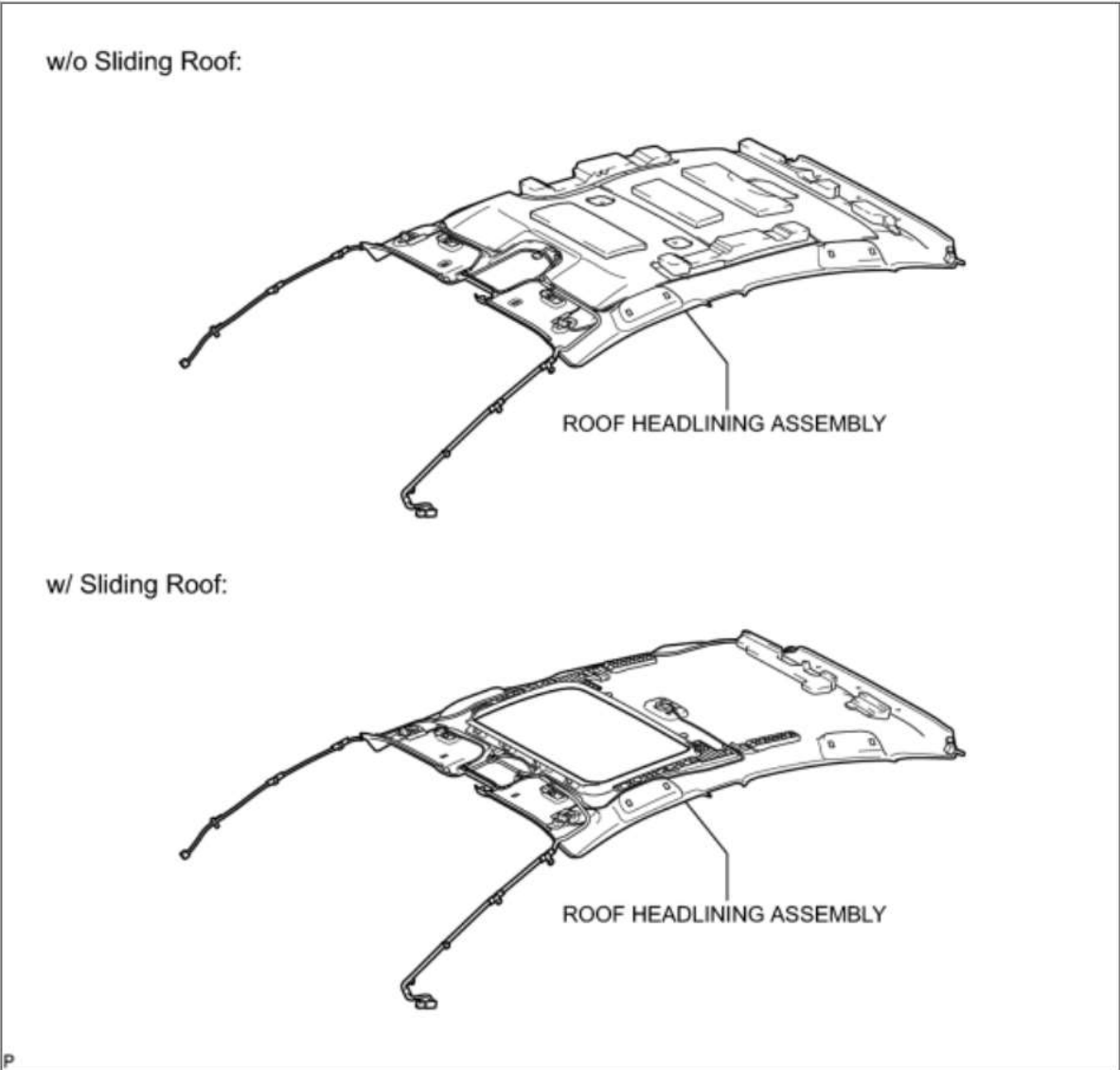
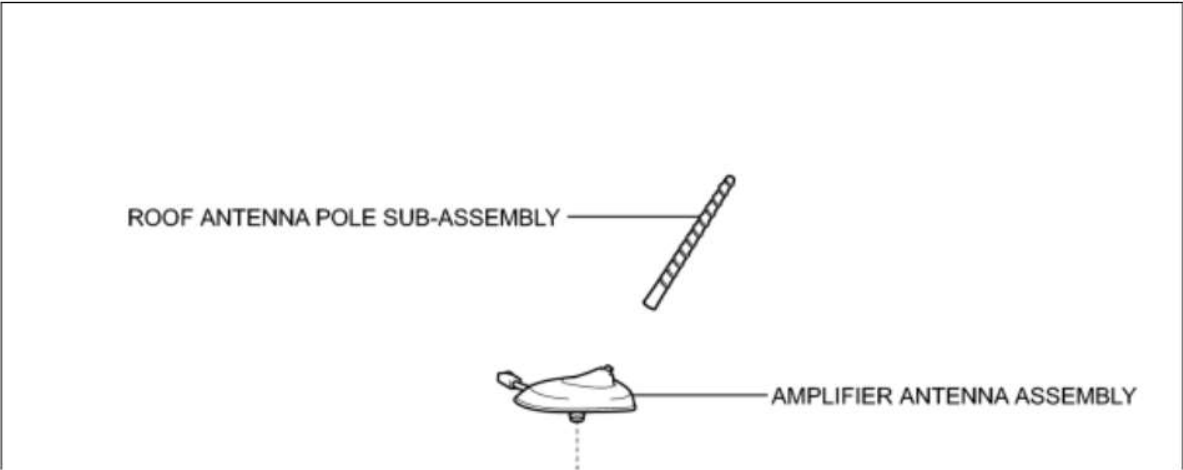


COMPONENTS

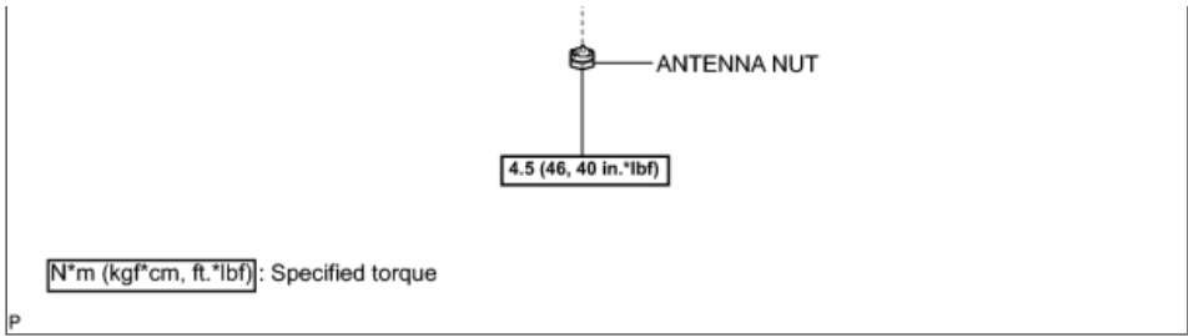
ILLUSTRATION



ILLUSTRATION



AUDIO / VIDEO: AMPLIFIER ANTENNA: COMPONENTS (2010 Prius)



cardiagn.com

INSTALLATION

1. INSTALL AMPLIFIER ANTENNA ASSEMBLY

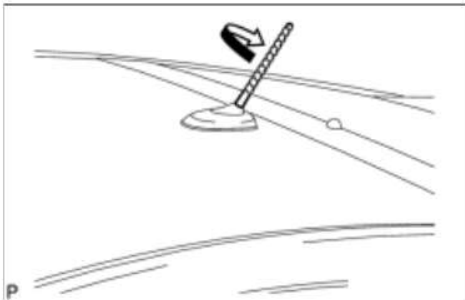


(a) Install the amplifier antenna assembly with the antenna nut.

Torque: 4.5 N·m (46 kgf·cm, 40in·lbf)

(b) Connect the 2 connectors.

2. INSTALL ROOF ANTENNA POLE SUB-ASSEMBLY



(a) Install the roof antenna pole sub-assembly as shown in the illustration.

3. INSTALL ROOF HEADLINING ASSEMBLY

HINT:

Refer to the procedure from Install Roof Headlining Assembly [INFO](#) .

AUDIO / VIDEO: AMPLIFIER ANTENNA: REMOVAL (2010 Prius)

Last Modified: 7-21-2009	5.6 A	From: 200904
Model Year: 2010	Model: Prius	Doc ID: RM000003W9I007X
Title: AUDIO / VIDEO: AMPLIFIER ANTENNA: REMOVAL (2010 Prius)		

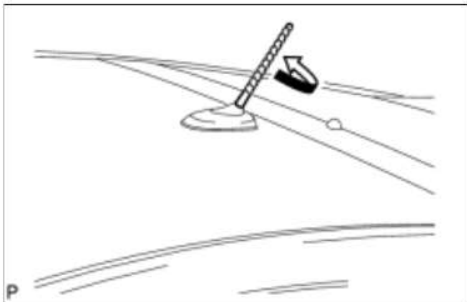
REMOVAL

1. REMOVE ROOF HEADLINING ASSEMBLY

HINT:

Refer to the procedure up to Remove Roof Headlining Assembly [INFO](#) .

2. REMOVE ROOF ANTENNA POLE SUB-ASSEMBLY



(a) Remove the roof antenna pole sub-assembly as shown in the illustration.

3. REMOVE AMPLIFIER ANTENNA ASSEMBLY



(a) Disconnect the 2 connectors.

(b) Remove the antenna nut and amplifier antenna assembly.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DIAGNOSTIC TROUBLE CODE CHART (2010 Prius)

DIAGNOSTIC TROUBLE CODE CHART**Communication Diagnosis**

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
01-21	ROM Error	Radio receiver assembly	INFO
01-22	RAM Error	Radio receiver assembly	INFO
01-2E	EEPROM Error	Radio receiver assembly	INFO
01-D5	Absence of Registration Unit	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-D6	No Master	1. Radio receiver assembly power source circuit 2. Power source circuit of the component which has stored this code 3. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 4. Component which has stored this code 5. Radio receiver assembly	INFO
01-D7	Connection Check Error	1. Radio receiver assembly power source circuit 2. Power source circuit of the component which has stored this code 3. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 4. Component which has stored this code 5. Radio receiver assembly	INFO
01-D8	No Response for Connection Check	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-D9	Last Mode Error	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DA	No Response Against ON / OFF Command	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DB	Mode Status Error	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DC	Transmission Error	If the same sub-code is stored in other components, check power source circuit and communication system of all components shown by sub-code	INFO
01-DD	Master Reset	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 3. Radio receiver assembly	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DIAGNOSTIC TROUBLE CODE CHART (2010 Prius)

		3. Radio receiver assembly 4. Component which has stored this code	
01-DE	Slave Reset	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DF	Master Error	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 3. Radio receiver assembly 4. Component which has stored this code	INFO
01-E0	Registration Complete Indication Error	-	INFO
01-E1	Voice Processing Device ON Error	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 3. Radio receiver assembly 4. Component which has stored this code	INFO
01-E2	ON / OFF Indication Parameter Error	Radio receiver assembly	INFO
01-E3	Registration Demand Transmission	-	INFO
01-E4	Multiple Frame Incomplete	-	INFO
01-F2	No Response from Diagnosis Memory Request	Stereo component amplifier assembly	INFO
01-FF	No Response to Diagnosis Request	Stereo component amplifier assembly	INFO

Telephone

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
57-10	TEL ECU Malfunction (TEL)	Radio receiver assembly	INFO
57-47	Bluetooth Module Initialization Failed	Radio receiver assembly	INFO

Radio Unit

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
60-10	AM Tuner PLL does not Lock	Radio receiver assembly	INFO
60-11	FM Tuner PLL does not Lock	Radio receiver assembly	INFO
60-42	Tuner Power Source Error	Radio receiver assembly	INFO
60-43	AM Tuner Error	Radio receiver assembly	INFO
60-44	FM Tuner Error	Radio receiver assembly	INFO
60-50	Malfunction in Internal IC	Radio receiver assembly	INFO

-- --

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DIAGNOSTIC TROUBLE CODE CHART (2010 Prius)

CD Player

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
62-10	CD Player Mechanical Error	Radio receiver assembly	INFO
62-11	CD Insertion and Ejection Error	Radio receiver assembly	INFO
62-12	CD Reading Abnormal	Radio receiver assembly	INFO
62-41	Wrong Disc	1. CD 2. Radio receiver assembly	INFO
62-42	Disc cannot be Read	1. CD 2. Radio receiver assembly	INFO
62-43	CD-ROM Abnormal	1. CD 2. Radio receiver assembly	INFO
62-44	CD Abnormal	Radio receiver assembly	INFO
62-45	Eject Error	Radio receiver assembly	INFO
62-46	Scratched / Reversed Disc	1. CD 2. Radio receiver assembly	INFO
62-47	High Temperature	Radio receiver assembly	INFO
62-48	Excess Current	Radio receiver assembly	INFO
62-50	Tray Insertion / Ejection Error	Radio receiver assembly	INFO
62-51	Elevator Error	Radio receiver assembly	INFO
62-52	Clamp Error	Radio receiver assembly	INFO
62-78	DSP Error	-	INFO
62-7D	Disc cannot be Played	1. CD 2. Radio receiver assembly	INFO
62-7E	No Playable Files	1. CD 2. Radio receiver assembly	INFO
62-7F	Copyright Protection Error	1. CD 2. Radio receiver assembly	INFO

In-dash CD Changer

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
63-10	CD Changer Mechanical Error	Radio receiver assembly	INFO
63-11	CD Insertion and Ejection Error	Radio receiver assembly	INFO
63-12	CD Reading Abnormal	Radio receiver assembly	INFO
63-41	Wrong Disc	1. CD 2. Radio receiver assembly	INFO
63-42	Disc cannot be Read	1. CD 2. Radio receiver assembly	INFO
63-43	CD-ROM Abnormal	1. CD	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DIAGNOSTIC TROUBLE CODE CHART (2010 Prius)

		2. Radio receiver assembly	
63-44	CD Abnormal	Radio receiver assembly	
63-45	Eject Error	Radio receiver assembly	
63-46	Scratched / Reversed Disc	1. CD 2. Radio receiver assembly	
63-47	High Temperature	Radio receiver assembly	
63-48	Excess Current	Radio receiver assembly	
63-50	Tray Insertion / Ejection Error	Radio receiver assembly	
63-51	Elevator Error	Radio receiver assembly	
63-52	Clamp Error	Radio receiver assembly	
63-78	DSP Error	-	
63-7D	Disc cannot be Played	1. CD 2. Radio receiver assembly	
63-7E	No Playable Files	1. CD 2. Radio receiver assembly	
63-7F	Copyright Protection Error	1. CD 2. Radio receiver assembly	

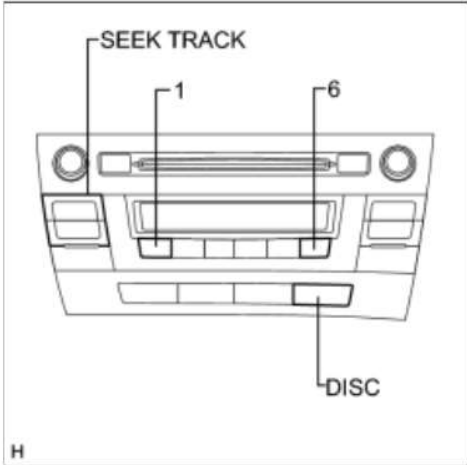
XM Tuner

DTC CODE	DETECTION ITEM	TROUBLE AREA	SEE PAGE
C0-11	Satellite Radio Tuner Internal Circuit Error 1	Radio receiver assembly	
C0-12	Satellite Radio Tuner Internal Circuit Error 2	Radio receiver assembly	
C0-13	Satellite Radio Tuner Internal Circuit Error 3	Radio receiver assembly	
C0-14	Satellite Radio Tuner Internal Circuit Error 4	Radio receiver assembly	
C0-15	Satellite Radio Tuner Internal Circuit Error 5	Radio receiver assembly	
C0-16	Satellite Radio Tuner Internal Circuit Error 6	Radio receiver assembly	
C0-40	Antenna not Connected	1. Antenna cord 2. Amplifier antenna assembly (Satellite radio antenna) 3. Radio receiver assembly	
C0-41	Antenna Shorted	1. Antenna cord 2. Amplifier antenna assembly (Satellite radio antenna) 3. Radio receiver assembly	

DTC CHECK / CLEAR

HINT:
If the system cannot enter diagnostic mode, inspect the AVC-LAN and all the components that are connected to the AVC-LAN for short circuits and repair or replace the malfunctioning part INFO.

1. STARTING DIAGNOSTIC MODE



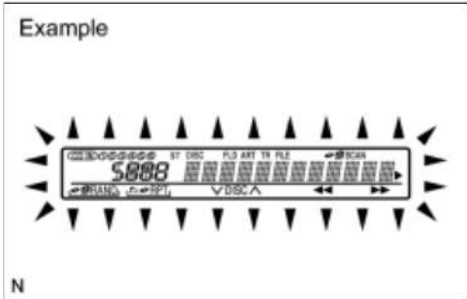
(a) Turn the power switch on (ACC).

- (b) Turn off the audio system.
- (c) While pressing preset switches "1" and "6" at the same time, press the "DISC" switch 3 times.

HINT:
A beep is emitted 3 times and the diagnostic function is activated. The system enters all element illumination mode and switch check mode.

2. ALL ELEMENT ILLUMINATION MODE AND SWITCH CHECK MODE

HINT:
Illumination status of all switches and operations of the panel switches can be checked.

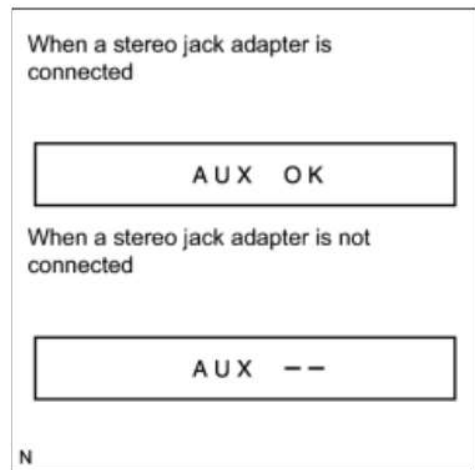


(a) Check that all elements are on.

- (b) When pressing each panel switch, check that a beep is emitted.

HINT:
Pressing the "SEEK TRACK UP" switch transfers the screen to the stereo jack adapter connection check screen. Check the operation of this switch by confirming the transfer of the screen.

3. STEREO JACK ADAPTER CONNECTION CHECK MODE



(a) Press the "SEEK TRACK UP" switch.

(b) Check if the stereo jack adapter is recognized.

HINT:

- The radio receiver assembly displays "AUX OK" or "AUX ON" when it recognizes a connection to the stereo jack adapter.
- Vehicles that do not have a stereo jack adapter also have this function.
- This function is not to check connection status to an external device, but to check recognition of the stereo jack adapter.

4. SERVICE CHECK MODE

(a) Press the "SEEK TRACK UP" switch.

HINT:

For details of service check mode, refer to following "6. Check DTC" and "7. DTC Clear/Recheck".

5. FINISHING DIAGNOSTIC MODE

(a) Press the "DISC" switch for 2 seconds or more, or turn the power switch off.

6. CHECK DTC

HINT:

Illustrations may differ from the actual vehicle depending on the device settings and options. Therefore, some detailed areas may not be shown exactly the same as on the actual vehicle.

(a) Reference

In system check mode, the system check and diagnostic memory check are performed, and the check results are displayed in ascending order of the component codes (physical address).

TERM	MEANING
Component code (Physical address)	Three-digit code (in hexadecimal) is given to each device comprising AVC-LAN. Corresponding to its function, individual symbol is provided.
Logical address	Two-digit code (in hexadecimal) is given to each function and device unit in each device comprising AVC-LAN.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)

(b) Service check result display

DISPLAY	PREVIOUS TERM	MEANING	ACTION TO BE TAKEN
good	Good (normal)	No DTCs are detected in both "System Check Mode" and "Diagnostic Memory Mode".	-
nCon	No connection	The system recognized the component when it was registered, but the component gives no response to "Diagnostic Mode ON Request".	Check the power source circuit and the communication circuit of the component indicated by the component code (physical address).
ECHn	Exchange	One or more DTCs for "Exchange" are detected in either "System Check Mode" or "Diagnostic Memory Mode".	Go to the detailed information mode to check the trouble area referring to the DTC chart.
CHEC	Check	When no DTCs are detected for "Exchange", one or more DTCs for "Check" are detected in either "System Check Mode" or "Diagnostic Memory Mode".	Go to the detailed information mode to check the trouble area referring to the DTC chart.
OLd	Old version	Old DTC application is identified and DTC is detected in either "System Check Mode" or "Diagnostic Memory Mode".	-
nrES	No response	The device gives no response to any one of "System Check Mode ON Request", "System Check Result Request" and "Diagnostic Memory Request".	Check the power source circuit and the communication circuit of the component indicated by the component code (physical address).

(c) Device name and physical address

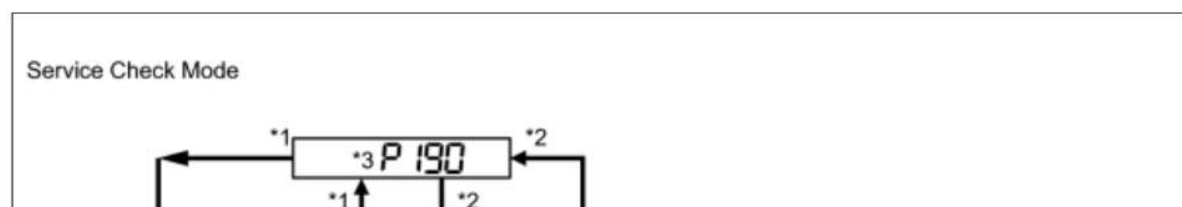
PHYSICAL ADDRESS NO.	NAME
190	Radio receiver assembly
440	Stereo component amplifier assembly
1F1	Satellite radio tuner

(d) Service check mode

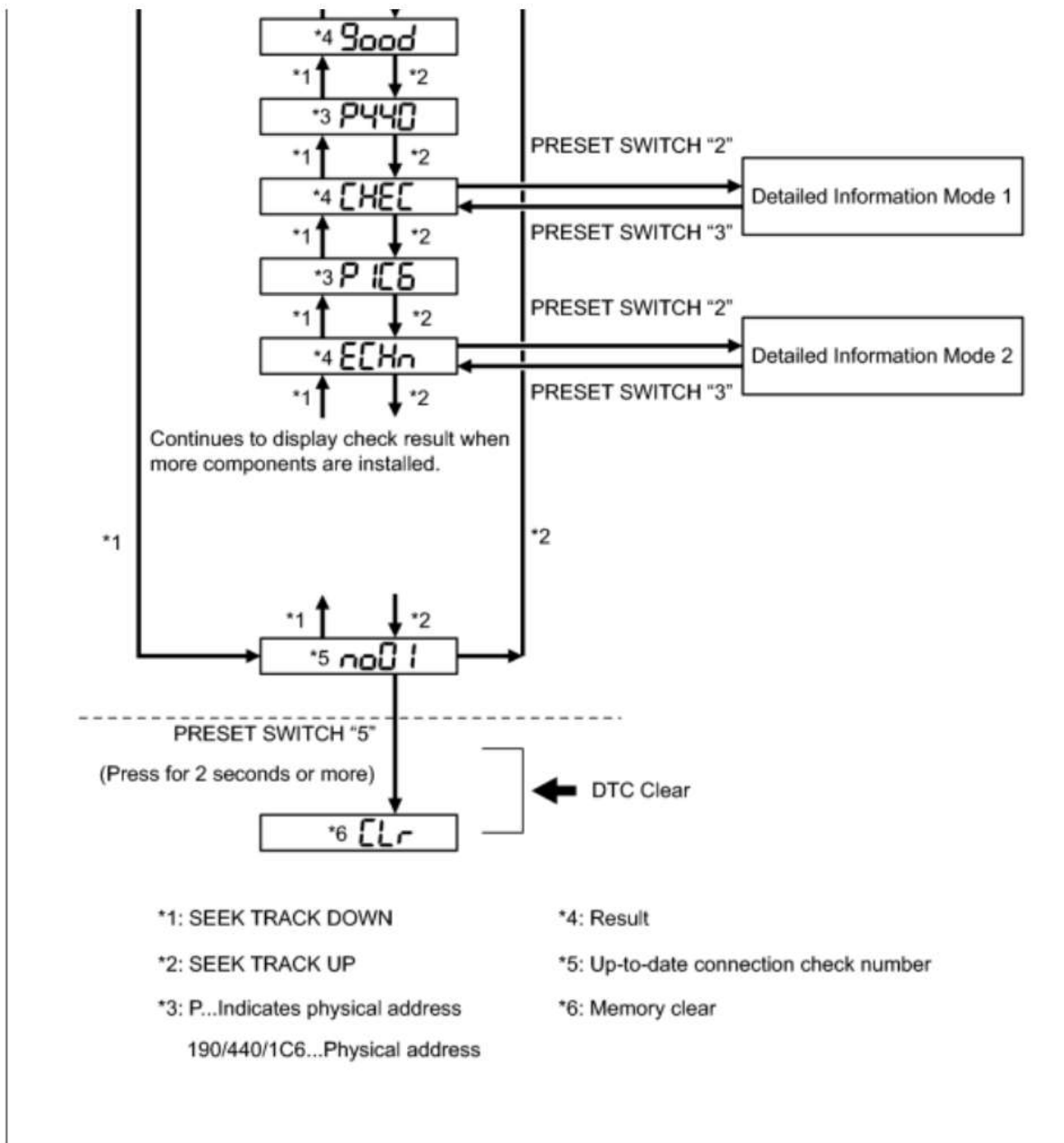
- (1) Press the "SEEK TRACK" switch to see the check result of each component.
- (2) The component code (physical address) is displayed first, and then the check result follows.

HINT:

- If all check results are "good", the system judges that no DTC exists.
- If preset switch "1" is pressed in service check mode, service check is performed again.
- This illustration is only an example and may differ for each optional part and output DTCs.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)



(e) Detailed information mode 1

HINT:

- "Detailed Information Mode 1" is displayed when there is no response to "System Check Result Request" and DTC is stored only in "Diagnostic Memory Request".
- The component device code (physical address) is displayed first, and then the check result follows.
- This illustration is only an example and may differ in cases such as for each optional part and output DTCs.

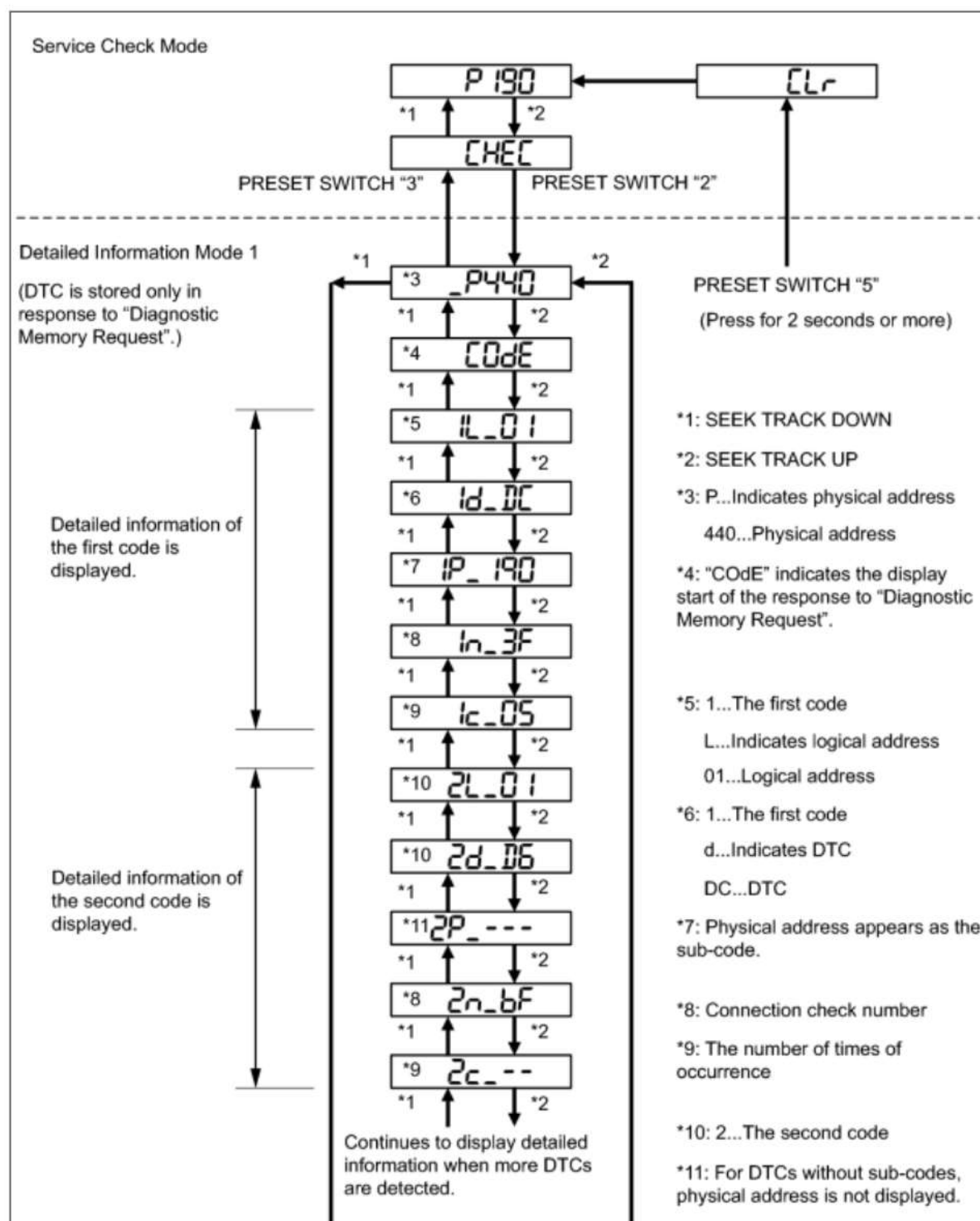
- (1) Press preset switch "2" to go to "Detailed Information Mode 1".
- (2) Press the "SEEK TRACK" switch to display the physical address and DTC of the component.
- (3) Press the preset switch "3" to go to "Service Check Mode".
- (4) Select between the displays of the responses to "System Check Result Request" and "Diagnostic Memory Request". In order to distinguish the information detected in "System Check Mode" and "Diagnostic Memory Mode" in "EChn", "CHEC", and "OLD" in "Detailed Information Mode 1", refer to the following:
 - "SyS" is displayed before the detailed codes detected as a result of "System Check Result Request" are displayed.
 - "CoDe" is displayed before the detailed codes detected as a result of "Diagnostic Memory Request" are displayed.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)

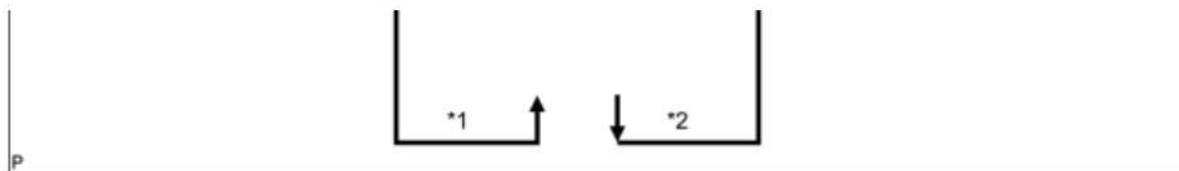
are displayed.

HINT:

- The response to "System Check Result Request" is the current information given from each ECU as a result of the system check.
- The response to "Diagnostic Memory Request" contains the information received from each ECU or stored in each ECU in the past.
- The response to "Diagnostic Memory Request" is the output DTCs as a result of the diagnostic memory check or the DTCs received from each ECU.
- "System Check Result Request (SyS)" is displayed first, and then the logical address and DTC appear in order.
- "Diagnostic Memory Request (COdE)" is displayed first, and then the logical address, DTC, sub-code, connection check number, and the number of occurrence appear in order.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)



(f) Detailed information mode 2

HINT:

- "Detailed Information Mode 2" is displayed when DTCs are stored in responses to both "System Check Result Request" and "Diagnostic Memory Request".
- The component device code (physical address) is displayed first, and then the check result follows.
- This illustration is only an example and may differ in cases such as for each option part and output DTCs.

(1) Press preset switch "2" to go to "Detailed Information Mode 2".

(2) Press the "SEEK TRACK" switch to display the physical address and DTC of the component.

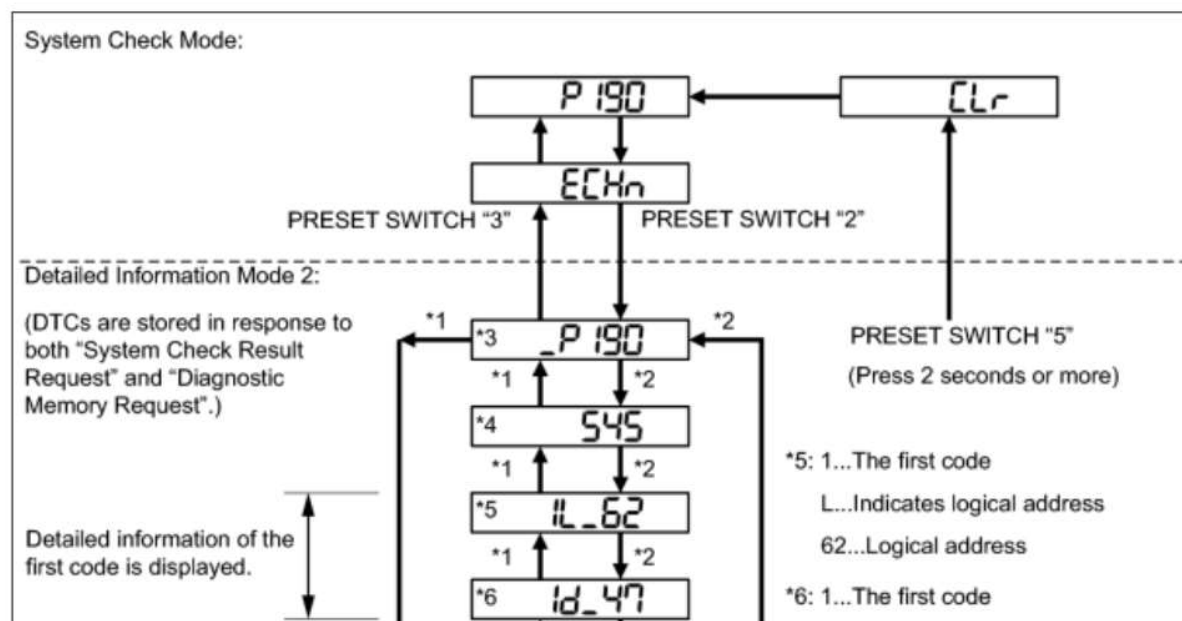
(3) Press preset switch "3" to go to "Service Check Mode".

(4) Select between the displays of the responses to "System Check Result Request" and "Diagnostic Memory Request". In order to distinguish the information detected in "System Check Mode" and "Diagnostic Memory Mode" in "ECHn", "CHEC", and "OLD" in "Detailed Information Mode 2", refer to the following:

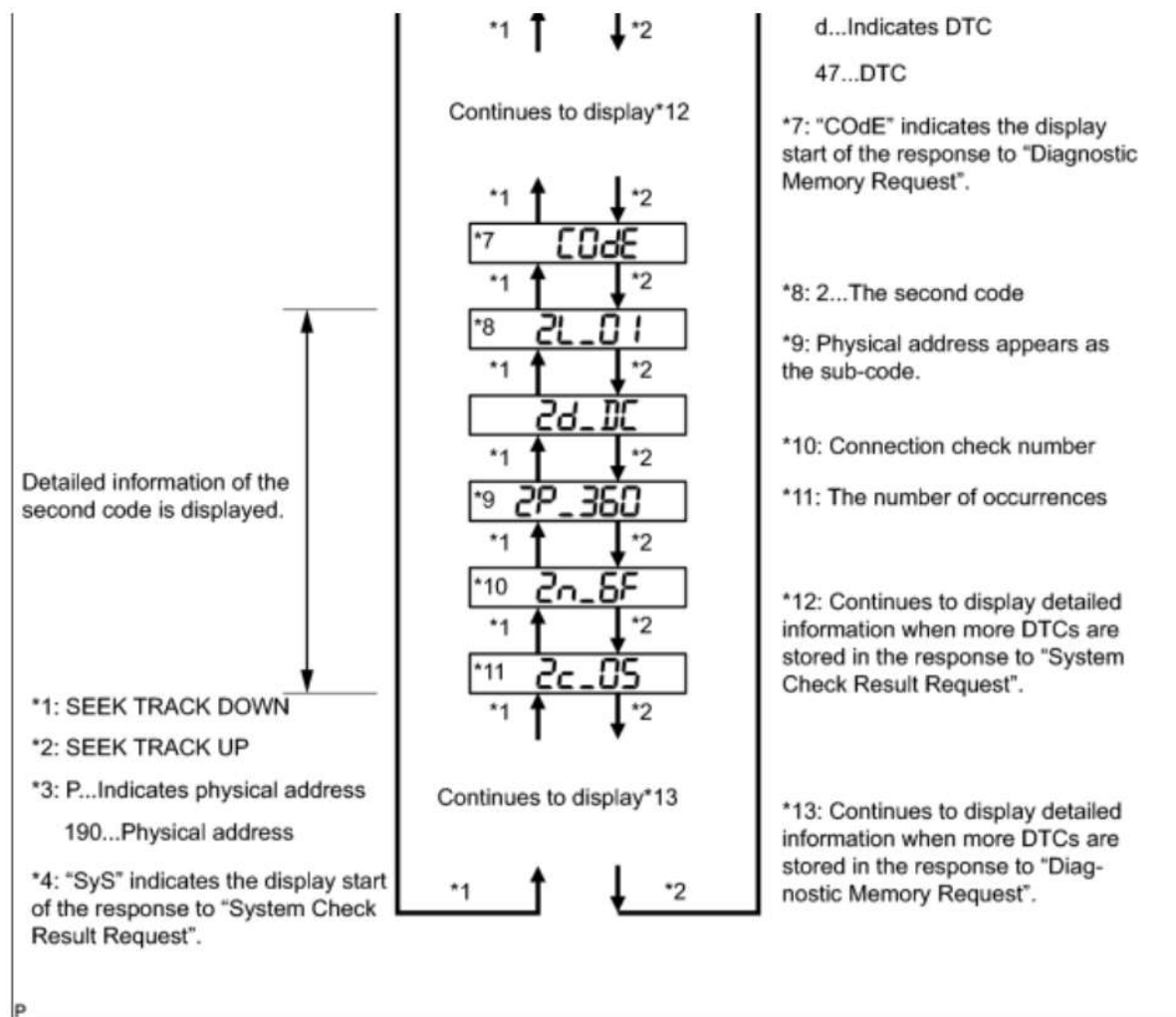
- "SyS" is displayed before the detailed codes detected as a result of "System Check Result Request" are displayed.
- "COdE" is displayed before the detailed codes detected as a result of "Diagnostic Memory Request" are displayed.

HINT:

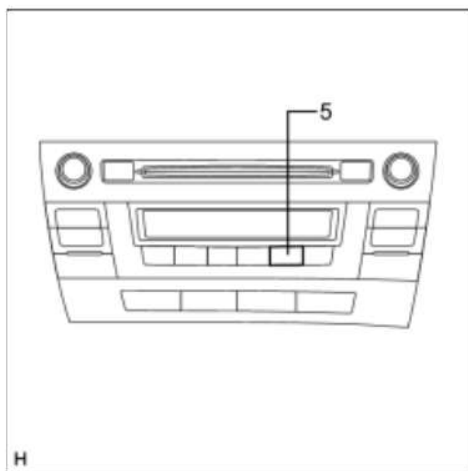
- The response to "System Check Result Request" is the current information given from each ECU as a result of the system check.
- The response to "Diagnostic Memory Request" contains the information received from each ECU or stored in each ECU in the past.
- The response to "Diagnostic Memory Request" is the output DTCs as a result of the diagnostic memory check or the DTCs received from each ECU.
- "System Check Result Request (SyS)" is displayed first, and then the logical address and DTC appear in order.
- "Diagnostic Memory Request (COdE)" is displayed first, and then the logical address, DTC, sub-code, connection check number, and the number of occurrence appear in order.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)



7. DTC CLEAR/RECHECK



(a) Clearing All DTC Memory (when clearing all the memory of the previously detected DTCs)

- (1) When preset switch "5" is pressed for 2 seconds or more during "Service Check Mode", the DTCs for all components are cleared. ("CLr" is displayed at this time.)

- A beep sound is emitted once when the DTC memory is completely cleared.
- When the DTC memory for all the components is cleared, only the component codes (physical address) are displayed.
- After the DTC memory is cleared, "Service Check Mode" is restored.

(b) Clearing the specified DTC Memory (when clearing the specified memory of the previously detected DTC)

- (1) When preset switch "5" is pressed for 2 seconds or more during "Detailed Information Mode 1" or "Detailed Information Mode 2", the DTCs for the target component are cleared.

HINT:

- A beep sound is emitted once when the DTC memory is completely cleared.
- When the DTC memory is cleared, only the component code (physical address) is displayed for the target

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: DTC CHECK / CLEAR (2010 Prius)

component.

- After the DTC memory is cleared, the "Service Check Mode" is restored.
- To check DTCs, press preset switch "1" and perform the system check again.

(c) Press preset switch "1" to perform the service check again, and check that no DTCs are displayed for all the component codes (physical address).

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

Use the following procedure to troubleshoot the audio and visual system.

1. VEHICLE BROUGHT TO WORKSHOP

NEXT

2. INSPECT BATTERY VOLTAGE

Standard Voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding to the next step.

NEXT

3. BASIC INSPECTION

- (a) Turn the power switch on (IG).
- (b) Check whether or not the radio receiver assembly turns on.

Result:

RESULT	PROCEED TO
Radio receiver assembly turns on	A
Radio receiver assembly does not turn on	B

B ▶ Go to step 7

A

4. CONFIRM MODEL

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: HOW TO PROCEED WITH TROUBLESHOOTING (2010 Prius)

4. CONFIRM MODEL

Result:

RESULT	PROCEED TO
for 8 Speakers	A
except for 8 Speakers	B

B ▶ Go to step 7**A****5. CHECK FOR DTC****HINT:**Refer to DTC Check/Clear .

- (a) Check for DTCs and note any codes that are output.
- (b) Clear the DTCs.
- (c) Recheck for DTCs by simulating the operation indicated by the DTCs.

HINT:

- If the system cannot enter diagnostic mode, inspect the AVC-LAN and all the components that connect to the AVC-LAN for short circuits and repair or replace the malfunctioning part.
- Even if the symptom malfunction is not confirmed, check the DTCs. This is because the system stores history DTCs.
- Check and clear history DTCs. Then recheck for DTCs.

Result:

RESULT	PROCEED TO
DTC is output again	A
DTC is not output	B

B ▶ Go to step 7**A**

6. DIAGNOSTIC TROUBLE CODE CHART

HINT:

Refer to Diagnostic Trouble Code Chart  .

NEXT  Go to step 9

7. PROBLEM SYMPTOMS TABLE

HINT:

Refer to Problem Symptoms Table  .

Result:

RESULT	PROCEED TO
Fault is not listed in Problem Symptoms Table	A
Fault is listed in Problem Symptoms Table	B

B  Go to step 9

A


8. OVERALL ANALYSIS AND TROUBLESHOOTING

HINT:

Refer to Terminals of ECU  .

NEXT


9. ADJUST, REPAIR OR REPLACE

NEXT

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: HOW TO PROCEED WITH TROUBLESHOOTING (2010 Prius)



10.	CONFIRMATION TEST
------------	--------------------------

NEXT  **END**

IDENTIFICATION OF NOISE SOURCE

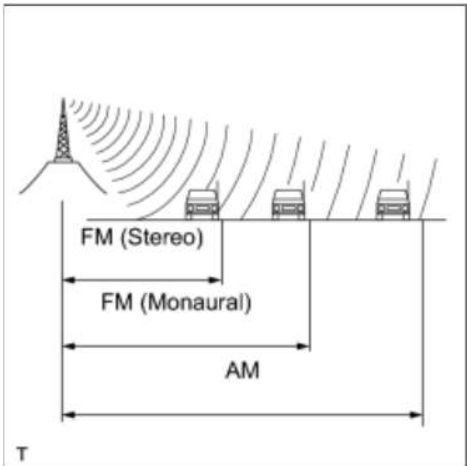
1. RADIO DESCRIPTION

(a) Radio frequency band

(1) Radio broadcasts use the radio frequency bands shown in the table below.

Frequency	30 kHz	300 kHz	3 MHz	30 MHz	300 MHz
Designation	LF	MF	HF	VHF	
Radio Wave		AM		FM	
Modulation	Amplitude Modulation			Frequency Modulation	

LF: Low Frequency MF: Medium Frequency HF: High Frequency VHF: Very High Frequency



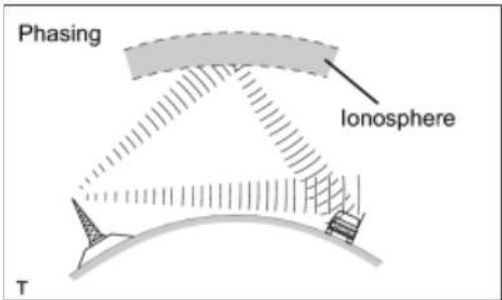
(b) Service area

(1) The service areas of AM and FM broadcasts are vastly different. Sometimes an AM broadcast can be received very clearly but an FM stereo cannot. FM stereo has the smallest service area, and is prone to pick up static and other types of interference such as noise.

(c) Radio reception problems

HINT:

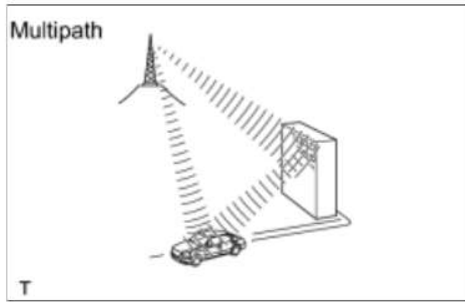
In addition to static, other problems such as "phasing", "multipath" and "fade out" exist. These problems are not caused by electrical noise, but by the radio signal propagation method itself.



(1) Phasing

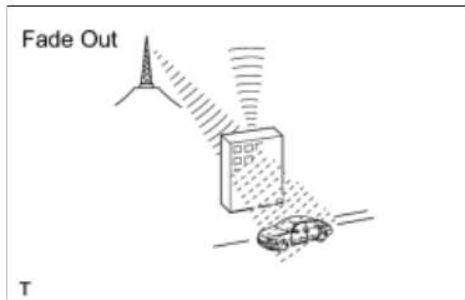
AM broadcasts are susceptible to electrical interference and another kind of interference called phasing. Occurring only at night, phasing is the interference created when a vehicle receives 2 radio wave signals from the same transmitter. One signal is reflected off the ionosphere and the other signal is received directly from the transmitter.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: IDENTIFICATION OF NOISE SOURCE (2010 Prius)



(2) Multipath

Multipath is a type of interference created when a vehicle receives 2 radio wave signals from the same transmitter. One signal is reflected off buildings or mountains and the other signal is received directly from the transmitter.



(3) Fade out

Fade out is caused by objects (buildings, mountains and other such large obstacles) that deflect away part of a signal, resulting in a weaker signal when the object is between the transmitter and vehicle. High frequency radio waves, such as FM broadcasts, are easily deflected by obstructions. Low frequency radio waves, such as AM broadcasts, are less likely to deflect.

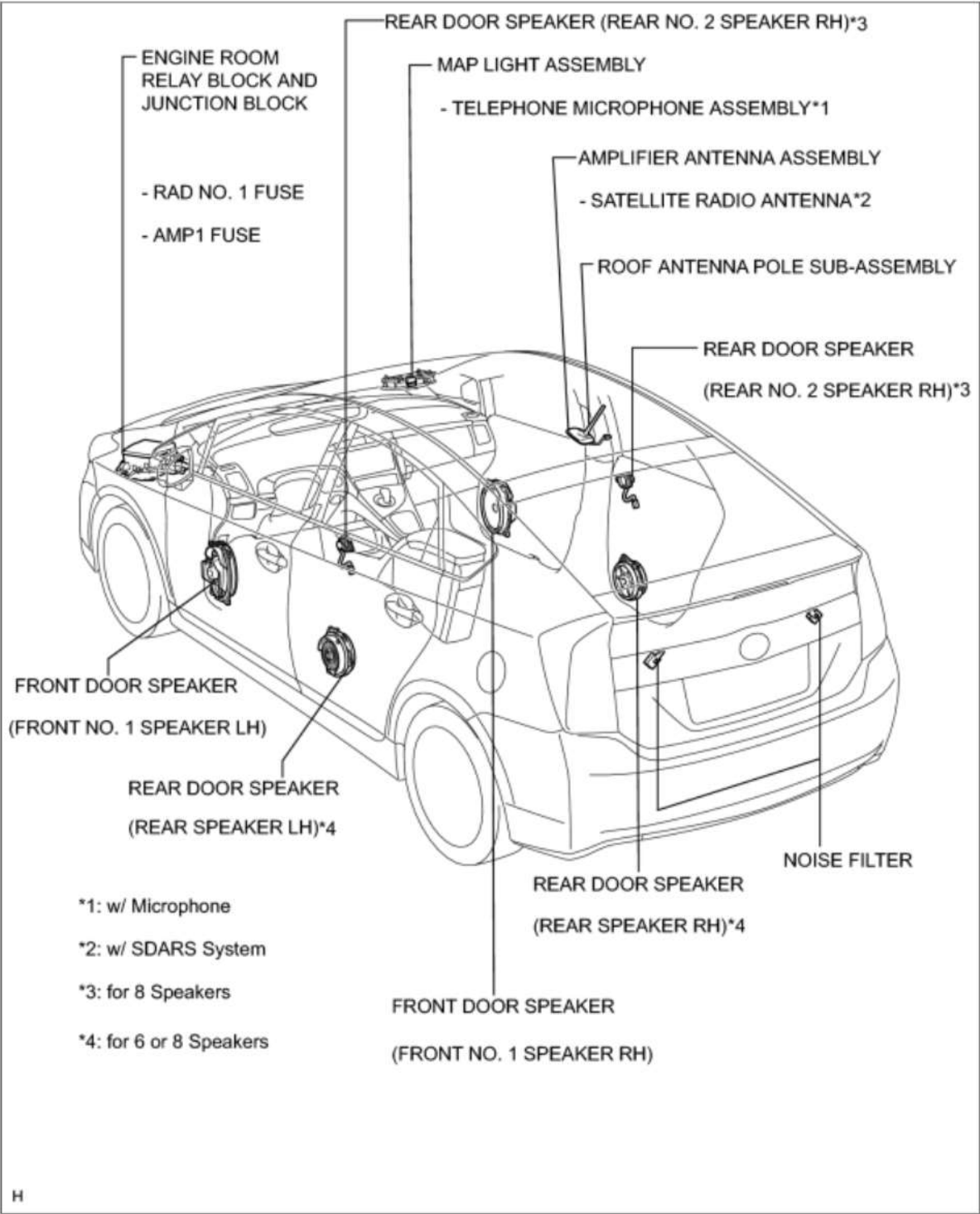
(d) Noise problem

Technicians must have a clear understanding about each customer's noise complaint. Use the following table to diagnose noise problems.

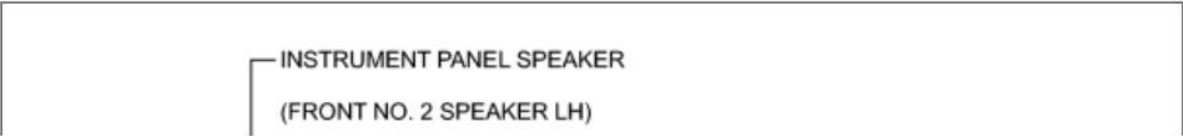
RADIO FREQUENCY	NOISE OCCURRENCE CONDITION	PRESUMABLE CAUSE
AM	Noise occurs in a specified area	Foreign noise
AM	Noise occurs when listening to an intermittent broadcast	An identical program transmitted from multiple towers can cause noise where the signals overlap
AM	Noise occurs only at night	Signal phasing
FM	Noise occurs while driving in a specified area	Multipath resulting from a change in FM frequency

PARTS LOCATION

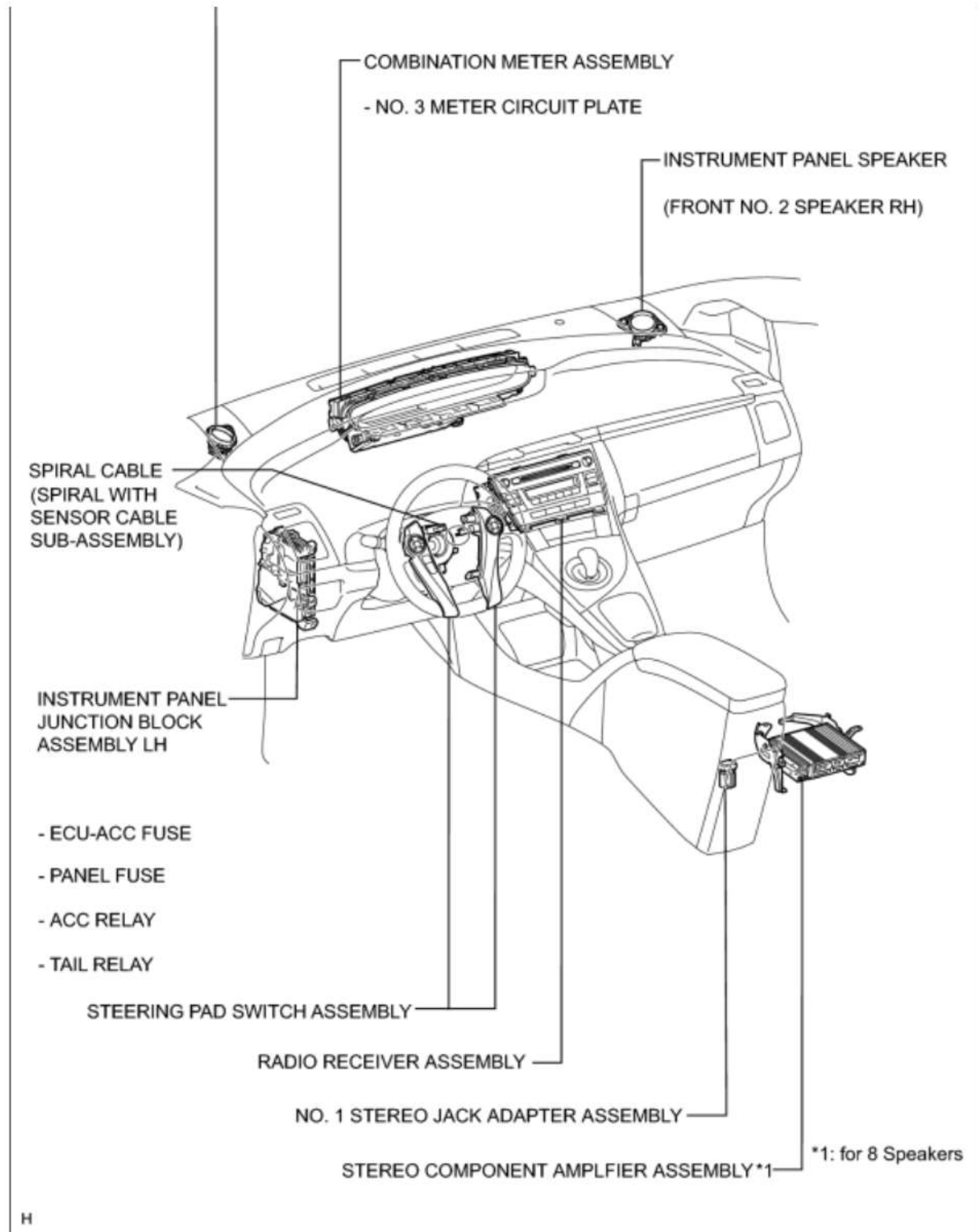
ILLUSTRATION



ILLUSTRATION



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: PARTS LOCATION (2010 Prius)



PRECAUTION

1. PRECAUTION FOR DISCONNECTING CABLE FROM NEGATIVE (-) BATTERY TERMINAL

NOTICE:

When disconnecting the cable from the negative (-) battery terminal, initialize the following system after the terminal is reconnected.

SYSTEM NAME	SEE PROCEDURE
Advanced Parking Guidance System	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: PROBLEM SYMPTOMS TABLE (2010 Prius)

PROBLEM SYMPTOMS TABLE**HINT:**

- Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.
- Inspect the fuses and relays related to this system before inspecting the suspected areas below.

Audio Function

SYMPTOM	SUSPECTED AREA	SEE PAGE
Pressing power switch does not turn on system.*1	Proceed to "Pressing Power Switch does not Turn on System"	INFO
	Radio receiver power source circuit	INFO
	AVC-LAN circuit	INFO
	Radio receiver assembly	INFO
Pressing power switch does not turn on system.*2	Proceed to "Pressing Power Switch does not Turn on System"	INFO
	Radio receiver power source circuit	INFO
	Radio receiver assembly	INFO
Panel switch does not function.*1	Steering pad switch circuit	INFO
	AVC-LAN circuit	INFO
	Radio receiver assembly	INFO
Panel switch does not function.*2	Steering pad switch circuit	INFO
	Radio receiver assembly	INFO
No sound can be heard from speakers. (Audio is mute.)*1	Radio receiver power source circuit	INFO
	Proceed to "No Sound can be Heard from Speakers"	INFO
	Stereo component amplifier power source circuit	INFO
	Proceed to "Sound Signal Circuit between Radio Receiver and Stereo Component Amplifier"	INFO
	Speaker circuit	INFO
	Proceed to "Mute Signal Circuit between Radio Receiver and Stereo Component Amplifier"	INFO
	Stereo component amplifier assembly	INFO
	Radio receiver assembly	INFO
No sound can be heard from speakers. (Audio is mute.)*2	Radio receiver power source circuit	INFO
	Proceed to "No Sound can be Heard from Speakers"	INFO
	Speaker circuit	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: PROBLEM SYMPTOMS TABLE (2010 Prius)

	Radio receiver assembly	INFO
Sound quality is bad in all modes. (Volume is too low.)*1	Proceed to "Poor Sound Quality in All Modes (Low Volume)"	INFO
	Speaker circuit	INFO
	Proceed to "Sound Signal Circuit between Radio Receiver and Stereo Component Amplifier"	INFO
	Proceed to "Mute Signal Circuit between Radio Receiver and Stereo Component Amplifier"	INFO
	Stereo component amplifier assembly	INFO
	Radio receiver assembly	INFO
Sound quality is bad in all modes. (Volume is too low.)*2	Proceed to "Poor Sound Quality in All Modes (Low Volume)"	INFO
	Speaker circuit	INFO
	Radio receiver assembly	INFO
ASL does not function.*1	Proceed to "Vehicle Speed Signal Circuit between Stereo Component Amplifier and Combination Meter"	INFO
ASL does not function.*2	Proceed to "Vehicle Speed Signal Circuit between Radio Receiver and Combination Meter"	INFO
External device sound cannot be heard or sound quality is bad. (Stereo jack is used.)*3	Radio receiver power source circuit	INFO
	Proceed to "Sound Signal Circuit between Radio Receiver and Stereo Jack Adapter"	INFO
	No. 1 stereo jack adapter assembly	INFO
	Radio receiver assembly	INFO
Abnormal noise occurs.*1	Proceed to "Noise occurs"	INFO
	Noise filter	INFO
	Stereo component amplifier assembly	INFO
	Radio receiver assembly	INFO
Abnormal noise occurs.*2	Proceed to "Noise occurs"	INFO
	Noise filter	INFO
	Radio receiver assembly	INFO
Radio broadcast cannot be received or poor reception.	Proceed to "Radio Broadcast cannot be Received or Poor Reception"	INFO
CD cannot be inserted/played or CD is ejected right after insertion.	Radio receiver power source circuit	INFO
	Proceed to "CD cannot be Inserted / Played or CD is Ejected Right After Insertion"	INFO
CD cannot be ejected.	Radio receiver power source circuit	INFO
	Proceed to "CD cannot be Ejected"	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: PROBLEM SYMPTOMS TABLE (2010 Prius)

Sound quality is bad only when CD is played. (Volume is too low.)	Proceed to "Sound Quality is Bad Only when CD is Played (Volume is Too Low)"	INFO
CD sound skips.	Proceed to "CD Sound Skips"	INFO
Radio receiver cannot be illuminated at night.	Illumination circuit	INFO
	Radio receiver assembly	INFO

Steering Pad Switch Function

SYMPTOM	SUSPECTED AREA	SEE PAGE
Audio system cannot be operated with steering pad switch.	Steering pad switch circuit	INFO
	Radio receiver assembly	INFO
Steering pad switch cannot be illuminated at night.	Illumination circuit	INFO
	Radio receiver assembly	INFO

"Bluetooth" Function*4

SYMPTOM	SUSPECTED AREA	SEE PAGE
Bluetooth is inoperative.	Proceed to "Microphone Circuit between Microphone and Radio Receiver"	INFO
	Telephone microphone assembly*5	INFO
	Telephone microphone assembly*6	INFO
	Radio receiver assembly	INFO
Cellular phone registration failure, phone directory transfer failure.	Proceed to "Cellular Phone Registration Failure, Phone Directory Transfer Failure"	INFO
Cellular phone cannot send/receive.	Proceed to "Cellular Phone cannot Send/Receive"	INFO
	Steering pad switch circuit	INFO
	Radio receiver assembly	INFO
Cellular phone cannot call in a certain place.	Proceed to "Cannot Call in a Certain Place"	INFO
Other callers voice cannot be heard, is too quiet, or distorted.	Proceed to "The Other Callers Voice cannot be Heard, is too Quiet, or Distorted"	INFO
	Proceed to "Cellular Phone Voice Circuit between Radio Receiver and Stereo Component Amplifier"	INFO
	Telephone microphone assembly*5	INFO
	Telephone microphone assembly*6	INFO
	Radio receiver assembly	INFO
Other caller cannot hear your voice, or your voice is too quiet or distorted.	Proceed to "The Other Caller cannot Hear Your Voice, or Your Voice is too Quiet or Distorted"	INFO
	Proceed to "Microphone Circuit between Microphone and Radio Receiver"	INFO

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: PROBLEM SYMPTOMS TABLE (2010 Prius)

Other caller cannot hear your voice, or your voice is too quiet or distorted.	Telephone microphone assembly*5	INFO
	Telephone microphone assembly*6	INFO
	Radio receiver assembly	INFO

SDARS system Function*7

SYMPTOM	SUSPECTED AREA	SEE PAGE
Satellite radio broadcast cannot be received or reception is bad.	Proceed to "Satellite Radio Broadcast cannot be Received"	INFO
	Radio receiver assembly	INFO
Pay-type satellite radio broadcast cannot be received.	Proceed to "Satellite Radio Broadcast cannot be Received"	INFO
	Radio receiver assembly	INFO
Satellite radio broadcast cannot be selected or after selecting broadcast, broadcast cannot be add into memory.	Proceed to "Satellite Radio Broadcast cannot be Received"	INFO
	Proceed to "Satellite Radio Broadcast cannot be Selected or After Selecting Broadcast, Broadcast cannot be Added into Memory"	INFO
	Radio receiver assembly	INFO

*1: for 8 Speakers

*2: except for 8 Speakers

*3: w/ Stereo Jack Adapter

*4: w/ Microphone

*5: w/ Sliding Roof

*6: w/o Sliding Roof

*7: w/ SDARS System

SYSTEM DESCRIPTION

1. DISC PLAYER OUTLINE

- (a) A CD player uses a laser pickup to read digital signals recorded on CDs. By converting the digital signals to analog, music and other content can be played.

CAUTION:

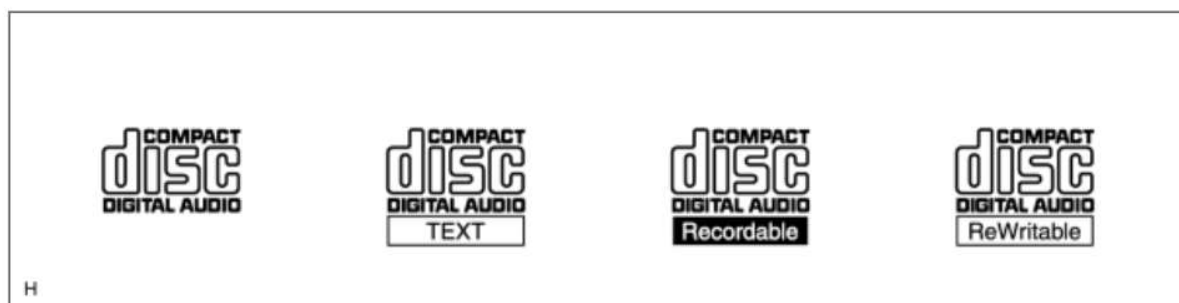
Do not look directly at the laser pickup because the CD player uses an invisible laser beam. Be sure to operate the player only as instructed.

NOTICE:

- Do not disassemble any part of the CD player.
- Do not apply oil to the CD player.
- Do not insert anything but a CD into the CD player.

- (b) Usable discs

- (1) The CD player can only play audio CDs, CD-Rs (CD-Recordable) and CD-RWs (CD-ReWritable) that have any of the following marks:



- (c) Precautions for use of discs

NOTICE:

- Copy-protected CDs cannot be played.
- CD-Rs and CD-RWs may not be played depending on the recording conditions or characteristics of the discs, or due to damage, dirt or deterioration caused by leaving the discs in the cabin for a long time.
- Unfinalized CD-Rs and CD-RWs cannot be played.
- Keep the discs away from dirt. Be careful not to damage the discs or leave your fingerprints on them.
- Hold discs by the outer edge and center hole with the label side up.
- Leaving the disc exposed halfway out of the slot for a long time after pressing the disc eject button may cause deformation of the disc, making the disc unusable.
- If discs have adhesive tape, stickers, CD-R labels or any traces of such labels attached, the discs may not be ejected or player malfunctions may result.
- Keep the discs away from direct sunlight. (Exposure to direct sunlight may cause deformation of the disc, making the disc unusable.)
- Do not use odd-shaped CDs because these may cause player malfunctions.
- Do not use discs whose recording portion is transparent or translucent because they may not be inserted, ejected or played normally.

HINT:

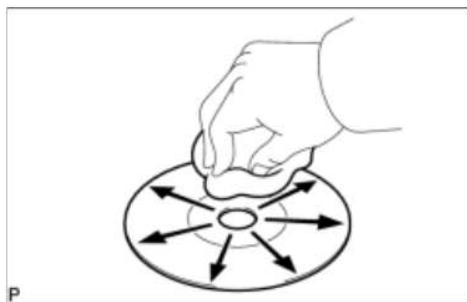
- When it is cold or it is raining, if the windows mist up, mist and condensation may form in the player. In such cases, the CD sound may skip or stop in the middle of play. Ventilate or dehumidify the cabin for a while before using the player.
- The CD sound may skip if the player experiences strong vibrations when the vehicle is driven on rough road or similar uneven surface(s).

- (d) Cleaning

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: SYSTEM DESCRIPTION (2010 Prius)

NOTICE:

Do not use a lens cleaner because it may cause a malfunction in the pickup portion of the player.



(1) If dirt is on the disc surface, wipe it clean with a soft dry cloth such as an eyeglass cleaner for plastic lenses from the inside to the outside in a radial direction.

- Pressing on the disc by hand or rubbing the disc with a hard cloth may scratch the disc surface.
- Use of solvent such as a record spray, antistatic agent, alcohol, benzine and thinner, or a chemical cloth may cause damage to the disc, making the disc unusable.

2. MP3/WMA OUTLINE

(a) Playable MP3 file standards

Compatible standard	MP3 (MPEG1 LAYER3, MPEG2 LSF LAYER3)
Compatible sampling frequency	• MPEG1 LAYER3: 32, 44.1, 48 (kHz) • MPEG2 LSF LAYER3: 16, 22.05, 24 (kHz)
Compatible bit rate	• MPEG1 LAYER3: 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (kbps) • MPEG2 LSF LAYER3: 64, 80, 96, 112, 128, 144, 160 (kbps) • Compatible with VBR
Compatible channel mode	Stereo, joint stereo, dual channel, monaural

(b) Playable WMA file standards

Compatible standard	WMA Ver. 7, 8 and 9
Compatible sampling frequency	32, 44.1, 48 (kHz)
Compatible bit rate (Only compatible with 2-channel playback)	• Ver. 7, 8: CBR48, 64, 80, 96, 128, 160, 192 (kbps) • Ver. 9: CBR48, 64, 80, 96, 128, 160, 192, 256, 320 (kbps)

(c) ID3 tag and WMA tag

- (1) Additional textual information called ID3 tag can be input to MP3 files. Information such as song titles and artist names can be stored.

HINT:

This player is compatible with the ID3 tags of ID3 Ver. 1.0 and 1.1, and ID3 Ver. 2.2 and 2.3. (Number of characters complies with ID3 Ver. 1.0 and 1.1.)

- (2) Additional textual information called WMA tag can be input to WMA files. Information such as song titles and artist names can be stored.

(d) Usable media

- (1) Only CD-ROMs, CD-Rs (CD-Recordable) and CD-RWs (CD-ReWritable) can be used to play MP3/WMA files.

NOTICE:

CD-Rs and CD-RWs are more easily affected by heat and humidity than discs used for normal audio.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: SYSTEM DESCRIPTION (2010 Prius)

- CD-Rs and CD-RWs are more easily affected by a hot and humid environment than discs used for normal audio CDs. For this reason, some CD-Rs and CD-RWs do not play.
- If there are fingerprints or scratches on a disc, the disc may not play or the CD sound may skip.
- Some CD-Rs and CD-RWs may deteriorate if they are left in the cabin for a long time.
- Keep CD-Rs and CD-RWs in an opaque case.

(e) Usable media format

(1) Usable media format

Disc format	CD-ROM Mode 1, CD-ROM XA Mode 2 Form1
File format	ISO9660 Level 1 and Level 2 (Joliet, Romeo)

HINT:

- As for MP3/WMA files written in any unlisted format, the contents of the files may not play normally or the file names or folder names may not display correctly.
- This player is compatible with multi-session discs and can play CD-Rs and CD-RWs on which MP3/WMA files are added. However, only the first session can be played.
- Discs whose first session includes both music data and MP3 or WMA format data cannot be played.

(2) Standard and restrictions

Maximum directory levels	8 levels
Maximum number of characters for a folder name/file name	32 characters
Maximum number of folders	192 (Including empty folders, route folders, and folders that do not contain MP3/WMA files)
Maximum number of files in a disc	255 (Including non-MP3/WMA files)

(f) File names

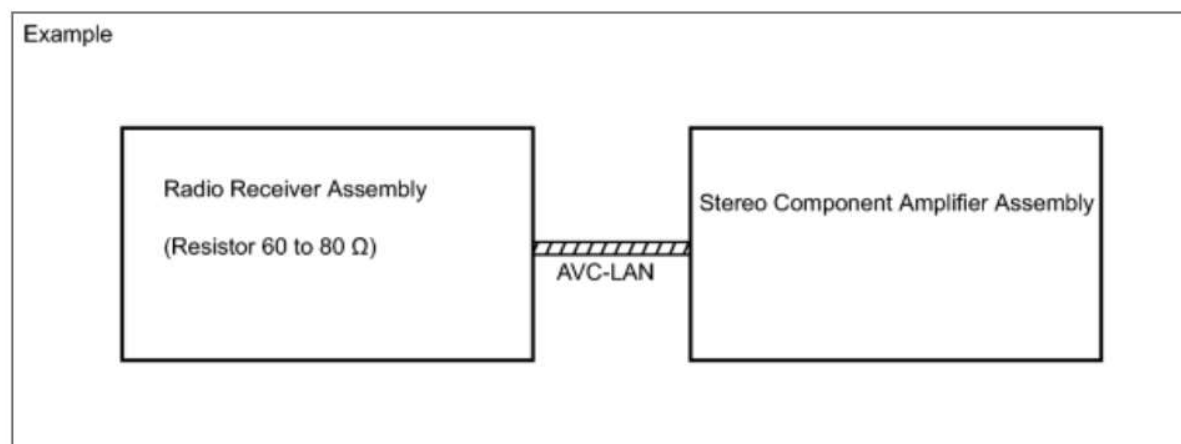
- (1) Only files with an extension of ".mp3" or ".wma" can be recognized and played as MP3 or WMA files.
- (2) Save MP3 or WMA files with an extension of ".mp3" or ".wma".

NOTICE:

If non-MP3 or non-WMA files are saved with an extension of ".mp3" or ".wma", those files may be wrongly recognized as MP3 or WMA files and played. A loud noise may occur and damage to the speakers may result.

3. AVC-LAN DESCRIPTION

(a) What is AVC-LAN?



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: SYSTEM DESCRIPTION (2010 Prius)

AVC-LAN, an abbreviation for Audio Visual Communication Local Area Network, is a united standard developed by the manufacturers in affiliation with Toyota Motor Corporation. This standard pertains to audio and visual signals as well as switch and communication signals.

(b) Purpose

Recently, car audio systems have rapidly developed and the functions have vastly changed. The conventional car audio system is being integrated with multi-media interfaces similar to those in navigation systems. At the same time, customers are demanding higher quality from their audio systems. This is merely an overview of the standardization background. The specific purposes are as follows:

- (1) To solve sound problems etc. caused by using components of different manufacturers through signal standardization.
- (2) To allow each manufacturer to concentrate on developing products they do best. From this, reasonably priced products can be produced.

HINT:

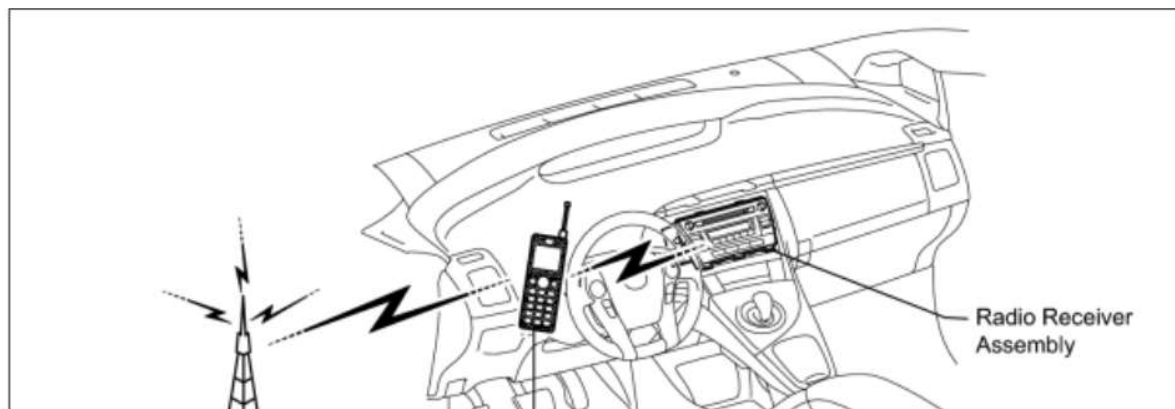
- If a short to +B or short to ground is detected in the AVC-LAN circuit, communication is interrupted and the audio system will stop functioning.
- If the audio system has a navigation system installed, the multi-display unit acts as the master unit. If the navigation system is not installed, the audio head unit acts as the master unit instead. If the navigation receiver assembly is installed, it is the master unit.
- The radio receiver assembly contains a resistor that is necessary to enable communication on the different AVC-LAN circuits.
- The car audio system with an AVC-LAN circuit has a diagnostic function.
- Each component has a specified number (3-digit) called a physical address. Each function has a number (2-digit) called a logical address.

4. COMMUNICATION SYSTEM OUTLINE

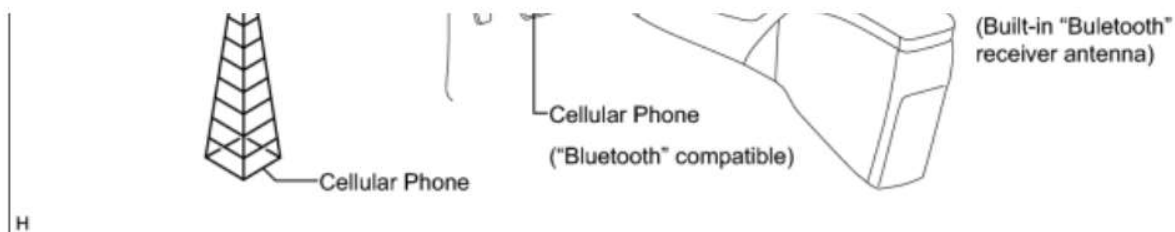
- (a) Components of the audio system communicate with each other via the AVC-LAN.
- (b) The master component of the AVC-LAN is a radio receiver assembly with a 60 to 80 Ω resistor. This is essential for communication.
- (c) If a short circuit or open circuit occurs in the AVC-LAN circuit, communication is interrupted and the audio system will stop functioning.

5. DIAGNOSTIC FUNCTION OUTLINE

- (a) The audio system has a diagnostic function (the result is indicated on the master unit).
- (b) A 3-digit hexadecimal component code (physical address) is allocated to each component on the AVC-LAN. Using this code, the component in the diagnostic function can be displayed.

6. "BLUETOOTH" OUTLINE

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: SYSTEM DESCRIPTION (2010 Prius)



- (a) "Bluetooth" is a trademark owned by Bluetooth SIG. Inc.
- (b) "Bluetooth" is a new wireless connection technology that uses the 2.4 GHz frequency band.

HINT:

The communication performance of "Bluetooth" may vary depending on obstructions or radio wave conditions between communication devices, electromagnetic radiation, communication device sensitivity or antenna capacity.

- (c) Hands-free function
 - (1) The "Bluetooth" built-in radio receiver and a "Bluetooth" compatible cellular phone*1 can be connected using a "Bluetooth" wireless connection. This enables use of the hands-free function on the cellular phone even the phone may be in a pocket or bag. For this reason, it is not necessary to use a connector or cable to connect the cellular phone.
- *1: Some versions of "Bluetooth" compatible cellular phones may not function.

7. ASL (Automatic Sound Levelizer) FUNCTION OUTLINE

- (a) The Automatic Sound Levelizer (ASL) function automatically adjusts the sound data in order to enable to hear the clear sound from the audio system even when vehicle noise increases (as vehicle noise increases, the volume is turned up etc.). Vehicle speed signals are received from the combination meter assembly and used for the ASL.

8. RBDS FUNCTION OUTLINE (BROADCAST IN NORTH AMERICA ONLY)

The Radio Broadcast Data System (RBDS) is broadcast through conventional FM radio broadcasts. Even if a vehicle changes locations, the same information can be received from several FM stations without breaks. Information such as song names, traffic information, broadcast station names, etc. can be received.

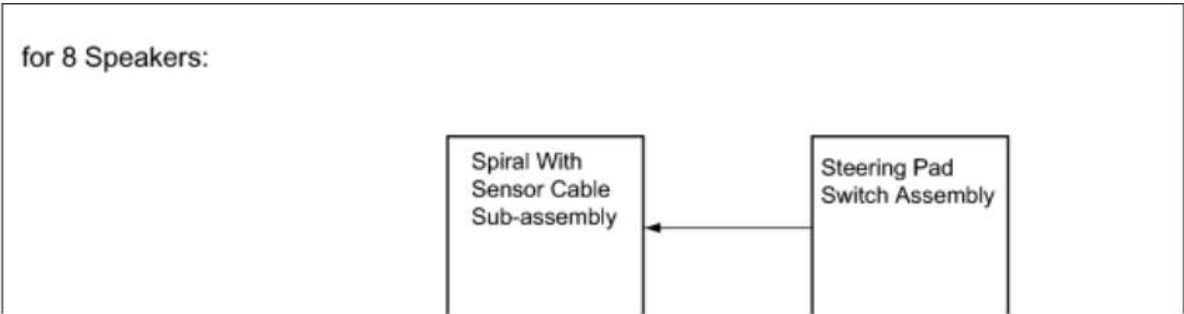
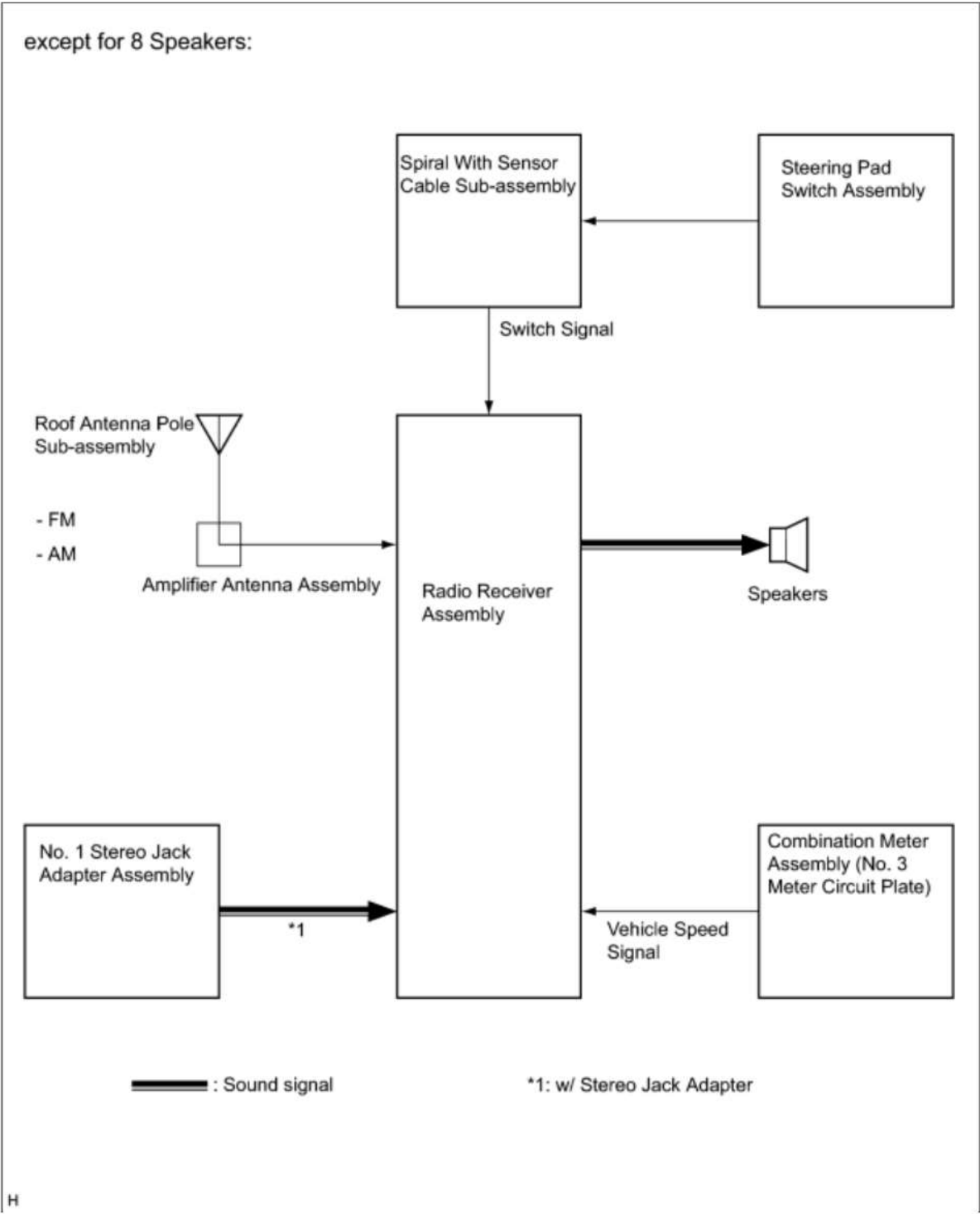
9. SDARS SYSTEM FUNCTION OUTLINE (BROADCAST IN NORTH AMERICA ONLY)

Satellite Digital Audio Radio Service (SDARS) is a satellite digital radio broadcast provided by Sirius XM Radio Inc. The broadcast (pay-type) is performed through satellites and terrestrial repeater networks. Several unique channels are available, and even if a vehicle changes locations, the same information can be received without breaks. Information such as song names, broadcast station names, etc. can be received.

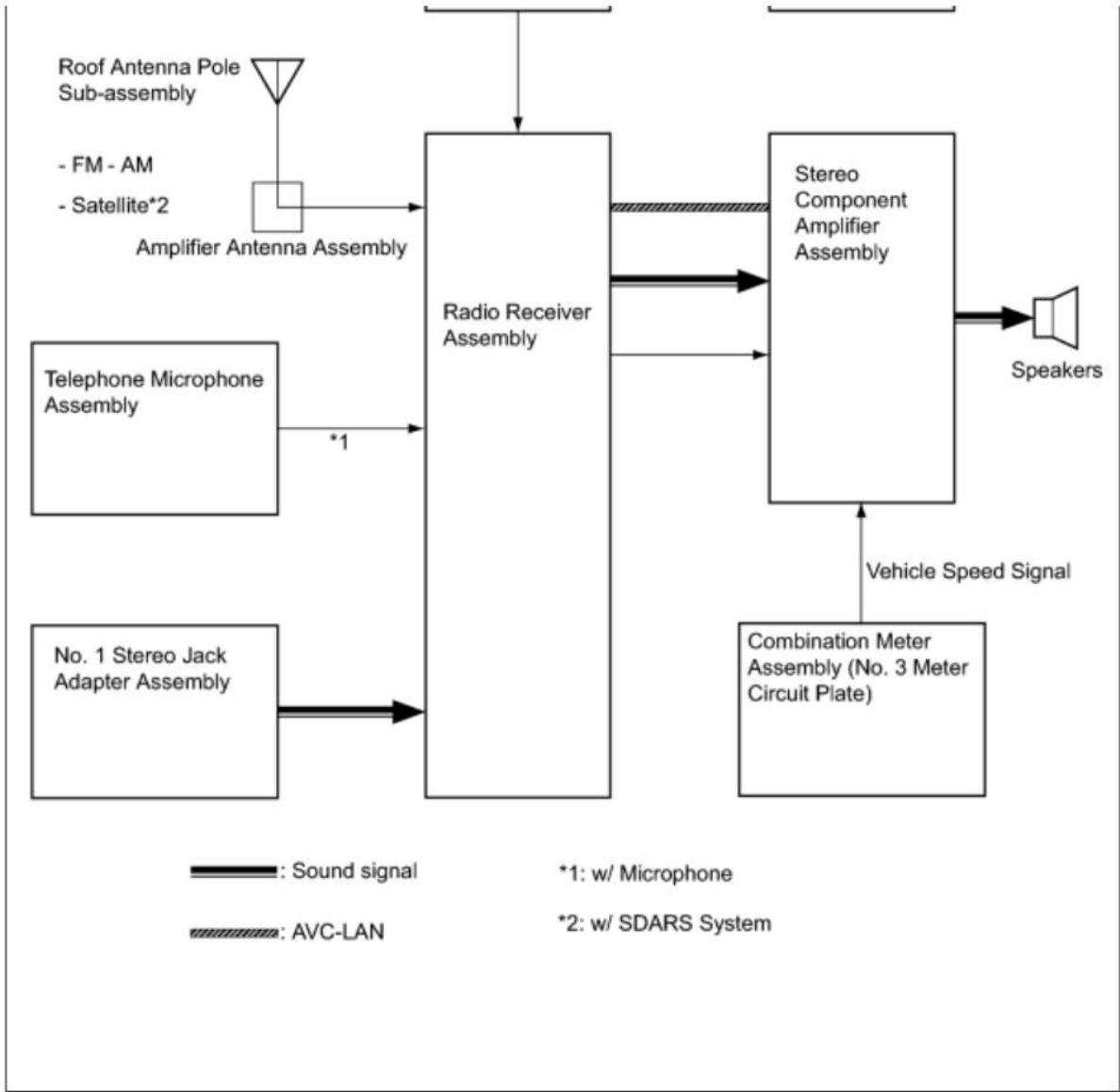
NOTICE:

To receive an audio-visual pay-type broadcasts, the customer must enter into a pay-type contract with XM Satellite Radio Inc. After entering into a contract, registration of an 8-digit XM Radio ID is required. Also, if parts are replaced, the XM Radio ID must be reregistered.

SYSTEM DIAGRAM



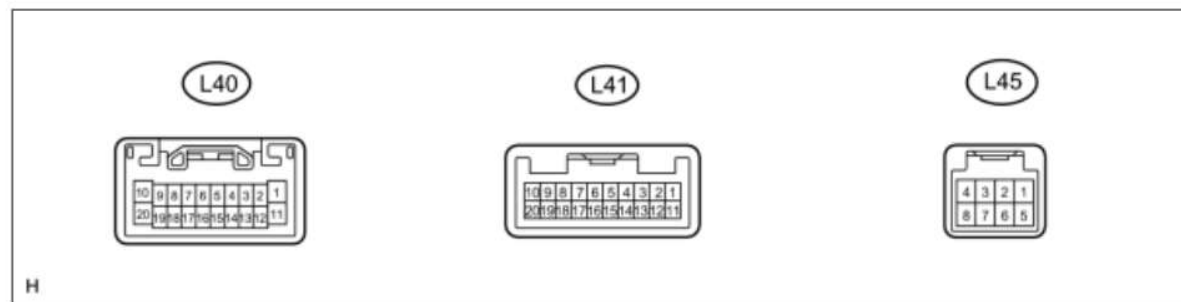
AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: SYSTEM DIAGRAM (2010 Prius)



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TERMINALS OF ECU

1. RADIO RECEIVER ASSEMBLY (for 8 Speakers)



TERMINAL NO. (SYMBOL)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFICATION
L40-1 (B) - L40-20 (GND)	SB - BR	Battery	Power switch off	11 to 14 V
L40-2 (ILL+) - L40-20 (GND)	G - BR	Illumination signal	Light control switch off	Below 1 V
L40-2 (ILL+) - L40-20 (GND)	G - BR	Illumination signal	Light control switch tail	11 to 14 V
L40-5 (ATX+)	G	AVC-LAN communication signal	-	-
L40-7 (MUTE) - L40-20 (GND)	B - BR	MUTE signal	Audio system playing mode	Above 2.5 V
L40-7 (MUTE) - L40-20 (GND)	B - BR	MUTE signal	Audio system changing mode	Below 0.5 V
L40-8 (R+) - L40-20 (GND)	G - BR	Sound signal (Right)	Audio system playing mode	A waveform synchronized with sounds is output
L40-9 (L+) - L40-20 (GND)	R - BR	Sound signal (Left)	Audio system playing mode	A waveform synchronized with sounds is output
L40-10 (SLD) - Body ground	Shield - Body ground	Shield ground	Always	Below 1 V
L40-11 (ACC) - L40-20 (GND)	GR - BR	Accessory (ON)	Power switch off	Below 1 V
L40-11 (ACC) - L40-20 (GND)	GR - BR	Accessory (ON)	Power switch on (ACC)	11 to 14 V
L40-12 (ILL-) - L40-20 (GND)	W-B - BR	Illumination (rheostat) signal	Light control switch off	Below 1 V
L40-12 (ILL-) - L40-20 (GND)	W-B - BR	Illumination (rheostat) signal	Light control switch tail	Pulse generation
L40-13 (ANT) - L40-20 (GND)	BE - BR	Power source of antenna	Radio switch on and AM or FM	8 V or higher
L40-15 (ATX-)	R	AVC-LAN communication signal	-	-
L40-18 (R-) - L40-20 (GND)	B - BR	Sound signal (Right)	Audio system playing mode	A waveform synchronized with sounds is output

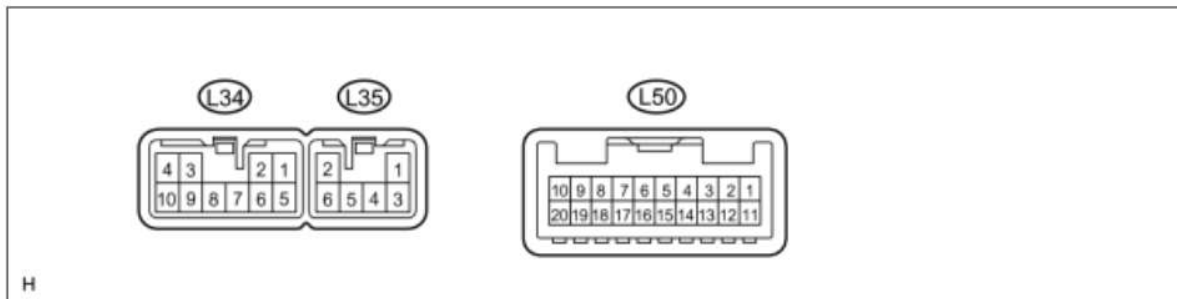
AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: TERMINALS OF ECU (2010 Prius)

L40-19 (L-) - L40-20 (GND)	W - BR	Sound signal (Left)	Audio system playing mode	A waveform synchronized with sounds is output
L40-20 (GND) - Body ground	BR - Body ground	Ground	Always	Below 1 V
L41-6 (SWG) - L40-20 (GND)	P - BR	Steering pad switch ground	Always	Below 1 V
L41-7 (SW1) - L40-20 (GND)	R - BR	Steering pad switch signal	Steering pad switch not operated	3.28 to 3.5 V
L41-7 (SW1) - L40-20 (GND)	R - BR	Steering pad switch signal	Seek+ switch pushed	Below 0.8 V
L41-7 (SW1) - L40-20 (GND)	R - BR	Steering pad switch signal	Seek- switch pushed	0.9 to 1.3 V
L41-7 (SW1) - L40-20 (GND)	R - BR	Steering pad switch signal	Volume+ switch pushed	1.65 to 1.9 V
L41-7 (SW1) - L40-20 (GND)	R - BR	Steering pad switch signal	Volume- switch pushed	2.45 to 2.6 V
L41-8 (SW2) - L40-20 (GND)	G - BR	Steering pad switch signal	Steering pad switch not operated	3.28 to 3.5 V
L41-8 (SW2) - L40-20 (GND)	G - BR	Steering pad switch signal	MODE switch pushed	Below 0.8 V
L41-8 (SW2) - L40-20 (GND)*1	G - BR	Steering pad switch signal	On hook switch pushed	0.9 to 1.3 V
L41-8 (SW2) - L40-20 (GND)*1	G - BR	Steering pad switch signal	Off hook switch pushed	1.65 to 1.9 V
L41-8 (SW2) - L40-20 (GND)*1	G - BR	Steering pad switch signal	Voice switch pushed	2.45 to 2.6 V
L41-11 (IVO+) - L40-20 (GND)	Y - BR	Voice signal	"Bluetooth" hands-free voice signal received	A waveform synchronized with sounds is output
L41-12 (IVO-) - L40-20 (GND)	BR - BR	Voice signal	"Bluetooth" hands-free voice signal received	A waveform synchronized with sounds is output
L41-13 (SLD) - Body ground	Shield - Body ground	Shield ground	Always	Below 1 V
L41-15 (ARI) - L40-20 (GND)	B - BR	Sound signal (Right)	External device playing (When stereo jack used)	A waveform synchronized with sounds is output
L41-16 (ASGN) - L40-20 (GND)	W - BR	Shield ground	Always	Below 1 V
L41-17 (ALI) - L40-20 (GND)	R - BR	Sound signal (Left)	External device playing (When stereo jack used)	A waveform synchronized with sounds is output
L41-18 (AGND) - Body ground	Shield - Body ground	Shield ground	Always	Below 1 V
L41-19 (AUXI) - L40-20 (GND)	W - BR	External device connection detection signal	External device connected	Below 1 V
L45-1 (SNS2) - L40-20 (GND)*1	B - BR	Microphone connection detection signal	Always	Below 1 V

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: TERMINALS OF ECU (2010 Prius)

L45-2 (MIN+) - L40-20 (GND)*1	B - BR	Microphone voice signal	"Bluetooth" hands-free function on	A waveform synchronized with sounds is output
L45-3 (MACC) - L40-20 (GND)*1	R - BR	Microphone amplifier power supply	Power switch off	Below 1 V
L45-3 (MACC) - L40-20 (GND)*1	R - BR	Microphone amplifier power supply	Power switch on (IG)	4 to 6 V
L45-5 (MIN-) - L40-20 (GND)*1	W - BR	Microphone voice signal	"Bluetooth" hands-free function on	A waveform synchronized with sounds is output
L45-6 (SGND) - Body ground*1	Shield - Body ground	Shield ground	Always	Below 1 V

*1: w/ Microphone

2. RADIO RECEIVER (except for 8 Speakers)

TERMINAL NO. (SYMBOL)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFICATION
L34-1 (FR+) - L34-7 (GND)	LG - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L34-2 (FL+) - L34-7 (GND)	P - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L34-3 (ACC) - L34-7 (GND)	GR - BR	Accessory (ON)	Power switch off	Below 1 V
L34-3 (ACC) - L34-7 (GND)	GR - BR	Accessory (ON)	Power switch on (ACC)	11 to 14 V
L34-4 (B) - L34-7 (GND)	SB - BR	Battery	Power switch off	11 to 14 V
L34-5 (FR-) - L34-7 (GND)	L - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L34-6 (FL-) - L34-7 (GND)	V - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L34-7 (GND) - Body ground	BR - Body ground	Ground	Always	Below 1 V
L34-8 (ANT) - L34-7 (GND)	BE - BR	Power source of antenna	Radio switch on and AM or FM	8 V or higher
L34-10 (ILL+) - L34-7 (GND)	G - BR	Illumination signal	Light control switch off	Below 1 V
L34-10 (ILL+) - L34-7 (GND)			Light control switch tail or	

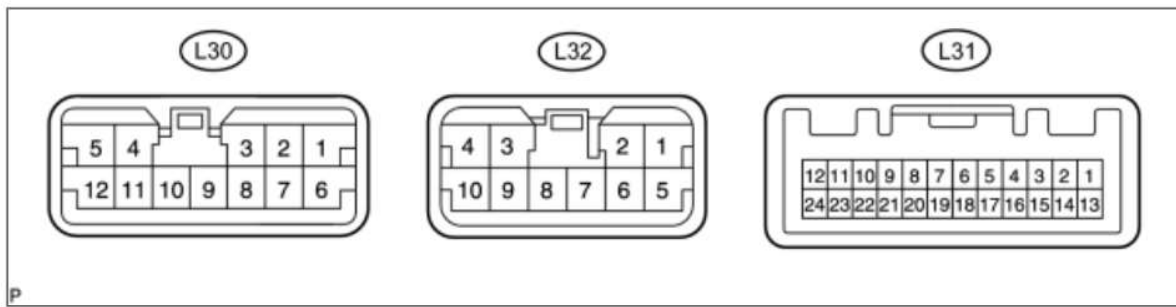
AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: TERMINALS OF ECU (2010 Prius)

L34-10 (ILL-) - L34-7 (GND)	G - BR	Illumination signal	Light control switch tail or head	11 to 14 V
L35-1 (RR+) - L34-7 (GND)*1	R - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized with sounds is output
L35-2 (RL+) - L34-7 (GND)*1	B - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output
L35-3 (RR-) - L34-7 (GND)*1	W - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized with sounds is output
L35-5 (ILL-) - L34-7 (GND)	W-B - BR	Illumination (rheostat) signal	Light control switch off	Below 1 V
L35-5 (ILL-) - L34-7 (GND)	W-B - BR	Illumination (rheostat) signal	Light control switch tail or head	Pulse generation
L35-6 (RL-) - L34-7 (GND)*1	Y - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output
L50-3 (SPD) - L34-7 (GND)	V - BR	Speed signal from combination meter	Power switch on (IG) Driver wheels turned slowly	Pulse generation
L50-6 (SWG) - L34-7 (GND)	R - BR	Steering pad switch ground	Always	Below 1 V
L50-7 (SW1) - L34-7 (GND)	R - BR	Steering pad switch signal	Steering pad switch not operated	4.5 to 5.5 V
L50-7 (SW1) - L34-7 (GND)	R - BR	Steering pad switch signal	Seek+ switch pushed	Below 0.5 V
L50-7 (SW1) - L34-7 (GND)	R - BR	Steering pad switch signal	Seek- switch pushed	0.86 to 0.95 V
L50-7 (SW1) - L34-7 (GND)	R - BR	Steering pad switch signal	Volume+ switch pushed	1.91 to 2.01 V
L50-7 (SW1) - L34-7 (GND)	R - BR	Steering pad switch signal	Volume- switch pushed	3.23 to 3.57 V
L50-8 (SW2) - L34-7 (GND)	G - BR	Steering pad switch signal	Steering pad switch not operated	4.5 to 5.5 V
L50-8 (SW2) - L34-7 (GND)	G - BR	Steering pad switch signal	MODE switch pushed	Below 0.5 V
L50-15 (ARI) - L34-7 (GND)*2	B - BR	Sound signal (Right)	External device playing (When stereo jack used)	A waveform synchronized with sounds is output
L50-16 (ASGN) - L34-7 (GND)*2	W - BR	Shield ground	Always	Below 1 V
L50-17 (ALI) - L34-7 (GND)*2	R - BR	Sound signal (Left)	External device playing (When stereo jack used)	A waveform synchronized with sounds is output
L50-18 (AGND) - Body ground*2	Shield - Body ground	Shield ground	Always	Below 1 V
L50-19 (AUXI) - L34-7 (GND)*2	W - BR	External device connection detection signal	External device connected	Below 1 V

*1: for 6 Speakers

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: TERMINALS OF ECU (2010 Prius)

*2: w/ Stereo Jack Adapter

3. STEREO COMPONENT AMPLIFIER ASSEMBLY (for 8 Speakers)

TERMINAL NO. (SYMBOL)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFICATION
L31-1 (MUTE) - L30-6 (GND)	B - BR	Mute signal from radio receiver assembly	Audio system playing	Above 2.5 V
L31-1 (MUTE) - L30-6 (GND)	B - BR	Mute signal from radio receiver assembly	Audio system changing sources	Below 0.5 V
L31-2 (L-) - L30-6 (GND)	W - BR	Sound signal (Left)	Audio system playing	A waveform synchronized with sounds is output
L31-3 (L+) - L30-6 (GND)	R - BR	Sound signal (Left)	Audio system playing	A waveform synchronized with sounds is output
L31-4 (R-) - L30-6 (GND)	B - BR	Sound signal (Right)	Audio system playing	A waveform synchronized with sounds is output
L31-5 (R+) - L30-6 (GND)	G - BR	Sound signal (Right)	Audio system playing	A waveform synchronized with sounds is output
L31-7 (TX-)	R	AVC-LAN communication signal	-	-
L31-8 (TX+)	G	AVC-LAN communication signal	-	-
L31-11 (SPD) - L30-6 (GND)	V - BR	Speed signal from combination mete assembly	Power switch on (IG) Drive wheels turned slowly	Pulse generation
L31-12 (ACC) - L30-6 (GND)	GR - BR	Accessory (ON)	Power switch off	Below 1 V
L31-12 (ACC) - L30-6 (GND)	GR - BR	Accessory (ON)	Power switch on (ACC)	11 to 14 V
L31-22 (INT-) - L30-6 (GND)	BR - BR	Voice signal	"Bluetooth" hands-free voice signal transmitted	A waveform synchronized with sounds is output
L31-23 (INT+) - L30-6 (GND)	Y - BR	Voice signal	"Bluetooth" hands-free voice signal transmitted	A waveform synchronized with sounds is output
L32-1 (+B) - L30-6 (GND)	R - BR	Battery	Power switch off	11 to 14 V
L32-2 (WFR+) - L30-6 (GND)	LG - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L32-3 (RL+) -	B - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: TERMINALS OF ECU (2010 Prius)

L30-6 (GND)	-	Sound signal (Front Right)	Audio system playing	with sounds is output
L32-4 (RR-) - L30-6 (GND)	W - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output
L32-5 (+B2) - L30-6 (GND)	B - BR	Battery	Power switch off	11 to 14 V
L32-6 (WFR-) - L30-6 (GND)	L - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L32-7 (WFL-) - L30-6 (GND)	V - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L32-8 (WFL+) - L30-6 (GND)	P - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L32-9 (RL-) - L30-6 (GND)	Y - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output
L32-10 (RR+) - L30-6 (GND)	R - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized with sounds is output
L30-1 (FL-) - L30-6 (GND)	V - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L30-2 (FL+) - L30-6 (GND)	P - BR	Sound signal (Front Left)	Audio system playing	A waveform synchronized with sounds is output
L30-3 (FR-) - L30-6 (GND)	LG - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L30-4 (TWR+) - L30-6 (GND)	R - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized with sounds is output
L30-5 (TWL+) - L30-6 (GND)	B - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output
L30-6 (GND) - Body ground	BR - Body ground	Ground	Always	Below 1 V
L30-7(GND2) - Body ground	BR - Body ground	Ground	Always	Below 1 V
L30-9 (FR+) - L30-6 (GND)	LG - BR	Sound signal (Front Right)	Audio system playing	A waveform synchronized with sounds is output
L30-10 (TWR-) - L30-6 (GND)	W - BR	Sound signal (Rear Right)	Audio system playing	A waveform synchronized with sounds is output
L30-12 (TWL-) - L30-6 (GND)	Y - BR	Sound signal (Rear Left)	Audio system playing	A waveform synchronized with sounds is output

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-21,01-22,01-2E: ROM Error (2010 Prius)

DTC	01-21	ROM Error
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DTC	01-22	RAM Error
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DTC	01-2E	EEPROM Error
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DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-21	A ROM malfunction exists.	Radio receiver assembly
01-22	A RAM malfunction exists.	
01-2E	A checksum malfunction exists.	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY
-----------	--

(a) Replace the radio receiver assembly  .

NEXT  **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D5,01-D8,01-D9,01-DA,01-DB,01-DE: Absence of Registration Unit (2010 Prius)

DTC	01-D5	Absence of Registration Unit
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DTC	01-D8	No Response for Connection Check
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DTC	01-D9	Last Mode Error
------------	--------------	------------------------

DTC	01-DA	No Response Against ON / OFF Command
------------	--------------	---

DTC	01-DB	Mode Status Error
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DTC	01-DE	Slave Reset
------------	--------------	--------------------

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-D5 *1, *3	A device indicated by the sub-code is (was) disconnected from the system while the power switch on (IG) or (ACC). The communication condition with the device that the DTC shows cannot be obtained when the engine starts.	- Power source circuit of the component shown by the sub-code - AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code - Component shown by the sub-code
01-D8 *2, *3	The device indicated by the sub-code is (was) disconnected from the system after the engine starts.	
01-D9 *1, *3	The device that had functioned before the engine stopped is (was) disconnected from the system while the power switch on (IG) or (ACC).	
01-DA *3	No response is identified when changing mode. Sound and image do not change by switch operation.	
01-DB *1, *3	A dual alarm is detected.	
01-DE *3, *4	A slave device has been disconnected after the engine starts.	

HINT:

- *1: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this DTC is stored after 180 seconds.
- *3: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D5,01-D8,01-D9,01-DA,01-DB,01-DE: Absence of Registration Unit (2010 Prius)

for the device.

- *4: This DTC may be stored if the engine is started and the power switch start again.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

- | | |
|----|--|
| 1. | CHECK "RADIO RECEIVER COMMUNICATION ERROR" IN FLOW CHART |
|----|--|

HINT:

Refer to Radio Receiver Communication Error  .

NEXT  **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D6,01-D7: No Master (2010 Prius)

DTC	01-D6	No Master
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DTC	01-D7	Connection Check Error
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DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-D6*1	Either condition is met: • The device that stores (stored) the DTC has (had) been disconnected while the power switch on (IG) or (ACC). • The master device has (had) been disconnected when this DTC is stored.	• Radio receiver assembly power source circuit • Power source circuit of the component which has stored this code • AVC-LAN circuit between the radio receiver assembly and component which has stored this code • Component which has stored this code • Radio receiver assembly
01-D7*2	Either condition is met: • The device that stored the code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this DTC is (was) stored.	

HINT:

- *1: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.
- *2: When 210 seconds have elapsed after disconnecting the power supply connector of the master component with the power switch on (IG) or (ACC), this DTC is stored.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1. CHECK RADIO RECEIVER ASSEMBLY POWER SOURCE CIRCUIT

HINT:

Refer to Radio Receiver Power Source Circuit [INFO](#)

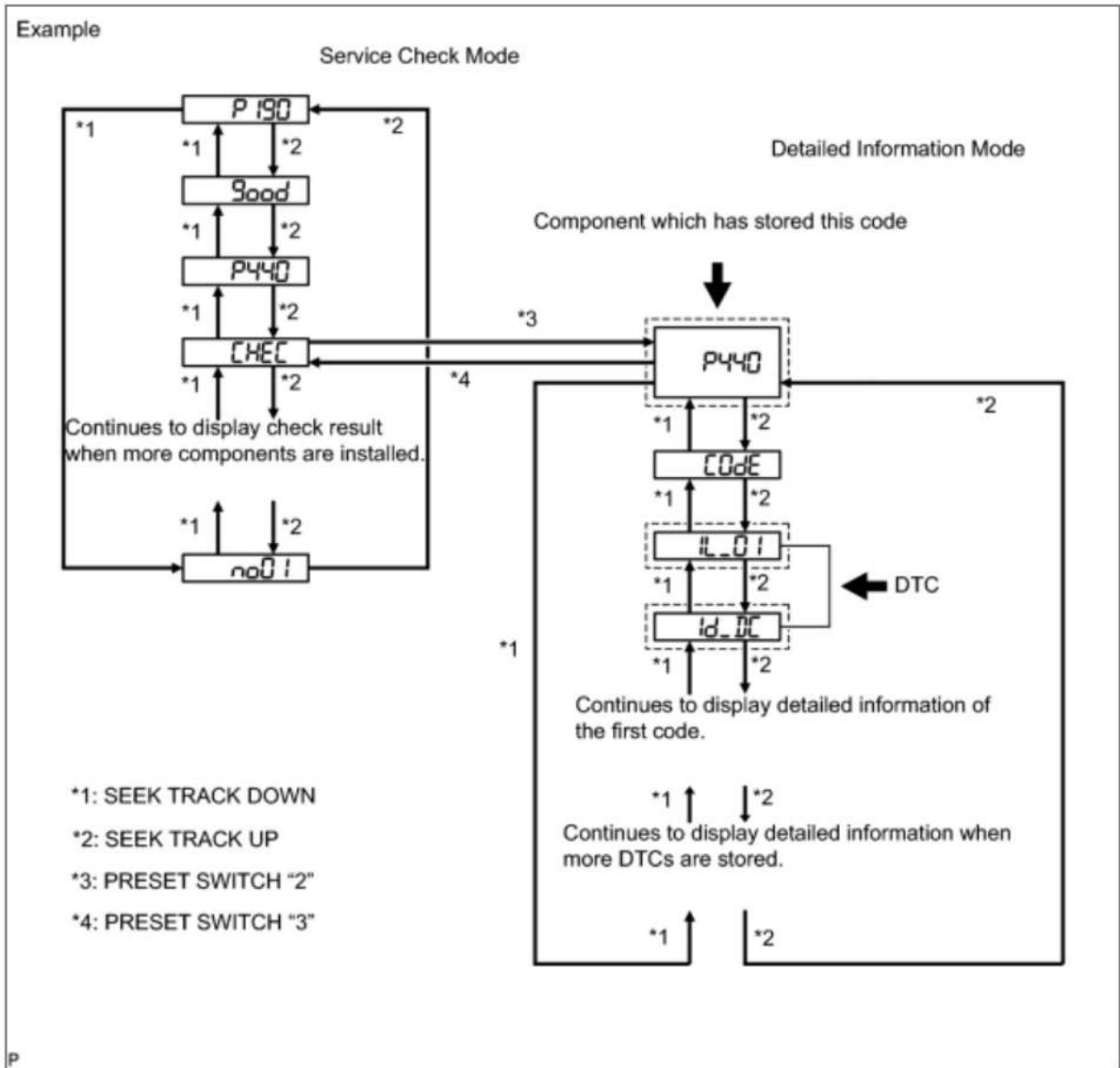
Next to Radio Receiver Power Source Circuit

If the power source circuit is operating normally, proceed to the next step.

NEXT

2. IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

COMPONENT	PHYSICAL ADDRESS
-----------	------------------

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D6,01-D7: No Master (2010 Prius)

COMPONENT	PHYSICAL ADDRESS
Stereo component amplifier assembly	440
Satellite radio tuner	1F1

HINT:

- "P440" set by the stereo component amplifier assembly shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear .

NEXT**3. CHECK COMPONENT SHOWN BY SUB-CODE**

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

COMPONENT	PROCEED TO
Except satellite radio tuner	A
Satellite radio tuner (1F1)	B

B ▶ REPLACE RADIO RECEIVER ASSEMBLY**A****4. CHECK POWER SOURCE CIRCUIT OF COMPONENT WHICH HAS STORED THIS CODE**

(a) Inspect the power source circuit of the component which has stored this code.

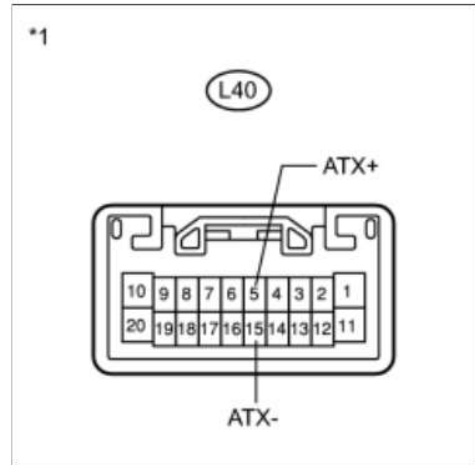
If the power source circuit is operating normally, proceed to the next step.

Component Table

COMPONENT	PROCEED TO
Stereo component amplifier assembly	Stereo component amplifier power source circuit 

NEXT

5. INSPECT RADIO RECEIVER ASSEMBLY



(a) Disconnect the radio receiver assembly connector.

(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L40-5 (ATX+) - L40-15 (ATX-)	Always	60 to 80 Ω

Text in Illustration

*1	Component without harness connected (Radio Receiver Assembly)
----	--

NG▶ REPLACE RADIO RECEIVER ASSEMBLY

OK

6. CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU INFO.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D6,01-D7: No Master (2010 Prius)

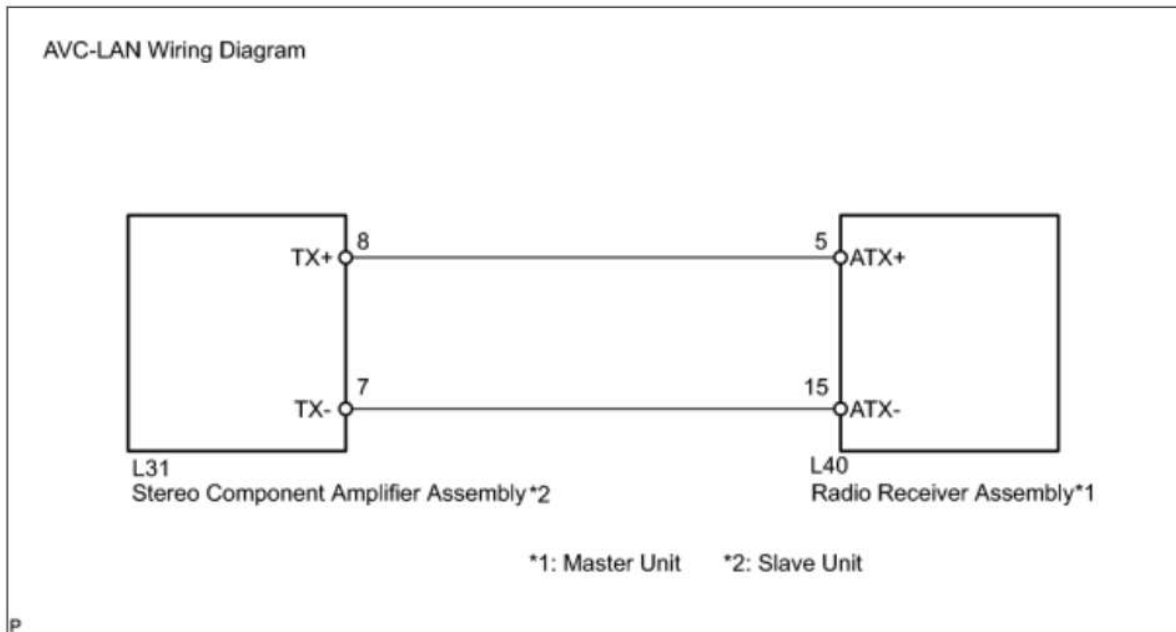
(a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

(1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.

(2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

OK:

There is no open or short circuit.



NG ► **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



7. REPLACE COMPONENT WHICH HAS STORED THIS CODE

(a) Replace the component which has stored this code with a known good one.

NEXT



8. CLEAR DTC

(a) Clear the DTCs .

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-D6,01-D7: No Master (2010 Prius)

NEXT**9. RECHECK FOR DTC**

(a) Recheck for DTCs and check if the same problem occurs again.

OK:

Malfunction disappears.

NG  **REPLACE RADIO RECEIVER ASSEMBLY**

OK  **END**

DTC	01-DC	Transmission Error
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DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-DC *1	Transmission to component shown by sub-code failed (Detecting this DTC does not always mean actual failure).	If the same sub-code is stored in other components, check power source circuit and communication system of all components shown by sub-code

HINT:

***1: If the power switch is turned off after idling for 60 seconds, this DTC may be stored when the engine is started again.**

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reason described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1. CHECK FOR DTC OF OTHER COMPONENTS

(a) Check if the component shown by the sub-code is displayed in the check result of the other components.

(1) Check if DTC 01-DC is output for the other components.

(2) If DTC 01-DC is output for any other components, check if the same physical address is displayed.

Result:

RESULT	PROCEED TO
DTC 01-DC is output and the same physical address is displayed	A
DTC 01-DC is not output or the same physical address is not displayed	B

HINT:

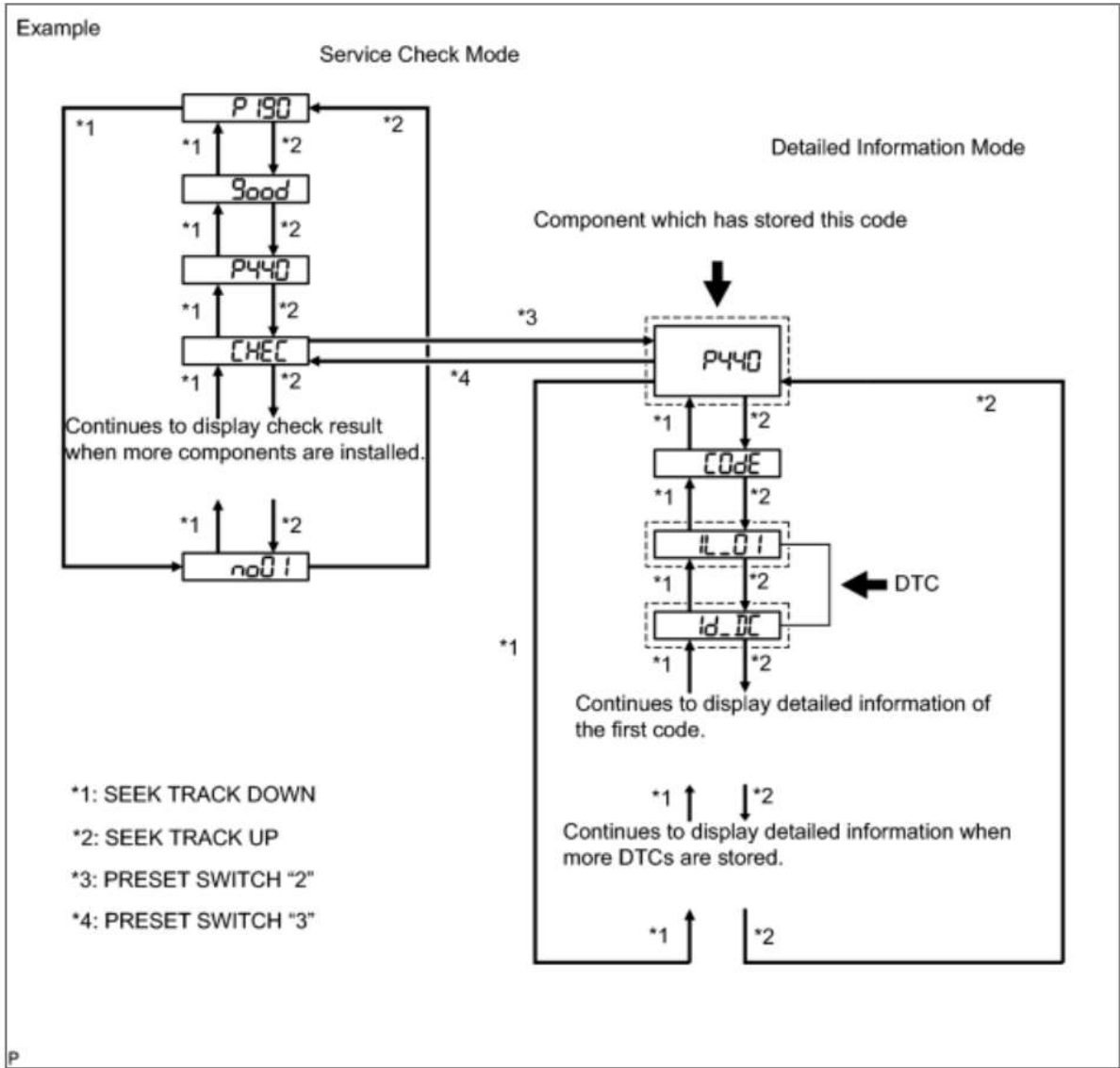
For the list of the components shown by sub-codes, refer to the table in step 2.

B  **CLEAR DTC**



2. IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



- (b) Press preset switch "2" to change the mode to "Detailed Information Mode".
- (c) Identify the component which has stored this code.

Component Table

COMPONENT	PHYSICAL ADDRESS
Stereo component amplifier assembly	440
Satellite radio tuner	454

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DC: Transmission Error (2010 Prius)

Satellite radio tuner	1F1
Radio receiver assembly	190

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear [INFO](#).

NEXT

▼

3.

CHECK COMPONENT WHICH HAS STORED THIS CODE

(a) Select the component which has stored this code.

Component Table

COMPONENT	PROCEED TO
Stereo component amplifier assembly	Stereo component amplifier communication error INFO
Satellite radio tuner	Satellite radio tuner communication error INFO
Radio receiver assembly	Radio receiver communication error INFO

NEXT ► **END**

4.

CLEAR DTC

(a) Clear the DTCs [INFO](#).

HINT:

If DTC 01-DC is output for only one component, this may not indicate a malfunction.

NEXT

▼

5.

RECHECK FOR DTC

(a) Recheck for DTCs and check if the same trouble occurs again.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DC: Transmission Error (2010 Prius)

OK:
Malfunction disappears.

NG ► **CHECK COMPONENT WHICH HAS STORED THIS CODE**

OK ► **END**

6.	CHECK COMPONENT WHICH HAS STORED THIS CODE
----	--

(a) Select the component which has stored this code.

Component Table

COMPONENT	PROCEED TO
Stereo component amplifier assembly	Stereo component amplifier communication error INFO
Satellite radio tuner	Satellite radio tuner communication error INFO
Radio receiver assembly	Radio receiver communication error INFO

NEXT ► **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DD,01-E1: Master Reset (2010 Prius)

DTC	01-DD	Master Reset
------------	--------------	---------------------

DTC	01-E1	Voice Processing Device ON Error
------------	--------------	---

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-DD *1	The device that should be the master has been disconnected after the engine starts.	- Radio receiver assembly power source circuit - AVC-LAN circuit between the radio receiver assembly and component which has stored this code - Radio receiver assembly - Component which has stored this code
01-E1 *2	The AMP device stores that the AMP output does not function even while the source device operates.	

HINT:

- *1: If the power switch is turned off after idling for 60 seconds, this DTC may be stored when the engine is started again.
- *2: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK RADIO RECEIVER POWER SOURCE CIRCUIT
-----------	--

HINT:

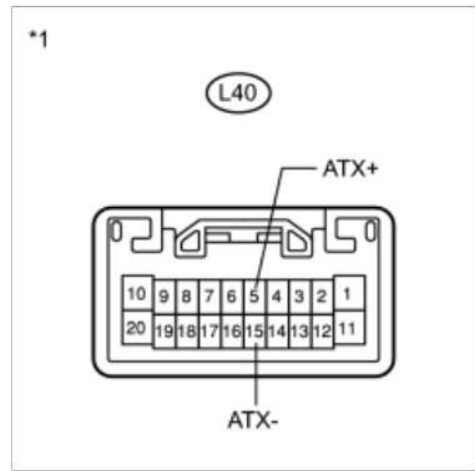
Refer to Radio Receiver Power Source Circuit .

If the power source circuit is operating normally, proceed to the next step.

NEXT



2. INSPECT RADIO RECEIVER ASSEMBLY



(a) Disconnect the radio receiver assembly connector.

(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L40-5 (ATX+) - L40-15 (ATX-)	Always	60 to 80 Ω

Text in Illustration

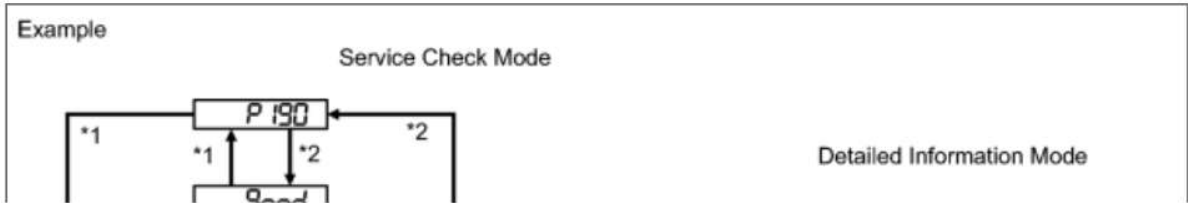
*1	Component without harness connected (Radio Receiver Assembly)
----	--

NG▶ REPLACE RADIO RECEIVER ASSEMBLY

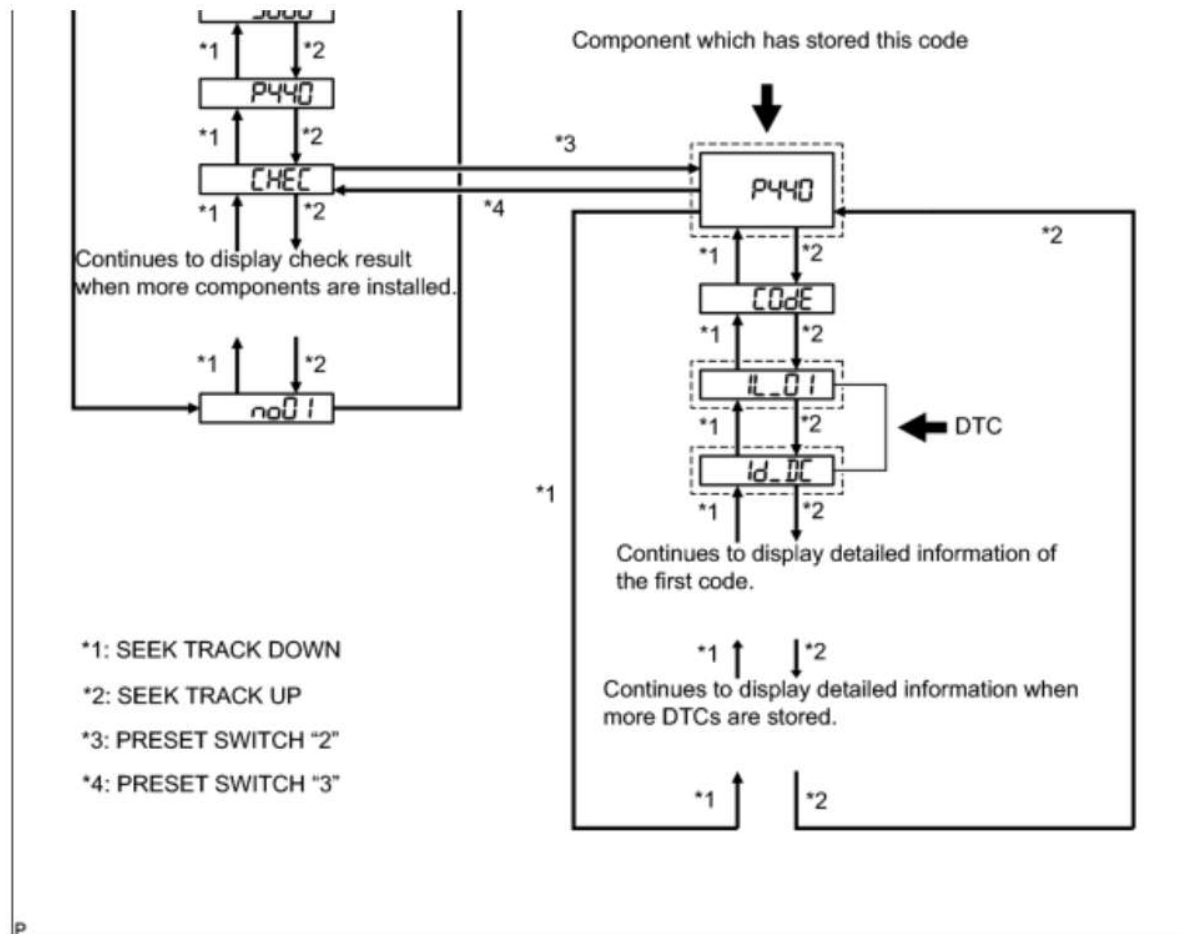
OK
▼

3. IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DD,01-E1: Master Reset (2010 Prius)



(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

COMPONENT	PHYSICAL ADDRESS
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Radio receiver assembly	190

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear  .

NEXT



4. CHECK COMPONENT SHOWN BY SUB-CODE

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

COMPONENT	PROCEED TO
Except satellite radio tuner	A
Satellite radio tuner (1F1)	B

B  **REPLACE RADIO RECEIVER ASSEMBLY**

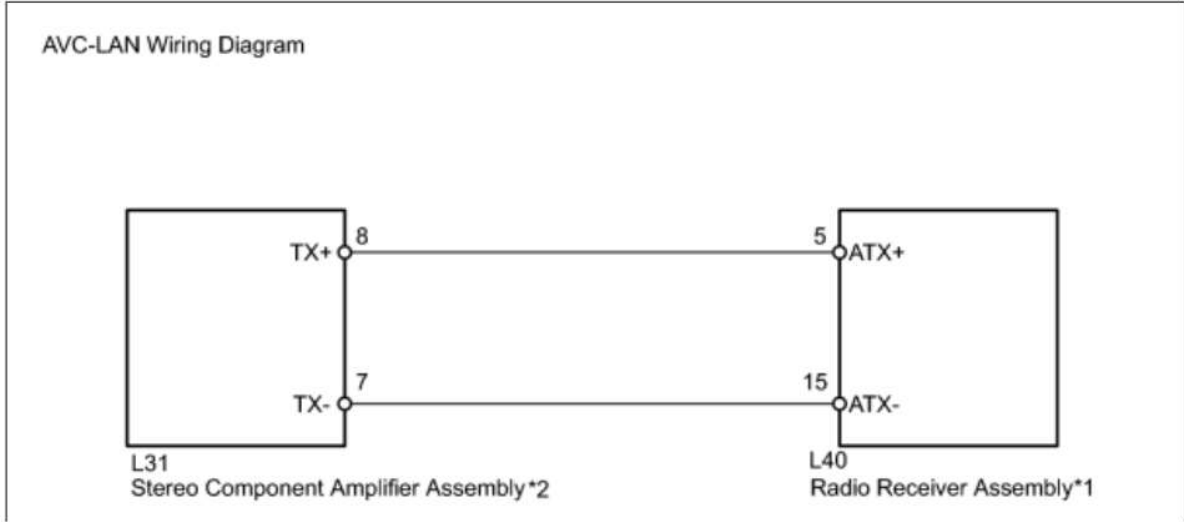
A


5. CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU .

- (a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.
- (1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.
- (2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.
- OK:
There is no open or short circuit.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DD,01-E1: Master Reset (2010 Prius)

*1: Master Unit *2: Slave Unit

NG  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



6. REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly with a known good one.

NEXT



7. CLEAR DTC

(a) Clear the DTCs .

NEXT



8. RECHECK FOR DTC

(a) Recheck for DTCs and check if the same problem occurs again.

OK:

Malfunction disappears.

NG  **REPLACE COMPONENT WHICH HAS STORED THIS CODE**

OK  **END**

DTC	01-DF	Master Error
-----	-------	--------------

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-DF *1	The device with a display fails and the master unit is switched to the audio device. Also when a communication error between the sub-master unit (audio) and master unit occurs, this DTC is stored.	• Radio receiver assembly power source circuit • AVC-LAN circuit between the radio receiver assembly and component which has stored this code • Radio receiver assembly • Component which has stored this code

HINT:

***1: When 210 seconds have elapsed after disconnecting the power supply connector of the master component with the power switch on (IG) or (ACC), this DTC is stored.**

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reason described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1. CHECK RADIO RECEIVER POWER SOURCE CIRCUIT

HINT:

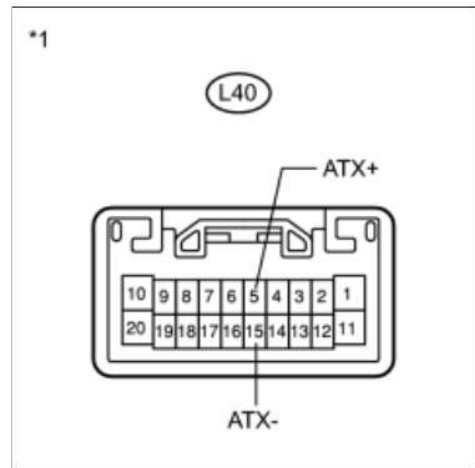
Refer to Radio Receiver Power Source Circuit .

If the power source circuit is operating normally, proceed to the next step.

NEXT



2. INSPECT RADIO RECEIVER ASSEMBLY



(a) Disconnect the radio receiver assembly connector.

(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L40-5 (ATX+) - L40-15 (ATX-)	Always	60 to 80 Ω

Text in Illustration

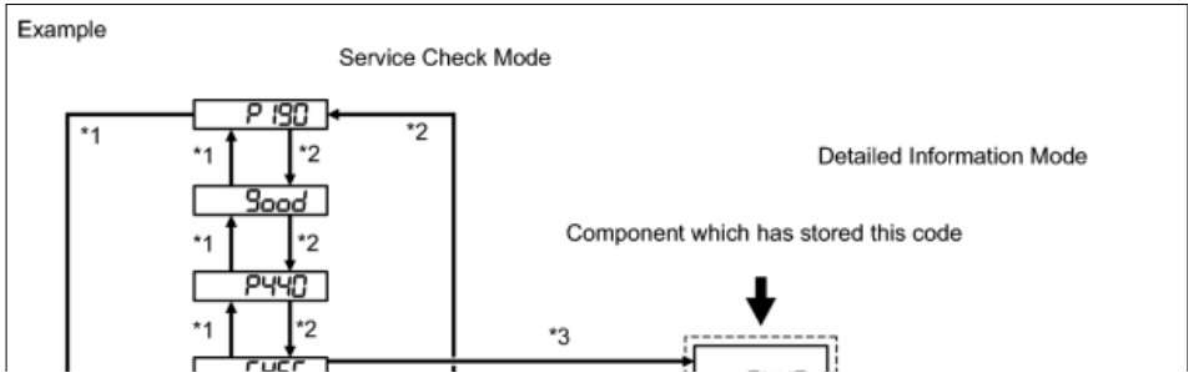
*1	Component without harness connected (Radio Receiver Assembly)
----	--

NG REPLACE RADIO RECEIVER ASSEMBLY

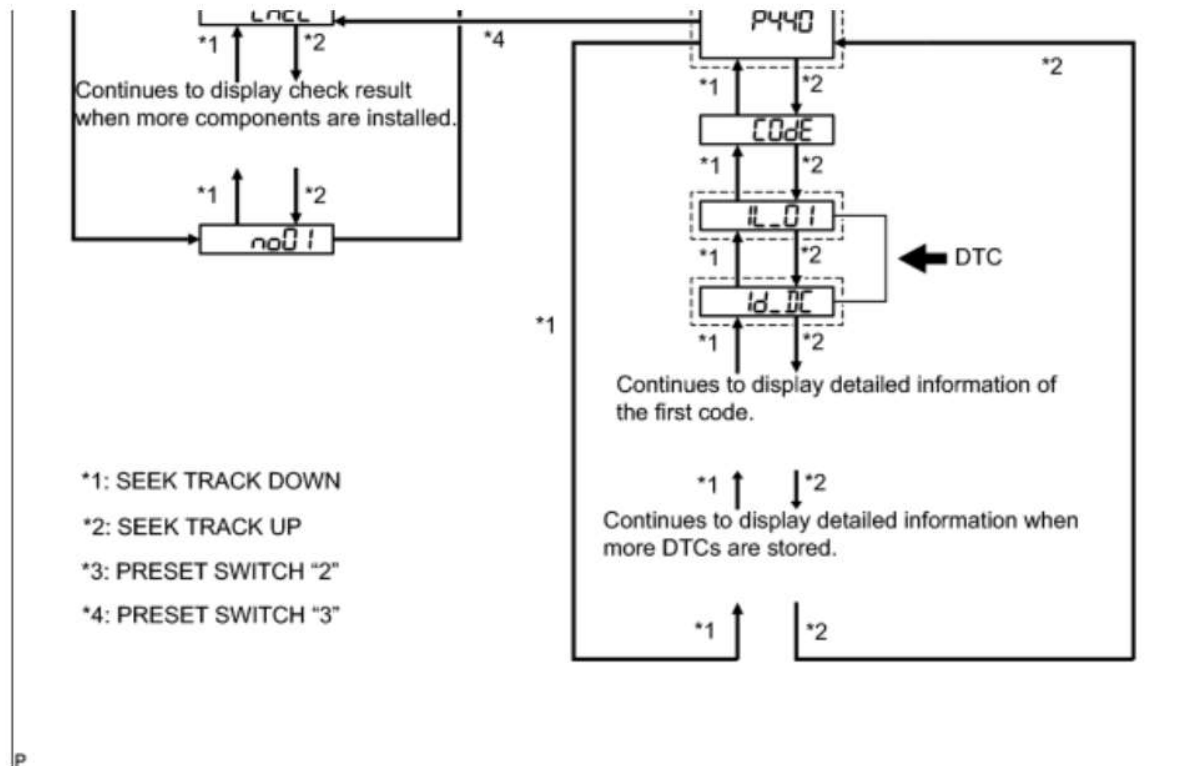
OK

3. IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DF: Master Error (2010 Prius)



(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

COMPONENT	PHYSICAL ADDRESS
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Radio receiver assembly	190

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear  .

NEXT



4. CHECK COMPONENT SHOWN BY SUB-CODE

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

COMPONENT	PROCEED TO
Except satellite radio tuner	A
Satellite radio tuner (1F1)	B

B ▶ REPLACE RADIO RECEIVER ASSEMBLY

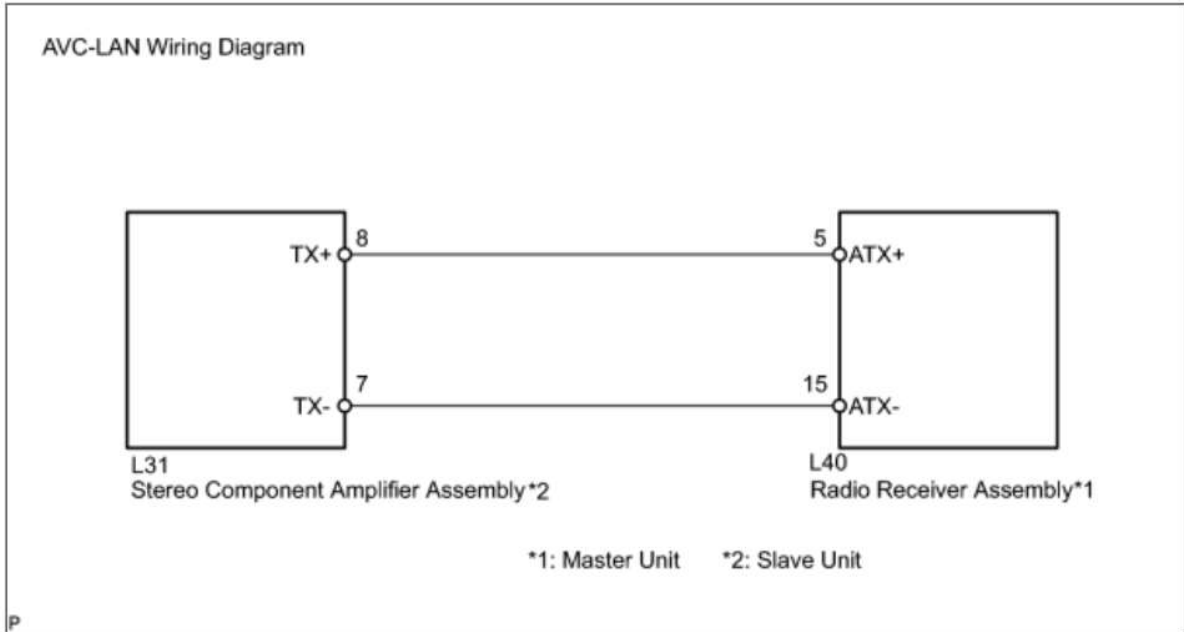
A
▼

5. CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU INFO .

- (a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.
- (1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.
 - (2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.
- OK:
There is no open or short circuit.



NG ▶ REPAIR OR REPLACE HARNESS OR CONNECTOR

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-DF: Master Error (2010 Prius)

 **REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****6. REPLACE RADIO RECEIVER ASSEMBLY**

(a) Replace the radio receiver assembly with a known good one.

NEXT**7. CLEAR DTC**

(a) Clear the DTCs  .

NEXT**8. RECHECK FOR DTC**

(a) Recheck for DTCs and check if the same problem occurs again.

OK:

Malfunction disappears.

NG  **REPLACE COMPONENT WHICH HAS STORED THIS CODE****OK**  **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-E0,01-E3,01-E4: Registration Complete Indication Error (2010 Prius)

DTC	01-E0	Registration Complete Indication Error
------------	--------------	---

DTC	01-E3	Registration Demand Transmission
------------	--------------	---

DTC	01-E4	Multiple Frame Incomplete
------------	--------------	----------------------------------

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-E0	"Registration complete" signal from the master device cannot be received.	-
01-E3	Either condition is met: • The registration demand signal from the slave device is output. • The registration demand signal is output by receiving connection confirmation signal from the sub-master device.	-
01-E4	The multiple frame transmission is incomplete.	-

HINT:

Even if no fault is present, these DTCs may be stored depending on the battery condition or engine start voltage.

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs. These DTCs do not indicate a malfunction.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 01-E2: ON / OFF Indication Parameter Error (2010 Prius)

DTC	01-E2	ON / OFF Indication Parameter Error
------------	--------------	--

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-E2	The command for ON/OFF control from the master device has a problem.	Radio receiver assembly

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY
-----------	--

(a) Replace the radio receiver assembly .

NEXT  **END**

DTC	01-F2	No Response from Diagnosis Memory Request
-----	-------	---

DTC	01-FF	No Response to Diagnosis Request
-----	-------	----------------------------------

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
01-F2	Any reply to a system inspection instruction, system inspection result request or diagnosis memory request could not be completed within a designated time.	Stereo component amplifier assembly
01-FF	No response to a diagnosis request	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	CLEAR DTC
----	-----------

(a) Clear the DTCs  .

NEXT



2.	RECHECK FOR DTC
----	-----------------

(a) Recheck for DTCs and check if the same trouble occurs again.

OK:

Malfunction disappears.

- NG  REPLACE STEREO COMPONENT AMPLIFIER ASSEMBLY
- OK  END

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 57-10,57-47: TEL ECU Malfunction (TEL) (2010 Prius)

DTC	57-10	TEL ECU Malfunction (TEL)
------------	--------------	----------------------------------

DTC	57-47	Bluetooth Module Initialization Failed
------------	--------------	---

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
57-10	"Bluetooth" module malfunction	Radio receiver assembly
57-47	"Bluetooth" module is not installed. - Problem with "Bluetooth" module - Problem in communication line to "Bluetooth" module	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY
-----------	--

(a) Replace the radio receiver assembly .

NEXT  **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 60-10,60-11: AM Tuner PLL does not Lock (2010 Prius)

DTC	60-10	AM Tuner PLL does not Lock
------------	--------------	-----------------------------------

DTC	60-11	FM Tuner PLL does not Lock
------------	--------------	-----------------------------------

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
60-10	The AM tuner PLL (phase locked loop) synchronization is impossible.	Radio receiver assembly
60-11	The FM tuner PLL (phase locked loop) synchronization is impossible.	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY
-----------	--

(a) Replace the radio receiver assembly .

NEXT  **END**

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 60-42-60-44,60-50: Tuner Power Source Error (2010 Prius)

DTC	60-42	Tuner Power Source Error
DTC	60-43	AM Tuner Error
DTC	60-44	FM Tuner Error
DTC	60-50	Malfunction in Internal IC

DESCRIPTION

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
60-42	The power source of the tuner is abnormal.	Radio receiver assembly
60-43	The AM tuner is abnormal.	
60-44	The FM tuner is abnormal.	
60-50	A problem occurs in the IC inside the tuner unit and radio reception is not normal.	

INSPECTION PROCEDURE

HINT:
After the inspection is completed, clear the DTCs.

PROCEDURE

1.	CLEAR DTC
----	-----------

(a) Clear the DTCs  .

NEXT
▼

2.	RECHECK FOR DTC
----	-----------------

(a) Recheck for DTCs and check if the same trouble occurs again.

AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: 60-42-60-44,60-50: Tuner Power Source Error (2010 Prius)

HINT:

If DTCs are detected frequently, replace the radio receiver assembly.

OK:

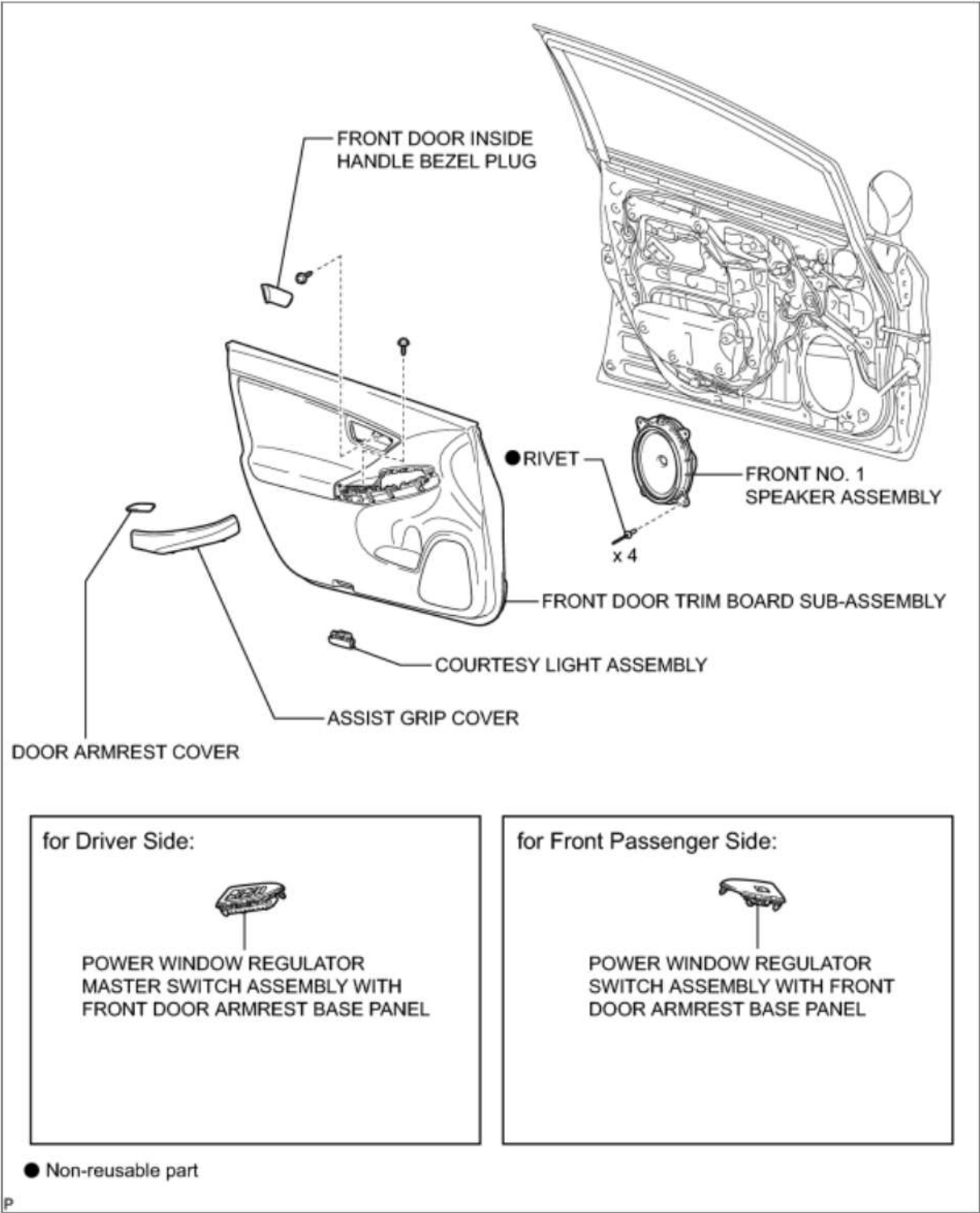
Malfunction disappears.

NG  **REPLACE RADIO RECEIVER ASSEMBLY**

OK  **END**

COMPONENTS

ILLUSTRATION



INSPECTION

1. INSPECT FRONT NO. 1 SPEAKER

- (a) With the speaker installed, check that there is no looseness or other abnormalities.
- (b) Check that there is no foreign matter in the speaker, no tears on the speaker's cone part or other abnormalities.

(c) Measure the resistance of the speaker.

Standard Resistance (except for 8 Speakers):

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	3.2 to 4.8 Ω

Standard Resistance (for 8 Speakers):

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	1.4 to 2.2 Ω

If the result is not as specified, replace the speaker assembly.

Text in Illustration

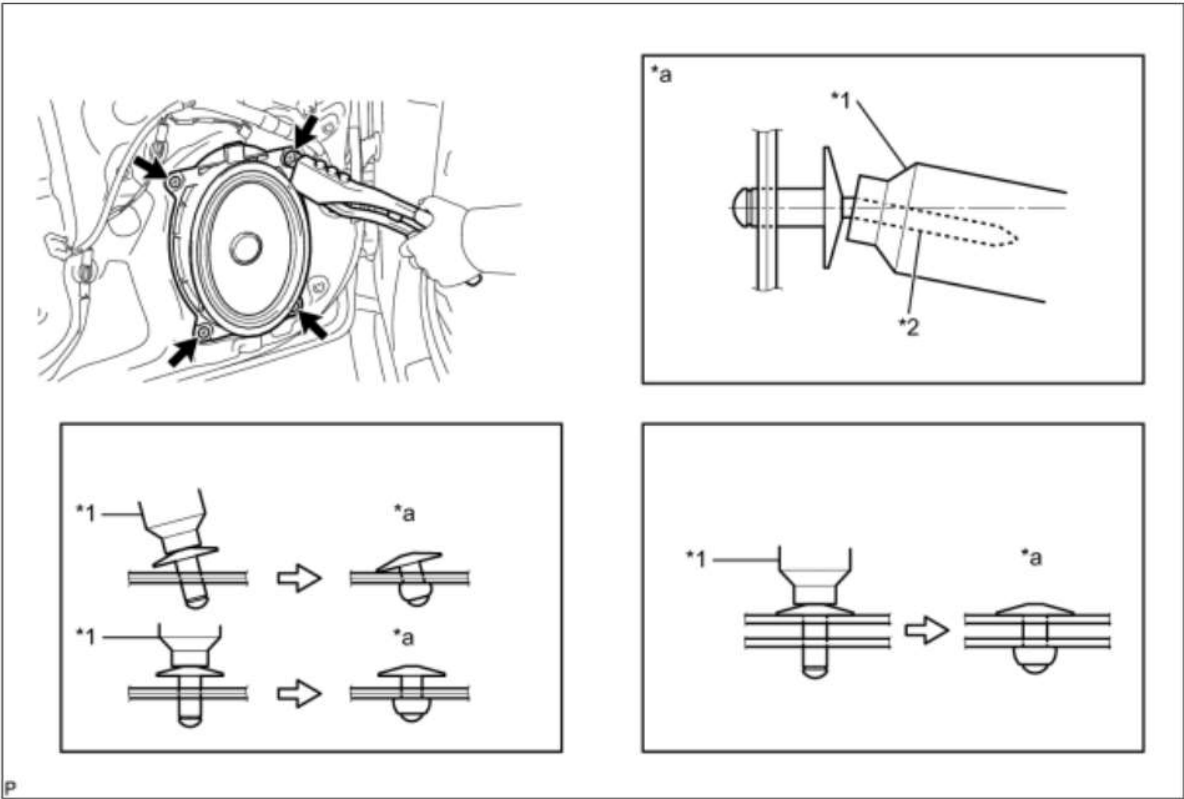
*1	Component without harness connected (Front No. 1 Speaker)
----	--



INSTALLATION

1. INSTALL FRONT NO. 1 SPEAKER ASSEMBLY

(a) Using an air riveter or a hand riveter, install the front No. 1 speaker assembly with 4 new rivets.



Text in Illustration

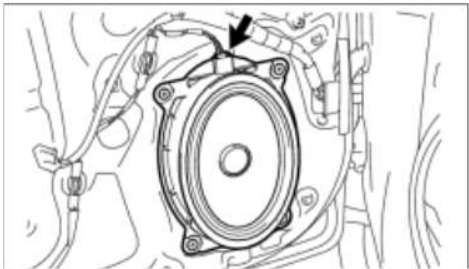
*1	Riveter	*2	Mandrel
*a	INCORRECT	-	-

NOTICE:

- Do not pry the rivet with the riveter, as this will cause damage to the riveter and mandrel.
- Confirm that the rivet is seated properly against the moulding. Do not tilt the riveter when installing the rivet to the moulding. Do not leave any clearance between the rivet head and moulding.
- Do not leave any clearance between the moulding and door frame. Firmly hold the 2 items together while installing the rivet.

HINT:

If the rivet cannot be cut, pull it once and cut it.



(b) Connect the connector.

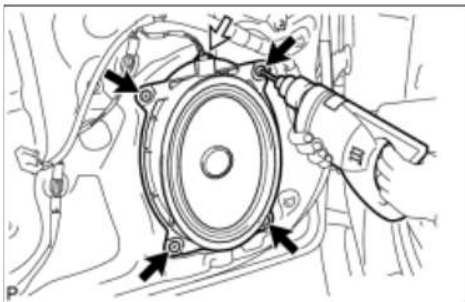
AUDIO / VIDEO: FRONT DOOR SPEAKER: INSTALLATION (2010 Prius)



2. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY [INFO](#)
3. INSTALL COURTESY LIGHT ASSEMBLY [INFO](#)
4. INSTALL DOOR ARMREST COVER [INFO](#)
5. INSTALL POWER WINDOW REGULATOR SWITCH ASSEMBLY WITH FRONT DOOR ARMREST BASE PANEL (for Front Passenger Side) [INFO](#)
6. INSTALL POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY WITH FRONT DOOR ARMREST BASE PANEL (for Driver Side) [INFO](#)
7. INSTALL ASSIST GRIP COVER [INFO](#)
8. INSTALL FRONT DOOR INSIDE HANDLE BEZEL PLUG [INFO](#)

REMOVAL

1. REMOVE FRONT DOOR INSIDE HANDLE BEZEL PLUG INFO
2. REMOVE ASSIST GRIP COVER INFO
3. REMOVE POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY WITH FRONT DOOR ARMREST BASE PANEL (for Driver Side) INFO
4. REMOVE POWER WINDOW REGULATOR SWITCH ASSEMBLY WITH FRONT DOOR ARMREST BASE PANEL (for Front Passenger Side) INFO
5. REMOVE DOOR ARMREST COVER INFO
6. REMOVE COURTESY LIGHT ASSEMBLY INFO
7. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY INFO
8. REMOVE FRONT NO. 1 SPEAKER ASSEMBLY



(a) Disconnect the connector.

(b) Using a drill bit with a diameter of less than 4 mm (0.158 in.), drill out the 4 rivet heads and remove the front No. 1 speaker assembly.

NOTICE:

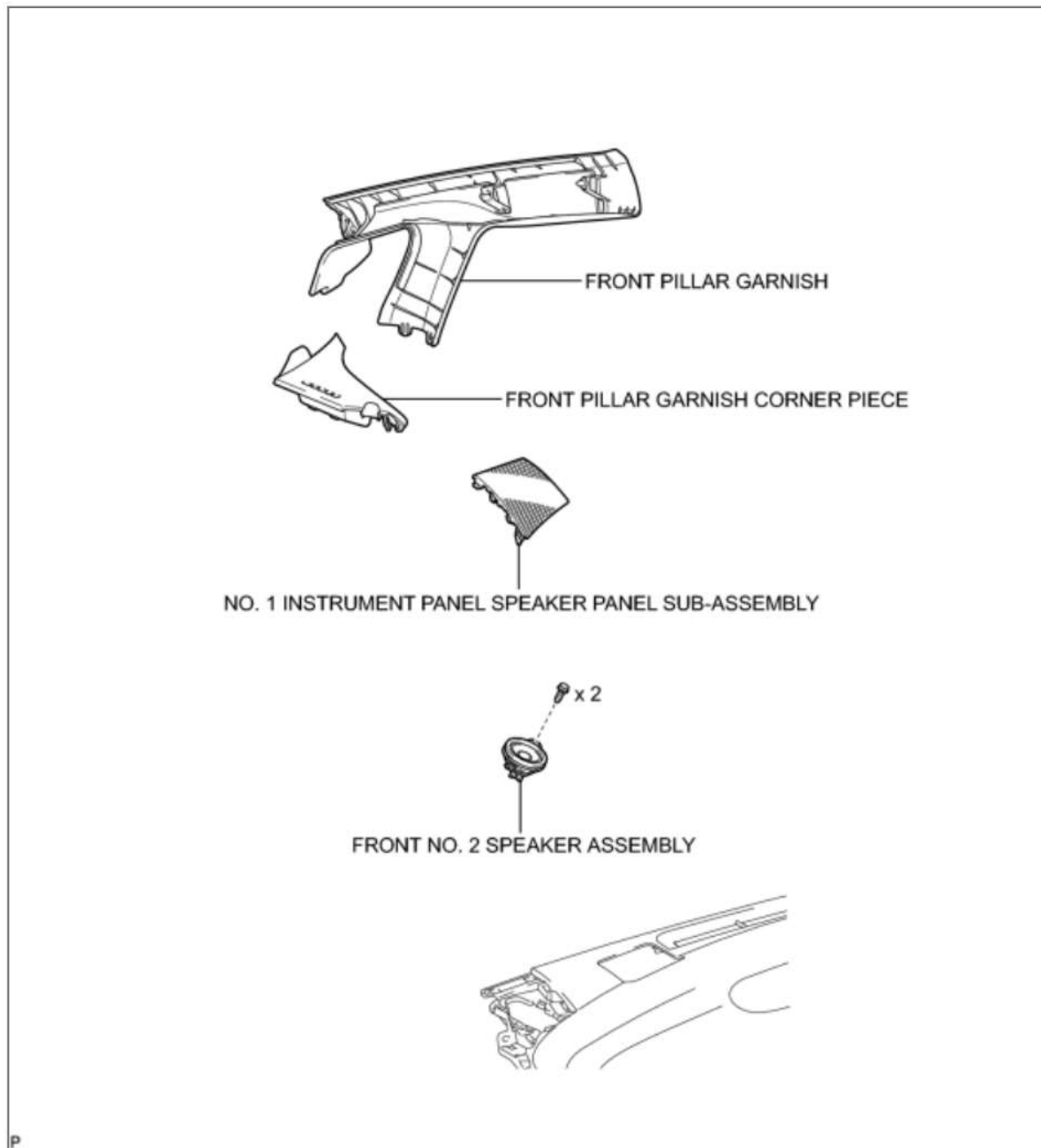
- Do not touch the cone part of the speaker.
- Do not drill the rivet at an angle as this will cause damage to the drill and drill hole. Line up the drill and rivet, and carefully drill out the rivet head.
- Be careful as the cut rivet will be very hot.

(c) Continue drilling and push out the remaining rivet fragments.

(d) Using a vacuum cleaner, remove the rivet fragments and shavings from the inside of the door.

COMPONENTS

ILLUSTRATION



INSPECTION

1. INSPECT FRONT NO. 2 SPEAKER (except for 8 Speakers)

- (a) With the speaker installed, check that there is no looseness or other abnormalities.
- (b) Check that there is no foreign matter in the speaker, no tears on the speaker's cone part or other abnormalities.
- (c) When there is a possibility that either the right or left speaker is malfunctioning, interchange the speakers and perform an inspection. If the malfunction disappears after interchanging the speakers, replace the malfunctioning speaker.

HINT:

Connect all connectors to the speakers when performing an inspection. If the result is not as specified, replace the speaker assembly.

2. INSPECT FRONT NO. 2 SPEAKER (for 8 Speakers)

- (a) With the speaker installed, check that there is no looseness or other abnormalities.
- (b) Check that there is no foreign matter in the speaker, no tears on the speaker's cone part or other abnormalities.

(c) Measure the resistance of the speaker.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	1.5 to 2.5 Ω

If the result is not as specified, replace the speaker assembly.

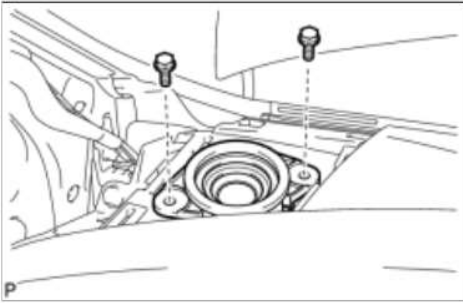
Text in Illustration

*1	Component without harness connected (Front No. 2 Speaker)
----	--



INSTALLATION

1. INSTALL FRONT NO. 2 SPEAKER ASSEMBLY



(a) Connect the connector.

(b) Install the front No. 2 speaker assembly with the 2 bolts.

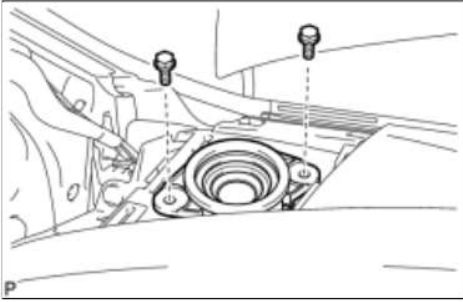
2. INSTALL NO. 1 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY INFO

3. INSTALL FRONT PILLAR GARNISH CORNER PIECE INFO

4. INSTALL FRONT PILLAR GARNISH INFO

REMOVAL

1. REMOVE FRONT PILLAR GARNISH INFO
2. REMOVE FRONT PILLAR GARNISH CORNER PIECE INFO
3. REMOVE NO. 1 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY INFO
4. REMOVE FRONT NO. 2 SPEAKER ASSEMBLY



(a) Remove the 2 bolts.

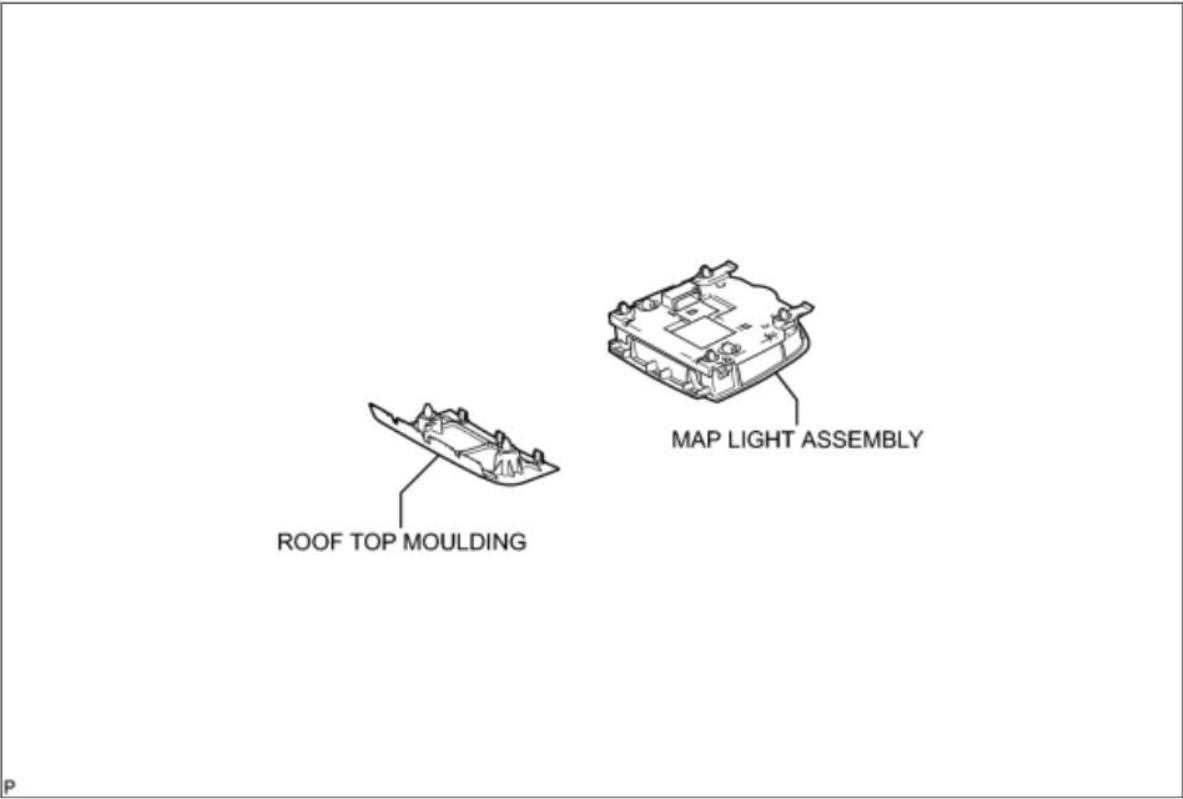
(b) Disconnect the connector and remove the front No. 2 speaker assembly.

NOTICE:

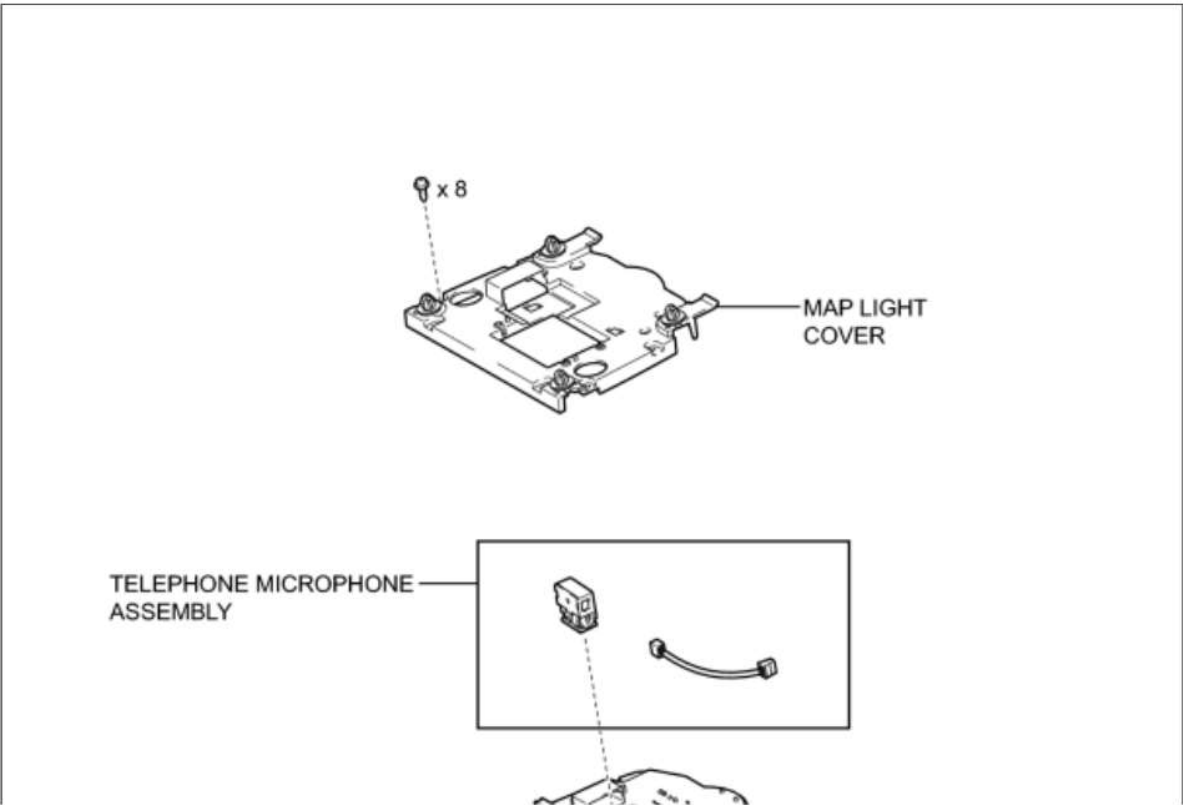
Do not touch the cone part of the speaker.

COMPONENTS

ILLUSTRATION



ILLUSTRATION



AUDIO / VIDEO: MICROPHONE (w/ Sliding Roof): COMPONENTS (2010 Prius)

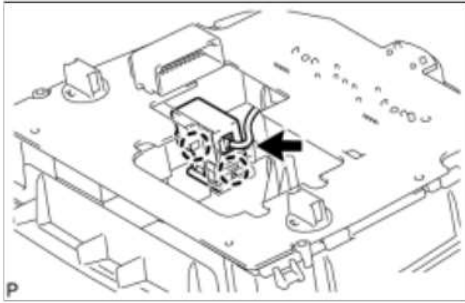


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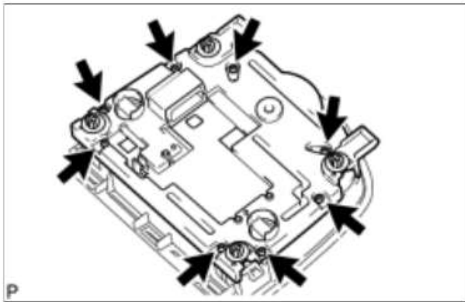
INSTALLATION

1. INSTALL TELEPHONE MICROPHONE ASSEMBLY



(a) Engage the 2 claws to install the telephone microphone assembly.

(b) Connect the connector.



(c) Install the map light cover with the 8 screws.

2. INSTALL MAP LIGHT ASSEMBLY INFO

3. INSTALL ROOF TOP MOULDING INFO

REMOVAL

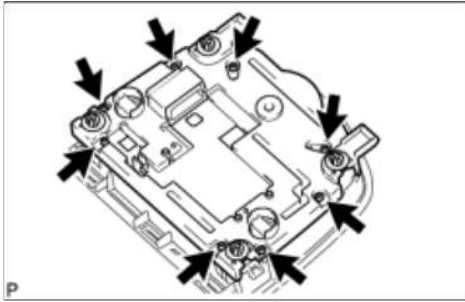
1. REMOVE ROOF TOP MOULDING

[INFO](#)

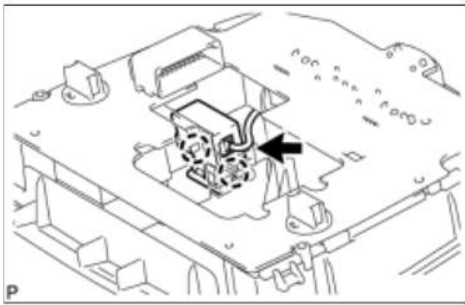
2. REMOVE MAP LIGHT ASSEMBLY

[INFO](#)

3. REMOVE TELEPHONE MICROPHONE ASSEMBLY



(a) Remove the 8 screws and map light cover.

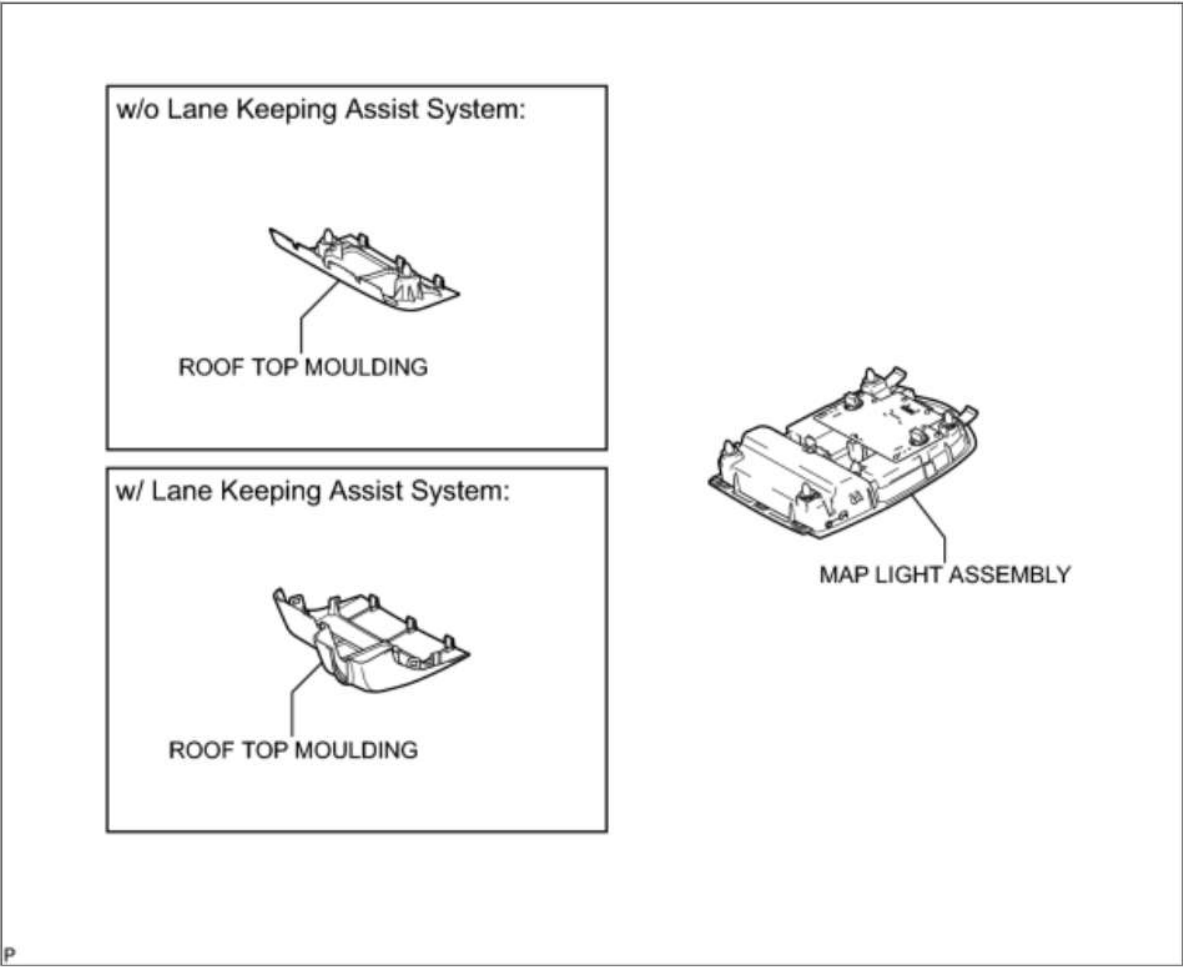


(b) Disconnect the connector.

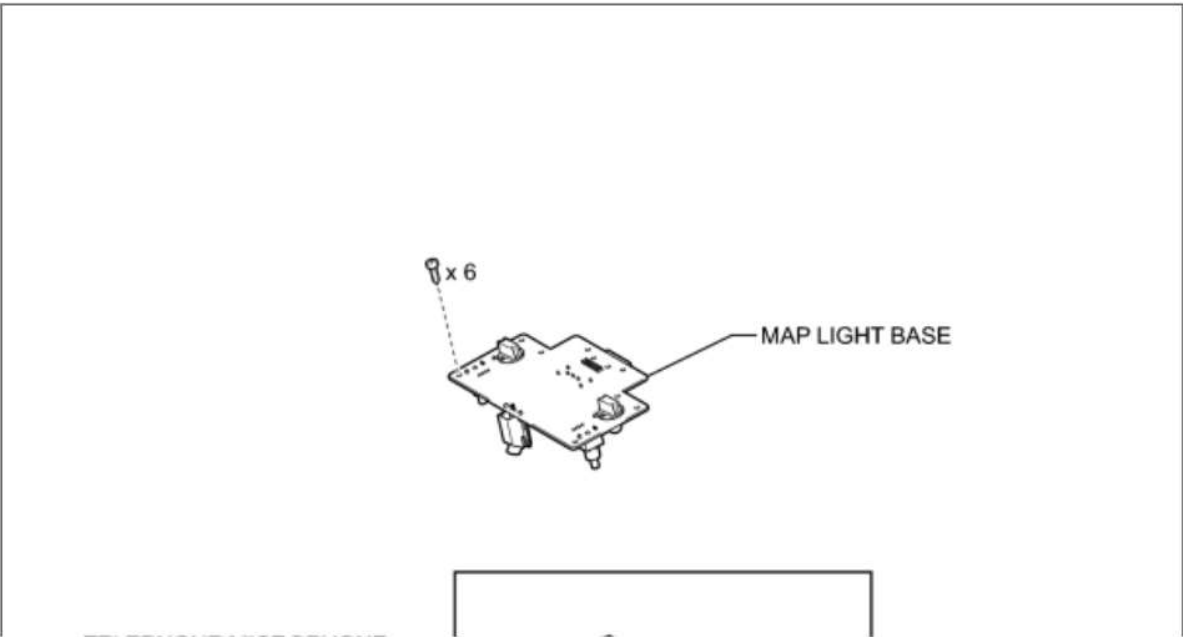
(c) Disengage the 2 claws and remove the telephone microphone assembly.

COMPONENTS

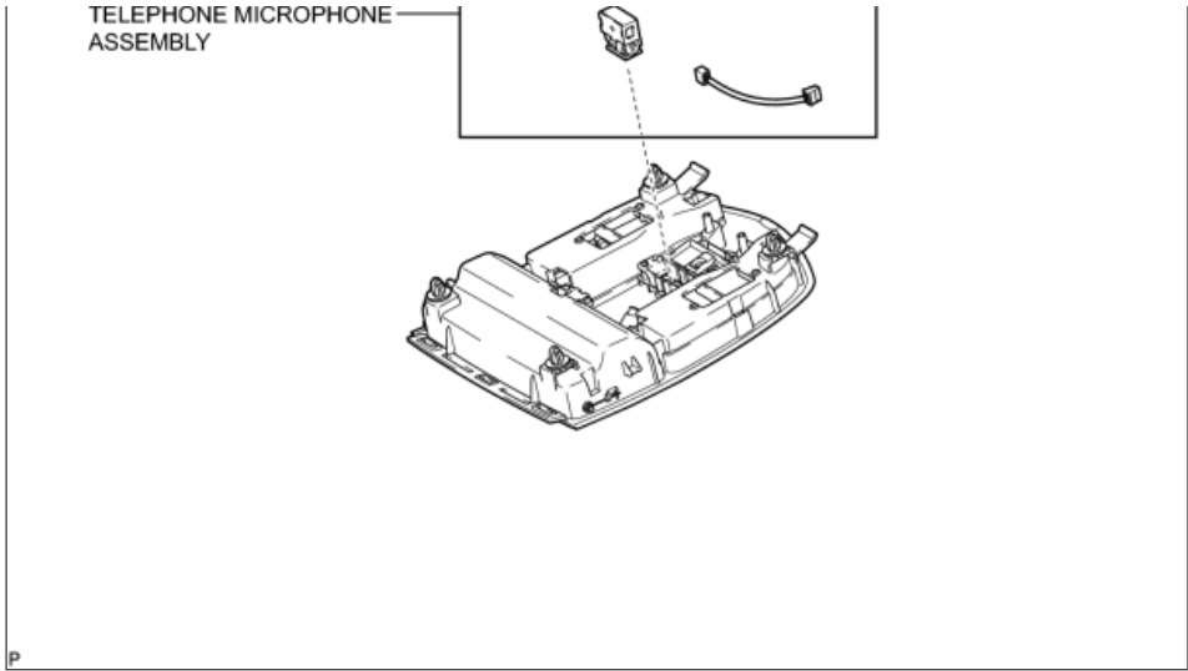
ILLUSTRATION



ILLUSTRATION



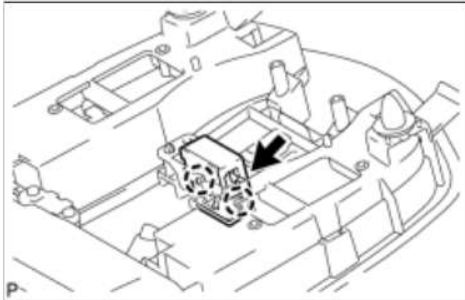
AUDIO / VIDEO: MICROPHONE (w/o Sliding Roof): COMPONENTS (2010 Prius)



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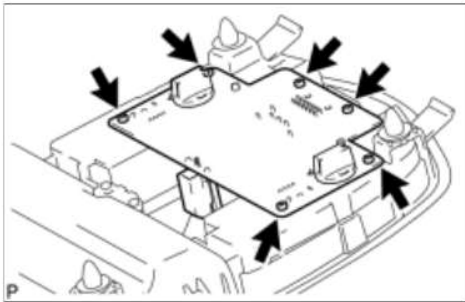
INSTALLATION

1. INSTALL TELEPHONE MICROPHONE ASSEMBLY



(a) Engage the 2 claws to install the telephone microphone assembly.

(b) Connect the connector.



(c) Install the map light base with the 6 screws.

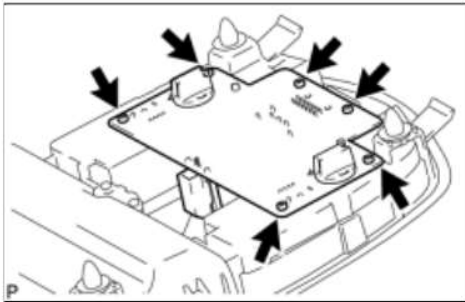
2. INSTALL MAP LIGHT ASSEMBLY INFO

3. INSTALL ROOF TOP MOULDING (w/o Lane Keeping Assist System) INFO

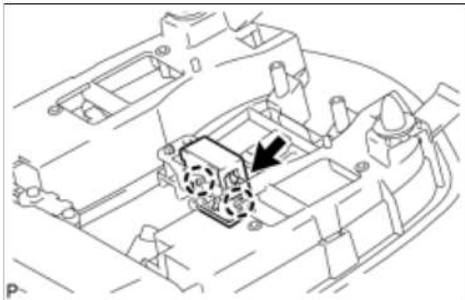
4. INSTALL ROOF TOP MOULDING (w/ Lane Keeping Assist System) INFO

REMOVAL

1. REMOVE ROOF TOP MOULDING (w/o Lane Keeping Assist System) INFO
2. REMOVE ROOF TOP MOULDING (w/ Lane Keeping Assist System) INFO
3. REMOVE MAP LIGHT ASSEMBLY INFO
4. REMOVE TELEPHONE MICROPHONE ASSEMBLY



(a) Remove the 6 screws and map light base.

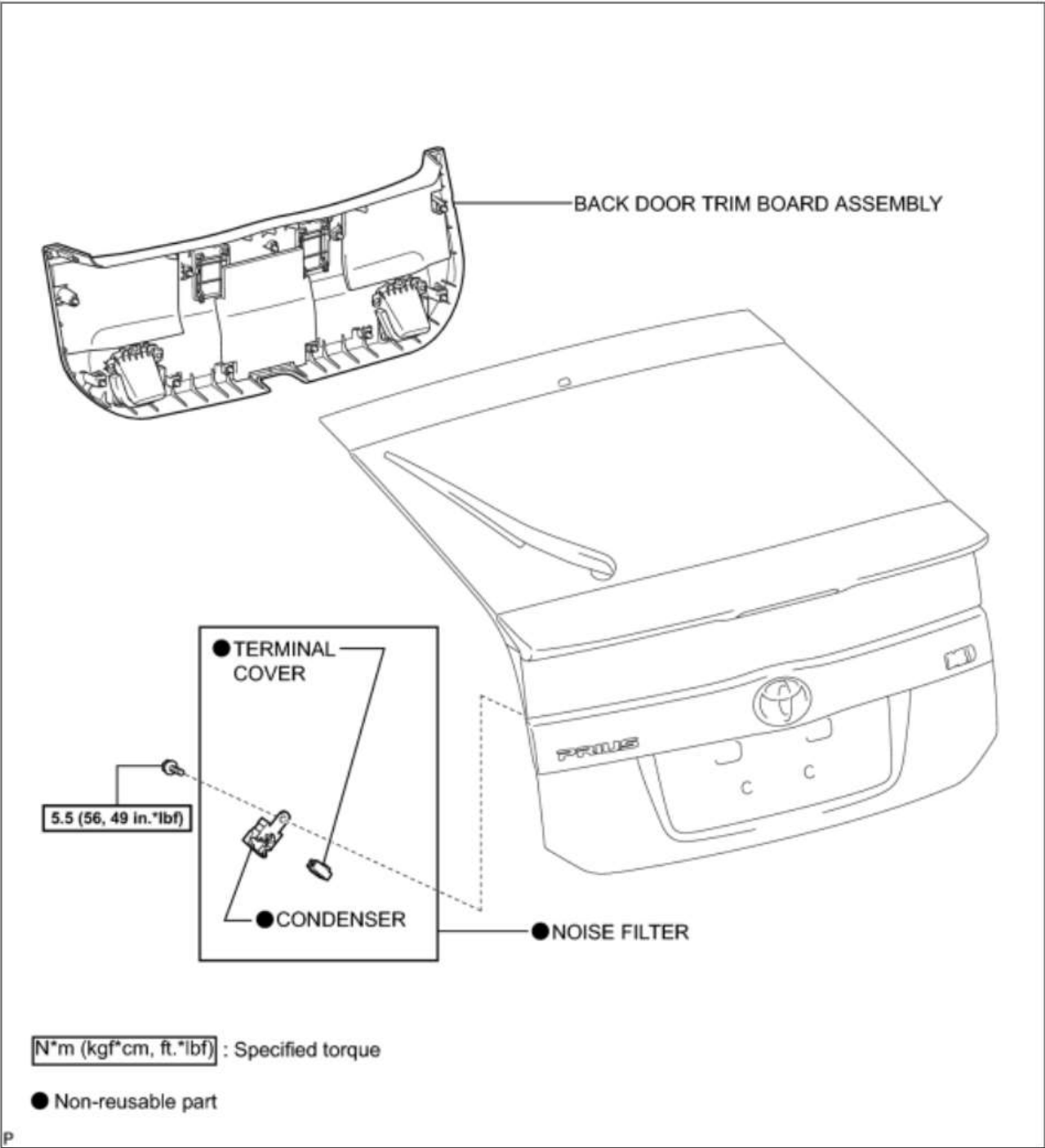


(b) Disconnect the connector.

(c) Disengage the 2 claws and remove the telephone microphone assembly.

COMPONENTS

ILLUSTRATION

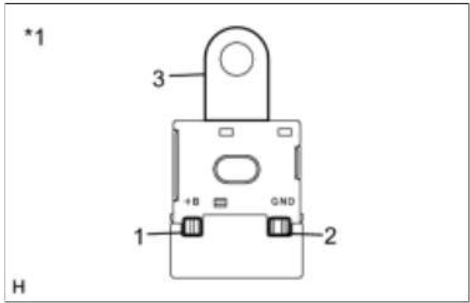


INSPECTION

1. INSPECT NOISE FILTER

- (a) With the noise filter installed, check that there is no looseness or other abnormalities.
- (b) Remove the noise filter.
- (c) Measure the resistance of the noise filter according to the value(s) in the table below.

Standard Resistance:



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 (+B) - 2 (GND)	Always	10 kΩ or higher
2 (GND) - 3	Always	Below 1 Ω

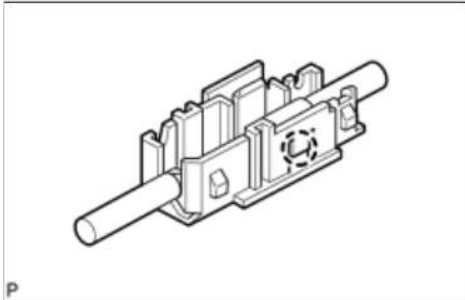
Text in Illustration

*1	Noise Filter
----	--------------

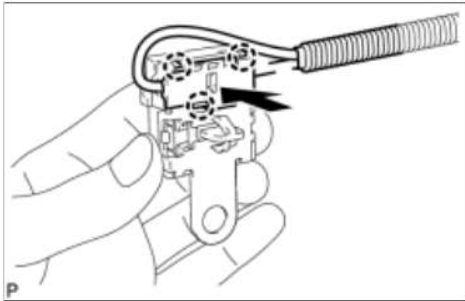
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INSTALLATION

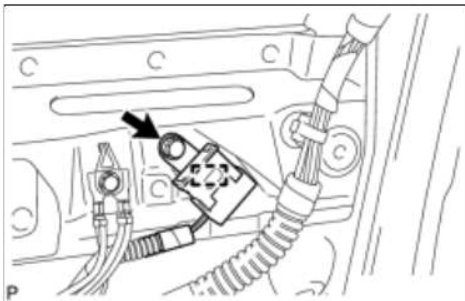
1. INSTALL NOISE FILTER



(a) Engage the claw to install a new terminal cover to the wire harness.



(b) Engage the 3 claws to install the new terminal cover with wire harness to a new condenser.



(c) Engage the clamp to temporarily install a new noise filter with wire harness to the back door.

(d) Install the new radio setting condenser with the bolt.

Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)

2. INSTALL BACK DOOR TRIM BOARD ASSEMBLY INFO

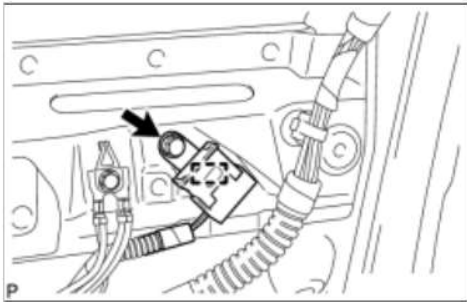
REMOVAL

1. REMOVE BACK DOOR TRIM BOARD ASSEMBLY INFO

2. REMOVE NOISE FILTER

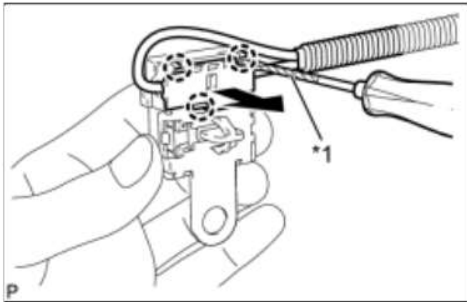
NOTICE:

When the terminal cover is removed, the noise filter must be replaced because the terminal cover and condenser are supplied as a set.



(a) Remove the bolt.

(b) Disengage the clamp and disconnect the noise filter with wire harness from the vehicle body.

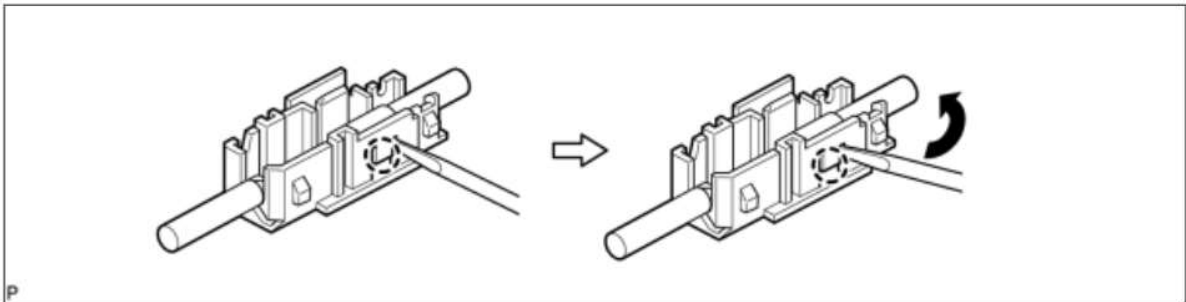


(c) Using a screwdriver with its tip wrapped with protective tape, disengage the 3 claws and remove the terminal cover with wire harness from the condenser.

Text in Illustration

*1	Protective Tape
----	-----------------

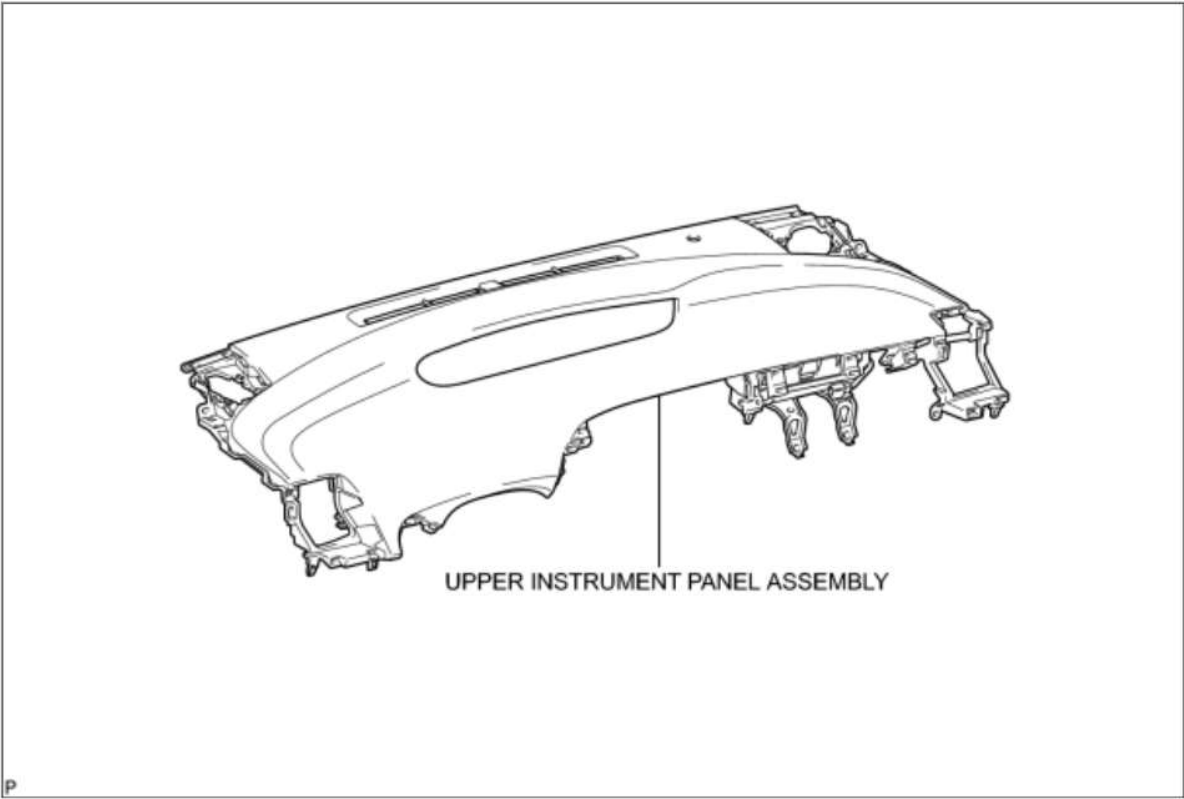
(d) Using a screwdriver, bend back and break off the claw as shown in the illustration.



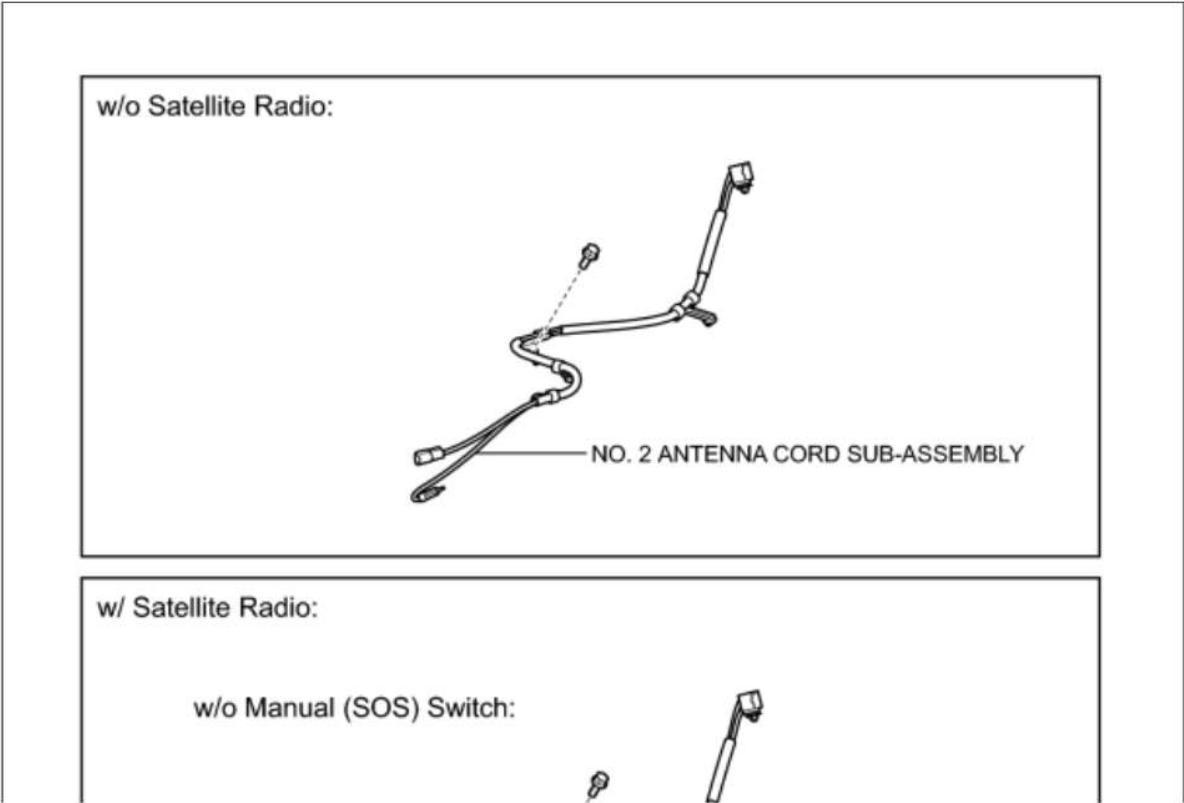
(e) Remove the terminal cover from the wire harness.

COMPONENTS

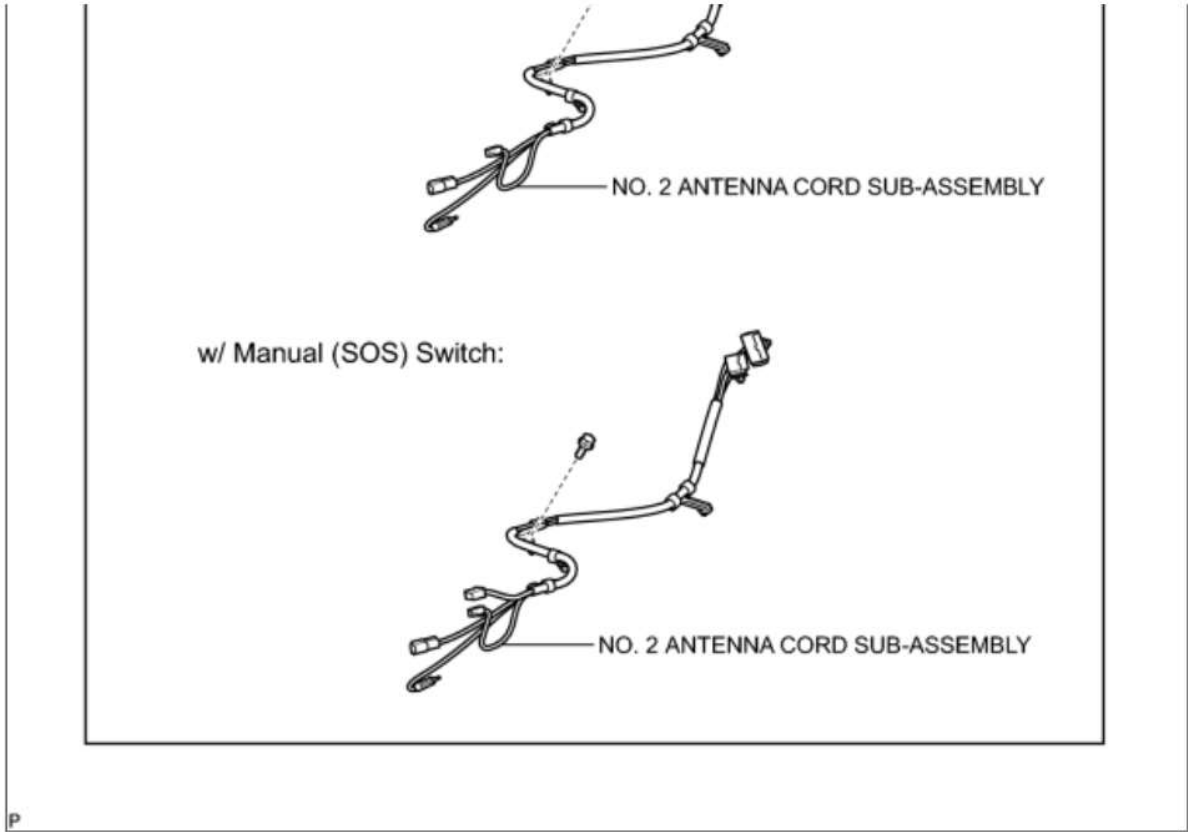
ILLUSTRATION



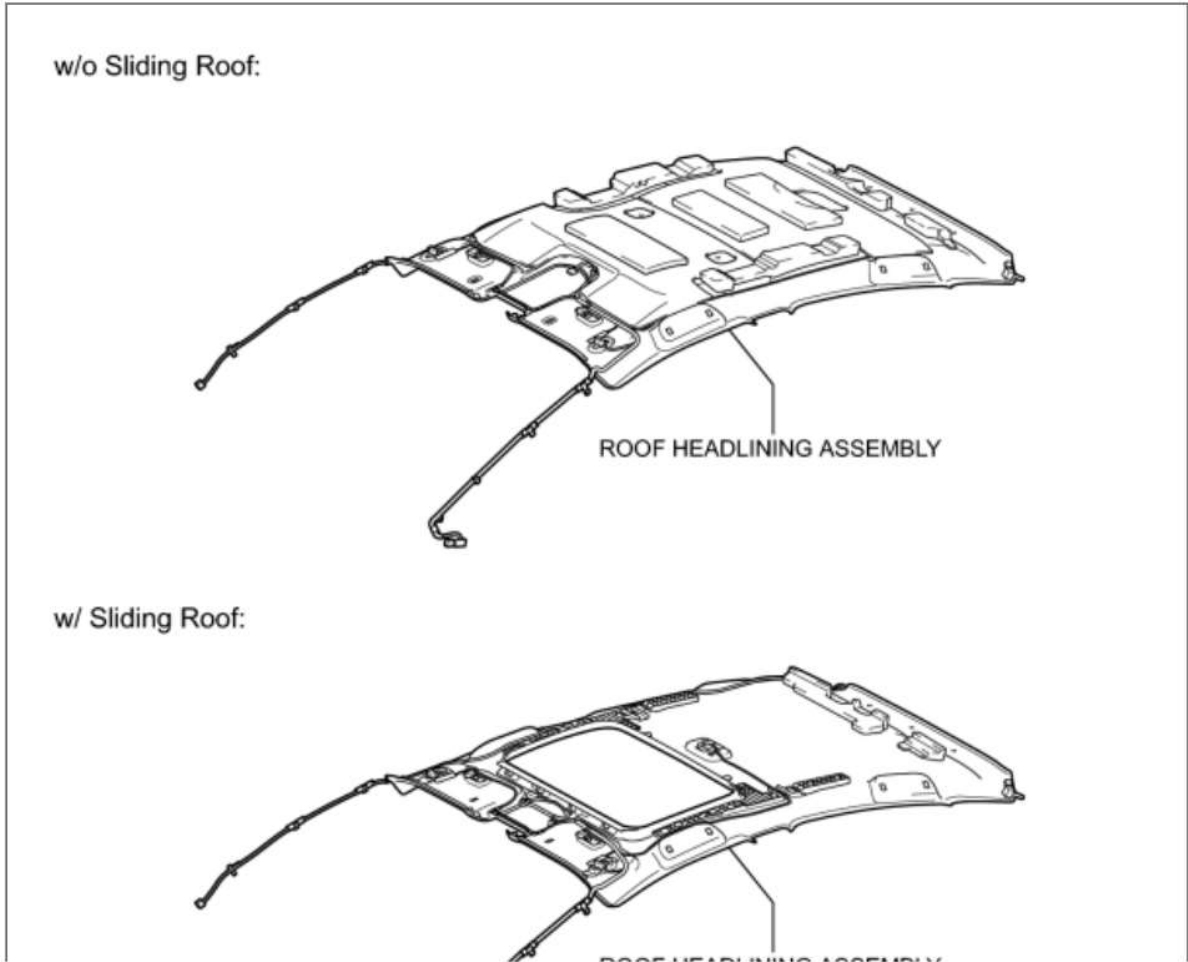
ILLUSTRATION



AUDIO / VIDEO: RADIO ANTENNA CORD: COMPONENTS (2010 Prius)



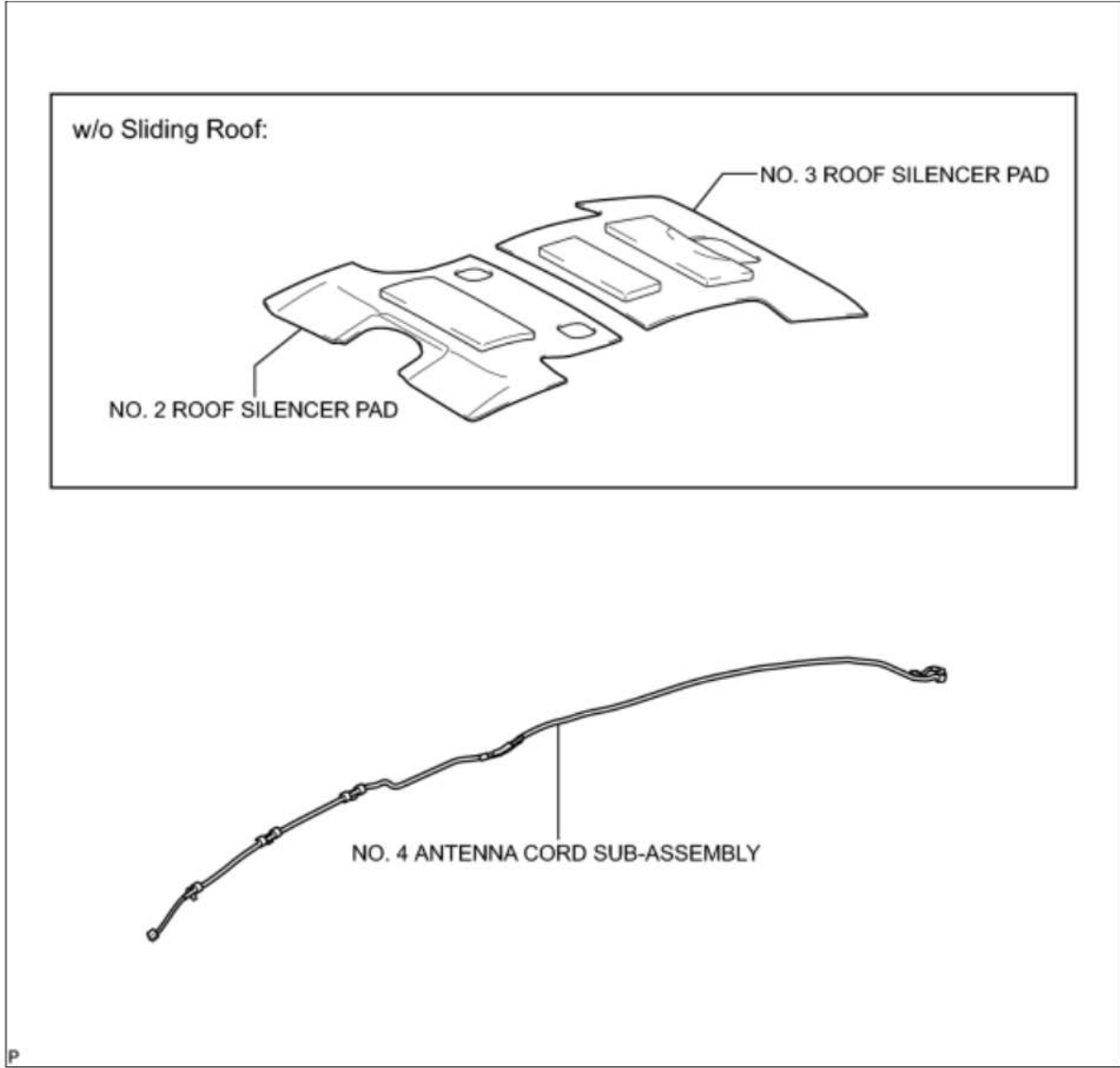
ILLUSTRATION



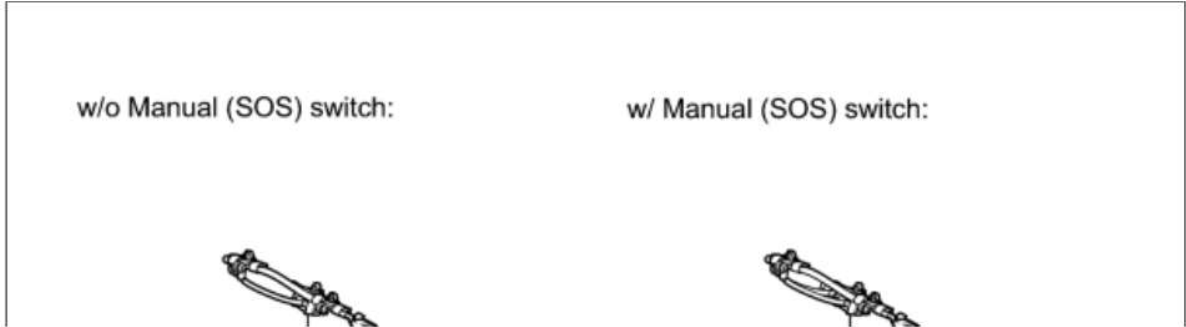
AUDIO / VIDEO: RADIO ANTENNA CORD: COMPONENTS (2010 Prius)



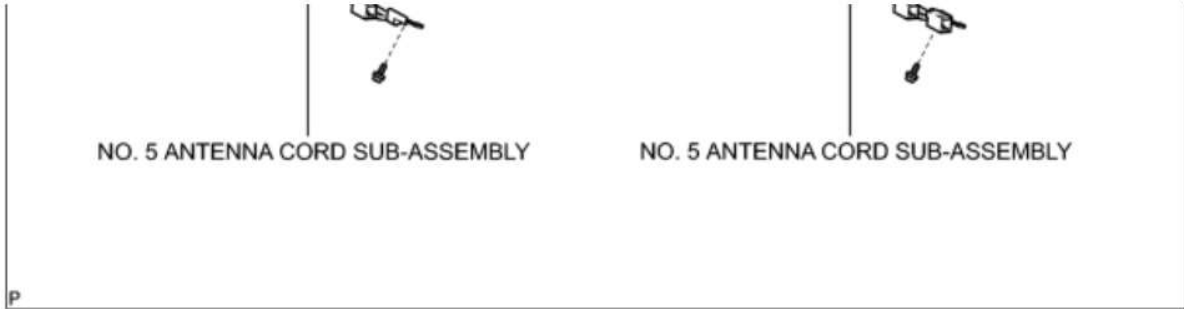
ILLUSTRATION



ILLUSTRATION



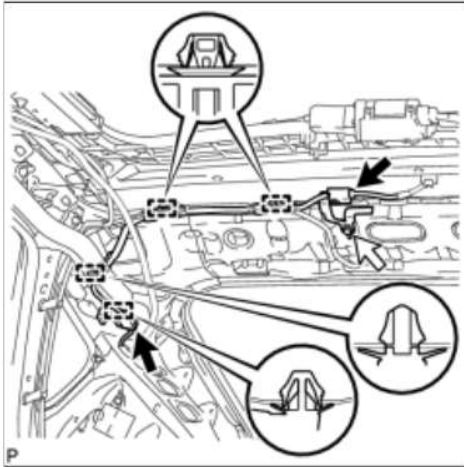
AUDIO / VIDEO: RADIO ANTENNA CORD: COMPONENTS (2010 Prius)



P

INSTALLATION

1. INSTALL NO. 5 ANTENNA CORD SUB-ASSEMBLY (w/o Manual (SOS) Switch)



(a) Engage the 4 clamps.

(b) Install the No. 5 antenna cord sub-assembly with the bolt.

(c) Connect the 2 connectors.

2. INSTALL NO. 5 ANTENNA CORD SUB-ASSEMBLY (w/ Manual (SOS) Switch)



(a) Engage the 4 clamps.

(b) Install the No. 5 antenna cord sub-assembly with the bolt.

(c) Connect the 4 connectors.

3. INSTALL NO. 4 ANTENNA CORD SUB-ASSEMBLY

HINT:

Double-sided tape and tape are not available as supply parts. If the tape still has enough adhesion to secure the roof headlining and antenna cord, reuse it. If the roof headlining has been replaced with a new one, or if the tape and/or the double-sided tape is no longer sticky, apply new tape following the procedure below.

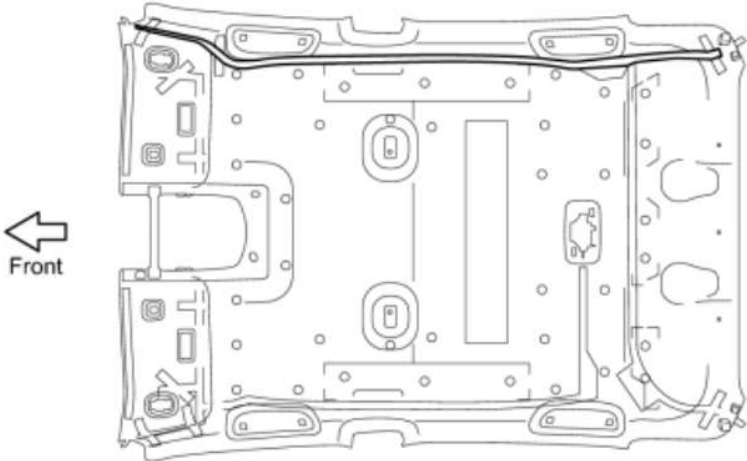
If the double-sided tape cannot be reused:

(a) Peel off the release paper from one side of new double-sided tape and apply the new double-sided tape to the position indicated in the illustration. Be careful not to touch the adhesive surface.

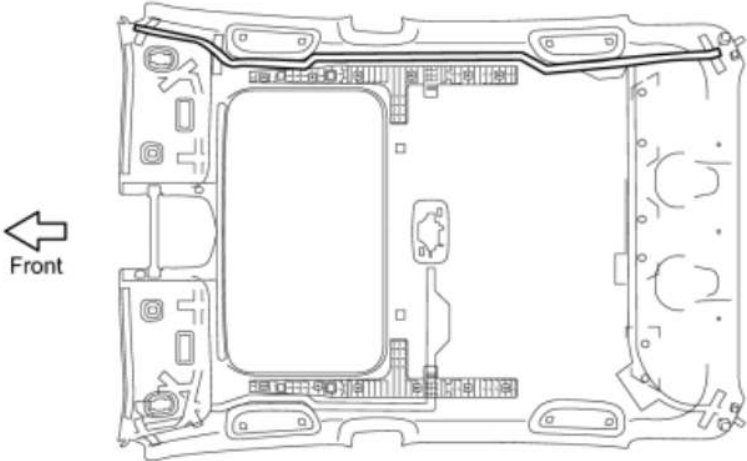
AUDIO / VIDEO: RADIO ANTENNA CORD: INSTALLATION (2010 Prius)

position indicated in the illustration. Be careful not to touch the adhesive surface.

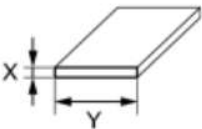
w/o Sliding Roof:



w/ Sliding Roof:



Double-sided Tape Size:



☐ Double-sided Tape

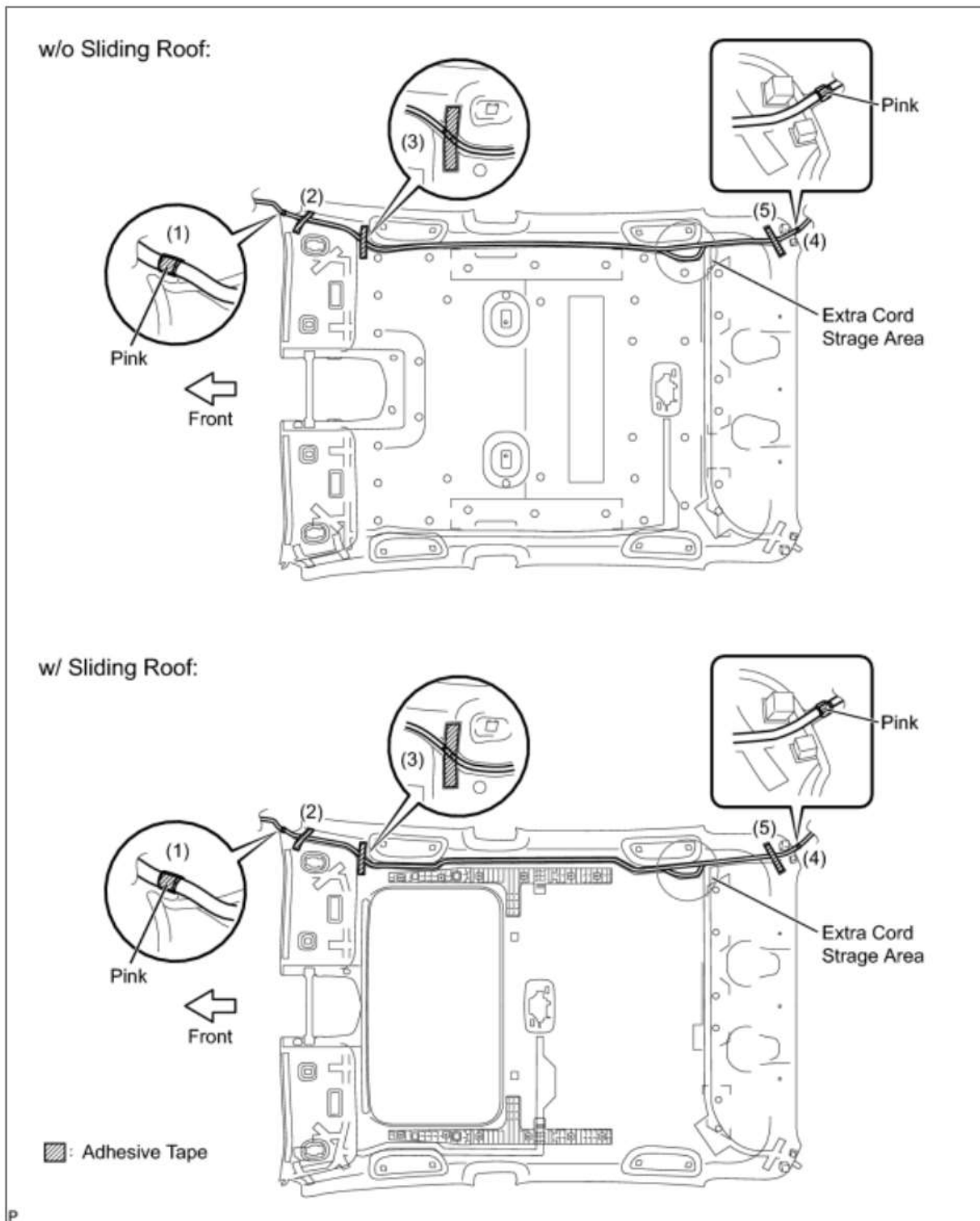
AREA	DIMENSION
X	1.0 mm (0.0394 in.)
Y	10.0 mm (0.394 in.)

NOTICE:

- Be sure to apply the double-sided tape carefully so that the tape will not be misaligned or come off.
- (b) Peel off the release paper from the double-sided tape. Be careful not to touch the adhesive surface.
- (c) Align the vehicle front side marking (pink) on the No. 4 antenna cord sub-assembly with the vehicle front side tab

AUDIO / VIDEO: RADIO ANTENNA CORD: INSTALLATION (2010 Prius)

on the roof headlining, and wrap the tape over the antenna cord to install it. (1)

**HINT:**

If the tape cannot be reused, packing tape can be used as a substitute.

- (d) Temporarily install the front side of the No. 4 antenna cord sub-assembly (2) with the adhesive tape.
- (e) Temporarily install the front side of the No. 4 antenna cord sub-assembly (3) with the adhesive tape.
- (f) Temporarily install the No. 4 antenna cord sub-assembly by placing it on the double-sided tape from the front of the vehicle to the point just before the extra cord storage area.
- (g) Align the vehicle rear marking (pink) on the No. 4 antenna cord sub-assembly with the tape attachment location (center line) of the roof headlining, and wrap the tape over the antenna cord to install it. (4)

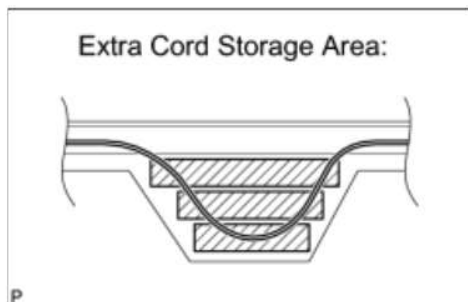
AUDIO / VIDEO: RADIO ANTENNA CORD: INSTALLATION (2010 Prius)

(scribe line) of the roof headlining, and wrap the tape over the antenna cord to install it. (4)

HINT:

If the tape cannot be reused, packing tape can be used as a substitute.

- (h) Temporarily install the rear side of the No. 4 antenna cord sub-assembly (5) with the adhesive tape.
- (i) Temporarily install the No. 4 antenna cord sub-assembly by placing it on the double-sided tape from the rear of the vehicle to the point just before the extra cord storage area.



- (j) Using double-sided tape, place any excess No. 4 antenna cord sub-assembly in the extra cord storage area to finish installing the antenna cord.

HINT:

Attach 3 pieces of double-sided tape to the extra cord storage area as shown in the illustration.

4. INSTALL NO. 3 ROOF SILENCER PAD (w/o Sliding Roof) INFO

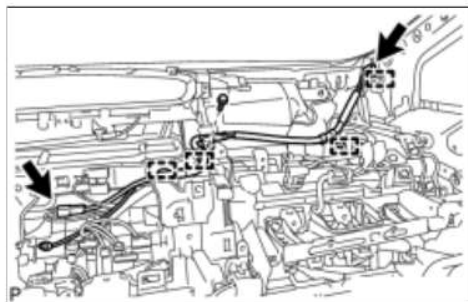
5. INSTALL NO. 2 ROOF SILENCER PAD (w/o Sliding Roof) INFO

6. INSTALL ROOF HEADLINING ASSEMBLY

HINT:

Refer to the procedure from Install Roof Headlining Assembly INFO.

7. INSTALL NO. 2 ANTENNA CORD SUB-ASSEMBLY (w/o Satellite Radio)



- (a) Engage the 4 clamps.

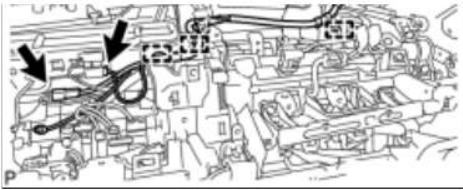
- (b) Install the No. 2 antenna cord sub-assembly with the bolt.
- (c) Connect the 2 connectors.

8. INSTALL NO. 2 ANTENNA CORD SUB-ASSEMBLY (w/ Satellite Radio)

- (a) w/o Manual (SOS) Switch:



AUDIO / VIDEO: RADIO ANTENNA CORD: INSTALLATION (2010 Prius)

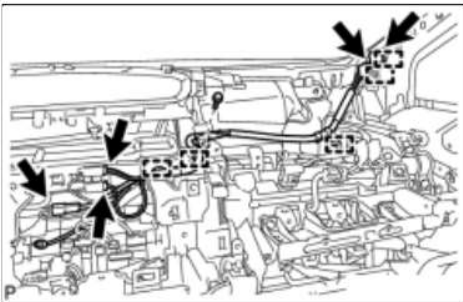


(1) Engage the 4 clamps.

(2) Install the No. 2 antenna cord sub-assembly with the bolt.

(3) Connect the 3 connectors.

(b) w/ Manual (SOS) Switch:



(1) Engage the 5 clamps.

(2) Install the No. 2 antenna cord sub-assembly with the bolt.

(3) Connect the 5 connectors.

9. INSTALL UPPER INSTRUMENT PANEL ASSEMBLY

HINT:

Refer to the procedure from Install Upper Instrument Panel Assembly  .

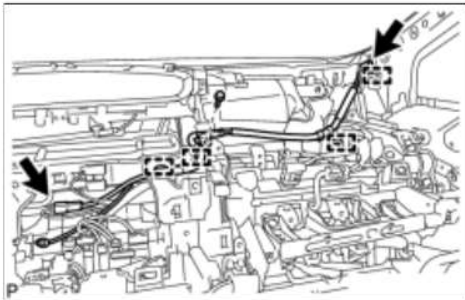
REMOVAL

1. REMOVE UPPER INSTRUMENT PANEL ASSEMBLY

HINT:

Refer to the procedure up to Remove Upper Instrument Panel Assembly [INFO](#).

2. REMOVE NO. 2 ANTENNA CORD SUB-ASSEMBLY (w/o Satellite Radio)

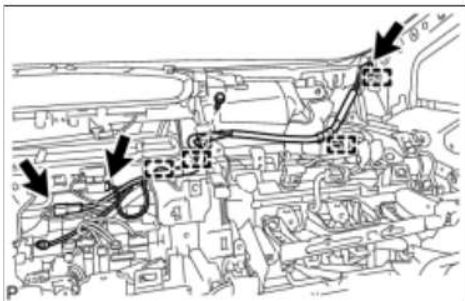


(a) Disconnect the 2 connectors.

(b) Remove the bolt.

(c) Disengage the 4 clamps and remove the No. 2 antenna cord sub-assembly.

3. REMOVE NO. 2 ANTENNA CORD SUB-ASSEMBLY (w/ Satellite Radio)

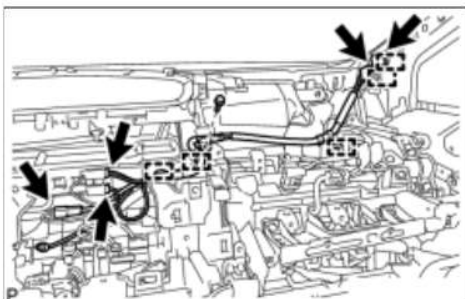


(a) w/o Manual (SOS) Switch:

(1) Disconnect the 3 connectors.

(2) Remove the bolt.

(3) Disengage the 4 clamps and remove the No. 2 antenna cord sub-assembly.



(b) w/ Manual (SOS) Switch:

(1) Disconnect the 5 connectors.

(2) Remove the bolt.

(3) Disengage the 5 clamps and remove the No. 2 antenna cord sub-assembly.

4. REMOVE ROOF HEADLINING ASSEMBLY

HINT:

Refer to the procedure up to Remove Roof Headlining Assembly [INFO](#).

AUDIO / VIDEO: RADIO ANTENNA CORD: REMOVAL (2010 Prius)

5. REMOVE NO. 2 ROOF SILENCER PAD (w/o Sliding Roof)

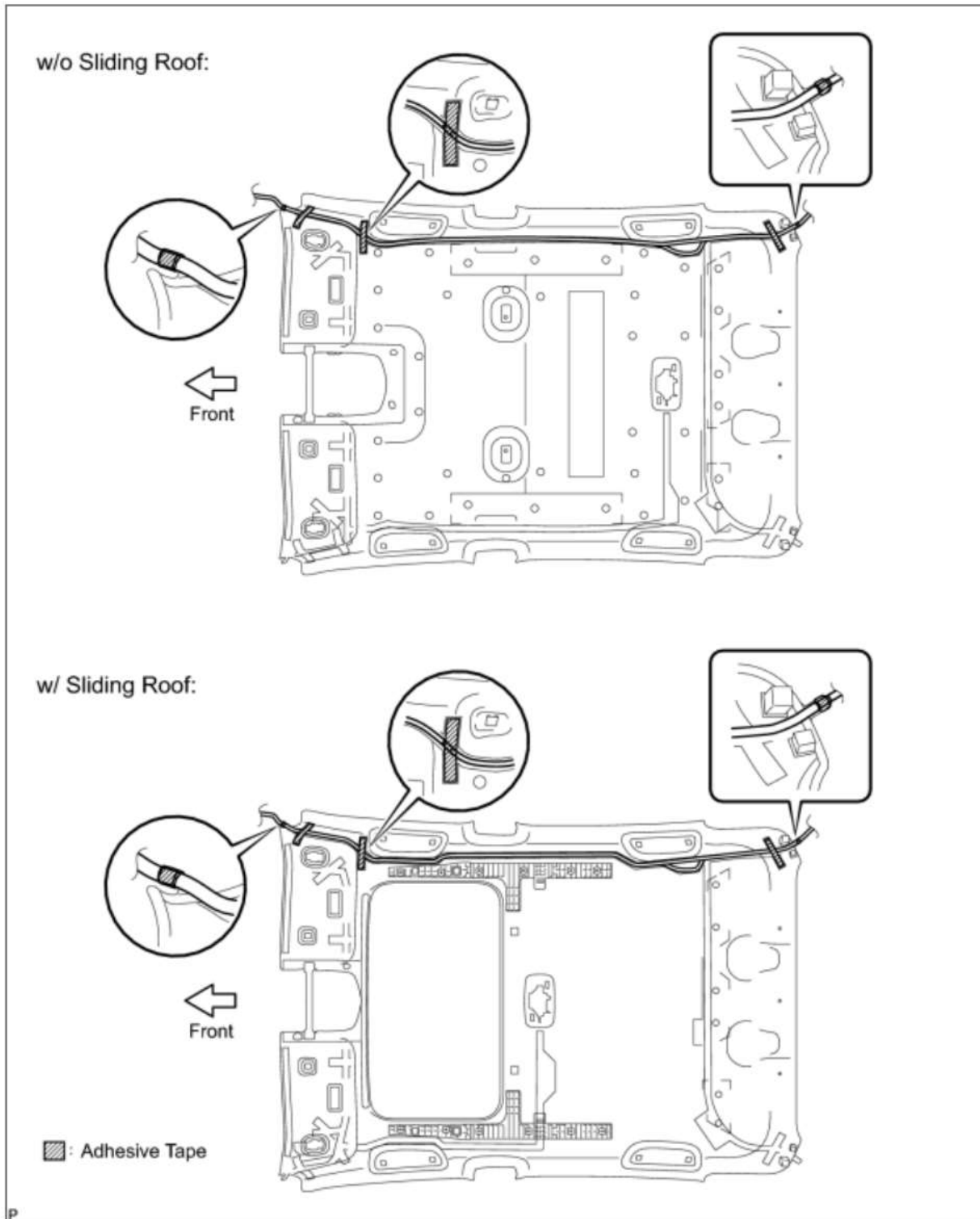
INFO

6. REMOVE NO. 3 ROOF SILENCER PAD (w/o Sliding Roof)

INFO

7. REMOVE NO. 4 ANTENNA CORD SUB-ASSEMBLY

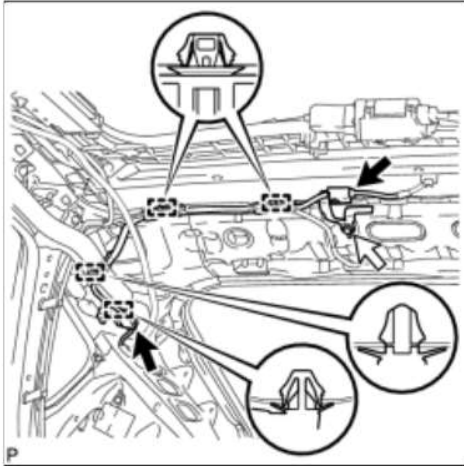
- (a) Peel the strips of the tape used to secure the antenna cord only to the extent that allows removal of the antenna cord.



- (b) Remove the No. 4 antenna cord sub-assembly.

8. REMOVE NO. 5 ANTENNA CORD SUB-ASSEMBLY (w/o Manual (SOS) Switch)

AUDIO / VIDEO: RADIO ANTENNA CORD: REMOVAL (2010 Prius)



(a) Disconnect the 2 connectors.

(b) Remove the bolt.

(c) Disengage the 4 clamps and remove the No. 5 antenna cord sub-assembly.

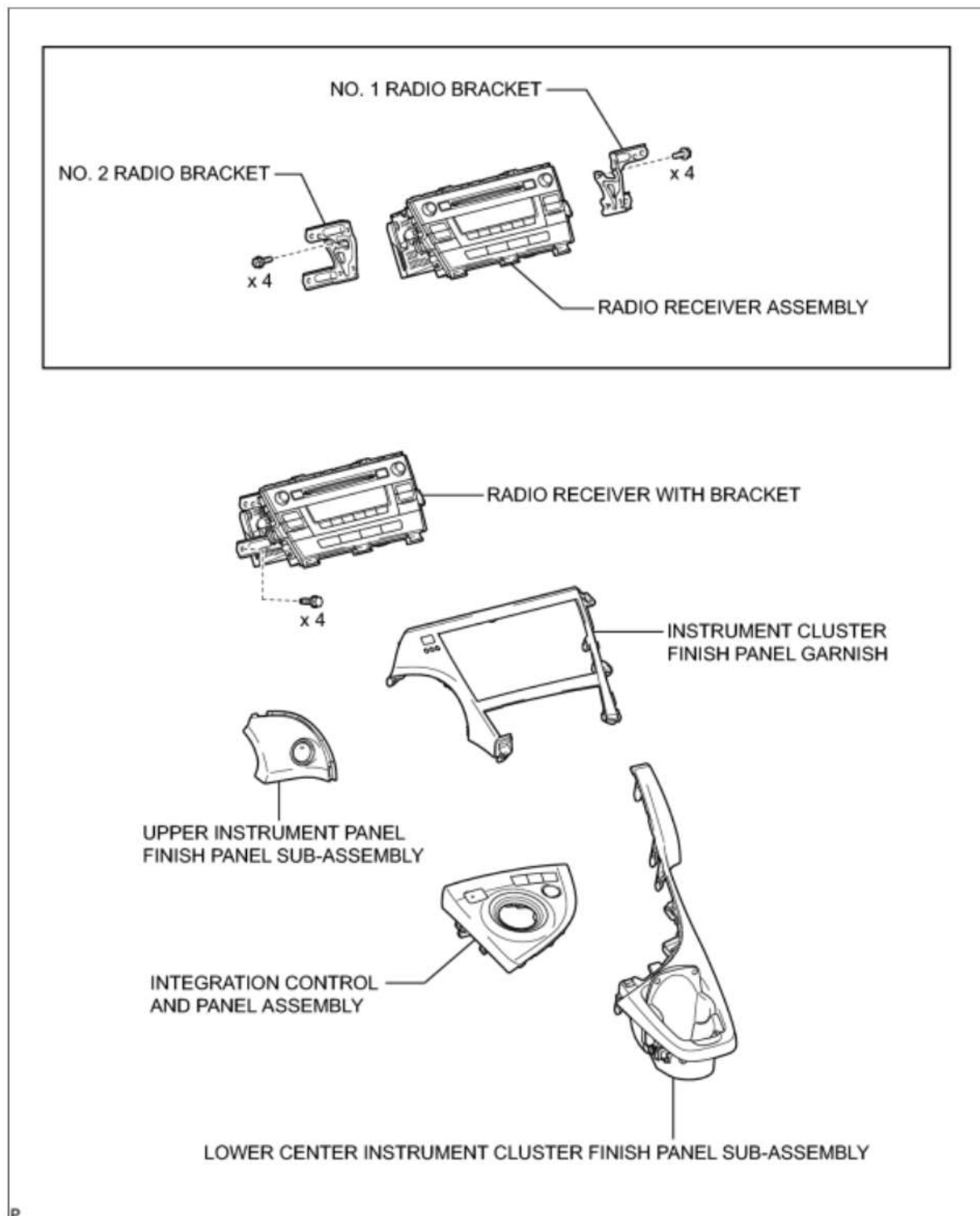
9. REMOVE NO. 5 ANTENNA CORD SUB-ASSEMBLY (w/ Manual (SOS) Switch)

(a) Disconnect the 4 connectors.

(b) Remove the bolt.

(c) Disengage the 4 clamps and remove the No. 5 antenna cord sub-assembly.

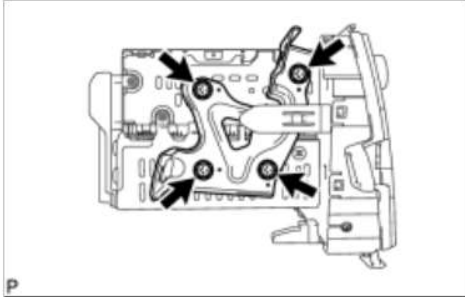
AUDIO / VIDEO: RADIO RECEIVER: COMPONENTS (2010 Prius)

COMPONENTS**ILLUSTRATION**

INSTALLATION

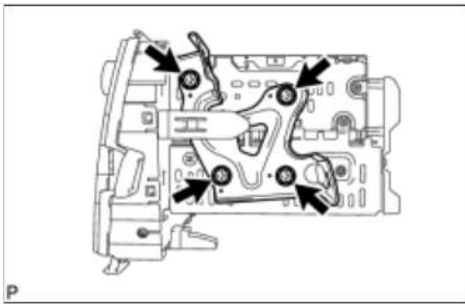
1. INSTALL RADIO RECEIVER ASSEMBLY

2. INSTALL NO. 2 RADIO BRACKET



(a) Install the No. 2 radio bracket with the 4 bolts.

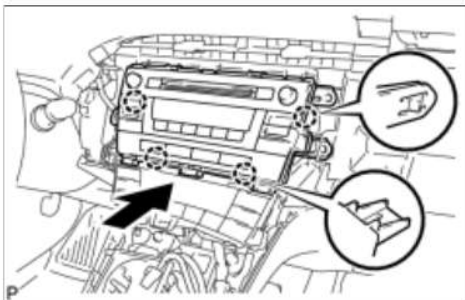
3. INSTALL NO. 1 RADIO BRACKET



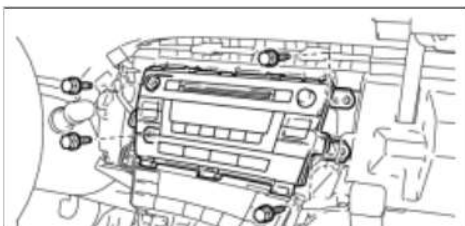
(a) Install the No. 1 radio bracket with the 4 bolts.

4. INSTALL RADIO RECEIVER WITH BRACKET

(a) Connect each connector.



(b) Engage the 4 claws as shown in the illustration.



(c) Install the radio receiver with bracket with the 4 bolts.

AUDIO / VIDEO: RADIO RECEIVER: INSTALLATION (2010 Prius)



5. INSTALL UPPER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY [INFO](#)

6. INSTALL INSTRUMENT CLUSTER FINISH PANEL GARNISH [INFO](#)

7. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY [INFO](#)

8. INSTALL INTEGRATION CONTROL AND PANEL ASSEMBLY [INFO](#)

AUDIO / VIDEO: RADIO RECEIVER: REMOVAL (2010 Prius)

REMOVAL**1. REMOVE INTEGRATION CONTROL AND PANEL ASSEMBLY**

INFO

2. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

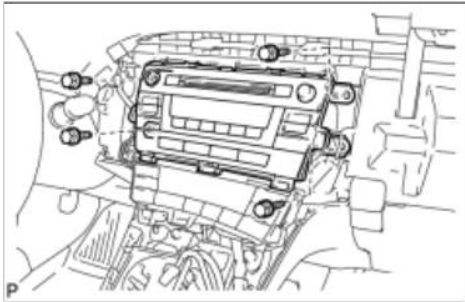
INFO

3. REMOVE INSTRUMENT CLUSTER FINISH PANEL GARNISH

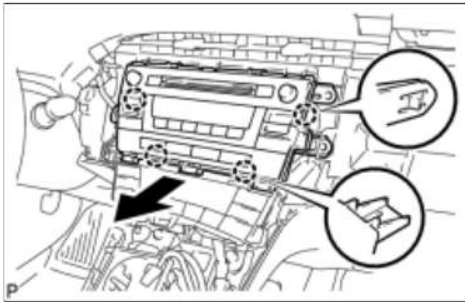
INFO

4. REMOVE UPPER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY

INFO

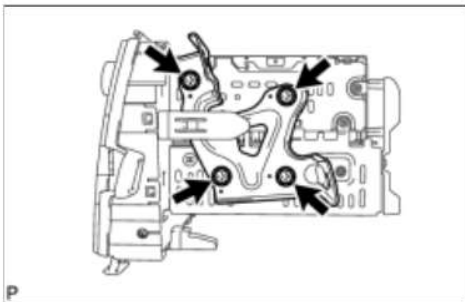
5. REMOVE RADIO RECEIVER WITH BRACKET

(a) Remove the 4 bolts.



(b) Disengage the 4 claws as shown in the illustration.

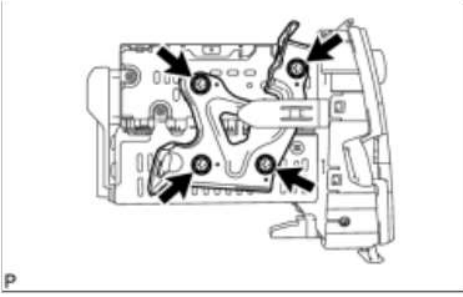
(c) Disconnect each connector and remove the radio receiver with bracket.

6. REMOVE NO. 1 RADIO BRACKET

(a) Remove the 4 bolts and No. 1 radio bracket.

7. REMOVE NO. 2 RADIO BRACKET

AUDIO / VIDEO: RADIO RECEIVER: REMOVAL (2010 Prius)

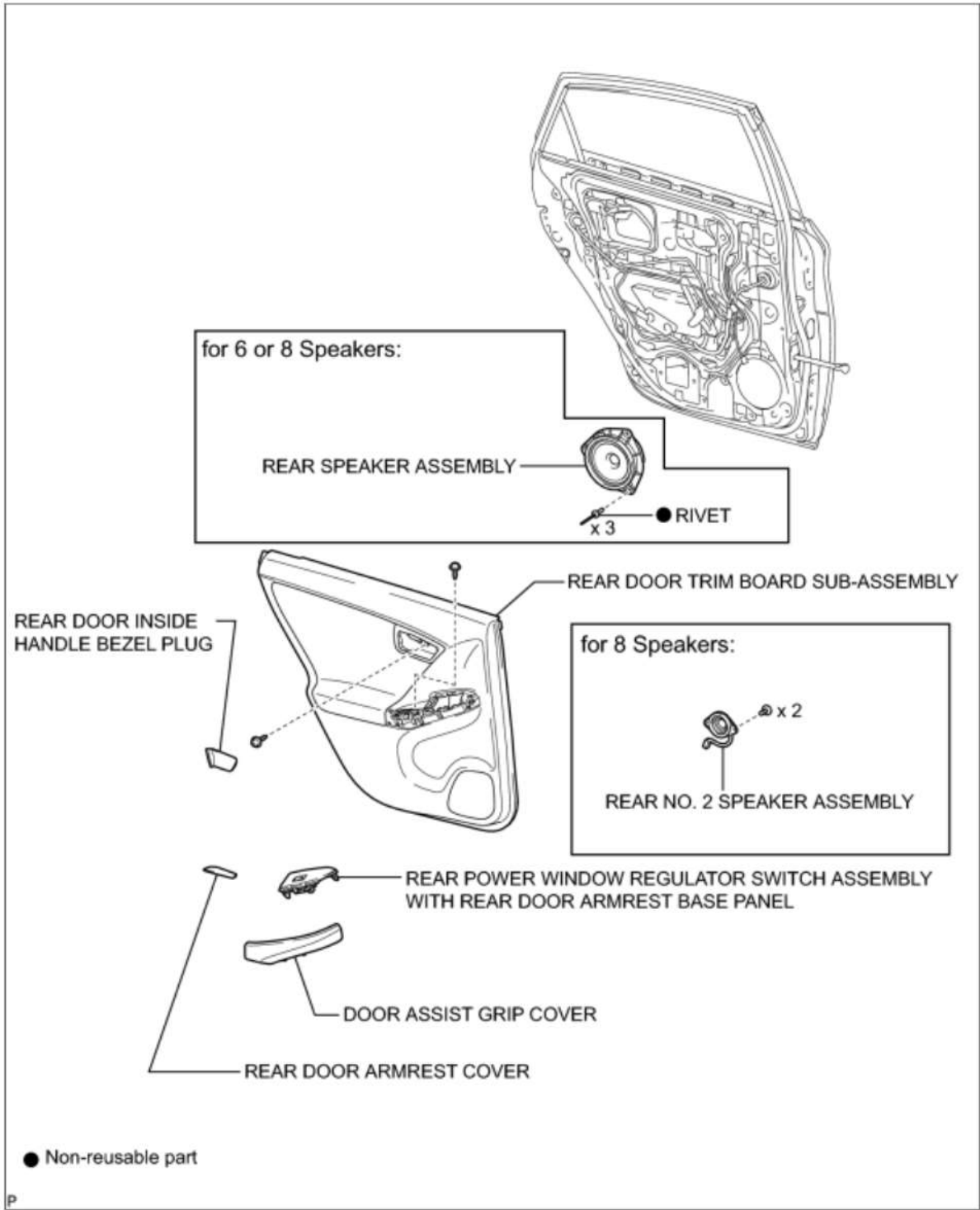


(a) Remove the 4 bolts and No. 2 radio bracket.

8. REMOVE RADIO RECEIVER ASSEMBLY

COMPONENTS

ILLUSTRATION



INSPECTION

1. INSPECT REAR SPEAKER

Measure the resistance of the speaker.

Standard Resistance (for 6 Speakers):

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	3.2 to 4.8 Ω

Standard Resistance (for 8 Speakers):

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	1.5 to 2.2 Ω

If the result is not as specified, replace the speaker assembly.

Text in Illustration

*1	Component without harness connected (Rear Speaker)
----	---

2. INSPECT REAR NO. 2 SPEAKER (for 8 Speakers)

Measure the resistance of the speaker.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	1.5 to 2.5 Ω

If the result is not as specified, replace the speaker assembly.

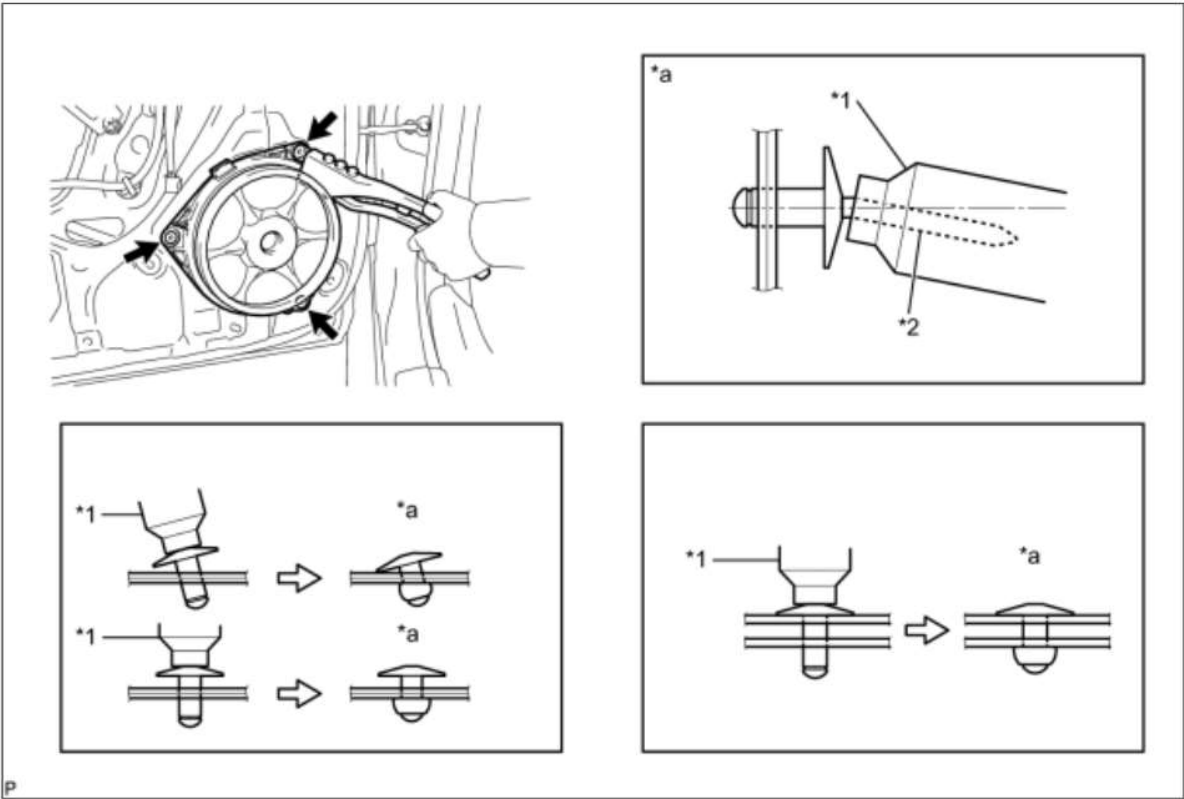
Text in Illustration

*1	Component without harness connected (Rear No. 2 Speaker)
----	---

INSTALLATION

1. INSTALL REAR SPEAKER ASSEMBLY (for 6 or 8 Speakers)

(a) Using an air riveter or a hand riveter, install the rear speaker assembly with 3 new rivets.



Text in Illustration

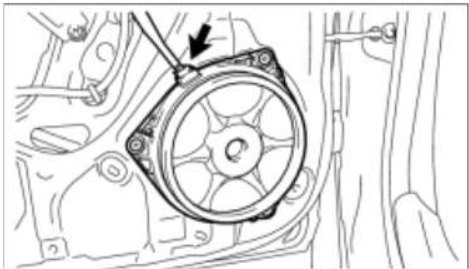
*1	Riveter	*2	Mandrel
*a	INCORRECT	-	-

NOTICE:

- Do not pry the rivet with the riveter, as this will cause damage to the riveter and mandrel.
- Confirm that the rivet is seated properly against the moulding. Do not tilt the riveter when installing the rivet to the moulding. Do not leave any clearance between the rivet head and moulding.
- Do not leave any clearance between the moulding and door frame. Firmly hold the 2 items together while installing the rivet.

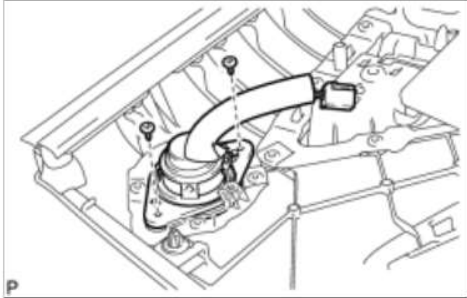
HINT:

If the rivet cannot be cut, pull it once and cut it.



(b) Connect the connector.

AUDIO / VIDEO: REAR DOOR SPEAKER: INSTALLATION (2010 Prius)

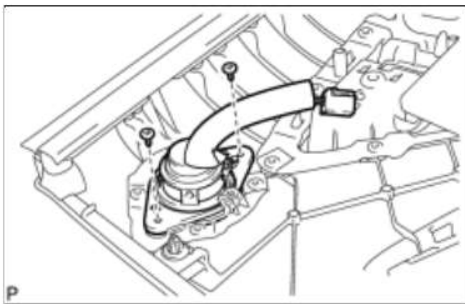
**2. INSTALL REAR NO. 2 SPEAKER ASSEMBLY (for 8 Speakers)**

(a) Install the rear No. 2 speaker assembly with the 2 screws.

3. INSTALL REAR DOOR TRIM BOARD SUB-ASSEMBLY[INFO](#)**4. INSTALL REAR DOOR ARMREST COVER**[INFO](#)**5. INSTALL REAR POWER WINDOW REGULATOR SWITCH ASSEMBLY WITH REAR DOOR ARMREST BASE PANEL**[INFO](#)**6. INSTALL DOOR ASSIST GRIP COVER**[INFO](#)**7. INSTALL REAR DOOR INSIDE HANDLE BEZEL PLUG**[INFO](#)

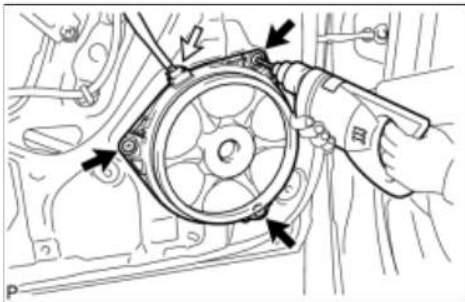
REMOVAL

1. REMOVE REAR DOOR INSIDE HANDLE BEZEL PLUG INFO
2. REMOVE DOOR ASSIST GRIP COVER INFO
3. REMOVE REAR POWER WINDOW REGULATOR SWITCH ASSEMBLY WITH REAR DOOR ARMREST BASE PANEL INFO
4. REMOVE REAR DOOR ARMREST COVER INFO
5. REMOVE REAR DOOR TRIM BOARD SUB-ASSEMBLY INFO
6. REMOVE REAR NO. 2 SPEAKER ASSEMBLY (for 8 Speakers)



(a) Remove the 2 screws and rear No. 2 speaker assembly.

7. REMOVE REAR SPEAKER ASSEMBLY (for 6 or 8 Speakers)



(a) Disconnect the connector.

(b) Using a drill bit with a diameter of less than 4 mm (0.158 in.), drill out the 3 rivet heads and remove the rear speaker assembly.

NOTICE:

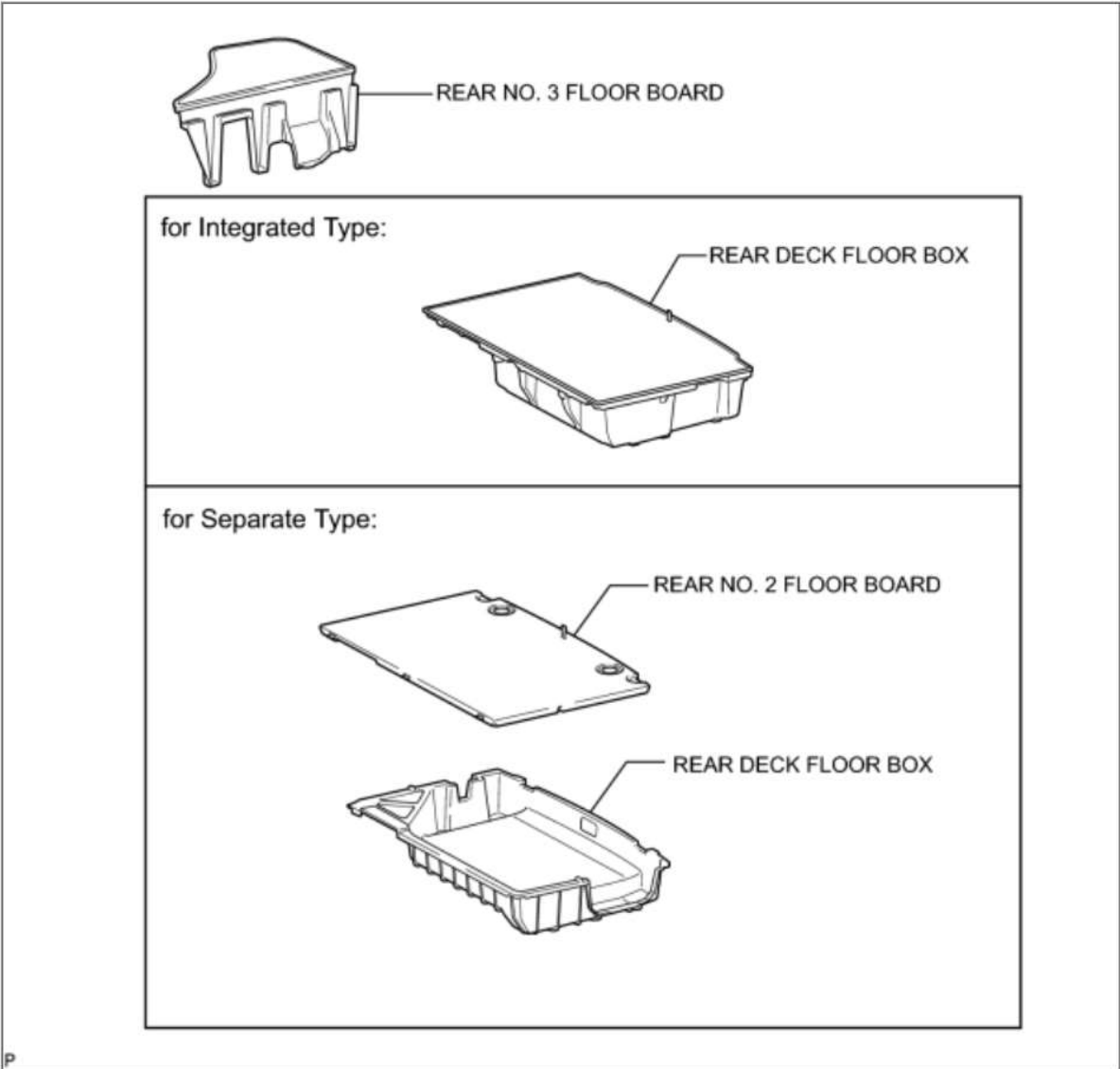
- Do not touch the cone part of the speaker.
- Do not drill the rivet at an angle as this will cause damage to the drill and drill hole. Line up the drill and rivet, and carefully drill out the rivet head.
- Be careful as the cut rivet will be very hot.

(c) Continue drilling and push out the remaining rivet fragments.

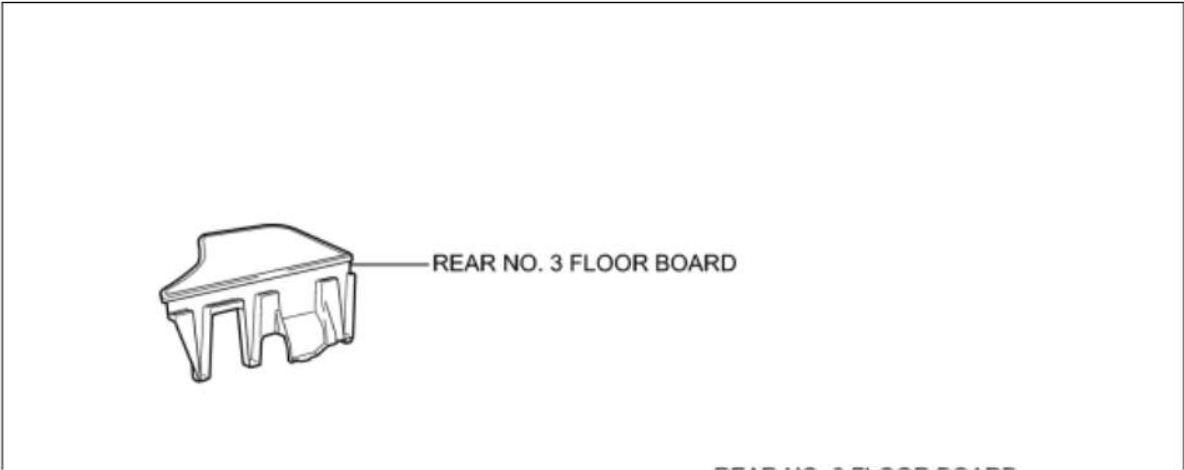
(d) Using a vacuum cleaner, remove the rivet fragments and shavings from the inside of the door.

COMPONENTS

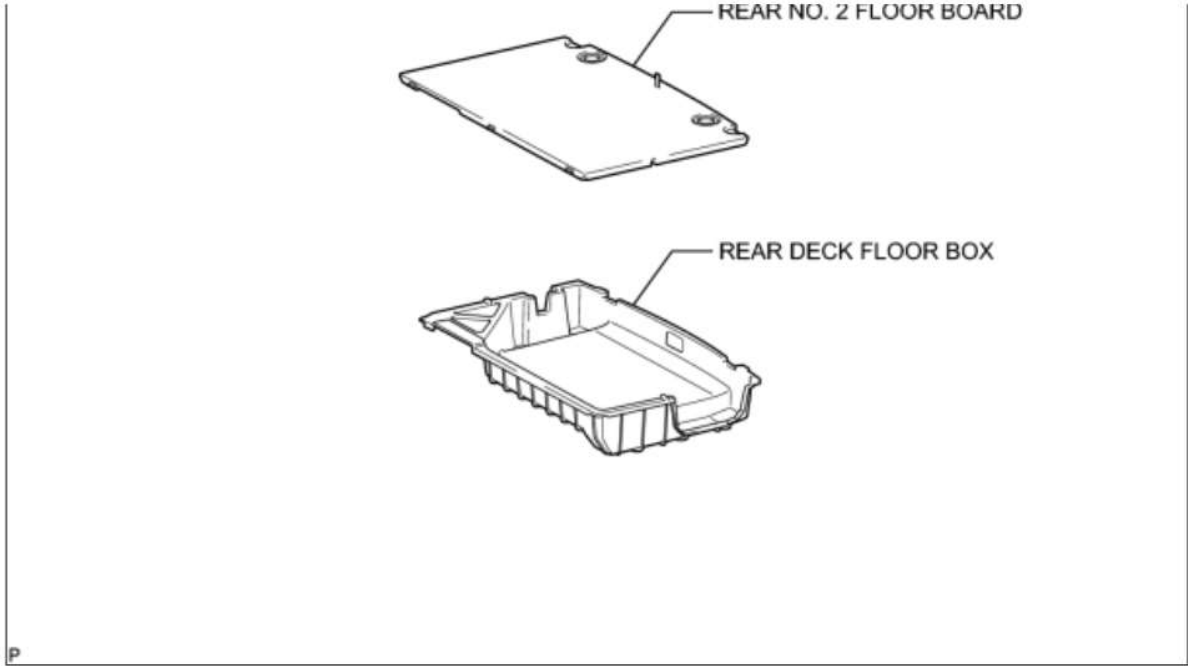
ILLUSTRATION



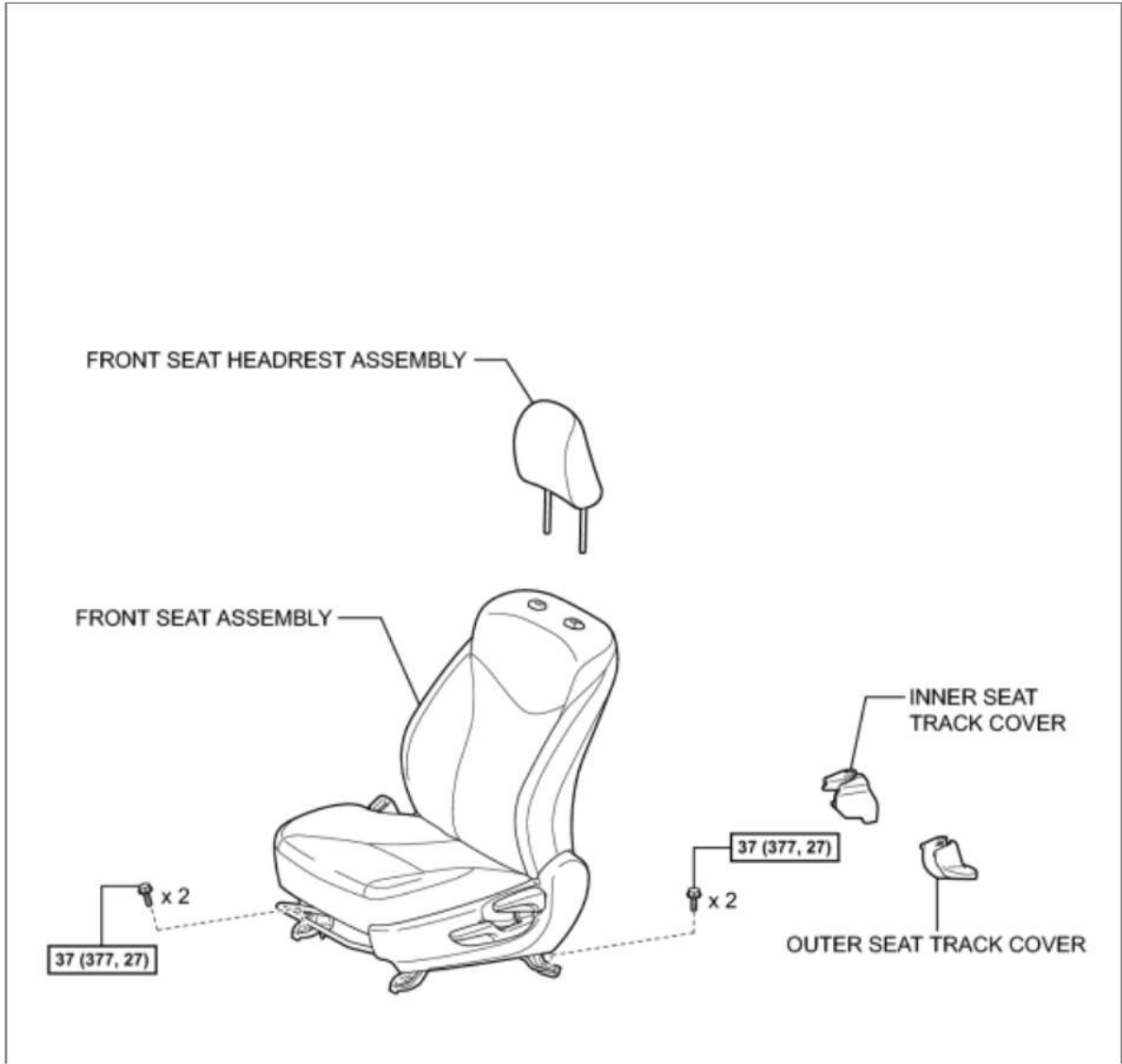
ILLUSTRATION



AUDIO / VIDEO: SATELLITE RADIO TUNER: COMPONENTS (2010 Prius)



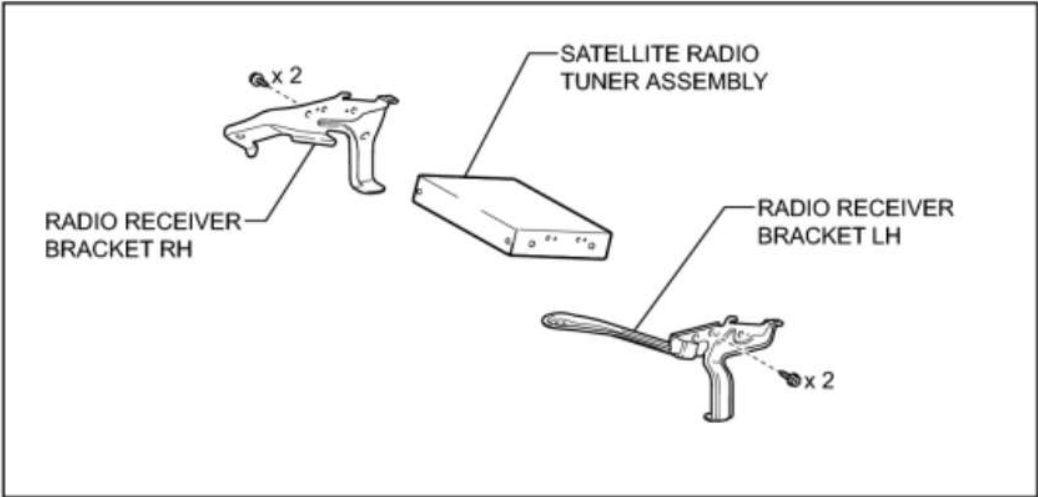
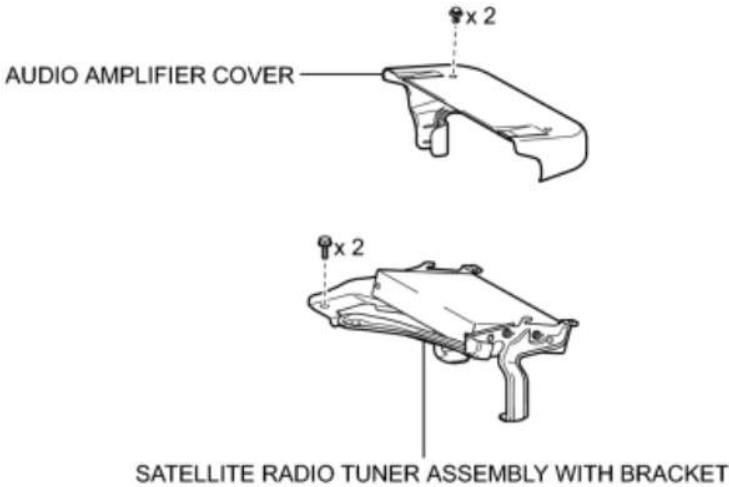
ILLUSTRATION



[N*m (kgf*cm, ft.*lbf)]: Specified torque

P

ILLUSTRATION



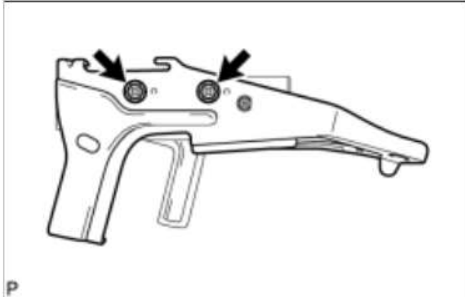
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INSTALLATION

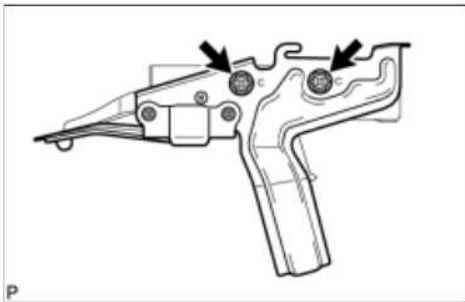
1. INSTALL SATELLITE RADIO TUNER ASSEMBLY

2. INSTALL RADIO RECEIVER BRACKET RH



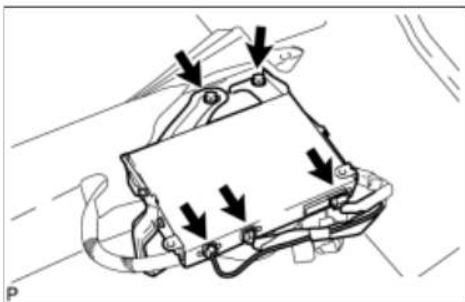
(a) Install the radio receiver bracket RH with the 2 screws.

3. INSTALL RADIO RECEIVER BRACKET LH



(a) Install the radio receiver bracket LH with the 2 screws.

4. INSTALL SATELLITE RADIO TUNER ASSEMBLY WITH BRACKET



(a) Install the satellite radio tuner assembly with bracket with the 2 bolts.

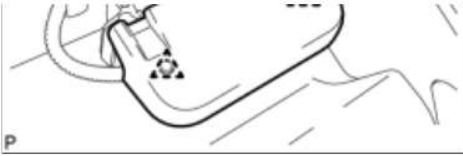
(b) Connect the 3 connectors.

5. INSTALL AUDIO AMPLIFIER COVER



(a) Install the audio amplifier cover with the 2 clips.

AUDIO / VIDEO: SATELLITE RADIO TUNER: INSTALLATION (2010 Prius)



6. INSTALL FRONT SEAT ASSEMBLY [INFO](#)

7. INSTALL INNER SEAT TRACK COVER [INFO](#)

8. INSTALL OUTER SEAT TRACK COVER [INFO](#)

9. INSTALL FRONT SEAT HEADREST ASSEMBLY [INFO](#)

10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected [INFO](#) .

11. INSTALL REAR NO. 3 FLOOR BOARD [INFO](#)

12. INSTALL REAR DECK FLOOR BOX [INFO](#)

13. INSTALL REAR NO. 2 FLOOR BOARD [INFO](#)

REMOVAL

NOTICE:

After replacing the stereo component tuner assembly of vehicles subscribed to pay-type satellite radio broadcasts, registration of the XM radio ID is necessary.

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

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 INFO.

2. REMOVE REAR NO. 2 FLOOR BOARD INFO

3. REMOVE REAR DECK FLOOR BOX INFO

4. REMOVE REAR NO. 3 FLOOR BOARD INFO

5. REMOVE FRONT SEAT HEADREST ASSEMBLY INFO

6. REMOVE OUTER SEAT TRACK COVER INFO

7. REMOVE INNER SEAT TRACK COVER INFO

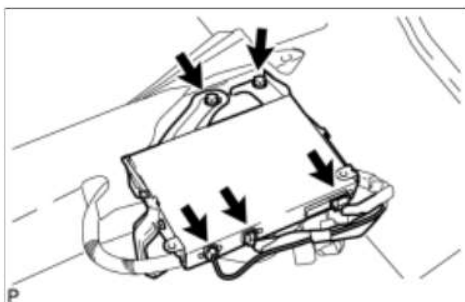
8. REMOVE FRONT SEAT ASSEMBLY INFO

9. REMOVE AUDIO AMPLIFIER COVER



(a) Using a clip remover, remove the 2 clips and audio amplifier cover.

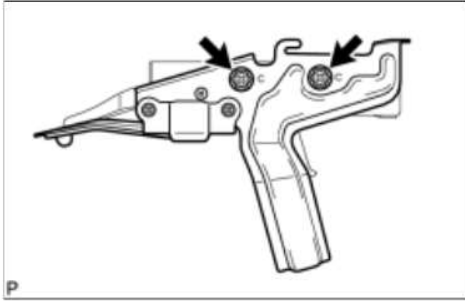
10. REMOVE SATELLITE RADIO TUNER ASSEMBLY WITH BRACKET



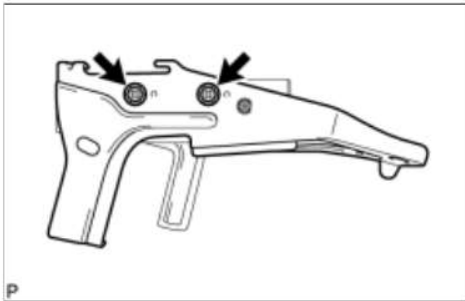
(a) Disconnect the 3 connectors.

(b) Remove the 2 bolts and satellite radio tuner assembly with bracket.

AUDIO / VIDEO: SATELLITE RADIO TUNER: REMOVAL (2010 Prius)

11. REMOVE RADIO RECEIVER BRACKET LH

(a) Remove the 2 screws and radio receiver bracket LH.

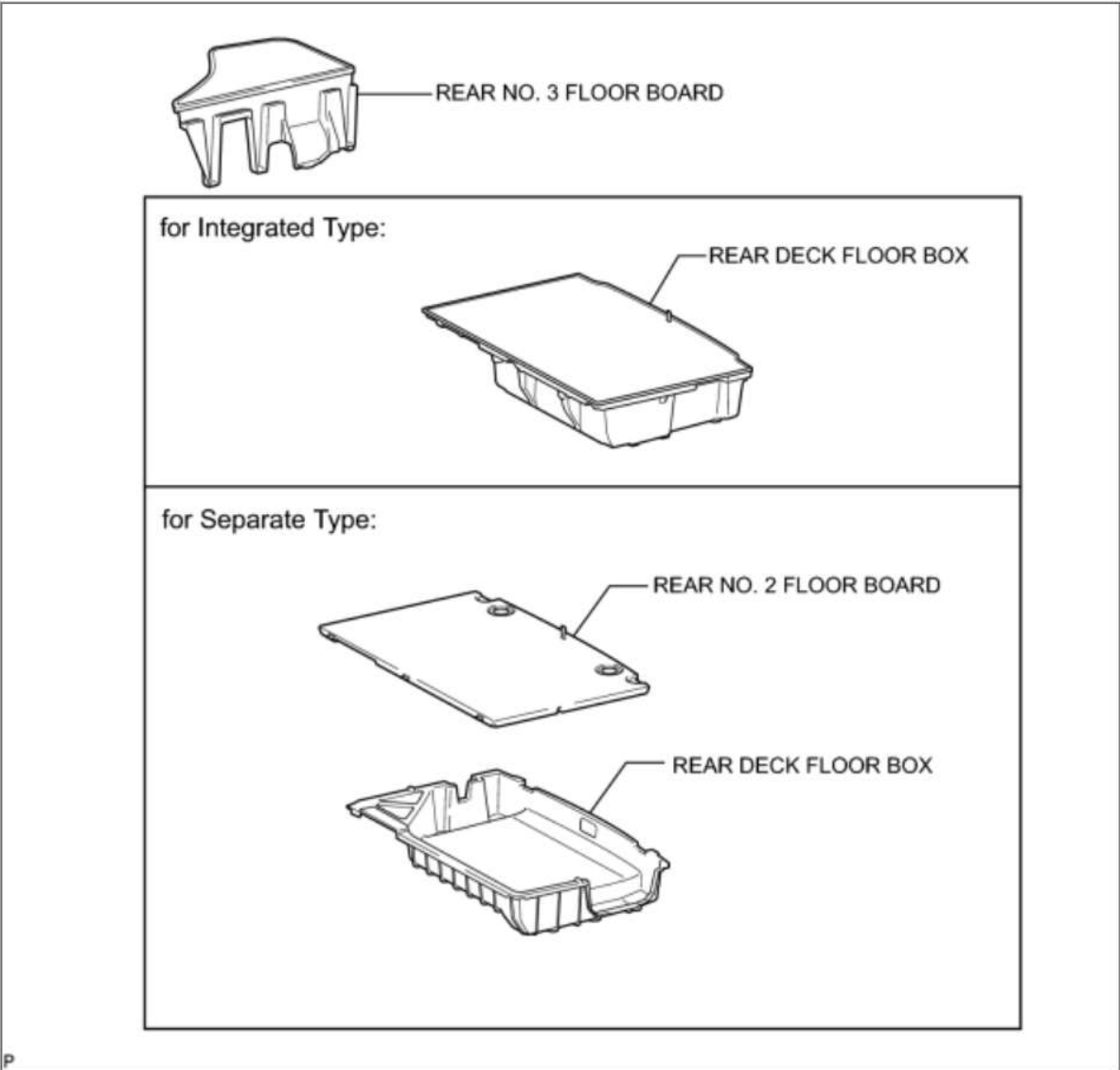
12. REMOVE RADIO RECEIVER BRACKET RH

(a) Remove the 2 screws and radio receiver bracket RH.

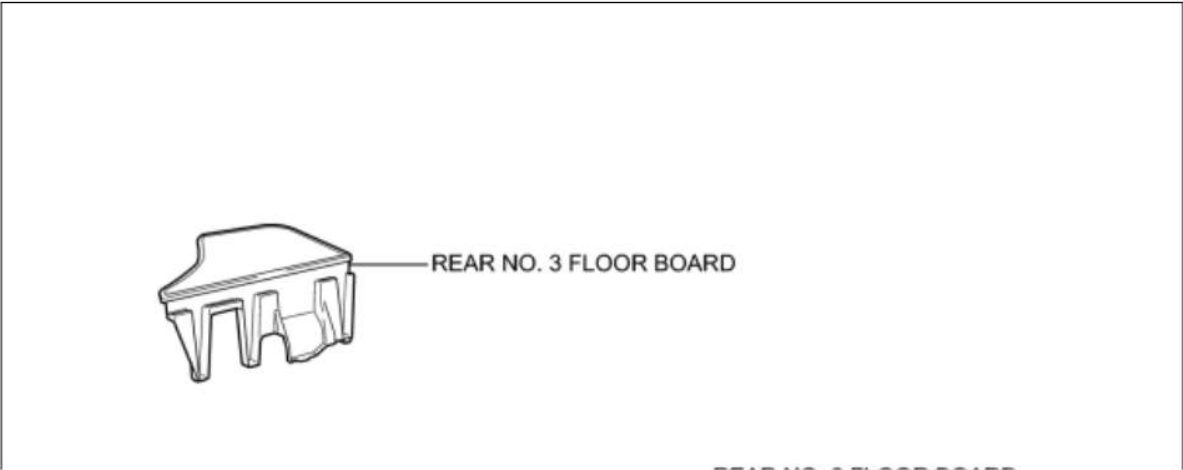
13. REMOVE SATELLITE RADIO TUNER ASSEMBLY

COMPONENTS

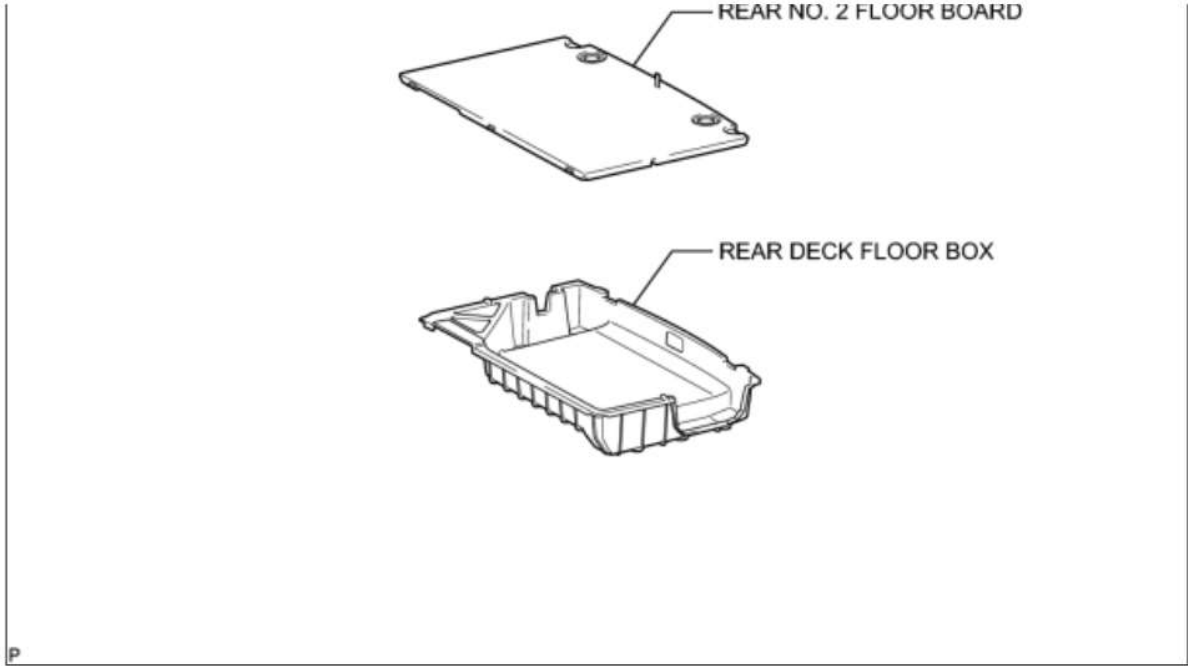
ILLUSTRATION



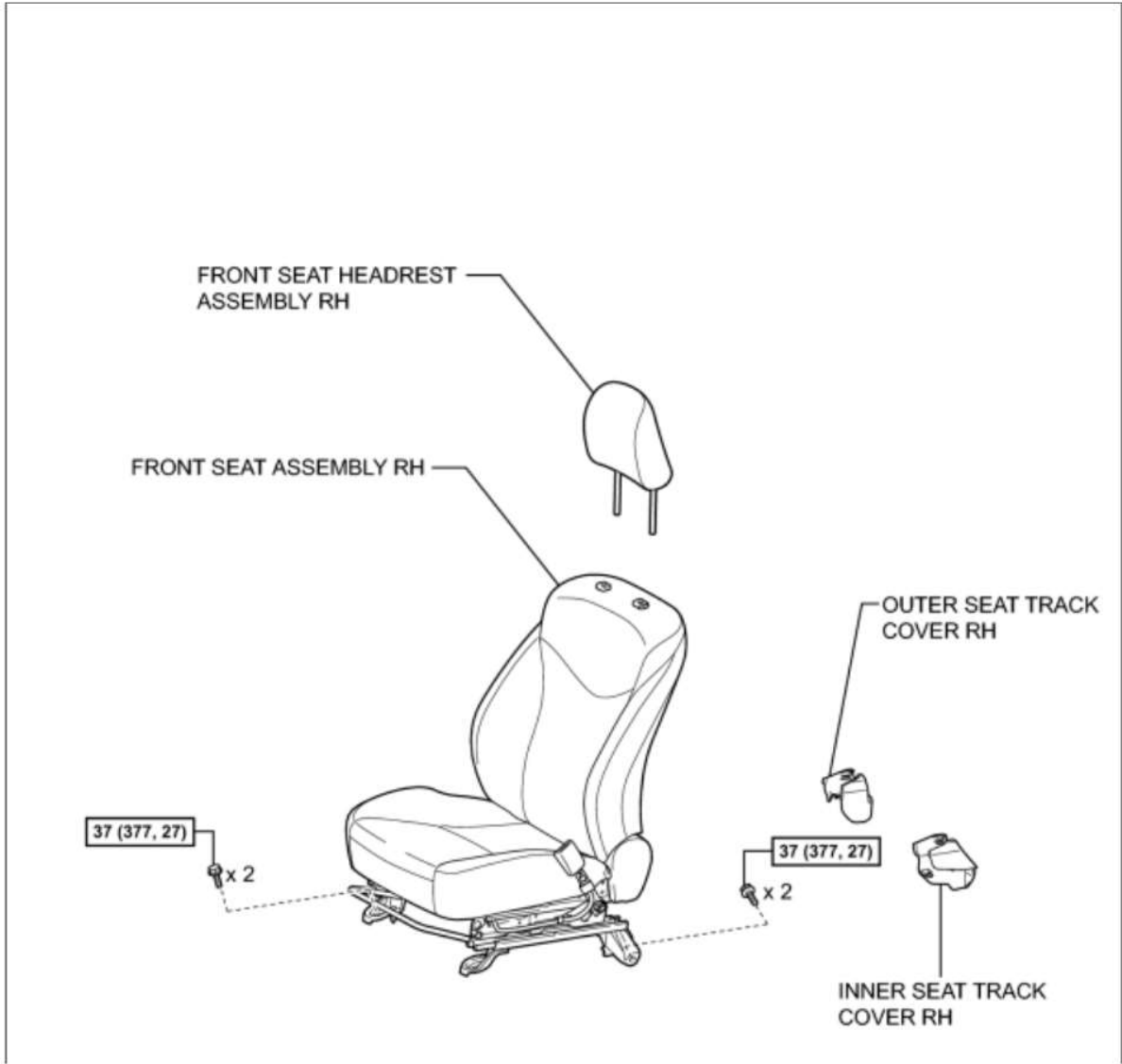
ILLUSTRATION



AUDIO / VIDEO: STEREO COMPONENT AMPLIFIER: COMPONENTS (2010 Prius)



ILLUSTRATION

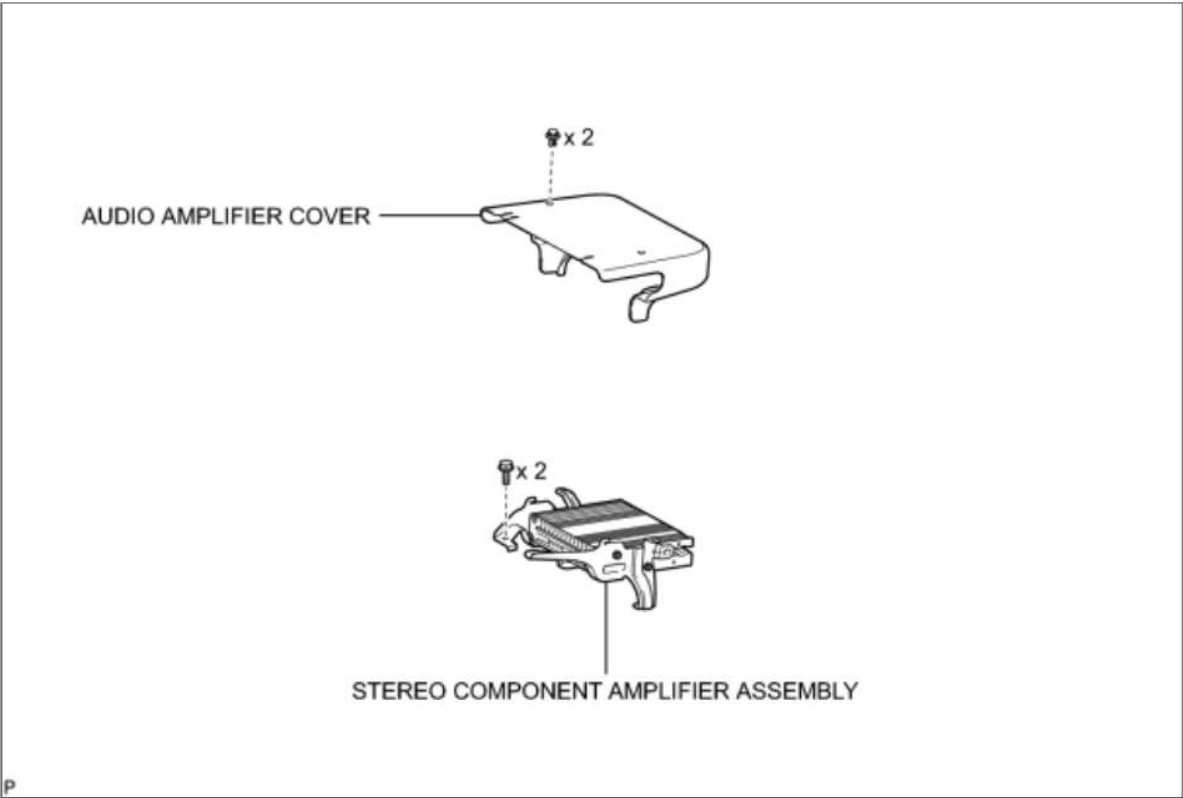


AUDIO / VIDEO: STEREO COMPONENT AMPLIFIER: COMPONENTS (2010 Prius)

N*m (kgf*cm, ft.*lbf): Specified torque

P

ILLUSTRATION



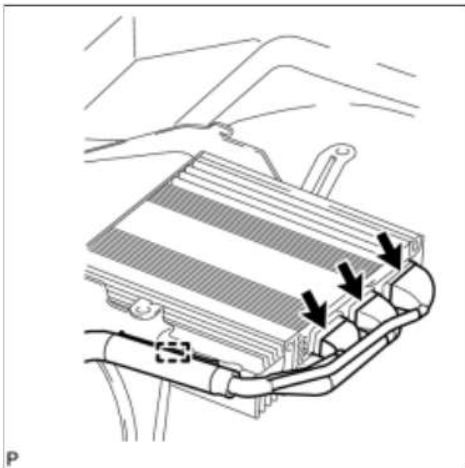
P

INSTALLATION

1. INSTALL STEREO COMPONENT AMPLIFIER ASSEMBLY



(a) Install the stereo component amplifier assembly with the 2 bolts.



(b) Engage the clamp and connect the wire harness.

(c) Connect the 3 connectors.

2. INSTALL AUDIO AMPLIFIER COVER



(a) Install the audio amplifier cover with the 2 clips.

3. INSTALL FRONT SEAT ASSEMBLY RH

LIMIT.

AUDIO / VIDEO: STEREO COMPONENT AMPLIFIER: INSTALLATION (2010 Prius)

HINT:

Use the same procedure for the RH side and LH side  .

4. ZERO POINT CALIBRATION AND SENSITIVITY CHECK**HINT:**

Perform zero point calibration and sensitivity check  .

5. INSTALL INNER SEAT TRACK COVER RH**HINT:**

Use the same procedure for the RH side and LH side  .

6. INSTALL OUTER SEAT TRACK COVER RH**HINT:**

Use the same procedure for the RH side and LH side  .

7. INSTALL FRONT SEAT HEADREST ASSEMBLY RH**HINT:**

Use the same procedure for the RH side and LH side  .

8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**NOTICE:**

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

9. INSTALL REAR NO. 3 FLOOR BOARD **10. INSTALL REAR DECK FLOOR BOX ****11. INSTALL REAR NO. 2 FLOOR BOARD (for Separate Type) ****12. INSPECT FRONT SEAT ASSEMBLY ****13. INSPECT SRS WARNING LIGHT**

(a) Inspect the SRS warning light  .

REMOVAL

1. REMOVE REAR NO. 2 FLOOR BOARD (for Separate Type) INFO

2. REMOVE REAR DECK FLOOR BOX INFO

3. REMOVE REAR NO. 3 FLOOR BOARD INFO

4. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

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 INFO.

5. REMOVE FRONT SEAT HEADREST ASSEMBLY RH

HINT:

Use the same procedure for the RH side and LH side INFO.

6. REMOVE OUTER SEAT TRACK COVER RH

HINT:

Use the same procedure for the RH side and LH side INFO.

7. REMOVE INNER SEAT TRACK COVER RH

HINT:

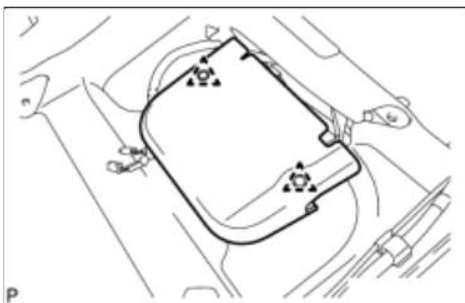
Use the same procedure for the RH side and LH side INFO.

8. REMOVE FRONT SEAT ASSEMBLY RH

HINT:

Use the same procedure for the RH side and LH side INFO.

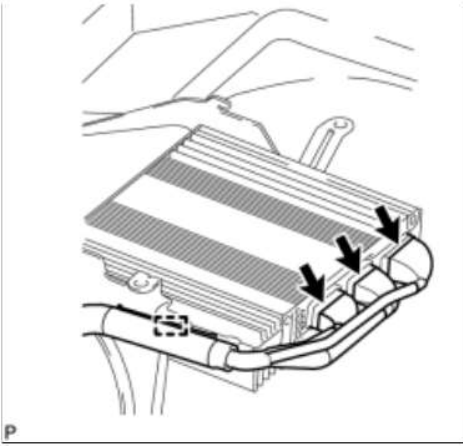
9. REMOVE AUDIO AMPLIFIER COVER



(a) Using a clip remover, remove the 2 clips and audio amplifier cover.

10. REMOVE STEREO COMPONENT AMPLIFIER ASSEMBLY

AUDIO / VIDEO: STEREO COMPONENT AMPLIFIER: REMOVAL (2010 Prius)



(a) Disconnect the 3 connectors.

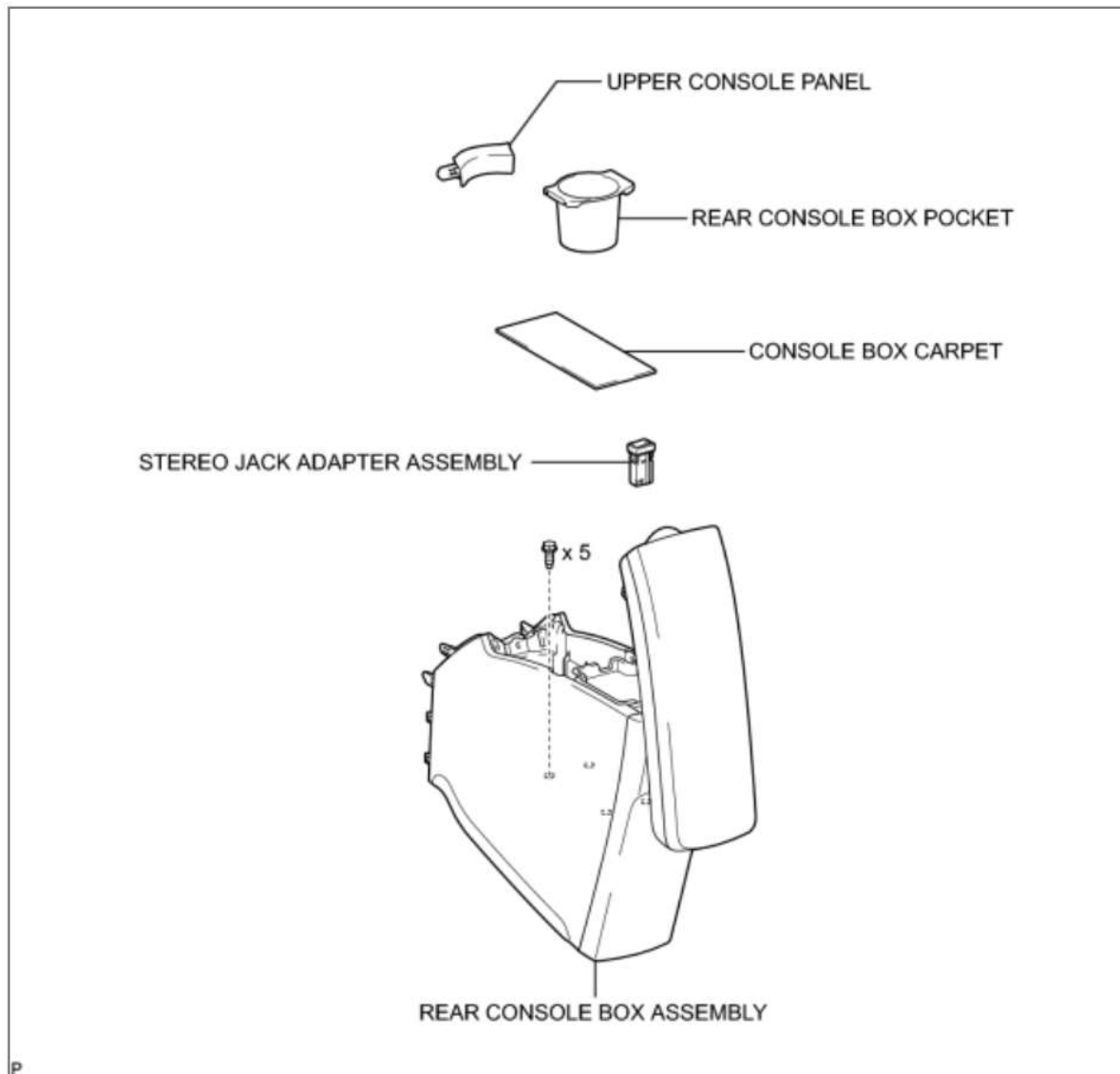
(b) Disengage the clamp and disconnect the wire harness.



(c) Remove the 2 bolts and stereo component amplifier assembly.

COMPONENTS

ILLUSTRATION



INSTALLATION

1. INSTALL STEREO JACK ADAPTER ASSEMBLY



(a) Engage the 2 claws to install the stereo jack adapter assembly.

(b) Connect the connector.

2. INSTALL REAR CONSOLE BOX ASSEMBLY

[INFO](#)

3. INSTALL CONSOLE BOX CARPET

[INFO](#)

4. INSTALL UPPER CONSOLE PANEL

[INFO](#)

5. INSTALL REAR CONSOLE BOX POCKET

[INFO](#)

REMOVAL

1. REMOVE REAR CONSOLE BOX POCKET

INFO

2. REMOVE UPPER CONSOLE PANEL

INFO

3. REMOVE CONSOLE BOX CARPET

INFO

4. REMOVE REAR CONSOLE BOX ASSEMBLY

INFO

5. REMOVE STEREO JACK ADAPTER ASSEMBLY



(a) Disconnect the connector.

(b) Disengage the 2 claws and remove the stereo jack adapter assembly.