

Thank You

Thank you for choosing MotorGuide® VariMAX™. With VariMAX, MotorGuide capitalized on many years of experience to provide you with a motor designed to deliver Digital Variable Speed Control and maximum time on the water.

We designed VariMAX with a BluVis™ Function Display to show precise speed setting and battery voltage so you are always in control. The VariMAX Digital Advantage lets you dial in the exact speed for your boat to match the fishing conditions of the day while providing significantly longer run times on your battery charge.

The VariMAX motor and its controls are designed to be very intuitive. You will need to properly install the handle, so please take the time to read this manual. Remember to keep your receipt and immediately register your trolling motor. A warranty card is enclosed or you can complete registration on the internet at www.motorguide.com.

At MotorGuide, we believe there are some things you should Never Stop doing.

**NEVER STOP LEARNING, NEVER STOP IMPROVING,
AND NEVER, EVER STOP FISHING.**

Warranty Message

The product you purchased comes with a **Limited Warranty** from MotorGuide. The terms of the policy are set forth in the **Warranty Information** section of this manual. The policy statement contains a description of the duration of coverage, **important disclaimers and limitations of damages**, and other related information. Please review this important information.

The description and specifications contained herein were in effect at the time this manual was approved for printing. MotorGuide, whose policy is one of continued improvement, reserves the right to discontinue models at any time, to change specifications, designs, methods, or procedures without notice and without incurring obligation.

MotorGuide, Lowell, Michigan U.S.A.

Litho in U.S.A.

© 2010, Mercury Marine. All Rights Reserved. Reproduction in whole or in part without permission is prohibited.

VariMAX and BluVis are trademarks of Brunswick Corporation.

Mercury, Mercury Marine, MerCruiser, Mercury MerCruiser, Mercury Racing, MotorGuide, Gator, Machete, Mercury Precision Parts, Mercury Propellers, Mariner, Quicksilver, #1 On The Water, Alpha, Bravo, Bravo Two, Pro Max, OptiMax, Sport-Jet, K-Planes, MerCathode, SmartCraft, Total Command, VesselView, Zero Effort, Zeus, M with Waves logo, Mercury with Waves logo, and SmartCraft logo are all registered trademarks of Brunswick Corporation. Mercury Product Protection logo is a registered service mark of Brunswick Corporation.

Warranty Information

MotorGuide Limited Warranty.....	1
----------------------------------	---

General Information

Recording Serial Number.....	4
Boater's Responsibilities.....	5
Protecting People in the Water.....	5
Passenger Safety Message.....	6
Safe Boating Suggestions.....	6

Product Overview and Assembly

Component Identification.....	8
Attaching the Handle.....	9
Extending and Retracting the Handle.....	12
Installing the Propeller.....	13

Wiring and Battery Information

Battery Precautions.....	15
Standard Practices and Procedures.....	15
Battery Recommendations.....	15
BluVis Battery Voltage Indicator.....	16
Single, Parallel, and Series Circuit Battery Connection.....	17

Mount Installation

Transom Mount Installation.....	21
Pontoon Mount Installation.....	21
Gator 20.8 Breakaway Installation.....	22
Gator Flex 360.....	24

Operation

Installing the Motor into the Bow Mount.....	27
Removing the Motor from the Bow Mount.....	27
Stowing the Trolling Motor.....	27
Deploying the Trolling Motor.....	29
Adjusting the Steering Tension.....	31
Adjusting the Motor Depth.....	31
Speed Control.....	32
Direction Control.....	33

Maintenance and Storage

Trolling Motor Care.....	37
Inspection and Maintenance Schedule.....	37
Storage Preparation.....	38
Battery Inspection.....	38
Propeller Replacement.....	39

Custom Applications

Repositioning the Top Housing.....	41
Setting the Direction Control Switch.....	42
Motor Control Wiring.....	46

Owner Service Assistance

Troubleshooting.....	47
Service Assistance.....	48
Mercury Marine Service Offices.....	48

WARRANTY INFORMATION

MotorGuide Limited Warranty

KEEP YOUR ORIGINAL PURCHASE RECEIPT OR BILL OF SALE.

1. For recreational use customers, MotorGuide electric trolling motors are warranted to the original retail purchaser to be free from defects in material or workmanship for two (2) years.
2. To obtain warranty service, the purchaser should deliver or return the unit (postage prepaid and insured) to any MotorGuide authorized service dealer. **DO NOT RETURN TO PLACE OF PURCHASE** unless they are an authorized service center. Products returned by mail should be carefully packaged and include a note describing the nature of the problem and/or service requested, customer address and phone number. A copy of the receipt, Bill of Sale, registration verification, or other proof of purchase is required with the return of the product for warranty consideration. Warranty claims will not be accepted without presentation of purchase receipt for trolling motor, other verification of registration, or bill of sale for boat package.
3. MotorGuide, at its discretion, will repair or replace items covered under the terms of this warranty. Neither MotorGuide nor MotorGuide service dealers are responsible for damages to MotorGuide products due to repairs performed by anyone other than an authorized MotorGuide service dealer. Neither MotorGuide nor Mercury Marine is responsible for failure or damage caused by improper installation, set-up, preparation, or previous service or repair errors.
4. For commercial use and government use customers, MotorGuide electric trolling motors are warranted to the original retail purchaser to be free from defects in material or workmanship for one (1) year. Commercial use is defined as any work or employment-related use of the product, or any use of the product which generates income, for any part of the warranty period, even if the product is only occasionally used for such purpose such as rental fleets, guides, fish camps, or similar operations. Warranty is not transferable to any subsequent purchaser. The Mercury Product Protection plan is not available to commercial use or government use customers.

WARRANTY INFORMATION

5. Warranty coverage is available to customers that purchase from an authorized dealer or retailer that is authorized by MotorGuide Marine to distribute the product in the country in which the sale occurred. Warranty coverage and duration varies by the country in which the owner resides. This warranty applies to MotorGuide trolling motors sold and used in the United States. This limited warranty begins on the date the product is first sold to a purchaser or the date on which the product is first put into service, whichever occurs first. MotorGuide accessories are covered by this limited warranty for a coverage period of one (1) year from the date of retail sale. The repair or replacement of parts, or the performance of service under this warranty, does not extend the life of this warranty beyond its original expiration date. Promotional warranties are not included in this statement and coverage may vary by promotion. Product either sold or put into service more than six years from date of manufacture is excluded from warranty coverage.
6. This warranty does not apply to normal worn parts, for example, worn cables, adjustments, or product damage due to; 1) neglect, lack of maintenance, accident, abnormal operation, or improper installation or service; 2) abuse, such as, bent metal columns, bent armature shafts, broken control cables, etc., accidents, modifications, misuse, excessive wear or damage caused by an owner's failure to provide reasonable and necessary installation or care; 3) use of an accessory or part not manufactured by MotorGuide or Mercury; 4) alteration or removal of parts; 5) opening the lower unit (motor) by anyone other than an authorized MotorGuide service center will void this warranty.
7. We reserve the right to improve the design of any trolling motor without assuming any obligation to modify any trolling motor previously manufactured.

WARRANTY INFORMATION

8. All serialized "Service-Repair" trolling motors receive a one (1) year warranty. Non-serialized "Service-Repair" electric trolling motors are NOT warranted. "Service-Repair" motor denotes a trolling motor sold by MotorGuide that may be used, but has been inspected and may have had minor repairs. Original retail purchaser of a "Service-Repair" motor is the first purchaser of the motor after it is denoted as "Service-Repair." "Service-Repair" motors have a blue sticker on the battery cable and box denoting "Manufacturer Certified Service-Repair Motor."
9. This warranty will not apply to 1) haul-out, launch, towing and storage, transportation charges and/or travel time, telephone or rental charges of any type, inconvenience, or loss of time or income, or other consequential damages; or 2) removal or replacement of boat partitions or material because of boat design for necessary access to the Product; or 3) disconnection and reconnection of hard-wired trolling motors.
10. TERMINATION OF COVERAGE: Warranty coverage may be terminated for repossessed product, or product purchased at auction, from a salvage yard, from a liquidator, from an insurance company, from unauthorized marine dealers or boatbuilders, or other third party entities.
11. ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM THIS WARRANTY, WARRANTIES OF MERCHANTABILITY AND FITNESS ARE EXCLUDED FROM THIS WARRANTY, IMPLIED WARRANTIES ARE LIMITED TO THE LIFE OF THIS WARRANTY. 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 OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS WHICH MAY VARY FROM STATE TO STATE.

For Your Records:

Model Number _____

Serial Number _____

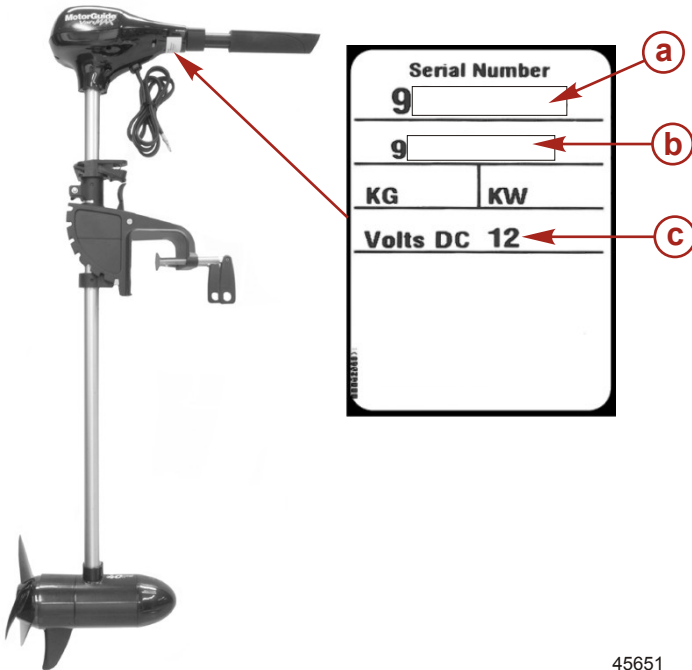
GENERAL INFORMATION

Recording Serial Number

Record the serial number for future reference. For warranty purposes, complete the enclosed warranty card or register your trolling motor at www.motorguide.com.

TRANSOM MOUNT

The transom mount serial number decal is located underneath the bottom cover.



45651

- a** - Serial number
- b** - Model identification number
- c** - Voltage

GENERAL INFORMATION

Boater's Responsibilities

The operator (driver) is responsible for the correct and safe operation of the boat and safety of its occupants and general public. It is strongly recommended that each operator (driver) read and understand this entire manual before operating the trolling motor.

Be sure at least one additional person on board is instructed in the basic operation of the trolling motor in case the driver is unable to operate the boat.

Protecting People in the Water

WHILE YOU ARE TROLLING

It is very difficult for a person in the water to take quick action to avoid a boat heading in their direction, even at slow speeds.



Always slow down and exercise extreme caution any time you are boating in an area where there might be people in the water.

WHILE THE BOAT IS STATIONARY

WARNING

A spinning propeller, a moving boat, or any solid device attached to the boat can cause serious injury or death to swimmers. Stop the trolling motor immediately whenever anyone in the water is near your boat.

Shut off the trolling motor before allowing people to swim or be in the water near your boat.

GENERAL INFORMATION

Passenger Safety Message

Whenever the boat is in motion, observe the location of all passengers. A sudden reduction in boat speed, such as a sharp change of boat direction, could throw them off the boat.

Safe Boating Suggestions

In order to safely enjoy the waterways, familiarize yourself with local and other governmental boating regulations and restrictions, and consider the following suggestions.

Use flotation devices. It is the law to have an approved personal flotation device of suitable size for each person aboard and have it readily accessible.

Do not overload your boat. Most boats are rated and certified for maximum load (weight) capacities, refer to your boat capacity plate. If in doubt, contact your dealer or the boat's manufacturer.

Perform safety checks and required maintenance. Follow a regular schedule and ensure all repairs are made properly.

Never be under the influence of alcohol or drugs while boating (it is the law). Alcohol or drug use impairs your judgment and greatly reduces your ability to react quickly.

Passenger boarding. Stop the trolling motor whenever passengers are boarding or unloading.

Be alert. The operator of the boat is responsible by law to maintain a proper lookout by sight and hearing. The operator must have an unobstructed view particularly to the front. No passengers, load, or fishing seats should block the operators view when operating the boat.

Underwater hazards. Reduce speed and proceed with caution whenever navigating in shallow water.

Tripping hazards. To avoid a trip hazard, route all cables and wiring neatly and out of the way.

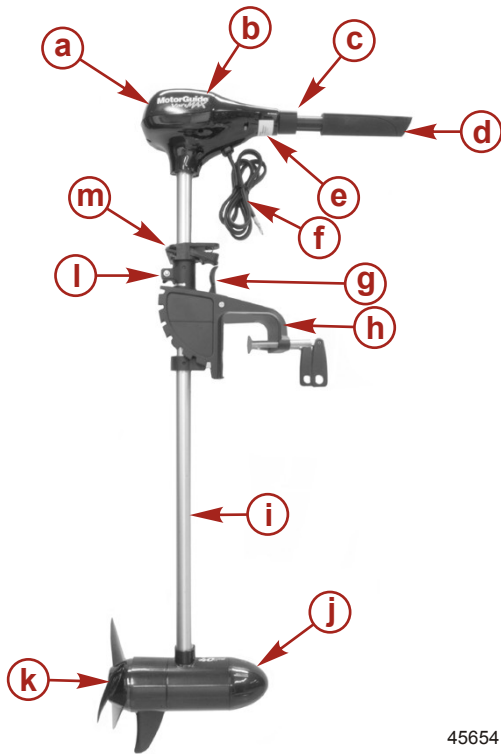
GENERAL INFORMATION

Report accidents. Boat operators are required by law to file a Boating Accident Report with their state boating law enforcement agency when their boat is involved in certain boating accidents. A boating accident must be reported if 1) there is loss of life or probable loss of life, 2) there is personal injury requiring medical treatment beyond first aid, 3) there is damage to boats or other property where the damage value exceeds \$500.00 or 4) there is complete loss of the boat. Seek further assistance from local law enforcement.

PRODUCT OVERVIEW AND ASSEMBLY

Component Identification

TRANSOM MOUNT

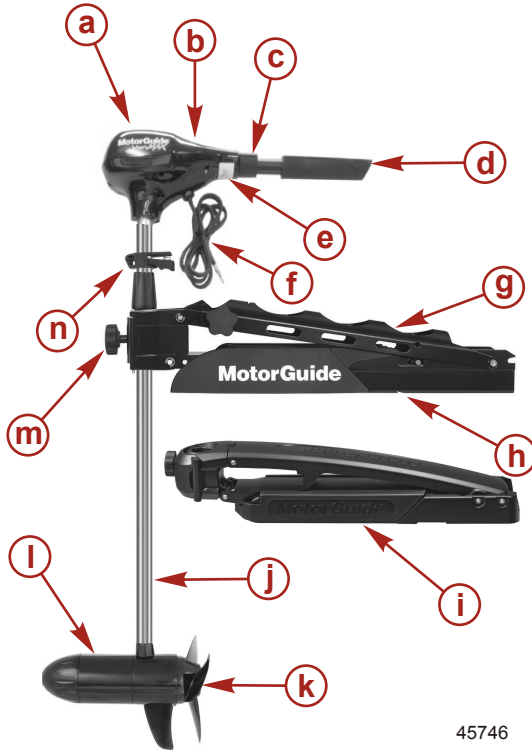


- a** - Top housing
- b** - BluVis function display
- c** - Cam lock
- d** - Extendable speed control handle
- e** - Serial number
- f** - Battery cables
- g** - Tilt lock release lever
- h** - Clamp bracket
- i** - Column
- j** - Lower unit
- k** - Propeller
- l** - Steering tension collar
- m** - Depth adjustment collar

45654

PRODUCT OVERVIEW AND ASSEMBLY

VARIMAX BOW MOUNT



- a** - Top housing
- b** - BluVis function display
- c** - Cam lock
- d** - Extendable speed control handle
- e** - Serial number
- f** - Battery cables
- g** - Gator 20.8 breakaway
- h** - Decket
- i** - Gator Flex 360
- j** - Column
- k** - Propeller
- l** - Lower unit
- m** - Steering tension collar
- n** - Depth adjustment collar

45746

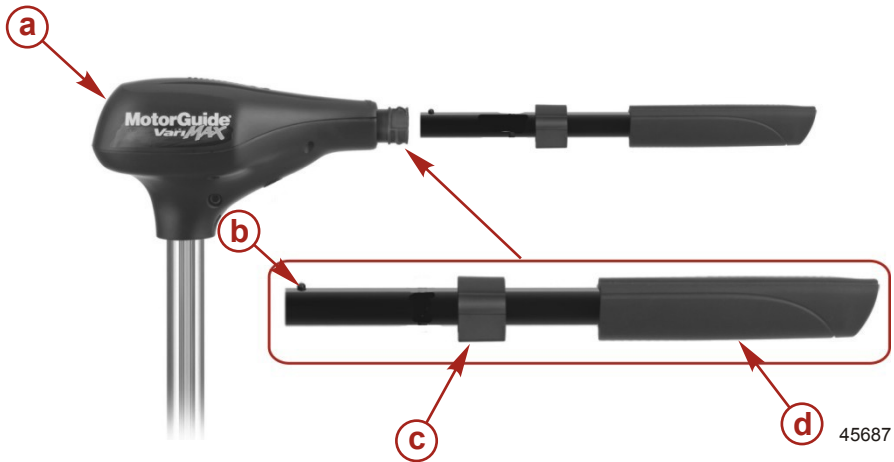
Attaching the Handle

NOTE: For proper installation, assemble the trolling motor on a flat, level surface.

1. Ensure the battery cables are disconnected from the power source.

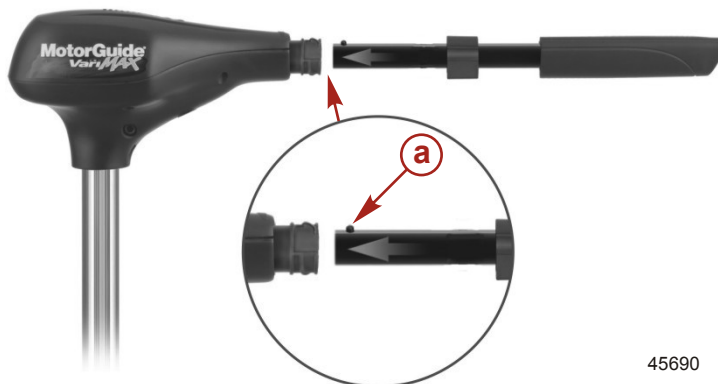
PRODUCT OVERVIEW AND ASSEMBLY

2. Align the handle to the top housing using the flat groove on the extension handle. The handle extension spring should face up.



- a** - Top housing
- b** - Handle extension spring
- c** - Cam lock
- d** - Handle

3. Press the handle extension spring in while inserting the handle into the top housing. Adjust the handle to the desired length.



- a** - Handle extension spring

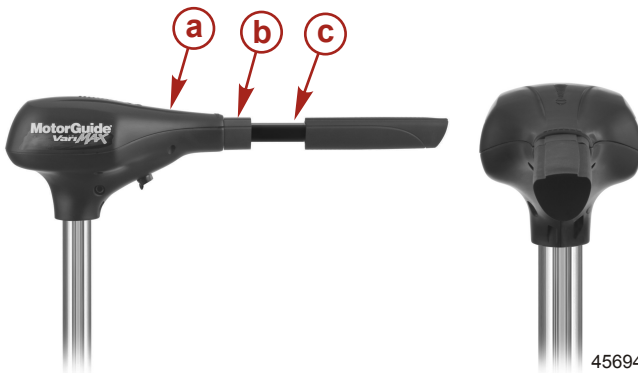
PRODUCT OVERVIEW AND ASSEMBLY

4. Rotate the cam lock clockwise 180°. Move the cam lock flush against the top housing.



39062

5. To secure the handle, hold the handle steady while rotating and tightening the cam lock clockwise 180°. Verify that the flat surfaces of the handle, cam lock, and top housing are in alignment.



45694

- a** - Top housing
- b** - Cam lock
- c** - Handle

PRODUCT OVERVIEW AND ASSEMBLY

Extending and Retracting the Handle

1. Firmly grasp the handle, then rotate and loosen the cam lock counterclockwise 180°.



2. Extend or retract the handle to the desired length.



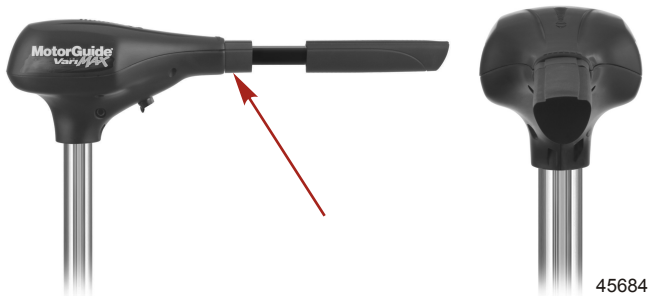
Extending handle



Retracting handle

PRODUCT OVERVIEW AND ASSEMBLY

3. To secure the handle, hold the handle steady while rotating and tightening the cam lock clockwise 180°. Verify that the handle, cam lock, and top housing are in alignment.



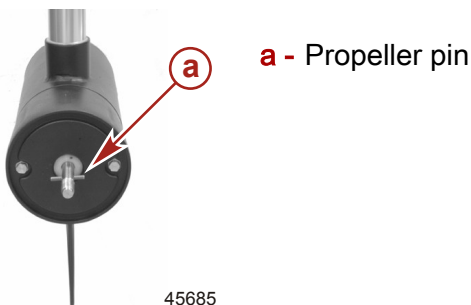
Cam lock and top housing in alignment

Installing the Propeller

WARNING

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected motor starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing motor components.

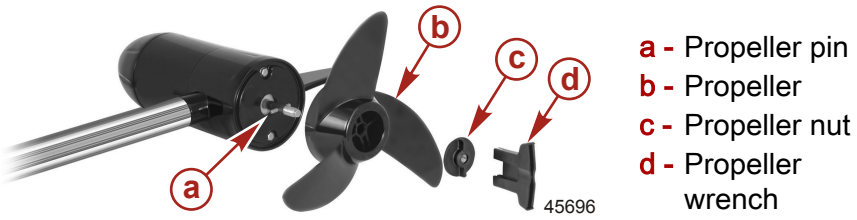
1. Rotate the motor shaft to insert the propeller pin horizontally.



2. Install the propeller onto the motor shaft by engaging the propeller onto the propeller pin.

PRODUCT OVERVIEW AND ASSEMBLY

3. Install the propeller nut. Tighten securely.



4. Use a MotorGuide propeller wrench or pliers to tighten the propeller nut another $\frac{1}{4}$ turn.

Recommended MotorGuide Accessory Description	Part Number
MotorGuide prop wrench kit	MGA050B6

WIRING AND BATTERY INFORMATION

Battery Precautions

WARNING

An operating or charging battery produces gas that can ignite and explode, spraying out sulfuric acid, which can cause severe burns. Ventilate the area around the battery and wear protective equipment when handling or servicing batteries.

When charging batteries, an explosive gas mixture forms in each cell. Part of this gas escapes through holes in the vent plugs and may form an explosive atmosphere around the battery if ventilation is poor. This explosive gas may remain in or around the battery for several hours after it has been charged. Sparks or flames can ignite this gas and cause an internal explosion, which may shatter the battery.

The following precautions should be observed to prevent an explosion:

1. Do not smoke near batteries being charged or which have been charged very recently.
2. Do not break live circuits at terminals of batteries, because a spark usually occurs at the point where a live circuit is broken. Always be careful when connecting or disconnecting cable clamps on chargers. Poor connections are a common cause of electrical arcs which cause explosions.
3. Do not reverse polarity of battery terminal to cable connections.

Standard Practices and Procedures

- Do not use the main engine battery to power the trolling motor.
- Disconnect the trolling motor from the battery when charging and after each use.
- Route the trolling motor wires on the opposite side of the boat from other miscellaneous boat wiring.
- Connect boat accessories directly to the main engine battery.

Battery Recommendations

- Use a 12 volt, deep cycle marine battery.
- Install a 50 amp manual reset circuit breaker in line with the trolling motor positive leads within 180 cm (72 in.) of the batteries.

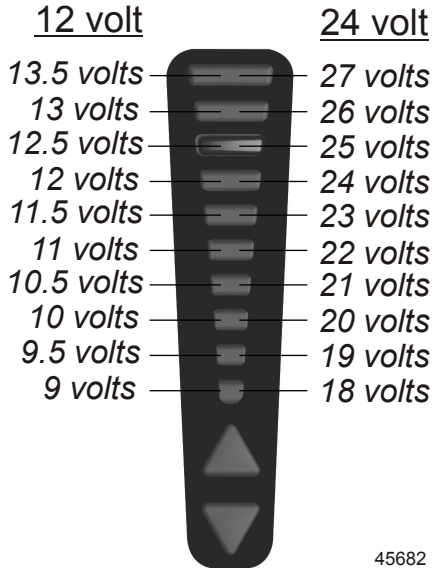
WIRING AND BATTERY INFORMATION

- Use 13 mm (6 gauge) battery cables if extending the existing wire beyond the standard battery cable.

Recommended MotorGuide Accessory Description	Part Number
Trolling motor power plug	8M4000953
Trolling motor sp (receptacle)	8M4000954
50 amp alligator clips	8M4000287
6 gauge battery cable and terminals with 50 amp manual reset circuit breaker	MM309922T
50 amp manual reset circuit breaker	MM5870

BluVis Battery Voltage Indicator

Use the BluVis function display to determine battery voltage level. The battery indicator will display the voltage for four seconds when the motor is connected to the battery and when the speed control is turned off. Refer to the diagram below to reference remaining battery voltage for 12 and 24 volt battery connections.



WIRING AND BATTERY INFORMATION

Single, Parallel, and Series Circuit Battery Connection

CAUTION

Disconnecting or connecting the battery cables in the incorrect order can cause injury from electrical shock or can damage the electrical system. Always disconnect the negative (-) battery cable first and connect it last.

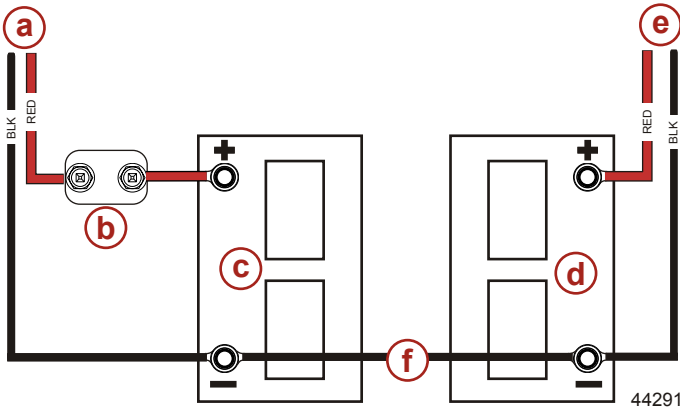
Recommended MotorGuide Accessory Description	Part Number
6 gauge battery cable and terminals with 50 amp manual reset circuit breaker	MM309922T
50 amp manual reset circuit breaker	MM5870

SINGLE 12 VOLT BATTERY CONNECTION

1. Install a 50 amp manual reset circuit breaker in line with the trolling motor power cable positive lead and the battery positive (+) terminal.
2. Connect the black trolling motor power cable negative lead to the battery negative (-) terminal.
3. Connect a jumper cable (common ground bond) from the trolling motor battery negative (-) terminal to the engine battery negative (-) terminal.

WIRING AND BATTERY INFORMATION

NOTE: Vessels with multiple batteries, must have a common ground bonding circuit. Not establishing a common ground between the vessel batteries, may cause severe corrosion, electrolysis, or an electrical shock.



- a** - Power cables to trolling motor
- b** - 50 amp manual reset circuit breaker
- c** - Trolling motor battery
- d** - Engine starting battery
- e** - Power cables to engine
- f** - Common ground bond

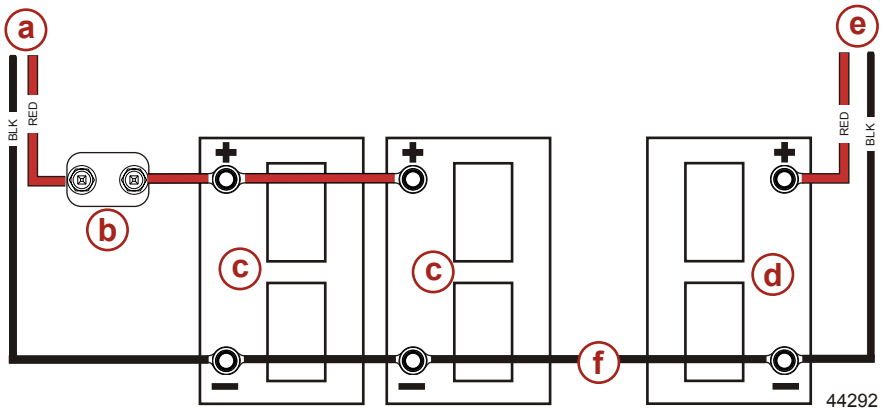
12 VOLT PARALLEL CIRCUIT BATTERY CONNECTION

1. Install a 50 amp manual reset circuit breaker in line with the trolling motor power cable positive lead and the battery positive (+) terminal.
2. Connect a jumper cable between both of the trolling motor battery positive (+) terminals.
3. Connect a jumper cable between both of the trolling motor battery negative (-) terminals.
4. Connect the black trolling motor power cable negative lead to the battery negative (-) terminal.

WIRING AND BATTERY INFORMATION

5. Connect a jumper cable (common ground bond) from the trolling motor battery negative (-) terminal to the engine battery negative (-) terminal.

NOTE: Vessels with multiple batteries, must have a common ground bonding circuit. Not establishing a common ground between the vessel batteries, may cause severe corrosion, electrolysis, or an electrical shock.



- a** - Power cables to trolling motor
- b** - 50 amp manual reset circuit breaker
- c** - Trolling motor batteries
- d** - Engine starting battery
- e** - Power cables to engine
- f** - Common ground bond

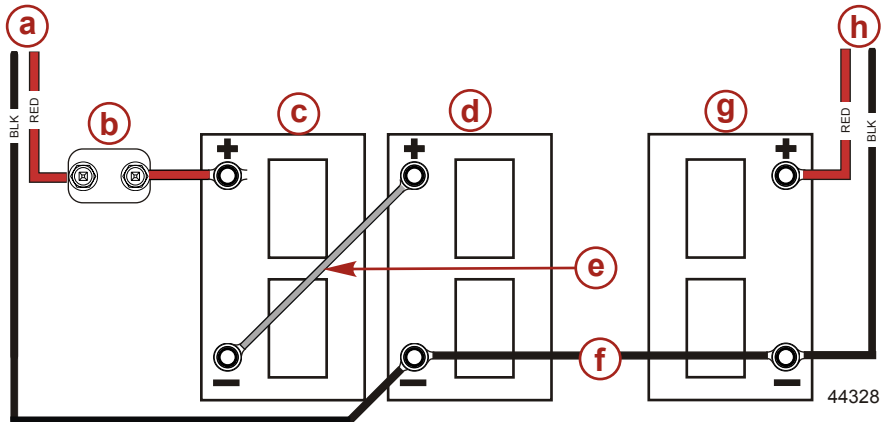
24 VOLT SERIES CIRCUIT BATTERY CONNECTION

1. Install a 50 amp manual reset circuit breaker in line with the trolling motor power cable positive (+) lead and battery "c" positive (+) terminal.
2. Connect a jumper wire (reference grey) between the negative (-) terminal on battery "c" to the positive (+) terminal on battery "d."
3. Connect the trolling motor negative (-) lead to the negative (-) terminal on battery "d."

WIRING AND BATTERY INFORMATION

4. Connect a jumper cable (common ground bond) from the trolling motor battery "d" negative (-) terminal to the engine battery negative (-) terminal.

NOTE: Vessels with multiple batteries, must have a common ground bonding circuit. Not establishing a common ground between the vessel batteries, may cause severe corrosion, electrolysis, or an electrical shock.



- a - Power cables to trolling motor
- b - 50 amp manual reset circuit breaker
- c - Trolling motor battery "c"
- d - Trolling motor battery "d"
- e - Series cable connection
- f - Common ground bond
- g - Engine starting battery
- h - Power cables to engine

MOUNT INSTALLATION

Transom Mount Installation

NOTE: The transom mount will fit transoms up to 8.25 cm (3.25 in.) thick.

IMPORTANT: Overtightening the transom clamp screws can weaken or damage the mount bracket.

1. Place the transom mount onto the transom of the boat.

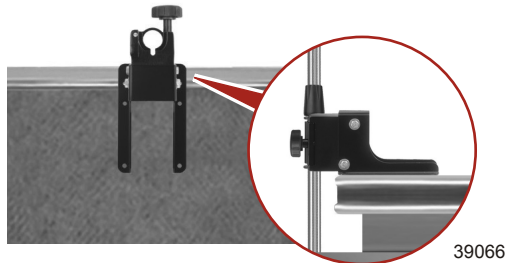


2. Tighten the transom clamp screws securely.

Pontoon Mount Installation

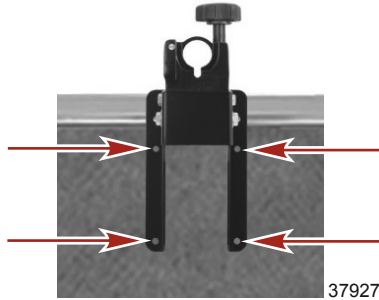
IMPORTANT: Choose an area on the deck which allows 2.5 cm (1 in.) clearance between the column and the bow of the boat for all motor positions.

1. Select an appropriate area on the deck of the boat to install the mount.



MOUNT INSTALLATION

2. Place the pontoon mount base on the surface of the boat deck. Use the mount base as a template to mark the location of the mount holes.



Pontoon mount holes

IMPORTANT: Using a larger drill bit, countersink the holes on fiberglass boats to prevent the gel-coat from cracking.

3. Drill the mounting holes with a 7 mm (1/4 in.) diameter drill bit. Remove any debris.
4. Install four stainless steel washers and locking nuts onto the mounting screws underneath the boat deck. Tighten securely.

Gator 20.8 Breakaway Installation

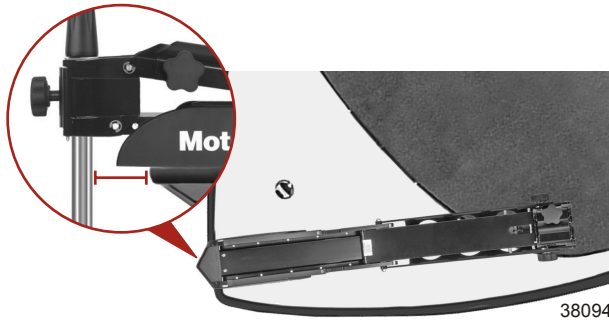


Gator 20.8 Breakaway

IMPORTANT: Choose an area on the deck which allows a 7.6 cm (3 in.) clearance between the column and the bow of the boat for all motor positions.

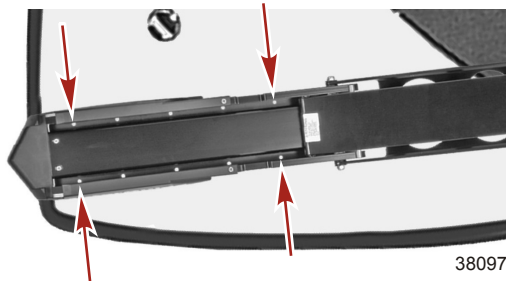
MOUNT INSTALLATION

1. Select an appropriate area on the deck of the boat to install the mount. Ensure that the forward mounting screws will not penetrate the hull.



Mount on deck

2. Place the bow mount base on the surface of the boat deck. Use the mount base as a template to mark the locations of the front mounting holes in the plastic decket and the rear mounting holes on the mount base.



Mount base mounting holes

3. Drill the mounting holes with a 7 mm (1/4 in.) diameter drill bit. Remove any debris.
4. Redrill each mounting hole with a 13 mm (1/2 in.) diameter drill bit. **IMPORTANT: Use a larger drill bit to countersink the holes on fiberglass boats to prevent cracking.**

MOUNT INSTALLATION

5. Insert the rubber mounting isolators into the mounting holes. Position the isolators in line with the mount base with the wider side toward the outside of the mount base bracket.



6. Place the mount base on the isolators and align the holes. Install the two longer screws into the front mounting holes and the two shorter screws into the rear mounting holes. Tighten all of the mounting screws securely.

IMPORTANT: The mount base must lay flush against the isolators before being bolted to the deck or the mount will bind making it difficult or impossible to unlatch.

7. The bracket should fasten securely and evenly with the latch pins in the latch. The bracket should release with a light, quick snap of the rope handle.

Gator Flex 360



Gator Flex 360

IMPORTANT: Choose an area on the deck which allows a 7.6 cm (3 in.) clearance between the column and the bow of the boat for all motor positions.

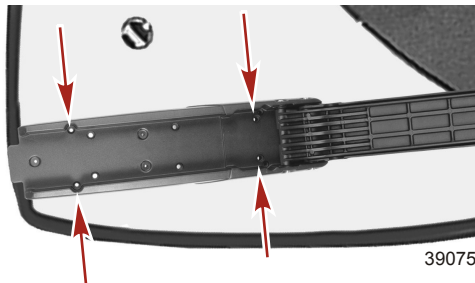
MOUNT INSTALLATION

1. Select an appropriate area on the deck of the boat to install the mount. Ensure that the forward mounting screws will not penetrate the hull.



Mount on deck

2. Place the bow mount base on the surface of the boat deck. Use the mount base as a template to mark the locations of the front mounting holes in the plastic decket and the rear mounting holes on the mount base.



Mount base mounting holes

3. Drill the mounting holes with a 7 mm (1/4 in.) diameter drill bit. Remove any debris.

IMPORTANT: Use a larger drill bit to countersink the holes on fiberglass boats to prevent cracking.

4. Insert the rubber washers between the base of the mount and the boat mounting surface. Install the steel washers and nylon locking nuts onto the mounting screws underneath the boat deck. Tighten securely with a Phillips screwdriver and 11 mm (7/16 in.) wrench.

MOUNT INSTALLATION

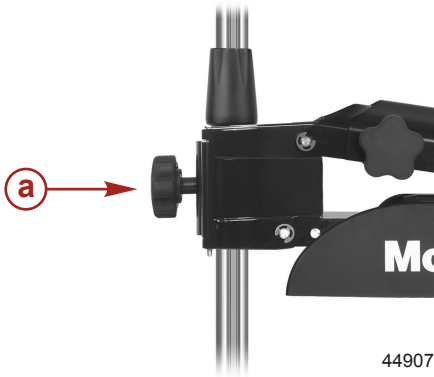
IMPORTANT: If necessary, shim the rubber washers with 25 mm (1 in.) stainless steel washers to create a level mounting surface.

5. The mount base should fasten securely and evenly with the latch pins in the latch. The base should release with a light, easy pull on the rope handle.
6. Secure the decket to the mount base with the decket screws.

OPERATION

Installing the Motor into the Bow Mount

1. Turn the bracket door knob counterclockwise to loosen and open the bracket door.
2. Place the motor column into the bracket and close the door.
3. Turn the bracket door knob clockwise to tighten the motor column in the bracket.



a - Bracket door knob

Removing the Motor from the Bow Mount

1. Turn the bracket door knob counterclockwise to loosen and open the bracket door.
2. Remove the motor column from the bracket and close the door.

Stowing the Trolling Motor

⚠ WARNING

Rotating propellers can cause serious injury or death. Never start or operate the motor out of water.

⚠ CAUTION

Moving parts, such as hinges and pivot points, can cause serious injury. Keep away from moving parts when stowing, deploying, or tilting the motor.

OPERATION

TRANSOM MOUNT

IMPORTANT: Ensure the mount is stowed while using the main engine or trailering the boat. Ensure the steering tension collar is tightened securely.

1. Firmly grasp the column and push the tilt lever towards the column.



- a - Column
- b - Tilt lever

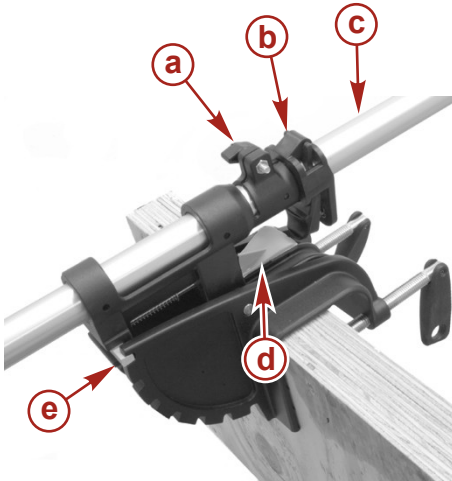
45664

IMPORTANT: Do not use the handle to stow or tilt the motor.

2. Tilt the motor toward you by pulling on the column while simultaneously holding the tilt lever.
3. Once the motor is stowed, release the tilt lever. Verify the lock pin is securely engaged. The motor should not tilt if the lock pin is properly engaged.
4. Move the depth collar flush against the steering tension collar.

OPERATION

- Adjust the steering friction by turning the steering tension collar knob.



- a** - Steering tension collar
- b** - Depth collar
- c** - Column
- d** - Tilt lever
- e** - Lock pin

45665

Deploying the Trolling Motor

⚠ WARNING

Rotating propellers can cause serious injury or death. Never start or operate the motor out of water.

⚠ CAUTION

Moving parts, such as hinges and pivot points, can cause serious injury. Keep away from moving parts when stowing, deploying, or tilting the motor.

⚠ CAUTION

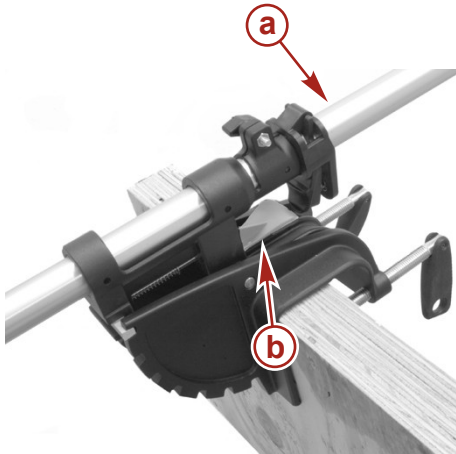
Avoid possible serious injury from the motor dropping suddenly when adjusting the motor depth. Firmly grasp the motor shaft with one hand when raising or lowering the motor.

TRANSOM MOUNT

IMPORTANT: Do not use the handle to tilt or deploy the motor.

OPERATION

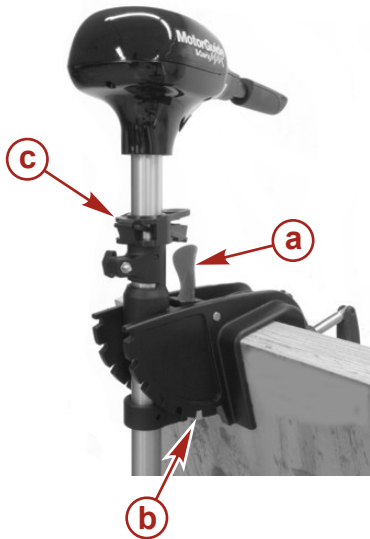
1. Firmly grasp the column and engage the tilt lever.



- a - Column
- b - Tilt lever

45674

2. Adjust the angle of the motor to the desired position while simultaneously holding the tilt lever.
3. Release the tilt lever. Verify that the lock pin is securely engaged.
4. Grasp the shaft with one hand and pinch the depth collar to lower the trolling motor to the desired depth.



- a - Tilt lever
- b - Lock pin
- c - Depth collar

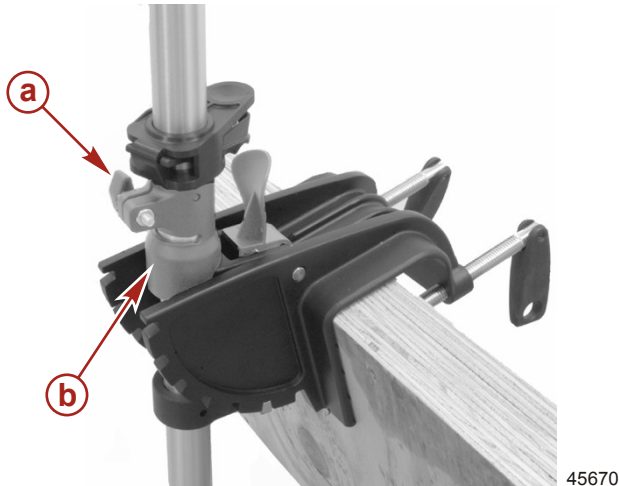
45675

OPERATION

Adjusting the Steering Tension

Adjust the steering tension collar to increase or decrease the effort to turn the motor freely.

1. To increase steering tension or to fasten the column in a fixed position, tighten the friction knob clockwise.
2. To unfasten the column from a fixed position or to reduce steering tension, turn the friction knob counterclockwise.



- a - Friction knob
- b - Steering tension collar

Adjusting the Motor Depth

⚠ CAUTION

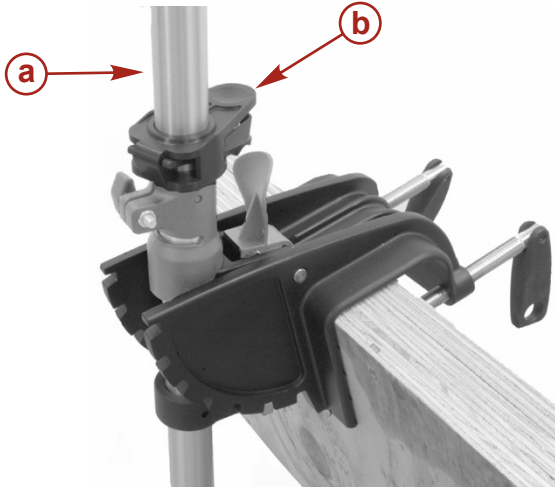
Avoid possible serious injury from dropping the motor when adjusting the motor depth. Firmly grasp the motor shaft with one hand when raising or lowering the motor.

Adjust the depth of the motor to improve trolling motor performance in various water depths.

IMPORTANT: When adjusting the motor depth, ensure the lower unit is fully submerged to avoid propeller cavitation.

OPERATION

1. Firmly grasp the column with one hand while holding the depth collar.
2. Pinch the depth collar until the motor column slides freely.
3. Raise or lower to the desired depth.



a - Column

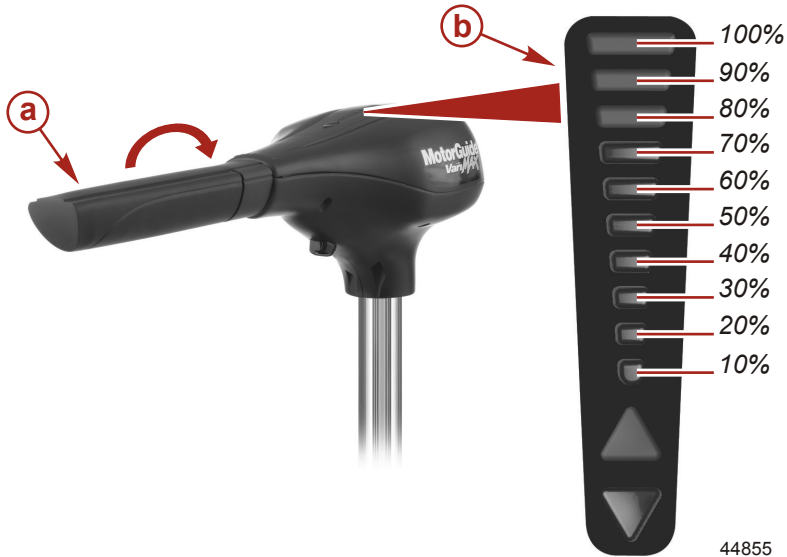
b - Depth collar

Speed Control

NOTE: Speed control is operable regardless of handle position.

OPERATION

Rotate the handle clockwise to increase speed in both forward and reverse directions. The BluVis function display indicates speed setting.



- a** - Rotate the handle clockwise
- b** - BluVis function display with speed settings

Direction Control

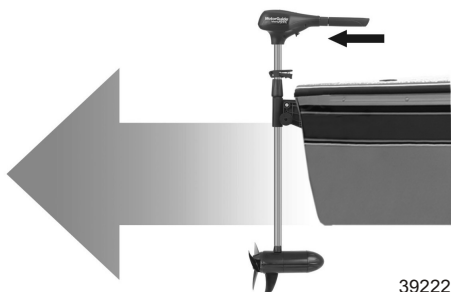
The push-forward, pull-reverse direction control lets you increase the speed by turning the handle clockwise, whether in forward or reverse. To shift and change the direction of the propeller, simply pull back or push forward on the handle. The BluVis function display shows your relative speed setting and direction when the propeller is moving.

IMPORTANT: To shift the motor and change the direction of the propeller, the power must be below 60% to provide instant direction control for forward and reverse. The motor will only shift if below the 60% speed setting to protect the motor from damage.

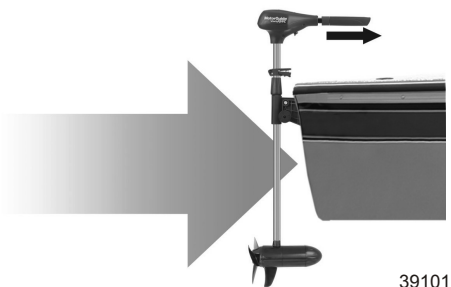
OPERATION

TRANSOM MOUNT APPLICATION

To move the boat forward, pull the handle. To move the boat in reverse, push the handle. The BluVis function display indicates the motor direction.



Reverse



Forward

TRANSOM MOUNT—BACKROLLING APPLICATION

To use the transom mount for backtrolling, reverse the top housing position and toggle the direction control switch. Refer to **Setting the Direction Control Switch**.

OPERATION

To backtroll, push the handle. To reverse backtroll, pull the handle. The BluVis function display indicates the motor direction.



Backtroll

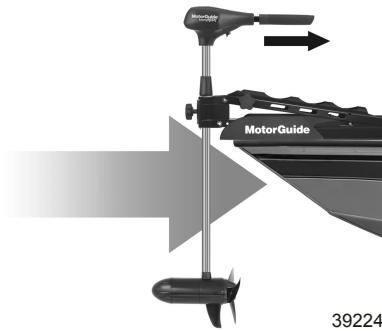


Backtroll reverse

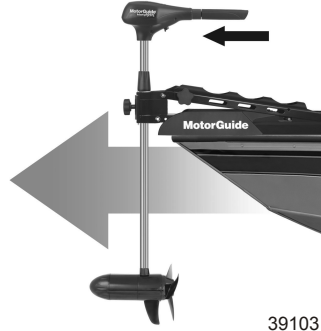
OPERATION

BOW MOUNT APPLICATION

To move the boat forward, push the handle. To move the boat in reverse, pull the handle. The BluVis function display indicates the motor direction.



Reverse



Forward

MAINTENANCE AND STORAGE

Trolling Motor Care

To keep your trolling motor in the best operating condition and retain its dependability, your trolling motor must receive periodic inspections and maintenance. Keep it maintained properly to ensure the safety of you and your passengers.

WARNING

Neglecting to inspect, maintain, or repair your trolling motor can result in product damage or serious injury or death. Do not perform maintenance or service on your trolling motor if you are not familiar with the correct service and safety procedures.

Record all maintenance performed and save maintenance work orders and receipts.

SELECTING REPLACEMENT PARTS

Original MotorGuide Certified Tough replacement parts.

Inspection and Maintenance Schedule

BEFORE EACH USE

- Check the tightness of the battery lead connections.
- Visually inspect for loose or corroded wiring connections.
- Check the tightness of the propeller nut.
- Check the propeller blades for damage.

AFTER EACH USE


- Disconnect the battery cables from the power source or unplug the motor from the boat.
- Check the propeller and propeller shaft for debris such as weeds and fishing line. Remove all debris.
- Check the tightness of the propeller nut.
- Rinse the trolling motor with clean water to remove dirt and dust that may scratch the surface.

MAINTENANCE AND STORAGE

EVERY 100 HOURS OF USE OR ANNUALLY

- Periodically lubricate all the pivot points with a nonaerosol, nonsolvent based lubricant.

IMPORTANT: Never use an aerosol lubricant to grease or oil any part of the unit. Many aerosol lubricants contain harmful propellants that can cause damage to various parts of the trolling motor.

Tube Ref No.	Description	Where Used	Part No.
 95	2-4-C with Teflon	Pivot points	92-802859A 1

- Check the tightness of bolts, nuts, and other fasteners.
- Inspect the battery. Refer to **Battery Inspection**.

Storage Preparation

The major consideration in preparing your trolling motor for storage is to protect it from corrosion and damage caused by freezing of trapped water.

Refer to the **Inspection and Maintenance Schedule** and complete the appropriate care instructions to prepare your trolling motor for storage. Store the trolling motor in a dry location where it will not be affected by temperatures below -29 °C (-20 °F).

IMPORTANT: Trolling motors stored in temperatures below 0 °C (32 °F) should be operated slowly for a minimum of 15 minutes before going above 30% operation.

Battery Inspection

The battery should be inspected at periodic intervals to ensure proper trolling motor operation.

IMPORTANT: Read the safety and maintenance instructions which accompany your battery.

1. Ensure that the battery is secured to the vessel.
2. Ensure that the battery cable terminals are clean, tight, and correctly installed.
3. Ensure that the battery is equipped with a battery box to prevent accidental shorting of the battery terminals.

MAINTENANCE AND STORAGE

Propeller Replacement

⚠ WARNING

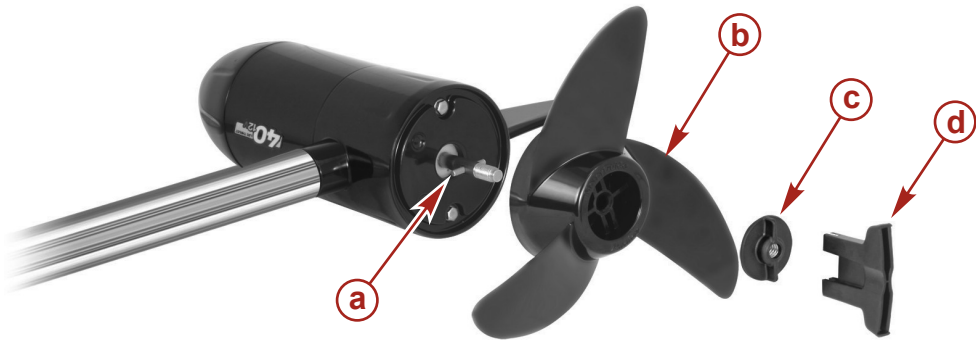
Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected motor starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing motor components.

REMOVING THE PROPELLER

1. Disconnect the battery cables from the power source.
2. While holding the propeller blade with one hand, use a propeller wrench or pliers to remove the propeller nut.

IMPORTANT: If the propeller cannot be removed easily, hold one blade and use a rubber mallet to lightly tap the backside of the opposite blade. If the propeller cannot be removed, refer to Owner Service Assistance - Troubleshooting.

NOTE: If the propeller pin is bent, replace the propeller pin.



44934

- a** - Propeller pin
- b** - Propeller
- c** - Propeller nut
- d** - Prop wrench

MAINTENANCE AND STORAGE

Recommended MotorGuide Accessory Description	Part Number
MotorGuide prop wrench kit	MGA050B6

INSTALLING THE PROPELLER

1. Rotate the motor shaft to insert the propeller pin horizontally.
2. Install the propeller onto the motor shaft by engaging the propeller onto the propeller pin.
3. Install the propeller nut. Tighten the nut securely.
4. Use a MotorGuide propeller wrench or pliers to tighten the propeller nut another $\frac{1}{4}$ turn.

CUSTOM APPLICATIONS

Repositioning the Top Housing

VariMAX transom mount motors are configured at the factory for use on the transom. The VariMAX motor head can be reversed (eight head positions are available) to fit any application including bow, backtroller, or sideways pulling applications. The BluVis lights can also be reversed to keep the intuitive push-pull feel and control consistent. If you have a VariMAX bow mount or pontoon mount motor, it is already configured for bow mount applications.

IMPORTANT: While configuring the top housing to a new position, toggle the position switch for the appropriate mount application. Refer to **Setting the Direction Control Switch**.

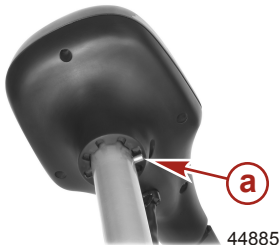
1. Ensure the battery cables are disconnected from the power source.
2. Loosen the top housing retaining bolt with a 5 mm diameter Allen wrench. Do not fully remove the retaining bolt.

IMPORTANT: Do not fully remove the top housing retaining bolt or the retaining nut may fall out. Do not raise the top housing off of the column. Removing the top housing may disconnect the motor control wires. If the wires disconnect, refer to **Motor Control Wiring** for wire orientation.



a - Allen wrench

3. Raise the top housing until the height pin disengages.



a - Height pin

CUSTOM APPLICATIONS

4. Rotate the top housing to the desired position and push the top housing back down to engage the height pin.



- a - Top housing
- b - Eight position settings

5. Tighten the top housing retaining bolt with an Allen wrench. Tighten the bolt to the specified torque.

Torque Description	Nm	lb-in.	lb-ft
Top housing retaining bolt	8.5	75	–



- a - Allen wrench

Setting the Direction Control Switch

VariMAX motors are configured to the intuitive push-pull direction control. To use the transom mount on the bow of the vessel, reverse the top housing and toggle the direction control switch to set the motor and BluVis function display orientation for a bow application. To reverse the top housing, refer to **Repositioning the Top Housing**.

1. Disconnect the battery cables from the power source.
2. Loosen the top housing retaining bolt with an Allen wrench. Do not fully remove the retaining bolt.

CUSTOM APPLICATIONS

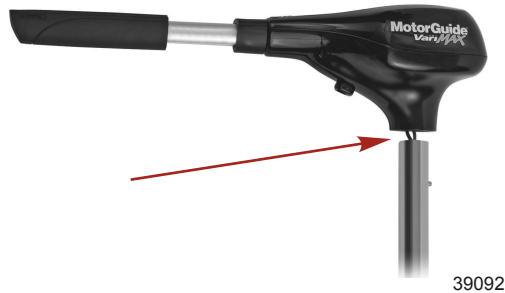
IMPORTANT: Do not fully remove the top housing retaining bolt or the retaining nut may fall out. Slowly raise the top housing off of the shaft ensuring that the motor control wires do not disconnect. If the wires are disconnected, refer to Motor Control Wiring.



a - Allen wrench

3. Remove the top housing from the column.

NOTE: On saltwater models, do not remove the heat sink grease on the motor column. Heat sink grease will not wash out of clothing.

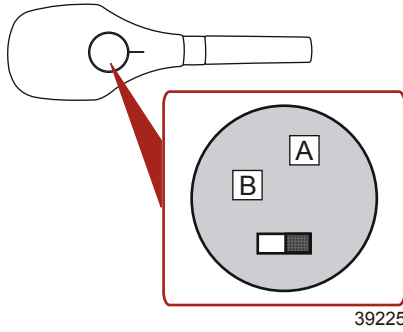


Top housing removed from column

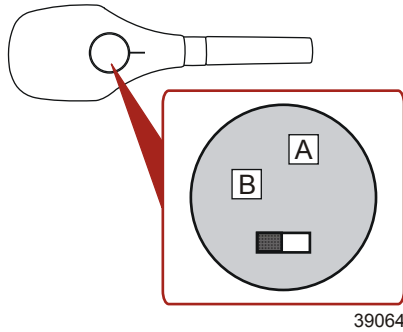
4. Turn the top housing upside down to expose the direction control switch inside.
5. Slide the switch away from the handle.

CUSTOM APPLICATIONS

NOTE: If necessary, use a flathead screwdriver to slide the direction control switch.



Transom mount application (default)



Bow, pontoon mount, or backtrolling application

6. Install the top housing onto the motor column.

CUSTOM APPLICATIONS

7. Rotate the top housing to the desired position and push the top housing back down to engage the height pin.



- a** - Top housing
- b** - Eight position settings

8. Retighten the top housing retaining bolt with an Allen wrench. Tighten the bolt to the specified torque.

Torque Description	Nm	lb-in.	lb-ft
Top housing retaining bolt	8.5	75	–



- a** - Allen wrench

CUSTOM APPLICATIONS

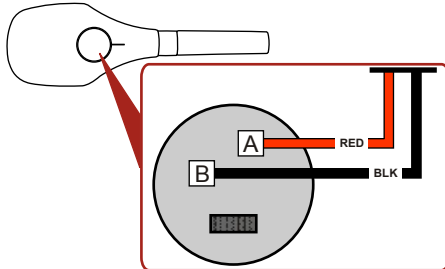
Motor Control Wiring

⚠ WARNING

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected motor starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing motor components.

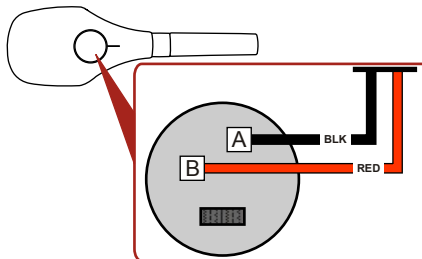
IMPORTANT: Disconnect the VariMAX motor control wiring for service only. Do not reconfigure the motor control wiring when reorienting the motor top housing between transom and bow applications.

NOTE: If necessary, use needle nose pliers to connect the motor control wires to their respective terminal. Ensure the wiring connection is secure.



45692

Transom mount application



45693

Bow or pontoon mount application

OWNER SERVICE ASSISTANCE

Troubleshooting

NOTE: For service information, contact any certified MotorGuide service center. For a full listing of MotorGuide service centers, go to www.motorguide.com or contact any Mercury service office.

Symptom	Possible Cause	Resolution
Loss of power	Weak 12 volt trolling motor battery	Check 12 volt battery charge. Recharge or replace battery as required.
	Loose or corroded battery connections	Inspect battery connections for cleanliness and tightness.
	Propeller is loose, damaged, or off-balance	Refer to Propeller Replacement .
	Wiring or electrical connection faulty	Wire gauge from the battery to the trolling motor is insufficient. Six gauge wire is recommended.
Excessive noise, vibration	Motor shaft is bent	Refer to a service center.
	Propeller is loose, damaged, or off-balance	Refer to Propeller Replacement .
Motor failure (all speeds)	Weak 12 volt trolling motor battery	Check 12 volt battery charge. Recharge or replace battery as required.
	Loose or corroded battery connections	Inspect battery connections for cleanliness and tightness.
	Wiring or electrical connection faulty.	Wire gauge from the battery to the trolling motor is insufficient. Six gauge wire is recommended.
	Fuse on circuit breaker is open	Replace the fuse or reset the circuit breaker only after determining the root cause of the problem.
	Magnets interfering with armature	Turn off the power and manually rotate the propeller. If the propeller does not rotate freely with a slight magnetic drag, contact a service center.

OWNER SERVICE ASSISTANCE

Symptom	Possible Cause	Resolution
Motor rotates in the wrong direction	Direction control switch is in the wrong position	Refer to Setting the Direction Control Switch .
BluVis function display failure	Electrical	Refer to a service center.
	Wiring or electrical connection faulty	Check the battery connection or refer to a service center.
Difficulty removing propeller	Bent propeller pin	Hold one blade and lightly tap the opposite blade with a rubber mallet.
		Use a putty knife on both sides of the propeller to apply equal pressure.
	Bent armature shaft	Refer to a service center.

Service Assistance

Your satisfaction with your product is very important to us. If you have a problem or question about your motor, contact your dealer or any certified MotorGuide service center. For more service assistance information, refer to **Warranty Information**.

The following information will be needed by the service office:

- Your name and address
- Daytime telephone number
- Model and serial number of your trolling motor
- Proof of purchase or registration verification
- Nature of problem

Mercury Marine Service Offices

For assistance, call, fax, or write. Please include your daytime telephone number with mail and fax correspondence.

OWNER SERVICE ASSISTANCE

United States		
Telephone	English - (920) 929-5040	Mercury Marine W6250 W. Pioneer Road Fond du Lac, WI 54936-1939
	Francais - (905) 636-4751	
Fax	English - (920) 929-5893	
	Francais - (905) 636-1704	
Website	www.motorguide.com	

Australia, Pacific		
Telephone	(61) (3) 9791-5822	Mercury Marine Australia 132-140 Frankston Road Dandenong, Victoria 3164 Australia
Fax	(61) (3) 9706-7228	

Europe, Middle East, Africa		
Telephone	(32) (87) 32 • 32 • 11	Marine Power - Europe, Inc. Parc Industriel de Petit-Rechain B-4800 Verviers, Belgium
Fax	(32) (87) 31 • 19 • 65	

Mexico, Central America, South America, Caribbean		
Telephone	(954) 744-3500	Mercury Marine 11650 Interchange Circle North Miramar, FL 33025 U.S.A.
Fax	(954) 744-3535	

Brunswick Asia Pacific Group		
Telephone	(65) 65466160	T/A Mercury Marine Singapore Pte Ltd 29 Loyang Way Singapore, 508944
Fax	(65) 65467789	