

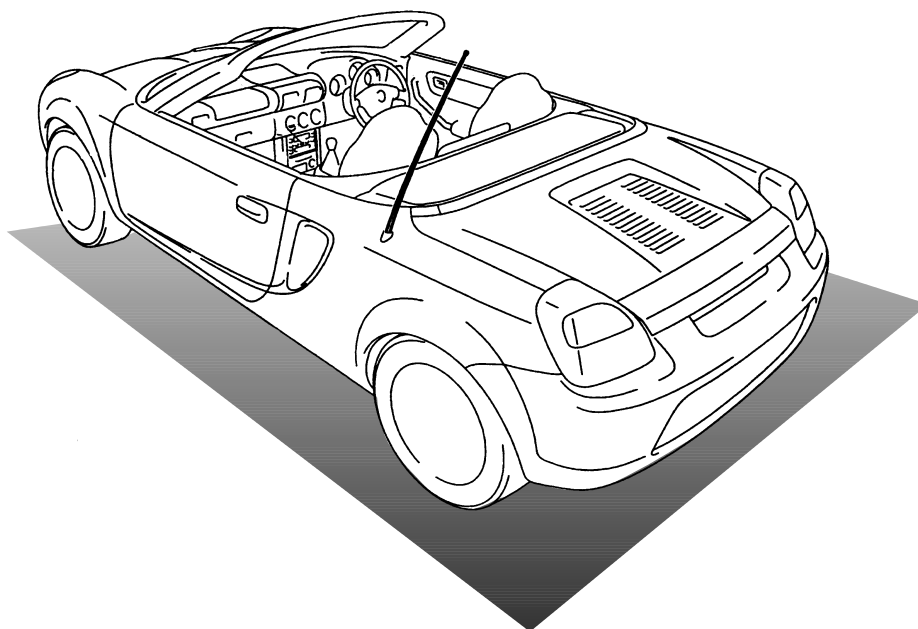
ALARM

TOYOTA VEHICLE SECURITY SYSTEM

TVSS IV-D

INSTALLATION INSTRUCTIONS

for



MR2 (RHD)

PRELIMINARY

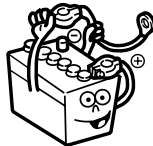
PART NUMBER

MAIN KIT	08585-12950
FITTING KIT	08586-17890
SUB KIT (SIREN AND RADAR)	08586-1A890
FOR **W3*R	

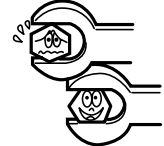
PRECAUTIONS

PLEASE READ THOROUGHLY THESE PRECAUTIONS BEFORE THE TVSS INSTALLATION

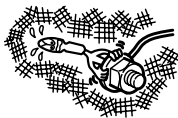
- Be sure to disconnect the negative (-) lead from the battery terminals.



- Use the correct tool when tightening bolts or nuts.



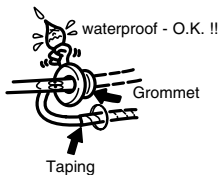
- Do not pinch the rear wiring or harness in the tightened part.



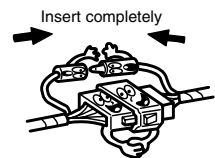
- Before drilling a hole, check that the rear of the mounting wall is clear.



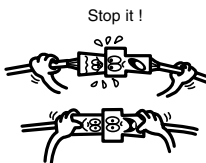
- When passing the wires through the bulkhead or other panels, use a grommet to ensure waterproofing.
- Protect the wiring with tape when it is passed through a hole.



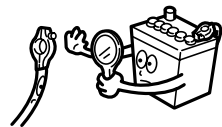
- Be sure to firmly tighten connectors and terminals.



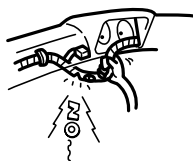
- When disconnecting the connectors, be sure to grip the connector body. Do not tug on the wiring.



- Before connecting the power wiring to the battery, check the wiring connections, harness, etc. to see that they are properly secured.



- Do not forcibly pull any car wiring harness. Rough tugging may result in opened connections, or a broken wire or harness.



- Check body and trim near area of installation to be certain no dirt or scratches resulted from the installation.

- Confirm that lamps, horn, wiper and other car accessories operate normally.



- Protect your car with wing covers, seat and so on.

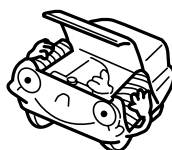


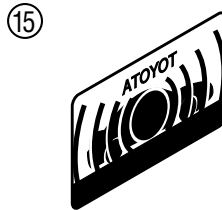
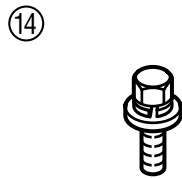
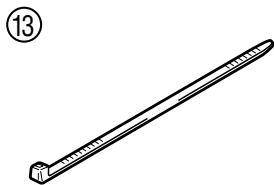
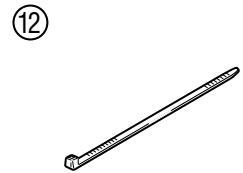
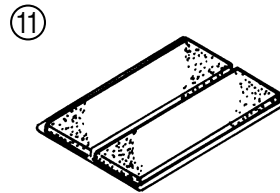
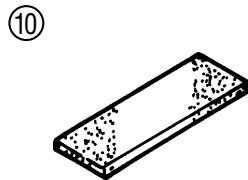
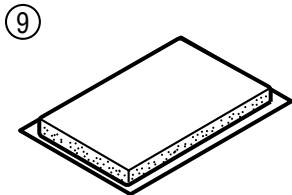
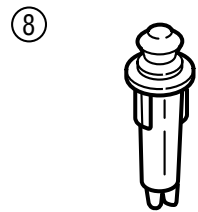
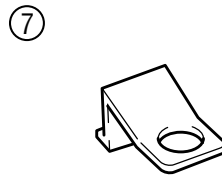
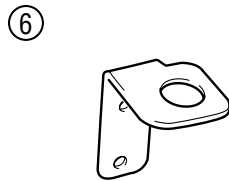
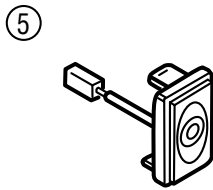
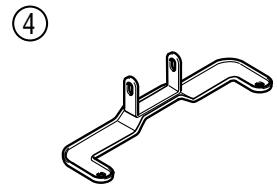
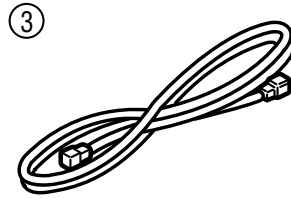
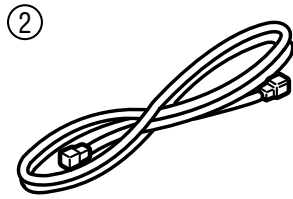
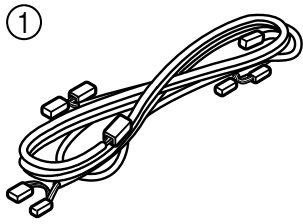
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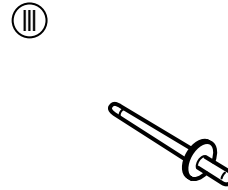
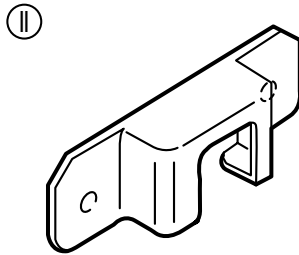
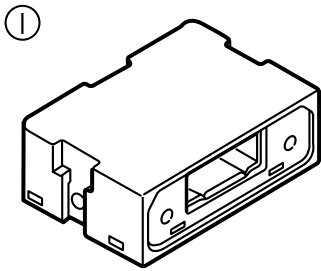
FITTING KIT**08586-17890**

Pos. No.	Description	Qty
①	TVSS WIRE HARNESS (MAIN)	1
②	TVSS WIRE HARNESS (BOOT)	1
③	TVSS WIRE HARNESS (ENGINE)	1
④	SIREN BRACKET	1
⑤	STATUS MONITOR	1
⑥	HOOD SWITCH BRACKET (BOOT)	1
⑦	HOOD SWITCH BRACKET (ENGINE)	1
⑧	HOOD SWITCH	2
⑨	BUTYL TAPE	3
⑩	FOAM (1 DIVISION ON 1 SHEET)	1
⑪	FOAM (2 DIVISIONS ON 1 SHEET)	1
⑫	WIRE TIE (150mm)	25
⑬	WIRE TIE (200mm)	5
⑭	BOLT	3
⑮	WINDOW STICKERS	2

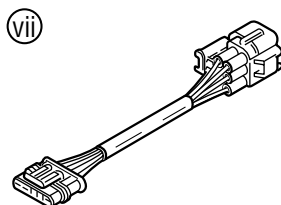
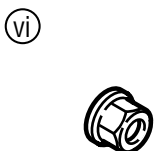
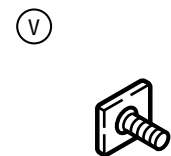
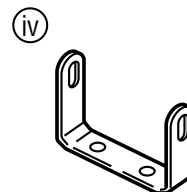
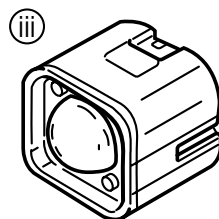
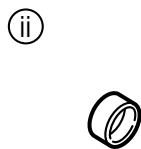
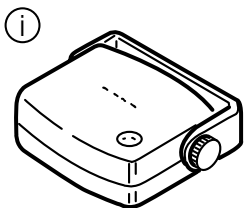


MAIN KIT**08585-12950**

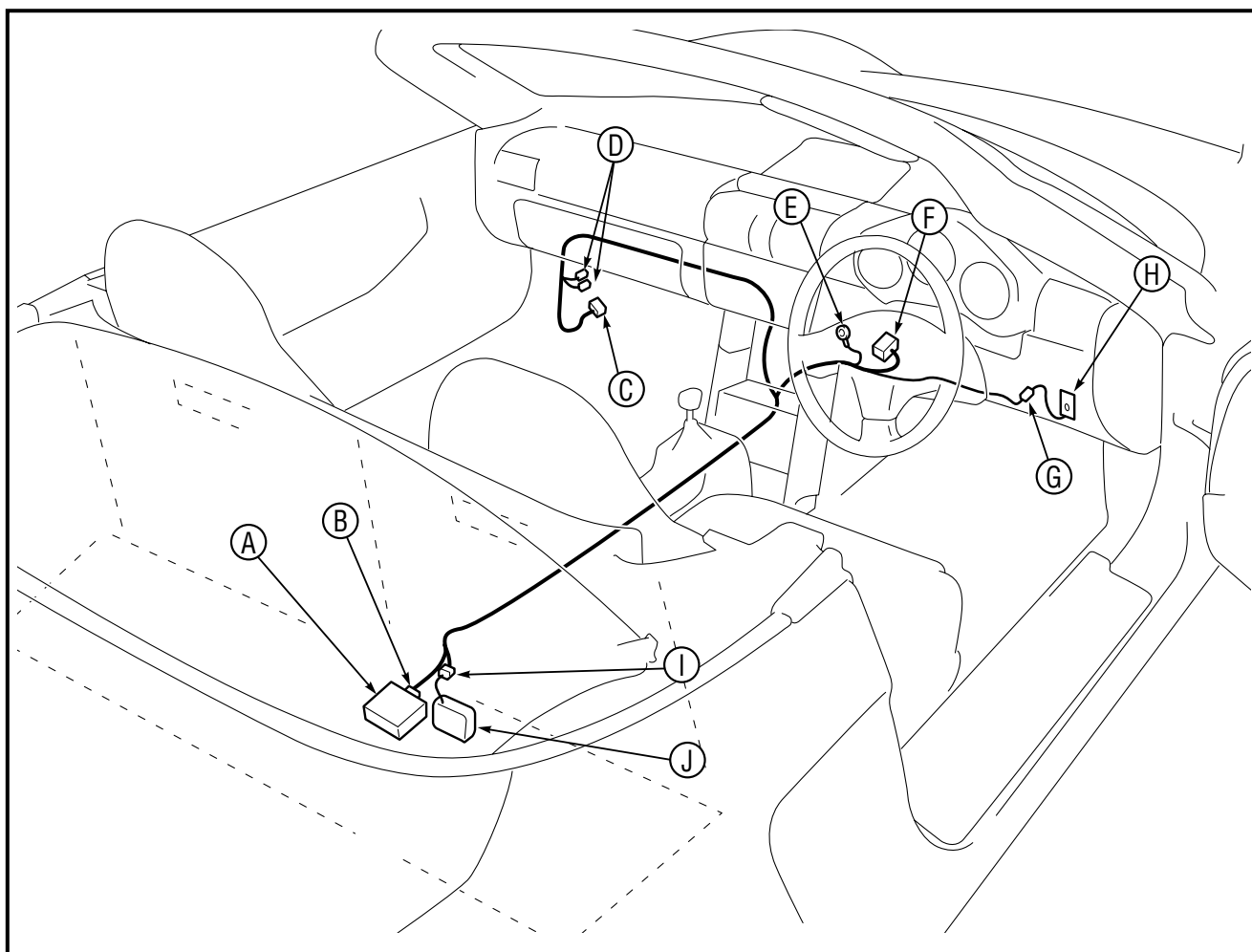
Pos. No.	Description	Qty
①	TVSS ECU	1
②	ECU PROTECTIVE BRACKET	1
③	BLIND RIVET	2

**SUB KIT (RADAR AND SIREN)****08586-1A890**

Pos. No.	Description	Qty
①	RADAR SENSOR	1
②	CAP	2
③	SIREN	1
④	SIREN BRACKET	1
⑤	BOLT	2
⑥	NUT	2
⑦	SIREN WIRE HARNESS	1

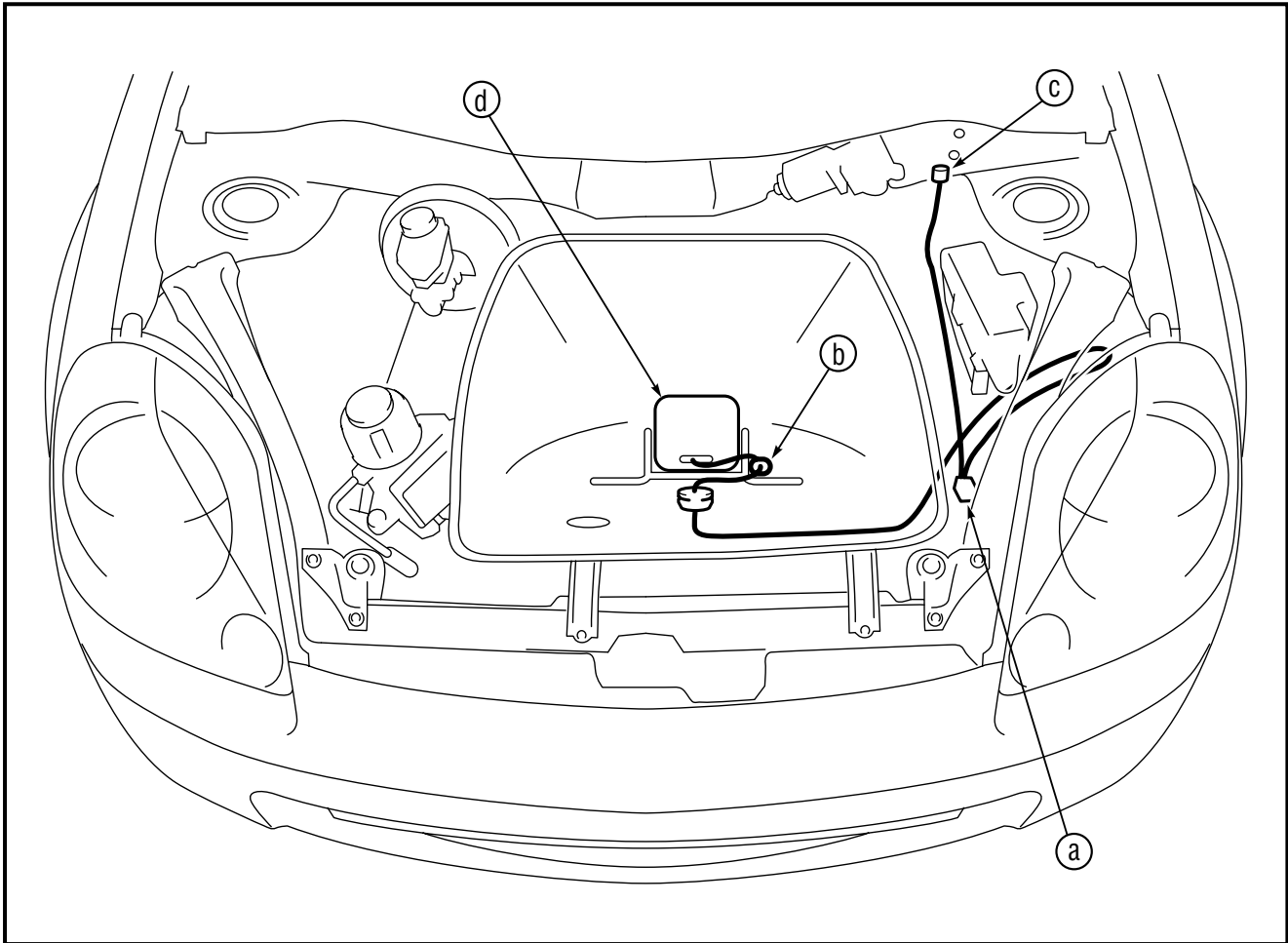


SYSTEM LAYOUT AND WIRE HARNESS OUTLINE (MAIN)



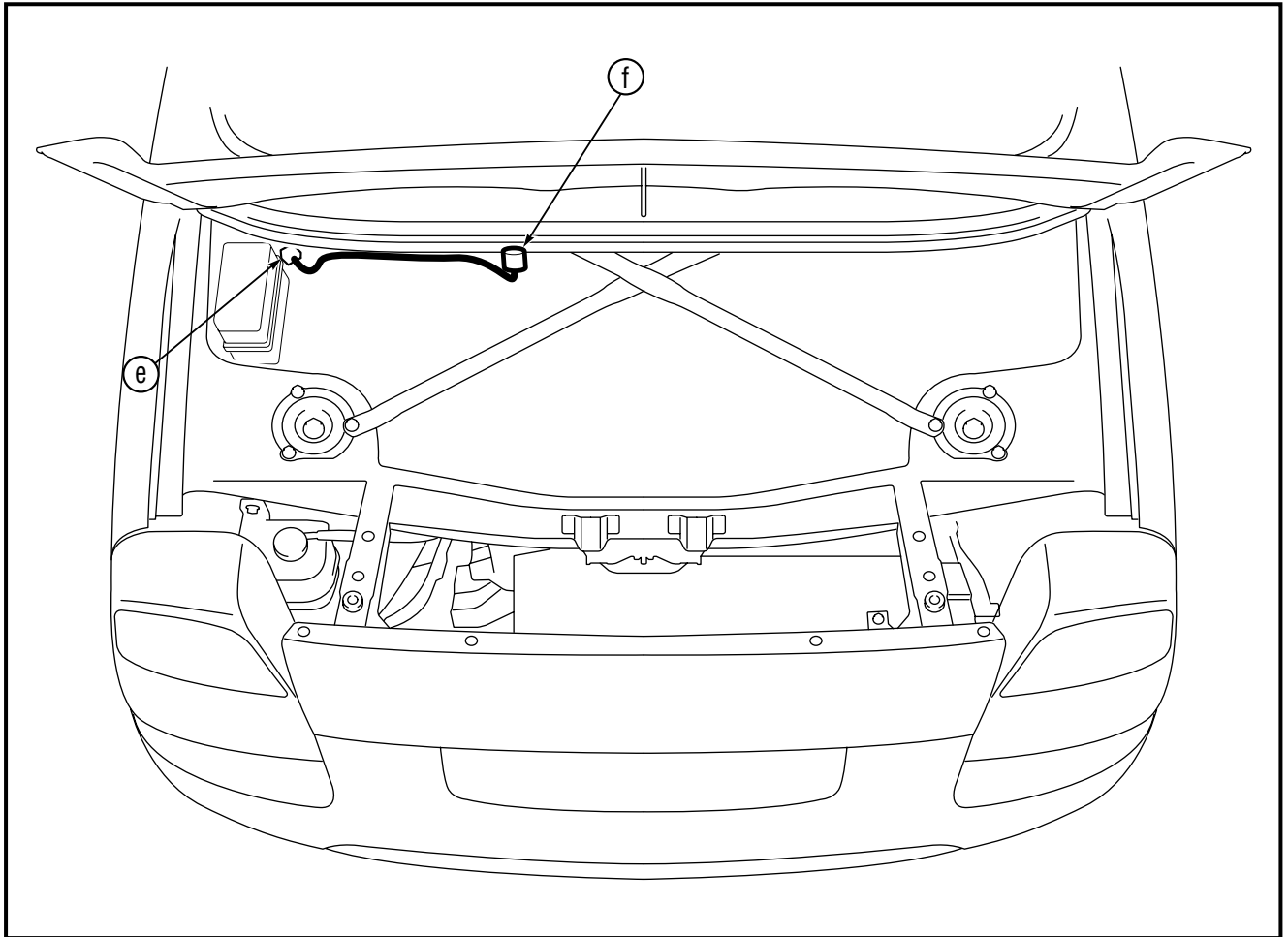
(A)	TVSS ECU
(B)	TVSS ECU connector (26P female grey)
(C)	Pre-wired connector (3P male white)
(D)	Pre-wired connector (1P female and male white)
(E)	Ground terminal
(F)	Pre-wired connector (11P male white)
(G)	Status monitor connector (2P female clear)
(H)	Status monitor
(I)	Radar sensor connector (4P female)
(J)	Radar sensor

SYSTEM LAYOUT AND WIRE HARNESS OUTLINE (BONNET)



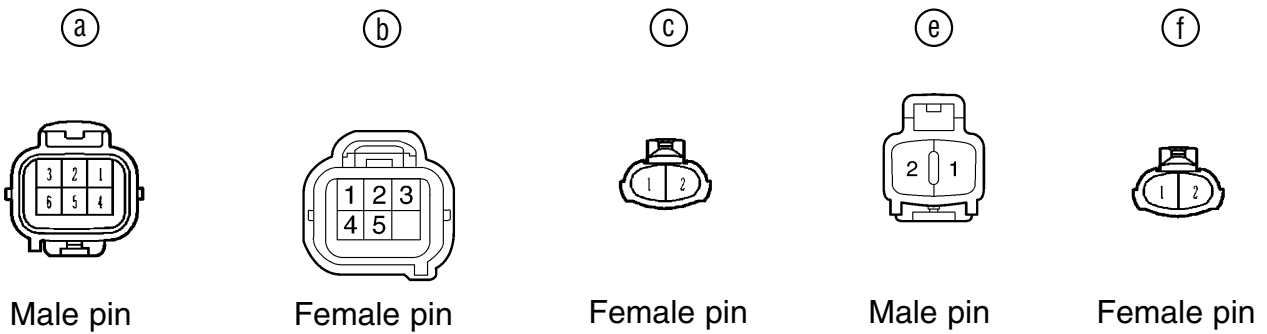
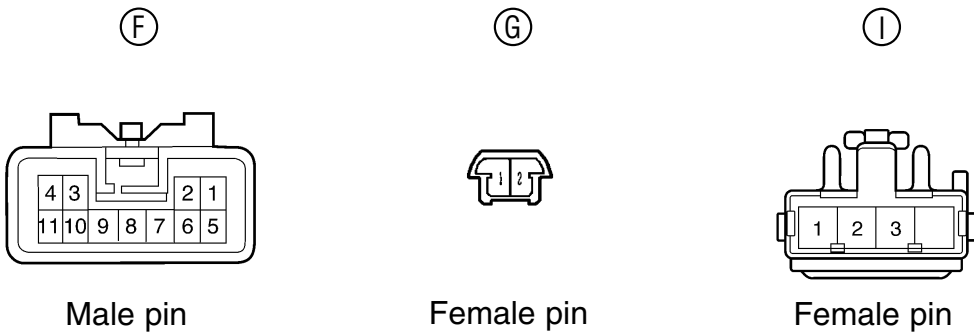
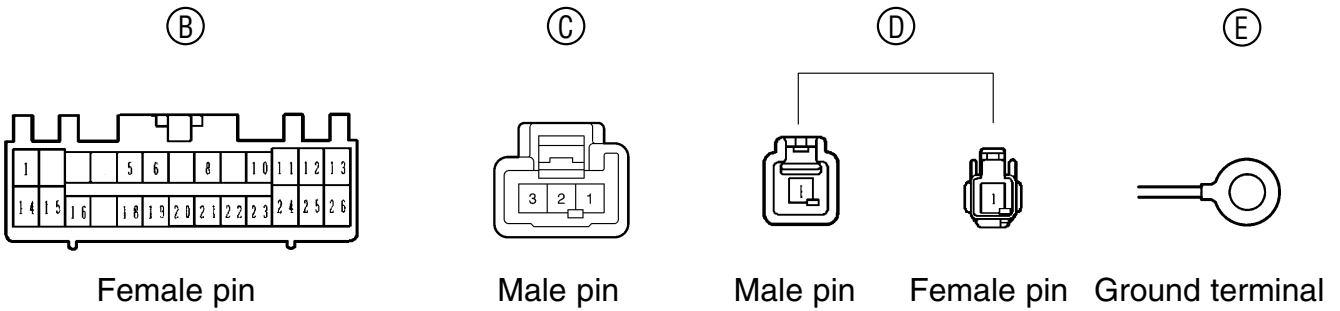
(a)	Pre-wired connector (6P male grey)
(b)	Siren Connector (6P female grey)
(c)	Hood switch connector (2P female white)
(d)	Siren

SYSTEM LAYOUT AND WIRE HARNESS OUTLINE (ENGINE)



ⓔ	Pre-wired connector (2P male grey)
ⓕ	Hood switch connector (2P female white)

CONNECTOR ARRANGEMENT OF THE TVSS (PIN VIEW) 



VEHICLE DISASSEMBLY

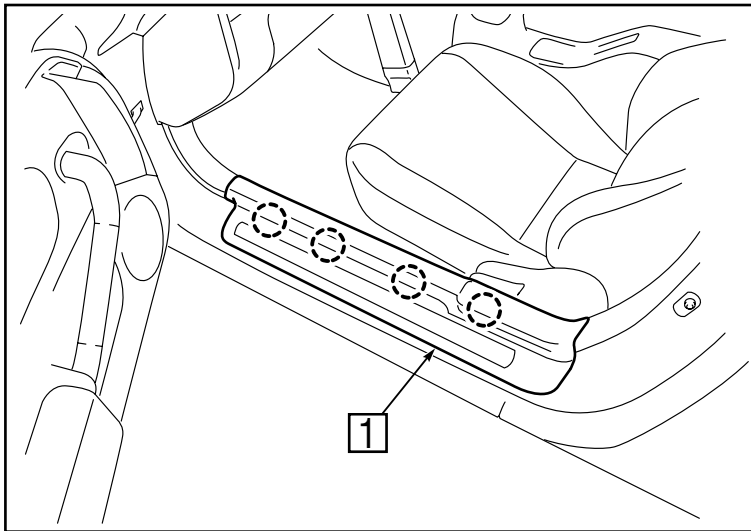


Figure 1

1.

Remove the passenger's side front door scuff plate **1**.

○ : Clip (4x)

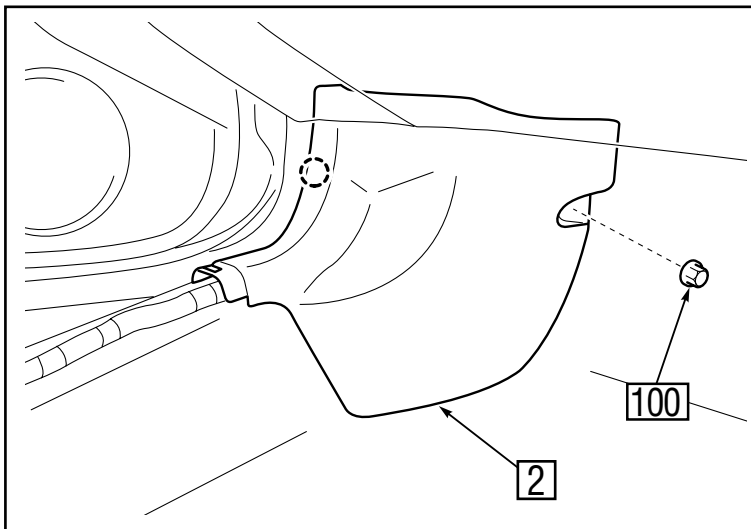


Figure 2

2.

Remove the passenger's side kick panel **2**.

100 : Retainer (1x)

○ : Clip (1x)

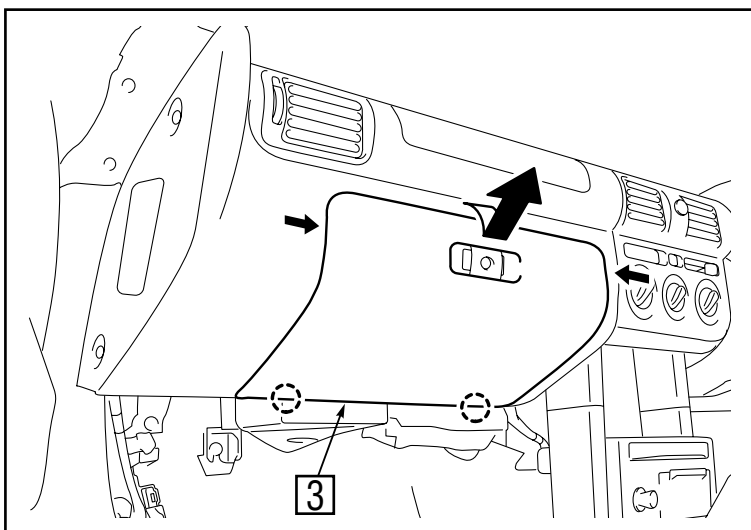


Figure 3

3.

Remove the glove compartment door assembly **3**.

○ : Clip (2x)

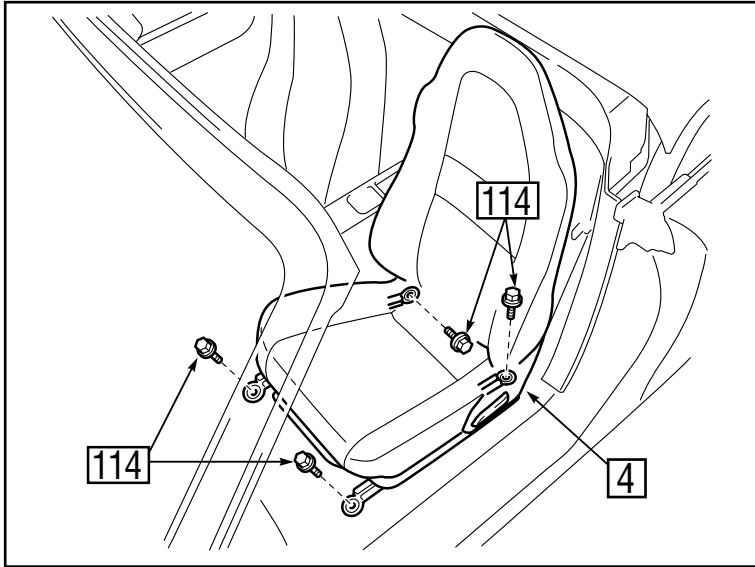


Figure 4

4.
Remove the passenger's seat [4].
[114] : Bolt (4x)

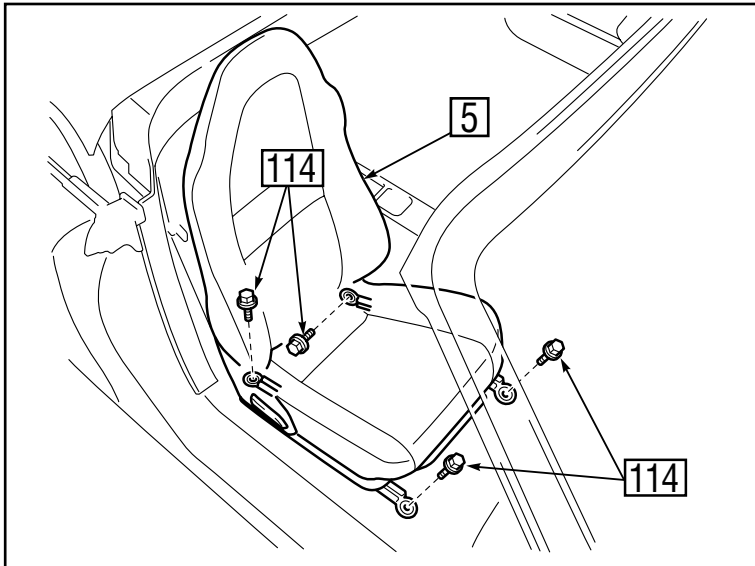


Figure 5

5.
Remove the driver's seat [5].
[114] : Bolt (4x)

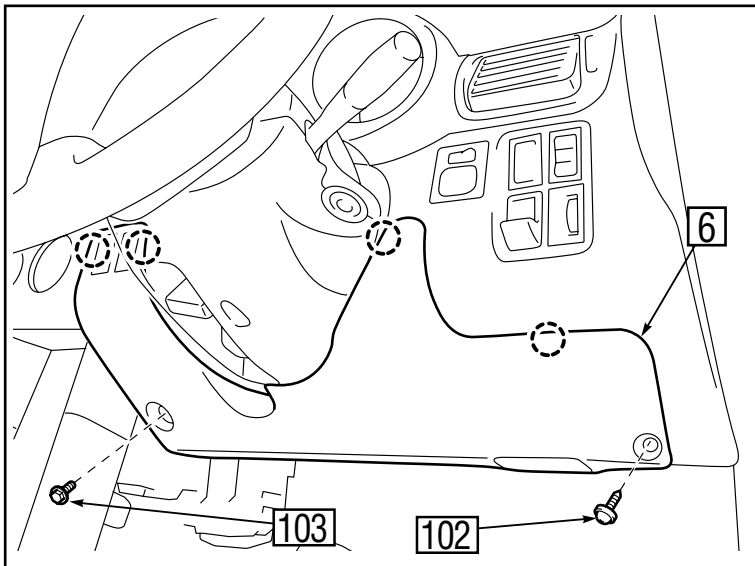


Figure 6

6.
Remove the underdash cover [6].
[103] : Bolt (1x)
[102] : Screw (1x)
○ : Clip (4x)

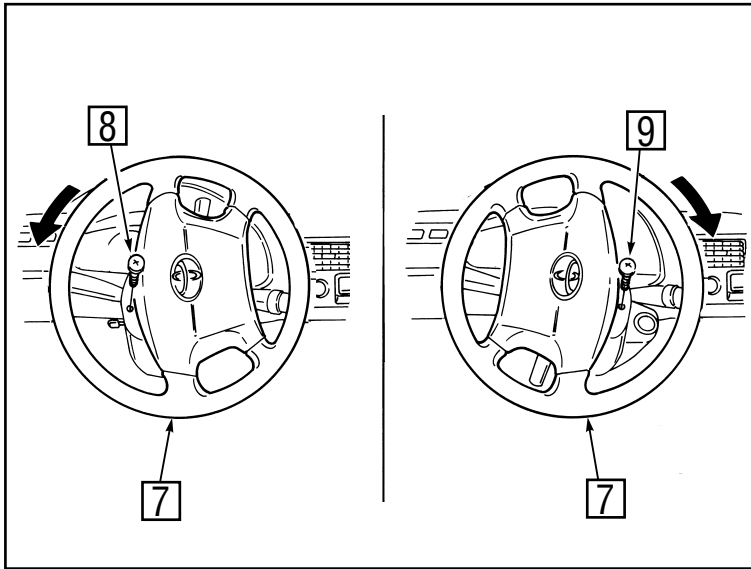


Figure 7

7.

- a) Turn the steering wheel **7** to the left, then remove the screw **8**.
- b) Turn the steering wheel **7** to the right, then remove the screw **9**.

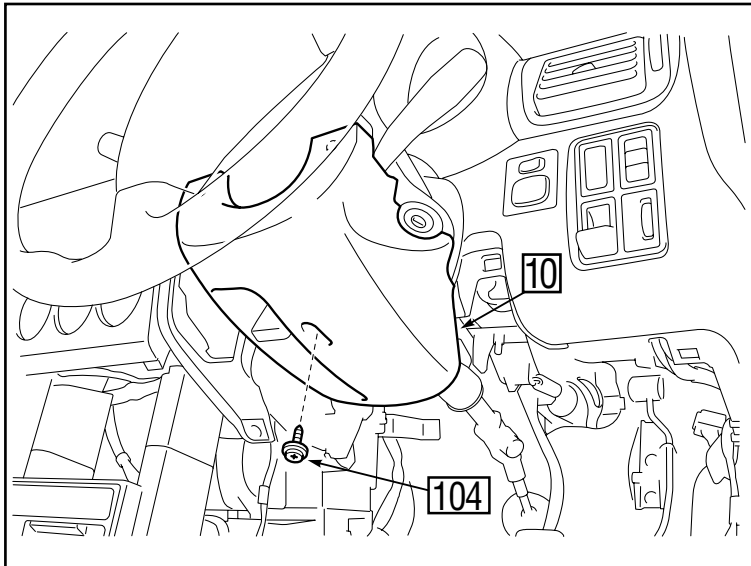


Figure 8

8.

Remove the steering column lower cover **10**.

104 : Screw (1x)

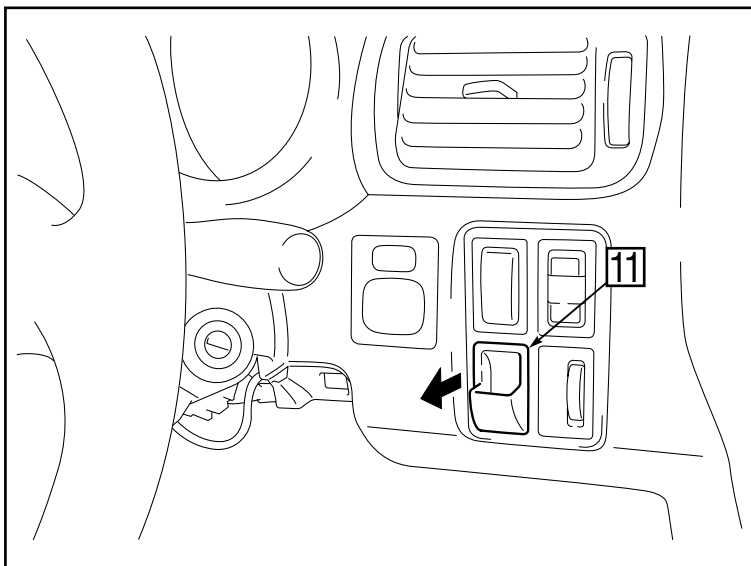


Figure 9

9.

Remove the coin holder **11**.

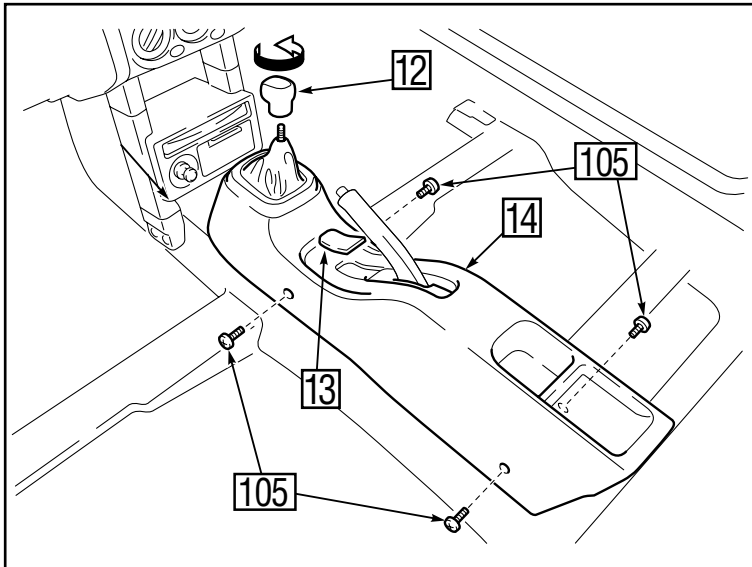


Figure 10

- 10.
- a) Remove the shift knob **12**.
 - b) Remove the console box RR cover **13**.
 - c) Remove the console box RR **14**.
- 105** : Screw (4x)

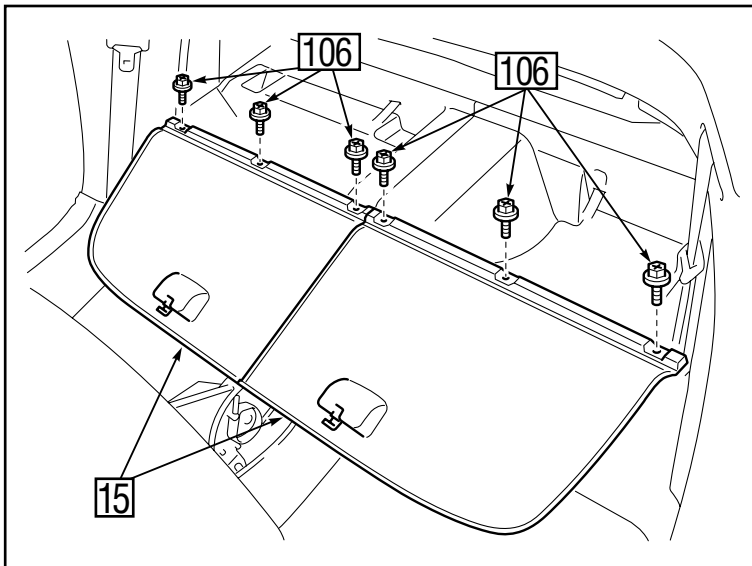


Figure 11

- 11.
- Remove the luggage lid **15**.
- 106** : Bolt (6x)

WIRE HARNESS INSTALLATION PART 1 (MAIN)



1. Locate the connectors in the vehicle before fitting the TVSS wire harness (main).

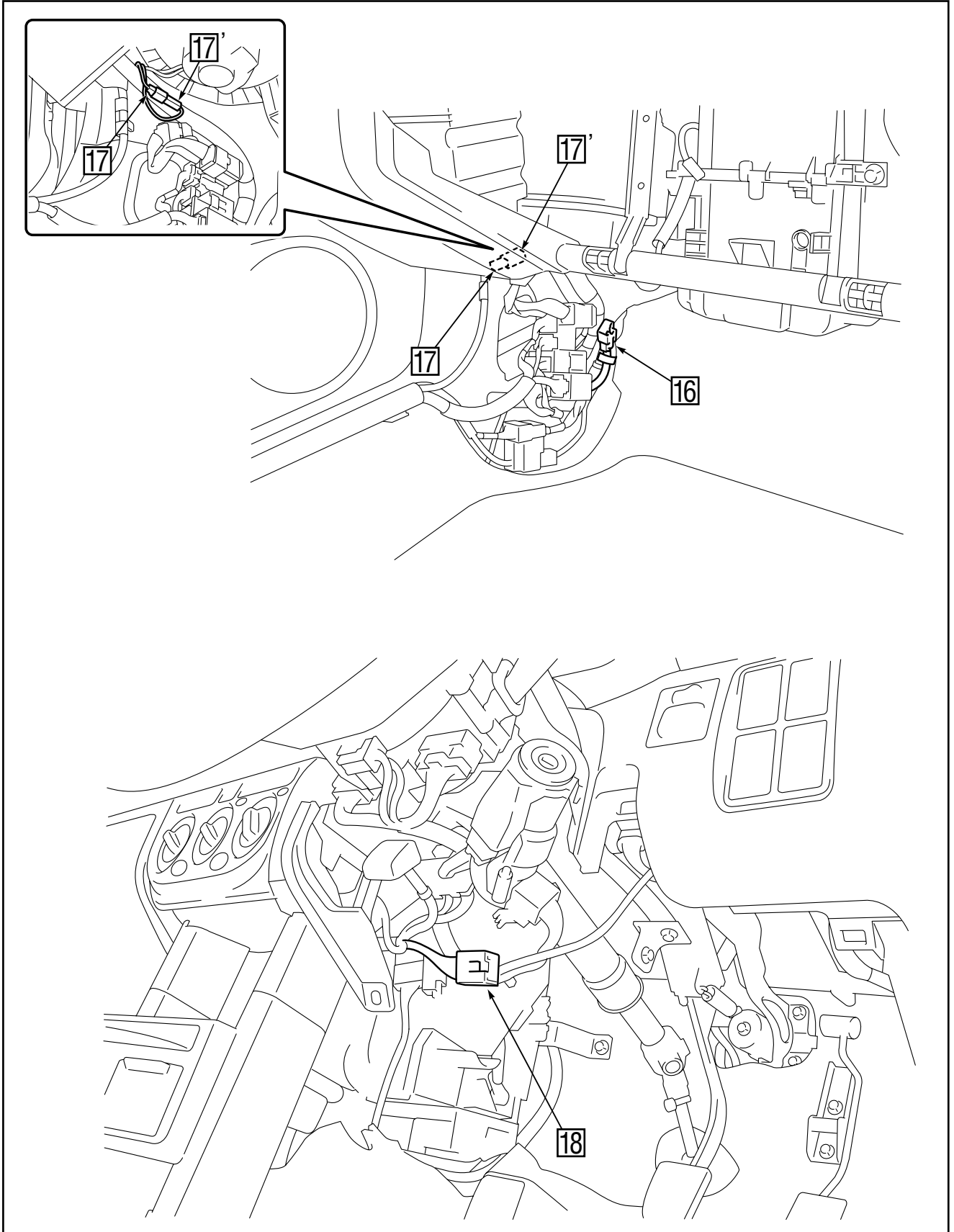


Figure 12

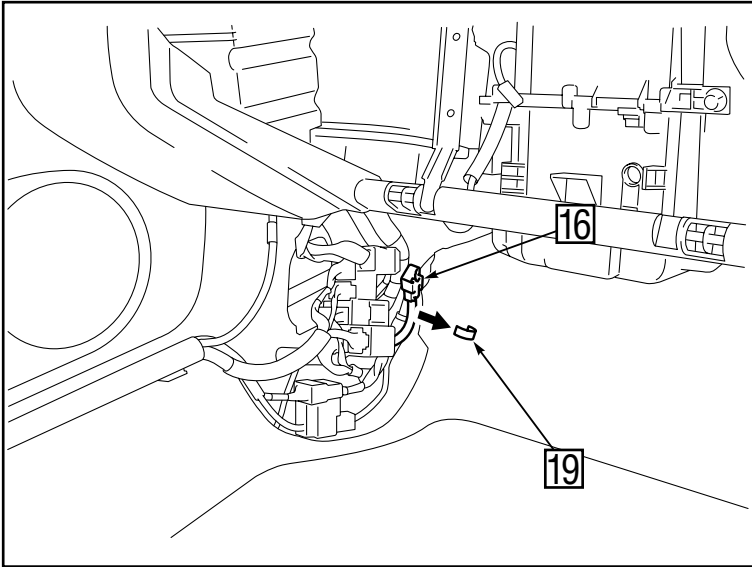


Figure 13

2.

Locate the 3P connector **16** (white) in passenger's side cowl area and remove the tape **19** from the connector **16**.

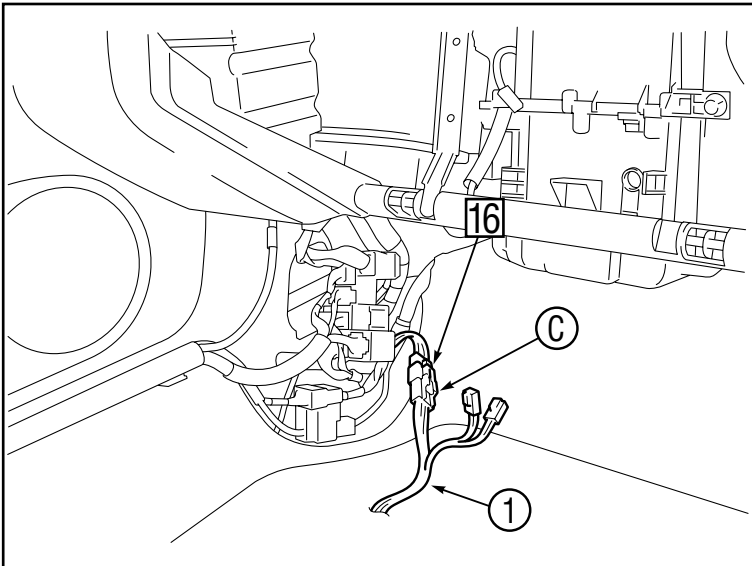


Figure 14

3.

Connect the TVSS wire harness (main) **1** 3P connector **C** (white) to the vehicle side 3P connector **16** (white).

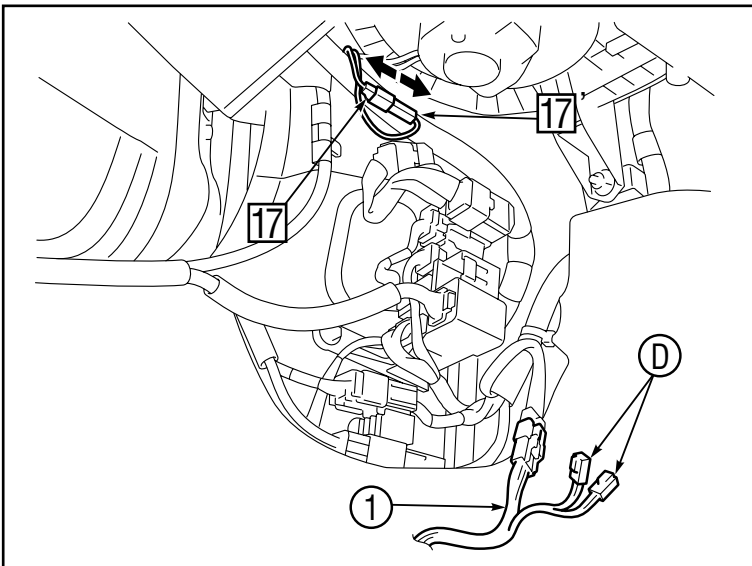


Figure 15

4.

Locate and disconnect 1P connector **17** (female) and **17'** (male) in up side passenger's cowl side area.

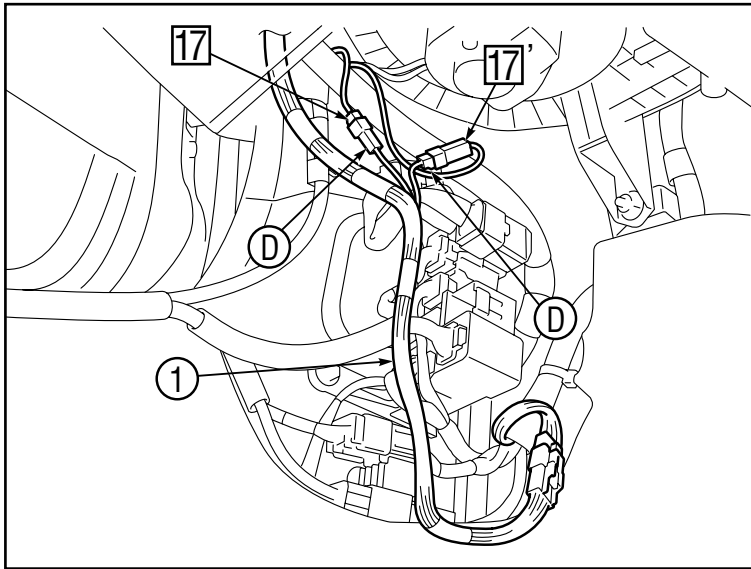


Figure 16

5.

Insert the 1P connectors ① of the TVSS wire harness (main) ① between connectors ⑰ (female) and ⑰' (male).

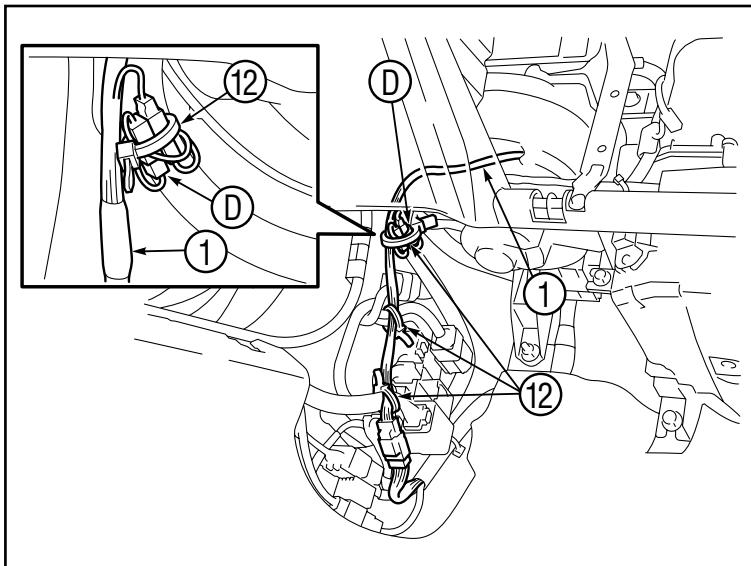


Figure 17

6.

- a) Route the TVSS wire harness (main) ① as shown in Fig. 17.
- b) Secure the TVSS wire harness (main) ① and the connectors ① to the vehicle harness using the wire ties ⑫ (3x).

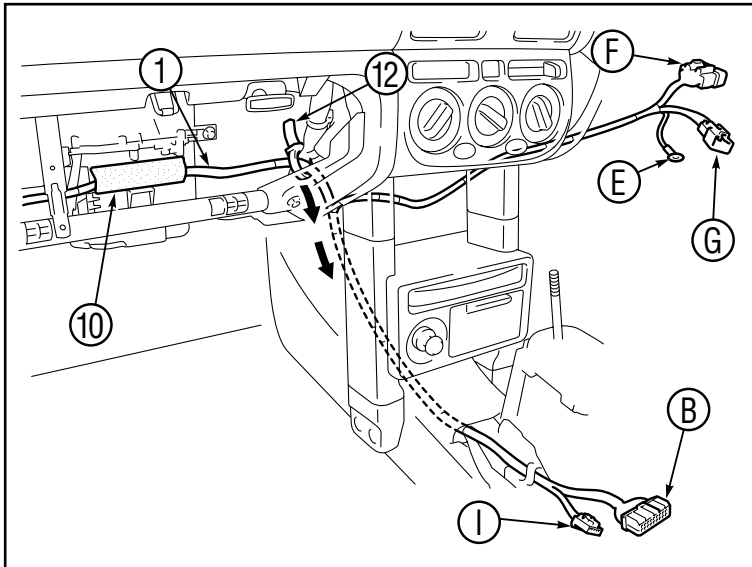


Figure 18

7.
 - a) Wire the TVSS wire harness (main) ① temporarily to the position around the centre console.
 - b) Fix the TVSS wire harness (main) ① the heater unit using the foam tape ⑩.
 - c) Fix the TVSS wire harness (main) ① to the vehicle harness using the wire tie ⑫ (1x).
 - d) Run 11P connector ④ (white), 2P connector ⑤ (clear) and the ground terminal ③ of the TVSS wire harness (main) ① to the driver's side through the back of the centre console.
 - e) Run the TVSS wire harness (main) ①, 26P connector ⑥ (grey) and 4P connector ⑤ (white) from the back of the centre console through under the carpet and wire them temporarily.

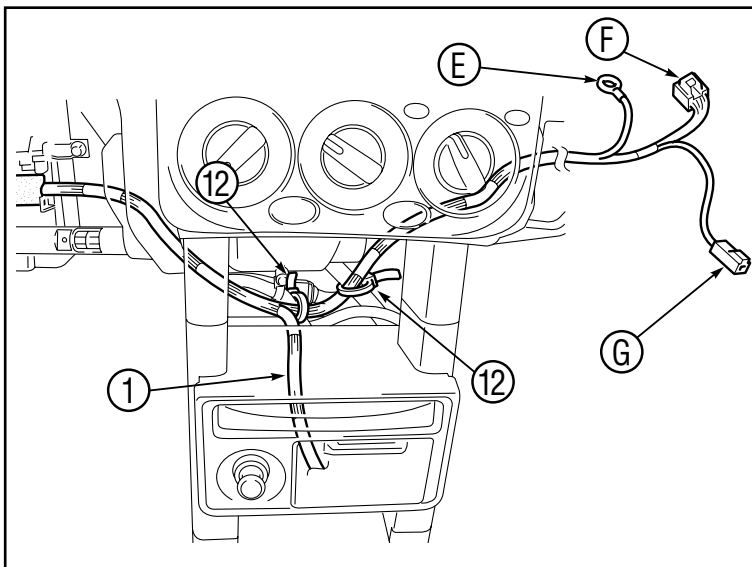


Figure 19

8.
 - Secure the TVSS wire harness (main) ① using the wire ties ⑫ (2x).

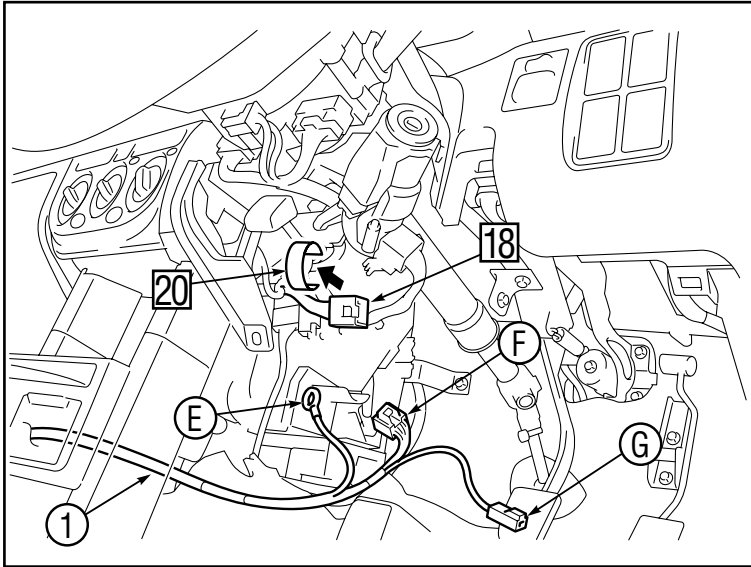


Figure 20

9.

Locate the 11P connector **18** (white) in under the steering column area and remove the tape **20** from the connector **18**.

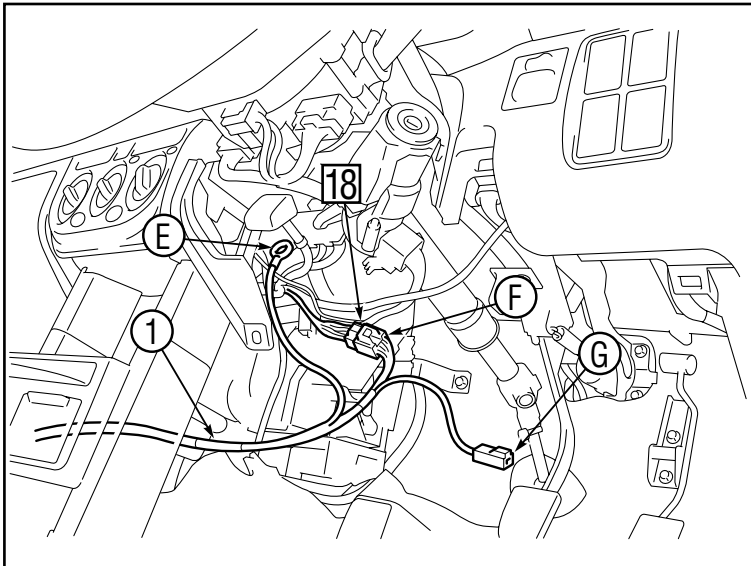


Figure 21

10.

Connect the TVSS wire harness (main) **1** 11P connector **F** (white) to the vehicle side 11P connector **18** (white).

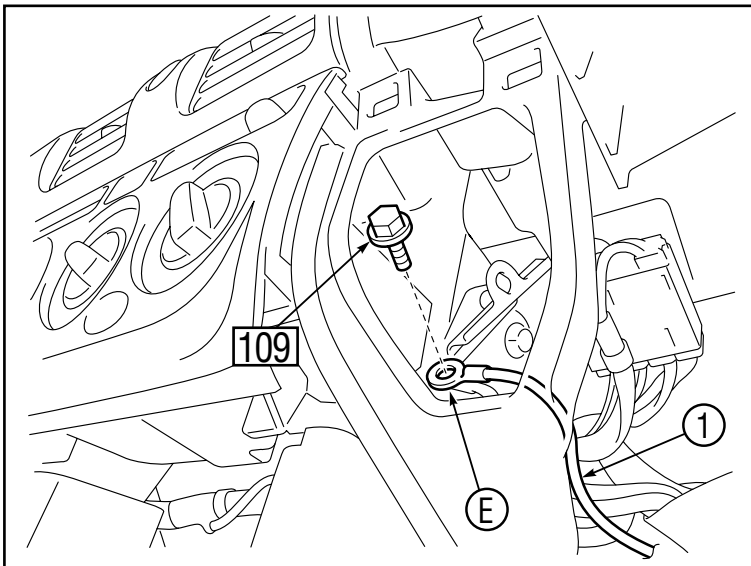


Figure 22

11.

- a) Remove the bolt **109** that secures ground terminal.
- b) Locate ground terminal **E** of the TVSS wire harness (main) **1**.
- c) Secure the ground terminal **E** together with ground terminal by using the bolt **109**.

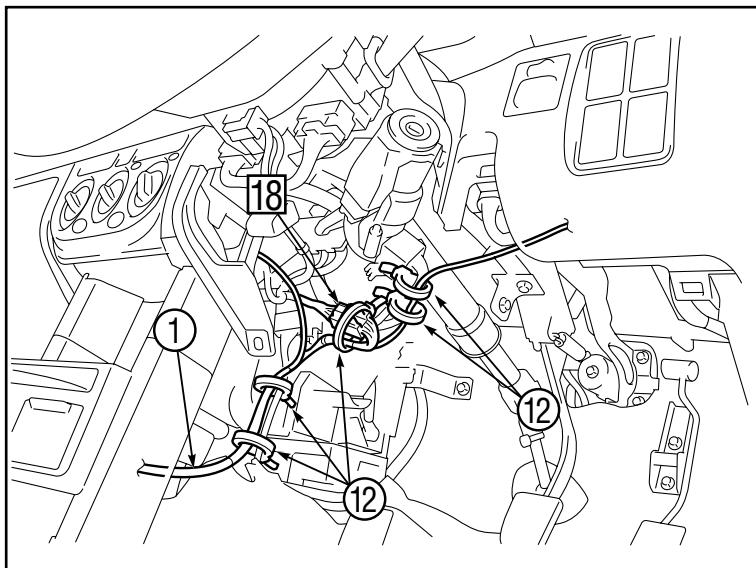


Figure 23

- 12.
- a) Secure the 11P connector 18 (white) to the vehicle wire harness using the wire tie 12 (1x).
 - b) Secure the TVSS wire harness (main) 1 to the vehicle wire harness using the wire ties 12 (4x).

MOUNTING THE STATUS MONITOR

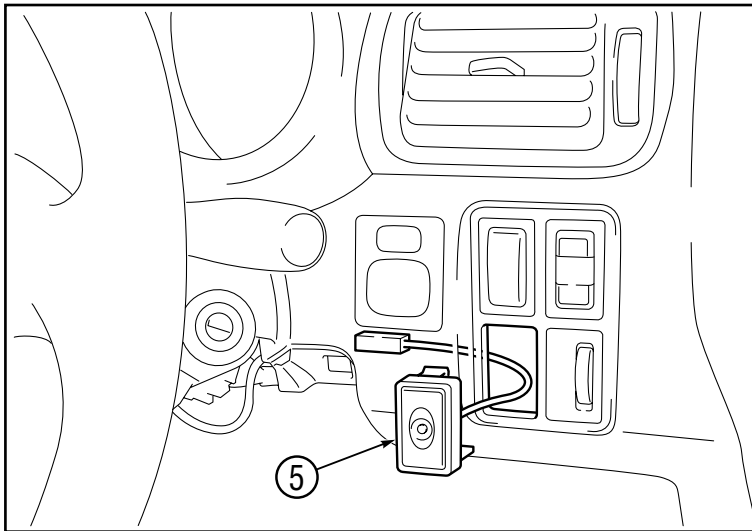


Figure 24

1.

Fit the status monitor ⑤ to the switch hole.

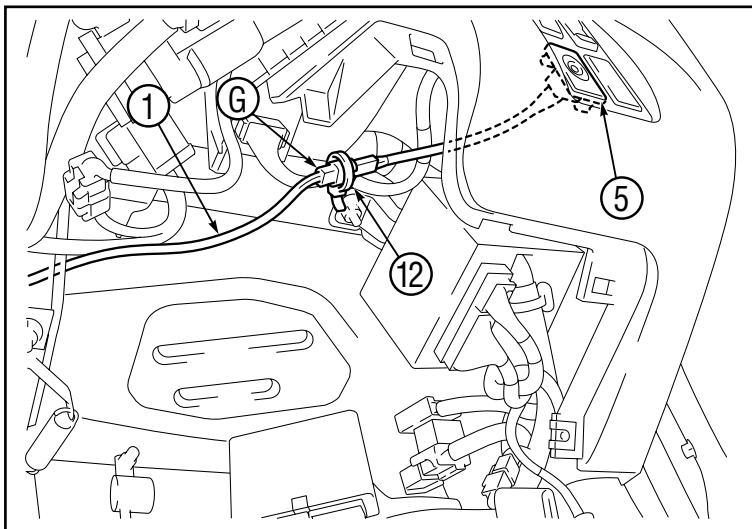


Figure 25

2.

- a) Connect the 2P connector ⑥ (clear) of TVSS wire harness (main) ① to the status monitor ⑤ 2P connector (clear).
- b) Secure the 2P connectors ⑥ at the position shown in Fig. 25 using the wire tie ⑫ (1x).

WIRE HARNESS INSTALLATION PART 2 (MAIN)

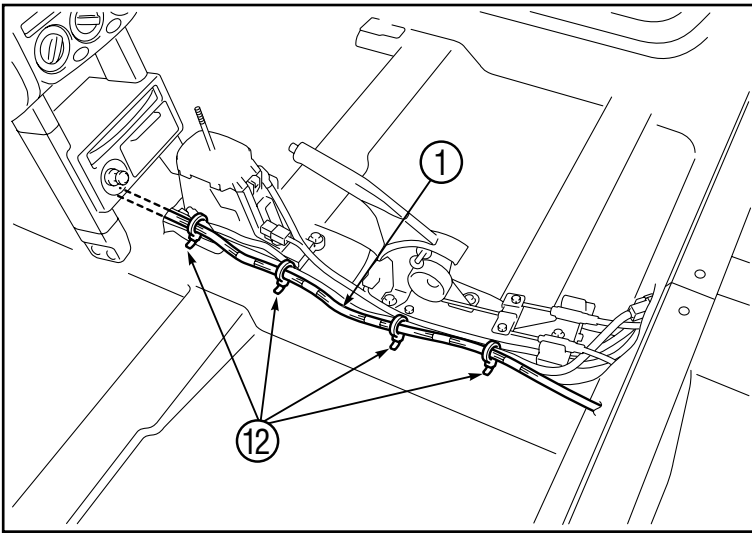


Figure 26

1.

Route the TVSS wire harness (main) ① as shown in Fig. 26, and secure the TVSS wire harness (main) ① to the vehicle wire harness using the wire ties ⑫ (4x).

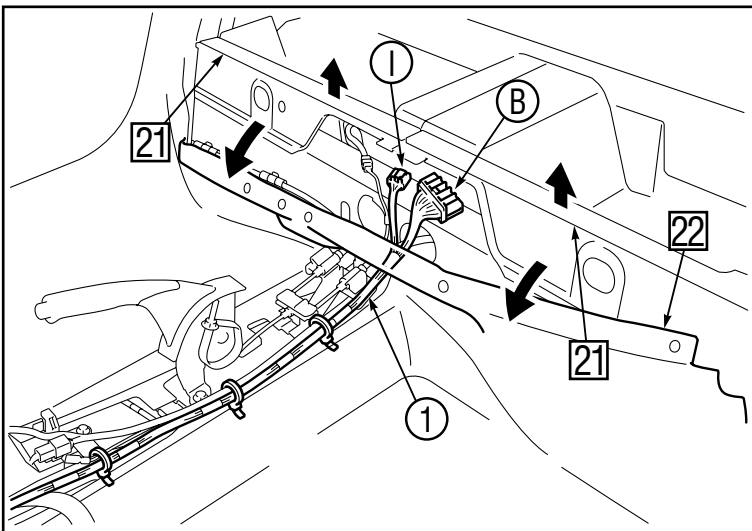


Figure 27

2.

- a) Lift the rear luggage tray 21 slightly and turn the floor carpet 22.
- b) Route the TVSS wire harness (main) ① as shown in Fig. 27.

MOUNTING THE RADAR SENSOR

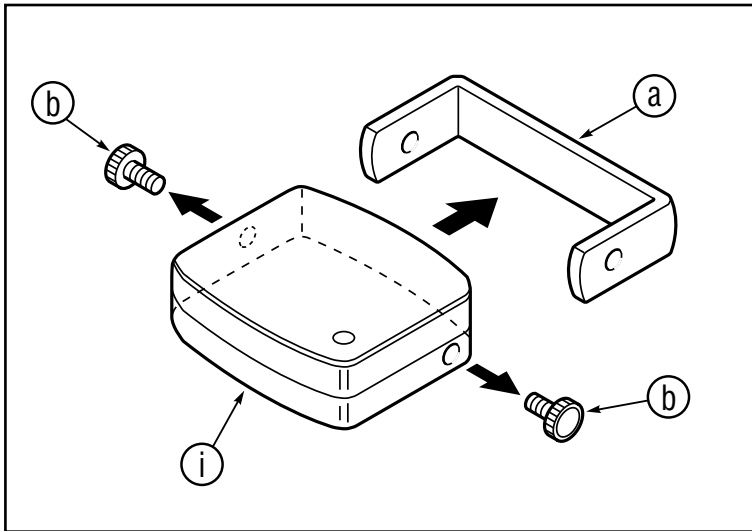


Figure 28

1. Remove the bracket (a) and the screws (b) (2x) from the radar sensor (i).

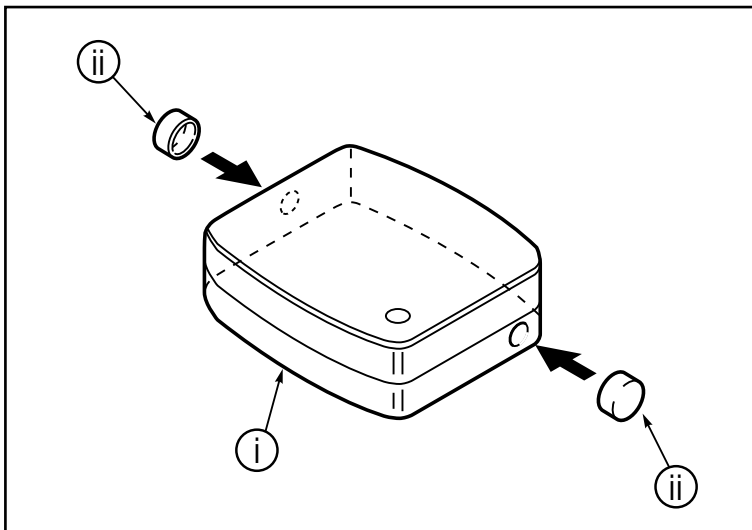


Figure 29

2. Fit the caps (ii) (2x) to the radar sensor (i).

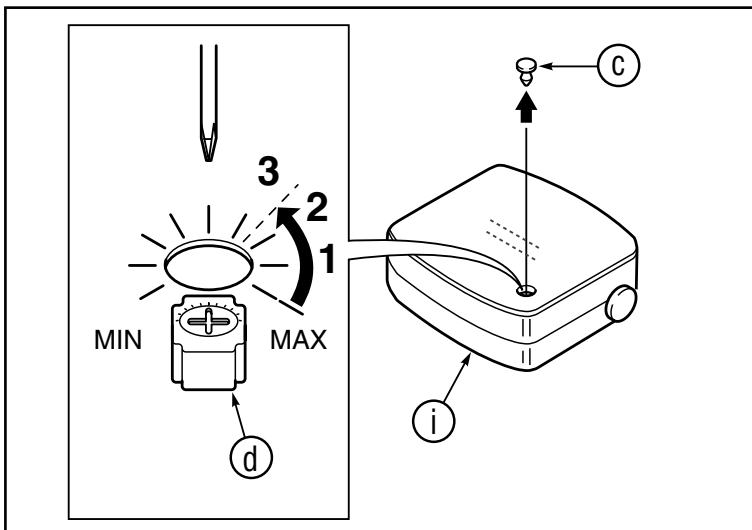


Figure 30

3.
 - a) Remove the cap (c) from the radar sensor (i).
 - b) Locate the trimmer (d) in the small hole.
 - c) Turn the trimmer (d) clockwise to the maximum position.
 - d) Turn the trimmer (d) counterclockwise between the second and the third position from the maximum.
 - e) Test and adjust the radar sensor sensitivity in accordance with the SETTING GUIDE.
 - f) Refit the cap (c).

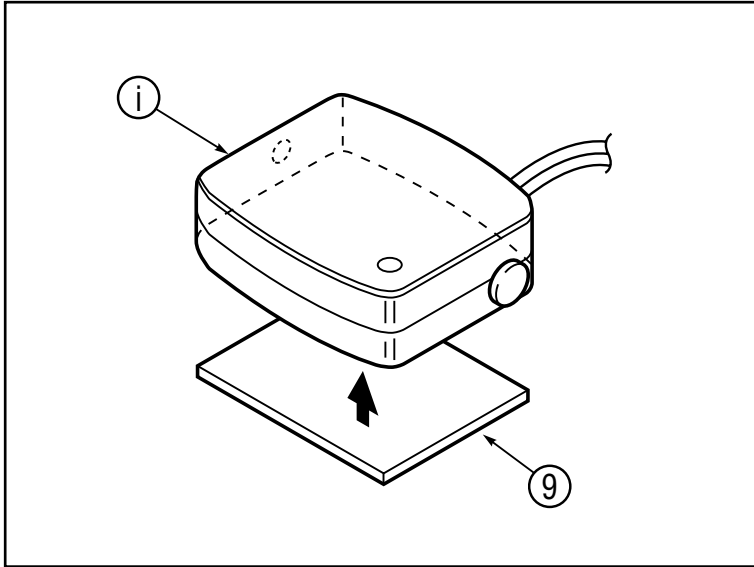


Figure 31

4.

Attach the butyl tape ⑨ to the bottom of the radar sensor ①.

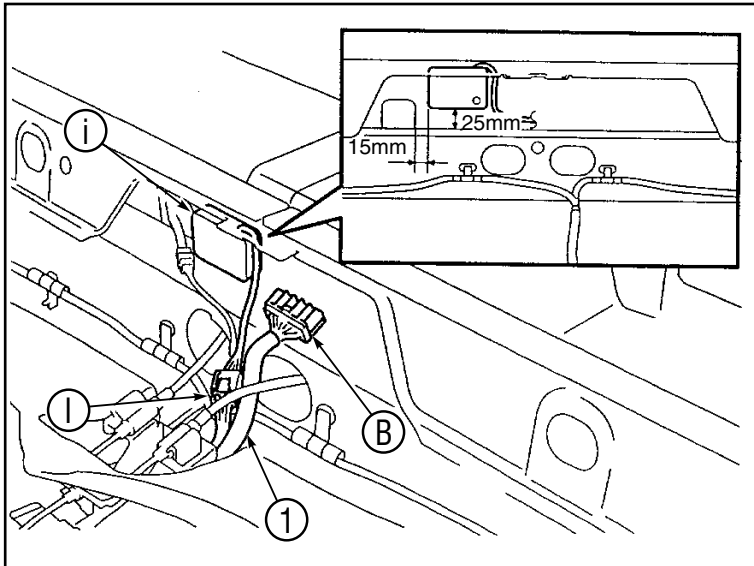


Figure 32

5.

Attach the radar sensor ① on the body floor surface as shown in Fig. 32.

VEHICLE DISASSEMBLY (BOOT)

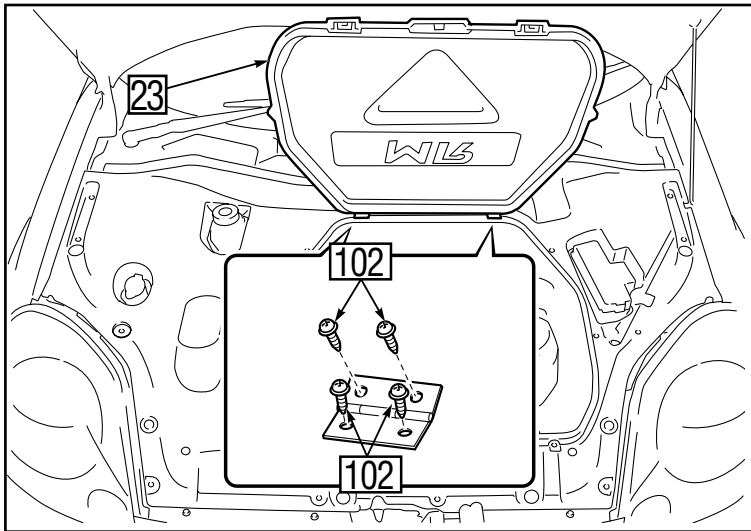


Figure 33

1. Remove the front box cover [23](#).
[102](#) : Screw (4x)

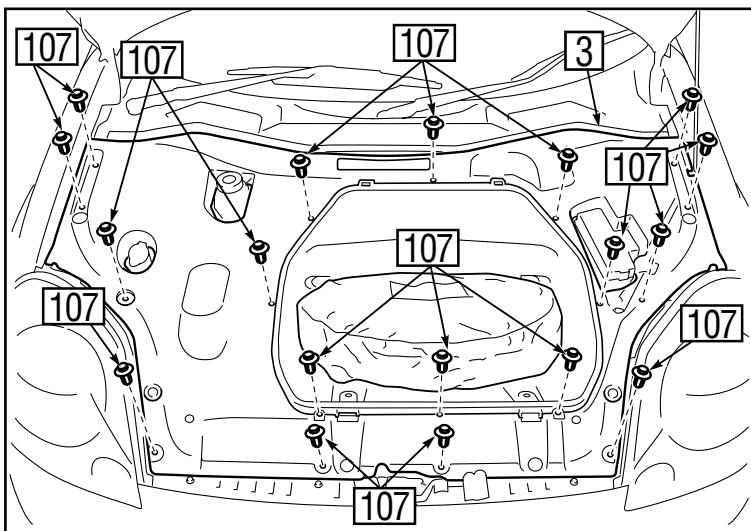


Figure 34

2. Remove the luggage compartment trim box cover [24](#).
[107](#) : Clip (18x)

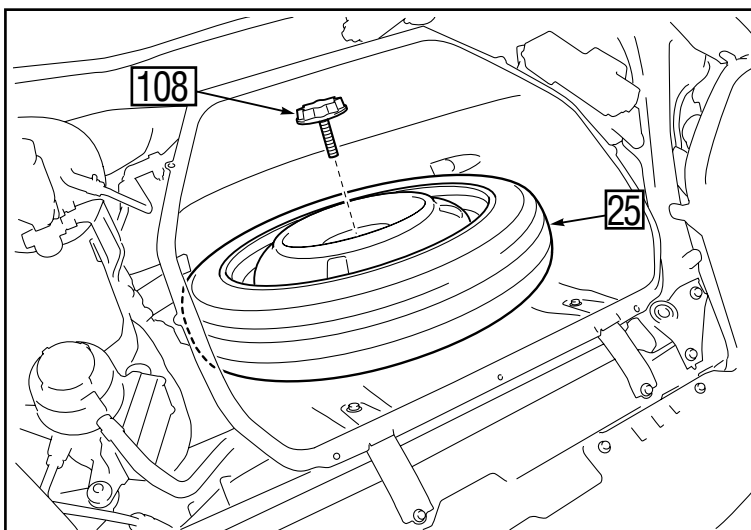


Figure 35

3. Remove the spare tire [25](#).
[108](#) : Bolt

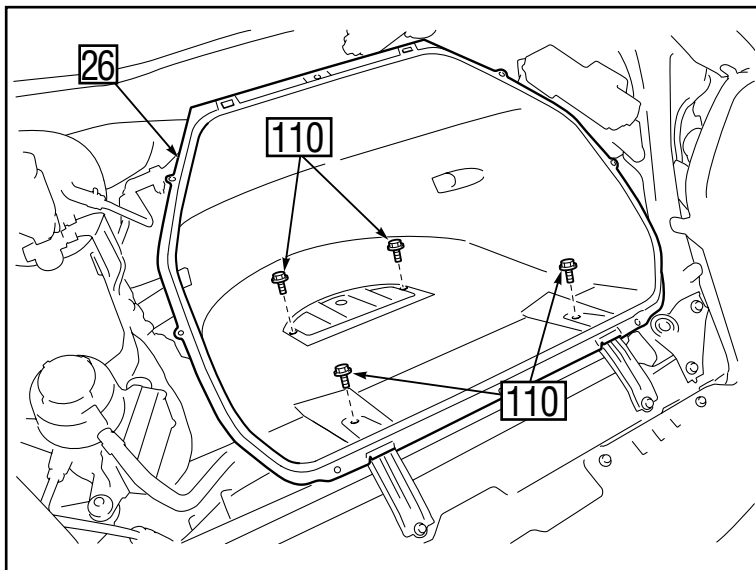


Figure 36

4.

Remove the front box 26.

110 : Bolt (4x)

DRILLING THE HOLES

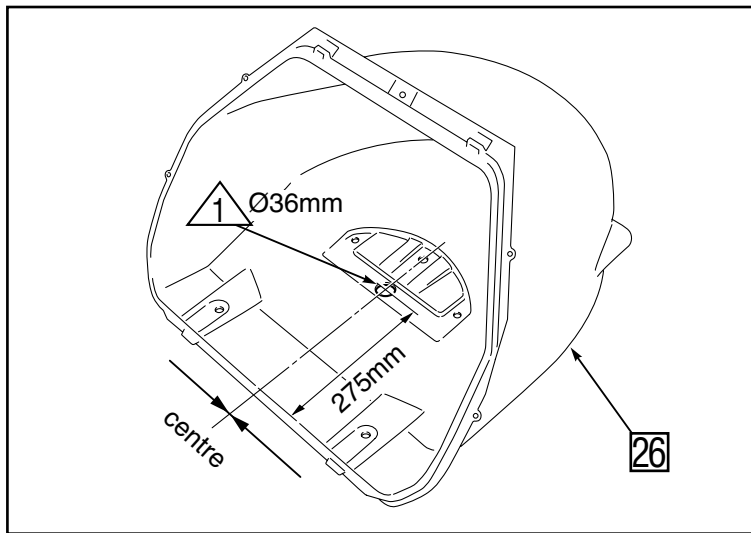





Figure 37

1.
 - a) Measure and mark the hole centre  Ø36mm on the front box .
 - b) Drill the hole .

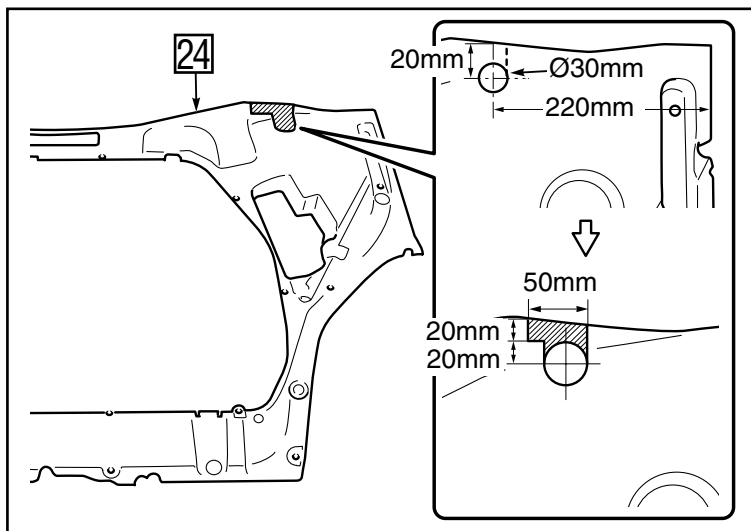




Figure 38

2.
 - a) Drill a Ø30mm hole in the luggage compartment trim box  following the dimensions shown.
 - b) Cut and remove the section marked  on the diagram following the dimensions shown.

WIRE HARNESS INSTALLATION (BOOT)

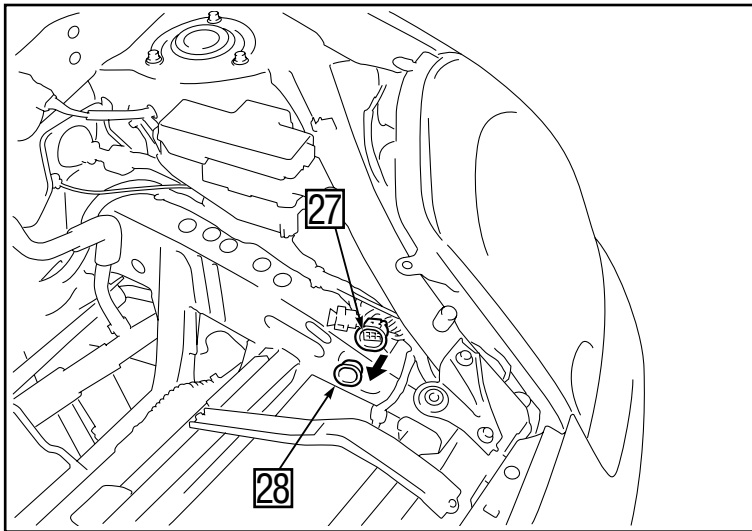


Figure 39

1.

Locate the 6P connector 27 (grey) and remove the cap 28 from the connector 27.

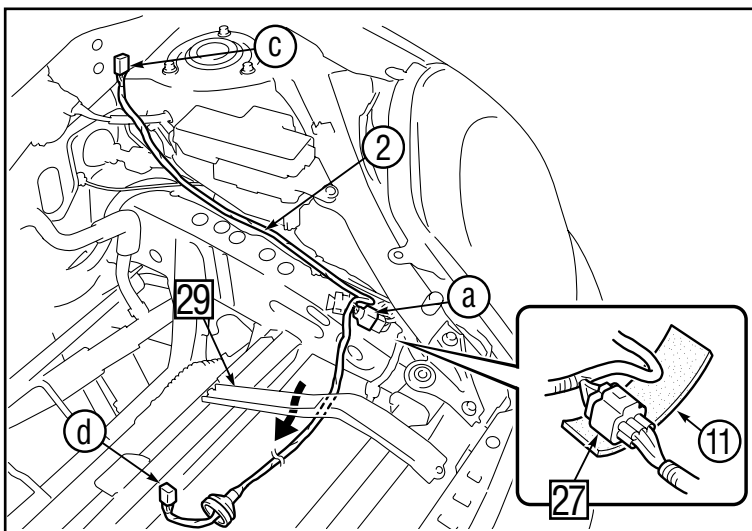


Figure 40

2.

- a) Connect the 6P connector a (grey) of the TVSS wire harness (boot) 2 to the pre-wired 6P connector 27 (grey).
- b) Wrap the 6P connector 27 and a in the foam tape 11.
- c) Route the TVSS wire harness (boot) 2 with the grommet under the bracket 29.

3.

Route and attach the TVSS wire harness (boot) 2 to the vehicle wire harness using the wire ties 12.

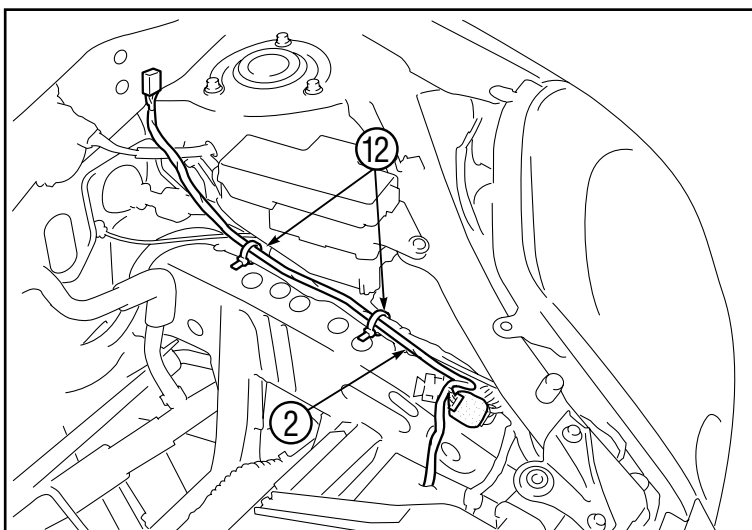


Figure 41

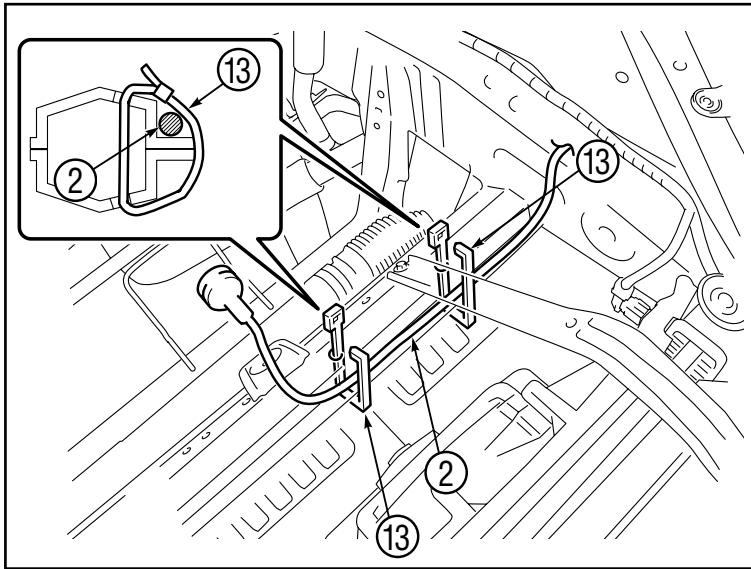


Figure 42

4.

Run the wire ties ⑬ (2x) through the reinforcement holes.

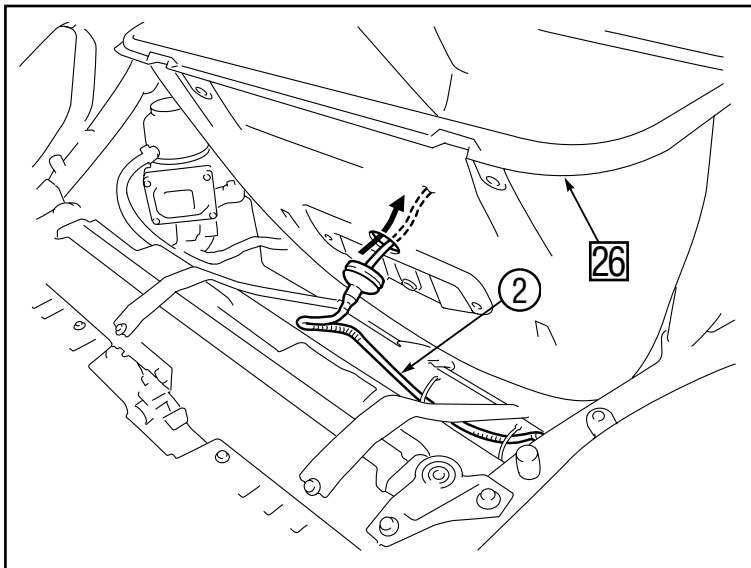


Figure 43

5.

Run the TVSS wire harness (boot) ② through the hole with Ø36mm which is made on the front box ⑳. Then fit the grommet closely to the hole.

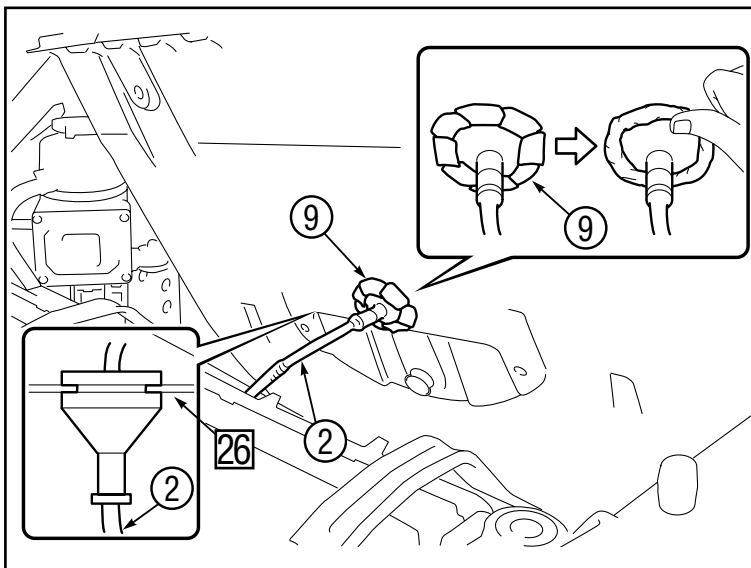


Figure 44

6.

Cut the butyl tape ⑨ in appropriate lengths and put them around the grommet pushing by fingers for waterproof.

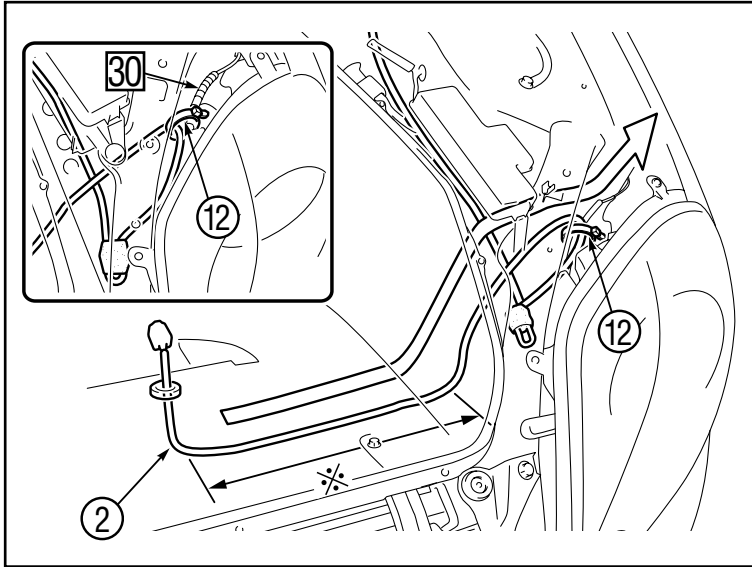


Figure 45

7.

Put the front box 26 temporarily at the original position. Then pull the extra length of the TVSS wire harness (boot) 2 and fix it to the headlamp harness 30 shown in Fig. 45 using the wire tie 12.

NOTE:

Ensure the harness is tightly routed in this area * and there is no slack.

MOUNTING THE SIREN

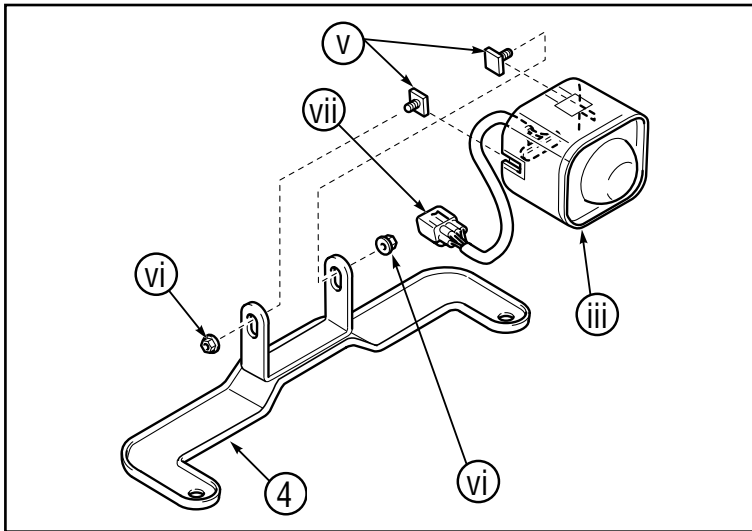


Figure 46

1.
 - a) Connect the siren wire harness (vii) to the siren (iii).
 - b) Fit the siren (iii) to the siren bracket (4).

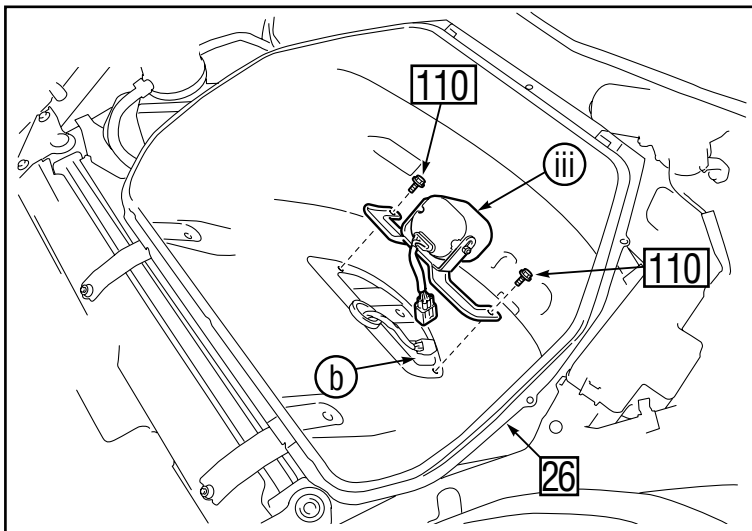


Figure 47

2. Fit the siren assembly to the front box (26) using the bolts (110) (2x).

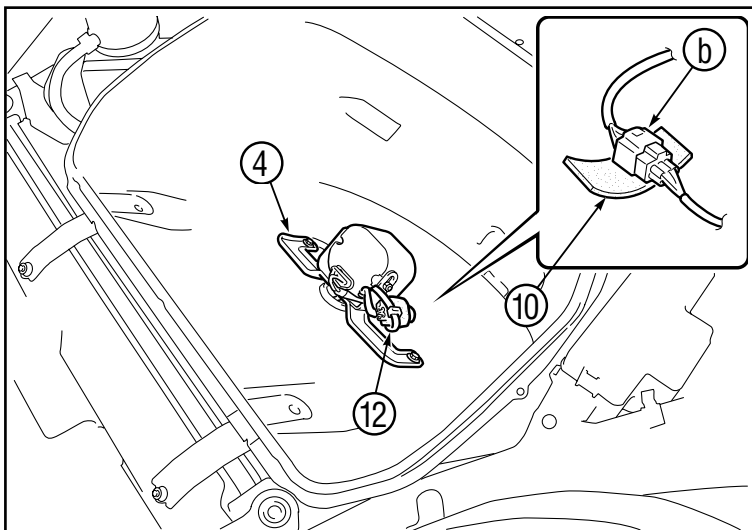


Figure 48

3.
 - a) Connect the 6P connector (grey) of the TVSS wire harness (boot) (2) to the 6P connector (b) (grey) of the siren harness.
 - b) Wrap the 6P connectors into the foam tape (11).
 - c) Attach the connectors to the siren bracket (4) using the wire tie (12).

MOUNTING THE HOOD SWITCH (BOOT)

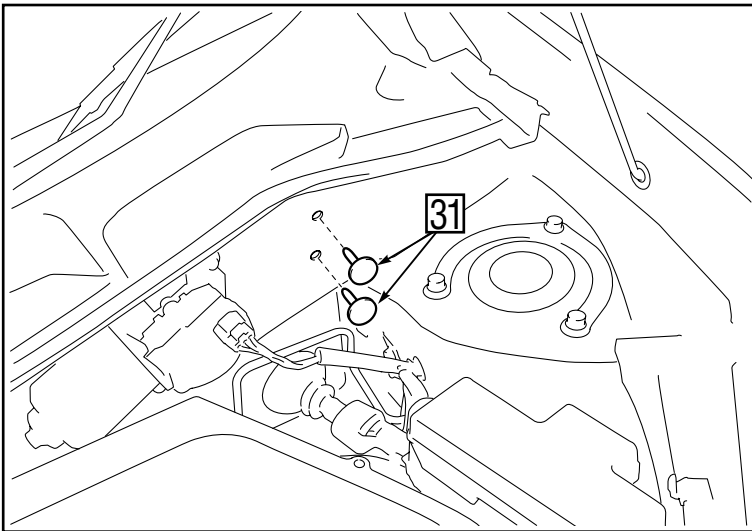


Figure 49

1. Remove the hole cover ③① (2x).

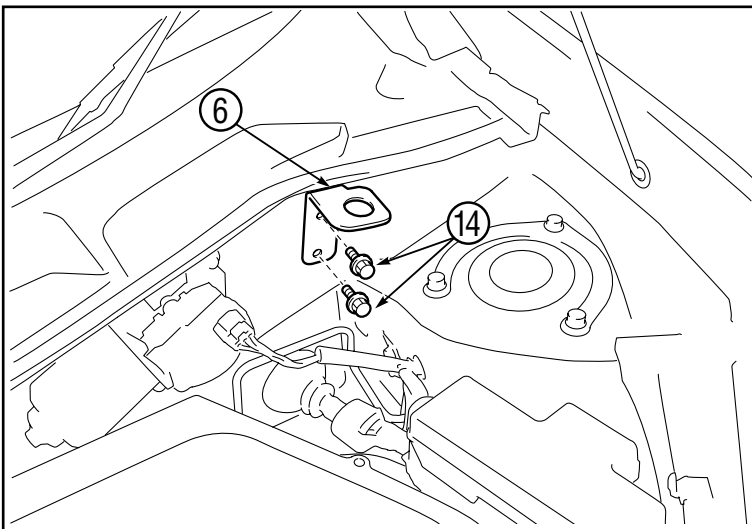


Figure 50

2. Attach the hood switch bracket (boot) ⑥ using the bolts ①④ (2x).

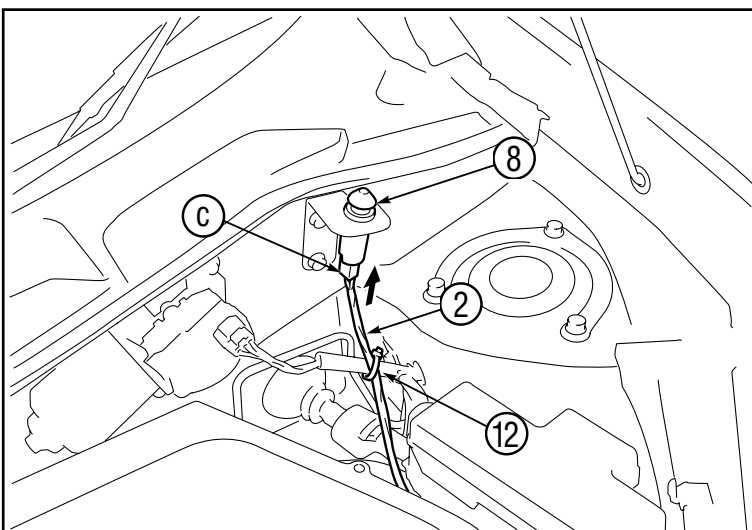


Figure 51

3.
 - a) Fit the hood switch ⑧ to the hood switch bracket (boot) ⑥.
 - b) Connect the 2P connector ③ of the TVSS wire harness (boot) ② to the hood switch ⑧.
 - c) Attach the TVSS wire harness (boot) to the vehicle wire harness using the wire tie ①② (1x).

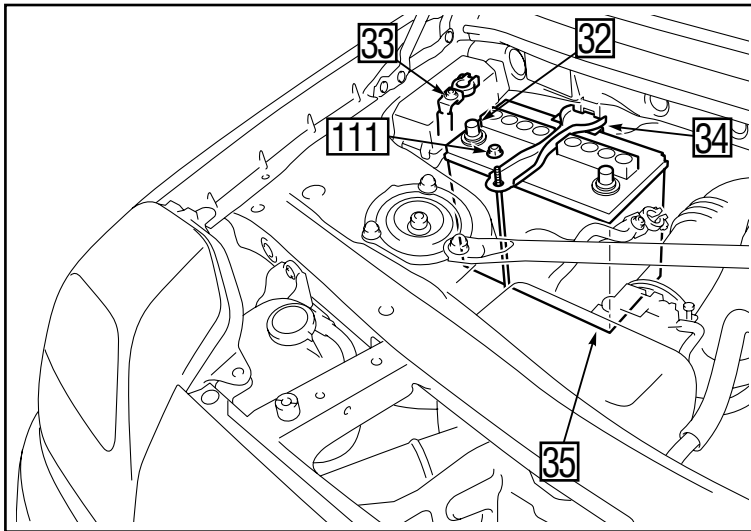
VEHICLE DISASSEMBLY (ENGINE)

Figure 52

1.
 - a) Disconnect the positive lead from the battery terminal 33.
 - b) Remove the bracket 34.
 - c) Remove the battery 35.
- 111 : Nut (1x)

WIRE HARNESS INSTALLATION (ENGINE)

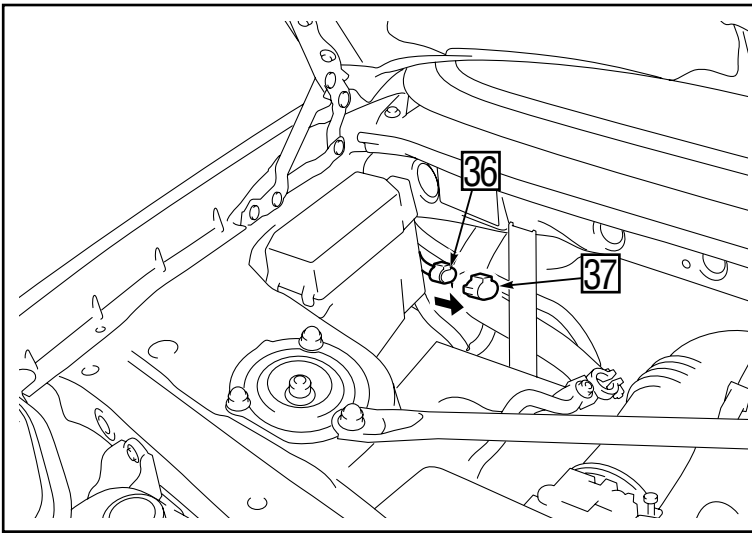


Figure 53

1.
 - a) Locate the pre-wired 2P connector ③⑥ (grey) in front of the relay box.
 - b) Remove the cap ③⑦ from the connector ③⑥.

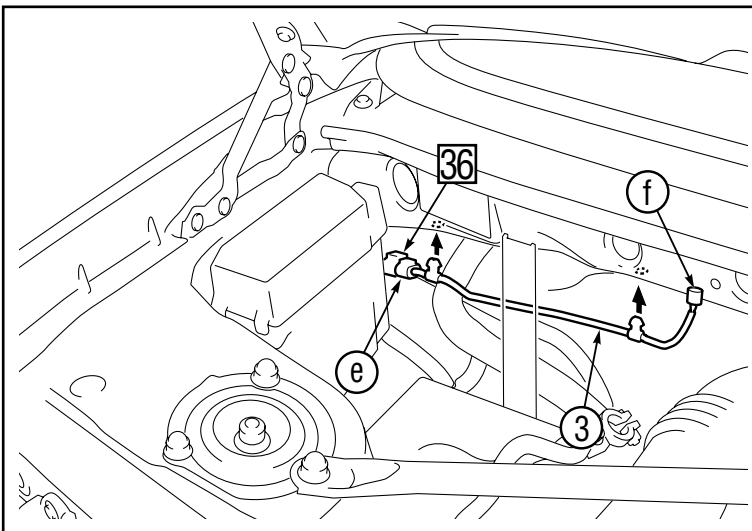


Figure 54

2.
 - a) Connect the 2P connector ④ (grey) of the TVSS wire harness (engine) ③ to the pre-wired 2P connector ③⑥ (grey).
 - b) Install the clips (2x) of the TVSS wire harness (engine) ③.

MOUNTING THE HOOD SWITCH (ENGINE)

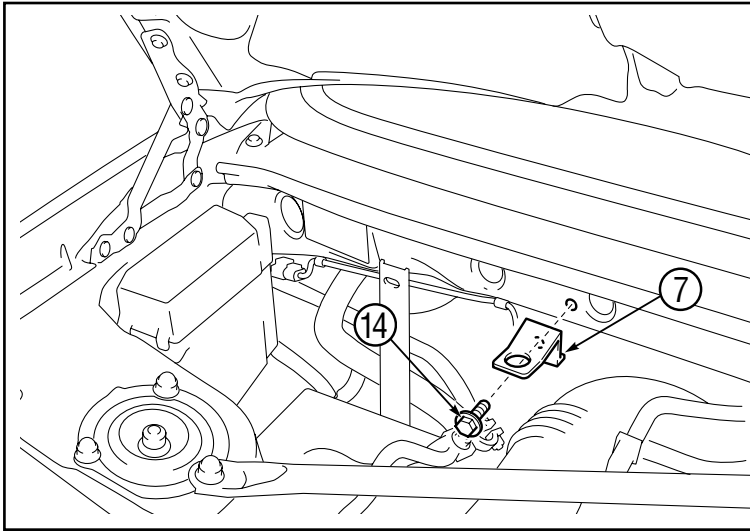


Figure 55

1.

Attach the hood switch bracket (engine) ⑦ using the bolt ⑭ (1x).

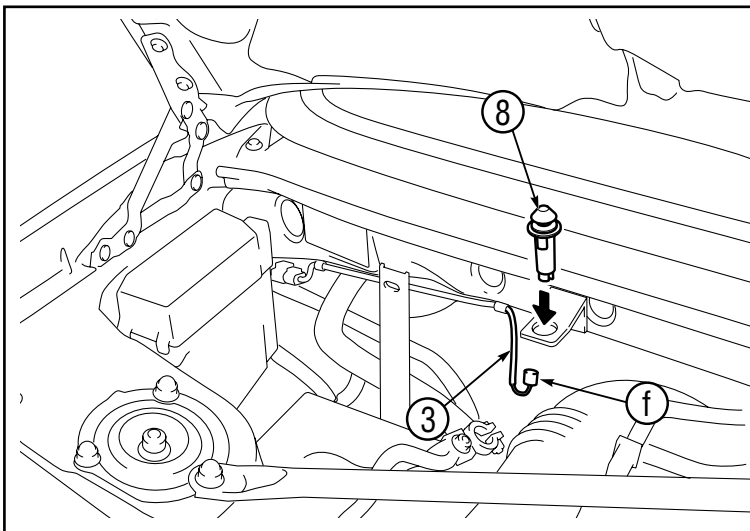


Figure 56

2.

- a) Fit the hood switch ⑧ to the hood switch bracket (engine) ⑦.
- b) Connect the 2P connector ① of the TVSS wire harness (engine) ③ to the hood switch ⑧.

MOUNTING THE TVSS ECU

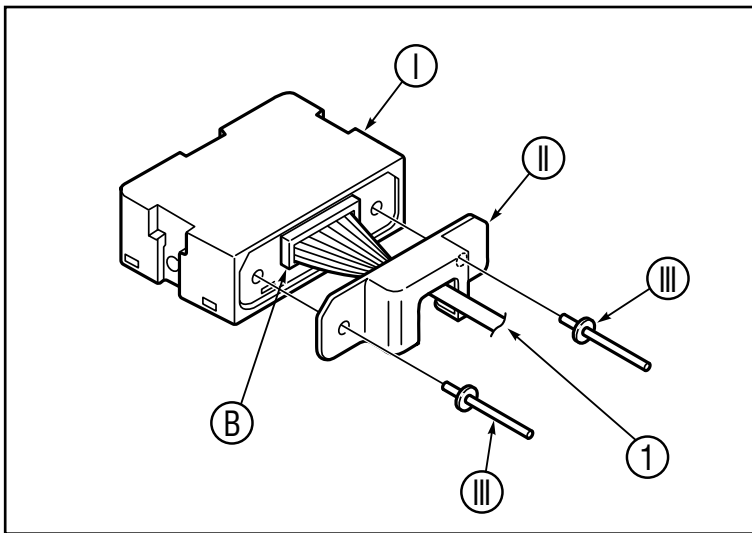


Figure 57

1.
 - a) Connect the TVSS wire harness (main) ① 26P connector ② (grey) to the TVSS ECU ①.
 - b) Fit the protective bracket ② to TVSS ECU ① with the blind rivets ③ (2x).

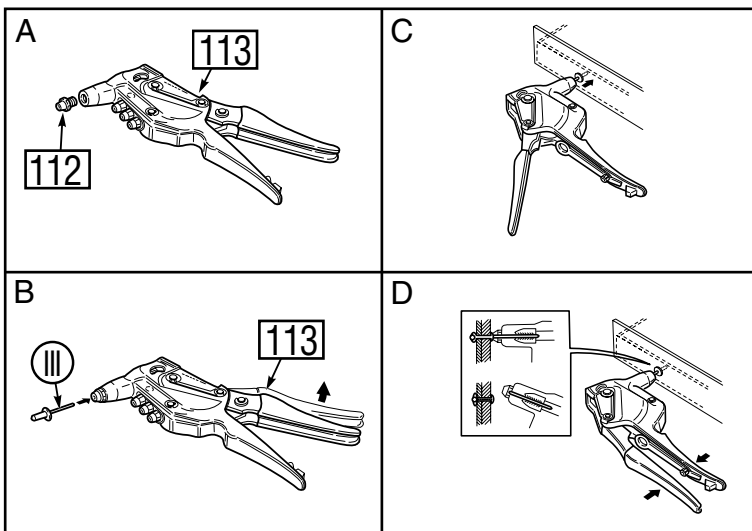


Figure 58

2.
 - a) Fit the nose adapter fitting ⑫ to the nose of the riveting tool ⑬.
 - b) Open the riveting tool ⑬ and put the blind rivet ⑭ on the nose.
 - c) Insert the tip of the blind rivet ⑭ through the hole in TVSS ECU ① as far as it will go.
 - d) Close the riveting tool ⑬ arms repeatedly until the blind rivet ⑭ comes away.

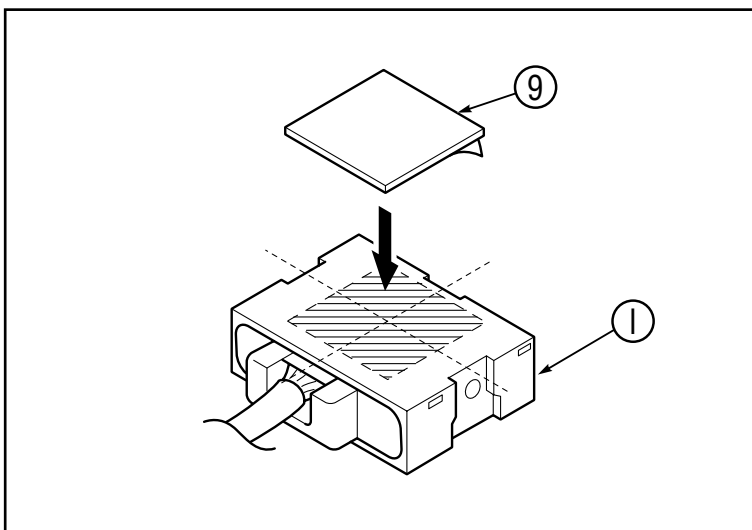


Figure 59

3.
 - a) Attach the second butyl tape ⑨ to the bottom of the TVSS ECU ①.

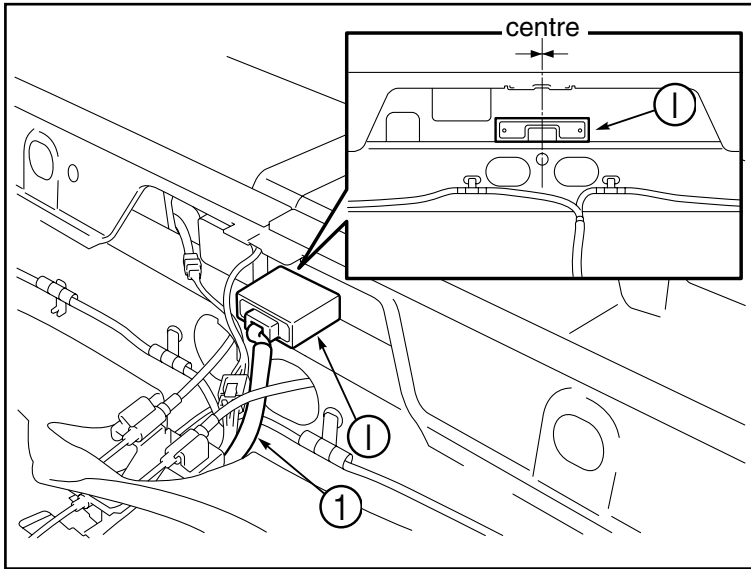


Figure 60

4.

Attach the TVSS ECU ① on the body floor surface as shown in Fig. 60.

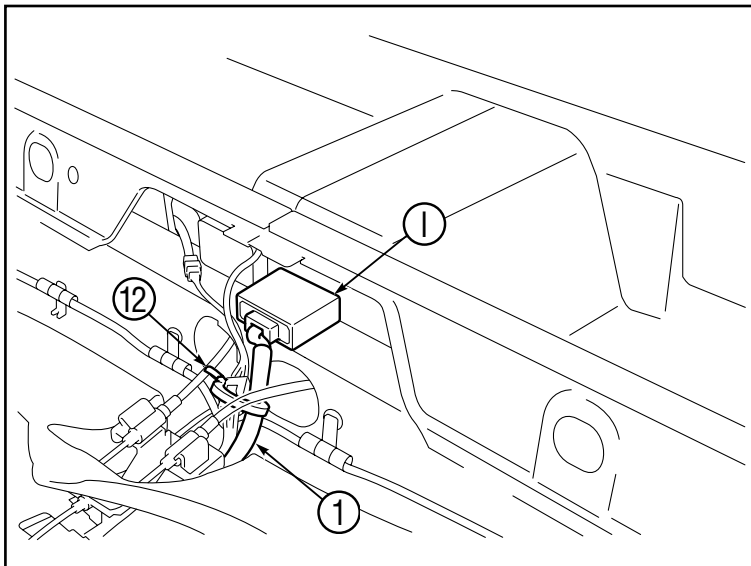
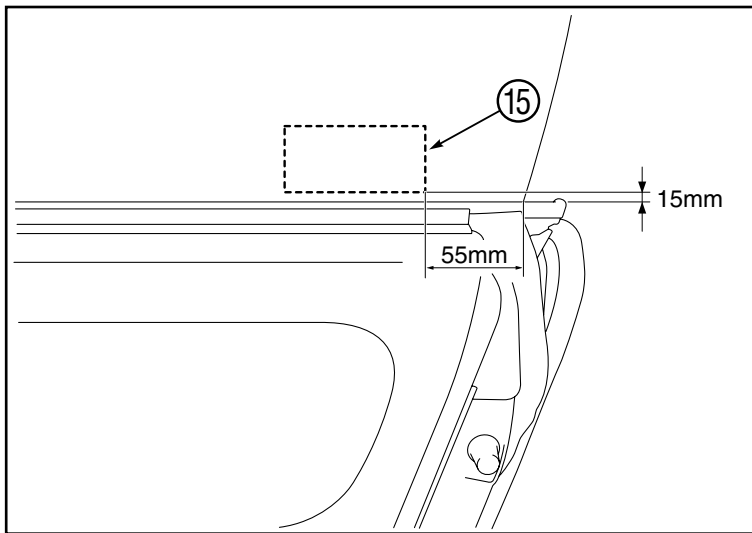


Figure 61

5.

Attach the 4P connector ① of the TVSS wire harness (main) ① and the TVSS wire harness (main) ① using the wire tie ⑫.

ATTACHING THE STICKERS*Figure 62*

1.
 - a) Clean the inside surface of both door windows.
 - b) Attach the stickers ⑮ to the inside of both windows as shown.

REFIT THE TRIM AND REMOVED PARTS.

TOYOTA
GENUINE PARTS