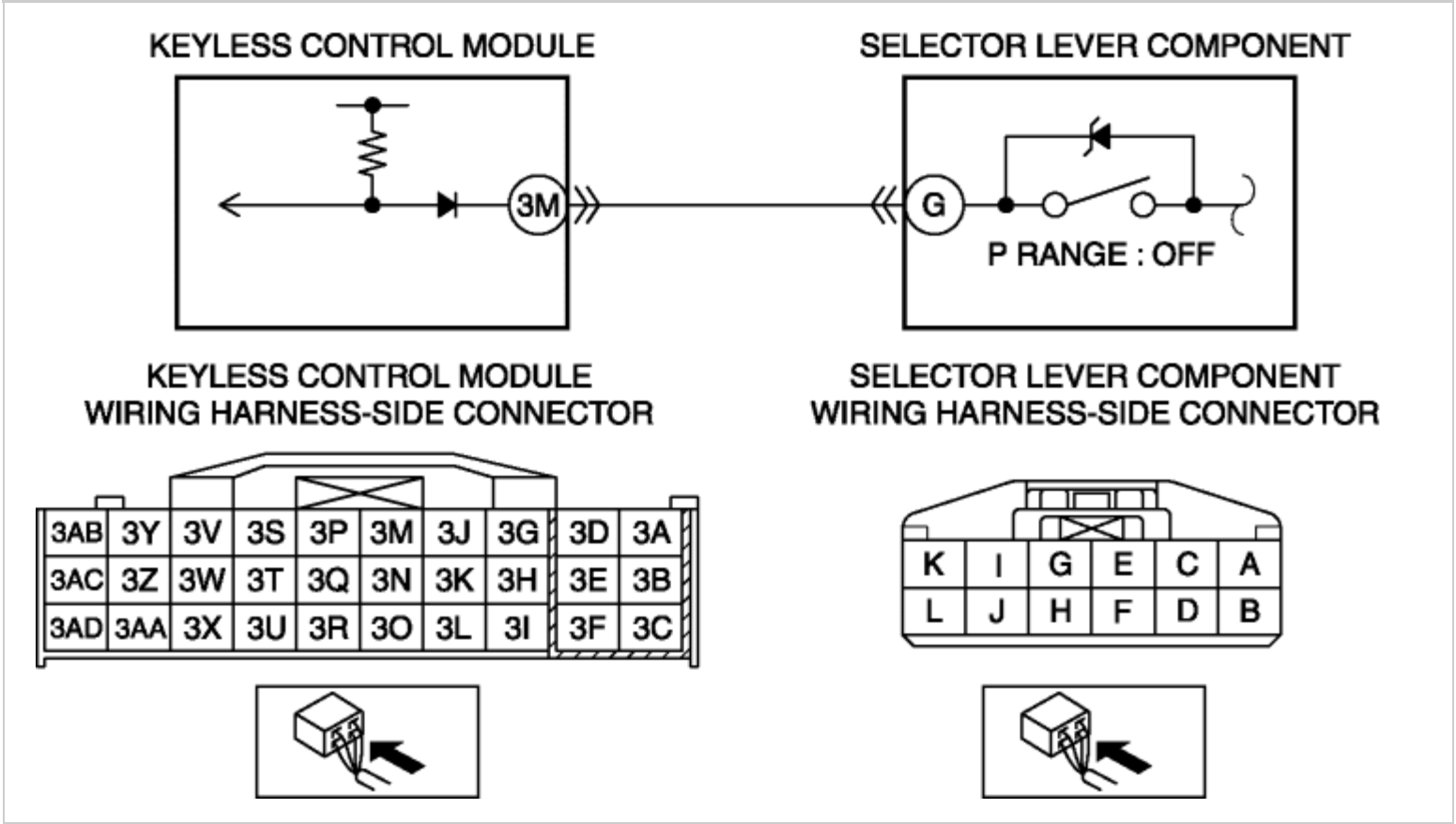


2012 - Mazda6 - Body and Accessories

DTC P081C:62 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	CAN and P range switch signals do not correspond, while ignition switch is ON
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Short to power supply in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Selector lever component malfunction • Open circuit in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Keyless control module malfunction



Diagnostic Procedure

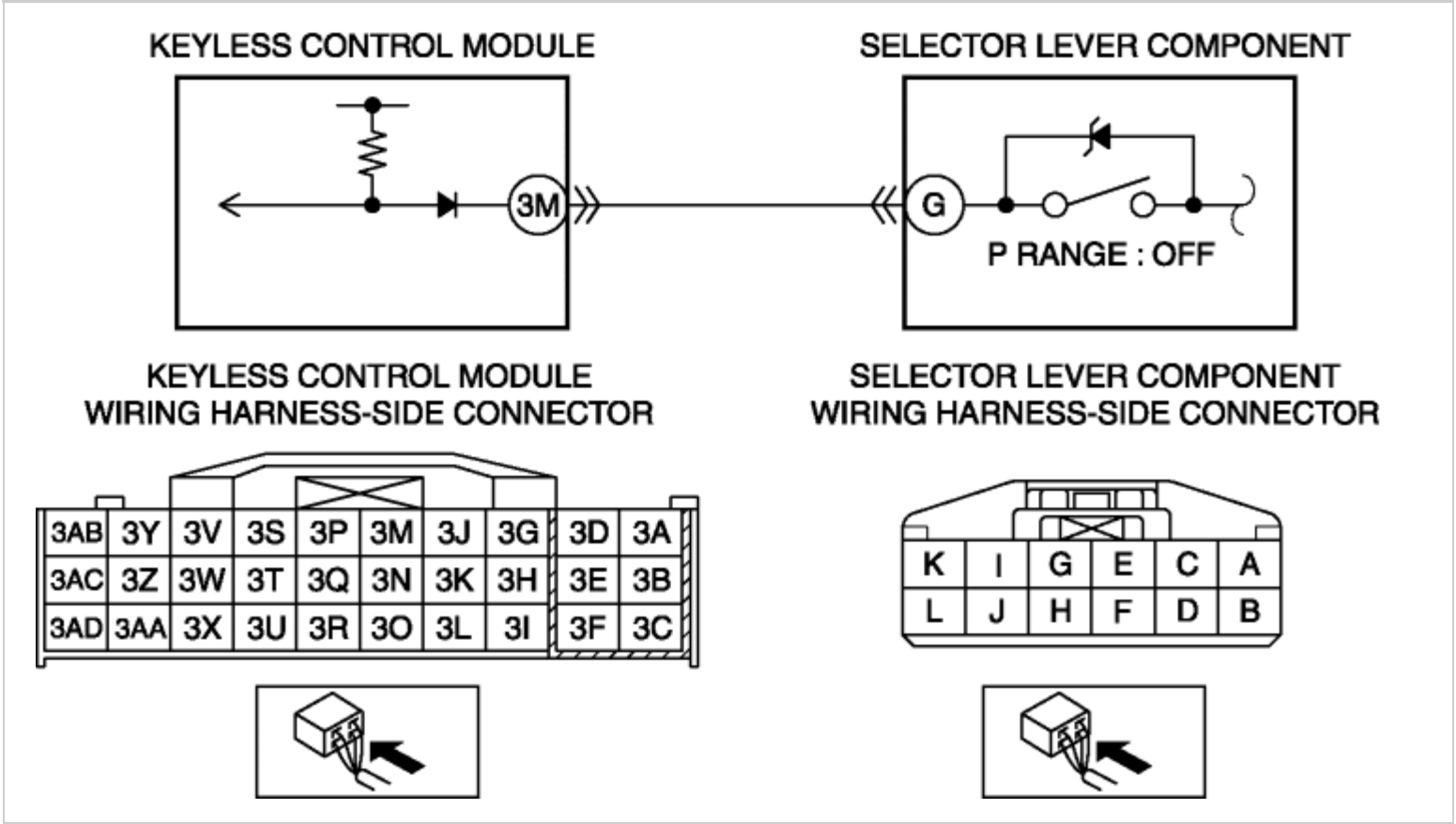
Step	Inspection	Action
1	INSPECT SELECTOR LEVER COMPONENT CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the negative battery cable. - Disconnect the selector lever component connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	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 SELECTOR LEVER COMPONENT CIRCUIT FOR SHORT TO GROUND - Inspect for continuity between selector lever component terminal G (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 SELECTOR LEVER COMPONENT CIRCUIT FOR SHORT TO POWER SUPPLY - Reconnect the negative battery cable. - Switch the ignition to ON. - Measure the voltage between selector lever component terminal G (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 SELECTOR LEVER	Yes Replace the selector lever component,

	COMPONENT • Switch the ignition to off. • Disconnect the negative battery cable. • Inspect the selector lever component. (See SELECTOR LEVER INSPECTION.) • Is there any malfunction?		then go to Step 7. (See NEUTRAL SWITCH REMOVAL/ INSTALLATION [G66M-R].)
		No	Go to the next step.
6	INSPECT SELECTOR LEVER COMPONENT CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between selector lever component terminal G (wiring harness-side) and keyless control module terminal 3M (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 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].) • 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.

2012 - Mazda6 - Body and Accessories

DTC P081C:62 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

DETECTION CONDITION	CAN and P range switch signals do not correspond, while ignition switch is ON
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Short to power supply in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Selector lever component malfunction • Open circuit in the wiring harness between selector lever component terminal G and keyless control module terminal 3M • Keyless control module malfunction



Diagnostic Procedure

Step	Inspection	Action
1	INSPECT SELECTOR LEVER COMPONENT CONNECTOR CONDITION • Switch the ignition to off. • Disconnect the negative battery cable. • Disconnect the selector lever component 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 SELECTOR LEVER COMPONENT CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between selector lever component terminal G (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 SELECTOR LEVER COMPONENT CIRCUIT FOR SHORT TO POWER SUPPLY • Reconnect the negative battery cable. • Switch the ignition to ON. • Measure the voltage between selector lever component terminal G (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 SELECTOR LEVER	Yes Replace the selector lever component,

	COMPONENT • Switch the ignition to off. • Disconnect the negative battery cable. • Inspect the selector lever component. (See SELECTOR LEVER INSPECTION.) • Is there any malfunction?		then go to Step 7. (See NEUTRAL SWITCH REMOVAL/ INSTALLATION [G66M-R].)
		No	Go to the next step.
6	INSPECT SELECTOR LEVER COMPONENT CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between selector lever component terminal G (wiring harness-side) and keyless control module terminal 3M (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 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].) • 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.

