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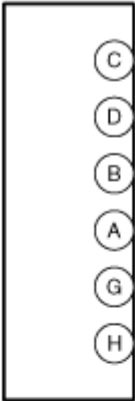
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2016 MAZDA 6 / Atenza Sedan OEM Service and Repair Workshop Manual

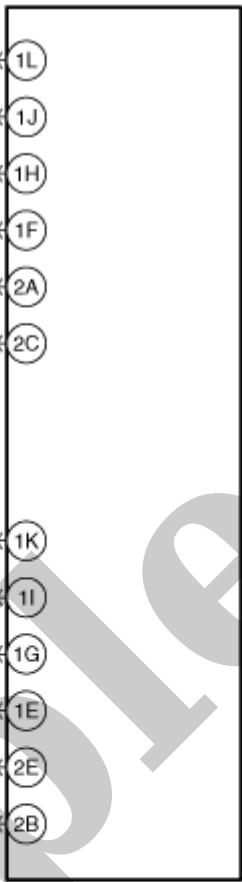
[Go to manual page](#)

STEP	INSPECTION	ACTION	
1	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (LH) CONNECTOR CONDITION - Switch the ignition off. - Disconnect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) - Disconnect the power liftgate (PLG) drive unit (LH) 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 7.
2	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (RH) CONNECTOR CONDITION - Disconnect the power liftgate (PLG) drive unit (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 7.
3	INSPECT POWER LIFTGATE (PLG) CONTROL MODULE CONNECTOR CONDITION - Disconnect the power liftgate (PLG) control module 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 7.
4	INSPECT POWER LIFTGATE (PLG) DRIVE CIRCUIT FOR SHORT TO POWER SUPPLY - Verify that the power liftgate (PLG) drive unit (LH), power liftgate (PLG) drive unit (RH) and power liftgate (PLG) control module connectors are disconnected. - Connect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) - Switch the ignition ON (engine off or on). - Measure the voltage at the following terminals (wiring harness-side): - Power liftgate (PLG) drive unit (LH) terminal G - Power liftgate (PLG) drive unit (LH) terminal H - Power liftgate (PLG) drive unit (RH) terminal G - Power liftgate (PLG) drive unit (RH) terminal H - Is there continuity?	Yes	Refer to the wiring diagram and verify whether or not there is a common connector between the following terminals: - Power liftgate (PLG) drive unit (LH) terminal G—Power liftgate (PLG) control module terminal 2A - Power liftgate (PLG) drive unit (LH) terminal H—Power liftgate (PLG) control module terminal 2C - Power liftgate (PLG) drive unit (RH) terminal G—Power liftgate (PLG) control module terminal 2E - Power liftgate (PLG) drive unit (RH) terminal H—Power liftgate (PLG) control module terminal 2B If there is a common connector: - Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for a short to power supply. - Repair or replace the malfunctioning part. If there is no common connector: - Repair or replace the wiring harness which has a short to power supply. Go to Step 7.
		No	Go to the next step.

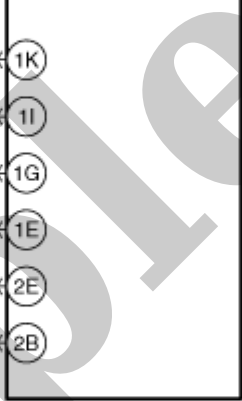
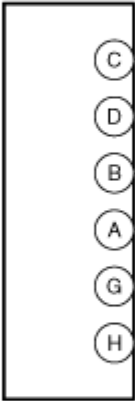
POWER LIFTGATE (PLG) DRIVE UNIT (LH)



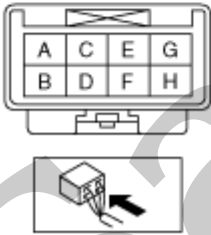
POWER LIFTGATE (PLG) CONTROL MODULE



POWER LIFTGATE (PLG) DRIVE UNIT (RH)

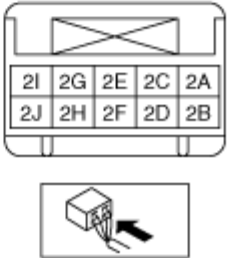


POWER LIFTGATE (PLG) DRIVE UNIT (LH)/(RH)
WIRING HARNESS-SIDE CONNECTOR



POWER LIFTGATE (PLG) CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR

1AE	1AC	1AA	1Y	1W	1U	1S	1Q	1O	1M	1K	1I	1G	1E	1C	1A
1AF	1AD	1AB	1Z	1X	1V	1T	1R	1P	1N	1L	1J	1H	1F	1D	1B

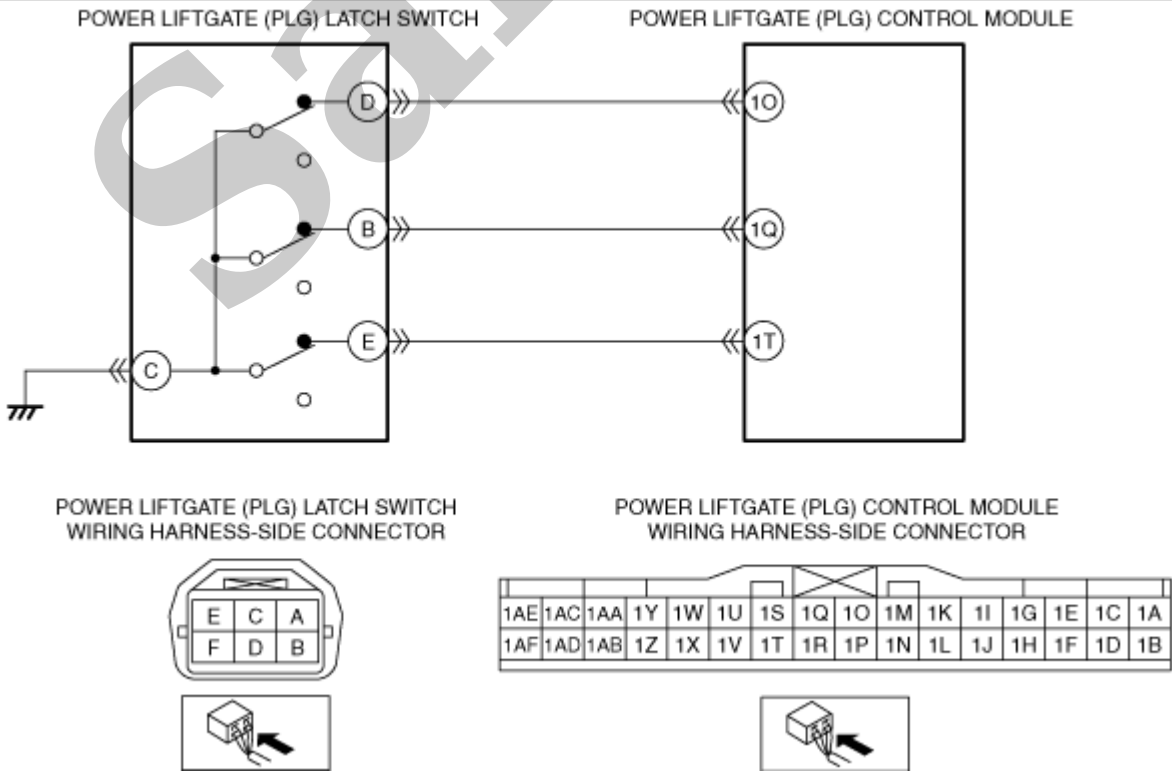


DTC B1453:02 [POWER LIFTGATE (PLG) CONTROL MODULE]

SM2898927

id0902o804870

Description	Power liftgate (PLG) latch switch circuit malfunction
Detection condition	• The power liftgate (PLG) control module detected the following condition. — The voltage input to the half latch switch does not change while the power liftgate (PLG) system is operating. — The voltage input to the full latch switch does not change while the power liftgate (PLG) system is operating.
Fail-safe	• Stops the power liftgate (PLG) system operation.
Possible cause	• Power liftgate (PLG) latch switch connector or terminal malfunction • Open circuit in wiring harness between power liftgate (PLG) latch switch terminal C and body ground • Power liftgate (PLG) control module connector or terminal malfunction • Short to ground in wiring harness between the following terminals: — Power liftgate (PLG) latch switch terminal B—Power liftgate (PLG) control module terminal 1Q — Power liftgate (PLG) latch switch terminal D—Power liftgate (PLG) control module terminal 1O • Short to power supply in wiring harness between the following terminals: — Power liftgate (PLG) latch switch terminal B—Power liftgate (PLG) control module terminal 1Q — Power liftgate (PLG) latch switch terminal D—Power liftgate (PLG) control module terminal 1O • Open circuit in wiring harness between the following terminals: — Power liftgate (PLG) latch switch terminal B—Power liftgate (PLG) control module terminal 1Q — Power liftgate (PLG) latch switch terminal D—Power liftgate (PLG) control module terminal 1O • Power liftgate (PLG) latch switch malfunction • Power liftgate (PLG) control module malfunction



STEP	INSPECTION		ACTION
9	VERIFY IF OTHER DTCs DISPLAYED • Are any other DTCs displayed?	Yes	Repair or replace the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [POWER LIFTGATE (PLG) CONTROL MODULE].)
		No	DTC troubleshooting completed.

Sample

STEP	INSPECTION	ACTION	
1	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (LH) CONNECTOR CONDITION • Switch the ignition off. • Disconnect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) • Disconnect the power liftgate (PLG) drive unit (LH) 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 9.
2	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (RH) CONNECTOR CONDITION • Disconnect the power liftgate (PLG) drive unit (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 9.
3	INSPECT POWER LIFTGATE (PLG) CONTROL MODULE CONNECTOR CONDITION • Disconnect the power liftgate (PLG) control module 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 9.
4	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT CIRCUIT FOR SHORT TO GROUND • Verify that the power liftgate (PLG) drive unit (LH), power liftgate (PLG) drive unit (RH) and power liftgate (PLG) control module connectors are disconnected. • Inspect for continuity between the following terminals (wiring harness-side) and body ground: — Power liftgate (PLG) drive unit (LH) terminal D — Power liftgate (PLG) drive unit (LH) terminal B — Power liftgate (PLG) drive unit (RH) terminal D — Power liftgate (PLG) drive unit (RH) terminal B • Is there continuity?	Yes	Refer to the wiring diagram and verify whether or not there is a common connector between the following terminals: • Power liftgate (PLG) drive unit (LH) terminal D—Power liftgate (PLG) control module terminal 1J • Power liftgate (PLG) drive unit (LH) terminal B—Power liftgate (PLG) control module terminal 1H • Power liftgate (PLG) drive unit (RH) terminal D—Power liftgate (PLG) control module terminal 1I • Power liftgate (PLG) drive unit (RH) terminal B—Power liftgate (PLG) control module terminal 1G If there is a common connector: • Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for a short to ground. • Repair or replace the malfunctioning part. If there is no common connector: • Repair or replace the wiring harness which has a short to ground. Go to Step 9.
			Go to the next step.
		No	Go to the next step.

DTC B144F:79 [POWER LIFTGATE (PLG) CONTROL MODULE]

SM2898925

id0902o804850

Description	Sudden drop of liftgate
Detection condition	• The power liftgate (PLG) control module detects the following conditions while it is stopped at the halfway position or fully closed position. — The power liftgate (PLG) drive unit (LH) decreases for a 100 pulse count or more. (Power liftgate (PLG) drive unit (RH) is normal) — The power liftgate (PLG) drive unit (RH) decreases for a 100 pulse count or more. (Power liftgate (PLG) drive unit (LH) is normal)
Fail-safe	• Stops the power liftgate (PLG) system operation.
Possible cause	• Power liftgate (PLG) drive unit (LH) connector or terminal malfunction • Power liftgate (PLG) drive unit (RH) connector or terminal malfunction • Power liftgate (PLG) control module connector or terminal malfunction • Short to ground in wiring harness between the following terminals: — Power liftgate (PLG) drive unit (LH) terminal D—Power liftgate (PLG) control module terminal 1J — Power liftgate (PLG) drive unit (LH) terminal B—Power liftgate (PLG) control module terminal 1H — Power liftgate (PLG) drive unit (RH) terminal D—Power liftgate (PLG) control module terminal 1I — Power liftgate (PLG) drive unit (RH) terminal B—Power liftgate (PLG) control module terminal 1G • Open circuit in wiring harness between the following terminals: — Power liftgate (PLG) drive unit (LH) terminal D—Power liftgate (PLG) control module terminal 1J — Power liftgate (PLG) drive unit (LH) terminal B—Power liftgate (PLG) control module terminal 1H — Power liftgate (PLG) drive unit (RH) terminal D—Power liftgate (PLG) control module terminal 1I — Power liftgate (PLG) drive unit (RH) terminal B—Power liftgate (PLG) control module terminal 1G • Power liftgate (PLG) drive unit (LH) malfunction • Power liftgate (PLG) drive unit (RH) malfunction • Power liftgate (PLG) control module malfunction

STEP	INSPECTION		ACTION
5	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT CIRCUIT FOR OPEN CIRCUIT - Verify that the power liftgate (PLG) drive unit (LH), power liftgate (PLG) drive unit (RH) and power liftgate (PLG) control module connectors are disconnected. - Inspect for continuity between the following terminals (wiring harness-side): — Power liftgate (PLG) drive unit (LH) terminal D—Power liftgate (PLG) control module terminal 1J — Power liftgate (PLG) drive unit (LH) terminal B—Power liftgate (PLG) control module terminal 1H — Power liftgate (PLG) drive unit (RH) terminal D—Power liftgate (PLG) control module terminal 1I — Power liftgate (PLG) drive unit (RH) terminal B—Power liftgate (PLG) control module terminal 1G - Is there continuity?	Yes	Go to the next step.
		No	Refer to the wiring diagram and verify whether or not there is a common connector between the following terminals: - Power liftgate (PLG) drive unit (LH) terminal D—Power liftgate (PLG) control module terminal 1J - Power liftgate (PLG) drive unit (LH) terminal B—Power liftgate (PLG) control module terminal 1H - Power liftgate (PLG) drive unit (RH) terminal D—Power liftgate (PLG) control module terminal 1I - Power liftgate (PLG) drive unit (RH) terminal B—Power liftgate (PLG) control module terminal 1G If there is a common connector: - Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for an open circuit. - Repair or replace the malfunctioning part. If there is no common connector: - Repair or replace the wiring harness which has an open circuit. Go to Step 8.
6	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (LH) - Inspect the power liftgate (PLG) drive unit (LH). (See POWER LIFTGATE (PLG) DRIVE UNIT INSPECTION.) - Is the power liftgate (PLG) drive unit (LH) normal?	Yes	Go to the next step.
		No	Replace the power liftgate (PLG) drive unit (LH), then go to Step 8. (See POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION.)
7	INSPECT POWER LIFTGATE (PLG) DRIVE UNIT (RH) - Inspect the power liftgate (PLG) drive unit (RH). (See POWER LIFTGATE (PLG) DRIVE UNIT INSPECTION.) - Is the power liftgate (PLG) drive unit (RH) normal?	Yes	Go to the next step.
		No	Replace the power liftgate (PLG) drive unit (RH), then go to the next step. (See POWER LIFTGATE (PLG) DRIVE UNIT REMOVAL/INSTALLATION.)
8	VERIFY THAT REPAIRS HAVE BEEN COMPLETED - Always reconnect all disconnected connectors. - Connect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) - Clear the DTC for the power liftgate (PLG) control module using the M-MDS. (See CLEARING DTC [POWER LIFTGATE (PLG) CONTROL MODULE].) - Retrieve the power liftgate (PLG) control module DTCs using the M-MDS. (See DTC INSPECTION [POWER LIFTGATE (PLG) CONTROL MODULE].) - Is the same DTC displayed?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the power liftgate (PLG) control module. (See POWER LIFTGATE (PLG) CONTROL MODULE REMOVAL/INSTALLATION.) Go to the next step.
		No	Go to the next step.
9	VERIFY IF OTHER DTCs DISPLAYED Are any other DTCs displayed?	Yes	Repair or replace the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [POWER LIFTGATE (PLG) CONTROL MODULE].)
		No	DTC troubleshooting completed.

STEP	INSPECTION		ACTION
5	INSPECT RETURN SWITCH CIRCUIT FOR SHORT TO POWER SUPPLY • Verify that the power liftgate (PLG) latch switch and power liftgate (PLG) control module connectors are disconnected. • Connect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) • Switch the ignition ON (engine off or on). • Measure the voltage at the power liftgate (PLG) latch switch terminal E (wiring harness-side). • Is the voltage 0 V?	Yes	Go to the next step.
		No	Refer to the wiring diagram and verify whether or not there is a common connector between power liftgate (PLG) latch switch terminal E and power liftgate (PLG) control module terminal 1T. If there is a common connector: • Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for a short to power supply. • Repair or replace the malfunctioning part. If there is no common connector: • Repair or replace the wiring harness which has a short to power supply. Go to Step 8.
6	INSPECT RETURN SWITCH CIRCUIT FOR OPEN CIRCUIT • Switch the ignition off. • Disconnect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) • Verify that the power liftgate (PLG) latch switch and power liftgate (PLG) control module connectors are disconnected. • Inspect for continuity between power liftgate (PLG) latch switch terminal E (wiring harness-side) and power liftgate (PLG) control module terminal 1T (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Refer to the wiring diagram and verify whether or not there is a common connector between power liftgate (PLG) latch switch terminal E and power liftgate (PLG) control module terminal 1T. If there is a common connector: • Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for an open circuit. • Repair or replace the malfunctioning part. If there is no common connector: • Repair or replace the wiring harness which has an open circuit. Go to Step 8.
7	INSPECT POWER LIFTGATE (PLG) LATCH SWITCH • Inspect the power liftgate (PLG) latch switch. (See LIFTGATE/POWER LIFTGATE (PLG) LATCH SWITCH INSPECTION.) • Is the power liftgate (PLG) latch switch?	Yes	Go to the next step.
		No	Replace the power liftgate (PLG) latch switch, then go to the next step. (See LIFTGATE LATCH AND LOCK ACTUATOR REMOVAL/INSTALLATION.)
8	VERIFY THAT REPAIRS HAVE BEEN COMPLETED • Always reconnect all disconnected connectors. • Connect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) • Clear the DTC for the power liftgate (PLG) control module using the M-MDS. (See CLEARING DTC [POWER LIFTGATE (PLG) CONTROL MODULE].) • Retrieve the power liftgate (PLG) control module DTCs using the M-MDS. (See DTC INSPECTION [POWER LIFTGATE (PLG) CONTROL MODULE].) • Is the same DTC displayed?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the power liftgate (PLG) control module. (See POWER LIFTGATE (PLG) CONTROL MODULE REMOVAL/INSTALLATION.) Go to the next step.
		No	Go to the next step.
9	VERIFY IF OTHER DTCs DISPLAYED • Are any other DTCs displayed?	Yes	Repair or replace the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [POWER LIFTGATE (PLG) CONTROL MODULE].)
		No	DTC troubleshooting completed.

STEP	INSPECTION		ACTION
2	INSPECT LIFTGATE LATCH SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT • Verify that the liftgate latch switch connector is disconnected. • Inspect for continuity between liftgate latch switch terminal A (wiring harness-side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Refer to the wiring diagram and verify whether or not there is a common connector between liftgate latch switch terminal A and body ground. If there is a common connector: • Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for an open circuit. • Repair or replace the malfunctioning part. If there is no common connector: • Repair or replace the wiring harness which has an open circuit. Go to Step 11.
3	INSPECT LIFTGATE LATCH SWITCH • Inspect the liftgate latch switch. (See LIFTGATE/POWER LIFTGATE (PLG) LATCH SWITCH INSPECTION.) • Is the liftgate latch switch normal?	Yes	Go to the next step.
		No	Replace the liftgate latch switch, then go to Step 11. (See LIFTGATE LATCH AND LOCK ACTUATOR REMOVAL/INSTALLATION.)
4	INSPECT POWER LIFTGATE (PLG) LATCH SWITCH CONNECTOR CONDITION • Disconnect the power liftgate (PLG) latch switch 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 POWER LIFTGATE (PLG) LATCH SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT • Verify that the power liftgate (PLG) latch switch connector is disconnected. • Inspect for continuity between power liftgate (PLG) latch switch terminal C (wiring harness-side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Refer to the wiring diagram and verify whether or not there is a common connector between power liftgate (PLG) latch switch terminal C and body ground. If there is a common connector: • Determine the malfunctioning part by inspecting the common connector and the terminal for corrosion, damage, or pin disconnection, and the common wiring harness for an open circuit. • Repair or replace the malfunctioning part. If there is no common connector: • Repair or replace the wiring harness which has an open circuit. Go to Step 11.
6	INSPECT POWER LIFTGATE (PLG) CONTROL MODULE CONNECTOR CONDITION • Disconnect the power liftgate (PLG) control module 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.