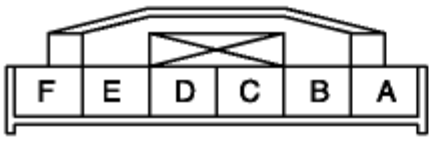
2012 - Mazda6 - Body and Accessories

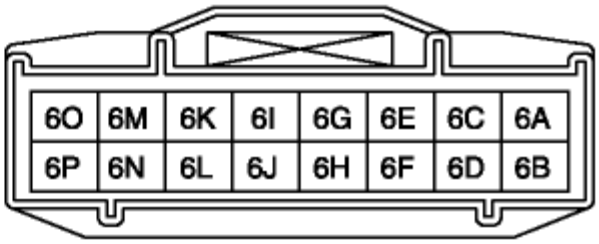
NO.3 TRANSMITTER ID CODE CANNOT BE REPROGRAMMED [KEYLESS ENTRY SYSTEM]

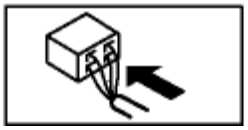
3	**Transmitter ID code cannot be reprogrammed**
DESCRIPTION	• Malfunction in BCM circuit, keyless receive circuit
POSSIBLE CAUSE	• Malfunction in keyless receiver related part ▪ Keyless receiver malfunction ▪ Keyless receiver power supply fuse malfunction ▪ Malfunction in wiring harness between keyless receiver and ground ▪ Malfunction in wiring harness between keyless receiver power supply fuses and keyless receiver ▪ Malfunction in wiring harness between keyless receiver and BCM • Malfunction in BCM related part ▪ Malfunction in wiring harness between keyless receiver and BCM ▪ Malfunction in BCM

KEYLESS RECEIVER WIRING HARNESS-SIDE CONNECTOR



BODY CONTROL MODULE (BCM) WIRING HARNESS-SIDE CONNECTOR





Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT POWER SUPPLY FUSE** • Is the keyless receiver power supply fuse normal?	Yes	Go to the next step.
		No	Install an appropriate amperage fuse, then go to Step 6.
2	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN FUSE BLOCK AND KEYLESS RECEIVER) OR ELSEWHERE** • Measure the voltage at the following keyless receiver terminal: ▪ Power supply signal (terminal A) • Is the voltage **B+** ?	Yes	Go to the next step.
		No	Repair the wiring harness between the fuse block and keyless receiver, then go to Step 6.
3	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND GROUND) OR ELSEWHERE** • Is there continuity between keyless receiver terminal B(4-pin connector type)/E(6-pin connector type) and ground?	Yes	Go to the next step.
		No	Repair the wiring harness between the keyless receiver and ground, then go to Step 6.
4	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND BCM) OR ELSEWHERE** • Disconnect the keyless receiver connector and BCM connector. • Is there continuity between the following terminals? ▪ 6J (BCM connector)—D (keyless receiver connector)	Yes	Go to the next step.
		No	Repair the wiring harness between the keyless receiver and BCM, then go to Step 6.
5	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND BCM) OR BCM** • Measure the signal wave pattern for keyless receiver terminal D using an oscilloscope when the transmitter is operated with the key not inserted into the ignition key cylinder. • Does the wave pattern change when the transmitter is operated?	Yes	Replace the BCM, then go to the next step. (See **BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION**.)
		No	Replace the keyless receiver, then go to the next step. (See **KEYLESS RECEIVER**

	NOTE: • Perform the oscilloscope setting using 0.5V/DIV (Y), 100ms/DIV (X), DC range.		**REMOVAL/ INSTALLATION**.)
6	**REINSPECT MALFUNCTION SYMPTOM AFTER REPAIR** • Does the keyless entry system operate properly?	Yes	Troubleshooting completed. Explain repairs to the customer.
		No	Reinspect the malfunction symptoms, then repeat from Step 1 if the malfunction recurs.

< Previous Next >

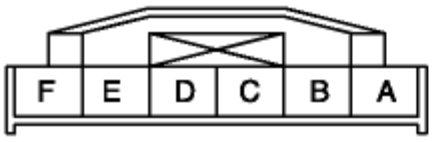
Back to Top

2012 - Mazda6 - Body and Accessories

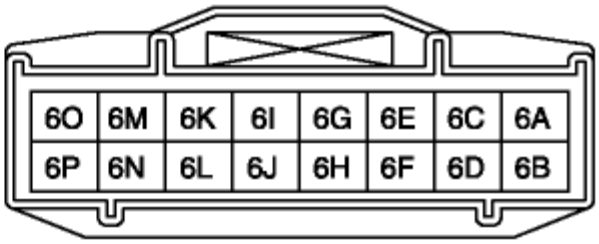
NO.3 TRANSMITTER ID CODE CANNOT BE REPROGRAMMED [KEYLESS ENTRY SYSTEM]

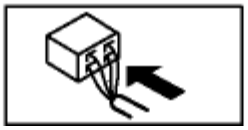
3	**Transmitter ID code cannot be reprogrammed**
DESCRIPTION	• Malfunction in BCM circuit, keyless receive circuit
POSSIBLE CAUSE	• Malfunction in keyless receiver related part ▪ Keyless receiver malfunction ▪ Keyless receiver power supply fuse malfunction ▪ Malfunction in wiring harness between keyless receiver and ground ▪ Malfunction in wiring harness between keyless receiver power supply fuses and keyless receiver ▪ Malfunction in wiring harness between keyless receiver and BCM • Malfunction in BCM related part ▪ Malfunction in wiring harness between keyless receiver and BCM ▪ Malfunction in BCM

KEYLESS RECEIVER WIRING HARNESS-SIDE CONNECTOR



BODY CONTROL MODULE (BCM) WIRING HARNESS-SIDE CONNECTOR





Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT POWER SUPPLY FUSE** • Is the keyless receiver power supply fuse normal?	Yes	Go to the next step.
		No	Install an appropriate amperage fuse, then go to Step 6.
2	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN FUSE BLOCK AND KEYLESS RECEIVER) OR ELSEWHERE** • Measure the voltage at the following keyless receiver terminal: ▪ Power supply signal (terminal A) • Is the voltage **B+** ?	Yes	Go to the next step.
		No	Repair the wiring harness between the fuse block and keyless receiver, then go to Step 6.
3	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND GROUND) OR ELSEWHERE** • Is there continuity between keyless receiver terminal B(4-pin connector type)/E(6-pin connector type) and ground?	Yes	Go to the next step.
		No	Repair the wiring harness between the keyless receiver and ground, then go to Step 6.
4	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND BCM) OR ELSEWHERE** • Disconnect the keyless receiver connector and BCM connector. • Is there continuity between the following terminals? ▪ 6J (BCM connector)—D (keyless receiver connector)	Yes	Go to the next step.
		No	Repair the wiring harness between the keyless receiver and BCM, then go to Step 6.
5	**INSPECT IF MALFUNCTION IS IN WIRING HARNESS (NO CONTINUITY BETWEEN KEYLESS RECEIVER AND BCM) OR BCM** • Measure the signal wave pattern for keyless receiver terminal D using an oscilloscope when the transmitter is operated with the key not inserted into the ignition key cylinder. • Does the wave pattern change when the transmitter is operated?	Yes	Replace the BCM, then go to the next step. (See **BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION**.)
		No	Replace the keyless receiver, then go to the next step. (See **KEYLESS RECEIVER**

	NOTE: • Perform the oscilloscope setting using 0.5V/DIV (Y), 100ms/DIV (X), DC range.		**REMOVAL/ INSTALLATION**.)
6	**REINSPECT MALFUNCTION SYMPTOM AFTER REPAIR** • Does the keyless entry system operate properly?	Yes	Troubleshooting completed. Explain repairs to the customer.
		No	Reinspect the malfunction symptoms, then repeat from Step 1 if the malfunction recurs.

< Previous Next >

Back to Top