

TROUBLESHOOTING

1. DIAGNOSIS FUNCTION

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

(a) Diagnosis mode

(1) Diagnosis start-up:

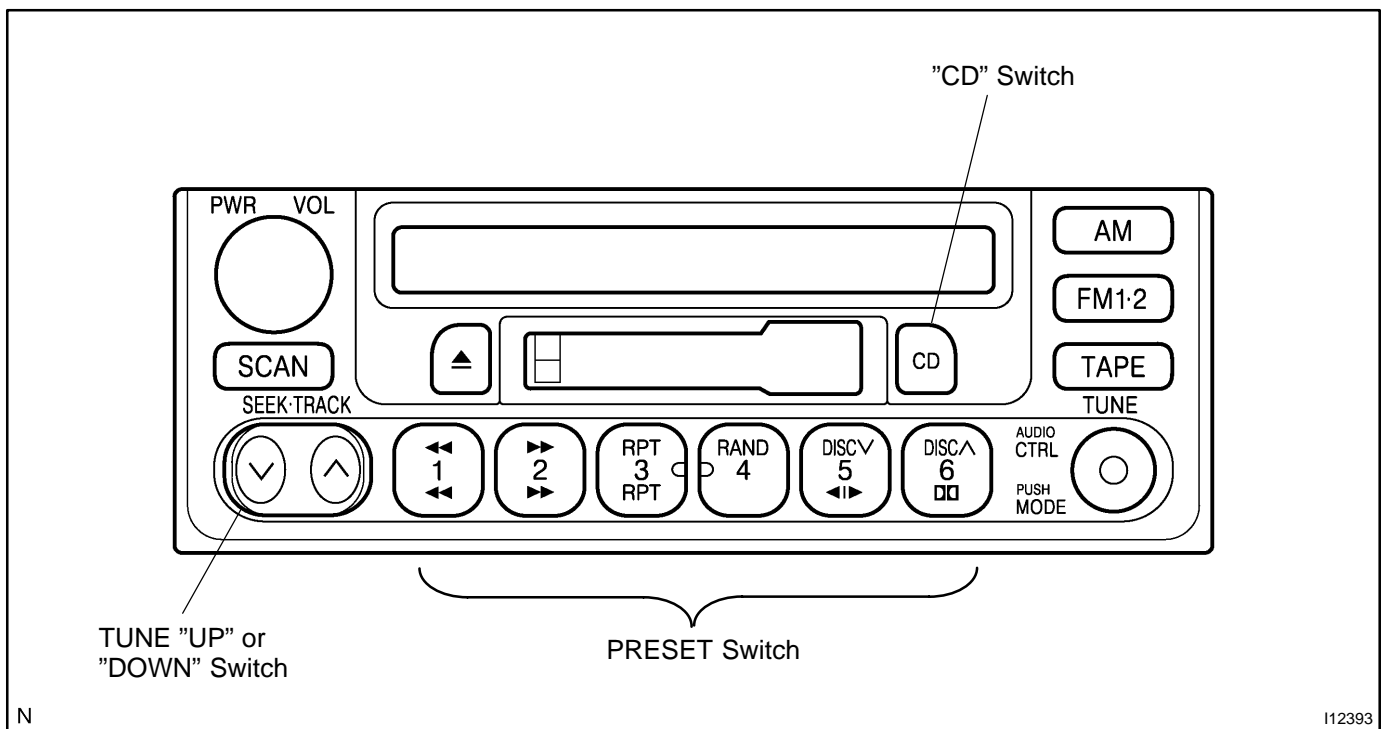
For shifting to diagnosis mode, push "CD" switch 3 times with pressing "1" and "6" of PRESET switch at the same time while the audio power is OFF and ACC is ON.

To exit from diagnosis mode, press "CD" switch for 2 seconds or turn the ignition key OFF.

(When "1-190" is displayed, the mode is transferred to LAN check mode.)

(2) 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 "DOWN" switch. In LAN check mode, by pressing "5" of PRESET switch 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

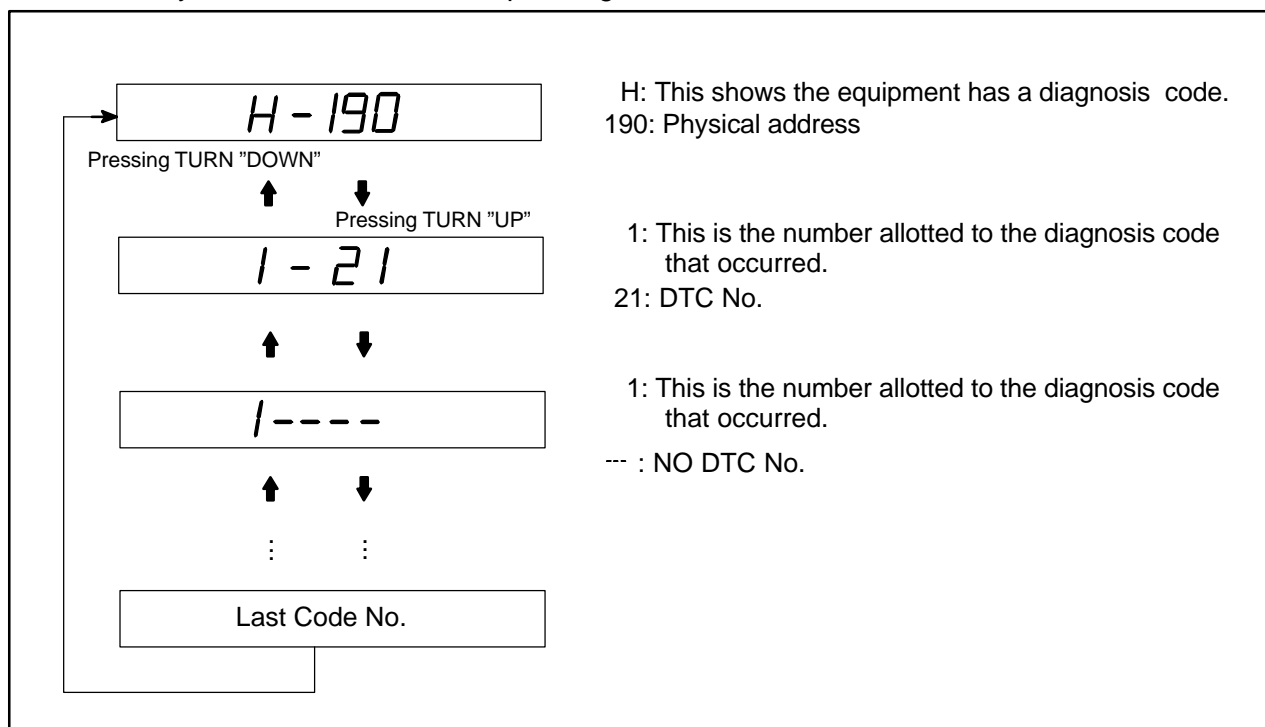
Code No. (physical address)	Equipment name
190	Radio receiver assembly (Audio head unit)

(b) System check

- When pressing "1" of PRESET switch in LAN check mode, the mode turns to the system check mode, the system performs self diagnosis of connected equipment and displays the results. ("SYS" (showing the system is under detection) is displayed.)
- Perform the operation shown in the following illustration, then read the result of the inspection.

HINT:

- It sometimes takes approx. 40 secs. till the system inspection is completed.
- The chart below is an example of when diagnosis code "21" appears on the physical address (190) equipment. (ROM error occurs on the radio receiver.)
- The smaller code numbers (physical address) are displayed in order (code No., 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 "DOWN" switches the display.
- In the system check mode, when pressing "6" of PRESET switch the mode returns to LAN check mode.



(c) Diagnosis memory

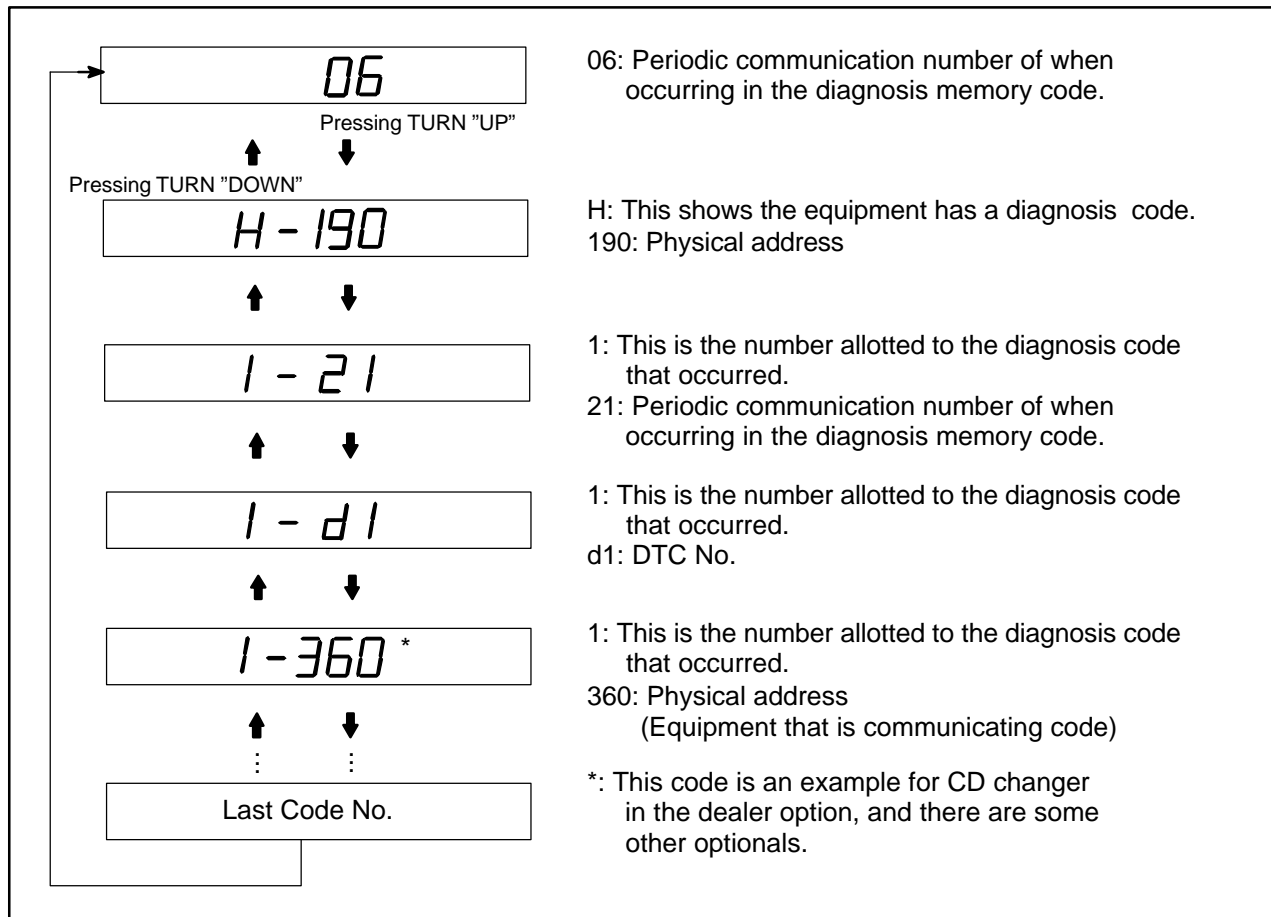
- (1) In LAN check mode, when pressing "2" of PRESET switch the mode turns to the diagnosis memory mode. ("CODE" is displayed.)

The results of self diagnosis performed over tuner and connected equipment are memorized and displayed.

- (2) Perform the operation shown in the following illustration, then read the result of the inspection.

HINT:

- The smaller code numbers (physical address) are displayed in order (code No. , 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 "DOWN" switches the display. Each diagnosis code is same as code in the system check mode.
- When pressing "6" of PRESET switch, the mode returns to LAN check mode.
- The following illustration below is an example of when diagnosis code "D1" appears on the code (190) and (360) equipment. (Communication error occurs between the radio receiver and CD changer.)



(d) Diagnosis memory clear

- (1) After error is fixed, start up the diagnosis mode.
- (2) Continue pressing "5" of PRESET switch for 2 secs. (CLr is displayed.)
- (3) Press the "2" of PRESET switch and transfer to the diagnosis memory mode and check that the normal code (00) is output.

2. DIAGNOSIS CODE LIST

- If there is "O" in the column of system check, an error can be detected when the mode is switched to the system check mode.
- If there is "O" in the column of diagnosis mode, each unit is monitoring whether or not it has failure. In case of detecting failure, it memorizes DTC.

Parts Name	DTC	Diagnosis item	Diagnosis content	Countermeasure and inspected parts	System Check	Diagnosis memory
Head Unit (190)	42	FM tuner error	There is an error in FM tuner.	Radio receiver check.	X	○
	50	Cassette error	There is an error in cassette deck.		X	○
	51	Cassette eject error	Cassette can not be ejected from Head Unit.		X	○
	D1	Transmitter error	Communication with the equipment that is communicating has failed successively.	Radio receiver check. Wire harness and connector check.	○	○
	D2	Periodic communication no response	Error in periodic communication.	● Wire harness and connector	X	○
	FF	Diagnosis no response	Result of diagnosis is not issued from start to finish.	Radio receiver check.	○	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:

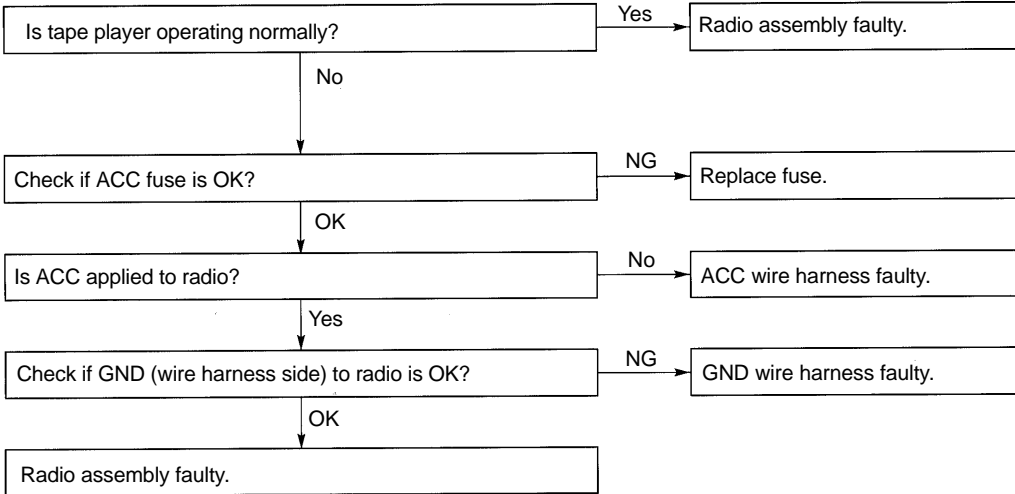
This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and was prepared on the assumption of system component troubles (except for the wires and connectors, etc.).

Always inspect the trouble taking the following items into consideration.

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

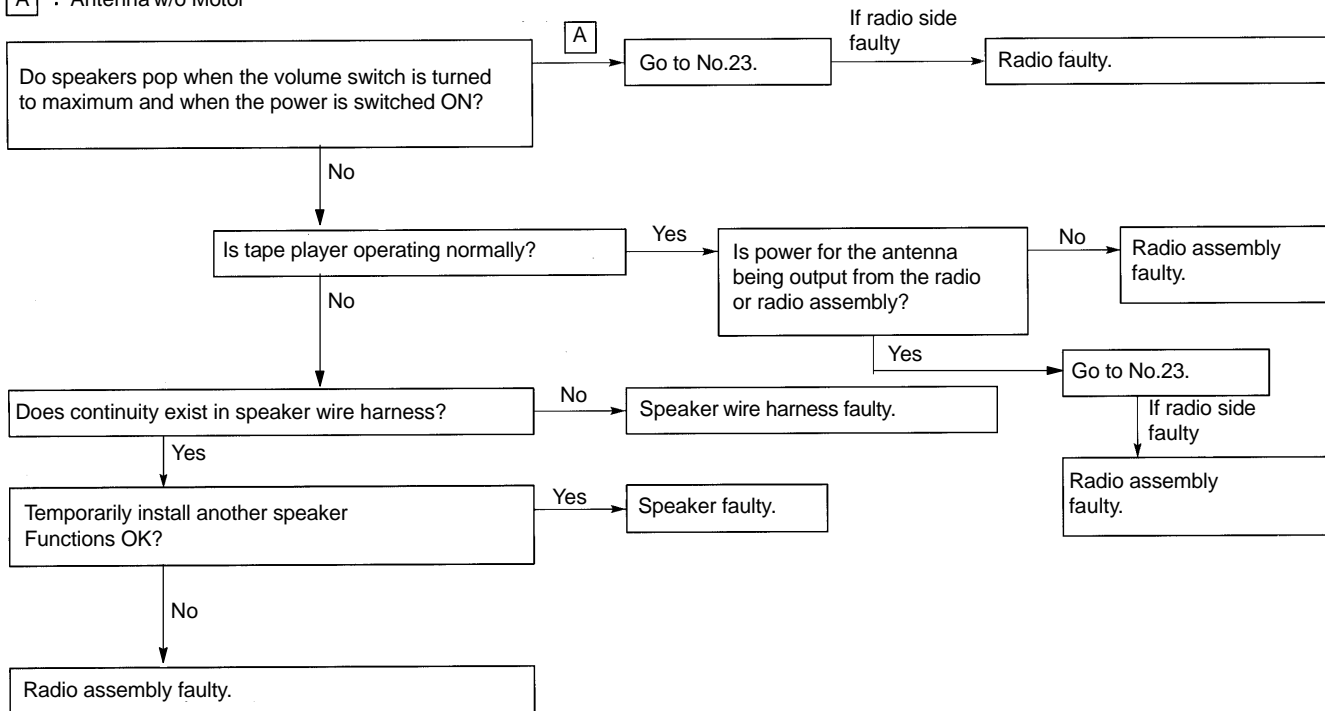
	Problem	No.
Radio	No power coming in.	1
	Power coming in, but radio not operating.	2
	Noise present, but AM - FM not operating.	3
	Any speaker does not work.	4
	Either AM or FM does not work.	5
	Reception poor (Volume faint).	5
	Few preset tuning bands.	5
	Sound quality poor.	6
	Cannot set station select button.	6
	Preset memory disappears.	7
Tape Player	Cassette tape cannot be inserted.	8
	Cassette tape inserted, but no power.	9
	Power coming in, but tape player not operating.	10
	Any speaker 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
	Cassette tape will not ejected.	15
CD Player	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
	Any speaker does not work.	21
	CD will not be ejected.	22
Antenna	Antenna-related.	23
Noise	Noise produced by vibration or shock while driving.	24
	Noise produced when engine starts.	25

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

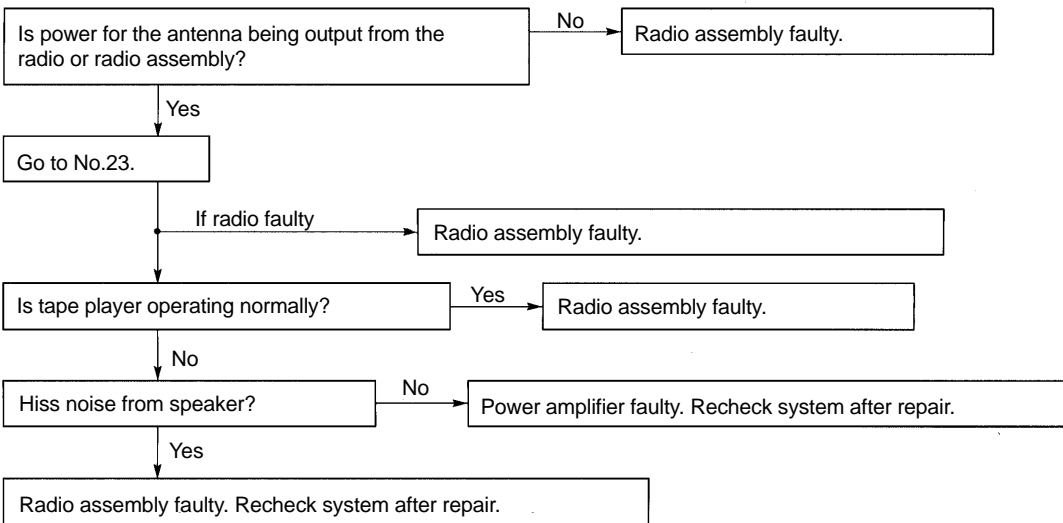


2	Radio	POWER COMING ON, BUT RADIO NOT OPERATING
----------	--------------	---

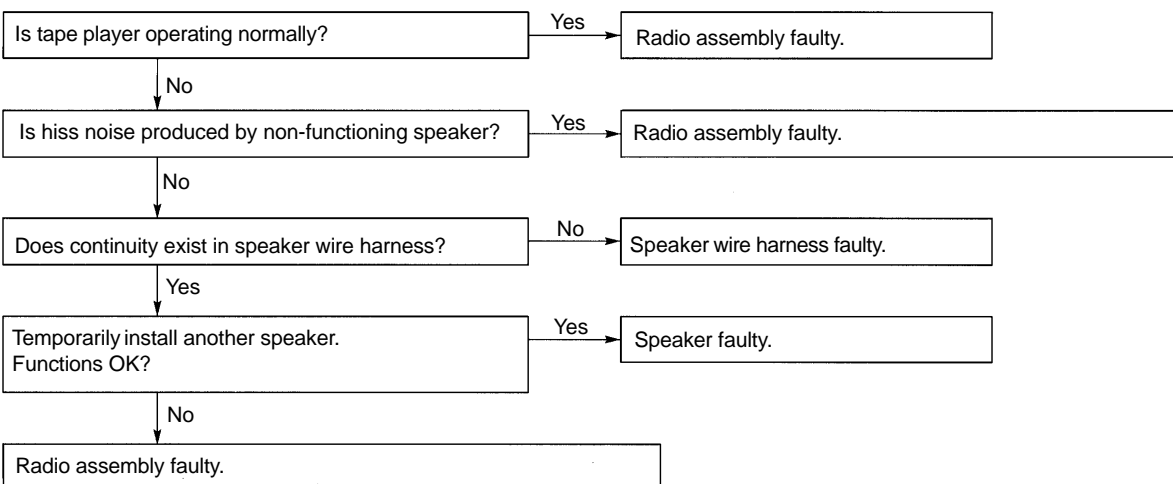
A : Antenna w/o Motor



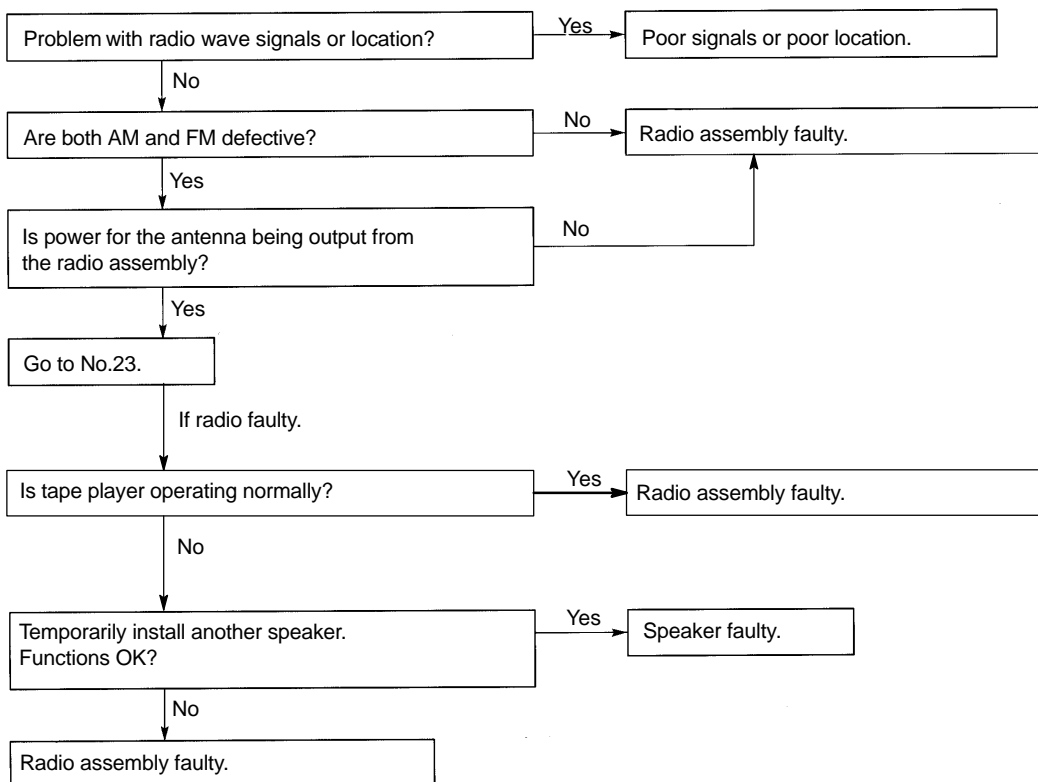
3	Radio	NOISE PRESENT, BUT AM-FM NOT OPERATING
----------	--------------	---



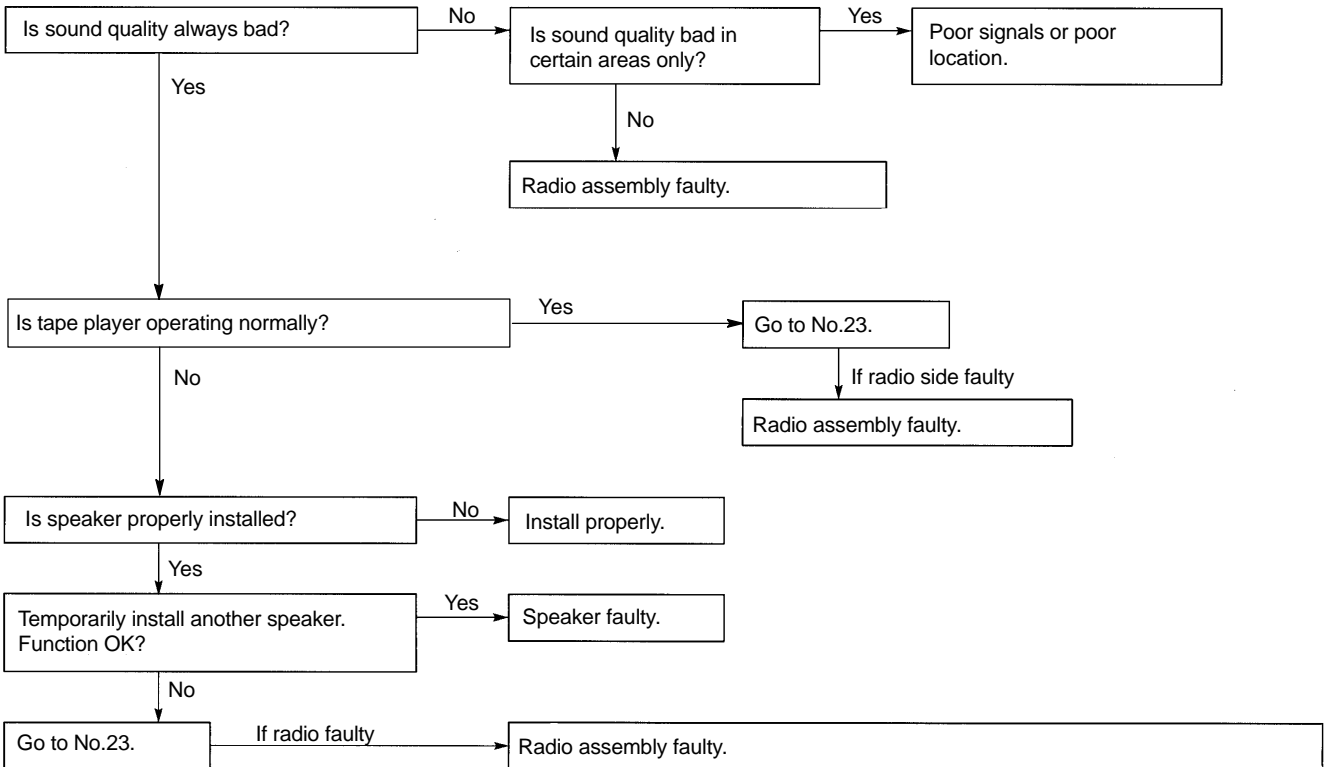
4	Radio	ANY SPEAKER DOES NOT WORK
----------	--------------	----------------------------------



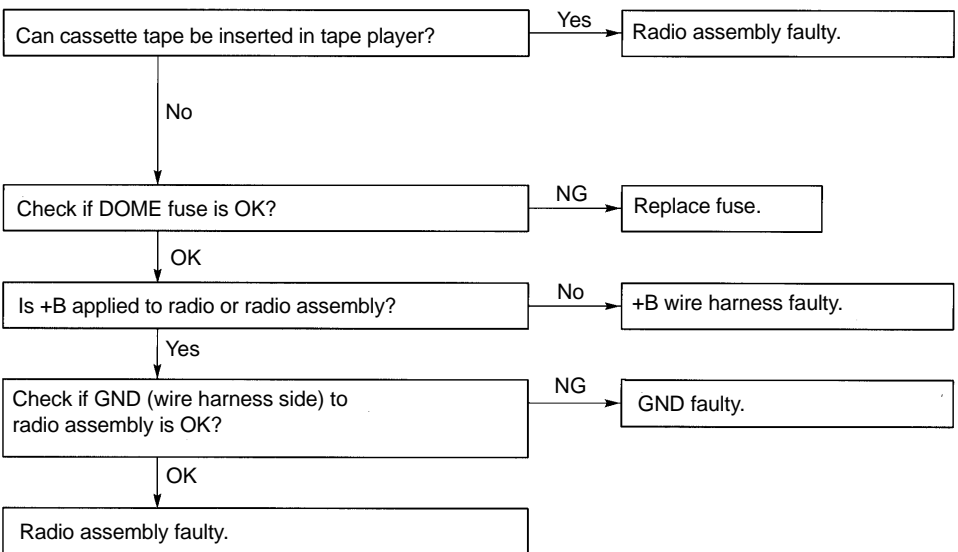
5	Radio	EITHER AM OR FM DOES NOT WORK, RECEPTION POOR (VOLUME FAINT), FEW PRESET TUNING BANDS
---	-------	--



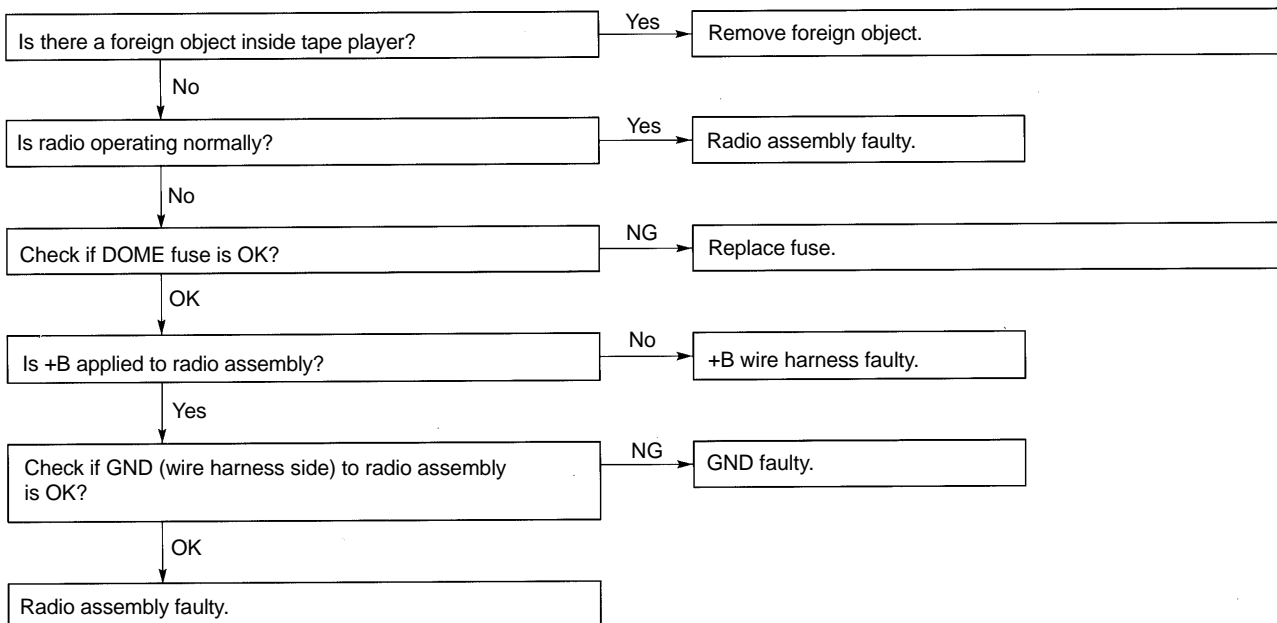
6	Radio	SOUND QUALITY POOR
----------	--------------	---------------------------



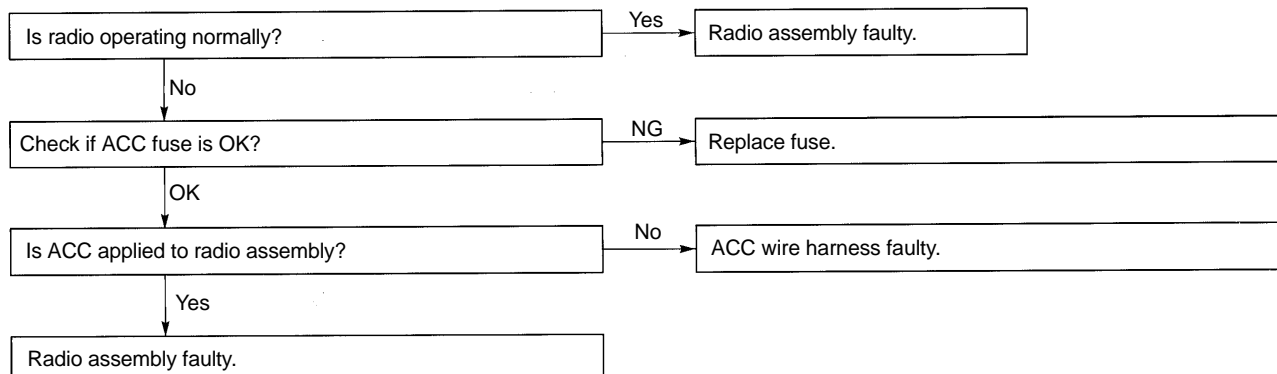
7	Radio	CANNOT SET STATION SELECT BUTTON, PRESET MEMORY DISAPPEARS
----------	--------------	---



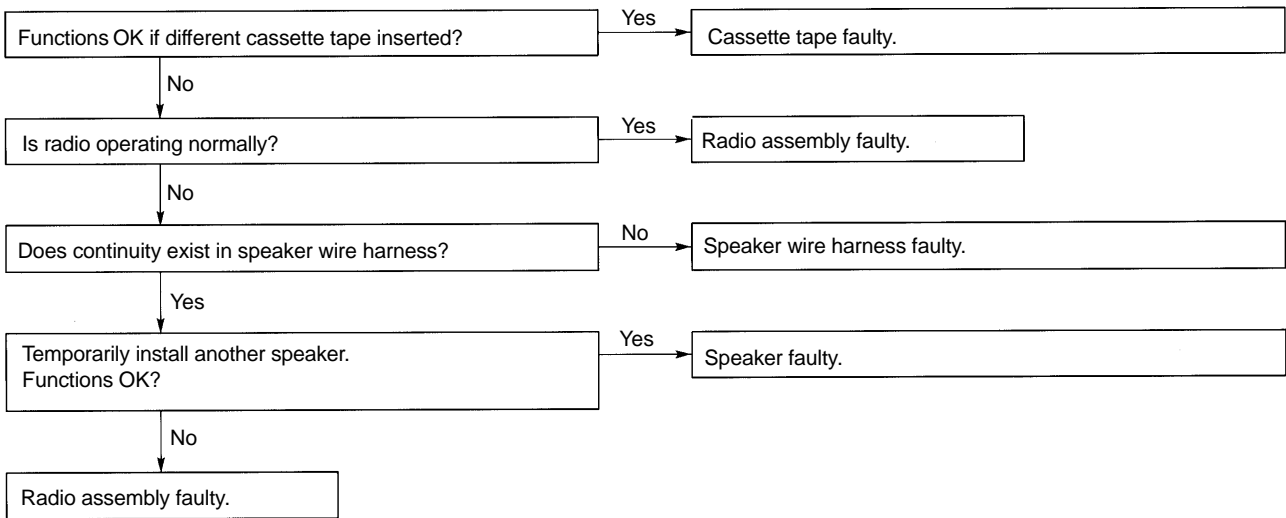
8	Tape Player	CASSETTE TAPE CANNOT BE INSERTED
----------	--------------------	---



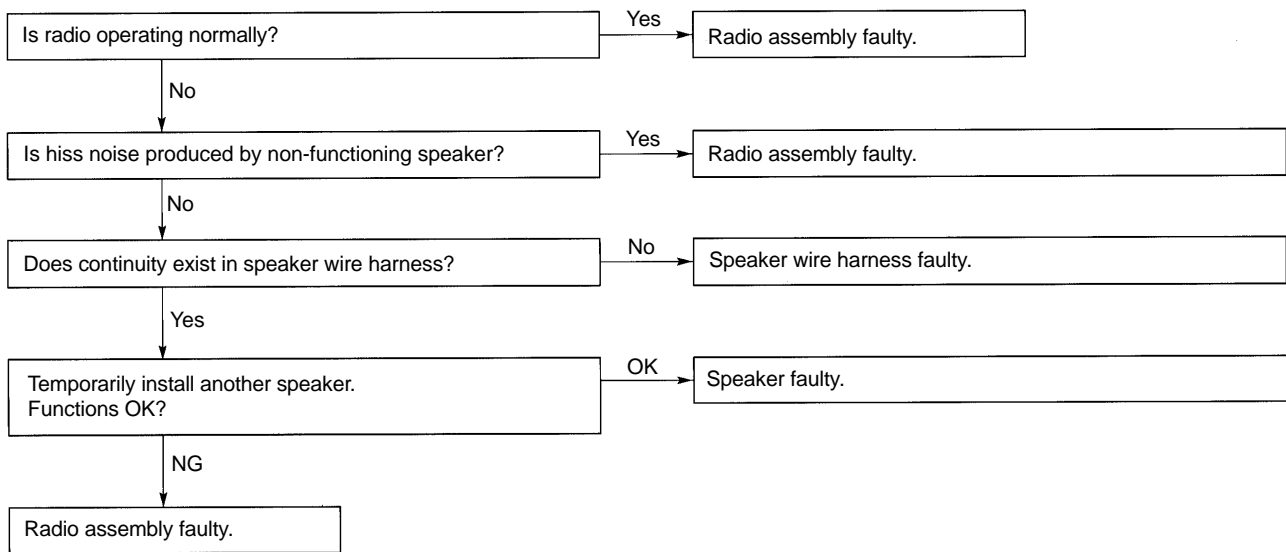
9	Tape Player	CASSETTE TAPE INSERTED, BUT NO POWER
----------	--------------------	---



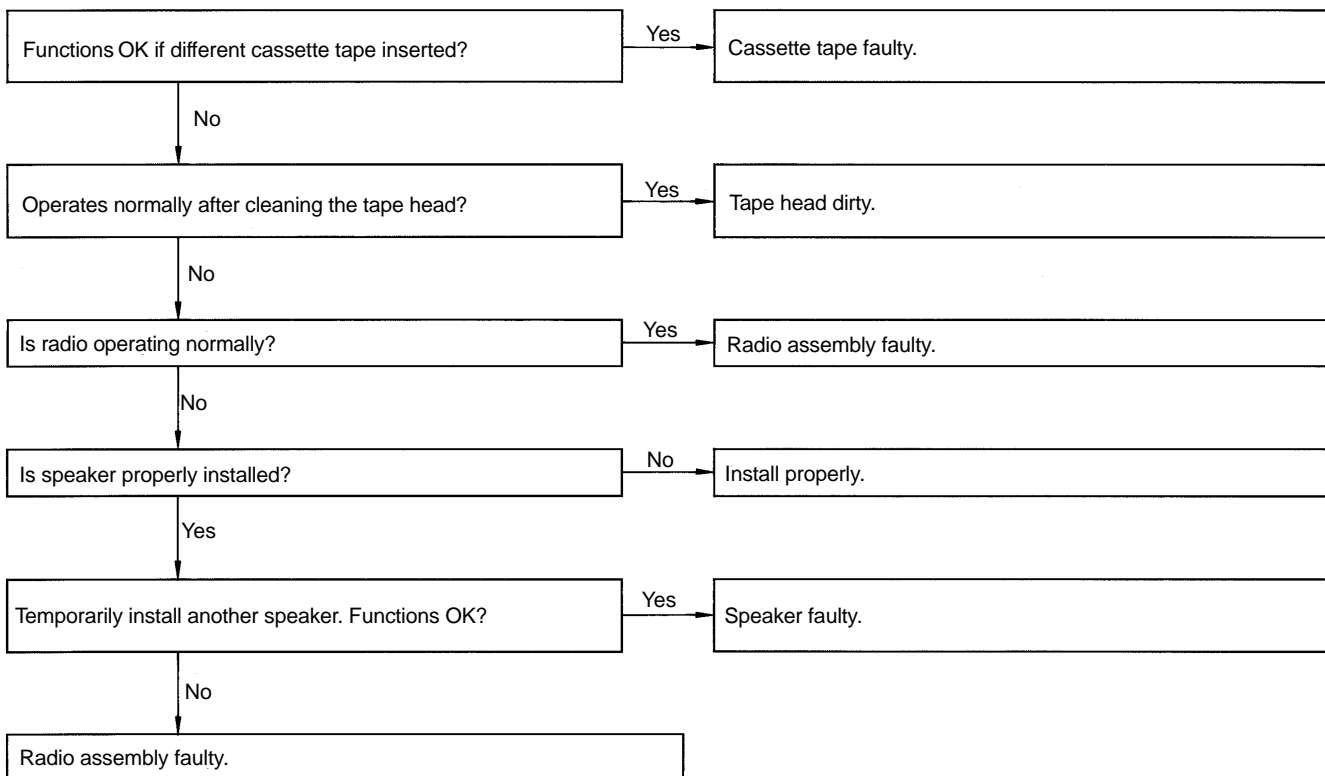
10	Tape Player	POWER COMING IN, BUT TAPE PLAYER NOT OPERATING
-----------	--------------------	---



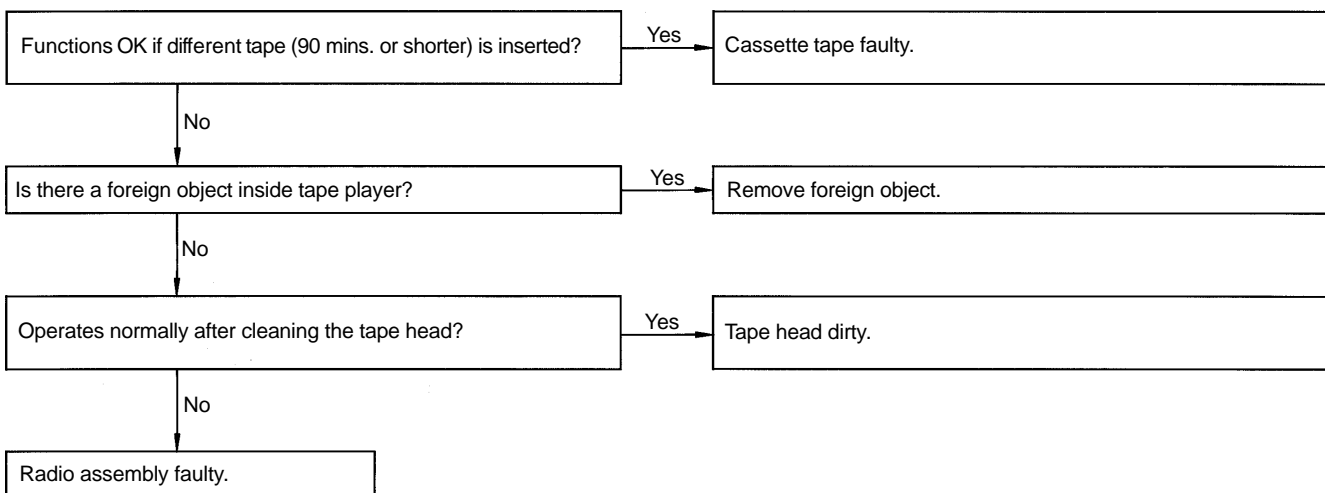
11	Tape Player	ANY SPEAKER DOES NOT WORK
-----------	--------------------	----------------------------------



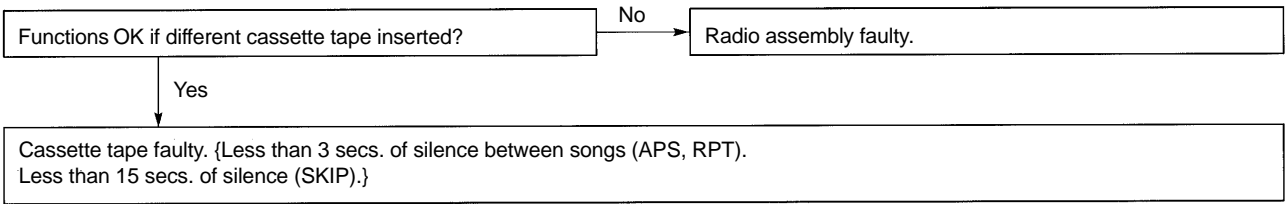
12	Tape player	SOUND QUALITY POOR (VOLUME FAINT)
-----------	--------------------	--



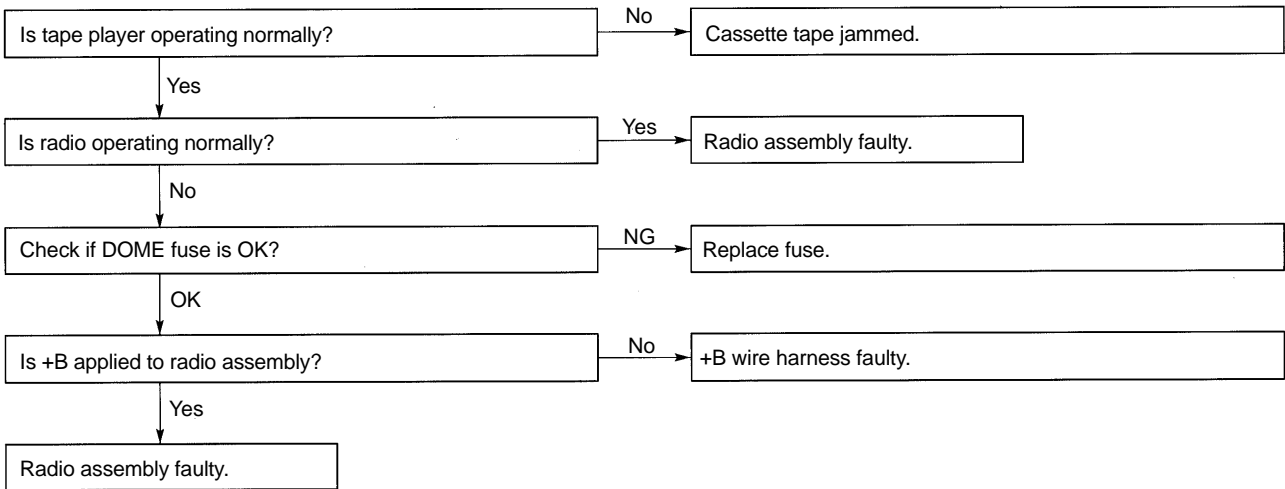
13	Tape Player	TAPE JAMMED, MALFUNCTION WITH TAPE SPEED OR AUTO-REVERSE
-----------	--------------------	---



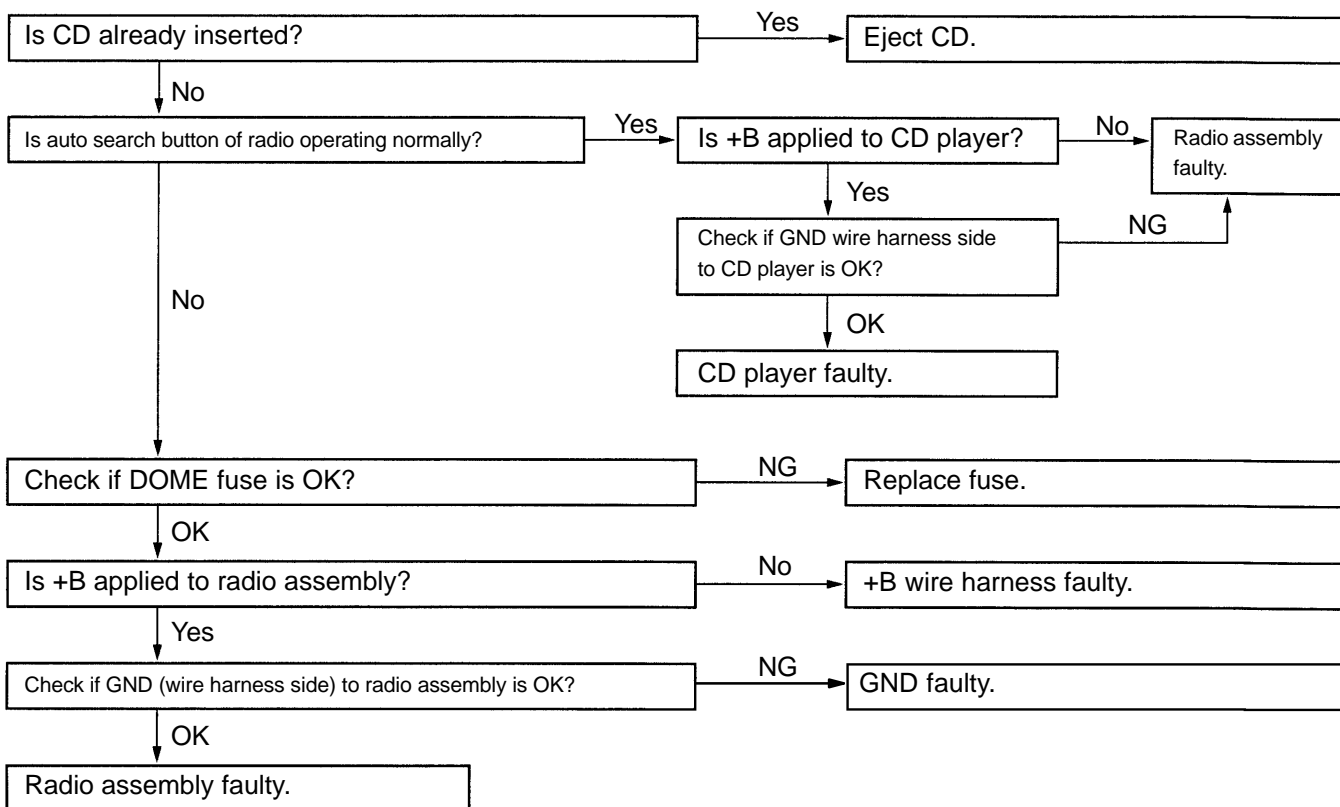
14	Tape Player	APS, SKIP, RPT BUTTONS NOT OPERATING
-----------	--------------------	---



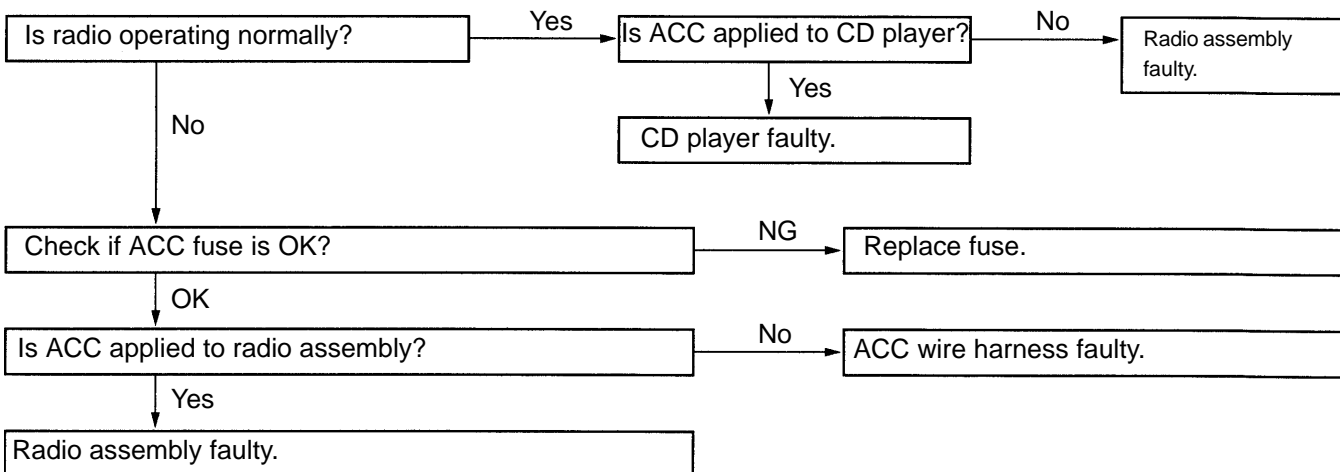
15	Tape Player	CASSETTE TAPE WILL NOT BE EJECTED
-----------	--------------------	--



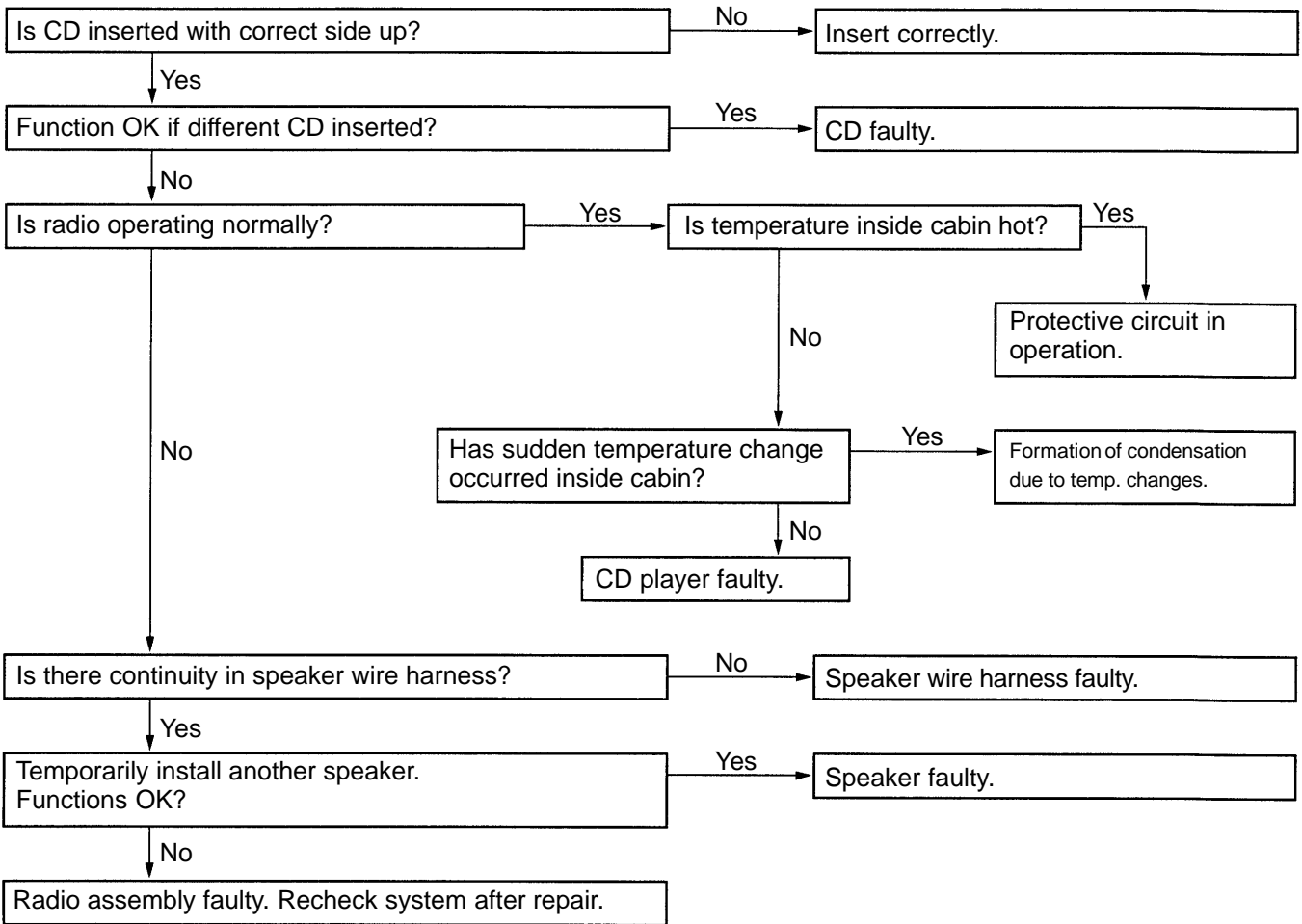
16	CD Player	CD CANNOT BE INSERTED
-----------	------------------	------------------------------



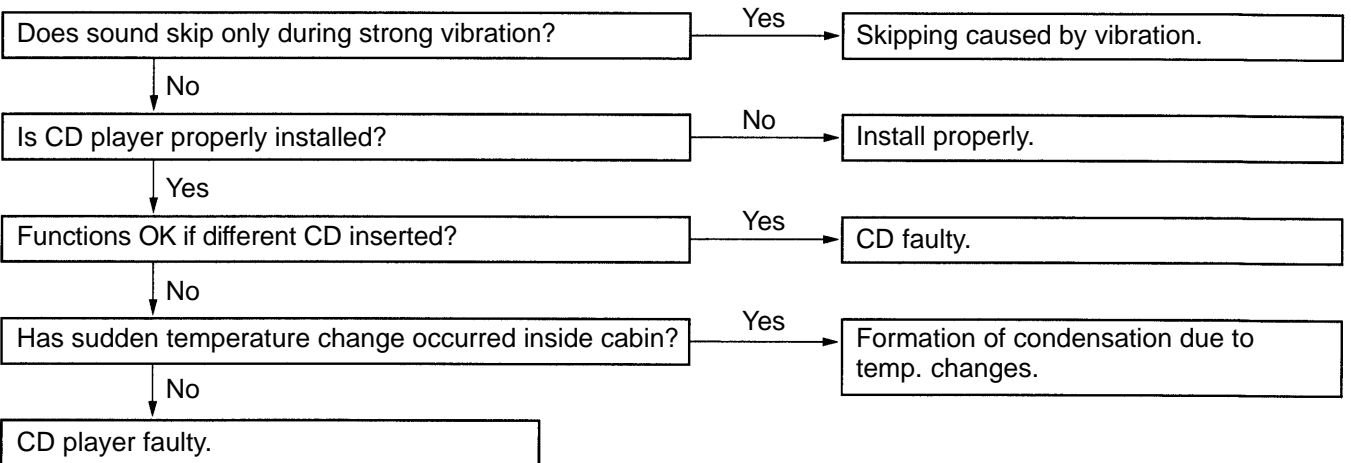
17	CD Player	CD INSERTED, BUT NO POWER
-----------	------------------	----------------------------------



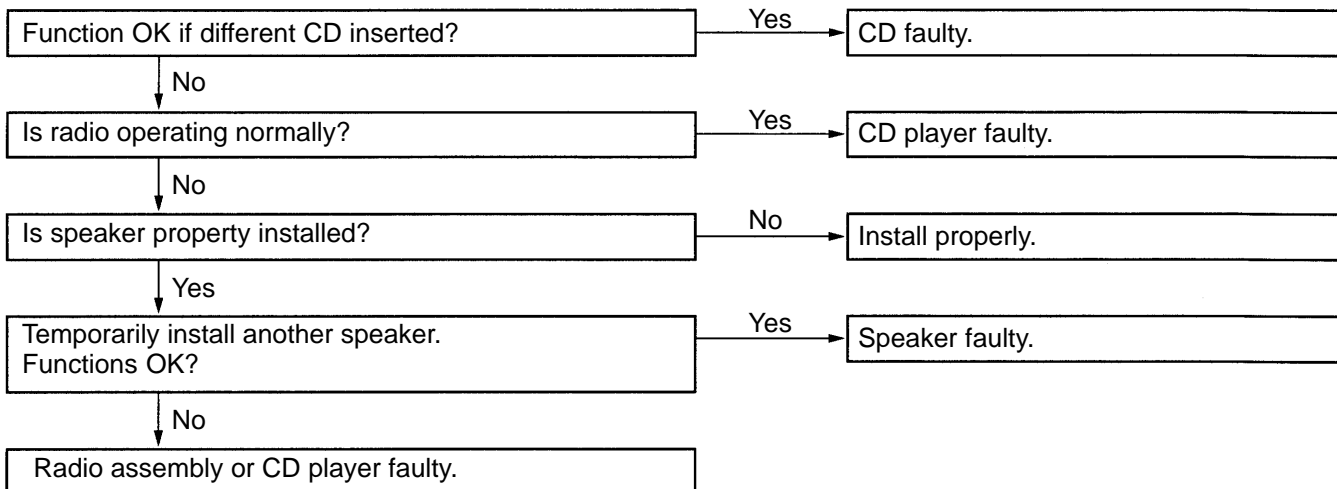
18	CD Player	POWER COMING IN, BUT CD PLAYER NOT OPERATING
-----------	------------------	---



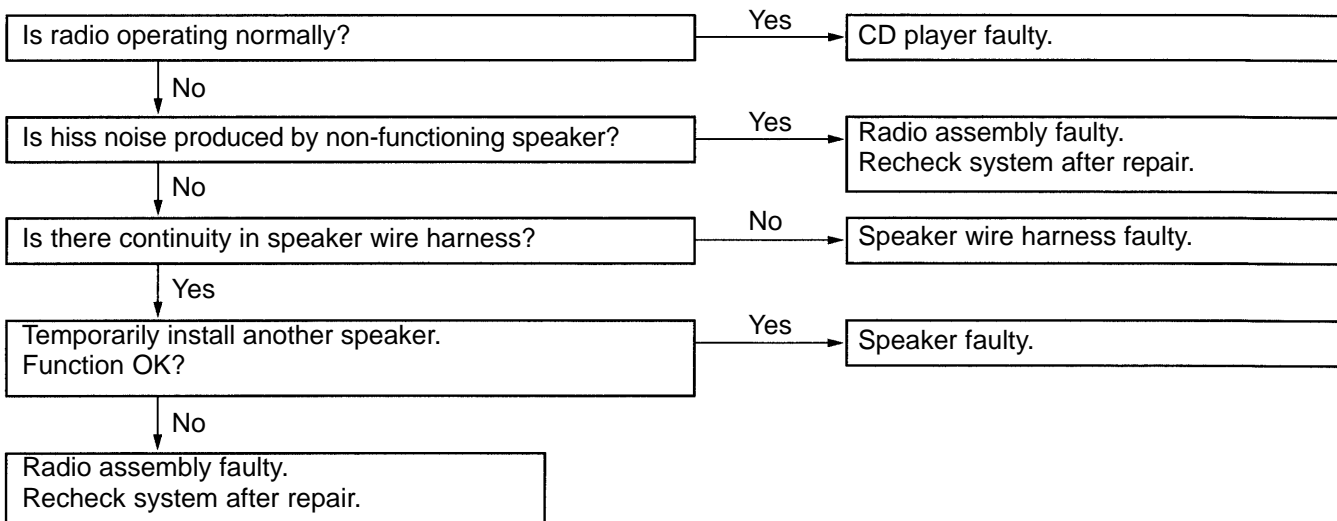
19	CD Player	SOUND SKIPS
-----------	------------------	--------------------



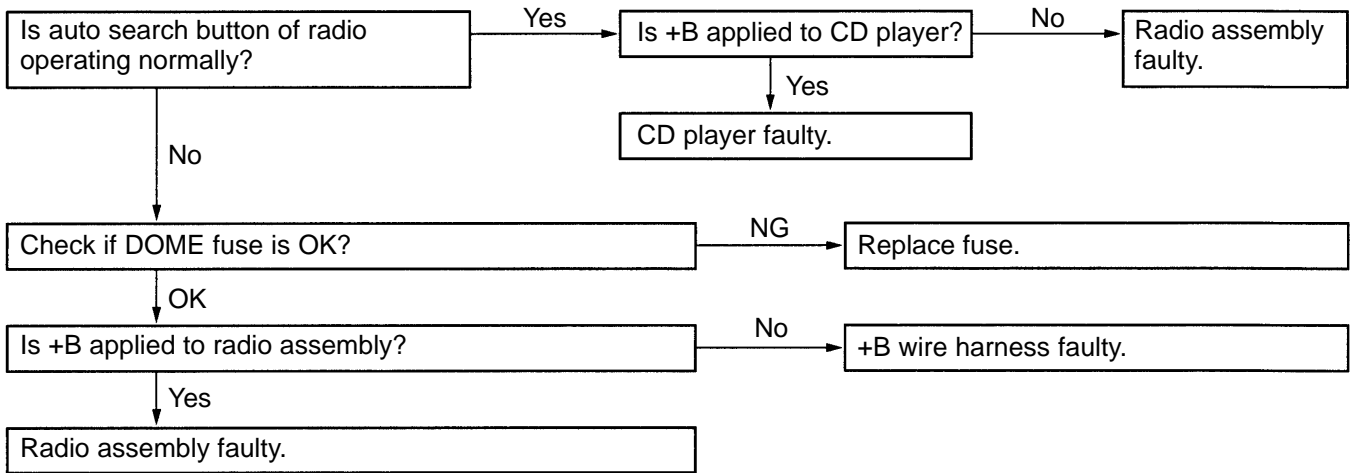
20	CD Player	SOUND QUALITY POOR (VOLUME FAINT)
-----------	------------------	--



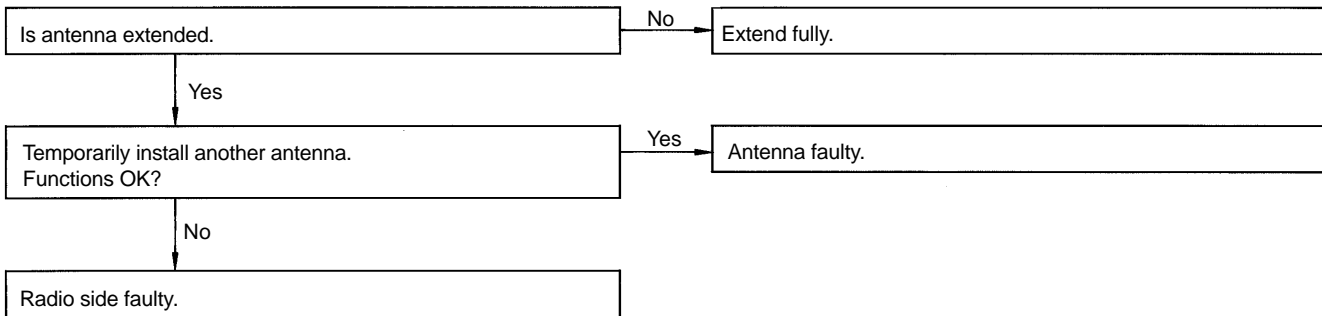
21	CD Player	ANY SPEAKER DOES NOT WORK
-----------	------------------	----------------------------------



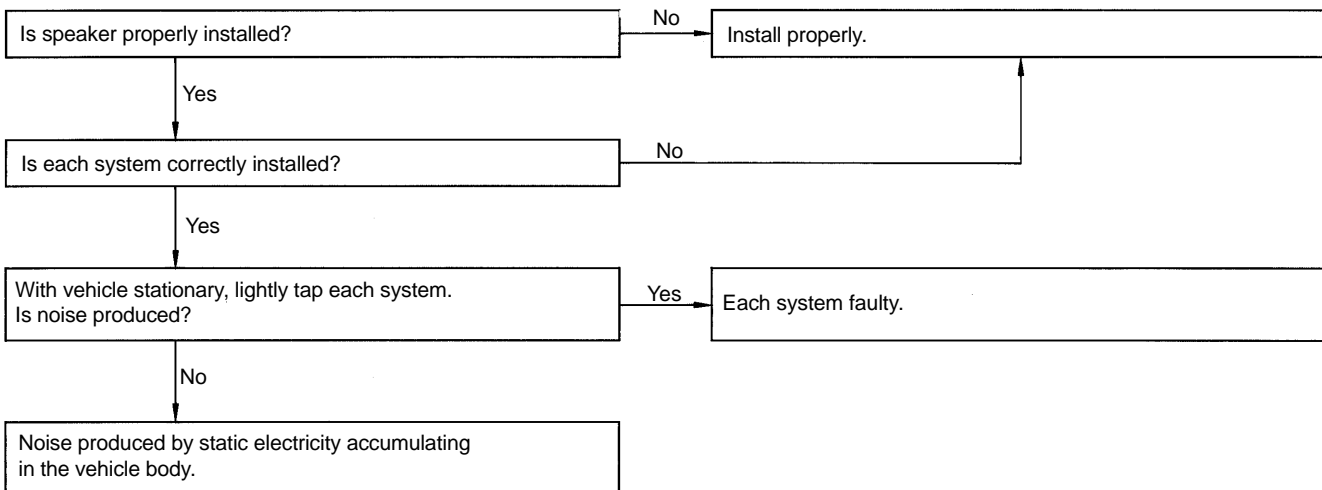
22	CD Player	CD WILL NOT BE EJECTED
----	-----------	------------------------



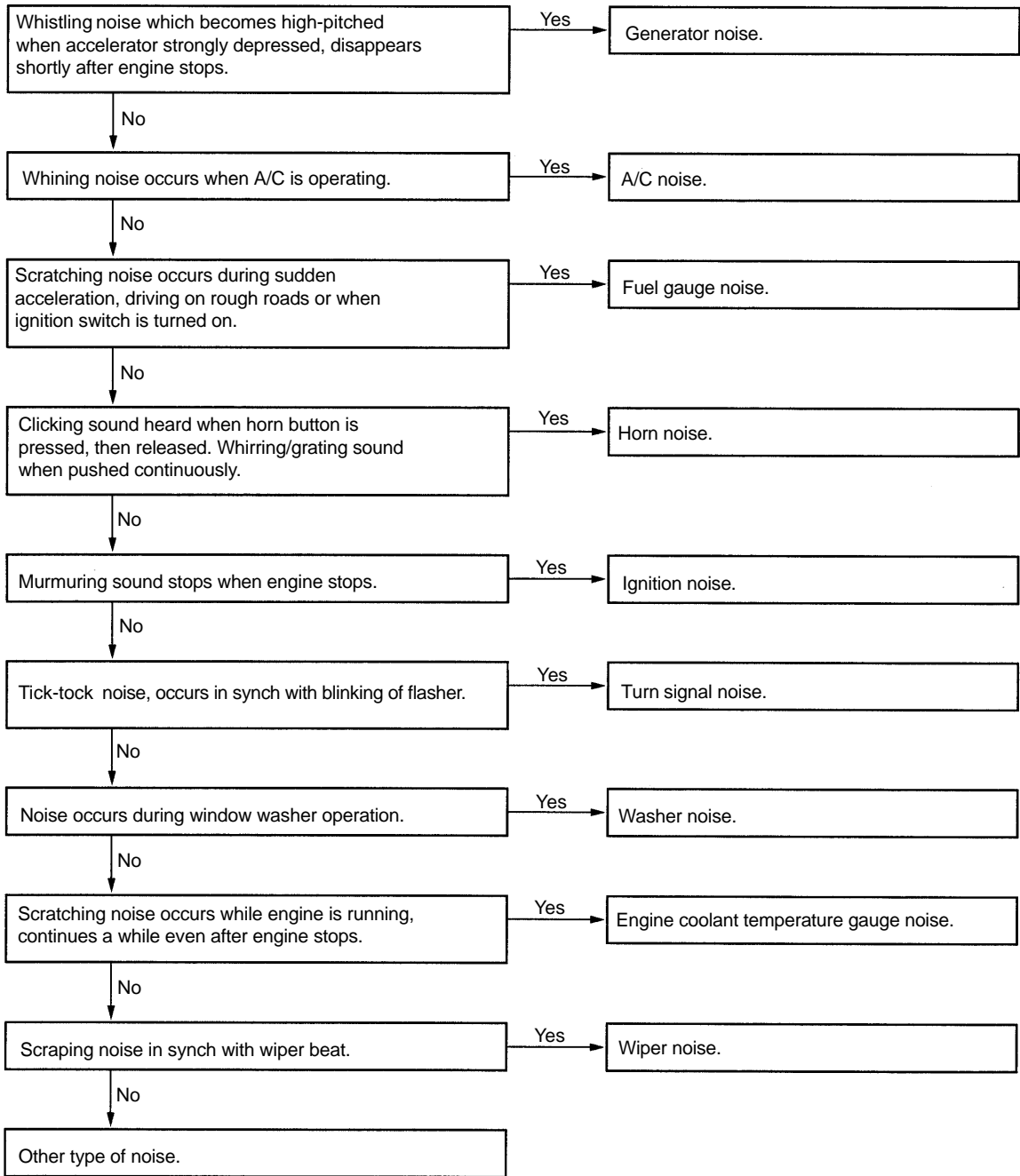
23	Antenna	ANTENNA-RELATED
-----------	----------------	------------------------



24	Noise	NOISE PRODUCED BY VIBRATION OR SHOCK WHILE DRIVING
-----------	--------------	---



25	Noise	NOISE PRODUCED WHEN ENGINE STARTS
-----------	--------------	--



V08467