

# Service Alert

Mazda North American Operations  
Irvine, CA 92618-2922



<b>Subject:</b>  <b>VEHICLE CRANKS BUT DOES NOT START DUE TO PCM/IMMOBILIZER MALFUNCTION</b>	<b>Service Alert No.:</b> SA-048/18
	<b>Last Issued:</b> 11/07/2018

## APPLICABLE MODEL(S)/VINS

2001-2002 Miata

## DESCRIPTION

Some vehicles may crank but not start due to a PCM/Immobilizer malfunction. If this happens, check the status of Recall 3505H.

- If Recall 3505H has NOT yet been completed, perform the following steps:

- a. Perform and close recall 3505H.
- b. Order a new immobilizer (PN: BJ3D675G2L).
- c. Confirm at least two valid keys are present. Keys may be valid or new keys. Cut new transponder equipped key(s) if necessary.
- d. When new immobilizer is available, continue to REPAIR PROCEDURE.

- If Recall 3505H has already been completed, perform the following steps:

- a. Contact the Parts Test Lab (PTL@mazdausa.com) for a shipping label for the PCM.
- b. Send the PCM to the MNAO Parts Test Lab address shown below for erase/reprogramming. Attach a copy of the Repair Order when shipping the PCM. (See PCM REMOVAL/INSTALLATION).
- c. Order a new immobilizer (PN: BJ3D675G2L).
- d. Confirm at least two valid keys are present. Keys may be valid or new keys. Cut new transponder equipped key(s) if necessary.
- e. When reprogrammed PCM is returned and new immobilizer is available, continue to REPAIR PROCEDURE.

**NOTE:** If the PCM cannot be reprogrammed due to a damaged PCM, the PCM will be returned to the dealer with notification of PCM damage. Check the eMDCS for PCM availability. If no parts are available, it is suggested to out-source the PCM.

## MNAO

Attention: Parts Test Lab  
1424 McGaw Ave  
Irvine CA, 92614

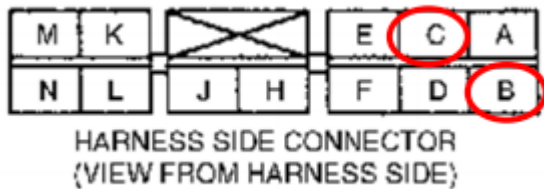
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## REPAIR PROCEDURE

1. Inspect the B and C terminals of the immobilizer unit connector (vehicle harness side) and change the terminal position as necessary.

**NOTE:** It is necessary to change the position of a terminal of the immobilizer connector for the new immobilizer unit.

- If C is empty and B has a terminal, remove B terminal and install it in C position.
- If B is empty and C has a terminal, it is OK and NO terminal position change is necessary.



### NOTE:

- Two valid keys are required to perform PCM / Immobilizer programming. Keys may be valid or new keys.
- When an error occurs in Steps 3 to 7, repeat the procedure from Step 1.
- When an error occurs in Step 7, perform the "Reprogram error recovery procedure for both immobilizer unit and PCM replacement". (See IMMOBILIZER SYSTEM REPROGRAM PROCEDURE).
- For steps 3-8, each step should be performed within 30 seconds.

2. Install the new immobilizer unit and the PCM if not done already. (See IMMOBILIZER UNIT REMOVAL/INSTALLATION and PCM REMOVAL/INSTALLATION.)

3. Using key 1, turn the ignition switch to the ON position and verify the security light goes on and then goes off in the instrument cluster.

4. Turn key 1 to the LOCK position and verify the security light blinks once repeatedly.

5. Using key 2, turn the ignition switch to the ON position and verify the security light goes on and then goes off.

6. Turn key 2 to the LOCK position and verify the security light blinks twice repeatedly.

**NOTE:** Perform steps 7-8 if more than 2 keys are being reprogrammed, otherwise go to step 9.

7. Using key 3, turn ignition switch to ON position and verify the security light goes on and then goes off.

8. Turn key 3 to the LOCK position and verify the security light blinks three times repeatedly.

**NOTE:** If there are more than three keys (valid and/or new keys), repeat the previous steps verifying that the light blinks for the number of keys being programmed.

9. Wait for 30 seconds to quit the reprogram mode.

10. After reprogramming, clear any DTCs in the PCM.