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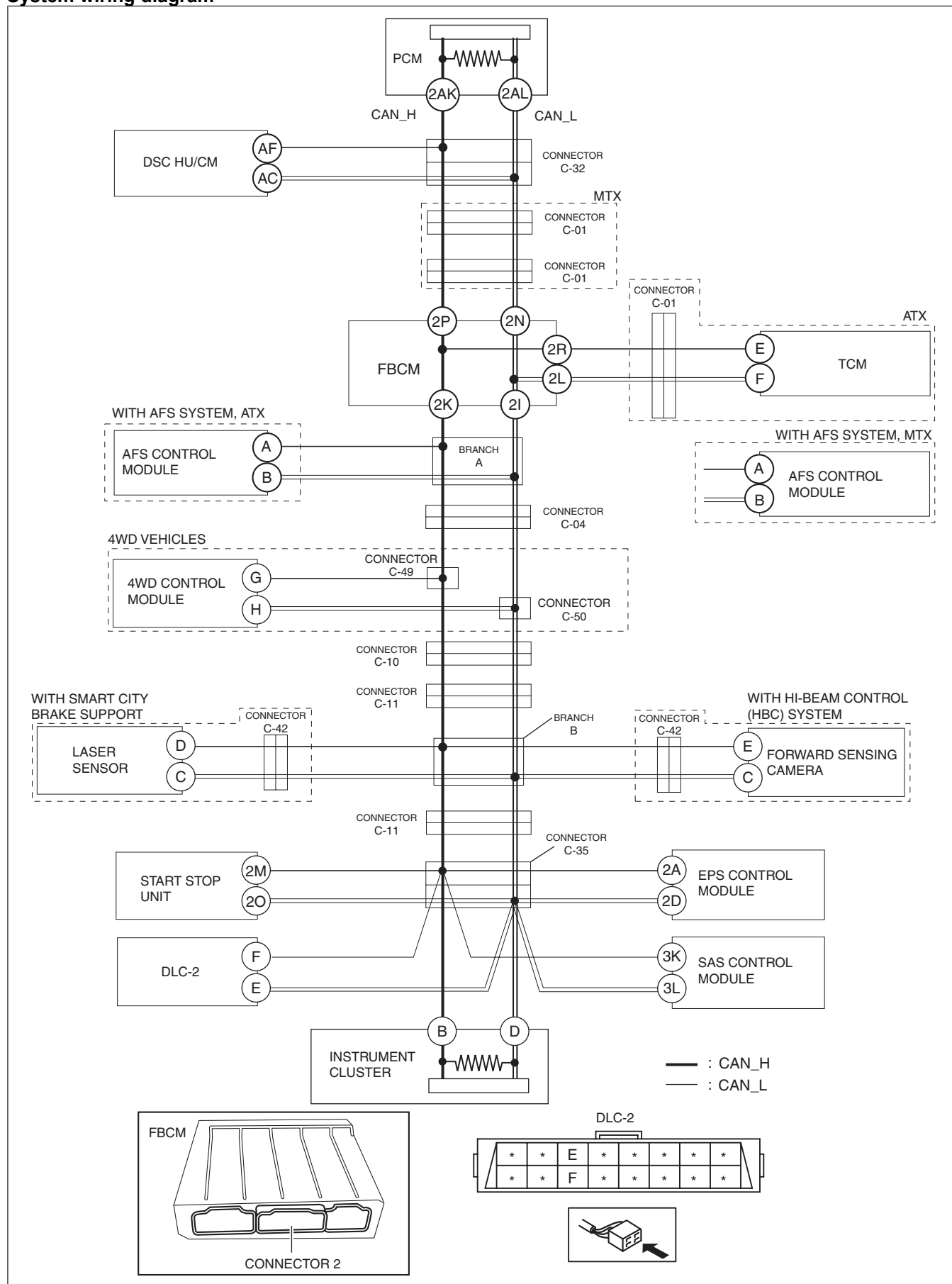
## DETERMINING SHORT TO POWER SUPPLY LOCATION (HS-CAN) [SKYACTIV-D 2.2 (L.H.D.)]

id100205000700

### Caution

- Perform the following malfunction diagnosis only when it is diagnosed with a short to power supply by CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-D 2.2 (L.H.D.)].

## System wiring diagram



## Determination procedure

### Caution

- When disconnecting the connector, verify that there is no looseness, damage, deformation, corrosion, or poor connection of the connector terminals.
- When inspecting the DLC-2, touch it with a paper clip or similar thin pin without directly inserting a tester into the terminals.
- Disconnect the negative battery cable before performing any work that requires handling of connectors.

Step	Inspection	Action
1	<b>INSPECT FOR SHORT TO POWER SUPPLY BETWEEN FRONT BODY CONTROL MODULE (FBCM) AND INSTRUMENT CLUSTER</b> <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector 2 which has front body control module (FBCM) terminals 2K and 2I.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Go to the next step.
		No Go to Step 5.
2	<b>INSPECT CAN LINE BETWEEN TCM OR AFS CONTROL MODULE AND FRONT BODY CONTROL MODULE (FBCM) FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at TCM terminals E and F. (ATX)</li> <li>• Measure the voltage at AFS control module terminals A and B. (MTX)</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Go to Step 26.
		No <ul style="list-style-type: none"> <li>• Go to the next step. (ATX)</li> <li>• Go to Step 4. (MTX)</li> </ul>
3	<b>INSPECT CAN LINE BETWEEN TCM AND CONNECTOR C-01 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-01.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at TCM terminals E and F.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Repair or replace the wiring harness between connector C-01 and the front body control module (FBCM) because the wiring harness is shorted to the power supply.
		No Go to the next step.

Step	Inspection	Action
4	<b>INSPECT TCM OR AFS CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect the TCM connector. (ATX)</li> <li>• Connect connector C-01. (ATX)</li> <li>• Disconnect the AFS control module connector. (MTX)</li> <li>• Connect connector 2 which has front body control module (FBCM) terminals 2K and 2I</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes <ul style="list-style-type: none"> <li>• Replace the TCM because there is a short to the power supply in the TCM. (ATX) (See CONTROL VALVE BODY REMOVAL/INSTALLATION [FW6A-EL, FW6AX-EL].)</li> <li>• Replace the AFS control module because there is a short to the power supply in the AFS control module. (MTX) (See ADAPTIVE FRONT LIGHTING SYSTEM (AFS) CONTROL MODULE REMOVAL/INSTALLATION.)</li> </ul>
		No <ul style="list-style-type: none"> <li>• Repair or replace the wiring harness between TCM and connector C-01 because the wiring harness is shorted to the power supply. (ATX)</li> <li>• Repair or replace the wiring harness between AFS control module and the front body control module (FBCM) because the wiring harness is shorted to the power supply. (MTX)</li> </ul>
5	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-04 AND INSTRUMENT CLUSTER FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-04.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes <ul style="list-style-type: none"> <li>• Go to the next step. (ATX)</li> <li>• Repair or replace the wiring harness between the front body control module (FBCM) and connector C-04 because the wiring harness is shorted to the power supply. (MTX)</li> </ul>
		No <p>Go to Step 7.</p>
6	<b>INSPECT AFS CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect the AFS control module connector.</li> <li>• Connect connector C-04.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes <p>Replace the AFS control module because there is a short to the power supply in the AFS control module. (See ADAPTIVE FRONT LIGHTING SYSTEM (AFS) CONTROL MODULE REMOVAL/INSTALLATION.)</p>
		No <p>Repair or replace the wiring harness between AFS control module and the front body control module (FBCM) / connector C-04 because the wiring harness is shorted to the power supply.</p>

Step	Inspection	Action	
7	<b>INSPECT CAN LINE BETWEEN CONNECTORS C-49 AND C-50 AND INSTRUMENT CLUSTER FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connectors C-49 and C-50.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to the next step.
		No	Go to Step 10.
8	<b>INSPECT CAN LINE BETWEEN 4WD CONTROL MODULE AND CONNECTORS C-49 AND C-50 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at 4WD control module terminals G and H.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Repair or replace the wiring harness between connector C-04 and connectors C-49 and C-50 because the wiring harness is shorted to the power supply.
		No	Go to the next step.
9	<b>INSPECT 4WD CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connectors C-49 and C-50.</li> <li>• Disconnect the 4WD control module connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the 4WD control module because there is a short to the power supply in the 4WD control module. (See 4WD CONTROL MODULE REMOVAL/ INSTALLATION.)
		No	Repair or replace the wiring harness between the 4WD control module and connectors C-49 and C-50 because the wiring harness is shorted to the power supply.
10	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-10 AND INSTRUMENT CLUSTER FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-10.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Repair or replace the wiring harness between connectors C-49 and C-50 and connector C-10 because the wiring harness is shorted to the power supply.
		No	Go to the next step.

Step	Inspection	Action	
11	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-11 AND INSTRUMENT CLUSTER FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-11.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to the next step.
		No	Go to Step 17.
12	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-11 AND FORWARD SENSING CAMERA/LASER SENSOR FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at the forward sensing camera terminals E and C (with high beam control (HBC) system).</li> <li>• Measure the voltage at laser sensor terminals D and C (with smart city brake support).</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Repair or replace the wiring harness between connector C-10 and connector C-11 because the wiring harness is shorted to the power supply.
		No	Go to the next step.
13	<b>INSPECT CAN LINE BETWEEN LASER SENSOR AND CONNECTOR C-42 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-42.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at laser sensor terminals D and C.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to Step 15.
		No	Go to the next step.
14	<b>INSPECT LASER SENSOR FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect the laser sensor connector.</li> <li>• Connect connector C-42.</li> <li>• Connect connector C-11.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the laser sensor because there is a short to the power supply in the laser sensor. (See LASER SENSOR REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the laser sensor and connector C-42 because the wiring harness is shorted to the power supply.

Step	Inspection	Action	
15	<b>INSPECT CAN LINE BETWEEN FORWARD SENSING CAMERA AND CONNECTOR C-42 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at forward sensing camera terminals E and C.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Repair or replace the wiring harness between connector C-11 and connector C-42 because the wiring harness is shorted to the power supply.
		No	Go to the next step.
16	<b>INSPECT FORWARD SENSING CAMERA FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect the forward sensing camera connector.</li> <li>• Connect connector C-42.</li> <li>• Connect connector C-11.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the forward sensing camera because there is a short to the power supply in the forward sensing camera. (See FORWARD SENSING CAMERA (FSC) REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the forward sensing camera and connector C-42 because the wiring harness is shorted to the power supply.
17	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-35 AND DLC-2 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-35.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage 0 V?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness between connector C-35 and DLC-2 because the wiring harness is shorted to the power supply.
18	<b>INSPECT CAN LINE BETWEEN START STOP UNIT AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at start stop unit terminals 2M and 2O.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to Step 20.
		No	Go to the next step.

Step	Inspection	Action	
19	<b>INSPECT START STOP UNIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-35.</li> <li>• Disconnect the start stop unit connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals E and F.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the start stop unit because there is a short to the power supply in the start stop unit. (See START STOP UNIT REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the start stop unit and connector C-35 because the wiring harness is shorted to the power supply.
20	<b>INSPECT CAN LINE BETWEEN EPS CONTROL MODULE AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at EPS control module terminals 2A and 2D.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to Step 22.
		No	Go to the next step.
21	<b>INSPECT EPS CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-35.</li> <li>• Disconnect the EPS control module connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals E and F.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the EPS control module because there is a short to the power supply in the EPS control module. (See STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the EPS control module and connector C-35 because the wiring harness is shorted to the power supply.
22	<b>INSPECT CAN LINE BETWEEN INSTRUMENT CLUSTER AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure the voltage at instrument cluster terminals B and D.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to Step 24.
		No	Go to the next step.
23	<b>INSPECT INSTRUMENT CLUSTER FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-35.</li> <li>• Disconnect the instrument cluster connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the instrument cluster because the instrument cluster is shorted to the power supply. (See INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the instrument cluster and connector C-35 because the wiring harness is shorted to the power supply.



Step	Inspection	Action	
24	<b>INSPECT CAN LINE BETWEEN SAS CONTROL MODULE AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect the SAS control module connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at SAS control module terminals 3K and 3L (wiring harness side).</li> <li>• Is the voltage 0 V?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness between the SAS control module and connector C-35 because the wiring harness is shorted to the power supply.
25	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-11 AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-35.</li> <li>• Disconnect the SAS control module connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the SAS control module because there is a short to the power supply in the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between connector C-11 and connector C-35 because the wiring harness is shorted to the power supply.
26	<b>INSPECT CAN LINE BETWEEN PCM AND FRONT BODY CONTROL MODULE (FBCM) FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure voltage at PCM terminals 2AK and 2AL.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Replace the front body control module (FBCM) because there is a short to the power supply in the front body control module (FBCM). (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.)
		No	<ul style="list-style-type: none"> <li>• Go to Step 29. (ATX)</li> <li>• Go to the next step. (MTX)</li> </ul>
27	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-01 AND FRONT BODY CONTROL MODULE (FBCM) FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-01.</li> <li>• Connect connector 2 which has front body control module (FBCM) terminals 2K and 2I.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness between connector C-01 and the front body control module (FBCM) because the wiring harness is shorted to the power supply.

Step	Inspection	Action
28	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-01 AND CONNECTOR C-32 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-32.</li> <li>• Connect connector C-01.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Go to Step 30.
		No Repair or replace the wiring harness between connector C-01 and connector C-32 because the wiring harness is shorted to the power supply.
29	<b>INSPECT CAN LINE BETWEEN CONNECTOR C-32 AND FRONT BODY CONTROL MODULE (FBCM) FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Disconnect connector C-32.</li> <li>• Connect connector 2 which has front body control module (FBCM) terminals 2K and 2I.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Go to the next step.
		No Repair or replace the wiring harness between connector C-32 and front body control module (FBCM) because the wiring harness is shorted to the power supply.
30	<b>INSPECT CAN LINE BETWEEN DSC HU/CM AND CONNECTOR C-32 FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Measure voltage at DSC HU/CM terminals AF and AC.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Go to Step 32.
		No Go to the next step.
31	<b>INSPECT DSC HU/CM FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-32.</li> <li>• Disconnect the DSC HU/CM connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Replace the DSC HU/CM because the DSC HU/CM is shorted to the power supply. (See DSC HU/CM REMOVAL/INSTALLATION.)
		No Repair or replace the wiring harness between the DSC HU/CM and connector C-32 because the wiring harness is shorted to the power supply.

Step	Inspection	Action
32	<b>INSPECT PCM FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Switch the ignition off (LOCK).</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect connector C-32.</li> <li>• Disconnect the PCM connector.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Measure the voltage at DLC-2 terminals F and E.</li> <li>• Is the voltage between 1.5 - 3.5 V?</li> </ul>	Yes Replace the PCM because there is a short to the power supply in the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No Repair or replace the wiring harness between the PCM and connector C-32 because the wiring harness is shorted to the power supply.