

Bombardier Recreational Products

BRP US Inc.
250 Sea Horse Drive
Waukegan, IL 60085
Telephone (800) 888-4662
Fax (847) 689-7235
www.brp.com



ESSENTIAL SERVICE LITERATURE

Bulletin Set (2001 to 2005), P/N 5007148

Dear Dealer ~

This Bulletin Set contains all bulletins published and released by BRP from 2001 through 2005. Additionally, a Table of Contents and Binder Tabs are included with this set to assist in searching for specific bulletins.

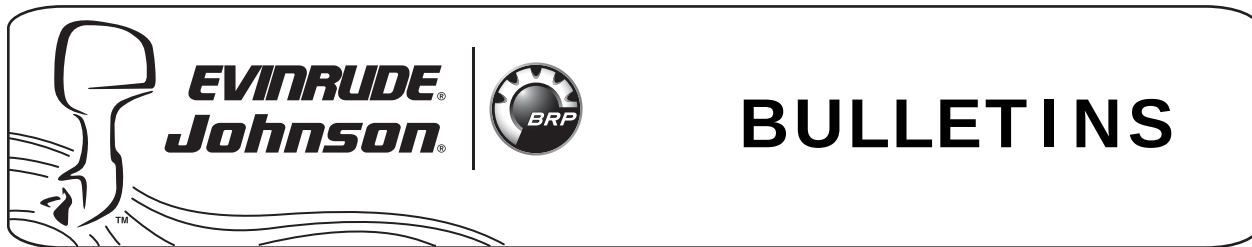
As an *Evinrude/Johnson* dealer, it is important to keep these bulletins in a binder for reference. When a new bulletin is forwarded to you, remember to include it in this set in order to keep it up-to-date.

All Bulletins can be viewed on the *DealerPort*® website at www.dealerport.com.

Sincerely,
Technical Literature Group
Boats and Outboard Engines Division

Bulletin Set (2001 to 2005)





All dealership personnel should be familiar with new bulletins and fully understand how each document applies to the products within your business organization.

Each bulletin category has a defined purpose. Dealers are responsible to complete any procedure or instruction outlined in a bulletin prior to the delivery of the product. Even after product delivery, dealers have a responsibility to complete any additional procedure or instruction which may appear in subsequent bulletins including all Safety Campaigns which may affect product performance or operator safety.

BULLETIN DISTRIBUTION

Bulletins will be distributed to you by mail as required. They will also be available to view on the *DealerPort* website at www.dealerport.com. Additional copies can be printed from *DealerPort* as needed. Contact *Evinrude/Johnson* Parts and Accessories to purchase a Bulletin Set (2001-2005), P/N 5007148.

DEALERSHIP REQUIREMENTS

All authorized dealers are responsible for managing the distribution of each bulletin to all employees. You must follow the instructions and information contained in each bulletin.

The DEALER, as part of the distribution chain, CARRIES A RESPONSIBILITY IN MAKING SURE THE CUSTOMER IS NOTIFIED of any safety related concern and that it is properly corrected. Failure to do so may involve the dealer in the event of an accident. If a failure occurs subsequent to a warranty bulletin for which the dealer has not completed the prescribed corrections, the dealer may be debited for claims, without prejudice to other recourses, on the applicable product if they are related to the conditions identified in the bulletin.

IMPORTANT: All authorized dealers must maintain a master file of all service bulletins for all employees to access as required. From time to time, Bombardier Recreational Products Inc. will distribute a current bulletin index for your filing system. Periodically, a BRP representative may ask to evaluate your bulletin file as part of BRP's ongoing dealership evaluation process.

ADDITIONAL INFORMATION

Since bulletins are available in several categories, they may not necessarily constitute a recall. Therefore, you should read each bulletin carefully to determine your course of action as instructed on the bulletin.

BULLETIN TYPES

- ADMINISTRATIVE BULLETIN
- PARTS AND ACCESSORIES BULLETIN
- PRE-DELIVERY BULLETIN
- SERVICE BULLETIN
- WARRANTY BULLETIN

BULLETIN NUMBERING

All bulletins have a unique identifying number, consisting of the year of publication, sequential bulletin number, and bulletin type. All three components comprise the bulletin number.

2005 - 01 (A)
Year Number Type
A = Administrative
P = Parts / Acc.
D = Pre-Delivery
S = Service
W = Warranty

THE FOLLOWING TYPES OF BULLETINS MAY BE ISSUED:

ADMINISTRATIVE BULLETIN

Please route to: Init. ☐ Service ☐ ☐ Sales ☐ ☐ Parts ☐	 	  ADMINISTRATIVE Bulletin

Administration, policy, and procedures generally related to service and warranty.

PREDELIVERY BULLETIN

Please route to: Init. ☐ Service ☐ ☐ Sales ☐ ☐ Parts ☐	 	  PREDELIVERY Bulletin

Information related to installation and set-up procedures.

PARTS AND ACCESSORIES BULLETIN

Please route to: Init. ☐ Service ☐ ☐ Sales ☐ ☐ Parts ☐	 	  PARTS AND ACCESSORIES Bulletin

Information related to parts and accessories that is not necessarily specified in other service literature such as a Service Manual.

SERVICE BULLETIN

Please route to: Init. ☐ Service ☐ ☐ Sales ☐ ☐ Parts ☐	 	  SERVICE Bulletin

Service related information that does not necessarily pertain to product warranty. Some examples of information that could be found in a Service Bulletin are service procedures and specifications.

WARRANTY BULLETIN

Please route to: Init. ☐ Service ☐ ☐ Sales ☐ ☐ Parts ☐	 	  WARRANTY Bulletin

Service related information that would be covered under the product's limited warranty. Safety Campaigns will be clearly identified.



2001 – 2005 BULLETIN INDEX

ADMINISTRATIVE	Subject	Model(s)
2001-01(A) (Rev 1)	Engine Registration and Warranty Reimbursement	–
2001-02(A) (Rev 1)	<i>Ficht Fuel Injection EMM</i> and <i>ECU</i> Return Authorization	–
2001-03(A)	<i>DealerPort™</i> Enhancements	–
2002-01(A)	Warranty Procedures for Marine Accessories	Allied Marine Accessories
2002-02(A)	<i>Evinrude/Johnson</i> Service Manuals	–
2003-01(A)	New Outboard Model Versions and Changes to In-Box Components	–
2003-02(A)	Engine Starting and Over-Rev Protection	2004 <i>Evinrude E-TEC</i>
2003-03(A)	Outboard Registrations and Warranty Allowance Requests	–
2004-01(A)	Tamper Resistant Carburetors	2004 and Later <i>Johnson</i> 2-Stroke 9.9, 15, and 90–175 HP
2004-02(A)	Replacement of ECI Labels (EPA) and Star Emissions Decals	ALL MODELS
2004-03(A)	Oil Recommendations	ALL <i>Evinrude/Johnson</i> 4-Stroke
2005-01(A)	Outboard Shipping, Handling, and Storage	–
2005-02(A)	Updated BRP Contact Information	–

PARTS AND ACCESSORIES	Subject	Model(s)
2001-01(P)	Rectifier/Regulator Purple Lead	–
2002-01(P)	Parts Catalog Correction and Piston Identification	60° V4/V6 <i>Evinrude</i>
2002-02(P)	Replacement Gearcases	–
2002-03(P)	Technical Literature	ALL 2002/2003 Models
2002-04(P)	New 4-Stroke Diagnostic Software	1998-2003 4-Stroke
2003-01(P)	Ventilation Rings (V6 Gearcase)	–
2003-02(P)	Technical Literature	ALL 2004 Models
2003-03(P)	New <i>Evinrude/Johnson</i> Outboard Oils	ALL MODELS
2004-01(P)	Large Motor Display Stand	ALL MODELS
2004-02(P)	Helmsman Gauge Series	ALL <i>Evinrude E-TEC</i>
2005-01(P)	HYDRUS Propeller Exhaust Ring	–
2005-02(P)	E-ssentials Training CD-ROM	–

PREDELIVERY	Subject	Model(s)
2002-01(D)	Initial Installation and Start-Up	2002 <i>Evinrude</i> below serial number 4988136
2002-02(D)	Predelivery Checklist	ALL MODELS
2003-01(D)	<i>Evinrude E-TEC</i> Predelivery	ALL <i>Evinrude E-TEC</i>
2004-01(D)	Key Predelivery Safety Checks	ALL MODELS
2004-02(D)	Oil System Priming	<i>Evinrude E-TEC</i> 200–250 HP
2004-03(D)	Oil Injection Rate and XD100 Oil Decal	<i>Evinrude E-TEC</i> Models with remote oil tank

SERVICE	Subject	Model(s)
2001-01(S) (Rev 1)	Identification and Service Procedures for <i>Ficht</i> Fuel Injectors	1998-2001 <i>Ficht</i> Fuel Injection Outboards
2001-02(S)	Changes to Service Codes and Engine Monitoring Functions	<i>Ficht Ram</i> Injection
2002-01(S)	New Service Tools	—
2002-02(S)	<i>EMM</i> Tampering	All models with <i>EMMs</i>
2002-03(S) (Rev 1)	Diagnostic Software EMMDIAG Version 1.42 for PCs	Direct Injection
2002-04(S)	Vacuum Switch	2002 <i>Johnson</i> 60° V6
2002-05(S)	Trim/Tilt Switch Durability	4-Stroke with Trim & Tilt
2003-01(S)	2002/2003 Essential Service Tools	—
2003-02(S)	New Connecting Rod	2001 & newer <i>Evinrude</i> 90° 3.3 liter
2003-03(S)	Service Tool Modification Gear Holder	2001 & newer <i>Johnson</i> 60–140 HP 4-Stroke
2003-04(S)	Difficult Shifting	2003 <i>Johnson</i> 90–140 HP 4-Stroke
2003-05(S)	Oil Requirements, Usage, and Information for <i>Evinrude E-TEC</i> Product Line	<i>Evinrude E-TEC</i>
2003-06(S)	Remote control units, P/N 176380, 176381, 177217 and 177218, Starboard-only use	ALL <i>Evinrude/Johnson</i> Remote Control Units With Specific Date Codes
2004-01(S)	2004 Essential Software and Service Tools	—
2004-02(S)	Use of Fiber Washer on Carburetor Drain Screw	2004 <i>Johnson</i> 25–55 HP
2004-03(S)	Throttle Position Sensor (TPS) Voltage Too High	ALL 2004 <i>Evinrude E-TEC</i>
2004-04(S)	<i>EMM</i> Starter Mode Configuration	ALL 2004 <i>Evinrude E-TEC</i> S/N 5069781 and below
2004-05(S)	Repeated Code 38 Warnings	ALL 2004 <i>Evinrude E-TEC</i>
2004-06(S)	Priming Fuel System (Rope Start Method)	<i>Evinrude E-TEC</i> 40 HP Rope (E40DRLSRC)
2004-07(S)	Linkage Retainer Clips	ALL MODELS
2004-08(S)	Starter Cable Repositioning	2004 and 2005 2-Cylinder <i>Evinrude E-TEC</i>

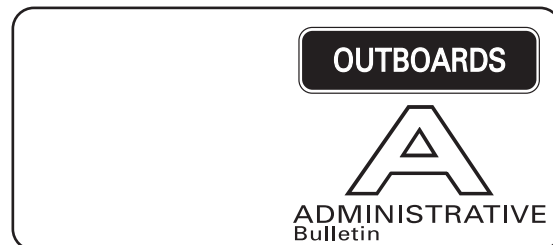
SERVICE <i>(cont.)</i>	Subject	Model(s)
2004-09(S)	Gearcase Alignment Gauge Kit	<i>Evinrude/Johnson V6</i>
2004-10(S)	New Connecting Rod	—
2004-11(S)	2005 Essential Service Tools and Software	—
2004-12(S)	Spark Plug Gap	2005 <i>Evinrude E-TEC</i> 200–250 HP
2005-01(S)	Powerhead or Cylinder Reinstallation	2004 <i>Johnson 4-Stroke</i> 9.9–15 HP
2005-02(S)	New Power Trim and Tilt Units Using <i>Evinrude/Johnson Biodegradable Trim and Tilt Fluid</i>	2005 Outboards with New Power Trim and Tilt Units
2005-03(S)	Cylinder Head Modification to Eliminate Low Speed Overheat	2005 <i>Evinrude E-TEC</i> 200–250 HP
2005-04(S)	Exhaust and Propeller Hub Cooling	2005 and early production 2006 <i>Evinrude E-TEC</i> 200–250 HP
2005-05(S)	Engine Idle Operating Temperature	<i>Evinrude E-TEC</i> 200–250 HP
2005-06(S)	2006 Essential Service Tools	

WARRANTY	Subject	Model(s)
2001-01(W) (Safety)	Enhancement Kit, P/N 5004550	ALL 1999 and 2000 <i>Evinrude</i> 200–225 HP
2001-01(W) (Rev 1)	International ONLY	—
2002-01(W) (Rev 1)	International ONLY	—
2002-02(W) (Safety)	Shift Linkage Adjustment	2002 <i>Johnson 25/30 HP</i> below serial number 4998986
2002-03(W)	Water Fouled Spark Plugs	<i>Johnson 3.5 HP</i>
2002-04(W)	Pinched Oil Lines	2002 <i>Evinrude 60° V6</i>
2002-05(W)	Crankshaft Position Sensor	2001 and newer <i>Evinrude</i> DI 90° 3.3 liter
2003-01(W) (Safety)	Fuel Manifolds	2002 & 2003 <i>Evinrude 60°</i> V4/V6
2003-02(W) (Safety)	Fuel Manifolds	2002 & 2003 <i>Evinrude 90°</i> V6
2003-03(W) (Safety)	Remote Control Box Repair	ALL <i>Evinrude/Johnson</i> Remote Control Boxes
2003-04(W) (Safety)	Fuel Return Manifolds	2004 <i>Evinrude D.I. 100,</i> 115, 135, 150, 175 HP
2003-05(W) (Safety)	Fuel Return Manifolds	2004 <i>Evinrude D.I. 200,</i> 225, 250 HP
2004-01(W)	Improved Oil Distribution	2004 <i>Evinrude D.I. 60° V6</i>
2004-02(W)	Recalibration Software	ALL 2004 <i>Evinrude</i> <i>E-TEC</i> 90 HP
2004-03(W) (Safety)	ECM Replacement	<i>Johnson 4-Stroke</i> 200, 225 HP
2004-04(W)	Electric Starter Motor Modification	2004 <i>Evinrude E-TEC</i> with Electric Starter

WARRANTY <i>(cont.)</i>	Subject	Model(s)
2005-01(W)	Manufacturing Change Adding Fuel Hose Clip	2005 <i>Evinrude E-TEC</i> 200–250 HP
2005-02(W)	Recalibration Software	ALL 2005 <i>Evinrude E-TEC</i> 200-250 HP
2005-03(W) (Safety)	Injector Fastener Kit	Model listing on bulletin
2005-04(W) (Safety)	Fasteners for Service Fuel Injectors	<i>Evinrude</i> 90° 200-250 HP D.I.
2005-05(W) (Safety)	Flywheel Inspection	2004 <i>Johnson</i> 4-Stroke 200, 225 HP
2005-06(W)	Replacement Injector Fasteners	2006 <i>Evinrude E-TEC</i> (see affected outboards listing)
2005-07(W)	Cylinder Head Bolt Re-Torque	2006 <i>Evinrude E-TEC</i> 200–250 HP
2005-08(W) (Safety)	Engine Control Module (ECM) Replacement	<i>Johnson</i> 4-Stroke 200, 225
2005-09(W) (Safety)	Misassembled <i>Evinrude E-TEC</i> Tiller Kits	<i>Evinrude E-TEC</i> 40–90 HP

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: June, 2001

No. 2001-01(A) (Rev. 1)

EFFECTIVE IMMEDIATELY

SUBJECT: Engine Registration and Warranty Reimbursement

Dear Evinrude®/Johnson® Dealers:

This communication is to inform Evinrude and Johnson dealers of policies and procedures for engine registrations and warranty repair reimbursements on 2000, 2001 and future Evinrude and Johnson products. These policies may differ from your past business practices. The primary intention of these guidelines is to improve warranty information and service practices in the future.

ENGINE REGISTRATION AND WARRANTY REIMBURSEMENT

- Dealers must utilize the OMNI System for all engine registrations and warranty claims. **(Exception: Parts & Accessories Warranty Claims)** If special circumstances arise, registrations or warranty claims can be mailed directly to:

Mailing address:

Evinrude/Johnson Dealer Support Services
200 Sea Horse Drive
Waukegan, IL 60085

Addresses for parts being requested for return:

U.S. Dealers:

Evinrude/Johnson Dealer Support Services
300 Sea Horse Drive, Dock 5
Waukegan, IL 60085

Canadian Dealers:

Marine Medics
R. R. #3
Lakefield, ON
KOL 2H0

Warranty assistance:

Phone (800) 888-4662
Fax (847) 689-7235

- Warrantable claims received within **30 days** of the repair will be reimbursed for parts and labor. **Effective 6/1/01, claims must be received within 30 days from the date of repair. Claims received beyond this time frame will not be processed.**

- Engine registrations or warranty claims submitted by mail must be complete and legible. **Corrections must be returned to Evinrude/Johnson within 14 days for credit. Addresses and signatures for customer and dealer are required on all warranty claims or they will be returned.**

- The repair of major assemblies requires authorization from an Evinrude/Johnson Dealer Support Services Representative prior to the start of the repair. Claims submitted without prior authorization will be returned, a \$35.00 administrative fee will be charged to the dealer's account, and the claim can not be re-submitted.

List of major assemblies requiring prior authorization:

Powerhead, gearcase, power tilt and trim assembly, ECU, EMM, upper motor covers, and lower motor covers.

- All failed components replaced under warranty must be held at dealership for a period of **90 days** after receipt of your credit note. Any/or all parts can be requested for further analysis by the manufacturer within this period. Failure to provide these parts upon request, verification, or audit will result in a debit of the complete claim.

- Requests for additional labor require authorization from a Dealer Support Services Representative. Warranty claims for additional labor will not be paid without prior approval. Please include the name of the Representative and the authorization number on the claims.

- During a dealer audit, if it is determined that the repair date on the claim was modified, the dealer will be debited for the claim. An administrative charge of \$35.00 will be charged to the dealer's account.

- The process of auditing warranty claims is to insure the accuracy of warranty information. Dealers are expected to provide accurate information on all claims.

PARTS & ACCESSORIES LIMITED WARRANTY

- The Parts & Accessories limited warranty is for a period of one (1) year except for powerheads. Powerheads will receive a six (6) month limited warranty from the date of consumer purchase.

- A copy of the work order from the original repair must be submitted along with the warranty claim. **Addresses and signatures for customer and dealer are required on all warranty claims or they will be returned.**

- Replacement parts and assemblies provided during the standard limited warranty of an engine will receive a warranty equal to the balance of the engine's standard warranty.

- All powerheads purchased through Parts & Accessories must be installed by an authorized *Evinrude/Johnson* dealer for warranty consideration or coverage.

- Recalled parts that are found to be free from defects will be returned to the dealer. The dealer will be debited for any credits received from the warranty claim, and charged for return shipping and a \$35.00 administrative fee.

- **Assemblies requested for return must be received in an unaltered state. The dealer will not receive credit on assemblies returned with missing components. The associated claim will be canceled. If credit was issued, the dealer's account will be debited.**

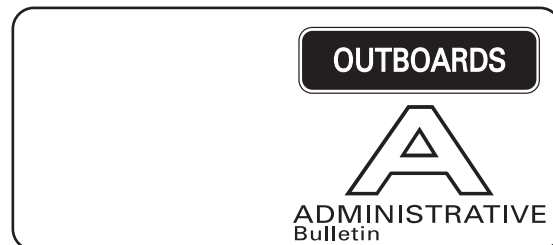
- For warranty related issues and flat rate times, please refer to the Warranty Procedure and Flat Rate Manual distributed in 2000 by OMC or call Dealer Support Services @ 1-800-888-4662. *Evinrude/Johnson* Dealer Support Service is in the process of developing a new Warranty Procedures & Flat Rate Manual. All dealers will receive this updated publication when available.

Thank you for your efforts in advance.

Evinrude/Johnson Dealer Support Services

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: August, 2001

No. 2001-02(A)

EFFECTIVE IMMEDIATELY

SUBJECT: *Ficht Fuel Injection EMM and ECU*
Return Authorization

U.S. DEALERS ONLY

This communication is to inform *Evinrude/Johnson* dealers of new policies and procedures for the repair or replacement of *Ficht EMMs* and *ECUs*.

Authorization:

Prior to the return of an *EMM/ECU* for repair or replacement **authorization**, dealers **must** call Dealer Support Services (1-800-888-4662).

***EMMs/ECUs* or claims submitted without prior authorization will be returned. A \$35.00 administrative fee will be charged to the dealer's account, and the claim cannot be resubmitted.**

Documentation:

A **COMPLETED** warranty claim must be sent with the *EMM/ECU*. **(SEE BACK)**

Send disk(s) with *EMM/ECU* if download problems are experienced. EXAMPLE: "Injector Replacement" or "Engine MAP Upgrade".

Dealer Support Services Representatives can provide assistance to dealers in collecting the required information for the warranty claim.

Additional Requirements: (SEE BACK)

Shipping and Packaging:

Package the *EMM/ECU* and warranty claim securely. Damage caused from inadequate packaging is not warrantable.

Send only the *EMM/ECU*, warranty claim, and disk(s). Do not send any mounting hardware or related parts. Parts other than the *EMM/ECU* and disk(s) will **NOT** be returned or replaced under warranty.

Address the *EMM/ECU* and warranty claim to:

"EMM/ECU REPLACEMENT PROGRAM"
c/o Dealer Support Services
300 Sea Horse Drive, Dock 5
Waukegan, IL 60085

EMM/ECU replacements will be returned **UPS[†]** ground prepaid. **UPS NEXT DAY[†]** requests will be charged to the dealer's UPS account number. **UPS** account number must be printed on claim.

UPS NEXT DAY C.O.D. is not available.

Typical return shipment time is 24 to 48 hours from receipt.

Claims that are missing any of the **REQUIRED** information will not be processed and will be returned with the *EMM/ECU*.



DEALER SUPPORT SERVICES
200 Sea Horse Drive
Waukegan, Illinois 60085-4885

**WARRANTY
ALLOWANCE
REQUEST**

CLAIM NO.

OWNER'S NAME ADDRESS AND ZIP CODE (REQUIRED)				SERVICING DEALER'S NAME-ADDRESS AND ZIP CODE (REQUIRED)				DATE OF REQUEST		
								DATE OF INCIDENT		
								DATE WORK COMPLETED		
ENGINE MODEL AND SERIAL NO.				PURCHASE DATE		SERVICING DEALER'S CODE NO.		HOURS USED		
"X" IF CLAIM IS A PARTS & ACCESSORIES CLAIM			"X" IF THIS IS A REPEATED PART FAILURE CLAIM			AUTHORIZATION NUMBER			NOTE: GRAY SHADED AREAS FOR FACTORY USE ONLY DEALER FILL IN ALL OTHER.	
CUSTOMER COMMENT CODE(S) (REQUIRED)										
ADDITIONAL COMMENTS (REQUIRED)						SHIPPING INSTRUCTIONS				
						INVOICE NUMBER				
						RETURN ALL PARTS ☐				
						RETURN *PARTS ONLY ☐				
						ATTN				
						CHECK AMOUNT				
						\$				
ONLY EVINRUDE/JOHNSON GENUINE PARTS MAY BE USED IN WARRANTY REPAIR										
PART THAT CAUSED FAILURE										
PART NUMBER	PART NAME			GROUP CODE	ACCT DEPT TIME ORDER NO.	FLAT RATE CODE	FLAT RATE TIME HRS. THS.	FLAT RATE CODE	FLAT RATE TIME HRS. THS.	
WARRANTY REIMBURSEMENT MADE ONLY FOR PARTS LISTED BELOW.										
LIST ALL PARTS USED IN REPAIR										
PART NUMBER	PART NAME			QTY	PART NUMBER	PART NAME			QTY	
EPA REQUIRED Circle "Y" for yes or "N" for no.										
Y N Did warning horn sound?					Y N Did engine stop running?					
Y N Did engine go into S.L.O.W. TM Mode?					Y N Did engine exhibit reduced drivability/misfire?					
OWNER'S SIGNATURE (REQUIRED)				DEALER'S SIGNATURE			APPROVED		DATE	

☐ **Claim Return - See Back of Claim**

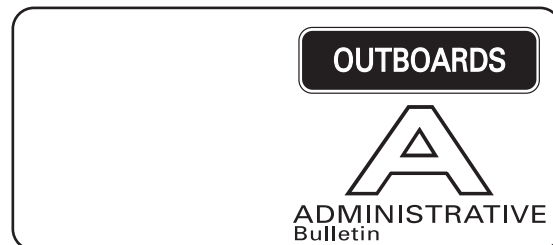
RETAIN GREEN COPY SEND BALANCE OF SET TO FACTORY
USE TYPEWRITER OR PRESS HARD WITH BALL POINT PEN.

HOLD ALL PARTS FOR 90 DAYS PENDING FACTORY RECALL

P/N 773629 Rev. 10/01
DSS162

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: November, 2001

No. 2001-03(A)

SUBJECT: *DealerPort™* Enhancements

The *DealerPort* (formerly *OMNI*) 'Service and Warranty' feature of Dealer Information Services (DIS) has been enhanced to further speed claims and credits processing.

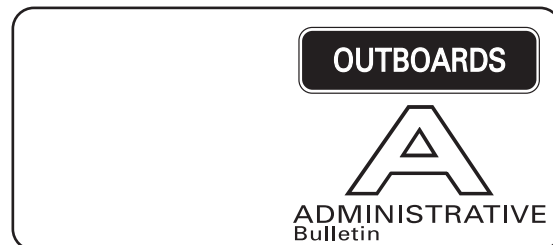
A new *DealerPort* Warranty Worksheet replaces the current *OMNI* Claim Form. The new *DealerPort* Warranty Worksheet is available as a PDF download on *DealerPort* at www.johnson.com, www.evinrude.com, and the new www.dealerport.com Web site.

Enhancements Effective November 1, 2001

- ◆ A claim number is automatically assigned when the claim is entered.
- ◆ **Initially, for U.S. dealers only**—The claim entry will accept but hold claims that require the part be returned and inspected. (Previously, these claims were not identified in claim entry until entry of the claim was nearly completed, and the claim mailed in.) Instructions for returning parts to Bombardier will be displayed as the last screen in claim entry. Receipt and inspection of returned parts remain a requirement for claim approval. Claim inquiries will identify and track the status of 'return parts' claims.
- ◆ Several new part number edits will alert you to make corrections during claim entry, expediting approval of many claims.
- ◆ Responses to emissions-related questions are now **required** on each claim.
- ◆ The make of the boat is now **required** on claims with boat length information optional.
- ◆ The menu feature 'Display Claims You Can Change' will be replaced with 'View Unprocessed Claims', allowing access to the status of the day's dealer-entered claims, claims pending return of parts, and incomplete claims. Claims that can be modified will be identified as such.
- ◆ Denied claims will be available for viewing in the existing DIS warranty claim inquiries.
- ◆ Claims started in DIS but left incomplete will be removed if not completed within 30 days. The Claims Menu in DIS will display an alert message for:
 - Claims that are incomplete or unpaid; and
 - Claims requiring returned parts.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: May 2002

No. 2002-01(A)

MODELS: Allied Marine Accessories

SUBJECT: Warranty Procedures for Marine Accessories

Certain marine accessories in the Evinrude/Johnson Genuine Parts and Accessories Catalog are not sold under the Evinrude or Johnson brand names. These Allied line of marine accessories are located in the rear of the catalog and are identified by manufacturer or brand names (e.g. Teleflex, Attwood, Perko, etc.)

Warranty and product support for these marine accessories that are not branded by Evinrude and Johnson will be administered by the respective manufacturers. All inquiries to Bombardier Motor Corporation of America regarding these marine accessories will be directed to the proper manufacturer.

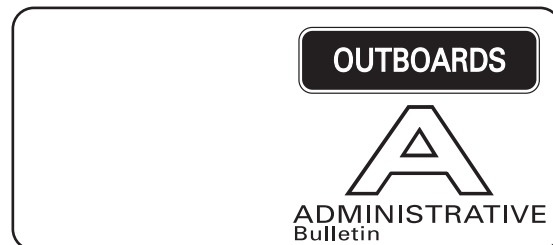
To ensure faster and more direct response to warranty and product issues for these marine accessories please refer to the enclosed list and contact information. DO NOT return defective items or file a warranty claim with Bombardier's Warranty Department. Please contact the manufacturer directly.

All of the marine accessories sold through this catalog come with a warranty established by the manufacturer. Statements of those warranties can be found on the packaging material packed with the product.

Name	Address	City/State/ZIP	Country	Phone
Anderson Marine Division Peterson Manufacturing Co.	4200 E. 135th St.	Grandview, MO 64030	USA	816-765-2000
Armstrong	3170 S.E. Dominica Terrace	Stuart, FL 34997	USA	561-286-7204
Attwood	P.O. Box 230	Lowell, MI 49331	USA	616-897-2225
Badger Tire & Wheel, Inc. Div. of I.S.C. Corp.	935 W. State Street	Hartford, WI 53027	USA	262-673-0508
Bennett Marine	550 Northwest 12th Ave.	Deerfield Beach, FL 33442	USA	954-427-1400
BRK Brands, Inc.	3901 Liberty Street Road	Aurora, IL 60504	USA	630-851-7330
Caviness Woodworking Co., Inc.	P.O. Box 710	Calhoun City, MS 38916	USA	601-628-5195
CIPA-U.S.A.	3350 Griswold	Port Huron, MI 48060	USA	810-982-3555
Crowe Rope Industries	P.O. Box 600	Waterville, ME 04901	USA	800-848-4405
Detmar Corporation	2001 West Alesandrine	Detroit, MI 48208	USA	313-831-1155
E.S. Ritchie & Sons, Inc.	243 Oak Street	Pembroke, MA 02359	USA	781-826-5131
Erickson Manufacturing, LTD.	B RR6	Thamesville, Ontario N0P 2K0	CANADA	519-352-2259
Floscan Instrument Co	3016 Blakely Street	Seattle, WA 98105	USA	206-524-6625
Fulton Industries, Inc.	135 E. Linfoot Street	Wauseon, OH 43567	USA	419-335-3015
Hopkins Manufacturing Corp.	428 Peyton	Emporia, KS 66801	USA	316-342-7320
Idea Development Corp.	83 Idea Place	Sequim, WA 98382	USA	360-683-3000
ITT Jabsco	1485 Dale Way P.O. Box 2158	Costa Mesa, CA 92628	USA	714-545-8251
ITT Rule Industries Cape Ann Industrial Park	1 Kondelin Road	Gloucester, MA 01930	USA	978-281-0573
Johnson Outdoors	1326 Willow Road	Sturtevant, WI 53177	USA	800-299-2592
KA Manufacturing, Inc.	P.O. Box 5743	Bellingham, WA 98227	USA	360-734-6860
Marinco/Guest	2655 Napa Valley Corp. Drive	Napa, CA 94558	USA	707-226-9600
Marine Dynamics, Inc.	8780 Mastin	Overland Park, KS 66212	USA	800-942-6636
Marine Steering, Inc.	8780 Mastin	Overland Park, KS 66212	USA	913-888-5431
Mayfair Molded Products Corp.	3700 N. Rose Street	Schiller Park, IL 60176	USA	847-678-5440
McGard	3875 California Rd.	Orchard Park, NY 14127	USA	716-662-8980
Moeller Marine Products	801 N. Spring Street	Sparta, TN 38583	USA	800-432-8344
Nordic Marine International, Inc.	P.O. Box 611	Crompond, NY 10517	USA	203-798-8064
Optronics, Inc.	350 N. Wheeler St.	Fort Gibson, OK 74434	USA	918-683-9514
Perko, Inc.	16490 N.W. 13th Ave. P.O. Box 64000-D	Miami, FL 33164	USA	305-621-7525
Rabud, Inc.	110 N. Byran Street	Dania, FL 33004	USA	954-925-4199
Racor Div. - Parker Hannifin Corp.	3400 Finch Road P.O. Box 3208	Modesto, Ca 95353	USA	800-344-3286
Scepter Corporation	170 Midwest Road	Scarborough, Ontario M1P 3A9	CANADA	416-751-9445
Sen-dure Products, Inc.	6785 NW 17 Avenue	Ft. Lauderdale, FL 33309	USA	516-286-6861
Sevylor	903 Prestwick Parkway	Rockford, IL 61107	USA	815-227-5962
Skyblazer	4275 Palm Street	Fullerton, CA 92835	USA	714-254-8350
Springfield Marine Co.	P.O. Box 588 HWY 160	Nixa, MO 65714	USA	417-725-2667
Stoltz Industries, Inc.	5932 S.W. 43rd St.	Ft. Lauderdale, FL 33309	USA	516-286-6861
Swivl-Eze Marine Products	1400 Meadowlark Ln.	Lancaster, TX 75146	USA	972-223-5533
T-H Marine Supplies, Inc.	200 Finney Dr.	Hunstville, AL 35824	USA	256-772-0164
Taylor Made	313 West Rush Street P.O. Box 157	Kendallville, IN 46755	USA	219-347-1368
Teleflex - Canada LTD	3831 No. 6 Road	Richmond, BC V6V 1P6	CANADA	604-270-6899
Teleflex - Electrical Systems	6980 Professional Pkwy. East	Sarasota, FL 34240	USA	941-907-1000
Teleflex Inc. Marine/Industrial Div.	640 North Lewis Road	Limerick, PA 19468	USA	610-495-7011
Tempo Products	6200 Cochran Road	Cleveland, OH 44139	USA	440-248-1450
Tie Down Engineering, Inc.	5901 Wheaton Dr.	Atlanta, GA 30336	USA	800-241-1806
Tough Duck Outdoor Products	P.O. Box 31	Duncan, BC U9L 3XL	CANADA	888-246-3850
Walter Kidde Portable Equip., Inc.	1394 South 3rd St.	Mebane, NC 27302	USA	800-654-9677
Wellington Leisure Products Cut'n Jump/Nova	P.O. Box 244	Madison, GA 30650	USA	800-426-6757
Wesbar Corporation	4201 City Highway P P.O. Box 577	West Bend, WI 53095	USA	262-334-2381
Wise Company, Inc.	5535 Pleasant View Rd.	Memphis, TN 38134	USA	843-426-2125

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: December, 2002

No. 2002-02(A)

SUBJECT: *Evinrude/Johnson* Service Manuals

Dear *Evinrude/Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of the restructured layout of the *Evinrude/Johnson* Service Manuals. Bombardier's introduction of these new service manuals is another step in providing explicit, easy-to-follow service literature.

The *Evinrude/Johnson* Service Manuals are enhanced dealer tools designed to offer a better understanding of the servicing of outboards. The service manuals have been updated for content in many ways, including a new layout, latest reference images, new or changed part numbers, and complete service tool information.

Bombardier is proud to present these new *Evinrude/Johnson* Service Manuals and is sure you will find them to be valuable reference literature. We appreciate your comments and remain committed to providing the best products possible. These service manuals represent a new face for *Evinrude* and *Johnson*! Get onboard!

All *Evinrude/Johnson* Service Manuals have exciting new features to offer quicker access of information and service procedures.

- The Table of Contents appearing at the beginning of each section presents a more detailed listing of that section's topics and procedures.
- The Index near the back of the book gives an alphabetized listing of key words and subject matters.
- Typical Pages are in the Introduction section of each manual and are a representative display of each manual's layout and general design.
- Standardized procedures for most components are broken down into Removal, Disassembly, Inspection, Assembly, and Installation.
- Understanding and retaining the information is easier with more pictures, diagrams, and simplified processes.
- Cross references direct readers to related topics and subjects. Look for "Refer to..." in the text to find a related area of discussion.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐	 	OUTBOARDS  ADMINISTRATIVE Bulletin
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Date: April, 2003

No. 2003-01(A)

SUBJECT: New Outboard Model Versions and
Changes to In-Box Components

Dear *Evinrude/Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of Bombardier's change in the marketing and distribution of some outboard engines and components.

Following is a complete listing of these changes:

- **(MWS) Modular Wiring System Harness** – The MWS harness will no longer be supplied with V4 and larger outboards with serial numbers greater than 5028943. The 10 ft. MWS harness, P/N 176334, will need to be ordered as a separate part.
- **60° V6 20 in. Models** – During 2003 new versions of the existing 60° V6 model lineup were created. The new model version is equipped with an "O" style gearcase and identified with an "F" suffix in the model number.
- **40 HP *Johnson* 2-Stroke transom plate** – Starting in the 2004 model year, 40 HP models will no longer include a transom mounting plate with the outboard. The transom plate, P/N 328594, will need to be ordered as a separate part.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

A
ADMINISTRATIVE
Bulletin

Date: November, 2003

No. 2003-02(A)

MODELS: 2004 Evinrude[®] E-TEC[™] Outboards

SUBJECT: Engine Starting and Over-rev Protection

The Evinrude E-TEC outboard product line has several unique procedures that differ from other Evinrude and Johnson outboards.

Each Evinrude E-TEC Operator's Guide includes key information appearing in gray boxes with a key above the text. This highlighted information is a vital reference when operating the outboard.

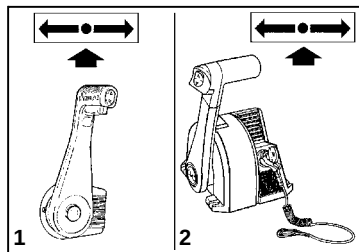
Please take the time to read the new Evinrude E-TEC Operator's Guide in its entirety. Page 13 (included here) outlines the important starting procedures which must be followed each time. Particular attention should be paid to the key information instructing the operator to NOT advance the throttle before starting.

All Evinrude E-TEC outboards are equipped with an EMM-controlled feature which limits over-revolution. If the throttle is advanced when the outboard is in NEUTRAL, the EMM will limit the engine's RPM to 1800 while running in NEUTRAL, protecting against over-revving and engine damage.

Please review the Operator's Guide with the customer at the time of delivery. Ensure the customer understands the importance of reading the entire Operator's Guide. Remember to fill out the confirmation of receipt at the back of the Operator's Guide and retain it for your records.

► STARTING, STOPPING, SHIFTING

Move the remote control handle to NEUTRAL.



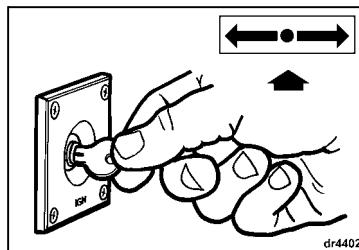
1. Concealed side mount control
2. Binnacle mount control

WARNING

If you are using a remote control that does not have start-in-gear prevention, the outboard can be started while it is in gear. Protect against unexpected boat movement by always starting your outboard in NEUTRAL.

DO NOT advance the throttle before start-up. Advancing the throttle overrides the electronic idle control system. After the engine starts, the engine management module (EMM) automatically increases idle speed slightly. Idle speed will decrease as the engine warms up. The System Check gauge lights will illuminate if the throttle is advanced.

Turn the key switch fully clockwise to the START position. Crank the engine no longer than 20 seconds.



IMPORTANT: The starter motor can be damaged if operated **continuously** for more than 20 seconds.

Upon start-up, release the key.

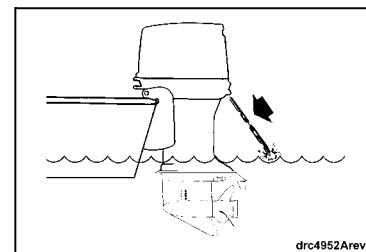
If the engine did not start, release the key momentarily, then try again.

Each time the key switch is turned from OFF to ON, the warning system will self-test. Refer to **Engine Monitoring** on page 18. If the warning system fails to self-test during start-up, see your Dealer.

If your outboard does not react normally to this starting procedure or if it fails to start, refer to **Troubleshooting** on page 37.

After Engine Starts

Check the water pump indicator. A steady stream of water indicates the water pump is working. If a steady stream of water from the water pump indicator is not visible, stop the engine. Refer to **Engine Overheating** on page 20.



drc4952Arev

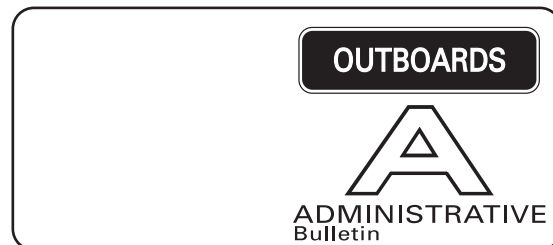
ENGINE STOPPING

Move control handle to NEUTRAL.

Turn key switch counterclockwise to the OFF position. Remove the key when the boat will be unattended.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: November, 2003

No. 2003-03(A)

MODELS: ALL MODELS

SUBJECT: Outboard Registrations and Warranty Allowance Requests

Dear *Evinrude/Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a change in the policies and procedures for outboard registrations and warranty allowance requests. These policy changes are incorporated into the *Evinrude/Johnson* 2000-2004 Warranty Procedures and Flat Rate Manual (P/N 5005610) and will take effect when the manual is distributed. **These policies differ from past business practices as stated in all previous Warranty Procedures and Flat Rate Manuals.**

OUTBOARD REGISTRATIONS

DealerPort™ has been modified to allow dealers to enter **new** registrations whether or not the outboard was shipped directly to them. *DealerPort* should be used to register **all** new outboards. Second Owners, FLW, Consignment, Demonstration, and Prize Outboards that require a registration change can be faxed or mailed. Some small horsepower outboard registration cards contain a suffix letter at the end of the Model Number. If *DealerPort* does not allow the registration due to an Invalid Model Number error, be sure to check the Model Number using the "INTRODUCES" year designation matrix (outlined in the Introduction section of all *Evinrude* and *Johnson* Service Manuals).

If a new outboard registration is faxed or mailed to Dealer Support for entry by the Warranty Department and it could have been processed using *DealerPort*, **a processing charge of \$1.00(US) per registration** will be debited from the dealer's Parts and Accessories account. Special circumstances that require faxing or mailing new registrations to Dealer Support for manual entry must have prior approval.

Mailing address: *Evinrude/Johnson* Dealer Support
250 Sea Horse Drive
Waukegan, IL 60085

OUTBOARD WARRANTY ALLOWANCE REQUESTS

DealerPort is to be used to process warranty allowance requests for *Evinrude/Johnson* outboards. Replacement claims for **major assemblies** (powerhead, gearcase, and power trim and tilt) and all 40 HP through 250 HP **upper and lower motor covers** must be phoned in to Dealer Support. Replacement parts are sent **no charge** to the dealer. In some circumstances, Dealer Support will require the return of certain parts for quality assurance. In these cases, the dealer must print a copy of his or her warranty allowance request and return the part with the claim. Parts must be held for 90 days, with shipping instructions provided by Bombardier.

If a warranty allowance request that could have been processed using *DealerPort* is faxed or mailed to Dealer Support for entry by the Warranty Department, **a processing charge of \$5.00(US) per claim** will be debited from the claim when it is processed. Special circumstances that require faxing or mailing claims to Dealer Support for manual entry must have prior approval.

Additional Information

For warranty assistance or approval of special circumstances, please phone (800) 888-4662.

For any warranty allowance request or registration card returned to the dealer due to incorrect or incomplete information, or claims submitted for parts that are "replacement only" parts, the dealer's Parts and Accessories account will be automatically debited a \$35.00(US) administration charge.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
Johnson®



OUTBOARDS

A
ADMINISTRATIVE
Bulletin

Date: January, 2004

No. 2004-01(A)

MODELS: 2004 and Later Model *Johnson®*
2-Stroke 9.9, 15, and 90–175 HP
Outboards

SUBJECT: Tamper Resistant Carburetors

Dear *Evinrude®* and *Johnson* Dealers:

This communication is to inform dealers of new tamper resistant carburetors for certain *Johnson* 2-stroke outboards. These carburetors appear on the following 2004 model year *Johnson* 2-stroke carbureted outboards.

Model	Year
9.9 and 15 HP	2004 (SR) and later
60° V4 / V6 90–175 HP	2004 (SR) and later

The *Johnson* 2-stroke 9.9, 15, and 90–175 HP carbureted outboards for model year 2004 are manufactured in accordance with U.S. Environmental Protection Agency (EPA) standards for emissions.

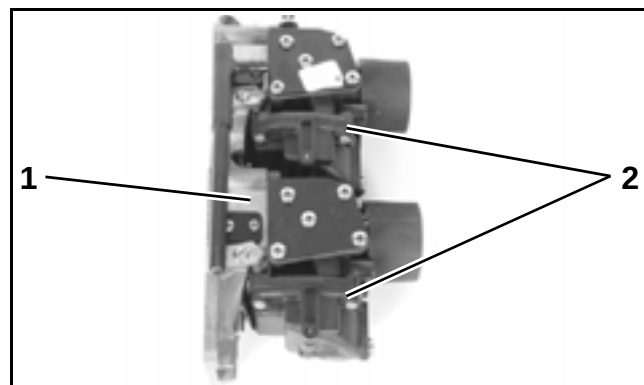
When servicing, **DO NOT** substitute any part of the carburetor with non-tamper resistant parts. **Only an authorized *Evinrude/Johnson* dealer should perform service.**

Adjustment of the tamper resistant needle valve requires a special Torx Screwdriver, P/N 351204. **DO NOT** sell or provide the Torx Screwdriver to customers or owners.

IMPORTANT: Changing the original factory fuel mixture calibrations of the outboard will affect the outboard's emissions and is a violation of federal law. **Any fuel mixture changes affecting emissions become the responsibility of the dealer/ servicing technician and/or the owner.**

When servicing the carburetors, it is very important that the procedures in the applicable service manual are followed **EXACTLY** to ensure compliance with emissions standards.

A complete 90-175 HP tamper resistant carburetor assembly consists of a throttle body assembly and carburetor body assemblies.

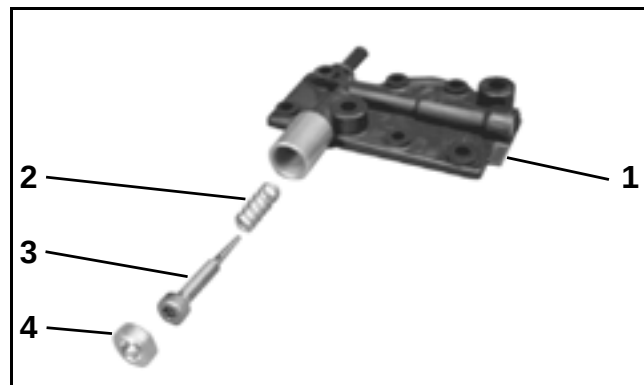


TYPICAL – 90-175 HP (60° V4/V6 Carbureted)

000875

1. Throttle body
2. Carburetor body(s)

A 9.9/15 HP carburetor body cover consists of a spring, mixture screw, and retainer. The cover and insert assembly appear on the carburetor body of 2004 and later model year outboards.



TYPICAL – 9.9/15 HP

002809

1. Cover and insert assembly
2. Spring
3. Mixture screw
4. Retainer



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
Johnson®



OUTBOARDS



Date: January, 2004

CALIFORNIA DEALERS ONLY

MODELS: 2004 *Johnson*® 4-Stroke Outboards

SUBJECT: Revised California Emission Control
Warranty Statement

Dear *Johnson* 4-stroke Dealers:

This communication is to inform **California dealers only** of a revised California Emission Control Warranty Statement for all 2004 *Johnson* 4-stroke outboards.

Model	Year
All <i>Johnson</i> 4-stroke	2004 (SR)

The *Johnson* 4-stroke outboards for model year 2004 are manufactured in accordance with the California Air Resources Board (CARB) standards for emissions.

Included with this mailing is the revised California Emission Control Warranty Statement. The revision includes expanded warranty coverage of intake valves on 2004 *Johnson* 4-stroke carbureted model outboards.

IMPORTANT: The Manufacturer's Limited Warranty Coverage has not changed. The addition of the intake valves on 2004 *Johnson* 4-stroke carbureted model outboards is the **only** change in warranty coverage.

Please supply a copy of the included revised California Emission Control Warranty Statement to all customers purchasing a 2004 *Johnson* 4-stroke outboard.

Bombardier Motor Corporation of America will notify current registered 2004 *Johnson* 4-stroke owners and supply a copy of the revised California Emission Control Warranty Statement.

All owner's manual literature for 2005 models and later will include the revised California Emission Control Warranty Statement.

	Carbureted	SPFI
Air Induction System		
Timing Chain/Belt and Tensioner	X	X
Camshaft and Followers	X	X
Intake Valves	X	X
Electronic Dash Pot System		X

SAMPLE – Revised Warranty Statement

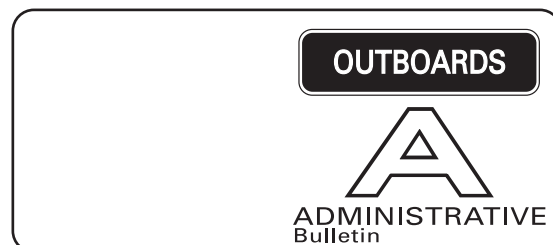


Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



Date: January, 2004

No. 2004-02(A)

MODELS: ALL OUTBOARDS

SUBJECT: Replacement of ECI Labels (EPA) and Star Emissions Decals

Dear *Evinrude/Johnson* Dealers:

This communication is to inform you of procedures and requirements in the replacement of ECI labeling and California Air Resources Board Star labels.

Model	Model Year
ALL <i>Evinrude/Johnson</i> Models	2001 (SI) to current

The Federal Clean Air Act, enacted in 1998, requires the U.S. Environmental Protection Agency (EPA) to regulate the exhaust emissions (hydrocarbons and nitrogen oxides) for Marine Spark Ignition Engines. All 1998 and newer (including current model year) outboards sold in the United States and its territories must display an Emission Control Information (ECI) label.

Similar legislation by the California Air Resources Board (CARB) requires a special environmental label with a star rating. New outboard engines must be designed, built, and equipped to meet that state's stringent anti-smog standards.

Replacement of these important labels requires strict adherence to the following guidelines.

When requesting a replacement of an ECI or CARB Star label, the requestor must provide Dealer Support with the following:

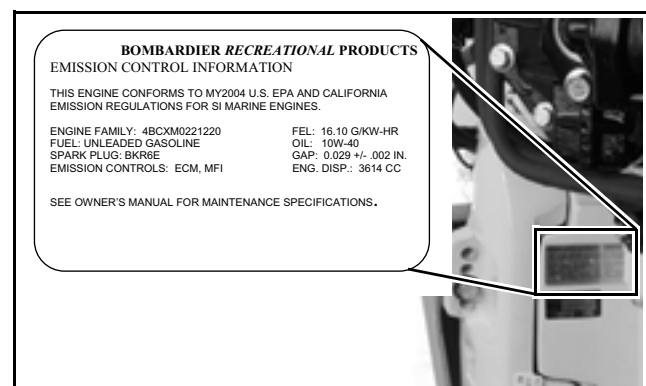
- Outboard serial number;
- Sales model;
- **Damaged or partial label being replaced;**
- Name of requestor; and
- **Written** reason why label has to be replaced.

It is important to include the damaged or partial label in the request.

When the new replacement label is to be applied, special arrangements will be made to ensure the new label is applied to the correct outboard.

The Emission Compliance Team will use the information provided by the requestor to determine if a label will be replaced and who will apply the replacement label.

Bombardier Motor Corporation of America reserves the right to deny replacement label requests if the guidelines are not met fully.



TYPICAL – ECI Label

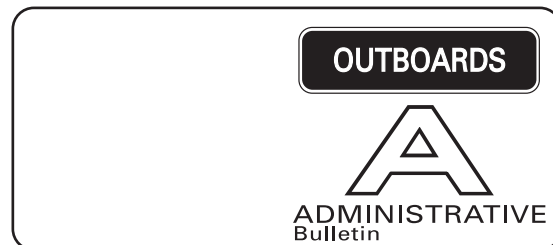


TYPICAL – Star Label



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: June, 2004

No. 2004-03(A)

MODELS: ALL Evinrude®/Johnson® 4-Stroke

SUBJECT: Oil Recommendations

Dear Evinrude/Johnson Dealers:

This communication is to update oil recommendations for all Evinrude and Johnson 4-Stroke models, including break-in oil. Evinrude/Johnson 4-Stroke Outboard Break-In Lubricant has been discontinued.

Models
ALL Evinrude/Johnson 4-Stroke

When selling or servicing any Evinrude or Johnson 4-Stroke outboard, please inform your customer that Evinrude®/Johnson® 4-Stroke Outboard Oil should be used in place of Evinrude/Johnson 4-Stroke Outboard Break-In Lubricant.

OIL

Initial Fill and Break-In

IMPORTANT: 4-Stroke outboards are shipped without oil in the crankcase. Oil must be added to the crankcase before starting the outboard for the first time.

When breaking in 4-Stroke outboards, use Evinrude/Johnson 4-Stroke Outboard Oil for the first 10 hours of operation.

IMPORTANT: For break-in, do not use Evinrude/Johnson Ultra™ 4-Stroke synthetic blend oil.

Only after the first 10 hours of operation, replace the break-in lubricant with Evinrude/Johnson Ultra 4-Stroke synthetic blend oil.

Recommended Oil

Evinrude/Johnson Ultra 4-Stroke synthetic blend oil is recommended for use in Evinrude and Johnson 4-Stroke outboards. It allows for extended oil change intervals and is best for high load applications. Evinrude/Johnson Ultra 4-Stroke synthetic blend oil delivers ultra viscosity stability, sludge protection, friction reducing properties, and superior corrosion protection.

If Evinrude/Johnson Ultra 4-Stroke synthetic blend oil is temporarily unavailable, the customer may use Evinrude/Johnson 4-Stroke Outboard Oil. This oil provides excellent wear and corrosion resistance under normal operating conditions.

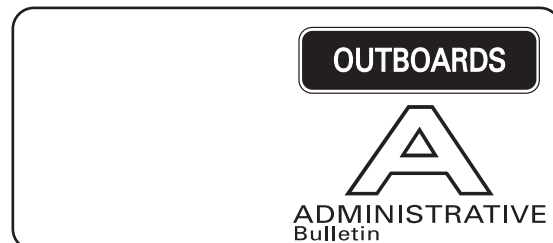
If neither Evinrude/Johnson Ultra 4-Stroke synthetic blend oil or Evinrude/Johnson 4-Stroke Outboard Oil is available, an equivalent FC-W-approved 10W-40 or 10W-50 oil must be used.

Refer to **Engine Specifications** in the model's Operator's Guide for the outboard's oil capacity.



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: February, 2005

No. 2005-01(A)

SUBJECT: Outboard Shipping, Handling, and Storage

Dear Evinrude®/Johnson® Dealers:

This communication is to give an overview of outboard shipping, handling and storage, and to outline the necessary steps when product damage results from shipping.

PRODUCT HANDLING

The careful shipping and handling of outboards is very important. Warranty claims will be examined to determine the cause and nature of any product damage. **Product damage resulting from shipping or dealer mishandling is not covered by product warranty.**

In an effort to curb product damage as a result of mishandling, it is necessary to strictly follow these guidelines.

Handling — DO NOT drop an outboard carton, or push it off the end of a truck or platform.

Storage — DO NOT store an outboard carton on its end. Stacked outboard cartons CANNOT exceed four cartons high.

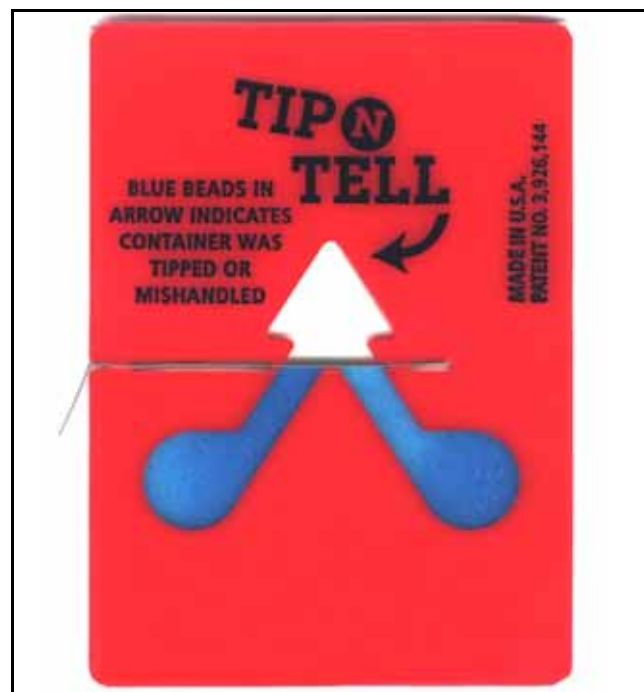
Inspection — Visually inspect **the outboard carton and product** on arrival, paying particular attention to the condition of motor covers. To assist identifying less obvious product mishandling during shipping, BRP is introducing the use of Tip N Tell indicator shipping tags.

What is Tip N Tell?

Tip N Tell is a shipping / handling indicator designed to inform dealers in the event the outboard shipping carton has been tipped over or mishandled, and to raise dealer awareness of the potential for outboard damage.

DESCRIPTION

Tip N Tell indicator tags will begin appearing on certain outboard shipping cartons in March, 2005.



Tip N Tell Shipping Tag

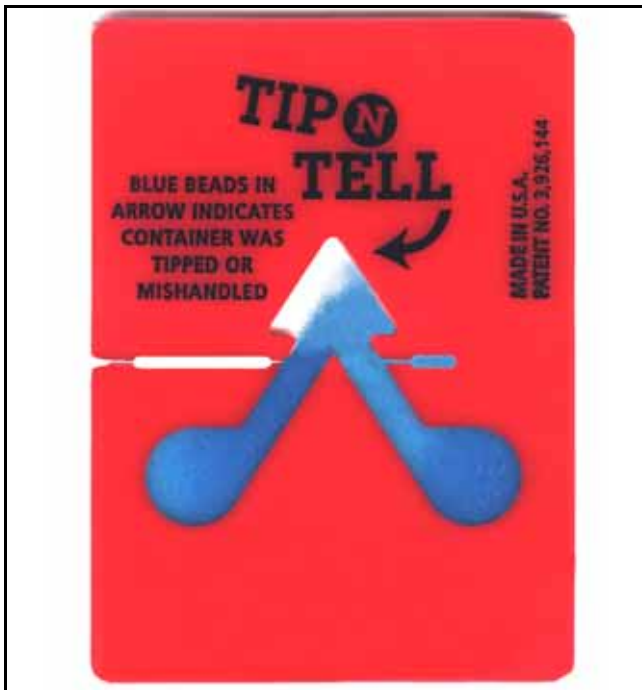
004906

How Does Tip N Tell Work?

Tip N Tell tags are activated at the plant. The tags have small blue beads that will shift if the outboard shipping carton **has been** tipped over, upended, or mishandled.



If the shipping carton has been tipped slightly less than 90°, a significant amount of blue beads will be present in the Tip N Tell tag arrow head indicator.



Activated Tag with Tipping Evidence

004907



Monitored Shipment Tag

004905

LOCATION

Tip N Tell shipping tags are located on the shipping carton near the serial number identification sticker.



Tip N Tell — Location

USAGE

IMPORTANT: If the tag indicates tipping has occurred, dealers are urged to immediately inspect carton and product thoroughly. It is the **dealer's responsibility** to note any damage on the bill of lading (shipping receipt/invoice).

BRP is not responsible for shipping damage.

Upon outboard arrival, visually inspect Tip N Tell tag. Dealers are advised to **not** sign shipping receipt until completing a thorough carton inspection.

If the Tip N Tell tag shows evidence of tipping or mishandling, open the shipping carton to inspect the outboard, paying close attention to the condition of upper and lower motor covers, as well as a general overview of the outboard's condition.

If damage to the outboard has occurred, make a note of the damage (be specific, including location) on the bill of lading. For your records, retain a copy of this bill of lading with the noted damage.

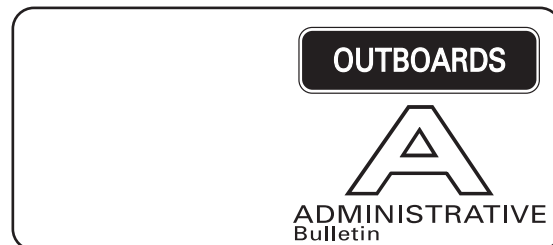
Immediately contact BRP Dealer Support. The following information will be required:

- Copy of the bill of lading with proper notations signed by carrier driver;
- Photos of the activated Tip N Tell (located at serial number sticker); and
- Photos of the damaged shipping container and product.

BRP will write a warranty claim, send dealers the replacement parts, and file a damage claim with the carrier. Freight damage **not reported** to BRP Dealer Support at product receipt **will not be covered**. BRP is not responsible for damage once the consignee has accepted the freight.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: August, 2005

No. 2005-02(A)

SUBJECT: Updated BRP Contact Information

Dear *Evinrude®/Johnson®* Dealers:

This communication is to give dealers worldwide an updated reference tool when contacting BRP or re-turning parts.

CONTACTING BRP

Dealers can call or fax BRP offices at the following numbers:

North America (Authorized Dealers)

- Phone — 1-800-888-4662
- Fax — 1-847-689-6902

Europe, Middle East, Africa, and Commonwealth of Independent States (former Soviet Union)

- Phone — 41 21 318 78 00
- Fax — 41 21 318 78 01

Australia and Pacific Islands

- Phone — 612-9794-6600
- Fax — 612-9794-6697

New Zealand

- Phone — 649-274-5718
- Fax — 649-274-5240

Brazil

- Phone — 55 (19) 3783-9605
- Fax — 55 (19) 3783-9622

Caribbean Islands and Latin America (excluding Brazil)

- Phone — 954-846-1442
- Fax — 954-846-1476

Japan

- Phone — 81-44-200-1431
- Fax — 81-44-200-1432

Asia (excluding Japan)

- Phone — (65) 6726-8951
- Fax — (65) 6726-8952

WARRANTY CLAIM RETURN ADDRESSES

Refer to the following addresses when returning parts in conjunction with a warranty claim:

U.S. Dealers

Bombardier Recreational Products Inc.
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

Canadian Dealers

Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6

All Other Warranty Return Addresses

Contact regional offices. See mailing addresses on reverse side.



Asian Dealers

Bombardier Recreational Products Inc.
Blk 5 Siglap Road
09-42 Mandarin Gardens
Singapore 448908

Australian and Pacific Island Dealers

BRP Australia Pty Ltd
56 Canterbury Road
Bankstown 2200
New South Wales, Australia

Brazilian Dealers

Bombardier Recreational Products do Brasil
Rodovia Anhanguera Km 104 - Loteamento Tecno Park
Condominio Empresarial AZTech
Avenida James Clerck Maxwell, 280 Módulo 04
Campinas, SP 13069-380 Brasil

Caribbean and Latin American Dealers

Bombardier Recreational Products Inc.
480 Sawgrass Corporate Parkway, Suite 100
Sunrise, FL 33325

European, Middle Eastern, African, and Commonwealth of Independent States Dealers

Bombardier Recreational Products Europe N.V.
Skaldenstraat 125
B-9042 Gent
Belgium

Japanese Dealers

Bombardier Recreational Products Japan
Parale Mitsui Building 15F
Higashida-cho 8, Kawasaki-ku
Kawasaki-shi 210-0005 Japan

New Zealand Dealers

BRP Australia Pty Ltd
136 Cryers Rd.
East Tamaki
Auckland, New Zealand

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
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OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: August, 2001

No. 2001-01(P)

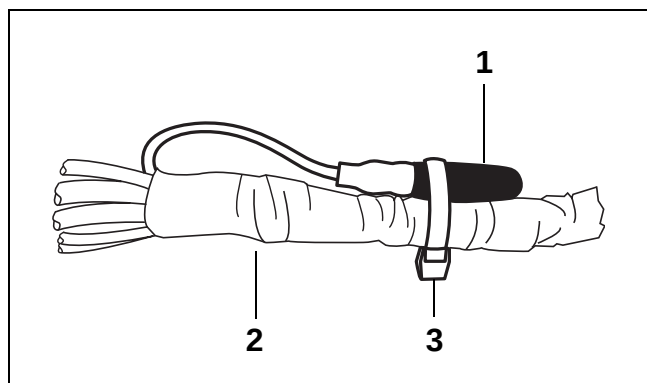
SUBJECT: Rectifier/Regulator Purple Lead

PROCEDURE

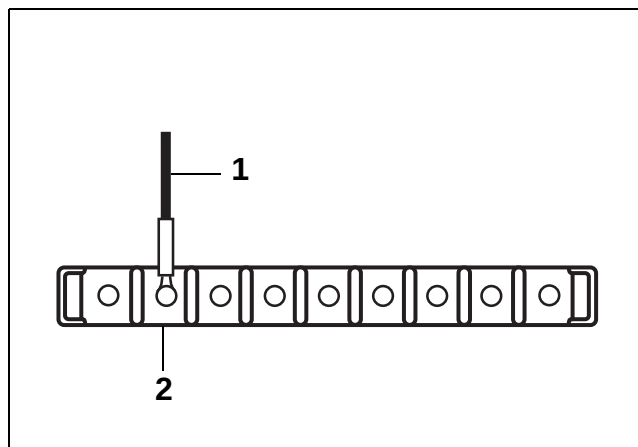
Replacement rectifier/regulators have been improved to automatically turn on under normal engine operation. These improved rectifier/regulators do not have a purple lead.

Install the new rectifier/regulator as described by the instruction sheet or *Evinrude/Johnson Service Manual*. Refer to the following supplemental information for rectifier/regulators that do not have the purple lead.

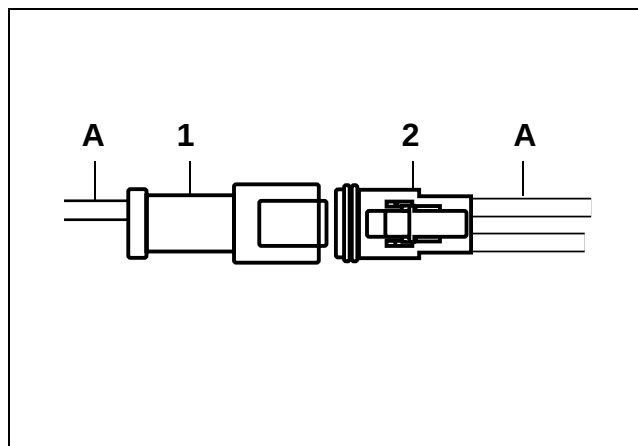
For engines that have bullet type connectors, isolate and secure the existing engine harness purple lead. Install P/N 328074 cap (1) on lead and secure to engine harness (2) with P/N 320107 tie strap (3).



For engines that use terminal board connectors, secure engine harness purple lead (1) to its existing position on the terminal board (2). The secured ring terminal should be coated using *Evinrude Black Neoprene Dip* P/N 909570.



For engines that use *System Check®* wiring, connect new rectifier/regulator connector to engine harness connector. Align grey leads.



IMPORTANT: Rectifier/regulators with a purple lead should not be used on current engines where the engine harness purple lead for the rectifier/regulator has been eliminated.

Please route to:

Init.

☐ Service ☐

☐ Sales ☐

☐ Parts ☐



Date: July, 2002

No. 2002-01(P)

MODELS: 60° V4/V6 Evinrude

SUBJECT: Parts Catalog Correction and Piston Identification

PROBLEM

The 2000 Final Edition and 2001 Preliminary Edition Parts Catalogs for the 75/90/115 HP *Ficht*® models list incorrect part numbers for oversize service piston and ring sets and for oversize service rings. If a powerhead were to be rebuilt using the incorrect parts it could fail in a short amount of running time, due to improper oiling.

Part numbers of affected parts catalogs:

Model Year 2000	Model Year 2001
Final Edition Parts Catalog	Preliminary Edition Parts Catalog
P/N 5001017	P/N 5001644

SOLUTION

Please update your copies of the 2000 Final Edition and 2001 Preliminary Edition Parts Catalogs for 75/90/115 HP *Ficht* models with the information in the following table:

P/N	Name of Part
5000812	PISTON & RINGS, Std., port
5000813	PISTON & RINGS, Std., stbd.
5000814	PISTON & RINGS, 0.030 in. O.S., port
5000815	PISTON & RINGS, 0.030 in. O.S., stbd.
5000819	RING SET, Std.
5000820	RING SET, 0.030 in. O.S.

ADDITIONAL INFORMATION

Dealers may encounter cases in which a 1999 or earlier model engine may have a newer model fully dressed powerhead installed.

Before ordering replacement pistons:

- Identify the powerhead
- Determine the type of oiling system
- Establish the type of service piston required

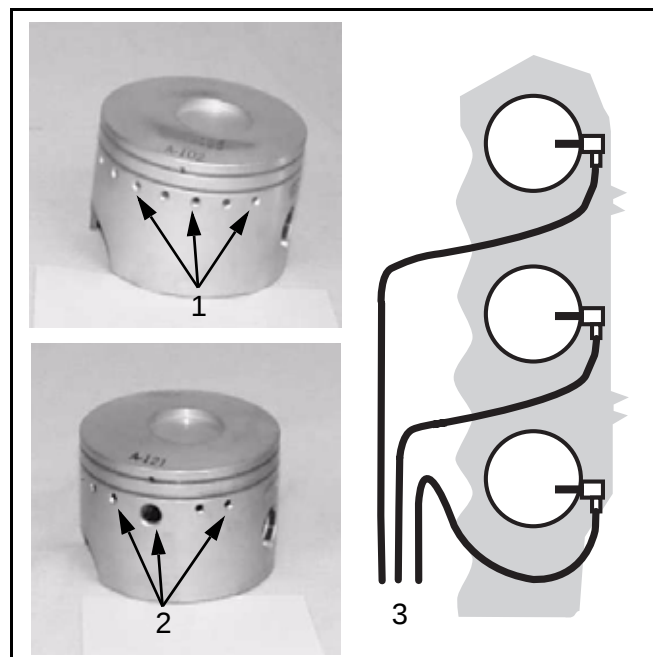
If the piston being replaced has seven small oil ports, or if it has five small oil ports grouped around one large oil port, refer to **Throttle Body Oiling – Replacement Parts (Piston has multiple oil ports)**.

If the piston being replaced has only one large oil port, refer to **Sleeve Oiling Only – Replacement Parts (Piston has only one large oil port)**.

See reverse for photo and replacement parts.

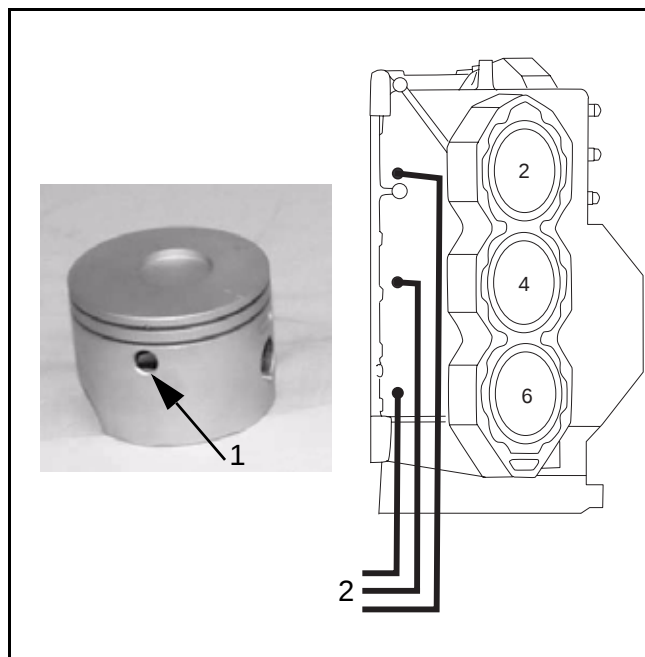
Ficht Piston Identification

Powerheads with Throttle Body Type Oiling 1999 and Older 60° V4/V6



1. OEM Piston: seven small oil ports
2. Service Piston: five small and one large oil ports
3. Throttle body oiling

Powerheads with Sleeve Oiling 1999 and Newer "O" Suffix 60° V6 2000 and Newer 60° V4/V6



1. Piston has only one large oil port
2. Sleeve oiling

Throttle Body Oiling – Replacement Parts (Piston has multiple oil ports)

P/N	Name of Part
439867	PISTON & RINGS, Std., port
439868	PISTON & RINGS, Std., stbd.
439527	PISTON & RINGS, 0.030 in. O.S., port
439528	PISTON & RINGS, 0.030 in. O.S., stbd.
436353	RING SET, Std.
436354	RING SET, 0.030 in. O.S.

Sleeve Oiling Only – Replacement Parts (Piston has only one large oil port)

P/N	Name of Part
5000812	PISTON & RINGS, Std., port
5000813	PISTON & RINGS, Std., stbd.
5000814	PISTON & RINGS, 0.030 in. O.S., port
5000815	PISTON & RINGS, 0.030 in. O.S., stbd.
5000819	RING SET, Std.
5000820	RING SET, 0.030 in. O.S.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
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OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: November, 2002

No. 2002-02(P)

SUBJECT: Replacement Gearcases

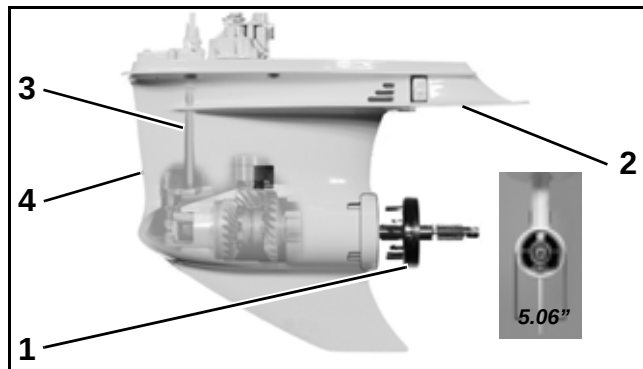
This bulletin has been prepared to assist with the identification of V6 gearcase types and to aid in the ordering of replacement gearcases.

When ordering replacement gearcases first identify the type of gearcase you are replacing with the descriptions provided.

GEARCASE IDENTIFICATION

"M"-TYPE

The "M"-type gearcase is new for 2002 and newer models. This is a maximum durability gearcase matched with very good overall performance.



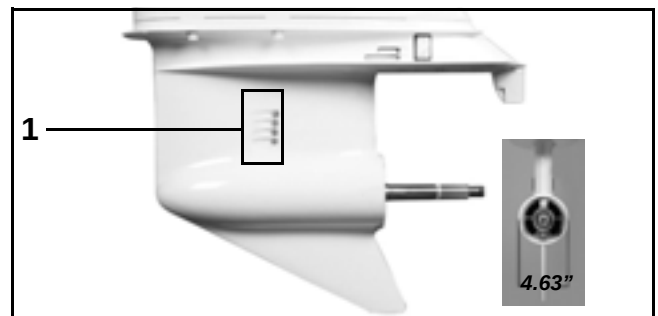
"M"-Type Gearcase (2002 and newer)

000883a

1. Attached exhaust ring P/N 346462 (included with gearcase) or alternate P/N 350626 for small hub props
2. **REQUIRED** Trim tab gasket P/N 331409 (included with gearcase)
3. Shorter shift rod
4. Speedometer pick-up

"4 HOLE"

This type is obsolete and no longer available. Refer to the **Replacement Gearcase Application Chart**.



"4 Hole" Gearcase (2001 and older - obsolete)

000888

1. 4 hole water pick-up

000887

"O"-TYPE

This gearcase is currently available for direct replacement. Some applications may benefit from the more robust "M"-type. Refer to the **Replacement Gearcase Application Chart**.



"O"-Type Gearcase (No speedometer pick-up)

000890

1. External screen water pick-up

000887

"L"-TYPE

This is a high performance gearcase specifically designed for applications with top speeds of 75 MPH or greater. Peak performance with this gearcase is attained when mounted high on the transom. Using this gearcase on slower applications and/or standard transom heights may actually reduce top speed and increase steering torque.



"L"-Type Gearcase (2001 and newer FHL models)

1. Speedometer pick-up

000890

000887

PROCEDURE

Refer to Replacement Gearcase Application Chart to select the replacement gearcase type.

Replacement Gearcase Application Chart				
Models	Original Gearcase	Replace with	For These Applications	Instructions
2002 and newer V6 models	"M"	"M"	Direct replacement	Refer to 2002 and newer Parts Catalog.
2001 and older V6 models	"4 Hole"	"M"	Maximum durability	Refer to "M"-Type Gearcase Order Procedure
		"O" or "L"	Operator desires higher performance than "M"-type	Refer to Optional Gearcase Order Procedure
	"O"	"M"	Maximum durability	Refer to "M"-Type Gearcase Order Procedure
		"O"	Direct replacement	Refer to Optional Gearcase Order Procedure
2001 and newer V6 VL, HGL, HG, and FHL models	"L"	"L"	Direct replacement	Refer to Optional Gearcase Order Procedure

Due to the many variables in boat and motor applications it is difficult to predict how a new gearcase type will respond, particularly in higher performance applications such as bass boats. For some applications, a new propeller may be required to maintain proper full throttle operating RPM. This chart is a guide only and must be weighed with what the operator may favor. Always inform your customers so any variation in performance does not come as a surprise to them.

"M"-Type Gearcase Order Procedure

Follow the steps below when replacing "O" or "4 Hole"-type gearcase with "M"-type gearcase.

STEP 1

Order appropriate replacement gearcase.

Engine	P/N
Standard rotation	5004633
Counter rotation	5004634

STEP 2

Order appropriate shift rod.

IMPORTANT: A new shift rod is required only when installing an "M"-type gearcase to replace an "O", "4 Hole", or "L"-type.

Engine	P/N
60° FFI (all) and Carb (2001 and later) 20"	349590
60° FFI (all) and Carb (2001 and later) 25"	349591
60° Carb (2000 and earlier) 20"	350464
60° Carb (2000 and earlier) 22.5"	349701
60° Carb (2000 and earlier) 25"	350465
90° All V6 Loop Charged 20"	347300
90° All V6 Loop Charged 22.5"	350466
90° All V6 Loop Charged 25"	347301
90° All V6 Loop Charged 30"	347391
90° V6 Cross Flow 20"	350460
90° V6 Cross Flow 25"	350461

STEP 3

If replacing an "O" or "4 Hole"-type gearcase, also order thread-forming screw, P/N 341219, and washer, P/N 307161, to attach the anode.

"M"-type gearcases are shipped with a required trim tab gasket and slightly protruding water inlet screens. The available high performance screen kit, P/N 5005124, has screens that fit flush to the gearcase in order to reduce drag. **These screens are designed for the "M"-type gearcase only and are not interchangeable with previous gearcases.**

"M"-type gearcases are also shipped with exhaust ring, P/N 346462. For smaller hubbed propellers (i.e., Renegade Bass), order alternate exhaust ring, P/N 350626. This ring is installed in place of the included exhaust ring and is designed to work with the smaller hubbed Renegade Bass or similar sized propellers.

STEP 4

Refer to **SUPPLEMENTAL SHIFT ROD AND DRIVESHAFT PROCEDURE**.

Optional Gearcase Order Procedure

STEP 1

Order appropriate replacement gearcase.

"O"-Type (not equipped with speedometer)	P/N
V6 standard rotation (.54 ratio)	5005401
V6 counter rotation (.54 ratio)	5005402
"L"-Type	
V6 standard rotation (.54 ratio)	5004913
IMPORTANT: When using a new "L"-type gearcase for any application other than as a replacement for a 2002 or newer "L"-type gearcase, also order thread-forming screw, P/N 341219, and washer, P/N 307161, to attach the anode.	

STEP 2

Refer to **SUPPLEMENTAL SHIFT ROD AND DRIVESHAFT PROCEDURE**.

SUPPLEMENTAL SHIFT ROD AND DRIVESHAFT PROCEDURE

STEP 1

Replacement gearcases are **not** shipped with the upper driveshaft, water pump, shift rod, or trim tab.

Use original shift rod (unless otherwise noted for "M"-type).

STEP 2

1993 and newer outboards have a two-piece, "snap in"-style driveshaft. This allows an undamaged, original upper driveshaft to be transferred ("snapped") into a new gearcase.

1992 and older outboards with a one-piece driveshaft, or early two-piece driveshaft with roll pin and spring require ordering an upper driveshaft kit. Refer to **Upper Driveshaft Order Chart** for correct upper driveshaft kit.

Upper Driveshaft Order Chart

Engine	Model Year	Driveshaft Kit	
		20"	25"
90° Loop Charged & Crossflow	1979-1991	P/N 5000618	P/N 5000626
	1992	P/N 5000614	P/N 5000623
60° Loop Charged	1991	P/N 5000619	P/N 5000627
	1992	P/N 5000615	P/N 5000624

IMPORTANT: Roll pin and retainer used for upper driveshaft retention are included in driveshaft kits. **Service gearcases have these parts preinstalled.**

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE
Johnson



OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: November, 2002

No. 2002-03(P)

MODELS: ALL 2002 AND 2003 MODELS

SUBJECT: Technical Literature

This communication is to inform *Evinrude* and *Johnson* dealers of Bombardier's Technical Literature Product availability and part numbers.

This table of Technical Literature products is provided to ensure a complete listing of the data available through *Evinrude/Johnson* Genuine Parts and Accessories.

Dates appearing in parenthesis () indicate the anticipated availability. Use this communication as a reference to complete and update your dealership's technical documents for *Evinrude* and *Johnson* outboards.

PARTS CATALOGS

Brand	Models	2002 Final	2003 Preliminary
Evinrude	200, 225, 250	5005130	5005292
Evinrude	135, 150, 175, 175MX (03')	5005131	5005293
Evinrude	75, 90, 115	5005133	5005294
Johnson	150, 175	5005132	5005297
Johnson	90, 105 Comm (03'), 115	5005134	5005298
Johnson	40, 50 PL	5005136	5005301
Johnson	55 Comm	NA	5005304
Johnson	40R, RL	5005135	5005302
Johnson	25, 30 R, RL	5005138	5005307
Johnson	25, 30 EL	5005137	5005305
Johnson	25 TE, TEL	5005139	5005306
Johnson	9.9 and 15 R, RL, 10RH (03')	NA	5005308
Johnson	6, 8 R, RL	NA	5005309
Johnson	3.5	5005141	5005311
Johnson 4-Stroke	140	NA	5034085
Johnson 4-Stroke	90, 115	NA	5033316
Johnson 4-Stroke	60, 70 PL4	5032941	5033315
Johnson 4-Stroke	40, 50 PL4	5032939	5033314
Johnson 4-Stroke	9.9, 15 R4, RL4, TE4, TEL4	5032943	5033313

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Brand	Models	2002 Final	2003 Preliminary
Johnson 4-Stroke	6 R4, RL4	NA	5005157
Johnson 4-Stroke	8 R4, RL4	NA	5005159
Johnson 4-Stroke	4, 5 R4, RL4	NA	5033312
Evinrude/Johnson	ALL	Final Edition Set P/N 5005142**	Preliminary Edition Set P/N 5005332**
Evinrude/Johnson	ALL	Final Edition Microfiche Set P/N 5005289**	Final Edition Microfiche Set P/N 5005334 (5/01/03)

SERVICE MANUALS

Brand	Models	2002	2003
Evinrude DI	75, 90, 115, 135, 150, 175, 200, 225, 250	5005259	5005259*
Johnson V	90, 105, 115, 150, 175	5005463	5005463*
Johnson	55	NA	5005483*
Johnson	40, 50	5005464	5005464* (Winter, 2003)
Johnson	9.9, 10, 15, 25, 30	5005465	5005465* (Winter, 2003)
Johnson	3.5, 6, 8	5005466	5005466* (Spring, 2003)
Johnson 4-Stroke	90,115,140	NA	5005467* (Spring, 2003)
Johnson 4-Stroke	60, 70	5005468	5005500* (Spring, 2003)
Johnson 4-Stroke	40, 50	5005469	5005469* (Spring, 2003)
Johnson 4-Stroke	9.9,15	5005470	5005470* (Winter, 2003)
Johnson 4-Stroke	6, 8	NA	5005471* (Spring, 2003)
Johnson 4-Stroke	4, 5	NA	5005472* (Winter, 2003)

OPERATOR'S GUIDES

Brand	Models	2002	2003
Evinrude DI	75, 90, 115, 135, 150, 175, 200, 225, 250	214967 – English 215271 – French	215420 – English 215421 – French
Johnson V	90, 115, 150, 175	215218 – English 215273 – French	215424 – English 215425 – French
Johnson V	105	NA	215400 – English 215401 – French
Johnson	40, 50 PL	214996 – English 215306 – French	215428 – English 215429 – French
Johnson	40 R, RL	214993 – English 215303 – French	215432 – English 215433 – French
Johnson	25, 30 EL	214988 – English 215312 – French	215436 – English 215437 – French
Johnson	25, 30 R, RL, TE, TEL	214985 – English 215309 – French	215440 – English 215441 – French

Brand	Models	2002 Final	2003 Preliminary
Johnson	9.9, 15 R, RL	NA	215389 – English 215390 – French
Johnson	6, 8 R, RL	NA	215381 – English 215382 – French
Johnson	3.5	451525 – English 5032777 – French	215444 – English 215445 – French
Johnson 4-Stroke	90, 115, 140	NA	5033281 – English 5033282 – French
Johnson 4-Stroke	60, 70	5002714 – English 5032774 – French	5033277 – English 5033278 – French
Johnson 4-Stroke	40, 50	5002713 – English 5032771 – French	5033273 – English 5033274 – French
Johnson 4-Stroke	9.9, 15	5032713 – English 5032768 – French	5033269 – English 5033270 – French
Johnson 4-Stroke	8	NA	215316 – English 215374 – French
Johnson 4-Stroke	6	NA	215315 – English 215371 – French
Johnson 4-Stroke	4, 5	NA	5033265 – English 5033266 – French

ADDITIONAL LITERATURE

P/N 5005278**	Service Bulletin Set, 2001 and Newer
P/N 5005263**	Installation & Predelivery – 2002 V4 & V6 Models
P/N 5005274**	Warranty Procedures and Flat Rate Manual – English
P/N 5005473*	Warranty Procedures and Flat Rate Manual – French

NA – Not available

* Essential Service Literature Automatic Shipment to current Dealers of record at time of availability.

** Previously shipped through Essential Service Literature Automatic Shipment Program.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



Date: November, 2002

No. 2002-04(P)

MODELS: 4-Stroke

SUBJECT: New 4-Stroke Diagnostic Software

A new diagnostic software program is available for 4-Stroke models equipped with an *ECM* (Electronic Control Module). This new software program (Version 4) is **necessary** for all 2003 models and will also work on 2002 and older models.

Affected Models
1998–2003 Model Year 4-Stroke

This Diagnostic Kit is part of an Essential Service Tool program. It will be shipped to you automatically in December 2002.

Order the part below.

DESCRIPTION	P/N	QTY
Diagnostic Kit	5033251	1

The Diagnostic Kit consists of both the Software CD-ROM, P/N 5033249, and the Diagnostic Software User Guide, P/N 5033250.

The diagnostic Cable and Adapter, P/N 787053, is required to communicate with the *ECM*. If needed, it can be ordered on your next parts order.

IMPORTANT: This new diagnostic software is not compatible with PDAs (handheld devices).

- Read the User Guide.
- Install the new program onto a shop computer with these minimum requirements:
 - Windows 95[†]
 - Pentium 133 MHz
 - 32 MB RAM (Windows 95) or 64 MB RAM (Windows 2000)
 - 20 MB free hard disk space
 - CD-ROM
 - RS-232 (Dsub 9-pin) port

The new program is a Windows-based diagnostic program designed with the Service Technician in mind. The added tools include:

- Enhanced user interface;
- Ability to view graphed data; and
- Multi-function display.

Follow the User Guide for proper installation and execution of the diagnostic program.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
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OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: April, 2003

No. 2003-01(P)

SUBJECT: Ventilation Rings (V6 Gearcases)

PURPOSE

This bulletin has been prepared to indicate the proper use, selection, and installation of ventilation (weed) rings with small hub diameter propellers (i.e. *Renegade[®] Bass*) on V6 gearcases.

APPLICATION

Use of a small hub propeller on a V6 gearcase **MAY** require a ventilation (weed) ring:

- to stop weeds from being pulled into the propeller hub between the hub and the gearcase; or,
- to control excessive ventilation under hard acceleration in some boat/motor setups.

Under normal conditions, exhaust gases flow over the hub of the propeller, allowing the engine to build up RPM quickly to get the boat on plane. Once the boat is on plane, water rushing past the hub limits ventilation, increasing the propeller blades' grip on the water.

If ventilation is excessive, the propeller loses contact with the water as the engine RPM continues to build, and the boat may not plane off. A ventilation ring controls the flow of exhaust gases over the hub, limiting the amount of ventilation.

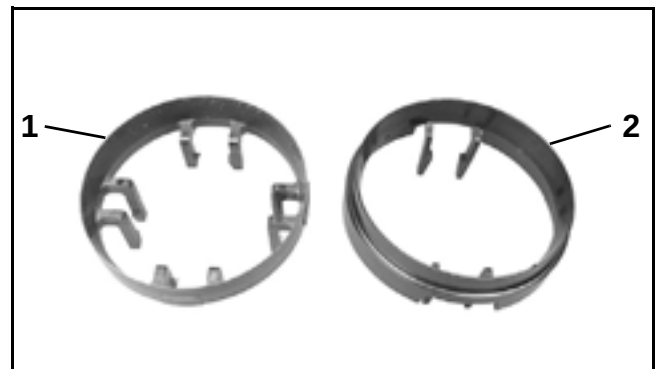
PROCEDURE

To determine if a particular boat/motor setup requires the use of a ventilation ring, run propeller on boat under hard acceleration:

- If the boat planes quickly, the use of a ventilation ring is not necessary.
- If the boat is slow to plane because of excessive propeller ventilation, identify gearcase type, install appropriate ventilation ring, and retest.

RING IDENTIFICATION

Two ventilation (weed) rings are available for use with small hub propellers on V6 gearcases.

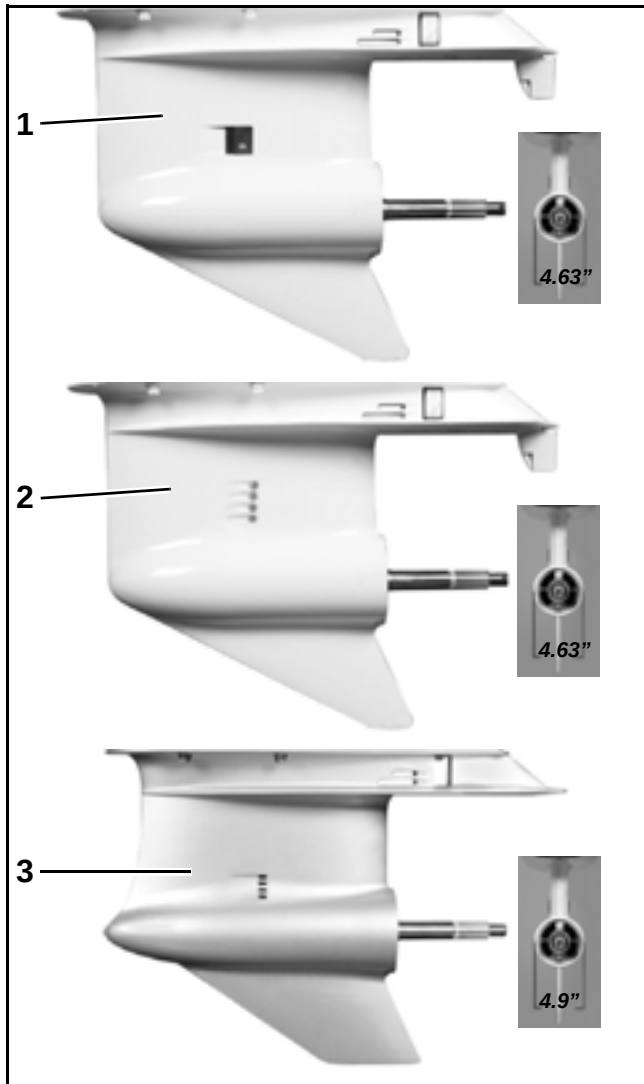


1. Ventilation ring, P/N 126669
2. Ventilation ring, P/N 350626

001292

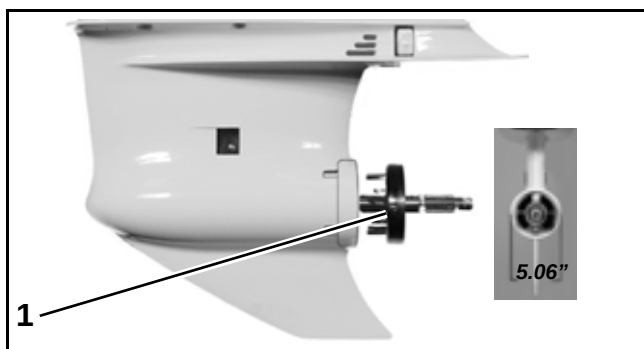
Ventilation Ring Applications	
Gearcase Style	Part Number
"O," "L," "4 Hole"	126669
"M"	350626

Gearcases using P/N 126669 Ring



1. "O"-type gearcase 000889
2. "4 Hole" gearcase 000888
3. "L"-type gearcase 000890
000887

Gearcases using P/N 350626 Ring

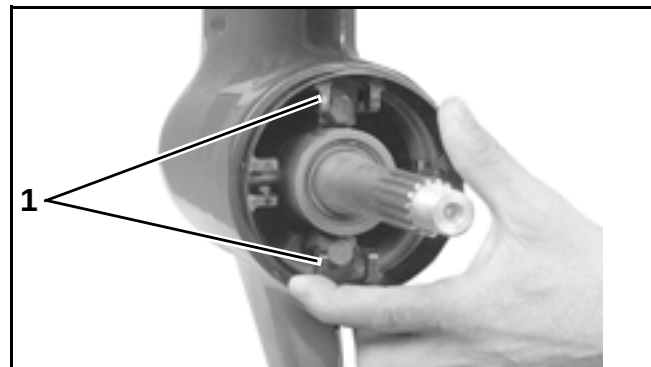


1. Original propeller seal ring P/N 346462 000883B
000887

INSTALLATION

P/N 126669

Snap the notched prongs on the ventilation ring over the ribs of the bearing housing.



Ventilation ring installation

001291

P/N 350626

The "M"-type gearcase includes an installed propeller seal ring. If weeds OR excessive ventilation are a problem with a small hub propeller, the original seal ring must be removed to install the accessory ventilation ring.

Use a pry tool to release the notched prongs of the original propeller seal ring from the bearing housing retaining tabs.

After the original ring is removed, install the ventilation ring by snapping the notched prongs over the bearing housing retaining tabs.

IMPORTANT: For all models, if bearing housing retaining tabs are removed for any reason, retainers, washers, and screws must be properly installed. Apply *Ultra Lock™* to screws and torque to 18 to 20 ft. lbs. (24 to 27 N·m).

Torque propeller nut to 70 to 80 ft. lbs. (95 to 109 N·m).

⚠
WARNING
⚠

When servicing the propeller, always shift the outboard to NEUTRAL, turn the key switch OFF, and disconnect the battery positive (+) cable so the outboard cannot be started accidentally.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐		OUTBOARDS PARTS AND ACCESSORIES Bulletin
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Date: November, 2003

No. 2003-02(P)

MODELS: ALL 2004 MODELS

SUBJECT: Technical Literature

This communication is to inform *Evinrude* and *Johnson* dealers of Bombardier's Technical Literature part numbers for 2004 Model Year outboards.

The table of Technical Literature products below is provided to ensure a complete listing of the data

available through *Evinrude/Johnson* Genuine Parts and Accessories. Use this communication as a reference to complete and update your dealership's technical documents for *Evinrude* and *Johnson* outboards.

OPERATOR'S GUIDES			
Brand	Models	2004 Literature	
Evinrude E-TEC	75, 90	215408 – English 215409 – French	215410 – Spanish 215411 – Portuguese
Evinrude E-TEC	40, 50, 60	215586 – English 215417 – French	215418 – Spanish 215419 – Portuguese
Evinrude E-TEC	40 RL	215582 – English 215583 – French	215584 – Spanish 215585 – Portuguese
Evinrude	100, 115, 135, 150, 175, 200, 225, 250	215564 – English 215473 – French	215474 – Spanish 215475 – Portuguese
Johnson V	90, 115, 150, 175	215519 – English 215520 – French	215521 – Spanish 215522 – Portuguese
Johnson V	105 Commercial	215515 – English 215516 – French	215517 – Spanish 215518 – Portuguese
Johnson	55 Commercial (20")	215464 – English 215465 – French	215466 – Spanish 215467 – Portuguese
Johnson	55 Commercial (22.5")	215574 – English 215575 – French	215576 – Spanish 215577 – Portuguese
Johnson	40, 50 PL	215479 – English 215496 – French	215497 – Spanish 215498 – Portuguese
Johnson	40 R, RL	215478 – English 215493 – French	215494 – Spanish 215495 – Portuguese
Johnson	25, 30 EL	215477 – English 215490 – French	215491 – Spanish 215492 – Portuguese

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OPERATOR'S GUIDES

Brand	Models	2004 Literature	
Johnson	25, 30 R, RL, TE, TEL	215476 – English 215487 – French	215488 – Spanish 215489 – Portuguese
Johnson	25 Commercial	215570 – English 215571 – French	215572 – Spanish 215573 – Portuguese
Johnson	15 Commercial	215566 – English 215567 – French	215568 – Spanish 215569 – Portuguese
Johnson	9.9, 15 R, RL	215483 – English 215484 – French	215485 – Spanish 215486 – Portuguese
Johnson	6, 8 R, RL	215460 – English 215461 – French	215462 – Spanish 215463 – Portuguese
Johnson	3.5	215503 – English 215504 – French	215505 – Spanish 215506 – Portuguese
Johnson 4-Stroke	200, 225	5034758 – English 5034759 – French	5034760 – Spanish 5034761 – Portuguese
Johnson 4-Stroke	90, 115, 140	5034276 – English 5034278 – French	5034279 – Spanish 5034280 – Portuguese
Johnson 4-Stroke	60, 70	5034272 – English 5033273 – French	5034274 – Spanish 5034275 – Portuguese
Johnson 4-Stroke	40, 50	5034268 – English 5034269 – French	5034270 – Spanish 5034271 – Portuguese
Johnson 4-Stroke	25, 30 PL	5034406 – English 5034411 – French	5034412 – Spanish 5034413 – Portuguese
Johnson 4-Stroke	25, 30 TEL	5034405 – English 5034408 – French	5034409 – Spanish 5034410 – Portuguese
Johnson 4-Stroke	9.9, 15 EL	5034407 – English 5034414 – French	5034415 – Spanish 5034416 – Portuguese
Johnson 4-Stroke	9.9, 15 R, RL, TE, TEL	5034264 – English 5034265 – French	5034266 – Spanish 5034267 – Portuguese
Johnson 4-Stroke	8	215511 – English 215512 – French	215513 – Spanish 215514 – Portuguese
Johnson 4-Stroke	6	215507 – English 215508 – French	215509 – Spanish 215510 – Portuguese
Johnson 4-Stroke	4, 5	5034260 – English 5034261 – French	5034262 – Spanish 5034263 – Portuguese

MILITARY LITERATURE

Literature available on CD only. CD includes Part Catalog, Operator's Guide, and Service Manual.

Brand	Models	2004 Literature
Johnson Military	30, 55, 157, 175	5005854

PARTS CATALOGS

Sets

5005687 – 2004 Paper

5005820 – 2004 Microfiche

Brand	Models	2004 Literature
Evinrude	200, 225, 250	5005686
Evinrude	135, 150, 175	5005685
Evinrude	100, 115	5005684
Evinrude E-TEC	75, 90	5005315
Evinrude E-TEC	40, 50, 60	5005316
Johnson	150, 175	5005683
Johnson	90, 115 (Commercial included)	5005682
Johnson	55 Commercial	5005680
Johnson	40, 50 PL	5005678
Johnson	40 R, RL	5005677
Johnson	25, 30 EL	5005676
Johnson	25 TE, TEL	5005675
Johnson	25, 30 R, RL (Commercial included)	5005674
Johnson	9.9, 10, 15 (Commercial included)	5005673
Johnson	6, 8	5005672
Johnson	3.5	5005671
Johnson 4-Stroke	200, 225	5034427
Johnson 4-Stroke	140	5034426
Johnson 4-Stroke	90, 115	5034425
Johnson 4-Stroke	60, 70 PL4	5034424
Johnson 4-Stroke	40, 50 PL4	5034423
Johnson 4-Stroke	25, 30 PL4, TEL4	5034421
Johnson 4-Stroke	9.9, 15 R4, RL4, TE4, TEL4, EL4	5034420
Johnson 4-Stroke	8	5005779
Johnson 4-Stroke	6	5005778
Johnson 4-Stroke	4, 5	5034419

SERVICE MANUALS

Set	Models	2004 Literature
Evinrude 5005773 – English 5005774 – French	Evinrude 60° – 100, 115, 135, 150, 175	5005636 – English 5005637 – French
	Evinrude 90° – 200, 225, 250	5005649 – English 5005650 – French
	Evinrude E-TEC – 75, 90	5005644 – English 5005645 – French
	Evinrude E-TEC – 40, 50, 60	5005642 – English 5005643 – French
Johnson 2-Stroke 5005667 – English 5005668 – French	Johnson V – 90, 105, 115, 150, 175	5005647 – English 5005648 – French
	Johnson – 55 Commercial	5005646 – English 5005728 – French
	Johnson – 40, 50	5005640 – English 5005641 – French
	Johnson – 9.9, 10, 15, 25, 30	5005638 – English 5005639 – French
	Johnson – 3.5, 6, 8	5005634 – English 5005635 – French
Johnson 4-Stroke 5005669 – English 5005670 – French	Johnson 4-Stroke – 200, 225	5005663 – English 5005664 – French
	Johnson 4-Stroke – 90,115,140	5005661 – English 5005662 – French
	Johnson 4-Stroke – 60, 70	5005659 – English 5005660 – French
	Johnson 4-Stroke – 40, 50	5005657 – English 5005658 – French
	Johnson 4-Stroke – 25, 30	5005665 – English 5005666 – French
	Johnson 4-Stroke – 9.9,15	5005655 – English 5005656 – French
	Johnson 4-Stroke – 6, 8	5005653 – English 5005654 – French
	Johnson 4-Stroke – 4, 5	5005651 – English 5005652 – French

ADDITIONAL LITERATURE

P/N 5005263*	Installation & Predelivery – V4 & V6 Models
P/N 5005536*	Installation & Predelivery – 4-Stroke Models
P/N 5005812	Installation & Predelivery – Evinrude E-TEC Models
P/N 5005610	2004 Warranty Procedures and Flat Rate Manual – English
P/N 5005874	2004 Warranty Procedures and Flat Rate Manual – French

* Previously shipped through Essential Service Literature Automatic Shipment Program.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: October, 2003

No. 2003-03(P)

MODELS: ALL MODELS

SUBJECT: New *Evinrude/Johnson* Outboard Oils

This communication is to assist *Evinrude* and *Johnson* dealers with the identification of the new “family” of *Evinrude/Johnson* 2-stroke oils for outboards. The complete line-up of new 2-stroke oils are available through *Evinrude/Johnson* Genuine Parts and Accessories.

Evinrude/Johnson Genuine Parts has introduced three new oil formulations for 2-stroke outboard oils. The new formulations have new names:

- *Evinrude/Johnson XD30™*
- *Evinrude/Johnson XD50™*
- *Evinrude/Johnson XD100™*

The new formulas replace current formulations and offer improved lubricity and increased protection against wear.

Become familiar with the new line of 2-stroke outboard oils. Refer to the table and descriptions provided below.

<i>Evinrude/Johnson XD30</i> • Good	<i>Evinrude/Johnson XD50</i> • Better	<i>Evinrude/Johnson XD100</i> • Best
Color accent – Red	Color accent – Blue	Color accent – Gold
Blend – Performance enhanced	Blend – Synthetic blend	Blend – Premium synthetic
Features and Benefits • Pre-mix and oil injection outboard oil • Minimizes carbon and deposit build-up • Protects against wear with premium lubricity	Features and Benefits • Direct Injection and oil injection outboard oil • Reduces smoke for cleaner operation • Contains <i>CarbX™</i> for carbon suspension • Protects against wear with superior lubricity	Features and Benefits • <i>Evinrude E-TEC</i> and Direct Injection outboard oil • Smokeless, ashless, odorless • Provides unsurpassed protection for 2-stroke outboards • Offers maximum detergency, reducing combustion deposits • Protects against friction and wear with ultimate lubricity • Produces superior protection in temperatures below 32°
(Formerly <i>Evinrude/Johnson</i> 2-stroke outboard oil)	(Formerly <i>Evinrude Ficht Ram</i> Injection oil)	New formulation

IMPORTANT: When used in *Evinrude E-TEC* outboards, use of *XD100* oil can provide added protection and reduce operating cost by programming the *EMM* to significantly reduce normal oil consumption, compared to using a conventional oil. Refer to the *Evinrude E-TEC* service manuals, P/Ns 5005642 and 5005644 for information to reprogram *Evinrude E-TEC EMMs* for *XD100* oil usage. Only an authorized *Evinrude E-TEC* dealer can program the *EMM* for this benefit.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
Johnson®



OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: April, 2004

No. 2004-01(P)

MODELS: ALL MODELS

SUBJECT: Large Motor Display Stand,
P/N 775368

Dear *Evinrude®/Johnson®* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of the weight limitations of the Large Motor Display Stand, P/N 775368.



Motor Display Stand

003926

This stand was designed for 40 HP through V6 model outboards built by Bombardier Motor Corporation of America **ONLY**. It is not intended for outboards heavier than V6 2-Stroke models.

IMPORTANT: The Large Motor Display Stand, P/N 775368, will **not** support the *Johnson* 200/225 HP V6 4-Stroke model outboards.



WARNING



Do not overload a motor display stand. Overloading a display stand could allow the outboard to drop, causing personal injury or property damage.



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: September, 2004

No. 2004-02(P)

MODELS: ALL Evinrude® E-TEC™

SUBJECT: Helmsman Gauge Series

Dear Evinrude®/Johnson® Dealers:

This communication is to inform Evinrude and Johnson dealers that the Helmsman gauge series is **NOT compatible** with Evinrude E-TEC outboards.

PROBLEM

Different communication transfer (baud) rates between the Helmsman Gateway and the Evinrude E-TEC diagnostics connector cause improper engine function.

SOLUTION

Use the SystemCheck™ Commander series of instruments when fuel management and water depth displays are required on Evinrude E-TEC outboards. Installation and functionality of the fuel flow transducer and the depth transducer is identical.



Please route to:

☐ Service ☐ Init.
☐ Sales ☐
☐ Parts ☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

P

PARTS AND ACCESSORIES
Bulletin

Date: February, 2005

No. 2005-01(P)

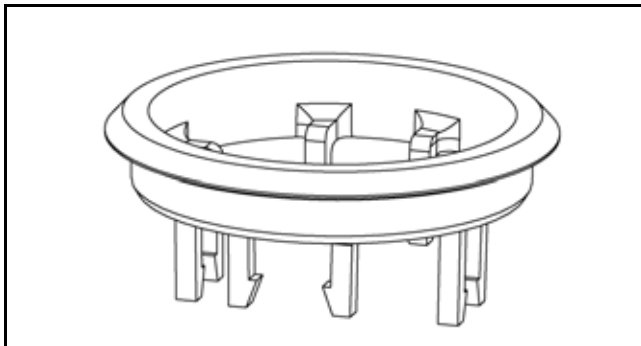
SUBJECT: *HYDRUS*[™] Propeller Exhaust Ring,
P/N 5006512

PURPOSE

This bulletin has been prepared to indicate the use and installation of the *HYDRUS* propeller's exhaust ring.

APPLICATION

The use of this exhaust ring improves performance and should be installed on gearcases fitted with *HYDRUS* propellers, P/N's 177201, 177202, 177203.



Exhaust Ring, P/N 5006512

004846

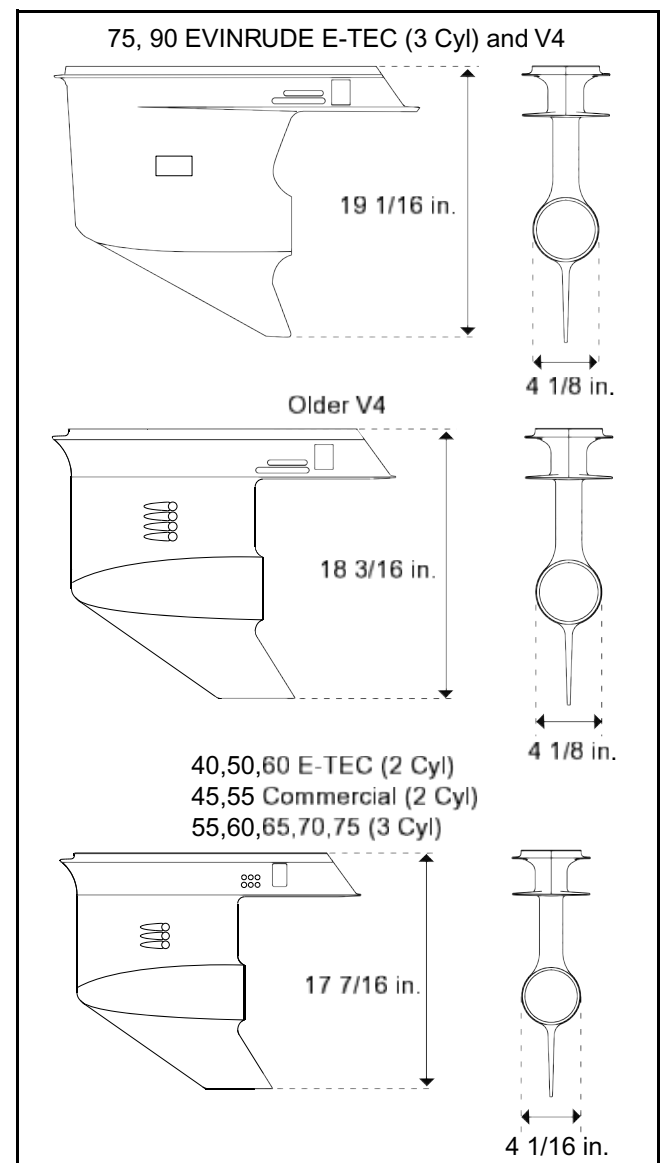
IMPORTANT: Refer to application chart in *Evinrude/Johnson Genuine Parts and Accessories Catalog* for available sizes and use of *HYDRUS* propellers. *HYDRUS* propellers are not available for V6 type gearcases.



HYDRUS propeller

004847

Gearcases using *HYDRUS* Propeller Exhaust Ring, P/N 5006512



INSTALLATION



WARNING



When servicing the propeller, always shift the outboard to **NEUTRAL**, turn the key switch **OFF**, and twist and remove all spark plug leads so the engine cannot be started accidentally.

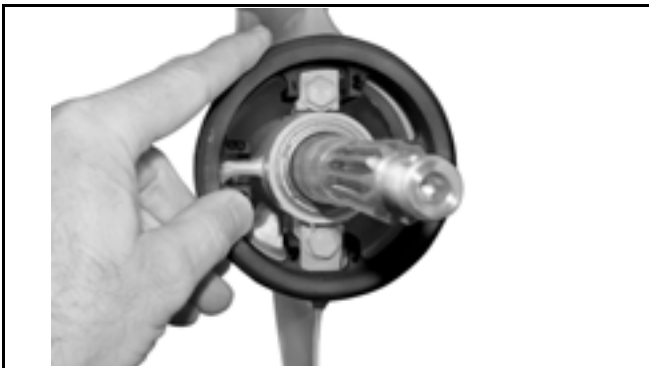
Exhaust Ring

Snap the notched prongs on the exhaust ring over the ribs of the bearing housing. Push ring to seat against gearcase housing.



40-60 HP Evinrude E-TEC, 40-55 HP COMM and older 3-cylinder gearcase

004843



75/90 HP Evinrude E-TEC and V4 gearcase

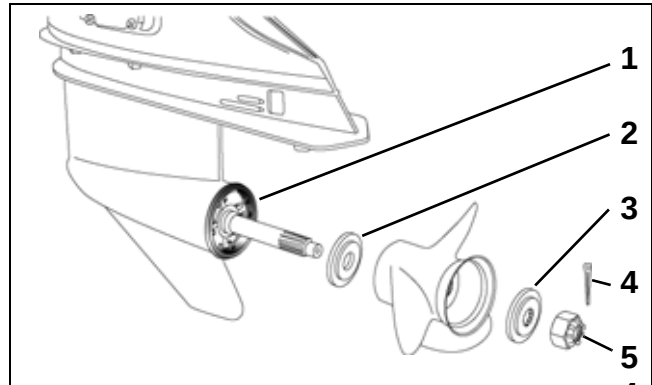
004844

IMPORTANT: For 75-90 HP Evinrude® E-TEC™ (3-cyl) and V4 models, if bearing housing retaining tabs are removed for any reason, retainers, washers, and screws must be properly installed. Apply *Ultra Lock™* to screws and torque to 18 to 20 ft. lbs. (24 to 27 N·m).

Propeller Hardware

Apply *Triple-Guard®* grease to the entire propeller shaft before installing the propeller. Install thrust bushing onto propeller shaft with shoulder of thrust bushing facing aft. Taper of bushing must match taper of propshaft.

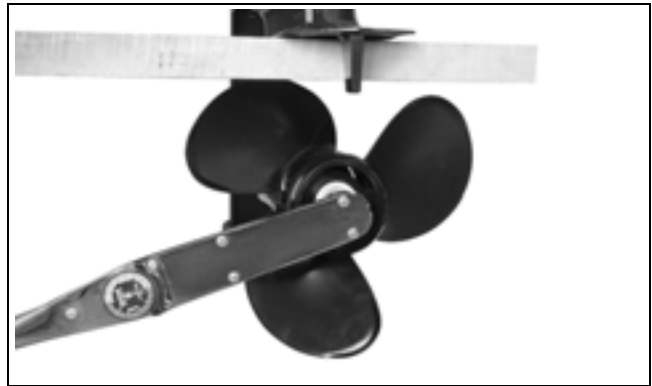
Install propeller on propeller shaft by aligning splines and pushing until seated on the thrust bushing. Install the spacer, engaging the propeller shaft splines.



1. Exhaust ring
1. Thrust bushing
2. Spacer
3. Cotter pin
4. Propeller nut

004845

Wedge a block of wood between propeller blade and the anti-ventilation plate.



004864

Install the propeller nut and torque to 120 to 144 in. lbs. (13.6 to 16.3 N·m). If cotter pin holes in the propeller nut and propeller shaft are not aligned, tighten the nut until they are in line. Do not loosen.

Insert a new cotter pin through the propeller nut and shaft. Bend ends over the nut to secure the assembly.

IMPORTANT: After fastening propeller nut, make sure outboard is in **NEUTRAL** and carefully spin propeller. Propeller must turn freely and should not spin off center. If propeller appears to wobble, check for possible bent propeller shaft.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: February, 2005

No. 2005-02(P)

SUBJECT: *E-ssentials*™ Training CD-ROM

PROBLEM

PCs running Windows[†] XP with Service Pack 2 will stall the *E-ssentials* Training program at the practice quiz question in Module One of the training program.

SOLUTION

There is a patch download available for *E-ssentials* training CD users running Windows XP operating system with Service Pack 2.

To check the version of your operating system:

- Right-click **My Computer**
- Click **Properties** from the dropdown
- Under the **General** tab, look for "System:"

Download Patch

The Windows XP SP2 Update patch is now available on the *DealerPort* website.

Log on *DealerPort*. Click **Training** on main page.



(The Windows XP SP2 Update can also be found in the Downloads section of DealerPort.)

Download the file **EssentialsXPSP2.exe** by clicking it.

Save the patch to your desktop.

Install the update by double-clicking the saved file and following the onscreen instructions.

PROBLEM

The e-mail address for test score results is incorrect in some *E-ssentials* training booklets and software.

SOLUTION

Test score results must be mailed to the current Bombardier Recreational Products Training e-mail address.

The correct address is:

training.results@brp.com

Updated workbooks have the correct address.

Older training booklets refer readers to an outdated "@recreation.bombardier.com" address.

NEW E-SENTIALS PART NUMBER

There is a new part number for the *E-ssentials* Training Kit.

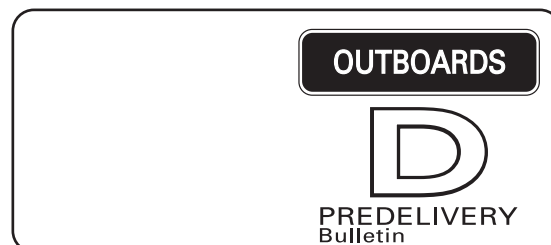
This new part number, P/N 5006494, is for the *E-ssentials* CD-ROM set and includes two updated workbooks. Future orders will supercede to this new part number.

The new version of the *E-ssentials* Training CD-ROM **does not** require the patch download.



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: March, 2002

No. 2002-01(D)

MODELS: 2002 *Evinrude* outboards below serial number 4988136

SUBJECT: Initial Installation and Start-Up

PROBLEM

On initial start-up, after the outboard has been installed for the first time, the outboard will crank, but may be hard to start-up or may not start-up at all. This hard start-up or no start-up condition may be caused by an air-lock in the fuel system.

IMPORTANT: The starter motor can be damaged if operated continuously for more than 10 seconds.

SOLUTION

Purging the air from the fuel system will correct an air-locked condition and improve the initial start-up. Once the outboard has been started for the first time, it will not need additional purging.

To purge the air from the fuel system, attach the bleeder valve of fuel pressure gauge P/N 772959 to the fuel rail's schrader valve. Position the bleeder valve hose in an approved gasoline container.

With the pressure gauge valve open, prime the fuel system by squeezing the primer bulb.

⚠
WARNING
⚠

Do NOT use the ignition key to cycle the electric fuel pump during this process. Doing so could result in fire or explosion.

When solid fuel appears, the fuel system is primed. Disconnect the bleeder valve from the outboard, check fuel system for leaks, then reinstall schrader valve cap.

⚠
WARNING
⚠

Gasoline is extremely flammable and highly explosive under certain conditions. Improper handling of fuel could result in property damage, serious injury or death.

Always use approved gasoline containers when transferring or draining fuel from the outboard's fuel system.

Failure to check for leakage could allow a leak to go undetected, resulting in fire or explosion.

Always wipe off any fuel spillage.

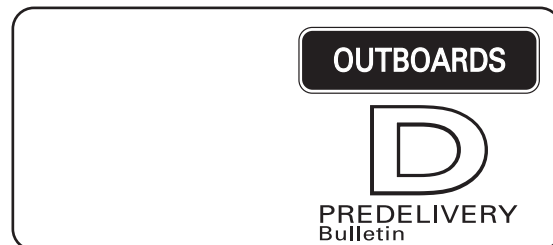
Do not smoke, or allow open flames, or sparks or use electrical devices such as cellular phones in the vicinity of open fuel.

Always work in a well ventilated area.

Before starting any fuel system service, refer to General Safety Warnings in the Fuel System section of the appropriate product service manual.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: June, 2002

No. 2002-02(D)

MODELS: ALL MODELS

SUBJECT: Predelivery Checklist Reminder

Dear *Evinrude/Johnson* Dealers:

This communication is to remind each *Evinrude* and *Johnson* dealer of the new *Evinrude/Johnson* **Predelivery Checklist**. *Bombardier's* introduction of the Predelivery Checklist is another example of our continuing effort to make certain our benchmarks of quality and reliability are passed on to the customer.

The Predelivery Checklist is a dealer tool to ensure a complete inspection of *Evinrude* and *Johnson* outboards prior to customer delivery. **It is the responsibility of the *Evinrude/Johnson* dealer to perform a complete predelivery inspection.**

Bombardier is committed to providing customers complete satisfaction with our products. **It is essential the Predelivery Checklist is signed by the Owner with a copy provided to him or her.**

The Predelivery Checklist includes key inspection topics such as:

- Parts installation
- Lubricants and fluids
- Adjustments and procedures
- Fuel system pressurization
- Final inspection

When delivering outboards to the Owner, dealers must confirm the Owner received the Operator's Guide. A receipt is provided in the back of the Operator's Guide and is to be signed by the Owner.

Dealers should keep the receipt in their files along with the completed and signed copy of the Predelivery Checklist.

A copy of the "Motor Tester Tag" shipped with the outboard should always be kept on file with the dealer invoice records. Outboards not built at the Sturtevant, WI facility may not have a "Motor Tester Tag".



Motor Tester Tag

Periodically, a *Bombardier* representative may ask to see your files to confirm your dealership's use of the Predelivery Checklist, as part of a component of *Bombardier's* ongoing dealership evaluation process.

The Predelivery Checklist is available on *Dealer-Port* at **www.dealerport.com**.

PREDELIVERY CHECKLIST – 2-STROKE

Outboard 1

MODEL NUMBER									

SERIAL NUMBER									



Outboard 2

MODEL NUMBER									

SERIAL NUMBER									

IMPORTANT: This Checklist must be used in conjunction with the applicable Predelivery Bulletin, Service Manual, or Installation and Predelivery Guide.

Every *Evinrude/Johnson* Dealer has a responsibility to perform a complete predelivery inspection on all *Evinrude* and *Johnson* outboards. If an *Evinrude* or *Johnson* outboard was pre-rigged by the boat builder, a complete predelivery inspection is still required. Refer to Installation and Predelivery Guide for detailed instructions. Dealer predelivery programs should include additional processes related to boat accessories and trailers.

NOTE: File this document in the outboard file. Give a copy to the owner.

	OB 1	OB 2
PARTS INSTALLATION	✓	✓
Stern bracket mounting hardware and height		
Steering system and connectors		
Remote control with start-in-gear prevention		
Throttle and shift cables		
Fuel hoses, primers, and clamps		
Oil tank(s), oil hose(s), and clamps		
Instrument harness(es) and key switch(es)		
Emergency stop switch and safety lanyard		
System Check® gauge(s)		
Heavy-duty marine battery terminals		
Propeller(s)		
Battery(s) – NO wing nuts		
Battery switch(es) (optional)		
Accessory gauges (optional)		
Remote oil fill kit(s) (optional)		
Water-separating fuel filter(s) (optional)		
Accessory battery charge wiring (optional)		
LUBRICANTS AND FLUIDS	✓	✓
Fill oil tank with outboard lubricant		
Power trim and tilt fluid level		
Gearcase lubricant level		
Steering system grease or fluid level		
Fuel		
ADJUSTMENTS AND PROCEDURES	✓	✓
Throttle and shift cable		
Tilt limit switch and outboard clearances		
Trailer bracket, inspect ground clearance		
Oil system purged of air and primed		
Fuel system primed		
Check idle speed		

	OB 1	OB 2
FUEL SYSTEM PRESSURIZATION	✓	✓
Inspect for fuel leaks (outboard running)		
FINAL INSPECTION		
<i>Operation, movement, and appearance</i>	✓	✓
System Check operation, self-test		
Safety lanyard and key switch		
Remote control		
Water pump overboard indicator		
All gauges (tachometer, fuel, etc.)		
Accessories (switches, primers, etc.)		
Water test for propeller selection and WOT		
Steering system		
Trailer bracket and ground clearance		
Clean thoroughly and wash		
AT SALE, EXPLAIN TO OWNER	✓	✓
The Operator's Guide and Limited Warranty		
AT DELIVERY	✓	✓
Complete ELECTRONIC warranty registration		
Obtain Operator's Guide receipt confirmation		
"Motor Tester Tag" filed with dealer records		

Inspected by: _____

Dealer name: _____

Dealer number: _____

_____ Date

_____ Dealer Signature

The Dealer named in this document has instructed me on the operation, maintenance, safety features, and warranty policy for my outboard, all of which I understand. I am also satisfied with the pre-delivery set-up and inspection of my outboard. I have also received a copy of the Operator's Guide for my outboard. I understand that I should take a safe boating course and will instruct users of my outboard on proper and safe use.

_____ Date

_____ Owner Signature

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐		OUTBOARDS PREDELIVERY Bulletin
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Date: November, 2003

No. 2003-01(D)

MODELS: ALL Evinrude® E-TEC™ Outboards

SUBJECT: Evinrude E-TEC Predelivery

Dear Evinrude/Johnson Dealers:

This communication is to remind each Evinrude and Johnson dealer of the **Evinrude E-TEC Predelivery Checklist**. This Predelivery Checklist contains new procedures and techniques **specific to Evinrude E-TEC outboards only**. It is another example of our continuing effort to make certain our benchmarks of quality and reliability are passed on to the customer.

The Predelivery Checklist is a dealer tool to ensure a complete inspection of Evinrude E-TEC outboards prior to customer delivery. **It is the responsibility of the Dealer to perform a complete predelivery inspection.**

Bombardier is committed to providing its customers complete satisfaction with our Evinrude E-TEC outboards.

It is essential the Predelivery Checklist is signed by the Owner with a copy provided to him or her.

A copy of the "Motor Tester Tag" shipped with the outboard should always be kept on file with the dealer invoice records.



Motor Tester Tag

When delivering outboards to the Owner, dealers must confirm the Owner received the Operator's Guide. A receipt is provided in the back of the Operator's Guide and is to be signed by the Owner. Dealers should keep the receipt in their files along with the completed and signed copy of the Predelivery Checklist.

Periodically, a Bombardier representative may ask to see your files to confirm your dealership's use of the appropriate Predelivery Checklist, as a component of our ongoing dealership evaluation process.

All of the predelivery checklists are available on the DealerPort™ website at www.dealerport.com.

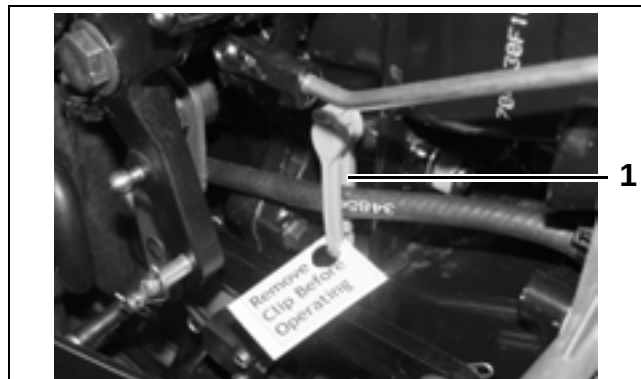
Included with this bulletin is a copy of each of the three Predelivery Checklists:

- Evinrude/Johnson 2-Stroke & Direct Injection
- Johnson 4-Stroke
- Evinrude E-TEC

Vent Line Clamp

In compliance with Federal regulations (49 CFR §173.220), all outboards utilizing a fuel vapor separator must be shipped with a vent line clamp installed. Expect to find this clamp installed on the fuel vapor separator vent hose of all Evinrude Direct Injection and E-TEC outboards and Johnson 60° 90-175 HP carbureted outboards. This clamp **must** be removed **prior** to attempting to prime the fuel system or start the outboard for the first time.

IMPORTANT: Failure to remove the clamp may cause fuel starvation issues and undesirable running qualities.



1. Vent line clamp

002552

PREDELIVERY CHECKLIST – *EVINRUDE® E-TEC™*

Outboard 1

MODEL NUMBER									

SERIAL NUMBER									



Outboard 2

MODEL NUMBER									

SERIAL NUMBER									

IMPORTANT: This Checklist must be used in conjunction with the *Evinrude E-TEC* Installation and Predelivery Guide.

Every *Evinrude/Johnson* Dealer has a responsibility to perform a complete predelivery inspection on all *Evinrude* and *Johnson* outboards. If an *Evinrude* or *Johnson* outboard was pre-rigged by the boat builder, a complete predelivery inspection is still required. Refer to the *Evinrude E-TEC* Installation and Predelivery Guide for detailed instructions. Dealer predelivery programs should include additional processes related to boat accessories and trailers.

NOTE: File this document in the outboard file. Give a copy to the owner.

	OB 1	OB 2
PARTS INSTALLATION	✓	✓
Stern bracket mounting hardware and height		
Steering system and connectors		
Remote control with start-in-gear prevention		
Throttle and shift cables		
Fuel hoses and clamps		
Instrument harness(es) and key switch(es)		
Emergency stop switch and safety lanyard		
System Check® gauge(s)		
Heavy-duty marine battery terminals		
Propeller(s)		
Battery(s) – NO wing nuts		
Battery switch(es) (optional)		
Accessory gauges (optional)		
Water-separating fuel filter(s) (optional)		
LUBRICANTS AND FLUIDS	✓	✓
Fill oil tank with outboard lubricant		
Power trim and tilt fluid level		
Gearcase lubricant level		
Steering system grease or fluid level		
Fuel		
ADJUSTMENTS AND PROCEDURES	✓	✓
Throttle and shift cable		
Tilt limit switch and outboard clearances		
Trailing bracket, inspect ground clearance		
Oil system purged of air and primed		
Fuel system primed		

	OB 1	OB 2
FUEL SYSTEM PRESSURIZATION	✓	✓
Inspect for fuel leaks (outboard running)		
FINAL INSPECTION		
<i>Operation, movement, and appearance</i>	✓	✓
System Check operation, self-test		
Safety lanyard and key switch		
Remote control		
Water pump overboard indicator		
All gauges (tachometer, fuel, etc.)		
Accessories (switches, primers, etc.)		
Water test for propeller selection		
Steering system		
Trailing bracket and ground clearance		
Clean thoroughly and wash		
AT SALE, EXPLAIN TO OWNER	✓	✓
The Operator's Guide and Limited Warranty		
AT DELIVERY	✓	✓
Complete ELECTRONIC warranty registration		
Obtain Operator's Guide receipt confirmation		
"Motor Tester Tag" filed with dealer records		

Inspected by: _____

Dealer name: _____

Dealer number: _____

Date

Dealer Signature

The Dealer named in this document has instructed me on the operation, maintenance, safety features, and warranty policy for my outboard, all of which I understand. I am also satisfied with the pre-delivery set-up and inspection of my outboard. I have also received a copy of the Operator's Guide for my outboard. I understand that I should take a safe boating course and will instruct users of my outboard on proper and safe use.

Date

Owner Signature

PREDELIVERY CHECKLIST – 2-STROKE

Outboard 1

MODEL NUMBER									

SERIAL NUMBER									

**EVINRUDE®
Johnson®**



Outboard 2

MODEL NUMBER									

SERIAL NUMBER									

IMPORTANT: This Checklist must be used in conjunction with the applicable Predelivery Bulletin, Service Manual, or Installation and Predelivery Guide.

Every *Evinrude/Johnson* Dealer has a responsibility to perform a complete predelivery inspection on all *Evinrude* and *Johnson* outboards. If an *Evinrude* or *Johnson* outboard was pre-rigged by the boat builder, a complete predelivery inspection is still required. Refer to Installation and Predelivery Guide for detailed instructions. Dealer predelivery programs should include additional processes related to boat accessories and trailers.

NOTE: File this document in the outboard file. Give a copy to the owner.

	OB 1	OB 2
PARTS INSTALLATION	✓	✓
Stern bracket mounting hardware and height		
Steering system and connectors		
Remote control with start-in-gear prevention		
Throttle and shift cables		
Fuel hoses, primers, and clamps		
Oil tank(s), oil hose(s), and clamps		
Instrument harness(es) and key switch(es)		
Emergency stop switch and safety lanyard		
System Check® gauge(s)		
Heavy-duty marine battery terminals		
Propeller(s)		
Battery(s) – NO wing nuts		
Battery switch(es) (optional)		
Accessory gauges (optional)		
Remote oil fill kit(s) (optional)		
Water-separating fuel filter(s) (optional)		
Accessory battery charge wiring (optional)		
LUBRICANTS AND FLUIDS	✓	✓
Fill oil tank with outboard lubricant		
Power trim and tilt fluid level		
Gearcase lubricant level		
Steering system grease or fluid level		
Fuel		
ADJUSTMENTS AND PROCEDURES	✓	✓
Throttle and shift cable		
Tilt limit switch and outboard clearances		
Trailing bracket, inspect ground clearance		
Oil system purged of air and primed		
Fuel system primed		
Check idle speed		

	OB 1	OB 2
FUEL SYSTEM PRESSURIZATION	✓	✓
Inspect for fuel leaks (outboard running)		
FINAL INSPECTION		
<i>Operation, movement, and appearance</i>	✓	✓
System Check operation, self-test		
Safety lanyard and key switch		
Remote control		
Water pump overboard indicator		
All gauges (tachometer, fuel, etc.)		
Accessories (switches, primers, etc.)		
Water test for propeller selection and WOT		
Steering system		
Trailing bracket and ground clearance		
Clean thoroughly and wash		
AT SALE, EXPLAIN TO OWNER	✓	✓
The Operator's Guide and Limited Warranty		
AT DELIVERY	✓	✓
Complete ELECTRONIC warranty registration		
Obtain Operator's Guide receipt confirmation		
"Motor Tester Tag" filed with dealer records		

Inspected by: _____

Dealer name: _____

Dealer number: _____

_____ Date

_____ Dealer Signature

The Dealer named in this document has instructed me on the operation, maintenance, safety features, and warranty policy for my outboard, all of which I understand. I am also satisfied with the pre-delivery set-up and inspection of my outboard. I have also received a copy of the Operator's Guide for my outboard. I understand that I should take a safe boating course and will instruct users of my outboard on proper and safe use.

_____ Date

_____ Owner Signature

PREDELIVERY CHECKLIST – 4-STROKE

Outboard 1

MODEL NUMBER									

SERIAL NUMBER									



Outboard 2

MODEL NUMBER									

SERIAL NUMBER									

IMPORTANT: This Checklist must be used in conjunction with the applicable Predelivery Bulletin, Service Manual, or Installation and Predelivery Guide.

Every *Johnson* 4-Stroke Dealer has a responsibility to perform a complete predelivery inspection on all *Johnson* 4-Stroke outboards. If a *Johnson* 4-Stroke outboard was pre-rigged by the boat builder, a complete predelivery inspection is still required. Refer to Installation and Predelivery Guide for detailed instructions. Dealer predelivery programs should include additional processes related to boat accessories and trailers.

NOTE: File this document in the outboard file. Give a copy to the owner.

	OB 1	OB 2
PARTS INSTALLATION	✓	✓
Stern bracket mounting hardware and height		
Steering system and connectors		
Remote control with start-in-gear prevention		
Throttle and shift cables		
Fuel hoses, primers, and clamps		
Instrument harness(es) and key switch(es)		
Emergency stop switch and safety lanyard		
System Check® gauge(s)		
Heavy-duty marine battery terminals		
Propeller(s)		
Battery(s) – NO wing nuts		
Battery switch(es) (optional)		
Accessory gauges (optional)		
Water-separating fuel filter(s) (optional)		
Accessory battery charge wiring (optional)		
LUBRICANTS AND FLUIDS	✓	✓
Check engine crankcase lubricant level		
Power trim and tilt fluid level		
Gearcase lubricant level		
Steering system grease or fluid level		
Fuel		
ADJUSTMENTS AND PROCEDURES	✓	✓
Throttle and shift cable		
Tilt limit switch and outboard clearances		
Trailing bracket, inspect ground clearance		
Fuel system primed		
Check idle speed		

	OB 1	OB 2
FUEL SYSTEM PRESSURIZATION	✓	✓
Inspect for fuel leaks (outboard running)		
FINAL INSPECTION		
<i>Operation, movement, and appearance</i>	✓	✓
System Check operation, self-test		
Safety lanyard and key switch		
Remote control		
Water pump overboard indicator		
All gauges (tachometer, fuel, etc.)		
Accessories (switches, primers, etc.)		
Water test for propeller selection and WOT		
Steering system		
Trailing bracket and ground clearance		
Clean thoroughly and wash		
AT SALE, EXPLAIN TO OWNER	✓	✓
The Operator's Guide and Limited Warranty		
AT DELIVERY	✓	✓
Complete ELECTRONIC warranty registration		
Obtain Operator's Guide receipt confirmation		
"Motor Tester Tag" filed with dealer records		

Inspected by: _____

Dealer name: _____

Dealer number: _____

Date

Dealer Signature

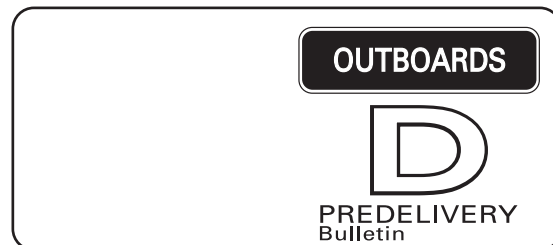
The Dealer named in this document has instructed me on the operation, maintenance, safety features, and warranty policy for my outboard, all of which I understand. I am also satisfied with the pre-delivery set-up and inspection of my outboard. I have also received a copy of the Operator's Guide for my outboard. I understand that I should take a safe boating course and will instruct users of my outboard on proper and safe use.

Date

Owner Signature

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: April, 2004

No. 2004-01(D)

MODELS: All Models

SUBJECT: Key Predelivery Safety Checks

Dear Evinrude/Johnson Dealers:

This communication is to remind each Evinrude and Johnson dealer of routine—yet important—key predelivery safety checks.



Key information appears in gray boxes with a key above the text. This highlighted information is a vital reference when conducting predelivery checks.

When used with the Predelivery Checklists and Service Manuals, the steps outlined here ensure a safe rigging for the customer. Complete installation and predelivery procedures for all models are outlined in the new Installation and Predelivery Manual, P/N 5006079.

Please take the time to review these necessary checks. **It is the responsibility of the Dealer to perform a complete predelivery inspection.**

All of the predelivery checklists are available on the DealerPort® website at www.dealerport.com.



WARNING



DO NOT run outboard without a water supply to the outboard's cooling system. Cooling system and/or powerhead damage could occur.



DANGER



DO NOT run the engine indoors or without adequate ventilation or permit exhaust fumes to accumulate in confined areas. Engine exhaust contains carbon monoxide which, if inhaled, can cause serious brain damage or death.



DANGER



Contact with a rotating propeller is likely to result in serious injury or death. Assure the engine and prop area is clear of people and objects before starting engine or operating boat. Do not allow anyone near a propeller, even when the engine is off. Blades can be sharp and the propeller can continue to turn even after the engine is off.

Start-In-Gear Prevention



Make certain the starter will not operate when the outboard is in gear. The start-in-gear prevention feature is required by the United States Coast Guard to help prevent personal injuries.

Follow these steps to confirm start-in-gear prevention is working:

- 1) Start outboard and shift remote control lever to FORWARD.
- 2) Turn outboard OFF while remote control is in FORWARD.
- 3) Attempt restarting the outboard. **Outboard should not start.**
- 4) Pull remote control lever back to NEUTRAL and restart outboard.
- 5) Shift remote control lever to REVERSE. Turn outboard OFF while remote control is in REVERSE.
- 6) Attempt restarting the outboard. **Outboard should not start.**



System Check Operation

Attach emergency stop lanyard.

Turn key switch to ON.



Observe the *System Check* self-test function. The warning horn should sound momentarily and all warning indicator lights should turn on simultaneously, then turn off one at a time.

Fuel System

Perform running checks of the fuel system by following these steps:

- Squeeze fuel primer bulb until hard or activate electric primer. Observe all fuel hoses and connections. Repair any leaks.
- Start outboard. Visually inspect all oil hoses and connections and fuel hoses and connections. Repair any leaks or misrouted hoses immediately.

Emergency Stop / Key Switch

Check emergency stop function.



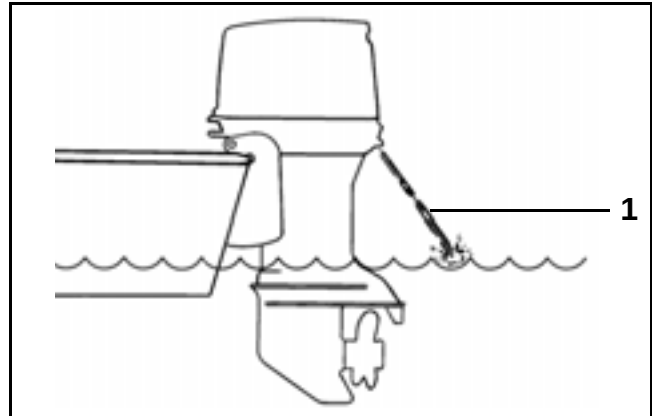
With outboard running at IDLE, pull safety lanyard from emergency stop switch. **Outboard must stop immediately.**

Remote Control Operation

Confirm that control can be easily moved into all gear and throttle settings. Do not shift remote control when outboard is not running.

Water Pump Overboard Indicator

A steady stream of water should flow from the overboard indicator.



1. Water pump overboard indicator

DRC4952

Adjust the indicator angle by loosening and rotating the fitting. Re-tighten securely after adjusting.

IMPORTANT: Do not operate outboard with indicator removed (unless hose is attached to port for flushing). Operating the outboard without the overboard indicator fitting in place causes overheating and powerhead damage.

Vent Line Clamp

All outboards utilizing a fuel vapor separator must be shipped with a vent line clamp installed.



This clamp **must** be removed **prior** to attempting to prime the fuel system or start the outboard for the first time.

IMPORTANT: Failure to remove the clamp may cause fuel starvation issues and undesirable running qualities.

Please route to: ☐ Service ☐ Sales ☐ Parts Init. ☐ ☐ ☐		OUTBOARDS PREDELIVERY Bulletin
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Date: October, 2004

No. 2004-02(D)

MODELS: Evinrude E-TEC 200–250 HP

SUBJECT: Oil System Priming

PROBLEM

Air may become trapped in the oiling system during initial set-up.

SOLUTION

Use the following procedure to purge all air from the oiling system.

PROCEDURE

⚠
WARNING
⚠

DO NOT run outboard without a water supply to the outboard's cooling system. Cooling system and/or powerhead damage could occur. Always use caution while working around machinery with moving parts. The following set-up procedures require running tests that are performed with the outboard's motor cover removed.

⚠
DANGER
⚠

DO NOT run the engine indoors or without adequate ventilation or permit exhaust fumes to accumulate in confined areas. Engine exhaust contains carbon monoxide which, if inhaled, can cause serious brain damage or death. Contact with a rotating propeller is likely to result in serious injury or death. Assure the engine and prop area is clear of people and objects before starting engine or operating boat. Remove propeller before servicing and when running the outboard on a flushing device.

Insert the end of the oil supply hose (from the oil tank) into a suitable container.

Squeeze the oil primer bulb to flow oil from the oil tank.

Once oil flow is observed, connect the oil tank hose to the outboard's oil supply hose and secure with 14.5 mm *Oetiker*[†] clamp.

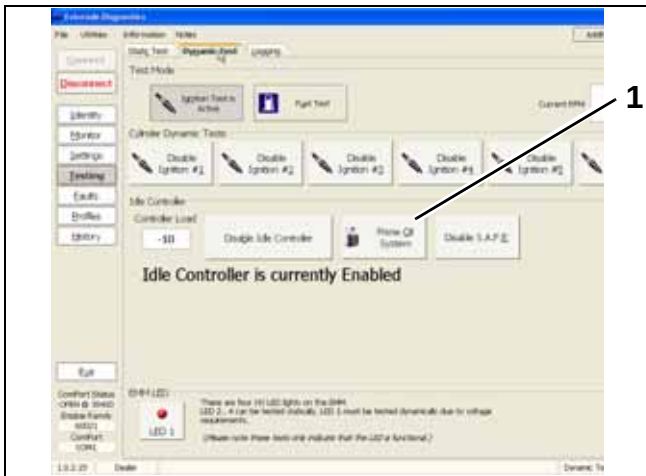
Oil Distribution Manifold Priming

Follow these steps for initial outboard set-up:

- Tilt outboard completely and turn to starboard.
- Squeeze the oil primer bulb to flow oil from the hose connection, through the filter, to the oil pump.
- Visually inspect filter to ensure that all air has been purged.
- Continue squeezing the primer until oil flows through the distribution manifold into the oil distribution hoses and to the crankcase fittings. All air must be eliminated from oil lines.
- Use the *Evinrude* Diagnostics Software program to confirm that the *EMM* is programmed for the type of oil being used.
- Start the outboard and use the oil priming function in the software for a minimum of 90 seconds to make sure the system is completely primed.

(continued on next page)



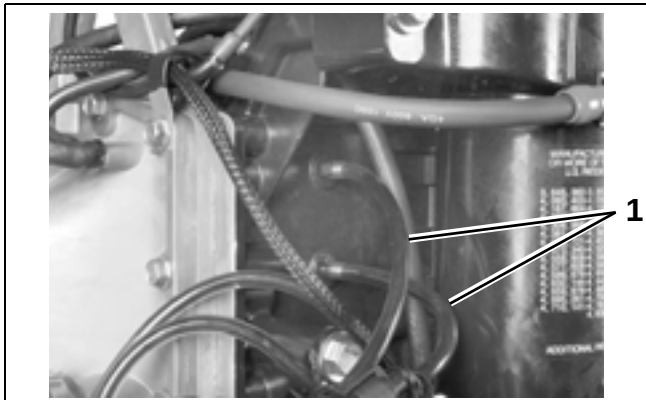


Dynamic Tests Screen

1. Prime Oil button

004210

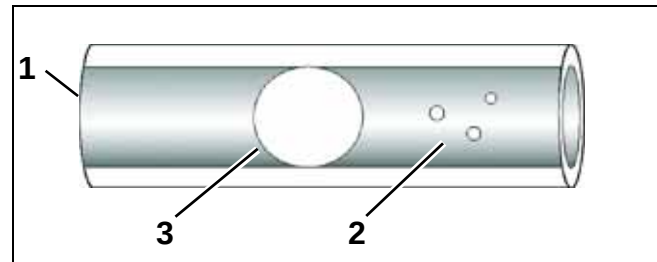
Observe the oil flow through the oil distribution hoses.



1. Oil distribution hoses (7)

004224

Small bubbles are acceptable. Large bubbles must be eliminated through a continued priming process.



1. Oil distribution hose
2. Small bubbles
3. Large bubbles

004398

IMPORTANT: All clear “blue” oil distribution hoses on the powerhead should fill with oil as the air is purged from the lines.



WARNING



Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system.

Protect against hazardous fuel spray. Before starting any fuel system service, carefully relieve fuel system pressure. Refer to Relieving Fuel System Pressure in Service Manual.

Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.

Always work in a well ventilated area and wipe off any fuel spillage.

DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

Temporarily disconnect the fuel supply hose to relieve pressure in fuel supply hose as an aid in priming the oil-to-fuel hose.

Repair any fuel or oil leaks.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

D
PREDELIVERY
Bulletin

Date: October, 2004

No. 2004-03(D)

MODELS: *Evinrude[®] E-TEC[™]* Models with remote oil tanks

SUBJECT: Oil Injection Rate and *Evinrude[®]/Johnson[®] XD100[™]* Outboard Oil Decal

Oil Injection Rate

If the owner desires, the Engine Management Module (EMM) on *Evinrude E-TEC* models can be programmed to exclusively use *Evinrude/Johnson XD100* oil, significantly reducing oil consumption.



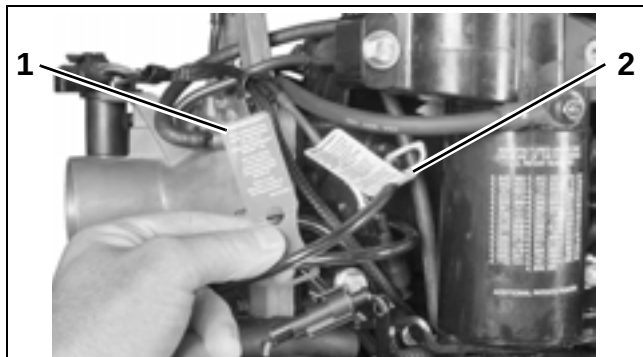
CAUTION



Running an *Evinrude E-TEC* outboard on other grades of oil while set to the *XD100* oil ratio will result in increased engine wear and shortened outboard life.

The TC-W3RL OIL control setting allows the outboard to be run on any TC-W3RL outboard lubricant. Changing to the optional *XD100 OIL CONTROL* setting requires the use of *Evinrude/Johnson XD100* outboard lubricant. Running the outboard in *XD100 OIL CONTROL* mode can reduce oil consumption by approximately one-third.

Powerhead oil programming labels are provided to identify *EMM* oil programming on the outboard. Install the correct label to alert user to specific oil requirements.



1. *XD100* outboard oil (Premium) **BLUE label**, P/N 351520 004119
2. *XD50 / XD30* outboard oil (TC-W3RL) **YELLOW label** (Installed), P/N 351519

XD100 Outboard Oil Decal

A new *Evinrude/Johnson XD100* oil decal is available for use to label boats equipped with *Evinrude E-TEC* outboards that have been programmed for the *XD100* oil injection ratio.

Use the **XD100 outboard oil decal**, P/N 352369, to accurately inform the boat operator of the *XD100* outboard oil requirement.



XD100 Outboard Oil Decal

Install this decal in one or more of the highly visible recommended locations to alert the outboard operator(s).

Recommended Locations:

- Dashboard or deck of boat, adjacent to key switch
- Deck of boat, adjacent to the remote oil fill
- Deck of boat, adjacent to oil tank assembly
- Oil tank cover
- Cover of oil tank compartment
- Attach to oil tank or oil fill cap

IMPORTANT: Make sure the *Evinrude E-TEC* engine label and boat decal match *EMM* programming.



RECOMMENDED LOCATIONS



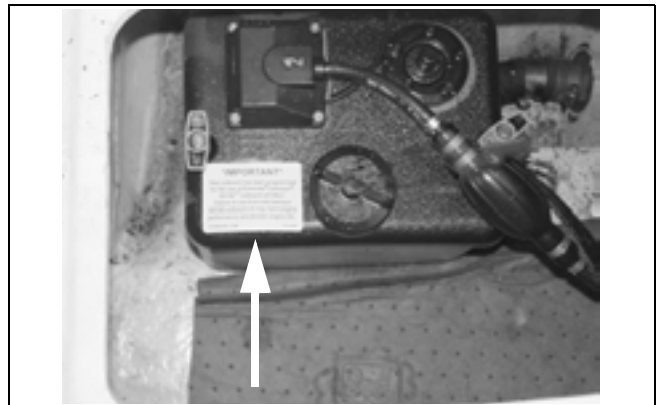
Dashboard



Remote Oil Fill



Operator Warnings



Oil Tank



Deck Lid



Oil Tank Compartment

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: August, 2001

No. 2001-01(S) (Rev 1)

MODELS: 1998-2001 *Ficht*[®] Fuel Injection
Outboards

SUBJECT: Identification and Service Procedures
for *Ficht* Fuel Injectors

PROBLEM

Installation procedures for replacement fuel injectors have changed.

SOLUTION

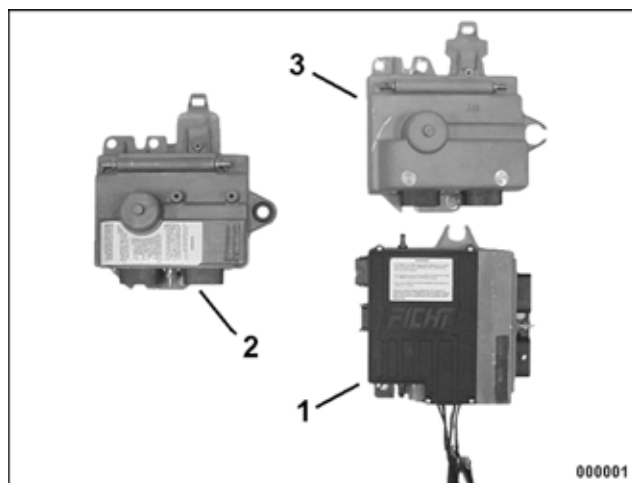
Familiarize service personnel with the contents of this bulletin. The information contained in this document can be used for servicing all *Ficht Fuel Injection* outboards that use flange-type injectors. This bulletin provides the following service information:

- Fuel control system and fuel injector identification.
- Fuel injector software installation procedures.
- Fuel injector replacement procedures.
- Information on new injector cap and sleeve service kits.

PROCEDURE

Fuel Control System and Injector Identification

Identify engine by model number and engine management system. Water-cooled processors fit into two categories, Electronic Control Units (*ECU*) and Electronic Management Modules (*EMM*).



1. *EMM*
2. *ECU* with backpressure sensor
3. *ECU*

Injectors must be identified as “compensated” or “non-compensated”. Use the latest version of “*Ficht* Diagnostic Software” to access injector information.

- Start the diagnostic program.
- The Program Select Menu displays three options, select option 2, Service Utilities.
- From the Service Utilities Menu select option 2, Injector Information.
- The Injector Information files open after the Emissions Warning screen is displayed.



If no serial numbers are displayed, the engine does not have fuel flow compensation. If injector serial numbers are displayed by cylinder location, the *ECU/EMM* is programmed for fuel flow compensation.

IMPORTANT: The last digit of the injector's serial number will not necessarily match the last digit of the serial number displayed on the injector information screen. Other than the last digit, the serial numbers must match.

If the *ECU/EMM* provides fuel flow compensation, verify the injector locations coincide with the programming in the *ECU/EMM*.

IMPORTANT: All “compensated” injectors must be verified for proper cylinder placement by serial number. Improper installation of compensated injectors may result in engine failures. The identification labels on fuel injectors contain the serial number of the injector as well as a production part number. Production part numbers can be used to identify injectors. The chart below indicates operation voltages and production part numbers for the various injectors. All 90° engines use 40 volt injectors. 60° engines were originally produced with *ECUs* and used 26 volt injectors. All 60° models built with *EMMs* use 40 volt injectors. Injector housings look identical and can only be identified by the production number on the injector. If the label on the injector is removed or damaged, and the injector can not be identified properly, the injector should not be used.

INJECTOR APPLICATIONS CHART							
60° V4(75-115HP) AND 60° V6(135-175HP) INJECTOR IDENTIFICATION							
ECU		ECU		ECU W/BP SENSOR		EMM	
26 VOLT		26 VOLT		26 VOLT		40 VOLT	
FLANGE MOUNT		FLANGE MOUNT		FLANGE MOUNT		FLANGE MOUNT	
NO COMPENSATION		COMPENSATION		COMPENSATION		COMPENSATION	
1998 6V4 & 1999 6V4		1999 6V4 & 1999 6V6		1999 6V6 "O" SUFFIX		2000/2001 6V4 & 6V6	
1999 6V6				2000 6V6 "V" SUFFIX			
P/N ON INJECTOR		P/N ON INJECTOR		P/N ON INJECTOR		P/N ON INJECTOR	
439604		5000769		5000944		5001162	
5000413		5000595		5000937		5001156	
5000769							
5000583							
SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N	
5004477		5004478		5004479		5004451	
9V6(200-250HP) INJECTOR IDENTIFICATION							
ECU		ECU		EMM		EMM	
40 VOLT		40 VOLT		40 VOLT		40 VOLT	
FLANGE MOUNT (5/16")		FLANGE MOUNT (5/16")		FLANGE MOUNT (5/16")		FLANGE MOUNT (3/8")	
NO COMPENSATION		COMPENSATION		COMPENSATION		COMPENSATION	
1999		1999		2000		2001	
P/N ON INJECTOR		P/N ON INJECTOR		P/N ON INJECTOR		P/N ON INJECTOR	
PORT	STARBOARD	PORT	STARBOARD	PORT	STARBOARD	PORT	STARBOARD
439630	439648	5000609	5000610	5000947	5000946	5004284	5004285
5000609	5000610	5000607	5000608	5001163	5001164		
5000585	5000586			5001470	5001471		
SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N		SERVICE REPLACEMENT P/N	
PORT	STARBOARD	PORT	STARBOARD	PORT	STARBOARD	PORT	STARBOARD
5004473	5004474	50004475	5004476	5004443	5004444	5004501	5004502



1. 90° V6 1999-2000
2. 60° V4 1998-2001 & 60° V6 1999-2001
3. 90° V6 2001

Injectors should have identification labels, one indicating the serial number of the injector and one indicating the injector's placement from production. Fuel flow characteristics or "coefficients" for each injector are programmed into the *ECU/EMM* during production.

Software Installation

ECUs (compensated) and *EMMs* require critical programming that is specific to the replacement injector being installed. The floppy disk included with each replacement injector contains the fuel flow compensation values that are unique to that service injector.

- 1) Verify that the serial number on the floppy disk matches the serial number on the service injector.
- 2) Note the cylinder location in which the service injector is to be installed.
- 3) Connect the appropriate laptop computer to the engine's communication port using the interface cable (P/N 437955). Connect interface cable to computer com port 1. Turn on the computer.
- 4) Power up the *ECU/EMM* by turning the engine's key switch on.
- 5) Insert the floppy disk into the computer's "A" drive. From the "Run" command in the Windows "Start" menu or from a DOS prompt type A:\GO. (Another option is to activate the "GO.exe" file on the floppy disk from the "A" drive in "My Computer".)
- 6) Follow the on-screen instructions. Enter the service injector's location by cylinder number.

Injector Serial Number and Compensation Type v1.02

Service 98356000363103	Cylinder #2	Compensated 00087060060523	Cylinder #1
Compensated 98356000826111	Cylinder #4	Compensated 98356000113104	Cylinder #3
Compensated 99019000623115	Cylinder #6	Compensated 98356000058105	Cylinder #5

Type cylinder number for injector you want to replace
<Esc> to cancel. <Enter> to continue

000013



The program will assign the required fuel flow coefficients to the appropriate control function in the *ECU/EMM*. The pre-existing coefficients for the injector being replaced will be recorded onto the disk. This feature allows the original injector to be reinstalled if necessary. Reinstallation of the original fuel injector would be done using the same procedure outlined above.

7) Turn the key switch off when the program has completed. Remove the floppy disk from the "A" drive and write the engine's serial number and the original injector's serial number on the disk. The disk now contains the coefficients for the original injector. Keep the disk and injector together. If the injector is to be discarded, discard the disk as well. Once the program has been installed, the replacement injector's serial number should be displayed on the "Injector Information Screen."

8) Use the *Ficht* Diagnostic Software to verify that the installation is correct.

Injector Replacement Procedures



WARNING

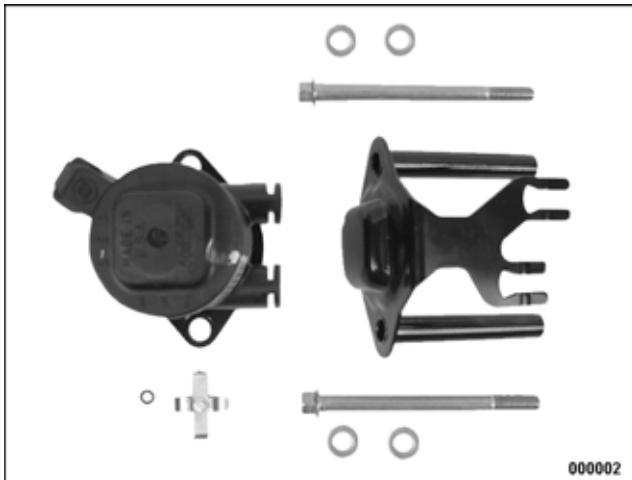


Disconnect engine battery cables at battery. Disconnect electrical connection to injector.

Before starting any fuel system disassembly, carefully relieve fuel system pressure. Protect against hazardous fuel spray by attaching a suitable device to the fuel manifold test point and slowly release pressure. Have a container available to catch residual fuel. Wear eye protection. Work in ventilated area.

Removal 60° V4 1998-2001 and 60° V6 1999-2001

Remove screws that fasten fuel injector assembly to cylinder head. Injectors not secured with retainer assemblies can be upgraded with injector retainer kits (P/N 5004906). The following image shows components of kit and 60°V4/V6 style injector.



Disengage fuel tube fittings from fuel injector assembly.

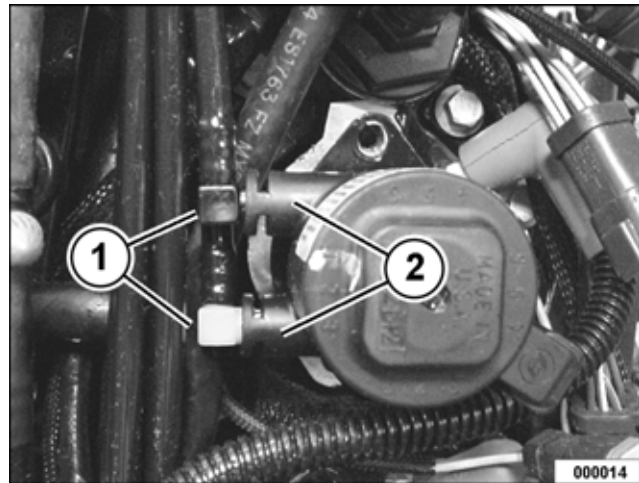
IMPORTANT: Use caution to prevent dirt or debris from entering fuel inlet and outlet ports of injector and fuel tubes. Cover injector nozzle port in cylinder head to prevent contamination of combustion chamber. Clean any residue of thread-lock material from injector mount threads in cylinder head. Use a 5/16-18 bottoming tap, P/N 787147, *Evinrude Cleaning Solvent* and compressed air. Clean injector flange surface and cylinder head mating surface. All thread-lock material must be cleaned from all surfaces prior to reassembly. All

injector and adapter mating surfaces, screws, and threaded areas must be clean and free of any debris.

Installation 60° V4 1998-2001 and 60° V6 1999-2001

Position injector in the proper cylinder location.

Insert fuel tube fittings into injector. Both fittings must be fully seated into the injector fuel ports.

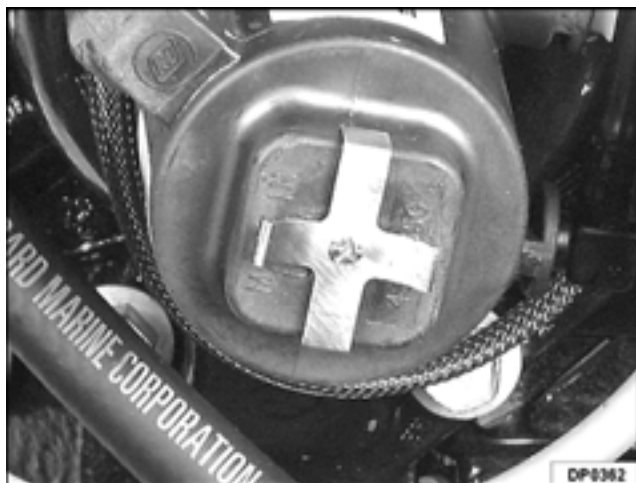


1. Fuel tube fittings
2. Injector fuel ports

Place small O-ring in depression in end of the injector.



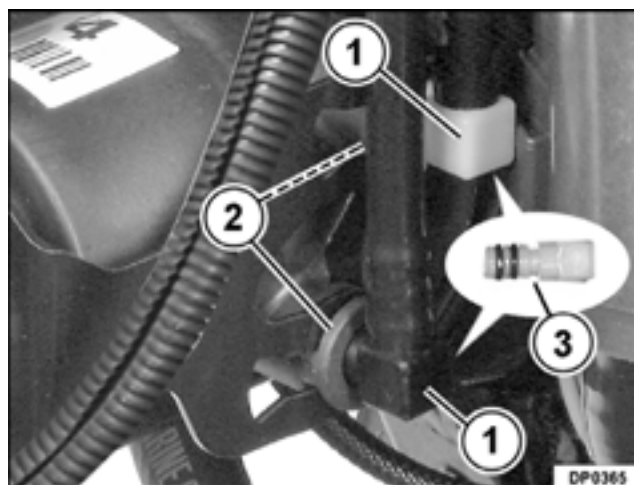
Place spring assembly over end of injector. The pin of the spring should be positioned in the small O-ring.



Install large O-ring on inside of retainer. O-ring can be glued in place with a small amount of *Evinrude Type "M" Adhesive™*.



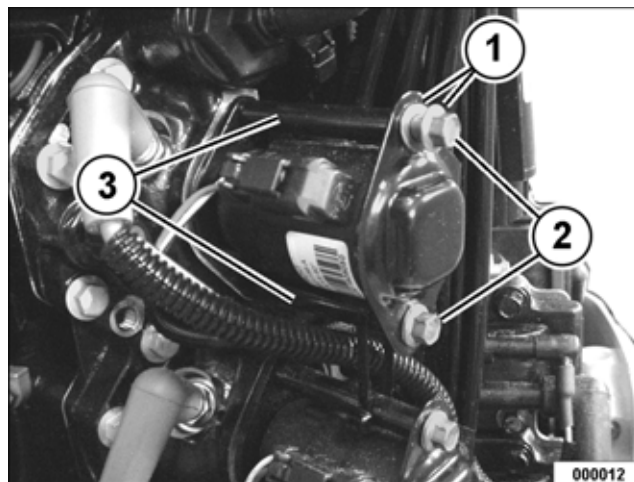
Install injector retainer assembly over the end of the injector. Fuel tube fittings must be properly seated in fuel injector. The flanges on the retainer must engage the outer groove of the fuel tube nipples.



1. Fuel tube fittings
2. Flanges
3. Fuel tube nipples (outer groove)

IMPORTANT: Be careful not to pinch any wiring or hoses during installation.

Apply *Evinrude Lockquic Primer* and *Evinrude Nut Lock* to the threads of the injector retainer screws. Install two (2) washers, P/N 348224, on each screw. Insert screws with washers into retainer sleeves. Tighten screws in stages. Start with lower screw. Torque screws to 12 to 14 ft. lbs. (16,2 to 19 N-m).



1. Washers
2. Screw
3. Retainer sleeves

Reconnect electrical connection to injector. Reconnect battery cables. Turn key on to pressurize fuel system. Inspect all fuel system components for leaks. Repair all fuel leaks.

Removal 90° V6 1999-2000 models

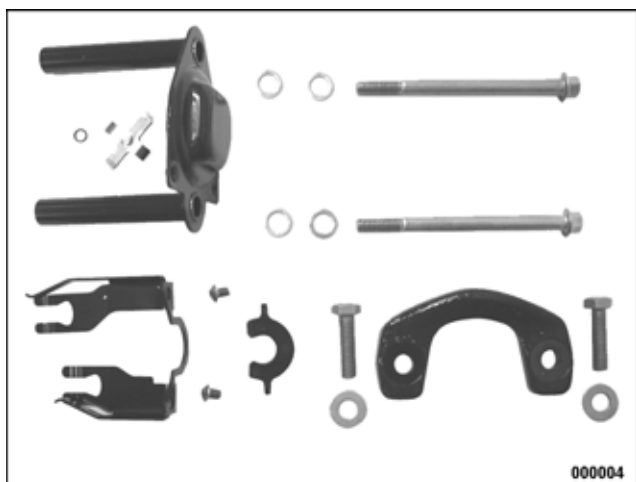


WARNING

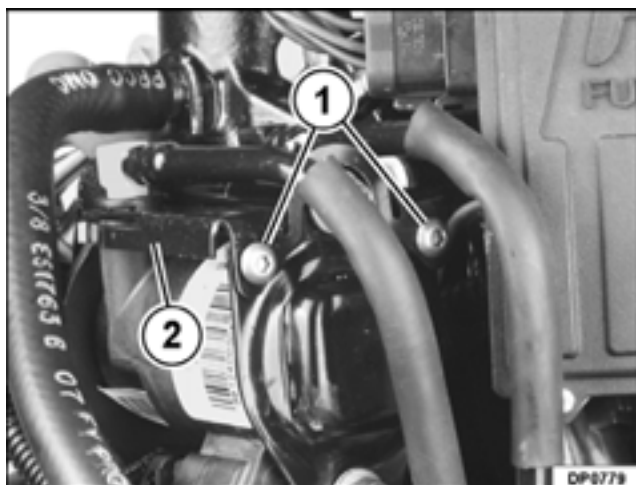


Before servicing one of these models, verify that it has been updated with enhancement kit, P/N 5004550. Refer to Warranty Bulletin 2001-01 for Safety Campaign details. This enhancement kit included additional injector mounting hardware. Proper installation of enhancement kit, P/N 5004550, reduces the possibility of fuel system leaks that could lead to fire or explosion.

Image 000004 shows fuel injector fastening system components for these models.

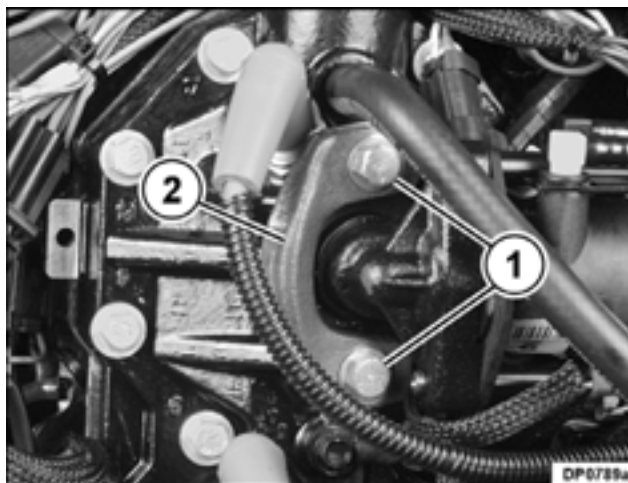


Remove and discard screws that fasten fuel tube clip to injector retainer assembly. Disengage fuel tube clip from injector fuel ports.



1. Screws
2. Fuel tube clip

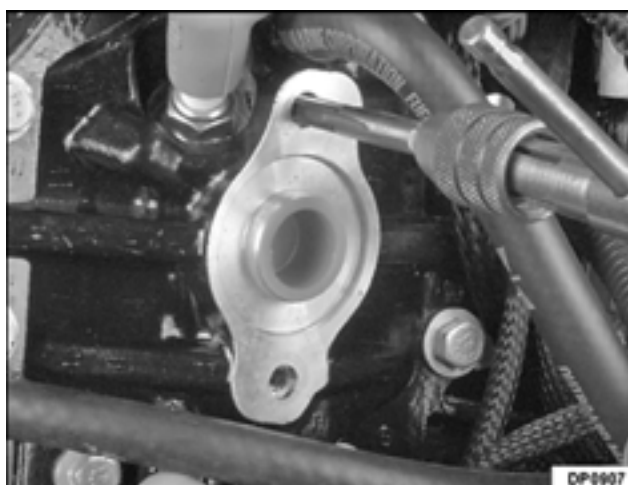
Remove injector to cylinder head retaining screws and support flange. Pull injector away from cylinder head.



1. Cylinder head retaining screws
2. Support flange

Disengage fuel tube fittings from fuel injector assembly.

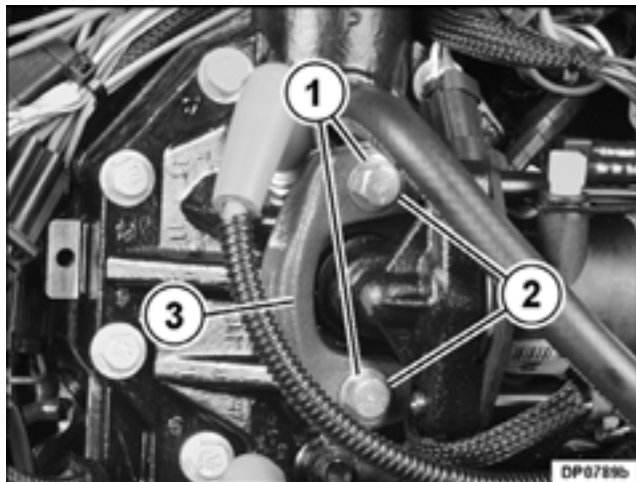
IMPORTANT: Use caution to prevent dirt or debris from entering fuel inlet or outlet ports of fuel injectors. Cover injector nozzle port in cylinder head to prevent contamination of combustion chamber. Clean all residue of thread lock material from injector mounting threads in cylinder head. Use a 5/16-18 bottoming tap, P/N 787147, *Evinrude Cleaning Solvent*, and compressed air. Clean injector flange surface and cylinder head mating surface prior to reassembly. All injector and adaptor mating surfaces, screws, and threaded areas must be clean and free of dirt and debris.



Installation 90° V6 1999-2000 models

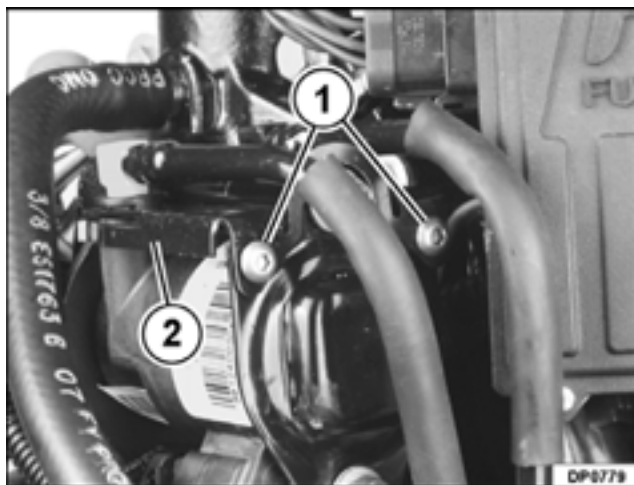
Position replacement injector next to cylinder head. Insert fuel tube fittings into injector. Both fittings must be fully seated into the injector fuel ports.

Install washers, P/N 321465, on new injector flange to cylinder head retaining screws, P/N 349645. Apply *Evinrude Lockquic Primer* and *Evinrude Nut Lock* to threads of screws. Fasten injector to cylinder head with screws, washers, and flange support, P/N 349412.



1. Washers
2. Cylinder head retaining screws
3. Flange support

IMPORTANT: Follow this torque procedure: Tighten screws in stages. Tighten lower screw and then upper screw. Torque screws to 10 ft. lbs. (13,6 N·m), then 15 ft. lbs. (20,3 N·m), and to a final torque of 24 ft. lbs. (32,6 N·m). Verify fuel tube fittings are fully inserted into injector. Install fuel tube retaining clip into the grooves of the injector fuel ports. The clip must engage the outer groove on the fuel tube fittings. Fasten clip with new retaining screws and torque screws to 25 to 30 in. lbs. (2,82 to 3,39 N·m).

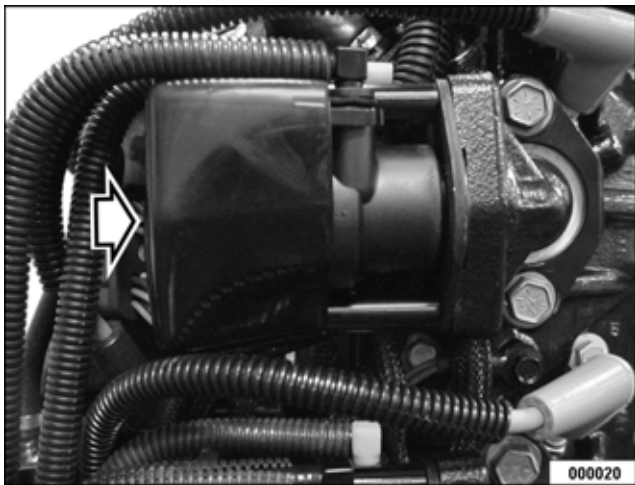


1. New retaining screws
2. Fuel tube retaining clip

Install fuel line guard. Position fuel tubes on top of guard.



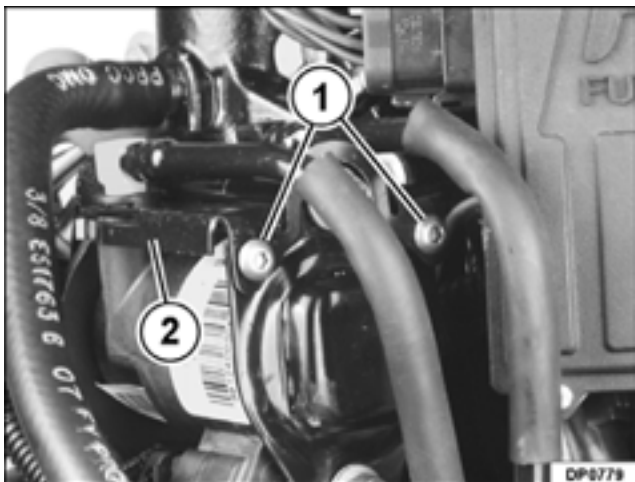
When servicing the #1 cylinder, be certain the protective boot is reinstalled.



Reconnect electrical connection to injector. Reconnect battery cables. Turn key on to pressurize fuel system. Inspect all fuel components for leaks. Repair all fuel leaks.

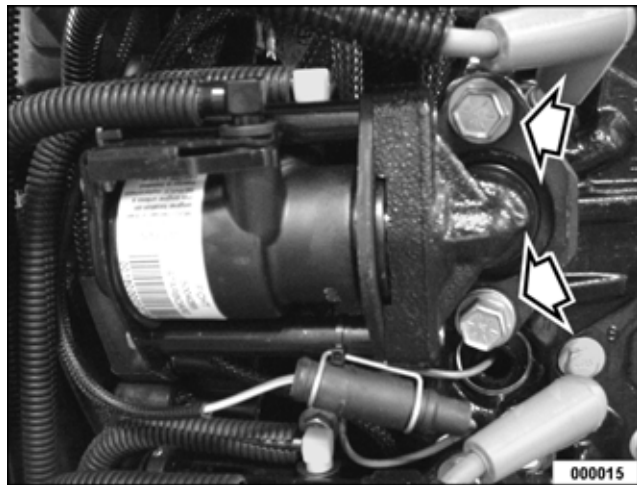
Removal 90° V6 2001 models

Remove and discard screws that fasten fuel tube clip to injector retainer assembly. Disengage fuel tube clip from injector fuel ports.



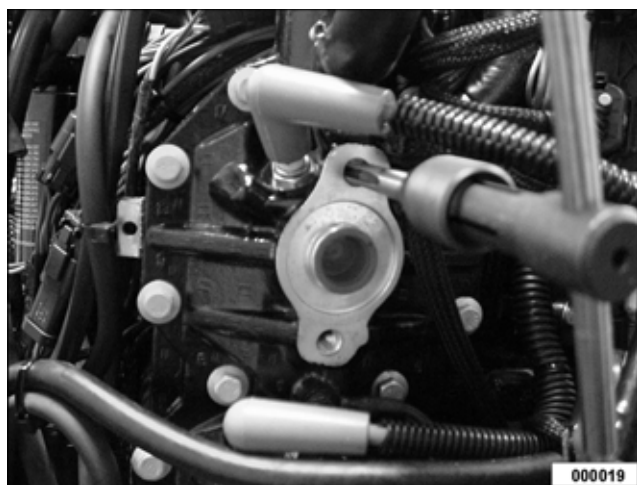
1. Screws
2. Injector retainer assembly

Remove injector to cylinder head retaining screws. Pull injector away from cylinder head.



Disengage fuel tube fittings from fuel injector assembly.

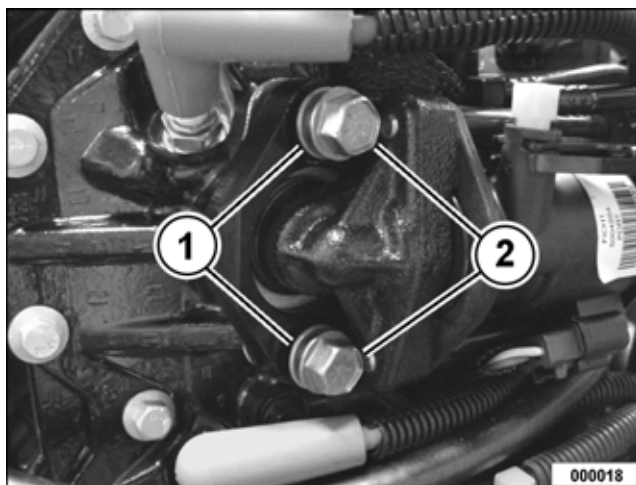
IMPORTANT: Use caution to prevent dirt or debris from entering fuel inlet or outlet ports of fuel injectors. Cover injector nozzle port in cylinder head to prevent contamination of the combustion chamber. Clean all residue of thread locking material from injector mounting threads in cylinder head. Use a 3/8-16 SAE bottoming tap, *Evinrude Cleaning Solvent*, and compressed air. Clean injector flange surface and cylinder head mating surface prior to reassembly. All injector and adaptor mating surfaces, screws, and threaded areas must be clean and free of dirt and debris.



Installation 90° V6 2001 models

Position replacement injector next to cylinder head. Insert fuel tube fittings into injector. Both fittings must be fully seated into injector fuel ports.

Install washers on new injector flange to cylinder head retaining screws. Apply *Evinrude Lockquic Primer* and *Evinrude Nut Lock* to threads of screws. Install injector on cylinder head with screws and washers.



- 1. Washers
- 2. Cylinder head retaining screws

IMPORTANT: Be careful not to pinch any wiring or hoses during assembly.

IMPORTANT: Follow this torque procedure: Tighten screws in stages. Tighten the lower screw first and then the upper screw. Torque screws to 10 ft. lbs. (13.6 N·m) and then to a final torque of 34 to 36 ft. lbs. (46 to 49 N·m).

Verify fuel tube fittings are fully inserted into injector. Install fuel tube retaining clip into the grooves of the injector fuel ports. The clip must engage the outer groove on the fuel tube fittings. Fasten clip with new retaining screws and torque screws to 25 to 30 in. lbs. (2,82 to 3,39 N·m).

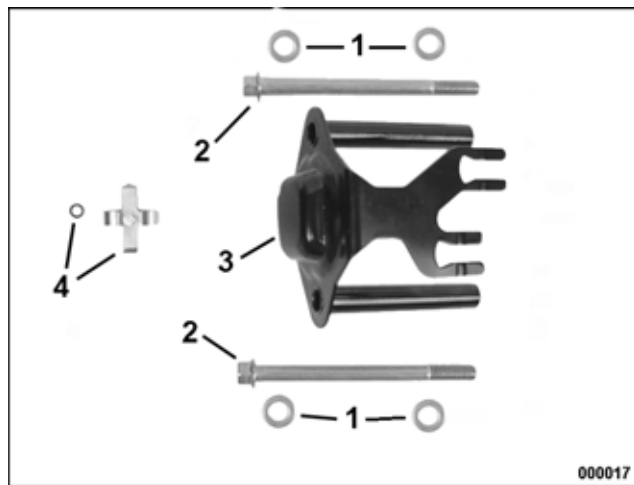
Reconnect electrical connection to injector. Reconnect battery cables. Turn key on to pressurize fuel system. Inspect all fuel system components for leaks. Repair all fuel leaks.

ADDITIONAL INFORMATION

Two service kits are available for injectors. These kits provide the components needed to replace an injector cap and sleeve assembly.

60° V4 (1998-2001 models)

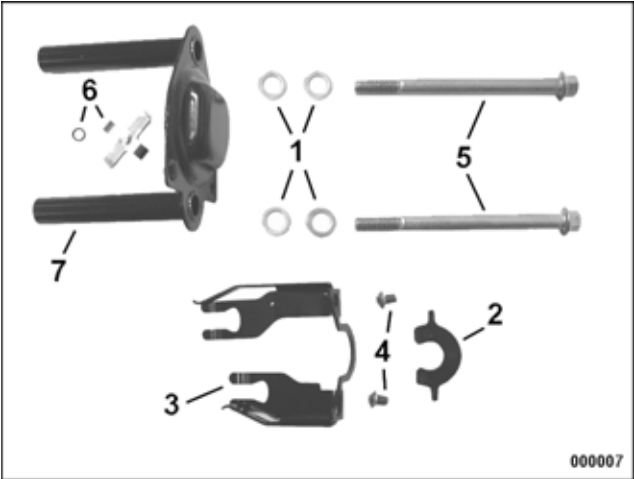
60° V6 (1999-2001 models)



Ref	P/N	Name of Part	Qty
	5004906	CAP & SLEEVE KIT ASSEMBLY	
1	348224	*WASHER	4
2	349870	*SCREW	2
3	5001718	*CAP & SLEEVE	1
4	5001911	*SPRING & O-RING	1

Refer to pages 4 and 5 of this bulletin for installation procedure of these components.

90°V6 Models (1999-2001 models)



Ref	P/N	Name of Part	Qty
	5004596	CAP & SLEEVE KIT ASSEMBLY	
1	348224	*WASHER	4
2	349002	*GUARD	1
3	349080	*CLIP	1
4	349090	*SCREW	2
5	349870	*SCREW	2
6	5001911	*SPRING & O-RING	1
7	5004270	*CAP & SLEEVE	1

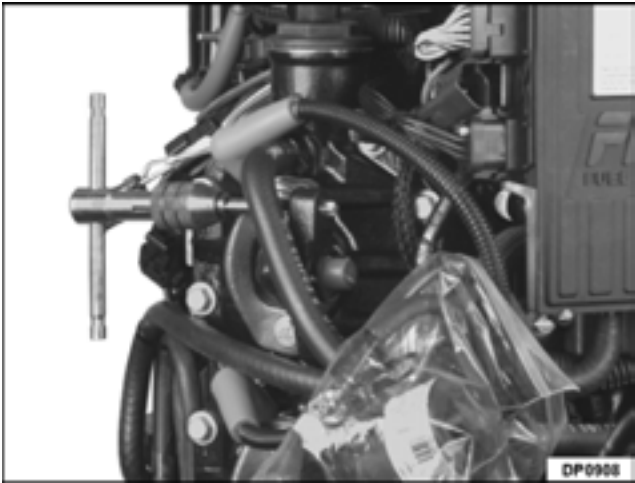
Injector Cap and Sleeve Servicing

Removal

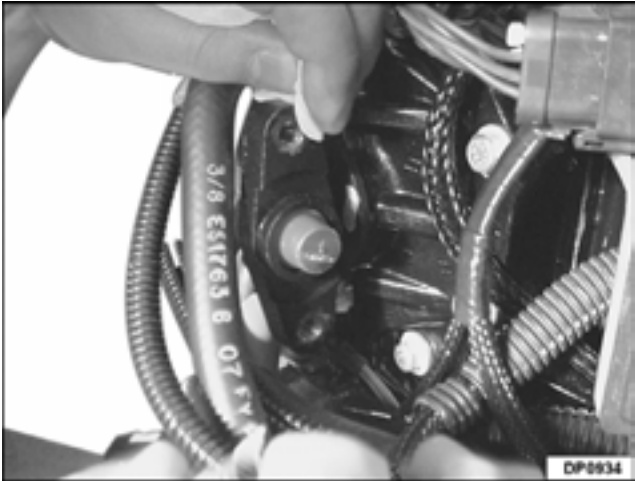
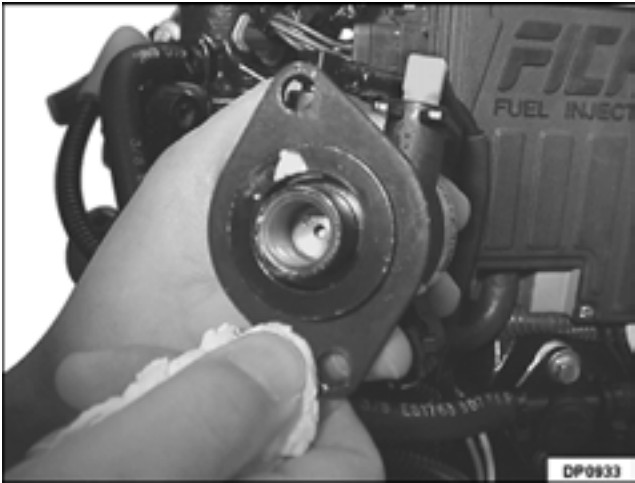
Remove screws that fasten injector retainer assembly to injector adaptor. Hold injector housing. Remove cap and sleeve and fuel tube clip.



IMPORTANT: Pull injector away from adaptor. Cover injector with a clean plastic bag to prevent injector from becoming contaminated. Cover injector inlet. Clean adaptor threads using the appropriate bottoming tap, *Evinrude Cleaning Solvent*, and compressed air.

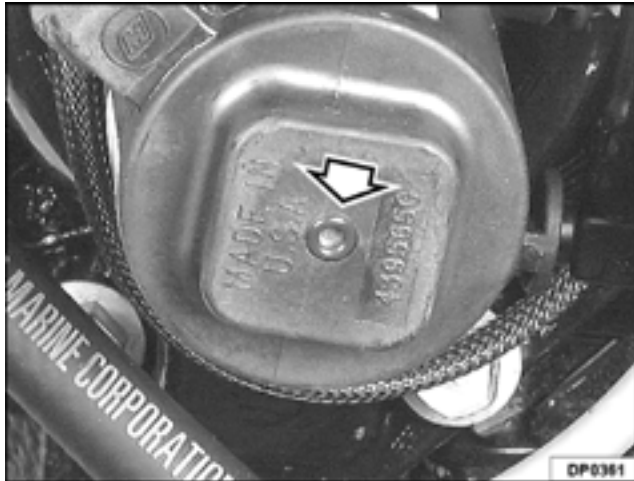


Clean all screw lock material from injector flange surface and adaptor surface.



Installation

Position injector on injector adaptor housing. Replace O-ring and spring on end of injector.



Verify O-ring is positioned on cap and sleeve assembly. Apply Evinrude Type "M" Adhesive to secure if necessary.



Install two new washers on both cap and sleeve retaining screws. Apply *Evinrude Lockquic Primer* and *Evinrude Nut Lock* to threads of screws. Slide screws through cap and sleeve assemblies. Position cap and sleeve assembly over injector and hand tighten screws.



Verify fuel tube fittings are fully inserted into injector. Install fuel tube retainer clip into the grooves of the injector fuel ports. The clip must engage the outer groove on the fuel tube fittings. Fasten clip with new retaining screws and torque screws to 25 to 30 in. lbs. (2,82 to 3,39 N-m).



Torque cap and sleeve screws in stages. Start with lower screw. Torque screws to 12 to 14 ft. lbs. (16,2 to 19 N·m).



Install fuel tube guard onto cap and sleeve assembly. Position fuel tubes on top of guard.

(See image DP0783 on page 7.)

Reconnect electrical connection to injector. Reconnect battery cables. Turn key on to pressurize fuel system. Inspect fuel system components for leaks. Repair fuel leaks.

When servicing the #1 cylinder, be certain the protective boot is reinstalled.

(See image 000020 on page 7.)

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: October, 2001

No. 2001-02(S)

MODELS: *Ficht® Ram Injection*

SUBJECT: Changes to Service Codes and Engine Monitoring functions

Service department personnel must be advised of these revised and new service codes and new Engine Monitoring functions:

Revised and New Codes for 2002 and 2000–2001 Models with Replacement EMM (Electronic Management Module)

CODE 25

- **Fault:** Water flow through EMM restricted. High temperature. If code 23 is also set, temperature sensing circuits inside the EMM may not be functioning.
- **Repair:** If this is a hard code, STOP THE MOTOR to prevent damage to the EMM. This code indicates an overheat inside the EMM. This can be caused by blocked EMM cooling water or engine overheat. Check other fault codes for indication of cause. Codes 22, 41, and 43 indicate an overheat. Code 18 indicates excessive alternator voltage. See Diagnostic Manual.

CODE 29

- **Fault:** Shutdown due to EMM temperature above limit. WATER TEMP or HOT light flashes.
- **Repair:** EMM is operating above temperature limit. Check for clear water passages throughout entire EMM cooling circuit. Unplugging the EMM discharge hose does not validate a clear passage. See Diagnostic Manual.

CODE 31

- **Fault:** Shutdown due to engine temperature above limit. WATER TEMP or HOT light flashes.
- **Repair:** Engine is operating above temperature limit. Check for clear water passages in cooling circuits. See Diagnostic Manual.

CODE 57

- **Fault:** Engine RPM increase without throttle position moving. Indicates an uncontrolled amount of fuel being introduced into the motor. CHECK ENGINE or CHK ENG light flashes. Engine will not restart.
- **Repair:** Fuel leaks, internal and external, should be sought and corrected immediately.

New Codes for 2002 Models

CODE 38

- **Fault:** No oil pressure feedback.
- **Repair:** Fault is caused by lack of oil pressure at the oil manifold during running. See Diagnostic Manual.

CODE 39

- **Fault:** Oil prime failure. No oil present in oil manifold.
- **Repair:** Fault is caused by lack of oil pressure at the oil manifold during startup. See Diagnostic Manual.

PROCEDURE

This Service Bulletin will be supplied with 2000–2001 Replacement EMM.

If you replace an EMM on a 2000–2001 model, please advise your customer about the new Engine Monitoring functions described in the Operator's Guide Addendum. Detach the Addendum and instruct the customer to insert it into the Operator's Guide.

ENGINE MONITORING

IMPORTANT: Your outboard must be equipped with the *System Check*® engine monitor. Operating your outboard without the *System Check* engine monitor will void your warranty for failures related to the functions monitored on your engine.

When you turn the key switch ON, the *System Check* engine monitor horn performs a self-test by sounding a 1/2-second beep. The gauge self-tests by turning the warning lights on, then off in sequence. During engine start-up, pause with the key switch in the ON position to observe the horn and gauge perform the self-test. If the self-test does not happen as stated, see your DEALER.

The *System Check* engine monitor alerts the operator with a 10-second beep of the horn and a warning light on the gauge when certain engine problems occur. **The appropriate warning light will stay on until the problem is corrected or the key switch is turned OFF.**

If the engine management module (EMM) senses that the problem could cause permanent engine damage, it will also limit engine speed to 1200 RPM. This additional protection feature is referred to as *S.L.O.W.*™. If the engine was running faster than 1200 RPM when the *S.L.O.W.* system activated, it will shake noticeably. Under certain operating conditions the *EMM* will shut OFF the engine.

**CAUTION**

In the *S.L.O.W.* mode, the engine speed is limited. Under certain conditions, the engine's limited speed may reduce maneuverability of your boat.

If the *S.L.O.W.* mode is activated and you are unable to correct the problem, seek assistance and/or return to safe harbor. Serious engine damage, engine shutoff, and/or reduced maneuverability may be imminent.

“NO OIL”

There is an oil delivery problem. Serious engine damage can occur quickly. The *EMM* will activate *S.L.O.W.*

If the oil tank is empty, add the recommended oil.

If the oil tank is not empty, seek assistance and/or return to safe harbor. DO NOT exceed 1000 RPM. See your DEALER.

“WATER TEMP” or “HOT”

The engine is overheating. Serious engine damage can occur quickly. The *EMM* will activate *S.L.O.W.* Under certain conditions the *EMM* will shut OFF the engine.

A **continuous** “WATER TEMP” or “HOT” light with *S.L.O.W.* — The *EMM* has identified an overheating condition. Shut OFF the engine and refer immediately to **Engine Overheating**.

A **flashing** “WATER TEMP” or “HOT” light — The *EMM* has identified a progressive overheating condition. The engine will shut OFF and will not restart until the engine cools.

“CHECK ENGINE” or “CHK ENG”

The *EMM* has identified a potentially serious problem.

A **flashing** “CHECK ENGINE” or “CHK ENG” light — The *EMM* has identified an abnormal operating condition related to the fuel system. The engine will shut OFF and cannot be restarted.

**WARNING**

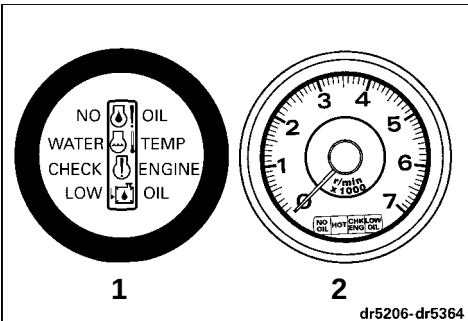
If the engine shuts OFF and the “CHECK ENGINE” or “CHK ENG” light is flashing, the engine cannot be restarted. A hazardous fuel condition may exist. Seek assistance to return to port.

A **continuous** “CHECK ENGINE” or “CHK ENG” light with *S.L.O.W.* — The *EMM* has identified a problem that will cause engine damage if it is not addressed. Seek assistance and/or return to safe harbor. See your DEALER.

A **continuous** “CHECK ENGINE” or “CHK ENG” light without *S.L.O.W.* — The *EMM* has identified a problem that should be addressed by your DEALER as soon as practical to avoid operational difficulties.

“LOW OIL”

Oil in the oil tank is at reserve level (about 1/4 full). Fill the oil tank with recommended oil as soon as possible to avoid emptying the tank. Refer to **Filling the Oil Tank**.



- 1. System Check Gauge
- 2. System Check Gauge with Tachometer

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: May, 2002

No. 2002-01(S)

SUBJECT: New Service Tools

Four new service tools are now available:

5005058 Ficht Direct Injection Diagnostic Software Version 1.42

This updated software is required to access *EMM* information on 2002 *Evinrude* models. This is an essential tool and will be shipped automatically. **350281 User's Guide** provides detailed instructions for the software above.

NOTE: Retain earlier versions of the software for use on 1997–1998 outboards with air-cooled *ECUs*

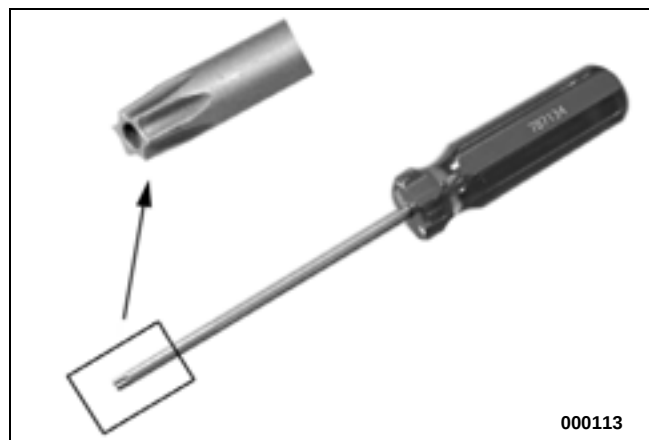
349957 Gauge Bar

This new gauge bar is used in conjunction with the existing 393185 Driveshaft Shimming Tool to shim the new gearcase used on most 2002 V6 and 25" V4 models.



787134 Tamper Resistant Screwdriver

This screwdriver is required for the throttle linkage screws on 2001 and newer *Evinrude* V4 and V6 models.



350618 Oil Pressure Test Adapter

This adaptor is used in conjunction with the 5000902 pressure gauge to test oil pressure on 2002 and later *Evinrude* models.



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
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OUTBOARDS

S
SERVICE
Bulletin

Date: July, 2002

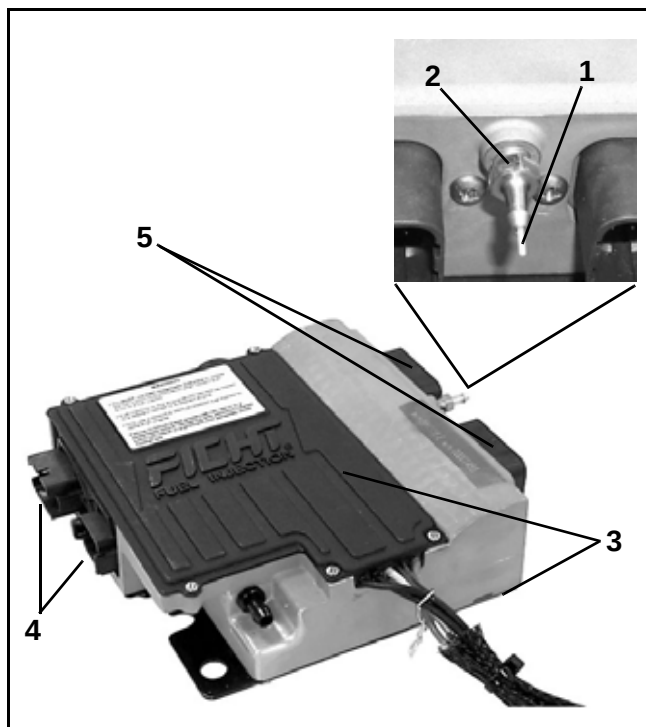
No. 2002-02(S)

MODELS: All models with *EMMs*

SUBJECT: *EMM* Tampering

PROBLEM

Service personnel on occasion have reportedly tampered with the monofilament line which protrudes from the nipple on the side of the *EMM* housing. This line connects the barometric pressure sensor and the stainless steel nipple. If this monofilament line is removed, the *EMM* will be permanently damaged.



- 1. Monofilament line
- 2. Nipple
- 3. Cover
- 4. Stator connections
- 5. J-connectors

SOLUTION

DO NOT remove the nipple or disturb the monofilament line that protrudes from the nipple on the side of the *EMM* housing. Internal damage to the *EMM* will occur.

DO NOT remove the covers from the *EMM* housing. Internal damage to the *EMM* could occur.

ADDITIONAL INFORMATION

When servicing *EMMs* ensure that the keyswitch is in OFF before removing or re-installing J-connectors. Failure to do so could result in Start Assist Circuit (SAC) damage. Also, apply dielectric grease to the seals of the stator connectors before firmly seating them, and locking them into place.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: October, 2002

No. 2002-03(S) (Rev 1)

MODELS: Direct Injection

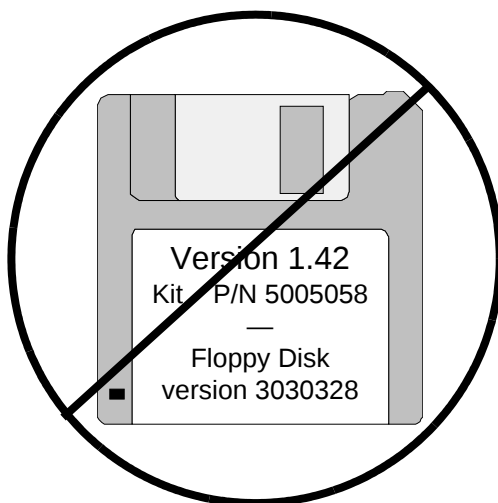
SUBJECT: Diagnostic software EMMDIAG
version 1.42 for PCs

PROBLEM

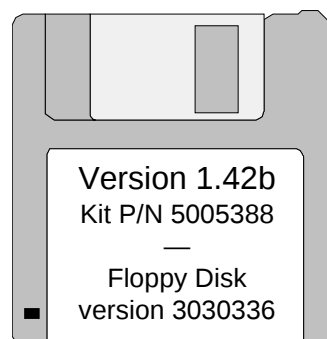
Certain functions of EMMDIAG version 1.42 for PCs are ineffective and incomplete. Continued use may result in erroneous information and improper set-up operations. Discontinue use of version 1.42 and upgrade to version 1.42b.

SOLUTION

- Destroy all disks containing the previous version EMMDIAG 1.42 (Kit P/N 5005058 or Floppy Disk version 3030328). This is critical to ensure that only the latest software version is installed on each of the diagnostic computers that your technicians access. This ensures diagnostic consistency.
- Download the new version EMMDIAG 1.42b from *DealerPort* or order it using Kit P/N 5005388.
- Continue to follow the Users Guide for *Ficht*® Diagnostic Software Version 1.42 (P/N 350281).



DISCARD OLD VERSION



UPGRADE TO NEW VERSION

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
Johnson®



OUTBOARDS

S
SERVICE
Bulletin

Date: September, 2002

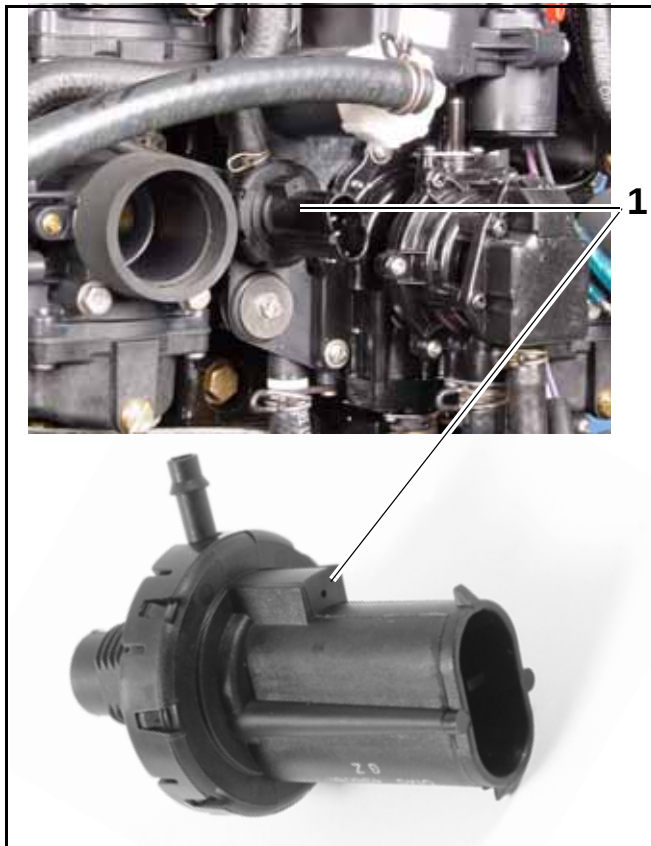
No. 2002-04(S)

MODELS: 2002 *Johnson* 60° V6

SUBJECT: Vacuum switch

PROBLEM

Field reports indicate false fuel restriction warnings and "Check Engine" light on 2002 (and some older) 60° V6 models. Some vacuum switches may have been manufactured without a vent hole.



1. Vent hole

Affected Models

J150PLSNF	Below S/N 5000301
J150PXS NF	
J150CXSNF	
J150VLSNF	
J175PLSNF	
J175PXS NF	
J175CXSNF	
J175VLSNF	

Affected Part Numbers

Description	P/N
Vacuum switch	438081
Vacuum switch kit	586544

SOLUTION

Step 1

All **Affected Models** in your inventory and all affected product received for servicing and storage must have the correct vented vacuum switch installed. Please inspect your inventory and install a new vacuum switch if it is missing the vent hole.

Step 2

Please inspect all **Affected Part Numbers** in your parts inventory to make sure that they contain the vent hole. **Do not attempt to drill the hole in a non-vented switch.** Return all defective switches with the warranty claim.

(continued on reverse)

ADDITIONAL INFORMATION

After the repair has been completed, a standard warranty allowance request form must be filled out with all required engine information.

Use a flat rate code VS-01 for 0.5 hours. Use a special failing part number of 8888811. Credit for labor will be issued only when the warranty allowance request form is submitted. **Return all defective switches with the warranty claim.** Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is as follows:

*Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Sea Horse Dr.
Waukegan, IL 60085*

Call 1-800-888-4662 for more information.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



Date: August, 2003 (Revision)

No. 2002-05(S) (Rev 1)

MODELS: 2003 and older *Johnson* 4-Stroke with Trim & Tilt

SUBJECT: Trim/Tilt Switch Durability (Failures)

PROBLEM

A relay and harness assembly is now available to maximize the durability of the trim switch on affected models.

Affected Models	
2003 and older <i>Johnson</i> 4-Stroke	Solenoid operated trim/tilt models. See Affected Model Identification Diagram (p. 2)

IMPORTANT: 2004 and newer models incorporate a design change which no longer requires installing this relay. **Warranty claims submitted for 2004 models will not be processed.**

SOLUTION

If replacing a trim/tilt switch on these models, order and install the parts below in addition to the new switch.

The installation of this relay assembly is also recommended when installing/rigging a new engine or control.

DESCRIPTION	P/N	QTY
Relay and Harness Assembly	586806	1

PROCEDURE

⚠
WARNING
⚠

To prevent accidental starting while servicing, disconnect battery cables at battery.

Replace trim/tilt switch if required. See appropriate *Evinrude/Johnson* Accessories service manual for detailed instructions.

Connect new relay assembly into trim/tilt harness, as shown in "*Relay and Harness Connection*" on page 2.

Using cable ties, securely fasten the relay assembly and harness leads to avoid damage or disconnection.

Connect battery cables at battery.

Test operation of new switch and relay assembly.

ADDITIONAL INFORMATION

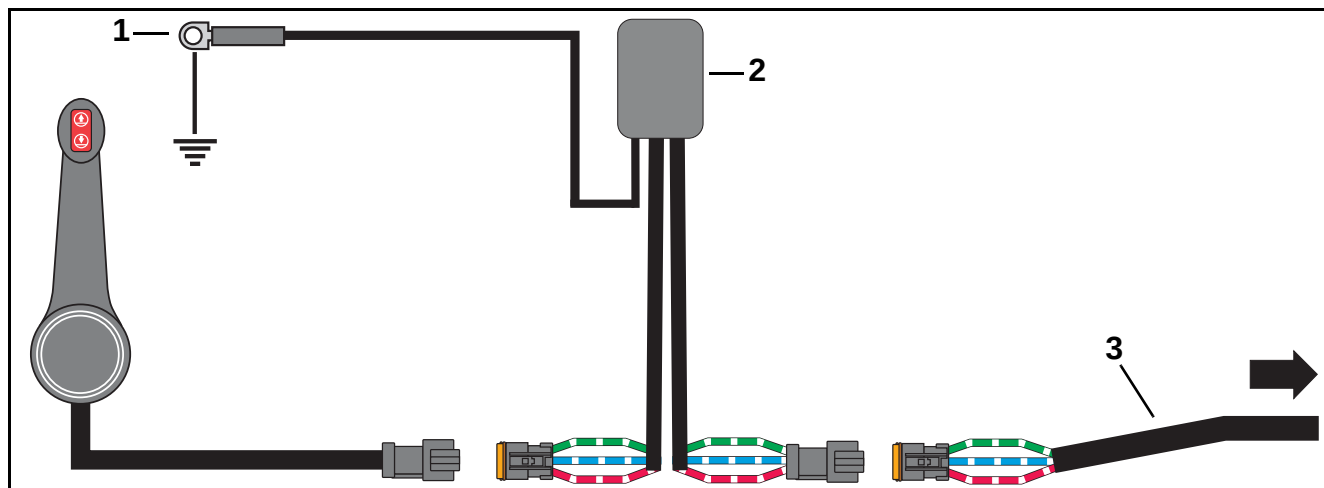
Credit for labor will be issued providing engine is under warranty. Use flat rate code TS02 for 1.0 hour. Warranty claims must be properly completed and submitted within 21 days of repair.

Return address:

*Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Sea Horse Dr.
Waukegan, IL 60085*

Call *Dealer Support Services* 1-800-888-4662 for more information.

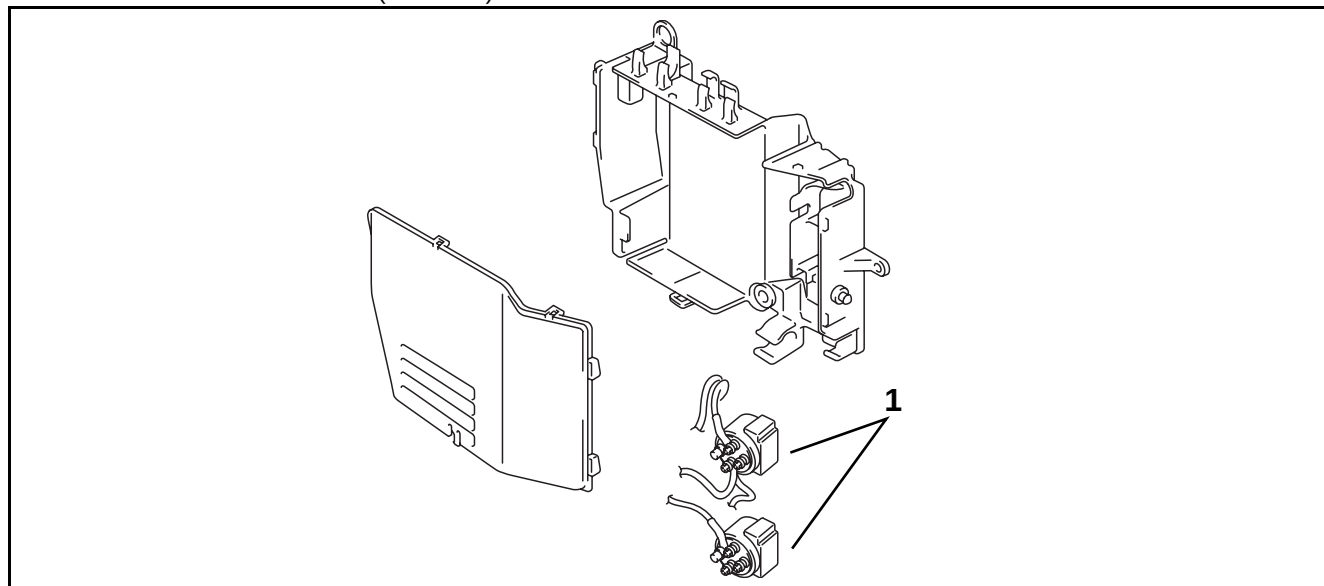
Relay and Harness Connection



1. Boat Electrical Panel negative (-) ground
2. Relay and harness assembly
3. Trim harness to outboard

Affected Model Identification

SOLENOID OPERATED MODELS (TYPICAL)



1. Trim/Tilt Solenoids

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐	 	OUTBOARDS  SERVICE Bulletin
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Date: April, 2003

No. 2003-01(S)

SUBJECT: 2002/2003 Essential Service Tools

Two new 2002/2003 Essential Service Tool kits have been developed for servicing *Evinrude* and *Johnson* outboards. These kits will be shipped as part of the *Evinrude/Johnson* Essential Service Tool Program.

Refer to the applicable service manual for specific procedures related to tool use.

2002/2003 Two Stroke (2S) Essential Tool Kit, P/N 5005566, contains:

349957 Gauge bar: Used in conjunction with the existing Driveshaft Shimming Tool, P/N 393185, to shim the driveshaft on "M" style gearcases.

350618 Oil pressure adaptor: Provides test fitting to connect to pressure gauge, P/N 5000902, for measuring oil lift pump pressure on 60° V and 90° V model *Evinrude* direct injection outboards (2002 and later).

350860 *Oetiker* pincers: Used to remove or install *Oetiker* "stepless" clamps.

350902 Fuel pressure test adaptor: Provides test fitting required to connect to pressure gauge, P/N 5000902 (high pressure).

350929 Fuel pressure test adaptor: Provides test fitting required to connect to a fuel pressure gauge (low pressure).

350932 Pinion bearing spacer: Used in conjunction with the existing Pinion Bearing Remover and Installer Kit, P/N 391257, to service the pinion bearing on "M" style gearcases.

350958 Pinion bearing installer: Used in conjunction with the existing Pinion Bearing Remover and Installer Kit, P/N 391257, to service the pinion bearing on "M" style gearcases.

787134 *Torx* driver: Used to adjust linkages with tamper resistant screws.

2002/2003 Four Stroke (4S) Essential Tool Kit, P/N 5005514, contains:

351048 Gauge bar: Used in conjunction with the existing Driveshaft Shimming Tool, P/N 393185, to shim the driveshaft on 2003 *Johnson* 140 HP 4-stroke gearcases.

351049 Gauge bar: Used in conjunction with the existing Driveshaft Shimming Tool, P/N 393185, to shim the driveshaft on 2003 *Johnson* 90/115 HP 4-stroke gearcases.

351050 Gauge bar: Used in conjunction with the existing Driveshaft Shimming Tool, P/N 393185, to shim the driveshaft on 2001-2003 *Johnson* 60/70 HP 4-stroke gearcases.

351051 Collar: Used in conjunction with the existing Driveshaft Shimming Tool, P/N 393185, to shim the driveshaft on 2003 *Johnson* 90/115/140 HP 4-stroke gearcases.

351055 Pinion bearing installer: Used in conjunction with the existing Pinion Bearing Remover and Installer Kit, P/N 391257, to service the pinion bearing on *Johnson* 9.9/15 HP 4-stroke gearcases.

351058 Propeller shaft bearing installer: Used on *Johnson* 60/70 & 90/115/140 4-stroke gearcases.

351126 Propeller shaft bearing remover: Used on *Johnson* 60/70 & 90/115/140 4-stroke gearcases.

5034226 Valve Adjustment Tool Kit: Used on *Johnson* 40/50 HP and 90/115/140 HP 4-stroke outboards.

5034235 Flywheel removal bolts: Used on *Johnson* 9.9/15 HP 4-stroke outboards.

5034237 Propeller shaft puller: Used on *Johnson* 9.9/15 HP 4-stroke gearcases.

5034239 Driveshaft holder: Used on *Johnson* 90/115/140 HP 4-stroke outboards.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE
Johnson



OUTBOARDS

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SERVICE
Bulletin

Date: April, 2003

No. 2003-02(S)

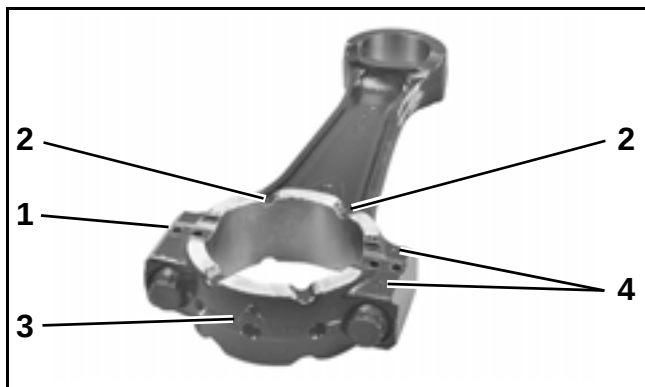
MODELS: 90° 3.3 liter *Evinrude* models, 2001 and newer

SUBJECT: New Connecting Rod

A new connecting rod has been released for use with all 3.3 liter *Evinrude* models, 2001 and newer. This new rod is offered for use when rebuilding outboards across all 2001 and newer model years. Additionally, the connecting rod can be used in any combination with older 3.3 liter connecting rods. New connecting rods offer superior lubrication and bearing life.

The new connecting rod has the following features:

- A two-hole break with added forged oil scallops;
- A cast-in arrow and alignment dots on the rod cap to aid alignment; and
- A standardized torque of 62 to 64 ft. lbs. (84 to 87 N·m) and **Triple-Guard® grease** lubrication.



1. Two-hole break
2. Oil scallops
3. Cast-in arrow
4. Alignment dots

001221

Affected Models

All 90° 3.3 liter *Evinrude* models

Order the connecting rod below and use the new torque and lubrication procedure described below.

DESCRIPTION	P/N	QTY
Rod Assy, Connecting	5000643	1

Apply **Triple-Guard grease** to the threads and mating surface under the head of each screw.

IMPORTANT: A torque of 62 to 64 ft. lbs. (84 to 87 N·m) should be used on **all** connecting rods, both new and existing 3.3 liter rods. This torque supercedes the specification printed in the 2002/2003 *Evinrude* Service Manual, P/N 5005259, on pages 241 and 295. Please make a note in the service manual to reference this Service Bulletin.

Align the connecting rod with the arrow and alignment dots up, facing the flywheel.

IMPORTANT: Refer to the *Evinrude* Service Manual for the necessary tools and procedures for completing connecting rod installation.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

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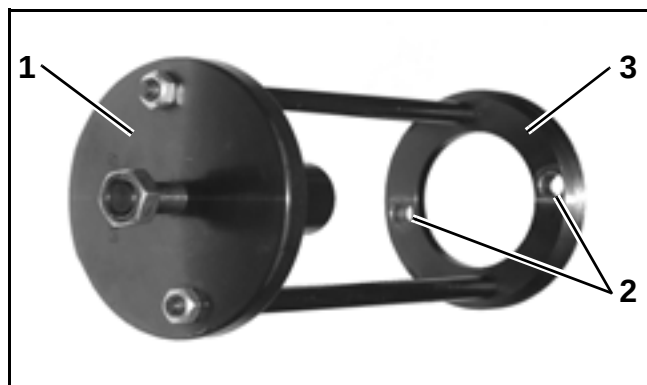
Date: April, 2003

No. 2003-03(S)

MODELS: 60–140 HP 4-Stroke *Johnson*,
2001 and newer

SUBJECT: Service Tool Modification Gear
Holder

A change to Gear Holder, P/N 342689, provides two additional holes on the lower plate of the assembly. This change allows the tool to be used for shim adjustment measuring and propeller shaft bearing housing removal on “tab”-retained propeller shaft bearing housings.



1. Gear Holder
2. Additional holes
3. Lower plate

001225

PROCEDURE

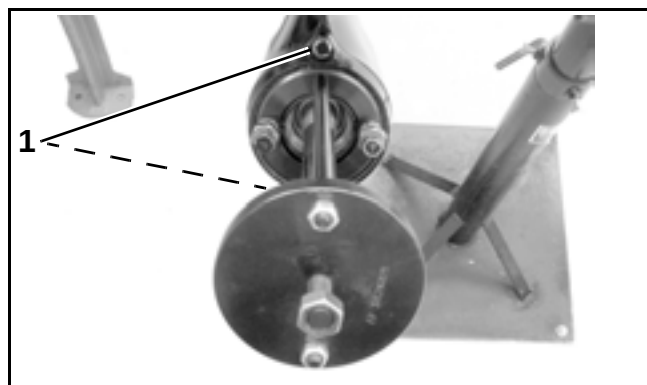
Order new lower plate, P/N 351235, and install on older tools.

OR

Modify existing tools by performing the following procedure:

- Remove the lower plate.
- Drill two additional holes in the lower plate, 0.421 in. (11 mm) in diameter.
- Use a center punch to mark positions prior to drilling holes.
- Chamfer top edge of holes to a 45° angle.

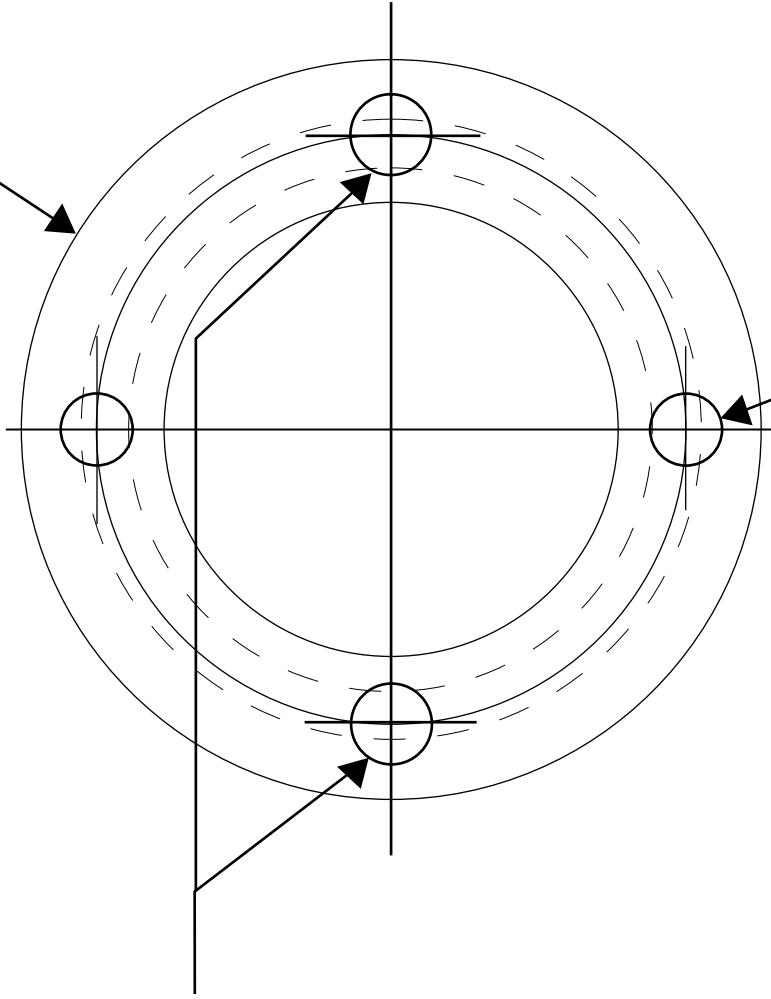
IMPORTANT: Refer to template on back of page. Make a copy of template and file this bulletin for future reference.



1. Tab

001226

W98 X 2.0 THREAD



DRILL:
 .421 IN. (11 MM) DIA. THRU
 (2) HOLES 180° APART
 90° FROM TAPPED HOLES
 ON 3.070 BOLT CIRCLE

TAPPED HOLES (EXISTING)
 3/8-24 UNF-28 THRU
 (2) HOLES 180° APART
 ON 3.070 BOLT CIRCLE

MODIFICATION TEMPLATE
 GEAR HOLDER, P/N 342689

001224

Please route to: ☐ Service ☐ Sales ☐ Parts Init. ☐ ☐ ☐		OUTBOARDS SERVICE Bulletin
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Date: July, 2003

No. 2003-04(S)

MODELS: *Johnson* 2003(ST) 90, 115, 140 HP
4-Stroke

SUBJECT: Difficult Shifting

AFFECTED MODEL

Identify model number before performing any service procedures.

IMPORTANT: ONLY REMOTE MODELS ARE AFFECTED. (90/115 HP TILLER-KIT CONVERSIONS ARE NOT INVOLVED).

Models	Model Year	Serial Number
J90PL4ST J90PX4ST	2003	ALL
J115PL4ST J115PX4ST		
J140PL4ST J140PX4ST		

PROBLEM

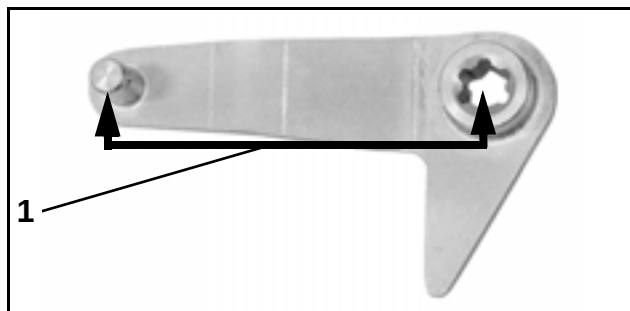
Some outboards models listed above have been built with an incorrect clutch lever.

Symptoms may be experienced as:

- Difficult shifting into either FORWARD or REVERSE.
- Inadequate gear engagement (clutch dog ratcheting).
- Shift control cable adjustments do not correct problem.

INSPECTION

Remove starboard lower motor cover and measure clutch lever from center of pin, to center of spline. The correct length is 2.559 in. (65 mm).



Clutch Lever
1. P/N 5033546 2.559 in. (65 mm)

001175

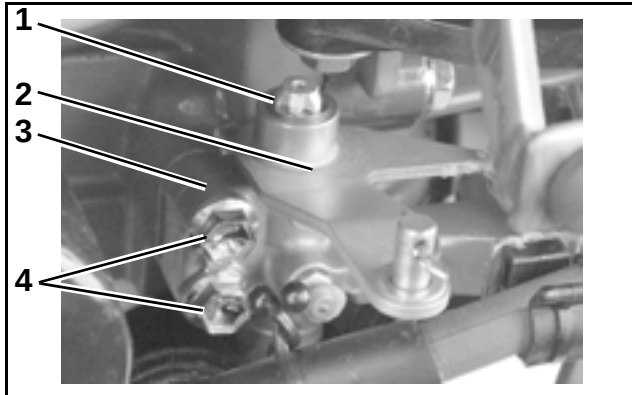
SOLUTION

If the clutch lever does not measure to the correct length, **order** the following parts.

DESCRIPTION	P/N	QTY
Clutch Lever	5033546	1
E-Ring	5033624	1

Remove the starboard lower motor cover. Remove retaining pin and shift cable from shift lever.

Remove two screws, bracket and e-ring. Slide shaft down and remove clutch lever.



1. E-Ring
2. Clutch lever
3. Bracket
4. Screws

001181

Install new clutch lever and e-ring. Ensure tip of lever does not catch on the top of the neutral switch actuator pad.

Install bracket and two screws, torque to 11 to 15 ft. lb. (15 to 20 N·m).

Refer to 4-Stroke Installation and Predelivery manual, P/N 5005536, for detailed instructions on the installation and adjustment of the shift control cable.

ADDITIONAL INFORMATION

A warranty claim form **MUST** be completed and submitted along with the following part:

- Original shift lever

Using a standard warranty claim form, use the following information:

- Failing Part Number – **5033546**
- Flat Rate Code – **CL001**
- Flat Rate Labor Allowance – **1.0 hours**

Credit for parts and labor will be issued only when the completed warranty allowance request form and required parts are returned. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

For additional information, dealers can call 1-800-888-4662.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐	 	OUTBOARDS  SERVICE Bulletin
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Date: November, 2003

No. 2003-05(S)

MODELS: 2004 *Evinrude*® *E-TEC*™ Outboards

SUBJECT: Oil Requirements, Usage, and Information for *Evinrude E-TEC* Product Line

The *Evinrude E-TEC* outboard product line has oil requirements and usage that differ from other *Evinrude* and *Johnson* outboards. Pay special attention to the following new techniques and products associated with *Evinrude E-TEC* outboards.

IMPORTANT: Refer to the *Evinrude E-TEC* Service Manual (P/N 5005644) and the *Evinrude E-TEC* Installation and Predelivery Guide (P/N 5005812) for complete product specifications and service, installation, and predelivery procedures.

OIL REQUIREMENTS

Evinrude E-TEC outboards have a new oiling system design. The following outboard oils are available for use in *Evinrude E-TEC* outboards:

Recommended

- *Evinrude/Johnson XD100*™
- *Evinrude/Johnson XD50*™
- *Evinrude/Johnson XD30*™

Evinrude/Johnson brand oils are formulated to give best engine performance while controlling piston and combustion chamber deposits, providing superior lubrication, and ensuring maximum spark plug life.

OIL CONTROL

Evinrude E-TEC outboards have new software-related oil control functions which control system priming, oil usage, and the break-in procedure.

Oil Priming

Due to the new oiling system of *Evinrude E-TEC* outboards, the priming procedure is unique. Priming the oiling system of *Evinrude E-TEC* outboards can be completed two ways:

- Use diagnostic software (**preferred**); or
- Use winterization procedure.

Refer to the User's Guide of the *Evinrude E-TEC* Engine Diagnostic Software for PDAs for instructions to prime the oiling system using the PDA software.

Refer to **Long-Term (Winterization)** in the **STORAGE** section of the Operator's Guide for complete step-by-step instructions to prime the oiling system using the winterization procedure.

IMPORTANT: The oiling system **MUST** be primed before delivering any *Evinrude E-TEC* outboard. Additionally, the oil tank should be filled with the recommended oil, and the customer informed of the oil requirements.

EMM Oil Control Programming

Using the *Evinrude E-TEC* Engine Diagnostic Software for PDAs (P/N 777230) or the *Evinrude* Diagnostic Software for PC Windows[†] (P/N 777231 – available in Spring 2004), the *EMM* on an *Evinrude E-TEC* outboard can be programmed to take advantage of the reduced oil consumption when using *Evinrude/Johnson XD100* oil.

***Evinrude/Johnson XD100* oil is preferred for all *Evinrude E-TEC* outboards.** It is formulated with special additives for cleaner burning and lower consumption. This synthetic blend oil also provides superior lubrication and maintains top performance.

The outboard is shipped with a small amount of *Evinrude/Johnson XD50* in the tank and has been programmed at the factory to run on *XD25*, *XD30*, *XD50*, or *XD100* oil.

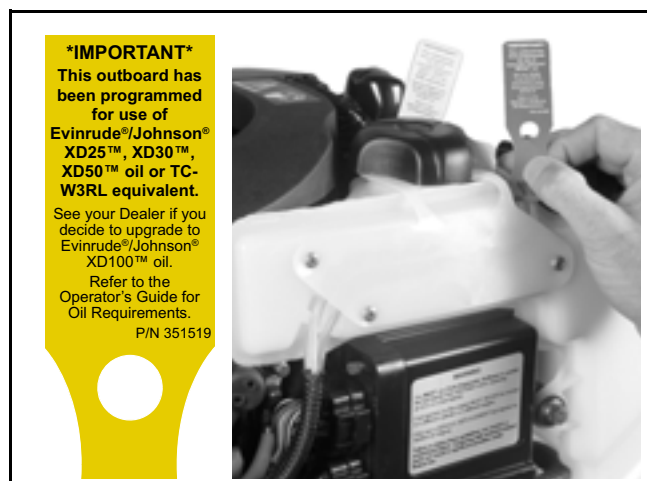
IMPORTANT: NMMA TC-W3RL certified oil must be used if *Evinrude/Johnson* brand oils are unavailable.

Oil Tags

Oil usage tags **MUST** be used and explained to inform the customer what oil is currently being used in the outboard's oil tank.

TC-W3RL Oil Tag (Yellow)

Evinrude E-TEC outboards are shipped with a yellow oil tag (P/N 351519) informing the operator the outboard has been programmed to run on *XD25*, *XD30*, *XD50*, or *XD100* oil, or NMMA TC-W3RL certified oil.



TC-W3RL Oil Tag

002339

The yellow tag is wrapped over the flexweave of the oil tank wire harness.

XD100 Oil Tag (Blue)

A blue oil tag (P/N 351520) is shipped with the outboard in the owner's pack. If the owner chooses to have the *EMM* programmed via the diagnostic software option to take advantage of *Evinrude/Johnson XD100* oil and its cleaner burning and lower consumption, the blue *Evinrude/Johnson XD100* oil tag **MUST** be fixed in place of the yellow TC-W3RL oil tag.



XD100 Oil Tag

002339

Tag Placement

After using the PDA software to program the *EMM* for *Evinrude/Johnson XD100* usage, remove the yellow TC-W3RL oil tag by carefully cutting it from the oil tank wire harness flexweave.

Place the blue *Evinrude/Johnson XD100* oil tag under the oil tank wire harness flexweave with the language you want the owner to see (English or French) facing up and the wide loophole near the oil fill cap.



1. Oil supply hose flexweave
2. Wide loophole

002536

Fold the tag and feed it through the wide loophole. It may be necessary to fold the tag along its length to feed it through the loop.



002537

Pull firmly on the tag to fasten it securely.



002538

Keep a supply of yellow (P/N 351519) and blue tags (P/N 351520) on hand for customers who may switch back to non-*XD100* oil or lose the *XD100* tag.

IMPORTANT: After programming the *EMM* for *Evinrude/Johnson XD100*, instruct the customer to **NOT** use any other oil unless in an emergency. If *Evinrude/Johnson XD100* is temporarily unavailable, a one-time-only use of an NMMA TC-W3RL certified oil is allowed. If *Evinrude/Johnson XD100* oil usage is discontinued, the customer **MUST** first return to your dealership to have the *EMM* reprogrammed back to the NMMA TC-W3RL certified oil setting.

Failure to follow oil specifications could void the engine warranty if a lubrication-related failure occurs.

Break-In Clock

Evinrude E-TEC outboards require **NO** break-in procedures for the customer to perform.

The *EMM* is programmed to supply extra oil to the engine during the first two hours of operation above 2000 RPM for break-in.

Evinrude E-TEC outboard break-in clocks are controlled by the *EMM*. The elapsed time of the break-in clock can be viewed using the *Evinrude E-TEC* Engine Diagnostic Software for PDAs.



Break-In Clock Screen (PDA)

002464

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

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Date: November, 2003

No. 2003-06(S)

MODELS: All Evinrude/Johnson Remote Control Units Bearing the Date Codes Below

SUBJECT: Remote control units, P/N 176380, 176381, 177217 and 177218, Starboard-only use

AFFECTED MODELS

Affected Date Codes

Remote Control	Manufactured and Distributed	Date Codes
P/N 176380	July 10, 2003 to Oct. 18, 2003	10-G-1C to 18-J-1C
P/N 176381		
P/N 177217		
P/N 177218		

Reading Date Codes

Day	01-31
Month	A = January, B = February, C = March, D = April, E = May, F = June, G = July, H = August, I = September, J = October, K = November, L = December
Year	1C = 2003
Date Code Example: 15-F-1C = 15 June, 2003	



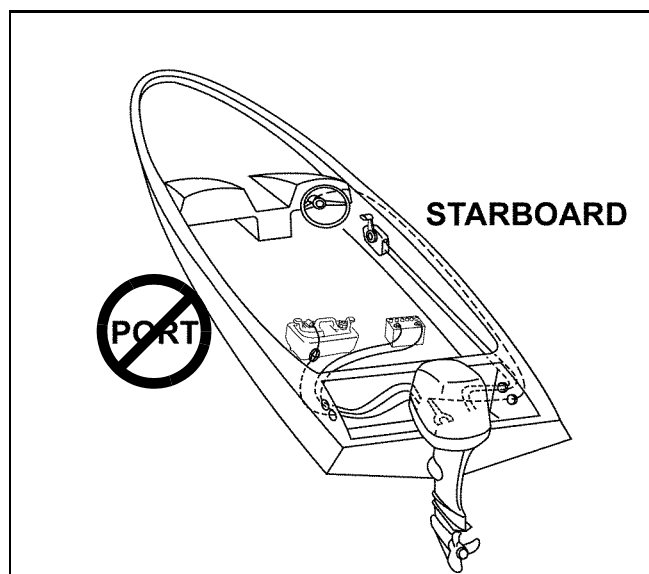
Location of Date Code

1. Date code
2. Fast idle lever

002475

PROBLEM

Remote control units, P/N 176380, 176381, 177217 and 177218, that were manufactured between July 10, 2003 and October 18, 2003, can only be mounted on the starboard side of a boat. When mounted on the port side, they will not function properly.



SOLUTION

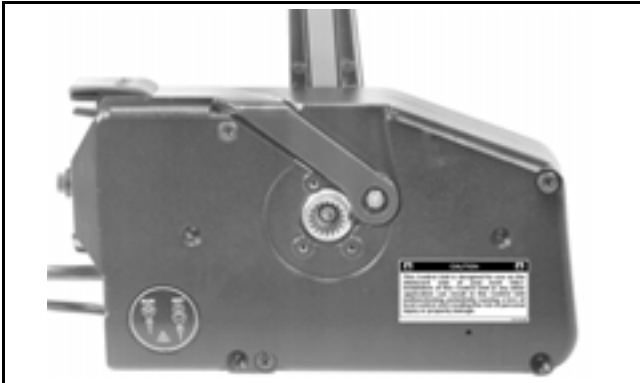
Return any of these remote control units that are scheduled to be mounted on the port side of a boat for credit towards the purchase of another unit that can be mounted on the port or starboard side of a boat and reorder as required.

Affected remote control units should be returned to:

Evinrude/Johnson Genuine Parts
3225 Prairie Ave.
Beloit, WI 53511

Be sure to write **Bulletin 2003-06(S)** on the box and RCM form when returning a unit.

Remote control units, P/N 176380, 176381, 177217 and 177218, with the affected date codes, that are going to be mounted on the starboard side of a boat must have a decal, P/N 351686, affixed to the unit as shown.



Location of Decal

0040885a



CAUTION



This Control Unit is designed for use on the Starboard side of your boat ONLY. Installation of this Control Unit in any other application can result in the Control Unit malfunctioning, potentially causing a loss of boat control and creating the risk of personal injury or property damage.

Decal, P/N 351686

This decal can be ordered, at no additional charge, through Bombardier Parts and Accessories.

Remote control units, P/N 176380, 176381, 177217 and 177218, that were manufactured before July 10, 2003 or after October 18, 2003, and are not identified with an affected date code, are appropriate for either a port or starboard application.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: March, 2004

No. 2004-01(S) Rev 1

SUBJECT: 2004 Essential Software and Service Tools

New service tools and software have been developed for servicing *Evinrude* and *Johnson* outboards. The Essential Service Tool Kits and Software listed are shipped automatically as part of the 2004 *Evinrude/Johnson* Essential Service Tool and Software Program. Refer to the applicable service manual for specific procedures related to tool use.

2004 Two Stroke (2S) Essential Software:

777230 Diagnostic software (PDA, *Palm*[†] based): Used to communicate with *Evinrude E-TEC*[™] and 2001 and newer *Evinrude* outboards.

777231 Diagnostic software (PC, *Windows*[†] based): Used to communicate with *Evinrude E-TEC* and 2000 and newer *Evinrude* outboards.

2004 Two Stroke (2S) Essential Tool Kit, P/N 5005811, contains:

351204 *Torx*[†] driver: Used on 2004 and newer 9.9/15HP and 90-175HP *Johnson* (2S) carburetors with tamper resistant screws.

351413 Terminal release tool: Used on *Amp*[†] Power Timer series connectors to remove terminal from connector housing.

777077 Terminal primary lock tool: Used on *Amp* Superseal 1.5 connectors to remove terminal from connector housing.

777078 Terminal secondary lock tool: Used on *Amp* Superseal 1.5 connectors to remove anti-backout device from connector housing.

777079 Terminal secondary lock installer: Used on *Amp* Superseal 1.5 connectors to install anti-backout device into connector housing.

5005799 Stator test adaptor: Used on 40-90HP *Evinrude E-TEC* models to test stator output and resistance.

5005844 Injector fitting kit: Provides fittings needed to pressure test *Evinrude E-TEC* fuel injectors.

2004 Four Stroke (4S) Essential Tool Kit, P/N 5005893, contains:

5035744 Test cord, 3-pin connector: Used to test shift position sensor on 200/225HP *Johnson* outboards.

5034229 Injector test cord: Used to test individual fuel injectors on 40 through 225HP *Johnson* outboards.

5035748 High tension wire adaptor. Used to access ignition high tension circuit on 40/50HP and 200/225HP *Johnson* outboards.

IMPORTANT: The 4-Stroke Diagnostic Software requires a database update to function fully on 200/225HP *Johnson* outboards. Update is available for download on *DealerPort*[®] at "Engine Software" link.

New Tools for 25/30HP and 200/225HP Four Stroke (4S) Outboards:

IMPORTANT: The following tools are not part of the 2004 Four Stroke (4S) Essential Tool Kit. Order as needed.

5034762 Remover: Used to attach puller to propeller shaft on 25/30HP *Johnson* (4S).

5034763 Installer: Positions pinion bearing in gearcase housing on 25/30HP *Johnson* (4S).

5034764 Remover: Removes propeller shaft bearing on 25/30HP *Johnson* (4S).

5034774 Installer: Positions bearing in propeller shaft bearing housing on 25/30HP *Johnson* (4S).

5035743 Wrench: Removes and installs driveshaft housing on 200/225HP *Johnson* (4S).

5035745 Test cord, 26-pin and 34-pin connectors: Connects to ECM and wiring harness to check circuit voltages on 200/225HP *Johnson* outboards.

5035746 Gear holder: Positions gears during gearcase shimming on 200/225HP *Johnson* (4S).

5035747 Backlash indicator: Used for gearcase shimming on 200/225HP *Johnson* (4S).

5035749 Gear adjust spring set. Used for "CR" gearcase shimming on 200/225HP *Johnson* (4S).

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Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: March, 2004

No. 2004-02(S)

MODELS: 2004 *Johnson* 25 – 55 HP

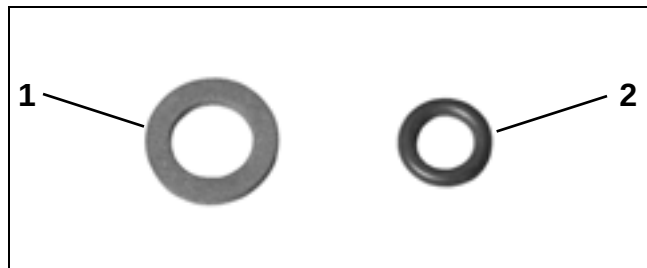
SUBJECT: Use of Fiber Washer on Carburetor
Drain Screw

PROBLEM

Some 2004 25 – 55 HP models may have a fiber washer, P/N 303630, installed on the carburetor drain screw instead of the O-ring, P/N 334746, that is listed in the parts book.

A fiber washer may have been used on some carburetor drain screws that would not seal properly with an O-ring.

Carburetor repair kit, P/N 396701 includes both a fiber washer and an O-ring.



1. Fiber washer, P/N303630
2. O-ring, P/N 334746

003521

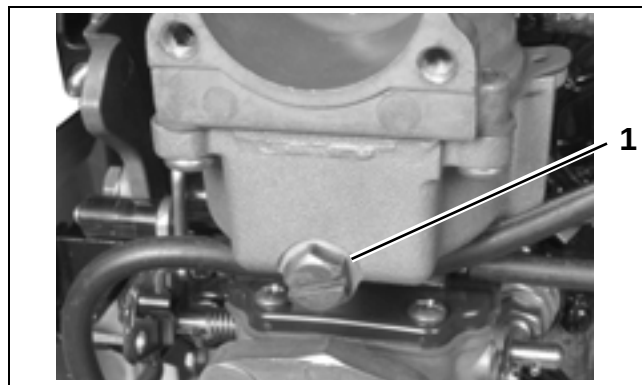
SOLUTION

When servicing carburetors, always replace the seal with the same style fiber washer or O-ring that was removed **unless**:

Inspection shows fuel leakage around the bowl drain screw when an O-ring has been used.

To repair a carburetor with this condition, replace the O-ring with a fiber washer, P/N 303630.

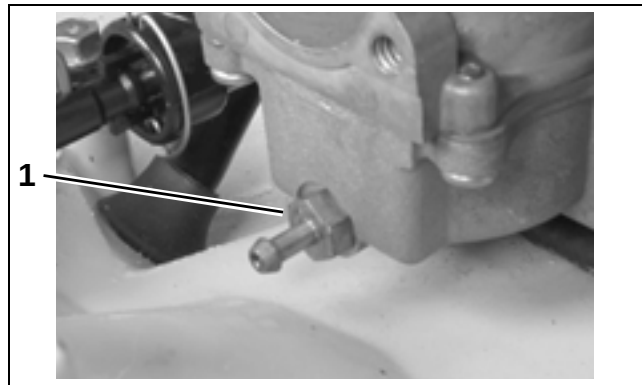
Tighten the plain hex screw 40 to 60 in. lbs. (4.5 to 7 N·m).



1. Carburetor drain screw

003522

Or, tighten the hex screw with nipple 30 to 35 in. lbs. (3.5 to 4 N·m).



1. Hex screw with nipple

003523



WARNING



After servicing the fuel system, check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.



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OUTBOARDS

S
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Date: April, 2004

No. 2004-03(S)

MODELS: All 2004 Evinrude® E-TEC™ models

SUBJECT: Throttle Position Sensor (TPS)
Voltage Too High

PROBLEM

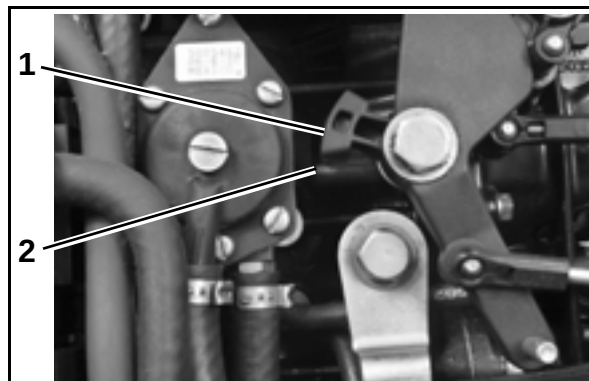
If an Evinrude E-TEC outboard will not accelerate above idle speed and no other faults or issues are found, the Throttle Position Sensor (TPS) voltage may be set too high (exceeding approximately 0.85 V).

SOLUTION

IMPORTANT: First, make sure the throttle is fully closed when starting the engine. A partially open throttle may cause the TPS voltage to be too high.

When rigging an Evinrude E-TEC outboard, make sure the throttle cable is adjusted so the throttle lever is against the idle stop when the outboard is at IDLE and also returns to the idle stop when moved. Then use one of the Evinrude E-TEC Diagnostic Software programs to verify that the TPS voltage is approximately 0.5 V.

For the correct test procedure, refer to "Sensor Resistance Tests" in the **ELECTRICAL AND IGNITION** section of the Evinrude E-TEC Service Manual. Also refer to the **User's Guide** for the diagnostic software.



1. Throttle lever
2. Idle stop

003913



Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐	 	OUTBOARDS  SERVICE Bulletin
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Date: April, 2004

No. 2004-04(S)

MODELS: All 2004 Evinrude® E-TEC™ models, S/N 5069781 and below

SUBJECT: EMM Starter Mode Configuration

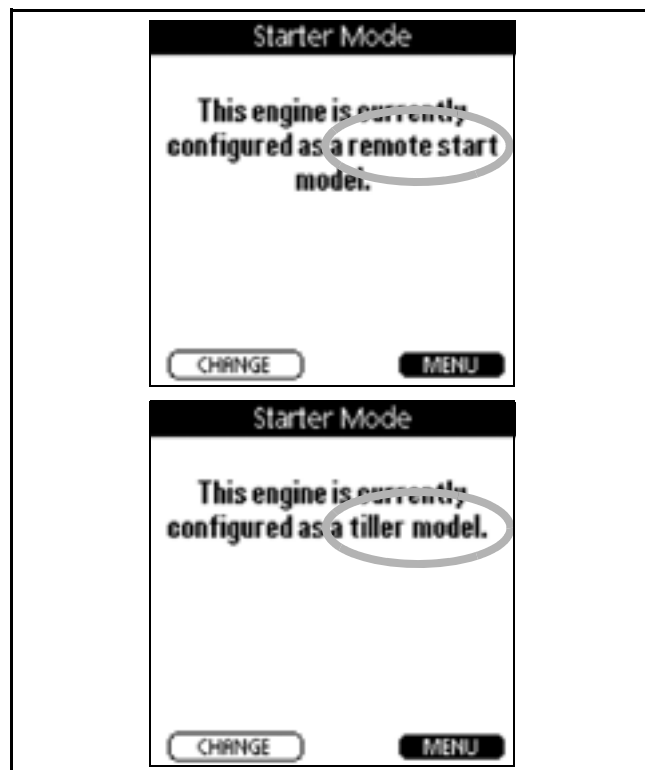
PROBLEM

An EMM programming omission may have left outboards in the affected serial number range with the Starter Mode incorrectly set to "Tiller Model."

SOLUTION

When rigging an Evinrude E-TEC outboard, use one of the Evinrude E-TEC Diagnostic Software programs to verify that the Starter Mode is correctly configured for the application (either "remote start model" or "tiller model").

Refer to the topic "Starter Mode (Tiller/Remote Programming)" in the **ENGINE MANAGEMENT MODULE (EMM)** section of the Evinrude E-TEC Service Manual. Also refer to the **User's Guide** for the diagnostic software.



Starter Mode Screens

002469
002469a



Please route to: ☐ Service ☐ Sales ☐ Parts Init. ☐ ☐ ☐		OUTBOARDS SERVICE Bulletin
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Date: June, 2004

No. 2004-05(S)

MODELS: All 2004 Evinrude® E-TEC™

SUBJECT: Repeated Code 38 Warnings

PROBLEM

An older *EMM* software version may be causing repeated code 38 warnings (loss of oil manifold pressure) in certain weather conditions, particularly cold weather.

A lack of appropriate oil pressure pulses in the oil distribution manifold or an inoperative pressure switch activates service code 38, and the *EMM*:

- Activates the *SystemCheck*™ “NO OIL” light;
- Activates *EMM* LED “NO OIL/OVERHEAT”;
- Stores a service code 38; and
- Initiates S.A.F.E. (Speed Adjusting Failsafe Electronics)

SOLUTION

Check the *EMM* software version. The current software versions are listed below.

Models	Software Version
E40DELSRC E40DPLSRC	73527
E50DPLSRC	73532
E75DPLSRC	72935
E90DPLSRC E90DPXSRC E90DSLRS	72936

If a download is needed, go to the *DealerPort*® website. Dealers **without** *DealerPort* can send an e-mail requesting the new software.

Log into *DealerPort*.

Click **Engine Software**.



1. Engine Software link

DP02

Click **Download Windows & PDA Engine Maps**.

Scroll to the list of Map part numbers and locate the correct recalibrated software version for the corresponding model.

Click **Get Map**.

After downloading the file and opening it, the unzip program will place the Engine Map files in three locations for use with PDA, EV DIAG, and PDC Diagnostics software.

IMPORTANT: Do not change the default path from C:\ when the file is unzipped.

If you do not have DealerPort, e-mail a request for the software to bmca.techsvc@brp.com. In the e-mail subject line, you **must** reference “E-TEC Code 38.”



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☐ Parts	☐



Date: June, 2004

No. 2004-06(S)

MODELS: Evinrude® E-TEC™ (E40DRLSRC)

SUBJECT: Priming Fuel System
(Rope Start Method)

PROBLEM

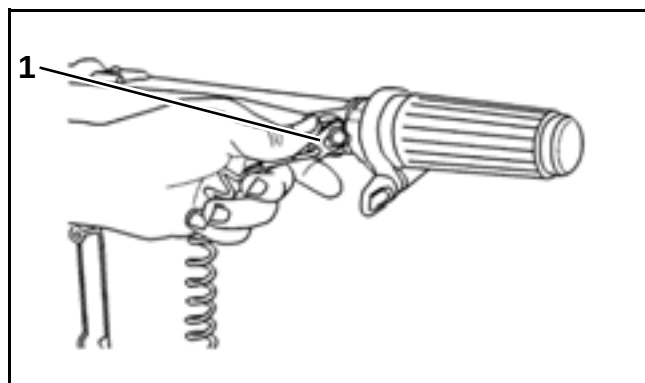
Rope starting the outboard can be difficult after air has entered the high-pressure circuits of the fuel system. This occurs if the outboard is run out of fuel or the high pressure fuel system is disassembled.

Priming of the high-pressure fuel system requires activation of the electric fuel pump for at least 10 seconds. Using the fuel primer bulb only fills the vapor separator and does not purge air from the fuel injectors.

SOLUTION

Use the primer bulb to fill the low pressure fuel system of the outboard. Squeeze the primer bulb until firm.

Prime the high-pressure fuel circuits and injectors by first **disconnecting the emergency stop lanyard** and then pulling the starter rope several times. This process provides increased current to the electric fuel pump circuit and allows the fuel pump to purge air from the fuel injectors.



1. Emergency stop lanyard

NOTE: The spark plugs can be temporarily removed to reduce the effort of turning outboard's powerhead with the starter rope. Disconnect the emergency stop lanyard prior to removing spark plugs.



WARNING



DO NOT pull rewind starter rope with spark plugs removed unless emergency stop lanyard has been disconnected. Removing emergency stop lanyard stops ignition output and eliminates ignition spark. Failure to follow this procedure could result in fire or explosion if fuel vapor is present.

ADDITIONAL INFORMATION

Refer to DealerPort® for software upgrades related to your specific model. E40DRLSRC model outboards can benefit from enhanced software designed to improve starting.



1. DealerPort, Engine Software



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Date: September, 2004

No. 2004-07(S)

MODELS: ALL MODELS

SUBJECT: Linkage Retainer Clips

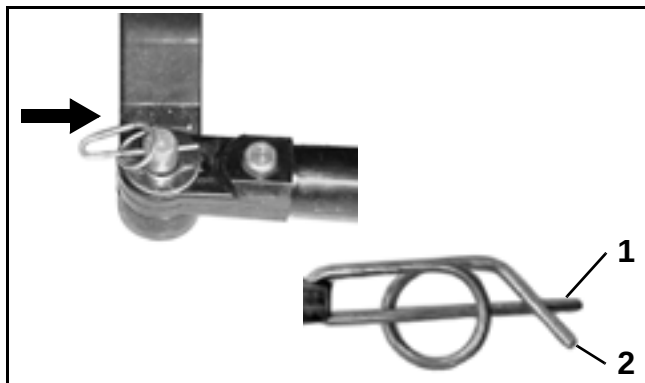
Dear *Evinrude®/Johnson®* Dealers:

This communication is to remind all servicing technicians of the importance of securing linkage retainer clips in the installation of *Evinrude/Johnson* outboards.

IMPORTANT: Retainer clips **must not** be bent or deformed.

Retainer clips should be "locked" after installation. For proper installation and locking, review closely the following steps:

- 1) Place washer on linkage pin.
- 2) Position retainer clip with straight section of wire on the bottom and angled section of wire on the top.
- 3) Use long nose pliers to position retainer clip on pin.
- 4) Insert straight section of clip into linkage pin's hole.



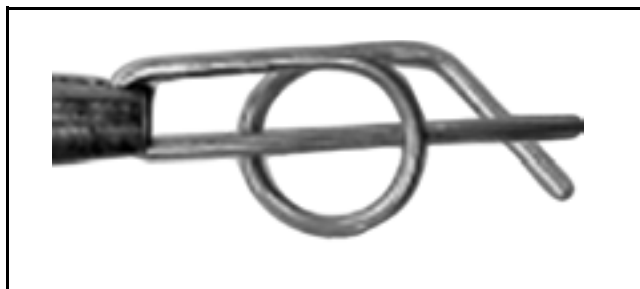
1. Straight section
2. Angled section

DP0818
DP0817

5) Push the clip towards the hole while lifting on the curved end with the pliers.

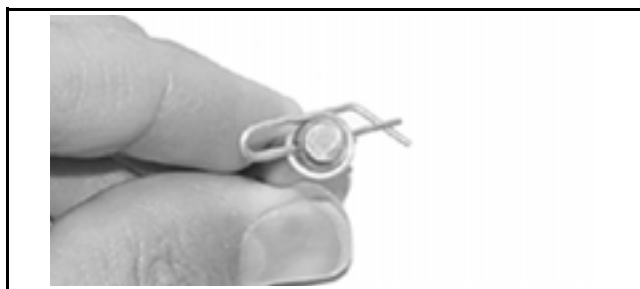
6) Be sure the retainer clip fully engages the linkage pin.

7) Lock the retainer clip by moving the angled section **behind** the straight section of the clip.



Locked Retainer Clip
(Angled section behind straight section)

DP0817rev



08759



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☐ Parts ☐

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Date: October, 2004

No. 2004-08(S)

MODELS: 2004 and 2005 Model Year 2-Cylinder
Evinrude[®] E-TEC[™]

SUBJECT: Starter Cable Repositioning

PROBLEM

Damage may occur to the wiring harness due to the harness rubbing against the starter solenoid positive (+) battery cable mounting flange.

AFFECTED MODELS

Identify the model and serial number before performing any service procedures.

Model Year	Models	Serial Number
2004 (SR)	40 / 50 HP	ALL
2005 (SO)	40 / 50 HP	ALL up to 5088780

SOLUTION

Reposition the starter cable and place a tie strap around wire harness at the J1-A connector. These modifications will eliminate potential rubbing and harness damage.



WARNING



To prevent accidental starting while servicing, remove emergency stop lanyard and disconnect battery cables at the battery.

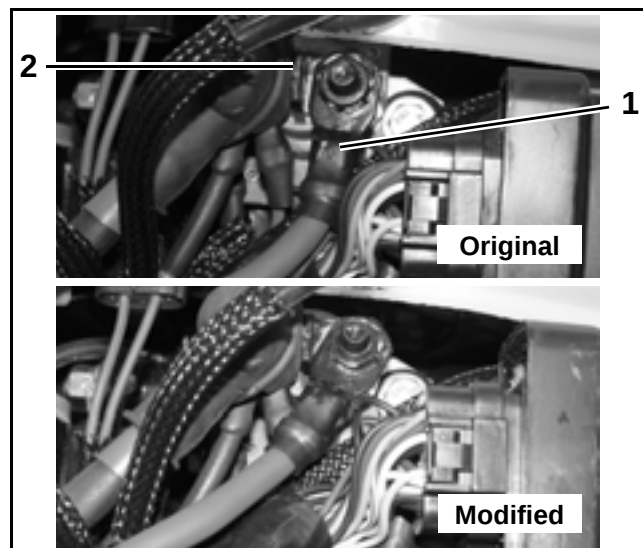
Loosen the nut securing the starter positive (+) cable. Rotate the starter cable, angling it away from the starter solenoid, until it contacts the bolt wall. Retighten bolt to secure the starter cable in its new position.



WARNING



Keep all electrical connections clean, tight, and insulated to prevent shorting or arcing.

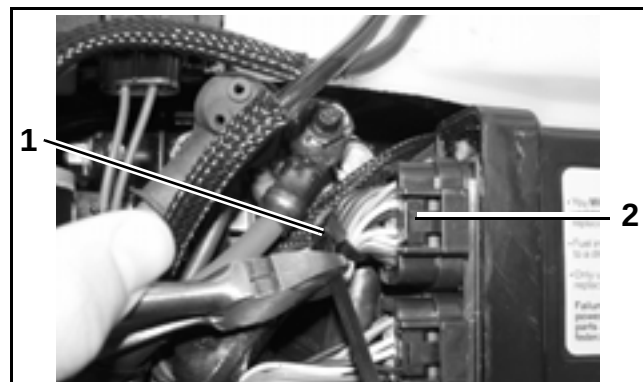


1. Starter cable
2. Bolt wall

004229
004230

After servicing, re-coat wire and terminal with *Black Neoprene Dip*.

Place a tie strap around the J1-A connector wire bundle. The tie strap will bind the wires closely, keeping them from rubbing against starter cable.



1. Tie strap
2. J1-A connector of EMM

004231



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Date: October, 2004

No. 2004-09(S)

MODELS: Evinrude/Johnson V6

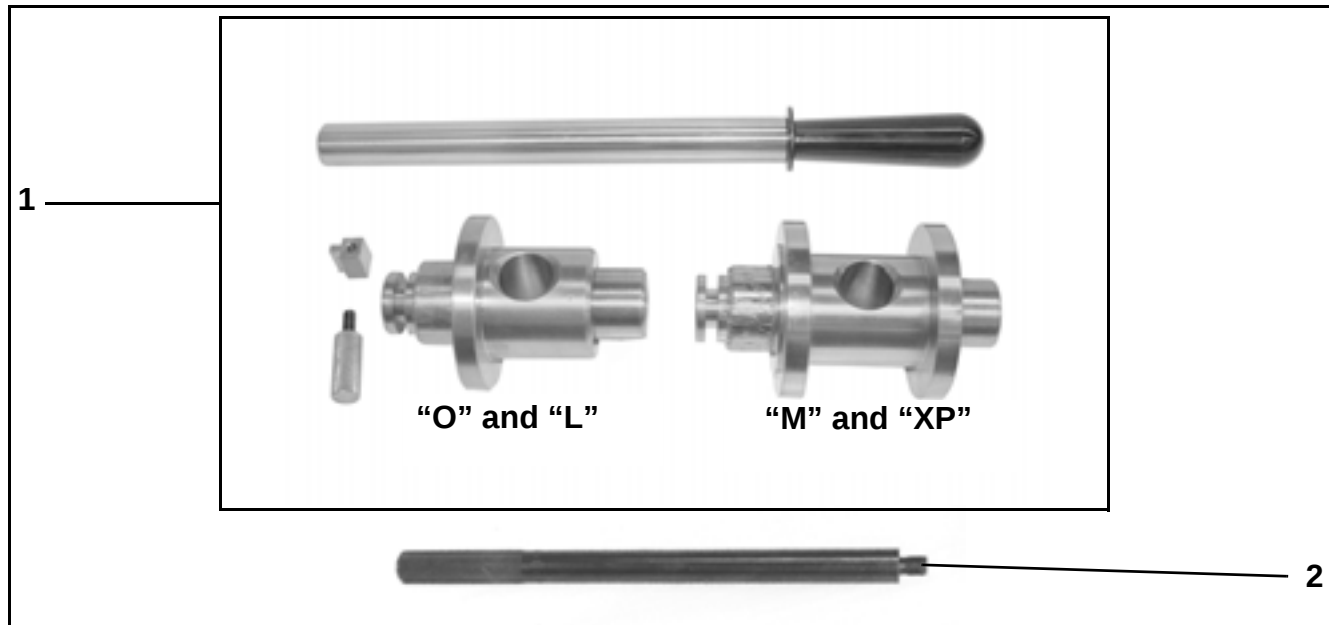
SUBJECT: Gearcase Alignment Gauge Kit (V6),
P/N 5006349

A new service tool has been developed for servicing *Evinrude* and *Johnson* outboards. Use Gearcase Alignment Gauge Kit, P/N 5006349 to check the condition of all late model V6 gearcase housings prior to reassembly.

Check the alignment of the gearcase housing on gearcase assemblies that have experienced impact damage and/or internal bearing and gear failure.

Distorted gearcase housings affect driveshaft to propshaft alignment and gear alignment. Failure to properly identify distorted gearcase housings can result in replacement gear failure. This type of failure is **not** covered by warranty.

This gauge kit assembles to the forward bearing housing of a standard rotation gearcase and driver handle, P/N 311880 (existing tool). Assemble as indicated to check all V6 gearcase housings (1979 and newer 4 hole water inlet, "O" and "L" types; and "M" and "XP" types). Refer to P&A Bulletin No. 2002-02 to properly identify gearcase types.



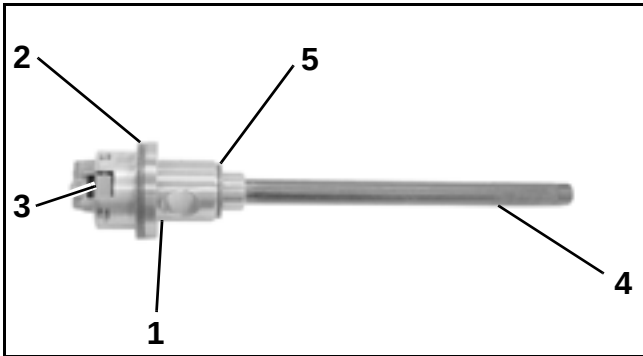
1. Gearcase Alignment Gauge Kit, P/N 5006349
2. Driver Handle, P/N 311880

IMPORTANT: Disassemble and thoroughly clean gearcase housing and reinstall pinion bearing prior to installing the assembled gearcase alignment gauge into gearcase housing.



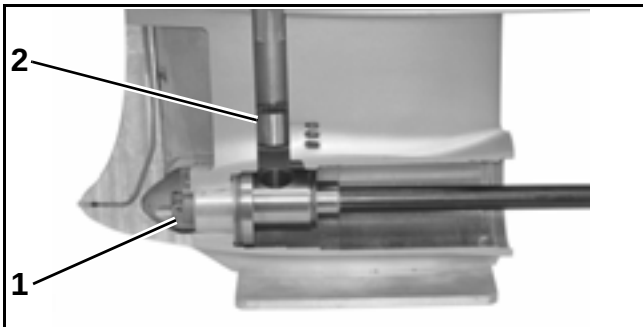
INSTRUCTIONS

Assemble gauging head with forward thrust bearing and washer onto forward bearing housing with retainer and shift pin. Thread driver handle into back of gauging head and tighten. Position reverse thrust bearing and washer on gauging head.



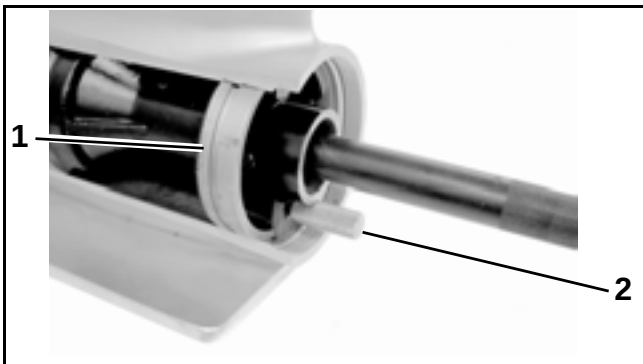
1. Gauging head
2. Forward thrust washer and bearing
3. Retainer
4. Driver handle, P/N 311880
5. Reverse thrust bearing and washer

Insert assembly into cleaned gearcase housing. Make sure that forward bearing housing seats completely into front of gearcase housing.



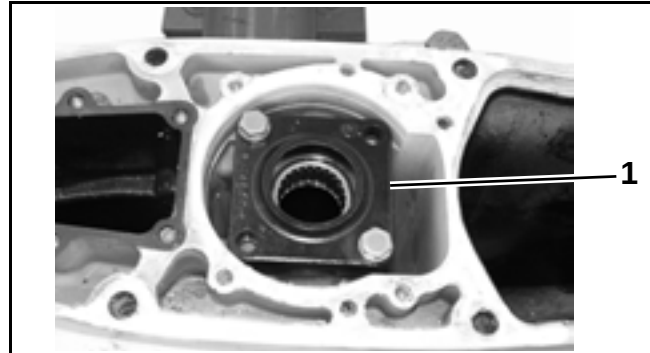
1. Forward bearing housing
2. Pinion bearing, assembled

Temporarily install the propeller shaft bearing housing **without** large O-rings (or locking wedge, if equipped). Bearing housing must be fully seated in gearcase housing. Install lower tab retainer in housing and secure with thumb screw (if equipped).



1. Bearing housing
2. Thumb screw

Temporarily install driveshaft bearing housing **without** seals and O-ring into gearcase housing and secure with two (2) screws. Bearing housing must be fully seated in gearcase housing.



1. Driveshaft bearing housing

Use driver handle to turn gauging head as needed. Position gauging head to allow gauging shaft to slide easily into alignment hole in gauging head.

IMPORTANT: DO NOT force shaft into alignment hole. Shaft **MUST** slide easily into hole of gauging head. If shaft does not slide into hole, gearcase housing is damaged and **must** be replaced.



1. Gauging shaft



Assembled Cutaway View

004317

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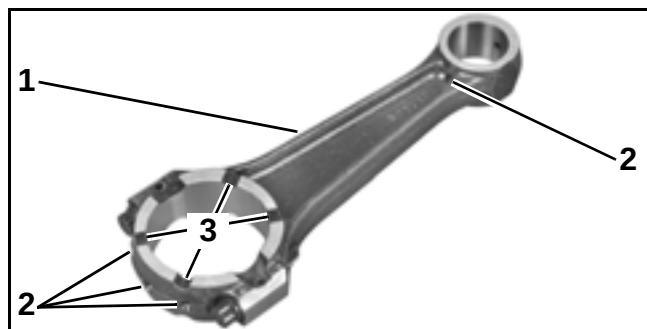
S
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Date: October, 2004

No. 2004-10(S)

SUBJECT: New Connecting Rod, P/N 5006383

A change in outboard production occurred with serial number 5093769. All 2005 MY *Evinrude* and *Johnson* 60°V outboards built after this serial number are built with a new style connecting rod, P/N 5006383. This connecting rod will also supercede connecting rod, P/N 392591, for replacement parts.



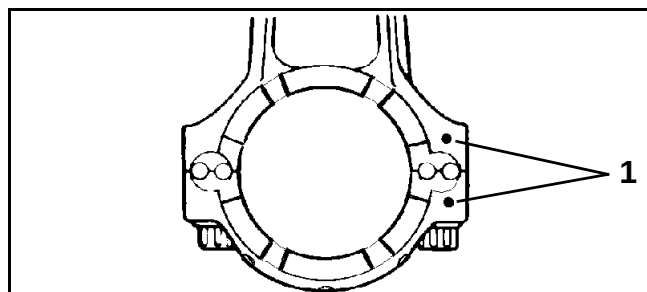
1. Connecting rod, P/N 5006383
2. Oiling hole(s)
3. Oiling Slots

002055

IMPORTANT: When servicing outboards with the new style connecting rod, use the following assembly procedure. The alignment fixture torque has been **reduced**.

ASSEMBLY PROCEDURE

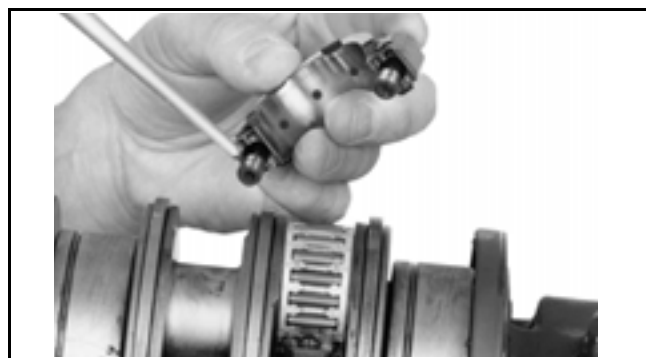
Be sure alignment dot on rod cap matches dot on rod and that both dots face flywheel.



1. Alignment dots

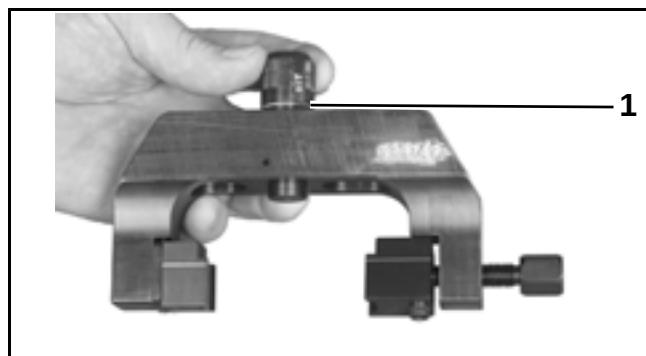
53628

Lubricate rod cap screw threads and under screw head mating surface with outboard lubricant. Align dot on rod cap with dot on the connecting rod. Install rod cap screws finger tight (NO MORE than 6 in. lbs. (1 N·m) maximum).



49080

Install Rod Cap Alignment Fixture, P/N 396749, **before** tightening rod cap screws. Align the flat marked "SET" on the rod engagement stop with the arrow on the frame. Position stop at the center setting (one line showing). Rotate adjustment knob 180° to lock in position.



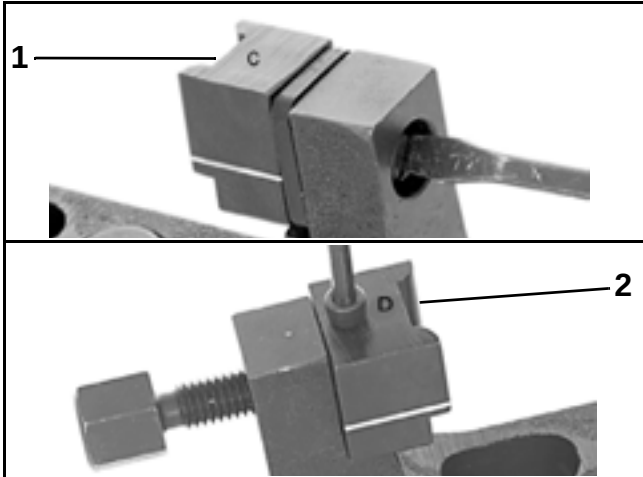
1. Center position, one line showing

002484

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Secure restraining jaw “C” and forcing jaw “D” to frame.



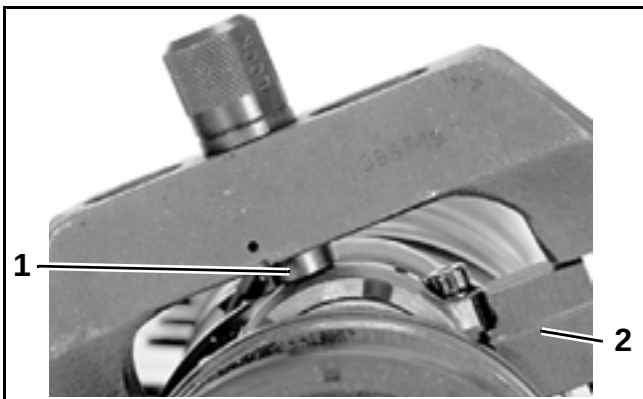
1. Forcing Jaw “C”
2. Forcing Jaw “D”

21591/21594

IMPORTANT: Torquing the screws without Alignment Fixture, P/N 396749, or using an incorrect procedure could cause permanent damage to the connecting rod and crankshaft. To maintain accurate torque values, keep torque wrench extension length to a minimum.

Apply a light coat of outboard lubricant to the corners of the connecting rod and rod cap. Place frame on connecting rod using the following procedure:

- Position frame onto the connecting rod so the contact area of the jaw is centered on the side of the rod.
- Tighten forcing screw until jaws contact connecting rod.
- Slide frame down until adjustment stop contacts the rod cap. The groove lines on the jaws must be centered on the rod/crankpin diameter.



1. Adjustment stop
2. Groove line

34460

IMPORTANT: Make sure that frame is squarely in position and that rod and cap are aligned.

Tighten the forcing screw to a torque of 14 to 16 in lbs. (1.6 to 1.8 N·m). Do not overtighten.

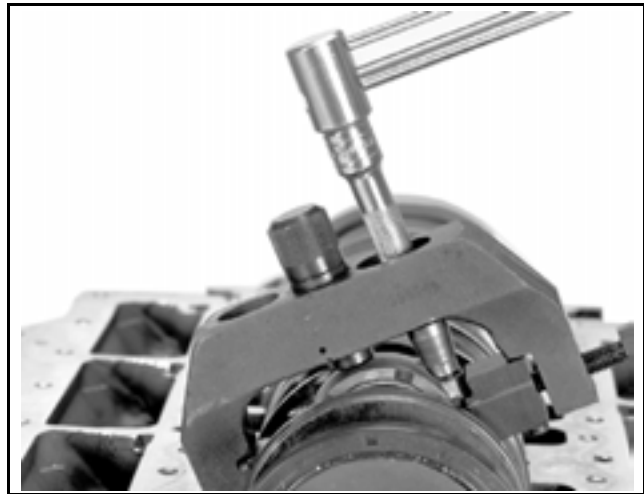


34461

Loosen both rod cap screws one-quarter turn.

Use Torquing Socket, P/N 331638, to tighten rod cap screws in three stages:

- Apply an initial torque of 40 to 60 in. lbs. (5 to 7 N·m) to both rod cap screws.
- Torque screws to 14 to 16 ft. lbs. (19 to 21.7 N·m).
- Apply a final torque of 30 to 32 ft. lbs. (41 to 43 N·m).



34463

Loosen forcing screw and remove the frame.

IMPORTANT: Test at least three corners of the rod and cap joint with a pick. Joint must be smooth with no step.

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Date: October, 2004

No. 2004-011(S)

SUBJECT: 2005 Essential Service Tools and Software

New service tools and software have been developed for servicing *Evinrude[®]* and *Johnson[®]* outboards. The Essential Service Tools listed are shipped automatically as part of the 2005 *Evinrude/Johnson* Essential Service Tool and Software Program. Refer to the applicable service manual for specific procedures related to tool use.

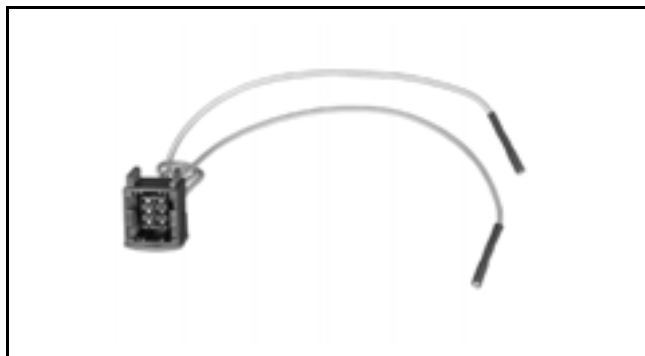
2005 Two-Stroke (2S) Essential Software:

Software Updates are available on *DealerPort[®]*. Refer to *DealerPort* to download free updates for:

- Diagnostic software (PDA, *Palm[†]* based, P/N 777230): Used to communicate with *Evinrude E-TEC[™]* and 2001 and newer *Evinrude* outboards
- Diagnostic software (PC, *Windows[†]* based, P/N 777231): Used to communicate with *Evinrude E-TEC* and 2000 and newer *Evinrude* outboards.

2005 Two-Stroke (2S) Essential Tools:

5006211 Stator test adaptor: Used on *Evinrude E-TEC* 200–250 HP models to test stator output and resistance.



004222

5006397 Fuel Pressure Test kit: Provides 0 to 15 PSI gauge and fittings needed to pressure test

Evinrude E-TEC low pressure fuel system. Connects to lower test valve on vapor separator of *Evinrude E-TEC* 200–250 HP models and future *Evinrude E-TEC* models.

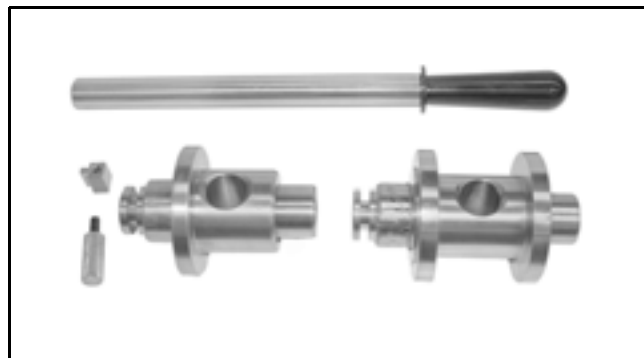


004560

Additional New Tools for 2005 Two-Stroke (2S) Outboards:

IMPORTANT: The following tool is not part of the 2005 *Evinrude/Johnson* Essential Service Tool and Software Program. Order as needed.

5006349 Gearcase Alignment Gauge Kit (V6): Used to check the alignment of gearcase housing on gearcases that have experienced impact damage and/or internal bearing and gear failure.



004315

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OUTBOARDS

S
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Date: December, 2004

No. 2004-12(S)

MODELS: 2005 Model Year 200–250 HP
Evinrude[®] E-TEC[™]

SUBJECT: Spark Plug Gap

This communication is to inform *Evinrude* and *Johnson* dealers of a specification change on *Evinrude E-TEC* 200–250 HP models.

The change affects the spark plug gap setting for the *Champion[†]* QC10PEPB spark plug used on these models.

The **new** spark plug gap setting is **.028 ± .003 in.** (The spark plugs were gapped to .030 ± .003 in. on early production engines.)



000758

IMPORTANT: Always check spark plug gap settings and adjust spark plug gap to the lower end of range for maximum spark plug life. Install spark plugs following the “Spark Plug Indexing” procedure provided in the service manual.

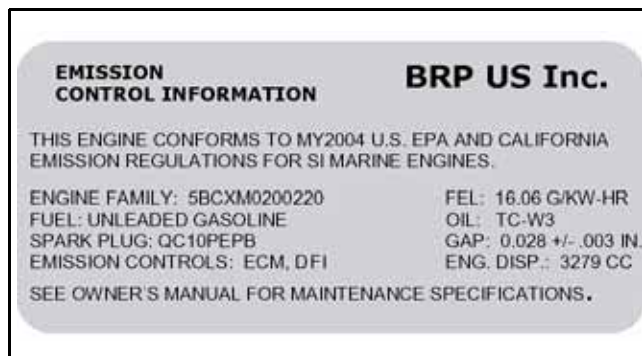
Refer to Emission Control Information (ECI) Label for specific spark plug gap setting and spark plug information.



TYPICAL – Swivel Bracket

1. ECI Label

000449



ECI Label

004727



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Date: February, 2005

No. 2005-01(S)

MODELS: 2004 Model Year 9.9–15 HP
Johnson® 4-Stroke

SUBJECT: Powerhead or Cylinder Reinstallation

Dear *Evinrude®/Johnson* Dealers:

This communication is to inform all servicing technicians of the requirement for applying liquid gasket during the reassembly of certain *Johnson* 4-stroke outboards.

AFFECTED MODELS

Identify the model and serial number before performing any service procedures.

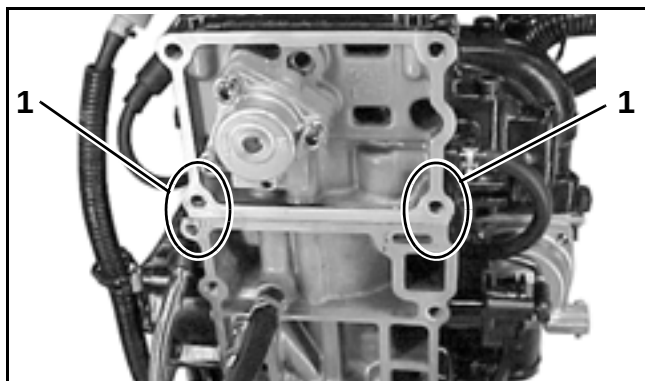
Model Year	Models	Serial Number Range
2004 (SR)	9.9 HP	22031026 to 22031565
2004 (SR)	15 HP	23030842 to 23031201

PROCEDURE

IMPORTANT: Refer to Service Manual, P/N 5005655, and follow these additional instructions when servicing an affected model.

Reassembly is the reverse order of removal, with special attention to the following steps.

Apply *Three Bond 1207B*, P/N 351053, liquid gasket to the mating area between the cylinder head and cylinder block.



1. Mating area

004871

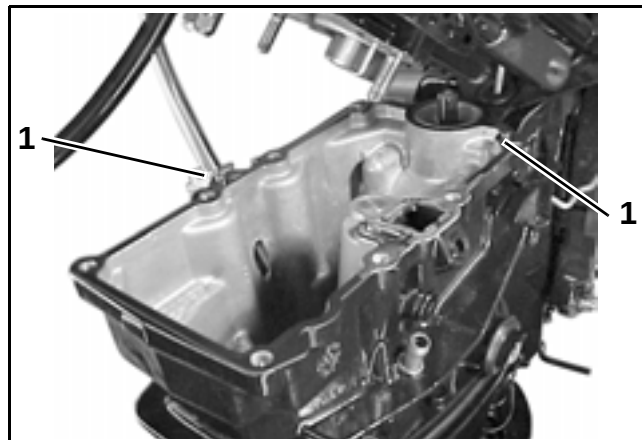


WARNING



Failure to properly seal the powerhead and cylinders can cause oil contamination with water.

Install two dowel pins.

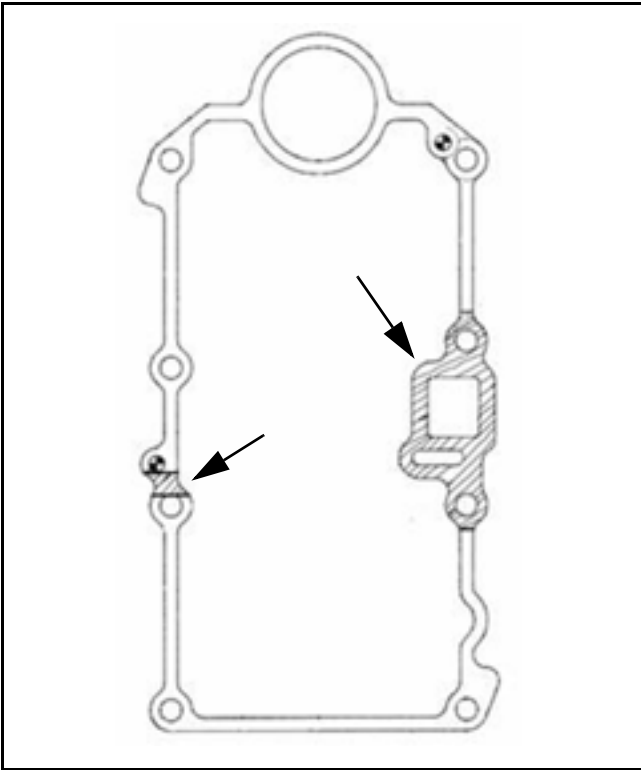


1. Dowel pins

004872



Apply *Three Bond 1207B* liquid gasket to areas on both sides of oil pan gasket (shaded areas in diagram).



Oil Pan Gasket

Immediately after fitting the gasket to the oil pan, install the power unit in place and torque the bolts to 23 N·m (17 ft. lbs.).

IMPORTANT: *Three Bond 1207B* liquid gasket starts to harden shortly after application, so do not delay in reinstalling the power unit.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: February, 2005

No. 2005-02(S)

MODELS: 2005 Model Year Outboards with New Power Trim and Tilt Units

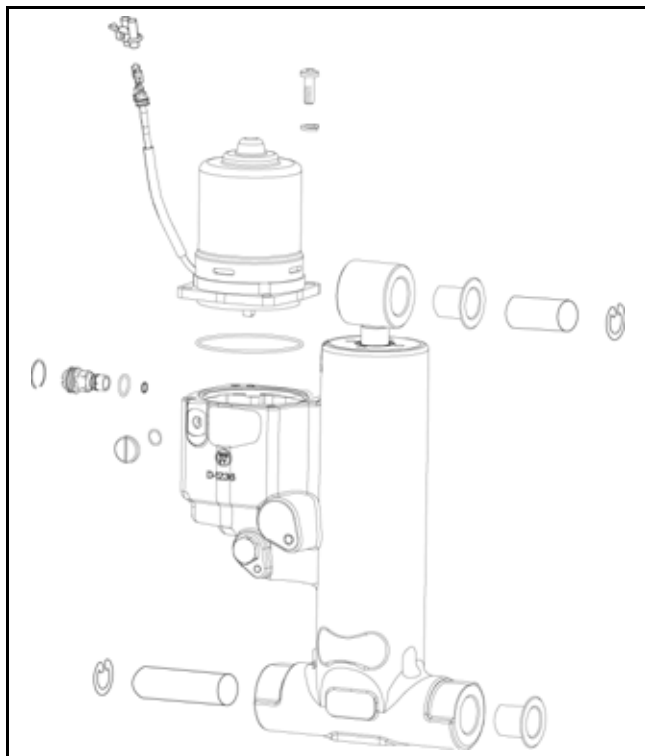
SUBJECT: New Power Trim and Tilt Units
Using Evinrude[®]/Johnson[®]
Biodegradable Trim and Tilt Fluid

Dear Evinrude/Johnson Dealers:

A new single cylinder hydraulic power trim and tilt unit was introduced in 2005 outboard production. The first models receiving this new unit are the Evinrude E-TEC[™] 75 / 90 HP outboards.

The new power trim and tilt unit, P/N 5005756, **requires** the use of new Evinrude/Johnson Biodegradable Trim and Tilt Fluid, available in one-quart bottles, P/N 763439.

IDENTIFICATION



New Power Trim and Tilt Unit

FLUID USAGE

The new Evinrude/Johnson Biodegradable Trim and Tilt Fluid **must** be used properly. Use Evinrude/Johnson Biodegradable Trim and Tilt Fluid as instructed by appropriate service manual or manufacturing specifications.

IMPORTANT: Follow these usage instructions which appear on the bottle's label.

- Use only where specified.
- **DO NOT MIX** with other hydraulic fluids.
- **DO NOT SUBSTITUTE** or use in place of other hydraulic fluids.
- Do not substitute or use in place of Evinrude/Johnson Power Trim/Tilt and Power Steering Fluid.



WARNING



Incorrect or improper hydraulic fluid usage can damage the power trim and tilt unit or affect proper operation of unit.



Evinrude/Johnson Biodegradable Trim and Tilt Fluid, P/N 763439



Please route to:

☐ Service ☐ Init.
☐ Sales ☐
☐ Parts ☐

EVINRUDE[®]
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OUTBOARDS

S
SERVICE
Bulletin

Date: July, 2005

No. 2005-03(S)

MODELS: 2005 *Evinrude[®] E-TEC[™]* 200–250 HP

SUBJECT: Cylinder Head Modification to
Eliminate Low Speed Overheat

Dear *Evinrude/Johnson[®]* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a change to the cylinder head on 2005 *Evinrude E-TEC* 200-250 HP models. Outboards with serial number 5109291 or higher are built with this feature.

In certain operating conditions, a low speed overheat can occur. The following cylinder head modification will eliminate persistent low speed overheat conditions.

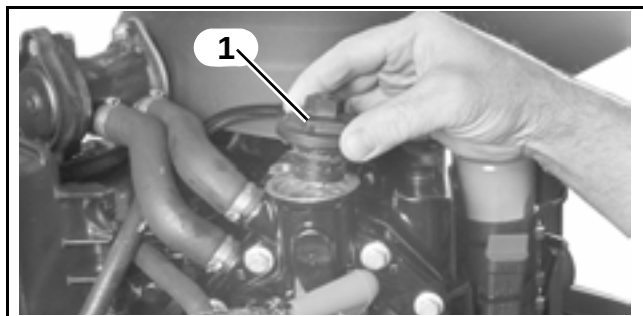
A machined passage was added to the top of the cylinder head, adjacent to the seat for the thermostat cover. This new machined passage allows air to vent from the top of the thermostat chamber to the top pressure valve passage of the cylinder head.

This feature can be added to 2005 *Evinrude E-TEC* 200-250 HP models built prior to serial number 5109291. Adding this feature provides improved venting of the thermostat chamber and improves thermostat operation.

PROCEDURE

Perform this procedure on both cylinder heads.

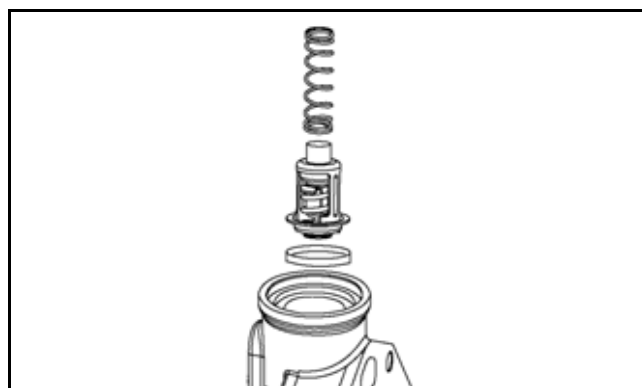
Remove thermostat cover and O-ring from the cylinder head.



1. Thermostat covers

004338

Remove the thermostat spring and thermostat assembly.

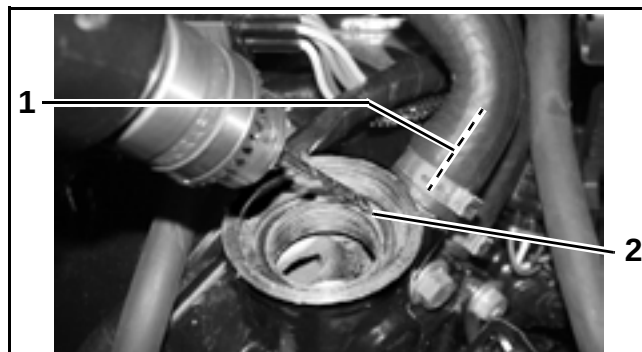


004098R

IMPORTANT: Carefully place a paper towel or equivalent in cylinder head opening to prevent metal chips from entering the cooling passages of cylinder head.

IMPORTANT: Apply grease to the full length of drill bit to capture metal chips during drilling.

Use a 1/8 in. drill bit. **Center** drill bit on pressure valve passage. Drill a 1/8 in. (0.3 mm) hole at a 45° angle **into the second step** of the cylinder head.



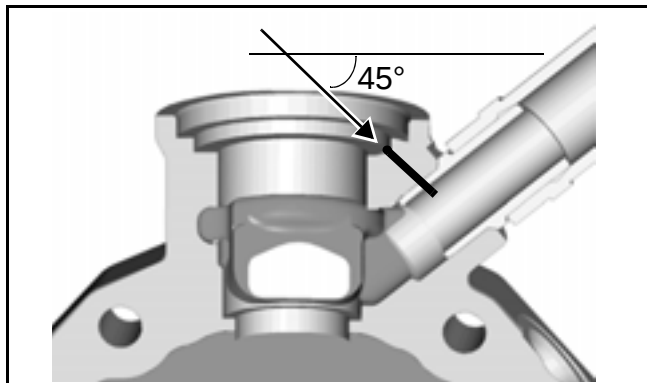
1. Pressure valve passage
2. Second step of cylinder head

004934

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Drill until the drill bit enters pressure valve passage, through the brass hose fitting.



Cross-Section of Drilled Cylinder Head

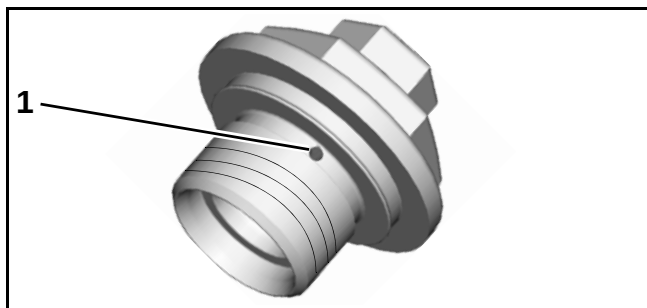
004935

Remove the paper towel from the cylinder head. Clear any chips or debris from area using compressed air, and reinstall the original thermostat assembly and thermostat spring.

Inspect thermostat O-ring. Replace, if necessary.

Carefully coat threads of each cylinder head thermostat cover with *Gasket Sealing Compound*. Install and tighten the cover to a torque of 120 to 144 in. lbs. (13.6 to 16.3 N·m).

IMPORTANT: Use caution when coating thermostat cover threads to ensure air bleed holes are not coated or obstructed.



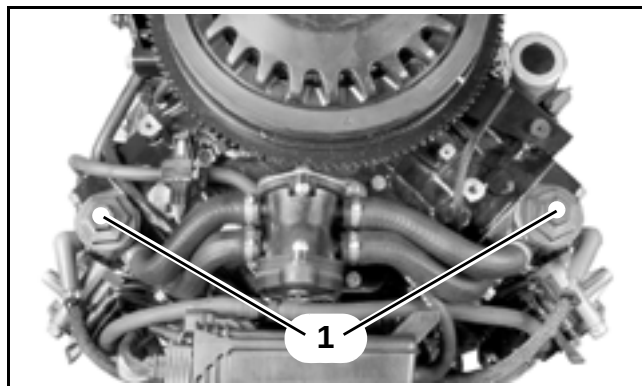
1. Air bleed hole

004939

Start the outboard and check thermostat cover area for water leaks.

Identification Procedure

Every outboard that has had the cylinder head modification procedure must be easily identified. Use a white permanent marker or paint to mark the top of the thermostat cover to indicate the machined hole is present.



1. Cylinder head modification marks

004245

ADDITIONAL INFORMATION

Warranty claims can be filed online using the following information:

- Flat Rate Code – **PT01**

Flat Rate Labor Allowance:

- Rework – **1.0 hours**
- Failing Part No. – **8888819**

Dealers without online claim processing can submit a standard warranty claim form.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

BRP will credit dealers for repairs performed up to 12 months from the date this bulletin is issued.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: July, 2005

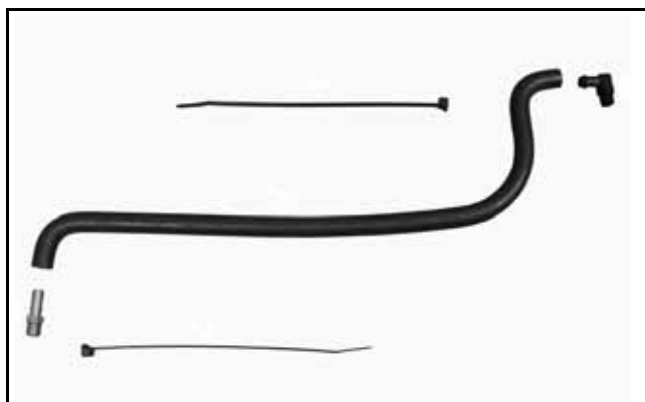
No. 2005-04(S) (Rev 1)

MODELS: 2005 and early production 2006
Evinrude[®] E-TEC[™] 200–250 HP

SUBJECT: Exhaust and Propeller Hub Cooling

Dear *Evinrude/Johnson[®]* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of Exhaust and Propeller Hub Cooling Kit, P/N 5007020.



Exhaust and Propeller Hub Cooling Kit

004983

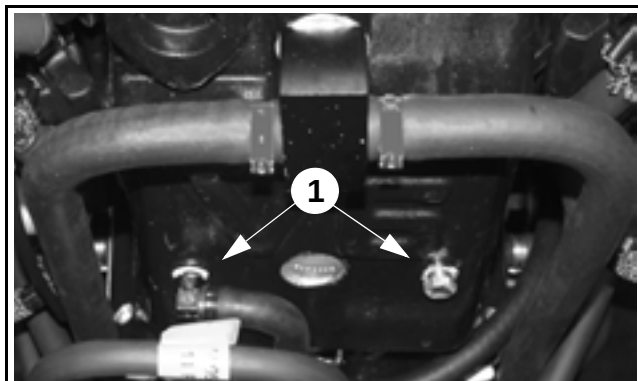
This kit provides components to enhance exhaust cooling and allows changes similar to those on current production outboards.

In certain operating conditions, the water flow through the exhaust housing can be restricted or reduced, and exhaust temperatures can increase. Installation of this kit provides increased water flow to the inner exhaust.

Excessively high exhaust temperatures can adversely affect propeller hubs and lead to propeller hub failures. Providing this modification can effectively reduce propeller hub overheating and failures.

This kit can be installed on 2005 *Evinrude E-TEC* 200–250 HP models and early production 2006 *Evinrude E-TEC* 200–250 HP models built without this feature. Refer to instructions provided with kit for specific details.

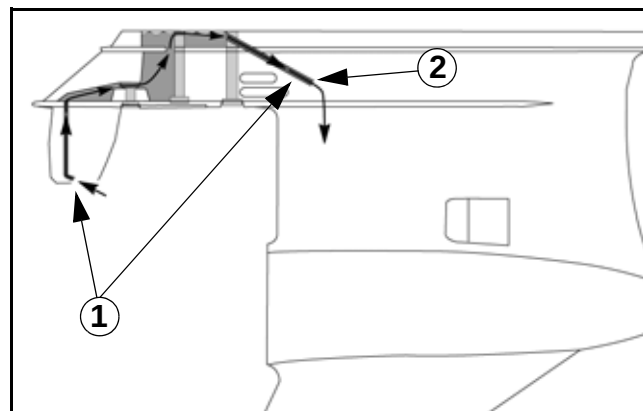
Later production 2006 *Evinrude E-TEC* 200–250 HP models can be identified by the presence of two water port fittings on the exhaust housing.



1. Fittings (2)

005021

IMPORTANT: For outboards experiencing propeller hub failures, check cooling system operation and water pump condition. Check trim tab and gearcase water passages. **Both** must be clear and unrestricted to allow water flow to propeller hub area. Tapered gearcase water passages can be enlarged to 5/16 in. (8 mm) for the complete length of passage.



1. Trim tab and gearcase water passages
2. Enlarge to 5/16 in. (8 mm)

005022



Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

S
SERVICE
Bulletin

Date: October, 2005

No. 2005-05(S)

MODELS: Evinrude[®] E-TEC[™] 200–250 HP

SUBJECT: Engine Idle Operating Temperature

Dear Evinrude/Johnson[®] Dealers:

This communication is to inform Evinrude dealers of the importance of properly verifying engine IDLE operating temperature on Evinrude E-TEC 200-250 HP outboards.

Certain conditions can prevent the engine from achieving proper IDLE operating temperatures. Failure to achieve specific operating temperatures can result in running quality issues and premature spark plug replacement. Always verify IDLE temperature prior to troubleshooting an outboard for running quality issues or spark plug replacement.

OPERATING TEMPERATURE

Observe IDLE operating temperature for both port and starboard cylinder heads. Two methods can be used.

Method 1

Use Evinrude Diagnostics program. Observe temperature displays for port and starboard temperature sensors.



Engine Monitor Screen

004208

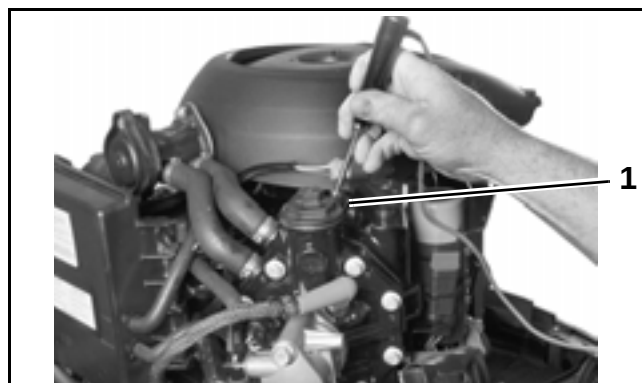
Typical temperature displays at IDLE speed should be 160°F ± 10°F (71°C ± 6°C).

Method 2

Perform this procedure on both port and starboard sides of cylinder block assembly.

Use a temperature gun (infrared) or a digital pyrometer to accurately determine the outboard's operating temperature.

Position infrared beam or pyrometer pickup on top of cylinder assembly, adjacent to the thermostat housing at top of cylinder head. Check temperature on both sides of powerhead.



1. Top of cylinder block (starboard side)

004339

Typical temperatures observed at IDLE speed with pyrometer should be 143°F ± 15°F (62°C ± 8°C)

TROUBLESHOOTING

If engine temperature is not within specified range, troubleshoot cooling system to determine problem.

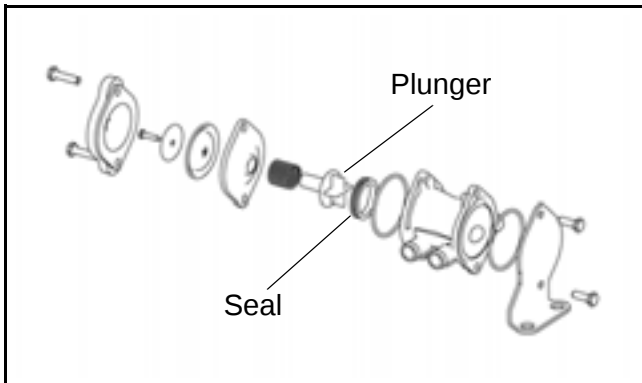
Check thermostats and pressure relief valve operation if engine temperature is below normal operating temperature. Remember, cold running outboards prevent spark plugs from achieving proper operating temperatures.

(continued)



Pressure Relief Valve

Verify engine temperature at IDLE. The pressure relief valve should be closed. Water should not flow past the plunger and seal at IDLE speed.

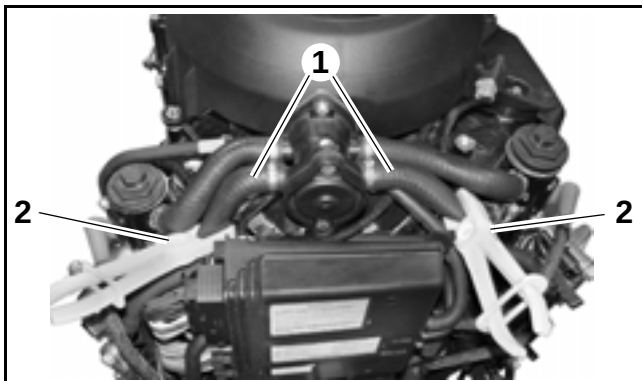


Pressure Relief Valve

DRC8113

If IDLE temperature increases to specific operating range, pressure relief valve and thermostats are functioning properly.

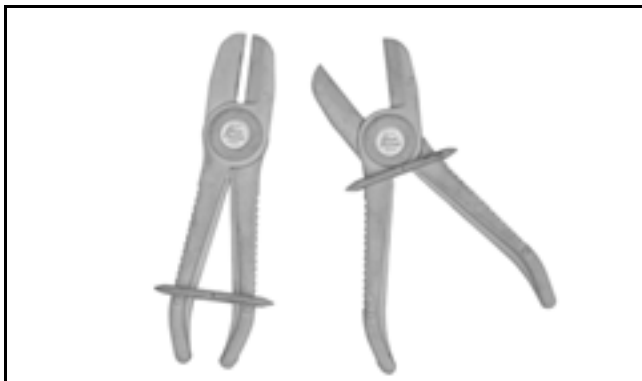
If IDLE temperature is below specific operating range, pinch off the water outlet hoses from pressure relief valve to cylinder heads.



1. Outlet hoses
2. Pliers

DSC00827

Use the appropriate hose pinching pliers (acquired through local tool source) to prevent hose damage.



Hose Pinching Pliers

DSC00830

Start the outboard and check IDLE operating temperature using *Evinrude Diagnostics* software program.

If IDLE temperature increases to specific operating range, 160°F ± 10°F (71°C ± 6°C), after pinching off hoses and eliminating water flow to the cylinder heads, pressure relief valve is leaking. Replace pressure relief valve.

If IDLE temperature is still below specific operating range with hoses pinched off, inspect thermostats and thermostat seals.

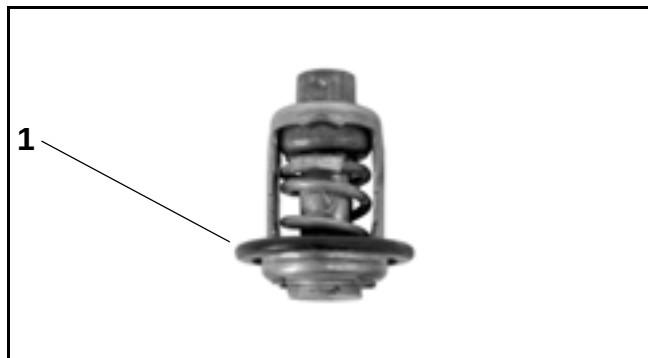
Thermostats

Remove thermostat cover(s) and inspect thermostat(s).



004338

IMPORTANT: Check position of thermostat seal and how thermostat seals against cylinder head. Seal must be properly fitted to flange of thermostat.



1. Seal, thermostat

DSC02335

Inspect thermostat for cracks, heat damage, or signs of corrosion. Check thermostat for proper operation. Thermostat opens at 143°F (62°C).

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



Date: October, 2005

No. 2005-06(S)

SUBJECT: 2006 Essential Service Tools

New service tools have been developed for servicing *Evinrude*® outboards. The 2006 Two-Stroke (2S) Essential Tool Kit listed below will be shipped automatically as part of the 2006 *Evinrude/Johnson*® Essential Service Tool and Software Program. Refer to the applicable service manual for specific procedures related to tool use.

**2006 Two-Stroke (2S) Essential Tool Kit,
P/N 5007053**

Includes the following:

352877 Lower Driveshaft Wrench: Used with Lower Driveshaft Spline Tool, P/N 5007052, to install and remove retaining screw from lower driveshaft with bolted pinion gear.

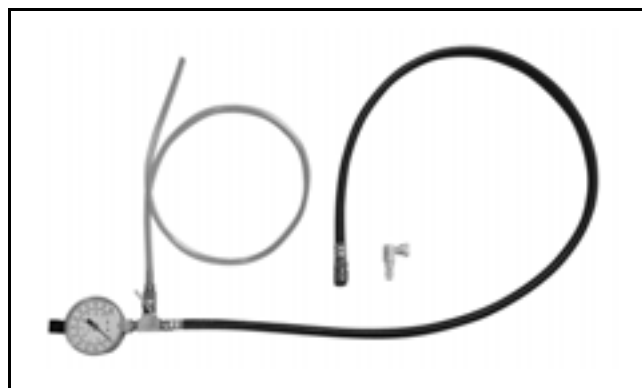
352878 Lower Driveshaft Shimming Bolt: Used with Universal Driveshaft Shimming Tool Kit (P/N 5005925 or 393185) to install pinion gear during driveshaft shimming procedure on lower driveshaft with bolted pinion gear.

5007052 Lower Driveshaft Spline Tool Kit: Used with Lower Driveshaft Wrench, P/N 352877, to hold lower driveshaft during retaining screw installation and removal on lower driveshaft with bolted pinion gear. (Use plug and retainer to pressure/vacuum test gearcase with spline tool in place.)



NOTE: Install upper driveshaft to perform final gearcase pressure/vacuum test.

5007100 Fuel Pressure Test Kit: Provides 0 to 60 PSI gauge and fittings needed to pressure test *Evinrude E-TEC* high pressure fuel system. Connects to upper test valve on vapor separator of *Evinrude E-TEC* 40 through 250 HP models.



352932 Tilt Cylinder End Cap Wrench: Used to remove and install cylinder end cap on newer style power tilt and trim assemblies.



(continued)



Additional New Tool for Two-Stroke (2S) Outboards:

IMPORTANT: The following tool is not part of the 2006 *Evinrude/Johnson* Essential Service Tool and Software Program. Order as needed.

352879 Gearcase Alignment Gauge (V4): Used with Gearcase Alignment Gauge Kit, P/N 5006349, to check the alignment of gearcase housing on V4 gearcases that have experienced impact damage and/or internal bearing and gear failure.

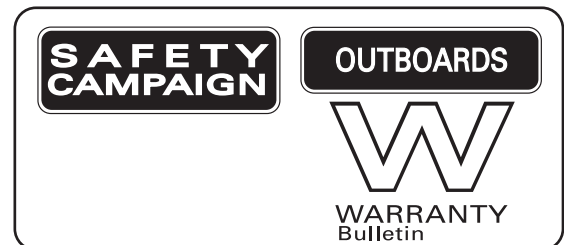


Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: March, 2001

No. 2001-01(W)

MODELS: ALL 1999 and 2000 model year
200 HP and 225 HP *Evinrude*
outboards

SUBJECT: Enhancement Kit P/N 5004550

PROBLEM

Fuel injector fasteners could loosen and/or break.
Potential fuel leaks could result in fire or explosion.

SOLUTION

Install enhancement kit listed below:

DESCRIPTION	P/N	QTY
Enhancement kit	5004550	1

PROCEDURE

Engines that have been updated with enhancement kit P/N 5004550 can be identified by having a rubber boot covering the number 1 injector. Engines without the rubber boot must be updated. Detailed instructions are included in each enhancement kit.

ADDITIONAL INFORMATION

Bombardier will be sending a letter to all registered owners urging them to discontinue using the product(s) and outlining what they need to do to upgrade their unit(s).

Distributors are urged to contact customers that are known to have purchased the affected models.

Use the enclosed fax order form to order the required enhancement kits (P/N 5004550). To ensure sufficient inventory, please only order the number of kits your dealership will install.

Kits will be shipped to dealers at no charge by regular shipping methods.

Each kit contains detailed instructions, essential parts, software (a floppy disk), a pre-printed warranty allowance request, and a return shipping label. (Note: Some kits may contain return shipping labels with an incorrect address. Please use the return address listed below.)

The warranty allowance request form must be completed with all required information and submitted with the required parts. (See instruction sheet provided with enhancement kit.) Canadian dealers only – return claim form. Do not return parts.

A flat rate allowance of 3.3 hours is printed on the claim. Credit for labor will be issued only when the warranty allowance request form and required parts are returned. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

Dealer labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database obtained from OMC.

All dealers were shipped a VHS videotape in December of 2000 explaining the enhancement kit installation procedures.

Dealers can call 1-800-888-4662 for additional information.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: July, 2002

No. 2002-02(W)

MODELS: 2002 25/30 HP *Johnson* outboards
below serial number 4998986

SUBJECT: Shift Linkage Adjustment

PROBLEM

These outboards may have a misadjusted shift linkage that can potentially cause the outboard to:

- Remain in gear when the outboard is running even though the shift lever is in the NEUTRAL position; and
- Start in gear even though the shift lever is in the NEUTRAL position, causing unexpected boat movement when the engine starts

A loss of shifting control could cause a risk of personal injury to the operator, passengers, and people in the water.

SOLUTION

Adjust shift linkage as outlined below.

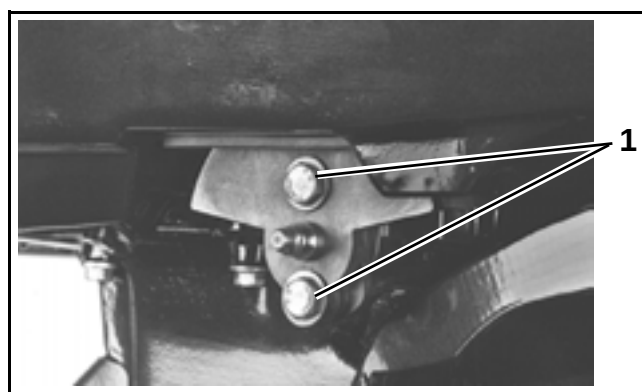
PROCEDURE

⚠
WARNING
⚠

Prior to performing this procedure, remove propeller and twist and remove spark plug wires to prevent accidental starting of outboard.

- 1) Rotate the propeller shaft and move the shift lever until the outboard is in NEUTRAL (propeller free to rotate).**

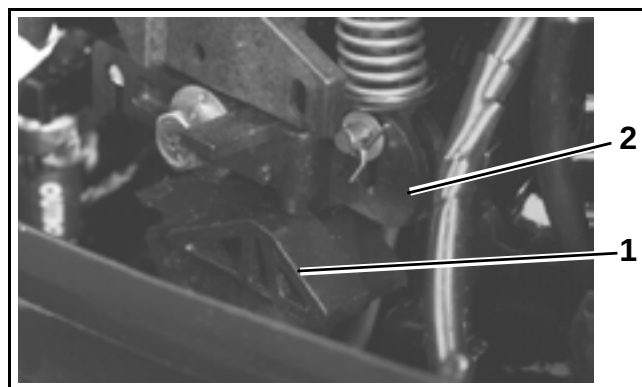
- 2) Loosen both shift lever screws.**



1. Shift lever screws

47177

- 3) Move the shift actuator cam back and forth until the neutral shift lockout lever centers in the notch of shift actuator cam.**



1. Shift actuator cam

2. Neutral shift lockout lever

47175

(continued on reverse)

- 4) Tighten the shift lever screws to a torque of 60 to 84 in. lbs. (7 to 9 N·m).
- 5) Check the shift operation.
 - Turn the propeller shaft and shift to FORWARD. Then, shift back to NEUTRAL. In NEUTRAL, the propeller shaft should turn freely.
 - Turn the propeller shaft and shift to REVERSE. Then, shift back to NEUTRAL. In NEUTRAL, the propeller shaft should turn freely.

ADDITIONAL INFORMATION

Bombardier will be sending a letter to all registered owners urging them to discontinue using the product(s) and outlining what they need to do to have their unit(s) adjusted.

All dealers, as part of the distribution chain, CARRY A RESPONSIBILITY TO MAKE SURE THE CUSTOMER IS NOTIFIED of any safety related concern and that it is properly corrected. Please contact all of your customers who purchased these outboards and request they bring their outboard in for adjustment. As part of this process the dealer MUST submit a warranty claim to Bombardier to record the program progress to the United States Coast Guard.

After the adjustment has been completed, a standard warranty allowance request form must be filled out with all required engine information.

Use a flat rate code SR-01 for 0.4 hours. Use a special failing part number of 9999942. Credit for labor will be issued only when the warranty allowance request form is submitted. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Dr.
Waukegan, IL 60085

Dealers can call 1-800-888-4662 for additional information.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐		OUTBOARDS
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Date: August, 2002

No. 2002-03(W)

MODELS: 3.5 HP *Johnson*

SUBJECT: Water Fouled Spark Plugs

PROBLEM

In certain applications, water may enter the combustion chamber. The most immediate indicator is water on the spark plug. During periods of non-use, water which may have entered the combustion chamber can lead to internal corrosion and rusting.

Affected Models	
J3RSNB	9482001 – 9485605
J3RSTB	9489001 – 9490400

SOLUTION

Order and install the parts below.

DESCRIPTION	P/N	QTY
Water Tube	5005433	1
Gasket	115230	1

IMPORTANT: All product in your inventory and product you have sold must have the parts installed.

One or both of the following identifies product which has already been fitted with the water tube:

- A “W” stamped on the motor carton wrap label.
- Two marks on the port side of the cylinder head.



1. “W” Stamp
2. Two (2) marks

000749a
000751a

PROCEDURE

Remove the powerhead. Refer to *Johnson Service Manual 2000 SS P/N 787066 (3.3 HP Model)*. DO NOT disassemble the powerhead.

Inspect the powerhead when it is removed. If there is any evidence of corrosion or rust, contact Dealer Support Services for further instructions.

Remove the two screws attaching the crankcase head to the powerhead.

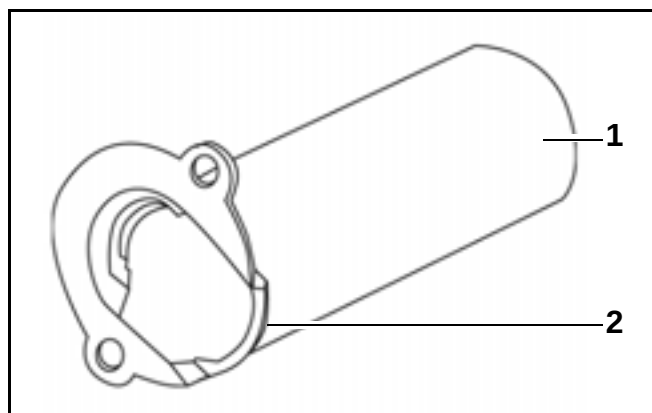
Keep the two screws and discard the crankcase head and powerhead gasket.

Clean the gasket surfaces on the powerhead and midsection.

Clean the area where the crankcase head was attached.

Apply *Moly Lube* to the square end of crankshaft.

The water tube is designed to be installed in only one position. Make sure the open end of the flange on the water tube (P/N 5005433) is facing the port side of the powerhead.



1. Water tube, P/N 5005433
2. Open end of flange

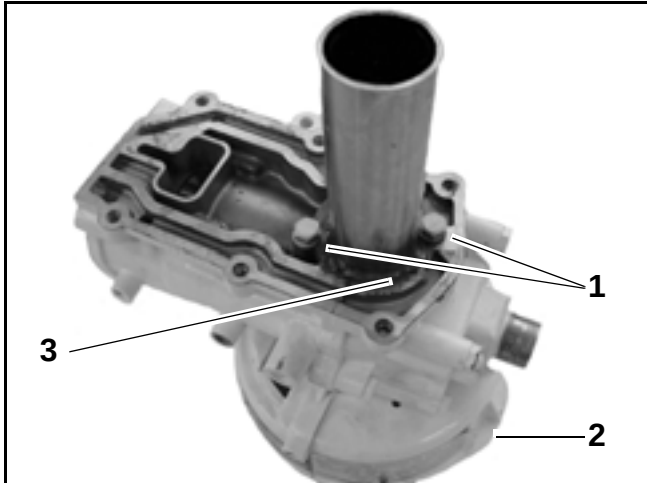
000745

Apply *Gasket Sealing Compound* to the flange on the bottom of the water tube.

Position the water tube on the powerhead in the correct position.

Lightly coat the threads of the two screws with *Gasket Sealing Compound*.

Install the water tube on the powerhead. Torque the screws to 60 to 84 in. lbs. (7 to 9 N.m).



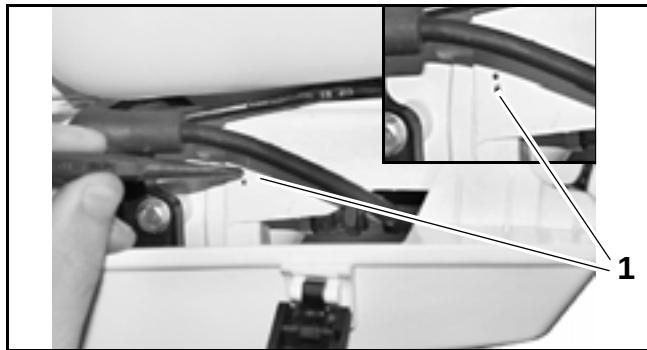
1. Screws
2. Powerhead
3. Open end of flange facing port side

000746

Apply *Gasket Sealing Compound* on both sides of the new powerhead gasket (P/N 115230).

Install the powerhead.

Using a small center punch, make two marks on the port side of the cylinder head.



1. Two small marks

000750

000751a

Run the outboard in a test tank at half throttle for 20 minutes and check for leaks.

ADDITIONAL INFORMATION

After the repair has been completed, a standard warranty allowance request form must be filled out with all required engine information.

Use a flat rate code P101 for 1.2 hours. Use a special failing part number of 9999943. Credit for labor will be issued only when the warranty allowance request form is submitted. Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is as follows:

*Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Sea Horse Dr.
Waukegan, IL 60085*

Dealers can call 1-800-888-4662 for more information.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE
Johnson



OUTBOARDS

W
WARRANTY
Bulletin

Date: September, 2002

No. 2002-04(W)

MODELS: 2002 Evinrude 60° V4

SUBJECT: Pinched oil lines

PROBLEM

When the lower engine covers are removed and installed for service, it is possible for the oil distribution lines to be pinched between the covers.

Affected Models	
E75FPLSNF	Below S/N 4994750
E90FPLSNF	
E115FPLSNF	
E115FPXSNF	

SOLUTION

Order and install the part below. All product in your inventory and all product received for servicing and storage must have this part installed. Please inspect your inventory and install this clamp if it is missing.

DESCRIPTION	P/N	QTY
J Clamp	330151	1

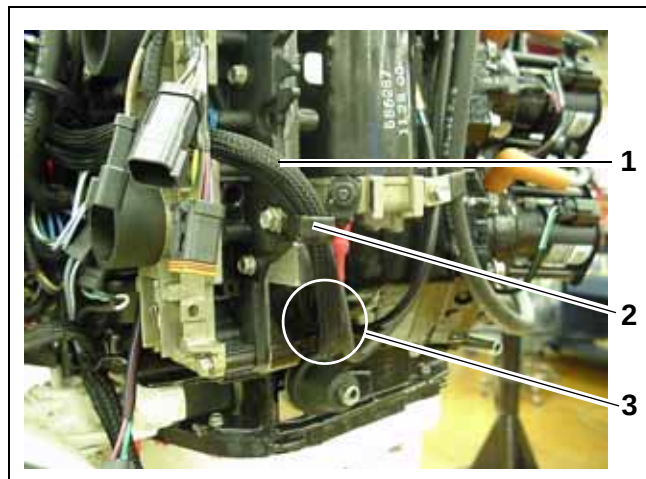
PROCEDURE

The lower engine covers do not need to be removed to do this work.

Install J clamp with opening toward rear of powerhead using existing intake manifold bolt.

Torque bolt to 40 to 50 in. lbs. (4.5 to 5.6 N·m).

Inspect the oil distribution lines. If they are pinched then please call Technical Service at 1-800-888-4662. If they are not pinched then position them in J clamp and close clamp. Be careful not to pinch lines.



1. Oil distribution lines
2. J clamp
3. Possible oil line pinch area

ADDITIONAL INFORMATION

After the repair has been completed, a standard warranty allowance request form must be filled out with all required engine information.

Use a flat rate code JC-01 for 0.25 hours. Use a special failing part number of 8888816. Credit for labor will be issued only when the warranty allowance request form is submitted. Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is as follows:

*Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Sea Horse Dr.
Waukegan, IL 60085*

Call 1-800-888-4662 for more information.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

W
WARRANTY
Bulletin

Date: December, 2002

No. 2002-05(W)

MODELS: 2001 and newer 90° 3.3 liter
Evinrude DI Models

SUBJECT: Crankshaft Position Sensor

PROBLEM

Field reports indicate instances of the crankshaft position sensor (CPS) requiring a reinforcement brace. This brace may be necessary if the outboard consistently displays the following conditions:

- Repeated *EMM* Code 16 activation on acceleration; or
- Rough running on hard acceleration.

Affected Models

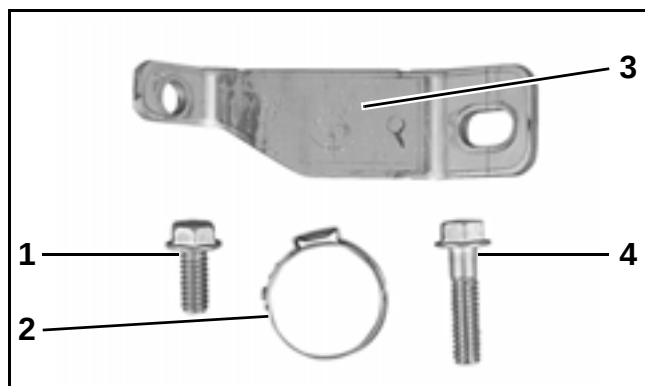
2001; 2002; and 2003 90° 3.3 liter *Evinrude* models up to serial number 5017877

SOLUTION

Order the kit below and follow installation procedure as outlined.

DESCRIPTION	P/N	QTY
CPS Brace Kit	5005450	1

CONTENTS OF KIT



1. Screw – 5/8 in. (15.9 mm), P/N 329217
2. Oetiker clamp – 1 in. (25.6 mm), P/N 346152
3. Brace, P/N 350936
4. Screw – 1 1/8 in. (28.6 mm), P/N 324334

000988

PROCEDURE



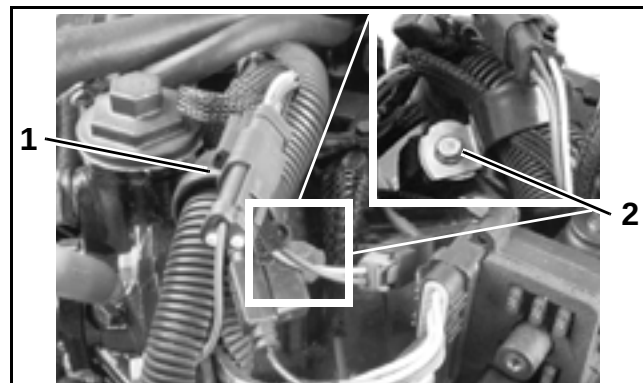
WARNING



To prevent accidental starting while servicing, disconnect battery cables at the battery.

IMPORTANT: Clear access to the CPS mounting bracket is required to properly install the CPS brace. DO NOT attempt to force hose and wire routings aside to access CPS mounting bracket screws. Doing so will stress or damage hoses and wiring. Follow the steps in this procedure explicitly.

Remove starboard main wire harness loop clamp screw.



1. Loop clamp
2. Screw

000989

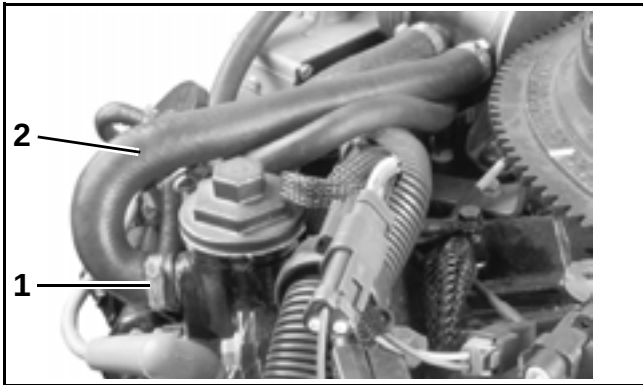
Printed in the United States.

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TM, ® Trademarks and registered trademarks of Bombardier Motor Corporation of America or its affiliates.

† Oetiker is a registered trademark of Hans Oetiker AG Maschinen.

Remove *Oetiker*[†] clamp on water supply hose from starboard cylinder head to pressure valve. Remove hose from fitting.

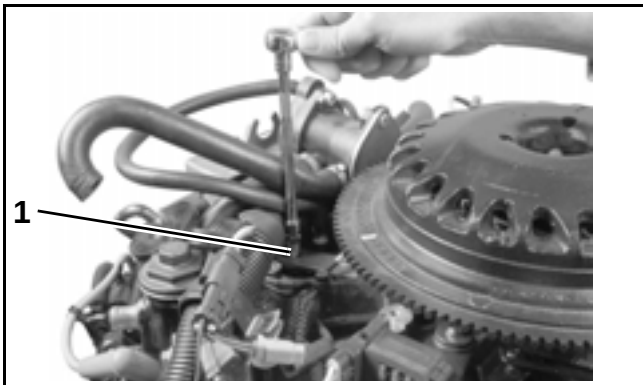


1. *Oetiker* clamp
2. Water supply hose to pressure valve

000989

Pull back water supply hose and wire harness to access the outer CPS mounting bracket screw. Remove the **outer** CPS mounting bracket screw.

IMPORTANT: DO NOT remove the inner CPS mounting bracket screw.



1. Outer CPS mounting bracket screw

000990

Remove CPS mounting screw.

IMPORTANT: DO NOT remove the CPS. Leave in position.

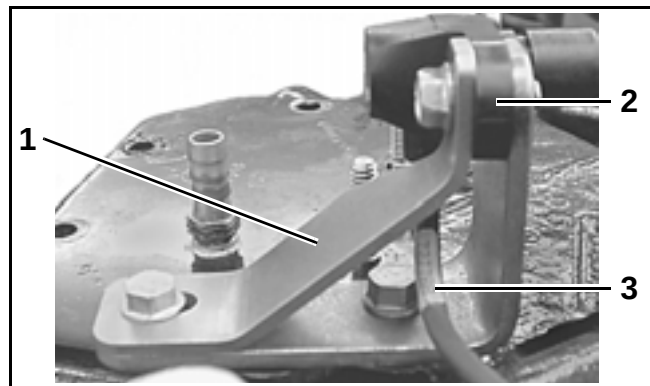


1. CPS mounting screw

000991

Place CPS brace with tapered end facing up, **over-lapping** CPS mounting tab.

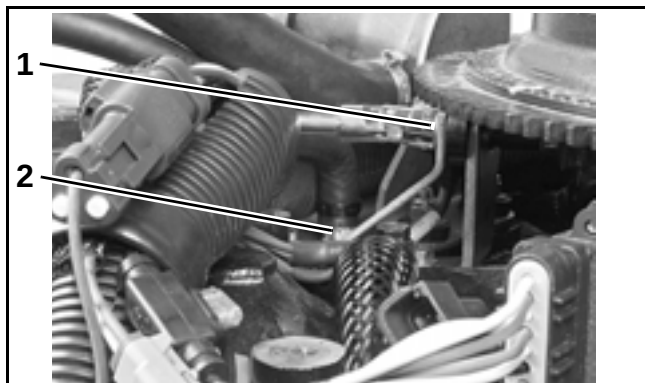
IMPORTANT: CPS wire must remain routed as is, under the newly installed CPS brace.



1. CPS brace
2. CPS mounting tab
3. CPS wire

000995

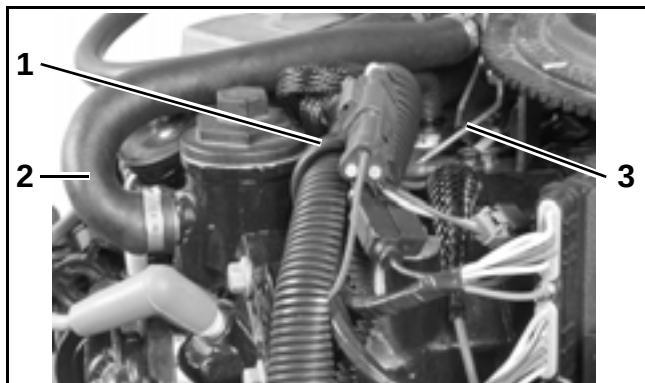
Apply *Blue Nut Lock™* to screws supplied in CPS brace kit. Install 1 1/8 in. (28.6 mm) screw finger tight in lower hole of CPS brace **first**. Install 5/8 in. (15.9 mm) screw in upper hole of CPS brace and torque to 60 to 84 in. lbs. (6.8 to 9.5 N·m). Complete the torque on 1 1/8 screw to 60 to 84 in. lbs. (6.8 to 9.5 N·m).



1. Screw – 5/8 (15.9 mm)
2. Screw – 1 1/8 in. (28.6 mm)

000992

Reinstall starboard main wire harness loop clamp. Reconnect water supply hose and fasten with supplied *Oetiker* clamp.



1. Main wire harness loop clamp
2. Oetiker clamp
3. CPS brace

000994

ADDITIONAL INFORMATION

After the brace installation has been completed, a standard warranty allowance request form must be filled out with all required engine information.

Use a flat rate code CP01 for 0.5 hours. Use a special failing part number of 8888818. Credit for labor will be issued only when the warranty allowance request form is submitted (now available through *DealerPort™*). Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is as follows:

*Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Sea Horse Dr.
Waukegan, IL 60085*

Call 1-800-888-4662 for more information.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: May, 2003

No. 2003-01(W)

MODELS: 2002 & 2003 (SN/ST) Model Year
75 HP through 175 HP Evinrude Direct
Injection Outboards

SUBJECT: Fuel Manifolds

AFFECTED MODELS

Identify model and serial number before performing any service procedures.

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the inspection or repair as outlined in this bulletin.

Model	Year	Serial Number Range
60° V4 75 through 115 HP	2002 (SN) & 2003 (ST)	4996724 through 4999230
60° V6 135 through 175 HP	2002 (SN) & 2003 (ST)	4993888 through 4997951

PROBLEM

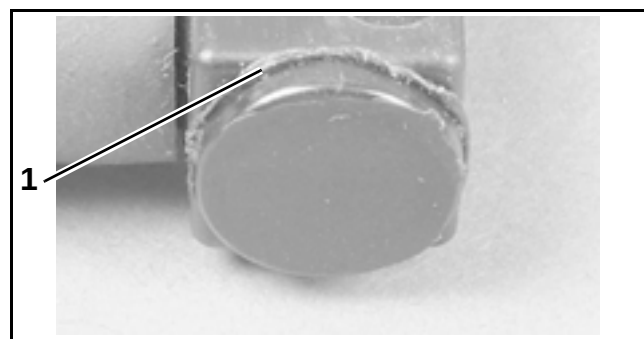
The fuel supply or return manifolds could loose an end cap, resulting in a fuel leak. A fuel leak, when combined with an ignition source, could result in a fire or explosion and present a risk of serious personal injury.

INSPECTION

IMPORTANT: The inspection and repair procedures outlined in this bulletin **MUST** be performed by an authorized *Evinrude/Johnson Dealer* and *Evinrude/Johnson Certified Technician*.

Visually inspect **both** supply and return fuel manifold assemblies for proper welding at plug area.

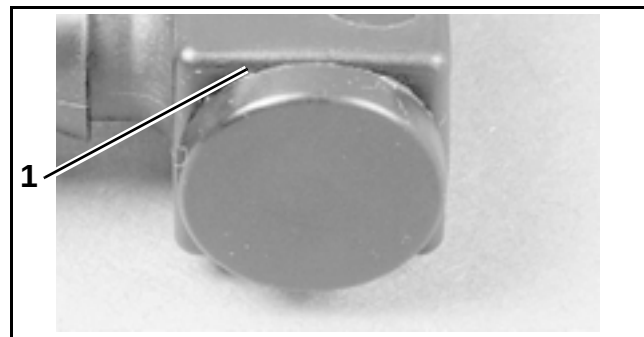
A proper weld shows evidence of flashing all the way around the outside of the cap.



1. Proper weld (flashing around cap)

001732

An incomplete weld shows a lack of or no evidence of flashing around the outside of the cap.

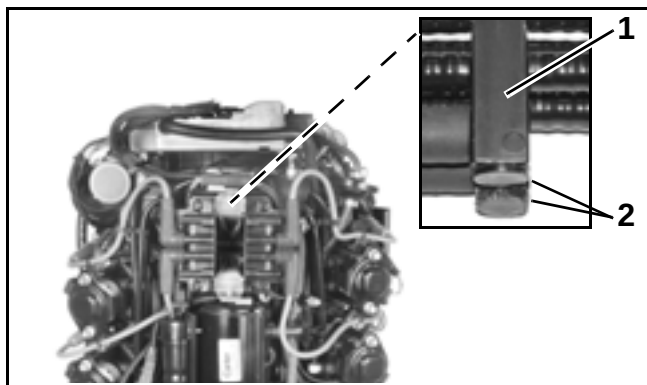


1. Incomplete weld

001733

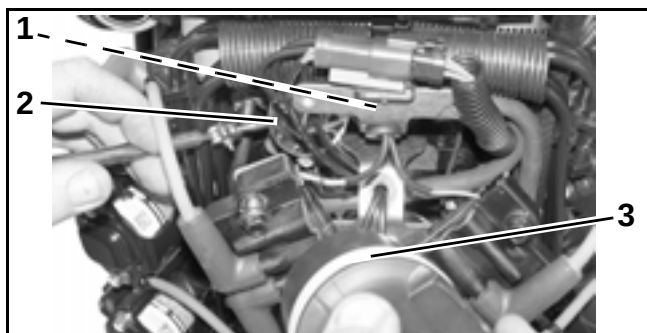
The use of a flashlight and/or small mirror are recommended to properly inspect the weld area.

To inspect **60° V4** models, remove ignition coils from bracket and swing them out of the way to view fuel manifold plug area behind ignition coil bracket.



60° V4 Model
1. Fuel manifold
2. Plugs (2)

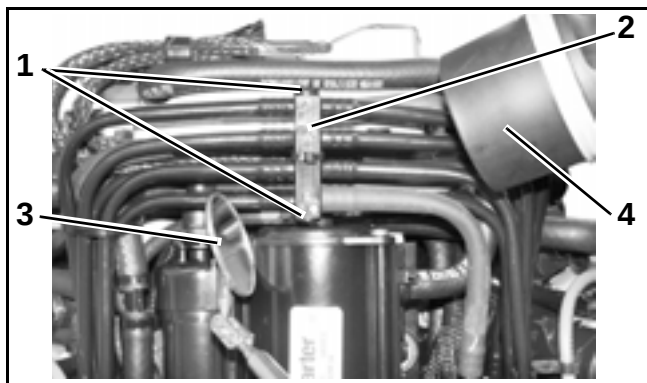
001735
001736



60° V4 Model (Ignition coils removed)
1. Fuel manifold
2. Inspection mirror
3. Flashlight

001737

To inspect **60° V6** models, visually inspect upper and lower plugs of manifold.



60° V6 Model
1. Plugs (2)
2. Fuel manifold
3. Inspection mirror
4. Flashlight

001734

ORDERING PARTS

ONLY Authorized Dealers may order parts.

If replacement is required, replace the fuel manifold assembly with a new fuel manifold assembly as listed.

To order a new fuel manifold assembly, choose the correct P/N listed below and **fax the order to 847-689-7235.**

The order FAX form **MUST** include the following:

- Date of order
- Dealer Name and Dealer Code
- Dealer Phone Number
- Each Engine Model and Serial Number parts are needed for.

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Parts Needed		
Fuel Manifold Assembly	P/N	QTY
60° V4 75 through 115 HP	5005405	1
60° V6 135 through 175 HP	5005408	1

Parts will be shipped at no charge.

REPLACEMENT PROCEDURE

⚠

WARNING

⚠

Wear safety glasses at all times when working on any part of the fuel system.

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system:

- Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.
- Always work in a well ventilated area and wipe off any fuel spillage.
- **DO NOT** smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

RELIEVING FUEL SYSTEM PRESSURE



WARNING



Protect against hazardous fuel spray. Before starting any fuel system service, carefully relieve fuel system pressure.

MODELS WITH PRESSURE TEST VALVE

Disconnect battery cables at the battery.

Connect fuel pressure gauge, P/N 772959, to pressure test valve in fuel return manifold.

Insert gauge venting hose into suitable container.

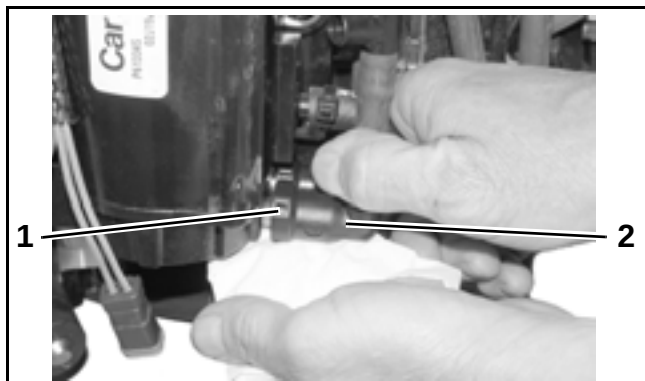
Slowly open gauge's venting valve. Clean up any spilled fuel with shop towels.

MODELS WITHOUT PRESSURE TEST VALVE

Disconnect battery cables at the battery.

Wrap a shop towel completely around the return fuel pump connector to minimize fuel spray when disconnecting.

Press the fuel pump connector release button and slowly pull the connector off the fuel pump.

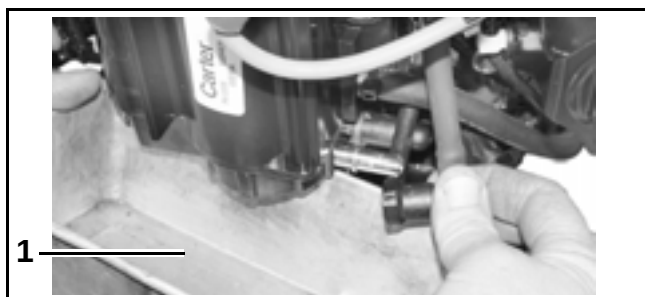


Towel removed for clarity

1. Release button
2. Return fuel pump connector

001743

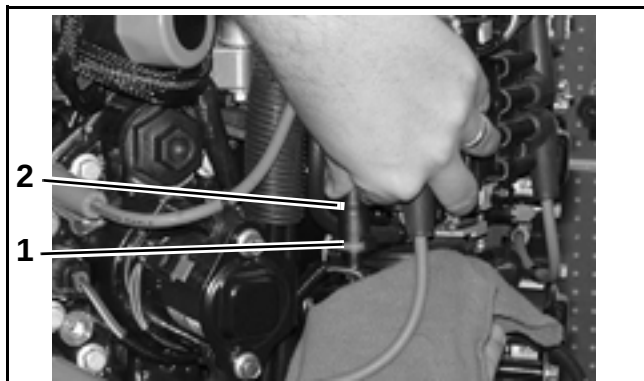
Drain any residual fuel remaining in the system into a suitable fuel container.



1. Container

001744

Disconnect the supply fuel pump connector in the same manner as the return connector. Drain any residual fuel remaining in the system into a suitable fuel container.



Towel removed for clarity

1. Release button
2. Supply fuel pump connector

000703

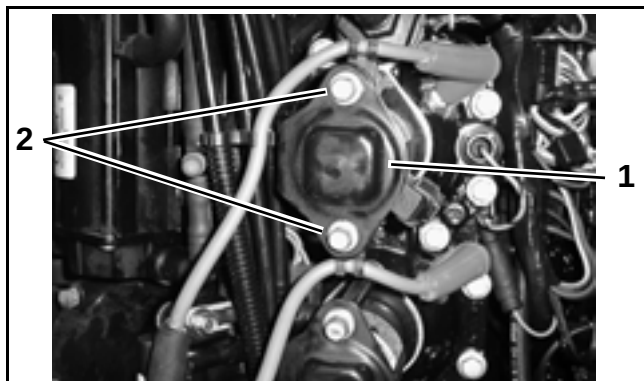
FUEL MANIFOLD REPLACEMENT

Remove high tension spark plug leads and the retainers used to position the spark plug leads.

IMPORTANT: Note the proper locations and positioning of all spark plug leads and retainer clips prior to disassembly.

Mark fuel injectors to indicate cylinder positioning.

Remove the fuel injector retainer screws.



1. Injector retainer
2. Screws

000203

Disconnect all fuel manifold fittings from fuel injector ports and vapor separator/pump assembly.

Remove any tie straps, guards or components used to secure manifolds in place and remove fuel manifolds.

Installation

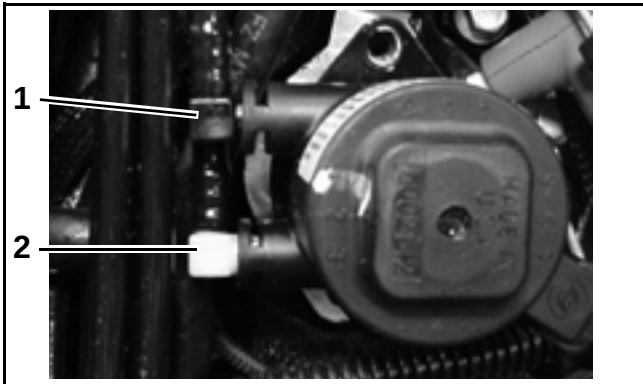
IMPORTANT: Refer to *Evinrude* Service Manual, P/N 5005259, and clean all thread-lock material residue from the following areas (**DO NOT CONTAMINATE INJECTOR PORT OR TIP AREA**):

- Injector mounting threads in cylinder head
- Screw threads

Install new fuel manifolds in same position as originals.

Position injectors in the proper cylinder location.

Confirm condition of sealing O-rings of fuel manifold fittings. Lubricate with *Evinrude direct injection* oil and insert the new fuel manifold fittings into injector. Both fittings must be fully seated into the injector fuel ports.



1. Fuel return manifold fitting
2. Fuel supply manifold fitting

000014

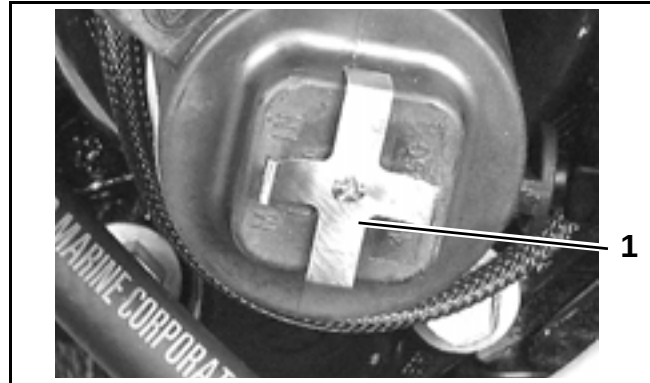
Place small O-ring in depression on the end of injector.



1. O-ring

DP0361

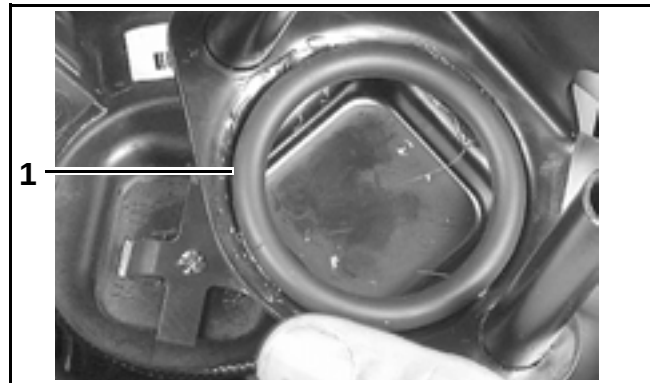
Place spring assembly over end of injector. The pin in the center of the spring should be positioned in the small O-ring.



1. Spring assembly

DP0362

Install large O-ring on inside of injector retainer. O-ring can be glued in place with *Evinrude/Johnson Type "M" Adhesive™*.

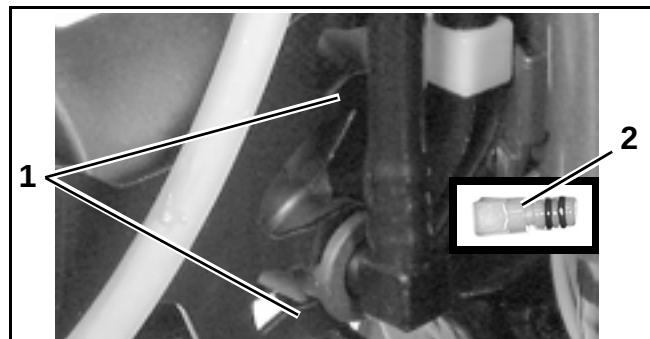


1. O-ring

DP0363

Install injector retainer over the end of injector.

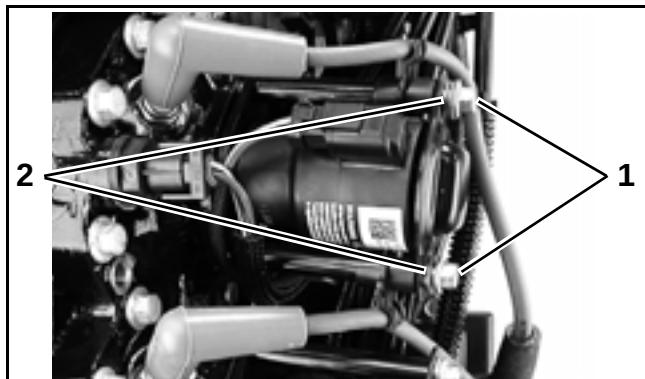
IMPORTANT: The flanges on the injector retainer must engage the outer groove of the fuel manifold fittings. Be careful not to pinch any wiring or hoses during assembly.



1. Injector retainer flange
2. Outer groove of fuel manifold fitting

DP0365

Apply *Locquic® Primer* and *Nut Lock™* to the threads of the injector/fuel fitting screws. Apply a thin coat of *Triple Guard®* grease to the two washers and install on each screw. Insert screws with washers into retainer sleeves.



1. Screws
2. Washers (two on each screw)

000233

Torque screws in stages, starting with the lower screw. Final torque is 144 to 168 in. lbs. (16.3 to 19 N·m).

Repeat the above process for the remaining injectors.

Connect the fuel manifolds to vapor separator/pump assembly. An audible click will signal proper connection. In addition, the fuel pump connector release button should pop out to a flush position.

To verify a proper connection, pull on the connector without pressing the release button. The connector should not disconnect from the high pressure fuel pump.

Install tie straps to secure fuel manifolds in place.

Install high tension spark plug leads and the retainers used to position the spark plug leads.

Install any components removed during removal for access to fuel manifolds.

Thoroughly clean any spilled or residual fuel from the engine.



WARNING



Failure to check for fuel leakage could allow a leak to go undetected and, when combined with an ignition source, result in a fire or explosion.

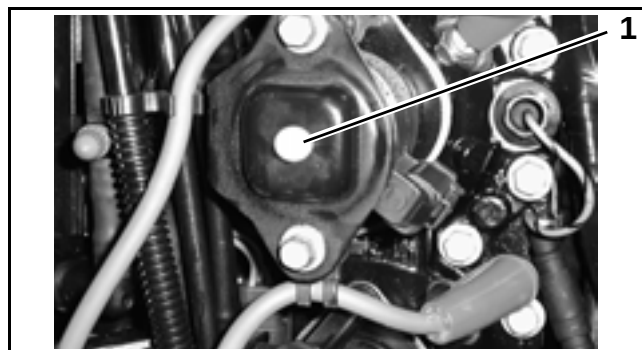
Reconnect battery cables.

IMPORTANT: Refer to Predelivery Service Bulletin (D 2002-01) for fuel system purging instructions and starting procedures. After initial fuel system pressurization, **inspect all fuel system components for leaks and repair as needed before operating engine.**

IDENTIFICATION PROCEDURE

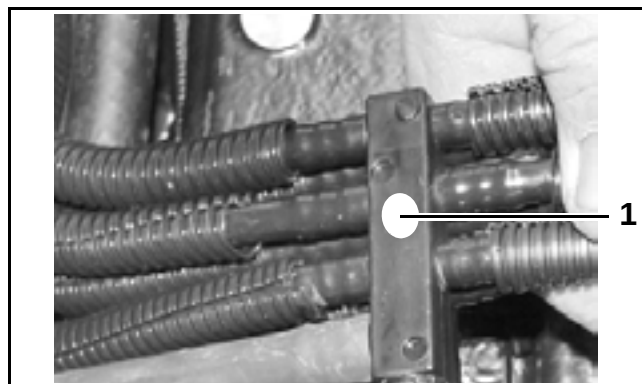
Every outboard that has been inspected, and/or had replacement fuel rails installed, must be easily identified.

Mark the engine using **WHITE** marker or paint. Place a large dot on both (#1 & #2) cylinder fuel injector cap retainers **and** on the fuel manifold to identify this campaign has been completed.



1. Identification marking

00204



- TYPICAL**
1. Identification marking

001742

ADDITIONAL INFORMATION

IMPORTANT: If the weld is incomplete OR visual inspection is inconclusive, replace the fuel manifold assembly as outlined above under **REPLACE-MENT PROCEDURE**.

THE CUSTOMER

Bombardier will send a letter to all registered owners instructing them not to attempt to start or use the outboard until an authorized *Evinrude/Johnson* dealer has completed the inspection or repair. This is a safety issue.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated serial numbers are affected.

A warranty claim form **MUST** be completed and submitted along with the following parts:

- 1) Original fuel return manifold (less rails).
- 2) Original fuel supply manifold (less rails).

Once removed from the outboard, cut the manifold from the rails. Thoroughly clean fuel manifolds of **ALL** fuel residue and place in a sealed plastic bag to prevent damaging the claim form. Discard the fuel rails.



TYPICAL – Fuel manifolds cut from rails

001738

You must return the completed claim with the fuel manifolds for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Using a standard warranty claim form, use the following information:

- **INSPECTION** Flat Rate Code – **MI03**
- **REPAIR** Flat Rate Code – **MR03**
- Failing Part Number – **9999945**

Flat Rate Labor Allowance:

V4

- Inspection – **0.7 hours**
- Replacement – **1.7 hours**

V6

- Inspection – **0.5 hours**
- Replacement – **1.7 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required parts are returned. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

For additional information, dealers can call 1-800-888-4662.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: May, 2003

No. 2003-02(W)

MODELS: 2002 & 2003 (SN/ST) Model Year 200, 225, 250 HP *Evinrude* Direct Injection Outboards

SUBJECT: Fuel Manifolds

AFFECTED MODELS

Identify model and serial number before performing any service procedures.

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the inspection or repair as outlined in this bulletin.

Model	Year	Serial Number Range
90° V6 200 through 250 HP	2002 (SN) & 2003 (ST)	4993893 through 4999479

PROBLEM

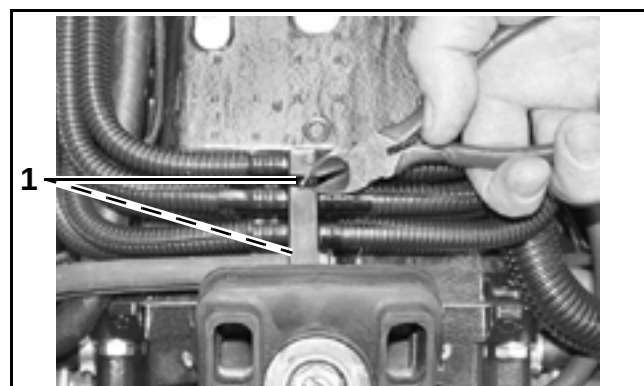
The fuel supply or return manifolds could loose an end cap, resulting in a fuel leak. A fuel leak, when combined with an ignition source, could result in a fire or explosion and present a risk of serious personal injury.

INSPECTION

IMPORTANT: The inspection and repair procedures outlined in this bulletin **MUST** be performed by an authorized *Evinrude/Johnson* Dealer and *Evinrude/Johnson* Certified Technician.

Remove lower engine covers to access the fuel manifold assemblies for inspection.

The tie straps retaining the fuel rails must be removed for proper inspection.

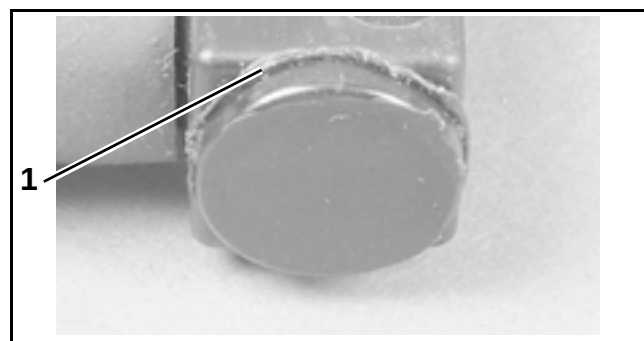


1. Tie straps

001740

Visually inspect **both** supply and return fuel manifold assemblies for proper welding at plug area.

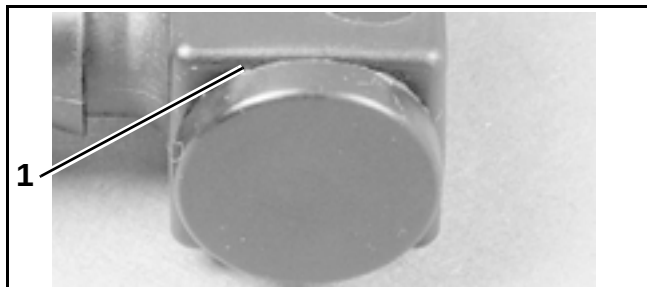
A proper weld shows evidence of flashing all the way around the outside of the cap.



1. Proper weld (flashing around cap)

001732

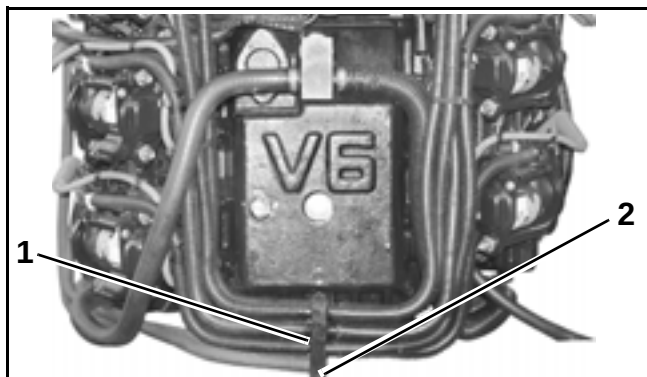
An incomplete weld shows a lack of or no evidence of flashing around the outside of the cap.



1. Incomplete weld

001733

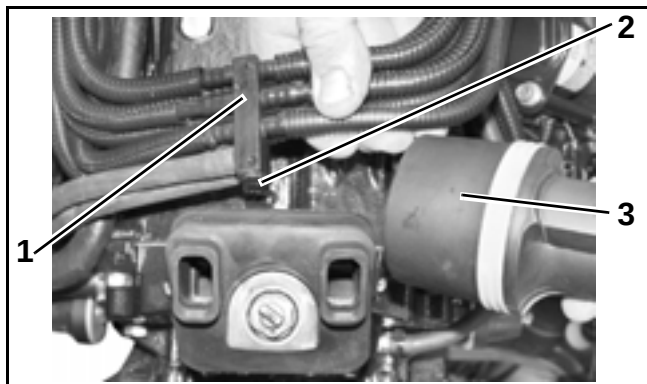
The use of a flashlight and/or small mirror are recommended to properly inspect the weld area.



1. Fuel manifold

2. Plug areas

001741



1. Fuel manifold

2. Plugs (2)

3. Flashlight

001742

ORDERING PARTS

ONLY Authorized Dealers may order parts.

If replacement is required, replace the fuel manifold assembly with a new fuel manifold assembly as listed.

To order a new fuel manifold assembly, choose the correct P/N listed below and **fax the order to 847-689-7235.**

The order FAX form **MUST** include the following:

- Date of order
- Dealer Name and Dealer Code
- Dealer Phone Number
- Each Engine Model and Serial Number parts are needed for.

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Parts Needed	P/N	QTY
Fuel Manifold Assembly	5005414	1
Injector Retainer Flange Screws	349090	12

Parts will be shipped at no charge.

REPLACEMENT PROCEDURE

**WARNING**

Wear safety glasses at all times when working on any part of the fuel system.

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system:

- Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.
- Always work in a well ventilated area and wipe off any fuel spillage.
- DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

RELIEVING FUEL SYSTEM PRESSURE



WARNING



Protect against hazardous fuel spray. Before starting any fuel system service, carefully relieve fuel system pressure.

MODELS WITH PRESSURE TEST VALVE

Disconnect battery cables at the battery.

Connect fuel pressure gauge, P/N 772959, to pressure test valve in fuel return manifold.

Insert gauge venting hose into suitable container.

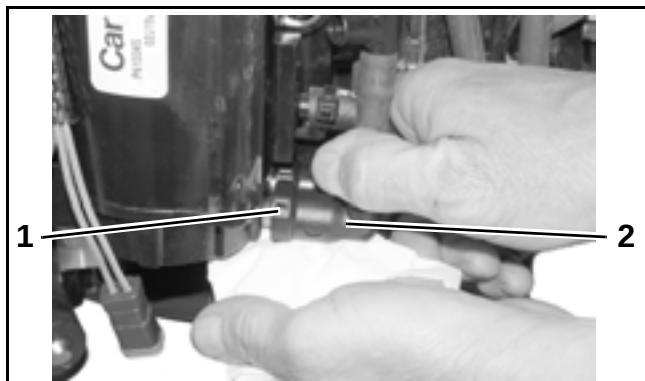
Slowly open gauge's venting valve. Clean up any spilled fuel with shop towels.

MODELS WITHOUT PRESSURE TEST VALVE

Disconnect battery cables at the battery.

Wrap a shop towel completely around the return fuel pump connector to minimize fuel spray when disconnecting.

Press the fuel pump connector release button and slowly pull the connector off the fuel pump.

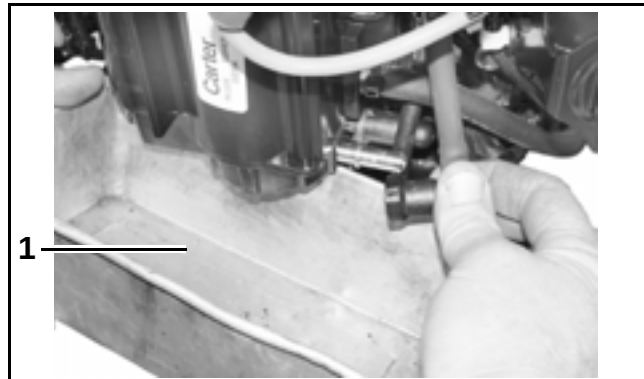


Towel removed for clarity

1. Release button
2. Return fuel pump connector

001743

Drain any residual fuel remaining in the system into a suitable fuel container.



1. Container

001744

Disconnect the supply fuel pump connector in the same manner as the return connector. Drain any residual fuel remaining in the system into a suitable fuel container.



Towel removed for clarity

1. Release button
2. Supply fuel pump connector

001745

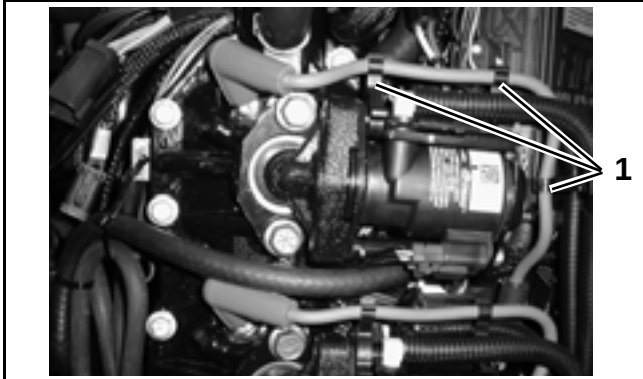
FUEL MANIFOLD REPLACEMENT

Removal

Disconnect the battery cables at the battery.

IMPORTANT: Note the proper locations and positioning of all spark plug leads and retainer clips prior to disassembly.

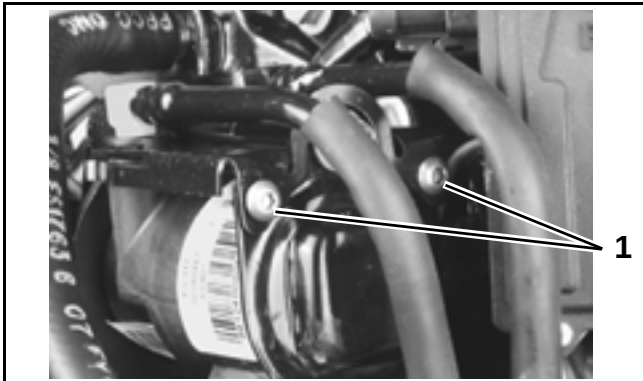
Remove high tension spark plug leads and the retainers used to position the spark plug leads.



1. Retainers

000202

Remove fuel manifold retainer screws and remove retainer from fuel injector ports.



1. Screws

DP0779

Disconnect all fuel manifold fittings from fuel injector ports and vapor separator/pump assembly.

Remove any tie straps, guards or components used to secure manifolds in place and remove fuel manifolds.

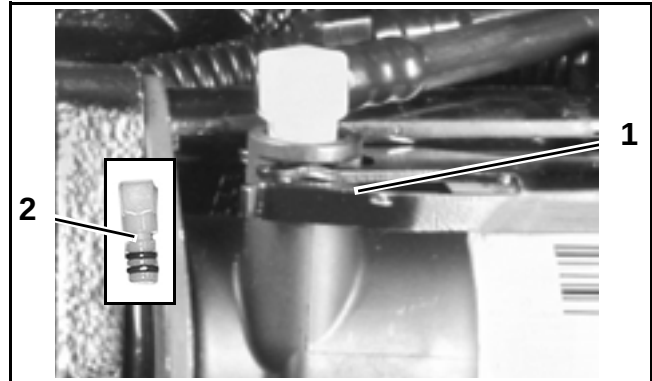
Installation

Refer to *Evinrude Service Manual*, P/N 5005259. Install new fuel manifolds in same position as originals.

Confirm condition of sealing O-rings of fuel manifold fittings. Lubricate with *Evinrude direct injection* oil and insert the new fuel manifold fittings into injector. Both fittings must be fully seated into the injector fuel ports.

Install fuel manifold retainer flanges into the grooves of the injector ports.

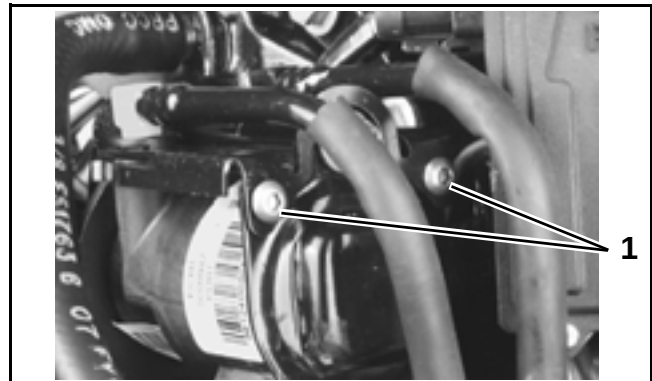
IMPORTANT: The retainer flanges must engage the outer groove of the manifold fittings.



1. Retainer
2. Outer groove

DP0552

Fasten retainer with **new** retaining screws P/N 349090. Torque to 25 to 30 in. lbs. (2.8 to 3.4 N·m).



1. Screws

DP0779

Connect the fuel manifolds to vapor separator/pump assembly. An audible click will signal proper connection. In addition, the fuel pump connector release button should pop out to a flush position.

To verify a proper connection, pull on the connector without pressing the release button. The connector should not disconnect from the high pressure fuel pump.

Install tie straps to secure fuel manifolds in place.

Install high tension spark plug leads and the retainers used to position the spark plug leads.

Install any components removed during removal for access to fuel manifolds.

Thoroughly clean any spilled or residual fuel from the engine.

**WARNING**

Failure to check for fuel leakage could allow a leak to go undetected and, when combined with an ignition source, result in a fire or explosion.

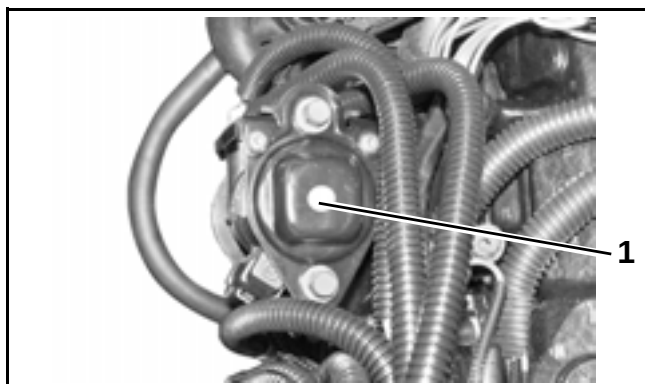
Reconnect battery cables.

IMPORTANT: Refer to Predelivery Service Bulletin (D 2002-01) for fuel system purging instructions and starting procedures. After initial fuel system pressurization, **inspect all fuel system components for leaks and repair as needed before operating engine.**

IDENTIFICATION PROCEDURE

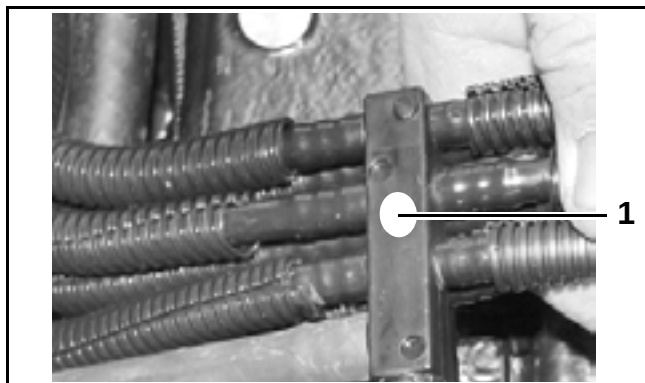
Every outboard that has been inspected, and/or had replacement fuel rails installed, must be easily identified.

Mark the engine using **WHITE** marker or paint. Place a large dot on both (#2 & #3) cylinder fuel injector cap retainers **and** on the fuel manifold to identify this campaign has been completed.



1. Identification marking

001746



1. Identification marking

001742

ADDITIONAL INFORMATION

IMPORTANT: If the weld is incomplete OR visual inspection is inconclusive, replace the fuel manifold assembly as outlined above under **REPLACE-MENT PROCEDURE.**

THE CUSTOMER

Bombardier will send a letter to all registered owners instructing them not to attempt to start or use the outboard until an authorized *Evinrude/Johnson* dealer has completed the inspection or repair. This is a safety issue.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated serial numbers are affected.

A warranty claim form **MUST** be completed and submitted along with the following parts:

- 1) Original fuel return manifold (less rails).
- 2) Original fuel supply manifold (less rails).

Once removed from the outboard, cut the manifold from the rails. Thoroughly clean fuel manifolds of **ALL** fuel residue and place in a sealed plastic bag to prevent damaging the claim form. Discard the fuel rails.



TYPICAL – Fuel manifolds cut from rails

001738

You must return the completed claim with the fuel manifolds for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Using a standard warranty claim form, use the following information:

- **INSPECTION** Flat Rate Code – **MI03**
- **REPAIR** Flat Rate Code – **MR03**
- Failing Part Number – **9999945**

Flat Rate Labor Allowance:

- Inspection – **0.7 hours**
- Replacement – **1.7 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required parts are returned. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

For additional information, dealers can call 1-800-888-4662.

Please route to: ☐ Service ☐ Sales ☐ Parts Init. ☐ ☐ ☐		SAFETY CAMPAIGN OUTBOARDS
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⚠ **WARNING:** All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: October, 2003

No. 2003-03(W)

MODELS: All Evinrude/Johnson Remote Control Boxes Bearing the Date Codes Below

SUBJECT: Remote Control Box Repair

AFFECTED MODELS

Identify outboards equipped with the affected side-mount remote control boxes listed below before performing any service procedures.

IMPORTANT: DO NOT sell, deliver, or use any affected remote control boxes in your parts and boat inventories, until you have performed the inspection or repair as outlined in this bulletin.

Affected Date Codes

Remote Control	Manufactured and Distributed	Date Codes
P/N 176380	Jan. 1, 2001 to Aug. 1, 2003	01-A-A1
P/N 176381		(or 01-A-1A) to 01-H-1C

Reading Date Codes

Day	01-31
Month	A = January, B = February, C = March, D = April, E = May, F = June, G = July, H = August, I = September, J = October, K = November, L = December
Year	1A (or A1) = 2001 1B (or B1) = 2002 1C = 2003
Date Code Example: 15-F-1C = 15 June, 2003	

IMPORTANT: Bombardier does not have responsibility for remote control boxes made and distributed prior to January 1, 2001 and will not pay warranty claims for those units.

The part numbers for newly manufactured remote control boxes have been changed to:

- P/N 177218 (**with** Trim and Tilt) and;
- P/N 177217 (**without** Trim and Tilt).

PROBLEM

These units may have loose or improperly assembled fast idle lever components, which could potentially cause the outboard to stick in gear or in neutral or jam the throttle.

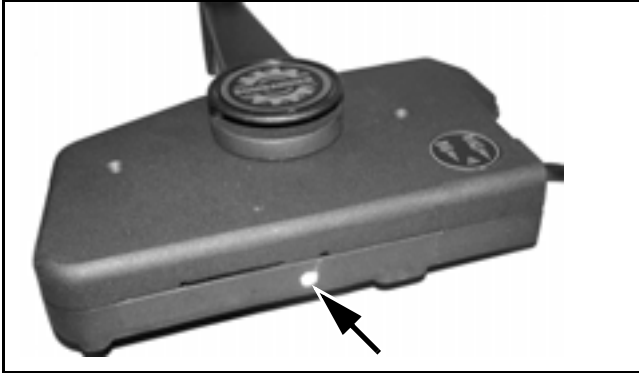
	WARNING	
A loss of boat control or diminished boat control could cause a risk of personal injury to the operator, passengers, and people who are nearby.		

IMPORTANT: ONLY authorized service dealers can perform the repair.

IDENTIFICATION

Check for a white dot on the bottom of the remote control box. A white dot signifies the remote control box has already been inspected and repaired.

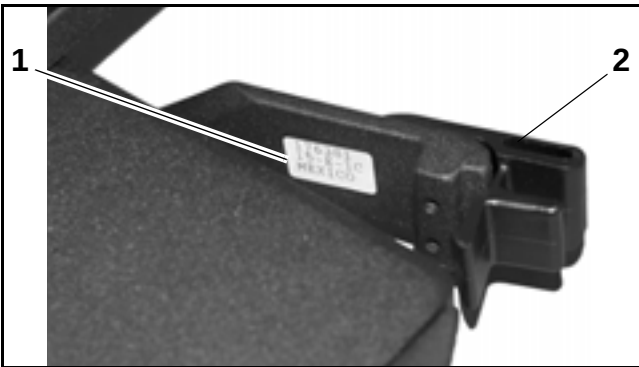
IMPORTANT: If there is a white dot, no further identification or repair is needed and no warranty repair costs will be paid.



Remote Control Box with White Dot

002476

If there is no identifying mark, check the date code on the underside of the fast idle lever.



1. Date code
2. Fast idle lever

002475

SOLUTION

IMPORTANT: Remote control boxes with date codes of **01-A-A1** or **01-A-1A** to **01-H-1C** should be repaired as specified in this bulletin.

- Replace throttle lever half of remote control box with Remote Control Kit, P/N 5005869; **or**
- **If there is damage to the shift lever cam,** replace complete remote control box.

Bombardier does not have responsibility for remote control boxes made and distributed prior to January 1, 2001 and will not pay warranty claims for those units.

REPLACEMENT PROCEDURE



WARNING

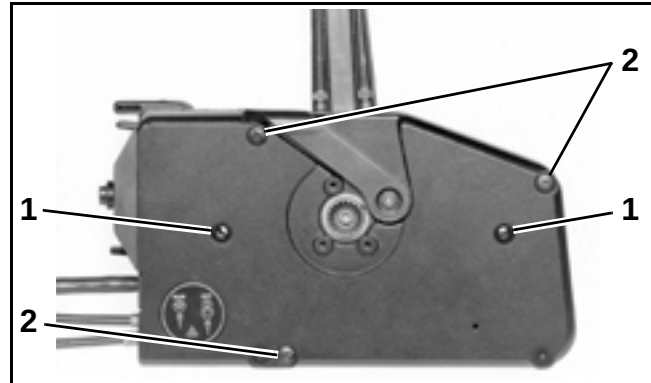


To prevent accidental starting while servicing, disconnect the battery cables at the battery.

Disassembly

Remove two (2) mounting bolts. Remove remote control box from boat.

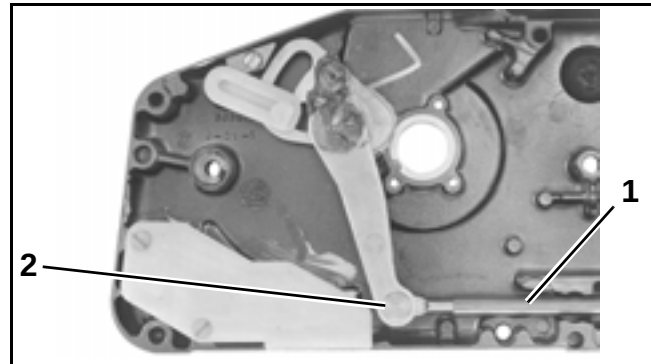
Remove three (3) screws and separate both halves of remote control box.



1. Mounting bolts (2)
2. Screws (3)

42556

Lift throttle cable trunnion from pocket. Pull cable back to expose cable pin. Remove pin and cable.



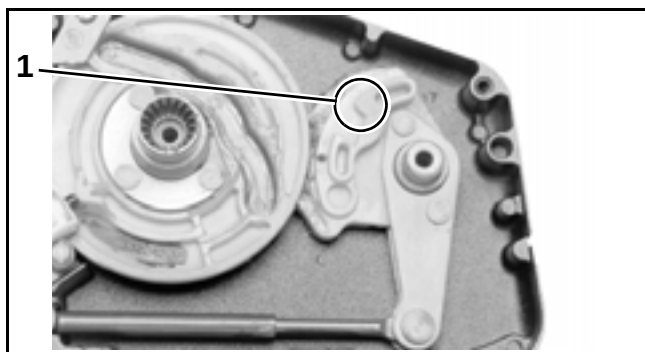
1. Throttle cable
2. Cable pin

35156

Inspection

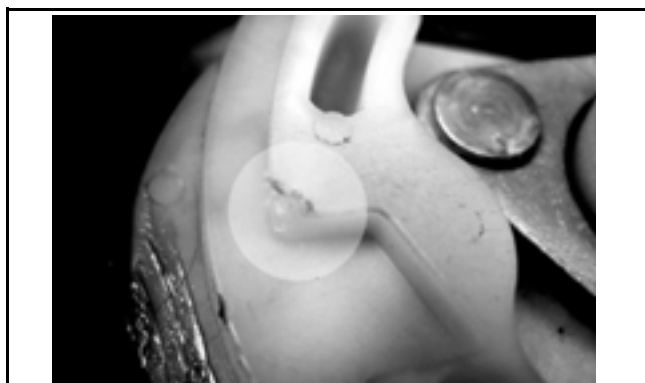
Inspect shift lever cam for damage in area indicated.

- If there is no damage to the shift lever cam, only the throttle lever half of the remote control box must be replaced.
- If damage to the shift lever cam is evident, the complete remote control box must be replaced.



1. Shift lever cam

42594



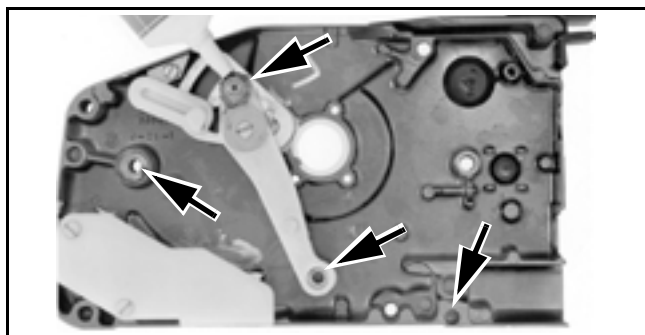
Damaged Shift Lever Cam

002477

IMPORTANT: To receive authorization to replace the complete remote control box, you must first contact **Evinrude/Johnson Dealer Support Services** at 1-800-888-4662.

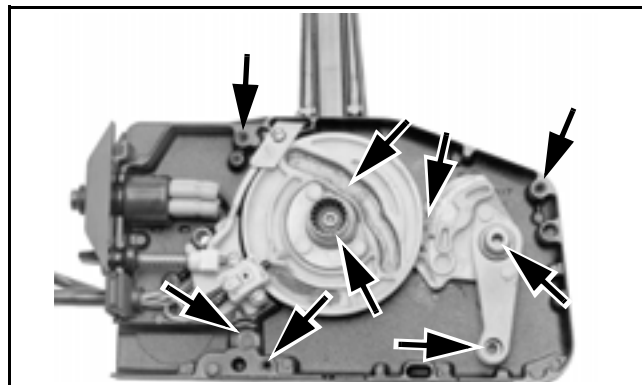
Assembly

Apply *Moly Lube*™ to all points indicated on the remote control box halves.



35209

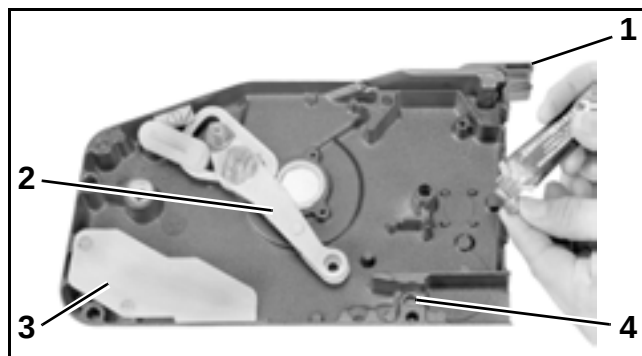
Apply lubricant to all points indicated.



42682

Place new remote control box half flat. With fast idle lever completely down, move throttle lever out from behind plastic separator plate. **Do not remove separator plate.** If separator plate is missing, cable pins can fall out.

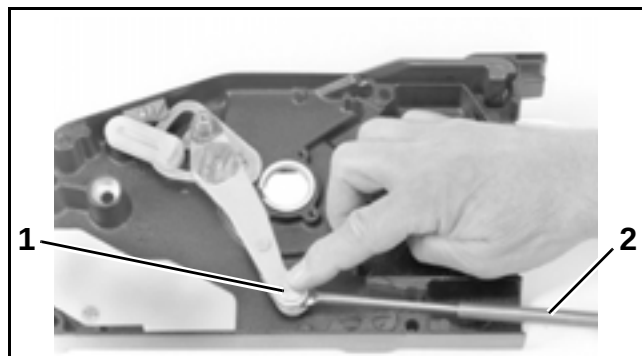
Apply *Triple-Guard*™ grease to trunnion pocket and cable pin.



1. Fast idle lever
2. Throttle lever
3. Separator plate
4. Trunnion pocket

40886

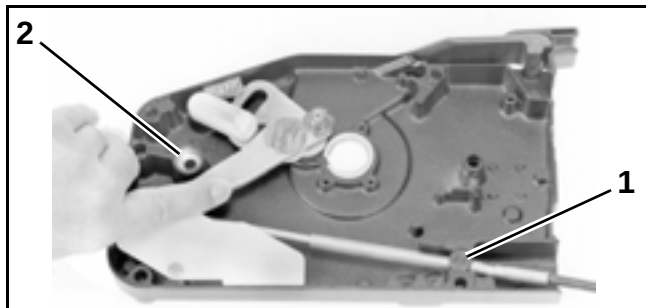
Place throttle cable eyelet between throttle lever halves. Secure throttle cable to throttle lever with cable pin.



1. Cable pin
2. Throttle cable

40887

Insert cable trunnion into pocket, then push throttle lever forward against lever stop.

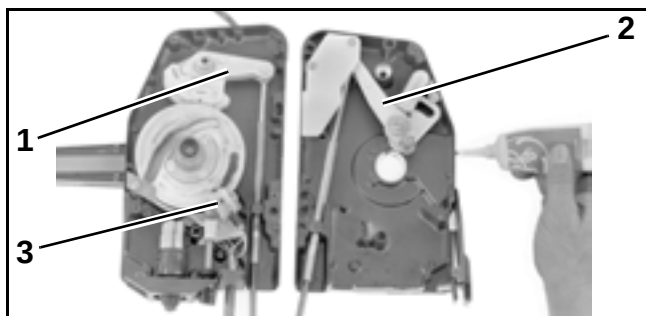


1. Cable trunnion
2. Lever stop

40888

Before halves of remote control box are reassembled, shift lever must be in NEUTRAL, throttle lever must be against lever stop, and neutral start switch must be in center of neutral start cam.

Apply RTV sealant around top and side mating edges of both remote control box halves.

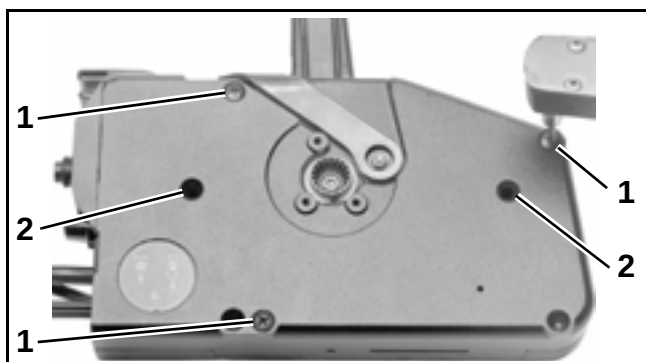


1. Shift lever
2. Throttle lever
3. Neutral start switch

40892

To assemble remote control halves, place shift lever half flat to keep shift lever pin from falling out. Place **new** half over shift lever half. Make sure electrical cable grommet is positioned properly into remote control box.

Install and tighten three (3) screws to a torque of 40 to 50 in. lbs. (4.5 to 5.5 N·m). Secure remote control to boat with two (2) mounting bolts.

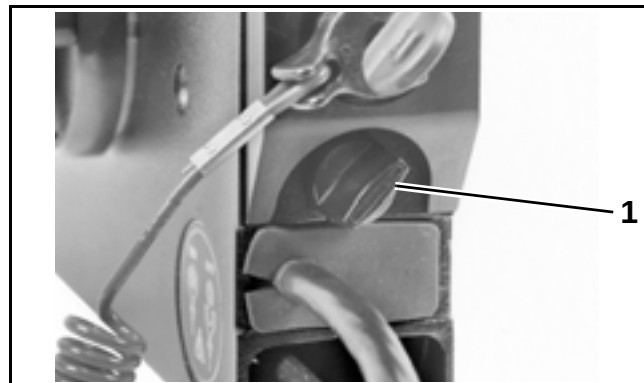


1. Screws (3)
2. Mounting bolts (2)

42649

Make sure remote control handle and fast idle lever move freely but with equal friction through full ranges of movement. Any binding could cause remote control to jam when cables are attached to outboard.

To increase control handle friction to eliminate "throttle creep" during boat operation, turn throttle friction knob clockwise. To decrease friction, turn knob counterclockwise.



1. Throttle friction knob

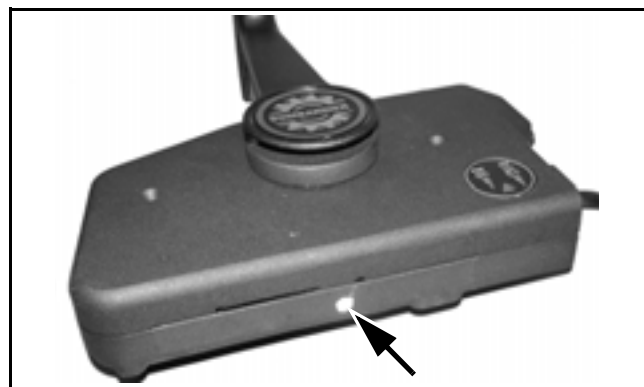
40899

Reconnect battery cables.

Identification Procedure

Every remote control box that has been inspected and had the throttle lever half of the remote control box replaced must be easily identified.

Mark the remote control box using permanent **WHITE** marker or paint. Place a large dot on the bottom of the remote control box to identify this campaign has been completed.



Remote Control Box with White Dot

002476

ADDITIONAL INFORMATION

Dealer Responsibility

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these remote control boxes and instruct them not to use the outboard until an authorized *Evinrude/Johnson* Dealer has completed an inspection and/or replacement. In addition, you **MUST** inspect your parts and boat inventories for affected remote control units. ***This is a safety issue.***

Once you receive the customer's product, if replacement is required, proceed with the instructions outlined in this bulletin.

A warranty claim form **MUST** be completed with the customer's name, address, model, and serial number and submitted along with any parts replaced in the repair.

You must return the completed claim with any parts replaced in the repair for warranty credit, and to ensure records are kept for reporting program progress to the United States Coast Guard.

Using a standard warranty claim form, use the following information:

- Flat Rate Code – **RC03**
- Flat Rate Labor Allowance for inspection and/or parts replacement – **1.0 hour**
- Failing Part Number – **9999947**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required parts are returned. The proper return address is as follows:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

Dealers can call **1-800-888-4662** for more information.

Ordering Parts

ONLY authorized *Evinrude/Johnson* Dealers may order parts. All parts, including entire control box replacements, must be ordered through Bombardier Warranty Department.

If only the throttle lever half of the remote control box must be replaced, order the repair kit.

Repair Kit	P/N	QTY
Remote Control Box Kit	5005869	1

If the complete remote control box must be replaced, order the necessary remote control box.

Remote Control Box	P/N	QTY
Models with Trim and Tilt	177218	1
Models without Trim and Tilt	177217	1

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Fax the order to **847-689-7235**.

The order **MUST** include the following:

- Date of order
- Dealer name and dealer code
- Dealer phone number
- P/N(s) of repair kit(s) and/or remote control box(es)
Note: Multiple orders for repair kits or replacement remote control boxes can be submitted on one fax.
- Customer's name, address, and serial number for each repair kit or control box needed

Parts will be shipped at no charge UPS ground.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: December, 2003

No. 2003-04(W)

MODELS: 2004 (SR) Model Year 100, 115, 135, 150, 175 HP Evinrude® Direct Injection Outboards

SUBJECT: Fuel Return Manifolds

AFFECTED MODELS

IMPORTANT: Only the following models with a serial number on the attached list are covered by this bulletin.

Identify the model and serial number before performing any service procedures.

Model	Year
60° V4 100 through 115 HP	2004 (SR)
60° V6 135 through 175 HP	2004 (SR)

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the repair as outlined in this bulletin.

PROBLEM

The fuel **return** manifold supplied to Bombardier by an outside vendor for use on these outboards may contain excessive flashing on an elbow. This manifold, if defective, could potentially cause a fuel leak if excessive flashing prevents the O-ring from properly seating. A fuel leak, when combined with an ignition source, could result in a fire or explosion and present a risk of serious personal injury.

IMPORTANT: The repair procedure outlined in this bulletin **MUST** be performed by an authorized Evinrude/Johnson Dealer and Evinrude/Johnson Certified Technician.

ORDERING PARTS

ONLY Authorized Dealers may order parts.

Replace the fuel return manifold with the new fuel return manifold as described in this bulletin. The black fuel return manifold assembly is the only part to be replaced.

To order new fuel return manifold, choose the correct P/N listed below and **fax the complete order to 847-689-7235.**

The order FAX form **MUST** include the following:

- Bulletin number — 2003-04(W)
- Date of order
- Dealer Name and Dealer Code
- Dealer phone number
- Requested part number(s)
- Each Engine Model and Serial Number parts are needed for

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Parts Needed		
Fuel Return Manifold	P/N	QTY
60° V4 75 through 115 HP	5005404	1
60° V6 135 through 175 HP	5005407	1

Parts will be shipped at no charge.

REPLACEMENT PROCEDURE



WARNING



Wear safety glasses at all times when working on any part of the fuel system.

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system:

- Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.
- Always work in a well ventilated area and wipe off any fuel spillage.
- DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

RELIEVING FUEL SYSTEM PRESSURE



WARNING

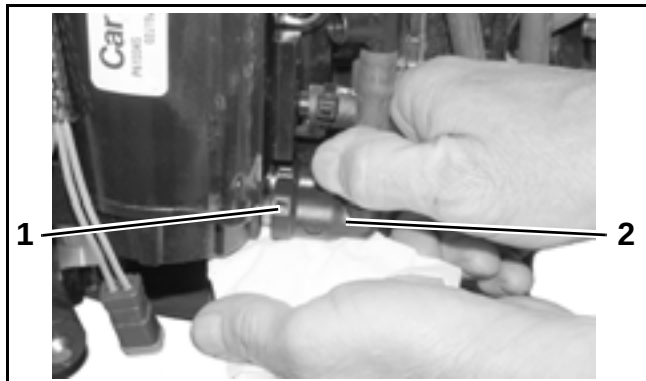


Protect against hazardous fuel spray. Before starting any fuel system service, carefully relieve fuel system pressure.

Disconnect battery cables at the battery.

Wrap a shop towel completely around the return fuel pump connector to minimize fuel spray when disconnecting.

Press the fuel pump connector release button and slowly pull the connector off the fuel pump.



Towel removed for clarity

1. Release button
2. Return fuel pump connector

001743

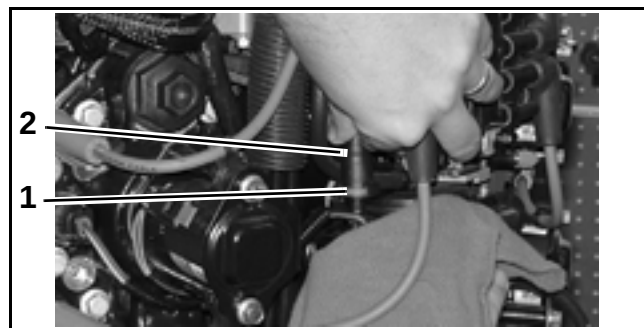
Drain any residual fuel remaining in the system into a suitable fuel container.



1. Container

001744

Disconnect the supply fuel pump connector in the same manner as the return connector. Drain any residual fuel remaining in the system into a suitable fuel container.



Towel removed for clarity

1. Release button
2. Supply fuel pump connector

000703

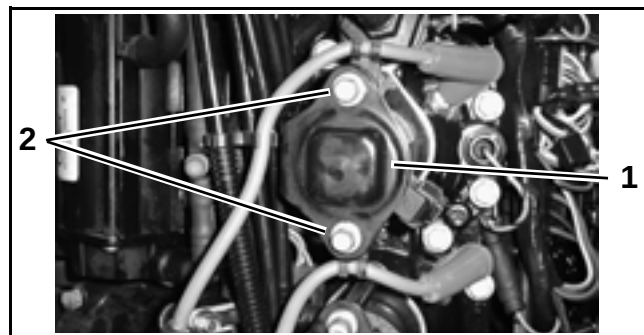
FUEL RETURN MANIFOLD REPLACEMENT

Remove high tension spark plug leads and the retainers used to position the spark plug leads.

IMPORTANT: Note the proper locations and positioning of all spark plug leads and retainer clips prior to disassembly.

Mark fuel injectors to indicate cylinder positioning.

Remove the fuel injector retainer screws.



1. Injector retainer
2. Screws

000203

Disconnect fuel return manifold fittings (black nipples only) from fuel injector ports and vapor separator/pump assembly.

Remove any tie straps, guards or components used to secure manifolds in place and remove fuel return manifold.

Installation

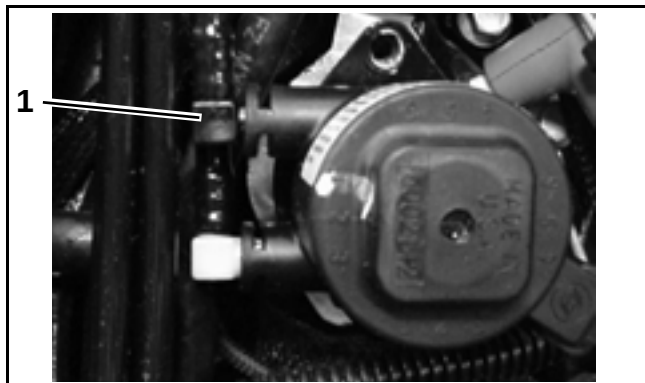
IMPORTANT: Refer to *Evinrude Service Manual*, P/N 5005259, and clean all thread-lock material residue from the following areas (**DO NOT CONTAMINATE INJECTOR PORT OR TIP AREA**):

- Injector mounting threads in cylinder head
- Screw threads

Install new fuel manifold in same position as original.

Position injectors in the proper cylinder location.

Confirm condition of sealing O-rings of fuel return manifold fittings. Lubricate with *Evinrude direct injection* oil and insert the new fuel manifold fittings into injector. Both fittings must be fully seated into the injector fuel ports.



1. Fuel return manifold fitting (black)

000014

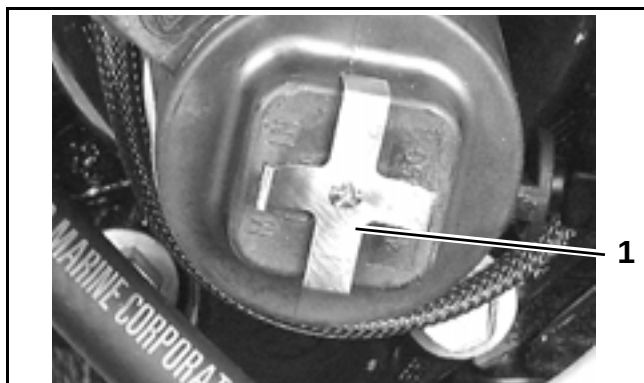
Place small O-ring in depression on the end of injector.



1. O-ring

DP0361

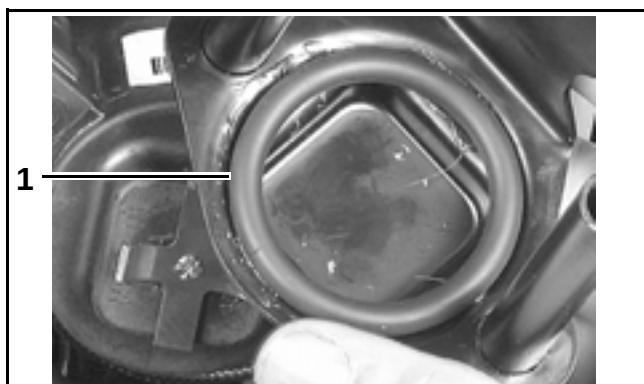
Place spring assembly over end of injector. The pin in the center of the spring should be positioned in the small O-ring.



1. Spring assembly

DP0362

Install large O-ring on inside of the injector retainer. O-ring can be glued in place with *Evinrude/Johnson Type "M" Adhesive™*.

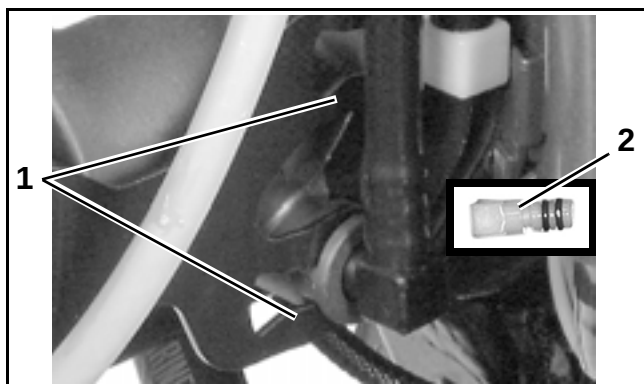


1. O-ring

DP0363

Install injector retainer over the end of injector.

IMPORTANT: The flanges on the injector retainer must engage the outer groove of the fuel manifold fittings. Be careful not to pinch any wiring or hoses during assembly.

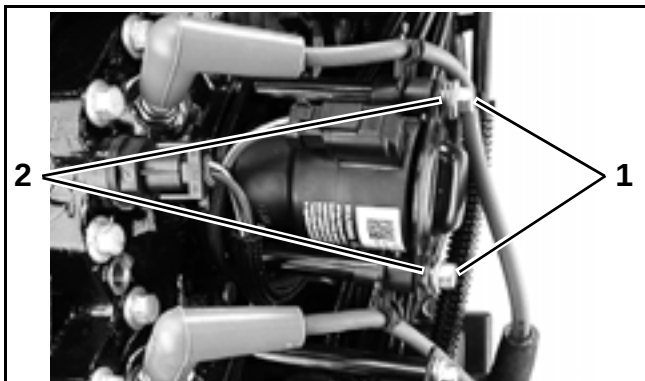


1. Injector retainer flange

2. Outer groove of fuel manifold fitting

DP0365

Apply *Locquic® Primer* and *Nut Lock™* to the threads of the injector/fuel fitting screws. Apply a thin coat of *Triple Guard®* grease to the two washers and install on each screw. Insert screws with washers into retainer sleeves.



1. Screws
2. Washers (two on each screw)

000233

Torque screws in stages, starting with the lower screw. Final torque is 144 to 168 in. lbs. (16.3 to 19 N·m).

Repeat the above process for the remaining injectors.

Connect the fuel manifolds to vapor separator/pump assembly. An audible click will signal proper connection. In addition, the fuel pump connector release button should pop out to a flush position.

To verify a proper connection, pull on the connector without pressing the release button. The connector should not disconnect from the high pressure fuel pump.

Install tie straps to secure fuel manifolds in place.

Install high tension spark plug leads and the retainers used to position the spark plug leads.

Install any components removed during removal for access to fuel manifolds.

Thoroughly clean any spilled or residual fuel from the engine.

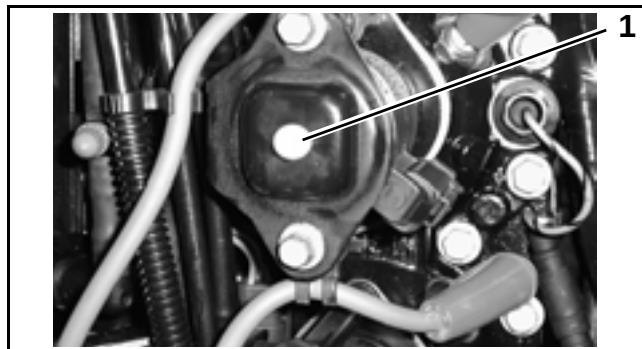
Reconnect battery cables.

IMPORTANT: Refer to Predelivery Service Bulletin (2002-01(D)) for fuel system purging instructions and starting procedures. After initial fuel system pressurization, **inspect all fuel system components for leaks and repair as needed before operating engine.**

IDENTIFICATION PROCEDURE

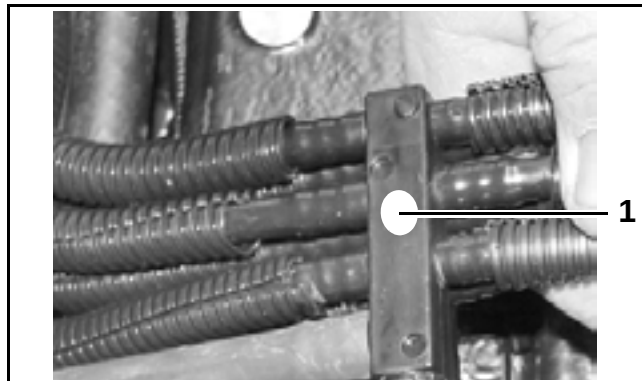
Every outboard that has had replacement fuel return manifolds installed must be easily identified.

Mark the engine using **WHITE** marker or paint. Place a large dot on both (#1 & #2) cylinder fuel injector cap retainers **and** on the fuel manifold to identify this campaign has been completed.



1. Identification marking

00204



- TYPICAL**
1. Identification marking

001742

⚠ **WARNING** ⚠

Failure to check for fuel leakage could allow a leak to go undetected and, when combined with an ignition source, result in a fire or explosion.

ADDITIONAL INFORMATION

THE CUSTOMER

Bombardier will send a letter to all registered owners instructing them not to attempt to start or use the outboard until an authorized *Evinrude/Johnson* dealer has completed the repair. This is a safety issue.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated serial numbers are affected.

A warranty claim form **MUST** be completed and submitted along with the following parts:

- 1) Original fuel return manifold.
- 2) Original fuel return elbows.

Once removed from the outboard, cut the fuel return manifold and black elbows from the rails. Thoroughly clean parts of **ALL** fuel residue and place in a sealed plastic bag to prevent damaging the claim form. Discard the fuel rails.



TYPICAL – Fuel return manifold and elbows

002599

You must return the completed claim with the fuel return manifold and elbows for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Using a standard warranty claim form, use the following information:

- Flat Rate Code – MR04
- Failing Part Number – 9999949

Flat Rate Labor Allowance:

V4

- Replacement – **1.5 hours**

V6

- Replacement – **1.5 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required parts are returned. The proper return address is:

U.S. Dealers

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

Canadian Dealers

Bombardier Recreational Products
Attn: Service Department
1789 Stenson Boulevard
Petersborough, ON Canada K9J7B6

For additional information, dealers can call 1-800-888-4662.

Serial Numbers of Outboards Covered by Safety Campaigns 2003-04(W)

IMPORTANT: Please review this table carefully to determine if you have sold or currently retain one or more of the affected models.

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5041170	5041428 to 5041431	5041598	5042078
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5041266	5041446	5041614	5042099
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5041313	5041477	5041633	5042179
5041315	5041478	5041635 to 5041638	5042181
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5041322 to 5041325	5041494	5041643 to 5041646	5042542
5041327 to 5041329	5041496	5041648	5042543
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5042639	5042925 to 5042929	5044078	5044339
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5042743 to 5042747	5043526 to 5043530	5044175	5044381
5042801	5043551	5044176	5044383 to 5044389
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5042813 to 5042815	5043569	5044202 to 5044215	5044400 to 5044407
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5042819	5043623	5044219 to 5044221	5044413
5042821	5043625	5044224 to 5044226	5044419
5042822	5043626	5044232	5044421
5042826	5043628	5044235	5044423
5042827	5043810 to 5043812	5044237 to 5044239	5044424
5042829	5043814 to 5043816	5044242 to 5044249	5044426
5042830	5043818 to 5043820	5044251	5044427
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5042838	5043850	5044258	5044458
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5042848 to 5042850	5043857 to 5043859	5044266 to 5044268	5044471
5042853 to 5042860	5043861 to 5043865	5044270	5044472
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5044536	5045363	5046828	5047670 to 5047672
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5044546	5045371	5046834	5047681
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5044578	5045935	5046877	5047725
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5044589	5046001 to 5046003	5046915	5047732
5044590	5046055	5046920	5047755
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5045006	5046061	5046947	5047763 to 5047768
5045008	5046063	5046948	5047819
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5045013	5046071	5047000	5047836
5045014	5046128 to 5046130	5047401 to 5047405	5047837
5045018 to 5045026	5046133 to 5046144	5047437	5047867
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5045067	5046155	5047440	5047873 to 5047875
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5045228 to 5045236	5046245	5047551	5048620
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5045284	5046650 to 5046652	5047601	5048661
5045285	5046685	5047603	5048665
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5045347	5046746	5047608	5048727 to 5048730
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5045350	5046749	5047614 to 5047616	5048734
5045351	5046754 to 5046764	5047644	5048759
5045354	5046769	5047646	5048760
5045356	5046825	5047647	5048763
5045358 to 5045360	5046826	5047649 to 5047654	

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: December, 2003

No. 2003-05(W)

MODELS: 2004 (SR) Model Year 200, 225, 250 HP **SUBJECT:** Fuel Return Manifolds
Evinrude Direct Injection Outboards

AFFECTED MODELS

IMPORTANT: Only the following models with a serial number on the attached list are covered by this bulletin.

Identify the model and serial number before performing any service procedures.

Model	Year
90° V6 200 through 250 HP	2004 (SR)

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the repair as outlined in this bulletin.

PROBLEM

The fuel **return** manifold supplied to Bombardier by an outside vendor for use on these outboards may contain excessive flashing on an elbow. This manifold, if defective, could potentially cause a fuel leak if excessive flashing prevents the O-ring from properly seating. A fuel leak, when combined with an ignition source, could result in a fire or explosion and present a risk of serious personal injury.

IMPORTANT: The repair procedure outlined in this bulletin MUST be performed by an authorized Evinrude/Johnson Dealer and Evinrude/Johnson Certified Technician.

ORDERING PARTS

ONLY Authorized Dealers may order parts.

Replace the fuel return manifold with the new fuel return manifold as described in this bulletin. The black fuel return manifold assembly is the only part to be replaced.

To order new fuel return manifold, choose the correct P/N listed below and **fax the complete order to 847-689-7235.**

The order FAX form **MUST** include the following:

- Bulletin number — 2003-05(W)
- Date of order
- Dealer Name and Dealer Code
- Dealer phone number
- Requested part number(s)
- Each Engine Model and Serial Number parts are needed for

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Parts Needed	P/N	QTY
Fuel Manifold Assembly	5005413	1
Injector Retainer Flange Screws	349090	12

Parts will be shipped at no charge.

REPLACEMENT PROCEDURE



WARNING



Wear safety glasses at all times when working on any part of the fuel system.

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system:

- Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.
- Always work in a well ventilated area and wipe off any fuel spillage.
- DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

RELIEVING FUEL SYSTEM PRESSURE



WARNING

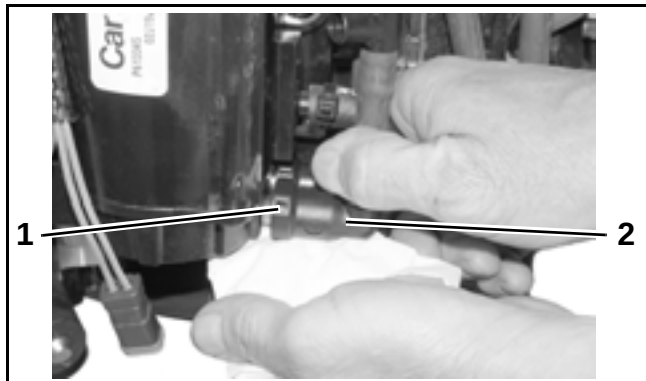


Protect against hazardous fuel spray. Before starting any fuel system service, carefully relieve fuel system pressure.

Disconnect battery cables at the battery.

Wrap a shop towel completely around the return fuel pump connector to minimize fuel spray when disconnecting.

Press the fuel pump connector release button and slowly pull the connector off the fuel pump.

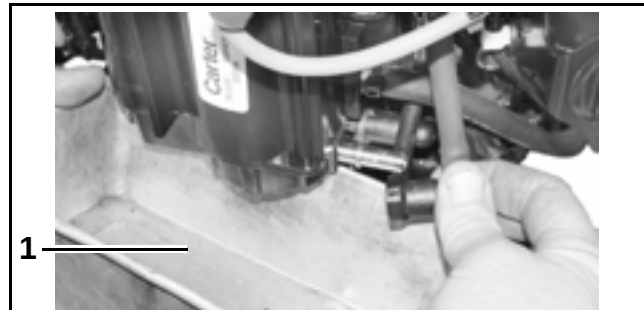


Towel removed for clarity

1. Release button
2. Return fuel pump connector

001743

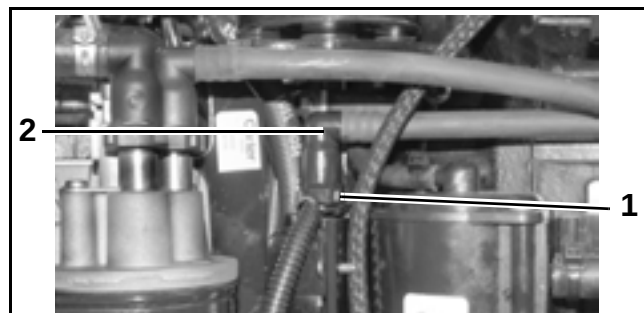
Drain any residual fuel remaining in the system into a suitable fuel container.



1. Container

001744

Disconnect the supply fuel pump connector in the same manner as the return connector. Drain any residual fuel remaining in the system into a suitable fuel container.



Towel removed for clarity

1. Release button
2. Supply fuel pump connector

001745

FUEL RETURN MANIFOLD REPLACEMENT

Removal

Disconnect the battery cables at the battery.

IMPORTANT: Note the proper locations and positioning of all spark plug leads and retainer clips prior to disassembly.

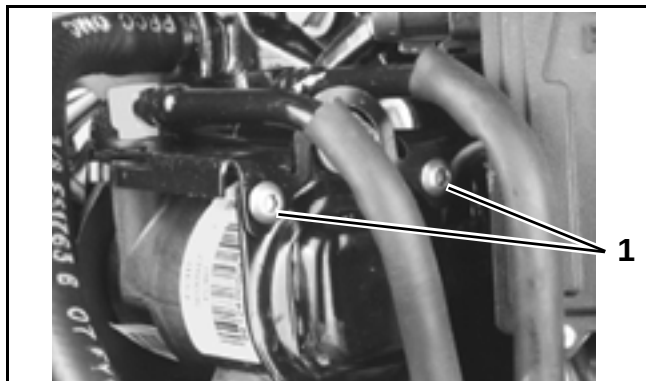
Remove high tension spark plug leads and the retainers used to position the spark plug leads.



1. Retainers

000202

Remove fuel manifold retainer screws and remove retainer from fuel injector ports.



1. Screws

DP0779

Disconnect fuel return manifold fittings (black nipples only) from fuel injector ports and vapor separator/pump assembly.

Remove any tie straps, guards or components used to secure manifolds in place and remove fuel return manifold.

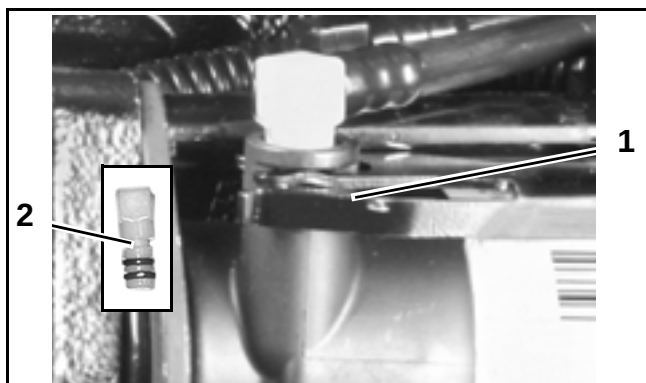
Installation

Refer to *Evinrude Service Manual*, P/N 5005259. Install new fuel manifold in same position as original.

Confirm condition of sealing O-rings of fuel return manifold fittings. Lubricate with *Evinrude direct injection* oil and insert the new fuel manifold fittings into injector. Both fittings must be fully seated into the injector fuel ports.

Install fuel manifold retainer flanges into the grooves of the injector ports.

IMPORTANT: The retainer flanges must engage the outer groove of the manifold fittings.

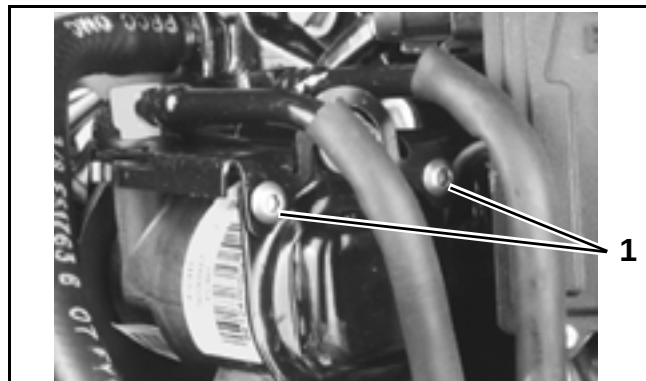


1. Retainer

2. Outer groove

DP0552

Fasten retainer with **new** retaining screws P/N 349090. Torque to 25 to 30 in. lbs. (2.8 to 3.4 N·m).



1. Screws

DP0779

Connect the fuel manifolds to vapor separator/pump assembly. An audible click will signal proper connection. In addition, the fuel pump connector release button should pop out to a flush position.

To verify a proper connection, pull on the connector without pressing the release button. The connector should not disconnect from the high pressure fuel pump.

Install tie straps to secure fuel manifolds in place.

Install high tension spark plug leads and the retainers used to position the spark plug leads.

Install any components removed during removal for access to fuel manifolds.

Thoroughly clean any spilled or residual fuel from the engine.

⚠	WARNING	⚠
Failure to check for fuel leakage could allow a leak to go undetected and, when combined with an ignition source, result in a fire or explosion.		

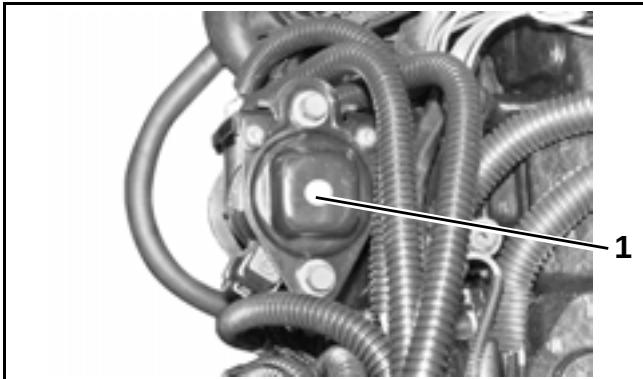
Reconnect battery cables.

IMPORTANT: Refer to Predelivery Service Bulletin (2002-01(D)) for fuel system purging instructions and starting procedures. After initial fuel system pressurization, **inspect all fuel system components for leaks and repair as needed before operating engine.**

IDENTIFICATION PROCEDURE

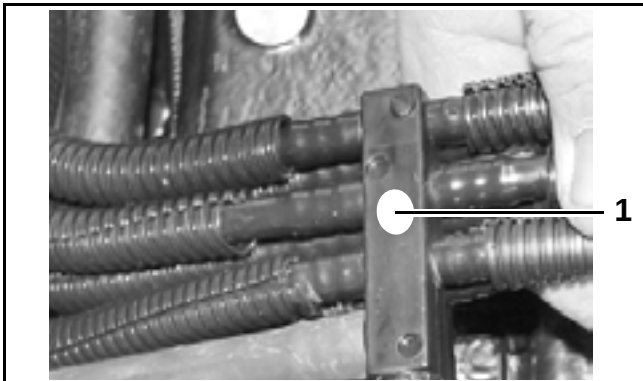
Every outboard that has had replacement fuel return rails installed must be easily identified.

Mark the engine using **WHITE** marker or paint. Place a large dot on both (#2 & #3) cylinder fuel injector cap retainers **and** on the fuel manifold to identify this campaign has been completed.



1. Identification marking

001746



1. Identification marking

001742

ADDITIONAL INFORMATION

THE CUSTOMER

Bombardier will send a letter to all registered owners instructing them not to attempt to start or use the outboard until an authorized *Evinrude/Johnson* dealer has completed the repair. This is a safety issue.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated serial numbers are affected.

A warranty claim form **MUST** be completed and submitted along with the following parts:

- 1) Original fuel return manifold.
- 2) Original fuel return elbows.

Once removed from the outboard, cut the fuel return manifold and black elbows from the rails. Thoroughly clean parts of **ALL** fuel residue and place in a sealed plastic bag to prevent damaging the claim form. Discard the fuel rails.



TYPICAL – Fuel return manifold and elbows

001738

You must return the completed claim with the fuel return manifold and elbows for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Using a standard warranty claim form, use the following information:

- Flat Rate Code – MR04
- Failing Part Number – 9999949

Flat Rate Labor Allowance:

- Replacement – **1.5 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required parts are returned. The proper return address is:

U.S. Dealers

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

Canadian Dealers

Bombardier Recreational Products
Attn: Service Department
1789 Stenson Boulevard
Petersborough, ON Canada K9J7B6

For additional information, dealers can call 1-800-888-4662.

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5041227	5041444	5041612	5042094
5041266	5041446	5041614	5042099
5041270	5041447	5041617	5042141
5041277	5041453	5041618	5042143
5041278	5041455 to 5041457	5041621	5042145
5041280	5041462	5041627	5042147
5041282	5041464 to 5041469	5041629	5042170 to 5042172
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5041338	5041505 to 5041508	5041654	5042549
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5041359	5041532	5041671	5042587 to 5042589
5041361	5041537	5041678	5042591 to 5042594
5041362	5041542	5041680	5042634
5041365	5041543	5041683 to 5041685	5042638

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5042700	5043029 to 5043032	5044138	5044364
5042723	5043034 to 5043039	5044140	5044365
5042725 to 5042730	5043041	5044141	5044367 to 5044375
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5042801	5043551	5044176	5044383 to 5044389
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5042813 to 5042815	5043569	5044202 to 5044215	5044400 to 5044407
5042817	5043622	5044217	5044412
5042819	5043623	5044219 to 5044221	5044413
5042821	5043625	5044224 to 5044226	5044419
5042822	5043626	5044232	5044421
5042826	5043628	5044235	5044423
5042827	5043810 to 5043812	5044237 to 5044239	5044424
5042829	5043814 to 5043816	5044242 to 5044249	5044426
5042830	5043818 to 5043820	5044251	5044427
5042832 to 5042835	5043824 to 5043827	5044252	5044433
5042837	5043845 to 5043848	5044257	5044441 to 5044451
5042838	5043850	5044258	5044458
5042840 to 5042844	5043852 to 5043855	5044260 to 5044264	5044466
5042848 to 5042850	5043857 to 5043859	5044266 to 5044268	5044471
5042853 to 5042860	5043861 to 5043865	5044270	5044472
5042862 to 5042864	5043906 to 5043911	5044271	5044474
5042867	5043913	5044274 to 5044281	5044476
5042868	5043914	5044287	5044477
5042870 to 5042881	5043918 to 5043923	5044289 to 5044291	5044480
5042883	5043960	5044293	5044481
5042889	5043961	5044295 to 5044301	5044483
5042891 to 5042893	5043963	5044305	5044494
5042895 to 5042897	5043965	5044307	5044496
5042899	5043968 to 5043972	5044312	5044507
5042900	5043974 to 5043985	5044313	5044510
5042905 to 5042911	5044011	5044320	5044511
5042914	5044015	5044321	5044516
5042915	5044017	5044328	5044519
5042918	5044039	5044329	5044525
5042920	5044042 to 5044046	5044331	5044526
5042923	5044049 to 5044051	5044334	5044528
5042953	5044076	5044335	5044530

5044536	5045363	5046828	5047670 to 5047672
5044543	5045366 to 5045368	5046830	5047675 to 5047679
5044546	5045371	5046834	5047681
5044549	5045373	5046836	5047685
5044561	5045376	5046837	5047687 to 5047691
5044564	5045382	5046840	5047717 to 5047721
5044565	5045412	5046875	5047723
5044578	5045935	5046877	5047725
5044584	5045938	5046913	5047727 to 5047729
5044589	5046001 to 5046003	5046915	5047732
5044590	5046055	5046920	5047755
5044592 to 5044594	5046057	5046943	5047757
5045005	5046058	5046945	5047761
5045006	5046061	5046947	5047763 to 5047768
5045008	5046063	5046948	5047819
5045009	5046068	5046954	5047824
5045011	5046069	5046956	5047834
5045013	5046071	5047000	5047836
5045014	5046128 to 5046130	5047401 to 5047405	5047837
5045018 to 5045026	5046133 to 5046144	5047437	5047867
5045063	5046146 to 5046153	5047439	5047870
5045067	5046155	5047440	5047873 to 5047875
5045069	5046156	5047442	5047933
5045144	5046230 to 5046233	5047443	5047979
5045148	5046235	5047445 to 5047448	5048013
5045158	5046238 to 5046242	5047450 to 5047453	5048023
5045220 to 5045226	5046244	5047455 to 5047460	5048617
5045228 to 5045236	5046245	5047551	5048620
5045238 to 5045244	5046620	5047553	5048626 to 5048628
5045246	5046627	5047555 to 5047557	5048631
5045269	5046629 to 5046631	5047559	5048632
5045271	5046635	5047563	5048635 to 5048637
5045274 to 5045276	5046645 to 5046647	5047565	5048660
5045284	5046650 to 5046652	5047601	5048661
5045285	5046685	5047603	5048665
5045311 to 5045321	5046741 to 5046743	5047605	5048667
5045347	5046746	5047608	5048727 to 5048730
5045348	5046748	5047610 to 5047612	5048732
5045350	5046749	5047614 to 5047616	5048734
5045351	5046754 to 5046764	5047644	5048759
5045354	5046769	5047646	5048760
5045356	5046825	5047647	5048763
5045358 to 5045360	5046826	5047649 to 5047654	

Please route to: ☐ Service ☐ Sales ☐ Parts ☐ Init. ☐ ☐		OUTBOARDS WARRANTY Bulletin
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Date: April, 2004

No. 2004-01(W)

MODELS: 2004 60° V6 Evinrude DI Models

SUBJECT: Improved Oil Distribution

Dear Evinrude/Johnson Dealers:

This communication is to inform Evinrude and Johnson dealers of a change in manufacturing to improve oil distribution and further reduce oil consumption.

The improvement requires oil restrictors to be inserted into starboard oil lines, improving oil distribution and consumption.

Affected Models
ALL 2004 (SR) 60° V6 Evinrude DI models ONLY

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this oil distribution kit.

INSPECTION

Remove the engine cover and inspect starboard oil lines for oil restrictor hang tags as shown below. If tags are present, oil restrictors have been installed in the oil lines and **the kit is not required**.



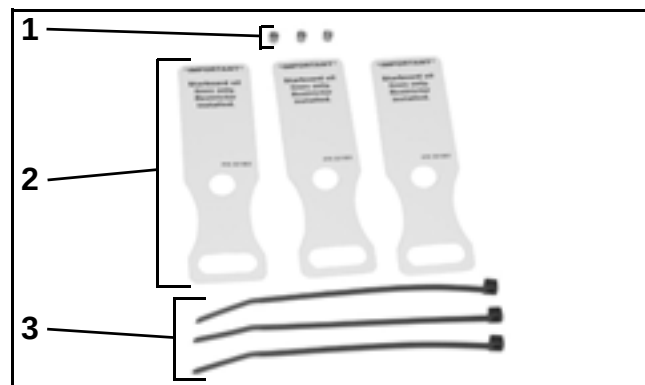
1. Restrictor tag

003924

OIL DISTRIBUTION KIT

Order kit and follow outlined installation procedure.

DESCRIPTION	P/N	QTY
Oil Distribution Kit	5006140	1



1. Restrictors (3), P/N 351967
2. Restrictor tags (3), P/N 351963
3. Tie straps (3), P/N 317893

003925

IMPORTANT: Visually inspect the oil restrictor for any debris, and to ensure it is machined through. Restrictor **MUST** be free of any blockage.

PROCEDURE



WARNING



To prevent accidental starting while servicing, disconnect battery cables at the battery.

IMPORTANT: Follow the steps in this procedure explicitly. The starboard oil lines must be identified and installed correctly.



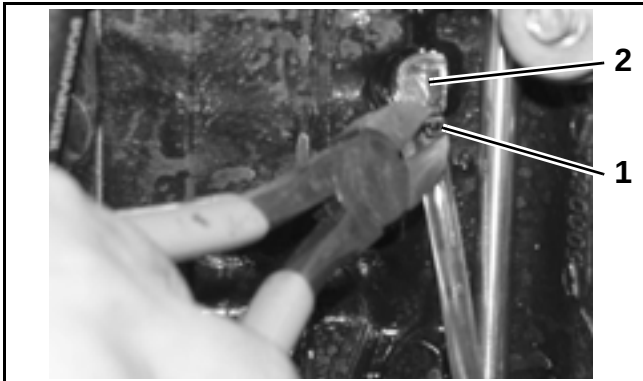
Remove engine cover.

Remove the two Power Distribution Panel (PDP) screws. Do not completely remove the component from the powerhead.

With the PDP moved aside, cut the tie strap on the oil supply line of the **top starboard cylinder only**.

Remove the oil line from the pressed-in fitting at cylinder.

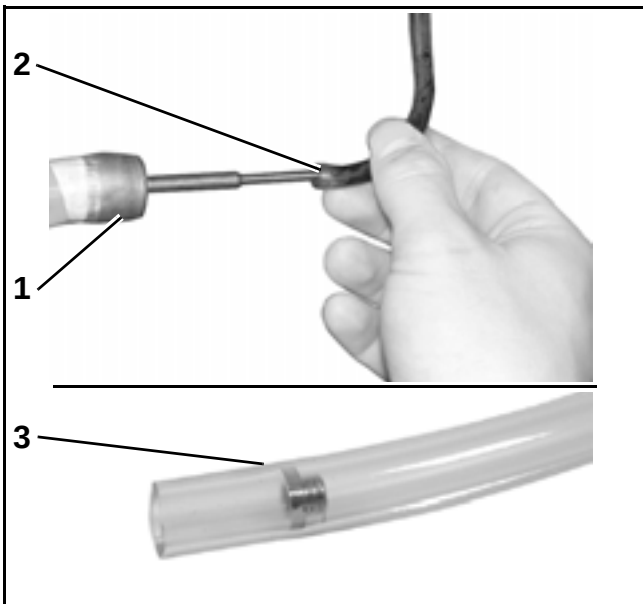
IMPORTANT: Carefully remove the oil line. DO NOT cut or alter the length of any hoses.



1. Tie strap
2. Pressed-in fitting

003920

Using *Amphenol*[†] Removal Tool, P/N 322698, insert **small end** of restrictor into the oil line first. Push the restrictor 0.5 to 1.0 in. (1.3 to 2.5 cm) into the oil line.



1. Amphenol Removal Tool
2. Restrictor
3. Restrictor in oil hose

003921
003925a

Thread one hang tag onto the oil line as shown.

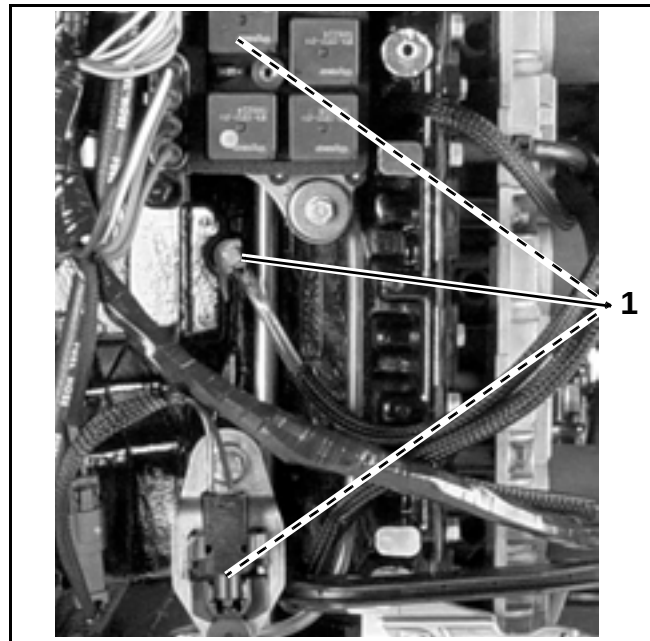


Oil Restrictor Hang Tag

0003922

After threading hang tag, position the oil line on the pressed-in fitting and install tie strap.

IMPORTANT: Use caution when routing oil lines to ensure proper routing and positioning.



1. Starboard oil lines
(top and bottom lines obstructed)

003923

Repeat steps for middle and bottom cylinders, completing each restrictor installation, threading the hang tag, refitting the oil hose on the pressed-in fitting, and securing with tie strap before continuing with the next oil line.

Reinstall PDP and replace the engine cover.

IMPORTANT: Prime the oiling system. Refer to **PRIMING** in the *Evinrude* Service Manual.

ADDITIONAL INFORMATION

ONLY Authorized servicing Dealers may order parts.

Warranty claims can be filed on *DealerPort* using the following information:

- Flat Rate Code – OD01
- Failing Part Number – 9999950

Flat Rate Labor Allowance:

- Replacement – **0.5 hours**

Dealers without *DealerPort* can submit a standard warranty claim form.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

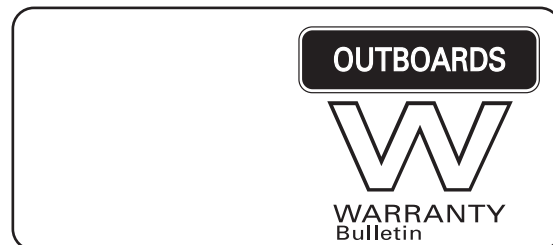
For additional information, call 1-800-888-4662.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



Date: April, 2004

No. 2004-02(W)

MODELS: ALL 2004 Evinrude® E-TEC™ 90 HP

SUBJECT: Recalibration Software

Dear Evinrude/Johnson® Dealers:

This communication is to inform Evinrude and Johnson dealers of an EMM software recalibration. Software programs, or "maps," are downloaded into the EMM prior to factory testing of the outboard.

Affected Models
ALL 2004 (SR) Evinrude E-TEC 90 HP models ONLY

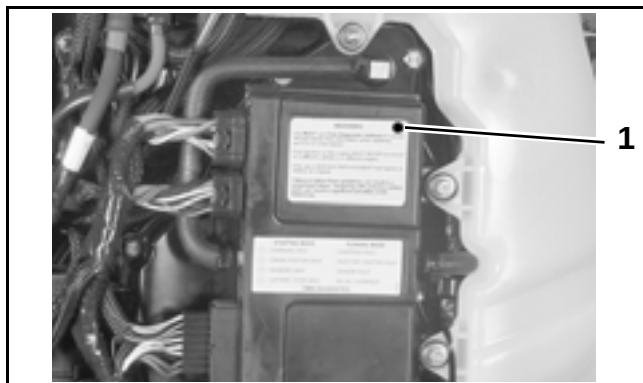
The recalibration software will optimize fuel consumption and **MUST** be installed on all affected outboards **before** delivering to customers.

THE CUSTOMER

Bombardier will send a letter to all registered owners instructing them to return their outboard to an authorized Evinrude or Johnson dealer to complete the software recalibration.

INSPECTION

Remove the engine cover and inspect EMM for recalibration mark as shown below. If the marking is present in the location shown, the recalibrated software has already been installed.



1. Recalibration mark

002107a

PROCEDURE

If the recalibration software is required, go to the DealerPort® website to download the necessary file. Dealers **without** DealerPort can send an e-mail requesting the new software.

Log into DealerPort.

Click **Engine Software**.



1. Engine Software link

DP02

Click **Download Windows & PDA Engine Maps**.

Scroll to the list of Map part numbers and locate Map P/N 3030334, PCN 72936. Click **Get Map**.

After downloading the file and opening it, the unzip program will place the Engine Map files in three locations for use with PDA, EV DIAG, and PDC Diagnostics software.

IMPORTANT: Do not change the default path from C:\ when the file is unzipped.

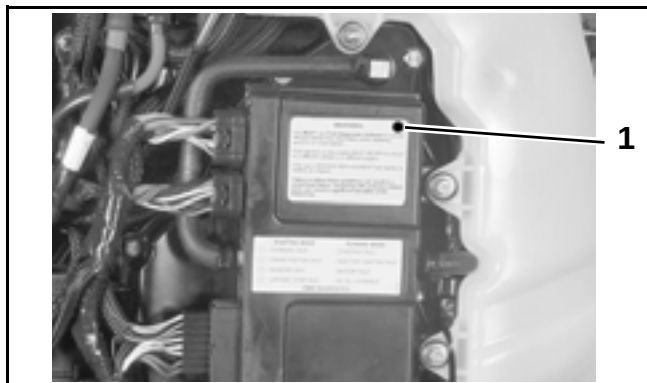
If you do not have DealerPort, e-mail a request for the software to bmca.techsvc@brp.com. In the e-mail subject line, you **must** reference "Software Map 3030334."



Identification Procedure

Every outboard that has had recalibrated software successfully installed must be easily identified.

Use a BLACK permanent marker to mark the *EMM* as shown below to indicate this recalibration software has been installed.



1. Recalibration mark

002107a

IMPORTANT: It is not necessary to perform timing verification.

DEALER RESPONSIBILITY

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated horsepower and model year outboard is affected.

ADDITIONAL INFORMATION

ONLY Authorized servicing Dealers may perform the software recalibration.

Warranty claims can be filed on *DealerPort* using the following information:

- Flat Rate Code – RS01
- Failing Part Number – 9999951

Flat Rate Labor Allowance:

- Replacement – **0.5 hours**

Dealers without *DealerPort* can submit a standard warranty claim form.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Bombardier will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

For additional information, call 1-800-888-4662.

Please route to: ☐ Service Init. ☐ Sales ☐ Parts		SAFETY CAMPAIGN OUTBOARDS
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⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: August, 2004

No. 2004-03(W) **Rev. 1**

MODELS: 200, 225 HP *Johnson*® 4-Stroke

SUBJECT: ECM Replacement

SUPERCEDED

This bulletin has been SUPERCEDED — please refer to Warranty Bulletin 2005-08(W).

Warranty claims in conjunction with Warranty Bulletin 2004-03(W)
MUST be submitted by December 31, 2005 to receive payment.
 The campaign outlined in this bulletin has been superceded.

AFFECTED MODELS

Dear *Evinrude*®/*Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a required ECM replacement.

Identify the model and serial number before performing any service procedures.

Model Year	Models	Serial Number
2004 (SR)	200/225 HP	ALL
2005 (SO)	200 HP	ALL up to 30025075
	225 HP	ALL up to 31025089

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the repair as outlined in this bulletin.

PROBLEM

Under certain operating conditions, a momentary opposite-direction rotation of the crankshaft can cause breakage or explosion of the collector assembly, resulting in the engine cover suddenly coming off, which may cause serious personal injury.

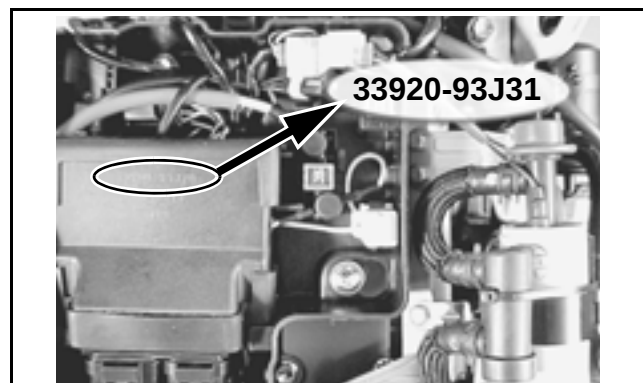
IMPORTANT: The repair procedure outlined in this bulletin MUST be performed by an authorized *Evinrude/Johnson* Dealer and *Evinrude/Johnson* Certified Technician.

THE CUSTOMER

BRP US Inc. will send a letter to all registered owners instructing them to return their outboard to an authorized *Evinrude* or *Johnson* dealer to complete the ECM inspection and replacement. This is a safety issue.

INSPECTION

Remove engine cover and inspect ECM. Replaced ECMs can be identified by the following ECM part number: **33920-93J31**. If this part number appears on the ECM in the location shown, no replacement is required.



Corrected ECM part number

003103

IMPORTANT: Only models in the serial number range require ECM replacement. Models must be carefully identified as falling within the serial number range before proceeding with this replacement.



ORDERING PARTS

ONLY Authorized Dealers may order parts.

Replace the ECM with the new ECM as described in this bulletin. The ECM is the only part to be replaced.

To order new ECM, fax the complete order to 847-689-7235.

The order FAX form **MUST** include the following:

- Bulletin number — 2004-03(W)
- Date of order
- Dealer name and Dealer code
- Dealer phone number
- Requested part number
- Each Engine Model and Serial Number parts are needed for

Please clearly PRINT or TYPE your order on dealer letterhead or paper to ensure efficient order processing.

Parts Needed		
Replacement ECM	P/N	QTY
ALL 200 / 225 HP 4-Stroke	5036540	1

Parts will be shipped at no charge.

REPLACEMENT PROCEDURE

 WARNING 
After servicing the outboard, check connections. Failure to check connections could allow a problem to go undetected, resulting in an unsafe operating condition.

Installation

IMPORTANT: Refer to *Johnson Service Manual*, P/N 5005663, and install new ECM in same position as original.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the models with designated serial number ranges are affected.

A warranty claim form **MUST** be completed and submitted along with the following part:

- 1) Original ECM

You must return the completed claim with the original ECM for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Using a standard warranty claim form, use the following information:

- Flat Rate Code – **EC01**
- Failing Part Number – **9999953**

Flat Rate Labor Allowance:

- Replacement – **0.5 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

IMPORTANT: If the ECM was already replaced, BRP will **NOT** pay for inspection.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required part is returned. The proper return address is:

U.S. Dealers

BRP US Inc.
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive/Dock 5
Waukegan, IL 60085

Canadian Dealers

Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6

For additional information, dealers can call 1-800-888-4662.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE[®]
Johnson[®]



OUTBOARDS

W
WARRANTY
Bulletin

Date: October, 2004

No. 2004-04(W)

MODELS: 2004 *Evinrude[®] E-TEC[™]* with Electric Starter

SUBJECT: Electric Starter Motor Modification

Dear *Evinrude/Johnson[®]* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a manufacturing modification for electric starter motors.

The modification requires one double-ended bolt and washer as well as increased torque values to assure long-term durability of starter mounting.

AFFECTED MODELS

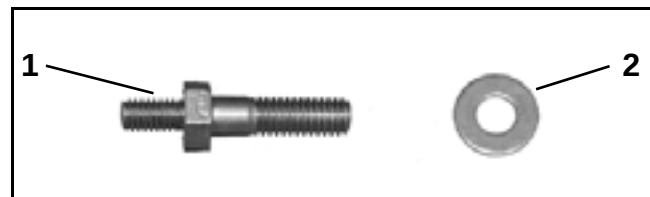
Models	Serial Number	Model Year
E40DELSRC E40DPLSRC E50DPLSRC	5067167 and below	2004 (SR)
E75DPLSRC E90DPLSRC E90DPXSRC E90DSLRS	5067193 and below	

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this starter motor modification.

ORDERING PARTS

Order kit and follow outlined installation procedure.

DESCRIPTION	P/N	QTY
Starter Reinforcement Kit	5006206	1



1. Double-ended bolt (1), P/N 351827
2. Washer (1), P/N 321465

004308

PROCEDURE



WARNING



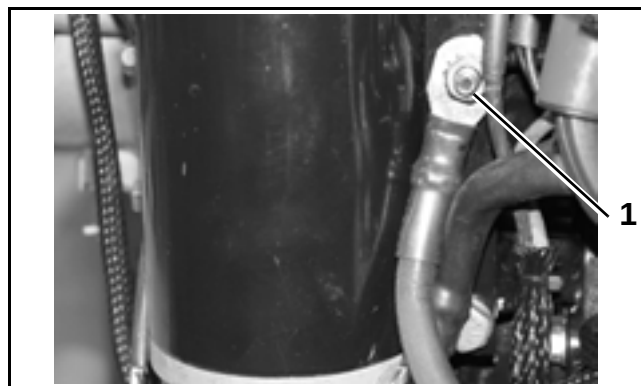
To prevent accidental starting while servicing, remove emergency stop lanyard and disconnect battery cables at the battery.

IMPORTANT: Follow the steps in this procedure explicitly. The torque values must be correct for the modification to be effective.

Remove emergency stop lanyard and disconnect battery cables at the battery.

Remove engine cover.

Remove battery negative (–) cable from the double-ended bolt ground stud first.

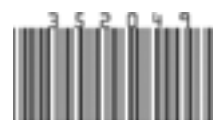


1. Double-ended bolt

003959

Remove the double-ended bolt.

Install washer, P/N 321465, from kit on new double-ended bolt, P/N 351827. Apply *Triple-Guard* grease to the threads of the new double-ended bolt and also to the washer. Install new bolt and torque to 14 to 16 ft. lbs. (19 to 22 N·m).



IMPORTANT: Further inspection for loose components is recommended when installing double-ended bolt or retorquing starter screws.

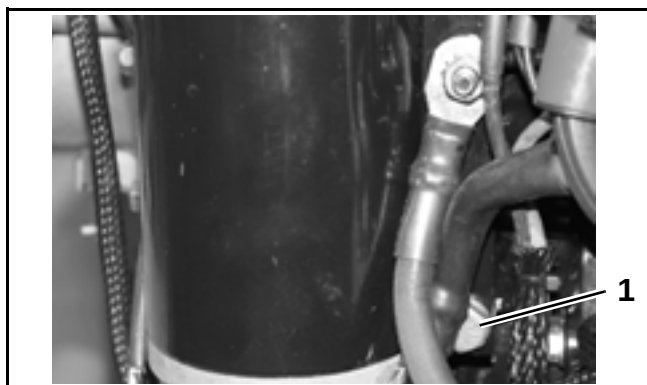
75 / 90 HP Models

Retorque the forward and rear starter motor screws to 14 to 16 ft. lbs. (19 to 22 N·m).



1. Forward screw

003960



1. Rear screw

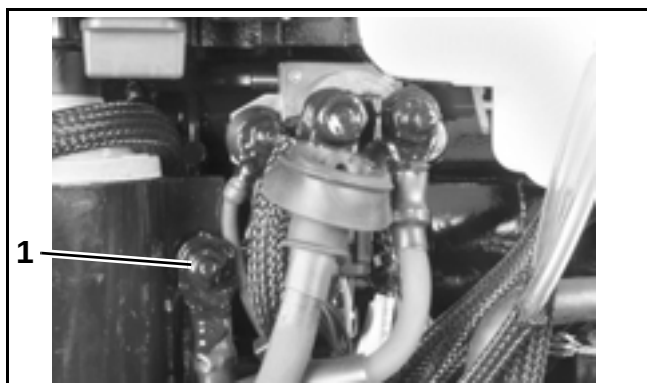
003959

40 / 50 HP Models

Retorque the accessible rear starter screw to 14 to 16 ft. lbs. (19 to 22 N·m). It is not necessary to retorque the forward starter screw.

All Models

Attach battery negative (–) cable to double-ended bolt with starwasher and nut. Torque nut to 120 to 140 in. lbs. (13.6 to 15.8 N·m). Confirm all electrical connections are coated with *Black Neoprene Dip*.



1. Black Neoprene Dip on negative (–) cable

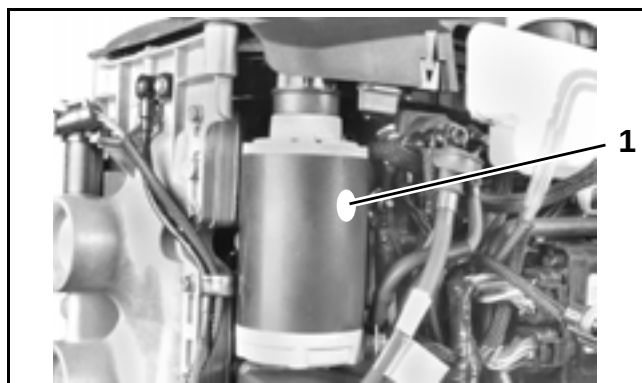
002292

Reattach battery cables at the battery with nuts and lock washers. DO NOT use wing nuts.

IDENTIFICATION PROCEDURE

Every outboard that has had the electric starter motor modification completed must be easily identified.

Use a WHITE permanent marker to mark the starter as shown below to indicate this modification has been completed.



1. Starter motor modification mark

002293

ADDITIONAL INFORMATION

ONLY Authorized servicing Dealers may order parts.

Warranty claims can be filed on *DealerPort* using the following information:

- Flat Rate Code – E-120
- Failing Part Number – 9999952

Flat Rate Labor Allowance:

- Replacement – 0.5 hours

Dealers without *DealerPort* can submit a standard warranty claim form. The proper address is:

BRP US Inc.
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

BRP US Inc. will credit dealers for repairs performed up to 12 months from the date this bulletin is issued.

For additional information, call 1-800-888-4662.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE®
Johnson®



OUTBOARDS

W
WARRANTY
Bulletin

Date: February, 2005

No. 2005-01(W)

MODELS: 2005 Evinrude® E-TEC™ 200–250 HP

SUBJECT: Manufacturing Change Adding Fuel Hose Clip

Dear Evinrude/Johnson® Dealers:

This communication is to inform Evinrude and Johnson dealers of a manufacturing change effective December 13, 2004. The port fuel hose can be damaged when replacing the engine cover. A retaining clip was added to prevent damage.

The modification requires installing a fuel hose clip securing the port fuel hose.

AFFECTED MODELS

Models	Model Year	Serial Number
ALL 200-250 Evinrude E-TEC	2005 (SO)	ALL below 5099477

Please contact customers who have purchased the affected outboards and request they schedule this important warranty upgrade. Any outboards in stock **MUST** have clip installed before being sold.

ORDERING PARTS

Order clip and follow installation procedure.

DESCRIPTION	P/N	QTY
Fuel Hose Clip	352531	1



Fuel Hose Clip

004869

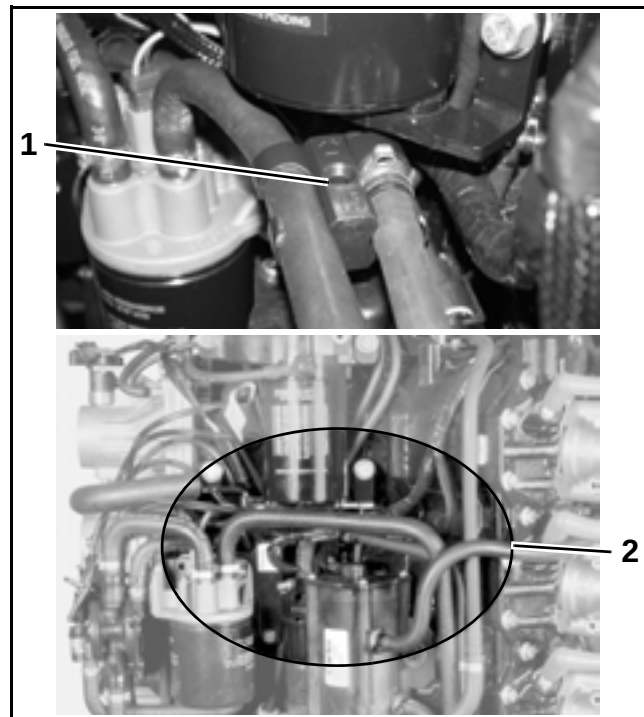
INSTALLTION

IMPORTANT: Follow the steps in this procedure explicitly. Clip installation must be correct for the modification to be effective.

Remove engine cover.

IMPORTANT: DO NOT disconnect fuel hoses; clip can be installed without disconnecting hoses.

Install fuel hose clip, P/N 352531, to **port** fuel hoses. Confirm hoses fit securely in all clip holdings.



1. Fuel hose clip
2. Area of detail

004870

004253

IMPORTANT: Inspect for frayed or damaged fuel hoses. Replace any fuel hose that has evidence of damage.



ADDITIONAL INFORMATION

ONLY Authorized Servicing Dealers may order parts.

Warranty claims can be filed on *DealerPort* using the following information:

- Failing Part Number – **9999956**

Flat Rate Labor Allowance:

- Replacement – **0.3** hours
- Flat Rate Code – **FC-05**

Dealers without *DealerPort* can submit a standard warranty claim form. The proper address is:

BRP US Inc.
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

BRP US Inc. will credit dealers for claims submitted within 12 months of the date of this bulletin.

For additional information, call 1-800-888-4662.

Please route to: ☐ Service ☐ Sales ☐ Parts ☐ Init. ☐		OUTBOARDS W WARRANTY Bulletin
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Date: April, 2005

No. 2005-02(W)

MODELS: ALL 2005 Evinrude® E-TEC™
200–250 HP

SUBJECT: Recalibration Software

Dear Evinrude/Johnson® Dealers:

This communication is to inform Evinrude and Johnson dealers of an EMM software recalibration. Software programs, or “maps,” are downloaded into the EMM.

AFFECTED MODELS

Models	Model Year	Serial Number
ALL 200-250 Evinrude E-TEC	2005 (SO)	ALL below 5109291

Please contact customers who have purchased the affected outboards and request they schedule this important warranty upgrade. Any outboards in stock **MUST** have the recalibration software installed on all affected outboards **before** delivering to customers.

DESCRIPTION

The recalibration software has many benefits:

- Code 38 — A new reset procedure for the release of S.A.F.E. requires the outboard be at idle, and the oil switch receive ten consecutive measureable pressure pulses.
- Oiling — The oiling system provides extra lubrication when operating the outboard above the 4500 – 5800 RPM operating range, and helps prevent engine damage.
- Evinrude I-Command™ — Software update adds I-Command (CANbus) gauge capability.
- Code 57 (ATAC) — A delay has been added to prevent an erroneous Code 57 occurrence.

INSPECTION

Remove the engine cover and inspect EMM for recalibration mark as shown below. If the marking is present in the location shown, the recalibrated software has already been installed.



1. Recalibration mark

004245

PROCEDURE

If the recalibration software is required, go to the DealerPort® website to download the necessary file. Dealers **without** DealerPort can send an e-mail requesting the new software.

Log into DealerPort.

Click **Engine Software**.



1. Engine Software link

DP02



Click **Download Windows & PDA Engine Maps**.

Scroll to the list of software part numbers and locate the appropriate Software P/N, based on the horsepower and model type.

Horsepower and Model Type	Software P/N	PCN
250	3030341	81810
225	3030344	81811
200	3030343	81453
225 HO	3030341	81810HO
200 HO	3030343	81453HO

Click **Get Map**.

After downloading the file and opening it, the unzip program will place the Engine Map files in three locations for use with PDA, EV DIAG, and PDC Diagnostics software.

IMPORTANT: Do not change the default path from C:\ when the file is unzipped.

If you do not have DealerPort, e-mail a request for the software to bmca.techsvc@brp.com. In the e-mail subject line, you **must** reference "E-TEC V6 Software Map."

Identification Procedure

Every outboard that has had recalibrated software successfully installed must be easily identified.

Use a BLACK permanent marker to mark the *EMM* as shown below to indicate this recalibration software has been installed.



1. Recalibration mark

004245

IMPORTANT: It is not necessary to perform timing verification after this software is loaded.

DEALER RESPONSIBILITY

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the designated horsepower up to the serial number range is affected.

ADDITIONAL INFORMATION

ONLY Authorized servicing Dealers may perform the software recalibration.

Warranty claims can be filed on *DealerPort* using the following information:

- Flat Rate Code – **RS01**
- Failing Part Number – **9999957**

Flat Rate Labor Allowance:

- Replacement – **0.5 hours**

Dealers without *DealerPort* can submit a standard warranty claim form.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

BRP will credit dealers for repairs performed up to 12 months from the date this bulletin is issued. The proper return address is:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

For additional information, call 1-800-888-4662.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐		SAFETY CAMPAIGN OUTBOARDS WARRANTY Bulletin
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⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: July, 2005

No. 2005-03(W)

MODELS: Evinrude® Direct Injection outboards
 (See **Affected Models** for detailed listing)

SUBJECT: Injector Fastener Kit

PROBLEM

Fuel injector fasteners could loosen or break. Potential fuel leaks could result in fire or explosion.

This problem DOES NOT affect any Evinrude® E-TEC™ outboard models.

IMPORTANT: The repair procedure outlined in this bulletin **MUST** be performed by an authorized Evinrude/Johnson Dealer and Evinrude/Johnson Certified Technician.

AFFECTED MODELS

Identify the model and serial number before performing any service procedures.

Model Year	D.I. Models	Serial Number
2001 (SI)	200–250 HP	ALL
2004 (SR)	200–250 HP	5050319 and later
2005 (SO)	100, 115 HP	ALL up to 5111879
	135–175 HP	ALL up to 5111879
	200–250 HP	ALL up to 5088447

IMPORTANT: DO NOT sell or deliver any affected models until you have performed the inspection and/or repair as outlined in this bulletin.

THE CUSTOMER

BRP US Inc. will send a letter to all registered owners instructing them to return their outboard to an authorized Evinrude or Johnson dealer to complete the fuel injector fastener replacement. This is a safety issue.

INSPECTION

Replaced fuel injector fasteners can be identified by an embedded numeric stamp on the fastener head. If the embedded stamp is present, no replacement is required.



ORDERING PARTS

ONLY Authorized Dealers may order parts.

Install fuel injector fastener kit listed below:

Description	P/N	QTY
Fuel Injector Fastener Kit — V4	5006649	1
Fuel Injector Fastener Kit — V6	5006650	1

Fax the complete order to 847-689-7235.

Dealers outside North America — order through the local distributor.

The order FAX **MUST** include the following:

- Bulletin number — 2005-03(W)
- Dealer name, code, and phone number
- Requested part number
- Each Engine Model and Serial Number parts are needed for

Please PRINT / TYPE orders on dealer letterhead or paper to ensure efficient order processing.

Parts will be shipped at no charge.

IMPORTANT: Only one kit per engine serial number will be shipped.



DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only the models with designated serial number ranges are affected.

WARRANTY AND RETURN INFORMATION

The pre-printed warranty claim form enclosed in the kit **MUST** be completed and submitted along with the following parts:

- All original fuel injector fasteners

You must return the completed claim with the original fasteners for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

Each Fuel Injector Fastener Kit contains:

- Detailed instructions;
- Replacement fasteners and washers;
- A four-inch 5/16-18" bottoming tap
- A pre-printed warranty allowance request; and
- A pre-printed return shipping label.

The warranty allowance request form must be completed with all required information and submitted with the required parts. (See instruction sheet provided with fastener kit.) A standard warranty allowance request form can be used, filling in the information below.

A flat rate labor allowance is printed on the claim, depending on the model the kit was ordered for.

- Failing Part Number – **9999958**
- Flat Rate Code – **F101**
- **V4 – 1.0 hours**
- **V6 – 1.5 hours**

Credit for labor will be issued only when the warranty allowance request form and returned required parts are received.

Returning Parts

- **U.S. Dealers only** — Use pre-paid UPS label. **UPS label cannot be used in conjunction with any other package or return program.**
- **Canadian Dealers** — Account will be credited \$10 U.S. (or equivalent). The address is:

Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6

- **Dealers Outside North America** — Return old fasteners to regional office.

For additional information, U.S. and Canadian dealers can call 1-800-888-4662. Dealers outside North America can call their regional office.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: July, 2005

No. 2005-04(W)

MODELS: Evinrude® 90° 200–250 HP Direct Injection (See **Affected Injectors** for detailed listing)

SUBJECT: Fasteners for Service Fuel Injectors

PROBLEM

Fuel injector fasteners could loosen or break. Potential fuel leaks could result in fire or explosion.

This problem DOES NOT affect any Evinrude® E-TEC™ outboard models.

IMPORTANT: The replacement procedure outlined in this bulletin **MUST** be performed by an authorized Evinrude/Johnson Dealer and Evinrude/Johnson Certified Technician.

AFFECTED INJECTORS

Identify the affected service fuel injector assemblies listed below before performing any service procedures. Affected injectors could be installed on any 2001–2005 Evinrude 90° 200–250 HP D.I. outboard.

IMPORTANT: DO NOT sell or deliver any affected injector assembly in your parts inventory. Check your service records for outboards fitted with the affected service injectors. Dealers are urged to contact the customer owning the outboard with an affected service injector to schedule service.

Affected Date Codes

	Date Code Ranges
Service Injector Kit Assembly P/Ns 5004501 (port) 5004502 (starboard) 5005196 (port) 5005197 (starboard)	00130 to 00348 and 03289 to 04252
Injector P/Ns 5004284 (port) 5004285 (starboard)	

Reading Julian Date Codes

Julian date codes are the first five numbers of the injector serial number. The date code appears after "SN."

SN 00 166 01009183

YEAR: 00 = 2000
 03 = 2003
 04 = 2004

DAY OF YEAR: 31 = January 31st
 58 = February 27th
 166 = June 15th

Date Code Example: 00166 = 166th day of 2000

Serial Number Location

The injector serial number is located on the injector, near the barcode.

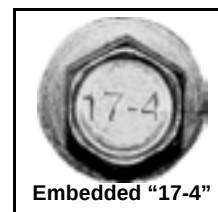


Injector Serial Number

004962

INSPECTION

Replaced fuel injector fasteners can be identified by an embedded numeric stamp on the fastener head. If the embedded stamp is present, no replacement is required.



Embedded "17-4"



SOLUTION

IMPORTANT: Service fuel injectors with affected date codes should be repaired as specified in this bulletin.

- If the service injector is installed on an out-board, replace the injector fasteners by following the “*Installed Injectors*” replacement procedure outlined in this bulletin; or
- If the service injector is in your inventory, replace the injector fasteners by following the “*Inventory Injectors*” replacement procedure outlined in this bulletin.

ORDERING PARTS

ONLY Authorized Dealers may order parts.

Order the parts listed below from *Evinrude/Johnson Parts and Accessories* for each service injector:

Description	P/N	QTY
Fuel Injector Fasteners	352699	2 (per injector)
Washers	348224	4 (per injector)
Cleaning Tap, P/N 352798, must be used to complete the fastener replacement. Order this reusable tool when placing fastener order, or reuse the cleaning tap provided in Replacement Fastener Kits P/N 5006649, or 5006650.		

REPLACEMENT PROCEDURE

IMPORTANT: Complete the replacement procedure as required. For installed injectors, follow the instructions below. For inventory injectors, see page 4 for instructions.

Installed Injectors

IMPORTANT: Refer to the appropriate *Evinrude* 90° V6 DI Service Manual before attempting any service repairs or part replacement.

Disconnect battery cables and remove upper and lower engine covers as needed to access lower injectors.

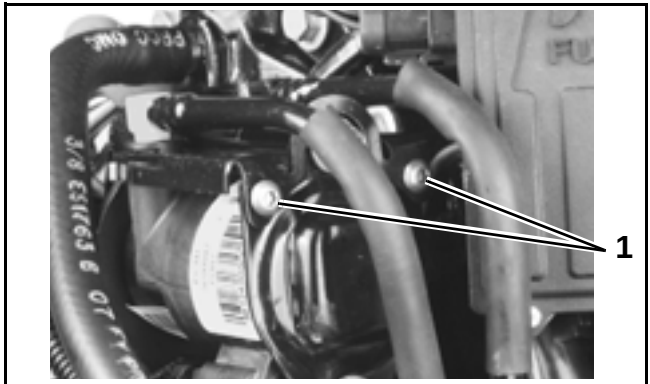
Relieve fuel system pressure. Refer to FUEL SYSTEM section of Service Manual.

Work on one injector at a time. If servicing multiple injectors, start at the lowest injector of each cylinder bank and work toward the top injector. Do not remove any of the spark plugs during any part of this procedure.

DO NOT REMOVE INJECTOR. DO NOT allow dirt and debris to enter injectors or fuel tubes. Replace one injector fastener at a time (first top and then bottom fastener).

IMPORTANT: Note the proper locations and positioning of all spark plug leads and retainer clips prior to disassembly. Check condition of retainer assembly cap and sleeve. Replace if damaged.

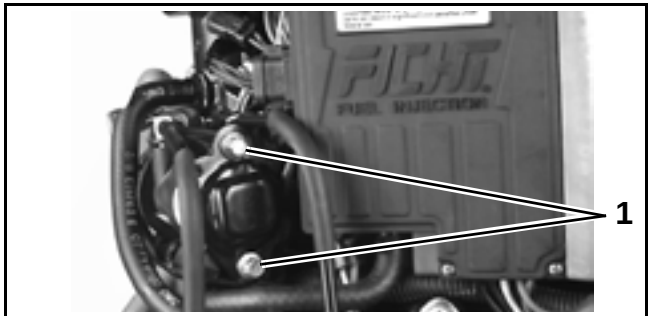
DO NOT remove the fuel injector retainer, fuel manifolds, or fuel injector assembly from the cylinder head.



1. Fuel manifold retainer screws (DO NOT REMOVE) DP0779

IMPORTANT: Back out the upper **and** lower injector fasteners **two to three turns** each.

After backing out both fasteners, completely remove **only top** injector fastener and washers.



1. Injector sleeve fasteners DP0784

IMPORTANT: DO NOT discard the old fasteners. The fasteners **MUST be returned** with a warranty claim form to receive warranty credit. Pay close attention to keeping the new fasteners away from the old fasteners to be returned.

Clean injector adapter threads using cleaning tap, *Cleaning Solvent*, and compressed air.

**WARNING**

Wear safety glasses to avoid personal injury, and set compressed air to less than 25 psi (172 kPa).



Cleaning Tap

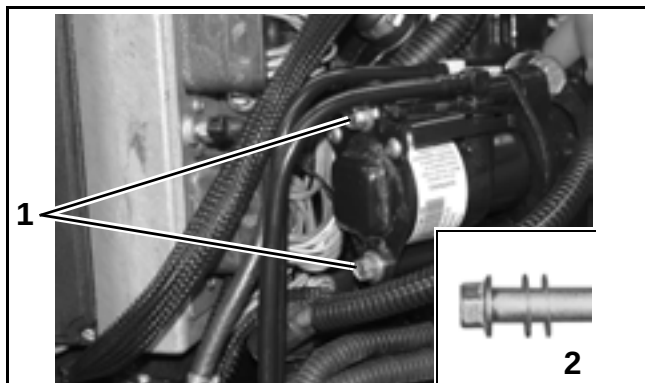
004966

**CAUTION**

All injector components must be clean to ensure correct torque tightening specifications. To prevent fuel leakage, carefully follow these installation instructions.

Install two washers on each fastener.

IMPORTANT: Washers are factory-lubricated. Do not clean the washers.



1. Fasteners and washers
2. Washers (two per fastener)

000396
004976

Apply *Locquic Primer* and *Nut Lock* to threads of fastener.

Install fastener. Finger tighten only.

IMPORTANT: DO NOT torque fastener until completing installation of bottom fastener. Torque procedure must be followed **only after both fasteners are installed.**

Repeat steps for the bottom fuel injector fastener before performing torque procedure.

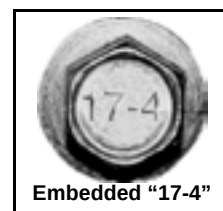
Torque Procedure

IMPORTANT: Torquing of each fastener must be completed within two minutes of chemical application.

After both fasteners are installed, tighten in stages, starting with lower fastener, and alternating to upper with each torque. Torque fasteners to 10 ft. lbs. (14 N·m), then 12 ft. lbs. (16 N·m), and then to a final torque of 14 ft. lbs. (19 N·m).

Check Work

After all fasteners are installed, confirm each fastener has an embedded numeric stamp on the fastener head.



Embedded "17-4"

Completing

**WARNING**

After servicing the fuel system, check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

Reconnect battery cables. Turn key switch "ON" to pressurize fuel system. Inspect all fuel system components for leaks. Repair any fuel leaks.

Confirm location of spark plug leads and retainer clips.

Install upper and lower engine covers, if removed.

Inventory Injectors

Securely fasten service injector in a vise or suitable fixture before proceeding with the replacement. Protect the injector by placing in aluminum jaws, or wrap with a rag. Plug the fuel ports.

Replace one injector fastener at a time (first top and then bottom fastener).

IMPORTANT: Back out the upper **and** lower injector fasteners **two to three turns** each.

After backing out both fasteners, completely remove **only top** injector fastener and washers.



005001

IMPORTANT: DO NOT discard the old fasteners. The fasteners **MUST be returned** with a warranty claim form to receive warranty credit. Pay close attention to keeping the new fasteners away from the old fasteners to be returned.

Clean injector adapter threads using cleaning tap, *Cleaning Solvent*, and compressed air.



WARNING



Wear safety glasses to avoid personal injury, and set compressed air to less than 25 psi (172 kPa).



Cleaning Tap

004966



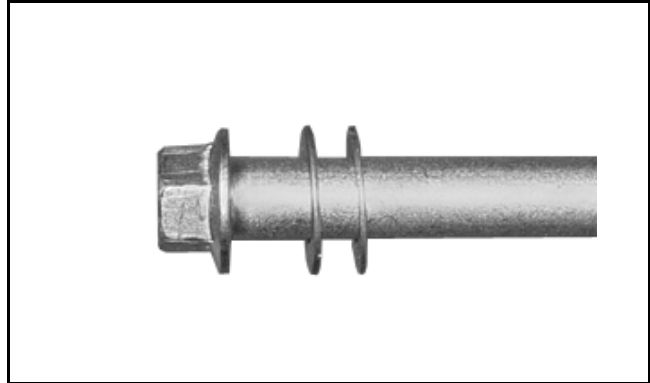
CAUTION



All injector components must be clean to ensure correct torque tightening specifications. To prevent fuel leakage, carefully follow these installation instructions.

Install two washers on each fastener.

IMPORTANT: Washers are factory-lubricated. Do not clean the washers.



Two Washers Per Fastener

004976

Apply *Locquic Primer* and *Nut Lock* to threads of fastener.

Install fastener. Finger tighten only.

IMPORTANT: DO NOT torque fastener until completing installation of bottom fastener. Torque procedure must be followed **only after both fasteners are installed**.

Repeat steps for the bottom fuel injector fastener before performing torque procedure.

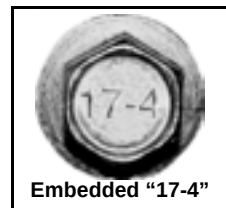
Torque Procedure

IMPORTANT: Torquing of each fastener must be completed within two minutes of chemical application.

After both fasteners are installed, tighten in stages, starting with lower fastener, and alternating to upper with each torque. Torque fasteners to 10 ft. lbs. (14 N·m), then 12 ft. lbs. (16 N·m), and then to a final torque of 14 ft. lbs. (19 N·m).

Check Work

After all fasteners are installed, confirm each fastener has an embedded numeric stamp on the fastener head.



Embedded "17-4"

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please carefully check your records and contact all of your customers who have purchased these service injectors and request they return their outboards to your dealership for this service. Only the service injectors with designated serial number ranges and date codes are affected.

WARRANTY AND RETURN INFORMATION

A warranty claim form **MUST** be completed and submitted along with the following parts:

- All original fuel injector fasteners

You must return the completed claim with the original fasteners for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

The warranty allowance request form must be completed with all required information and submitted with the required parts. A standard warranty allowance request form can be used, filling in the information below.

- Bulletin number — 2005-04(W)
- Dealer name, code, and phone number
- Each 14-digit injector serial number requiring fastener replacement
- Engine model and serial number
- Failing Part Number — **9999959**
- Flat Rate Code — **SI01**
- Flat Rate Labor Allowance — **0.3**

Credit for parts and labor will be issued only when the warranty allowance request form and returned required parts are received.

Returning Parts

- **U.S. Dealers only** — The address is:
Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085
- **Canadian Dealers** — The address is:
Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6
- **Dealers Outside North America** — Return old fasteners to regional office.

For additional information, U.S. and Canadian dealers can call 1-800-888-4662. Dealers outside North America can call their regional office.

Please route to: ☐ Service ☐ Init. ☐ Sales ☐ ☐ Parts ☐		SAFETY CAMPAIGN OUTBOARDS WARRANTY Bulletin
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⚠ **WARNING:** All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: July, 2005

No. 2005-05(W)

MODELS: 2004 Model Year *Johnson*® 4-Stroke
200/225 HP

SUBJECT: Flywheel Inspection

PROBLEM

A limited number of flywheels were cast with an incorrect metallic composition, which could cause the flywheel to come apart, resulting in injury to the operator or other boat occupants.

This problem affects 2004 model year *Johnson* 4-stroke 200/225 HP outboard models ONLY.

IMPORTANT: The inspection and any repair procedure outlined in this bulletin **MUST** be performed at an authorized *Evinrude/Johnson* dealership by an *Evinrude/Johnson* Certified Technician.

THE CUSTOMER

BRP US Inc. will send a letter to all registered owners of potentially affected models instructing them to return their outboard to an authorized *Evinrude* or *Johnson* dealer to complete the flywheel inspection. **This is a safety issue.**

IDENTIFYING AFFECTED MODELS

Affected models must meet three criteria before replacing the flywheel. Refer to the inspection and testing steps to determine if the flywheel should be replaced. All steps must be taken before performing any flywheel replacement service procedures.

IMPORTANT: DO NOT sell, deliver, or use any affected models until you have performed the inspection and/or repair as outlined in this bulletin.

Affected outboards must be closely inspected and accurately tested to determine if flywheel replacement is required.

STEP 1

Identify the model and serial number.

Model	Serial Number Range
2004 (SR) 200 HP	30024096 to 30024246
2004 (SR) 225 HP	31024122 to 31024329

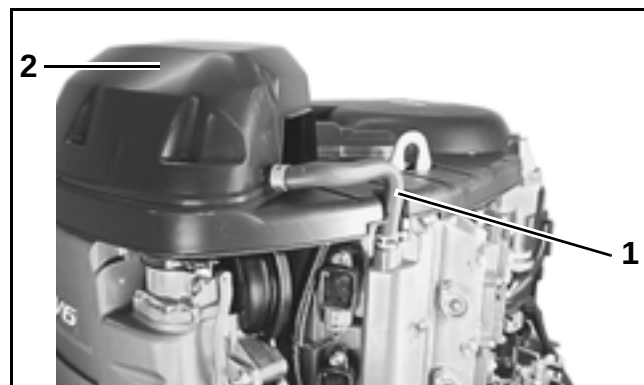
If the outboard does not appear in the serial number range, the flywheel does not need replacement, and no further inspection is required. Proceed to Step 2 only if the outboard is in the affected serial number range.

STEP 2

Identify the flywheel casting number by completing the outlined component removal procedures.

Disconnect battery cables from battery.

Loosen clamp that secures breather hose, then remove breather hose from silencer case.



1. Breather hose (starboard)
2. Air intake silencer case

002853



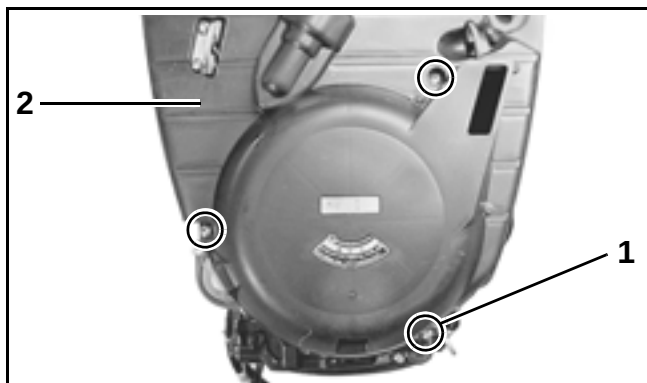
Loosen clamps that secure starboard and port outlet tube to throttle body.



1. Clamp
2. Throttle body

003240

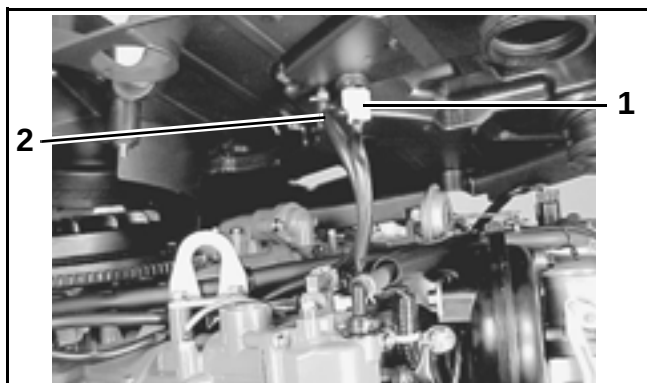
Remove three bolts that secure ring gear cover.



1. Bolts
2. Ring gear cover

003241

Raise ring gear cover and air intake silencer case slightly. Remove intake air temperature sensor and purge valve hose from air intake silencer case. Then remove cover and case.



1. Intake air temperature (IAT) sensor
2. Purge valve hose

003242

Check flywheel casting number.



Flywheel Casting Number

Proceed to Step 3 only if the casting number is one of the numbers shown below.

Affected Flywheel Casting Numbers			
031202	031209	031215	031222
031204	031210	031216	031223
031205	031211	031217	031224
031208	031212	031220	031225

STEP 3

Order the PC Sound Test Kit, P/N 5007032.

- **North American Dealers only** — Fax the complete order to 847-689-7235.
- **Dealers outside North America** — Contact regional office.

The order FAX form **MUST** include the following:

- Bulletin number — 2005-05(W)
- Date of order
- Dealer name and Dealer code
- Dealer phone number
- Requested part number (P/N 5007032)
- Engine model and serial number
- Flywheel casting number

IMPORTANT: DO NOT order the PC Sound Test Kit until completing the first two steps.

The PC Sound Test Kit contains a software program on CD-ROM to test the sound signature of the flywheel when it is tapped with a hammer to determine if flywheel is of proper metallic composition.

IMPORTANT: Order only one PC Sound Test Kit. It can be used to test multiple outboards.

The kit contains a CD-ROM and microphone required to complete the sound signature test.

To use the PC sound test software, your computer/laptop requires:

- CD-ROM drive
- Microphone input jack
- Sound card
- Speaker

Load the CD-ROM and follow the onscreen instructions.

The PC sound test software allows for an audible sound test conducted by the servicing technician. A computer-based sound waveprint test can also be run to confirm the sound signature test. Technicians are urged to view the movie file included on the CD-ROM.

The computer-based sound waveprint test will display onscreen if the flywheel passed the test ("OK") or if it requires replacement ("NG"). If the flywheel does not pass, it must be replaced. Refer to Ordering Parts.

REPLACEMENT

If the flywheel fails the sound signature test, a replacement part must be ordered, and the installation procedure followed.

Ordering Parts

ONLY Authorized Dealers may order parts.

- **North American Dealers only** — Contact Dealer Support at 1-800-888-4662.
- **Dealers outside North America** — Contact regional office.

When ordering, please provide the following:

- Bulletin number — 2005-05(W)
- Engine model, serial number, and flywheel casting number

Parts will be shipped at no charge. Flywheel will be recalled.

Installation Procedure

If flywheel replacement is required, refer to 2004 (SR) 4-Stroke 200, 225 HP Service Manual, P/N 5005663. Follow steps closely, paying close attention to all safety procedures in the ENGINE CONTROL section.

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this inspection. Only the models with designated serial number ranges are affected.

WARRANTY AND RETURN INFORMATION

A warranty allowance claim form **MUST** be completed and submitted along with the following information and part (if applicable):

- Flywheel casting number
- Original flywheel (if replaced)

IMPORTANT: Claims without the flywheel casting number will be rejected.

You must return the completed claim with the original flywheel (if replaced) for warranty credit, and to ensure records are kept for recording program progress to the U.S.C.G.

A flat rate labor allowance must be printed on the claim, depending on the extent of work completed as outlined in the identification steps.

- Failing Part Number — **9999961**

Flywheel Inspection (Step 2)

- Flat Rate Code — **EF01**
- Labor — **0.5 hours**

Sound Signature Test (Step 3)

- Flat Rate Code — **EF02**
- Labor — **1.0 hours**

Flywheel Replacement

- Flat Rate Code — **EF03**
- Labor — **2.0 hours**

IMPORTANT: Only one flat rate code is allowed per model serial number and **flat rate codes/labor allowances cannot be used in any combination.**

Credit for labor will be issued only when the warranty allowance request form (with casting number) and returned flywheel (if replaced) is received.

Returning Parts

Please call for complete instructions.

- **North American Dealers only** — Contact Dealer Support at 1-800-888-4662.
- **Dealers outside North America** — Contact regional office.

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE
Johnson



OUTBOARDS

W
WARRANTY
Bulletin

Date: July, 2005

No. 2005-06(W)

MODELS: See Affected Outboards Listing

SUBJECT: Replacement Injector Fasteners

Dear *Evinrude/Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a limited number of *Evinrude E-TEC™* outboards that require fuel injector fastener replacement.

During a factory audit, injector fasteners were found to not match *Evinrude/Johnson* Genuine Parts quality. To ensure consistency of product, BRP is replacing all injector fasteners on affected outboards.

Properly installed replacement injector fasteners will offer increased clamp load and **MUST** be installed on all affected outboards **before** delivering to customers.

AFFECTED OUTBOARDS

IMPORTANT: Only the following outboards with a serial number on the attached list are covered by this bulletin.

Identify the model and serial number before performing any service procedures.

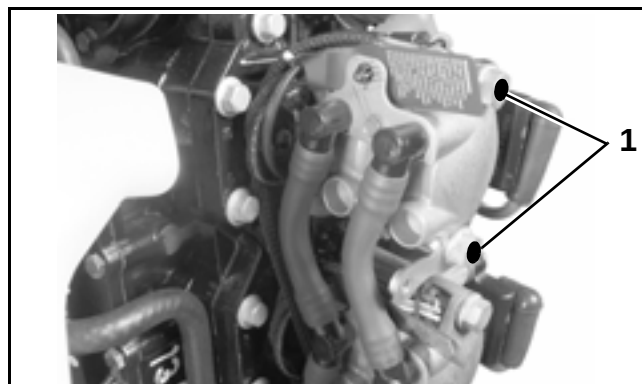
Model	Year
<i>Evinrude E-TEC</i> 2-cyl. 40–60 HP	2006 (SD)
<i>Evinrude E-TEC</i> 3-cyl. 75–90 HP	2006 (SD)
<i>Evinrude E-TEC</i> 90° V6 200–250 HP	2006 (SD)

IMPORTANT: Perform the replacement procedure outlined in this bulletin **before** selling or delivering any affected outboards.

INSPECTION

Remove the engine cover and inspect injector fasteners for identification marks as shown below.

If the markings are present in the locations shown, the fasteners have already been replaced, and no repair is required.



1. Fastener replacement marks (In-line model)

002494

SOLUTION

IMPORTANT: Affected outboards should be repaired as specified in this bulletin.

ORDERING PARTS

ONLY Authorized Dealers may order parts.

Order the part listed below from *Evinrude/Johnson Parts and Accessories* for each outboard:

Description	P/N	QTY	MODEL
Fuel Injector Fastener	350995	4	2-cyl. 40–60 HP
		6	3-cyl. 75–90 HP
		12	90° V6 200–250 HP



PROCEDURE



WARNING



Wear safety glasses at all times when working on any part of the fuel system.

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system:

- Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.
- Always work in a well ventilated area and wipe off any fuel spillage.
- DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

DO NOT remove the fuel injector assembly from the cylinder head, or remove or disturb spark plug leads or retainer clips.

IMPORTANT: Loosen the upper **and** lower injector fasteners **two to three turns** each.

After loosening both fasteners, completely remove **only top** injector fastener and washer.

IMPORTANT: DO NOT discard the old fasteners. Old fasteners **MUST be returned** with a completed warranty form to receive warranty credit. Do not mix the old fasteners with the new fasteners.

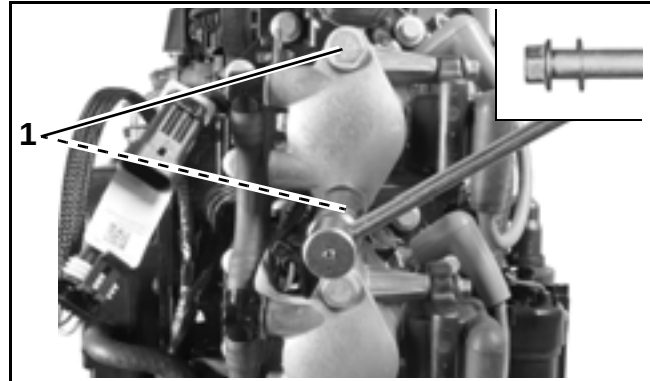
Apply *Triple-Guard* grease to the fastener threads and the underside of the fastener head.

Re-install one washer on new fastener.

Install fastener. Finger tighten only.

Repeat steps for the lower injector fastener before performing torque procedure.

IMPORTANT: Perform torque procedure only after both fasteners are installed.



1. Injector fasteners (In-line model)

002195

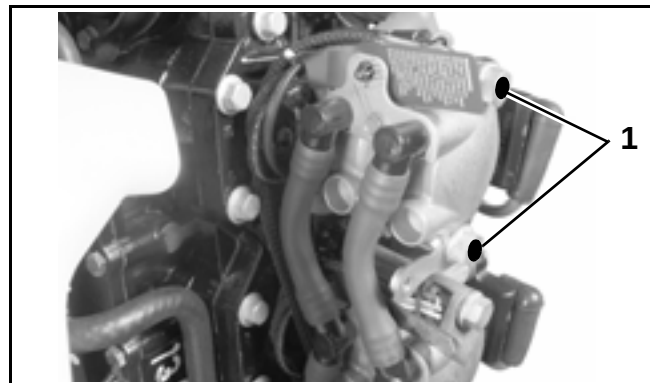
Torque Procedure

After both fasteners are installed, tighten in stages, starting with lower fastener, and alternating to upper with each torque. Torque fasteners to 5 ft. lbs. (7 N·m), then 10 ft. lbs. (14 N·m), and then to a final torque of 24 to 26 ft. lbs. (33 to 35 N·m).

Identification Procedure

Every outboard that has had replacement fuel injector fasteners successfully installed must be easily identified.

Use a BLACK permanent marker to mark each fastener as shown below to indicate this replacement work has been completed.



1. Fastener replacement marks (In-line model)

002494

DEALER RESPONSIBILITY

Please contact all of your customers who have purchased these outboards and request they return their outboards to your dealership for this service. Only outboards with serial numbers listed in the Affected Outboards Listing are affected.

WARRANTY AND RETURN INFORMATION

A warranty claim form (P/N 773629) **MUST** be completed and submitted along with all original fuel injector fasteners.

You must return the completed claim with the original fasteners for warranty credit.

The warranty allowance request form must be completed with all required information and submitted with the required parts. A standard warranty allowance request form can be used, filling in the information below.

- Bulletin number — 2005-06(W)
- Dealer name, code, and phone number
- Engine model and serial number
- Flat Rate Code – FE01
- Failing Part Number – 9999960

Flat Rate Labor Allowance:

- **2-Cyl.** Replacement – **0.6 hours**
- **3-Cyl.** Replacement – **0.7 hours**
- **V6** Replacement – **1.0 hours**

Credit for parts, labor, and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and returned required parts are received.

Returning Parts

- **U.S. Dealers only** — The address is:

Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
250 Seahorse Drive
Waukegan, IL 60085

- **Canadian Dealers** — The address is:

Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6

- **Dealers Outside North America** — Return old fasteners to regional office.

For additional information, U.S. and Canadian dealers can call 1-800-888-4662. Dealers outside North America can call their regional office.

AFFECTED OUTBOARDS

Serial Numbers of Outboards Affected by Warranty Campaign 2005-06(W)			
IMPORTANT: Review this table carefully to determine if you have sold or currently retain one or more of the affected outboards. ONLY outboards listed here require injector fastener replacement.			
5120093 to 5120095	5120524	5120712	5120915
5120302	5120528	5120714	5120938
5120307	5120529	5120718 to 5120720	5120961
5120310 to 5120316	5120532	5120722	5120962
5120319	5120534	5120723	5120968
5120327	5120535	5120725	5120970 to 5120973
5120329	5120537 to 5120543	5120726	5120977
5120335	5120546	5120730	5120988
5120337	5120548 to 5120552	5120733	5120991
5120344	5120554 to 5120561	5120735 to 5120737	5120993
5120347	5120565 to 5120573	5120742	5121002
5120351 to 5120353	5120575	5120745 to 5120748	5121072
5120357	5120577 to 5120580	5120750 to 5120754	5121073
5120363	5120583 to 5120585	5120756	5121075
5120364	5120590 to 5120592	5120758 to 5120760	5121077
5120366	5120594	5120765 to 5120767	5121078
5120369	5120596	5120776	5121081
5120373 to 5120378	5120600	5120778 to 5120780	5121083
5120381	5120601	5120785 to 5120788	5121086 to 5121088
5120384	5120603 to 5120605	5120791	5121094
5120389 to 5120393	5120607	5120793	5121096 to 5121098
5120397	5120609 to 5120612	5120798	5121100
5120399 to 5120401	5120614	5120799	5121106
5120403 to 5120406	5120618	5120802 to 5120804	5121108
5120434	5120620 to 5120623	5120809	5121109
5120435	5120625	5120816	5121112
5120446	5120626	5120818	5121114
5120449	5120628 to 5120637	5120819	5121115
5120450	5120645 to 5120648	5120823 to 5120825	5121118
5120453	5120650 to 5120652	5120835	5121119
5120464	5120654	5120838	5121121
5120465	5120655	5120839	5121131
5120469	5120659	5120842	5121132
5120475	5120661	5120843	5121136 to 5121138
5120477	5120662	5120861	5121146
5120479	5120664	5120864	5121158
5120480	5120667	5120875	5121302
5120482	5120668	5120876	5121308
5120483	5120670	5120879	5121312 to 5121314
5120491	5120678	5120883	5121321 to 5121323
5120494	5120687	5120889	5121325 to 5121328
5120498	5120688	5120891	5121330
5120507	5120691	5120904	5121333
5120509 to 5120513	5120696	5120906	5121335
5120519	5120699 to 5120703	5120909	
5120520	5120709	5120911	
5120523	5120710	5120914	

Please route to:

☐ Service	☐ Init.
☐ Sales	☐
☐ Parts	☐

EVINRUDE
Johnson



OUTBOARDS

W
WARRANTY
Bulletin

Date: October, 2005

No. 2005-07(W)

MODELS: 2006 Model Year *Evinrude*® *E-TEC*™
200–250 HP

SUBJECT: Cylinder Head Bolt Re-Torque

Dear *Evinrude/Johnson*® Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a re-torquing requirement for the cylinder head bolts on certain 2006 *Evinrude E-TEC* 200–250 HP models.

Due to bolt plating and bolt lubrication on affected models, a specific cylinder head bolt torque is required which deviates from the *Evinrude E-TEC* Service Manual.

IMPORTANT: This torque procedure is for the re-torque only. **Any future servicing** of an affected model should follow the *Evinrude E-TEC* Service Manual.

AFFECTED OUTBOARDS

Identify the serial number before performing any service procedures. **Only affected outboards require a re-torque.**

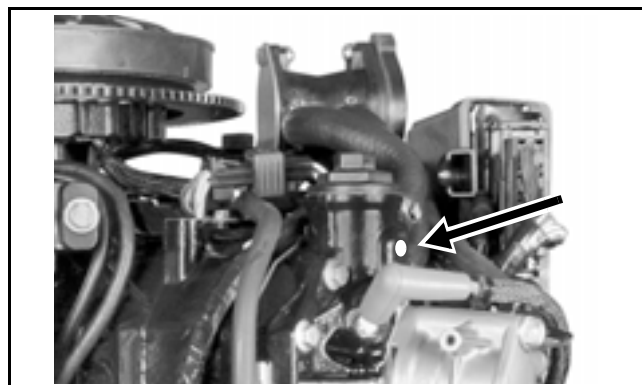
Models	Serial Number Range
2006 (SD) <i>Evinrude E-TEC</i> 200–250 HP	5125031 to 5129561

IMPORTANT: DO NOT sell or deliver any affected models until you have performed the re-torque as outlined in this bulletin.

In certain operating conditions, cooling system leakage can occur. The specific cylinder head bolt re-torque will eliminate potential product damage.

INSPECTION

Re-torqued cylinder head bolts can be identified by a white marking on the port and starboard cylinder head, below the thermostat cover. If the white markings are present, no re-torque is required.



Re-Torque Identification

004253

If the cylinder heads are not marked, the re-torque has NOT been completed.

PROCEDURE



WARNING



To prevent accidental starting while servicing, disconnect battery cables at battery.

Loosen the lower engine cover retaining screws. Disconnect cover-mounted power trim/tilt switch. Remove one lower cover half at a time.



1. Lower cover screws

004122



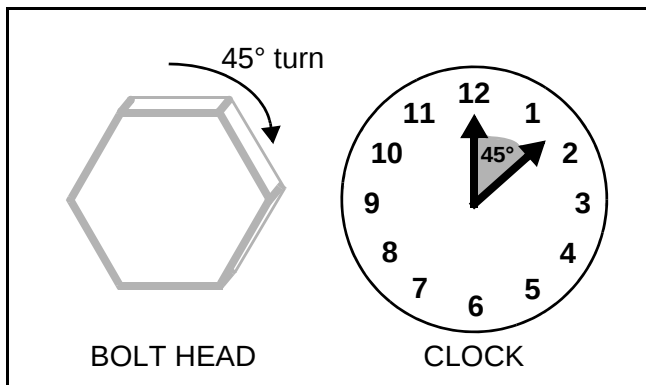
IMPORTANT: DO NOT loosen or remove any cylinder head bolts.

Use the following special torque procedure.

Re-Torque Bolts

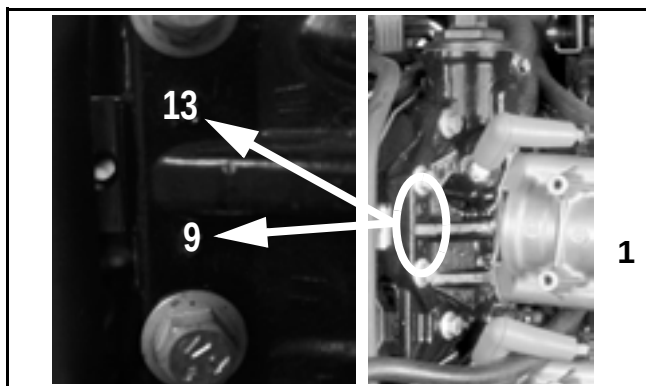
The re-torque must be performed on all cylinder head bolts. **Re-torque all bolts to 13 ft. lbs. (17.6 N·m).**

Turn each bolt an additional 45° after torque.



Reference — 45° Bolt Turn

Following the torque sequence numbers on the cylinder head, re-torque all cylinder head bolts.



TYPICAL — Cylinder Head Torque Sequence Numbers

Reinstall lower engine covers.

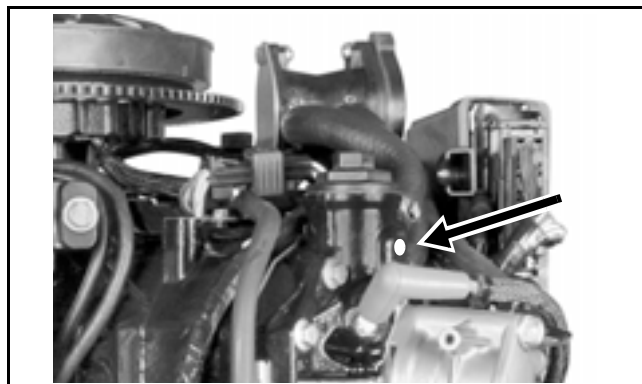
Reconnect power trim/tilt switch.

Reconnect battery cables.

Start and run the outboard. Inspect the cylinder heads for leaks. Check outboard for any water, fuel, or oil leaks.

Identification Procedure

Every outboard that has had the cylinder head bolt re-torque procedure must be easily identified. Use a white permanent marker or paint to mark the port and starboard cylinder heads just below the thermostat cover to indicate the re-torque is complete.



Re-Torque Identification

004253

ADDITIONAL INFORMATION

Warranty claims can be filed online using the following information:

- Flat Rate Code – **CH01**

Flat Rate Labor Allowance:

- Rework – **1.0 hours**
- Failing Part No. – **8888820**

Dealers without online claim processing can submit a standard warranty claim form.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

BRP will credit dealers for repairs performed up to 12 months from the date this bulletin is issued.

Please route to:

☐ Service ☐ Init.

☐ Sales ☐

☐ Parts ☐



⚠ WARNING: All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: November, 2005

No. 2005-08(W)

MODELS: 200, 225 HP *Johnson*® 4-Stroke

SUBJECT: Engine Control Module (ECM)
Replacement

Dear *Evinrude*®/*Johnson* Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a **required** ECM replacement.

AFFECTED MODELS

ALL *Johnson* 200 and 225 HP 4-Stroke Outboards (2004, 2005, and 2006 models) with serial numbers below 31026064 must have updated ECM installed.

Model Year	Models	Serial Number
2004 (SR)	200/225 HP	ALL
2005 (SO)	200/225 HP	ALL
2006 (SD)	200 HP	ALL up to 30026061
	225 HP	ALL up to 31026064

IMPORTANT: Outboards which may have received a replacement ECM under Safety Campaign (Warranty Bulletin) 2004-03(W) will also be required to have this Safety Campaign Repair. Service replacement ECMs (P/Ns 5035097, 5035707, 5036540, 5035959 and 5036655) must also be inspected and replaced. This includes **all** 200, 225 HP *Johnson* 4-Stroke outboards serviced with these replacement ECMs. **DO NOT** sell, deliver, or use any affected outboards or ECMs that you have in stock until ECM replacement has been completed.

PROBLEM

Older ECMs can provide confusing commands to the Electronic Fuel Injection (EFI) system as a result of reduced voltage on the ECM's 12 volt power supply. This can result in a severe backfire and damage the engine's collector assembly (air intake). If the collector assembly breaks, the engine cover can come off unexpectedly, possibly causing serious personal injury. Failing batteries, inade-

quate battery cables or connections, or high voltage electronics can cause reduced voltage on the 12 volt system and the ECM's power supply.

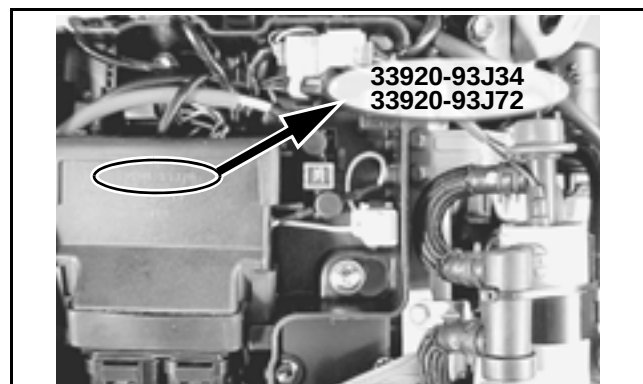
THE CUSTOMER

BRP US Inc. will send a letter to all registered owners (North America) instructing them to return their outboard to an authorized *Evinrude* or *Johnson* dealer to complete the ECM inspection and replacement. This is a safety issue.

IMPORTANT: The repair procedure outlined in this bulletin **MUST** be performed by an authorized *Evinrude/Johnson* Dealer and *Evinrude/Johnson* Certified Technician.

INSPECTION

Remove engine cover and inspect ECM. Identify the ECM part number imprinted on ECM housing.



ECM Part Number

003103

IMPORTANT: ECM part numbers: 33920-93J34 (BRP P/N 5036792) or 33920-93J72 (BRP P/N 5036793) are the newest version of ECM. All outboards must be fitted with this ECM version (or newer, future versions).



ORDERING PARTS

New ECM(s) must be ordered as follows.

North American Dealers

Please clearly PRINT or TYPE your order request on company letterhead or paper to ensure efficient order processing.

Fax the complete order request to 847-689-7235.

The order request **MUST** include the following:

- Bulletin number — 2005-08(W)
- Date of order
- Dealer name and dealer code
- Dealer phone number
- Requested part number
- For **installed** ECMs — Engine Model and Serial Number
- For **service replacement** ECMs — a copy of the purchase invoice

Parts Needed		
Replacement ECM	P/N	QTY
U.S. and Canada	5036792	1
Outside North America	5036793	1

Parts will be shipped at no charge.

IMPORTANT: ONLY Authorized North American Dealers eligible to service this product may order parts.

Dealers Outside North America

Contact regional office.

REPLACEMENT PROCEDURE

Refer to *Johnson* Service Manual and install new ECM in same position as original.

Make a visual inspection and review other service requirements for the outboard.

	WARNING	
After servicing the outboard, check connections. Failure to check connections could allow a problem to go undetected, resulting in an unsafe operating condition.		

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased or operate these outboards and request they return their outboards to your dealership for this service.

North American Dealers

A warranty claim form **MUST** be completed and submitted along with the **Original ECM**.

Return the completed warranty claim form with the original ECM for warranty credit. Complete documentation of repair is required for reporting program progress to the U.S.C.G.

Using a standard warranty claim form (P/N 773629), use the following information:

- Flat Rate Code – **EC01**
- Failing Part Number – **9999962**

Flat Rate Labor Allowance:

- Replacement – **0.5 hours**

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for labor and \$10 US to cover shipping and handling of returned parts will be issued only when the warranty allowance request form and required part is returned.

Returning Parts

- **U.S. Dealers only** — The address is:
Bombardier Recreational Products
Evinrude/Johnson Dealer Support Services
300 Seahorse Drive, Dock 5
Waukegan, IL 60085
- **Canadian Dealers** — The address is:
Bombardier Recreational Products Inc.
Attn: Service Department
1789 Stenson Boulevard
Peterborough, ON Canada K9J7B6
- **Dealers Outside North America** — Return old ECM to regional office.

For additional information, U.S. and Canadian dealers can call 1-800-888-4662. Dealers outside North America can call their regional office.

Please route to: ☐ Service ☐ Sales ☐ Parts		SAFETY CAMPAIGN OUTBOARDS
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⚠ **WARNING:** All involved customers must be notified, all involved units must be corrected as per instructions herein.

Date: December, 2005

No. 2005-09(W)

MODELS: 40–90 HP *Evinrude*® *E-TEC*™

SUBJECT: Misassembled *Evinrude E-TEC* Tiller Kits

Dear *Evinrude/Johnson*® Dealers:

This communication is to inform *Evinrude* and *Johnson* dealers of a **required** tiller kit modification.

AFFECTED KITS AND MODELS

ALL affected tiller kits and ALL *Evinrude E-TEC* 40, 50, 60, 65 (Jet), 75, and 90 HP outboards with an affected tiller kit installed must be inspected and modified to ensure safe operation.

AFFECTED KIT PART NUMBERS		
Kit P/N	<i>Evinrude E-TEC</i> Models	Color
5006552	40, 50, 60 HP	Blue
5006551	65 (Jet), 75, 90 HP	White
5006188	65 (Jet), 75, 90 HP	Blue

ONLY tiller kit P/Ns listed above are affected.

IMPORTANT: DO NOT sell, deliver, or use any affected tiller kits or tiller-installed outboards that you have in stock until tiller kit modification has been completed.

Evinrude E-TEC Tiller Kit P/Ns have been superceded. **New, superceded tiller kit part numbers are not affected by this safety campaign.**

NEW KIT PART NUMBERS		
Kit P/N	<i>Evinrude E-TEC</i> Models	Color
5007118	40, 50, 60 HP	Blue
5007117	65 (Jet), 75, 90 HP	White
5007116	65 (Jet), 75, 90 HP	Blue

PROBLEM

The tiller handle may have been improperly assembled at the factory. The inner steering handle may not be seated, and retaining screw may not be correctly installed. The throttle twist grip can come loose or pull out of the tiller arm assembly, causing a loss of throttle and steering control.

⚠
WARNING
⚠

A loss of boat control or diminished boat control could cause a risk of personal injury to the operator, passengers, and people who are nearby.

THE CUSTOMER

BRP US Inc. has identified all registered owners and will send each a letter instructing him or her to return their outboard to an authorized *Evinrude* or *Johnson* dealer to complete the tiller kit modification. This is a safety issue.

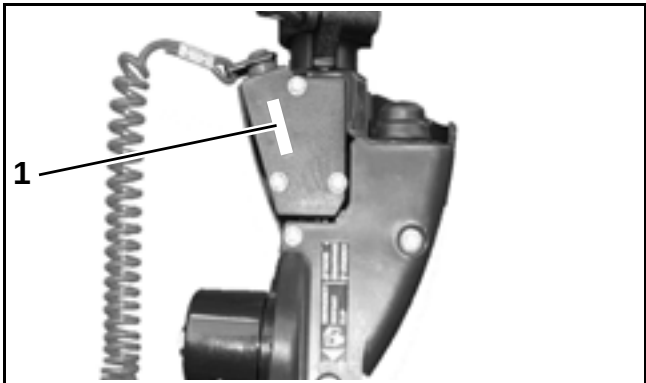
IMPORTANT: The repair procedure outlined in this bulletin **MUST** be performed by an authorized *Evinrude/Johnson* Dealer and *Evinrude/Johnson* Certified Technician.



INSPECTION

Tiller kits which have been corrected can be identified by a white marking on the stop switch cover (viewed with tiller arm raised). If the white marking is present, no modification is required.

New, superceded part numbers will not have this identification marking.



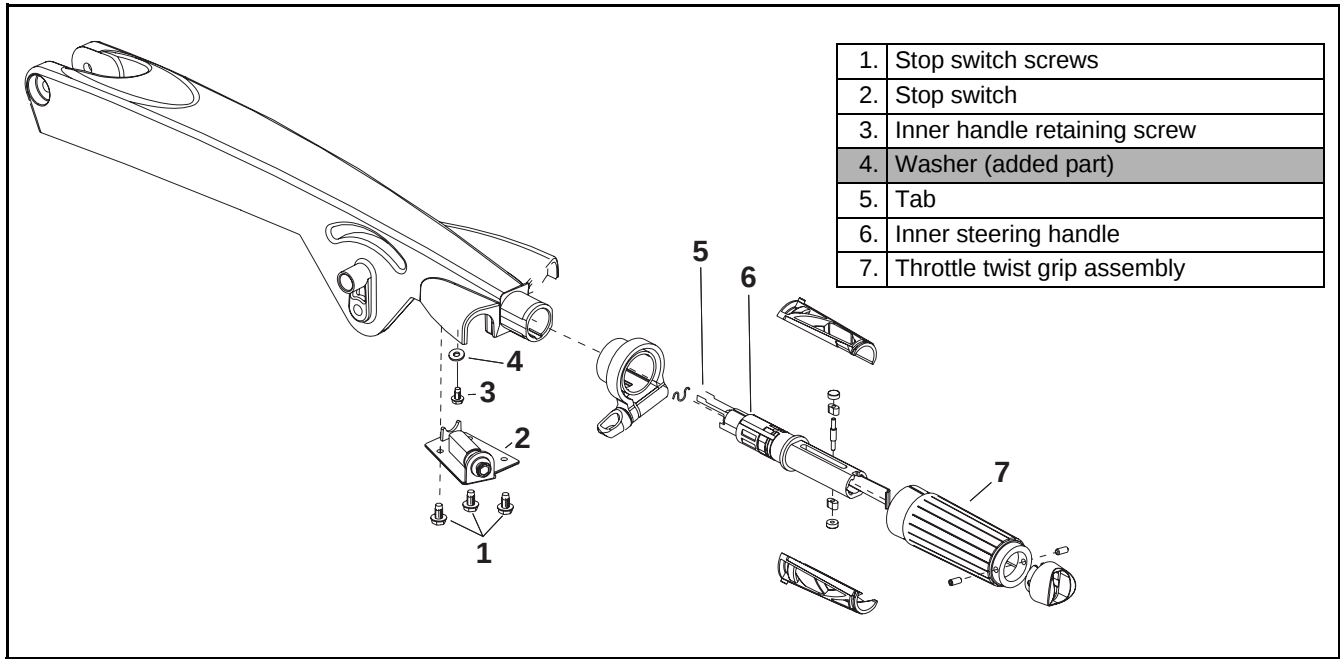
1. Identification marking 0005T

ORDERING PARTS

Order the added washer from *Evinrude/Johnson Parts and Accessories*, and follow the modification procedure.

Part Needed	P/N	QTY
Washer	328739	1

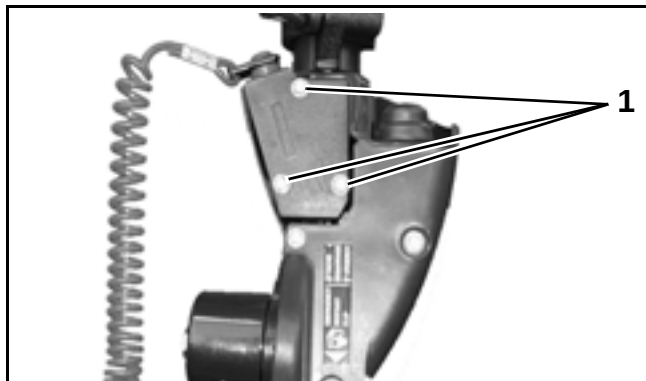
Refer to the tiller kit parts view.



PROCEDURE

A 5/16" nut driver or socket wrench is required to complete the service procedure.

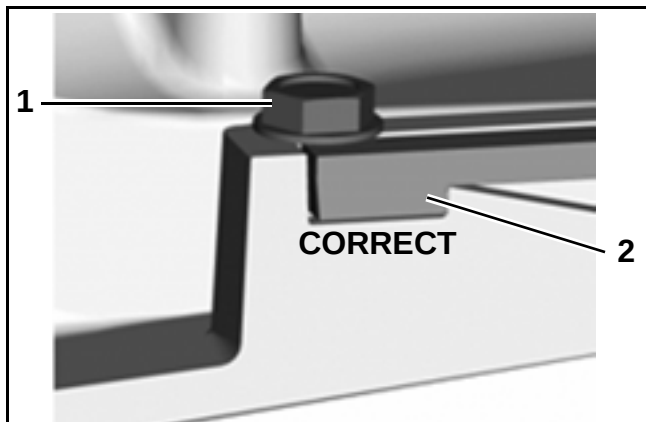
Remove the three stop switch screws. Do not remove or disconnect the stop switch. The modification should be able to be completed without removing the black tiller handle cover.



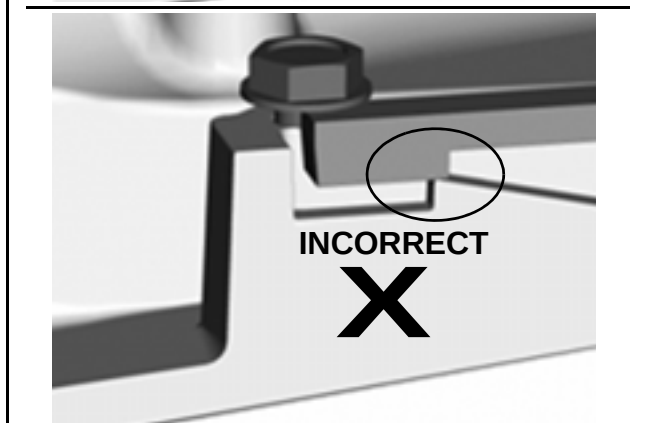
1. Stop switch screws (3)

0005T

Remove the inner handle retaining screw. **With tiller arm assembly tilted up, push down on twist grip assembly**, forcing tab into fully installed (flush with steering handle boss) position (top image).



CORRECT



INCORRECT

X

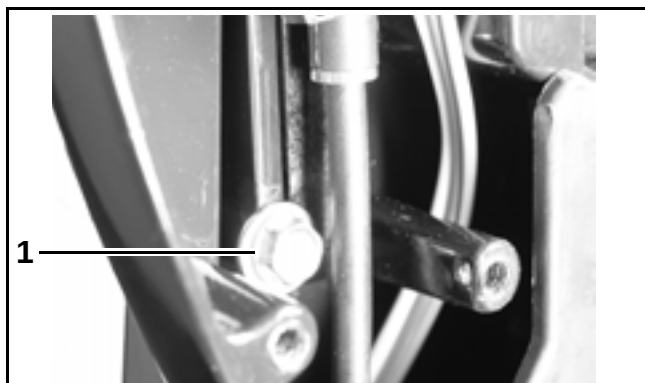
CROSS SECTION OF TILLER ARM ASSEMBLY

1. Inner handle retaining screw
2. Tab

0001T

0002T

Place one washer, P/N 328739, on inner handle retaining screw. Coat threads with *Nut Lock*. Reinstall screw.



1. Inner handle retaining screw (with washer)

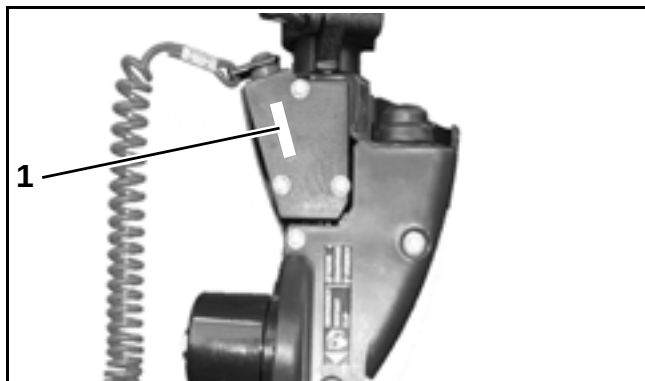
0003T

Reinstall stop switch on the tiller arm assembly.

IDENTIFICATION PROCEDURE

Every tiller that has been inspected and modified with the added washer must be easily identified.

Mark the stop switch using WHITE marker or paint. With the tiller arm raised, fill in the indented area of the stop switch plate to identify this campaign has been completed.



1. Identification marking

0005T

DEALER RESPONSIBILITY

All dealers, as part of a distribution chain, **CARRY A RESPONSIBILITY TO NOTIFY THE CUSTOMER** of any safety related concern and correct the problem properly.

Please contact all of your customers who have purchased this tiller kit or operate an outboard with this tiller kit installed and request they return their outboards to your dealership for this service.

Warranty claims can be filed online using the following information:

- Flat Rate Code – **L**
- Failing Part Number – **336481**
- Bulletin number – 2005-09(W)
- For **installed** tiller kits – Engine Model and Serial Number
- For **non-installed** tiller kits – invoice number

Flat Rate Labor Allowance:

- Tiller installed – **0.5 hours**
- Tiller not installed – **0.3 hours**

Dealers without online claim processing can submit a standard warranty claim form (P/N 773629).

A warranty claim **MUST** be completed and submitted for warranty credit.

Complete documentation of repair is required for reporting program progress to the U.S.C.G.

Labor will be paid in accordance with the established warranty labor rates listed in the current dealer warranty database.

Credit for part and labor will be issued only when the warranty allowance request is received.

For additional information, U.S. and Canadian dealers can call 1-800-888-4662. Dealers outside North America can call their regional office.