SYSTEM DESCRIPTION

1. COMPACT DISC PLAYER

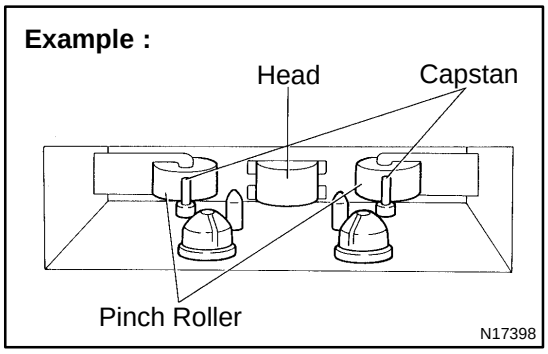
(a) Compact Disc Players (hereafter called ”CD”) use a laser beam pick–up to read the digital signals recorded on the CD and reproduce analog signals of the music, etc. 4.7 in. (12 cm) discs are available for the CD player.

HINT:

Never disassemble or apply oil to any part of the player unit. Do not insert any object other than a disc into the CD player.

NOTICE:

CD players use an invisible laser beam which could cause hazardous radiation exposure. Be sure to operate the player correctly as instructed.

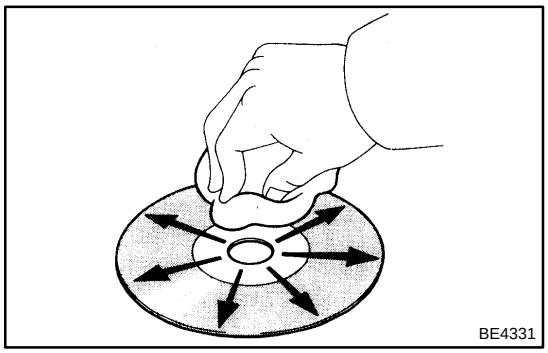


2. MAINTENANCE

Tape Player / Head Cleaning:

(a) Raise the cassette door with your finger.
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, pinch rollers and capstans.



3. MAINTENANCE

CD Player / Disc Cleaning:

If the disc gets dirty, clean the disc by wiping the surface from the center to outside in the radial directions with a soft cloth.

NOTICE:

Do not use a conventional record cleaner or anti–static preservative.

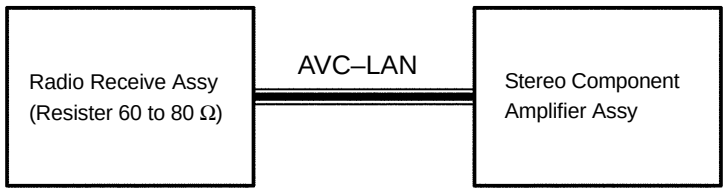
4. OUTLINE OF AVC–LAN

(a) What is AVC–LAN?

AVC–LAN is the abbreviation for Audio Visual Communication–Local Area Network. This is an unified standard co–developed by 6 audio manufacturers associated with Toyota Motor Corporation.

The unified standard includes signals, such as audio, visual and signals for switch indication and communication.

Example:



P I39082

(b) Objectives

Recently, development in car audio systems has been rapid and functions have been changed drastically. The conventional system has been switched to the multi–media type such as a navigation system. At the same time, customers wants to upgrade their audio systems. This is the factor that lies behind this standardization.

The concrete objectives are explained below.

(1) When products by different manufacturers were combined together, malfunctions such as sound failure occurred. This problem can be solved by standardization of signals.

(2) Various types of after market products are available.

(3) Because of the above (2), each manufacturer has been able to concentrate on developing products in their strongest field. This has enabled the development of inexpensive products.

(4) In general, a new product developed by a particular manufacturer could not be used due to a lack of compatibility with other manufacturer's products. By developing this new standard, users can enjoy a range of compatible products from different manufacturers.

(c) The above stated are the reasons for the introduction of AVC–LAN. Under this standardization, development of new products no longer causes systematic errors.

HINT:

- When +B short or GND short is detected in the AVC–LAN circuit, communication stops, and the audio system does not function normally.
- The radio receiver assy is equipped with a resistor (60 to 80 Ω) for communication.
- The car audio system using AVC–LAN circuit has a diagnostic function.

5. COMMUNICATION SYSTEM

(a) Components in the audio system communicate each other through AVC–LAN.

(b) The master component of AVC–LAN is the multi–display. The radio receiver assy has a resistor (60 to 80 Ω), which is necessary for communication.

HINT:

For the AVC–LAN circuit with the navigation system, see page 05–1967, "NAVIGATION SYSTEM".

(c) When a short circuit or circuit breakdown occurs in the AVC–LAN circuit, the audio system does not operate normally due to the communication cutoff.

6. DIAGNOSTIC FUNCTION

(a) The audio system has diagnostic function (the diagnostic result is displayed on the LCD of the radio receiver assy).

(b) The components on the AVC–LAN have a three–digit identification number (physical address). The two–digit numbers (logical address) are also allocated to each function. These codes are referred to as "DTC (Diagnosis Trouble Code)." For details of DTC, see page 05–1785.