

# TROUBLESHOOTING

## 1. DIAGNOSIS FUNCTION

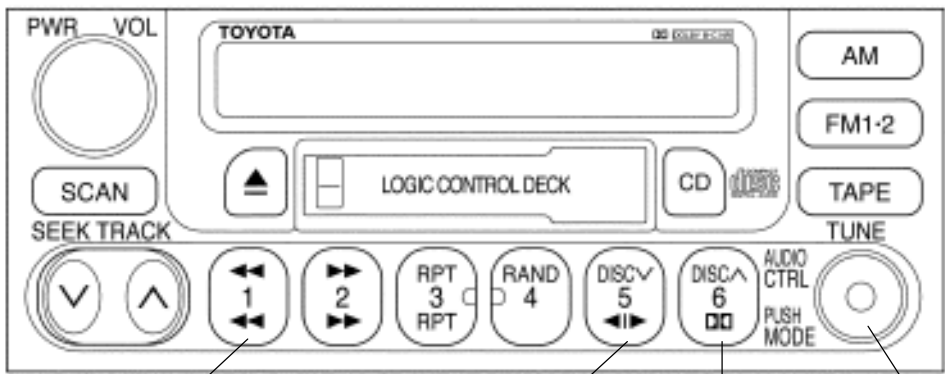
Error codes over tuner and connected equipment are displayed on the screen of tuner.

(a) Diagnosis start-up

For shifting to diagnosis mode, push "CD" button 3 times with pressing "1" and "6" of TRAC TUNE APS button at the same time while the audio power is OFF and ACC is ON.

In diagnosis mode, by pressing "CD" button for 2 seconds or turning the ignition key OFF, the diagnosis mode is released.

<Example>



(b) LAN check

When starting up the diagnosis mode, the mode turns to LAN check mode, the screen displays the code numbers (physical address) of tuner and connected equipment. Smaller codes are displayed in order, displayed code numbers are switched by operating TUNE "UP" or TUNE "DOWN" button. In LAN check mode, by pressing "5" of TRAC TUNE APS button for more than 2 secs., diagnosis memory of each equipment can be deleted, when deletion is completed, the mode returns to LAN check mode.

**Code No. (physical address) List**

Code No.	Equipmentname
190	Radio receiver assembly (Audio head unit)

(c) System check

When pressing "1" of TRAC TUNE APS button in LAN check mode, the mode turns to the system check mode, the system performs self diagnosis of connected equipment and displays the results. The smaller code numbers (physical address) are displayed in order (code No. (physical address), diagnosis code, support code of diagnosis code (object equipment)). When no error is detected in the system, "00" is displayed. When an error code is detected, up to 6 codes per one system are displayed. Pressing TUNE "UP" or TUNE "DOWN" switches the display. In the system check mode, when pressing "6" of TRAC TUNE APS button the mode returns to LAN check mode.

## (d) Diagnosis memory

In LAN check mode, when pressing "2" of TRAC TUNE APS button the mode turns to the diagnosis memory mode. The results of self diagnosis performed over tuner and connected equipment are memorized and displayed. The smaller code numbers (physical address) are displayed in order (code No. (physical address), periodic communication number when error occurs, diagnosis code, and support code of diagnosis code (object equipment)). When no error is detected in the system, "00" is displayed. When an error code is detected, up to 6 codes per one system are displayed. Pressing TUNE "UP" or TUNE "DOWN" switches the display. Each diagnosis code is same as code in the system check mode. When pressing "6" of TRAC TUNE APS button, the mode returns to LAN check mode.

**2. DIAGNOSIS CODE LIST**

Parts Name	DTC	Diagnosis item	Diagnosis content	Countermeasure and inspected parts	System Check	Diagnosis memory
Head Unit	41	AM tuner error	There is an error in AM tuner.	Radio receiver check.	X	○
	42	FM tuner error	There is an error in FM tuner.		X	○
	50	Cassette error	There is an error in cassette deck.		X	○
	D1	Transmitter error	An error occurs during transmitting a signal from head unit to the system.	Radio receiver check. Wire harness and connector check.	○	○
	D4	AVC-LAN Periodic communication no response	Radio receiver does not respond to periodic communication.	Radio receiver check.	X	○
	FF	Diagnosis no response	Result of diagnosis is not issued from start to finish.		○	X

**NOTICE:**

**When replacing the internal mechanism (computer part) of the audio system, be careful that no part of your body or clothing comes in contact with the terminals of the leads from the IC, etc. of the replacement part (spare part).**

**HINT:**

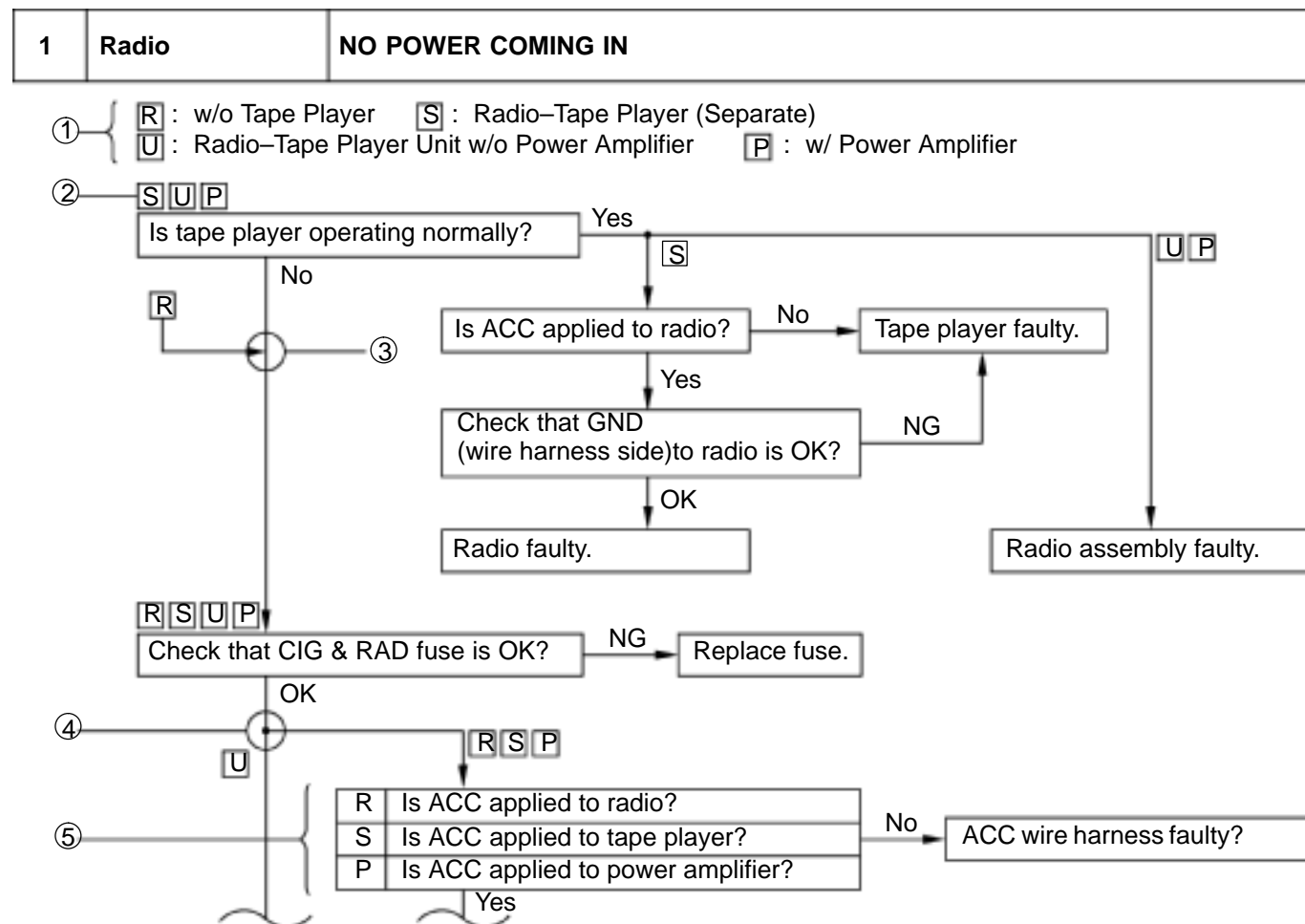
This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and was prepared on the assumption of system component troubles (except for the wires and connectors, etc.).

Always inspect the trouble taking the following items into consideration.

- Open or short circuit of the wire harness
- Connector or terminal connection fault

	Problem	No.
Radio	No power coming in.	1
	Power coming in, but radio not operating.	2
	Noise present, but AM – FM not operating.	3
	Either speaker does not work.	4
	Either AM or FM does not work.	5
	Reception poor (Volume faint).	5
	Few preset tuning bands.	5
	Sound quality poor.	6
	Cannot set station select button.	7
	Preset memory disappears.	7
Tape Player	Cassette tape cannot be inserted.	8
	Cassette tape is inserted, but no power.	9
	Power coming in, but tape player not operating.	10
	Either speakers does not work.	11
	Sound quality poor (Volume faint).	12
	Tape jammed, malfunction with tape speed or auto–reverse.	13
	APS, SKIP, RPT buttons not operating.	14
CD Player	Cassette tape will not be ejected.	15
	CD cannot be inserted.	16
	CD inserted but no power.	17
	Power coming in, but CD player not operating.	18
	Sound jumps.	19
	Sound quality poor (Volume faint).	20
	Either speaker does not work.	21
	CD will not be ejected.	22
	Antenna does not fully extend or fully retract.	23
Antenna	Antenna – related.	24
Noise	Noise produced by vibration or shock while driving.	25
	Noise produced when engine starts.	26

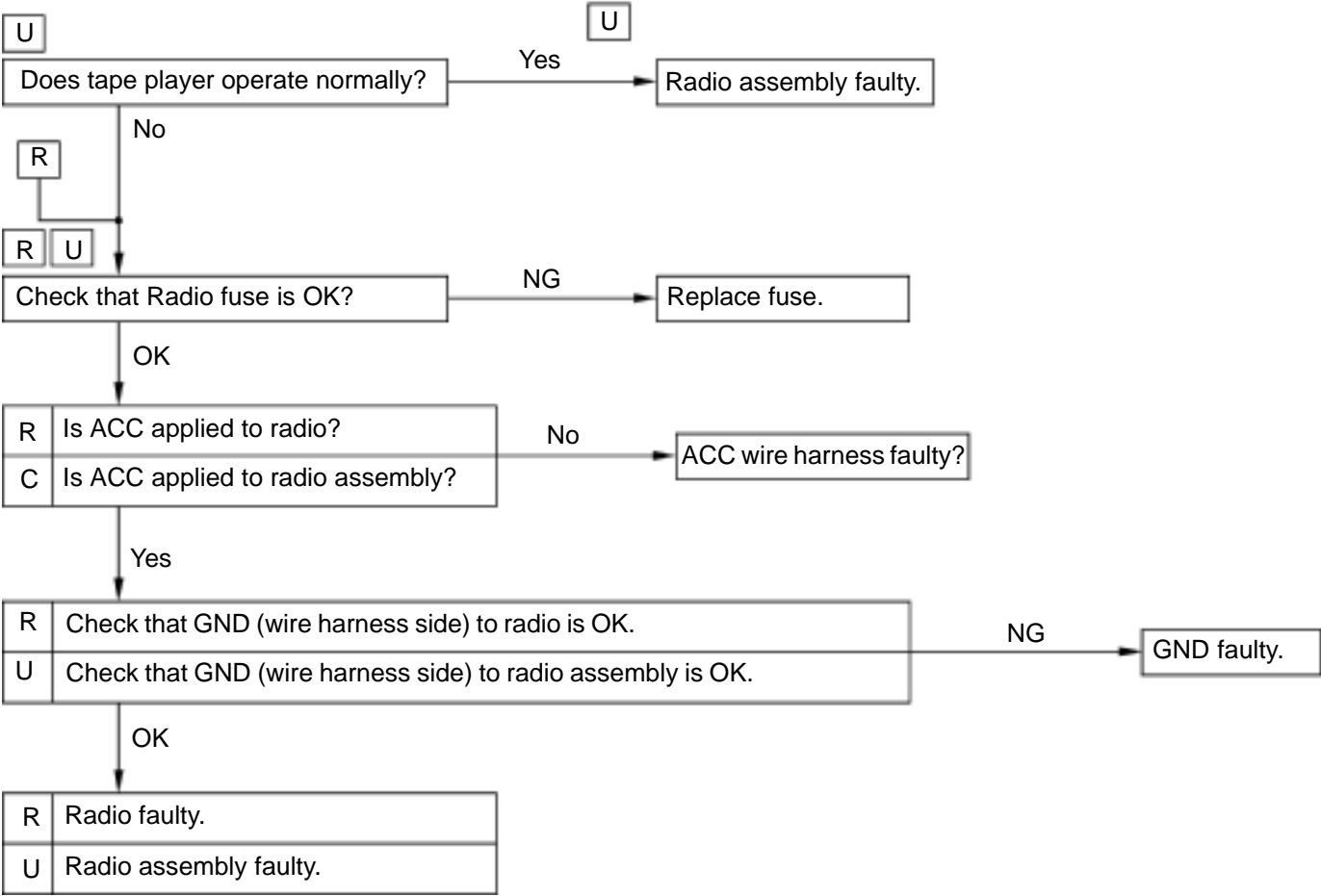
The term "AM" includes LW, MW and the term "FM" includes UKW.



- ① Audio system type and symbol used.  
HINT :  
Check the applicable type of audio system.
- ② Symbol for type of audio system the question applies to.  
HINT :  
If the audio system type is not applicable, proceed to next question below.
- ③ Junction without black circle.  
HINT :  
Proceed to next question below.
- ④ Junction with black circle.  
HINT :  
Proceed to question for applicable audio system type.
- ⑤ HINT :  
Select question for applicable audio system type.

1	Radio	NO POWER COMING IN
---	-------	--------------------

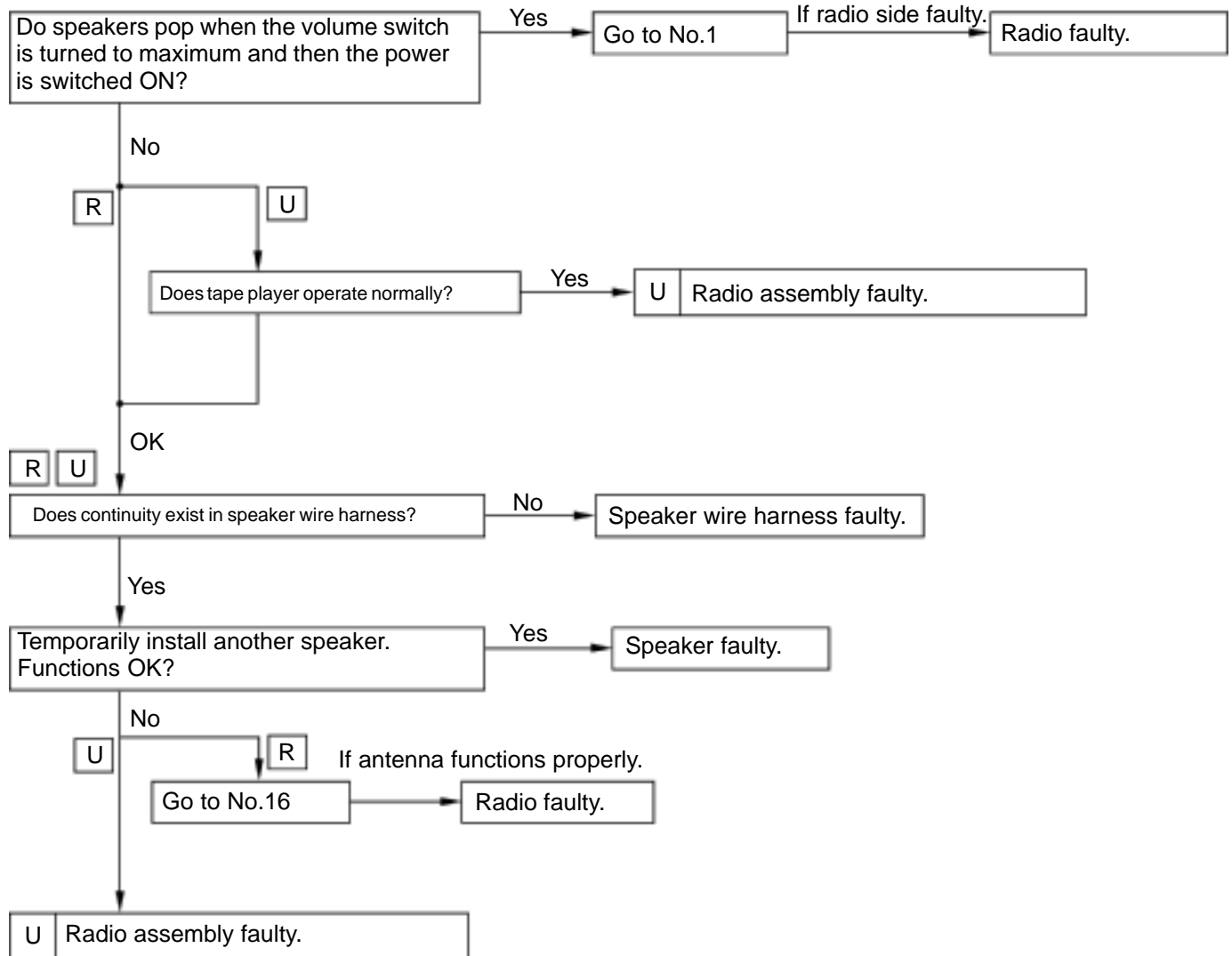
R : Radio      U : Radio-Tape Player Unit



I01420

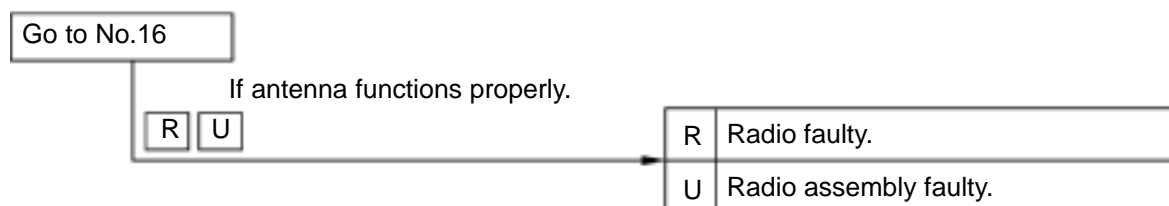
2	Radio	POWER COMING IN, BUT RADIO NOT OPERATING
---	-------	--

**R** : Radio      **U** : Radio-Tape Player Unit



3	Radio	NOISE PRESENT, BUT AM-FM NOT OPERATING
---	-------	--

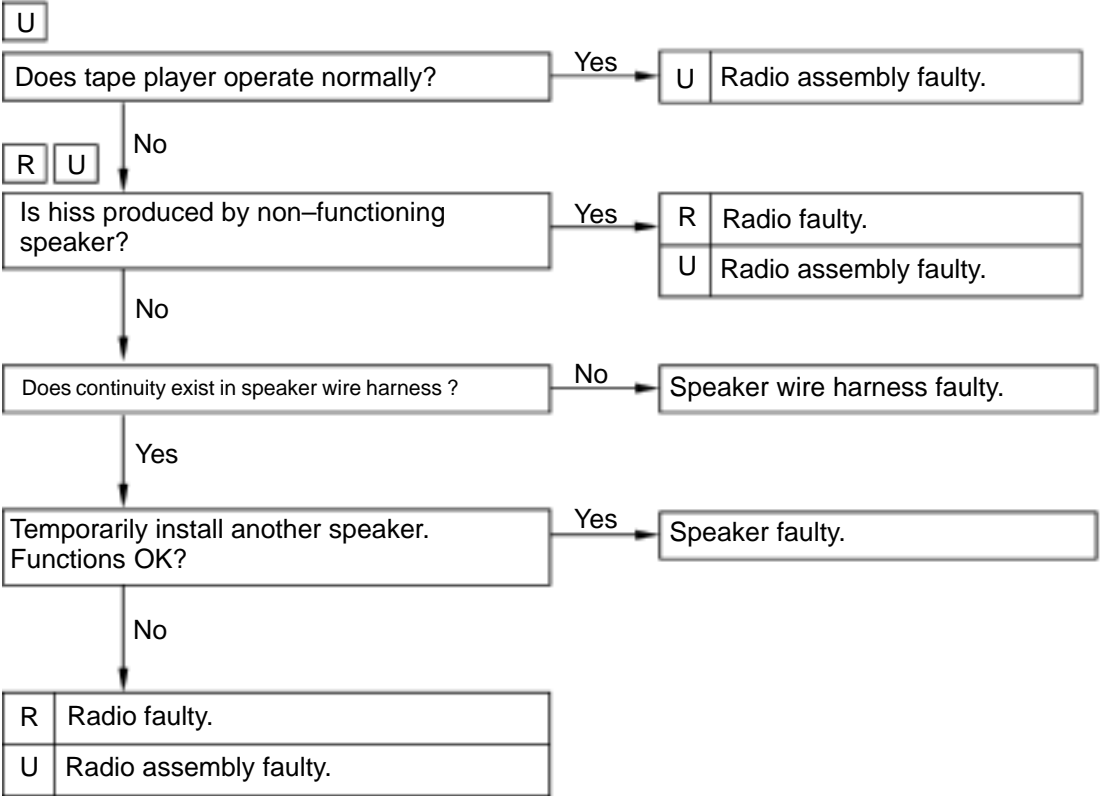
**R** : Radio      **U** : Radio-Tape Player Unit



4	Radio	EITHER SPEAKER DOES NOT WORK
---	-------	------------------------------

R	: Radio
---	---------

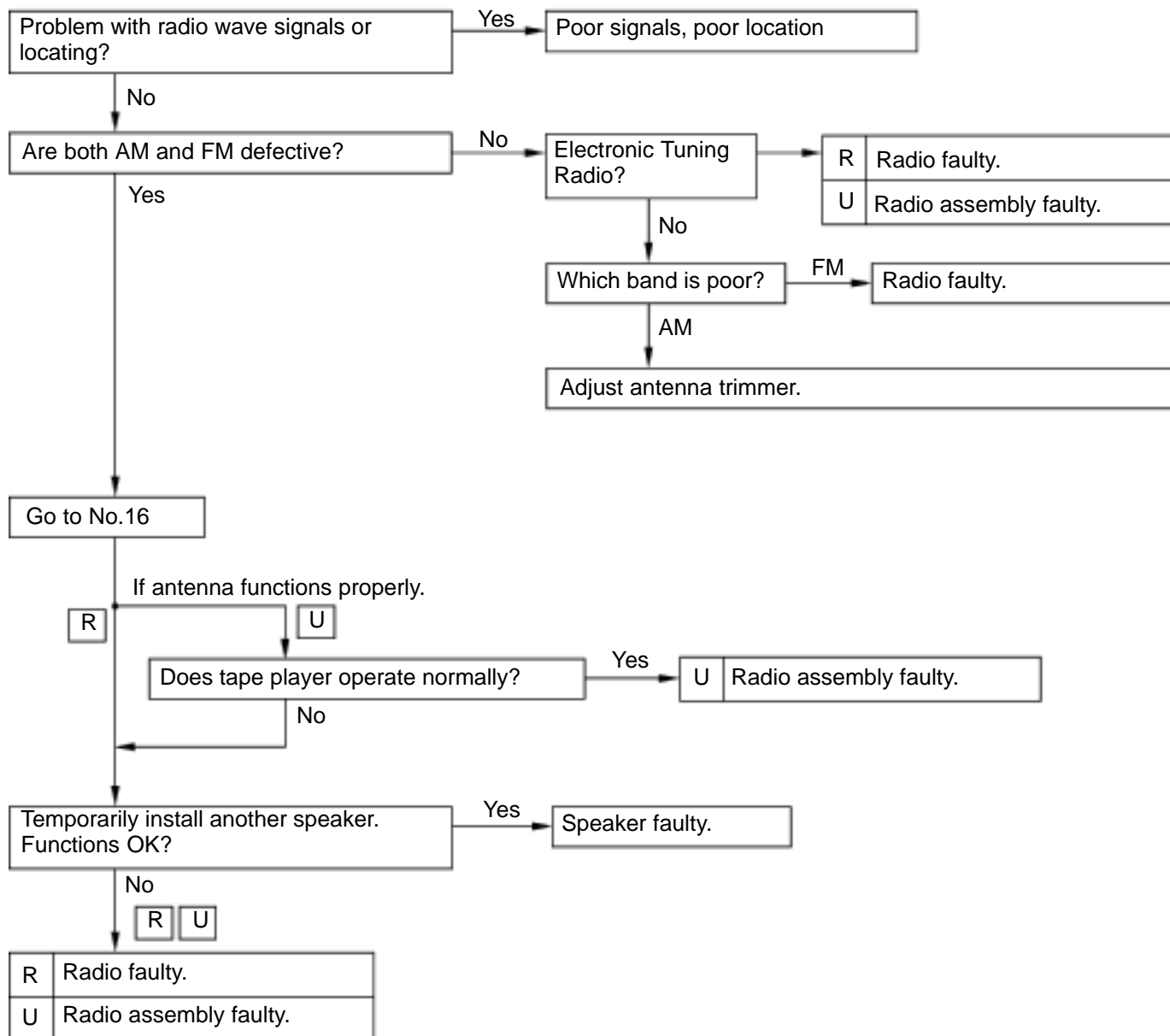
U	: Radio-Tape Player Unit
---	--------------------------



I01422

5	Radio	EITHER AM OR FM DOES NOT WORK, RECEPTION POOR (VOLUME FAINT), FEW PRESET TUNING BANDS
---	-------	---

**R** : Radio      **U** : Radio-Tape Player Unit

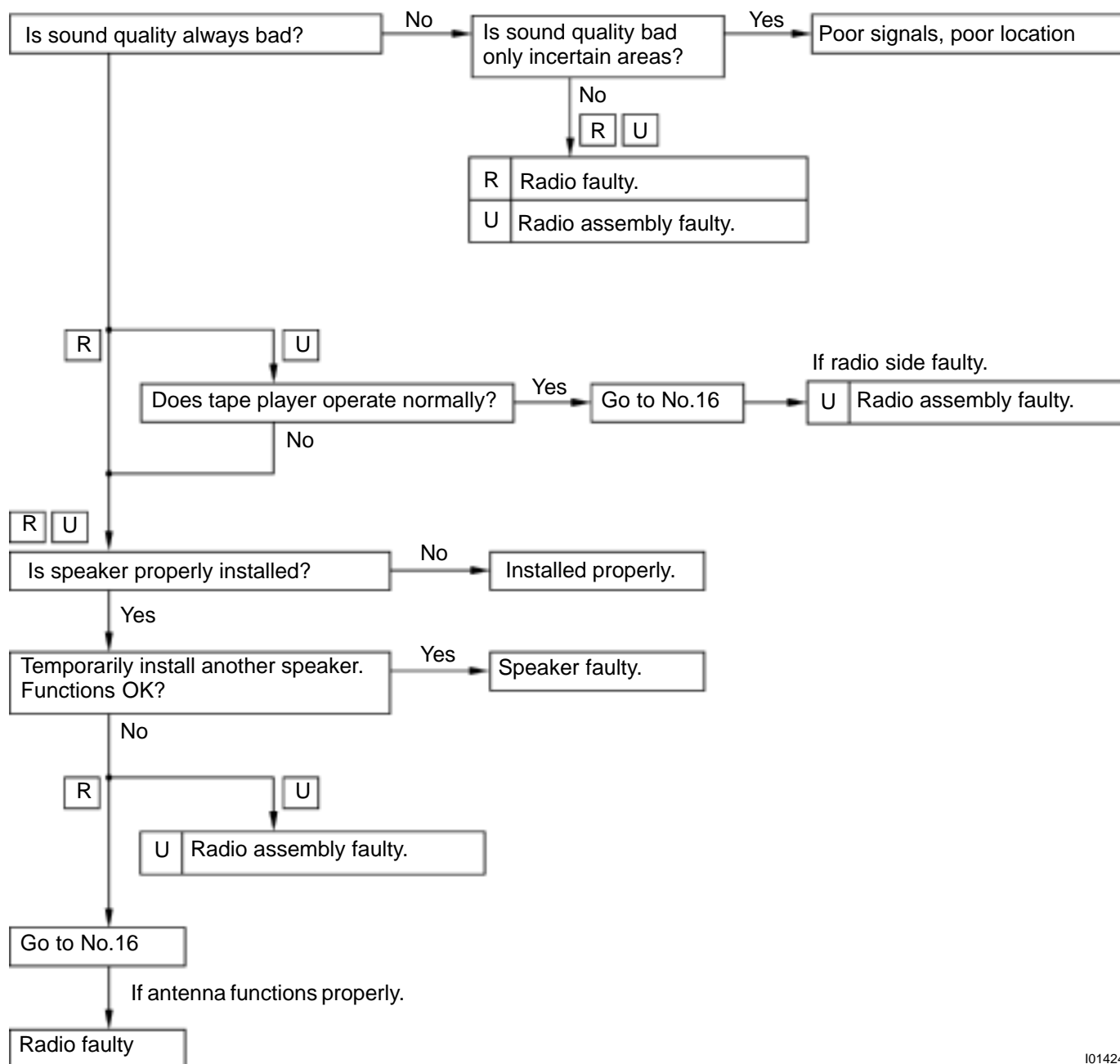


I01423



6	Radio	SOUND QUALITY POOR
---	-------	--------------------

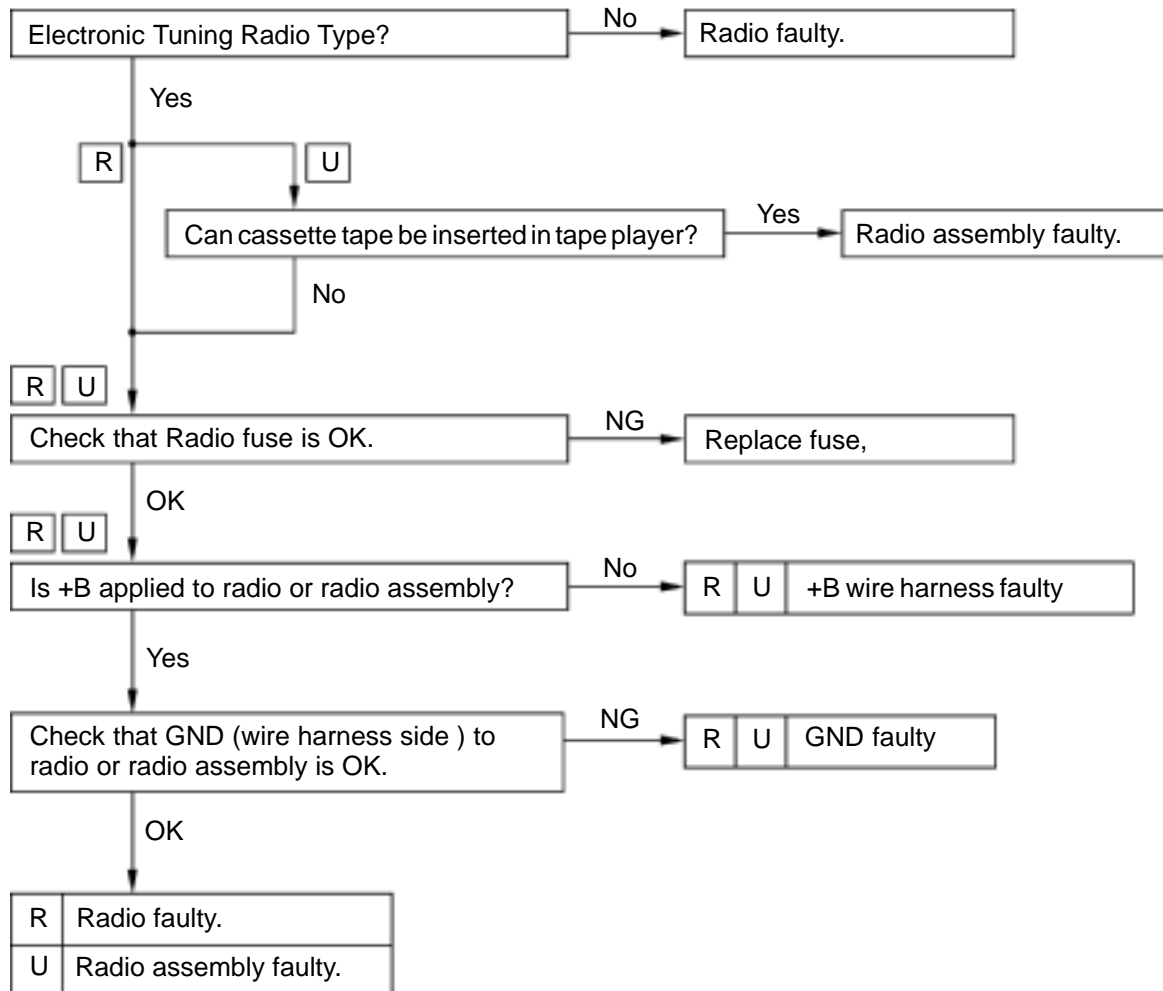
**R** : Radio      **U** : Radio-Tape Player Unit



I01424

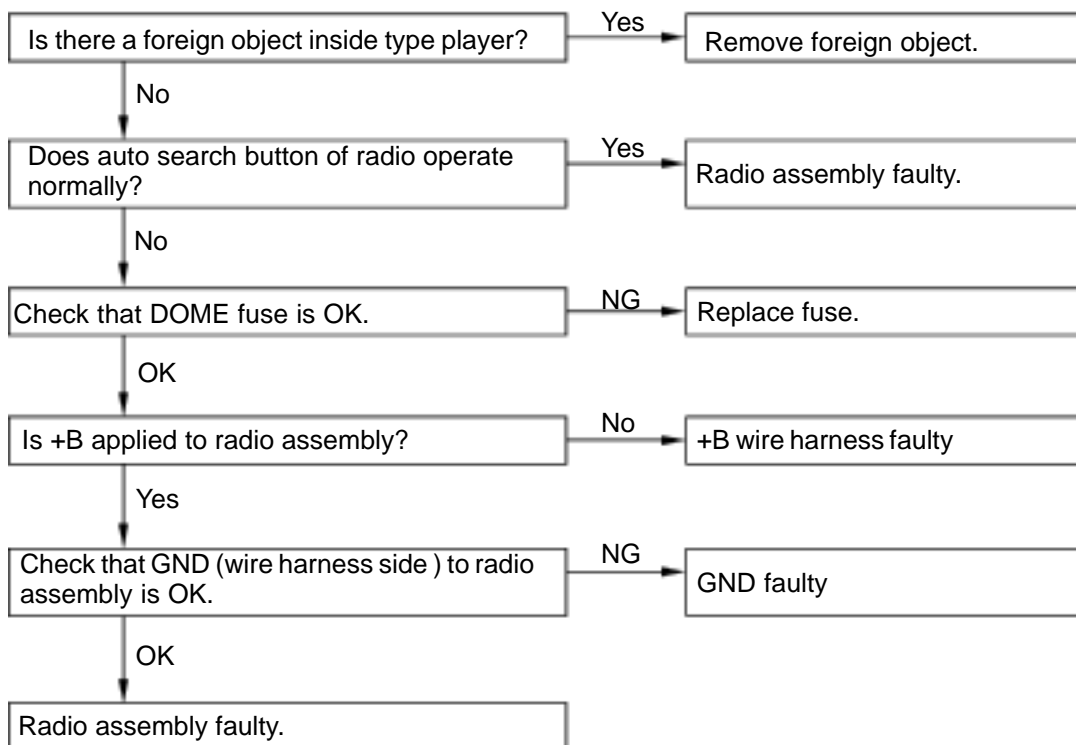
7	Radio	CANNOT SET STATION SELECT BUTTON, PRESET MEMORY DISAPPEARS
---	-------	--

**R** : Radio      **U** : Radio-Tape Player Unit



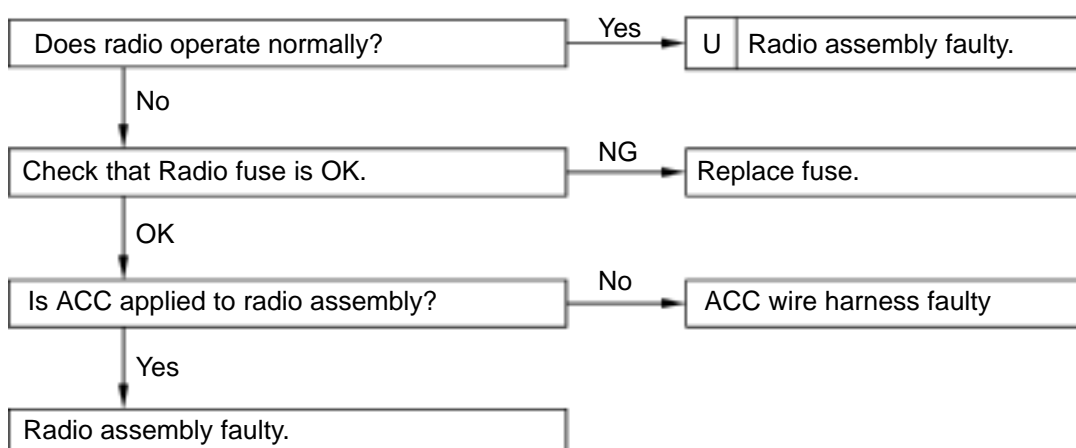
8	Tape Player	CASSETTE TAPE CANNOT BE INSERTED
---	-------------	----------------------------------

U : Radio-Tape Player Unit



9	Tape Player	CASSETTE TAPE IS INSERTED, BUT NO POWER
---	-------------	---

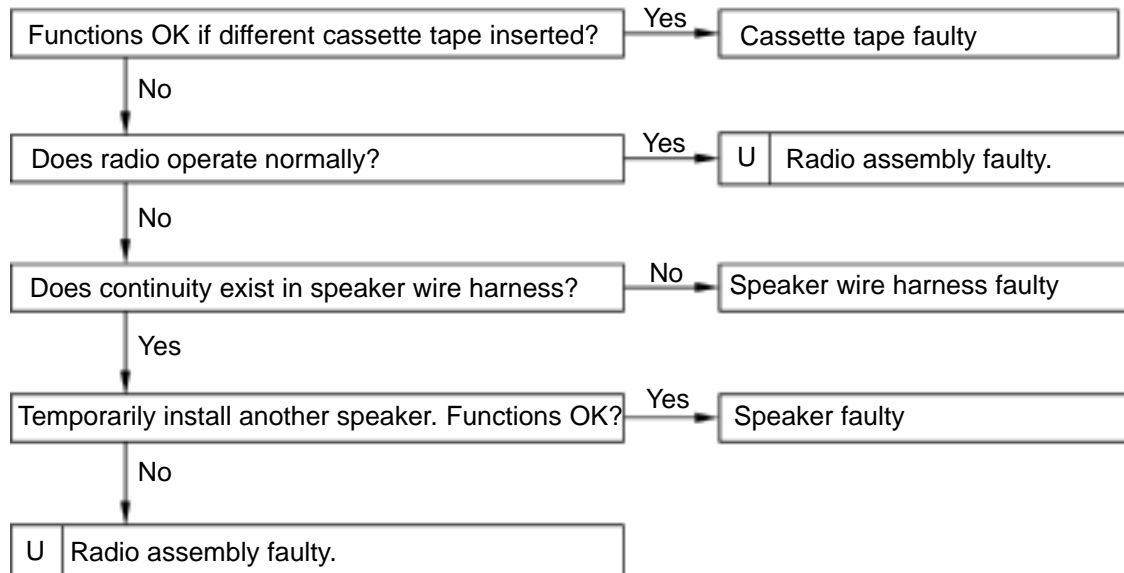
U : Radio-Tape Player Unit



I01426

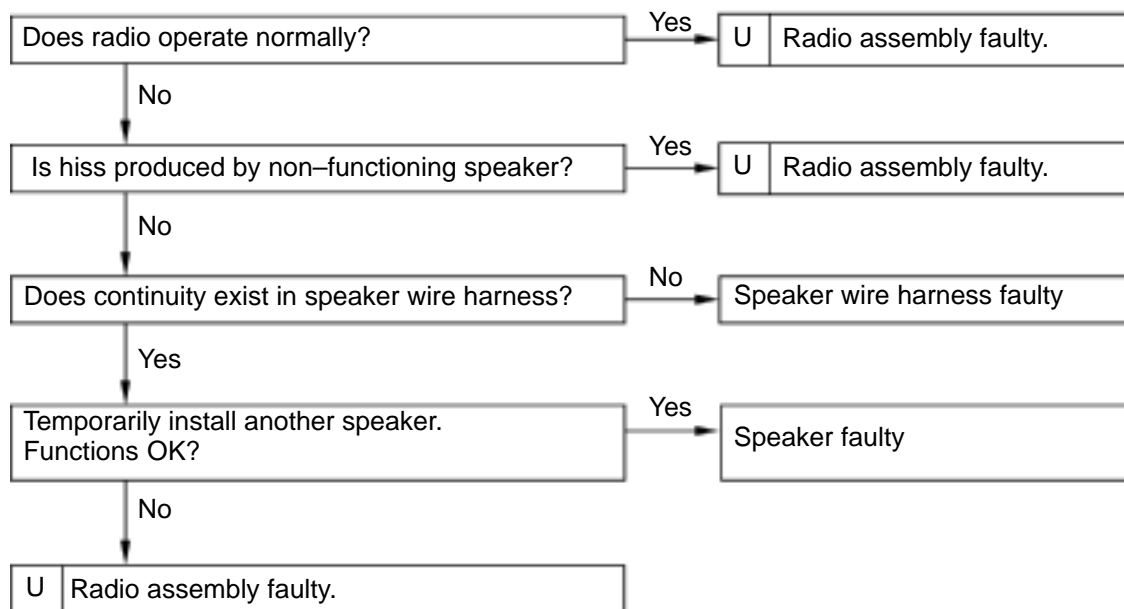
10	Tape Player	POWER COMING IN, BUT TAPE PLAYER NOT OPERATING
----	-------------	--

U : Radio-Tape Player Unit



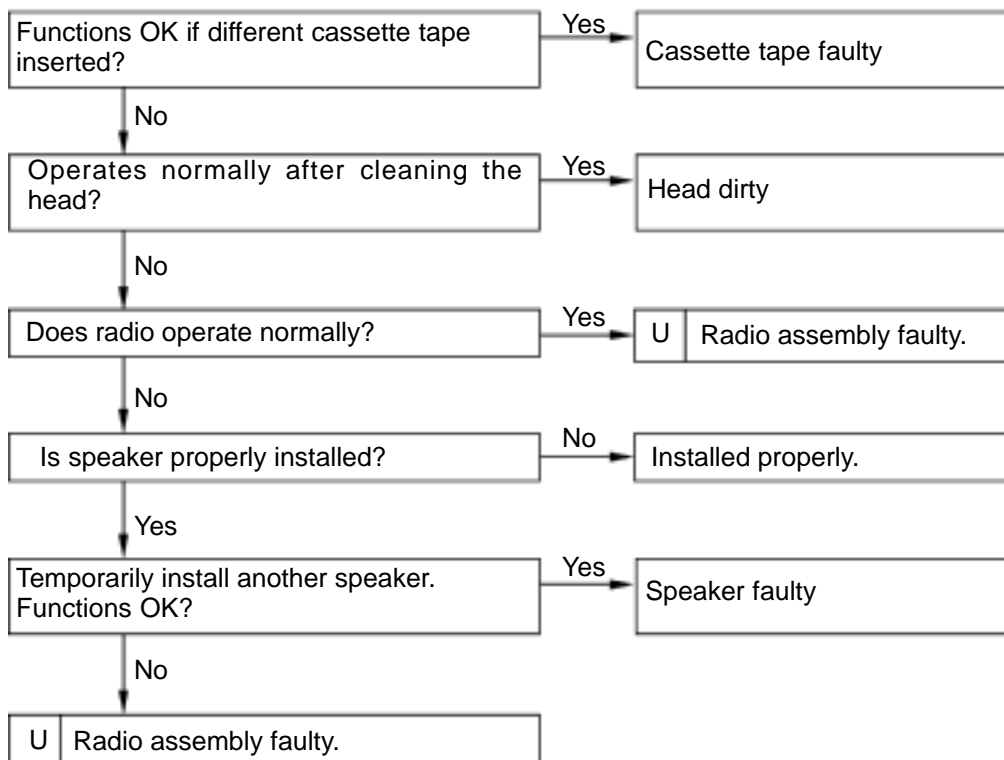
11	Tape Player	EITHER SPEAKER DOES NOT WORK
----	-------------	------------------------------

U : Radio-Tape Player Unit



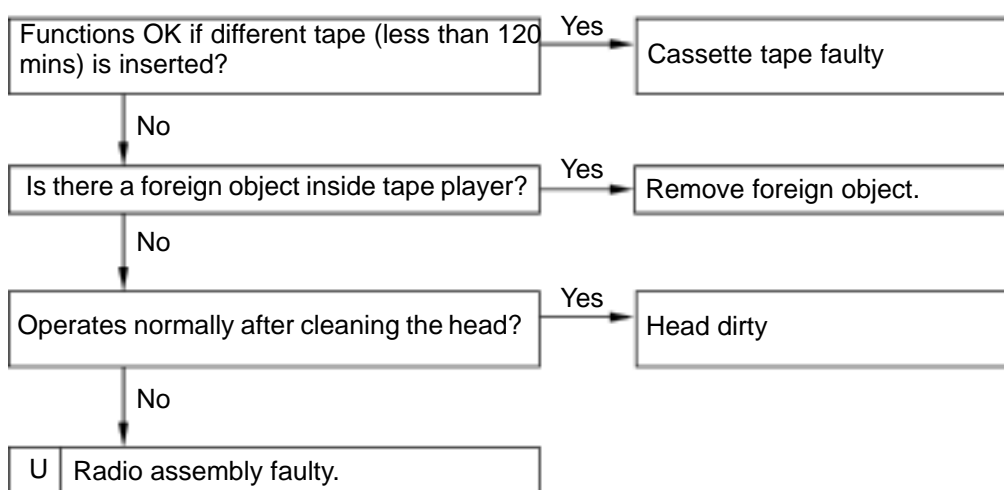
12	Tape Player	SOUND QUALITY POOR (VOLUME FAINT)
----	-------------	-----------------------------------

U : Radio-Tape Player Unit



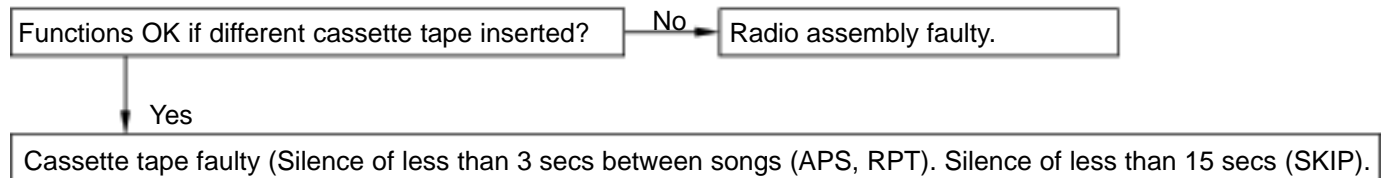
13	Tape Player	TAPE JAMMED, MALFUNCTION WITH TAPE SPEED OR AUTO- REVERSE
----	-------------	---

U : Radio-Tape Player Unit



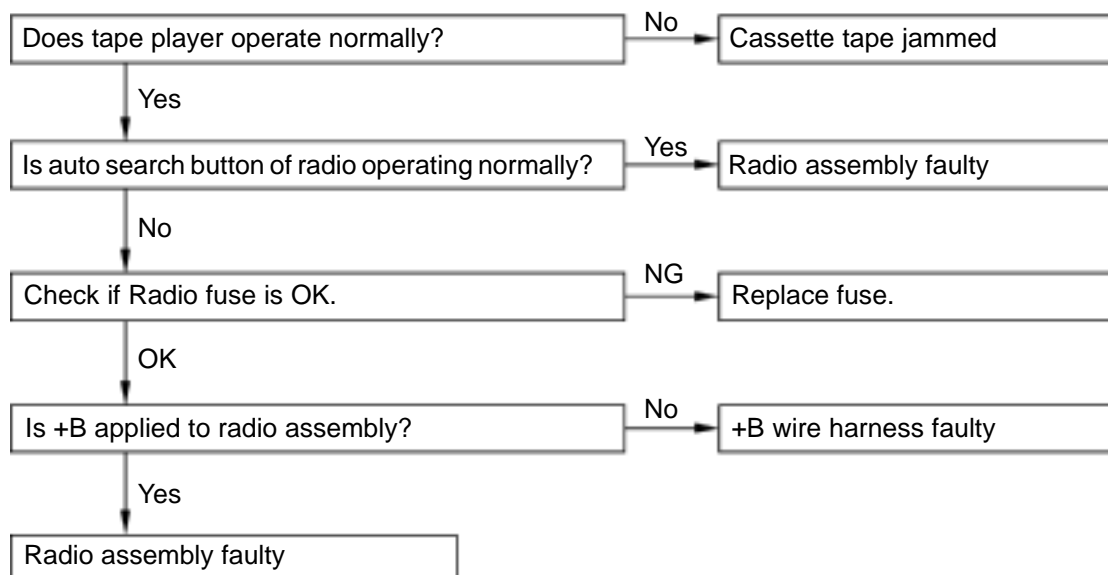
I01428

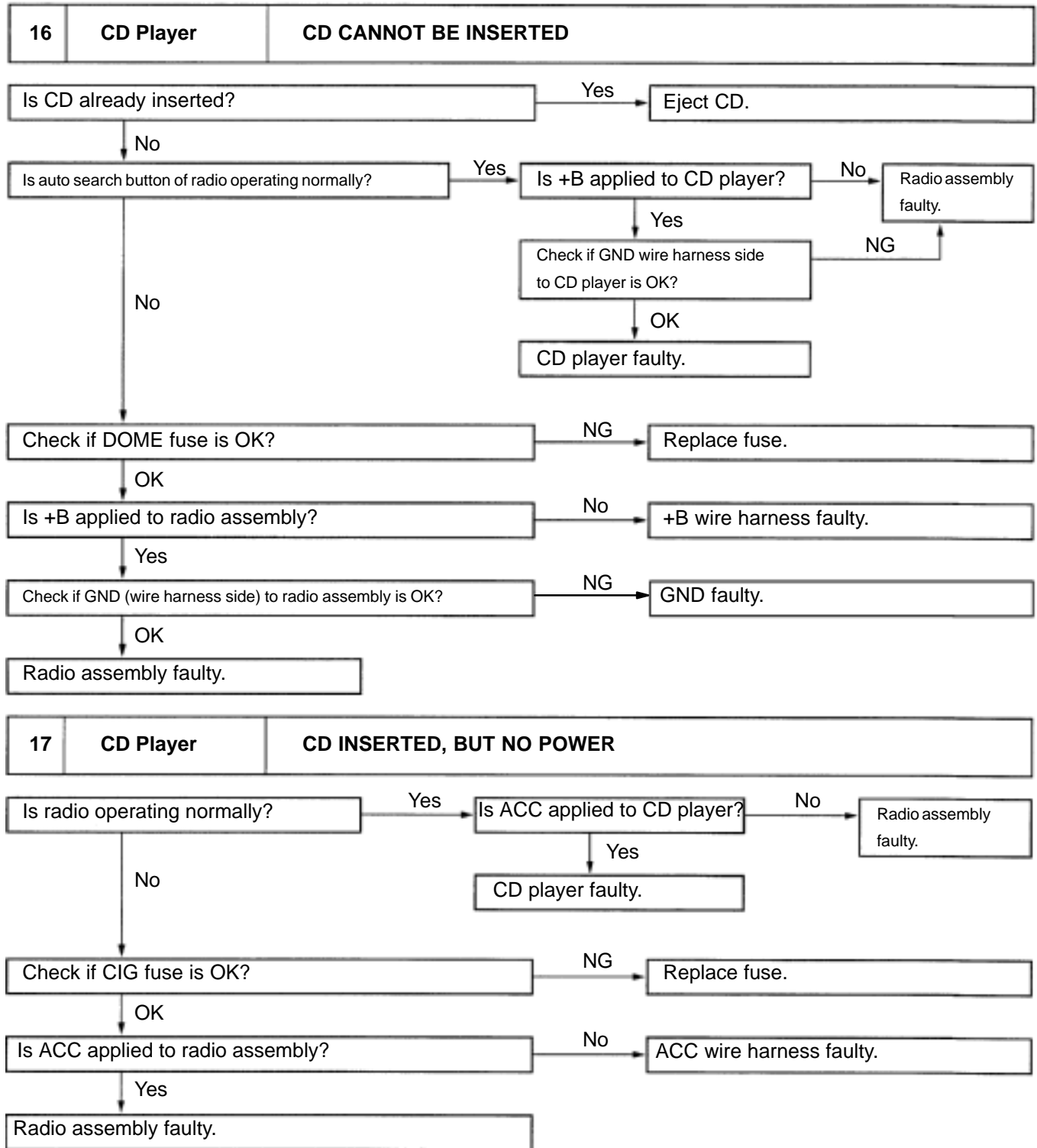
14	Tape Player	APS, SKIP, RPT BUTTONS NOT OPERATING
----	-------------	--------------------------------------

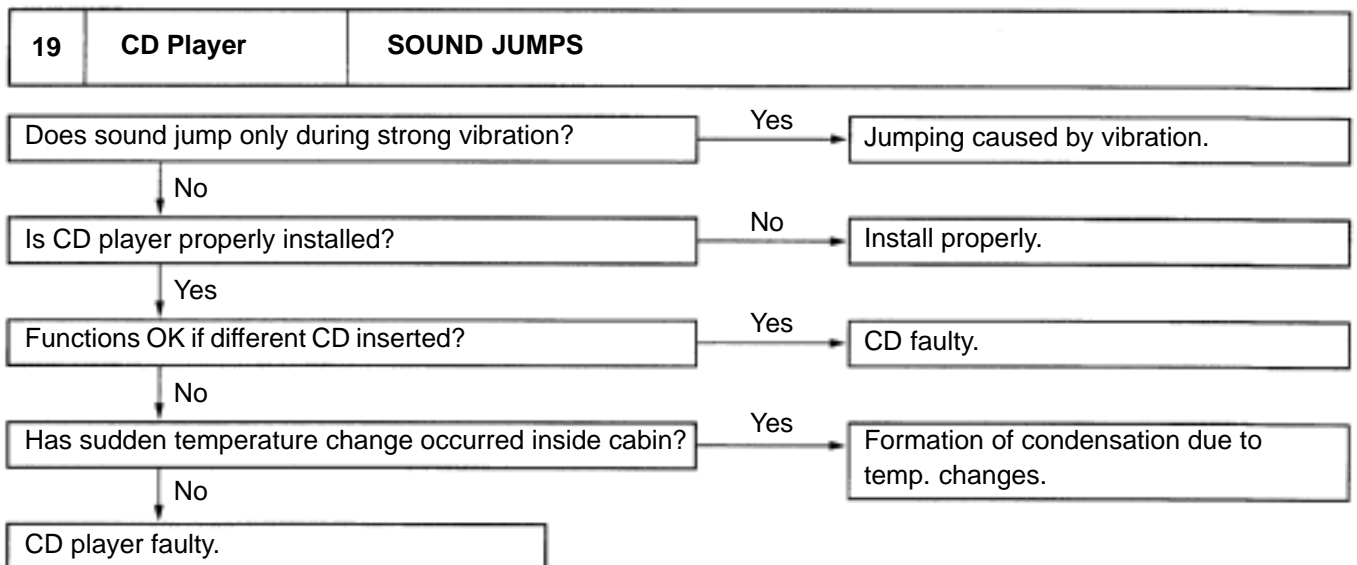
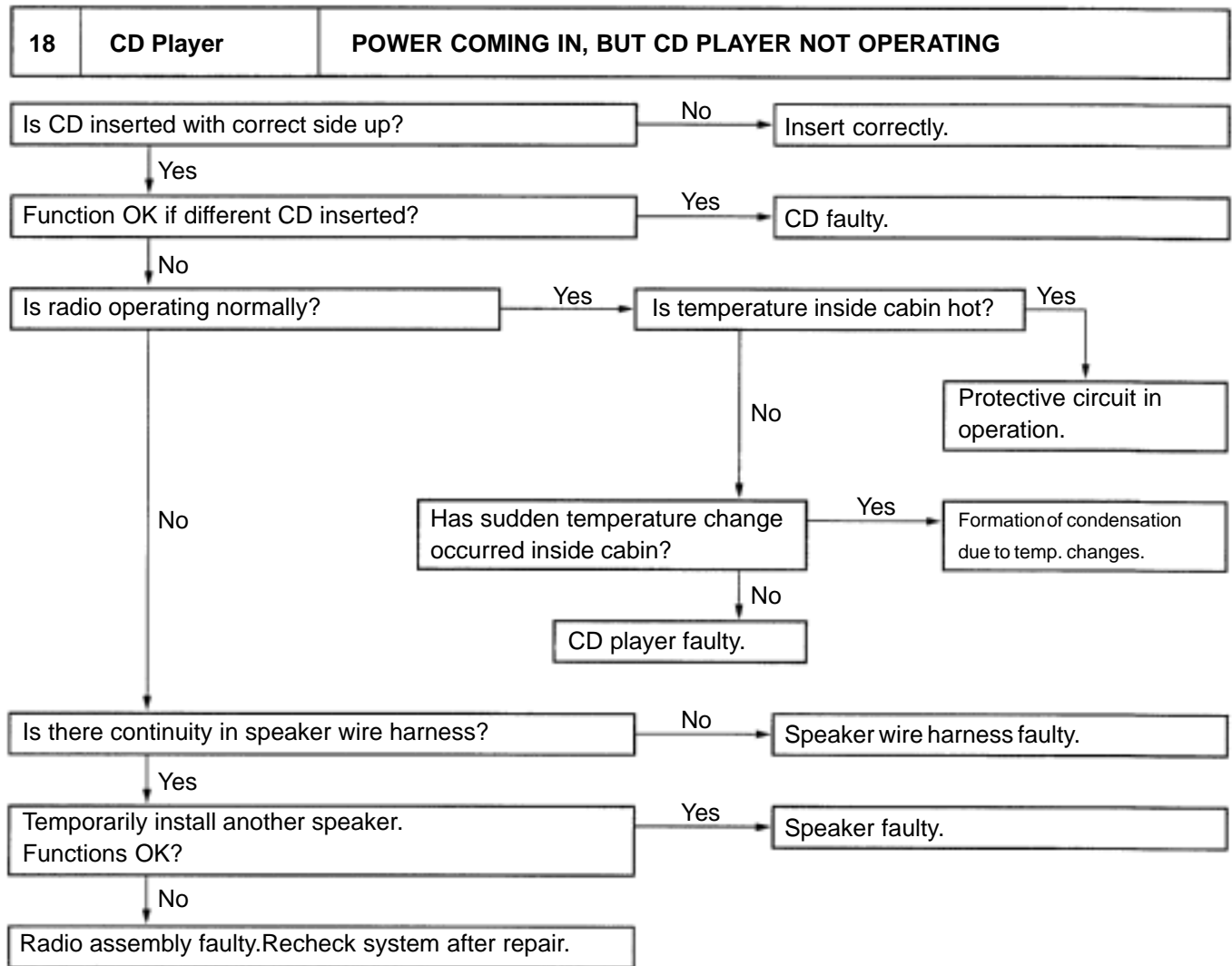


15	Tape Player	CASSETTE TAPE WILL NOT BE EJECTED
----	-------------	-----------------------------------

U : Radio-Tape Player Unit

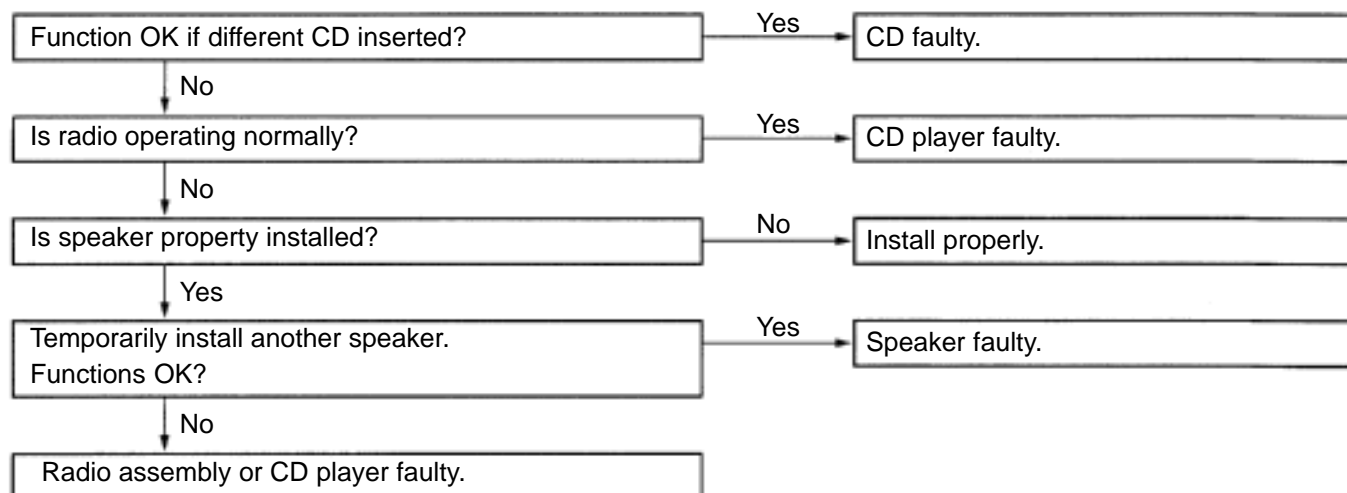




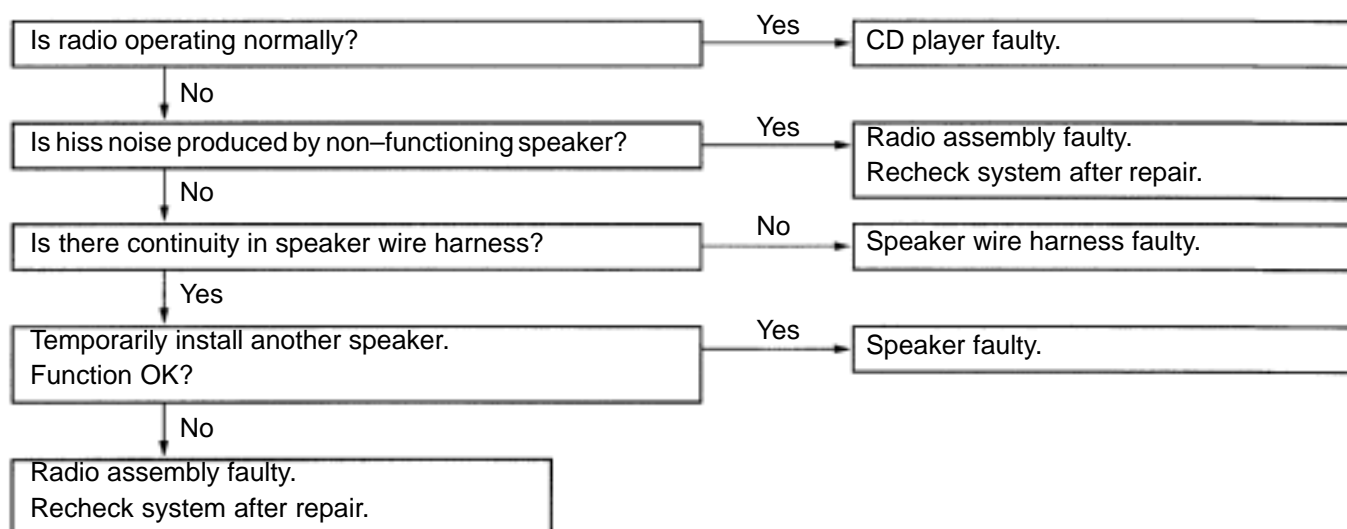


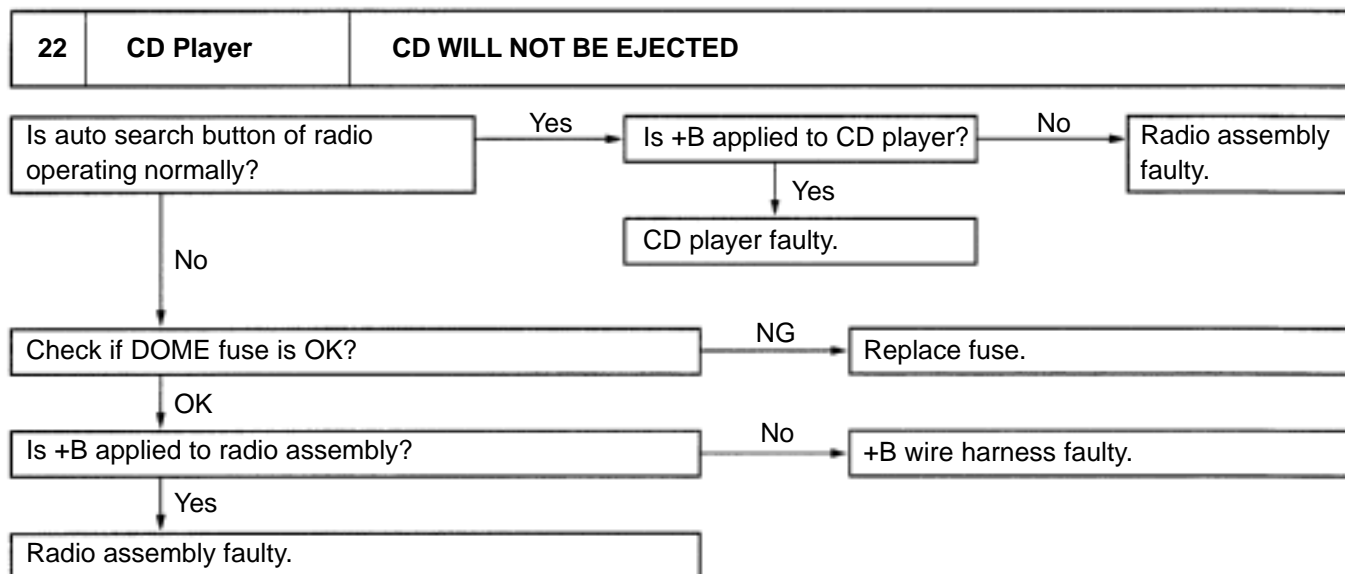


<b>20</b>	<b>CD Player</b>	<b>SOUND QUALITY POOR (VOLUME FAINT)</b>
-----------	------------------	--

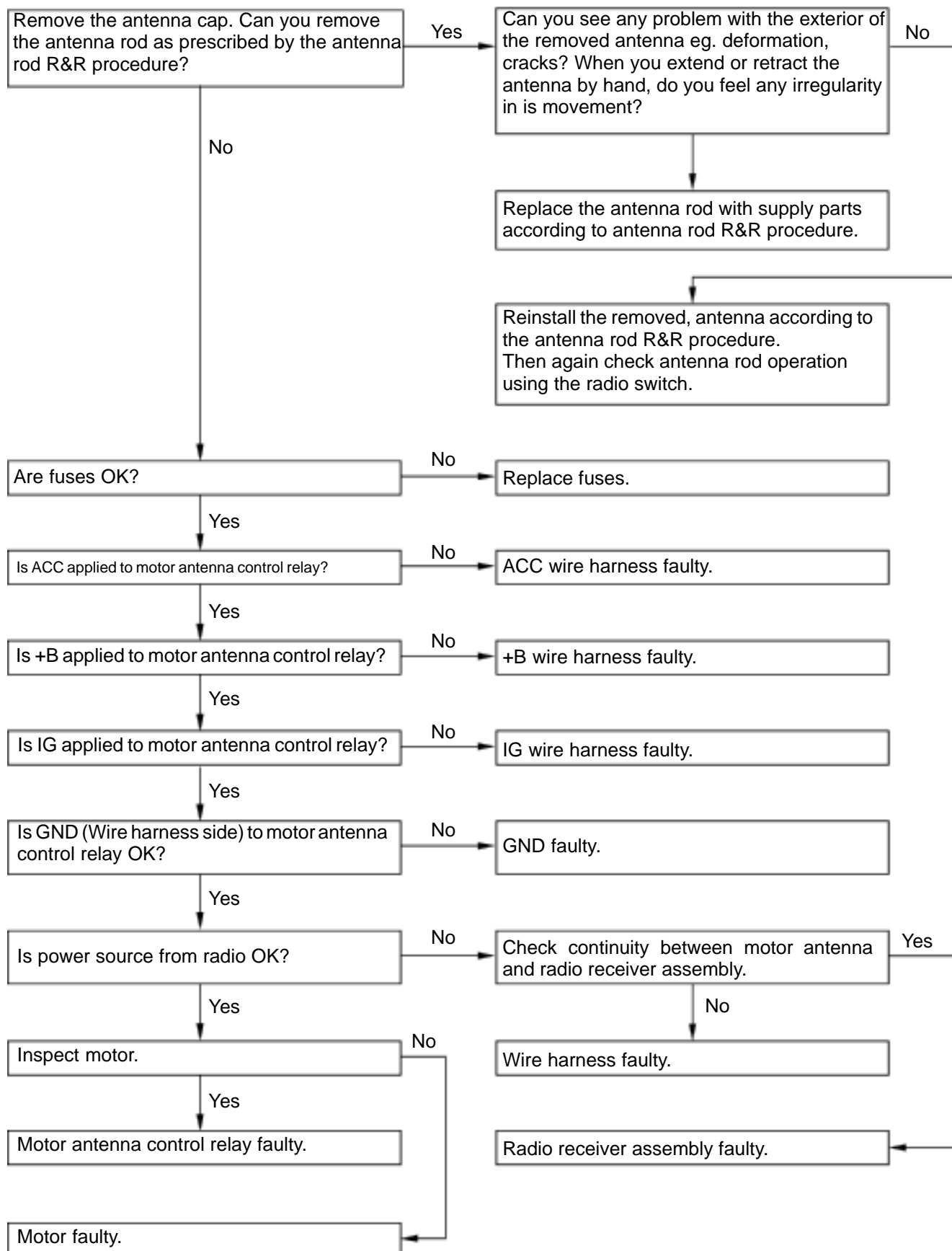


<b>21</b>	<b>CD Player</b>	<b>EITHER SPEAKER DOES NOT WORK</b>
-----------	------------------	-------------------------------------

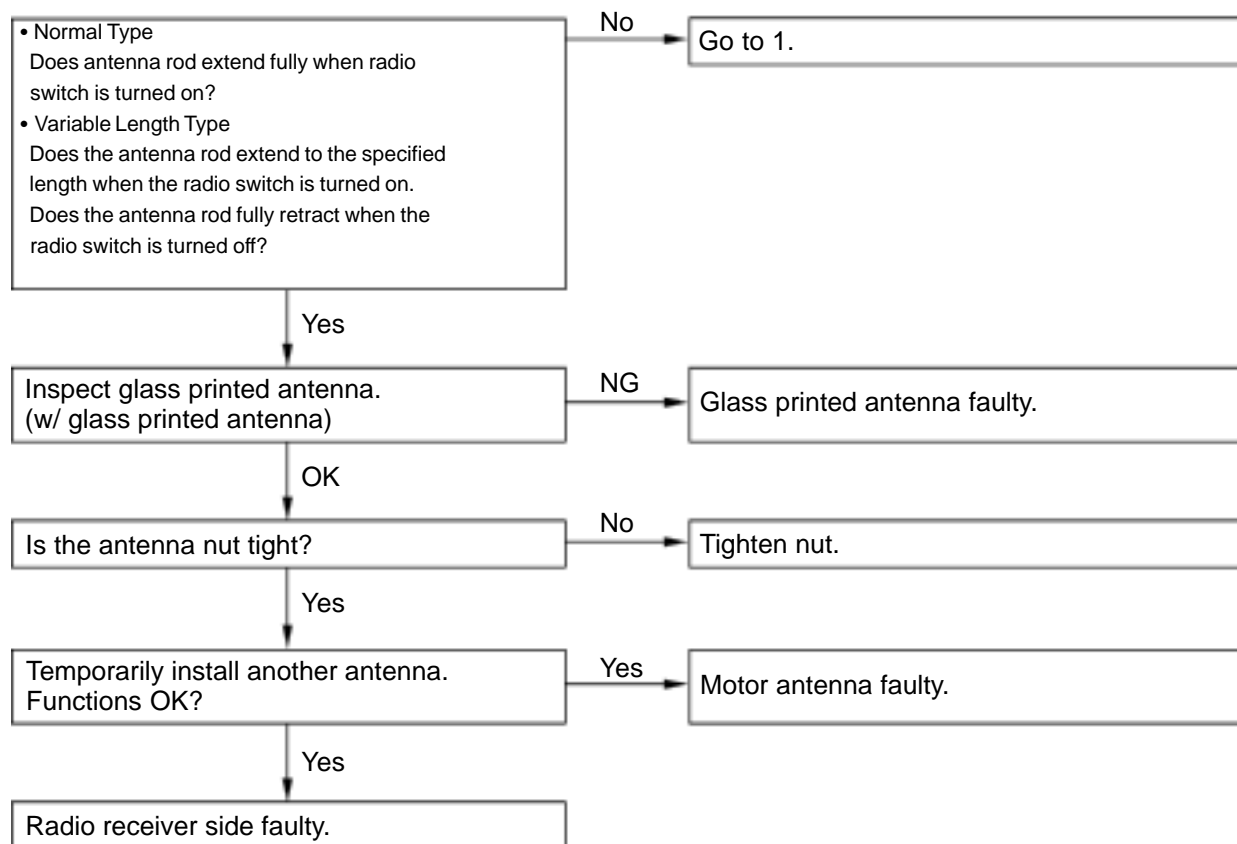




23	Tape Player	<b>ANTENNA DOES NOT FULLY EXTEND OR FULLY RETRACT</b>
----	-------------	---



<b>24</b>	<b>Antenna</b>	<b>ANTENNA-RELATED</b>
-----------	----------------	------------------------



<b>25</b>	<b>Noise</b>	<b>NOISE PRODUCED BY VIBRATION OR SHOCK WHILE DRIVING</b>
-----------	--------------	---

