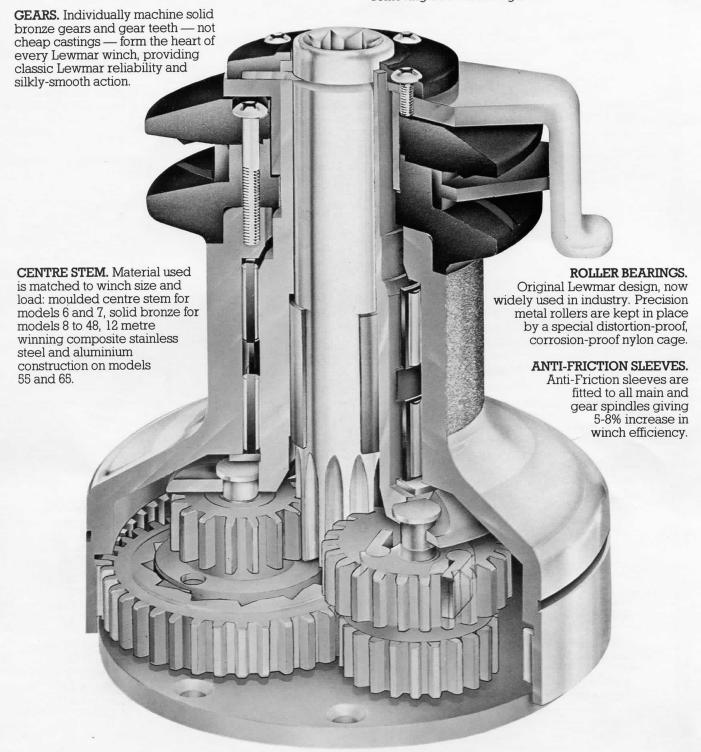
**DRUM.** In three metals: hardwearing chromed bronze; lightweight hard-anodised aluminium alloy; and, for winches size 48 and above, high quality stainless steel.

**STRIP-FROM-THE-TOP DESIGN.** Whether you service your winches yourself or not, thoughtful Lewmar design means fast, easy maintenance. Start at the top and work your way into the heart of the winch... without removing deck fastenings.



**PAWLS.** Lewmar never forget that pawls carry the load. Innovative design matched to aircraft industry technology ensures exceptional consistency and accuracy to fit at every turn of the winch. Tempered stainless steel pawl springs ensure exact return load and long life.

GEAR RATIOS. Our extensive research into the ergonomics of sail loads has developed gear ratios scientifically matched to the physical capability of the average sailor. And, of course, power ratios and speed options increase logically in step with boat size.

# ... THE INSIDE STORY

#### LEWMAR LOGIC

Lewmar believe in getting the basics right – a philosophy founded on solid practical experience gained on top racing and cruising yachts all over the world. It is this practical experience that enabled Lewmar to be the first to introduce: linked winch systems, three speed winches, automatic grinder systems, back-wind grinders, self-tailing and electric winches.

Match this innovation to an enormous re-investment in research and development and its no surprise that we have earned **over half** the world's market for winches!

We get the basics right because we are, first and foremost, a precision engineering company, designing

and building to standards that would satisfy the demands of almost any branch of industry.

That alone would be enough to produce truly outstanding winches. But many of us at Lewmar are yachtsmen too... and that gives us a deep and unique understanding of the yachtsman's requirements. It is this special combination of engineering expertise and on-water sailing experience that enables us to build winches that are light years ahead of the rest.

If you want total reliability, high efficiency, guaranteed performance and the assurance of worldwide service and support, then Lewmar is the logical choice.

#### FROM ONE TO THREE SPEEDS.

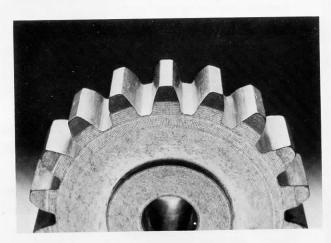
Lewmar makes choosing winches easy. Gear ratios, power ratios and speeds rise logically in step with increasing boat size:

One-speed winches for 20 to 30 ft yachts.

Two-speed winches 27 to 36 ft yachts, quarter and half tonners.

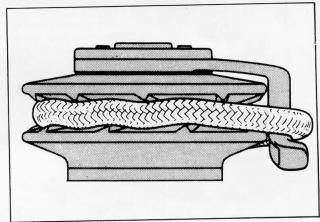
Three-speed winches for 35 ft yachts, one tonners and larger boats.

A comprehensive selection chart is provided inside the facing page.



### SELF-TAILER CONVENIENCE.

If you've ever found yourself short of hands, space or just plain old musclepower, a couple of Lewmar self-tailing winches will make all the difference. By freeing you of the necessity to tail the sheet, a self-tailer enables you to use both hands to wind. Lewmar's patented Wavegrip concept is simple, safe and convenient... aren't those the features you're looking for?



### CRUISE ELECTRIC

When it comes to sheer convenience and easy cruising, there's nothing to touch a Lewmar electric winch. A powerful motor, controlled remotely by Lewmar's special non-electrical switch, (can be operated by hand, foot or even the elbow!), enables you to winch without effort. A microprocessor, safely housed in a sealed control box, provides sophisticated load-sensitive control, with automatic gear changes for optimum sheeting performance.



# ILING WINCHES

### The big little winches from Lewmar.

These direct-action winches are little only in terms of size: built into them is all the performance and reliability of Lewmar's biggest winches.

#### Alloy or chromed bronze.

Where lightness is important, and where only rope will be used, Lewmar's hard-anodised alloy versions are the ones to choose: typical weight savings are between 30 to 50%. If you plan to use wire, the heavier but more rugged chromed bronze winches are recommended.

#### Ratchet drive.

Lewmar's ingenious ratchet drive mechanism makes these single-speed winches much easier to use, particularly in confined spaces.

## Self-tailing models.

If you want a single-speed winch with self-tailing, check out the 16ST winch shown here. This model offers all the features of the non-self-tailing models, plus geared drive and of course, the Wavegrip self-tailing facility. Wavegrip accepts different sheet diameters without prior adjustment.

#### A closer look:

### Lewmar strip-from the top servicing.

Whether you service your winches yourself or not, Lewmar's strip-from-the-top design makes a big difference. It means that, whether you want to carry out routine maintenance or – very unlikely – emergency repairs, you can get right to the heart of any Lewmar winch within seconds, using nothing more than a screwdriver. Simply start at the top of the winch and follow a disassembly procedure that hardly varies throughout the range. The components soon become familiar – many are standard on every size of Lewmar winch-and fiddly bits have been designed out wherever possible. Re-assembly is simply a reversal of the disassembly procedure. That's Lewmar's thoughtful engineering working for you.

Other 'Closer Looks':

All-geared approach: Page 8. Wavegrip self-tailing: Page 10.

H D н B For fitting instructions see page 21

6 for boats 17' to 19' LOA (5.2m to 5.8m)

Gear Ratio -1st gear 1:1 Power Ratio - 1st gear 6.8:1 Weight Bronze 1.1kg 2.42lbs

Weight Alloy 0.5kg 1.20lbs
Dimensions D 59mm 25/6", B 94mm 31/6", H 83mm 31/4" Finish Aluminium in Chromed Bronze and Hard Anodised Alloy Spares kit No. 7001

**Mounting (A)** 4 x 6mm (1/4") c'sk head screws on 66mm (25%") P.C.D.

7 for boats 18' to 23' LOA (5.5m to 7m)

Gear Ratio - lst gear 1:1

Power Ratio - lst gear 7.9:1 Power Ratio -

Weight Bronze 1.7kg 3.6lbs
Weight Alloy 0.8kg 1.8lbs
Dimensions D 65mm 2%", B 108mm 4¼", H 102mm 4"
Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7001 Mounting (A) 5 x 6mm ( $\frac{1}{4}$ ") c'sk head screws on 80mm (3%6") P.C.D.

for boats 19' to 25' LOA (5.8m to 7.6m)
ear Ratio - lst gear 1:1
ower Ratio - lst gear 7.9:1 Gear Ratio -**Power Ratio** Weight Bronze 2.3kg 5.1lbs Weight Alloy 1.4kg 3.1lbs Dimensions D 65mm 2% "

, **B** 108mm 4¼", **H** 102mm 4" Finish Available in Chromed Bronze and Hard Anodised Alloy Spares kit No. 7001

Mounting (A) 5 x 6mm (1/4") c'sk head screws on 80mm (31/6") P.C.D.

16ST\_'Wavegrip®' for boats 24' to 27' LOA (7.3m to 8.2m)

Gear Ratio -1st gear 2:1 Power Ratio -1st gear 16:1

Range of Rope Diameter 8-14mm 1/16". 1/16"

Weight Bronze 3.7kg 8.2lbs
Weight Alloy 2.6kg 5.8lbs
Dimensions D 67mm 211/s ", B 120mm 43/4", H 149mm 57/s" Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002 Mounting (A) 5 x 6mm (1/4") c'sk head screws on 94mm (33/4") P.C.D.

# SINGLE SPEED/STANDARD SELF TAILING WINCHES



**LEWMAR** 

## PEED WINCH

The winches shown here provide 2-speed efficiency; a wide range of sizes is available to cover boat sizes from 24' (7.3m) to 38' (11.5m) overall.

Faster, more powerful.

Two carefully selected speeds help keep you operating closer to your optimum power output. Speed change is instantaneous: simply wind in the opposite direction for the alternative speed.

Sizes 16, 24, 30 and 40 have a direct-action first gear and a geared second speed, whilst sizes 43 and 46 utilize Lewmar's high-performance all-geared approach.

Alloy or chromed bronze.

Choose Lewmar's hard-anodised alloy winches for lightness where rope is used... or go for good-looking chromed bronze, especially if you're planning on using wire. Whichever you choose, you get the best solid bronze gears with individually machined teeth for reliability and that famous Lewmar clockwork-precision feel. Remember too, that Lewmar strip-from-the-top design means easy servicing without the need to remove the deck mountings.

A closer look:

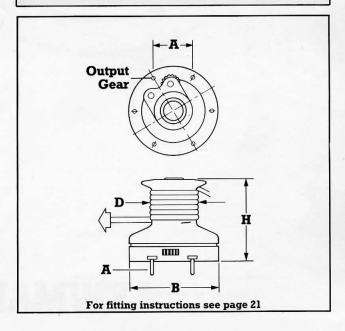
Lewmar's all-geared approach.

What does 'all-geared' mean? It's the phrase we use to describe the latest generation of Lewmar winches. Our intensive research into ergonomics and the power output of the average crew has led to winches that are easier to wind than ever before. Muscle-power wastage is minimised, efficiency is maximised, thanks to more closely spaced gear ratios. The change from first to second gear is smoother, with none of the 'flat-spots' associated with less carefully chosen ratios.

You can wind Lewmar's all-geared winches for longer in first gear, so cruising crew find it easier on the muscles whilst racing crew can shave seconds off a tack.

Other 'Closer Looks':

Strip-from-the-top servicing: Page 6. Wavegrip self-tailing: Page 10.



16 for boats 24' to 27' LOA (7.3m to 8.2m) Gear Ratio - 1st gear 1:1, 2nd gear 2:1

Power Ratio - 1st gear 8:1, 2nd gear 16:1

Weight Bronze 3.2kg 7.1lbs

Weight Alloy 2.1kg 4.6lbs Weight Alloy 2.1kg 4.6lbs Dimensions D 64mm 2½", **B** 119mm 4½6", **H** 113mm 4½6" Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002 Mounting (A) 5 x 6mm (1/4") c'sk head screws on 94mm (31/4") P.C.D.

24 for boats 25' to 29' LOA (7.6m to 8.8m)

Gear Ratio – lst gear 1:1, 2nd gear 3.1:1

Power Ratio – lst gear 7.7:1, 2nd gear 24:1

Weight Bronze 3.3kg 7.2lbs

Weight Alloy 2.3kg 5.0lbs

Dimensions: D 65mm 2% ", B 121mm 4%", H 123mm 4%"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002
Mounting (A) 5 x 6mm (1/4") c'sk head screws on 80mm (3%6")
P.C.D.

30 for boats 26' to 31' LOA (7.9m to 9.4m)

Gear Ratio - lst gear 1:1, 2nd gear 4.3:1

Power Ratio - lst gear 7:1, 2nd gear 30:1 Weight Bronze 4.6kg 10.2lbs
Weight Alloy 2.9kg 6.4lbs
Dimensions D 74mm 2%", B 140mm 5½", H 128mm 5"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002 Mounting (A) 5 x 6mm (¼") c'sk head screws on 114mm (4½") P.C.D.

40 for boats 30' to 34' LOA (9.1m to 10.3m) 1st gear 1:1, 2nd gear 6:1 1st gear 6.7:1, 2nd gear 40:1 Gear Ratio -Power Ratio -

Weight Bronze 5.5kg 12.1lbs Weight Alloy 3.8kg 8.4lbs

Dimensions D 75mm 3", B 147mm 5¾", H 138mm 5¾6" Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002 Mounting (A) 5 x 6mm (¼") c'sk head screws on 121mm (4¾") P.C.D.

43 for boats 32' to 36' LOA (9.7m to 10.9m)

Gear Ratio - lst gear 2.7:1, 2nd gear 7.3:1

Power Ratio - lst gear 15.6:1, 2nd gear 43:1

Weight Bronze 7.7kg 16.9lbs
Weight Alloy 5.7kg 12.5lbs
Dimensions D 87mm 3%", B 166mm 6½" H 151mm 6"
Finish Available in Chromed Bronze and Hard Anodised Alloy Spares kit No. 7002 Mounting (A) 5 x 8mm ( $\%_{16}$ ") c'sk head screws on 136mm (5 $^{11}/_{32}$ ")

46 for boats 33' to 38' LOA (10m to 11.5m)

Gear Ratio - lst gear 3:1, 2nd gear 8.7:1

Power Ratio - lst gear 16:1, 2nd gear 46:1

Weight Bronze 11.2kg 24.6lbs

Weight Alloy 7.5kg 16.5lbs

Dimensions D 95mm 334", B 184mm 714", H 166mm 61/2"

Finish Available in Chromed Bronze and Hard Anodised Alloy

**Spares kit No.** 7002 **Mounting (A)** 5 x 8mm (%6") c'sk head screws on 150mm (5 29/32") P.C.D.

52 for boats 36' to 40' LOA (10.9m to 12m) lst gear 3.6:1, 2nd gear 10.6:1 lst gear 17.3:1, 2nd gear 51.3:1 l0kg 22lbs Gear Ratio -Power Ratio —

Weight Alloy 13.6kg 30lbs

Weight S/Steel Dimensions D 105mm (4½") B 210mm (8¼"), H 222mm (8¾")

Finish Available in Hard Anodised Alloy or Stainless Steel

Spares kit No. 7002

Mounting (A) 6 x 8mm (5/16") c'sk head screws on 180mm (73/32") P.C.D.

# 2 SPEED WINCHES



## 2 SPEED SELF TAILING WINCHES

Self-tailing simplicity.

If you frequently sail short-handed, or simply want something to make winching easier, safer and faster, Lewmar's 2-speed self-tailing winches are precisely what you're looking for.

These winches incorporate all the benefits of the 2speed all-geared winches described on the previous spread, plus the effortless simplicity of Lewmar's patented

**Wavegrip®** self-tailing mechanism. **Thoughtful Lewmar features.** 

Lewmar's 2-speed self-tailers are packed with features. All-geared design means more efficiency, less wasted musclepower. Changing gear is simply a matter of turning the handle the other way. Lewmar's strip-from-the-top design means faster, simpler servicing. A wide range of sizes means that you can put these features to work on your boat; you can also choose between hard-anodised alloy (light, tough, ideal for rope) or chromed bronze (extremely durable, takes wire too).

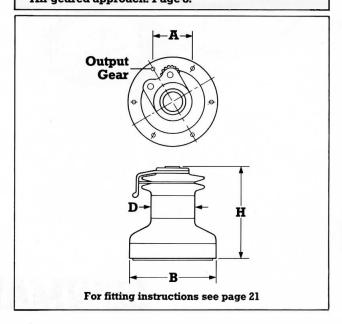
A closer look: Self-tailing with Lewmar's Wavegrip®.

Ever since its introduction, Lewmar's patented Wavegrip mechanism has set the world standard for self-tailing performance. Other winchmakers had been playing with brawny, rope-chewing spring-loaded jaws; typically, Lewmar engineers used brains instead.

Wavegrip's carefully designed radial 'teeth', set in a wave form, takes ropes of different diameters without adjustment. Each rope finds its own optimum position and is held there, not by cumbersome spring-loaded jaws, but by the load in the line itself. The higher the load, the firmer the grip, yet releasing the rope requires little or no musclepower... just ease it out of the Wavegrip jaws.

Wavegrip handles the rope gently, so there's less wear and tear on your sheets. Another big feature: the low-friction design means you can set the winch up before you tack, and tail the first few metres of slack in by hand... through Wavegrip! Try that on any other self-tailor!

Other 'Closer Looks': Strip-from-the-top servicing: Page 6. All-geared approach: Page 8.



30ST for boats 26' to 31' LOA (7.9m to 9.4m)

Gear Ratio - lst gear 2:1, 2nd gear 4:1

Power Ratio - lst gear 15:1, 2nd gear 30:1

Range of Rope Diameter 8-14mm %6"-%6"

Weight Bronze 6.5kg 14.4lbs

Weight Alloy 4.6kg 10.5lbs

Dimensions D 74mm 2%", B 136mm 5%6", H 160mm 6\%"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002

Mounting (A) 5 x 6mm (\%") c'sk head screws on 114mm (4\%")P.C.D.

40ST for boats 30' to 34' LOA (9.1m to 10.3m)

Gear Ratio - lst gear 2.1:1, 2nd gear 5.9:1

Power Ratio - lst gear 13.5:1, 2nd gear 40:1

Gear Ratio - 1st gear 2.1:1, 2nd gear 5.9:1

Power Ratio - 1st gear 13.5:1, 2nd gear 40:1

Range of Rope Diameter 10-14mm %"-%6"

Weight Bronze 7.2kg 15.8lbs

Weight Alloy 5.6kg 12.2lbs

Dimensions D 77mm 3", B 147mm 5%", H 170mm 6 1/6"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002

Mounting (A) 5 x 6mm (1/4") c'sk head screws on 121mm (4%") P.C.D.

43ST for boats 32' to 36' LOA (9.7m to 10.9m)

Gear Ratio - 1st gear 2.7:1. 2nd gear 7.3:1

Power Ratio - 1st gear 15.6:1, 2nd gear 43:1

Range of Rope Diameter 10 - 16mm %"-%"

Weight Bronze 9kg 19.8lbs

Weight Alloy 7kg 15.4lbs

Dimensions D 87mm 3%", B 166mm 6½", H 191mm 7½"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002

Mounting (A) 5 x 8mm (%6") c'sk head screws on 136mm (511/32") P.C.D.

46ST for boats 33" to 38' LOA (10m to 11.5m)

Gear Ratio - lst gear 3:1, 2nd gear 8.7:1

Power Ratio - lst gear 16:1, 2nd gear 46:1

Range of Rope Diameter 10 - 16mm %"-%"

Weight Bronze 12kg 26.4lbs

Weight Alloy 9kg 19.8lbs

Dimensions D 95mm 3%", B 184mm 7¼", H 205mm 8"

Finish Available in Chromed Bronze and Hard Anodised Alloy

Spares kit No. 7002

Mounting (A) 5 x 8mm (%") c'sk head screws on 150mm (5 2%2") P.C.D.

43

**Spares kit No.** 7002 **Mounting (A)** 6 x 8mm (<sup>5</sup>/<sub>16</sub>") c'sk head screws on 180mm (7<sup>3</sup>/<sub>32</sub>") P.C.D.

55ST for boats 36' to 44' LOA (10.9m to 13.3m)

Gear Ratio - 1st gear 4.75:1, 2nd gear 12.3:1

Power Ratio - 1st gear 21:1, 2nd gear 55:1

Range of Rope Diameter 12-18mm ½"-1½6"

Weight Bronze 19.5kg 43 lbs

Weight Alloy 15.4kg 34 lbs

Weight S/Steel 18.7kg 41.2lbs

Dimensions D 118mm 4 ½6", B 238mm 9%", H 315mm 12%"

Finish Available in Chromed Bronze, Hard Anodised Alloy, or to order, in Stainless Steel.

Spares kit No. 7004 Mounting (A) 6 x 10mm (%") c'sk head screws on 200mm (7%") P.C.D.

Gear Ratio - 1st gear 6.9:1, 2nd gear 17.8:1

Power Ratio - 1st gear 6.9:1, 2nd gear 65:1

Range of Rope Diameter 14-20mm %6".34"

Weight Bronze 29.7kg 65.5lbs

Weight S/Steel 28.5kg 62.8lbs

Dimensions D 143mm 5%", B 280mm 11", H 340mm 13%"

Finish Available in Chromed Bronze, Hard Anodised Alloy, or, to order, in Stainless Steel.

or, to order, in Stainless Steel.

Spares kit No. 7004

Mounting (A) 6 x 10mm (%") c'sk head screws on 241mm (9½") P.C.D.

# 2 SPEED SELF TAILING WINCHES



**LEWMAR** 

## FITTING YOUR WINCH

**Fitting your winch** To achieve the best bolt and output gear support to optimise performance, we suggest you fit your Lewmar winches in the following manner:

- 1. Remove the drum
- 2. Locate the winch base to achieve the best possible bolt support
- 3. Mark the location of the bolt holes
- 4. Remove the winch
- 5. Drill the bolt holes
- **6.** Apply bedding compound to the underside, ensuring that each bolt is bedded but keeping the gear spindles clean
- 7. Bolt the winch into place, progressively tightening the bolts in a clockwise direction
- 8. Clean off surplus bedding compound
- 9. Refit the drum
- 10. Check that the winch is operating correctly

**N.B.** Please refer to the special instructions provided with every Lewmar Self Tailing and Electric Winch.

