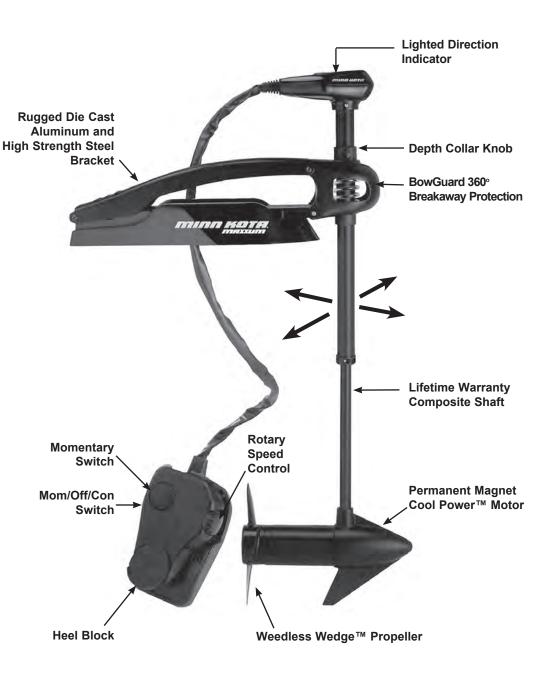


# CE Master User Manual for MAXXUM

BOWMOUNT BOWGUARD 360°® FOOT CONTROL TROLLING MOTOR



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.

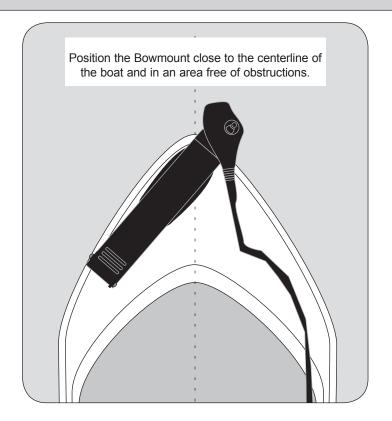


# INSTALLATION OF THE BOWMOUNT:

We recommend that you have another person help with this procedure.

- 1. For installation, do not remove the shaft/motor from the Bowguard. The Bowguard spring is under tension and must always remain secured.
- 2. Place the mount, with the motor in the fully retracted (flat) position, on the deck of the boat:
  - The motor should be mounted as close to the centerline of the boat as possible.
  - Make sure bow area under the chosen location is clear and unobstructed for drilling.
  - Make sure the motor rest is positioned far enough beyond the edge of the boat. The motor, as it is lowered into the water or raised into the boat, must not encounter any obstructions.
- 3. Once in position, mark four (4) of the holes provided in the bow plate and drill through the marks using a (9/32") bit.
- 4. Mount the plate to the bow through the four (4) drilled holes using the provided (1/4-20x3-1/2") bolts, nuts and washers.
- NOTE: If possible, secure all sets of mounting bolts, nuts and washers.

# CAUTION: MAKE SURE YOUR MOTOR IS MOUNTED ON A LEVEL SURFACE.



# **BOW MOUNT OPERATION:**

- The bowmount is designed to fold back and lock the motor flat on the deck when not in use and to provide secure stowage for transport.
- The pull rope releases the lock bar, which automatically engages when the unit is lowered or raised into position. The pull grip and rope should be used to both lower and raise the unit.
- The motor rest positions the lower unit as it comes in contact with the nose of the mount and guides it onto the motor rest.

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

**WARNING:** WHEN INCLUDED WITH MOTOR, THE VELCRO STRAP AND STABILIZER MUST BE USED WHEN MOTOR IS IN THE STOWED POSITION. FAILURE TO INSTALL AND USE THESE SUPPLIED PARTS MAY RESULT IN DAMAGE TO THE MOTOR NOT COVERED BY THE PRODUCT WARRANTY.

# FOOT PEDAL CONTROL OPERATION:

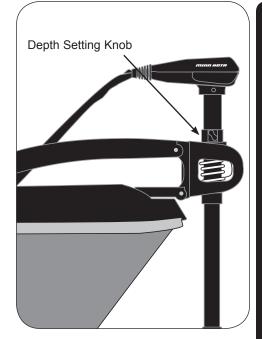
Most of the controls in the remote foot pedal are easy to operate by either foot or hand:

- ROTARY SPEED CONTROL. These motors offer a choice of five speed settings. Turn the knob clockwise to increase speed and counter-clockwise to decrease speed.
- MOM / OFF / CON SWITCH. When depressed to CON, the "constant on" allows you to run continuously without keeping your foot on the pedal. Depress the switch MOM for momentary operation or to OFF.
- MOMENTARY SWITCH. With the MON / OFF / CON set to "MOM", a toe touch on the "momentary" switch turns the motor on. Let up and the motor stops.
- RIGHT/LEFT. Push the toe end of the foot rest down to turn right and push the heal end of the foot rest down to turn left. Watch the indicator on the motor head to check direction.
- FORWARD/REVERSE. The motor always drives forward by depressing the constant on or momentary switch. You can reverse the direction of thrust by turning the motor 180°.

### CAUTION: SWITCH THE MOM / OFF / CON CONTROL TO OFF WHEN NOT IN USE. IF THE MOTOR CONTROL IS LEFT ON AND THE PROPELLER ROTATION IS BLOCKED, SEVERE MOTOR DAMAGE CAN RESULT.

# **DEPTH ADJUSTMENT:**

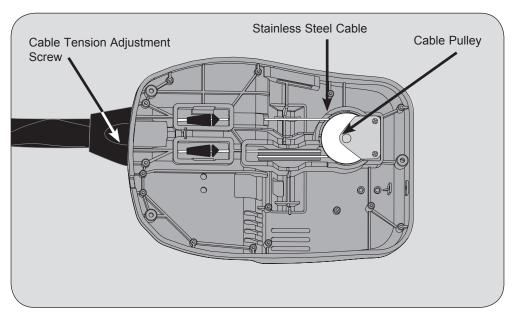
- Firmly grasp the outer shaft or control head and hold it steady.
- · Loosen the depth setting knob until the shaft slides freely.
- Raise or lower the motor to the desired depth.
- Turn the motor control head to the desired position.
- Tighten depth setting knob to secure the motor in place.
- **NOTE:** When setting the depth be sure the top of the motor is submerged at least 12" to avoid churning or agitation of surface water. The propeller must be completely submerged.



# CABLE ADJUSTMENT:

The steering cable tension is pre-set at the factory but will, through normal use, need occasional adjustment. Adjust the length and tension by turning the Phillips/hex head screw located near the bottom of the foot pedal, just under the steering cable cover. Turn the screw clockwise to increase tension and counter-clockwise to decrease tension.

**NOTE:** If the cable becomes too loose it may disengage for either the roller drum in the control box or the pulley in the foot pedal.



### 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≈.

### **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.

### 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

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### 24 Volt System:

1. Two 12 volt batteries are required.

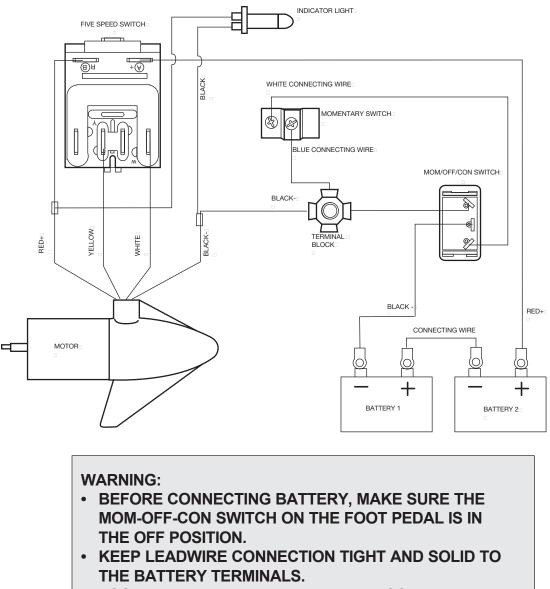
2. The batteries must be wired in series, as directed in wiring diagram to provide 24 volts.

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

B. Connect the positive (+) red lead from the foot pedal to the positive (+) terminal on battery 2.

C. Connect the negative (–) black lead to the negative (–) terminal of batt ery 1.

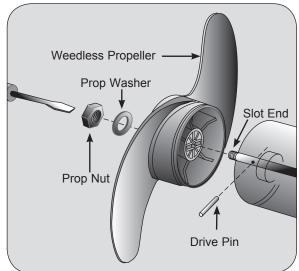
### Over-Current Protection Devices not shown in illustrations.



• LOCATE BATTERY IN A VENTILATED COMPARTMENT.

# PROPELLER REPLACEMENT:

- Disconnect motor from battery prior to changing the propeller.
- Hold the propeller and loosen the prop nut with a pliers or a wrench.
- Remove prop 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 prop nut.
- Tighten prop nut 1/4 turn past snug. [ 25-25 inch pounds ]. Be careful, over tightening the prop nut can damage the propeller.



### CAUTION:

MAKE SURE MOTOR IS DISCONNECTED FROM BATTERY BEFORE BEGINNING ANY PROP WORK OR MAINTE-NANCE.

# MAINTENANCE:

- 1. After use, these units should be rinsed with fresh water, then wiped down with a cloth dampened with silicone spray. This motor is <u>not</u> equipped for salt water exposure.
- 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

# TROUBLESHOOTING:

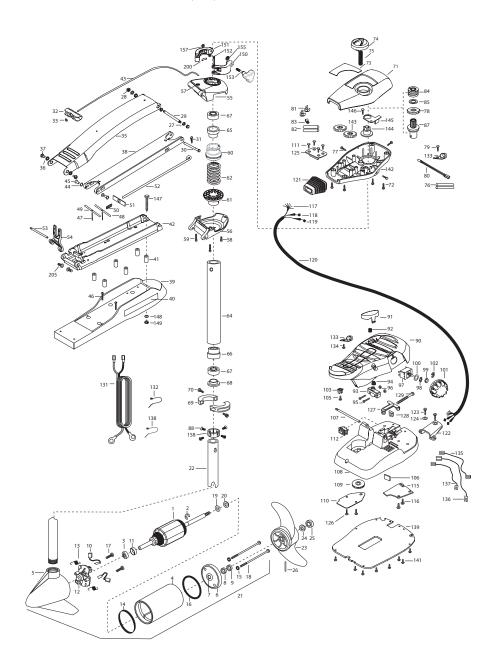
- 1. Motor fails to run or lacks power:
  - · Check battery connections for proper polarity.
  - Make sure terminals are clean and corrosion free. Use fine sandpaper or emery cloth to clean terminals.
  - · Check battery water level. Add water if needed.
- 2. Motor loses power after a short running time:Check battery charge, if low, restore to full charge.

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.

- 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 an edge is rough or nicked from use, restore to smooth by sanding with fine sandpaper.
- 3. Motor is difficult to steer:Check steering cables for proper tension. Adjust as necessary.
- 4. 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.

MAX 70/SC 70 lbs Thrust 24 Volt 42" 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 but not limited to: Flat Head screw driver, Phillips screw driver, Socket set, Pliers, wire Cutters.



1	2-100-119		53	2260506	HINGE-PIN HEADLESS ZINC	107	2260511	PIN-PIVOT A/T FT PDL
2	788-015	RETAINING RING	54	2293811	YOKE, MAX MNT-POLYPROPYLENE	108	2774550	FT PED BASE/PIN ASSEMBLY
3	140-010	BALL BEARING		2991762	BOWGUARD ASSEMBLY	109	2262301	PULLEY- FOOT PEDAL
4	431-005	CENTER HOUSING ASSEMBLY 3.625 FW TXT	55	2772319	BRACKET BASE TOP/EYELET ASSEMBLY	110	2266401	COVER-PULLEY STAMPING
5	2-300-039	BRUSH END HOUSING ASSEMBLY 3.62 SPCO	56	2991771	BRKT BTTM/BEARING FW ASSEMBLY	111	2223430	SCREW- #8 X3/4 SS PPH TYPE 25 [4.EA]
6	2-400-101	PLAIN END HOUSING ASSEMBLY	57	2772352	EYELET KIT	112	2254031	SWITCH-M0M/OFF/CON
7			58	2263423		115	2266412	
	144-049	BEARING - FLANGE (SERVICE ONLY)			SCREW 5/16-18 X 1" SHCS ZINC			SWITCH PLATE, FT PEDAL
8	880-003	SEAL	59	2263425	SCREW 5/16-18 X 2 1/2" SHCS [2.EA]	116	2332103	SCREW-6-20 X 3/8 THD SS [2.EA]
9	880-006	SEAL WITH SHIELD	60	2071541	SPRING-SLEEVE UPPER	117	2261208	WIRE HARNESS, A/T FT. PHD
10	188-037	BRUSH ASSEMBLY [2.EA]	61	2071535	SPRING SLEEVE, LOWER	118	2267505	CABLE ASSY-RIGHT (5')
11	725-050	BRUSH RETENTION- PAPER TUBE	62	2262706	SPRING, BOWGUARD, NIK PL	119	2267515	CABLE ASSY-LEFT (5')
12	738-036	BRUSH PLATE W/HOLDER		2772012	TUBE W/BEARING RACE ASSEMBLY	120	2265430	CABLE JACKET (5')
13	975-040	SPRING - TORSION [2.EA]		2772016	TUBE W/BEARING RACE ASSEMBLY	121	2265110	BOOT-CONTROL BOX
14	337-036	GASKET	64	2272069	TUBE OUTER-21" 4 HOLES	122	2265115	BOOT-FOOT PEDAL BASE
15	701-008	O-RING, THRU-BOLT [2.EA]	0.	2272067	TUBE OUTER -24" 4 HOLES	123	2372100	SCREW-8-18 X 5/8 THD SS [2.EA]
16	701-000	O-RING	65	2266260	BEARING RACE	123	2261714	WASHER-MAXXUM FT PDL [2.EA]
10	2888460	SEAL & ORING KIT	66	22662200	BEARING RACE-STEEL	124	2261714	BRACKET-CONDUIT
17	830-007	SCREW-8-32 [2.EA]	67	2266000	BEARING BALL-STEEL [2.EA]	126	2301310	SCREW-8-18 X 1/2 SS [2.EA]
18	830-008	THRU-BOLT 10-32X9.2" [2.EA]	68	2266115	BEARING CONE	127	2263210	BRACKET-CONDUIT ADJUSTMEN
19	990-067	WASHER- STEEL THRUST	69	2771617	COLLAR HALF-ZINC- 2 PER KIT	128	2263104	NYLOCK KEEPER
20	990-070	WASHER - NYLATRON [2.EA]	70	2263452	SCREW-1/4-20 X 3/4" SHCS [2.EA]	129	2263463	SCREW-1/4-20 X 2" STL PPH
21	2096035	MOTOR ASSEMBLY 24V 3.625 5SPC FW 52"	71	2280201	CONTROL BOX COVER	131	2261225	LEADWIRE 24V 10GA. RING
22	2032003	TUBE (COMP) 4 HOLE-42"	72	2372100	SCREW-8-18 X 5/8" THD SS [4.EA]	132	2256300	TIE WRAP-5.5" BLACK
	1378131	PROP KIT	73	2275603	DECAL-COVER MAX70/SC	133	2263201	CLAMP WIRE HARNESS MICRO [2.EA]
23	2091160	PROPELLER (W.WEDGE 2)	74	2990140	DIRECTIONAL INDICATOR	134	2332103	SCREW-6-20 X 3/8 THDT SS
24	2151726	WASHER-5/16 STD SS	75	2282730	SPRING-INDICATOR	135	2260301	CONNECTING WIRE (SWITCH)
25	2053101	NUT-PROP,NYLOC (MED) 5/16 SS	76	2375400	SHRINK TUBE-1/40D X 1-3/4" [2.EA]	136	2260301	WIRE,BLK W/WHT STRP 19 1/2
25	2092600	PIN-DRIVE (95-4HP'S) SS	77	2053414	SCREW-#8-32 X 1/2" TRI-LOBE [3.EA]	137	2260312	WIRE,BLK W/BLUE STRP-12"
27	9008236	WASHER 1/4 FLAT ZINC [4.EA]	78	2267800	GEAR-INDICATOR	138	2256301	TIE WRAP-5.5" WHITE
28	2223100	NUT- TENSION 5/16-18 SS [2 .EA]	79	2372100	SCREW-8-18 X 5/8" SS	139	2266414	BOTTOM PLATE MAX FOOT PED
29	2262605	PIN- BWGRD UPPER THREADED	80	2264019	LIGHT/INDICATOR MAX65/SC	141	9953104	SCREW-8 X 1/2" SS [8.EA]
30	2262607	CLEVIS PIN ZP MAXXUM BWGRD	81	2020713	TERMINAL-ADAPTOR, MAX [2.EA]	142	2282500	CONTROL BOX
31	2260805	SPRING CLIP	82	2335400	SHRINK TUBE-1/2 OD X 2" [2.EA]	143	2267800	GEAR-INDICATOR [2.EA]
32	2150400	PULL-GRIP	83	2052511	CABLE CLAMP, 1/4" VANTAGE	144	2262221	INDICATOR-DRIVE
33	2151700	WASHER-EYE SHAFT(.562 OD)	84	2232360	PULLEY-CABLE DRUM .	145	2261905	BRACKET/INDICATOR
	2991840	MOUNT, BOW ASS, W/O BGRD, FW STD	85	2261730	WASHER-NYLON A/T CON B	146	2301310	SCREW-8-18 X 1/2" SS
35	2264241	ARM-UPPER FW.STD	87	2996247	PINION/RACE ASSEMBLY		2994830	BAG ASSEMBLY-MAXXUM
36	2293501	BUSHING, STAINLESS STEEL [4.EA]	88	2223468	SCREW-8-32 X 7/16" ZN PL [4.EA]	*147	2263431	SCREW 1/4-20 X 3.5" PPH [6.EA]
37	2263500	BOLT- SHOULDER (MAXXUM) [2.EA]	90	2994496	FOOT PEDAL/PLUG ASSEMBLY (AT)	*148	2261713	WASHER-1/4 FLAT SS [6.EA]
38	2994307	ARM-LOWER ASSEMBLY.STD.FW.EXT	91	2283700	PUSH-BUTTON FOOT PEDAL	*149	2263103	NUT-1/4-20 NYLOCK-JAM SS [6.EA]
39	2263912	MOTOR REST STD MAXXUM	92	2302732	SPRING-LOWER PEDAL SS	145	2991550	CLAMP COLLAR ASSEMBLY
40	2265514	DECAL-MAXXUM,MOTOR REST [2.EA]	93	2264020	SWITCH MOMENTARY	150	2071550	CLAMP COLLAR "A"
			93 94	2265140				
41	2261505	SPACER, MOTOR REST [6.EA]			BOOT-MICROSWITCH	151	2071555	CLAMP COLLAR "B"
42	2773987	BOWPLATE,STD FW-MACH/INSERT	95	2262114	SCREW-MOUNTING/SWITCH [2.EA]	152	2072621	PIN-KNURLED
43	2251601	ROPE (40"), MAXXUM MOUNT	96	2233100	NUT-SWITCH MOUNT [2.EA]	153	2281505	KNOB-CLAMP COLLAR
44	2261708	WASHER-3/8X1/2X.010" SS [2.EA]	97	2264026	SWITCH-5 SPEED (ALL TERRAIN)	155	2071718	WASHER #10 NYLON RETAINING
45	2267318	BEARING NYLINER-[2.EA]	98	2261701	LOCKWASHER-STAR	157	2073102	NUT - HEX 1/4 - 28 SS
46	2263434	SCREW, 8-18 X 1" PPH SS [2.EA]	99	2263105	NUT-HEX	158	2071560	SPLIT COLLAR
47	2152610	SPRING-PIN LOCKBAR [2.EA]	100	2261715	SPACER-SWITCH 5 SP MODELS	200	2075120	URETHANE PAD
48	2233600	LOCK BAR- BOW MOUNT	101	2280110	KNOB-SPEED CONTROL (5 SPD)	205	2261540	INSERT-THREADED BOWPLATE (2 EA)
49	2233602	LOCK BAR, REAR - ZINC	102	2263000	E-RING TRU-ARC#5133-43			· · · · · · · · · · · · · · · · · · ·
50	2152700	SPRING-LOCKBAR CAD.PLTD	103	2260730	CONNECTOR 1/4 MALE TAB OD			
51	2262703	SPRING STOP	105	2332103	SCREW-6-20 X 3/8" THD SS			
52	2153602	EYE SHAFT-2LOCKBAR STD-PL	105	2266413	TENSION SCREW PLATE FTPED			
52	2100002		100	2200410	LENGION CONCENT EXTERNED			

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

### ENVIRONMENTAL COMPLIANCE STATEMENT:

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

#### WEEE Directive:

- EU Directive 2002/96/EC "Waste of Electrical and Electronic Equipment Directive (WEEE)" impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.
- WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.

This symbol (WEEE wheelie bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Marine Electronics,

Inc. will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirement do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.



#### Disposal:

Minn Kota motors are not subject to the disposal regulations EAG-VO (electric devices directive) that implements

the WEEE directive. Nevertheless never dispose of your Minn Kota motor in a garbage bin but at the proper place of collection of your local town council.

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