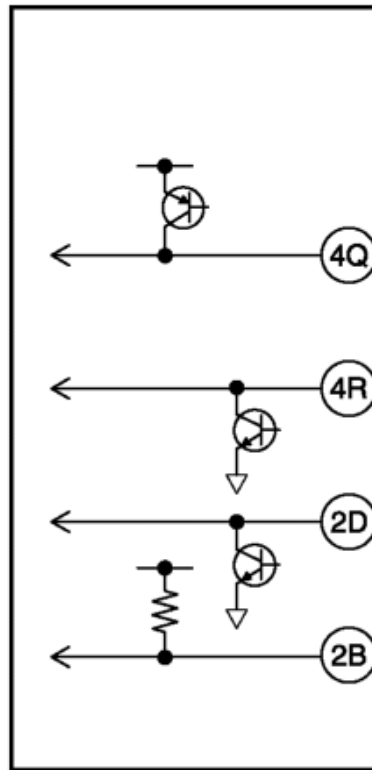


2012 - Mazda6 - Body and Accessories

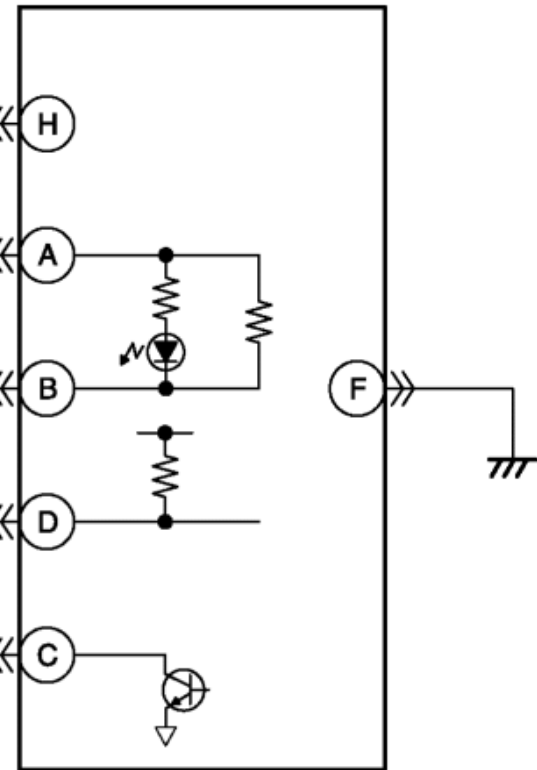
SECURITY LIGHT: 11, DTC: B10D9:87/ P1260:00 [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)]

DTC	Security light flashing pattern		11	No detected communication with coil antenna
	M-MDS display	Keyless control module	B10D9:87	
		PCM	P1260:00	
POSSIBLE CAUSE				• Connector or terminal malfunction • Open circuit in coil antenna ground circuit • Short to ground in coil antenna power supply circuit • Open circuit in coil antenna power supply circuit • Open circuit in wiring harness between coil antenna terminal B and keyless control module terminal 4R • Open circuit in wiring harness between coil antenna terminal D and keyless control module terminal 2D • Open circuit in wiring harness between coil antenna terminal C and keyless control module terminal 2B • Coil antenna malfunction • Keyless control module malfunction

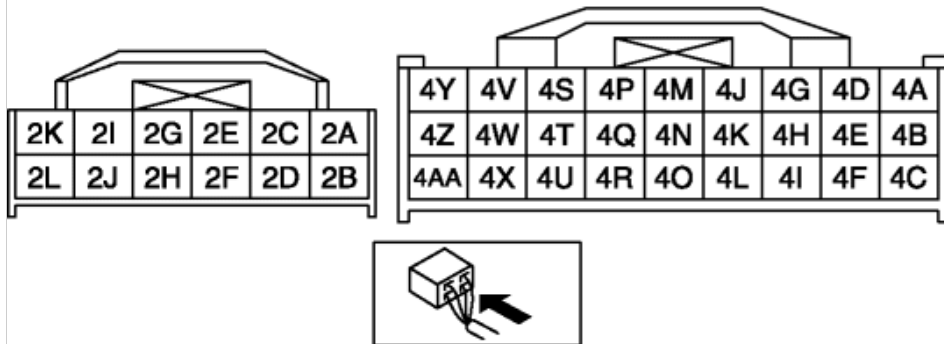
KEYLESS CONTROL MODULE



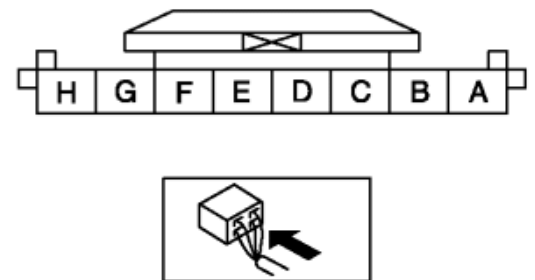
COIL ANTENNA



KEYLESS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



COIL ANTENNA WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS.	Yes Perform the security light: not illuminated, DTC: B10E6:11/- inspection. (See SECURITY LIGHT: NOT ILLUMINATED, DTC B10E6:11/ - [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)].) No Go to the next step.

	(See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Is the following DTC present? - Keyless control module: B10E6:11		
2	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 Step 7.
		No	Go to the next step.
3	INSPECT COIL ANTENNA GROUND CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between coil antenna terminal F (wiring harness-side) and body ground. - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 7.
4	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 Step 7.
		No	Go to the next step.
5	INSPECT COIL ANTENNA POWER SUPPLY CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between coil antenna terminal H (wiring harness-side) and body ground. - Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to ground, then go to Step 7.
		No	Go to the next step.
6	INSPECT COIL ANTENNA CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between the following terminals: - Coil antenna terminal H (wiring harness-side) and keyless control module terminal 4Q (wiring harness-side) - Coil antenna terminal A	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.

	(wiring harness-side) and keyless control module terminal 4Q (wiring harness-side) ▪ Coil antenna terminal B (wiring harness-side) and keyless control module terminal 4R (wiring harness-side) ▪ Coil antenna terminal D (wiring harness-side) and keyless control module terminal 2D (wiring harness-side) ▪ Coil antenna terminal C (wiring harness-side) and keyless control module terminal 2B (wiring harness-side) • Is there continuity?		
7	PERFORM DTC INSPECTION • Reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Is the same DTC present?	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 Step 9.
8	VERIFY TROUBLESHOOTING COMPLETED • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [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.

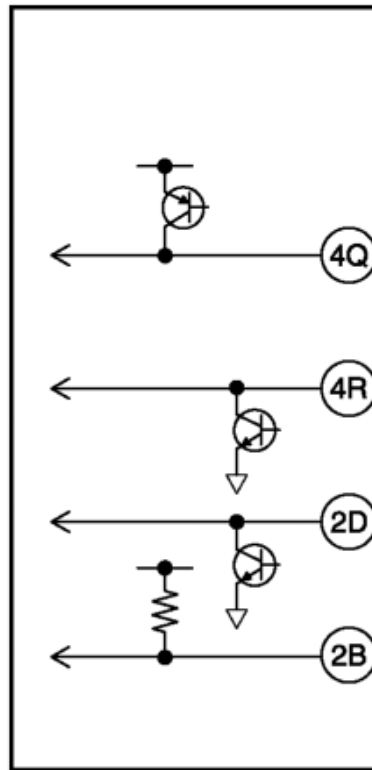
	KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) Is the same DTC present?		
9	VERIFY THAT NO OTHER DTCs ARE PRESENT Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

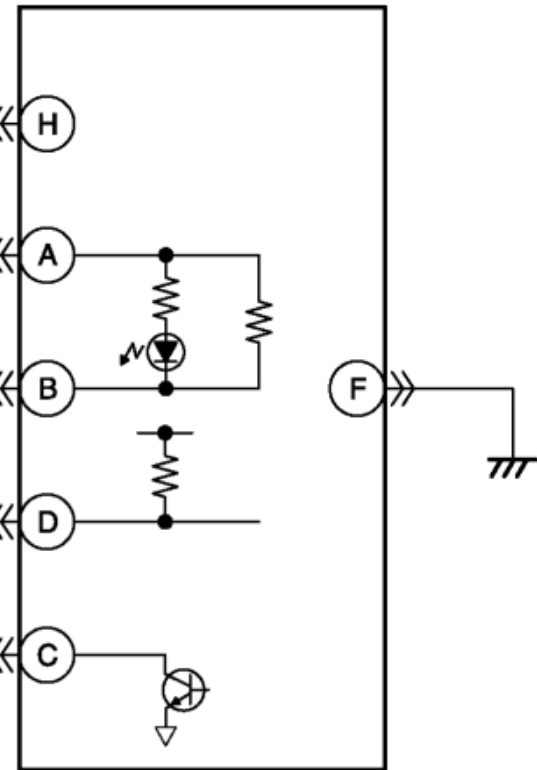
SECURITY LIGHT: 11, DTC: B10D9:87/ P1260:00 [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)]

DTC	Security light flashing pattern		11	No detected communication with coil antenna
	M-MDS display	Keyless control module	B10D9:87	
		PCM	P1260:00	
POSSIBLE CAUSE				• Connector or terminal malfunction • Open circuit in coil antenna ground circuit • Short to ground in coil antenna power supply circuit • Open circuit in coil antenna power supply circuit • Open circuit in wiring harness between coil antenna terminal B and keyless control module terminal 4R • Open circuit in wiring harness between coil antenna terminal D and keyless control module terminal 2D • Open circuit in wiring harness between coil antenna terminal C and keyless control module terminal 2B • Coil antenna malfunction • Keyless control module malfunction

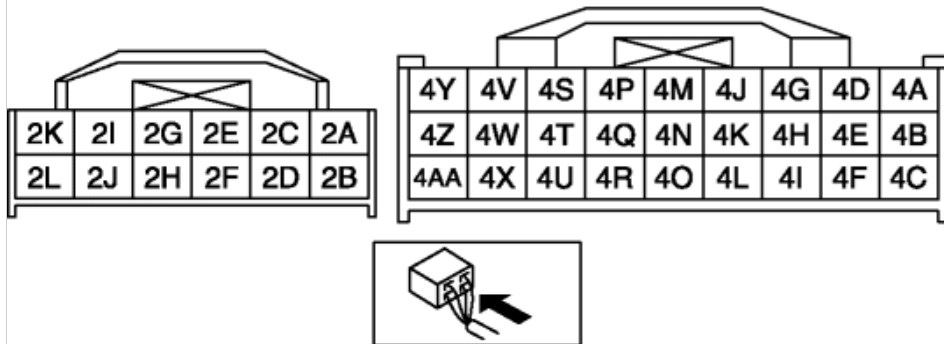
KEYLESS CONTROL MODULE



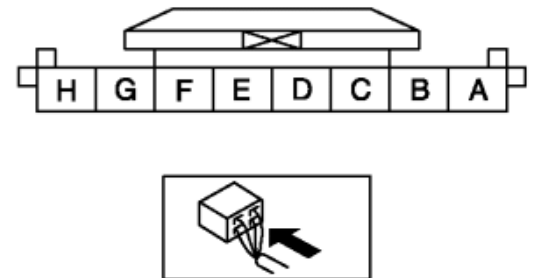
COIL ANTENNA



KEYLESS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



COIL ANTENNA WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action
1	PERFORM DTC INSPECTION - Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) - Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS.	Yes Perform the security light: not illuminated, DTC: B10E6:11/- inspection. (See SECURITY LIGHT: NOT ILLUMINATED, DTC B10E6:11/ - [IMMOBILIZER SYSTEM (ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM)] .) No Go to the next step.

	(See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Is the following DTC present? - Keyless control module: B10E6:11		
2	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 Step 7.
		No	Go to the next step.
3	INSPECT COIL ANTENNA GROUND CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between coil antenna terminal F (wiring harness-side) and body ground. - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 7.
4	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 Step 7.
		No	Go to the next step.
5	INSPECT COIL ANTENNA POWER SUPPLY CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between coil antenna terminal H (wiring harness-side) and body ground. - Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to ground, then go to Step 7.
		No	Go to the next step.
6	INSPECT COIL ANTENNA CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between the following terminals: - Coil antenna terminal H (wiring harness-side) and keyless control module terminal 4Q (wiring harness-side) - Coil antenna terminal A	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.

	(wiring harness-side) and keyless control module terminal 4Q (wiring harness-side) ▪ Coil antenna terminal B (wiring harness-side) and keyless control module terminal 4R (wiring harness-side) ▪ Coil antenna terminal D (wiring harness-side) and keyless control module terminal 2D (wiring harness-side) ▪ Coil antenna terminal C (wiring harness-side) and keyless control module terminal 2B (wiring harness-side) • Is there continuity?		
7	PERFORM DTC INSPECTION • Reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Is the same DTC present?	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 Step 9.
8	VERIFY TROUBLESHOOTING COMPLETED • Clear the DTC from the keyless control module and PCM memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Perform the immobilizer system (advanced keyless entry and push button start system) DTC inspection using the M-MDS. (See DTC INSPECTION [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] .) Is the same DTC present?		
9	VERIFY THAT NO OTHER DTCs ARE PRESENT Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	DTC troubleshooting completed.