

# **RIPTIDE TERROVA® QUEST™**

## **BOW-MOUNT TROLLING MOTOR**

Installation Instructions

# INTRODUCTION

## THANK YOU

Thank you for choosing Minn Kota. We believe that you should spend more time fishing and less time positioning your boat. That's why we build the smartest, toughest, most intuitive trolling motors on the water. Every aspect of a Minn Kota trolling motor is thought out and rethought until it's good enough to bear our name. Countless hours of research and testing provide you the Minn Kota advantage that can truly take you "Anywhere. Anytime." We don't believe in shortcuts. We are Minn Kota. And we are never done helping you catch more fish.

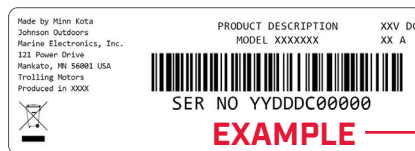
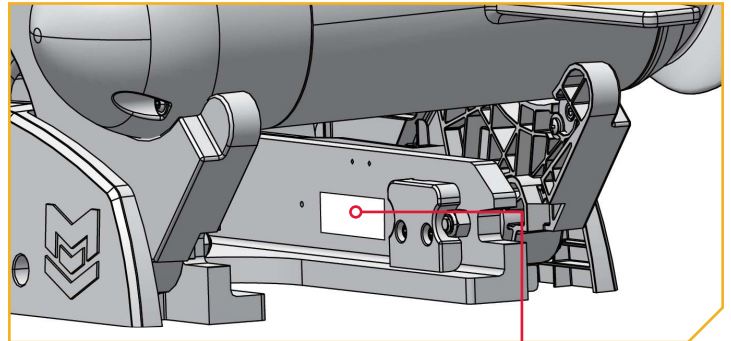
## REGISTRATION

Remember to keep your receipt and immediately register your trolling motor on our website at [minnkota.johnsonoutdoors.com/register](http://minnkota.johnsonoutdoors.com/register).

## SERIAL NUMBER

Your Minn Kota 11-character serial number is very important. It helps to determine the specific model and year of manufacture. When contacting Consumer Service or registering your product, you will need to know your product's serial number.

**NOTICE:** The serial number for the Riptide Terrova QUEST is located on the inside of the Mount, behind the left Fall Away Ramp.



## MOTOR INFORMATION (For Consumer Reference Only)

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Store Where Purchased: \_\_\_\_\_

**NOTICE:** Do not return your Minn Kota motor to your retailer. Your retailer is not authorized to repair or replace this unit. You may obtain service by: calling Minn Kota at (800) 227-6433; returning your motor to the Minn Kota Factory Service Center; sending or taking your motor to any Minn Kota authorized service center. A list of authorized service centers is available on our website at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com). Please include proof of purchase, serial number and purchase date for warranty service with any of the above options.

Made for iPhone® 11 and iPhone X

For updated iOS, Humminbird® and Minn Kota® compatibility, visit [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com)



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# SAFETY CONSIDERATIONS

Please thoroughly read the user manual. Follow all instructions and heed all safety and cautionary notices. Use of this motor is only permitted for persons that have read and understood these user instructions. Minors may use this motor only under adult supervision.

## **WARNING**

You are responsible for the safe and prudent operation of your vessel. We have designed your Minn Kota product to be an accurate and reliable tool that will enhance boat operation and improve your ability to catch fish. This product does not relieve you from the responsibility for safe operation of your boat. You must avoid hazards to navigation and always maintain a permanent watch so you can respond to situations as they develop. You must always be prepared to regain manual control of your boat. Learn to operate your Minn Kota product in an area free from hazards and obstacles.

## **WARNING**

Never run the motor out of the water, as this may result in injuries from the rotating propeller. The motor should be disconnected from the power source when it is not in use or is off the water. When connecting the power-supply cables of the motor to the battery, ensure that they are not kinked or subject to chafe and route them in such a way that persons cannot trip over them. Before using the motor make sure that the insulation of the power cables is not damaged. Disregarding these safety precautions may result in electric shorts of battery(s) and/or motor. Always disconnect motor from battery(s) before cleaning or checking the propeller. Avoid submerging the complete motor as water may enter the lower unit through control head and shaft. If the motor is used while water is present in the lower unit considerable damage to the motor can occur. This damage will not be covered by warranty.

## **WARNING**

Take care that neither you nor other persons approach the turning propeller too closely, neither with body parts nor with objects. The motor is powerful and may endanger or injure you or others. While the motor is running watch out for persons swimming and for floating objects. Persons whose ability to run the motor or whose reactions are impaired by alcohol, drugs, medication, or other substances are not permitted to use this motor. This motor is not suitable for use in strong currents. The constant noise pressure level of the motor during use is less than 70dB(A). The overall vibration level does not exceed 2,5 m/sec<sup>2</sup>.

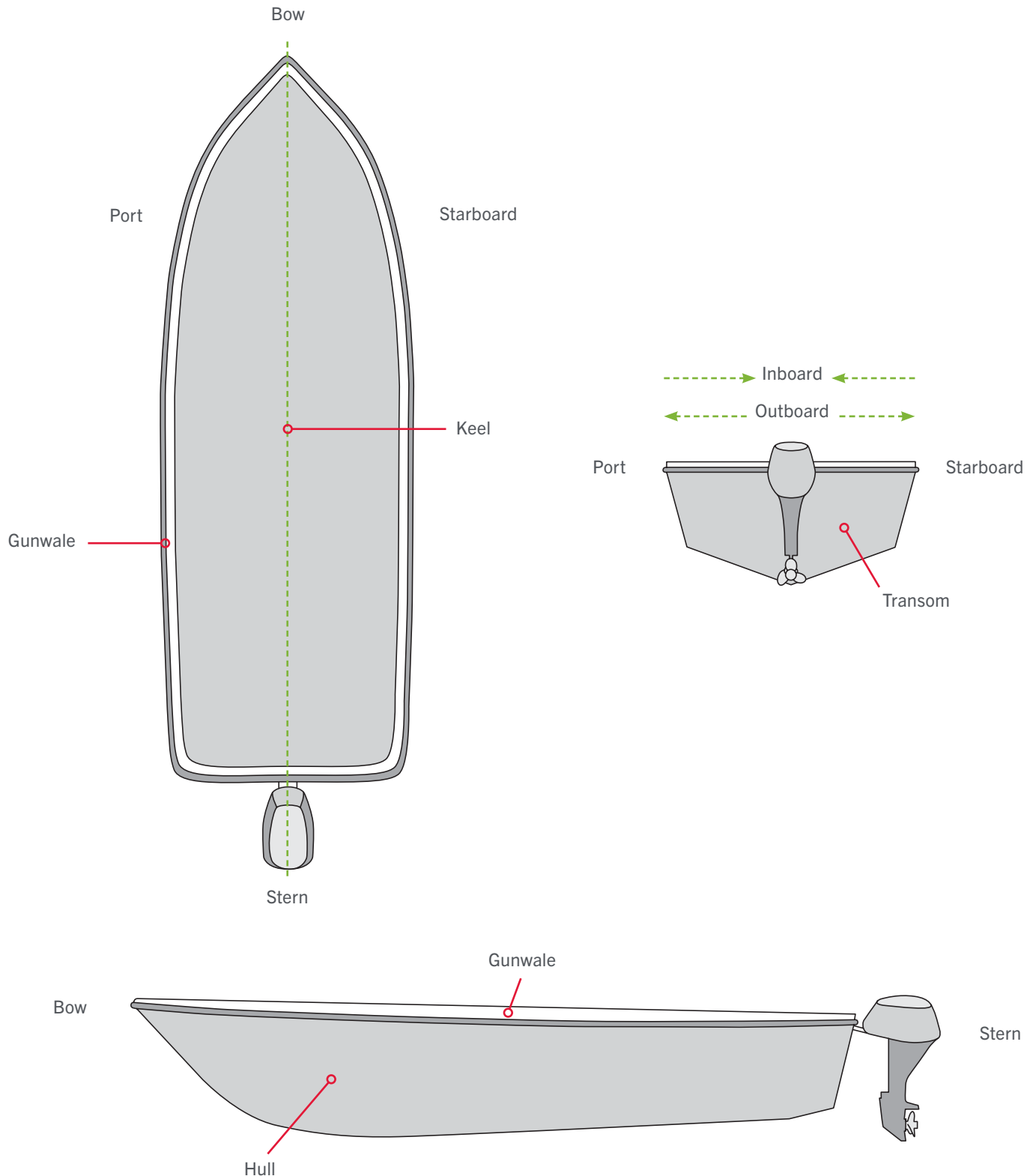
## **WARNING**

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts. In the event of unexpected operation, remove power leads from the battery.

## **WARNING**

It is recommended to only use Johnson Outdoors approved accessories with your Minn Kota motor. Using non-approved accessories including to mount or control your motor may cause damage, unexpected motor operation and injury. Be sure to use the product and approved accessories, including remotes, safely and in the manner directed to avoid accidental or unexpected motor operation. Keep all factory installed parts in place including motor and accessory covers, enclosures and guards.

# KNOW YOUR BOAT





# INSTALLATION

## INSTALLING THE RIPTIDE TERROVA QUEST

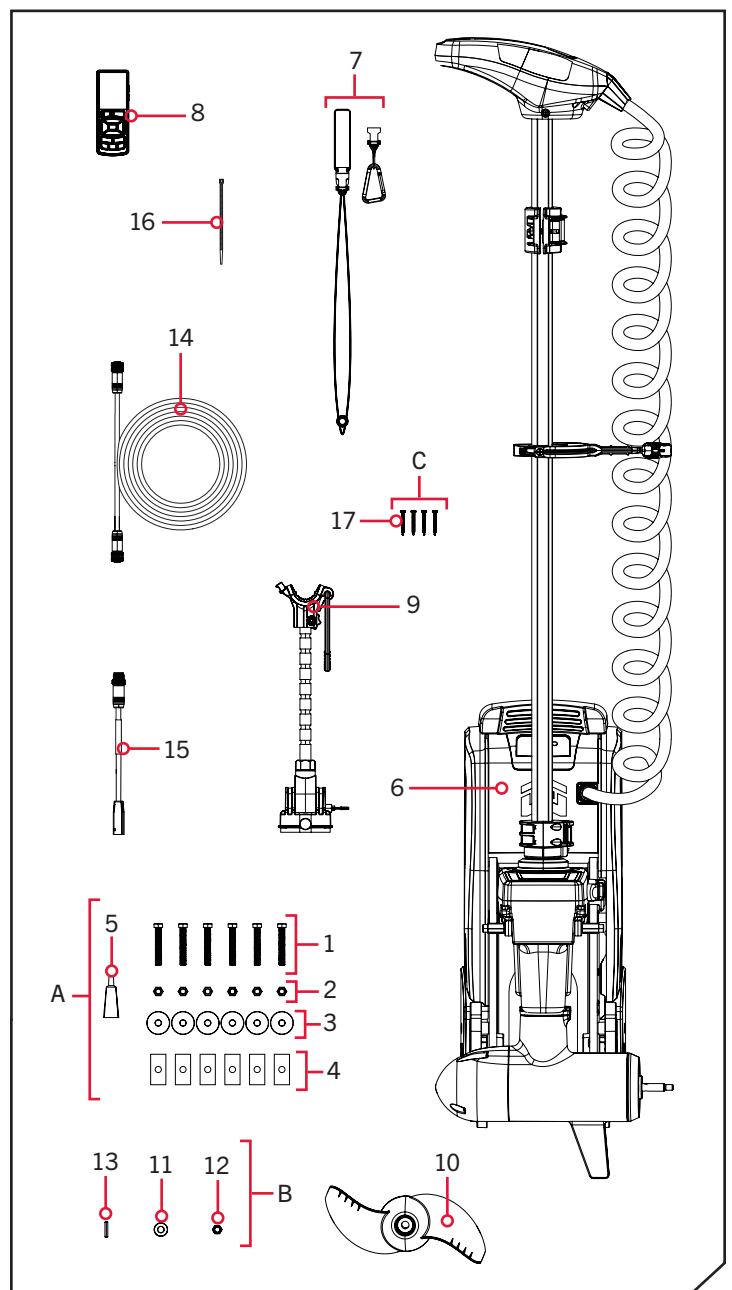
Your new Riptide Terrova QUEST comes with everything you'll need to install it directly to the boat. The motor can be mounted directly to the bow or coupled with a Minn Kota quick release bracket for ease of mounting and removal. For compatible quick release brackets and to locate your nearest dealer, visit [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com). To install the motor directly to the boat, follow the instructions provided in this manual. Please review the parts list, mounting considerations and tools needed for installation prior to getting started. For additional product support, visit [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

### INSTALLATION PARTS LIST

Item / Assembly	Part #	Description	Qty.
A (Includes 1-5)	2994948	BAG ASM, INSTINCT, T3 BL HDW	1
1	2323440	SCREW-3/8-16 X 2 1/2 HHCS SS	6
2	2383122	NUT 3/8-16 NYLON INST LOCKNUT	6
3	2321710	WASHER, RUBBER MOUNT	6
4	2371796	BACKUP BAR 3/16 X 1 X 2	6
5	2378608	ANTI SEIZE TUBE, 4CC, TALON	1
6	✱	MOTOR ASSEMBLY	1
7	2390802	LANYARD w/CARABINER IP RMT U2	1
8	411690-1	TROLLING MOTOR REMOTE	1
9	2992371	STABILIZER, BWMT ES TM ASM *72" *87" *100"	1
10	2321170	PROP, POWER REAMED	1
B (Includes 11-13)	2992604	BAG ASSM, PROP HARDWARE	1
11	2091701	WASHER-PROP (LARGE) MAX101	1
12	2093101	NUT-PROP, NYLOC, LG, MX101 3/8 SS	1
13	2262659	PIN-DRIVE 1" X 3/16 SS 17-4	1
14	490384-4	CABLE, ETHERNET (M12-M12), 30'	1
15	490380-1	CABLE, ETHERNET PIGTAIL-700 HD	1
16	2206301	TIE WRAP, LOW PROFILE 8"	1
C (Includes 17)	2994955	BAG ASM, MKA-60 STABILIZER *72" *87" *100"	1
17	2383475	SCREW-#8-18x1 1/2 L SELF DRILL SS *72" *87" *100"	4
▲	2327139	MANUAL, RT TERROVA 3 BL	1
▲	2327141	MANUAL-INSTLGUIDE RT T3BL	1
▲	2397110	MANUAL, WIRELESS REMOTE	1
▲	2397115	GUIDE-QCK REFERENCE IP 4.0	1
▲	2294950	INSTRUCTIONS, OBN & REMOTE PAIR	1
▲	2207130	BRUSHLESS QS SETUP GUIDE	1
▲	2377179	INSTR. SHEET, MKA-60 STBLZR *72" *87" *100"	1

▲ Not shown on Parts Diagram.

✱ This part is included in an assembly and cannot be ordered individually.



# MOUNTING CONSIDERATIONS

## MOUNTING CONSIDERATIONS

It is recommended that the motor be mounted as close to the centerline or keel of the boat as possible. Make sure the area under the mounting location is clear to drill holes and install hardware. The mounting surface for the Riptide Terrova QUEST must be flat. Rubber washers can be used to shim the base extrusion flat before hardware is tightened.

The motor must not encounter any obstructions as it is lowered into the water or raised into the boat when stowed and deployed. When stowed, ensure that there is enough room for the Shaft and Control Head and that they do not extend off the side of the boat.



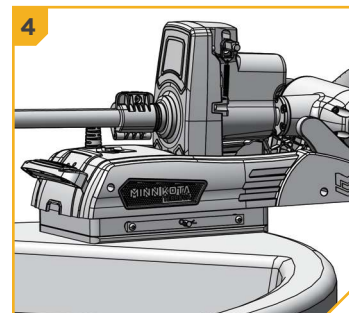
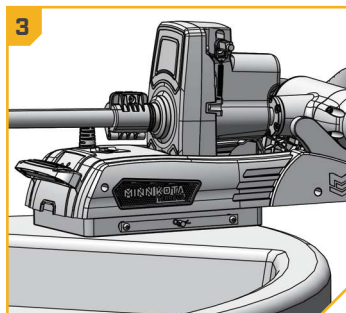
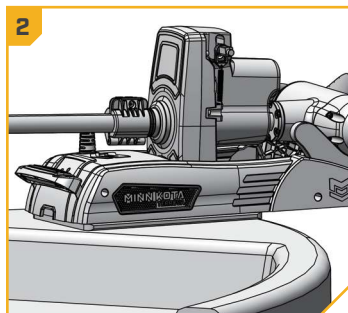
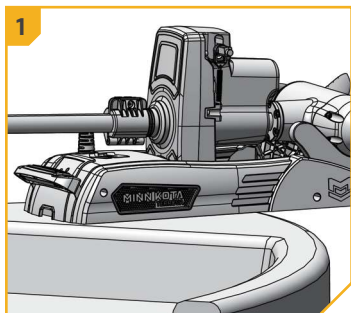
View accessories available for your trolling motor at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

All six mounting holes must be used when securing the Riptide Terrova QUEST to the boat deck. If the desired mounting location does not allow for all six mounting holes and mounting bolts, a Boat Deck Reinforcement Kit (1854058) should be used or a new mounting location selected. Consider a quick release bracket with the installation of your motor.

Mounting options for the Riptide Terrova QUEST include:

1. Installing the motor directly to the boat deck
2. Mounting the motor with an MKA-58 Boat Deck Reinforcement Kit (1854058)
3. Mounting the motor with an MKA-56/RTA-55 composite quick release bracket (1854056 - black/1854055 - white) or an MKA-57 sliding quick release bracket (1854057)
4. Combining an MKA-58 Boat Deck Reinforcement Kit and an MKA-56/RTA-55 Quick Release Bracket with the Riptide Terrova QUEST

When mounting the Riptide Terrova QUEST directly to the boat, follow the installation instructions outlined in this manual. If an accessory bracket will be used to mount the Riptide Terrova QUEST, follow the installation instructions provided with the mounting accessory. To view a list of compatible accessories, visit [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).



## TOOLS AND RESOURCES REQUIRED

- #3 Phillips Screwdriver
- Drill
- 3/8" Drill Bit
- Needle-nose Pliers
- Awl or similar marking tool
- 9/16" Open/Box End Wrench
- 9/16" Deep Well Socket
- A second person to help with the installation

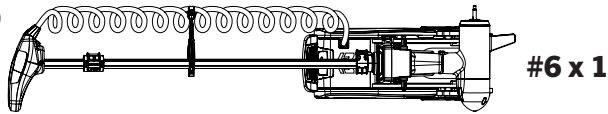
# INSTALLING THE RIPTIDE TERROVA QUEST

## INSTALLATION »

### INSTALLING THE RIPTIDE TERROVA QUEST

1

#### ITEM(S) NEEDED



- a. Place the trolling motor (Item #6) on an elevated, level surface, such as a workbench or the tailgate of a pickup. The motor, as removed from the box, should be in the stowed position.
- b. Make sure that the Power Cables from the battery are disconnected or that the breaker, if equipped, is "off."

#### WARNING

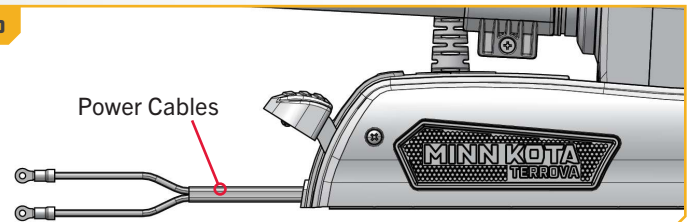
Make sure the motor is on a level surface and is not connected to a power source.

**NOTICE:** The trolling motor weighs up to 90lb. Minn Kota recommends having a second person help with the installation.

1a



1b

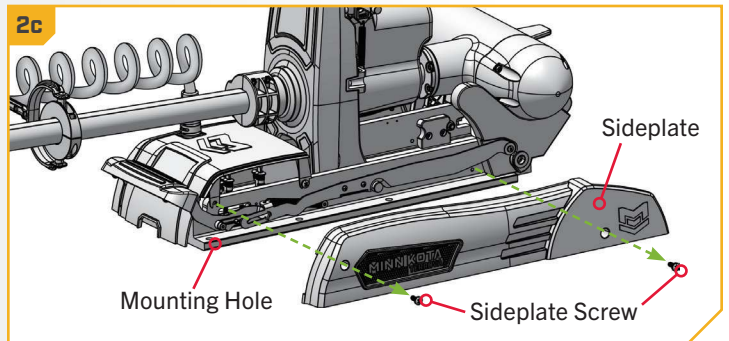


2

- c. Remove the four Sideplate Screws using a #3 Phillips Screwdriver. Two screws will be located on each side of the mount.
- d. Remove the Right Sideplate and Left Sideplate to expose the six mounting holes in the Base Extrusion.

**NOTICE:** Ensure that the area between the Mount and Steering Housing is clean and free of debris and that no installation hardware has fallen in. The Mount contains pads that contact the Steering Housing when stowed. The motor cannot stow securely if an obstruction is present on the pads.

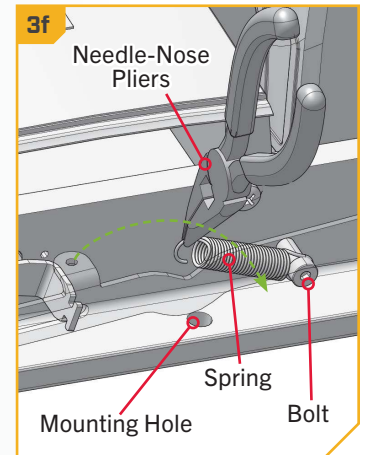
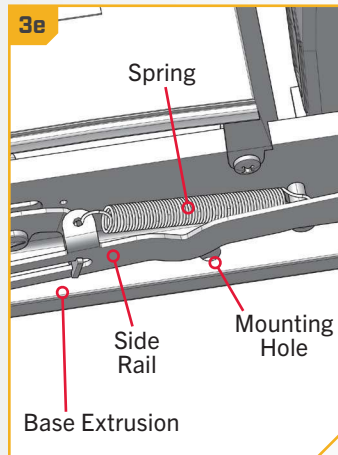
2c



## INSTALLING THE RIPTIDE TERROVA QUEST

3

- e. The center mounting hole on each side of the Base Extrusion is blocked by a Spring. One end of each Spring must be disconnected in order to access the mounting holes.
- f. To disconnect the Spring, take a Needle-nose Pliers and carefully grab the hooked end on the top half of the Spring. Unhook it from the hole in the Side Rail by pulling up and away. Guide it towards the bottom half of the Spring still attached to the Base Extrusion and gently set it down. Do not disconnect the end of the Spring that is wrapped around a bolt. Repeat this process with the remaining Spring on the other side of the mount.



### CAUTION

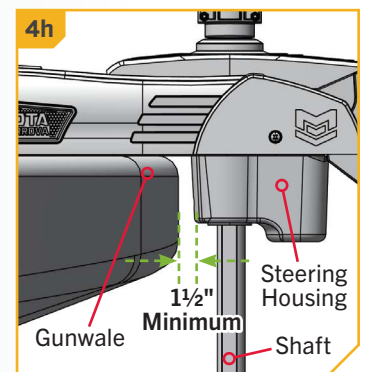
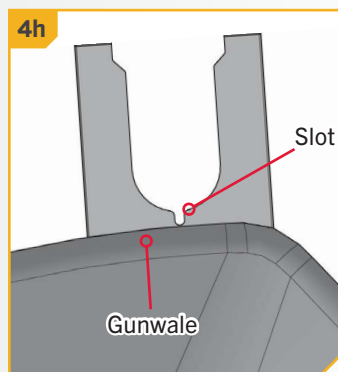
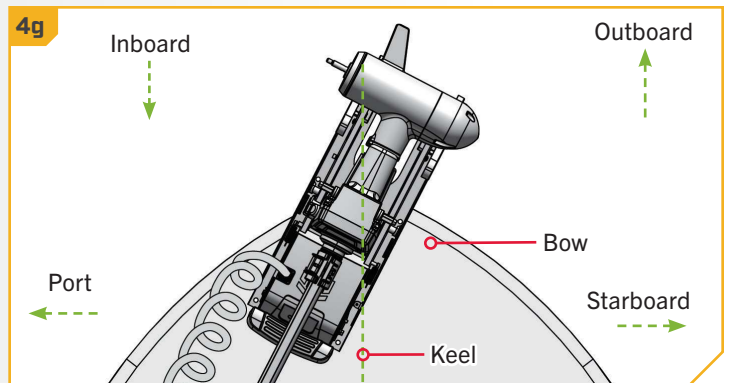
When maneuvering each Spring, carefully handle the Spring to avoid bending it. Do not grab the body of the Spring to avoid pinching between the spring coils. Always grab by the hooked end.

### CAUTION

When handling each Spring, always keep the spring tension under control. Abruptly releasing the Spring while there is still tension could damage it and cause it to release unpredictably.

4

- g. Review the mounting considerations at the beginning of the Installation section for proper clearance. Place the motor on the bow of the boat at the intended mounting location, as close to the centerline or keel as possible. Ensure there is enough room for the Shaft and Control Head and that they do not extend off the side of the boat. The motor can be installed on either the Port or Starboard side of the bow, based on personal preference.
- h. Position the motor so that the Slot in the Base Extrusion is positioned beyond the boat Gunwale. For proper clearance, the entire Slot must be visible beyond the Gunwale. When the motor is deployed, there must be a minimum required distance of 1½" between the Gunwale and the bottom of the Steering Housing and Shaft.
- i. When mounting the Riptide Terrova QUEST, all six mounting holes must be used. If the desired mounting location does not allow for all six mounting holes, a Boat Deck Reinforcement Kit (1854058) should be used or a new mounting location selected.

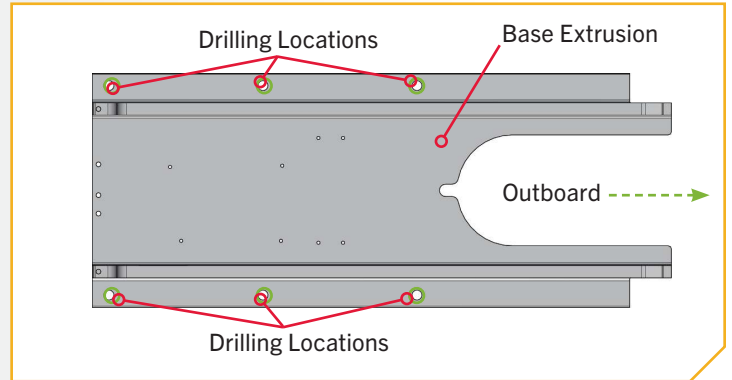


## INSTALLING THE RIPTIDE TERROVA QUEST

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- j. With the motor at the intended mounting location, take an Awl or similar tool and mark all six mounting holes in the Base Extrusion.
- k. Slide the motor aside to drill the mounting holes.
- l. Drill through the boat deck using a Drill and a 3/8" Drill Bit on all six marked locations.
- m. Reposition the motor over the drilled holes to install mounting hardware.

**NOTICE:** New mounting holes are required when upgrading from a Riptide Terrova to a Riptide Terrova QUEST. New mounting holes will accommodate the higher thrust motor and ensure the installation is secure.



**NOTICE:** The mounting surface for the Riptide Terrova QUEST must be flat. Rubber Washers can be used to shim the Base Extrusion flat before hardware is tightened.

6

### ITEM(S) NEEDED



#1 x 6

#2 x 6



#3 x 6



#4 x 6

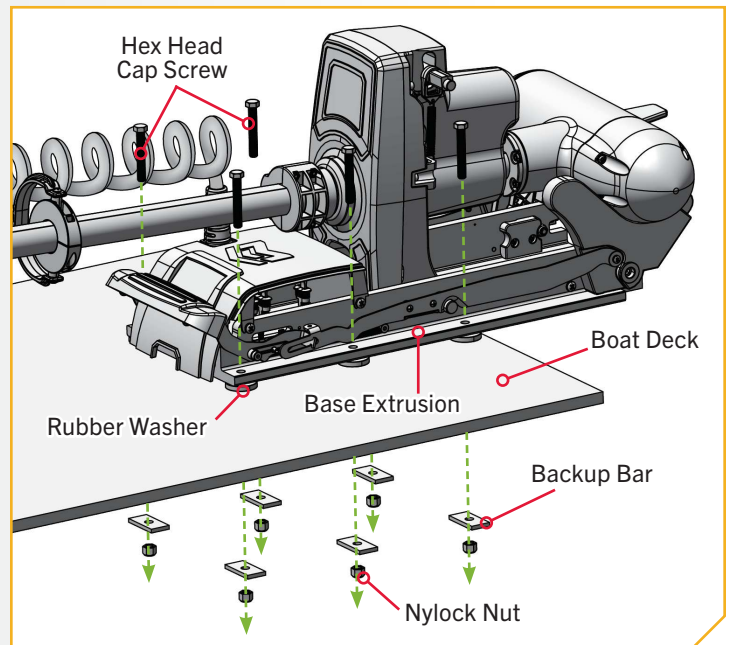


#5 x 1

**NOTICE:** To prevent seizing of the stainless steel hardware, do not use high-speed installation tools. Wetting the screws or applying an anti-seize (Item #5) may help prevent seizing.

- n. Take six Hex Head Cap Screws (Item #1) and apply anti-seize (Item #5) to each Screw. Insert the Screws through the Base Extrusion and into each of the drilled locations. If Rubber Washers (Item #3) are used, the Rubber Washers should sit between the Base Extrusion and boat deck. Take care not to damage the loose Springs that were released to access the mounting holes.
- o. Place a Backup Bar (Item #4) and then a Nylock Nut (Item #2) on the end of each Screw. Tighten with a 9/16" Box End or Open End Wrench. Make sure all hardware is secure.

**NOTICE:** Use extra care to avoid pinching and damaging the sensor wires that run alongside the Base Extrusion when installing and tightening the mounting hardware.





## INSTALLING THE RIPTIDE TERROVA QUEST

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- p. With the mounting hardware secure, reassemble the Springs that were disconnected. Use a Needle-nose Pliers to grab the hooked end of the loose Spring. Reconnect it by pulling it upwards and hooking it in the hole on the Side Rail. The curved end of the Spring should be reattached from the top down. Make sure the Spring is not twisted when reattaching it. Reattach the Spring on both the right and left sides of the Base Extrusion.

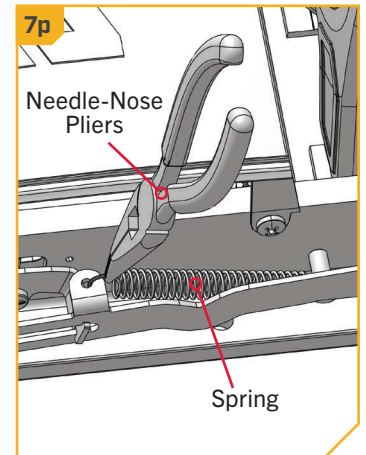
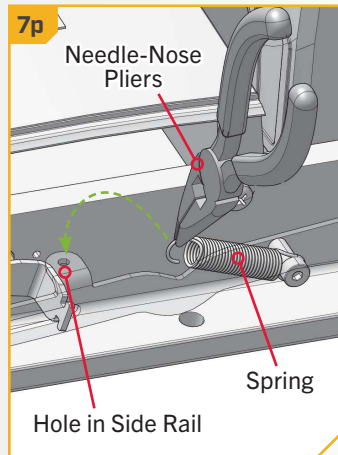


### CAUTION

When maneuvering each Spring, carefully handle the Spring to avoid bending it. Do not grab the body of the Spring to avoid pinching between the spring coils. Always grab by the hooked end.

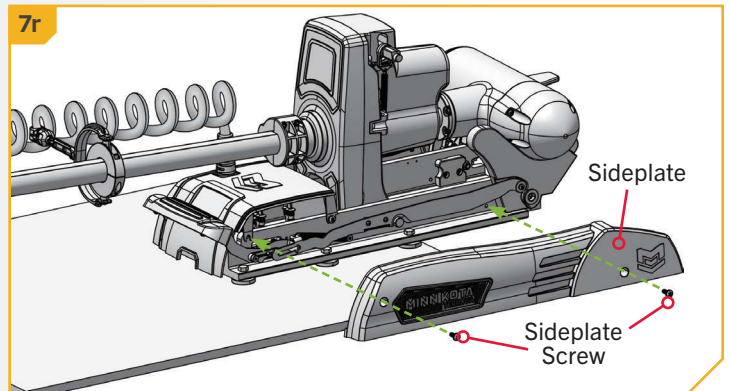
- q. With both Springs reattached, replace the Right Sideplate and Left Sideplate.
- r. Reinstall the four Sideplate Screws using a #3 Phillips Screwdriver. Two of these screws will be located on each side of the mount. Hand tighten.

**NOTICE:** When reinstalling the Sideplates, be sure not to pinch the sensor wires that run alongside the Base Extrusion.



### CAUTION

When handling each Spring, always keep the spring tension under control. Abruptly releasing the Spring while there is still tension could damage it and cause it to release unpredictably.





# BATTERY & WIRING INSTALLATION

## BOAT RIGGING & PRODUCT INSTALLATION

For safety and compliance reasons, we recommend that you follow American Boat and Yacht Council (ABYC) standards when rigging your boat. Altering boat wiring should be completed by a qualified marine technician. The following specifications are for general guidelines only:

### CAUTION

These guidelines apply to general rigging to support your Minn Kota motor. Powering multiple motors or additional electrical devices from the same power circuit may impact the recommended conductor gauge and circuit breaker size. If you are using wire longer than that provided with your unit, follow the conductor gauge and circuit breaker sizing table below. If your wire extension length is more than 25 feet, we recommend that you contact a qualified marine technician.

### CAUTION

**An over-current protection device (circuit breaker or fuse) must be used.** Coast Guard requirements dictate that each ungrounded current-carrying conductor must be protected by a manually reset, trip-free circuit breaker or fuse. The type (voltage and current rating) of the fuse or circuit breaker must be sized accordingly to the trolling motor used. The table below gives recommended guidelines for circuit breaker sizing.

## CONDUCTOR GAUGE AND CIRCUIT BREAKER SIZING TABLE

This conductor and circuit breaker sizing table is only valid for the following assumptions:

1. No more than 2 conductors are bundled together inside of a sheath or conduit outside of engine spaces.
2. Each conductor has 105° C temp rated insulation.
3. No more than 3% voltage drop allowed at full motor power based on published product power requirements.

Motor Thrust / Model	Max Amp Draw	Circuit Breaker		Wire Extension Length				
		Amps	Minimum	5 feet	10 feet	15 feet	20 feet	25 feet
QUEST 24V	60	60 Amp	24 VDC	6 AWG	6 AWG	4 AWG	4 AWG	2 AWG
QUEST 36V	60	60 Amp	36 VDC	6 AWG	6 AWG	6 AWG	6 AWG	4 AWG

**NOTICE:** Wire Extension Length refers to the distance from the batteries to the trolling motor leads. Consult website for available thrust options.

#### Reference

United States Code of Federal Regulations: 33 CFR 183 – Boats and Associated Equipment ABYC E-11: AC and DC Electrical Systems on Boats

# SELECTING THE CORRECT BATTERIES

## SELECTING THE CORRECT BATTERIES

The QUEST series trolling motors are compatible with deep-cycle marine batteries operating at 12, 24, or 36 volts. They are optimized for use with LiFePO4 lithium-ion battery cells, which maintain higher voltages over extended periods compared to lead-acid batteries, thereby enhancing trolling motor performance.

To ensure safety and compliance, it's essential to adhere to the relevant marine regulations and standards for battery choices in different regions:

**UNITED STATES** - Use only batteries that meet U.S. Coast Guard regulations and applicable American Boat and Yacht Council (ABYC) standards. ABYC's E-13 standard for lithium-ion batteries ensures safety and reliability in marine environments.

**CANADA** - Comply with Transport Canada's Transportation of Dangerous Goods (TDG) Regulations, which govern the safe handling, packaging, labeling, and transportation of batteries, particularly lithium batteries classified as dangerous goods. Marine safety guidelines provided by Transport Canada further ensure environmental protection and operational safety when using batteries on vessels.

**EUROPE** - Follow the European Union's Batteries Regulation, which promotes sustainability, performance, and safety throughout a battery's life cycle.

**AUSTRALIA** - Comply with the Australian Maritime Safety Authority (AMSA) regulations and standards, which emphasize maritime safety and environmental protection.

**NEW ZEALAND** - Align with Maritime New Zealand's standards, which provide guidance on the safe use of lithium-ion batteries on vessels.

Always consult local and/or in-country marine regulations and standards when selecting and installing batteries for your trolling motor to ensure compliance and optimal performance.

QUEST series trolling motors may also be powered with lead-acid (flooded, AGM, or GEL) deep-cycle marine 12-volt battery/batteries. For best results Minn Kota recommends using a deep-cycle marine battery with rating outlined in the "Deep Cycle Amp-Hour Rating" table. Maintain lead-acid batteries at full charge. Proper care will ensure battery power when needed and significantly improve battery life. Failure to recharge lead-acid batteries (within 12-24 hours) is the leading cause of premature battery failure. Use a multi-stage charger to avoid overcharging. When using Lithium Ion batteries, manufacturers may recommend storing in a semi-charged state and charging fully prior to use.

Deep Cycle Amp-Hour Rating			
Run Time	Voltage	Group Size	Amp-Hour
GOOD	12	24	70-85
BETTER	12	27	85-110
BEST	12	31	95-125

If using a crank battery to start a gasoline outboard, Minn Kota recommends using a separate battery/batteries for your Minn Kota trolling motor. Always check with the battery manufacturer for specific maintenance, care and storage instructions. Minn Kota also offers a wide selection of chargers to fit your charging needs. For more information on battery selection, rigging, and chargers, please visit [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

### WARNING

Never connect the (+) and the (–) terminals of the same battery together. Take care that no metal object can fall onto the battery and short the terminals. This would immediately lead to a short and extreme fire danger.

# SELECTING THE CORRECT BATTERIES



## CAUTION

Refer to “Conductor Gauge and Circuit Breaker Sizing Table” in the previous section to find the appropriate circuit breaker or fuse for your motor. For motors requiring a 60-amp breaker, the Minn Kota MKR-27 60-amp circuit breaker (1865115) is recommended.



## CAUTION

Please read the following information before connecting your motor to your batteries in order to avoid damaging your motor and/or voiding your warranty.

### ADDITIONAL CONSIDERATIONS

#### › Using DC or Alternator Chargers

Your Minn Kota trolling motor may be designed with an internal bonding wire to reduce sonar interference. Most alternator charging systems do not account for this bonding wire, and connect the negative posts of the trolling motor batteries to the negative posts of the crank/starting battery. These external connections can damage connected electronics and the electrical system of your trolling motor, voiding your warranty. Review your charger’s manual carefully or consult the manufacturer prior to use to ensure your charger is compatible.

Minn Kota recommends using Minn Kota brand chargers to recharge the batteries connected to your Minn Kota trolling motor, as they have been engineered to work with motors that include a bonding wire. Learn more about Minn Kota chargers online at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

#### › Additional Accessories Connected to Trolling Motor Batteries

Significant damage to your Minn Kota motor, your boat electronics, and your boat can occur if incorrect connections are made between your trolling motor batteries and other battery systems. Minn Kota recommends using an exclusive battery system for your trolling motor. Where possible, accessories should be connected to a separate battery system. Radios and sonar units should not be connected to any trolling motor battery systems as interference from the trolling motor is unavoidable. If connecting any additional accessories to any trolling motor battery system, or making connections between the trolling motor batteries and other battery systems on the boat, be sure to carefully observe the information below.

The negative (-) connection must be connected to the negative terminal of the same battery that the trolling motor negative lead connects to. In the diagrams below this battery is labeled “Low Side” Battery. Connecting to any other trolling motor battery will input positive voltage into the “ground” of that accessory, which can cause excess corrosion. Any damage caused by incorrect connections between battery systems will not be covered under warranty.

#### › Automatic Jump Start Systems and Selector Switches

Automatic jump start systems and selector switches tie the negatives of the connected batteries together. Connecting these systems to the “High Side” Battery or “Middle” Battery in the diagrams below and will cause significant damage to your trolling motor and electronics. The only trolling motor battery that is safe to connect to one of these systems is the “Low Side” Battery.

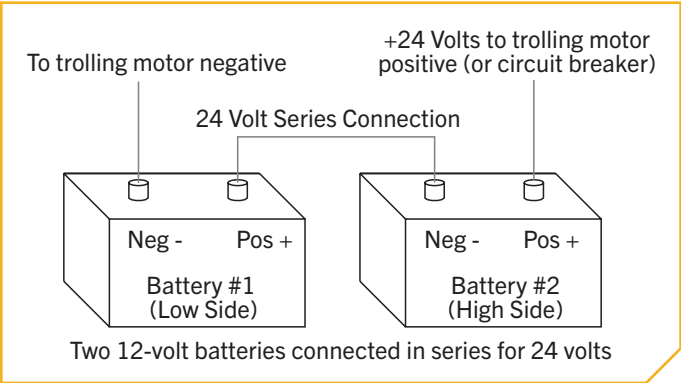
# CONNECTING THE BATTERIES IN SERIES

## CONNECTING THE BATTERIES IN SERIES (IF REQUIRED FOR YOUR MOTOR)

### 24-Volt Systems

Two 12-volt batteries are required. The batteries must be wired in series, only as directed in the wiring diagram, to provide 24 volts.

1. Make sure that the motor is switched off (speed selector on “0”).
2. Connect a connector cable to the positive ( + ) terminal of battery 1 and to the negative ( – ) terminal of battery 2.
3. Connect positive ( + ) red motor lead to positive ( + ) terminal on battery 2.
4. Connect negative ( – ) black motor lead to negative ( – ) terminal of battery 1.



## WARNING

For safety reasons do not switch the motor on until the propeller is in the water. If installing a leadwire plug, observe proper polarity and follow instructions in your boat owner’s manual.

## WARNING

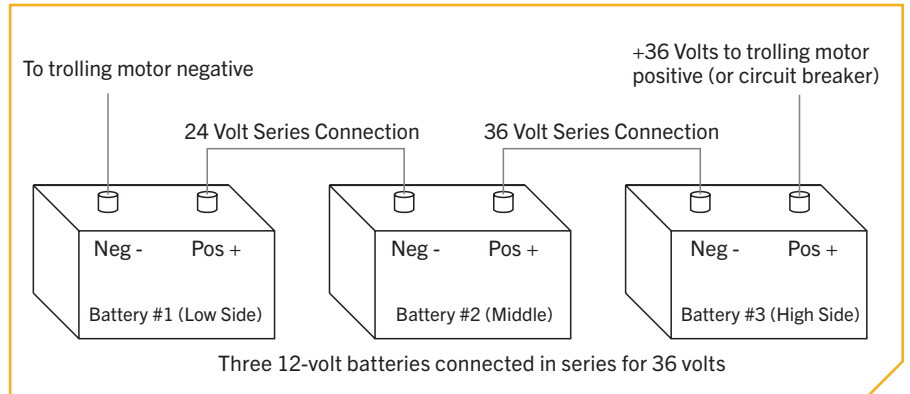
- For safety reasons, disconnect the motor from the battery or batteries when the motor is not in use or while the battery/batteries are being charged.
- Improper wiring of 24/36 volt systems could cause battery explosion.
- Keep leadwire wing nut connections tight and solid to battery terminals.
- Locate battery in a ventilated compartment.

## CONNECTING THE BATTERIES IN SERIES

### 36-Volt Systems

Three 12-volt batteries are required. The batteries must be wired in series, only as directed in the wiring diagram, to provide 36 volts.

1. Make sure that the motor is switched off (speed selector on "0").
2. Connect a connector cable to the positive (+) terminal of battery 1 and to the negative (–) terminal of battery 2 and another connector cable from the positive (+) terminal of battery 2 to the negative (–) terminal of battery 3.
3. Connect positive (+) red motor lead to positive (+) terminal on battery 3.
4. Connect negative (–) black motor lead to negative (–) terminal of battery 1.



### WARNING

For safety reasons, do not switch the motor on until the propeller is in the water. If installing a leadwire plug, observe proper polarity and follow instructions in your boat owner's manual.

### WARNING

- For safety reasons, disconnect the motor from the battery or batteries when the motor is not in use or while the battery/batteries are being charged.
- Improper wiring of 24/36 volt systems could cause battery explosion.
- Keep leadwire wing nut connections tight and solid to battery terminals.
- Locate battery in a ventilated compartment.

# COMPLETING THE INSTALLATION

## COMPLETING THE RIPTIDE TERROVA QUEST INSTALLATION




The Riptide Terrova QUEST is an advanced trolling motor. To maximize its performance, mechanical and electrical systems should be set and calibrated to fit every user's installation. This portion of the installation will cover how to verify power, install the Bow-mount Stabilizer, and more. The installation will conclude with connecting Accessory Cables and setting motor preferences for ease of use. Minn Kota recommends connecting the trolling motor to the One-Boat Network app to assist in these steps. Find more information in the One-Boat Network App document included with the trolling motor or the One-Boat Network Owner's Manual found online at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

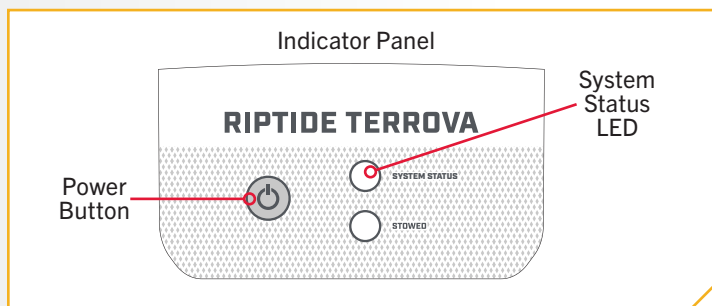
### COMPLETING THE INSTALLATION >

#### > Verifying Power

Each time the trolling motor is powered "on," the control board will auto-detect the power supplied from the battery system and adjust the thrust output based on a 24V or 36V battery system. To verify power to the trolling motor, connect the Riptide Terrova QUEST to power. At specific points in the installation, power will be disconnected or turned "off" to ensure a safe environment for installation.

1

- Locate the Indicator Panel at the front of the Mount. Power on the trolling motor by pressing the Power  button on the Indicator Panel. When the trolling motor is on, the System Status  LED will be blue.
- To turn the motor "off," press and release the Power button. When the Motor is powered off, the System Status  LED will not be illuminated.



**NOTICE:** In instances where the trolling motor is updating, the System Status LED will flash blue while the update is performed. Once the update is complete, the system will self-reboot and perform the normal start-up sequence. If a standard power-up sequence is not experienced, refer to the "Troubleshooting" section of this manual to identify any errors. To learn more about software updates, see the Owner's Manual for the Advanced GPS Navigation Wireless Remote online at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

#### > Installing the Bow-Mount Stabilizer

Riptide Terrova QUEST motors with a 72", 87" or 100" shaft length come with an MKA-60 Bow-Mount Stabilizer Kit (Item #9 and Assembly #C). This accessory stabilizes the shaft and control head when the motor is stowed for transport. Motors with shaft lengths under 72" may purchase the MKA-60 separately as an optional accessory (1862060). For instructions on installing the MKA-60 to the Riptide Terrova QUEST, refer to the document provided with the Bow-Mount Stabilizer Kit.



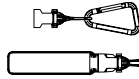
## › Powering on the Wireless Remote

1







### ITEM(S) NEEDED



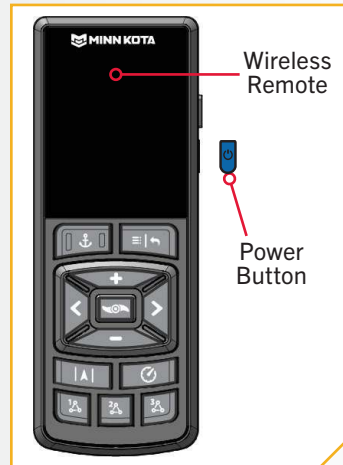
#8 x 1




#7 x 1

- Power on the trolling motor.
- To turn on the Wireless Remote (Item #8), press and hold the Power  button on the side of the Remote.
- A message will appear on the display screen. Read the disclaimer, then press the Steer Right  button to select "I Agree."
- The content on the display screen will populate. Remote functions to manually control the motor are now active, including Speed Up , Speed Down , Steer Left , Steer Right , and Prop On/Off.
- When the Advanced GPS Navigation system has obtained a minimum GPS signal strength of one bar, all remaining functions will become available.


**NOTICE:** Attaching the Lanyard (Item #7) to the Wireless Remote is optional.





**Warning!**

You are responsible for the safe and prudent operation of your boat. This product does not relieve you from the responsibility for safe operation of your boat.

**I Agree** 

**NOTICE:** The Wireless Remote comes from the factory paired to the Riptide Terrova QUEST.

**NOTICE:** A Remote Cradle accessory (1866675) can be purchased for mounting the Wireless Remote or attaching the Remote to a belt clip.

# IDENTIFYING TROLLING MOTOR FEATURES AND THEIR ASSOCIATED CABLES

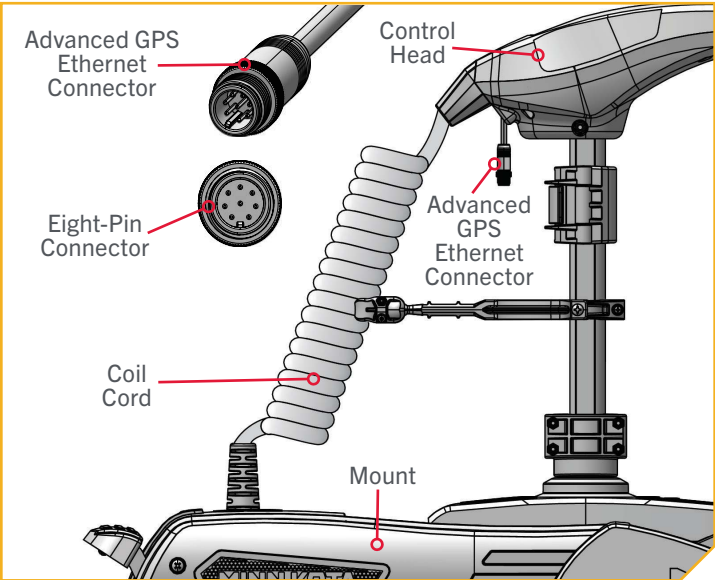
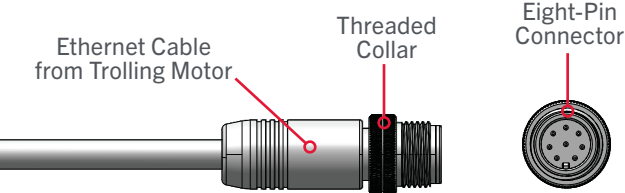
## IDENTIFYING TROLLING MOTOR FEATURES AND THEIR ASSOCIATED CABLES

### Feature & Cable Identification

The Riptide Terrova QUEST is pre-installed with **Advanced GPS Navigation** - including the ability to connect via Ethernet to a Humminbird fish finder. One Eight-Pin Advanced GPS Ethernet Connector will exit the base of the Control Head and rest just below the Control Head next to the Coil Cord.

If the Advanced GPS Navigation on the trolling motor will be used with a fish finder, an Ethernet Cable may be attached to the Advanced GPS Ethernet Connector. See the “Advanced GPS Navigation” and “Securing the Ethernet Cable” sections of this document for details on how to install the Advanced GPS Ethernet Connector to a Humminbird fish finder.

#### Advanced GPS Navigation



### › Feature & Cable Management

#### ADVANCED GPS NAVIGATION ›

Your Minn Kota trolling motor and Humminbird fish finder communicate with each other to change the way you fish. Advanced GPS Navigation offers a large array of features including controlling speed, steering, Spot-Lock, and the ability to record and retrace paths on the water, all at your fingertips. To learn more about the GPS capabilities available with your new motor, please refer to the Advanced GPS Navigation Owner's Manual by visiting [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

The Wireless Remote and GPS controller make up the Advanced GPS Navigation system. A Wireless Remote comes paired to the controller from the factory. The GPS controller contains a very sensitive compass and is where all GPS satellite and remote signals are received. The GPS controller is located in the trolling motor Control Head and may be connected to a fish finder from a connection cable that exits the Control Head. If the Advanced GPS Navigation system will be used with a fish finder, the Ethernet link between the trolling motor and the fish finder should be connected.

### › Considerations for Connecting and Routing Advanced GPS Navigation

Advanced GPS Navigation is pre-installed on your trolling motor. One eight-pin Advanced GPS Ethernet Connector will exit the base of the Control Head and rest just below the Control Head next to the Coil Cord. If the Advanced GPS Navigation on the trolling motor will be used with a fish finder, an Ethernet Cable will need to be attached to the Advanced GPS Ethernet Connector below the Control Head. Consider the distance between the trolling motor and the fish finder to determine how to complete the Ethernet connection.

**ETHERNET CABLES** - Minn Kota provides one 30 ft Ethernet cable ([AS EC 30E - 30' Ethernet Cable - 720073-4](#)) with every trolling motor equipped with Advanced GPS Navigation. The 30 ft Ethernet cable will accommodate a standard Ethernet connection for most installations to a Humminbird fish finder and is "Apex and Solix Ready." If the distance between the trolling motor and Humminbird fish finder is relatively small and a shorter cable is preferred, alternate cable lengths are available from [humminbird.johnsonoutdoors.com](http://humminbird.johnsonoutdoors.com). These options include:

- 10 ft - ([AS EC 10E - 10' Ethernet Cable - 720073-2](#))
- 15 ft - ([AS EC 15E - 15' Ethernet Cable - 720073-5](#))
- 20 ft - ([AS EC 20E - 20' Ethernet Cable - 720073-3](#))

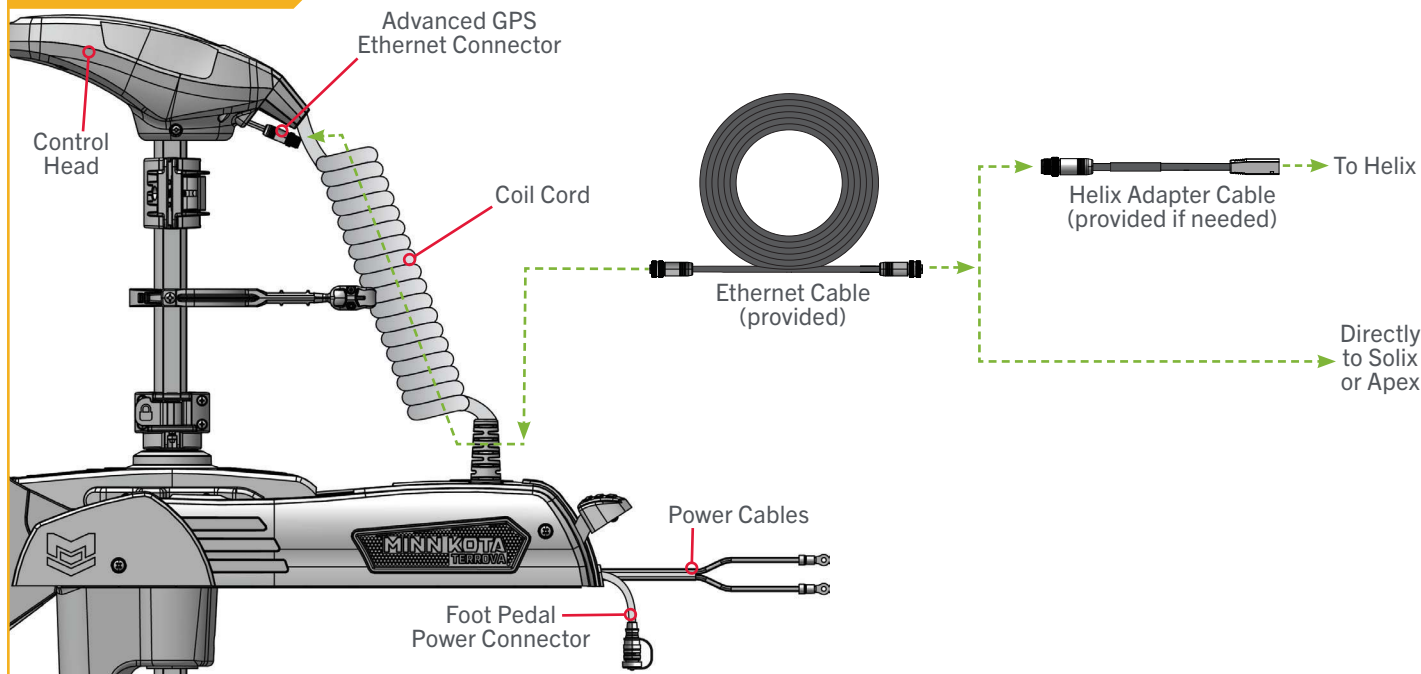
Every length of Ethernet cable plugs directly into a Solix or Apex or directly into a Helix Adapter Cable.

**HUMMINBIRD HELIX ADAPTER CABLES** - Minn Kota provides one Helix Adapter Cable ([AS EC QDE - Ethernet Adapter Cable - 720074-1](#)) with every trolling motor equipped with Advanced GPS Navigation. If the Ethernet connection is being made between the trolling motor and any Humminbird® Helix fish finder, the Helix Adapter Cable should be used. The Helix Adapter Cable directly connects the Ethernet Cable to a Helix fish finder.

**ETHERNET EXTENSION CABLES** - If the 30 ft Ethernet cable provided with your trolling motor with Advanced GPS Navigation is not long enough to reach the fish finder, an Ethernet Extension cable should be used. The Ethernet Extension cable is available from [humminbird.johnsonoutdoors.com](http://humminbird.johnsonoutdoors.com) and is available in a 30 ft length ([AS ECX 30E - 30' Ethernet Extension Cable - 760025-1](#)). The Ethernet Extension Cable will plug directly into any length of Ethernet cable.

## ADVANCED GPS NAVIGATION

### GPS Ethernet Connection



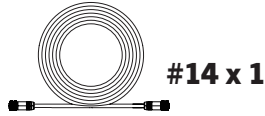
## CAUTION

Failure to follow the recommended wire routing for installed features, if equipped, may cause damage to the product and void your product warranty. Route cables away from pinch points or other areas that may cause them to bend in sharp angles. Routing the cables in any way other than directed may cause damage to the cables by being pinched or severed.

**NOTICE:** Minn Kota recommends routing the Ethernet Cable or Ethernet Extension Cable through the Coil Cord when making the Ethernet connection. The cable will be installed from the Mount to the Control Head through the Coil Cord. Bypassing the Coil Cord when routing the Ethernet Cable or Ethernet Extension Cable is not recommended.

## 1

### ITEM(S) NEEDED



**NOTICE:** Your fish finder should be turned off until this procedure is complete.

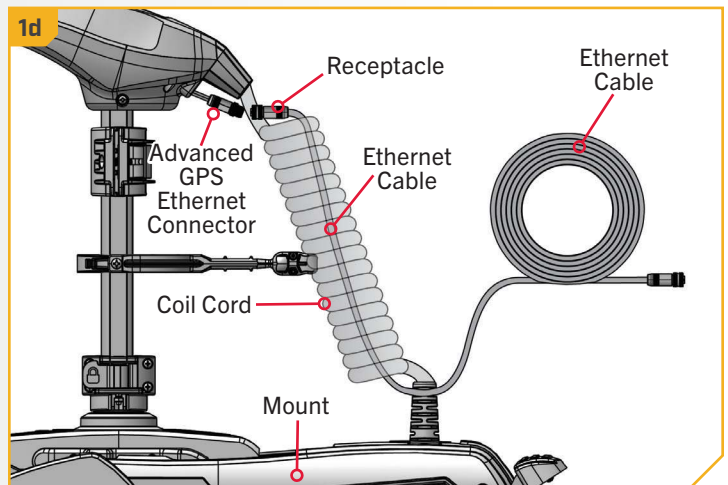
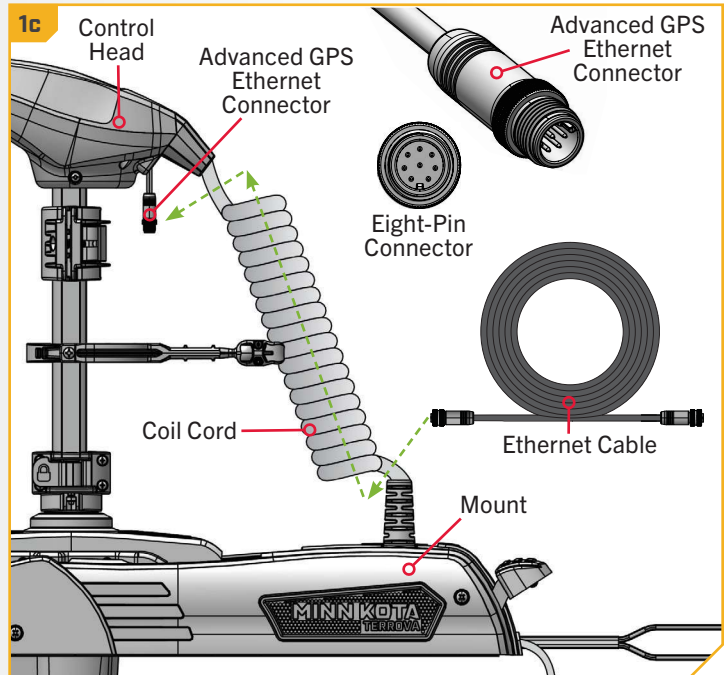
- Place the motor in the deployed position.
- Locate the Eight-Pin Advanced GPS Ethernet Connector below the Control Head.
- Identify the keyed Receptacle on the Ethernet Cable (Item #14). It is keyed to fit with the Eight-Pin Advanced GPS Ethernet Connector below the Control Head.

**NOTICE:** The Ethernet Cable has a Receptacle for the Advanced GPS Ethernet Connector on both ends. Either end may be connected.

- Run the Receptacle on the Ethernet Cable up through the center of the Coil Cord. The Receptacle should exit from the top of the Coil Cord, with the other end exiting from the bottom of the Coil Cord near the Mount. The Ethernet Cable should float freely inside the Coil Cord.

**NOTICE:** The 30' Ethernet Cable (AS EC 30E - 30' Ethernet Cable - 720073-4) is provided. If a different length is preferred, alternate cable lengths are available from [humminbird.johnsonoutdoors.com](http://humminbird.johnsonoutdoors.com).

**NOTICE:** A 30' Ethernet Extension Cable (AS ECX 30E - 30' Ethernet Extension Cable - 760025-1) is available from [humminbird.johnsonoutdoors.com](http://humminbird.johnsonoutdoors.com) and should be used if the standard 30' Ethernet Cable provided with the trolling motor is not long enough to reach the fish finder.

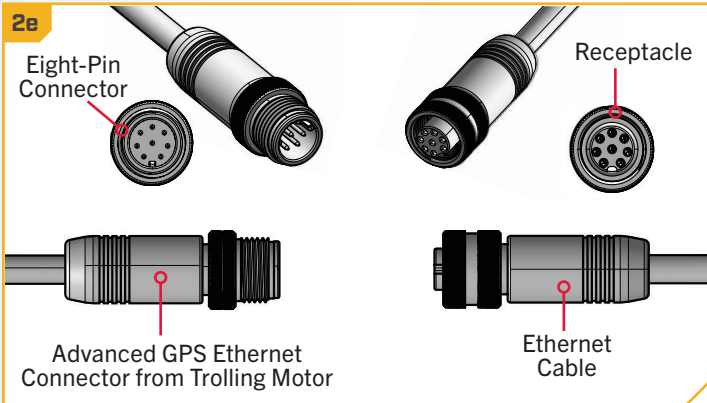


## ADVANCED GPS NAVIGATION

2

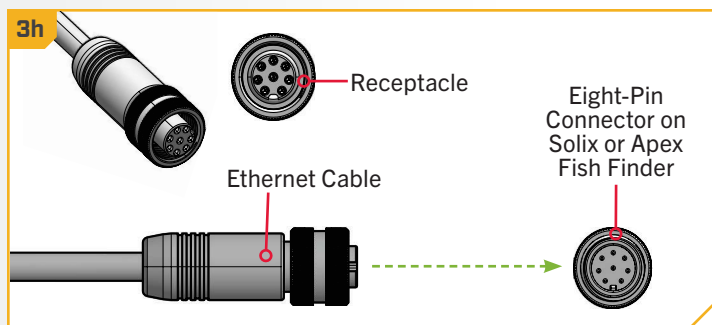
- e. To install the Ethernet Cable, align the pins on the Advanced GPS Ethernet Connector with the Receptacle on the Ethernet Cable. Notice the keyed connectors. Tighten the Collar from the Ethernet Cable to secure the connection.
- f. The Ethernet Cable will plug directly into a Solix or Helix Fish Finder or directly into a Helix Adapter Cable.

**NOTICE:** The 30' Ethernet Cable (AS EC 30E - 30' Ethernet Cable - 720073-4) is provided. If an alternate length is preferred, alternate cable lengths are available from [humminbird.johnsonoutdoors.com](http://humminbird.johnsonoutdoors.com).



3

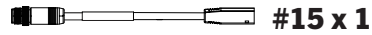
- g. If installing directly to a Solix or Apex, the connector will be flat on the back of the fish finder display.
- h. Align the Receptacle on the Ethernet Cable with the Eight-Pin Connector on the Apex or Solix fish finder. Notice the keyed connectors. Tighten the Collar from the Ethernet Cable to secure the connection. Once directly installed to the Solix or Apex, the connection is complete.





## 4

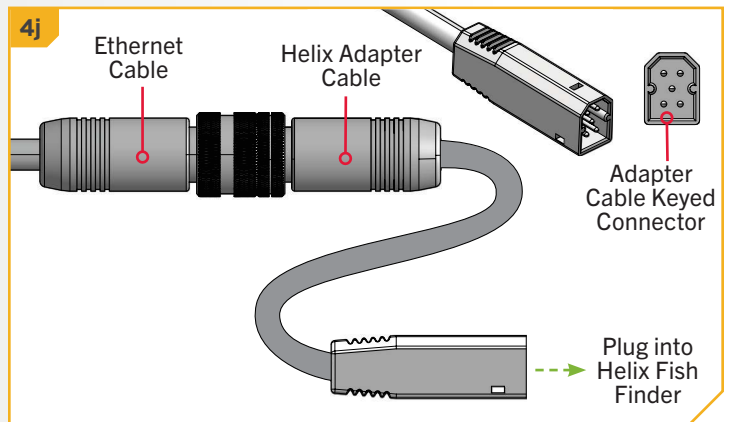
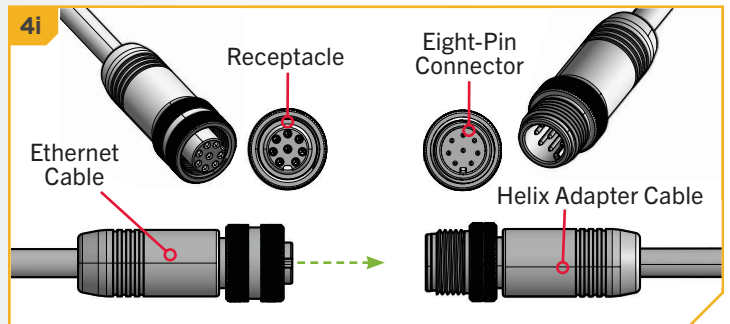
### ITEM(S) NEEDED



- i. If installing directly to a Helix Adapter Cable (Item #15), align the Receptacle on the Ethernet Cable with the Eight-Pin Connector on the Helix Adapter Cable provided. Notice the keyed connectors. Tighten the Collar from the Ethernet Cable to secure the connection.

**NOTICE:** Minn Kota provides one Helix Adapter Cable (AS EC QDE - Ethernet Adapter Cable - 720074-1) with every trolling motor equipped with Advanced GPS Navigation.

- j. The Helix Adapter Cable directly connects the Ethernet Cable to a Helix fish finder. Locate the Helix Adapter Cable Keyed Connector on the back of the fish finder. Plug the Helix Adapter Cable into the back of the Helix fish finder to complete the connection.



## SECURING THE ETHERNET CABLE

### › Securing the Ethernet Cable

The Ethernet Cable must be routed and all connections secured before completing the installation in this section. To review how the Ethernet Cable should be routed and connected, review the "Advanced GPS Navigation" section of this document.

## ⚠ CAUTION

Failure to follow the recommended wire routing for installed features, if equipped, may cause damage to the product and void your product warranty. Route cables away from pinch points or other areas that may cause them to bend in sharp angles. Routing the cables in any way other than directed may cause damage to the cables by being pinched or severed. Do not over-tighten the cable tie as it may damage the wire.

1

### ITEM(S) NEEDED

 **#16 x 1**

- Place the motor in the stowed position.
- Confirm that the Ethernet Cable is connected to an output device as desired. With the motor stowed, locate the Advanced GPS Ethernet Connector below the Control Head.
- Take a Cable Tie (Item #16) and secure the Ethernet Cable to the second coil of the Coil Cord. The Cable Tie should wrap around the Ethernet Cable and Coil Cord. Secure the Cable Tie until it is fingertip tight. Do not over-tighten as it may damage the Ethernet Cable.

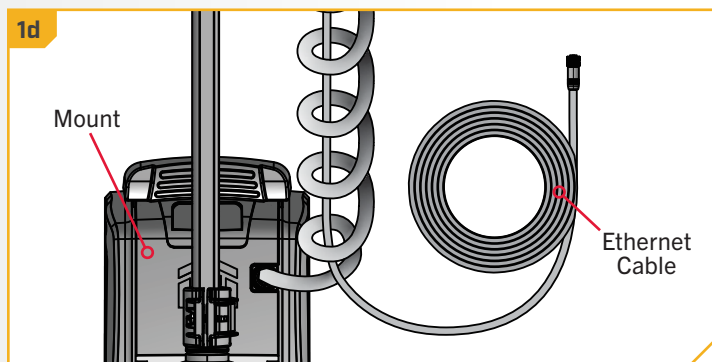
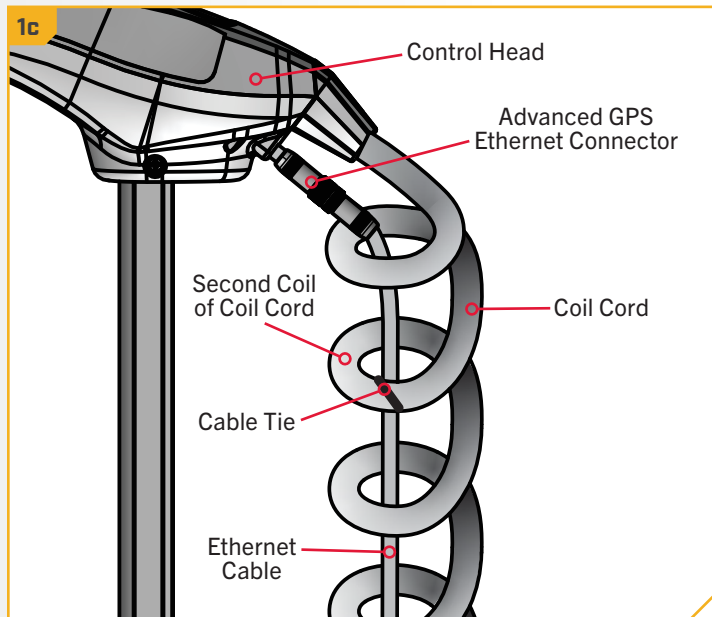
**NOTICE:** The Ethernet Cable should be secured to the second coil of the Coil Cord. Securing the Ethernet Cable to any other coil may damage the Cable.

## ⚠ CAUTION

Do not over-tighten the Cable Tie as it may damage the wires.

- Bundle any excess cable near the mount in a loose loop no less than 4" in diameter.

**NOTICE:** Minn Kota recommends routing the Ethernet Cable through the Coil Cord. Bypassing the Coil Cord when routing the Ethernet Cable is not recommended.



## › Installing the Prop

1

**ITEM(S) NEEDED**




**#10 x 1**


**#11 x 1**


**#12 x 1**


**#13 x 1**

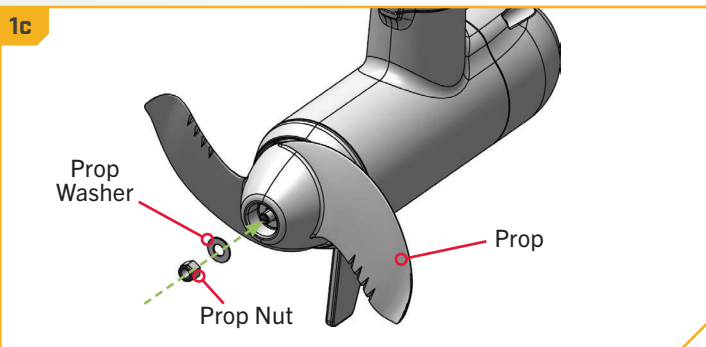
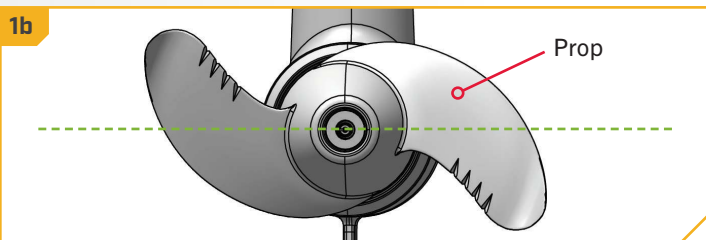
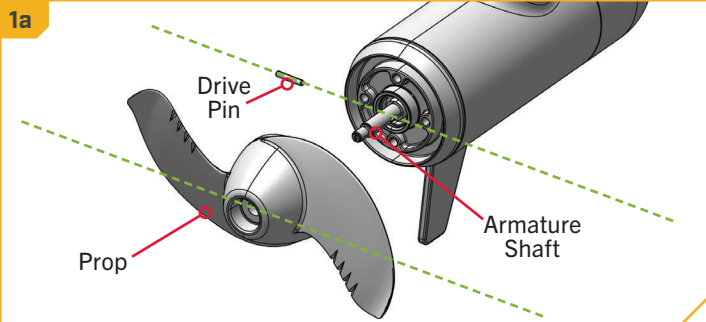
### CAUTION

Disconnect the motor from the battery before beginning any prop work or maintenance.

- a. Take the Drive Pin (Item #13) and slide it through the Hole in the Armature Shaft. Position the Drive Pin horizontally by grasping the Armature Shaft and rotating it with the Drive Pin in place.
- b. Align the Prop (Item #10) so it is horizontal and parallel with the Drive Pin. Slide the Prop onto the Armature Shaft and Drive Pin until it is seated against the lower unit.
- c. Install the Prop Washer (Item #11) and the Prop Nut (Item #12) onto the end of the Armature Shaft.
- d. While holding the Prop horizontal, tighten the Prop Nut with a 9/16" Deep Well Socket. Tighten the Prop Nut to 25-35 in-lbs.

### CAUTION

Do not over-tighten as this can damage the Prop.



# ONE-BOAT NETWORK

## OPTIMIZING THE PERFORMANCE OF THE RIPTIDE TERROVA QUEST WITH THE WIRELESS REMOTE OR ONE-BOAT NETWORK APP

Minn Kota® and Humminbird® have joined forces to bring you the One-Boat Network, including the latest Advanced GPS Navigation Wireless Remote and the One-Boat Network app. The Wireless Remote comes from the factory paired to the trolling motor. To learn more about Wireless Remote features, refer to the Wireless Remote Owner's Manual online at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

To get the most from your One-Boat Network, we encourage you to download the One-Boat Network app onto your smart device. The One-Boat Network® app is a free iOS and Android application that you can download to a mobile device, providing unparalleled control over all of your One-Boat Network connected products. Minn Kota recommends connecting the trolling motor to the OBN app to assist in these steps. For instructions on pairing the OBN app to the trolling motor, refer to the OBN Quick Start Guide included with the motor. For more information on the OBN app, refer to the One-Boat Network Owner's Manual online at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

Completing the installation of the Riptide Terrova QUEST through the Wireless Remote or OBN app should be done following the Prop installation. Ensure that the trolling motor is connected to a power source before adjusting One-Boat Network settings.



### WARNING

Take care that neither you nor other persons approach the turning propeller too closely, neither with body parts nor with objects. The motor is powerful and may endanger or injure you or others. Stay clear of the Prop and watch out for accidental engagement.

**NOTICE:** Ensure that the trolling motor is connected to a power source before adjusting One-Boat Network settings.

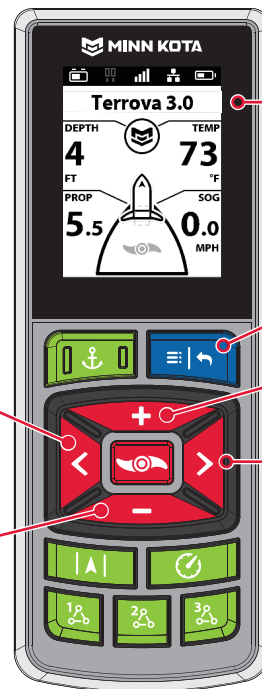
**NOTICE:** If the Wireless Remote is lost or becomes non-functioning during navigation, and the One-Boat Network app is unavailable, press the Stow Deploy Lever at the front of the Mount to cancel all active navigation and turn off the Prop.



One-Boat Network app Icon



One-Boat Network Dashboard on Mobile Device



Wireless Remote

Menu/Back

Speed Up

Steer Right

Steer Left

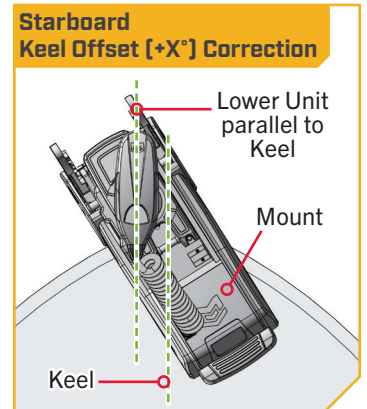
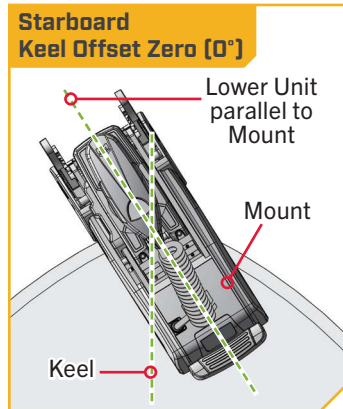
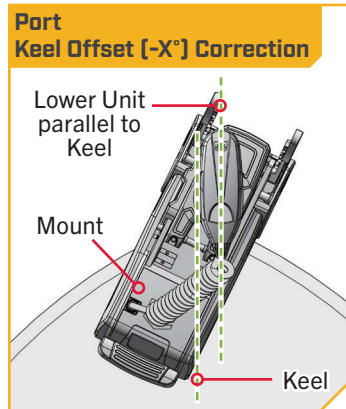
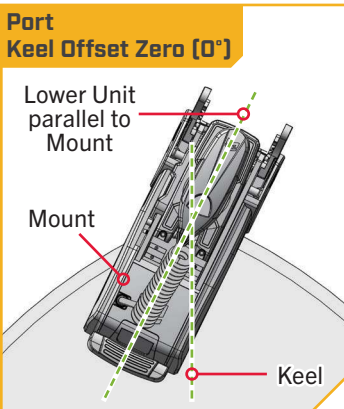
Speed Down

## ONE-BOAT NETWORK ADJUSTMENTS



### KEEL OFFSET

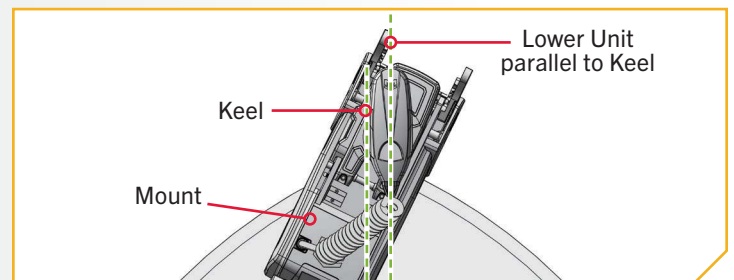
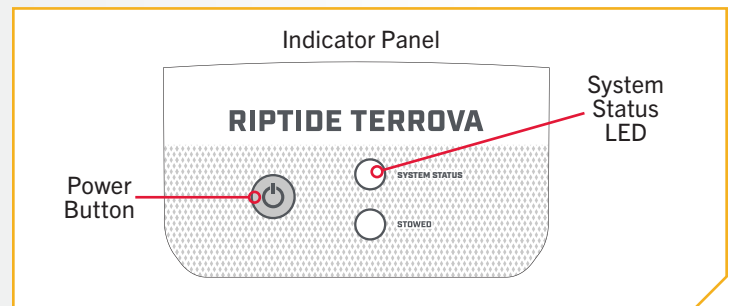
The Riptide Terrova QUEST comes from the factory with the Lower Unit parallel to the Mount. When the Lower Unit is parallel to the Mount, the Keel Offset is zero. In an ideal installation, the Lower Unit will be parallel to the Keel; however, the Mount is rarely installed to be perfectly inline with the Keel, therefore the Lower Unit will not be parallel with the Keel. Nearly all installations will have some variation in mounting position to either the Port or Starboard side of the boat. The Keel Offset feature records the position of the Lower Unit when it is parallel to the Keel based on the Mount being offset from the Keel. Before adjusting the Keel Offset, complete all installation steps. This includes mounting the trolling motor to the boat and installing power and accessory cables. The Keel Offset can be recorded through the Wireless Remote or One-Boat Network App.

**NOTICE:** When the motor is installed from the factory, the Keel Offset is 0 degrees. When adjusting the Keel Offset, any position towards Port will create a Keel Offset of a negative angle. Any position towards Starboard will create a positive angle.












### Setting the Keel Offset with the Wireless Remote

1.
  - a. Power on the trolling motor by pressing the Power  button on the Indicator Panel. When the trolling motor is on, the System Status  LED will be blue.
  - b. With either the Wireless Remote or One-Boat Network (OBN) app on a paired mobile device, steer the motor so that the control head and lower unit are parallel to the Keel.

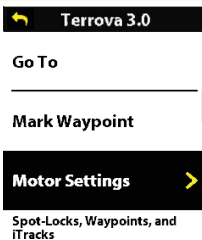


## KEEL OFFSET

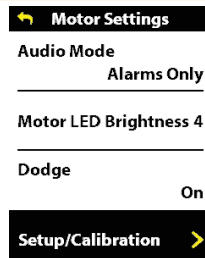
2

- c. Press the Menu  button on the Wireless Remote.
- d. Use the Speed Up  or Speed Down  button to find the Motor Settings menu. Use the Steer Right  button to select Motor Settings.
- e. In the Motor Settings Menu, use the Speed Up  or Speed Down  button to find Setup/Calibration.
- f. In the Setup/Calibration menu, use the Speed Up  or Speed Down  button to find Keel Mount Offset. Use the Steer Right  button to select Keel Mount Offset.

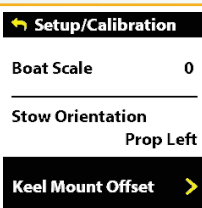
2d









2e



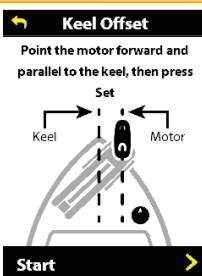
2f



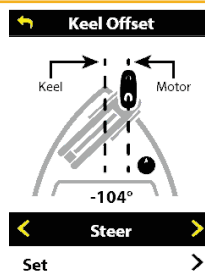
3

- g. Review all safety warnings. Use the Steer Right  button to select Start and begin the process.
- h. Use the Steer Left  or Steer Right  button to point the motor forward and parallel to the keel.
- i. When satisfied with the placement of the trolling motor, use the Speed Up  or Speed Down  button to scroll to Set. Use the Steer Right  button to select Set. The degree of offset is displayed at the bottom of the Dashboard.

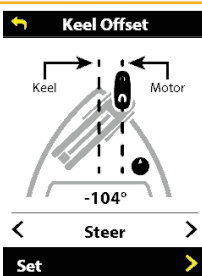
3g



3h





3i

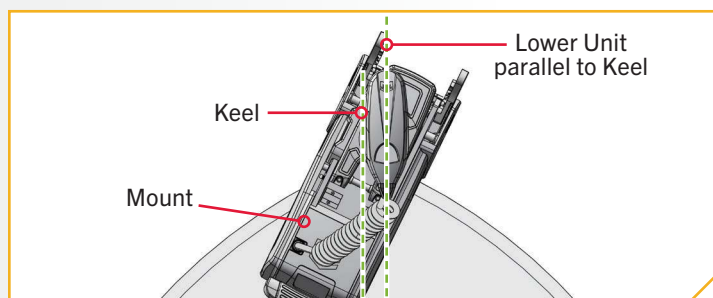
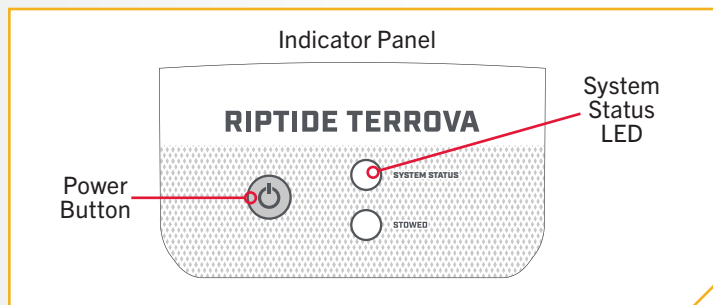




## Setting the Keel Offset with the One-Boat Network App

1

- Power on the trolling motor by pressing the Power  button on the Indicator Panel. When the trolling motor is on, the System Status  LED will be blue.
- With either the Wireless Remote or One-Boat Network (OBN) app on a paired mobile device, steer the motor so that the control head and lower unit are parallel to the Keel.

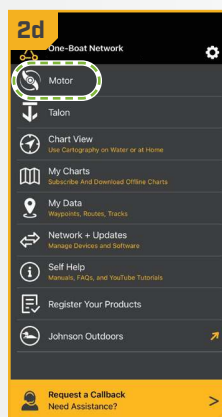


2

- Open the One-Boat Network (OBN) app on the mobile device. Make sure the mobile device is paired with the trolling motor.
- From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor home screen.
- Before the Motor home screen will open, tap Agree on the on-screen prompt.

**NOTICE:** The on-screen prompt will only display once each time the app is launched. If the prompt has displayed, the Motor home screen appears.

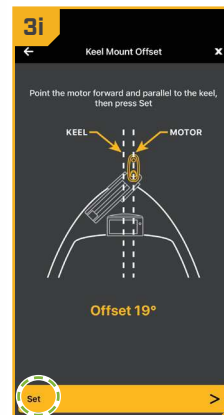
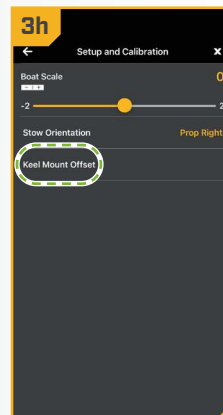
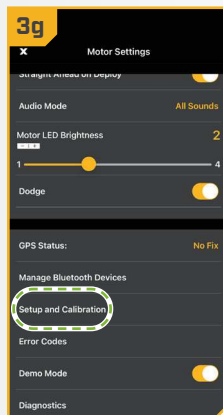
- On the Motor home screen, locate the Motor Settings button in the upper-right corner and tap it.



## KEEL OFFSET

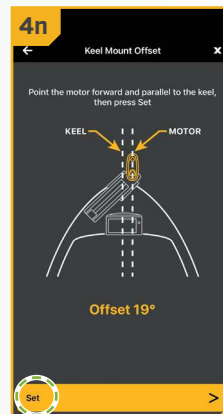
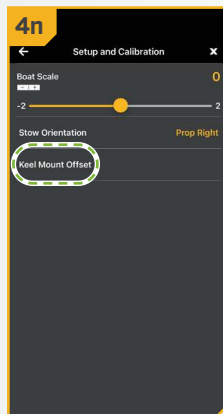
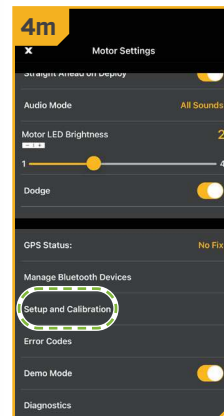
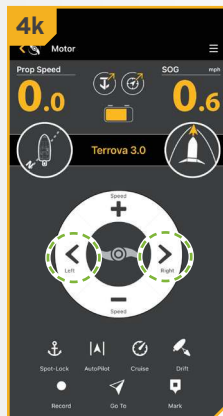
3

- g. In the Motor Settings menu, find and tap Setup and Calibration.
- h. In Setup and Calibration, find and tap Keel Mount Offset.
- i. Review all safety warnings. Follow the prompts in the One-Boat Network app. If the placement of the trolling motor is pointing forward and parallel to the keel, tap Set. The degree of offset will show at the bottom of the app Display.



4

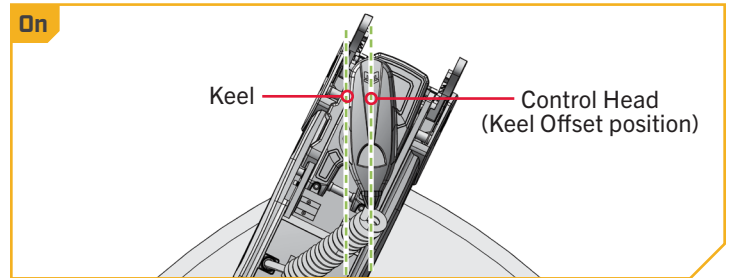
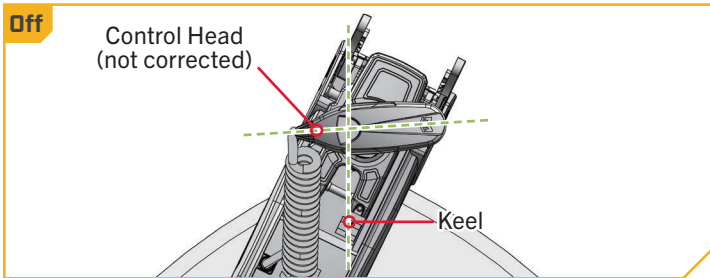
- j. If the trolling motor needs to be adjusted, locate the Return button on the upper-left corner of the app screen. Tap the Return button three times until the Motor home screen displays.
- k. Use the Steer Right > and Steer Left < buttons to point the motor forward and parallel to the keel.
- l. When satisfied with the placement of the trolling motor, locate the Motor Settings button in the upper-right corner and tap it.
- m. In the Motor Settings menu, find and tap Setup and Calibration.
- n. In Setup and Calibration, find and tap Keel Mount Offset. If the placement of the trolling motor is pointing forward and parallel to the keel, tap Set.
- o. The degree of offset shows at the bottom of the app Display. Tap Return to close the Keel Mount Offset and return to the home screen.



## STRAIGHT ON DEPLOY








Minn Kota recommends setting the Keel Offset when the position of the Lower Unit is parallel with the Keel. Save the Keel Offset before exploring the Straight on Deploy feature. Straight on Deploy uses the position recorded in Keel Offset to know where to position the Lower Unit to be parallel with the Keel.

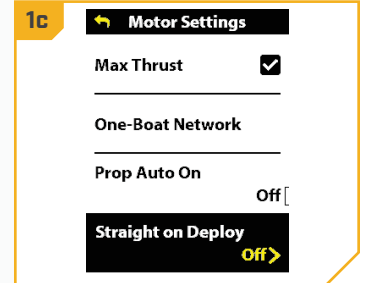
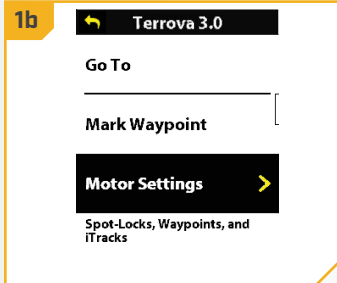
When Straight on Deploy is engaged, the lower unit will automatically rotate to the Keel Offset position when deployed. By default, the Lower Unit will be parallel to the Keel when the Mount is parallel to the Keel. If the Keel Offset was programmed to another angle, the Straight on Deploy feature will correct the position to match the Keel Offset angle when turned "on." If Straight on Deploy is turned "off," the trolling motor will not correct the position in any direction.



### To Toggle Straight on Deploy with the Wireless Remote

1

- With the motor on, press the Menu  button on the Wireless Remote.
- Use the Speed Up  or Speed Down  button to find the Motor Settings menu. Use the Steer Right  button to select Motor Settings.
- In the Motor Settings Menu, use the Speed Up  or Speed Down  button to find Straight on Deploy.
- By default, the Straight on Deploy is toggled "off."
- Use the Steer Right  button to toggle between "on" and "off."



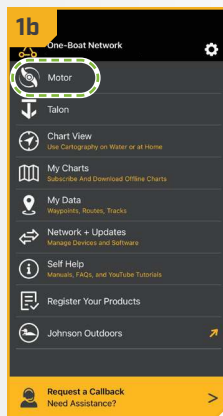
# STRAIGHT ON DEPLOY

## ▶ To Toggle Straight on Deploy with the One-Boat Network App

1

- Open the One-Boat Network (OBN) app on a mobile device. Make sure the mobile device is paired with the trolling motor and that the motor is powered "on."
- From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor home screen.
- Before the Motor home screen will open, tap Agree on the on-screen prompt.

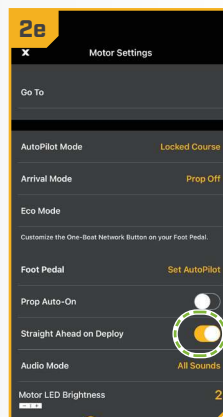
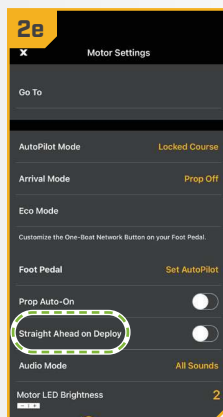
**NOTICE:** The on-screen prompt will only display once each time the app is launched. If the prompt has displayed, the Motor home screen appears.



- On the Motor home screen, locate the Motor Settings button in the upper-right corner and tap it.

2

- In the Motor Settings menu, find the Straight Ahead on Deploy toggle. Tap to turn the toggle "on" and "off." When highlighted yellow the toggle is "on."

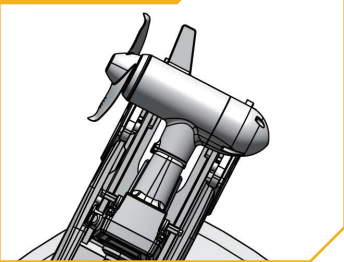


## STOW ORIENTATION

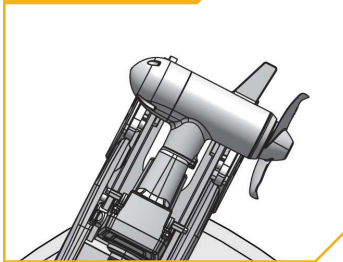
The Stow Orientation is a term used to describe the lower unit and Prop position when the motor is stowed. The lower unit will automatically rotate into the Stow Orientation when stowing the motor. The Stow Orientation can be set to Prop Left or Prop Right through the Wireless Remote or One-Boat Network app. The factory default setting for the lower unit is Prop Left. Adjusting the Stow Orientation allows the installation to be customized to fit boat positioning for either a Port or Starboard installation and to accommodate fishing or trailering applications.

**NOTICE:** If the Stow Orientation is set to Prop Right, the Depth Collar must be rotated on the Shaft to improve accessibility. See the "Rotating the Depth Collar" section for instructions.

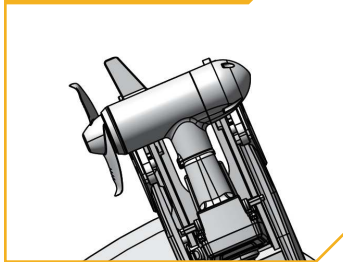
Prop Left [Port]



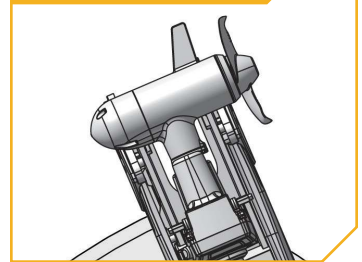
Prop Right [Port]



Prop Left [Starboard]










Prop Right [Starboard]



## Setting the Stow Orientation with the Wireless Remote

1

- With the trolling motor powered on, press the Menu  button on the Wireless Remote.
- Use the Speed Up  or Speed Down  button to find the Motor Settings menu. Use the Steer Right  button to select Motor Settings.
- In the Motor Settings Menu, use the Speed Up  or Speed Down  button to find Setup/Calibration. Use Steer Right  to open the Setup/Calibration menu.

1b

Terrova 3.0

Go To

Mark Waypoint

Motor Settings

Spot-Locks, Waypoints, and iTracks

1c

Motor Settings

Audio Mode

Alarms Only







Motor LED Brightness 4

Dodge

On

Setup/Calibration

2

- Once in the Setup/Calibration menu, use the Speed Up  or Speed Down  button to find Stow Orientation. Use Steer Right  to open the Stow Orientation menu.
- In the Stow Orientation menu, use the Speed Down  or Speed Up  button to scroll between Prop Left and Prop Right. Use the Steer Right  button to select the desired stow orientation.

2d

Setup/Calibration

Boat Scale 0

Stow Orientation

Prop Left

Keel Mount Offset

2e

Stow Orientation

Prop Left

Prop Right

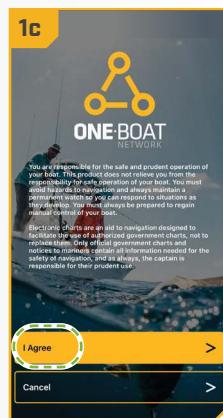
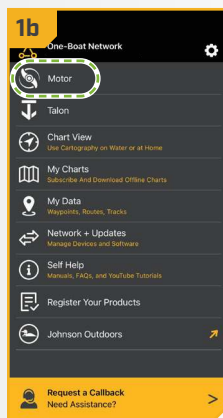
# STOW ORIENTATION

## ➤ Setting the Stow Orientation with the One-Boat Network App

1

- Open the One-Boat Network (OBN) app on a mobile device. Make sure the mobile device is paired with the trolling motor and that the motor is powered "on."
- From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor home screen.
- Before the Motor home screen will open, tap Agree on the on-screen prompt.

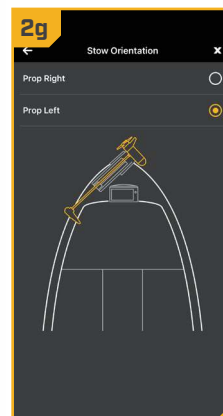
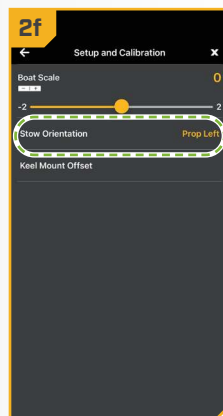
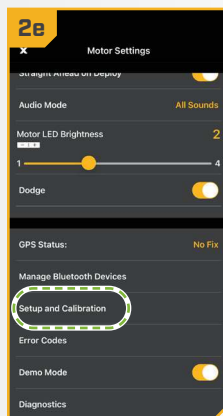
**NOTICE:** The on-screen prompt will only display once each time the app is launched. If the prompt has displayed, the Motor home screen appears.



- On the Motor home screen, locate the Motor Settings button in the upper-right corner and tap it.

2

- In the Motor Settings menu, find and tap Setup and Calibration.
- In Setup and Calibration, find and tap Stow Orientation.
- Set the feature to Prop Right or Prop Left.




BOAT SCALE




Trolling motor performance can be impacted by factors including, but not limited to, wind, water conditions, boat specifications, battery health, wiring, etc. Boat Scale provides a method of adjusting how the trolling motor will perform to account for these and other variables. The Riptide Terrova QUEST comes from the factory with Boat Scale set to zero. Boat Scale can be adjusted up (+2) or down (-2) to increase or decrease how the motor control software applies power while using a navigation mode like Spot-Lock.



An example showing the need to reduce Boat Scale would be while using Spot-Lock and the motor is over-correcting or making frequent adjustments. In this case, try reducing Boat Scale -1 to reduce this behavior. If the behavior continues, reduce Boat Scale to -2. An example showing the need to increase Boat Scale while using Spot-Lock would be the motor is drifting away from its target location frequently or needs help to make corrections. Try increasing Boat Scale to +1 to help improve the trolling motor accuracy in this case. If the behavior continues, increase Boat Scale to +2.

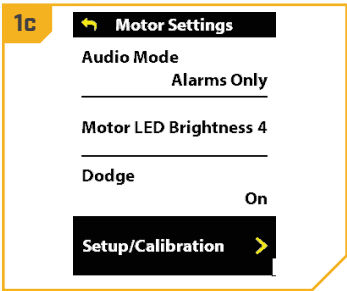
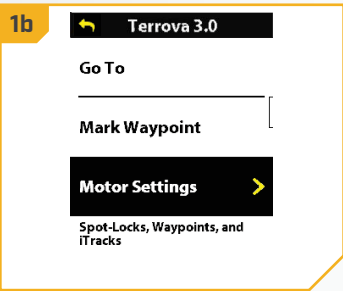
Adjusting Boat Scale with the Wireless Remote

- 1
- a.



With the motor on, press the Menu  button on the Wireless Remote.
- b.



Use the Speed Up  or Speed Down  button to find the Motor Settings menu. Use the Steer Right  button to select Motor Settings.
- c.

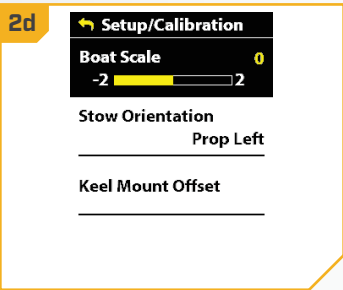
In the Motor Settings Menu, use the Speed Up  or Speed Down  button to find Setup/Calibration.



- 2
- d.

Once in the Setup/Calibration menu, use the Speed Up  or Speed Down  button to find Boat Scale.
- e.

Use the Steer Left  or Steer Right  button to adjust the Boat Scale to one of the five settings: -2, -1, 0, 1 or 2.





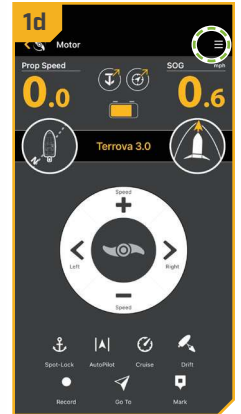
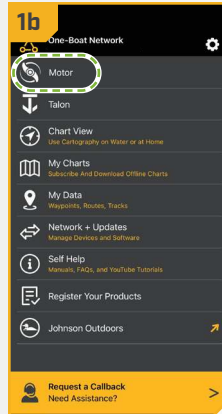
# BOAT SCALE

## Adjusting Boat Scale with the One-Boat Network App

1

- Open the One-Boat Network (OBN) app on a mobile device. Make sure the mobile device is paired with the trolling motor and that the motor is powered "on."
- From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor home screen.
- Before the Motor home screen will open, tap Agree on the on-screen prompt.

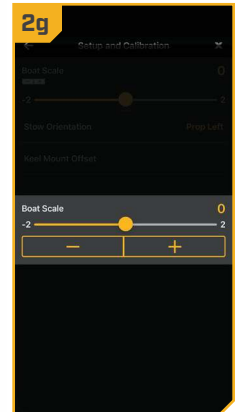
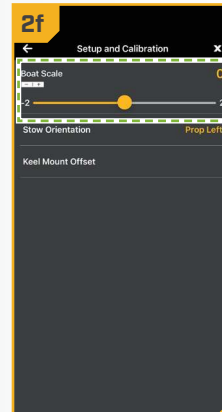
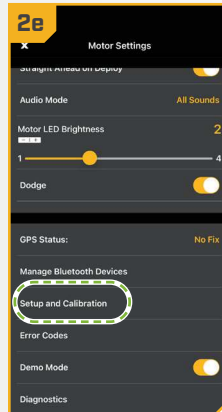
**NOTICE:** The on-screen prompt will only display once each time the app is launched. If the prompt has displayed, the Motor home screen appears.



- On the Motor home screen, locate the Motor Settings button in the upper-right corner and tap it.

2

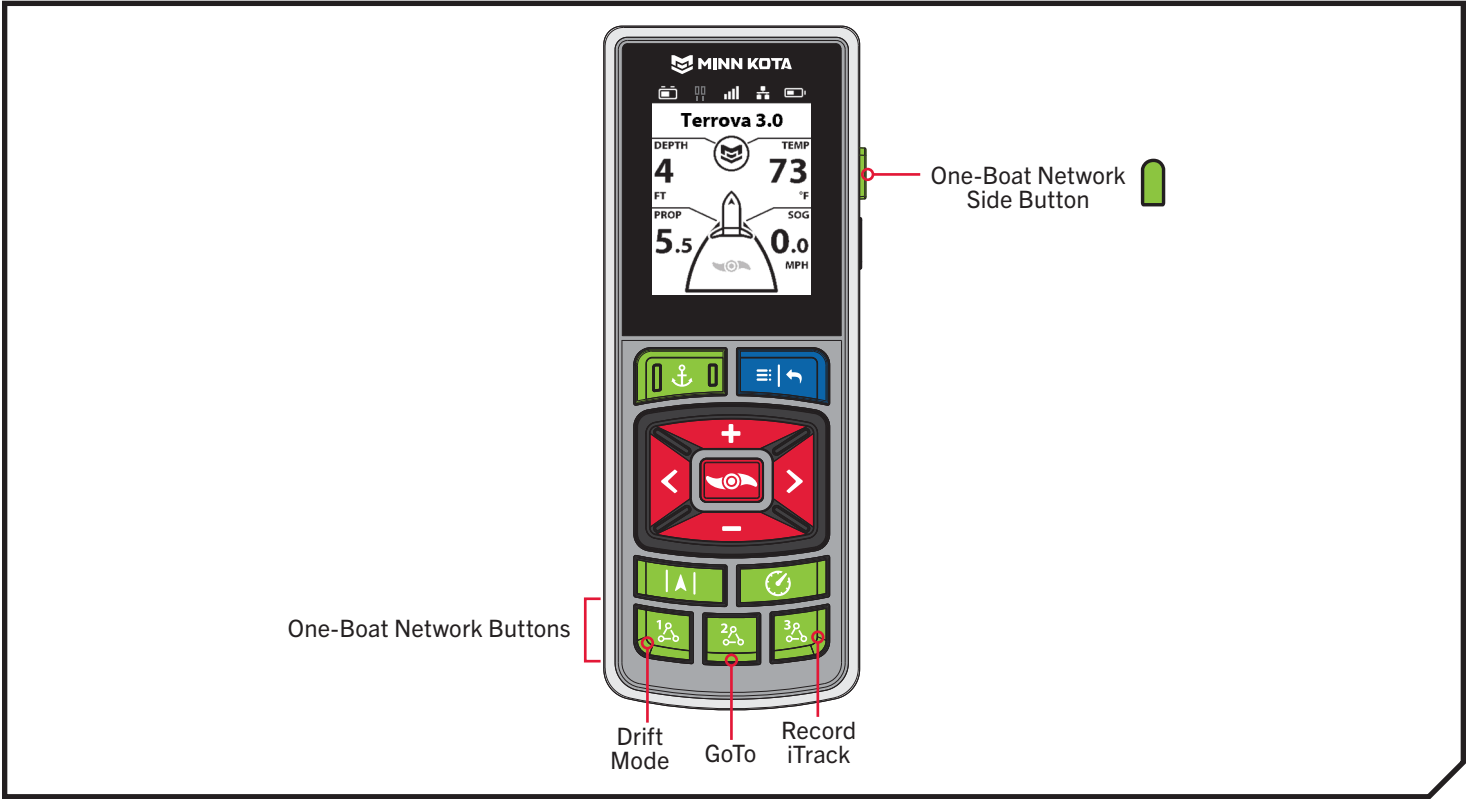
- In the Motor Settings menu, find and tap Setup and Calibration.
- In Setup and Calibration, find and tap Boat Scale.
- Set the feature to increase or decrease Boat Scale.



ONE-BOAT NETWORK BUTTONS

Minn Kota trolling motors equipped with Advanced GPS Navigation are compatible with devices enabled with the One-Boat Network (OBN), such as the Wireless Remote. OBN functions can be enabled and disabled through four customizable OBN buttons on the Wireless Remote. The function of the OBN buttons can be customized based on user preference to enhance operation of the OBN product.







CUSTOMIZING THE ONE-BOAT NETWORK BUTTONS ON THE WIRELESS REMOTE



One-Boat Network Default Buttons			
	Drift Mode		Record iTrack
	GoTo		Mark a Waypoint

# CUSTOMIZING THE ONE-BOAT NETWORK BUTTONS ON THE WIRELESS REMOTE











One-Boat Network functions can be enabled and disabled through four One-Boat Network buttons on the Wireless Remote. The One-Boat Network buttons can be customized to control the following functions, depending on your setup:

Function	Icon	Description
Drift Mode		Drift mode is the default function for OBN Button 1. Press once to engage Drift Mode. Press a second time to Adjust Course.
Go To		Go To is the default for the OBN Button 2. Press once to open the Go To Menu. The Go To options are Spot-Locks, Waypoints, iTracks and Drift.
Record iTrack		Record iTrack is the default function for OBN Button 3. Press once to start recording an iTrack. Press a second time to save the iTrack.
Waypoint		Mark Waypoint is the default function for the OBN Side Button. Press once to save a Waypoint.
Max Speed		Max Speed must first be customized to one of the OBN buttons. Double press to engage Max Speed. Single press to return to the previous speed.
Talon/Raptor		The shallow water anchor function must first be customized on one of the OBN buttons. The shallow water anchor function will display as Talon or Raptor depending on your configuration. Double press to deploy the anchor. Press once to pause or stow the anchor.

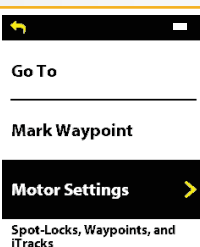
# CUSTOMIZING THE ONE-BOAT NETWORK BUTTONS ON THE WIRELESS REMOTE

## › Customize the One-Boat Network Buttons on the Wireless Remote

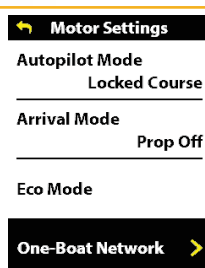
1

- On the Wireless Remote, press the Menu  button to open the Motor Menu.
- In the Motor Menu, use the Speed Down  or Speed Up  button to find the Motor Settings menu. Use the Steer Right  button to select Motor Settings.
- In the Motor Settings menu, use the Speed Down  or Speed Up  button to find One-Boat Network. Use the Steer Right  button to select One-Boat Network.
- In the One-Boat Network Menu, use the Speed Down  or Speed Up  button to find Remote Buttons. Use the Steer Right  button to select Remote Buttons.

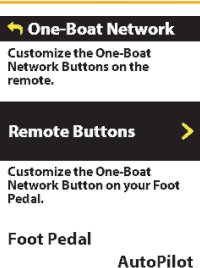
1b









1c



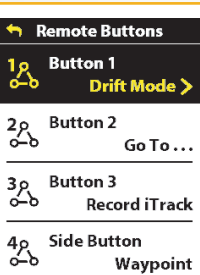
1d



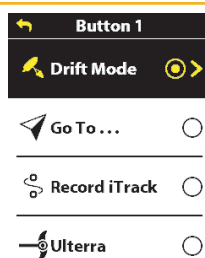
2


- Use the Speed Down  or Speed Up  button to highlight the OBN button to customize. There are four options: Button 1, Button 2, Button 3 or Side Button. Press the Steer Right  button to make the selection.
- Use the Speed Down  or Speed Up  button to scroll through the options. Use the Steer Right  button to select the function.

2e




2f



**NOTICE:** The radio button next to the desired function will be selected when the Steer Right  button is used to customize the function. The function options listed are based on the trolling motor and other devices in the Advanced GPS Navigation network.

**NOTICE:** For quick customization, press and hold the OBN button you want to customize to quickly bring up the customization screen.

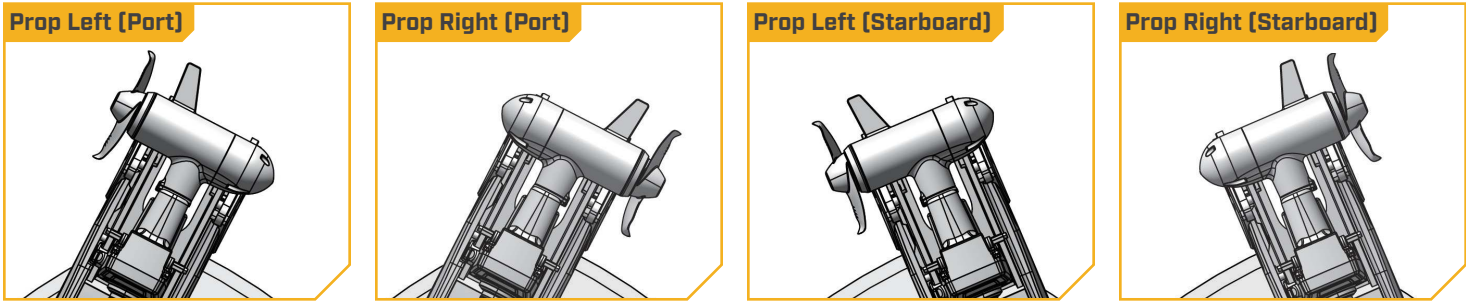
- Press and hold the Menu  button to close and return to the Home Screen.

# ROTATING THE DEPTH COLLAR

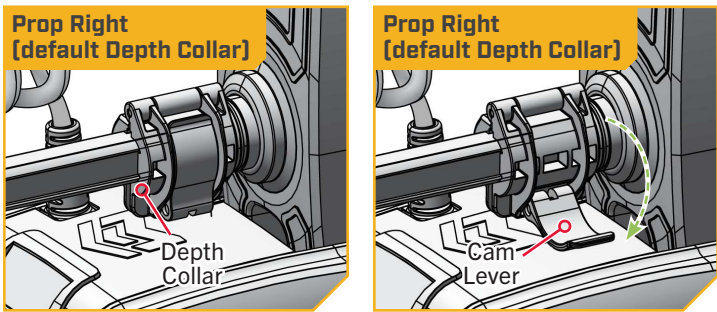
ADJUSTMENTS >

## ROTATING THE DEPTH COLLAR

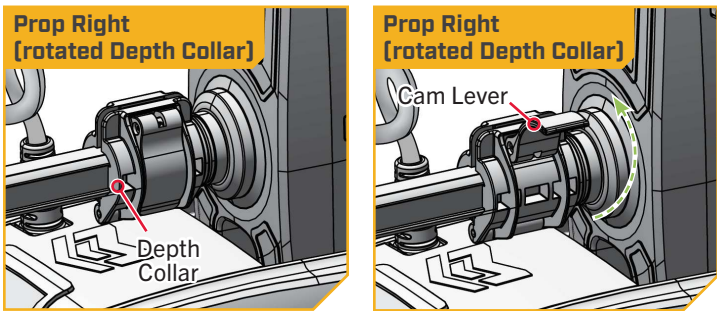
The Depth Collar is installed from the factory so that the Cam Lever opens in an upward motion when the Stow Orientation of the lower unit is Prop Left. The factory default Stow Orientation is Prop Left. The Stow Orientation can be changed to Prop Right using the wireless remote or One-Boat Network app. For more information about Stow Orientation, refer to the "One-Boat Network" section of this manual.



A Prop Right orientation turns the lower unit and shaft when stowed, causing the Depth Collar to open downward. This reduces its range of motion and creates an obstruction when placing the Depth Collar for a secure stow.



If the Stow Orientation is changed to Prop Right, the Depth Collar must be rotated on the shaft to improve accessibility. The Depth Collar is positioned correctly on the Shaft when the Cam Lever opens upward when the motor is stowed.



TOOLS AND RESOURCES REQUIRED >

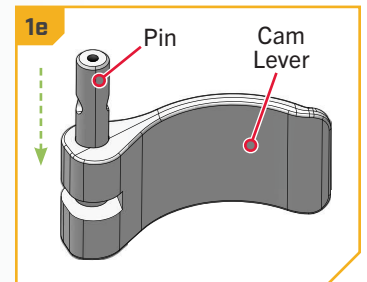
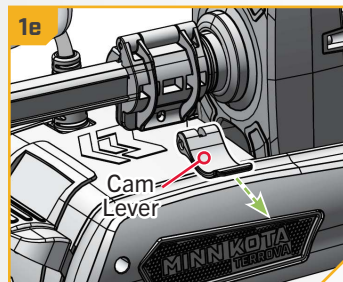
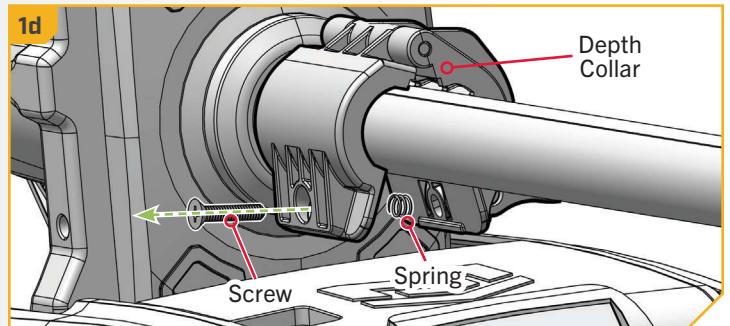
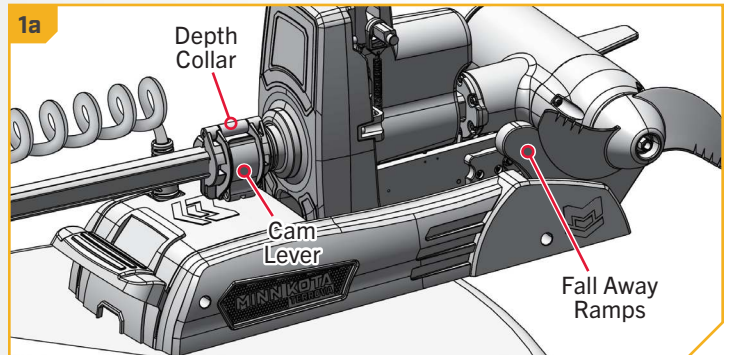
- #3 Phillips Screwdriver

## ROTATING THE DEPTH COLLAR

### INSTALLATION »

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- a. With the Stow Orientation set to Prop Right, stow the trolling motor. Ensure that the Lower Unit is resting securely on the Fall Away Ramps and that the **STOWED** LED on the Indicator Panel is illuminated orange.
- b. Release the Depth Collar by opening the Cam Lever.
- c. Locate the single Screw on the back side of the Depth Collar. This Screw secures the Cam Lever.
- d. Using a #3 Phillips Screwdriver, and with the Cam Lever open, remove the Screw from the Depth Collar. While loosening the Screw, gently open the halves of the Depth Collar to access a Spring inside. This Spring sits between the Depth Collar halves and is retained by the Screw. Take the Spring and place it onto the Screw, then set both aside for reassembly later.
- e. Remove the Cam Lever from the Depth Collar and set it aside. There is a Pin contained in the Cam Lever. If the Pin slides out, place it back in before reassembly.

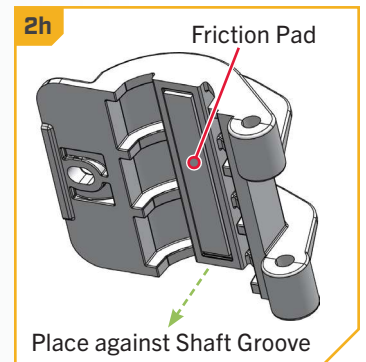
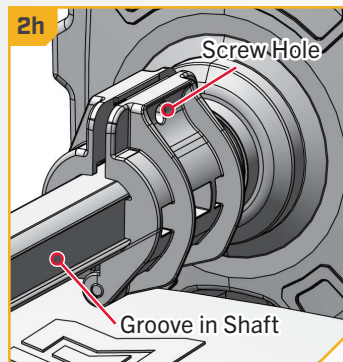
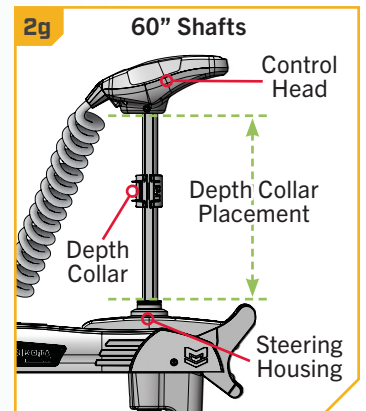
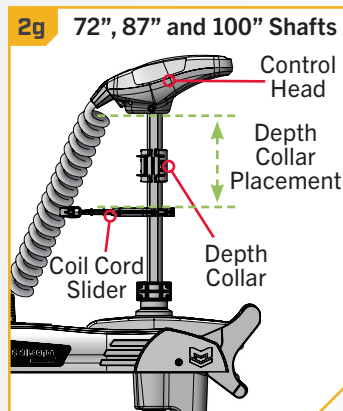
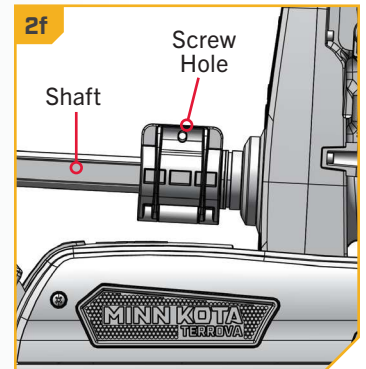
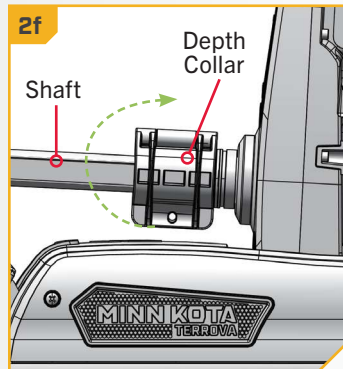




## ROTATING THE DEPTH COLLAR

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- f. Remove the Depth Collar from the Shaft. Turn the Depth Collar 180° so that the screw hole in the Depth Collar sits above the Shaft.
- g. Place the Depth Collar on the Shaft in the new position. For motors with a 72", 87" or 100" shaft, the Depth Collar should sit between the Control Head and Coil Cord Slider. On motors with a 60" shaft, the Depth Collar can sit anywhere between the Control Head and Steering Housing.
- h. Pay attention to the shape of the Depth Collar halves and ensure that they close correctly around the Shaft. The Friction Pad inside the Depth Collar should sit against the groove of the Shaft.

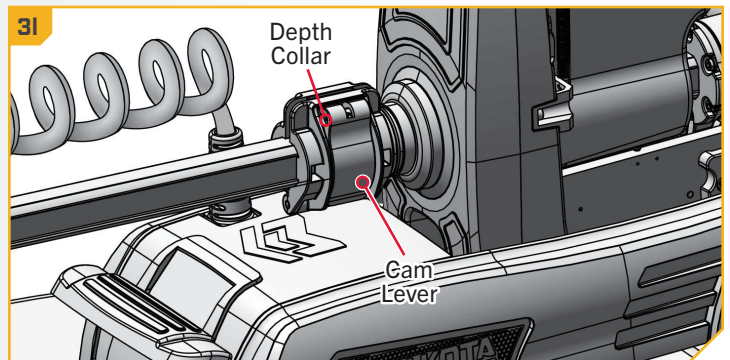
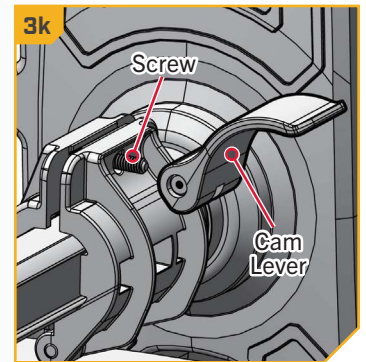
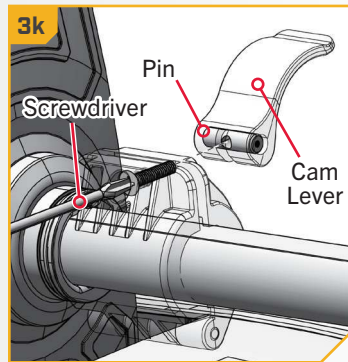
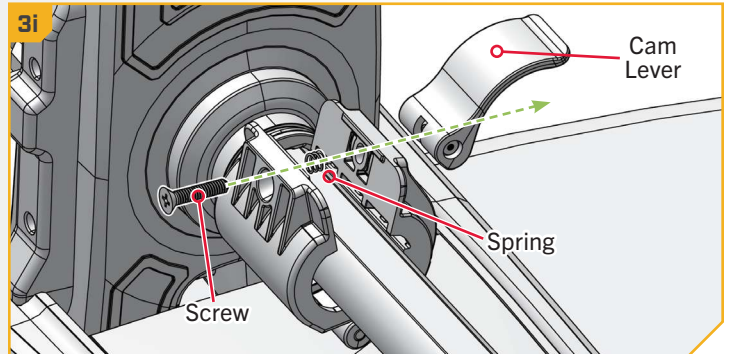




## ROTATING THE DEPTH COLLAR

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- i. With the Depth Collar in position on the Shaft, take the Screw and Spring that were removed earlier in the installation. Hold the Spring inside the Depth Collar against the screw hole. The Spring should sit between the Depth Collar halves. Insert the Screw into the Depth Collar so that it passes through the Spring and out the second half of the Depth Collar.
- j. Take the Cam Lever and ensure that the Pin is inside. Hold the Cam Lever in position against the Depth Collar, with the threaded hole in the Pin positioned towards the Screw. Pay attention to the shape of the Cam Lever and hold it so it curves over to wrap around the Depth Collar. When positioned correctly, the curve in the Cam Lever should follow the shape of the Depth Collar when closed. Attaching the Cam Lever upside down will prevent the Depth Collar from closing.
- k. Using a #3 Phillips Screwdriver, hold the Screw steady while aligning the Pin in the Cam Lever. It may be necessary to rotate the Pin inside the Cam Lever so that the threaded hole aligns with the Screw. Begin tightening the Screw so it catches the Pin. When the Screw engages with the Pin, close the Cam Lever to lock the Depth Collar. Finish tightening the Screw to 60 in-lbs.
- l. Ensure that the Cam Lever is neither too loose nor too tight. If the Cam Lever is too tight, it will be difficult to open or close and the Depth Collar will not move, even when unlocked. If the Cam Lever is too loose, the Depth Collar will not securely hold the Shaft even when locked. If the Depth Collar can be forcibly pushed up or down the Shaft when locked, the Collar is too loose. Recheck the tension of the Screw and tighten or loosen as needed.



This completes the installation of your Riptide Terrova QUEST. A complete Owner's Manual can be downloaded at [minnkota.johnsonoutdoors.com](http://minnkota.johnsonoutdoors.com).

# RECOMMENDED ACCESSORIES

## PRECISION BATTERY CHARGERS

Stop buying new batteries and start taking care of the ones you've got. Many chargers can actually damage your battery over time – creating shorter run times and shorter overall life. Digitally controlled Minn Kota chargers are designed to provide the fastest charge that protect and extend battery life.



## SHALLOW WATER ANCHORS

When you find fish, we're down. From the relentless Raptor to the trusted power of Talon, when you're ready to lock down fish in shallow water, we have your weapon.



### How to Dominate in Shallow Water

A shallow water anchor revolutionizes the way you stay on fish. Both Raptor and Talon give fish nowhere to run and nowhere to hide. Zero in on your target by keeping your boat in the exact position and orientation you want, with a whisper-quiet anchor and no prop to disturb sediment or spook fish.

### Anchor in Anything

Raptor and Talon can adjust their anchoring force based on what kind of bottom you're anchoring into, so you get the right amount of power you need for a secure hold in rocks, silt, mud or sand. Raptor can even sense the bottom automatically, dialing in the right amount of force for the job.

### Control from Anywhere

Raise and lower your anchor from the unit, a dedicated remote control, wireless remote, One-Boat Network App, or Humminbird fish finder.

## MINN KOTA ACCESSORIES

We offer a wide variety of trolling motor accessories, including:

- 60-Amp Circuit Breaker
- Mounting Brackets
- Stabilizer Kits
- Extension Handles
- Battery Connectors
- Battery Boxes
- Quick Connect Plugs



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Part #2327141

Minn Kota Consumer & Technical Service  
Johnson Outdoors Marine Electronics, Inc.  
PO Box 8129  
Mankato, MN 56001

121 Power Drive  
Mankato, MN 56001  
Phone (800) 227-6433  
Fax (800) 527-4464



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