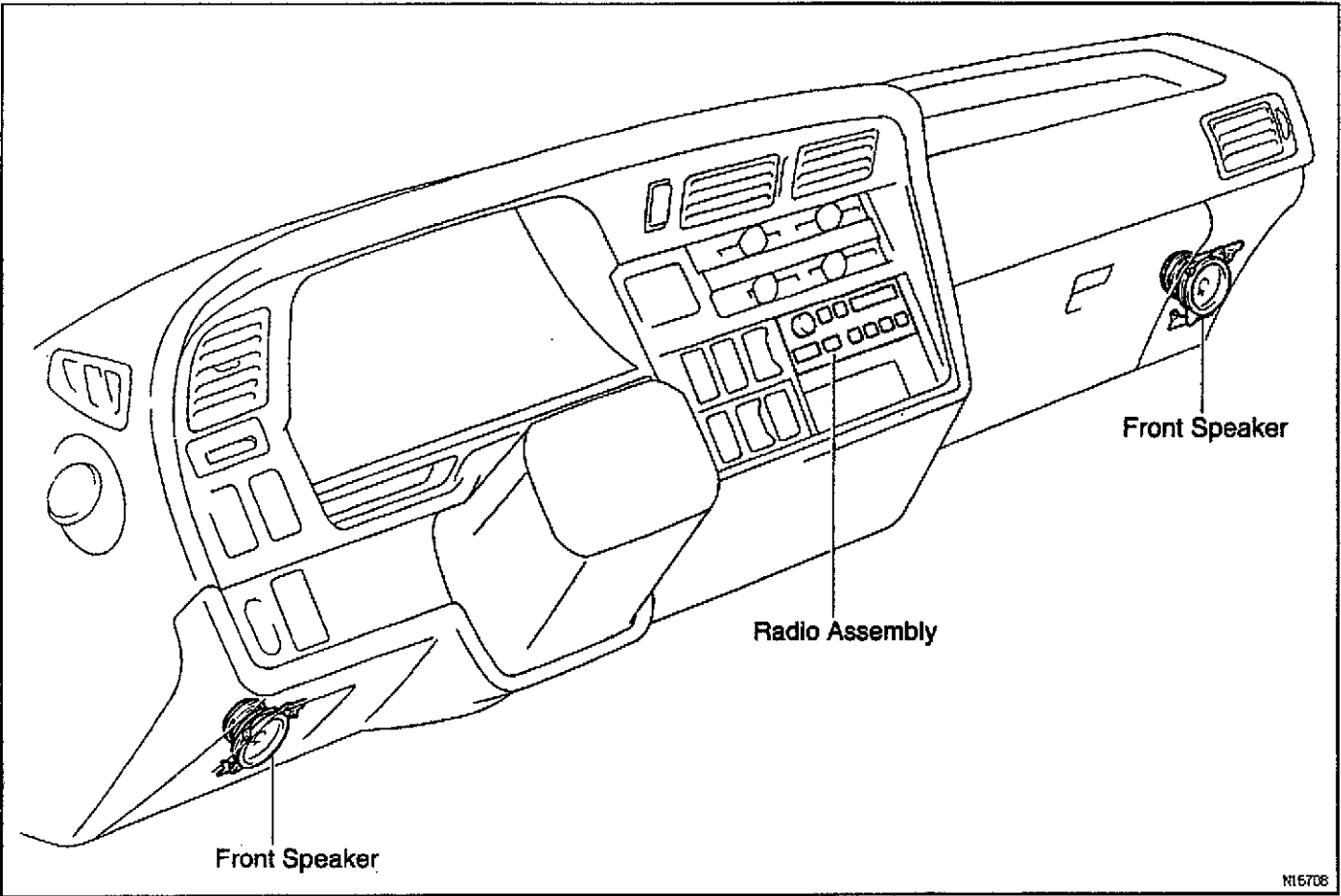


AUDIO SYSTEM
PARTS LOCATION

98020-0K



N15708

SYSTEM DESCRIPTION

981M2-00

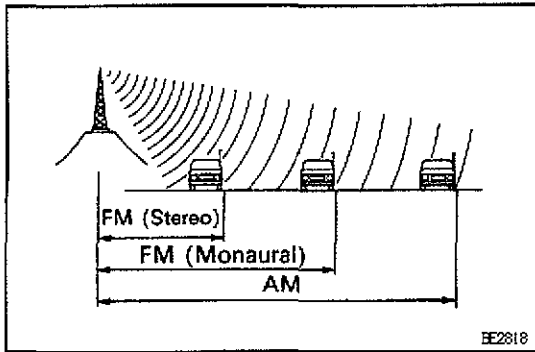
1. RADIO WAVE BAND

The radio wave bands used in radio broadcasting are as follows:

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

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

V03941



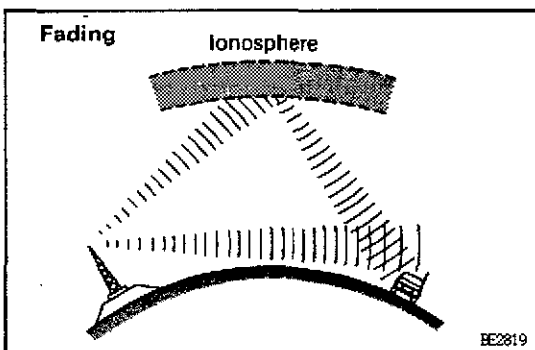
2. SERVICE AREA

There are great differences in the size of the service area for AM, FM monaural, and FM stereo broadcasts cannot be received even though AM comes in very clearly.

Not only does FM stereo have the smallest service area, but it also picks up static and other types of interference ("noise") easily.

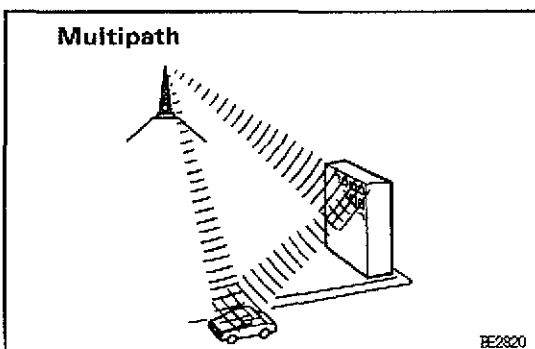
3. RECEPTION PROBLEMS

Besides the problem of static, there are also the problems called "fading", "multipath" and "fade out". These problems are caused not by electrical noise but by the nature of the radio waves themselves.



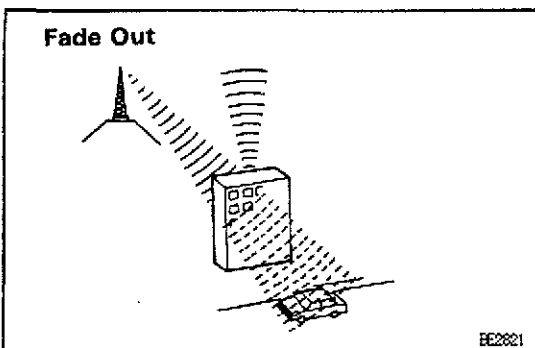
Fading

Besides electrical interference, AM broadcasts are also susceptible to other types of interference, especially at night. This is because AM radio waves bounce off the ionosphere at night. These radio waves then interfere with the signals from the same transmitter that reach the vehicle's antenna directly. This type of interference is called "fading".



Multipath

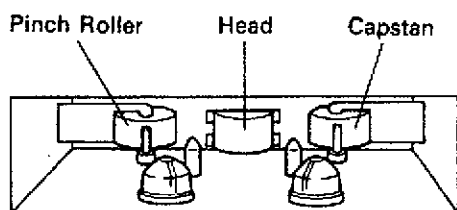
One type of interference caused by the bouncing of radio waves off of obstructions is called "multipath". Multipath occurs when a signal from the broadcast transmitter antenna bounces off buildings and mountains and interferes with the signal that is received directly.



Fade Out

Because FM radio waves are of higher frequencies than AM radio waves, they bounce off buildings, mountains, and other obstructions. For this reason, FM signals often seem to gradually disappear or fade away as the vehicle goes behind a building or other obstruction. This is called "fade out".

Example:



N09121

MAINTENANCE

Tape Player/Head Cleaning

- (a) Raise the cassette door with your finger.
Next using a pencil or similar object, push in the guide.
- (b) Using a cleaning pen or cotton applicator soaked in cleaner, clean the head surface, punch rollers and capstans.

BC2WM-01

TROUBLESHOOTING

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

BE

	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 inserts, but no power.	9
	Power coming in, but tape player not operating.	10
	Either speaker does not work.	11
	Sound quality poor (Volume faint).	12
	Tape jammed, malfunction with tape speed or auto—reverse.	13
	Cassette tape will not eject.	14
Antenna	Antenna — related.	15
Noise	Noise produced by vibration or shock while driving.	16
	Noise produced when engine starts.	17

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

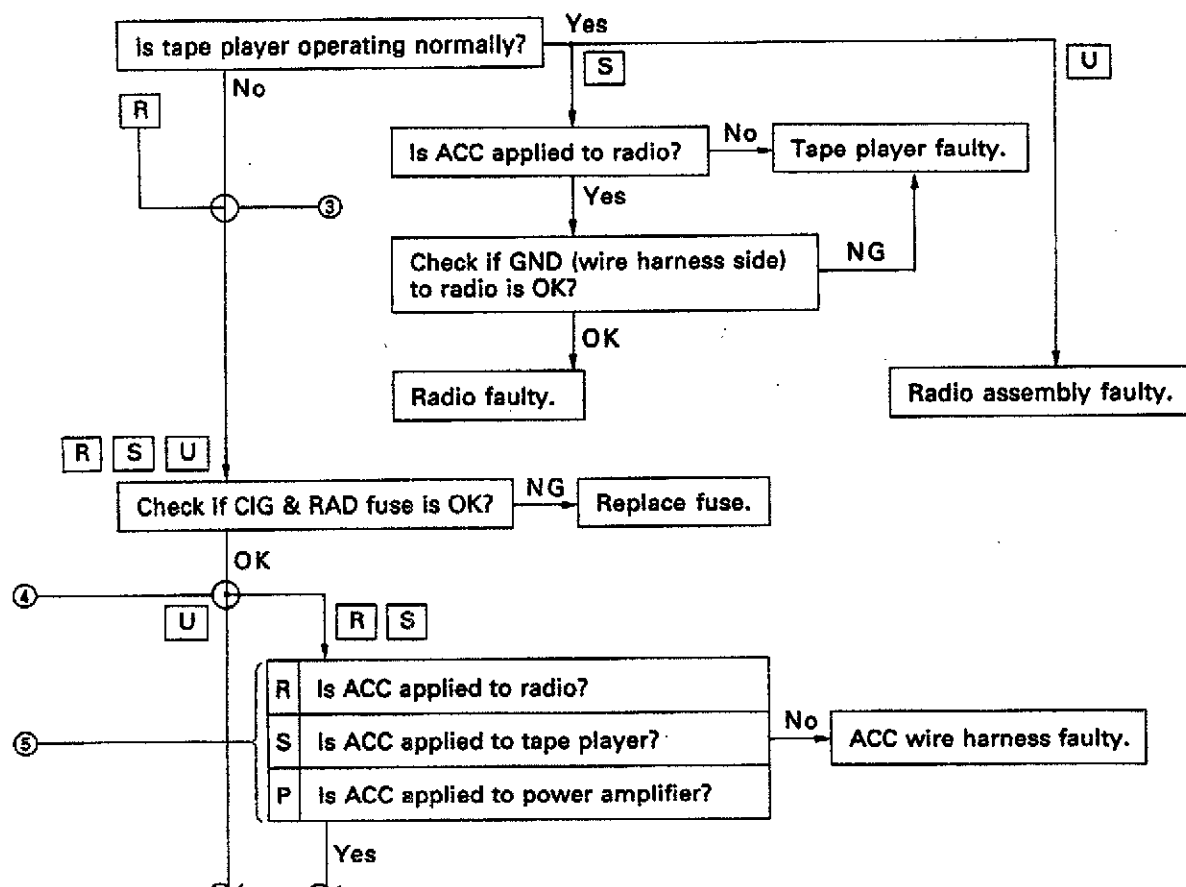
HOW TO USE DIAGNOSTIC CHART

Reference:

1	Radio	NO POWER COMING IN
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① — **R** : Radio **S** : Tape Player (Separate) **U** : Radio – Tape Player Unit

② — **S** **U** **R**



① Audio system type and symbol used.

HINT: Confirm 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.

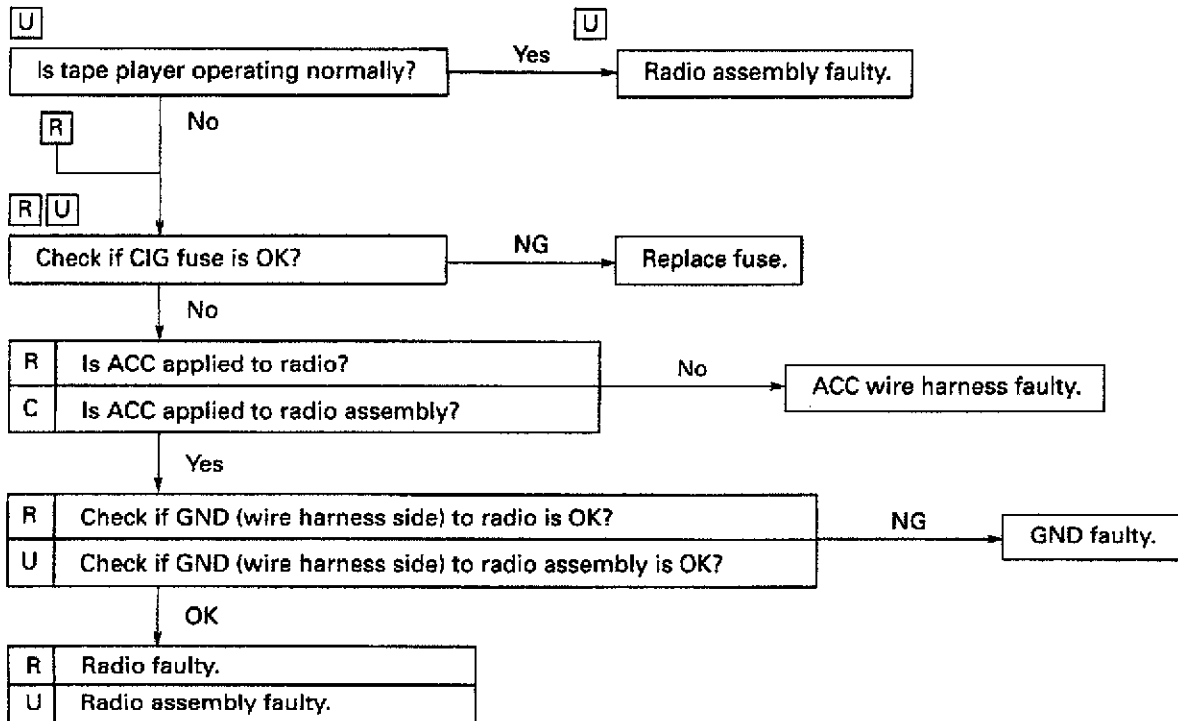
④ Junction with black circle.

HINT: Proceed to question for applicable audio system type.

⑤ HINT: Select question for applicable audio system type.

NO POWER COMING IN

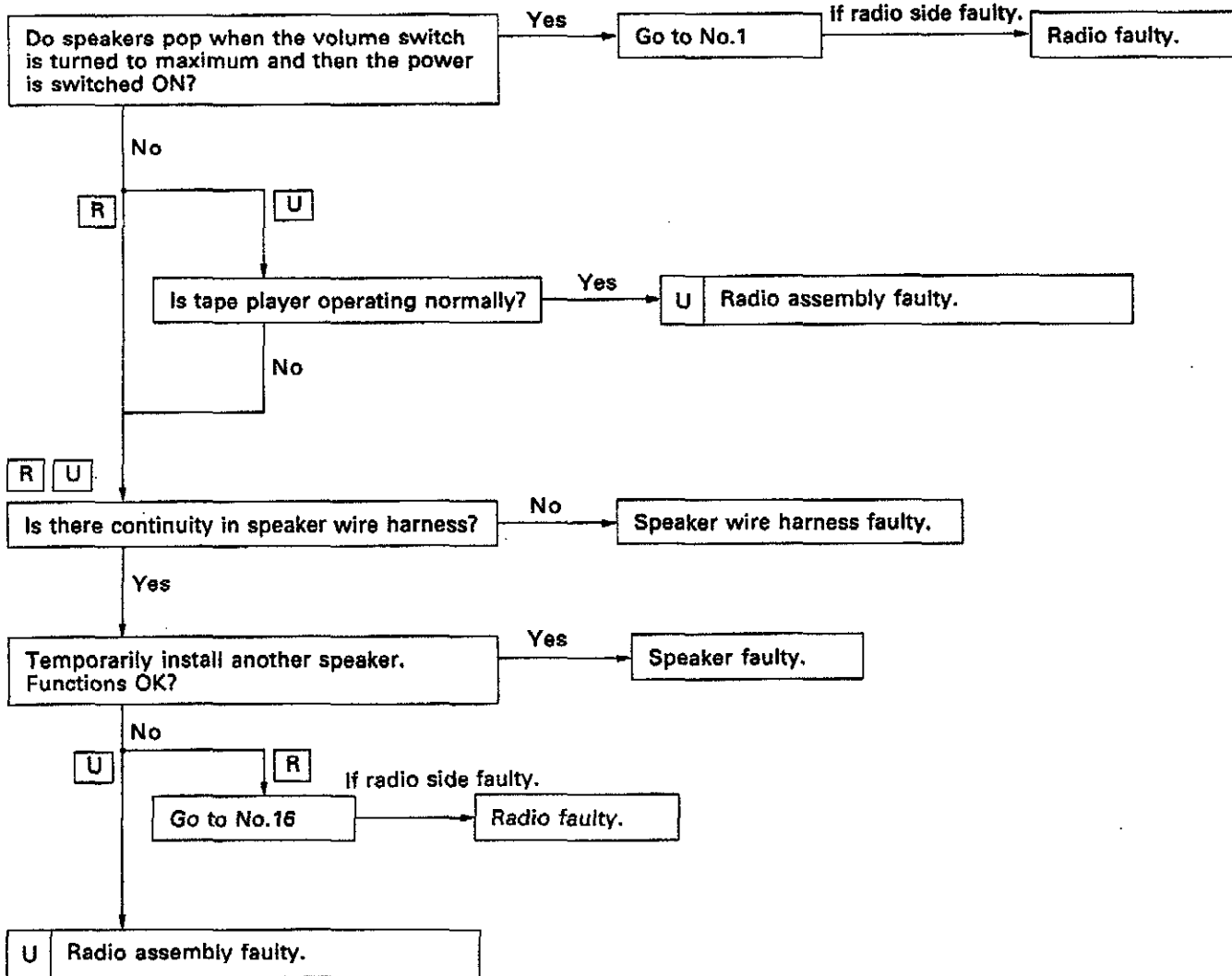
U : Radio - Tape Player Unit



V05008

2	Radio	POWER COMING IN, BUT RADIO NOT OPERATING
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R : Radio U : Radio – Tape Player Unit



BE

3	Radio	NOISE PRESENT, BUT AM-FM NOT OPERATING
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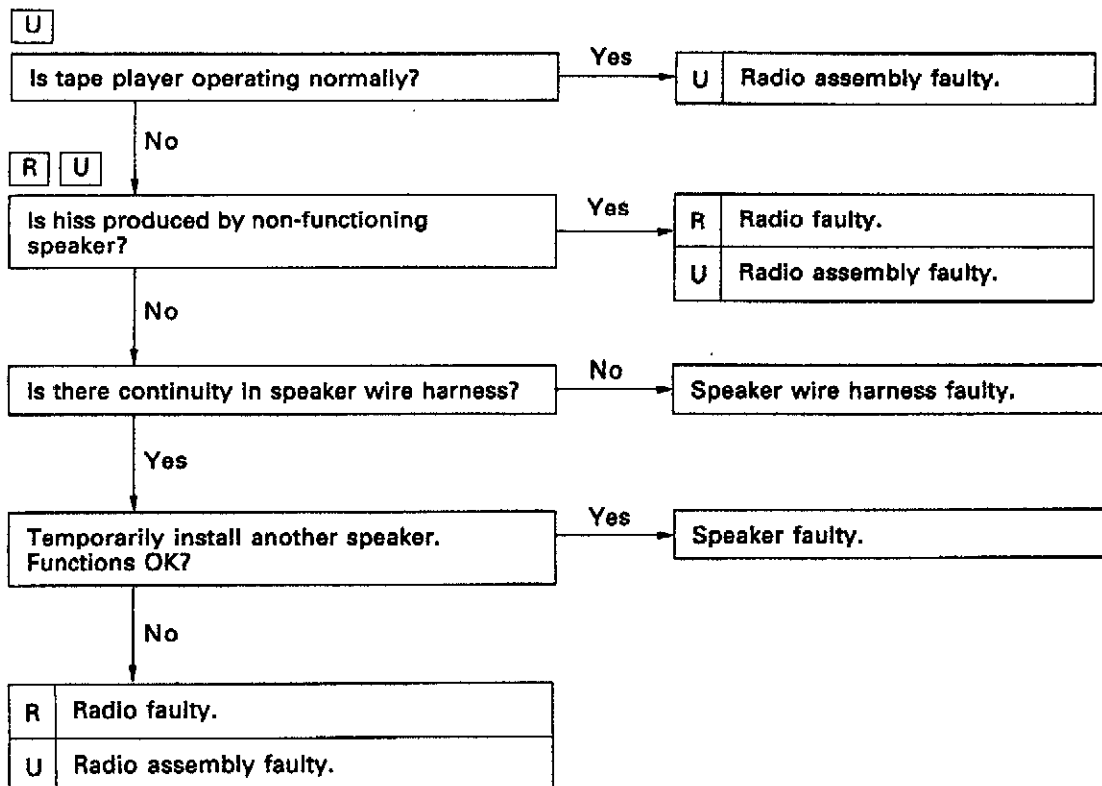
R : Radio U : Radio – Tape Player Unit



4	Radio	EITHER SPEAKER DOES NOT WORK
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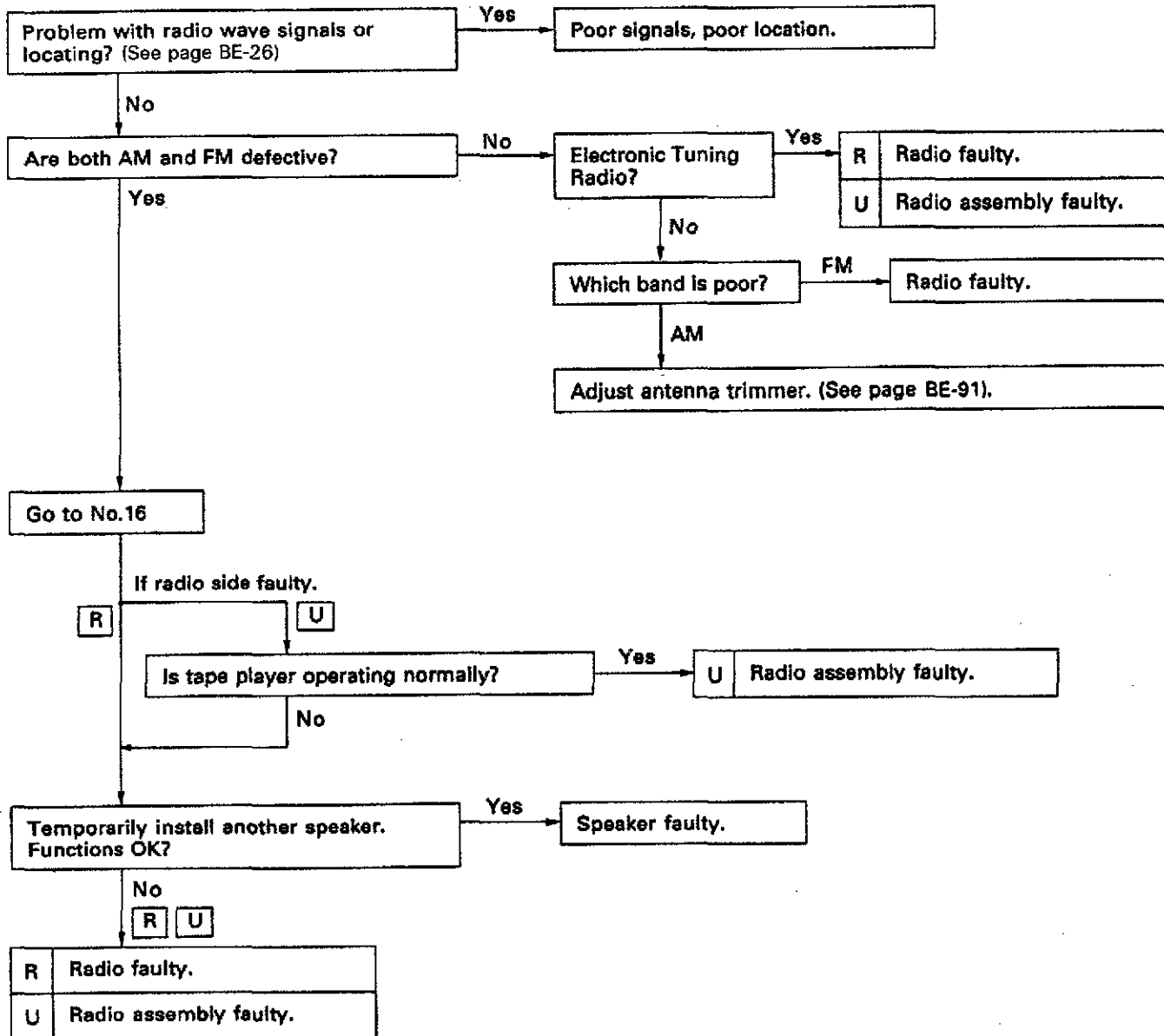
R : Radio

U : Radio – Tape Player Unit



5	Radio	EITHER AM OR FM DOES NOT WORK, RECEPTION POOR (VOLUME FAINT), FEW PRESET TUNING BANDS
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R : Radio **U** : Radio – Tape Player Unit



BE

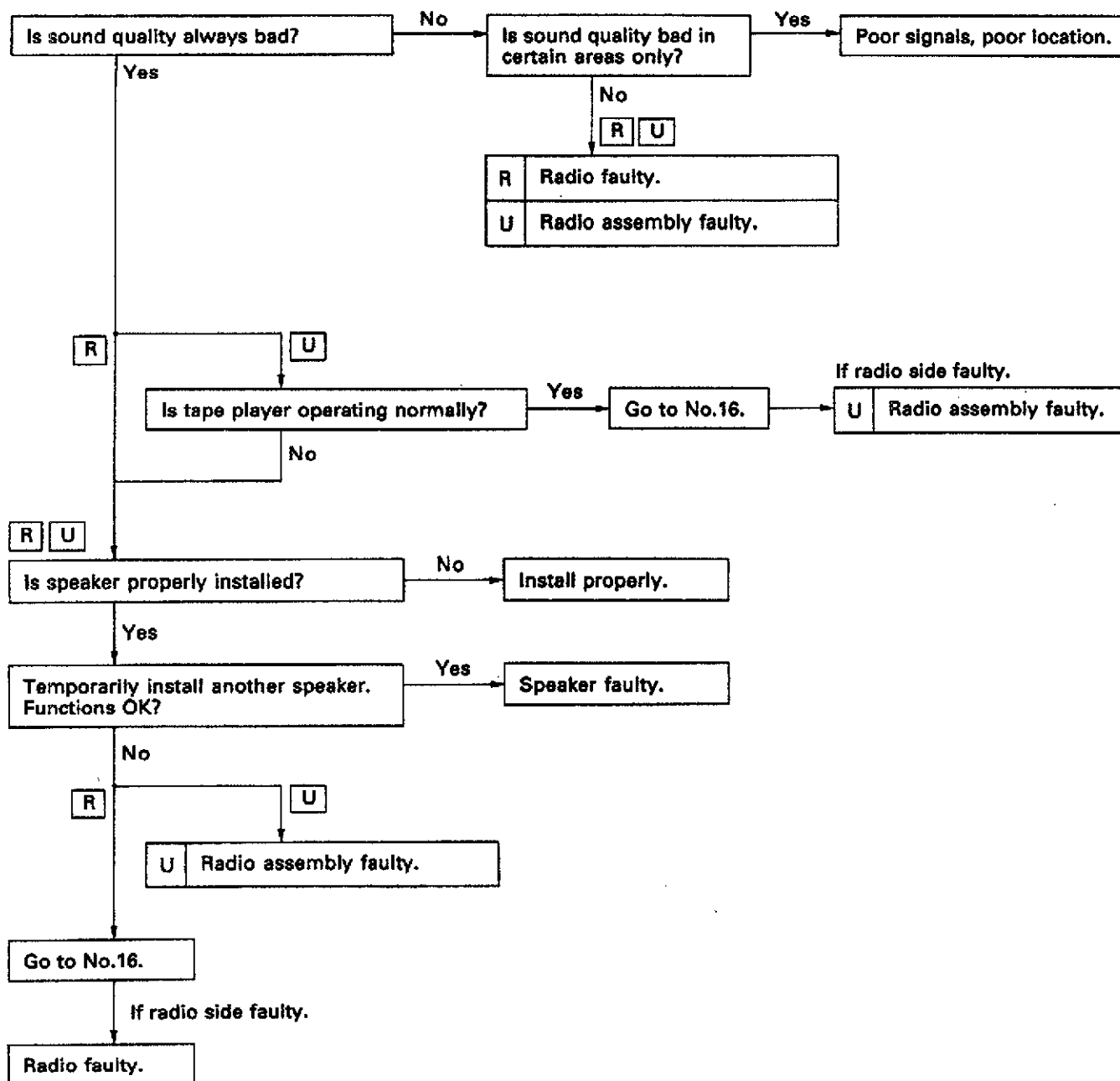
6

Radio

SOUND QUALITY POOR

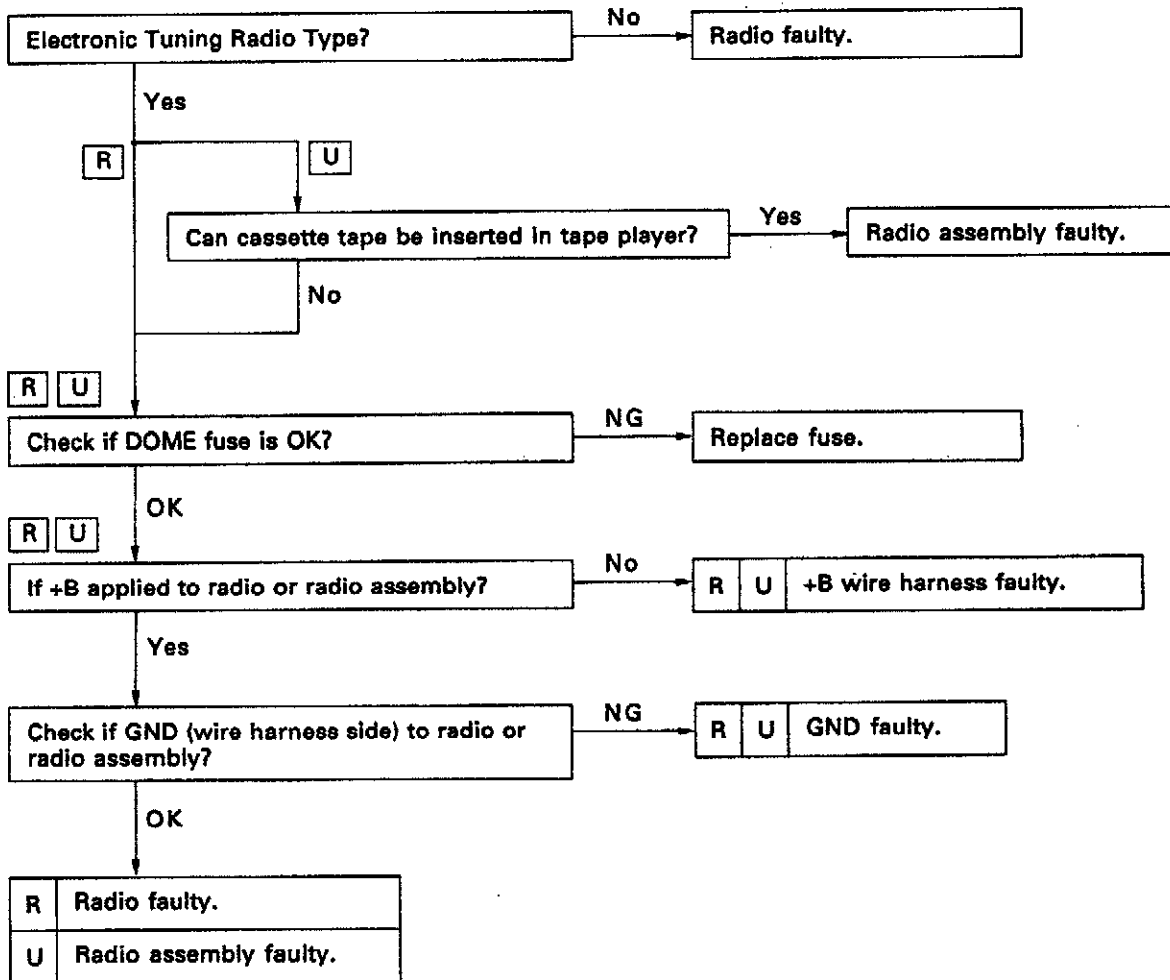
R : Radio

U : Radio – Tape Player Unit



7	Radio	CANNOT SET STATION SELECT BUTTON, PRESET MEMORY DISAPPEARS
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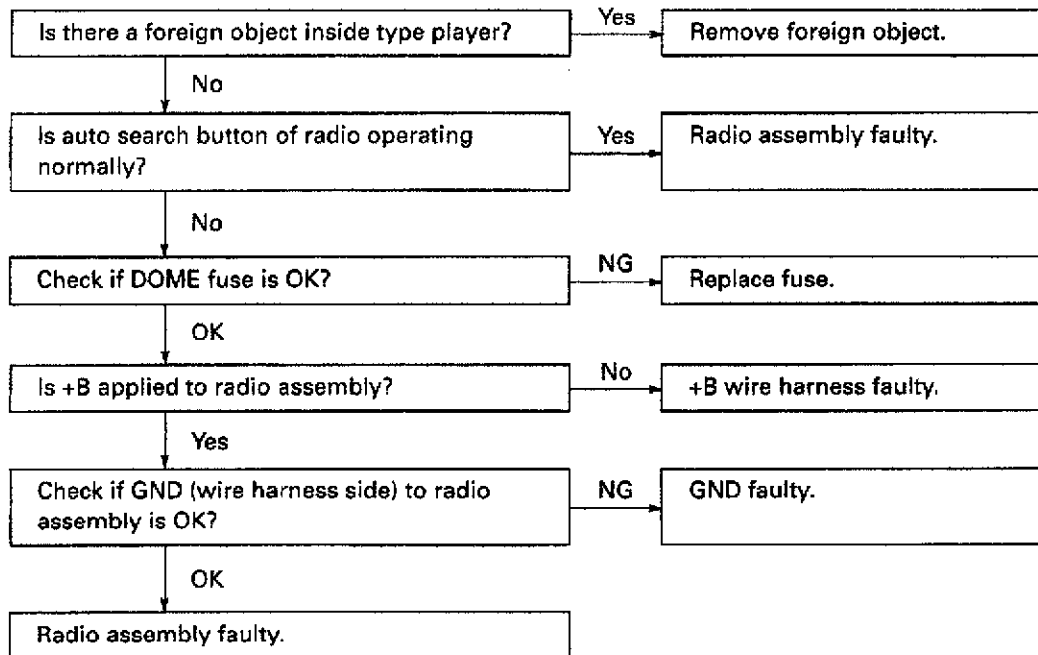
R : Radio **U** : Radio – Tape Player Unit



BE

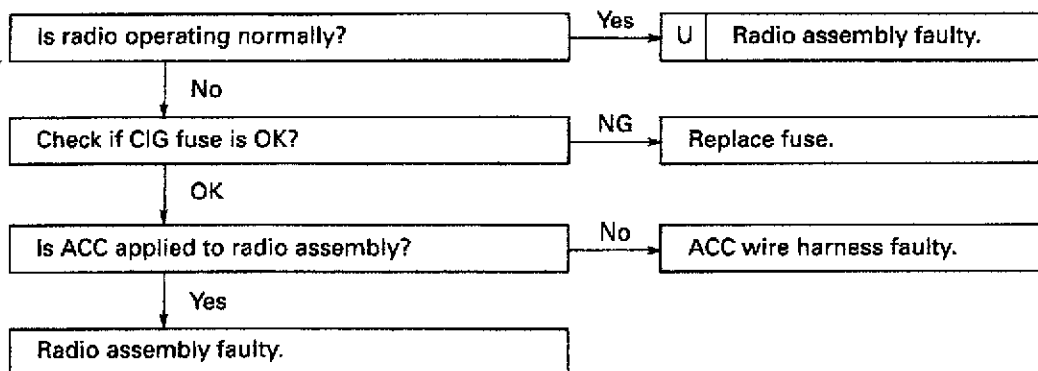
8	Tape Player	CASSETTE TAPE CANNOT BE INSERTED
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U : Radio – Tape Player Unit



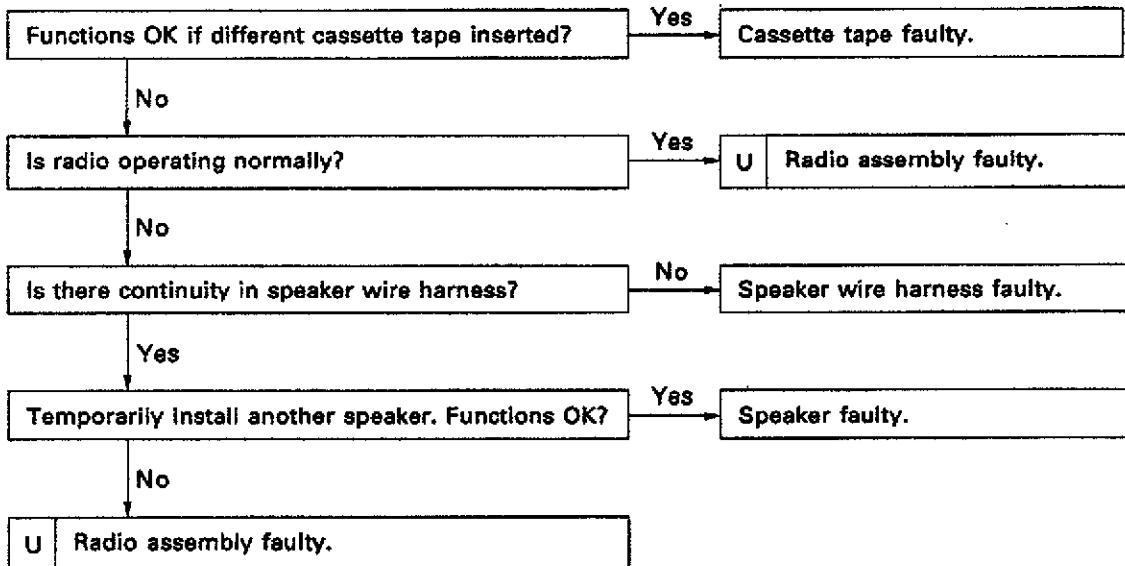
9	Tape Player	CASSETTE TAPE INSERTS, BUT NO POWER
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U : Radio – Tape Player Unit



10	Tape Player	POWER COMING IN, BUT TAPE PLAYER NOT OPERATING
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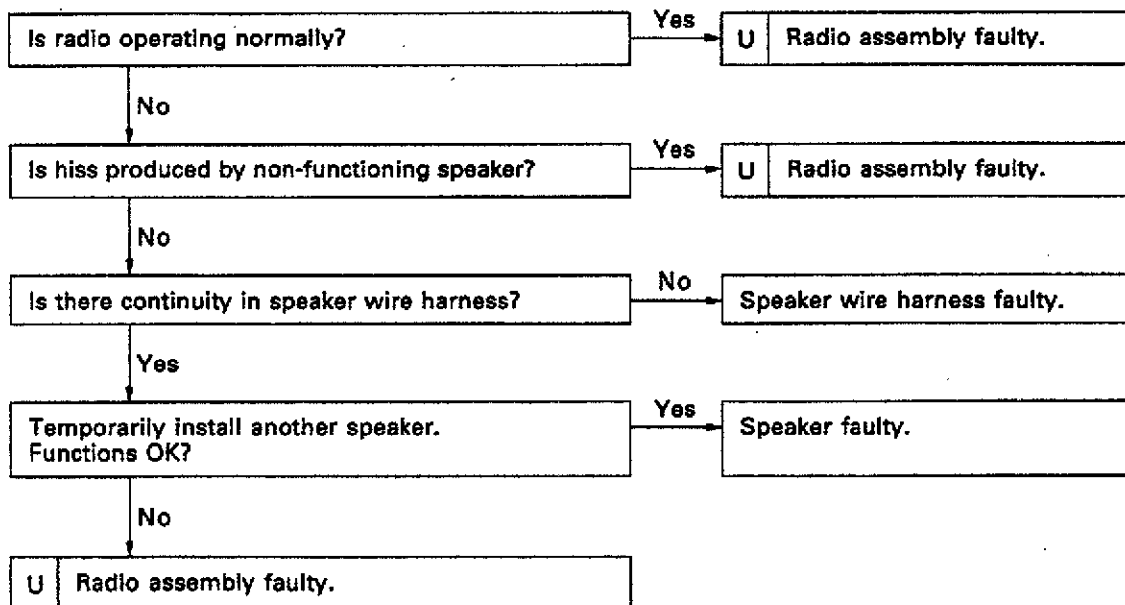
U : Radio – Tape Player Unit



BE

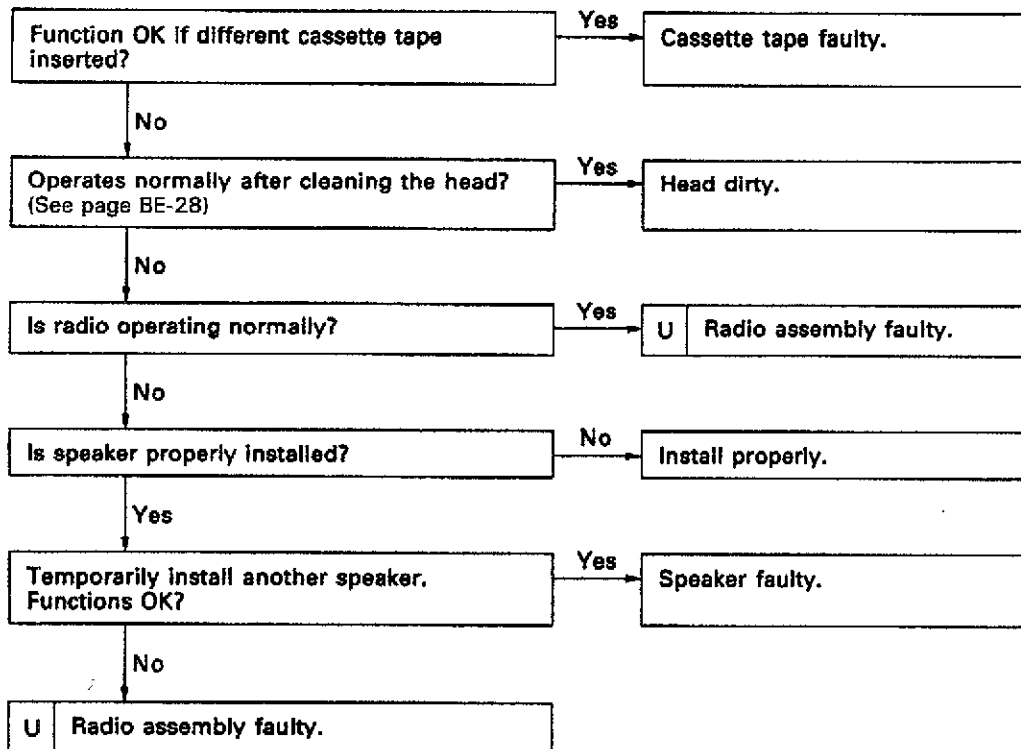
11	Tape Player	EITHER SPEAKER DOES NOT WORK
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U : Radio – Tape Player Unit



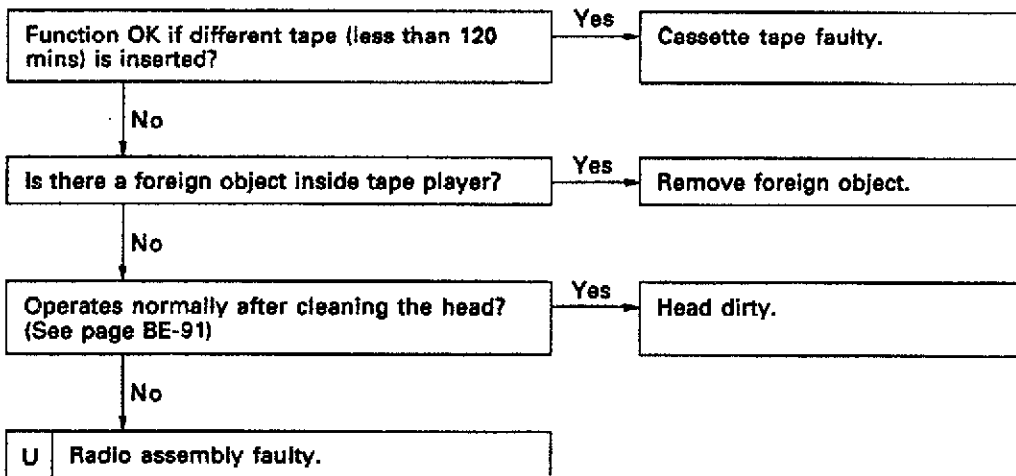
12	Tape Player	SOUND QUALITY POOR (VOLUME FAINT)
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U : Radio – Tape Player Unit



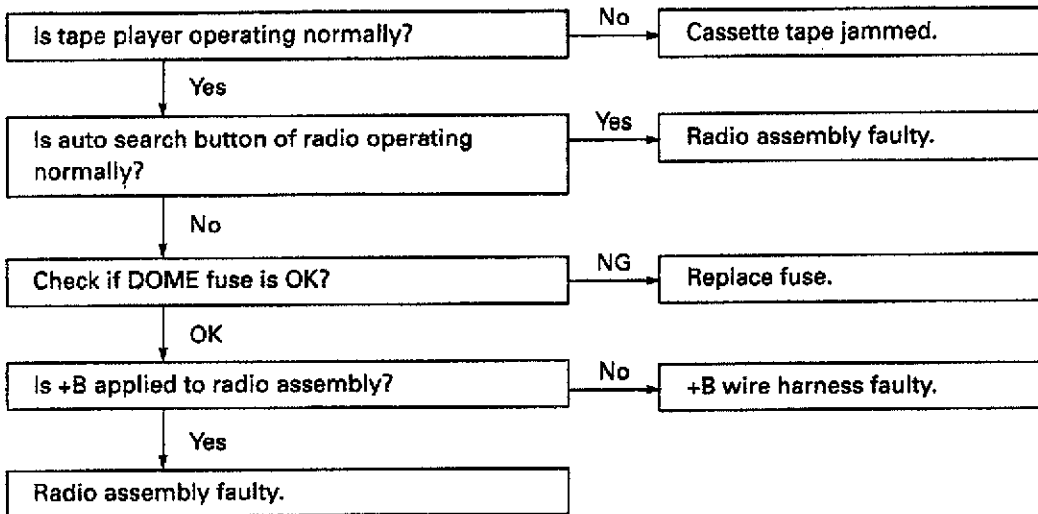
13	Tape Player	TAPE JAMMED, MALFUNCTION WITH TAPE SPEED OR AUTO-REVERSE
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U : Radio – Tape Player Unit

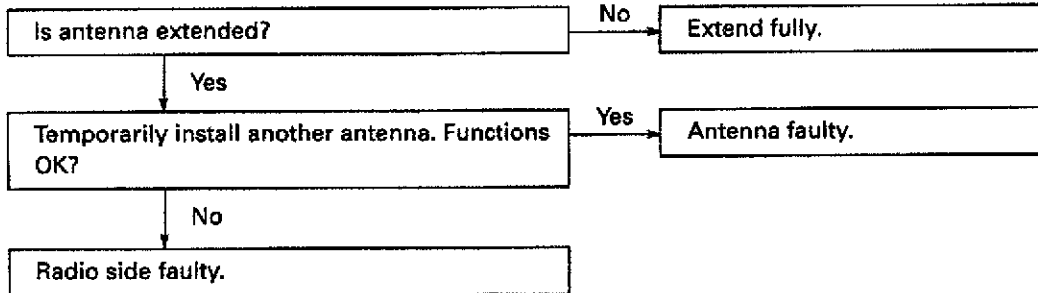


14 Tape Player CASSETTE TAPE WILL NOT EJECT

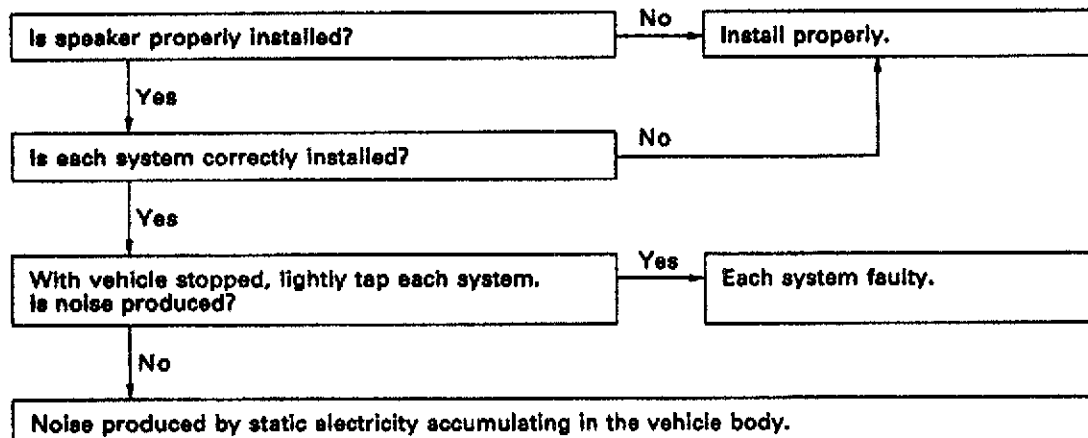
U : Radio – Tape Player Unit



15 Antenna ANTENNA-RELATED



16 Noise NOISE PRODUCED BY VIBRATION OR SHOCK WHILE DRIVING



17

Noise

NOISE PRODUCED WHEN ENGINE STARTS

