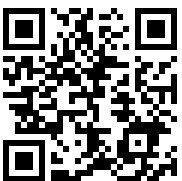


LOWRANCE®

GHOST® SERIES

OPERATOR MANUAL

ENGLISH



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Warranty

This product's warranty is supplied as a separate document.

Compliance

Declarations of conformity

The relevant declarations of conformity are available at: www.lowrance.com.

Europe

The trolling motor complies with CE under the Radio Equipment Directive 2014/53/EU and Machinery Directive 2006/42/EC. The compass complies with CE under the Electromagnetic Compatibility Directive 2014/30/EU.

United Kingdom

The trolling motor complies with UKCA under The Radio Equipment Regulations 2017 and Supply of Machinery (Safety) Regulations 2008. The compass complies with UKCA under The Electromagnetic Compatibility Regulations 2016.

United States of America

This product 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.

! Warning: The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

→ **Note:** This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of the receiver is connected.
- Consult the dealer or an experienced technician for help.

Canada

This product complies with ISED (Innovation, Science and Economic Development) Canada's license-exempt RSSs. 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.

Australia

This product complies with ACMA according to Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017 and Radiocommunications (Compliance Labelling - Devices) Notice 2014.

New Zealand

This product complies with RSM according to Radiocommunications (EMC Standards) Notice 2019 and Radiocommunications (Radio Standards) Notice 2020.

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Document version: 006

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1

Introduction

About this manual

This manual is a reference guide for installation and operation of the trolling motor. Important text that requires special attention from the reader is emphasized as follows:

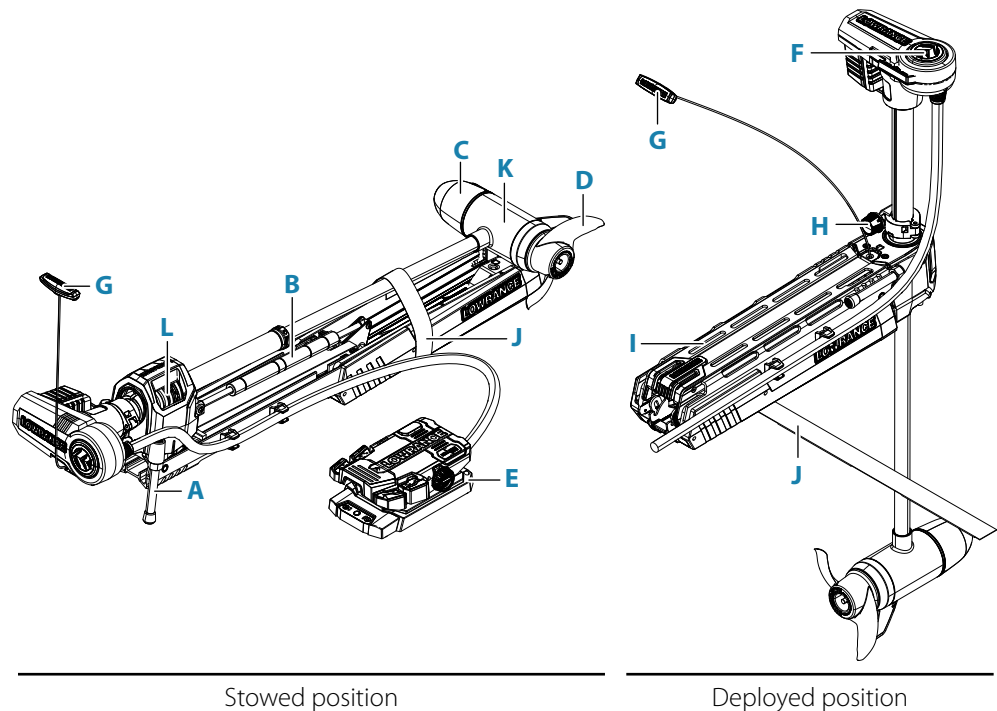
→ **Note:** Used to draw the reader's attention to a comment or some important information.

⚠ **Warning:** Used when it is necessary to warn personnel that they should proceed carefully to prevent risk of injury and/or damage to equipment/personnel.

Limitations

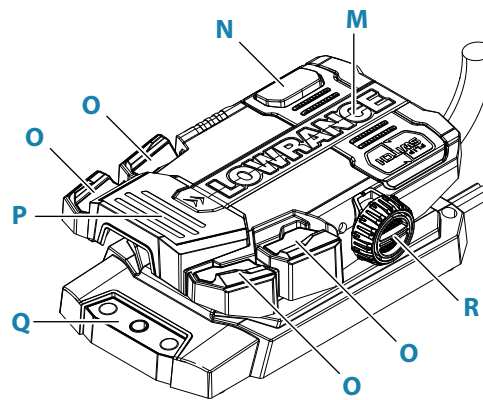
⚠ **Warning:** This product is intended to be used in freshwater only and a sacrificial anode (sold separately) is required for use in brackish water. Use of the product in brackish water (without the anode) or saltwater will void the warranty.

Product overview



- A** Stabilizer
Supports the trolling motor when in the stowed position.
- B** Stow and deploy assist spring
Reduces the force needed to stow and deploy the trolling motor.
- C** HDI Nose cone transducer
- D** Propeller
- E** Foot pedal
- F** Direction indicator
- G** Braided stainless steel pull cable and handle
Used when stowing and deploying the trolling motor. The trolling motor is latched in both stowed and deployed positions, pulling the cable releases the latching.
- H** Depth adjustment knob
When loosened, the lower unit depth can be adjusted.

- I Motor mount
- J Stow strap
- K Lower unit
- L 360 breakaway



Foot pedal

- M Toe end
- N Momentary switch
- O Mode and action keys
- P Heel end
- Q Power key and battery capacity indicator
- R Speed adjustment knob

Safe operation with the trolling motor

Do not use automatic steering when:

- In heavy traffic areas or in narrow waters
- In poor visibility or extreme sea conditions
- In areas where use of an autopilot is prohibited by law

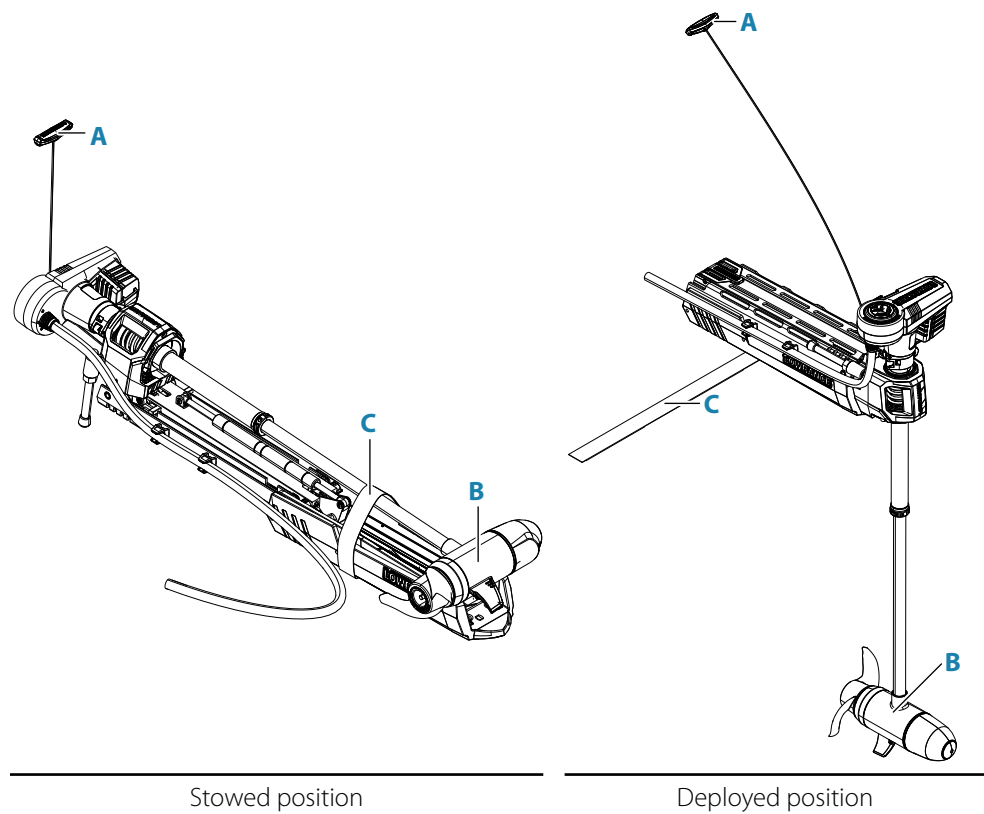
When using a trolling motor:

- Do not place any magnetic material or equipment near the heading sensor used by the trolling motor system
- Verify at regular intervals the course and position of the vessel

Warning:

- Do not run the propeller out of the water. Doing so may cause serious injuries.
- Disconnect power when the motor is being stored, transported or not in use for extended periods of time.
- Always install the stow strap while the motor is stowed for transportation.
- Always disconnect motor from the batteries before cleaning or checking the propeller.
- Do not attempt to disassemble the 360 breakaway.
- Keep fingers clear from moving parts when stowing or deploying the trolling motor.

Deploying and stowing the trolling motor



Deploying

- 1 Release the stow strap (C) and pull the Braided stainless steel pull cable and handle (A) to unlatch the trolling motor from the stowed position.
- 2 Lift the trolling motor from the stowed position and tilt it down until it is locked in the deployed position.
 - If the trolling motor is turned ON, the lower unit will position itself according to the foot pedal position.
 - If the trolling motor is turned OFF, the lower unit will be deactivated until the trolling motor is turned ON and the foot pedal operated.
- 3 Make sure that the trolling motor is fully deployed and latched in the deployed position.

Stowing

The trolling motor should be turned ON during the stowing operation. This will ensure that the lower unit is adjusted to its stowing position.

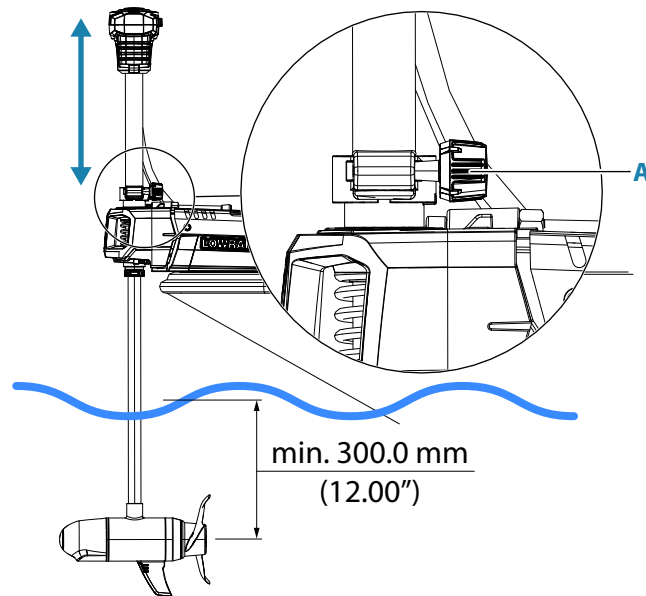
- 1 Pull the Braided stainless steel pull cable and handle (A) to unlatch the trolling motor from the deployed position.
- 2 Lift the pull cable up and backward to slowly lift the trolling motor into the stowed position.
- 3 Tilt the trolling motor to the stow position. The lower unit (B) will automatically adjust to the proper stowing angle.
- 4 If necessary, push the trolling motor down against the deck of the boat until it locks in the stow position. Attach the stow strap (C).

2

Adjusting the trolling motor

Depth adjustment

- 1 Loosen the depth adjustment knob (A).
- 2 Raise or lower the motor assembly to the desired level.
- 3 Tighten the depth adjustment knob (A).



How to use the FlipSwitch

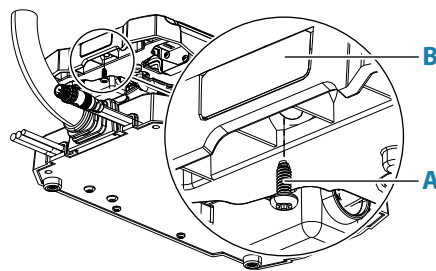
The FlipSwitch allows you to move the momentary switch (propeller ON) from the left to the right side.

Tools required

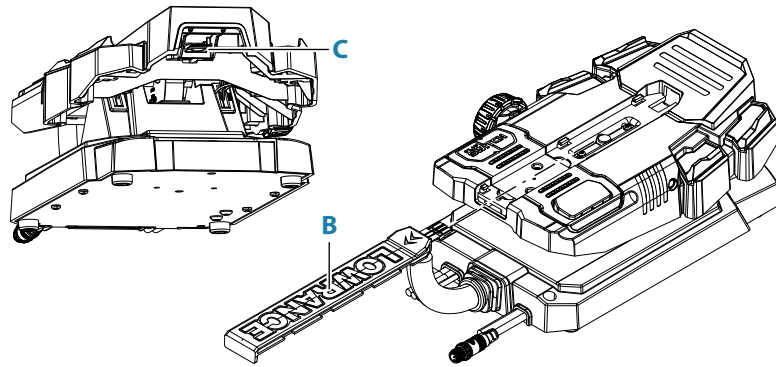
- 1x Phillips screwdriver #2

Procedure

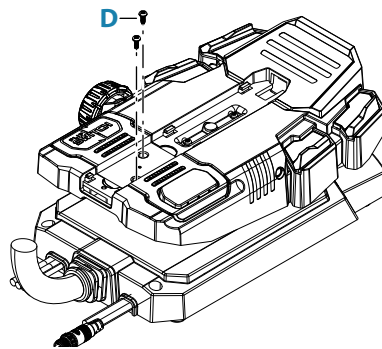
- 1 Remove the lock screw (A) that secures the cover plate (B).



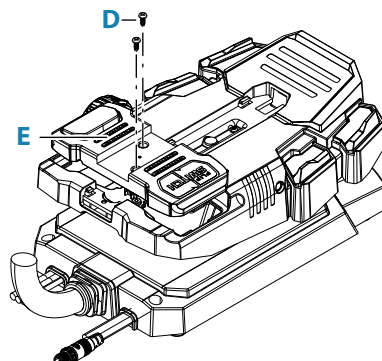
- 2 Press the locking tab (C) upwards and slide the cover plate (B) forward until it is free.



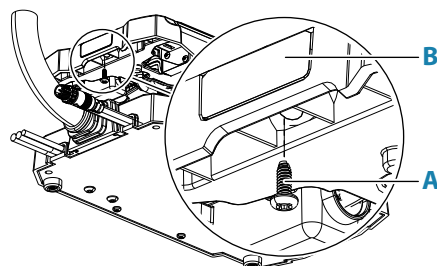
- 3 Remove the screws (D) that secures the FlipSwitch assembly.



- 4 Turn the FlipSwitch assembly (E) 180° and fasten the screws (D) that secure the FlipSwitch assembly.



- 5 Slide the cover plate (B) back in place and fasten the lock screw (A).



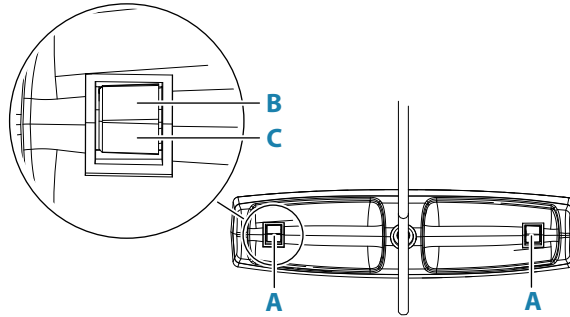
Adjusting the braided stainless steel pull cable length

Tools required

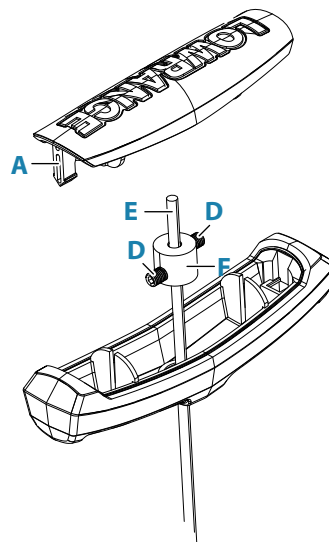
- 2x Small flat headed screwdrivers
- 1x 2 mm hex key
- 1x Side-cutting pliers

Procedure

- 1 Apply pressure to both sides (**B** and **C**) of the locking tabs (**A**) to remove the handle top cover.



- 2 Loosen the 2 set screws (**D**) and slide the pull cable (**E**) to the desired length.



- 3 Apply thread locker to the 2 set screws (**D**) if needed. Tighten the set screws and cut the pull cable (**E**) approximately 5 mm (1/5") above the clamp (**F**).
- 4 Re-install the handle top cover by pushing it down onto the handle.

3

Operation

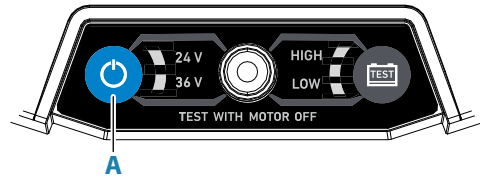
This document describes the foot pedal operation of the trolling motor.

It is also possible to control the trolling motor from a compatible multifunction display unit. Refer to the documentation supplied with your display unit for more information.

Power the trolling motor ON or OFF

Press the power key (A) to power the trolling motor ON or OFF.

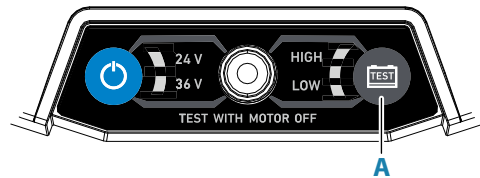
The voltage level of the electrical system is indicated when the trolling motor is powered ON.



Check the battery capacity

→ **Note:** The battery capacity should only be checked when the trolling motor is not running.

Press the test key (A) to activate the indicator LEDs.

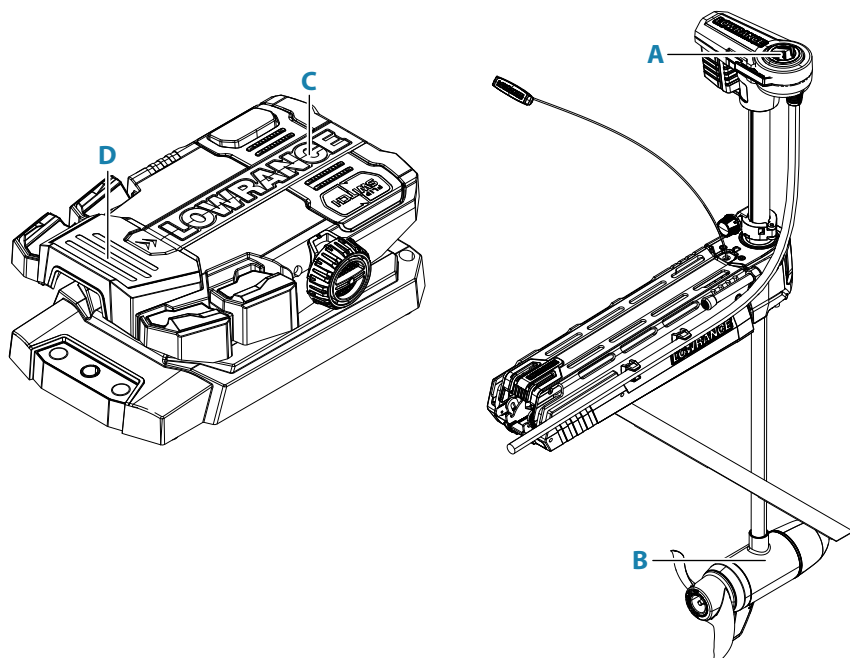


Steering with the foot pedal

The direction indicator (A) shows the direction in which the lower unit (B) is pointing.

Turn to starboard (right) by pushing the toe end (C) of the foot pedal down.

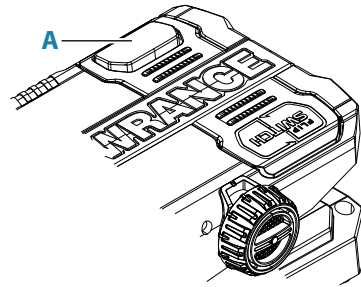
Turn to port (left) by pushing the heel end (D) of the foot pedal down.



Activating the propeller

The propeller will run as long as the momentary switch (A) is pressed, provided the speed adjustment knob is not in the OFF position.

The propeller will stop when the momentary switch is released.

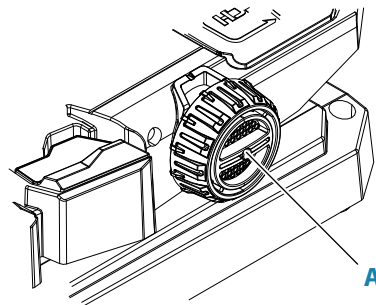


It is also possible to run the trolling motor in Propeller constant ON mode, refer to "Propeller constant ON" on page 16.

→ **Note:** Propeller will not run if the trolling motor is in the stowed position.

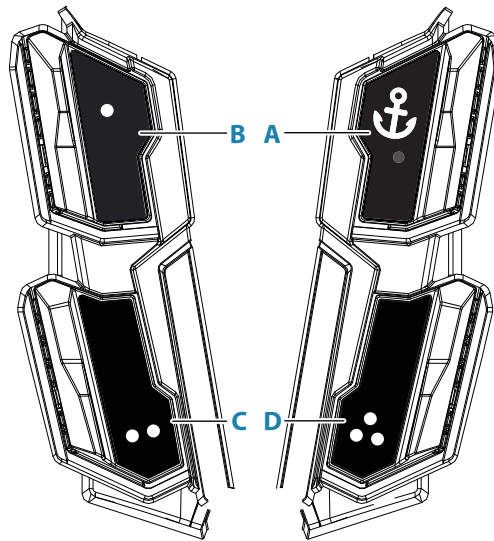
Adjusting the speed

Rotate the speed adjustment knob (A) to increase or decrease the propeller speed.



Select a mode or action

By default the trolling motor is in manual mode, controlled by the foot pedal. Modes can be selected by pressing the mode/action keys.



- A** Anchor key
- B** Configurable key 1
Default function: Propeller constant ON
- C** Configurable key 2
Default function: none
- D** Configurable key 3
Default function: none

Modes and actions

- **Note:** The direction indicator will stay illuminated when in Course lock, Heading lock, or Propeller constant ON. In anchor mode, the direction indicator will illuminate when the propeller is active.

Configure trolling motor keys

The configurable keys can be configured from a compatible multifunction display unit to access the following modes and functionalities in addition to the default modes.

- **Note:** Please visit www.lowrance.com to ensure your product is compatible and that the display software is up to date. The trolling motor and display must be connected to the same NMEA 2000 network.

To configure the keys, refer to the documentation for your display unit.

Anchor

Maintains the vessel at the current position.

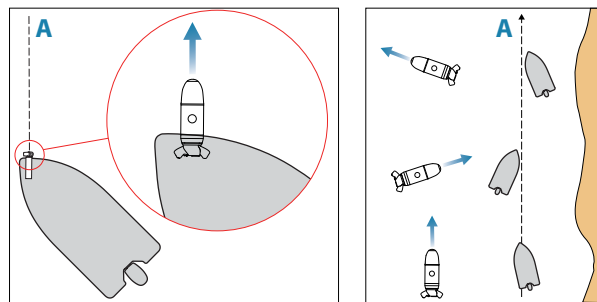
- **Note:** When in anchor mode, the vessel heading will be affected by wind and/or current.

Deactivate anchor mode

Any foot pedal operation will deactivate the mode.

Course lock

In Course lock mode, the vessel is steered along a course line. When the mode is activated, the trolling motor will draw an invisible track line (A) based on current direction of the lower unit. The trolling motor will use the position information to calculate the cross track distance, and automatically steer along the course line.



- **Note:** If the vessel is drifting away from the course line due to current and/or wind, the vessel will follow the line with a crab angle.

Adjusting speed

Speed can be changed by turning the speed adjustment knob.

- **Note:** When the mode is activated, the motor will automatically run to the speed level indicated on the speed wheel.

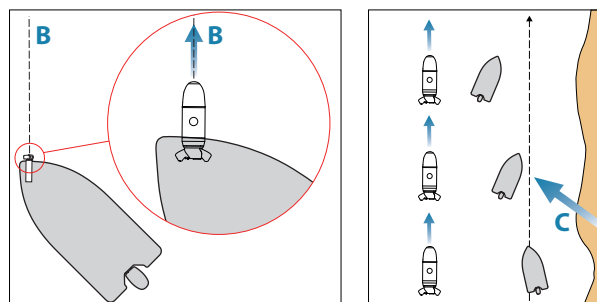
Deactivate course lock mode

Any foot pedal operation will deactivate the mode.

Heading lock

In this mode, the trolling motor steers the heading of the lower unit on a set heading. When the mode is activated, the trolling motor selects the direction of the lower unit as the set heading.

In heading lock mode, the heading (B) of the trolling motor is locked.



- **Note:** In this mode, the trolling motor does not compensate for any drifting caused by current and/or wind (C).

Adjusting speed

Speed can be changed by turning the speed adjustment knob.

- **Note:** When the mode is activated, the motor will automatically run to the speed level indicated on the speed wheel.

Deactivate heading lock mode

Any foot pedal operation will deactivate the mode.

Propeller constant ON

Engages the propeller to spin continuously.

Adjusting speed

Speed can be changed by turning the speed adjustment knob.

- **Note:** When the mode is activated, the motor will automatically run to the speed level indicated on the speed wheel.

Deactivate constant ON mode

Press any mode key or the momentary switch to deactivate constant ON mode.

Power-Pole auto down

Lowers the Power-Poles all the way down.

Power-Pole auto up

Raises the Power-Poles all the way up.

Create waypoint

Creates a waypoint at the current vessel position.

4

Service and maintenance

For service contact information, spare parts and accessories refer to: www.lowrance.com.

General maintenance

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

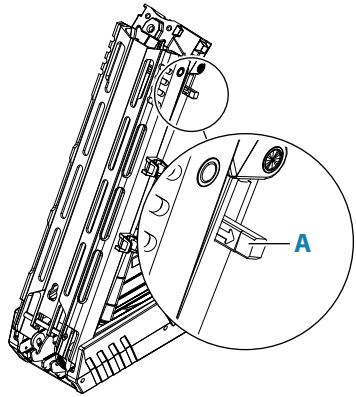
Before each use

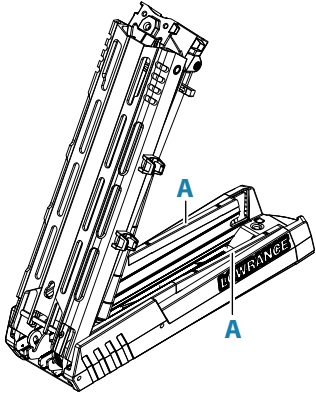
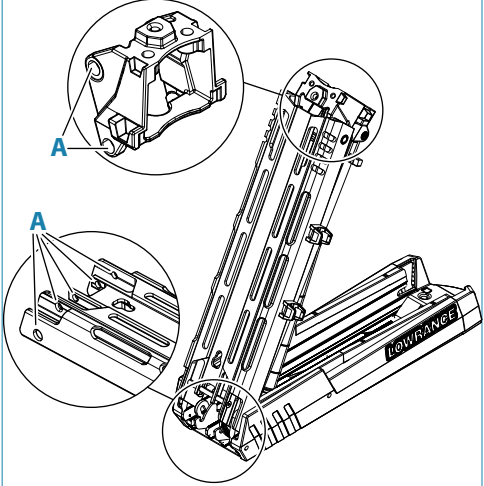
- Visually inspect the stow/deploy cable and handle for damage or wear. Repair or replace as necessary.
- Check the trolling motor for tightness on the deck mount.
- Visually inspect for loose or corroded electrical wiring/components.
- Inspect the stow strap assembly for damage, fraying or excessive wear.
- Remove any debris interfering with stow strap operation.
- Inspect the trolling motor stabilizer for damage or excessive free play.

After each use

- Ensure the 6 mm screws securing the motor to the mount are torqued to specification.
- Clean and inspect your propeller for any nicks or abrasions. Remove nicks and abrasions with fine sandpaper or a file.
- Remove the prop. Promptly remove any fishing line or debris that may be wedged between the propeller and lower unit. Re-install the propeller and propeller nut. Make sure the nut is properly tightened.
- Check the battery leads for cuts or abrasions and repair or replace if necessary.
- Disconnect power when the motor is being stored, transported, or not in use for extended periods of time.
- Recharge your batteries as soon as possible. The ideal state for a battery is fully charged.
- Rinse the trolling motor with fresh clean water after use in brackish environment.
- Inspect the stabilizer bar for damage or excessive freeplay. Adjust as necessary to minimize travel while stowed.

Maintenance schedule

Item	Occurrence	Description
Batteries	Weekly	Check terminals for any corrosion or dirt. Clean if necessary.
Mount		
Front latch block	Yearly	Grease the contact surface (A) of the front latch block with calcium sulfonate marine grease. 

Item	Occurrence	Description
Braided stainless steel pull cable and handle	Before each use	Visually inspect. Replace if damaged.
Wear bearing	Yearly	<p>Visually inspect. Replace the wear bearings (A) if necessary.</p>  <p>The wear bearings can be pried off using a wide blade flat screwdriver.</p>
Stow strap	After each use	Replace if damaged.
Stow bow arm/mount stabilizer	Before each use	Visually inspect. Replace if damaged. Inspect stabilizer for fitment to properly support the motor during transportation. Adjust and tighten lock nut as necessary.
Bushings	As necessary	<p>Lubricate brass bushing points (A) with a multi-purpose lubricant.</p>  <p>Remove excess quickly to avoid discoloration or collection of dirt.</p>
Foot pedal		
Electrical terminals	Yearly	Check that terminal screws are not loose. If needed, reapply Tef-Gel to the terminals.
Trolling motor		
Direction indicator	As necessary	Clean the indicator. Remove the indicator by prying it off with a flat head screwdriver. Blow/clean with rubbing alcohol.

Propeller replacement

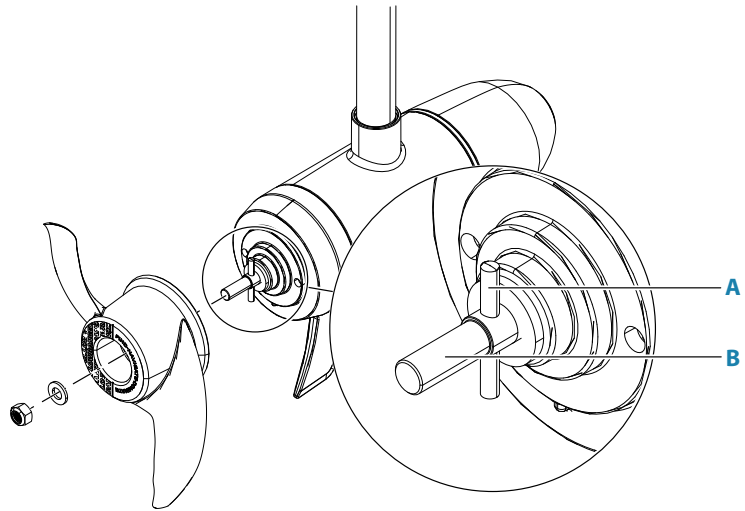
Tools required

17 mm deep socket

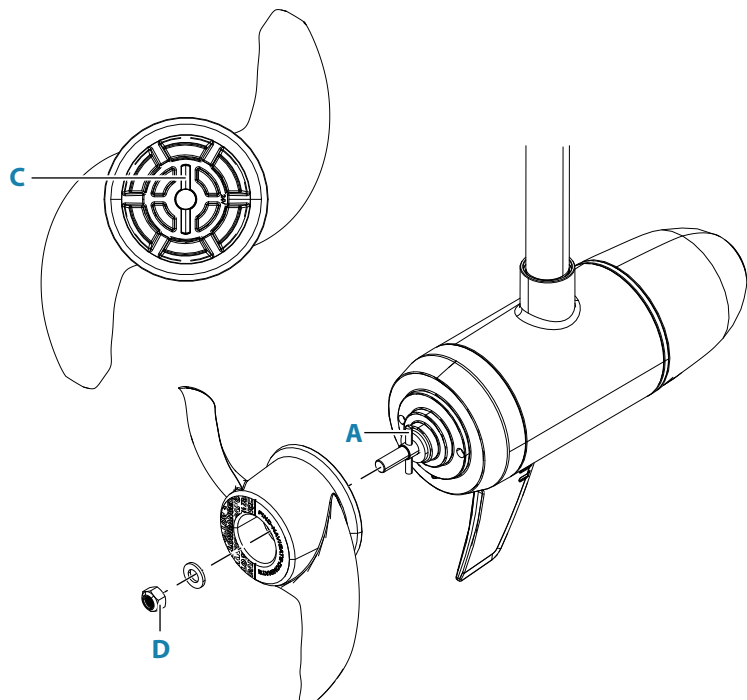
Warning: Do not use power tools to remove or install the propeller nut. Only hand tools should be used for removal and installation of the nut.

Procedure

- 1 Remove the propeller and inspect the drive pin (A) and propeller shaft (B) for damage. If the shaft is damaged, contact a service center.



- 2 Replace any damaged parts. The drive pin (A) can be removed by gently tapping from one side.
- 3 Clean the threads of the propeller shaft of any pre-existing grease and debris and apply included Anti-seize compound prior to installing propeller nut (D).
- 4 Install the new propeller. Make sure that the drive pin (A) aligns with the slot in the propeller (C). Torque the propeller nut (D) to 13 Nm (10 lbft).



Updating the software

The trolling motor software can be updated from the Lowrance: Fishing & Navigation mobile app or from a compatible multifunction display unit.

The Lowrance: Fishing & Navigation app can be downloaded from the relevant phone/tablet application store. Follow the prompts in the app to update the trolling motor software.

To update the unit from a compatible multifunction display unit, download the latest software from www.lowrance.com and refer to the display unit's documentation for details about the update procedure.

Force a software upgrade

In the unlikely event that you receive a software version mismatch error, or if the power LEDs are blinking one at a time (1 time per second), you may need to force a software upgrade. To force a software upgrade, enter user configuration mode and hold down the anchor key and configurable key 3.

Perform a factory reset

In the unlikely event that the motor encounters an error within its operating system, you may need to do a factory reset to the motor's setting.

To perform a factory reset, power on the motor and enter user configuration mode (refer to the installation manual for the configuration mode procedure).

Next, press and hold down configurable keys 1 and 2. Wait for an audible confirmation and the trolling motor will restart. Release all buttons when the audible confirmation is heard and/or the Power LEDs are no longer flashing.

- **Important:** After completing a factory reset, a bow offset and compass calibration should be performed. All programmable buttons, paired bluetooth devices, arrival modes, system voltage, and stow direction will be restored to their default settings.

Configuration

For configuration of the trolling motor, refer to the installation manual.

Troubleshooting

Problem	Action
Motor not running	<p>Check battery connections for proper polarity.</p> <p>Make sure terminals are clean and corrosion free. Use fine sandpaper or emery cloth to clean terminals.</p> <p>Check the condition of the battery, refer to the battery suppliers recommendations.</p> <p>Check for proper battery voltage.</p> <p>Make sure the trolling motor is in the deployed position.</p>
Motor loses power after a short running time	<p>Check battery charge level.</p> <p>Check power wires and connections, make sure that the correct cable diameter is used.</p>
Direction indicator hangs up or stutters during rotation	<p>Clean the indicator.</p> <p>Remove the indicator by prying it off with a flat head screwdriver. Blow/wash out carefully if necessary.</p> <p>Verify the white Teflon sticker is properly placed within the small circle of the gear cover window.</p> <p>Verify indicator races is free of debris.</p> <p>Inspect indicator tabs for deformation or flashing. File nicks or imperfections as needed.</p>
Propeller vibration during operation	<p>Inspect the propeller and propeller shaft for damage and replace if necessary.</p> <p>Remove and rotate the prop 180°.</p>

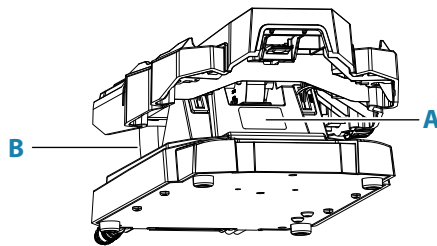
Problem	Action
Anchoring or heading issues	Perform calibration of the compass and/or bow offset. Refer to the installation manual. Validate TMC-1 compass installation location is sufficient and in a position free of magnetic interference.
Trolling motor does not appear as a device in the display unit	Check the NMEA 2000 wiring. Make sure that the proper sources have been selected. Refer to the documentation supplied with your display unit for more information.
Cannot get the sonar to work	Check the sonar wiring. Verify the sonar is properly set up on the compatible multifunction display unit.
Motor is hard to stow	Loosen the mounting bolts 1-2 turns to verify the mount is not unevenly tightened to the mounting surface. Place your foot on top of the mount and press down before unlatching the mount via the stow cable. Place shims or included rubber spacers between the boat deck and the bottom of the mount to create a level mounting surface. Ensure the steering system to mount 6 mm Allen head bolts are tight. On new installation, cross check steering system was installed with the mount in the deploy position.
TMR-1 remote LED never flashes green when pairing	Stop the pairing process and complete a factory reset. After the factory reset is complete, press any button on the remote. If the LED light on the remote turns green, pairing is complete. If the LED light is red, start over with the TMR-1 pairing sequence.
Motor is hard to deploy	Check for proper installation and spacing on the stabilizer. Check to ensure the mount is level. Add grease to latches. Inspect wear bearings for damage (see Maintenance schedule on <i>page 17</i>).

Direction indicator LED and audible feedback

Beep pattern	Direction indicator (A)	Description
NA	ON	Propeller running.
1 short beep	NA	Enabling anchor mode.
		Enabling heading lock mode.
		Enabling course lock mode.
		Enabling constant ON mode.
		Speed increased (from remote controller or multifunction display).
2 short beeps	NA	Speed decreased (from remote controller or multifunction display).
		Disabling anchor mode.
		Disabling heading lock mode.
		Disabling course lock mode.
		Disabling constant ON mode.

Beep pattern	Direction indicator (A)	Description
3 short beeps	2 short flashes	Missing GPS signal. Invalid heading data, check compass connection.
4 short beeps	OFF	Trolling motor startup sequence completed.
2 long beeps	2 long flashes	Calibration initiated.
		Broadcast Bluetooth pairing.
3 long beeps	3 long flashes	Calibration completed.
		Bluetooth pairing completed.
		Factory reset.
4 long beeps	4 long flashes	Battery level below threshold. Unit will shut off.
5 long beeps	5 long flashes	High temperature.
	Fast double LED flashes until error has been resolved	Hardware error: Perform a power cycle to reset the unit. If the problem persists, please contact a service center.
	10 fast triple LED flashes	Software version mismatch. Refer to "Force a software upgrade" on page 20.
NA	Blinking (1 Hz)	During upgrade of motor components.
		During compass calibration.

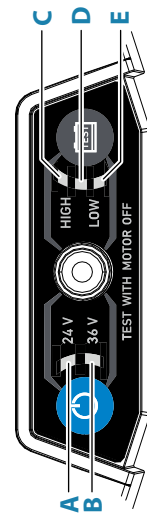
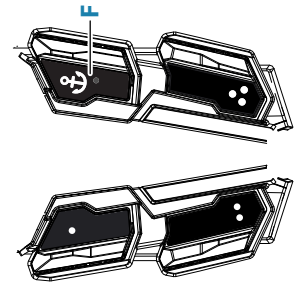
Serial number



The serial number of the trolling motor can be found underneath the heel end (**A**) and the toe end (**B**) of the foot pedal.

Foot pedal LED indicators

LED	Regular usage		During startup	During upgrade of motor components	If upgrading failed
	24 V system	36 V system			
24 V (A)	ON	OFF	ON	Blinking fast, one at a time (10 Hz)	Blinking slow, one at a time (1 Hz)
36 V (B)	OFF	ON	ON		
HIGH (C)	ON if battery > 23.6 V	ON if battery > 35.4 V	ON	OFF	OFF
Battery capacity					
MID (D)	ON if 23.0 V < battery < 23.6 V	ON if 34.5 V < battery < 35.4 V	ON	OFF	ON if Bluetooth module upgrade failed
Battery capacity					
LOW (E)	ON if battery < 23.0 V	ON if battery < 34.5 V	ON	OFF	ON if main controller upgrade failed
Battery capacity					
Anchor key (F)	ON if anchor is the current mode		OFF	OFF	OFF





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