AUDIO SYSTEM

SPECIFICATION EE7AAA28

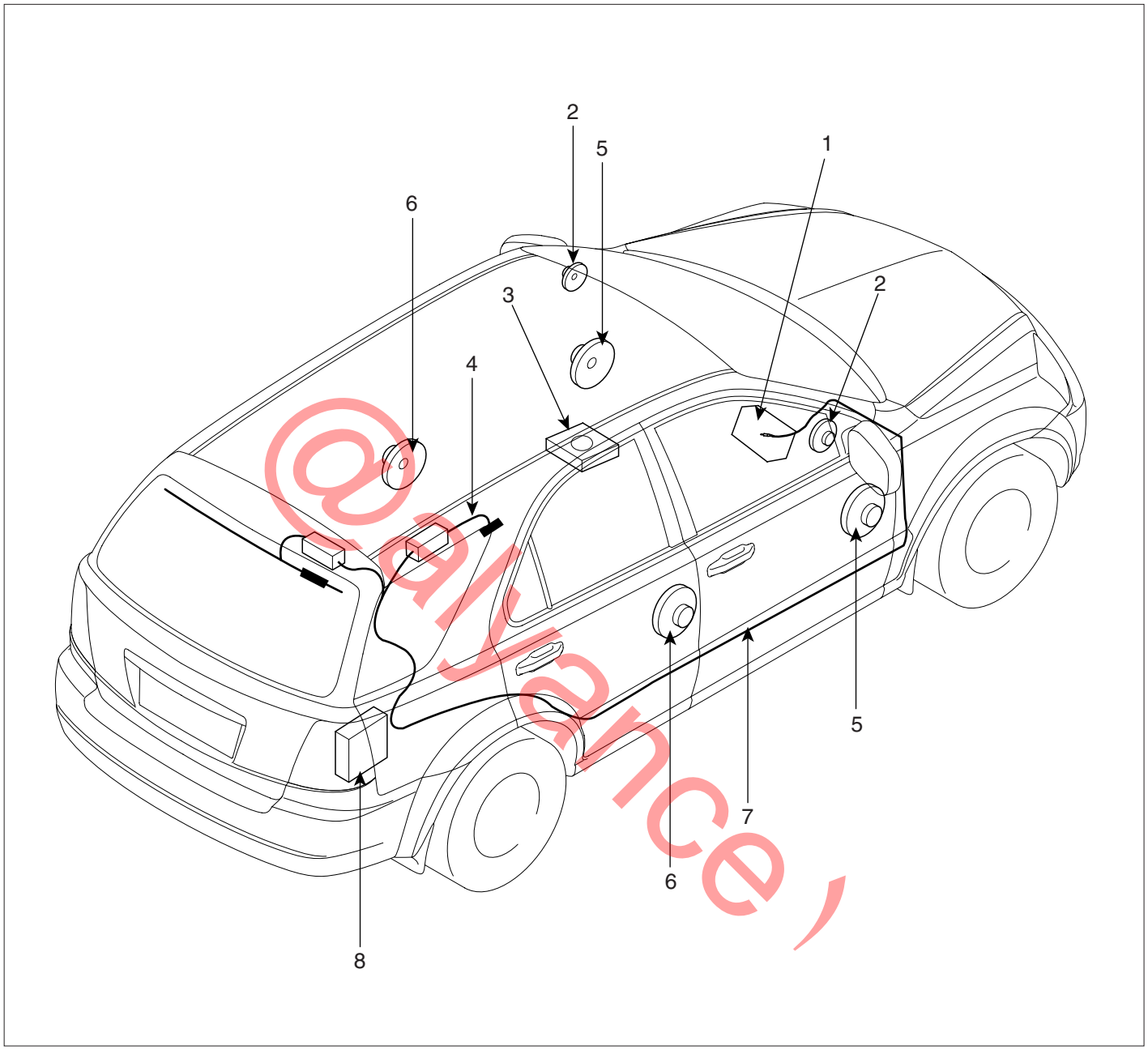
AUDIO

Item		Specification	
Model		RADIO/TAPE/CD/MP3 (M455)	RADIO/TAPE/6CDC (M465)
Power supply		DC 14.4V	
Rated output		Max 43W x 4	3.2Vrms
Speaker impedance		4Ω x 4	10Ω
Antenna		80PF 75Ω	
Tuning type		PLL synthesized type	
Amplifier		Internal amplifier	External amplifier
Frequency range / Channel space	FM	87.5~108 MHz / 100KHz (General), 50KHz(Europe)	
	AM	531~1602 KHz / 9KHz (General)	
	MW	522~1620 KHz / 9KHz (Europe)	
	LW	153~279 KHz / 1KHz (Europe)	

SPEACKER

Item		M455	M465
Input Power (W)	Front	43 (1WAY)	55 (2WAY)
	Rear	45 (2WAY)	45 (2WAY)
	Tweeter	30	30
Speaker Impedance(Ω)	Front	4.0 ± 0.6 (1WAY)	4.0 ± 0.6 (2WAY)
	Rear	4.0 ± 0.6 (2WAY)	4.0 ± 0.6 (2WAY)
	Tweeter	4.0 ± 0.6	4.0 ± 0.6
Speaker Number		6	6

COMPONENT LOCATION EACDA4AB



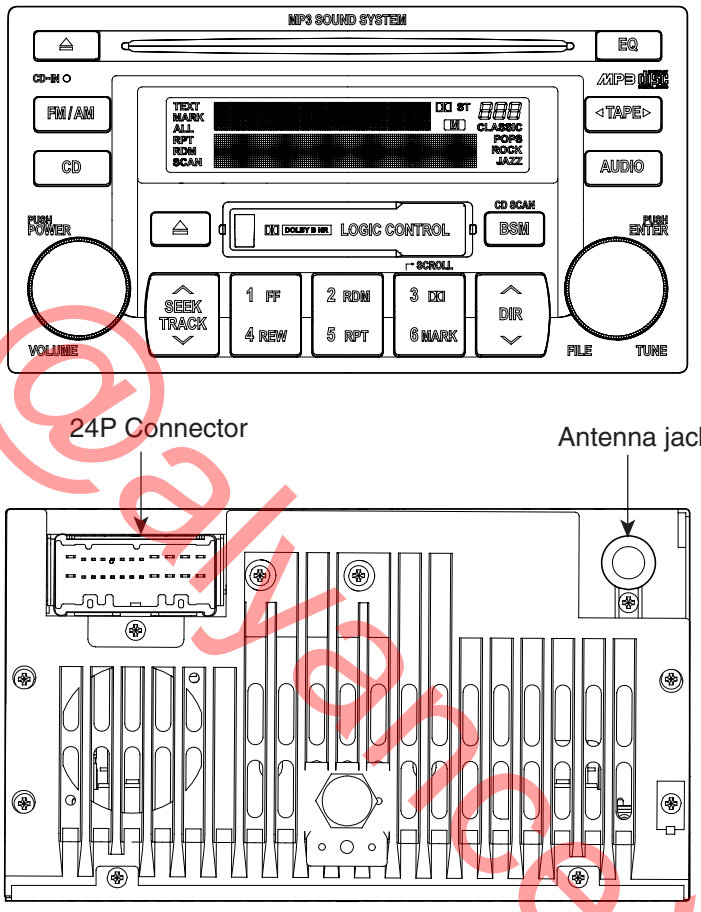
1. Audio unit
2. Tweeter speaker
3. External amplifier
4. Glass antenna
5. Front door speaker
6. Rear door speaker
7. Antenna feeder cable
8. Tuner unit

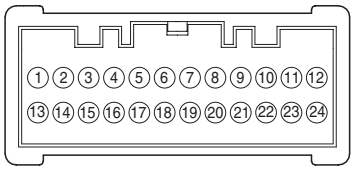
SBLBE6001L

AUDIO UNIT

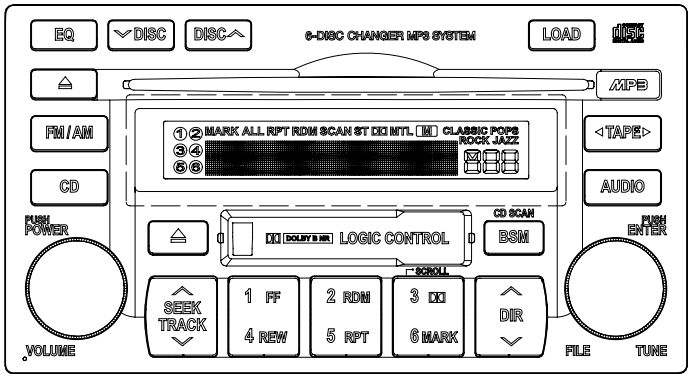
COMPONENTS EB9F63C9

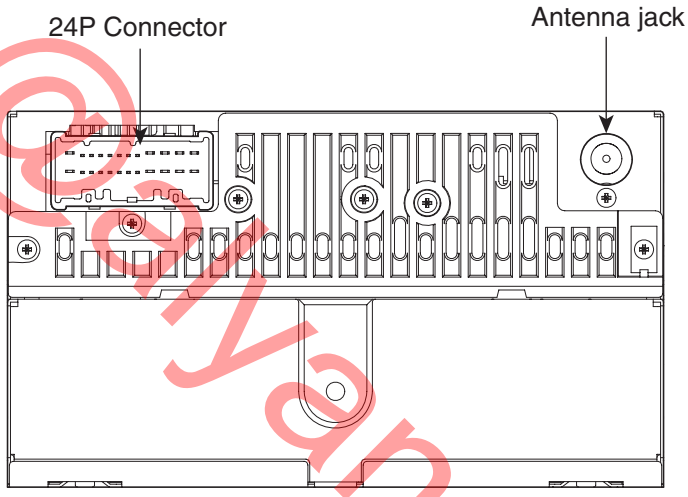
[MP3 (M455)]

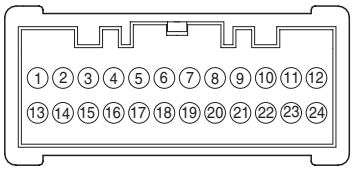


24P Connector	Pin	Name	Pin	Name
	1	Front left speaker (+)	13	Front left speaker (-)
	2	Front right speaker (+)	14	Front right speaker (-)
	3	Rear right speaker (+)	15	Rear right speaker (-)
	4	Rear left speaker (+)	16	Rear left speaker (-)
	5	Illumination (+)	17	Illumination (-)
	6	Steering remote control-	18	Remote control ground
	7	-	19	MUTE
	8	-	20	Ground
	9	-	21	-
	10	-	22	-
	11	ACC	23	Antenna B+
	12	Battery	24	Ground

[6CDC (M465)]



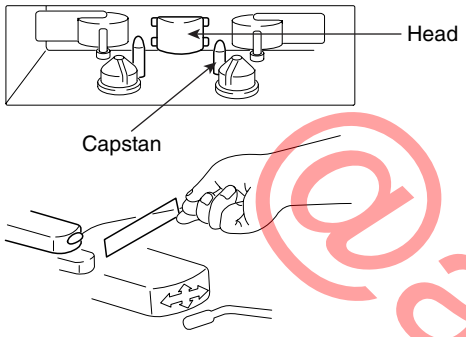


24P Connector	Pin	Name	Pin	Name
	1	Front left speaker (+)	13	Front left speaker (-)
	2	Front right speaker (+)	14	Front right speaker (-)
	3	Rear right speaker (+)	15	Rear right speaker (-)
	4	Rear left speaker (+)	16	Rear left speaker (-)
	5	Illumination (+)	17	Illumination (-)
	6	Steering remote control-	18	Remote control ground
	7	-	19	MUTE
	8	-	20	Ground
	9	-	21	-
	10	-	22	-
	11	ACC	23	Antenna B+
	12	Battery	24	Ground

INSPECTION ECC2A625

TAPE HEAD AND CAPSTAN CLEANING

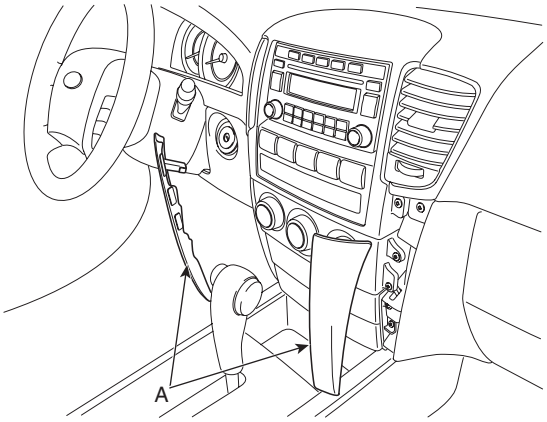
1. To obtain optimum performance, clean the head, and capstan as often as necessary, depending on frequency of use and tape cleanness.
2. To clean the tape head and capstan, use a cotton swab dipped in ordinary rubbing an alcohol. Wipe the head and capstan.



LTAC005A

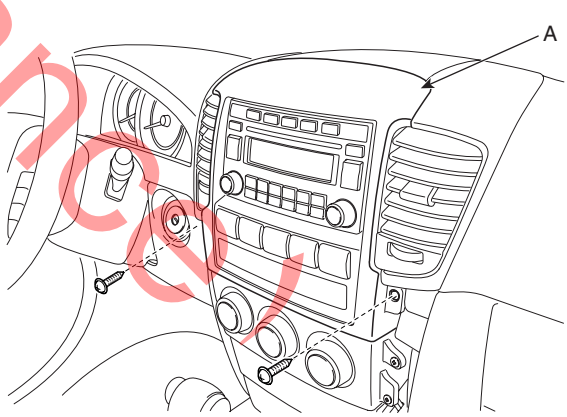
REMOVAL E106BA6F

1. Disconnect the negative (-) battery terminal.
2. Remove the center fascia lower panel (A).(Refer to the Crash pad in BD group.) after pulling it by using regular screw driver (-) at part (A). Take care of fixing clips (B).



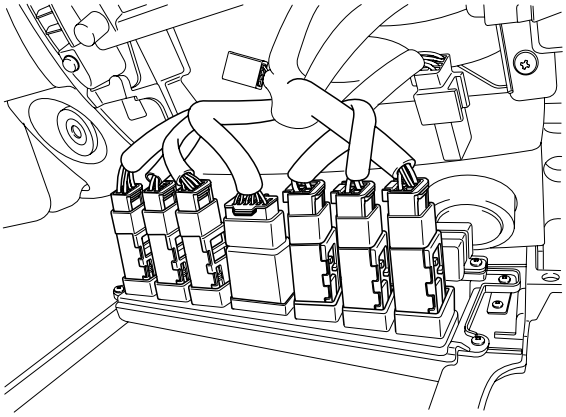
SBLBE6015D

3. Remove the center fascia panel (A) after loosening the screws. Avoid damaging retaining clips.



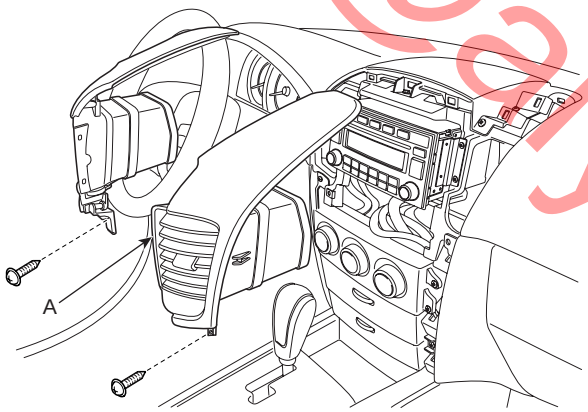
SBLBE6010D

4. Remove the connectors of center fascia panel.



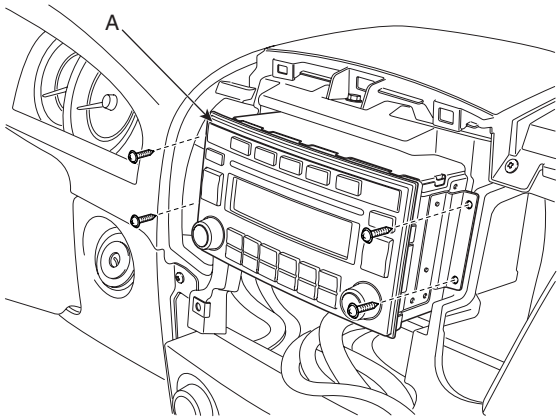
SBLBE6014D

5. Remove the mounting screws then remove the center air vent (A).



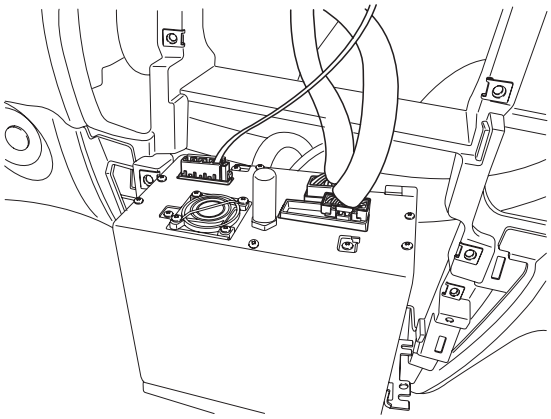
SBLBE6011D

6. Remove the mounting screws then remove the audio unit (A).



SBLBE6012D

7. Remove the audio unit after disconnecting the audio connectors and cable.



SBLBE6013D

INSTALLATION EDBAD1C5

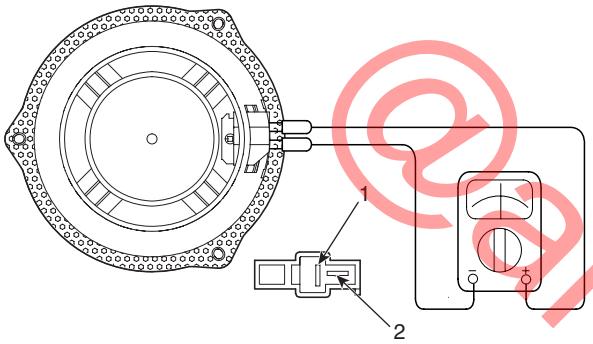
1. Connect the audio connectors and cable to the audio unit
2. Fasten the audio mounting screws.
3. Reassemble the center air vent (A).
4. Reassemble the center fascia panel after connecting the connectors.
5. Reassemble the center fascia lower panel.
6. Connect the negative (-) battery terminal and then check the audio working.

SPEAKERS

INSPECTION E3EDC26E

1. Check the speaker with an ohmmeter. If an ohmmeter indicates the correct impedance of the speaker when checking between the speaker (+) and speaker (-) of the same channel, the speaker is OK.
2. If a clicking sound is emitted from the speaker when the ohmmeter is connected to the speaker terminals, the speaker is OK.

[1 WAY]



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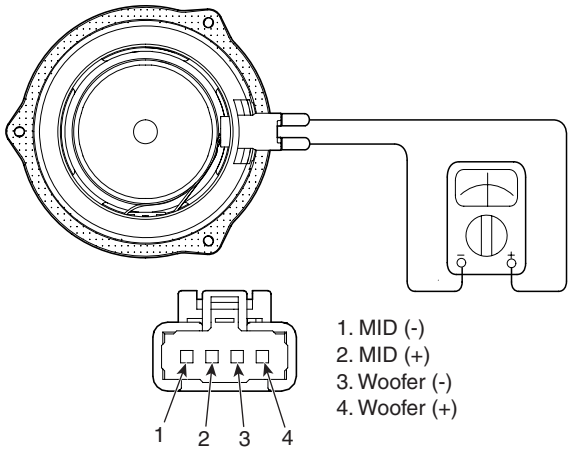
[2 WAY]

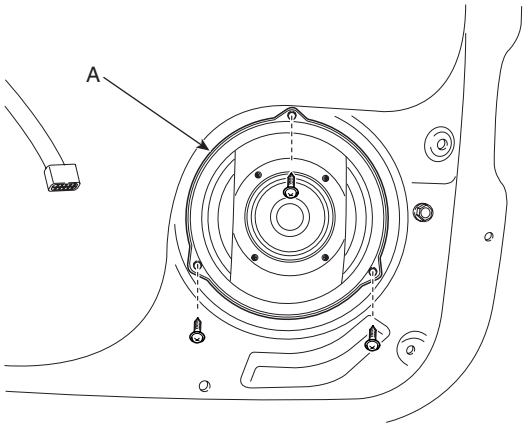


SBLBE6021L

REMOVAL EBCB442F

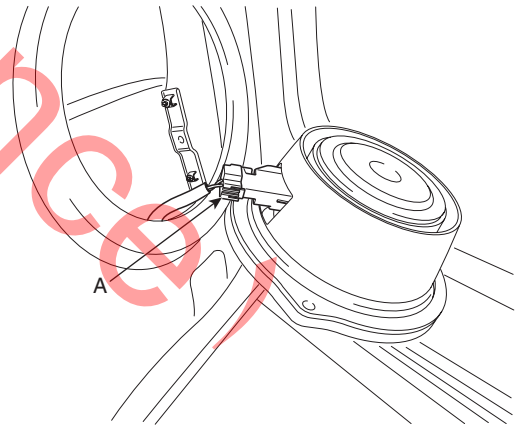
FRONT SPEAKER

1. Remove the front door trim panel (Refer to the Front door in BD group).
2. Remove the front speaker (A) after removing 3 screws.



SBLBE6022D

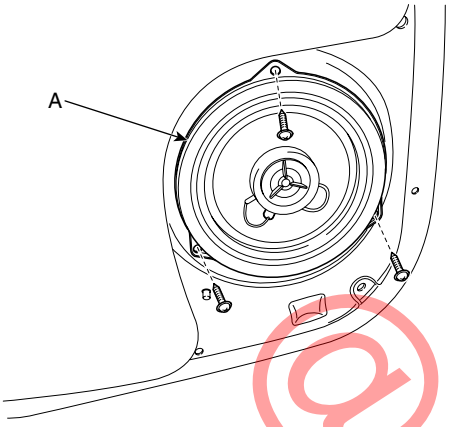
3. Remove the connector (A).



SBLBE6025D

REAR SPEAKER

1. Remove the rear door trim panel (Refer to the Rear door in BD group).
2. Remove the rear speaker (A) after removing 3 screws rivets.



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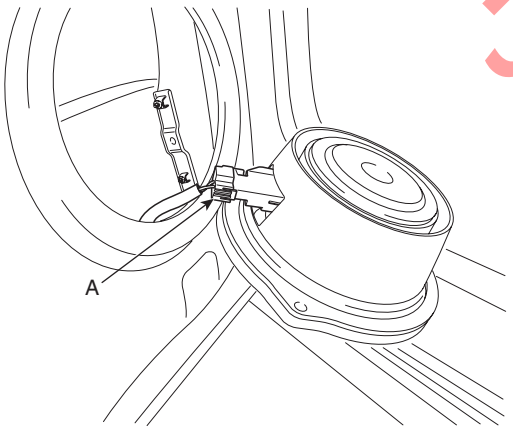
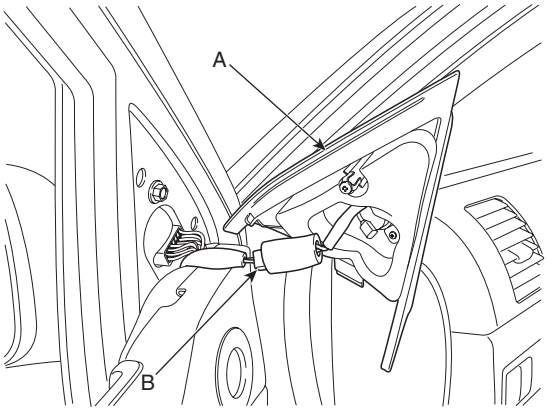
3. Disconnect the connector(A).



SBLBE6025D

TWEETER SPEAKER

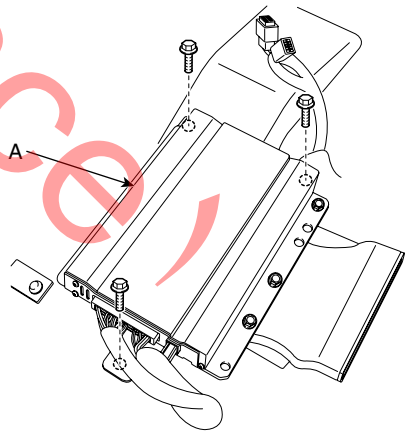
1. Remove the tweeter speaker cover (A) and then disconnect the connector (B) (Refer to the Front door in BD group).



SBLBE6026D

EXTERNAL AMPLIFIER

1. Remove the driver seat. (Refer to the Front seats in BD group.)
2. Remove the external amplifier (A) from the driver seat floor inner panel (A) after removing 3 bolts.



SBLBE6027D

INSTALLAITION E374AFD2

FRONT SPEAKER

1. Connect the connectors to the front speaker.
2. Reassemble the front speaker.
3. Reassemble the front door trim panel.

REAR SPEAKER

1. Connect the connectors to the rear speaker.
2. Reassemble the rear speaker.
3. Reassemble the rear door trim panel.

TWEETER SPEAKER

1. Connect the connectors and then reassemble the tweeter speaker.

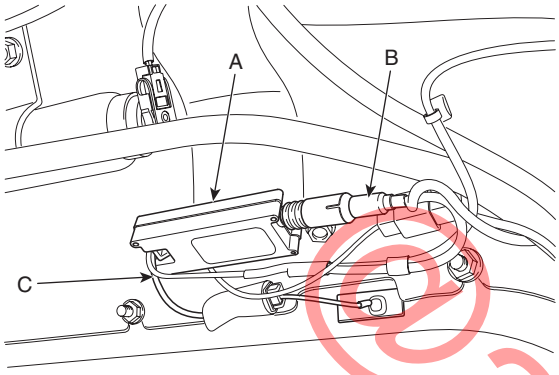
EXTERNAL AMPLIFIER

1. Reassemble the external amplifier on the driver seat floor
2. Reassemble the driver seat after connecting the connectors.

ANTENNA

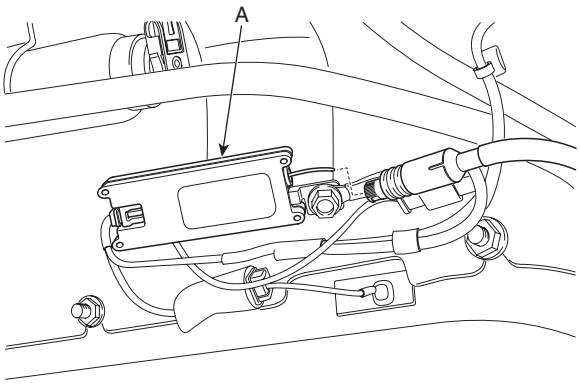
REMOVAL E57651F8

1. Remove the rear right quarter trim.
2. Remove the radio feeder cable (B) and amplifier wiring (C) from the glass antenna radio amplifier (A).



SBLBE6030D

3. Remove the glass antenna radio amplifier (A) after removing fixing bolt(1EA).



SBLBE6031D

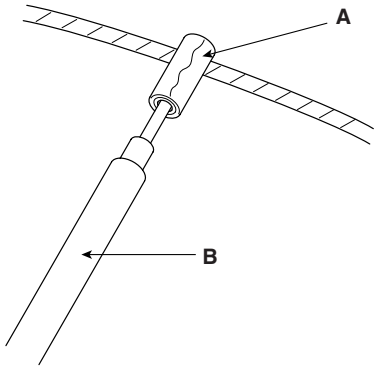
INSTALLATION EB339BD5

1. Reassemble the glass antenna radio amplifier
2. Connect the feeder cable and connector.
3. Reassemble the rear right quarter trim.

INSPECTION EB7C02F1

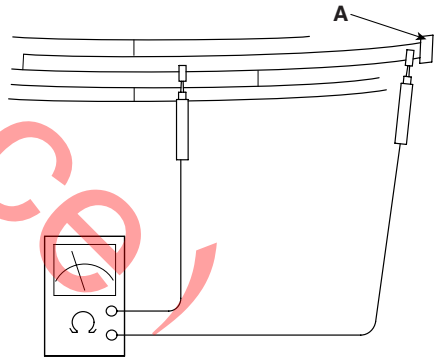
GLASS ANTENNA TEST

1. Wrap aluminum foil (A) around the tip of the tester probe (B) as shown.



ETKD003A

2. Touch one tester probe to the glass antenna terminal (A) hear, and move the other tester probe along the antenna wires to check that continuity exists.



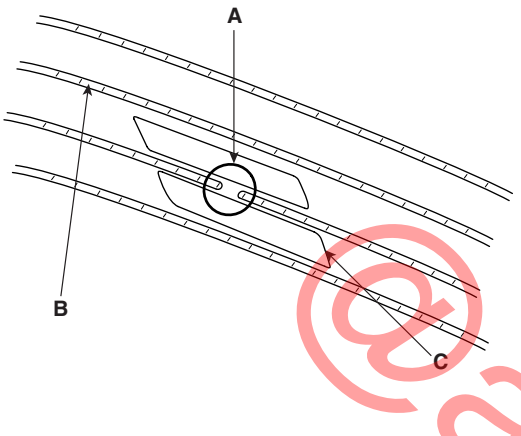
ETKD004A

GLASS ANTENNA REPAIR

NOTE

To make an effective repair, the broken section must be no longer than one inch.

1. Lightly rub the area around the broken section (A) with fine steel wool, and then clean it with alcohol.

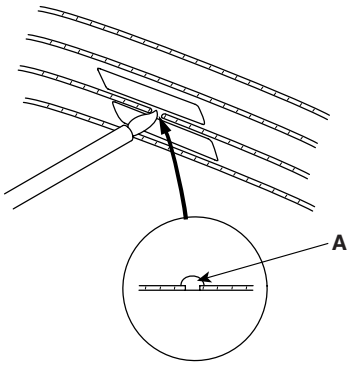


ETKD004K

2. Carefully mask above and below the broken portion of the glass antenna wire (B) with cellophane tape (C).
3. Using a small brush, apply a heavy coat of silver conductive paint (A) extending about 1/8˝ on both sides of the break. Allow 30 minutes to dry.

NOTE

Thoroughly mix the paint before use.



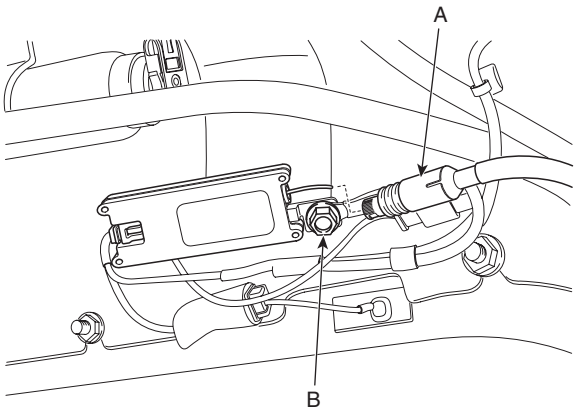
ETKD006Z

4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry three hours before removing the tape.

RADIO AMPLIFIER INSPECTION

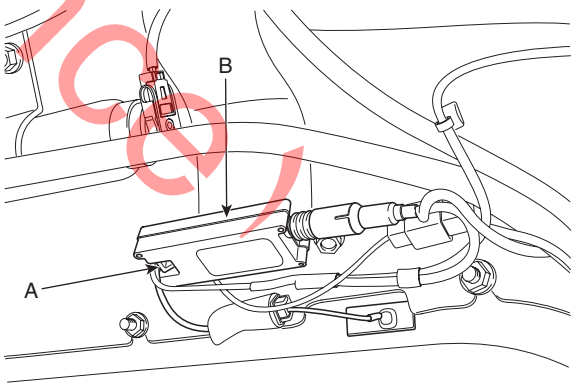
1. Remove the radio feeder cable from the radio amp after removing the rear right quarter trim panel.
2. Turn the radio ON.
   Measure the voltage between radio amp feeder cable (A) and body ground (B).

OK : approximately 12V (ACC+)



SBLBE6032D

3. Check for continuity between grid wire connector (A) and radio amp (B) rightly.

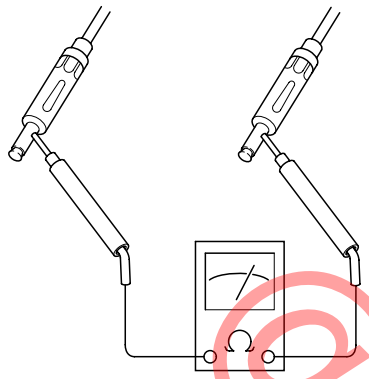


SBLBE6033D

4. Check the grid lines for continuity.
5. When a poor radio reception is not repaired through the above inspection methods, replace the amp.
   If the radio reception is still poor, check the radio cable for short and radio head unit for failure.

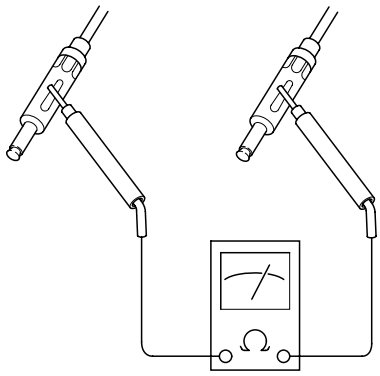
ANTENNA CABLE

1. Remove the antenna jack from the audio unit and antenna.
2. Check for continuity between the center poles of antenna cable.



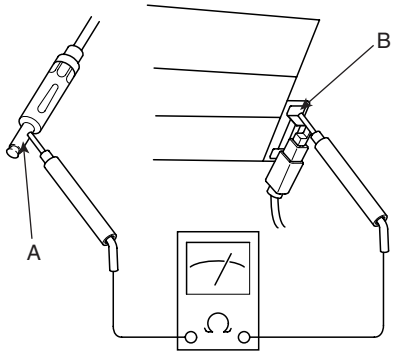
ATJF023C

3. Check for continuity between the outer poles of antenna cable. There should be continuity.



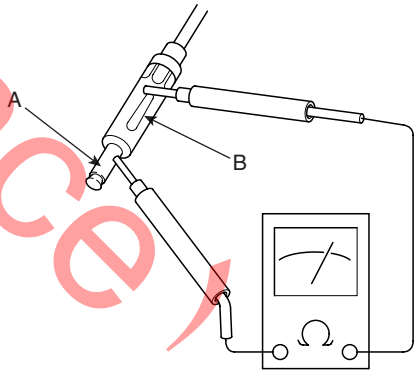
ATJF023D

4. If there is no continuity, replace the antenna cable.
5. Check for continuity between the center pole (A) of antenna cable and terminal of glass antenna (B). There should be continuity.



ATJF023E

6. If there is no continuity, replace the antenna amplifier.
7. Check for continuity between the center pole (A) and outer pole (B) of antenna cable. There should be no continuity.

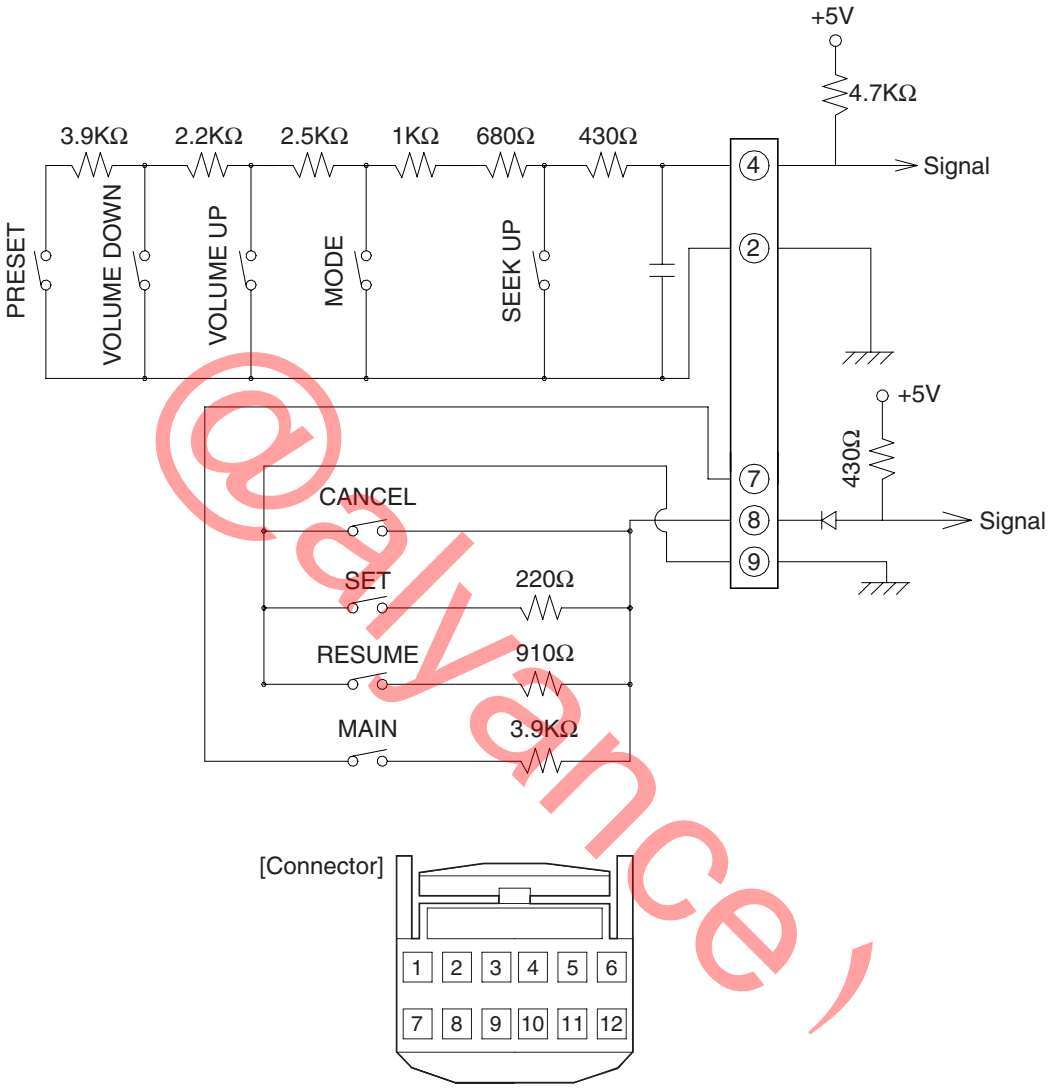


ATJF023F

8. If there is continuity, replace the antenna cable.

AUDIO REMOTE CONTROL

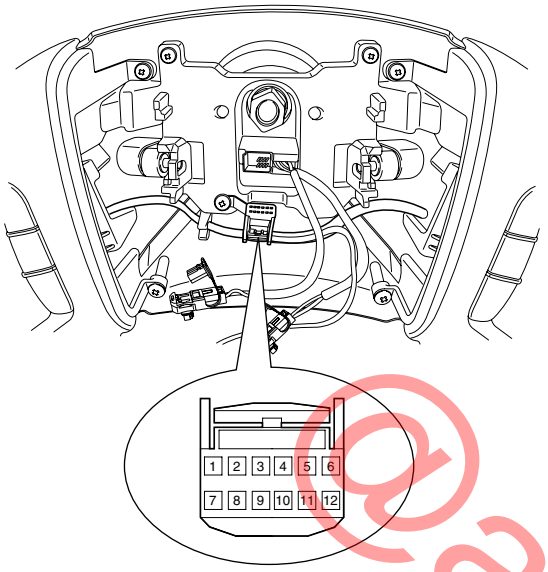
CIRCUIT DIAGRAM E0EC330A



SBLBE6037L

INSPECTION E5403C8F

1. Check for resistance between No.2 and No.4 terminals in each switch position.

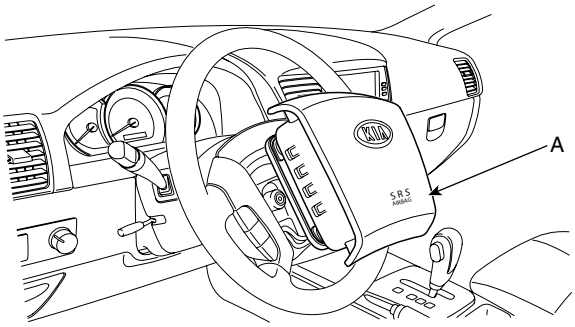


SBLBE6036D

Switch name	Connector terminal	Resistance (±5%)
VOLUME DOWN	2 - 4	6.81 kΩ
VOLUME UP	2 - 4	4.61 kΩ
MODE	2 - 4	2.11 kΩ
SEEK UP	2 - 4	430 Ω
PRESET	2 - 4	10.71 kΩ

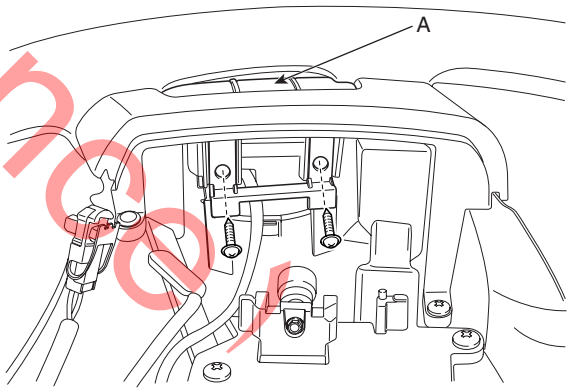
REMOVAL ED43DCAE

1. Disconnect the negative (-) battery terminal.
2. Remove the driver airbag module (A). (Refer to the airbag group)



SBLBE6034D

3. Remove the audio remote control switch (A) after remove the steering wheel remote control switch connector and 2 screws.



SBLBE6035D

INSTALLATION EF4F87C0

1. Reassemble the audio remote control switch.
2. Connect the remote control switch connector.
3. Reassemble the driver airbag module and the negative (-) battery terminal.

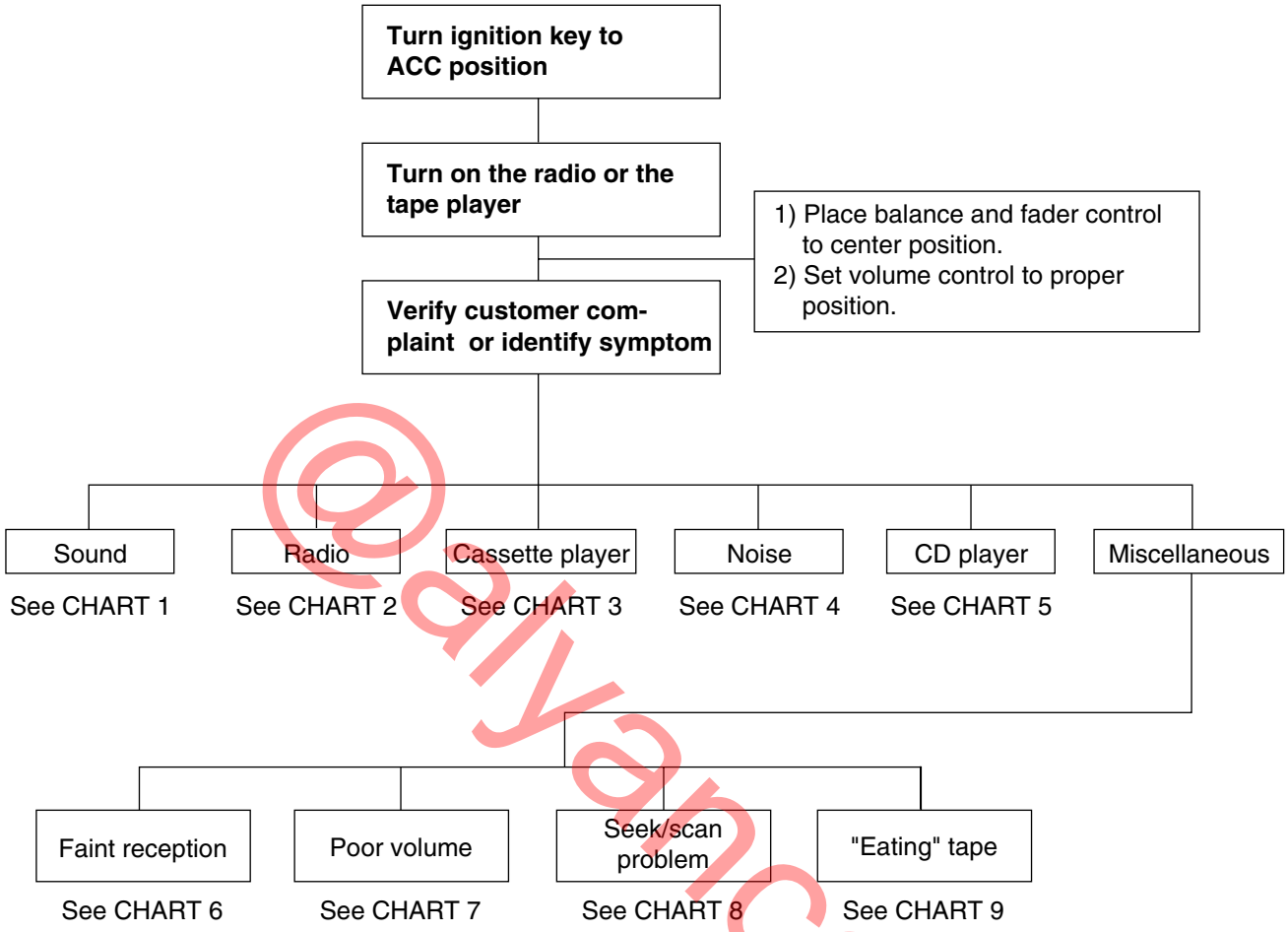
TROUBLESHOOTING EF3AEBCC

CUSTOMER COMPLAINT ANALYSIS CHECK SHEET

TROUBLE IN	☐ ALL ☐ AM ☐ FM ☐ TAPE ☐ CD ☐ MP3 ☐ CD changer ☐ AMP ☐ Others
TROUBLE OCCURS	☐ Always ☐ Engine start ☐ Engine Running ☐ Cold ☐ Warm ☐ Sometimes ☐ Most of the time ☐ Engine off
TYPE OF TROUBLE	☐ Will not play ☐ Tape speed not proper ☐ Weak ☐ Squealing noise ☐ Eats tape ☐ Display/illumination poor ☐ CD skips & jumps ☐ Tape/CD will not eject or insert ☐ Others (Describe) :
OTHERS	▶ Customer complaint contents : ▶ Have you checked customer's defects :
✶ Using the customer complaint analysis check sheet for reference, ask the customer for as much detail as possible about the problem.	

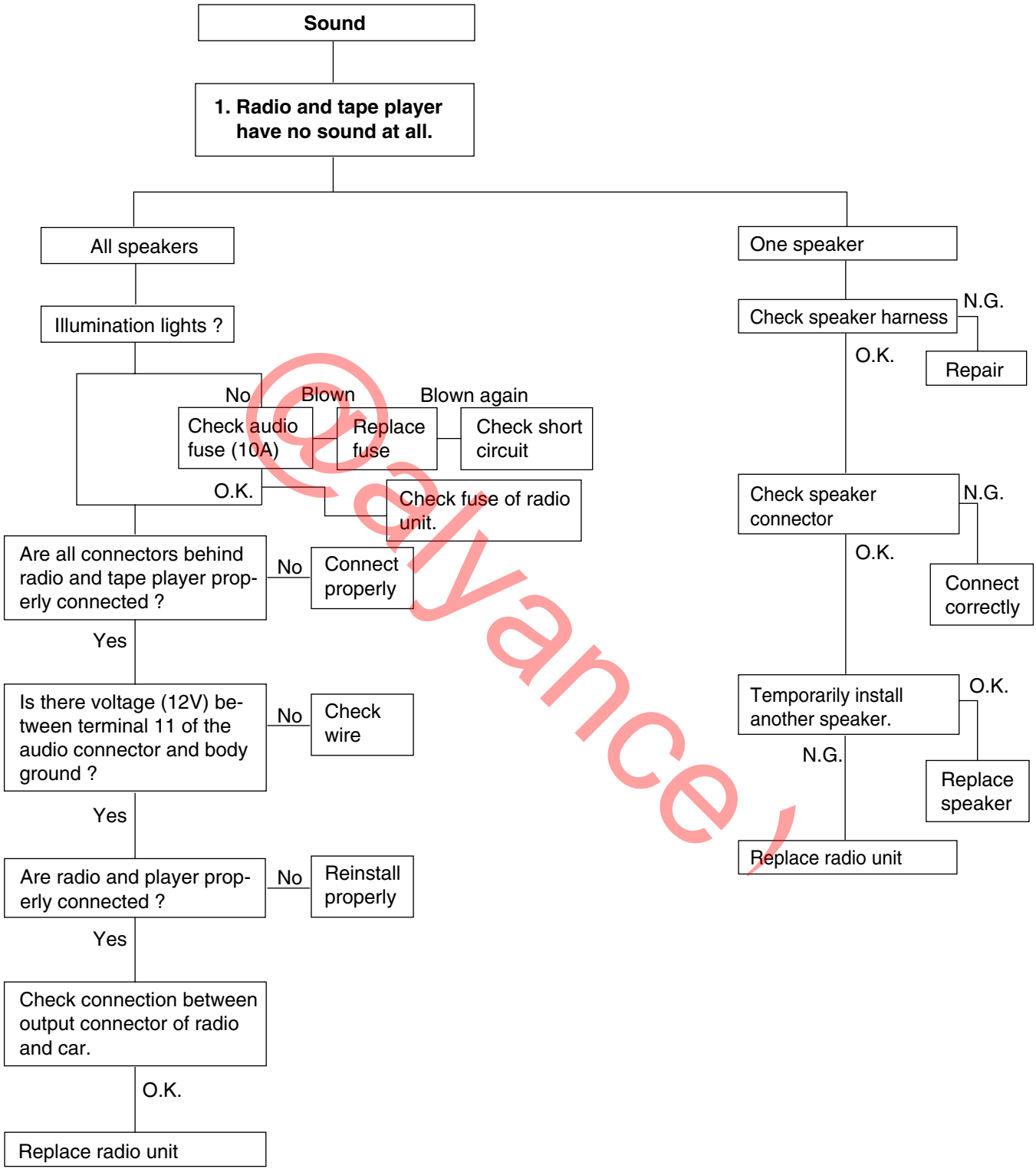
BT1G001A

There are six areas where a problem can occur: wiring harness, the radio, the cassette tape deck, the CD player, and speaker. Troubleshooting enables you to confine the problem to a particular area.

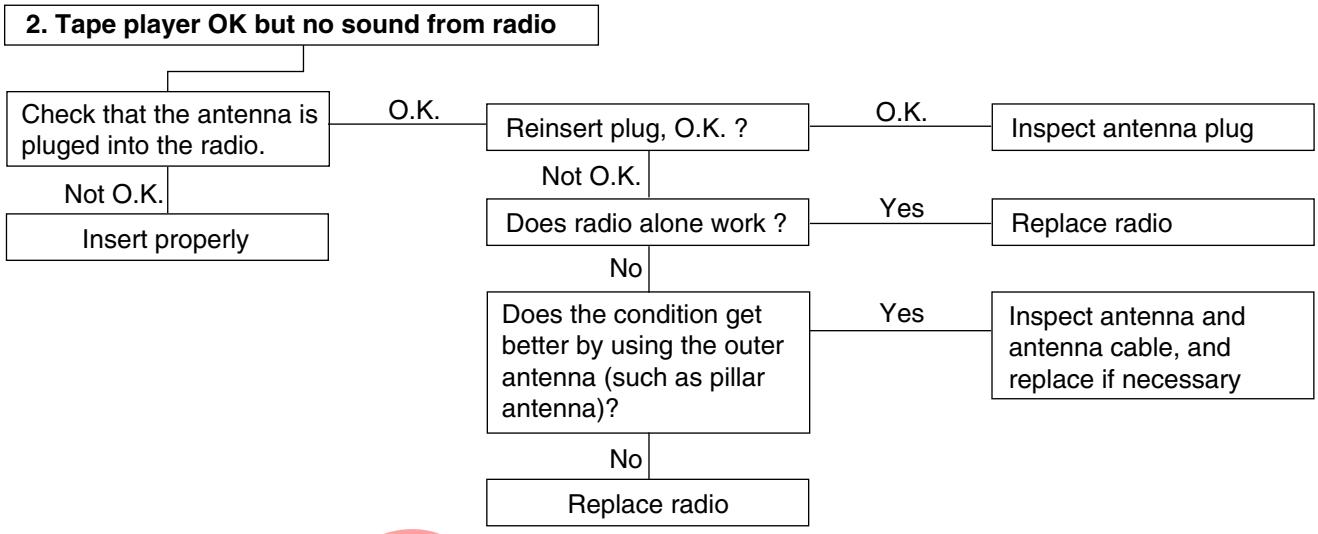


LTIF001A

CHART 1

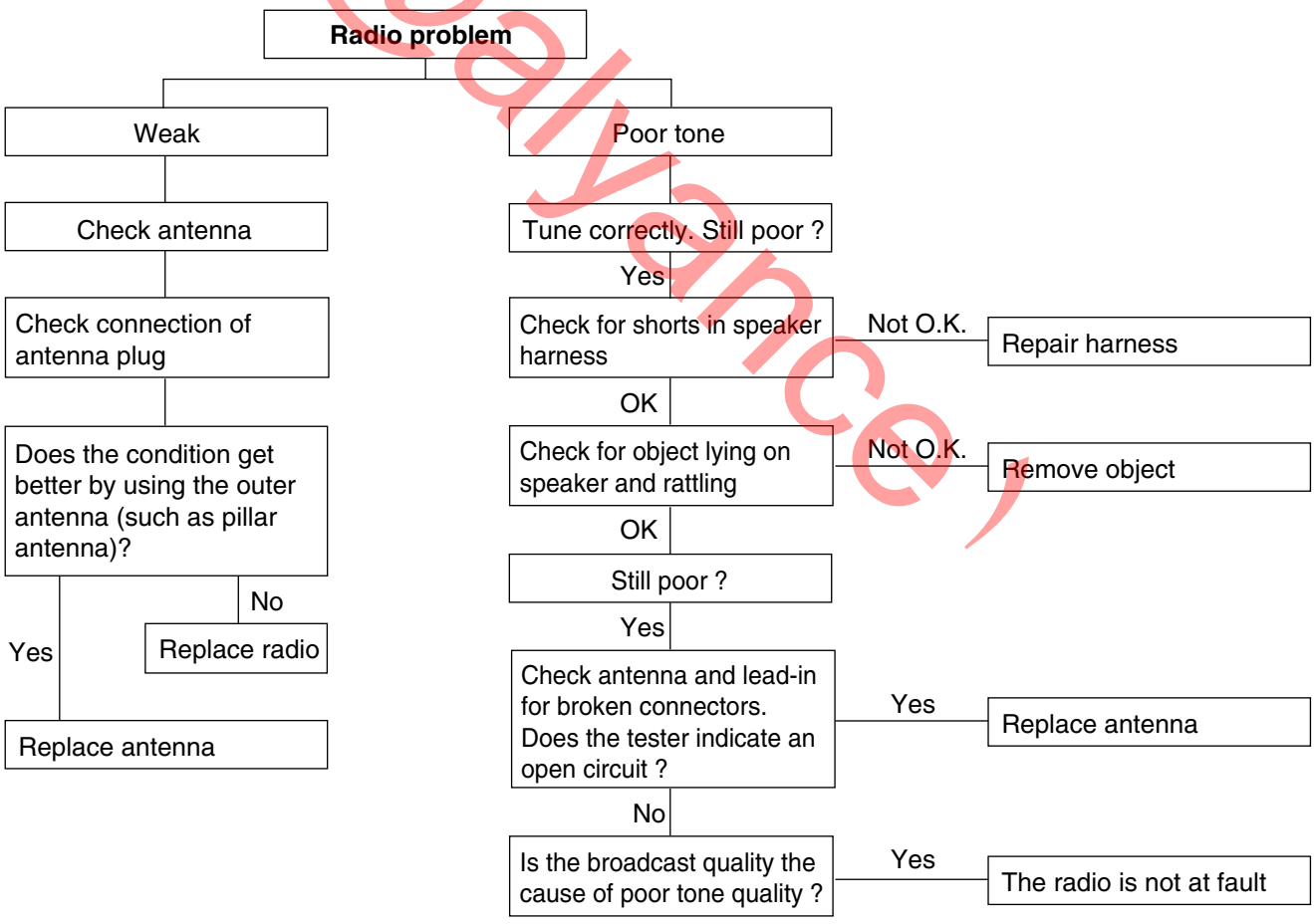


LTJF001B



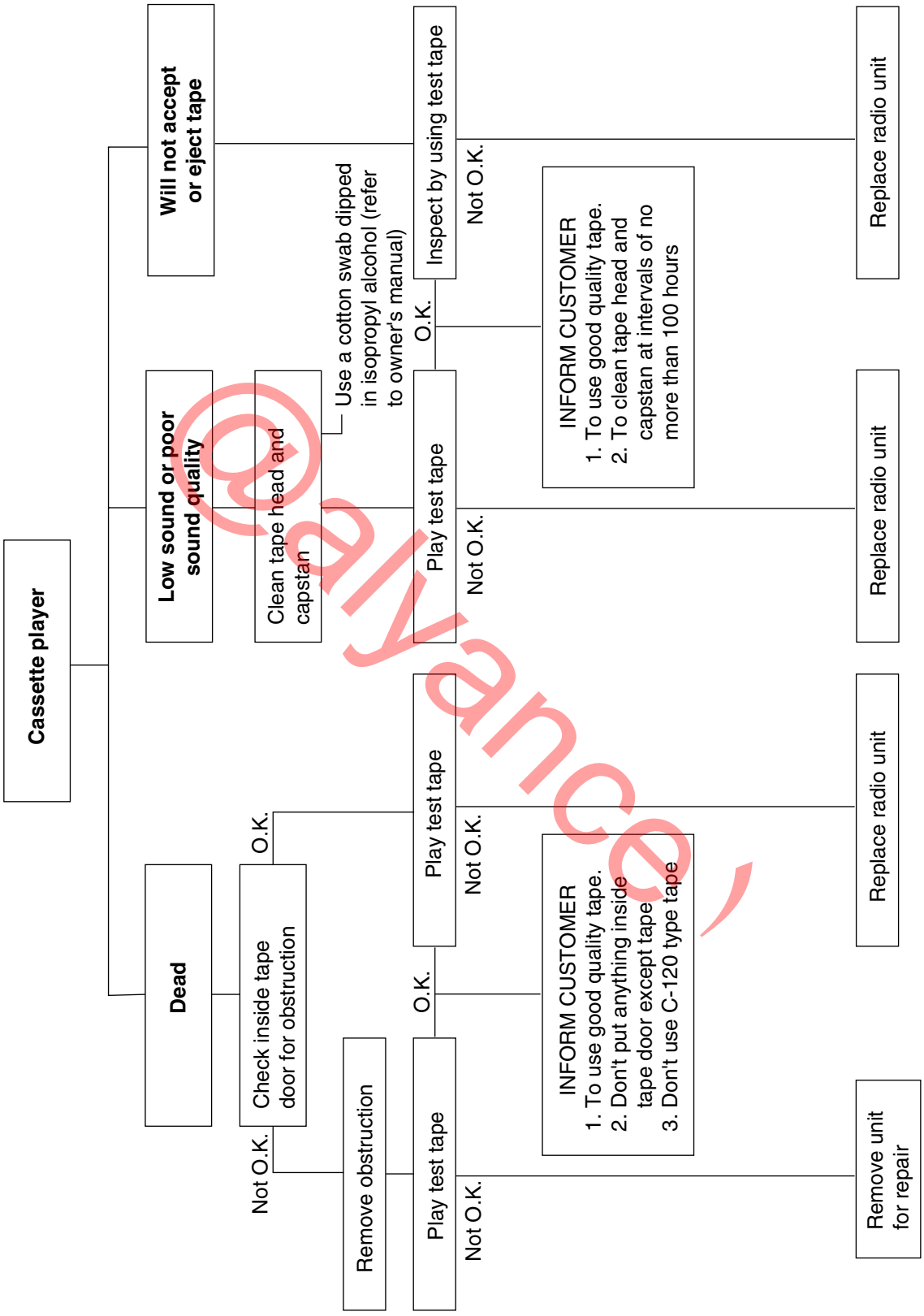
LTIF001C

CHART 2



BTIF001D

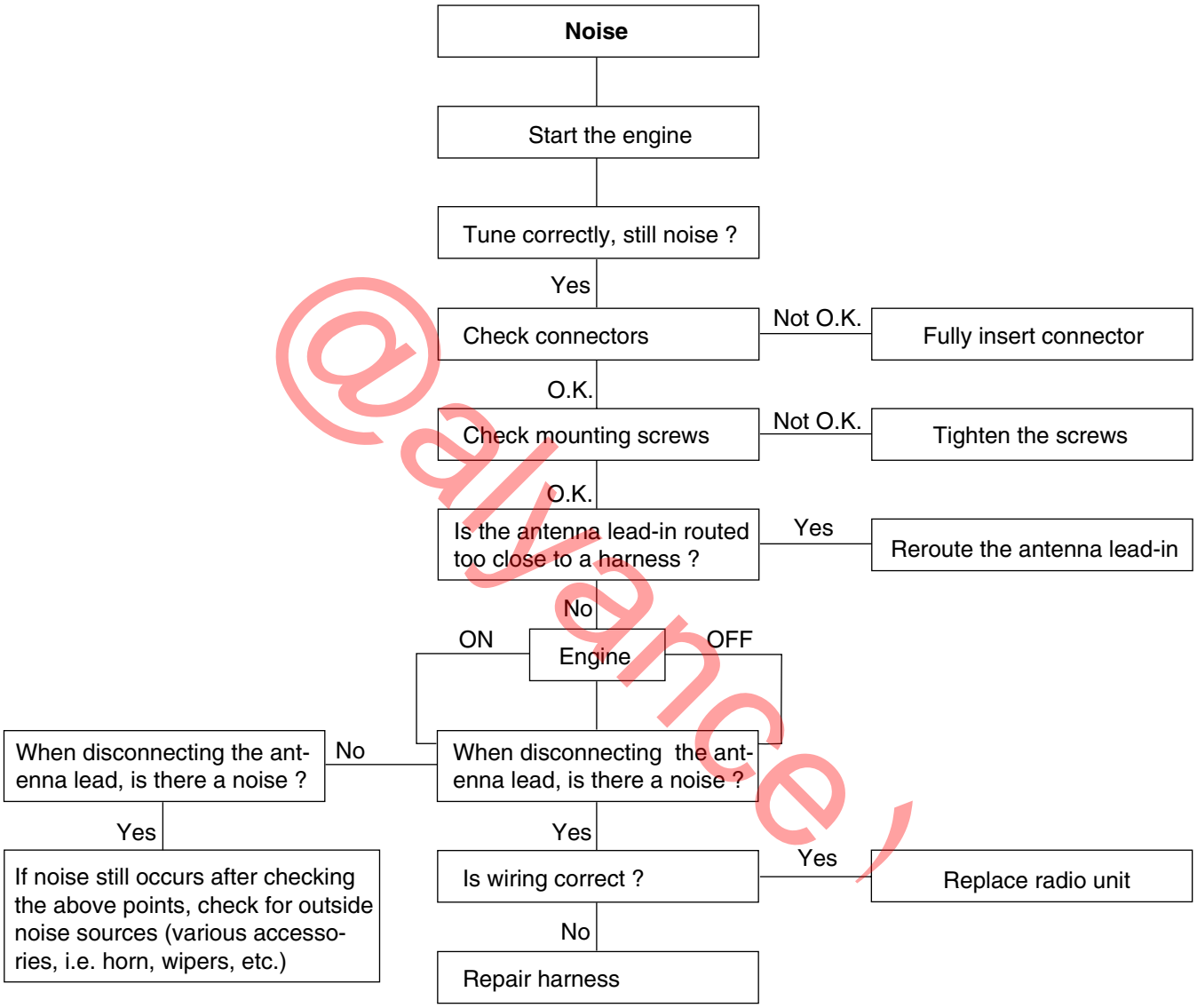
CHART 3



ETBF001E

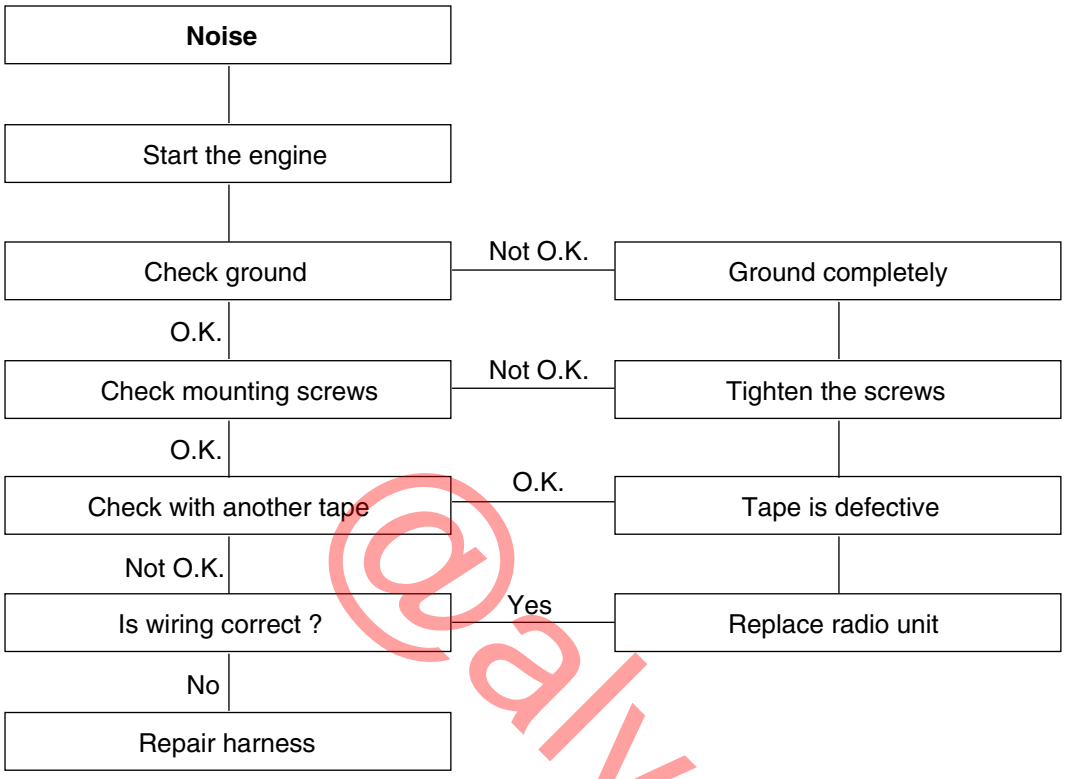
CHART 4

1. RADIO



LTIF001F

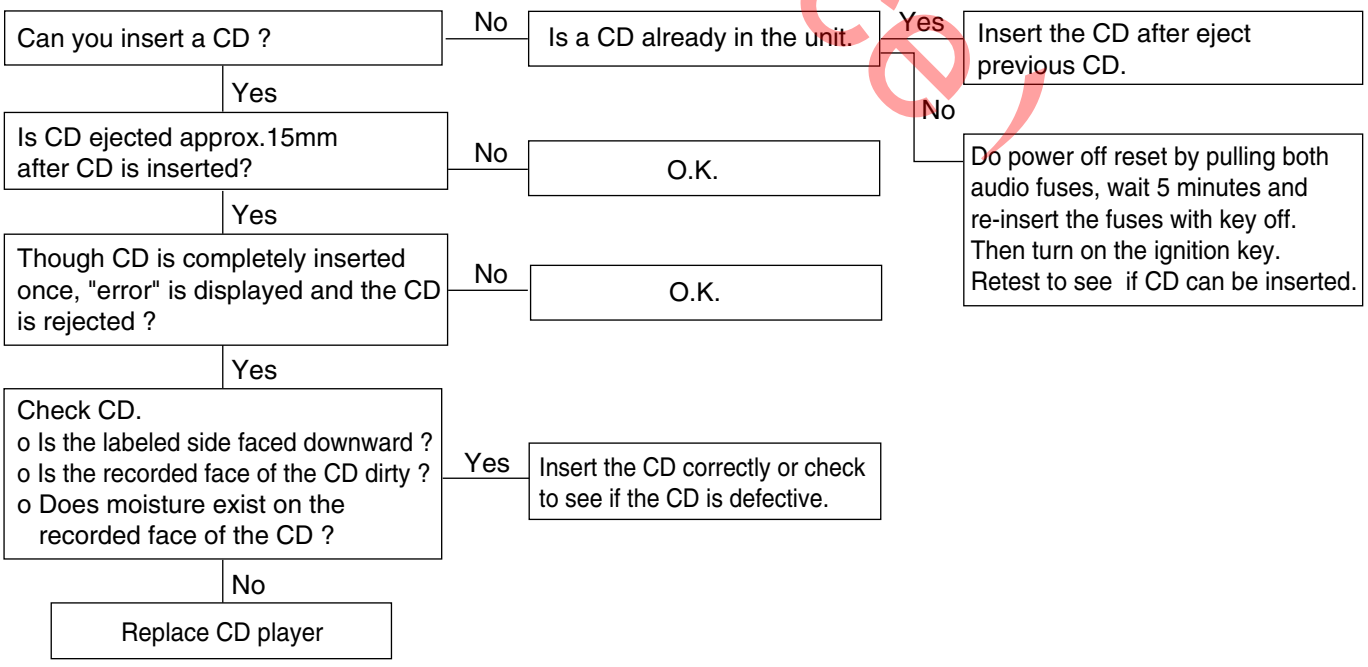
2. TAPE



LTIF001G

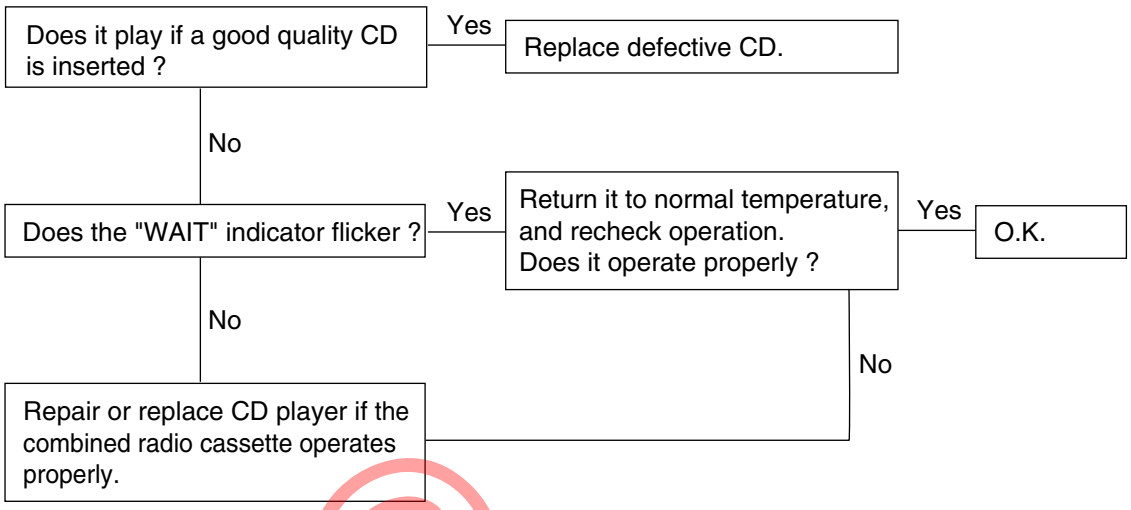
CHART 5

1. CD WILL NOT BE ACCEPTED



LTIF001H

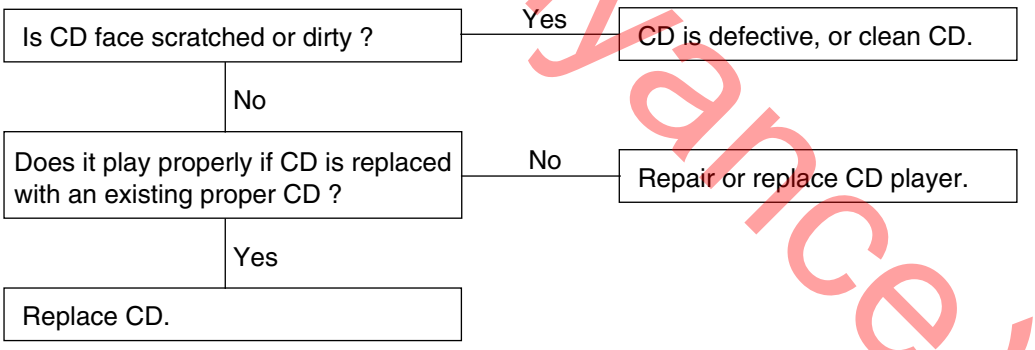
2. NO SOUND



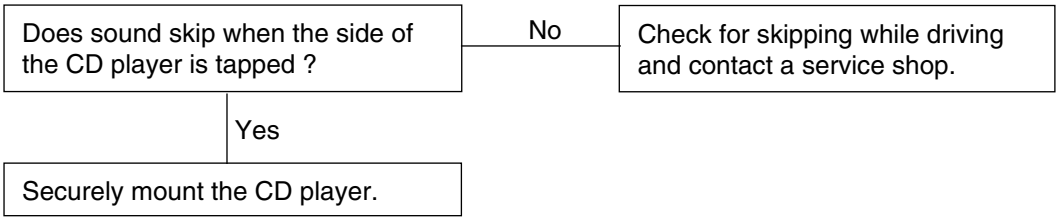
LTIF001I

3. CD SOUND SKIPS

1) Sound sometimes skips when parking.

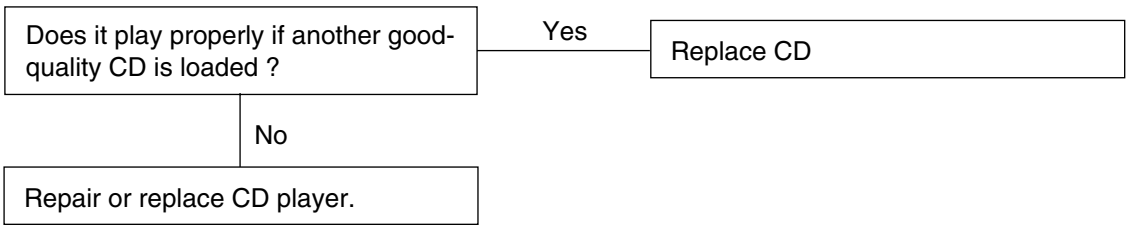


2) Sound sometimes skips when driving.
(Stop vehicle, and check it.)
(Check by using a CD which is free of scratches, dirt or other damage.)

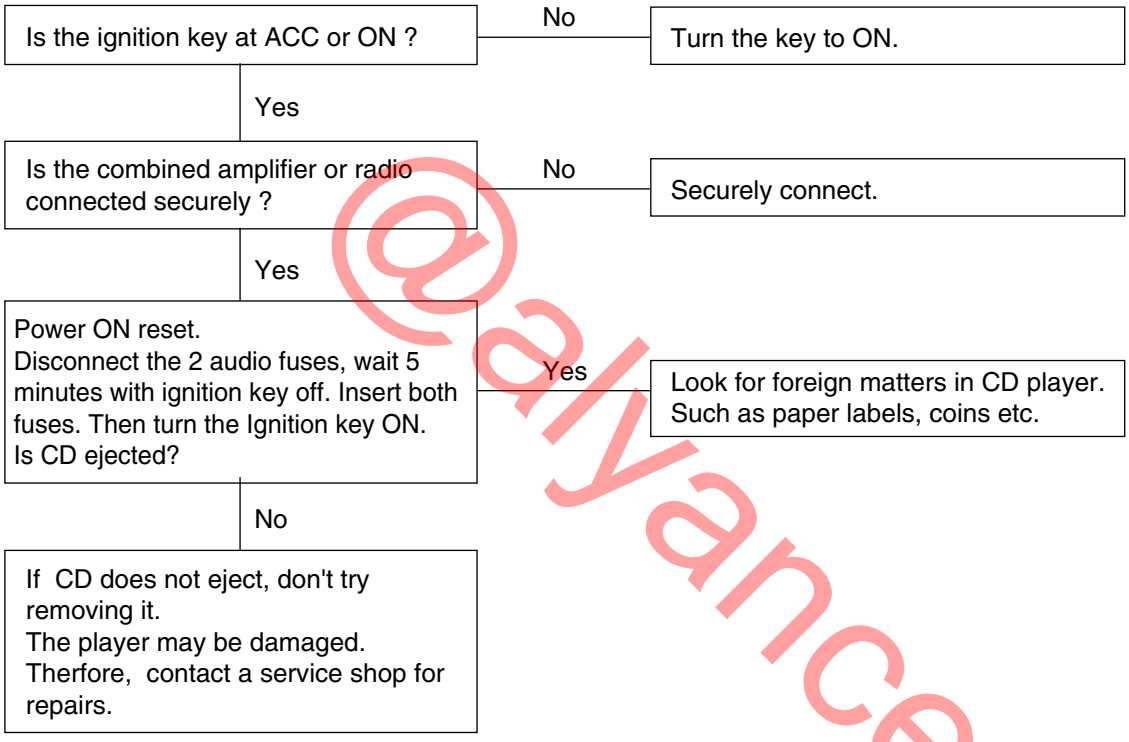


LTIF001J

4. SOUND QUALITY IS POOR



5. CD WILL NOT EJECT



6. NO SOUND FROM ONE SPEAKER

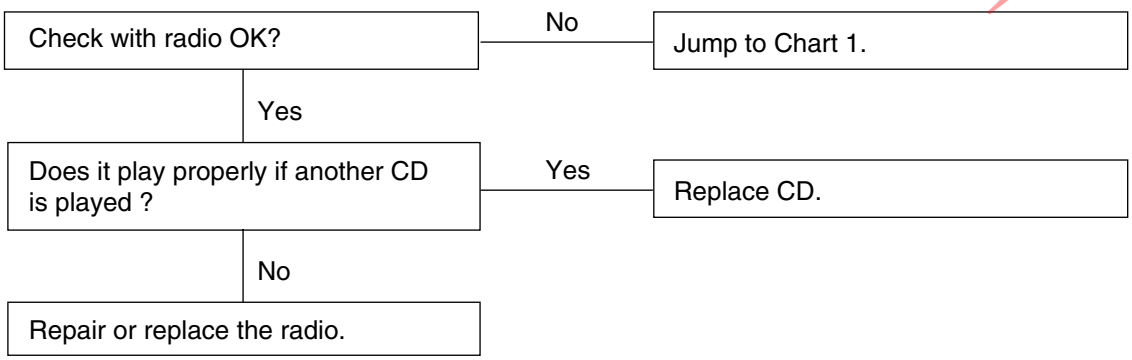


CHART 6

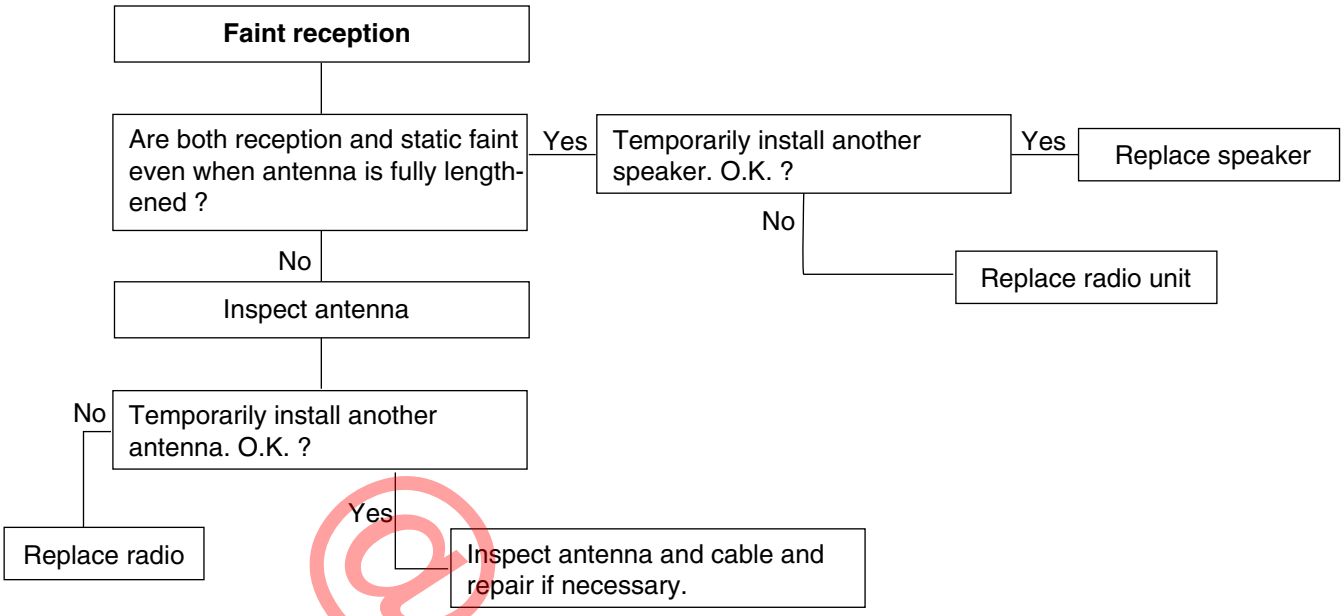


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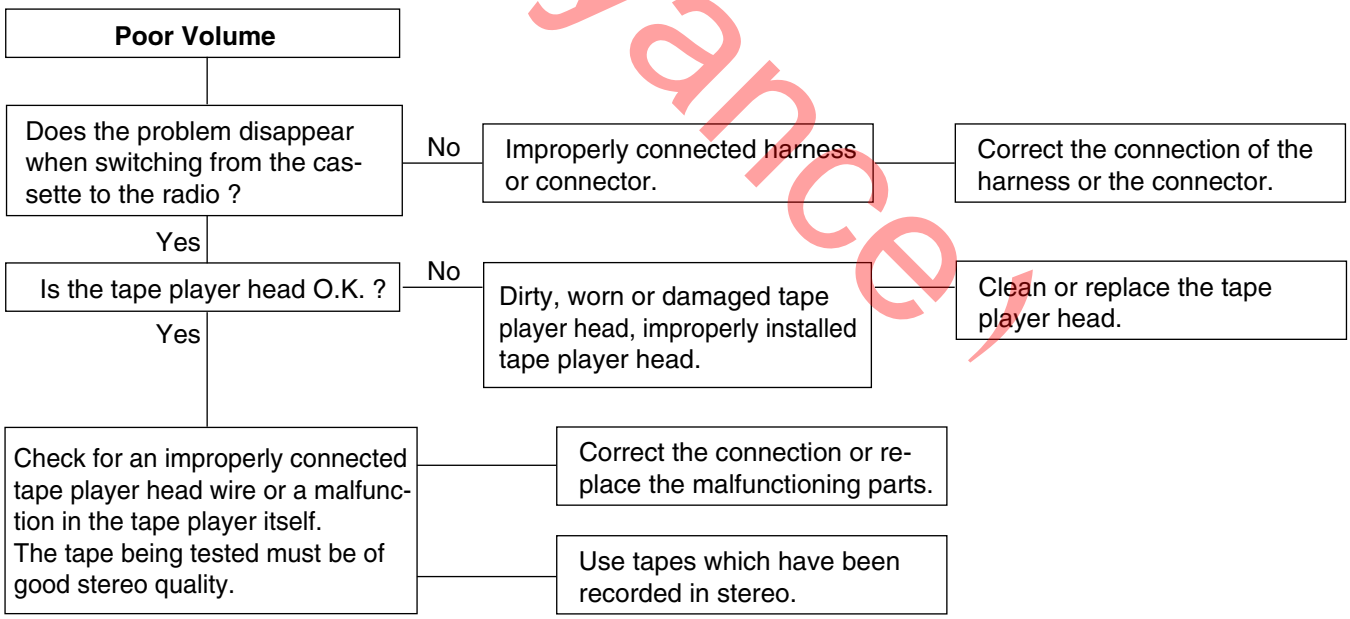
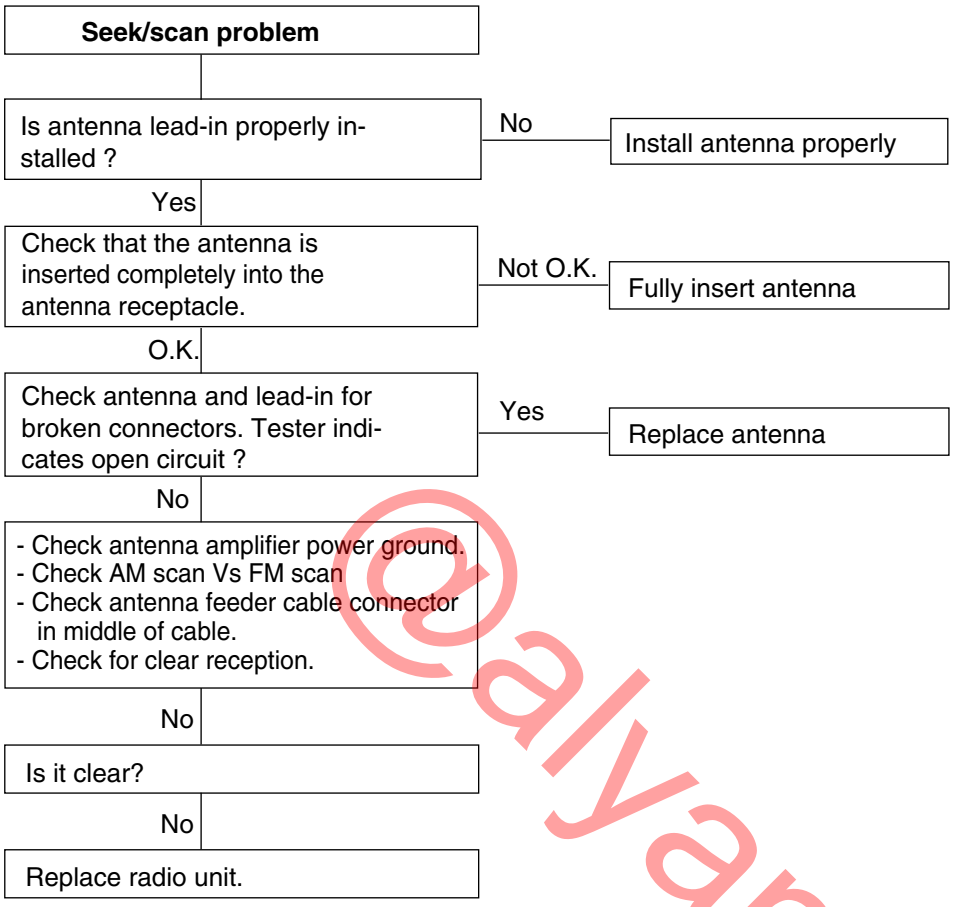
CHART 7



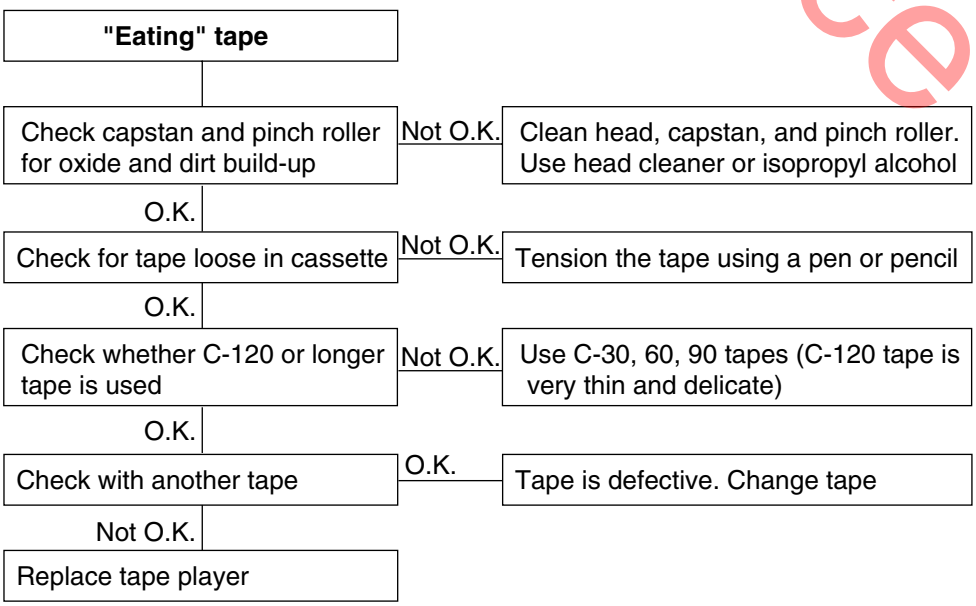
LTIF001M

CHART 8



LTIF001N

CHART 9



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