

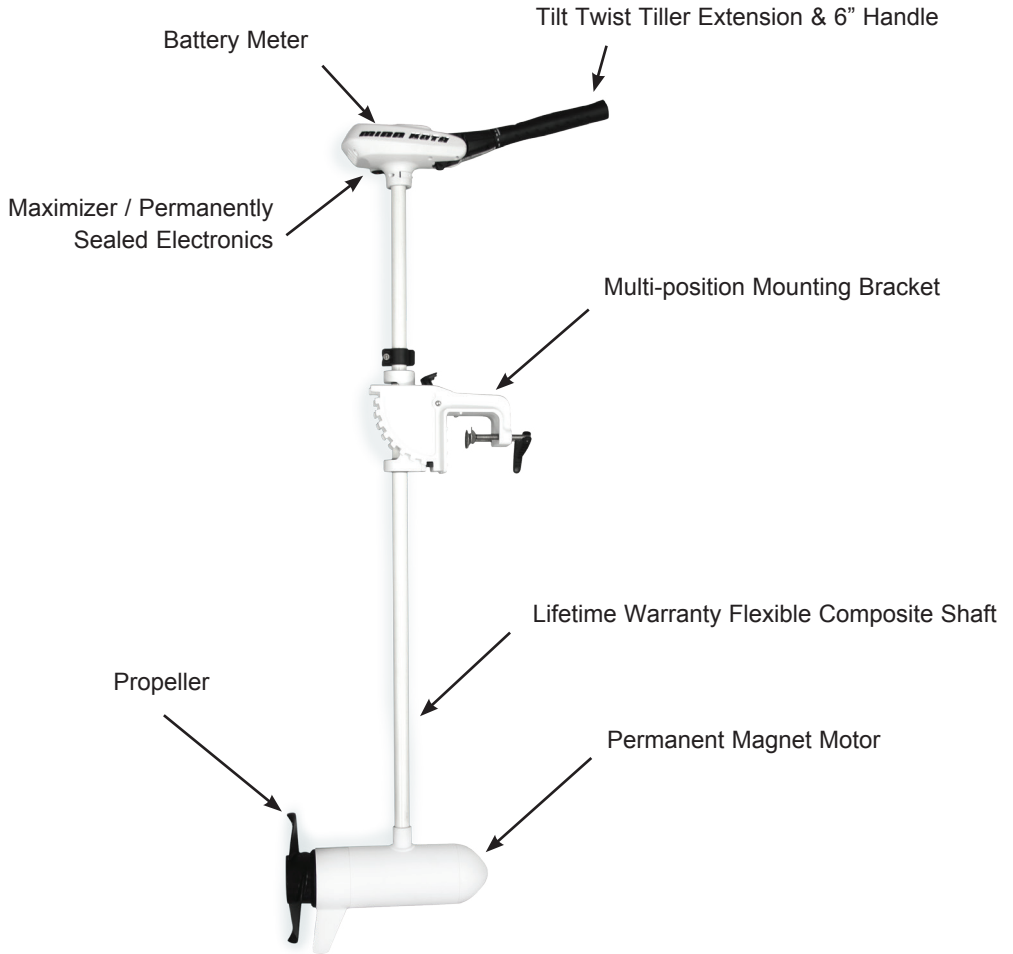


Master User Manual for **RIPTIDE**



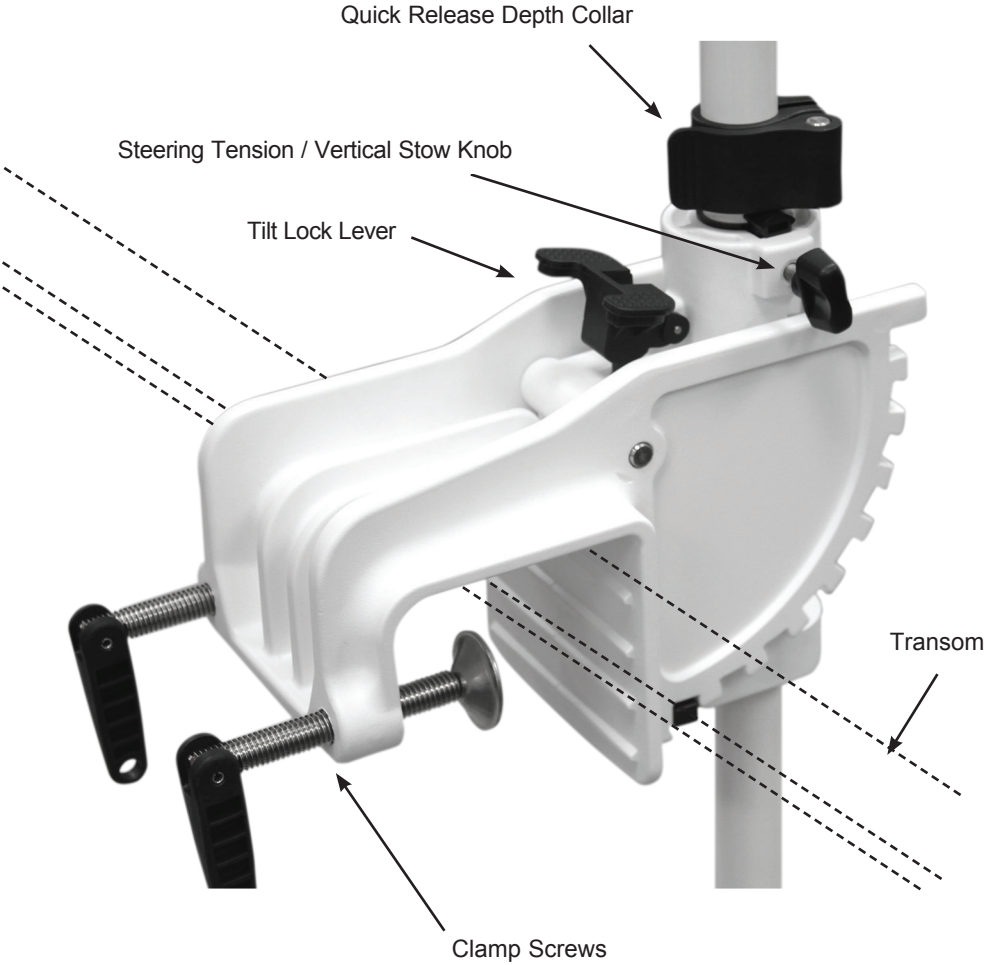
PLEASE THOROUGHLY READ THIS USER MANUAL. FOLLOW ALL INSTRUCTIONS AND HEED ALL SAFETY & CAUTIONARY NOTICES BELOW. USE OF THIS MOTOR IS ONLY PERMITTED FOR PERSONS THAT HAVE READ AND UNDERSTOOD THESE USER INSTRUCTIONS. MINORS MAY USE THIS MOTOR ONLY UNDER ADULT SUPERVISION.

RIPTIDE TRANSOM OVERVIEW



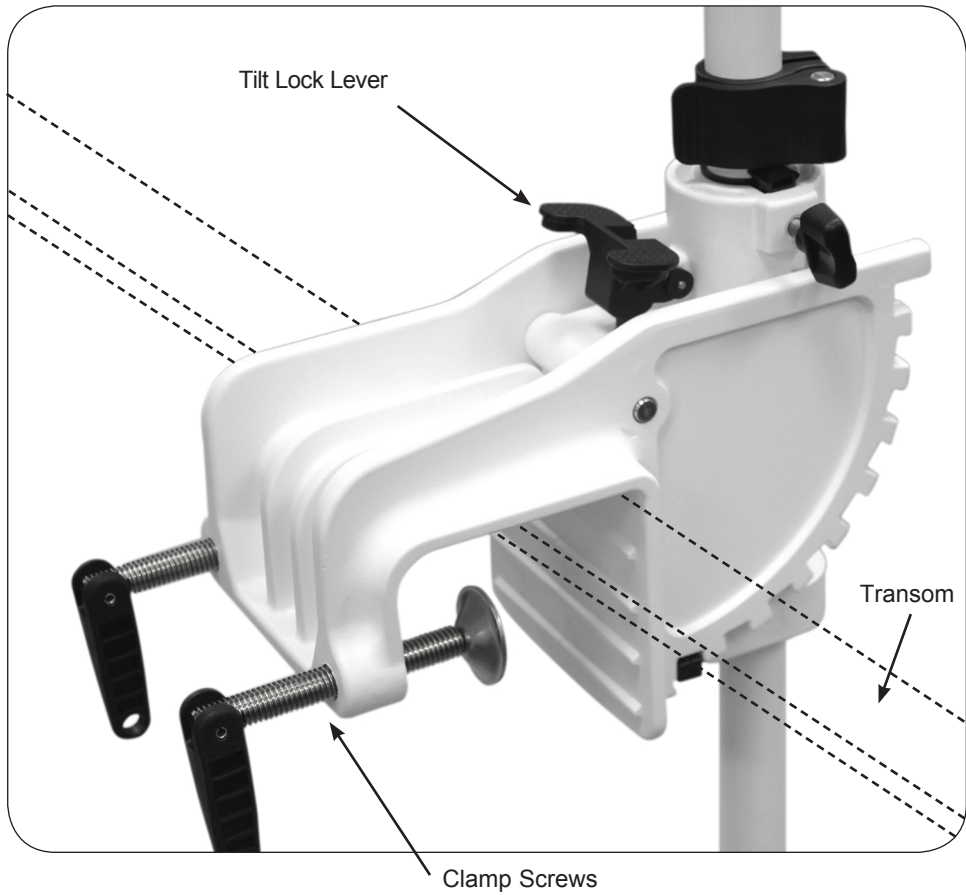
Specifications subject to change without notice.

RIPTIDE TRANSOM MOUNT



INSTALLATION OF THE PRODUCT:

Install the motor on the transom of the boat. Be sure to (hand only) tighten the clamp screws securely. Place the motor on the included transom saver making sure the motor has clearance through the full rotation. Mark and drill holes through transom and secure the transom saver with included screws.



Attention:

- Avoid running your motor with the propeller outside of the water. This may result in injuries from the rotating propeller.
- It is recommended to set the speed selector to zero and place the motor in the deployed position prior to connecting power cables. Disconnect power cables prior to stowing.
- Always ensure that the power cables are not twisted or kinked; and that they are securely routed to avoid a safety or trip hazard. Ensure cables are unobstructed in all locations to avoid damaging the wire insulation. Damage to the insulation could result in failure or injury.
- Always inspect the insulation of the power cables prior to use to ensure they are not damaged.
- Disregarding these safety precautions may result in an electrical short of the battery(s) and/or motor. Always disconnect the motor from the 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. Water in the lower unit may cause an electrical short and damage the lower unit. This damage will not be covered by warranty.

Caution!

- Always operate the motor in a safe distance away from obstructions. Never approach the motor when the propeller is running. Contact with a spinning propeller may endanger you or others.
- Always exercise safe practices when using your motor; stay clear of other watercrafts, swimmers, and any floating objects. Always obey water regulations applicable to your area of operation.
- Never operate the motor while under the influence of alcohol, drugs, medication, or other substances which may impair your ability to safely operate equipment.
- This motor is not suitable for use in strong currents exceeding the thrust level of the motor.

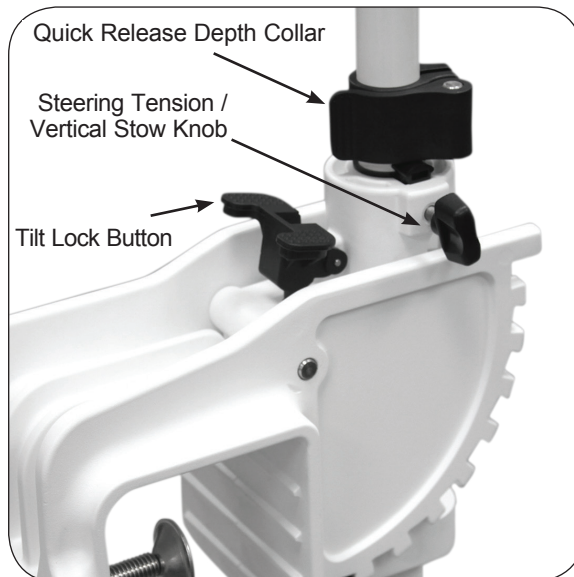
The constant noise pressure level of the motor during use is less than 70dB(A). The overall vibration level does not exceed 2,5m/sec².

OPERATION OF THE PRODUCT:

Stowing and Deploying Your Motor: There are 2 methods for stowing your motor for travel:

Horizontal Stow: While firmly holding the motor shaft, loosen the steering tension knob, press the tilt release lever down, grab the motor shaft and tilt the motor into the boat. Be sure to retighten the steering tension knob and slide the quick release depth collar down to the top of the steering tension knob for transport. To deploy your motor from this stowed position, loosen the quick release collar, reposition and retighten to desired depth location, hold the motor shaft or head firmly, and loosen the steering tension knob, press the tilt release lever while holding control head and gently lower the motor into the water. Retighten the quick release collar. Retighten the steering tension knob to the desired steering tension.

Vertical Stow: While firmly holding the motor shaft, loosen the steering tension knob and lift up on the motor. Retighten the steering tension knob to retain the vertical stow position of the motor. Be sure to slide the quick release depth collar down to the top of the steering tension knob for added security. To deploy your motor from this vertically stowed position, loosen the quick release collar, hold the motor shaft firmly, and loosen the steering tension knob, and gently lower the motor into the water. Retighten the quick release collar. Retighten the steering tension knob to the desired steering tension.



WARNING : WHEN RAISING OR LOWERING MOTOR, KEEP FINGERS CLEAR OF ALL HINGE AND PIVOT POINTS AND ALL MOVING PARTS.

OPERATION OF THE PRODUCT CONT'D:

Tilt and Extension Handle Operation:

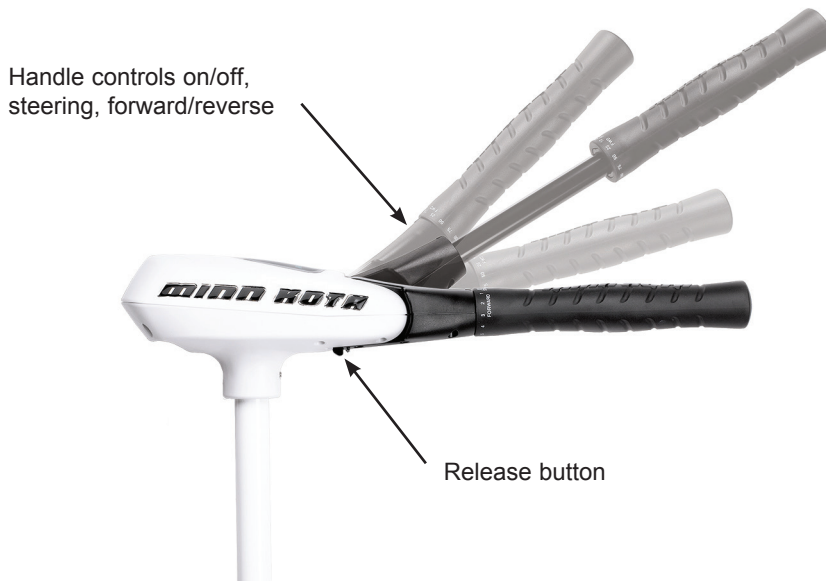
Your Riptide Transom trolling motor features 7 usable handle tilt positions...45°, 30°, and 15° up and down from the 0° (horizontal) position. To use the down positions, you must first press the release button located on the left underside of the pivot handle.

Your Riptide Transom trolling motor handle also features a unique stow position, that is useful for limiting the amount of space required for storage or travel.

**IMPORTANT: THE MOTOR MUST BE IN THE OFF POSITION TO USE TO USE THE STOW POSITION!
FAILURE TO PUT THE MOTOR IN THE OFF POSITION BEFORE
STOWING THE HANDLE WILL RESULT IN JOINT FAILURE.**

First press the release button located on the left underside of the pivot handle, then push the handle down until you feel the handle "lock in" to the stowed position. This will be almost parallel to the motor shaft.

To extend the handle, pull the handle towards you to the desired position. The handle will extend a full 6 inches. To retract, push the handle in until it meets the face of the motor control head.



CAUTION: NEVER OPERATE YOUR MOTOR WHEN IT IS OUT OF THE WATER.

OPERATION OF THE PRODUCT CONT'D:

Steering Tension Adjustment:

The steering tension can be adjusted by tightening or loosening the steering tension knob for the desired steering tension.

Depth Adjustment

The Quick Release Depth Collar can easily be adjusted by opening the lever arm to release the depth collar, sliding it to the desired depth, and then closing the lever arm again. The tension of the quick release depth collar can be adjusted with a screw driver to obtain the proper "feel". **Be careful not to over tighten!**



**PINCH POINT WARNING!!
BE SURE TO FIRMLY HOLD THE MOTOR SHAFT
WHENEVER MAKING ADJUSTMENTS TO THE QUICK
RELEASE DEPTH COLLAR. THE MOTOR CAN SLIDE
DOWN QUICKLY AND CAUSE INJURY.**

BATTERY INFORMATION:

The motor will operate with any deep cycle marine 12 volt battery/batteries. For best results use a deep cycle, marine battery with at least a 115 ampere hour rating. As a general on the water estimate, your 12 volt motor will draw one ampere per hour and your 24 volt motor will draw .75 ampere per hour for each pound of thrust produced when the motor is running on high. The actual ampere draw is subject to your particular environmental conditions and operation requirements. 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 variable rate charger to avoid overcharging.

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.

Advice regarding batteries:

Never connect the (+) and the (-) terminals of the 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 utmost fire danger.

Recommendation: Use battery boxes and covered battery terminal clamps like Minn Kota accessory #MK-BC-1.

These motors are equipped with a "push to test" battery gauge. The LED provides an accurate display of the remaining charge in the battery. It is only accurate when the motor is off. The gauge reads as:

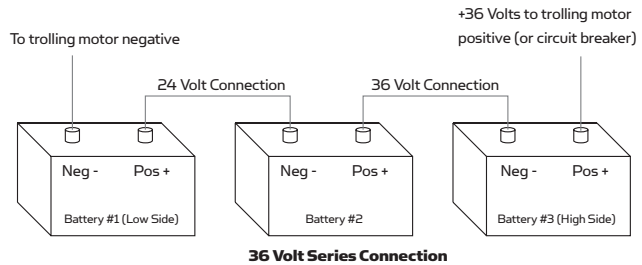
- Four lights indicate full charge.
- Three lights indicate good charge.
- Two lights indicate low charge.
- One light indicates recharge.



HOW TO CONNECT THE BATTERIES IN SERIES (IF REQUIRED FOR YOUR MOTOR)

36 VOLT SYSTEMS:

1. Make sure that the motor is switched off (speed selector on "0").
2. Three 12 volt batteries are required.
3. The batteries must be wired in series, only as directed in wiring diagram, to provide 36 volts.
 - a. Connect a connector cable to the positive (+) terminal of battery 1 and to the negative (-) terminal of battery 2 and another connector cable from the positive (+) terminal of battery 2 to the negative (-) terminal of battery 3.
 - b. Connect positive (+) red lead to positive (+) terminal on battery 3.
 - c. Connect negative (-) black lead to negative (-) terminal of battery 1.
4. 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. See wiring diagram on following pages.



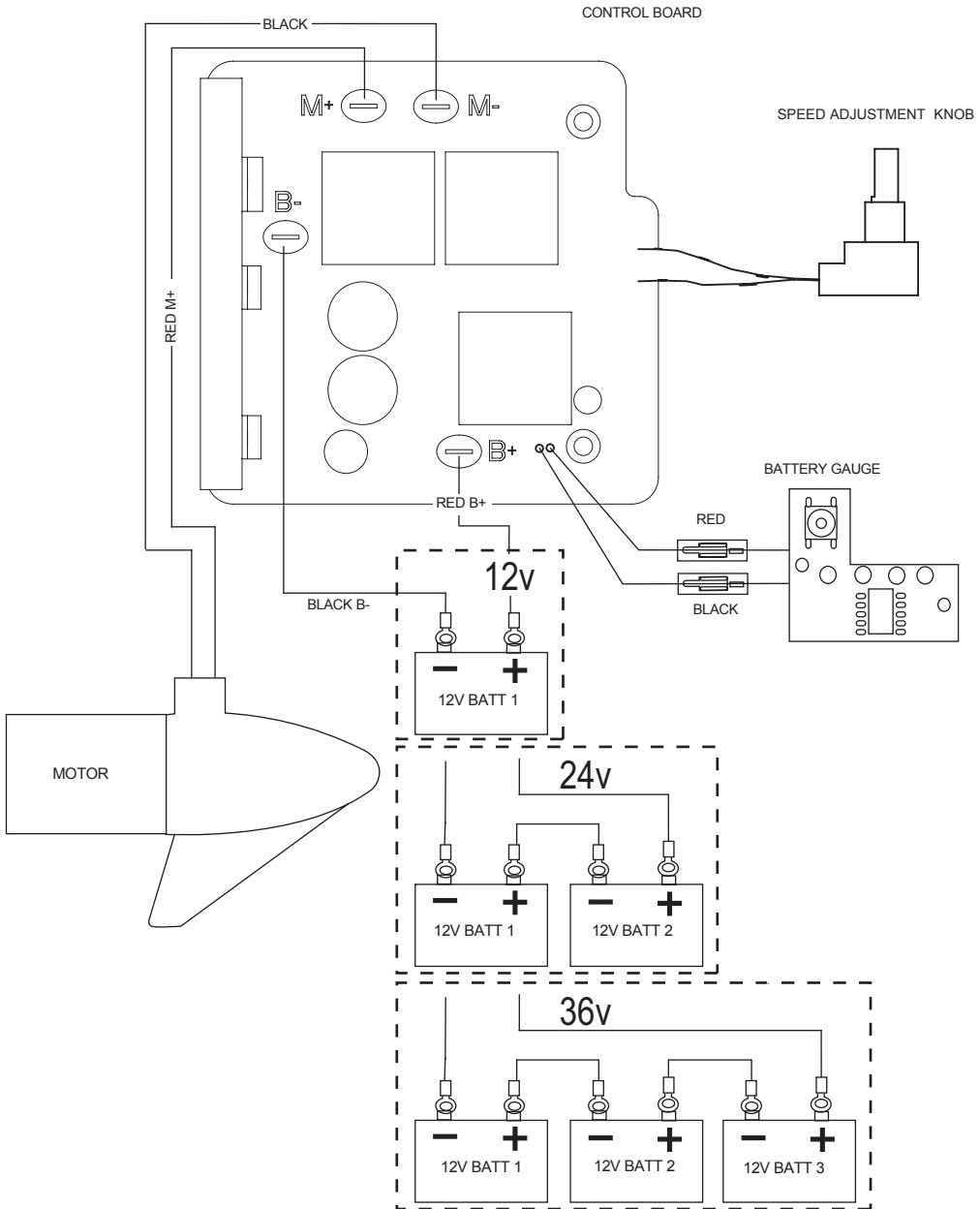
CAUTION

- **Improper wiring of 24/36 volt systems could cause battery explosion!**
- **Keep leadwire wing nut connection tight and solid to battery terminals.**
- **Locate battery in a ventilated compartment.**
- **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.**

12-24-36 VOLT VARIABLE SPEED MODELS

THIS IS A UNIVERSAL MULTI-VOLTAGE DIAGRAM. DOUBLE CHECK YOUR MOTORS VOLTAGE FOR PROPER CONNECTIONS

Over-Current Protection Devices not shown in illustrations.



BOAT RIGGING AND 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.

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 the circuit breaker sizing.

Reference:

United States Code of Federal Regulations: 33 CFR 183 - Boats and Associated Equipment

ABYC E-11: AC and DC Electrical Systems on Boats.

*Conductor Gauge and Circuit Breaker Sizing Table

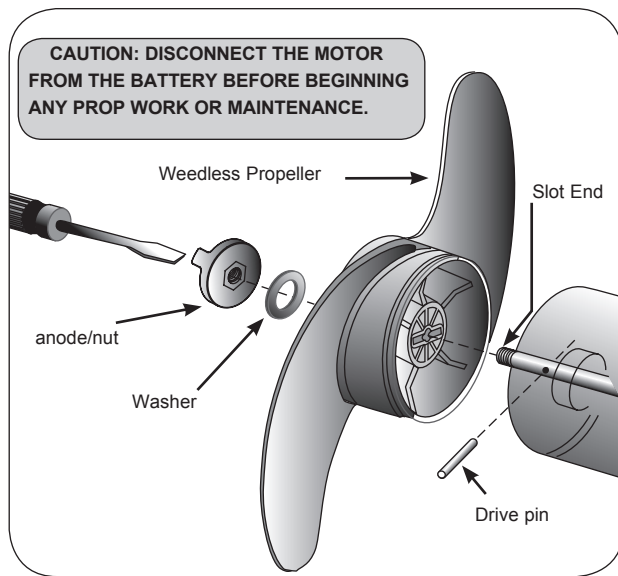
Motor Thrust	Max Amp Draw	Circuit Breaker	Wire Extension Length				
			5 feet	10 feet	15 feet	20 feet	25 feet
30#	30	50 Amp @ 12 VDC	10 AWG	10 AWG	8 AWG	6 AWG	4 AWG
40#, 45#	42		10 AWG	8 AWG	6 AWG	4 AWG	4 AWG
50#, 55#	50	60 Amp @ 12 VDC	8 AWG	6 AWG	4 AWG	4 AWG	2 AWG
70#	42	50 Amp @ 24 VDC	10 AWG	10 AWG	8 AWG	8 AWG	6 AWG
80#	56	60 Amp @ 24 VDC	8 AWG	8 AWG	8 AWG	6 AWG	6 AWG
101#	46	50 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
112#	52	60 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
E-Drive	40	50 Amp @ 48 VDC	10 AWG	10 AWG	10 AWG	10 AWG	10 AWG

*The conductor and circuit breaker sizing table above is only valid for the following assumptions.

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

PROPELLER REPLACEMENT:

- Disconnect motor from battery prior to changing the propeller.
- Hold the propeller and loosen the anode/nut with a wrench.
- Remove anode/nut and washer. If the drive pin is sheared/broken, you will need to hold the shaft steady with a screwdriver blade pressed into the slot on the end of the shaft.
- Turn the old prop to horizontal (as illustrated) and pull it straight off. If drive pin falls out, push it back in.
- Align new propeller with drive pin.
- Install prop washer and anode/nut.
- Tighten anode/ nut 1/4 turn past snug. [25-35 inch lbs.] Be careful, over tightening can damage prop.



MAXIMIZER™: (On Select Models)

The built-in Maximizer's electronics create pulse width modulation to provide longer running time and extended battery life. With the Maximizer speed control, 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.

MAINTENANCE OF THE PRODUCT:

1. After use, these units should be rinsed with fresh water, then wiped down with a cloth dampened with an aqueous based silicone spray such as Armor All®.
2. The propeller must be cleaned of weeds and fishing line. The line can get behind the prop, wear away the seals and allow water to enter the motor. Check this after every 20 hours of operation.
3. Before each use, check to see that the prop nut is secure.
4. To prevent accidental damage during trailering or storage, disconnect the battery whenever the motor is off the water. For prolonged storage, lightly coat all metal parts with an aqueous based silicone spray.
5. For maximum performance, restore battery to full charge before each use.
6. Keep battery terminals clean with fine sandpaper or emery cloth.
7. The weedless wedge propeller is designed to provide absolute 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.

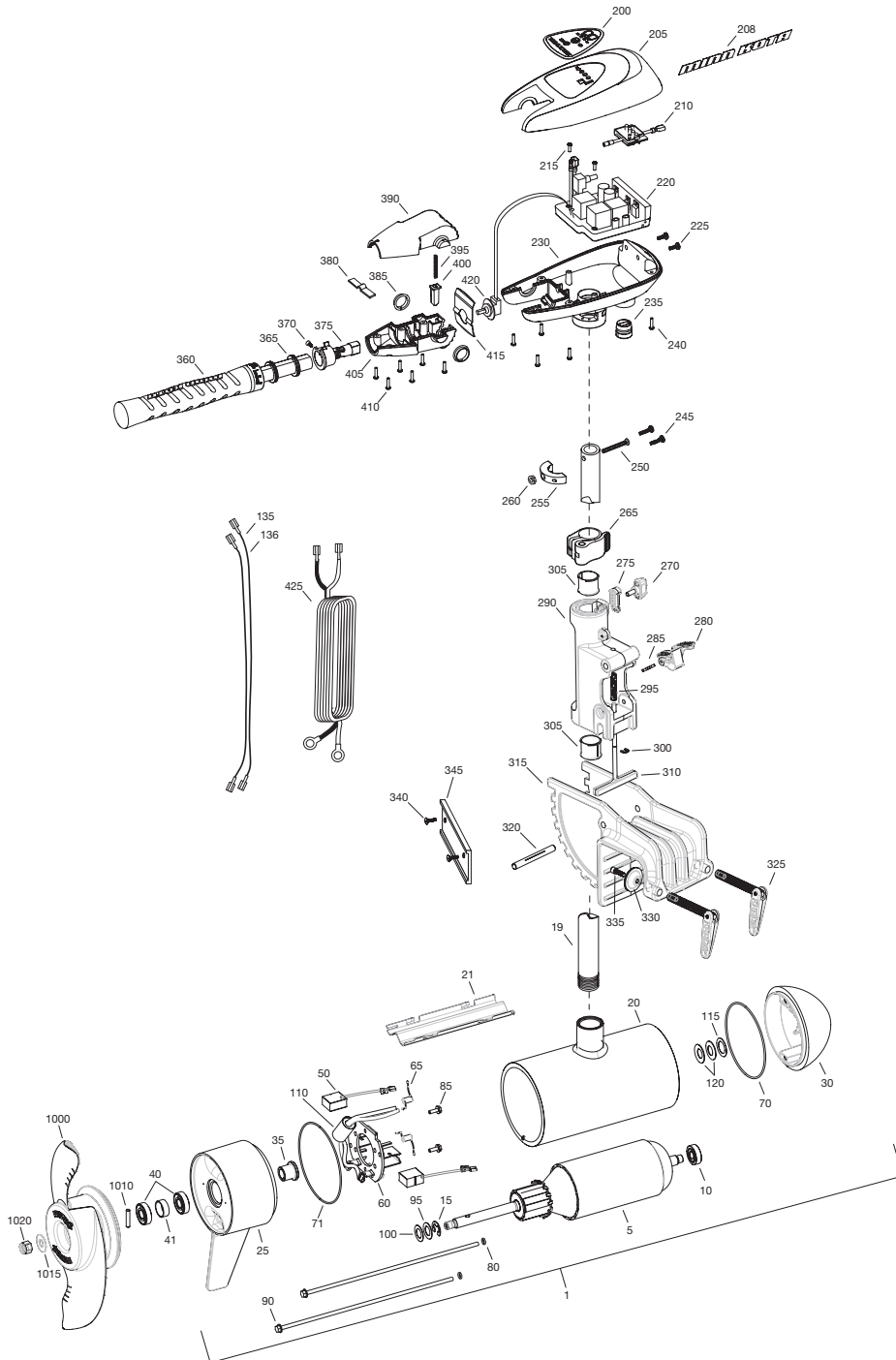
TROUBLESHOOTING:

1. Motor fails to run or lacks power:
 - Check motor for obstructions. The motor may have gone into current limit. To reset: return to off position, remove obstruction and resume operation.
 - Failure to put the motor in the off position before stowing the handle will result in joint failure.
 - 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 hard to steer:
 - Loosen the steering tension knob on the top of bracket.
 - Lubricate the composite shaft.
 4. Bracket shifts or "walks" on transom:
 - With some boats, the transom bracket may loosen or shift during heavy use.
 5. You experience prop vibration during normal operation:
 - Remove and rotate the prop 180°. See removal instructions in prop section.
- NOTE:** For all other malfunctions, see enclosed authorized service center listing for nearest service center.

RT112/T
112 LBS THRUST
36 VOLT / 52 AMPS
52" SHAFT

This page provides MinnKota® 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: Flat Head screw driver, Phillips screw driver, Socket set, Pliers.



Item	P/N	Description	Qty	Item	P/N	Description	Qty
1	2317091	36V Motor 52" SW	1	290	2071863	Hinge-SW	1
5	2-100-245	Armature assembly	1	295	2332700	Spring-(T-bar), SS	1
10	140-014	Bearing	1	300	2333001	E-ring, SS	1
15	788-040	Retaining ring	1	305	2037301	Bushing, hinge	2
19	2002014	Tube 52"	1	310	2073604	T-bar, (e-coat)	1
20	2-200-340	Center housing assembly	1	315	2071942	Bracket, die cast SW	1
21	582-016	Retaining clip	1	320	2070514	Pin-Hinge, 3/8 x 3.5, SS	1
25	2-300-151	Brush end housing assembly	1	325	2991303	Clamp screw, handle assy.	2
30	421-241	Plain end housing assembly STD	1	330	2331700	Washer-clamp screw, SS	2
35	144-017	Flange bearing	1	335	2263452	Screw, 1/4-20 x 3/4 SHCS, SS	2
40	880-025	Seal	2				
41	725-095	Paper tube - seal bore	1	■	2994844	Bag assembly, transom extrusion	
50	188-095	Brush	2	340	2053421	Screw 1/4-14 x 1 PFH, SS	2
60	9-738-011	Brush plate assembly	1	345	2058415	Transom extrusion	1
65	975-045	Brush spring	2				
■	2881450	Seal and O-ring Kit [40, 70-80]		■	2990957	Handle assy, VARS [360-410]	1
70	701-098	O-ring, plain end	1	360	2990456	Grip/handle assy, VARS [360-375]	1
71	701-046	O-ring, brush end	1	365	2060015	Bearing, handle	2
80	701-009	O-ring, thru-bolt	2	370	2063405	Screw, #6 PFH SS	1
85	2053410	Screw, 10-32 x 1/2"	2	375	2884092	Yoke / spider assy, VARS	1
90	830-094	Thru-bolt 12-24	2	380	2302742	Spring, detent, off	1
95	990-051	Washer, steel	1	385	2060005	Bearing, handle pivot	2
100	990-052	Washer, nylatron	2	390	2060900	Handle pivot, top	1
110	2777312	Ferrite bead w/ shrink	1	395	2302745	Spring, release button	1
115	990-011	Washer, shim	1	400	2063700	Button, release	1
120	992-011	Washer, belleville	2	405	2060905	Handle pivot, bottom	1
135	640-041	Leadwire, black 52"	1	410	2303412	Screw, #6 x 5/8 SS	6
136	640-141	Leadwire, red 52"	1	415	2062715	Spring, handle pivot	1
				420	2061700	Washer, pot holder	1
200	2095605	Decal, c-box cover	1	425	2992523	Leadwire assy, includes [235]	1
205	2060296	C-box cover	1				
208	2325666	Decal - Minn Kota	2	■	1378160	Propeller kit WW2 [1000-1020]	
210	2074082	Battery meter, 36V SW	1	■	2994876	Propeller bag assy [1010-1020]	
215	2043427	Screw, #8 x 7/8 SS	2	1000	2341160	Propeller WW2	1
220	2184017	Control board, 24/36V	1	1010	2262658	Drive pin, large	1
■	2888411	Potentiometer Replacement Kit		1015	2091701	Washer, prop, large	1
225	2303434	Screw, #8-30 x 5/8 SS	2	1020	2198401	Nut, nylock, prop, Anode	1
230	2062503	Control box, VARS, SW	1				
235	2062905	Strain relief	1				
240	2303412	Screw, #6 x 5/8 SS	6				
245	2263434	Screw, #8 x 1 SS	2				
250	2383406	Screw, #10-24 x 2" PPH SS	1				
255	2061517	Collar, c-box	1				
260	2333101	Nut, 10-24, nylock, SS	1				
265	2991521	Cam lock/depth collar assy	1				
■	2991714	Bracket assy, Aluminum [270-335]	1				
270	2011366	Knob, screw-collar, SS	1				
275	2062801	Tension block	1				
280	2077202	Lever-tilt, transom bracket	1				
285	2070512	Pin-hinge, 1/8 x 1	1				

* This item is part of an assembly. This item cannot be sold separately due to machining and /or assembly that is required.

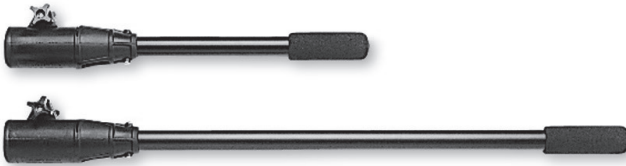
Minn Kota accessories available for your motor.



Portable Chargers



Power Center



Extension Handles



Quick Plugs