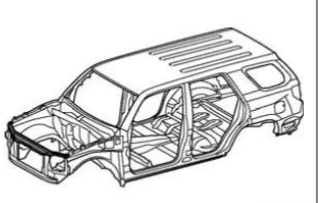


BODY PANEL REPLACEMENT

BP-1

RADIATOR UPPER SUPPORT (ASSY)



F42914A

Symbol meaning

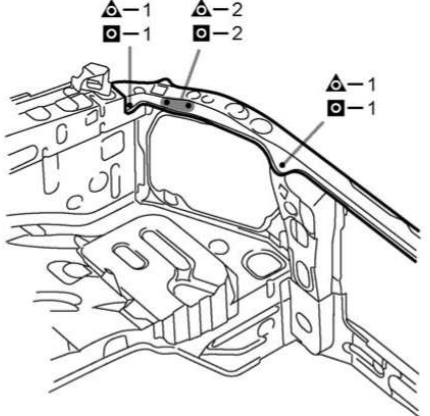
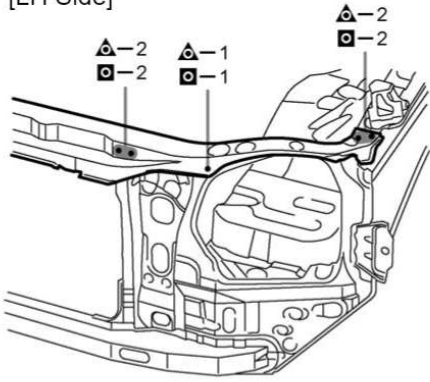
REMOVAL ▲ : Remove Weld Points

INSTALLATION ◻ : Plug Weld

F42914B

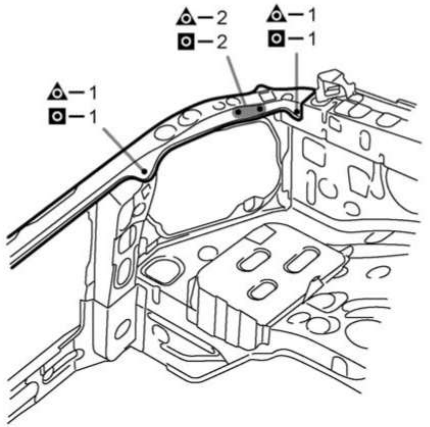
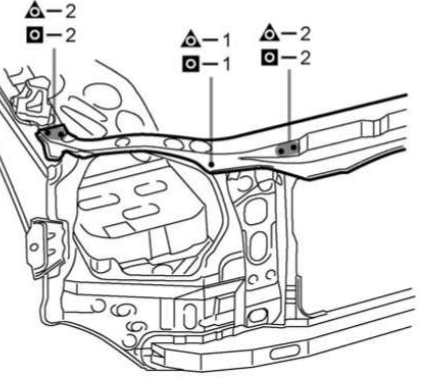
REMOVAL-INSTALLATION

[LH Side]



F42914

[RH Side]



F42914

INSTALLATION POINT

1

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

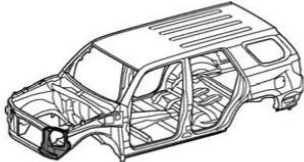
2

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

3

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

RADIATOR SIDE SUPPORT (ASSY)



F42915A

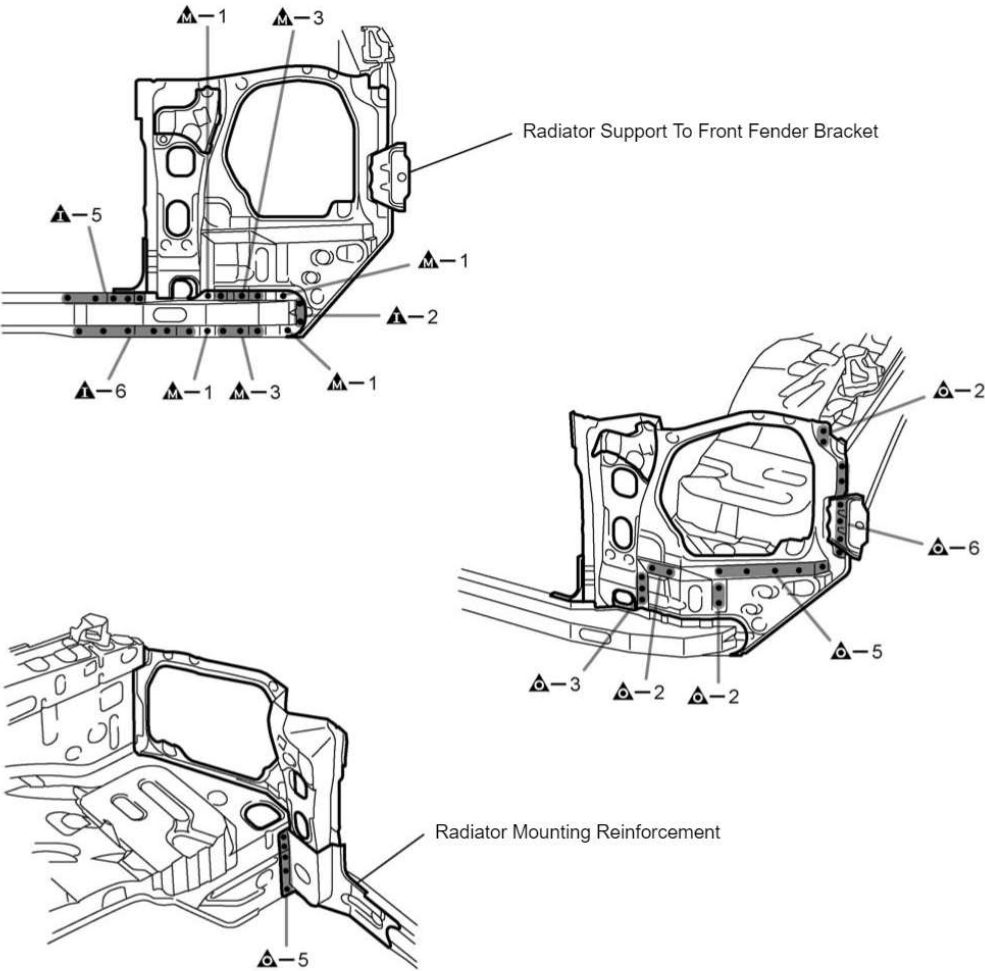
With the radiator upper support removed.

Symbol meaning

▲▲▲ : Remove Weld Points

F42915B

REMOVAL



Radiator Support To Front Fender Bracket

Radiator Mounting Reinforcement

F42915

REMOVAL POINT

1 Remove the radiator support to front fender bracket and radiator mounting reinforcement at the same time.

BODY PANEL REPLACEMENT

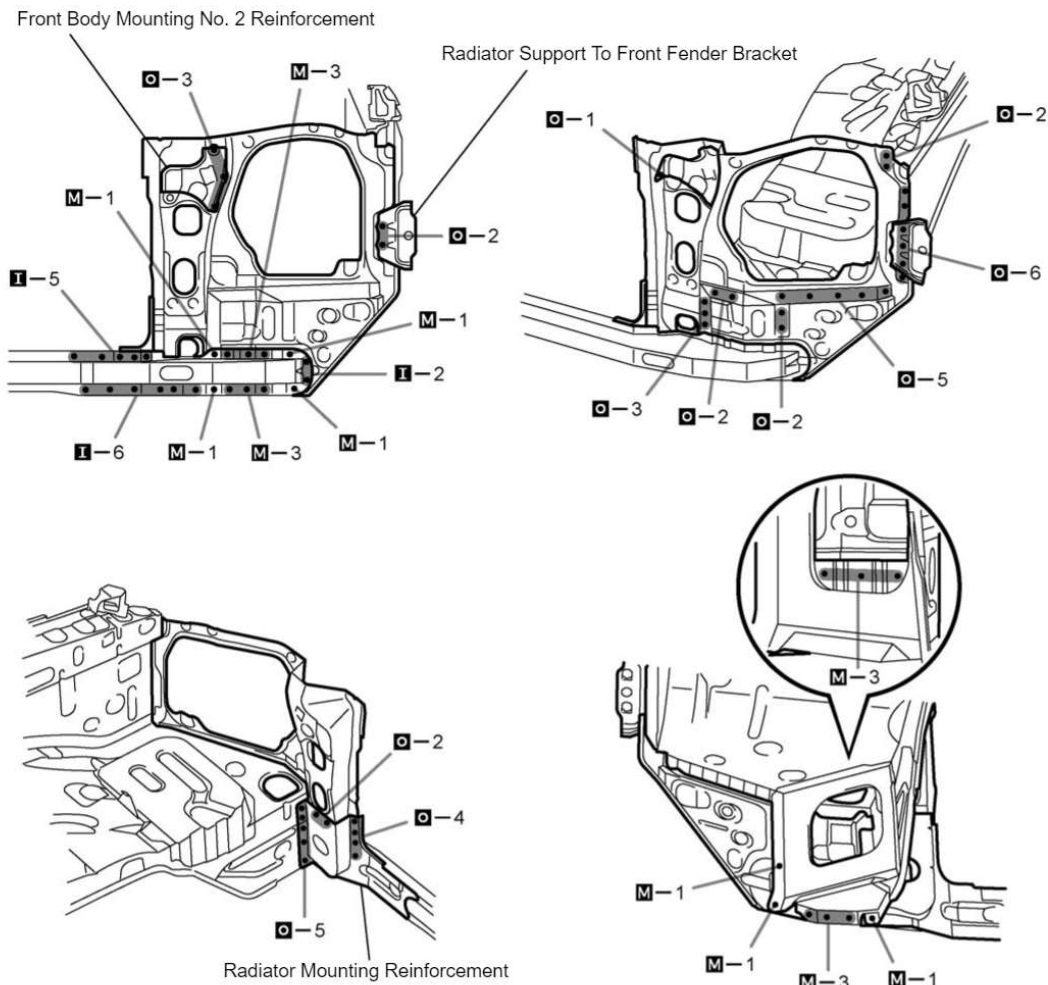
BP-3

Symbol meaning

⬡ M I : Plug Weld

F42916B

INSTALLATION



F42916

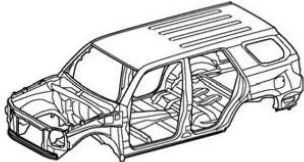
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 4 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-4

BODY PANEL REPLACEMENT

FRONT CROSSMEMBER (ASSY)



F42917A

Symbol meaning

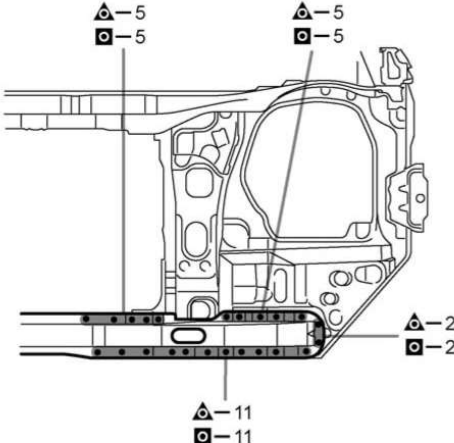
REMOVAL ▲ : Remove Weld Points

INSTALLATION ◻ : Plug Weld

F42917B

REMOVAL-INSTALLATION

[LH Side]



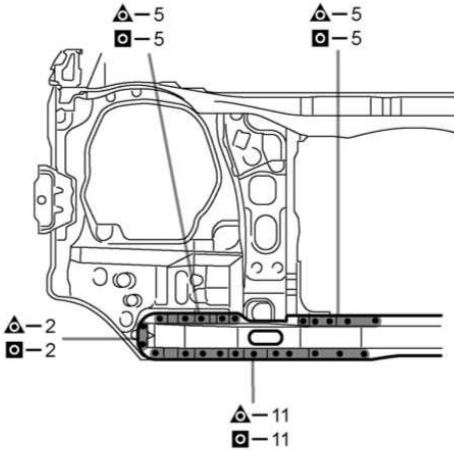
▲-5
◻-5

▲-5
◻-5

▲-2
◻-2

▲-11
◻-11

[RH Side]



▲-5
◻-5

▲-5
◻-5

▲-2
◻-2

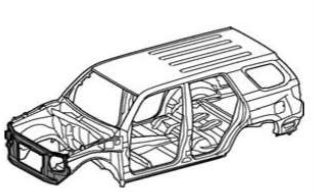
▲-11
◻-11

F42917

INSTALLATION POINT

- 1 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 2 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

RADIATOR SUPPORT (ASSY)



F42918A

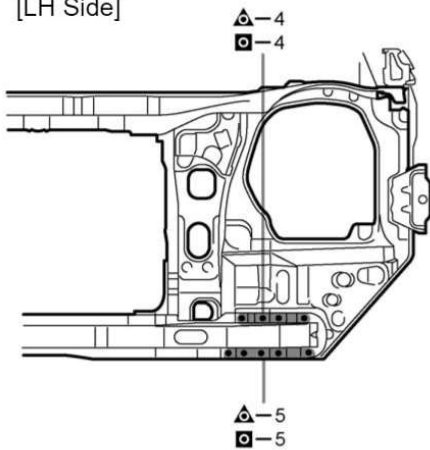
Symbol meaning

REMOVAL ▲ : Remove Weld Points

INSTALLATION ◻ : Plug Weld

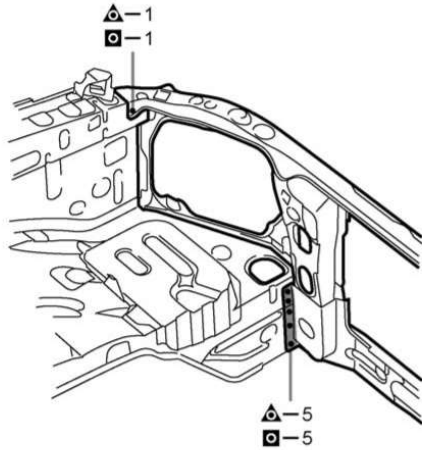
REMOVAL-INSTALLATION

[LH Side]



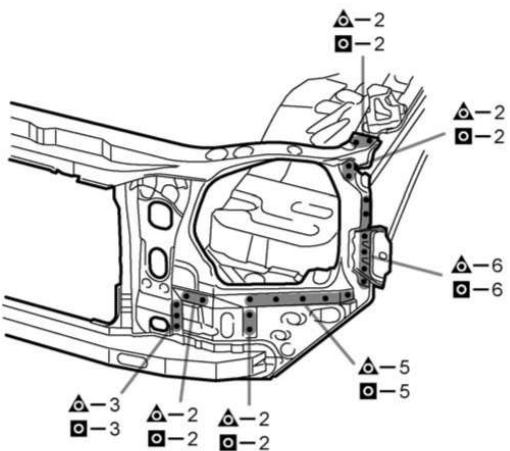
▲-4
◻-4

▲-5
◻-5



▲-1
◻-1

▲-5
◻-5



▲-2
◻-2

▲-2
◻-2

▲-6
◻-6

▲-5
◻-5

▲-3
◻-3

▲-2
◻-2

▲-2
◻-2

INSTALLATION POINT

1

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

2

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

F42918

<https://cardiagn.com/2010-toyota-4runner-brm-body-panel-replacement/>

5/109

BP-6

BODY PANEL REPLACEMENT

Symbol meaning

REMOVAL

INSTALLATION

▲ : Remove Weld Points

◻ : Plug Weld

F42919B

[RH Side]

▲-4

◻-4

▲-5

◻-5

▲-1

◻-1

▲-5

◻-5

▲-2

◻-2

▲-2

◻-2

▲-6

◻-6

▲-5

◻-5

▲-2

◻-2

▲-2

◻-2

▲-3

◻-3

F42919

INSTALLATION POINT

1

2

3

4

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

After welding, apply body sealer to the corresponding parts. (See the paint coating)

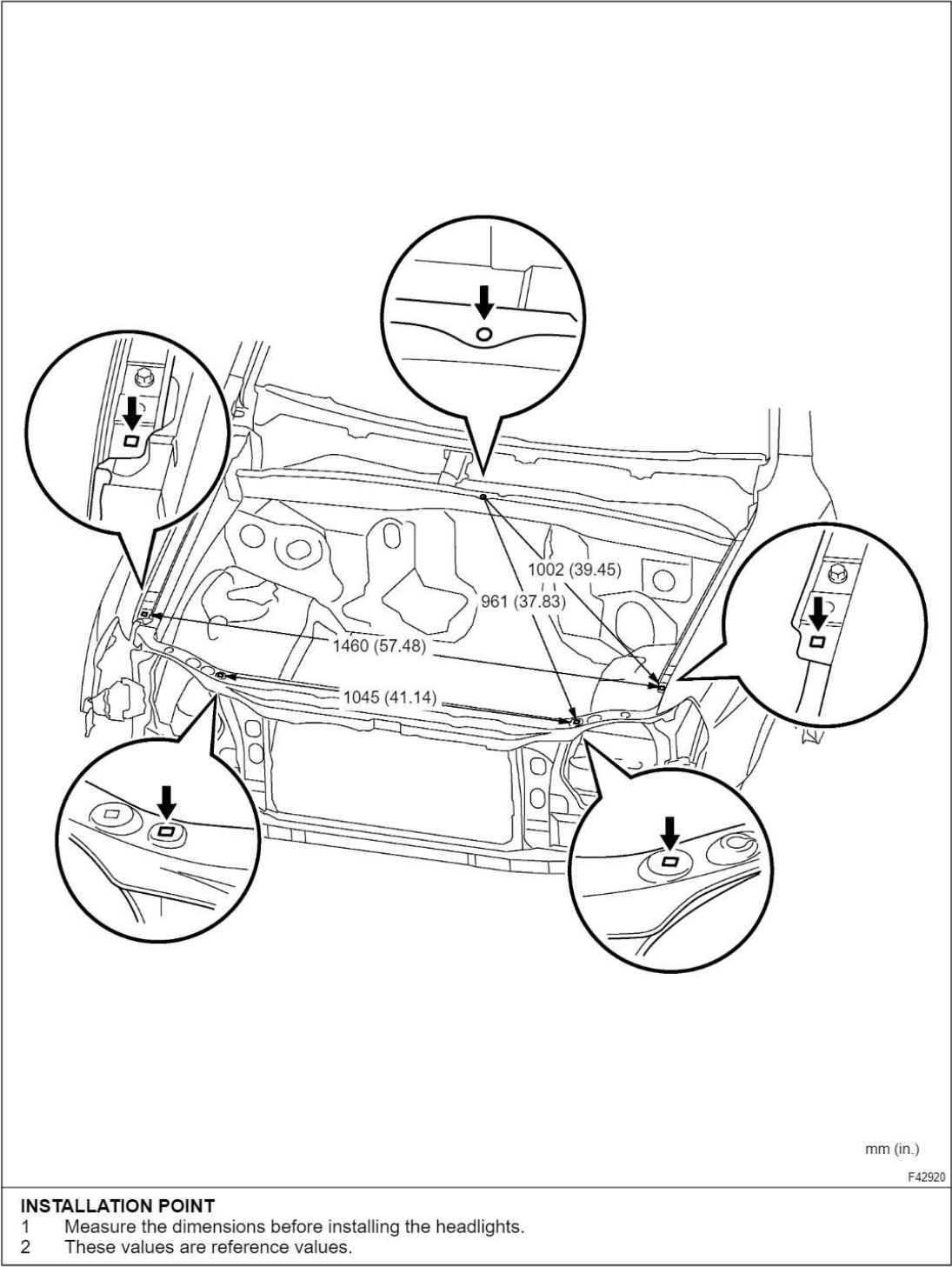
After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

<https://cardiagn.com/2010-toyota-4runner-brm-body-panel-replacement/>

6/109

BODY PANEL REPLACEMENT

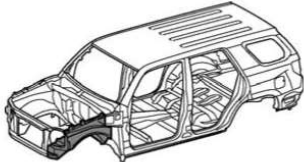
BP-7



BP-8

BODY PANEL REPLACEMENT

FRONT FENDER APRON (ASSY)



F42921A

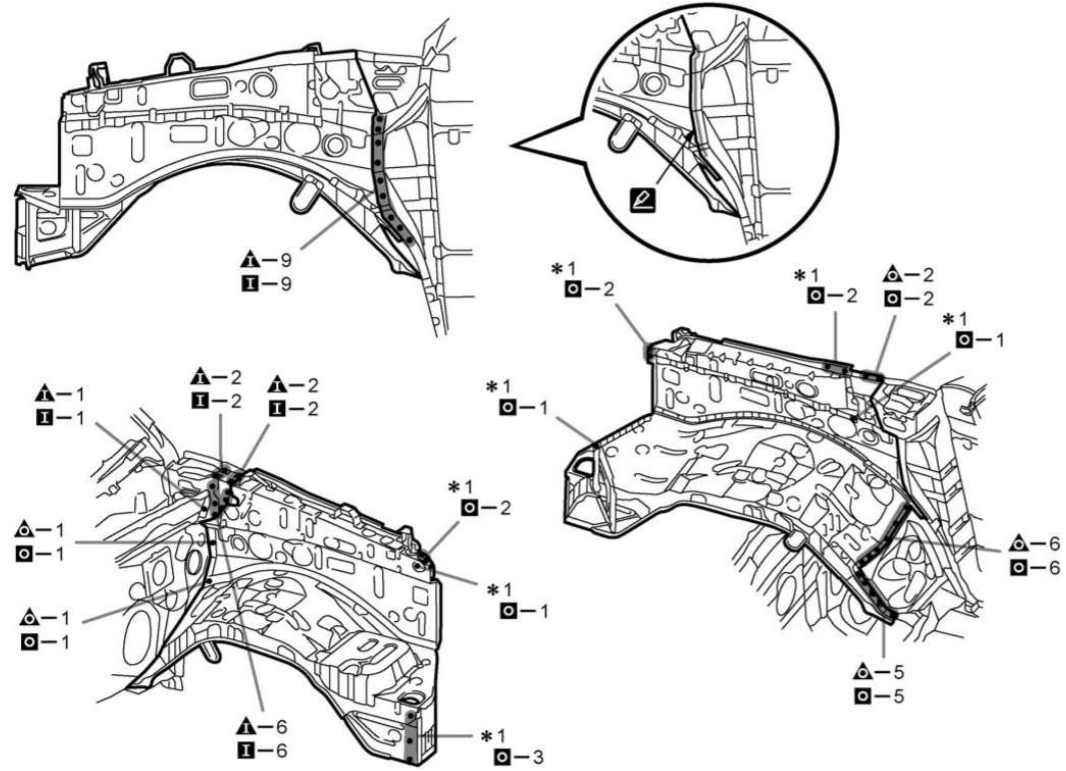
With the radiator support and front body pillar lower gusset removed.

Symbol meaning

REMOVAL	⚠ : Remove Weld Points
INSTALLATION	⓪ ⓘ : Plug Weld 🛡 : Body Sealer

F42921B

REMOVAL-INSTALLATION



F42921

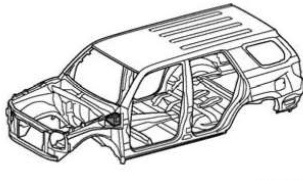
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 *1 is only for installation.
- 4 Before installing a new part, apply body sealer.

HINT:
Apply body sealer in an even, continuous bead.

- 5 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint-coating)
- 6 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

COWL TOP SIDE PANEL (ASSY)



F42922A

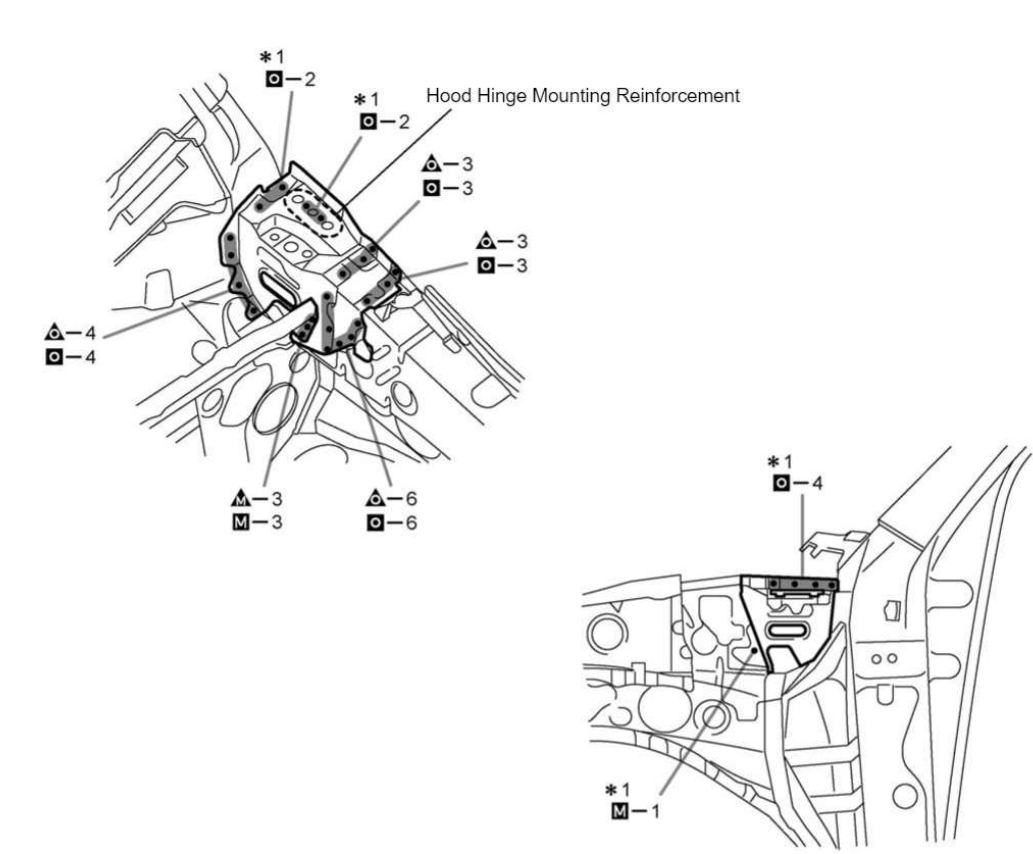
With the front body pillar lower gusset removed.

Symbol meaning

REMOVAL	△ △ : Remove Weld Points
INSTALLATION	□ M : Plug Weld

F42922B

REMOVAL-INSTALLATION



F42922

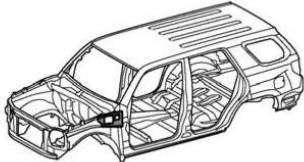
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 *1 is only for installation.
- 4 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 5 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-10

BODY PANEL REPLACEMENT

FRONT BODY PILLAR LOWER GUSSET (ASSY)

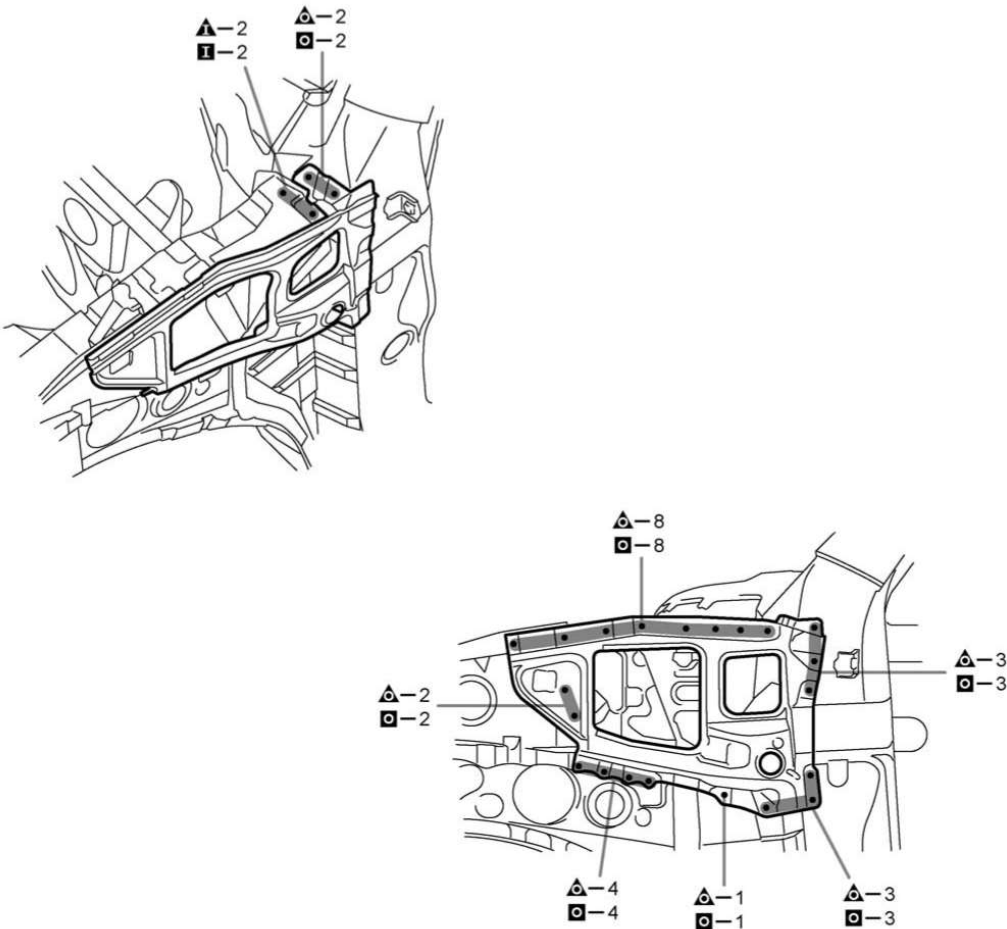


F42923A

Symbol meaning

REMOVAL	▲ ▲ : Remove Weld Points
INSTALLATION	◻ ■ : Plug Weld

REMOVAL-INSTALLATION

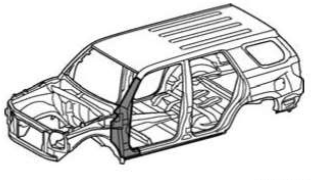


F42923

INSTALLATION POINT

1 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

FRONT BODY PILLAR (CUT)



F42924A

Weld work for 980 MPa ultra high strength steel

1 Follow the welding conditions below when welding ultra high strength steel to assure sufficient weld strength. (When repairing this model)

*1: When welding 2 panels together including 980 MPa ultra high strength steel.

Spot weld	Pressure	2940 N (300 kgf, 661 lbf)
	Weld current	10000 A
	Weld time	18 Cyc. (0.30 Sec.)
Plug weld	Plug diameter	10 mm (0.39 in.)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

*2: When welding more than 3 panels together including 980 MPa ultra high strength steel.
(When plug welding a panel to the welded panels with the weld condition above.)

Plug weld	Plug diameter	Same as the standard method (See the introduction)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

HINT:
Be sure to use Metal active gas (Ar 80% + CO₂ 20%) as the shield gas when plug welding.
Sufficient weld strength cannot be assured when using 100% CO₂ shield gas.

BP-12 BODY PANEL REPLACEMENT

With the cowl top side panel removed.

Symbol meaning

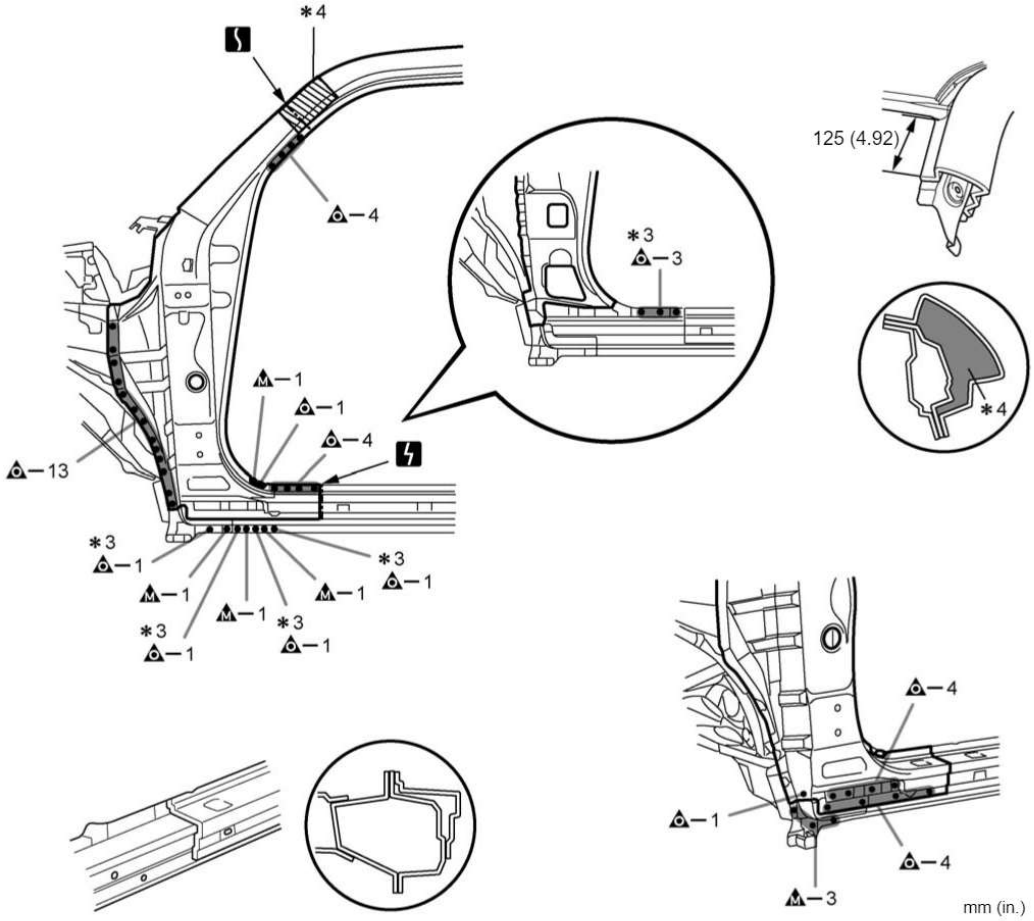
 : Remove Weld Points

 : Cut and Join Location

 : Cut Location for Supply Parts

F42924B

REMOVAL



125 (4.92)

mm (in.)

F42924

REMOVAL POINT

1

Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

2

*3 indicates welds to remove for easier removal.

3

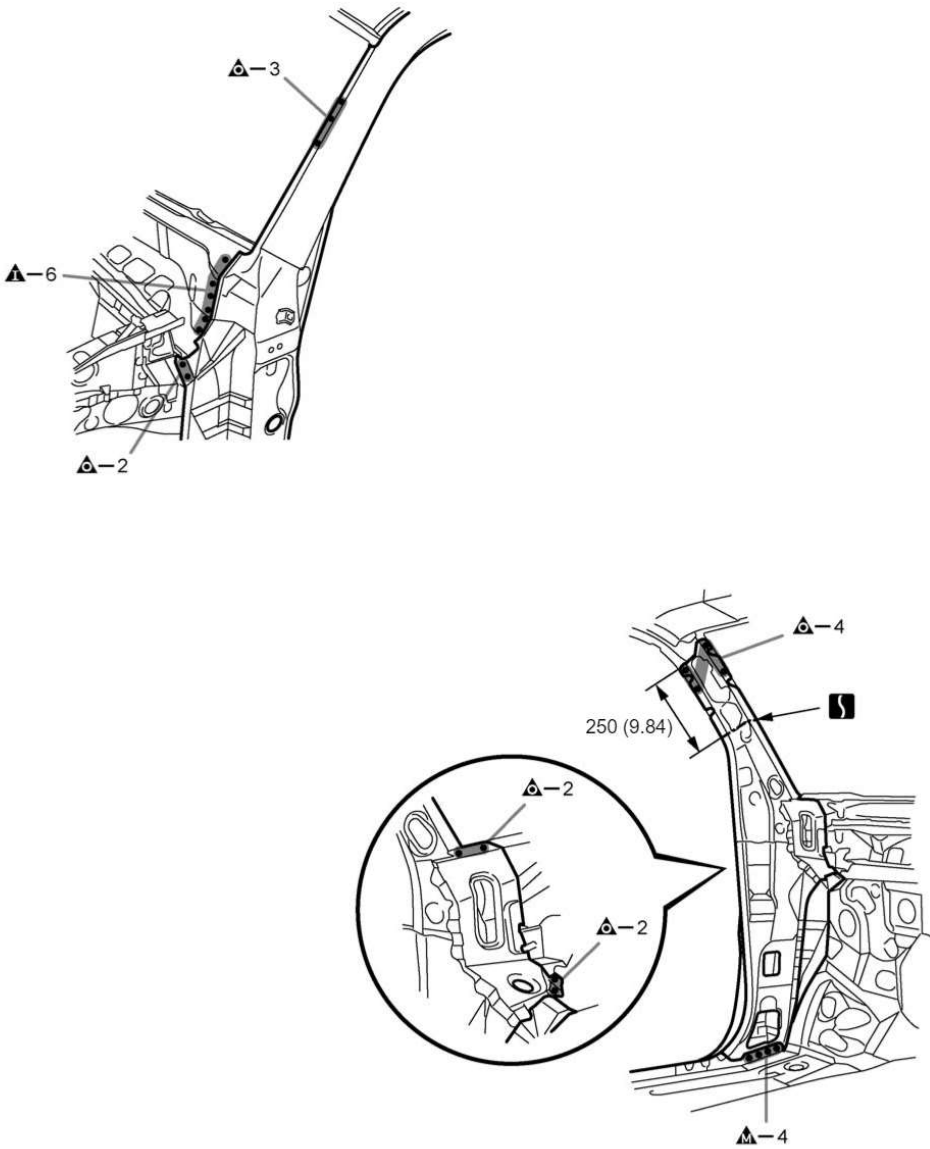
*4 indicates the location of the foamed sealing material. Be careful when cutting as the foamed sealing material is located near the cutting position.

4

Remove the remaining foamed sealing material from the vehicles side.

BODY PANEL REPLACEMENT

BP-13



mm (in.)
F42925

REMOVAL POINT

- 1 Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

Symbol meaning

□ M T

:

Plug Weld



:

Butt Weld

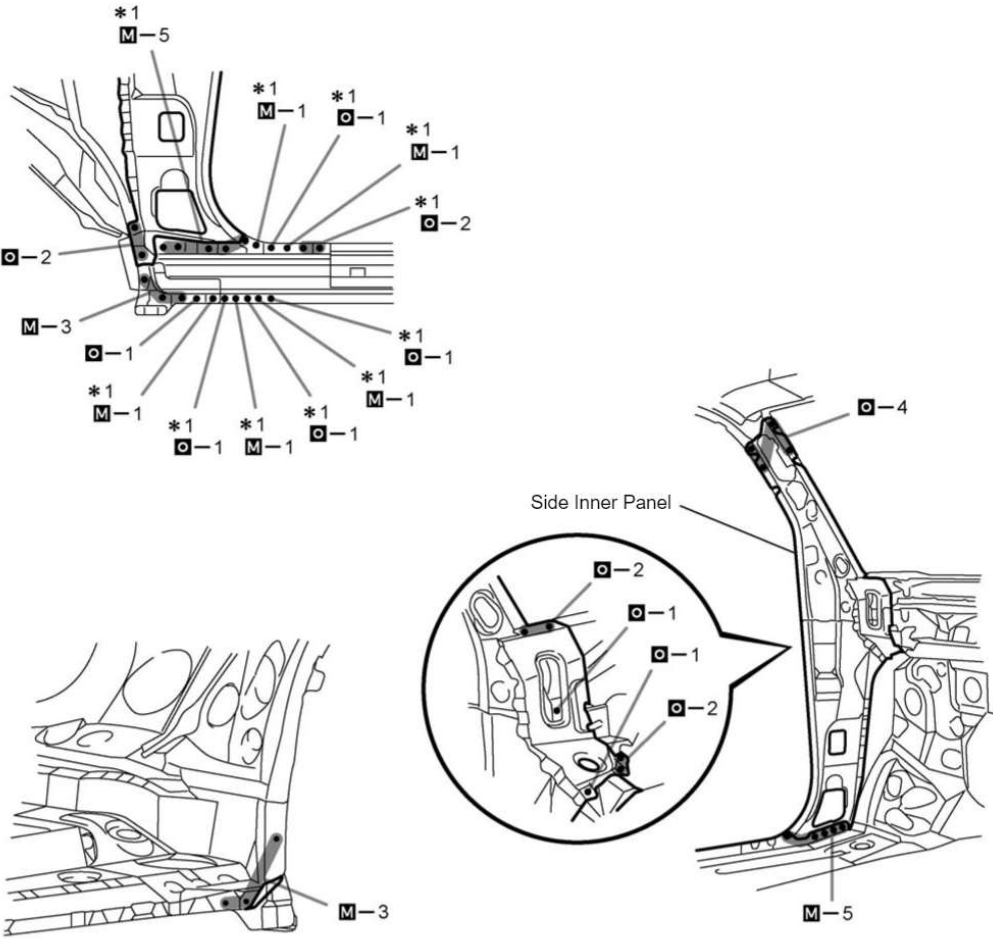


:

Body Sealer

F42926B

INSTALLATION



Side Inner Panel

F42926

INSTALLATION POINT

1

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

2

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

3

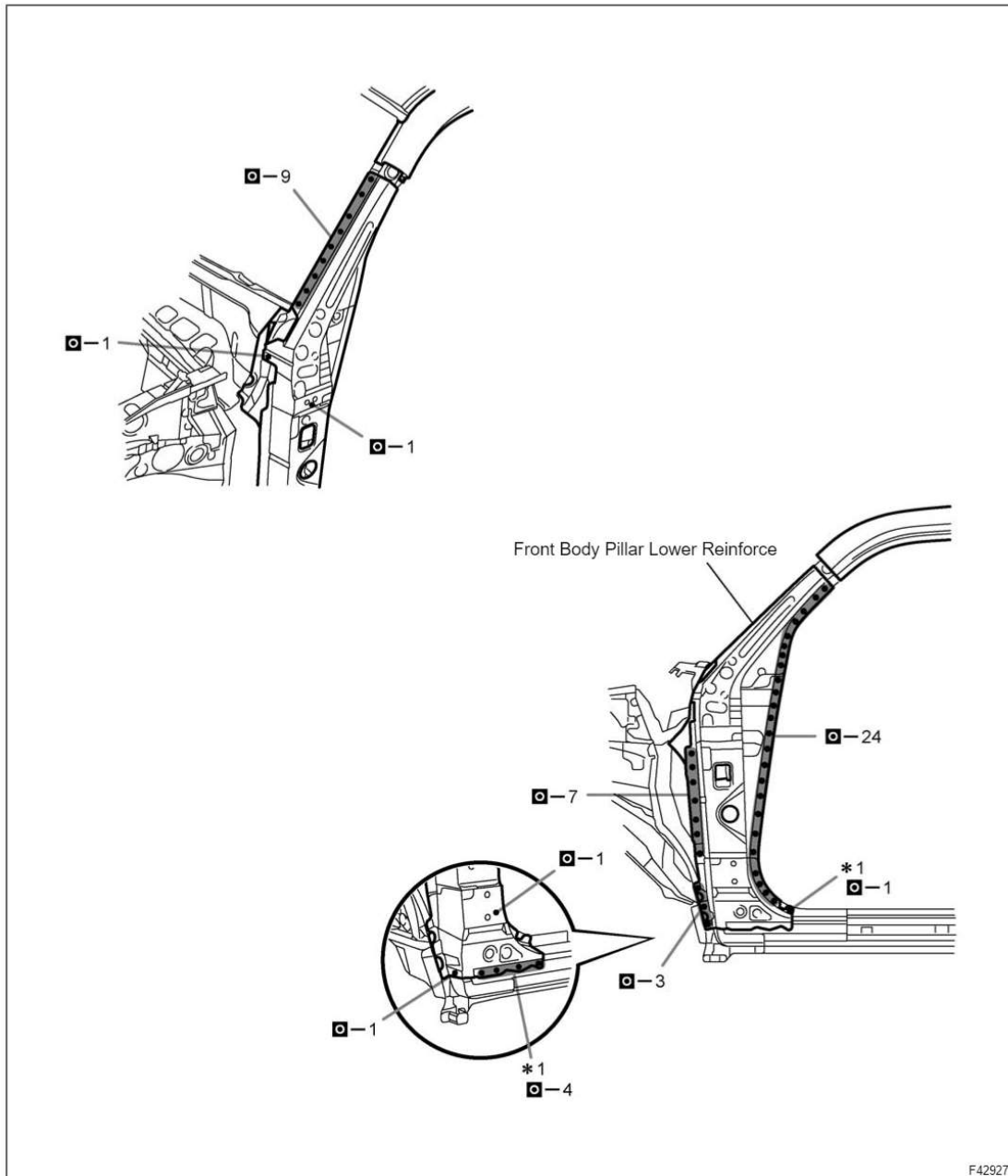
Follow the welding conditions when welding point *1 to assure sufficient weld strength. (See the introduction)

4

After welding the side inner panel to the vehicle side, install the front body pillar lower reinforce.

BODY PANEL REPLACEMENT

BP-15



F42927

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding *1 to assure sufficient weld strength. (See the introduction)
- 4 After welding the front body pillar lower reinforce to the vehicle side, install the front body upper outer pillar.

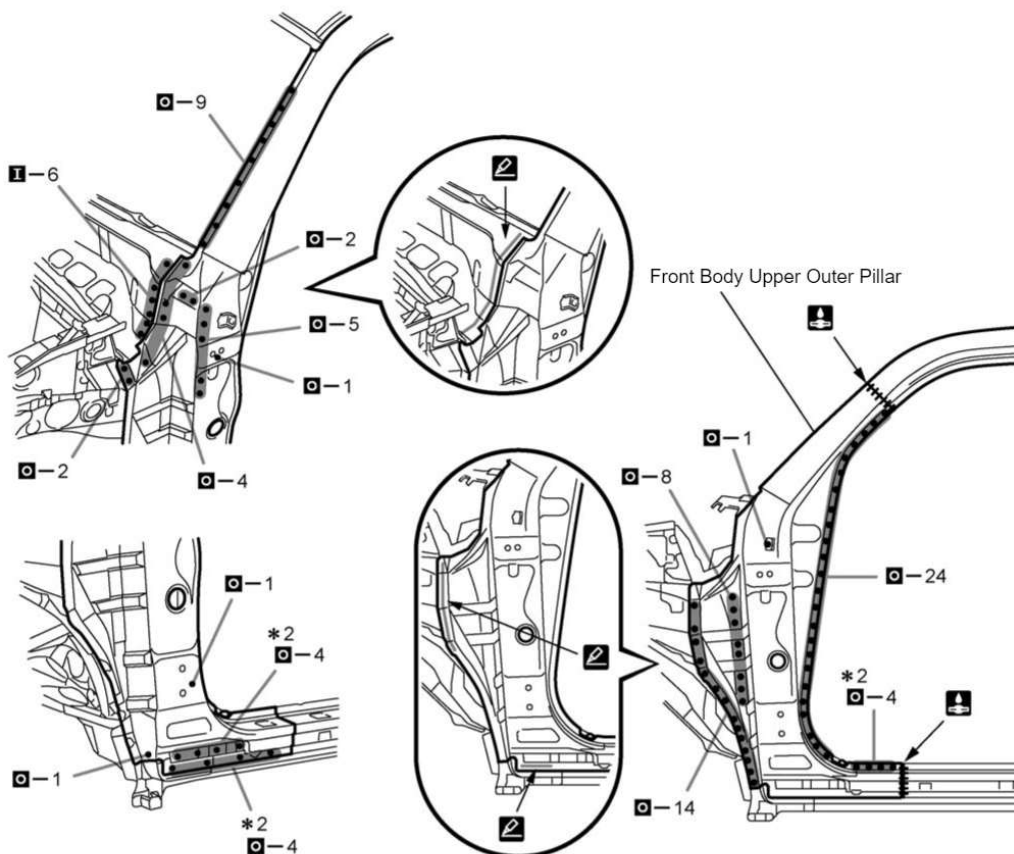
BP-16

BODY PANEL REPLACEMENT

Symbol meaning

□ M I : Plug Weld  : Butt Weld  : Body Sealer

F42928B

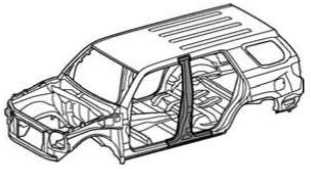


F42928

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
 - 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
 - 3 Follow the welding conditions when welding point *2 to assure sufficient weld strength. (See the introduction)
 - 4 After welding the side inner panel and front body pillar lower reinforce to the vehicle side, install the front body upper outer pillar.
 - 5 Before installing a new part, apply body sealer.
- HINT:**
Apply body sealer in an even, continuous bead.
- 6 After welding, apply the foamed sealing material to the corresponding parts. (See the paint coating)
 - 7 After welding, apply body sealer to the corresponding parts. (See the paint coating)
 - 8 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

CENTER BODY PILLAR (CUT)



F42929A

Weld work for 980 MPa ultra high strength steel

1 Follow the welding conditions below when welding ultra high strength steel to assure sufficient weld strength. (When repairing this model)

*1: When welding 2 panels together including 980 MPa ultra high strength steel.

Spot weld	Pressure	2940 N (300 kgf, 661 lbf)
	Weld current	10000 A
	Weld time	18 Cyc. (0.30 Sec.)
Plug weld	Plug diameter	10 mm (0.39 in.)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

*2: When welding more than 3 panels together including 980 MPa ultra high strength steel.
(When plug welding a panel to the welded panels with the weld condition above.)

Plug weld	Plug diameter	Same as the standard method (See the introduction)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

HINT:
Be sure to use Metal active gas (Ar 80% + CO₂ 20%) as the shield gas when plug welding.
Sufficient weld strength cannot be assured when using 100% CO₂ shield gas.

Symbol meaning

  : Remove Weld Points

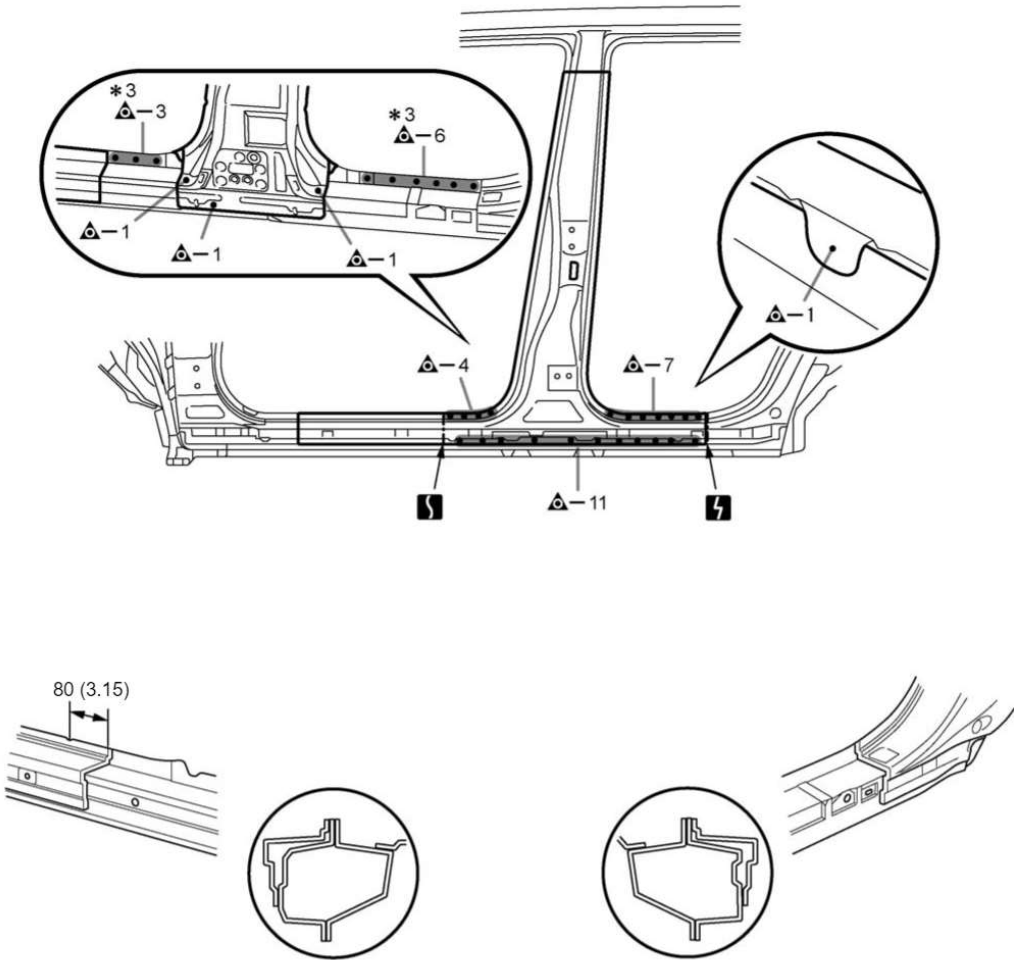
 : Cut with Disc Sander etc.

 : Cut and Join Location

 : Cut Location for Supply Parts

F42929B

REMOVAL



80 (3.15)

mm (in.)

F42929

REMOVAL POINT

1

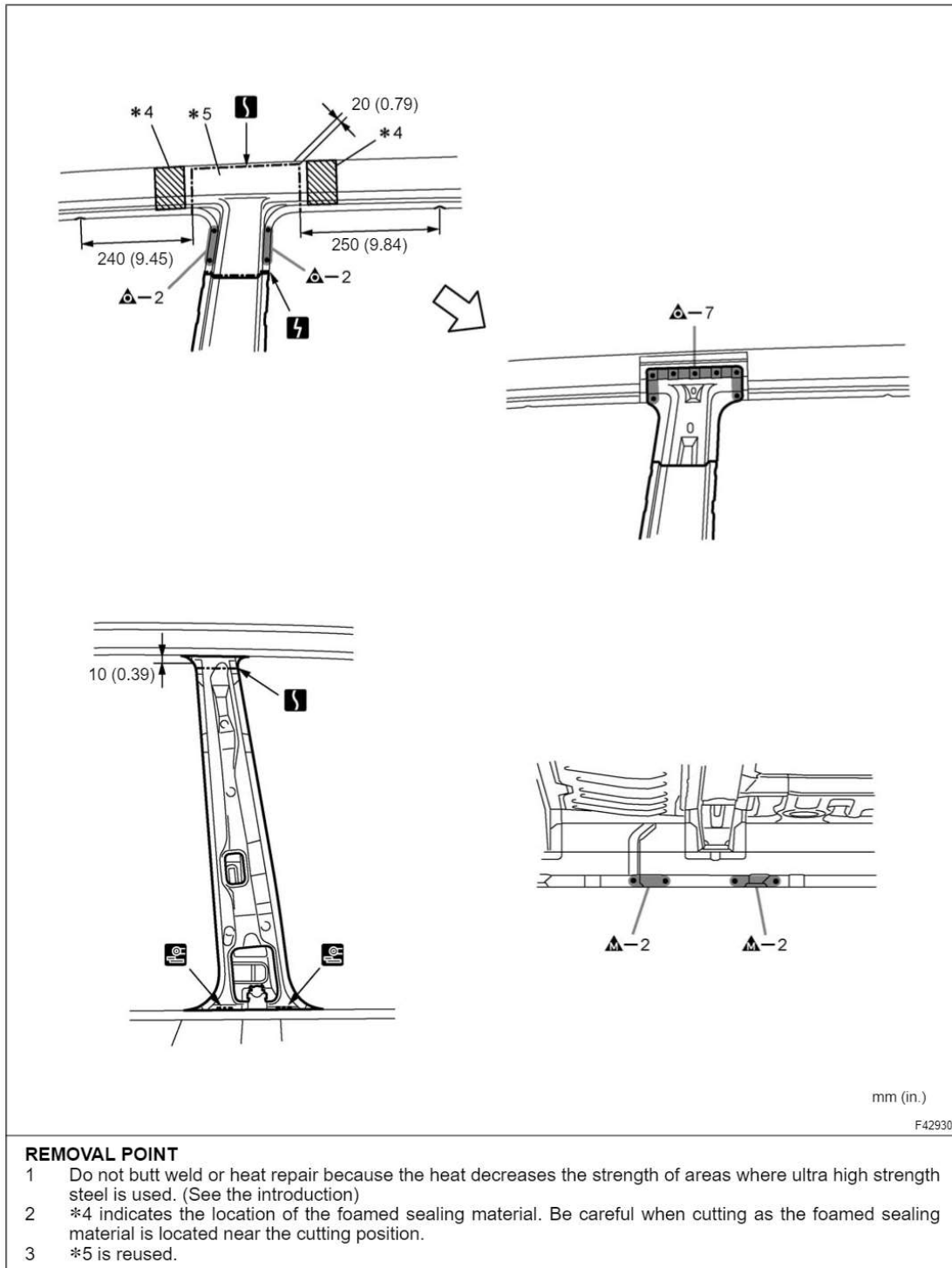
Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

2

*3 indicates welds to remove for easier removal.

BODY PANEL REPLACEMENT

BP-19



BP-20

BODY PANEL REPLACEMENT

Symbol meaning

Q

M

T

 : Plug Weld



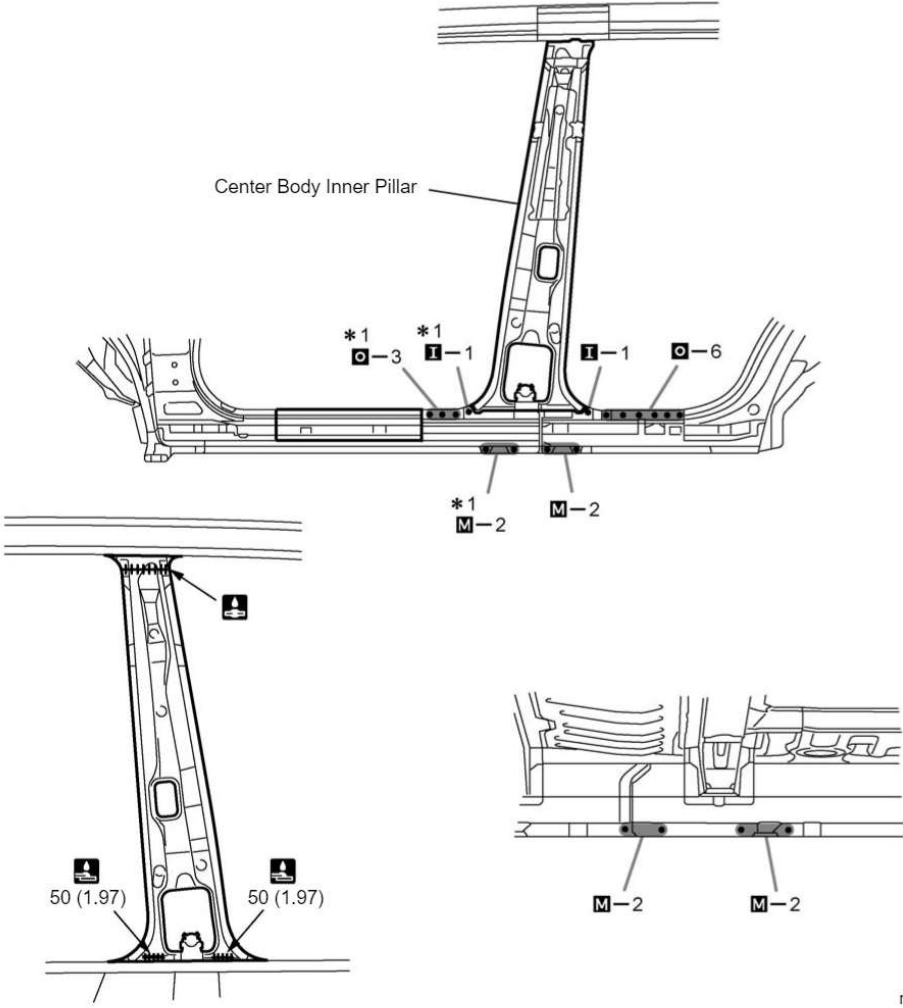
 : Fillet Weld



 : Butt Weld

F42931B

INSTALLATION



Center Body Inner Pillar

*1

Q-3

I-1

I-1

Q-6

*1

M-2

M-2

50 (1.97)

50 (1.97)

M-2

M-2

mm (in.)

F42931

INSTALLATION POINT

1

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

2

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

3

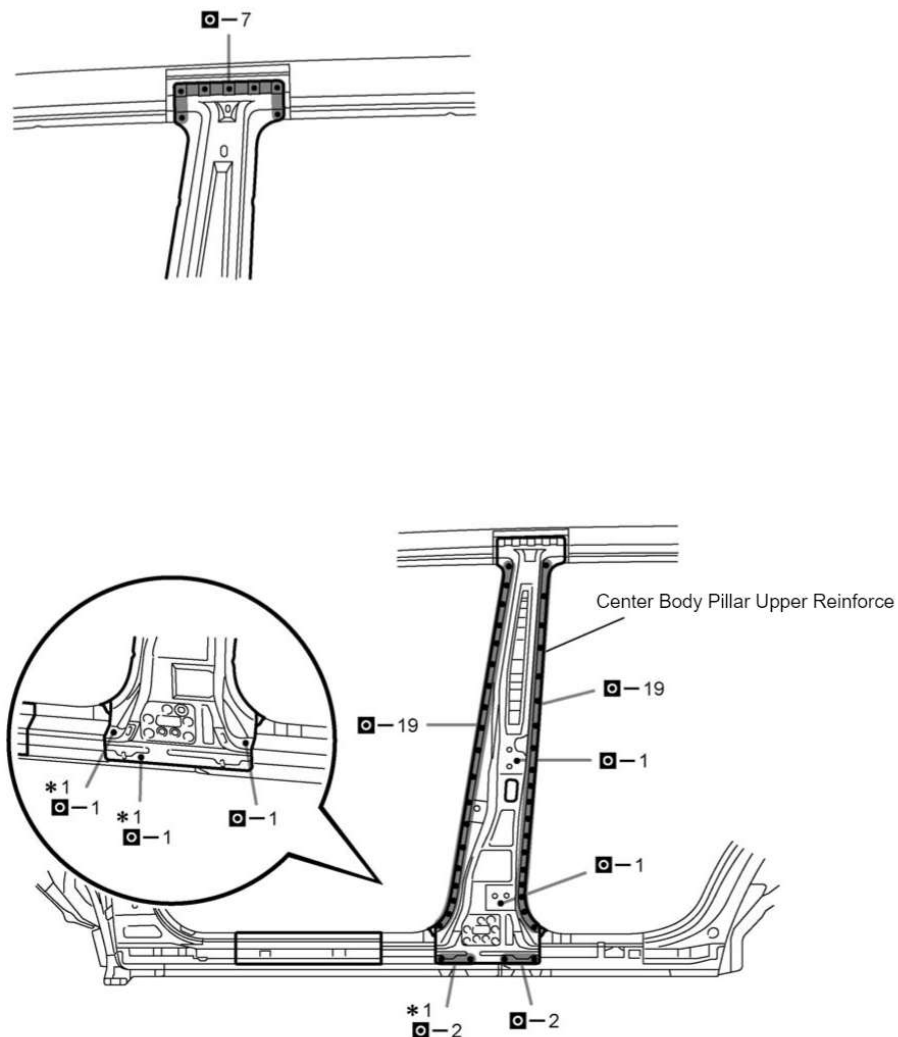
Follow the welding conditions when welding point *1 to assure sufficient weld strength. (See the introduction)

4

After welding the center body inner pillar to the vehicle side, install the center body pillar upper reinforce.

BODY PANEL REPLACEMENT

BP-21



F42932

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding point *1 to assure sufficient weld strength. (See the introduction)
- 4 After welding the center body pillar upper reinforce to the vehicle side, install the center body outer pillar.

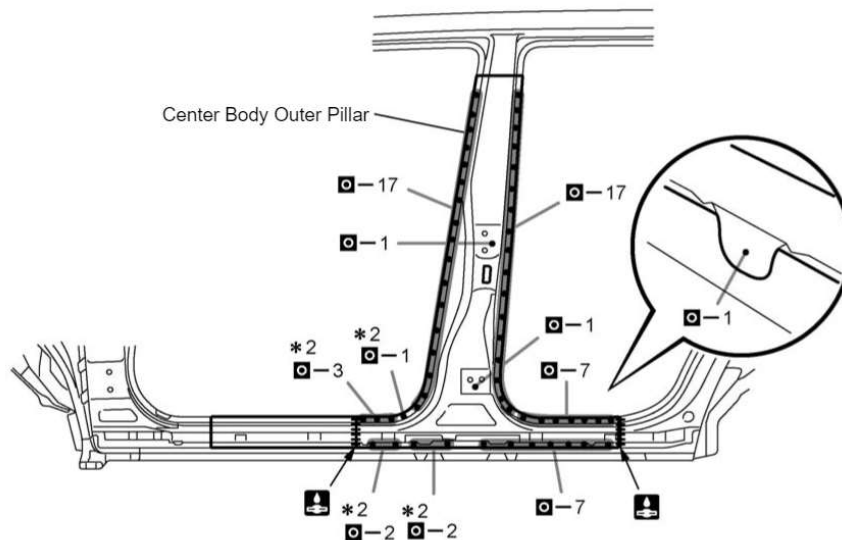
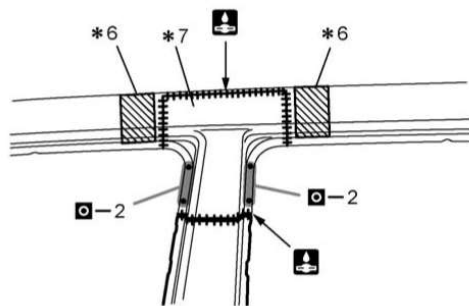
BP-22

BODY PANEL REPLACEMENT

Symbol meaning

   : Plug Weld
  : Fillet Weld
  : Butt Weld

F42931B



F42933

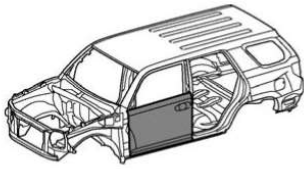
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding point *2 to assure sufficient weld strength. (See the introduction)
- 4 *6 indicates the location of the foamed sealing material. Be careful when welding as the foamed sealing material is located near the area that is cut and joined together.
- 5 After welding the center body inner pillar and center body pillar upper reinforce to the vehicle side, install the center body outer pillar and *7.
- 6 After welding, apply the foamed sealing material to the corresponding parts. (See the paint coating)
- 7 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 8 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-23

FRONT DOOR OUTER PANEL (ASSY)



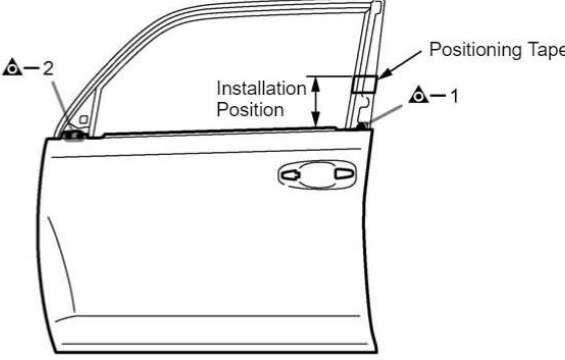
F42934A

Symbol meaning

▲ : Remove Weld Points

F42934B

REMOVAL

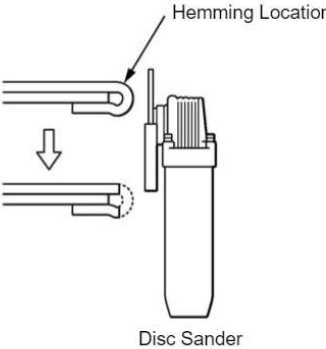


▲-2

Positioning Tape

Installation Position

▲-1



Hemming Location

Disc Sander

F42934

REMOVAL POINT

- 1 Before removing the outer panel, mark the installation position with tape.
- 2 Before removing the outer panel, establish its exact position in relation to the window frame using a reference marker, etc.
- 3 After grinding off the hemming location, remove the outer panel.

Symbol meaning

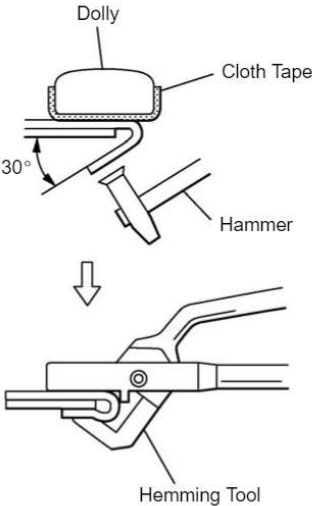
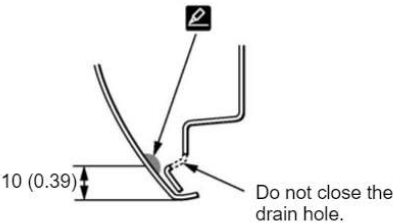
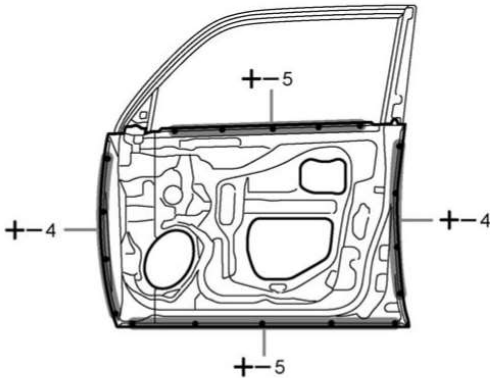
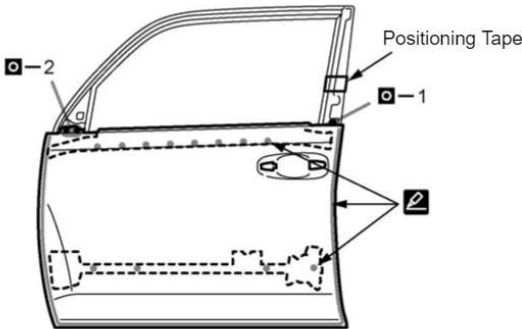
 : Plug Weld

 : Spot MIG Weld

 : Body Sealer

F42935B

INSTALLATION



mm (in.)

F42935

INSTALLATION POINT

1

Before temporarily installing the new parts, apply body sealer to the reinforcement, side impact protection beam and backside of the new parts.
HINT:
Apply sealer evenly about 10 mm (0.39 in.) from the flange and 3 mm (0.12 in.) in diameter on the outer panel and apply just enough sealer for the reinforcement and side impact protection beam to make contact.

2

Bend the flange hem about 30° with a hammer and dolly. Then, fasten tightly with a hemming tool.
HINT:

- Perform hemming in three steps, being careful not to warp the panel.
- If a hemming tool cannot be used, hem with a hammer and dolly.

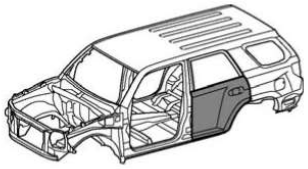
3

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

<https://cardiagn.com/2010-toyota-4runner-brm-body-panel-replacement/>

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REAR DOOR OUTER PANEL (ASSY)



F42936A

Symbol meaning

 : Remove Weld Points  : Braze

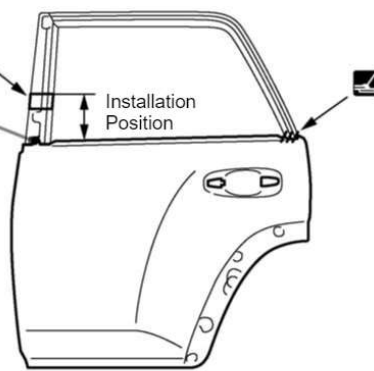
F42936B

REMOVAL

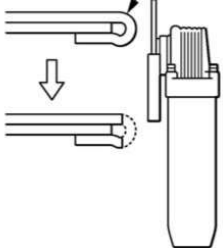
Positioning Tape

 - 1

Installation Position



Hemming Location



Disc Sander

F42936

REMOVAL POINT

- 1 Before removing the outer panel, mark the installation position with tape.
- 2 Before removing the outer panel, establish its exact position in relation to the window frame using a reference marker, etc.
- 3 After grinding off the hemming location, remove the outer panel.

BP-26 BODY PANEL REPLACEMENT

Symbol meaning

 : Plug Weld

 : Braze

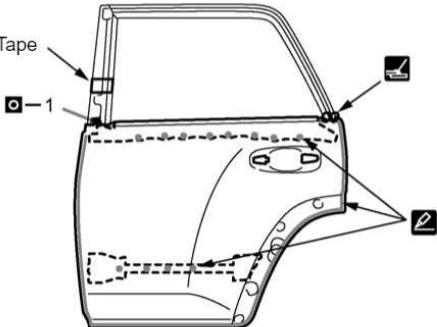
 : Spot MIG Weld

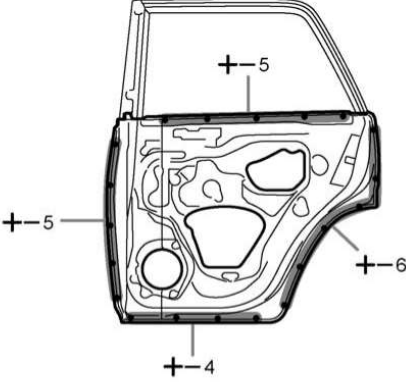
 : Body Sealer

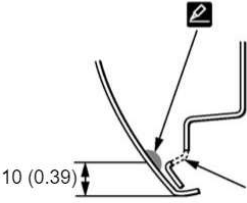
F42937B

INSTALLATION

Positioning Tape







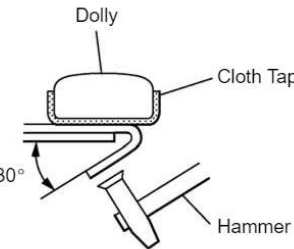
Do not close the drain hole.

Dolly

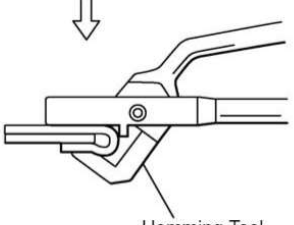
Cloth Tape

30°

Hammer



Hemming Tool



mm (in.)

F42937

INSTALLATION POINT

1

Before temporarily installing the new parts, apply body sealer to the reinforcement, side impact protection beam and backside of the new parts.

HINT:

Apply sealer evenly about 10 mm (0.39 in.) from the flange and 3 mm (0.12 in.) in diameter on the outer panel and apply just enough sealer for the reinforcement and side impact protection beam to make contact.

2

Bend the flange hem about 30° with a hammer and dolly. Then, fasten tightly with a hemming tool.

HINT:

• Perform hemming in three steps, being careful not to warp the panel.

• If a hemming tool cannot be used, hem with a hammer and dolly.

3

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

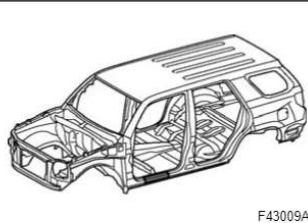
<https://cardiagn.com/2010-toyota-4runner-brm-body-panel-replacement/>

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BODY PANEL REPLACEMENT

BP-27

CENTER BODY OUTER PILLAR (CUT)



Weld work for 980 MPa ultra high strength steel

1 Follow the welding conditions below when welding ultra high strength steel to assure sufficient weld strength. (When repairing this model)

*1: When welding 2 panels together including 980 MPa ultra high strength steel.

Spot weld	Pressure	2940 N (300 kgf, 661 lbf)
	Weld current	10000 A
	Weld time	18 Cyc. (0.30 Sec.)
Plug weld	Plug diameter	10 mm (0.39 in.)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

*2: When welding more than 3 panels together including 980 MPa ultra high strength steel.
(When plug welding a panel to the welded panels with the weld condition above.)

Plug weld	Plug diameter	Same as the standard method (See the introduction)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

HINT:

Be sure to use Metal active gas (Ar 80% + CO₂ 20%) as the shield gas when plug welding.
Sufficient weld strength cannot be assured when using 100% CO₂ shield gas.

BP-28

BODY PANEL REPLACEMENT

Symbol meaning

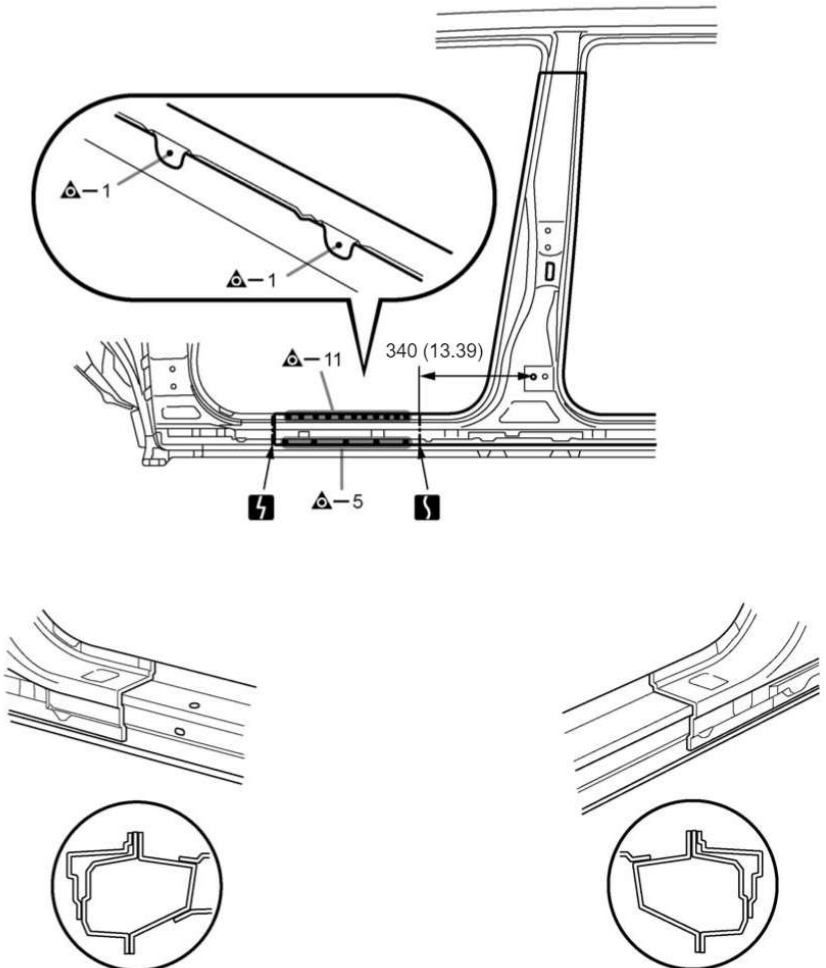
 : Remove Weld Points

 : Cut and Join Location

 : Cut Location for Supply Parts

F43009B

REMOVAL



mm (in.)

F43009

REMOVAL POINT

1

Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

BODY PANEL REPLACEMENT

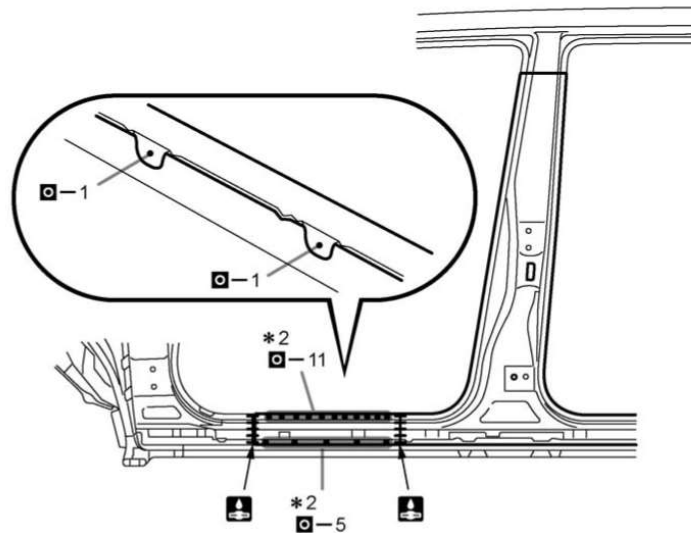
BP-29

Symbol meaning

□ : Plug Weld ■ : Butt Weld

F43010B

INSTALLATION

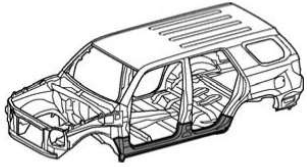


F43010

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding point *2 to assure sufficient weld strength. (See the introduction)
- 4 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 5 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

ROCKER OUTER PANEL (ASSY)



F42938A

Weld work for 980 MPa ultra high strength steel

1 Follow the welding conditions below when welding ultra high strength steel to assure sufficient weld strength. (When repairing this model)

*1: When welding 2 panels together including 980 MPa ultra high strength steel.

Spot weld	Pressure	2940 N (300 kgf, 661 lbf)
	Weld current	10000 A
	Weld time	18 Cyc. (0.30 Sec.)
Plug weld	Plug diameter	10 mm (0.39 in.)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

*2: When welding more than 3 panels together including 980 MPa ultra high strength steel.
(When plug welding a panel to the welded panels with the weld condition above.)

Plug weld	Plug diameter	Same as the standard method (See the introduction)
	Wire type	AWS A5.18 ER70S-3
	Shield gas	Metal active gas

HINT:
Be sure to use Metal active gas (Ar 80% + CO₂ 20%) as the shield gas when plug welding.
Sufficient weld strength cannot be assured when using 100% CO₂ shield gas.

BODY PANEL REPLACEMENT

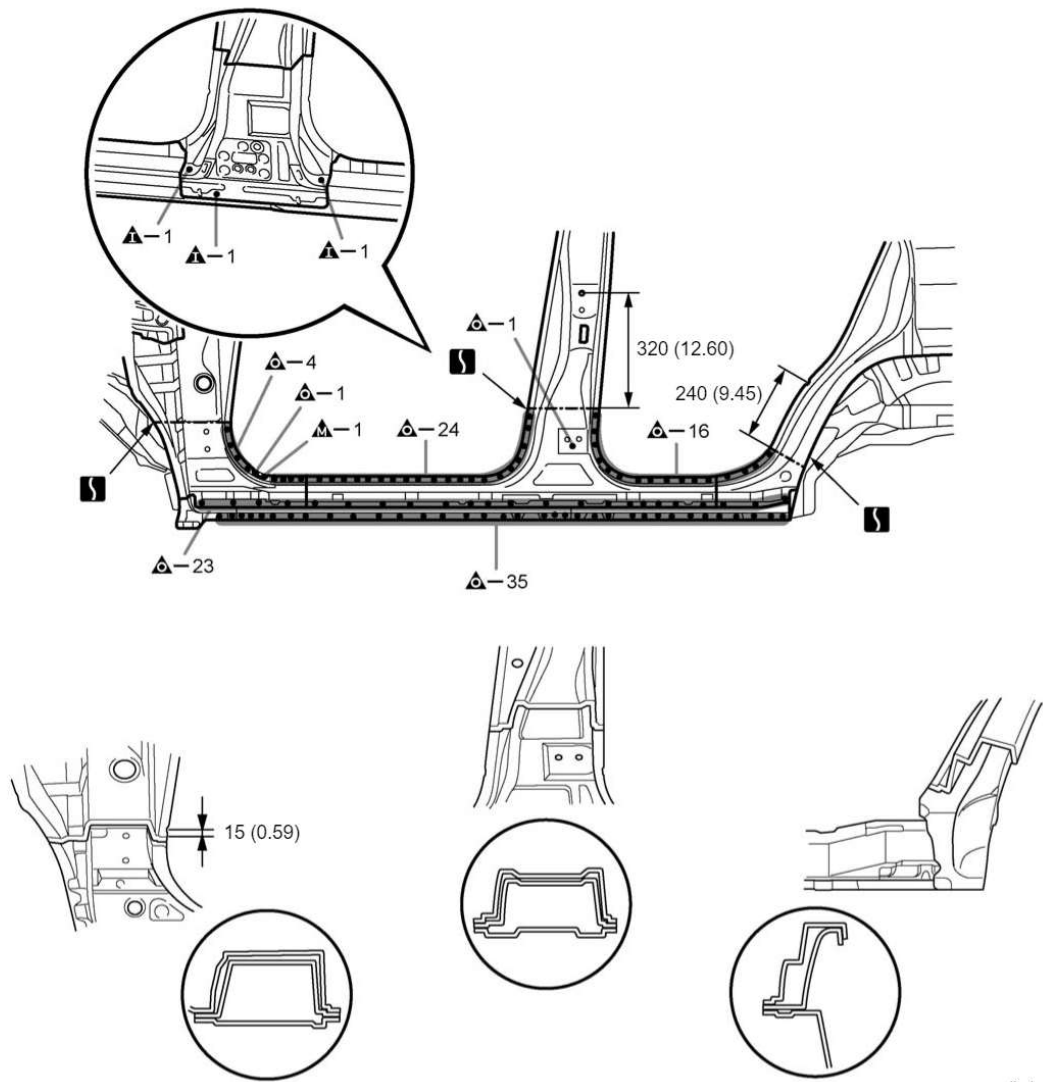
BP-31

Symbol meaning

▲▲▲ : Remove Weld Points  : Cut with Disc Sander etc.  : Cut and Join Location

F42938B

REMOVAL



mm (in.)

F42938

REMOVAL POINT

- 1 Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

BP-32

BODY PANEL REPLACEMENT

Symbol meaning

: Remove Weld Points

: Cut with Disc Sander etc.

: Cut and Join Location

F42938B

F42939

REMOVAL POINT

1 Do not butt weld or heat repair because the heat decreases the strength of areas where ultra high strength steel is used. (See the introduction)

BODY PANEL REPLACEMENT

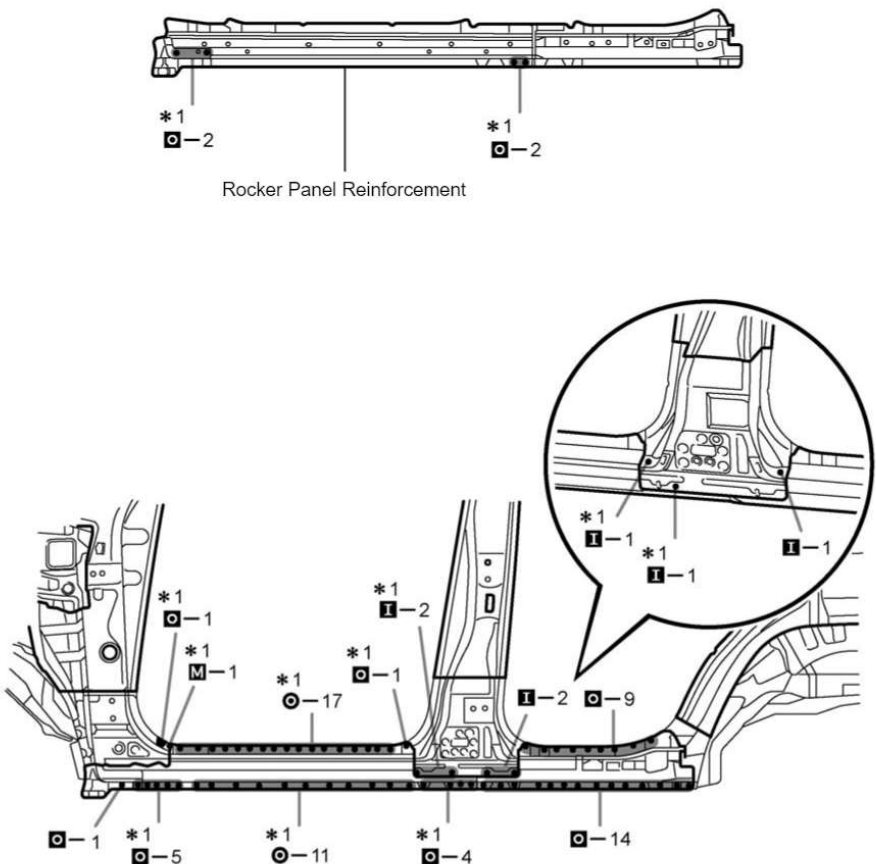
BP-33

Symbol meaning

- ⊙ : Spot Weld □ M I : Plug Weld  : Fillet Weld
 : Butt Weld  : Body Sealer

F42940B

INSTALLATION



F42940

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding point *1 to assure sufficient weld strength. (See the introduction)
- 4 After welding the rocker panel reinforcement to the vehicle side, install the front body upper outer pillar, center body outer pillar and quarter panel.

Symbol meaning

 : Spot Weld

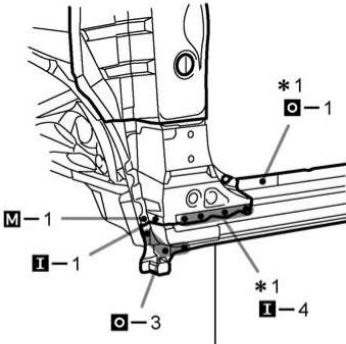
 M  I : Plug Weld

 : Fillet Weld

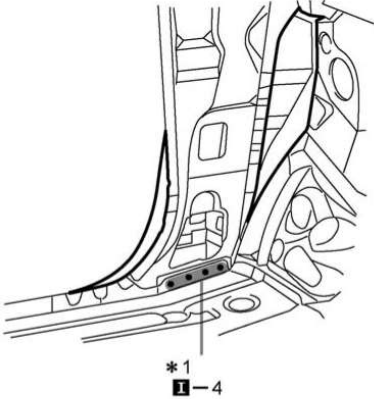
 : Butt Weld

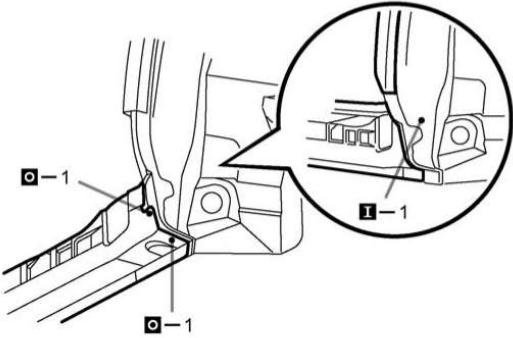
 : Body Sealer

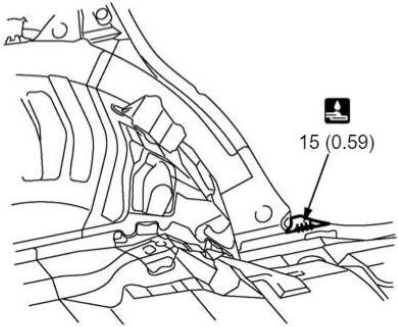
F42940B



Rocker Panel Reinforcement







mm (in.)

F42941

INSTALLATION POINT

1

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

2

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

3

Follow the welding conditions when welding point *1 to assure sufficient weld strength. (See the introduction)

4

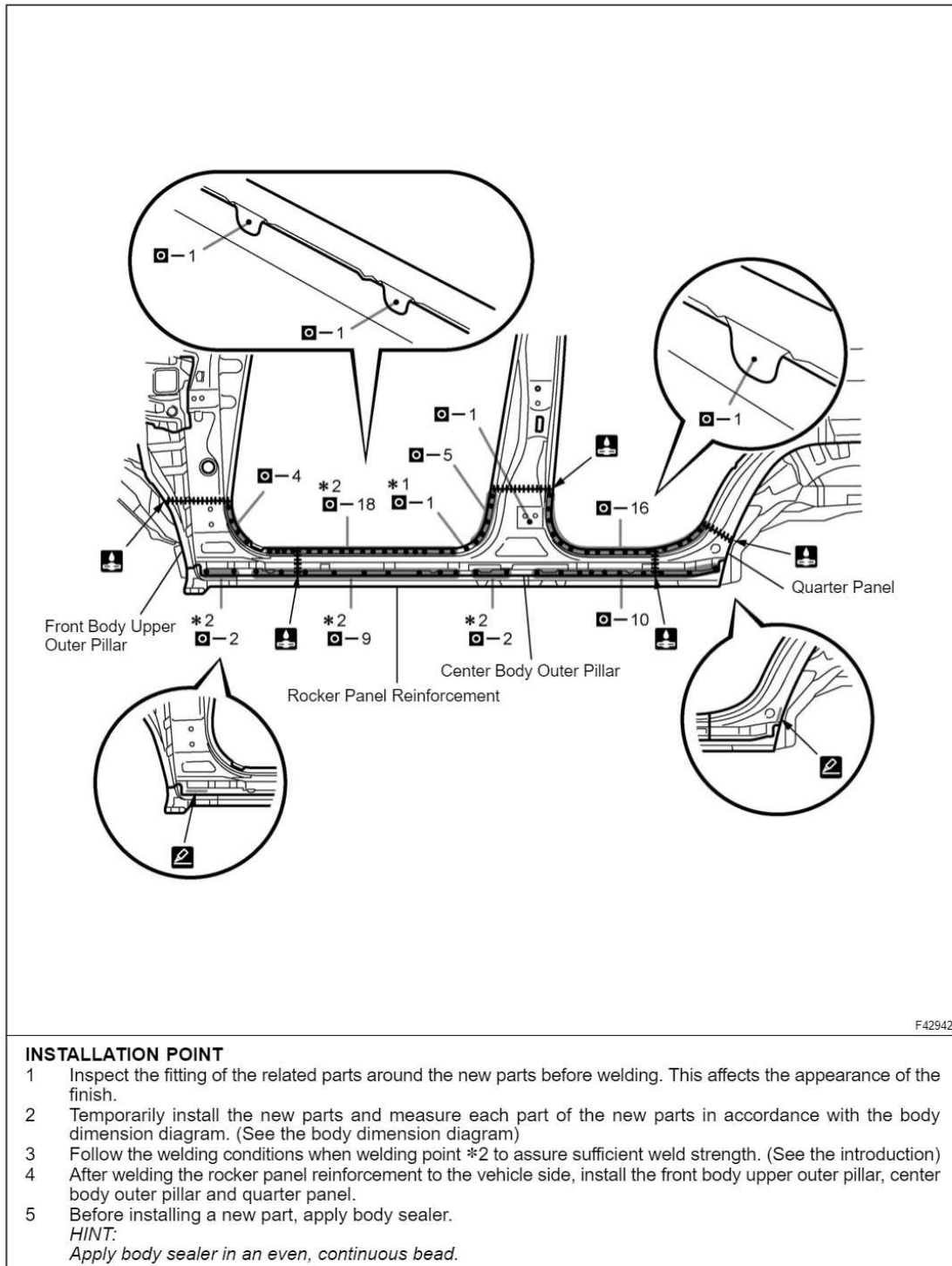
After welding the rocker panel reinforcement to the vehicle side, install the front body upper outer pillar, center body outer pillar and quarter panel.

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BODY PANEL REPLACEMENT

BP-35



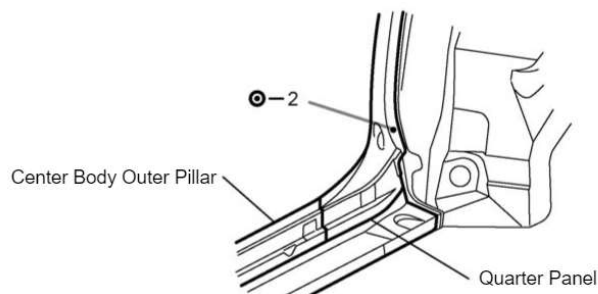
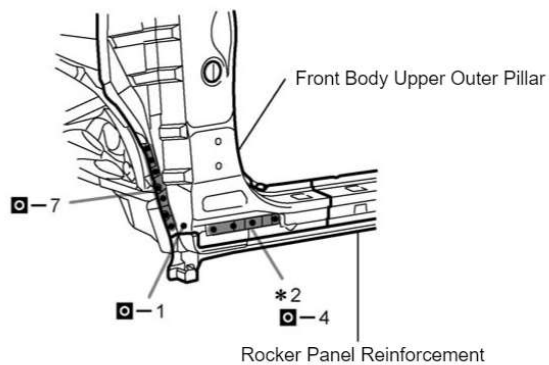
BP-36

BODY PANEL REPLACEMENT

Symbol meaning

- : Spot Weld ○ M I : Plug Weld ■ : Fillet Weld
 ■ : Butt Weld ■ : Body Sealer

F42940B



F42943

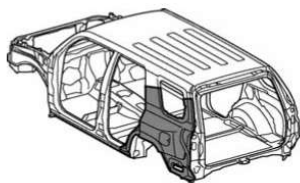
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Follow the welding conditions when welding point *2 to assure sufficient weld strength. (See the introduction)
- 4 After welding the rocker panel reinforcement to the vehicle side, install the front body upper outer pillar, center body outer pillar and quarter panel.
- 5 After welding, apply the foamed sealing material to the corresponding parts. (See the paint coating)
- 6 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 7 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-37

QUARTER PANEL (ASSY)



F42944A

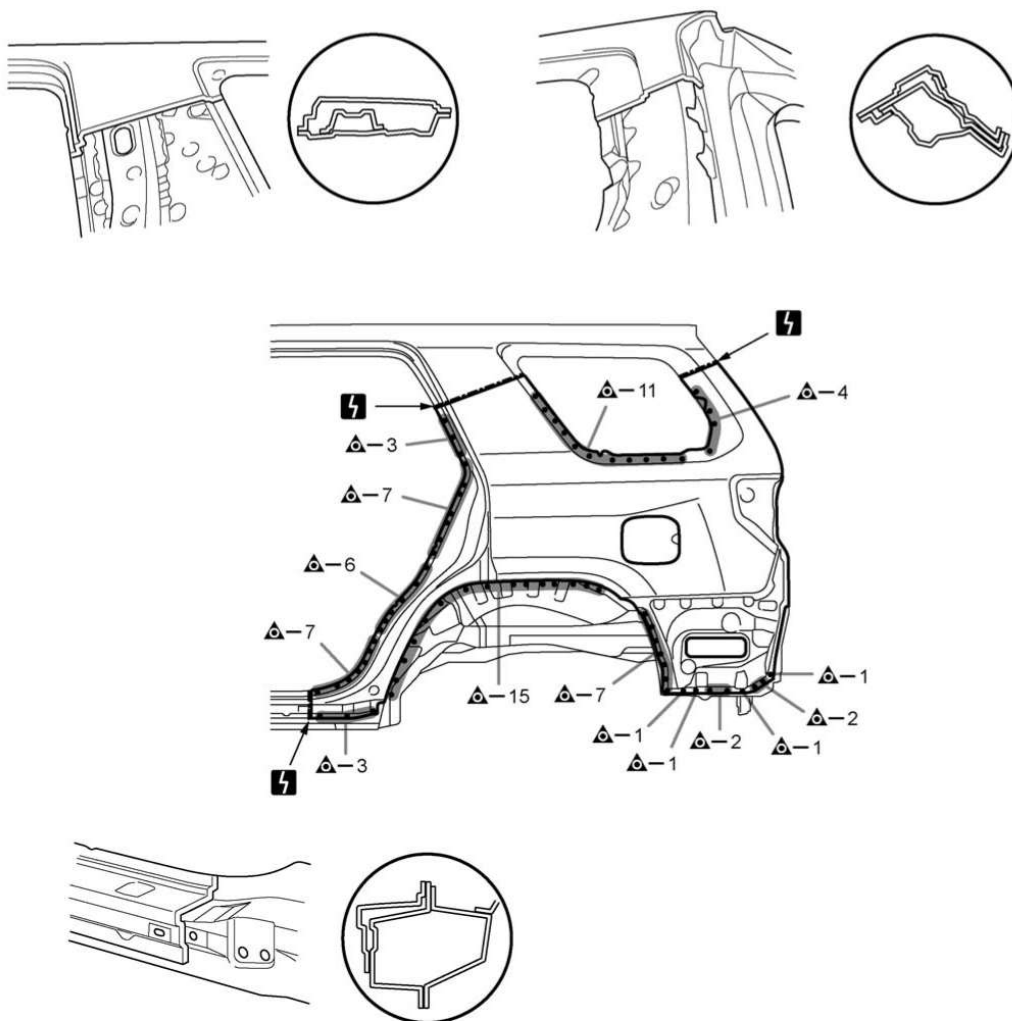
Symbol meaning

 : Remove Weld Points : Cut with Disc Sander etc.

⚡ : Cut Location for Supply Parts

F42944B

REMOVAL

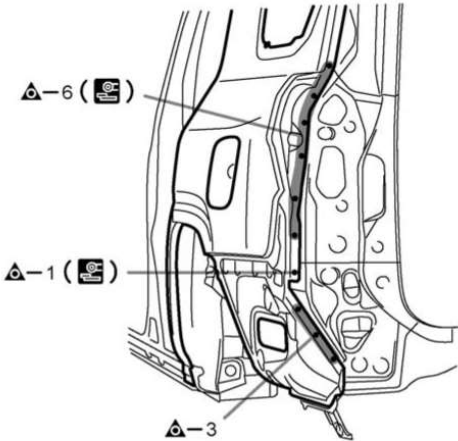
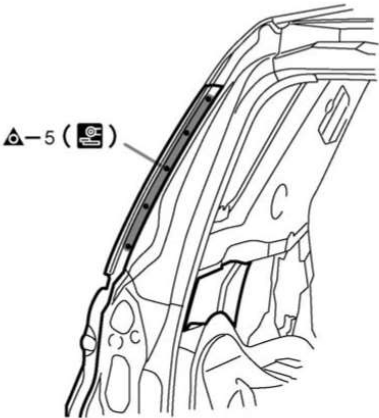


F42944

Symbol meaning

- ⚠ : Remove Weld Points ✂ : Cut with Disc Sander etc.
⚡ : Cut Location for Supply Parts

F42944B



F42945

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BODY PANEL REPLACEMENT

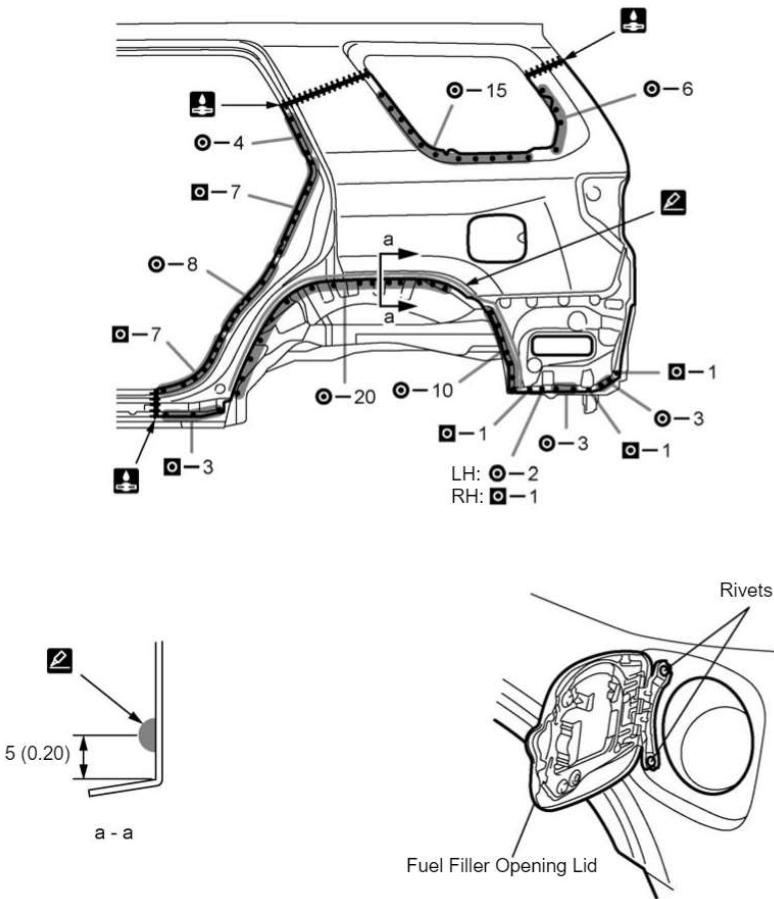
BP-39

Symbol meaning

- : Spot Weld
- ◻ : Plug Weld
- ⏏ : Butt Weld
- ◻ : Body Sealer

F42946B

INSTALLATION



F42946

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 Before installing a new part, apply body sealer.

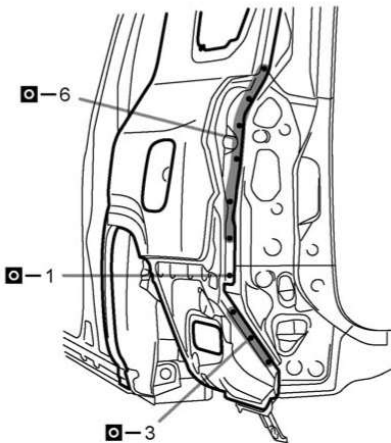
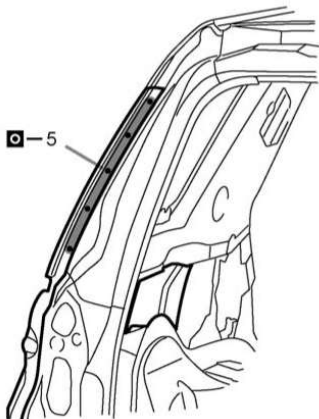
HINT:

Apply body sealer evenly about 5 mm (0.20 in.) from the flange, avoiding any oozing.
Apply body sealer evenly, about 3 – 4 mm (0.12 – 0.16 in.) in diameter.

Symbol meaning

- : Spot Weld ◻ : Plug Weld ■ : Butt Weld
◻ : Body Sealer

F42946B



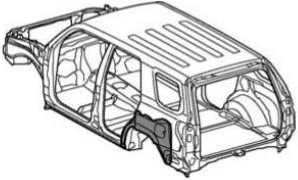
F42947

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After welding, apply the foamed sealing material to the corresponding parts. (See the paint coating)
- 4 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 5 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

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QUARTER WHEEL HOUSING OUTER PANEL (ASSY)



F42948A

With the quarter panel removed.

Symbol meaning

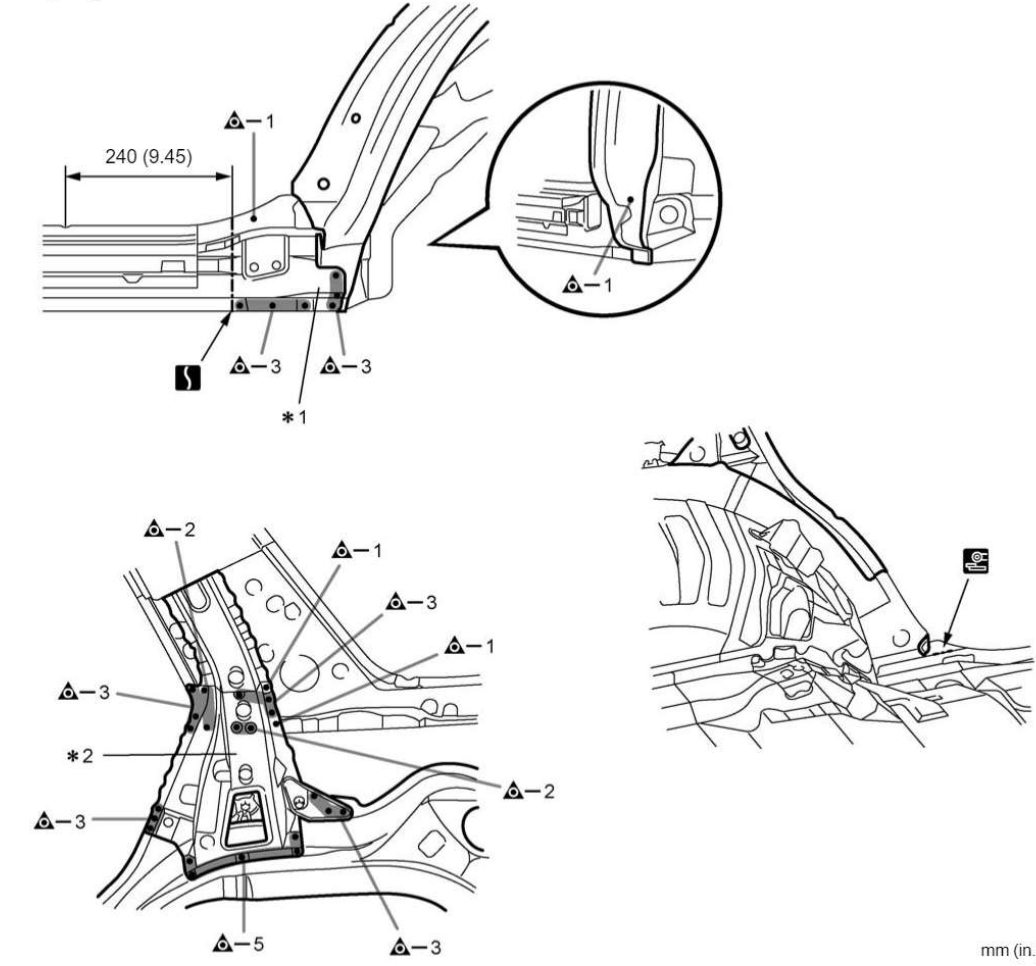
▲▲ : Remove Weld Points  : Cut with Disc Sander etc.

 : Cut and Join Location

F42948B

REMOVAL

[LH]



mm (in.)

F42948

REMOVAL POINT

1 *1 is reused.

2 After removing the *1 and *2 remove the quarter wheel housing outer panel.

BP-42 BODY PANEL REPLACEMENT

Symbol meaning

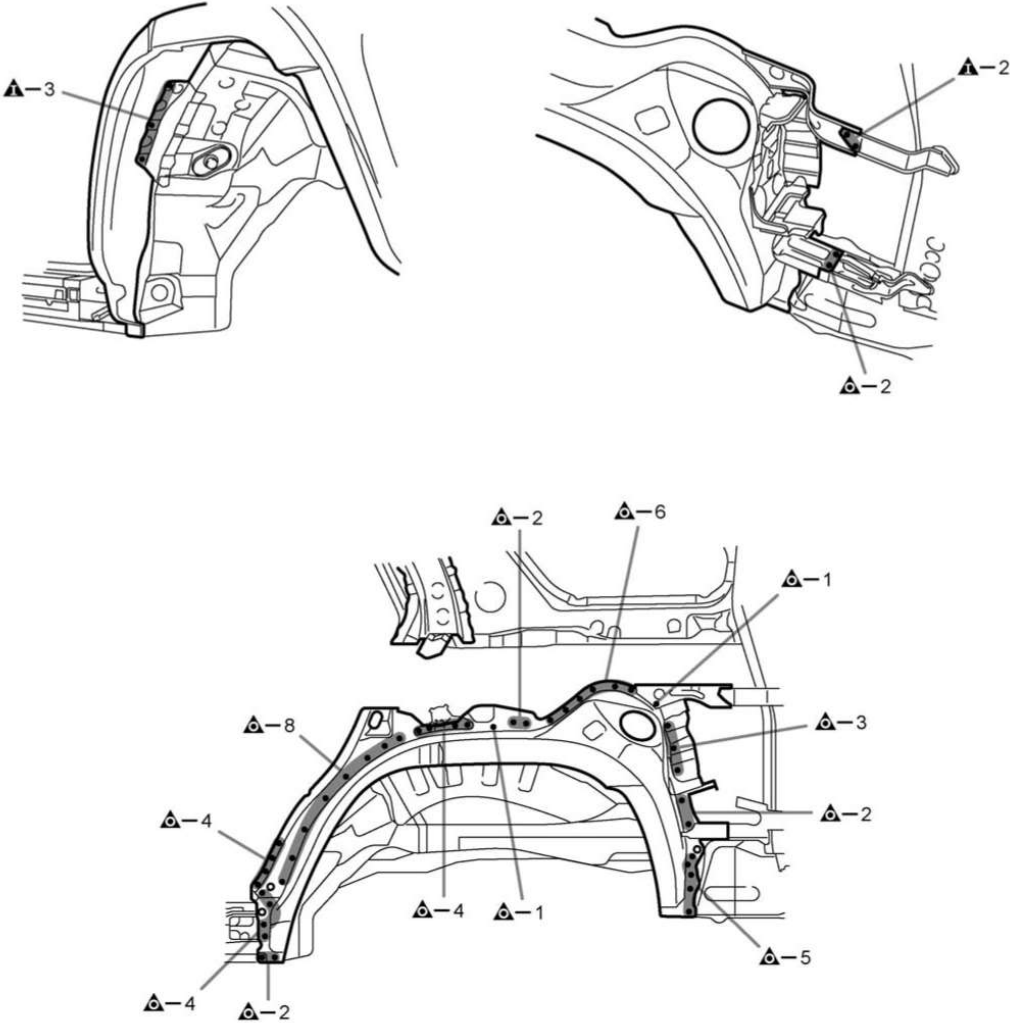
  : Remove Weld Points

 : Cut with Disc Sander etc.

 : Cut and Join Location

F42948B

[LH]



The diagram shows the LH (Left Hand) front left quarter panel and fender area. It includes three views: a side view of the fender, a side view of the quarter panel, and a top-down view of the quarter panel. Various weld points and cut locations are marked with symbols and numbers. The symbols used are triangles with a dot inside (weld points) and a line with a dot (cut locations). The numbers indicate specific points or areas.

- Weld points: 3 (fender), 2 (quarter panel), 6 (top of quarter panel), 1 (rear of quarter panel), 8 (front of quarter panel), 4 (bottom of quarter panel), 5 (bottom of quarter panel).
- Cut locations: 2 (top of quarter panel), 1 (rear of quarter panel), 3 (rear of quarter panel), 2 (bottom of quarter panel), 4 (bottom of quarter panel), 2 (bottom of quarter panel).

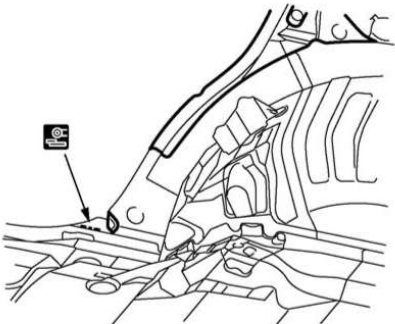
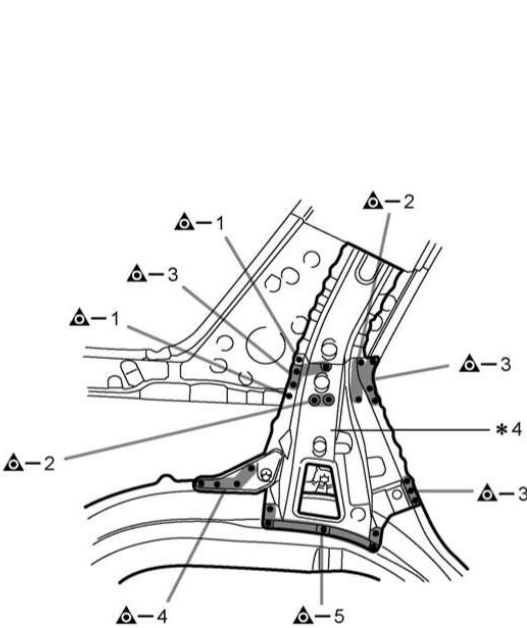
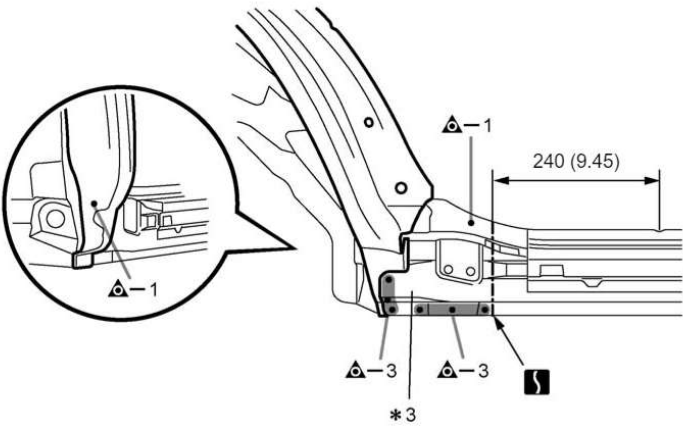
F42949

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BODY PANEL REPLACEMENT

BP-43

[RH]



mm (in.)
F42950

- REMOVAL POINT**
- 1 *3 is reused.
 - 2 After removing the *3 and *4 remove the quarter wheel housing outer panel.

BP-44

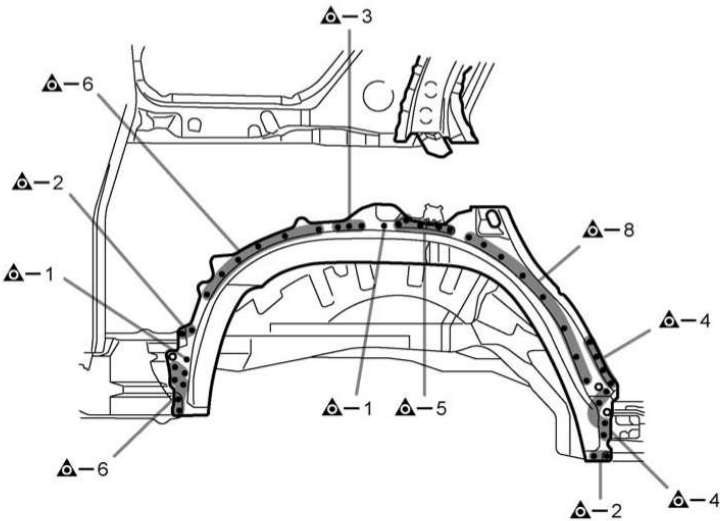
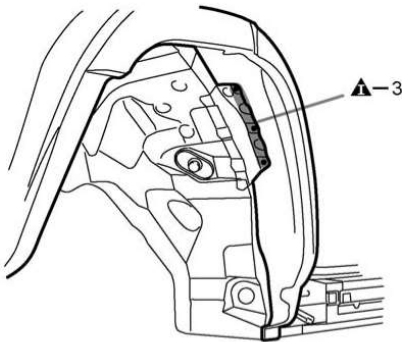
BODY PANEL REPLACEMENT

Symbol meaning

- ▲▲ : Remove Weld Points  : Cut with Disc Sander etc.
 : Cut and Join Location

F42948B

[RH]



F42951

BODY PANEL REPLACEMENT

BP-45

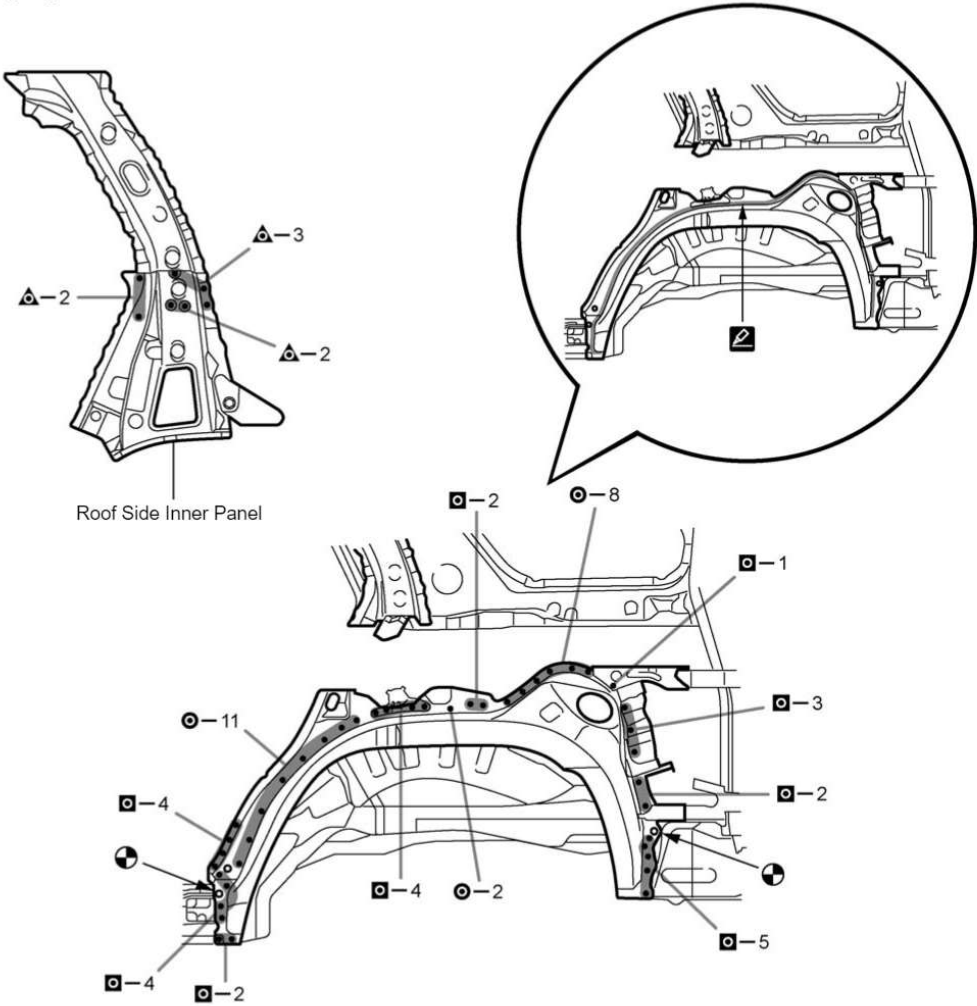
Symbol meaning

- △ : Remove Weld Points ○ : Spot Weld □ I : Plug Weld
▬ : Fillet Weld ■ : Butt Weld ② : Body Sealer

F42952B

INSTALLATION

[LH]



F42952

INSTALLATION POINT

- 1 If the entire supply part is not needed, remove the part of the supply part that is needed.
 - 2 For positioning of the new parts, align the installation standard holes of the outer panel and the inner panel.
 - 3 Before installing a new part, apply body sealer.
- HINT:*
Apply body sealer in an even, continuous bead.

BP-46

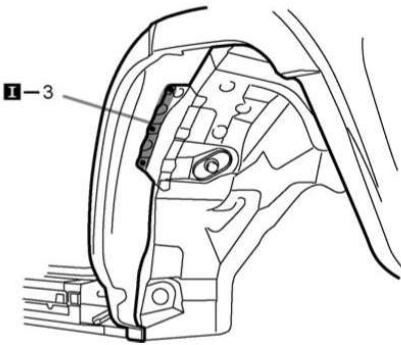
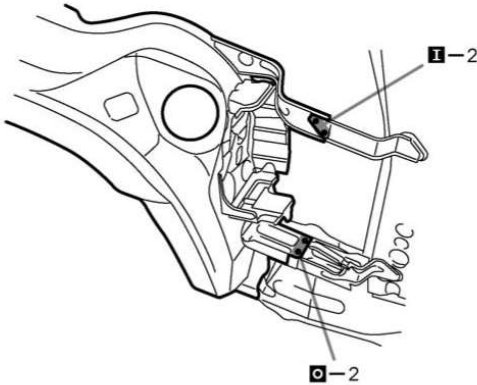
BODY PANEL REPLACEMENT

Symbol meaning

- ▲ : Remove Weld Points ● : Spot Weld □ I : Plug Weld
■ : Fillet Weld ■ : Butt Weld ■ : Body Sealer

F42952B

[LH]



F42953

BODY PANEL REPLACEMENT

BP-47

[LH]

mm (in.)

F42954

INSTALLATION POINT

- 1 After welding the quarter wheel housing outer panel to the vehicle side, install the *5 and *6.
- 2 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)
- 3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-48

BODY PANEL REPLACEMENT

Symbol meaning

 : Remove Weld Points

 : Spot Weld

 1 : Plug Weld

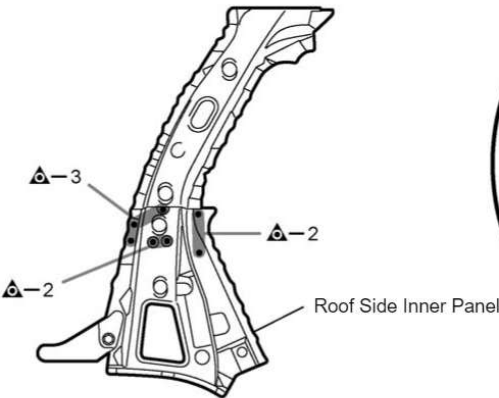
 : Fillet Weld

 : Butt Weld

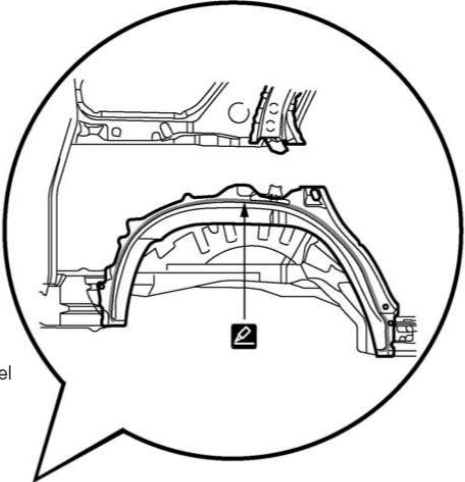
 : Body Sealer

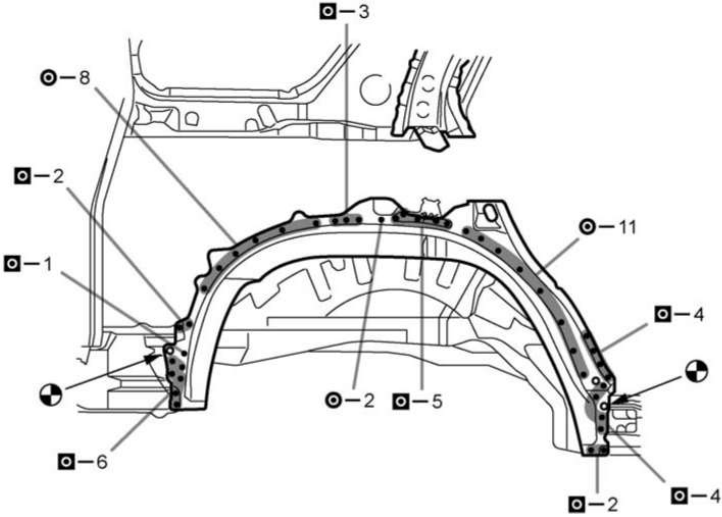
F42952B

[RH]



Roof Side Inner Panel





F42955

INSTALLATION POINT

1

If the entire supply part is not needed, remove the part of the supply part that is needed.

2

For positioning of the new parts, align the installation standard holes of the outer panel and the inner panel.

3

Before installing a new part, apply body sealer.

HINT:

Apply body sealer in an even, continuous bead.

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BODY PANEL REPLACEMENT

BP-49

[RH]

1-3

15 (0.59)

1

3

7

8

2

4

5

3

mm (in.)

F42956

INSTALLATION POINT

1 After welding the quarter wheel housing outer panel to the vehicle side, install the *7 and *8.

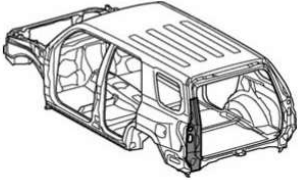
2 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)

3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-50

BODY PANEL REPLACEMENT

QUARTER OUTER PANEL (CUT)



F42957A

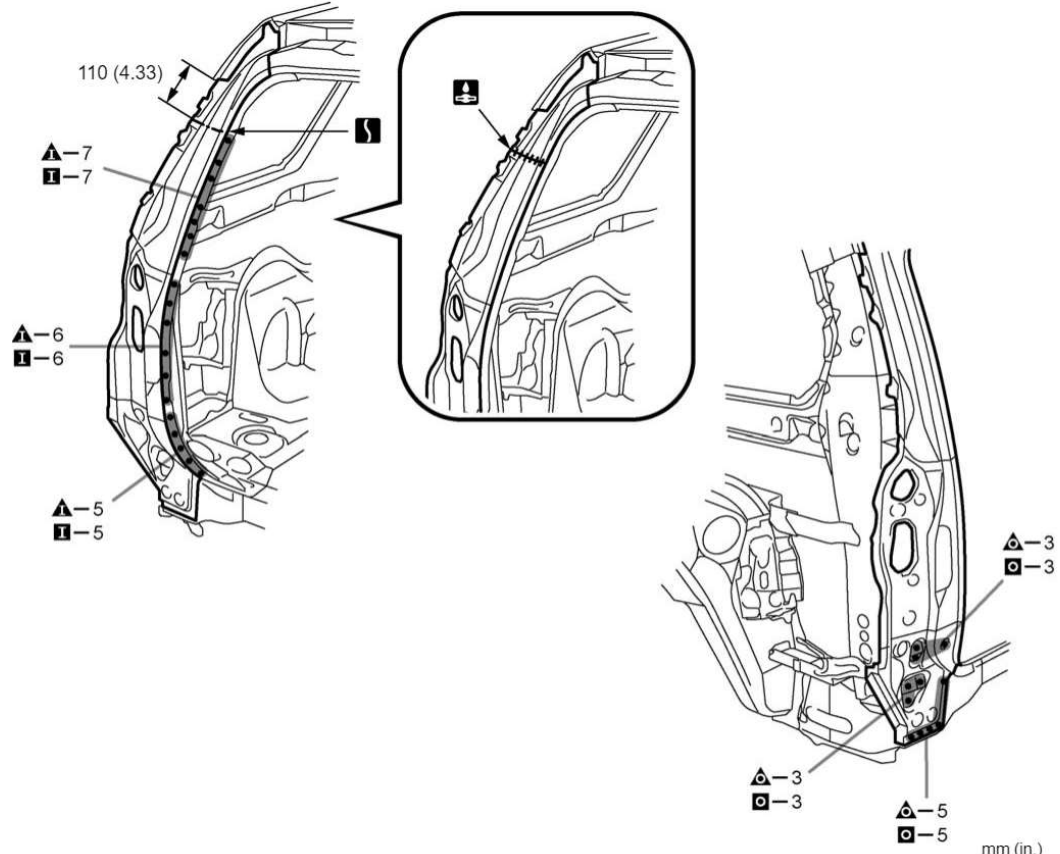
With the quarter panel removed.

Symbol meaning

REMOVAL	△ : Remove Weld Points	⌋ : Cut and Join Location
INSTALLATION	□ : Plug Weld	⌋ : Butt Weld

F42957B

REMOVAL-INSTALLATION



110 (4.33)

△-7
□-7

△-6
□-6

△-5
□-5

△-3
□-3

△-5
□-5

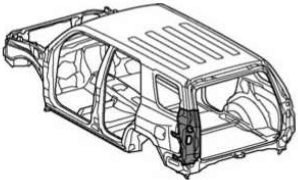
mm (in.)

F42957

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 4 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

ROOF SIDE INNER REINFORCE (CUT)



F42958A

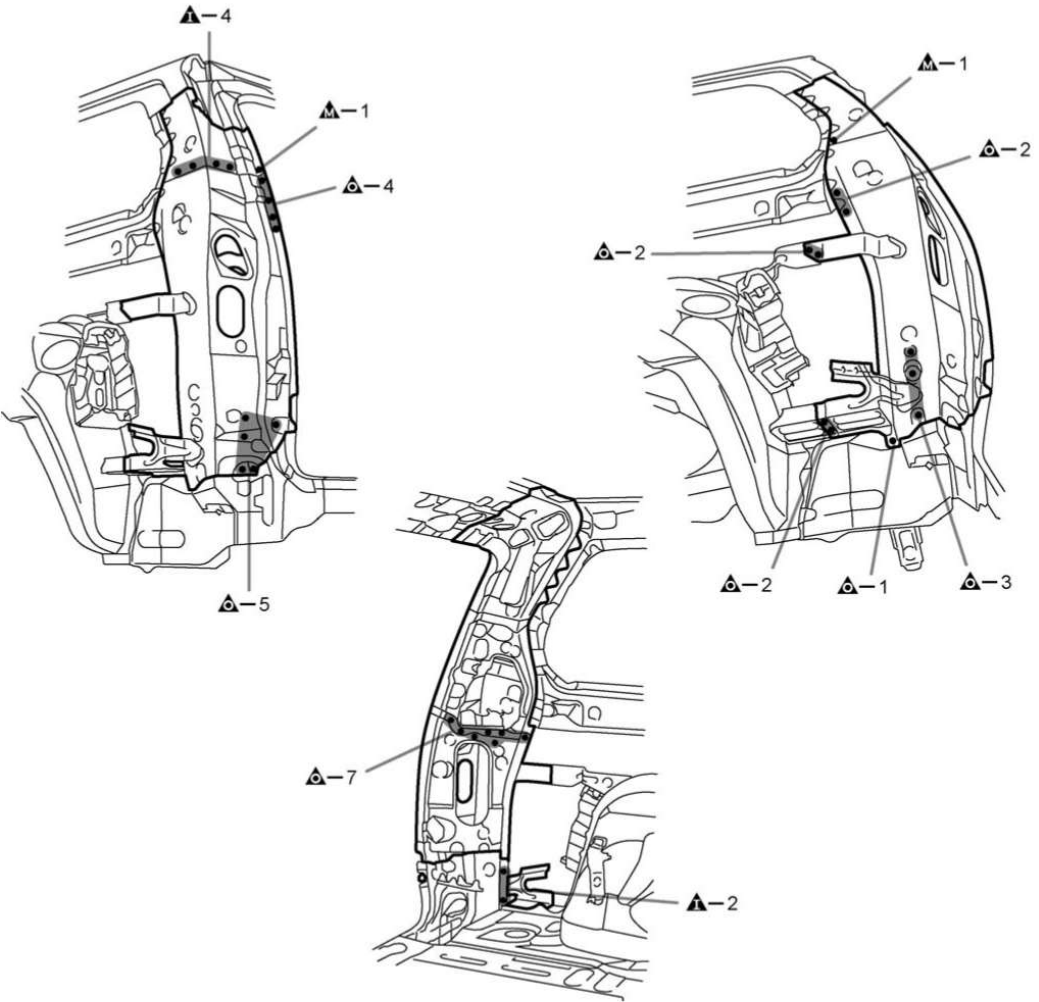
With the quarter outer panel and rear floor crossmember No. 2 removed.

Symbol meaning

▲▲▲ : Remove Weld Points

F42958B

REMOVAL



F42958

BP-52

BODY PANEL REPLACEMENT

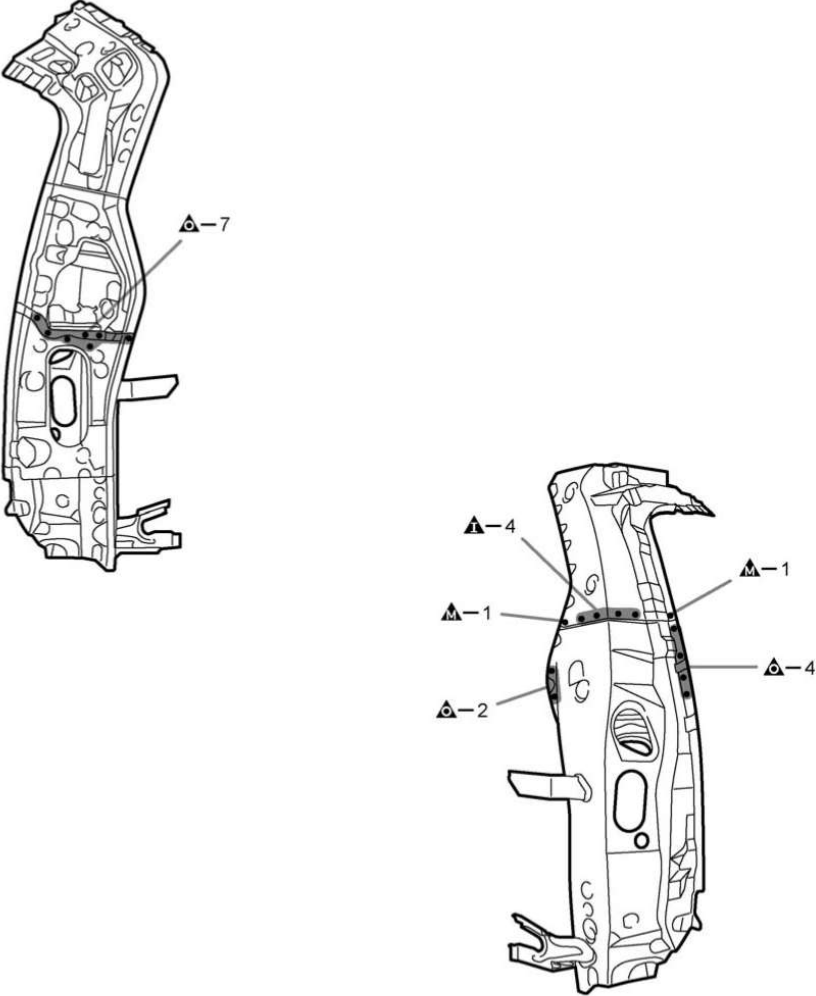
Symbol meaning

 : Remove Weld Points

 : Plug Weld

F43013B

INSTALLATION



F43013

INSTALLATION POINT

1 If the entire supply part is not needed, remove the part of the supply part that is needed.

BODY PANEL REPLACEMENT

BP-53

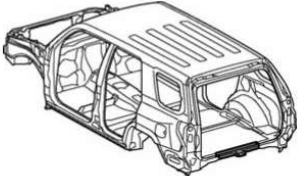
The diagrams illustrate the correct placement of various fasteners and components during the body panel replacement process. The top-left diagram shows the front quarter panel with labels I-4, M-1, Q-4, and Q-5. The top-right diagram shows the rear quarter panel with labels M-1, Q-2, Q-2, Q-1, and Q-3. The bottom diagram shows the rear door area with labels Q-7, Q-1, and I-2.

F43014

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY LOWER BACK PANEL (CUT)



F42959A

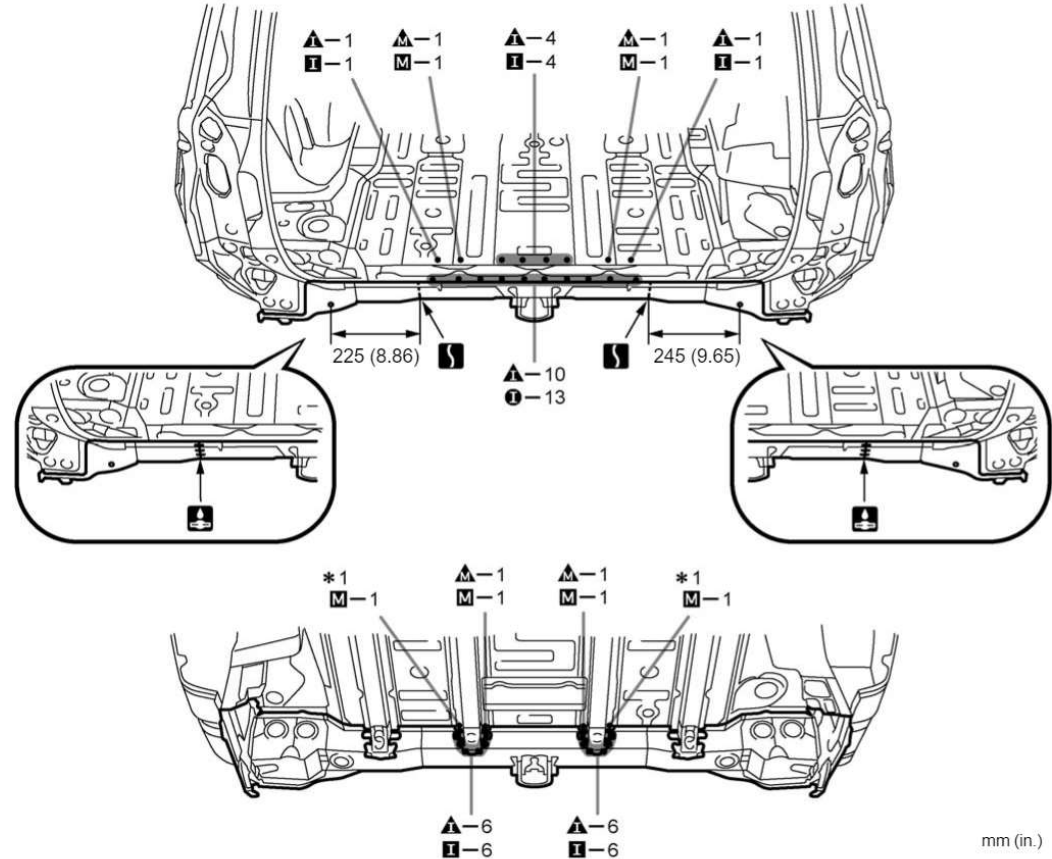
Symbol meaning

REMOVAL ▲▲ : Remove Weld Points ■ : Cut and Join Location

INSTALLATION ● : Spot Weld ■ I : Plug Weld ■ : Butt Weld

F42959B

REMOVAL-INSTALLATION



mm (in.)

F42959

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 *1 is only for installation.
- 4 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)
- 5 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY LOWER BACK PANEL (ASSY)



F42960A

With the roof side inner reinforce removed.

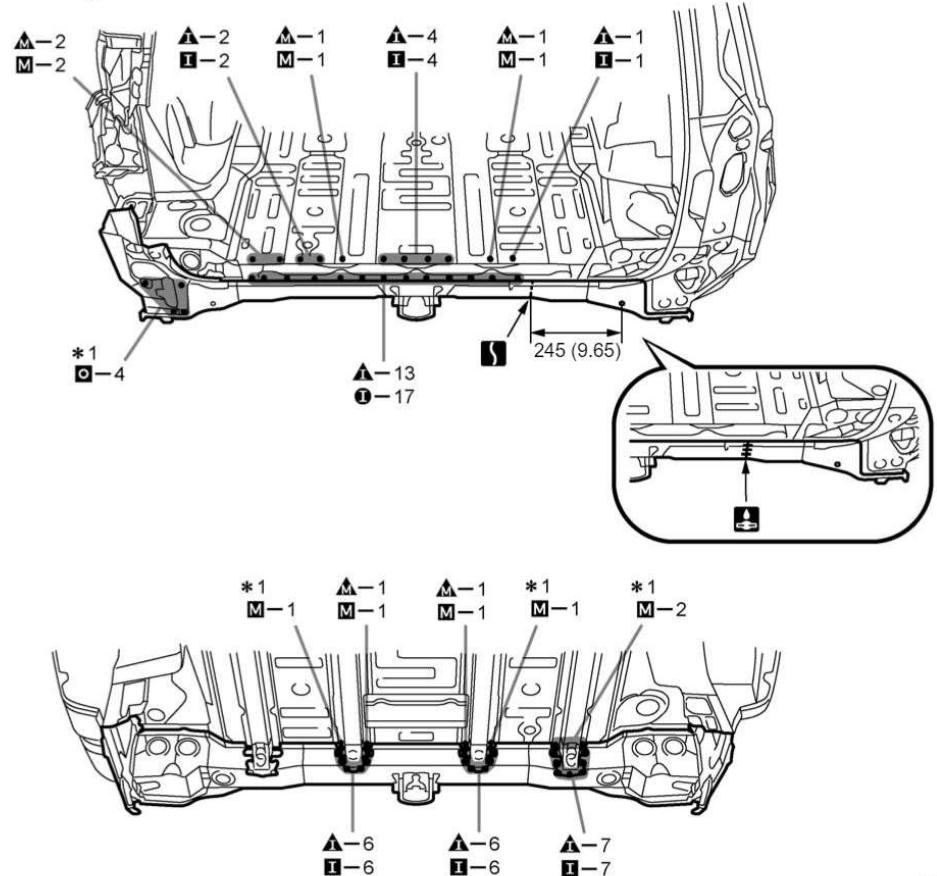
Symbol meaning

REMOVAL	▲▲ : Remove Weld Points	⌋ : Cut and Join Location	
INSTALLATION	● : Spot Weld	⊠ M ⊠ : Plug Weld	⌋ : Butt Weld

F42960B

REMOVAL·INSTALLATION

[LH Side]



mm (in.)

F42960

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 *1 is only for installation.

BP-56

BODY PANEL REPLACEMENT

Symbol meaning

REMOVAL

INSTALLATION

: Remove Weld Points

: Cut and Join Location

: Spot Weld

: Plug Weld

: Butt Weld

F42960B

[LH Side]

The diagram illustrates the removal and installation of a body panel on the left-hand side of a vehicle. It shows three views: a top view of the panel being removed, a side view of the panel being installed, and a front view of the panel being installed. Removal points are indicated by triangles (▲) and installation points by squares (■). The top view shows removal points ▲-2 and ■-2. The side view shows removal points ▲-5 and ■-5, and installation points ▲-6 and ■-6. The front view shows removal points ▲-2 and ■-2, and installation points ▲-2 and ■-3.

F42961

INSTALLATION POINT

1

2

3

4

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

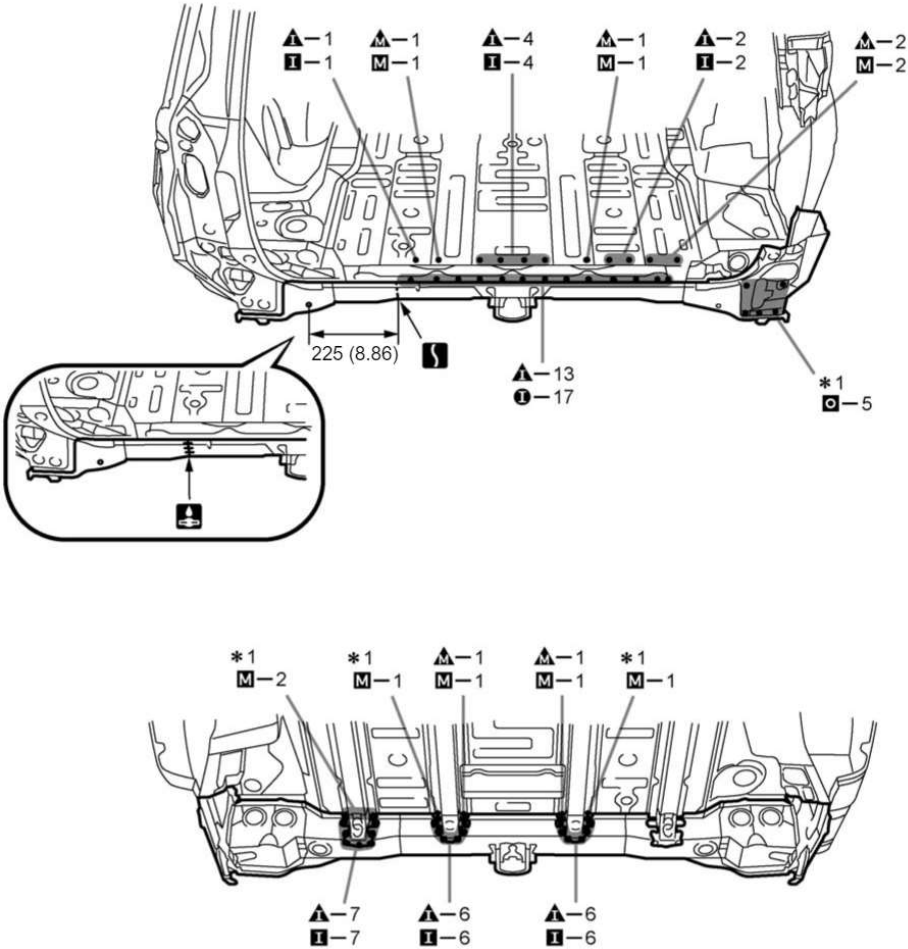
After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-57

[RH Side]



mm (in.)
F42962

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 *1 is only for installation.

Symbol meaning

REMOVAL

INSTALLATION

: Remove Weld Points

: Cut and Join Location

: Spot Weld

: Plug Weld

: Butt Weld

F42960B

[RH Side]

The diagram illustrates the removal and installation of a rear quarter panel on the right-hand side of a vehicle. It shows the panel being removed from the body and then re-installed. Key weld points are identified with symbols: triangles for removal and circles with letters for installation. Specific points are labeled with numbers: 1, 2, 3, and 6. The diagram also shows the internal structure of the body and the panel being replaced.

F42963

INSTALLATION POINT

1

2

3

4

Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

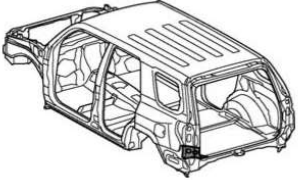
After welding, apply body sealer and undercoating to the corresponding parts. (See the paint-coating)

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

<https://cardiagn.com/2010-toyota-4runner-brm-body-panel-replacement/>

58/109

REAR FLOOR CROSSMEMBER NO. 2 (ASSY)



F42966A

Symbol meaning

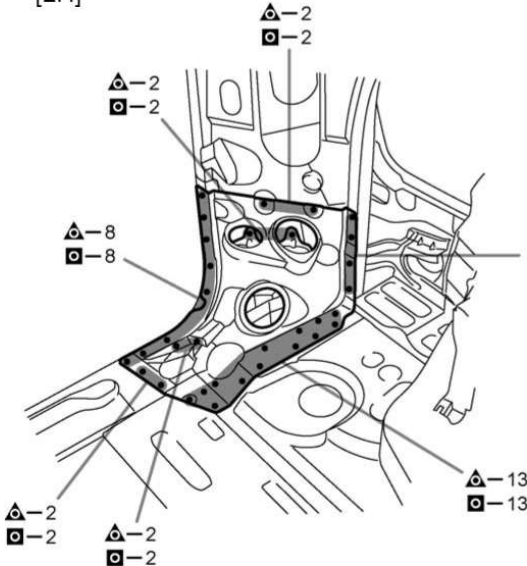
REMOVAL ▲ : Remove Weld Points

INSTALLATION ◻ : Plug Weld

F42966B

REMOVAL-INSTALLATION

[LH]



▲-2
◻-2

▲-2
◻-2

▲-8
◻-8

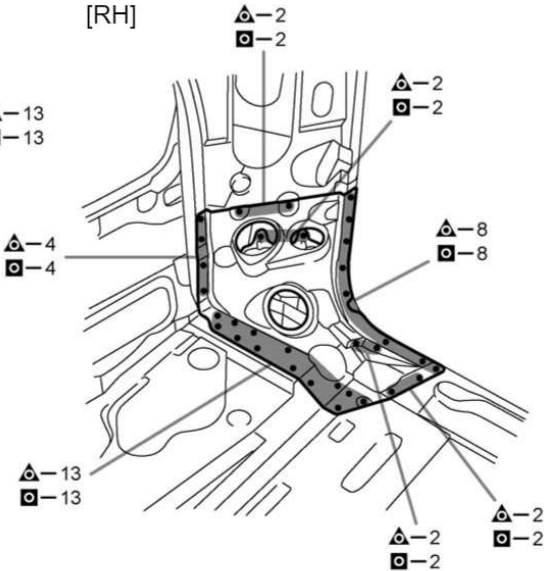
▲-4
◻-4

▲-13
◻-13

▲-2
◻-2

▲-2
◻-2

[RH]



▲-2
◻-2

▲-2
◻-2

▲-8
◻-8

▲-4
◻-4

▲-13
◻-13

▲-2
◻-2

▲-2
◻-2

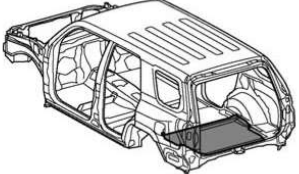
F42966

INSTALLATION POINT

1 After welding, apply body sealer to the corresponding parts. (See the paint coating)

2 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

REAR FLOOR PAN (ASSY)



F42967A

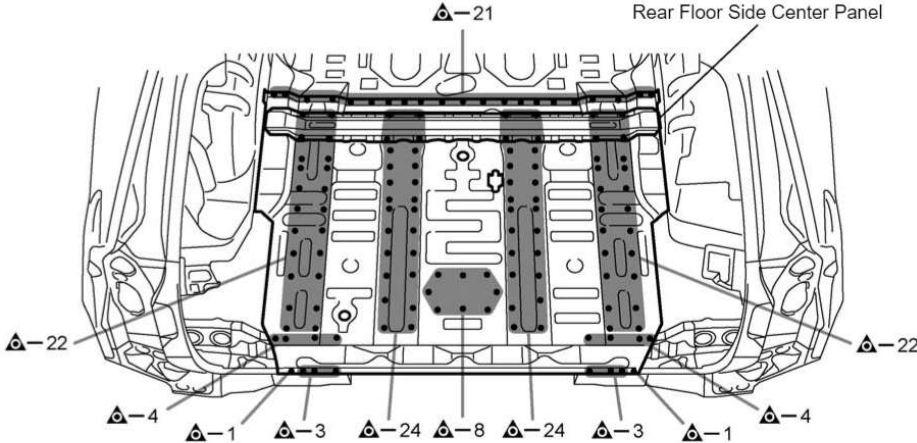
With the body lower back panel and rear floor side panel removed.

Symbol meaning

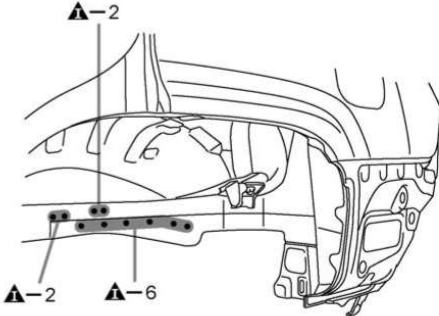
▲▲ : Remove Weld Points

F42967B

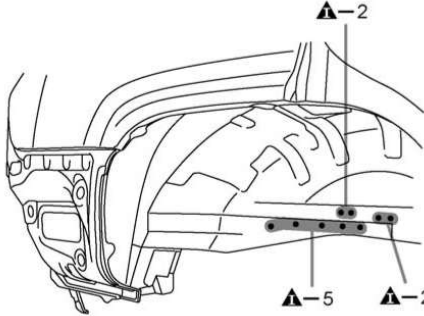
REMOVAL



[LH Side]



[RH Side]



F42967

REMOVAL POINT

1 Remove the rear floor side center panel at the same time.

BODY PANEL REPLACEMENT

BP-61

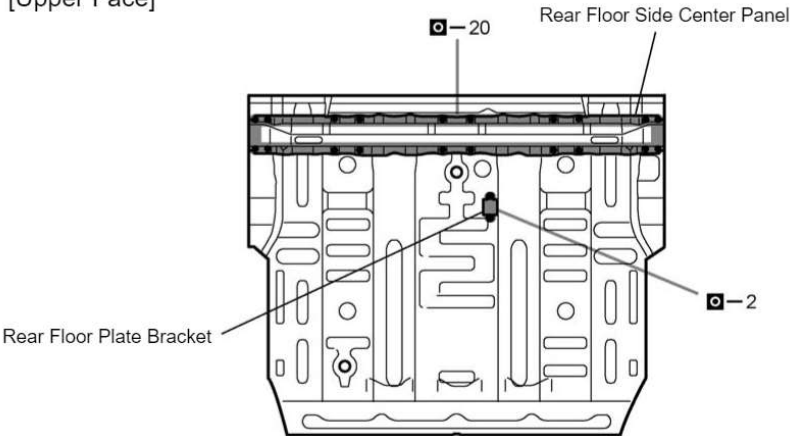
Symbol meaning

⊙ : Spot Weld ⊠ T : Plug Weld █ : Fillet Weld

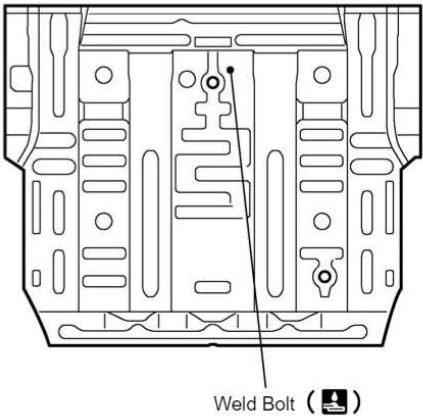
F42968B

INSTALLATION

[Upper Face]



[Lower Face]



F42968

INSTALLATION POINT

- 1 Before temporarily installing the new parts, weld the rear floor side center panel, rear floor plate bracket and weld bolt with the standard number of welding points.

BP-62

BODY PANEL REPLACEMENT

Symbol meaning

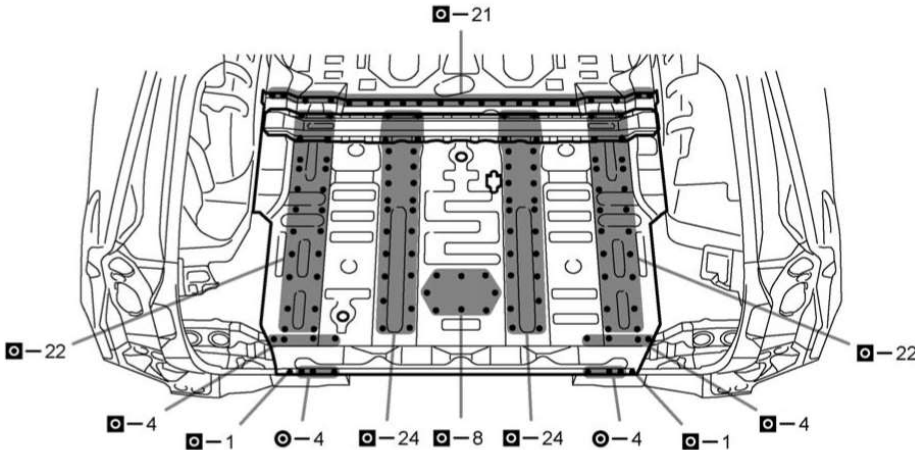
 : Spot Weld

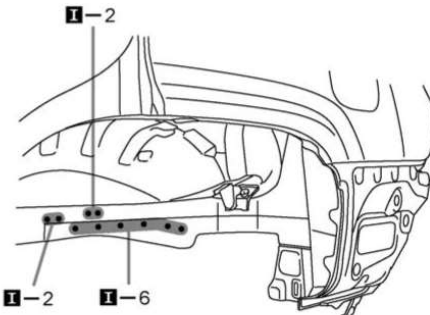
 : Plug Weld

 : Fillet Weld

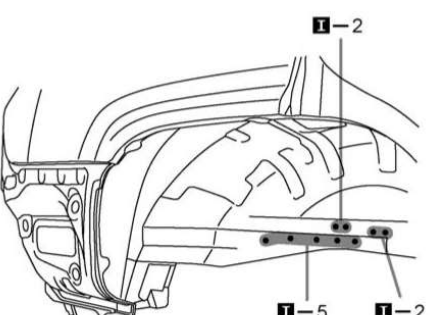
F42968B



[LH Side]



[RH Side]



F42969

INSTALLATION POINT

1

Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)

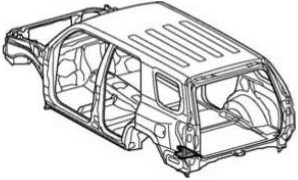
2

After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)

3

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

REAR FLOOR SIDE PANEL (ASSY)



F42970A

With the rear floor crossmember No. 2 removed.

Symbol meaning

REMOVAL    : Remove Weld Points

INSTALLATION    : Plug Weld

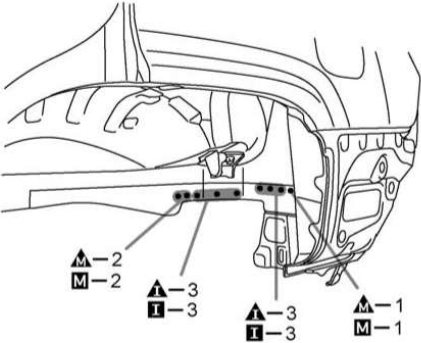
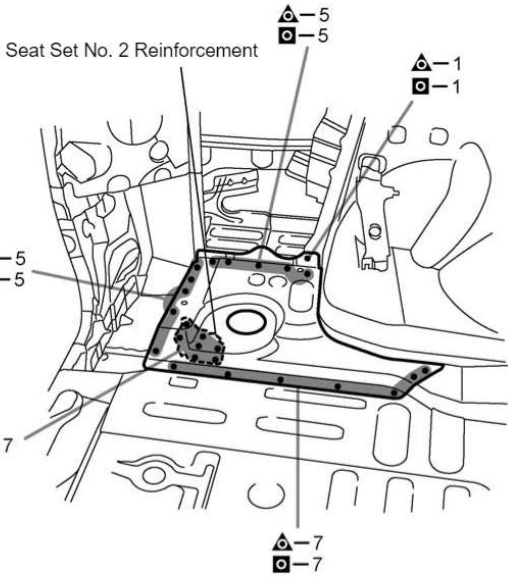
F42970B

REMOVAL-INSTALLATION

[LH]

Seat Set No. 2 Reinforcement

*1
w/ Rear No. 2 Seat: -7



F42970

INSTALLATION POINT

1 *1 is only for installation.

2 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)

3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-64

BODY PANEL REPLACEMENT

Symbol meaning

REMOVAL

INSTALLATION

▲▲▲

□M▲

: Remove Weld Points

: Plug Weld

F42970B

[RH]

Belt Anchor No. 4 Reinforcement

Seat Set No. 1 Reinforcement

*1
w/ Rear No. 2 Seat: □-3

▲-2
□-2

▲-6
□-6

▲-5
□-5

*1
w/ Rear No. 2 Seat: □-6

▲-7
□-7

▲-1
M-1

▲-3
I-3

▲-2
M-2

F42971

INSTALLATION POINT

1

2

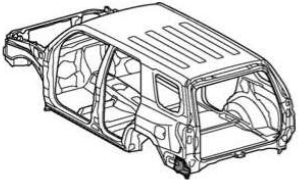
3

*1 is only for installation.

After welding, apply body sealer and undercoating to the corresponding parts. (See the paint-coating)

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

REAR FLOOR SIDE PANEL REAR EXTENSION (ASSY)



F42972A

With the roof side inner reinforce removed.

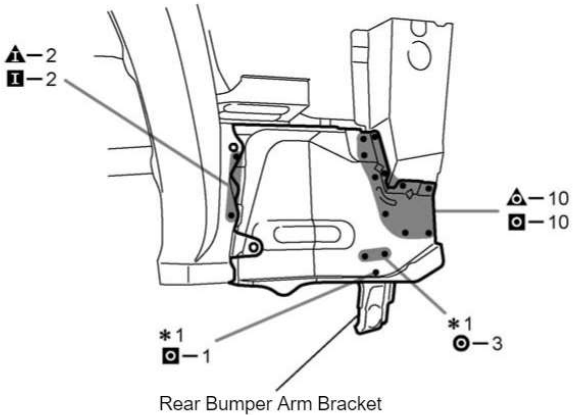
Symbol meaning

REMOVAL	▲ ▲ : Remove Weld Points
INSTALLATION	⊙ ⓘ : Spot Weld ◻ ⓘ : Plug Weld

F42972B

REMOVAL-INSTALLATION

[LH]



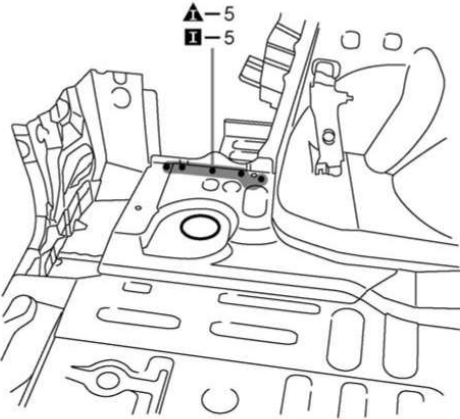
▲-2
ⓘ-2

▲-10
◻-10

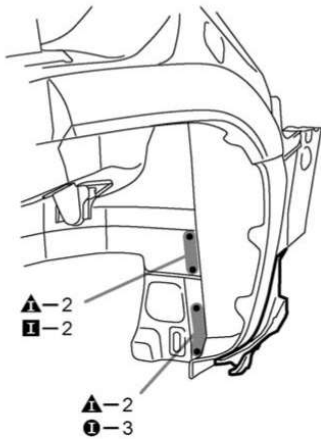
*1
◻-1

*1
⊙-3

Rear Bumper Arm Bracket



▲-5
ⓘ-5



▲-2
ⓘ-2

▲-2
ⓘ-3

F42972

INSTALLATION POINT

1 *1 is only for installation.

2 After welding, apply body sealer and undercoating to the corresponding parts. (See the paint coating)

3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BP-66 BODY PANEL REPLACEMENT

Symbol meaning

REMOVAL

INSTALLATION

▲ ▲ : Remove Weld Points

● ● : Spot Weld

■ ■ : Plug Weld

F42972B

[RH]

Rear Bumper Arm Bracket

▲-6
■-6

▲-2
■-2
▲-2
■-3

F42973

INSTALLATION POINT

1

2

3

*1 is only for installation.

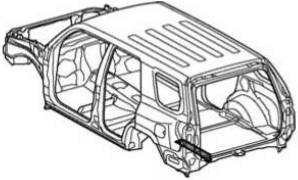
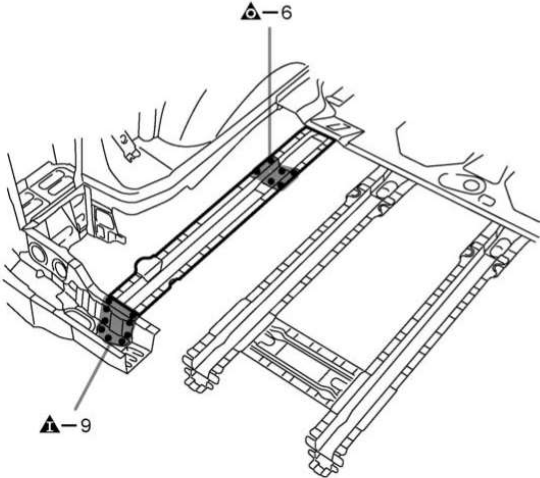
After welding, apply body sealer and undercoating to the corresponding parts. (See the paint-coating)

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-67

REAR FLOOR SIDE MEMBER (CUT)

 F42974A	With the rear floor pan removed. Symbol meaning ▲▲ : Remove Weld Points F42974B
REMOVAL  F42974	

BP-68 BODY PANEL REPLACEMENT

Symbol meaning

▲

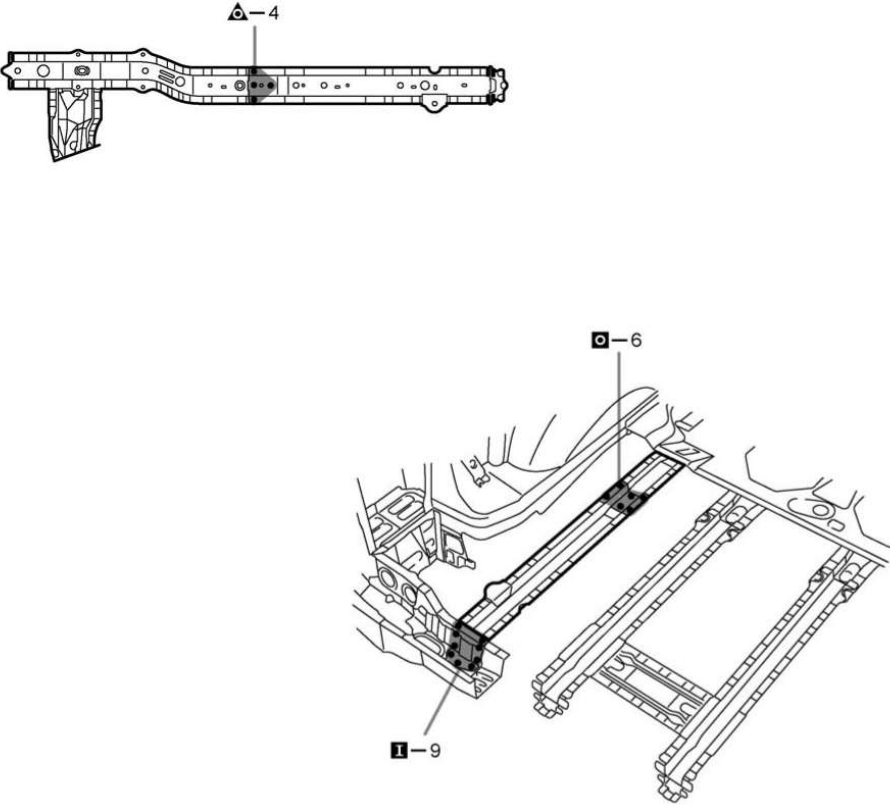
 : Remove Weld Points

□

I : Plug Weld

F43011B

INSTALLATION



F43011

INSTALLATION POINT

1

 If the entire supply part is not needed, remove the part of the supply part that is needed.

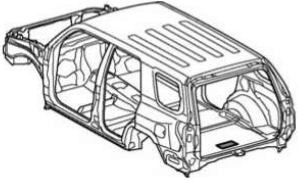
2

 After welding, apply undercoating to the corresponding parts. (See the paint coating)

3

 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

REAR FLOOR CROSSMEMBER NO. 3 (ASSY)



F42975A

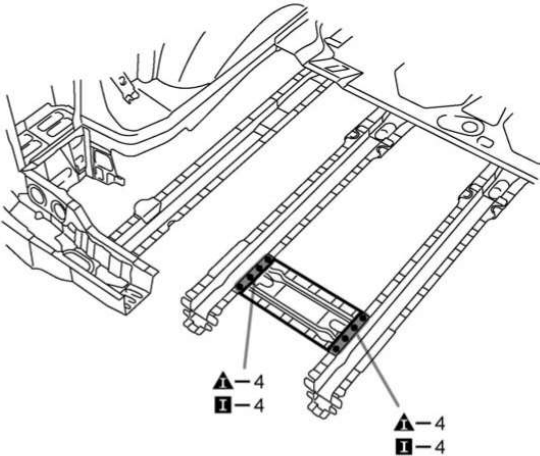
With the rear floor pan removed.

Symbol meaning

REMOVAL	▲ : Remove Weld Points
INSTALLATION	■ : Plug Weld

F42975B

REMOVAL-INSTALLATION

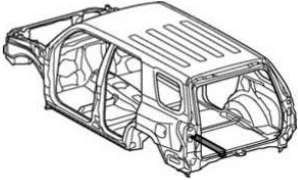
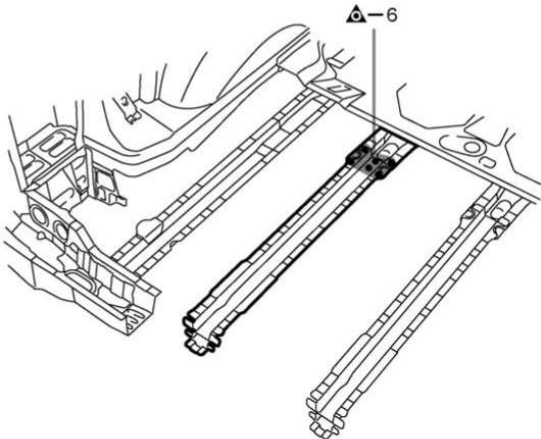


F42975

INSTALLATION POINT

- 1 After welding, apply undercoating to the corresponding parts. (See the paint coating)
- 2 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

REAR FLOOR SIDE CENTER MEMBER (CUT)

 F42976A	With the rear floor crossmember No. 3 removed. Symbol meaning  : Remove Weld Points F42976B
REMOVAL  F42976	

BODY PANEL REPLACEMENT

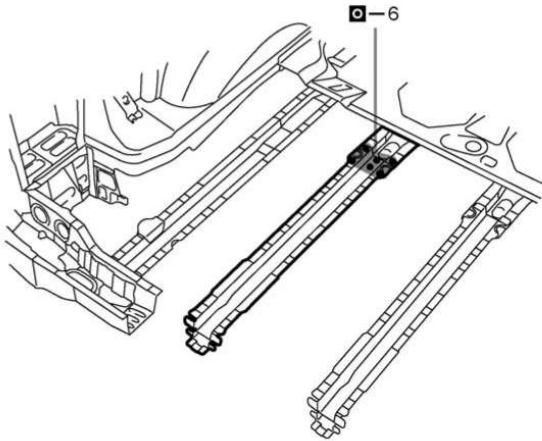
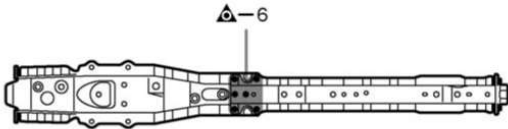
BP-71

Symbol meaning

▲ : Remove Weld Points ◻ : Plug Weld

F43012B

INSTALLATION

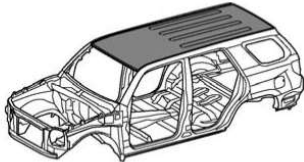


F43012

INSTALLATION POINT

- 1 If the entire supply part is not needed, remove the part of the supply part that is needed.
- 2 After welding, apply undercoating to the corresponding parts. (See the paint coating)
- 3 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

ROOF PANEL (ASSY):
w/o Sliding Roof



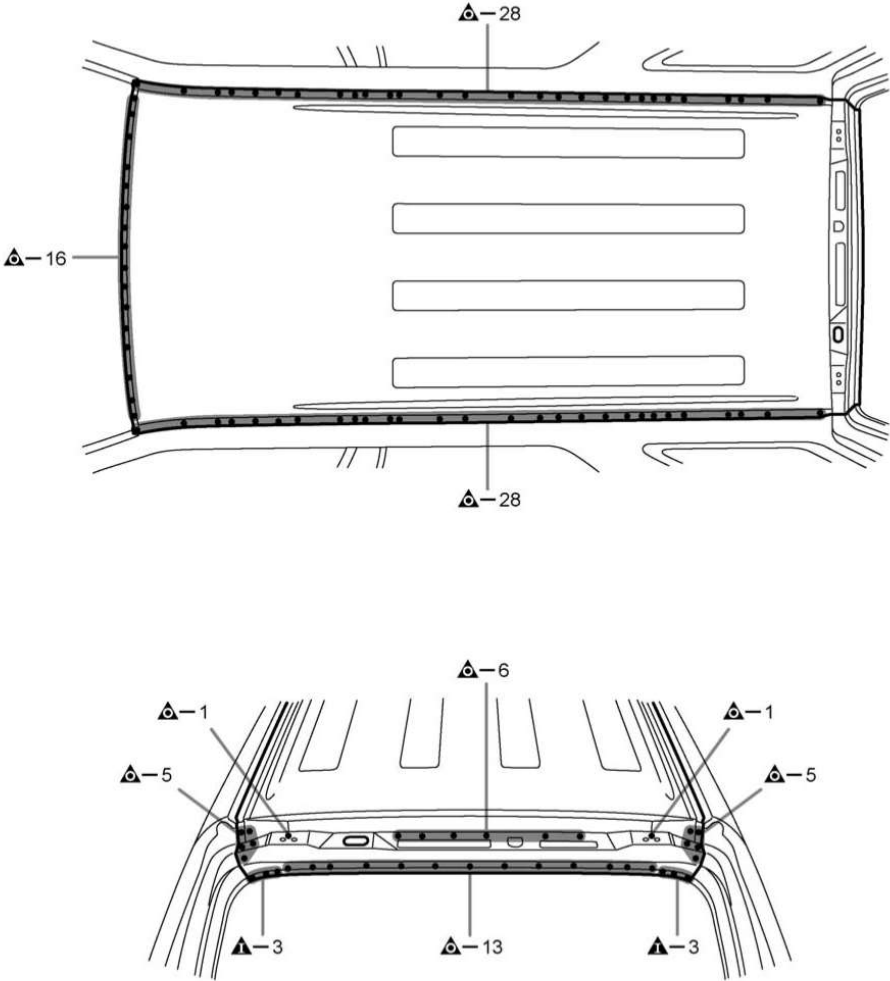
F42977A

Symbol meaning

▲▲ : Remove Weld Points

F42977B

REMOVAL



F42977

BODY PANEL REPLACEMENT

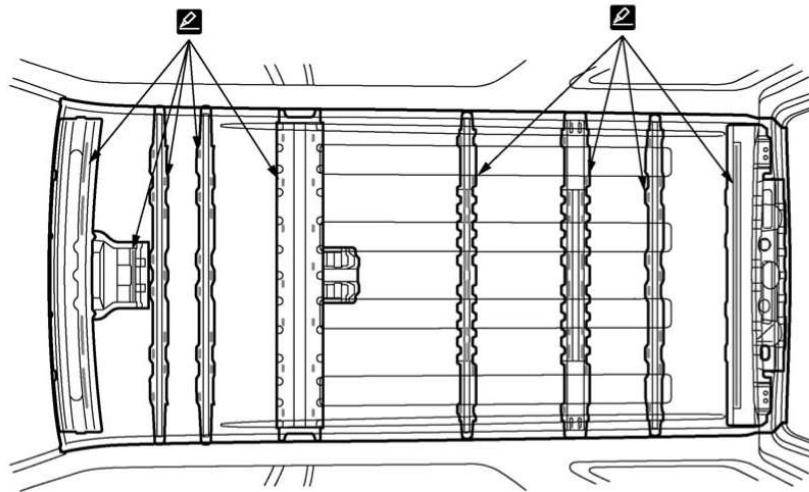
BP-73

Symbol meaning

 **T** : Plug Weld
  : Body Sealer

F42978B

INSTALLATION



F42978

INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After the roof panel reinforcement is welded to the new parts, install the roof panel to the vehicle side.
- 4 Before temporarily installing the new parts, apply body sealer to the windshield header panel, roof panel reinforcement and back door opening frame.

HINT:

Apply just enough body sealer for the new parts to make contact.

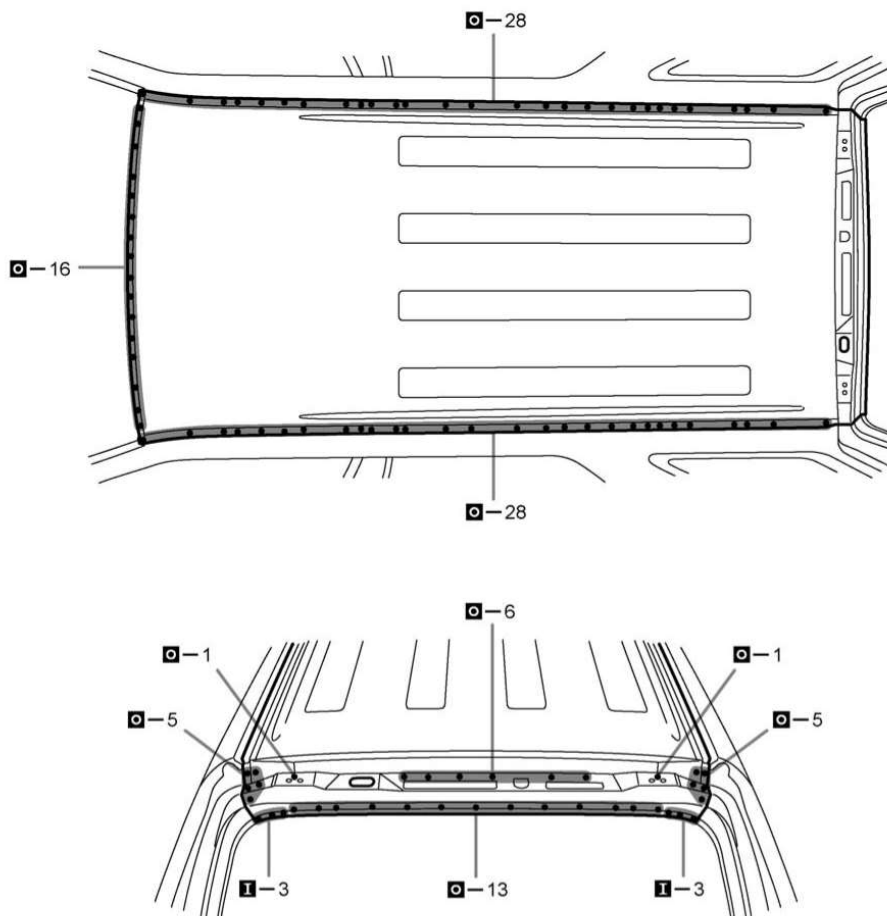
BP-74

BODY PANEL REPLACEMENT

Symbol meaning

□ 1 : Plug Weld □ 2 : Body Sealer

F42978B



F42979

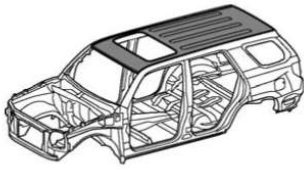
INSTALLATION POINT

- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After welding, apply the foamed sealing material to the corresponding parts. (See the paint coating)
- 4 After welding, apply body sealer to the corresponding parts. (See the paint coating)
- 5 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-75

ROOF PANEL (ASSY):
w/ Sliding Roof



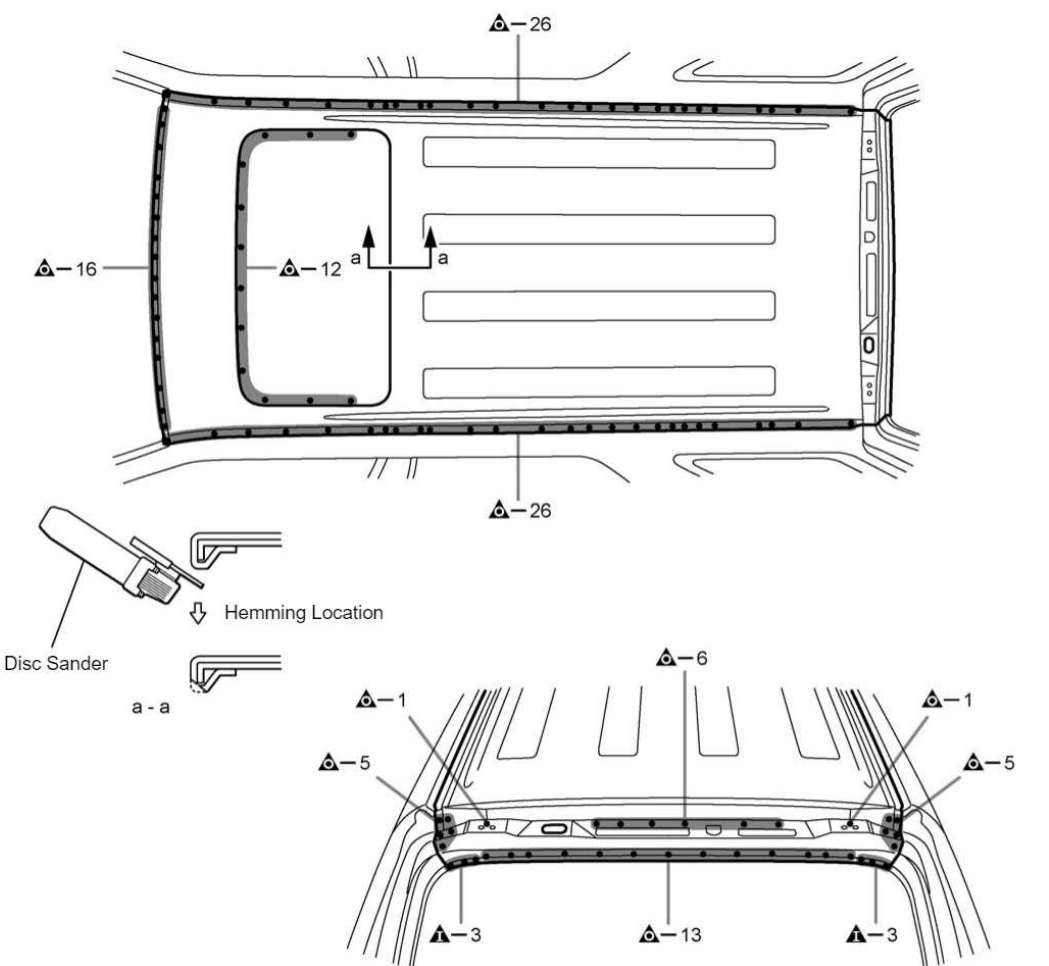
F42980A

Symbol meaning

▲▲ : Remove Weld Points

F42980B

REMOVAL



Disc Sander

Hemming Location

a - a

F42980

REMOVAL POINT

1 If reusing the roof panel reinforcement, trim the hemming location using a disc sander, etc.

BP-76

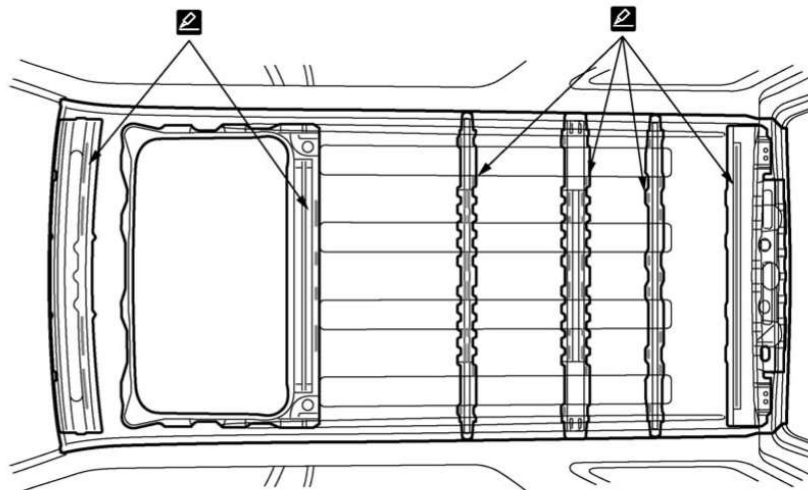
BODY PANEL REPLACEMENT

Symbol meaning

⬢ I : Plug Weld ⬢ : Body Sealer

F42981B

INSTALLATION



F42981

INSTALLATION POINT

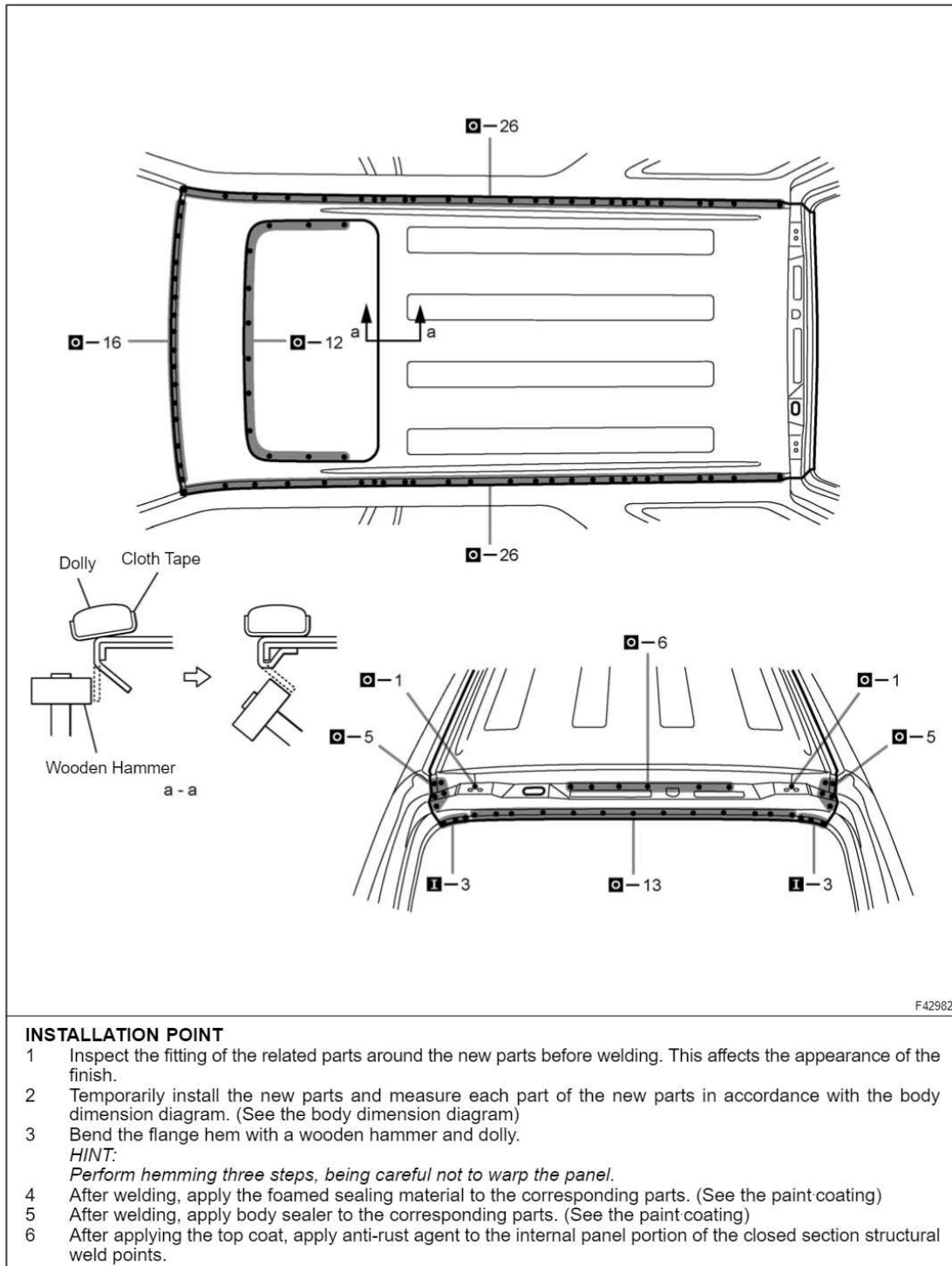
- 1 Inspect the fitting of the related parts around the new parts before welding. This affects the appearance of the finish.
- 2 Temporarily install the new parts and measure each part of the new parts in accordance with the body dimension diagram. (See the body dimension diagram)
- 3 After the roof panel reinforcement is welded to the new parts, install the roof panel to the vehicle side.
- 4 Before temporarily installing the new parts, apply body sealer to the windshield header panel, roof panel reinforcement and back door opening frame.

HINT:

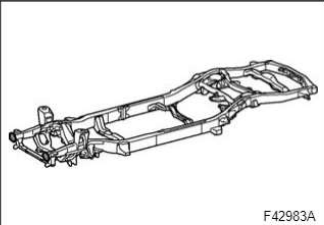
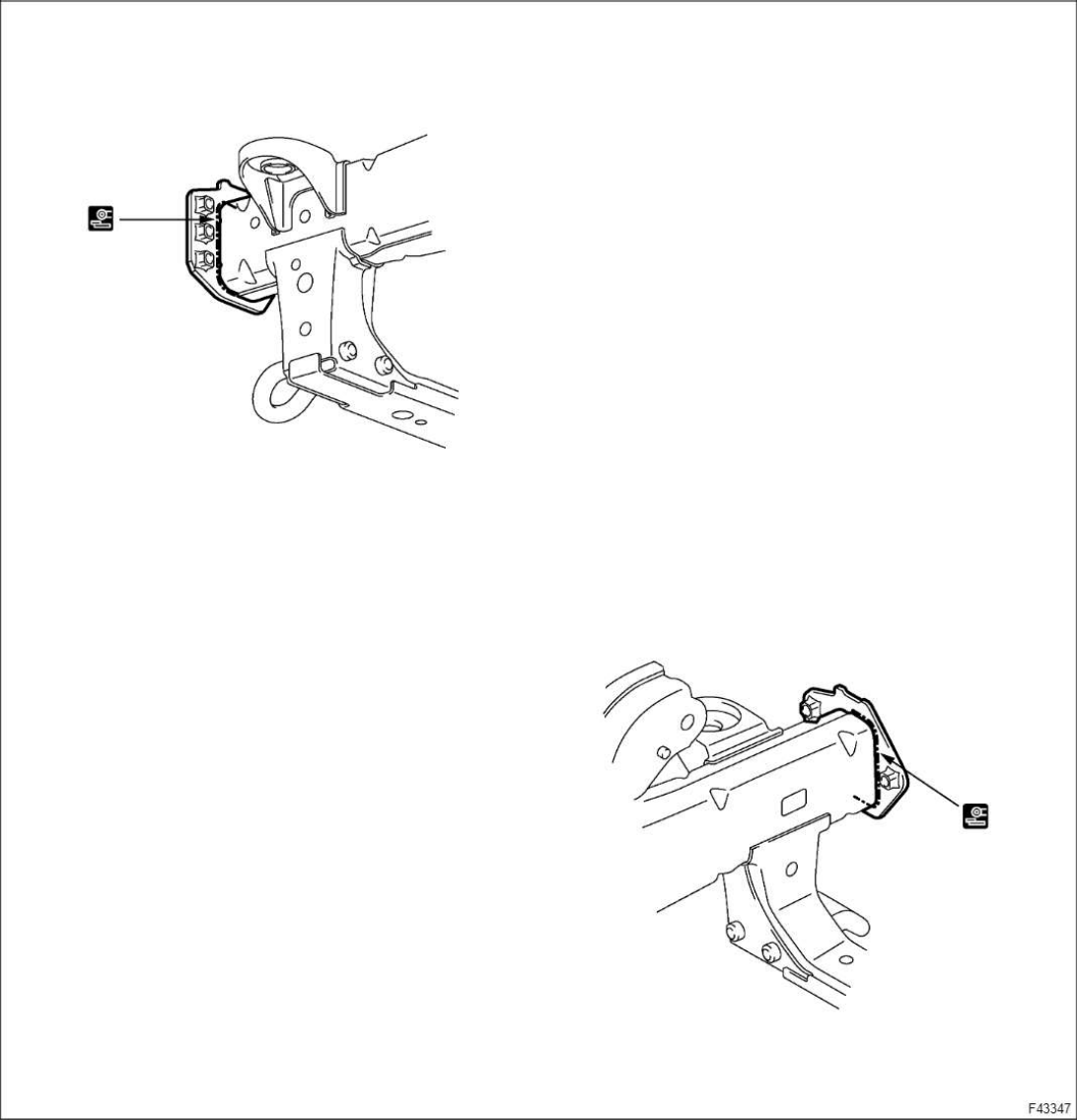
Apply just enough body sealer for the new parts to make contact.

BODY PANEL REPLACEMENT

BP-77



FRAME SIDE RAIL PLATE (ASSY)

 F42983A	Symbol meaning  : Cut with Disc Sander etc. F43347B
REMOVAL	
 F43347	

BODY PANEL REPLACEMENT

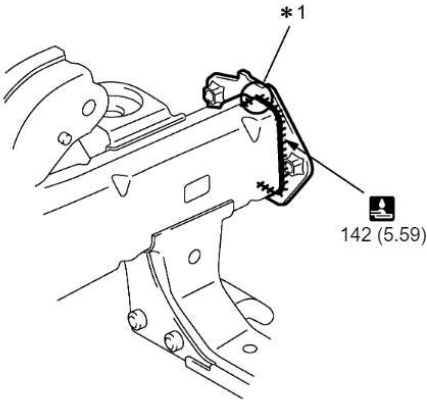
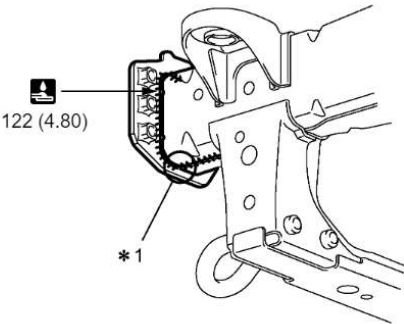
BP-79

Symbol meaning

 : Fillet Weld

F43348B

INSTALLATION



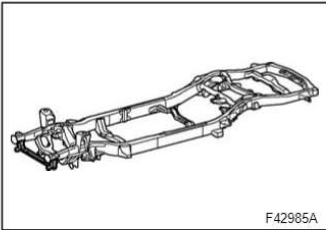
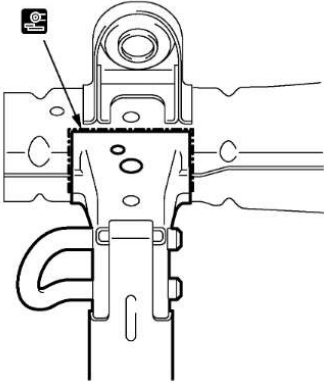
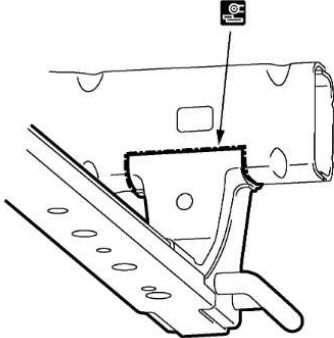
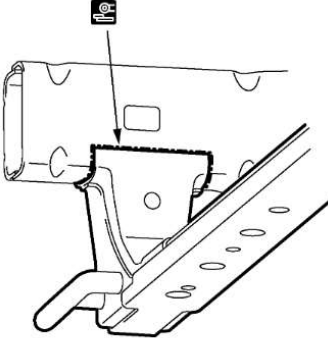
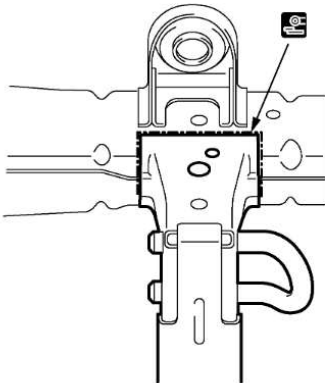
mm (in.)

F43348

INSTALLATION POINT

- 1 Make sure that proper welding can be performed by setting up the welding conditions as necessary before performing work.
- 2 Make sure that the welding bead at *1 is overlapped.
- 3 To prevent heat deformation, weld the right and left side of each part before continuing to the next part.
- 4 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

FRAME AUXILIARY CROSSMEMBER (ASSY)

 F42985A	With the frame side rail plate removed. Symbol meaning  : Cut with Disc Sander etc. F43349B
REMOVAL [LH Side]  [RH Side]  F43349	

BODY PANEL REPLACEMENT

BP-81

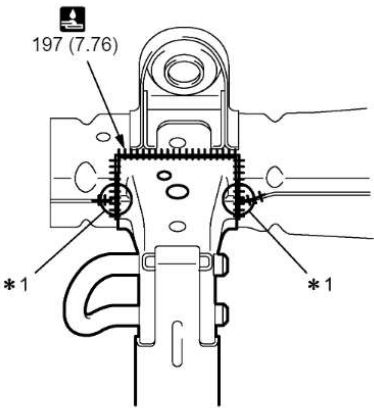
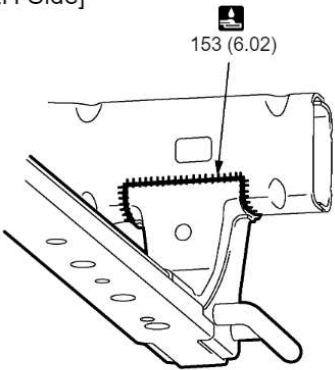
Symbol meaning

 : Fillet Weld

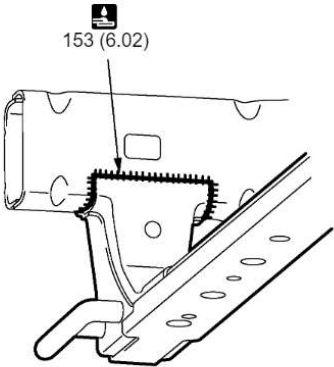
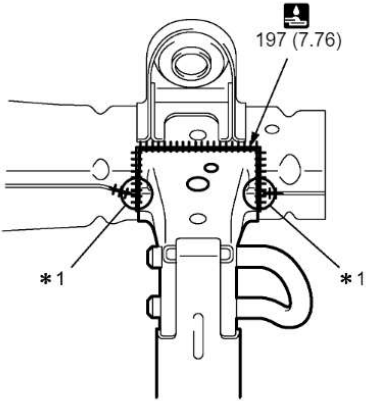
F43350B

INSTALLATION

[LH Side]



[RH Side]



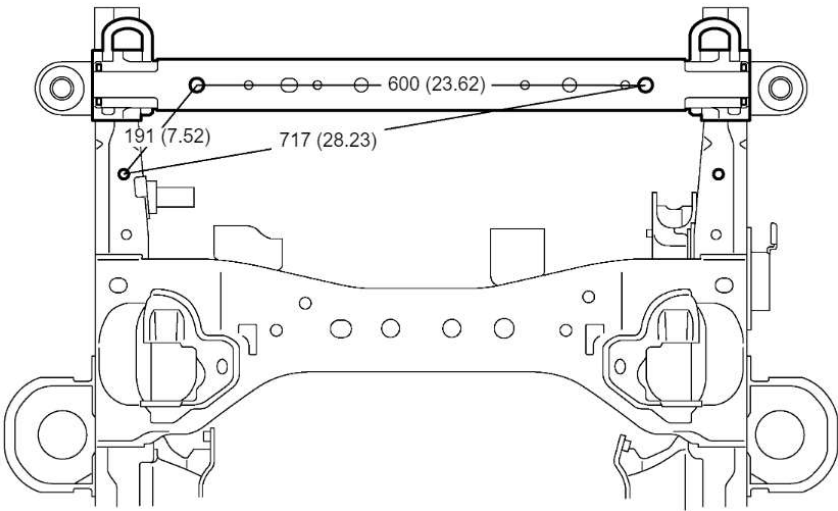
mm (in.)

F43350

INSTALLATION POINT

- 1 Make sure that proper welding can be performed by setting up the welding conditions as necessary before performing work.
- 2 Make sure that the welding bead at *1 is overlapped.
- 3 To prevent heat deformation, weld the right and left side of each part before continuing to the next part.
- 4 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

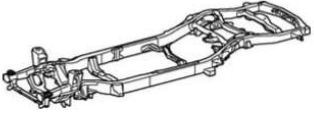
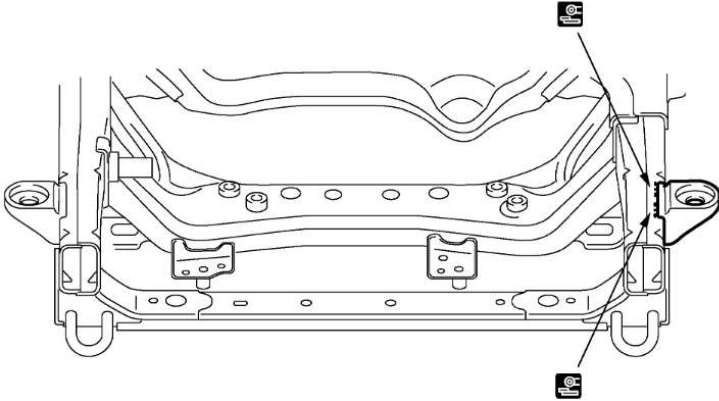
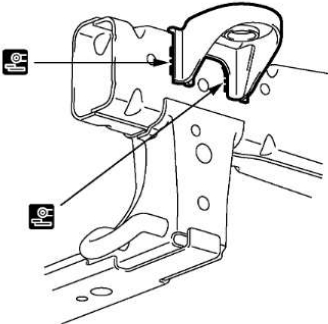
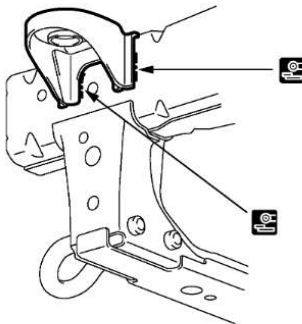
BP-82 BODY PANEL REPLACEMENT



mm (in.)
F43351

INSTALLATION POINT
1 These values are reference values.

CAB MOUNTING NO. 1 BRACKET (ASSY)

 F42988A	With the frame side rail plate removed. Symbol meaning  : Cut with Disc Sander etc. F43352B
REMOVAL    F43352	

BP-84

BODY PANEL REPLACEMENT

Symbol meaning

 : Fillet Weld

F43353B

INSTALLATION

25 (0.98)

25 (0.98)

30 (1.18)

25 (0.98)

30 (1.18)

25 (0.98)

mm (in.)

F43353

INSTALLATION POINT

1

Make sure that proper welding can be performed by setting up the welding conditions as necessary before performing work.

2

Before installing the cab mounting No. 1 brackets, set the cab (upper body) on the vehicle frame and confirm the cab mounting No. 1 brackets' installation positions.

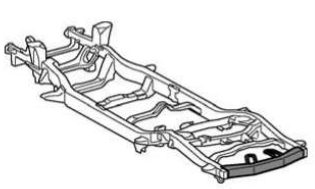
3

To prevent heat deformation, weld the right and left side of each part before continuing to the next part.

4

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

FRAME REAR CROSSMEMBER (ASSY)



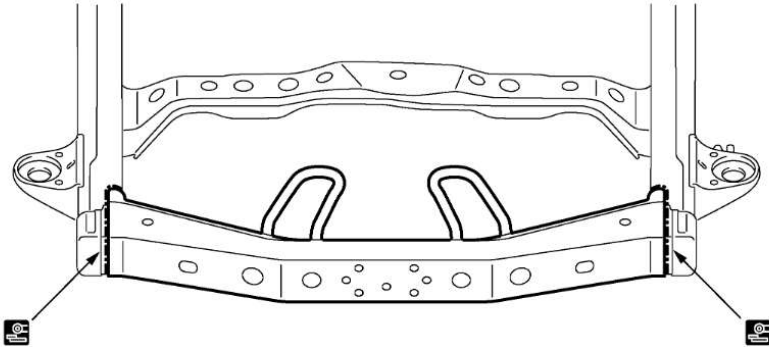
F42990A

Symbol meaning

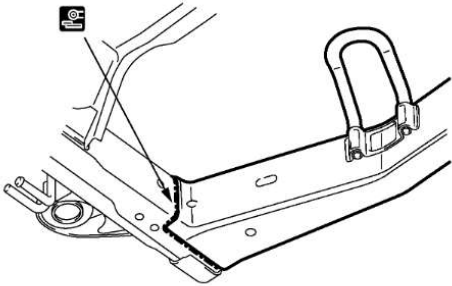
 : Cut with Disc Sander etc.

F42990B

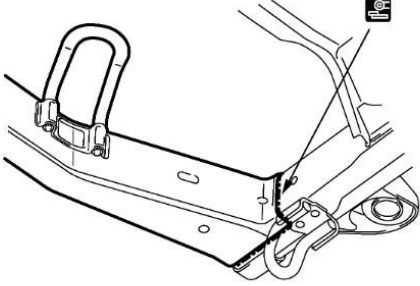
REMOVAL



[LH Side]



[RH Side]



F42990

cardiagn.com

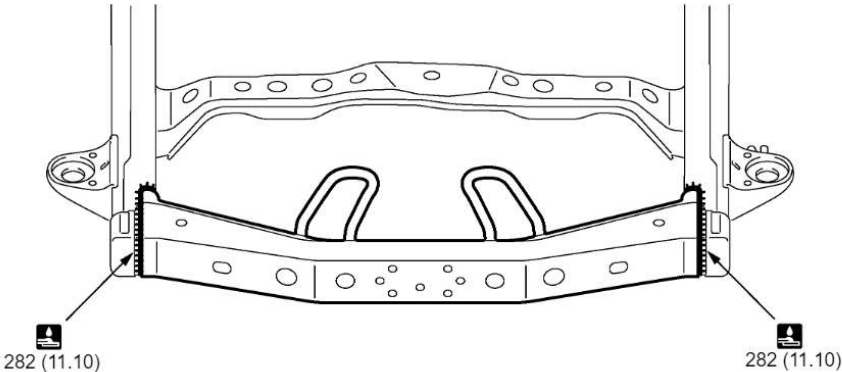
BP-86 BODY PANEL REPLACEMENT

Symbol meaning

 : Fillet Weld

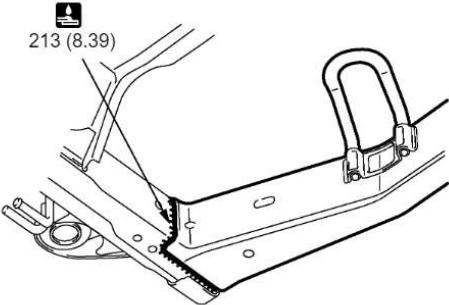
F42991B

INSTALLATION



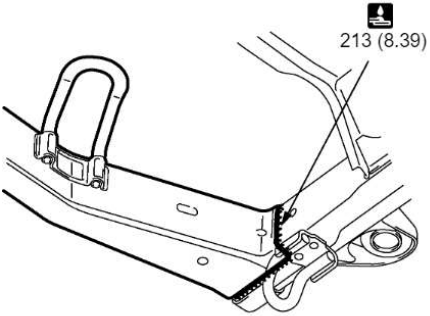
282 (11.10) 282 (11.10)

[LH Side]



213 (8.39)

[RH Side]



213 (8.39)

mm (in.)

F42991

INSTALLATION POINT

1

Make sure that proper welding can be performed by setting up the welding conditions as necessary before performing work.

2

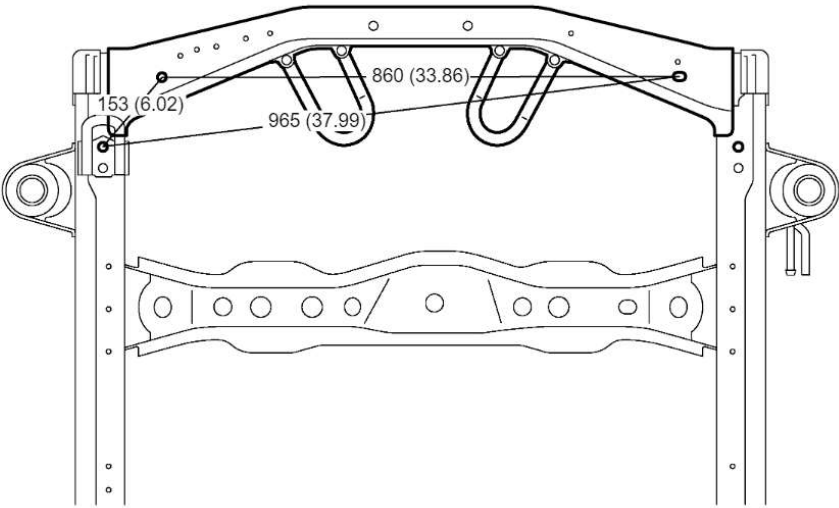
To prevent heat deformation, weld the right and left side of each part before continuing to the next part.

3

After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

BODY PANEL REPLACEMENT

BP-87

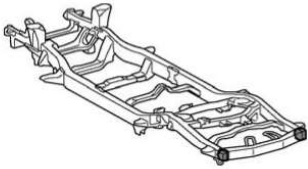
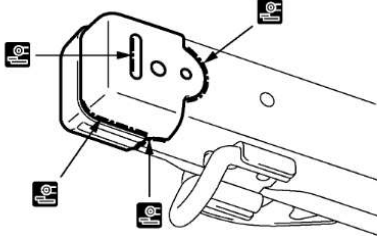
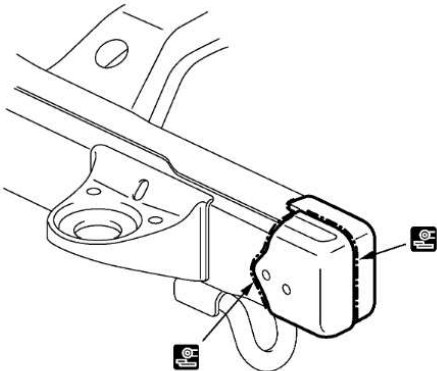


mm (in.)
F42992

INSTALLATION POINT

1 These values are reference values.

FRAME REAR CROSSMEMBER GUSSET (ASSY)

 F42993A	With the frame rear crossmember removed. Symbol meaning  : Cut with Disc Sander etc. F43357B
REMOVAL  F43357	

BODY PANEL REPLACEMENT

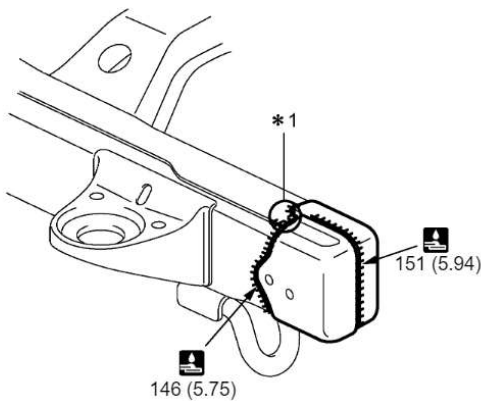
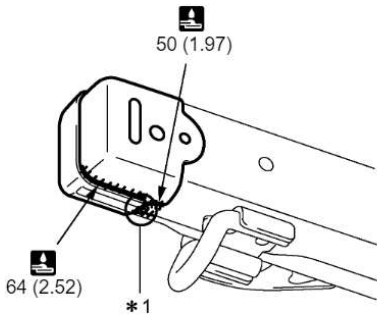
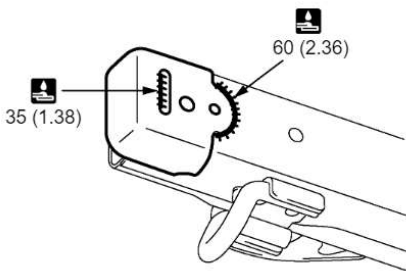
BP-89

Symbol meaning

 : Fillet Weld

F43358B

INSTALLATION



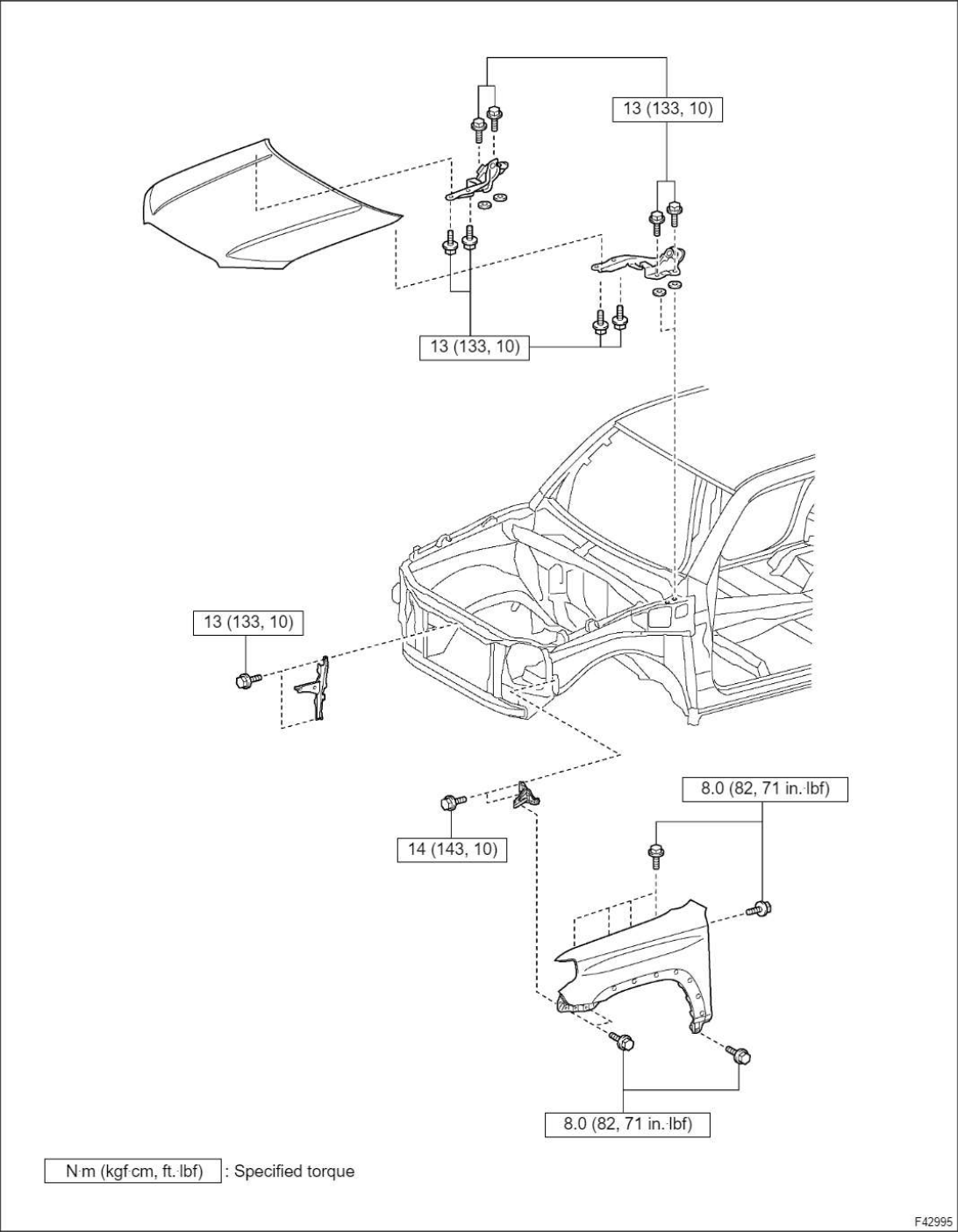
mm (in.)

F43358

INSTALLATION POINT

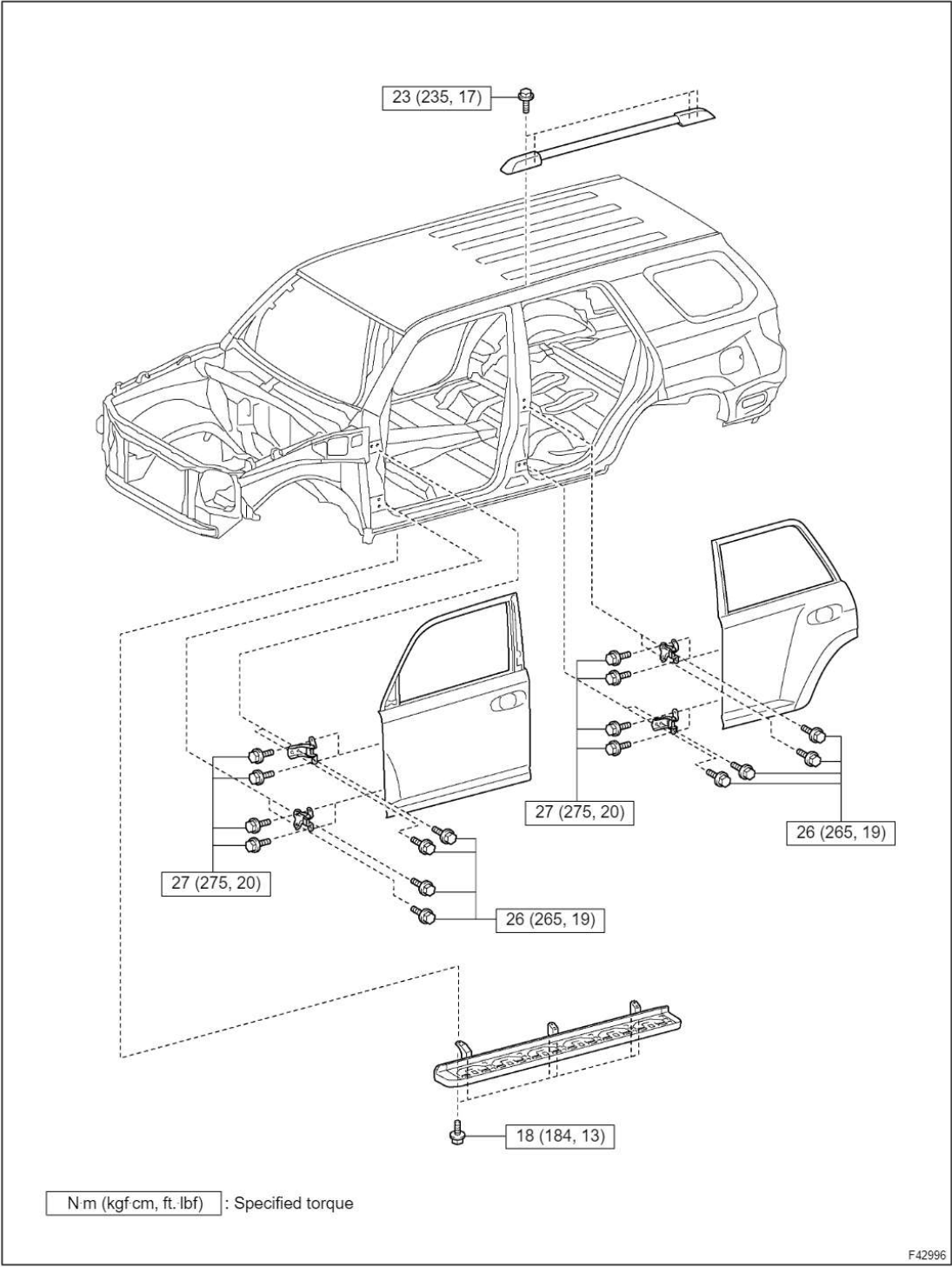
- 1 Make sure that proper welding can be performed by setting up the welding conditions as necessary before performing work.
- 2 Make sure that the welding bead at *1 is overlapped.
- 3 To prevent heat deformation, weld the right and left side of each part before continuing to the next part.
- 4 After applying the top coat, apply anti-rust agent to the internal panel portion of the closed section structural weld points.

OUTER PANEL INSTALLATION TORQUE

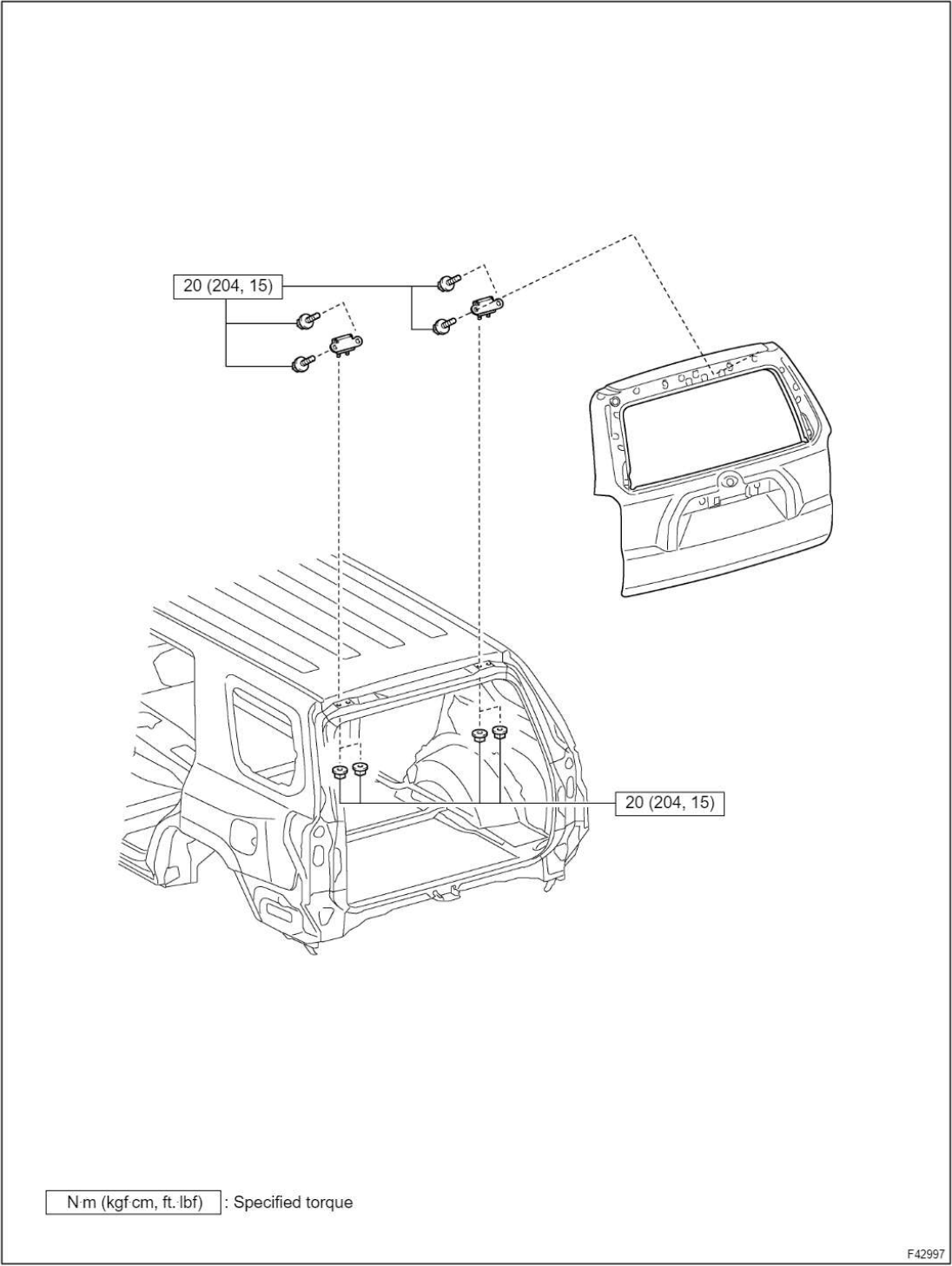


BODY PANEL REPLACEMENT

BP-91

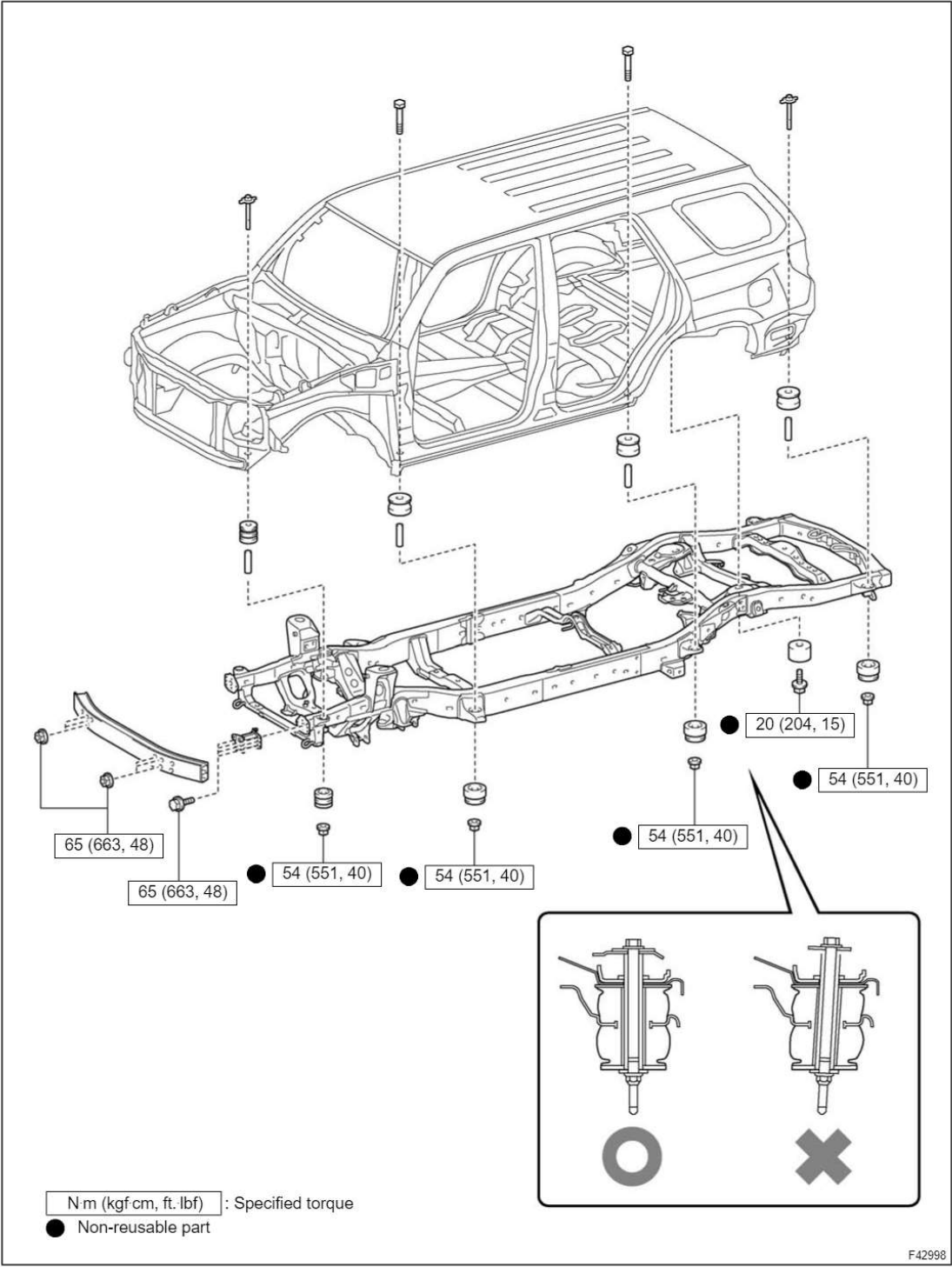


BP-92 BODY PANEL REPLACEMENT



BODY PANEL REPLACEMENT

BP-93

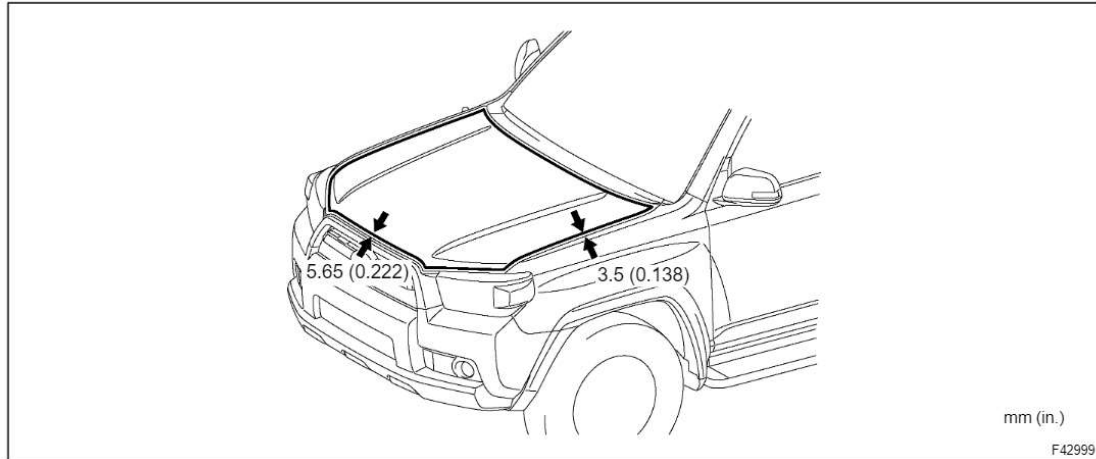


BP-94

BODY PANEL REPLACEMENT

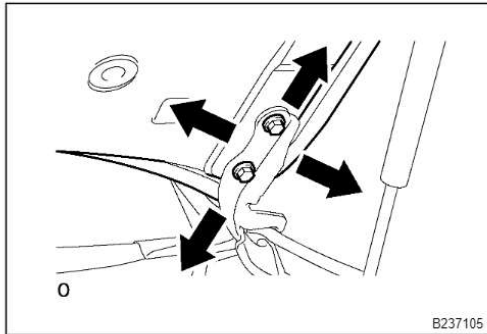
FIT STANDARD/ADJUSTMENT METHOD/TORQUE SPECIFICATION

1. HOOD SUB-ASSEMBLY



HINT:

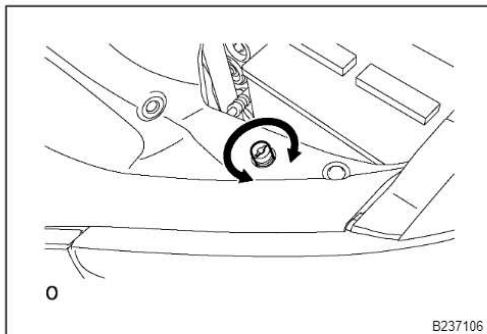
Centering bolts are used to mount the hood hinge and hood lock. The hood and hood lock cannot be adjusted with the centering bolts installed. Substitute the centering bolts with standard bolts when making adjustments.



- (a) Adjust the hood position.
- (1) Loosen the 4 hinge bolts on the hood.
 - (2) Move the hood and adjust the clearance between the hood and front fender.
 - (3) Tighten the 4 hinge bolts on the hood after the adjustment.

Torque:

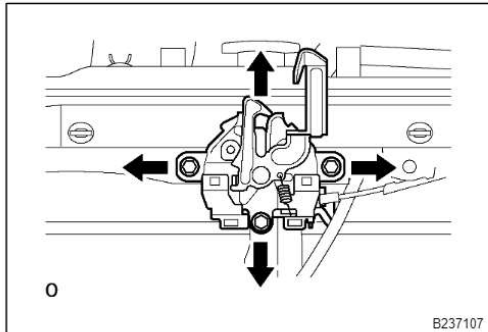
13 N·m (133 kgf·cm, 10 ft·lbf)



- (b) Adjust the height of the front end of the hood using the cushion rubbers.
- (1) Adjust the cushion rubbers so that the hood and fender are aligned.

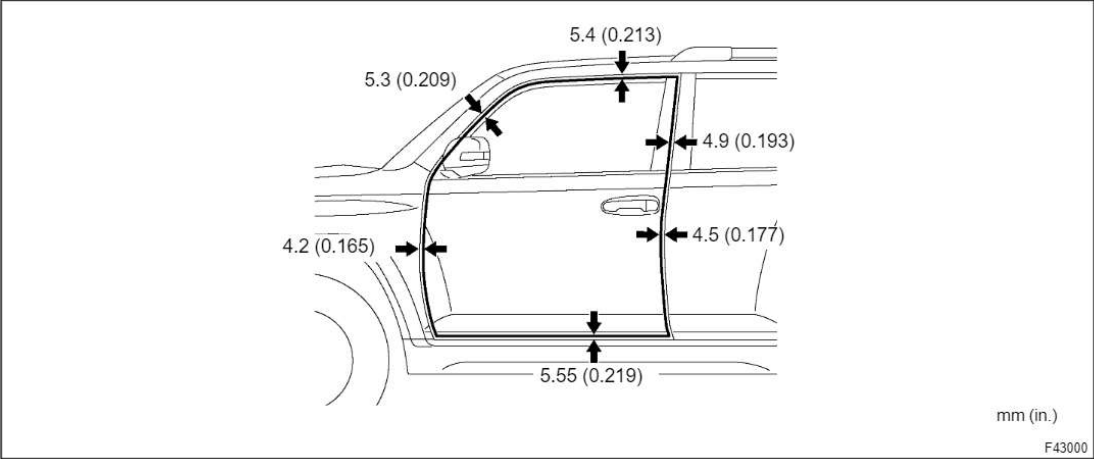
HINT:

Raise or lower the front end of the hood by turning the 2 cushion rubbers.

BODY PANEL REPLACEMENT**BP-95**

- (c) Adjust the hood lock.
- (1) Loosen the 3 bolts.
 - (2) Adjust the hood lock and tighten the 3 bolts.
- Torque:**
7.5 N·m (76 kgf·cm, 66 in·lbf)
- (3) Check that the striker can engage with the hood lock smoothly.

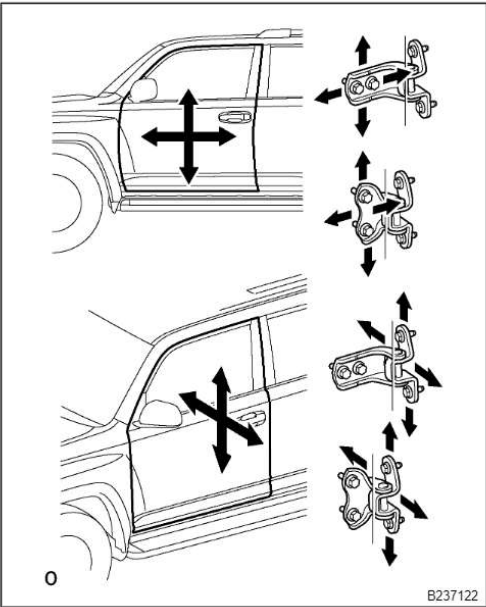
2. FRONT DOOR



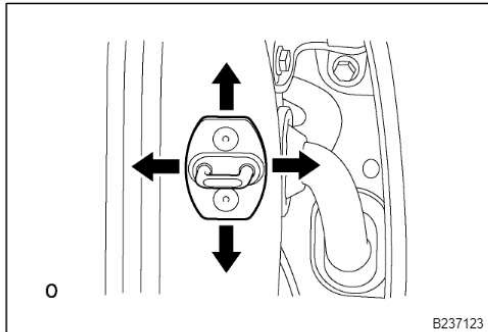
CAUTION:
Wait at least 90 seconds after disconnecting the cable from the negative (–) battery terminal to disable the SRS system.

NOTICE:
When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

HINT:
Centering bolts are used to mount the door hinge to the vehicle body and door. The door cannot be adjusted with the centering bolts installed on it. Substitute the centering bolts with standard bolts when making adjustments.



- (a) Using SST, loosen the hinge bolts on the vehicle body and adjust the door position.
SST
09812-00010
- (b) Tighten the hinge bolts on the vehicle body after the adjustment.
Torque:
26 N·m (265 kgf·cm, 19 ft·lbf)
- (c) Loosen the hinge bolts on the door and adjust the door position.
- (d) Tighten the hinge bolts on the door after the adjustment.
Torque:
27 N·m (275 kgf·cm, 20 ft·lbf)

BODY PANEL REPLACEMENT**BP-97**

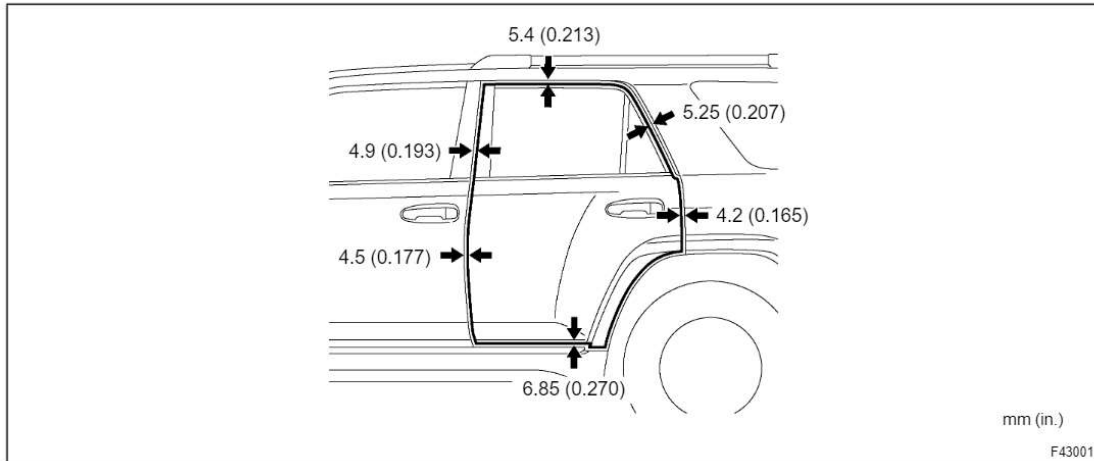
- (e) Using a T40 "TORX" socket wrench, slightly loosen the striker mounting screws.
- (f) Using a brass bar and hammer, hit the striker to adjust its position.
- (g) Using a T40 "TORX" socket wrench, tighten the striker mounting screws after the adjustment.

Torque:**23 N·m (235 kgf·cm, 17 ft·lbf)**

BP-98

BODY PANEL REPLACEMENT

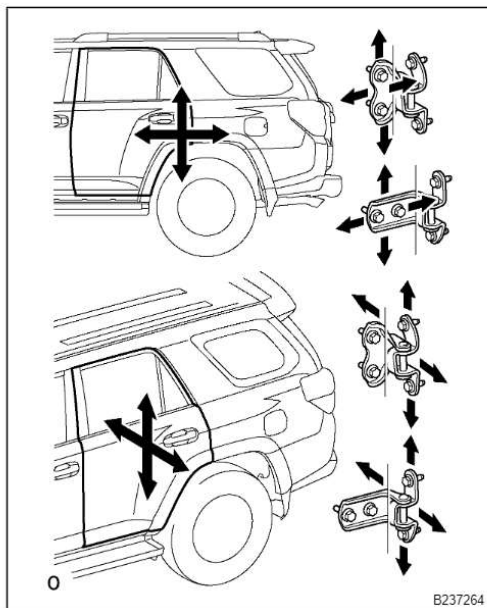
3. REAR DOOR

**NOTICE:**

When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

HINT:

Centering bolts are used to mount the door hinge to the vehicle body and door. The door cannot be adjusted with the centering bolts installed. Substitute the centering bolts with standard bolts when making adjustments.



- (a) Using SST, loosen the hinge bolts on the vehicle body and adjust the door position.

SST

09812-00010

- (b) Tighten the hinge bolts on the vehicle body after the adjustment.

Torque:

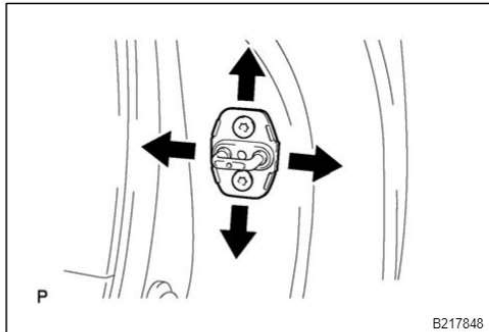
26 N·m (265 kgf·cm, 19 ft·lbf)

- (c) Loosen the hinge bolts on the door and adjust the door position.

- (d) Tighten the hinge bolts on the door after the adjustment.

Torque:

27 N·m (275 kgf·cm, 20 ft·lbf)

BODY PANEL REPLACEMENT**BP-99**

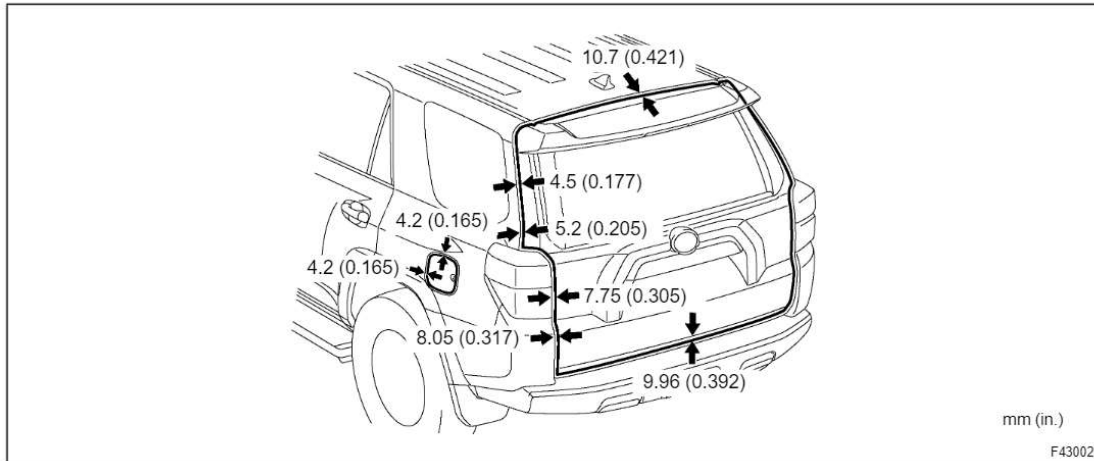
- (e) Using a T40 "TORX" socket wrench, slightly loosen the striker mounting screws.
- (f) Using a brass bar and hammer, hit the striker to adjust its position.
- (g) Using a T40 "TORX" socket wrench, tighten the striker mounting screws after the adjustment.

Torque:**23 N·m (235 kgf·cm, 17 ft·lbf)**

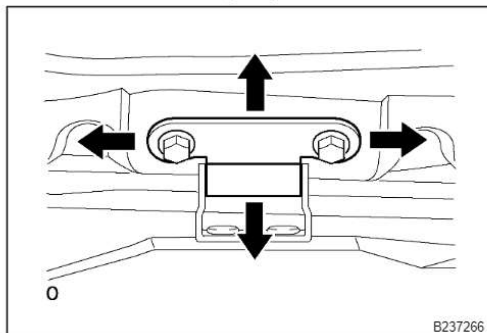
BP-100

BODY PANEL REPLACEMENT

4. BACK DOOR

**HINT:**

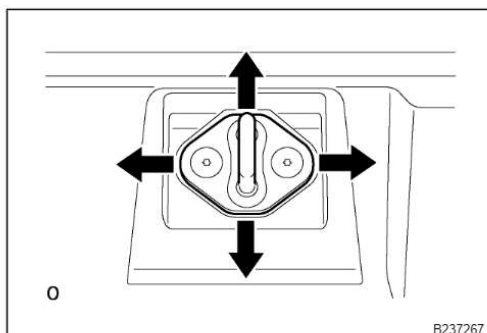
- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.
- Centering bolts are used to mount the door hinge to the vehicle body and door. The door cannot be adjusted with the centering bolts installed. Substitute the centering bolts with standard bolts and washers when making adjustments.



- Before adjusting the upper end of the back door up and down or left and right, loosen the bolts.
- Tighten the body side hinge after the adjustment.

Torque:

20 N·m (204 kgf·cm, 15 ft·lbf)



- Using a T40 "TORX" socket wrench, slightly loosen the striker mounting screws.
- Using a brass bar and hammer, hit the striker to adjust its position.
- Using a T40 "TORX" socket wrench, tighten the striker mounting screws after the adjustment.

Torque:

27 N·m (275 kgf·cm, 20 ft·lbf)

NAME PLATE APPLICATION PROCEDURE

- 1

Heat the double-sided tape remaining on the body with an infrared lamp or equivalent.

HINT:
Heat the tape to 40 to 60° C for approximately 1 to 2 minutes.
- 2

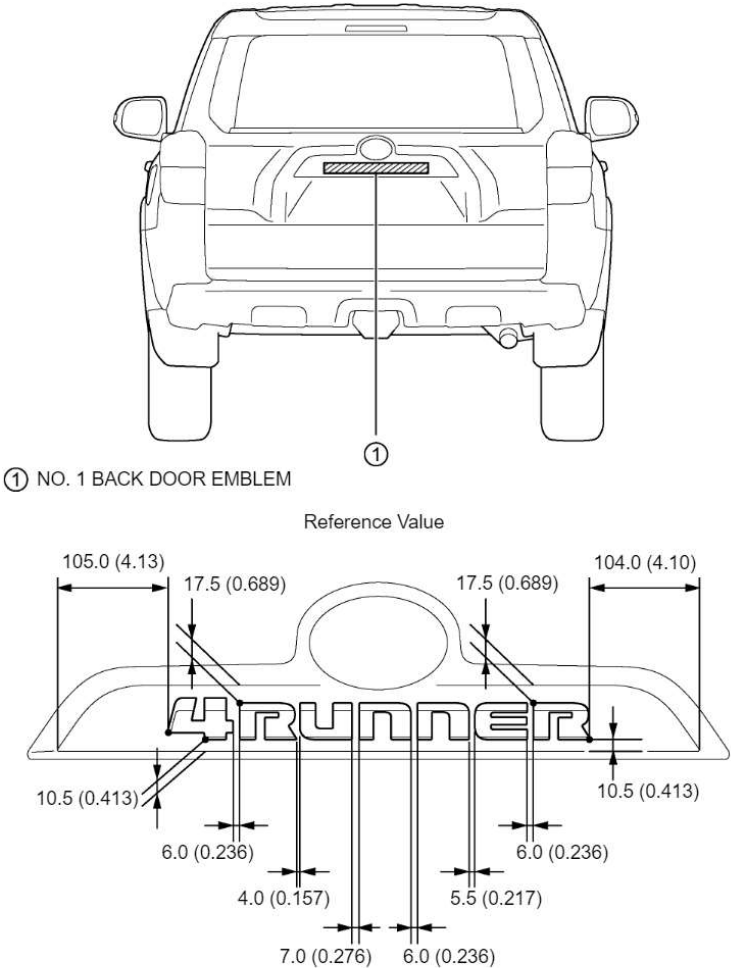
Wipe off the remaining double-sided tape using a clean cloth or equivalent.

HINT:
If a name plate is installed without thoroughly removing the remaining double-sided tape from the body, the name plate will not adhere properly. Make sure to thoroughly wipe off the double-sided tape.
- 3

After cleaning the installation area of the body with degreasing agent, attach the name plate to the position shown in the illustration.

HINT:
The working environment should be 20° C when installing the name plate. If the working environment is below 20° C, heat the installation area of the body to 20 to 30° C and then install the name plate.

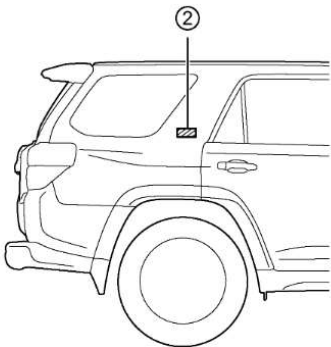
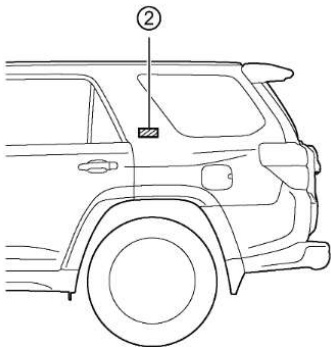
[USA, Canada]



mm (in.)
F43015

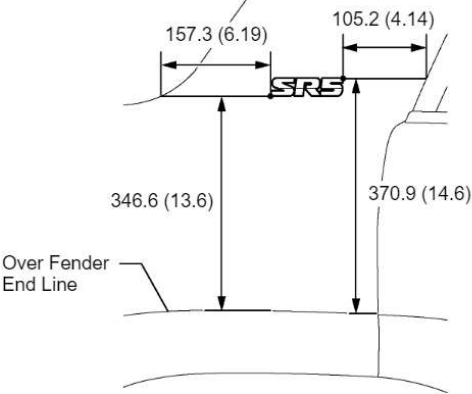
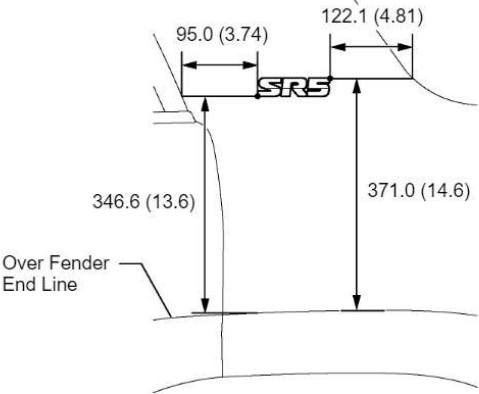
BP-102 BODY PANEL REPLACEMENT

[USA, Canada]



② NO. 1 ROOF SIDE MARK

Reference Value



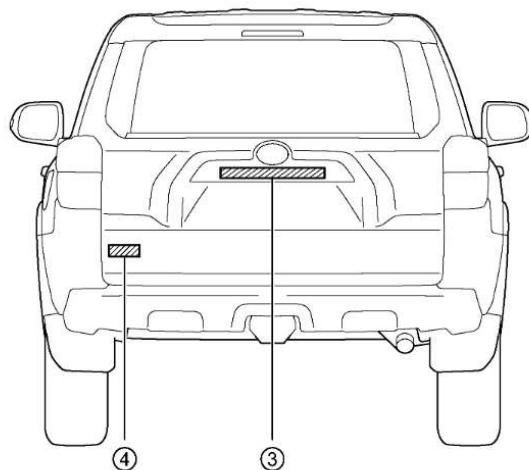
mm (in.)

F43016

BODY PANEL REPLACEMENT

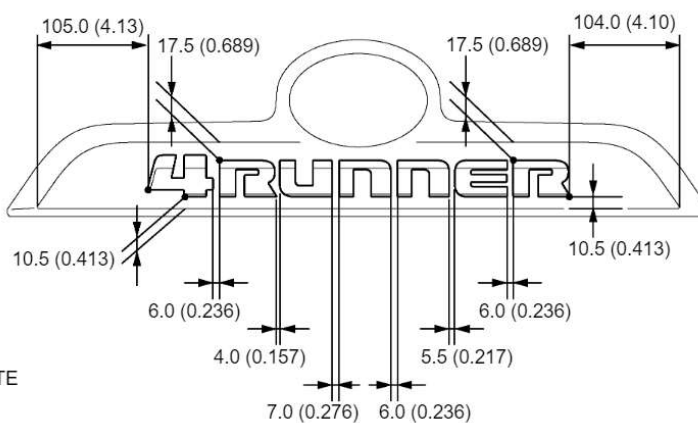
BP-103

[Except USA, Canada]

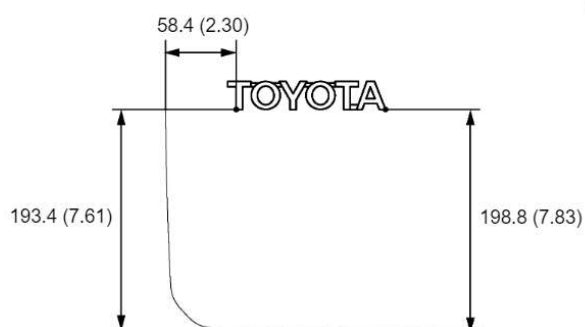


③ NO. 1 BACK DOOR EMBLEM

Reference Value



④ NO. 2 BACK DOOR NAME PLATE

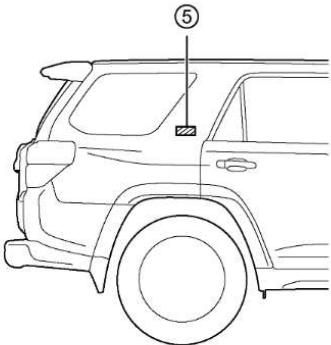
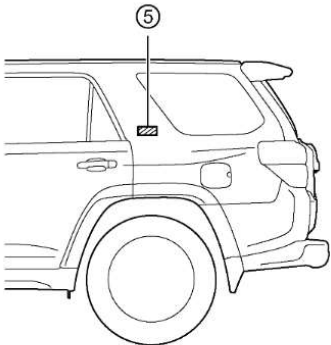


mm (in.)

F43017

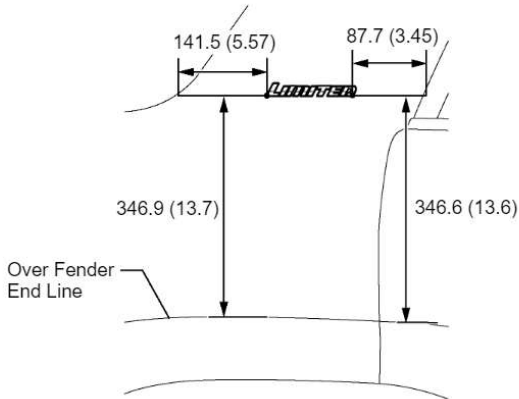
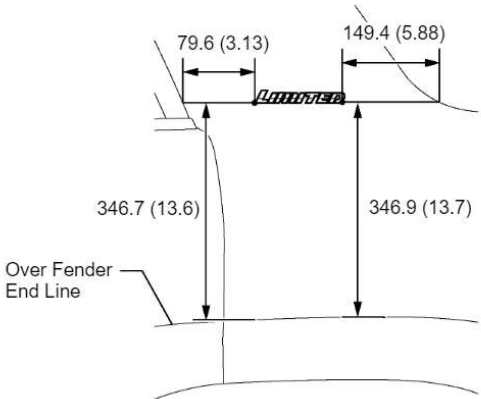
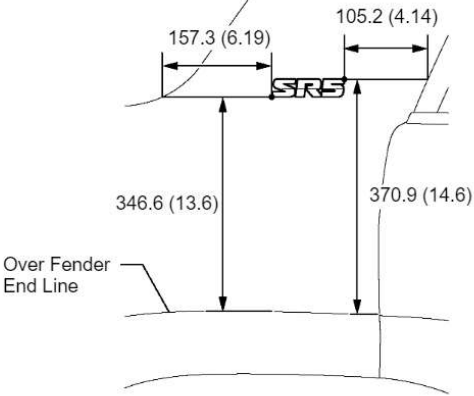
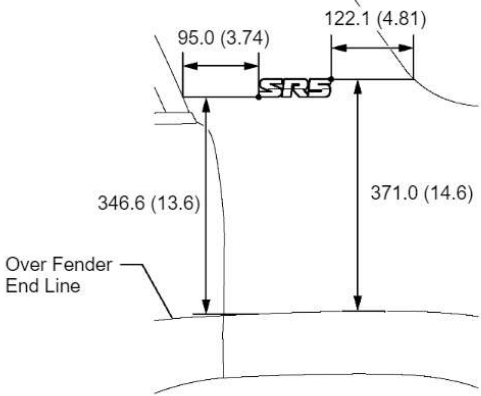
BP-104 BODY PANEL REPLACEMENT

[Except USA, Canada]



⑤ NO. 1 ROOF SIDE MARK

Reference Value



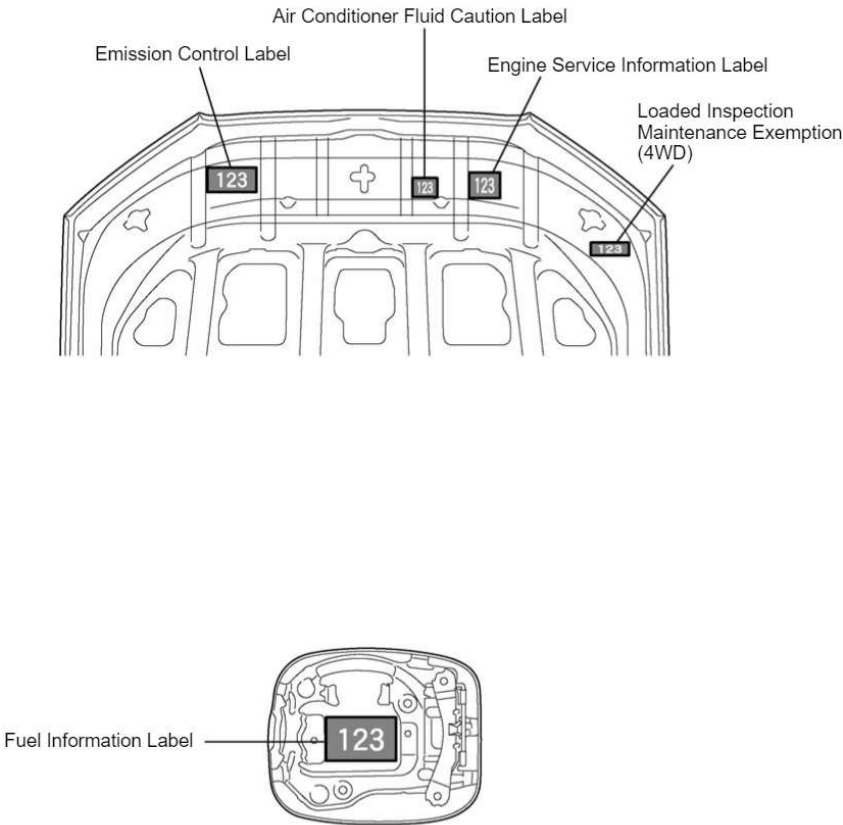
mm (in.)

F43018

CAUTION LABEL ATTACHMENT POSITION

- 1
- After using a degreasing agent to clean the surfaces of the body where the caution labels will be attached, attach the caution labels to the positions shown in the illustration.
- HINT:
- Attach each caution label with its orientation the same as the numbers shown in the illustration.
 - Make sure the caution label is not attached over a spot weld.
 - When attaching the caution label, make sure not to touch the label's adhesive surface.
 - To prevent the edges of the caution label from peeling, apply extra pressure to the label's periphery.
 - If the work area's temperature is 5°C or less, the caution label's adhesive will deteriorate. It is recommended that you heat the label to 20 to 40°C.

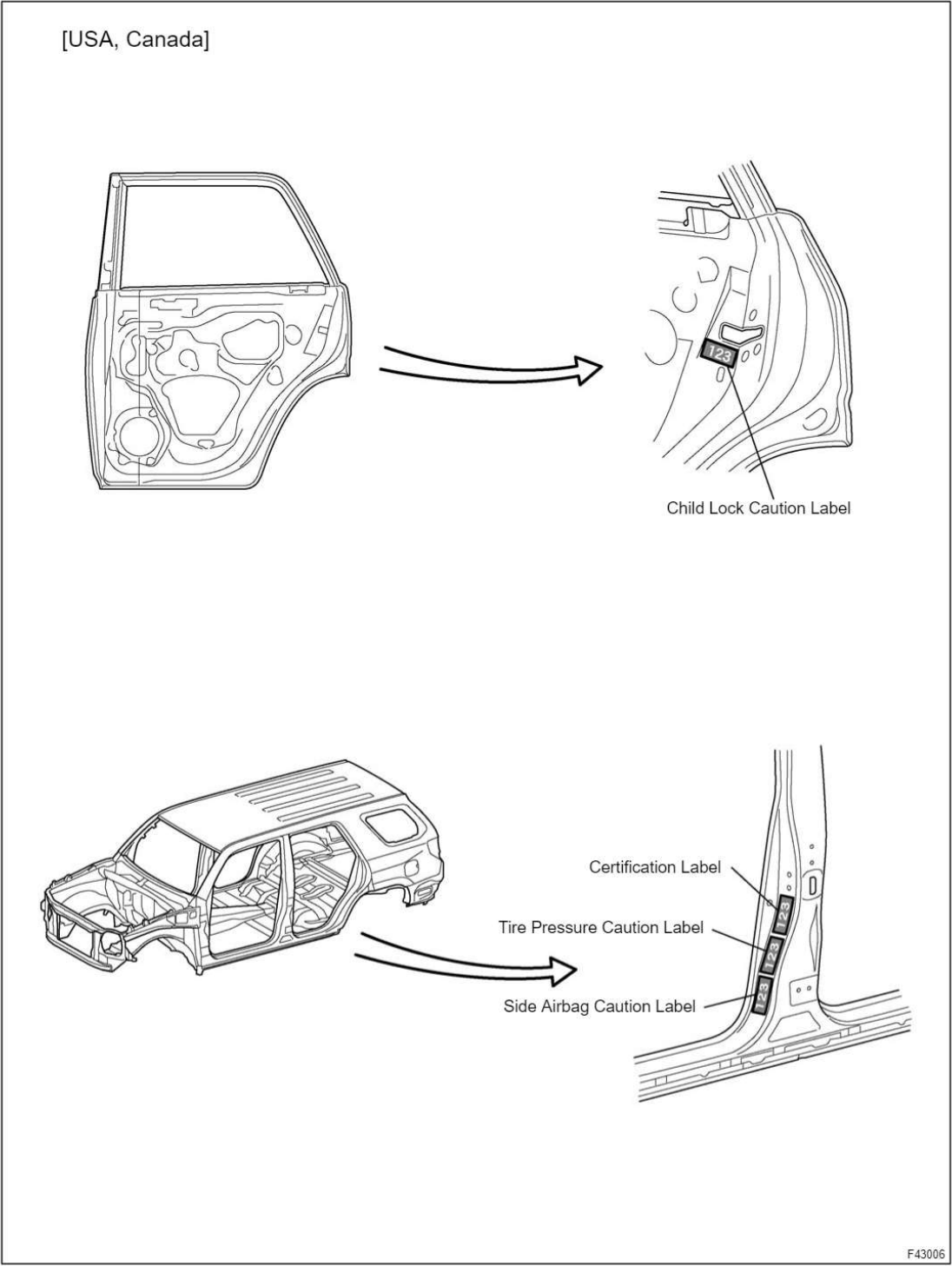
[USA, Canada]



F43005

BP-106 BODY PANEL REPLACEMENT

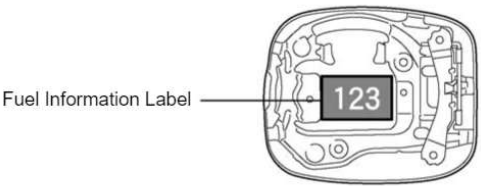
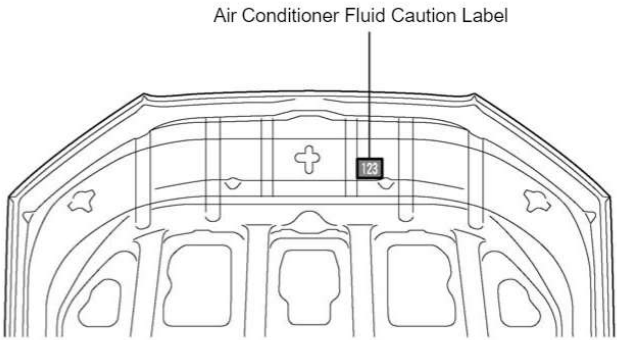
[USA, Canada]



BODY PANEL REPLACEMENT

BP-107

[Except USA, Canada]

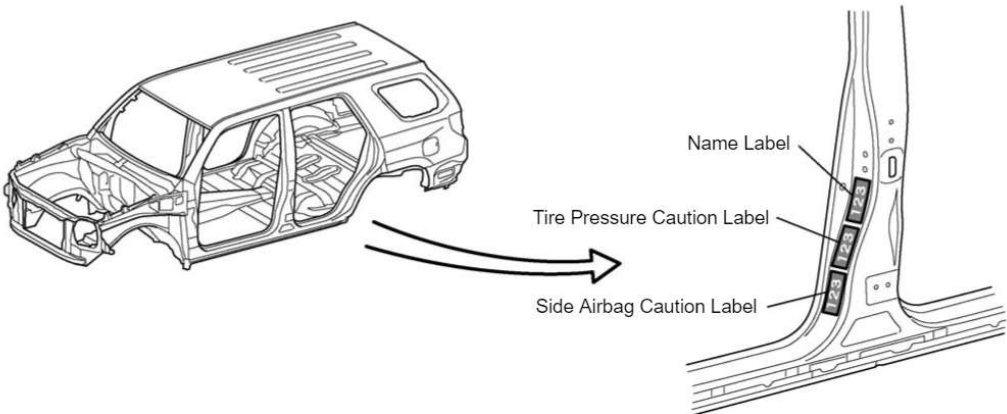
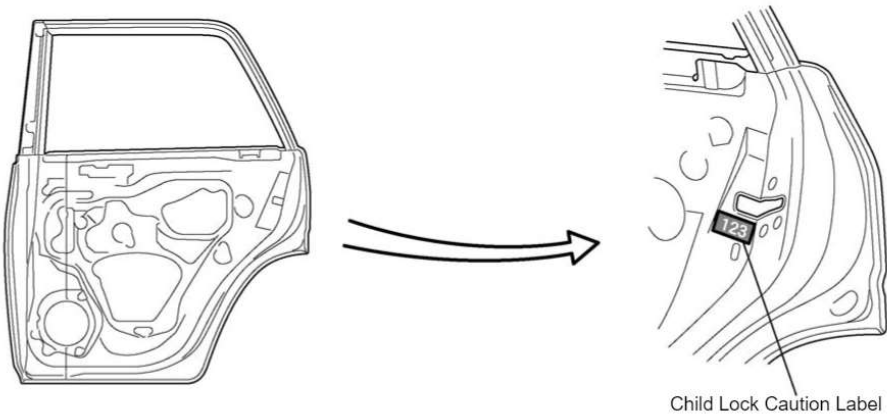


F43007

BP-108

BODY PANEL REPLACEMENT

[Except USA, Canada]



F43008

