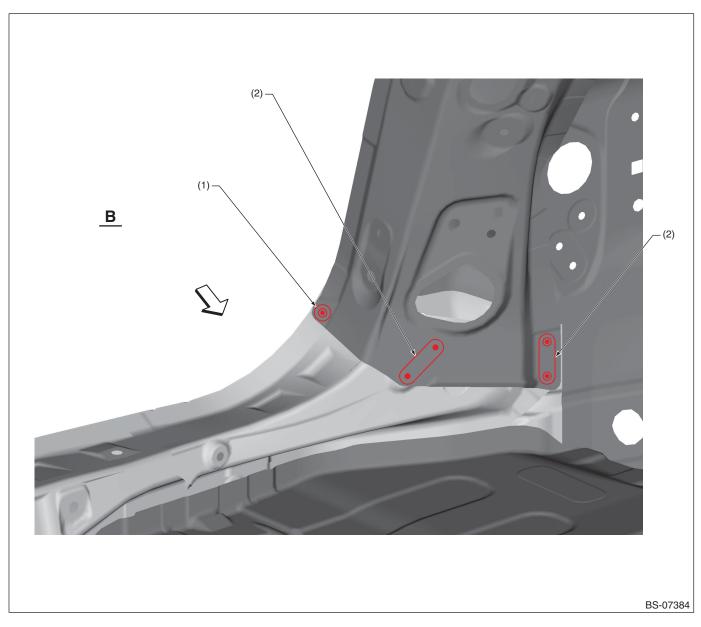
## • View A



(1) 2 points

(2) 1 point

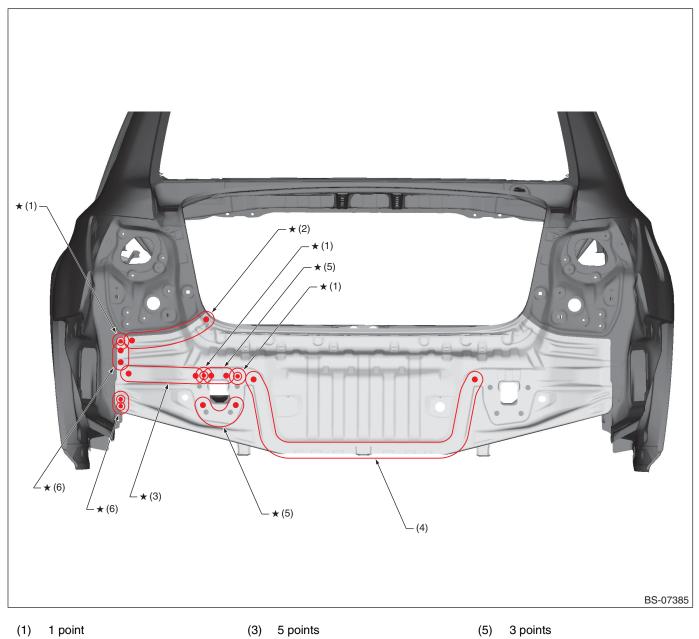
## • View B



(1) 1 point

(2) 2 points

# 8-36. Rear Skirt (Total replacement)/SEDAN A: REMOVAL

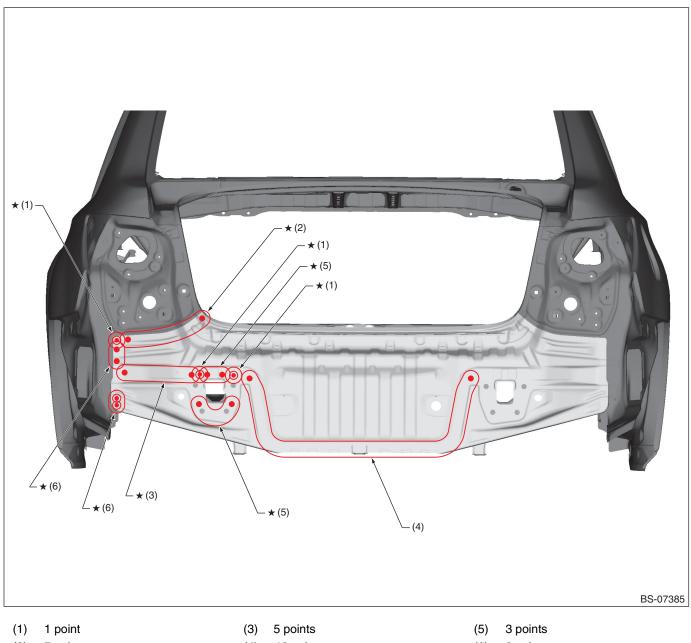


(2) 7 points

(4) 18 points

(6) 2 points

## **B: INSTALLATION**



(2) 7 points

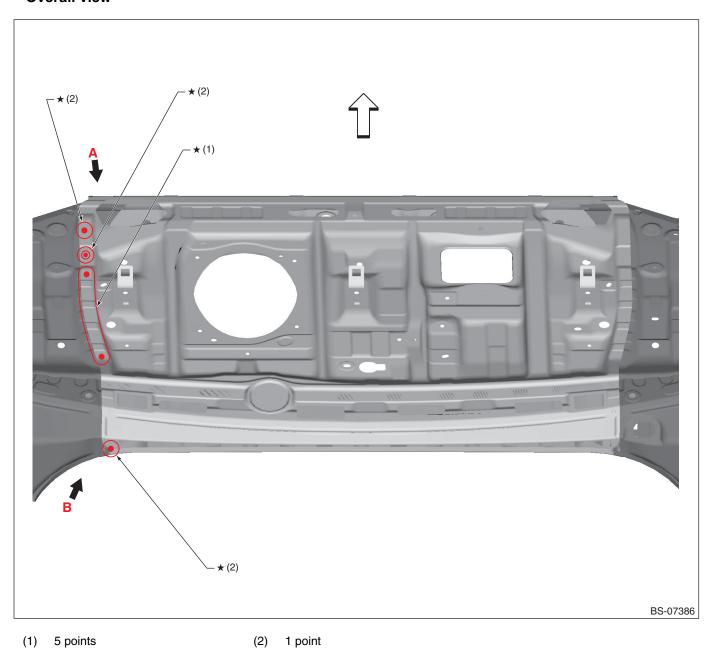
(4) 18 points

(6) 2 points

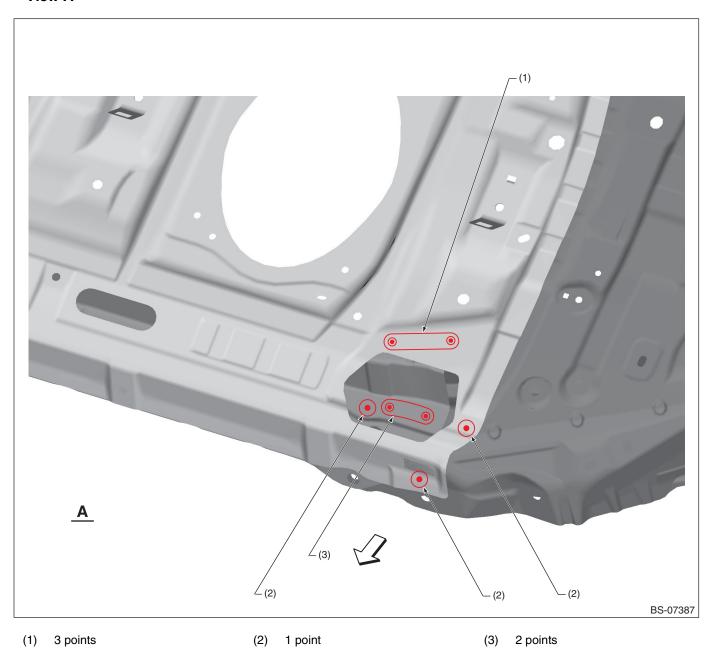
## 8-37. Rear Panel (Total replacement)/SEDAN

#### A: REMOVAL

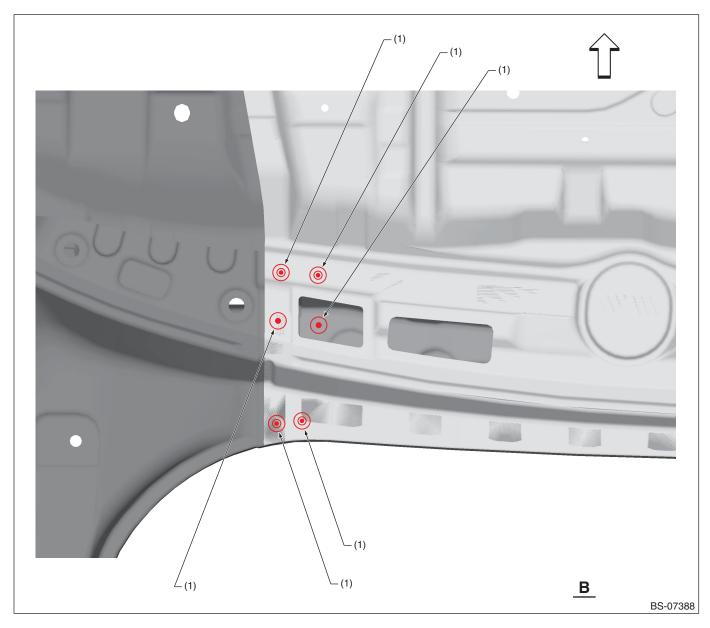
Overall view



## • View A



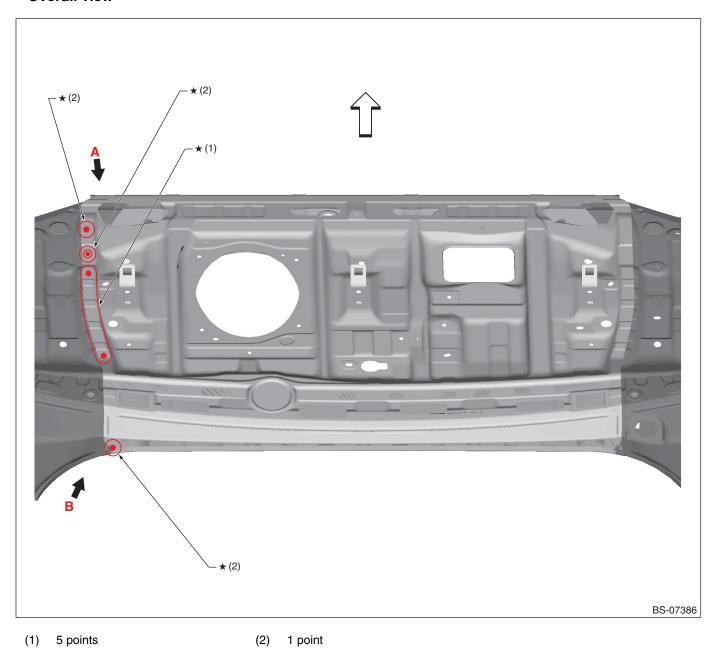
## • View B



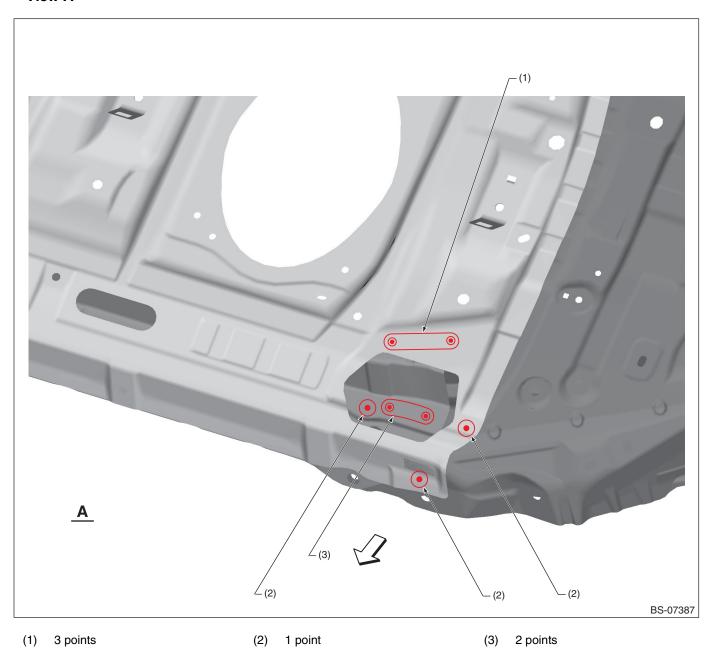
(1) 1 point

## **B: INSTALLATION**

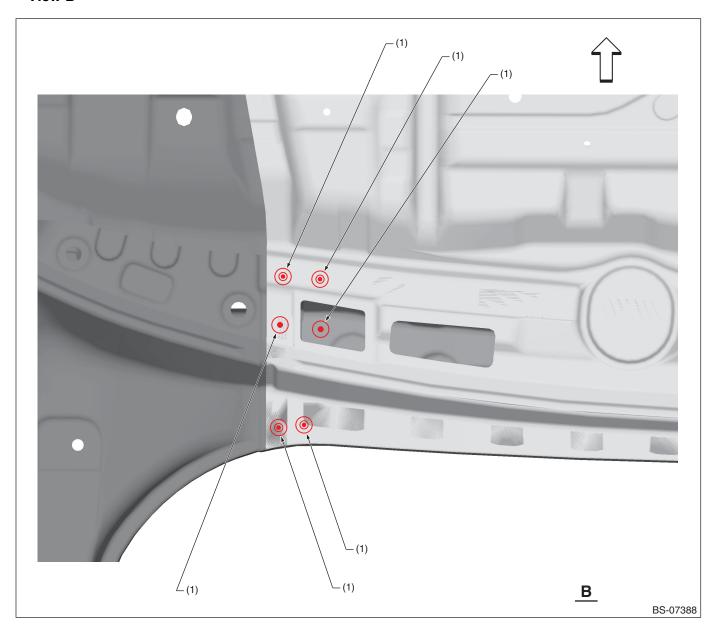
#### Overall view



## • View A



## • View B

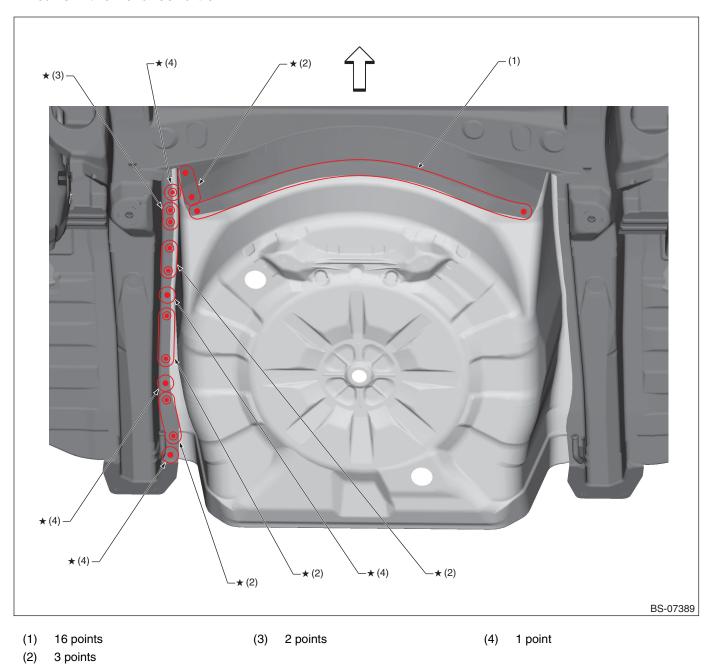


(1) 1 point

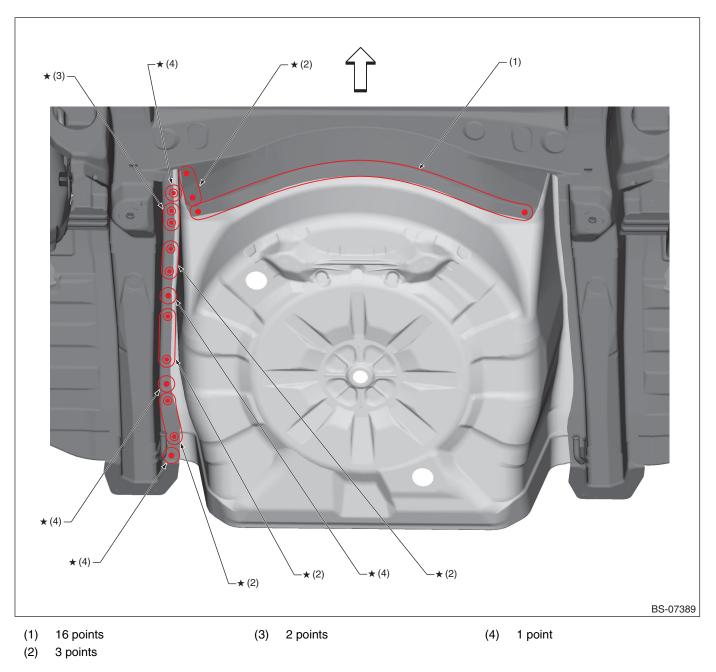
## 8-38. Rear Floor Pan (Total replacement)

#### A: REMOVAL

• Rear skirt removal condition



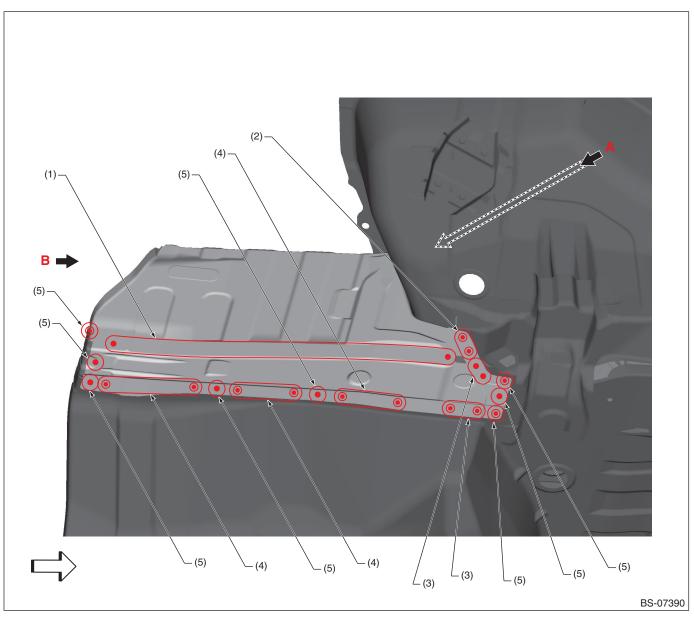
### **B: INSTALLATION**



## 8-39. Rear Floor Side (Total replacement)

### A: REMOVAL

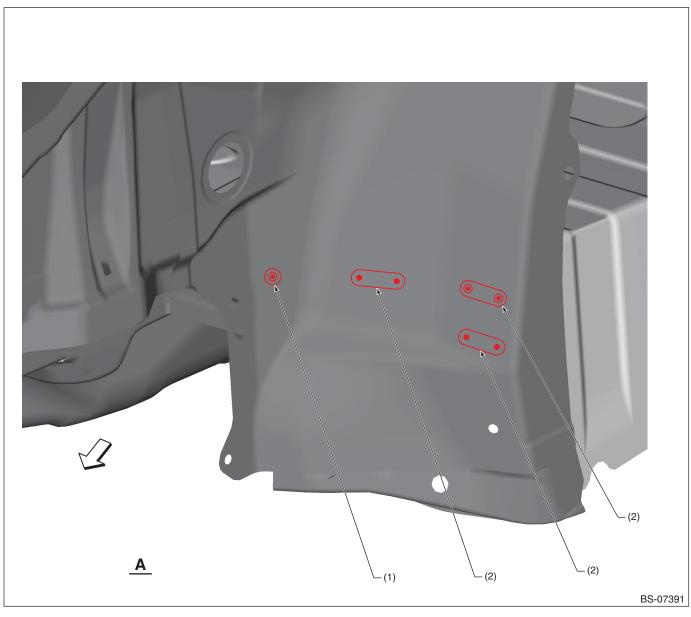
• Overall view (Rear skirt and rear quarter removal condition)



- (1) 10 points
- (2) 2 points (Only LH) 1 point (Only RH)
- (3) 2 points
- (4) 3 points

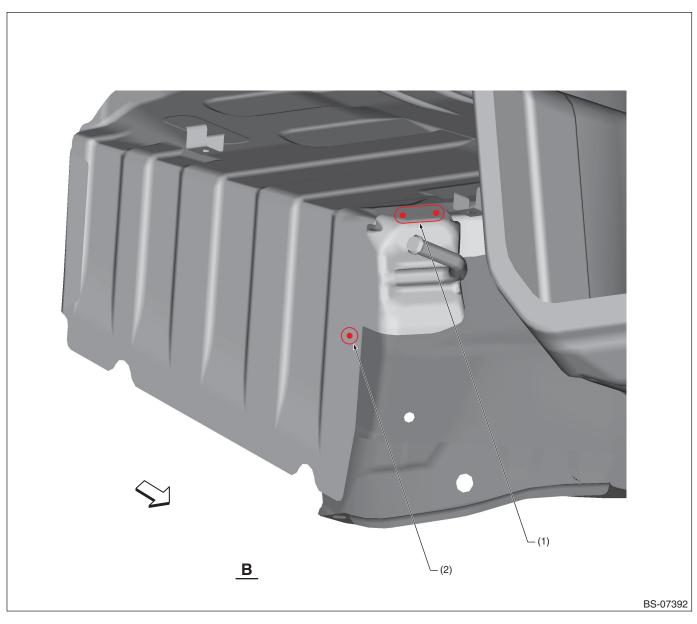
(5) 1 point

### • View A



(1) 1 point (2) 2 points

### • View B

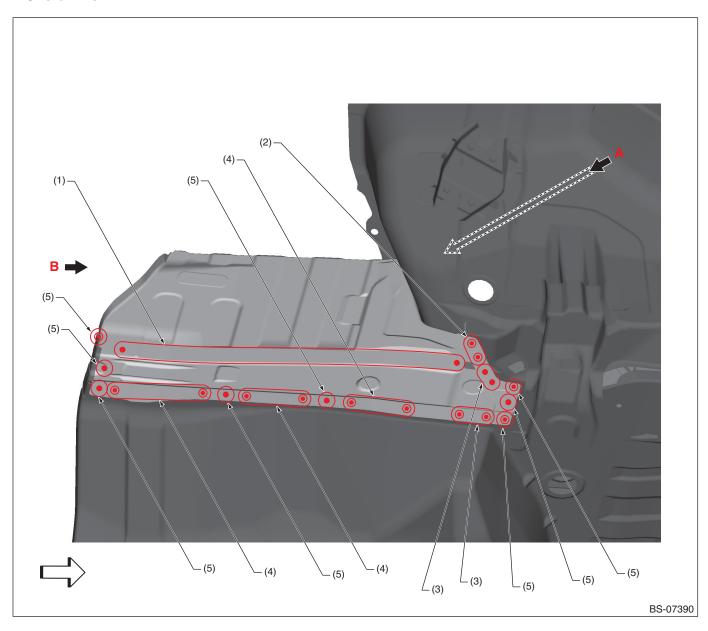


(1) 2 points

(2) 1 point

### **B: INSTALLATION**

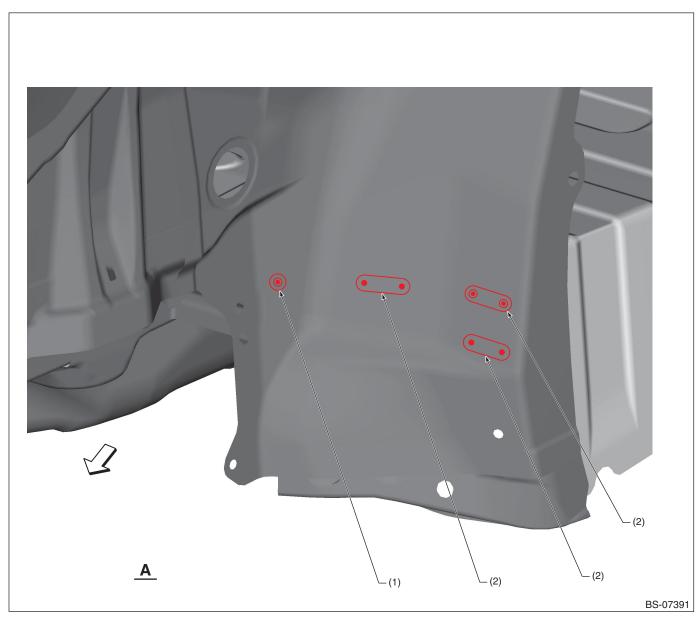
#### Overall view



- (1) 10 points
- (2) 2 points (Only LH) 1 point (Only RH)
- (3) 2 points
- (4) 3 points

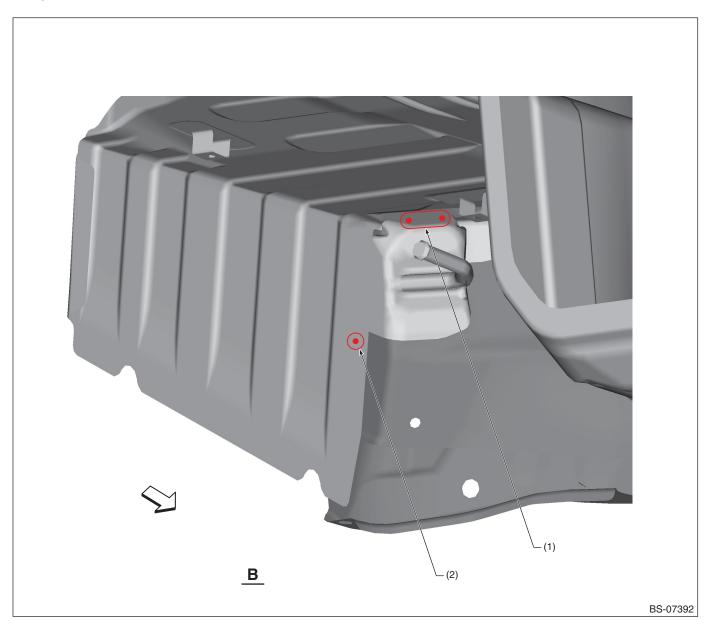
(5) 1 point

### • View A



(1) 1 point (2) 2 points

### • View B



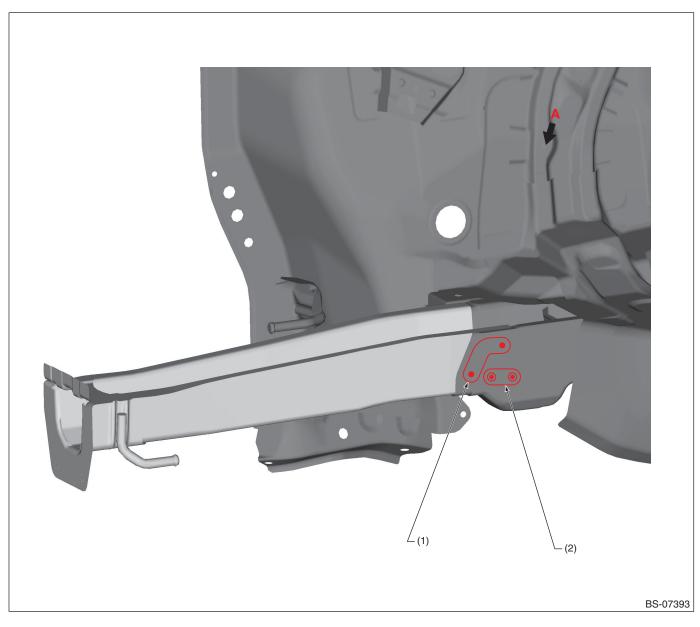
(1) 2 points

(2) 1 point

### 8-40. Rear Side Frame Rear (Total replacement)

### A: REMOVAL

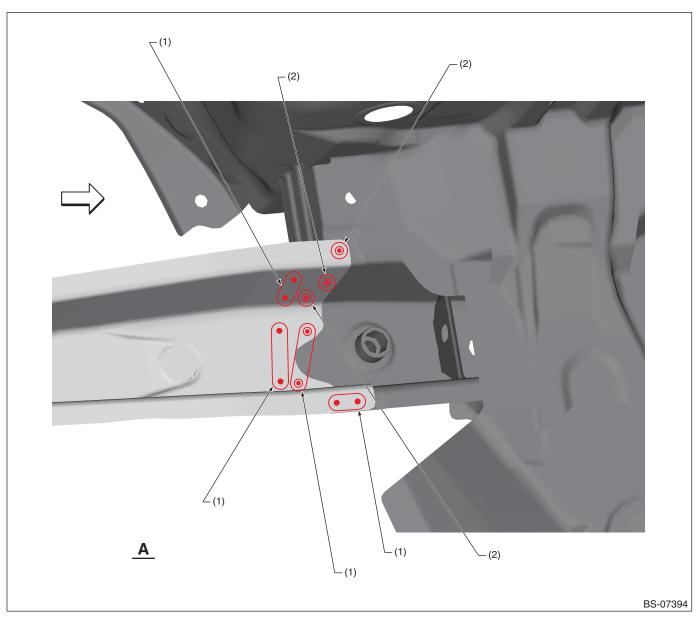
• Overall view (Rear skirt, rear floor side and rear floor pan removal condition)



(1) 3 points

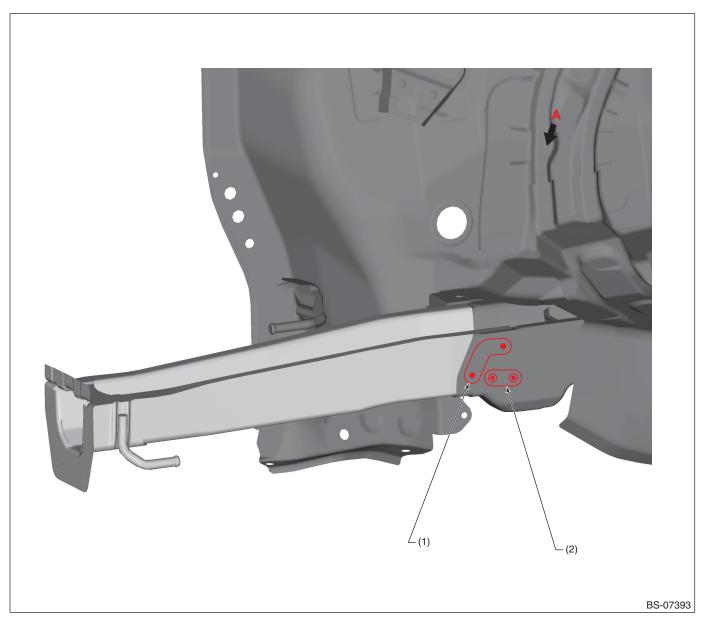
(2) 2 points

### • View A



(1) 2 points (2) 1 point

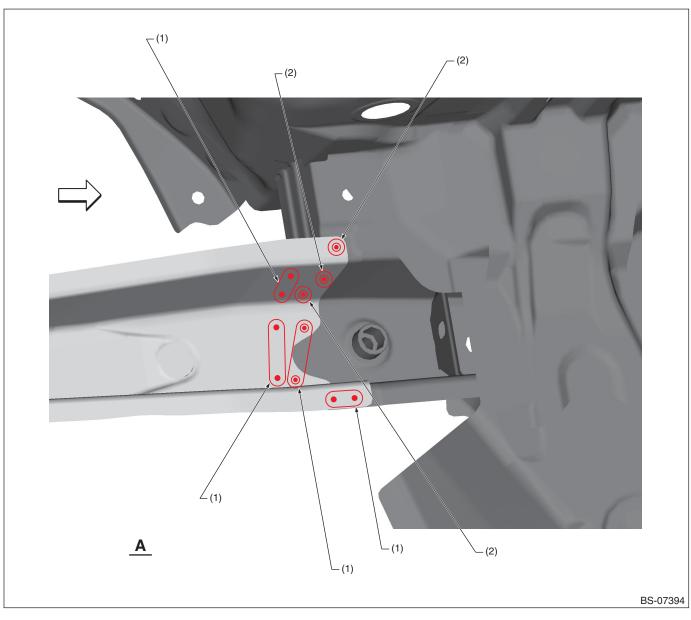
# B: INSTALLATION • Overall view



(1) 3 points

(2) 2 points

### • View A

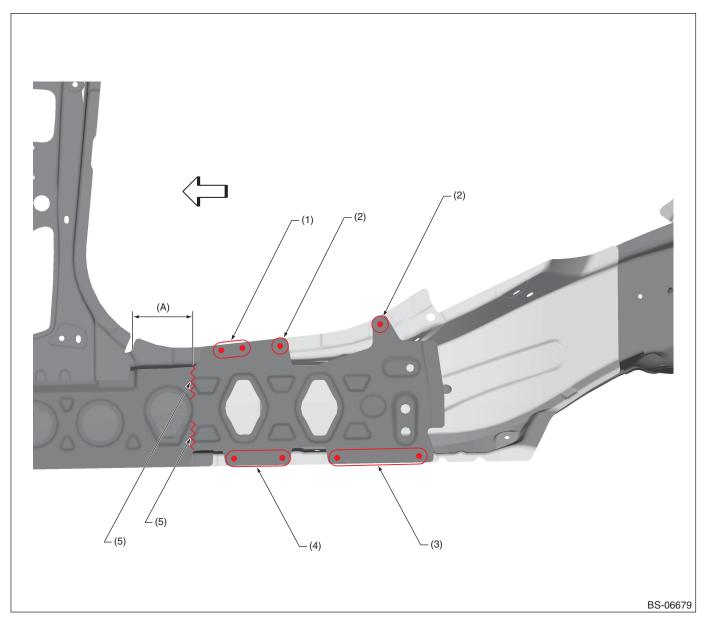


(1) 2 points (2) 1 point

### 8-41. Side Sill Inner Rear (Total replacement)

### A: REMOVAL

• Overall view (Rear quarter outer & inner and side sill reinforcement outer removal condition)



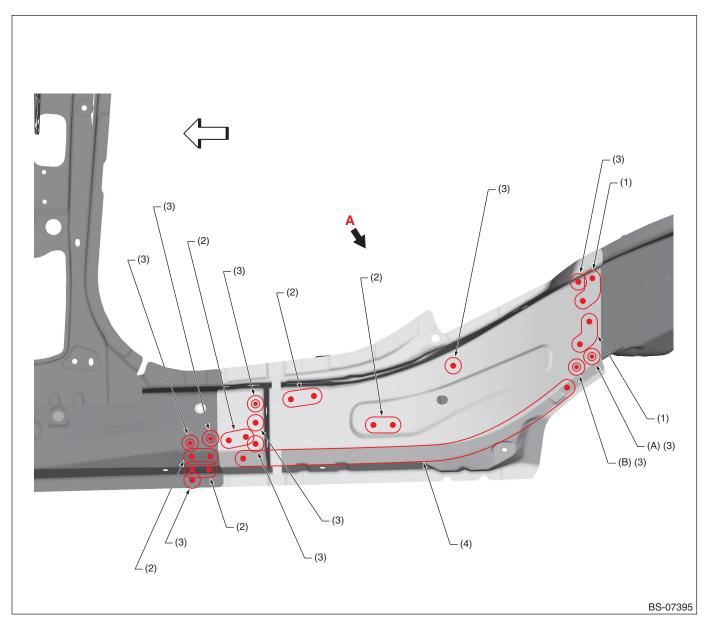
- (A) 60 mm (2.36 in)
- (1) 2 points

(2)

1 point

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

(5) Cut position



(A) Only LH

(B) Only RH

(1) 3 points

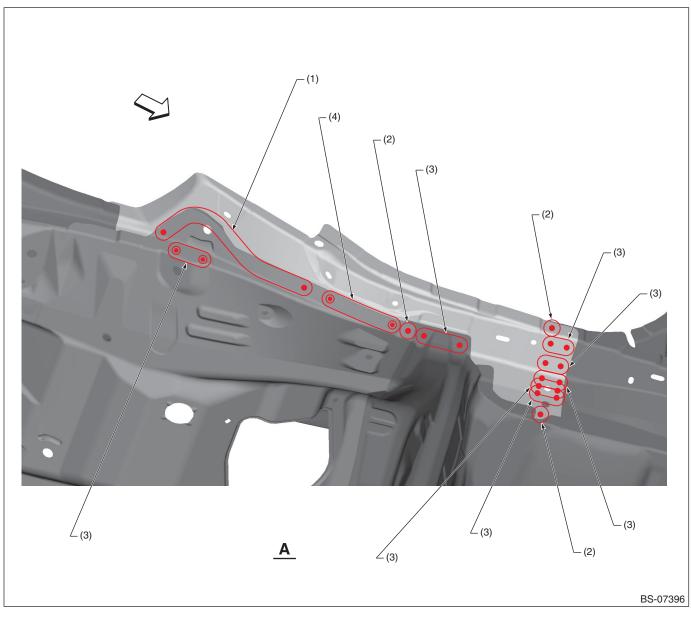
2 points

(2)

(3) 1 point

(4) 13 points

### • View A

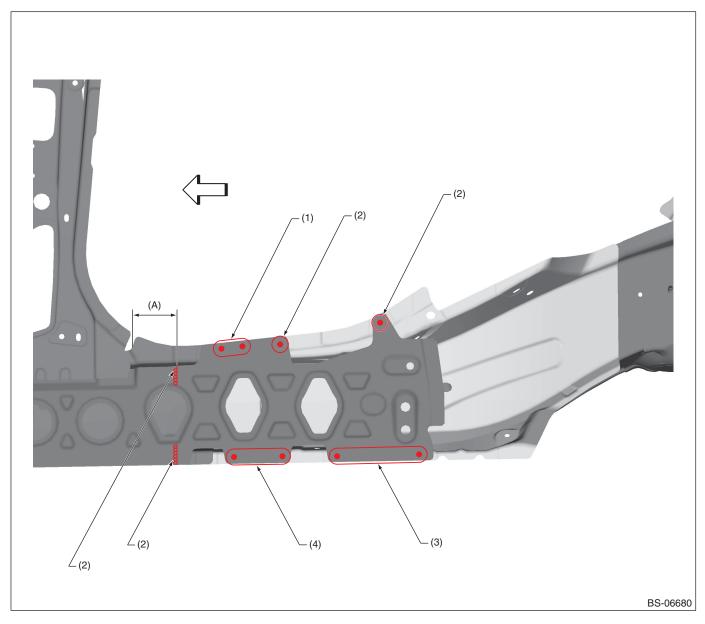


- (1) 6 points
- (2) 1 point

(3) 2 points

(4) 3 points

# B: INSTALLATION • Overall view

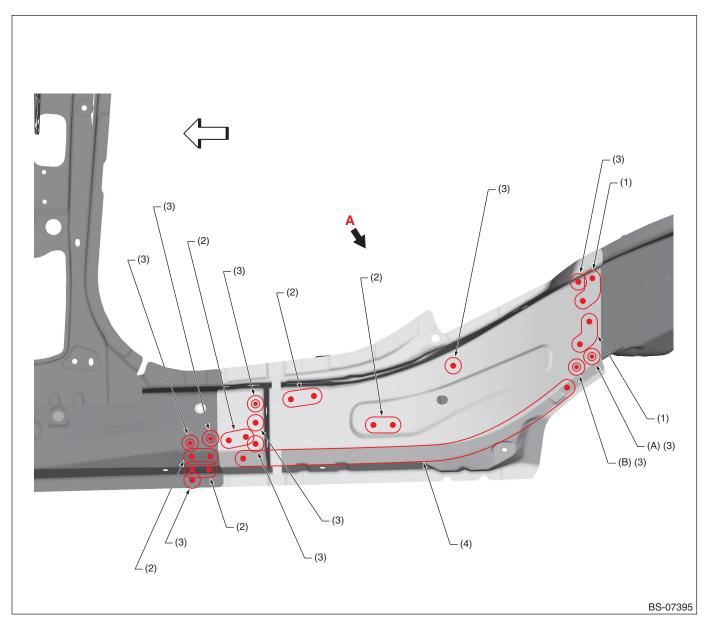


- 40 mm (1.57 in) (A)
- 2 points (1)

4 points (3)

(4) 3 points

1 point (2)



(A) Only LH

(B) Only RH

(1) 3 points

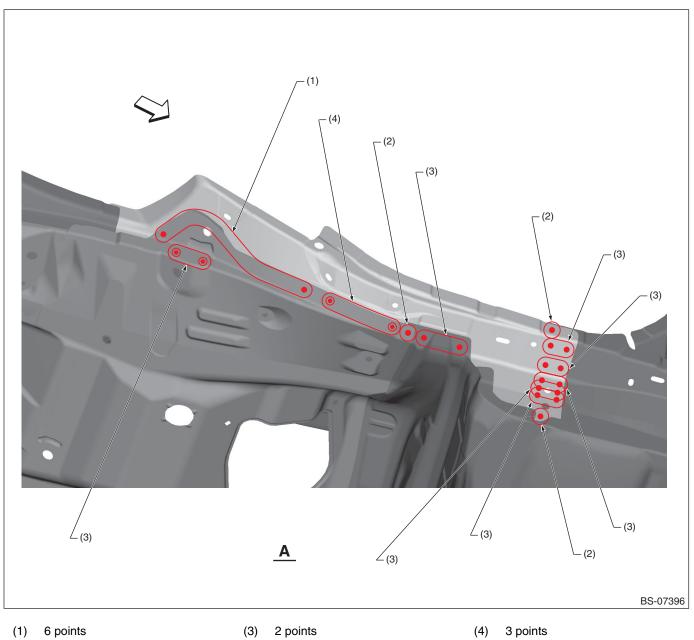
2 points

(2)

(3) 1 point

(4) 13 points

### • View A

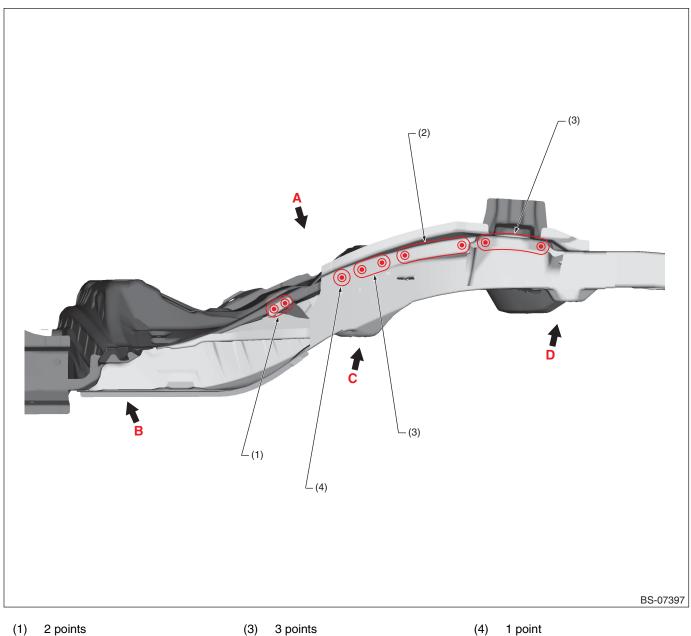


- (2) 1 point

### 8-42. Rear Floor Side Frame (Total replacement)

#### A: REMOVAL

• Overall view (Rear skirt, rear floor pan, rear floor side, rear quarter outer & inner, side sill reinforcement and side sill inner rear removal condition)

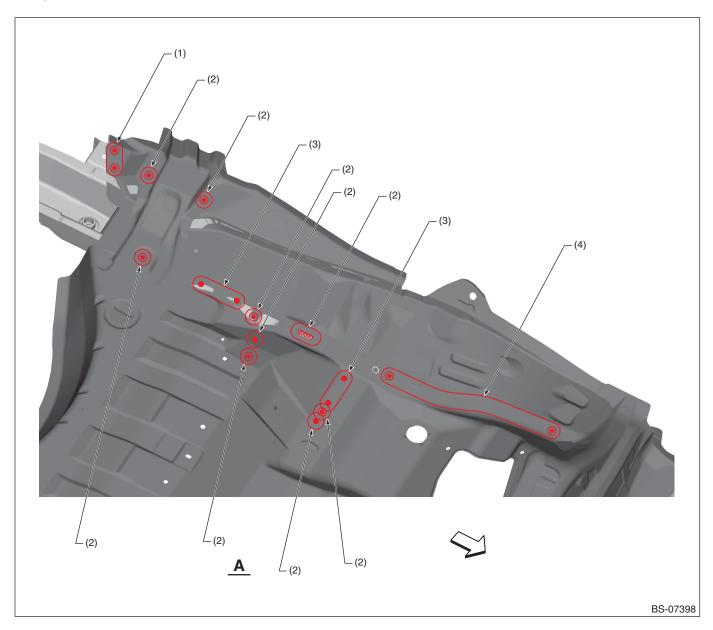


2 points (1)

4 points

3 points

### • View A

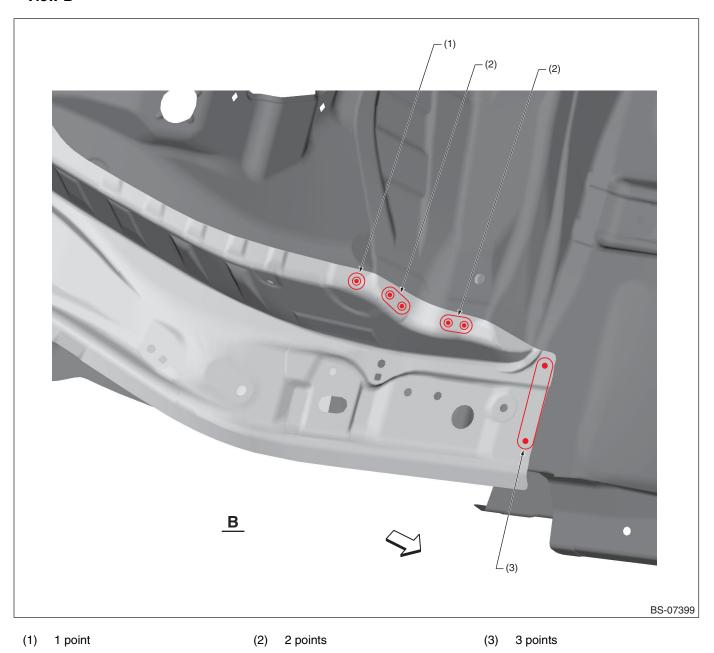


- (1) 2 points (Only LH) 1 point (Only RH)
- (3) 3 points

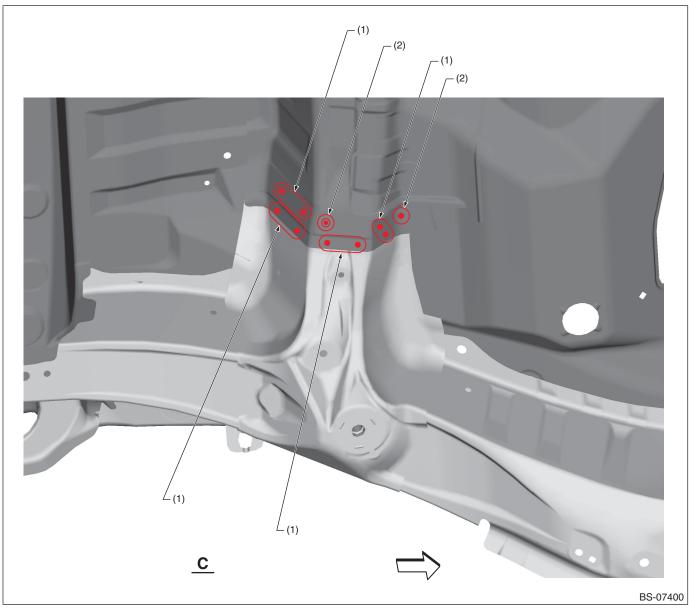
(4) 8 points

(2) 1 point

### • View B

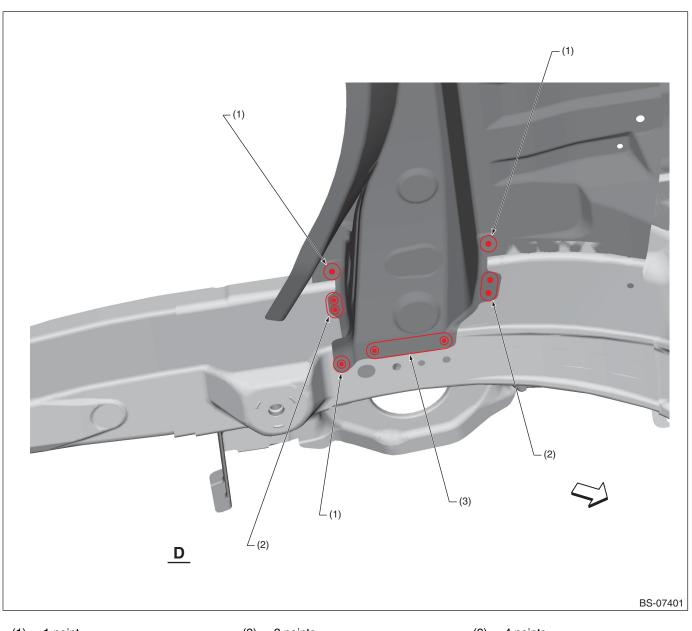


### • View C



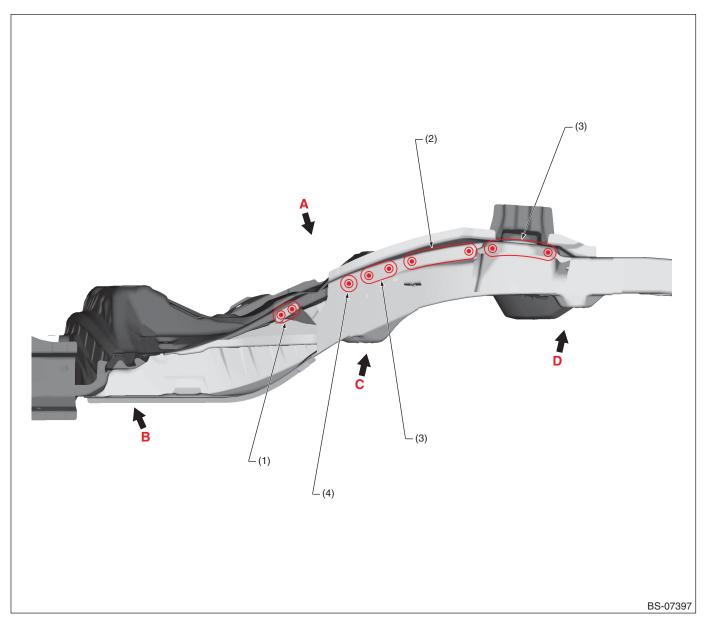
(1) 2 points (2) 1 point

### • View D



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

# B: INSTALLATION • Overall view

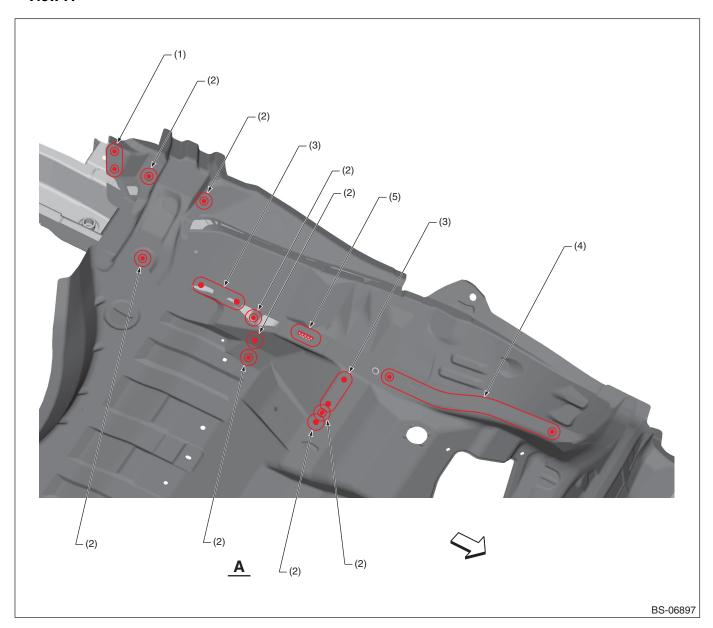


- 2 points (1)
- 4 points (2)

3 points (3)

(4) 1 point

### • View A

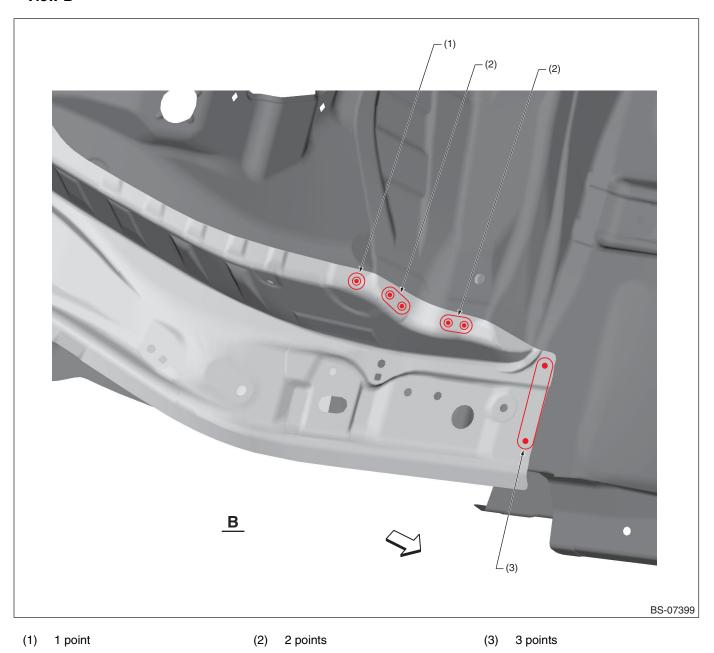


- (1) 2 points (Only LH) 1 point (Only RH)
- (2) 1 point

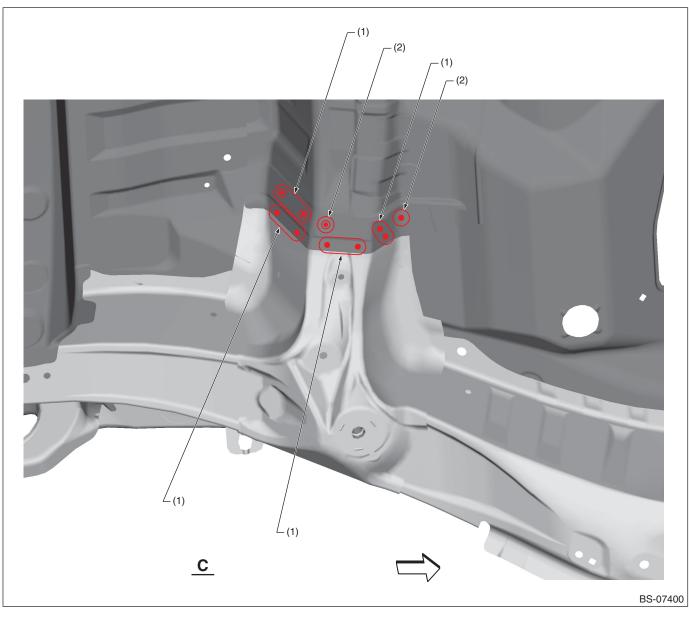
- (3) 3 points
- (4) 8 points

(5) 1 point [30 mm (1.18 in)]

### • View B

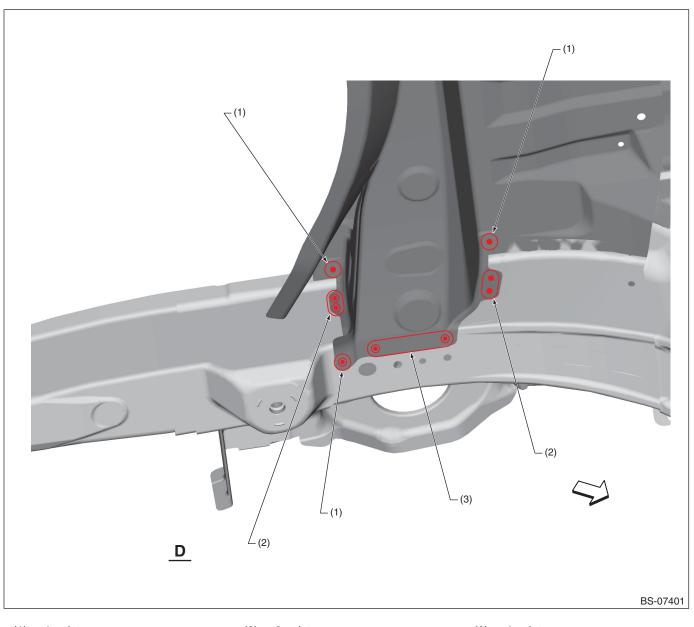


### • View C



(1) 2 points (2) 1 point

### • View D

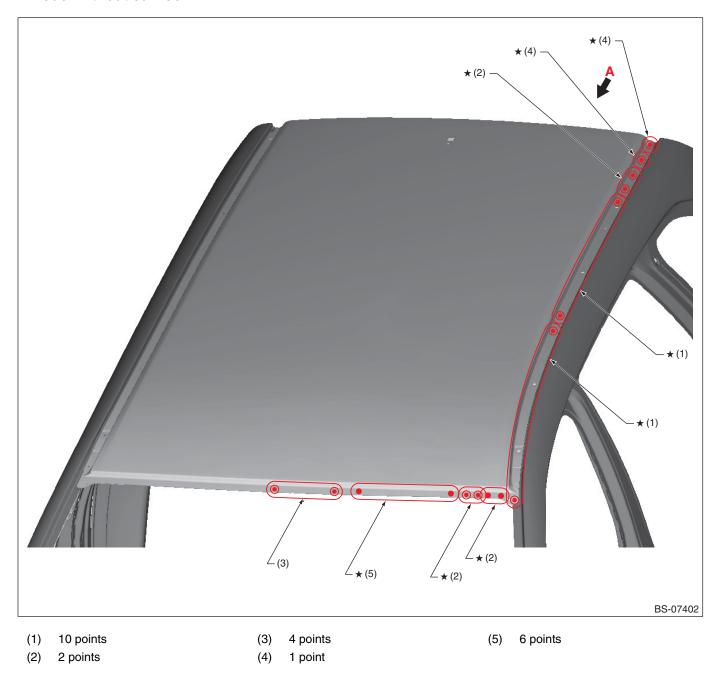


(1) 1 point (2) 2 points (3) 4 points

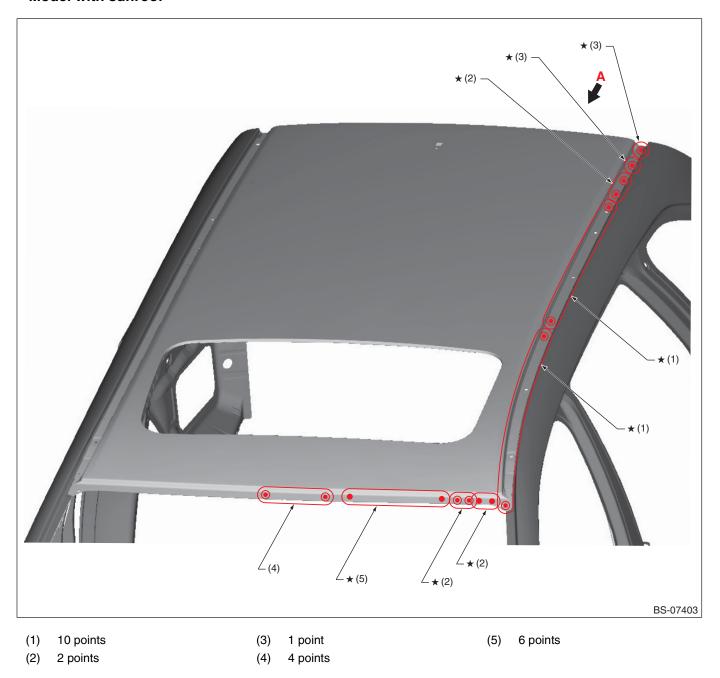
### 8-43. Roof Panel (Total replacement)/OUTBACK

#### A: REMOVAL

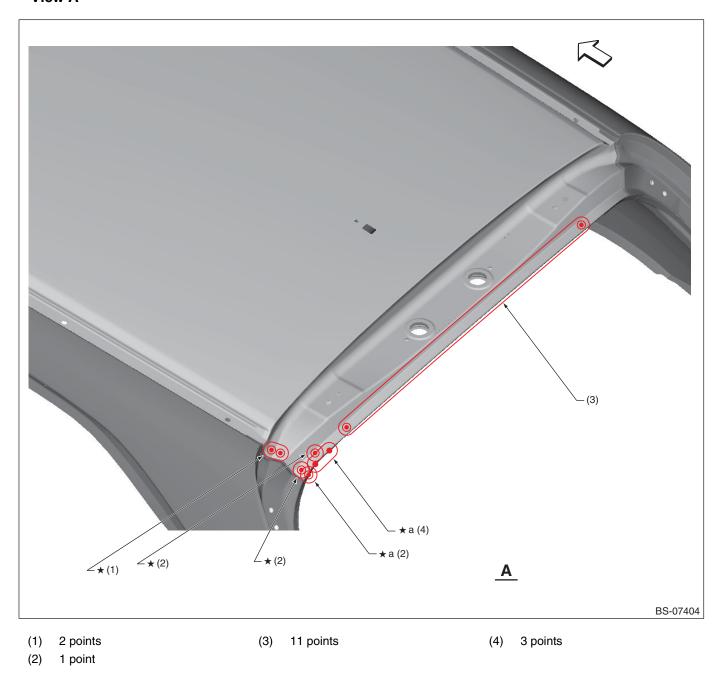
Model without sunroof



#### Model with sunroof



#### View A



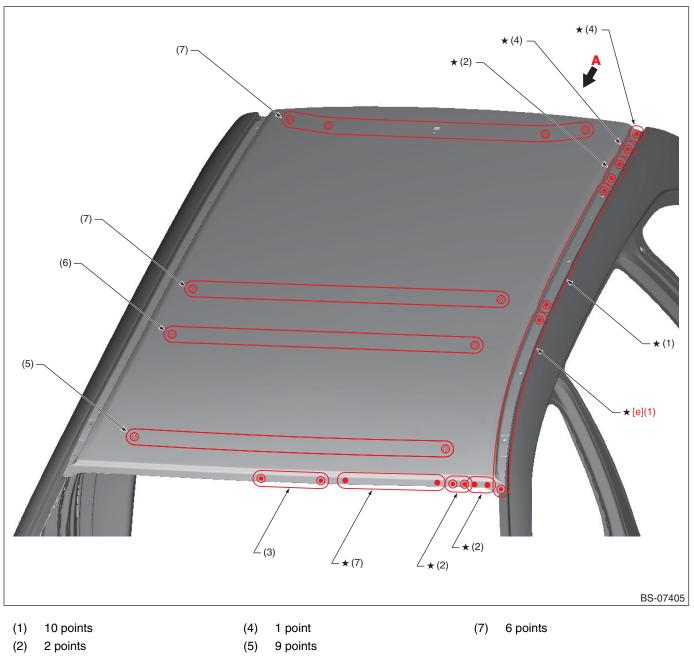
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

#### **CAUTION:**

In order to keep the drill from hitting the part "a," perform the work with the weather strip mounting part straightened.

#### **B: INSTALLATION**

#### • Model without sunroof



(3) 4 points

(6) 7 points

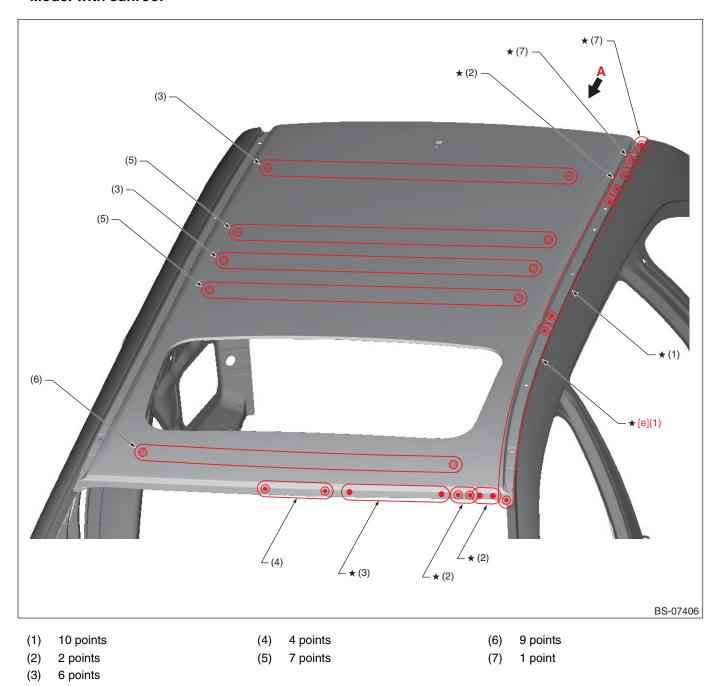
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

: Application of adhesive at the time of roof panel installation.

[e] Spot welding

Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

#### Model with sunroof

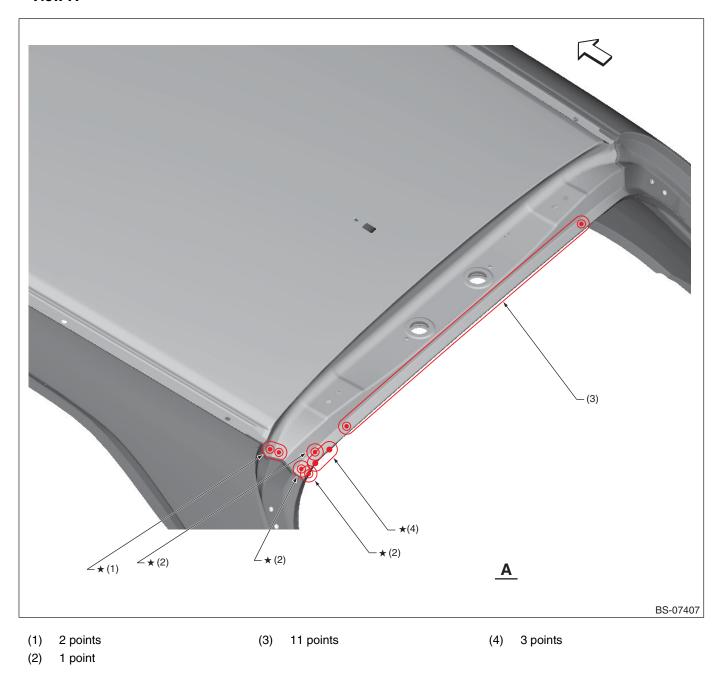


For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

: Application of adhesive at the time of roof panel installation.

[e] Spot welding Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

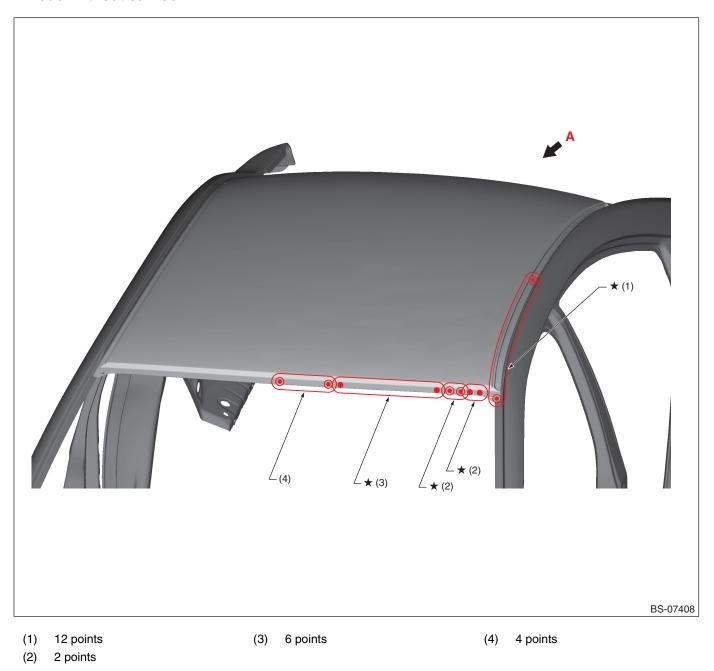
#### View A



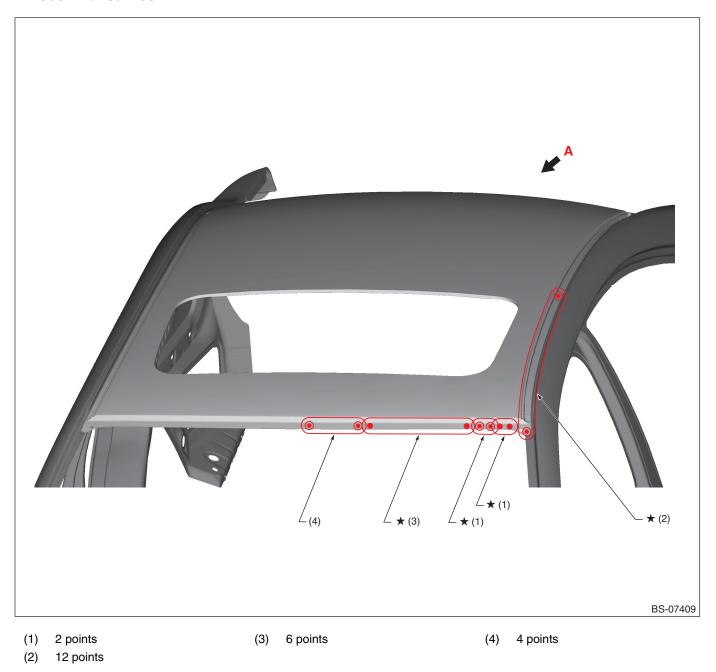
### 8-44. Roof Panel (Total replacement)/SEDAN

#### A: REMOVAL

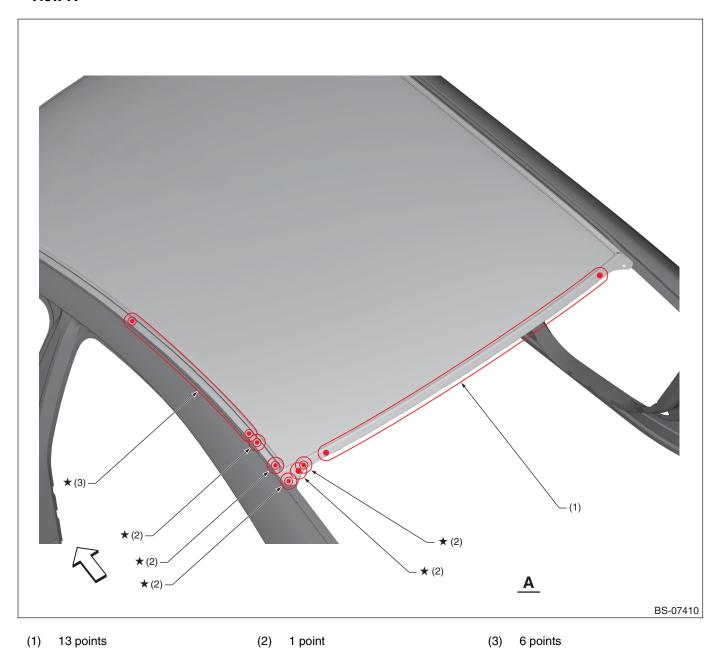
• Model without sunroof



#### Model with sunroof

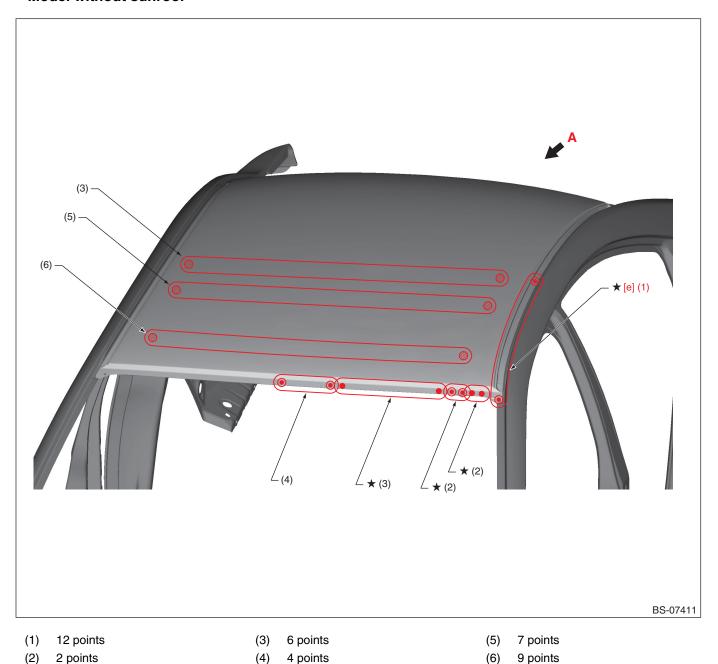


#### View A



# **B: INSTALLATION**

#### • Model without sunroof



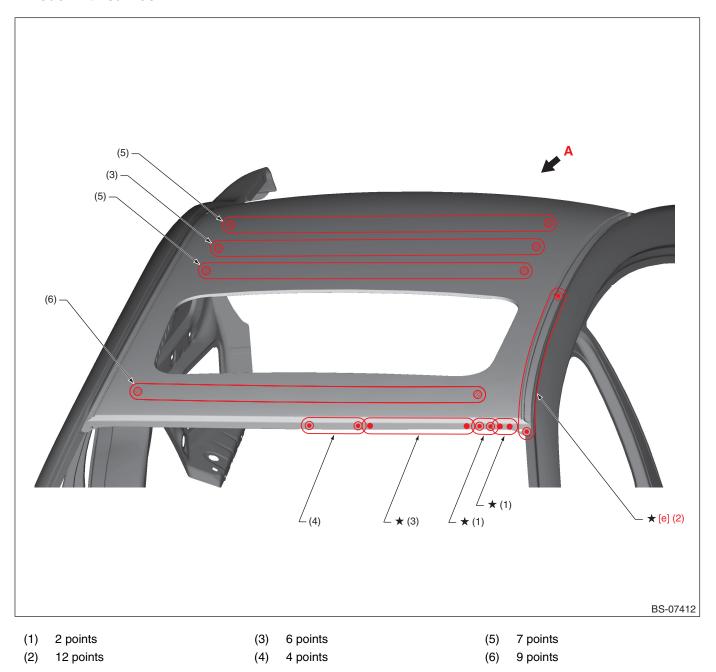
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

: Application of adhesive at the time of roof panel installation.

[e] Spot welding Compression: 4.4 kN, Current: 8.0 kA, Welding time: 20 cyc

# **Panel Replacement**

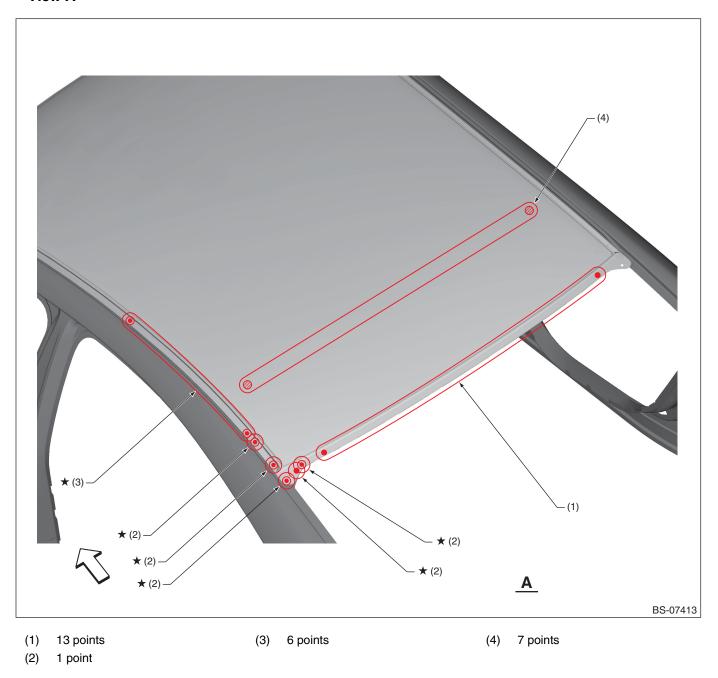
#### Model with sunroof



For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

[e] Spot welding Compression: 4.4kN, Current: 8.0 kA, Welding time: 20 cyc

### View A



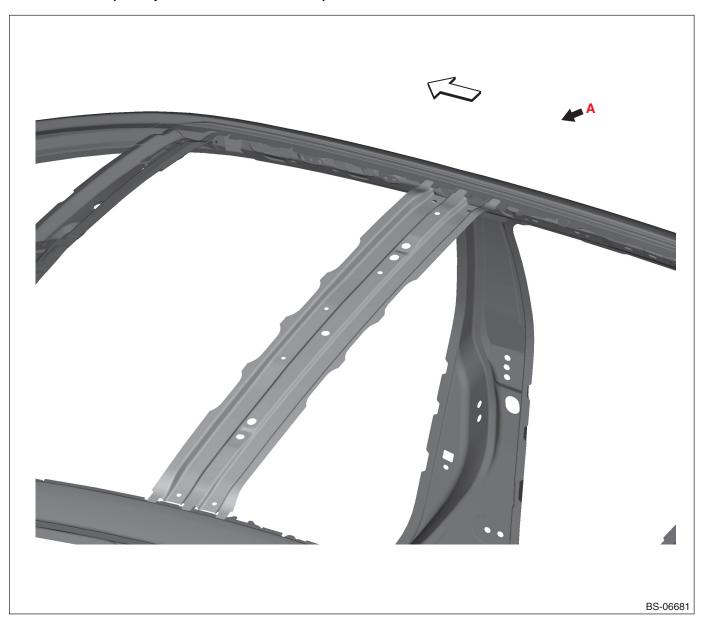
For locations marked by  $\star$ , the welding method and the number of welding points are the same on the left and the right.

: Application of adhesive at the time of roof panel installation.

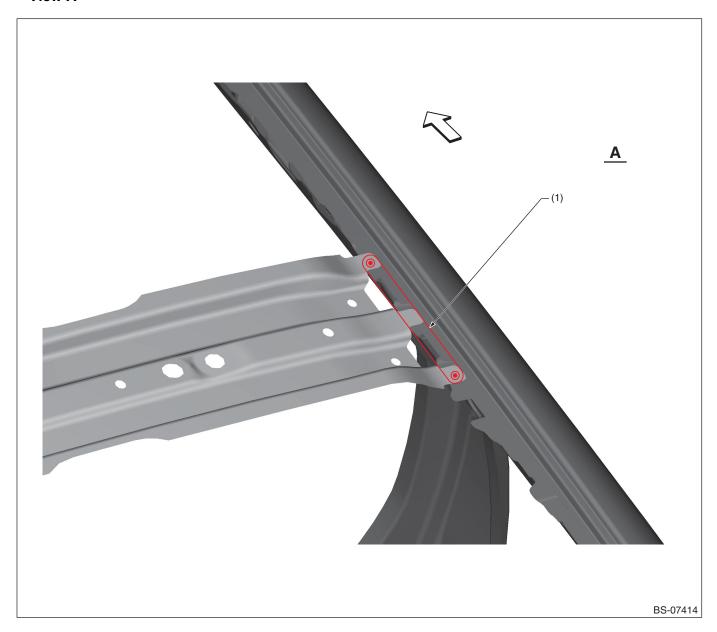
# 8-45. Roof Center Brace (Total replacement)

# A: REMOVAL

• Overall view (Roof panel removal condition)



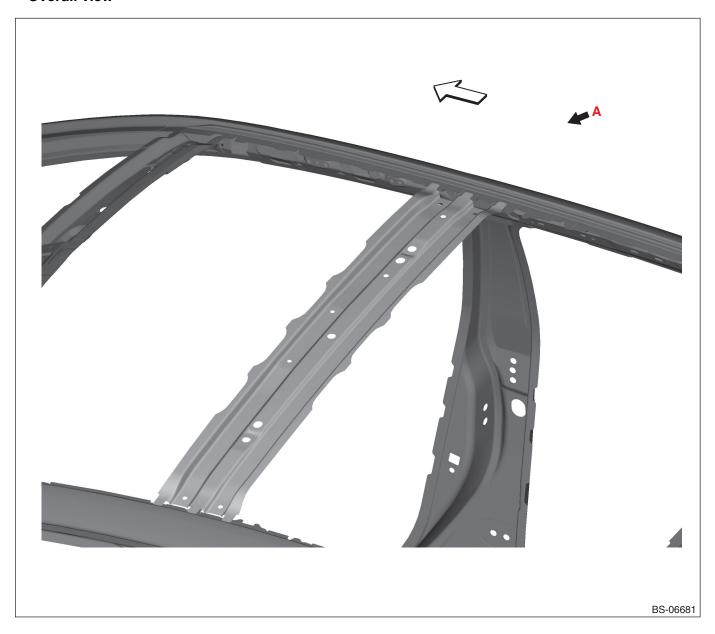
# • View A



(1) 3 points

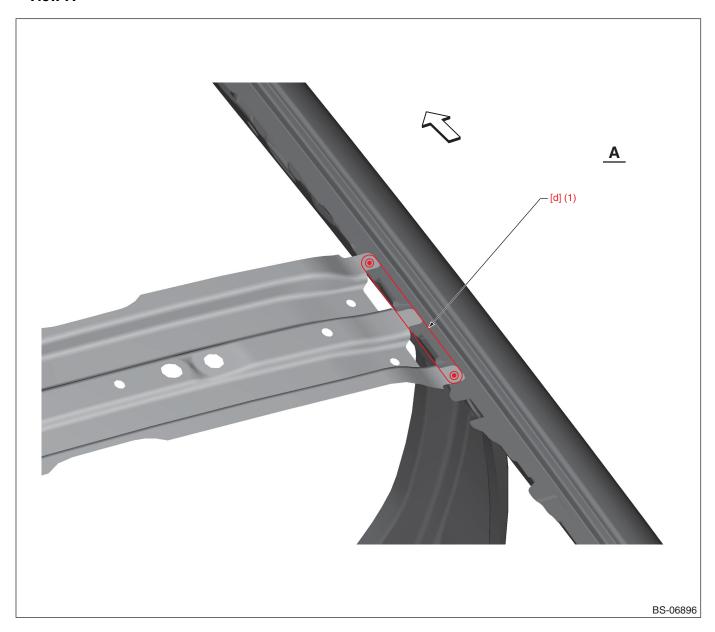
# **Panel Replacement**

# B: INSTALLATION • Overall view



# **Panel Replacement**

# • View A



(1) 3 points

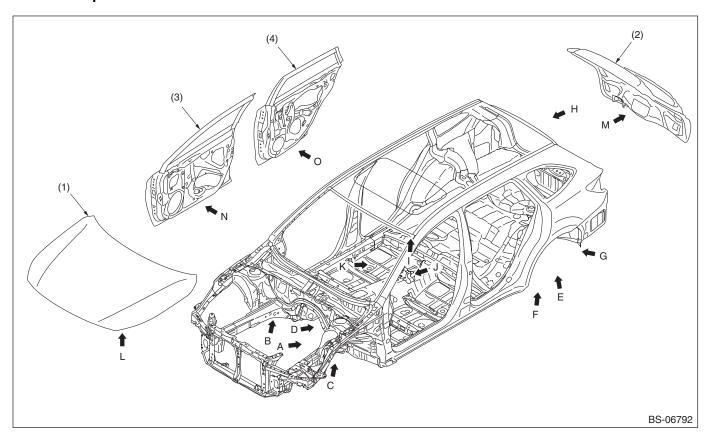
[d] Spot welding Compression: 4.4 kN, Current: 8.0 kA, Welding time: 25 cyc

# **A: SPECIFICATIONS**

Used material: Three Bond 4101 (004403063)

: Sealer application location

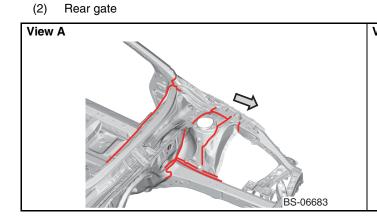
• Common parts for OUTBACK and SEDAN

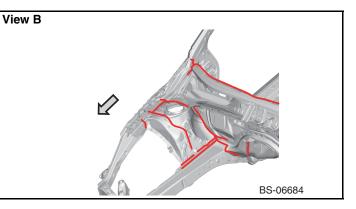


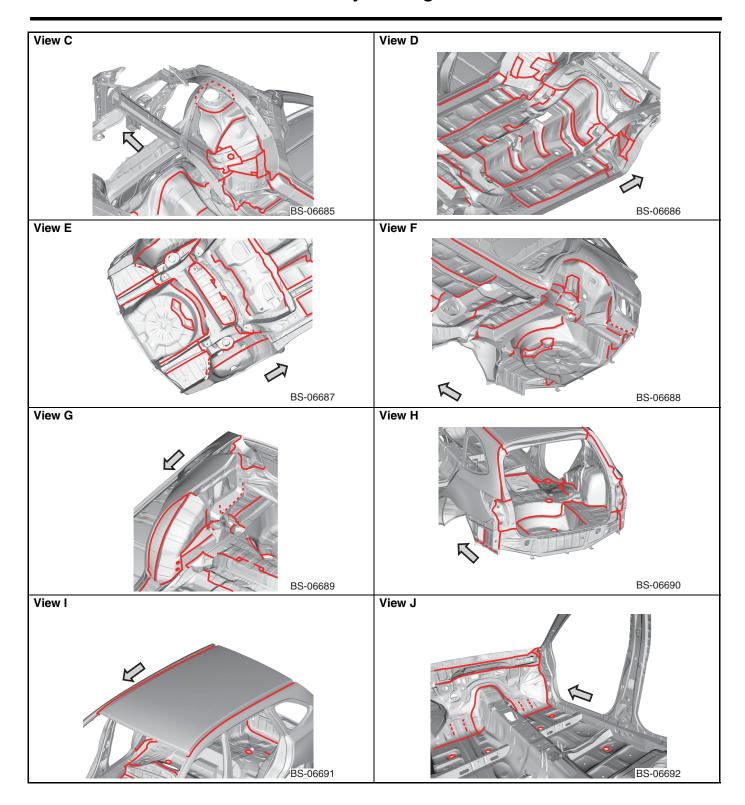
(1) Front hood

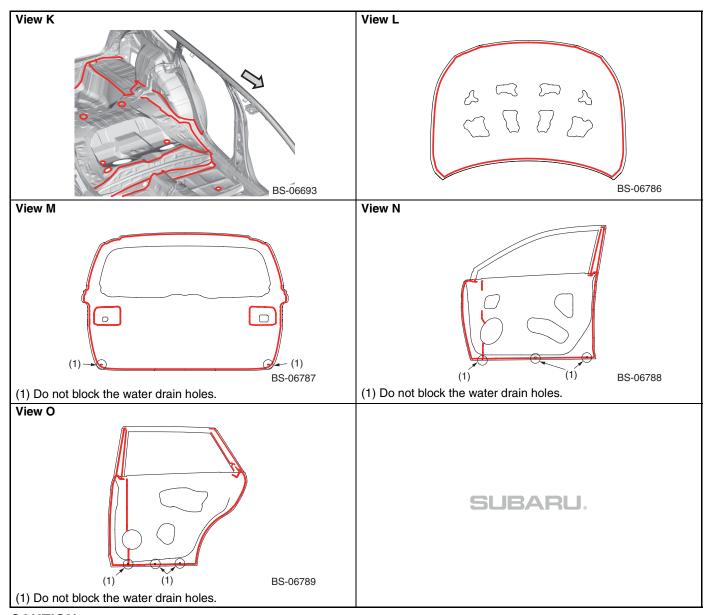
(3) Front door

(4) Rear door





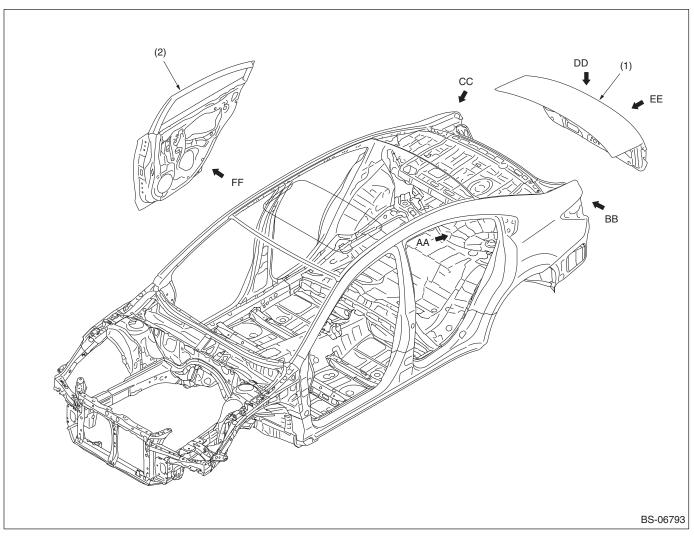




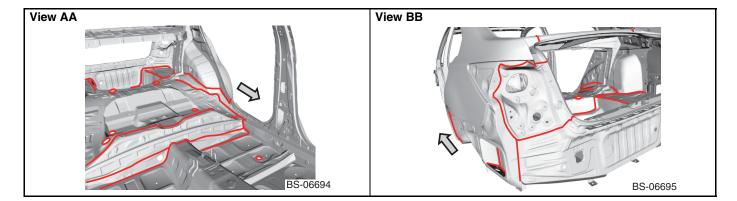
#### **CAUTION:**

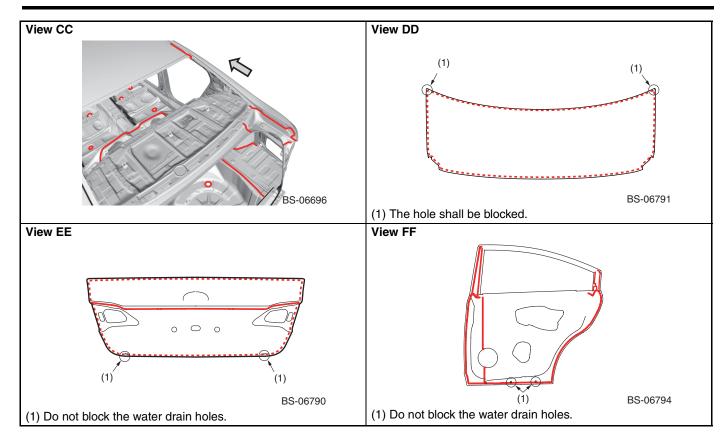
Sealer has already been applied to hood, door and rear gate that are in replacement condition.

# Special SEDAN parts



(1) Trunk (2) Rear door





#### **CAUTION:**

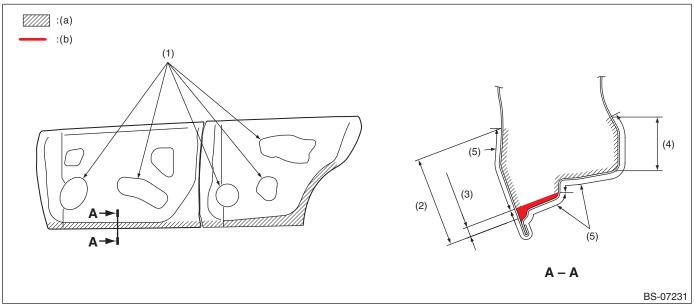
Sealer has already been applied to trunk and door that are in replacement condition.

# **A: SPECIFICATIONS**

Used material: Rust-stop aerosol (K0877YA015)

— and \_\_\_\_\_ : Application area

• Doors (Application thickness =  $50 \mu m$  or more)



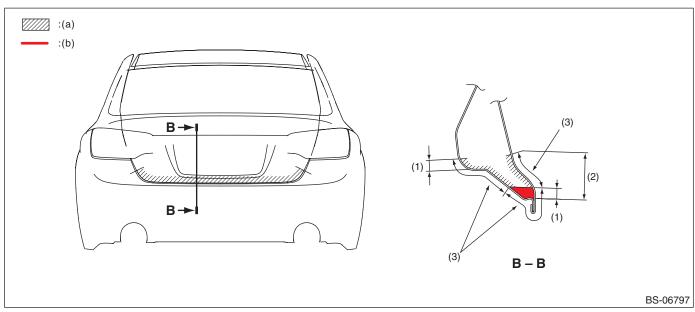
(a) Rust-stop aerosol

90 mm (3.54 in)

- (b) To be filled into the plate joint.
- (1) Wax application work openings
- (3) 10 mm (0.39 in)
- (4) 50 mm (1.97 in)

(5) Adherence of mist is allowable

Trunk lid (Application thickness = 50 μm or more)



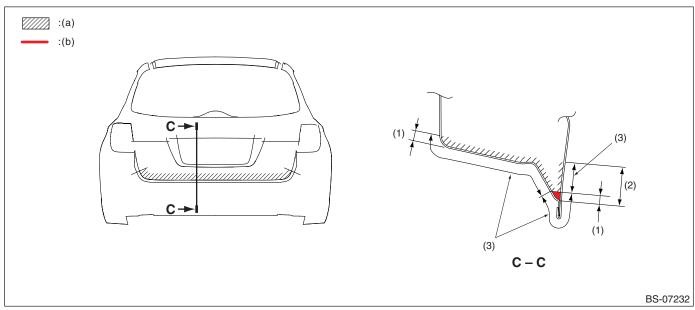
- (a) Rust-stop aerosol
- (b) To be filled into the plate joint.

(1) 10 mm (0.39 in)

(2) 40 mm (1.57 in)

(3) Adherence of mist is allowable

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



- (a) Rust-stop aerosol
- (b) To be filled into the plate joint.

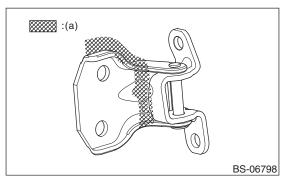
(1) 10 mm (0.39 in)

(2) 40 mm (1.57 in)

(3) Adherence of mist is allowable

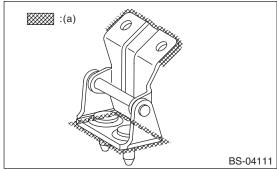
more)

ference (plate edges) on the door side.



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

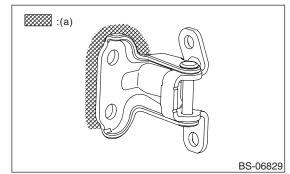
Apply to the contact surface on the body side at two locations on the left and right, and to installation outer circumference (indicated range, plate edges) on the rear gate side.



(a) Rust-stop aerosol

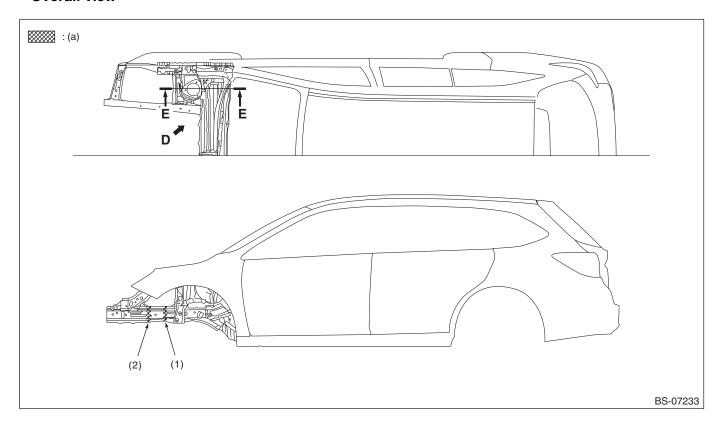
• Front door hinge (Application thickness = 15  $\mu$ m or • Rear door hinge (Application thickness = 15  $\mu$ m or more)

Apply to the contact surface (indicated range) on Apply to the contact surface (indicated range) on body side at two locations at the top and bottom (four body side at two locations at the top and bottom (four locations in all), and to the installation outer circum- locations in all), and to the installation outer circumference (plate edges) on the door side.



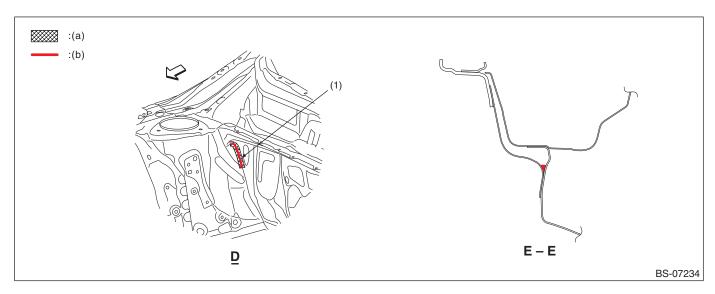
(a) Rust-stop aerosol

#### Overall view



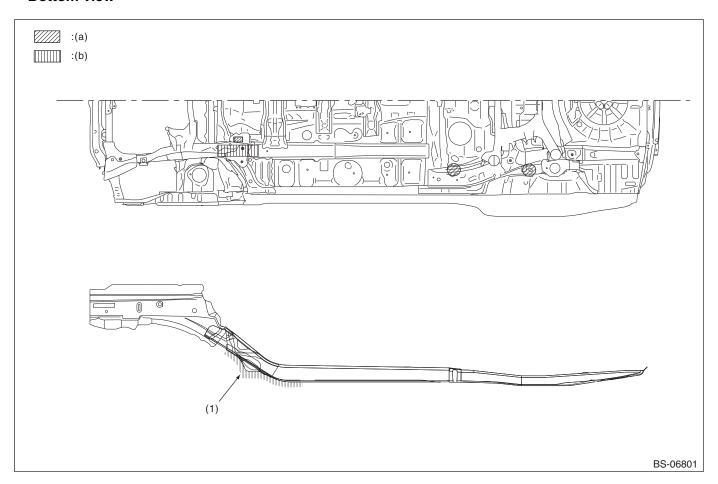
- (a) Rust-stop aerosol (Application thickness = 15 μm or more)
- (1) The panel joints shall be covered. (2) The panel joints on the inside of the engine compartment shall be covered.

#### View/Cross section



- (a) Rust-stop aerosol (Application thickness = 15  $\mu$ m or more)
- (b) To be filled into the plate joint.
- (1) Securely cover the contact surface of the toe board, front suspension bracket.

#### Bottom view



- (a) Rust-stop aerosol (Application thickness =  $50 \mu m$  or more).
- (1) Application shall be done without the transverse link bush coated.
- (b) Rust-stop aerosol (Application thickness = 150  $\mu$ m or more).

### **A: SPECIFICATIONS**

Repair material: PVC (NT guardcoat 5900FL)

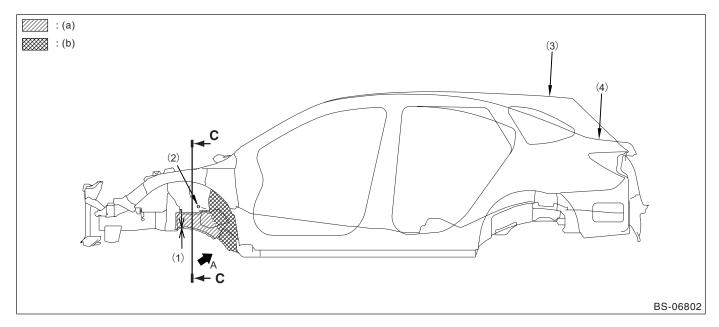
#### **CAUTION:**

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

- High-temperature parts related to the exhaust pipe
- Hoses, tubes and harness parts
- Installation surfaces of rear suspension, transmission, subframe,etc.
- 1) Application area and application thickness

200 μm or more
Dry: 340 $\mu m$ or more $\chi$ Wet: 330 $\mu m$ or more
Dry: 780 μm or more、Wet: 630 μm or more
The panel gap shall be filled.

#### Side view



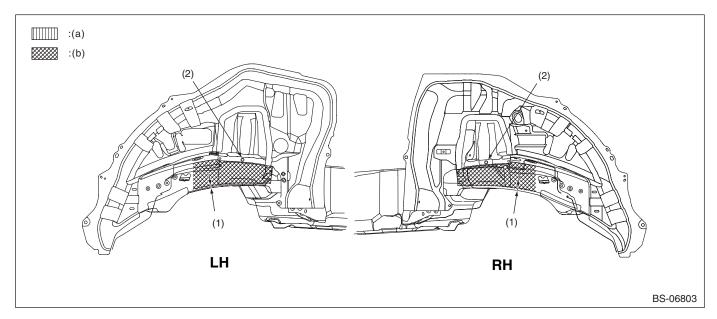
- (a) Dry: 340  $\mu m$  or more, Wet: 330  $\mu m$  or more
- (b) Dry: 780  $\mu m$  or more, Wet: 630  $\mu m$  or more

(3)

- (1) 10 mm (0.39 in) (Adherence of mist is allowable)
- (2) Plug must be covered with PVC
- OUTBACK (4)

SEDAN

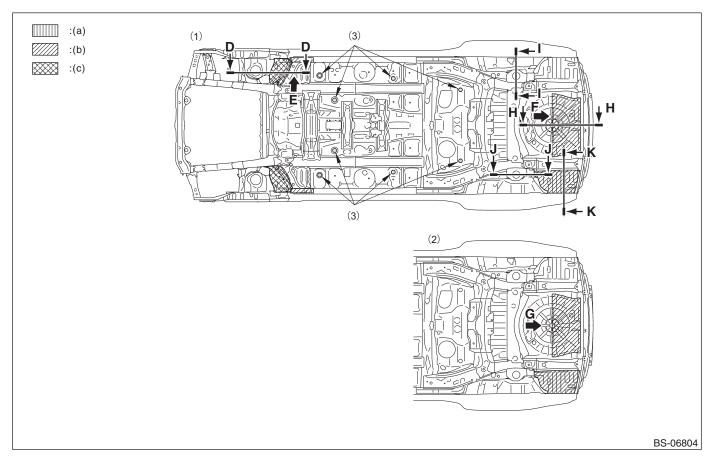
### Rear wheel apron side view



(a)  $200 \mu m$  or more

- (b) Dry: 780  $\mu m$  or more, Wet: 630  $\mu m$  or more
- (1) 10 mm (0.39 in) (Adherence of mist is allowable)
- (2) Plug must be covered with PVC

#### Bottom view



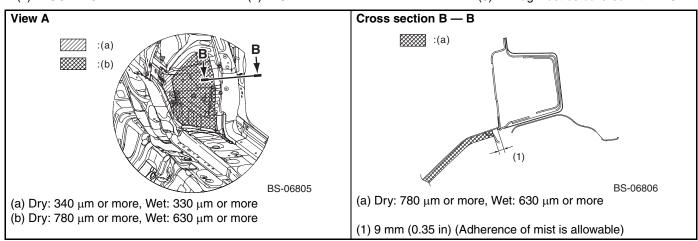
(a) 200 µm or more

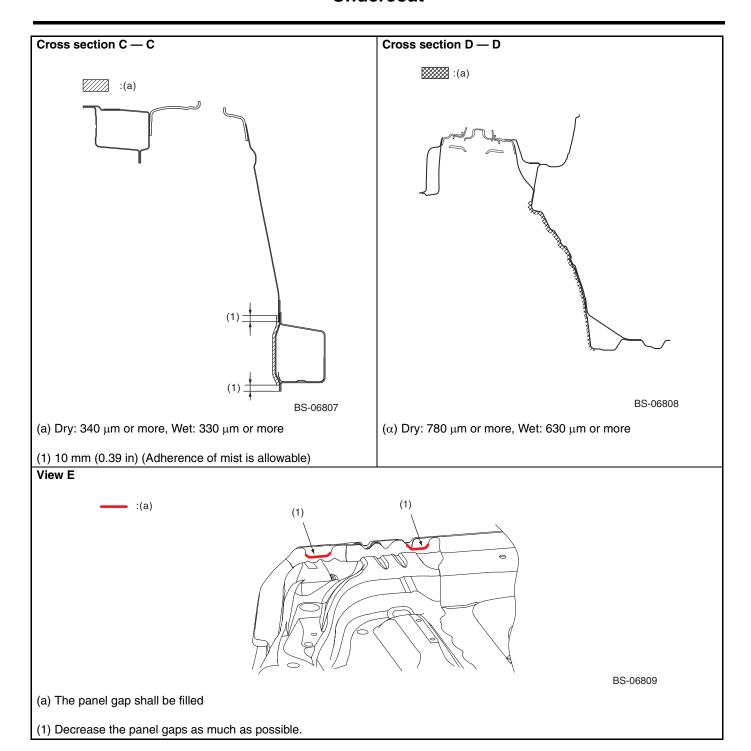
- (b) Dry: 340  $\mu m$  or more, Wet: 330  $\mu m$  or more
- (c) Dry: 780  $\mu m$  or more, Wet: 630  $\mu m$  or more

(1) OUTBACK

(2) SEDAN

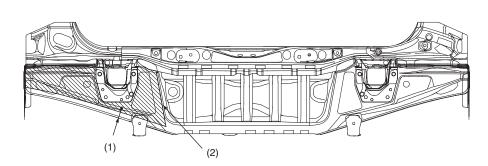
(3) Plug must be covered with PVC





#### F View (turned 90° to the right)

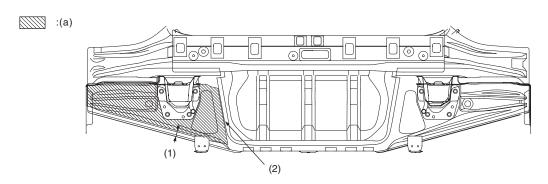




BS-07235

- (a) Dry: 340  $\mu m$  or more, Wet: 330  $\mu m$  or more
- (1) 20 mm (0.78 in) (Adherence of mist is allowable)
- (2) Basically, only for the models with single muffler (Application is allowed for the models with dual muffler)

#### G View (turned 90° to the right)

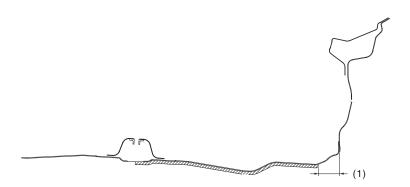


BS-07236

- (a) Dry: 340  $\mu m$  or more, Wet: 330  $\mu m$  or more
- (1) 20 mm (0.78 in) (Adherence of mist is allowable)
- (2) Basically, only for the models with single muffler (Application is allowed for the models with dual muffler)

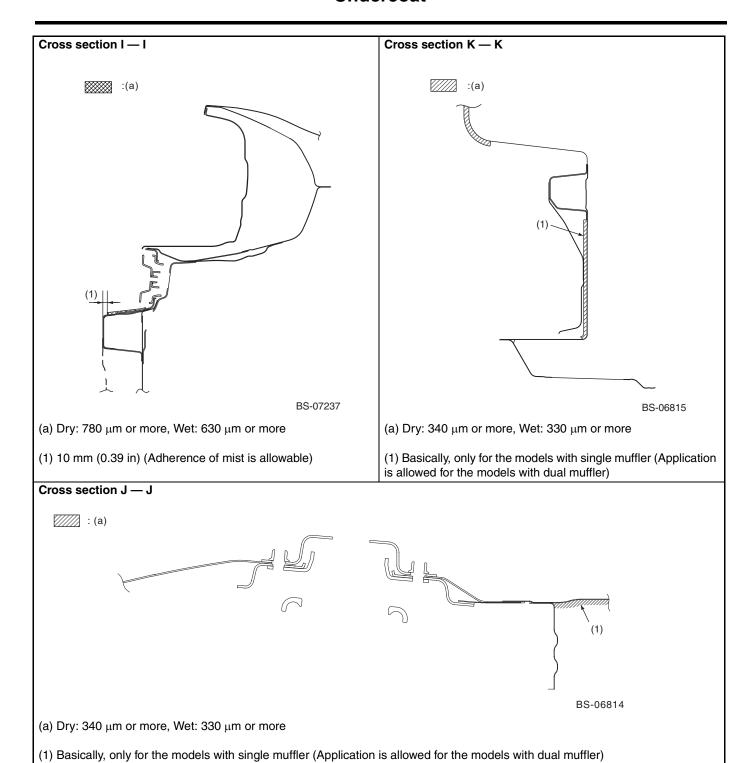
#### Cross section H — H





BS-06812

- (a) Dry: 340  $\mu m$  or more, Wet: 330  $\mu m$  or more
- (1) 37 mm (1.46 in)

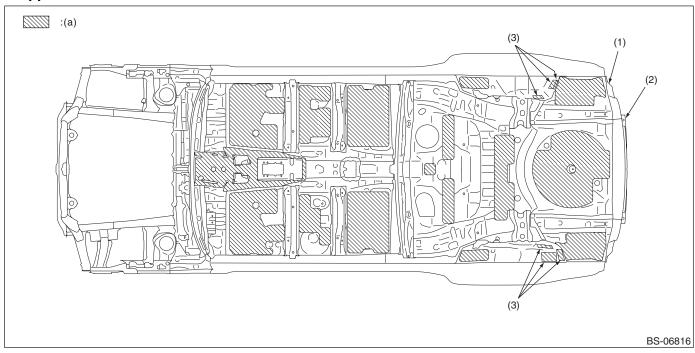


# 12.Damping Seat

# **A: SPECIFICATIONS**

#### 1. COMMON FOR OUTBACK AND SEDAN

# • Upper view

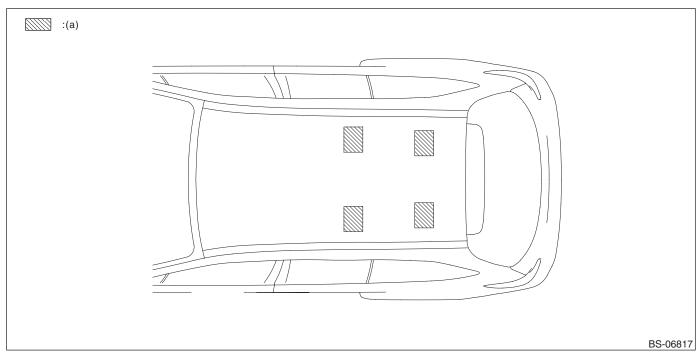


- (a) Silencer
- (1) OUTBACK

(2) SEDAN

(3) Only OUTBACK

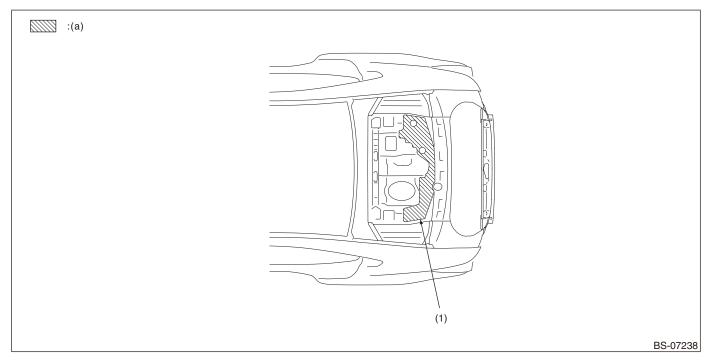
#### 2. SPECIAL FOR OUTBACK



(a) Damping seat

# **Damping Seat**

# 3. SPECIAL FOR SEDAN

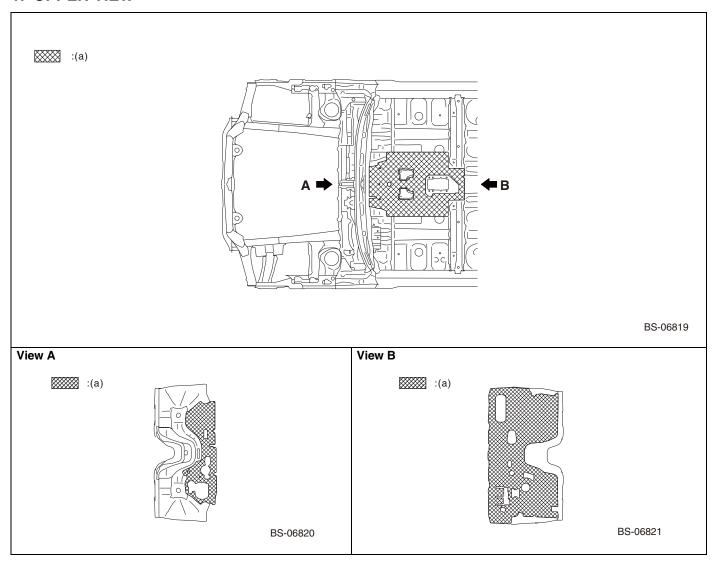


- (a) Silencer
- (1) Only for the models with woofer

# 13.Insulator

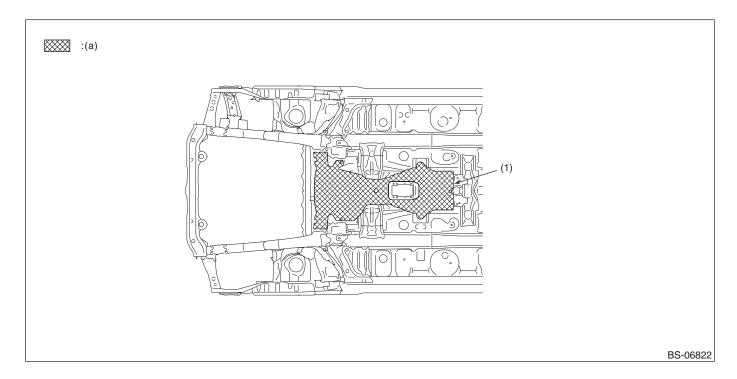
# **A: SPECIFICATIONS**

### 1. UPPER VIEW



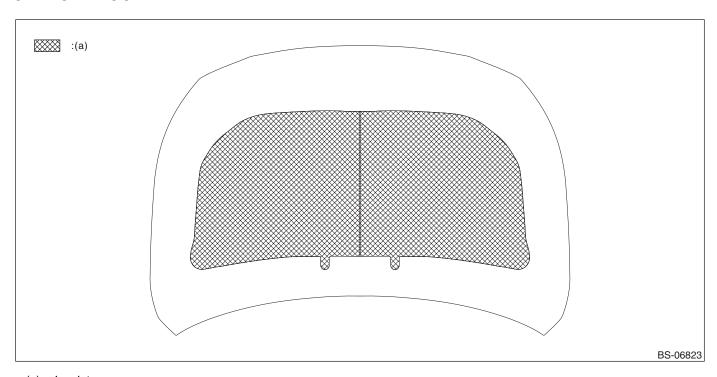
(a) Insulator

# 2. BOTTOM VIEW



- (a) Insulator
- (1) CVT model only

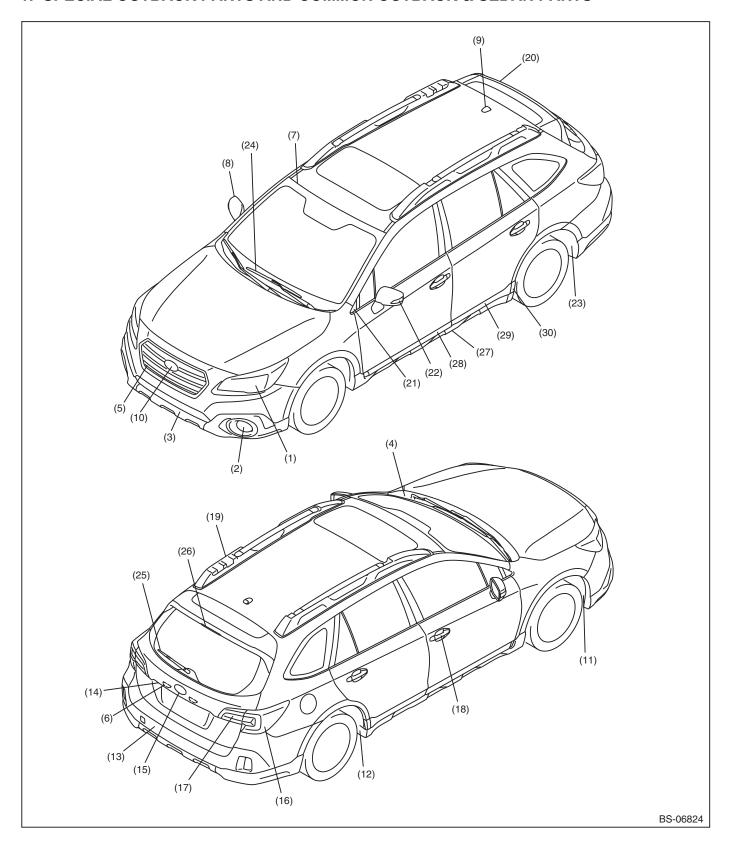
# 3. FRONT HOOD



(a) Insulator

# **A: SPECIFICATIONS**

#### 1. SPECIAL OUTBACK PARTS AND COMMON OUTBACK & SEDAN PARTS



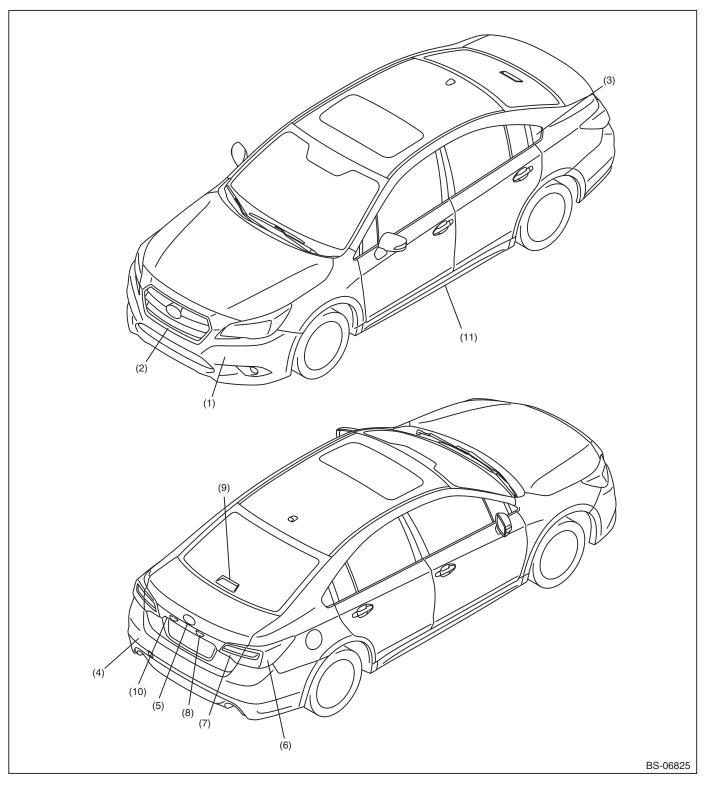
(1)	Headlight	(12)	Air flap rear	(23)	Rear mudguard
(2)	Front fog light	(13)	Rear bumper	(24)	Front wiper
(3)	Front bumper	(14)	Rear gate garnish	(25)	Rear wiper
(4)	Cowl panel	(15)	Ornament rear	(26)	High mount stop light
(5)	Front grill	(16)	Rear combination light	(27)	Side sill garnish
(6)	License light	(17)	Rear finisher light	(28)	Front door garnish
(7)	Front window moulding	(18)	Door handle	(29)	Rear door garnish
(8)	Door mirror	(19)	Roof rail	(30)	Rear quarter garnish
(9)	Antenna	(20)	Roof spoiler		Undercover
(10)	Ornament front	(21)	A pillar cover		Splash board
(11)	Front mudguard	(22)	Side turn light		

No	Part name		Material
(1)	Headlight (Halogen )	Outer lens	PC
		Housing	PP-TD30
		Reflector A	BMC
		Reflector B	PPS
		Reflector	PPS
		Inner lens	PC
		Extension A	PBT
		Extension B	ULTEM
		Side RR	PC
		Light guide A, B	PC
		Base	PC
		Bracket B	PP
	Headlight (HID)	Outer lens	PC
		Housing	PP-TD30
		Reflector A	BMC
		Reflector B	PPS
		Reflector	PPS
		Inner lens A	PC
		Extension A	PBT
		Extension B	ULTEM
		Side RR	PC
		Light guide A, B	PC
		Base	PC
		Bracket B	PP-GF40
(2)	Front fog light	Lens	PC
		Reflector	UP-M60-GF10
		Bracket	PP-GF30
(3)	Front bumper	Sealing bumper	EPDM
		Face	PP
		Bumper cover	PP
		Hook cover	PP
		Side bracket	POM
		Corner bracket	PP-GF30
		Center lower bracket	PP
		EA form	PP

No		Part name		Material
(4)	Cowl panel	Body		PP-TD10
		Side		PP-TD10
(5)	Front grill	Grill		ABS+AES+PP
		Ornament		ABS+PMMA
(6)	License light	Lens		PC
,		Housing		PC
(7)	Front window moulding	1 ,		PVC
(8)	Door mirror	Body		AES
		Cover body		ASA
		Cover front		ABS
		Cover stay A		ASA
		Cover stay B		ASA
		Holder		PP
		Side turn light	Housing	PC
			Lens	PMMA
		Packing stay	I	TPO
(9)	Antenna			PC+ASA
(10)	Ornament front			ABS+PMMA
(11)	Front mudguard	Body		PE
, ,		Air flap		PE+EPDM
(12)	Air flap Rear	· ·		PP+EPDM
(13)	Rear bumper	Face		PP
,	·	Hook cover		PP
		Side bracket		POM
		Corner bracket		PP-GF30
		Muffler cover		PP
		EA form		PP
		Cap bolt		PP
(14)	Rear gate garnish			PC-PET
(15)	Ornament rear		ABS+PMMA	
(16)	Rear combination light	Outer lens 1st		PMMA
, ,		Outer lens 2nd		PMMA
		Housing		ASA
		Inner lens		PC
		Extension		PC
		Base		PC
(17)	Rear finisher light	Outer lens 1st		PMMA
	_	Outer lens 2nd		PMMA
		Housing		ASA
(18)	Door handle	Handle		PC+PBT
		Handle cover		PC+PBT
(19)	Roof rail	Roof rail cover		TPO
		Roof rail inner		PA6-GF40
(20)	Roof spoiler	Body		AES
(21)	A pillar cover			AES
(22)	Side turn light	Lens		PC
		Housing		PMMA
(23)	Rear mudguard	<u>-</u>	1 3	
(24)	Front wiper	Blade		PBT-GF30
(25)	Rear wiper	Blade		PBT-GF30

No	Part name		Material
(26)	High mount stop light	Lens	PMMA
		Housing	ABS
(27)	Side sill garnish		PP
(28)	Front door garnish	PP	
(29)	Rear door garnish	PP	
(30)	Rear quarter garnish	PP	
	Undercover	PP	
	Splash board	PP	

# 2. SPECIAL SEDAN PARTS



- (1) Front bumper
- (2) Front grill
- (3) C pillar cover
- (4) Rear bumper

- (5) Ornament rear
- (6) Rear combination light
- (7) Rear finisher light
- (8) License light

- (9) High mount stop light
- (10) Trunk garnish
- (11) Side spoiler

No.		Material	
(1)	Front bumper	Face	PP
		Fog light cover	PP
		Side bracket	POM
		Corner bracket	PP-GF30
		Center lower bracket	PP
		EA form	PP
(2)	Front grill	Grill	ABS+AES+PP
(3)	C pillar cover	•	AES
(4)	Rear bumper	Face	PP
		EA form	PP
		Hook cover	PP
		Side bracket	POM
		Corner bracket	PP-GF30
		Muffler cover	PP
(5)	Ornament rear		ABS+PMMA
(6)	Rear combination light	Outer lens 1st	PMMA
		Outer lens 2nd	PMMA
		Housing	ASA
		Inner lens	PC
		Rear RR	PMMA
		Extension	PC
		LED base	PC
(7)	Rear finisher light	Outer lens 1st	PMMA
		Outer lens 2nd	PMMA
		Housing	ASA
		Reflector	PC
		Bezel	ASA
(8)	License light	Lens	PC
		Housing	PC
(9)	High mount stop light	Lens	PC
		Housing	PP
		Cover	PP-TD20
(10)	Trunk garnish		PC+PET
(11)	Side spoiler		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	PP	Polypropylene
AES	Acrylonitrile/ethylene styrene	PP-GF30	Polypropylene (30 % glass fiber content)
ASA	Acrylonitrile/strene acrylate	PP-GF40	Polypropylene (40 % glass fiber content)
BMC	Premix molding compound	PPS	Polyphenylene sulfide
EPDM	Ethylene/propylene/dien rubber	PP-TD10	Polypropylene (10 % talc content)
PA6-GF40	Polyamide (nylon)(40 % glass fiber content)	PP-TD20	Polypropylene (20 % talc content)
PBT	Polybutylene terephthalate	PP-TD30	Polypropylene (30 % talc content)
PC	Polycarbonate	PVC	Polyvinyl chloride
PE	Polyethylene	TPE	Thermoplastic elastomer
PET	Polyethylene terephthalate	TPO	Thermo polyolefin
PMMA	Polymethyl methacrylate	ULTEM	Ultem resin
РОМ	Polyacetal	UP-M60- GF10	Unsaturated polyester 60% mineral powder (10% glass fiber content)