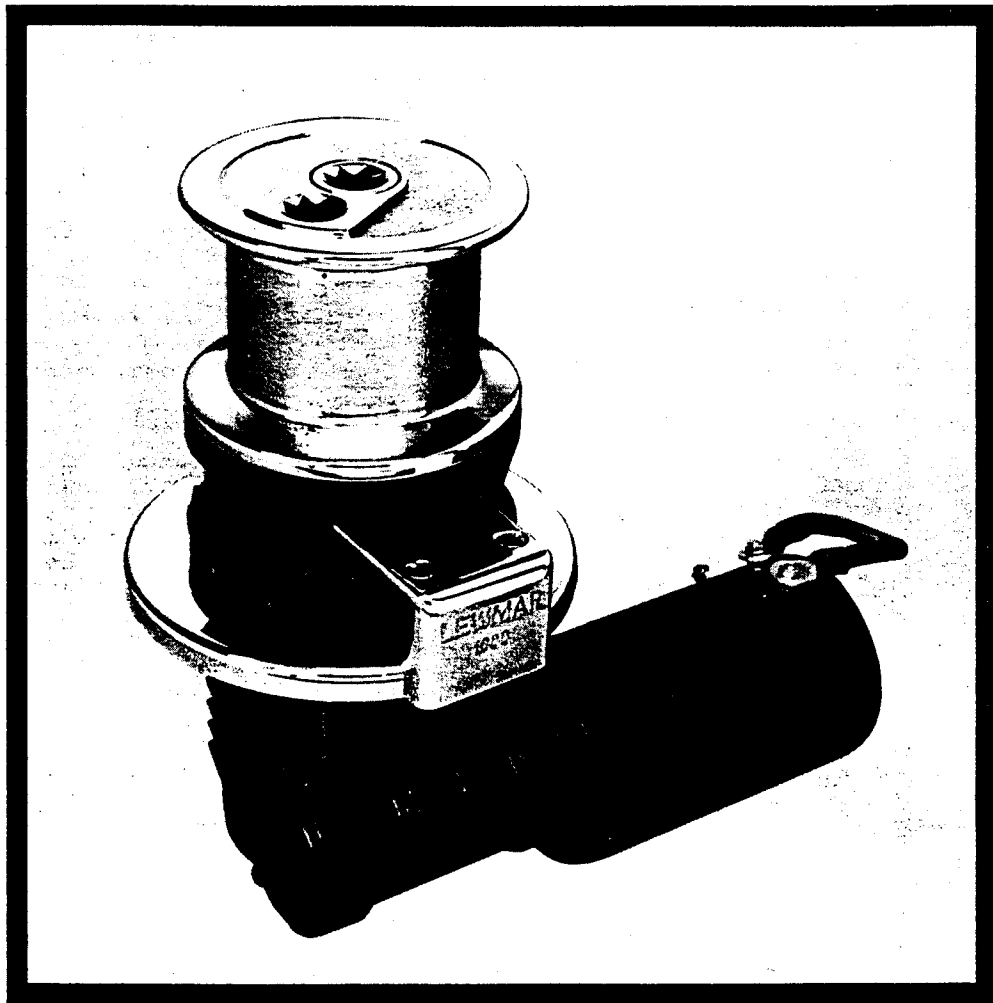


VERTICAL HOLDFAST POWER WINDLASS MODELS 700 1000 & 2000

AKII



INSTALLATION and SERVICE MANUAL

NEDERLANDS

Voor een vertaling van deze
gebruiksaanwijzing king u kontakt opnemen
met uw Lewmar kantoor - zie pagina 8.

DEUTSCH

Fuer ein Uebersetzung dieser
Gebrauchsanweisung, bitte wenden Sie
sich an ihr Lewmar Buro - sehe Seite 8.

SWENSKA

For oversattning av denna manual
vanligen kontakta närmaste Lewmar
kontor - se sida 8.

FRANCAIS

Pour la traduction de ce manuel, veuillez
vous adresser à l'agence Lewmar la plus
proche (voir page 8).

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IMPORTANT - retain this booklet onboard after fitting

LEWMAR

LEWMAR

INSTALLATION

The Installation Notes below are **FOR GUIDANCE ONLY**. We advise that a study be made of the schematic layouts and Wiring diagrams so that all aspects are checked before starting installation.

- Remove the Anchor Windlass and control box from the packing box. Ensure that you have the necessary parts (see schematic P3) required to complete your system.
- Position the Anchor Windlass on deck or in the anchor well (use the full size Template, Centre Pages, to aid location) such that the **centreline of the chain gypsy** aligns with the bow roller in a Horizontal plane, and that the Vertical line is within 10 Degrees of the chain gypsy. Ensure that the Chain achieves maximum contact with the chain gypsy (ie at least 90 and preferably 180 Degrees contact).
NOTE The MAXIMUM DECK THICKNESS IS 125mm/5" with the Standard Drive Shaft supplied. If the Deck is thicker than this please refer to your Lewmar supplier.
- Drill four holes for the M8 fixing studs (700/1000).
M10 fixing studs (2000).
- Cut an access hole in the deck to clear the Windlass and Hawse Pipe (See Centre Pages) assembly below deck. Remember to allow space for the connection of the electric cable from the electric motor to the control box.
- Screw the M8/10 Studs into the Upper module, apply bedding compound onto the joint face, then mount the Windlass.
- After the Upper Capstan module is positioned, attach the Lower Gearbox/Motor module to the Upper Capstan module using the 4 x M8/10 Nuts and flat Washers supplied, tightening the nuts to 50 Nm (40 lbf ft) torque.
- Plan the position of the control box, remove control box lid and mount the control box. Apply bedding compound/sealant as required to the cables.
- Plan the electric cables (we recommend the use of the cables detailed on page 4) and run them back to the battery or main circuit breaker.
- Find a convenient position for the safety Deck Switch(es) and Remote Control Deck Switch (if fitted), and their associated sub boxes (air only).

- For the Air Operated System fit the PVC tubing (2m supplied) ensuring that the tube is free from kinks or perforations, between the Switch(es) and Sub Box which should be mounted in a suitable position. Electric wiring (Customer Supply) is used between the Sub Box and Control Box terminals (see diagrams in box lid) or use the diagram on page 5.
- For the Electric System, electric wiring (Customer Supply) use 16/ 0.2 wire or equal) is used between the deck Switch(es) and Control Box.
- Additional switches to customer requirements (ie Lewmar 3 Way Switch Cat No. 19346100) may be connected to the control box terminals, in parallel with other switch(es).
- Connect up the electric cables from the control box back to the Battery area (Customer supply).
- Complete the battery connections, and start the Windlass.
- Check for correct operation, including operation of the remote control.
- **In an emergency a Lewmar Winch Handle may be used** (Cat No. 1010 or 1120). It is important to back off (unscrew) the screw to be found at the top of the Main Shaft, (located at the bottom of the centre bi-square socket); a one half turn using a flat bladed Screwdriver. This will allow a smooth Manual action to be achieved. When the power drive is restored make sure the screw is tightened down before use.
- **IMPORTANT - DO NOT LEAVE A HANDLE IN PLACE WHEN USING THE WINDLASS IN POWER DRIVE.**
- It is recommended that a circuit breaker be placed in the Anchor Windlass circuit for Peak Load protection (see Characteristics Page 2).
- Each Lewmar Anchor Windlass is set to produce its Maximum Load (which demands a certain Amperage (See Page 2). If a lower load is required, adjustments can be made by your Lewmar Engineer.
- The Control Box is set to cut out at the Working Load. For ships circuit protection a Circuit Breaker can be used
Lewmar Cat No. 18000390 - 700/1000
Lewmar Cat No. 18000391 - 2000

CHARACTERISTICS - 700 / 1000 & 2000 VERTICAL ELECTRIC

	MODEL 700	MODEL 1000	MODEL 2000
	Reversing	Reversing - Windlass version Non-Reversing - Capstan version	Reversing
POWER SUPPLY	12v DC*	12v DC*	12v or 24v DC
MAX APPLIED LOAD	1000lbs / 450kg	1000lbs / 450kg	2000lbs / 907kg
MAX STATIC PULL	750lbs / 340kg	750lbs / 340kg	2000lbs / 907kg
CURRENT DRAIN WORKING LOAD	500lbs - 168 Amps	500lbs - 168 Amps	1000lbs - 168 Amps (12v) 105 Amps (24v)
CURRENT DRAIN MAX LOAD	750lbs - 250 Amps	750lbs - 250 Amps	2000lbs - 290 Amps (12v) 175 Amps (24v)
CIRCUIT BREAKER	100 Amp (18000390)	100 Amp (18000390)	150 Amp (18000391)
BATTERY CAPACITY	Suggested minimum for 12v, is 400 Amp/Hrs		
PULL SPEED	SEE GRAPHS	SEE GRAPHS	SEE GRAPHS
BOAT SIZE	30' - 40' / 9.2m - 12.2m	30' - 40' / 9.2m - 12.2m	40' - 60' / 12.2m - 18m
CHAIN SIZE (specify when ordering)	8 mm / 5/16" 10mm / 3/8"	8 mm / 5/16" 10mm / 3/8"	8 mm / 5/16" 10mm / 3/8" 12mm / 7/16"
WIDTH	180mm / 7 1/16"	180mm / 7 1/16"	180mm / 7 1/16"
LENGTH	188mm / 7 3/8"	188mm / 7 3/8"	188mm / 7 3/8"
HEIGHT	102mm / 4"	166mm / 6 1/2" Capstan version 106mm / 4 1/8"	172mm / 6 3/4"
WEIGHT	13.6kg / 30lbs	15.9kg / 35lbs	25kg / 55lbs
FIXINGS (supplied)	4 x M8 HEX Studs	4 x M8 HEX Studs	4 x M10 HEX Studs
HAND OPERATION	Use a Standard Lewmar Winch Handle Cat No. 1010 or 1120		

* 24v version under development

CONTROLS / ACCESSORIES

CONTROLS

700/1000 Plastic Hawse Pipe Assembly	CAT NO.
700/1000/2000 Chrome Hawse Pipe Assembly	18000217
1000 Capstan 12v Control Box	18000398
1000 12v Control Box (Reversing)	18000301
1000 24v Control Box (Reversing)	18000188
2000 12v Control Box	18000200
2000 24v Control Box	18000270
Safety Lid Air Deck Switch Windlass UP	18000271
Safety Lid Air Deck Switch Windlass DOWN	345211
Windlass Handle	345212
	1010 or 1120

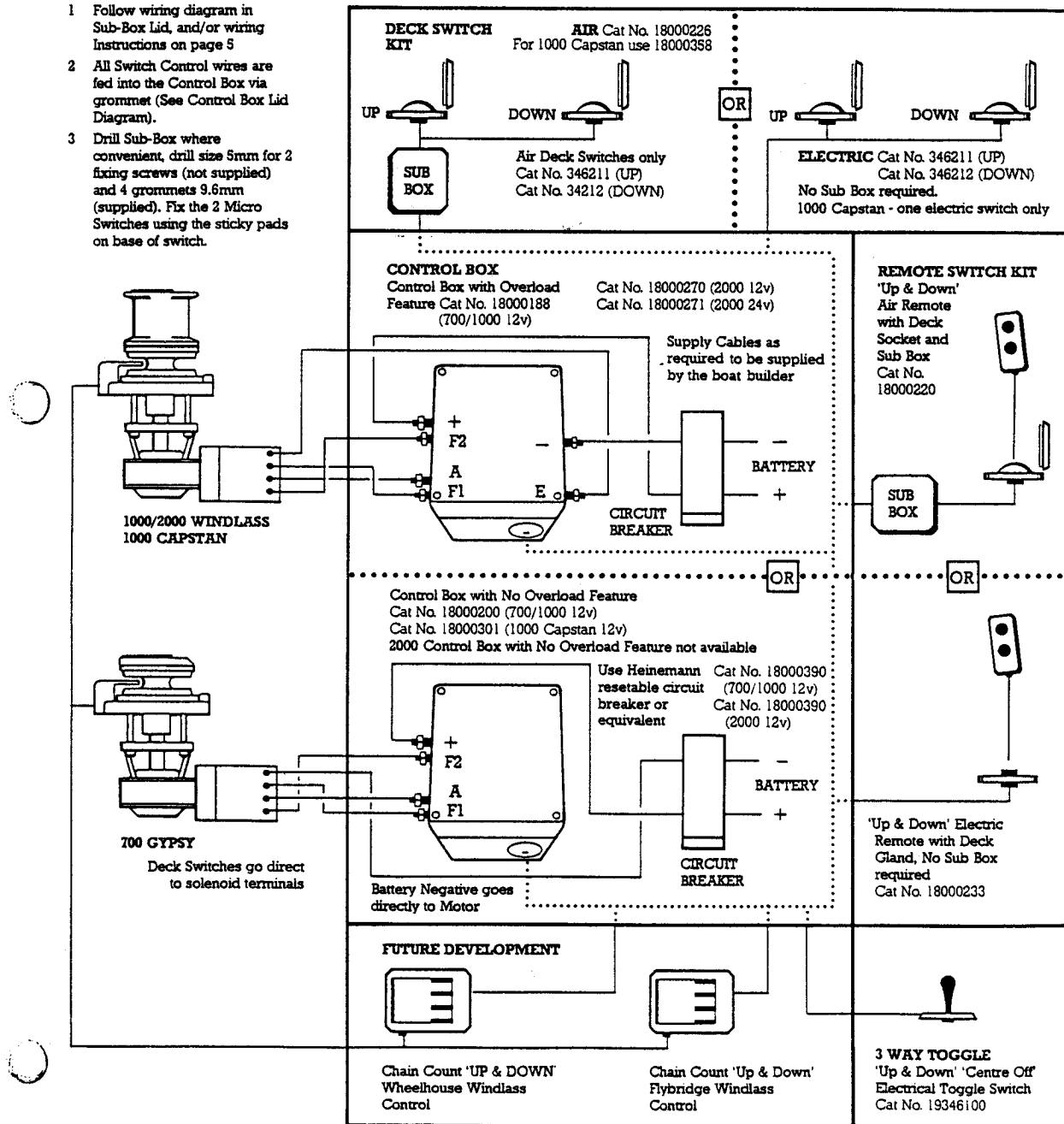
CAT NO.

CONTROLS

Air Deck Switch plus Sub Box 18300146 (1000 Capstan only)	18000358
Air Deck Switches plus Sub Box 18300146	18000226
Air Remote Control/Deck Switch/Sub Box	18000220
Safety Lid Electric Deck Switch Windlass UP	346211
Safety Lid Electric Deck Switch Windlass DOWN	346212
Electric Remote Control plus Deck Plug/Socket	18000233
Electric 3 Way Switch up/down (centre off)	19346100
100 Amp Resetable Circuit Breaker (700/1000)	18000390
150 Amp Resetable Circuit Breaker (2000)	18000391

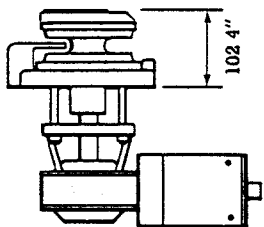
INSTALLATION SCHEMATIC

- 1 Follow wiring diagram in Sub-Box Lid, and/or wiring Instructions on page 5
- 2 All Switch Control wires are fed into the Control Box via grommet (See Control Box Lid Diagram).
- 3 Drill Sub-Box where convenient, drill size 5mm for 2 fixing screws (not supplied) and 4 grommets 9.6mm (supplied). Fix the 2 Micro Switches using the sticky pads on base of switch.



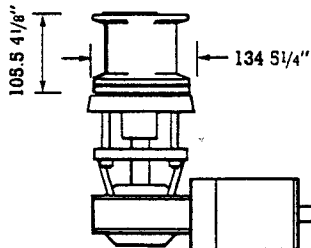
DIMENSIONS AND 'CUT OUT' DETAILS

**700
GYPSY**



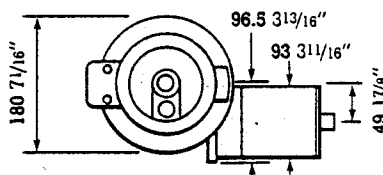
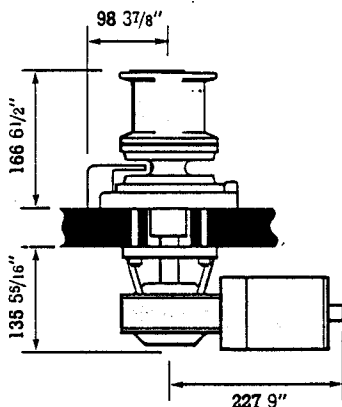
Motor and gearbox can be orientated in 4 positions

**1000
CAPSTAN**

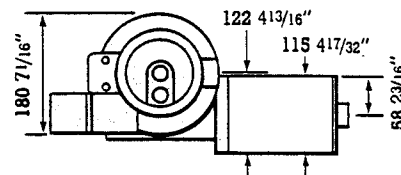
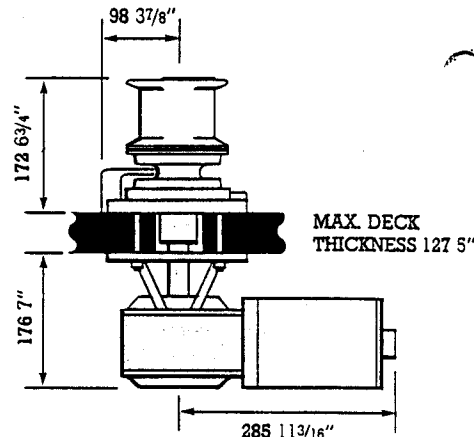


*Hawse pipe not needed on Capstan version

**1000
WINDLASS**

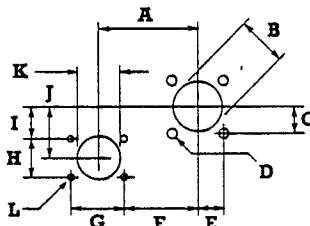


**2000
WINDLASS**



700 / 1000 WINDLASS GYPSY and CAPSTAN
With Plastic Hawse Pipe Cat No. 18000217

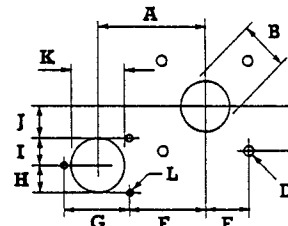
- A 120 43/4"
- B 60 23/8"
- C 32 11/4"
- D Four Holes at 9mm 11/32"
- E 32 11/4"
- F 90 31/2"
- G 64 21/2"
- H 45.5 13/4"
- I 38 11/4"
- J 61 23/8"
- K 51 2"
- L Four Holes at 6.5mm 1/4"



2000 WINDLASS

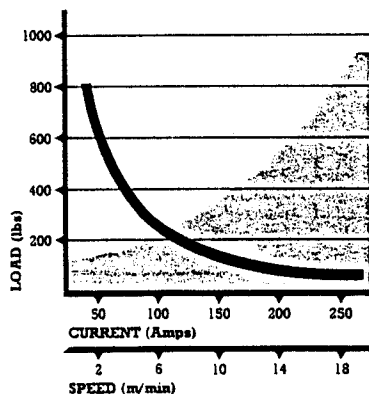
With Chrome Hawse Pipe Cat No. 18000398

- A 129 53/32"
- B 60 23/8"
- C 53 23/32"
- D Four Holes at 11mm 7/16"
- E 53 23/32"
- F 92.9 337/64"
- G 79 37/64"
- H 32 11/4"
- I 32 11/4"
- J 38 11/2"
- K 64 21/2"
- L Three Holes at 9mm 11/32"

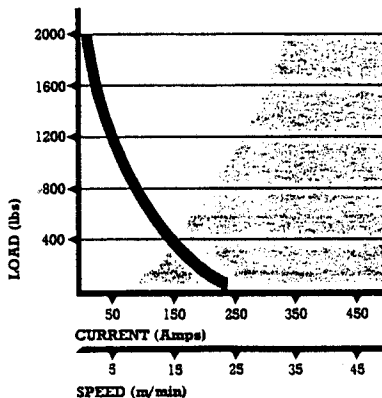


PERFORMANCE CURVES

700 / 1000



2000



Reduction in hauling speed as load rises

Increase in amperage as load increases

ELECTRIC CABLES

Lewmar recommend the use of the following Cables - Total Cable lengths

Total Cable Run	0 - 10m	10m - 20m
12v	50 Sq mm	60 Sq mm
24v	35 Sq mm	50 Sq mm

Windlass performance is directly related to Cable Size and Length.

If reduced Windlass performance can be tolerated then ONE Cable size smaller (preferably Heat Resisting PVC or Butyl Rubber Insulated Cable) may be used.

Cable Size (Sq mm)	US Equivalent
25	3 Guage
35	1 guage
50	1/0
70	2/0
95	3/0

