

# MotorGuide®

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**Operation  
Maintenance  
Installation  
Warranty  
Manual**

**Tour Pro 82/Tour Pro 109**

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## Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device complies with FCC Rules. Changes or modifications not expressly approved by MotorGuide could void the user's authority to operate the equipment. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Environmental Compliance Statement

All MotorGuide products that are subject to the Directive 2012/19/EU WEEE directive are compliant with the WEEE marking requirement. Such products are marked with the "crossed-out wheelee bin" WEEE symbol (shown, below) in accordance with European Standard EN50419.



The symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

## CE Declaration

An official copy of the Declaration of Conformity can be found at <https://www.motorguide.com/us/en/support-certifications.html>.

## Thank You

Thank you for choosing MotorGuide, one of the finest trolling motors available. Years of experience have been committed to the goal of producing the finest quality products. This led to MotorGuide's reputation for strict quality control, excellence, durability, long-lasting performance and being the best at providing after-the-sale service and support.

Please read this manual carefully before operating your motor. This manual has been prepared to assist you in the operation, safe use, and care of your trolling motor.

Again, thank you for your confidence in MotorGuide.

## Warranty Message

The product you have purchased comes with a **Three Year 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.

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# WARRANTY INFORMATION

## Disclaimers, Limitations, and Waivers

No individual or entity, including Mercury Marine authorized dealers, has been given authority by Mercury Marine to make any affirmation, representation or warranty regarding the Product, other than those contained in this Mercury Marine Limited Warranty, and if made, shall not be enforceable against Mercury Marine.

### **DISCLAIMERS AND LIMITATIONS:**

**THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE LIFE OF THE EXPRESS WARRANTY. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM COVERAGE UNDER THIS WARRANTY. SOME STATES/COUNTRIES DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS, AND EXCLUSIONS IDENTIFIED ABOVE; AS A RESULT, THEY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS THAT VARY FROM STATE TO STATE AND COUNTRY TO COUNTRY.**

### **SUBMISSION TO JURISDICTION**

**ANY LEGAL SUIT, ACTION, OR PROCEEDING ARISING OUT OF OR RELATING TO THIS MERCURY MARINE LIMITED WARRANTY OR THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE INSTITUTED IN THE COURT OF THE STATE OF WISCONSIN, COUNTY OF MILWAUKEE, AND EACH PARTY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF SUCH COURT IN ANY SUCH SUIT, ACTION, OR PROCEEDING. THE PARTIES IRREVOCABLY AND UNCONDITIONALLY WAIVE ANY OBJECTION TO JURISDICTION AND/OR VENUE OF ANY SUIT, ACTION, OR PROCEEDING IN SUCH COURTS AND IRREVOCABLY WAIVE AND AGREE NOT TO PLEAD OR CLAIM IN ANY SUCH COURT THAT ANY SUCH SUIT, ACTION, OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. ALL CLAIMS MUST BE BROUGHT IN THE PARTIES' INDIVIDUAL CAPACITY, AND NOT AS A CLASS MEMBER IN ANY PURPORTED CLASS OR REPRESENTATIVE PROCEEDING.**

### **GOVERNING LAW**

**ALL MATTERS ARISING OUT OF OR RELATING TO THIS MERCURY MARINE LIMITED WARRANTY SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF WISCONSIN WITHOUT GIVING EFFECT TO ANY CHOICE OR CONFLICT OF LAW PROVISION OR RULE (WHETHER OF THE STATE OF WISCONSIN OR ANY OTHER JURISDICTION).**

# WARRANTY INFORMATION

## MotorGuide Limited Three Year Warranty

### KEEP YOUR ORIGINAL PURCHASE RECEIPT

1. To obtain warranty service, the purchaser should deliver or return the unit (postage prepaid and insured) to any MotorGuide authorized service center. **DO NOT RETURN TO PLACE OF PURCHASE** unless they are an authorized service center. Motors purchased in other countries should be returned to place of purchase. 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.
2. MotorGuide electric trolling motors are warranted to the original purchaser to be free from defects in material and/or workmanship for three (3) years.
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 the MotorGuide Factory Service Center. Neither MotorGuide nor Mercury Marine is responsible for failure or damage caused by improper installation, setup, preparation, or previous service or repair errors.
4. For commercial use and government use customers, Tour MotorGuide trolling motors are warranted to the original retail purchaser to be free from defects in material or workmanship for two (2) years. 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 only to customers that purchase from a dealer authorized by MotorGuide/Mercury Marine to distribute the product in the country in which the sale occurred. Warranty coverage and duration varies by the country in which the product resides. This warranty applies to Tour MotorGuide trolling motors sold and residing in the United States. Unless applicable rules and regulations otherwise specify, this Limited Warranty Coverage 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. MotorGuide Composite Shaft Limited Lifetime Warranty. MotorGuide composite shafts are warranted to the original retail purchaser to be free of defects in material or workmanship for the lifetime of the original purchaser. MotorGuide will provide a new composite shaft at no cost for any composite shaft which contains a defect in material or workmanship. The installation costs are the sole responsibility of the purchaser.
7. This warranty does not apply to normal worn parts, i.e., worn cables, adjustments, or product damage due to 1) neglect, lack of maintenance, accident, abnormal operation or improper installation or service; 2) abuse, i.e., 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/Mercury; 4) alteration or removal of parts; 5) opening the lower unit (motor) by anyone other than the Factory Service Center will void this warranty.
8. This warranty will not apply to 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.
9. 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

10. Serialized "Service-Repair" motors have a one (1) year warranty. Nonserialized "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."
11. 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.
12. ALL INCIDENTAL AND/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.

# 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.

## 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.

# GENERAL INFORMATION

**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.

**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



70276

# PRODUCT OVERVIEW

## Box Contents

Ref. No.	Qty.	Description
a	1	Steering assembly
b	2	Cable routing cable tie
c	2	Cable routing cable tie screws
d	4	Nylon lock nuts
e	4	Mounting washers
f	4	Rubber mounting spacers
g	4	Mounting screws
h	1	Bounce buster assembly
i	1	Mount
j	1	Gas spring
k	2	Cable routing clips
l	1	Tie-down strap
m	2	Allen screws
n	2	Plastic retaining washers
o	1	T20 Torx bit
p	1	Self-tapping screw
q	1	Propeller pin
r	1	Propeller washer
s	1	Propeller nut
t	1	Katana propeller
u	1	T40 Torx bit
v	1	Pinpoint GPS remote
w	1	NMEA 2000 T-connector

# PRODUCT OVERVIEW

## RECOMMENDED TOOL LIST

The following list of tools is recommended to aid in assembly and installation of the motor.

1. Drill
2. 6 mm (1/4 in.) drill bit
3. P3 screwdriver
4. 11 mm (7/16 in.) wrench
5. 6 mm (1/4 in.) Allen wrench
6. 13 mm (1/2 in.) wrench
7. 4 mm (5/32 in.) Allen wrench
8. Hacksaw
9. 3 mm (7/64 in.) drill bit (optional foot pedal mounting)
10. Ratchet and 6 mm (1/4 in.) socket

# PRODUCT OVERVIEW

## Tour Pro 82/Tour Pro 109 MotorGuide Trolling Motor



70275

- a** - Top housing
- b** - Depth collar handle
- c** - Integrated bounce buster
- d** - HD+ universal sonar cable (some models)
- e** - Stow/deploy handle
- f** - Speed control knob
- g** - Foot pedal
- h** - NMEA 2000 cable
- i** - Momentary on button
- j** - Anchor button
- k** - Heading lock button
- l** - Prop on button
- m** - LED dashboard
- n** - Battery cables
- o** - Mount
- p** - Propeller
- q** - Lower unit



# PRODUCT OVERVIEW

r - Composite column

## Specifications

Model	Peak Thrust	Volts	Speeds Control/ Motor Direction	Integrated Sonar	Pinpoint GPS	Shaft Length
TR Pro 82 45"	82	24 V	Digital Variable/ Forward	No	Yes	114.3 cm (45 in.)
TR Pro 109 45"	109	36 V	Digital Variable/ Forward	No	Yes	114.3 cm (45 in.)
TR Pro 82 45" HD+SN R	82	24 V	Digital Variable/ Forward	Yes	Yes	114.3 cm (45 in.)
TR Pro 109 45" HD+SN R	109	36 V	Digital Variable/ Forward	Yes	Yes	114.3 cm (45 in.)

# PRODUCT OVERVIEW

Notes:

# WIRING AND BATTERY INFORMATION

## Wiring and Battery Information

### ⚠ 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.

### ⚠ 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.

## Recommended Practice and Procedures

**IMPORTANT:** Unplug the trolling motor after each use and when charging the battery.

- Do not use the main engine battery to power the trolling motor. Use a dedicated trolling motor battery or battery bank.
- Ensure that the batteries are enclosed and secured within a battery box to prevent accidental shorting of the battery terminals.
- Route the trolling motor wires on the opposite side of the boat from other boat wiring.
- Connect boat accessories directly to the main engine battery.
- Do not charge the trolling motor batteries while the trolling motor is in the deployed (down) position.

## Battery Recommendations

- Use 12-volt, deep cycle marine batteries. The number of batteries required varies according to the model of your trolling motor. Refer to **Battery Connection**.
- As a general rule, deep cycle batteries with a higher amp-hour rating or reserve capacity rating will provide longer run times and better performance.

**IMPORTANT:** A circuit breaker purchased for use with this trolling motor must be suitable for isolation in accordance with IEC 60947-2. This circuit breaker shall be capable of being locked in the OFF position.

- Install a manual reset circuit breaker in line with the trolling motor positive leads within 1.8 m (6 ft) of the batteries. These can be purchased from your local MotorGuide retailer or from [www.motorguide.com](http://www.motorguide.com).
- Do not extend the included 10-gauge battery cables more than 1.8 m (6 ft) for a total of 3 m (10 ft). If longer battery cables are required, MotorGuide offers accessory 8 mm<sup>2</sup> (8-gauge) battery cables.

# WIRING AND BATTERY INFORMATION

- Use nylock nuts to secure the battery cables to their terminals. Using wing nuts to secure the battery cables can cause loose connections.
- Do not power any depth finders or fish finders from the trolling motor battery. Connecting electronic equipment to the trolling motor batteries can cause electrical interference. Any depth finders or fish finders must be powered from the engine starting or accessory battery.

Recommended MotorGuide Accessory Description
8-gauge battery cable and terminals with 50-amp manual reset circuit breaker
50-amp manual reset circuit breaker
60-amp manual reset circuit breaker

## 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. Keep flames away and do not smoke near batteries being charged or which have been charged recently.
2. Do not disconnect the battery cables while the trolling motor is operating, a spark usually occurs at the point where a live circuit is broken. Always use care to prevent reverse polarization when connecting or disconnecting cable clamps on chargers. Poor connections are a common cause of electrical arcs, which cause explosions.
3. Do not reverse the polarity of battery terminal to cable connections.

## Wire and Cable Routing

- Route the trolling motor wires on the opposite side of the boat away from other boat wiring.
- The trolling motor should be connected to its own dedicated battery.
- Sensitive electronics, such as depth finders, should be connected to a separate battery.
- Marine engines should have their own dedicated starting battery.
- All batteries should have a common ground.

# WIRING AND BATTERY INFORMATION

## Wire Color Code Abbreviations

Wire Color Abbreviations				
BLK	Black		BLU	Blue
BRN	Brown		GRY or GRA	Gray
GRN	Green		ORN or ORG	Orange
PNK	Pink		PPL or PUR	Purple
RED	Red		TAN	Tan
WHT	White		YEL	Yellow
LT or LIT	Light		DK or DRK	Dark

## Battery Connection

### ⚠ WARNING

Before working around electrical system components, disconnect the battery cables from the battery to prevent injury or damage to the electrical system due to an accidental short circuit.

### ⚠ 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.

### NOTICE

Failure to operate the trolling motor within the recommended voltage specifications can cause product damage. Do not exceed the maximum supply voltage.

**IMPORTANT:** Refer to the decal on the head of the trolling motor to determine the voltage requirements of your trolling motor.

## 24-VOLT BATTERY CONNECTION

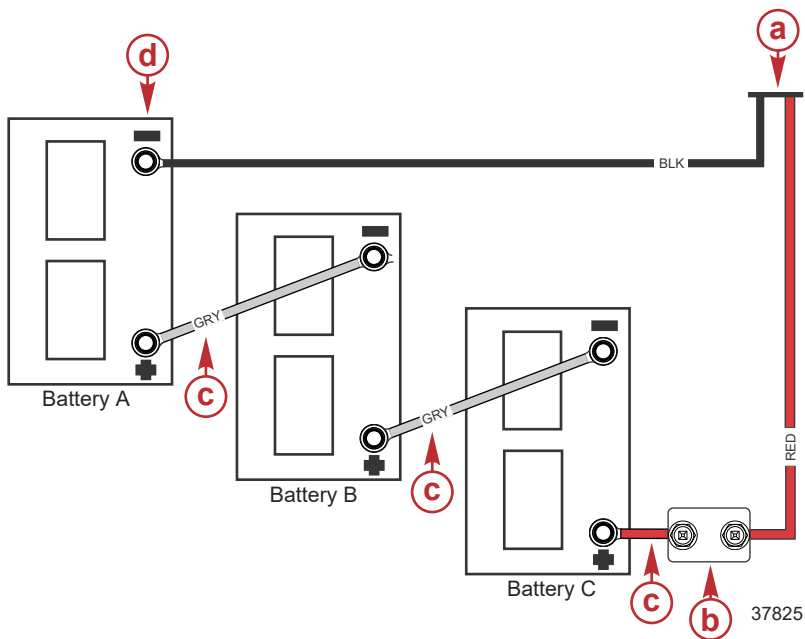
1. Starting with the negative (-) lead, disconnect the battery cables from the engine starting or accessory battery.
2. Install a 50-amp (good) or 60-amp (best) manual reset circuit breaker in line with the trolling motor power cable positive (+) lead and the trolling motor battery **B** positive (+) terminal.
3. Connect the positive (+) trolling motor lead to the positive (+) terminal on trolling motor battery **B**.
4. Connect a jumper wire (reference gray) between the negative (-) terminal on battery **B** to the positive (+) terminal on battery **A**.

**IMPORTANT:** The jumper wire should be the same wire gauge as the negative (-) and positive (+) power cables.



# WIRING AND BATTERY INFORMATION

6. Connect the trolling motor negative (-) lead to the negative (-) terminal on battery **A**.
7. Starting with the positive (+) lead, reconnect the battery cables to the engine starting or accessory battery.



## 36-volt battery connection

- a** - Power cables to trolling motor
- b** - Manual reset circuit breaker
- c** - Jumper wire (not supplied)
- d** - Negative (-) battery terminal

# WIRING AND BATTERY INFORMATION

Notes:



# TROLLING MOTOR INSTALLATION AND OPERATION

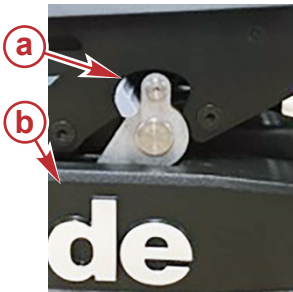
## Installing the Steering System on the Mount

**IMPORTANT:** Do not install the gas spring at this time.

1. Remove the mount from the packaging and leave the mount in the deployed position.



2. Rest the mount on a level elevated surface such as a workbench.
3. Remove the steering assembly from the packaging.
4. Remove the plastic latch spacer from the mount.

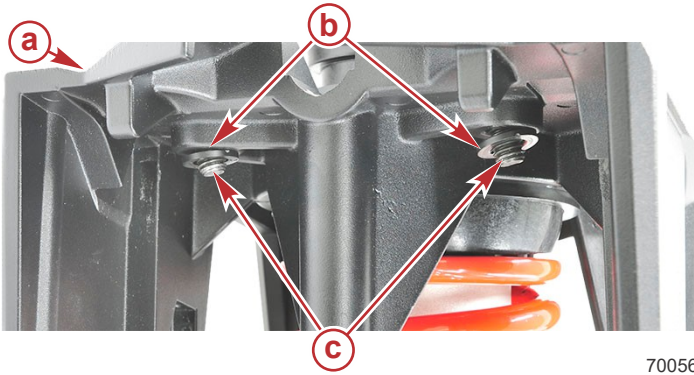


- a - Latch spacer
- b - Mount

5. Remove the MotorGuide Tour mount accessory kit from the packaging.
6. Install the Allen screws on the steering system assembly.

# TROLLING MOTOR INSTALLATION AND OPERATION

7. Push the plastic retaining washers onto the Allen screws.

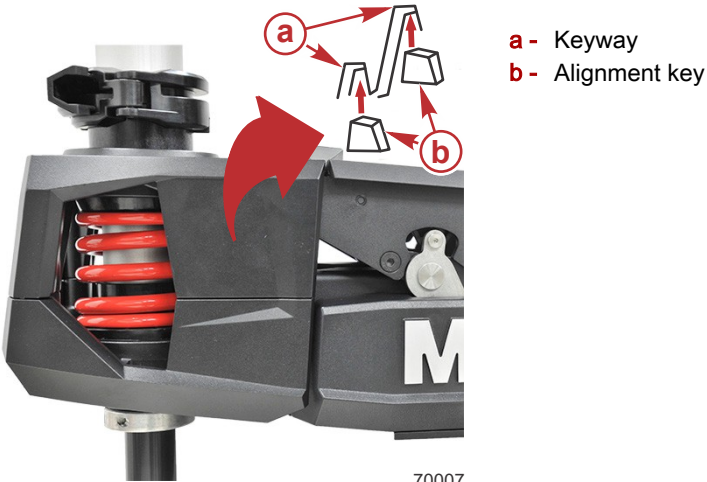


70056

- a** - Steering assembly
- b** - Plastic retaining washers
- c** - Allen screws

**IMPORTANT: Be careful not to pinch the stow/deploy handle and cable between the mounting bracket and the steering system.**

8. Lower the steering assembly onto the mount vertically from above while aligning the keyways and the alignment keys.



70007

**IMPORTANT: Be certain the top of the 360 breakaway housing is aligned with the top of the mount.**

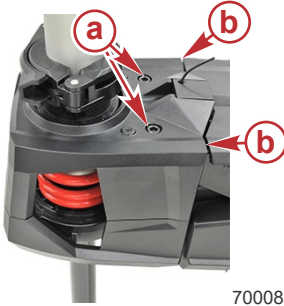
**Do not overtighten the screws when installing the 360 breakaway housing to the mount.**

# TROLLING MOTOR INSTALLATION AND OPERATION

**NOTE:** The first Allen screw may come loose while tightening the second Allen screw.

9. Tighten one of the two Allen screws to the specified torque. Then tighten the second Allen screw to the specified torque. When the second Allen screw is tightened, verify that the first Allen screw is still tightened to the specified torque.

Description	Nm	lb-in.	lb-ft
Allen screws (2)	16.3	144	–



- a - Allen screws
- b - 360 breakaway housing aligned with the top of the mount

## Trolling Motor Installation

**IMPORTANT:** Mount the motor as far forward on the boat as possible.

**Make sure there is nothing obstructing the stowing or deploying of the motor in and out of the water.**

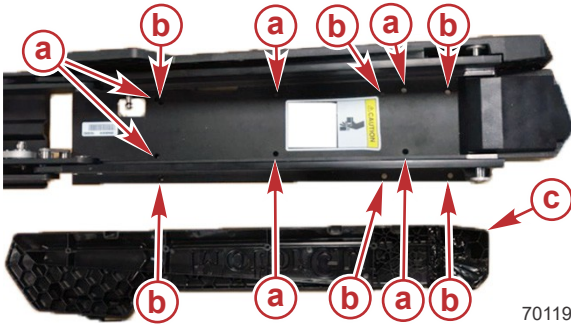
**Make sure there are no obstructions underneath the mount.**

1. Stow the fully assembled motor by pulling on the stow/deploy handle and raising the motor into the stowed position.



# TROLLING MOTOR INSTALLATION AND OPERATION

Installation Variations	
If replacing an existing trolling motor that uses a 4" hole pattern	Remove the four screws and starboard side cover plate from inside of the mount to uncover the 10.2 cm (4 in.) mounting hole pattern that matches the legacy MotorGuide trolling motor mounts.



- a** - 7.6 cm (3 in.) pattern
- b** - 10.2 cm (4 in.) pattern
- c** - Starboard side cover

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

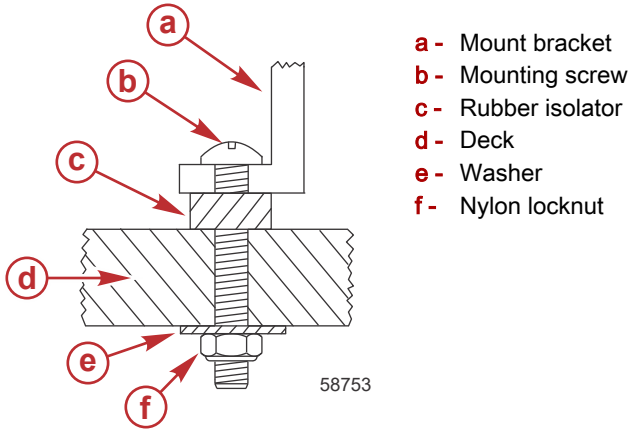
4. Drill the mounting holes with a 6 mm (1/4 in.) diameter drill bit. Remove any debris.
5. Insert the rubber isolators between the base of the mount and the boat mounting surface.
6. Install the stainless steel washers and nylon locknuts onto the mounting screws underneath the boat deck. Tighten the screws securely.

# TROLLING MOTOR INSTALLATION AND OPERATION

**IMPORTANT:** To prevent galling of the mounting hardware, do not use a drill to tighten the mounting screws.

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

The mount bracket must lay flush against the rubber isolators before being bolted to the deck or the mount will bind, making it difficult or impossible to unlatch.



7. Once installed, the bracket should fasten securely and evenly, and release with a light, quick pull on the stow/deploy handle.

## Permanent Foot Pedal Mounting—Optional

1. Determine a suitable location for the foot pedal with the trolling motor deployed and in the stowed position. Ensure that there are no obstructions beneath the boat deck that would interfere with the mounting screws, such as bulkheads or boat wiring.
2. Once a suitable location is chosen, mark the mounting holes, using the foot pedal as a template.

**IMPORTANT:** To prevent cracking, use a countersink drill bit or a larger drill bit to countersink the holes on fiberglass boats.

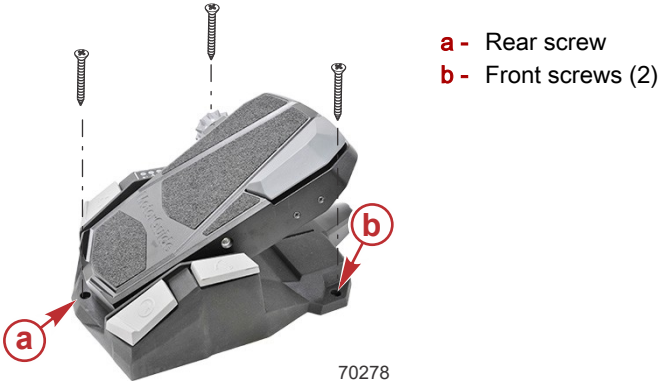
3. Use a 3 mm (7/64 in.) drill bit to drill holes through the boat deck.

**NOTE:** Make sure the cable and cable sheathing are not kinked or twisted before mounting the foot pedal to the boat deck. If steering cables are kinked or twisted, this can introduce excessive pedal tension. Rotate the foot pedal to remove the cable twist or re-route the steering cables.

4. Use three #8 x 2 in. stainless steel screws (not included) to secure the foot pedal to the boat deck.
5. Push the pedal into the full toe down position and install the two front screws on the foot pedal.

# TROLLING MOTOR INSTALLATION AND OPERATION

6. Push the pedal into the full heel down position and install the rear screw on the foot pedal.



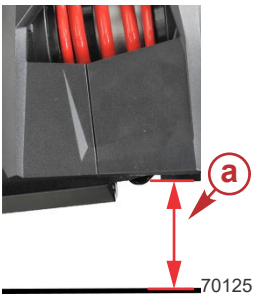
## Bounce Buster Installation

1. Place the trolling motor in the stowed position.
2. Remove the bounce buster from the mounting accessory kit.

### ▲ CAUTION

Avoid injury from parts flying into the passenger compartment of the boat. If the bounce buster is not correctly installed, the trolling motor can inadvertently deploy, which at planing speed could result in catastrophic failure of the trolling motor. Check that the stow latch fully engages after installation of the bounce buster.

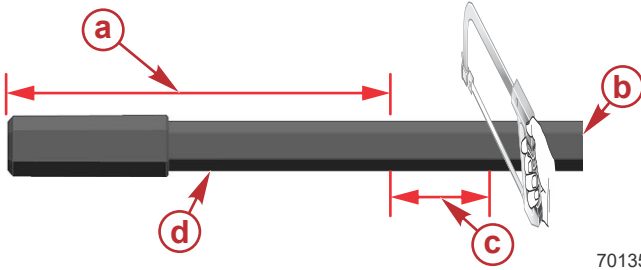
3. Measure the distance between the boat deck and the outside surface of the mounting bracket.



4. Add 12.7 mm (1/2 in.) to the measured length (distance between the boat deck and the outside surface of the mounting bracket) taken in the previous step.

# TROLLING MOTOR INSTALLATION AND OPERATION

5. Cut the bounce buster to the new measurement on the unassembled end of the bounce buster.



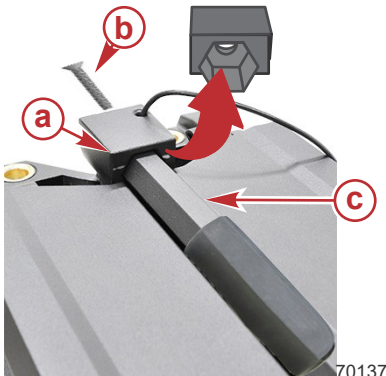
- a** - Distance between the boat deck and outside surface of the mounting bracket
- b** - Unassembled end
- c** - Add 12.7 mm (1/2 in.)
- d** - Bounce buster

6. Move the trolling motor into the deployed position.

**NOTE:** Removing the steering system from the deployed mount will allow for easier tightening of the bounce buster screw.

**NOTE:** The bounce buster will loosen if not fully seated in the bounce buster pocket.

7. Slide the unassembled end of the bounce buster into the bounce buster pocket.
8. Use a pencil or piece of tape to mark a line to indicate when bounce buster is fully seated in the bounce buster pocket. Mark the line 20 mm (0.79 in.) from the cut end of the bounce buster.
9. Insert and tighten the included bounce buster self-tapping screw into the bounce buster pocket.



- a** - Bounce buster pocket
- b** - Self-tapping screw
- c** - Bounce buster



# TROLLING MOTOR INSTALLATION AND OPERATION

**NOTE:** Install the steering system if removed. Refer to **Installing the Steering System on the Mount**.

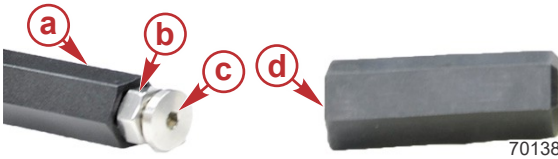
10. Stow the trolling motor.



70020

**NOTE:** Over adjusting of the fine adjustment screw may cause additional binding of the system. If over adjusted, the unit will be more difficult to release from the stowed position.

11. Adjust the boot end of the bounce buster by removing the rubber boot, then loosen the jam nut by turning the screw counterclockwise to the desired length.
12. Tighten the jam nut to the base of the bounce buster followed by a clockwise turn.
13. Replace the rubber boot.



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- a - Bounce buster
- b - Jam nut
- c - Fine adjustment screw
- d - Rubber boot

14. Verify in the stowed position that the stow latch is engaged by lifting up on the 360 breakaway without the use of the stow/deploy handle. If the stow latch is engaged, the mount will not release. If mount releases, repeat Step 11-13 until Step 14 can be verified.

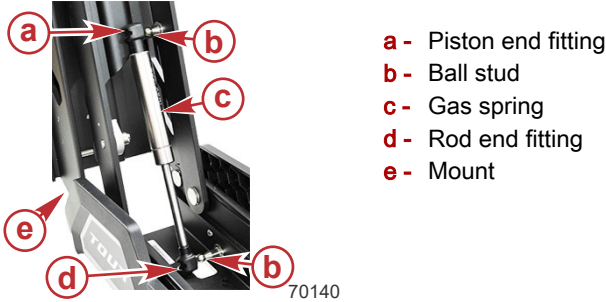
## Installing the Zero-G Gas Spring

1. Remove the gas spring from the Accessory Kit located in the packaging.
2. Rotate the motor into the stowed position until the ball end studs align with the gas spring end fittings.

**IMPORTANT:** Do not install the gas spring with the rod end up. This can result in premature gas spring failure.

# TROLLING MOTOR INSTALLATION AND OPERATION

3. Push or squeeze the piston end fitting of the gas spring onto the ball stud located on the inner arm of the mount.
4. Repeat the previous step for the rod end fitting of the gas spring onto the ball stud located on the base of the mount.



5. Deploy the motor fully to ensure the gas spring operates correctly.
6. Fully stow the motor.
7. Refer to **Tour Pro Pedal Resistance Settings** to customize the feel of resistance on the pedal using the remote.

## NMEA 2000 Pinpoint Connection

The NMEA 2000 Chartplotter integration connecting Tour Pro via a NMEA 2000 network will enable on-screen control and motor status by using the Pinpoint GPS features such as Anchor Lock, Jog, Heading Lock, Cruise Control on-screen as well as following custom drawn routes, go-to waypoint, programmable turns and more.

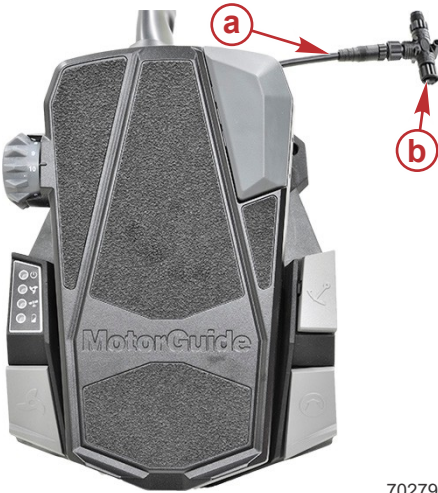
### INSTALLATION

1. Remove the NMEA 2000 T-connector from the accessory kit.

**NOTE:** A 182.9 cm (6 ft.) drop cable may be used between the foot pedal connection and the provided T-connector to reach an existing NMEA 2000 network if the provided cable length at the foot pedal will not reach.

# TROLLING MOTOR INSTALLATION AND OPERATION

2. Connect the middle male port to the NMEA 2000 cable that is coming out of the Tour Pro foot pedal.



- a - NMEA 2000 cable
- b - NMEA 2000 T-connector

70279

3. Attach the T-connector to an existing NMEA 2000 network backbone. If no existing network exists, purchase MotorGuide NMEA 2000 Starter Kit (Part #8M0107522).
4. Use a termination resistor to cap off the remaining open connector end of the T-Connector if it is the last T in a NMEA 2000 network.

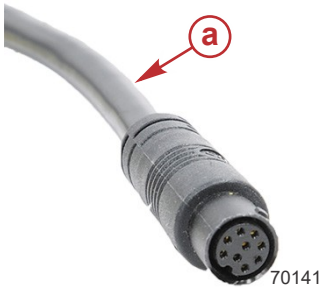
## Connecting the Sonar Display to the Trolling Motor

**NOTE:** This procedure applies only to models equipped with integrated HD+ universal sonar.

This sonar display connection procedure applies to trolling motor models with internal sonar that offer built-in 83/200 and 455/800 kHz HD+ universal sonar transducers compatible with Garmin®, Humminbird®, Lowrance®, and Raymarine® brand sonar displays. For compatibility with other sonar units, refer to [www.motorguide.com](http://www.motorguide.com).

# TROLLING MOTOR INSTALLATION AND OPERATION

The trolling motor is equipped with a MotorGuide HD+ universal sonar plug. Adapters are available to connect other brands of sonar displays to the trolling motor. Match the cable connector to the sonar port on the back of the sonar display. Some sonar multifunction displays may require additional cables provided by the sonar manufacturer. Power up the unit to ensure that the sonar cable is connected securely.



**a** - Harness—to nose cone sonar

Transducer adapter cables available from MotorGuide	Part Number
Lowrance® 9-Pin HD+ Sonar Adapter Cable	8M4004174
Lowrance® 7-Pin HD+ Sonar Adapter Cable	8M4004175
Humminbird® 11-Pin HD+ Sonar Adapter Cable	8M4004176
Humminbird® 7-Pin HD+ Sonar Adapter Cable	8M4004177
Garmin® 8-Pin HD+ Sonar Adapter Cable	8M4004178
Raymarine® HD+ Element Sonar Adapter Cable	8M4004179
Raymarine® HD+ Axiom Sonar Adapter Cable	8M4004180
MotorGuide 15' HD+ "Universal Sonar Extension Cable	8M4004245

## Reducing Sonar Transducer Interference

Sonar transducers can be affected by interference, such as radio frequency interference (RFI) and electromagnetic interference (EMI). This interference can cause undesired operation of the sonar display. Refer to the following list to reduce sonar interference sources.

1. Lower the sonar sensitivity, also known as gain. Refer to the documents included with your sonar display.
  - a. Change the sensitivity to an automatic setting.
  - b. If the automatic setting does not reduce sonar interference, manually change the sensitivity to 55–65% of the maximum setting.
2. Verify that the transducer cable is not routed near any power cables.
3. Ensure that the positive (+) and negative (–) power cables are installed next to each other. This helps cancel any EMI.
4. Inspect the transducer cable for damage, nicks, or cuts. Replace the transducer cable if it is damaged.

# TROLLING MOTOR INSTALLATION AND OPERATION

5. Connect the sonar display to a separate accessory battery with only the sonar display connected. This will verify if the interference is coming from the power cables or the transducer cable.
  - a. If the interference stops when the sonar display is connected to a separate accessory battery, inspect the boat wiring. Most likely, there is a problem with the ground (-) connection. All devices should have a common ground.
  - b. If the interference continues, it is likely coming from the transducer or transducer cable.
6. Install a radio frequency (RF) choke onto the sonar display power cable.
7. Connect the sonar display to a different transducer.

## Cable Routing Installation for External Accessories

### ▲ CAUTION

**Avoid injury caused by unintended motor deployment. An improperly secured motor may deploy during boat operation, causing damage and flying debris.**

***NOTE:** An unsecured stowed motor can inadvertently deploy while underway and cause damage. This damage can include broken components that may strike occupants of the boat. When stowing the motor always adjust the trolling motor depth down to the top half of the outer column to remove any slack from cables, ensure that the tie-down strap is secure and check that the motor is latched before powering or trailering the boat. Improper use or installation of external cables can interfere with latches and cause inadvertent deployment. The cable routing clips are intended to be used with externally routed trolling motor accessories that require cables to be routed on the outside of the shaft of the motor and alongside the mount for a seamless installation on the trolling motor.*

# TROLLING MOTOR INSTALLATION AND OPERATION

1. Place the motor in the deployed position.



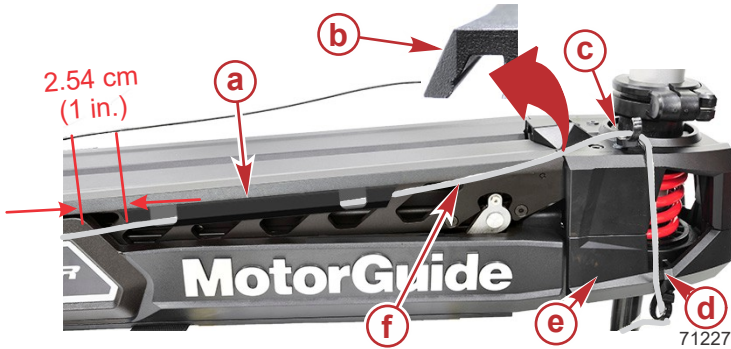
70022

2. After mounting the accessory of choice on the shaft or lower unit of the motor run the cable on the side of the shaft to the bottom of the 360 breakaway housing.
3. Attach the cable to the bottom of the 360 breakaway housing using the provided cable tie and screw found in the trolling motor accessory kit.
4. Route the cable from the bottom of the 360 breakaway housing to the top of the 360 breakaway housing using the cable tie and screw.
5. Insert the cables of the accessory into the front of the cable routing clip and out of the second slot on the opposite end of the clip.

**IMPORTANT: The clip must be within 2.54 cm (1 in.) of the raised part of the side plate to avoid damage to the clip when stowing and deploying.**

# TROLLING MOTOR INSTALLATION AND OPERATION

6. Insert the clip, open side up, into the overhang on the top of either side of the trolling motor mount.



- a** - Cable routing clip
- b** - Overhang
- c** - Top of 360 breakaway housing
- d** - Bottom of 360 breakaway housing
- e** - 360 breakaway housing
- f** - Cable

## 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.

### ▲ CAUTION

Avoid injury caused by unintended motor deployment. An improperly secured motor may deploy during boat operation, causing damage and flying debris.

# TROLLING MOTOR INSTALLATION AND OPERATION

**IMPORTANT:** An improperly stowed motor can inadvertently deploy while underway and cause damage. This damage can include broken components that may strike occupants of the boat. When stowing the motor always adjust the trolling motor depth down to the top half of the outer column, ensure the tie-down strap is secure and check that the motor is latched before powering or trailering the boat.

Raise the trolling motor out of the water. While holding the release handle allow the trolling motor to fall into the stow latched position from the 90° position. Do not release the latch release handle until the stow latch is engaged.

1. Adjust the trolling motor depth down to the top half of the outer column. Refer to **Adjusting the Trolling Motor Depth**.
2. Firmly grasp the stow/deploy handle.
3. Snap the stow/deploy handle to deploy the latch hooks.
4. Continue to pull the stow/deploy handle to raise the lower unit onto the mount.



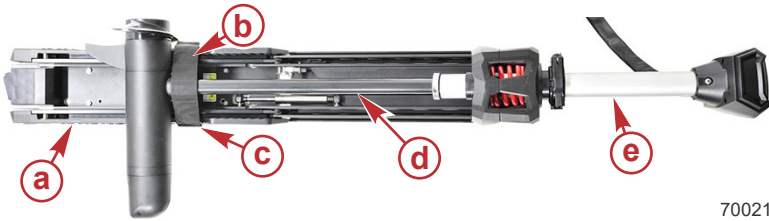
71235

- a - Top half of the outer column
- b - Stow/deploy handle



# TROLLING MOTOR INSTALLATION AND OPERATION

5. Once the motor is in the stowed position, the stow latch engages to secure the trolling motor.



70021

- a** - Mount
- b** - Tie-down strap
- c** - Buckle
- d** - Composite column
- e** - Motor

6. Position the tie-down strap over the composite column and through the buckle. Pull it tight, then secure the hook-and-loop backing together to secure the motor to the mount.

## 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.

1. Release the tie-down strap that is securing the composite shaft to the mount.
2. Firmly grasp the stow/deploy handle.
3. Pull the latch stow/deploy handle to disengage the stow latch.

# TROLLING MOTOR INSTALLATION AND OPERATION

**IMPORTANT:** Lower the trolling motor into the water. Release the stow/deploy handle allowing the gas spring to ease the motor into the deployed position.



**a** - Stow/deploy handle

70019

**IMPORTANT:** Make sure the Bulldog deploy latches are engaged before operating the motor.

4. Once the motor is in the deployed position, the deploy latch hooks will engage to secure the trolling motor.



70022

# TROLLING MOTOR INSTALLATION AND OPERATION

## Adjusting the Trolling 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 and wave conditions.

**IMPORTANT:** When adjusting the motor depth, ensure that the propeller blades are fully submerged 15–30 cm (6–12 in.) below the water surface to avoid cavitation.

1. Firmly grasp the outer column with one hand.
2. Pull open the cam lock arm until the outer column slides freely.
3. Raise or lower the outer column until the propeller blades are submerged 15–30 cm (6–12 in.) below the water surface.

**IMPORTANT:** Make sure there is nothing obstructing the operation of the cam lock lever.

The motor head should be positioned perpendicular to the mount base during trolling motor operation.

4. Rotate the cam lock lever until the depth collar binds tightly on the outer column, then close the cam lock arm.



- a - Cam lock lever  
b - Outer column

## Directional Indicator

The indicator provides directional information at a glance.

1. To make a right turn, press the toe down. The motor steers the boat to the right.
2. To forward direction, place the foot pedal in neutral position.
3. To make a left turn, press the heel down. The motor steers the boat to the left.

# TROLLING MOTOR INSTALLATION AND OPERATION

- To reverse direction, continue to press the toe or heel all the way down to point the lower unit toward the back of the boat to move the boat in reverse.



- a** - Directional indicator
- b** - Right turn - toe down
- c** - Straight ahead - foot pedal in neutral position
- d** - Left turn - heel down

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## Pinpoint GPS Overview

### TROLLING MOTOR INSTALLATION GUIDELINES

This section covers important guidelines for the Tour Pro trolling motor. Refer to the following list of important considerations:

- Verify that objects containing iron (such as anchors) are not located within 91.4 cm (36 in.) of the trolling motor.

# TROLLING MOTOR INSTALLATION AND OPERATION

- Keep unnecessary wiring and power cables away from the trolling motor.
- Verify that the trolling motor power cables are bundled together. Do not route the power cables separately, particularly within 91.4 cm (36 in.) of the trolling motor. Routing the power cables together reduces electromagnetic interference.
- Obstructions such as mountain ranges, bridges, tall trees, buildings, and severe weather can affect the GPS signal strength.
- GPS signal strength can be affected by certain geographic locations, such as southern or northern polar extremes like Alaska and northern Canada.

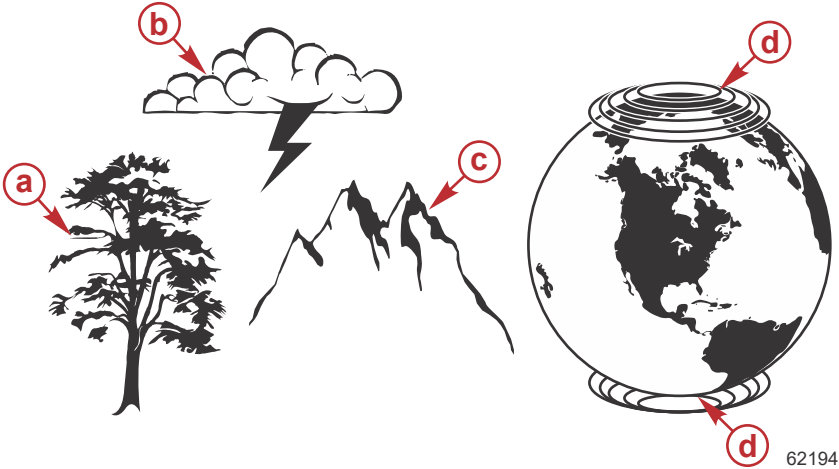
## **▲ CAUTION**

**Avoid injury or property damage due to unintended operation. Certain objects—especially magnetic metal objects, such as anchors—can affect the GPS system if they are within or passing through the magnetic field surrounding the trolling motor. Objects obstructing the GPS signal can also have a negative effect on system operation. Be mindful of objects close to the trolling motor, and use care when operating the trolling motor in a GPS-guided mode.**

# TROLLING MOTOR INSTALLATION AND OPERATION

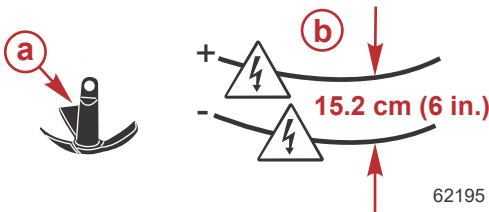
## ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Objects restricting foot pedal movement and power assisted steering can have a negative affect on GPS-guided modes. Ensure that the foot pedal area is free and clear of obstructions and that the trolling motor can steer 360 degrees in both directions using the wireless remote before entering a GPS-guided mode. Be mindful of objects close to the trolling motor and foot pedal, and use care when operating the trolling motor in GPS-guided mode.



### Objects and locations may obstruct the GPS signal

- a** - Trees
- b** - Severe weather
- c** - Mountains
- d** - Extreme Northern and Southern locations



### Objects may cause disturbance to the magnetic field within 91 cm (36 in.) of the trolling motor

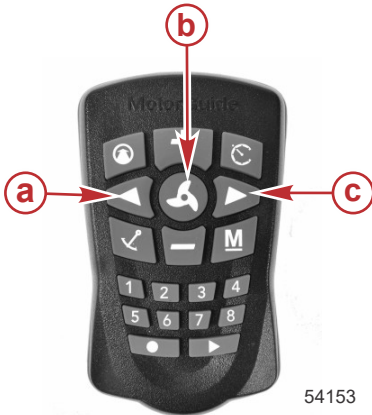
- a** - Objects containing iron (such as anchors)
- b** - Trolling motor power cables (install no more than 15.2 cm [6 in.] apart)

# TROLLING MOTOR INSTALLATION AND OPERATION

## LINKING THE HANDHELD REMOTE TO THE TROLLING MOTOR

The first time the trolling motor is powered up, the handheld remote will need to be linked to the trolling motor. The linking procedure is listed as follows:

1. Deploy the trolling motor.
2. Starting with the positive (+) lead, connect the trolling motor power cables to the battery.
3. Within ten seconds after connecting the power cables, press and hold the **left arrow** button and **right arrow** button on the handheld remote at the same time. The trolling motor will emit a low tone to confirm that the handheld remote has been linked to the trolling motor.



- a - Left arrow button
- b - Propeller button
- c - Right arrow button

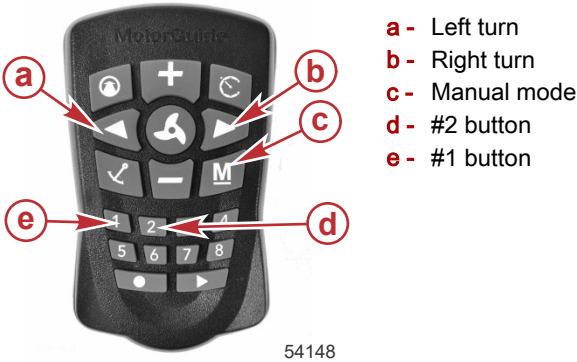
To clear the linked handheld from the trolling motor's memory, connect the battery cables to a power source such as the trolling motor battery or power receptacle, and in less than ten seconds press the **left arrow**, **right arrow**, and **propeller** buttons at the same time. Complete the link procedure again to use the handheld remote with the trolling motor.

If there is trouble syncing the remote, start with the motor unplugged and deployed. Hold down the **left arrow**, **right arrow**, and **propeller** buttons at the same time before plugging in the motor. Once the battery light turns green, let go of the buttons and the link process should be complete.

# TROLLING MOTOR INSTALLATION AND OPERATION

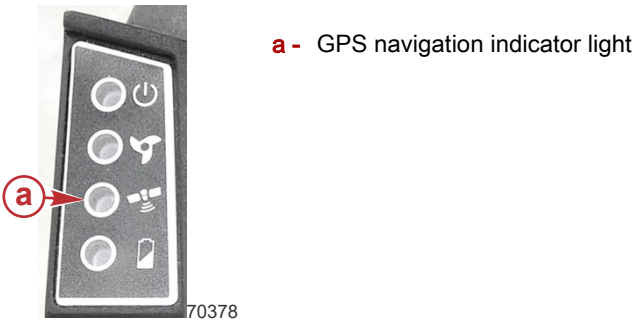
## MOUNTING ANGLE CALIBRATION

**IMPORTANT:** This calibration is required and must be completed. It should be repeated when the trolling motor is moved from one boat to another. This calibration can be done with the boat in or out of the water.



- a** - Left turn
- b** - Right turn
- c** - Manual mode
- d** - #2 button
- e** - #1 button

**IMPORTANT:** A fixed GPS position is required to complete the mounting angle calibration. The Pinpoint GPS system will emit an audible tone once it has acquired a fixed GPS position (in the default audio mode), and the GPS status indicator light will illuminate on the LED dashboard located on the foot pedal.



- a** - GPS navigation indicator light

1. Power up and deploy the trolling motor. Adjust the motor height so that the bottom of the head is 15.2 cm (6 in.) above the depth collar and the motor is clear of any obstructions while turning.

**IMPORTANT:** Stay a safe distance away from the propeller when the trolling motor is in an operational mode.

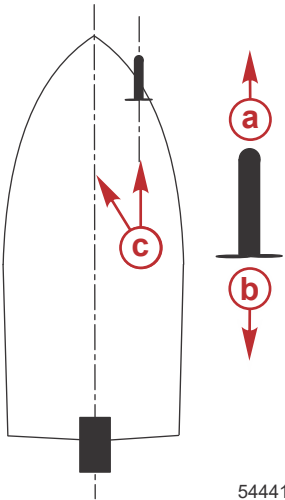
### **⚠ WARNING**

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



# TROLLING MOTOR INSTALLATION AND OPERATION

2. Use the **left turn** and **right turn** buttons to steer the unit so that it is facing straight ahead, parallel with the keel of the boat, with the nose cone of the lower unit facing forward and the propeller facing aft.



## View of boat from above

- a - Nose cone facing the bow
- b - Propeller facing the stern
- c - Parallel lines

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3. Once the lower unit is positioned as close to parallel with the keel as possible, press and hold the **manual mode** button, then press and release the **1, 1**, then **2** buttons in sequence. The trolling motor will emit an audible tone, flash the status indicator light, and then return to manual mode, completing the mounting angle calibration.

## COMPASS CALIBRATION

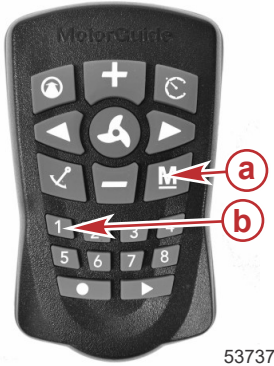
**IMPORTANT:** Calibration should not be completed using the trolling motor for propulsion as this could negatively impact GPS Pinpoint performance.

**IMPORTANT:** Calibration is critical to Pinpoint GPS performance and should be repeated three times at the time of installation. Compass calibration should be repeated if the Pinpoint GPS system is not performing as expected or if a long distance has been traveled from the last point of calibration. This calibration may be done with the boat in the water using the primary propulsion engine, or with the boat on the trailer.

**IMPORTANT:** A fixed GPS position is required to complete the compass calibration. The Pinpoint GPS system will emit an audible tone once it has acquired a fixed GPS position (in the default audio mode), and the GPS status indicator light will illuminate. Calibration cannot be completed using the trolling motor for propulsion as this could negatively impact GPS Pinpoint performance.

# TROLLING MOTOR INSTALLATION AND OPERATION

**IMPORTANT:** GPS signal strength may vary, depending on satellite reception. This can affect GPS performance.



- a - Manual mode
- b - #1 button

1.
  - a. **If performing the compass calibration with the boat in the water:** locate a suitable area clear of obstructions to navigation (both above and below the waterline) to perform the compass calibration.
  - b. **If performing the compass calibration with the boat on the trailer:** locate a suitable area clear of obstructions to perform the compass calibration.
2. Deploy the trolling motor. Adjust the motor height so that the bottom of the head is 15.2 cm (6 in.) above the depth collar and the motor. If performing the compass calibration with the boat in the water, verify that the trolling location is where the trolling motor and primary propulsion engine will not hit bottom or other obstructions.
3. Press and hold the **manual mode** button, then press **1, 1, 1**. The trolling motor will emit a long beep and the GPS status indicator light will turn off.
4.
  - a. **If performing the compass calibration with the boat in the water:** use the primary propulsion engine to slowly drive the boat in two complete circles.
  - b. **If performing the compass calibration with the boat on the trailer:** tow the boat in two complete circles.
5. Two beeps will occur when close to completing the second circle. The GPS status indicator light will turn on and a beep will occur, signaling a successful compass calibration.
6. For initial installations repeat steps 1-5 two additional times to ensure motor is fully calibrated to the specific boat and geographic region.

## RESET TO FACTORY CALIBRATION

To reset the trolling motor to the factory calibration, press and hold the **manual mode** button, then press **1, 1, 4**.

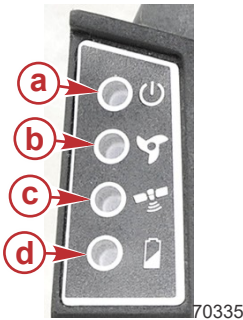
# TROLLING MOTOR INSTALLATION AND OPERATION

## Operating the Pinpoint GPS System

### STATUS INDICATOR LIGHT IDENTIFICATION

This trolling motor is equipped with a multifunction status indicator light panel. It can display the status of the motor, propeller, battery charge, and GPS status for quick and easy reference during operation.

- Lights and functions:
  - a. The Power indicator LED will illuminate when power is connected to the trolling motor.
  - b. The propeller LED will illuminate when the propeller on button is activated or when a GPS function requiring the propeller to be on is activated indicating that the propeller is on.
  - c. The GPS navigation LED will illuminate as a solid light when GPS satellite is acquired and will flash when a GPS function is engaged and in use.
  - d. The Battery Status LED will display trolling motor battery level.  
Progressing from:
    - i. Green (Good)
    - ii. Red (Low)
    - iii. Flashing Red (Critical Low)



- a** - Power **ON/OFF** indicator light
- b** - Propeller **ON/OFF** indicator light
- c** - GPS navigation indicator light
- d** - Battery status light

### PINPOINT GPS STARTUP

The global positioning system (GPS) is a satellite-based navigation system capable of providing positional information anywhere on Earth, provided that the GPS receiver has a clear line of sight to at least four GPS satellites.

# TROLLING MOTOR INSTALLATION AND OPERATION

When the trolling motor is powered up and deployed, it is immediately capable of operating as a conventional trolling motor. The trolling motor will require between 30 seconds to 10 minutes to acquire a fixed GPS position, depending on how much time has passed since the unit was powered up. Having a clear view of the sky overhead, with no large trees, power lines, bridges, mountain ranges, or buildings to interfere with the GPS signal, will improve the GPS accuracy and reduce the amount of time required to obtain a fixed GPS position. Once the unit has acquired a fixed GPS position, the GPS accuracy will continually improve for several minutes. It is recommended to power up the trolling motor as soon as possible before operation to allow the fixed GPS position to become as accurate as possible.

Power up the trolling motor by connecting the battery cables to the trolling motor batteries, or plugging the trolling motor into the trolling motor power plug (if equipped). The trolling motor will emit audio signals to make the operator aware of its status.

- The trolling motor will emit one beep when it is powered up.
- The trolling motor will emit a three-beep tune once it has acquired a fixed GPS position, and the GPS status indicator light will illuminate.

**NOTE:** *Areas near the North and South poles, remote Northern areas, bridges, severe weather, mountain ranges, and other large obstructions may affect the GPS signal strength.*

## OPERATING IN MANUAL MODE

In manual mode, the trolling motor operates like a conventional trolling motor. It allows the operator to manually control the direction of travel and thrust level of the trolling motor, using the directional controls on the handheld remote or foot pedal. Refer to the following illustration and instructions to operate the trolling motor in manual mode with the handheld remote.

# TROLLING MOTOR INSTALLATION AND OPERATION

Once the trolling motor is powered up, it is ready to operate in manual mode. Manual mode is the default mode after power-up, and also if the GPS signal is lost while in a GPS operating mode. If the GPS signal is lost, the GPS indicator light will turn off. The trolling motor will emit one beep to indicate its status in manual mode. To enter manual mode from another mode, press the **manual mode** button.



## Turning the Handheld Remote ON or OFF

The handheld remote is always **ON**, and is ready for use anytime that the trolling motor is powered up and in the deployed position.

## Steering

- To turn left, press the **left turn** button on the handheld remote.
- To turn right, press the **right turn** button on the handheld remote.
- The available steering range allows the trolling motor to turn beyond 180° for operation in reverse.

## Speed Control

- Press the propeller **ON/OFF** button once to start the propeller, and press the propeller **ON/OFF** button again to stop the propeller.
- The trolling motor will emit a two-beep tone when the propeller is started, and the propeller status indicator light on the trolling motor will illuminate.
- The trolling motor will emit a two-beep tone when the propeller is stopped, and the propeller status indicator light will turn off.
- The system is equipped with 20 speed levels. Press the **increase speed (+)** button to increase motor speed by one level, and press the **decrease speed (-)** button to reduce the motor speed by one level.
- Holding the **increase speed (+)** or **decrease speed (-)** buttons will cause the speed level to increase or decrease until the speed level is reached. Holding the **increase speed (+)** or **decrease speed (-)** button for 2.5 seconds will increase the speed level from 0% to 100%, or decrease from 100% to 0%, respectively. The trolling motor will emit a two-beep tone when it reaches the 100% or 0% speed level.

# TROLLING MOTOR INSTALLATION AND OPERATION

- The trolling motor will emit a two-beep tone if the user tries to increase or decrease the motor speed beyond its limits.

## OPERATING IN ANCHOR MODE

### Anchor Mode

Anchor mode allows the boat's bow to remain in a fixed location, and will automatically account for wind and current changes to keep the boat in the selected location, using the trolling motor steering and speed controls. In order for anchor mode to operate, the Pinpoint GPS system must have achieved a fixed GPS location, indicated by the trolling motor emitting a three-beep tone. When achieved, the GPS status indicator light will illuminate.

### ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.

### ⚠ 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.



- a - Anchor mode
- b - Manual mode

53018

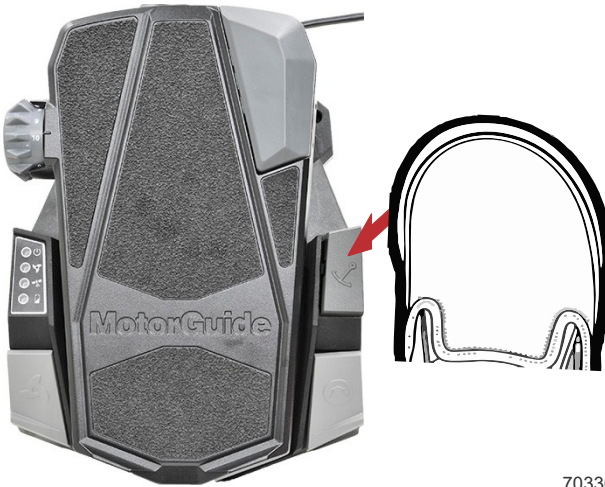
### ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Objects restricting foot pedal movement and power assisted steering can have a negative affect on GPS-guided modes. Ensure that the foot pedal area is free and clear of obstructions and that the trolling motor can steer 360 degrees in both directions using the wireless remote before entering a GPS-guided mode. Be mindful of objects close to the trolling motor and foot pedal, and use care when operating the trolling motor in GPS-guided mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## ⚠ CAUTION

Avoid injury while operating the pedal. Keep hands and feet clear of pinch points.



70336

**Anchor button**

### **Setting the Anchor**

Press the **anchor mode** button on the handheld remote or foot pedal to place the system in anchor mode. When the **anchor mode** button is pressed, the system will lock onto the fixed GPS position at the moment that the button was pressed. The trolling motor will emit one ascending chirp to indicate its status in anchor mode, and the GPS status indicator light will blink slowly.

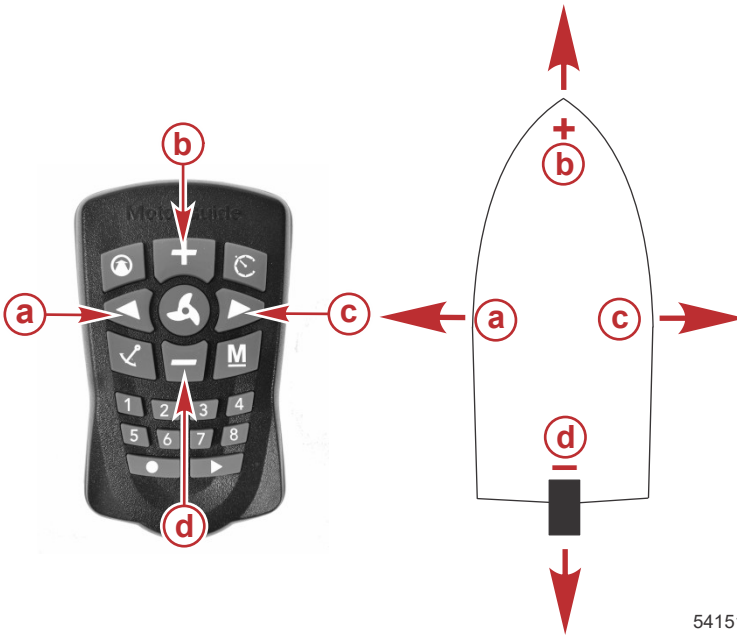
While anchor mode holds the boat in the selected position, the boat may rotate or pivot around the trolling motor's steering axis. The orientation of the boat will follow the wind or current.

### **Exiting Anchor Mode**

To exit anchor mode using the foot pedal, press the **momentary** button or press the **anchor mode** button again. To exit anchor mode using the remote, press the **manual mode** button or the **anchor mode** button. The trolling motor will emit a descending chirp and the GPS status indicator light on the trolling motor will stop blinking and remain on.

# TROLLING MOTOR INSTALLATION AND OPERATION

## Adjusting the Anchor Position



54151

- a** - Left turn—"jog" left
- b** - Increase speed—"jog" ahead
- c** - Right turn—"jog" right
- d** - Decrease speed—"jog" behind

Once the trolling motor is in anchor mode, the anchor position can be adjusted by pressing the **left turn**, **right turn**, **increase speed (+)**, or **decrease speed (-)** buttons. Pressing any of these buttons once will adjust the anchor position by five feet in the direction selected, relative to the boat's heading. For example, pressing the + button once will move the anchor position forward of the bow by five feet.

### **CAUTION**

Avoid injury or property damage due to unintended operation. Certain objects—especially magnetic metal objects, such as anchors—can affect the GPS system if they are within or passing through the magnetic field surrounding the trolling motor. Objects obstructing the GPS signal can also have a negative effect on system operation. Be mindful of objects close to the trolling motor, and use care when operating the trolling motor in a GPS-guided mode.



# TROLLING MOTOR INSTALLATION AND OPERATION

**NOTE:** Pressing a button multiple times will move the anchor position five feet for each time the button is pressed.

## Storing or Overwriting an Anchor Position



**a** - Memory buttons (1–8)

**NOTE:** An anchor position can be stored or overwritten from any operating mode except route record mode.

To store an anchor location, press and hold any of the numbered **memory** buttons for two seconds. The unit will emit a tone to indicate that the anchor position has been stored successfully.

Stored anchor positions cannot be erased, but you can overwrite (record over) them. A stored anchor position can be overwritten by simply storing a new anchor position to the desired **memory** button.

## Recalling a Stored Anchor Position

**NOTE:** A stored anchor position can be recalled from any operating mode.

To recall a stored anchor position, press and release the desired **memory** button. The trolling motor will emit an ascending chirp to indicate that a stored anchor position has been retrieved. If the selected anchor position button does not have a stored anchor position, or if the anchor location is over one mile away from the current location, the trolling motor will emit an error tone.

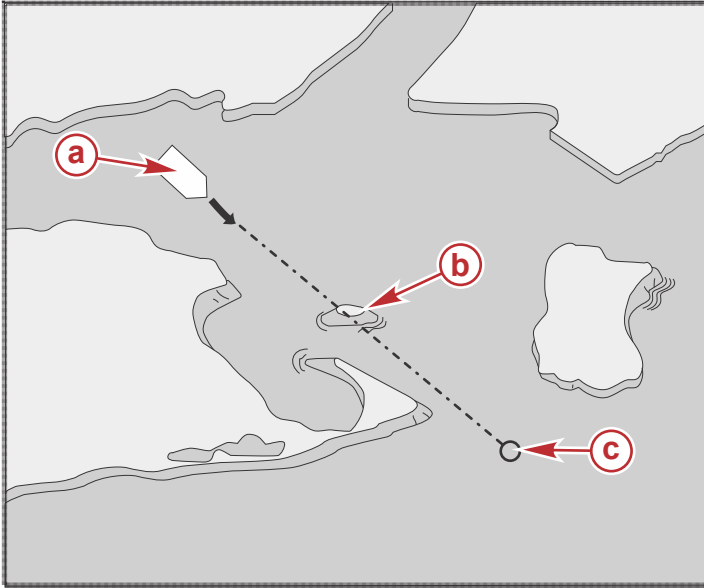
**IMPORTANT:** If the trolling motor loses the GPS signal while in any GPS mode, the trolling motor will emit an error tone and automatically return to manual mode.

**IMPORTANT:** When recalling a stored anchor position, the system will calculate a straight-line course from the current position to the selected anchor position. Ensure that there are no obstructions to navigation between the location and the selected anchor position—the system will recall an anchor point even if obstructions are present. If obstructions are encountered, navigate around them by operating in manual mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



54421

### Course shown has an obstruction to navigation

- a** - Current position of the boat
- b** - Obstruction to navigation
- c** - Selected anchor position

## HEADING LOCK MODES OF OPERATION

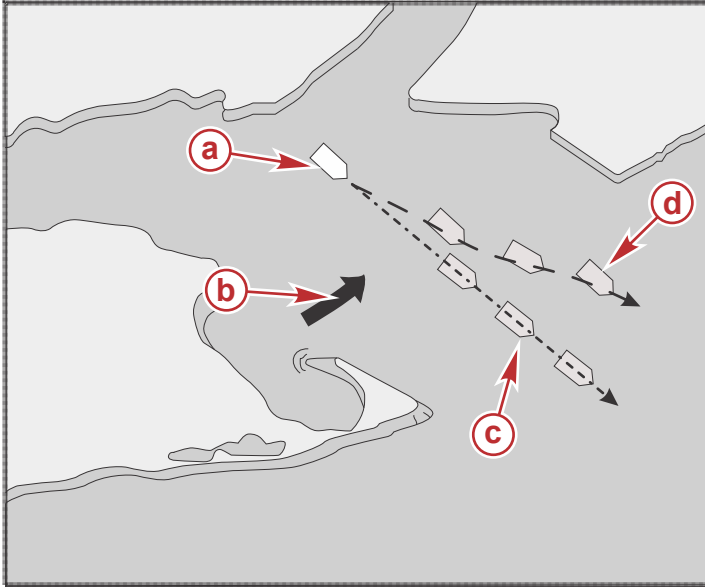
The Pinpoint GPS system is capable of operating in two different heading lock modes. These modes are:

- Heading lock—course mode (default mode)
- Heading lock—compass mode

When heading lock—course mode is selected, the trolling motor will achieve lock and navigate along the trolling motor's heading, and compensate for current, tide, and wind conditions. While in this mode, the operator can adjust the speed and the heading by using the handheld remote or foot pedal. This is the default heading lock mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

When heading lock—compass mode is selected, the trolling motor will drive the boat along the trolling motor's compass heading. The boat will drift with the wind, tide, and current, but the trolling motor will maintain a constant compass heading. The operator can adjust the speed and the heading by using the handheld remote or foot pedal.



61241

- a** - Current position of the boat
- b** - Direction of wind or current
- c** - Boat traveling in heading lock—course mode (adjusting for the wind, tide, and current)
- d** - Boat traveling in heading lock—compass mode (trolling motor maintains a constant heading, boat drifts with the wind, tide, and current)

Both heading lock modes offer advantages to the angler. You can tailor the bait presentation depending on the species of fish, type of bait, underwater terrain, structures, water depth, or environmental conditions. MotorGuide recommends that you experiment with each heading lock mode in different conditions to learn what works best for you.

The operator can toggle between either heading lock modes. Refer to the following procedures for operating instructions and how to toggle between each mode.

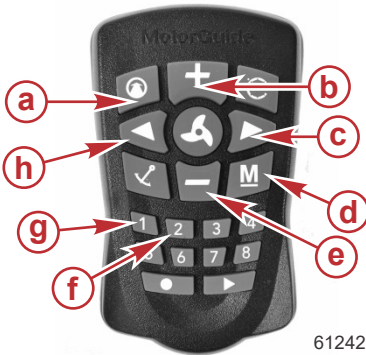
# TROLLING MOTOR INSTALLATION AND OPERATION

## OPERATING IN HEADING LOCK—COURSE MODE

When heading lock—course mode is selected, the trolling motor will lock in and navigate along the trolling motor's heading, while compensating for current, tide, and wind conditions. While in this mode, the operator can adjust the speed and the heading by using the handheld remote or foot pedal. This is the default heading lock mode.

### ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



- a - Heading lock
- b - Increase speed (+)
- c - Right turn
- d - Manual mode
- e - Decrease speed (-)
- f - Button 2
- g - Button 1
- h - Left turn

61242

### ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Objects restricting foot pedal movement and power assisted steering can have a negative affect on GPS-guided modes. Ensure that the foot pedal area is free and clear of obstructions and that the trolling motor can steer 360 degrees in both directions using the wireless remote before entering a GPS-guided mode. Be mindful of objects close to the trolling motor and foot pedal, and use care when operating the trolling motor in GPS-guided mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## ▲ CAUTION

Avoid injury while operating the pedal. Keep hands and feet clear of pinch points.



Heading lock button

### Heading Lock—Course Mode Operation

**IMPORTANT:** If the trolling motor loses the GPS signal while in a heading lock mode, the trolling motor will emit an error tone, automatically return to manual mode, and continue running at the selected speed.

If Cruise control was operating while in a heading lock mode and the GPS signal is lost, the trolling motor will emit an error tone, automatically return to manual mode, and the trolling motor will stop.

To operate the trolling motor in heading lock—course mode:

1. Steer the trolling motor so it is pointing in the desired direction of travel.
2. Press the **heading lock** button on the handheld remote or foot pedal.

The trolling motor will drive the boat along the chosen heading, and will automatically steer to compensate for wind, current, or tides to maintain course. The trolling motor will emit an ascending chirp to indicate its status in heading lock—course mode, and the GPS status indicator light will blink slowly.

# TROLLING MOTOR INSTALLATION AND OPERATION

The trolling motor will drive the bow of the boat along this course, while the boat itself may be askew to the direction of travel due to current, tide, or wind conditions. In heading lock—course mode, the trolling motor will automatically steer to maintain course, and motor speed is user-selectable. The operator can use the left turn and right turn buttons or use the heel-toe operation of the foot pedal to navigate around obstacles. In extreme current or wind conditions, it may be necessary to increase the motor speed to maintain the desired heading.

To exit the heading lock mode from the foot pedal, press the **heading lock** button. To exit the heading lock mode from the remote press the **heading lock** or **manual mode** buttons on the remote. The trolling motor will emit a descending chirp and the GPS status indicator light will stop blinking.

## Adjusting Motor Speed

If a heading lock mode is selected from manual mode, the trolling motor will run at the last selected speed. The motor speed can be adjusted by pressing the **increase speed (+)** button or **decrease speed (-)** button on the remote or by rotating the speed knob on the foot pedal counterclockwise to increase the speed or clockwise to decrease the speed. The trolling motor will emit two beeps when the user tries to exceed the available motor speed limits.

Cruise control can be used while in either heading lock mode. Refer to **Using Cruise Control**.

## Adjusting the Heading

While in a heading lock mode, the heading can be adjusted by pressing the **left turn** or **right turn** buttons on the handheld remote or by holding the momentary button down on the foot pedal while steering the foot pedal toe down to steer right or heel down to steer left. The trolling motor will resume heading lock when the momentary button is released and will navigate based on the new trolling motor heading.

## Changing the Heading Lock Mode

Heading lock—course mode is the default heading lock mode. To switch to heading lock—compass mode, press and hold the **manual mode** button, then press the **2, 1, 2** buttons in sequence. To switch back to heading lock—course mode, press and hold the **manual mode** button, then press the **2, 1, 1** buttons in sequence.

**IMPORTANT:** The Pinpoint GPS system will remember which heading lock mode was last used, and the next time the heading lock button is pressed, the trolling motor will operate that mode.

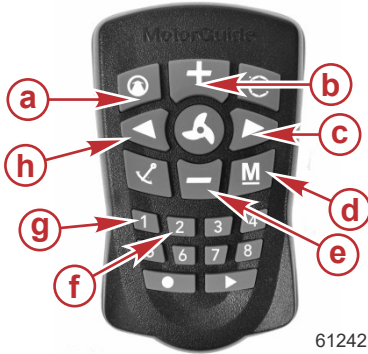
# TROLLING MOTOR INSTALLATION AND OPERATION

## OPERATING IN HEADING LOCK—COMPASS MODE

When heading lock—compass mode is selected, the trolling motor will lock in the trolling motor's compass heading and drive the boat along that heading. The boat will drift with the wind, tide, and current, but the trolling motor will maintain a constant compass heading. The operator can adjust the speed and the heading by using the handheld remote or the foot pedal as described above.

### ▲ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



61242

- a** - Heading lock
- b** - Increase speed (+)
- c** - Right turn
- d** - Manual mode
- e** - Decrease speed (-)
- f** - Button 2
- g** - Button 1
- h** - Left turn



70337

Heading lock button

# TROLLING MOTOR INSTALLATION AND OPERATION

## Heading Lock—Compass Mode Operation

**IMPORTANT:** If the trolling motor loses the GPS signal while in a heading lock mode, the trolling motor will emit an error tone, automatically return to manual mode, and continue running at the selected speed.

If cruise control was operating while in a heading lock mode and the GPS signal is lost, the trolling motor will emit an error tone, automatically return to manual mode, and the trolling motor will stop.

To operate the trolling motor in the heading lock—compass mode:

1. Steer the trolling motor so that it is pointing in the desired direction of travel.
2. Press the **heading lock** button on the handheld remote or foot pedal. The trolling motor will emit an ascending chirp, indicating it's status in heading lock—course mode.

**IMPORTANT:** To operate heading lock—compass mode for the first time, press and hold the manual mode button, then press the 2, 1, 2 buttons in sequence.

The trolling motor will maintain a constant compass heading, but the boat will drift with the wind, tide, and current. The operator can adjust the speed and the heading by using the handheld remote or foot pedal. In extreme current or wind conditions, it may be necessary to increase the motor speed to maintain the desired heading.

To exit heading lock—compass mode, press the **heading lock** button or the **manual mode** button. The trolling motor will emit a descending chirp and the GPS status indicator light will stop blinking.

To switch back to heading lock—course mode, press and hold the **manual mode** button, then press the 2, 1, 1 buttons in sequence.

## Adjusting Motor Speed

If a heading lock mode is selected from manual mode, the trolling motor will run at the last selected speed. The motor speed can be adjusted by pressing the **increase speed (+)** button or **decrease speed (-)** button on the remote or by rotating the speed knob on the foot pedal counterclockwise to increase the speed or clockwise to decrease the speed. The trolling motor will emit two beeps when the user tries to exceed the available motor speed limits.

Cruise control can be used while in either heading lock mode. Refer to **Using Cruise Control**.

## Adjusting the Heading

While in a heading lock mode, the heading can be adjusted by pressing the **left turn** or **right turn** buttons on the handheld remote or by holding the momentary button down on the foot pedal while steering the foot pedal toe down to steer right or heel down to steer left. The trolling motor will resume heading lock when the momentary button is released and will navigate.



# TROLLING MOTOR INSTALLATION AND OPERATION

## Changing the Heading Lock Mode

Heading lock—course mode is the default heading lock mode. To switch to heading lock—compass mode, press and hold the **manual mode** button, then press the **2, 1, 2** buttons in sequence. To switch back to heading lock—course mode, press and hold the **manual mode** button, then press the **2, 1, 1** buttons in sequence.

**IMPORTANT:** The Pinpoint GPS system will remember which heading lock mode was last used, and the next time the heading lock button is pressed, the trolling motor will operate that mode.

## OPERATING IN ROUTE MODE

Route mode has the ability to store and recall user-defined routes. These routes can be recorded and recalled by the user from any operating mode.

### ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



- a - Memory buttons (1–8)
- b - Route playback
- c - Route record

53021

### ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Certain objects—especially magnetic metal objects, such as anchors—can affect the GPS system if they are within or passing through the magnetic field surrounding the trolling motor. Objects obstructing the GPS signal can also have a negative effect on system operation. Be mindful of objects close to the trolling motor, and use care when operating the trolling motor in a GPS-guided mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## Storing and Overwriting a Route

A route can be stored from any mode by pressing the **route record** button. The trolling motor will emit a tone when the **route record** button is pressed. Once the **route record** button is pressed, begin navigating along your desired course. You can switch between manual mode and heading lock mode at any time while recording a route. The trolling motor will emit one beep (and the GPS status indicator light will blink) for every 2 m (6.5 ft) travelled while recording. Press and hold any of the numbered **memory** buttons to stop recording and store the route to the selected **memory** button. The trolling motor will emit a tone to confirm that it has stored the route. The trolling motor can store up to eight routes, each up to 6.4 km (4 miles) in length.

Stored routes cannot be erased, but you can overwrite (record over) them. Overwriting a stored route is accomplished using the same procedure as storing a new route.

## Recalling a Stored Route

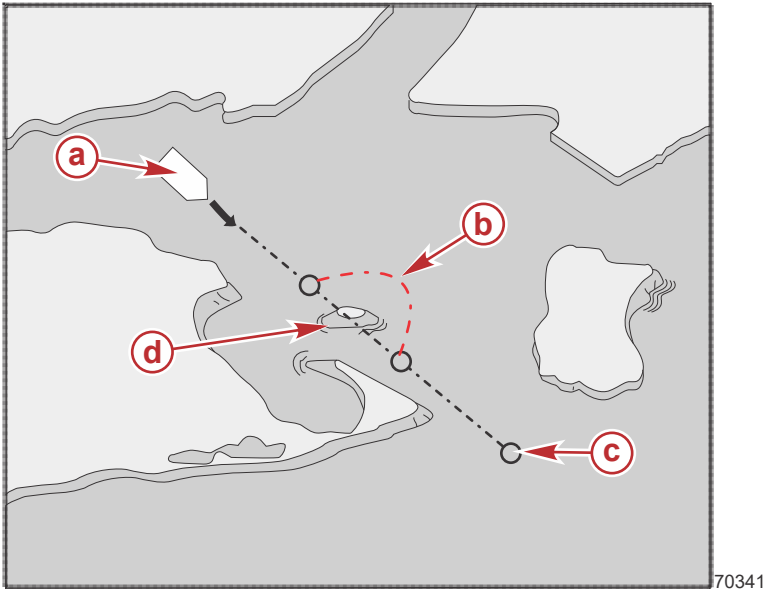
A stored route can be recalled while operating in any mode by pressing the **route playback** button, then pressing the desired **memory** button. The trolling motor will emit an ascending chirp to indicate that the route has been successfully recalled.

**IMPORTANT:** When recalling a stored route, the system will calculate a straight-line course from your current position to the nearest point on the recalled route. Ensure that there are no obstructions to navigation between your current position and the recalled route. The system will recall a stored route even if obstructions are present. If obstructions are encountered, navigate around them by operating in manual mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



### Recalling a stored route—beware of possible obstructions to navigation

- a - Boat
- b - Manual mode route
- c - Stored route
- d - Obstacle

If the selected memory position is empty, or if the boat is over 1.6 km (1 mile) from a point on the selected route, the trolling motor will emit an error tone and exit the route mode.

**IMPORTANT:** If the trolling motor loses the GPS signal while in any GPS mode, the trolling motor will emit an error tone and automatically return to manual mode.

# TROLLING MOTOR INSTALLATION AND OPERATION

## ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Certain objects—especially magnetic metal objects, such as anchors—can affect the GPS system if they are within or passing through the magnetic field surrounding the trolling motor. Objects obstructing the GPS signal can also have a negative effect on system operation. Be mindful of objects close to the trolling motor, and use care when operating the trolling motor in a GPS-guided mode.

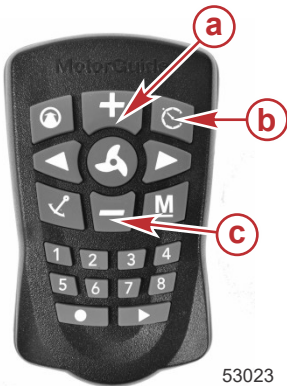
When recalling a stored route, the trolling motor will navigate to the nearest point on the route, then travel to the most distant end from the boat's current position. At any time while traveling along a stored route, the direction of travel can be reversed by recalling the stored route again. Once you have reached the end of a stored route, the trolling motor will set anchor in the anchor mode and will emit an ascending chirp to indicate that the boat has arrived at the end of the stored route.

## USING CRUISE CONTROL

Cruise control can be activated while in heading lock mode or route playback mode to maintain a constant trolling speed. It will automatically adjust the motor speed to correct for current and wind conditions to maintain a constant speed.

## ⚠ WARNING

Avoid serious injury from colliding with other boats, running aground, or striking objects in the water. The Pinpoint GPS system cannot detect other boats, shallow water, or objects in the water. Always beware of possible obstructions to navigation when operating in any Pinpoint GPS mode.



- a** - Increase speed (+)
- b** - Cruise control
- c** - Decrease speed (-)

53023

# TROLLING MOTOR INSTALLATION AND OPERATION

## ▲ CAUTION

Avoid injury or property damage due to unintended operation. Certain objects—especially magnetic metal objects, such as anchors—can affect the GPS system if they are within or passing through the magnetic field surrounding the trolling motor. Objects obstructing the GPS signal can also have a negative effect on system operation. Be mindful of objects close to the trolling motor, and use care when operating the trolling motor in a GPS-guided mode.

### Setting Cruise Control

While in heading lock mode or route recall mode, you can set the cruise control by pressing the **cruise control** button. The trolling motor will emit one chirp to indicate that the cruise control has been activated. The system will automatically set a trolling speed of 1.0 mph (1.6 kph) and will compensate for current and wind conditions to maintain this speed. Pressing the **cruise control** button again will turn the cruise control off, indicated by a descending chirp from the trolling motor.

While cruise control is turned on, the GPS speed over ground can be adjusted by pressing the **increase speed (+)** or **decrease speed (-)** buttons. Pressing either button once will adjust the speed by 0.1 mph (0.16 kph) accordingly. For example, to set the cruise control at 1.3 mph (2.1 kph), press the **cruise control** button, then press the **increase speed (+)** button three times.

To exit cruise control mode from the remote control press the **cruise control** or **manual** buttons on the remote.

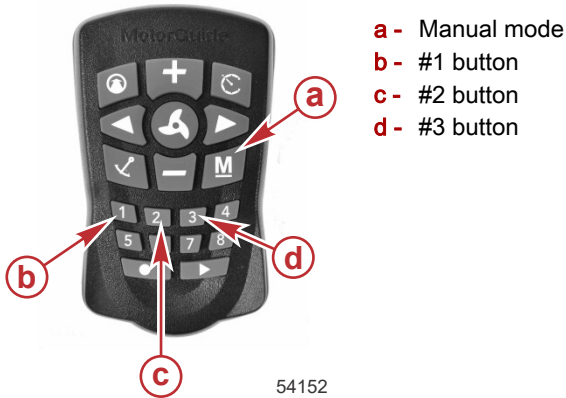
**IMPORTANT:** If the trolling motor loses the GPS signal while in any GPS mode, the trolling motor will emit an error tone and automatically return to manual mode.

**IMPORTANT:** Cruise control function can be affected by the quality of the GPS signal. Obstructions such as bridges, mountains, and trees, or environmental conditions such as thunderstorms may affect the GPS signal strength and possibly cause the trolling motor to operate erratically.

# TROLLING MOTOR INSTALLATION AND OPERATION

## SELECTING THE AUDIO MODE

The Pinpoint GPS system has three user-selectable audio modes to choose from. These audio modes provide audible confirmation of selected modes, speeds, and button selections.



Audio mode 1 can be selected by pressing and holding the **manual mode** button, then pressing **1, 3, 1**.

Audio mode 2 can be selected by pressing and holding the **manual mode** button, then pressing **1, 3, 2**.

Audio mode 3 can be selected by pressing and holding the **manual mode** button, then pressing **1, 3, 3**.

Condition	Audio Pattern	Audio Mode 1 (Default)	Audio Mode 2	Audio Mode 3
Startup	1 beep	Yes	Yes	Yes
Remote learn confirmation	Low tone	Yes	Yes	Yes
User invalid command (No GPS fix)	Error beep	Yes	Yes	Yes
GPS fix acquired	High tone	Yes	Yes	-
Loss of GPS fix	Error	Yes	Yes	-
Speed + (when less than maximum speed)	Short beep	-	Yes	-
Speed + (at maximum speed)	2 beeps	Yes	Yes	-
Speed - (when greater than speed level 0)	Short beep	-	Yes	-
Speed - (at speed 0)	2 beeps	Yes	Yes	-

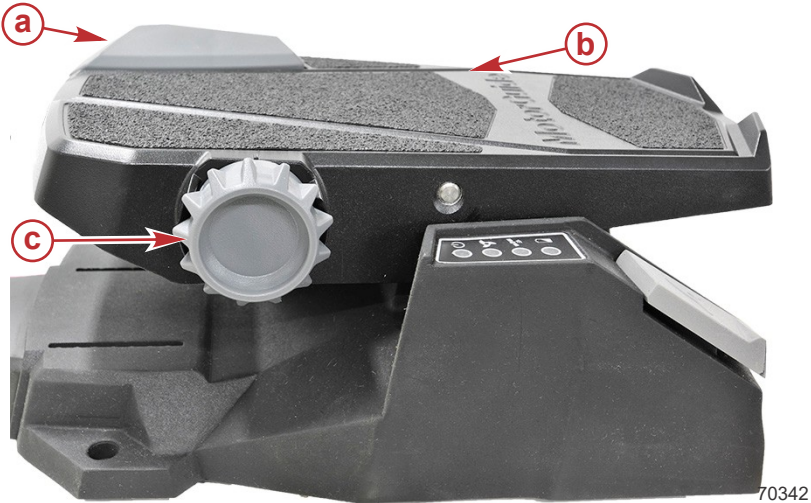
# TROLLING MOTOR INSTALLATION AND OPERATION

Condition	Audio Pattern	Audio Mode 1 (Default)	Audio Mode 2	Audio Mode 3
Pressing the propeller <b>ON/OFF</b> button to turn the propeller on	2 beeps up	Yes	Yes	–
Pressing the propeller <b>ON/OFF</b> button to turn the propeller off	2 beeps down	Yes	Yes	–
Momentary propeller	None	–	–	–
Record Route Enable	Tone	Yes	Yes	–
Record Route Save	Tone	Yes	Yes	–
Recall Route Enable	Chirp up	Yes	Yes	–
Recall Route Disable	Chirp down	Yes	Yes	–
Reach End of Route	Chirp up	Yes	Yes	–
Heading Lock Enable	Chirp up	Yes	Yes	–
Heading Lock Disable	Chirp down	Yes	Yes	–
Cruise Control Enable	Chirp up	Yes	Yes	–
Cruise Control Disable	Chirp down	Yes	Yes	–
Anchor Enable	Chirp up	Yes	Yes	–
Anchor Disable	Chirp down	Yes	Yes	–
Record Anchor Position	Tone	Yes	Yes	–
Anchor Recall	Chirp up	Yes	Yes	–
Recalling an anchor point or route more than one mile away	Error	Yes	Yes	Yes

# TROLLING MOTOR INSTALLATION AND OPERATION

## Speed Control

All Tour Pro motors are equipped with digital variable speed control. Control the speed of your motor by rolling the speed control knob with your hand or foot until you reach the desired speed.



- a** - Momentary switch
- b** - Foot pedal
- c** - Speed control knob

- **Speed control knob:** Digital variable speed settings are numbered 0–10, and allow you to select any speed from 0–10, and stop the motor.
- **Momentary switch:** The momentary switch is located on the top right corner of the foot pedal. The momentary switch works in conjunction with the **ON/OFF** pedal switch when it is in the pedal position. When the momentary switch is pressed, the motor will run at the selected speed as long as the switch is pressed.

## Tour Pro Pedal Resistance Settings

The user can manually adjust the pedal resistance to feel looser or tighter based on user preferences. Press and hold the Manual Mode button and press 2,3,1 for the lightest setting up to 2,3,5 which is the heaviest or most resistant setting. settings are 1 - 5.

- 1: 2, 3, 1 - Least resistant, lighter feel.
- 2: 2, 3, 2
- 3: 2, 3, 3
- 4: 2, 3, 4



# TROLLING MOTOR INSTALLATION AND OPERATION

- 5: 2, 3, 5 - Most resistance, heavier feel.

# TROLLING MOTOR INSTALLATION AND OPERATION

Notes:

# MAINTENANCE

## Trolling Motor Care

To keep the trolling motor in the best operating condition and retain its dependability, it is important that the trolling motor receive periodic inspections and maintenance. MotorGuide urges proper maintenance to ensure that the operator and the passengers remain safe.

### 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.**

## SELECTING REPLACEMENT PARTS

MotorGuide recommends using original MotorGuide certified replacement parts.

## Inspection and Maintenance Schedule

### BEFORE EACH USE

- Check the trolling motor for tightness on the deck mount.
- Check the tightness of the battery lead connections.
- Visually inspect for loose or corroded electrical wiring.
- Visually inspect for worn or frayed stow/deploy cable and handle assembly.
- Check the tightness of the propeller nut.
- Check the propeller blades for damage.

### AFTER EACH USE

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

### EVERY 100 HOURS OF USE OR ANNUALLY

- Periodically lubricate all the pivot points. Refer to **Lubrication Points**.
- Check the tightness of bolts, nuts, and other fasteners.
- Inspect the battery. Refer to **Battery Inspection**.

### STANDARD OPERATION

Complete the appropriate care instructions before and after each use to maintain the trolling motor performance. Operate the trolling motor in temperatures ranging from 0 °C (32 °F) to 50 °C (122 °F) and with relative humidity at 50 °C (122 °F) not to exceed 50%.

# MAINTENANCE

## STORAGE PREPARATION

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

Complete the appropriate care instructions to prepare the 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) and above 75 °C (167 °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.**

## Lubrication Points

***NOTE:** Preferred lubricants can be obtained at any authorized MotorGuide or Mercury Marine service center.*

To reduce friction and quiet squeaks, lubricate the specified locations periodically with the following lubricants:

- Latch hooks - Tour Latch Grease

Description	Where Used	Part No.
Tour Latch Grease	Latch hooks	8M4005246

- Latch strikers - Tour Latch Grease

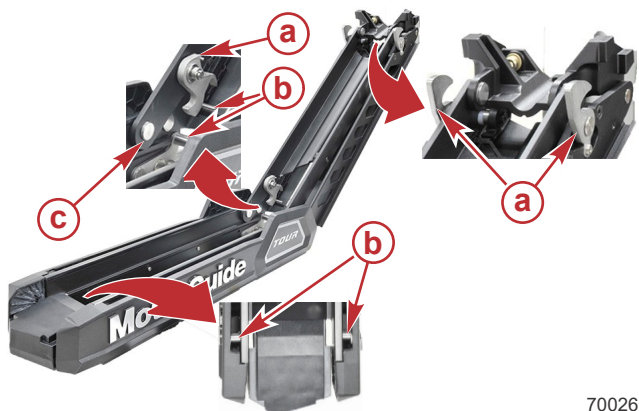
Description	Where Used	Part No.
Tour Latch Grease	Latch strikers	8M4005246

- Pivot pins - 4-Stroke 10W-30 Outboard Oil

Description	Where Used	Part No.
10W-30 4-Stroke Marine Engine Oil	Pivot pins	92-8M0078625

# MAINTENANCE

**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.



70026

- a** - Latch hooks
- b** - Latch strikers
- c** - Pivot pins

## Battery Inspection

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

**IMPORTANT:** Read the safety and maintenance instructions that accompany the battery.

Lithium batteries are equipped with their own internal battery management system set by the battery manufacturer. In cases where the trolling motor is showing symptoms of insufficient power or power loss, the Lithium battery should be tested to the manufacturer specifications. If the battery cannot be tested, replace it with a known good traditional lead acid/AGM marine battery (refer to **Wiring and Battery Information**), to isolate the issue between the trolling motor and its power supply source.

1. Ensure that the battery is secured to the boat.
2. Ensure that the battery cable terminals are clean, tight, and correctly installed. For installation instructions, refer to **Battery Connection**.
3. Ensure that the battery is in a battery box or has sufficient protection to safeguard against accidental shorting of the battery terminals.

# MAINTENANCE

## 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.

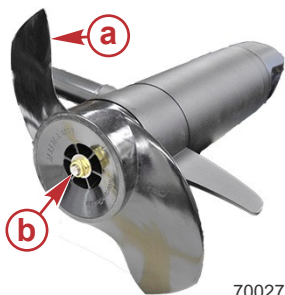
### REMOVING THE PROPELLER

1. Disconnect the power cables from the battery.

**IMPORTANT:** Remove the propeller nut with a wrench or a ratchet and socket. Using another tool may damage the propeller nut or shaft. If the propeller cannot be removed easily, use a rubber mallet to lightly tap the back side of the opposite blade. If the propeller cannot be removed, have the propeller removed by an authorized dealer.

**NOTE:** Replace the propeller pin if it is bent.

2. While holding the propeller blade with one gloved hand, use a 9/16 in. wrench or a ratchet to remove the propeller nut. Remove the propeller nut and washer.

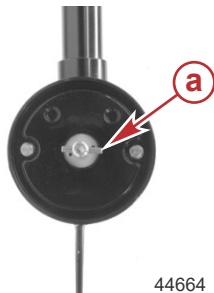


70027

- a - Propeller
- b - Propeller nut and washer

### INSTALLING THE PROPELLER

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



44664

- a - Propeller pin

# MAINTENANCE

2. Install the propeller onto the motor shaft by engaging the propeller onto the propeller pin.
3. Install the washer onto the propeller shaft, then install the propeller nut. Use a wrench or a socket and ratchet to tighten the propeller nut until it is snug, then tighten the nut another 1/4 turn.

## Adjusting the Steering Cable Tension—Tour Pro Only

### ⚠ WARNING

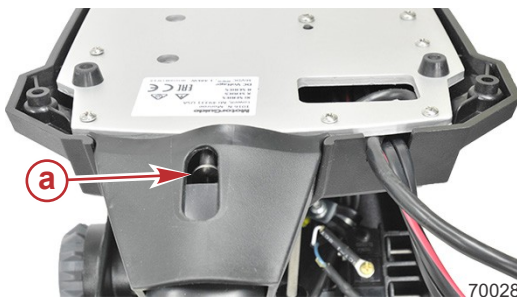
**Neglecting to inspect, maintain, or repair your trolling motor can result in product damage or serious injury or death. Do not perform maintenance or service on your trolling motor if you are not familiar with the correct service and safety procedures.**

The cable tension on the trolling motor is preset at the factory. With time and use, the cables may stretch slightly, requiring occasional adjustment. The following procedure explains how to adjust the steering cable tension.

Use care while adjusting the steering cable tension. Improper cable tension, whether too loose or too tight will cause poor operation of the GPS guided functions.

To adjust the foot pedal refer to **Tour Pro Pedal Resistance Settings**.

1. Remove the foot pedal from the boat deck if it has been secured with screws.
2. Adjust the cable tension by turning the cable tension screw clockwise to increase tension, and counterclockwise to decrease tension. Adjust the cable tension screw until there is 3.175 mm ( 0.125 in.) of play in the foot pedal pad while the motor is stowed.



**Bottom of foot pedal**  
**a - Cable tension screw**

3. Use the remote to verify the cables have not been over-tensioned.
4. Place the foot pedal in a toe down position.
5. Hold the left arrow on the remote to rotate the unit counterclockwise until the foot pedal is heel down.

# MAINTENANCE

6. Hold the right arrow on the remote to rotate the unit clockwise until the foot pedal is toe down. The unit should smoothly rotate 360 degrees clockwise and counterclockwise without shuttering. If shuttering occurs, decrease cable tension.

**IMPORTANT:** Do this calibration where the motor will not hit the bottom of the body of water and the surrounding area is free of obstructions.

7. After adjustment of manual cable tension, power cycle the trolling motor and using the remote control complete a M284 foot pedal end-of-travel calibration. Refer to **Foot Pedal End-of-Travel Calibration**.

**NOTE:** The trolling motor will steer itself max toe down and max heel down during this calibration.

## Foot Pedal End-of-Travel Calibration

### ⚠ CAUTION

Avoid injury or property damage due to unintended operation. Objects restricting foot pedal movement and power assisted steering can have a negative affect on GPS-guided modes. Ensure that the foot pedal area is free and clear of obstructions and that the trolling motor can steer 360 degrees in both directions using the wireless remote before entering a GPS-guided mode. Be mindful of objects close to the trolling motor and foot pedal, and use care when operating the trolling motor in GPS-guided mode.

**IMPORTANT:** The thrust motor must be off. The trolling motor system must be powered on.

1. Deploy the motor.
2. Rotate the foot pedal to the neutral position.

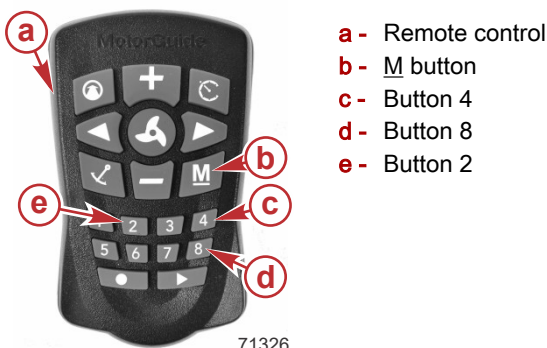


**NOTE:** After pressing the remote control buttons, the foot pedal will drive automatically heel down for 3 seconds. Then the foot pedal will drive automatically to the toe down position, pause, then releases tension on system and beeps. Then the foot pedal will drive automatically to the heel down position, pause, then releases tension on system and beeps. Unit should remain at heel down upon completion of the calibration.



## MAINTENANCE

- Using the remote control hold the M button, and press button **2**, button **8**, and button **4**.
- Release the M button.



- After the foot pedal has come to rest for more than ten seconds. Unplug and cycle power to the trolling motor for at least ten seconds.
- The end-of-travel calibration is complete, and the trolling motor is ready for normal use.

**NOTE:** End-of-travel calibration may need to be repeated after extended use of the trolling motor.

**IMPORTANT:** If the trolling motor will not steer 360 degrees with the wireless remote, refer to the nearest service provider or owner service assistance prior to using GPS guided modes.

- Test the trolling motor by steering the lower unit with a synced wireless remote.

**NOTE:** The trolling motor should steer from max toe down to max heel down and back without shuddering or pausing.

# MAINTENANCE

Notes:

# TROUBLESHOOTING

## Trolling Motor Performance

Symptom	Possible Cause	Resolution
Loss of power	Weak battery	Refer to <b>Wiring and Battery Information</b> and <b>Battery Inspection</b> .
	Loose or corroded battery connections	
	Propeller is loose, damaged, or off-balance	Refer to <b>Maintenance</b> .
	Weak circuit breaker or faulty wiring/electrical connection.	Refer to <b>Wiring and Battery Information</b> and <b>Battery Inspection</b> . Wire gauge from the battery to the trolling motor is insufficient. Six-gauge wire is recommended.
	Weeds, fishing line, or debris wrapped around propeller	Remove weeds, fishing line, or debris from propeller.
Excessive noise, vibration	Motor shaft is bent	Refer to <b>Warranty Information</b> .
	Propeller is loose, damaged, or off-balance	Refer to <b>Maintenance</b> .
Motor failure (all speeds)	Weak battery	Refer to <b>Wiring and Battery Information</b> and <b>Battery Inspection</b> .
	Loose or corroded battery connections	
	Electrical	Check the connector for a loose or damaged connection. Refer to <b>Wiring and Battery Information</b> .
	Fuse or circuit breaker is open	Locate and correct the cause of the overload. Then replace the fuse or reset the circuit breaker.
Motor failure (one or more speeds)	Propeller is loose, damaged, or off-balance	Refer to <b>Maintenance</b> .
	Cold weather, weak circuit breaker, or faulty wiring/electrical connection	Refer to <b>Storage Preparation, Battery Inspection, and Warranty Information</b> .

# TROUBLESHOOTING

Symptom	Possible Cause	Resolution
	Magnets interfering with the armature	Power off the trolling motor and manually rotate the propeller. If the propeller does not rotate freely with a slight drag, Refer to <b>Owner Service Assistance</b> .
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 the service center.
	Latch hooks, latch strikers or pivot pins need lubrication	Refer to <b>Lubrication Points</b> .
Mount bracket squeaks	Steering system screws have loosened	Tighten steering system screws. Refer to <b>Installing the Steering System on the Mount</b> .
	The steering cable tension screw is too tight. The steering cables are kinked or twisted.	Loosen the cable tension screw and tighten only until there is 3.175-6.35 mm (0.125-0.250 in.) of free play in the foot pedal pad. Refer to <b>Adjusting the Steering Cable Tension</b> .
Excessive steering	The steering cables are kinked or twisted.	Flip the foot pedal 360 degrees and adjust the trolling motor head in the necessary direction to ensure cables and cable sheathing are not kinked or twisted.

# TROUBLESHOOTING

Symptom	Possible Cause	Resolution
Unintended heading changes in Heading Lock	The steering cable tension screw is too tight. The steering cables are kinked or twisted.	Loosen the cable tension screw and tighten only until there is 3.175-6.35 mm (0.125-0.250 in.) of free play in the foot pedal pad. Refer to <b>Adjusting the Steering Cable Tension</b> .
	The steering cables are kinked or twisted.	Flip the foot pedal 360 degrees in the necessary direction to ensure cables and cable sheathing are not kinked or twisted.
Unintended kick-out of Anchor Mode	The steering cable tension screw is too tight. The steering cables are kinked or twisted.	Loosen the cable tension screw and tighten only until there is 3.175-6.35 mm (0.125-0.250 in.) of free play in the foot pedal pad. Refer to <b>Adjusting the Steering Cable Tension</b> .
	The steering cables are kinked or twisted.	Flip the foot pedal 360 degrees in the necessary direction to ensure cables and cable sheathing are not kinked or twisted.
Motor loss of power at end-of-travel of foot pedal	Internal wiring or electrical connection is disconnected or damaged.	Replace the momentary switch kit in the foot pedal.
Mount binds when attempting to stow or deploy the motor	There is dirt/debris buildup on the latches or strikers.	Carefully clean and reapply grease to all the latches and striker locations. Refer to <b>Lubrication Points</b> .
	The mount is improperly installed or twisted.	Loosen the mounting bolts and tighten the mounting bolts while ensuring the mount is level fore/aft and side/side. Refer to <b>Trolling Motor Installation</b> .
Excessive noise while steering, loss of power steering	The transmission has failed.	Refer to the nearest service center.

# TROUBLESHOOTING

Symptom	Possible Cause	Resolution
Erratic GPS anchor and/or heading lock performance	There is an improper GPS/Control Board installation calibration.	Ensure the trolling motor head is perpendicular to the mount. Repeat GPS Calibrations. Refer to <b>Deploy the Trolling Motor, Compass Calibration, and Mounting Angle Calibration.</b>
Steering Cables are twisted or pedal tension is out of specification.	Inspect manual cable tension and layout by rotating the lower unit using the Pinpoint remote from max heel to max toe and back.	If shuddering occurs, refer to <b>Adjusting the Steering Cable Tension—Tour Pro Only.</b>

## Resetting Motor After Unexpected Stop

The trolling motor may stop unexpectedly due to propeller stall, overheating, bent propeller shaft, or loose or corroded battery connections.

If the trolling motor stops unexpectedly, follow the steps below in order to safely restart the trolling motor.

1. Adjust the speed knob to speed 0.
2. Remove power from the trolling motor.
3. Place the trolling motor in the stowed position.
4. Examine the trolling motor for unexpected binding or debris on the propeller shaft.
5. Examine the wiring to the trolling motor for loose connections or corrosion.
6. Wait 30 seconds and then restart the trolling motor.
7. Place the trolling motor in the deployed position.
8. Use the trolling motor in normal operation.

# OWNER SERVICE ASSISTANCE

## Mercury Marine Service Offices

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

<b>United States, Canada</b>		
Telephone	English +1 920 929 5040 Français + 905 636 4751	Mercury Marine W6250 Pioneer Road P.O. Box 1939 Fond du Lac, WI 54936-1939
Fax	English +1 920 929 5893 Français +1 905 636 1704	
Website	www.mercurymarine.com	

<b>Australia, Pacific</b>		
Telephone	+61 3 9791 5822	Brunswick Asia Pacific Group 41-71 Bessemer Drive Dandenong South, Victoria 3175 Australia
Fax	+61 3 9706 7228	

<b>Europe, Middle East, Africa</b>		
Telephone	+32 87 32 32 11	Brunswick Marine Europe Parc Industriel de Petit-Rechain B-4800 Verviers, Belgium
Fax	+32 87 31 19 65	

<b>Mexico, Central America, South America, Caribbean</b>		
Telephone	+1 954 744 3500	Mercury Marine 11650 Interchange Circle North Miramar, FL 33025 U.S.A.
Fax	+1 954 744 3535	

<b>Asia, Singapore, Japan</b>		
Telephone	+65 68058100	Mercury Marine Singapore Pte Ltd 11 Changi South Street 3, #01-02 Singapore, 486122
Fax	+65 68058138	