

2017

Rigging Essentials

EVINRUDE®
E-TEC®





TABLE OF CONTENTS

- 3 *Evinrude E-TEC Custom Panel*
- 4 *ICON II CONTROLS*
- 5 *Evinrude i-Dock Joystick System & Optimus 360*
- 6 *ICON Touch Gauges*
- 8 *ICON Gauges*
- 12 *Rigging Accessories*
- 16 *Propellers: RX4 & Raker H.O. with VVP (Variable Vent Port)*
- 22 *Propeller Selection*
- 24 *Propeller Hub Systems*
- 25 *Propeller Family Descriptions*
- 25 *Application Chart*
- 26 *Quick Reference Guide*



DESIGN YOUR OWN EVINRUDE E-TEC G2.

The Evinrude E-TEC G2 engine is the world's first outboard with customizable side, top and front panels, as well as accent color. Now you have hundreds of different color combinations to choose from. Create an Evinrude E-TEC G2 to perfectly match your boat.

FRONT & TOP PANELS - STANDARD

FRONT & TOP PANELS - PREMIUM



SIDE PANELS - STANDARD

SIDE PANELS - PREMIUM



ACCENT STRIPES (PORT & STARBOARD)



SEE FOR YOURSELF AT evinrude.com



EVINRUDE ICON PUTS YOU IN CHARGE WITH THE INDUSTRY'S MOST ADVANCED ELECTRONIC ENGINE CONTROL.

It was Evinrude designers who delivered a groundbreaking combination of ergonomics and aesthetics with the ICON digital control binnacle. And for Evinrude E-TEC G2, Evinrude pushes the throttle forward with new enhancements for this next generation of digitally controlled outboards.

NEW STYLING of the top-mount binnacle, with excellent ergonomics, is designed to reduce fatigue and provide smooth, predictable control.

RELIABILITY is built in with redundant networks and redundant sensors

MULTIPLE ENGINE SUPPORT Evinrude E-TEC G2 is engineered to fit up to 4 engines.

MULTIPLE HELM STATIONS Single station and second station rigging for flying bridge applications

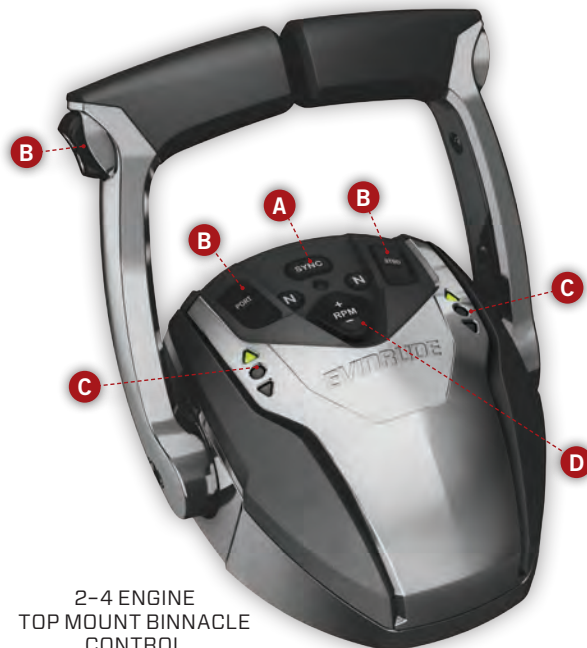
The result is legendary ICON ergonomics with all new designs and advanced engineering for a new generation of Evinrude E-TEC G2 outboards.

A **POWERSYNC** Synchronize multiple engine RPMs and control multiple engines by combining shift and throttle functions with the push of a button. Boat operators can now operate multi-engine boats by using a single control lever.

B **ENGINE TRIM** A single master engine trim switch is installed on the shift lever to control all engines. Conveniently located individual trim switches allow easy operation and fine-tuning adjustments.

C **F-N-R INDICATORS** Forward-Neutral-Reverse (F-N-R) indicators easily identify gear position for added safety and usability.

D **RPM TUNE** This Evinrude exclusive is a virtual RPM cruise control ranging from idle to wide-open throttle. Press the "RPM" button on the control to fine-tune the engine RPM slightly higher or lower; this makes it easy to find the exact trolling speed or optimize fuel economy at cruise.



2-4 ENGINE
TOP MOUNT BINNACLE
CONTROL



ICON II PREMIUM RIGGING KITS

P/N	DESCRIPTION
767984	Dual Engine, Main Station Rigging Kit
767985	Dual Engine, Second Station Rigging Kit
767986	Triple Engine, Main Station Rigging Kit
767987	Triple Engine, Second Station Rigging Kit
767988	Quad Engine, Main Station Rigging Kit
767989	Quad Engine, Second Station Rigging Kit
767982	Single Engine, Main Station Rigging Kit
767983	Single Engine, Second Station Rigging Kit
766126	Concealed Side Mount Rigging Kit

DIGITAL CONTROL DOES NOT NEED TO BE EXPENSIVE.



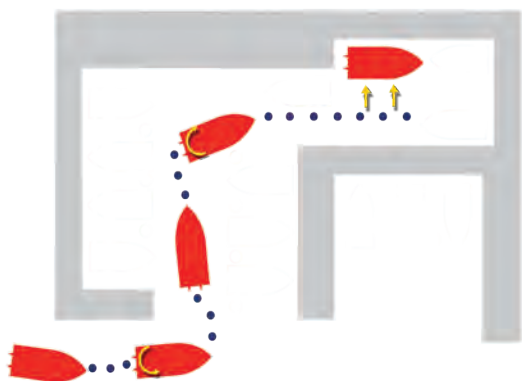
Select STM ICON II rigging kit for engine, boat and instrumentation applications targeting basic shift and throttle capability.

ICON II RIGGING KITS

P/N	DESCRIPTION
768443	Single Engine, Top Mount Rigging Kit
768444	Concealed Side Mount Rigging Kit



TAKE YOUR DOCKING SKILLS TO A NEW LEVEL.



360-DEGREE MANEUVERING AGILITY

- Fingertip control – The 3 axis joystick controls the independent steering, shift and throttle of the of the engines
- Ease of use – Experienced captains, novice owners and everyone in between will benefit from intuitive boat control
- Reserve power – The BOOST mode provides increased thrust when working against wind, tide or current

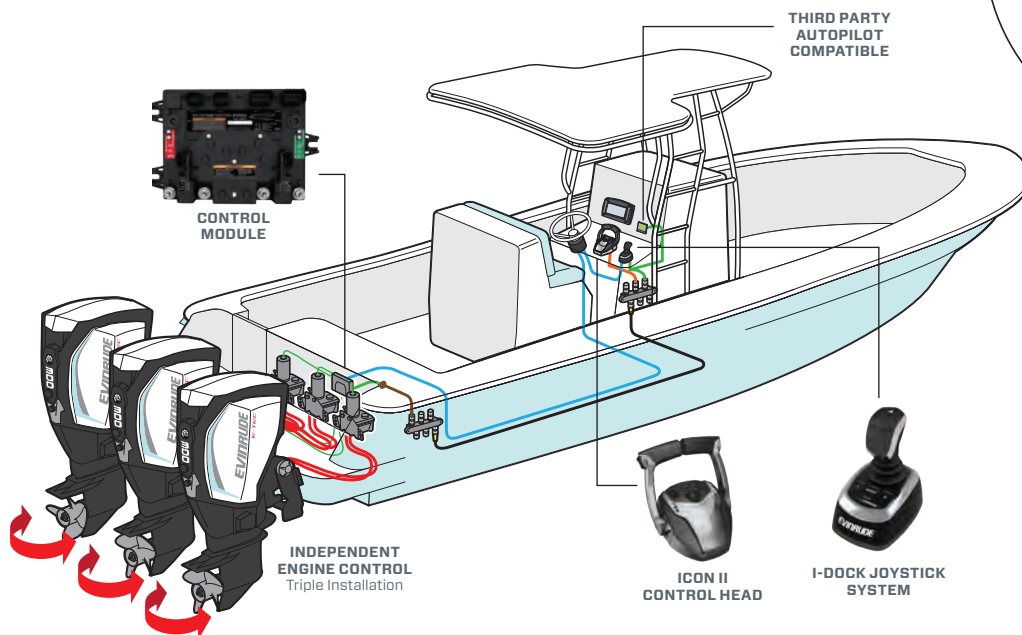
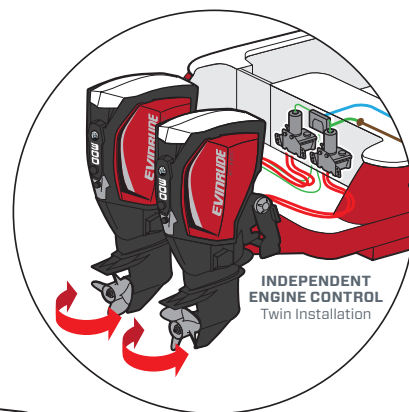


SPEED SENSITIVE POWER STEERING

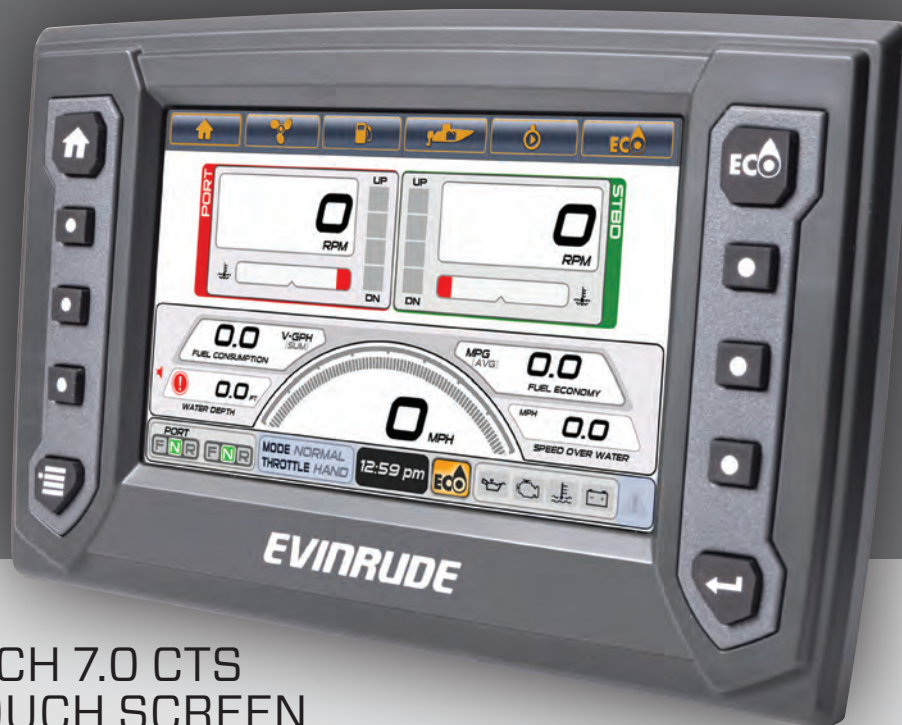
- Variable assist – Effortless steering at low speed provides easy maneuvering, tuned assist at higher speeds provides just the right feel
- Adjustable steering ratio – The lock-to-lock ratio is adjustable to suit your boat speed and handling characteristics
- Compatible with Auto Pilot – No added expense of additional steering components required

ENGINEERED FOR RELIABILITY

- Designed for the harsh conditions of the marine environment including waterproof locking harness connections
- Redundant network design provides security in performance and peace of mind in use
- Evinrude i-Dock joystick systems exceed North American ABYC and European ISO standards – recognized symbols of quality and reliability



ICON TOUCH GAUGES



ICON TOUCH 7.0 CTS COLOR TOUCH SCREEN

DESIGNED FOR EVINRUDE® E-TEC® G2. ICON TOUCH 7.0 CTS FEATURES A LARGE FORMAT, FULL-COLOR 7.0 INCH TOUCH SCREEN.

MAJOR FUNCTIONS AND SUPPORT INCLUDE:

- Color Touch Screen - Easy to access information - in multiple ways.
- 1, 2, 3 or 4 engine support.
- Mode control for adjustments to power steering, trim assist and for concealed side mount, switching between hand and foot throttle operation.
- Fuel tank levels up to 4 tanks
- Engine oil level and accessory oil tank levels.
- Water tank levels up to 3 tanks / 3 water types.
- Accessory display of engine water pressure, depth, SOW and water temperatures of sea water, live well and bait well.
- Multi-language - English, French, Italian, German, Spanish.
- Descriptive text for fault codes and procedures.

PREDEFINED, INTUITIVE AND UNCLUTTERED DESIGN ARRANGES ENGINE AND BOAT SYSTEMS INFORMATION VIA SIX SCREEN GROUPINGS:

- Home page - general cruising and performance information including RPM, trim level, engine water temperature, fuel economy MPG, fuel consumption GPH and boat speed.
- Engine page - in-depth monitoring of one or up to 4 Evinrude® E-TEC® G2 outboards.
- Fuel/Fluids page - precise readouts of fuel levels up to 4 tanks, engine oil levels and water tanks.
- Vessel page - accurate readouts of battery voltage, boat speed, and fuel economy.
- Trip Logs page - offers detailed information regarding trip distance, fuel economy, average speed and more.
- Eco view page - fuel management information allows the user to optimize engine throttle and trim adjustment for instant changes and the most efficient operation.
- A status bar is always visible with gear position, GPS clock, active throttle, and fault notifications.

INSTALLATION REQUIREMENTS

- Surface mount dimensions - 10" / 25.4cm wide x 6" / 15.24cm tall.
- Includes drill template, mounting hardware and GPS antenna.

DESCRIPTION

ICON Touch 7.0 CTS - Single, Twin, Triple or Quad Engines with GPS

PACK QTY

1

P/N

766284

ICON Touch 4.5 CTS - Single or Twin Engines with GPS

1

766285

ICON 3.5 CS - Single Engine without GPS

1

767750

ICON 3.5 CS - Single Engine with GPS

1

768151



ICON TOUCH 4.3 CTS COLOR TOUCH SCREEN

ICON TOUCH 4.3 CTS FEATURES A MEDIUM FORMAT, FULL-COLOR 4.3-INCH TOUCH SCREEN. DESIGNED FOR EVINRUDE® E-TEC® G2.

MAJOR FUNCTIONS AND SUPPORT INCLUDE:

- Color Touch Screen - Easy to access information - in multiple ways.
- 1 or 2 engine support.
- Mode control for adjustments to power steering, trim assist and for concealed side mount, switching between hand and foot throttle operation.
- Fuel tank levels up to 4 tanks.
- Engine oil level and accessory oil tank levels.
- Water tank levels up to 1 tank / 1 water type.
- Accessory display of engine water pressure, depth, SOW and water temperatures of sea water, live well and bait well.
- Multi-language - English, French, Italian, German, Spanish.
- Descriptive text for fault codes and procedures.

PREDEFINED, INTUITIVE AND UNCLUTTERED DESIGN ARRANGES ENGINE AND BOAT SYSTEMS INFORMATION VIA 6 SCREEN GROUPINGS:

- Home page - general cruising and performance information including RPM, trim level, engine water temperature, fuel economy MPG, fuel consumption GPH and boat speed.
- Engine page - in-depth monitoring of one or up to 2 Evinrude® E-TEC® G2 outboards.
- Fuel/Fluids page - precise readouts of fuel levels up to 4 tanks, engine oil levels and water tanks.
- Vessel page - accurate readouts of battery voltage, boat speed, and fuel economy.
- Trip Logs page - offers detailed information regarding trip distance, fuel economy, average speed and more.
- Eco View page - fuel management information allows the user to optimize engine throttle and trim adjustment for instant changes and the most efficient operation.
- A status bar is always visible with gear position, GPS clock, active throttle, and fault notifications.

INSTALLATION REQUIREMENTS

- Surface mount dimensions - 7.5" / 19.05cm wide x 4" / 10.16cm tall.
- Includes drill template, mounting hardware and GPS antenna.



ICON 3.5 CS COLOR SCREEN

ICON 3.5 CS FEATURES A FULL-COLOR 3.5-INCH SCREEN. DESIGNED FOR EVINRUDE® E-TEC® G2.

MAJOR FUNCTIONS AND SUPPORT INCLUDE:

- Color Screen - Easy to access information.
- 1 engine support.
- Mode control for adjustments to power steering, trim assist and for concealed side mount, switching between hand and foot throttle operation.
- Fuel tank levels up to 2 tanks.
- Engine oil level and accessory oil tank levels.
- Accessory display of engine water pressure.
- Multi-language - English, French, Italian, German, Spanish.
- Descriptive text for fault codes and procedures.

PREDEFINED, INTUITIVE AND UNCLUTTERED DESIGN ARRANGES ENGINE AND BOAT SYSTEMS INFORMATION VIA 5 SCREEN GROUPINGS:

- Home page - with two modes: one for general cruising information and another for just basic information such as RPM, trim level, engine water pressure and boat speed.
- Engine page - in-depth monitoring of one Evinrude® E-TEC® G2 outboard.
- Fuel/Fluids page - precise readouts of fuel levels up to 2 tanks and engine oil levels.
- Vessel page - accurate readouts of battery voltage, boat speed, and fuel economy.
- Eco View page - fuel management information allows the user to optimize engine throttle and trim adjustment for instant changes and the most efficient operation.

INSTALLATION REQUIREMENTS

- Surface mount dimensions - 4" / 10.16cm wide x 4" / 10.16cm tall.
Fits standard 3 3/8" round hole.



ICON GAUGES. FROM THE FUNCTION-FILLED PRO SERIES TO THE NO-NONSENSE BASIC SERIES.

FUNCTIONALITY AND ACCURACY An analog look in a digital world working together seamlessly. Contemporary styling and high-end performance available in small and large displays. Multi-function gauges offer high visibility of information, including fuel-management functions. It's all there.

A HOST OF OPTIONS Evinrude offers a selection of ICON gauges, allowing you to customize your console to your exact needs. Select ICON main gauges from the Pro Series, Basic 3-n-1 or Basic series. Available in two colors. Accenting your boat is as simple as black and white.





INCREASED FUNCTIONALITY IN AN LCD WINDOW.

ICON PRO Offers digital performance wrapped in an analog look with increased functionality in an LCD window.

SPECIALIZED FUNCTIONS Including GPS speed, fuel management, fuel economy, trip logs and many more.

IT'S PLUG AND PLAY Connects directly into the existing Evinrude NMEA 2000 network.

VERSATILE Works on Evinrude E-TEC 40-hp through 300-hp

INTERNATIONAL Supports multi-language

VISIBLE Features anti-fog lens

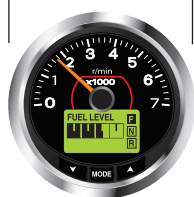
SECURITY Includes engine fault display



ICON PRO 3.5

3.5 IN.
(89MM)

RPM GAUGE



768007 Black

SPEEDOMETER

80 mph

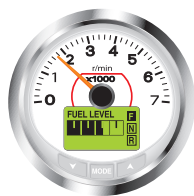
50 mph



768055 Black



768056 Black



768008 White



768056 White



768054 White

ICON GAUGES - BASIC SERIES



HIGH PERFORMANCE IN TRADITIONAL STYLING.

BASIC FUNCTIONS Packaged in a high value, lower cost gauge.

USER FRIENDLY No buttons to push, no setup required. Just straight accurate engine information

IT'S PLUG AND PLAY Connects directly into the existing Evinrude NMEA 2000 network.

SIMPLE Daisy chain connections between the tachometer and accessory gauges simplify wiring.

VERSATILE Works on Evinrude E-TEC 40-hp through 300-hp

FLEXIBLE Supports up to 2 engines and up to 2 fuel tanks

MULTI-FUNCTION 3-N-1 GAUGES offer high visibility and compact installation. Two gauges offer 7 major functions.

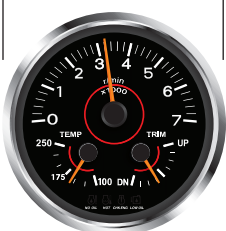
VISIBLE Features anti-fog lens

SECURITY Includes engine fault warning lights



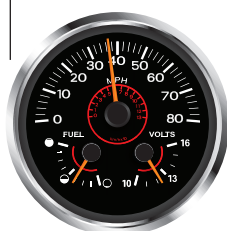
ICON BASIC 3-N-1 5 IN. (127MM)

RPM GAUGE

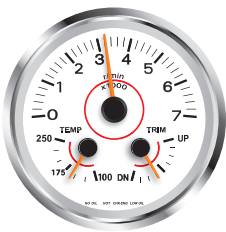


766160 Black with
Engine Temp. & Trim

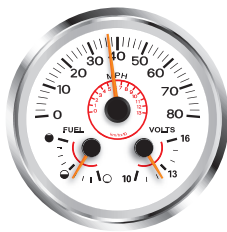
SPEEDOMETER



766166 Black with
Fuel & Volt



766183 White with
Engine Temp. & Trim



766189 White with
Fuel & Volt

ICON BASIC 3.5 IN. (89MM)

RPM GAUGE



766159
Black



766182
White

80 mph



766165
Black

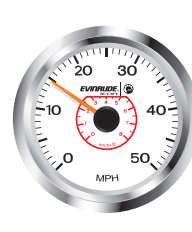


766188
White

50 mph



766164
Black



766187
White

30 mph



766163
Black



766186
White

ICON GAUGES - ACCESSORY SERIES



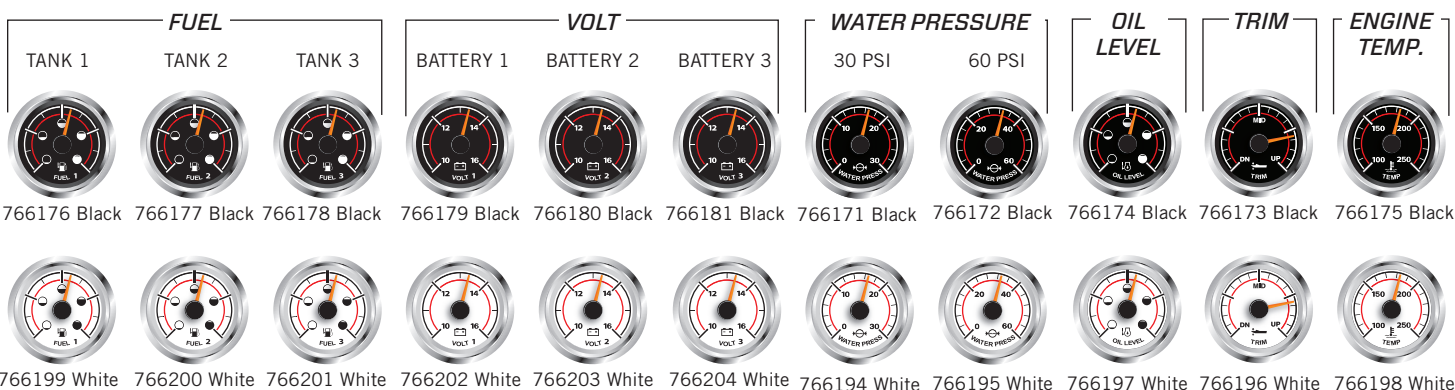
THE PERFECT COMPLEMENT TO THE ICON PRO, ICON BASIC 3-N-1 AND ICON BASIC MAIN GAUGES.

ACCESSORY GAUGES Provide dedicated display of water pressure, fuel level, battery volts, engine trim, engine temperature and oil tank level.



ICON ACCESSORY

2 IN.
(51MM)



ADDITIONAL ACCESSORIES

P/N	DESCRIPTION
766114	ICON Basic backlight adjustment kit Note: Optional with ICON Basic gauge to provide backlight dimming.
765510	Harness, fuel level input, 3rd & 4th tank level display Note: Needed to add Fuel Tank input for Tank 3 and 4. Use on ICON PRO.
765349	GPS antenna - SOG input
764193	Paddle Wheel Kit - SOW input
764671	Triducer, transom mount, SOW/Depth/Seawater temp
764673	Triducer, thru-hull, plastic, SOW/Depth/Seawater temp
764672	Transducer, transom mount, Depth /Seawater temp (no Speed)

WATER PRESSURE SENSORS

P/N	DESCRIPTION	HP RANGE	MODEL YEAR	PRESSURE RANGE
5008300	Block Mounted Sensor	115HP-300HP	2008 - 2011	0 - 30 PSI
5008640	Block Mounted Sensor	115HP-300HP	2012 & newer	0 - 50 PSI
765038	NMEA Network Based Sensor	40HP-90HP	2008 & newer	0 - 100 PSI

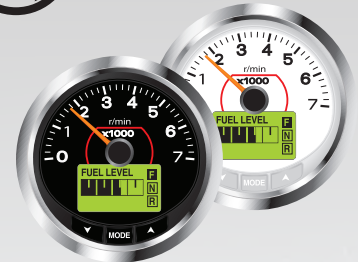
ICON GAUGE NETWORK PARTS

P/N	DESCRIPTION
766026	Engine EMM Harness – per engine
764157	Power Supply – per boat
764155	Terminator Kit – per boat
764163	Backbone – 25 feet, – per boat
767488	GPS Module – per boat

UNIVERSAL REPOWER RIGGING SYSTEM

ALLOWS REUSE OF EXISTING MECHANICAL ENGINE CONTROLS AND GAUGES TO DELIVER A REDUCED COST RIGGING SOLUTION.

- Converts mechanical motions of standard shift and throttle cables into digital EST commands
- Compatible with competitive controls and SAE type control cables
- Includes integrated digital to analog converter allowing the reuse of existing gauges
- Offers the lowest cost repower rigging solution
- Recommended for single and twin engine applications



DESCRIPTION	PACK QTY	P/N
Universal Repower Rigging System	1	767682

UNIVERSAL REPOWER RIGGING SYSTEM COMPATIBILITY

ENGINE BRAND	EVINRUDE JOHNSON 1995 - OLDER	EVINRUDE JOHNSON 1996 - NEWER 2 OR 4 STROKE	YAMAHA* 2 OR 4 STROKE	MERCURY* 2 OR 4 STROKE	SUZUKI 4 STROKE	HONDA 4 STROKE
Reuse Existing Control Box	YES	YES	YES	YES	YES	YES
Reuse Existing Control Cables	YES	YES	REQUIRED CABLE ADAPTER INCLUDED IN RIGGING SELECTION	REQUIRED CABLE ADAPTER INCLUDED IN RIGGING SELECTION	REQUIRED CABLE ADAPTER INCLUDED IN RIGGING SELECTION	REQUIRED CABLE ADAPTER INCLUDED IN RIGGING SELECTION
Reuse Existing Wire Harness	REQUIRED HARNESS INCLUDED IN RIGGING SELECTION	YES	REQUIRED HARNESS INCLUDED IN RIGGING SELECTION	REQUIRED HARNESS INCLUDED IN RIGGING SELECTION	REQUIRED HARNESS INCLUDED IN RIGGING SELECTION	REQUIRED HARNESS INCLUDED IN RIGGING SELECTION
Reuse Existing Ignition Switch	REQUIRED KEY SWITCH INCLUDED IN RIGGING SELECTION	YES	REQUIRED KEY SWITCH INCLUDED IN RIGGING SELECTION	REQUIRED KEY SWITCH INCLUDED IN RIGGING SELECTION	REQUIRED KEY SWITCH INCLUDED IN RIGGING SELECTION	REQUIRED KEY SWITCH INCLUDED IN RIGGING SELECTION

* Not compatible with Mercury Verado and Yamaha Command Link models.
Note: If purchased out of program, Evinrude SystemCheck gauge recommended.
For Mercury applications, an Evinrude trim gauge will also be included.



EVINRUDE E-LINK

CONVENIENCE OF A VIRTUAL DASHBOARD ON YOUR MOBILE DEVICE

Evinrude E-TEC G2 engine data displayed on a mobile phone or tablet:

- Plug and play Wi-Fi connection to engine and vessel via NEMA 2000 network
- Displays engine information including RPM, fuel flow, trim position, oil level and more
- Displays vessel and accessory information including fuel levels, battery voltage, water depth and more

Direct control of important engine features:

- Provides engine mode adjustment including i-Trim engine trim control, Dynamic Power Steering level adjustment and winterization.
- Concierge feature includes links to “find a dealer” and Evinrude E-Nation social media site with option to forward engine data to your dealer via email.

An alternative to traditional marine instrumentation:

- Provides the same information and functionality available through Evinrude ICON Touch digital marine gauges
- Provides ECO View function to monitor average fuel economy, estimated range and instantaneous fuel use to maximize boat efficiency.



Purchase includes the Evinrude E-Link Wi-Fi module and a free App download with no membership or subscription fees.

DESCRIPTION	PACK QTY	P/N
Evinrude E-Link	1	768403



FABRIC ENGINE COVER FOR EVINRUDE E-TEC G2 OUTBOARDS

A CUSTOM STYLED AND DESIGNED COVER TO PROTECT THE ENGINE FROM WEATHER AND ABRASION.

MAJOR FEATURES INCLUDE:

- Designed exclusively for Evinrude G2 outboards 150 HP-300 HP
- Contoured and sewn to fit the exact shape of the engine cowling
- A custom fit and easy to install
- Solution dyed water repellent polyester fabric
- Special woven-in soft inner liner won't scratch
- Superior protection for special engine graphics
- Designed for over the road towing.
- Key areas reinforced against wear
- Elastic stretch cords plus hook and loop straps keep the cover tight and secure.
- No loose edges to flap in the wind and abrade the finish
- No zippers or drawstrings
- Not designed for engine operation when installed
- Black with Evinrude E-TEC G2 graphics

DESCRIPTION	PACK QTY	P/N
Fabric Engine Cover for 200 H.O.-300 HP	1	768133
Fabric Engine Cover for 150 HP-200 HP	1	768856



FOOT THROTTLES

TAKE YOUR HIGH PERFORMANCE BOATING EXPERIENCE TO A NEW LEVEL OF CONTROL.

Evinrude E-TEC G2 supports an accessory foot throttle which you can switch between foot and hand operation. Using the Evinrude ICON color displays, drivers can easily toggle between hand and foot throttle control.

The foot throttle interface comes in two variations to take advantage of the footwell design of the boat. Select the bulkhead floor throttle for footwell areas with built in foot rests. Select the Floor mount kit for alternate installations.

The benefits of either installation are numerous, from an automotive-like driving experience, to the improved control of keeping both hands on the steering wheel, to the smooth and predictable throttle inputs you would expect from your car or truck.

DESCRIPTION	PACK QTY	P/N
Foot Throttle Floor Mount	1	766567
Foot Throttle Bulkhead Mount	1	767747



ENGINE FLUSH KIT

A FRONT MOUNTED FLUSHING ACCESSORY IS NOW AVAILABLE FOR EVINRUDE E-TEC G2 OUTBOARDS.

MAJOR FEATURES INCLUDE:

Use this kit to provide an alternate location for fresh water flushing of the engine's cooling system with standard garden hose.

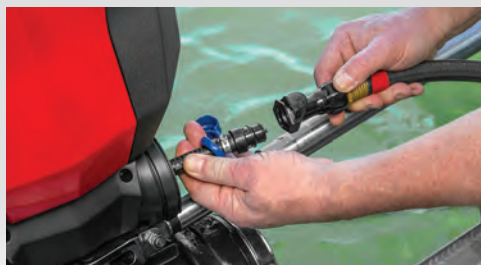
Designed specifically for Evinrude E-TEC G2 outboards, the kit installs conveniently into the Dual Axis rigging center and can be neatly tucked away and hidden when not IN USE.

Quick connect couplings snap together with ease and eliminate threaded connections that can seize. Integrated check valves assure proper operation. All parts are included for a complete installation using normal hand tools.

Your customers will appreciate the ease of fresh-water flushing for their Evinrude E-TEC G2 outboard engines.

FEATURES & BENEFITS:

- Easy access, front mounted flushing
- Hides away when not needed
- Port or starboard installation
- Quick connect couplings
- Uses standard garden hose connection
- Easy to install with normal hand tools
- Designed for Evinrude E-TEC G2 outboards



DESCRIPTION

Front Mount Engine Flush Kit

PACK QTY

1

P/N

5010004

STEERING SUPPORT BRACE

USE THE EVINRUDE STEERING SUPPORT BRACE TO MAINTAIN STRAIGHT-AHEAD ALIGNMENT OF THE EVINRUDE E-TEC G2 ENGINE DURING OVER THE ROAD TOWING.

The brace stabilizes the engine to prevent steering movement that may cause engine contact with anchor poles, poling stands and auxiliary engines.

The lightweight one piece design is easy to install and remove by simply tilting the engine using the engine mounted trim switch. No tools are required.

FEATURES & BENEFITS:

- Custom designed for Evinrude E-TEC G2 outboards
- Installs between the lower motor mount and stern bracket
- Prevents steering movement while towing
- Fits any shaft length
- Lightweight one-piece design
- Tough powder paint coating resists chips and scratches



DESCRIPTION

Steering Support Brace

PACK QTY

1

P/N

768606



RX4[®] PROPELLER

The RX4 is a no compromises 4 blade propeller. RX4 masters the power curve of the Evinrude[®] E-TEC[®] G2[™] engine. It is optimized for traction and rough water performance with industry leading speed, acceleration, and fuel economy. It delivers superior bow lift on larger boats and does not slip in turns.

- V.V.P. Variable Vent Porting
- Every propeller is hand finished and precision gauged for quality and consistency.
- Available in right hand rotation sizes 16, 18, 20, 22, 24, 25 and 26 pitch.
- Available in left hand rotation sizes 16, 18, 20, 22, 24 pitch.



RAKER H.O.[®] PROPELLER

Fast, Fast, Fast. The Raker legend lives on with the Raker[®] H.O..
The Raker propeller line has always set the highest standard in top speed performance. The Raker H.O. is the next evolution in the line, maximizing the superior power and torque of the Evinrude[®] E-TEC[®] G2 outboard and every V6 Evinrude[®]/Johnson[®] before it. Tight tolerances, precision manufacturing, and hand finishing - move the Raker[®] H.O. one step closer to a high performance custom propeller.

- V.V.P. Variable Vent Porting
- Available in right hand rotation sizes 22, 24, 25, 26 and 28 pitch.



V.V.P.

Variable Vent Porting
allows you to custom tune acceleration power of the RX4 or Raker H.O. propeller. By adjusting the opening of the vent ports, you can change the amount of bite the propeller has on acceleration.



PROPELLER HUB SYSTEM - V6 STAINLESS STEEL PROPELLER INTERCHANGEABLE CHART

DESCRIPTION	P/N
Evinrude E-TEC G2 TBX™ bushing kit (POP) - PY2015 thru	767683
TBX™ bushing kit (POP) - Evinrude®/Johnson® outboards V6 (1997 thru 2015)	177283
TBX™ bushing kit (POP) - competitive outboards V6	177288

WHERE THE POWER MEETS THE WATER!



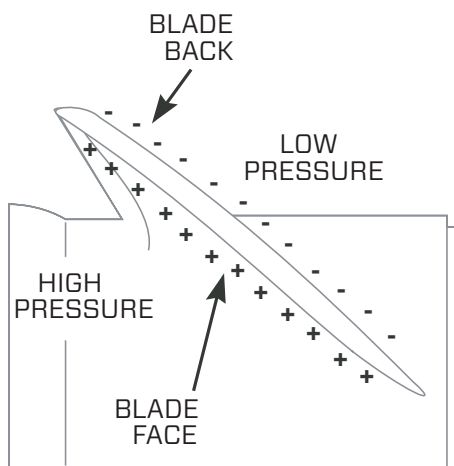
Choosing the right propeller is the single most important decision you can make to get the best performance from your boat and outboard! Propeller choice can affect boat top speed by as much as 5 to 10 MPH. It also has a direct effect on acceleration, cornering, pulling power, and fuel economy. With some boats, you may need to change propellers for different activities, such as high speed cruising, water skiing, or carrying heavy loads. Using the wrong propeller in any of these applications will not only hurt performance, but could also cause engine damage.





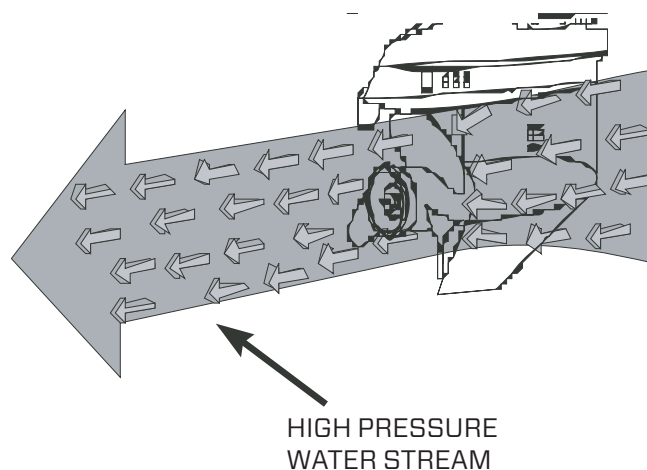
BASIC PROPELLER TERMS

- A** *LEADING EDGE:* The edge of the blade closest to the boat.
- B** *TRAILING EDGE:* The edge of the blade farthest from the boat.
- C** *BLADE TIP:* The point on the blade farthest from the hub. It separates the leading edge from the trailing edge.
- D** *BLADE ROOT:* The area where the blade attaches to the hub.
- E** *BLADE BACK:* The side of the blade closest to the boat (low pressure side).
- F** *BLADE FACE:* The side of the blade opposite to the boat (high pressure side).



HOW DOES A PROPELLER WORK?

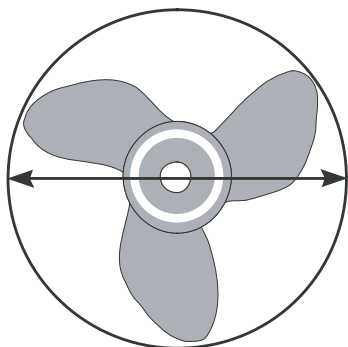
A propeller is a set of identical twisted blades, spaced evenly around a hub. Most propellers have a splined bushing in the hub that mounts on the outboard. The bushing attaches to the propeller with flexible rubber that acts like a shock absorber. If the propeller strikes something hard, the rubber helps protect against damage. Newer propellers may use a multi-piece interchangeable hub system. Refer to Propeller Hub Systems on Page 24. Each propeller blade has two surfaces that displace water to move the boat. As the propeller rotates, the blade back creates a low pressure that helps pull the boat forward. The blade face creates high pressure as it rotates. This pressure forces a stream of water away from the propeller. As the water is pushed to the rear, an equal force pushes the boat forward.



WHAT TO CONSIDER WHEN SHOPPING FOR A PROP

Several characteristics affect how a propeller will perform. Especially important are propeller diameter, pitch, rake, and cup. Most propellers are identified by their diameter and pitch. Look for a number like 14 3/4 X 21. The first number is the diameter, the second is the pitch. In addition, it is important to understand the effects of ventilation, cavitation, materials, and other application variables on propeller performance.

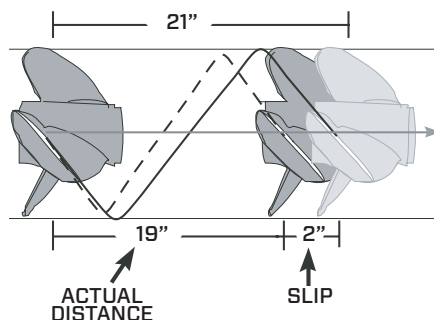
DIAMETER



DIAMETER

Diameter is the width of the circle described by the tips of the rotating blades. Propeller diameter determines the amount of power a propeller can apply to the water—how much load the propeller can push. Generally, heavy loads require larger diameter propellers while small, fast boats are more efficient with a smaller diameter. However, diameter is not usually a critical option when choosing a propeller. Focus instead on propeller style and pitch.

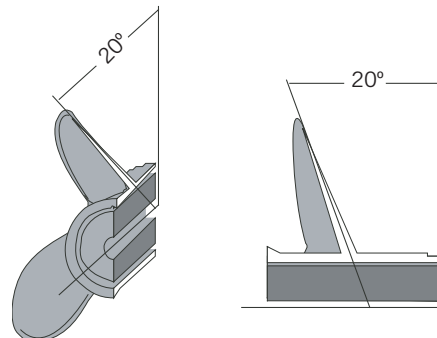
THEORETICAL DISTANCE (PITCH)



PITCH

Pitch is the theoretical distance a propeller will travel in one complete revolution. For example, a 14-1/2 X 21 propeller would ideally move 21 inches forward with each revolution. In practice, the actual distance travelled is less than the pitch because of “slip” which is necessary to produce thrust. Lower pitched propellers are like the lower gears on a car or bicycle. They create less forward travel with each revolution. A low pitch allows engine RPM to build up quickly, which gives faster acceleration and more pulling power. This works well for heavy loads, but results in slower top speeds. Higher pitched propellers are similar to high gears. They create more forward travel with each revolution. A high pitch puts more load on the engine, which reduces low speed pulling power and acceleration, but usually provides more top speed.

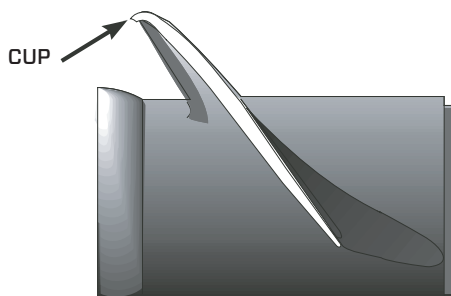
RAKE ANGLE



RAKE

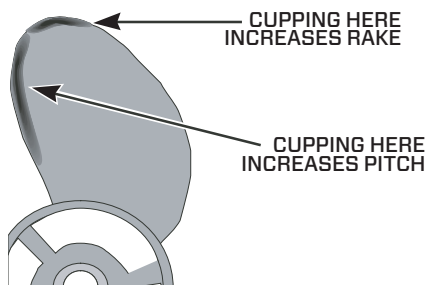
Rake is the angle the blade tip tilts away from the gearcase. The angle is measured on a line extending from the center of the hub through the center of the blade. Rake can be either flat or progressive. Progressive rake means that the rake angle increases with distance from the hub. Most propellers have between 0° and 20° rake. High rake propellers tend to lift the bow of the boat. On fast, lightweight, V-bottom boats, a high rake propeller should increase speed by reducing the amount of wetted hull surface. When operated partially surfacing, high rake propellers reduce the amount of water being thrown off the blade by centrifugal force as the blade leaves the water. This allows high rake propellers to work more effectively in these applications. Tunnel boats and other air entrapment type hulls may become unstable when using a high rake propeller. In these applications, a propeller with less bow lift would be a more appropriate selection.



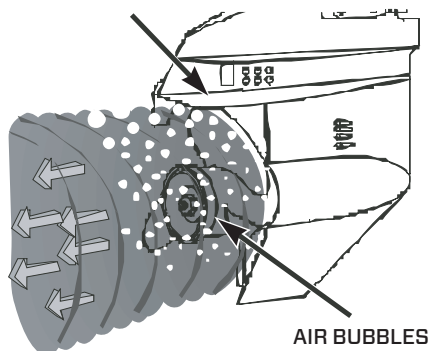


CUP

Cup is the small curved lip added to the edges of some propellers. Cupping acts like a seal on the edge of the blade. It keeps water on the high pressure blade face from flowing around the trailing edge to the low pressure area on the blade back. This reduces ventilation and slipping, especially when operating in disturbed or aerated water. Propellers with cup excel in sharp turns and applications where the engine is mounted higher than normal. Cupping also allows the outboard to be trimmed higher for more bow lift. Cupping the tips of the blades increases the effective rake, adding to the bow lift capabilities of the propeller. Adding cup to the trailing edge of the blades has the effect of increasing pitch. As a result, you can expect a slight loss of engine speed (150-300 RPM) when cup is added. However, the additional cup may allow the propeller to work at a higher transom height. Raising the motor will reduce drag on the gearcase and will often recover the engine speed.

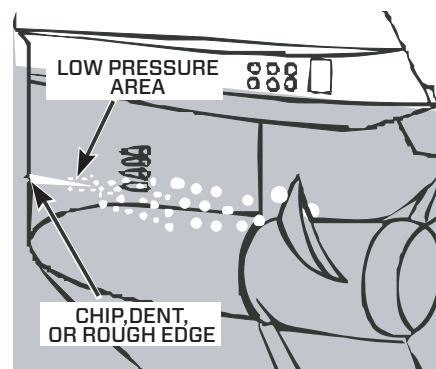


ANTI-VENTILATION PLATE



VENTILATION

Ventilation is the result of air bubbles from surface air or exhaust gases being drawn into the blades. These pockets of air make a propeller lose its bite or thrust. Your RPM may climb wildly, yet you may not gain or lose speed. This is most common with high transom mountings, extreme trim settings, or sharp turns. To help prevent ventilation, the outboard has an anti-ventilation plate directly above the propeller. For most applications, this plate should be within an inch above or below the bottom of the boat. On a high-performance boat, this rule does not necessarily apply. The anti-ventilation plate may be several inches above the boat bottom. Water testing is the best way to determine the correct engine mounting height. Cupped or high performance propellers help minimize ventilation.



CAVITATION

Cavitation is caused by a disturbance of the water flow in front of the propeller. An irregularity in the boat bottom or gearcase, a misplaced transducer or speedometer pickup, or even a loose rivet can cause this problem. Cavitation begins when a disturbance creates a low-pressure area in the water flow. As speed increases, the low pressure intensifies enough to vaporize (boil) some of the surrounding water. When the vapor bubbles approach a high pressure area, they collapse, releasing energy and causing damage. The results of cavitation usually appear as burned areas on the gearcase or propeller blades. If the damage is substantial, performance is lost and the propeller should be replaced. In addition, the cause of the disturbance should be repaired to prevent further problems.



SELECT THE RIGHT PROPELLER FOR YOUR BOAT & OUTBOARD



MATERIAL

Aluminum propellers provide a good balance of cost, performance, and durability for most applications. Stainless steel propellers offer improved performance, fuel economy, and durability. Because stainless steel is five times stronger than aluminum, it is much less susceptible to damage from striking underwater objects. However, the main advantage of stainless steel is in performance. Because of its strength, stainless propeller blades can be cast much thinner, which reduces drag. Stainless steel blades are also stiffer, which increases efficiency. Composite and plastic propellers are generally used for emergency situations.

BLADE COUNT

Theoretically, the fewer number of blades a propeller has, the more efficient it will be. But as the number of blades is increased, vibration is decreased. For most applications, three blade propellers provide the best balance between efficiency and smoothness. However, BRP/Evinrude engineers have created a series of four blade propellers that provide increased efficiency and a superior grip on the water. The result is improved acceleration and better cornering in all water conditions. In addition, when operated in a surfacing application, a four blade propeller keeps more blades in the water for maximum thrust and efficiency.

ROTATION

Right-hand propellers are considered standard rotation propellers. To move the boat forward, the propeller rotates in a right-hand (clockwise) direction as viewed from the rear. Left-hand propellers are considered counter-rotation propellers. To move the boat forward, the propeller rotates in a left-hand (counterclockwise) direction as viewed from the rear. Left-hand propellers must ONLY be used on an outboard equipped with a counter-rotation gearcase. In a dual-outboard installation, the use of both right-hand and left-hand propellers balances the torque created by the rotation of the propellers. This helps to reduce the effort needed in steering and also helps to keep the boat level from side to side.

WARNING

For dual-outboard installations, always check to be sure propellers are installed on the correct engines before aggressively operating the boat.



STEP ONE

Choose the propeller type designed for the way the boat will be used:

- Fishing, skiing, cruising, commercial, racing, etc?
- How many people will be on board?
- Is the water shallow, or are there rocks or other underwater objects?
- Will the boat be used for multiple purposes?

Use the propeller family descriptions in the following pages as a guide. For example, a Rebel™ propeller could be a good choice for a large, offshore boat. In contrast, a Raker® propeller provides bow lift, for increased top speed, on small, fast boats.

STEP TWO

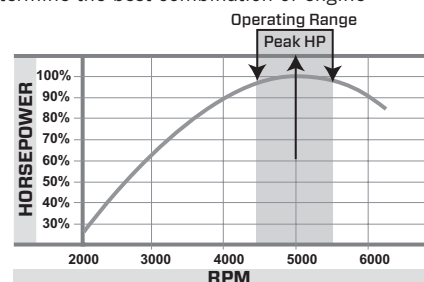
Find the correct sized propeller for your specific outboard, boat, and load combination. When selecting a propeller, start with the propeller charts in the following pages. These charts group all of the propellers designed for a particular outboard and provide detailed information such as pitch, diameter, style, and the number of blades.

To complete the selection process, you must perform a water test. During this running test, you will determine the best combination of engine mounting height, propeller style, and propeller pitch.

All Evinrude and Johnson outboards have a recommended full throttle operating range. This means that, at full throttle, engine RPM must never be below or above this range. These specifications can be found in the Operator's Guide. The propeller provides the load that controls engine RPM.

Reducing propeller pitch size will increase engine RPM at full throttle.

Increasing propeller pitch size will decrease engine RPM at full throttle. You have the correct propeller pitch when the engine runs at the midpoint of the full throttle operating RPM range with the normal, expected load in the boat. This is usually the point of peak horsepower. Choosing the correct propeller pitch for a given boat and application will ensure long engine life, along with best overall fuel economy and performance.



When you have a selection of propellers ready for testing:

1. Use an accurate tachometer to measure RPM and an accurate speedometer to measure boat speed.
2. Testing should be performed with the typical load—number of people, gear, water in live wells, etc.
3. Make sure that every test is with an identical setup.
4. Test each propeller at wide open throttle (WOT).
5. Engines should be tested at their optimum trim angle. This is the highest trim position the engine can be run without excessive ventilation, either in a straight line or in turns.
6. If the RPM is too low at WOT, try a reduced pitch and retest.
7. If the RPM is too high at WOT, test a propeller with more pitch. One pitch size usually results in a change of 200-300 RPM.
8. If the boat will be used for two applications, like water skiing and cruising, it may be necessary to test propellers for each type of use.

STEP THREE

Adjust the engine mounting height for peak performance. The ideal engine mounting height provides the fastest boat speed without sacrificing acceleration, maneuverability, or engine water pressure. It is achieved by a trial and error method.

1. Start with the outboard's anti-ventilation plate even with the bottom of the boat.
2. Raise the outboard one mounting hole at a time until engine performance is no longer acceptable. Then, lower the outboard back down one hole. Optimum engine height is affected by propeller style, diameter, and pitch. As you raise the engine, you may need to experiment with a variety of propellers to maximize performance.

THINGS TO REMEMBER

Check full throttle RPM often. It is possible that the propeller pitch size may have to change as the boating application or load changes.

- Adding or removing people can significantly change the power requirements placed on the engine.
- Changes in atmospheric pressure, temperature, and humidity all affect engine performance, which directly affects propeller performance.
- Salt water is more buoyant than fresh water; this may cause some hulls to run faster when moving from a fresh water to salt water location.
- The accumulation of marine growth or dirt—moss, barnacles, lime deposits, etc—is a major cause of poor boat performance.



DID YOU KNOW EVINRUDE JOHNSON GENUINE PARTS HAS PROPELLERS TO FIT EVERY BRAND OF OUTBOARD ENGINE?

Evinrude and Johnson has been a leader in propeller performance for over 40 years. Since 1982 our engineers have laid claim to defining new levels of speed and performance with the legendary Raker and now the Raker II propellers. Since the Nineties, the Viper propeller has unleashed previously unknown performance in the everyday runabout. As an extra bonus every Evinrude Johnson propeller comes with a 3 year limited warranty.

Evinrude Johnson Genuine Parts has been expanding our propeller line to include a select group of V4 and V6 propellers with interchangeable hub systems.

The Evinrude Johnson interchangeable hub offering begins with V4 and V6 aluminum propellers, commonly referenced in the aftermarket as D Series and E Series. They use the "Aluminum Interchangeable Hub"

system and can be fitted with accessory hub kits designed to match the propeller shaft of all brands of outboard engines.

The expanded lineup continues into the V6, E Series stainless steel propellers comprised of SSP, Viper, Rebel, Cyclone, Raker H.O. with VVP and RX4 with VVP propellers. These props use the TBX hub system designed specifically for the heavy load requirements of high horsepower outboards. With only one additional TBX hub kit these propellers can also be fitted to virtually every competitive brand of V6 outboard engine.



PROPELLER HUB SYSTEM - V6 STAINLESS STEEL PROPELLER INTERCHANGEABLE CHART

DESCRIPTION	P/N
Evinrude E-TEC G2 TBX™ bushing kit (POP) - PY2015 thru	767683
TBX™ bushing kit (POP) - Evinrude®/Johnson® outboards V6 (1997 thru 2015)	177283
TBX™ bushing kit (POP) - competitive outboards V6	177288

PROPELLER HUB SYSTEM - ALUMINUM PROPELLER INTERCHANGEABLE CHART

APPLICATION	SPLINE	YEAR	P/N
Evinrude®/Johnson® V4 45-75 HP, large gearcase 4-1/4"	13	1968-current	765195
Evinrude®/Johnson® V4 85-140 HP	13	1969-current	765195
Evinrude®/Johnson® 90-140 HP, large gearcase	15	1991-current	765190
Force® 75-150 HP	15	1995-current	765192
Honda® 75-150 HP	15	1995-1998	765192
Honda® BF 135 HP, 150 HP, 200 & 225 HP	15	2003-current	765192
Mercury®/Mariner®/MerCruiser® 60 HP Bigfoot	15		765192
Mercury®/Mariner®/MerCruiser® 70-140 HP (except 135 HP), XR-4, XR-6	15	1961-current	765192
Mercury®/Mariner®/MerCruiser® 135 HP	15	1987-current	765192
Mercury®/Mariner®/MerCruiser® 150-300 HP	15	1978-current	765192
Yamaha® 80-140 HP	15	1978-1983	765192
Yamaha® 150-175 HP	15	1978-1983	765192
Yamaha® 115 HP, FS115 (4-stroke), 130 HP	15	1984-current	765193
Yamaha® 150-130 HP	15	1984-current	765193
Yamaha® Sterndrives	15	1989-1993	765193
OMC Cobra® SX	19	1994-current	765194
Volvo® SX Sterndrives	19	1994-current	765194
Honda® 75-90 HP	15	1999-current	765196
Honda® 115-130 HP	15	1999-current	765196
Nissan®/Tohatsu® 90-140 HP	15	1987-current	765197
Mercury®/Mariner®/MerCruiser® 225 EFI (4-stroke) manufactured by Yamaha®	15		765198
Evinrude®/Johnson® 90, 115 HP (4-stroke)	15	2003-current	765199
Suzuki® DF90, DF115 (4-stroke)	15	2001-current	765199
Suzuki® DF140 (4-stroke)	15	2001-current	765200

FAMILY DESCRIPTIONS



The right propeller will increase fuel economy, top-end speed and even engine life. We've engineered Evinrude Johnson propellers for every application. And all of our props feature a 3-year limited warranty. The best propellers all have one thing in common: the legendary Evinrude Johnson name.

REBEL® TBX™ OFFSHORE & CRUISING

- V6 – Standard & Counter Rotation
- Use on offshore boats, large runabout, & pontoon boats
- Designed & engineered for efficient midrange cruising
- Improved fuel economy with longer cruising range
- TBX interchangeable hub system



ROGUE™ SMALL RUNABOUTS & FLATS BOATS

- Provides extra stern lift
- Stays on plane w/minimum RPM
- Custom high luster finish
- 40HP-130HP w/shock absorbing rubber hub



RAKER® H.O. BASS & HIGH PERFORMANCE

- Fast, Fast, Fast...
- Custom cupped high rake blades
- Superior bow lift
- Exceptional top end speed
- Vented hub for faster acceleration
- V6 Raker II use the TBX hub system



VIPER™ TBX™ RUNABOUTS & GENERAL RECREATION

- V6 – Standard & Counter Rotation
- V4 – Standard Rotation
- Versatile 3-blade performance
- Excellent balance of speed and durability
- V6 sizes use the TBX™ hub system
- 40HP-130HP w/shock absorbing rubber hub



HYDRUS™ PONTOON PONTOON BOATS

- Ideal upgrade from aluminum
- Fast planing 3-blade versatile prop
- Cupped blades
- V6 sizes use the TBX™ hub system
- 40HP-130HP w/shock absorbing rubber hub



CYCLONE™ TBX™ OFFSHORE CRUISING & RUNABOUTS

- V6 – Standard & Counter Rotation
- Enhanced performance propeller
- Stays on plane with minimum RPM
- Less vibration and improved fuel economy
- TBX interchangeable hub system



SSP® TBX™ GENERAL PURPOSE & DURABILITY

- Ideal upgrade from aluminum
- Fast planing 3-blade versatile prop
- Cupped blades
- V6 sizes use the TBX™ hub system
- 40HP-130HP w/shock absorbing rubber hub



ALUMINUM GENERAL PURPOSE & ECONOMY

- Sizes for 40HP through 300HP
- Lowest cost and good value
- Precision casting provides great strength and long life
- Cupped blades
- Includes custom interchangeable hub system



RX4® TRACTION & ROUGH WATER

The RX4 is a no compromises 4 blade propeller. RX4 masters the power curve of the Evinrude® E-TEC® G2™ engine. It is optimized for traction and rough water performance with industry leading speed, acceleration, and fuel economy. It delivers superior bow lift on larger boats and does not slip in turns.

- Variable Vent Porting
- Every propeller is hand finished and precision gauged for quality and consistency.
- Available in right hand rotation sizes 18, 20, 22, 24, 25 and 26 pitch.
- Available in left hand rotation sizes 18, 20, 22, 24 pitch.



FAMILY APPLICATION CHART

ENGINE TYPE	ALUMINUM	HYDRUS	SSP	ROGUE	RX4	RAKER	VIPER	REBEL	CYCLONE
I2 40-60 HP	•	•	•	•		•	•		
I3 75-90 HP*	•	•	•	•		•	•		
V4 115-130 HP	•	•	•	•		•	•		
V6 150-300 HP	•	•	•		•	•	•	•	•
Rotation - Standard RH	•	•	•	•	•	•	•	•	•
Rotation - Counter LH			•		•		•	•	•

BOAT TYPE	ALUMINUM	HYDRUS	SSP	ROGUE	RX4	RAKER	VIPER	REBEL	CYCLONE
Runabout - Fiberglass	•		•	•	•		•		•
Runabout - Aluminum	•		•	•	•		•		•
Deck Boat	•				•		•	•	•
Flats Boat	•			•			•		•
Bay Boat	•			•			•	•	•
Multi-Species Boat - Aluminum	•				•		•		•
Multi-Species Boat - Fiberglass					•	•	•	•	
Bass Boat					•	•			•
Sport Runabout 150 HP+					•	•			
Offshore - small, single engine	•			•	•		•	•	•
Offshore - multiple engine					•		•	•	•
Pontoon - twin log	•	•	•	•			•	•	
Pontoon - triple log					•		•	•	

QUICK REFERENCE GUIDE

All aluminum propellers fitting 40-140HP 2-stroke, 13 spline and V6 aluminum propellers, 15 spline are packaged with Aluminum Interchangeable Hub kit. All V6 stainless steel propellers are packaged with the Evinrude / Johnson TBX hub kit. Refer to the Interchangeable hub kit chart to order kits to fit competitors outboards.

All Evinrude®/Johnson® Propellers have a 3-Year Limited Warranty!

15H.O.-30 HP EVINRUDE® E-TEC®

P/N	MATERIAL/FAMILY	BLADE COUNT	DIAMETER	PITCH	NOTES
5008225	Aluminum	4	11"	7"	15H.O. High Thrust
765048	Aluminum	3	11"	9"	General Purpose and Economy
765049	Aluminum	3	10 1/2"	11"	General Purpose and Economy
765135	Aluminum	4	10.2"	11"	General Purpose and Economy
765050	Aluminum	3	10.3"	12"	General Purpose and Economy
765136	Aluminum	4	10.1"	12"	General Purpose and Economy
778863	Aluminum	3	10.3"	13"	General Purpose and Economy
765137	Aluminum	4	10"	13"	General Purpose and Economy
765138	Aluminum	4	10"	14"	General Purpose and Economy
763486	Aluminum	3	10"	15"	General Purpose and Economy
765139	Aluminum	4	10"	15"	General Purpose and Economy
765176	SSP	3	10"	11"	Durability and General Purpose
765174	SSP	4	10"	11"	Durability and General Purpose
765177	SSP	3	10"	12"	Durability and General Purpose
765175	SSP	4	10"	12"	Durability and General Purpose
765178	SSP	3	10"	13"	Durability and General Purpose
766153	SSP	4	10"	13"	Durability and General Purpose
765179	SSP	3	10"	14"	Durability and General Purpose
765180	SSP	3	10"	15"	Durability and General Purpose

40-130 HP EVINRUDE® E-TEC® (EXCLUDES 25" MODELS)

P/N	MATERIAL/FAMILY	BLADE COUNT	DIAMETER	PITCH	NOTES
763300	Aluminum	3	14"	9"	General Purpose and Economy
763301	Aluminum	3	14"	11"	General Purpose and Economy
765181	Aluminum	3	13 3/4"	13"	General Purpose and Economy
765182	Aluminum	3	13 1/2"	15"	General Purpose and Economy
765183	Aluminum	3	13 1/4"	17"	General Purpose and Economy
765184	Aluminum	3	13.2"	19"	General Purpose and Economy
765185	Aluminum	3	13.2"	21"	General Purpose and Economy
177201	HydruS™ Aluminum	3	13 7/8"	9"	Pontoon boats, High Reverse Thrust
177202	HydruS™ Aluminum	3	13 7/8"	11"	Pontoon boats, High Reverse Thrust
177203	HydruS™ Aluminum	3	13 7/8"	13"	Pontoon boats, High Reverse Thrust
763957	SSP	3	13 3/4"	13"	Durability and General PurposE
763950	SSP	3	13 1/2"	15"	Durability and General PurposE
763951	SSP	3	13 1/4"	17"	Durability and General PurposE
763952	SSP	3	13"	19"	Durability and General PurposE
763929	Viper™	3	13 7/8"	15"	Swept blade design, General use, Bow Lifter
763930	Viper™	3	13 7/8"	17"	Swept blade design, General use, Bow Lifter
763931	Viper™	3	13 7/8"	19"	Swept blade design, General use, Bow Lifter
763932	Viper™	3	13 7/8"	21"	Swept blade design, General use, Bow Lifter
763953	Raker®	3	13 1/2"	18"	High Performance Bow Lifter
763954	Raker®	3	13 1/2"	20"	High Performance Bow Lifter
763956	Raker®	3	13 1/2"	24"	High Performance Bow Lifter
763964	Rogue™	4	13 1/2"	13"	Flat Boats and Runabouts
763965	Rogue™	4	13 1/4"	15"	Flat Boats and Runabouts
763966	Rogue™	4	13"	17"	Flat Boats and Runabouts
763967	Rogue™	4	13"	19"	Flat Boats and Runabouts
763968	Rogue™	4	13"	21"	Flat Boats and Runabouts



150 - 300 HP EVINRUDE® E-TEC®, 25" MODELS - 90, 115, 130 EVINRUDE® E-TEC®

RIGHT HAND (STANDARD ROTATION)	LEFT HAND (COUNTER ROTATION)	MATERIAL/ FAMILY	BLADE COUNT	DIAMETER	PITCH	NOTES
767620		Aluminum	3	15 1/2"	11"	General Purpose and Economy
763453		Aluminum	3	15 1/2"	13"	General Purpose and Economy
765186		Aluminum	3	15"	15"	General Purpose and Economy
765187		Aluminum	3	14 7/8"	17"	General Purpose and Economy
765188		Aluminum	3	14 1/2"	19"	General Purpose and Economy
765189		Aluminum	3	14.3"	21"	General Purpose and Economy
763470		Aluminum	3	14 1/4"	23"	General Purpose and Economy
763959		SSP TBX™	3	15 5/8"	11"	Durability and General Purpose
763960	763961	SSP TBX™	3	15 5/8"	13"	Durability and General Purpose
763962	763963	SSP TBX™	3	15"	15"	Durability and General Purpose
763910	763911	Viper™ TBX™	3	15"	14"	All-around General Purpose, Bow Lifter
763912	763913	Viper™ TBX™	3	14 3/4"	16"	All-around General Purpose, Bow Lifter
763914	763915	Viper™ TBX™	3	14 3/4"	17"	All-around General Purpose, Bow Lifter
763916	763917	Viper™ TBX™	3	14 3/4"	18"	All-around General Purpose, Bow Lifter
763918	763919	Viper™ TBX™	3	14 3/4"	19"	All-around General Purpose, Bow Lifter
763920	763921	Viper™ TBX™	3	14 3/4"	20"	All-around General Purpose, Bow Lifter
763922	763923	Viper™ TBX™	3	14 1/2"	21"	All-around General Purpose, Bow Lifter
763924	763925	Viper™ TBX™	3	14 1/4"	22"	All-around General Purpose, Bow Lifter
763936	763937	Cyclone™ TBX™	4	14 1/2"	15"	Cruising and Transom Lift
763938	763939	Cyclone™ TBX™	4	14 1/4"	17"	Cruising and Transom Lift
763940	763941	Cyclone™ TBX™	4	14 1/8"	18"	Cruising and Transom Lift
763942	763943	Cyclone™ TBX™	4	14 1/8"	19"	Cruising and Transom Lift
763944	763945	Cyclone™ TBX™	4	14"	20"	Cruising and Transom Lift
763946	763947	Cyclone™ TBX™	4	14"	21"	Cruising and Transom Lift
763948	763949	Cyclone™ TBX™	4	14"	23"	Cruising and Transom Lift
177264		Raker II® TBX™	3	14 1/2"	22"	High Performance Bow Lifter
177265		Raker II® TBX™	3	14 1/2"	24"	High Performance Bow Lifter
177299		Raker II® TBX™	3	14 1/2"	25"	High Performance Bow Lifter
177266		Raker II® TBX™	3	14 1/2"	26"	High Performance Bow Lifter
177267		Raker II® TBX™	3	14 1/2"	28"	High Performance Bow Lifter
763984	763985	Rebel TBX™	3	15 3/4"	15"	Faster Cruising Speeds & Improved Fuel Economy
763986	763987	Rebel TBX™	3	15 1/2"	17"	Faster Cruising Speeds & Improved Fuel Economy
763988	763989	Rebel TBX™	3	15 3/8"	18"	Faster Cruising Speeds & Improved Fuel Economy
763990	763991	Rebel TBX™	3	15 1/4"	19"	Faster Cruising Speeds & Improved Fuel Economy
763992	763993	Rebel TBX™	3	15 1/8"	20"	Faster Cruising Speeds & Improved Fuel Economy
763994	763995	Rebel TBX™	3	15"	21"	Faster Cruising Speeds & Improved Fuel Economy
763996	763997	Rebel TBX™	3	14 7/8"	22"	Faster Cruising Speeds & Improved Fuel Economy
763998	763999	Rebel TBX™	3	14 3/4"	23"	Faster Cruising Speeds & Improved Fuel Economy
764000	764001	Rebel TBX™	3	14 1/2"	25"	Faster Cruising Speeds & Improved Fuel Economy
RAKER® H.O. WITH VARIABLE VENT PORTS (NO TBX™ HUB)						
177304		Raker® H.O.	3	14 1/2"	22"	Maximize speed and optimize acceleration
177305		Raker® H.O.	3	14 1/2"	24"	Maximize speed and optimize acceleration
177308		Raker® H.O.	3	14 1/2"	25"	Maximize speed and optimize acceleration
177306		Raker® H.O.	3	14 1/2"	26"	Maximize speed and optimize acceleration
177307		Raker® H.O.	3	14 1/2"	28"	Maximize speed and optimize acceleration
RX4™ WITH VARIABLE VENT PORTS (NO TBX™ HUB)						
177340	177341	Rx4™	4	15"	16"	For optimal mid-range fuel economy, roughwater bite and bow lift - offshore, inshore, pontoon, runabouts
177320	177321	Rx4™	4	15"	18"	
177322	177323	Rx4™	4	15"	20"	
177324	177325	Rx4™	4	15"	22"	
177326	177327	Rx4™	4	15"	24"	
177328		Rx4™	4	15"	25"	
177330		Rx4™	4	15"	26"	



ski-doo ***LYNX*** ***SEA-DOO*** ***EVINRUDE*** ***ROTAX*** ***Can-am***