

User Manual for **RIPTIDE ST**

NOTE: DO NOT RETURN YOUR MINN KOTA MOTOR TO YOUR RETAILER. YOUR RETAILER IS NOT AUTHORIZED TO REPAR OR REPLACE THIS UNIT. YOU MAY OBTAIN SERVICE BY:

• CALLING MINN KOTA AT: 1-800-227-6433

• RETURNING YOUR MOTOR TO THE MINN KOTA FACTORY SERVICE CENTER;

 SENDING OR TAKING YOUR MOTOR TO ANY MINN KOTA AUTHORIZED SERVICE CENTER ON ENCLOSED LIST.
PLEASE INCLUDE PROOF OF PURCHASE, SERIAL NUMBER AND PURCHASE DATE FOR WARRANTY SERVICE WITH ANY OF THE ABOVE OPTIONS.

PLEASE THOROUGHLY READ THIS USER MANU-AL. 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.



SERIAL NUMBER

PURCHASE DATE

Riptide ST

Features	pg. 2-3
Installation	pg. 4
Cautions	pg. 5
Operation	pg. 6
Controls	pg. 7
Adjustments	pg. 7
Battery Information	pg. 8
Circuit Breaker	pg. 8
Battery Connections	pg. 9
Maximizer	pg. 9
Wiring Diagram	pg. 10
Propeller Replacement	pg. 11
Maintenance	pg. 11
Troubleshooting	pg. 11

CoPilot

Feature Information	pg 12
Adding/Removing Remotes	pg. 12
Misc. Information	pg. 13
Battery Replacement	pg. 13
General Operation	pg. 14
Audio Modes	pg. 14-15
Troubleshooting	pg. 15
Technical Assistance	pg. 15
FAQ's, FCC Disclaimer	pg. 16
Limited Warranty	pg. 17

SYSTEM COMPONENTS



COPILOT RIPTIDE ST RECEIVER Preinstalled in sideplate



Specifications subject to change without notice.



INSTALLATION OF THE RIPTIDE ST:

We recommend that you have another person help with this procedure. Tools required: 7/16" wrench, #3 phillips screwdriver and electric drill with a 9/32" bit.

- 1. Remove the four sideplate screws. Remove the right
- sideplate and swing the left sideplate out and away from the base extrusion.
- 2. Place the motor on the bow of the boat in the deployed position:
 - We recommend that the motor be mounted as close to the centerline of the boat as possible.
 - Make sure the bow area under the mounting location is clear and unobstructed for drilling and accessible for you to attach the nuts and washers.

• Make sure the mount is positioned so that the shaft is out beyond the rub strip of the boat by 1 1/2". The lower unit, as it is lowered into the water or raised into the boat, must not encounter any obstructions.

- 3. Once in position, mark four of the six holes provided in the bow mount base for drilling. If possible, use the four holes that are farthest apart. Drill through the marked holes using a the 9/32" drill bit.
- 4. Mount the plate to the bow using the provided bolts, nuts and washers.
- 5. Replace the sideplates and sideplate screws.



Mount Bracket so that during stow and deploy, the shaft will not encounter boat's rub strip.

Mounting Holes Le fait de Monter des Trous

CAUTION: MAKE SURE YOU MOUNT YOUR MOTOR ON A LEVEL SURFACE. USE THE RUBBER WASHERS TO CREATE A LEVEL SURFACE — IF NECESSARY.

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/sec≈.

GENERAL:

System Ready (green): The motor is equipped with a system ready indicator. Indicator light will be on when motor is deployed and power is applied to the motor. When the motor is properly stowed the indicator light will go off indicating all power has been turned off to the motor. If this indicator light does not come on when deployed, check that motor is connected to battery properly and motor is completely deployed. If indicator light does not go off when stowed, be sure that stow/deploy lever is fully latched and locked into the stowed position.

TO STOW:

Push and hold the stow/deploy lever down. Gently tilt and pull the composite shaft or control head until the motor engages the motor ramps. Motor should rest on the motor ramps and lock into place. The stow/deploy lever should latch automatically into the stowed position. System ready indicator light (green) MUST go off for the motor to be stowed properly.

TO DEPLOY:

Push in and rotate the stow/deploy lever down. Gently slide the motor out from the ramps. Lower the motor to the desired depth making sure it clicks into a secure, vertical position. System ready indicator light (green) will be lit indicating motor is ready for operation.

TRANSPORTATION:

In conditions where the stowed motor is subject to high levels of shock or vibration, take care to provide a secure stow. Move the depth collar snug against the steering motor and tighten.



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

POINTS AND ALL MOVING PARTS.

1. PUSH IN



TO DEPLOY

AUTOPILOT™ CONTROLS: AUTOPILOT ON EQUIPPED MOTORS ONLY

- The MINNKOTA AutoPilot uses a magnetic compass and a microprocessor chip to keep the trolling motor pointed in the direction you want to go. Each time the wind or water current moves the boat off course, the AutoPilot senses the change and steers itself back to the original heading. The AutoPilot direction is set every time a steering change is made. To change direction, steer until the control head points to the desired course. The AutoPilot will pull the bow of the boat around and correct automatically until the boat is moving in the direction you chose.
- 1. This unit has an automatic steering shutdown for safety. In conditions where an obstruction prevents the trolling motor from turning, or in extremely windy conditions, the automatic steering may stop. Any steering input on the foot pedal will reset the system to normal.
- When the AutoPilot is on and the trolling motor is pulled out of the water to the stow position, the steering motor will continue to run until the motor is stowed properly. Once the motor is stowed properly, AutoPilot will turn off and the system ready indicator will go off.
- 3 This unit uses a magnetic compass to detect direction of travel. The compass can be adversely affected by magnets or large, ferrous metal objects near (within 12" of) the trolling motor control head.
- 4. After steering to a new direction, there is a short delay before the direction is locked in to allow the compass to stabilize.
- 5. Obstructions on the propeller may cause excessive vibration of the motor head. This vibration can cause the compass to wander and erratic steering to occur. Clear the obstruction to return the motor to normal operation.
- 6. When broad speed changes are made, the motor heading may change slightly. This is normal.

DEPTH ADJUSTMENTS:

Firmly grasp and hold the composite shaft above the PowerDrive housing. Loosen the depth/drive collar knob until the shaft slides freely. Raise or lower the motor to the desired depth. Tighten the depth/drive collar knob to secure the motor in place.

EXTERNAL TRANSDUCER INSTALLATION:

- Transducer cables should be routed through the coil cable and handle as shown. Leave enough slack for proper deployment and retraction. Mount transducer according to transducer instructions.
- **NOTE:** An external transducer is not included with your trolling motor.



BATTERY INFORMATION:

The motor will operate with any deep cycle marine 12 volt battery

[24 volts require two and 36 volts requires three]. For best results, use a deep cycle MinnKota marine battery with at least an 115 ampere hour rating. The actual ampere draw is subject to your particular environmental conditions and operation requirements.

- Maintain battery at full charge. Proper care will significantly improve the battery life. Failure to recharge lead-acid batteries (within 12-24 hours) is the leading cause of premature battery failure. For best results, use a variable rate MinnKota charger.
- If you are using a crank battery to start a gasoline outboard, we recommend that you use a separate deep cycle marine battery for your 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.

The motor is equipped with a battery gauge. This LED gauge provides an accurate display of the remaining charge in the battery. The gauge is only accurate when the motor is off. The gauge reads as:

•Four lights = full charge •Three lights = good charge •Two lights = low charge •One light = recharge.



Boat Rigging and Motor Installation:

An over-current protection device (circuit breaker or fuse) must be used with this motor. 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 following breaker sizes are recommended guidelines:

Maximum thrust Voltage / Recommended circuit breaker rating

30# to 45# 12V 50A @ 12VDC 50# to 55# 12V 60A @ 12VDC 65# to 70# 24V 50A @ 24VDC 80# 24V 60A @ 24VDC 101# 36V 50A @ 36VDC E-Drive 48V 40A @ 48VDC

The appropriate wire size needed to connect your trolling motor to the trolling motor batteries varies depending on the length of cable needed and voltage of the motor. For additional information, please consult appropriate ABYC (American Boat and Yacht Council) and Coast Guard requirements.

Reference:

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

CIRCUIT BREAKER

BATTERY CONNECTION

BATTERY CONNECTION

12 Volt Systems:

- 1. Make sure that the motor is switched off (speed selector on "0").
- 2. Connect positive (+) red lead to positive (+) battery terminal.
- 3. Connect negative (-) black lead to negative (-) battery terminal.
- 4. For safety reasons do not switch the motor on until the propeller is in the water.

24 Volt Systems:

- **1.** Make sure that the motor is switched off (speed selector on "0").
- 2. Two 12 volt batteries are required.
- The batteries must be wired in series, only as directed in wiring diagram, to provide 24 volts.

a. Connect a connector cable to positive (+) terminal of battery 1 and to negative (–) terminal of battery 2.

b.Connect positive (+) red lead to positive (+) terminal on battery 2.

 $\ensuremath{\textbf{c}}.$ Connect negative (–) black lead to negative (–) terminal of battery 1.

For safety reasons do not switch the motor on until the propeller is in the water.

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 dia

gram, to provide 36 volts.

- a. Connect a connector cable to positive (+) terminal of battery 1 and to negative (–) terminal of battery 2.
- **b.** Connect a connector cable to positive (+) terminal of battery 2 and to negative (–) terminal of battery 3.
- c. Connect positive (+) red lead to positive (+) terminal on battery 3.

 $\mbox{d.}$ 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.

• IMPROPER WIRING OF 24 VOLT SYSTEM COULD CAUSE BATTERY EXPLOSION!

• KEEP LEADWIRE WING NUT CONNECTION TIGHT AND SOLID TO BATTERY TERMINALS.

• LOCATE BATTERY IN A VENTILATED COMPARTMENT.

MAXIMIZER™:

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. If problems still persist, call our service department at 1-800-227-6433.



€

SENSOR BOARD

ACCESSORY PLUG

ų RED M+

BLACK M-

MOTOR

RED WHITE 0 00 BLACK a Bþ ------atta BLACK 0 0 ACCESSORY PLUG M+ M-BLACK M-Æ μ AUTOPILOT INDICATOR, RED 11Þ RED M+ Ð SYSTEM READY INDICATOR, GREEN ¥ SPEED ADJUSTMENT KNOB B+ 0 BLACK B-REED SWITCH RED B+ COIL CORD I 1999 FOOT PEDAL CONTROL BOARD L 8:2 9 I - 0 **BATTERY 1** L 0 MOMENTARY / CONSTANT INDICATOR, GREEN AUTO PILOT INDICATOR, RED (EQUIPPED MOTORS ONLY) 24v I I I I **BATTERY 1 BATTERY 2** I = = — = _ _ = = 36v I

ACCESSORY PLUG

STEERING MOTOR

BATTERY 3

I

CONTROL BOARD/ CARTE DE COMMANDE

I

I

BATTERY 1

BATTERY 2

WIRING DIAGRAM

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 total conductor length is more than 50 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 circuit breaker sizing.

*Conductor Gauge and Circuit Breaker Sizing Table

Motor Thrust	Circuit Breaker	10 feet	20 feet	30 feet	40 feet	50 feet
30#	-50 Amp @ 12 VDC	12 AWG	10 AWG	8 AWG	6 AWG	4 AWG
40#, 45#		10 AWG	8 AWG	6 AWG	4 AWG	4 AWG
50#, 55#	60 Amp @ 12 VDC	8 AWG	6 AWG	4 AWG	4 AWG	2 AWG
70#	50 Amp @ 24 VDC	10 AWG	10 AWG	8 AWG	8 AWG	6 AWG
80#	60 Amp @ 24 VDC	8 AWG	8 AWG	8 AWG	6 AWG	6 AWG
101#	50 Amp @ 36 VDC	8 AWG				
E-Drive	40 Amp @ 48 VDC	10 AWG	10 AWG	8 AWG	6 AWG	6 AWG

Total Conductor Length (length of all conductors in the total circuit)

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

1. No more than 3 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.

Reference:

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

BATEAU GRÉEMENT ET PRODUIT DE L'INSTALLATION :

Pour des raisons de sécurité et de conformité, nous recommandons de suivre les normes de l'American Boat And Yacht Council (ABYC) lorsque truquer votre bateau. Modifier le câblage du bateau doit être complété par un technicien marin qualifié. Les spécifications suivantes sont uniquement des directives générales :

Avertissement : Ces directives s'appliquent au gréement générale à l'appui de votre moteur Minn Kota. Alimenter plusieurs moteurs ou des dispositifs électriques supplémentaires depuis le même circuit de puissance peut influencer la taille recommandée de la jauge du conducteur et disjoncteur. Si vous utilisez fil plus long que celui fourni avec votre unité, suivre le conducteur jauge et le disjoncteur dimensionnement tableau ci-dessous. Si la longueur totale de votre conducteur est plus de 15 mètres nous recommandons que vous contacter un technicien marin qualifié.

Un dispositif de protection de surintensité (disjoncteur ou fusible) doit être utilisé. Les exigences de la Garde-Côte américain disent que chaque conducteur sans fondement de porteurs de courant doit être protégé par un disjoncteur mise en circuit, à déclenchement libre ou un fusible. Le type (tension et courant nominal) du fusible ou disjoncteur doit être dimensionné en conséquence pour le moteur utilisé. Le tableau ci-dessous donne les directives pour le calibrage de disjoncteur.

* Jauge de conducteur et disjoncteur Table de dimensionnement

		on our cotai		r	r	
Moteur poussée	Disjoncteur 3 mètres 6 mètres 9 mètres		12 mètres	15 mètres		
30#	Amp 50 @ 12 VDC	3 mm	5 mm	8 mm	13 mm	21 mm
40#, 45#		5 mm	8 mm	13 mm	21 mm	21 mm
50#, 55#	Amp 60 @ 12 VDC	8 mm	13 mm	21 mm	21 mm	32 mm
70#	Amp 50 @ 24 VDC	5 mm	5 mm	8 mm	8 mm	13 mm
80#	Amp 60 @ 24 VDC	8 mm	8 mm	8 mm	13 mm	13 mm
101#	Amp 50 @ 36 VDC	8 mm	8 mm	8 mm	8 mm	8 mm
E-Drive	Amp 40 @ 48 VDC	5 mm	5 mm	8 mm	13 mm	13 mm

Longueur totale de chef d'orchestre (longueur de tous les conducteurs dans le circuit total)

* Le disjoncteur tableau ci-dessus de dimensionnement et chef d'orchestre est uniquement valable pour les hypothèses suivantes.

1. Pas plus de 3 conducteurs sont regroupés à l'intérieur d'une gaine ou conduites à l'extérieur des espaces de moteur.

- 2. Chaque conducteur a 105°c temp, évalué à isolation.
- 3. Pas plus d'une chute de tension de 5 % a permis à la puissance du moteur complet en fonction des besoins de puissance produit publié.

Référence :

United States Code of Federal Regulations : CFR 33 183 – bateaux et équipement connexe ABYC E-11: AC et DC des systèmes électriques à bord de bateaux

REPAIR AND TROUBLESHOOTING

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

FREQUENTLY ASKED QUESTIONS

Did you know that we have over 100 FAQ's to help answer all of your Minn Kota questions? Visit www.minnkotamotors.com and click on "Frequently Asked Questions" under the "Service" tab to find an answer to your question.

http://www.minnkotamotors.com/service/faq.aspx?linkidentifier=id&itemid=817



Minn Kota has over 300 authorized service centers in the United States and Canada where you can purchase parts or get your products repaired. Please visit www.minnkotamotors.com and click on "Service Center Locator" under the "Service" tab to locate a service center in your area.

http://www.minnkotamotors.com/service/asclocator.aspx



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



You can email our customer service department with questions regarding your Minn Kota products. To email your quesiton, visit www.minnkotamotors.com and click on "Contact Us" under the "Service" tab.

http://www.minnkotamotors.com/service/contact.aspx



PARTS DIAGRAM

RT80/ST 80 LBS THRUST 24 VOLT 54" OR 60" 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, Wire cutters.



In the U.S.A., replacement parts may be ordered directly from MINN KOTA Parts Dept., 121 Power Drive,P.O. Box 8129 Mankato, Minnesota 56002-8129. In Canada, parts may be ordered from any of the Canadian Authorized Service Centers shown on the enclosed list. Be sure to provide the MODEL and SERIAL numbers of your motor when ordering parts. Please use the correct part numbers from the parts list. Payment for any parts ordered from the MINN KOTA parts department, may be by cash, personal check, Discover Card, MasterCard or VISA. To order, call 1-800-227-6433 or FAX 1-800-527-4464.

ъ
-
고
- i
ົ
S

Item	P/N	Description	Qty	Item	P/N	Description	Qty
1	2777027	24V Motor 60" SW	1	345	2302605	Roll pin 5/16	4
	2777026	24V Motor 54" SW	1	350	2308601	Breather, filter	1
5	2-100-214	Armature assembly	1	360	2302240	Pinion gear	1
10	140-010	Bearing	1	365	2300265	Cap, motor, plastic	1
15	788-040	Retaining ring	1	370	2777020	Motor, steering, 24V	1
20		Included in #200 assemby		380	2302255	Gear, cluster 3rd stage	1
25	2-300-370	Brush end housing assembly	1	385	2302250	Gear, cluster 2nd stage	1
30	421-376	Plain end housing assembly SW	1	390	2302245	Gear, cluster 1st stage	1
35	144-017	Flange bearing	1	395	2302610	Shaft, gear 1st stage	1
40	880-025	Seal	2	400	2302620	Shaft, gear 3rd stage	1
50	188-094	Brush	2	405	2302615	Shaft gear 2nd stage	1
60	2-600-199	Brush plate assembly	1	410	2321704	Washer thrust	2
65	975-041	Brush spring	2	415	2321515	Liner output tube	1
70	701-043	O-ring motor	2	420	2324608	Ω -ring 224	2
80	701-040	O-ring, thru-bolt	2	425	2321720	Shim O-ring	2
85	830-027	Screw $10-32 \times 2$	2	420	2327315	Bushing Aluminum Spacer	2
00	030-027	Thru holt 12 24 x 10 21	2	425	2027010	Coor output	4
90	000 051	Masher steel	2	435	2322200	Bushing Dro Stooring	2
100	990-051	Washer, steel	2	440	2327314	Tube, sutput mechined	4
100	990-052	Spacer, hrush plate	2	440	2322031	Celler drive better	1
110	973-025	Spacer, brush plate	2	450	2321510	Collar, drive, bollori	1
115	992-010	Washer, Belleville	2	455	2326507	Steering nousing, Bottom	1
120	990-045	Spacer, thrust	1	460	2320605	Leadwire, Steering	1
125	582-013	Clip, retaining, short	1	465	2322601	Pin, latch, SS	1
135	640-025	Leadwire, black	1	470	2322603	Pin, pivot, SS	1
136	640-133	Leadwire, red	1	475	2327310	Bushing, pivot pin	2
				480	2321702	Washer, flat .375	2
200	2777396	Tube, composite 60" SW	1	485	2263011	E-ring .375	2
205		Included in #200 assemby		490	2322702	Spring, latch pin	2
				495	2323410	Screw, 8-32 x .75	1
210	2325666	Decal, cover	2	500	2323408	Screw, 8-32 x 2	7
215	2325686	Decal, ctrl box 80 RT	1	510	2090651	Leawire, 10 ga	1
	2325683	Decal, ctrl box 80 RT Autopilot	1	515	2305403	Shrink tube5 ID x 1.0 Adhesive	4
220	2320201	Cover, ctrl box	1	520	2305410	Shrink tube315 OD x 2.25"	3
225	2324032	Ctrl board, compass, Autpillot only	/ 1	521	2305415	Shrink tube472 OD x 2.25"	1
230	2302960	Grommet, compass, Autopilot only	y 3	525	2991271	Coil cord, 54" / 60"	1
235	2305415	Wire insulator	2	530	2320202	Cap, dust, coil cord, non-AP only	1
245	2372100	Screw, 8-18 x .625	3	535	2325643	Decal, sideplate, left	1
250	2052510	Cable clamp	3	540	2323405	Screw, 1/4-20	4
255	2322501	Ctrl box	1	545	2321916	Sideplate. left	1
260	2332102	Screw. 10-24	1	550	2323403	Screw, 1/4-20 x .375 SS	2
265	2372100	Screw, 8-18 x .625	4	555	2321925	Skid, left	1
			-	560	2323422	Screw 10-24 x 375	2
270	2333101	Nut 10-24	1	565	2321700	Washer #10 SS	2
275	2224702	Plug ctrl box	1	570	2322921	Stand-off, aluminum anodized	2
305	2771500	Depth collar assembly	1	571	2323405	Screw $1/4-20 \times 1/2^{\circ}$	2
315	2260906	Knob (included in #305)	1	575	2323905	Ramp 4" left	1
320	2200000	Washer (included in #305)	1	580	2325117	Pad rubber rest	1
321	2021/00	Nut (included in #305)	1	585	2323117	Washer #8	4
JZ I	5255102		'	500	23221100	Scrow 8 18 v 25	4
325	2007022	Stooring housing	1	590	2323412	lnsort ramp	4
220	2331022	Steering housing ton	1	090	2004202	Arm rologoo loft	4
33U	2320302		1	600	2994203	Anni, release, leit	1
335	2324004	O-ming, case seal	1	CUO	2322/10	Spring, extension	2

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

Fuera de los Estados Unidos, consultar la lista anexa para ubicar el Centro de servicio autorizado MINN KOTA. No dejar de incluir el número del MODELO y el número de SERIE del motor para el cual se solicitan las piezas. Usar siempre los números de pieza correctos indicados en la lista de piezas.

Item	P/N	Description	Qty	Item	P/N	Description	Qty
	2770251	Cover, speed control with decal	1				
620	2325651	Decal, speed control	1		2994864	Mounting hardware bag assy	
625	2320211	Cover, speed control	1				
630	2322901	Strain relief	1		2889460	Seal & Oring Kit	
635	2324023	Control board i-Pilot/Link, 24-36v	1				
	2884050	Switch-reed repair kit					
636	2320208	Dust plug	1				
640	2320203	Cap, dust, control board	1				
645	2323406	Screw, 10-24 x	2				
650	2321315	Holder, connector	1				
655	2332103	Screw, 6-20 x .375	2				
660	2074081	Battery meter, 24v	1				
665	2323402	Screw, 1/4-20 x .375	4				
670	2321941	Bracket, strain relief	1				
675	2321310	Strain relief, wire	1				
680	2323405	Screw, 1/4-20 x .5	1				
685	2333100	Speed nut, .375	2				
690	2320216	Handle, release cover	1				
695	2301700	Bushing,	1				
700	2322701	Spring, release handle	1				
710	2320401	Handle, release SW	1				
715	2322712	Spring, release handle	2				
720	2322604	Bushing, handle	2				
725	2332104	Screw, 1/4-20 x .625	2				
730	2323000	E-clip, 3/16, SS	2				
735	2322607	Pin, follower, handle	1				
740	2321906	Base extrusion, machined SW	1				
745	2322912	Spring pin,	2				
750	2321951	Bracket, sideplate	1				
755	2323900	Ramp, 4" right	1				
757	2994201	Arm, release, Right	1				
760	2321920	Skid, right	1				
765	2301310	Screw, 8-18 x .5	3				
770	2370221	Cover, access, SW	1				
772	2374197	Copilot Reciever Board	1				
115	2321911	Sideplate, right, SW	1				
780	2325642	Decal, sideplate, right	1				
850	2994095	Remote assembly	1				
851		Case, cover, transmitter	1				
860		Keypad, transmitter	1				
865		Transmitter board	1				
870		Battery, transmitter	1				
875		Case, bottom, transmitter	1				
880		Screw, 4-24	4				
	1378132	Propeller kit WW2					
	2994876	Propeller bag assy					
1000	2331160	Propeller WW2	1				
1010	2262658	Drive pin, large	1				
1015	2091701	Washer, prop, large	1				
1020	2198401	Nut, Anode, nylock, prop, large	1				

P/N 2324955

PARTS LIST

Minn Kota accessories available for your motor.





Stabilizer Kits



Quick Release Brackets



Circuit Breakers



Anywhere. Anytime. Visit our website at <u>www.minnkotamotors.com</u>