

14Scion Display Audio

PT546-00140

TROUBLESHOOTING GUIDE

Rev A : 5/17/2013

AUDIO MAINUNIT TROUBLESHOOTING

APPLY TO: PT546-00140

HINT:

This inspection procedure is a simple troubleshooting that should be carried out on the vehicle during system operation and was prepared on the assumption of system component troubles (except for the wires and connectors, etc.).

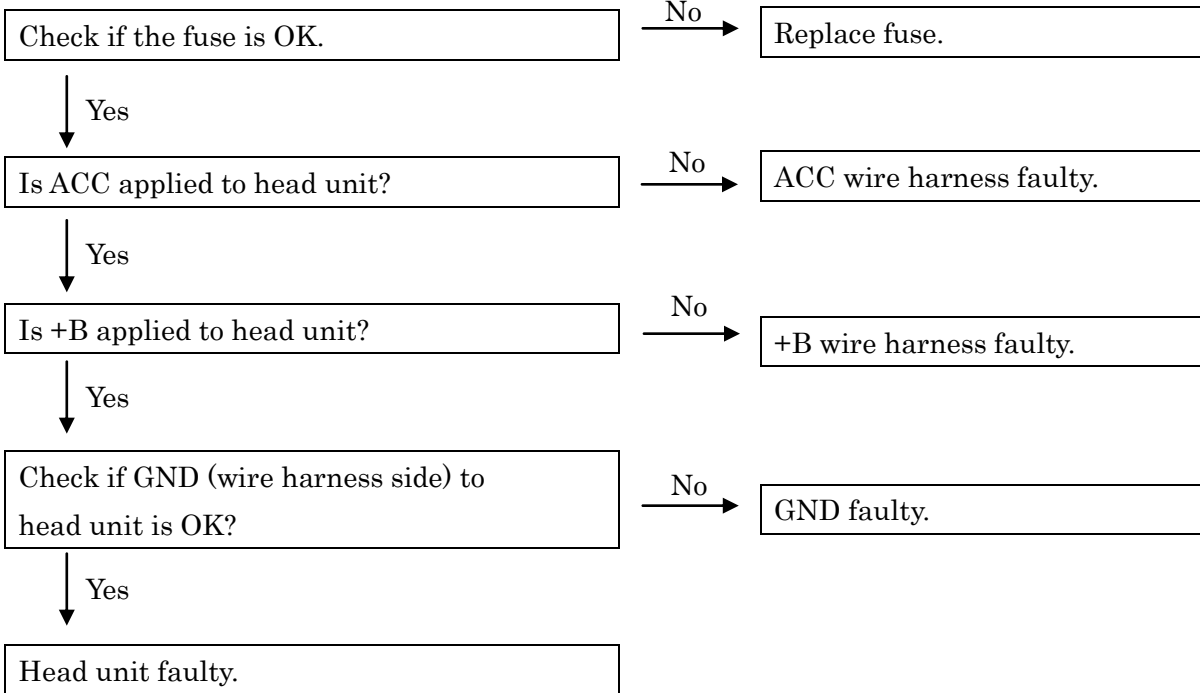
Always inspect the trouble taking the following into consideration.

*Open or short circuit of the wire harness

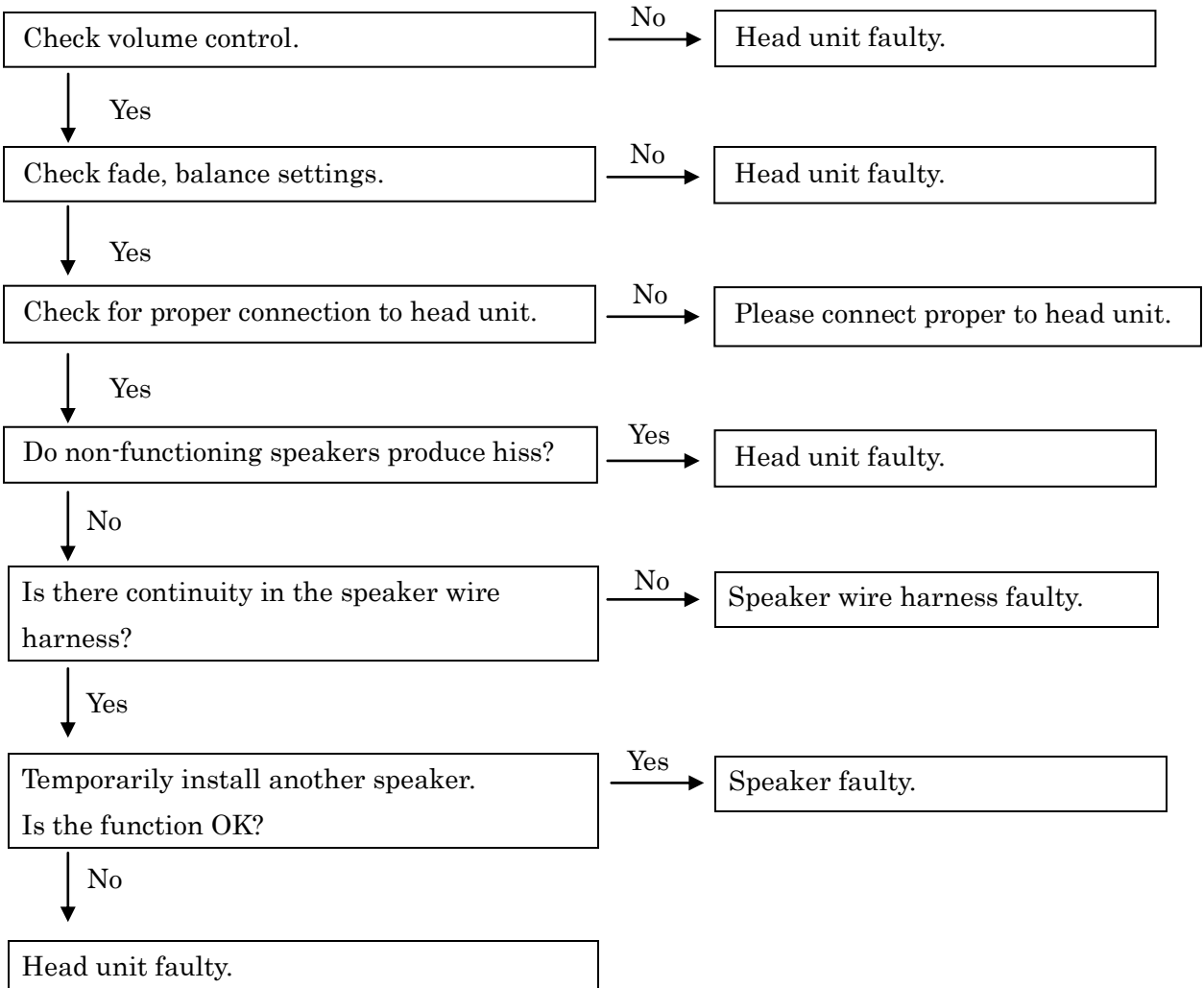
*Connector or terminal connection fault

No.		PROBLEM
1	GENERAL	No power coming in.
2		One or more speakers do not work.
3		Sound quality poor.
4	RADIO	Power coming in, but radio not operating.
5		Either AM or FM does not work.
5		Reception poor (volume faint).
5		Few preset tuning bands.
6		Sound quality poor.
7		Cannot set station select button.
7		Preset memories disappear.
8		Analog reception can receive but, HD radio can not receive.
9		HD reception is poor and sound is mute frequently.
10	CD PLAYER	CD cannot be inserted.
11		Power coming in, but CD player not operating.
12		Sound jumps.
13		Sound quality poor (Volume faint).
14		CD will not eject.
15	NOISE	Noise produced by vibration or shock while driving.
16		Noise produced when engine starts.
17		Noise heard occasionally.
18	AUX	Cannot select AUX mode.
19		Sound quality poor (Volume faint).
20	ASL	ASL ineffective (sound level will not increase).
21	USB	Sound quality poor.
22		USB device connected, but cannot select USB mode.
23	iPod/USB	Head unit can play USB devices, but not iPod.
24	iPod	Head unit can operate iPod, but not charge it.
25	Bluetooth	Bluetooth setup menu is not displayed.
26	MAP Screen	MAP Screen is not displayed.

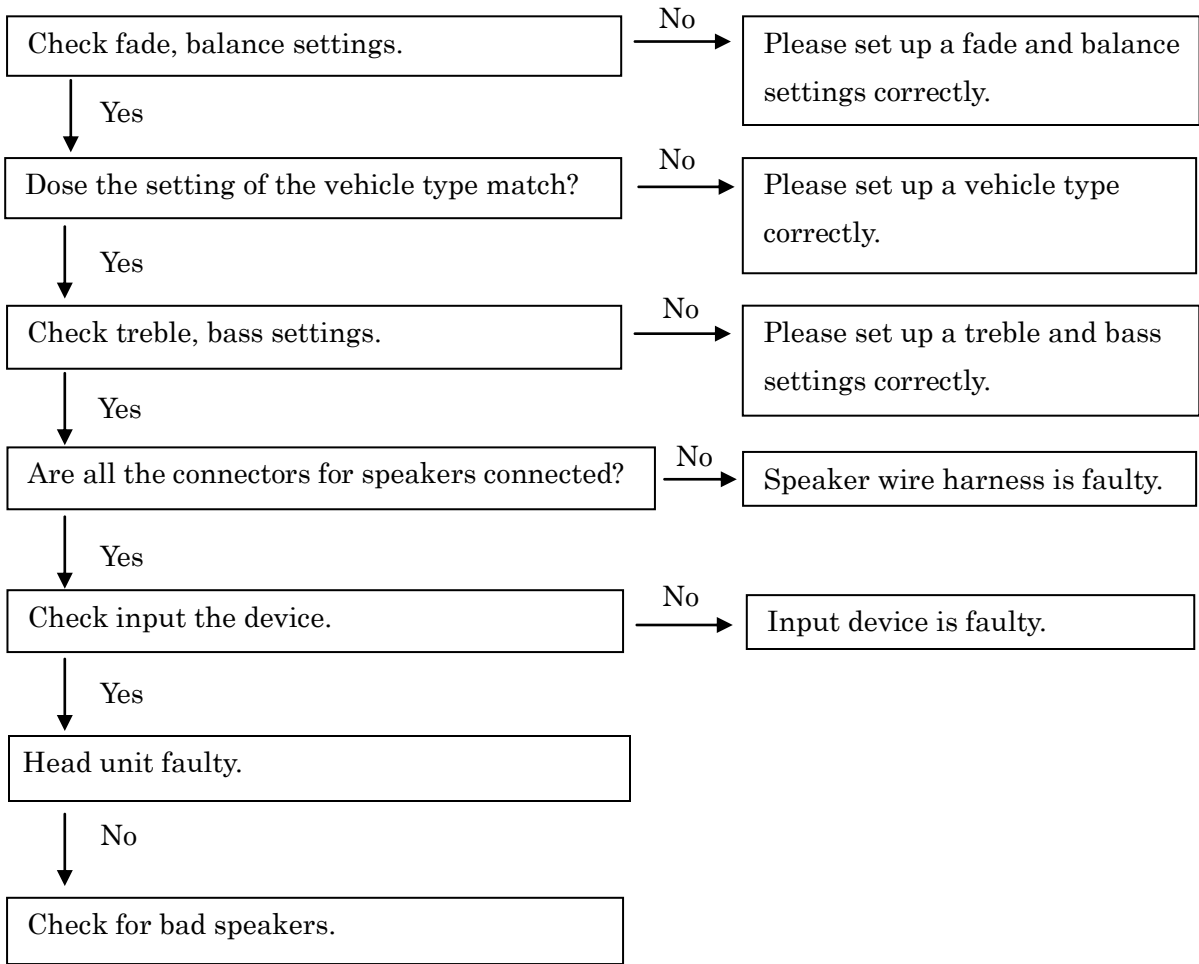
1	GENERAL	No power coming in.
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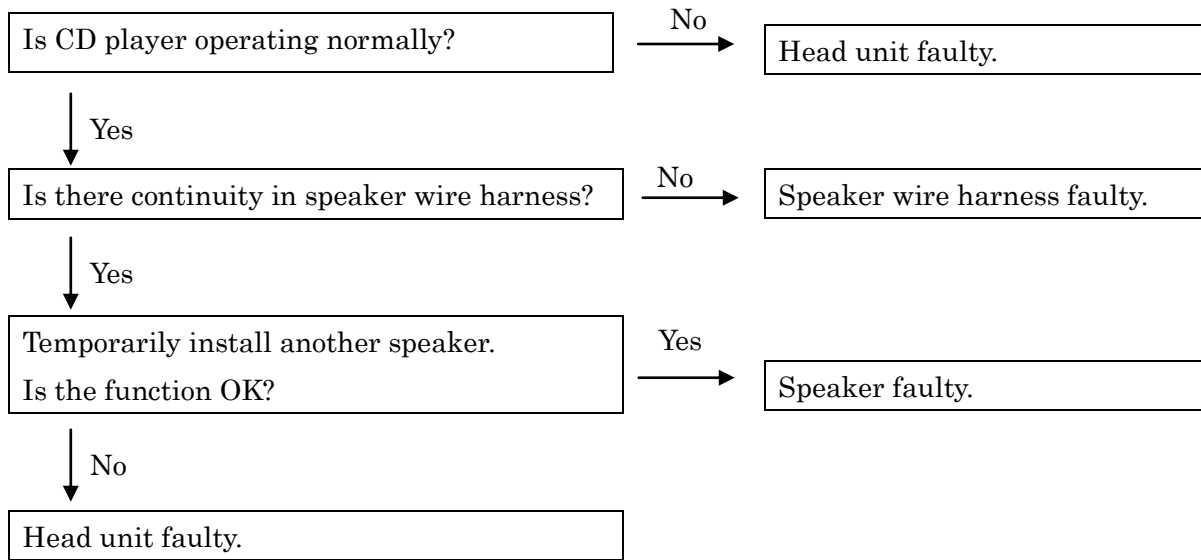
2	GENERAL	One or more speakers do not work.
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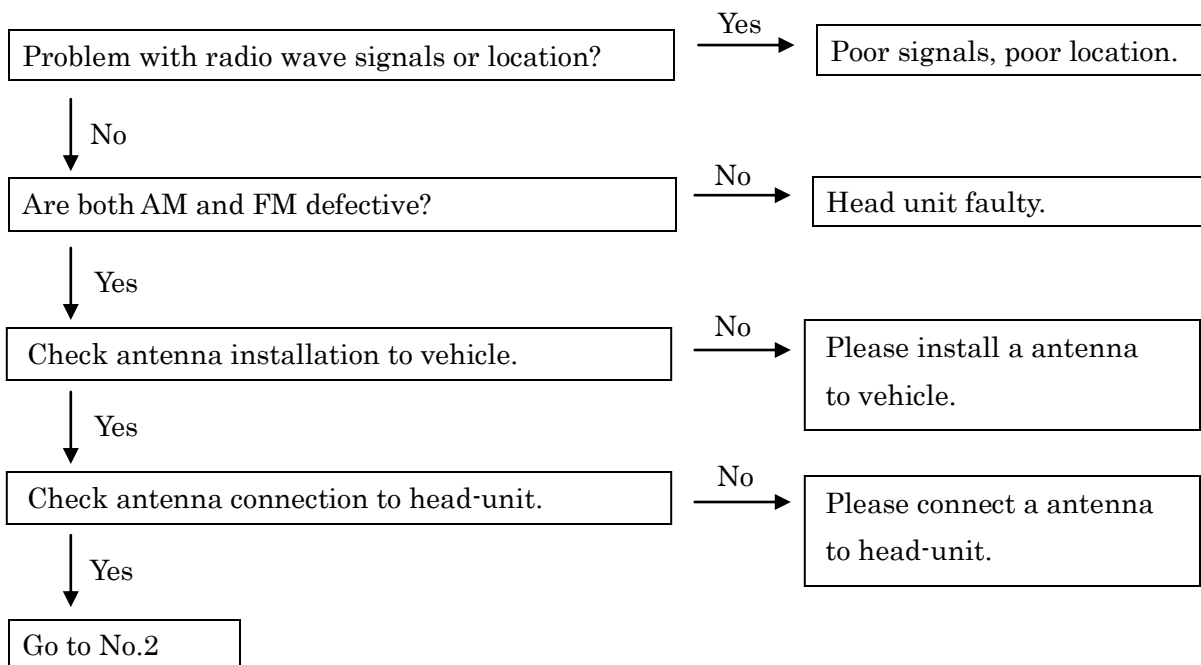
3	GENERAL	Sound quality poor.
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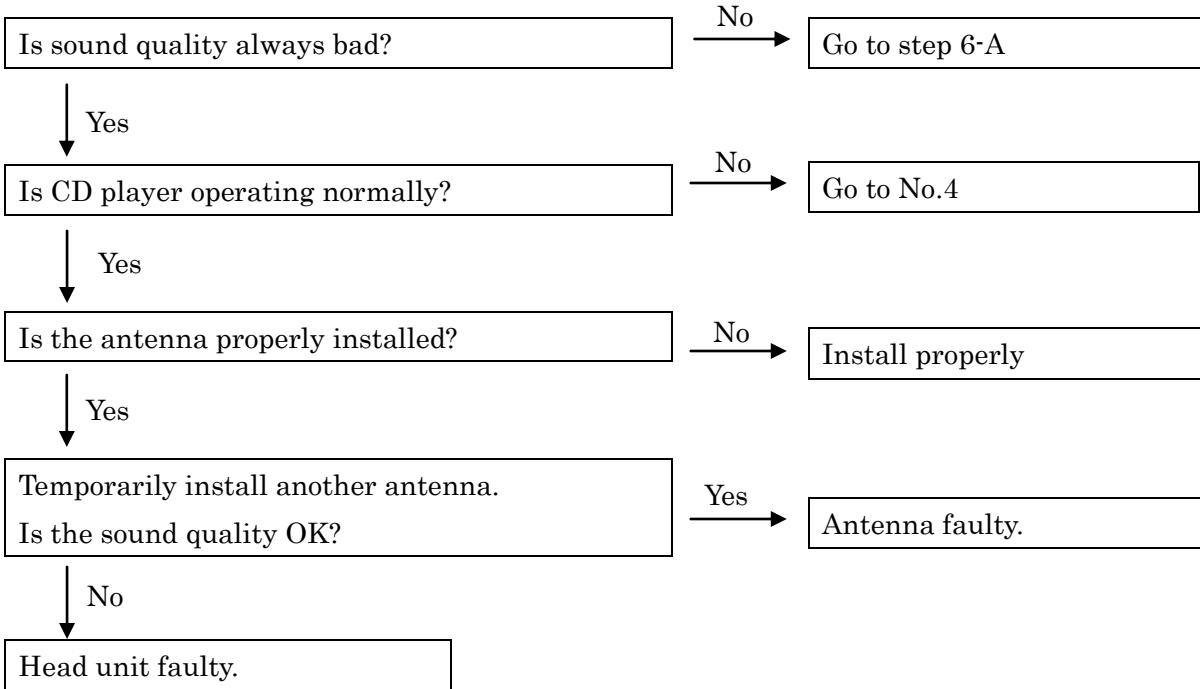
4	RADIO	Power coming in, but radio not operating.
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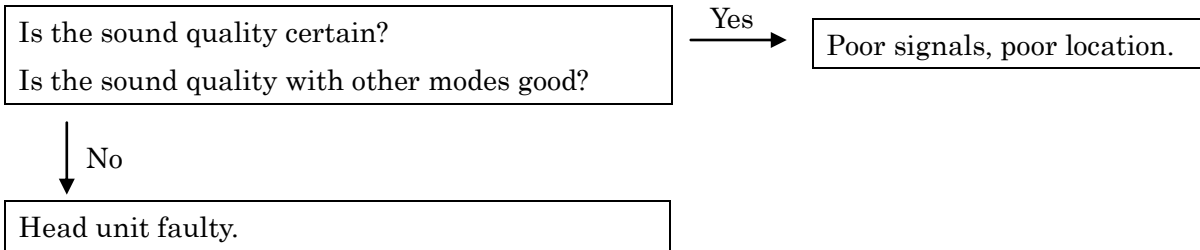
5	RADIO	Either AM or FM does not work, reception poor (volume faint), few preset tuning bands.
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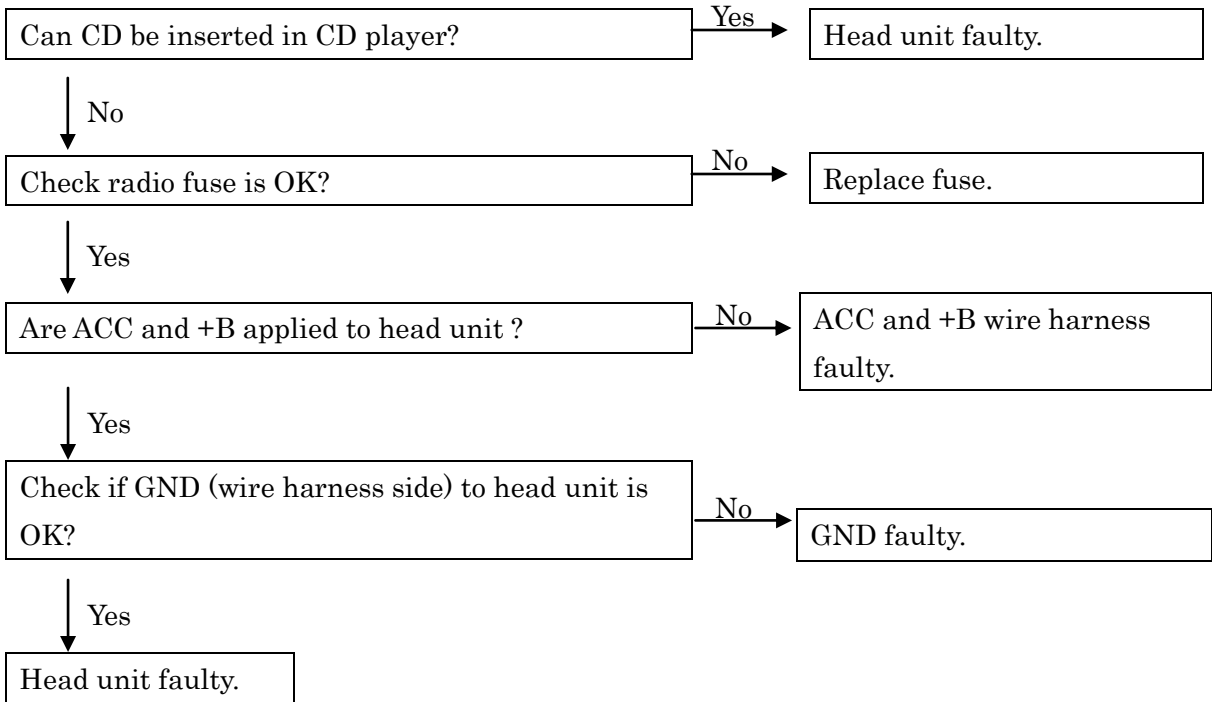
6	RADIO	Sound quality poor.
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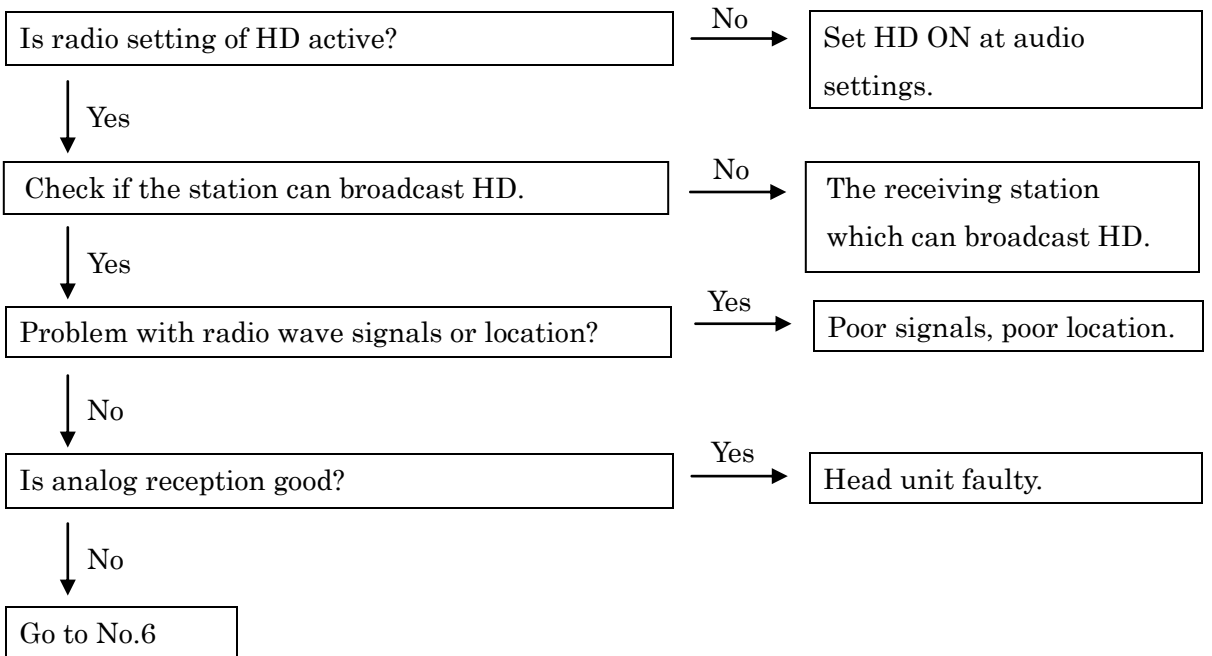
6-A



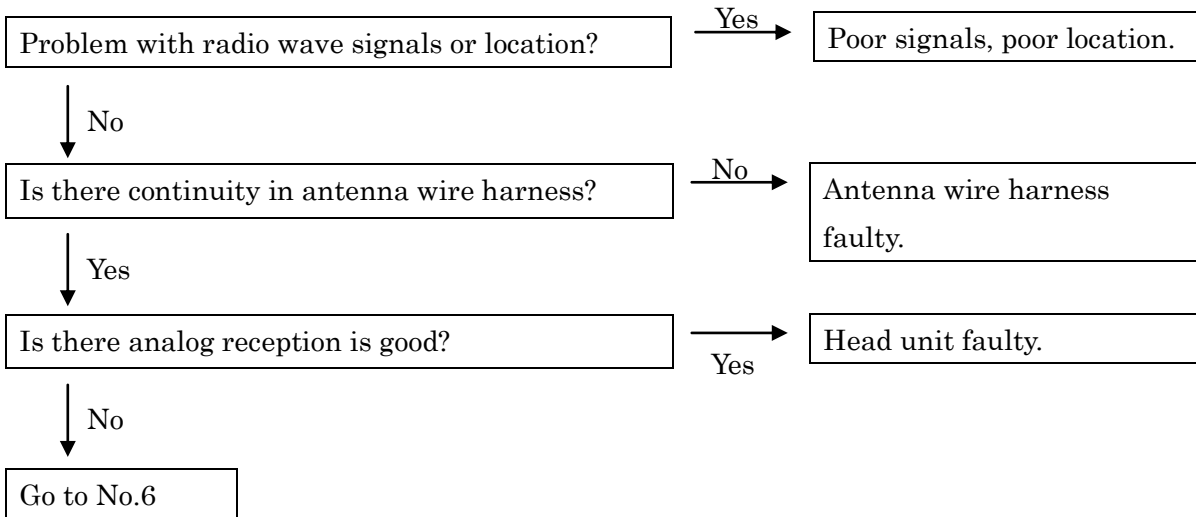
7	RADIO	Cannot set station select button, Preset memories disappear.
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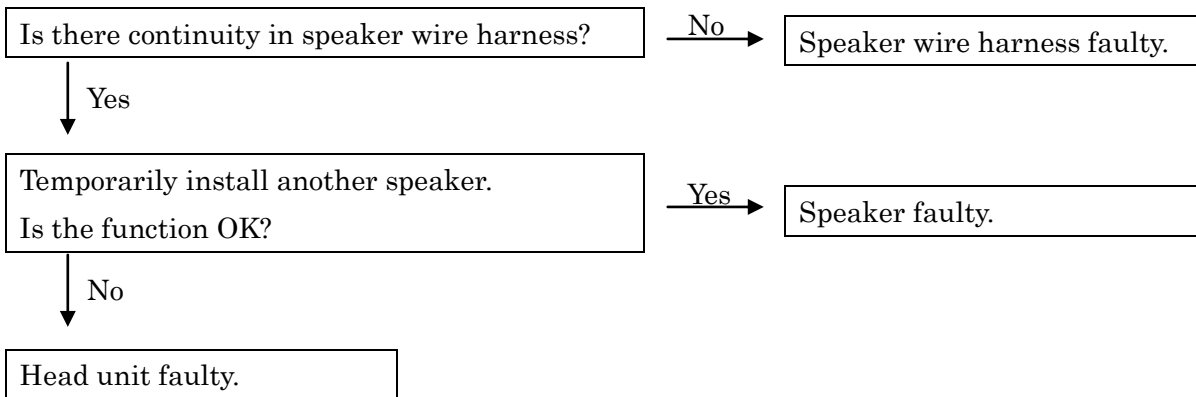
8	RADIO	Analog reception can receive but, HD radio can not receive.
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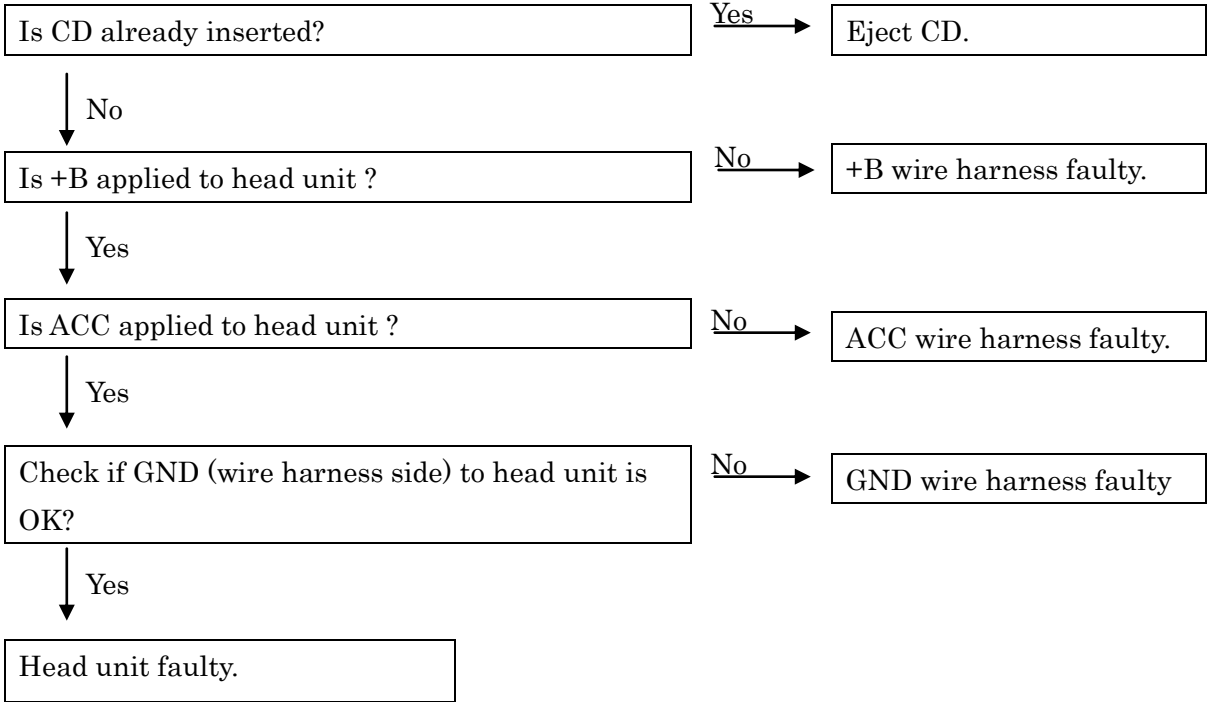
9	RADIO	HD reception is poor and sound is mute frequently.
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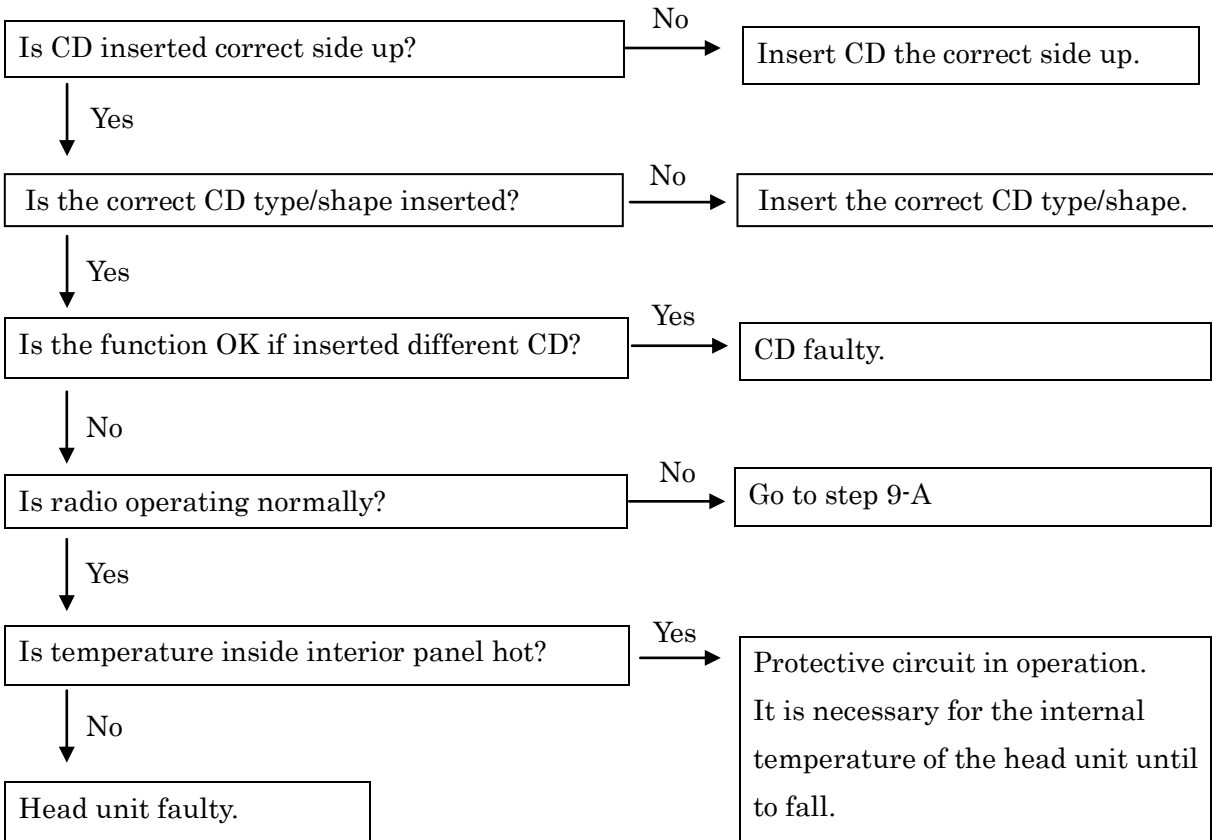
9-A.



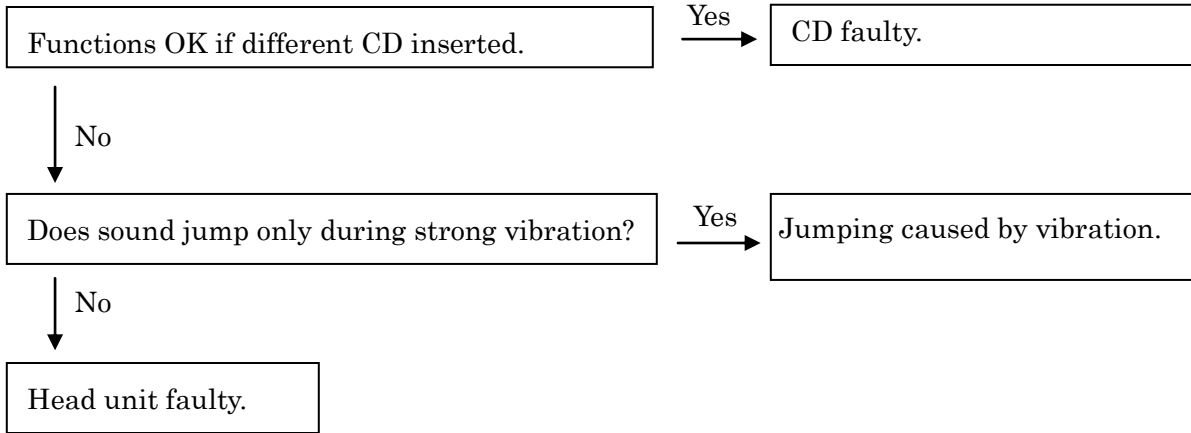
10	CD PLAYER	CD cannot be inserted.
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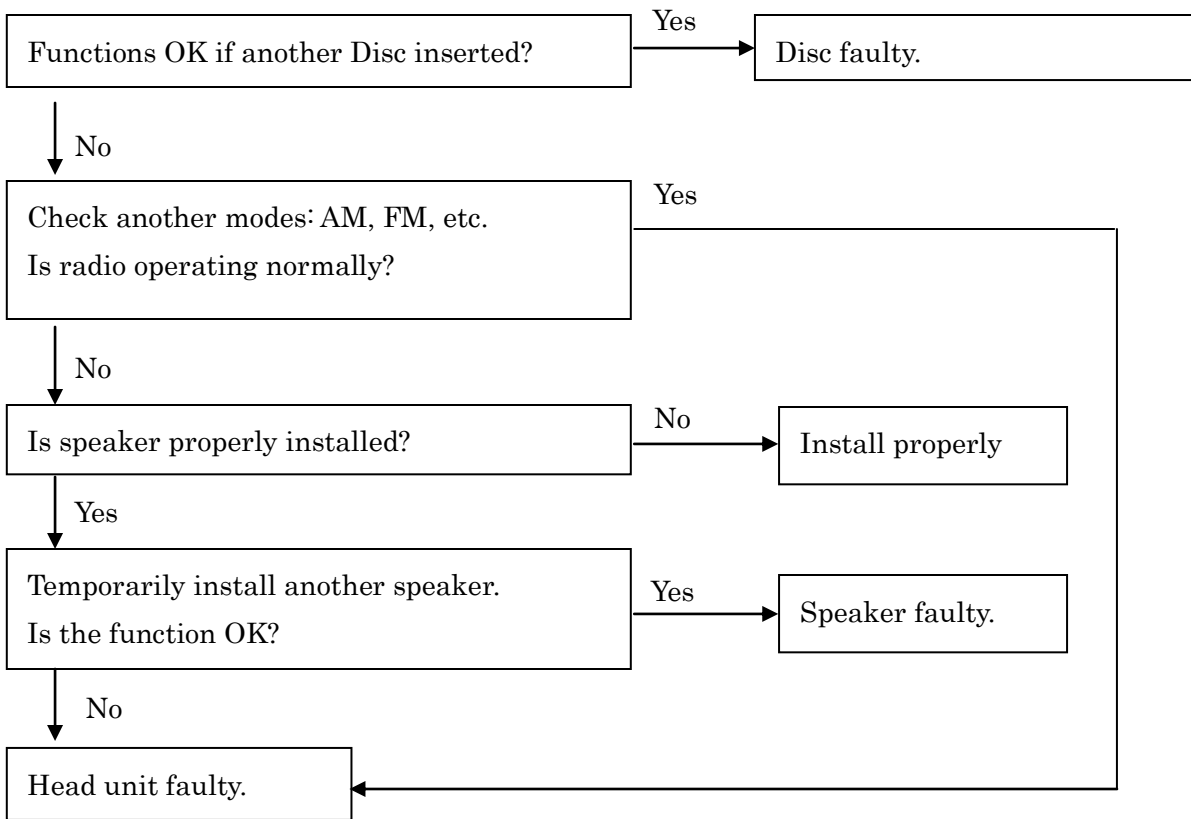
11	CD PLAYER	Power coming in, but CD player not operating.
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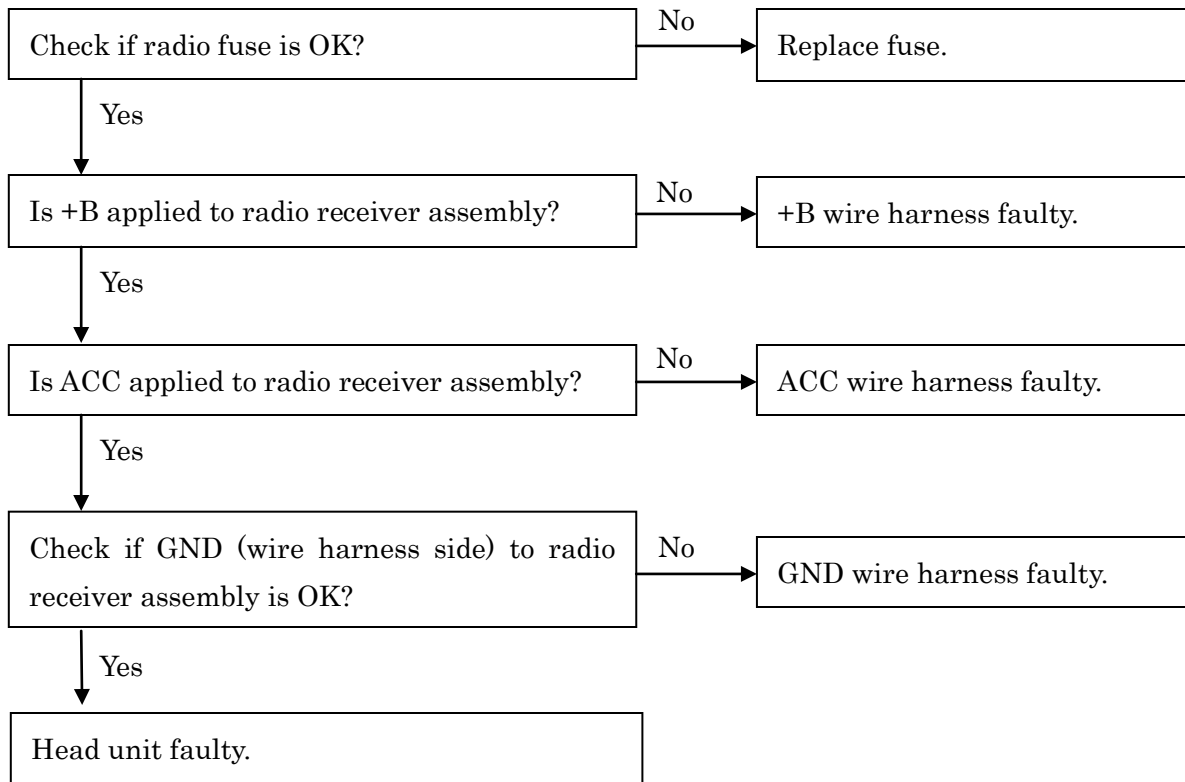
12	CD PLAYER	Sound jumps.
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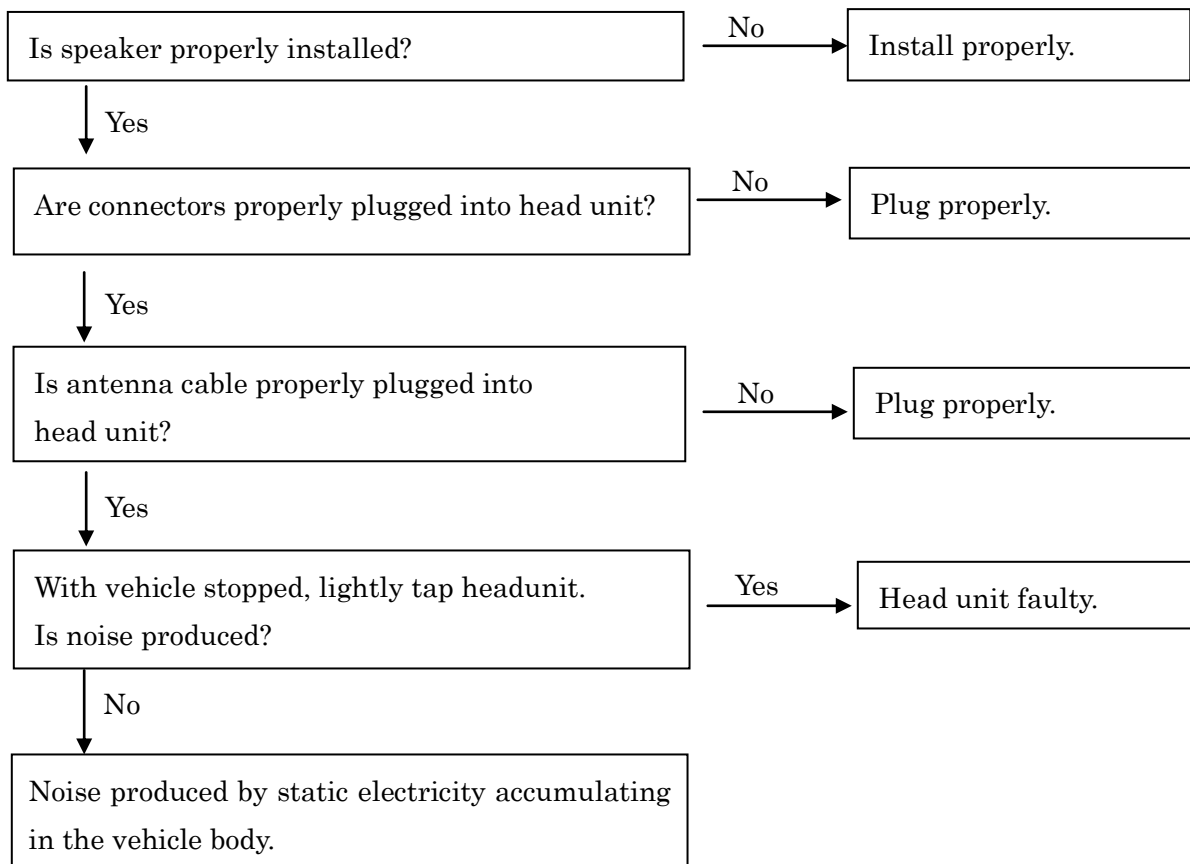
13	CD PLAYER	Sound quality poor (Volume faint).
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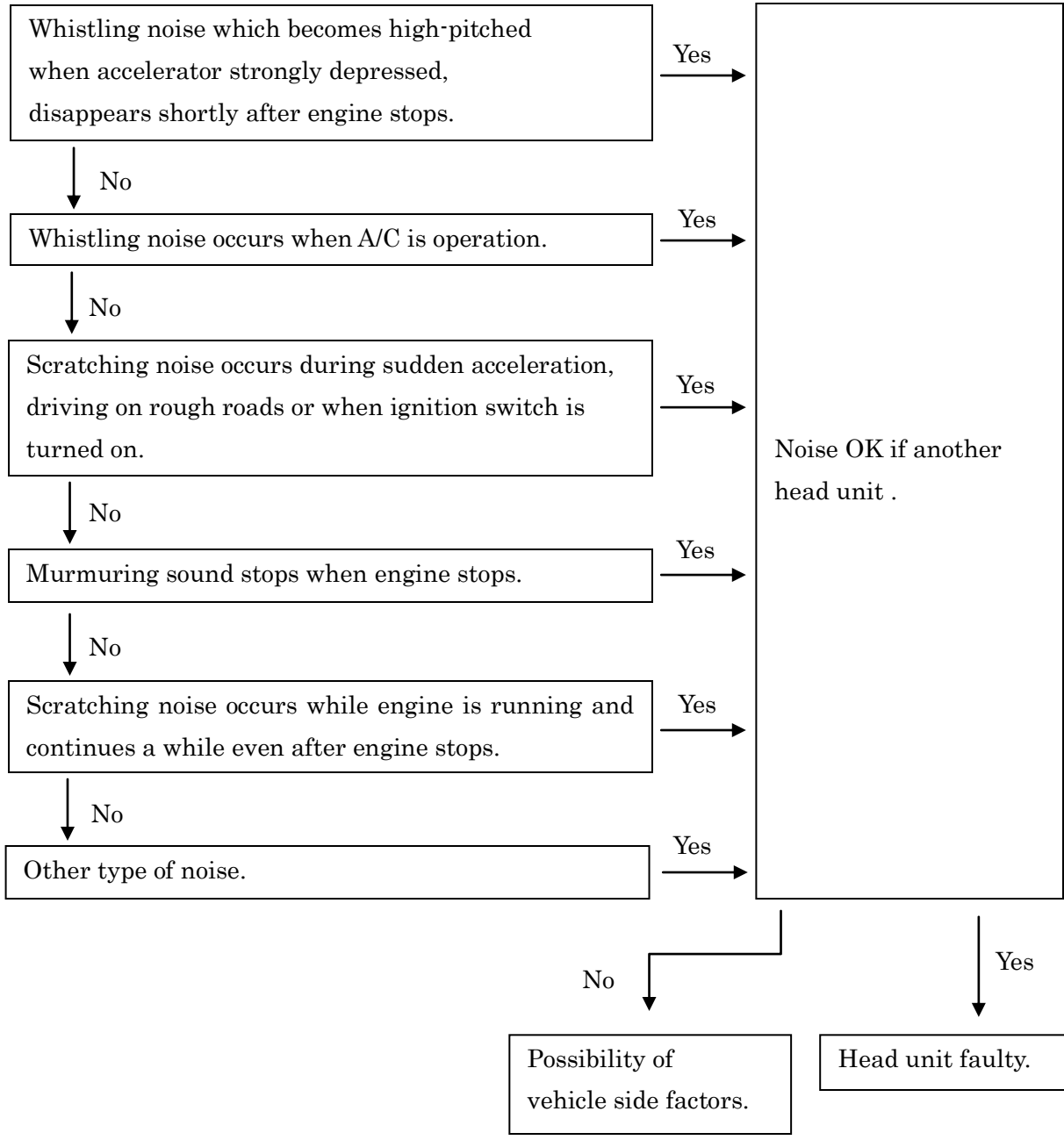
14	CD PLAYER	CD will not eject.
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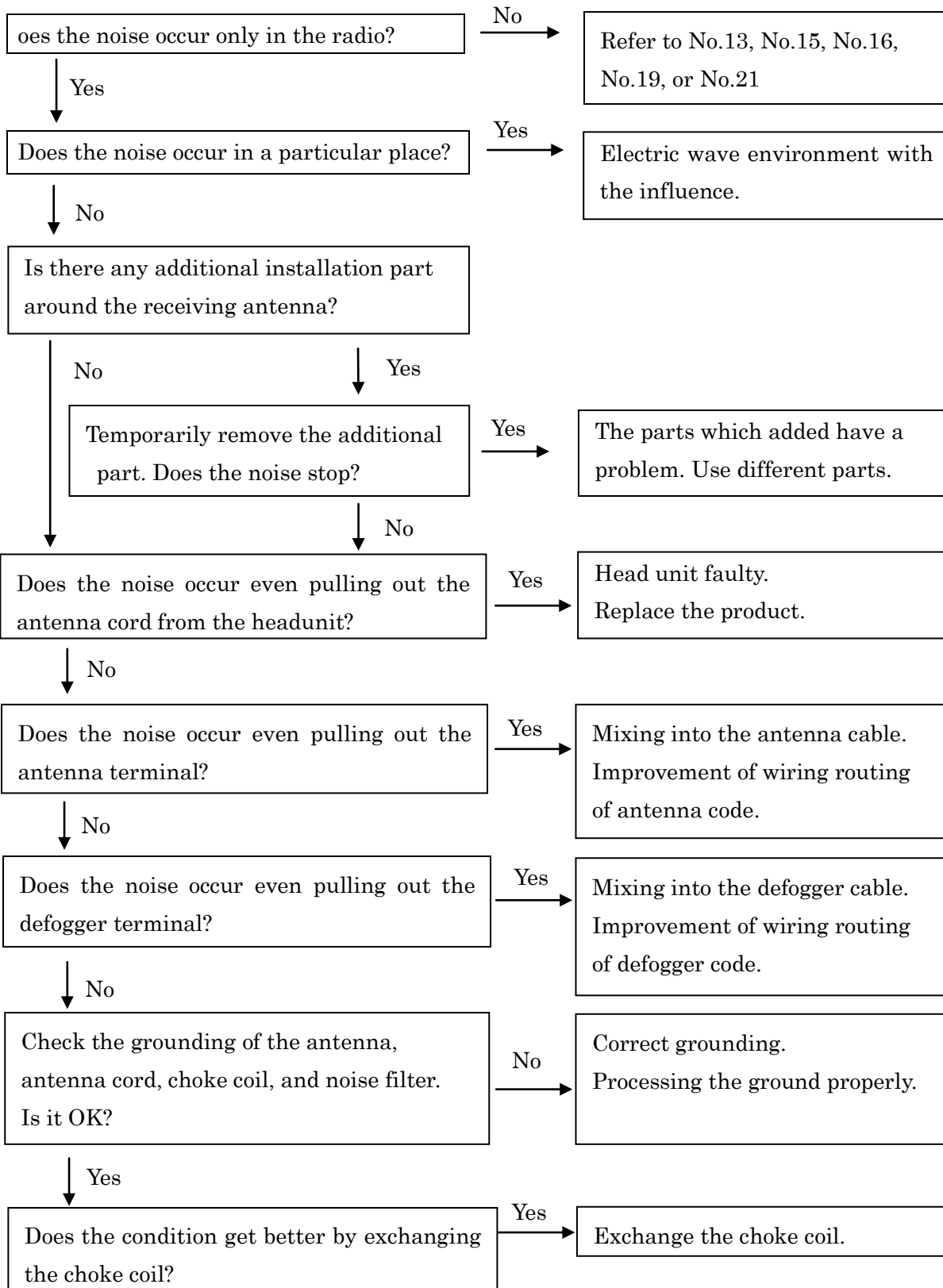
15	NOISE	Noise produced by vibration or shock while driving.
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16	NOISE	Noise produced when engine starts.
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17	NOISE	Noise heard occasionally.
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↓ No

Does the condition get better by replacing the antenna cord?

Yes →

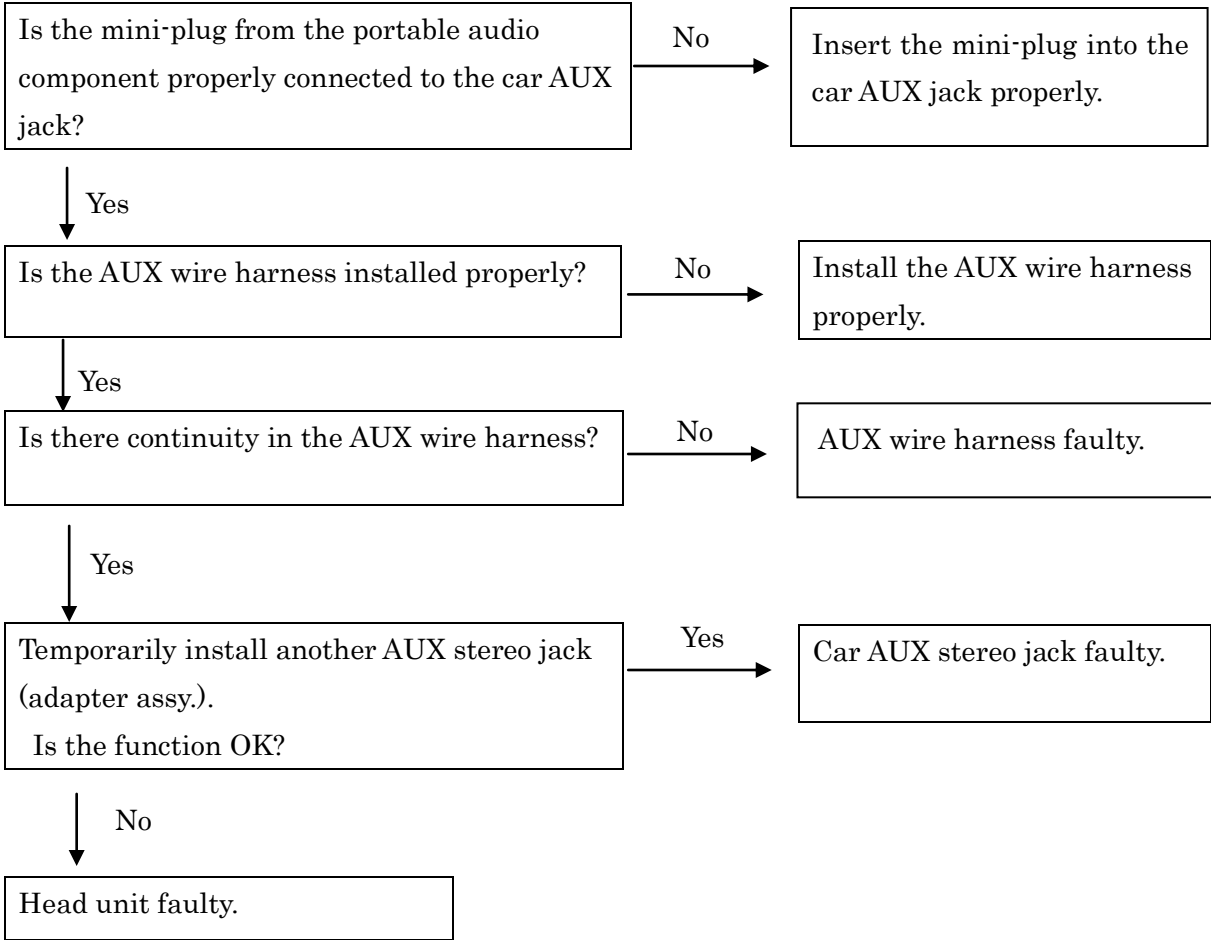
Exchange the antenna cord.

↓ No

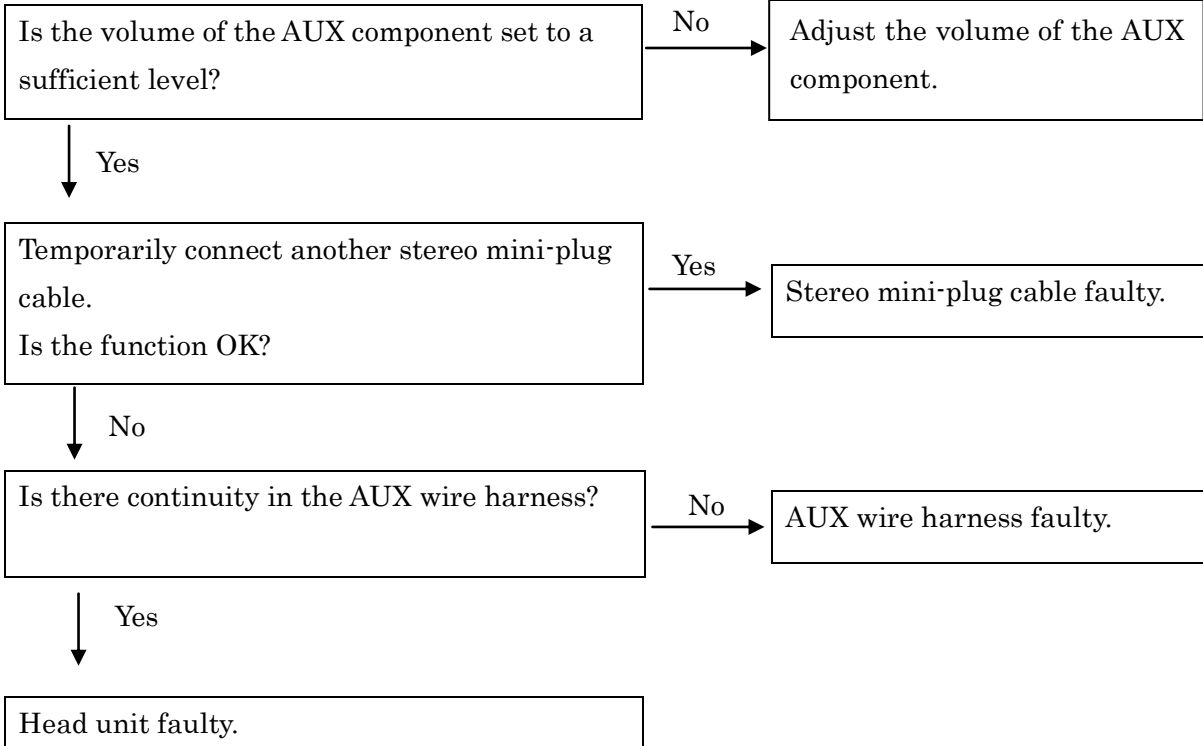
A noise jumps at the antenna cable line via a defogger terminal part from the outbreak source and mixes it.

Please identify a noise source from the wiring around the defogger terminal.

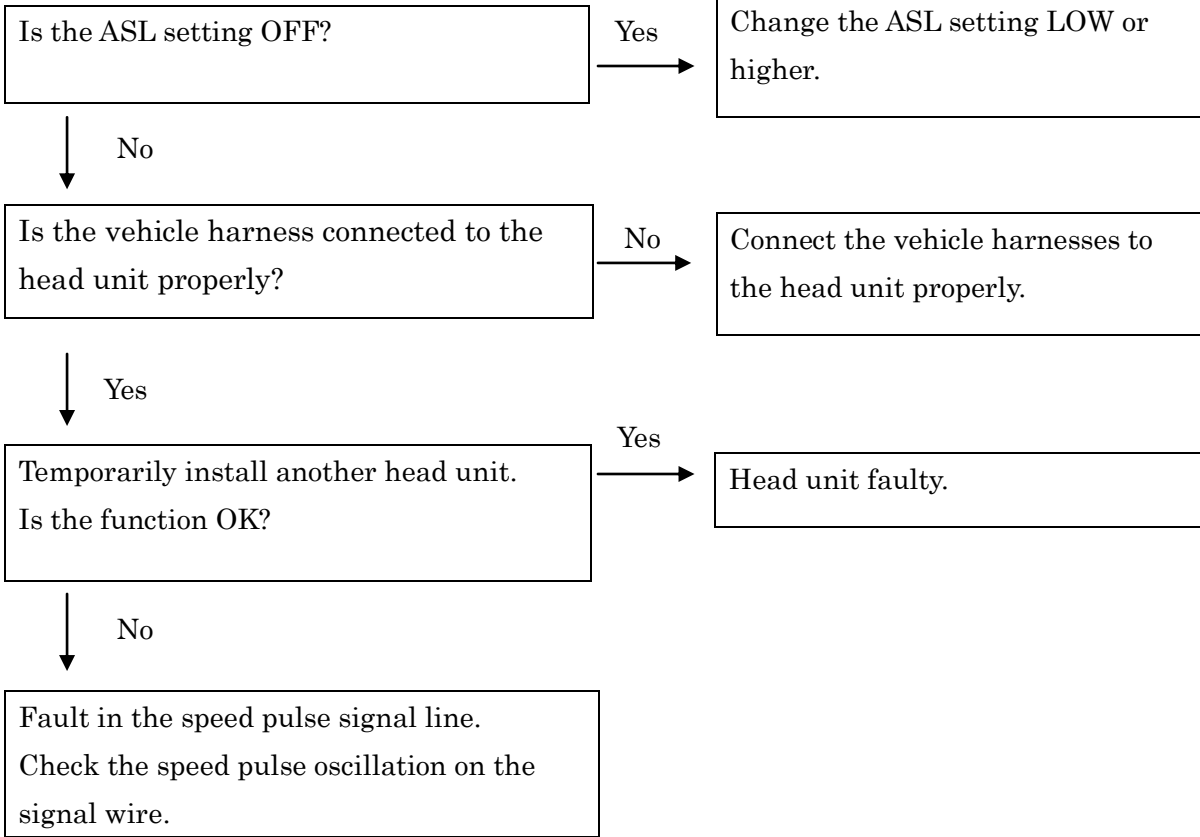
18	AUX	Cannot select AUX mode.
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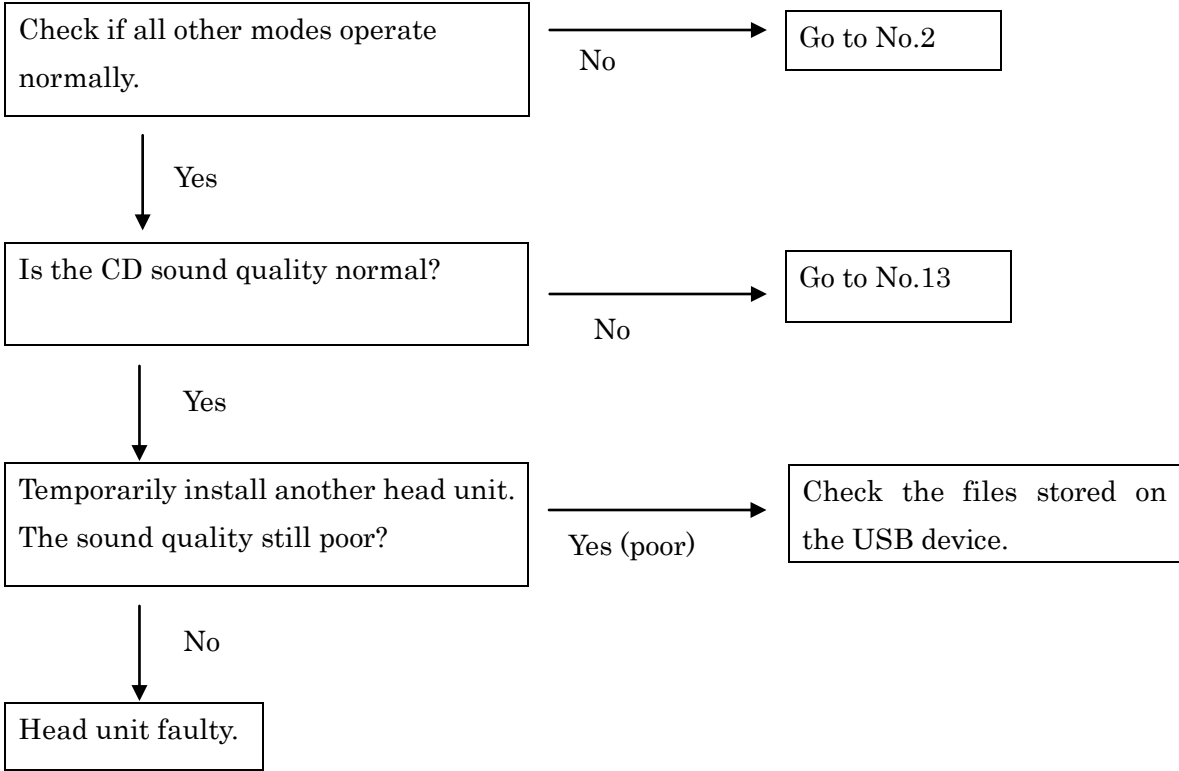
19	AUX	Sound quality poor (volume faint).
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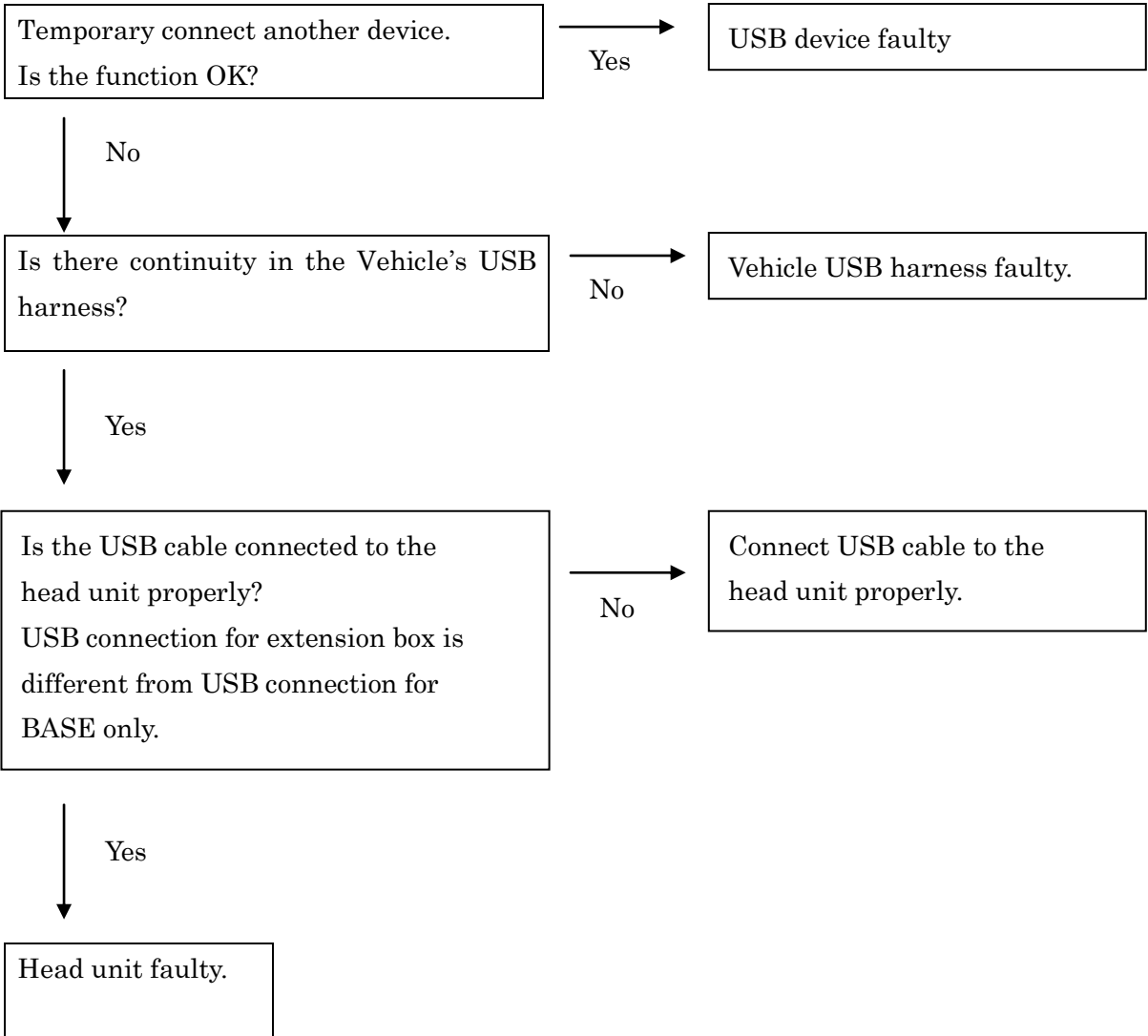
20	ASL	ASL ineffective (sound level will not increase).
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21	USB	Sound quality poor.
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22	USB	USB device connected, but cannot select USB mode.
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23	iPod/USB	Head unit can play USB devices, but not iPod.
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Disconnect the iPod from the vehicle USB connection and reset it. Is the function OK?

No

Is there continuity in the USB-iPod cable?

No → USB-iPod cable faulty.

Yes

Check If the software version of the iPod is compatible.

↓

About iPod software version
 The iPod software versions that can be used with this unit are as follows (operations verified as of February 2013):

iPod (5th generation)	ver: 1.3
iPod classic	ver: 1.1.2
iPod classic 120GB	ver: 2.0.1
iPod classic 160GB	ver: 2.0.4
iPod nano (1st generation)	ver: 1.3.1
iPod nano (2nd generation)	ver: 1.1.3
iPod nano (3rd generation)	ver: 1.1.3
iPod nano (4th generation)	ver: 1.0.4
iPod nano (5th generation)	ver: 1.0.2
iPod nano (6th generation)	ver: 1.0
iPod touch (1st generation)	ver: 3.1.3
iPod touch (2nd generation)	ver: 4.1
iPod touch (3rd generation)	ver: 5.0
iPod touch (4th generation)	ver: 5.0
iPhone	ver: 3.1.3
iPhone 3G	ver: 4.1
iPhone 3GS	ver: 4.1
iPhone 4	ver: 6.1

* Please note that no guarantee applies to iPod operations and future updated versions of iPod software.

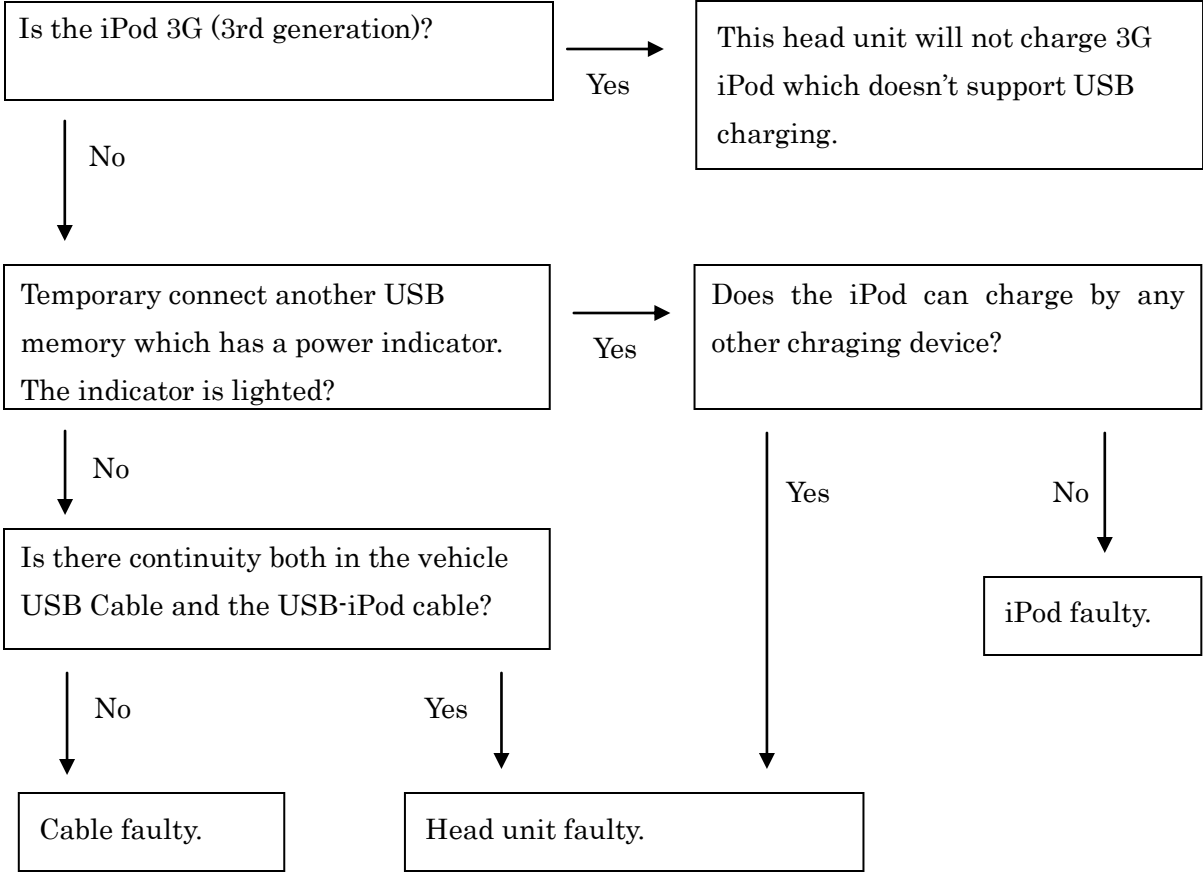
Yes → Head unit faulty.

No

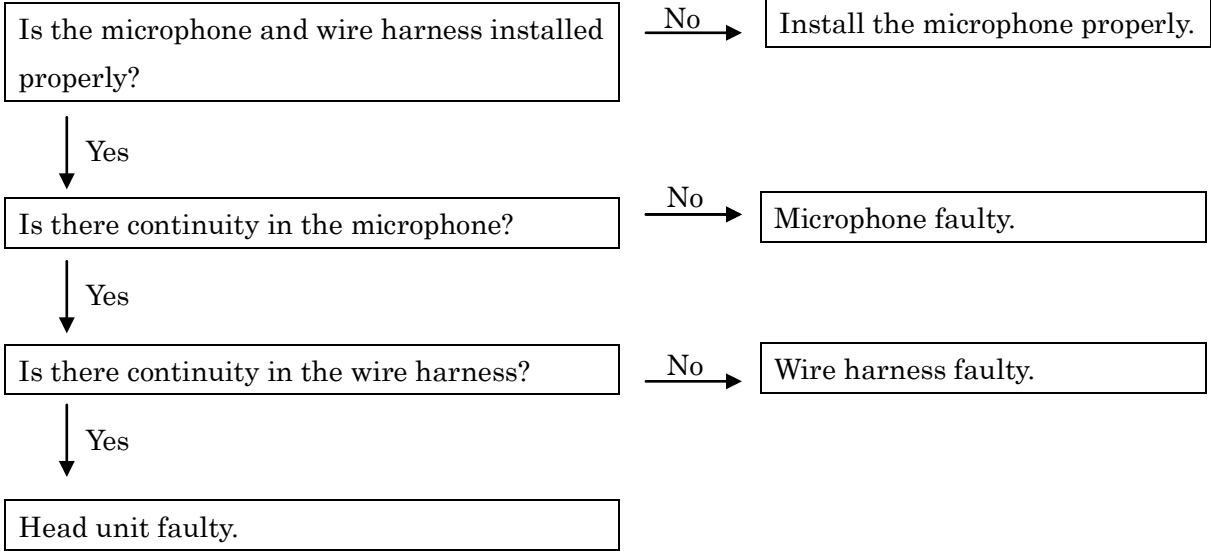
Update the iPod.
Is the function OK?

No → Head unit faulty.

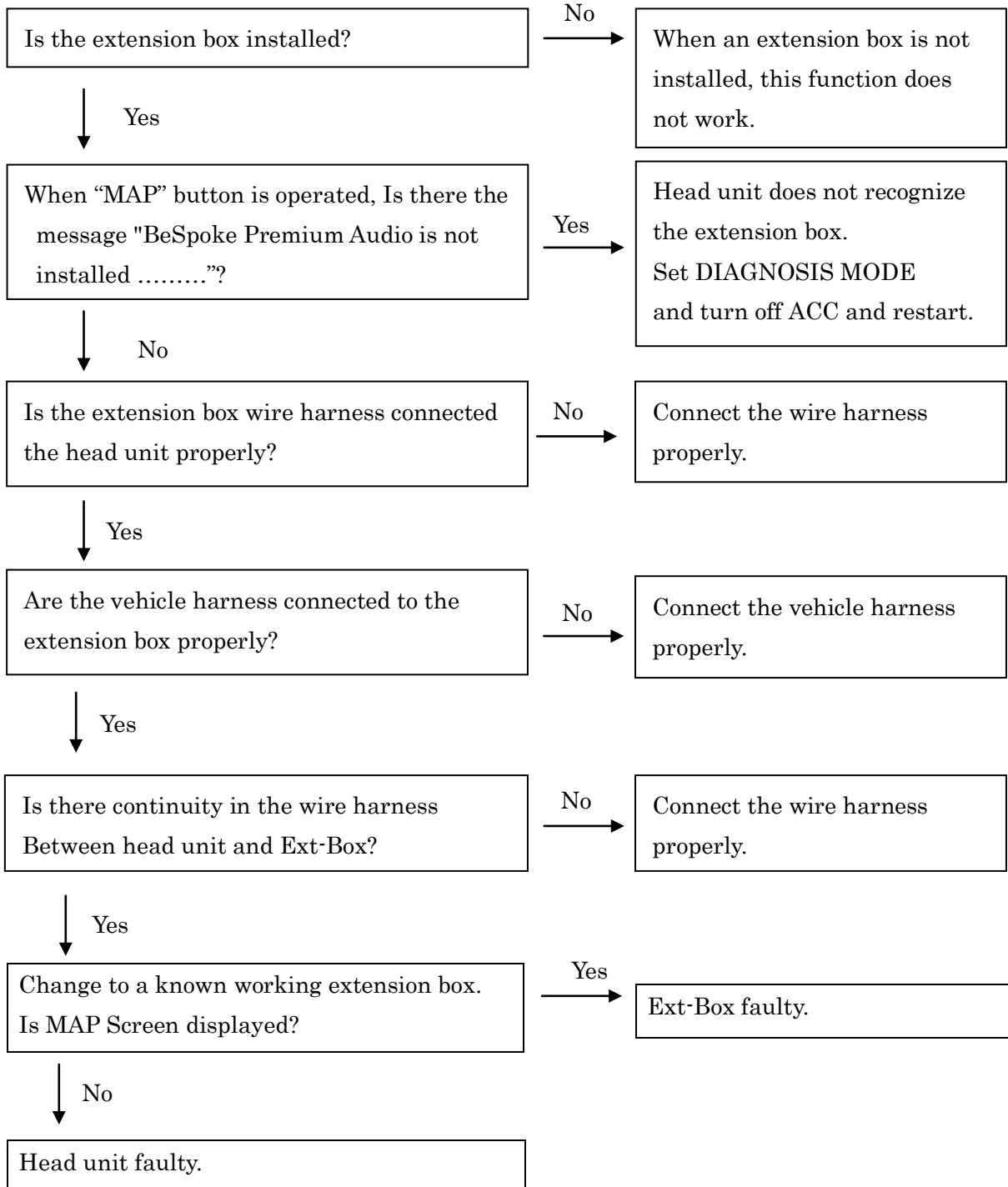
24	iPod	Head unit can operate iPod, but not charge it.
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25	Bluetooth	Bluetooth setup menu is not displayed.
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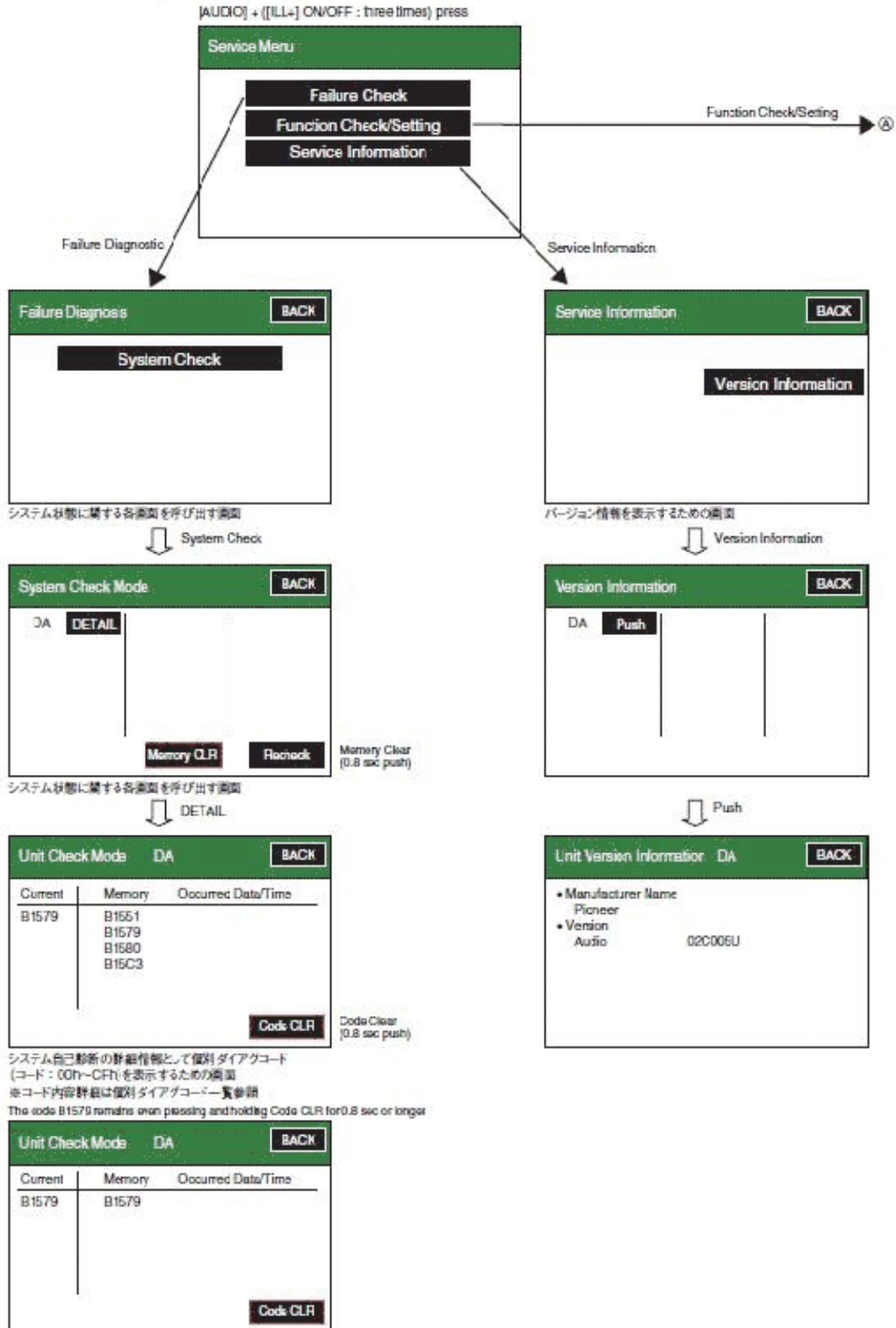
26	MAP Screen	MAP Screen is not displayed.
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DIAGNOSIS MODE : see next section.

DIAGNOSIS MODE

Service Menu Flow diagram



A ① Function Check/Setting

Function Check/Setting I BACK

Panel&Steering Switch	Vehicle Signal
Touch Switch	
Mic&Voice Recognition	HF Voice Quality Setting
Color Bar	Camera Setting

B 機能検査・調整に関する各画面を呼び出す画面

Panel&Steering Switch

Panel&Steering Switch Check Mode BACK

Push Switch Check
Check the detection result and the number of pushed SW.
Result: Pushed SW:

Rotary Switch Check
The SW is being turned .

C パネルスイッチ操作・ロータリー式スイッチ操作反応を検査する画面

Vehicle Signal

Vehicle Signal Check Mode BACK

Battery	13.3 V	SPEED	0 km/h
IG	OFF	TAIL	OFF
PKB	OFF	ADIM/TCAN	BRIGHT
REV	OFF		

機器に入力されている車両信号の状態を検査する画面

Touch Switch

Touch Switch Check BACK

D タッチスイッチ動作状態を検査する画面

HF Voice Quality Setting

Hands-Free Voice Quality Setting BACK

Receive Voice Level ±0

Send Voice Level ±0

Voice Quality Type 0000

INT 0 Set

ハンズフリー音質を設定する画面

Mic&Voice Recognition

Microphone&Voice Recognition Check BACK

Mic input Level

E マイクの入力を検査する画面

Color Bar

Color Bar Check Mode BACK

Please check to see that each color name corresponds to each color on the bar.

Black	Red	Green	Blue	White	Stripe

F ディスプレイのカラー表示を検査する画面

Diagnosis code table

B****cord management list(MM System area)

Cause	Code
Device abnormal	155*
Communication abnormal	156*
Disconnection (not connected) - short	157*
Other device (Other parts) / Abnormal detection • Environmental abnormal detection • Processing failure	158*
Communication abnormal	159*
Device abnormal	15A*
Disconnection (not connected) • short	15B*
Communication abnormal	15C*
Other device (Other parts) / Abnormal detection • Environmental abnormal detection • Processing failure	15D*
Reserved(Communication abnormal)	15E*

B-cord allotment list

Division	Code	Details
B155*	B1550	DAB tuner abnormal
	B1551	HD-RADIO tuner abnormal
	B1552	Extension module device abnormal
	B1553	Reserved
	B1554	Reserved
	B1555	Reserved
	B1556	Reserved
	B1557	Reserved
	B1558	Reserved
	B1559	Reserved
	B155A	Reserved
	B155B	Reserved
	B155C	Reserved
	B155D	Reserved
	B155E	Reserved
	B155F	Reserved
	B156*	B1560
B1561		XM tuner device failure
B1562		XM tuner device failure
B1563		Haptic device failure
B1564		DAB device failure
B1565		CD-CH device failure
B1566		Navigation/Brake communication data abnormal
B1567		HUD device failure
B1568		Clock device failure
B1569		DVD-ROM deck device failure
B156A		Gateway device failure
B156B		USB_BOX device failure
B156C		Extension module device failure
B156D		Reserved
B156E		USB_BOX device no reply
B156F		Motor control device no reply
B157*		B1570
	B1571	Indicator(GREEN) not connected
	B1572	Microphone not connected
	B1573	No telephone antenna connected (short) Reserved
	B1574	GVIF not connected (from Perimeter monitoring ECU)
	B1575	GVIF not connected (from EMV/MM Integral machine to DISP)
		Reserved
	B1578	Reserved
	B1579	Sound recognition microphone not connected
	B157A	Steering SW not connected
B157B	No DTV antenna 3 connected	
B157C	No DTV antenna 4 connected	
B157D	No DAB antenna connected	
B157E	No BT antenna connected	
B157F	Reserved	

Division	Code	Details
B158*	B1580	Camera image abnormal
	B1581	Remote control device initialization abnormal
	B1582	Map disc reading abnormal
	B1583	GPS reception abnormal
	B1584	Panel SW abnormal
	B1585	USB-BOX connected device abnormal
	B1586	Disconnection abnormal (Immobilizer ECU-DCM)
	B1587	Communication abnormal (Immobilizer ECU-DCM)
	B1588	DSSS Roadside unit abnormal
	B1589	DSSS reception data abnormal
	B158A	Extension module Step noise adjustment abnormal
	B158B	Touch SW anchoring detection
	B158C	SD card communication abnormal
	B158D	Reserved
	B158E	Reserved
	B158F	Reserved
	B159*	B1590
B1591		Audio HU device no reply
B1592		DVD player device no reply
B1593		AMP device no reply
B1594		DTV device no reply
B1595		RSE device no reply
B1596		Haptic device no reply
B1597		Display device no reply
B1598		ETC device no reply
B1599		DCM no reply
B159A		RS-ECU no reply
B159B		DSRC no reply
B159C		HUD device no reply
B159D		Operation panel device no reply
B159E		Clock device no reply
B159F		XM tuner device no reply
B15A*		B15A0
	B15A1	Audio HU device abnormal
	B15A2	DVD player device abnormal
	B15A3	AMP device abnormal
	B15A4	DTV device abnormal
	B15A5	RSE device abnormal
	B15A6	Display device abnormal
	B15A7	ETC abnormal
	B15A8	DCM abnormal
	B15A9	DSRC abnormal
B15AA	2 media VICS abnormal	
B15AB	Operation panel device abnormal	
B15AC	Rear controller device abnormal	
B15AD	Navigation processing brock abnormal	
B15AE	Mobile broadcasting device abnormal	
B15AF	Haptic device abnormal	

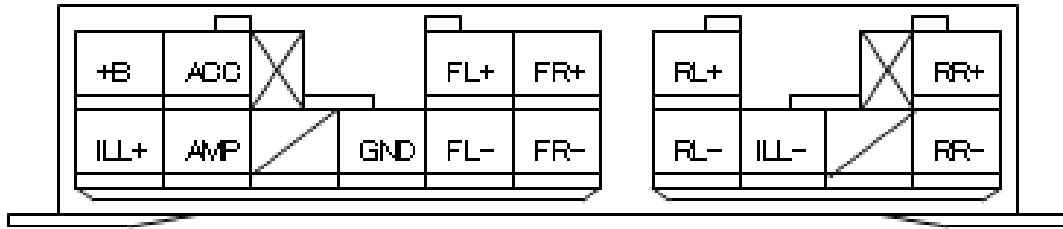
Diagnosis code table

Division	Code	Details
B15E*	B15E0	Security camera operation abnormal
	B15E1	Reproduction media abnormal
	B15E2	ETC CARD abnormal
	B15E3	B-CAS CARD abnormal
	B15E4	Brake system hard abnormal
	B15E5	Electric slot system abnormal
	B15E6	Regulation camera image signal input abnormal
	B15E7	HDD Read/writing abnormal (Low temperature)
	B15E8	HDD Read/writing abnormal (High temperature)
	B15E9	Communication processing failure
	B15EA	OTA failure(A7)
	B15EB	OTA failure(other)
	B15EC	Back up battery deterioration
	B15ED	Noncompliant Back up battery detection
	B15EE	Contract invalidity
	B15EF	Help In-vehicle device ID change
	B15F0	Reserved
	B15F1	ETC communication information abnormal
	B15F2	ETC wireless communication abnormal
	B15F3	Setup abnormal
	B15F4	Operation abnormal
	B15F5	Air conditioner ECU:The vehicle setting processing is abnormal.
	B15F6	Main body ECU:The vehicle setting processing is abnormal.
	B15F7	Checking ECU:The vehicle setting processing is abnormal.
	B15F8	D-seat ECU:The vehicle setting processing is abnormal.
	B15F9	Reserved
	B15FA	D-seat door ECU:The vehicle setting processing is abnormal.
B15FB	P-seat door ECU:The vehicle setting processing is abnormal.	
B15FC	AMP-ANC connected device disagreement	
B15FD	mobile air antenna not connected	
B15FE	XM tuner antenna not connected	
B15FF	XM tuner antenna short	

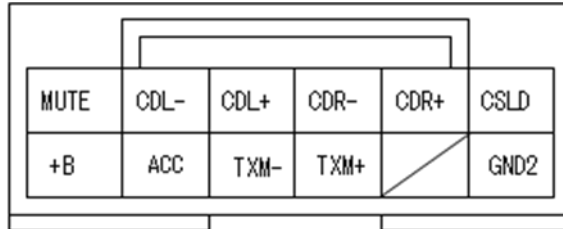
Division	Code	Details
B15B*	B15B0	Display area abnormal
	B15B1	TV tuner abnormal
	B15B2	DTV tuner abnormal
	B15B3	Radio tuner abnormal
	B15B4	CD(changer) mecha abnormal
	B15B5	DVD(changer) mecha abnormal
	B15B6	MD(changer) mecha abnormal
	B15B7	Bluetooth module abnormal
	B15B8	HDD abnormal
	B15B9	DVD-ROM deck abnormal
	B15BA	XM tuner block abnormal
	B15BB	USB-BOX abnormal
	B15BC	Reserved
	B15BD	Reserved
	B15BE	Reserved
	B15BF	Reserved
	B15C0	GPS antenna not connected (short)
	B15C1	GPS antenna not connected (disconnection)
	B15C2	Speed pulse signal abnormal
	B15C3	Speaker output short
	B15C4	Air bag signal non-input
	B15C5	Manual operation button abnormal
	B15C6	IG signal abnormal
	B15C7	ATV antenna 1 not connected
	B15C8	DTV antenna 2 not connected
	B15C9	DTV antenna 1 not connected
	B15CA	ETC antenna not connected
B15CB	DCM antenna not connected	
B15CC	Back up battery disconnection	
B15CD	Optical beacon antenna not connected	
B15CE	Seedback display not connected	
B15D*	B15D0	MOST communication non-establishment
	B15D1	Audio HU device not connected failure
	B15D2	DVD player device failure
	B15D3	AMP device failure
	B15D4	DTV device failure
	B15D5	RSE device failure
	B15D6	Display device failure
	B15D7	ETC device failures
	B15D8	Perimeter monitoring device failure
	B15D9	Operation panel device failure
	B15DA	Rear controller device failure
	B15DB	DCM device failure
	B15DC	RS-ECU device failure
	B15DD	DSRC device failure
	B15DE	DCM Location information suspension
B15DF	USB-BOX connected device communication abnormal	

CONNECTOR INFORMATION

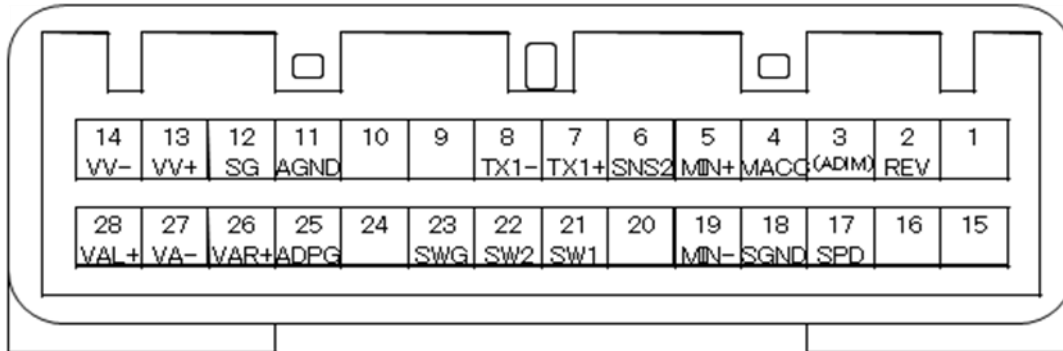
A. Powers and Speakers (2.3 II 10P+6P)



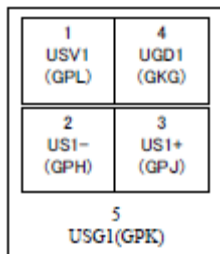
B. AVC-LAN (0.64 12P)



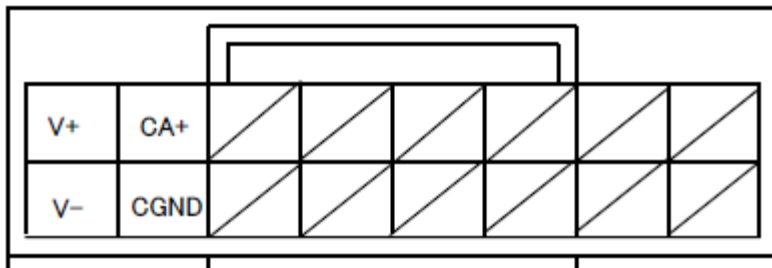
C. EXTENSIONS (0.64 28P)



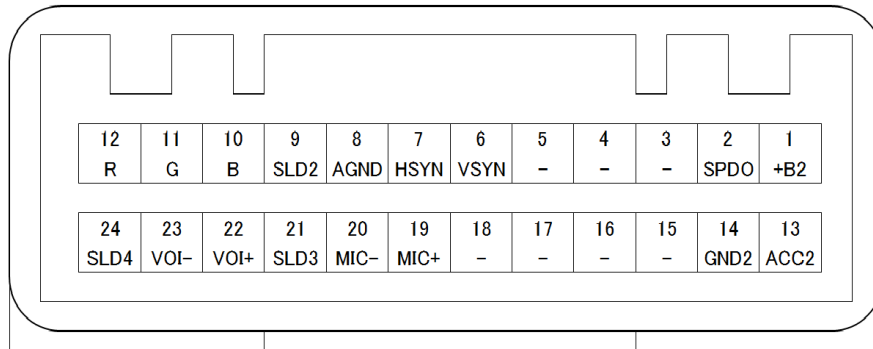
D. USB (TOYOTA USB 2.0 4P)



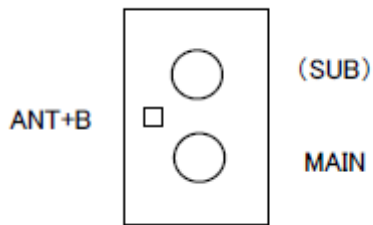
E. Rear camera (0.64 16P)



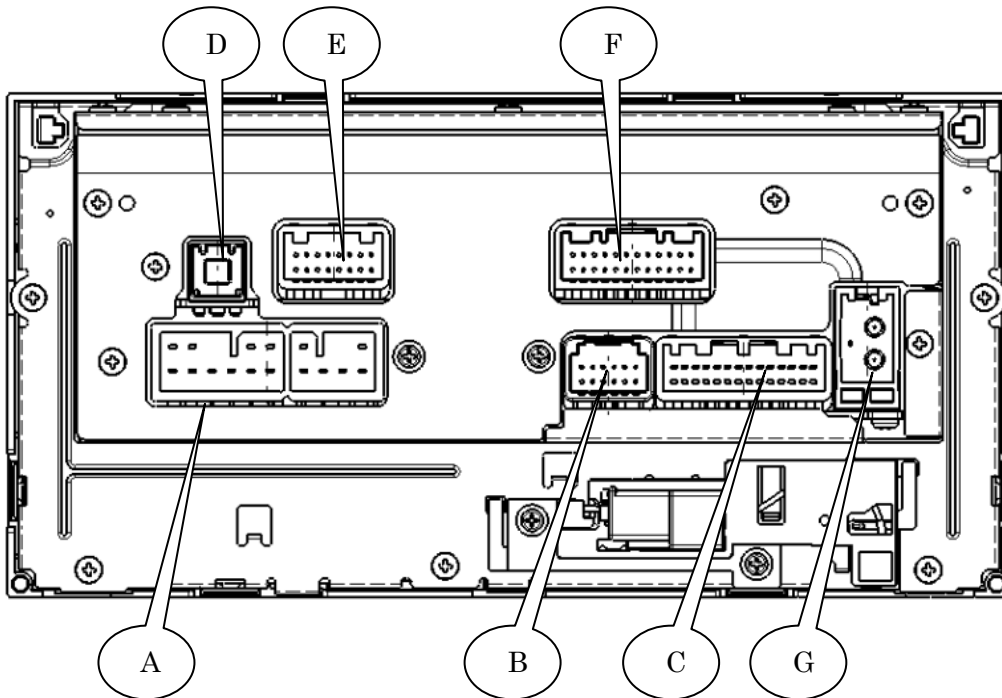
F. EXTENSIONS (0.64 24P)

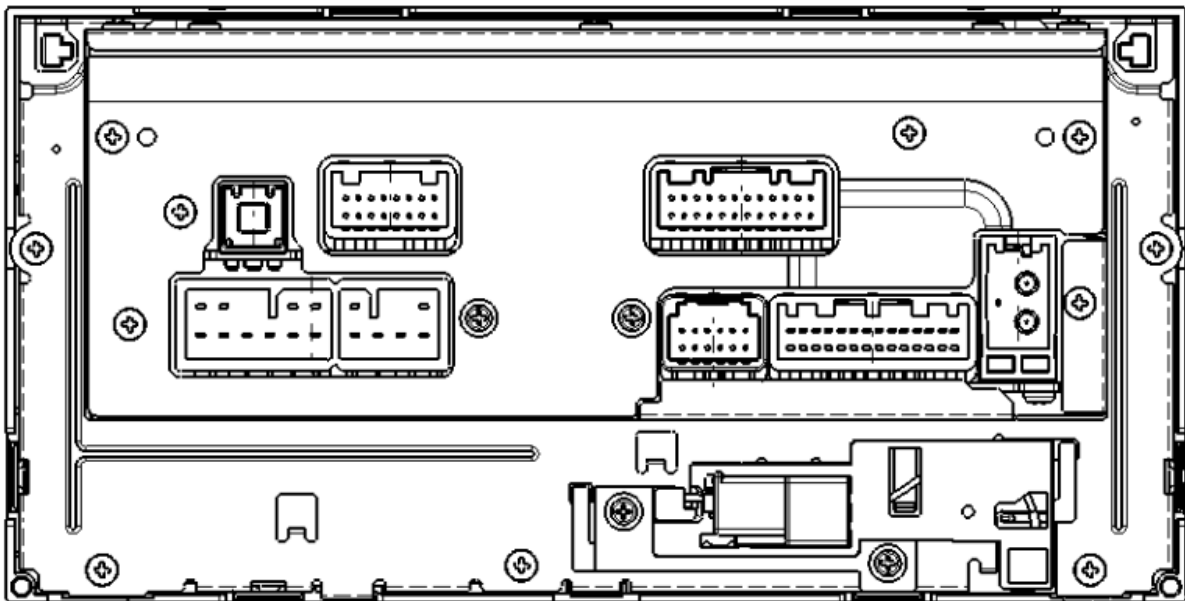


G. Antenna (HFC 2P+0.64 1P)



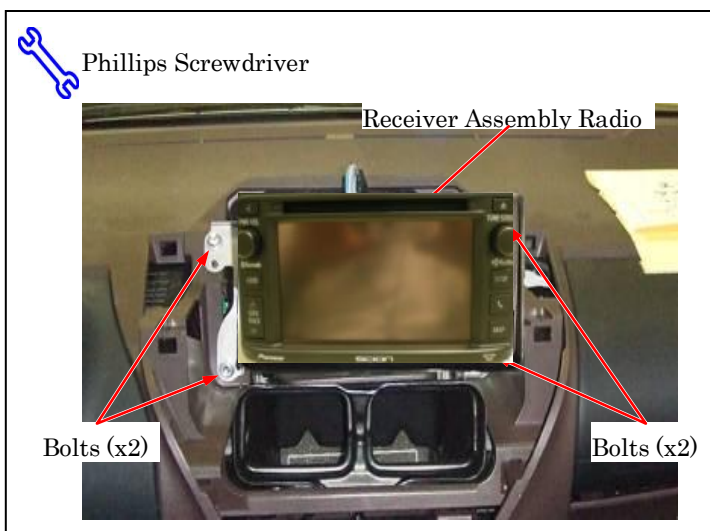
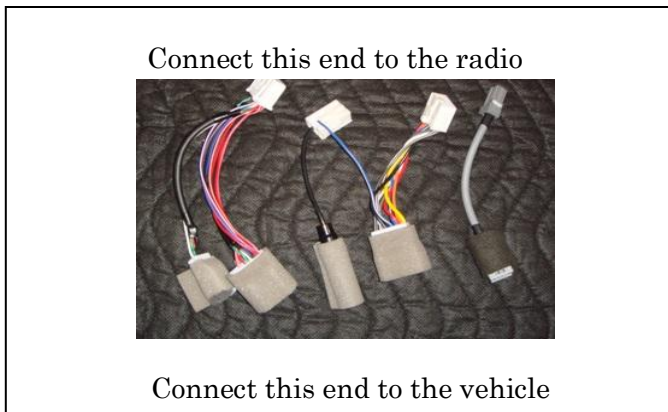
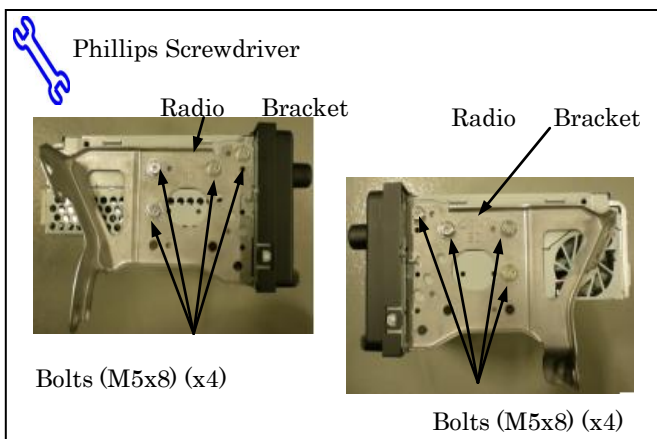
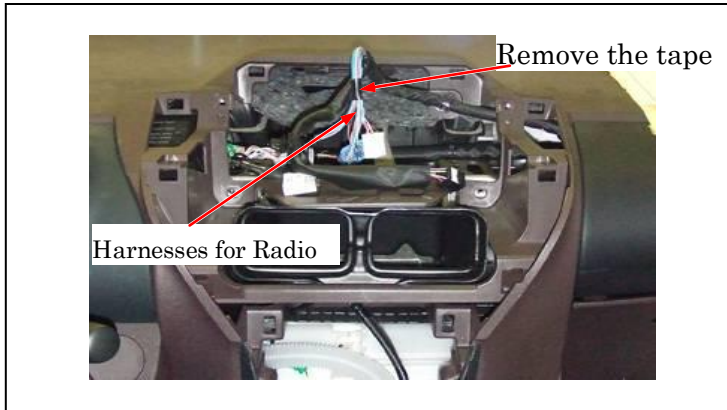
■ REAR VIEW




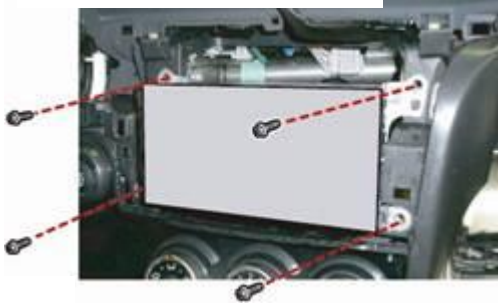


Installation Manual


iQ



 Ratchet, Extension, Socket



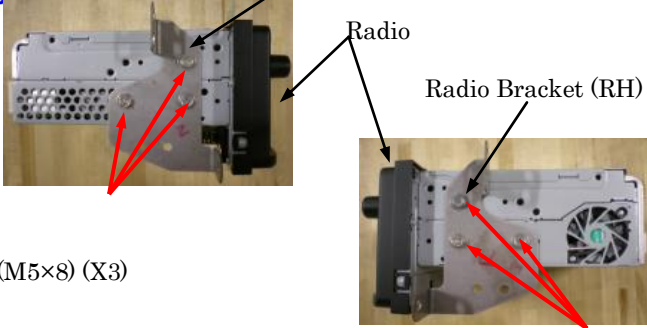
Remove the and save the 4 bolts and remove the radio brackets (R) and (L) from the interior panel.

 Phillips Screwdriver

Radio Bracket (LH)

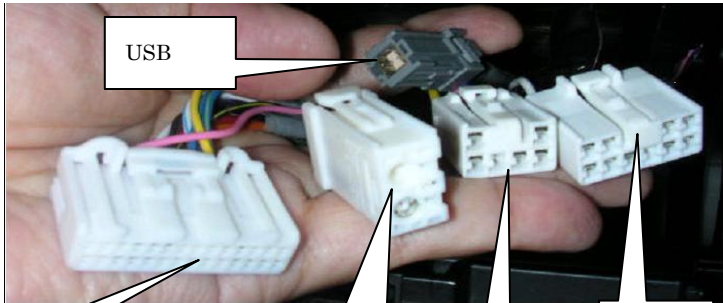
Radio

Radio Bracket (RH)



Bolts(M5×8) (X3)

Bolts(M5×8) (X3)




USB

28 Pin


HFC antenna

6 Pin

10 Pin

 Ratchet, Extension, Socket 10mm

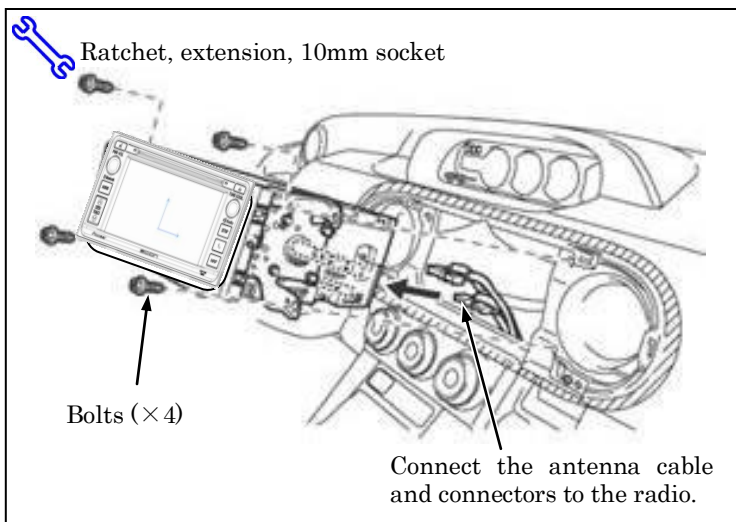
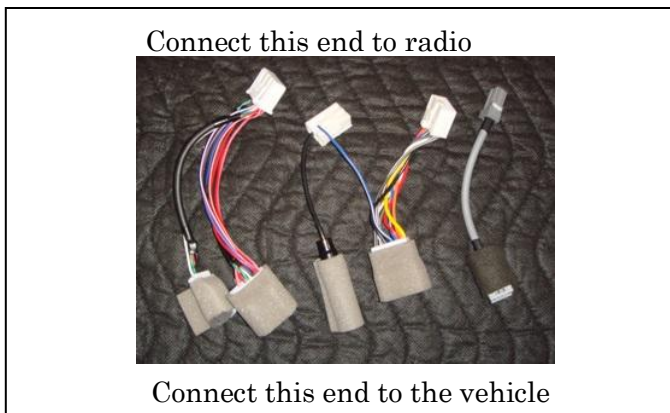
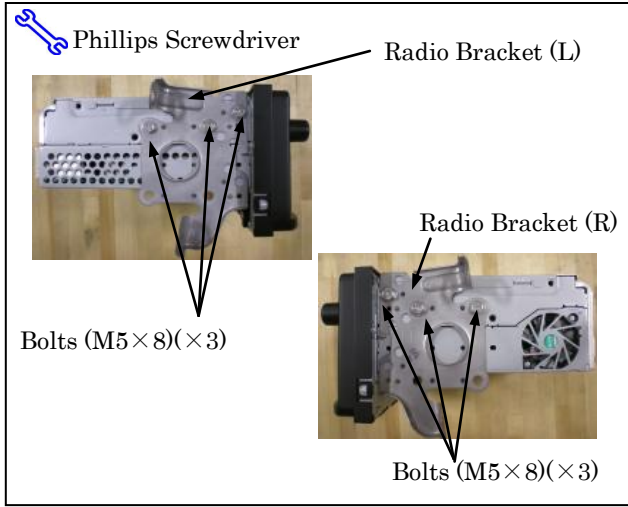
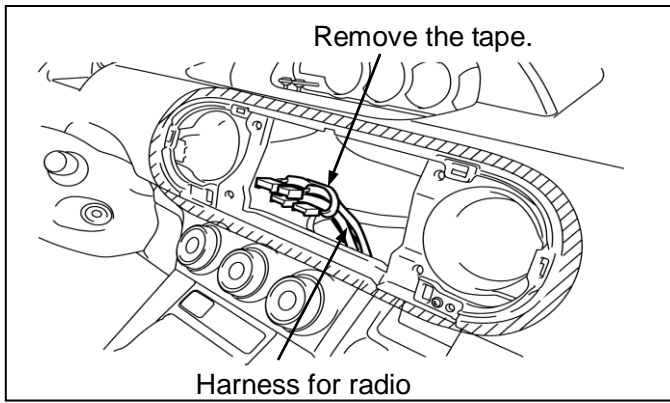
Connect the harness connectors to the radio.

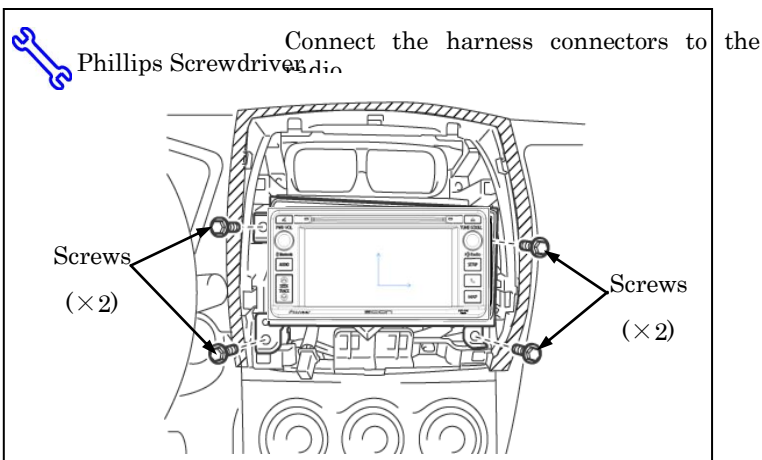
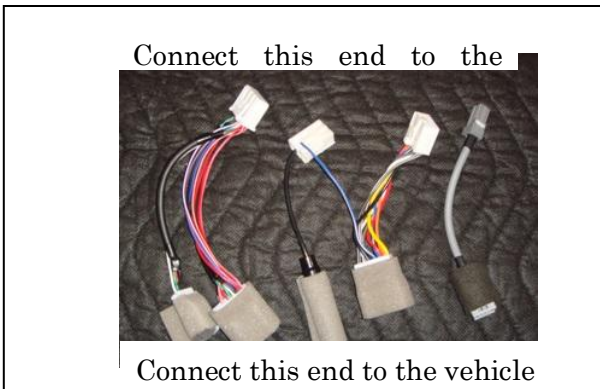
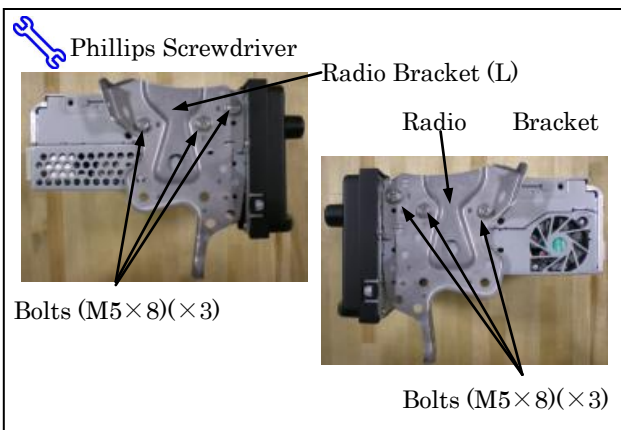
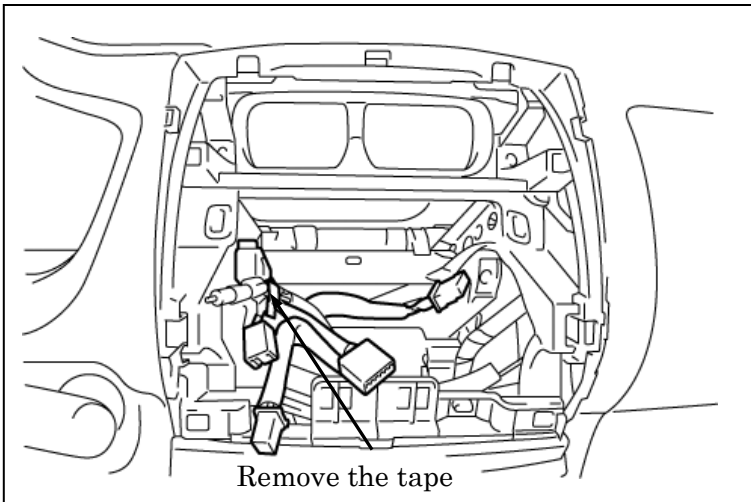


Bolts (×2)

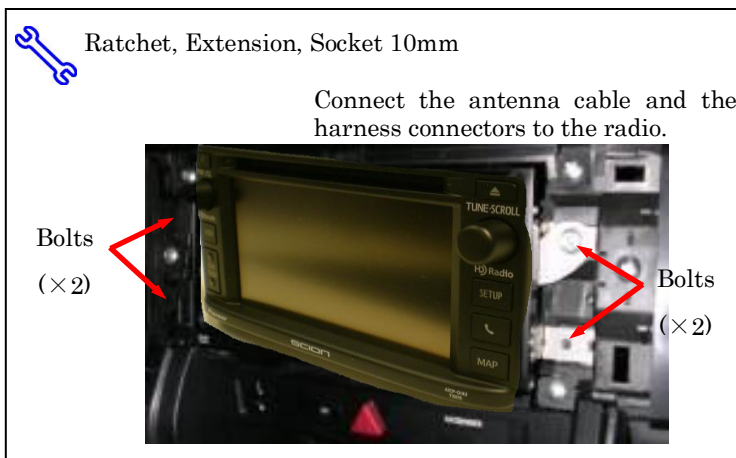
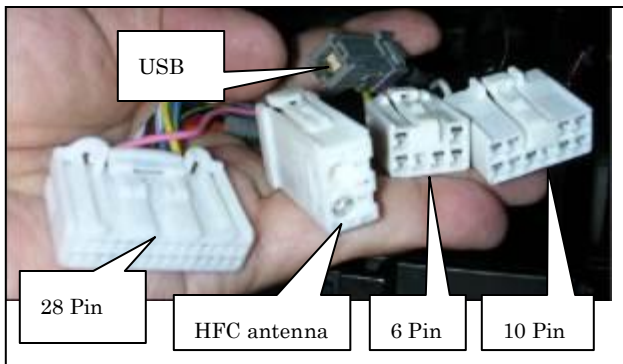
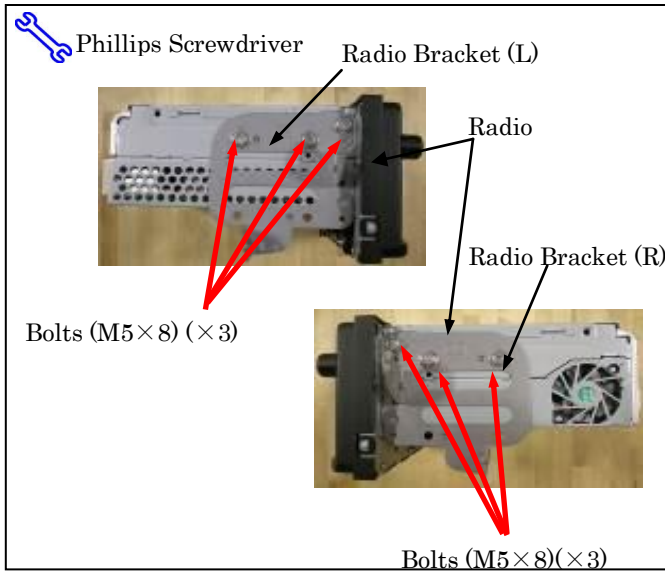
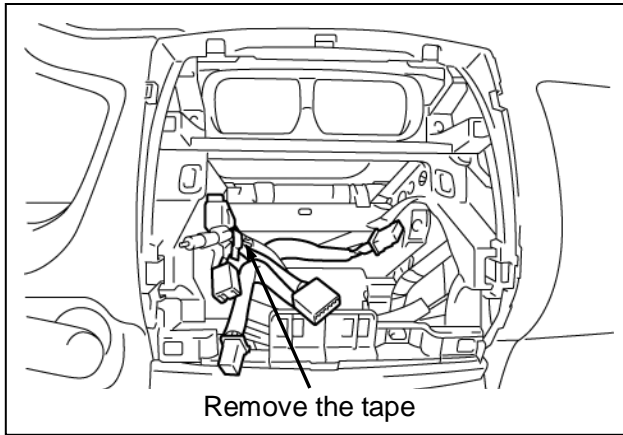
Bolts (×2)

xB

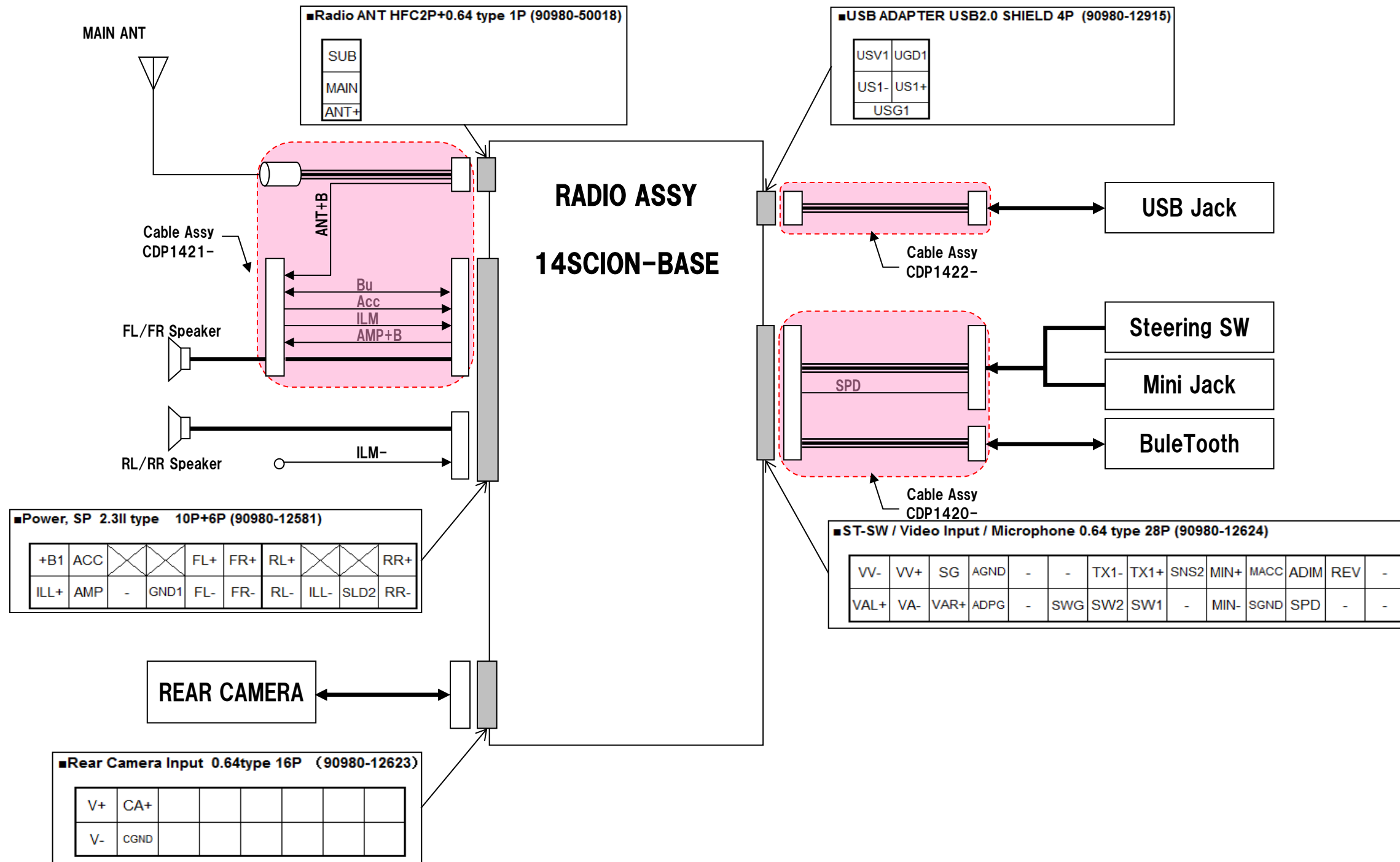




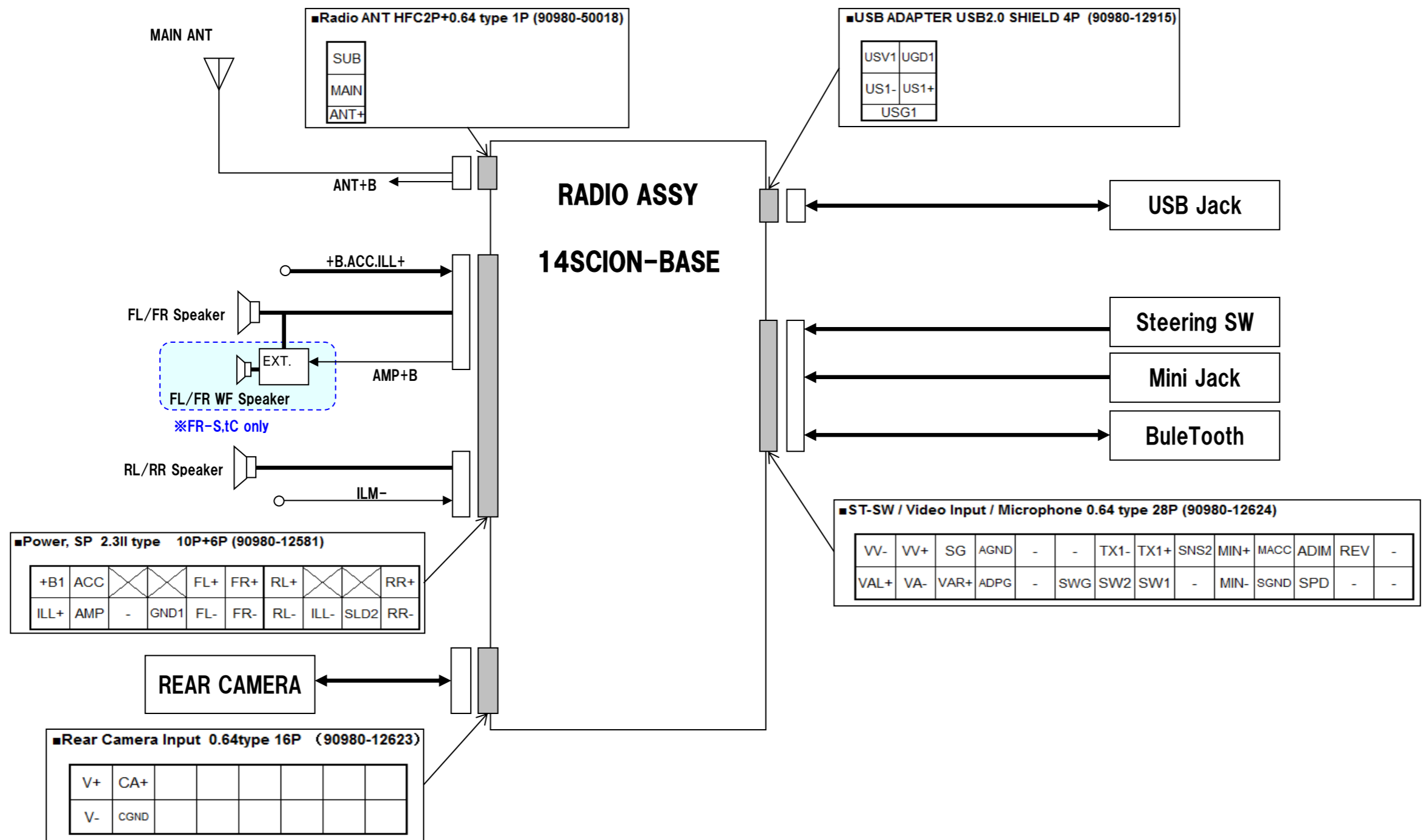
FR-S



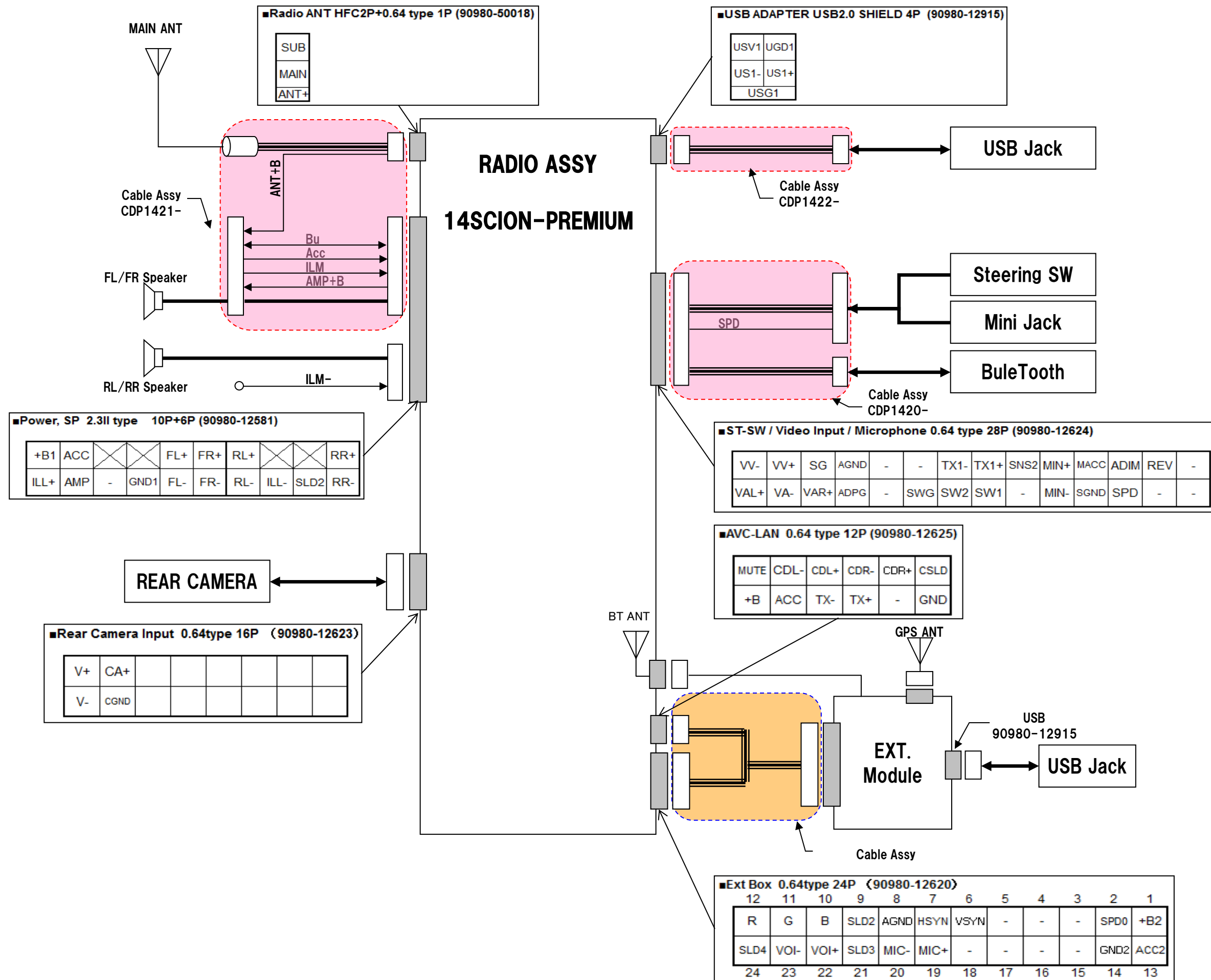
14SCION-BASE Electrical Wiring Diagram (xB,xD,iQ)



14SCION-BASE Electrical Wiring Diagram (FR-S,tC)



14SCION-PREMIUM Electrical Wiring Diagram (xB,xD,iQ)



14SCION-PREMIUM Electrical Wiring Diagram (FR-S,tC)

