



RIPTIDE TERROVA

BOW-MOUNT TROLLING MOTOR

Owner's Manual

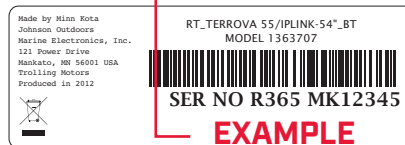
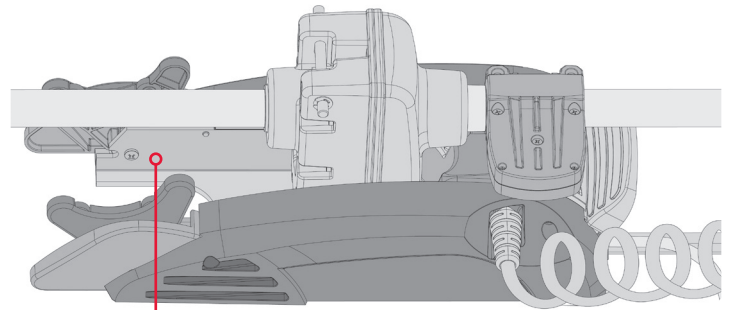
INTRODUCTION

THANK YOU

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

SERIAL NUMBER

Your Minn Kota 11-character serial number is very important. It helps to determine the specific model and year of manufacture. When contacting Consumer Service or registering your product, you will need to know your product's serial number. We recommend that you write the serial number down so that you have it available for future reference.



NOTICE: The serial number on your Riptide Terrova is located inside the mount below the motor rests.

SAFETY CONSIDERATIONS

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

WARNING

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

WARNING

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

WARNING

Take care that neither you nor other persons approach the turning propeller too closely, neither with body parts nor with objects. The motor is powerful and may endanger or injure you or others. While the motor is running watch out for persons swimming and for floating objects. Persons who lack the 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.

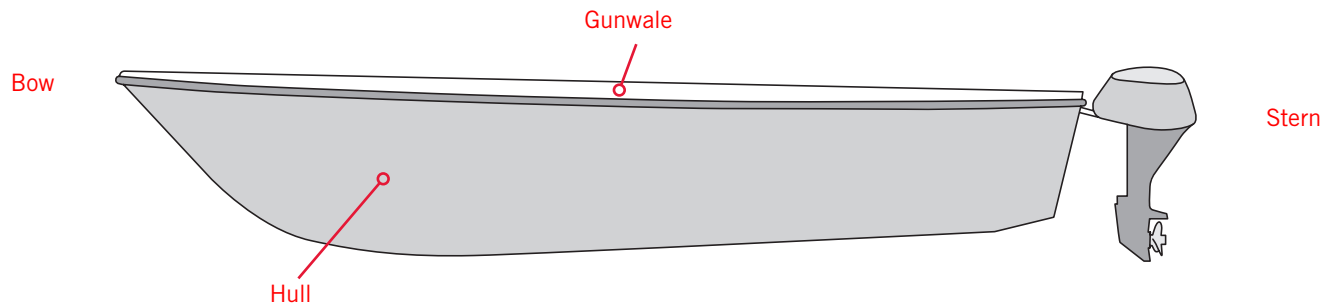
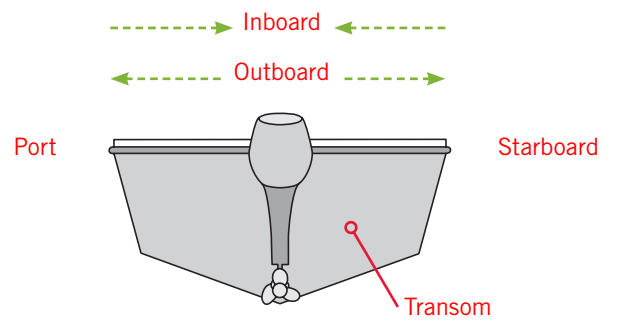
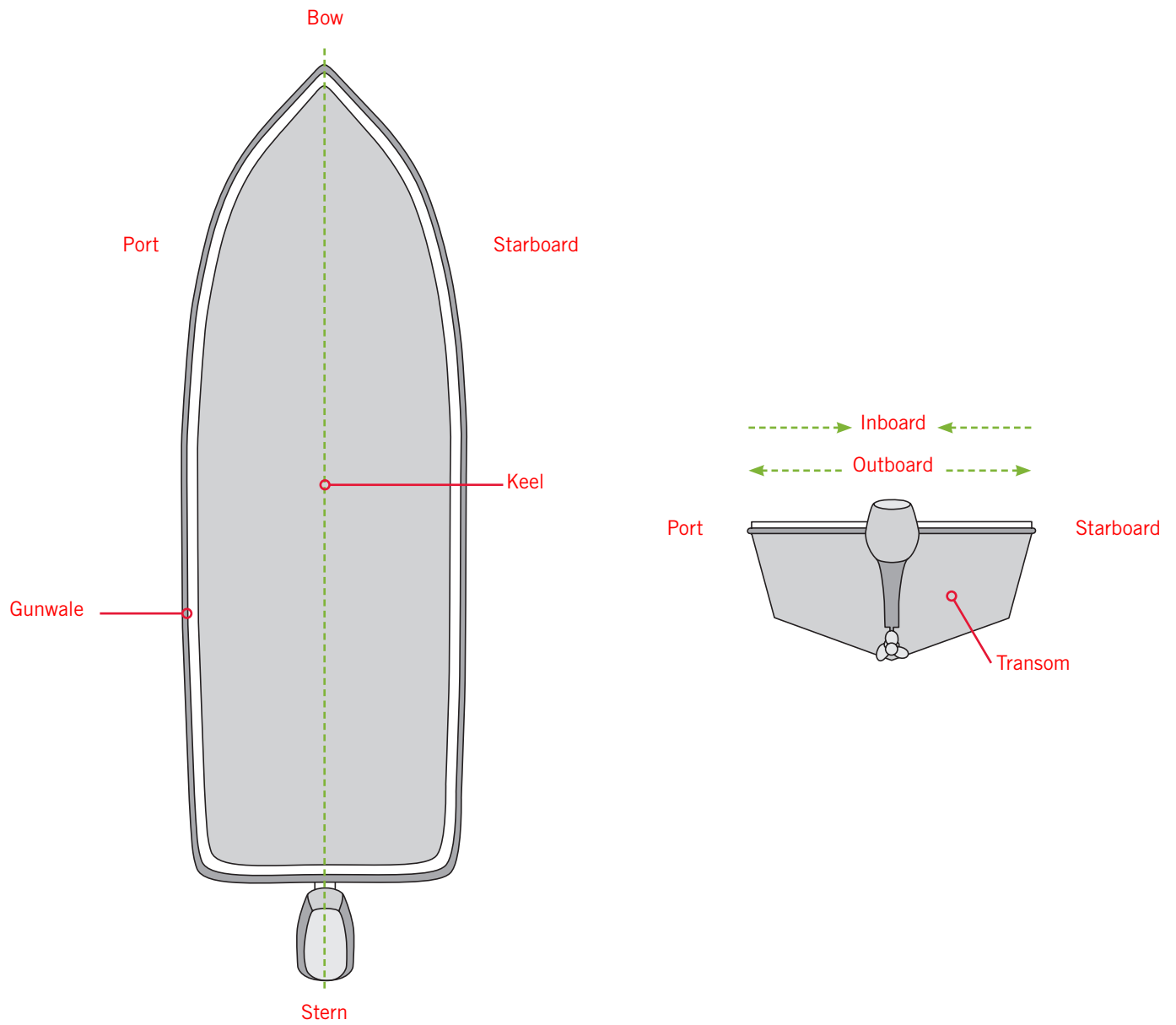
WARNING

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.

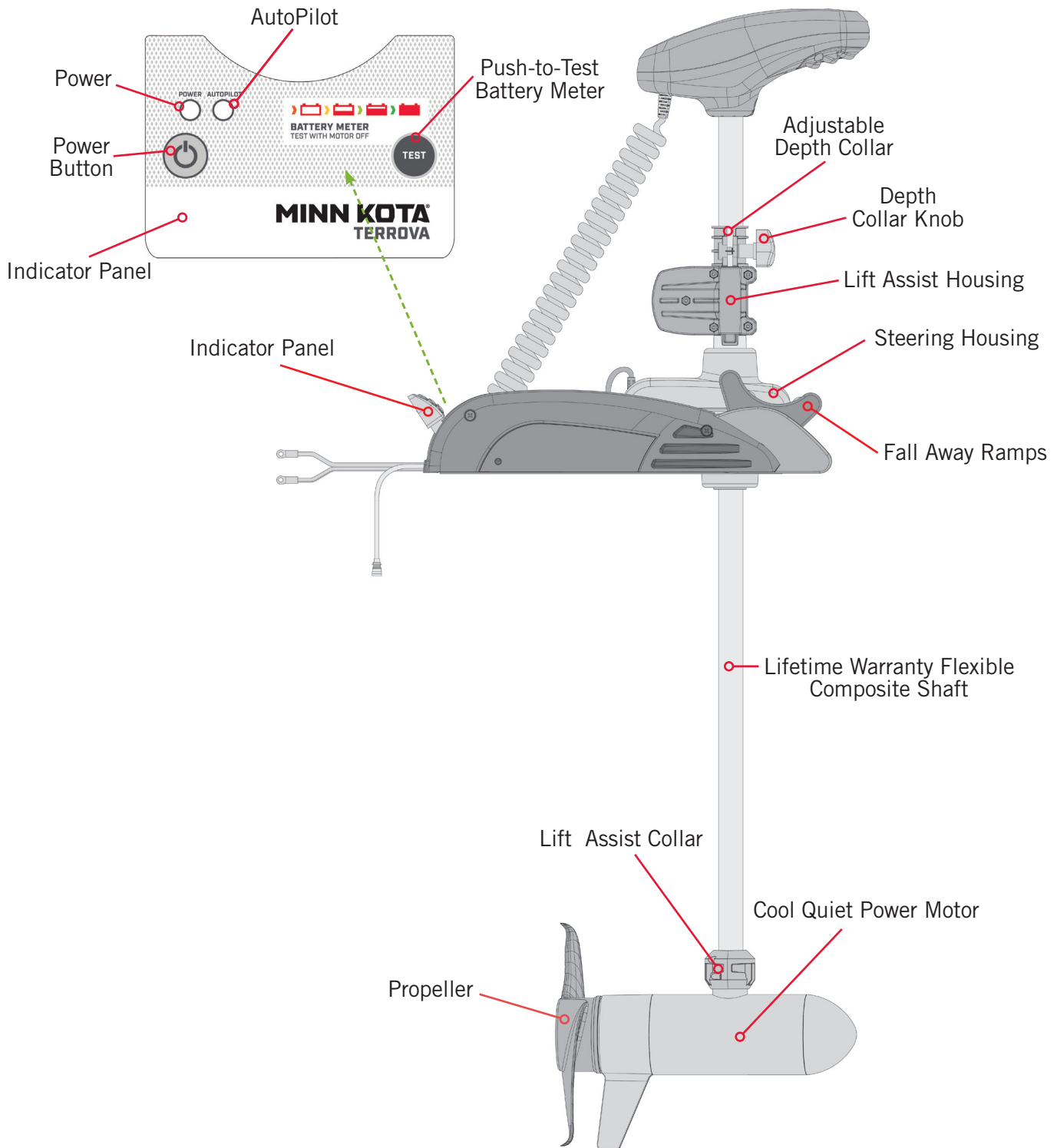
WARNING

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.

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

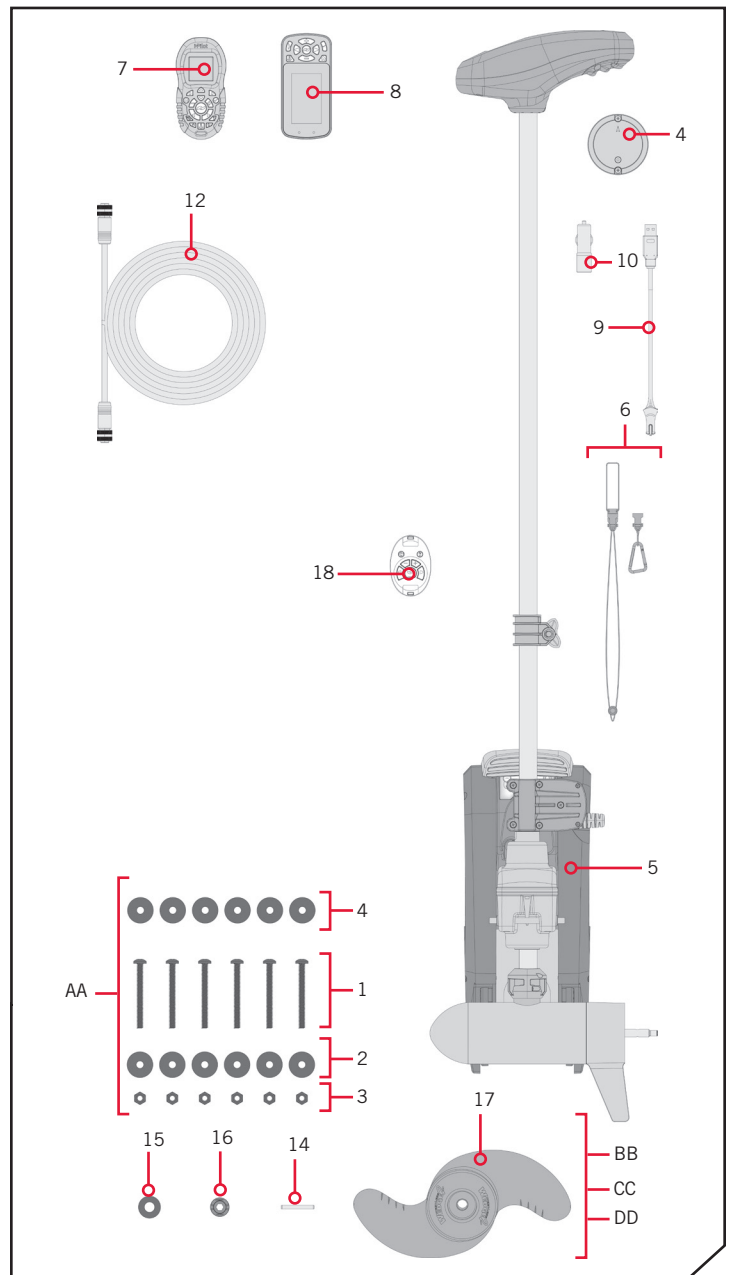
INSTALLING THE RIPTIDE TERROVA

Your new RiptideTerraova comes with everything you'll need to directly install it to the boat. This motor can be directly mounted to the boat or coupled with a Minn Kota quick release bracket for ease of mounting and removal. For installation with a quick release bracket, refer to the installation instructions provided with the bracket. To install the motor directly to the boat, please follow the instructions provided in this manual. Please review the parts list, mounting considerations and tools needed for installation prior to getting started.

INSTALLATION PARTS LIST

Item / Assembly	Part #	Description	Qty.
AA	2994864	BAG ASSEMBLY - (BOLT, NUT, WASHERS)	1
1	2263462	BOLT-MOUNTING-1/4X2 W/STG	6
2	2261713	WASHER-1/4	6
3	2263103	NUT NYLOK 1/4-20 MTG	6
4	2301720	WASHER-MOUNTING RUBBER	6
5	✘	MOTOR ASSEMBLY	1
6	2390800 ◆◆	LANYARD, REMOTE W/ CARABEENER	1
7	2994075 ◆	REMOTE ASY, IPILOT	1
▲	2397106◆	MANUAL, QUICK REF., IPILOT 1.6	1
8	2994076 ●	REMOTE ASSEMBLY LINK TOUCHSCREEN	1
9	2373241 ●	CABLE, USB REMOTE CHARGER LINK	1
10	2375901 ●	ADAPTER, USB DC POWER LINK	1
11	2996400 ◆◆	HEADING SENSOR ASSEMBLY	1
12	490389-1 ●	CABLE, ETH (M12-M-M12-F, 30'	1
14	2092600	PIN-DRIVE 1.06" LG (SS)	1
	2262658	PIN-DRIVE 1" X 3/16" S/S	1
15	2151726	WASHER-5/16 STD (S/S)	1
	2091701	WASHER-PROP (LARGE)	1
16	2198400	ANODES, ZINC, 3.25/3.62" LWR UNT	1
17	2091160	PROP-WW2 (3-5/8") REAMED	1
	2341160	PROP-WW2 (4.5) W/ADP.RING	1
	2331160	PROP-WW2 (4") W/ADP.RING	1
BB	1378131	PROP IND 2091160 WDLS WDG II	1
CC	1378160	PROP KIT 2341160 112# WW2	1
DD	1378132	PROP IND 2331160 WDLS WDG II	1
18	2994095 ●	TRANSMITTER ASY,TRRV CPLT	1
▲	2327132	INSTALLATION INSTRUCTIONS TERROVA	1
▲	2397107 ●	MANUAL, QUICK REF., IPILOT LINK 3.0	1

- Only available with models factory installed with CoPilot.
- ▲ Not shown on Parts Diagram.
- ✘ This part is included in an assembly and cannot be ordered individually.
- ◆ Only available with models factory installed with i-Pilot.
- Only available with models factory installed with i-Pilot Link.



INSTALLING THE RIPTIDE TERROVA

MOUNTING CONSIDERATIONS

It is recommended that the motor be mounted as close to the centerline of the boat as possible. Make sure the area under the mounting location is clear to drill holes and install nuts and washers. Make sure the motor rest is positioned far enough beyond the edge of the boat. The motor must not encounter any obstructions as it is lowered into the water or raised into the boat when stowed and deployed. Consider a quick release or adapter bracket with the installation of your motor.

TOOLS AND RESOURCES REQUIRED

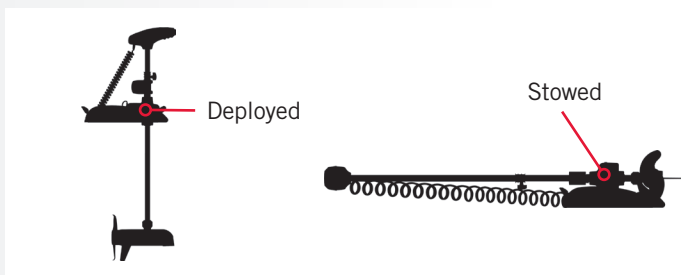
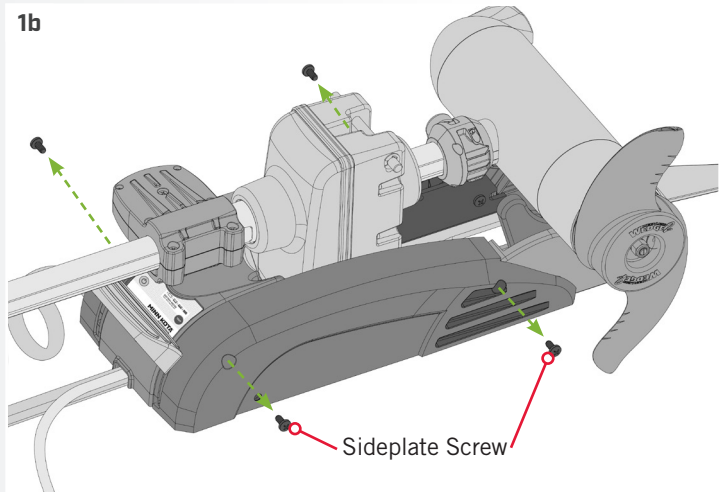
- #3 Phillips Screw Driver
- Drill
- 9/32" Drill Bit
- 7/16" Box End Wrench
- A second person to help with the installation

INSTALLATION

INSTALLING THE RIPTIDE TERROVA

1. a. Place the mount on an elevated, level surface such as a workbench or the tailgate of a pickup. The motor, as removed from the box, should be in the stowed position.
b. Remove the four sideplate screws using a #3 Phillips screwdriver. Two of these screws will be located on each side of the mount.

NOTICE: This motor weighs approximately 65lbs. We recommend having a second person help with the installation.

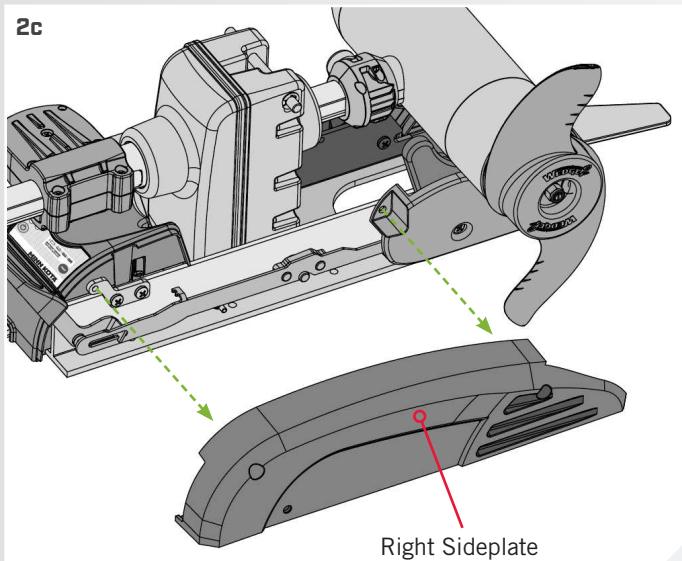


INSTALLING THE RIPTIDE TERROVA

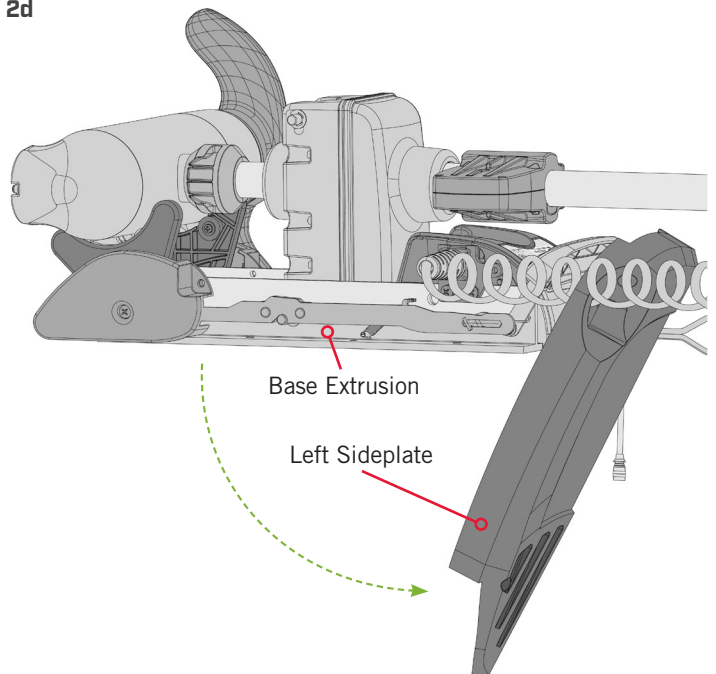
2

- c. Remove the Right Sideplate.
- d. Swing the Left Sideplate out and away from the Base Extrusion.

2c



2d

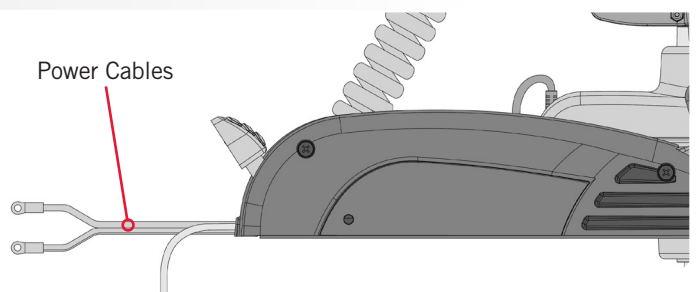


3

- e. Make sure that the Power Cables from the battery are disconnected, or that the breaker, if equipped, is "off".

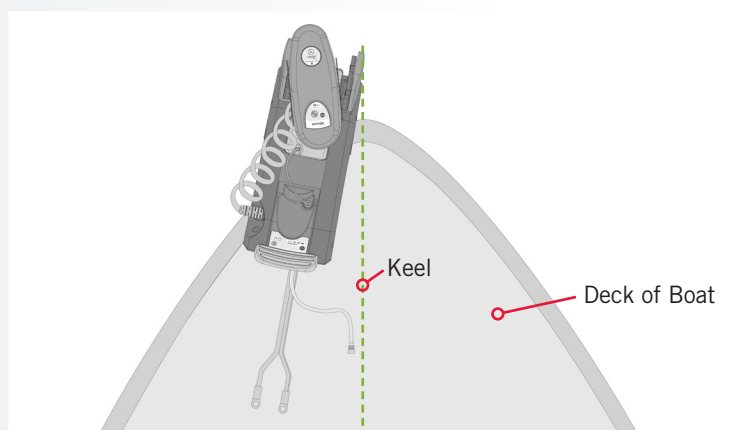
WARNING

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



4

- f. Place the mount as close to the centerline or keel of the boat as possible. The motor can be installed on either the Port or Starboard side of the boat based on personal preference. Check placement with the motor in the stowed and deployed positions. Review the mounting considerations at the beginning of the installation.



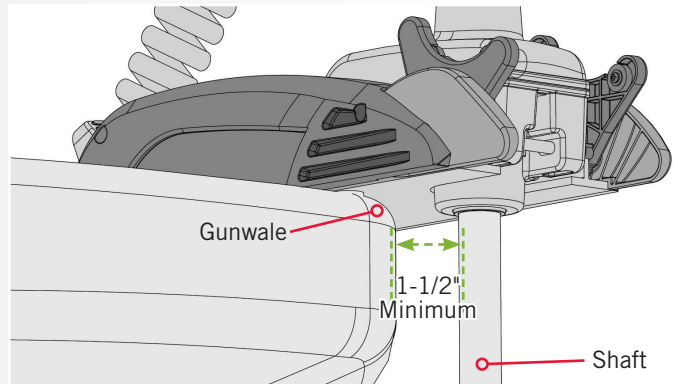
INSTALLING THE RIPTIDE TERROVA

5

ITEM(S) NEEDED

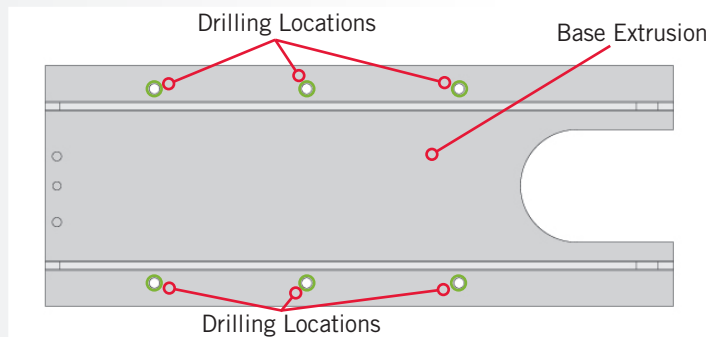
● #4 x 6

- g. When the motor is in the deployed position, make sure that the Shaft is 1-1/2" out past the Gunwale of the boat. The lower unit, when stowed and deployed must not encounter any obstructions.
- h. Check to be sure that the mount is level. Use the Rubber Washers (Item #4) provided to create a level surface if necessary.



6

- i. It is recommended to mark at least 4 of the 6 holes in the Base Extrusion and to have a minimum of two bolts on each side that are located the farthest apart. Ideal installation would allow for 6 bolts to be used, with a minimum of 4.
- j. Drill through the deck of the boat using a 9/32" Drill Bit on the marked locations.



INSTALLING THE RIPTIDE TERROVA

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ITEM(S) NEEDED

#1 x 6

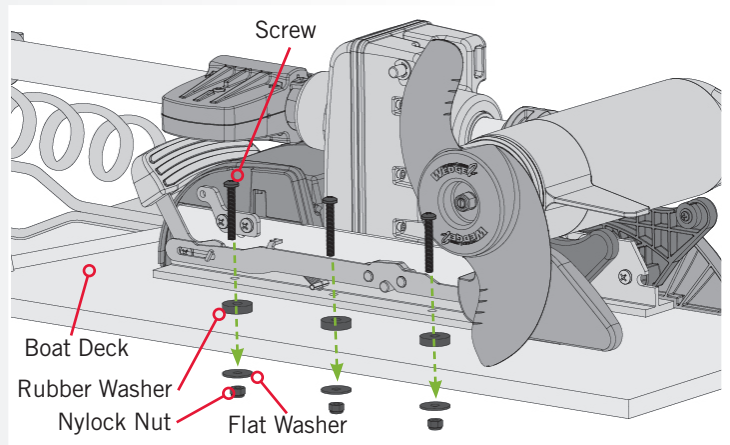
● #2 x 6

○ #3 x 6

● #4 x 6

- k. Put a 1/4-20 x 3 1/2" (Item #1) screw in each of the drilled locations. The screw should pass through the Base Extrusion and the boat deck. If the rubber washers (Item #4) are used, they should sit between the Base Extrusion and boat deck. Make sure to secure the motor with screws on each side of the Base Extrusion.
- l. Place a Flat Washer (Item #2) and then a Nylock Nut (Item #3) at the end of each screw as shown and secure. Make sure all hardware is secure.

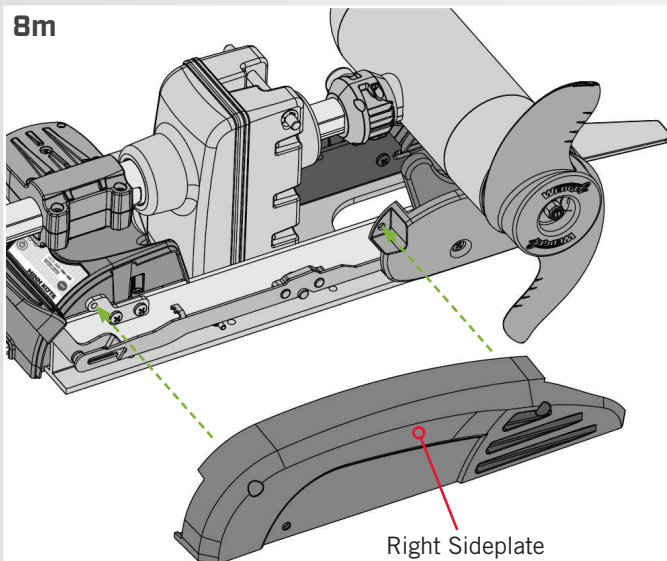
NOTICE: To prevent seizing of the stainless steel hardware, do not use high speed installation tools. Wetting the screws or applying an anti-seize may help prevent seizing.



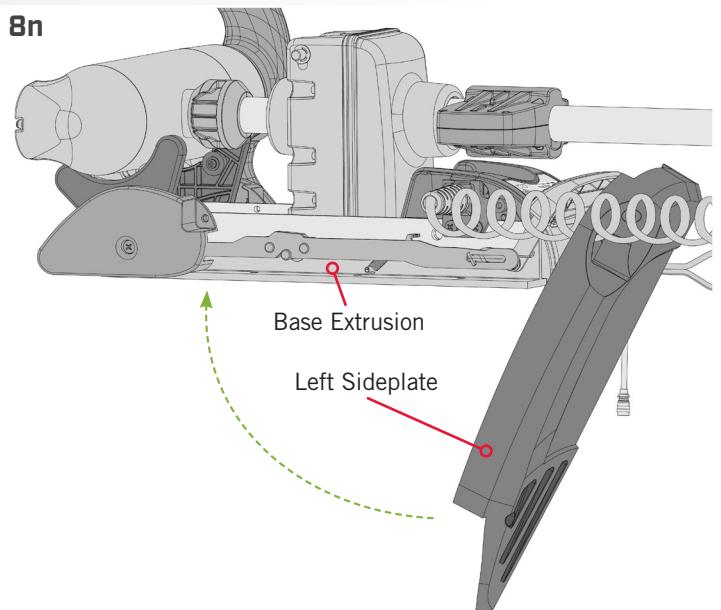
8

- m. Replace the Right Sideplate.
- n. Swing the Left Sideplate back into its correct position on the Base Extrusion.

8m



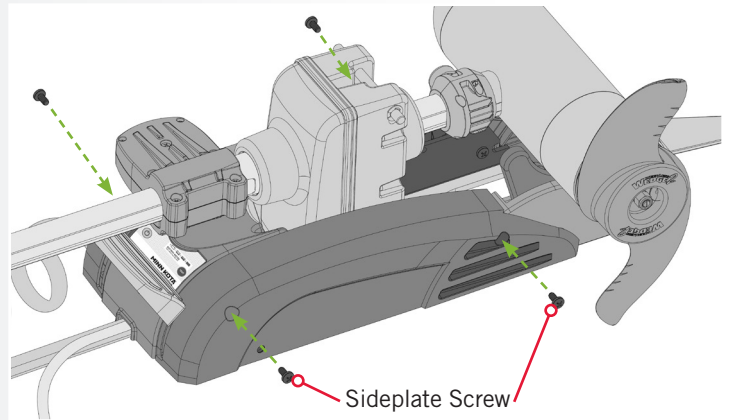
8n



ROUTING THE i-PILOT LINK CABLE

9

- o. Replace the four sideplate screws using a #3 or #2 Phillips screwdriver. Two of these screws will be located on each side of the mount.



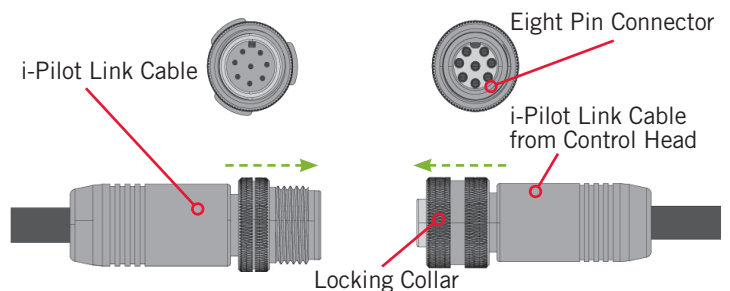
ROUTING THE i-PILOT LINK CABLE

Your trolling motor may be pre-installed with either i-Pilot or i-Pilot Link.

The i-Pilot Link features require a cable to be connected to an output device. This connection is present on the trolling motor below the Control Head, if installed. The i-Pilot system does not need an external wired connection. If only one connection is present, your motor is equipped with the i-Pilot Link system. If no connections are present, your motor may or may not be installed with i-Pilot. Please follow the Minn Kota recommendations on routing the cables to optimize mobility and maximize functionality. The routing will be the same regardless of the number of cables present. Use the following instructions to properly route cables.

Cables are shielded to minimize interference. To protect this shielding the cables should not be pulled tight against sharp angles or hard objects. If using cable ties, do not over-tighten. Any excess cable should be bundled in a loose loop of no less than 4" in diameter.

To minimize trolling motor interference, ensure that the fish finder and trolling motor are powered by separate batteries. Please refer to the Battery & Wiring Installation and Motor Wiring Diagram sections of this manual for correct rigging instructions.



ROUTING THE i-PILOT LINK CABLE

1

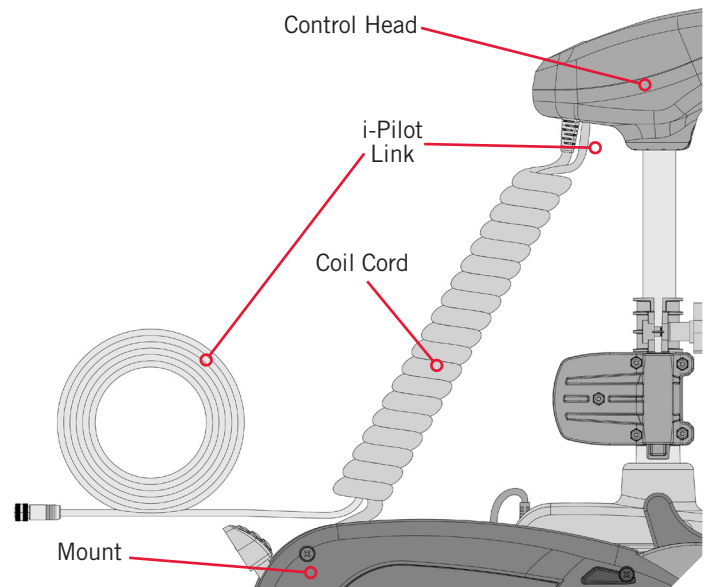
- a. Place the motor in the deployed position.
- b. Locate the i-Pilot Link cable, at the base of the Control Head.



CAUTION

Not following the recommended wire routing for the i-Pilot Link cable, 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.

- c. The i-Pilot Link cable should be fed all the way through the Coil Cord. It should exit the Coil Cord at the bottom of the Coil Cord, where it connects to the Mount.



NOTICE: After the i-Pilot Link Cable exits the Coil Cord, it should be routed through an established routing system on the boat, in an area with minimal interference. Inspect the selected route carefully to ensure that there are no sharp edges, obstacles, or obstructions that may damage the cables.

BATTERY & WIRING INSTALLATION

BOAT RIGGING & PRODUCT INSTALLATION

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

CAUTION

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

CAUTION

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

CONDUCTOR GAUGE AND CIRCUIT BREAKER SIZING TABLE

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

1. No more than 2 conductors are bundled together inside of a sheath or conduit outside of engine spaces.
2. Each conductor has 105° C temp rated insulation.
3. No more than 5% voltage drop allowed at full motor power based on published product power requirements.

Motor Thrust / Model	Max Amp Draw	Circuit Breaker	Wire Extension Length				
			5 feet	10 feet	15 feet	20 feet	25 feet
30 lb.	30	50 Amp @ 12 VDC	10 AWG	10 AWG	8 AWG	6 AWG	4 AWG
40 lb., 45 lb.	42		10 AWG	8 AWG	6 AWG	4 AWG	4 AWG
50 lb., 55 lb.	50	60 Amp @ 12 VDC	8 AWG	6 AWG	4 AWG	4 AWG	2 AWG
70 lb.	42	50 Amp @ 24 VDC	10 AWG	10 AWG	8 AWG	8 AWG	6 AWG
80 lb.	56	60 Amp @ 24 VDC	8 AWG	8 AWG	8 AWG	6 AWG	6 AWG
101 lb.	46	50 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
Engine Mount 101	50	60 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
112 lb.	52	60 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
Engine Mount 160	116	(2) x 60 Amp @ 24 VDC	6 AWG	6 AWG	4 AWG	2 AWG	2 AWG
E-Drive	40	50 Amp @ 48 VDC	10 AWG	10 AWG	10 AWG	10 AWG	10 AWG

NOTICE: Wire Extension Length refers to the distance from the batteries to the trolling motor leads. Consult website for available thrust options. Maximum Amp Draw values only occur intermittently during select conditions and should not be used as continuous amp load ratings.

Reference

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

SELECTING THE CORRECT BATTERIES



SELECTING THE CORRECT BATTERIES

The motor will operate with any lead acid, deep cycle marine 12 volt battery/batteries. For best results, use a deep cycle, marine battery with at least a 105 amp-hour rating. Maintain battery at full charge. Proper care will ensure having battery power when you need it, and will significantly improve the 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. We offer a wide selection of chargers to fit your charging needs. If you are using a crank battery to start a gasoline outboard, we recommend that you use a separate deep cycle marine battery/batteries for your Minn Kota trolling motor.

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-19 60-amp circuit breaker is recommended.

CAUTION

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

ADDITIONAL CONSIDERATIONS

Using DC or Alternator Chargers

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

Minn Kota recommends using Minn Kota brand chargers to recharge the batteries connected to your Minn Kota trolling motor, as they have been engineered to work with motors that include a bonding wire.

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.

CONNECTING THE BATTERIES IN SERIES



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

12 Volt Systems

1. Make sure that the motor is switched off (speed selector on “OFF” or “0”).
2. Connect positive (+) red lead to positive (+) battery terminal.
3. Connect negative (–) black lead to negative (–) battery terminal.



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.

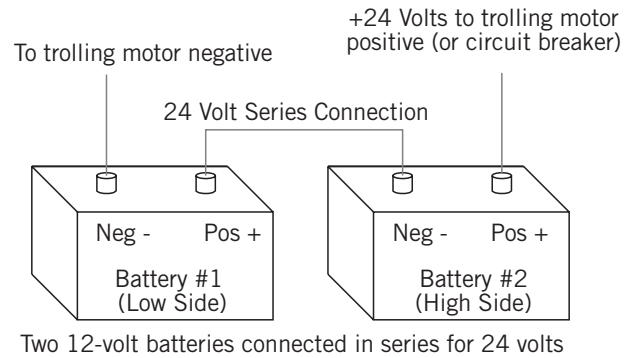
CONNECTING THE BATTERIES IN SERIES

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

24 Volt Systems

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

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



WARNING

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

WARNING

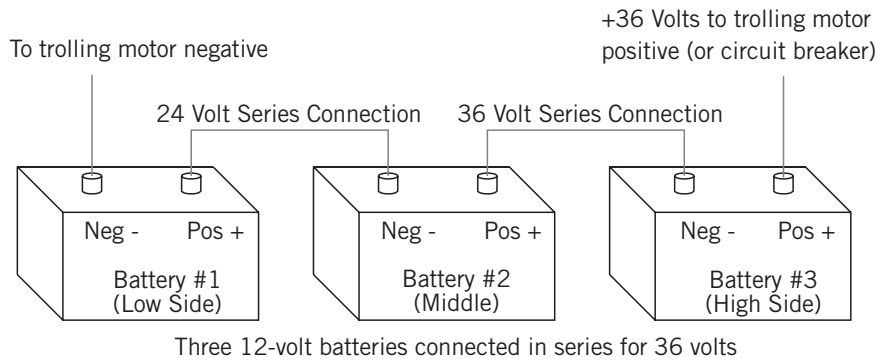
- For safety reasons, disconnect the motor from the battery or batteries when the motor is not in use or while the battery/batteries are being charged.
- Improper wiring of 24/36 volt systems could cause battery explosion.
- Keep leadwire wing nut connections tight and solid to battery terminals.
- Locate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

CONNECTING THE BATTERIES IN SERIES

36 Volt Systems

Three 12 volt batteries are required. The batteries must be wired in series, only as directed in 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.

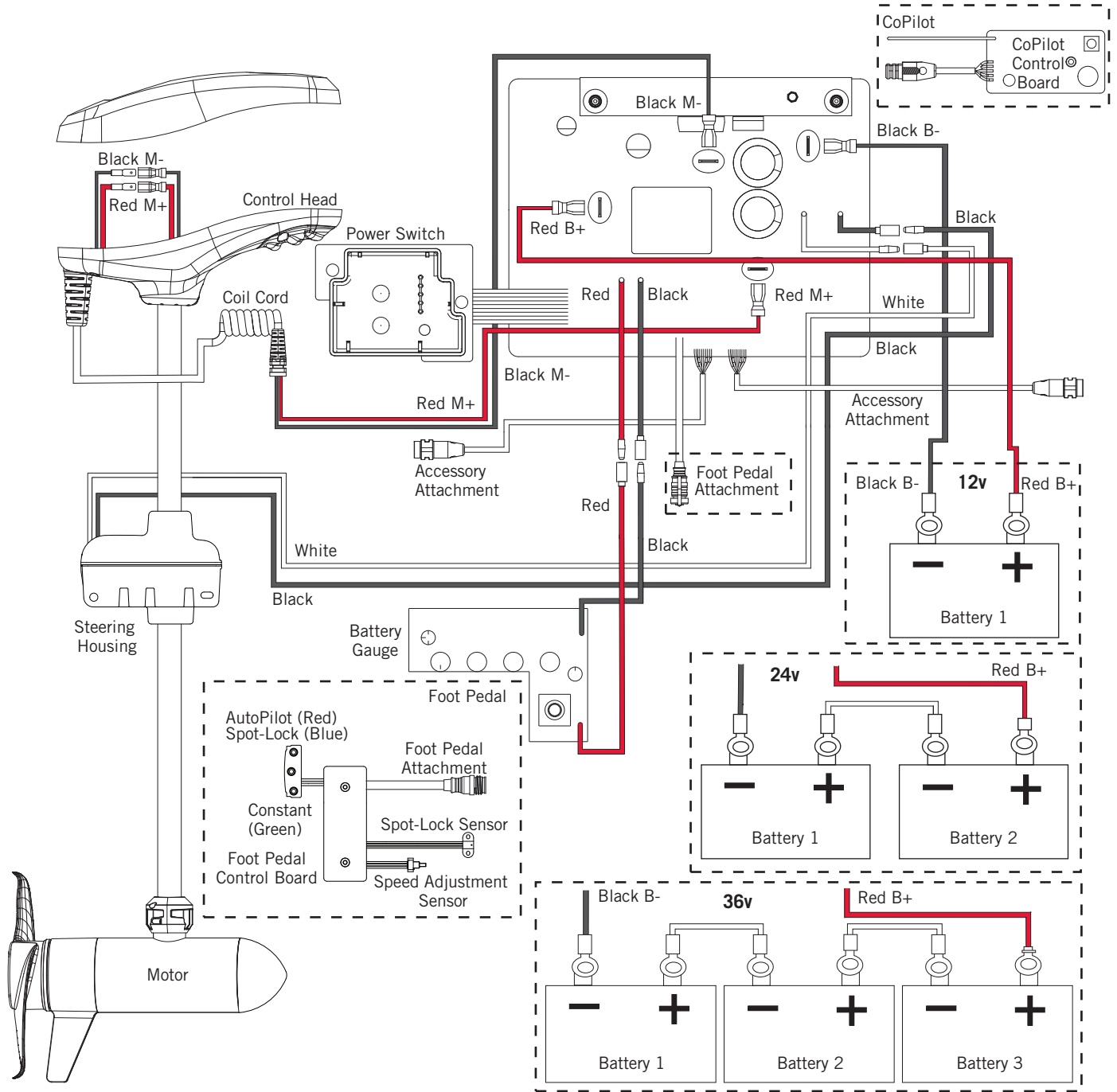
WARNING

- 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.

MOTOR WIRING DIAGRAM

RIPTIDE TERROVA WITH COPILOT

The following Motor Wiring Diagram applies to all Riptide Terrova models that come factory installed with CoPilot. CoPilot or a Foot Pedal may be installed as an after market accessory on select models.

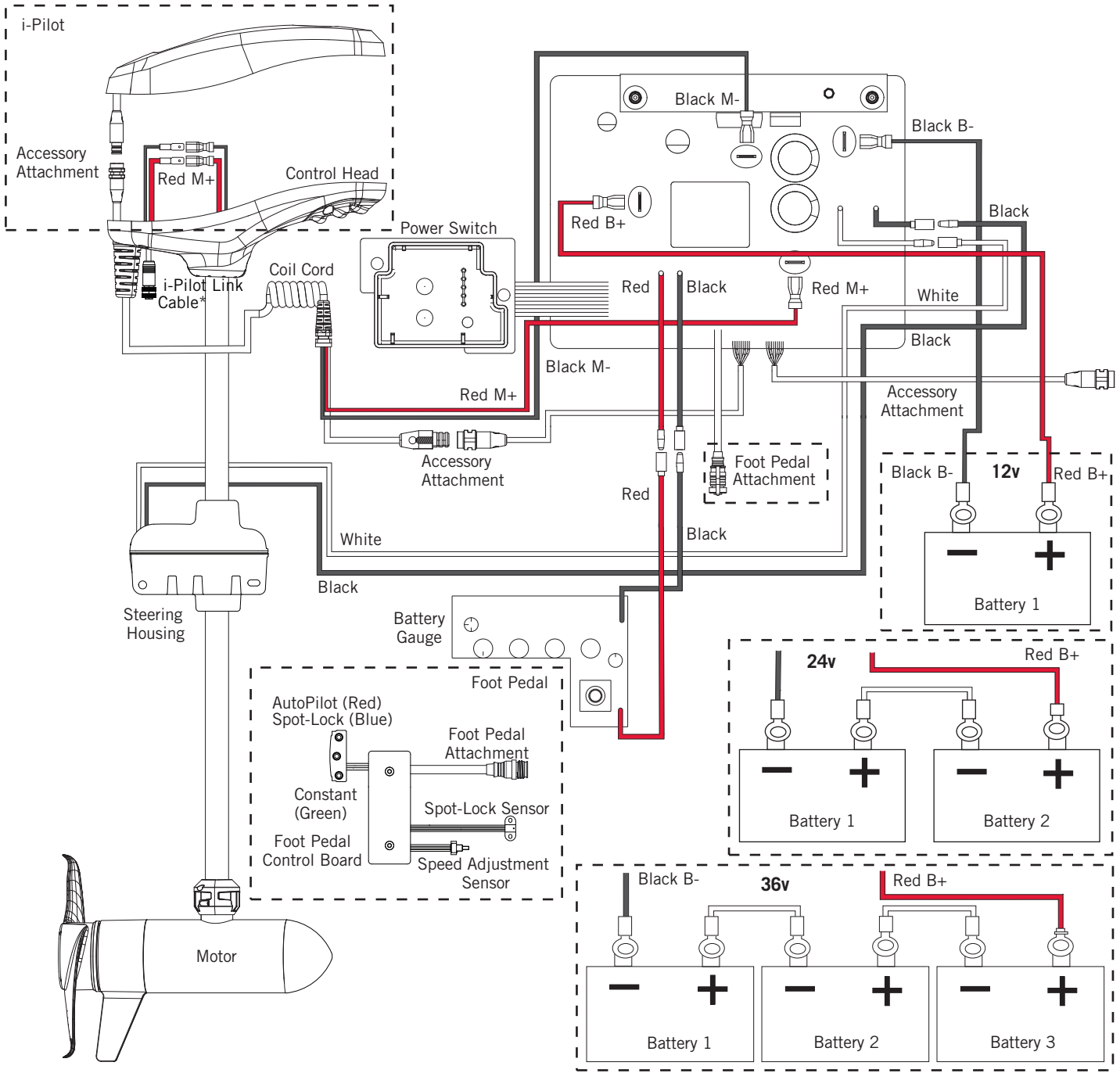


NOTICE: This is a multi-voltage diagram. Double-check your motor's voltage for proper connections. Over-Current Protection Devices are not shown in this illustration.

MOTOR WIRING DIAGRAM

RIPTIDE TERROVA WITH i-PILOT OR i-PILOT LINK

The following Motor Wiring Diagram applies to all Riptide Terrova models that come factory installed with either i-Pilot or i-Pilot Link. A Foot Pedal can be installed as an after market accessory.

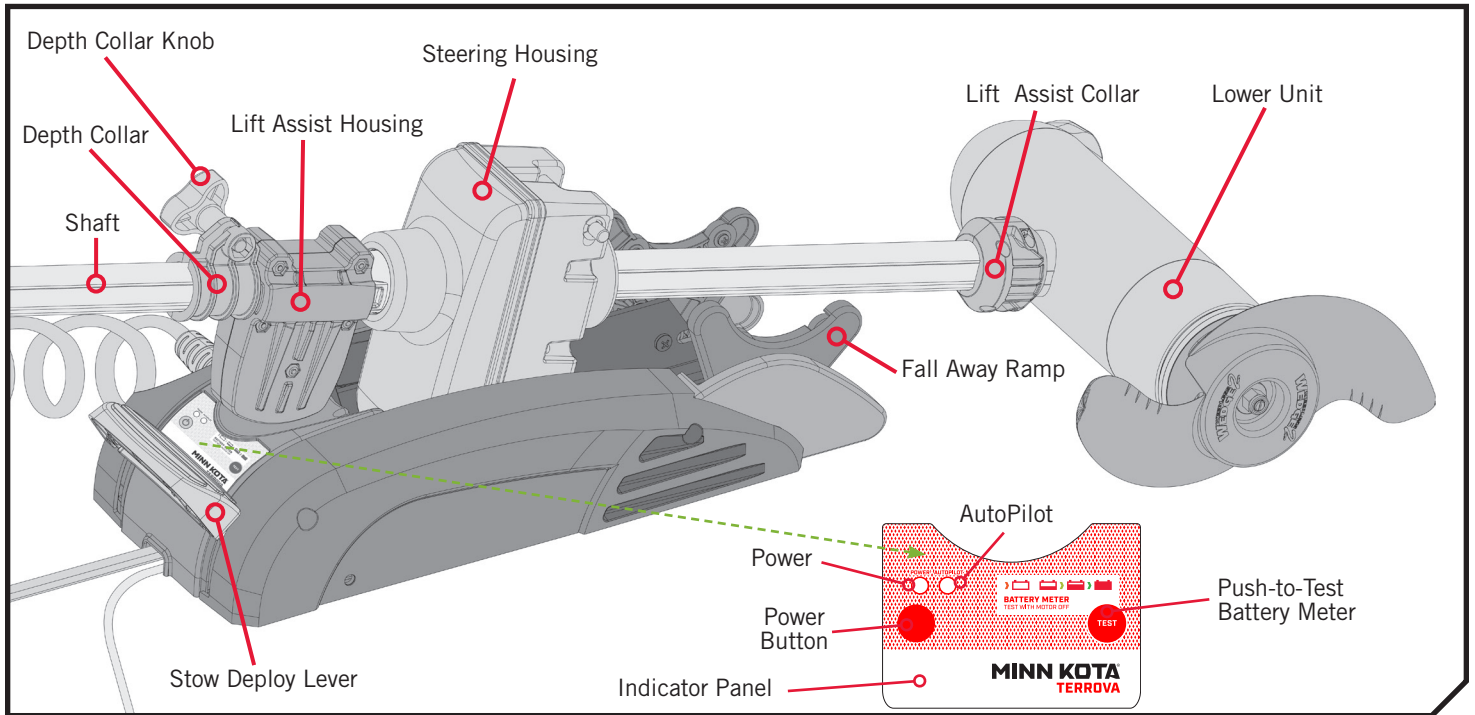


NOTICE: This is a multi-voltage diagram. Double-check your motor's voltage for proper connections. Over-Current Protection Devices are not shown in this illustration.

USING & ADJUSTING THE MOTOR

MOUNT FEATURES

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






Depth Collar & Depth Collar Knob

The Depth Collar is located on the Shaft above the Lift Assist Housing. It functions to hold the motor at the proper depth while deployed. It also functions to hold the Lower Unit in place when stowed while not in use and during transport. The Depth Collar Knob is used to loosen and tighten the Depth Collar so that it can be used to slide up and down the motor shaft.

Fall Away Ramps

The Fall Away Ramps hold the Lower Unit when the Motor is stowed and rotate to release the Lower Unit as the unit is being deployed. When the Stow Deploy Lever is pressed it unlocks the position of the Fall Away Ramps and the Ramps rotate to guide the Lower Unit back onto the mount when the motor is stowed.

Power Button

The Power button  is located on the Indicator Panel on the Mount. The Terrova must be manually powered "on" and "off". When the Motor is powered "on", the Power Indicator will be illuminated green  when the Motor is powered "off", the Power Indicator will not be illuminated .

NOTICE: Do not completely remove the Depth Collar Knob from the Depth Collar Assembly. Doing so allows a washer shaped spacer to fall out of the Depth Collar. This spacer plays a key role in creating tension for the Depth Collar to clamp and function properly.

WARNING

When the motor is being transported, it is important to place the Depth Collar snug against the Lift Assist Housing and tighten. 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.

WARNING

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



ADJUSTING THE DEPTH OF THE MOTOR



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.

AutoPilot

The AutoPilot Indicator is located on the Indicator Panel on the Mount. It is illuminated green  when AutoPilot is engaged and it is not illuminated  when AutoPilot is not engaged for i-Pilot and i-Pilot Link equipped motors.

Stow Deploy Lever

The Stow Deploy Lever is located at the top of the mount. The Stow Deploy Lever functions to unlatch the Fall Away Ramps which rotate to guide the Lower Unit. The Stow Deploy Lever is actuated by pressing it down.

STOWING AND DEPLOYING THE MOTOR

To Deploy the Motor

Loosen the Depth Collar, then push firmly down on the Stow Deploy Lever to release the Lift Assist Collar and slide the motor forward, out from the Fall Away Ramp. Lower the motor to the desired depth. Make sure it clicks into a secure, vertical position. Once at the desired depth, slide the Depth Collar against the Lift Assist Housing and tighten.

To Stow the Motor

Depress the Stow Deploy Lever. Raise the motor by pulling up on the Shaft or Control Head. Pull the motor toward the stern until it rests securely on the Fall Away Ramp and the Fall Away Ramps capture the Lower Unit. Loosen the Depth Collar and slide it down and secure it against the top of the Lift Assist Housing to secure the motor in place and prevent accidental deployment.

WARNING

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

WARNING

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

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

WARNING

Moving parts can cut or crush. The Lift Assist Housing can come off of Steering Housing and create a crushing hazard. Keep fingers clear of all moving parts.

WARNING

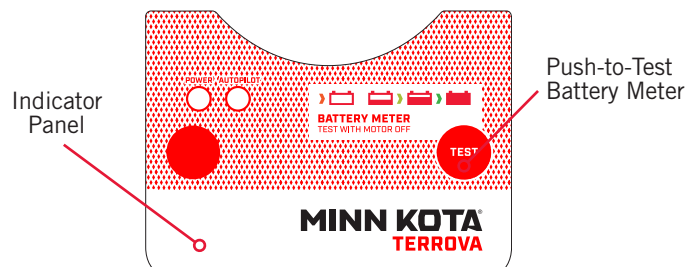
If a propeller encounters an obstruction while running, the increased electrical current being generated by the obstruction will signal the motor to decrease the power to the propeller to prevent damage. If the current overload is detected for more than 20 seconds, the prop will be disabled to prevent damage to the motor. In this event, the operator can turn the prop back on after being sure that the obstruction has been cleared.

ADJUSTING THE DEPTH OF THE MOTOR

PUSH-TO-TEST BATTERY METER

This motor is equipped with a Push-to-Test Battery Meter. The LED located on the Indicator Panel on the Mount of the motor. The Battery Meter provides an accurate display of the remaining charge in the battery. It is only accurate when the motor is off. The meter reads as follows:

- One light indicates recharge.
- Two lights indicate low charge.
- Three lights indicate good charge.
- Four lights indicate full charge.



NOTICE: No lights indicates no battery connection or an incorrect battery connection.

ADJUSTING THE DEPTH OF THE MOTOR

MOTOR ADJUSTMENTS

ADJUSTING THE DEPTH OF THE MOTOR

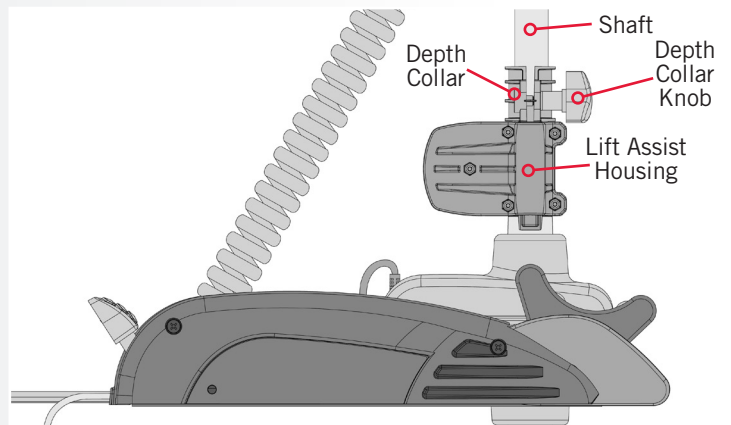
Once the boat is on the water, it may be necessary to adjust the Lower Unit up or down to achieve an optimum depth for motor performance. When setting the depth of the motor, be sure the top of the motor is submerged at least 12" below the surface of the water to avoid churning or agitation of surface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

- 1
 - a. With the motor in the deployed position, locate the Depth Collar on the Shaft above the Lift Assist Housing.
 - b. While holding the Shaft, loosen the Depth Collar Knob until the Shaft can slide up and down freely.



WARNING

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

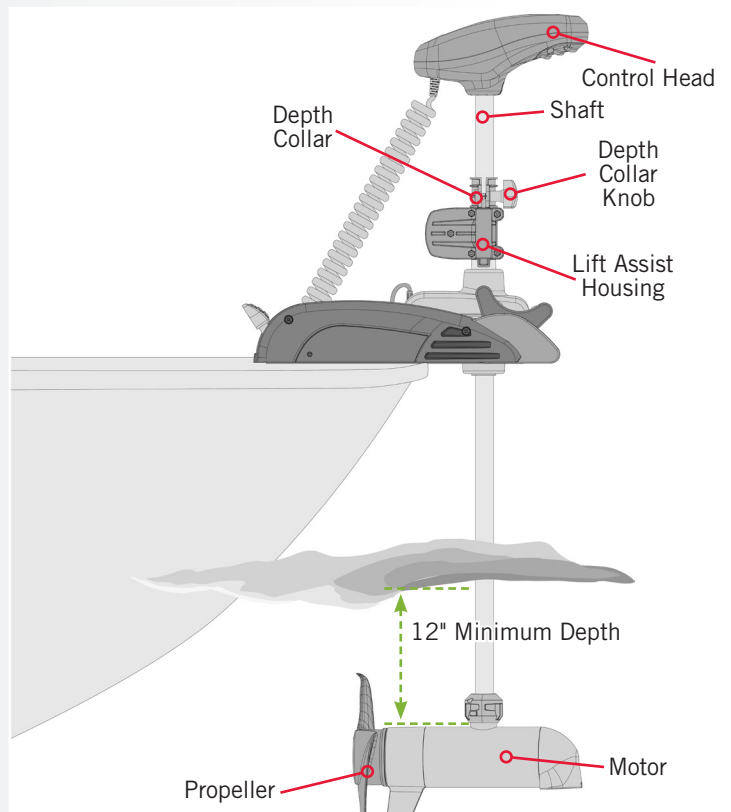


- 2
 - c. Raise or lower the motor to the desired depth.
 - d. Turn the motor Control Head to the desired position.
 - e. Slide the Depth Collar against the Steering Housing and tighten the Depth Collar Knob to secure the motor in place.



WARNING

The Lift Assist Housing contains a spring that may break from excessive wear. Watch for sharp points that can be a puncture hazard. Always use care when handling the motor.



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, a part of the Motor Mount. It is recommended to secure the motor using the following instructions to avoid damage to the motor and shaft from vibrations during transport.

1

- a. Before transporting the boat over water or land, stow the motor to determine where the Lower Unit rests on the Fall Away Ramps.

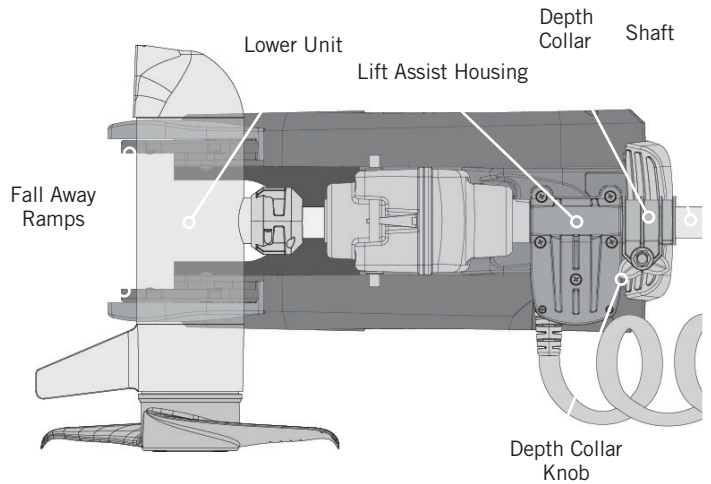
NOTICE: The correct positioning of the Lower Unit will place it directly on the Fall Away Ramps.

- b. If the Lower Unit does not sit on the Fall Away Ramps, deploy the motor, and stow it again.
- c. Be sure to press the Stow Deploy Lever and adjust the Motor to allow it to rest on the Fall Away Ramps.



CAUTION

The Lower Unit should be placed on the Mount Ramps every time the motor is transported. If the Lower Unit is improperly placed, either above or below the Motor Rest Area, damage to the Lower Unit or Shaft will occur and the Shaft will be incorrectly captured. Not following the recommended placement for the Lower Unit will cause damage to the product and void your product warranty.



NOTICE: Slide the Depth Collar down and secure it against the top of the Steering Housing when stowed to secure the motor in place and prevent accidental deployment.



WARNING

When the motor is being transported, it is important to place the Depth Collar snug against the Lift Assist Housing and tighten. 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.

INSTALLING AN EXTERNAL TRANSDUCER

INSTALLING AN EXTERNAL TRANSDUCER

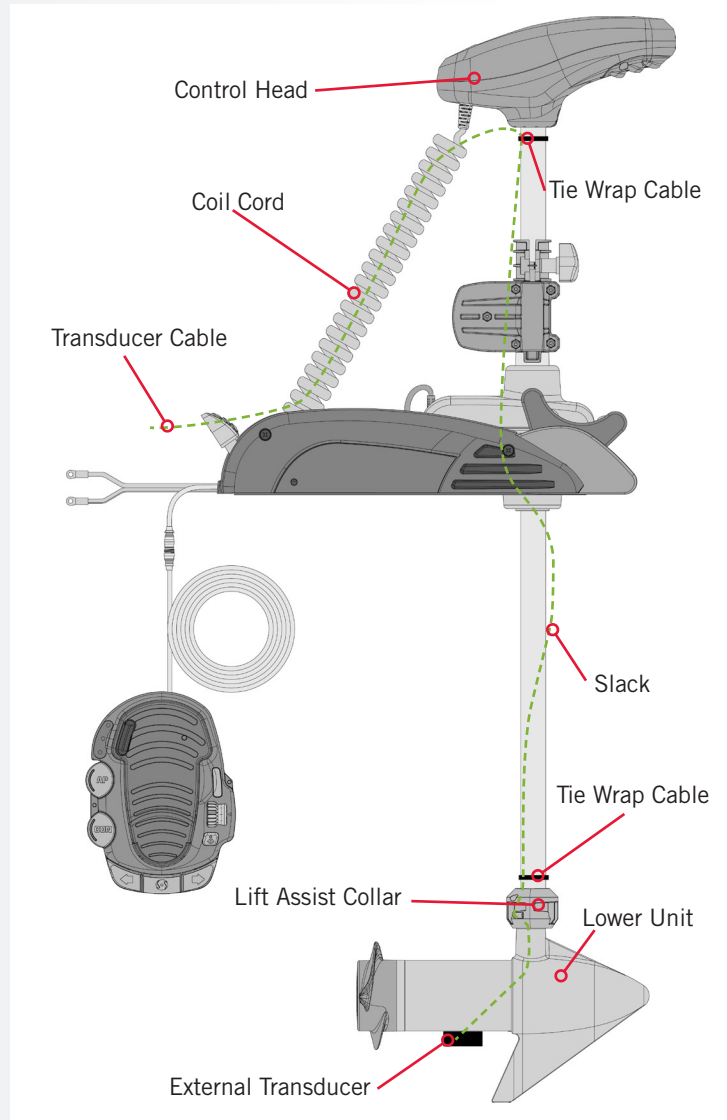
An external transducer is not included with your trolling motor. An external transducer can be installed onto the motor.

1

- Mount the External Transducer according to directions provided with the transducer.
- Leave enough slack in the Transducer Cable between the Lower Unit and Control Head to allow the motor to properly stow and deploy.
- Use two tie wrap cables to secure the Transducer Cable to the Shaft just above the Lift Assist Collar and just below the Control Head.
- Run the Transducer Cable through the Coil Cord to the power supply.

CAUTION

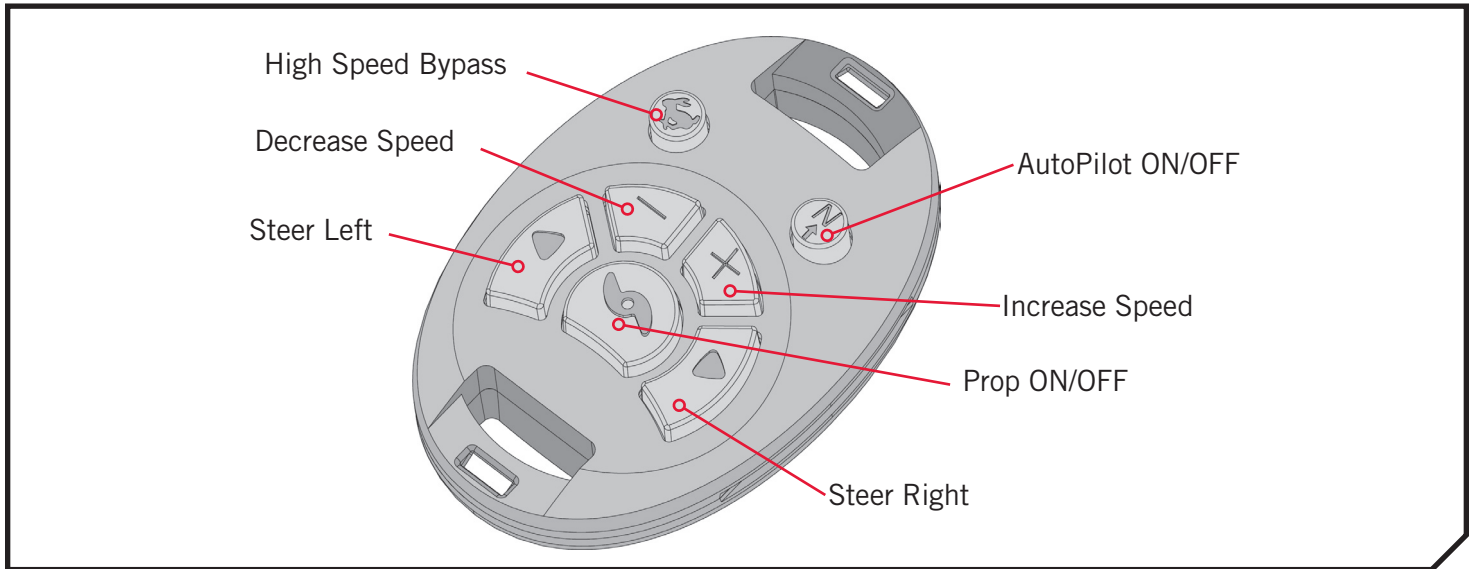
Not following the recommended wire routing for the Universal Sonar may cause damage to the product and void your product warranty. Take care to test the length and placement of cable to be sure that there is enough slack where needed and that cables are free of being entangled in moving parts. Routing the cables in any way other than directed may cause damage to the cables by being pinched or severed.



COPILOT

CONTROLLING THE MOTOR WITH COPILOT

Review the complete CoPilot section of this manual to become familiar with this feature.



Prop ON/OFF

This button is located in the middle of the remote. It turns the propeller on or off. Press the button once to turn the propeller ON; press button a second time to turn it OFF. The button does not need to be held down.

Steer Left & Steer Right

These buttons are located to the right and left of the Prop ON/OFF button and have an arrow symbol. They cause the motor to turn in the desired direction as long as the button is held down. If the Steer Right or Steer Left button is held for more than seven seconds, the steering will automatically stop until the button is pressed again.

Increase Speed & Decrease Speed

The Increase Speed and Decrease Speed buttons are located above the Prop ON/OFF button and are identified with a positive and negative symbol. Pressing and releasing these buttons causes the speed to increase or decrease by increments of 1. The speed is adjustable from level 0-10. At level 0, the prop will not turn.

In audio mode 2, an audible beep is heard for each increment when changing speed. Attempting to go higher than speed 10 or lower than speed 0 will result in the speed not changing and no beep will be heard. See the Audio Mode section for more information.

If the receiver senses no foot pedal or remote operation for 1 hour, the remote speed setting is automatically set to zero. This helps prevent unintentional activation of the propeller if the prop on/off remote button is inadvertently pressed.

AutoPilot On/Off

The AutoPilot button is located on the top right side of the remote. It functions to turn AutoPilot on or off. The button does not need to be held down. If the motor does not have AutoPilot, the AUTOPILOT ON/OFF button will be non-functional.

High Speed Bypass

The High Speed Bypass button is located on the top left side of the remote. It toggles the speed between the current speed setting and the maximum speed setting (level 10). Pressing the button sets the motor at speed 10 instantly; pressing the button again sets the motor speed back to the previous speed setting.

COPILOT GENERAL OPERATION

Operating with the Remote and Foot Pedal

- The CoPilot and foot pedal can be used for motor control simultaneously.
- The foot pedal and CoPilot remote operate on a first-in-line priority basis. If a button is pressed and held down on the foot pedal and a button with the same function is then pressed on the remote, the foot pedal will have priority. The remote would have priority if the remote was first to send the command.
- Multiple functions can be performed at the same time. For instance, AutoPilot can be turned on or off from the remote while speed is being adjusted on the foot pedal. If the momentary button is being held down on the corded foot pedal, steering adjustments can be made at the same time from the remote.
- When the momentary button is being held down on the foot pedal, speed increase/decrease and prop on/off will not function on the remote.
- When the foot pedal has priority over the remote and remote commands are received, the receiver will emit an audible chirp. This will indicate that the remote is functioning properly however the foot pedal is taking priority.

Operating without the Foot Pedal

- If the foot pedal is not being used, the CoPilot receiver will always react to any commands from the CoPilot remote.



AUDIO MODES

There are three receiver Audio Modes available. The unit is factory set to Audio Mode 2. To switch from one audio mode to another, simultaneously press and hold the increase and decrease speed buttons for one second. The receiver will respond with 1, 2 or 3 audible beeps indicating the corresponding receiver audio mode change.

Audio Mode	Function
Mode 1	All of the normal audible sounds mentioned in this owners manual, but no audible beeps for speed increase/ decrease or prop on/off.
Mode 2	Same as audio mode 1 plus an audible beep for speed increase / decrease and prop on/off.
Mode 3	Same as audio mode 2 plus the prop on audible tick every 1.5 seconds.

NOTICE: When the Foot Pedal is operating the motor and the propeller is on, the prop on indicator tick will be heard if the receiver is set to Audio Mode 3.

Audio Pattern	What Condition Causes Audio Pattern	Audio Mode
1 Beep	Pressing the Increase Speed or Decrease Speed button	Modes 2 and 3
1 Beep	Pressing the Prop ON/OFF button to turn the Prop on	Modes 2 and 3
2 Beeps	Pressing the Prop ON/OFF button to turn the Prop off	Modes 2 and 3
Single tick every 1.5 seconds	When the Prop is active including when Speed is set to 0	Mode 3
1 Beep	Switching to audio Mode 1	All
2 Beeps	Switching to audio Mode 2	All
3 Beeps	Switching to audio Mode 3	All
1 Chirp	Every time the receiver is powered up and there is at least one remote learned	All
2 second long Beep	Every time the receiver is powered up and there are no remotes learned	All
5 Beeps	Foot pedal speed control is moved after speed has been adjusted with remote	All
Steady Tone	Heard while holding down the Learn button on the receiver	All
4 Beeps	Heard after a remote button is pressed while the receiver learns it.	All
Ten second warbling sound that transitions into a steady tone	Heard during the process used to clear all stored remotes after the learn switch is released, a 2 second long beep will be heard	All
1 long Beep, 2 short Beeps, pause (repeat)	Powered up with Momentary/Constant Switch in the CON position (or the Momentary Button held) when the Foot Pedal is moved to momentary, the power up audio will be heard	All

ADDING/REMOVING REMOTES

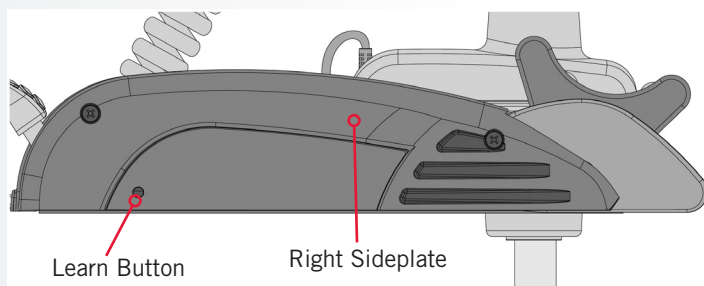
The CoPilot remote came from the factory already "Learned" by the CoPilot receiver. Any additional remotes must be "Learned" by the receiver. The receiver stores all "Learned" information even when the motor is disconnected from a power source.

To "Learn" Remotes

Your receiver may learn up to ten remotes. Any additional remotes can be "Learned" using the following steps. This will also work to "Learn" any remote if all remotes are erased from the receiver.

1

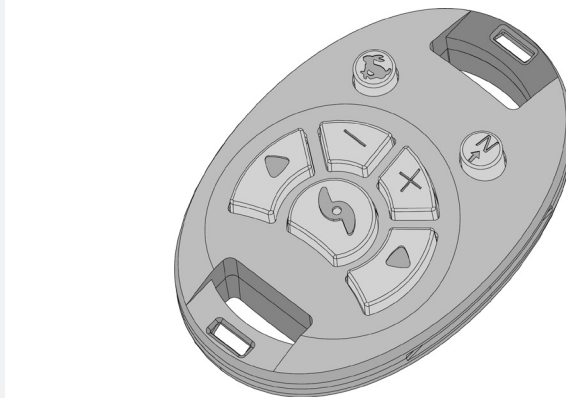
- a. Using a small blunt object such as a pen or screwdriver, press and hold the Learn Button located on the side of the receiver.
- b. The receiver will emit a continuous tone.



2

- c. Press any button on the remote.
- d. The receiver will beep 4 times confirming that it has "Learned" the remote successfully.

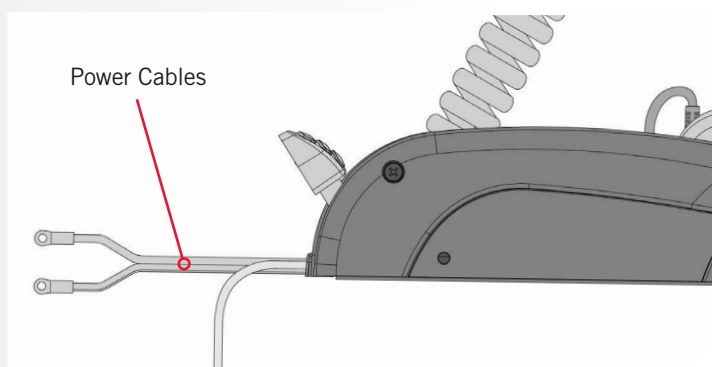
NOTICE: "Learning" the same remote will not overwrite previously "Learned" remotes. If the receiver has "Learned" ten remotes, "Learning" an eleventh remote will overwrite the first remote.



To Erase All Remotes from the Receiver

1

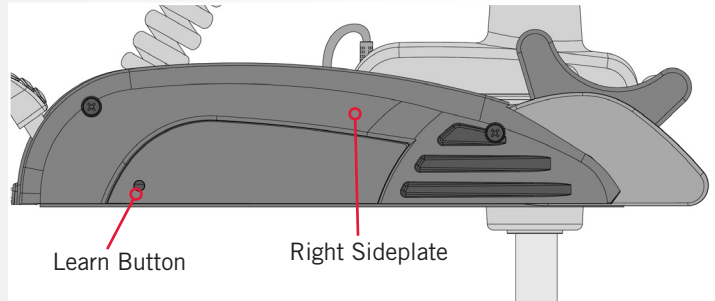
- a. Remove power from the CoPilot receiver by disconnecting the Power Cables, or by making sure that the breaker, if equipped, is "off".



COPILOT

2

- b. Press and hold the Learn Button and power up the CoPilot receiver by reconnecting the Power Cables, or by making sure that the breaker, if equipped, is "on".
- c. Continue to hold the Learn Button down for 10 seconds. During this time the receiver audio will emit a warble sound, slowly transition to a constant beep and then shut off.
- d. Release the Learn Button and the receiver will reboot. The receiver will emit a 2 second long beep indicating memory is empty. This audio pattern will occur each time the receiver powers up until a remote is "Learned".



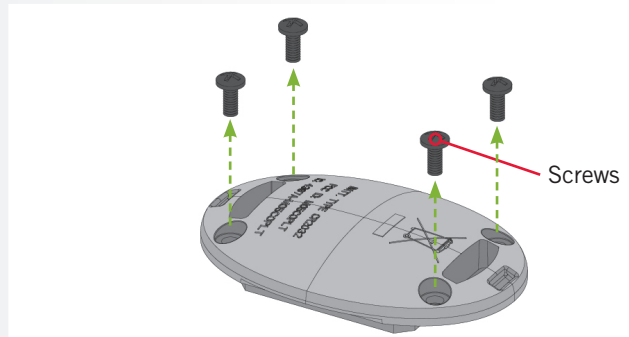
REPLACING THE BATTERY

1

- a. Temporarily ground yourself by touching a grounded metal object in order to discharge any static electricity in your body.

NOTICE: The replacement battery must be a model CR2032 coin cell type. It is strongly recommended that a name brand battery is used.

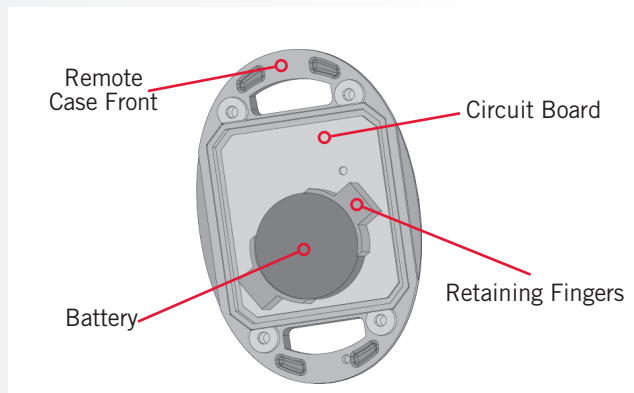
- b. Remove the four screws on the bottom of the remote case.
- c. Separate the case halves to access the circuit board.



2

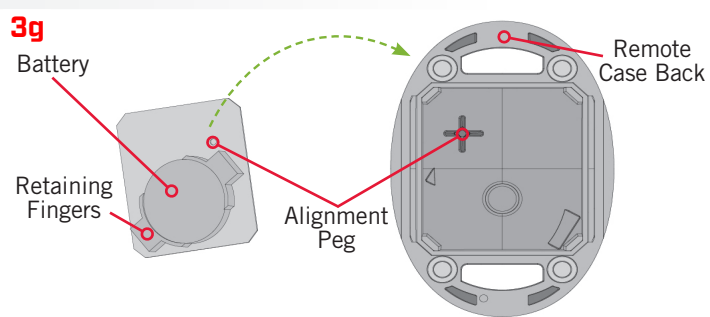
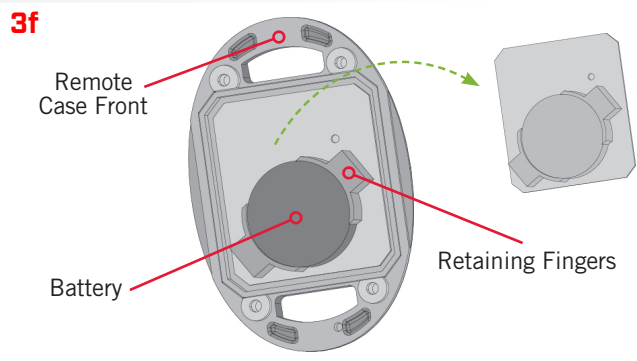
- d. To remove the Battery, place the tip of a finger or thumb under the exposed edge of the Battery and pry it upwards.
- e. Install the new battery with the positive (+) side of the Battery facing up and away from the Circuit Board. Ensure Battery is snapped securely in place.

NOTICE: The replacement battery must be a model CR2032 coin cell type. It is strongly recommended that a name brand battery is used.



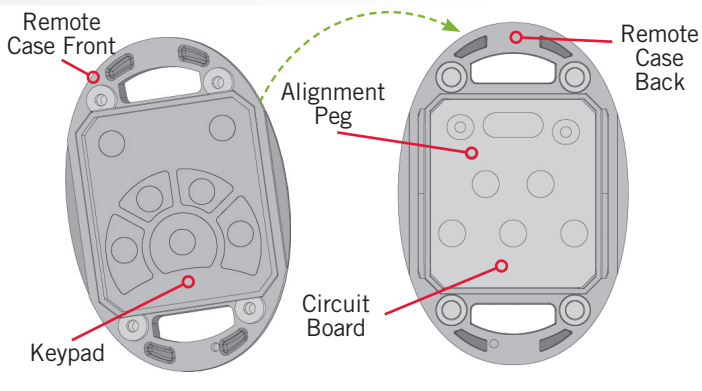
3

- d. Reassemble the remote. Begin by removing the board from the front of the remote case. This is the same board that holds the battery. Leave the Keypad in place on the front of the remote.
- e. Note that the alignment peg in the back of remote case must line up with the corresponding alignment hole in the circuit board. Place the board with the battery facing down on the back of the remote case.



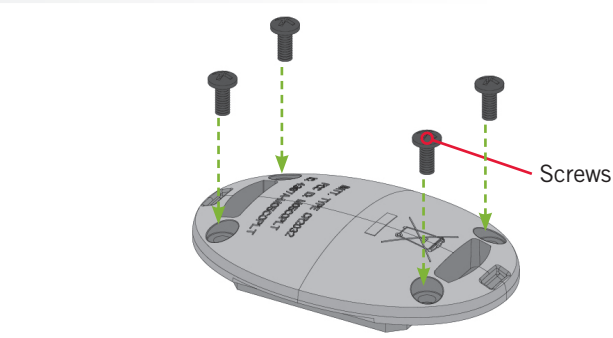
4

- f. Position the back of the remote case so that the Alignment peg is towards the top when the remote is laying on a flat surface. Position the front of the remote case so the keypad and the curved buttons are towards the bottom when the remote is laying on a flat surface.
- g. Keep the back of the Remote Case flat. Place the front of the Remote Case, with the Keypad in place, on the back of the Remote Case. Make sure the Case is seated.



5

- h. Reinstall the four case screws and tighten them as required.



SERVICE & MAINTENANCE

PROPELLER REPLACEMENT

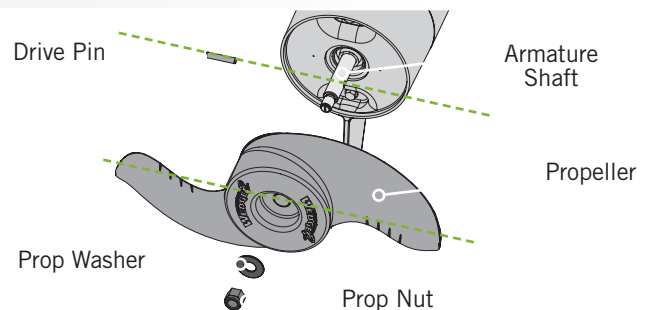
TOOLS AND RESOURCES REQUIRED

- 9/16" Open End Wrench
- Flat Blade Screwdriver

INSTALLATION

- Disconnect the motor from all sources of power prior to changing the propeller.
 - Hold the propeller and loosen the Prop Nut with a pliers or a wrench.
 - Remove the Prop Nut and Prop Washer.

NOTICE: If the Drive Pin is sheared or broken, you will need to hold the shaft stationary with a flat blade screwdriver pressed into the slot on the end of the shaft while you loosen the Prop Nut.



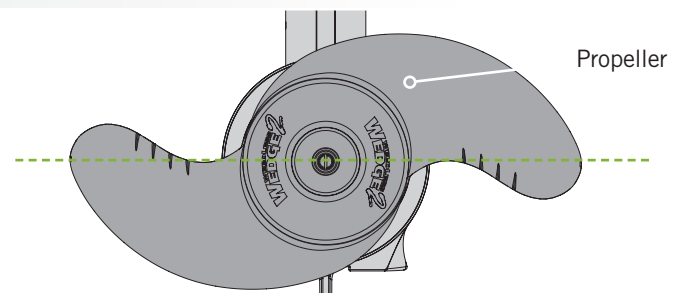
⚠ CAUTION

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

- Turn the old prop to horizontal and pull it straight off. If drive pin falls out, push it back in.

⚠ CAUTION

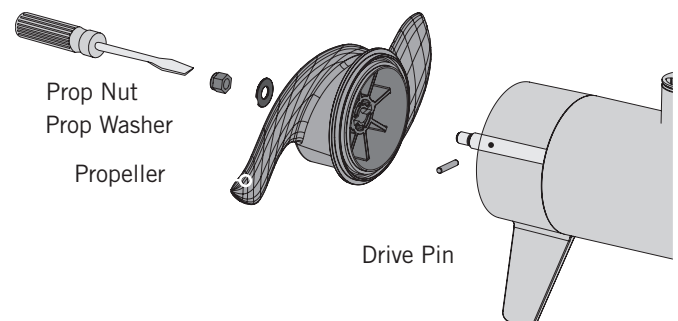
If the prop does not readily slide off, take care to not bend the Armature Shaft while removing the prop by pulling the prop evenly off the Armature Shaft.



- Align the new Propeller with the Drive Pin.
 - Install the Prop Washer and Prop Nut.
 - Tighten the Prop Nut 1/4 turn past snug at 25-35 inch-lbs.

⚠ CAUTION

Do not over tighten as this can damage the prop.





GENERAL MAINTENANCE

- After every use, the entire motor should be rinsed with freshwater, then wiped down with a cloth dampened with an aqueous based silicone spray. Do not spray water into the ventilation openings in the head of the motor.
- The composite shaft requires periodic cleaning and lubrication for proper retraction and deployment. A coating of an aqueous based silicone spray will improve operation.
- The propeller must be inspected and cleaned from weeds and fishing line after every use. Fishing line and weeds can get behind the prop, damage the seals and allow water to enter the motor.
- Verify the anode is secure each time the motor is used.
- To prevent accidental damage during transportation or storage, disconnect the battery whenever the motor is off of the water. For prolonged storage, lightly coat all metal parts with an aqueous based silicone spray.
- For maximum battery life recharge the battery(s) as soon as possible after use. For maximum motor performance restore battery to full charge prior to use.
- Keep battery terminals clean with fine sandpaper or emery cloth (flooded lead acid only).
- The propeller is designed to provide weed free operation with very high efficiency. To maintain this top performance, the leading edge of the blades must be kept smooth. If they are rough or nicked from use, restore to smooth by sanding with fine sandpaper.

TROUBLESHOOTING

1. Motor fails to run or lacks power:
 - 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. If you experience prop vibration during normal operation:
 - Remove and rotate the prop 180°. See removal instructions in the Propeller Replacement Section.
4. Experiencing interference with your fishfinder:
 - You may, in some applications, experience interference in your depth finder display. We recommend that you use a separate deep cycle marine battery for your trolling motor and that you power the depth finder from the starting/cranking battery.

SERVICE & MAINTAINANCE



TROUBLESHOOTING THE COPILOT

Cause	Effect	Solution
Remote is not transmitting.	The battery is discharged.	Replace battery.
	Receiver may not have "learned" the remote.	Remote needs to be learned. See the Adding/Removing Remotes section of this manual to learn the remote.
	With the foot pedal connected, the MOM-CON switch is in the CON position. An audio response will be heard if a button is pressed with the foot pedal in the CON position.	The foot pedal switch must be placed in Momentary Mode (MOM). The receiver will not accept any commands from the remote with the switch in the Constant Mode (CON) position.
	If remote has been taken apart, the keypad and top case may have been installed backwards.	Take remote apart. See the Replacing the Battery section of this manual and reinstall case halves with the proper orientation.
When receiver is powered up, it sounds a beep pattern (1 long beep, 2 short beeps, pause, repeat).	The foot pedal Momentary/Constant Switch is in the CON position.	The foot pedal switch must be placed in the MOM position. The beeping sound will continue until the switch is placed in the MOM position.
The prop is not turning but the Prop ON audio pattern is still going.	Prop Speed is set at "0".	Increase the Prop Speed above "0"
	The Prop ON audio pattern occurs only in Audio Mode 3	Switch Audio Mode to either Audio 1 or 2. See the Audio Modes section of this manual.

FCC COMPLIANCE



Model: CoPilot

This is only applicable to motors factory installed with CoPilot



- Contains IC: 4397A-M05COPLT
- Contains FCC ID: M05COPLT

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.

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

ENVIRONMENTAL RATINGS

Ambient operating temperature range: -10C to 50C

Ambient operating humidity range: 5% to 95%

Maximum operating altitude: 10,000 feet

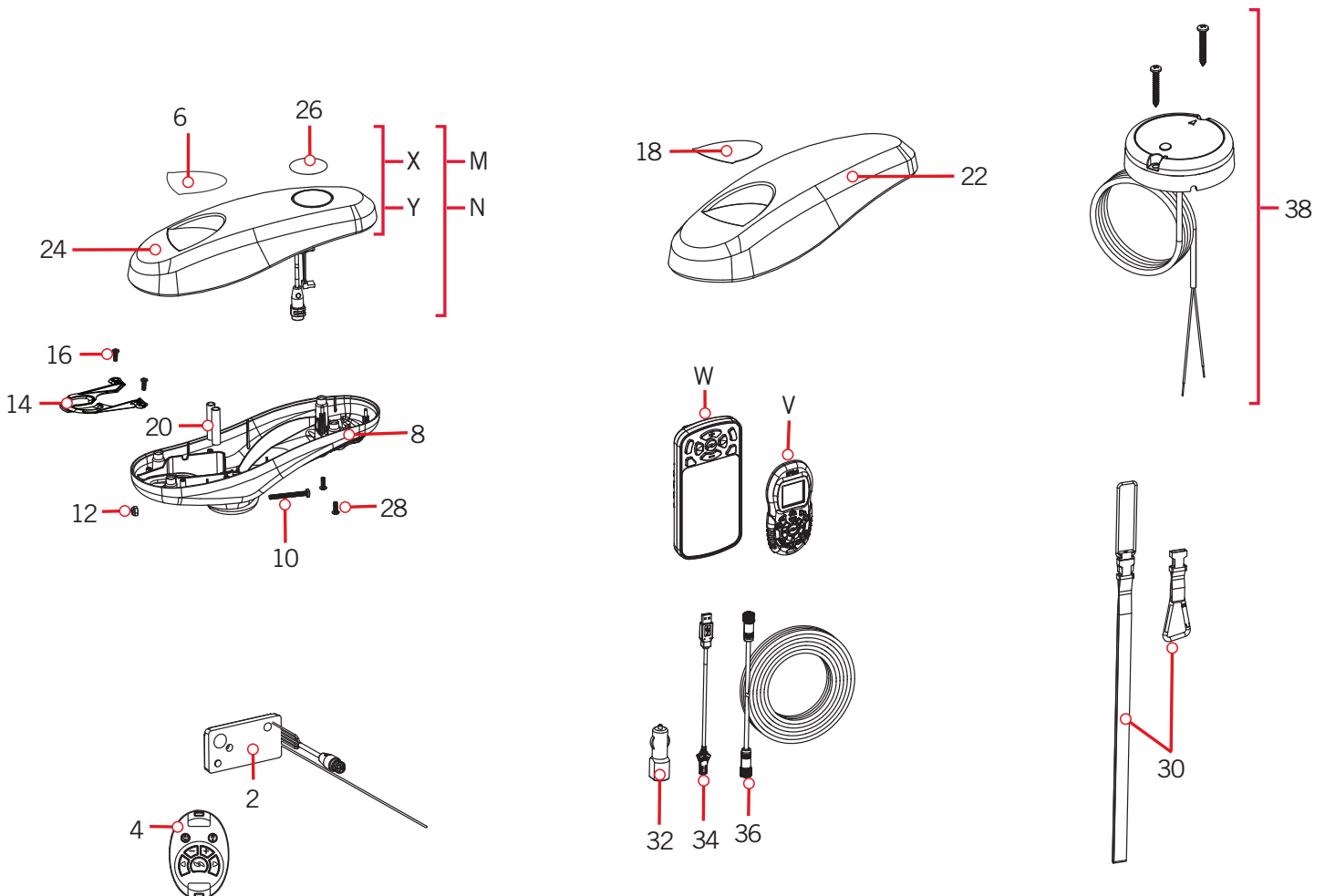
PARTS DIAGRAM & PARTS LIST

RIPTIDE TERROVA - 55/80/112 LBS THRUST - 12/24/36 VOLT - 54"/60"/72" SHAFT

The parts diagram and parts list provides Minn Kota® 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 CONTROL HEAD

Control Head Parts Diagram



PARTS DIAGRAM & PARTS LIST

Control Head Parts List

Assembly	Part #	Description	Quantity
M	2774178 ◆	MOTOR KIT, iPLT 1.6 RT TERROVA *I-PILOT RECEIVER*	1
N	2774179 ●	MOTOR KIT, iPLT 3.0 RT TERROVA *I-PILOT LINK RECEIVER*	1
V	2994075 ◆	REMOTE ASSY, IPILOT 1.6	1
W	2994076 ●	REMOTE ASSY, IPILOT LINK *LINK ONLY*	1
X	2770235 ◆	COVER KIT, iPLT 1.6 RT TERROVA *I-PILOT COVER & DECALS ONLY*	1
Y	2770236 ●	COVER KIT, iPLT 3.0 RT TERROVA *I-PILOT LINK COVER & DECALS ONLY*	1
Item	Part #	Description	Quantity
▲	✘	SEAL,BUNG LOWER	1
▲	✘	SEAL,BUNG UPPER,SW	1
2	2994097 ●	TRANSMITTER ASY,TRRV CPLT *COPILOT*	1
4	2374197 ●	PCB ASY COPLT REC. TERROVA *COPILOT*	1
6	2395551 ◆●	DECAL, COVER, RT, TERROVA 55 *55LB THRUST*	1
	2395555 ◆●	DECAL, COVER, RT, TERROVA 80 *80LB THRUST*	1
	2325635 ◆	DECAL, COVER, RT, TERROVA 112 *112LB THRUST*	1
▲	2256300	TIE WRAP-5.5" BLACK	2
8	2292501	CONTROL BOX, SW ST	1
10	2263406	SCREW-#10-24 X 2" SS PPH	1
12	2333101	NUT-HEX #10-24 UNC-2B NYL SS	1
14	2224707	INSERT-PLUG	1
16	2372103	SCREW. #6 x 3/8 PLASTITE	2
18	2325633 ●	DECAL COVER, RT, T2 80	1
▲	9950433	TIE WRAP-4" BLACK	2
20	2305402	SHRINK TUBE-.374 OD X 2.25"	2
22	2290213	COVER,CTRL BOX, RT PD PRINTED *COPILOT* 80LB THRUST*	1
24	2292501	CONTROL BOX, SW ST	1
26	2395546 ◆	DECAL, DOMED IPILOT SW *IPILOT*	1
	2395548 ●	DECAL, DOMED, IPILOT LINK SW *IPILOT LINK*	1
28	2372100	SCREW-#8-18 X 5/8 THD (SS)	7
30	2390800 ◆●	LANYARD, REMOTE W/ CARABINER	1
32	2395900 ●	ADAPTER, USB DC POWER *LINK ONLY*	1
34	2373241 ●	CABLE, USB REMOTE CHARGER *LINK ONLY*	1
36	490389-1 ●	CABLE, ETHERNET, 30' * LINK ONLY*	1
38	2996400	HEADING SENSOR ASSEMBLY	1
▲	2397106◆	MANUAL, QUICK REF., IPILOT 1.6	1
▲	2397107 ●	MANUAL, QUICK REF., IPILOT LINK 3.0	1

● Only available with models factory installed with CoPilot.

◆ Only available with models factory installed with i-Pilot.

▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
▲	2397100 ◆	MANUAL, iPILOT 1.6	1
▲	2397102 ●	MANUAL, iPILOT LINK 3.0	1
▲	2297165	MANUAL - DISCLAIMER, DOWNLOAD INFO	1
▲	2327133	INSTALLATION INSTRUCTIONS TERROVA	1
▲	2327131	MANUAL TERROVA BT SW	1
▲	2015800	HANG TAG "CAUTION TILT HINGE"	1
▲	2394900 ◆●	INSTRUCTIONS, HEADING SENSOR	1

● Only available with models factory installed with CoPilot.

▲ Not shown on Parts Diagram.

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

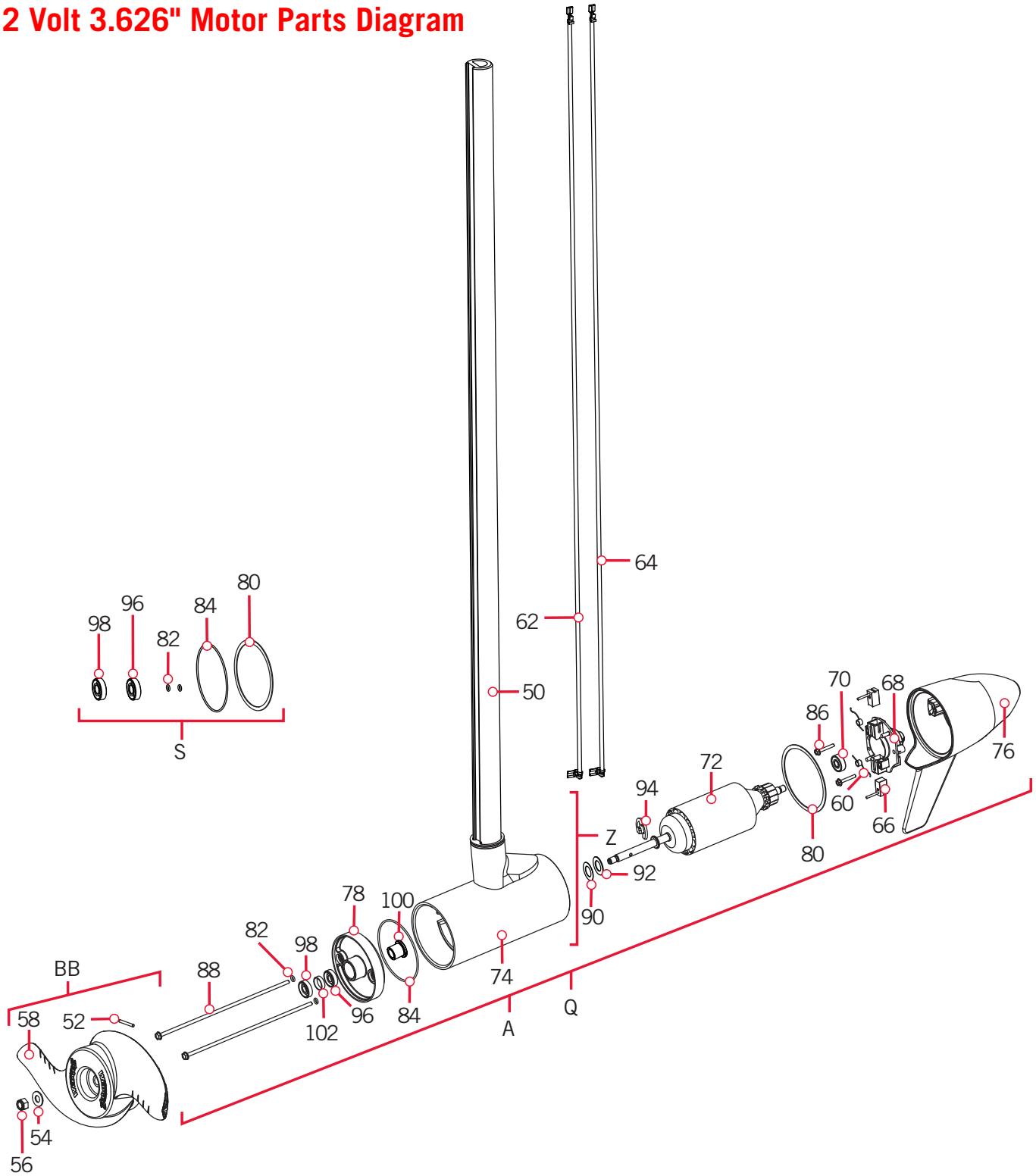
◆ Only available with models factory installed with i-Pilot.

● Only available with models factory installed with i-Pilot Link.

PARTS DIAGRAM & PARTS LIST

RIPTIDE TERROVA MOTOR

12 Volt 3.626" Motor Parts Diagram



PARTS DIAGRAM & PARTS LIST

12 Volt 3.626" Motor Parts List

Assembly	Part #	Description	Quantity
A	2779034	MTR/TUBE ASM 55# 54" RT TRV BT *MOTOR & TUBE* *54" *3.625*	1
Q	2779036	MTR/TUBE ASM 55# 60" *MOTOR & TUBE* *60" *3.625* *EUROPE ONLY*	1
Z	2779307	CTR HSG, CB, 55#, SW 60" *UP TO 60"* *TUBE* *3.625*	1
BB	1378131	PROP IND 2091160 WDL5 WDG II *3.625* *55LB THRUST*	1
S	2888460	SEAL & O-RING KIT *55LB THRUST* *3.625*	1
Item	Part #	Description	Quantity
50	✘	TUBE-COMP,WHT,54",1/4" WALL,T2 *54"* *55 LBS*	1
	✘	TUBE-COMP,WHT,60",1/4" WALL,T2 *iPILOT* *60"* *55 LBS*	1
52	2092600	PIN-DRIVE 1" X 3/8" S/S *55LB THRUST* *3.625*	1
54	2151726	WASHER-5/16 STD (S/S) *55LB THRUST* *3.625*	1
56	2198400	ANODES, ZINC, 3.25/3.62" LWR UNT *55LB THRUST* *3.625*	1
58	2091160	PROP-WW2 (3-5/8") REAMED *55LB THRUST* *3.625*	1
60	975-040	SPRING - TORSION *3.625* *55LB THRUST*	2
62	640-151	LEADWIRE RED 10 AWG 70.375 GPT *54"* *55 LBS*	1
	640-156	LEADWIRE RED 10 AWG 76.375 *iPILOT* *60"* *55 LBS* *M*	1
64	640-023	LEADWIRE BLK 10 AWG 69" GPT *54"* *55 LBS*	1
	640-056	LEADWIRE BLK 10 AMP 75" GPT *iPILOT* *60"* *55 LBS* *M*	1
66	188-036	BRUSH ASSEMBLY *3.625* *55LB THRUST*	2
68	738-036	BRUSH PLATE WITH HOLDER 3.625 *3.625* *55LB THRUST*	1
70	725-050	PAPER TUBE - BRUSH RETENTION *3.625* *55LB THRUST*	1
72	2-100-146	ARM ASY 12V 3.62 55#CB/LS *55LB THRUST* *3.625*	1
74	✘	CTR HSG ASY 3.6 SW/CB/W-MG *55LB THRUST* *3.625*	1
76	421-350	HSG BRSH END 3.62 SW CB/WHITE *55LB THRUST* *3.625*	1
78	2-400-337	PLAIN END HSG ASY 3.6 TX/W *55LB THRUST* *3.625*	1
80	337-036	GASKET *55LB THRUST* *3.625*	1
82	701-008	O-RING *55LB THRUST* *3.625*	2
84	701-081	O-RING *55LB THRUST* *3.625*	1
86	830-007	SCREW, # 8-32 *55LB THRUST* *3.625*	2
88	830-008	THRU BOLT 10-32 x 9.205 *55LB THRUST* *3.625*	2
90	990-067	WASHER - STEEL THRUST *55LB THRUST* *3.625*	1
92	990-070	WASHER - NYLATRON *55LB THRUST* *3.625*	1
94	788-015	RETAINING RING *3.625*	1
96	880-003	SEAL	1
98	880-006	SEAL WITH SHIELD	1
100	144-049	BEARING-FLANGE	1
102	725-035	PAPER TUBE - SEAL BORE	1

● Only available with models factory installed with CoPilot.

◆ Only available with models factory installed with i-Pilot.

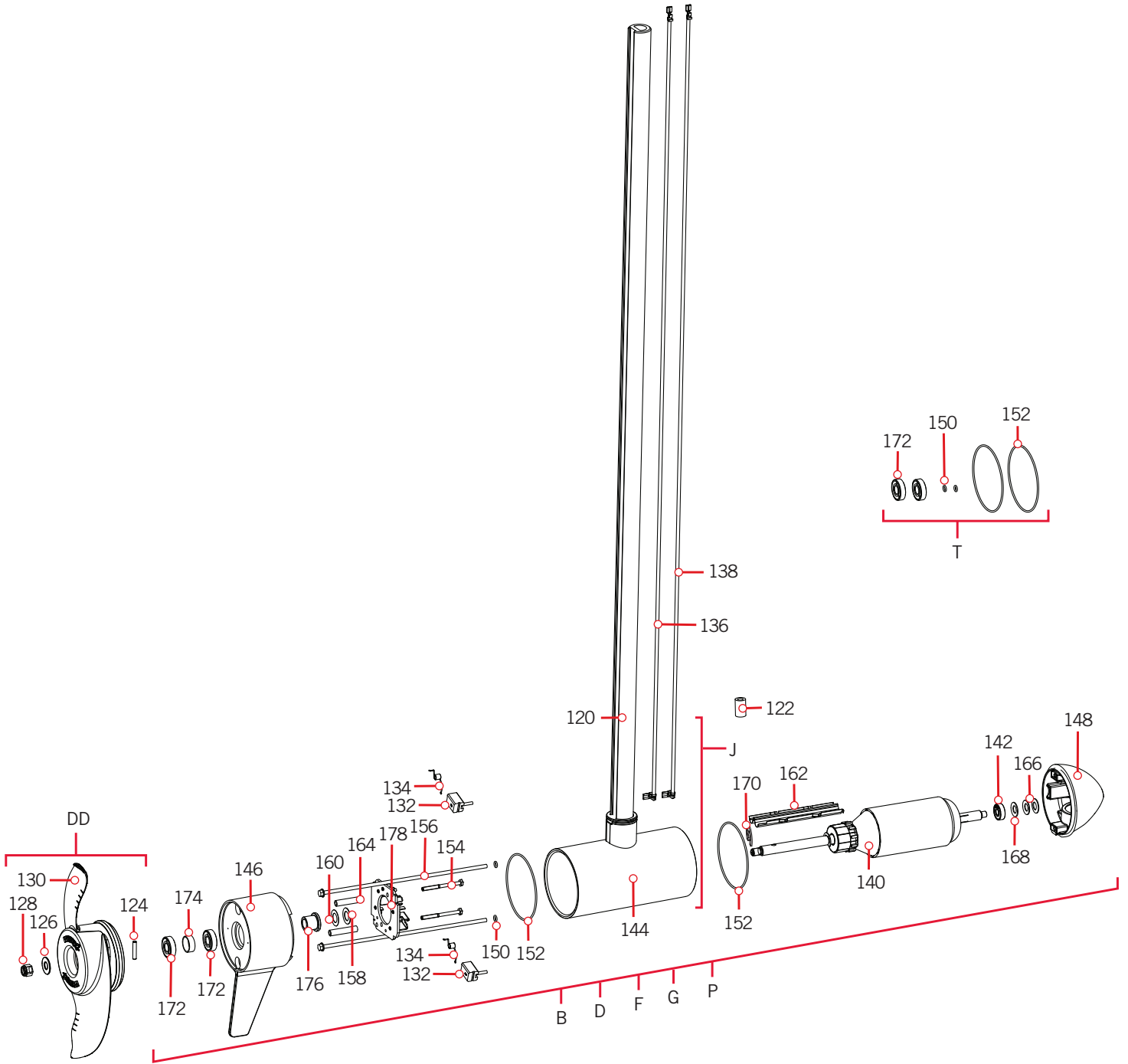
▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST

24 Volt 4" Motor Parts Diagram



PARTS DIAGRAM & PARTS LIST

24 Volt 4" Motor Parts List

Assembly	Part #	Description	Quantity
B	2777034	MTR/TUBE ASM 80# 54" TRV BT *MOTOR & TUBE* *54* *4* *COPILOT*	1
F	2777035	MTR/TUBE ASM 80# 54" TRV-M BT *MOTOR & TUBE* *54* *4* *EUROPE ONLY*	1
D	2777036	MTR/TUBE ASM 80# 60" RT TRV BT *MOTOR & TUBE* *60* *4*	1
G	2777037	MTR/TUBE 80# 60" RT TRV-M BT *MOTOR & TUBE* *60* *4* *EUROPE ONLY*	1
P	2777042	MTR/TUBE ASM 80# 72" *MOTOR & TUBE* *72* *4* *EUROPE ONLY*	1
J	2777398	CTR HSG,CB,80#,SW, UP TO 60" *TUBE* *4*	1
DD	1378132	PROP IND 233160 WDLS WDG II *4* *80LB THRUST*	1
T	2889460	SEAL & O-RING KIT *80LB THRUST* *4*	1
Item	Part #	Description	Quantity
120	✘	TUBE-COMP,WHT,54",1/4", "M",T2 *54"*	1
	✘	TUBE-COMP,WHT,60",1/4", "M",T2 *60"*	1
	✘	TUBE-COMP,WHT,60",1/4", WALL,T2 *60"*	1
	✘	TUBE-COMP,WHT,72",1/4", "M",T2 *72"*	1
	✘	TUBE-COMP,WHT,72",1/4" WALL,T2 *72"*	1
122	2307312	BEAD-FERRITE *M SKU* *EUROPE ONLY*	1
124	2262658	PIN-DRIVE *80LB THRUST* *4*	1
126	2091701	WASHER-PROP (LARGE) *80LB THRUST* *4*	1
128	2198401	ANODES, ZINC, 4.0"LWR UNIT *80LB THRUST* *4*	1
130	2331160	PROP-WW2 (4) w/ADP.RING *4* *80LB THRUST*	1
132	188-094	BRUSH W/TERMINAL *4* *80LB THRUST*	2
134	975-041	SPRING - TORSION *4* *80LB THRUST*	2
▲	✘	RIVET - .25" *4* *80LB THRUST*	6
136	640-133	LEADWIRE RED 10AWG 66-1/4 XLP *COPILOT* *54"*	1
	640-126	LEADWIRE RED 10AWG 71" XLP *60"*	1
	640-155	LEADWIRE RED 10AWG 83.625 XLP *72"*	1
138	640-025	LEADWIRE BLK 10 AWG 66 3/4 XLP *COPILOT* *54"*	1
	640-022	LEADWIRE BLK 10 AWG 72.5 XLP *60"*	1
	640-053	LEADWIRE BLK 10 AWG 82.375 XLP *72"*	1
▲	✘	BRUSH HOLDER *4* *80LB THRUST*	2
▲	✘	CONNECTOR 1/4 MALE TAB QD *4* *80LB THRUST*	2
140	2-100-214	ARM ASSY 24V 4" 80# (WW2) *80LB THRUST* *4.0*	1
142	140-010	BEARING - BALL *80LB THRUST* *4.0*	1
144	✘	CTR HSG ASM 4.0" SW CB MGNTZD *80LB THRUST* *4.0*	1
146	2-300-370	BRUSH END HSG ASY SW/W 4.0 *80LB THRUST* *4.0*	1
148	421-376	HSG PLN END 4" SW WHT BS *80LB THRUST* *4.0*	1

● Only available with models factory installed with CoPilot.

◆ Only available with models factory installed with i-Pilot.

▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
150	701-009	O-RING *80LB THRUST* *4.0*	2
152	701-043	O-RING *80LB THRUST* *4.0*	2
154	830-027	SCREW - SELF-THREAD 10-32X2.25 *80LB THRUST* *4.0*	2
156	830-094	THRU BOLT 12-24 x 10.31 *80LB THRUST* *4.0*	2
158	990-051	WASHER - STEEL THRUST *80LB THRUST* *4.0*	1
160	990-052	WASHER - NYLATRON *80LB THRUST* *4.0*	1
162	582-013	CLIP, RETAINING SHORT *80LB THRUST* *4.0*	1
164	973-025	SPACER - BRUSHPLATE *80LB THRUST* *4.0*	2
166	992-010	WASHER - BELLEVILLE *80LB THRUST* *4.0*	2
168	990-045	SPACER - THRUST *80LB THRUST* *4.0*	1
170	788-040	RETAINING RING	1
172	880-025	SEAL	2
174	725-095	PAPER TUBE, SEAL	1
176	144-017	BEARING, FLANGE	1
178	9-738-004	BRUSH PLATE 4" TERMINAL *4"* *80LBS THRUST*	1

● Only available with models factory installed with CoPilot.

▲ Not shown on Parts Diagram.

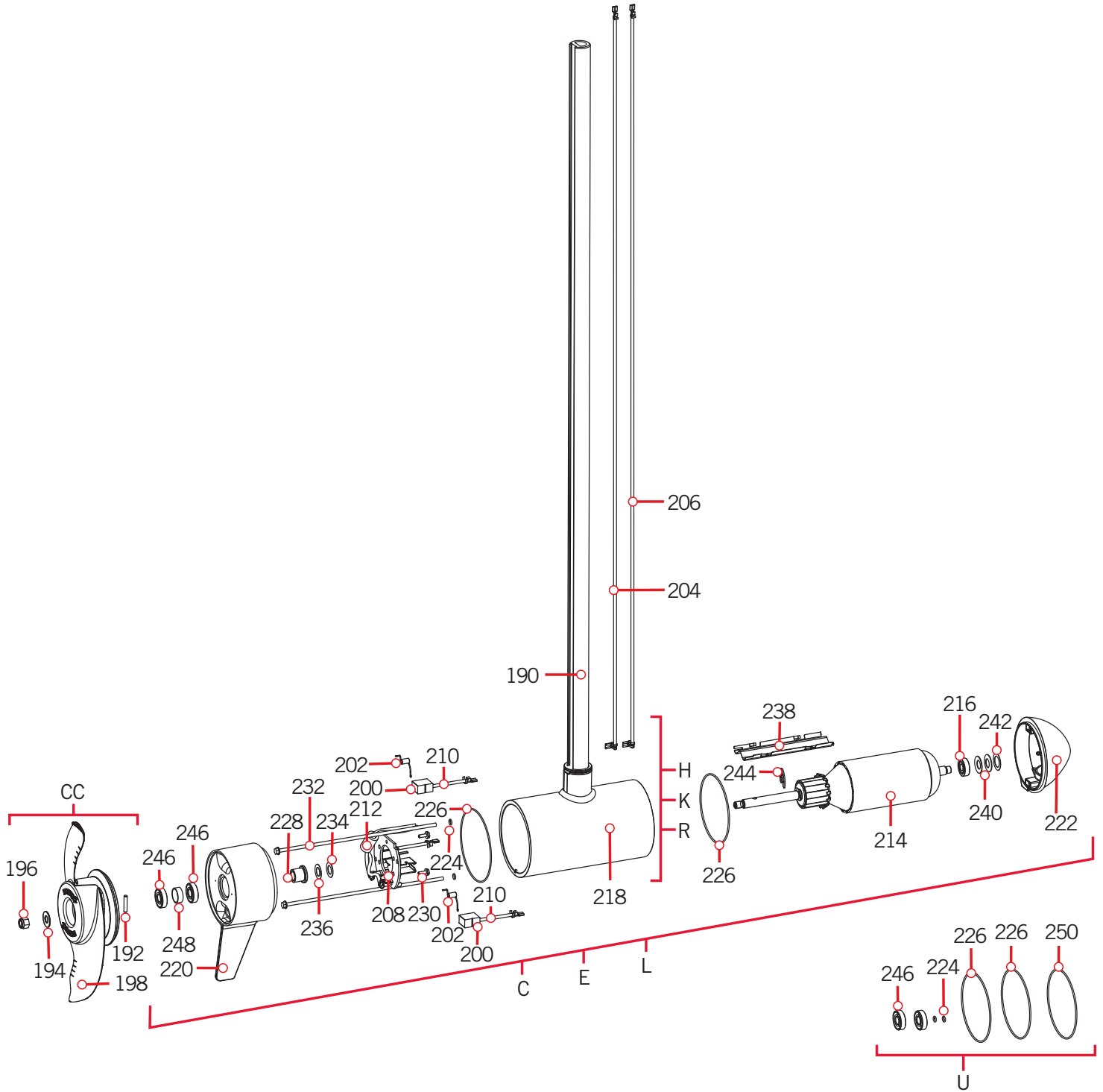
✱ This part is included in an assembly and cannot be ordered individually.

◆ Only available with models factory installed with i-Pilot.

● Only available with models factory installed with i-Pilot Link.

PARTS DIAGRAM & PARTS LIST

36 Volt 4.5" Motor Parts Diagram



PARTS DIAGRAM & PARTS LIST

36 Volt 4.5" Motor Parts List

Assembly	Part #	Description	Quantity
C	2777083	MTR/TUBE 112# 60" RT TRV BT *MOTOR & TUBE* *60* *4.5*	1
E	2777084	MTR/TUBE 112# 72" RT TRV BT *MOTOR & TUBE* *72* *4.5*	1
L	2777198	MTR/TUBE 112# 87" RT TRV BT *MOTOR & TUBE* *87* *4.5*	1
H	2777343	CTR HSG,CB,112#,SW, UP TO 60" *TUBE* *4.5*	1
K	2777344	CTR HSG,CB,112#,SW, 72" *TUBE* *4.5*	1
R	2777356	CTR HSG,CB, 112#, SW, 87" *TUBE* *4.5*	1
CC	1378160	PROP KIT 2341160 112# WW2 *4.5* *112LB THRUST*	1
U	2881450	SEAL & O-RING KIT *112LB THRUST* *4.5*	1
Item	Part #	Description	Quantity
190	✘	TUBE-COMP,WHT,72",1/4" WALL,T2 *72"*	1
	✘	TUBE-COMP,WHT,60",1/4" WALL,T2 *60"*	1
	✘	TUBE-COMP, WHT, 87",, 1/4" WALL *87"*	1
192	2262658	PIN-DRIVE 3/16" DIAMETER LG (SS) *112LB THRUST* *4.5*	1
194	2091701	WASHER-PROP (LARGE) *112LB THRUST* *4.5*	1
196	2198401	ANODES, ZINC, 4.5"LWR UNIT *112LB THRUST* *4.5*	1
198	2341160	PROP-WW2 (4.5") w/ADP.RING *112LB THRUST* *4.5*	1
200	188-095	BRUSH *4.5* *112LB THRUST*	2
202	975-045	SPRING - TORSION *4.5* *112 LB THRUST*	2
▲	✘	RIVET - .25" *4.5* *112LB THRUST*	6
204	640-145	LEADWIRE RED 10AWG 75 7/8" GPT	1
	640-149	LEADWIRE RED 10AWG 88" GPT *72"*	1
	640-157	LEADWIRE RED 10 AWG 100" GPT *87"*	1
206	640-049	LEADWIRE BLK 10AWG 88.50" GPT *72"*	1
	640-045	LEADWIRE BLK 10 AWG 76.5 GPT *60"*	1
	640-057	LEADWIRE BLK 10A 100.5" GPT *87"*	1
▲	✘	BRUSH HOLDER *4.5* *112LB THRUST*	2
208	9-738-011	BRUSH PLATE *4.5* *112LB THRUST*	1
210	2260731	TERMINAL 1/4" MALE TAB-THREE *4.5* *112LB THRUST*	2
212	2307312	BEAD-FERRITE *4.5* *112LB THRUST*	1
214	2-100-245	ARMATURE ASY 4.5"LWR UNIT *112LB THRUST* *4.5*	1
216	140-014	BEARING-BALL 6000 *112LB THRUST* *4.5*	1
218	✘	CTR HSG ASY 4.5" MAG FW CB *112LB THRUST* *4.5*	1
220	2-300-176	BRUSH END HSG ASY 4.5" SW *112LB THRUST* *4.5*	1
222	421-241	PLAIN END HSG 4.5" PNTD SW *112LB THRUST* *4.5*	1
224	701-009	O-RING *112LB THRUST* *4.5*	2
226	701-098	O-RING, 98MM X 2MM *112LB THRUST* *4.5*	2

● Only available with models factory installed with CoPilot.

◆ Only available with models factory installed with i-Pilot.

▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
228	144-017	BEARING, FLANGE	1
230	2053410	SCREW-#8-32 X 1/2 TRI-LOBE HEX *112LB THRUST* *4.5*	2
232	830-094	THRU BOLT 12-24 X10.31 *112LB THRUST* *4.5*	2
234	990-051	WASHER - STEEL THRUST *4.0* *112LB THRUST* *4.5*	1
236	990-052	WASHER - NYLATRON *112LB THRUST* *4.5*	1
238	582-016	CLIP-RETAINING, SONAR *112LB THRUST* *4.5*	1
240	992-011	WASHER - BELLEVILLE *112LB THRUST* *4.5*	2
242	990-011	WASHER-SHIM OD 1",ID.630"SS *112LB THRUST* *4.5*	1
244	788-040	RETAINING RING	1
246	880-025	SEAL	2
248	725-095	PAPER TUBE, SEAL	1
250	✘	O-RING, 107 MM X 1.78MM, 70 BUNA	1

● Only available with models factory installed with CoPilot.

▲ Not shown on Parts Diagram.

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

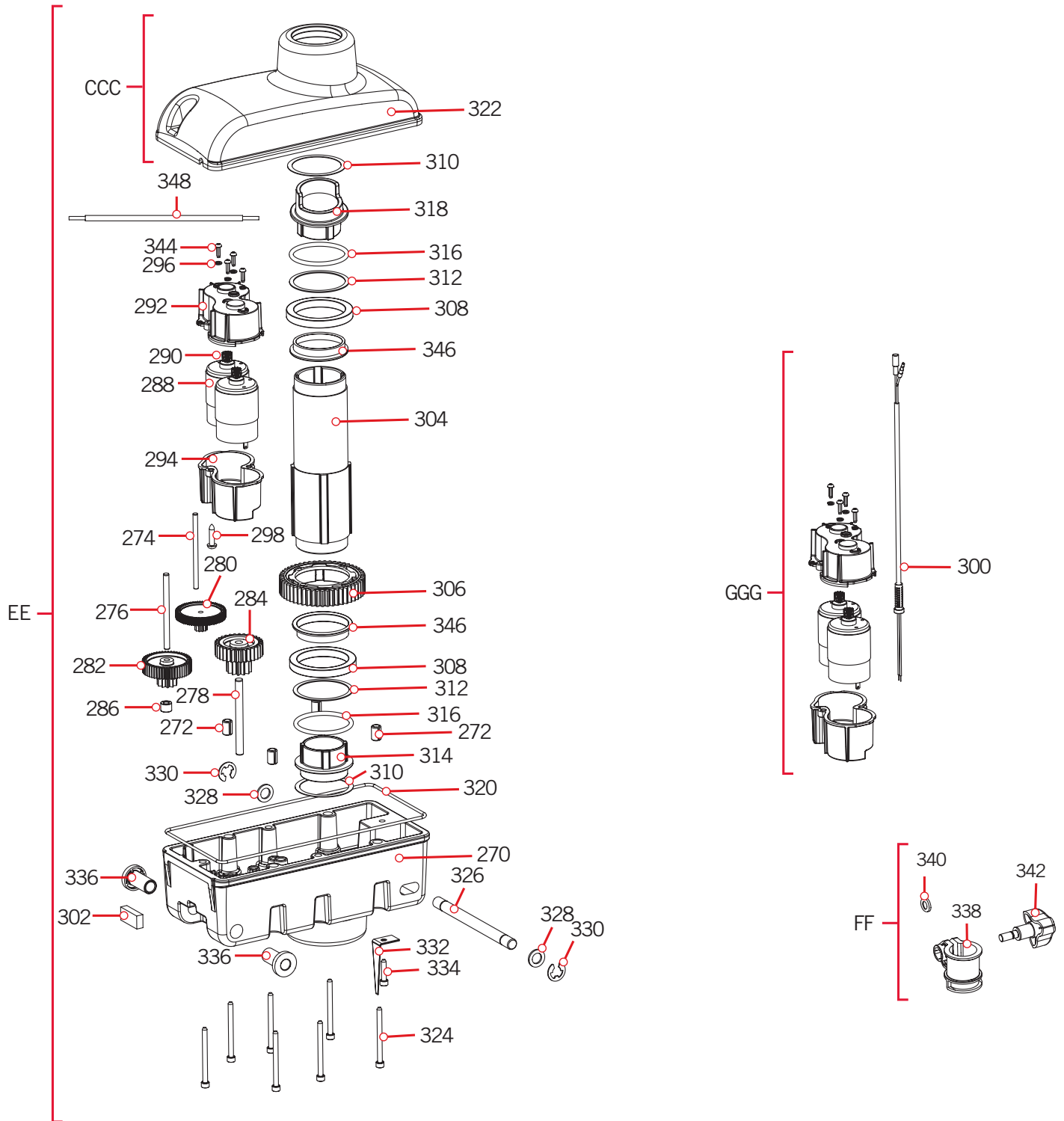
◆ Only available with models factory installed with i-Pilot.

● Only available with models factory installed with i-Pilot Link.

PARTS DIAGRAM & PARTS LIST

RIPTIDE TERROVA STEERING HOUSING

87" Motor Steering Housing Parts Diagram



PARTS DIAGRAM & PARTS LIST

87" Motor Steering Housing Part List

Assembly	Part #	Description	Quantity
EE	2997028	STEERING HSG ASM 36V 112 SW *87"**	1
GGG	2777063	STEERING MOTOR KIT, 36V SW T2	1
CCC	2776562	STEERING HSG TOP SW / GEAR KIT	1
FF	2771500	DEPTH COLLAR/KNOB ASSY	1
Item	Part #	Description	Quantity
270	2326567	STEERING HSG,BTTM,SW,WHT	1
272	✘	PIN-ROLL 5/16" X 1/2"	4
274	✘	SHAFT-GEAR, FIRST CLUSTER	1
276	✘	SHAFT-GEAR,INTERMED.CLUSTER	1
278	✘	SHAFT-GEAR, THIRD CLUSTER	1
280	2322210	GEAR & PINION,DR. HSG, STAGE 2	1
282	2302250	GEAR & PINION,DR. HSG, STAGE 3	1
284	2302255	GEAR & PINION,DR. HSG, STAGE 4	1
286	2321730	SPACER,GEAR CLUSTER	1
288	✘	MOTOR, STEERING 36V FW T2	2
290	2322215	PINION GEAR, DR.HSG, STAGE 1	2
292	2322521	CASE-MTR, STEER HSG, TOP w/HOLES *36 VOLT*	1
294	2322525	CASE-MOTOR,STRG HSG,BTM	1
296	2051710	SPLIT LOCK WASHER 3MM	4
298	2043412	SCREW-#8-18 X 3/4 TY AB SS PPH	1
300	✘	LEADWIRE,STEERING MOTOR	1
302	2308601	BREATHER FILTER, DR.HOUSING	1
304	2322031	TUBE-OUTPUT, SALTWATER	1
306	2322200	GEAR-OUTPUT	1
308	2327315	BUSHING,ALUMIN. SPACER ST	2
310	2321704	WASHER-THRUST, STEERING	2
312	2321720	SHIM,O-RING	2
314	2321510	COLLAR-DRIVE,BOTTOM	1
316	2324608	O-RING,224, STR HSG	2
318	2321515	LINER OUTPUT TUBE	1
320	2324604	O-RING, CASE SEAL	1
322	✘	HOUSING-STEERING, TOP, SW	1
324	2323408	SCREW-#8-32 X 2.0 SHCS SS	7
326	2322601	PIN-LATCH, SS	1
328	2321702	WASHER-FLAT .375 NYLON	2
330	2263011	E-RING 3/8 DIA. SHAFT	2

● Only available with models factory installed with CoPilot.

◆ Only available with models factory installed with i-Pilot.

▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
332	2322702	SPRING, LATCH PIN SS	2
334	2323410	SCREW-#8-32 X .75 SHCS SS	1
336	2327310	BUSHING, PIVOT PIN	2
338	2321500	DEPTH COLLAR 1.3	1
340	2321702	WASHER-FLAT .375 NYLON	1
342	2260906	KNOB-SOFT GRIP,HG/DR,SS	1
344	2053422	SCREW-M3-.5 X 10 PPH, ZPS	4
346	2327314	BUSHING, PRO STEERING SW	2
348	2320321	WIRE EXTENSION, 112" THRUST MOTOR	1
▲	2325502	DECAL, STOW / DEPLOY, T2	1

● Only available with models factory installed with CoPilot.

▲ Not shown on Parts Diagram.

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

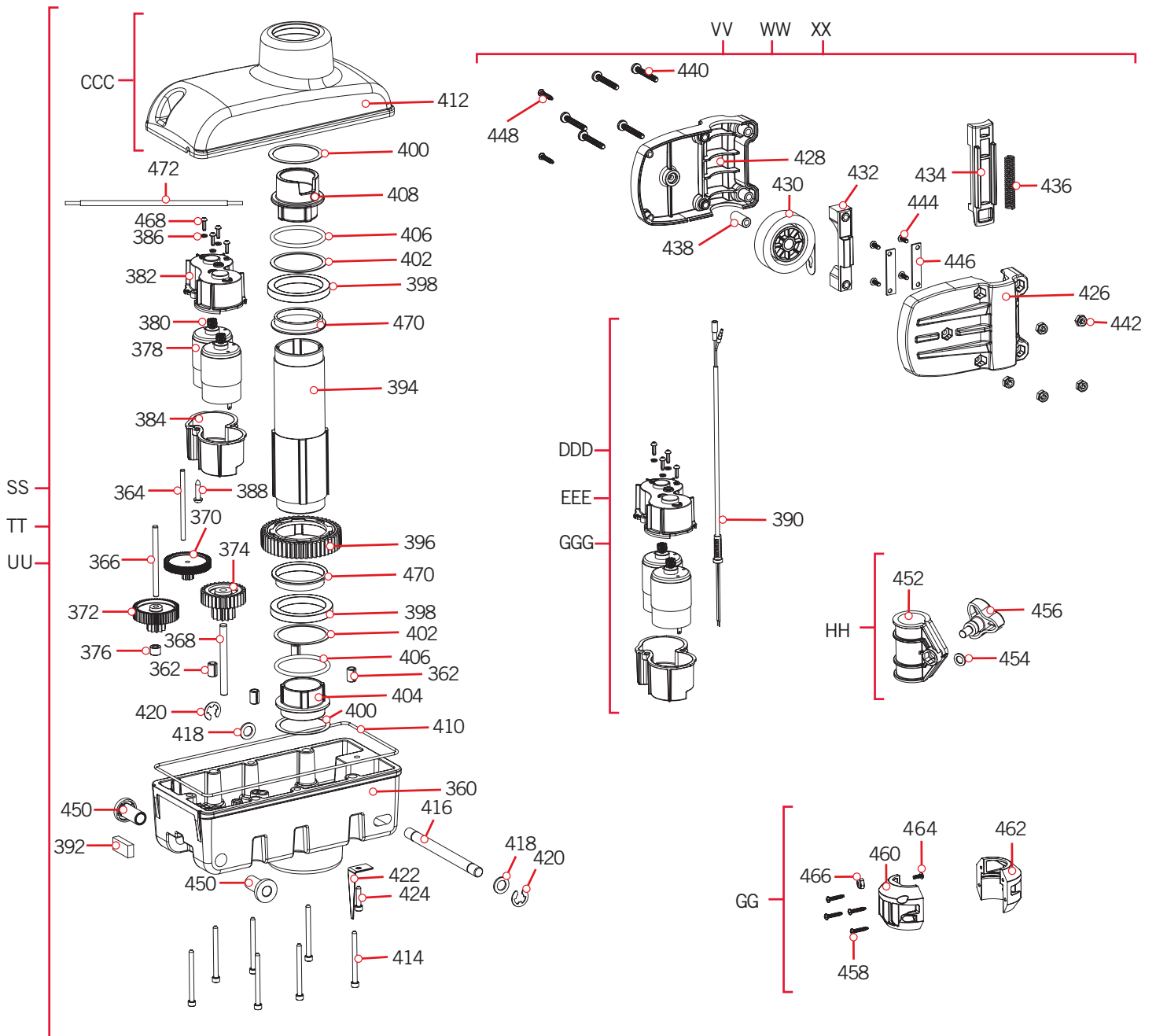
◆ Only available with models factory installed with i-Pilot.

● Only available with models factory installed with i-Pilot Link.

PARTS DIAGRAM & PARTS LIST

RIPTIDE TERROVA STEERING HOUSING

54", 60" & 72" Motor Steering Housing & Lift Assist Parts Diagram



PARTS DIAGRAM & PARTS LIST



54", 60" & 72" Motor Steering Housing & Lift Assist Parts List

Assembly	Part #	Description	Quantity
SS	2997064	STEERING HSG ASM 12V SW	1
TT	2997065	STEERING HSG ASM 24V SW	1
UU	2997063	STEERING HSG ASM 36V SW	1
VV	2992730	LIFT ASSIST, 55# SW	1
WW	2992731	LIFT ASSIST, 80# SW	1
XX	2992732	LIFT ASSIST, 112# SW	1
CCC	2776562	STEERING HSG TOP SW / GEAR KIT	1
DDD	2777060	STEERING MOTOR KIT, 12V T2	1
EEE	2777061	STEERING MOTOR KIT, 24V T2	1
GGG	2777063	STEERING MOTOR KIT, 36V SW T2 *DUAL MOTOR*	1
GG	2771523	COLLAR-FRONT/BACK, LFT ASST KIT	1
HH	2771505	DEPTH COLLAR KIT, TERROVA BT	1
Item	Part #	Description	Quantity
360	2326567	STEERING HSG,BTTM,SW,WHT	1
362	✘	PIN-ROLL 5/16" X 1/2"	4
364	✘	SHAFT-GEAR, FIRST CLUSTER	1
366	✘	SHAFT-GEAR,INTERMED.CLUSTER	1
368	✘	SHAFT-GEAR, THIRD CLUSTER	1
370	2322210	GEAR & PINION,DR. HSG, STAGE 2	1
372	2302250	GEAR & PINION,DR. HSG, STAGE 3	1
374	2302255	GEAR & PINION,DR. HSG, STAGE 4	1
376	2321730	SPACER,GEAR CLUSTER	1
378	✘	MOTOR, STEERING 12V FW T2 *SEE DDD*	1
	✘	MOTOR, STEERING 24V FW T2 *SEE EEE*	1
	✘	MOTOR, STEERING 36V FW T2 *SEE GGG*	2
380	2322215	PINION GEAR, DR.HSG, STAGE 1	1
382	2322520	CASE-MOTOR,STRG HSG, TOP *12 VOLT* *24 VOLT*	1
	2322521	CASE-MTR, STEER HSG, TOP w/HOLES *36 VOLT*	1
384	2322525	CASE-MOTOR,STRG HSG,BTM	1
386	2051710	SPLIT LOCK WASHER 3MM	4
388	2043412	SCREW-#8-18 X 3/4 TY AB SS PPH	1
390	✘	LEADWIRE,STEERING MOTOR *SEE DDD, EEE OR GGG*	1
392	2308601	BREATHER FILTER, DR.HOUSING	1
394	2322031	TUBE-OUTPUT, SALTWATER	1
396	2322200	GEAR-OUTPUT	1
398	2327315	BUSHING,ALUMIN. SPACER ST	2

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▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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

PARTS DIAGRAM & PARTS LIST

Item	Part #	Description	Quantity
400	2321704	WASHER-THRUST, STEERING	2
402	2321720	SHIM,O-RING	2
404	2321510	COLLAR-DRIVE,BOTTOM	1
406	2324608	O-RING,224, STR HSG	2
408	2321530	LINER OUTPUT TUBE, LIFT ASSIST	1
410	2324604	O-RING, CASE SEAL	1
412	✘	HOUSING-STEERING, TOP, SW	1
414	2323408	SCREW-#8-32 X 2.0 SHCS SS	7
416	2322601	PIN-LATCH, SS	1
418	2321702	WASHER-FLAT .375 NYLON	2
420	2263011	E-RING 3/8 DIA. SHAFT	2
422	2322702	SPRING, LATCH PIN SS	2
424	2323410	SCREW-#8-32 X .75 SHCS SS	1
426	2326546	HOUSING-RIGHT,LIFT ASSIST, SW	1
428	2326541	HOUSING-LEFT, LIFT ASSIST, SW	1
430	2997903	ASSEMBLY-HUB/SPRING, 55# INCNL	1
	2997904	ASSEMBLY-HUB/SPRING, 80# INCNL	1
	2997905	ASM-HUB/SPRING,112# INCN	1
432	2322300	GUIDE,DR.DOG, LIFT ASSIST	1
434	2328605	ENGAGEMENT DOG, LIFT ASST	1
436	2322726	SPRING,COMPRESSION,.360" OD SS	1
438	2322610	PIN-AXLE, LIFT ASSIST	1
440	2323430	SCREW-#10-24 X 1-3/8, PPH	5
442	2333101	NUT-HEX #10-24 UNC-2B NYL SS	5
444	2372103	SCREW-#6 X .375 PLASTITE SS	4
446	2321955	BRACKET, LIFT ASSIST	2
448	3393450	SCREW-#6-19 X .75 PPH HI-LO	2
450	2327310	BUSHING, PIVOT PIN	2
452	2321505	DEPTH COLLAR, LIFT ASSIST	1
454	2321702	WASHER-FLAT .375 NYLON	1
456	2260906	KNOB-SOFT GRIP,HG/DR,SS	1
458	3393450	SCREW-#6-19 X.75 PPH HI-LOW SS	4
460	2321523	COLLAR-FRONT, LIFT ASSIST, SW	1
462	2321527	COLLAR-BACK, LIFT ASSIST, SW	1
464	2372103	SCREW-#6 X .375 PLASTITE SS	1
466	2323110	NUT-HEX, 6-32 NYLOK SS	1
468	2053422	SCREW-M3-.5 X 10 PPH, ZPS	4

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▲ Not shown on Parts Diagram.

● Only available with models factory installed with i-Pilot Link.

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PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
470	2327314	BUSHING, PRO STEERING SW	2
472	2320321	WIRE EXTENSION, 112" THRUST MOTOR	1
▲	2325502	DECAL, STOW / DEPLOY, T2	1

● Only available with models factory installed with CoPilot.

▲ Not shown on Parts Diagram.

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

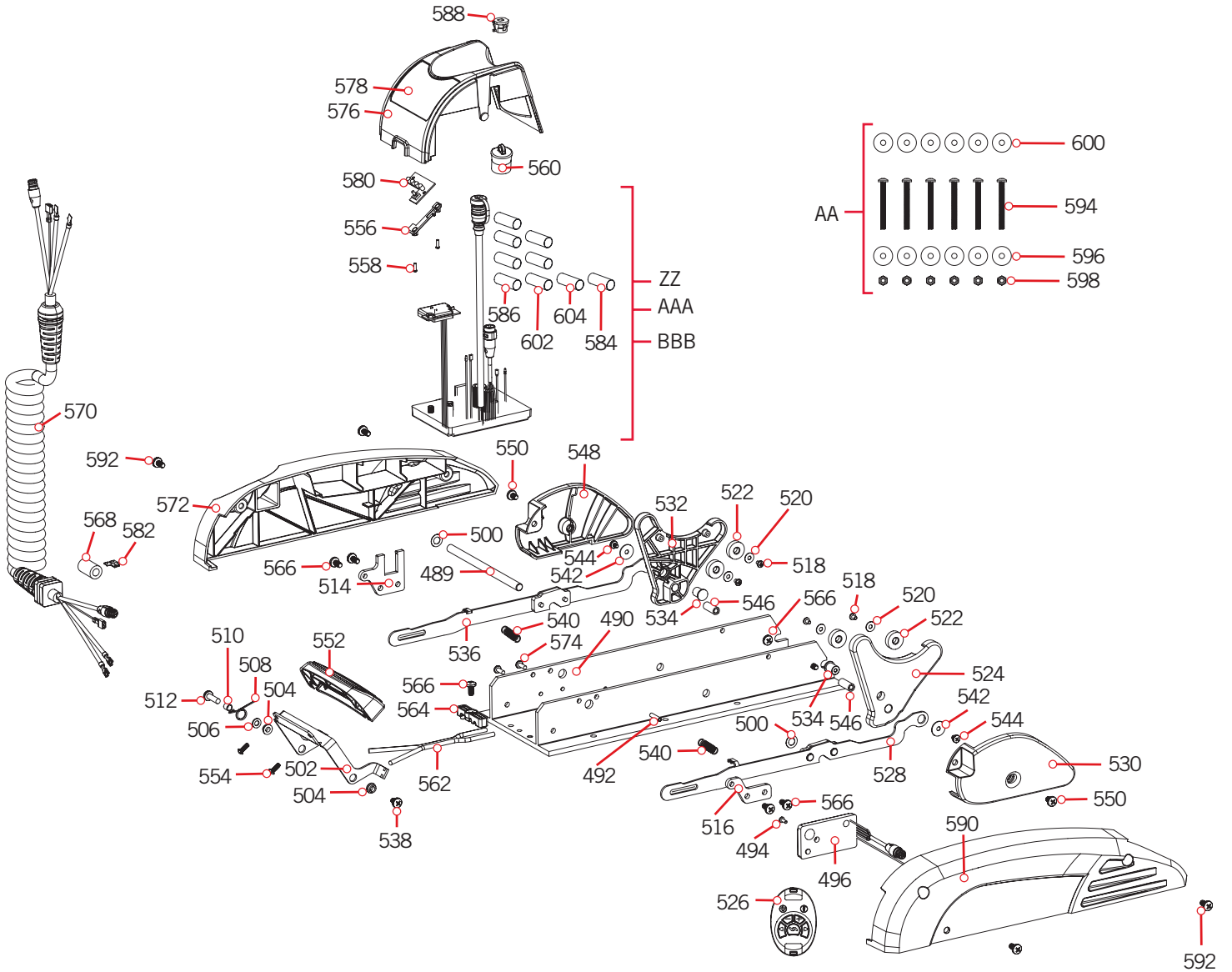
◆ Only available with models factory installed with i-Pilot.

● Only available with models factory installed with i-Pilot Link.

PARTS DIAGRAM & PARTS LIST

RIPTIDE TERROVA MOUNT

Mount Parts Diagram



PARTS DIAGRAM & PARTS LIST

Mount Parts List

Assembly	Part #	Description	Quantity
ZZ	2774066	CTRL BRD, 24/36V TRV BT w/SHRNK	1
AAA	2774067	CTRL BRD, 12V TRV BT w/SHRNK *i-PILOT/i-PILOT LINK*	1
BBB	2774069	CTRL, BRD, 24/36V IP TRV BT, SHRNK *i-PILOT/i-PILOT LINK*	1
AA	2994864	BAG ASSY-TERROVA/V2,MNTG HDW	1
Item	Part #	Description	Quantity
490	2321908	BASE-EXTRUSION, MACH, SW	1
492	2322912	PIN-ROLL .1875 X 1.000 SS	2
494	2332103 ●	SCREW-#8-18 X 1/2 (SS) *COPILOT*	1
496	2994097 ●	TRANSMITTER ASY, TRRV CPLT *COPILOT*	1
498	2322603	PIN-PIVOT, SS	1
500	2333100	NUT-SPEED (SS) 3HP-SS	2
502	2320406	HANDLE, RELEASE, SW	1
504	2322604	BUSHING,HANDLE,GOBEIL	2
506	2071716	WASHER-FLAT SS .253 x .470	1
508	2322701	SPRING, TORSION	1
510	2301700	SPACER-RELEASE LEVER-BRASS	1
512	2073408	SCREW-1/4-20 X 7/8 PPH S/S	1
514	2321941	BRACKET, STRAIN RELIEF SW	1
516	2321951	BRACKET, SIDEPLATE SW	1
518	2323412	SCREW-#8-18 X .25 PPH SS TY B	4
520	2321706	WASHER-FLAT #8 .50 OD/.188 SS	4
522	2325117	PAD, RUBBER REST, WHITE	4
524	2323910	RAMP-MOTOR, RIGHT 3-5/8"	1
	2323930	RAMP-MOTOR, RIGHT 4"	1
	2323931	RAMP-MOTOR, RIGHT 4.5"	1
526	2374197 ●	PCB ASY COPLT REC. TERROVA *COPILOT*	1
528	2994201	ARM/SUPPORT BLOCK ASSY,R,SW	1
530	2321920	PLATE-SKID, RIGHT FW *80 LBS* *55 LBS*	1
	2321922	PLATE-SKID, RIGHT *112 LBS*	1
532	2323915	RAMP-MOTOR, LEFT 3 5/8"	1
	2323935	RAMP-MOTOR, LEFT 4"	1
	2323936	RAMP-MOTOR, LEFT 4.5"	1
534	2324706	INSERT-MOTOR RAMP,METAL,SS	2
536	2994203	ARM/SUPPORT BLOCK ASSY,L,SW	1
538	2332104	SCREW-1/4-20 X 5/8 S/S	1

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PARTS DIAGRAM & PARTS LIST

Item	Part #	Description	Quantity
540	2322716	SPRING, EXTENSION, T2	2
542	2321700	WASHER #10 SS	2
544	2323422	SCREW-#10-24 X .25" PPH SS MCH	2
546	2322921	STAND-OFF, ALUM. ANODIZED	2
548	2321925	PLATE-SKID, LEFT *80 LBS* *55 LBS*	1
	2321927	PLATE-SKID, LEFT *112 LBS*	1
550	2323403	SCREW-1/4-20 X.375 MCH SS CRPH	3
552	2320218	COVER, HANDLE COSMETIC SW	1
554	2383446	SCREW-#8-16 X .50" PLASTITE SS	2
556	2320830	LOCKING TAB,PWR/BAT.METER	1
558	2383428	SCREW-#4-24 X 3/8 HI-LO SS	2
560	2320202	CAP-DUST,CONNECTOR, MALE	1
▲	2323406	SCREW-#10-24 X .50 CRPH SS	2
562	2090651	LEADWIRE,10 GA	1
564	2321310	STRAIN RELIEF	1
566	2323405	SCREW-1/4-20 X 1/2" MCH SS	5
568	2307312	BEAD-FERRITE	1
570	2991271	COIL CORD ASY 54"/60" NON-US2 *54"* *60"*	1
	2991275	COIL CORD ASY 72" NON-US * 72"* *112 LBS*	1
	2991277	COIL CORD ASM 84" NON-US * 87"* *112 LBS*	1
572	2323928	SIDEPLATE-LEFT, RT TERROVA	1
574	2323402	SCREW-1/4-20 X .375 T-L, ZP	2
576	2326531	HOUSING-CENTER, RT/ST	1
578	2325658	DECAL,BM/CN/PWR STATUS SW	1
580	2074080	BATTERY METER, 12V, SW	1
	2074081	BATTERY METER, 24V, SW	1
	2074082	BATTERY METER, 36V, SW	1
▲	2321721	SHIM, 2 X 4 X .025"	1
582	2320710	TERMINAL-AMP (T-TAB)	1
584	2325401	SHRINK TUBE-.375 OD X 2.25"	1
▲	2321315	HOLDER-CONNECTOR,NYLON,BLACK	1
586	2305403	SHRINK TUBE-.500 IDX1.0" ADHSV *SALTWATER*	4
588	2322901	STRAIN RELIEF, HEYCO P/N 1852	1
590	2323923	SIDEPLATE-RIGHT, RT/ TERROVA	1
592	2323405	SCREW-1/4-20 X 1/2" T-L SS	4
594	2263462	SCREW-1/4-20 X 2" S/S PPH ADJT	6
596	2261713	WASHER-1/4 FLAT 18-8 SS	6

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▲ Not shown on Parts Diagram.

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PARTS DIAGRAM & PARTS LIST



Item	Part #	Description	Quantity
598	2263103	NUT-1/4-20 NYLOCK SS	6
600	2301720	WASHER-MOUNTING - RUBBER	6
602	2305410	SHRINK TUBE-.315 OD X 2.25" *SALTWATER*	3
604	2305415	SHRINK TUBE-.472 ID X 2.25" *SALTWATER*	1

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● Only available with models factory installed with i-Pilot Link.

RECOMMENDED ACCESSORIES

› ON-BOARD & PORTABLE BATTERY CHARGERS

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



MK212PC



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Introducing the all-new, sleek redesigned Talon. Talon is the only shallow water anchor with up to 15' of anchoring depth, multiple anchoring modes, and control from the bow, transom, console, remote or mobile device.



BUILT-IN WORK LIGHT

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.



UP TO 15' DEEP

Control more water and catch more fish with the first 15' shallow water anchor.



MORE CONTROL OPTIONS

- Control Panel
- Wireless Remote
- Mobile App
- Wireless Foot Switch
- Humminbird® Connectivity
- i-Pilot® & i-Pilot Link™ Remote



BLUETOOTH® CONNECTIVITY

Lets you control Talon from your mobile device and easily update it. Also opens up communication to other control options.

› MINN KOTA ACCESSORIES

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

