

# Technical Service Bulletin

Mazda North American Operations  
Irvine, CA 92618-2922



<b>Subject:</b> <b>BATTERY TEST PROCEDURE REQUIREMENTS USING THE GR8-1291</b>	<b>Bulletin No.:</b> 01-002/19
	<b>Last Issued:</b> 01/02/2019

## BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted below in Red.

Previously Issued TSBs:	Date(s) issued
01-009/18	03/26/18
01-005/16	02/15/16
01-018/12	05/23/12
01-054/10	12/13/10
01-013/10	02/15/10
01-032/07	08/01/07
01-025/04	07/21/04

## APPLICABLE MODEL(S)/VINS

1995-2009 B-Series	1997-2002 626	2004-2019 Mazda3	2007-2012 CX-7	2016-2019 CX-3
1997-2003 Protege	1997-2006 MPV	2006-2014 Mazda5	2007-2019 CX-9	
1997-2005 Miata	2001-2011 Tribute	2003-2019 Mazda6	2006-2019 MX-5	
1997-2002 Millenia	2011-2014 Mazda2	2013-2019 CX-5	2004-2011 RX-8	

## DESCRIPTION

The Mazda GR8-1291 is required for all warranty battery testing. If the Mazda GR8-1291 is not used, incorrect battery testing may result in unnecessary battery replacement. Use the following test procedures in this Service Bulletin to test Mazda vehicle batteries and to generate a Warranty Code.

**NOTE:** A Warranty Code is required for warranty claim submission

Battery Identification (Mazda batteries have 2 rating types)

1. JIS (Japanese Industrial Standard):

JIS codes are six-digit alpha-numeric markings molded into the top of the battery to identify a battery by the capacity (amps), dimensions, and battery terminal type. Vehicles manufactured in Japan come from the factory with a JIS rated battery.

**NOTE:** Replacement batteries may use a CCA rating. If so, use the CCA rating listed on the battery.

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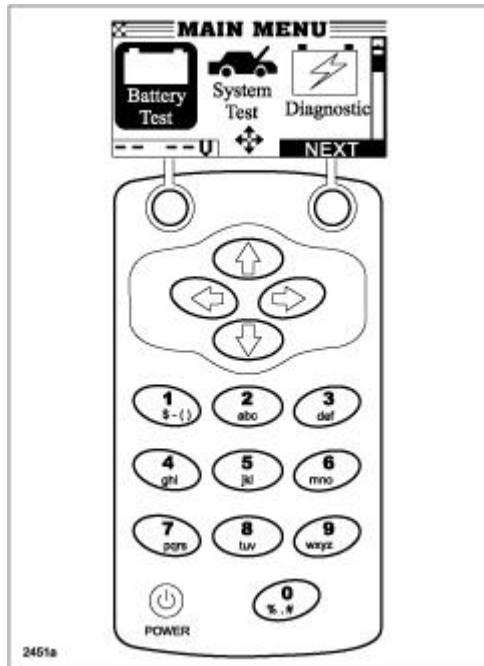
## 2. CCA (Cold Cranking Amps):

CCA ratings are normally located on a sticker affixed to the top of the battery to indicate a battery's Cold Cranking Amps. CCA rated batteries are supplied with domestically produced vehicles.

**NOTE:** If an incorrect CCA rating is entered into the Mazda GR8-1291, it will result in a false result and invalid Warranty Code from the tester. This will also result in unnecessary replacement of batteries.

## TEST PROCEDURE

Mazda GR8-1291 Control Module:



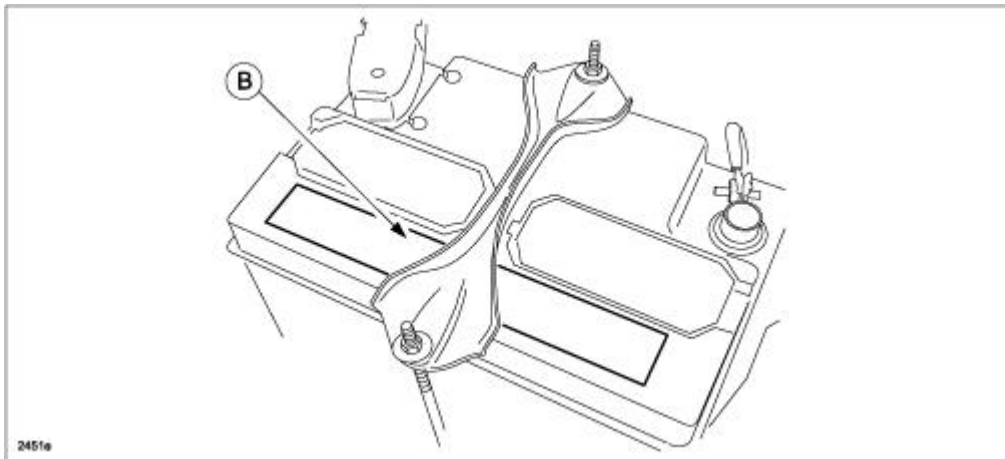
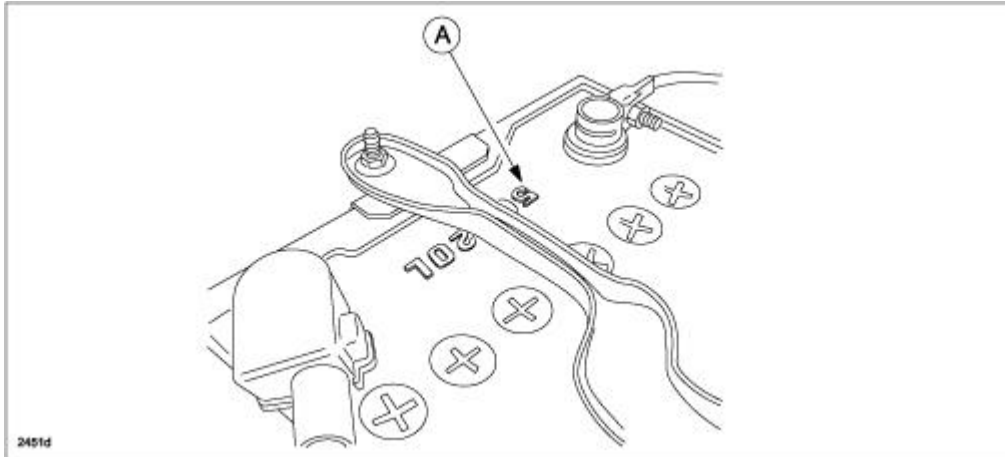
1. Attach the small red clamp to the positive battery terminal and the small black clamp to the negative terminal.
2. Select the Battery Test icon in the Main Menu, then press NEXT.

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3. Test the battery by following the on-screen instructions for entering the appropriate information. Refer to the Mazda GR8-1291 Instruction Manual for more information.

**NOTE:**

- Select the correct rating system for the battery by identifying the correct JIS code (A) stamped onto the batter top or CCA code (B) printed on the battery label.
- The battery hold down may need to be removed in order to read the JIS code.



4. After the test, the Control Module displays a battery test result and an analysis. The analysis includes the battery state of health (SOH) and state of charge (SOC). Before the Battery Test results are displayed, use the keypad on the Control Module to enter the last 5 digits of the vehicle's VIN and press NEXT to continue.

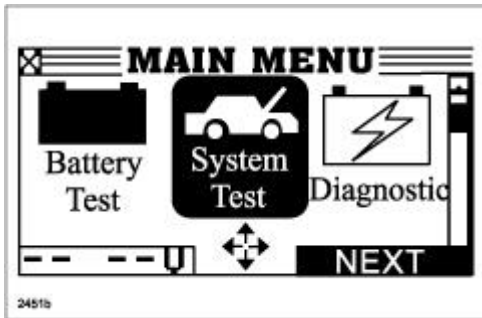
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5. The Mazda GR8-1291 will display and print out one of the eight possible battery test results listed below. Review the results and follow the Action for the displayed result.

Battery Tester Display	Action
“GOOD BATTERY”	Return the battery to service.
“GOOD - RECHARGE”	Fully charge the battery and return it to service.
“CHARGE AND RETEST”	Fully charge the battery and retest. Failure to fully charge the battery before retesting may cause false readings. If CHARGE AND RETEST appears again after you fully charge the battery, replace the battery.
“REPLACE BATTERY”	A REPLACE BATTERY result may also mean a poor connection between the battery and the vehicle. If you tested the battery using the System test, disconnect the battery cables and retest using the Battery Test before replacing it.
“BAD CELL - REPLACE”	Replace the battery. WARNING: Do not charge the battery. Charging a battery with one or more bad cells could cause an explosion and serious harm to the user.
“SIDE POST TEST”	Test data was inconclusive using the side post. Retest using side post adapters.
“JUMP START POST”	Data was inconclusive using the jump start post. Retest at the battery terminals.
“24 VOLT BATTERY”	24-volt battery detected. You are attempting to test in-vehicle both batteries in a 24-volt system. Disconnect the batteries and test them individually.

**REPAIR PROCEDURE**

1. Perform appropriate repair to vehicle. If needed, use the System Test of the Mazda GR8-1291 to test the charging and starting systems by following the on-screen instructions for entering the appropriate information. Refer to the Mazda GR8-1291 Instruction Manual for more information.




2. Verify repair.

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## WARRANTY INFORMATION

1. Write the Warranty Code on the RO and attach the printed results to the RO (do not attach with tape due to reaction with the printer paper).

**NOTE:** A Warranty Code is required for warranty claim submission. Claims filed WITHOUT correct codes will be subject to warranty claim denial.



TEST REPORT

YOUR SHOP NAME  
1000 ANY ST.  
YOUR TOWN, STATE  
60527  
USA  
800-555-1212  
WEBSITE.COM

10/29/2010  
9:41 AM

DEALER CODE  
12345


### BATTERY TEST

Test Info  
50D20

BATTERY TEST

RESULTS	
GOOD BATTERY	
RATED:	50D20
MEASURED:	411 CCA
VOLTAGE:	12.69V
TEMPERATURE:	67°F

STATE OF HEALTH



LAST 5 OF VIN  
12345  
WARRANTY CODE  
KALGCHFD7K

2451e

VERSION: 192-210195A

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