# **Service Bulletin**

Mazda North American Operations Irvine, CA 92618-2922



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Subject:

KEYLESS ENTRY SYSTEM - DOORS CANNOT BE LOCKED/UNLOCKED USING
TRANSMITTER - BATTERY IS OK

Bulletin No: 09-035/06

Last Issued: 8/14/2006

# APPLICABLE MODEL(S)/VINS

2006 Mazda5 vehicles with VINs lower than JM1 CR\*\*\*\* \*\* 123133 (produced before March 1, 2006) 2006 MX-5 vehicles w/o Advanced Keyless with VINs lower than JM1 NC\*\*\*\* \*\* 115201 (produced before March 1, 2006)

# **DESCRIPTION**

Some vehicles may experience that the doors cannot be locked / unlocked, trunk cannot be opened (MX-5) and panic alarm cannot be activated. The transmitter battery is found to be good. The negative terminal inside of the transmitter contacting the battery is deformed, causing poor contact.

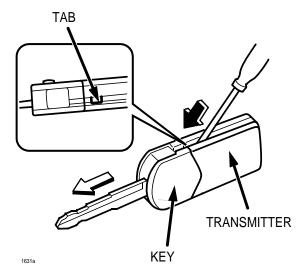
As a mass-production change, the shape of negative terminal in the transmitter has been changed. Customers having this concern should have their vehicle repaired using the following repair procedure.

# REPAIR PROCEDURE

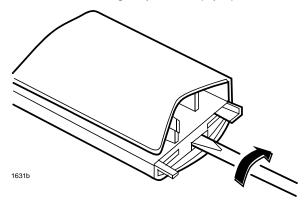
- 1. Verify customer concern.
- 2. Press any button on transmitter and verify light illuminates when each button is pressed.
  - If light does not illuminate, go to STEP 3.
  - If light illuminates on transmitter, proceed with diagnosis of keyless entry system.
    - For Mazda5, perform procedure in Workshop Manual section 09-03A KEYLESS ENTRY SYSTEM ON-BOARD DIAGNOSIS [KEYLESS ENTRY SYSTEM].
    - For MX-5, perform procedure in Workshop Manual section 09-03B KEYLESS ENTRY SYSTEM PRELIMINARY INSPECTION.

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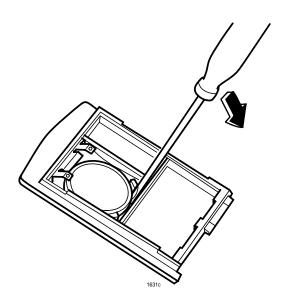
- 3. Remove the transmitter battery.
  - a. Insert a small screwdriver into the slot and push the tab to remove the key from the transmitter.



b. Insert a small screwdriver into the slot and gently twist to pry open the transmitter and access the battery.



c. Remove the battery.



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#### NOTE:

- Dead or low voltage batteries are not covered under the customer's Mazda Vehicle Warranty.
- 4. Using a Digital Volt meter, test the transmitter battery voltage.
  - If transmitter battery voltage is less than 2.7 V, replace battery (ensure positive + is facing down) and retest operation as described in STEP 2. If light still does not operate, replace the transmitter with a modified one and go to STEP 5.
  - If transmitter battery voltage is 2.7 V or more, replace transmitter with a modified one and go to STEP 5.
- 5. Program new transmitter to vehicle. See TRASNMITTER ID CODE REGISTRATION below.

#### NOTE:

- All transmitters will need to be obtained from the customer as all transmitters (new or existing) are programmed at one time. If a transmitter is not programmed during this procedure, it will become inoperative and all transmitters for the vehicle will need to be programmed together.
- 6. Verify repair.

# TRANSMITTER ID CODE REGISTRATION

### NOTE:

All transmitters will need to be obtained from the customer as all transmitters (new or existing) are
programmed at one time. If a transmitter is not programmed during this procedure, it will become
inoperative and all transmitters for the vehicle will need to be programmed together.

On 2006 model year MX-5 Miata and Mazda5, two types of keyless entry systems have been introduced, each having a different procedure for registering transmitters. To identity which type applies, perform the following steps:

- a. Remove key from steering lock and close all doors and liftgate or trunk lid.
- b. Open driver-side door.
- c. Insert key into steering lock.
- d. Repeat the following three times:
  - Turn ignition switch to ON position, then back to lock position.
- e. Close and open driver-side door three times (then leave the door open)
- f. Close the driver-side door.

Do the lock actuators perform the lock-unlock cycle twice?

- NO: Go to procedure for TYPE A system.
- YES: Go to procedure for TYPE B system.

### **TYPE A PROCEDURE**

#### **CAUTION:**

- If the programming mode is activated with one or two ID codes programmed and operation or programming of the transmitter is attempted, the programming operation is disabled and the programming mode is cancelled.
- If a button other than the transmitter UNLOCK button is operated, the programming operation is disabled and the programming mode is cancelled.

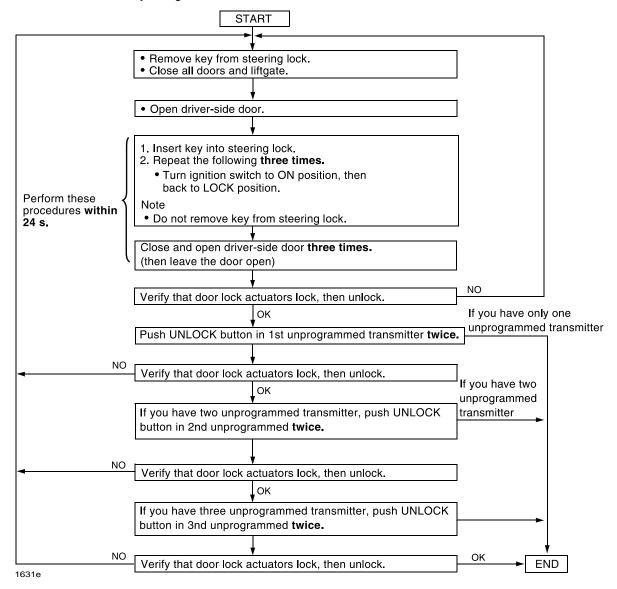
# NOTE:

- When clearing all the programmed ID codes, program three ID codes using an unprogrammed transmitter to terminate the programming mode, then reactivate the programming mode.
- A maximum of three ID codes can be programmed, however, one or two programmed ID codes is also possible.
- When programming the ID code into a keyless control module, verify that other transmitters are not being operated in the vicinity.

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 After ID code programming, remove the key from the steering lock and verify that all doors lock unlock normally using the transmitter.



# **TYPE B PROCEDURE**

### CAUTION:

 Always program three ID codes because the programming mode terminates if three ID codes are programmed. At this time, the same transmitter (programmed transmitter) can be programmed two or three times.

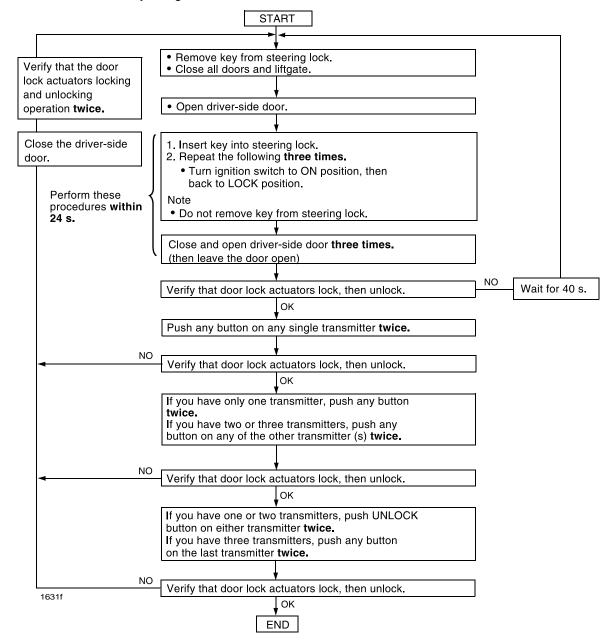
### NOTE:

- Always program three ID codes because all the ID codes programmed prior to activation are cleared when the programming mode is activated.
- A maximum of three ID codes can be programmed.
- When programming the ID code into a keyless control module, verify that other transmitters are not being operated in the vicinity.

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 After ID code programming, remove the key from the steering lock and verify that all doors lock unlock normally using the transmitter.



# PART(S) INFORMATION

Part Number	Description	Qty.	Notes
CC43-67-5RYA	Transmitter Assembly	1	Mazda5
NF49-67-5RYA	Transmitter Assembly	1	MX-5 - w/o advanced keyless system

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# **WARRANTY INFORMATION**

# NOTE:

 This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.

• Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A	
Symptom Code	41	
Damage Code	9M	
Part Number Main Cause	SEE PART(S) INFORMATION	
Quantity	1 or 2	
Operation Number / Labor Hours:	XXB317RX / 0.2 Hrs	