

# Service Alert

Mazda North American Operations  
Irvine, CA 92618-2922



|                                                                        |                                     |
|------------------------------------------------------------------------|-------------------------------------|
| <b>Subject:</b><br><br><b>ENGINE NO START DUE TO BATTERY DISCHARGE</b> | <b>Service Alert No.:</b> SA-002/18 |
|                                                                        | <b>Last Issued:</b> 02/02/2018      |

## APPLICABLE MODEL(S)/VINS

2017 MX-5 RF with VINs lower than JM1ND\*\*\*\*\*106475 (produced before May 16, 2017)

## DESCRIPTION

Some customers may complain about engine no start due to the battery discharged. This may be caused by a software error with the speedometer, a dark current of 80 mA can continue to flow after the ignition is turned off. If the vehicle is not used for more than a week and left in this condition, the battery will discharge.

**NOTE:** A normal dark current value is about 25 – 45 mA.

### Condition where dark current of 80mA occurs:

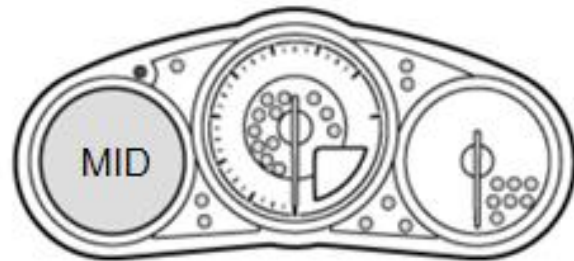
If the ignition is switched OFF while Cruise Control is ON (one of the Cruise Control indicators is ON in the MID), the microcomputer does not shift into the sleep mode and an operation current of 80 mA will continue to flow.

**NOTE:** If the ignition is switched OFF after Cruise Control is turned OFF, this concern does not occur.

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Cruise Control indicators is ON

Instrument Cluster with MID



To correct this concern, the software of the instrument cluster has been changed.

Customers having this concern should have their vehicle repaired using the following repair procedure.

## REPAIR PROCEDURE

1. Confirm with the customer if the dead battery occurred because of the following:

- The ignition was turned off while Cruise Control was activated.
- The vehicle was not used for more than a week.

2. Reprogram the speedometer (IC) with Mazda Modular Diagnostic System (M-MDS) using IDS **108.04** or later software.

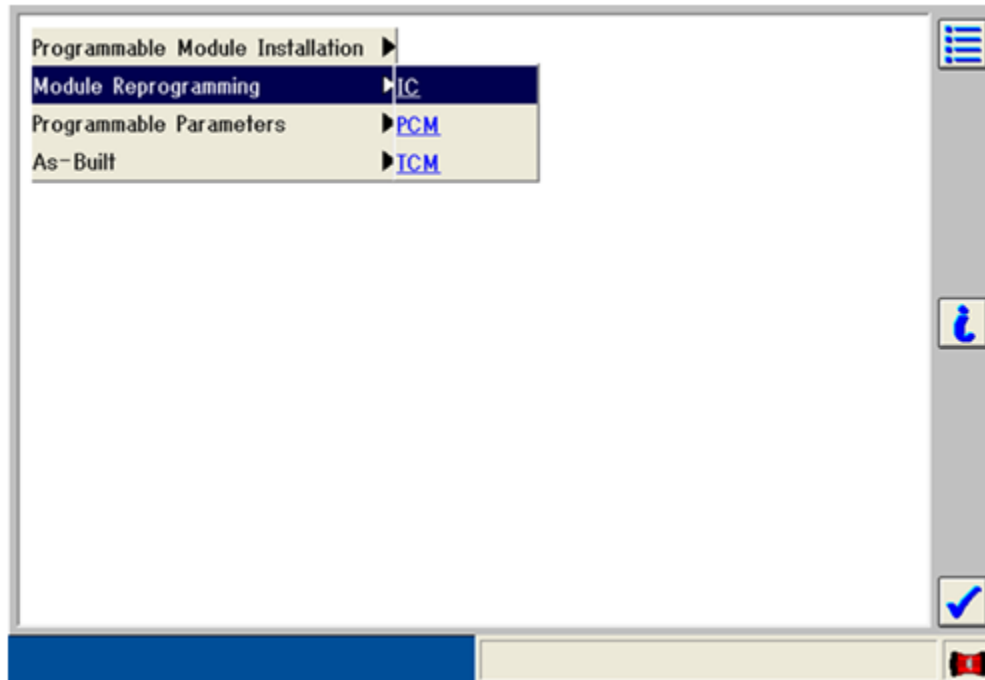
### NOTE:

- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for IC reprogramming.

### CAUTION:

- To avoid causing trouble during IC reprogramming, take extra care on all VCM cable connections and the battery voltage, correct them properly if necessary.

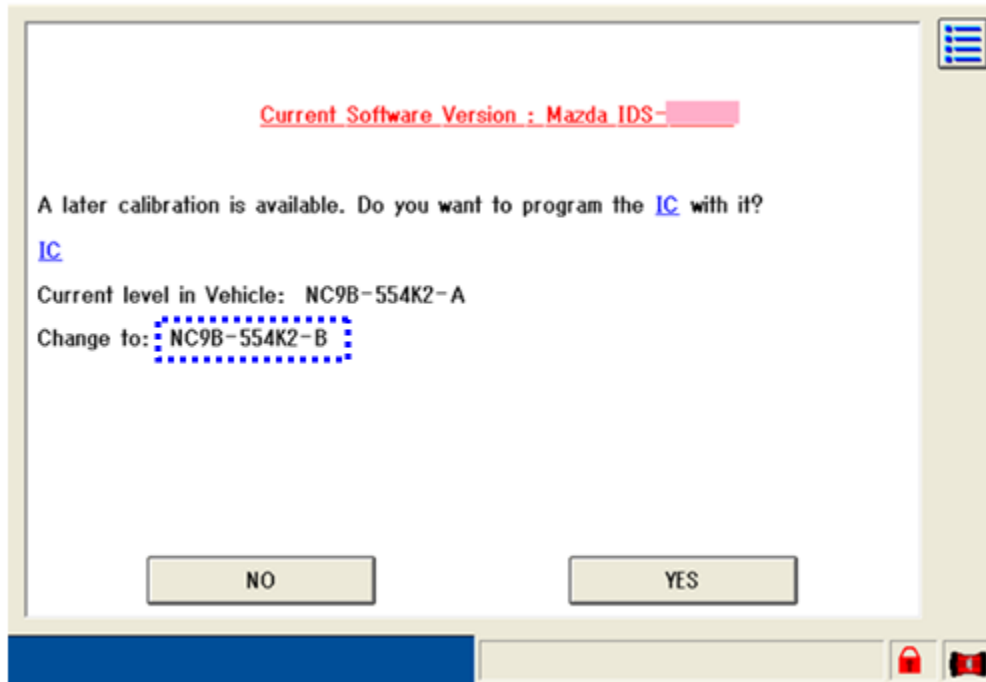
a. Select "Module Reprogramming", then select "IC".



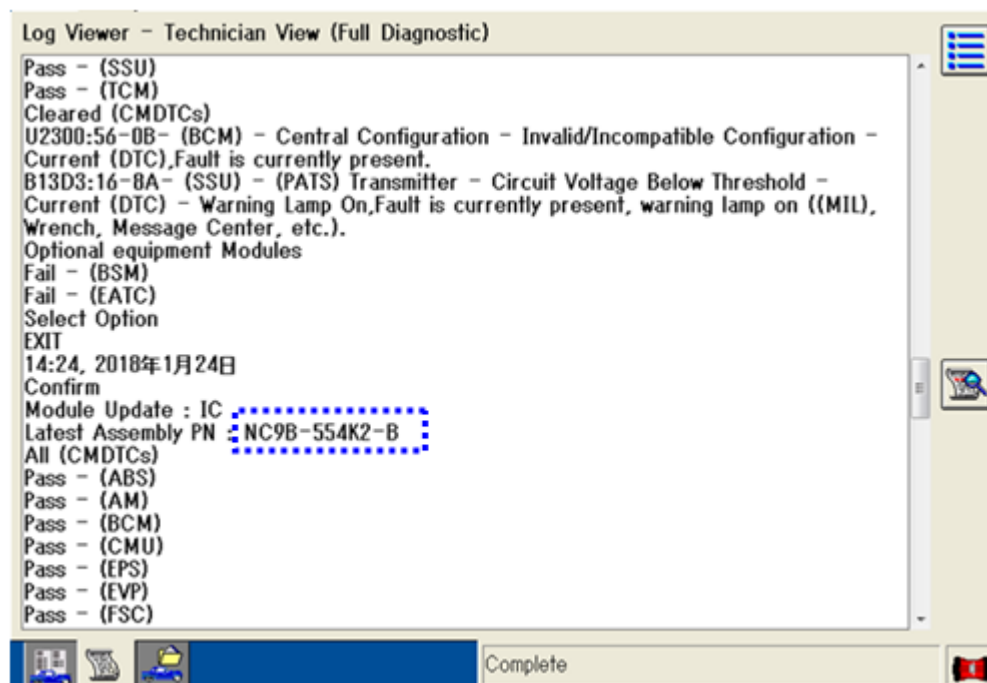
b. The following screen will be displayed:

Click “YES” and follow the M-MDS instructions to reprogram the speedometer.

If the message “No later calibration is available on the system for this IC” is displayed, the speedometer is already at the latest calibration. “Current level in Vehicle” will show the new file name. This Service Alert does not apply.



c. After reprogramming, remove the session. Then, open a new session again and go to the “Log Viewer” screen on which the programmed file name is displayed as shown in the figure. If the new file name matches to “NC9B-554K2-B”, the reprogramming has been successfully completed.



**NOTE:** After reprogramming, communication error related DTCs may be stored. This is a normal operation. Delete these DTCs.

Possible DTCs:

|             |                                                                        |
|-------------|------------------------------------------------------------------------|
| B1207:86-0E | ESU - Crash Input Hardwired Signal - Signal Invalid                    |
| U0121:00-0A | BSM - Lost Communication With (ABS) Control Module                     |
| U0155:00-0A | BSM - Lost Communication With Instrument Panel Cluster Control Module  |
| U0214:00-0A | BSM - Lost Communication With Remote Function Actuation                |
| U0155:00-0A | EATC - Lost Communication With Instrument Panel Cluster Control Module |
| U0423:68-0A | EATC - Invalid Data Received From (IPC)                                |
| U0100:00-48 | EPS - Lost Communication With (ECM)/(PCM) A                            |
| U0121:00-48 | EPS - Lost Communication With (ABS) Control Module                     |
| U0155:00-48 | EPS - Lost Communication With Instrument Panel Cluster Control Module  |
| U0401:00-48 | EPS - Invalid Data Received From (ECM)/(PCM)                           |

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3. Verify repair.

**NOTE:** If any DTCs should remain after performing DTC deletion, diagnose the DTCs according to the appropriate troubleshooting section of the Workshop Manual.

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