

PRE-CHECK

1. DIAGNOSTIC CHECK

(a) Starting Diagnostic Mode (All elements come on during the SW check mode.)

(1) Turn off the audio system and turn the ignition switch to the ACC position. While pressing the pre-set switches "1" and "6" at the same time, press the "DISC" 3 times.

(2) Reference:

- When the system enters the Diagnosis Mode, beep sound is emitted 3 times and all the elements come on during the SW check mode.
- It takes about 40 seconds to complete the check.
- Turn all the elements in the LCD on.
- When pressing the switch, confirm beep sound is emitted.
- Press the "SEEK TRACK UP" switch to enter the "Service Check Screen".

(b) Service Check Screen

(1) Reference:

In the service check mode, the system check and the diagnostic memory check are performed, and the check results are displayed in ascending order of the component codes (physical address).

Terms	Meaning
Component code (Physical address)	Three-digit code (in hexadecimal) given to each device comprising AVC-LAN. Corresponding to its function, individual symbol is provided.
Logical address	Two-digit code (in hexadecimal) given to each function and device unit in each device comprising AVC-LAN.

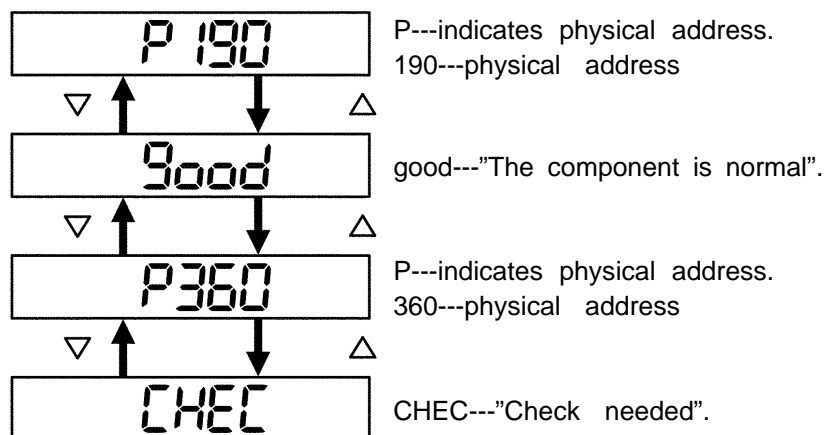
Code No. (physical address) List

Code No. (physical address)	Equipment name
190	Radio receiver assy (Audio head unit)
1F6, 16C	Multi-display Controller Sub-assy

(c) Finishing Diagnostic Mode

(1) Press the "DISC" switch for 2 seconds or more, or turn the ignition switch off.

- (d) Service Check Mode Result Display (for checking the current and the past system conditions).
- (1) Press the "SEEK TRACK" switch to see the check result of each component.



△ : SEEK TRACK UP

▽ : SEEK TRACK DOWN

The illustration shows the case that the system has 2 components with codes 190 and 360, and one component (code 360) requires a check.

The check result is displayed in ascending order of component code. The component device code is displayed first, and then the check result follows.

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(2) Check Result Display.

Display	Original Language	Meaning	Action to be taken
good	Good (normal)	No DTCs are detected in both "System Check Mode" and "Diagnostic Memory Mode".	-
NCON	No connection	The system recognized the component when it was registered, but the component gives no response to the "Diagnostic Mode ON Request".	Check the power source circuit and the communication circuit of the component indicated by the component code (physical address).
ECHN	Exchange	One or more DTCs for "Exchange" are detected in either "System Check Mode" or "Diagnostic Memory Mode".	Go to the detailed information mode to check the trouble area referring to the DTC list.
CHEC	Check	When no DTCs are detected for "Exchange", one or more DTCs for "Check" are detected in either "System Check Mode" or "Diagnostic Memory Mode".	Go to the detailed information mode to check the trouble area referring to the DTC list.

Display	Original Language	Meaning	Action to be taken
OLD	Old version	Old DTC application is identified and DTC is detected in either "System Check Mode" or "Diagnostic Memory Mode".	-
NRES	No response	The device gives no response to any one of "System Check Mode ON Request", "System Check Result Request" and "Diagnostic Memory Request".	Check the power source circuit and the communication circuit of the component indicated by the component code (physical address).

(3) To perform the Service Check again, press the preset switch "1".

(e) Detailed Information Mode (when displaying the DTC for a trouble component)

(1) With "CHEC" or "ECHN" being displayed, press the preset switch "2" to go to the detailed information mode.

(2) Press the "SEEK TRACK" switch to display the "System Check Result (SYS)" and "Diagnostic Memory Response (CODE)".

Service Check Mode

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CHEC

PRESET SWITCH "3"

PRESET SWITCH "2"

Detailed Information Mode

*1

P 190

P---indicates physical address.
190---physical address

545

SYS---system check result



1L-62

1---the first code
62---logical address

1d-47

47---DTC

Continue to display detailed information
when more than one DTC are detected.

CODE

CODE---diagnosis memory
response result

2L-01

2---the second code
01---logical address

2d-DC

DC---DTC



2P-360

P---indicates physical address.
360---sub code

2n-6F

(*2)
6F---connection
check number

2c-05

05---the number of times of
occurrence
(in decimal)Continue to display detailed information
when more than one DTC are detected.

From *1

To *1

△ : SEEK TRACK UP

▽ : SEEK TRACK DOWN

The illustration shows the case that the component with code 190 has DTC "47" and "dC" as a result of the system check and the diagnostic memory response.

The detailed information mode shows the system check result first, then the diagnostic memory response result follows. (*2): As for the DTCs that do not have any sub code, sub code is not displayed.

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(3) Displayed Items in Detailed Information Mode

Division Code for DTC display	Meaning	The order of detailed information displayed when the "TUNE UP" switch is pressed (The order is reversed when the "TUNE DOWN" switch is pressed.)
SYS	System check result is displayed.	Logical address → DTC
CODE	Diagnostic memory check result is displayed.	Logical address → DTC → Sub code → Connection confirmation number → The number of times of occurrence

(4) Check the trouble area referring to the DTC list.

(5) To return to the service check mode, press the preset switch "3".

(f) Clearing Individual DTC Memory (when clearing the memory of the DTC detected in the past individually)

(1) Press the preset switch "5" for 2 seconds or more while the "ECHN" is displayed in the service check mode or during the detailed information mode.

HINT:

- A beep sound is emitted once when the DTC memory is completely cleared.
- When the DTC memory is cleared, only the component code (physical address) is displayed for the target component.
- To check DTCs, press the preset switch "1" and perform the service check again.

(g) Clearance of all the DTC memory (when clearing all the memory of the DTCs detected in the past)

(1) Start the diagnostic mode after repairing the trouble area.

(2) Press the preset switch "5" for 2 seconds or more. ("CLR" is displayed at this time.)

HINT:

- A beep sound is emitted once when the DTC memory is completely cleared.
 - When the DTC memory for all the component is cleared, only the component codes (physical address) are displayed.
- (3) Press the preset switch "1" to perform the service check again, and check that no DTCs are displayed for all the component codes (physical address).

2. IDENTIFICATION OF NOISE SOURCE

- (a) Identify the condition in which the noise occurs, and check the noise filter on the related part.

Condition in which noise occurs	Noise Source
Depressing the acceleration pedal increases the noise, and stopping the engine stops the noise immediately.	Generator
Noise occurs during A/C or the heater operation.	Blower motor
Rapid acceleration while driving on an unpaved road or after the ignition switch is turned on makes noise.	Fuel pump
Pressing and then releasing the horn switch, and keeping pressing the horn switch makes unusual noise.	Horn
Quiet noise is heard while the engine is running, but stops with the engine.	Ignition
Noise occurs synchronously with the turn signal flash.	Flasher
Noise occurs during the window washer operation.	Washer
Noise occurs during the engine running, and it continues even after the engine stops.	Engine coolant temperature sensor
Noise occurs during the wiper operation.	Wiper
Noise occurs when the brake pedal is depressed.	Stop light switch
Others	Static electricity stored on the vehicle

- (b) Reference:

- Make sure first that there is no noise from outside. Failing to do so makes the noise source detection difficult and leads to misunderstanding.
- The noise should be removed in descending order of loudness.
- Turning the radio so that no station is received makes the noise more noticeable, making the recognition of the phenomenon easier.