Last Modified: 10-5-2010	6.4 S	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM0000017YP03JX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): DIAGNOSTIC TROUBLE CODE CHART (2010 HS250H)		

DIAGNOSTIC TROUBLE CODE CHART

NOTICE:

After replacing the radio receiver assembly of vehicles subscribed to pay-type satellite radio broadcasts, the XM radio ID registration is necessary. (w/ SDARS System)

Communication Diagnosis

DTC Code	Detection Item	Trouble Area	See page
01-21	ROM Error	Radio receiver assembly	INFO
01-22	RAM Error	Radio receiver assembly	INFO
01-2E	EEPROM Error	Radio receiver assembly	INFO
01-D5	Absence of Registration Unit	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-D6	No Master	1. Radio receiver assembly power source circuit 2. Power source circuit of the component which has stored this code 3. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 4. Component which has stored this code 5. Radio receiver assembly	INFO
01-D7	Connection Check Error	1. Radio receiver assembly power source circuit 2. Power source circuit of the component which has	INFO

		stored this code 3. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 4. Component which has stored this code 5. Radio receiver assembly	
01-D8	No Response for Connection Check	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-D9	Last Mode Error	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DA	No Response Against ON / OFF Command	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DB	Mode Status Error	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DC	Transmission Error	If the same sub-code is stored in other components, check power source circuit and communication system of all components shown by sub-code	INFO
01-DD	Master Reset	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver	INFO

		assembly and component which has stored this code 3. Radio receiver assembly 4. Component which has stored this code	
01-DE	Slave Reset	1. Power source circuit of the component shown by the sub-code 2. AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code 3. Component shown by the sub-code	INFO
01-DF	Master Error	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 3. Radio receiver assembly 4. Component which has stored this code	INFO
01-E0	Registration Complete Indication Error	-	INFO
01-E1	Voice Processing Device ON Error	1. Radio receiver assembly power source circuit 2. AVC-LAN circuit between the radio receiver assembly and component which has stored this code 3. Radio receiver assembly 4. Component which has stored this code	INFO
01-E2	ON / OFF Indication Parameter Error	Radio receiver assembly	INFO
01-E3	Registration Demand Transmission	-	INFO
01-E4	Multiple Frame Incomplete	-	INFO
01-F2	No Response from Diagnosis Memory Request	Stereo component amplifier assembly	INFO
01-FF	No Response to Diagnosis Request	Stereo component amplifier assembly	INFO

Telephone

DTC Code	Detection Item	Trouble Area	See page
57-10	TEL ECU Malfunction (TEL)	Radio receiver assembly	INFO
57-47	Bluetooth Module Initialization Failed	Radio receiver assembly	INFO

Radio Unit

DTC Code	Detection Item	Trouble Area	See page
60-10	AM Tuner PLL does not Lock	Radio receiver assembly	INFO
60-11	FM Tuner PLL does not Lock	Radio receiver assembly	INFO
60-42	Tuner Power Source Error	Radio receiver assembly	INFO
60-43	AM Tuner Error	Radio receiver assembly	INFO
60-44	FM Tuner Error	Radio receiver assembly	INFO
60-50	Malfunction in Internal IC	Radio receiver assembly	INFO

In-dash CD Changer

DTC Code	Detection Item	Trouble Area	See page
63-10	CD Changer Mechanical Error	Radio receiver assembly	INFO
63-11	CD Insertion and Ejection Error	Radio receiver assembly	INFO
63-12	CD Reading Abnormal	Radio receiver assembly	INFO
63-41	Wrong Disc	1. CD 2. Radio receiver assembly	INFO
63-42	Disc cannot be Read	1. CD 2. Radio receiver assembly	INFO
63-43	CD-ROM Abnormal	1. CD 2. Radio receiver assembly	INFO
63-44	CD Abnormal	Radio receiver assembly	INFO
63-45	Eject Error	Radio receiver assembly	INFO
63-46	Scratched / Reversed Disc	1. CD 2. Radio receiver assembly	INFO
63-47	High Temperature	Radio receiver assembly	INFO
63-48	Excess Current	Radio receiver assembly	INFO
63-50	Tray Insertion / Ejection Error	Radio receiver assembly	INFO
63-51	Elevator Error	Radio receiver assembly	INFO
63-52	Clamp Error	Radio receiver assembly	INFO

63-78	DSP Error	-	INFO
63-7D	Disc cannot be Played	1. CD 2. Radio receiver assembly	INFO
63-7E	No Playable Files	1. CD 2. Radio receiver assembly	INFO
63-7F	Copyright Protection Error	1. CD 2. Radio receiver assembly	INFO

Speakers

DTC Code	Detection Item	Trouble Area	See page
74-40	Short in Speaker Circuit	1. Wire harness or connector 2. Speaker 3. DCM (Telematics transceiver)*1 4. Stereo component amplifier assembly	INFO

- *1: w/ Manual (SOS) Switch

XM Tuner

DTC Code	Detection Item	Trouble Area	See page
C0-11	Satellite Radio Tuner Internal Circuit Error 1	Radio receiver assembly	INFO
C0-12	Satellite Radio Tuner Internal Circuit Error 2	Radio receiver assembly	INFO
C0-13	Satellite Radio Tuner Internal Circuit Error 3	Radio receiver assembly	INFO
C0-14	Satellite Radio Tuner Internal Circuit Error 4	Radio receiver assembly	INFO
C0-15	Satellite Radio Tuner Internal Circuit Error 5	Radio receiver assembly	INFO
C0-16	Satellite Radio Tuner Internal Circuit Error 6	Radio receiver assembly	INFO
C0-40	Antenna not Connected	1. Antenna cord 2. Telephone antenna assembly (Satellite	INFO

		radio antenna) 3. Radio receiver assembly	
C0-41	Antenna Shorted	1. Antenna cord 2. Telephone antenna assembly (Satellite radio antenna) 3. Radio receiver assembly	INFO

Multi-media Interface ECU

DTC Code	Detection Item	Trouble Area	See page
CB-10	System Microcomputer Malfunction	1. Multi-media interface ECU 2. "iPod" or USB device	INFO
CB-11	Media Interface Microcomputer Malfunction	1. Multi-media interface ECU 2. "iPod" or USB device	INFO
CB-12	CD-LSI Malfunction	1. Multi-media interface ECU 2. "iPod" or USB device	INFO
CB-13	USB Over Current Detection	1. "iPod" or USB device 2. No. 1 stereo jack adapter assembly 3. Wire harness or connector 4. Multi-media interface ECU	INFO
CB-43	USB Device Class/Protocol Error	1. Multi-media interface ECU 2. USB device	INFO
CB-44	USB File System Error	1. Multi-media interface ECU 2. USB device	INFO
CB-45	USB Communication Error	1. Multi-media interface ECU 2. USB device	INFO
CB-46	iPod Control Error	1. Multi-media interface ECU 2. "iPod"	INFO

CB-47	iPod Communication Error	1. Multi-media interface ECU 2. "iPod"	INFO
CB-50	iPod Malfunction	1. Multi-media interface ECU 2. "iPod"	INFO
CB-51	iPod Protocol Error	1. Multi-media interface ECU 2. "iPod"	INFO
CB-52	No Playable iPod File Exists	"iPod"	INFO
CB-7D	iPod Protocol Unsupported	1. Multi-media interface ECU 2. "iPod"	INFO
CB-7E	No Playable USB File Exists	USB device	INFO

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183S03JX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-21,01-22,01-2E: ROM Error (2010 HS250H)		

DTC	01-21	ROM Error
DTC	01-22	RAM Error
DTC	01-2E	EEPROM Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-21	A ROM malfunction exists.	Radio receiver assembly
01-22	A RAM malfunction exists.	
01-2E	A checksum malfunction exists.	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly INFO.

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183T03IX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-D5,01-D8,01-D9,01-DA,01-DB,01-DE: Absence of Registration Unit (2010 HS250H)		

DTC	01-D5	Absence of Registration Unit
DTC	01-D8	No Response for Connection Check
DTC	01-D9	Last Mode Error
DTC	01-DA	No Response Against ON / OFF Command
DTC	01-DB	Mode Status Error
DTC	01-DE	Slave Reset

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-D5 *1, *3	A device indicated by the sub-code is (was) disconnected from the system with the power switch on (IG) or (ACC). The communication condition with the device that the DTC shows cannot be obtained when the engine starts.	• Power source circuit of the component shown by the sub-code • AVC-LAN circuit between the radio receiver assembly and component shown by the sub-code • Component shown by the sub-code
01-D8 *2, *3	The device indicated by the sub-code is (was) disconnected from the system after the engine starts.	
01-D9 *1, *3	The device that had functioned before the engine stopped is (was) disconnected from the system with the power switch on (IG) or (ACC).	
01-DA *3	No response is identified when changing mode. Sound and image do not change by switch operation.	
01-DB *1, *3	A dual alarm is detected.	

01-DE *3	A slave device has been disconnected after the engine starts.	

HINT:

- *1: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.
- *2: If the power connector is disconnected after the engine starts, this DTC is stored after 180 seconds.
- *3: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK "RADIO RECEIVER COMMUNICATION ERROR" IN FLOW CHART

HINT:

Refer to Radio Receiver Communication Error INFO.

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183U03LX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-D6,01-D7: No Master (2010 HS250H)		

DTC	01-D6	No Master
DTC	01-D7	Connection Check Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-D6*1	Either condition is met: • The device that stores (stored) the DTC has (had) been disconnected with the power switch on (IG) or (ACC). • The master device has (had) been disconnected when this DTC is (was) stored.	• Radio receiver assembly power source circuit • Power source circuit of the component which has stored this code • AVC-LAN circuit between the radio receiver assembly and component which has stored this code • Component which has stored this code • Radio receiver assembly
01-D7*2	Either condition is met: • The device that stored the code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this DTC is (was) stored.	

HINT:

- *1: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.
- *2: When 210 seconds have elapsed after disconnecting the power supply connector of the master component with the power switch on (IG) or (ACC), this DTC is stored.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK RADIO RECEIVER ASSEMBLY POWER SOURCE CIRCUIT

HINT:

Refer to Radio Receiver Power Source Circuit 

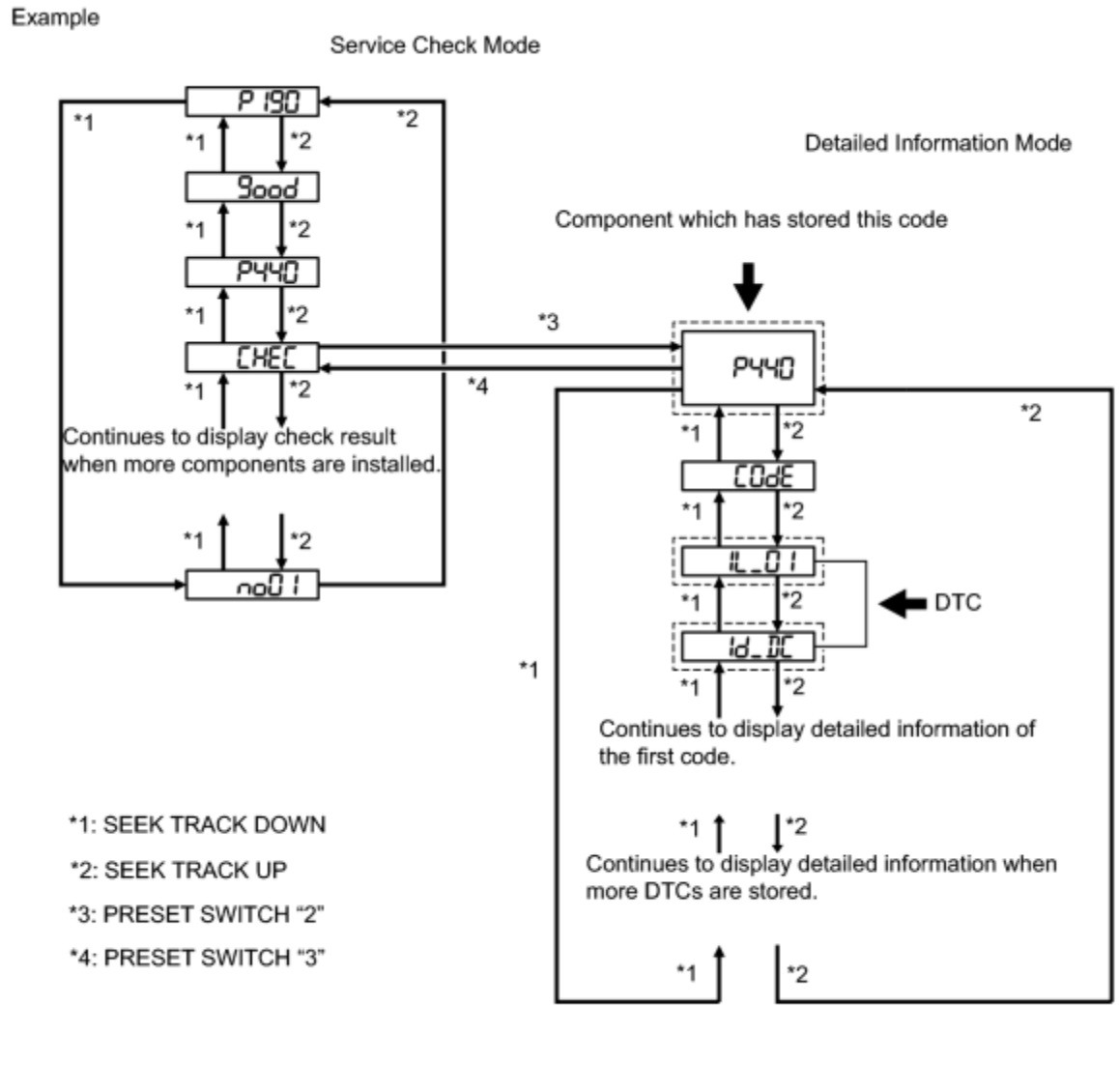
.

If the power source circuit is operating normally, proceed to the next step.

NEXT

2.	IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



P

(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

Component	Physical Address
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Multi-media interface ECU	388

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear INFO.

NEXT

3.	CHECK COMPONENT SHOWN BY SUB-CODE

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

Component	Proceed to
Except radio receiver assembly	A
Radio receiver assembly (190)	B

B REPLACE RADIO RECEIVER ASSEMBLY

A

4.	CHECK POWER SOURCE CIRCUIT OF COMPONENT WHICH HAS STORED THIS CODE

(a) Inspect the power source circuit of the component which has stored this code.

If the power source circuit is operating normally, proceed to the next step.

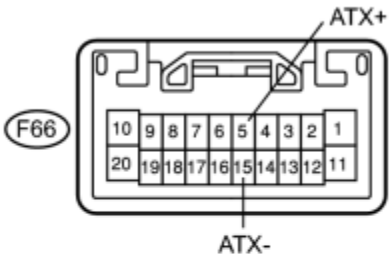
Component Table

Component	Proceed to
Stereo component amplifier assembly	Stereo component amplifier power source circuit INFO
Multi-media interface ECU	Multi-media interface ECU power source circuit INFO

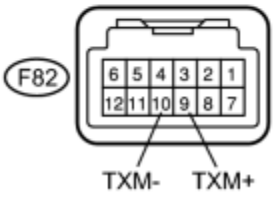
NEXT

5.	INSPECT RADIO RECEIVER ASSEMBLY

*1



(a) Disconnect the radio receiver assembly connectors.



(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F66-5 (ATX+) - F66-15 (ATX-)	Always	60 to 80 Ω
F82-9 (TXM+) - F82-10 (TXM-)	Always	60 to 80 Ω

Text in Illustration

*1	Component without harness connected (Radio Receiver Assembly)

NG ▶ REPLACE RADIO RECEIVER ASSEMBLY

OK

▼

6.	CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU INFO.

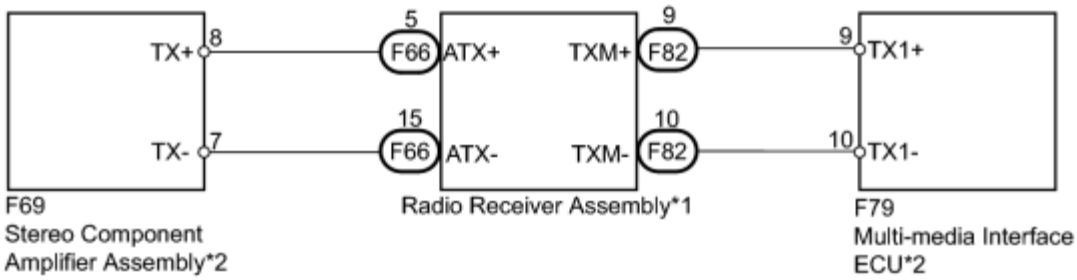
(a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

(1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.

(2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

OK:

There is no open or short circuit.



*1: Master Unit *2: Slave Unit

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.	REPLACE COMPONENT WHICH HAS STORED THIS CODE

(a) Replace the component which has stored this code with a known good one.

NEXT

8.	CLEAR DTC

(a) Clear the DTCs INFO.

NEXT

9.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

OK:

No DTCs are output.

NG  REPLACE RADIO RECEIVER ASSEMBLY

OK  **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183V03IX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-DC: Transmission Error (2010 HS250H)		

DTC	01-DC	Transmission Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-DC *1	Transmission to component shown by sub-code failed (Detecting this DTC does not always mean actual failure).	If the same sub-code is stored in other components, check power source circuit and communication system of all components shown by sub-code

HINT:

*1: If the power switch is turned off after idling for 60 seconds, this DTC may be stored when the engine is started again.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reason described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK FOR DTC OF OTHER COMPONENTS

(a) Check if the component shown by the sub-code is displayed in the check result of the other

components.

(1) Check if DTC 01-DC is output for the other components.

(2) If DTC 01-DC is output for any other components, check if the same physical address is displayed.

Result:

Result	Proceed to
DTC 01-DC is output and the same physical address is displayed	A
DTC 01-DC is not output or the same physical address is not displayed	B

HINT:

For the list of the components shown by sub-codes, refer to the table in step 2.

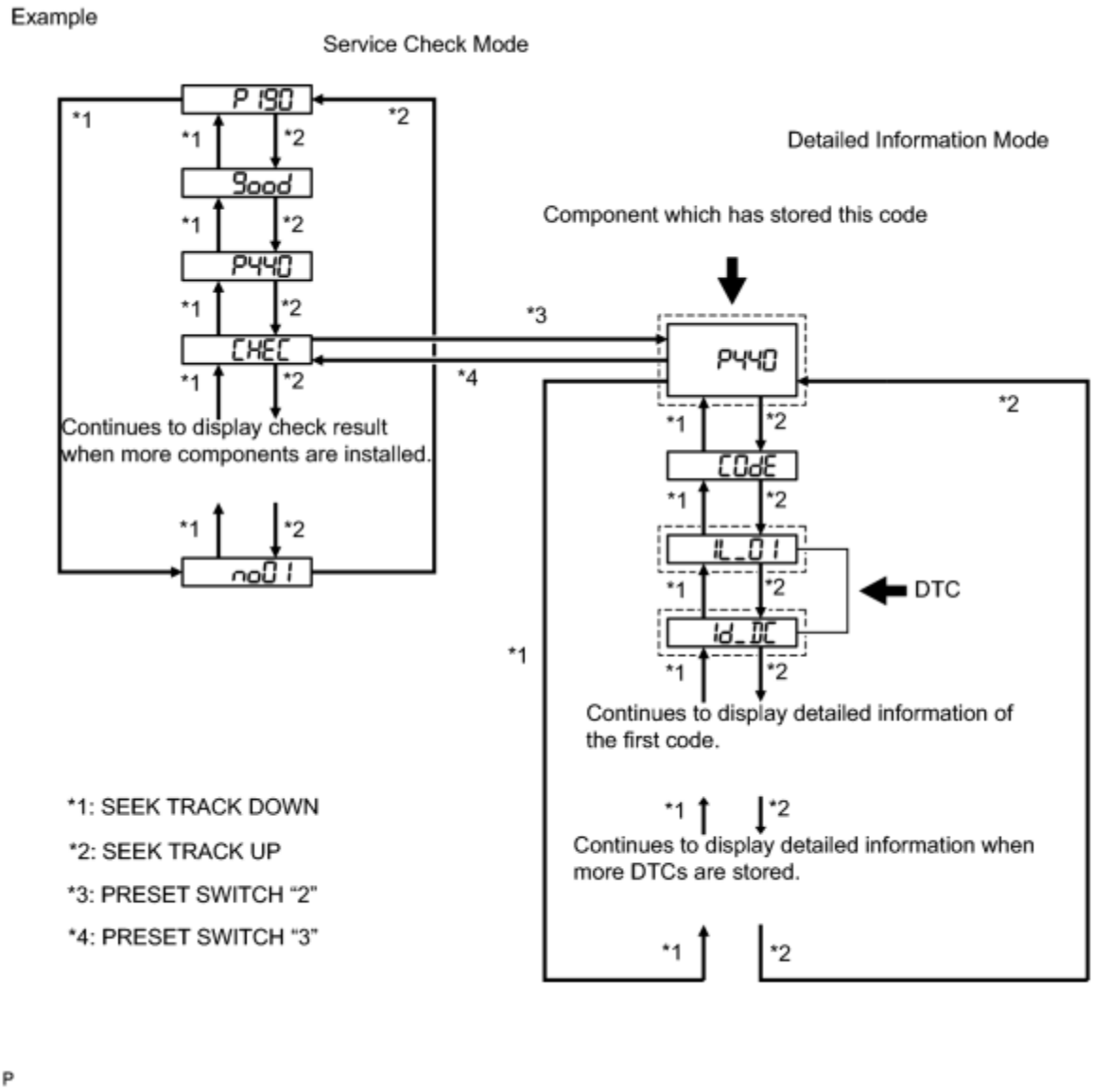
B ▶ CLEAR DTC

A

▼

2.	IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



P

(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

Component	Physical Address
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Radio receiver assembly	190
Multi-media interface ECU	388

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear INFO.

NEXT

3.	CHECK COMPONENT WHICH HAS STORED THIS CODE

(a) Select the component which has stored this code.

Component Table

Component	Proceed to
Stereo component amplifier assembly	Stereo component amplifier communication error INFO
Satellite radio tuner	Satellite radio tuner communication error INFO
Radio receiver assembly	Radio receiver communication error INFO
Multi-media interface ECU	Multi-media interface ECU communication error INFO

NEXT **END**

4.	CLEAR DTC

(a) Clear the DTCs INFO.

HINT:

If DTC 01-DC is output for only one component, this may not indicate a malfunction.

NEXT

5.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

OK:

No DTCs are output.

NG CHECK COMPONENT WHICH HAS STORED THIS CODE

OK **END**

6.	CHECK COMPONENT WHICH HAS STORED THIS CODE

(a) Select the component which has stored this code.

Component Table

Component	Proceed to
Stereo component amplifier assembly	Stereo component amplifier communication error INFO
Satellite radio tuner	Satellite radio tuner communication error INFO
Radio receiver assembly	Radio receiver communication error INFO
Multi-media interface ECU	Multi-media interface ECU communication error INFO

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183W03LX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-DD,01-E1: Master Reset (2010 HS250H)		

DTC	01-DD	Master Reset
DTC	01-E1	Voice Processing Device ON Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-DD *1	The device that should be the master has been disconnected after the engine starts.	• Radio receiver assembly power source circuit • AVC-LAN circuit between the radio receiver assembly and component which has stored this code • Radio receiver assembly • Component which has stored this code
01-E1 *2	The AMP device stores that the AMP output does not function even while the source device operates.	

HINT:

- *1: If the power switch is turned off after idling for 60 seconds, this DTC may be stored when the engine is started again.
- *2: Even if no fault is present, this DTC may be stored depending on the battery condition or engine start voltage.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reasons described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK RADIO RECEIVER POWER SOURCE CIRCUIT

HINT:

Refer to Radio Receiver Power Source Circuit INFO.

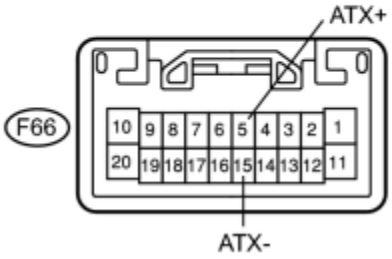
If the power source circuit is operating normally, proceed to the next step.

NEXT

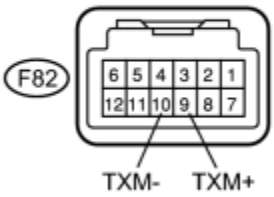
▼

2.	INSPECT RADIO RECEIVER ASSEMBLY

*1



(a) Disconnect the radio receiver assembly connectors.



(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F66-5 (ATX+) - F66-15 (ATX-)	Always	60 to 80 Ω
F82-9 (TXM+) - F82-10 (TXM-)	Always	60 to 80 Ω

Text in Illustration

*1	Component without harness connected (Radio Receiver Assembly)

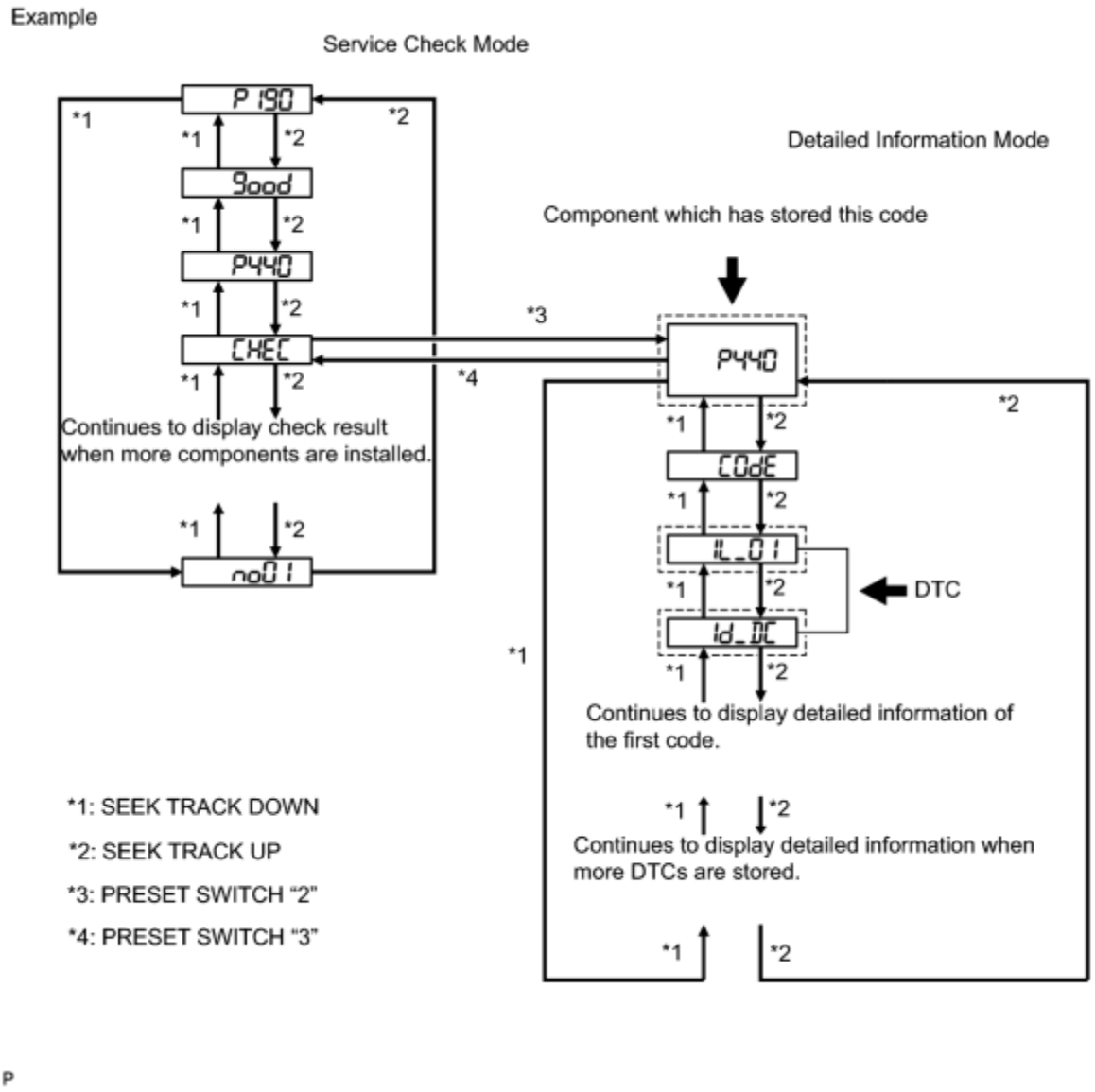
NG ▶ REPLACE RADIO RECEIVER ASSEMBLY

OK

▼

3.	IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



P

(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

Component	Physical Address
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Radio receiver assembly	190
Multi-media interface ECU	388

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear INFO.

NEXT

4.	CHECK COMPONENT SHOWN BY SUB-CODE

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

Component	Proceed to
Except radio receiver assembly	A
Radio receiver assembly (190)	B

B REPLACE RADIO RECEIVER ASSEMBLY

A

5.	CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU INFO.

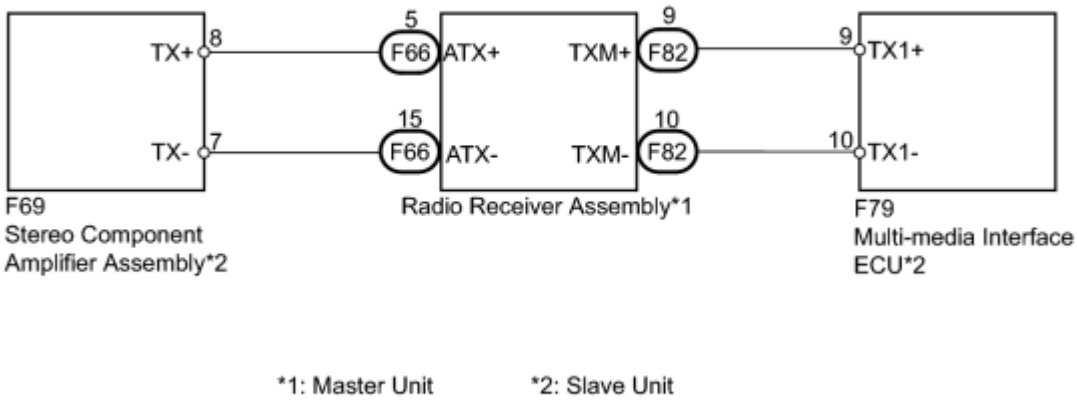
(a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

(1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.

(2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

OK:

There is no open or short circuit.



NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly with a known good one.

NEXT

7.	CLEAR DTC

(a) Clear the DTCs INFO.

NEXT

8.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

OK:

No DTCs are output.

NG ▶ REPLACE COMPONENT WHICH HAS STORED THIS CODE

OK ▶ **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183X03LX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-DF: Master Error (2010 HS250H)		

DTC	01-DF	Master Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-DF *1	The device with a display fails and the master unit is switched to the audio device. Also when a communication error between the sub-master unit (audio) and master unit occurs, this DTC is stored.	• Radio receiver assembly power source circuit • AVC-LAN circuit between the radio receiver assembly and component which has stored this code • Radio receiver assembly • Component which has stored this code

HINT:

*1: When 210 seconds have elapsed after disconnecting the power supply connector of the master component with the power switch on (IG) or (ACC), this DTC is stored.

NOTICE:

- Before starting troubleshooting, be sure to clear the DTCs stored due to the reason described in the HINT above. Then, check for DTCs and troubleshoot according to the output DTCs.
- The radio receiver assembly is the master unit.
- Be sure to clear and recheck for the DTCs after the inspection is completed to confirm that no DTCs are output.

INSPECTION PROCEDURE

NOTICE:

Be sure to read Description before performing the following procedure.

PROCEDURE

1.	CHECK RADIO RECEIVER POWER SOURCE CIRCUIT

HINT:

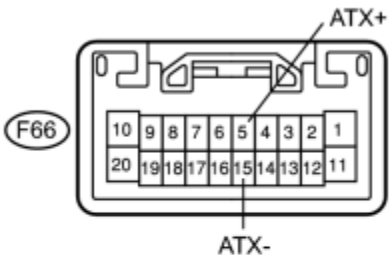
Refer to Radio Receiver Power Source Circuit INFO.

If the power source circuit is operating normally, proceed to the next step.

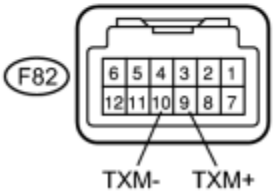
NEXT

2.	INSPECT RADIO RECEIVER ASSEMBLY

*1



(a) Disconnect the radio receiver assembly connectors.



(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F66-5 (ATX+) - F66-15 (ATX-)	Always	60 to 80 Ω

F82-9 (TXM+) - F82-10 (TXM-)	Always	60 to 80 Ω

Text in Illustration

*1	Component without harness connected (Radio Receiver Assembly)

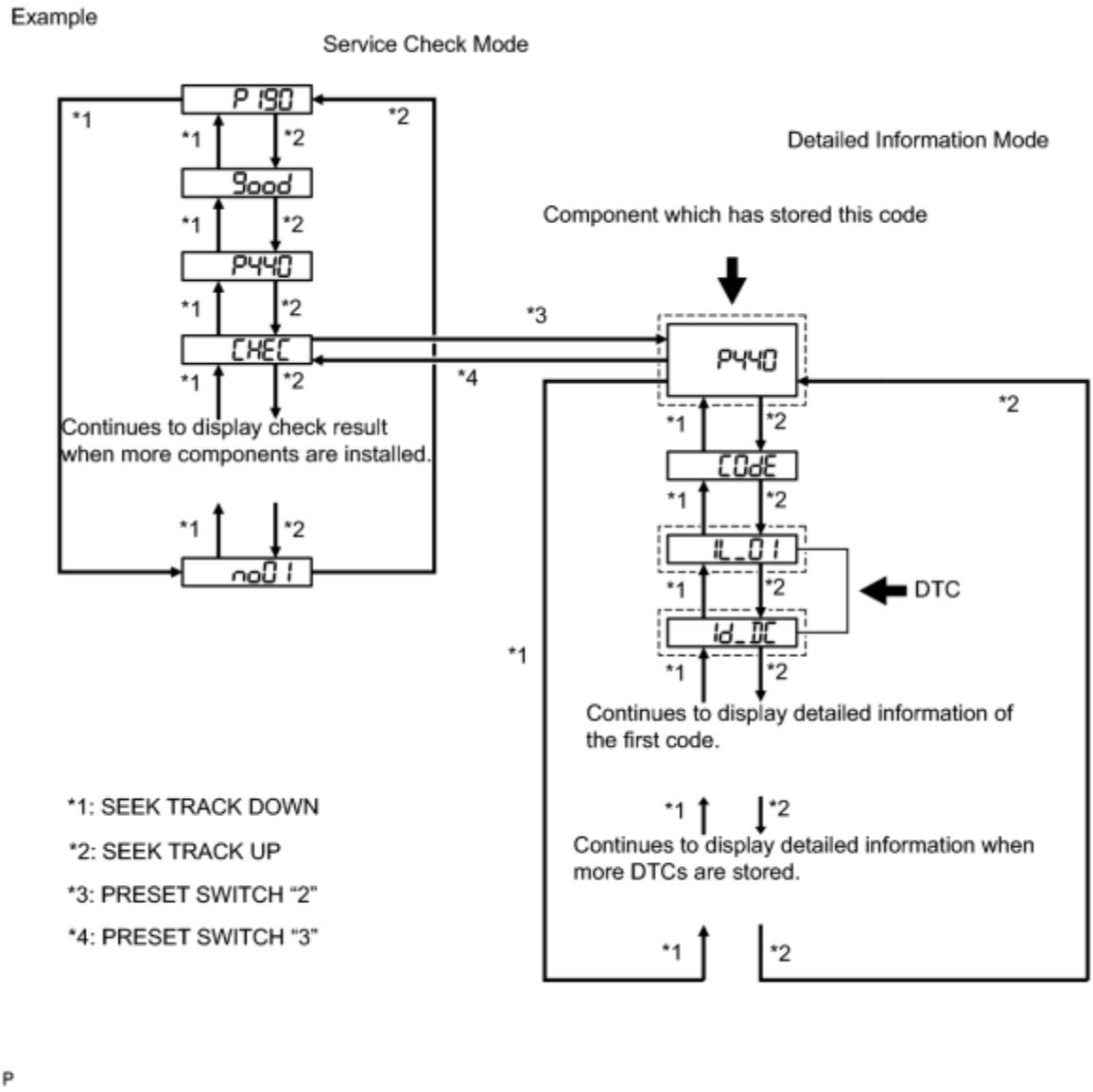
NG ▶ REPLACE RADIO RECEIVER ASSEMBLY

OK

▼

3.	IDENTIFY COMPONENT WHICH HAS STORED THIS CODE

(a) Enter diagnostic mode.



P

(b) Press preset switch "2" to change the mode to "Detailed Information Mode".

(c) Identify the component which has stored this code.

Component Table

Component	Physical Address
Stereo component amplifier assembly	440
Satellite radio tuner	1F1
Radio receiver assembly	190
Multi-media interface ECU	388

HINT:

- "P440" set by the stereo component amplifier assembly is shown in the preceding illustration as an example.
- For details of the DTC display, refer to DTC Check/Clear INFO.

NEXT

4.	CHECK COMPONENT SHOWN BY SUB-CODE

(a) Select the component shown by the sub-code.

HINT:

The satellite radio tuner is built into the radio receiver assembly. If there is a problem between the satellite radio tuner and radio receiver assembly, replace the radio receiver assembly.

Component Table

Component	Proceed to
Except radio receiver assembly	A
Radio receiver assembly (190)	B

B REPLACE RADIO RECEIVER ASSEMBLY

A

5.	CHECK HARNESS AND CONNECTOR

HINT:

For details of the connectors, refer to Terminals of ECU INFO.

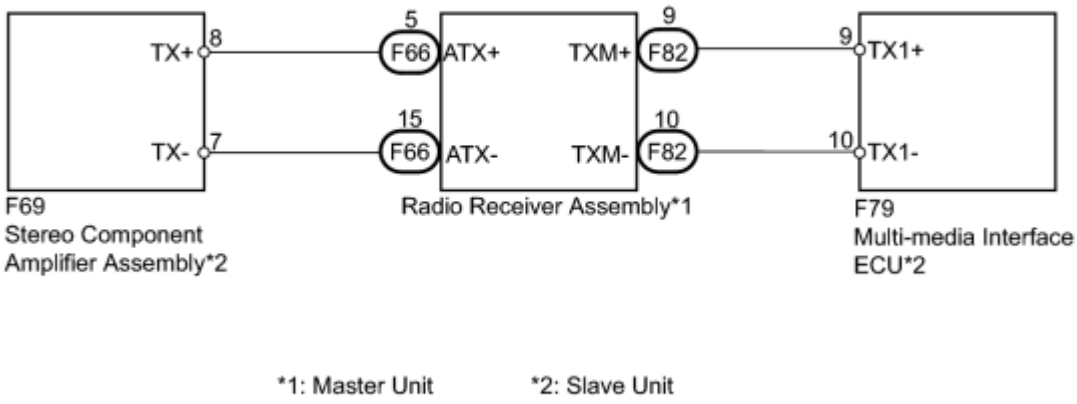
(a) Referring to the following AVC-LAN wiring diagram, check the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

(1) Disconnect all connectors between the radio receiver assembly and component which has stored this code.

(2) Check for an open or short in the AVC-LAN circuit between the radio receiver assembly and component which has stored this code.

OK:

There is no open or short circuit.



NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly with a known good one.

NEXT

7.	CLEAR DTC

(a) Clear the DTCs INFO.

NEXT

8.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

OK:

No DTCs are output.

NG ▶ REPLACE COMPONENT WHICH HAS STORED THIS CODE

OK ▶ **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM000001WQS033X
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-E0,01-E3,01-E4: Registration Complete Indication Error (2010 HS250H)		

DTC	01-E0	Registration Complete Indication Error
DTC	01-E3	Registration Demand Transmission
DTC	01-E4	Multiple Frame Incomplete

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-E0	"Registration complete" signal from the master device cannot be received.	-
01-E3	Either condition is met: • The registration demand signal from the slave device is output. • The registration demand signal is output by receiving connection confirmation signal from the sub-master device.	-
01-E4	The multiple frame transmission is incomplete.	-

HINT:

Even if no fault is present, these DTCs may be stored depending on the battery condition or engine start voltage.

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs. These DTCs do not indicate a malfunction.

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000183Z03GX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-E2: ON / OFF Indication Parameter Error (2010 HS250H)		

DTC	01-E2	ON / OFF Indication Parameter Error

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-E2	The command for ON/OFF control from the master device has a problem.	Radio receiver assembly

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly INFO.

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM000001WWI016X
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 01-F2,01-FF: No Response from Diagnosis Memory Request (2010 HS250H)		

DTC	01-F2	No Response from Diagnosis Memory Request

DTC	01-FF	No Response to Diagnosis Request

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
01-F2	Any reply to a system inspection instruction, system inspection result request or diagnosis memory request could not be completed within a designated time.	Stereo component amplifier assembly
01-FF	No response to a diagnosis request	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	CLEAR DTC

(a) Clear the DTCs INFO.

NEXT

2.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

OK:

No DTCs are output.

NG ▶REPLACE STEREO COMPONENT AMPLIFIER ASSEMBLY

OK **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM000001YYZ06JX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 57-10,57-47: TEL ECU Malfunction (TEL) (2010 HS250H)		

DTC	57-10	TEL ECU Malfunction (TEL)
DTC	57-47	Bluetooth Module Initialization Failed

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
57-10	"Bluetooh" module malfunction	Radio receiver assembly
57-47	• "Bluetooth" module is not installed. • Problem with "Bluetooth" module • Problem in communication line to "Bluetooth" module	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly INFO.

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000200N03DX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 60-10,60-11: AM Tuner PLL does not Lock (2010 HS250H)		

DTC	60-10	AM Tuner PLL does not Lock
DTC	60-11	FM Tuner PLL does not Lock

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
60-10	The AM tuner PLL (Phase Locked Loop) synchronization is impossible.	Radio receiver assembly
60-11	The FM tuner PLL (Phase Locked Loop) synchronization is impossible.	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	REPLACE RADIO RECEIVER ASSEMBLY

(a) Replace the radio receiver assembly INFO.

NEXT **END**

Last Modified: 10-5-2010	6.4 C	**From:** 200907
Model Year: 2010	**Model:** HS250H	**Doc ID:** RM00000200Q03LX
Title: AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM (w/o Navigation System): 60-42-60-44,60-50: Tuner Power Source Error (2010 HS250H)		

DTC	60-42	Tuner Power Source Error
DTC	60-43	AM Tuner Error
DTC	60-44	FM Tuner Error
DTC	60-50	Malfunction in Internal IC

DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
60-42	The power source of the tuner is abnormal.	Radio receiver assembly
60-43	The AM tuner is abnormal.	
60-44	The FM tuner is abnormal.	
60-50	A problem occurs in the IC inside the tuner unit and radio reception is not normal.	

INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

1.	CLEAR DTC

(a) Clear the DTCs INFO.

NEXT

2.	RECHECK FOR DTC

(a) Recheck for DTCs and check if the same DTC is output again.

HINT:

If DTCs are detected frequently, replace the radio receiver assembly.

OK:

No DTCs are output.

NG ▶ REPLACE RADIO RECEIVER ASSEMBLY
OK ▶ **END**