

SERVICE BULLETIN

HONDA MARINE

OUTBOARD MOTOR #70
REVISED OCTOBER 2010

BF200A • BF225A (A2~AK0) HEATED OXYGEN SENSOR (HO2S) FAILURE

SYMPTOM

The MIL light and audible warning systems are activated by the HO2S failure.

High engine temperatures and water mist spraying the HO2S in the exhaust manifold may cause the HO2S to crack and fail.

AFFECTED UNITS

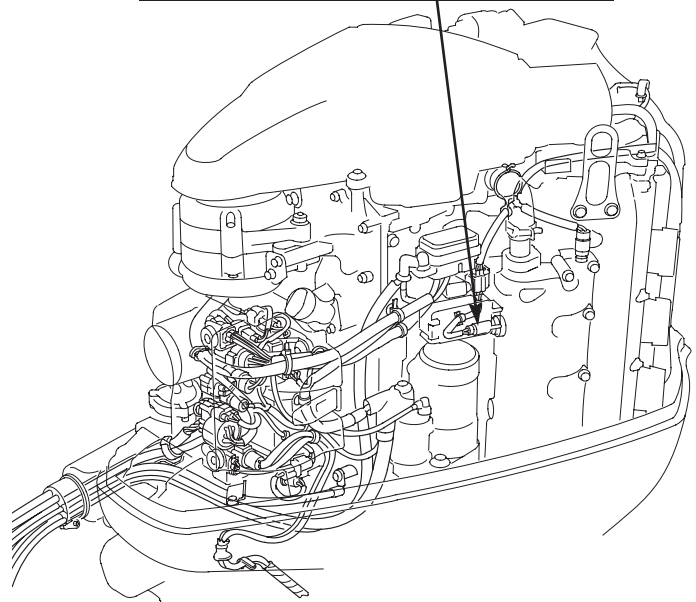
A2 ~ A5

MODEL	FRAME SERIAL NUMBER RANGE
BF200	BAEJ-1000001 ~ 1309999
	BAFJ-1000001 ~ 1309999
BF225	BAGJ-1000001 ~ 1309999
	BAHJ-1000001 ~ 1309999

A6 and AK0

MODEL	FRAME SERIAL NUMBER RANGE
BF200	BAEJ-1400001 ~ 1509999
	BAFJ-1400001 ~ 1509999
BF225	BAGJ-1400001 ~ 1509999
	BAHJ-1400001 ~ 1509999

The MIL light and audible warning systems are activated by the HO2S failure.


NEW

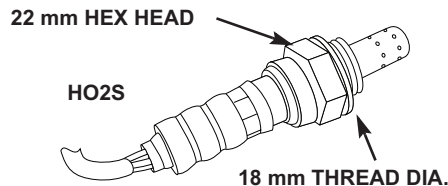
CONSUMER INFORMATION: The information in this service bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely service and repair your Honda outboard motor. These procedures should not be attempted by "do-it-yourselfers," and you should not assume that this bulletin applies to your equipment, or that your outboard motor has the condition described. To determine whether this information applies, contact an authorized Honda Marine dealer.

CORRECTIVE ACTION

A2 ~ A5 units:

Install a new HO2S on any unit with the described symptom following the procedure starting on page 3.

The HO2S Kit cannot be used on A2~A5 units due to changes in emission standards. Claims submitted for installation of the HO2S kit on A2~A5 units will be denied.

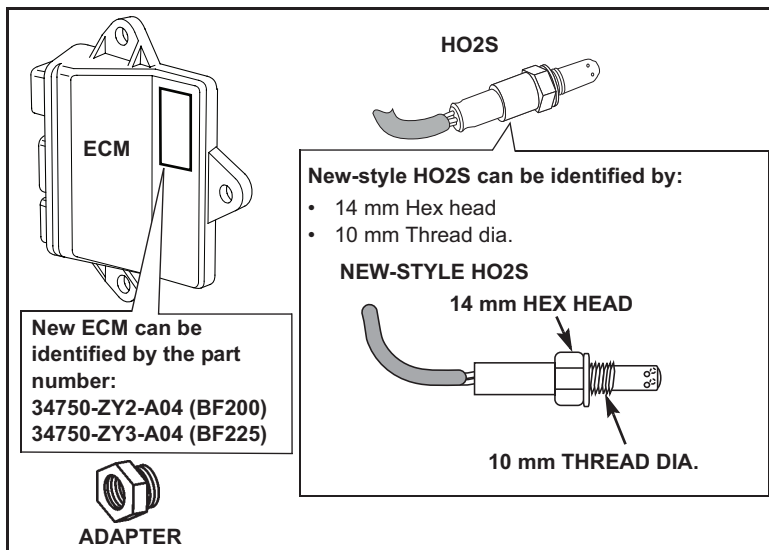


A6 and AK0 units:

A new HO2S is available with a higher heat resistance. The ECM (Engine Control Module) must also be replaced because it has been reprogrammed to accept the new HO2S.

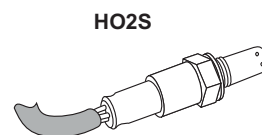
Install a new HO2S kit (A6 ~ AK0 units) on any unit with the described symptom following the procedure starting on page 4.

HO2S KIT INCLUDES:



A6 and AK0 units (HO2S failure after HO2S Kit installation):

On any unit that has had the HO2S Kit installed and the new HO2S has failed, install only a new HO2S (page 4). Do not install another HO2S kit.



- To ensure customer satisfaction, American Honda is extending the warranty period of the oxygen sensor on affected units to 6 years from the outboard original retail purchase date.
- In the event that a customer has previously paid to have the oxygen sensor replaced, American Honda will reimburse the customer directly for the cost of replacement, after receipt and approval of the Request for Reimbursement form.
Current repairs must go through the normal warranty claim process. Do not charge customers and make them submit for reimbursement.
- Registered customers were notified by letter in May 2010. A copy of the letter and the Request for Reimbursement are included at the end of this bulletin.

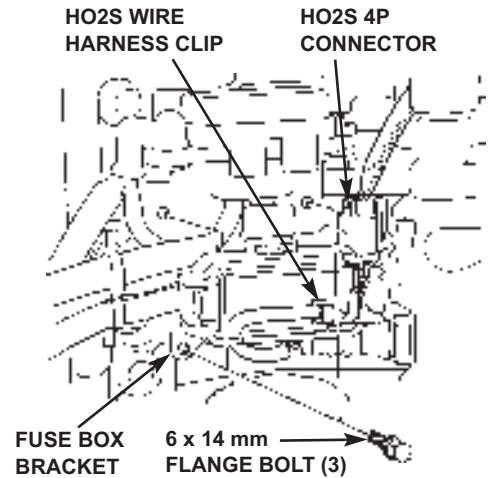
NEW

PROCEDURE

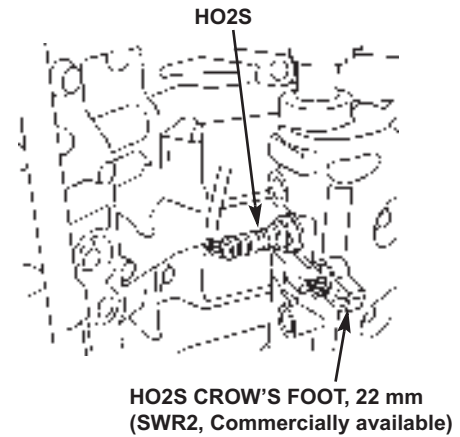
HO2S REPLACEMENT

A2 ~ A5 Units:

1. Remove the three 6 x 14 mm flange bolts securing the fuse box bracket. With the bracket loose, it can be moved out of the way to gain access to the HO2S.
2. Disconnect the HO2S 4P connector from the fuse box bracket. Disconnect the HO2S 4P connector.
3. Remove the HO2S wire harness clip from the fuse box bracket. Retain the wire harness clip to install on the new HO2S sensor wire harness.



4. Remove the HO2S using a commercially available 22 mm HO2S Crow's Foot (SWR2) as shown.
5. Install the new HO2S by hand.



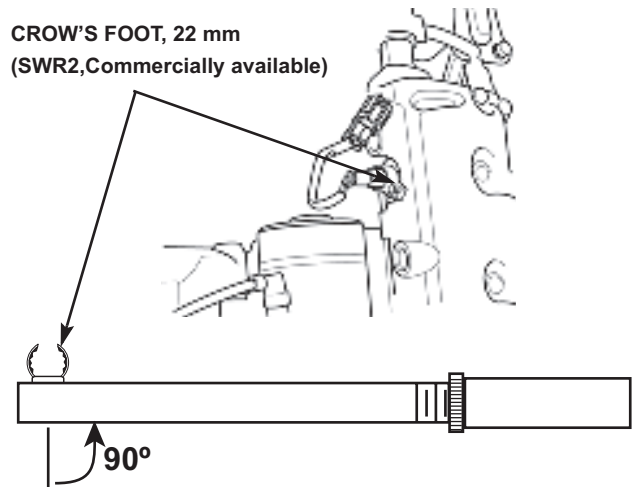
6. Tighten to the specified torque. Do not over-tighten. Attach the 22 mm Crow's Foot (SWR2) at a 90° angle to the body of the torque wrench as shown.

TORQUE: 42 N·m (31 ft·lb)

NOTICE

Do not exceed the torque specification. Over-tightening may strip the threads, damaging the exhaust manifold or adapter.

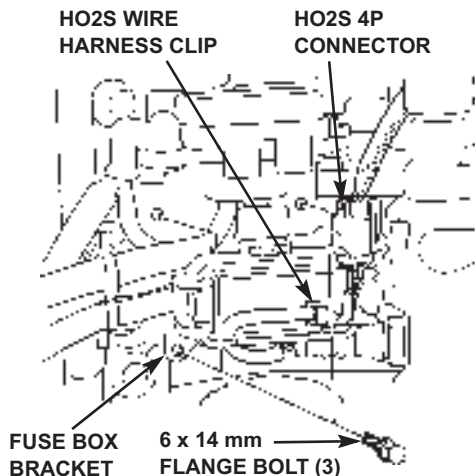
7. Install the HO2S wire harness clip securing the HO2S harness to the fuse box bracket.
8. Connect the HO2S 4P connector to the fuse box bracket. Connect the HO2S 4P connector.
9. Install the three 6 x 14 mm flange bolts securing the fuse box bracket.
10. Start and test the engine for proper operation.



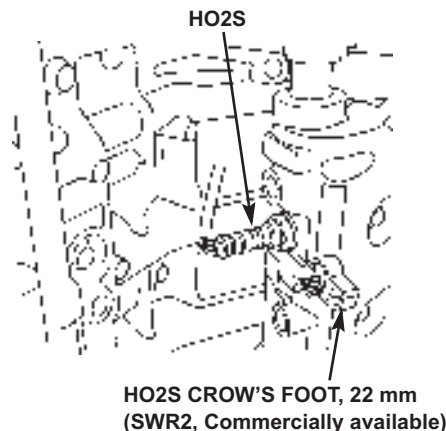
NEW

A6 and AK0 Units:

1. Remove the three 6 x 14 mm flange bolts securing the fuse box bracket. With the bracket loose, it can be moved out of the way to gain access to the HO2S.
2. Disconnect the HO2S 4P connector from the fuse box bracket. Disconnect the HO2S 4P connector.
3. Remove the HO2S wire harness clip from the fuse box bracket. Retain the wire harness clip to install on the new HO2S sensor wire harness.



4. Remove the HO2S using a commercially available 22 mm HO2S Crow's Foot (SWR2) as shown.



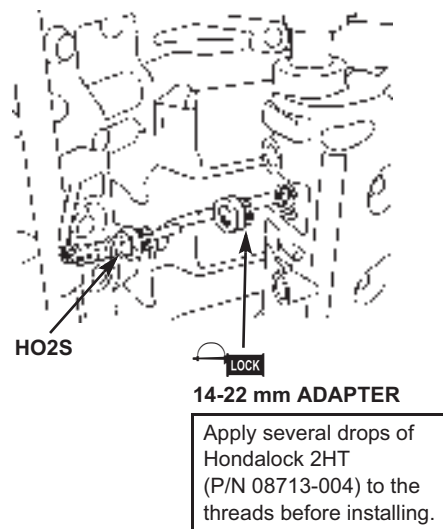
5. Apply several drops of Hondalock 2HT (P/N 08713-004) to the HO2S 14-22 mm adapter.
6. Install the new HO2S 14-22 mm adapter and tighten to the specified torque.

TORQUE: 20 N·m (14 ft·lb)

NOTICE

Do not exceed the torque specification. Over-tightening may strip the threads, damaging the exhaust manifold or adapter.

7. Install the new HO2S by hand. Do not apply Hondalock to the HO2S threads.

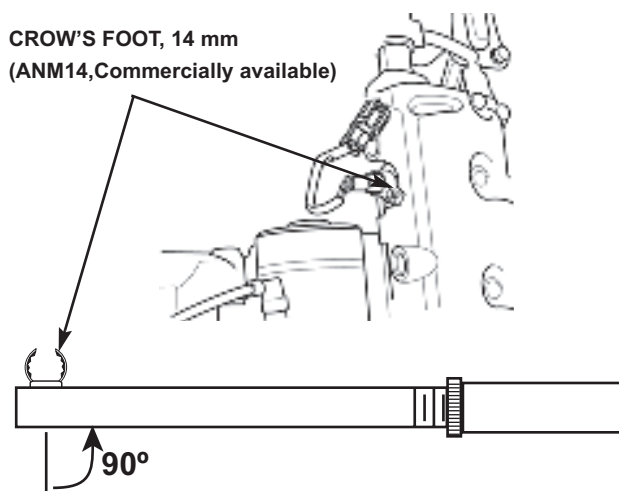


8. Tighten the new HO2S to the specified torque using the commercially available tool (ANM14). Attach the tool at a 90° angle to the body of the torque wrench.

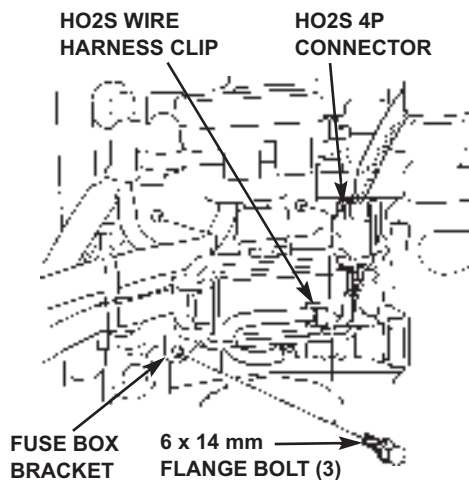
TORQUE: 10 N·m (7 ft·lb)

NOTICE

Do not exceed the torque specification. Overtightening may strip the threads, damaging the exhaust manifold or adapter.



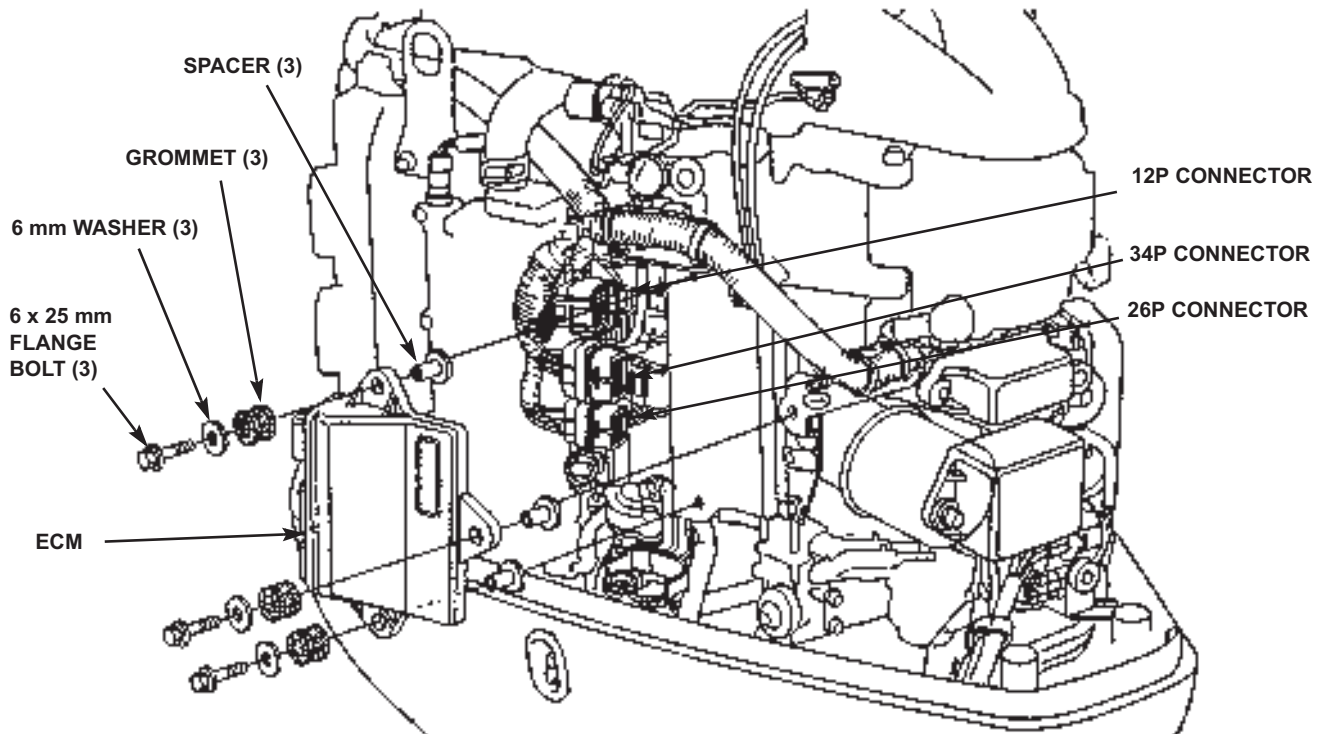
9. Install the HO2S wire harness clip securing the HO2S harness to the fuse box bracket.
10. Connect the HO2S 4P connector to the fuse box bracket. Connect the HO2S 4P connector.
11. Install the three 6 x 14 mm flange bolts securing the fuse box bracket.
12. Proceed to page 6 to install the new ECM.



NEW

ECM REPLACEMENT (A6 and AK0 Units)

1. Remove the three 6 x 25 mm flange bolts and washers.
2. Disconnect the 26P, 34P, and 12P connectors from the ECM.
3. Remove the ECM.
4. Transfer the three grommets and spacers to the new ECM.
5. Install the new ECM in the reverse of its removal.



6. Start and test the engine for proper operation.

NEW

TOOL ORDERING INFORMATION

This service bulletin shows the following commercially available tools:

Model Number	Description
SWR2	Crow's Foot, 22 mm
ANM14	Crow's Foot, 14 mm

There are two convenient ways to order: online or by toll-free phone.

- To order online, go to the iN: SERVICE>Tools>Tool and Equipment Program>Online Catalog, and then search by model number.
- To order by phone, call 1-888-424-6857.
 Customer service representatives are available from 7:30 AM until 7:00 PM CT, Monday through Friday.

PARTS INFORMATION

Order parts through your normal parts ordering procedures.

A2 ~ A5

Description	Qty	Part Number
Heated Oxygen Sensor (HO2S) (BF200/225)	1	35655-ZY3-013

A6 and AK0

- BF200A

Description	Qty	Part Number
HO2S Kit	1	06356-ZY2-325
Kit includes		
ECM	1	34750-ZY2-A04
HO2S	1	35655-ZY3-C01
Adapter	1	90074-ZY3-305

- BF225A

Description	Qty	Part Number
HO2S Kit	1	06356-ZY3-325
Kit includes		
ECM	1	34750-ZY3-A04
HO2S	1	35655-ZY3-C01
Adapter	1	90074-ZY3-305

A6 and AK0 (HO2S failure after HO2S Kit was installed)

Description	Qty	Part Number
Heated Oxygen Sensor (HO2S) (BF200A/225A)	1	35655-ZY3-C01

NEW

OUTBOARD MOTOR #70

REVISED OCTOBER 2010

WARRANTY INFORMATION

Duration

The warranty period for this service bulletin is 6 years from the original date of purchase of the outboard motor.

Out of warranty

Any repair performed after warranty expiration may be eligible for goodwill consideration. Contact Techline or your District Service Manager. You must request consideration and receive a decision before starting work.

VIN Information

A2 ~ A5


VIN Prefix	Affected Serial Number Range	Model
BAEJ	1000001 ~ 1309999	BF200A
BAFJ	1000001 ~ 1309999	
BAGJ	1000001 ~ 1309999	BF225A
BAHJ	1000001 ~ 1309999	

A6 and AK0

VIN Prefix	Affected Serial Number Range	Model
BAEJ	1400001 ~ 1509999	BF200A
BAFJ	1400001 ~ 1509999	
BAGJ	1400001 ~ 1509999	BF225A
BAHJ	1400001 ~ 1509999	

Processing

Service Bulletin warranty claim submission requirements apply. After completing the Service Bulletin repair procedure, submit one warranty claim per unit with the following information:

 Users:	BF200/225 A2 ~ A5 HO2S Only	BF200 A6 and AK0 HO2S KIT (initial failure)	BF225 A6 and AK0 HO2S KIT (initial failure)	BF200/225 A6 and AK0 HO2S Only after HO2S Kit installation (subsequent failures, if any)
Template Number:	R33A	R33B	R33C	R33D

A2 ~ A5 HO2S Replacement	A6 and AK0 HO2S Kit	A6 and AK0 HO2S Replacement ONLY after the HO2S kit installation
All others: Defect Code: 7S5 Labor Operation Number: 312175 Flat Rate Time: 0.7 Failed Part: 35655-ZY3-013	All others: Defect Code 7S5 Labor Operation Number: 312175 - HO2S Replacement (0.7) 312199 - ECM Replacement (0.3) Flat Rate Time: 1.0 Failed Part: 35655-ZY3-013	All others: Defect Code 7S5 Labor Operation Number: 312175 Flat Rate Time: 0.7 Failed Part: 35655-ZY3-013

NEW

The following is a copy of the letter and reimbursement form sent to registered customers in May 2010.

May 2010

Warranty Extension: BF200A, BF225A Outboard Motor Oxygen Sensor

Dear Honda BF200A or BF225A Owner,

Our records indicate you own a Honda BF200A or BF225A outboard motor. It is likely that some of the reasons you purchased a Honda were for the long service life, outstanding quality, and our reputation for standing behind our products. To help ensure your satisfaction, we are extending the warranty for the oxygen sensor (O² sensor) on your outboard.

Warranty extension details

The oxygen sensor can fail prematurely. Water mist in the exhaust manifold in combination with the high exhaust temperature may cause the failure of the oxygen sensor.

To eliminate your concerns, American Honda is extending the warranty on the oxygen sensor of your BF200A or BF225A outboard motor to a period of 6 years from the date of original retail purchase. The warranty extension applies to outboards registered for commercial or recreational use and is limited to replacement of the oxygen sensor. The warranty extension is automatically transferred to any subsequent owner. This letter, along with proof of original purchase, is all that is required to obtain warranty service.

If the oxygen sensor fails during the warranty extension period, it will be replaced at no cost to you for parts or labor. Transportation of the boat to the dealer and/or related hauling expenses are the responsibility of the owner.

If you have previously paid for an oxygen sensor replacement during the first 6 years of ownership, you may be eligible for reimbursement. Refer to the attached Instructions for Reimbursement for eligibility requirements and the reimbursement procedure.

If you have any questions regarding this matter that your servicing dealer cannot answer, please feel free to contact us at:

American Honda Motor Co., Inc.
Customer Service Department
4900 Marconi Drive
Alpharetta, GA 30005
(770) 497-6400

Our goal is to provide you with the highest quality products and best after-sale service. We apologize for any inconvenience this situation may have caused.

Sincerely,
Honda Marine
Service Operations

Customer reimbursement form for previously repaired units:

Instructions for Reimbursement: BF200/225 Oxygen Sensor

Reimbursement eligibility

You may be eligible for reimbursement if you previously paid to have the oxygen sensor on your BF200A or BF225A replaced during the first 6 years of ownership.

- You must have had oxygen sensor replaced before receiving this notice.
- You must have owned the outboard at the time of repair. You are still eligible if you no longer own the outboard.

NOTE: Any incidental expense or inconvenience you may have suffered due to the loss of use of your outboard is not reimbursable.

To apply for reimbursement

- ✓ **Complete the attached *Request for Reimbursement* form.**
- ✓ **Attach a copy of the repair receipt or invoice for the oxygen sensor replacement.** A copy of the repair invoice from an authorized Honda dealer or independent repair shop will meet this need. This invoice should show your outboard's model, outboard identification number (VIN), the name and address of the facility that did the repair, the cost of the repair (parts and labor), and the date the work was completed.
- ✓ **Attach Proof of Payment** a copy of the cancelled check, bank statement, cash receipt, or credit card receipt showing that you paid for the repair.
- ✓ **Mail the completed *Request for Reimbursement* form and copies of the receipts and invoices to:**

**American Honda Motor Co., Inc.
 Customer Relations Department
 4900 Marconi Drive
 Alpharetta, GA 30005**

Please allow six to eight weeks for reimbursement

Failure to include proper documentation can further delay your reimbursement. If you have questions, please call your local authorized Honda dealer. If they cannot help you, contact customer relations at (770) 497-6400.

Request For Reimbursement: BF200A, BF225A Oxygen Sensor Replacement

Fill in the following blanks. Please print clearly, and provide complete information.

 Name () _____
 Daytime telephone number

 Current Address Apt. No.

 City State Zip Code

Outboard Identification Number (VIN) REQUIRED \$ _____
 Total amount requested

Name of facility that performed the repair: _____