

**INSTALLATION
OPERATION &
MAINTENANCE
INSTRUCTIONS**

**IDEAL WINDLASS Co., INC.
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PACKING LIST

Windlass
Footswitch
Solenoid
Instructions
Circuit breaker panel

TOOLS AND MATERIALS REQUIRED

2- 3/4 " hole saw
13/32" drill bit
electric drill
wrench set
slotted screwdriver
caulking gun
caulking
wire
wire connectors
light grease
patience

SERIAL NUMBER

For future reference please register the serial number and voltage found on the windlass nameplate below.

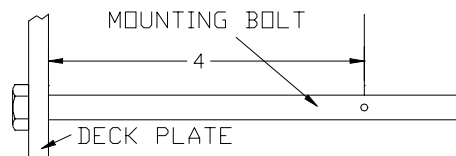
Ser.# _____ Voltage _____

1. Select a location on deck for the windlass making sure there is sufficient room below for the gear case. Give this location considerable thought keeping in mind how you plan use to your ground tackle. The height of the bow roller and the center of the capstan should be the same.

2. Remove the capstan washer, screw, capstan, drive pin and deck plate. Mark the location for the 2" center hole and drill. Set the deck plate in place and mark the location for the three mounting bolts. Adjust the location of these bolts so that the motor falls in the desired position.

3. Drill the three 13/32" mounting holes.

4. Take one of the mounting bolts and insert it into the deck plate. Measure from the underside of the deck plate 4" and mark the spot. If your windlass was built with a special deck thickness use that figure instead of 4".



5. With the deckplate in place, insert the marked mounting bolt. Measure from the underside of the deck to the marked spot on the bolt. This will be the required thickness of your spacer. This spacer can be larger than the deck plate, but must be made to miss any obstructions.

6. Prepare a spacer of suitable size and drill for the center hole and mounting bolts. It is a good idea to make these holes slightly oversized to ease installation.

I N S T A L L A T I O N

7. Bed the under side of the deck plate and around the riser tube where it comes through the deck plate with caulking and place in position. Be sure to use caulking that is removable. **DO NOT USE 5200.**

8. Install the gear case and spacer from below deck by carefully pushing the shaft up through the deck plate. Bolt into position with the 3 mounting bolts. Be careful to tighten the bolt evenly to avoid binding.

9. Replace the drive pin. Lightly grease the shaft and replace the capstan, washer and screw.

10. Select a suitable location on deck for the foot-switch. **CAUTION:**Keep the safety of the operator in mind when locating the switch. It must be located so that the operator can comfortably activate the windlass and tail the incoming line. It must not be placed so close that the operator can accidentally activate the switch with hand on the capstan. Be sure to bed the switch.

11. Wire the windlass as per the attached wiring diagram. To insure safe and proper operation, wire with the proper size wire and be sure this is done by a qualified electrician. **CAUTION:** Be sure to isolate and protect the electrical system. Using wire size less than recommended may cause a fire.

12. Check all connections and test the windlass by stepping on the switch. Proper rotation of the capstan is clockwise. **CAUTION:** Do not allow the windlass to run without a load for any length of time as the motor is series wound and damage may result.

OPERATION

Take two or three wraps of line around the capstan in a clockwise direction. Keep tension on the incoming line and step on the switch. If the line slips, add another wrap or apply more tension. **CAUTION:** Do not wrap chain around the capstan, unless the windlass is equipped with a urethane ratcheting capstan designed for chain. See the list of warnings for proper windlass usage.

Breaker Panel: The windlass electrical system must be isolated and protected. The breaker panel Model BP12 isolates and protects. This device **MUST** be used. Turn breaker off when windlass is not in use to prevent accidental activation. If the breaker trips from electrical overload it can be reset immediately. If the thermal sensor located on the motor senses too much heat it will deactivate the solenoid and the windlass will not restart until the motor cools down.

MAINTENANCE

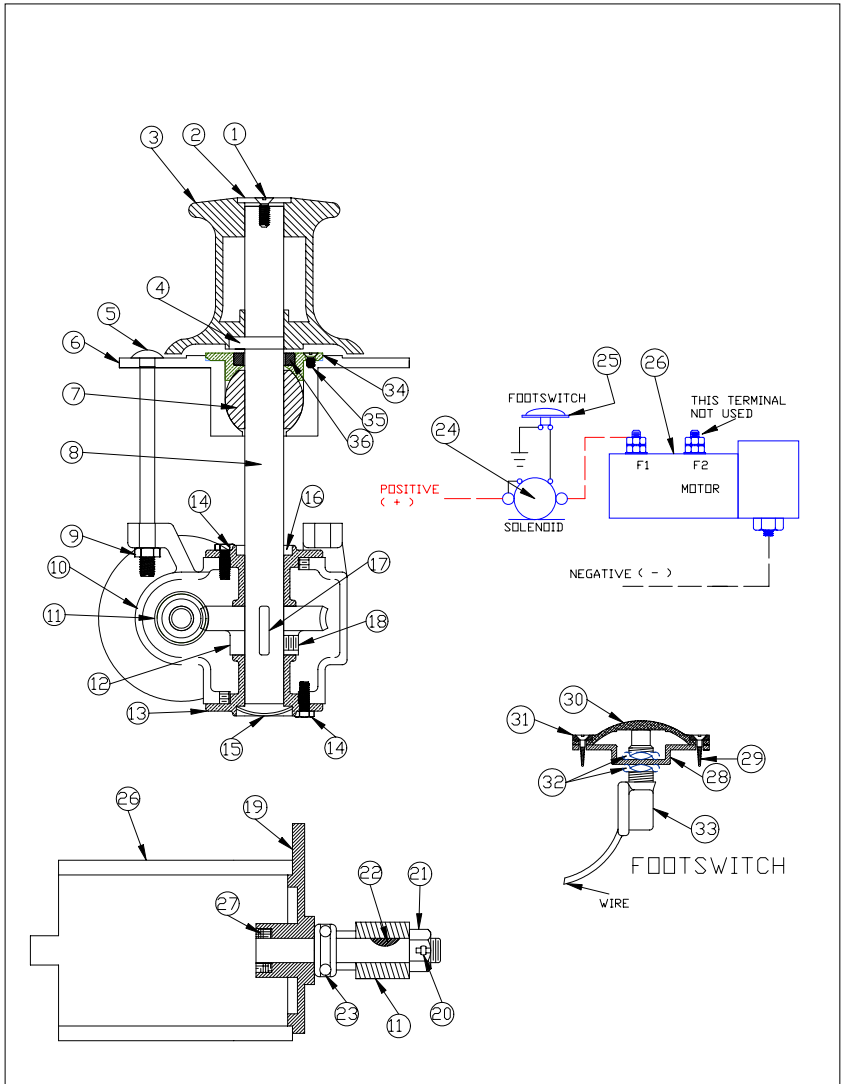
Once a season remove the capstan and lightly grease the shaft. This will enable the capstan to be removed if the windlass ever has to be removed from the boat for service.

Once a season check the oil level in the gear case. The level should be just below the level of the oil plug on the side of the gear case. Add 90 weight gear oil if necessary.

Once a season check the electrical connections and spray with WD-40 or similar. Inspect the rubber cover on the footswitch and replace every few years.

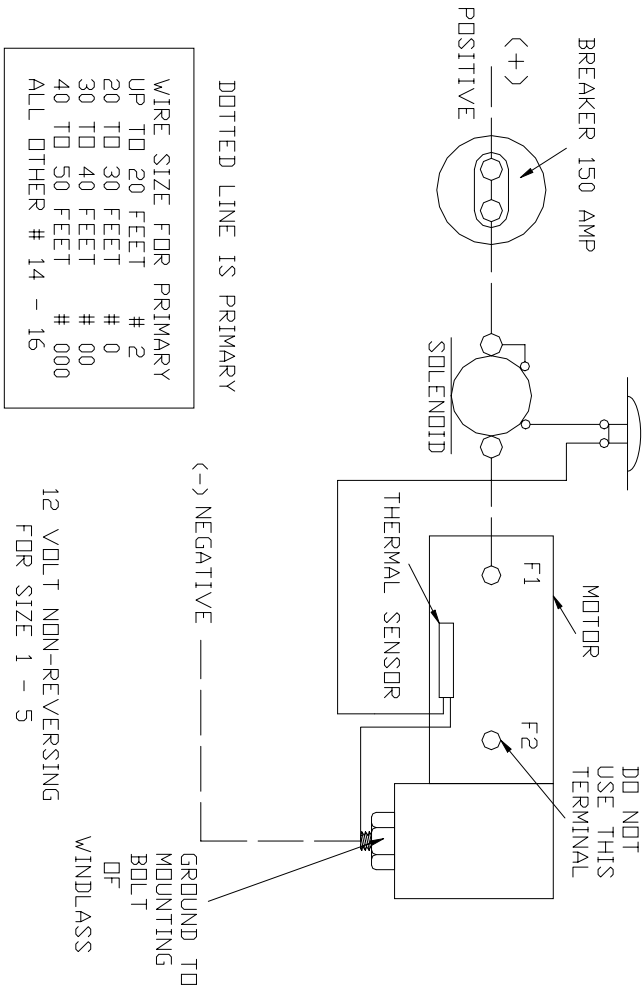
DRAWING & PARTS LIST

ITEM	QTY	PART #	NAME
1	1	CS-10	CAPSTAN SCREW
2	1	CW-10	CAPSTAN WASHER
3	1	CWA-2	CAPSTAN
4	1	DP-35	DRIVE PIN
5	3	DB-35	DECK BOLTS
6	1	MM-26	DECK PLATE
7	1	BA-35	BALL BUSHING
8	1	V1A-04	MAIN SHAFT
9	3	NU-35	NUTS
10	1	MM-1	GEAR CASE
11	1	A-20	MOTOR WORM
12	1	AM-12	WORM GEAR
13	2	AM-16	BEARING CAP
14	6	FA-35	HEX BOLT
15	1	EX-50	EXPANSION PLUG
16	1	OS-35	OIL SEAL
17	1	WK-35	WORM KEY
18	2	SS-55	SET SCREW
19	1	AM-3	END BELL
20	1	CP-35	COTTER PIN
21	1	CN-35	RETAINING NUT
22	1	WK-35	WORM KEY
23	1	GT-3	MOTOR THRUST BEARING
24	1	SO-12	SOLENOID
25	1	FSB	FOOTSWITCH
26	1	MM-350-12	MOTOR W/OUT WORM & BRG
26	1	MMC-350-12	MOTOR W/ WORM & BRG
27	1	MM-87	OIL SEAL
28	1	FSA-2	MOUNTING PLATE
29	6	FSA-6SS	MOUNTING SCREWS
30	1	FSA-1B	RUBBER COVER
31	1	FSA-3	MOUNTING RING
32	2	FSA-7	ELEMENT MOUNTING NUTS
33	1	ELM-DC	SWITCH ELEMENT
34	1	MM-26-A	BALL CAP
35	3	FA-36	BALL CAP SCREW
36	1	BS-35	CAP SEAL



WIRE SIZES & CONNECTIONS

12 VOLT DC NON-REVERSING



AL-994

PAY ATTENTION!!!

READ THESE WARNINGS!!!

WARNING: The anchor windlass has been designed for the following purposes; raising and lowering the anchor and warping into a dock. **NOT RECOMMENDED** are the following; hoisting crew, towing the vessel, leaving the vessel tied off to the windlass. Such uses can be dangerous and can cause serious injury.

WARNING: DO NOT OPERATE THE WINDLASS WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS OR MEDICATION. DOING SO CAN RESULT IN SERIOUS INJURY

WARNING: Always use extreme caution when using the anchor windlass. All operators must read the operating instructions and be well trained in all aspects of anchoring and anchor hauling. In extreme weather only well trained crew members should be allowed to operate or be in near proximity to the windlass while in use. As with all moving machinery, extreme care must be exercised to keep all body parts, especially hands and feet, away from the windlass. Failure to follow these warnings can result in serious injury.

WARNING: The electrical system of the windlass must be isolated and protected. The power to the windlass should be left off until the windlass is needed.

L I S T O F W A R N I N G S

WARRANTY

The Ideal Windlass Company ("Ideal") warrants to the original consumer purchaser of this product, that it is free from defects in materials and workmanship. Ideal's responsibility is limited to repair or, at Ideal's election, replacement of any defective product and does not include any charges for removal, reinstallation, or incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

EXPIRATION: This warranty and any implied warranties shall expire two (2) years from the date of purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

EXCEPTIONS: The above warranty does not apply to: metal finishes or coatings, a product not installed or maintained following Ideal's instructions, damaged by casualty or improper use, repaired or modified by other than Ideal personnel, installed in a vessel or manner judged by Ideal to be an inappropriate application of its product, or used with other products incompatible with the Ideal product or which adversely affect its performance or durability.

CLAIM PROCEDURE:

- (1) Immediately upon discovery of any apparent defect, notify your vendor, boatbuilder or Ideal describing such defect;
- (2) the vendor, boatbuilder or Ideal shall make a preliminary determination as to whether a warranty claim is justified and if so,
- (3) upon request, Ideal shall authorize return or repair of the product.

NO PRODUCT SHALL BE RETURNED UNTIL AUTHORIZED BY IDEAL..

(4). After such authorization, return the product, freight prepaid, with proof of purchase, and serial number to Ideal Windlass Co., 5810 Post Rd. E. Greenwich, RI 02818 USA.

(5) If found defective, Ideal will repair or replace the product.

OTHER RIGHTS: This warranty gives you specific legal rights and you may have other rights which vary from state to state.

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