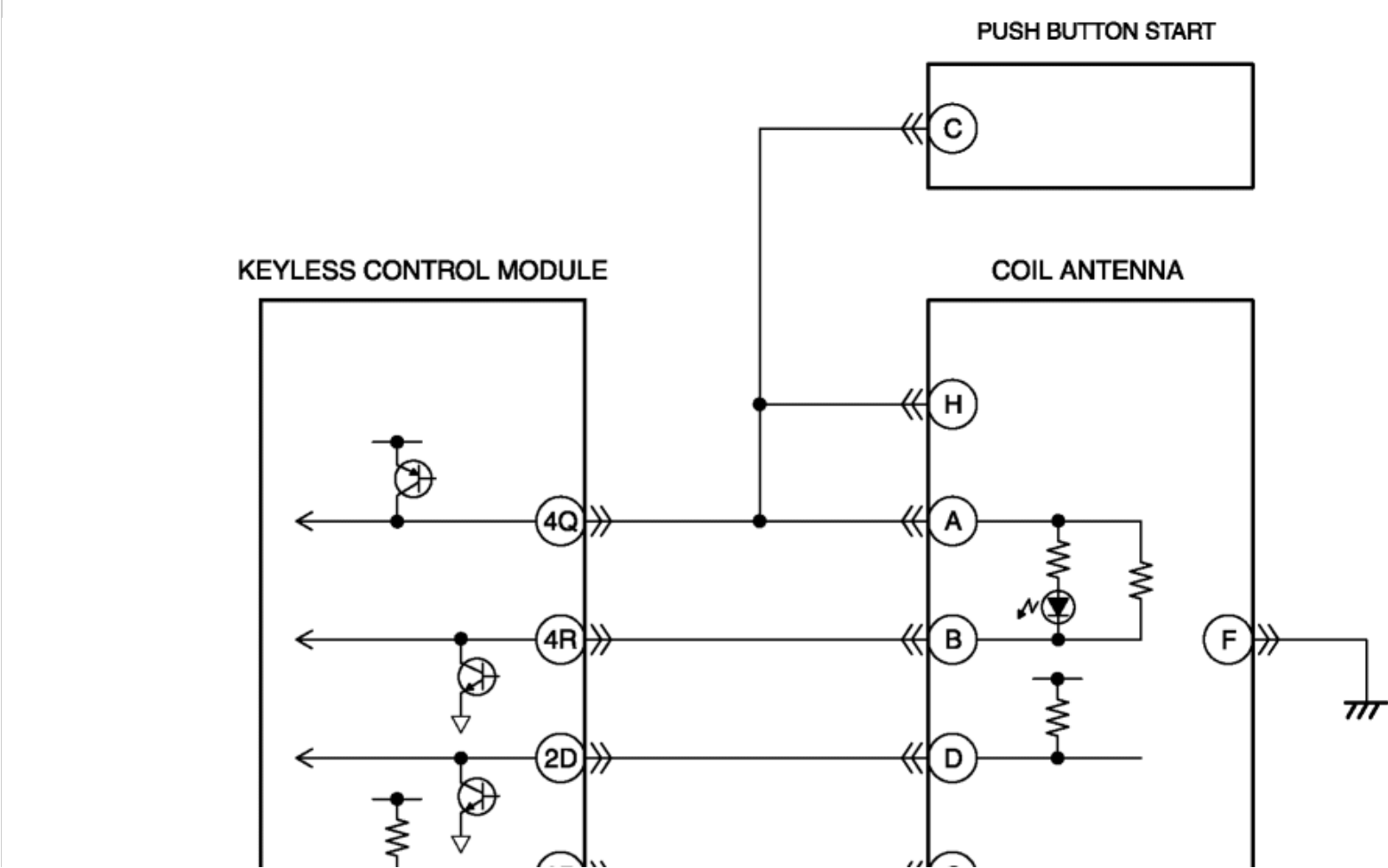


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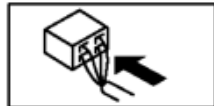
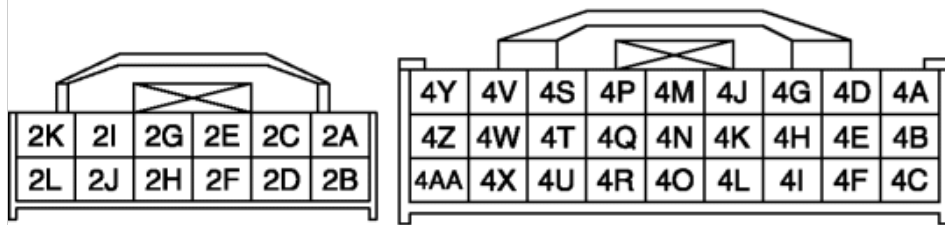
SECURITY LIGHT: NOT ILLUMINATED, DTC B10E6:12/ - [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)]

DTC	Security light flashing pattern		–	Voltage higher than the specification (2.2—6.5 V) is detected for 0.05 s while the coil antenna power supply circuit is not active
	M-MDS display	Keyless control module	B10E6:12	
		PCM	–	
POSSIBLE CAUSE				• Connector or terminal malfunction • Short to power supply in coil antenna power supply circuit • Push button start malfunction • Coil antenna malfunction • Keyless control module malfunction

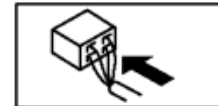
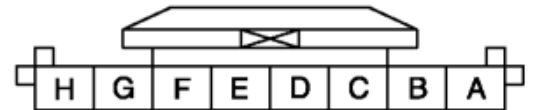




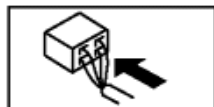
**KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR**



**COIL ANTENNA
WIRING HARNESS-SIDE
CONNECTOR**



**PUSH BUTTON START
WIRING HARNESS-SIDE CONNECTOR**



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT COIL ANTENNA CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the coil antenna connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to the next step.
		No Go to the next step.
2	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to the next step.
		No Go to the next step.

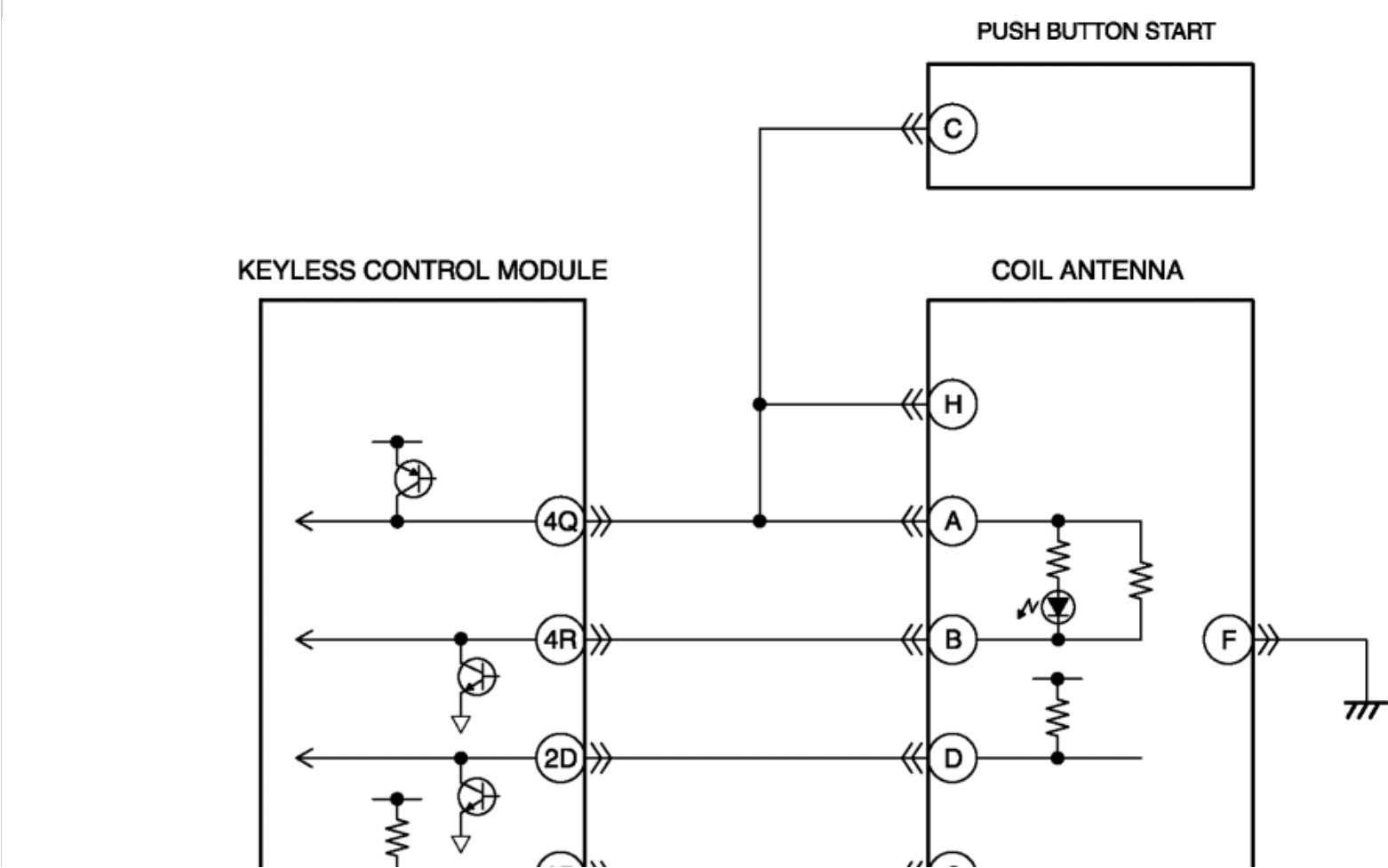
3	INSPECT PUSH BUTTON START CONNECTOR CONDITION • Disconnect the push button start connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to the next step.
		No	Go to the next step.
4	INSPECT COIL ANTENNA POWER SUPPLY CIRCUIT FOR SHORT TO POWER SUPPLY • Reconnect the negative battery cable. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to the next step.
		No	Go to the next step.
5	INSPECT PUSH BUTTON START • Reconnect the push button start connector. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Replace the push button start, then go to the next step. (See PUSH BUTTON START REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
6	INSPECT COIL ANTENNA • Reconnect the coil antenna connector. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Replace the coil antenna, then go to the next step. (See COIL ANTENNA REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
7	PERFORM DTC INSPECTION • Reconnect the keyless control module connector. • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)].) • Disconnect the negative battery cable. • Reconnect the negative battery cable. NOTE: • The keyless control module performs on-board self-diagnostics while the negative battery cable is connected. • Perform the immobilizer system (advanced	Yes	Replace the keyless control module and program the immobilizer system-related parts, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) (See IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.

	keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)] .) • Is the same DTC present?		
8	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

SECURITY LIGHT: NOT ILLUMINATED, DTC B10E6:12/ - [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)]

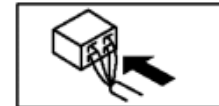
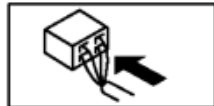
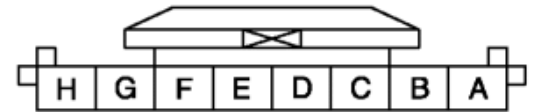
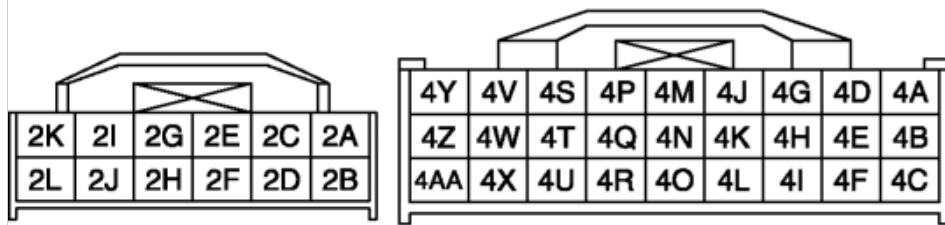
DTC	Security light flashing pattern		–	Voltage higher than the specification (2.2—6.5 V) is detected for 0.05 s while the coil antenna power supply circuit is not active
	M-MDS display	Keyless control module	B10E6:12	
		PCM	–	
POSSIBLE CAUSE				• Connector or terminal malfunction • Short to power supply in coil antenna power supply circuit • Push button start malfunction • Coil antenna malfunction • Keyless control module malfunction



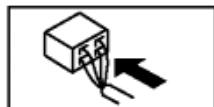


**KEYLESS CONTROL MODULE
WIRING HARNESS-SIDE CONNECTOR**

**COIL ANTENNA
WIRING HARNESS-SIDE
CONNECTOR**



**PUSH BUTTON START
WIRING HARNESS-SIDE CONNECTOR**



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT COIL ANTENNA CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the coil antenna connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to the next step.
		No Go to the next step.
2	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION - Disconnect the keyless control module connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to the next step.
		No Go to the next step.

3	INSPECT PUSH BUTTON START CONNECTOR CONDITION • Disconnect the push button start connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to the next step.
		No	Go to the next step.
4	INSPECT COIL ANTENNA POWER SUPPLY CIRCUIT FOR SHORT TO POWER SUPPLY • Reconnect the negative battery cable. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to the next step.
		No	Go to the next step.
5	INSPECT PUSH BUTTON START • Reconnect the push button start connector. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Replace the push button start, then go to the next step. (See PUSH BUTTON START REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
6	INSPECT COIL ANTENNA • Reconnect the coil antenna connector. • Measure the voltage between keyless control module terminal 4Q (wiring harness-side) and body ground. • Is the voltage more than 2.2 V?	Yes	Replace the coil antenna, then go to the next step. (See COIL ANTENNA REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
7	PERFORM DTC INSPECTION • Reconnect the keyless control module connector. • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)].) • Disconnect the negative battery cable. • Reconnect the negative battery cable. NOTE: • The keyless control module performs on-board self-diagnostics while the negative battery cable is connected. • Perform the immobilizer system (advanced	Yes	Replace the keyless control module and program the immobilizer system-related parts, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) (See IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.

	keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)] .) • Is the same DTC present?		
8	VERIFY THAT NO OTHER DTCs ARE PRESENT • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)] .)
		No	DTC troubleshooting completed.