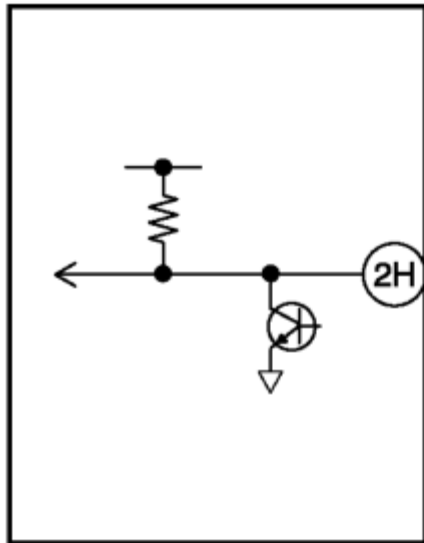


2012 - Mazda6 - Body and Accessories

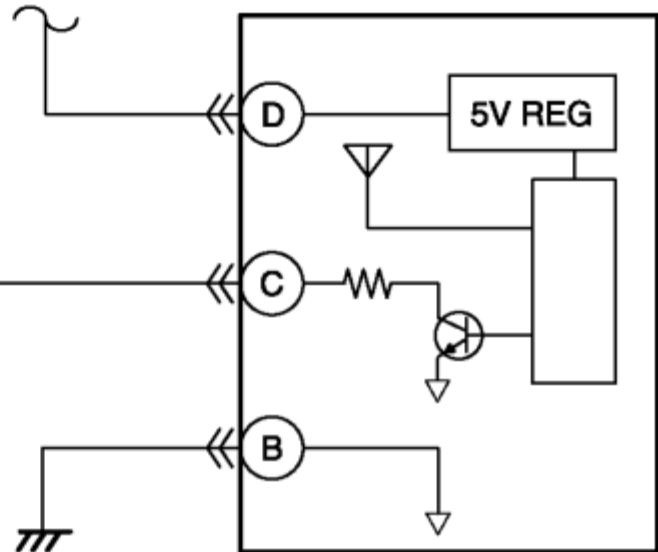
DTC U201F:13 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	No communication with keyless receiver
POSSI BLE CAUSE	• Connector or terminal malfunction • Short to ground in wiring harness between keyless receiver terminal C and keyless control module terminal 2H • Open circuit in wiring harness between keyless receiver terminal C and keyless control module terminal 2H • Keyless receiver malfunction • Keyless control module malfunction

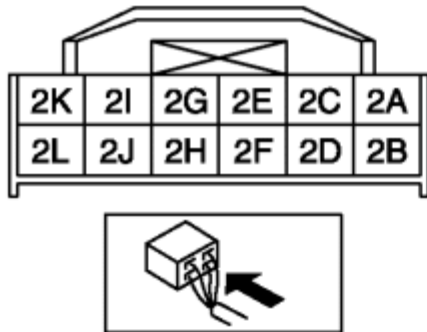
KEYLESS CONTROL MODULE



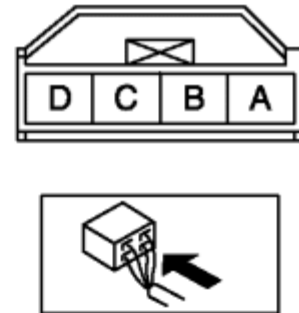
KEYLESS RECEIVER



KEYLESS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



KEYLESS RECEIVER WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT KEYLESS RECEIVER CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the keyless receiver 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 6.
		No Go to the next step.
2	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION Disconnect the keyless control module	Yes Repair or replace the connector or terminals, then go to Step 6.

	connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	No	Go to the next step.
3	INSPECT COMMUNICATION CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between keyless receiver terminal C (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 6.
		No	Go to the next step.
4	INSPECT COMMUNICATION CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between keyless receiver terminal C (wiring harness-side) and keyless control module terminal 2H (wiring harness-side). - 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 6.
5	INSPECT KEYLESS RECEIVER - Inspect the keyless receiver. (See KEYLESS RECEIVER REMOVAL/ INSTALLATION.) - Is there any malfunction?	Yes	Replace the keyless receiver, then go to the next step. (See KEYLESS RECEIVER REMOVAL/ INSTALLATION .)
		No	Go to the next step.
6	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect the disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from keyless control module memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Perform the 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].)	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the keyless control module, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.

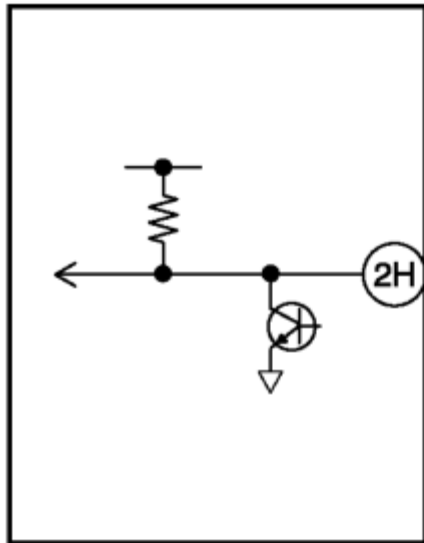
	Is the same DTC present?		
7	VERIFY THAT NO OTHER DTCs ARE PRESENT Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

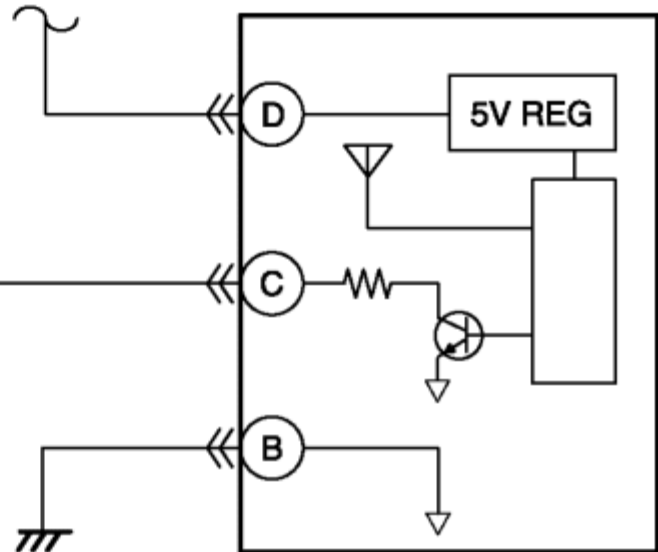
DTC U201F:13 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	No communication with keyless receiver
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground in wiring harness between keyless receiver terminal C and keyless control module terminal 2H • Open circuit in wiring harness between keyless receiver terminal C and keyless control module terminal 2H • Keyless receiver malfunction • Keyless control module malfunction

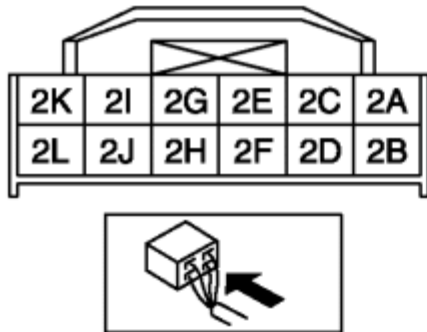
KEYLESS CONTROL MODULE



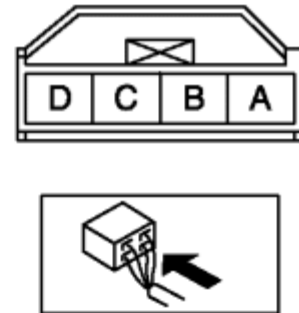
KEYLESS RECEIVER



KEYLESS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



KEYLESS RECEIVER WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT KEYLESS RECEIVER CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the keyless receiver 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 6.
		No Go to the next step.
2	INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION Disconnect the keyless control module	Yes Repair or replace the connector or terminals, then go to Step 6.

	connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	No	Go to the next step.
3	INSPECT COMMUNICATION CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between keyless receiver terminal C (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 6.
		No	Go to the next step.
4	INSPECT COMMUNICATION CIRCUIT FOR OPEN CIRCUIT - Inspect for continuity between keyless receiver terminal C (wiring harness-side) and keyless control module terminal 2H (wiring harness-side). - 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 6.
5	INSPECT KEYLESS RECEIVER - Inspect the keyless receiver. (See KEYLESS RECEIVER REMOVAL/ INSTALLATION.) - Is there any malfunction?	Yes	Replace the keyless receiver, then go to the next step. (See KEYLESS RECEIVER REMOVAL/ INSTALLATION .)
		No	Go to the next step.
6	VERIFY TROUBLESHOOTING COMPLETED - Make sure to reconnect the disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from keyless control module memory using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Perform the 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].)	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the keyless control module, then go to the next step. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.

	Is the same DTC present?		
7	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.