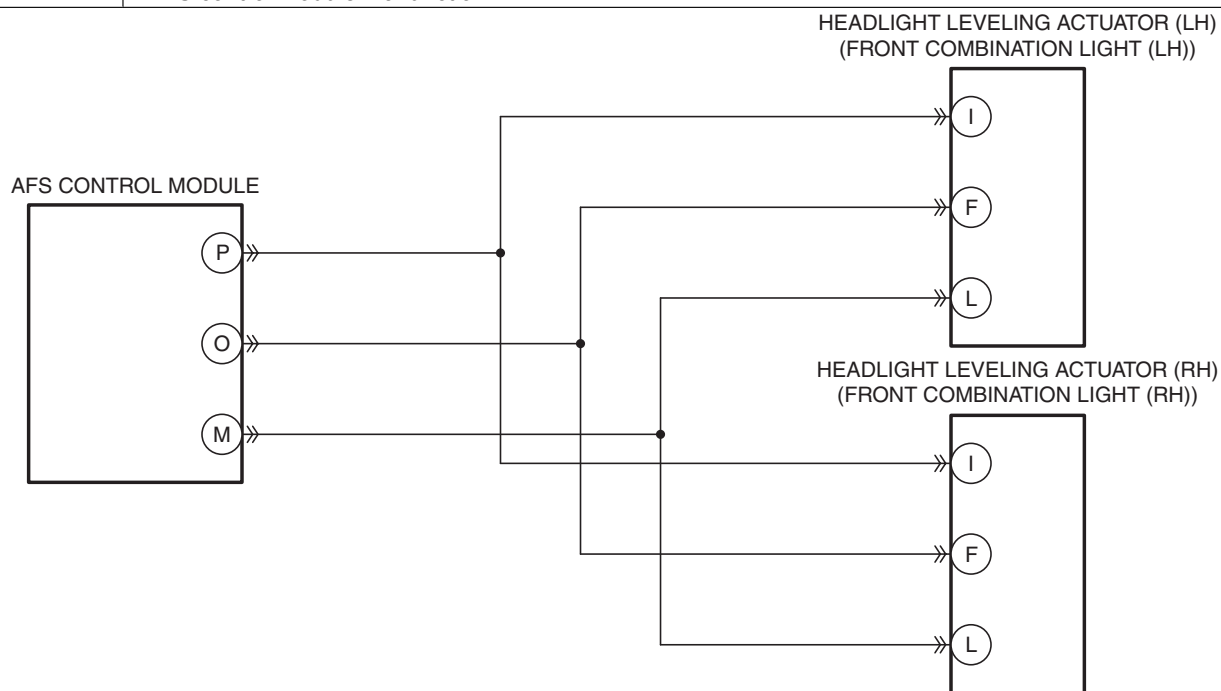


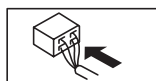
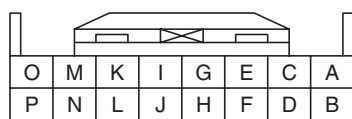
DTC B1041:14 [ADAPTIVE FRONT LIGHTING SYSTEM (AFS)]

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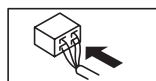
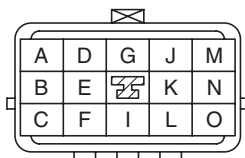
System malfunction location	Headlight leveling actuator circuit malfunction
Detection condition	<ul style="list-style-type: none"> Headlight leveling actuator circuit voltage of 3.2 V or less is detected for 5 s or more with the ignition switched ON (engine off or on).
Fail-safe	<ul style="list-style-type: none"> The swivel actuator is moved to the center. The headlight leveling actuator is stopped at the position when the malfunction is determined.
Possible cause	<ul style="list-style-type: none"> Front combination light (LH) connector or terminal malfunction Front combination light (RH) connector or terminal malfunction AFS control module connector or terminal malfunction Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> AFS control module terminal P and front combination light (LH) terminal I AFS control module terminal O and front combination light (LH) terminal F AFS control module terminal P and front combination light (RH) terminal I AFS control module terminal O and front combination light (RH) terminal F Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> AFS control module terminal P and front combination light (LH) terminal I AFS control module terminal O and front combination light (LH) terminal F AFS control module terminal P and front combination light (RH) terminal I AFS control module terminal O and front combination light (RH) terminal F Headlight leveling actuator malfunction AFS control module malfunction



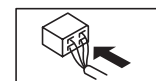
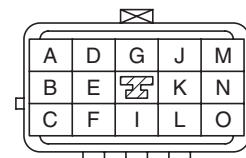
AFS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR



FRONT COMBINATION LIGHT (LH)
WIRING HARNESS-SIDE CONNECTOR



FRONT COMBINATION LIGHT (RH)
WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action	
1	INSPECT FRONT COMBINATION LIGHT (LH) 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 (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 FRONT COMBINATION LIGHT (RH) CONNECTOR CONDITION <ul style="list-style-type: none"> • 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 7.
3	INSPECT AFS CONTROL MODULE CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the AFS 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 HEADLIGHT LEVELING ACTUATOR CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the following connectors are disconnected. <ul style="list-style-type: none"> — Front combination light (LH) — Front combination light (RH) — AFS control module • Inspect for continuity between the following terminals (vehicle wiring harness side) and body ground. <ul style="list-style-type: none"> — Front combination light (LH) terminal I — Front combination light (LH) terminal F — Front combination light (RH) terminal I — Front combination light (RH) terminal F • Is there continuity? 	Yes	Repair or replace the wiring harness which is shorted to ground, then go to Step 7.
		No	Go to the next step.

Step	Inspection	Action
5	INSPECT HEADLIGHT LEVELING ACTUATOR CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> Verify that the following connectors are disconnected. <ul style="list-style-type: none"> Front combination light (LH) Front combination light (RH) AFS control module Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. <ul style="list-style-type: none"> AFS control module terminal P and front combination light (LH) terminal I AFS control module terminal O and front combination light (LH) terminal F AFS control module terminal P and front combination light (RH) terminal I AFS control module terminal O and front combination light (RH) terminal F Is there continuity? 	Yes Go to the next step.
		No Repair or replace the wiring harness which has an open circuit, then go to Step 7.
6	INSPECT HEADLIGHT LEVELING ACTUATOR OPERATION <ul style="list-style-type: none"> Perform the headlight leveling actuator operation check mode. (See HEADLIGHT LEVELING ACTUATOR OPERATION CHECK MODE [ADAPTIVE FRONT LIGHTING SYSTEM (AFS)].) Does the headlight leveling actuator operate normally? 	Yes Go to the next step.
		No Replace the front combination light, then go to the next step. (See FRONT COMBINATION LIGHT REMOVAL/INSTALLATION.)
7	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 the AFS control module DTCs using the M-MDS. (See CLEARING DTC [ADAPTIVE FRONT LIGHTING SYSTEM (AFS)].) Switch the ignition ON (engine off or on) and wait for 5 s or more. Perform the DTC inspection for the AFS control module using the M-MDS. (See DTC INSPECTION [ADAPTIVE FRONT LIGHTING SYSTEM (AFS)].) Is DTC B1041:14 displayed? 	Yes Repeat the inspection from Step 1. • If the malfunction recurs, replace the AFS control module, then go to the next step. (See ADAPTIVE FRONT LIGHTING SYSTEM (AFS) CONTROL MODULE REMOVAL/INSTALLATION.)
		No Go to the next step.
8	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 [ADAPTIVE FRONT LIGHTING SYSTEM (AFS)].)
		No DTC troubleshooting completed.