

Subject: FINAL QUALITY INSPECTION PROGRAM	Bulletin No: 00-001/06
	Last Issued: 10/26/2006

BULLETIN NOTE

This bulletin supersedes the previous bulletin 00-001/06, issued on 04/07/06. The APPLICABLE MODEL(S)/VINS, INSPECTION PROCEDURE, PART(S) INFORMATION and WARRANTY INFORMATION have been revised.

APPLICABLE MODEL(S)/VINS

2005-2007 RX-8

DESCRIPTION

As a part of our ongoing commitment to product excellence and customer satisfaction, Mazda Motor Corporation has decided to initiate a Final Quality Inspection (FQI) Program. This program consists of an inspection of the vehicle at time of customer delivery.

A critical element of this inspection is replacement of the spark plugs. Repeated short engine cycles encountered during the transportation process and when moved during dealer inventory may prematurely foul the spark plugs. The FQI is not limited to spark plug replacement. However, important inspection items that may require attention from the effects of storage are necessary. (Battery condition, tire pressure etc....).

Please refer to the inspection procedure for details.

INSPECTION PROCEDURE

1. Verify vehicle has been retailed.

NOTE:

- Procedure must not be performed more than 3 days prior to vehicle retail delivery.
- Procedure must be performed within 7 days after vehicle retail delivery.

2. Refer to Final Quality Inspection Form, perform all inspections / procedure as instructed.

NOTE:

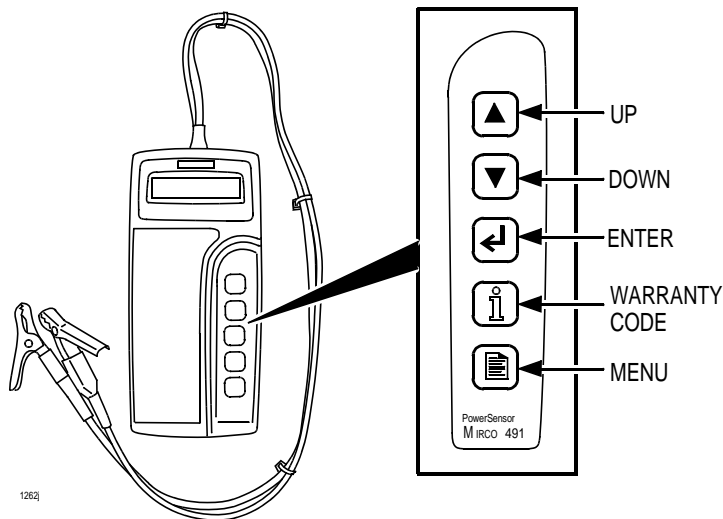
- Make sure to place a copy of the FQI sheet in the glove compartment after performing inspection. Place the FQI tag on vehicle's shifter for 2005 MY. (See 2005 MY note under "PARTS INFORMATION").

BATTERY INSPECTION

NOTE:

- After wholesale delivery, it is the dealer's responsibility to maintain the condition of the batteries in new Mazda vehicles while in inventory and at the time of new car delivery.
- This procedure should be performed using a Micro491 battery tester.
- Battery test results **MUST** be documented on battery tag.

1. Using the Mazda Micro491 Battery Tester (162-00017), attach the red probe to the positive battery terminal and the black probe to the negative terminal.



NOTE:

- The tester's display screen will automatically activate for batteries above 1 volt. For batteries that are below 1 volt, it may be necessary to charge the battery for 30 minutes to raise the battery above 1 volt for testing and DTC retrieval.

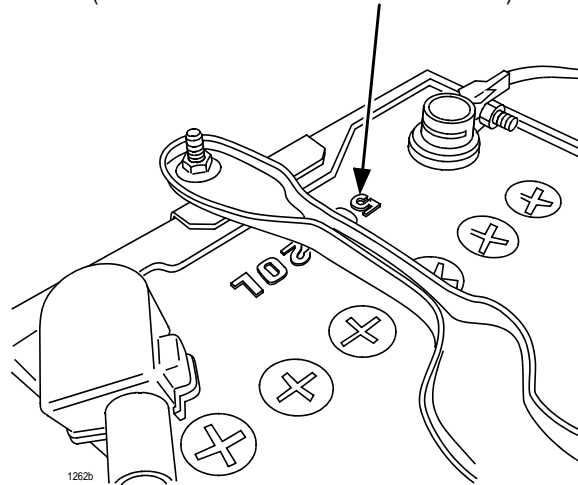
2. Select "IN-VEHICLE" test by scrolling with the UP and DOWN arrows, then press ENTER.

NOTE:

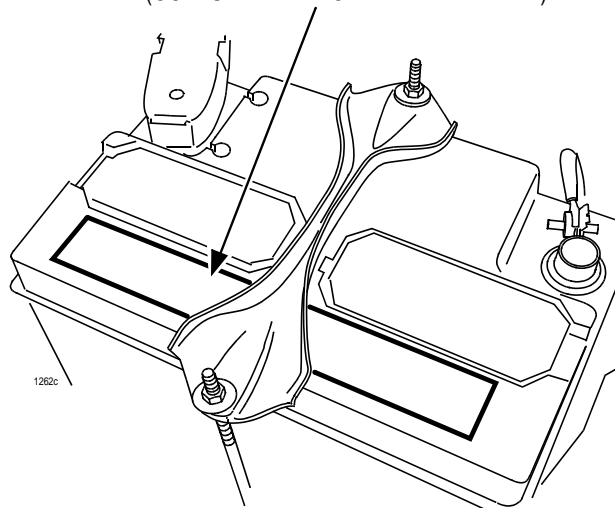
- When performing an "In-Vehicle" battery test, make certain that the key is in the OFF position and all electrical accessories and lights are turned off. Be sure that no diagnostic equipment is attached to the vehicle or DLC.

3. Select the correct rating system for the battery by identifying the correct JIS or CCA code.

JIS CODE LOCATION
(JIS IS STAMPED ONTO BATTERY TOP)



CCA RATING LOCATION
(CCA IS PRINTED ON BATTERY LABEL)



4. Enter the correct battery rating by using the UP and DOWN arrows to scroll to the correct rating, then press ENTER to start the battery test.

NOTE:

- For JIS batteries, the tester will only display the first five digits of the six-digit JIS number. Select the JIS number which represents the first five digits of the battery JIS code.

5. The battery tester will display one of the five possible results listed below. Review the results and follow the Action Step for the displayed result.

Battery Tester Display	Action Step
"BATTERY GOOD"	Go to "SPARK PLUG INSTALLATION"
"GOOD - RECHARGE"	Fully charge battery by normal recharging method. See SLOW CHARGE (REGULAR CHARGE) under "BATTERY CHARGING"

NOTE:

- If battery tester displays one of the three results listed below, perform a one (1) time quick recharging for 30 minutes. See QUICK CHARGE (BOOST CHARGE) under BATTERY CHARGING. Keep headlights on for 15 seconds to remove surface charge. Turn headlights off and let vehicle sit for 1 minute. Then repeat Steps 1 - 5, retest, then follow the Action Step for the displayed result.

Battery Tester Display	Action Step
"CHARGE & RETEST"	Fully charge battery by normal recharging method one (1) time. See SLOW CHARGE (REGULAR CHARGE) under "BATTERY CHARGING". Repeat Steps 1 - 5. NOTE: <ul style="list-style-type: none"> • If same result is displayed on 2nd test attempt, replace battery.
"BAD CELL"	Replace Battery
"REPLACE BATTERY"	Replace Battery

6. Generate a 6 character DTC code by performing the following steps:

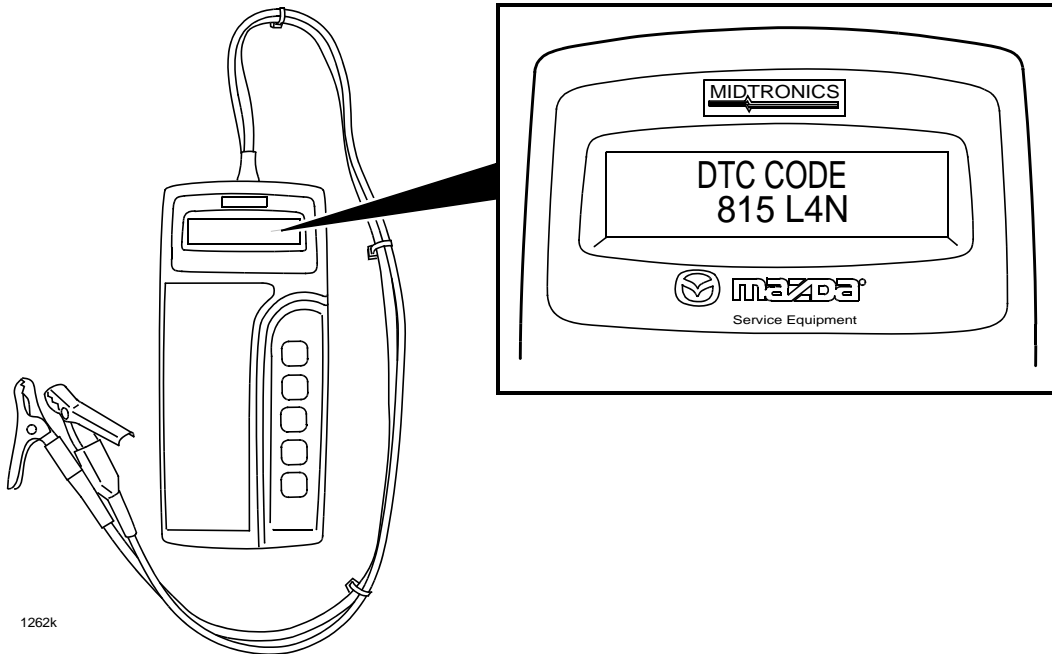
NOTE: These steps are required when submitting a Mazda warranty claim for battery replacement.

- a. Press the "i" icon.



- b. Enter the Warranty RO number by using the UP and DOWN buttons to scroll to the correct character, then press ENTER to select each character.
- c. Enter the RO Line Number by using the UP and DOWN buttons to scroll to the correct character, then press ENTER to select each character.
- d. Press ENTER when complete to view the Warranty Approval Code.

- e. Press ENTER again to view the DTC Code.

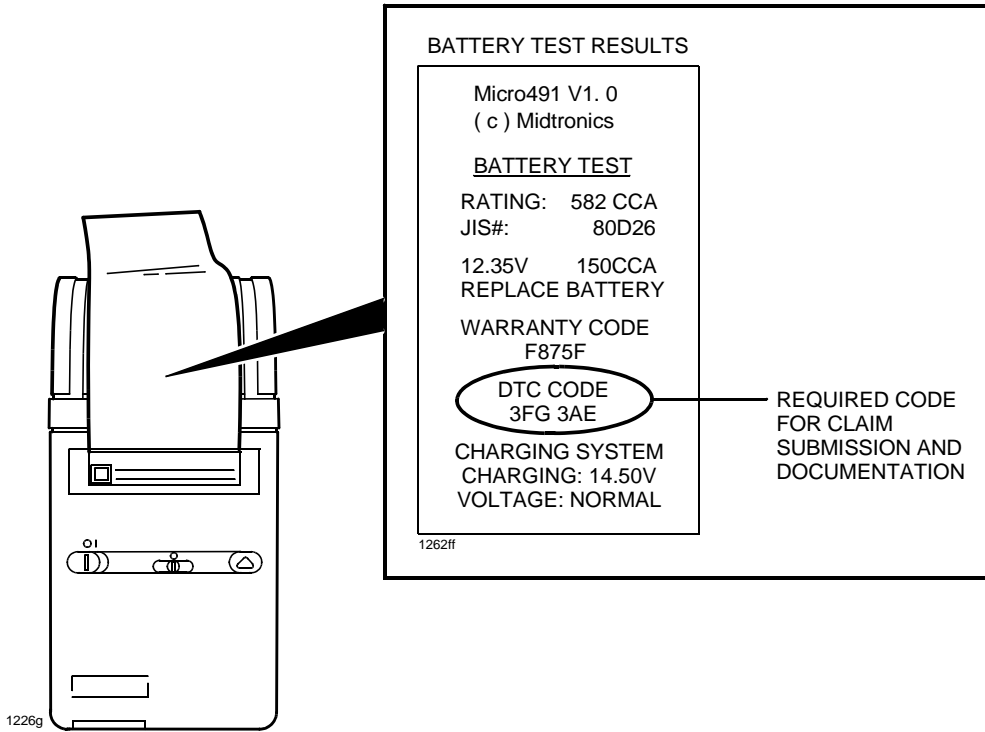


7. Attach the printout to the repair order hard copy.
8. To print test results for attachment to RO, perform the following steps:
- Turn off the battery tester by disconnecting the battery test leads from the battery.
 - Align the infrared ports of the battery tester and the printer.
 - With the tester off, press and hold the print button to activate the OPTION menu.
 - Use the UP and DOWN arrows to scroll to PRINT RESULTS, then press the ENTER button.

NOTE:

- The tester will print the results from the last battery test completed.

- If the tester results do not print, verify that the infrared IR port of the tester is pointing correctly at the infrared IR port of the printer.



9. Write the 6 character DTC code on the RO and attach the printed results to the RO Hardcopy (do not attach with tape due to reaction with the printer paper).

NOTE: Warranty Approval Code and DTC is required for warranty claim submission and must be typed in the Text field of the warranty claim.

10. Perform appropriate repair to vehicle.
11. Verify repair.

BATTERY CHARGING

There are 2 ways to properly charge a battery.

- Slow Charge (Regular Charge)
- Quick Charge (Boost Charge)

WARNING:

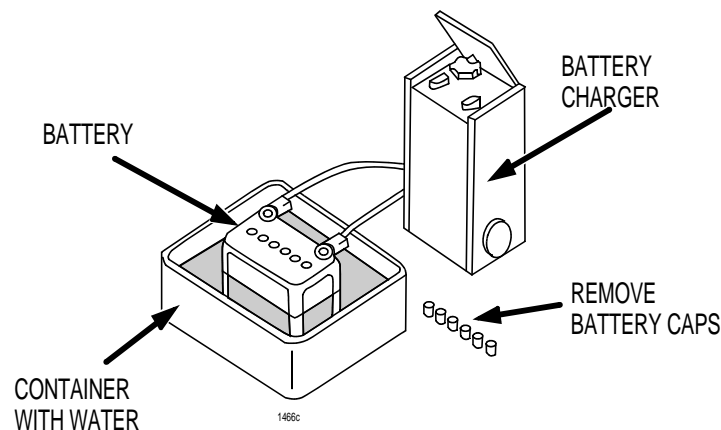
- During any battery charge procedure, remove the caps and charge in a well ventilated area. If battery acid comes in contact with your skin, wash away with large amount of water, then go to the doctor immediately.

NOTE:

- Before disconnecting battery, record radio station presets.

When performing quick or slow charge procedures, make sure the following precautions are adhered to:

- It is recommended to remove the battery from the vehicle and place battery in a pan of water during charging to avoid the increase of the battery heat.
- If charging the battery on the vehicle, disconnect the negative battery cable.
- If equipped, remove the battery caps.



- When electrolyte liquid level has fallen below the lower level, it can cause the battery to explode. When electrolyte liquid level is below half line of lower and upper level, add electrolyte liquid and fill to the upper level before charging.
- Avoid the risk of sparks and explosion by connecting up the charger cables before you turn on the charger. If battery cables are connected in reverse order, sparks could appear.
- Near the end of the charge cycle, hydrogen gas might be produced in large quantities - it has explosive potential so keep all flames away from it. Hydrogen gas can react with the vehicle's surface, so be sure to wash any possibly affected area with lots of soap and water immediately after you shut the charging down.

SLOW CHARGE (REGULAR CHARGE)

NOTE:

- You can recover the full charge with a slow charge with 1/10 of the 5 hours ratio capacity.
1. Connect battery charger to battery and adjust current.
 2. Charge battery.
 3. After completing slow charge, make sure battery has the standard voltage and specific gravity (more than 1.27 for 20°C) and battery has the same voltage and specific gravity 1 hour later.

CAUTION:

- During slow charge, keep the battery cool (under 45°C (113°F)) as outlined in BATTERY CHARGING. If battery gets hotter than 45°C (113°F) (hot to the touch), stop charging tempo-

rarily and allow to cool. Resume charging at a decreased current.

QUICK CHARGE (BOOST CHARGE)

WARNING:

- During any battery charge procedure, remove the caps and charge in a well ventilated area. If battery acid comes in contact with your skin, wash away with large amount of water, then go to the doctor immediately.

NOTE:

- Quick charge can temporarily recover the battery enough to start the engine but it will not charge the battery completely.
1. Connect the battery charger to the battery and adjust the current.
 2. Charge the battery for 30 minutes.

CAUTION:

- Do not perform quick charge for longer than 30 minutes. The heavy current creates high battery temperature. During quick charge, keep the battery cool (under 55°C (131°F)) as outlined in BATTERY CHARGING. If battery gets hotter than 55°C (131°F) (hot to the touch), stop charging temporarily and allow to cool. Resume charging at a decreased current. Do not perform a quick charge on a completely discharge battery as it will damage the battery.

SPARK PLUG INSTALLATION

IMPORTANT:

- 2007 models built after 7/14/2006 (VIN of 70207895 and later) DO NOT require trailing spark plug replacement. Only 1 set of leading spark plugs are included in the glove compartment of the vehicle from the factory.

1. Install spark plugs.

- a. Raise vehicle on hoist.
- b. Remove the driver's side front wheel (spark plugs may be removed with wheel in place, wheel removal provides more working space).
- c. Remove inner splash shield.
- d. Use a ratchet, long extension and spark plug socket to remove / replace spark plugs.

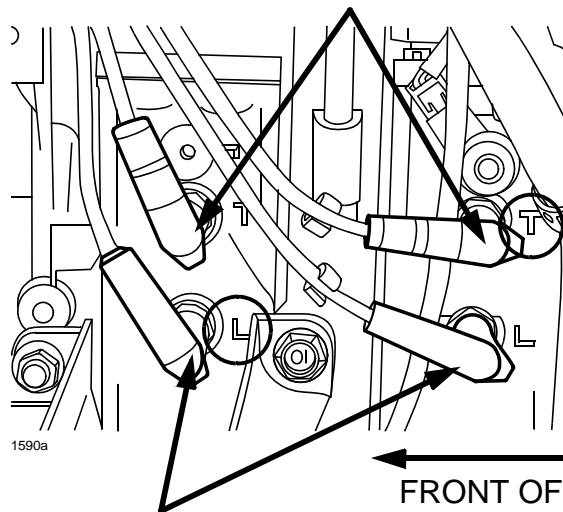
NOTE:

- Ensure leading / trailing spark plugs are installed in the proper location.

IMPORTANT:

- Vehicle's original spark plugs will be collected for warranty inspection. Make sure to retain original spark plugs with proper documentation. A warranty parts return request referencing Part Number Main Cause under WARRANTY INFORMATION will be issued.

TRAILING SPARK PLUGS
(NOTE BLACK SPARK PLUG BOOT
WITH BLUE & GREEN STRIPES
AND "T" CAST INTO ENGINE)



LEADING SPARK PLUGS
(NOTE BLACK SPARK PLUG
BOOT AND "L" CAST ENGINE)

PART(S) INFORMATION

IMPORTANT: Although the spark plug part numbers are different between 2005 RX-8 (N3Y3-18-S30) and 2006 RX-8 (N3M1-18-1BX), the spark plugs contained in the kits are the same.

2005 MODEL YEAR NOTE

- A package was sent to your Service Manager that contains Spark plug kit(s) / FQI sheet(s) / FQI tag(s) sufficient for the inventory of your dealer. Place FQI sheet / spark plug set in vehicle's glove compartment, or in a secure location until FQI can be performed. Pull Quick Tips string through hole in FQI tag and attach Quick Tips w/FQI tag to vehicle shift lever.

2006-2007 MODEL YEAR NOTE

- Spark Plug kit / FQI sheet is located in the vehicle's glove compartment when delivered to your dealer. The FQI tag is attached to Quick Tips string located on the shift lever.
- 2007 models built after 7/14/2006 (VIN of 70207895 and later) DO NOT require trailing spark plug replacement. Only 1 set of leading spark plugs are included in the glove compartment of the vehicle from the factory.

WARRANTY INFORMATION

NOTE:

- Spark plugs are provided at no charge.
- This warranty information applies only to vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.
- Additional diagnostic time cannot be claimed for this repair.

	2005-2007 FQI Procedure (Up to VIN 70207894)	2007 FQI Procedure (VIN 70207895 and later)
Authorization No.	A0659A	A0641A
Warranty Type	A	A
Symptom Code	99	99
Damage Code	99	99
Part Number Main Cause	N3M1-18-1BX	N3M1-18-1BX
Quantity	1	1
Operation Number / Labor Hours:	XXB268RX / 0.6 Hrs	XXB405RX / 0.5 Hrs

IMPORTANT:

- The warranty information has changed from the original Service Bulletin. Please make sure to use the new Part Number Main Cause listed above for 2005-2007 models and claim QTY "1". The spark plug set removed from the engine will be collected for inspection.

FQI SHEET

RX-8 FINAL QUALITY INSPECTION SHEET



REFER TO THE WORKSHOP MANUAL FOR DETAILED ADJUSTMENT PROCEDURES

- Problems found during inspection should be noted on a repair order.
- Inspection items followed by an asterisk (*) are required only if the vehicle is equipped with that feature.

IMPORTANT - Check, install or adjust the following components no more than 3 days prior to delivery.

BODY / INTERIOR - FUNCTION

- ___ Check vehicle for any open Recalls, SSPs or MSPs
- ___ Warning lights (check engine, seat belt, air bag, brake, engine oil, door, charge, ABS*, DSC*, electric power steering*, TPMS*, AT*, pass air bag off*)
- ___ Wipers and washers (front and rear), clean wiper blades if necessary
- ___ Steering wheel alignment

ON HOIST

- ___ Tire pressure
- ___ Spark plug replacement
If is mandatory to replace the spark plugs at time of customer delivery. Failure to replace spark plugs may cause starting concerns after customer delivery as the vehicle's original spark plugs may become prematurely fouled from repeated short drive cycles encountered during transportation and / or dealer storage

UNDER HOOD - ENGINE OFF

- ___ Fluid levels (engine oil, brake, clutch*, coolant, windshield washer, battery)
- ___ Battery terminal tightness
- ___ Battery voltage and load test

THIS FINAL QUALITY INSPECTION HAS BEEN PERFORMED BY A QUALIFIED MAZDA TECHNICIAN

VIN

Service Manager

PDI Technician

Dealer Code

Date

9999-95-RX8FQI-06 (Rev/ 03/06)