0561D–03

DIAGNOSTIC TROUBLE CODE CHART

Terms	Meaning
Physical address	Three–digit code (shown in hexadecimal) which is given to each component comprising the AVC–LAN. Corresponding to the function, individual symbols are specified.
Logical address	Two–digit code (shown in hexadecimal) which is given to each function comprising the inner system of the AVC–LAN.

1. RADIO RECEIVER ASSY (Physical address: 140)

HINT:

- *1: Even if no failure is detected, this code may be stored depending on the battery condition or voltage for starting an engine.
- *2: This code is stored when 180 sec. have passed after the power supply connector is pulled out after engine start.
- *3: This code may be stored when the engine key is turned again after engine start.
- *4: This code may be stored when the engine key is turned again 1 min. after engine start.

(a) Logical address: 01 (Communication control)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
21	ROM Error	Abnormal condition of ROM is detected.	Replace radio receiver assy.
22	RAM Error	Abnormal condition of RAM is detected.	Replace radio receiver assy.
D5 *1	Registered component disconnected	Component shown by sub–code is or was disconnected from system with ignition switch in ACC or ON. Communication with component shown by sub–code is not ensured when engine is started.	• Check harness for power supply of component shown by sub–code. • Check harness for communication system of component shown by sub–code.
D6 *1	Absence of Master	Component in which this code is recorded has been disconnected from system with ignition in ACC or ON. Or, when this code was recorded, radio receiver assy was disconnected.	• Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy.
D8 *2	No response to connection check	Component shown by sub–code is or was disconnected from system after engine is started.	• Check harness for power supply of component shown by sub–code. • Check harness for communication system of component shown by sub–code.
D9 *1	Last Mode Error	Component operated (sound and/or image was provided) before engine stop is or was disconnected with ignition switch in ACC or ON.	• Check harness for power supply of component shown by sub–code. • Check harness for communication system of component shown by sub–code.
DA	No Response to ON/OFF Instruction	No response is identified when changing mode (audio and visual mode change). Detected when sound and picture does not change by button operation	• Check harness for power supply system of component shown by sub–code. • Check harness for communication system of component shown by sub–code. • If error occurs again, replace component shown by auxiliary code
DB *1	Mode Status Error	Dual alarm is detected.	• Check harness for power supply system of component shown by sub–code. • Check harness for communication system of component shown by sub–code.
DC *4	Transmission Error	Transmission to component shown by sub–code has been failed. (This code does not necessarily mean actual failure.)	If same sub–code is recorded in other component(s), check harness for power supply and communication system of all components shown by code.

DD *4	Master Reset (Momentary Interruption)	After engine is started, radio receiver assy was disconnected from system.	• Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • If this error occurs frequently, replace radio receiver assy.
DE *3	Slave Reset (Momentary Interruption)	After engine start, slave component has been disconnected. DB	• Check harness for power supply system of component shown by sub–code. • Check harness for communication system of component shown by sub–code.
DF *5	Master Error	Due to defective condition of component with a display, master function is switched to audio equipment. Error occurs in communication between sub–master (audio) and master component.	• Check harness for power supply of radio receiver assy. • Check harness for communication system of radio receiver assy.
E0 *1	Registration Completion Instruction Error	”Registration Completion Instruction” command from master cannot be received.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.
E1 *1	Audio processor ON error	While source equipment is operating, AMP output is stopped.	• Check harness for power supply of radio receiver assy. • Check harness for communication system of radio receiver assy.
E2	ON/OFF Instruction Parameter Error	Error occurs in ON/OFF controlling command from radio receiver assy.	Replace radio receiver assy.
E3 *1	Registration Request Transmission	Registration Request command is output from slave component. Receiving Connection Check Instruction, Registration Request command is output from sub–master component.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.
E4 *1	Multiple Frame Abort	Multiple frame transmission is aborted.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.

(b) Logical address: 21 (Switch)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
10	Panel Switch Error	Error in panel switch input part is detected. (Error in switch control part, or internal communication error with switch control part is detected.)	• Inspect all switches on panel switch test screen in display check mode. If any of them does not function, replace A/C control assembly. • If all switches function without problem, observe them for a while.
11	Touch Switch Error	Error in touch switch sensor is detected. (Light level of LED is detected to be less than a fixed value.)	• Inspect all touch switches on touch switch test screen in display check mode. If any of lines do not react, replace radio receiver assy. • If all of vertical and horizontal lines react normally, observe them for a while.

(c) Logical address: 34 (Front passenger monitor)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
10	Error in Picture Circuit	Error in power supply system for picture circuit (abnormal voltage) is detected.	Replace radio receiver assy.
11	Back–light Error (No current)	Decline in power output from inverter circuit for back–light.	Replace radio receiver assy.
12	Back–light Error (Excess current)	Excess power output from inverter circuit for back–light.	Replace radio receiver assy.

(d) Logical address: 61 (Cassette tape player's switch)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
40	Mechanical Error of Media	Malfunction due to mechanical failure is identified. Or cassette tape is cut or entangled.	• Inspect cassette tape. • Replace radio receiver assy.

(e) Logical address: 63 (In–dash CD changer)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
42	No Disc Readout	Disc cannot be read.	Inspect CD.
44	CD Error	Error is detected in CD player.	Replace radio receiver assy.
45	EJECT Error	Disc cannot be ejected.	Replace radio receiver assy.
47	CD High Temp.	High temperature is detected in CD changer.	Replace radio receiver assy.
48	CD Excess Current	Excess current is applied to CD changer.	Replace radio receiver assy.

2. NAVIGATION ECU (Physical address: 178)

HINT:

- *1: Even if no failure is detected, this code may be stored depending on the battery condition or voltage for starting the engine.
- *2: When 210 sec. have passed after pulling out the power supply connector of the master component with the ignition switch in ACC or ON, this code is stored.
- *3: This code may be stored when the engine key is turned 1 min. again after engine start.
- *4: This code may be stored when the engine key is turned again after engine start.

(a) Logical address: 01 (Communication control)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
D6 *1	Absence of Master	Component in which this code is recorded has been disconnected from system with ignition in ACC or ON. Or, when this code was recorded, radio receiver assy was disconnected.	• Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • Check harness for power supply system of navigation ECU. • Check harness for communication system of navigation ECU.
D7 *2	Connection Check Error	Component in which this code is recorded has been disconnected from system after engine start. Or, when this code was recorded, radio receiver assy disconnected. D6	• Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • Check harness for power supply system of navigation ECU. • Check harness for communication system of navigation ECU.
DC *3	Transmission Error	Transmission to component shown by sub–code has been failed. (This code does not necessarily mean actual failure.)	If same sub–code is recorded in other component(s), check harness for power supply and communication system of all components shown by code.

DD *4	Master Reset (Momentary Interruption)	Component that is to be master has been disconnected after engine start.	• Check harness for power supply system of radio receiver assy. • Check harness for communication system of radio receiver assy. • If error occurs frequently, replace radio receiver assy.
E0 *1	Registration Completion Instruction Error	”Registration Completion Instruction” command from master cannot be received.	Since this DTC is provided for engineering, it may be detected when no actual failure exists.
E2	ON/OFF Instruction Parameter Error	Error is detected in ON/OFF control command from radio receiver assy .	Replace radio receiver assy.
E3 *1	Registration Request Transmission	• Registration Request command is output from slave component. • Registration Request command is output from sub–master component.	Since this DTC is provided for engineering, it may be detected when no actual failure exists.
DF *4	Master Error	Due to defective condition of component with a display, master function is switched to audio equipment. Error occurs in communication between sub–master (audio) and master component.	• Check harness for power supply of radio receiver assy. • Check harness for communication system of radio receiver assy.
E4 *1	Multiple Frame Abort	Multiple frame transmission is aborted.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.

(b) Logical address: 58 (Navigation ECU)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
10	Gyro Error	Error in gyro sensor is detected. (Abnormal value in voltage output from sensor is detected for more than specified time.)	Replace navigation ECU.
42	Map Disc Error	Data cannot be read for a certain time due to scratches or dirt on disc surface or insertion of wrong disc.	Inspect disc and replace if necessary. (Visually check disc surface and wipe it with a soft cloth.)
43	Vehicle Signal Error	Input error of vehicle signal is detected. (When no vehicle signal has been input for a certain time.)	• Inspect wire harness. • If wire harness is normal, replace navigation ECU.

(c) Logical address: 58 (GPS receiver)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
11	GPS Receiver Error	Operation error of GPS receiver is detected.	At an outdoor site with a clear view, operate to display GPS data. If GPS mark is not properly displayed after 15 min. or more, replace navigation ECU.
40	GPS Antenna Error	Open condition of GPS antenna is detected. (Open circuit, connection failure of connectors, etc.)	Inspect antenna and replace if necessary.
41	Power Supply Error of GPS Antenna	Abnormal voltage of GPS antenna cable or short circuit is detected.	• Inspect GPS antenna and replace if necessary. (When no continuity is identified between connector’s core and sealed part, GPS antenna is normal.) • If GPS antenna is normal, replace navigation ECU.

3. MULTI–DISPLAY (CRT DISPLAY) DISPLAY (Physical address: 110)

HINT:

- *1: Even if no failure is detected, it may be stored depending on the battery condition or voltage for starting an engine.
- *2: It is stored when 180 sec. have passed after the power supply connector is pulled out after engine start.
- *3: It may be stored when the engine key is turned again after engine start.
- *4: It may be stored when the engine key is turned 1 min. again after engine start.

(a) Logical address: 01 (Communication control)

DTC	Diagnosis item	diagnosis content	Countermeasure and inspected parts
21	ROM Error	Abnormal condition of ROM is detected.	Replace multi–display assembly.
22	RAM Error	Abnormal condition of RAM is detected.	Replace multi–display assembly.
D5 *1	Registered component disconnected	Component shown by auxiliary code is or was disconnected from system with ignition switch in ACC or ON. Communication with component shown by auxiliary code is not ensured when engine is started.	• Check harness for power supply of component shown by auxiliary code. • Check harness for communication system of component shown by auxiliary code.
D8 *2	No response to connection check	Component shown by auxiliary code is or was disconnected from system after engine is started.	• Check harness for power supply of component shown by auxiliary code. • Check harness for communication system of component shown by auxiliary code.
D9 *1	Last Mode Error	Component operated (sound and/or image was provided) before engine stop is or was disconnected with ignition switch in ACC or ON.	• Check harness for power supply of component shown by auxiliary code. • Check harness for communication system of component shown by auxiliary code.
DB *1	Mode Status Error	Dual alarm is detected.	• Check harness for power supply system of component shown by auxiliary code. • Check harness for communication system of component shown by auxiliary code.
DC *4	Transmission Error	Transmission to component shown by auxiliary code has been failed. (This code does not necessarily mean actual failure.)	If same auxiliary code is recorded in order component(s), check harness for power supply and communication system of all components shown by code.
DE *3	Slave Reset (Momentary Interruption)	After the engine start, slave component has been disconnected. DB	• Check harness for power supply system of component shown by auxiliary code. • Check harness for communication system of component shown by auxiliary code.
E2	ON/OFF Instruction Parameter Error	Error is detected in ON/OFF control command from multi–display assembly.	Replace multi–display assembly.
E3 *1	Registration Request Transmission	• Registration Request command is output from slave component. • By reception of connection check instruction, Registration Request command is output from sub–master component.	Since this DTC is provided for engineering, it may be detected when no actual failure exists.

(b) Logical address: 21 (Switch)

DTC	Diagnosis item	diagnosis content	Countermeasure and inspected parts
10	Panel Switch Error	Error in panel switch input part is detected. (Error in switch control part, or internal communication error with switch control part is detected.)	• Inspect all switches on panel switch test screen in display check mode. If any of them do not function, replace multi–display assembly. • If all switches function without problem, observe them for a while.
11	Touch Switch Error	Error in touch switch sensor is detected. (Light level of LED is detected to be less than a fixed value.)	• Inspect all touch switches on touch switch test screen in display check mode. If any of lines does not react, replace multi–display assembly. • If all of vertical and horizontal lines react normally, observe them for a while.

(c) Logical address: 34 (Front passenger monitor)

DTC	Diagnosis item	diagnosis content	Countermeasure and inspected parts
10	Error in Picture Circuit	Error in power supply system for picture circuit (abnormal voltage) is detected.	Replace multi–display assembly.
11	Back–light Error (No current)	Decline in power output from inverter circuit for back–light.	Replace multi–display assembly.
12	Back–light Error (Excess current)	Excess power output from inverter circuit for back–light.	Replace multi–display assembly.

4. STEREO COMPONENT AMPLIFIER ASSY (Physical address: 440)

HINT:

- *1: Even if no failure is detected, it may be stored depending on the battery condition or voltage for starting an engine.
- *2: It may be stored when the engine key is turned 1 min. again after engine start.
- *3: It may be stored when the engine key is turned again after engine start.
- *4: When 210 sec. have passed after pulling out the power supply connector of the master component with the ignition switch in ACC or ON, this code is stored.

Logical address: 01 (Communication control)

DTC	Diagnosis item	diagnosis content	Countermeasure and inspected parts
D6 *1	Absence of Master	Component in which this code is recorded has been disconnected from system with ignition in ACC or ON. Or, when this code was recorded, multi–display assembly was disconnected.	• Check harness for power supply of radio receiver assembly. • Check harness for communication system of radio receiver assembly. • Check harness for power supply of stereo component amplifier. • Check harness for communication system of stereo component amplifier.
D7	Communication Check Error	Component in which this code is recorded is or was disconnected from system after engine start. Or, when recording this code, multi–display assembly was disconnected.	• Check harness for power supply of radio receiver assembly. • Check harness for communication system of radio receiver assembly. • Check harness for power supply of stereo component amplifier. • Check harness for communication system of stereo component amplifier.
DC *2	Transmission Error	Transmission to component shown by auxiliary code has been failed. (Detecting this DTC does not necessarily mean actual failure.)	If same auxiliary code is recorded in order component, check harness for power supply and communication system of all components shown by code.

DD *3	Master Reset (Momentary Interruption)	After engine is started, multi–display assembly was disconnected from system.	• Check harness for power supply of radio receiver assembly. • Check harness for communication system of radio receiver assembly. • Check harness for power supply of stereo component amplifier. • Check harness for communication system of stereo component amplifier. • If this error occurs frequently, replace multi–display assembly.
DF *4	Master Error	Due to defective condition of component with a display, master function is switched to audio equipment. Error occurs in communication between sub–master (audio) and master component.	• Check harness for power supply of multi–display assembly. • Check harness for communication system of multi–display assembly. • Check harness for communication system between multi–display assembly and sub–master component.
E0 *1	Registration Completion Instruction Error	”Registration Completion Instruction” command from master cannot be received.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.
E1 *1	Audio processor ON error	While source equipment is operating, AMP output is stopped.	• Check harness for power supply of multi–display assembly. • Check harness for communication system of multi–display assembly.
E2	ON/OFF Instruction Parameter Error	Error occurs in ON/OFF controlling command from multi–display assembly.	Replace multi–display assembly.
E3 *1	Registration Request Transmission	• Registration Request command is output from slave component. • Registration Connection Check Instruction, Registration Request command is output from sub–master component.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.

5. DISC PLAYER CHANGER (Physical address: 240)

HINT:

- *1: Even if no failure is detected, it may be stored depending on the battery condition or voltage for starting an engine.
- *2: It may be stored when the engine key is turned 1 min. again after engine start.
- *3: It may be stored when the engine key is turned again after engine start.
- *4: It may be stored when the engine key is turned again after engine start.
- *5: When 210 sec. have passed after pulling out the power supply connector of the master component with the ignition switch in ACC or ON, this code is stored.

(a) Logical address: 01 (Communication control)

DTC	Diagnosis item	diagnosis content	Countermeasure and inspected parts
21	ROM Error	Abnormal condition of ROM is detected.	Replace CD auto changer.

22	RAM Error	Abnormal condition of ROM is detected.	Replace CD auto changer.
D6 *2	Absence of Master	Component in which this code is recorded is or was disconnected from system after engine start. Or, when recording this code, multi–display assembly was disconnected.	• Check harness for power supply system of multi–display. • Check harness for communication system of multi–display. • Check harness for power supply system of CD auto changer • Check harness for communication system CD auto changer
D7 *5	Connection check Error	Component in which this code is recorded is or was disconnected from system after engine start. Or, when recording this code, multi–display assembly was disconnected.	• Check harness for power supply of multi–display. • Check harness for communication system of multi–display. • Check harness for power supply of CD auto changer. • Check harness for communication system of CD auto changer.
DC *2	Transmission Error	Transmission to component shown by auxiliary code has been failed. (Detecting this DTC does not necessarily mean actual failure.)	If same auxiliary codes are recorded in order in the component, check harness for power supply and communication system of all components shown by code.
DD *3	Master Reset (Momentary Interruption)	After engine is started, multi–display assembly was disconnected from system.	• Check harness for power supply system of multi–display. • Check harness for communication system multi–display. • Check harness for power supply system of CD auto changer. • Check harness for communication system CD auto changer. • If this error occurs frequently, replace multi–display assembly.
DF *4	Master Error	Due to defective condition of component with a display, master function is switched to audio equipment. Error occurs in communication between sub–master (audio) and master component.	• Check harness for power supply of multi–display assembly. • Check harness for communication system of multi–display assembly. • Check harness for communication system between multi–display assembly and sub–master component.
E0 *1	Registration Completion Instruction Error	”Registration Completion Instruction” command from master cannot be received.	Since this DTC is provided for engineering, it may be detected when no actual failure exists.
E2	ON/OFF Instruction Parameter Error	Error occurs in ON/OFF controlling command from multi–display assembly.	Replace multi–display assembly.

E3 *1	Registration Request Transmission	• Registration Request command is output from slave component. • Receiving Connection Check Instruction, Registration Request command is output from sub–master component.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.
E4 *1	Multiple Frame Abort	Multiple frame transmission is aborted.	Since this DTC is provided for engineering purpose, it may be detected when no actual failure exists.

(b) Logical address: 63 (CD auto changer)

42	No Disc Readout	Disc cannot be read.	Inspect CD
44	CD Error	Error is detected in CD auto changer	Replace CD auto changer
45	EJECT Error	Magazine cannot be ejected	Replace CD auto changer
46	Scratched/ Reversed Disc	Scratches or dirt is found on CD surface or CD is set upside down.	Inspect CD
47	CD Auto Changer Temp. Too High	Readout cannot be done because temperature around player's pick–up (reading part) is too high.	With IG switch OFF, leave vehicle in cool shaded place for a while and recheck. After deleting the DTC memory, if same code detected, replace CD auto changer.
48	CD Auto Changer Excess Current	Excess current is applied to CD auto changer	Replace CD auto changer