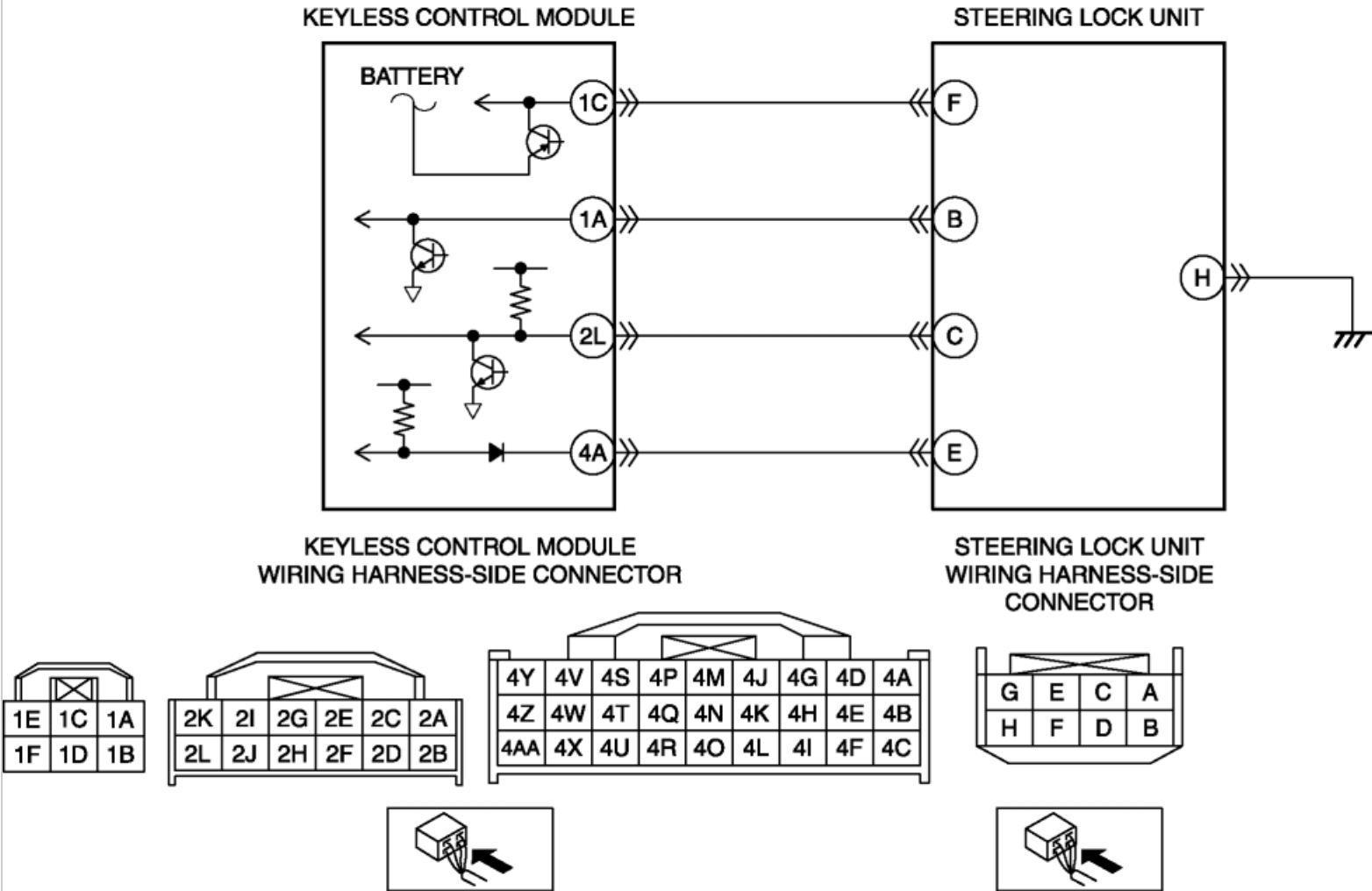


2012 - Mazda6 - Body and Accessories

DTC B1026:87 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	Communication error between keyless control module and steering lock unit
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Short to power supply in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Open circuit in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Steering lock unit malfunction • Keyless control module malfunction



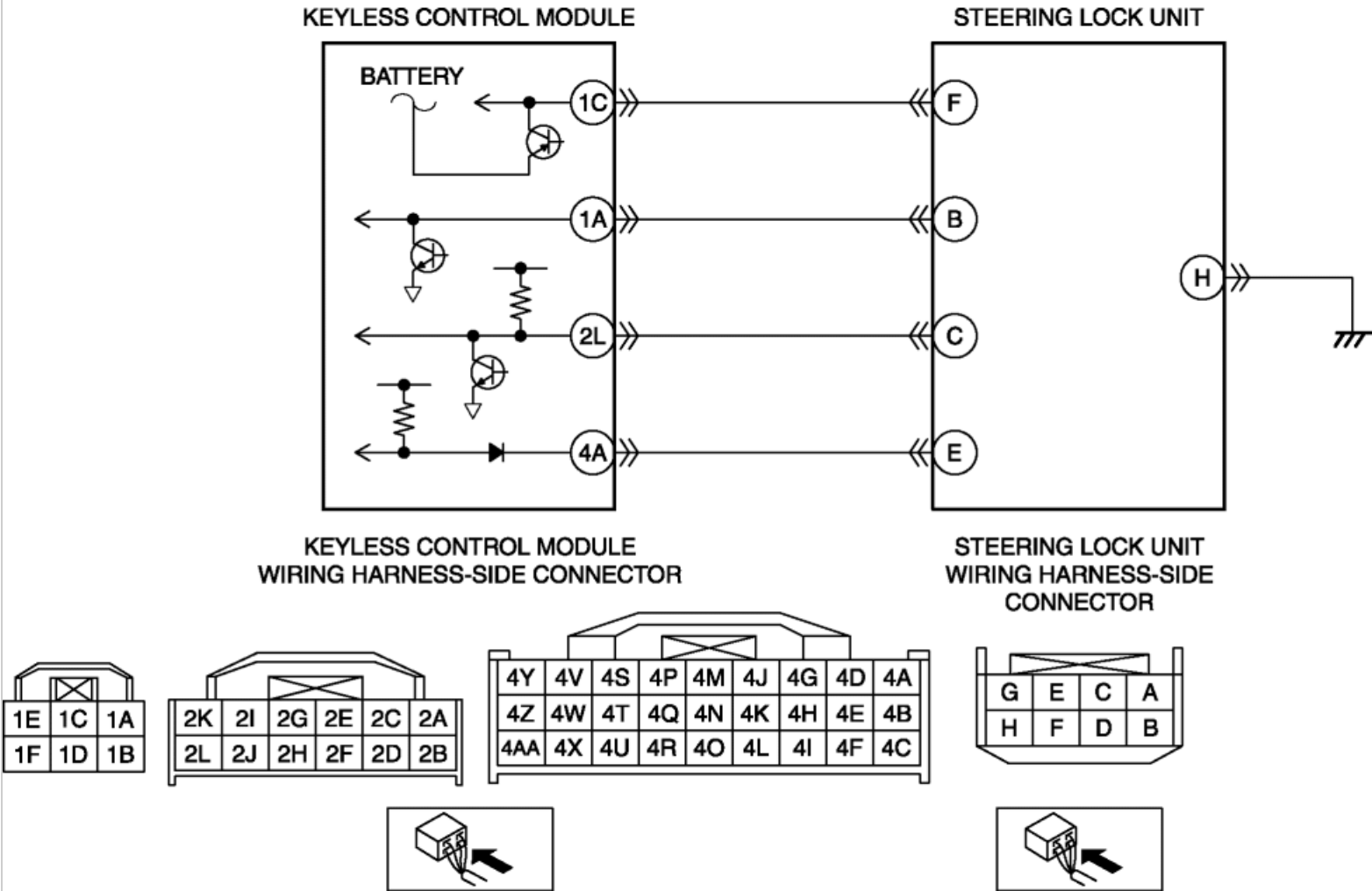
Step	Inspection	Action
1	INSPECT STEERING LOCK UNIT CONNECTOR CONDITION • Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the steering lock unit connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 7.
		No Go to the next step.
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 Step 7.
		No Go to the next step.
3	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between steering lock unit 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 7.
		No Go to the next step.
4	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR SHORT TO POWER SUPPLY • Measure the voltage between steering lock unit terminal C (wiring harness-side) and body ground. • Is there any voltage?	Yes Repair or replace the wiring harness for a possible short to power supply, then go to Step 7.
		No Go to the next step.
5	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR OPEN CIRCUIT • Switch the ignition to off. • Disconnect the negative battery cable. • Inspect for continuity between steering lock unit terminal C (wiring harness-side) and keyless control module terminal 2L (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 7.
6	INSPECT STEERING LOCK UNIT • Inspect the steering lock unit. (See STEERING LOCK UNIT INSPECTION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Is there any malfunction?	Yes Replace the steering lock unit and perform steering lock unit programming, then go to the next step.
		(See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No Go to the next step.

7	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] .) • Switch the ignition to off, then open the door to lock the steering. • 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] .) • Is the same DTC present?	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.
8	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.

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DTC B1026:87 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	Communication error between keyless control module and steering lock unit
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Short to power supply in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Open circuit in wiring harness between steering lock unit terminal C and keyless control module terminal 2L • Steering lock unit malfunction • Keyless control module malfunction



Step	Inspection	Action
1	INSPECT STEERING LOCK UNIT CONNECTOR CONDITION • Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the steering lock unit 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.
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 Step 7.
		No Go to the next step.
3	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between steering lock unit 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 7.
		No Go to the next step.
4	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR SHORT TO POWER SUPPLY • Measure the voltage between steering lock unit terminal C (wiring harness-side) and body ground. • Is there any voltage?	Yes Repair or replace the wiring harness for a possible short to power supply, then go to Step 7.
		No Go to the next step.
5	INSPECT STEERING LOCK UNIT COMMUNICATION CIRCUIT FOR OPEN CIRCUIT • Switch the ignition to off. • Disconnect the negative battery cable. • Inspect for continuity between steering lock unit terminal C (wiring harness-side) and keyless control module terminal 2L (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 7.
6	INSPECT STEERING LOCK UNIT • Inspect the steering lock unit. (See STEERING LOCK UNIT INSPECTION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • Is there any malfunction?	Yes Replace the steering lock unit and perform steering lock unit programming, then go to the next step.
		(See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No Go to the next step.

7	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] .) • Switch the ignition to off, then open the door to lock the steering. • 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] .) • Is the same DTC present?	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.
8	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.