

# Good® Automatic Windlass, Inc.

Made in the U.S.A.

## **Owner's Manual & Installation Instructions**

for Models

**F850 Stealth Series**

Automatic, Free-Drop, Rope/Chain Combination Anchor Windlasses



**F850 Stealth Series**

**Serial No.** \_\_\_\_\_

**Good® Automatic Windlass, Inc.**

357 Route 72 ~ Barnegat, New Jersey 08005

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**Web Site: [www.goodwindlass.com](http://www.goodwindlass.com)**

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357 Route 72 ~ Barnegat, New Jersey 08005

## *Manufacturer's Warranty*

Manufacturer warrants to the original purchaser, subject to the Limitations and Exceptions described herein, its' new manufactured products and parts to be free from defects in material and workmanship under normal use and service for a period of three (3) years from the date of the original purchase, or installation date, except that the warranty shall be for a period of (2) years on sprockets, bearings, and clutches, and one (1) year on seals, motors, electrical/electronic equipment and controls.

Manufacturer's obligation under this warranty shall be limited to repairing or replacing, at Manufacturer's factory or other designated places, each part or parts which shall be returned to the Manufacturer's plant or Manufacturer's designee, transportation charges prepaid and which examination shall disclose to have been thus defective while in the warranty period. This warranty or agreement to repair or replace does not cover any labor charges for removal, re-installation or any work done by any other party or parties except Manufacturer or it's specific designee. This warranty is expressly in lieu of all other warranties and representations expressed or implied and all other obligations and liabilities of any kind or character on Manufacturer's part. Manufacturer neither assumes nor authorizes any other person to assume for it any other liability in connection with the sale or use of Manufacturer's Marine Products and/or spare parts, and/or other products.

This warranty applies only if the product is used in NON-COMMERICAL applications, and has not been repaired or altered by anyone outside of the Manufacturer's factory, or Manufacturer's authorized designee, in any way, so as in Manufacturer's sole judgement to affect structure, stability, performance, or reliability. This warranty shall not apply to misuse, negligence, faulty installation, incorrect maintenance, accident, or use in applications for which they are not intended; nor to any product sold by Manufacturer which shall have been loaded or used beyond the factory rated load capacity, including but not limited to, wear and tear, corrosion, paint fading, chipping, or ultraviolet degradation.

Manufacturer reserves the right to change any of the assemblies, specifications, or prices of its products without incurring any responsibility with regard to any such assemblies or specifications previously sold or replaced. This policy does not provide replacement of products in instances where adjustments will correct the difficulty. Complete replacement of Good Products is not authorized, and therefore can only be replaced at the discretion of "Good". Copies of bill of sale, receipts are to be submitted at the time of the inspection documenting that the defect or failure occurred within the applicable warranty period. Examination by Good must concur that the product or part failed as a result of material and/or workmanship.

GOOD AUTOMATIC WINDLASS, INC. SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES TO PROPERTY OR PERSONS ARISING OUT OF OR FROM THE USE OF GOOD'S PRODUCTS BY THE BUYER OR BUYERS, ITS ASSIGNEES, EMPLOYEES, AGENTS OR CUSTOMERS. THIS WARRANTY DOES NOT APPLY TO LOSS OF THE VESEL/BOAT/PROPERTY OR EQUIPMENT, LOSS OF TIME, LOSS OF USE, INCONVENIENCE, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS WHICH VARY FROM STATE TO STATE, OR COUNTRY TO COUNTRY.

**WARRANTY RETURN PROCEDURES:** If a windlass or part does not operate properly and the steps suggested on "Information and Trouble Shooting Sheet" (and/or a phone call to our customer service department) does not provide a solution, we recommend prompt removal of the unit and return to "Good" for warranty inspection service. DO NOT OPEN or TAMPER with the windlass or part, as this will void your warranty. Please include your name, daytime phone number, and return shipping address with your return and note on the shipping carton and any paperwork "**WARRANTY REPAIR/INSPECTION**".

### **Please Record the following information and retain for your records:**

Windlass Model **F850** \_\_\_\_\_ Serial # \_\_\_\_\_ Date \_\_\_\_\_  
Purchase Date \_\_\_\_\_ Warranty Registration Date \_\_\_\_\_

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### Inserts

- 1-Installation Hole Template
- 1-Warranty Registration Card

**PLEASE, Read Carefully Before Proceeding!**

**THANK YOU!**

For choosing Good® as your first mate for anchoring!

Good® Automatic Windlass, Inc. has been manufacturing anchor windlasses since 1958 and from the Barnegat, New Jersey location since 1971. The company pioneered and patented the free-drop design of the Good® automatic anchor windlass for the pleasure boat industry. You can rest assured that your satisfaction is of primary importance to everyone at Good Automatic Windlass. Before beginning the installation or having your windlass professionally installed, please take the time to review the simplified instructions pertaining to the installation of your anchor windlass. This will make you more aware of the critical requirements necessary to achieve proper operation and the most satisfaction from your Good® automatic anchor windlass.

**Be sure that your windlass rope/chain entry hole is located over the deepest area of the anchor storage locker.** Select the correct length of line that your locker can comfortably hold, (**DO NOT** try to store more than your locker can hold; see the storage locker minimum requirement charts on page 2). Trying to store too much line could possibly cause problems, such as slipping or jamming when lowering or raising the anchor. **These 2 REQUIREMENTS ARE VERY CRITICAL FOR THE PROPER OPERATION OF YOUR ANCHOR WINDLASS.**

Please be aware of other manufactured anchor lines. Over the last 30 years, we have developed our own method of yacht lay construction in the manufacture of our anchor line kits. Don't be confused by other brands that state they are the same as Good® line, or may be identified as windlass line. Good® anchor line kits are clearly marked and easily identified. They are pre-spliced with a standard 10' lead of 5/16 BBB chain, dye colored for depth, and pre-shrunk. All Good® anchor line kits come with initial windlass feed instructions and the 200', 300' and 600' lengths include a dashboard depth chart for easy reference while deploying your anchor.

When purchasing the F850 Stealth free-wheeling anchor windlass, we do NOT recommend the use of more than 20' of chain on your anchor rode. If you require a longer chain lead or an all chain anchor rode, the free-drop mechanism may be dismantled by removing the two (2) ¼" diameter release pins and springs from the clutch cover on the top of the windlass. This will disable the clutch from dis-engaging the rope-chain sprocket wheel; thus, making the machine operate at 75-85 fpm, up or down by the speed of the motor's rotation.

Phone: (609) 698-4402, (800) 780-4655, Fax: (609) 698-3698, or E-mail: support@goodwindlass.com

Again, THANK YOU for choosing Good® and we wish you many Happy and Safe boating hours with your Good® Automatic Anchor Windlass.

**PLEASE BOAT SMART!**

# Please Read All Instructions Before Beginning Installation.

## Package Contents

Above Deck Windlass Assembly

Below Deck Motor & Gear Box Assembly

Safe-T-Loc. Switch & Plate Assembly

Manual Reset Circuit Breaker & Plate

Motor Reversing Control Panel

Stainless Steel Mounting studs, washers & nuts

Installation Instructions, Template, Deck Gasket & Warranty Registration

Note: If there are any shortages or questions please contact the factory or consult a professional marine equipment installer before proceeding.

## Tools Required

Electric Drill (3/8"-1/2" Chuck)

1 1/32" Diameter Drill Bit

Stripping/Crimping Pliers

#2 Phillips screwdriver

Marine Grade Silicone Sealer

3-1/8" Diameter Hole Saw

Soldering Iron with solder

3/8" through 9/16" open end wrenches

Rasp files (Round or Half-Round)

Small tube of grease

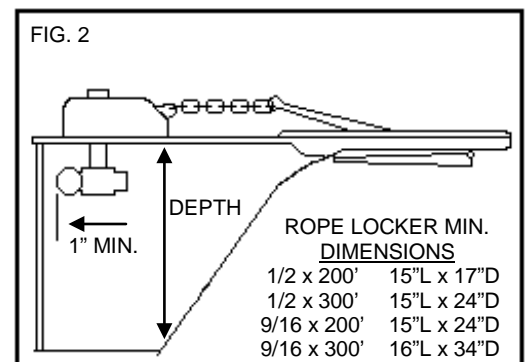
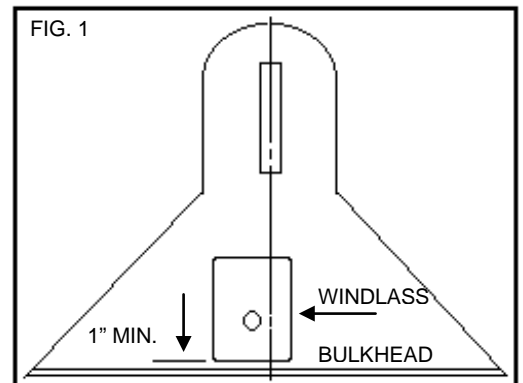
## PLANNING THE INSTALLATION

### Windlass Location Restrictions

- The 850 Stealth series is designed to install easily on boats with a deck thickness of up to 4 inches. If your deck's application is more than 4 inches thick call the factory. It may be necessary to return the unit for a shaft and mount extension option.
- The rear of the windlass must be located a minimum of 1" forward of the anchor locker bulkhead. (see Fig.1)

### Determining the Optimum Windlass Location

- Locate the windlass within 1" of a level plane with the anchor roller system. (see fig.2) Contour, deck spacer plates are available from the factory.
- Locate the windlass on the centerline of the boat's bow, over the deepest area of the anchor rode storage locker.
- The locker depth will determine the amount of anchor line that can be used in your windlass application. (see Fig.2)
- Locate the rope chain entry hole as close to the deepest area of the rode locker as possible.
- Keep in mind that you need to keep the rear of the windlass 1" forward of the anchor locker bulkhead.



## **850 STEALTH SERIES DECK INSTALLATION INSTRUCTIONS**

- Locate and mark the centerline of the boat's bow for the installation.
- Align the bow centerline on the paper template with your marks on the centerline of the bow. ( over the deepest part of the anchor line locker) Fasten the template with tape at this location.
- Carefully transfer the center points of the (2) two 3-1/8" holes and the (4) four 11/32" mounting holes.
- Remove the paper template and drill the (4) four 11/32" deck mounting holes.
- Then, using a 3-1/8" hole saw, carefully drill the two 3-1/8" holes as marked on the template.
- On decks thicker than 4", the rope/chain entry hole may need to be angled on the underside, front edge of the hole as shown on the paper template. Use a rasp file to do so.
- De-burr all rough edges; leaving no splinters or obstructions in the Rope/Chain entry hole. It is recommended to seal or gelcoat all through holes in the deck to prevent water intrusion.
- If mounted on a pulpit, make sure there is no void between the pulpit and the deck. If there is a void, this must be filled, especially in the Rope/Chain entry hole.
- The windlass will accommodate deck/pulpit thickness up to (4) four inches. An optional shaft extension is available for combined deck/pulpit thickness of up to 7-1/2" inches per request from the factory.
- Install the 5/16" stainless steel studs into the base of the windlass and test fit your hole locations.
- If correct, remove windlass, peel paper backing off of the deck gasket and adhere gasket to the base of the anchor windlass.
- Apply a small bead of silicone on the deck around all machined holes and re-install the windlass.
- On thinner decks ( less than 1" ), it is recommended to install a deck stiffener below the windlass to support the load when raising anchor. This stiffener **MUST NOT** obstruct the rope/chain entry hole.
- Install the (4) four 5/16" flat washers and hex nuts on the 5/16" windlass studs to fasten the anchor windlass to the deck.
- Apply a thin film of grease on the windlass shaft and gearbox mount face prior to installing the gear box and motor assembly.
- Align the keyways on the windlass shaft and gearbox and slide the gearbox onto the windlass shaft.
- Mount the gearbox with the motor pointing towards the starboard (right) side of the bow (Factory recommended positioning). DO NOT mount with motor pointing towards bow, this will interfere with rope/chain entry hole and could cause possible motor damage and/or failure.
- Tighten all (4) four 7/16" nuts, making sure to use the lock washers (supplied) to prevent the gear box motor assembly from vibrating loose.
- Your deck installation is now complete and you should now begin wiring the windlass.

# **ROPE/CHAIN COMBINATION WIRING INSTRUCTIONS**

## **Safe-T-Loc Switch Location**

Install your windlass control switch in a safe, accessible location. The factory recommends locating it near the throttle and transmission controls at your helm. This assures complete control of the boat during anchoring. All Good® windlasses are supplied with a Safe-T-Loc toggle switch and mounting plate. Pulling out the toggle handle, then pushing the handle to either the Raise or Lower position operates this switch. The Safe-T-Loc will prevent an inadvertent start up of the windlass if the switch is bumped accidentally.

If incorporating deck switches (not supplied), isolate the power to them as a safety precaution. When multiple switches are used, wire them in parallel. If, after wiring your switches, your windlass runs in the opposite direction as indicated at the switch location, reverse your leads R & L as illustrated in the wiring diagram (see page 5). While raising or lowering the anchor with the windlass, keep your engines running until anchoring is complete and a safe hold is secured, or the anchor is completely retrieved and stowed in the pulpit or roller system.

## **Motor Reversing Control Panel Location**

The motor reversing control panel should be located in a safe, dry location. The manufacturer recommends mounting with the connecting bolts horizontal or pointing up. **The control must not be mounted with the connecting bolts pointing downward.** The control is sealed however the panel should be protected from direct moisture contact. It is also recommended to choose a location that can be easily accessed in the future if needed.

## **Wiring Your Windlass** (See Wiring Diagram/Schematic)

It is very important to use the proper gauge wire as illustrated in the wiring diagram. The main positive (+) power cable and negative (-) ground cable must be 6 gauge minimum for a one way run of up to 40', 4 gauge for a one way run over 50'. The supply leads from the reversing control to the motor should be 6 gauge. The switch wires, from the toggle switch to the reversing control panel, are to be 14 gauge.

Wire the main positive power cable from terminal B on the reversing control either directly to the battery or to the battery selector switch, if possible. Install the 60 amp (manual reset) circuit breaker in-line, in a dry location protected from moisture and the outside elements. This breaker will protect the positive power cable at the power source. Connect the main ground (negative) cable from the 50 amp, automatic reset circuit breaker directly to the negative terminal on the marine battery. Do not forget to install a 6-gauge jumper ground wire from terminal C on the motor reversing control to the opposite pole of the 50 amp, automatic reset circuit breaker. Crimp, solder and seal all of your main power and ground connections to assure good electrical contact.

The switch wires are to be 14 gauge. Connect the switch to the motor reversing control via the spade connections on the top of the control. Be sure to connect the N (neutral) center spade terminal to the 50 amp negative circuit breaker. You may gain power for the switch from any 5 to 10 amp fused, power source at your bridge or helm station. It is recommended to solder, seal or liquid tape all terminals and wire connections. This will ensure good electrical contact and reduce the possibility of corrosion at the connections and in the wire itself.

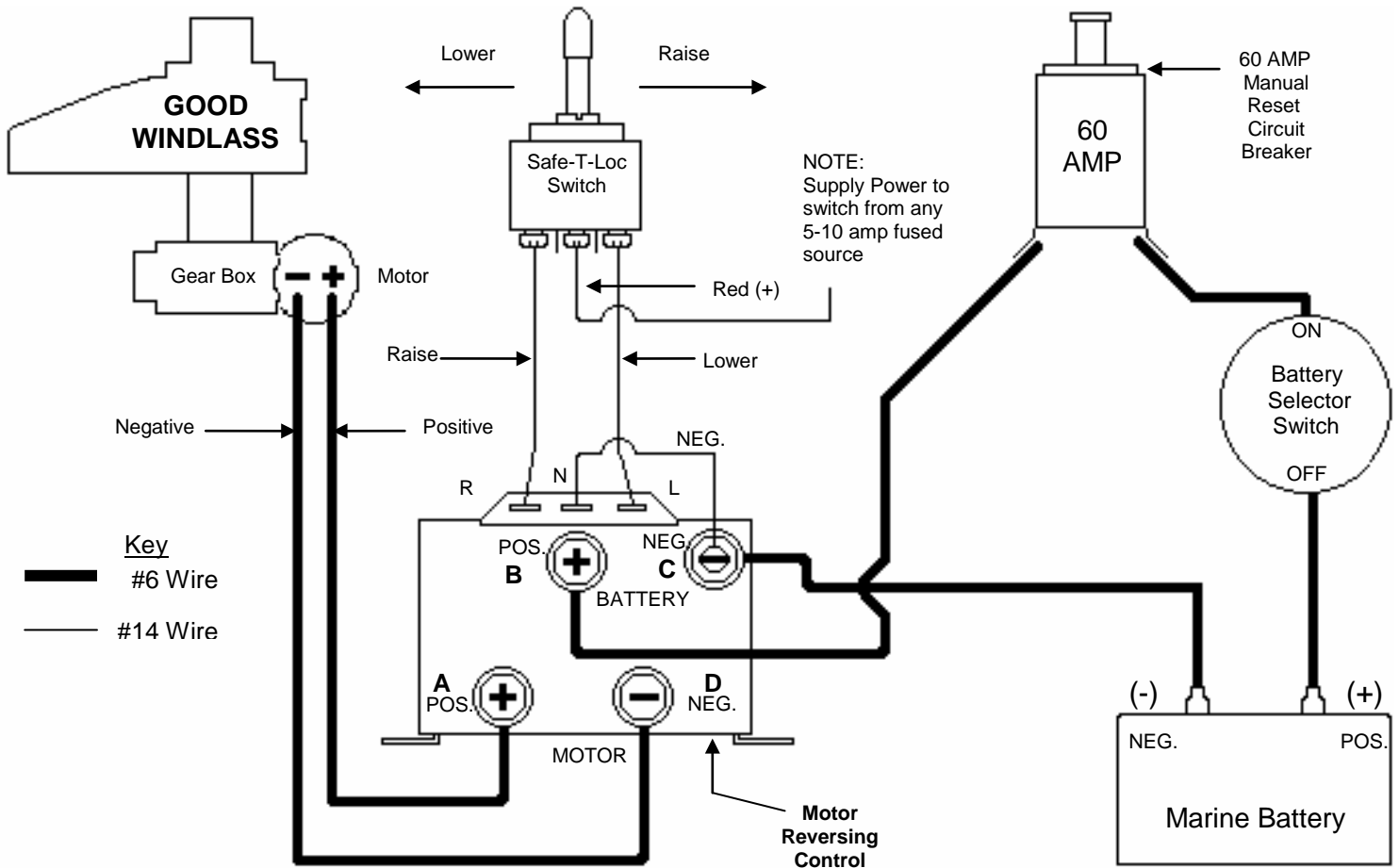
**Note:** Be sure to secure/clamp all wiring with nylon ties to prevent excessive strain on the electrical connections and components.

# Wiring Diagram/Schematic

## F850 Stealth Series

D.C. system

DC88-276 or 1061P Reversing Control with Permanent Magnet Motor



rev. 8/15

### Gauge Wire

### From

### To

#6 Red	Marine Battery (+) Positive	Battery Selector Switch
#6 Red	Battery Selector Switch	60 Amp Manual Reset Circuit Breaker
#6 Red	60 Amp Manual Reset Circuit Breaker	Terminal "B" on Motor Reversing Control
#6 Red	Terminal "A" on Motor Reversing Control	Motor Stud (+) Positive
#6 Black	Marine Battery (-) Negative	Terminal "C" on Motor Reversing Control
#6 Black	Terminal "D" on Motor Reversing Control	Motor Stud (-) Negative
#14 Lower	"L" Terminal on Motor Reversing Control	Top Screw on Safe-T-Loc Switch
#14 Raise	"R" Terminal on Motor Reversing Control	Bottom Screw on Safe-T-Loc Switch
#14 Negative	"N" Terminal on Motor Reversing Control	Terminal "C" on Motor Reversing Control
#14 Switch Pos.	Center Screw on Safe-T-Loc Switch	Any Auxillary 5-10 Amp Fused Power Source

### Motor Reversing Control

Terminal A = Motor (+) Positive  
Terminal B = Main Power (+) Positive

Terminal C = Main Ground (-) Negative  
Terminal D = Motor (-) Negative (Ground)

## **Initial Rope/Chain Feed Into Windlass (850 Stealth Series)**

- The windlass accommodates Good® color-coded line of the proper diameter with 5/16" BBB ACCO® anchor chain.
- This should be purchased with your windlass to ensure proper operation.
- Once the windlass is installed, you are ready for initial loading of the anchor rode into the anchor windlass. The factory recommends installing the line into the windlass directly from the dock in front of the boat (see installation below).

## **Installation of the Line & Chain**

- At the bow of the boat, using a broom handle as an axle, spin the chain and line off the reel onto the dock or foredeck of your boat. Do **Not** remove the rope over the sides of the reel!
- Pass the bitter end through the anchor roller and/or pulpit. Wrap the bitter end of the line around the rope/chain gypsy while holding the tension finger out. **Be Careful! Do Not** activate the windlass at this time! Be sure your fingers and hands are clear before operating windlass.
- With the anchor line in position, release the tension finger allowing the tension finger to engage the line in the rope/chain gypsy.
- Be sure that the tension finger is engaging the anchor line before operating the windlass.
- Operate the raise switch and power in approximately 10 to 15 feet of anchor line.
- Go below and secure the end of your anchor line. This should be tied off in the locker or to a block of wood on the end of the line. This can prevent the loss of your entire line and anchor.
- Once the line is secured, activate the raise switch and retrieve all but the last 15 feet of your line and chain. Attach the anchor to the chain lead, a swivel shackle may be used.
- Complete the retrieval of the anchor rode. A safety line to your anchor may be considered.
- You are now ready to anchor your boat automatically with your Good® Automatic Rope/Chain Windlass.



## Operating a Good® Automatic 850 Stealth Rope/Chain Combination Windlass

When preparing to anchor your boat, there are four very important factors to consider:

- The sea conditions, tide or currents
- The winds
- The sea bottom type
- The depth of water

These factors will determine the amount of scope required to hold the anchor in the sea floor. Anchor line scope is a term that refers to the amount of line or rode required to allow the anchor shank to remain horizontal to the sea floor and allow the anchor flutes to remain embedded in the bottom; thus securing the anchor's hold. A simple rule of thumb determining the line scope required is:

- Minimum 3 feet of line for every foot of waters depth (3 to 1)
- Normal line scope is 5 feet of line for every foot of waters depth (5 to 1)
- Optimum line scope is 7 feet of line for every foot of waters depth (7 to 1)

## Anchoring with the Free-Wheeling F850 Stealth Windlass

When you are ready to anchor your boat with your free-drop windlass follow these steps:

- Put the bow of your boat into the wind or tide and pick your spot to anchor.
- Run slowly over your chosen location and disengage your transmissions (props).
- While the boat is still, activate the windlass lower switch.
- When lowering anchor, pay close attention that the anchor leaves the bow roller system. If it does not, the windlass may jam the chain. **(Chain will not push!)**
- The windlass will power out 3 to 5 feet of rode; then, the automatic internal free fall clutch will disengage from the gypsy. When the anchor and rode begin to free fall to the sea floor briefly put the boat in reverse to start a reverse drift, then put transmissions back into neutral. This will prevent the anchor chain from fouling the anchor flukes.
- Once the anchor is on bottom and you have achieved the proper amount of scope you must stop the backward drift of the boat with your transmissions.
- Then activate your windlass switch in the raise position and power in 5 to 10 feet of line.
- This re-engages the drive clutch into the gypsy, securing the line in the windlass.
- Let the boat back drift to set the anchor.
- In most normal sea and wind conditions, no further cleating is required.
- It is always recommended to keep your boat engines running at idle during anchoring and until the anchor is set and hold is checked and secured.

## Raising Anchor with the F850 Stealth Series

When you are ready to raise your anchor follow these steps:

- Start the boat's engines, check your crew, passengers and view the surrounding area for other boats, swimmers, etc.
- Line up the bow of the boat with your anchor and anchor line.
- First, activate the lower switch and allow a foot or two of line out to release the stress and tension formed in the line in the sprocket while at anchor. Then, activate the raise switch and begin retrieving the line and anchor.
- It is recommended to occasionally idle forward as you are retrieving the anchor line to assist the windlass motor. The factory does not recommend pulling the boat through the water solely with the windlass motor.
- Most times the windlass will break the anchor out of the bottom by itself. If the unit stalls (circuit breaker trip), while breaking bottom and directly over the anchor, wait a few seconds for the breaker to reset itself automatically and let the surge of the boat break the anchor free from the bottom.
- Once it is free from bottom, continue to retrieve the remaining anchor rode.
- Carefully jog the anchor into stow in your pulpit or roller system, allowing the anchor to cradle into stow. **Do Not over-tighten the anchor into stow!**
- You may attach a safety line to your anchor as a safety precaution if desired.

While operating and anchoring your boat always use common sense, stay calm, do not rush & always practice boating safety.

**BOAT SMART!**

## Windlass Maintenance for the F850 Stealth Series

- Before beginning anchor windlass maintenance, be sure to shut off/isolate all power to the anchor windlass.
- It is recommended to wash down the above deck windlass assembly with fresh water after returning from sea. This will help prevent oxidation from occurring from salty seawater.
- The below deck gearbox and motor assembly is a sealed unit and should require little or no maintenance. Keep the motor terminals clean to ensure good contact.
- Make sure all electrical connections are kept clean and free of corrosion from moisture. These should be inspected periodically.
- Run the windlass whenever possible in order to circulate the oil in the gearbox and keep the mechanical parts moving freely.
- The above deck windlass assembly requires little or no attention. The spring loaded tension finger may require a spray or liquid lubricant occasionally or when lack of movement is detected. This can be done every other month.
- It is very important to pay close attention to the joint where the anchor line is spliced to the anchor chain. This area must be inspected regularly and maintained to ensure proper operation and complete safety while at anchor.
- If fraying or any loose ends appear at the splice, re-splice your anchor line to the chain with a four tuck locking back splice or contact the factory for splice maintenance.

Thank you for anchoring with Good® Automatic Anchor Windlass and we wish you many years of safe boating and trouble free anchoring.





[www.goodwindlass.com](http://www.goodwindlass.com)

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