



# **PRODUCT SERVICE UPDATE 2012**

**IMPORTANT**  
Technicians must complete  
2012 Update Exam at  
<http://exams.evinrude.com>.  
(North American dealers  
must complete exam by  
January 31, 2012)



# **EVINRUDE®**



# Product Service Update

BRP US Inc.  
Technical Publications  
P.O. Box 597  
Sturtevant, Wisconsin 53177 United States  
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# GENERAL INFORMATION



## CONTACT INFORMATION

### We've Moved

Please note the After Sales Service Department has relocated to new offices at the *Evinrude* headquarters facility in Sturtevant, Wisconsin. Dealers should begin using the new Wisconsin address and phone numbers listed in the following pages.

Dealers outside of North America should contact their regional office. Refer to **Dealers – Outside North America (BRP International Offices)** on p. 7.

### Dealers – North America

North American dealers use the following contact information.

#### Technical Support

After Sales Support  
P.O. Box 597  
Sturtevant, Wisconsin 53177  
Ph: 1-800-888-4662 (Authorized Dealers only)  
Fax: 1-262-884-5381

#### Warranty Administration Support

After Sales Support  
P.O. Box 597  
Sturtevant, Wisconsin 53177  
Ph: 1-800-888-4662 (Authorized Dealers only)  
Fax: 1-262-884-5381

### Consumer Support

BRP US Inc. Customer Support Services  
P.O. Box 597  
Sturtevant, Wisconsin 53177  
Ph: 1-262-884-5993 (Non-authorized dealers/consumers)  
Fax: 1-262-884-5381

### Parts & Accessories Support

North American dealers may call 1-800-888-4662 for assistance with parts and accessories.

- Select option 3, then:
  - Select option 1 for pricing, shipping and tracking, or for back order information.
  - Select option 2 for program questions, ordering requests, or for inquiries on existing orders.
  - Select option 3 for technical assistance or warranty questions.

To speed up the process, have your dealer number, the engine model number, part number and invoice date available.

### Technical Training Support

For questions regarding technical training, contact the Technical Training Center.

Technical Training Center  
P.O. Box 597  
Sturtevant, Wisconsin 53177  
Ph: 1-262-884-5500  
Fax: 1-262-884-5501



## Dealers – Outside North America (BRP International Offices)

### AUSTRALIA

Bombardier Recreational Products Australia Pty Limited  
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Bankstown 2200  
New South Wales, Australia  
Phone: +612 9794 6600

### BENELUX

BRP Europe  
Skaldenstraat 125  
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Phone: +32 9 218 26 00

### BRAZIL

Bombardier Recreational Products do Brasil  
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Condominio Empresarial AZTech  
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Campinas, SP 13069-380 Brasil  
Phone +55 19 3716 8600

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Ebblelake Industrial Estate  
Verwood Dorset UK BH31 6BA  
Phone: +44 1202 812 100



## WARRANTY INFORMATION – NORTH AMERICA

North American dealers should use the following information.

### Warranty Allowance Claims

All warranty allowance claims should be entered online when possible. When a written warranty Allowance Request Form, P/N 773629, is required mail to:

BRP US Inc.  
After Sales Support  
P.O. Box 597  
Sturtevant, WI 53177

Warranty parts returned with a Warranty Allowance Request Form, P/N 773629, ship to:

U.S. dealers ship to:  
BRP US Inc.  
After Sales Support  
300 Sea Horse Drive, Dock 5  
Waukegan, IL 60085

Canadian dealers ship to:  
BRP Warranty Returns – Sturtevant  
c/o Affiliated Global Logistics  
500 Carlingview Drive  
Etobicoke, ON M9W 5R3

### DealerPort Parts and Accessory Claim Entry

North American dealers using *DealerPort* can now enter Parts and Accessory (P&A) warranty claims using the existing online claim entry process in the Dealer Information Services (DIS) menu.

Refer to **Administrative Bulletin 2011-01(A)** for complete details.

### Prior Authorization Required for Parts and Accessories Warranty

If a replacement part or a dealer-rebuild fails, contact *Evinrude/Johnson* After Sales Support. Dealers are not authorized to rebuild assemblies without prior authorization.

Have your dealer number, the engine model and serial number, part number and invoice date available.

Certain parts or assemblies may require additional documentation:

- BRP invoice for the assembly
- installation work order
- previous work order for original repair
- sales receipt (over the counter sales)

Refer to “Parts and Accessories Claims” in the current **Warranty Procedures Manual**.

### Warranty Replacement of *EMMs*

Dealers in North America should be aware of new policies and procedures for the Warranty Replacement of *Evinrude E-TEC EMMs*. Dealers outside North America should contact their regional office.

**IMPORTANT:** Make sure the *EMM* is the source of the problem.

**Note:** For outboards NOT in warranty, refer to Parts and Accessories Bulletin 2011-02(P). See **Service Replacement EMMs** on p. 49.

Refer to **Administrative Bulletin 2011-02(A) Revision 1** for complete details. Also see **Engine Data Files** on p. 31.

### **B.E.S.T. Warranty Frequently Asked Question**

**Question:** Is the requirement for the 300 hour service / 3 year inspection on every outboard satisfied if the customer performs the service / inspection?

**Answer:** Dealers should refer customers to the **Maintenance Schedule** outlined in the **B.E.S.T. Contract Terms**, which states:

*“Routine inspection and maintenance is necessary to prolong outboard life. The following maintenance table (refer to the maintenance table in the **B.E.S.T. Contract Terms**) provides guidelines for inspection and maintenance to be performed by an Authorized Dealer. Please refer to your Operator’s guide for details.*

*Outboards used in heavy duty or high hour applications require more frequent inspections and maintenance. Adjust schedule for operating and environmental conditions.”*

A similar statement also appears above the maintenance table in the outboard Operator’s Guide.

BRP recommends customers return to an authorized dealership to receive the professional service that dealers are trained to perform.

This avoids potential conflicts with customers in the event of a failure.

**Remember:** All failed parts are subject to recall for inspection. If a failure occurs and it is determined the service was NOT performed correctly, that failure may not be covered under the terms of the **B.E.S.T. Contract**.

Refer to the **B.E.S.T. Frequently Asked Questions** available on *DealerPort*.

### **WARRANTY INFORMATION – OUTSIDE OF NORTH AMERICA**

Dealers outside of North America should contact their regional office for processing of warranty allowance claims, or returning parts. Refer to **Dealers – Outside North America (BRP International Offices)** on p. 7.



## FIELD SERVICE

### Dealers – North America

Technical Service Representatives – Applications Engineers (TSR-AE's) support both Dealer and OEM Partners. TSR-AE technical support visits are coordinated through the After Sales Support Call Center. Dealer and OEM Technicians should first contact the After Sales Support Center Team to resolve technical issues. Contact them at 1-800-888-4662 and follow the prompts.

TSR-AE's provide the following dealer support:

- Service department development assistance (Service Evaluations and goal setting)
- Feedback reports for product and business trends
- Technical support of BRP Outboard Engine products
- Customer Relations
- Serve as instructors at Dallas, Tacoma and Laval Training Centers

TSR's provide the following OEM partner support:

- All aspects of rigging, technical training to ensure safety and maximum performance for BRP powered boats
- Feedback reports for product and business trends
- Preparation and distribution of Performance Reports

### Dealers – Outside North America

Dealers outside of North America should contact their regional office. Refer to **Dealers – Outside North America (BRP International Offices)** on p. 7.

## TECHNICAL TRAINING

### Dealers – North America

Schedule training online ([www.DealerPort.com](http://www.DealerPort.com)). For questions contact the Technical Training Center.

Training courses are offered at the following locations:

- Sturtevant, Wisconsin
- Morrow, Georgia
- Tacoma, Washington
- Laval, Quebec
- Dallas, Texas

### *E-ssentials* Training Programs

*E-ssentials: Servicing Evinrude E-TEC*, P/N 5008692, began shipping to all North American dealers in June 2011.

All Certified Technicians are required to complete this program. The exam for *E-ssentials: Servicing Evinrude E-TEC* MUST be completed by November 30, 2011. Additionally, technicians who wish to attend hands-on training must complete this program as a prerequisite to attending training.

This DVD kit replaces both *E-ssentials 2*, P/N 5006014, and *E-ssentials 3*, P/N 5006480. If you have these older *E-ssentials* programs on hand, please take a moment to discard them.

### Technician Certification

Technicians who achieved "Certified" status between June 2006 and June 2007 must attend the Outboard Certification Course during the 2011-12 training season. Certified status WILL EXPIRE soon for technicians who fall into this category.

Technicians who achieved "Certified" status prior to June 2006 were required to return in prior training seasons. Certified status is

EXPIRED for technicians who fall into this category. They should return as soon as possible to recertify.

## Master Technician Program

Technicians desiring Master Technician status MUST:

1. Maintain Certified status for at least 4 years (no lapses).
2. Successfully complete all updates by the due date.
3. Complete Outboard Certification Course in 4.5 days or less.
4. Upon successful completion of the Outboard Certification Course, technicians who meet the qualifications, and who are approved by their instructor(s) will be given the opportunity to take the Master Technician exam.
5. Complete the 50 question exam with a minimum score of 90%. The exam may include questions on ANY outboards sold or marketed by BRP.

To maintain Master Technician status, technicians MUST:

- Complete all distance learning updates by the due date.
- Return for hands-on training when required. See **Technician Certification** on p. 10.
- When returning to the Outboard Certification Course, technicians must complete the course and pass Master Technician exam as outlined in steps 3 through 5 above.

If a technician allows their Certification to lapse, Master Technician status is lost.

A technician can take a missed exam at any time to have Certified status reinstated. However, Master Technician status can only be reinstated by again meeting the qualifications listed in steps 1 through 5 above.

## Dealers – Outside North America

Dealers outside of North America should contact their regional office. Refer to **Dealers – Outside North America (BRP International Offices)** on p. 7.

## TECHNICAL PUBLICATIONS

### Predelivery Checklist

Please note the Predelivery Checklist has been updated for 2012.

Dealers are reminded that a complete predelivery inspection is **REQUIRED** on each outboard. Dealers **MUST** keep predelivery checklists on file for a minimum of seven years.

The Predelivery Checklist in pdf format is available in the following languages: English, French, German, Italian and Spanish. Dealers may download the files from *DealerPort* or *BOSSWeb*.

Refer to **Predelivery Bulletin 2010-01(D)** for complete details.

### Suggestions for Improvement or Corrections

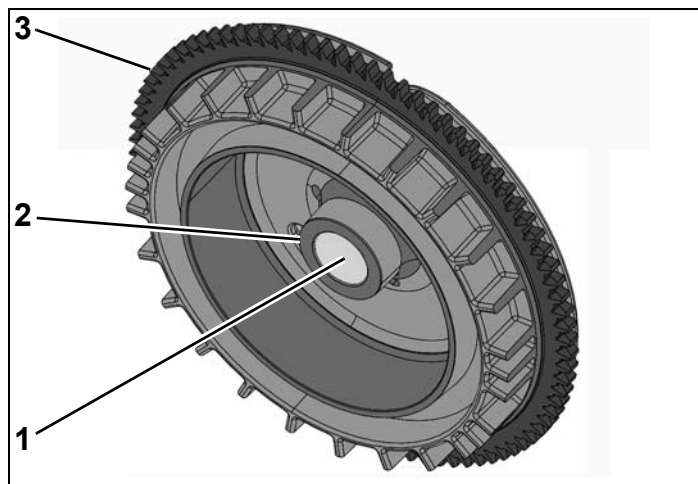
Dealers may e-mail suggestions for improvement or corrections for any *Evinrude/Johnson* publications to the following e-mail address:

bmca.techsvc@brp.com





# PRODUCT IMPROVEMENTS



1. Center hub taper
2. Center hub thickness
3. Ring gear

## INLINE MODEL OUTBOARDS (15 – 90 HP)

### New Flywheel 15 – 30 HP Models

The 2012 *Evinrude E-TEC* 15-30 HP models have a new flywheel.

- Use flywheel, P/N 587103, for rope start models
- Use flywheel, P/N 587104, for electric start models

The following changes have been made to the flywheel:

- center hub taper is changed to improve fit with crankshaft.
- center hub thickness increased to improve durability and clamp load.
- ring gear (electric start models) is moved upward to increase clearance between the starter bendix and the ring gear.

**IMPORTANT:** Due to the change in taper, the 2012 flywheels do NOT fit older models. Refer to the appropriate **Parts Catalog**.

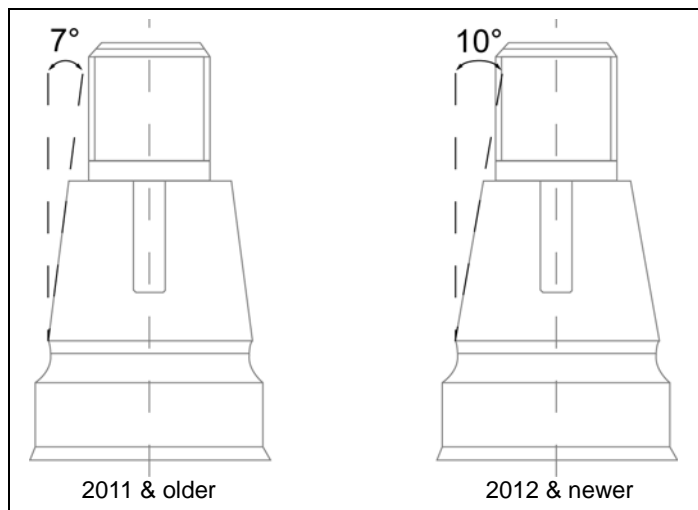
### New Crankshaft 15 – 30 HP Models

The 2012 *Evinrude E-TEC* 15-30 HP models have a new crankshaft. The taper is changed to improve fit with flywheel.

- Use flywheel to crankshaft key, P/N 307480

The torque value for the flywheel nut remains 66 to 70 ft. lbs. (90 to 95 N-m).

**IMPORTANT:** Due to the change in taper, the 2012 crankshaft does NOT fit older models. Refer to the appropriate **Parts Catalog**.



Crankshaft Taper



**V-MODEL OUTBOARDS (115 – 300 HP)**

**New Plug & Nozzle Assembly, P/N 5008838,  
200 – 300 HP 90° V6 Models**

A new plug and nozzle assembly, P/N 5008838, has been developed to improve engine durability on 200 – 300 HP 90° V6 models.

The overboard indicator plug and nozzle assembly consists of a new overboard indicator nozzle, o-rings and plug.

The new overboard indicator nozzle:

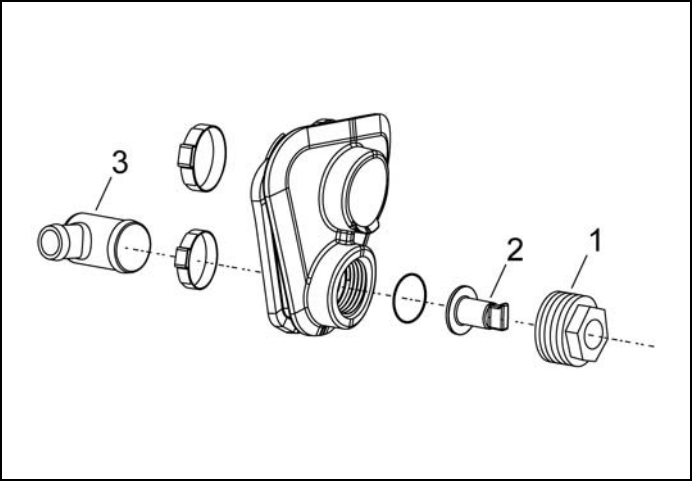
- is longer than the previous overboard indicator nozzle.
- MUST be used with the new elbow, P/N 356448.

Two o-rings seal the overboard indicator nozzle to the elbow and the plug retains the overboard indicator nozzle into the exhaust grommet.

**NOTICE** Do NOT mix and match old parts with new parts. Mismatched parts can result in a water leak which can cause significant engine damage.

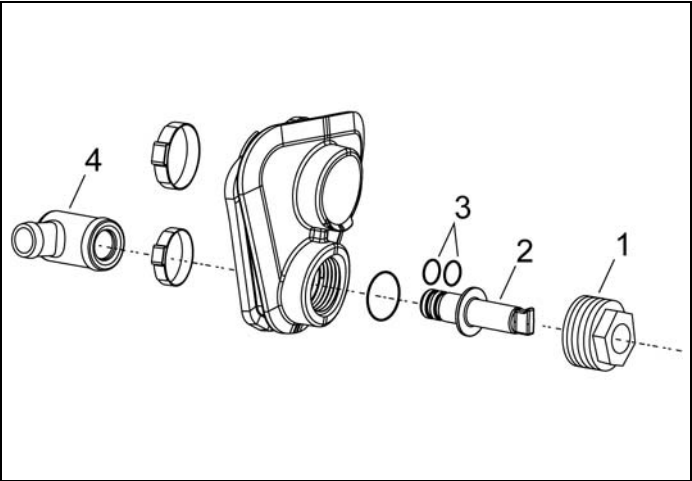
**Plug & Nozzle Assembly**

P/N	Description	Qty
5008838	PLUG & NOZZLE AY	1
–	* PLUG	1
–	* NOZZLE, Overboard indicator	1
307450	* O-RING, Overboard indicator nozzle	2
301967	* O-RING	1



**Old Plug, Nozzle and Elbow Fitting**

1. Plug
2. Nozzle
3. Elbow fitting



**New Plug, Nozzle and Elbow Fitting**

1. Plug
2. Nozzle
3. O-rings
4. Elbow fitting



## NOTICE

This outboard has been programmed for the use of Evinrude®/Johnson® XD100™ outboard oil ONLY.

Failure to use Evinrude®/Johnson® XD100™ outboard oil may harm engine performance and shorten engine life.

355627

XD-100 Notice Label

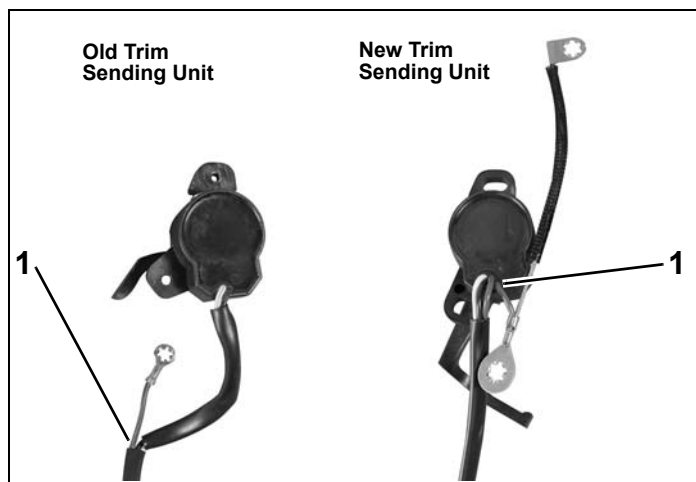
## ALL MODELS

### New Tags and Labels

BRP has developed new tags and labels for use on all *Evinrude E-TEC* outboards. The new tags and labels conform to the American National Standards Institute (ANSI) standards.

ANSI standard Z535 directs the use of color on tags and labels. To comply with the standard certain colors such as yellow or orange must be used to indicate a risk of injury, while the color blue indicates a notice. Therefore all *EMM*, shipping, safety, fuel injector, *XD-100* oil and *TCW-3* oil tags are changed for model year 2012.

Refer to the appropriate **2012 Parts Catalog** for the correct tags and labels.



1. Ground wire location

### New Trim Sending Units

New trim sending units and changes to the ground wires are in place for all 2012 models. New trim sending units have an internal thermal breaker and as a result, ground wire location and routing has changed. Previous part numbers will supersede to new part numbers.

The thermal breaker will activate (open circuit) if excessive electrical current flows through the trim sending unit. After the thermal breaker cools, it will automatically reset.

If the thermal breaker is activated, the operator may notice the trim gauge does not work, or the starter motor may not work when attempting to start the engine. If either of these symptoms occur, check for loose battery grounds at the engine ground stud, and at the battery.

# PRODUCT IMPROVEMENTS

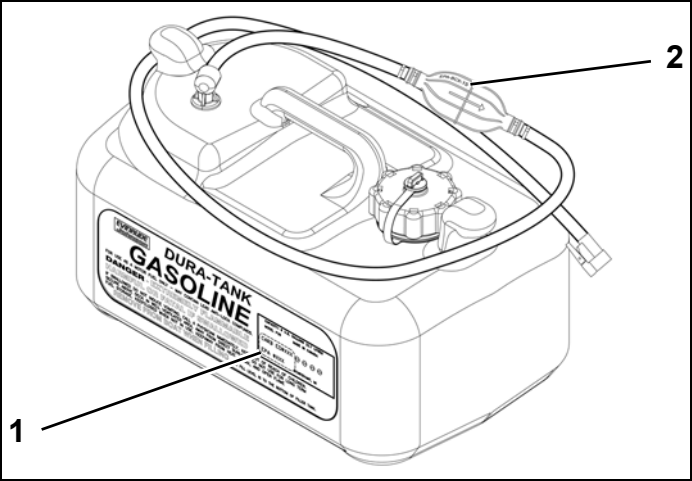
## Fuel Primer Bulbs and Portable Fuel Tanks

The U.S. Environmental Protection Agency (EPA) has issued NEW regulations requiring outboards and boats manufactured after January 1, 2011 be assembled and used with fuel primer bulbs, portable fuel tanks and gas caps that meet specific permeability limits for evaporative emissions.

Remember to use EPA compliant fuel primer bulb; and EPA compliant portable fuel tanks and gas caps. All EPA compliant fuel primer bulbs, and portable fuel tanks and gas caps have labels with the specification.

The new fuel tank features a gas cap with a ratcheting lock and a venting system that allows air in but will not allow fuel vapor to escape. When removing the gas cap, the design allows pressure that builds up in the fuel tank to be released slowly without spilling fuel. Refer to the gas cap label for venting and removal instructions.

Refer to **Service Bulletin 2011- 03 (S)** for additional information.



1. Fuel tank label  
2. Primer bulb label

**1** TURN VENT SCREW COUNTERCLOCKWISE TO OPEN FOR TRANSPORTATION AND OPEN FOR OPERATION AND CAP REMOVAL.

**2** TURN RATCHETING LOCK COUNTERCLOCKWISE TO ENGAGE FOR TRANSPORTATION AND OPEN FOR OPERATION AND CAP REMOVAL.

**3** PRESS DOWN ON TAB TO ENGAGE LOCK. LOCK WILL ENGAGE AGAIN.

**4** TURN TO REMOVE CAP. ALWAYS RELIEVE FUEL TANK PRESSURE BEFORE CONNECTING OR DISCONNECTING FUEL LINE.

**NOTICE:** Pursuant to section 213 of the Clean Air Act (42 U.S.C. section 7545) 40 CFR 106.0, in addition to the California Air Resources Board Regulation governing Portable Outboard Marine Tanks, this portable marine tank and cap assembly has been manufactured to meet the January 2011 regulations contained within the applicable regulations for emission permeability and fuel vapor retention. This system has a 3 year limited warranty from Date of Sale.

**SPECIAL FEATURES OF THIS SYSTEM**

The closure cap includes:

- 2 way vent valve which allows air to enter the tank while engine is in operation, and a pressure relief valve which is designed for fuel vapour retention when not in use.
- Click-to-close audible close indication
- Manual vent screw (on top of cap) which should be CLOSED for transportation and OPEN for OPERATION AND CAP REMOVAL.
- Pressure Relief Tab under cap

**STOP**

**WARNING - CONTENTS MAY BE UNDER PRESSURE!**

As part of the fuel vapour retention system your tank will expand under internal pressure. This is normal.

TO REMOVE CAP FOLLOW THESE STEPS:

1. OPEN VENT SCREW on top of cap (VENT SCREW should be CLOSED for transportation and OPEN for OPERATION AND CAP REMOVAL.)
2. Locate Pressure Relief Tab under cap. Turn cap until Pressure Relief Tab Lock engages.
3. Press down on tab, rotate cap 1/4 turn to relieve pressure before opening cap and release tab! Lock will engage again.
4. PRESS Pressure Relief Tab down again and turn to remove cap.

**DIRECTIONS FOR USE:**

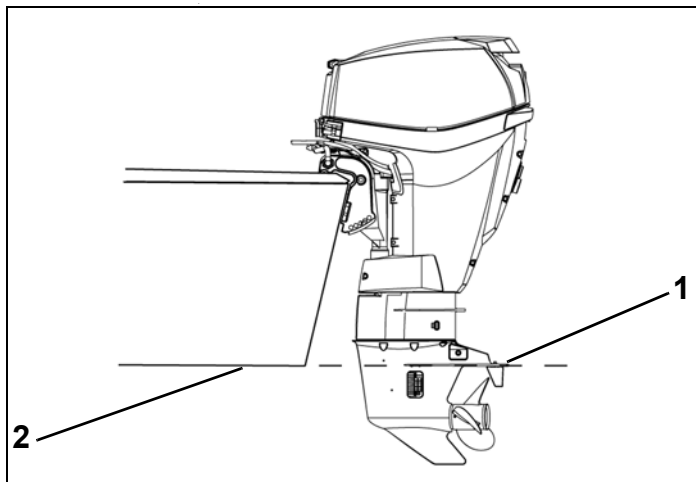
1. Always relieve tank pressure before connecting or disconnecting fuel line.
2. Always disconnect fuel line from engine or fuel tank when not in use.
3. Closure caps should be tightened until an audible "click" is heard.
4. Always remove from vessel for refueling.
5. When removing the closure cap ALWAYS FOLLOW INSTRUCTIONS AND REMOVE CAP SLOWLY TO REDUCE INTERNAL PRESSURE AND AVOID FUEL SPILLAGE - CONTENTS MAY BE UNDER PRESSURE!

Gas Cap Label





# SERVICE INFORMATION



1. Anti-ventilation plate
2. Bottom of hull

## 15 – 30 HP MODELS

### Engine Shaft Length and Installation

Make sure the transom height matches the engine shaft length of the outboard to be installed.

- A 19 to 21 in. (48.3 to 53.3 cm) transom height uses a 20 in. (50.8 cm) shaft outboard.
- The shaft length of the outboard being installed should come close to matching the transom height of the boat.
- Refer to SPECIFICATIONS in outboard **Operator's Guide** for transom height.

Generally, the anti-ventilation plate of the gearcase should align with the bottom of the hull.

Refer to **Predelivery Bulletin 2011-01(D)**.



Lower Engine Cover Seal Kit

### Lower Engine Cover Seal Kit, P/N 5008176

An optional Lower Engine Cover Seal Kit, P/N 5008176, was developed to aid the sealing of lower engine covers of *Evinrude E-TEC* 15–30 HP outboards that are used in extreme conditions.

Order and install lower engine cover seal kit, P/N 5008176, if evidence of water intrusion is found in the engine compartment area.

Refer to **Service Bulletin 2011-01(S)**.

## 40 – 90 HP MODELS

### Code 17; 55 Volt Circuit Below Range

When troubleshooting Code 17; 55 Volt Circuit Below Range, on 40 - 90 HP inline models, try this time-saving tip BEFORE performing stator and charging system tests.

First, make sure the capacitor connections are clean and tight.

Next, start the engine. Use *Evinrude Diagnostics* software "Monitor" screen to observe the system voltage.

If the system voltage is low, disconnect the vapor separator electrical connector.

If the voltage returns to approximately 55 volts, the vapor separator fuel circulation pump may be damaged or inoperable. If the voltage remains low, then perform stator and charging system tests.

The 55 volt system supplies electrical power to the vapor separator fuel circulation pump. If the fuel circulation pump "locks up" it will drain voltage from the 55 volt system causing the code 17.

The screenshot shows the Evinrude Diagnostics Software Program interface. The main window is titled "Evinrude Diagnostics Software Program [Standard Build] (version 5.1.0)". The "FAULTS" section is active, displaying a list of faults. The "Active Faults List" shows two entries:

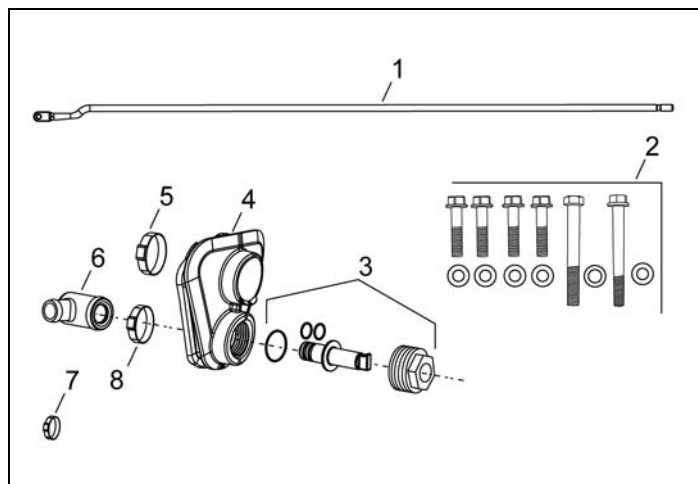
Code	Description
17	System voltage (55v) below expected range
91	Fuel pump open circuit detected

The "Selected Fault Information" section provides details for fault code 17:

- Fault Circuit:** 55 Volt Circuit BELOW Range
- Sys Check/ICON:** SysChk (Check Engine) / ICON (Check Engine Warning System Voltage Fault)
- Voltage Value:** n/a
- Resistance Value:** n/a
- EMM LED:** LED 1 (ON)
- Activate Time:** 1 minute V4, V6 60°, V6 90° 3.3L, 10 seconds V6 90° 3.4L
- Comments/Info:** 55 volts alternator output less than 45 volts at 500 to 1000 rpm, or less than 52

At the bottom of the window, the status bar shows: Fault Code: 17 | Family: E-TEC1 | S.A.F.E. Active | Shutdown Not Active | Internal Sensor

Code 17; System Voltage (55v) Below Expected Range



Additional Parts

## 200 – 300 HP 90° V6 MODELS

### Conversion from L2-Type to M2-Type Gearcase

The L2-Type gearcase with the .58 (1.71:1) gear ratio is no longer available. Use an M2-Type gearcase with the .54 (1.85:1) gear ratio if replacement is needed.

Existing L2-Type gearcase part numbers do not supersede. Dealers who enter an order for a .58 gear ratio L2-Type gearcase will receive an invoice with a “Note” to call the After Sales Service Department. This will result in delays receiving the correct replacement gearcase.

Additional parts are required to convert from an L2-Type gearcase to an M2-Type gearcase.

Ref	P/N	Description	Qty
Select the correct M2-Type replacement gearcase. Refer to the Parts Catalog for replacement gearcase part numbers.			
–	Select the correct shiftrod –		
1	347300	SHIFTRD, 20 Inch	AR
1	347301	SHIFTRD, 25 Inch	AR
2	5008485	SCREW KIT	1
3	5008838	PLUG & NOZZLE AY	1
4	5008515	GROMMET & INSERT AY	1
5	352110	CLAMP, 44 mm	1
6	356448	ELBOW	1
7	346152	CLAMP, 25.6 mm	1
8	352335	CLAMP, 33.1 mm	1

Refer to **Service Bulletin 2011-04(S) Revision 1**.



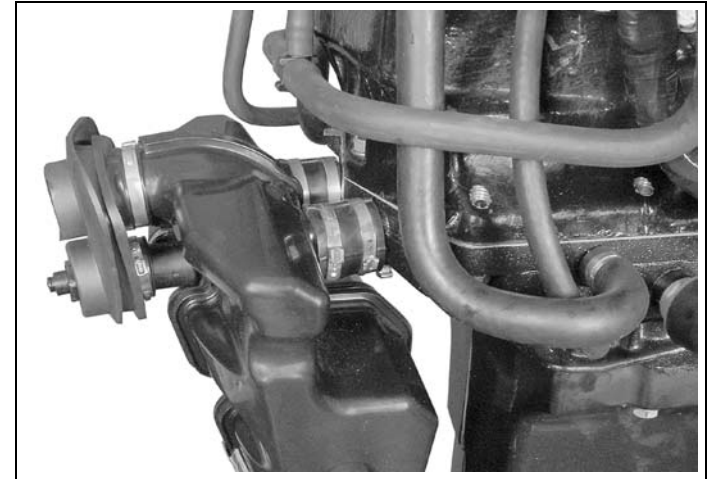
### Exhaust Grommet Assembly

**The problem:** The exhaust grommet elbow fitting, clamps and hoses may not be installed correctly on certain 2011 *Evinrude E-TEC 250 HP 90° V6* (3.4 L) outboard models. A misassembled exhaust grommet assembly can result in leaking water hose connections and possible engine damage due to water intrusion.

**The fix:** Inspect or replace the exhaust grommet assembly.

BRP recommends ALL affected outboard models be inspected or repaired.

**Note:** Warranty Bulletin 2011-01(W) has been replaced by Warranty Bulletin 2011-03(W). Refer to **Warranty Bulletin 2011-03(W)** for new information.



Exhaust Grommet and Muffler

### Incorrectly Installed Clamp on Fuel Hose

**The problem:** The clamp on the fuel outlet hose (3/8 inch diameter) of the fuel vapor separator may be loose or not be installed correctly on certain 2011 *Evinrude E-TEC 200 – 300 HP 90° V6* (3.3L and 3.4L) outboard models. The outboard may experience a fuel leak with a potential for fire or explosion. If this happens, it could lead to serious injuries.

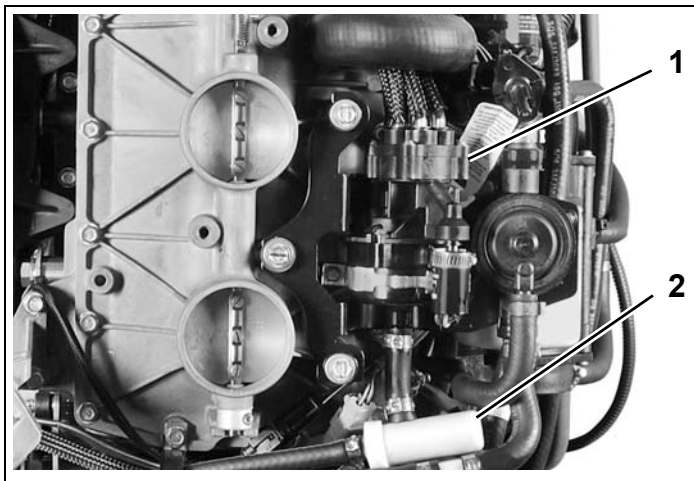
**The fix:** Inspect or repair to correct an improperly installed fuel hose clamp at the vapor separator assembly.

ALL affected engines MUST BE inspected or repaired.

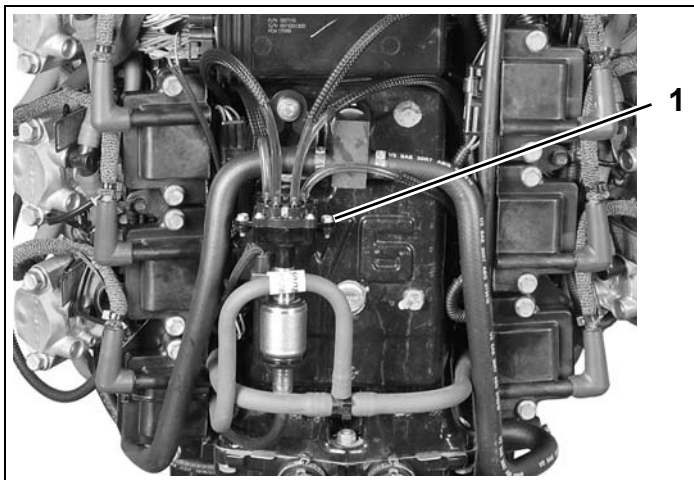
Refer to **SAFETY CAMPAIGN Warranty Bulletin 2011-02(W)**.



1. Clamp



1. Front oil pump
2. Oil filter



1. Rear oil pump

## Prime Oil System 250 H.O. and 300 HP 90° V6 (3.4 L) Models

Use the following procedure to prime the oil system on these outboard models if *Evinrude Diagnostics* software is not available.

### Oil Hose Priming

Insert the oil supply hose from the oil tank into a suitable container. Squeeze the oil primer bulb until oil flows from the oil tank into the container. Once oil supply hose from the oil tank is filled with oil, connect the hose to the oil supply fitting on outboard and secure with *Oetiker* clamp.

### Oil Pump Priming

Squeeze the oil primer bulb until oil flows from the oil supply hose, through the oil filter, and into the crankcase oil pump (front oil pump).

Inspect the oil filter to make sure it is filled with oil. All air must be eliminated from the oil filter during priming procedure. Continue to squeeze the oil primer bulb until oil flows through the front oil pump, into the oil distribution hoses, and to the crankcase fittings.

Start the outboard. Next activate the Winterize function. Refer to the outboard **Operator's Guide**.

Squeeze the oil primer bulb until oil flows through the oil distribution hoses of the rear oil pump.

**NOTICE** The winterize function **MUST** be used along with the primer bulb for two reasons:

- The primer bulb alone will not move oil through the rear pump assembly unless the pump is running.
- The pump assembly cannot prime itself until it has been filled with oil.

Observe oil flow through all oil distribution hoses. Air must be purged during the priming procedure. Small bubbles are acceptable. Large bubbles must be eliminated through continued priming.

## ELECTRICAL SYSTEM

### Setting the Timing Pointer – All Models

Use this service tip to make setting the timing pointer easier.

Remove spark plugs. Rotate the flywheel clockwise beyond 30° ATDC.

Install Piston Stop Tool, P/N 342679\*, into the spark plug hole of the number 1 cylinder.

Rotate flywheel counterclockwise until the number 1 piston contacts the tool. Keep pressure on the flywheel to position the piston firmly against the tool. Mark the flywheel directly across from the pointer. Label this mark "A."

Rotate the flywheel clockwise until the piston contacts the tool. Mark the flywheel directly across from the pointer. Label this mark "B." Rotate flywheel counterclockwise slightly to release tool then remove it from spark plug hole.

Use a piece of paper as flexible measuring device, to find the exact center between marks "A" and "B."

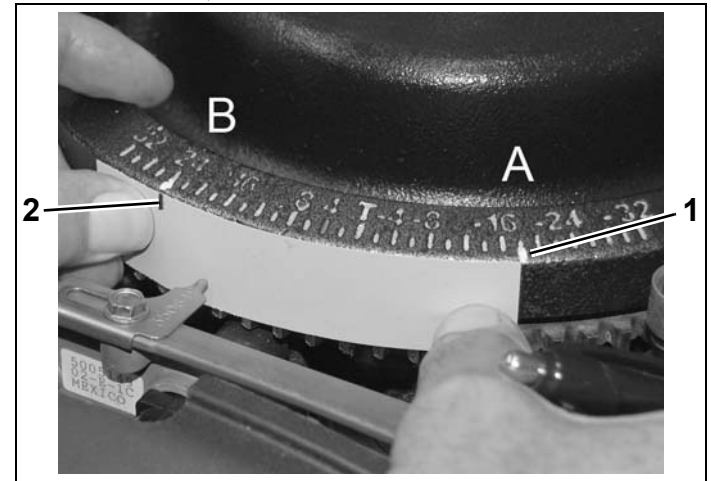
Place the paper along the edge of the flywheel. Align one edge of the paper with mark "A." Next, make a pencil line on the paper aligned with mark "B."

To find the center point, line up the edge of the paper from mark "A" with the pencil line at mark "B." Fold the paper. Open the folded paper and place a pencil line in the fold. Consider this pencil mark as the center point of marks "A" and "B."

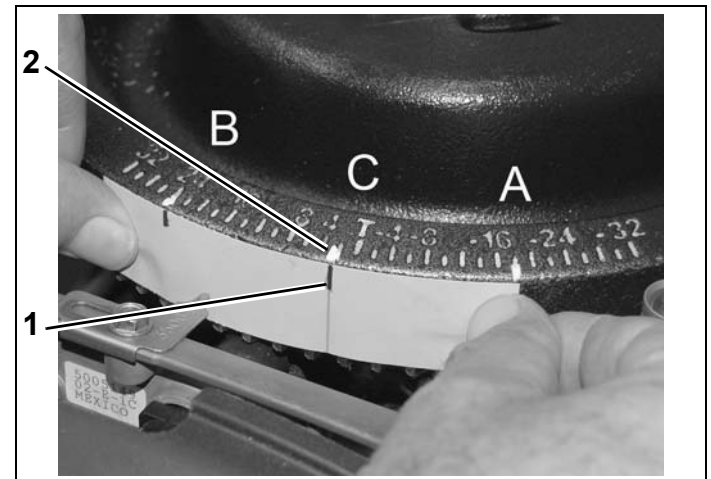
Realign the paper on the flywheel. Mark the flywheel at the center point pencil mark as "C." If mark "C" and the cast-in TDC boss on flywheel are in alignment, the timing pointer is in the correct location.

If the pointer alignment is NOT correct, rotate the flywheel clockwise to align the mark "C" with the pointer. Hold the flywheel in this position. Loosen the pointer retaining screw and adjust the pointer location to align with the cast-in TDC boss on the flywheel. Tighten retaining screw.

\*Replacement Tip Kit, P/N 5006098.



1. Align paper with mark "A"
2. Pencil line on paper at mark "B"



1. Center point pencil mark
2. Mark "C"



Damaged Fuel Hose



Damaged Fuel Pump Diaphragm

## FUEL SYSTEM

### Fuel Issues

Reports received by the After Sales Service Department indicate fuel related problems persist in areas where alcohol extended fuels are used.

These problems include:

- Phase separation
- Excessive alcohol or other solvent content in fuel
- Water or other contaminants in the fuel tank

These problems can result in:

- Corrosion of fuel system metal parts
- Deteriorated fuel hoses
- Blockage in the fuel system
- Engine damage

As part of routine maintenance, inspect fuel hoses from the fuel tank to the outboard. Make sure fuel supply hoses have not deteriorated. Replace deteriorated fuel hoses. Routine inspection of fuel hoses can help prevent expensive repairs.

Refer **Service Bulletin 2006-06(S)** and to the 2008 and 2009 **Product Service Update** books for additional information and recommendations.

These problems can occur with all brands and types of outboards and are related to fuel blending, contaminants, and atmospheric conditions.



# ***EVINRUDE DIAGNOSTICS SOFTWARE***



## IMPROVEMENTS AND INFORMATION

### Software Updates

*Evinrude Diagnostics* software has been updated to v 5.4. Keep your diagnostic software and engine management software packages up to date. Check for software updates at least once per month.

If the service laptop has internet access, start the diagnostic program. Select “Check for Updates” from the “Help” menu. *Evinrude Diagnostics* software will connect to the internet and search for available updates. If updates are available, the user will be prompted to download updates.

Select “Download Updates” from the “Help” menu to select available updates. When the log in screen appears, enter your *DealerPort* or *BOSSWeb* user name and password. Select from available diagnostic program or engine management software updates when the “Download Updates” window opens.

If the service laptop does not have internet access, use a computer with internet access to log on to *DealerPort* or *BOSSWeb*. Transfer and install software updates to the service laptop.

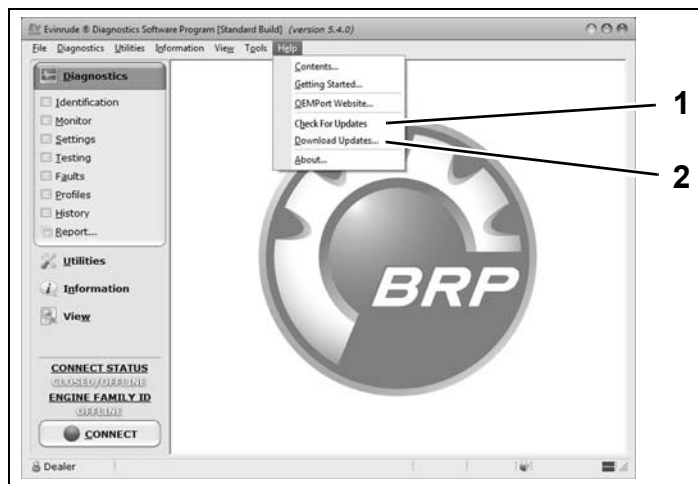
### Engine Management Software Packages

*Evinrude Diagnostics* software v 5.1 and higher, provides engine management software in three packages to service all 1999 to 2012 *Evinrude* DI or *Evinrude E-TEC* engines.

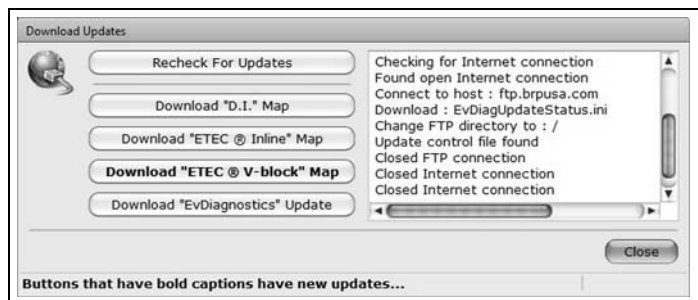
The engine management software packages are:

- *Evinrude E-TEC* "I" Package for 2004 and newer 15 to 90 HP models
- *Evinrude E-TEC* "V" Package for 2005 and newer 115 to 300 HP models
- *Evinrude* "DI" Package for 2006 and older 75 to 250 HP DI models

Using engine management software packages saves time by having the latest engine management software loaded on the service laptop. This eliminates searching for specific engine models and suffixes.



1. Check for Updates
2. Download Updates



Download Updates Window

## USB to Serial Adapter Information

Universal Serial Bus (USB) is a type of interface that allows plug-and-play devices such as printers, cameras, hard drives and keyboards to be added to a computer. Most new computer accessories come with USB connectors.

USB, which has a higher rate of data transfer, is good for connecting these external devices to a computer. But, many special devices are not compatible with USB and require a serial interface.

A serial interface is a physical interface, or port, usually a DB9 (9 pins) or DB25 (25 pins) connector positioned on the back of the computer. On most new computers serial ports are no longer available and have been replaced with one or more USB ports.

Due to the differences between a USB and serial interface port, an adapter is needed to translate signals between the computer USB and the serial interface.

A serial interface is required to communicate with an *Evinrude E-TEC* or DI out-board.

**IMPORTANT:** Use a USB to serial adapter that contains the “FTDI chipset.”

The following USB to Serial Adapters contain the “FTDI chipset” and work well with the *Microsoft Windows 7, Vista* and *XP* operating systems. Drivers are supplied on CD. These USB to serial adapters have been tested and are recommended by BRP:

- BRP adapter, P/N 587214.  
Order from *Evinrude/Johnson* Genuine Parts and Accessories
- USB Gear brand adaptor, P/N USBG-232Mini.  
Order from [www.usbgear.com](http://www.usbgear.com)

Refer to **RS232 Serial Adapters** in the **Frequently Asked Questions** section of the *Evinrude Diagnostics* software v 5.1 or higher Help file.

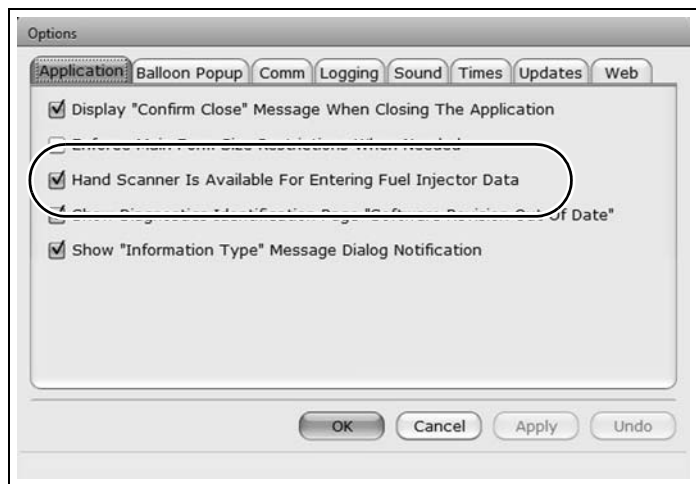


BRP USB to serial adapter, P/N 587214

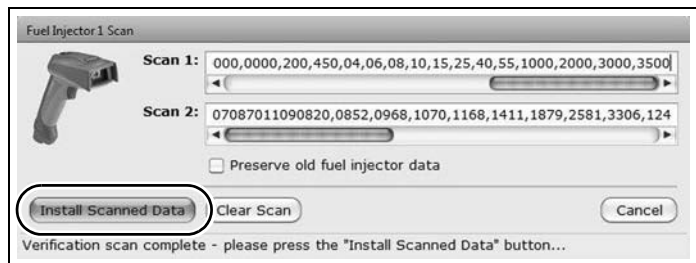


USB Gear USBG-232 Mini





Check box "Hand Scanner Is Available For Entering Injector Data"



Install Scanned Data

## Install Injector Coefficient Files Using a 2-D Bar Code Scanner

*Evinrude Diagnostic* software is capable of working with most 2-D bar code scanners. A 2-D bar code scanner creates the injector coefficient files by reading the information from the bar code located on the serial number label attached to each fuel injector electrical connector.

**Note:** 2-D bar code scanners are NOT available from BRP, and must be obtained locally. BRP does NOT offer assistance in troubleshooting problems with 2D scanners; please contact the scanner manufacturer for support. Keep in mind, the cost of a 2-D bar code scanner may not be a practical option for a shop that services only a few injectors each year.

To enable use of a 2-D bar code scanner, select "Options" from the Tools menu. Check the box "Hand scanner is available for entering injector data." Press the "Apply" button and then press the "OK" button.

To create an injector file, select the injector to be replaced. At the prompt "Scanner present - do you wish to use the scanner?" select "Yes".

Follow the on-screen prompts. The bar code located on the injector serial number label must be scanned two times. This ensures the correct information is received. After the second scan is complete, press the "Install Scanned Data" button to load the injector coefficient file.



# EVINRUDE DIAGNOSTICS SOFTWARE

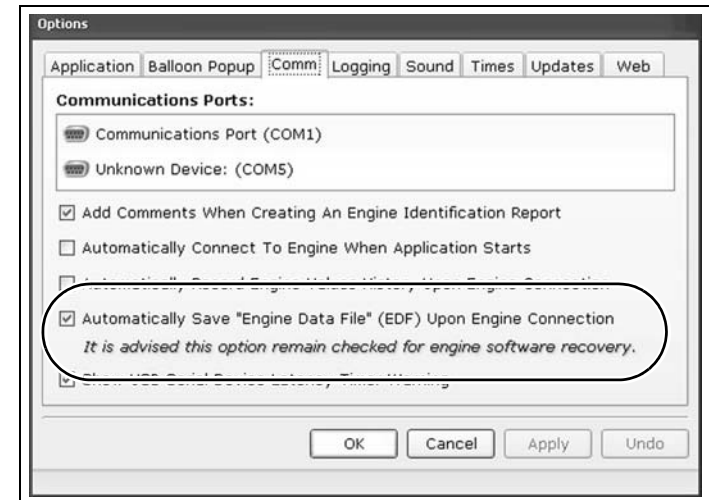
## Engine Data Files

Engine Data Files (EDF) are used to aid in *EMM* recovery, or replacement. An EDF file is normally saved every time *Evinrude Diagnostics* software connects to an engine.

Make sure the *Automatically save "Engine Data File" (EDF) Upon Engine Connection* option in *Evinrude Diagnostics* software is selected.

- Start *Evinrude Diagnostics* v 5.1 or higher.
- Use the Tools menu and select Options.
- Check *Automatically save "Engine Data File" (EDF) Upon Engine Connection*.
- Click "OK" to permanently save setting.

Also see **Administrative Bulletin 2011-02(A)** and **EMM Replacement Videos** available from *DealerPort* or *BOSSWeb*.

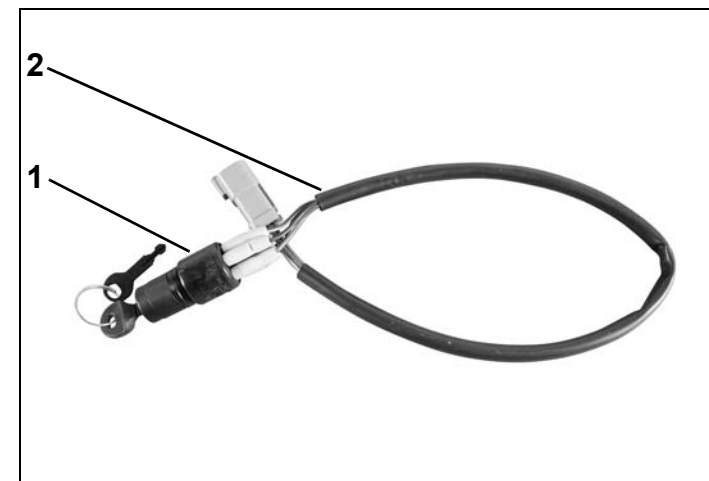


Automatically save "Engine Data File" (EDF) Upon Engine Connection

## EMM Communications

The *EMM* must turn ON before it will communicate with the service laptop computer. When performing diagnostics, or updating engine management software, many technicians find it convenient to power the *EMM* using a separate key switch tool connected at the engine harness key switch connector, rather than the key switch located at the helm.

If desired, Ignition Switch and Key, P/N 5005800 and Key Switch Cable Assembly, P/N 586262 can be used for this purpose.



1. Ignition Switch and Key, P/N 5005800
2. Key Switch Cable Assembly, P/N 586262





# ***EVINRUDE ICON* REMOTE CONTROL SYSTEM**

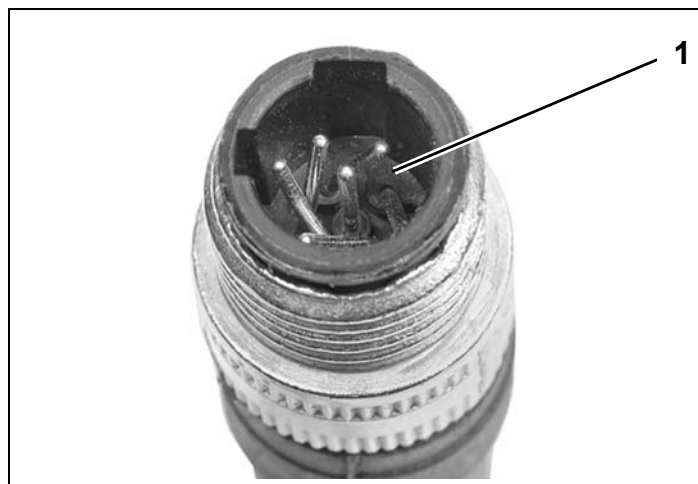


## EVINRUDE ICON RIGGING KIT SELECTION CHART

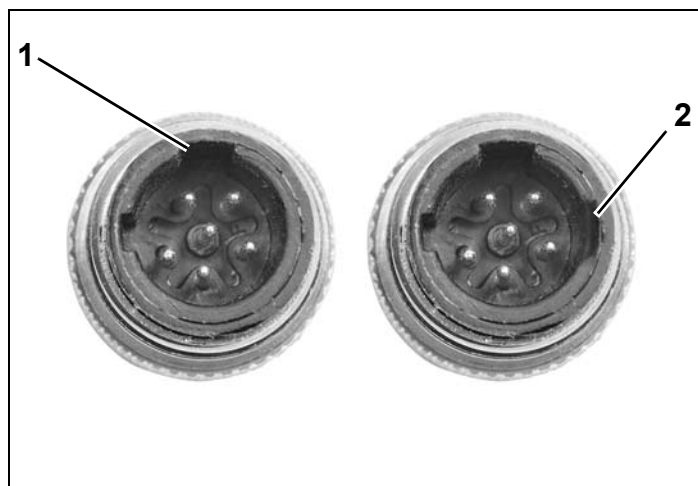
Step 1: Select number of engines.	1		2	3	4	5
Step 2: Select appropriate remote control.	Concealed Side Mount	Single Lever Binnacle Mount	Dual Lever Binnacle Mount			
Step 3: Order P/N for main or single station rigging kit.	Rigging Kit P/N 764990	Rigging Kit P/N 764980	Rigging Kit P/N 764982	Rigging Kit P/N 764984	Rigging Kit P/N 764986	Rigging Kit P/N 764988
<b>Main Station Rigging Kits include:</b>						
ICON Remote Control, P/N	765412	765381	765382	765383	765384	765385
Master Power/Key Switch, P/N	765371	765373	765374	765371	765371	765371
Start/Stop Switch Panel, P/N	765378	-		765375	765376	765377
Trim Switch Panel, P/N	-			765388	765389	765390
Network Power Cable, P/N	764921					
ICON Gateway Module Kit, P/N	764922					
ICON Accessory Power Relay, P/N	765296					
ICON Hubs (2), P/N	764943					
Buss Cable Extension 15ft (4.57m), P/N (Kit includes 1 buss cable per engine)	764948					
Buss Cable Backbone 20ft (6.1m), P/N	764950	-				
Buss Cable Backbone 25ft (7.4m), P/N	-	764951				
Engine Identity Plug ID#1, P/N	-	764916				
Engine Identity Plug ID#2, P/N	-			764917		
Engine Identity Plug ID#3, P/N	-				764918	
Engine Identity Plug ID#4, P/N	-					764919
ICON Remote Control User's Guide	765410	764954				
Installation Instructions included:						
ICON Remote Controls, P/N	355248	355084				
ICON Switch Panels, P/N	355085	355085				
ICON Gateway Module & Cable Kit, P/N	355086	355086				
ICON Accessory Power Relay Kit, P/N	355087	355087				
ICON Quick Connect Guide, P/N	765409	764953				

# EVINRUDE ICON REMOTE CONTROL SYSTEM

Step 4 (optional): Order P/N for second station rigging kit.	Concealed Side Mount Rigging Kit Not Available	Rigging Kit P/N 764981	Rigging Kit P/N 764983	Rigging Kit P/N 764985	Rigging Kit P/N 764987	Rigging Kit P/N 764989
<b>Second Station Rigging Kits Include:</b>						
<i>ICON</i> Remote Control, P/N	-	765381	765382	765383	765384	765385
Emergency Stop Switch Panel, P/N	-	765379	765380	765372	765372	765372
Start/Stop Switch Panel, P/N	-	-		765375	765376	765377
Trim Switch Panel, P/N	-	-		765388	765389	765390
Buss Cable Extension 15ft (4.57m), P/N	-	764948				
Buss Cable Extension 20ft (6.1m), P/N	-	-		764949		
Installation Instructions included:						
<i>ICON</i> Remote Controls, P/N	-	355084				
<i>ICON</i> Switch Panels, P/N	-	355085				
<i>ICON</i> Quick Connect Guide, P/N	-	764953				



1. Damaged pins



1. Groove  
2. Extra groove in the misaligned connector

## **EVINRUDE ICON REMOTE CONTROLS**

### **ICON Connector Alignment**

Incorrect alignment and assembly of *ICON* buss cables can result in a non-functional *ICON* network. Use the following information to avoid network communication issues.

Assemble connectors dry. Do NOT use *Electrical Grease* on this style connector.

Visually check the alignment and assembly of connectors. Align tabs and sockets of the female connector to the grooves and pins of the male connector. Tighten locking rings of connectors finger-tight.

Do not rotate the connectors to align pins to sockets. This can damage the pins of the connector. A damaged connector can cause an electrical short in the network, resulting in a failed 3 Amp fuse at the master power key switch.

It is possible for the pins of one connector to enter the sockets of the other connector when the tabs and grooves of the connector are misaligned. This damages the connector housing and makes an extra groove in the misaligned connector.

Misaligned connectors can cause the 3 Amp fuse at the master power key switch to blow and disrupt or eliminate communication on the network.

Improper network communication can create non-recoverable fault codes and activate *S.A.F.E.*

Refer to the current **ICON Installation Guide** and **Parts and Accessories Bulletin 2011-01(P)**.

# EVINRUDE ICON REMOTE CONTROL SYSTEM

## Electronic Servo Module (ESM) Installation

When installing or replacing an ESM be sure to check the engine identity plug for each engine. Service replacement ESMs are shipped with engine identity plug 0, which is for the first or a single engine.

The first time the system is turned ON, it automatically checks engine identity numbers. During this time, the controls will not respond to operator inputs.

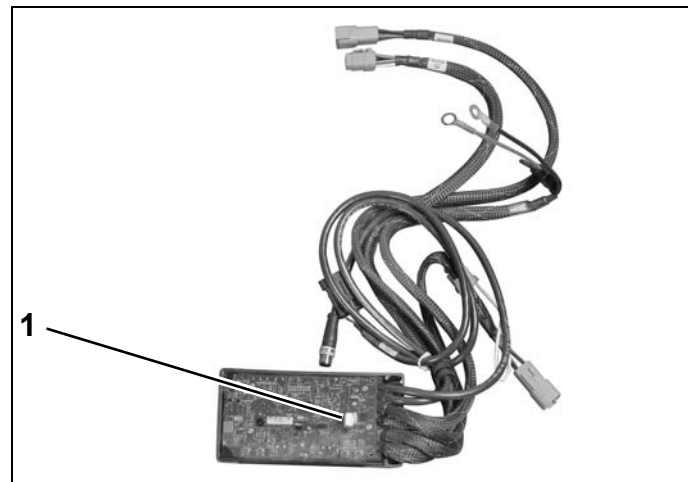
**IMPORTANT:** Allow approximately 3 seconds per engine for this check to complete.

If duplicate engine identity numbers are detected, the affected outboard's NEUTRAL indicator LED will flash rapidly. The system will enable one of the duplicates and disable the remaining duplicates. Outboards with a disabled ESM will not operate.

Check the engine identity plug number and be sure the engine identity plug is installed as outlined in the table.

Number of Outboards	Identity Numbers				
	Port	Port Center	Center	Starboard Center	Starboard
1	0				
2	0				1
3	0		1		2
4	0	1		2	3
5	0	1	2	3	4

The correct engine identity plugs are supplied with Remote Control Rigging Kits for two, three, four and five engines.

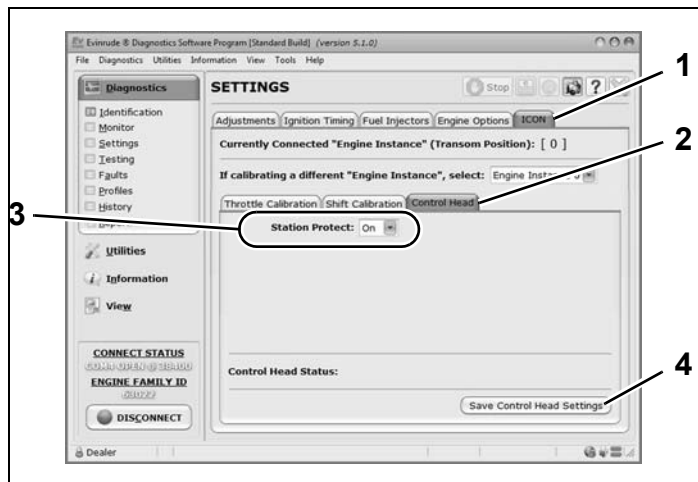


Electronic Servo Module (ESM)  
1. Engine identity plug

Engine Identity Plugs		
Engine Number	Identity Plug Number	P/N
1st	0	765915
2nd	1	765916
3rd	2	765917
4th	3	765918
5th	4	765919



1. + side of the RPM switch
2. N switch



#### Settings Screen

1. ICON tab
2. Control Head tab
3. Station Protect drop down menu
4. Save Control Head Settings button

## ICON Binnacle Mount Controls

**The issue:** An ICON single or dual binnacle mount remote control is installed in a single station application. When system is powered up the remote control LEDs illuminate for about one second and then turn OFF. Afterwards, the remote control is not responsive, the engine(s) will not start, or trim up or down from the remote control.

**The cause:** The Station Protect feature may be turned ON.

Because the Station Protect feature is turned on, AND there is only one remote control in the network, the remote control is waiting for a specific user input to become active.

To activate the remote control press the + side of the RPM switch and the N switch in this sequence:

- Press the + side of the RPM switch first,
- Press the + side of the RPM switch second,
- Press the N switch third and
- Press the + side of the RPM switch last.

**The fix:** Use Evinrude Diagnostic software (v 5.1 or higher) to turn OFF the Station Protect feature.

- From the *Settings* screen select the *ICON* tab.
- Next select the *Control Head* tab.
- From the *Station Protect* drop down menu, select OFF.
- Click the “Save Control Head Settings” button.



# EVINRUDE ICON REMOTE CONTROL SYSTEM

## Key Switch Service Issue

**The problem:** Customer complaint “Engine will not start.”

**Technician observations:** Turned the Master Power/Key Switch ON (engine OFF):

- all remote control LEDs are flashing
- the EMM diagnostic LEDs are – #1 OFF, #2 ON, #3 ON, #4 ON (should be #1 ON, #2 OFF, #3 ON, #4 ON)
- electric fuel pump does not operate
- cannot communicate with *Evinrude Diagnostics* software

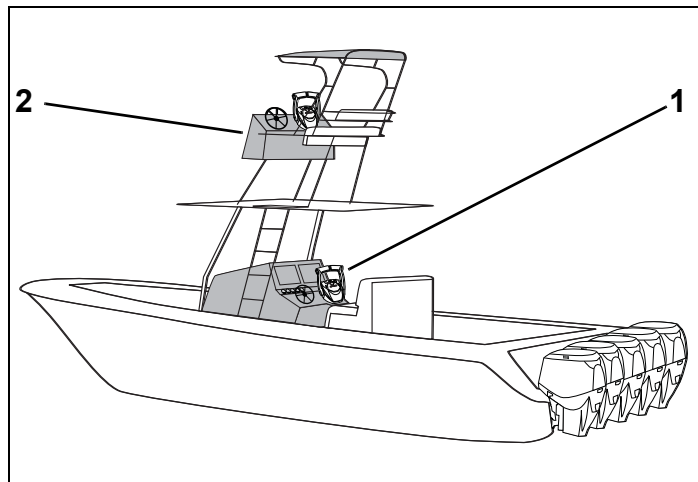
**Troubleshooting:** Substituted known good parts. Normal operation resumed when the Master Power/Key Switch was replaced.

**Conclusion:** Testing the Master Power/Key Switch revealed a high ohms value across the “M” terminals. The master power/key switch was mounted facing up, allowing water to accumulate inside the switch, resulting in a short circuit.

**IMPORTANT:** Technicians are reminded that assembly and installation of a key switch must provide water drainage. To allow for the draining of moisture that comes through the lock cylinder, make sure the mounting plate is installed so that the key switch is in a HORIZONTAL position with the drain hole DOWN.



1. Drain



1. Main station
2. Second station

## Emergency Stop Switch Function

**The problem:** The outboard will not start and the following symptoms occur:

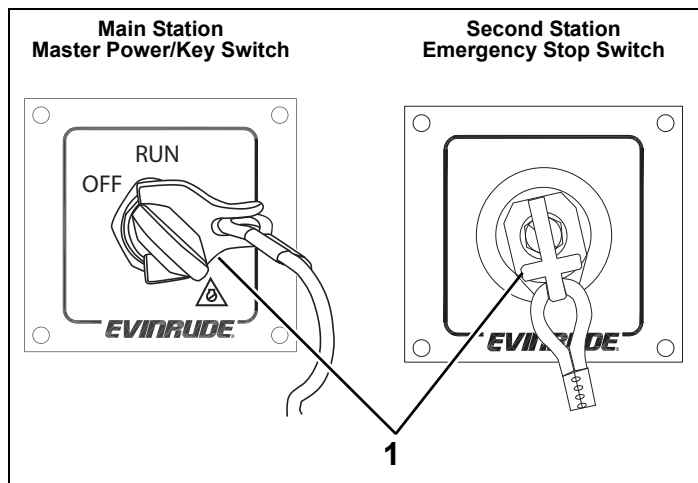
- All gear indicator LED's on the remote control flash five times per second
- The warning horn sounds

**The cause:** The stop circuit of the main station master power key switch and second station emergency stop switch are electrically connected in parallel. If the emergency stop lanyard is disconnected from second station emergency stop switch, the outboard's *EMM* will be put into SHUT DOWN mode.

While in SHUT DOWN mode the *EMM* does not communicate with the *ICON* remote control, and *ICON* service codes will not be stored in the *EMM*. The *ICON* remote control is in a nonrecoverable fault condition and initiates failsafe mode for the remote control and the *ESM*.

**The fix:**

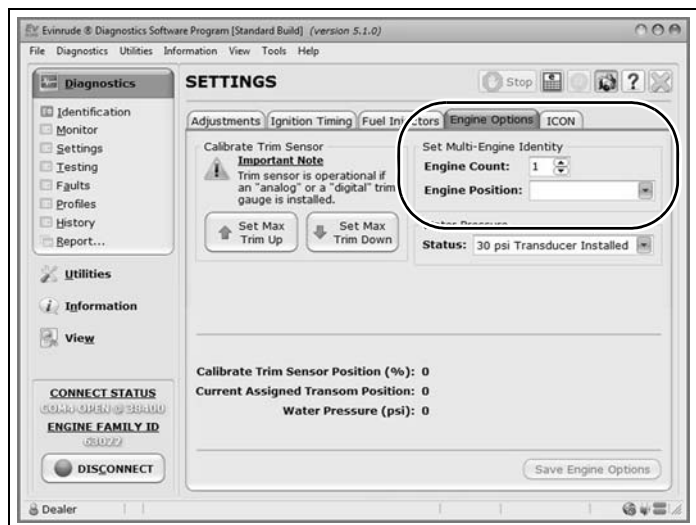
- Turn the master power key switch to the OFF position
- Make sure the clip of the emergency stop lanyard is connected to the emergency stop switch
- Turn the master power key switch to the ON position
- Restart the engine



1. Clip of emergency stop lanyard



# ***I-COMMAND***



Engine Instance (Transom Position) Information

## I-COMMAND INFORMATION

### Instancing

*I-Command* digital gauges with software newer than v 1.7.0, support up to eight engines and five fuel tanks.

A *NMEA 2000* network can be configured to support many instances of duplicate or similar devices on the same network. Additional devices must be added through careful network configuration. Instance numbers are used to represent similar devices on a common network.

When adding devices to the *NMEA 2000* network:

- Unconfigured devices **MUST** be added one device at a time.
- Preconfigured device kits can be added to the network all at one time.
- In either case, if a device is associated with an engine the device instance number **MUST** match the engine instance number.

Number of Outboards	Engine / Device Association				
	Port	Port Center	Center	Starboard Center	Starboard
	Instance Numbers				
1	0				
2	0				1
3	0		1		2
4	0	1		2	3
5	0	1	2	3	4

Use *Evinrude Diagnostics* software “Engine Options” screen to confirm engine instance, or engine position.

## Water Pressure Sensor Kits

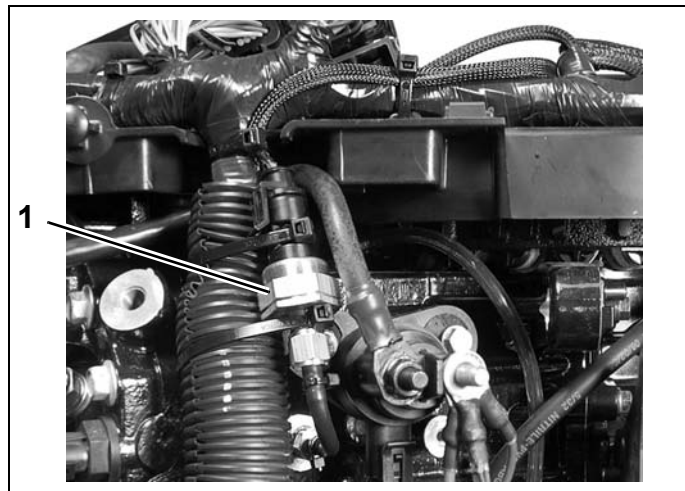
Use a water pressure sensor kit to provide water pressure data to *I-Command* or other instruments on a *NMEA 2000* network.

Install Water Pressure Sensor Kit, P/N 5008300, on **2011 and older Evinrude E-TEC 115 – 300 HP** outboards only. The water pressure sensor used in this kit provides water pressure readings from 0 to 30 psi (0 to 207 kPa).

Install Water Pressure Sensor Kit, P/N 5008640, on **2012 and newer Evinrude E-TEC 115 – 300 HP** outboards only. The water pressure sensor used in this kit provides water pressure readings from 0 to 50 psi (0 to 344 kPa).

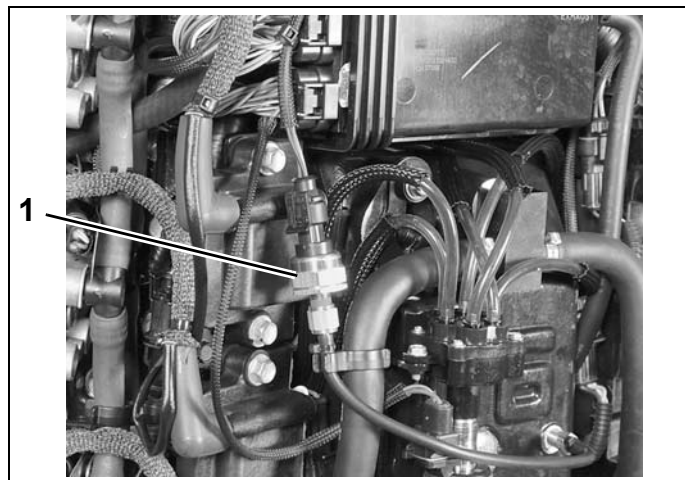
Refer to the installation instructions provided with the kit for correct installation. The water pressure sensor **MUST** be installed in a vertical position. Hose installation **MUST** provide complete drainage of water from the sensor.

**Note:** When a water pressure sensor kit is used, engine management software controls water pressure readings from the *EMM* to the *I-Command* gauge. The 50 psi (344 kPa) sensor works with 2012 and newer engine management software.



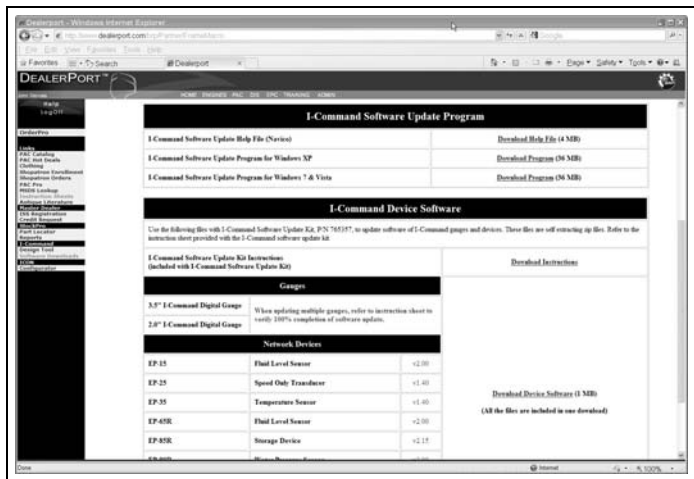
**115 – 200 HP 60° V4 and V6 Models**

1. Water pressure sensor installed in a vertical position



**200 – 300 HP 90° V6 Models**

Water pressure sensor installed in a vertical position



## I-Command Gauge Software Newer Than Version 1.7.0

I-Command gauge software newer than v 1.7.0 is available to update I-Command digital gauges.

Newer software can display data for up to eight engines and provides fuel management for up to five fuel tanks.

Because software newer than v 1.7.0 adds new features, the “Boat Setup” options **MUST** be configured **AFTER** updating the gauge software. The “Boat Setup” of newer software requires:

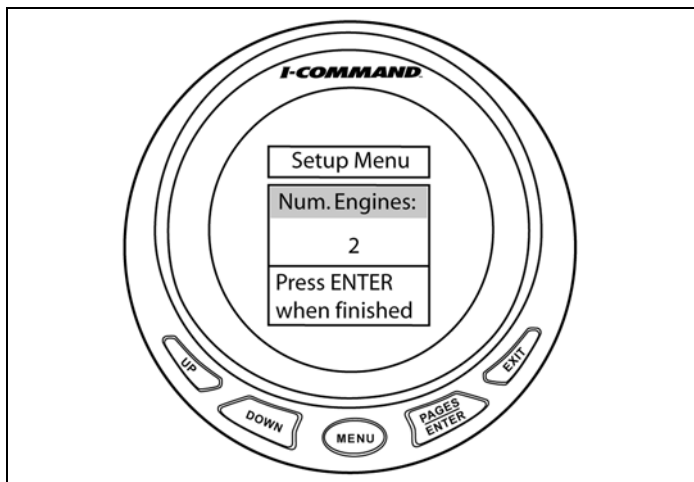
- Number of engines (engine quantity)
- Number of fuel tanks (fuel tank quantity)
- Units for fuel tank capacity (US or metric)
- Total fuel capacity of vessel (total of all tanks)

**IMPORTANT:** On vessels with single or multiple fuel tanks the boat setup process does **NOT** prompt the user to configure individual fuel tank capacity.

Refer to **Parts and Accessories Bulletin 2011-03(P) Revision 1** to identify gauge software version, and configure fuel tank capacity.

Use I-Command Software Update Kit, P/N 765657 and the instructions provided with the kit to update I-Command digital gauge software.

I-Command User’s Guides that support newer software are available from the BRP Operator’s Guides web site ([www.operatorsguides.brp.com](http://www.operatorsguides.brp.com)).



## I-Command Bulletins

Bulletin Number	Subject	Affected Models	Problem
2006-04(P)	<i>I-Command</i> Classic Instruments	All <i>I-Command</i> Classic instruments with date codes prior to and including date code 089/06 are suspect.	Certain <i>I-Command</i> Classic instruments may accumulate moisture internally and experience excessive lens fogging.
2006-04(S)	<i>Evinrude E-TEC</i> CANBus Software Update	All <i>Evinrude E-TEC</i> 115–250 HP outboards using CANBus network communications.	NMEA 2000 <i>Lowrance</i> depth-finders and GPS units can interfere with engine management module ( <i>EMM</i> ) functions on certain <i>Evinrude E-TEC</i> outboards during certain CANBus communication modes.
2007-01(P)	<i>I-Command</i> Network Connector(s)	2005 & newer 200 - 250 HP 90° V6 2007 & newer 115 - 200 HP 60° V4/V6 2008 & newer 40 - 90 HP	This bulletin provides information related to a change in <i>I-Command</i> network connectors. (Blue to Red connectors)
2008-01(P)	<i>I-Command</i> and NMEA 2000 Network Connectors	All	This bulletin provides information related to the differences in <i>I-Command</i> compatible DeviceNet-style connectors.
2008-03(P)	<i>I-Command</i> Water Pressure Sensor Kits	All	This bulletin provides information related to the selection and installation of <i>I-Command</i> water pressure sensors kits.
2008-04(P)	<i>I-Command</i> Fuel Level Converter Kits	All	This bulletin provides information related to the configuration of <i>I-Command</i> fuel level converters.
2010-01(P)	<i>I-Command</i> Digital Gauges	All	This bulletin provides recommended service procedures and information to update software and to submit warranty allowance requests.
2011-03(P) Revision 1	<i>I-Command</i> Gauge Software, Newer Than Version 1.7.0	All	This bulletin provides information related to changes in the “Boat Setup” process and some display details after updating to newer software.
2011-04(P) Revision 1	<i>I-Command</i> Gauge “Vessel Mismatch” error message.	All	This bulletin provides information related to a “Vessel Mismatch” error message.



## I-COMMAND TROUBLESHOOTING

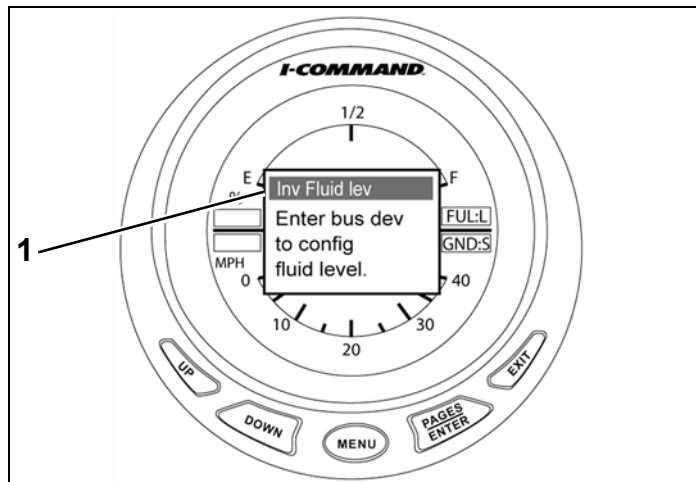
### Invalid Fuel Level Warning

An Invalid Fuel Level warning message (displayed as “Inv Fluid lev” on an *I-Command* gauge) will appear for approximately two seconds if individual fuel tank capacity is not configured.

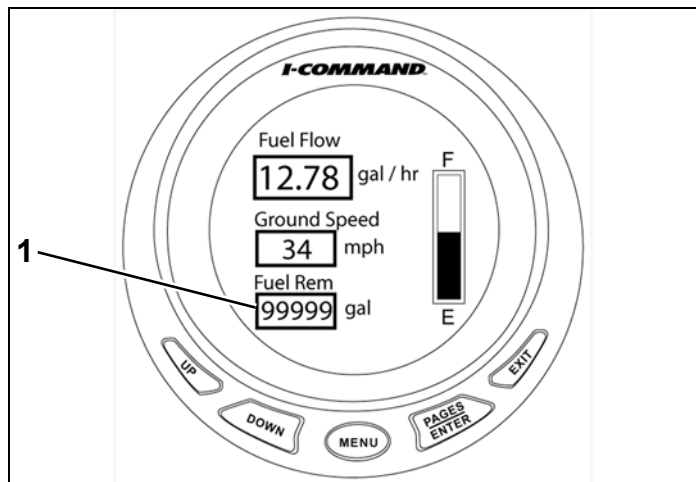
*I-Command* gauges programmed with software newer than version 1.7.0 will display the maximum fuel capacity value of 99999 in the Fuel Rem data field. Proper configuration of the fluid level sensor will eliminate the “Inv Fluid lev” message and allow the correct value to display in the Fuel Rem data field.

Configure individual fuel tank capacity for the appropriate fluid level sensor.

Refer to **Parts and Accessories Bulletin 2011-03(P) Revision 1** for complete details.



1. *Inv Fluid lev* warning message

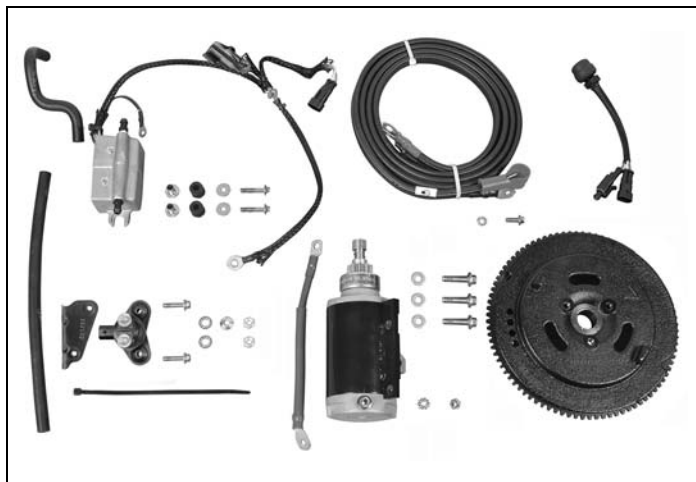


1. Fuel capacity value of 99999





# PARTS AND ACCESSORIES



New Electric Start Kit, P/N 5008836

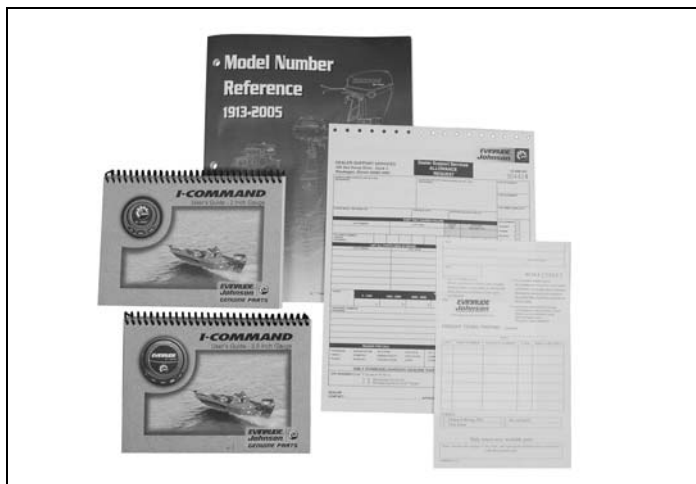
## P&A INFORMATION

### New Electric Start Kit, P/N 5008836

Changes to the flywheel and crankshaft of 2012 *Evinrude E-TEC* 25–30 HP models require a new electric start kit.

Use electric start kit, P/N 5008836 when installing an electric start kit on 2012 and newer models.

Refer to **New Flywheel 15 – 30 HP Models** on p. 14.



### Frequently Requested Part Numbers

The following items are frequently requested part numbers and should be ordered as needed:

- Predelivery Checklist, P/N 5008381, 10/pack
- Warranty Allowance Requests (warranty claim forms), P/N 773629, 25/pack
- RCM Form (form for return of unused, saleable parts), P/N 11111, 10/pack
- Model Year Reference Guide, P/N 5006145
- 2012 Predelivery and Installation Guide, P/N 5008815 \*
- *ICON* Installation Guide, P/N 764952 \*
- *ICON* Troubleshooting Guide, P/N 356076 \*
- *I-Command* Users Guide, P/N 355917 (3.5 inch) \*
- *I-Command* Users Guide, P/N 355918 (2 inch) \*
- *I-Command* Product Selection Guide, P/N 764677 \*

\* Available for download from *DealerPort* or *BossWeb*.

# PARTS AND ACCESSORIES

## Service Replacement *EMMs*

The purchase of a service replacement *EMM* is restricted to full line, package or service dealers only. Authorization is NOT required for replacement of out of warranty units. All *EMMs* have a one-year limited warranty.

**IMPORTANT:** *EMMs* are NOT returnable. Make sure the *EMM* is the source of the problem. No tests will be performed on units sent in for replacement.

BEFORE ordering a replacement *EMM*, review **Parts and Accessories Bulletin 2011-02(P)** for the policies and procedures for Service Replacement of *EMMs*. An *EMM* Order Form MUST be filled out and sent in with the old *EMM*. *EMMs* cannot be ordered as a regular parts order, since they must be programmed before shipping.

**Note:** For outboards WITHIN the factory warranty period refer to **Administrative Bulletin 2011-02(A) Revision 1**.

<b><i>Evinrude</i> DI Models</b>					
<b>Model</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000 – 2001</b>	<b>2002 – 2006</b>
75 – 115 HP 60° V4(New)		586462	586462	586724	586724
75 – 115 HP 60° V4 (Remanufactured)		NLA	NLA	778617	778611
135 – 175 HP 60° V6 (New)	NLA	NLA	586463 586496 <sup>1</sup>	586724 586496 <sup>1</sup>	586724
135 – 175 HP 60° V6 (Remanufactured)	NLA	NLA	NLA	778617	778611
200 – 250 HP 90° V6 (New)			586465 <sup>2</sup>	586724	586724
200 – 250 HP 90° V6 (Remanufactured)			NLA	778617	778611
<b>Notes:</b> 1. 1999–2000 150 – 175 HP: N, O, V suffix ONLY 2. 1999 200 – 225 HP: N, O, S suffix					





# SERVICE TOOLS



## NEW SERVICE TOOLS

New service tools have been developed for 2012 Model Year outboards. New tools were announced in Service Bulletin 2011-07(S).

### Cylinder Bore Gauge, P/N 766314

A new cylinder bore gauge, P/N 766314, replaces cylinder bore gauge, P/N 775589, and is now available for *Evinrude E-TEC* outboards.

This tool will NOT ship automatically as part of the essential tool program, dealers should order as needed.



Cylinder Bore Gauge, P/N 766314

### USB to Serial Adapter, P/N 587214

A new USB to serial adapter, P/N 587214, is now available for use with *Evinrude Diagnostics* software.

This tool will NOT ship automatically as part of the essential tool program, dealers should order as needed.



USB to Serial Adapter



# REFERENCE



# PAINT

Paint codes have been added to the Electronic Parts Catalogs (EPC) for the 2012 model year.

Color	Spray Can	PPG Paint Code Paint / Catalyst	Application
PRIMER	777172	–	Midsection & Gearcase
PRIMER (Gray)	–	W42650 / W29741	Use for white engines
PRIMER (Black)	–	SEP61993 / W29585	Use for blue engines
BLACK (Gloss)	777179	W28610 / W28792	Engine cylinder/crankcase
BLACK (Military)	351066	W43653 / W26790	Covers, Midsection, & Gearcase
WHITE	777171	W28502 / W45315	Base coat
CLEARCOAT	772414	W29461 / W26790	Use with base coat on upper & lower engine covers
BLUE ( <i>Evinrude E-TEC</i> )	351907	SAC61243 / W45315	Base coat

## ELECTRICAL INFORMATION

### Battery Cable Length Guide

Battery cable must be of the correct gauge to carry the electrical current required to start the outboard. Use the chart below to select the correct gauge battery cable.

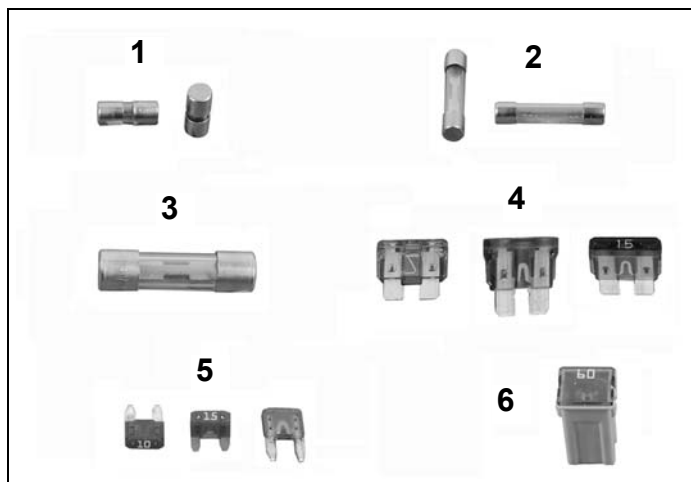
Battery Cable Length	Outboard Model	
	15–30 HP	40–300 HP
1 to 10 Ft. (.3 to 3 m)	6 Gauge	4 Gauge
11 to 15 Ft. (3.4 to 4.6 m)	4 Gauge	2 Gauge
16 to 20 Ft. (4.9 to 6.1 m)	2 Gauge	1 Gauge

### Battery Recommendations

Each outboard requires its own starting battery. Use the chart below to select a battery that meets or exceeds the minimum requirements.

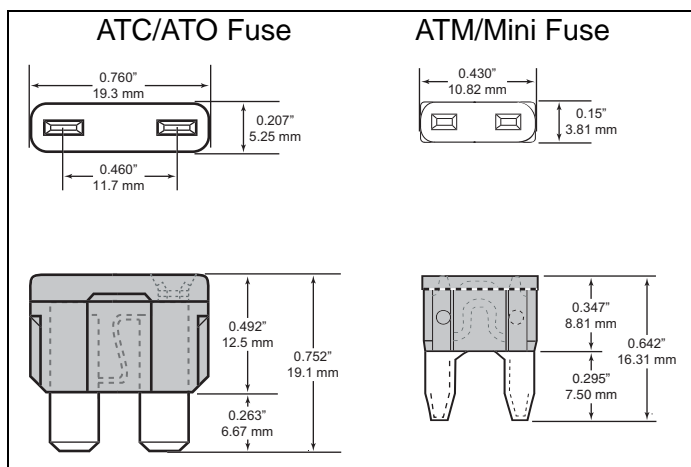
Outboard Model	Battery Rating
115–300 HP	675 CCA (845 MCA), <b>or</b> 800 CCA (1000 MCA) below 32°F (0°C) 107 amp-hr in extreme applications
15–90 HP	640 CCA (800 MCA), <b>or</b> 800 CCA (1000 MCA) below 32° F (0° C) 107 amp-hr in extreme applications





### Fuse Types

1. AGA
2. AGC/SFE
3. AGU
4. ATC/ATO
5. ATM/Mini
6. JT



Fuse Dimension Diagram

## Fuses

The chart below list all fuses available from *Evinrude/Johnson Genuine Parts and Accessories*.

Fuse P/N	Fuse Type	Amp Rating	Fuse Color	Fuse Dimensions (Length x Diameter)	Package Qty
114509	AGA	3	Glass	0.625 x 0.25	1
512129	AGA	5	Glass	0.625 x 0.25	5
510884	AGA	20	Glass	0.625 x 0.25	10
5031911	AGA	25	Glass	0.625 x 0.25	1
511386	AGA	30	Glass	0.625 x 0.25	1
123852	AGC	1	Glass	1.25 x 0.25	1
5030348	AGC	20	Glass	1.25 x 0.25	1
512672	AGU	40	Glass	1.5 x 0.411	1
3850985	AGU	50	Glass	1.5 x 0.411	1
982019	AGU	50	Glass	1.5 x 0.411	10
763640	ATC/ATO	1	Black	See Fuse Dimension Diagram	1
764538	ATC/ATO	3	Violet		1
763641	ATC/ATO	5	Tan		10
967545	ATC/ATO	10	Red		1
5032215	ATC/ATO	15	Blue		1
514021	ATC/ATO	20	Yellow		5
5032230	ATC/ATO	30	Green		1
514764	ATM/Mini	5	Tan		5
514766	ATM/Mini	10	Red		5
514767	ATM/Mini	15	Blue		1
514768	ATM/Mini	20	Yellow		1
5032630	ATM/Mini	30	Green		1
5033633	JT	60	Yellow		1
304980	SFE	20	Glass	1.25 x 0.25	1



## Evinrude E-TEC Spark Plug Service Chart

Model	2004	2005	2006	2007	2008	2009	2010	2011	2012
15 H.O. – 30 HP						QC10WEP	QC10WEP	QC10WEP	QC10WEP
40 – 50 HP	QC12PEP†	QC12PEP†	QC12PEPB†	QC12PEPB†	QC10WEP	QC10WEP	QC10WEP	QC10WEP	QC10WEP
60 – 65 HP	QC12PEP†	QC12PEP†	QC12PEPB†	QC12PEPB†	QC10WEP	QC10WEP	QC10WEP	QC10WEP	QC10WEP
75 – 90 HP	QC12PEP†	QC12PEP†	QC12PEPB†	QC12PEPB†	QC10WEP	QC10WEP	QC10WEP	QC10WEP	QC10WEP
115 – 130 HP 60° V4				QC10PEPB†	QC10WEP	QC10WEP	QC10WEP	QC10WEP	QC10WEP
150 – 200 HP 60° V6				QC10PEPB†	QC10WEP	QC10WEP	QC10WEP	QC10WEP	QC10WEP
200 – 250 HP 90°V6 (3.3L)		QC10WEP*	QC10WEP*	QC10WEP	QC10WEP**	QC8WEP	QC8WEP	QC8WEP	QC8WEP
250 HO – 300 HP 90°V6 (3.4L)					QC8WEP	QC8WEP	QC8WEP	QC8WEP	QC8WEP

† DO NOT substitute spark plugs on these models.

\* QC10WEP may be substituted for QC10PEPB on 2005/2006 200 - 250 HP 90° V6 models.

\*\* H suffix models use QC8WEP

## Spark Plug Part Numbers

Spark Plug	P/N		
	(4-pack)	(6-pack)	(24-pack)
QC12PEP		5001866	775983
QC12PEPB		5006525	763689
QC10WEP	5007419		764643
QC8WEP	5007597		764993
QC10PEPB		5006308	778874

## EMM Service Chart

EMMs cannot be ordered as a regular parts order, since they must be programmed before shipping.

BEFORE ordering a replacement *EMM*:

- Review **Administrative Bulletin 2011-02(A) Revision 1**, for the policies and procedures for replacing an *EMM* for an *Evinrude E-TEC* WITHIN the factory warranty period.
- Review **Parts and Accessories Bulletin 2011-02(P)** for the policies and procedures when replacing an *EMM* for an *Evinrude E-TEC* where the factory warranty period HAS EXPIRED.

Model	2004	2005	2006 – 2007	2008 2	009	2010	2011	2012
15 – 30 HP					587062	587062	587062	587126
40 – 50 HP	586759	586759	586759	586968	586968	586968	586968	587127
60 – 65 HP		586759	586862	586970	586970	586970	586970	587128
75 – 90 HP	586759	586759	586759	586970	586970	586970	586970	587128
115 HP 60° V4			586867	586982	586982 <sup>1</sup>			
115 – 130 HP 60° V4					587048 <sup>2</sup>	587048	587067	587130
150 – 200 HP 60° V6			586707	586982	587048	587048	587067	587130
200 – 250 HP 90° V6 (3.3 L)		586707	586707	586982	587048	587048	587067	587130
250 – 300 HP 90° V6 (3.4 L)				586982	587048	587048	587115	587131

**Notes:**

1. 2009 115 HP: F suffix ONLY
2. 2009 115 H.O. and 130 HP

**IMPORTANT:** Do NOT install an *EMM* from a newer engine on an older engine. Changes in the newer models will result in damage to the *EMM* if installed on an older engine.



# GEARCASE INFORMATION

## 2012 Evinrude E-TEC Gearcase Application Chart

Type	Assembly Part No.	Color	Model Family	Shaft Length	Gear Ratio	Gear Set	Reverse Gear	Oil Capacity
<b>H-Type</b>	5008162	Blue	15 H.O. – 30 HP	15" 20" 25"	13:28 (.465) 2.15:1	392475 (F), 351147 (P)	327655	11 oz (325 ml)
	5008214	White	15 H.O. – 30 HP	15" 20" 25"	13:28 (.465) 2.15:1	392475 (F), 351147 (P)	327655	11 oz (325 ml)
<b>F-Type</b>	5006558	Blue	40 – 60HP	20"	12:32 (.375) 2.67:1	398522 (F,P)	318353	21 oz (620 ml)
	5007628	White	40 – 60HP	20"	12:32 (.375) 2.67:1	398522 (F,P)	318353	21 oz (620 ml)
	5006126	Blue	65 Comm	22.5"	12:32 (.375) 2.67:1	398522 (F,P)	318353	21 oz (620 ml)
<b>S-Type</b>	5006555	Blue	75 – 90 HP	20"	13:26 (.500) 2:1	436746 (F,P)	345992	31.6 oz (935 ml)
	5006426	White	75 – 90 HP	20"	13:26 (.500) 2:1	436746 (F,P)	345992	31.6 oz (935 ml)
<b>S2-Type</b>	5006326	Blue	60° V4	20"	13:26 (.500) 2:1	5006311 (F,P)	352319	31.6 oz (935 ml)
	5006520	White	60° V4	20"	13:26 (.500) 2:1	5006311 (F,P)	352319	31.6 oz (935 ml)
<b>O-Type</b>	5007023	White	75 – 90 HP	25"	12:27 (.444) 2.25:1	435123 (F,P)	336574	32.8 oz (970 ml)
	5007334	Blue	60° V4	25"	12:27 (.444) 2.25:1	435123 (F,P)	336574	32.8 oz (1250 ml)
	5007023	White	60° V4	25"	12:27 (.444) 2.25:1	435123 (F,P)	336574	32.8 oz (970 ml)
	5006554	Blue	60° V6	20"	14:26 (.538) 1.86:1	5004218 (F,P,R)	336561	33.1 oz (980 ml)
	5007134	White	60° V6	20"	14:26 (.538) 1.86:1	5004218 (F,P,R)	336561	33.1 oz (980 ml)
<b>CORO</b>	5007594	White	60° V4	25"	12:27 (.444) 2.25:1	435932 (F,P)	431702	

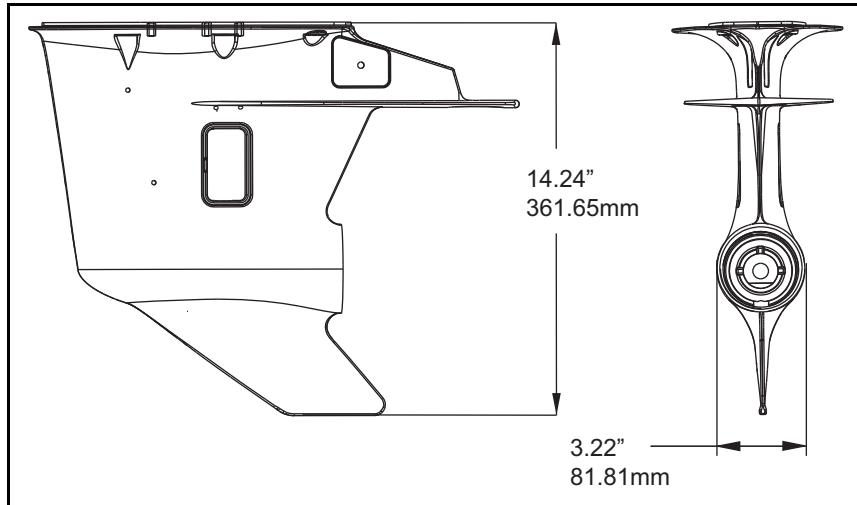
# REFERENCE

Type	Assembly Part No.	Color	Model Family	Shaft Length	Gear Ratio	Gear Set	Reverse Gear	Oil Capacity	
<b>M2-Type</b>	5007705	Blue	60° V6	25"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007669	White	60° V6	25"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007705	Blue	200 H.O. 90° V6 (3.3L) F-suffix	20"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007669	White	200 H.O. 90° V6 (3.3L) F-suffix	20"/25"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007705	Blue	225 – 250 HP 90° V6 (3.3L)	20"/25"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007669	White	225 – 250 HP 90° V6 (3.3L)	20"/25"/30"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007705	Blue	250 – 300 HP 90° V6 (3.4L)	20"/25"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	5007669	White	250 – 300 HP 90° V6 (3.4L)	20"/25"/30"	13:24 (.542) 1.85:1	5007389 (F,P,R)	347373	38.9 oz (1150 ml)	
	<b>CORO</b>	5007670	White	60° V6	25"	13:24 (.542) 1.85:1	5007388 (F,P,R)	5008224	35.8 oz (1060 ml)
		5007670	White	90° V6 (3.3L)	25"/30"	13:24 (.542) 1.85:1	5007388 (F,P,R)	5008224	35.8 oz (1060 ml)
		5007670	White	90° V6 (3.4L)	25"/30"	13:24 (.542) 1.85:1	5007388 (F,P,R)	5008224	35.8 oz (1060 ml)
	<b>L2-Type</b>	5007668	Blue	60° V6	20"	14:26 (.538) 1.86:1	5007663 (F,P)	353544	32.5 oz (960 ml)
5007706		White	60° V6	20"	14:26 (.538) 1.86:1	5007663 (F,P)	353544	32.5 oz (960 ml)	
5007668		Blue	200 H.O. 90° V6 (3.3L)	20"	14:26 (.538) 1.86:1	5007663 (F,P)	353544	32.5 oz (960 ml)	
5007706		White	200 H.O. 90° V6 (3.3L)	20"	14:26 (.538) 1.86:1	5007663 (F,P)	353544	32.5 oz (960 ml)	

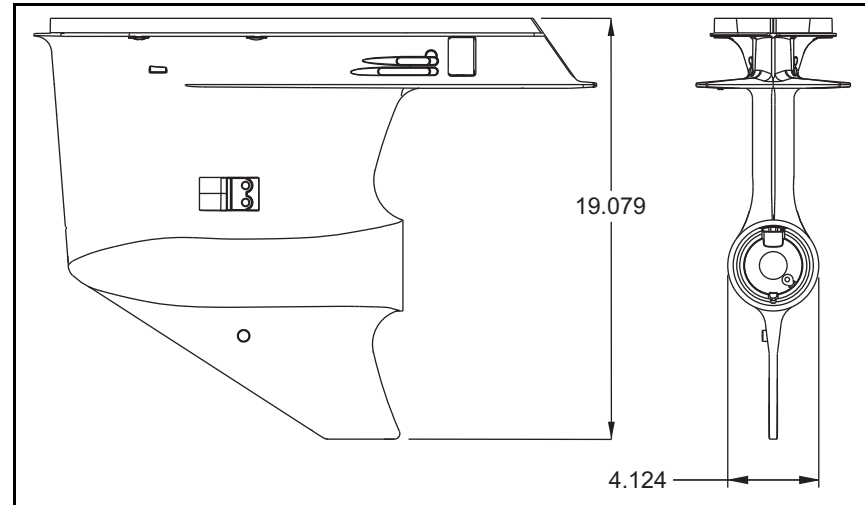


## Evinrude E-TEC Gearcase Line Drawings

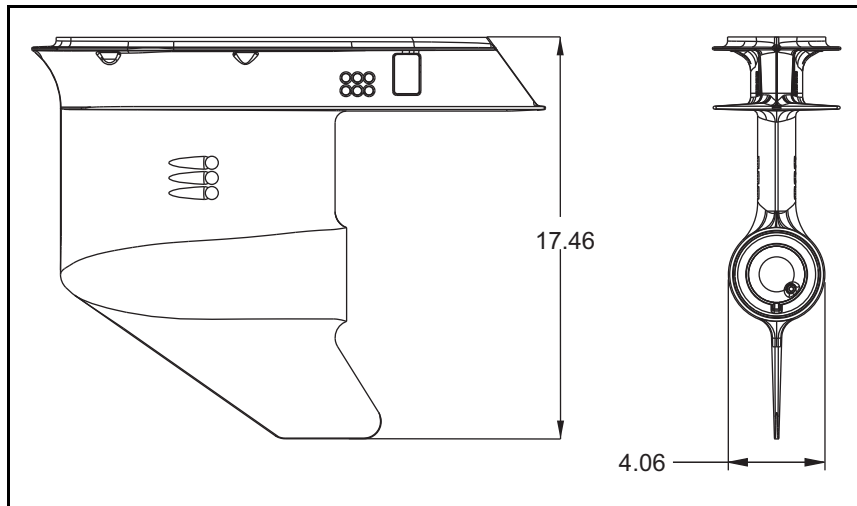
H-Type: 15 H.O. – 30 HP, I2



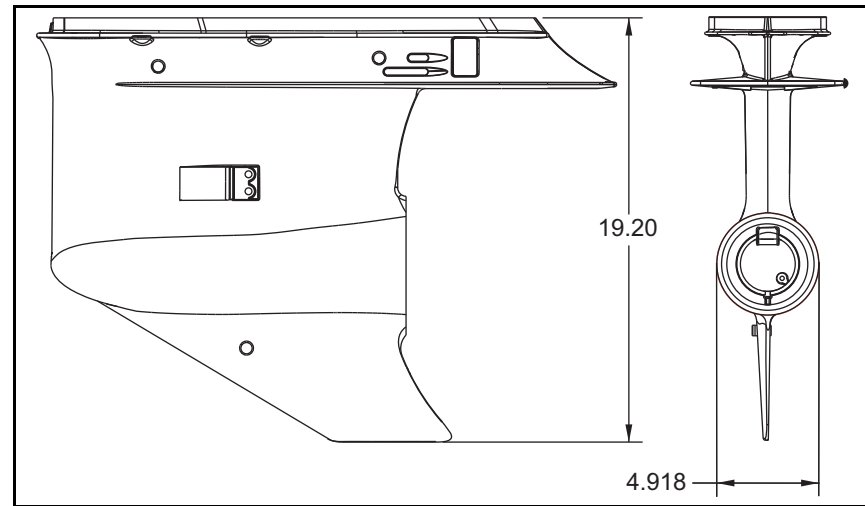
S-Type: 75 – 90 HP (20 inch), I3 and  
S2 Type: 115 – 130 HP (20 inch), V4



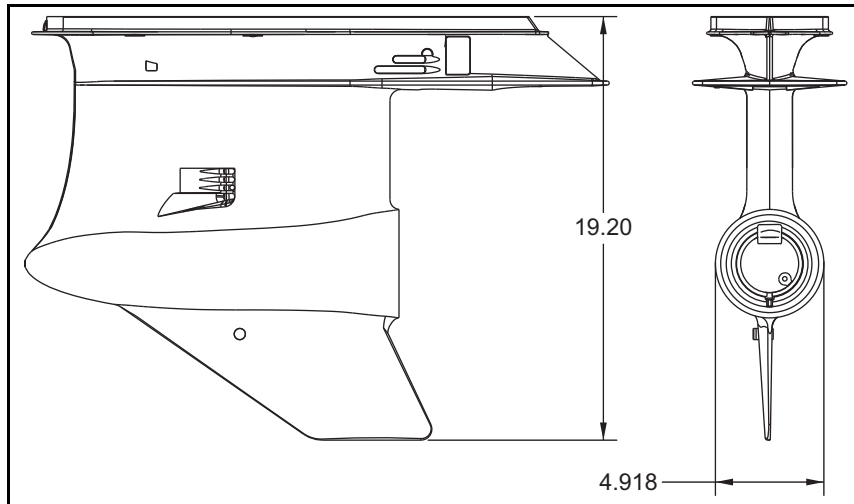
F-Type: 40 – 65 HP, I2



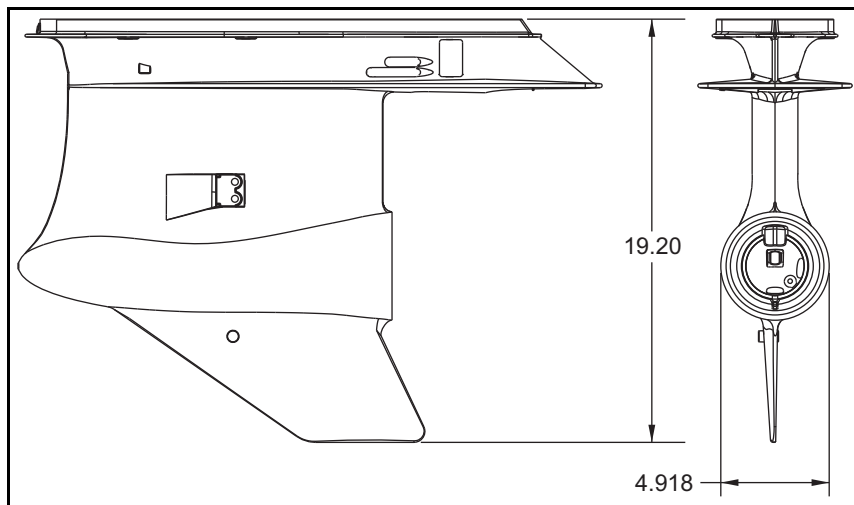
O-Type: 90 – 130 HP (25 inch), I3 & V4 and  
150 – 200 HP (20 inch), 60° V6



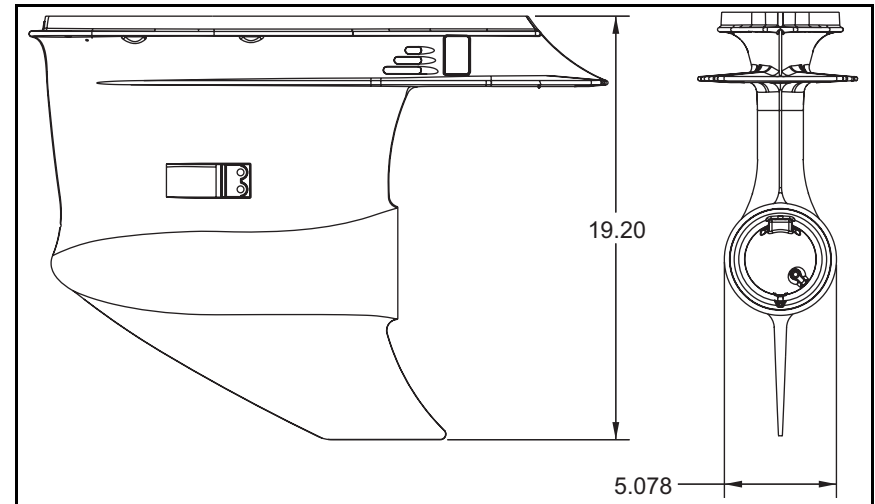
L-Type: No longer produced



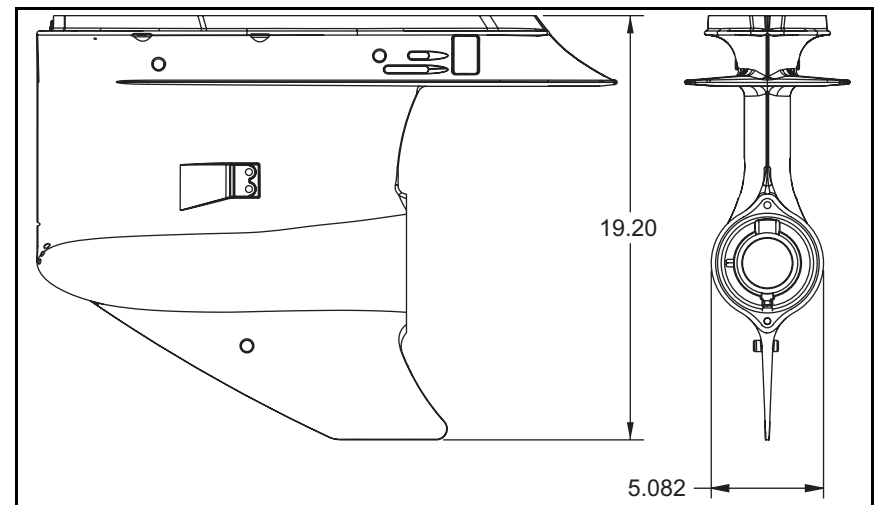
L2-Type: 150 H.O. 60° V6 (20 inch) and  
200 H.O. 90° V6 (3.3L) (20 inch)



M-Type: No longer produced



M2-Type: 150 – 200 HP 60° V6 (25 inch) and  
200 – 300 HP 90° V6 (20, 25 & 30 inch)





## Evinrude E-TEC Shift Rod Chart

Model	Year	Shaft Length	Gearcase Type	Gear Ratio	Shift Rod P/N	Height Adjustment (±1/2 turn)	Shift Rod Dimension (A)
75 – 90 HP	2004-2012	20	S	.50	351179	21 1/4 in (53.975 cm)	31.0 in (78.74 cm)
	2004-2005	25	O	.44	351180	26 1/4 in (66.675 cm)	36.0 in (91.44 cm)
	2006-2012	25	O	.44	352886	26 1/4 in (66.675 cm)	35.85 in (91.05 cm)
115 – 130 HP	2007-2012	20	S2	.50	350464	20 15/16 in (53.20 cm)	30.57 in (77.65 cm)
	2007-2012	25	O	.44	352957	25 15/16 in (65.90 cm)	35.55 in (90.29 cm)
150 – 200 HP 60° V6	2007-2012	20	L / L2	.54	350464	20 15/16 in (53.20 cm)	30.57 in (77.65 cm)
	2007-2012	20	O	.54	350464	20 15/16 in (53.20 cm)	30.57 in (77.65 cm)
	2007-2012	25	M / M2	.54	352808	25 15/16 in (65.90 cm)	35.32 in (89.71 cm)
200 – 300 HP 90° V6	2005-2012	20	L / L2	.54 / .58	329864	21 29/32 in (55.60 cm)	31.49 in (79.98 cm)
	2005-2010	25	L / L2	.54 / .58	329865	26 29/32 in (68.30 cm)	36.49 in (92.68 cm)
	2005-2012	20	M / M2	.54	347300	21 29/32 in (55.60 cm)	31.25 in (79.37 cm)
	2005-2012	25	M / M2	.54	347301	26 29/32 in (68.30 cm)	36.25 in (92.07 cm)
	2005-2012	30	M / M2	.54	347391	31 29/32 in (81.00 cm)	41.25 in (104.77 cm)



## External Water Screens and Applications

This chart lists standard and available optional water screens. For applications which may require additional cooling water, select optional water screens based on the type of application.

<b>M-Type, M2-Type and L2-Type Gearcases</b>				
<b>Water Screen Kit †</b>	<b>Port</b>	<b>Starboard</b>	<b>Height</b>	<b>Application</b>
High Performance, P/N 5005124 (L2 Standard)	348479	348480	Flush	High Speed (over 60 MPH)
High Flow, P/N 5005063	350264	350265	0.060	General
Ultra High Flow, P/N 5006337 (M2 Standard)	350946	350945	0.160	Aerated
Ultra High Flow +1/4, P/N 5007081	350790	350791	0.410	Severely aerated
Screws, P/N 337061				
† Note: Kits include both screens, screws and instruction sheet.				
<b>O-Type Gearcase</b>				
<b>Individual Water Screens ††</b>	<b>Port</b>	<b>Starboard</b>	<b>Height</b>	<b>Application</b>
Standard	337778	337778	0.023	General
Optional	339247	339247	0.055	Aerated
Screws, P/N 337061				
†† Note: Screens are symmetrical, use two per outboard.				
<b>S-Type and S2-Type Gearcases</b>				
<b>Individual Water Screens ††</b>	<b>Port</b>	<b>Starboard</b>	<b>Height</b>	<b>Application</b>
Standard (through 2006)	340495	340495	Flush	General
Standard (2007 and newer)	337778	337778	0.058	Aerated / Weedy
Optional	339247	339247	0.200	Severely aerated
Screws, P/N 340665				

†† Note: Screens are symmetrical, use two per outboard.



## 2012 WATER PRESSURE CHART

This chart lists typical water pressure readings for 2012 model outboards for boat speeds up to 50 mph (80 kph/43 knots) and is provided as a general guide for use when troubleshooting over-heating or over-cooling issues.

Water pressure readings can vary depending on water inlet screen type, hull design, set up, and operating conditions.

RPM	Idle	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500
Model	Water Pressure (psi/kpa)										
<b>40 – 65 HP</b>	4-5 (27-34)	5-6 (34-41)	7-9 (48-62)	10-11 (68-75)	14-15 (96-103)	15-17 (103-117)	16-18 (110-124)	16-18 (110-124)	14-16 (96-110)	12-14 (82-96)	10-12 (68-82)
<b>75 – 90 HP</b>	5-6 (34-41)	10-11 (68-75)	12-14 (82-96)	15-17 (103-117)	16-18 (110-124)	16-18 (110-124)	13-15 (89-103)	15-17 (103-117)	16-18 (110-124)	19-21 (131-144)	20-22 (137-151)
<b>115 – 130 HP 60° V4</b>	5-6 (34-41)	9-10 (62-68)	12-14 (82-96)	15-17 (103-117)	18-20 (124-137)	20-21 (137-144)	20-22 (137-151)	21-23 (144-158)	21-23 (144-158)	21-23 (144-158)	21-23 (144-158)
<b>150 – 200 HP 60° V6</b>	4-5 (27-34)	9-11 (62-75)	14-16 (96-110)	17-19 (117-131)	19-21 (131-144)	20-22 (137-151)	20-22 (137-151)	21-23 (144-158)	22-24 (151-165)	23-25 (158-172)	24-26 (165-179)
<b>200 – 250 HP 90° V6 (3.3L)<sup>1</sup></b>	3-5 (27-34)	7-9 (48-62)	8-10 (55-68)	9-11 (62-75)	10-12 (68-82)	11-13 (75-89)	12-14 (82-96)	13-15 (89-103)	14-16 (96-110)	15-17 (103-117)	16-18 (110-124)
<b>250 HO – 300 HP 90° V6 (3.4L)<sup>1</sup></b>	4-6 (27-41)	7-11 (48-75)	9-12 (62-82)	10-14 (68-96)	12-15 (82-103)	14-16 (96-110)	15-18 (103-124)	16-19 (110-131)	18-20 (124-137)	18-25 (124-172)	20-30 (137-207)

**Notes:**

1. Water pressure readings in excess of 40 psi (275 kpa) are possible for these models at boat speeds above 50 MPH (80 KPH/43 knots).

## 2012 RPM QUICK REFERENCE CHART

Model	Recommended Operating Range	Optimum RPM Range	RPM @ Rated HP
15 H.O.	5000 – 5500	5000 – 5250	5250
25 HP	5500 – 6000	5400 – 5750	5750
30 HP	5500 – 6000	5400 – 5750	5750
40 HP	5000 – 6000	5400 – 5600	5500
50 HP	5500 – 6000	5600 – 5750	5750
60 HP	5500 – 6000	5600 – 5750	5750
65 HP Commercial	5500 – 6000	5600 – 5750	5750
75 HP	4500 – 5500	5000 – 5200	5000
90 HP	4500 – 5500	5000 – 5200	5000
115 – 130 HP 60° V4	5500 – 6000	5500 – 5750	5750
150 HP/150 H.O. 60° V6	4850 – 5850	5500 – 5600	5350
175 HP 60° V6	4850 – 5850	5500 – 5600	5350
200 HP 60° V6	4850 – 5850	5600 – 5850	5350
200 H.O. 90° V6 (3.3L)	4500 – 5800	5500 – 5700	5150
225 HP/225 H.O. 90° V6 (3.3L)	4500 – 5800	5500 – 5700	5150
250 HP 90° V6 (3.3L)	4500 – 5800	5500 – 5700	5150
250 H.O. 90° V6 (3.4L)	4500 – 6000	5500 – 5800	5250
300 HP 90° V6 (3.4L)	5000 – 6000	5500 – 5800	5500

### How to Use the RPM Quick Reference Chart

When selecting a propeller for an outboard and boat application, refer to the recommended wide open throttle operating range for the outboard model.

When determining propeller selection, choose a propeller that will best suit the customer's needs. For example:

- choose a higher pitch propeller for low-to-mid rpm for light load cruising.
- choose a lower pitch propeller to attain top rpm for water skiing or other high load applications.

For best overall performance choose a propeller that allows the outboard to run in the optimum rpm range, which is usually the point of peak horsepower.

Remember, only a thorough water test will determine which propeller works best for a particular application.



# MAINTENANCE

## 26 Point Inspection Checklist

Use the 26 Point Inspection Checklist to explain required service for the *Evinrude E-TEC* 300 hour/3 year service, and to help “sell” a maintenance plan to your customer. The parts department can use the checklist to stock service supplies. Service technicians can use the checklist to check off service items as they are completed.

Description	Engine Care Product	Every 300 hours or 3 years <sup>(1)</sup>
Emergency stop circuit and lanyard (check operation)		X
Controls, steering and tilting, check operation		X
Engine mounting hardware, re-tighten		X
Fasteners, tighten any loosened components		X
Water intake screens, check condition		X
Cooling system, check water pump indicator		X
Anticorrosion anodes, check condition		X
Gearcase, check condition		X
Propeller, check condition		X
Fuel and oil systems, inspect and repair leaks		X
Check battery connections and condition		X
Access <i>EMM</i> information (resolve any service codes)		X
Electrical and ignition wires (inspect for wear or chafing)		X

Description	Engine Care Product	Every 300 hours or 3 years <sup>(1)</sup>
Fuel filter, replace <sup>(2)</sup>		X
Gearcase lubricant, replace	A	X
Spark plugs, inspect or replace <sup>(3)</sup>		X
Thermostats, inspect and check operation <sup>(3)</sup>		X
Grease fittings, lubricate	C	X
Power trim/tilt and fluid level, inspect	B	X
Propeller shaft splines, inspect and lubricate <sup>(4)</sup>	C	X
Starter pinion shaft, inspect and lubricate <sup>(4)</sup>	D	X
Control cables, inspect and adjust		X
Steering cable, inspect and lubricate		X
Water pump, inspect / replace		X
Exhaust back pressure fitting (if equipped)		X
Oil filters remote tank / engine (115 – 300 HP models)		X

(1) Average recreational use. Commercial use, heavy use or use in salt or polluted water requires more frequent inspection and maintenance.

(2) Boat mounted fuel water separating filters should be replaced annually

(3) Emission-related component.

(4) Annually in salt water applications

A – *HPF Pro* Gearcase Lubricant

B – Trim and Tilt Fluid, use Biodegradable Fluid on single ram hydraulic systems, use Power Trim and Tilt Fluid on three ram hydraulic systems

C – *Triple Guard* Grease

D – Use Starter Bendix Lube only

## SERVICE LITERATURE

2012

**Note:** Beginning with the 2012 model year, paper parts catalogs are no longer offered. Use *PartSmart* or the online Electronic Parts Catalog.

Description	English Operator's Guide	French Operator's Guide	English Service Manual	French Service Manual
<b><i>Evinrude E-TEC Models</i></b>				
15 – 30 HP	216067	216068	5008732	5008733
40 – 60 HP	216069	216070	5008734	5008735
65 HP Commercial	216071	216072	5008734	5008735
55 HP MFE	216073	216074	5008736	5008737
75 – 90 HP	216075	216076	5008734	5008735
115 – 130 HP 60° V4	216079	216080	5008738	5008739
150 – 200 HP 60° V6	216079	216080	5008738	5008739
200 – 300 HP 90° V6	216079	216080	5008740	5008741

Service Manual Sets		
Description	English	French
2012 Service Manual Set, <i>Evinrude E-TEC</i>	5008744	5008745
2012 Service Manual CD, <i>Evinrude E-TEC</i>	5008742	5008743

**Note:** Service Manual Sets Include:

All Service Manuals except 55 HP MFE, the current Predelivery and Installation Guide, a Special Tools Guide and the current Product Service Update.

Reference		
Description	English	French
2012 Flat Rate Guide, <i>Evinrude E-TEC Models</i>	5008492	5008493
2012 Warranty Procedures	5008494	500849
2012 Product Service Update	5008818	5008819
Predelivery & Installation, <i>Evinrude E-TEC Models</i>	5008815	5008816
Special Tools Guide, <i>Evinrude E-TEC Models</i>	5008526	5008649



# BULLETINS

## 2011 Bulletin Index

Bulletin Number	Models	Subject / Description
<b>Administrative (A)</b>		
2011-01(A)	<i>Evinrude/Johnson</i> Outboards	DealerPort Parts and Accessory Claim Process
2011-02(A) Revision 1	All <i>Evinrude E-TEC</i> Outboards	<i>EMM</i> Replacement
<b>Predelivery (D)</b>		
2011-01(D)	All 15 – 30 HP <i>Evinrude E-TEC</i>	Engine Shaft Length and Installation
<b>Parts and Accessories (P)</b>		
2011-01(P)	<i>Evinrude ICON</i> Remote Controls	<i>ICON</i> Connector Alignment
2011-02(P)	All <i>Evinrude E-TEC</i> and <i>Evinrude DI</i> Outboards	<i>EMM</i> Replacement
2011-03(P) Revision 1	All	<i>I-Command</i> Software, Version 2.1.0
2011-04(P) Revision 1	All	<i>I-Command</i> Vessel Mismatch Error
2011-05(P)	<i>Evinrude E-TEC</i> 40 – 130	Trim and Tilt Seal Kits
2011-06(P)	<i>Evinrude ICON</i> Concealed Side Mount Remote Control Systems	<i>ICON</i> Concealed Side Mount Remote Control Kit, P/N 765425
<b>Service (S)</b>		
2011-01(S)	All 15 – 30 HP <i>Evinrude E-TEC</i>	Lower Engine Cover Seal Kit, P/N 5008176
2011-02(S)	All <i>Evinrude E-TEC</i> and <i>Evinrude DI</i> Outboards	New <i>Evinrude</i> Diagnostics Software
2011-03(S)	All Outboards	New 2011 EPA Fuel Component Regulations
2011-04(S)	All <i>Evinrude E-TEC</i> 90° V6 (3.3 and 3.4 L) Outboards	Conversion from L2-Type to M2-Type Gearcase

## REFERENCE

Bulletin Number	Models	Subject / Description
<b>Service (S)</b>		
2011-05(S) Revision 1	All <i>Evinrude E-TEC</i> 15–300 HP outboards, 1999–2001 <i>Evinrude Ficht</i> 75–250 HP outboards, and 2002–2006 <i>Evinrude DI</i> 75–250 HP outboards	Injector Coefficient Database (Replaces Service Bulletin 2010-07(S))
2011-06(S)	All	New 2011 EPA Fuel Component Regulations
2011-07(S)	All	New Service Tools
2011-08(S)	2007 – 2012 <i>Evinrude E-TEC</i> 115 – 200 HP 60° V4 and V6 (1.7 and 2.6L)	Engine Cover Modification
<b>Warranty (W)</b>		
2011-01(W)	2011 <i>Evinrude E-TEC</i> 250 HP 90° V6 (3.4 L) Outboards	Exhaust Grommet and Muffler Assembly <b>This bulletin is replaced by Warranty Bulletin 2011-03(W).</b>
2011-02(W)	2011 <i>Evinrude E-TEC</i> 200–300 HP 90°V6 (3.3 L and 3.4 L) Outboards	<b>SAFETY CAMPAIGN:</b> Incorrectly Installed Clamp on Fuel Hose
2011-03(W)	2011 and 2012 <i>Evinrude E-TEC</i> 250 HP 90° V6 (3.4 L) Outboards	Exhaust Grommet Assembly with NEW Overboard Indicator. <b>This bulletin replaces Warranty Bulletin 2011-01(W).</b>







# APPENDIX



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The table provides a reference to information presented in the 2009 – 2011 Product Service Updates.

Model	Topic	Where to Find (Book Year/Section)	Other References
15 – 30 HP	New Model Rigging Information	2009 – Rigging	Predelivery Bulletin 2008–02(D)
15 – 30 HP	New Model Warning System Information	2009 – Rigging	
15 – 30 HP	Step Required to Install Battery Charge Module	2009 – Diagnostic Software	
15 – 30 HP	EMM Light Emitting Diodes (LEDs)	2009 – Engine Management Module	
15 – 30 HP	Code 120; Oil Level Switch Open Circuit Detected	2009 – Service Codes	
15 – 30 HP	Fuel Injector Seal Kits	2009 – Fuel System	
15 – 30 HP	Fuel Injector and Vapor Separator Servicing, New Procedure	2009 – Fuel System	Service Bulletin 2008–07(S)
15 – 30 HP	Oil Recirculation Diagram (New Model)	2009 – Oiling Systems	
15 – 30 HP	New Accessory Kits For <i>Evinrude E–TEC</i> 25/30 HP	2009 – Parts & Accessories	
15 – 30 HP	Flywheel Servicing	2010 – Service Tips	
15 – 30 HP	Water Pump Servicing	2010 – Service Tips	
15 – 30 HP	Engine Management Software	2011 – Product Improvements	Warranty Bulletin 2010–09(W)
15 – 30 HP	Engine Wiring Harness Changes	2011 – Product Improvements	
15 – 30 HP	New Flywheel Torque Specification	2011 – Product Improvements	Service Bulletin 2010–08(S)
15 – 30 HP	Lower Mounts	2011 – Product Improvements	
15 – 30 HP	<i>SystemCheck</i> Warnings	2011 – Service Information	
15 – 30 HP	Engine Overheat Damage	2011 – Service Information	
15 – 30 HP	Water Pump Impeller Kit, P/N 5008185	2011 – Service Information	
15 – 30 HP	Gearcase Flushing Adapter	2011 – Service Information	
15 – 30 HP	Oil Cap Assembly	2011 – Product Improvements	
40 – 65 HP	Rope Start Models – Revised Oil Pump Wire Harness Routing	2009 – Ignition & Electrical	
40 – 65 HP	New Trim and Tilt Assembly, P/N 5007774 – Manual Relief Valve Improved	2009 – Midsection	
40 – 65 HP	Electric Starter Motor Change	2011 – Product Improvements	
40 – 65 HP	Throttle Body Assemblies	2011 – Product Improvements	
40 – 65 HP	Exhaust Housings	2011 – Product Improvements	
40 – 90 HP	Air Bubbles In Oil Line	2009 – Oiling Systems	
40 – 90 HP	Change to Flywheel Service Procedures	2009 – Ignition & Electrical	



Model	Topic	Where to Find (Book Year/Section	Other References
40 – 90 HP	New Oil Tank and Oil Pump Assemblies	2010 – Product Improvements	
40 – 90 HP	Neutral Switch	2010 – Product Improvements	
40 – 90 HP	Installing a Second Battery	2010 – Service Tips	
40 – 200 HP	Inline and 60° V Models – Cylinder Head Changes	2010 – Service Tips	
40 – 300 HP	Longer Engine Mounting Screws	2009 – Rigging	Parts & Accessories Bulletin 2008–05(P)
40 – 300 HP	Cylinder Head Temperature Sensor Installation Change	2009 – Ignition & Electrical	Service Bulletin 2008–01(S)
40 – 300 HP	TNT Models – Melted Wiring and Bonding Wires	2009 – Ignition & Electrical	
40 – 300 HP	Fuel Injector Seal Kits	2009 – Fuel System	
40 – 300 HP	Vapor Separator Filter, P/N 354190, Now Available	2009 – Fuel System	
75 – 90 HP	2008 and Newer – Changes to Temperature Monitoring	2009 – Engine Management Software	
75 – 90 HP	New Starter Motor	2010 – Product Improvements	
75 – 90 HP	Installation of Oil Pump Assembly	2011 – Service Information	
75 – 130 HP	New Trim and Tilt Assembly, P/N 5007776 – Manual Relief Valve Improved	2009 – Midsection	
75 – 130 HP	Single Piston Hydraulic Trim & Tilt Assemblies	2011 – Service Information	
75 – 300 HP	External Water Screen Application Chart	2009 – Cooling System	
		2010 – Reference	
		2011 – Reference	
75 – 300 HP	Code 40; Engine Overheat, Low Speed (Port Or Single)	2009 – Service Codes	
75 – 300 HP	Driveshaft Bearing Housing Change to O–ring	2009 – Gearcase	
75 – 300 HP	Code 70; Engine Overheat, Low Speed (Starboard)	2009 – Service Codes	
75 – 300 HP	O–Ring, P/N 314728, Supersedes to P/N 354731	2010 – Product Improvements	
115 HP	Over–Oiling Issue	2009 – Oiling Systems	
115 – 130 HP	How to Identify S2–Type Gearcase	2009 – Gearcase	
115 – 130 HP	Oil Recirculation Changes 2008 & Older/2009 & Newer	2009 – Oiling Systems	
115 – 130 HP	S2–Type Gearcase – Pinion Screw Torque	2009 – Gearcase	
115 – 130 HP	S2–Type Gearcase – Stuck Driveshaft	2009 – Gearcase	
115 – 130 HP	Air Intake and Air Silencer	2010 – Product Improvements	
115 – 200 HP	60° Models – Powerhead Replacement Kits Revised Oil Hose Routing	2009 – Powerhead	
115 – 200 HP	60° Models – New Flywheel Cover	2009 – Rigging	

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Model	Topic	Where to Find (Book Year/Section)	Other References
115 – 200 HP	60° Models – Ignition Coil Mounting Bracket, Mounting Location Changed	2009 – Ignition & Electrical	
115 – 200 HP	60° Models – Starter Cable Service Kit, Improves Starting	2009 – Ignition & Electrical	
115 – 200 HP	60° Models – Water Separating Fuel Filter Added to 2009 Models	2009 – Fuel System	
115 – 200 HP	60° Models – Vapor Separator, P/N 5006084, Pressure Test Port Changed	2009 – Fuel System	
115 – 200 HP	60° Models – Rear Oil Manifold Bracket	2009 – Oiling Systems	
115 – 200 HP	60° Models – Improved Shift Lever, Eliminates Lost Motion	2009 – Gearcase	
115 – 200 HP	60° Models – Oil Filter Installation	2009 – Rigging	
115 – 200 HP	60° Models – Flywheel Stud	2010 – Product Improvements	
115 – 200 HP	60° Models – Lower Engine Cover Changes	2011 – Product Improvements	
115 – 300 HP	60° and 90° Models – V6 Starter Motors Differences and Changes	2009 – Ignition & Electrical	
115 – 300 HP	60° and 90° Models – 2008 and Newer – Service Fuel Injector Electrical Connectors	2009 – Fuel System	
115 – 300 HP	60° and 90° Models – Code 77; Start Assist Circuit Over Current Detected – False Setting	2009 – Service Codes	
115 – 300 HP	60° and 90° Models – Oil Pressure Sensor	2011 – Product Improvements	
115 – 300 HP	60° and 90° Models – Exhaust Backpressure Fitting	2011 – Service Information	
115 – 300 HP	60° and 90° Models – New Engine Wiring Harnesses	2009 – Ignition & Electrical	
115 – 300 HP	60° and 90° Models – Exhaust Grommet	2011 – Product Improvements	
115 – 300 HP	60° and 90° Models – Starter Drive Gear Engagement	2011 – Service Information	
115 H.O. – 130 HP	New Water Pump Kit, P/N 5007556	2009 – Cooling Systems	
115 H.O. – 130 HP	New Impeller Housing, P/N 5007554	2009 – Cooling Systems	
115 H.O. – 130 HP	V4 Exhaust Adapter Improvements	2009 – Midsection	
115 H.O. – 300 HP	<i>EMM</i> Changes	2009 – Engine Management Module	
115 H.O. – 130 HP	Inductive Ignition New On These Models	2009 – Ignition & Electrical	
150 – 200 HP	60° Models – Powerhead Alignment	2009 – Powerhead	
150 – 200 HP	60° Models – New Inner Exhaust Housing, P/N 354148, Improved Water Flow	2009 – Midsection	



Model	Topic	Where to Find (Book Year/Section	Other References
150 – 200 HP	60° V6 Models, Code 152 Issue	2011 – <i>Evinrude ICON</i> Remote Control	
150 – 300 HP	"Stars and Stripes" Decal Kits	2009 – Parts & Accessories	
150 – 300 HP	How to Identify L2-Type Gearcase	2009 – Gearcase	
150 – 300 HP	Powerhead Installation, Apply Permatex #2 to Gasket Area	2009 – Powerhead	
150 – 300 HP	Gearcase Flushing Adapter	2011 – Service Information	
150 – 300 HP	Exhaust Housing to Gearcase Alignment Pins	2011 – Service Information	
200 – 250 HP	90° Models – Adapter Kit, P/N 5007589	2009 – Midsection	
200 – 250 HP	90° (3.3 L) Models – Adapter, P/N 5001496	2009 – Midsection	
200 – 250 HP	90° Models – Issue With Flushing Adapter, P/N 775385	2009 – Cooling System	
200 – 250 HP	90° Models – Knock Sensors Added to These Models	2010 – Product Improvements	
200 – 250 HP	90° Models – 3.3 L Models – Water Plate, P/N 347251	2010 – Service Tips	
200 – 250 HP	90° Models – Ignition Coil Mounting Location, Coil Damage	2009 – Ignition & Electrical	
200 – 250 HP	90° Models – Pinched Oil Lines	2009 – Oiling Systems	
200 – 250 HP	90° Models – Powerhead to Adapter Gaskets Different	2009 – Midsection	
200 – 250 HP	90° Models – Trim and Tilt Assembly Improvements	2009 – Midsection	
200 – 250 HP	90° Models – New Pinion Bearing, P/N 5007751	2009 – Gearcase	
200 – 250 HP	90° Models – Trim Limit Rod, P/N 354185	2010 – Product Improvements	
200 – 250 HP	90° Models – Oil Recirculation System Hoses	2011 – Product Improvements	
200 – 250 HP	90° Models – Shift Switch Change	2011 – Product Improvements	
200 – 250 HP	90° Models – Powerhead Change	2011 – Product Improvements	
200 – 250 HP	90° Models – Ordering Replacement Gearcases	2011 – Service Information	
200 – 250 HP	90° Models – 200 – 300 HP <i>Icon</i> Conversion Kit Installation	2011 – <i>Evinrude ICON</i> Remote Control	
200 – 250 HP	90° Models – .58 Ratio L2-Type Gearcase Replaced	2011 – Product Improvements	
250 H. O.	3.4 L Models – Important Engine Management Software Update	2009 – Engine Management Software	Warranty Bulletin 2008–04 (W)
250 H.O.	3.4 L Models – Water Pump Installation	2009 – Cooling Systems	Warranty Bulletin 2008–04(W)
250 – 300 HP	3.4 L Models – Important Engine Management Software Update	2009 – Engine Management Software	Warranty Bulletin 2008–06 (W)
250 – 300 HP	3.4 L Models – Codes 1 Through 6: Excessive Knock Detected	2009 – Service Codes	
250 – 300 HP	3.4 L Models – Rear Oiling System	2011 – Product Improvements	Predelivery Bulletin 2010–02(D)
250 – 300 HP	3.4 L Models – Cooling System Change	2011 – Product Improvements	

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Model	Topic	Where to Find (Book Year/Section)	Other References
250 – 300 HP	3.4 L Models – Codes 7 and 8; Knock Sensor Open Circuit Detected	2009 – Service Codes	
250 – 300 HP	3.4 L Models – Knock Sensors Added to These Models	2009 – Ignition & Electrical	
250 – 300 HP	3.4 L Models – New Water Pump Kit, P/N 5007972	2009 – Cooling Systems	
250 – 300 HP	3.4 L Models – New Impeller Housing, P/N 5007968	2009 – Cooling Systems	
250 – 300 HP	3.4 L Models – Temperature Sensor and Clamp Servicing	2009 – Cooling Systems	Warranty Bulletin 2008–02(W)
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250 – 300 HP	3.4 L Models – F Suffix – Adapter, P/N 5007973	2009 – Midsection	
250 – 300 HP	3.4 L Models – C Or S Suffix – Adapter, P/N 5007971	2009 – Midsection	
250 – 300 HP	3.4 L Models – Code 36; Rear Oil Injection Pump Open Circuit	2011 – Service Information	
300 HP	Important Engine Management Software Update	2009 – Engine Management Software	Warranty Bulletin 2008–03 (W)
300 HP	M2–Type Gearcase, Alignment Pins	2009 – Gearcase	
4–Stroke	4–stroke Accessories and Service Kits	2009 – Parts & Accessories	
All	Overboard Indicator Requirements	2009 – Cooling System	
All	2009 Water Pressure Chart	2009 – Cooling System	
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All	Pressure Relief Valve Improvement	2008 – Cooling System	
All	Melted Propeller Hub, Modifications to Help Prevent	2009 – Cooling System	
All	Unleaded Gasoline	2009 – Fuel System	Service Bulletin 2006–06(S)
All	Alcohol Extended Fuels	2009 – Fuel System	
All	Fuel Related Problem Prevention	2009 – Fuel System	
All	Fuel System Maintenance	2009 – Fuel System	
All	Gearcase Application Chart	2009 – Gearcase	
		2010 – Reference	
		2011 – Reference	
All	Gearcase Identification Chart (Line Drawings)	2009 – Gearcase	
		2010 – Reference	
		2011 – Reference	
All	<i>Evinrude E–TEC</i> Shift Rod Chart	2011 – Reference	



Model	Topic	Where to Find (Book Year/Section	Other References
All	How to Identify Gear Ratios	2009 – Gearcase	
All	Spark Plug Chart	2009 – Ignition & Electrical	
		2010 – Reference	
		2011 – Reference	
All	TPS Calibration	2009 – Ignition & Electrical	
All	Starter Motor Service Parts	2010 – Ignition & Electrical	
All	Bulletin Index (2008 and 2009)	2010 – Reference	
All	Bulletin Index (2010)	2011 – Reference	
All	Oil Requirements	2009 – Oiling System	
All	Powerhead Identification Tag	2009 – Powerhead	
All	Engine Model Number On Serial Number Tag Different Than Model Number Stored In <i>EMM</i>	2009 – Powerhead	
All	Checklist to Return Outboard to Service After Powerhead Replacement/rebuild	2009 – Powerhead	
All	Break-in Oil Cycle	2009 – Powerhead	
All	Key Switch Accessory Circuit (Amperage Limit)	2009 – Rigging	
All	Key Switch Orientation (Water Drain)	2010 – Rigging	
All	Throttle Cable Adjustment	2009 – Rigging	
All	RPM Quick Reference Chart	2009 – Rigging	
		2010 – Reference	
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All	How to Use RPM Quick Reference Chart	2009 – Rigging	
		2010 – Reference	
		2011 – Reference	
All	Oetiker Clamp Selection	2009 – Rigging	
All	Oetiker Clamp Selection Chart	2009 – Rigging	
All	Freeze Frame Data Feature	2009 – Diagnostic Software	
All	Changes to Profile Screens	2009 – Diagnostic Software	
All	Two-minute History Report, New Feature On V 3.0	2009 – Diagnostic Software	
All	Changes to Fuel Control Feature	2009 – Diagnostic Software	
All	Stop Break-in Feature Removed	2009 – Diagnostic Software	
All	Ignition Voltage Display – Inductive Ignition Models	2009 – Diagnostic Software	
All	Error Message – Windows NT V 5.0	2009 – Diagnostic Software	



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Model	Topic	Where to Find (Book Year/Section)	Other References
All	Error Message – Invalid Chipset	2009 – Diagnostic Software	
All	Diagnostic Power Supply, P/N 587005	2009 – Diagnostic Software	
All	<i>EMM</i> Service Chart	2009 – Engine Management Module	
		2010 – Reference	
		2011 – Reference	
All	Codes 81 Through 86; Ignition Timing Circuit Open Detected	2009 – Service Codes	
All	Code 97; Intermittent Switched B+ Detected	2009 – Service Codes	
All	Codes 101 Through 106; Ignition Timing Circuit Short Detected	2009 – Service Codes	
All	New Crankshaft Position Sensor, P/N 587014	2009 – Ignition & Electrical	
All	Troubleshooting 5 Volt Sensor Circuit	2009 – Ignition & Electrical	
All	Change to Starter Solenoid Servicing	2009 – Ignition & Electrical	Service Bulletin 2008–04(S)
All	Corrosion	2009 – Ignition & Electrical	
All	Galvanic Corrosion	2009 – Ignition & Electrical	
All	Stray Current Corrosion	2009 – Ignition & Electrical	
All	Corrosion Protection Testing	2009 – Ignition & Electrical	
All	Fuel Control Adjustment Not Available	2009 – Fuel System	
All	Check Fuel Injectors When Water Found In Fuel	2009 – Fuel System	
All	<i>Evinrude / Johnson XD–100</i> Outboard Oil	2009 – Oiling Systems	
All	<i>Evinrude / Johnson XD–50</i> Outboard Oil	2009 – Oiling Systems	
All	Oil Type Setting, H.O. Models <i>XD–100</i> Setting Not Available	2009 – Oiling Systems	
All	Oil Type Setting, Use TCW–3 Setting With <i>XD–100</i> Oil (Extreme Applications)	2009 – Oiling Systems	
All	<i>Evinrude / Johnson XD–30</i> Outboard Oil	2009 – Oiling Systems	
All	Multi–point Oiling	2009 – Oiling Systems	
All	Tip to Check For Aerated Cooling Water	2009 – Cooling Systems	
All	Mounting Screw Torque	2009 – Gearcase	
All	Gear Oil Smell	2009 – Gearcase	
All	Propeller Shaft Bearing Housings	2010 – Product Improvements	
All	Use of Electrical Grease	2010 – Service Tips	
All	Electrical Test Adaptors	2010 – Service Tips	
All	Water Vapor From Exhaust Relief	2010 – Service Tips	
All	Engine Cover Care	2010 – Service Tips	



Model	Topic	Where to Find (Book Year/Section	Other References
All	Fuel Hoses	2011 – Product Improvements	
All	Maintenance Recommendations	2011 – Service Information	
All	FAQ: Spark Plugs	2011 – Service Information	
All	Voltage Drop Test	2011 – Service Information	
All	Inductive Ignition System	2011 – Service Information	
All	Injector Coefficient Database	2011 – Service Information	Service Bulletin 2010–07(S)
All	Internet Browser Blocks Download of Injector Coefficient File	2011 – Service Information	
All	Fuel Issues	2011 – Service Information	
All	Paint (Spray Can P/N's and PPG Paint Codes)	2011 – Reference	
All	Battery Cable Guide	2011 – Reference	
All	Battery Recommendations	2011 – Reference	
All	Fuse Chart (Identification/Part Number/rating)	2010 – Reference	
All		2011 – Reference	
All	Service Literature Listing (2010 & 2011)	2011 – Reference	
<i>ICON</i> Control	Features	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Rigging Kits	2010 – <i>Evinrude ICON</i> Remote Control	
		2011 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Conversion Kits	2010 – <i>Evinrude ICON</i> Remote Control	
		2011 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Rigging Kit Selection Chart	2010 – <i>Evinrude ICON</i> Remote Control	
		2011 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Remote Control System Installation	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	Master Power/Key Switch	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	Dual Lever Binnacle Mount Remote Controls	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Buss Cables	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	Engine Identity	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	Setting Up Multiple Engine Applications	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	Station Protect	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Remote Control System and Engine Management Software	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Remote Control Trim Plates	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Accessory Power Relay	2010 – <i>Evinrude ICON</i> Remote Control	
<i>ICON</i> Control	<i>ICON</i> Gateway Module	2010 – <i>Evinrude ICON</i> Remote Control	

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Model	Topic	Where to Find (Book Year/Section)	Other References
<i>ICON</i> Control	<i>ICON</i> Hubs (6–port)	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Shift and Throttle Actuator Calibration	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	<i>ICON</i> Switch Panels	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 107; Control Communication Error	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 108; <i>Icon</i> Failsafe Mode	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 109; Control Hardware Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 110; Trim Switch Module Communication Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 111; Electronic Servo–module Communication Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 149; Throttle Actuator Sensor Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 150; Throttle Actuator Motion Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 151; Shift Actuator Sensor Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Code 152; Shift Actuator Motion Fault	2010 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Buss Cable Installation Issues	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	150 – 200 HP 60° V6 Models, Code 152 Issue	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	200 – 300 HP 90° V6 <i>Icon</i> Conversion Kit Installation	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	<i>ICON</i> Troubleshooting Guide, P/N 356076	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Remote Control Neutral Position	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Battery Voltage	2011 – <i>Evinrude ICON Remote Control</i>	
<i>ICON</i> Control	Failed 3 Amp Fuse (Master Power Key Switch)	2011 – <i>Evinrude ICON Remote Control</i>	
<i>I–Command</i>	<i>I–Command</i> Digital Product Selection Guide	2009 – <i>I–Command</i>	
<i>I–Command</i>	<i>I–Command</i> Network Design and Gauge Simulator Tool	2009 – <i>I–Command</i>	
<i>I–Command</i>	Network Tester Kit, P/N 765023	2009 – <i>I–Command</i>	
<i>I–Command</i>	GPS Head Unit Kit, P/N 764592	2009 – <i>I–Command</i>	
<i>I–Command</i>	Device–Net Style Connectors	2009 – <i>I–Command</i>	Parts & Accessories Bulletin 2008–01(P)
<i>I–Command</i>	Water Pressure Sensor Kit, P/N 5006214	2009 – <i>I–Command</i>	
<i>I–Command</i>	Water Pressure Sensor Kit, P/N 764195	2009 – <i>I–Command</i>	
<i>I–Command</i>	Pre–Programmed Water Pressure Sensor Kits	2009 – <i>I–Command</i>	Parts & Accessories Bulletin 2008–03(P)
<i>I–Command</i>	Pre–Programmed Fuel Level Converter Kits	2009 – <i>I–Command</i>	Parts & Accessories Bulletin 2008–04(P)
<i>I–Command</i>	Fluid Level Converter Kit, P/N 764166	2009 – <i>I–Command</i>	
<i>I–Command</i>	How to Set Up Fuel Management Options	2009 – <i>I–Command</i>	



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<i>I-Command</i>	<i>I-Command</i> Gauge Installation (Dashboard Hole Size)	2009 – <i>I-Command</i>	
<i>I-Command</i>	How to Reset <i>I-Command</i> Gauge to Factory Default Settings	2009 – <i>I-Command</i>	
<i>I-Command</i>	Avoid Radar Antenna When Installing GPS Module	2009 – <i>I-Command</i>	
<i>I-Command</i>	Fuel Level Sender Resistance Different In North America and Europe	2009 – <i>I-Command</i>	
<i>I-Command</i>	Installing Oil Level Converter Kit	2009 – <i>I-Command</i>	
<i>I-Command</i>	Low Battery Voltage When Configuring Fuel Level Converter	2009 – <i>I-Command</i>	
<i>I-Command</i>	Instancing	2010 – <i>I-Command</i>	
<i>I-Command</i>		2011 – <i>I-Command</i>	
<i>I-Command</i>	<i>I-Command</i> and 15 – 90 HP Models	2010 – <i>I-Command</i>	
<i>I-Command</i>	Power Supply Kits, P/N 764157 Or P/N 764159	2010 – <i>I-Command</i>	
<i>I-Command</i>	Warranty Procedures For <i>I-Command</i> Digital Gauges	2010 – <i>I-Command</i>	
<i>I-Command</i>	<i>I-Command</i> Bulletins	2010 – <i>I-Command</i>	
<i>I-Command</i>		2011 – <i>I-Command</i>	
<i>I-Command</i>	Water Pressure Sensor Kit, P/N 5008300	2011 – <i>I-Command</i>	
<i>I-Command</i>	Software For <i>I-Command</i> Devices	2011 – <i>I-Command</i>	
P & A	OMS Rebuild Kits Available	2009 – Parts & Accessories	
P & A	Water Separating Fuel Filter Gasket Issue	2009 – Parts & Accessories	
P & A	OMS Replacement Checklist	2009 – Parts & Accessories	
P & A	TBX Torsion Bushing Damage	2009 – Parts & Accessories	
P & A	Rectifier/Regulator, No Purple Wire	2009 – Parts & Accessories	Parts & Accessories Bulletin 2001–01(P)
P & A	Frequently Requested Part Numbers	2010 – Parts & Accessories	
P & A		2011 – Parts & Accessories	
P & A	Reverse Gear Availability	2010 – Parts & Accessories	
P & A	Tiller Handle Kits For <i>Evinrude E-TEC</i> 15–30 HP Models	2011 – Parts & Accessories	
P & A	Propeller Shaft Failures (Due to Incorrect Propeller Hardware)	2011 – Parts & Accessories	
Propeller	<i>Hydrus</i> Propeller Exhaust Ring	2009 – Rigging	Parts & Accessories Bulletin 2005–01(P)
Propeller	Gear Ratio and Propeller Selection (.54 vs .58 Ratio Gearcases)	2009 – Rigging	
Propeller	Demo–Prop Program	2009 – Parts & Accessories	
Propeller	Propellers For 15 – 30 HP Models	2010 – Parts & Accessories	
Propeller	New Aluminum Propellers	2010 – Parts & Accessories	
Propeller	Installation Tip: Interchangeable Hub Propeller	2010 – Parts & Accessories	

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Propeller	Identifying Correct Propeller Part Numbers	2010 – Parts & Accessories	
Software	PC Specifications For Diagnostic Software	2008 – Diagnostic Software	
		2009 – Diagnostic Software	
Software	New USB to Serial Adapters For Diagnostic Software	2009 – Diagnostic Software	
Software	<i>Evinrude Diagnostics</i> Software Program Update, V 3.0	2009 – Diagnostic Software	Service Bulletin 2008–05(S)
Software	<i>Evinrude Diagnostics</i> Software Program Update, V 4.0	2010 – <i>Evinrude</i> Diagnostic Software	
Software	Software Versions and Revisions	2009 – Engine Management Software	
Software	Software Revision Updates	2009 – Engine Management Software	
Software	Software Revision Number Changes	2009 – Engine Management Software	
Software	Software Version Updates	2009 – Engine Management Software	
Software	Inline Update 2 – Adds TPS Calibration and Improved Calibrations	2009 – Engine Management Software	
Software	<i>I-Command</i> and Engine Management Software Updates	2009 – Engine Management Software	
Software	Data Logging	2010 – <i>Evinrude</i> Diagnostic Software	
Software	Understanding Knock Profiles	2010 – <i>Evinrude</i> Diagnostic Software	
Software	New <i>Evinrude Diagnostics</i> Software V 5.1	2011 – <i>Evinrude</i> Diagnostic Software	Service Bulletin 2011–02(S)
Software	<i>Evinrude Diagnostics</i> Software V 5.1 Program Installation	2011 – <i>Evinrude</i> Diagnostic Software	
Software	Software Registration	2011 – <i>Evinrude</i> Diagnostic Software	
Software	Stern Drive Parts Inquiries	2009 – Parts & Accessories	
Stern Drive	New Tools For M2–Type and L2–Type Gearcases	2009 – Gearcase	Service Bulletin 2008–03(S)
Tools	Propeller Shaft Seal Tools, Allow Replacement of Seals Without Gearcase Disassembly	2009 – Gearcase	Service Bulletin 2008–02(S)
Tools	Engine Lift Kit, P/N 354717	2010 – Service Tools	Predelivery Bulletin 2008–02(D)
Tools	Stator Test Adaptor, P/N 354719	2010 – Service Tools	Service Manual
Tools	Diagnostic Power Supply, P/N 587005	2010 – Service Tools	Service Manual
Tools	Accessory Power Cable Kit, P/N 5008092	2010 – Service Tools	Service Manual
Tools	Bearing Installers, P/N 321428 and P/N 335820	2010 – Service Tools	Service Manual
Tools	Alignment Gauge Puller, P/N 354718	2010 – Service Tools	Service Manual
Tools	Wrist Pin Retainer Tool, P/N 354720	2010 – Service Tools	Service Manual
Tools	Fuel Flow Test Kit, P/N 5008371	2011 – Service Tools	Service Manual
Tools	<i>I-Command</i> Software Update Kit, P/N 765357	2011 – Service Tools	Instruction Sheet

