

Horizontal Anchor Windlass

MODEL CWM

12 VOLT REV

**Installation,
Operation
&**

**Maintenance
Instructions**

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Contents

Anchor windlass
Hawse pipe/chain stripper
Windlass cover
Footswitches
Solenoids
Circuit breaker
Instructions

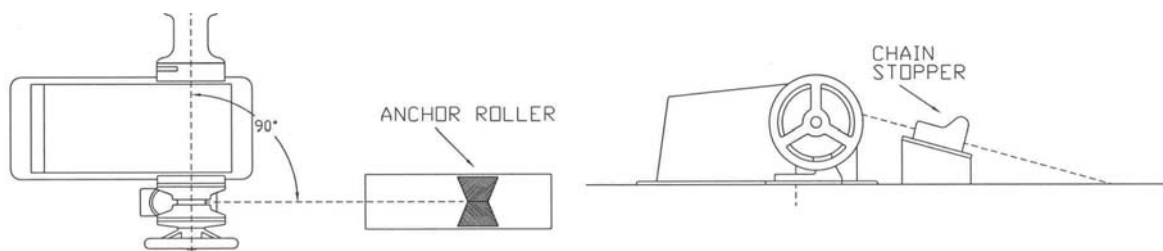
**Packing
List**

Electric drill
17/32 drill bit
2" hole saw
Jig saw
Wrench set
Screwdrivers
Caulking & gun
Grease
Mounting bolts for the windlass base, four 3/8 bolts
Mounting bolts for the chain stripper/ hawse pipe, four 1/4 bolts
Mounting screws for the windlass cover, four # 10 wood screws
Patience

**Tools
and
Materials
Required**

For identification purposes please record the serial number, model number and voltage of this anchor windlass and keep it in an accessible place. This information will be necessary if you need to contact IDEAL for any reason.

1.) **PLACEMENT:** The chain must approach the wildcat at a 90° angle to the shaft. The anchor roller, chain wildcat and hawse pipe should all be in line. If a chain stopper is used it must NOT be used to redirect the chain. It must also be installed on the same vertical plane as the chain. See the diagram below.



Put the windlass in the desired location and check below deck to make sure the hawse hole (under the wildcat) is above the chain locker. It is best if the hawse hole is over the deepest part of the locker. Check to see that the mounting bolt holes will not hit any obstructions and there is room to bring the wiring under the windlass cover.

2.) If the deck has camber or shear, a deck pad must be installed to correct this. The windlass should be installed on a flat surface. If the deck of the boat is aluminum, a gasket or pad must be installed to prevent electrolysis.

3.) Once everything is lined up properly use the windlass base as a template to mark the holes for the mounting bolts. Place the hawse pipe directly under the wildcat with the rounded top of the chain stripper finger directly under the center of the wildcat with the hawse hole facing aft. Mark the four bolt holes and hawse pipe hole. Move the windlass aside and drill these holes.

4.) Use the tube of 90 WT gear oil provided and fill the case up to the level of the pipe plug in the front of the gear case. Do not overfill.

5.) Apply a **REMOVABLE** type of bedding compound between the deck, deck pad and the windlass base. Be sure NOT to use a permanent type of bedding compound. Secure into place with the mounting bolts. These are not provided due to varying deck thickness. Position the chain stripper/hawse pipe and bolt into place.

6.) Choose a suitable location for the foot switches. **CAUTION:** keep the safety of the operator in mind when locating these switches. They must be located so that the operator can comfortably activate the windlass and tail the incoming line off the capstan. They must not be placed so close to the windlass that the operator can accidentally activate the windlass with a hand on the windlass. Be sure to bed the switches.

7.) Wire the windlass motor and controls according to the wiring diagram provided. Be sure this is done by a qualified electrician. The windlass circuit must be isolated and protected. **WARNING:** using undersized wire can cause a fire hazard.

8.) Seal around the wires brought through the deck to power the windlass.

9.) Position the cover over the windlass gear box & motor. Mark the location of the 4 mounting screws. Remove cover, drill for screws and install cover.

PLEASE READ THESE WARNINGS CAREFULLY!!!

RECOMMENDED USES: 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.

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CAPSTAN (line handling): The capstan is directly keyed to the main shaft and will always turn when the windlass is engaged. Wrap 3 or 4 turns around the capstan going over the top of the capstan in a clock wise direction, and keeping a small amount of tension on the line, step on the UP switch. If the line slips apply more tension or add another wrap. The capstan may be used independently of the wildcat by loosening the release wheel # 17 to disengage the wildcat # 5. **CAUTION:** Do not wrap chain around the capstan.

WILDCAT (chain handling): The chain wildcat #5 is driven by friction. The release wheel #17 engages and disengages the wildcat. The chain may be lowered electrically by using the down switch or by using the **FREE FALL** – Caution must be used when using the free fall feature. The operator must keep away from the outgoing chain at all times. Disengage the clutch by turning the release wheel #17 counter-clockwise. The speed of the outgoing chain can be controlled with the release wheel. **After the anchor is set** – set the chain stopper. Do NOT allow the vessel to sit at anchor with the strain on the anchor windlass. A chain stopper must be used.

HOISTING THE ANCHOR with all chain– Engage the wildcat by turning the release wheel #17 clockwise. Push the up switch. If the anchor is nestled in a hawse pipe, “inch” or “jog” the windlass the last few feet. **Severe damage may result otherwise.**

CIRCUIT BREAKER— The windlass electrical system must be isolated and protected. The breaker should be left OFF when the windlass is not in use. This will prevent accidental activation. If the breaker trips from electrical overload it can be reset immediately.

CAUTION: Do not allow the windlass to operate without a load for any long length of time as the motor is a series wound type that will heat up and damage can result. It is not necessary to pause while pulling up the anchor as the motor can run for several minutes at a time.

MAINTENANCE SCHEDULE

MAINTENANCE

Every six months:

Gear case: check the oil level by removing the pipe plug fitting in the front of the windlass. The oil should be up to this level. Add **90WT** gear oil if necessary.

Once a year:

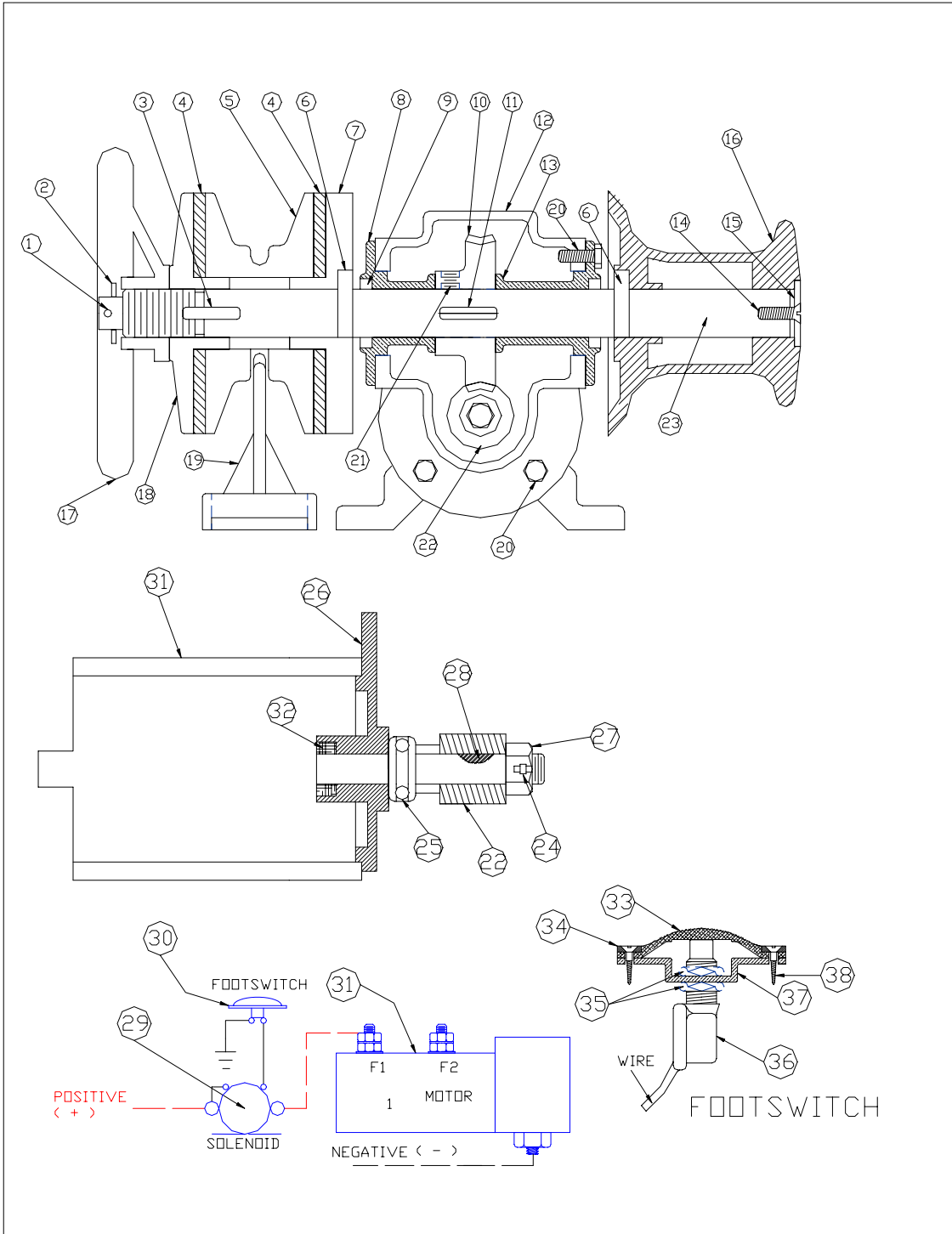
Wildcat: remove cotter pin #1, washer #2, the release wheel #17, the friction plate #18, chain stripper #19 and wildcat #5. Clean and grease the bore of the wildcat and friction plate. And the hubs of the inside & outside friction plates #18 & 7. The friction plate #18 should move in & out on the shaft easily. Do not get grease on either of the friction discs #4.

Every 2 years:

Electrical components: inspect the electrical connectors and spray with electrical cleaner. Inspect for wear. Inspect rubber covers on the footswitches and replace as necessary.

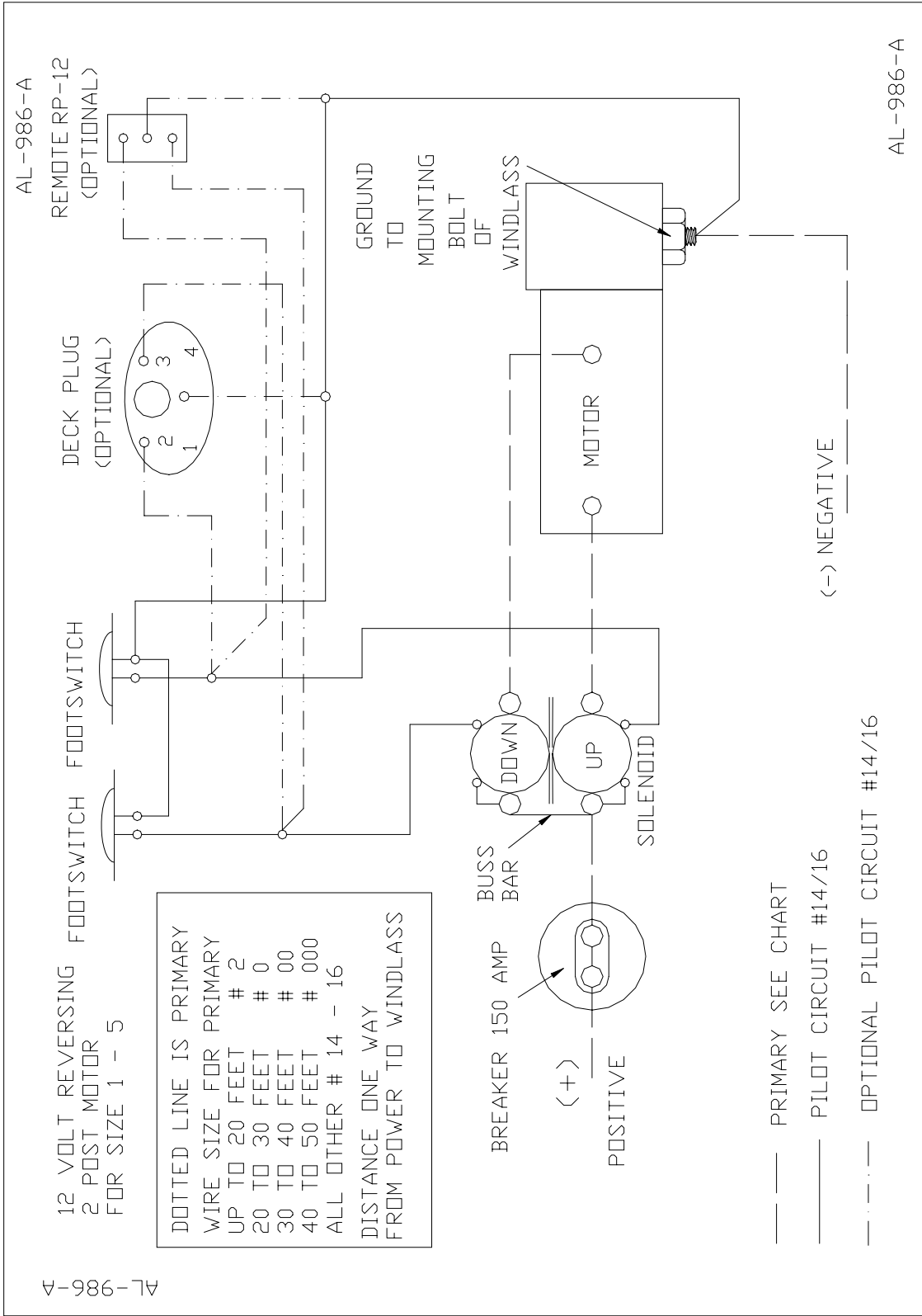
Gear case: change the oil in the gear case. There is no drain plug on the Model CWM. Use a small oil changing pump to remove the old oil. Fill to the level of the oil plug with **90WT** gear oil. Do not overfill.

PARTS DRAWING



ITEM	QTY	PART #	DESCRIPTION
1	1	CP-40	COTTER PIN
2	1	RW-35	WASHER
3	1	CK-35	WILDCAT KEY
4	2	CWM-9	FRICTION DISC
5	1	CWM-10	WILDCAT
6	2	DP-35	DRIVE PIN
7	1	CWM-8	INNER FRICTION PLATE
8	1	AM-16	SHORT BEARING CAP
9	2	OS-35	OIL SEAL
10	1	AM-12	WORM GEAR
11	1	WK-35	WORM KEY
12	1	CAM-1	GEAR CASE
13	1	AM-16A	LONG BEARING CAP
14	1	CS-10	CAPSTAN SCREW
15	1	CW-10	CAPSTAN WASHER
16	1	CWA-2	CAPSTAN
17	1	CHWS0-8	RELEASE WHEEL
18	1	CWM-15	OUTTER FRICTION PLATE
19	1	CWM-13A	CHAIN STRIPPER
20	9	FA-35	HEX BOLTS
21	2	SS-35	SET SCREWS
22	1	A-20	MOTOR WORM
23	1	CWM-5	MAIN SHAFT
24	1	CP-35	COTTER PIN
25	1	GT-3	THRUST BEARING
26	1	AM-3	END BELL
27	1	RN-35	RETAINING NUT
28	1	WK-09	MOTOR WORM KEY
29	1	SO-12	SOLENOID non-reversing
29	1	SO-12 REV	SOLENOID reversing
30	1	FSB	FOOTSWITCH
31	1	MM-350-12	MOTOR W/OUT GEAR & BRG
31	1	MMC-350-12	MOTOR W/ GEAR & BRG
32	1	MM-87	OIL SEAL
33	1	FSB-1B	RUBBER COVER
34	1	FSA-3	MOUNTING RING
35	2	FSA-7	ELEMEMENT RETAINING NUT
36	1	ELM-DC	SWITCH ELEMENT
37	1	FSA-2	MOUNTING PLATE
38	6	FSA-6SS	MOUNTIING SCREWS

PARTS LIST



WIRING DIAGRAM

WARRANTY

The equipment is guaranteed against faulty workmanship and defective materials for a 1 year period from date of shipment. IDEAL'S responsibility is limited to repair or, at IDEAL'S election, replacement of any part proven to be defective. The warranty does not cover and charges for removal and reinstallation of equipment nor any incidental or consequential damages of the equipment. In cases where it is not practical to return the equipment to the factory for warranty repairs, the customer is to provide IDEAL with all the information and documentation required in order to determine the nature of the problem. If determined that the problem is warranted, IDEAL will authorize the owner or an owner's representative to carry out these repairs by themselves or through a local shop at standard labor rates. Standard rates will have to be previously agreed and approved by IDEAL as reasonable. The length of time that each repair is to take cannot vary significantly with the time needed for that repair as per IDEAL'S experience.

EXCEPTIONS

The above warranty does not apply to:

- ◇ Metal finishes and coatings
- ◇ Any equipment not installed or maintained following IDEAL'S instructions
- ◇ Any equipment damaged by casualty or improper use, repair or modification by other than IDEAL'S personnel without IDEAL'S written authorization
- ◇ Any equipment installed in a vessel or manner judged by IDEAL to be an inappropriate application for its product, or used with other products incompatible with the IDEAL product or which adversely affects its performance or durability.

CLAIM PROCEDURE

Upon discovery or any apparent defect, notify your boat builder or IDEAL at:

Ideal Windlass Company
5810 Post Road
P.O. Box 430
East Greenwich, RI 02818 USA
Telephone: 401-884-2550 * FAX: 401-884-1260

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