

# **RIPTIDE TERROVA® QUEST**<sup>TM</sup> BOW-MOUNT TROLLING MOTOR

MINN KOTA TERROVA

**Owner's Manual** 

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### REGIST

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### SERIAL

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serial number label has been included, which can also be entered in the One-Boat Network App for future reference.

**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. 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

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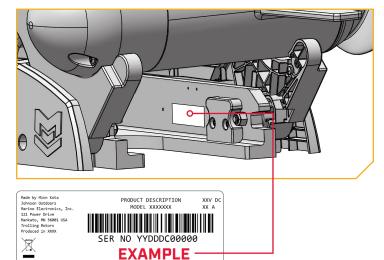
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f research and testing provide you the Minn Kota advantage that can /e are Minn Kota. And we are never done helping you catch more fish.





## **TABLE OF CONTENTS**

SAFETY CONSIDERATIONS	4
WARRANTY	5
KNOW YOUR BOAT	6
FEATURES	7
INSTALLATION	8
Installation Parts List	8
Mounting Considerations	9
Tools and Resources Required	9
Installing the Riptide Terrova QUEST	.10
BATTERY & WIRING INSTALLATION	.14
Boat Rigging & Product Installation	.14
Conductor Gauge and Circuit Breaker Sizing Table	.14
Selecting the Correct Batteries	.15
Additional Considerations	. 15
Connecting the Batteries in Series	.16
24-Volt Systems	.16
36-Volt Systems	.17
COMPLETING THE INSTALLATION	. 18
Verifying Power	. 18
Installing the Bow-Mount Stabilizer	. 18
Powering on the Wireless Remote	. 19
Identifying Trolling Motor Features	
and their Associated Cables	.20
Feature & Cable Management	.21
Advanced GPS Navigation	.21
Securing the Ethernet Cable	.26
Installing the Prop	.27
ONE-BOAT NETWORK	.28
Optimizing the Performance of the Riptide Terrova QUEST	
with the Wireless Remote or One-Boat Network App	.28
One-Boat Network Adjustments	.29
Keel Offset	.29
Straight On Deploy	.33
Stow Orientation	.35
Boat Scale	.37
One-Boat Network Buttons	. 39
Customizing the One-Boat Network Buttons	
on the Wireless Remote	. 39

MOTOR WIRING DIAGRAM	42
USING & ADJUSTING THE MOTOR	43
Mount Features	43
Indicator Panel	45
Stowing and Deploying the Motor	46
60" Shafts	46
To Deploy the Motor (60" Shafts)	46
To Stow the Motor (60" Shafts)	48
72", 87", and 100" Shafts	50
To Deploy the Motor (72", 87", and 100" Shafts)	50
To Stow the Motor (72", 87", and 100" Shafts)	52
Stowing and Deploying in Shallow Water	54
Deploying in Shallow Water (72", 87", and 100" Shafts)	54
Stowing in Shallow Water (72", 87", and 100" Shafts)	56
Motor Adjustments	58
Adjusting the Depth of the Motor	58
60" Shafts	58
72", 87", and 100" Shafts	59
Adjusting the Lower Unit for a Secure Stow	60
60" Shafts	60
72", 87", and 100" Shafts	61
Rotating the Depth Collar	62
Adjusting the Stow Lock Collar Tension	66
Installing an External Transducer	69
SERVICE & MAINTENANCE	70
Prop Replacement	70
General Maintenance	71
Troubleshooting	72
COMPLIANCE STATEMENTS	74
PARTS DIAGRAM & PARTS LIST	76

## SAFETY CONSIDERATIONS

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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/sec2.

## **▲ 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.

## WARRANTY

### MINN KOTA SALTWATER/RIPTIDE TROLLING MOTORS

### Minn Kota Saltwater/Riptide Trolling Motors - Limited Lifetime Warranty On Composite Shaft And Limited Two-Year Warranty On The Entire Product

Johnson Outdoors Marine Electronics, Inc. ("JOME") extends the following limited warranty to the original retail purchaser only. Warranty coverage is not transferable

### Minn Kota Limited Two-Year Warranty on the Entire Product

JOME warrants to the original retail purchaser only that the purchaser's new Minn Kota saltwater trolling motor will be materially free from defects in materials and workmanship appearing within two (2) years after the date of purchase. JOME will (at its option) either repair or replace, free of charge, any parts found by JOME to be defective during the term of this warranty. Such repair, or replacement shall be the sole and exclusive liability of JOME and the sole and exclusive remedy of the purchaser for breach of this warranty.

### Minn Kota Limited Lifetime Warranty on Composite Shaft

JOME warrants to the original retail purchaser only that the composite shaft of the purchaser's Minn Kota trolling motor will be materially free from defects in materials and workmanship appearing within the original purchaser's lifetime. JOME will provide a new composite shaft, free of charge, to replace any composite shaft found by JOME to be defective during the term of this warranty. Providing a new composite shaft shall be the sole and exclusive liability of JOME and the sole and exclusive remedy of the purchaser for breach of this warranty; and purchaser shall be responsible for installing, or for the cost of labor to install, any new composite shaft provided by JOME.

### Exclusions and Limitations

This limited warranty does not apply to products that have been used commercially or for rental purposes. This limited warranty does not cover normal wear and tear, blemishes that do not affect the operation of the product, or damage caused by accidents, abuse, alteration, modification, shipping damages, acts of God, negligence of the user or misuse, improper or insufficient care or maintenance. DAMAGE CAUSED BY THE USE OF OTHER REPLACEMENT PARTS NOT MEETING THE DESIGN SPECIFICATIONS OF THE ORIGINAL PARTS WILL NOT BE COVERED BY THIS LIMITED WARRANTY. The cost of normal maintenance or replacement parts which are not in breach of the limited warranty are the responsibility of the purchaser. Prior to using products, the purchaser shall determine the suitability of the products for the intended use and assumes all related risk and liability. Any assistance JOME provides to or procures for the purchaser outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of the terms, limitations or exclusions, nor will such assistance extend or revive the warranty. JOME will not reimburse the purchaser for any expenses incurred by the purchaser in repairing, correcting or replacing any defective products or parts, except those incurred with JOME's prior written permission. JOME'S AGGREGATE LIABILITY WITH RESPECT TO COVERED PRODUCTS IS LIMITED TO AN AMOUNT EQUAL TO THE PURCHASER'S ORIGINAL PURCHASE PRICE PAID FOR SUCH PRODUCT.

### Minn Kota Service Information

To obtain warranty service in the U.S., the product believed to be defective, and proof of original purchase (including the date of purchase), must be presented to a Minn Kota Authorized Service Center. Go to minnkota.johnsonoutdoors.com/us/support/service-providers/locate to find a Minn Kota Authorized Service Center. Any charges incurred for service calls, transportation or shipping/freight to/from the Minn Kota Authorized Service Center, labor to haul out, remove, re-install or re-rig products removed for warranty service, or any other similar items are the sole and exclusive responsibility of the purchaser. Products purchased outside of the U.S. must be returned prepaid with proof of purchase (including the date of purchase and serial number) to any Authorized Minn Kota Service Center in the country of purchase. To contact Minn Kota Customer Service go to minnkota-help.johnsonoutdoors.com/hc/en-us. Products repaired or replaced will be warranted for the remainder of the original warranty period, or for 90 days from the date of repair or replacement, whichever is longer. For any product that is returned for warranty service that JOME finds to be not covered by or not in breach of this limited warranty, there will be a billing for services rendered at the prevailing labor rate of the applicable Minn Kota Authorized Service Center and for a minimum of at least one hour.

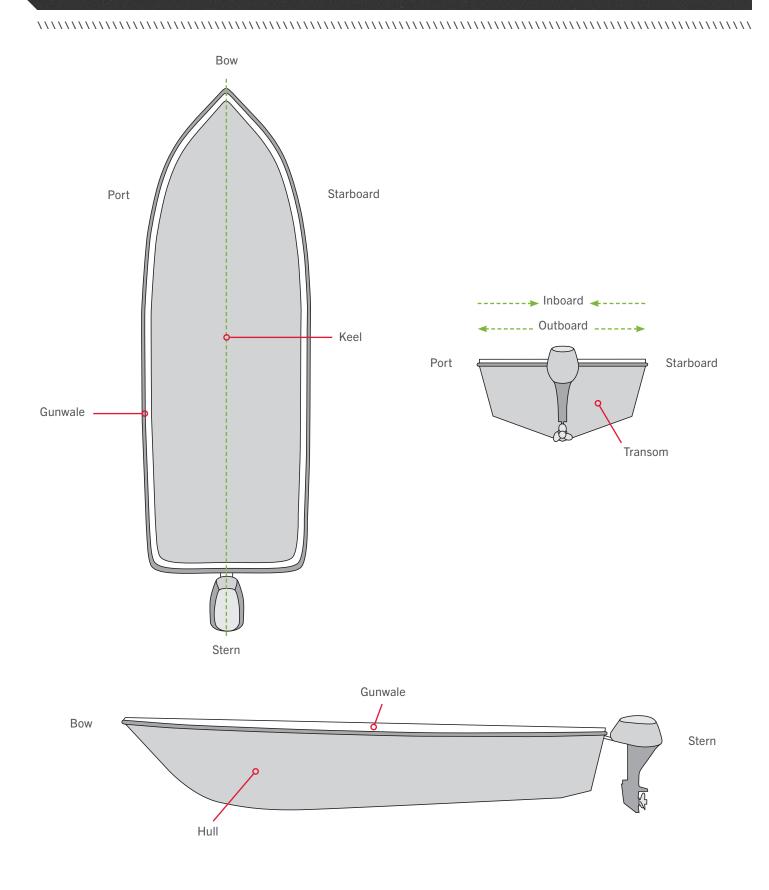


NOTICE: Do not return your Minn Kota product to your retailer. Your retailer is not authorized to repair or replace products.

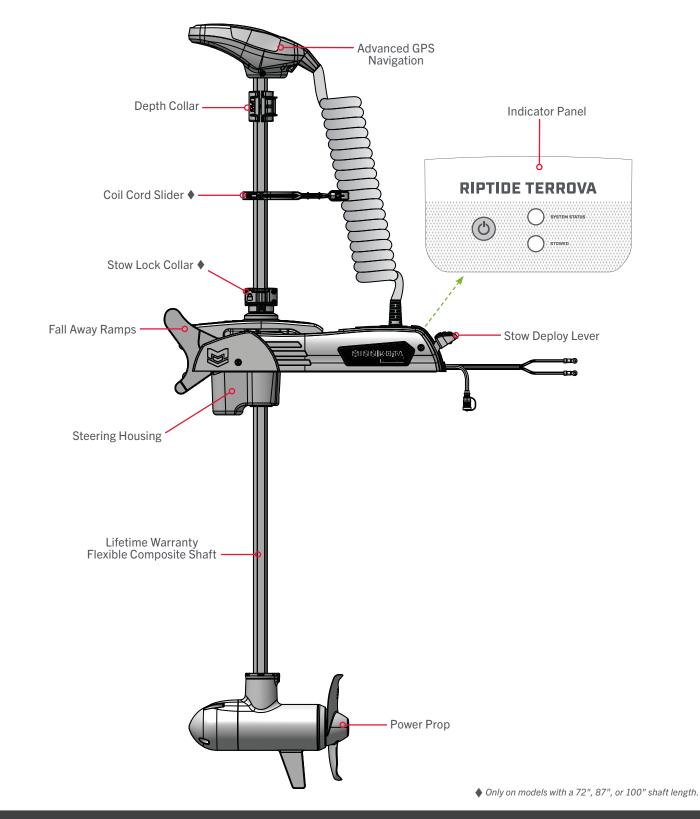
OTICE: THERE ARE NO EXPRESS WARRANTIES OTHER THAN THESE LIMITED WARRANTIES. IN NO EVENT SHALL ANY IMPLIED WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, EXTEND BEYOND THE DURATION OF THE RELEVANT EXPRESS LIMITED WARRANTY. IN NO EVENT SHALL JOME BE LIABLE FOR PUNITIVE, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES. Without limiting the foregoing, JOME assumes no responsibility for loss of use of product, loss of time, inconvenience or other damage.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

## **KNOW YOUR BOAT**



## **FEATURES**



NOTICE: Specifications subject to change without notice. This diagram is for reference only and may differ from your actual motor.

## INSTALLATION

### INSTALLING THE RIPTIDE TERROVA QUEST

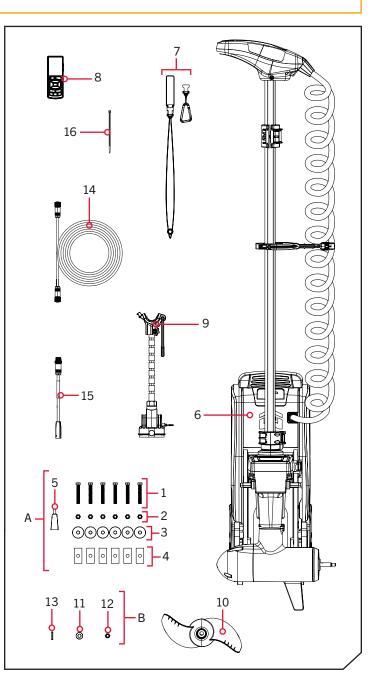
Your new Riptide Terrova QUEST comes with everything you'll need to install it directly to the boat. The motor can be mounted directly to the bow or coupled with a Minn Kota quick release bracket for ease of mounting and removal. For compatible quick release brackets and to locate your nearest dealer, visit minnkota.johnsonoutdoors.com. 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.

### INSTALLATION PARTS LIST >

ltem / 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/CARARBINER 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
	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.



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### MOUNTING CONSIDERATIONS

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### 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.

View accessories available for your trolling motor at minnkota. ohnsonoutdoors.com.

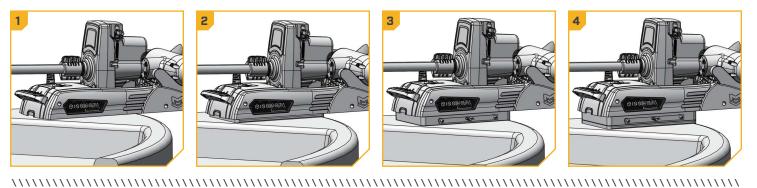
The motor must not encounter any obstructions as it is lowered into the water or raised into the boat when stowed and deployed. When stowed, ensure that there is enough room for the Shaft and Control Head and that they do not extend off the side of the boat.

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.



#### 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

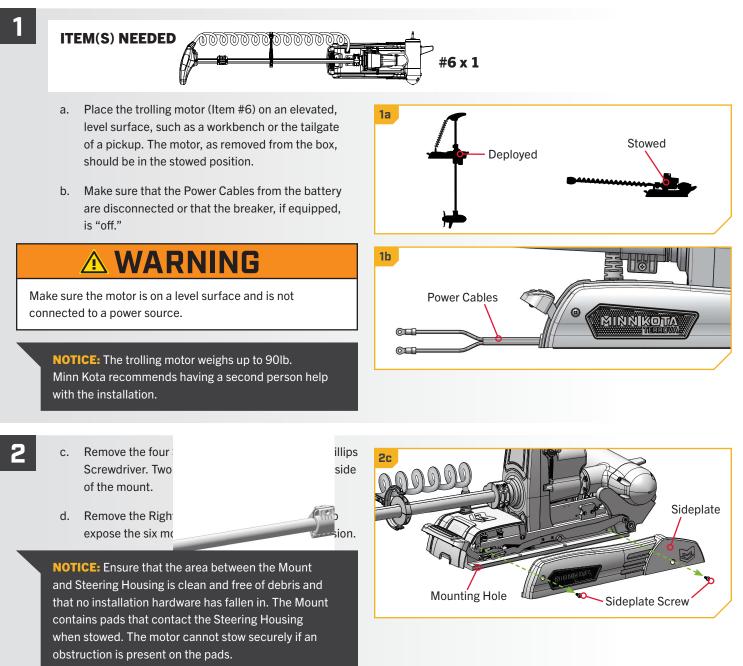
- 9/16" Deep Well Socket
- A second person to help with the installation

### **INSTALLING THE RIPTIDE TERROVA QUEST**

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INSTALLATION >

### INSTALLING THE RIPTIDE TERROVA QUEST



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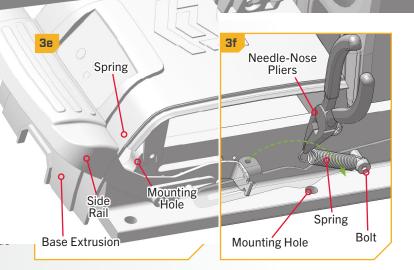
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- e. The center mounting hole on each side of the E Extrusion is blocked by a Spring. One end of ea Spring must be disconnected in order to acces mounting holes.
  - f. To disconnect the Spring, take a Needle-nosel and carefully grab the hooked end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

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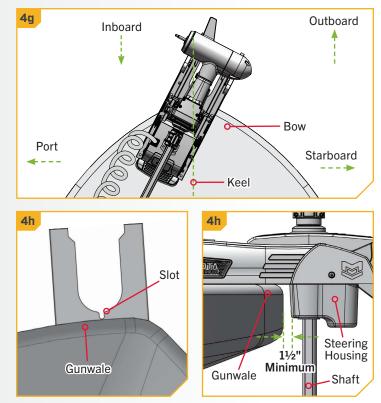
When maneuvering each Spring, carefully handle the Spring to avoid bending it. Do not grab the body of the Spring to avoid pinching between the spring coils. Always grab by the hooked end.

- 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.
  - 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 1<sup>1</sup>/<sub>2</sub>" 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.



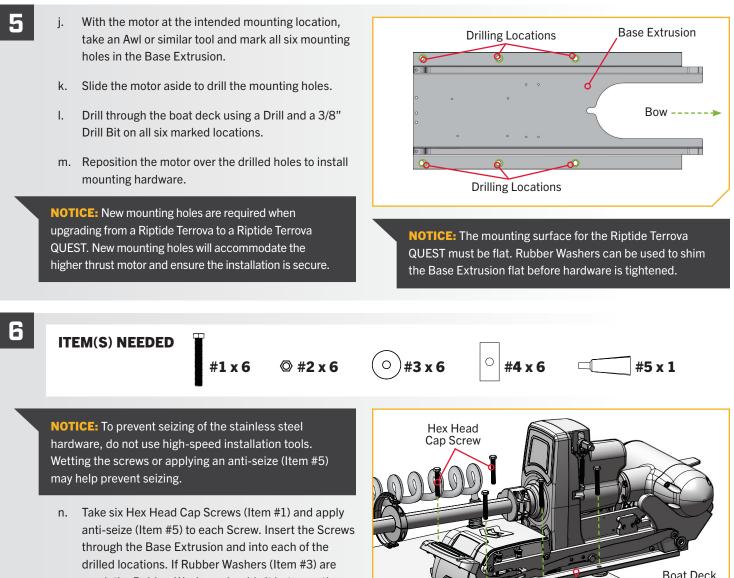
### 🛆 CAUTION

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.



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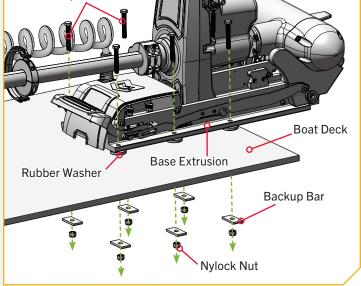
### INSTALLING THE RIPTIDE TERROVA QUEST



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.



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When maneuvering each spring, carefully nanole 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.
- Reinstall the four Sideplate Screws using a #3 r. 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.

Hole in Side Rail

Needle-Nose Pliers

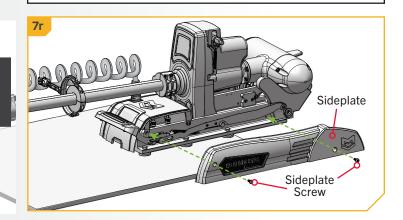
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Spring

**7**p 🛓

### 🛆 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 Â

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 /	Max	Circuit	Breaker		Wir	e Extension Len	igth	
Model	Amp Draw	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.

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### **BATTERY & WIRING INSTALLATION**

### SELECTING THE CORRECT BATTERIES

QUEST series motors will operate with any deep cycle marine 12, 24 or 36-volt battery/batteries and have been optimized for use with LiFePO4 lithium-ion battery cells. Lithium-ion batteries maintain higher voltages for more extended periods than lead-acid batteries and will provide the best performance in powering the trolling motor.

QUEST series trolling motors may also be powered with leadacid (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

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		

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.

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.

### **▲ 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.

## **▲ 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.

### 

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.

### **CONNECTING THE BATTERIES IN SERIES**

### ......

### > 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

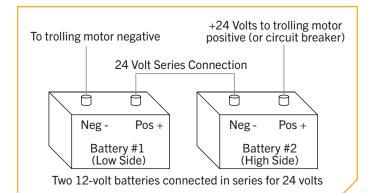
Automatic jump start systems and selector switches tie the negatives of the connected batteries together. Connecting these systems to the "High Side" Battery or "Middle" Battery in the diagrams below and will cause significant damage to your trolling motor and electronics. The only trolling motor battery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

### CONNECTING THE BATTERIES IN SERIES (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").
- 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.

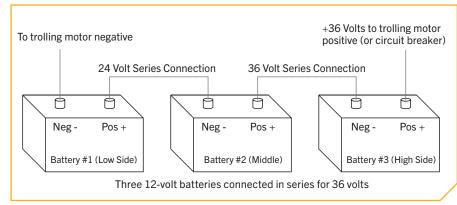
- For safety reasons, disconnect the motor from the battery or batteries when the motor is not in use or while the battery/batteries are being charged.
- Improper wiring of 24/36 volt systems could cause battery explosion.
- Keep leadwire wing nut connections tight and solid to battery terminals.
- Locate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

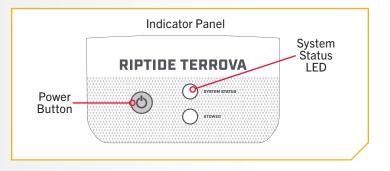
The Riptide Terrova QUEST is an advanced trolling motor. To maximize its performance, mechanical and electrical systems should be set and calibrated to fit every user's installation. This portion of the installation will cover how to verify power, install the Bow-mount Stabilizer, and more. The installation 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.

### 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.

- Locate the Indicator Panel at the front of the Mount. 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. 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.



### 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). 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.

### COMPLETING THE INSTALLATION

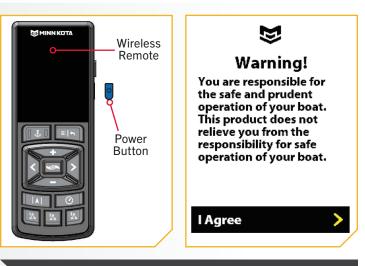
### Powering on the Wireless Remote





- Power on the trolling motor. a.
- b. To turn on the Wireless Remote (Item #8), press and hold the Power button on the side of the Remote.
- c. A message will appear on the display screen. Read the disclaimer, then press the Steer Right button to select "I Agree."
- d. 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 3, Steer Right 4, and Prop On/Off.
- e. 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.



**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.

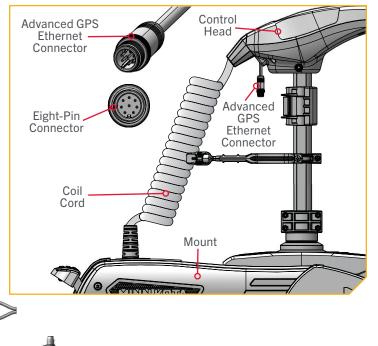
### IDENTIFYING TROLLING MOTOR FEATURES AND THEIR ASSOCIATED CABLES

### **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.





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### 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.

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. These options include:

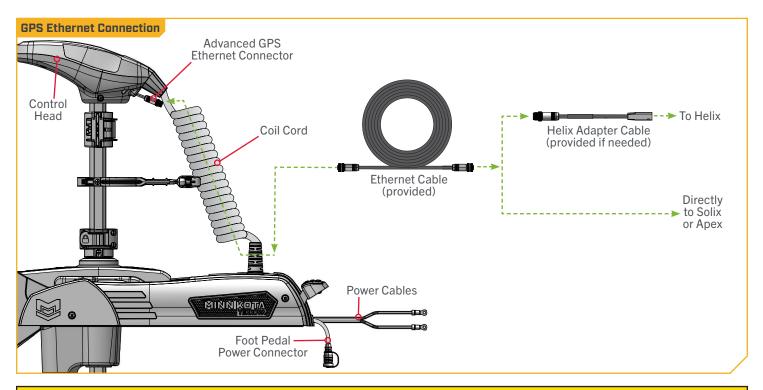
- 10 ft (AS EC 10E 10' Ethernet Cable 720073-2)
- 15 ft (AS EC 15E 15' Ethernet Cable 720073-5)
- 20 ft (AS EC 20E 20' Ethernet Cable 720073-3)

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 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.

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### CAUTION <u>/</u>

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



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

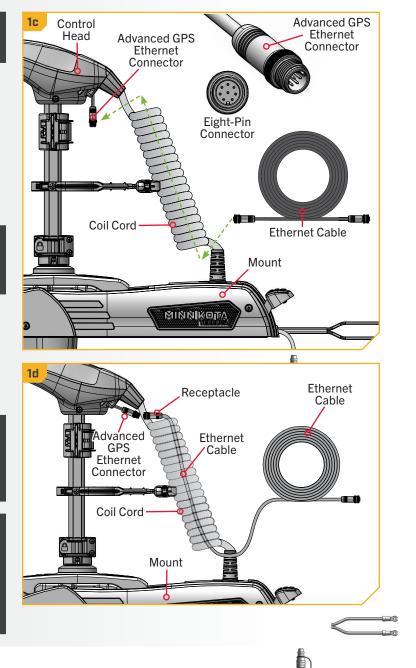
- a. Place the motor in the deployed position.
- b. Locate the Eight-Pin Advanced GPS Ethernet Connector below the Control Head.
- c. Identify the keyed Receptacle on the Ethernet Cable (Item #14). It is keyed to fit with the Eight-Pin Advanced GPS Ethernet Connector below the Control Head.

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

d. 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.

**NOTICE:** A 30' Ethernet Extension Cable (AS ECX 30E - 30' Ethernet Extension Cable - 760025-1) is available from 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.



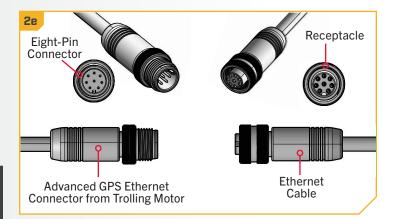
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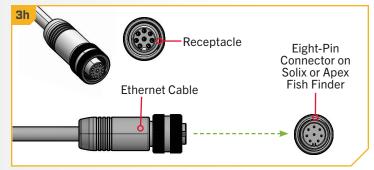
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- To install the Ethernet Cable, align the pins on e. the Advanced GPS Ethernet Connector with the Receptacle on the Ethernet Cable. Notice the keyed connectors. Tighten the Collar from the Ethernet Cable to secure the connection.
  - f. The Ethernet 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.

- 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.





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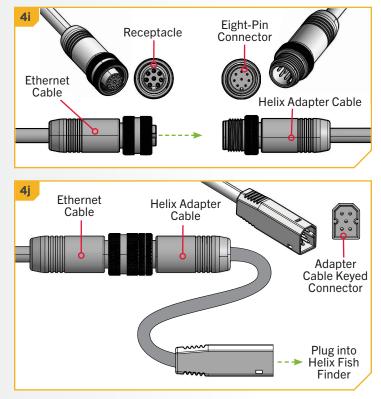
### **ITEM(S) NEEDED**

🗔 #15 x 1

If installing directly to a Helix Adapter Cable i. (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

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### > 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.

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#16 x 1

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

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- a. Place the motor in the stowed position.
- b. 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.
- c. 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.

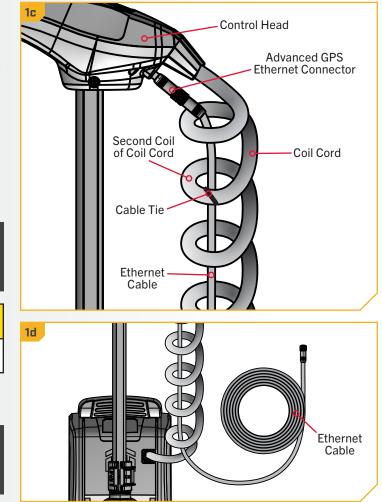
**NOTICE:** The Ethernet Cable should be secured to the second coil of the Coil Cord. Securing the Ethernet Cable to any other coil may damage the Cable.

### **▲ CAUTION**

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

d. 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**

### > Installing the Prop

**ITEM(S) NEEDED** 



 $(\bigcirc)$  #11 x 1 Ø #12 x 1 #13 x 1

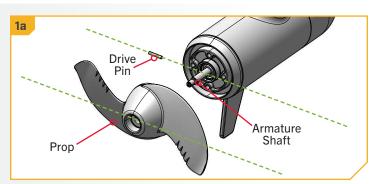
### **▲ CAUTION**

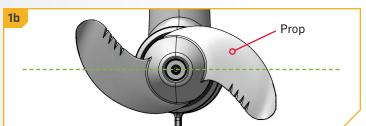
Disconnect the motor from the battery before beginning any prop work or maintenance.

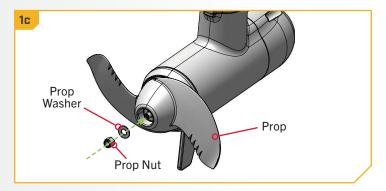
- a. Take the Drive Pin (Item #13) and slide it through the Hole in the Armature Shaft. Position the Drive Pin horizontally by grasping the Armature Shaft and rotating it with the Drive Pin in place.
- b. Align the Prop (Item #10) so it is horizontal and parallel with the Drive Pin. Slide the Prop onto 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 OUEST 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.

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<sup>®</sup> 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.

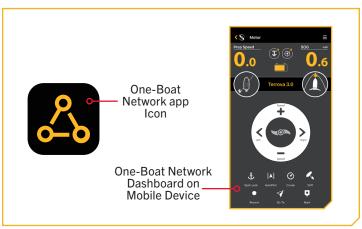
Completing the installation of the Riptide Terrova QUEST through the Wireless Remote or OBN app should be done following the Prop installation. Ensure that the trolling motor is connected to a power source before adjusting One-Boat Network settings.

### 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 nonfunctioning 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 ADJUSTMENTS

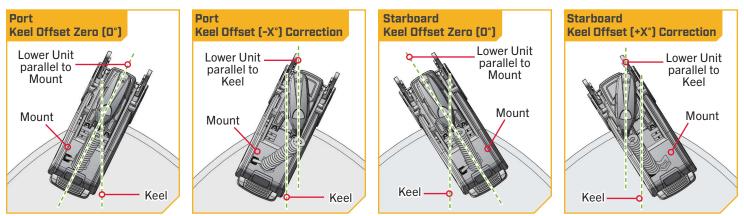
#### ONE-BOAT NETWORK ADJUSTMENTS >

### **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

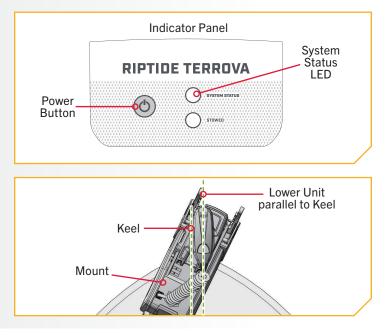
**NOTICE:** When the motor is installed from the factory, the Keel Offset is 0 degrees. When adjusting the Keel Offset, any position towards Port will create a Keel Offset of a negative angle. Any position towards Starboard will create a positive angle.

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.



### > Setting the Keel Offset with the Wireless Remote

- Power on the trolling motor by pressing the Power a. (d) button on the Indicator Panel. When the trolling motor is on, the System Status Q 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.



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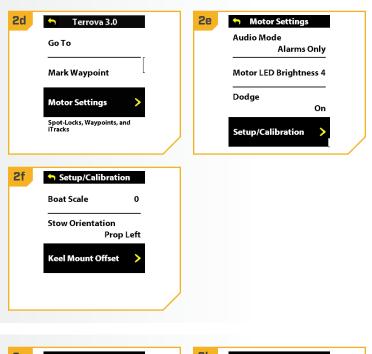
### **KEEL OFFSET**

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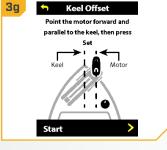
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- Press the Menu is button on the Wireless Remote. c.
  - d. Use the Speed Up 🖘 or Speed Down 🦚 button to find the Motor Settings menu. Use the Steer Right button to select Motor Settings.
  - e. In the Motor Settings Menu, use the Speed Up or Speed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



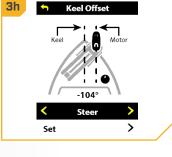
- Review all safety warnings. Use the Steer Right g. button to select Start and begin the process.
- h. Use the Steer Left 3 or Steer Right 5 button to point the motor forward and parallel to the keel.
- i. When satisfied with the placement of the trolling button to scroll to Set. Use the Steer Right § button to select Set. The degree of offset is displayed at the bottom of the Dashboard.



Keel Offs

-104 Steer

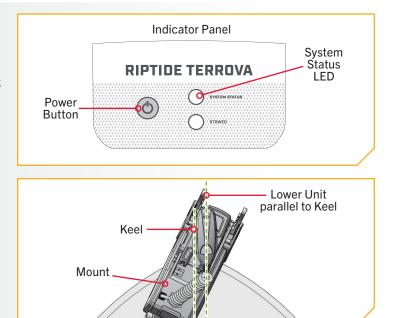
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### **KEEL OFFSET**

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

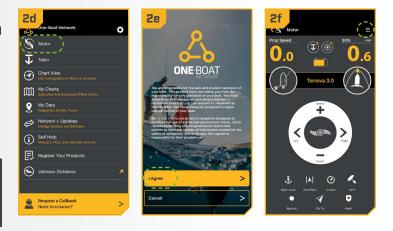
- a. Power on the trolling motor by pressing the Power (button on the Indicator Panel. When the trolling motor is on, the System Status 💭 LED will be blue.
  - b. With either the Wireless Remote or One-Boat Network (OBN) app on a paired mobile device, steer the motor so that the control head and lower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



- Open the One-Boat Network (OBN) app on the с. mobile device. Make sure the mobile device is paired with the trolling motor.
- d. From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor app home screen.
- e. Before the Motor app 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 app home screen appears.

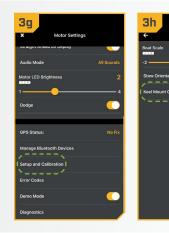
f. On the Motor app home screen, locate the Motor Setting button in the upper right-hand corner and tap it.



### **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.
- If the trolling motor needs to be adjusted, locate j. the Return button on the top-left corner of the app screen. Tap the Return button three times until the Motor app home screen displays.
  - k. Use the Steer Right > and Steer Left < buttons to point the motor forward and parallel to the keel.
  - I. When satisfied with the placement of the trolling motor, locate the Motor Settings button in the top-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.

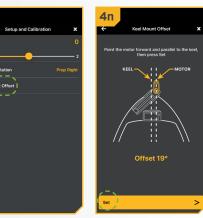








4m	
X Motor Settings	
Straight Aneau on Deploy	
Audio Mode	
Motor LED Brightness	
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Dodge	
GPS Status:	No Fix
Manage Bluetooth Devices	
Setup and Calibration	
Error Codes	
Demo Mode	
Diagnostics	



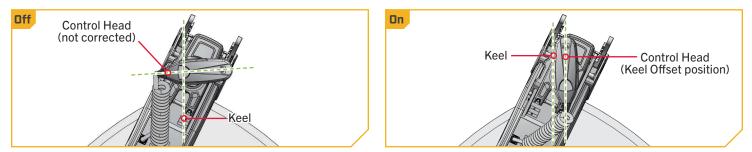
### STRAIGHT ON DEPLOY

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### STRAIGHT ON DEPLOY

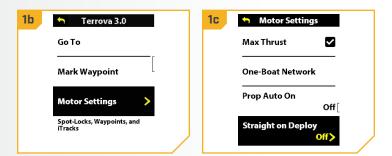
Minn Kota recommends setting the Keel Offset when the position of the Lower Unit is parallel with the Keel. Save the Keel Offset before exploring the Straight on Deploy feature. Straight on Deploy uses the position recorded in Keel Offset to know where to position the Lower Unit to be parallel with the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

- With the motor on, press the Menu 💽 button on a. the Wireless Remote.
- b. Use the Speed Up 🖘 or Speed Down 🥌 button to find the Motor Settings menu. Use the Steer Right **S** button to select Motor Settings.
- c. In the Motor Settings Menu, use the Speed Up or Speed Down button to find Straight on Deploy.
- d. By default, the Straight on Deploy is toggled "off."
- e. Use the Steer Right button to toggle between "on" and "off."



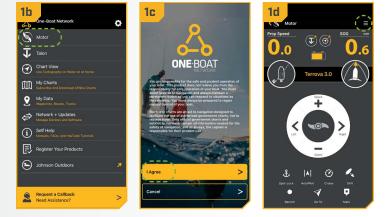
### STRAIGHT ON DEPLOY

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

- a. 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."
  - b. From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor app home screen.
  - c. Before the Motor app 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 app home screen appears.

- d. On the Motor app home screen, locate the Motor Setting button in the upper right-hand corner and tap it.
- In the Motor Settings menu, find the Straight Ahead e. on Deploy toggle. Tap to turn the toggle "on" and "off." When highlighted yellow the toggle is "on."





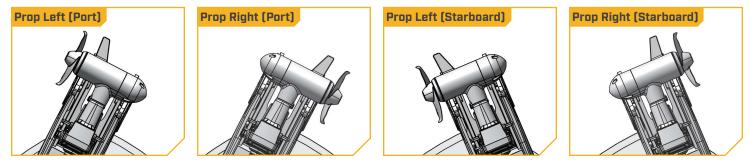
### STOW ORIENTATION

### 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

**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.

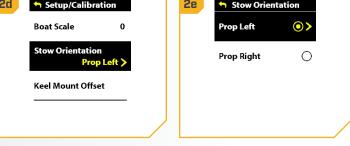
the Stow Orientation allows the installation to be customized to fit boat positioning for either a Port or Starboard installation and to accommodate fishing or trailering applications.



### > Setting the Stow Orientation with the Wireless Remote

With the trolling motor powered on, press the a. 👆 Motor Settings 1b 🕤 🛛 Terrova 3.0 1c Menu should be the Wireless Remote. Audio Mode Go To Alarms Only b. Use the Speed Up 🖘 or Speed Down 🥌 Mark Waypoint **Motor LED Brightness 4** button to find the Motor Settings menu. Use the Steer Right **button** to select Motor Settings. Dodae Motor Settings On Spot-Locks, Waypoints, and iTracks c. In the Motor Settings Menu, use the Speed Up Setup/Calibration or Speed Down button to find Setup/Calibration. Use Steer Right 2 to open the Setup/Calibration menu. d. Once in the Setup/Calibration menu, use the 2d Setup/Calibration 2e Stow Orientation Speed Up 🖘 or Speed Down 📣 button to Boat Scale Prop Left **()** find Stow Orientation. Use Steer Right 2 to open the Stow Orientation menu. Stow Orientation Prop Right Ο Prop Le e. 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 2 button to select the desired stow orientation.



### STOW ORIENTATION

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

E

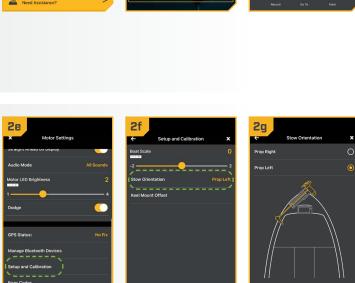
- a. Open the One-Boat Network (OBN) app on a mobile device. Make sure the mobile device is paired with the trolling motor and that the motor is powered "on."
- b. From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor app home screen.
- Before the Motor app home screen will open,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

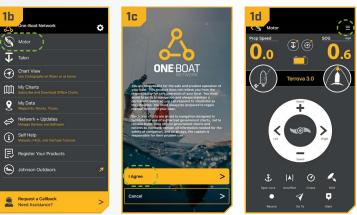
**NOTICE:** The on-screen prompt will only display once each time the app is launched. If the prompt has displayed, the Motor app home screen appears.

- d. On the Motor app home screen, locate the Motor Setting button in the upper right-hand corner and tap it.
- e. In the Motor Settings menu, find and tap Setup and Calibration.
- f. In Setup and Calibration, find and tap Stow Orientation.

2

g. Set the feature to Prop Right or Prop Left.





### **BOAT SCALE**

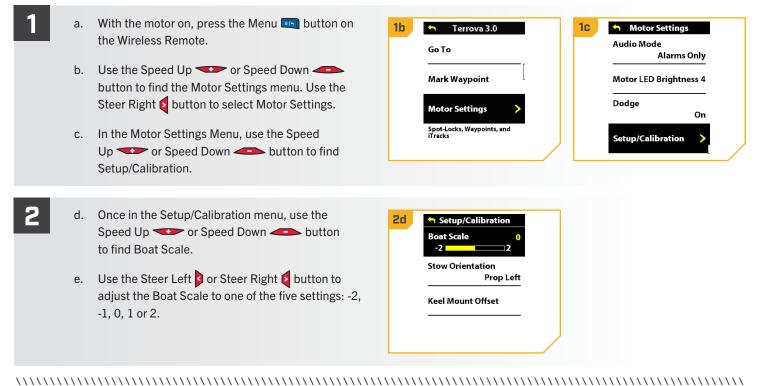
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### **BOAT SCALE**

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



# **BOAT SCALE**

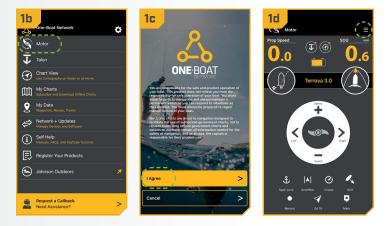
# 

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

- a. 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."
- b. From the OBN home screen, tap the Motor menu. The Motor menu opens the Motor app home screen.
- c. Before the Motor app 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 app home screen appears.

- d. On the Motor app home screen, locate the Motor Setting button in the upper right-hand corner and tap it.
- In the Motor Settings menu, find and tap Setup e. and Calibration.
  - In Setup and Calibration, find and tap Boat Scale. f.
  - g. Set the feature to increase or decrease Boat Scale.



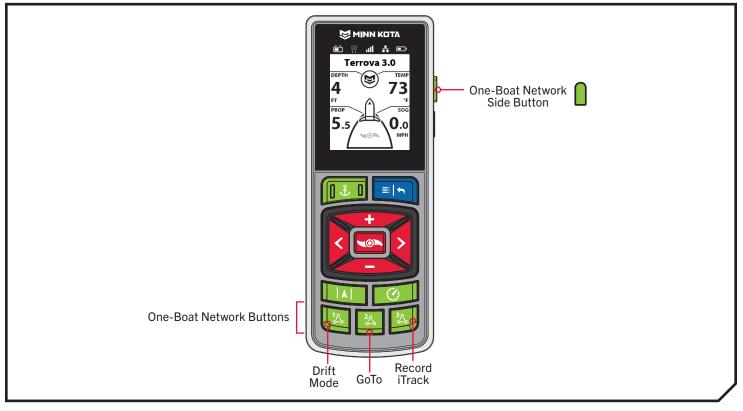
2e		2f		2g	
× Motor Setting	as 🗖	- Setup and C	alibration X	Setup and	
Straight Alleau on Deploy		oat Scale	0	Boat Scale	
Audio Mode		2	2	-2	
Motor LED Brightness	2	Stow Orientation	Prop Left	Stow Orientation	
1	4 <b>i</b>	Geel Mount Offset		Keel Mount Offset	
Dodge					
				Boat Scale	<u> </u>
GPS Status:	No Fix				+
Manage Bluetooth Devices					
Setup and Calibration					
Error Codes					
Demo Mode					
Diagnostics					

# 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					
12	Drift Mode	328	Record iTrack		
2 <u>2</u> 2	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	4	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	٥Ĵ٥	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	<b>只</b>	Mark Waypoint is the default function for the OBN Side Button. Press once to save a Waypoint.
Max Speed	Ø.	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	ļļ	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

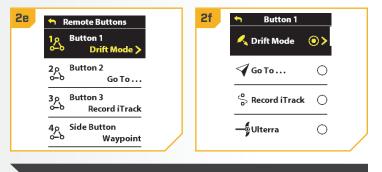
- a. On the Wireless Remote, press the Menu 📼 button to open the Motor Menu.
- b. In the Motor Menu, use the Speed Down or menu. Use the Steer Right **button to select** Motor Settings.
- c. In the Motor Settings menu, use the Speed Down or Speed Up button to find One-Boat Network. Use the Steer Right 2 button to select One-Boat Network.
- d. In the One-Boat Network Menu, use the Speed Down - or Speed Up - button to find Remote Buttons. Use the Steer Right **b**utton to select Remote Buttons.
- 1b **5** 1c Motor Settings Autopilot Mode Go To Locked Course Arrival Mode Mark Waypoint Prop Off Motor Settings Eco Mode Spot-Locks, Waypoints, and **One-Boat Network** 1d <table-cell-rows> One-Boat Network Customize the One-Boat Network Buttons on the **Remote Buttons** Customize the One-Boat Network Button on your Foot Pedal. Foot Pedal AutoPilot
- 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.

2

Use the Speed Down - or Speed Up f. button to scroll through the options. Use the Steer Right **button** to select the function.

**NOTICE:** The radio button next to the desired function will be selected when the Steer Right **5** 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.

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

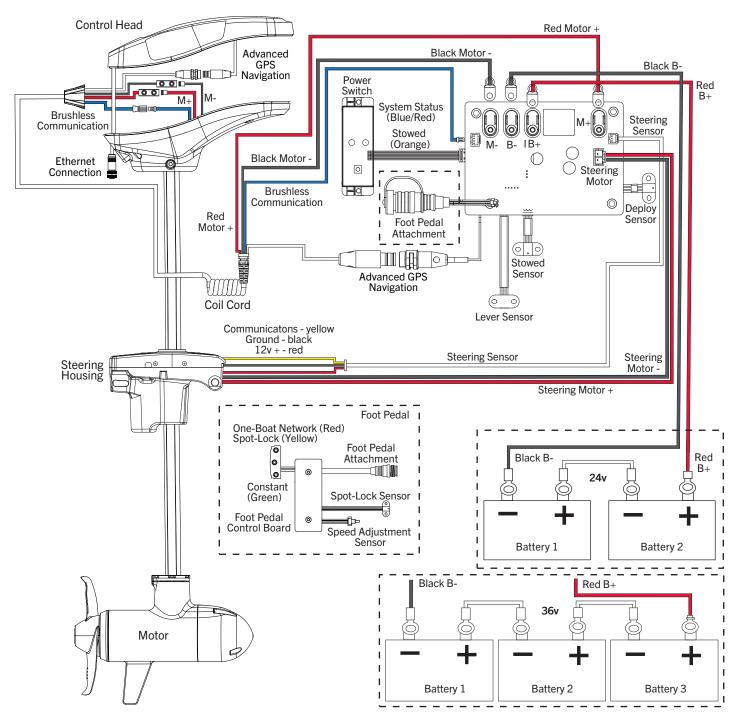


**NOTICE:** For quick customization, press and hold the OBN button you want to customize to quickly bring up the customization screen.

# **MOTOR WIRING DIAGRAM**

# **RIPTIDE TERROVA QUEST**

The following Motor Wiring Diagram applies to all QUEST series Riptide Terrova trolling motor models that come factory installed with Advanced GPS Navigation.



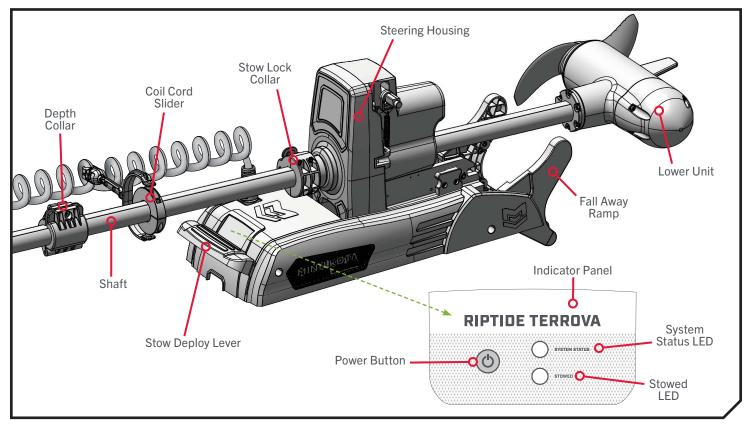
**NOTICE:** This is a multi-voltage diagram. Double-check your motor's voltage for proper connections. Over-Current Protection Devices are not shown in this illustration.

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# **USING & ADJUSTING THE MOTOR**

# **MOUNT FEATURES**

Become familiar with the features of the motor to maximize the capabilities this product offers.



# > Depth Collar

The Depth Collar functions to hold the motor at the proper depth while deployed. On motors with a shaft length of 60", the Depth Collar also holds the motor in place when stowed. Open the Cam Lever to release the Depth Collar and allow it to slide up and down the motor Shaft. Close the Cam Lever to secure the Depth Collar in place. On motors with a shaft length of 60", the Depth Collar sits between the Control Head and Steering Housing. On motors with a 72", 87" or 100" shaft length, the Depth Collar sits between the Control Head and the Coil Cord Slider.

# Stow Lock Collar

On motors with a shaft length of 72", 87", or 100", a Stow Lock Collar sits above the Steering Housing and functions to hold the motor in place when stowed. The Stow Lock Collar is not present on motors with a shaft length of 60". The Stow Lock Collar is stationary and can be locked to secure the Shaft or unlocked to allow the Shaft to slide freely when stowing or deploying. Flip the Lock Arm to lock or unlock the Stow Lock Collar.

Each side of the Lock Arm has an icon that displays the status of the Stow Lock Collar. When the Lock 🛆 icon is visible, the Stow

Locked Unlocked

Lock Collar is locked and the Shaft is secure; when the Unlock 🕒 icon is visible, the Stow Lock Collar is unlocked and will not hold the Shaft in place. When locking or unlocking, be sure to press the Lock Arm so that it is fully seated against the Stow Lock Collar.

# MOUNT FEATURES

### 

# 🗥 WARNING

When the motor is being transported, it is important to fully lock the Stow Lock Collar (for shaft lengths 72", 87" or 100") or secure the Depth Collar snug against the Steering Housing (for shaft lengths 60"). This provides a secure stow and holds the motor in place during transportation when it is subject to high levels of shock and vibration. Failure to secure the motor may result in injury or damage to the unit.

# Coil Cord Slider

Motors with a shaft length of 72", 87" or 100" have a Coil Cord Slider. The Coil Cord Slider functions to support the Coil Cord and prevent it from becoming tangled or hitting obstructions. The Coil Cord Slider sits on the Shaft between the Stow Lock Collar and the Depth Collar. The arm of the Coil Cord Slider connects to the Coil Cord. The Coil Cord Slider floats freely on the Shaft and moves with the Coil Cord while stowing and deploying.

# Fall Away Ramps

The Fall Away Ramps hold and support the Lower Unit when the motor is in the stowed position. The Fall Away Ramps also rotate to release the Lower Unit when deployed and guide the Lower Unit back onto the mount when stowed. When the Fall Away Ramps latch into an upright position, the STOWED O LED on the Indicator Panel will illuminate orange. The position of the Fall Away Ramps is released for deployment by pressing the Stow Deploy Lever.

# 🗥 WARNING

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.

# Stow Deploy Lever

The Stow Deploy Lever functions to unlatch the Fall Away Ramps and release the motor for deploying or stowing. When the motor is in the deployed position, pressing the Stow Deploy Lever will cause the Lower Unit to automatically rotate into the Stow Orientation. The Stow Deploy Lever is located at the front of the mount and is activated by pressing the Lever down.

# 🗥 CAUTION

For safety reasons, disconnect the motor from the battery/batteries when the motor is not in use or while the battery/batteries are being charged. If the motor control is left on and the propeller rotation is blocked, severe motor damage can result.

### **INDICATOR PANEL**

### INDICATOR PANEL

The Indicator Panel is located at the front of the Mount, above the Stow Deploy Lever. Power to the motor is turned "on" and "off" through the Power button on the Indicator Panel. The LEDs on the Indicator Panel communicate the status of the motor.

### Power Button

The Riptide Terrova QUEST must be manually powered "on" and "off." Press the Power 🕑 button on the Indicator Panel to turn the motor "on." When the motor is powered on, the System Status LED will illuminate 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.

### LED Patterns

#### STOWED

• Orange solid 🧕 - Indicates that the trolling motor is stowed. The Fall Away Ramps are locked upright to support the Lower Unit. When the motor is deployed, the STOWED O LED will not be illuminated.

#### SYSTEM STATUS

- Blue solid Normal operation. The trolling motor is powered on. When the Motor is powered off, the System Status LED will not be illuminated.
- Red solid . Error. When the System Status LED is solid red, the motor is trying to correct an error and fix it in real time.
- Red flashing 💭 Critical error. The Prop will lock so that it cannot be engaged. A critical error must be manually cleared by correcting the source of the error. Once fixed, cycle power to the trolling motor by pressing the Power button "off" and then back "on" to clear the error and resume normal operation.

# ▲ WARNING

The trolling motor is not safely stowed for transport until the orange STOWED O LED is illuminated and the Stow Lock Collar is locked or the Depth Collar is secured against the Steering Housing.

**NOTICE:** When encountering a critical error, the Wireless Remote will provide an error code in the Diagnostic menu. Refer to the Wireless Remote Owner's Manual to learn more about error codes.

Indicator Panel System Śtatus RIPTIDE TERROVA LED Power Button

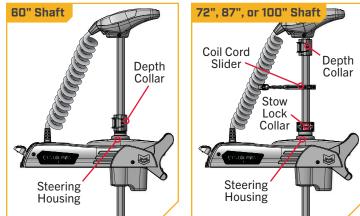
# STOWING AND DEPLOYING THE MOTOR

# STOWING AND DEPLOYING THE MOTOR

The method for securely stowing and deploying the Riptide Terrova QUEST varies slightly between short-shaft and long-shaft motors.

Short-shaft motors have a shaft length of 60". Motors with a short shaft only have a Depth Collar, which is used to set the motor depth when deploying. When stowing the motor, the Depth Collar is placed against the Steering Housing to ensure a secure stow.

Long-shaft motors have shaft lengths of 72", 87" or 100". Motors with a long shaft contain a Stow Lock Collar, Coil Cord Slider and Depth Collar. On long-shaft motors, the Depth Collar functions to hold the motor at the proper depth when deployed. The Stow Lock



Collar is unlocked to allow the Shaft to move freely when stowing and deploying. After stowing the motor, the Stow Lock Collar is locked to ensure a secure stow. The Stow Lock Collar can also be locked to hold the motor at the proper depth when deployed in shallow water.

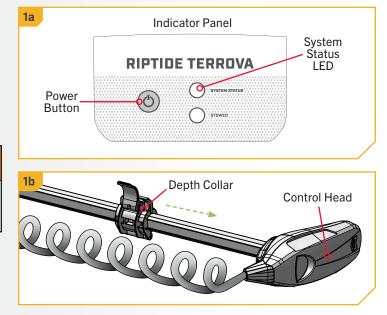
#### 60" SHAFTS

# > To Deploy the Motor (60" Shafts)

- Power on the trolling motor by pressing the Power a. 🕑 button on the Indicator Panel. When the trolling motor is on, the System Status 💭 LED will be blue.
- Release the Depth Collar by opening the Cam Lever. b. Slide the Depth Collar up towards the Control Head. When at the desired depth, close the Cam Lever to lock the Depth Collar position on the Shaft.

# 🛆 WARNING

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.



# TO DEPLOY THE MOTOR (60" SHAFTS)

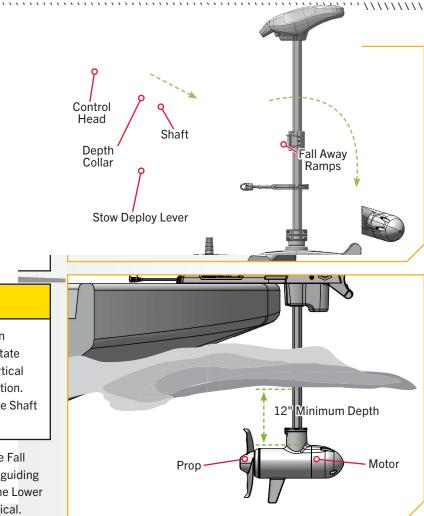
#### .....

Firmly grasp с. Depth Collar, base of the m



The Control Head will cr is released and the Cont Depth Collar. Grasp the way down and creating a

Practice proper ergonor motor to prevent injury.



**NOTICE:** Ensure that the top of the lower unit is submerged at least 12" below the surface of the water to avoid churning or agitation of surface water.

# CAUTION

If the Keel Offset has been configured, and Straight On Deploy is toggled "on," the motor will automatically rotate into the Keel Offset position when the Shaft is fully vertical and the Steering Housing locks into the deployed position. Be aware of this motion to avoid suddenly releasing the Shaft and to avoid contacting pinch points.

d. Guide the Lower Unit out and away from the Fall Away Ramps. Maintain a secure hold while guiding the motor to the deployed position. Allow the Lower Unit to drop and tilt so that the Shaft is vertical. Lower the motor into the water until the Depth Collar is seated against the Steering Housing.

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# TO STOW THE MOTOR (60" SHAFTS)

# > To Stow the Motor (60" Shafts)

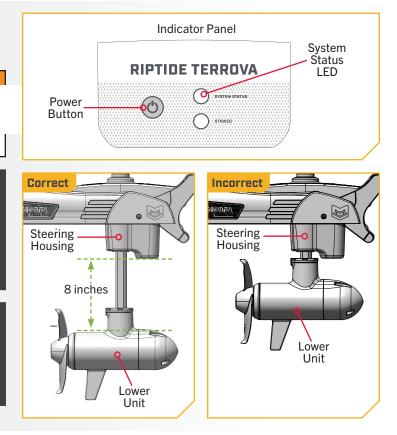
Power on the trolling motor by pressing the Power a. (b) button on the Indicator Panel. When the trolling motor is on, the System Status Status LED will be blue.

#### WARNING

When stowing or deploying the motor, keep fingers clea all hinge and pivot points and all moving parts.

**NOTICE:** Leave no less than 8" of space between the bottom of the Steering Housing and the top of the Lower Unit when tilting the motor into the stowed position. If the Lower Unit is trimmed too high before tilting the motor, the Lower Unit will collide with the Mount and be unable to stow.

**NOTICE:** When stowing the motor, ensure that the area between the Mount and Steering Housing is clean and free of debris. The Mount contains pads that contact the Steering Housing when stowed. The motor cannot stow securely if an obstruction is present on the pads.



# TO STOW THE MOTOR (60" SHAFTS)

Press the Stow Deploy Lever at the front of the b. mount. This will cause the Shaft and Lower Unit to automatically rotate into the Stow Orientation. Allow the Lower Unit to complete this motion before stowing the motor.

2

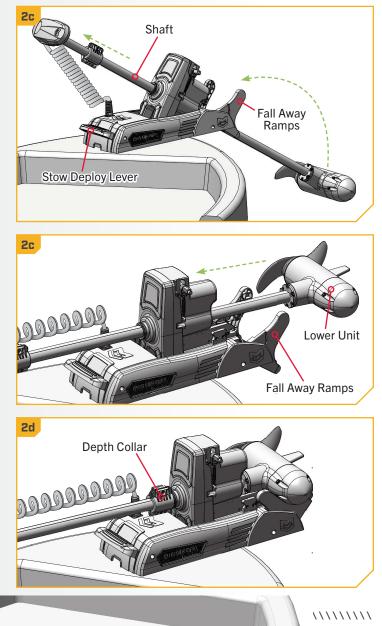
- c. Grasp the Shaft or Control Head. While holding down the Stow Deploy Lever, pull the Shaft upward to raise the Lower Unit. Tilt the Shaft into a horizontal position while guiding the motor toward the Fall Away Ramps. Pull the Lower Unit fully onto the Ramps. The Fall Away Ramps will latch upright and the STOWED LED on the Indicator Panel will illuminate orange when the motor is properly stowed.
- d. Open the Cam Lever on the Depth Collar and slide it down the Shaft until it is seated against the Steering Housing. Close the Cam Lever on the Depth Collar to secure the motor in the stowed position.

**NOTICE:** The trolling motor is not safely stowed for transport until the orange STOWED \_ LED is illuminated, the Fall Away Ramps are latched upright with the Lower Unit in place, and the Depth Collar is secured against the Steering Housing.

# ▲ WARNING

When the motor is stowed, the Depth Collar must be placed against the Steering Housing and secured with the Cam Lever closed to prevent accidental deployment. Accidental deployment may result in injury or damage to the trolling motor, accessories, or boat,

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# TO DEPLOY THE MOTOR (72", 87", AND 100" SHAFTS)

#### 

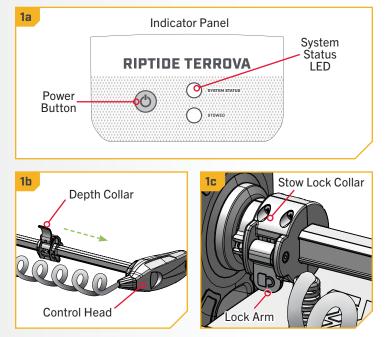
#### 72", 87", AND 100" SHAFTS 🔪

# > To Deploy the Motor (72", 87", and 100" Shafts)

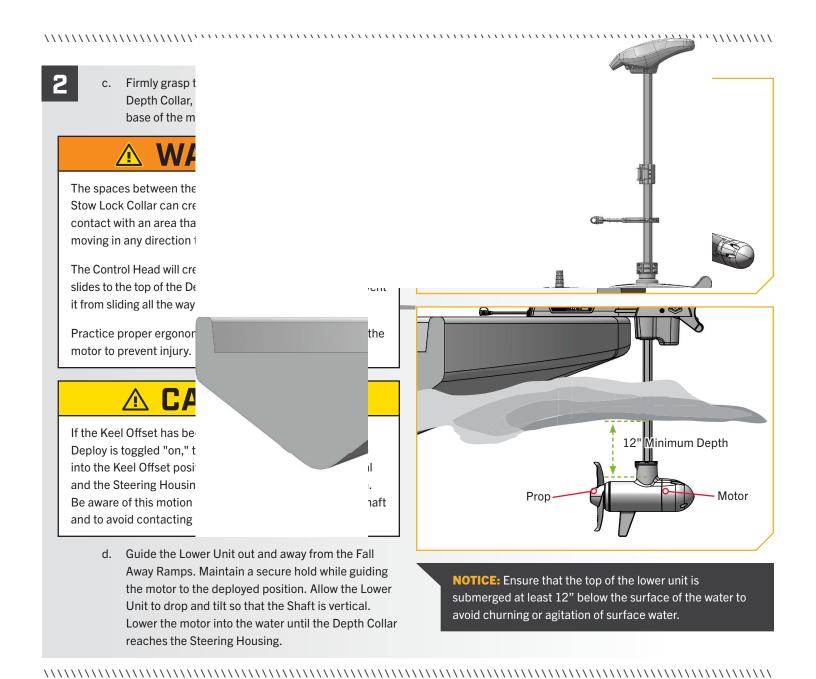
- a. Power on the trolling motor by pressing the Power (button on the Indicator Panel. When the trolling motor is on, the System Status 💭 LED will be blue.
  - b. Release the Depth Collar by opening the Cam Lever. Slide the Depth Collar up towards the Control Head. When at the desired depth, close the Cam Lever to lock the Depth Collar position on the Shaft.
  - c. Unlock the Stow Lock Collar by flipping the Lock Arm to the unlocked Pposition. Be sure to press the Lock Arm so that it is fully seated. The Stow Lock Collar must be completely unlocked so the Shaft can slide freely.

#### WARNING ∕₽

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.



# TO DEPLOY THE MOTOR (72", 87", AND 100" SHAFTS)



# TO STOW THE MOTOR (72", 87", AND 100" SHAFTS)

# > To Stow the Motor (72", 87", and 100" Shafts)

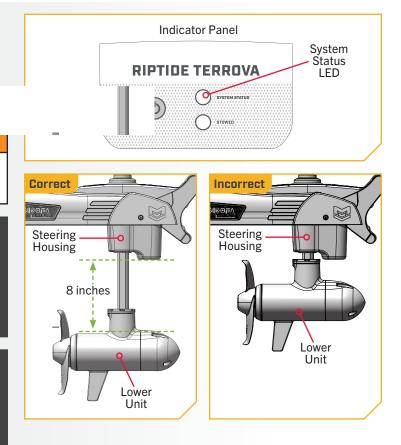
- Power on the trolling motor by pressing the Power a. (d) button on the Indicator Panel. When the trolling motor is on, the System Status Status LED will be blue.
  - Ensure that the Stow Lock Collar is in the unlocked b.  $\square$  position.

# WARNING

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.

**NOTICE:** Leave no less than 8" of space between the bottom of the Steering Housing and the top of the Lower Unit when tilting the motor into the stowed position. If the Lower Unit is trimmed too high before tilting the motor, the Lower Unit will collide with the Mount and be unable to stow.

**NOTICE:** When stowing the motor, ensure that the area between the Mount and Steering Housing is clean and free of debris. The Mount contains pads that contact the Steering Housing when stowed. The motor cannot stow securely if an obstruction is present on the pads.



# TO STOW THE MOTOR (72", 87", AND 100" SHAFTS)

Press the Stow Deploy Lever at the front of the с. mount. This will cause the Shaft and Lower Unit to automatically rotate into the Stow Orientation. Allow the Lower Unit to complete this motion before stowing the motor.

2

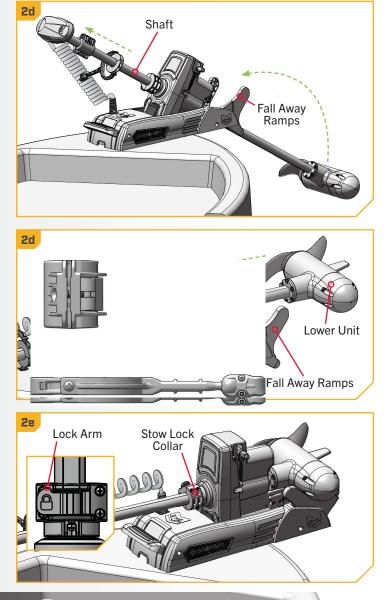
- d. Grasp the Shaft or Control Head. While holding down the Stow Deploy Lever, pull the Shaft upward to raise the Lower Unit. Tilt the Shaft into a horizontal position while guiding the motor toward the Fall Away Ramps. Pull the Lower Unit fully onto the Ramps. The Fall Away Ramps will latch upright and the STOWED LED on the Indicator Panel will illuminate orange when the motor is properly stowed.
- e. Secure the motor in place by flipping the Lock Arm on the Stow Lock Collar into the locked Position. Ensure that the Lock Arm is fully seated against the Stow Lock Collar.

**NOTICE:** The trolling motor is not safely stowed for transport until the orange STOWED 👱 LED is illuminated, the Fall Away Ramps are latched upright with the Lower Unit in place, and the Stow Lock Collar is locked  $\square$ .

# **▲ WARNING**

When the motor is stowed, the Stow Lock Collar must be in the locked  $\bigcap$  position to prevent accidental deployment. Accidental deployment may result in injury or damage to the trolling motor, accessories, or boat.

### .....



MINN KOT/

# STOWING AND DEPLOYING IN SHALLOW WATER

# STOWING AND DEPLOYING IN SHALLOW WATER

For trolling motors with a 72", 87", or 100" shaft, the Stow Lock Collar will be required to secure the Shaft when deployed in shallow water. Due to the position of the Coil Cord Slider, the Depth Collar cannot be placed beyond the midpoint of the Shaft to hold the depth of the lower unit when deploying in shallow water. The Stow Lock Collar should be used instead to perform this function.

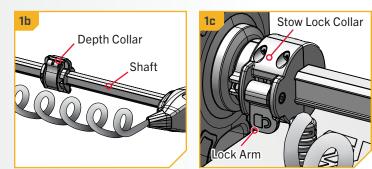
**NOTICE:** Straining against the Coil Cord Slider to place the Depth Collar too low on the Shaft may cause stress or excessive force on trolling motor components.

# > Deploying in Shallow Water (72", 87", and 100" Shafts)

- Power on the trolling motor. a.
- b. Ensure that the Depth Collar is secured on the Shaft and will not slide around while deploying.
- c. Unlock the Stow Lock Collar by flipping the Lock Arm to the unlocked 🖰 position.

# WARNING

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.



# DEPLOYING IN SHALLOW WATER (72", 87", AND 100" SHAFTS)

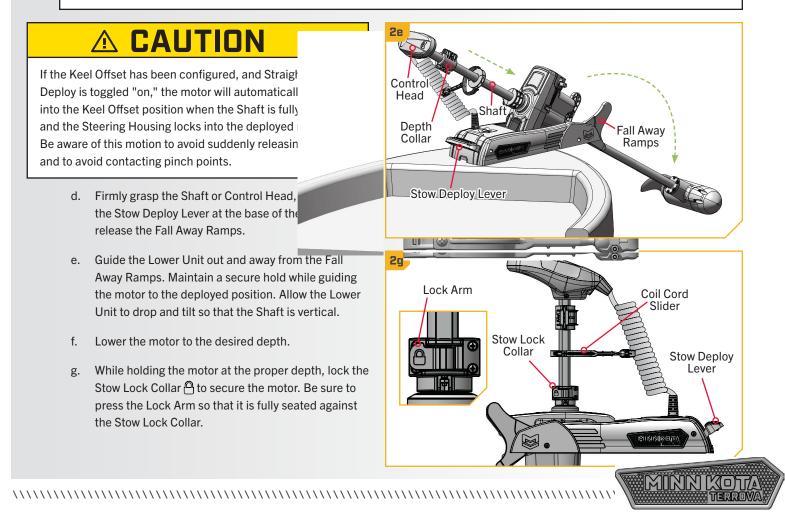


# ▲ WARNING

The spaces between the Depth Collar, Coil Cord Slider, and Stow Lock Collar can create pinch points. Do not come into contact with an area that may cause a pinch point when it is moving in any direction to avoid risk.

The Control Head will create a pinch point if the Control Head slides to the top of the Depth Collar. Grasp the Shaft to prevent it from sliding all the way down and creating a pinch point.

Practice proper ergonomics when stowing and deploying the motor to prevent injury.



# STOWING IN SHALLOW WATER (72", 87", AND 100" SHAFTS)

#### ......

# > Stowing in Shallow Water (72", 87", and 100" Shatts)

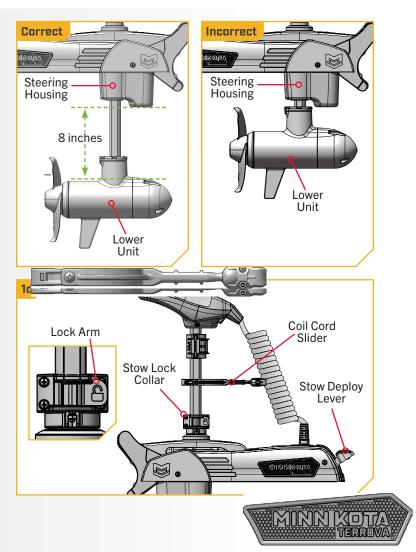
# ▲ WARNING

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.

**NOTICE:** Leave no less than 8" of space between the bottom of the Steering Housing and the top of the Lower Unit when tilting the motor into the stowed position. If the Lower Unit is trimmed too high before tilting the motor, the Lower Unit will collide with the Mount and be unable to stow.

**NOTICE:** When stowing the motor, ensure that the area between the Mount and Steering Housing is clean and free of debris. The Mount contains pads that contact the Steering Housing when stowed. The motor cannot stow securely if an obstruction is present on the pads.

- a. Power on the trolling motor.
- b. Press the Stow Deploy Lever at the front of the mount. This will cause the Shaft and Lower Unit to automatically rotate into the Stow Orientation. Allow the Lower Unit to complete this motion before stowing the motor.
- c. Firmly grasp the Shaft or Control Head. Maintain a secure hold throughout the entire stowing process.
- d. Unlock the Stow Lock Collar by flipping the Lock Arm to the unlocked  $\square$  position.



#### ......

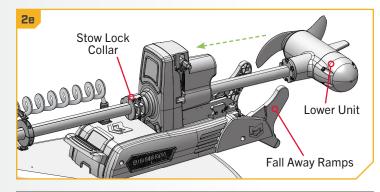
# STOWING IN SHALLOW WATER (72", 87", AND 100" SHAFTS)

While holding down the Stow Deploy Lever, pull the e. Shaft upward to raise the Lower Unit. Tilt the Shaft into a horizontal position while guiding the motor toward the Fall Away Ramps. Pull the Lower Unit fully onto the Ramps. The Fall Away Ramps will latch upright and the STOWED O LED on the Indicator Panel will illuminate orange when the motor is properly stowed.

2

f. Secure the motor in place by flipping the Lock Arm on the Stow Lock Collar into the locked Position. Ensure that the Lock Arm is fully seated against the Stow Lock Collar.

**NOTICE:** The trolling motor is not safely stowed for transport until the orange STOWED 👱 LED is illuminated, the Fall Away Ramps are latched upright with the Lower Unit in place, and the Stow Lock Collar is locked 🕰.



# WARNING

When the motor is stowed, the Stow Lock Collar must be in the locked (<sup>C)</sup> position to prevent accidental deployment. Accidental Deployment may result in injury or damage to the trolling motor, accessories, or boat.

# MOTOR ADJUSTMENTS

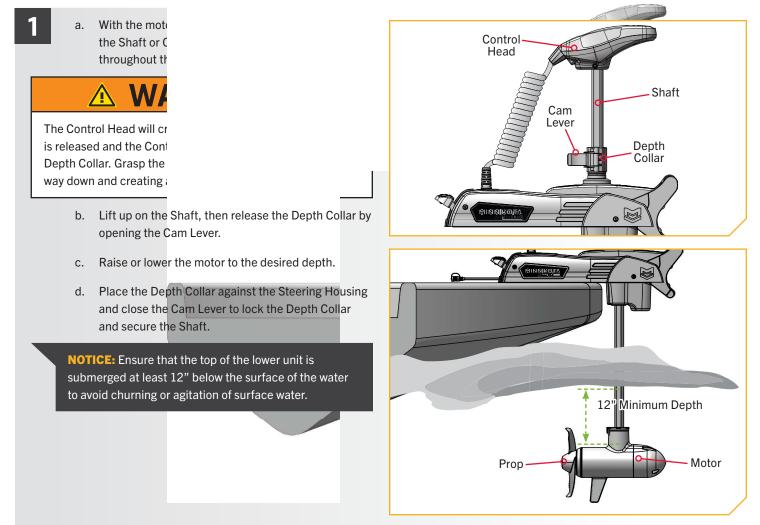
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#### MOTOR ADJUSTMENTS >

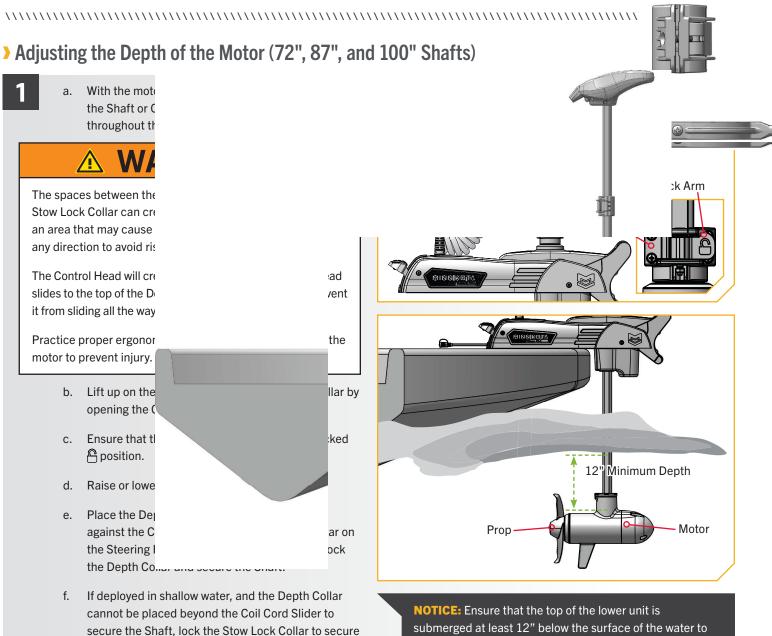
### ADJUSTING THE DEPTH OF THE MOTOR

Once the boat is on the water, it may be necessary to adjust the Lower Unit up or down to achieve an optimum depth for motor performance. When setting the depth of the motor, be sure the top of the motor is submerged at least 12" below the surface of the water to avoid churning or agitation of surface water.

# > Adjusting the Depth of the Motor (60" Shafts)



### ADJUSTING THE DEPTH OF THE MOTOR



the Shaft at the proper depth.

avoid churning or agitation of surface water.

# ADJUSTING THE LOWER UNIT FOR A SECURE STOW

# ADJUSTING THE LOWER UNIT FOR A SECURE STOW

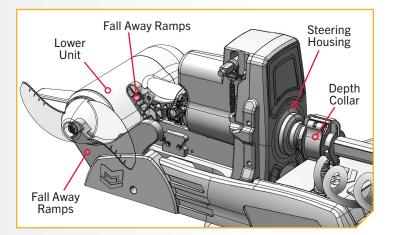
When the Motor is stowed, the Lower Unit should rest on the Fall Away Ramps. It is recommended to secure the motor using the following instructions to avoid damage to the motor and Shaft from vibrations during transport.

# > Adjusting the Lower Unit for a Secure Stow (60" Shafts)

- Before transporting the boat over water or land, stow the motor to ensure the Lower Unit rests properly on the Fall Away Ramps. When stowing the motor, the Lower Unit should be pulled fully onto the Fall Away Ramps, which rotate up to cradle the Lower Unit in the stowed position. The STOWED \_ LED on the Indicator Panel will illuminate orange when the Fall Away Ramps latch upright.
  - b. If the Lower Unit does not sit on the Fall Away Ramps, press the Stow Deploy Lever and adjust the motor to allow the Lower Unit to rest on the Ramps.
  - c. With the Lower Unit in place on the Ramps, and the orange STOWED O LED illuminated on the Indicator Panel, slide the Depth Collar down against the Steering Housing and close the Cam Lever to secure the motor.

# ▲ CAUTION

The Lower Unit should be placed on the Fall Away Ramps every time the motor is transported. If the Lower Unit is improperly placed, damage to the Lower Unit or Shaft will occur. Failure to follow the recommended placement for the Lower Unit will cause damage to the product and void your product warranty.



**NOTICE:** To secure the motor in place and prevent accidental deployment when stowed, slide the Depth Collar down against the top of the Steering Housing and close the Cam Lever to lock the Depth Collar.

# 🗥 WARNING

When the motor is being transported, it is important to place the Depth Collar snug against the Steering Housing and close the Cam Lever to lock the Depth Collar. This provides a secure stow and holds the motor in place during transportation when it is subject to high levels of shock and vibration. Failure to secure the motor may result in injury or damage to the unit.

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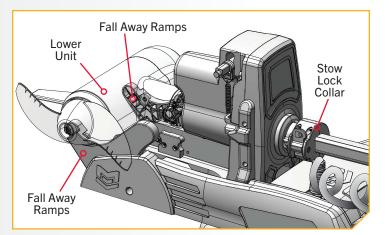
# ADJUSTING THE LOWER UNIT FOR A SECURE STOW

# > Adjusting the Lower Unit for a Secure Stow (72", 87", and 100" Shafts)

- Before transporting the boat over water or land, stow a. the motor to ensure the Lower Unit rests properly on the Fall Away Ramps. When stowing the motor, the Lower Unit should be pulled fully onto the Fall Away Ramps, which rotate up to cradle the Lower Unit in the stowed position. The STOWED O LED on the Indicator Panel will illuminate orange when the Fall Away Ramps latch upright.
  - b. If the Lower Unit does not sit on the Fall Away Ramps, press the Stow Deploy Lever and adjust the motor to allow the Lower Unit to rest on the Ramps.
  - c. With the Lower Unit in place on the Ramps, and the orange STOWED O LED illuminated on the Indicator Panel, secure the motor in place by flipping the Lock Arm on the Stow Lock Collar into the locked position. Ensure that the Lock Arm is fully seated against the Stow Lock Collar.

# ▲ CAUTION

The Lower Unit should be placed on the Fall Away Ramps every time the motor is transported. If the Lower Unit is improperly placed, damage to the Lower Unit or Shaft will occur. Failure to follow the recommended placement for the Lower Unit will cause damage to the product and void your product warranty.



**NOTICE:** To secure the motor in place and prevent accidental deployment when stowed, lock the Stow Lock Collar  $(\square)$ . Be sure to press the Lock Arm so that it is fully seated against the Stow Lock Collar.

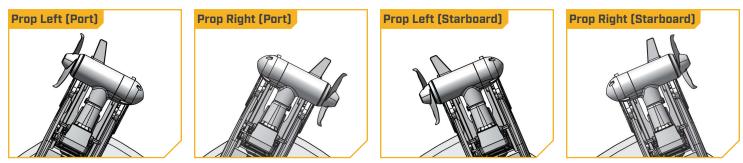
# WARNING

When the motor is being transported, it is important to fully lock A the Stow Lock Collar. This provides a secure stow and holds the motor in place during transportation when it is subject to high levels of shock and vibration. Failure to secure the motor may result in injury or damage to the unit.

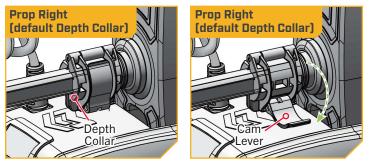
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### **ROTATING THE DEPTH COLLAR**

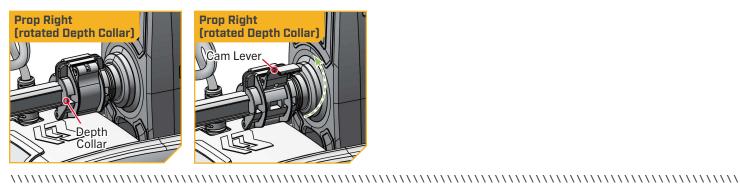
The Depth Collar is installed from the factory so that the Cam Lever opens in an upward motion when the Stow Orientation of the lower unit is Prop Left. The factory default Stow Orientation is Prop Left. Stow Orientation can be changed to Prop Right using the wireless remote or One-Boat Network app.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

#### 



INSTALLATION >

- a. With the Stow Orientation the trolling motor. Ensure resting securely on the Fa the STOWED On th illuminated orange.
- b. Release the Depth Collar I
- c. Locate the single Screw of Depth Collar. This Screws
- d. Using a #3 Phillips Screwd Lever open, remove the Sc While loosening the Screw the Depth Collar to access sits between the Depth Co

э er. ım Collar. /es of Spring

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by the Screw. Take the Spring and place it onto the Screw, then set both aside for reassembly later.

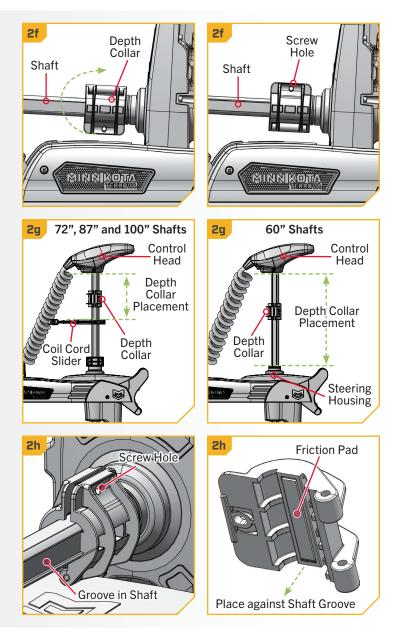
e. Remove the Cam Lever from the Depth Collar and set it aside. There is a Pin contained in the Cam Lever. If the Pin slides out, place it back in before reassembly.

1a Depth Collar am ever Fall Away Ramps Depth Collar Spring Screw 1e Cam Pin Lever d

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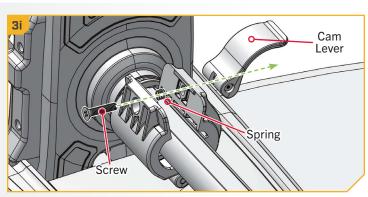
- f. Remove the Depth Collar from the Shaft. Turn the Depth Collar 180° so that the screw hole in the Depth Collar sits above the Shaft.
  - Place the Depth Collar on the Shaft in the new g. position. For motors with a 72", 87" or 100" shaft, the Depth Collar should sit between the Control Head and Coil 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.

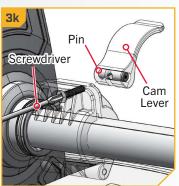


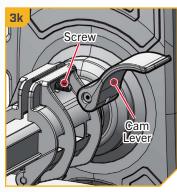
With the Depth Collar in position on the Shaft, take i. the Screw and Spring that were removed earlier in the installation. Hold the Spring inside the Depth Collar against the screw hole. The Spring should sit between the Depth Collar halves. Insert the Screw into the Depth Collar so that it passes through the Spring and out the second half of the Depth Collar.

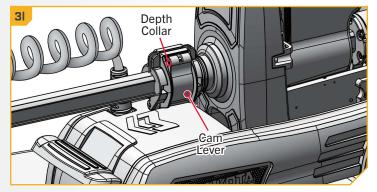
3

- i. 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.
- Ι. 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.









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# ADJUSTING THE STOW LOCK COLLAR TENSION

# ADJUSTING THE STOW LOCK COLLAR TENSION

The tension on the Stow Lock Collar is adjustable and can be tightened or loosened as needed. The Stow Lock Collar may wear and loosen over time. If the Stow Lock Collar is no longer securely holding the Shaft when in the locked Aposition, it may be necessary to tighten the Lock Arm on the Collar.

1c

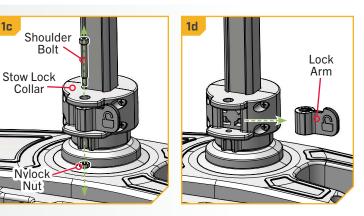
#### TOOLS AND RESOURCES REQUIRED >

• 1/8" Hex Head Screwdriver

• 3/8" Socket Wrench

#### INSTALLATION >

- a. Stow the trolling motor. Ensure that the Lower Unit is resting securely on the Fall Away Ramps.
- b. Unlock the Stow Lock Collar.
- c. Use a 1/8" Hex Head Screwdriver to loosen the Shoulder Bolt and Nylock Nut that secure the Lock Arm to the Stow Lock Collar. Loosen the Bolt in a counterclockwise direction. Remove the Bolt and Nylock Nut and set aside for reassembly later.
- d. With the Bolt removed, pull the Lock Arm out of the Stow Lock Collar. The tension adjustment for the Stow Lock Collar is made using the Lock Arm.

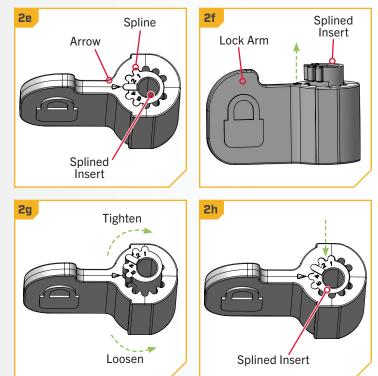


# ADJUSTING THE STOW LOCK COLLAR TENSION

Molded into the plastic on top of the Lock Arm is e. a small arrow. The arrow points to a Splined Insert contained within the Lock Arm. The larger the number in front of the arrow, the higher the tension on the Stow Lock Collar. The Splined Insert within the Lock Arm contains five Splines that are used to adjust the tension. The Stow Lock Collar comes from the factory with the middle Spline aligned to the arrow.

2

- f. Lift the Splined Insert from the center of the Lock Arm so the Splines are raised and free to rotate.
- g. To tighten the Lock Arm on the Stow Lock Collar, rotate the Splined Insert one Spline clockwise. To loosen the grip of the Lock Arm, rotate the Insert one Spline counterclockwise. A smaller number will be looser, a larger number will be tighter.
- h. When the desired Spline tension is in line with the arrow, press the Splined Insert back into the Lock Arm so that the Insert is fully seated.

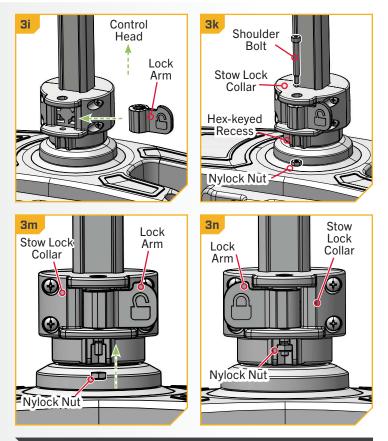


### ADJUSTING THE STOW LOCK COLLAR TENSION

i. To reassemble, hold the Lock Arm so that the Splined Insert faces the Control Head.

3

- j. Align the hole in the Lock Arm with the holes in the base of the Stow Lock Collar. Hold the Lock Arm so it is in the unlocked position.
- k. Insert the Shoulder Bolt into the Stow Lock Collar so it passes through the Lock Arm and out the hexkeyed recess.
- I. Insert the Nylock Nut into the hex-keyed recess. The flat side of the Nylock Nut should face toward the Control Head, while the rounded edge should face down.
- m. With a 1/8" Hex Bit Screwdriver and 3/8" Socket Wrench, hand-tighten the Shoulder Bolt. The Nylock Nut should sit flat when tight and be snug with the plastic of the Stow Lock Collar. Threads should stick out slightly and be visible past the end of the Nylock Nut.
- n. Close the Lock Arm on the Stow Lock Collar so that it is in the locked Position. Test the security of the Stow Lock Collar by pressing the Stow Deploy Lever to release the Fall Away Ramps, then trying to push the Lower Unit out horizontally and away from the Ramps. If the motor holds successfully, the adjustment is complete. If the motor moves when pushed, pull the Lower Unit back onto the Fall Away Ramps. Remove the Lock Arm and turn the Splined Insert clockwise an additional Spline, Reassemble the Stow Lock Collar and repeat the test until the motor can no longer be moved when the Stow Lock Collar is in the locked  $\square$  position.



**NOTICE:** If the Stow Lock Collar is too tight, the Shaft will not move freely even when the Stow Lock Collar is unlocked. If the Stow Lock Collar is too loose, it will not securely hold the Shaft when locked.

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# INSTALLING AN EXTERNAL TRANSDUCER

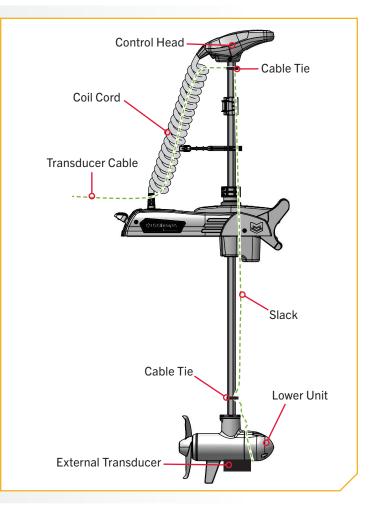
INSTALLING AN EXTERNAL TRANSDUCER

An external transducer is not included with your trolling motor. An external transducer can be installed onto motors that have Advanced GPS Navigation.

- a. Mount the External Transducer according to directions provided with the transducer.
- b. Leave enough slack in the Transducer Cable between the Lower Unit and Control Head to allow the motor to properly stow and deploy.
- c. Use two Cable Ties to secure the Transducer Cable to the Shaft just below the Control Head.
- d. Run the Transducer Cable through the Coil Cord to the fish finder.

# CAUTION

Failure to follow the recommended wire routing for the External Transducer may cause damage to the product and void your product warranty. Test the length and placement of cable to ensure that there is enough slack where needed. Ensure that cables will be free and not become entangled in moving parts. Routing the cables in any way other than directed may cause damage to the cables by being pinched or severed.



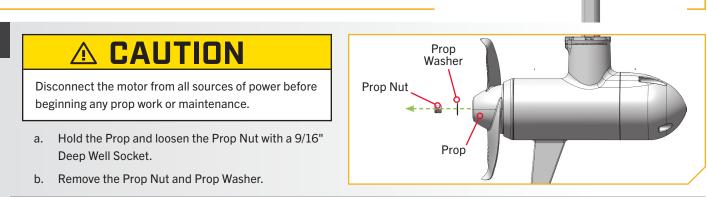
# **SERVICE & MAINTENANCE**

# PROP REPLACEMENT

#### TOOLS AND RESOURCES REQUIRED >

• 9/16" Deep Well Socket

#### INSTALLATION >



**NOTICE:** If the Drive Pin is sheared or broken, hold the Armature Shaft stationary with a Flat-Blade Screwdriver by pressing into the slot on the end of the shaft while loosening the Prop Nut.

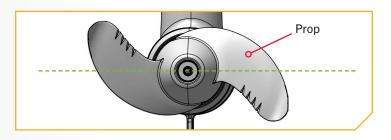
c. Turn the old Prop so it is horizontal and pull it straight off. If the Drive Pin falls out, push it back in.

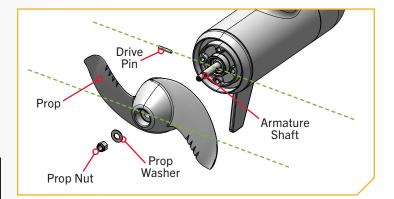
If the Prop does not readily slide off, take care not to bend the Armature Shaft. Pull the Prop evenly off the Armature Shaft.

- d. Align the new Prop 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.
  - e. Reinstall the Prop Washer and Prop Nut onto the end of the Armature Shaft. 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.

# <u>∧ CAUTION</u>

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





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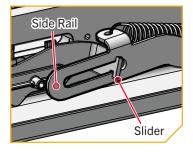
leck with the battery manufacturer for specifics on the battery.

Steering Housing. Water that sits in the steering housing when the motor is

between the Mount and Steering Housing is clean and free of debris. The stowed. If debris such as dirt, gravel, weeds, or fishing line enters this secure stow. Periodically clean this space to ensure a secure stow.

ove der Mount Sideplate

∕th.



### TROUBLESHOOTING

### TROUBLESHOOTING

- 1. Motor fails to run or lacks power:
  - Check the state of the batteries and replace if necessary. Low battery voltage will cause an error.
  - · Check battery connections for proper polarity.
  - Make sure terminals are clean and corrosion-free. Use fine sandpaper or emery cloth to clean terminals.
  - Check battery water level. Add water if needed.
- 2. Motor loses power after a short running time:
  - Check battery charge. If low, restore to full charge.
- 3. Motor is difficult to stow:
  - Lubricate the composite shaft.
  - For 72", 87", and 100" shaft motors, check that the Stow Lock Collar is in the unlocked position. If difficult to stow even when unlocked, loosen the tension of the Stow Lock Collar.
- 4. You experience Prop vibration during normal operation:
  - Replace the Prop.
  - Remove and rotate the Prop 180°. See removal instructions in the Prop Replacement section.
- 5. Experiencing interference with your fish finder:
  - You may, in some applications, experience interference in your fish finder display. We recommend that you use a separate deep cycle marine battery system for your trolling motor. If problems still persist, call our service department at 1-800-227-6433.
- 6. Experiencing flashing red System Status 👷 LED on the Indicator Panel:
  - The trolling motor is communicating that there is an error. Check the Wireless Remote Diagnostic menu for an error code, then refer to the Wireless Remote owner's manual for information on error codes and solutions. Correct the error and cycle power to the trolling motor. If the LED continues to flash red, please contact the Minn Kota service department.

NOTICE: For all other malfunctions, visit an Authorized Service Center. You can search for an Authorized Service Center in your area by visiting minnkota.johnsonoutdoors.com, or by calling our customer service number at 800-227-6433.

#### FOR FURTHER TROUBLESHOOTING AND REPAIR

#### FOR FURTHER TROUBLESHOOTING AND REPAIR

We offer several options to help you troubleshoot and/or repair your product. Please read through the options listed below.



#### **Buy Parts Online**

You can buy parts online directly from our website at minnkota.johnsonoutdoors.com. From screws to sideplates, you can order replacement parts for your Minn Kota products.



#### **Frequently Asked Questions**

Find answers to general inquiries, battery and rigging installation, and networking scenarios. We have FAQs available on our website at minnkota.johnsonoutdoors.com to help answer all of your Minn Kota questions.



#### Call Us (for U.S. and Canada)

Our consumer service representatives are available Monday - Friday between 7:00 a.m. - 4:30 p.m. CST at 800-227-6433. If you are calling to order parts, please have the 11-character serial number from your product, specific part numbers, and credit card information available. This will help expedite your call and allow us to provide you with the best consumer service possible. You can reference the parts list located in your manual to identify the specific part numbers.

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#### Contact Us

You can contact our consumer service department with questions regarding your Minn Kota products. To inquire, visit minnkota.iohnsonoutdoors.com.



#### **Authorized Service Centers**

Minn Kota has over 800 authorized service centers in the United States and Canada where you can purchase parts or get your products repaired. Please visit our website to locate a service center in your area.



Scan to visit Minn Kota service online.

## **COMPLIANCE STATEMENTS**

## ENVIRONMENTAL COMPLIANCE STATEMENT

It is the intention of JOME to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.

## WEEE DIRECTIVE

EU Directive 2002/96/EC "Waste of Electrical and Electronic Equipment Directive (WEEE)" impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.

WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.

This symbol (WEEE wheelie bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Inc. will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirements do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.



## DISPOSAL

Minn Kota motors are not subject to the disposal regulations EAG-VO (electric devices directive) that implements the WEEE directive. Nevertheless never dispose of your Minn Kota motor in a garbage bin but at the proper place of collection of your local town council.

Never dispose of battery in a garbage bin. Comply with the disposal directions of the manufacturer or his representative and dispose of them at the proper place of collection of your local town council.

## **REGULATORY COMPLIANCE INFORMATION**

## > Advanced GPS Navigation

For regulatory information on motors that come factory installed with Advanced GPS Navigation, please refer to the Advanced GPS Navigation Owner's Manual online at minnkota.johnsonoutdoors.com.

#### FCC COMPLIANCE

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Johnson Outdoors Marine Electronics, Inc. could void the user's authority to operate this equipment.

NOTICE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### INDUSTRY CANADA COMPLIANCE

This product meets the applicable Industry Canada technical specifications. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### ENVIRONMENTAL RATINGS

Ambient operating temperature range: -10C to 50C Ambient operating humidity range: 5% to 95% Maximum operating altitude: 10,000 feet



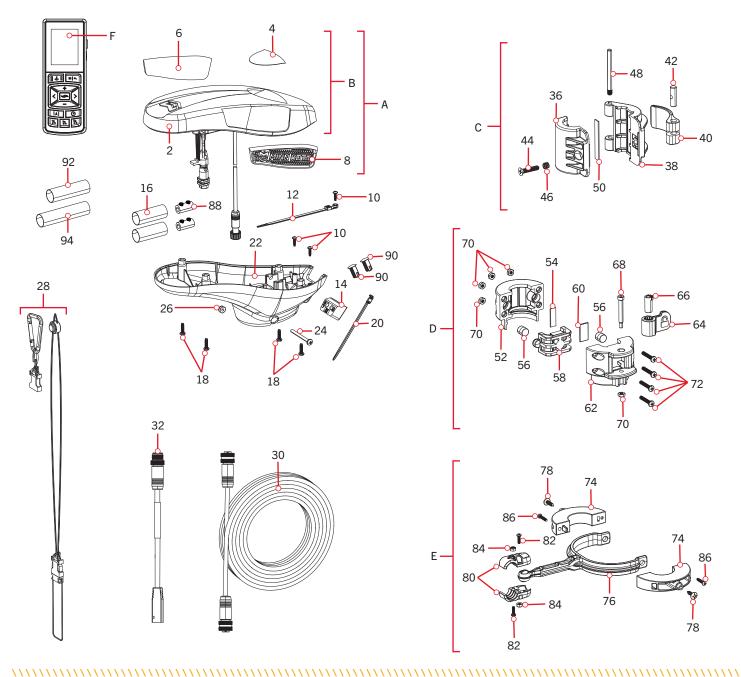
CE/UKCA MASTER USER MANUAL (FOR CE/UKCA CERTIFIED MODELS)

## RIPTIDE TERROVA QUEST - 90/115 THRUST - 24/36 VOLTS - 60"/72"/87"/100" SHAFT

The parts diagram and parts list provide Minn Kota<sup>®</sup> WEEE compliance disassembly instructions. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased. Tools required, but not limited to: flat head screwdriver, Phillips screwdriver, socket set, pliers, wire cutters.

#### RIPTIDE TERROVA QUEST CONTROL HEAD 〉

## > Control Head Parts Diagram



#### **Control Head Parts List**

Assembly	Part #	Description	Notes	Quantity
A	2774193	CONTROLLER KT 4.0 QUEST SW WHT		1
В	2770249	CTRL BOX COVER QUEST SW WHT	*COVER & DECALS*	1
С	2991530	CLAMP COLLAR ASSEMBLY		1
D	×	STOW LOCK COLLAR ASSEMBLY	*72"* *87"* *100"*	1
E	×	COIL CORD SLIDER ASSEMBLY	*72"* *87"* *100"*	1
F	411690-1	TROLLING MOTOR REMOTE		1
Item	Part #	Description	Notes	Quantity
2	2200221	CONTROL BOX COVER, WHITE		1
4	2395561	DECAL,PSH BTN, INST, WHT		1
6	2205541	DECAL, CTRL BOX MK RIGHT SW		1
8	2205546	DECAL, CTRL BOX MK LEFT SW		1
10	2203441	SCREW-#6 X 1/2" THRD FORM,SSTL		3
12	2206302	TIE WRAP, SCREW MOUNT 6.3"		1
14	2206710	PLUG, RUBBER, DI/SI		1
16	2205413	SHRINK TUBE-3/4 X 2.25"		2
18	2372100	SCREW-#8-18 X 5/8 THD* (SS		4
20	2206301	TIE WRAP, LOW PROFILE 8"		1
22	2202521	CONTROL BOX BASE, ULTERRA SW		1
24	2263406	SCREW-#10-24 X 2" S/S PPH		1
26	2333101	NUT-HEX #10-24 UNC-2B NYL SS		1
28	2390802	LANYARD w/CARARBINER IP RMT U2		1
30	490384-4	CABLE, ETHERNET (M12-M12), 30'		1
32	490380-1	CABLE, ETHERNET PIGTAIL-700 HD		1
36	2291530	CLAMP COLLAR, BOLT SIDE		1
38	2291535	CLAMP COLLAR, CAM SIDE		1
40	2297200	LEVER, CAM LOCK		1
42	2322615	PIN,CAM LOCK,DEPTH COLLAR		1
44	2323401	SCREW-1/4-28X1 1/4 PFH		1
46	2062720	SPRING, DEPTH COLLAR, TRAXX		1
48	2292617	PIN, HINGE		1
50	2295110	PAD, FRICTION		1
52	2321535	COLLAR-STOW SPRING SIDE	*72"* *87"* *100"*	1
54	2325120	PAD-FRICTION, SPRING SIDE	*72"* *87"* *100"*	1
56	2322707	SPRING SILICONE RUBBER	*72"* *87"* *100"*	2
58	2323010	RING-PRESSURE,STOW COLLAR	*72"* *87"* *100"*	1
60	2325121	PAD-FRICTION, CAM SIDE	*72"* *87"* *100"*	1
62	2321536	COLLAR-STOW, CAM SIDE	*72"* *87"* *100"*	1
64	2327910	CAM ARM, STOW COLLAR	*72"* *87"* *100"*	1

▲ Not shown on Parts Diagram.

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

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Item	Part #	Description	Notes	Quantity
66	2327330	BUSHING, CAM ARM	*72"* *87"* *100"*	1
68	2322635	BOLT,SHLDER ¼X1½X10-24 SS	*72"* *87"* *100"*	1
70	2323112	NUT-#10-24 NYLOCK JAM SS	*72"* *87"* *100"*	5
72	2323413	SCREW-#10-24X1 1/8 NYLOCK	**72"* *87"* *100"*	4
74	2201530	COLLAR HALF, COIL CORD	*72"* *87"* *100"*	2
76	2201531	COLLAR ARM, COIL CORD	**72"* *87"* *100"*	1
78	2203424	SCREW-#10-12 x.75 PTH SS	*72"* *87"* *100"*	2
80	2200860	CLAMP-BALL,COIL CORD SLDR	*72"* *87"* *100"*	2
82	830-065	SCREW-#6-32 X 1/2" TORX PH SS	*72"* *87"* *100"*	2
84	2323110	NUT-HEX, 6-32 NYLOK SS	*72"* *87"* *100"*	2
86	2203460	SCREW-#8 X 0.75 PPH HI-LO SS	*72"* *87"* *100"*	2
88	2375444	SPLICER, 6-10 AWG, TIN PLTD		2
90	2208633	RIVET-SNAP, PLASTIC PLUG		2
92	2205412	SHRINK TUBE75 ID X 2"		1
94	2205410	SHRINK-TUBE472 ID X 4"		1
	2327139	MANUAL, RT TERROVA 3 BL		1
	2327141	MANUAL-INSTALL GUIDE RT T3 BL		1
	2294950	INSTRUCTIONS,OBN & REMOTE PAIR		1
	2207130	BRUSHLESS QS SETUP GUIDE		1
	2297165	MANUAL-DISCLAIMER, DWNLOAD INFO		1
	2397115	GUIDE-QUICK REFERENCE iP 4.0		1

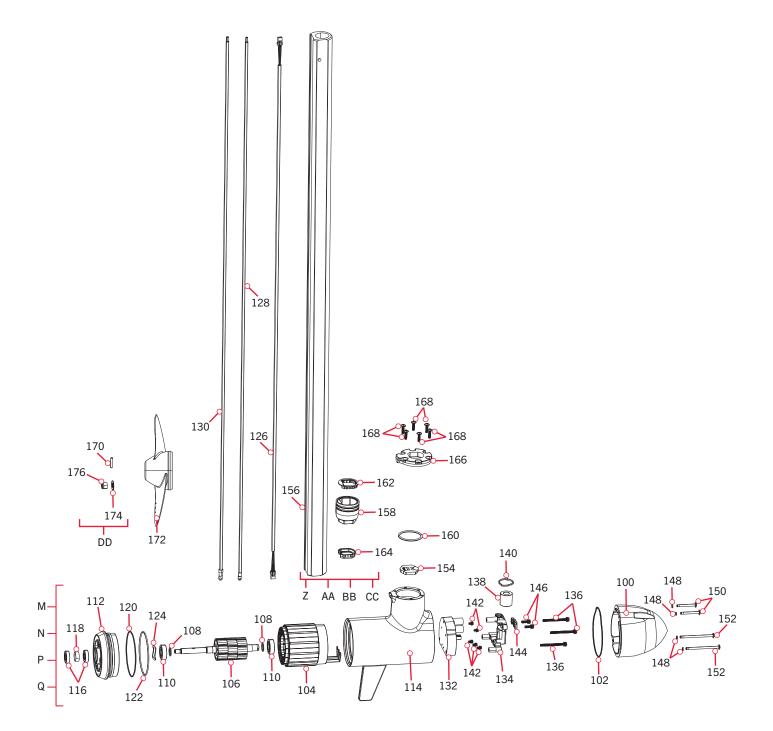
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▲ Not shown on Parts Diagram.

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

RIPTIDE TERROVA QUEST MOTOR >

## > 24/36 Volt 90/115 Thrust Motor Parts Diagram



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#### > 24/36 Volt 90/115lb Thrust Motor Parts List

Assembly	Part #	Description	Notes	Quantity
М	2771050	MTR ASY 24/36V 90/115# NS 60"	*60"*	1
N	2771051	MTR ASY 24/36V 90/115# NS 72"	*72"*	1
Р	2771052	MTR ASY 24/36V 90/115# NS 87"	*87"*	1
Q	2771053	MTR ASY 24/36V 90/115# NS 100"	*100"*	1
Z	2991065	SHAFT ASM 60" U2,T3 *60"*	*SHAFT* *60"*	1
AA	2991051	SHAFT ASM 72"INST,RT/T3 *72"*	*SHAFT* *72"*	1
BB	2991052	SHAFT ASM 87"INST,RT/T3 *87"*	*SHAFT* *87"*	1
CC	2991053	SHAFT ASM 100"INS,RT/T3 *100"*	*SHAFT* *100"*	1
DD	2992604	BAG ASSM, PROP HARDWARE		1
Item	Part #	Description	Notes	Quantity
100	421-168	FRONT ENDBELL, PLAIN, SW WHT PNT		1
102	880-032	SEAL-FRONT, BL MOTORS		1
104	×	STATOR ASSEMBLY		1
106	×	ROTOR ASSEMBLY		1
108	×	WASHER BEARING		2
110	×	BALL BEARING		2
112	×	REAR ENDBELL, SW WHT PAINT		1
114	*	CNTR HSG,MCH AFTR SW W.PNT		1
116	×	SEAL		2
118	×	PAPER TUBE - SEAL BORE		1
120	×	0-RING		1
122	×	0-RING		1
124	×	WASHER-WAVE		1
	195-032	CABLE-COM 22GA TWST PAIR 76.25	*60"*	1
106	195-033	CABLE-COM 22GA TWST PAIR 87.63	*72"*	1
126	195-034	CABLE-COM 22G TWST PAIR 102.63	*87"*	1
	195-035	CABLE-COM 22G TWST PAIR 111.38	*100"*	1
	640-472	LEADWIRE RED 8 AWG 78.75"	*60"*	1
128	640-483	LEADWIRE RED 6 AWG 90.13"	*72"*	1
120	640-484	LEADWIRE RED 6 AWG 105.13"	*87"*	1
	640-485	LEADWIRE RED 6 AWG 118.13"	*100"*	1
	640-422	LEADWIRE BLK 8 AWG 78.75"	*60"*	1
120	640-433	LEADWIRE BLK 6 AWG 90.13"	*72"*	1
130	640-434	LEADWIRE BLK 6 AWG 105.13"	*87"*	1
	640-435	LEADWIRE BLK 6 AWG 118.13"	*100"*	1
132	2994130	INVERTER ASM, 24/36V, BL		1
134	979-029	STRAIN RELIEF, BTM MACH		1

▲ Not shown on Parts Diagram.

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

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Item	Part #	Description	Notes	Quantity
136	830-118	SCREW-DBL SEM M5X.8MMX60MM		3
138	2307318	FERRITE BEAD, BL		1
140	9953310	TIE WRAP-8.5"		1
142	830-120	SCREW-M4X .7X8 PPH ZPS		5
144	979-022	STRAIN RELIEF, TOP CAST		1
146	830-121	SCREW-M5 X .8X18 PPH ZPS		2
148	701-010	O-RING, SCREW		4
150	830-115	SCREW-FRONT, TOP, COATED, BL MTR		2
152	830-116	SCREW-FRONT, BTM COATED, BL MTR		2
154	880-042	SEAL-WIRE, BL MTR, PLAIN END		1
	×	TUBE-1CM, BLK 60", 1.5 X .875	*60"*	1
450	×	TUBE-5CM, BLK 72", 1.5 X .75	*72"*	1
156	×	TUBE-5CM, BLK 87", 1.5 X .75	*87"*	1
	×	TUBE-5CM, BLK 100", 1.5 X .75	*100"*	1
158	×	PLUG, COMP SHAFT, PAINTED		1
160	2294630	O-RING, 226, 70 SHORE A		1
162	*	SEAL-TOP SHAFT, BRUSHLESS, CLR		1
164	*	SEAL-LWR SHAFT, BRUSHLESS, CLR		1
166	2296432	PLATE, CLAMP, PAINTED		1
168	830-013	SCREW-M5 X .8 FSHCS SS CTD		6
170	2262659	PIN-DRIVE 1" X 3/16" SS 17-4		1
172	2321170	PROP, POWER REAMED		1
174	2091701	WASHER-PROP (LARGE) MAX101		1
176	2093101	NUT-PROP,NYLOC,LG,MX101 3/8 SS		1

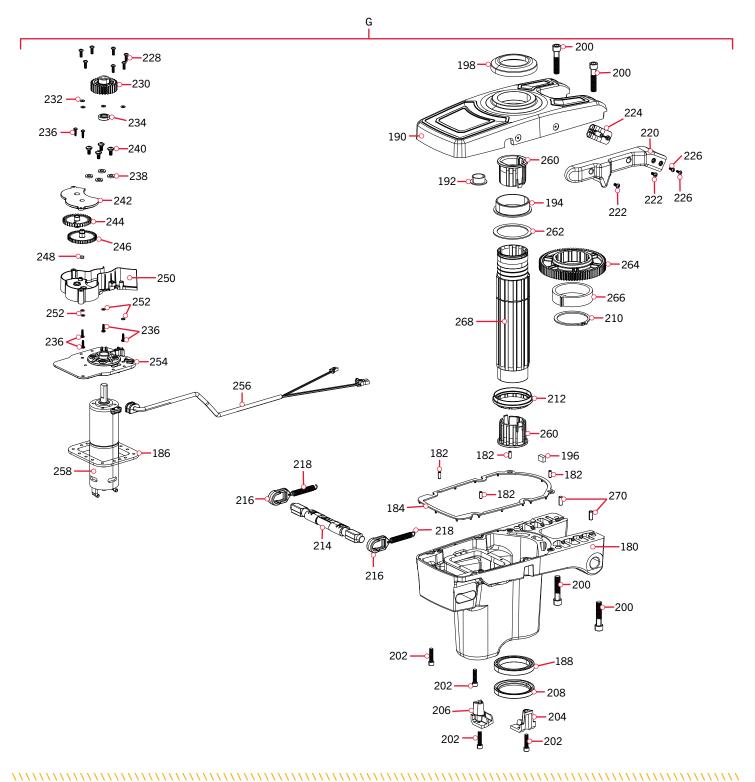
▲ Not shown on Parts Diagram. \* This part is included in an assembly and cannot be ordered individually.

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RIPTIDE TERROVA QUEST STEERING HOUSING >

## > Steering Housing Parts Diagram



82 | minnkota.johnsonoutdoors.com

## > Steering Housing Parts List

Assembly	Part #	Description	Quantity
G	2997067	STEERING HOUSING ASM, SW	1
Item	Part #	Description	Quantity
180	×	HSG-BTM, STEERING,SW, WHT	1
182	×	PIN-DOWEL, 3/16 X 1/2, SS	4
184	*	SEAL, STEERING HSG SPLIT	1
186	×	GASKET,MOTOR HOUSING, STR	1
188	×	BRG, 55 X 72 X 9MM, SSTL	1
	9950433	TIE WRAP-4" BLACK(#21041)	1
190	×	HOUSING, STEERING TOP, SW	1
192	×	BUSHING, JFM-2023-11	1
194	×	BUSHING,55MM, JFM-5560-50	1
196	×	VENT FILTER, STEERING HOUSING	1
198	×	SEAL, UMBRELLA	1
200	×	SCREW-3/8-16 X 1.75 SHCS SS NYSHD	4
202	×	SCREW-1/4-20X1,SHC,SS,NYSHIELD	4
204	×	MOUNT, LATCH PIN SPRING, RIGHT	1
206	×	MOUNT, LATCH PIN SPRING, LEFT	1
208	×	SEAL, OUTPUT	1
210	×	RETAINING RING, 2 3/8"	1
212	×	GREASE CAP BEARING	1
214	×	PIN-LATCH, OVERMOLDED	1
216	×	CLEVIS, LATCH PIN	2
218	×	SPRING, LATCH PIN	2
220	×	SHROUD,STR WIRE,SW w/MGNT	1
222	×	SCREW-#8-32 X 3/8 MACHINE	2
224	×	PLATE-BACKUP,STR WIRE	1
226	×	SCREW-#6 X .375 PLASTITE SS	2
228	×	SCREW-#8-32 X 1/2 (SS)	7
230	×	GEAR, 30 TOOTH , PINION STR	1
232	×	WASHER-FLAT #6 S/S	4
234	×	SEAL,ID 12MM, OD 20MM, T 5MM	1
236	×	SCREW-#6 X 1/2" THRD FORM,SSTL	6
238	×	0-RING, 3/16 ID X 3/8 0D	4
240	×	SCREW-M5X.8X12,FLANGED BTN HD	4
242	×	COVER, STEER SENSOR GEARS	1
244	×	GEAR-TRIM, 14T	1

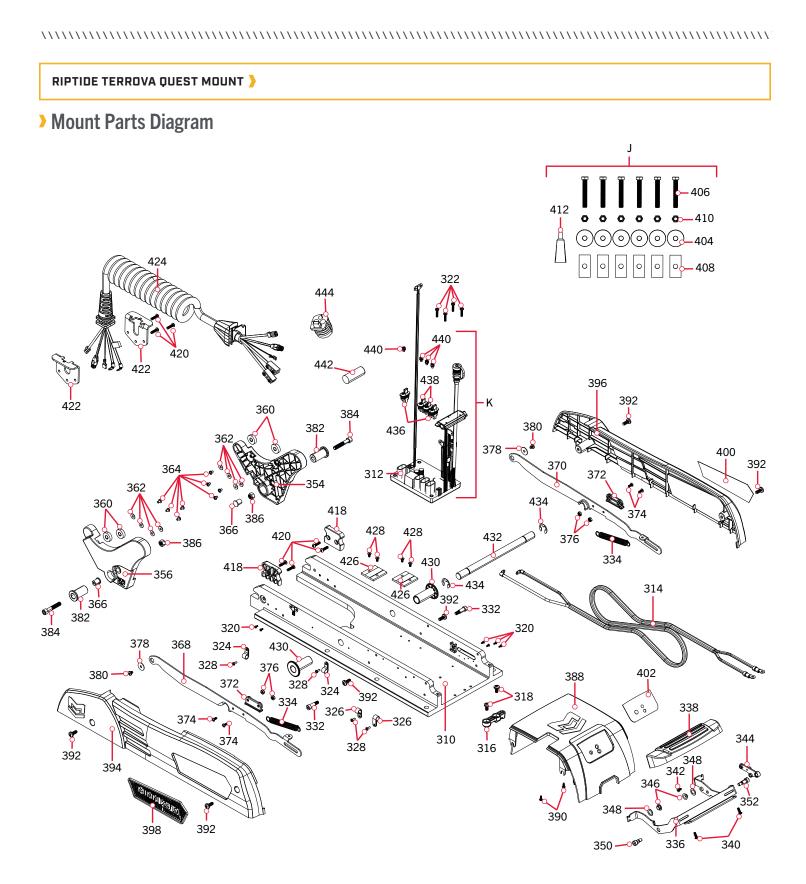
▲ Not shown on Parts Diagram.

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

Item	Part #	Description	Quantity
246	×	GEAR-STEER SENSOR, 51T	1
248	*	MAGNET, 1/4 X 1/8	1
250	×	SENSOR,STR,ROTATIONAL,I/T	1
252	×	SEALING WASHER, RUBBER	4
254	×	PLATE, MOTOR MNT, STEERING	1
256	×	STEERING CORD ASM	1
258	×	MOTOR, 24 VDC, 1:130 GEARBOX	1
260	×	BUSHING, OUTPUT TUBE, LWR	2
262	×	WASHER-THRUST, OUTPUT TUBE	1
264	×	GEAR,78 TOOTH,OUTPUT TUBE	1
266	×	HUB, STEERING STOP, ANODIZED	1
268	×	OUTPUT TUBE, ANDIZED	1
270	×	PIN-DOWEL, 1/4" X 5/8" SS	2
	×	O-RING, SAE-010, BUNA-N	1
	×	SCREW-1/4-20X.313 PLASTIC	1

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Not shown on Parts Diagram.
 This part is included in an assembly and cannot be ordered individually.



#### > Mount Parts List

Assembly	Part #	Description	Notes	Quantity
J	2994948	BAG ASM, INSTINCT, T3 BL HDW		1
К	×	RT TERROVA QUEST CONTROL BOARD		1
	2992372	STABILIZER BWMT ES TM w/CTN	*72"* *87"* *100"*	1
Item	Part #	Description	Notes	Quantity
310	2321961	BASE PLATE, MACHINED, SW		1
312	2324065	PCBA, TERROVA 3 BRUSHLESS		1
314	2200625	LEADWIRE ASM, 8AWG, ULT 2		1
316	2202919	STRAIN RELIEF, POWER		1
318	2323405	SCREW-1/4-20 X 1/2" MCH SS		2
320	2203440	SCREW-#4-40 X 1/4 PPH SS		6
322	2373487	SCREW-#8-32 X 3/4" PPH MACH SS		4
324	2040721	CLAMP-CABLE 3/8"		2
326	2052510	CABLE CLAMP, 3/16", NYLON		3
328	2073414	SCREW-#6-32 X .375 PPH SS		5
330 🔺	2323442	SCREW-#10-24X 3/8,BHCS,SS		1
332	2323504	BOLT-SHDR,5/16X1/2X1/4-20		2
334	2322717	SPRING, RAIL EXTENSION		2
336	2320411	RELEASE LEVER, SW		1
338	2320231	COVER,RELEASE LEVER,SW		1
340	2383446	SCREW-#8-16 X .50" PLASTITE SS		2
342	2323421	SCREW-#8-18 X 1/2" PFH SS TY B		1
344	2998615	CARRIER-MGNT, LEVER w/MGNT		1
346	2327335	BUSHING GFI-0506-03		2
348	2321709	WASHER, 3/8 FLAT, NYLON		2
350	2323503	BOLT-SHDR,5/16X1/4X1/4-20		1
352	2323504	BOLT-SHDR,5/16X1/2X1/4-20		1
354	2323955	RAMP, DSC/NS, RIGHT		1
356	2323956	RAMP, DSC/NS, LEFT		1
	×	BUSHING, RAMP PIVOT		2
360	2325115	PAD, RUBBER REST, BLACK		4
362	2321706	WASHER-FLAT #8 .50 OD/.188 SS		8
364	2323412	SCREW-#8-18 X .25 PPH SS TY B		8
366	2324706	INSERT-MOTOR RAMP, METAL, SS		2
368	2324220	SIDE RAIL,FORMED,LEFT,SS		1
370	2324221	SIDE RAIL,FORMED,RIGHT,SS		1
372	2323620	WEAR BAR, SIDE RAIL, PLSTC		2
374	2332100	SCREW-#8-32 X 3/8 MACHINE		4
376	2323111	NUT-#8-32 NYLOCK JAM SS		4

▲ Not shown on Parts Diagram.

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

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Item	Part #	Description	Notes	Quantity
378	2321700	WASHER #10 SS		2
380	2323422	SCREW-#10-24 X .25" PPH SS MCH		2
382	2323300	PIVOT, RAMP		2
384	2323444	SCREW-5/16-18 X 1.75 SHCS,SS		2
386	2223100	NUT-5/16-18 NYLOCK S/S		2
388	2326556	HOUSING-CONTROL, WHITE		1
390	2372103	SCREW-#6 X .375 PLASTITE SS		2
392	2332104	SCREW-1/4-20 X 5/8 S/S		6
394	2323941	SIDEPLATE, LEFT, SW		1
396	2323946	SIDEPLATE, RIGHT, SW		1
398	2325533	DECAL, SIDEPLATE, LEFT SW		1
400	2325532	DECAL, SIDEPLATE, RIGHT SW		1
402	2325551	DECAL-PWR SWTCH, SW, WHT, T3		1
404	2321710	WASHER, RUBBER MOUNT		6
406	2323440	SCREW-3/8-16 X 2 1/2 HHCS SS		6
408	2371796	BACKUP BAR 3/16 X 1 X 2		6
410	2383122	NUT 3/8-16 NYLON INST LOCKNUT		6
412	2378608	ANTI SEIZE TUBE, 4CC, TALON		1
418	2323211	STOP-DEAD, DEPLOY		2
420	2383469	SCREW-#10-24 X 3/4,SS,BHCS		7
422	2320825	BRACKET, COIL CORD		2
	2322905	MOUNT, CABLE TIE		1
	2991245	COIL CORD ASM 45" - 60"	*60"*	1
404	2991246	COIL CORD ASM 72"	*72"*	1
424	2991247	COIL CORD ASM 87"	*87"*	1
	2991248	COIL CORD ASM 100"	*100"*	1
426	2323210	STEERING STOP, UHMWPE		2
428	2323443	SCREW-#8-32X3/8, SS, BHCS		4
430	2207311	BUSHING, STEER HSG PIVOT		2
432	2322605	PIN, PIVOT		1
434	2373013	E-RING, EXTERNAL SS .625, HNDL		2
436	2294610	SEAL, PCBA TRMNL GRAY .215		2
438	2294611	SEAL, PCBA TERMNL BLK .270		2
440	830-123	SCREW-M4X .7X8MM HEX DBL		4
442	2205412	SHRINK TUBE75 ID X 2"		1
444	2206721	PLUG-WIRE, ROUND	*87"* *100"*	1
	9950433	TIE WRAP-4" BLACK(#21041)		1
	2325560	DECAL,STOW,TERROVA 3 BL		1
	2006819	LABEL-CARTON "CAUTION HEAVY"		1

▲ Not shown on Parts Diagram.

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

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Lets you tie lines and work from the transom any time of day or night. Includes both white and blue LED lights with three brightness settings.

**BLUETOOTH**<sup>®</sup>

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## UP TO 15' DEEP

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