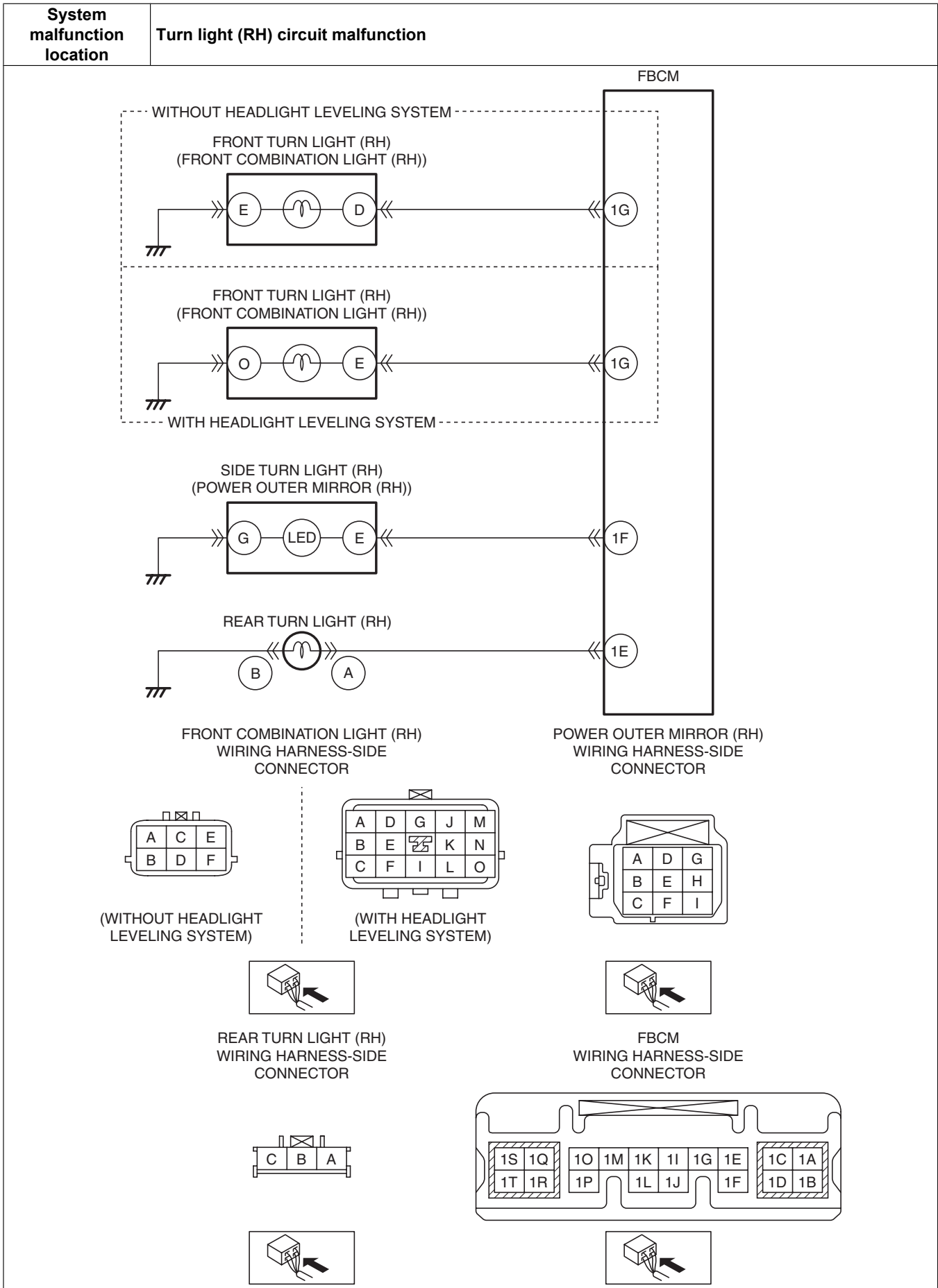


DTC B1D07:13 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2009800

System malfunction location	Turn light (RH) circuit malfunction
Detection condition	• The front body control module (FBCM) detects an open or short to power supply in the turn light (RH) circuit with the ignition switched ON (engine off or on).
Fail-safe	—
Possible cause	<ul style="list-style-type: none">• Front combination light (RH) connector or terminal malfunction• Front turn light bulb (RH) malfunction• Rear turn light (RH) connector or terminal malfunction• Rear turn light bulb (RH) malfunction• Malfunction in power outer mirror (RH) connector or terminal• Side turn light (RH) malfunction• Front body control module (FBCM) connector or terminal malfunction• Short to power supply in wiring harness between the following terminals:<ul style="list-style-type: none">— Front combination light (RH) terminal D and front body control module (FBCM) terminal 1G (without headlight leveling system)— Front combination light (RH) terminal E and front body control module (FBCM) terminal 1G (with headlight leveling system)— Power outer mirror (RH) terminal E and front body control module (FBCM) terminal 1F— Rear turn light (RH) terminal A and front body control module (FBCM) terminal 1E• Open circuit in wiring harness between the following terminals:<ul style="list-style-type: none">— Front combination light (RH) terminal D and front body control module (FBCM) terminal 1G (without headlight leveling system)— Front combination light (RH) terminal E and front body control module (FBCM) terminal 1G (with headlight leveling system)— Power outer mirror (RH) terminal E and front body control module (FBCM) terminal 1F— Rear turn light (RH) terminal A and front body control module (FBCM) terminal 1E• Front body control module (FBCM) malfunction



Diagnostic Procedure

Step	Inspection	Action
1	VERIFY FRONT BODY CONTROL MODULE (FBCM) DTCs AGAIN <ul style="list-style-type: none"> • Clear DTC for the front body control module (FBCM) using the M-MDS. (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].) • Switch the ignition ON (engine off or on). • Perform the DTC inspection for the front body control module (FBCM) using the M-MDS. (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) • Is DTC B1D07:13 displayed? 	Yes Go to the next step.
		No Go to Step 12.
2	INSPECT FRONT COMBINATION LIGHT (RH) CONNECTOR CONDITION <ul style="list-style-type: none"> • Switch the ignition to off. • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect the front combination light (RH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal? 	Yes Go to the next step.
		No Repair or replace the connector, then go to Step 11.
3	INSPECT FRONT TURN LIGHT BULB (RH) <ul style="list-style-type: none"> • Inspect the front turn light bulb (RH). • Is the front turn light bulb (RH) normal? 	Yes Go to the next step.
		No Replace the front turn light bulb (RH), then go to Step 11. (See FRONT TURN LIGHT BULB REMOVAL/ INSTALLATION.)
4	INSPECT REAR TURN LIGHT (RH) CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the rear turn light (RH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal? 	Yes Go to the next step.
		No Repair or replace the connector, then go to Step 11.
5	INSPECT REAR TURN LIGHT BULB (RH) <ul style="list-style-type: none"> • Inspect the rear turn light bulb (RH). • Is the rear turn light bulb (RH) normal? 	Yes Go to the next step.
		No Replace the rear turn light bulb (RH), then go to Step 11. (See REAR TURN LIGHT BULB REMOVAL/ INSTALLATION.)
6	INSPECT POWER OUTER MIRROR (RH) CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the power outer mirror (RH) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal? 	Yes Go to the next step.
		No Repair or replace the connector, then go to Step 11.
7	INSPECT SIDE TURN LIGHT (RH) <ul style="list-style-type: none"> • Inspect the side turn light (RH). (See SIDE TURN LIGHT INSPECTION.) • Is the side turn light (RH) normal? 	Yes Go to the next step.
		No Replace the side turn light (RH), then go to Step 11. (See SIDE TURN LIGHT REMOVAL/INSTALLATION.)

Step	Inspection	Action	
8	INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the front body control module (FBCM) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 11.
9	INSPECT TURN LIGHT (RH) CONTROL CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the front combination light (RH), rear turn light (RH), power outer mirror (RH) and front body control module (FBCM) connectors are disconnected. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (vehicle wiring harness side). <ul style="list-style-type: none"> — Front body control module (FBCM) terminal 1G — Front body control module (FBCM) terminal 1F — Front body control module (FBCM) terminal 1E • Is the voltage 0 V? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 11.

Step	Inspection	Action	
10	INSPECT TURN LIGHT (RH) CONTROL CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none">• Verify that the front combination light (RH), rear turn light (RH), power outer mirror (RH) and front body control module (FBCM) connectors are disconnected.• Switch the ignition to off.• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)• Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity.<ul style="list-style-type: none">— Front combination light (RH) terminal D and front body control module (FBCM) terminal 1G (without headlight leveling system)— Front combination light (RH) terminal E and front body control module (FBCM) terminal 1G (with headlight leveling system)— Power outer mirror (RH) terminal E and front body control module (FBCM) terminal 1F— Rear turn light (RH) terminal A and front body control module (FBCM) terminal 1E• Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to the next step.
11	VERIFY THAT REPAIRS HAVE BEEN COMPLETED <ul style="list-style-type: none">• Reconnect all the disconnected connectors.• Reconnect the disconnected negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)• Clear front body control module (FBCM) DTCs using the M-MDS. (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].)• Switch the ignition ON (engine off or on).• Perform the front body control module (FBCM) DTC inspection using the M-MDS. (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].)• Is DTC B1D07:13 displayed?	Yes	Repeat the inspection from Step 1. <ul style="list-style-type: none">• If the malfunction recurs, replace the front body control module (FBCM), then go to the next step. (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.)
		No	Go to the next step.
12	VERIFY IF OTHER DTCs DISPLAYED <ul style="list-style-type: none">• Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [FRONT BODY CONTROL MODULE (FBCM)].)
		No	DTC troubleshooting completed.