



**ENDURA C2**  
**TRANSOM-MOUNT TROLLING MOTOR**  
**Owner's Manual**

**NOTE:** Do not return your Minn Kota motor to your retailer. Your retailer is not authorized to repair or replace this unit. You may obtain service by: calling Minn Kota at (800) 227-6433 or (507) 345-4623; 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 manual. Follow all instructions and heed all safety and 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.

**ATTENTION:** Never run the motor outside the water, as this may result in injuries from the rotating propeller. Connect motor to battery only if motor is in operating position and the speed-control is in the zero position. Remove power supply from motor before tilting motor up and propeller out of the water. When connecting the power-supply cables of the motor to the battery take care 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 an electric short will occur and considerable damage to the motor will be the consequence. This damage will not be covered by warranty.

**CAUTION:** Take care that neither you nor other persons approach the turning propeller too closely, neither with body parts nor with objects. The motor is powerful and may endanger or injure you or others. While the motor is running watch out for persons swimming and for floating objects. Persons whose ability to run the motor or whose reactions are impaired by alcohol, drugs, medication, or other substances are not permitted to use this motor. This motor is not suitable for use in strong currents. The constant noise pressure level of the motor during use is less than 70dB(A). The overall vibration level does not exceed 2,5m/sec<sup>2</sup>.

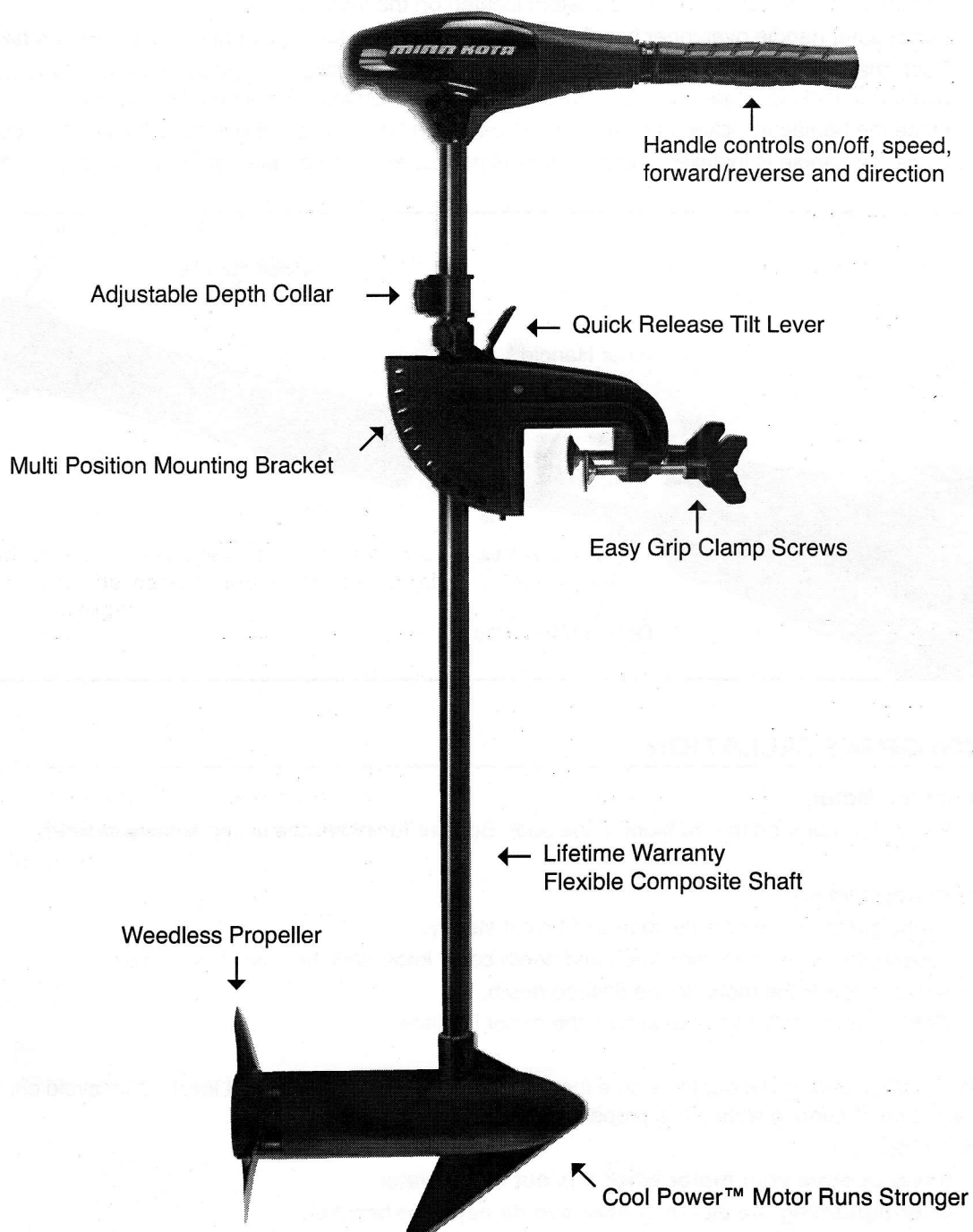
Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Store Where Purchased: \_\_\_\_\_

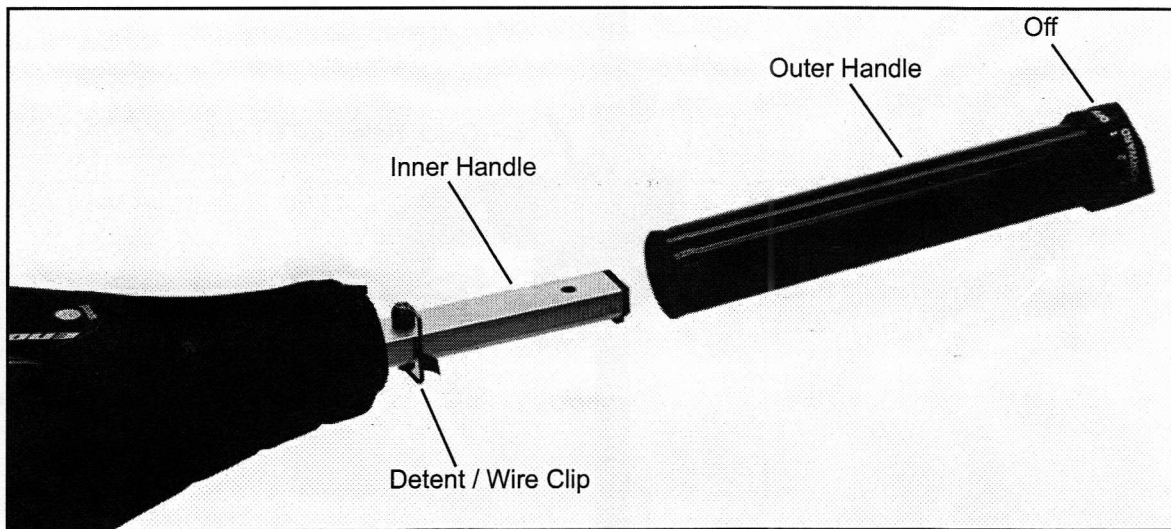
## FEATURES



Specifications subject to change without notice.

## HANDLE INSTALLATION

- Remove the wire clip from the ball detent located on the inner handle.
- Install outer handle over inner handle. Position the handles so the detent ball and OFF are aligned.
- Push the outer handle into the control box until handle “clicks” into place. The handle is held in place with locking fingers, so some force may be required to lock the handles together.
- Once the handle is locked into the control box, it can be rotated and extended for normal use.
- Once the handle is installed, the assembly is permanent. Do not attempt to remove the handle.



## MOTOR INSTALLATION

### Mount the Motor:

- Install the motor on the transom of the boat. Be sure to tighten the clamp screws securely.

### Depth Adjustment:

- Firmly grasp the composite shaft and hold it steady.
- Loosen the steering tension knob and depth collar knob until the shaft slides freely.
- Raise or lower the motor to the desired depth.
- Tighten depth collar 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.

### CAUTION:

- **Never operate your motor when it is out of the water.**
- **Over-tightening the clamp screws can damage the bracket.**

### Steering Adjustment:

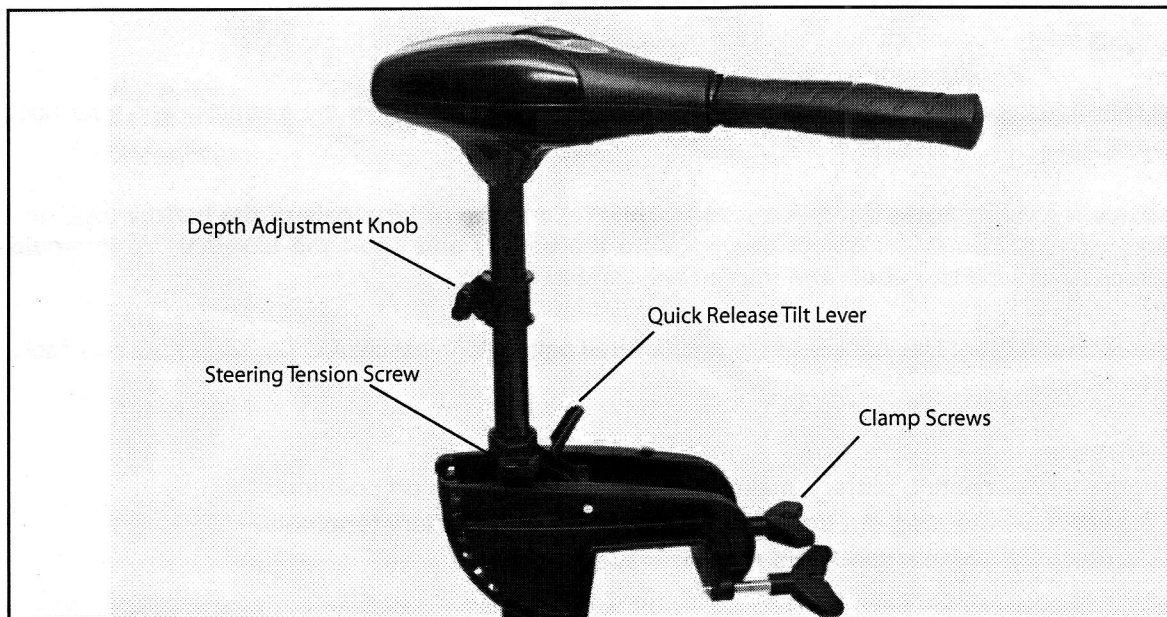
## ADJUSTMENTS

- Adjust the steering tension knob to provide enough tension to allow the motor to turn freely, yet remain in any position without being held or
- Tighten the knob to place the motor in a preset position to leave your hands free for fishing.

### Bracket Adjustment:

You can lock your motor in a vertical position, angle it for shallow water or tilt it completely out of the water.

- Firmly grasp the control head or composite shaft.
- Depress and hold the tilt lever.
- Tilt to any of the positions on the mounting bracket.
- Release the tilt lever.



**WARNING:** When raising/lowering motor or operating the tilt mechanism, keep fingers clear of all hinge and pivot points and all moving parts.

## OPERATION

### Twist Tiller:

These motors offer a choice of five forward and three reverse speeds. The speed control may be operated in either direction, forward or reverse. Turn the tiller handle counterclockwise from (OFF) to increase reverse speed and clockwise from (OFF) to increase forward speed. Thrust decreases as you approach (OFF) from either direction.

These motors will operate with any deep cycle marine 12 volt battery. For best results, use a deep

## BATTERY INFORMATION

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cycle marine battery with at least a 105 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 ensure having battery power when you need it, and will significantly improve 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 Minn Kota 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 for your trolling motor.

### 12 Volt Systems:

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

**NOTE:** If installing a leadwire plug, observe proper polarity and follow the instructions in your boat owner's manual.

**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.

### WARNING:

- Before connecting battery, make sure the switch is in the off position.
- Keep leadwire wing nut connection tight and solid to battery terminals.
- Locate battery in a ventilated compartment.

An over-current protection device (circuit breaker or fuse) must be used with this motor. Coast Guard



## BOAT RIGGING AND MOTOR INSTALLATION

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

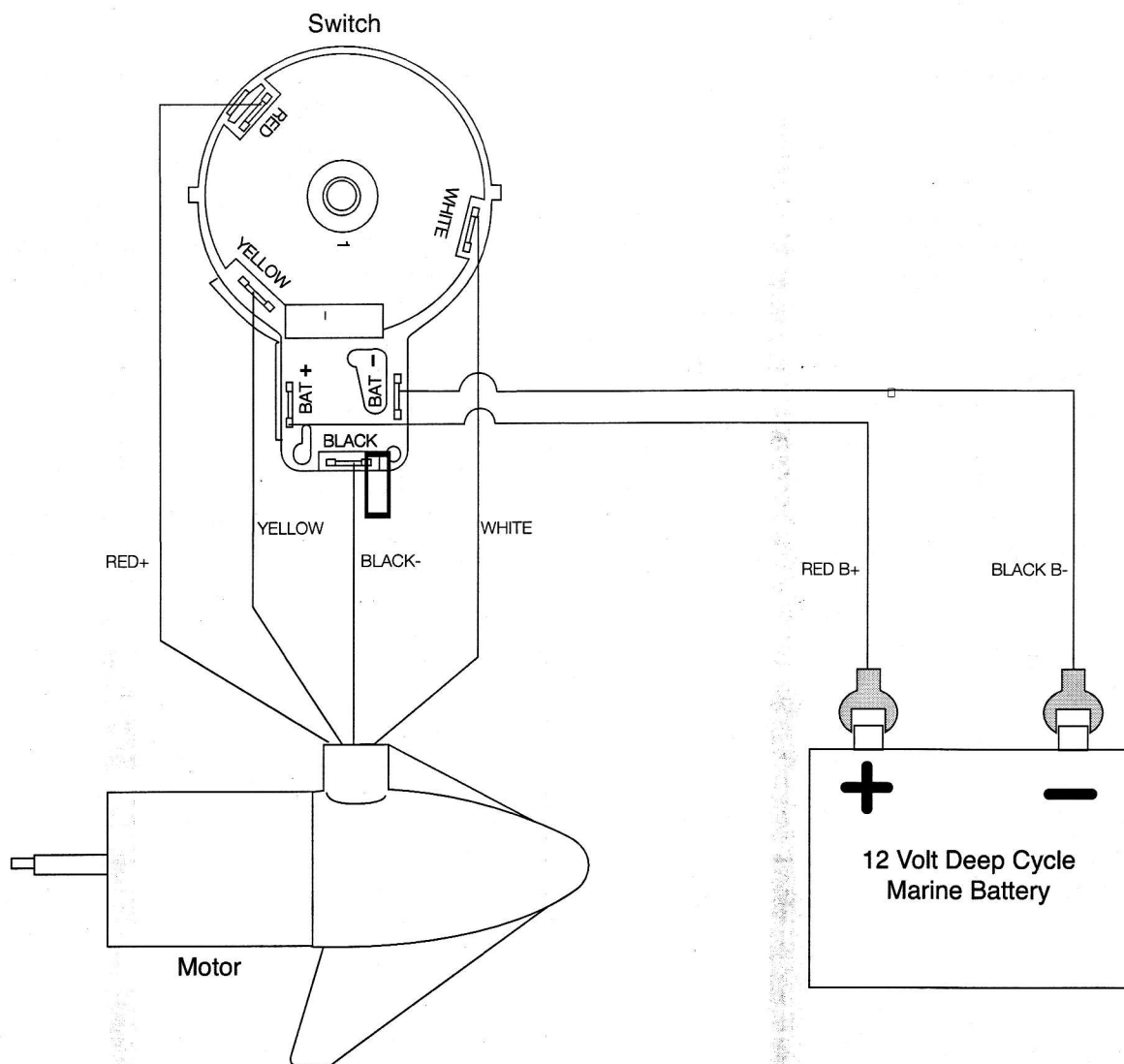
The appropriate breaker size can vary based on the wire gauge used by your boat manufacturer, distance between your motor and trolling motor battery(s), and modification/alteration to your factory boat wiring. For additional information, please consult appropriate ABYC (American Boat and Yacht Council) 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

- Disconnect motor from battery prior to changing the propeller.

# WIRING DIAGRAM

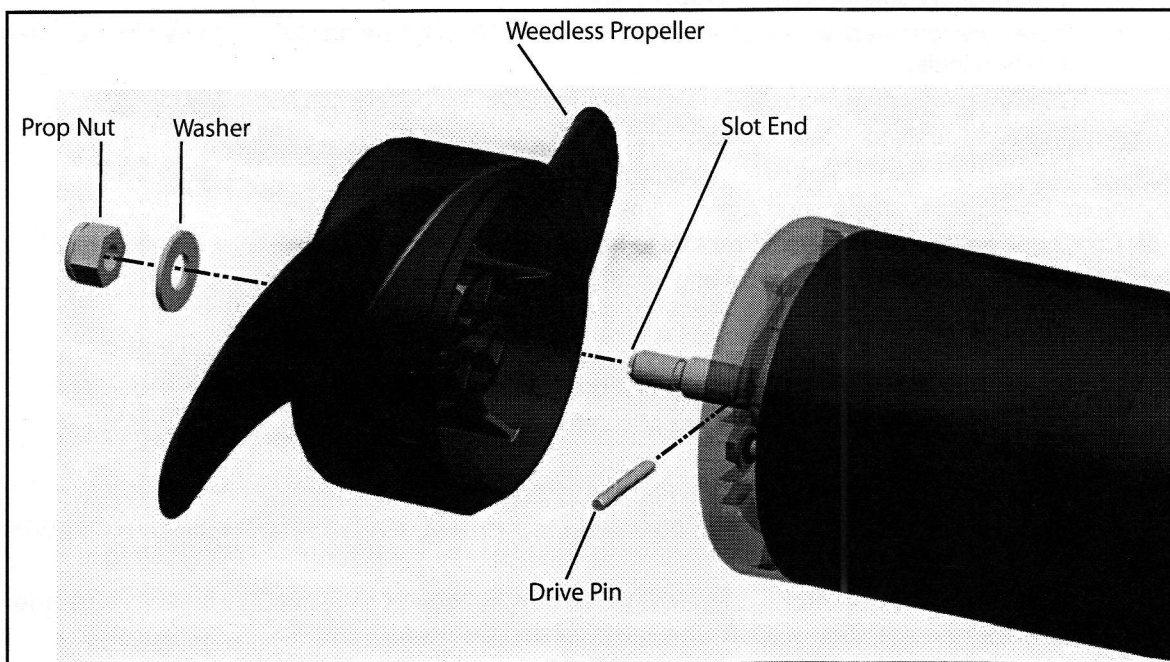




## PROPELLER REPLACEMENT

- 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. (25-35 inch lbs.) Be careful, overtightening can damage prop.

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



## MAINTENANCE

1. This motor is not designed for saltwater use. **Use of this product in saltwater will void your warranty.**
2. The propeller must be cleaned of weeds and fishing line. Line can get behind the prop, damage the seals and allow water to enter the motor. Disconnect battery and check this after every 20 hours of operation.
3. To prevent accidental damage during trailering or storage, always disconnect the trolling motor from battery. For prolonged storage, lightly coat all metal parts with silicone spray.
4. For maximum performance, restore battery to full charge before each use. Unless you are using a

## MAINTENANCE (cont.)

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power panel or onboard charger, disconnect the trolling motor when charging the battery.

5. The composite shaft requires periodic cleaning and lubrication for proper retraction and deployment. A coating of Armor All® will provide "like new" operation.
6. The propeller is designed to provide optimum performance with very high efficiency. To maintain top performance, the leading edge of the blades must be kept smooth. If this edge is rough or nicked, restore the smooth finish by sanding with fine sandpaper.

## TROUBLESHOOTING

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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 both terminals.
  - Check battery water level. Add water if needed after the battery has been fully charged.
  - Check propeller for line or weeds.
2. Motor loses power after a short running time:
  - Check battery charge. If low, restore to full charge.
  - Check circuit protection device and replace if faulty.
3. Motor is hard to steer
  - Loosen the steering tension knob on the bracket.
  - Lubricate the composite shaft. (See Maintenance section)
4. If you experience prop vibration during normal operation:
  - Remove and rotate the prop 180°. (See removal instructions in Propeller Replacement section)

**NOTE: For all other malfunctions, please refer to our website at [www.minnkotamotors.com](http://www.minnkotamotors.com) for a listing of your nearest Minn Kota Authorized Service Centers.**

# ENDURA 55 (36" & 42") PARTS LIST

In the U.S.A., replacement parts may be ordered directly from MINN KOTA Parts Dept., 121 Power Dr., Mankato, MN 56002-8129. In Canada, parts may be ordered from any of the Canadian Authorized Service Centers. Visit minnkotamotors.com for a current listing. Be sure to provide the MODEL and SERIAL number 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 Discover Card, Master Card or VISA. To order call 1-800-227-6433 or FAX 1-800-527-4464.

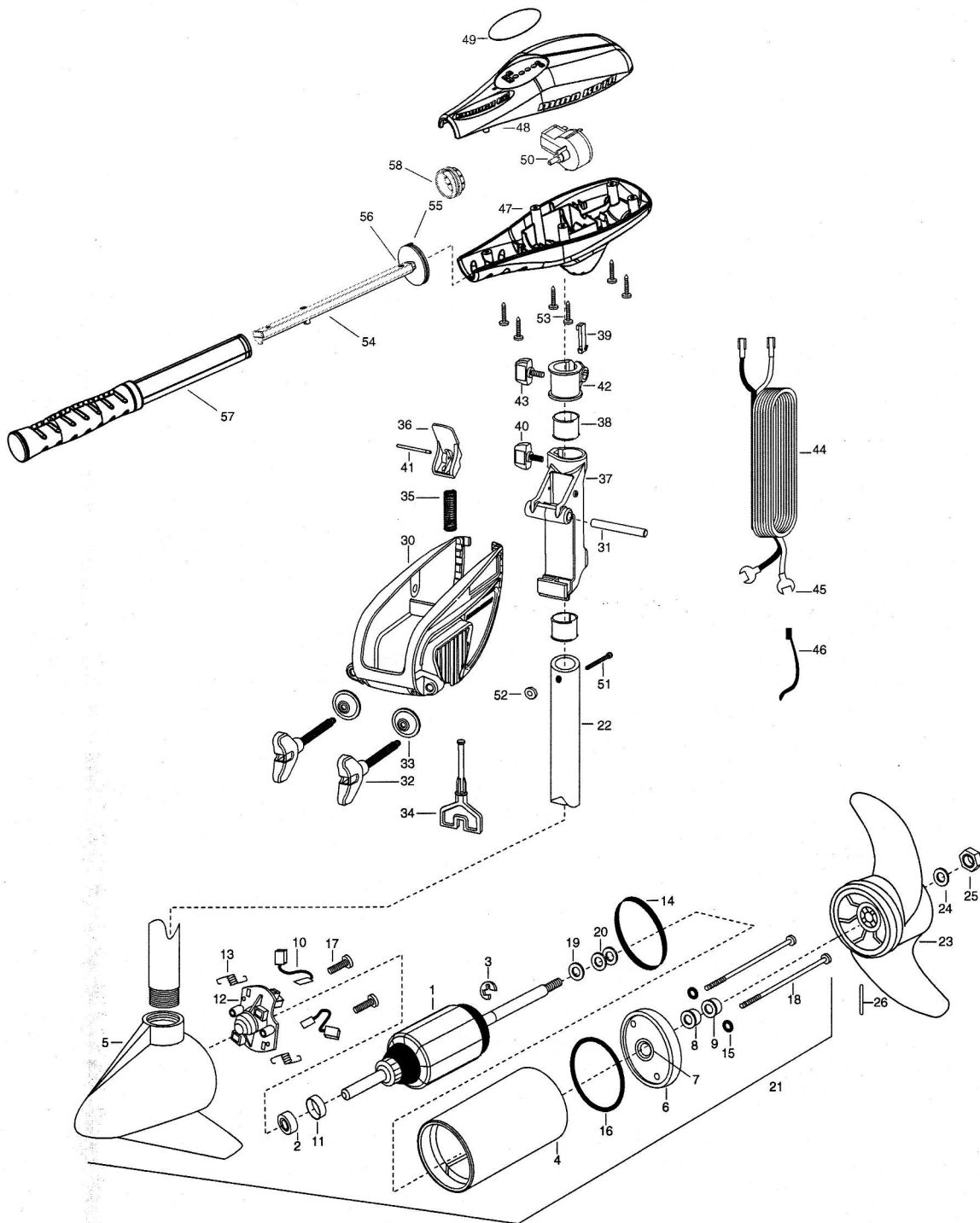
<u>Item</u>	<u>Part Number</u>	<u>Description</u>
1	2-100-121	ARMATURE ASSEMBLY 12v 3.62 FW
2	140-010	BEARING- BALL
3	788-015	RETAINING RING
4	2-200-101	CENTER HOUSING ASSEMBLY-
5	2-300-196	BRUSH END HOUSING ASSEMBLY 3.62 SPCO 36"
	2-300-195	BRUSH END HOUSING ASSEMBLY 3.62 SPCO 42"
6	2-400-101	PLAIN END HOUSING ASSEMBLY
7	144-049	BEARING- FLANGE, SERVICE ONLY
8	880-003	SEAL
9	880-006	SEAL WITH SHIELD
10	188-036	BRUSH ASSEMBLY [2.EA]
11	725-050	BRUSH RETENTION- PAPER TUBE
12	738-036	BRUSH PLATE WITH HOLDER
13	975-040	SPRING-TORSION [2.EA]
14	337-036	GASKET
15	701-008	O-RING [2.EA]
16	701-081	O-RING
17	830-007	SCREW- # 8-32 [2.EA]
18	830-042	THRU BOLT 10-32X8.83 [2.EA]
19	990-067	WASHER- STEEL THRUST
20	990-070	WASHER- NYLATRON [2.EA]
21	2097085	MOTOR ASSEMBLY 12V 3.62 5SPC FW 36"
	2097086	MOTOR ASSEMBLY 12V 3.62 5SPC FW 42"
22	2032052	TUBE COMPOSITE 36"
	2032053	TUBE COMPOSITE 42"
■	1378170	PROPELLER KIT
23	2091170	PROP, POWER 3-5/8"
24	2151726	WAHER- 5/16 STD SS
25	2053101	NUT- NYLOC 5/16
26	2092600	PIN-DRIVE
■	2771818	BRACKET & HINGE ASSEMBLY (INCLUDES 30-41)
■	2771910	BRACKET ASSEMBLY (INCLUDES 30, 32, 33)
*30	2061910	BRACKET
31	2060510	PIN-HINGE

## PARTS LIST (cont.)

<u>Item</u>	<u>Part Number</u>	<u>Description</u>
■	2881300	SCREW-CLAMP, WASHER, RETAINER KIT [2.EA]
*32	2061300	SCREW-CLAMP [2.EA]
*33	2011710	WASHER-CLAMP [2.EA]
34	2063605	T-BAR, PLASTIC
35	2062706	SPRING- T-BAR
36	2067201	LEVER- TILT BLACK
37	2061810	HINGE-PLASTIC
38	2037301	BUSHING-HING [2.EA]
39	2062800	TENSION BLOCK-SNAP IN
40	2011385	SCREW, TENSION/KNOB
41	2060515	PIN, TILT LEVER
42	2061520	COLLAR-DEPTH
43	2011365	SCREW-COLLAR/NEW KNOB
44	2050609	LEADWIRE 10 GA SPADE TERM
45	2020702	SPADE TERMINAL 10GA. [2.EA]
46	2026300	TIE WRAP [2.EA]
47	2062515	CONTROL BOX
48	2060215	CONTROL BOX COVER
49	2065704	DECAL COVER ENDURA C2 55
50	2064028	SWITCH-FWD/REV 5 SP
51	2033400	SCREW-10-24 X 1-3/4
52	2013110	NUT-10-24 HEX
53	2012100	SCREW-8-18 X 5/8 [6.EA]
54	2990919	INNER HANDLE ASSEMBLY
55	2060405	PIVOT, HANDLE
56	2012102	SCREW
57	2990928	OUTER HANDLE ASSEMBLY
58	2060009	FRONT BEARING
■	2888460	O-RING, GASKET SEAL KIT

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

# ENDURA 55 PARTS DIAGRAM



## LIMITED WARRANTY

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### Composite Shaft

Johnson Outdoors Marine Electronics, Inc. warrants to the original purchaser that the composite shaft of the purchaser's Minn Kota® trolling motor is free from defects in materials and workmanship appearing within the original purchaser's lifetime. Johnson Outdoors Marine Electronics, Inc. will provide a new shaft, free of charge, to replace any composite shaft found to be defective more than two (2) years after the date of purchase. Providing such a new shaft shall be the sole and exclusive liability of Johnson Outdoors Marine Electronics, Inc. and the sole and exclusive remedy of the purchaser for breach of this warranty; and purchaser shall be responsible for installing, or for the cost of labor to install, any new composite shaft provided by Johnson Outdoors Marine Electronics, Inc.

### Entire Product

Johnson Outdoors Marine Electronics, Inc. warrants to the original purchaser that the purchaser's entire Minn Kota® trolling motor is free from defects in materials and workmanship appearing within two (2) years after the date of purchase. Johnson Outdoors Marine Electronics, Inc. will, at its option, either repair or replace, free of charge, any parts, including any composite shaft, found to be defective during the term of this warranty. Such repair or replacement shall be the sole and exclusive liability of Johnson Outdoors Marine Electronics, Inc. and the sole and exclusive remedy of the purchaser for breach of this warranty.

### Terms Applicable to Both Warranties

These limited warranties do not apply to motors used commercially or in salt water, nor do they cover normal wear and tear, blemishes that do not affect the operation of the motor, or damage caused by accidents, abuse, alteration, modification, misuse or improper care or maintenance. **DAMAGE TO MOTORS CAUSED BY THE USE OF REPLACEMENT PROPELLERS OR OTHER REPLACEMENT PARTS NOT MEETING THE DESIGN SPECIFICATIONS OF THE ORIGINAL PROPELLER AND PARTS WILL NOT BE COVERED BY THIS LIMITED WARRANTY.** The cost of normal maintenance or replacement parts which are not defective are the responsibility of the purchaser. To obtain warranty service in the U.S., the motor or part believed to be defective, and proof of original purchase (including the date of purchase), must be presented to a Minn Kota® Authorized Service Center or to Minn Kota®'s factory service center in Mankato, MN. Any charges incurred for service calls, transportation or shipping/freight to/from the Minn Kota® Authorized Service Center or factory, labor to haul out, remove, re-install or re-rig products removed for warranty service, or any other similar items are the sole and exclusive responsibility of the purchaser. Motors purchased outside of the U.S. (or parts of such motors) must be returned prepaid with proof of purchase (including the date of purchase and serial number) to any Authorized Minn Kota® Service Center in the country of purchase. Warranty service can be arranged by contacting a Minn Kota® Authorized Service Center listed on the enclosed sheet, or by contacting the factory at 1-800- 227-6433, 1-507-345-4623 or fax 1-800-527-4464. Note: Do not return your Minn Kota® motor or parts to your retailer. Your retailer is not authorized to repair or replace them.

**THERE ARE NO EXPRESS WARRANTIES OTHER THAN THESE LIMITED WARRANTIES. IN NO EVENT SHALL ANY IMPLIED WARRANTIES (EXCEPT ON THE COMPOSITE SHAFT), INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, EXTEND BEYOND TWO YEARS FROM THE DATE OF PURCHASE. IN NO EVENT SHALL JOHNSON OUTDOORS MARINE ELECTRONICS, INC. BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.**

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

## ENVIRONMENTAL COMPLIANCE STATEMENT

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



### Disposal:

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

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





**Consumer & Technical Service**

Johnson Outdoors Marine Electronics, Inc.

PO Box 8129

121 Power Drive

Mankato, MN 56001

Phone (800) 227-6433

Fax (800) 527-4464

minnkotamotors.com

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Conforms to 89/336/EEC (EMC) under standards EN 55022A, EN 50082-2

since 1996 LN V9677264

**WARNING:** This product contains chemical(s) known to the state of California to cause cancer and/or reproductive toxicity.