05HD7-01

DIAGNOSTIC TROUBLE CODE CHART

Terms	Description
Physical@address	3-digit, the xadecimal code assigned to all components connected to the the AVC-LAN. Individual symbols are specified to a sed on the three se
Logical@address	2-digit,[hexadecimal[code[assigned[lo[all[lhe[lunctions[ln[lhe[AVC-LAN[system.

HINT:

Titles[f] or [ach [] in the [f] ollowing [] or der: [] parts[] name [] physical [] address) [] Name [] nd icated [] by [] TC] and the content of the conte

1. MULTI-DISPLAY [physical address: 110] [EMV]

(a) Logical address: 11 Communication control)

DTC	Name	Diagnosis	Verification	See page
D5 *1 *5	Absence of registration unit	A device that the sub code shows is (was) disconnected from the system when turning the ignition switch to the ACC or ON position. The communication condition with the device that the code shows cannot be obtained when the engine starts.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D8 *2 *5	No response for connection check	The device indicated by the sub code is (was) disconnected from the system after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D9 *1 *5	Last mode error	The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the ignition switch is (was) in the ACC or ON position.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DA *5	No response against ON/OFF command	No response is identified when changing mode (audio and visual mode change). Detected when sound and image do not change by switch operation.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DB *1 *5	Mode status error	This code detects a dual alarm.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DC *3 *5	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DE *4 *5	Slave reset	This code is stored when a slave device has been disconnected after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
21	ROM error	This code is output when a malfunction exists in ROM.	Replace multi-display	67-8
22	RAM error	This code is output when a malfunction exists in RAM.	Replace multi-display	67-8

- 1: This code may be recorded depending on the battery condition or engine start voltage even if no failure is detected.
- 2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- *3: This code may be stored fine gnition key is furned to the START position again with the engine running.
- *4: This Gode may be stored if the ignition key is held in the \$TART position for 1 minute or more before returning to the ON position.
- *5: [[ft]] hetelievice is freported as fnot existing during verification, wheck the power source training and AVC-LAN wire cuit for the device.
- (b) Logical ddress: 21 SW: with mame): 24 SW converting): 25 command SW)

DTC	Name	Diagnosis	Verification	See page
10	Panel switch error	The panel SW detection circuit has a failure.	Replace multi-display	67-8

2. NAVIGATION [ECU [Physical address: 178] [NAVI]

(a) Logical address: 1 Communication control)

HINT:

 $Methods \hbox{$\tt @} is ed \hbox{$\tt @} is ed \hbox{$\tt @} is ed \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} is ted \hbox{$\tt @} in \hbox{$\tt @} ret \hbox{$\tt @} in \hbox{$\tt @$

DTC	Name	Diagnosis	Verification	See page
		When either the following condition meets.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display -	05-1 <u>8</u> 43
D6 *1	No master	The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position.	radio receiver assy) 3. Power source circuit (navigation ECU)	05-1845
		The master device has (had) been disconnected when this code is (was) stored.	4. AVC-LAN circuit (navigation ECU – stereo component tuner) 5. Double of the state of the sta	05-1884
			5. Replace multi-display6. Replace navigation ECU	67–8 67–9
			Power source circuit (multi-dis-	05-1 <mark>8</mark> 43
		When either the following condition meets.	play) 2. AVC-LAN circuit (multi-display - radio receiver assy)	05-1898
D7	Connection check error	The device that stored this code has (had) been disconnected after the engine starts (started). The master device has (had) been disconnected.	Power source circuit (navigation ECU)	05–1 <mark>8</mark> 45
		when this code is (was) stored.	4. AVC-LAN circuit (navigation ECU – stereo component tuner) 7. Description:	05-1884
			5. Replace multi-display6. Replace navigation ECU	67–8 67–9
DC		The device stores the fact that transmission to the	Inspection for the device indicated by the sub code.	Refer to
*2 *5	Transmission error	device indicated by the sub code has failed.	(Refer to the inspection list for the device indicated by the sub code.)	step 10
			Power source circuit (multi-dis-	05-1 <mark>8</mark> 43
*3	Master reset	When the device that should be the master has been disconnected after engine starts.	play) 2. AVC-LAN circuit (multi-display - radio receiver assy)	05-1 8 98
			3. Replace multi-display	67-8
DF	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display -	05-1 8 43
*4		master (audio) and master occurs, this code is stored.	radio receiver assy) 3. Replace multi-display	67-8
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
		When the AMP device records that the AMP out-	Power source circuit (multi-dis- play)	05-1843
E1 *1	Voice processing device ON er- ror	put does not function even while the source de- vice operates.	AVC-LAN circuit (multi-display - radio receiver assy)	05-1 8 98
			3. Replace multi-display	67–8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67–8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely.	-	-

- *1: Even if molfailure is detected, all rouble code may be recorded depending on the battery condition or engine start voltage.
- 2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- 3: This code may be stored fine ignition key is furned again after the engine starts.
- 2: This code may be stored file ignition key is held in the START position for one minute or more before returning of he ON position.
- *5: [[ft]] hetelievice is freported as fnot existing during verification, wheck the power source training and AVC-LAN wire cuit for the device.

(b) Logical address: \[\frac{1}{5}8 \] Navigation): \[\frac{1}{5}0 \] GPS)

HINT:

 $Methods \underline{\ \ } listed \underline{\ \ } log verify \underline{\ \ } leg verification \underline{\ \ } column.$

DTC	Name	Diagnosis	Verification	See page
10	Gyro error	Ground short, power supply short, or open circuit in the gyro signal, gyro failure.	 Inspect the gyro error Replace GPS antenna Replace navigation ECU 	05–1 <mark>8</mark> 28 67–33 67–9
11	GPS receiver error	RTC, ROM, and RAM of the GPS receiver and TCXO errors. GPS receiver is failed.	Replace navigation ECU	67–9
40	GPS antenna error	GPS antenna error	Replace GPS antenna Replace navigation ECU	67–33 67–9
41	GPS antenna power source error	Error of the power source to the GPS antenna	Replace GPS antenna Replace navigation ECU	67–33 67–9
42	Map disc read error	Player error. A scratch or dirt on the disc. Access to an invalid address due to software error.	Inspect map disc read error Replace map disc Replace navigation ECU	05-1 8 29 - 67-9
43	SPD signal error	The difference between the GPS speed and SPD pulse is detected.	Inspect speed signal error Speed signal circuit Replace navigation ECU	05-1 8 30 05-1 8 59 67-9

3. RADIO[RECEIVER[ASSY[[Physical[address: 190)[[AUDIO[H/U]

(a) Logical address: 1 Communication control)

HINT:

 $Methods \hbox{$ @ $ listed $ listed $ @ $ listed $ @ $ listed $ @ $ listed $ listed $ @ $ listed $ @ $ listed $ @ $ listed $ listed $ @ $ listed $ listed $ listed $ @ $ listed $ listed $ @ $ listed $ li$

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position. • The master device has (had) been disconnected when this code is stored.	 Power source circuit (multi-display) AVC-LAN circuit (multi-display - radio receiver assy) Power source circuit (radio receiver assy) Replace multi-display Replace radio receiver assy 	05-1 <u>B</u> 43 05-1 <u>B</u> 98 05-1 <u>B</u> 49 67-8 67-5
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this code is (was) stored.	Power source circuit (multi-display) AVC-LAN circuit (multi-display – radio receiver assy) Power source circuit (radio receiver assy) Replace multi-display Replace radio receiver assy	05-1 <u>B</u> 43 05-1 <u>B</u> 98 05-1 <u>B</u> 49 67-8 67-5
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>B</u> 43 05-1 <u>B</u> 98 67-8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67-8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely	-	-

(b) Logical address: 01 (Communication control)

DTC	Name	Diagnosis	Verification	See page
D5 *1 *5	Absence of registration unit	A device that the sub code shows is (was) disconnected from the system when turning the ignition switch to the ACC or ON position. The communication condition with the device that the code shows cannot be obtained when the engine starts.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D8 *2 *5	No response for connection check	The device indicated by the sub code is (was) disconnected from the system after engine start	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D9 *1 *5	Last mode error	The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the ignition switch is (was) in the ACC or ON position.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DA *5	No response against ON/OFF command	No response is identified when changing mode (audio and visual mode change). Detected when sound and image do not change by switch operation.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DB *1 *5	Mode status error	This code detects a dual alarm.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DC *3 *5	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DE *4 *5	Slave reset	This code is stored when a slave device has been disconnected after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10

HINT:

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC–LAN circuit for the device.

(c) Logical address: 62 (CD): 63 (CD changer)

HINT:

DTC	Name	Diagnosis	Verification	See page
10	CD player mechanical error	A mechanical error in the CD player is detected while the CD is not being inserted or ejected.	Replace radio receiver assy	67–5
11	CD insertion & eject error	CD insertion or ejection is failed.	Replace radio receiver assy	67–5
12	CD reading abnormal	CD read problem occurs.	Replace radio receiver assy	67–5
40	No disc	No disc is inserted.	Check whether the CD is inserted or not. If the CD is inserted, check whether it can be ejected or not. If it cannot be ejected, replace radio receiver assy. Inspect CD. If the same code is detected, replace the radio receiver assy.	67-5 05-1 <u>0</u> 92 67-5
41	Wrong disc	An unsuitable disc is inserted.	Inspect CD. If the same code is detected, replace the radio receiver assy	05–1 <u>6</u> 92 67–5
42	Disc cannot be read	The disc cannot be read.	Inspect CD. If the same code is detected, replace the radio receiver assy	05–1 <u>6</u> 92 67–5
43	CD-ROM abnormal	CD-ROM operation is abnormal.	Replace radio receiver assy	67–5
44	CD abnormal	Operation error in the CD mechanism (except for code 10).	After clearing the DTC, check the malfunction symptom. If the same code is detected, replace the radio receiver assy	- 67-5
45	EJECT error	Magazine cannot be ejected	Replace radio receiver assy	67–5
46	Disc has scratches in the reverse surface	CD has a dirt or scratches in the reverse side	Inspect CD. If the same code is detected, replace the radio receiver assy	05–1 <u>6</u> 92 67–5
47	CD temperature is high	The sensor detects that the CD unit temperature is high.	Park the vehicle in a cool place. Turn the engine off. After checking that the temperature of the radio and navigation assy becomes sufficiently low, turn the engine on in order to verify the malfunction symptom. If the same code is detected, replace the radio receiver assy	- 67-5
48	Excess current	Excess current is applied to the disc player changer	Replace radio receiver assy	67–5
50	Tray insertion/ejection error	Malfunction insertion/ejection system	Replace radio receiver assy	67–5
51	Elevator error	Mechanical error occurred during elevator operation	Replace radio receiver assy	67–5
52	Clamp error	Clamp unusually generating	Replace radio receiver assy	67–5

(d) Logical address: 61 (Cassette)

HINT:

DTC	Name	Diagnosis	Verification	See page
10	Belt cut	The inside belt is cut or came off.	Replace radio receiver assy	67–5
40	Mechanical error of media	A malfunction due to mechanical problem, cassette tape is cut or entangled.	Replace the cassette tape and recheck the symptom. If the same code is detected, replace the radio receiver assy	- 67-5
41	EJECT error	A malfunction due to mechanical problem.	Replace radio receiver assy	67–5
42	Tape tangling	Cassette tape is tangled.	Replace radio receiver assy	67–5
43	Head dirt	Head is dirty.	Clean the head and recheck the symptom. If the same code is detected, replace the radio receiver assy	- 67-5
44	Device power supply problem	A short or open in the power circuit.	Power source circuit (radio receiver assy) Replace radio receiver assy	05-1 <u>8</u> 49 67-5

4. TELEPHONE TRANSCEIVER AND SPEAKER RELAY (Physical address: 17D) [TEL]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position. • The master device has (had) been disconnected when this code is (was) stored.	 Power source circuit (multi-display) AVC-LAN circuit (multi-display - radio receiver assy) AVC-LAN circuit (stereo component amplifier assy - stereo component tuner) Replace multi-display Replace telephone transceiver and speaker relay 	05-1 <u>8</u> 98 05-1 <u>8</u> 92 67-8
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this code is (was) stored.	 Power source circuit (multi-display) AVC-LAN circuit (multi-display - radio receiver assy) AVC-LAN circuit (stereo component amplifier assy - stereo component tuner) Replace multi-display Replace telephone transceiver and speaker relay 	05-1 <u>8</u> 98 05-1 <u>8</u> 92 67-8
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 8 43 05-1 8 98 67-8
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67-8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely		-

21	ROM error	'	Replace telephone transceiver and speaker relay	-
22	RAM error	·	Replace telephone transceiver and speaker relay	-

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC–LAN circuit for the device.
- (b) Logical address: 57 (Telephone information drawing): 68 (TEL)

HINT:

DTC	Name	Diagnosis	Verification	See page
10	TEL ECU malfunction	Malfunction in TEL ECU is detected.	Replace telephone transceiver and speaker relay	-
40	Communication line serial line malfunction	Communication malfunction with TEL ECU is detected.	AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) Replace telephone transceiver and speaker relay	05-1 <mark>8</mark> 92 -
41	Telephone power line malfunc- tion	TEL ECU detects a malfunction with cellular phone power.	Inspect telephone Replace telephone	_ _

5. AUDIO AND REAR A/C CONTROL SW (Physical address: 1C0) [Rr-CONT]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position. • The master device has (had) been disconnected when this code is (was) stored.	 Power source circuit (multi-display) AVC-LAN circuit (multi-display - radio receiver assy) Power source circuit (audio and rear A/C control SW) AVC-LAN circuit (stereo component amplifier assy - audio and rear A/C control SW) Replace multi-display Replace audio and rear A/C control SW 	05-1 <u>8</u> 98 05-1 <u>8</u> 98 05-1 <u>8</u> 95 05-1 <u>8</u> 95
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this code is (was) stored.	Power source circuit (multi-display) AVC-LANcircuit (multi-display – radio receiver assy) Power source circuit (audio and rear A/C control SW) AVC-LAN circuit (stereo component amplifier assy – audio and rear A/C control SW) Replace multi-display Replace audio and rear A/C control SW	05-1898 05-1856 05-1895 67-8 67-11
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 8 43 05-1 8 98 67-8
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
E0 *1	Registration complete indication When "Registration complete" command from the This code will be detected w		This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 8 43 05-1 8 98 67-8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67–8

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely	-	-

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC– LAN circuit for the device.

6. GATEWAY ECU (Physical address: 1C6) [G/W]

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D4	Regular Communication Error	Component in which this code is recorded has been disconnected from system with ignition in the ACC or ON position. Either that, or the multi-	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display – radio receiver assy) Power source circuit (gateway)	05-1 <u>8</u> 43 05-1 <u>8</u> 98
		display was disconnected when this code was recorded.	ECU) 4. AVC-LAN circuit (radio receiver assy – gateway ECU)	05-1 <mark>8</mark> 88
			5. Replace multi-display	67-8
			6. Replace gateway ECU	_

HINT:

This code is stored 210 seconds after the power supply connector of the master component is disconnected with the ignition switch in the ACC or ON position.

7. STEREO COMPONENT TUNER (Physical address: 1F0) [RADIO TUNER]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
D6		When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy) Power source circuit (stereo	05-1 <u>8</u> 98 05-1 <u>8</u> 98
*1	No master	switch is (was) in ACC or ON position. The master device has (had) been disconnected when this code is (was) stored.	component tuner) 4. AVC-LAN circuit (radio receiver assy - stereo component tuner) 5. Replace multi-display 6. Replace stereo component tuner	05–1 8 90 67–8 67–1 2
			Nepiace stered component tuner Power source circuit (multi-dis-	07-1 <u>8</u> 43
		When either the following condition meets	play) 2. AVC-LANcircuit (multi-display -	05-1898
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started).	radio receiver assy) 3. Power source circuit (stereo component tuner)	05–1 <mark>8</mark> 51
		The master device has (had) been disconnected when this code is (was) stored.	4. AVC-LAN circuit (radio receiver assy – stereo component tuner) 5. Replace multi-display	05–1 ₫ 90 67–8
			Replace multi-display Replace stereo component tuner	67-12
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display - radio receiver assy)	05-1 <u>8</u> 43
			3. Replace multi-display	67–8
DF *4	ter is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is		Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy)	05-1 <u>8</u> 98
E0 *1	Registration complete indication error	when "Registration complete" command from the master device cannot be received.	Replace multi-display This code will be detected when signal receiving time is delayed.	67-8
			Power source circuit (multi-dis-	05-1 <mark>8</mark> 43
E1 *1	Voice processing device ON error	put does not function even while the source de-	play) 2. AVC-LAN circuit (multi-display - radio receiver assy) 3. Replace multi-display	05−1 8 98
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67-8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely	-	-

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC– LAN circuit for the device.
- (b) Logical address: 60 (Radio)

HINT:

DTC	Name	Diagnosis	Verification	See page
10	AM tuner PLL does not lock	The PLL circuit in the AM tuner is abnormal.	 After clearing the DTC, check the antenna wiring. If the same code is detected, re- place the stereo component tun- er. 	- 67-1결
11	FM tuner PLL does not lock	The PLL circuit in the FM tuner is abnormal.	 After clearing the DTC, check the antenna wiring. If the same code is detected, re- place the stereo component tun- er. 	- 67-1일
40	Antenna is not connected	The antenna is disconnected.	 After clearing the DTC, check the antenna wiring. If the same code is detected, re- place the stereo component tun- er. 	- 67-1일
41	Antenna power source error	The power source system of the antenna is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	
42	Tuner power source error The power source of the tuner is abnormal component tuner)		Power source circuit (stereo component tuner) Replace stereo component tuner	05-1 8 51 67-1 2
43	AM tuner error	AM tuner error The AM tuner is abnormal. Replace stereo component tuner		67-12
44	FM tuner error	The FM tuner is abnormal. Replace stereo component tuner		67-12
45	SW tuner error The SW tuner is abnormal. Replace stereo component tuner		67-12	

8. TELEVISION CAMERA ECU (Physical address: 280) [CAMERA]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
	No master	When either the following condition meets.	Power source circuit (multi-dis- play) AVC-LAN circuit (multi-display -	05-1 <u>8</u> 43
D6 *1		The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position.	radio receiver assy) 3. Power source circuit (television camera ECU)	05-1 <mark>8</mark> 47
		The master device has (had) been disconnected when this code is stored.	AVC-LAN circuit (navigation ECU – television camera ECU)	05–1 <mark>8</mark> 86
			5. Replace multi-display6. Replace television camera ECU	67–8 67–1 5
			Power source circuit (multi–dis-	05-1 <mark>B</mark> 43
		When either the following condition meets.	play) 2. AVC-LAN circuit (multi-display -	05-1 <u>B</u> 98
D7	Connection check error	The device that stored this code has (had) been disconnected after the engine starts (started).	radio receiver assy) 3. Power source circuit (television camera ECU)	05–1847
		The master device has (had) been disconnected when this code is (was) stored.	4. AVC-LAN circuit (navigation ECU – television camera ECU)	05-1886
			5. Replace multi-display	67-8
			Replace television camera ECU Inspection for the device indicated	67–1 <u>5</u>
DC *2	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	by the sub code. (Refer to the inspection list for the	Refer to step 10
*5			device indicated by the sub code.)	
DD		When the device that should be the master has	Power source circuit (multi-dis- play)	05-1843
*3	Master reset	been disconnected after engine starts.	AVC-LAN circuit (multi-display – radio receiver assy) Replace multi-display	05–1 <u>₽</u> 98 67–8
		When the device with a display fails and the mas-	Power source circuit (multi-dis-	05-1843
DF *4	Master error	ter is switched to the audio device. Also when a communication error between sub	play) 2. AVC-LAN circuit (multi-display -	05-1 <u>8</u> 98
		master (audio) and master occurs, this code is stored.	radio receiver assy) 3. Replace multi-display	67–8
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	ı
			Power source circuit (multi-dis-	05-1 <mark>8</mark> 43
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	play) 2. AVC-LAN circuit (multi-display - radio receiver assy)	05-1 <mark>8</mark> 98
			Replace multi-display	67–8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67–8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely	-	-

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC– LAN circuit for the device.
- (b) Logical address: 5C (Camera)

HINT:

DTC	Name	Diagnosis	Verification	See page
40	Camera Picture Error Synchronous signal from the camera transmitted.		 Replace television camera assy Replace television camera ECU 	67-1 <u>4</u> 67-1 <u>5</u>

9. STEREO COMPONENT AMPLIFIER ASSY (Physical address: 440) [DSP AMP]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition switch is (was) in ACC or ON position. • The master device has (had) been disconnected when this code is (was) stored.	Power source circuit (multi-display) AVC-LAN circuit (multi-display – radio receiver assy) Power source circuit (stereo component amplifier assy) AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) Replace multi-display Replace stereo component amplifier assy	05-1898 05-1853 05-1892 67-8 67-18
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this code is (was) stored.	Power source circuit (multi-dis-play) AVC-LANcircuit (multi-display - radio receiver assy) Power source circuit (stereo component amplifier assy) AVC-LAN circuit (stereo component amplifier assy - stereo component tuner) Replace multi-display Replace stereo component amplifier assy	05-1898 05-1853 05-1892 67-8 67-16
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 98 05-1 <u>8</u> 98 67-8
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
E0 *1			This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	Power source circuit (multi-dis- play) AVC-LANcircuit (multi-display - radio receiver assy) Replace multi-display	05-1 <u>8</u> 43 05-1 <u>8</u> 98 67-8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67–8

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	1	I
E4	Multiple frame incomplete	When the multiple frame transmission ends incompletely	-	ı

- *1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds
- *3: This code may be stored if the ignition key is turned again after the engine starts.
- *4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- *5: If the device is reported as not existing during verification, check the power source circuit and AVC– LAN circuit for the device.

10. THE INSPECTION LIST FOR THE DEVICE INDICATED BY THE SUB CODE

HINT:

Sub code address (Device name)	Verification	See page
110 (Multi-display)	Power source circuit (multi-display) AVC-LAN circuit (multi-display - radio receiver assy) Replace multi-display	05-1 <mark>8</mark> 43 05-1 8 98 67-8
178 (Navigation ECU)	Power source circuit (navigation ECU) AVC-LAN circuit (stereo component tuner – navigation ECU) Replace navigation ECU	05–1 <mark>8</mark> 45 05–1 <mark>8</mark> 84 67–9
190 (Radio receiver assy)	Power source circuit (radio receiver assy) AVC-LAN circuit (multi-display – radio receiver assy) Replace radio receiver assy	05–1 g 49 05–1 g 98 67–5
17D (Telephone Transceiver and Speaker Relay)	AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) Replace telephone transceiver and speaker relay	05–1 <mark>8</mark> 92 –
1C0 (Audio and Rear A/C Control SW)	Power source circuit (audio and rear A/C control SW) AVC-LAN circuit (stereo component amplifier assy – audio and rear A/C control SW) Replace audio and rear A/C control SW	05–1 <mark>8</mark> 56 05–1 8 95 67–11
1C6 (Gateway ECU)	AVC-LAN circuit (radio receiver assy – gateway ECU) Replace gateway ECU	05–1 <mark>8</mark> 88 –
1F0 (Stereo Component Tuner)	Power source circuit (stereo component tuner) AVC-LAN circuit (radio receiver assy – stereo component tuner) Replace stereo component tuner	05-1 <mark>8</mark> 51 05-1 <mark>8</mark> 90 67-1 <u>2</u>
280 (Television Camera ECU)	Power source circuit (television camera ECU) AVC-LAN circuit (navigation ECU - television camera ECU) Replace television camera ECU	05–1 <u>8</u> 47 05–1 <u>8</u> 86 67–1 <u>5</u>
440 (Stereo Component Amplifier Assy)	Power source circuit (stereo component amplifier assy) AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) Replace stereo component amplifier assy	05-1 <mark>8</mark> 53 05-1 8 92 67-1 8