055LJ-11

# DIAGNOSTIC TROUBLE CODE CHART

 
 Terms
 Description

 Physical address
 3-digit hexadecimal code assigned to all components connected to the AVC-LAN. Individual symbols are specified based on function. Units whose names are unknown or relevant units are displayed with physical address.

 Logical address
 2-digit hexadecimal code assigned to all the functions in the AVC-LAN system.

HINT:

- Titles for each unit are stated in the following order: component name, (physical address) [DTC displayed name].
- For the DTC of a vehicle with a navigation system, refer to "NAVIGATION SYSTEM" (see page 05–1888).

## 1. MULTI-DISPLAY (PHYSICAL ADDRESS: 110) [EMV]

(a) Logical address: 01 (Communication control)

	DTC	Name		Diagnosis	Ve	rification	See page
	21	ROM error		Abnormal condition of ROM is detected.	Replace	multi-display	67–7
	22	RAM error		Abnormal condition of RAM is detected.	Replace	multi-display 67-7	
DTC	N	ame		Diagnosis		,	Verification
D5	Registered component	nt is missed	or v	nponent in which this code is r vas disconnected from the syster ver switch is in ACC (ON).		sub-codes.	mponents indicated by le for inspection of compo- by sub-code.
D8	No response for conr	nection check	(wa	device indicated by the sub cost of the system of the syst		sub-codes.	mponents indicated by le for inspection of compo- by sub-code.
D9	Last mode error		had (wa	device (for audio visual system functioned before the engine s s) disconnected from the system power switch is (was) in the A e.	stopped is em when	sub-codes.	mponents indicated by le for inspection of compo- by sub–code.
DA	No response against	ON/OFF command	moo Det	response is identified when ch de (audio and visual mode cha ected when sound and image nge by switch operation	nge).	sub-codes.	mponents indicated by le for inspection of compo- by sub-code.
DB	Mode status error		This	s code detects a dual alarm.		sub-codes.	mponents indicated by le for inspection of compo- by sub-code.
DC	Failure in transmissio	n	the NO	s code indicates a transmission device indicated by the sub co TE: This DTC may have no dir ship with the malfunction.	de.	sub-codes.	mponents indicated by le for inspection of compo- by sub-code.
DE	Slave reset			s code is stored when a slave on disconnected after engine st		sub-codes.	mponents indicated by le for inspection of compo- by sub-code.

(b) Logical address: 21 (SW unit): 23 (SW with name unit): 24 (SW converting unit): 25 (command SW unit)

## HINT:

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

DTC	Name	Diagnosis	Verification	See page
10	Panel SW failure	Panel SW detection circuit failure	Replace multi-display	67–7

# 2. RADIO RECEIVER ASSY (PHYSICAL ADDRESS: 190) [AUDIO H/U]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
	Absence of master unit	Component in which this code is recorded was disconnected from system or master component with ignition switch in ACC or ON.	<ol> <li>Power source circuit (multi–dis- play)</li> <li>Power source circuit (radio re-</li> </ol>	05–1933 05–1793
D6			ceiver assy) 3. AVC–LAN circuit (multi–display –	05–1826
			radio receiver assy) 4. Replace multi–display 5. Replace radio receiver assy	67–7 67–5
	Connection check error	Component in which this code is recorded is (was) disconnected from system after engine	<ol> <li>Power source circuit (multi–dis- play)</li> </ol>	05–1933
D7		start. Either that, or radio receiver assy was dis- connected when this code was recorded.	<ol> <li>Power source circuit (radio re- ceiver assy)</li> </ol>	05–1793
2.			3. AVC–LAN circuit (multi–display – radio receiver assy)	05–1826 67–7
			<ol> <li>Replace multi–display</li> <li>Replace radio receiver assy</li> </ol>	67–5
	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code.	1. Inspection of components indi- cated by sub-codes.	-
DC		NOTE: This DTC may have no direct relationship with the malfunction.	<ol> <li>Refer to the table for inspection of components indicated by sub- code.</li> </ol>	_
	Master reset	After the power switch ON (READY), master component was disconnected from system.	<ol> <li>Power source circuit (multi–dis- play)</li> </ol>	05–1933
DD			<ol> <li>AVC–LAN circuit (multi–display – radio receiver assy)</li> <li>Declare multi-display</li> </ol>	05–1826 67–7
	Master error	Due to defective cognition of component with a	3. Replace multi-display	07-7
		display, master function is switched to audio equipment. Error occurs in communication be-	1. Power source circuit (multi–dis- play)	05-1933
DF		tween sub-master (audio) and master compo- nent.	<ol> <li>AVC–LAN circuit (multi–display – radio receiver assy)</li> <li>Replace multi–display</li> </ol>	05–1826 67–7
E0	Registration complete indication error	"Registration complete" command from the mas- ter device cannot be received. NOTE: This DTC may not be directly related to the problem.	_	_

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E1	Voice processing device ON er- ror		device records that the AMP output unction even while the source device	р 2. А га	Power source circuit (multi–dis- olay) AVC–LAN circuit (multi–display – adio receiver assy) Replace multi–display	05–1933 05–1826 67–7
E2	ON/OFF indication parameter error		hand for ON/OFF control from the mashas a problem.	Rep	lace multi–display	67–7
E3	Registration demand transmis- sion	The registration demand command from the sla device is output, or the registration demand cor mand is output by receiving connection confirm tion command from the sub master device. NOTE: This DTC may not be directly related to the problem.			_	-
E4	Multiple frame incomplete		ble frame transmission ends incomplete. is DTC may not be directly related to m.		_	-
DTC	Name		Diagnosis		Verification	
D5	Registered component is missed		Component in which this code is recorde or was disconnected from the system w power switch is in ACC (ON).		<ul> <li>Inspection of components indic sub-codes.</li> <li>Refer to the table for inspection nents indicated by sub-code.</li> </ul>	
D8	No response for connection check		The device indicated by the sub code is (was) disconnected from the system after engine start.		<ul> <li>Inspection of components indic sub-codes.</li> <li>Refer to the table for inspection nents indicated by sub-code.</li> </ul>	-
D9	Last mode error		The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the power switch is (was) in the ACC or ON state.		<ul> <li>Inspection of components indic sub-codes.</li> <li>Refer to the table for inspection nents indicated by sub-code.</li> </ul>	
DA	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.		<ul> <li>Inspection of components indicated by sub–codes.</li> <li>Refer to the table for inspection of compo- nents indicated by sub–code.</li> </ul>	
DB	Mode status error		This code detects a dual alarm.		<ul> <li>Inspection of components indic sub-codes.</li> <li>Refer to the table for inspection nents indicated by sub-code.</li> </ul>	-
DE	Slave reset		This code is stored when a slave device has been disconnected after engine start.		<ul> <li>Inspection of components indic sub-codes.</li> <li>Refer to the table for inspection nents indicated by sub-code.</li> </ul>	

(b) Logical address: 60 (Radio unit)

# HINT:

DTC	Name	Diagnosis	Verification	See page
10	AM turner PLL does not lock	The PULL circuit in the AM tuner is abnormal.	<ol> <li>After clearing the DTC, check the antenna wiring.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1768 67–5

11	FM tuner PLL does not lock	The PULL circuit in the FM tuner is abnormal.	<ol> <li>After clearing the DTC, check the antenna wiring.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1768 67–5
40	Antenna not connection	Antenna is disconnected.	<ol> <li>After clearing the DTC, check the antenna wiring.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1768 67–5
41	Antenna power source error	A malfunction is detected in the antenna power supply system.	<ol> <li>After clearing the DTC, check the antenna wiring.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1768 67–5
42	Tuner power source error	The power source of the tuner is abnormal.	<ol> <li>Power source circuit (radio re- ceiver assy)</li> <li>Replace radio receiver assy</li> </ol>	05–1793 67–5
43	AM tuner error	The AM tuner is abnormal.	Replace radio receiver assy	67–5
44	FM tuner error	The FM tuner is abnormal.	Replace radio receiver assy	67–5
45	SW tuner error	The SW tuner is abnormal.	Replace radio receiver assy	67–5

(c) Logical address: 62 (CD unit): 63 (CD changer unit) 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.	<ol> <li>Check if a CD is inserted. If a CD is inserted, check if it can be ejected. If it cannot be ejected, replace the radio receiver assy.</li> <li>Inspect CD</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1832 05–1755 67–5
41	Wrong disc	An unsuitable disc is inserted.	<ol> <li>Inspect CD</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1755 67–5
42	Disc cannot be read	The disc cannot be read.	<ol> <li>Inspect CD</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1755 67–5
43	CD–ROM abnormal	CD–ROM operation is abnormal.	Replace radio receiver assy	67–5

45	EJECT error	The magazine cannot be ejected.	<ol> <li>Eject the magazine, check the inserting direction, and check the symptom.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	- 67–5
44	CD abnormal	Operation error in the CD mechanism (except for code 10).	<ol> <li>After clearing the DTC, check the malfunction symptom.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	- 67–5
46	CD has scratches or upside down	CD has dirt or scratches on the surface or is upside down.	<ol> <li>Inspect CD</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1755 67–5
47	CD temperature is high	The sensor detects that the CD unit temperature is high.	<ol> <li>Park the vehicle in a cool place. Turn the engine off. After check- ing that the temperature of the radio receiver assy becomes sufficiently low, turn the engine on in order to verify the malfunc- tion symptom.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	- 67–5
48	Over-current detection	Over-current flows in to the CD changer.	Replace radio receiver assy	67–5
50	Tray insertion/ejection error	The tray insertion/ejection error occurs in the CD changer.	<ol> <li>Foreign matter is found.</li> <li>Replace radio receiver assy</li> </ol>	- 67-5
51	Elevator error	Elevator error occurs in the CD changer.	Replace radio receiver assy	67–5
52	Clamp error	Clamp error occurs in the CD changer.	Replace radio receiver assy	67–5

# (d) Logical address: 61 (Cassette unit)

#### HINT:

DTC	Name	Diagnosis	Verification	See page
10	Belt cut	The inside belt is cut or come off.	Replace radio receiver assy	67–5
40	Mechanical error of media	A malfunction due to mechanical problem, cas- sette tape is cut or entangled.	<ol> <li>Replace the cassette tape and recheck the symptom.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1755 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

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43	Head dirt	Head is dirty	<ol> <li>Clean the head and recheck the symptom.</li> <li>If the same code is detected again, replace the radio receiver assy.</li> </ol>	05–1755 67–5
44	Device power supply problem	A short or open in the power circuit	<ol> <li>Power source circuit (radio re- ceiver assy)</li> <li>Replace radio receiver assy</li> </ol>	05–1793 67–5

# 3. GATEWAY ECU (PHYSICAL ADDRESS: 1C6) [G/W]

(a) Logical address: 01 (Communication control)

HINT:

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

DTC	Name	Diagnosis	Verification	See page
	Regulator communication error	The device whose code is recorded is separated when the power switch is in ON (or ACC) posi-	<ol> <li>Power source circuit (multi–dis- play)</li> </ol>	05–1933
D4		tion. When the code is recorded, the multi-display is disconnected.	2. Power source circuit (gateway ECU)	-
D4			<ol> <li>AVC–LAN circuit (multi–display – gateway ECU)</li> </ol>	05–1826
			<ol> <li>Replace multi–display</li> <li>replace gateway ECU</li> </ol>	67–7 67–5

# 4. STEREO COMPONENT AMPLIFIER ASSY (PHYSICAL ADDRESS: 440) [DSP AMP]

(a) Logical address: 01 (Communication control)

HINT:

DTC	Name	Diagnosis	Verification	See page
	Absence of master unit	Component in which this code is recorded was disconnected from system or master component with ignition switch in ACC or ON.	<ol> <li>Power source circuit (multi–dis- play)</li> </ol>	05–1933
D6			2. AVC-LAN circuit (multi-display -	05–1826
			radio receiver assy) 3. Power source circuit (stereo	05–1796
			component amplifier assy) 4. AVC–LAN circuit (radio receiver	05–1822
			assy – stereo component ampli- fier assy)	
			5. Replace multi–display	67–7
			6. Replace stereo component am-	67–11
			plifier assy	
D7	Connection check error	Component in which this code is recorded is (was) disconnected from system after engine start. Either that, or radio receiver assy was dis- connected when this code was recorded.	1. Power source circuit (multi–dis-	05–1933
			play) 2. AVC–LAN circuit (multi–display – radio receiver assy)	05–1826
			3. Power source circuit (stereo	05–1796
			component amplifier assy) 4. AVC–LAN circuit (radio receiver	05–1822
			assy – stereo component ampli-	
			fier assy)	
			5. Replace multi-display	67–7
			6. Replace stereo component am-	67–11
			plifier assy	

	Failure in transmission	This code indicates a transmission failure to the	1. Power source circuit (multi-dis-	05–1933
DC		device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	play) 2. AVC–LAN circuit (multi–display – radio receiver assy)	05–1826
			3. Power source circuit (stereo	05–1796
			component amplifier assy) 4. AVC–LAN circuit (radio receiver	05–1822
			assy – stereo component ampli- fier assy)	
			5. Replace multi-display	67–7
			6. Replace stereo component am- plifier assy	67–11
DD	Master reset	After the power switch ON (READY), master component was disconnected from system.	<ol> <li>Power source circuit (multi–dis- play)</li> </ol>	05–1933
			2. AVC-LAN circuit (multi-display -	05–1826
			radio receiver assy) 3. Replace multi–display	67–7
	Master error	Due to defective cognition of component with a display, master function is switched to audio	1. Power source circuit (multi–dis- play)	05–1933
DF		equipment.	2. AVC-LAN circuit (multi-display -	05–1826
		Error occurs in communication between sub- master (audio) and master component.	radio receiver assy) 3. Replace multi–display	67–7
E0	Registration complete indication error	"Registration complete" command from the mas- ter device cannot be received.		_
EU		NOTE: This DTC may not be directly related to the problem.		
	Voice processing device ON er- ror	The AMP device records that the AMP output does not function even while the source device operates.	<ol> <li>Power source circuit (radio re- ceiver assy)</li> </ol>	05–1793
E1			2. AVC-LAN circuit (multi-display -	05–1826
			radio receiver assy) 3. Replace radio receiver assy	67–5
E2	ON/OFF indication parameter error	The command for ON/OFF control from the mas- ter device has a problem.	Replace multi-display	67–7
E3	Registration demand transmis- sion	The registration demand command from the slave device is output, or the registration demand com- mand is output by receiving connection confirma- tion command from the sub master device.		
			-	-
		NOTE: This DTC may not be directly related to the problem.		
E4	Multiple frame incomplete	The multiple frame transmission ends incomplete. NOTE: This DTC may not be directly related to the problem.	-	_

# 5. COMPONENT CHECK TABLE INDICATED BY SUB CODES HINT:

Sub code address	Verification	See page
110	1. Power source circuit (multi-display)	05–1933
(Multi–display)	2. AVC-LAN circuit (multi-display - radio receiver assy)	05–1826
(Multi-display)	3. Replace multi-display	67–7
190	1. Power source circuit (radio receiver assy)	05–1793
(Radio Receiver Assy)	2. AVC–LAN circuit (multi–display – radio receiver assy)	05–1826
	3. Replace radio receiver assy	67–5

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Sub code address	Verification	See page
1C6	1. Power source circuit (gateway ECU)	-
(Gateway ECU)	<ol><li>AVC–LAN circuit (multi–display – gateway ECU)</li></ol>	05–1971
(Galeway LCO)	3. Replace gateway ECU	67–26
440	1. Power source circuit (stereo component amplifier assy)	05–1796
(Stereo Component Amplifier	2. AVC-LAN circuit (radio receiver assy – stereo component amplifier assy)	05–1824
Assy)	3. Replace stereo component amplifier assy	67–25