

 **TOYOTA**

TNS300

TOYOTA NAVIGATION SYSTEM



RAV4 (RHD)

INSTALLATION INSTRUCTIONS

FOR ****A2*R**

PART NUMBER

NAVIGATION KIT

08545-00805

PRECAUTIONS

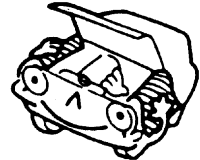


PLEASE READ THOROUGHLY THESE PRECAUTIONS BEFORE THE INSTALLATION

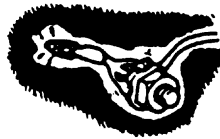
- Be sure to disconnect the negative (-) lead from the battery terminals.



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



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



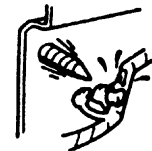
- Use the correct tool when tightening bolts or nuts.



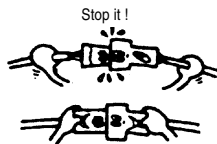
- When passing the wires through the dashboard or other panels, use a grommet to ensure waterproofing.
- Protect the wiring with tape when it is passed through a hole.



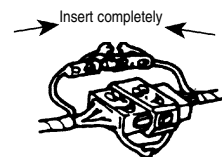
- Before drilling a hole, check that the rear of the mounting wall is clear.



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



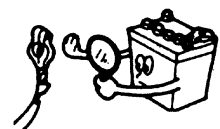
- Be sure to firmly tighten connectors and terminals.



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



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



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



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

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AUDIO & NAVIGATION APPLICATION CHART

TMME-CS group - May 2nd, 2003

RAV4 MMC **A2*

(RHD)

+ ADD-ON UNIT(S)

COMBINATION		HEAD UNIT	REQUIRED ADDITIONAL PARTS
1	Radio/Cassette (only)	08600-00964 (orange)	Cover plate (55522-42010)
2	Radio/Cassette + CD-Deck	08600-00964 (orange)	-
3	Radio/Cassette + CD-Changer	08600-00964 (orange) 08600-00964 (orange) 08600-00964 (orange)	Cover plate (55522-42010) F/K (08695-00803) + Cover plate (55522-42010)
4	Radio/CD (only)	08600-00966 (orange)	Cover plate (55522-42010)
5	Radio/CD + CD-Deck	08600-00966 (orange)	-
6	Radio/CD + CD-Changer	08600-00966 (orange) 08600-00966 (orange) 08600-00966 (orange)	Cover plate (55522-42010) F/K (08695-00803) + Cover plate (55522-42010)

0.6 CD-Changer (orange) (08601-00914) 0.6 CD-Deck (orange) (08601-00909)

Seat mount CD-Changer TM0461 (08601-00912)

Navigation System TNS300 (08545-00805)

MOP: Factory installed option - (*): Outside temperature sensor PZ432-R0310-00 can be retro-fitted. - Subwoofer PZ08691-00834: On the floor under the driver seat (if free)
F/K 08695-00803: Hanging seat mounting kit - (1): Hanging under the passenger seat - (2): On the floor under the passenger seat

AUDIO & NAVIGATION APPLICATION CHART
 TMME-CS group - May 2nd, 2003

RAV4 MMC **A2*

(RHD)

+ ADD-ON UNIT(S)

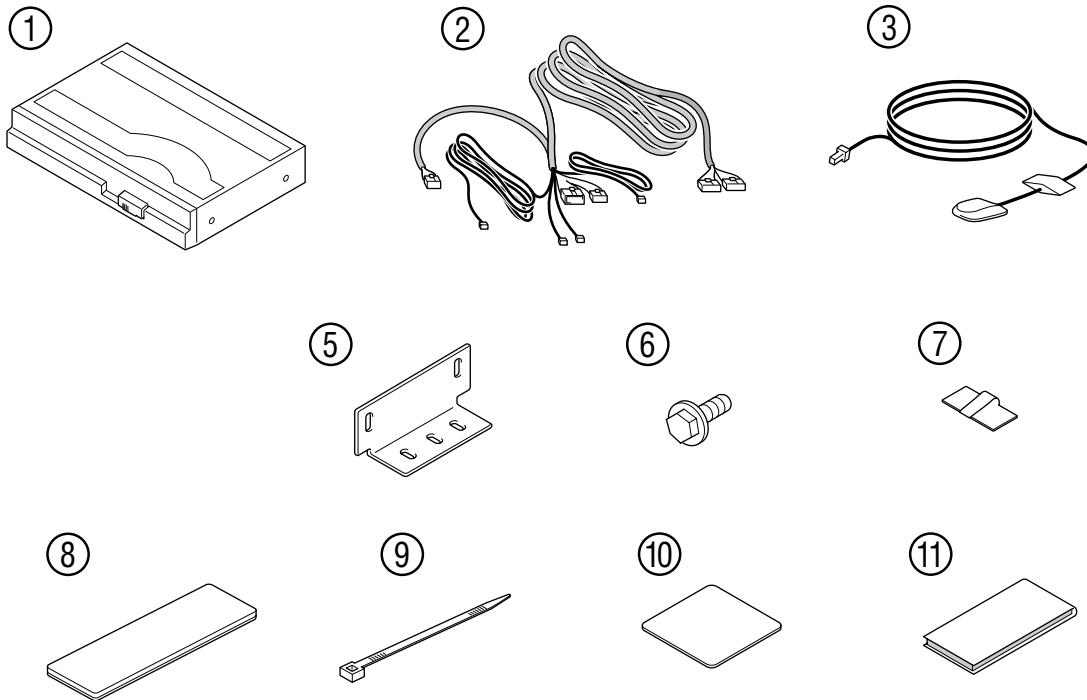
		0.6 CD-Changer (orange) (08601-00914) 0.6 CD-Deck (orange) (08601-00909)	
		Seat mount CD-Changer TM0461 (08601-00912)	Navigation System TMS300 (08545-00805)
COMBINATION		HEAD UNIT	REQUIRED ADDITIONAL PARTS
7	Radio/Cassette (only)	MOP-Unit or 08600-00954(orange) (*)	-
8	Radio/Cassette + CD-Changer	MOP-Unit or 08600-00954 (orange) (*)	F/K (08695-00803) F/K (08695-00803)
9	Radio/Cassette + Navigation (TBT)	MOP-Unit or 08600-00954(orange) (*)	●(2) ●(2)
10	Radio/Cassette + CD-Changer + Navigation (TBT)	MOP-Unit or 08600-00954(orange) (*)	●(2) ●(2)
11	Radio/CD (only)	MOP-Unit or 08600-00959 (orange) (*)	-
12	Radio/CD + CD-Changer	MOP-Unit or 08600-00959 (orange) (*)	F/K (08695-00803) F/K (08695-00803)
13	Radio/CD + Navigation (TBT)	MOP-Unit or 08600-00959 (orange) (*)	●(2) ●(2)
14	Radio/CD + CD-Changer + Navigation (TBT)	MOP-Unit or 08600-00959 (orange) (*)	●(2) ●(2)

Wide 2-DIN Head-Unit

MOP: Factory installed option - (*): Outside temperature sensor PZ432-R0310-00 can be retro-fitted. - Subwoofer PZ08691-00834: On the floor under the driver seat (if free)
 F/K 08695-00803: Hanging seat mounting kit - (1): Hanging under the passenger seat - (2): On the floor under the passenger seat

COMPONENT PARTS

08545-00805



No.	Part name	Quantity
①	COMPUTER	1
②	WIRE HARNESS	1
③	GPS-ANTENNA	1
⑤	COMPUTER BRACKET	2
⑥	BOLT (M5x8)	4
⑦	CORD CLAMP	2
⑧	FOAM	2
⑨	WIRE TIE	5
⑩	EARTH PLATE	1
⑪	BUTYL TAPE	4

REQUIRED PARTS**NAVIGATION DISC**

To be ordered separately.

Please refer to the list of available discs for Turn by Turn Navigation Systems (Access to accessories).

OWNER'S MANUAL

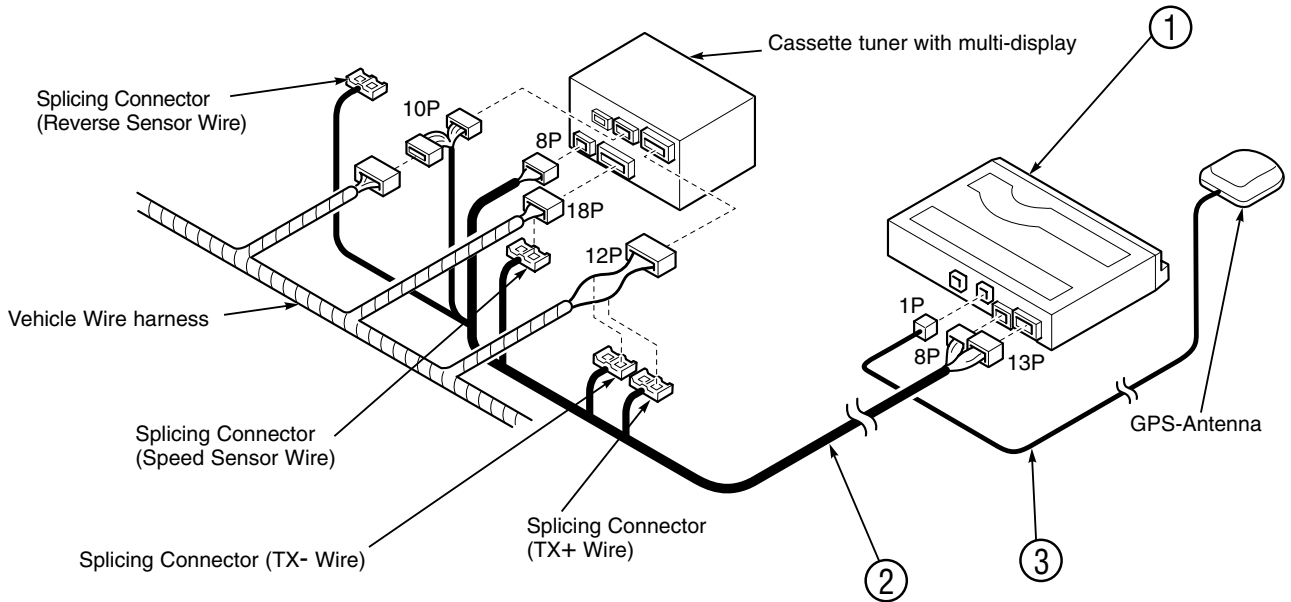
To be ordered separately.

WIRING CONNECTION

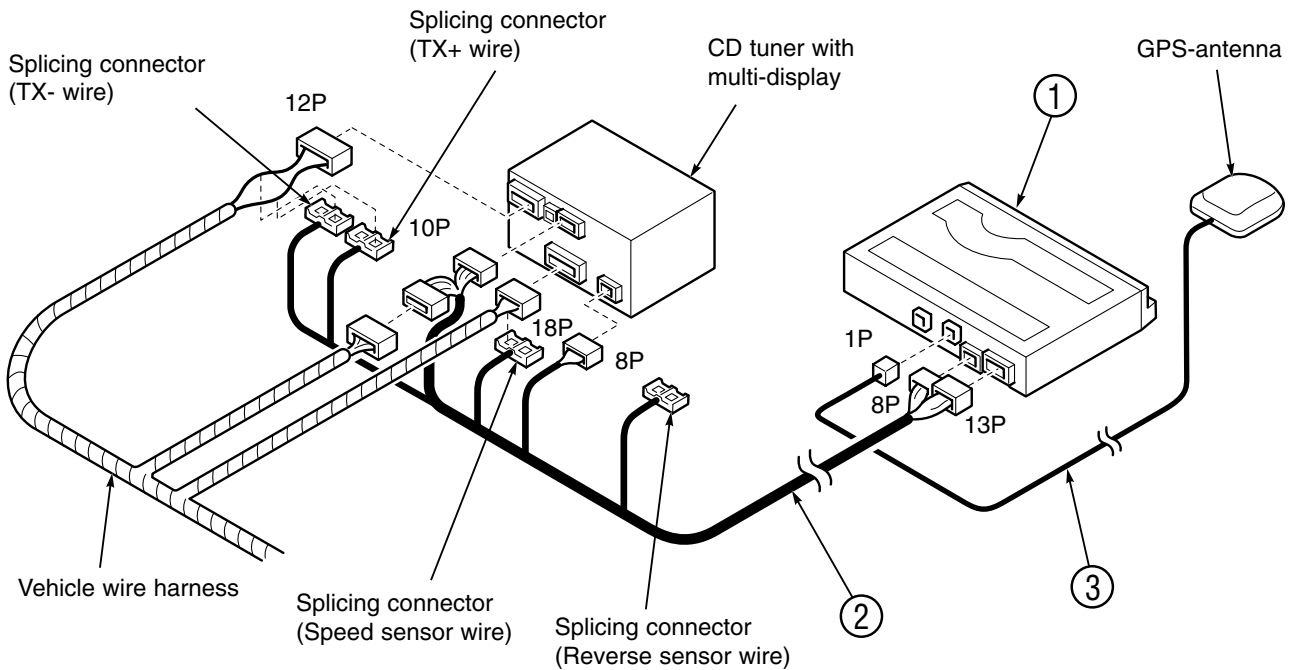


Connection Method:

CASSETTE TAPE PLAYER TYPE

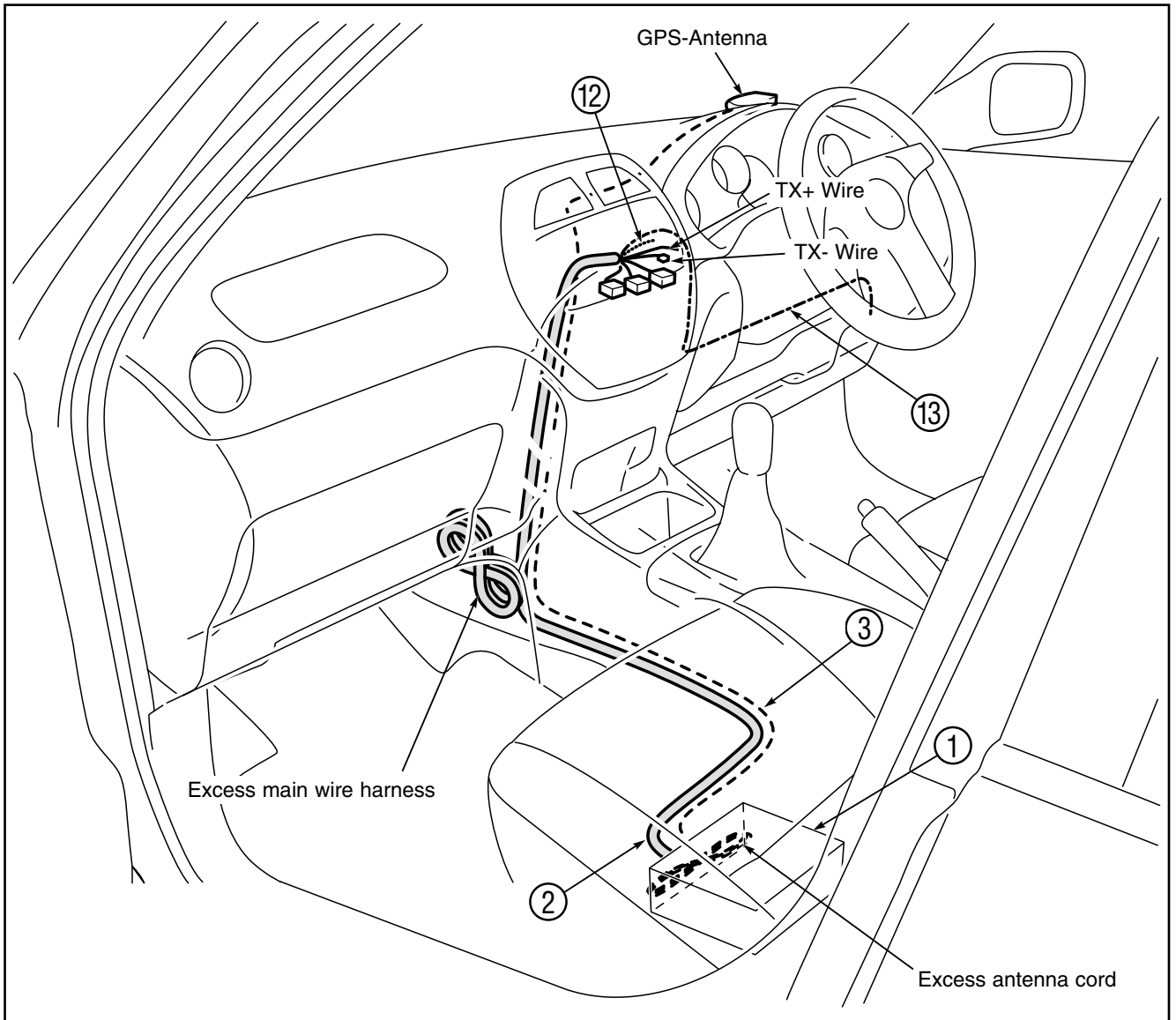


CD PLAYER TYPE




No.	Part name
①	COMPUTER
②	WIRE HARNESS
③	GPS-ANTENNA

INSTALLATION OVERVIEW



- (12) WIRE HARNESS - SPEED LINE (VIOLET/WHITE)
- ==== (2) WIRE HARNESS
- (3) ANTENNA CORD
- - - - (13) WIRE HARNESS REVERSE SENSOR WIRE (RED/BLUE)

VEHICLE DISASSEMBLY 

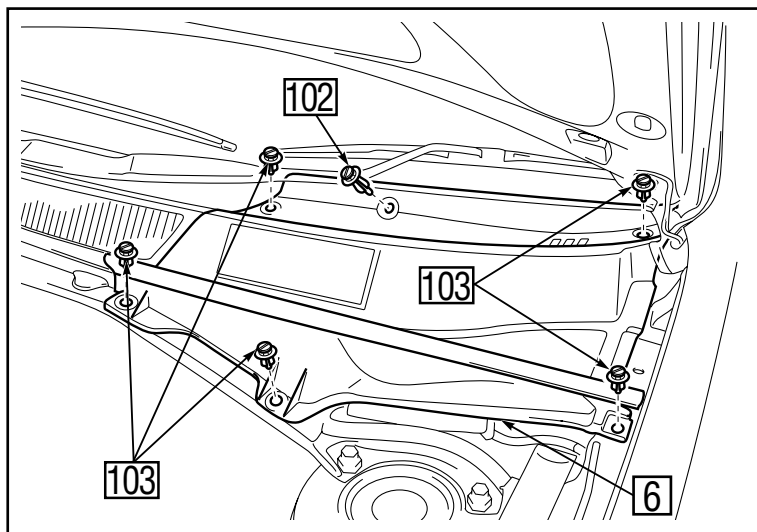


Fig. 1

1. Remove the battery cover **6** to disconnect the battery.
102: Clip (1x)
103: Clip (5x)

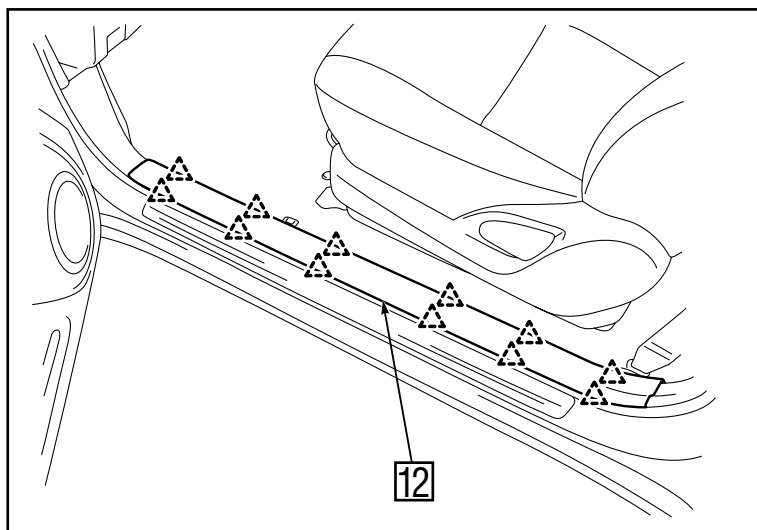


Fig. 2

2. Remove the front door scuff plate (L) **12**.
 △: Hook (3 door :15x / 5 door :11x)

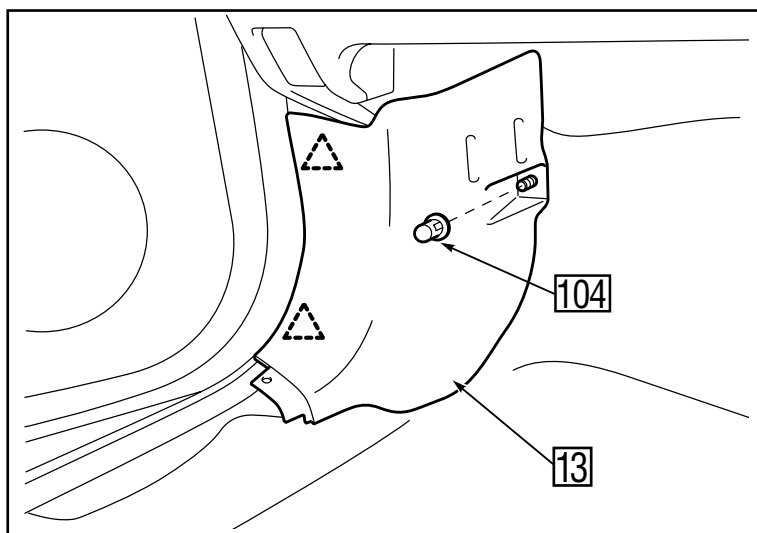


Fig. 3

3. Remove the kick panel (L) **13**.
 △: Hook (2x)
104: Nut (1x)

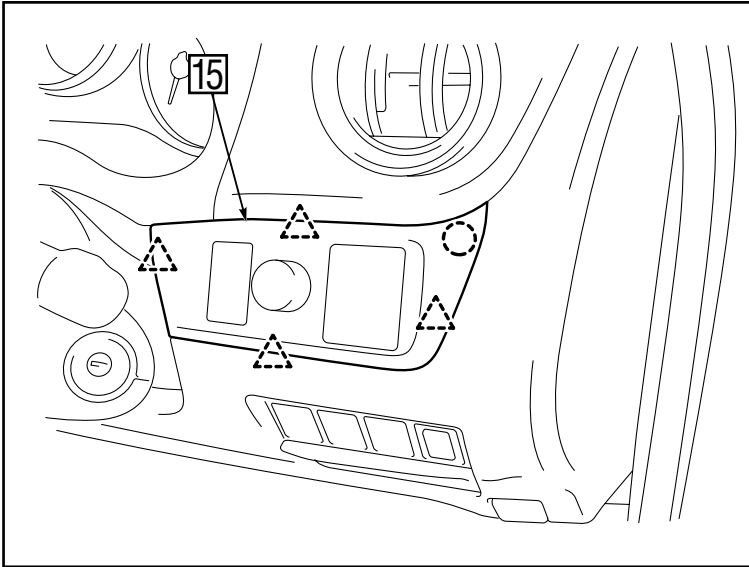


Fig. 4

4. Remove the instrument panel finish upper panel **15**.
 ○: Clip (1x)
 △: Hook (4x)

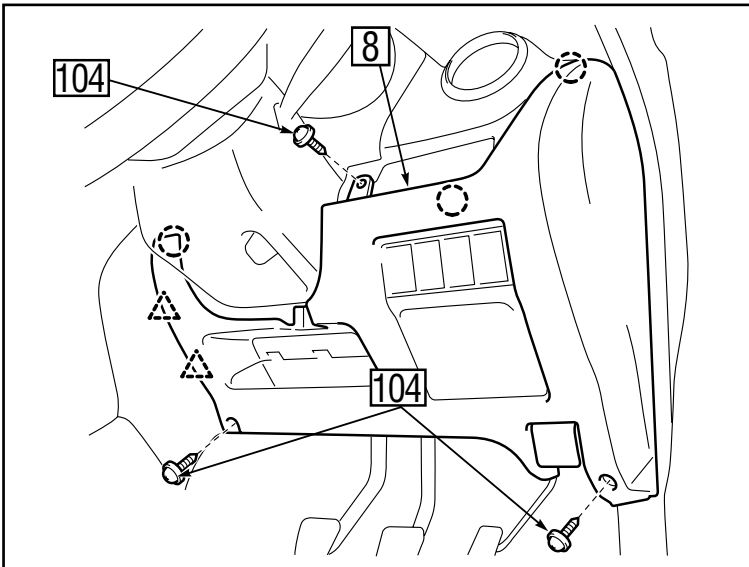


Fig. 5

5. Remove the instrument finish lower panel **8**.
 △: Hook (2x)
104: Screw (3x)
 ○: Clip (3x)

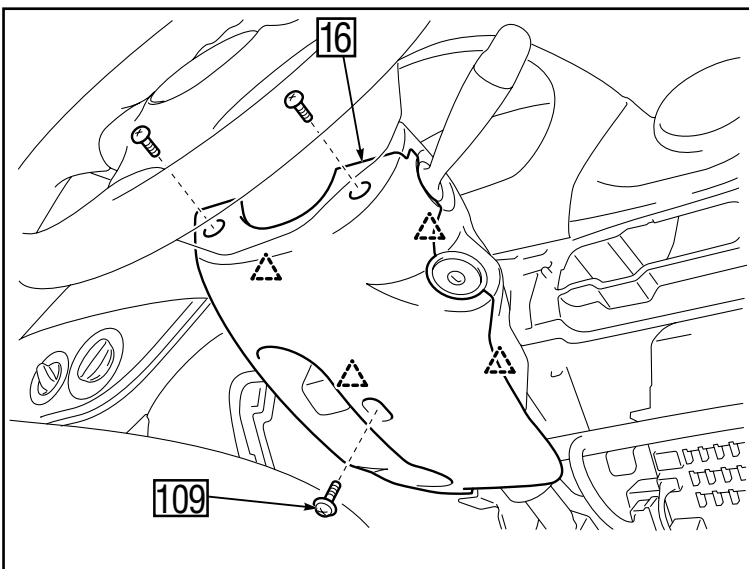


Fig. 6

6. Remove the steering column lower cover **16**.
 △: Hook (4x)
109: Screw (3x)

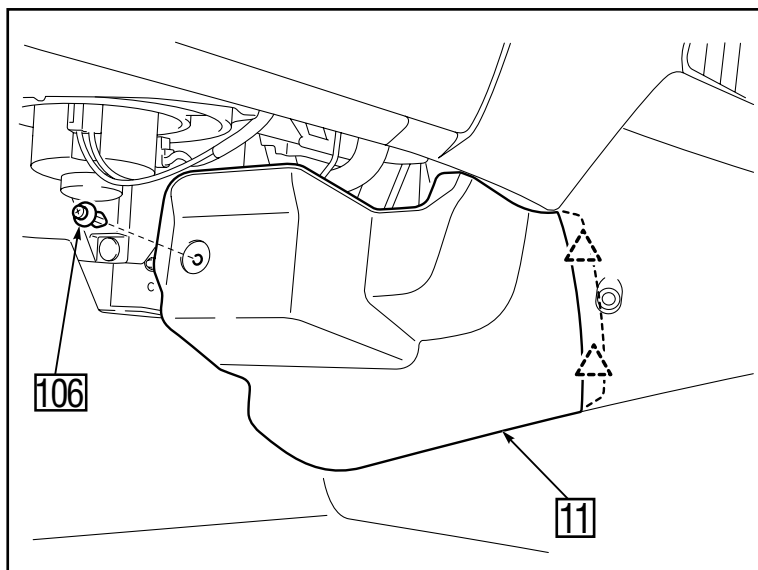


Fig. 7

- 7. Remove the centre lower cover (L) 11.
△: Hook (2x)
106: Clip (1x)

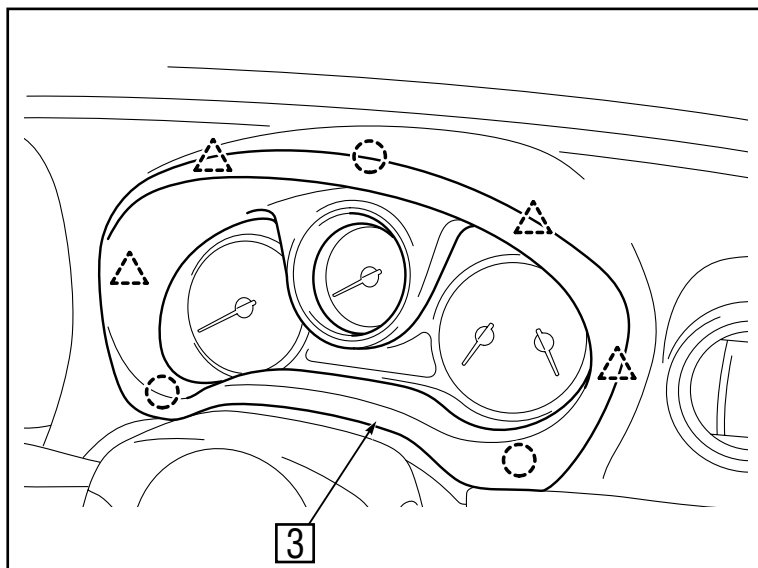


Fig. 8

- 8. Remove the meter cluster panel 3.
△: Hook (4x)
○: Clip (3x)

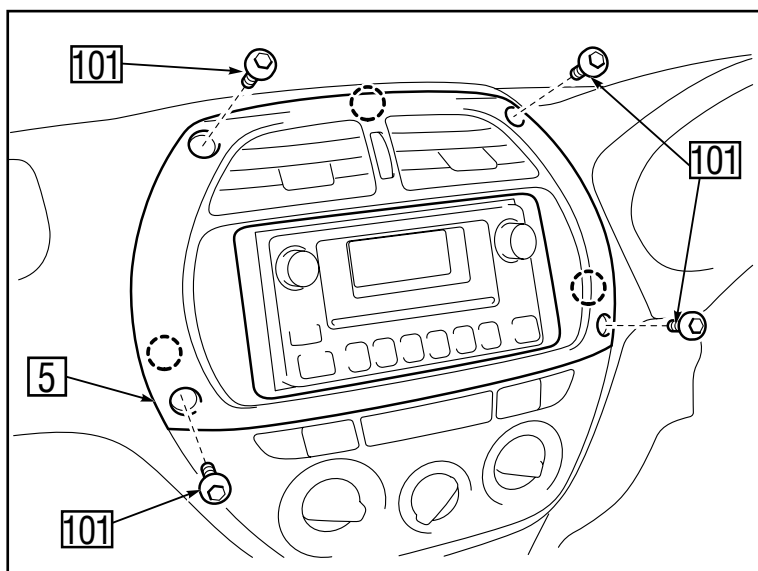


Fig. 9

- 9. Remove the centre cluster panel 5.
101: Bolt (4x)
○: Clip (3x)

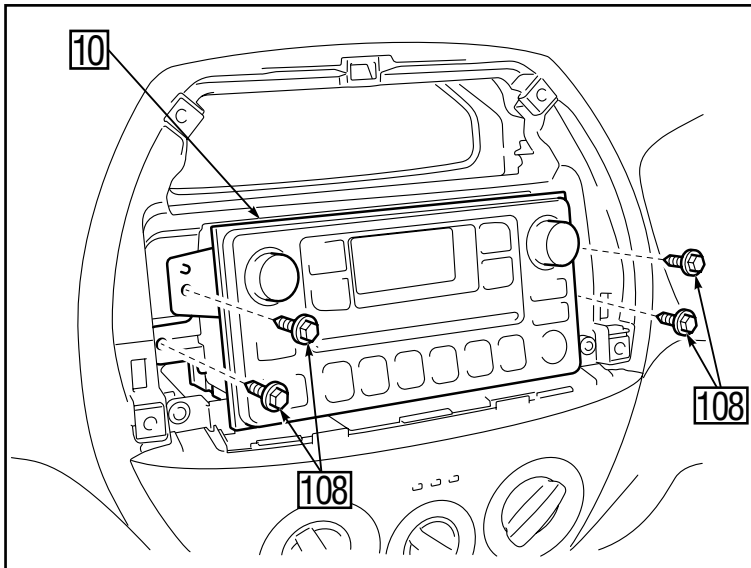


Fig. 10

10. Remove the CD (Cassette) tuner with multi display **10**.
108: Bolt (4x)

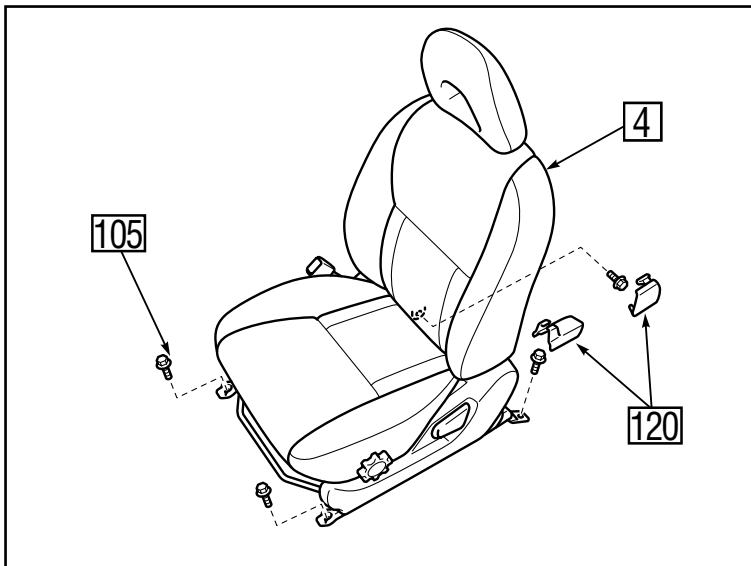


Fig. 11

11. Remove the passenger's seat **4**.
120: Cover (2x)
105: Bolt (4x)

CAUTION
 Fasten the bolt with specified torque wrench (25 N.m) when reassembling.

CAUTION
 Carefully disconnect the airbag connector.

INSTALLATION OF THE GPS-ANTENNA

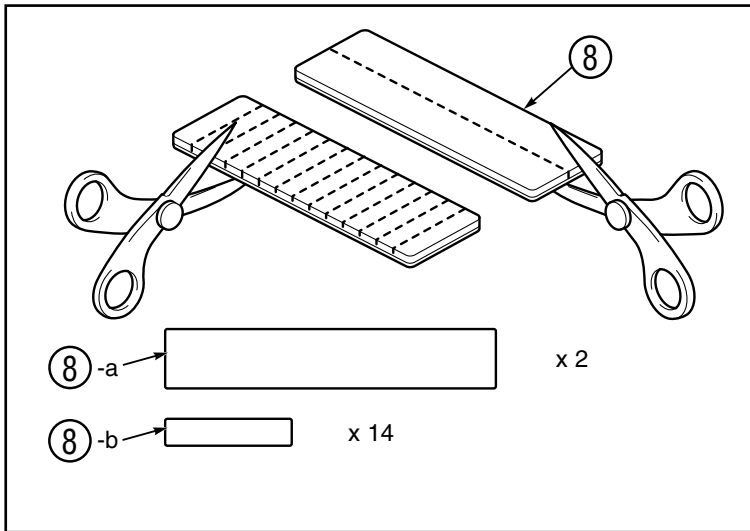


Fig. 12

1. Cut the foam ⑧ into 2 large pieces and 14 small pieces as shown in the illustration.
 ⑧-a: Foam tape (2x)
 ⑧-b: Foam tape (14x)

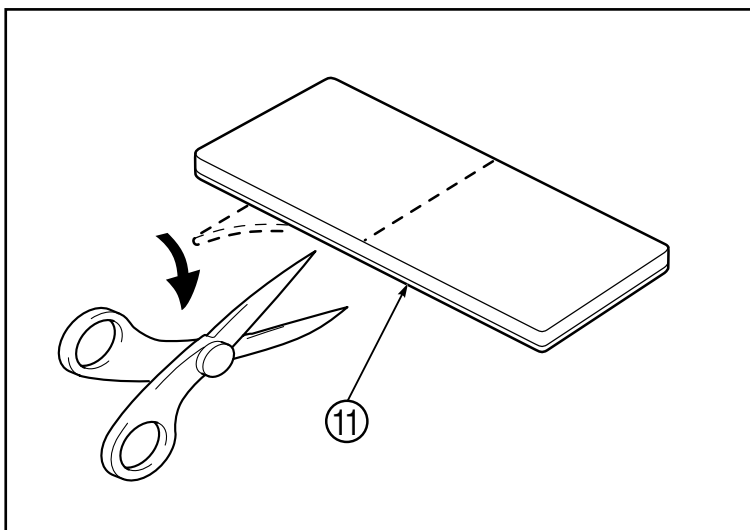


Fig. 13

2. Cut one butyl tape ⑪ into 2 equal sized pieces.

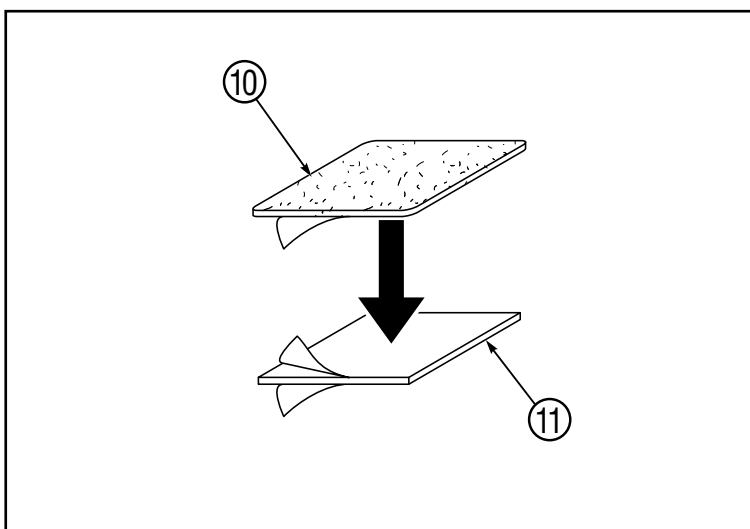


Fig. 14

3.
 - a) Remove the release paper of the earth plate ⑩ and attach the butyl tape ⑪ as shown.
 - b) Apply the tapes ⑪ to the adhesive side of the earth plate ⑩.

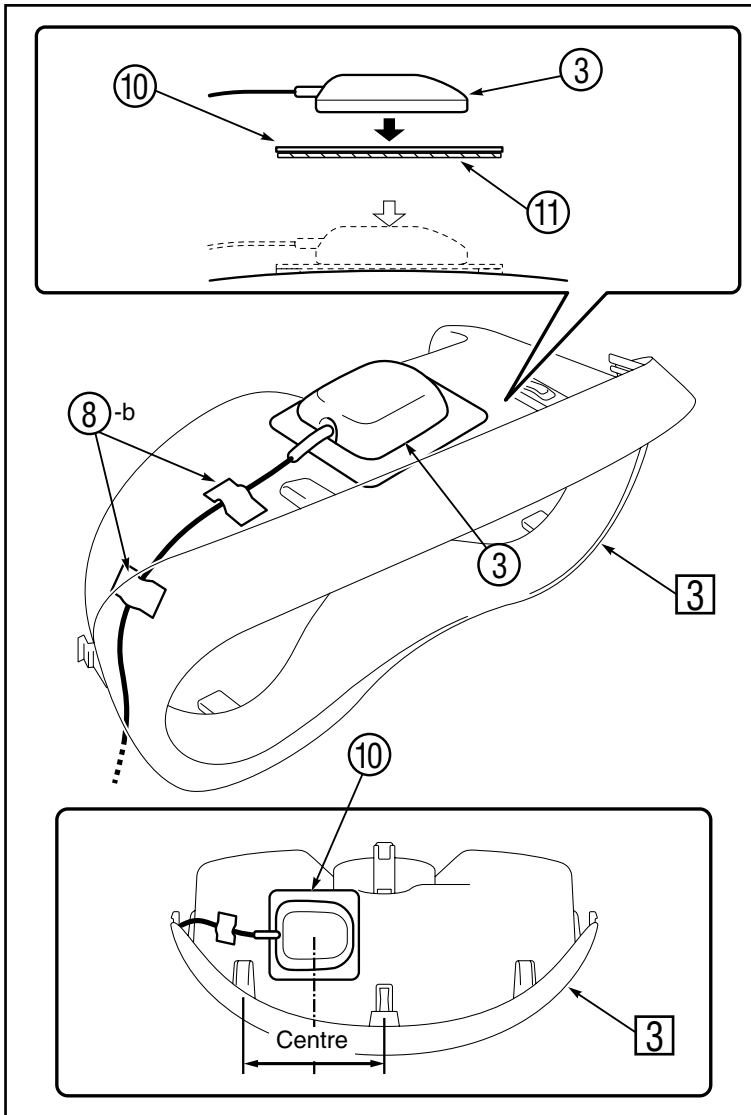


Fig. 15

4.
 - a) Attach the earth plate ⑩ to the meter cluster panel ③ as shown and mount the GPS-antenna ③ to the earth plate ⑩.

CAUTION

Clean the installation position surface before attaching the earth plate ⑩.

- b) Fix the antenna cord using the foam ⑧-b (2x).

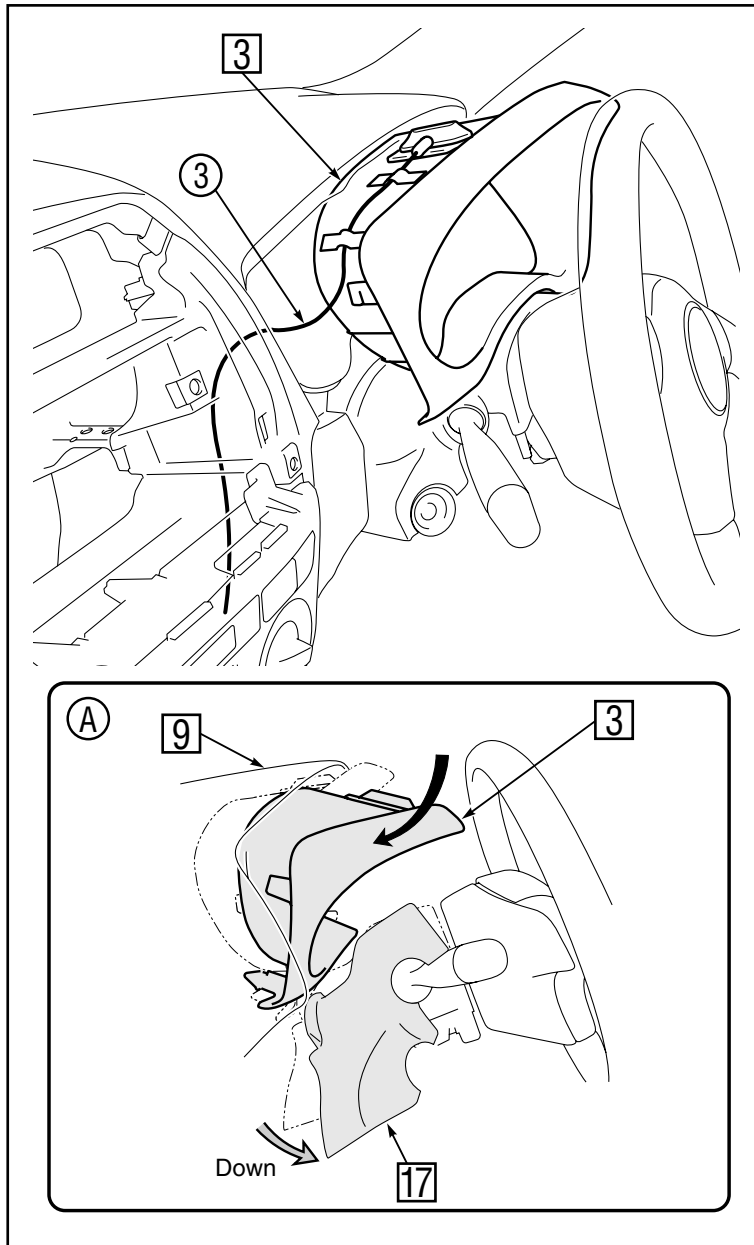



Fig. 16

5.
 - a) Route the antenna cord ③ as shown in the illustration.
 - b) According to the illustration ①, push down the lower steering column cover ⑰, and return the meter cluster ③ to its original position, without rubbing the GPS-antenna ③ against the instrument panel ⑨.

CAUTION

Be careful not to slip away the GPS-antenna ③ from the earth plate ⑩.

WIRE HARNESS INSTALLATION 

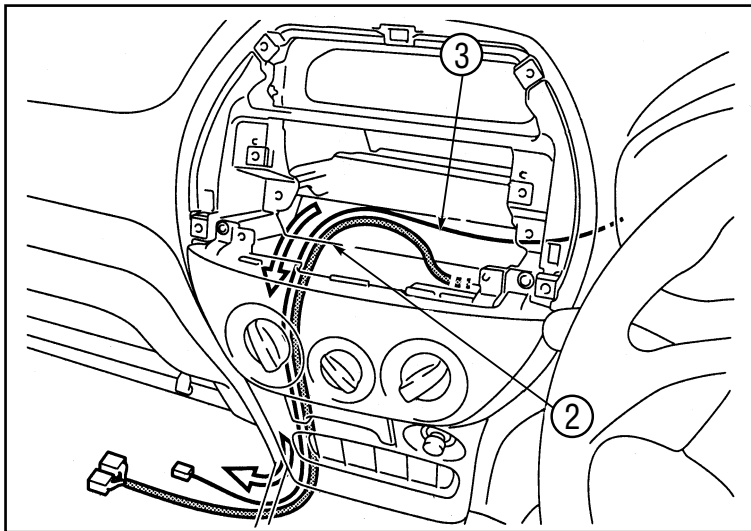


Fig. 17

1. Route the wire harness ② and GPS-antenna ③ along the midconsole area to the ECU location.

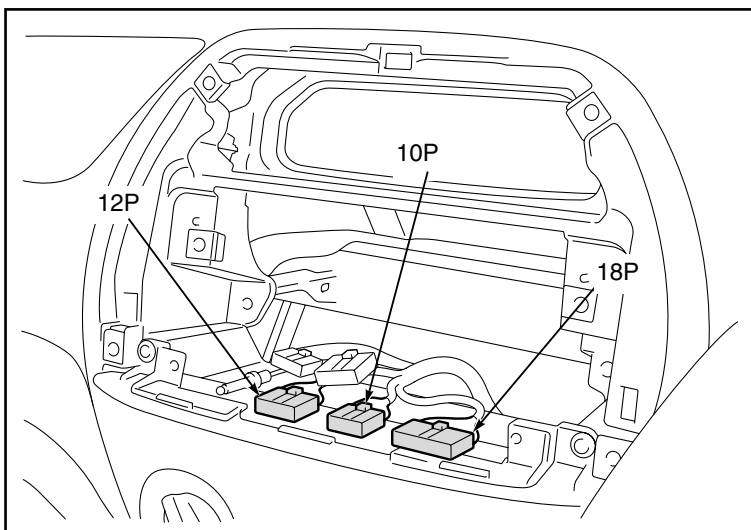


Fig. 18

2. The connectors shown in the illustration are the vehicle side connectors to be spliced.

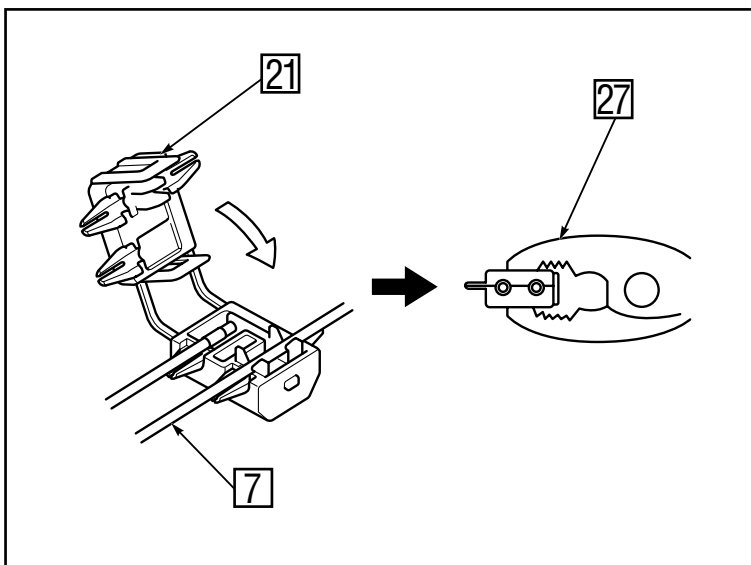


Fig. 19

● WIRE SPLICING CONNECTOR INSTRUCTIONS

3.
 - a) Remove appropriate amount of tape wrapping the vehicle side harness to be connected.
 - b) Insert the vehicle harness ⑦ to be connected securely into the guide slit.
 - c) After inserting the vehicle side harness into the guide slit, fix the splicing connector ⑳, and lock it securely using a plier ㉟ until the connector clicks.

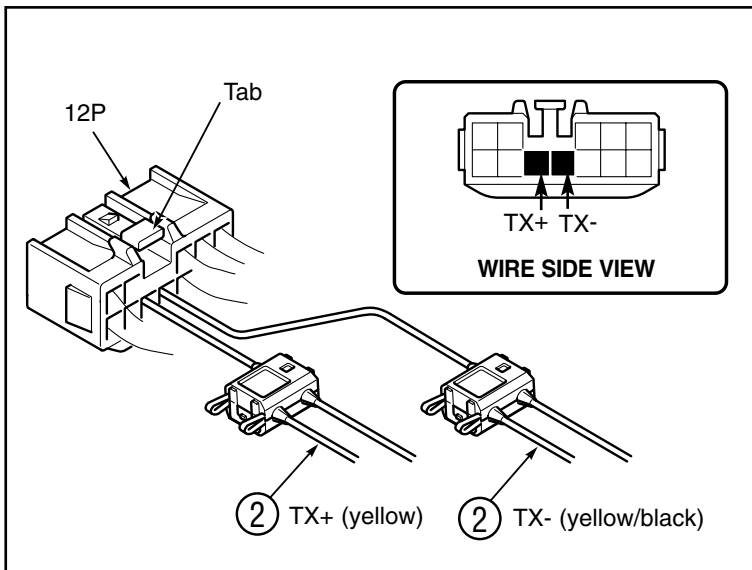


Fig. 20

● TX WIRE CONNECTION

4.
 - a) Turn the connector so that the wires face you and the tab is on top.
 - b) Connect the TX(+) wire (yellow) of the wire harness ② to the wire of the third position from the left side of the bottom row.
 - c) Connect the TX(-) wire (yellow/black) of the wire harness ② to the wire of the fourth position from the left side of the bottom row.

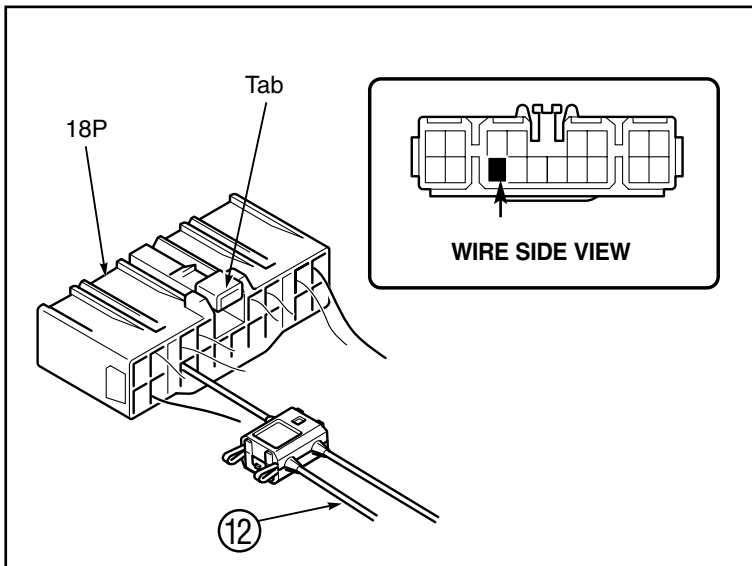


Fig. 21

● SPEED SENSOR CONNECTION

5.
 - a) Turn the connector so that the wires face you and the tab is on top.
 - b) Connect the speed sensor wire ⑫ (violet/white) of the wire harness to the wire of the third position from the left side of the bottom row.

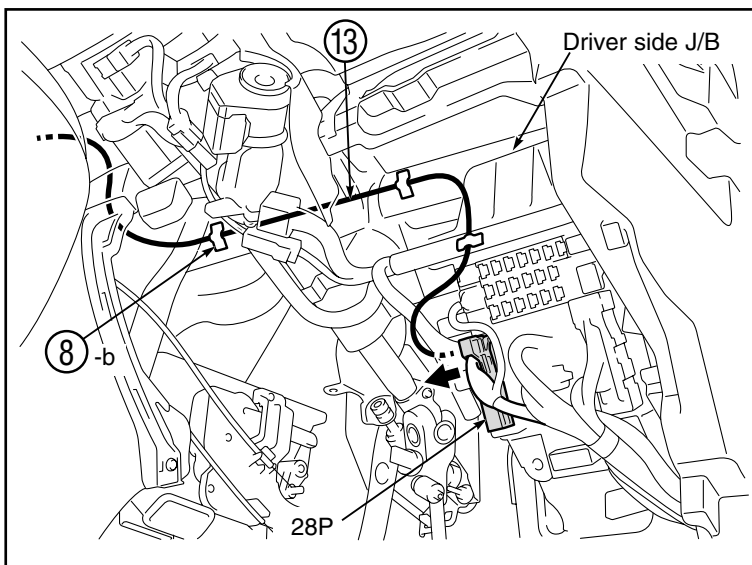


Fig. 22

● REVERSE SENSOR CONNECTION

6. Route the reverse sensor wire (red/blue) ⑬ as shown in the illustration, and attach the reverse sensor wire ⑬ using the foam ⑧-b (3x).

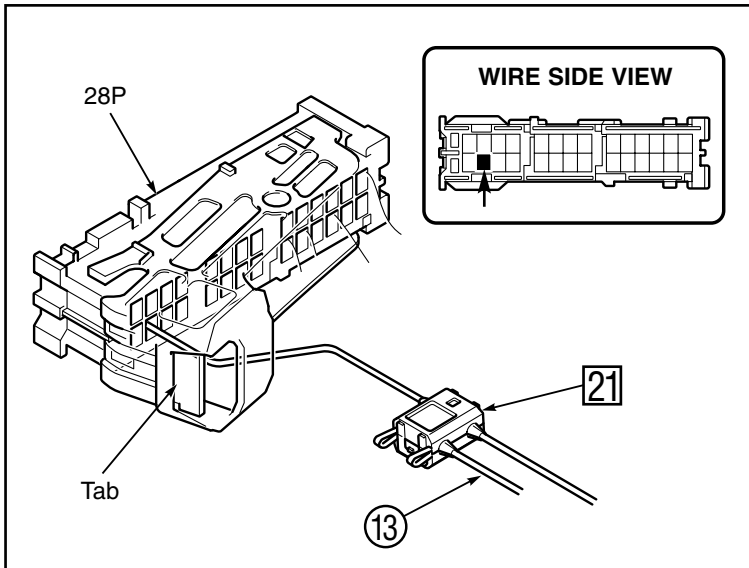


Fig. 23

7.
 - a) Turn the connector so that the wires face you and the tab is to the left.
 - b) Connect the reverse sensor wire ⑬ (red/blue) of the wire harness to the wire of the second position from the left side of the bottom row.
 - c) Reconnect the 28P connector to the driver's side J/B.
- ⑳: Splicing connector

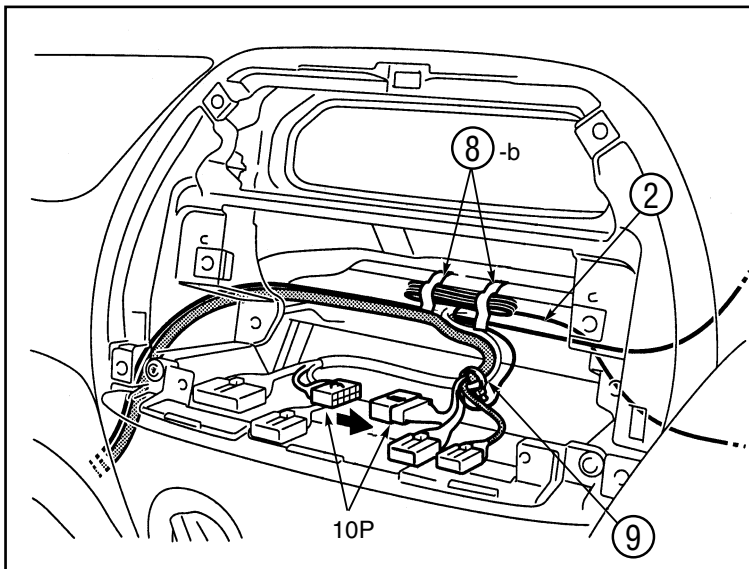


Fig. 24

8.
 - a) Connect the wire harness ② 10P connector to the vehicle side 10P connector.
 - b) Attach the wire harness ② to the vehicle wire harness using the wire tie ⑨ (1x).
 - c) Attach the extra length of the wire harness ② (speed sensor wire and reverse sensor wire) as shown in the illustration using the foam ⑧-b (2x).

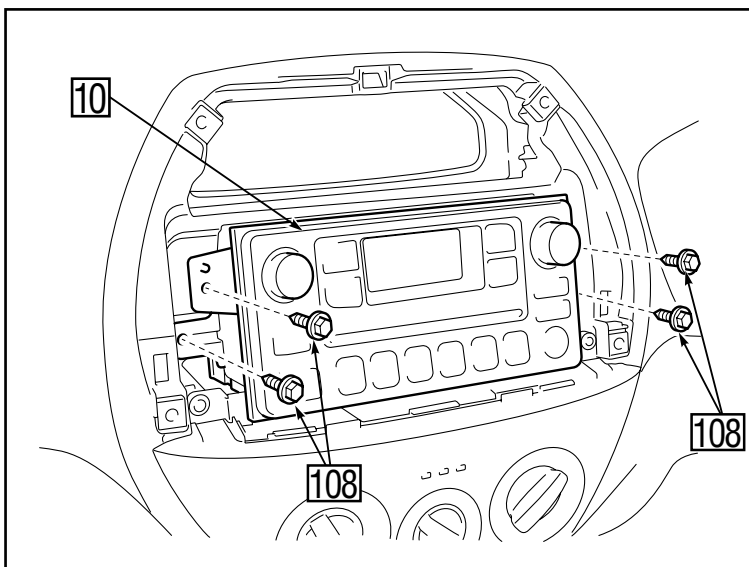


Fig. 25

9. Refit the CD (Cassette) tuner with multi display ⑩.
- ⑩⑧: Bolt (4x)

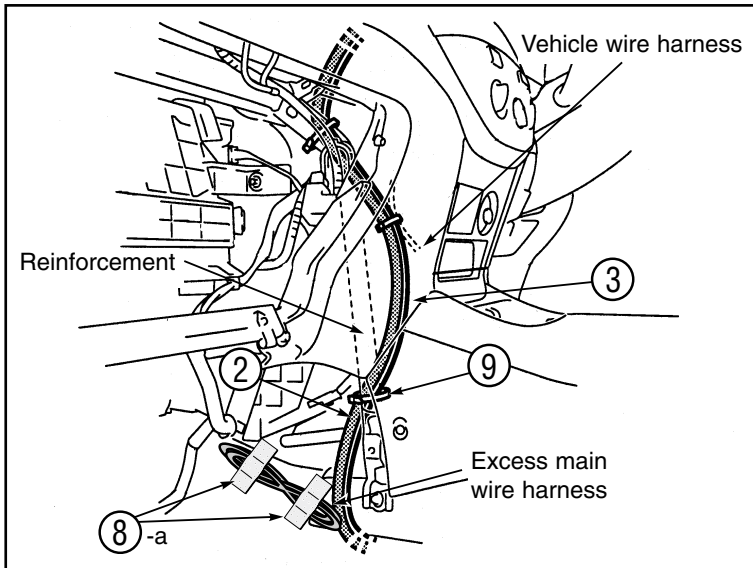


Fig. 26

10.
 - a) Attach the wire harness ② and antenna cord ③ to the reinforcement and vehicle wire harness using the wire ties ⑨ (3x).
 - b) Bundle and attach the excess main wire harness using foam ⑧-a (2x) as shown.

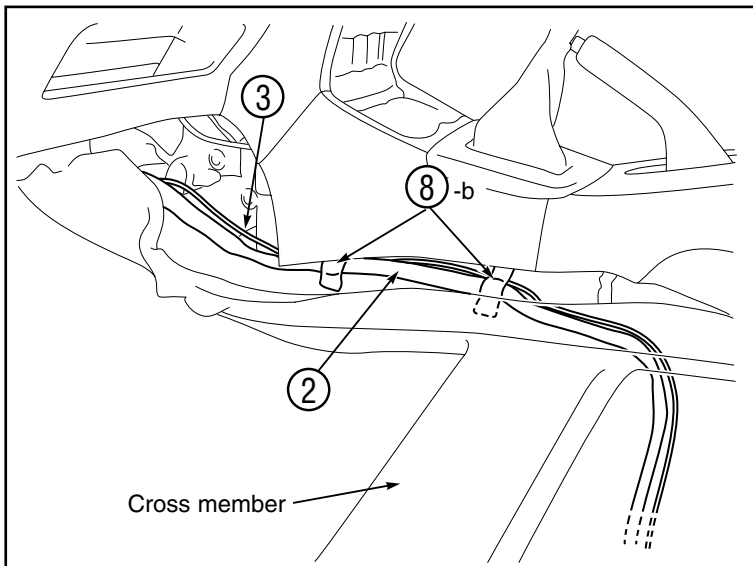


Fig. 27

11.
 - a) Route the main wire harness ② and antenna cord ③ along the midconsole and then under the carpet behind the cross member.
 - b) Attach the main wire harness ② and antenna cord ③ using foam ⑧-b (2x).

INSTALLATION OF THE COMPUTER

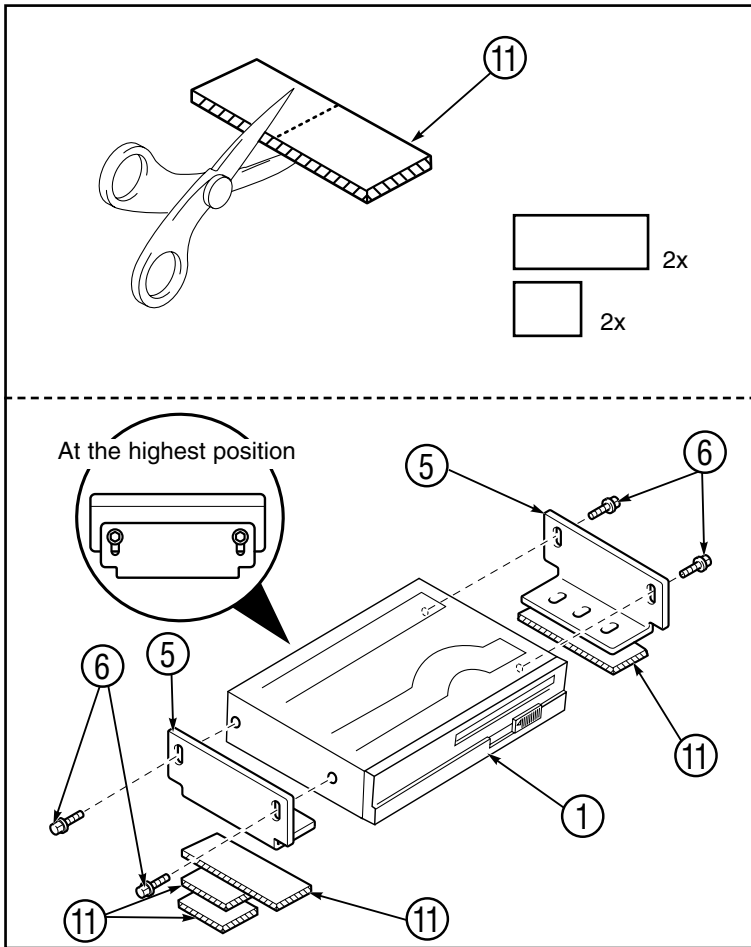


Fig. 28

1. Cut the butyl tape ⑪ into 2 large pieces and 2 small pieces as shown. Attach the butyl tape ⑪ to the bottom of the brackets ⑤.
⑥: Bolt (M5x8) (4x)

CAUTION
Do not remove the release paper on the bottom of the butyl tape ⑪ yet.

2. Temporarily place the brackets ⑤ on the computer ①.

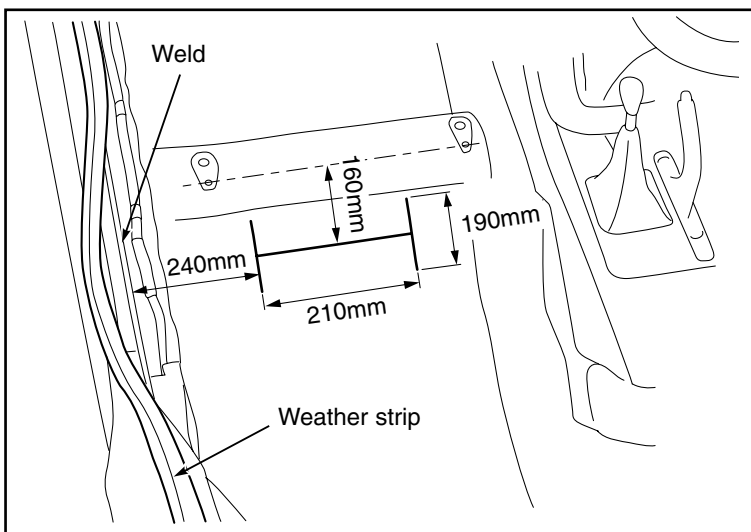


Fig. 29

3.
 - a) Partially remove the weather strip.
 - b) Make a slit in the carpet at the computer installation area as shown in the illustration.

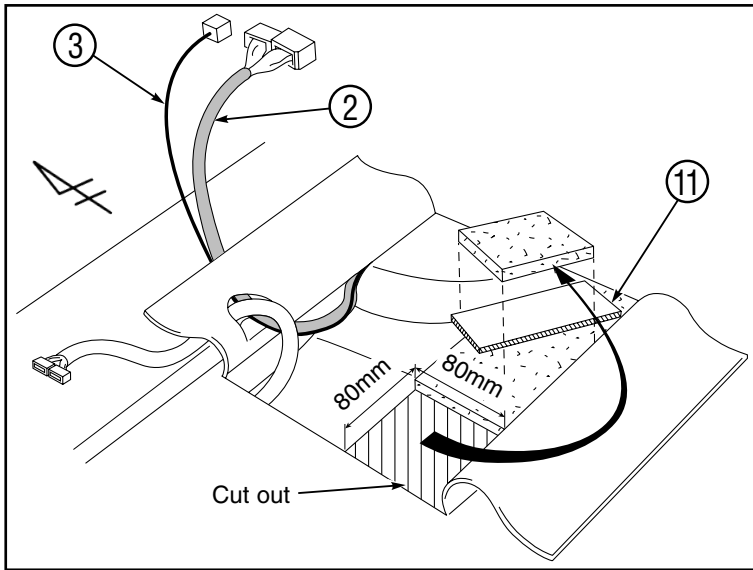


Fig. 30

4.
 - a) Route the main wire harness ② and antenna cord ③ through the carpet.
 - b) Attach the butyl tape ⑪ to the vehicle floor as shown.
 - c) Cut out the insulation mat according the dimensions indicated and put it on top of the butyl tape ⑪.

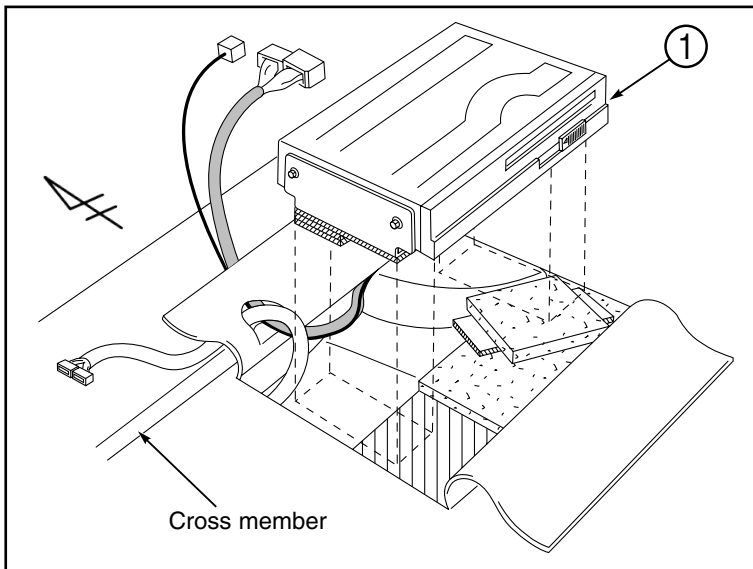


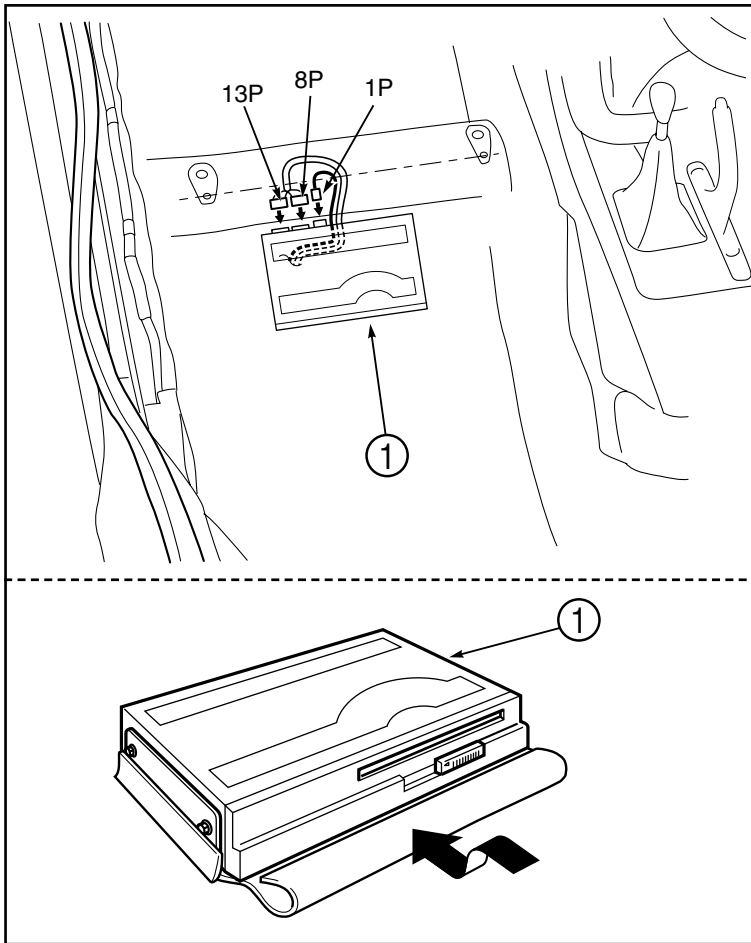
Fig. 31

5.
 - a) Fit the computer ① to the slit as shown.

CAUTION

When affixing the computer ①, make sure to carefully wipe off any dirt, moisture or oil from the surface of the location where it is to be affixed.

- b) Bundle and attach the excess antenna cord between the cross member and the computer ①.



6.
 - a) Connect the 1P connector (GPS-antenna), 8P connector and 13P connector (wire harness) to the computer ①.
 - b) Push in the slitted carpet under the computer ①.

Fig. 32

ENSURE THAT ALL REMOVED CONNECTORS ARE PUT BACK CORRECTLY.

REFIT THE TRIM AND REMOVED PARTS.

INSTALLATION OF NAVIGATION DISC

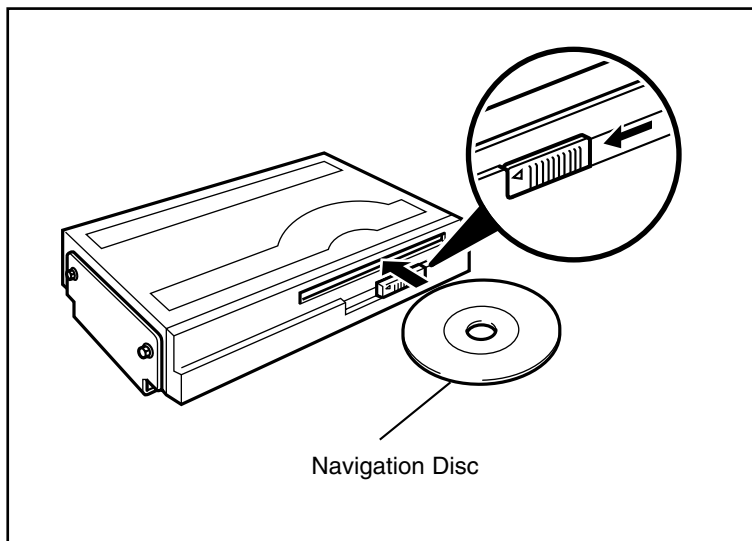


Fig. 33

1. Connect the battery and turn the ignition switch to the ACC position.
2. Slide the eject switch on the computer to the left to open the disc insertion slot.
3. With the label side of the disc facing up, insert the Navigation Disc into the disc insertion slot.
 - * **The disc will be pulled into the computer automatically.**
4. Slide the eject switch on the computer to the right to close the disc insertion slot.

POST-INSTALLATION INSPECTION



Installation Check

1. Inspect the wiring and installation for abnormalities.
2. Check particularly closely for any locations where the vehicle harness, wire harness or divergency harness is being pushed, pulled or pinched with excessive force. Also check again that clamps and bands have not shifted out of position and that all parts have been tightened.

Operation Check

1. Attach the (-) terminal of the battery and turn the key to the ACC or ON position or start the engine.
2. Press the NAVI switch and confirm that the navigation screen is displayed.
3. Adjust the volume by following the section on "Adjusting the Volume of the Guide Voice" in the TNS300 Owner's Manual, and confirm that the sound from the speakers changes.
4. Perform the "auto-compensation" procedure by following the section on "When Tires are Replaced" in the TNS300 Owner's Manual.

When an abnormality is suspected, perform troubleshooting based on the "Toyota Genuine Navigation System Service Manual".

REASSEMBLING

Return all vehicle parts that have been removed to their original locations. Especially make sure to attach trim and other interior materials properly so that they do not have a detrimental effect on the function of the vehicle. During restoration, make sure that wires are not pinched and all bolts and screws are tightened.

**ENSURE THAT ALL REMOVED CONNECTORS
ARE PUT BACK CORRECTLY.
REFIT THE TRIM AND REMOVED PARTS.**

TOYOTA
GENUINE PARTS