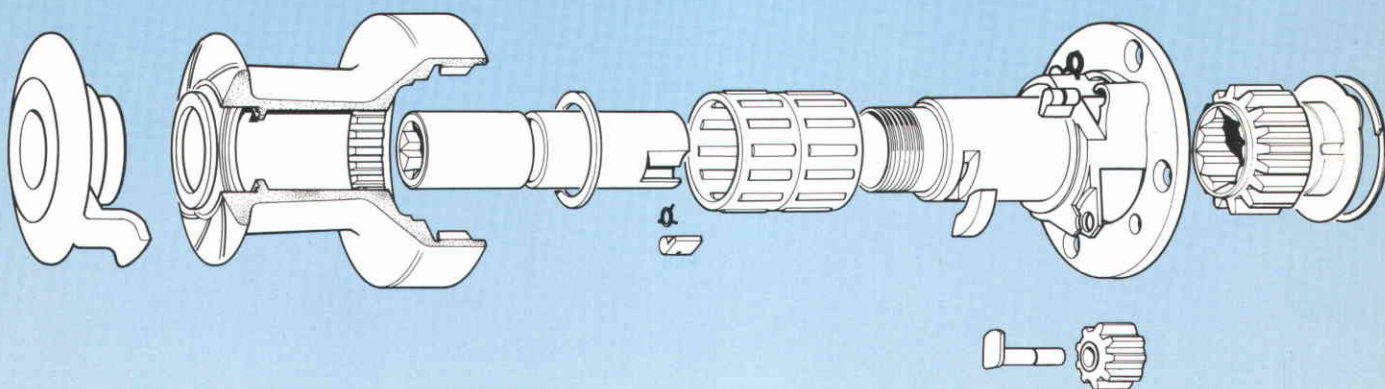




Lewmar Service Manual Volume II



Introduction

Lewmar is the world's leading manufacturer of yacht winches. Our manufacturing facilities set the highest standards in quality materials and performance. Each Lewmar winch is tested to ensure that at all stages in the manufacturing process it conforms to the Lewmar requirements of dimensional accuracy, rated strength and operating efficiency. Our winches are approved to Lloyds standards and in practice are in excess of them.

Lewmar winches are constantly being tested in the latest racing competition, aboard leading ocean racers around the world and, whether racing or cruising, they are rated for their long life and performance.

However, as with any precision engineered assembly, **Lewmar winches need regular maintenance** to operate at peak efficiency and, without this attention, permanent damage and premature wear can result.

This Manual gives the most complete details of the sequence and techniques required to dismantle completely, service and assemble each winch in the Lewmar range.

Lewmar has a worldwide network of offices and distributors who carry stocks of spare parts and spare kits. Expert advice and assistance is available for any servicing or repair problem.

Warranty Details

Lewmar winches have been developed over many years by extensive testing aboard the world's finest ocean racers, long distance cruising yachts and match racing yachts such as 12 metres. They are manufactured to quality standards in excess of those required by Lloyds and only the finest materials are used.

If installed, used and maintained as described in this Manual, they will give outstanding performance.

Lewmar undertake that any winch which proves defective in materials or workmanship within one year of the date of supply will be repaired or replaced **FREE OF CHARGE** provided that the winch is returned by the registered owner to the nearest Lewmar office or distributor for examination. Lewmar reserve all rights on determining the nature of the alleged fault and their decision is final.

Any warranty expressed or implied is ineffective unless the winch has been installed, used and regularly serviced in accordance with our instructions.

Service Notes

For satisfactory long term performance and product life these winches must be given the routine and full maintenance procedure described in the individual maintenance leaflets.

A MONTHLY: All Lewmar winches should be lightly oiled and greased as detailed in the separate free leaflet, "How to service your Lewmar Winch".

B TWO OR THREE TIMES DURING ACTIVE SAILING SEASON: All Lewmar winches should be stripped, cleaned and relubricated.

C AT THE END OF EACH SAILING SEASON OR BEFORE STARTING THE NEW SEASON: All Lewmar winches should be completely stripped (including removal from mountings where necessary), cleaned, thoroughly checked for damage, lubricated and reassembled as detailed in this Service Manual.

Dismantling

Lewmar winches are simple to dismantle and are designed for easy maintenance. Full details of the necessary techniques are

provided in this Service Manual. No other sequence of dismantling should be used.

Assembly

Winches must be assembled in the sequence detailed in this Service Manual.

Mounting

All winches must be mounted using **the correct size and type** of retaining bolts. Having decided on the correct winch position, the drum must be removed as detailed in the maintenance instructions for mounting. The winch must be mounted on a **flat clean** surface.

The hole centres for the winch retaining bolts must be marked off and drilled separately. The winch should be bedded on a **LIGHT** coating of sealing compound to stop leaks - too much compound gets in the gears and pawls.

The winch retaining fastenings must be securely tightened (but not overtightened). The winch is self draining and care must be taken to ensure the drain holes are not blocked.

Handles

All current winches accept any standard International handle (Lewmar red grip handle). For winches manufactured prior to conversion to International size, use a 5/8" square drive handle with a black grip. These handles are still being manufactured.

Recommended Lubricants

Grease

Lewmar Grease (7385)
(Lubriplate Marine Lube 'A' etc.)
Oil

Light Machine oil
(3 in 1 or equivalent)

Service and Spares

Full service facilities for Lewmar winches are provided at our factory and subsidiary companies and by our distributors and service centres worldwide. A full listing is provided for this Manual.

Spares kits for each winch are available and are listed on the individual maintenance leaflets.

Circlip Kits

Contain all necessary retaining circlips (12 off).

Owners are strongly recommended to carry spare circlips for all winches.

Current Winches

Part No. 7060

Winch Nos. 6, 7, 8, 10, 16, 25, 30, 40, 43, 44, 48, 55, 65, 1H

Part No. 7160

Winch No. 2H

Old Style

5/8" handle socket

Part No. 1328

Winch Nos. 8, 16, 1H, 2H

11/16" handle socket

Part No. 7160

Winch Nos. 8, 16, 1H

Tools Required

For routine servicing:

Winch Nos. 6, 7, 8, 10, 16, 25, 30, 40, 43, 44, 48, 55, 65, 1H

Small screwdriver or knife blade

Clean non-fluffy cloth

Cleaning fluid

Lubricants

3/16" AF Allen key for Winch Nos. 42ST, 44ST, 48ST, 55ST, 65ST, **only**.

Extra for full service:

Winch Nos. 6, 7, 8, 10, 16(new), 30
Nil

Winch Nos. 16(old), 25, 40, 43, 44, 48

Medium screwdriver

Flat nosed drift and hammer

Model 55

Screwdriver

Flat nosed drift and hammer

3/8" AF Allen key

Model 65

Medium screwdriver

Flat nosed drift and hammer

3/8" AF Allen key

7/32" AF Allen key

1/2" BSF spanner

Model 1H

1/8" AF Allen key

3/16" AF Allen key

Model 2, 2x2, 3

1/8" AF Allen key

5/32" AF Allen key

Parts pricing is subject to change. Apply to your nearest Lewmar office or distributor for current price lists.

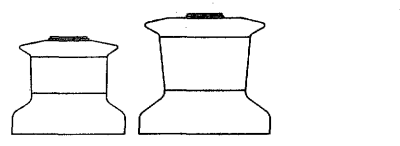
Contents Volume II

WINCHES	INTRODUCTION DATE	DISCONTINUED
Single Speed		
* 6 & 7	LATE 1975	
* 8 & 10	LATE 1975	1983
Two Speed		
16	SPRING 1978	1980
30	SPRING 1978	
* 40	EARLY 1976	1980
* 43	EARLY 1976	1979
Three Speed		
* 44	LATE 1974	1984
* 48	LATE 1974	
* 55	LATE 1974	
* 65 Mark II	EARLY 1976	
Self-Tailing		
16	EARLY 1978	
30	EARLY 1978	FEB 1983
34 Mark I	EARLY 1977	SPRING 1978
34 Mark II	SPRING 1978	FEB 1983
42	SUMMER 1978	DEC 1983
* 44	SPRING 1976	
* 48	SPRING 1976	
* 55	SPRING 1976	
* 65	SPRING 1976	
Grinders & Linkage		
* 80	EARLY 1976	
Halliard Reel		
1 Mark I	SUMMER 1975	SPRING 1978
1 Mark II	SPRING 1978	
2	EARLY 1976	DEC 1982
2 x 2	EARLY 1976	DEC 1982
3	EARLY 1976	DEC 1982
* Included in Volume I	See overleaf for contents of Volume I	

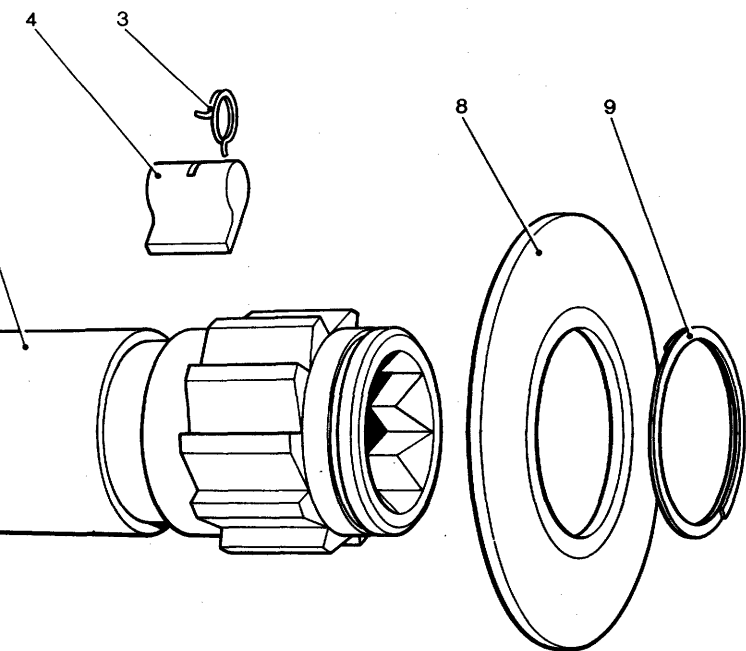
Contents Volume 1

WINCHES	INTRODUCTION DATE	DISCONTINUED
Single Speed		
6 & 7	LATE 1975	
8 & 10	LATE 1975	1983
Two Speed		
16	1972	SPRING 1978
25	EARLY 1976	SPRING 1978
40	EARLY 1976	1979
43	EARLY 1976	1979
Three Speed		
44	LATE 1974	
48	LATE 1974	
55	LATE 1974	
65 Mark I	LATE 1974	EARLY 1976
65 Mark II	EARLY 1976	
Self-Tailing		
40	AUTUMN 1976	LATE 1976
44	SPRING 1976	SUMMER 1977
48	SPRING 1976	SUMMER 1977
55	SPRING 1976	SUMMER 1977
65	SPRING 1976	SUMMER 1977
Grinders & Linkage		
80	EARLY 1976	
94	1973	LATE 1977
95	1973	LATE 1977
96	1976	
Pedestals		
1379/3840	1973	SPRING 1977

Models 6 & 7



Nos. 6 and 7



Parts list

No. 6			
Item	Part		No.
Number	Number	Description	Off
1	15006001	Centre Stem	1
2	15006005	Key	1
3	1260/7	Pawl Spring	4
4	1260/8	Pawl	4
5	15006004	Washer	1
6	15006102	Drum, Bronze	1
	15006202	Drum, Alloy	
7	15006003	Spindle	1
8	15006006	Top Cap	1
9	B 2075	Circlip	1

No. 7			
Item	Part		No.
Number	Number	Description	Off
1	15007001	Centre Stem	1
2	15010005	Key	1
3	1260/7	Pawl Spring	4
4	1260/8	Pawl	4
5	15006004	Washer	1
6	15008102	Drum, Bronze	1
	15008202	Drum, Alloy	
7	15006003	Spindle	1
8	15006006	Top Cap	1
9	B2075	Circlip	1

Spare Parts Kits

Model 6

Part No 19706400

Contents

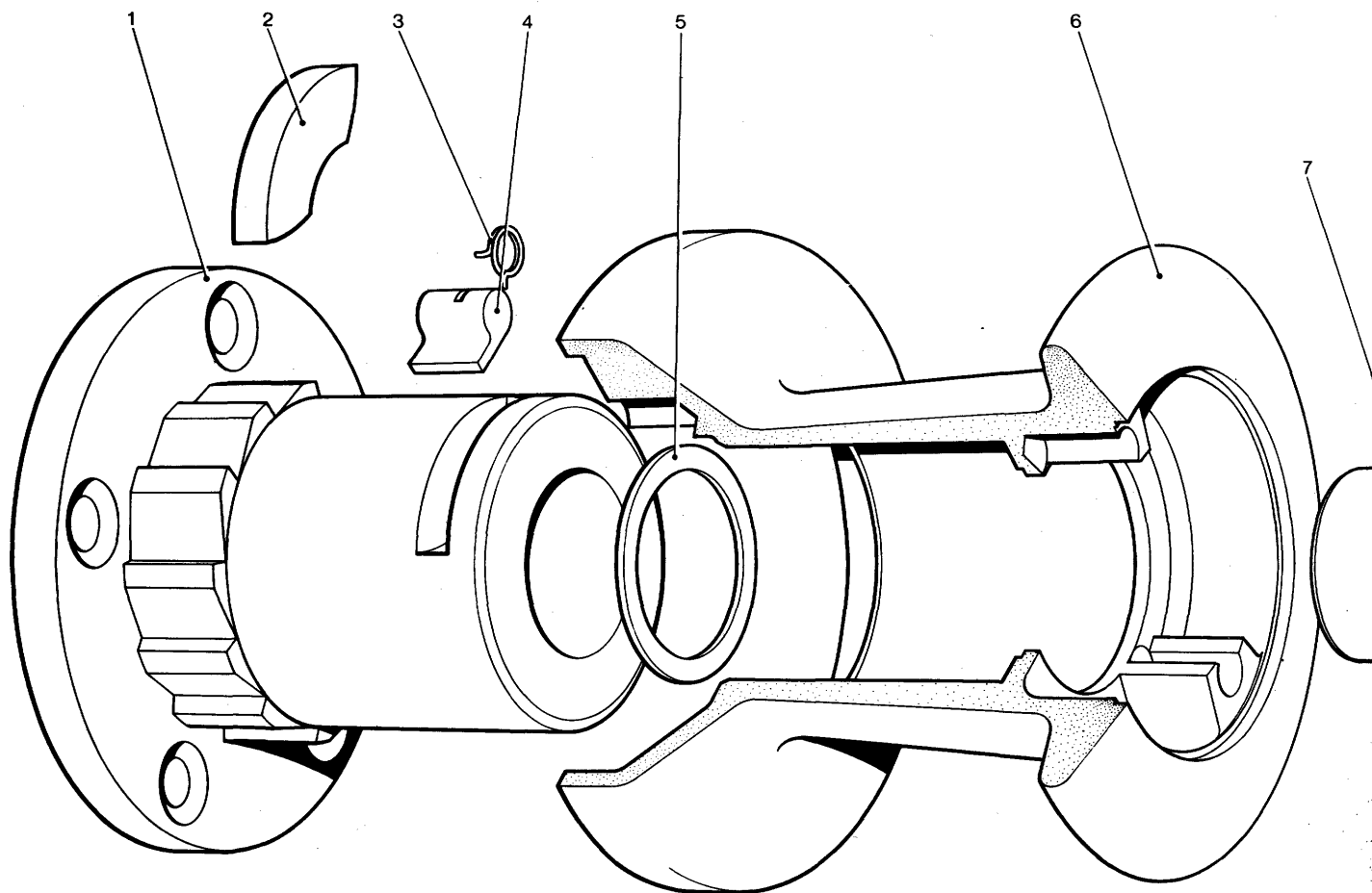
- 1 x Key Pt No 15006005
- 4 x Spring Pt No 1260/7
- 4 x Pawl Pt No 1260/8
- 1 x Circlip Pt No B2075

Model 7

Part No 19707400

Contents

- 1 x Key Pt No 15010005
- 4 x Spring Pt No 1260/7
- 4 x Pawl Pt No 1260/8
- 1 x Circlip Pt No B2075



Maintenance Nos. 6 & 7

A Remove circlip (9) using a small screwdriver or knife blade. Use a spiral motion to remove from groove.

B Lift drum (6) and cover plate (8) from centre stem (1).

C Remove cover plate (8) from drum (6).

The winch is now ready for routine monthly maintenance.

D Clean off excess grease and salt deposits from bearing surface of drum (6) and centre stem (1).

E Check free operation of pawls (4) in upper and lower parts of drum (6).

F Check free rotation of spindle (7) in centre stem (1).

G If satisfactory proceed with routine maintenance. If not continue with **FULL SERVICE PROCEDURE**.

H Lightly grease the bore of the drum (6) and the bearing surface of centre stem (1).

I Lightly oil the pawls.

J Lightly oil the centre spindle (7).

K Re-assemble drum (6) to centre stem (1) by introducing drum over centre spindle and turning clock-wise to engage lower pawls. Hold upper pawls

out with fingers to finally lower drum into position.

L Rotate drum (6) to check freedom of pawl movement and correct engagement.

Rotate spindle (1) to check complete engagement of top pawls.

M Replace top cap.

N Replace circlip (9) by entering one end into groove and winding circlip into position.

O Using handle check free operation of winch and correct engagement of pawls.

Full Annual Service

P Dismantle as per steps

A - C.

Q Remove four pawls (4) and pawl springs (3) from the winch drum (6).

R Remove spindle retaining key (2) from centre stem (1) with small screwdriver or knife blade.

S Remove spindle (7) and washer (5) from centre stem (1).

T Carefully wash drum, centre stem, spindle washer, pawls springs and spindle key.

U Lightly grease drum bore, centre stem bearing area, spindle.

V Assemble spindle (7) to centre stem (1) with washer (5) in position. Replace spindle retaining key (2).

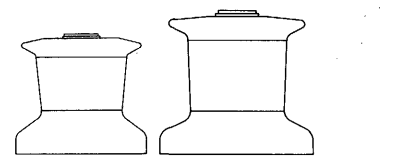
W Replace four pawls (4) and four springs (3) in drum, and lightly oil.

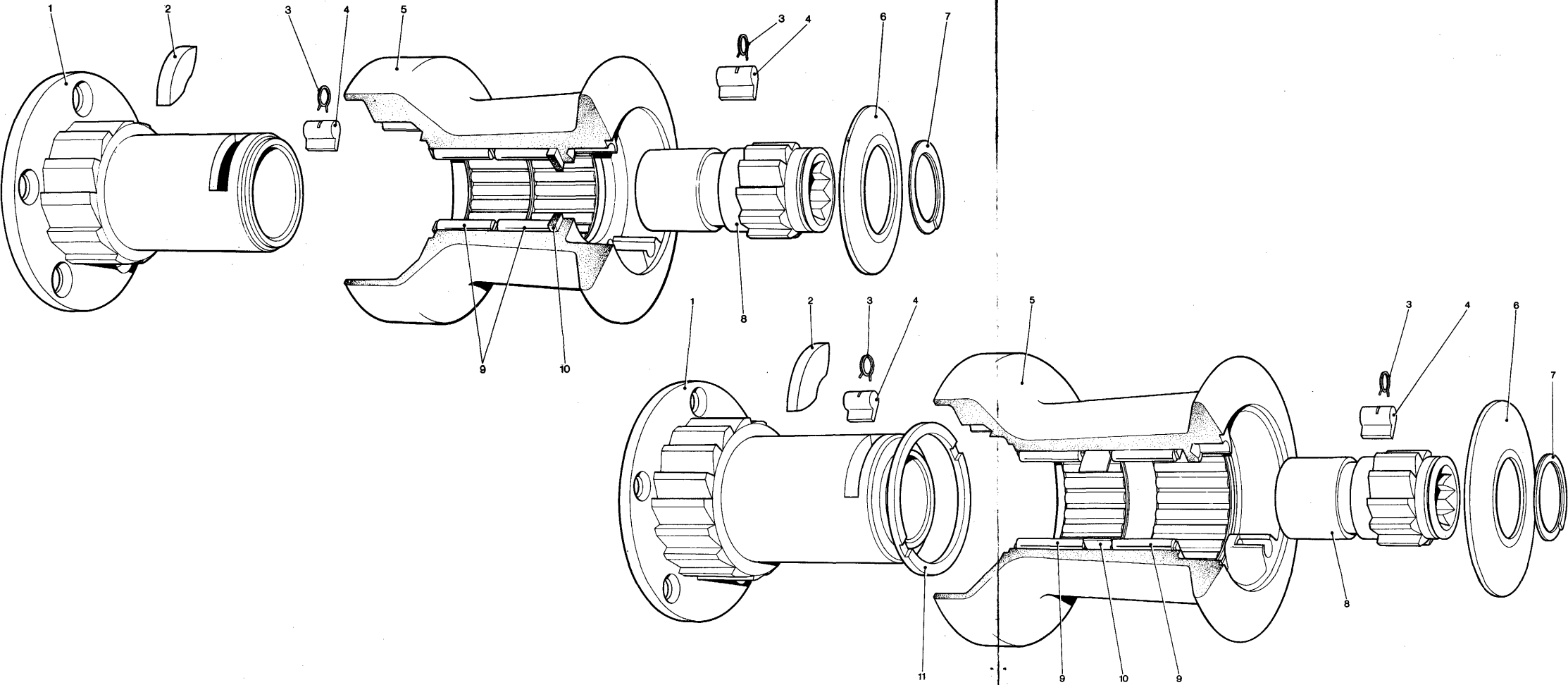
X Complete reassembly and testing as points **K - O**.

Y If winch fails to perform correctly re-check servicing technique or contact your nearest Lewmar service point.

Lewmar
Single speed winches

Models 8 & 10





Maintenance Nos. 8 & 10
A Remove circlip (7) using a small screwdriver or knife blade. Use a spiral motion to remove from groove.
B Lift drum (5) and top cap (6) from centre stem (1).
C Slide roller bearings (9) and bearing spacer [(10) MODEL 10 ONLY] out of drum.

The winch is now ready for routine monthly maintenance.

D Clean off excess grease and salt deposits from bearing surface of drum (5), centre stem (1) and roller bearings (9).
E Check free operation of pawls (4) in upper and lower parts of drum (5).
F Check free rotation of spindle (8) in centre stem (1).
G If satisfactory proceed with routine maintenance. If not continue to **Full Annual Service**.
H Lightly grease the bore of the drum (5) bearing surface of Centre Stem (1) and the roller bearings (9).
I Lightly oil the pawls (4).
J Lightly oil the centre spindle (8).
K Slide bearings (9) onto centre stem (1) ensuring that for:

Model 8
The drum washer (10) is in place on the top of the roller bearings (9).
Model 10
The bearing spacer (10) separates the two roller bearings (9) and the drum washer (11) is in place on the bottom.
L Reassemble drum (5) to centre stem (1) by introducing drum over centre stem and turning **CLOCK-WISE** to engage lower pawls. (On model 10 ensure that drum washer (11) is in place and that the pawls engage in the slots provided to facilitate engagement with the lower pawl track.)
M Rotate drum (5) to check freedom of pawl movement and correct engagement. Rotate spindle (8) to check complete engagement of top pawls.
N Replace top cap (6).
O Replace circlip (7) by entering one end into groove and winding circlip into place.
P Using handle check free operation of winch and correct engagement of pawls.

Full Annual Service
Q Dismantle as steps A - C.
R Remove four pawls (4) four pawl springs (3) from the winch

drums.
S Remove spindle retaining key (2) from centre stem (1) with small screwdriver or knife blade.
T Remove spindle (8) from centre stem (1).
U Carefully wash drum, centre stem, spindle, washers, pawls springs, spindle key and roller bearings.
V Lightly grease drum bore, centre stem bearing area, spindle and roller bearings.
W Assemble spindle (8) to centre stem (1). Replace spindle retaining key (2).
X Replace four pawls (4) and four springs (3) in drum and lightly oil.
Y Reassemble and check winch as points K - P.
Z If winch fails to perform correctly recheck servicing technique or contact your nearest Lewmar Service point.

Parts list

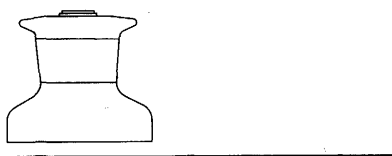
No. 8			
Item Number	Part Number	Description	No. Off
1	15008001	Centre Stem	1
2	15008005	Key	1
3	1260/7	Pawl Spring	4
4	1260/8	Pawl	4
5	15008102	Drum, Bronze	1
	15008202	Drum, Alloy	1
6	15006006	Top, Cap	1
7	B2075	Circlip	1
8	15008003	Spindle	1
9	15008007	Roller Bearing Assembly	2
10	15008004	Drum Washer	1

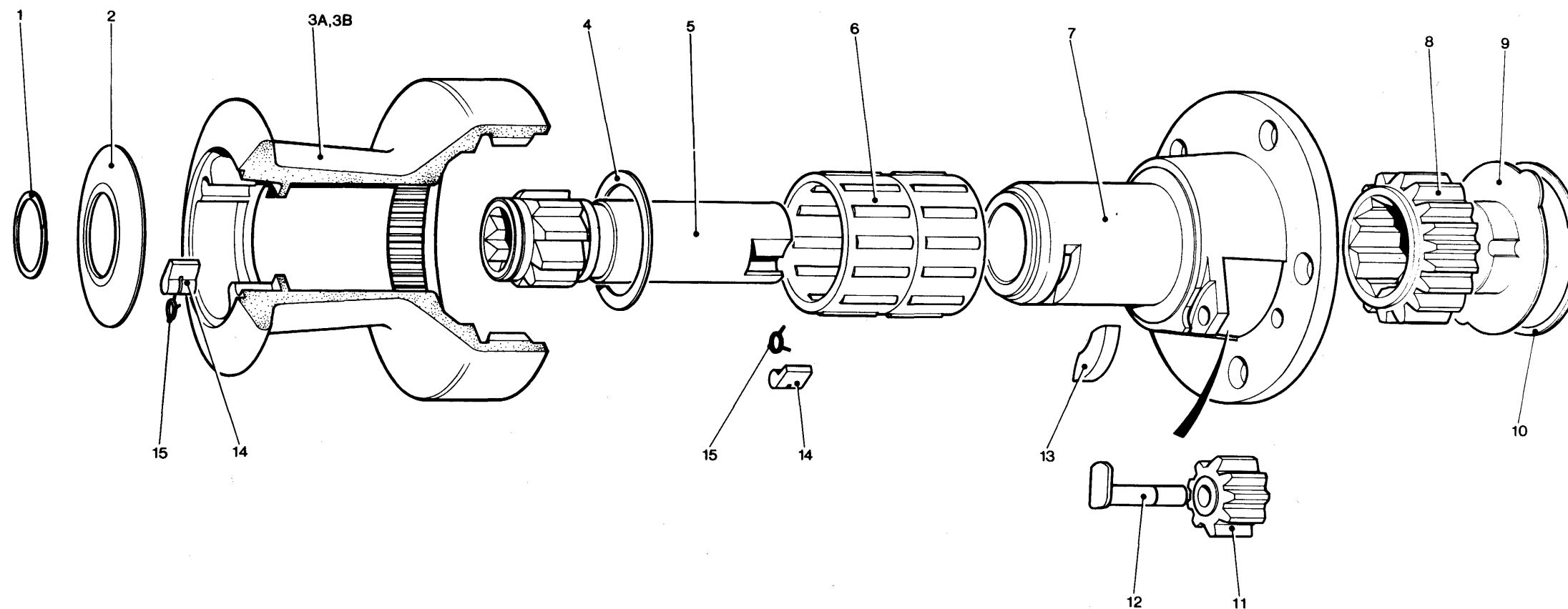
No. 10			
Item Number	Part Number	Description	No. Off
1	15010001	Centre Stem	1
2	15010005	Key	1
3	1260/7	Pawl Spring	4
4	1260/8	Pawl	4
5	15010102	Drum, Bronze	1
	15010202	Drum, Alloy	1
6	15010006	Top Cap	1
7	B2075	Circlip	1
8	15008003	Spindle	1
9	15010007	Roller Bearing Assembly	2
10	15010008	Spacer	1
11	15010004	Drum Washer	1

Spare parts kits
Model 8
Part No 19708400
Contents
1 x key Pt. No. 15008005
4 x spring Pt. No. 1260/7
4 x Pawl Pt. No. 1260/8
1 x Circlip Pt. No. B.2075
Model 10
Part No 19707400
Contents
1 x key Pt. No. 15010005
4 x spring Pt. No. 1260/7
4 x Pawl Pt. No. 1260/8
1 x Circlip Pt. No. B.2075

Lewmar
Two speed winches

Model 16





Item Number	Part Number	Description	No. Off
1	B2075	Spirolox Circlip	1
2	15016006	Top Cap	1
3A	15016102	Drum (Bronze)	1
3B	15016202	Drum (Alum)	1
4	15008004	Washer	1
5	18016003	Spindle Assembly	1
6	15008007	Case Assembly	1
7	15016001	Bearing	2
8	15016016	Centre Stem	1
9	15016016	Ratchet Gear	1
10	15016007	Retaining Plate	1
11	B2085	Spirolox Circlip	1
12	15016005	Idler Gear	1
13	15016004	Idler Spindle	1
14	15008005	Key	1
15	1260/8	Pawl	4
	1260/7	Pawl Spring	4

Maintenance No. 16

A Using a small screwdriver or knife-blade, remove circlip (1).

B Lift drum (3) from centre stem (7).

C Remove top cap (2) from drum (3).

D Remove bearings (6) from centre stem (7).

E Extract key (13) from centre stem (7).

F Remove spindle (5) from centre stem (7) by turning in a clockwise direction and lifting.

G Remove idler gear (11) from centre stem (7) by turning and lifting retaining spindle (12).

H Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.

I Lightly grease ratchet gear (8) in centre stem (7).

J Replace idler gear (11) and retaining spindle (12). Turn and lock retaining spindle (12) in centre stem (7). Lightly grease idler gear (11).

K Check that pawls and springs (14 & 15) in spindle (5) are free and oil lightly.

L Lightly grease spindle (5) and replace in centre stem (7) by turning in a clockwise direction.

M Insert key (13) into centre stem (7) ensuring that key is located in groove of spindle (5).

N Replace bearings (6) over centre stem (7) and lightly grease.

O Check that pawls and springs (14 & 15) in drum (3) are free and oil lightly.

P Lightly grease drum gear teeth and refit drum (3) over centre stem (7).

Q Replace top cap (2) and fit circlip (1) ensuring it is correctly located in groove of spindle (5).

If ratchet gear (8) is damaged:

R Remove drum (3) from winch as described above **A** and **B**.

S Remove winch from boat and strip as described above **C** to **G**.

T Release ratchet gear (8) from winch base by removing circlip (1) and retaining plate (9).

U Replace ratchet gear (8), retaining plate (9) and circlip (1).

V Clean and reassemble as above **H** to **Q**.

Spare Parts Kit

Model 16

Part No. 19716100

Contents

1 x Key Pt. No 15008005

4 x Spring Pt No 1260/7

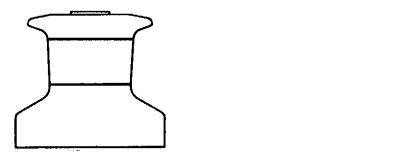
4 x Pawl Pt No 1260/8

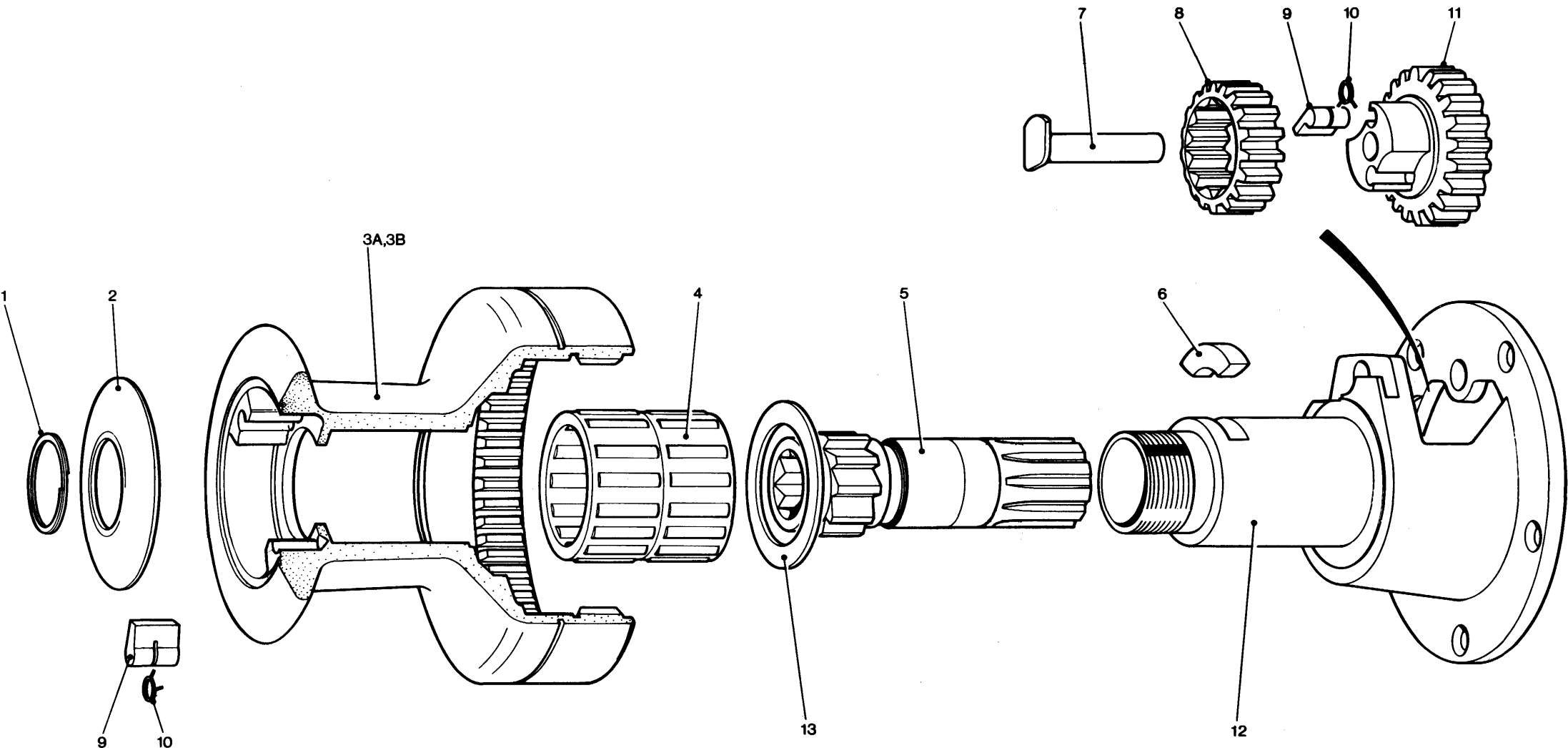
1 x Circlip Pt No 82075

1 x Washer Pt No 15008004

Lewmar
Two speed winches

Model 30





Maintenance No. 30

A Using a small screwdriver or knife-blade, remove circlip (1).
B Lift drum (3) from centre stem (12).
C Remove top cap (2) from drum (3).
D Removing bearings (4) and drum washer (13) from centre stem (12).
E Extract key (6) from centre stem (12).
F Remove spindle (5) from centre stem (12).
G Remove ratchet gear assembly (8 & 11) from centre stem (12) by turning and lifting retaining spindle (7). Separate ratchet gear (8) from pawl gear (11).
H Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
I Check that pawls and springs (9 & 10) in pawl gear (11) are free and oil lightly.
J Replace ratchet gear (8) on pawl gear (11) ensuring that recess on ratchet gear (8) fits over shoulder on pawl gear (11).
K Replace ratchet gear assembly (8 & 11) and retaining spindle (7). Turn and lock retaining spindle

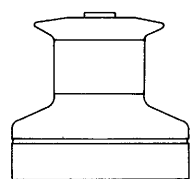
(7) in centre stem (12). Lightly grease ratchet gear assembly.
L Lightly grease spindle (5) and replace in centre stem (12).
M Insert key (6) into centre stem (12) ensuring that key is located in groove of spindle (5).
N Replace drum washer (13) and bearings (4) over centre stem (12) and lightly grease.
O Check that pawls and springs (9 & 10) in drum (3) are free and oil lightly.
P Lightly grease drum gear teeth and refit drum (3) over centre stem (12).
Q Replace top cap (2) and fit circlip (1) ensuring it is correctly located in groove of spindle (5).

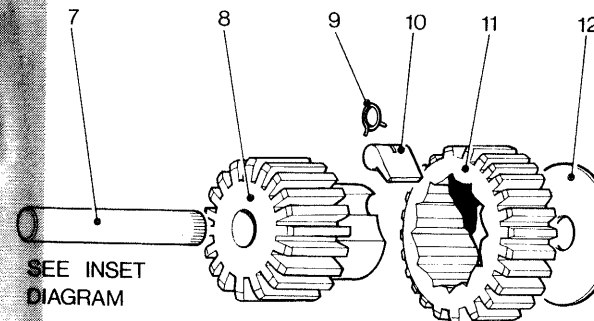
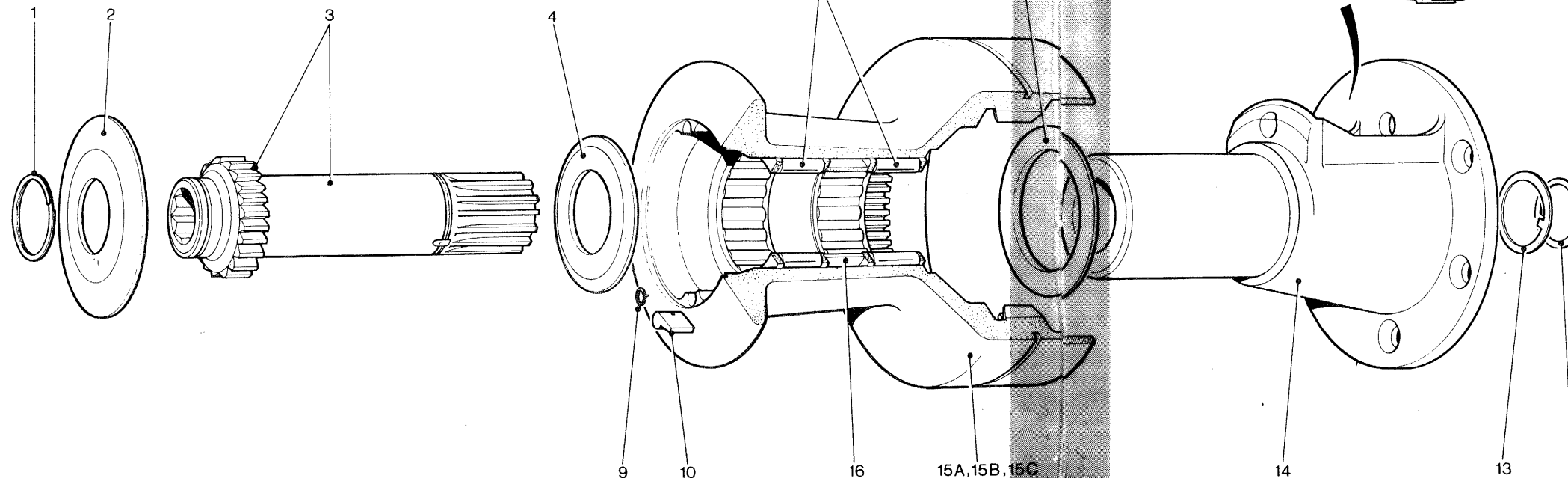
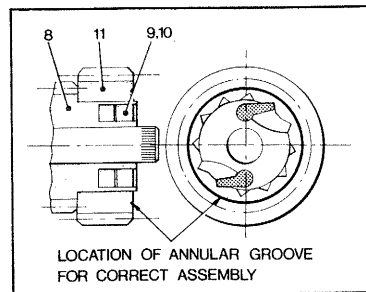
Spare Parts Kit
Model No 30
Part No 19730100
Contents
1 x Key Pt No 15008005
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
1 x Circlip Pt No B2075
1 x Washer Pt No 15030007

Item Number	Part Number	Description	No. Off
1	B2075	Spirolox Circlip	1
2	15010006	Top Cap	1
3A	15030102	Drum (Bronze)	1
3B	15030202	Drum (Aluminium)	1
4	15008007	Cage Assembly	2
		Bearing	2
5	18030003	Spindle Assembly	1
6	15008005	Key	1
7	15030004	Idler Spindle	1
8	15030005	Ratchet Gear	1
9	1260/8	Pawl	4
10	1260/7	Pawl Spring	4
11	15030006	Pawl Gear	1
12	15030001	Centre Stem	1
13	15030007	Washer	1

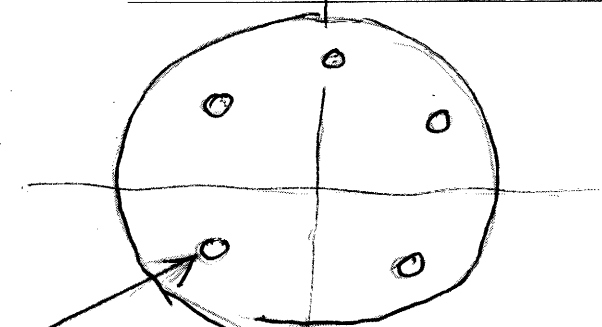
Lewmar
Two speed winches

Model 40





Item Number	Part Number	Description	No. Off
1	B2075	Circlip, Spirolox	2
2	15010006	Cap	1
3	1260/SA1	Spindle Assembly	1
4	1300/19	Washer	1
5	1260/SA2	Cage Assembly	2
6	1260/10	Drum Washer	1
7	1260/6	Gear Spindle	1
8	1260/4	Pawl Gear	1
9	1260/7	Spring	4
10	1260/8	Pawl	4
11	1260/5	Ratchet Gear	1
12	1260/9	Gear Washer	1
13	1260/19	Tab Washer	1
14	1260/1	Centre Stem	1
15A	1260/2	Drum, Bronze	1
15B	1255/2	Drum, Alloy	1
15C	1360/2	Drum, Stainless Steel	1
16	1260/11	Tube Spacer	1

**Maintenance No. 40**

A Remove circlip (1) using a small screwdriver or knife blade.
 B Lift drum (15) and cover plate (2) from centre stem (14).
 C Remove cover plate (2) from drum (15).

The winch is now ready for routine monthly maintenance.

D Clean off excess grease and salt deposits from bearing surface of drum (15) centre stem (14) and roller bearings (5).

E Check free operation of pawls (10) in upper part of drum.

F Check free operation of ratchet gear assembly (parts 7-12) by rotating large gear.

G Check free rotation of spindle (3) in centre stem (14).

H If satisfactory proceed with routine maintenance. If not

continue to **Full Annual Service**.

I Lightly grease the bore of the drum (15) and roller bearings (5).

J Lightly oil ratchet gear assembly (parts 7-12) and centre

spindle (3).

K Apply grease sparingly to gear teeth of ratchet assembly (7-12).

L Lightly oil pawls (10).

M Reassemble drum (15) to

centre stem (14) by introducing

drum over centre stem and

holding top pawls in the open position to facilitate engagement with the spindle ratchet track.
 N Rotate drum to check freedom of pawl movement and correct engagement.

O Replace top cap.

P Replace circlip (1) by entering one end into groove and winding circlip into place.

Q Using handle check free operation of winch and correct engagement of pawls.

Full Annual Service.

R To completely dismantle the winch the mounting bolts must be removed and the winch lifted from the deck.

S Dismantle as steps A - C.

T Remove two pawls (10) and two pawl springs (9) from drum.

U Support the centre stem assembly (14) on its base on a

firm structure (work bench etc.).

Ensure the lower exit of bearing

spindle (7) is not covered.

V Using a flat ended drift tap out the bearing spindle

DOWNWARDS.

W Remove the ratchet gear

assembly (8-12).

X Separate the upper and lower

gears (8) and (11) and cover

plate (12).

Y Remove two pawls (10) and

two springs (9) from ratchet

gear (8).

Z Remove lower circlip (1) and tab washer (13) with a small screwdriver or knife blade.

A1 Withdraw spindle (3) from centre stem (14).

B1 Withdraw washer (6) roller bearings (5) spacer (16) and drum washer (4) from centre stem (14).

C1 Carefully wash drum, centre stem, spindle, roller bearings, gears, washers, pawls and pawl springs.

D1 Lightly grease drum bore, roller bearings, centre stem bearing area and spindle.

E1 Slide drum washer (6) roller bearings (5) spacer (16) and washer (4) onto centre stem (14). Ensure that roller bearings (5) are separated by spacer (16).

F1 Insert spindle (3) and replace tab washer (3) and lower circlip (1), making sure that Tab engages in slot in bottom of spindle.

G1 Replace two pawls (10) and springs (9) in ratchet gear (8) lightly oil.

H1 Reassemble the upper and lower ratchet gears (8-11) noting the location of the annular groove for correct assembly (see sketch). Put the washer (12) in place.

I1 Support the centre stem on the gear aperture shoulder and

insert the ratchet assembly (8-12) into engagement with the spindle (3).

J1 Insert the gear spindle (7) into place and engage with the ratchet gear assembly (8-12).

Ensure correct line up.

K1 With drift tap the gear spindle into place.

L1 Reassemble and check winch as per points I - Q.

M1 If winch fails to perform correctly recheck servicing technique or contact your nearest Lewmar Service point.

5x8mm
on 105mm
P.C.D.

Spare Parts Kits

Model 40

Part No 19740400

Contents

1 x Circlip B2075

4 x Spring Pt No 1260/7

4 x Pawl Pt No 1260/8

1 x Washer Pt No 1260/9

2 x Pawl Pt No 15001012

1 x Tab washer Pt No 1260/19

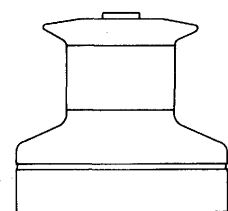
NEW STYLE 40

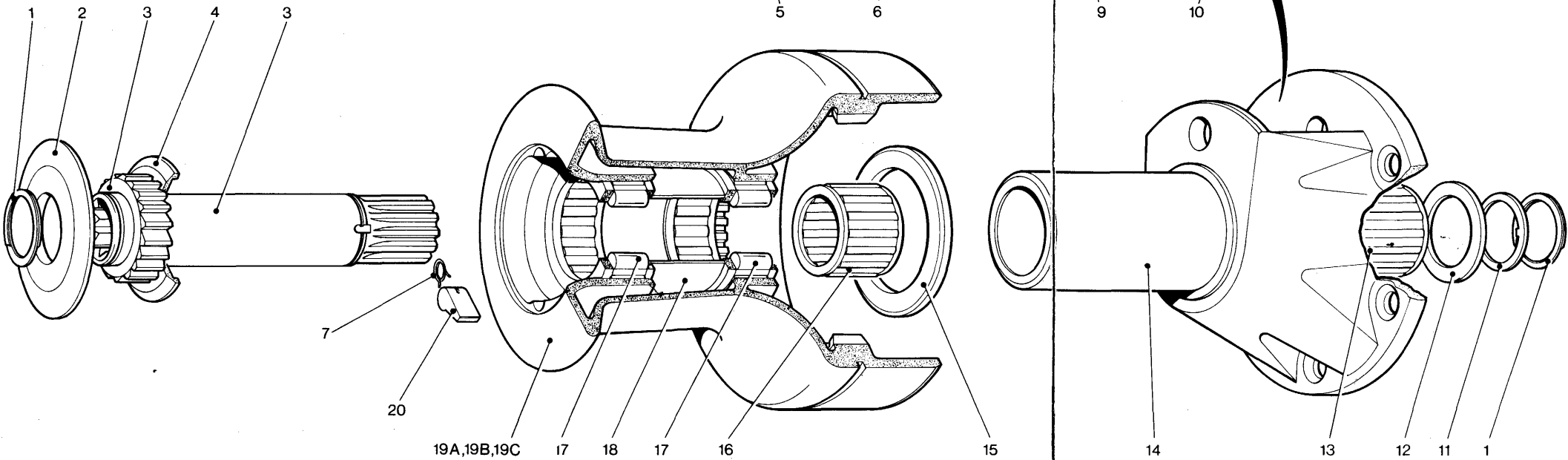
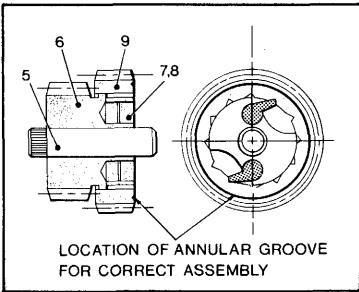
Chrome Drum
Alloy

15000002
15000003

Lewmar
Two speed winches

Model 43





Maintenance No. 43

- A Remove circlip (1) using a small screwdriver or knife blade.
B Lift drum (19) and cap (2) from centre stem.(14).
C Remove cover plate (2) from drum (19).

The winch is now ready for routine monthly maintenance.

- D Clean off excess grease and salt deposits from bearing surface of drum (19) centre stem (14) and roller bearings (17).
E Check free operation of pawls (20) in upper part of drum.
F Check free operation of ratchet gear assembly (parts 5-10) by rotating large gear.
G Check free rotation of spindle (3) in centre stem (14).
H If satisfactory proceed with routine maintenance. If not continue to FULL ANNUAL SERVICE
I Lightly grease the bore of the drum (19) and roller bearings (17).
J Lightly oil ratchet gear assembly (5-10) and centre spindle (3).
K Apply grease sparingly to gear teeth of ratchet assembly (5-10).
L Lightly oil pawls (20).
M Reassemble drum (19) to centre stem (14) by introducing

- drum over centre stem and holding top pawls in the open position to facilitate engagement with the spindle ratchet track.
N Rotate drum to check freedom of pawl movement and correct engagement.
O Replace top cap (2).
P Replace circlip (1) by entering one end into groove and winding circlip into place.
Q Using handle check free operation of winch and correct engagement of pawls.

Full Annual Service.

- R To completely dismantle the winch the mounting bolts must be removed and the winch lifted from the deck.
S Dismantle as steps A - C.
T Remove two pawls (20) and two pawl springs (7) from drum.
U Support the centre stem assembly (14) on the gear aperture shoulder on a firm structure (work bench, etc). Ensure that the lower exit of bearing spindle (5) is not covered.
V Using a flat ended drift tap out the bearing spindle DOWNWARDS.
W Remove the ratchet gear assembly (6-10).
X Separate the upper and lower

- gears (6) and (9) and cover plate (10).
Y Remove two pawls (8) and two springs (7) from pawl gear (6).
Z Remove lower circlip (1) with a small screwdriver or knife blade. Remove tab washer (11) and washer (12).
A1 Withdraw spindle (3) from centre stem (14).
B1 Withdraw lower spindle bearing (13) from centre stem (14).
C1 Withdraw washer (4) roller bearings (17) spacer (18) and drum washer (15) from centre stem (14).
D1 Withdraw upper spindle bearing (16) from centre stem (14).
E1 Carefully wash drum, centre stem, spindle, roller bearings, gears, washers, pawls and pawl springs.
F1 Lightly grease drum bore, roller bearings, centre stem bearing area and spindle.
G1 Insert spindle roller bearings (16 and 13) into centre stem (14).
H1 Slide drum washer (15) roller bearings (17) spacer (18) and washer (4) onto centre stem (12). Ensure spacer (18) separates roller bearings (17).
I1 Insert spindle (3) and replace washer (12). Tab washer (11)

- and lower circlip (1) making sure Tab is engaged in slot at bottom of spindle.
J1 Replace two pawls (8) and springs (7) in ratchet gear (6) lightly oil.
K1 Reassemble the upper and lower ratchet gears (6-9) noting the location of the annular groove for correct assembly (see sketch). Put the washer (10) in place.
L1 Support the centre stem on its base and insert the ratchet assembly (6-10) into engagement with the spindle (3).
M1 Insert the gear spindle (5) into place and engage with the ratchet gear assembly (6-10). Ensure correct line up.
N1 With drift tap the gear spindle into place.
O1 Reassemble and check winch per points I - Q.
I If winch fails to perform correctly recheck servicing technique or contact your nearest Lewmar Service point.

Spare Parts Kit

- Model 43
Part No 19743400
Contents
4 x Spring Pt No 1260/7
2 x Pawl Pt No 15001012
2 x Pawl Pt No 1264/8
1 x Tab washer Pt No 1260/19
1 x Circlip Pt No B2075
1 x Washer 1264/7
2 x Pawl Pt No 1260/8

Lewmar

Three speed winches

Maintenance No. 44

To ensure continuous trouble-free functioning, it is recommended that the winch is maintained as follows:

1. Routine maintenance at frequent intervals during constant use.
2. Full service annually.

Routine Maintenance.

A Using a small penknife or screwdriver remove top circlip (1) from spindle (20).
B Lift off drum and top cap assembly complete.
C Separate drum (33) and top cap assembly (5).
D Check that top cap mechanism and pawls (22) are functioning freely; with top cap mechanism inverted and push-button (3) depressed, the pawls will be normally in the open position.
E Grip the spring pillar posts on closing ring (8) and rotate in an anti-clockwise direction. This will close the pawls (22) and raise the push button (3). Both pawls (22) should now be in the fully closed position with the push button (3) locked in the raised position.
F Depress the push button (3) and the closing rings should rotate sharply in a clockwise direction, allowing both pawls to open fully. Should the rotation be sluggish or the pawls not fully open, the top cap must be stripped and cleaned prior to lubrication. See full annual service instructions.
G If the top cap mechanism functions correctly, clean off all salt deposits and dirt then oil lightly.
H Clean off all grease and salt deposits from drum bore (33), centre stem bearings (16) and ratchet gears (24, 28, 31, 32).
I Check free rotation of spindle (20) in centre stem (15). Check free operation of ratchet gears (24, 28, 31, 32).
J If satisfactory proceed with routine maintenance. If not, continue with **Full Service Procedure**.
K Lightly grease bore of drum (33), centre stem bearings (16) and ratchet gears (24, 28, 31, 32).
L Apply oil to centre spindle (20) and ratchet gear pawls through interface of ratchet gears.
M Reassemble drum (33) to centre stem.
N Replace top cap assembly, ensuring that pawls are in the closed position i.e. push button (3) is raised. Align drive

slots in the top cap (5) with drive pin (21) in spindle. Push top cap into recess in drum (33).
O Replace circlip (1) by entering one end into groove in spindle (20) and winding circlip into place.
P Check free rotation of drum (33) and, using handle, centre spindle (20).

Full Annual Service.

Note

To service completely the winch must be removed from the deck by removal of the 6 x 5/16" UNC c'sk screws securing the centre stem.

Q Remove drum and top cap points A-C.

R Remove centre stem from deck.

S Slide out cross-mounted drive pin (21) and remove clutch plate (11).

T Remove two plungers (12) and two springs (14), taking care not to loose these.

U Remove bearings (16) and drum support washer (17).

V Support the centre stem assembly (15) by the base on a firm structure (work bench etc.).

W Ensure the lower exits of bearing spindles (27, 29) are not covered. Using a flat-ended drift, tap out bearing spindles **DOWNWARDS**.

X Before fully removing spindles (27, 29) drive out about 1mm and check that knurled end is projecting before driving through. Knurled end of spindles **MUST NOT** pass through gears. Drive out spindles to release gear assemblies.

Y Remove ratchet gear assemblies and washers.

Z Separate ratchet gears (24, 31), remove two pawls (22) and two pawl springs (7). Remove washer (30).

A1 Separate ratchet gears (28, 32), remove two pawls (22) and two pawl springs (7). Remove spacer (23) and washer (30).

B1 Prise out two collets (13) from centre stem (15).

C1 Withdraw centre spindle (20) from centre stem (15). Remove bearing (18) and washer (19).

D1 Remove c'sk screw (26), securing lower ratchet assembly. Withdraw ratchet gear (24) spacer (23) and spindle end cap (25) or coupling (in the case of linked winches).

E1 Remove two pawls (22) and two pawl springs (7) from spindle.

F1 Carefully wash drum, centre stem, spindle, roller bearings,

gears, spacers, washers, pawls and pawl springs.

G1 Lightly grease drum bore, roller bearings, centre spindle and centre stem bearing area.

H1 Reassemble two pawls (22) and two pawl springs (7) to spindle (20). Oil lightly.

I1 Reassemble spacer (23), ratchet gear (24) and spindle end cap (25) to spindle (20). Secure with screw (26) and firmly tighten.

NOTE: correct location of annular groove (see sketch).

J1 Place washer (19) and bearing (18) onto spindle (20). Slide into centre stem (15). Secure with two collets (13).

K1 Replace two pawls (22) and two pawl springs (7) in pawl gears (31, 28). Reassemble ratchet gear (24) to (31). Put washer (30) in place.

L1 Reassemble spacer (23) and ratchet gear (32) to (28). Put washer (30) in place.

NOTE: Correct location of annular groove (see sketch).

M1 Support centre stem on the gear aperture shoulder. Insert ratchet gear assemblies and engage ratchet spindle (20). Ensure correct line-up.

N1 Insert gear spindles (27, 29) and engage with ratchet gear assemblies.

O1 With drift, tap spindles into place.

P1 Replace drum support washer (17), roller bearings (16).

Q1 Replace springs (14) and two plungers (12). Replace clutch plate (11).

R1 Insert drive pin (21).

S1 Replace drum (33).

Top Cap Maintenance.

T1 To dismantle top cap assembly complete, remove large circlip (10), disengage two springs (9), close pawls and withdraw closing ring (8). Remove plunger (4) and compression spring (6). Remove two pawls (22) and two pawl springs (7).

U1 Carefully clean all components.

V1 Reassemble two pawls (22) and two pawl springs (7). Lightly oil.

W1 Replace plunger (4) and compression spring (6).

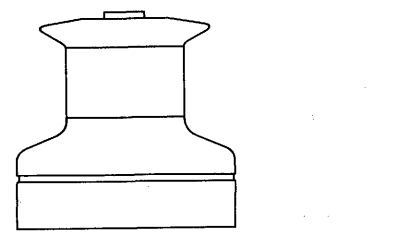
X1 Engage closing ring (8) with compression spring and plunger and holding pawls closed, insert closing ring into recess.

Y1 Ensure closing ring (8) seats correctly at base of recess. Re-insert circlip (10) and engage with groove provided.

Z1 Engage two springs (9) with

Lewmar Three speed winches

Model 44



Maintenance No. 48

To ensure continuous trouble-free functioning, it is recommended that the winch be maintained as follows:

1. Routine maintenance at frequent intervals during constant use.
2. Full service annually.

Routine Maintenance.

A Using a small penknife or screwdriver remove top circlip (1) from spindle (22).
B Lift off drum and top cap assembly complete.
C Separate drum (11) and top cap assembly (5).
D Check that top cap mechanism and pawls (28) are functioning freely; with top cap mechanism inverted and push-button (3) depressed, the pawls will be normally in the open position.
E Grip the spring pillar posts on closing ring (8) and rotate in an anti-clockwise direction. This will close the pawls (28) and raise the push button (3). Both pawls (28) should now be in the fully closed position with the push button (3) locked in the raised position.
F Depress the push button (3) and the closing rings should rotate sharply in a clockwise direction, allowing both pawls to open fully. Should the rotation be sluggish or the pawls not fully open, the top cap must be stripped and cleaned prior to lubrication. See full annual service instructions.
G If the top cap mechanism functions correctly, clean off all salt deposits and dirt then oil lightly.
H Clean off all grease and salt deposits from drum bore (11), centre stem bearings (16) and ratchet gears (32, 34, 37, 38).
I Check free rotation of spindle (22) in centre stem (18). Check free operation of ratchet gears (32, 34, 37, 38).
J If satisfactory, proceed with routine maintenance. If not, continue with **Full Service Procedure**.
K Lightly grease bore of drum (11), centre stem bearings (16) and ratchet gears (32, 34, 37, 38).
L Apply oil to centre spindle (22) and ratchet gear pawls through interface of ratchet gears.
M Reassemble drum (11) to centre stem.
N Replace top cap assembly, ensuring that pawls are in the closed position i.e. push button

(3) is raised. Align drive slots in top cap (5) with drive pin (23) in spindle. Push top cap into recess in drum (11).
O Replace circlip (1) by entering one end into groove in spindle (22) and winding circlip into place.
P Check free rotation of drum (11) and, using handle, centre spindle (22).

Full Annual Service

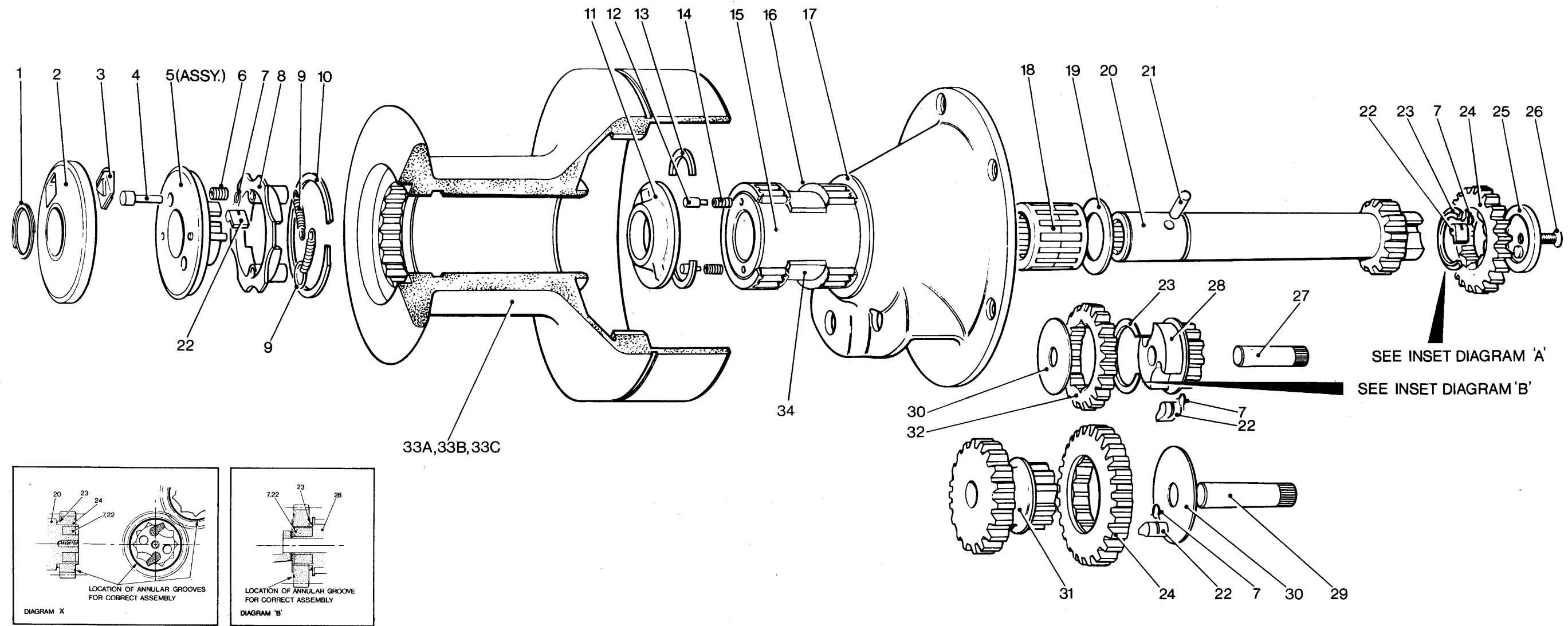
Note.

To service completely the winch must be removed from the deck by removal of the 6 x 5/16" UNC C'sk screws securing the centre stem.
Q Remove drum and top cap as points A-C.
R Remove centre stem from deck.
S Slide out cross-mounted drive pin (23) and remove clutch plate (12).
T Remove two plungers (14) and two springs (15), taking care not to lose these.
U Remove bearings (16) and drum support washer (19).
V Support the centre stem assembly (18) by the base on a firm structure (work bench etc.).
W Ensure the lower exits of bearing spindles (29, 36) are not covered. Using a flat-ended drift, tap out bearing spindles **DOWNWARDS**.
X Before fully removing spindles (29, 36) drive out about 1mm and check that knurled end is projecting before driving through. Knurled end of spindles **MUST NOT** pass through gears. Drive out spindles to release gear assemblies.
Y Remove ratchet gear assemblies and washers.
Z Separate ratchet gears (37, 38), remove two pawls (33) and two pawl springs (7). Remove washers (30,35). Remove two bearings (31).
A1 Separate ratchet gears (32, 34), remove two pawls (33) and two pawl springs (7). Remove washers (30,35). Remove bearing (31).
B1 Prise out two collets (13) from centre stem (18).
C1 Withdraw centre spindle (22) from centre stem (18). Remove bearing (20) and washer (21).
D1 Remove C'sk screw (27) securing lower ratchet assembly. Withdraw ratchet gear (25), spacer (24) and spindle end cap (26) or coupling (in the case of linked winches).
E1 Remove two pawls (28), and two pawl springs (7) from spindle.

F1 Carefully wash drum, centre stem, spindle, roller bearings, gears, spacers, washers, pawls and pawl springs.
G1 Lightly grease drum bore, roller bearings, centre spindle and centre stem bearing area.
H1 Reassemble two pawls (28) and two pawl springs (7) to spindle (22). Oil lightly.
I1 Reassemble spacer (24), ratchet gear (25) and spindle end cap (26) to spindle (22). Secure with screw (27) and firmly tighten.
NOTE: correct location of annular groove (see sketch).
J1 Place washer (21) and bearing (20) onto spindle (22). Slide into centre stem (18). Secure with two collets (13).
K1 Replace two pawls (33) and two pawl springs (7) in pawl gears (32, 38). Reassemble ratchet gear (34) to (32). Put washer (35) in place. Replace bearing (31) and washer (30).
L1 Reassemble ratchet gear (37) to (38). Put washer (35) in place. Replace bearings (31) and washer (30).
M1 Support centre stem on the gear aperture shoulder. Insert ratchet gear assemblies and engage ratchet spindle (22). Ensure line-up.
N1 Insert gear spindles (29, 36) and engage with ratchet gear assemblies.
O1 With drift, tap spindles into place.
P1 Replace drum support washer (19), roller bearings (16).
Q1 Replace two springs (15) and two plungers (12). Replace clutch plate (12).
R1 Insert drive pin (23).
S1 Replace drum (11).

Top Cap Maintenance

T1 To dismantle top cap assembly completely, remove large circlip (10), disengage two springs (9), close pawls and withdraw closing ring (8). Remove plunger (4) and compression spring (6). Remove two pawls (28) and two pawl springs (7).
U1 Carefully clean all components.
V1 Reassemble two pawls (28) and two pawl springs (7). Lightly oil.
W1 Replace plunger (4) and compression spring (6).
X1 Engage closing ring (8) with compression spring and plunger and holding pawls closed, insert closing ring into recess.
Y1 Ensure closing ring (8) seats correctly at base of recess. Re-insert circlip (10) and engage



pillars provided on closing ring(8).
A2 Check top cap mechanism for correct operation, as prescribed in point F. Oil lightly.
B2 Reassemble and check winch as points N—P.
B3 If winch fails to perform correctly, re-check servicing technique or contact your nearest Lewmar service point.

Spare Parts Kits
Model 44
Cat No 19744400
Contents
2 x Washer Pt No 15025106
1 x Pin Pt No 15044119
2 x Plunger Pt No 1300/24
2 x Spring Pt No 1300/20
8 x Pawl Pt No 1260/8
8 x Spring Pt No 1260/7
2 x Washer Pt No 15025107
1 x Plunger Pt No 15044111
1 x Spring Pt No 15044112
1 x Circlip Pt No B2083
1 x Circlip Pt No B2075
2 x Spring Pt No 15044113

Parts list

Item Number	Part Number	Description	No. Off
1	B2075	Circlip, Spirolox	1
2	15044117	Top Cap Cover	1
3	15044114	Push Button	1
4	15044111	Plunger	1
5	15044104	Top Cap Assembly	1
6	15044112	Spring	1
7	1260/7	Pawl Spring	8
8	15044106	Closing Ring	1
9	15044115	Spring	2
10	B2083	Circlip	1
11	15044105	Clutch Plate	1
12	1300/24	Plunger	2
13	15044118	Collet	2
14	1300/20	Spring	2
15	15044101	Centre Stem	1
16	15044121	Cage Assembly	2
17	~~15025107~~	Drum Washer	1
18	1264/SA2	Cage Assembly	1
19	1300/21	Washer	1
20	15044103	Spindle	1
21	15044119	Drive Pin	1
22	1260/8	Pawl	8
23	15025107	Spacer	2
24	15016105	Ratchet Gear	2
25	15016107	Spindle End Cap	1

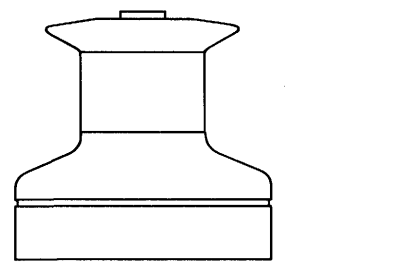
26	B0515	Countersunk Screw 1/4" U.N.C. x 1/2" long	1
27	15044108	Spindle	1
28	15025105	Pawl Gear	1
29	15044109	Spindle	1
30	15025106	Washer	2
31	15044107	Output Gear	1
32	15041105	Ratchet Gear	1
33A	15044102	Drum, Bronze	1
33B	15044202	Drum, Alloy	1
33C	15044302	Drum, Stainless Steel	1
34	15065115	Spacer	1

15044116

Lewmar

Three speed winches

Model 48



Maintenance No. 55

To ensure continuous trouble-free functioning, it is recommended that the winch be maintained as follows:

1. Routine maintenance at frequent intervals during constant use.
2. Full service annually.

Routine Maintenance.

A Using a small penknife or screwdriver remove top circlip (1) from spindle (20).

B Lift off drum and top cap assembly complete.

C Separate drum (33) and top cap assembly (5).

D Check that top cap mechanism and pawls (22) are functioning freely; with top cap mechanism inverted and push-button (3) depressed, the pawls will be normally in the open position.

E Grip the spring pillar posts on closing ring (8) and rotate in an anti-clockwise direction. This will close the pawls (22) and raise the push button (3). Both pawls (22) should now be in the fully closed position with the push button (3) locked in the raised position.

F Depress the push button (3) and the closing rings should rotate sharply in a clockwise direction, allowing both pawls to open fully. Should the rotation be sluggish or the pawls not fully open, the top cap must be stripped and cleaned prior to lubrication. See Full Annual Service Instructions.

G If the top cap mechanism functions correctly, clean off salt deposits and dirt then oil lightly.

H Clean off all grease and salt deposits from drum bore (48) centre stem bearings (47) and ratchet gears (35, 37, 43, 44).

I Check free rotation of spindle (20) in centre stem (15). Check free operation of ratchet gears (35, 37, 43, 44).

J If satisfactory, proceed with routine maintenance. If not, continue with **Full Service Procedure**.

K Lightly grease bore of drum (48), centre stem bearings (47) and ratchet gears (35, 37, 43, 44).

L Apply oil to centre spindle (20) and ratchet gear pawls through interface of ratchet gears.

M Reassemble drum (48) to centre stem.

N Replace top cap assembly, ensuring that pawls are in the closed position, i.e. push button (3) is raised. Align drive slots

in top cap (5) with drive pin (21) in spindle. Push top cap into recess in drum (48).

O Replace circlip (1) by entering one end into groove in spindle (20) and winding circlip into place.

P Check free rotation of drum (48) and, using handle, centre spindle (20).

Full Annual Service

Note.

To service completely the winch must be removed from the deck by removal of the 6 x 5/16" UNC C'sk screws securing the centre stem.

Q Remove drum/top cap assembly as points **A-C**.

R Slide out cross mounted drive pin (21) and remove clutch plate (11).

S Remove two plungers (12) and two springs (14) taking care not to lose them.

T Remove bearings (47) spacer (16) and drum support washer (46).

U Remove 3 x 3/8" UNC socket head screws (17) securing centre stem (15) to base (25) and lift off centre stem assembly complete.

V Invert the centre stem assembly and support in a firm way, ideally using a bench vice with soft faced jaws.

W Tap off the bridge piece (29) gently, taking care not to damage the spiral pins (28).

X Slide off gear assemblies from their spindles (35, 37, 43, 44).

Y Separate ratchet gear (44) from pawl gear (43) and remove washer (41) bearing (42) and washer (45). Remove two pawls (34) and two pawl springs (7) from pawl gear (43).

Z Remove circlip (36) and separate ratchet gear (37) from pawl gear (35). Remove washer (33), bearings (38) and washer (39).

A1 Remove two pawls (34) and two pawl springs (7) from pawl gear (35).

B1 Prise out two collets (13) from centre stem (15) and carefully withdraw centre spindle assembly.

C1 Undo c'sk screw (30) and remove spindle end cap (24) or coupling (in the case of linked winches).

D1 Remove ratchet gear (31) and spacer (23). Remove two pawls (22) and two pawl springs (7) from spindle (20).

E1 Carefully wash drum, centre stem, spindle, roller bearings, gears, spacers, washers, pawls

and pawl springs.

F1 Lightly grease drum bore, roller bearings, centre spindle and centre stem bearing area.

G1 Reassemble two pawls (22) and two pawl springs (7) to centre spindle (20). Lightly oil.

H1 Reassemble spacer (23) and ratchet gear (31) to centre spindle.

NOTE: Correct location of annular groove (see sketch).

I1 Replace spindle end cap (24) and firmly tighten c'sk screw (30).

J1 Place washer (19) and bearing (18) onto spindle (20), replace circlip (14). Slide centre spindle assembly into centre stem (19) and secure with two collets (13).

K1 Replace two pawls (34) and two springs (7) in pawl gear (43).

L1 Reassemble pawl gear (43) and ratchet gear (44).

M1 Replace washer (41), bearing (42) and washer (45).

N1 Reassemble gear assembly to spindle (40).

O1 Replace two pawls (34) and two pawl springs (7) in pawl gear (35).

P1 Replace ratchet gear (37) and secure with circlip (36).

Q1 Replace 3 bearings (38) and washer (39).

R1 Assemble gear assembly to spindle (32).

S1 Lightly grease all gear teeth (31, 35, 37, 20, 43, 44).

T1 Replace bridge piece, carefully lining up spiral pins (28) and gear assembly spindles (32, 40). Tap bridge piece gently into place.

U1 Take complete centre stem assembly and replace in base (25). Insert 3 x 3/8" UNC socket head screws and tighten firmly.

V1 Replace drum support washer (46), bearings (47) and spacer (10) noting correct separation.

W1 Replace two springs (14) and two plungers (12) replace clutch plate (11).

X1 Insert drive pin (21).

Y1 Replace drum (48).

Top Cap Maintenance.

Z1 To dismantle top cap assembly complete, remove large circlip (10) disengage two springs (9) close pawls and withdraw closing ring (8).

Remove plunger (4) and compression spring (6). Remove two pawls (22) and two pawl springs (7).

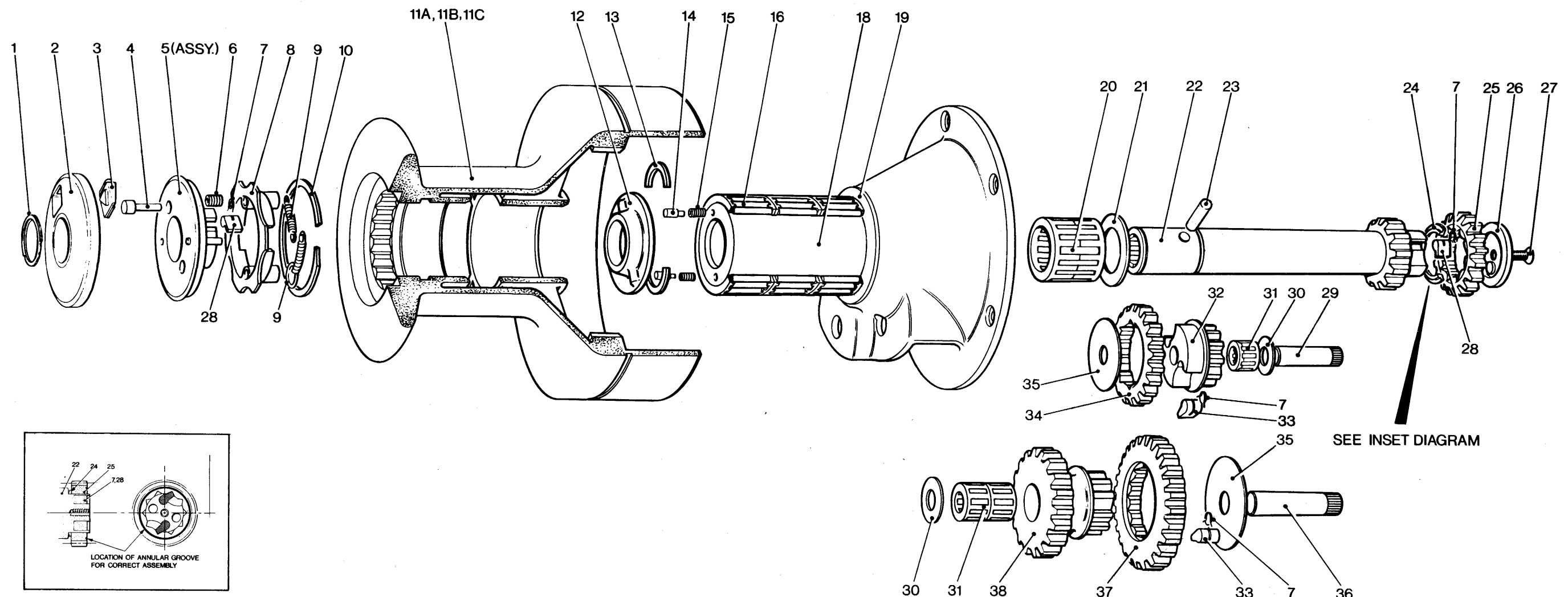
A2 Carefully clean all components.

B2 Reassemble two pawls (22) and two pawl springs (7). Lightly oil.

Lewmar

Three speed winches

Model 48



with groove provided.

Z1 Engage two springs (9) with pillars provided on closing ring (8).

A2 Check top cap mechanism for correct operation, as prescribed in point (F). Oil lightly.

B2 Reassemble and check winch as points (N-P).

C2 If winch fails to perform correctly, re-check servicing technique or contact your nearest Lewmar service point.

Spare Parts Kits

Model 48

Cat No 19748400

Contents

- 4 x Pawl Pt No 1260/8
- 8 x Spring Pt No 1260/7
- 4 x Pawl Pt No 1264/8
- 2 x Washer Pt No 1300/22
- 2 x Washer Pt No 1264/7
- 2 x Plunger Pt No 1300/24
- 2 x Spring 1300/20
- 1 x Plunger Pt No 15044111
- 1 x Spring Pt No 15044112
- 1 x Washer Pt No 15025107
- 1 x Circlip Pt No B2083
- 1 x Circlip Pt No B2075
- 1 x Pin Pt No 15044119
- 2 x Spring Pt No 15044113

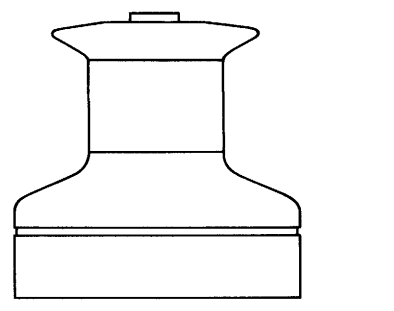
Parts list

Item Number	Part Number	Description	No. Off
1	B2075	Circlip, Spirolox	1
2	15048106	Top Cap Cover	1
3	15044114	Push Button	1
4	15044111	Plunger	1
5	15044104	Top Cap Assembly	1
6	15044112	Spring	1
7	1260/7	Pawl Spring	8
8	15044106	Closing Ring	1
9	15044113	Spring	2
10	B2083	Circlip	1
11A	15048102	Drum, Bronze	1
11B	15048202	Drum, Alloy	1
11C	15048302	Drum, Stainless Steel	1
12	15044105	Clutch Plate	1
13	15044118	Collet	2
14	1300/24	Plunger	2
15	1300/20	Spring	2
16	1301/SA3	Cage Assembly	3
18	15048101	Centre Stem	1
19	15044116	Washer	1
20	1264/SA2	Cage Assembly	1
21	1300/21	Washer	1
22	15048103	Spindle	1
23	15044119	Drive Pin	1

24	15025107	Spacer	1
25	15048104	Ratchet Gear	1
26	15016107	Spindle End Cap	1
27	B0515	Countersunk Screw 1/4" U.N.C. x 1/2" long	1
28	1260/8	Pawl	4
29	1300/10	Spindle	1
30	1300/22	Washer	2
31	1300/SA2	Cage Assembly	3
32	1300/8	Pawl Gear	1
33	1264/8	Pawl	4
34	1300/7	Ratchet Gear	1
35	1264/7	Washer	2
36	1300/9	Spindle	1
37	1300/5	Ratchet Gear	1
38	1300/6	Pawl Gear	1

Lewmar Three speed winches

Model 55



Maintenance No. 65

To ensure continuous trouble-free functioning, it is recommended that the winch be maintained as follows:

1. Routine maintenance at frequent intervals during constant use.
2. Full service annually.

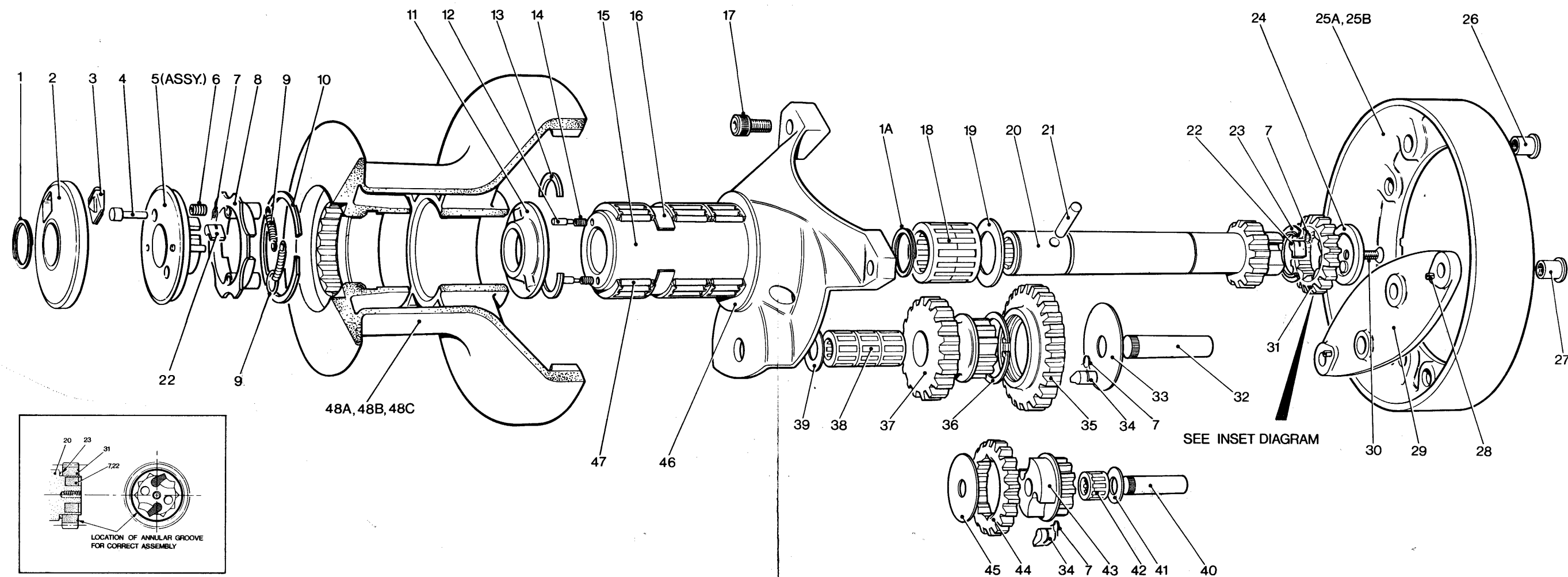
Routine Maintenance.

A Using a small penknife or screwdriver remove top circlip (1) from spindle (21).
B Lift off drum and top cap assembly complete.
C Separate drum (11) and top cap assembly (5).
D Check that top cap mechanism and pawls (29) are functioning freely; with top cap mechanism inverted and push-button (3) depressed, the pawls will be normally in the open position.
E Grip the spring pillar posts on closing ring (8) and rotate in an anti-clockwise direction. This will close the pawls (29) and raise the push button (3). Both pawls (29) should now be in the fully closed position with the push button (3) locked in the raised position.
F Depress the push button (3) and the closing rings should rotate sharply in a clockwise direction, allowing both pawls to open fully. Should the rotation be sluggish or the pawls not fully open, the top cap must be stripped and cleaned prior to lubrication. See Full Annual Service Instructions.
G If the top cap mechanism functions correctly, clean off all salt deposits and dirt then oil lightly.
H Clean off all grease and salt deposits from drum bore (11), centre stem bearings (14) and output gear (37).
I Check free rotation of spindle (21) in centre stem (16). Check free operation of output gear (37).
J If satisfactory, proceed with routine maintenance. If not, continue with **Full Service Procedure**.
K Lightly grease bore of drum (11), centre stem bearings (14) and output gear (37).
L Apply oil to centre spindle (21) and ratchet gear pawls through interface of ratchet gears.
M Reassemble drum (11) to centre stem (16).
N Replace top cap assembly, ensuring that pawls are in the closed position i.e. push button (3) is raised. Align drive slots in

top cap (5) with drive pin (22) in spindle. Push top cap into recess in drum (11).
O Replace circlip (1) by entering one end into groove in spindle (21) and winding circlip into place.
P Check free rotation of drum (11) and, using handle, centre spindle (21).

Full Annual Service.

Q Remove drum/top cap assembly as points A-C.
R Slide out cross mounted drive pin (22) and remove clutch plate (49).
S Remove two plungers (12) and two springs (13) taking care not to lose these.
T Remove bearings (14) spacer (15) and drum support washer (47).
U Remove 6 x $\frac{3}{8}$ " UNC socket head screws $\frac{3}{4}$ " long (17) securing centre stem (16) to base (30).
V Lift off centre stem assembly complete. If necessary, tap top of centre stem assembly gently to assist removal.
W Invert centre stem assembly and support firmly, ideally using a vice with soft face jaws.
X Remove $\frac{1}{2}$ " BSF lock-nut (31) and washer (32) from underside of bridge piece (24).
Y Remove 3 x $\frac{5}{16}$ " UNC socket head screws $1\frac{1}{2}$ " long (18) securing bridge piece (24) to centre stem (16). Gently tap bridge piece and remove.
Z Slide off ratchet gear assemblies (35, 37, 43, 44).
A1 Separate pawl gear (35) and ratchet gear (37). Remove two bearings (38) and washers (34, 39).
B1 Remove 3 pawls (36) and three pawl springs (7) from pawl gear.
C1 Separate pawl gear (43) from ratchet gear (44) by removing 2 C'sk screws (46). Remove washer (41) retaining plate (45) and two bearings (42).
D1 Remove 2 pawls (36) and 2 pawl springs (7) from pawl gear.
E1 Drive out two collets (48) from centre stem (16) and carefully withdraw centre spindle assembly.
F1 Remove bearing (19) and washer (20) from centre spindle (21).
G1 Remove ratchet gear (26) from spindle (21) by removing C'sk screw (28) and withdrawing spindle end cap (27) or coupling (in the case of linked winches).
H1 Remove ratchet gear (26) and spacer (25).
I1 Remove two pawls (29) and two pawl springs (7) from spindle (21).
J1 Carefully wash drum, centre stem, spindle, roller bearings, gears, spacers, washers, pawls, and pawl springs.
K1 Lightly grease drum bore, roller bearings, centre spindle and centre stem bearing area.
L1 Reassemble two pawls (29) and two pawl springs (7) to spindle (21). Oil lightly.
M1 Reassemble spacer (25) and ratchet gear (26) to spindle (21).
NOTE: Correct location of annular groove (see sketch).
N1 Replace spindle and cap (27) and C'sk screw (28). Tighten screw.
O1 Replace washer (20) and bearing (19) on spindle. Slide spindle into centre stem and secure with two collets (48).
P1 Replace two pawls (36) and two pawl springs (7) in pawl gear (43).
Q1 Reassemble ratchet gear (44) to pawl gear (43), secure by replacing retaining plate (45) inserting two C'sk screws (46) and tightening.
R1 Replace two bearings (42) and washers (41).
S1 Replace 3 pawls (36) and three pawl springs (7) in pawl gear (35). Oil lightly.
T1 Reassemble ratchet gear (37) to pawl gear (35).
U1 Replace two bearings (38) and washers (34, 39).
V1 Reassemble ratchet gear assembly (43, 44) over spindle (40).
W1 Reassemble ratchet gear assembly (35, 37) over spindle (33).
X1 Replace bridge piece (24) and locate carefully over spindles (33, 40). Tap gently into position.
Y1 Replace 3 x $\frac{5}{16}$ " UNC socket head screws $1\frac{1}{2}$ " long (18) securing bridge piece (24) to centre stem (16). Tighten firmly.
Z1 Replace $\frac{1}{2}$ " BSF lock-nut (31) and washer (32) on spindle thread (33). Tighten firmly.
A2 Replace centre stem (16) onto base (30).
NOTE: Align holes carefully over screw threads in base for socket head screws (11).
B2 Insert 6 x $\frac{3}{8}$ " UNC socket head screws $\frac{3}{4}$ " long (17) and tighten firmly.
C2 Replace drum thrust washer (47), 4 bearings (14) and collar (15). Note correct spacing of bearings and collar.
D2 Replace drum on centre stem assembly.



Parts list

Item Number	Part Number	Description	No. Off
1	B02075	Circlip, Spirolox	1
1A	B02079	Circlip, Spirolox	1
2	15055106	Top Cap Assembly	1
3	15044114	Push Button	1
4	15044111	Plunger	1
5	15044104	Top Cap Assembly	1
6	15044112	Spring	1
7	1260/7	Pawl Spring	8
8	15044106	Closing Ring	1
9	15044113	Spring	2
10	B2083	Circlip	1
11	15044105	Clutch Plate	1
12	1300/24	Plunger	2
13	15044118	Collet	2
14	1300/20	Spring	2
15	15055101	Centre Stem	1
16	15048105	Spacer	1
17	B0714	Socket Head Cap Screw 3/8" U.N.C. x 3/4" long	3
18	1264/SA2	Cage Assembly	1
19	1300/21	Washer	1
20	15055103	Spindle	1
21	15044119	Drive Pin	1
22	1260/8	Pawl	4

23	15025107	Spacer	1
24	15016107	Spindle End Cap	1
25A	15055104	Base, Bronze	1
25B	15055204	Base, Alloy	1
26	1301/22	Dowel	1
27	1301/17	Dowel	2
28	B1506	Spirol Pin	2
29	15055105	Bridge Piece	1
30	B0515	Countersunk Screw 1/4" U.N.C. x 1/2" long	1
31	15048104	Ratchet Gear	1
32	1301/10	Shaft	1
33	1301/11	Washer	1
34	1264/8	Pawl	4
35	1301/7	Pawl Gear	1
36	B2077	Circlip	1
37	1301/6	Ratchet Gear	1
38	1301/SA2	Cage Assembly	3
39	1301/19	Washer	1
40	1264/6	Shaft	1
41	1300/22	Washer	1
42	1300/SA2	Cage Assembly	1
43	1300/8	Pawl Gear	1
44	1300/7	Ratchet Gear	1
45	15055119	Washer	1
46	15044116	Drum Washer	1

15044121

47	~~1301/SA3~~	Cage Assembly	3
48A	15055102	Drum, Bronze	1
48B	15055202	Drum, Alloy	1
48C	15055302	Drum, Stainless Steel	1

Spare Parts Kits

Model 55

Cat No 19755400

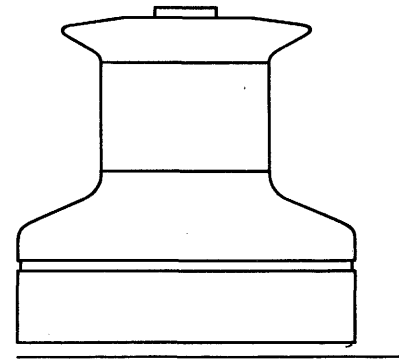
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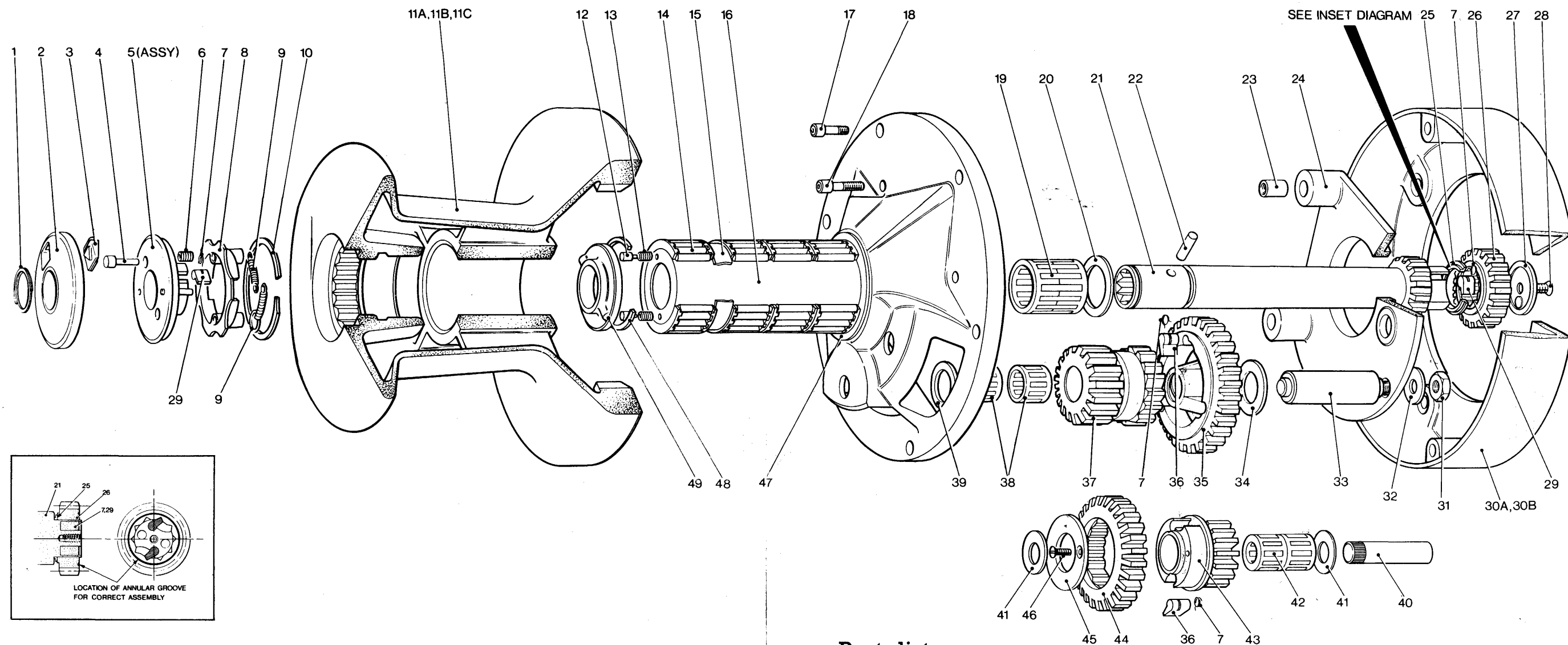
- 1 x Pin Pt No 15044119
- 1 x Washer Pt No 1301/19
- 1 x Washer Pt No 1301/11
- 1 x Washer Pt No 1300/22
- 1 x Washer Pt No 15055119
- 1 x Washer Pt No 15025107
- 2 x Plunger 1300/24
- 2 x Spring Pt No 1300/20
- 1 x Plunger Pt No 15044111
- 1 x Spring Pt No 15044112
- 4 x Pawl Pt No 1264/8
- 4 x Pawl Pt No 1260/8
- 8 x Spring Part No 1260/7
- 1 x Circlip Pt No B2075
- 1 x Circlip Pt No B2083
- 2 x Spring Pt No 15044113

C2 Replace plunger (4) and compression spring (6).
D2 Engage closing ring (8) with compression spring and plunger and holding pawls closed, insert ring into recess.
E2 Ensure closing ring (8) seats correctly at base of recess. Re-insert circlip (10) and engage with groove provided.
F2 Engage two springs (9) with pillars provided on closing ring(8).
G2 Check top cap mechanism for correct operation, as prescribed in point (F). Oil lightly.
H2 Reassemble and check winch as points N-P.
I2 If winch fails to perform correctly, recheck servicing technique or contact your nearest Lewmar service point.

Lewmar
Three speed winches

Model 65
Mark II



**Top Cap Maintenance.**

E2 To dismantle top cap assembly complete, remove large circlip (10) disengage two springs (9) close pawls and withdraw closing ring (8). Remove plunger (4) and compression spring (6). Remove two pawls (29) and two pawl springs (7).

F2 Carefully clean all components.

G2 Reassemble two pawls (29) and two pawl springs (7). Lightly oil.

H2 Replace plunger (4) and compression spring (6).

I2 Engage closing ring (8) with compression spring and plunger and holding pawls closed, insert closing ring into recess.

J2 Ensure closing ring (8) seats correctly at base of recess.

Re-insert circlip (10) and engage with groove provided.

K2 Engage two springs (9) with pillars provided on closing ring (8).

L2 Check top cap mechanism for correct operation, as prescribed in point (F). Oil lightly.

M2 Reassemble and check winch as points N-P.

N2 If winch fails to perform correctly recheck servicing technique or contact your nearest Lewmar service point.

Spare Parts Kits

Model 65 Mark II

Cat No 19765400

Contents

3 x Washer Pt No 1301/19
1 x Washer Pt No 1301/11
1 x Washer Pt No 15025107
4 x Pawl Pt No 1260/8
4 x Pawl Pt No 1264/8
8 x Spring Pt No 1260/7
2 x Plunger Pt No 1300/24
2 x Spring Pt No 1300/20
1 x Plunger Pt No 15044111
1 x Spring Pt No 15044112
1 x Pin Pt No 15044119
1 x Circlip Pt No B2077
1 x Circlip Pt No B2075
1 x Circlip Pt No B2083
2 x Spring Pt No 15044113

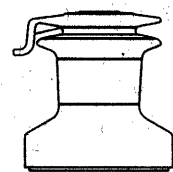
Parts list

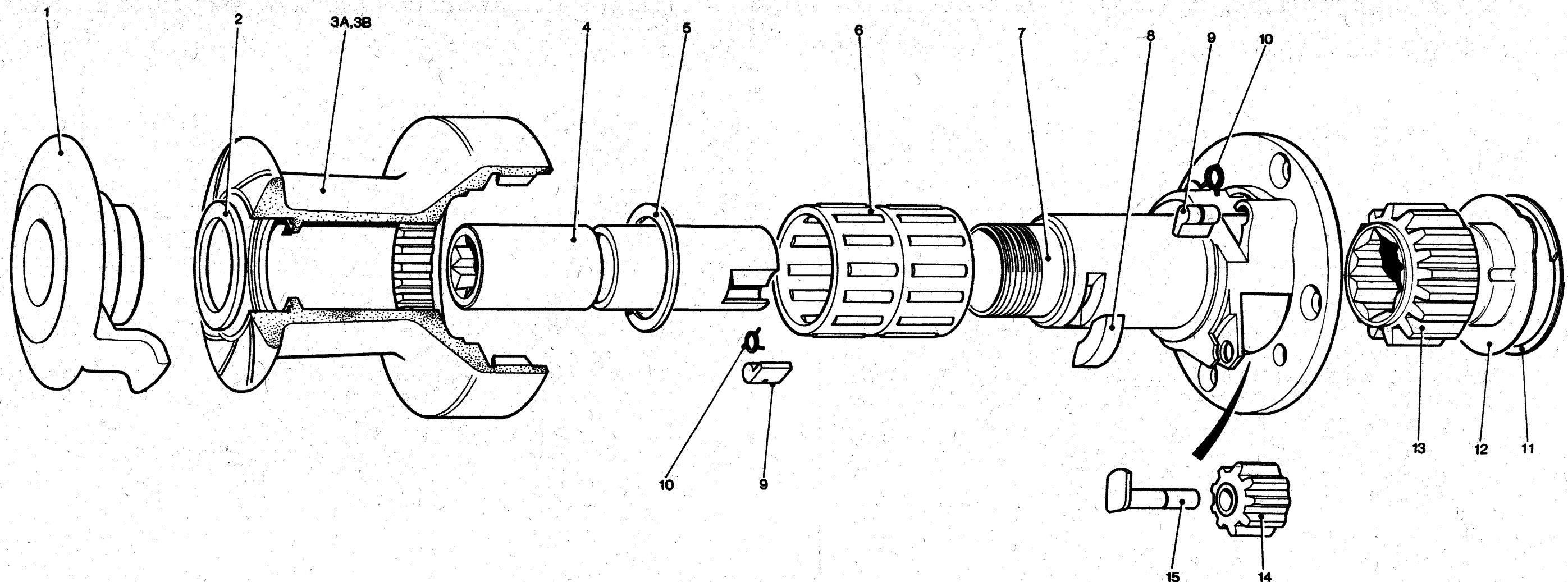
Item Number	Part Number	Description	No. Off
1	B0275	Circlip, Spirolox	1
2	15065106	Top Cap Cover	1
3	15044114	Push Button	1
4	15044111	Plunger	1
5	15044104	Top Cap Assembly	1
6	15044112	Spring	1
7	1260/7	Pawl Spring	9
8	15044106	Closing Ring	1
9	15044113	Spring	2
10	B2083	Circlip	1
11A	15065102	Drum, Bronze	1
11B	15065202	Drum, Alloy	1
11C	15065302	Drum, Stainless Steel	1
12	1300/24	Plunger	2
13	15065202	Spring 151372042	1
14	15044114	Cage Assembly	4
15	15065115	Spacer	1
16	15065201	Centre Stem	1
17	B0714	Socket Head Cap Screw 3/8" 16 U.N.C. x 3/4" long	6
18	B0698	Socket Head Cap Screw 5/16" 18 U.N.C. x 1 1/2" long	3
19	1264/SA2	Cage Assembly	1
20	1300/21	Washer	1
21	15065103	Spindle	1
22	15044119	Drive Pin	1

23	15065111	Hollow Dowel	3
24	15065105	Bridge Piece	1
25	15025107	Spacer	1
26	15065116	Ratchet Gear	1
27	15016107	Spindle End Cap	1
28	B0515	Countersunk Screw 1/4" U.N.C. x 1/2" long	1
29	1260/8	Pawl	4
30A	15065104	Base, Bronze	1
30B	15065204	Base, Alloy	1
31	B1009	Locknut, 1/2" BSF	1
32	B1202	Washer	1
33	15080009	Spindle	1
34	B2451	Washer	1
35	5080008	Pawl Gear	1
36	1264/8	Pawl	5
37	15080007	Output Gear	1
38	1337/SA2	Cage Assembly	2
39	15080014	Washer	1
40	1302/13	Spindle	1
41	1301/19	Washer	2
42	1301/SA2	Cage Assembly	2
43	1302/8	Pawl Gear	1
44	1302/7	Ratchet Gear	1
45	1302/17	Retaining Plate	1
46	B0511	Countersunk Screw 2BA x 3/8" long	2
47	15044116	Washer	1
48	15044118	Collet	2
49	15044105	Clutch Plate	1

Lewmar
Self-tailing winches

Model 16 ST



**Maintenance No. 16 ST**

A Using a soft mallet or wooden block and hammer, loosen top cap (1), with a firm tap in an anti-clockwise direction.

B Unscrew and remove top cap (1) from centre stem (7).

C Lift drum (3) from centre stem (7).

D Remove washer (2) from drum (3) and washer (5) from centre stem (7).

E Remove bearings (6) from centre stem (7).

F Extract key (8) from centre stem (7).

G Remove spindle (4) from centre stem (7) by turning in a clockwise direction and lifting.

H Remove idler gear (14) from centre stem (7) by turning and lifting retaining spindle (15).

I Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.

J Lightly grease ratchet gear (13) in centre stem (7).

K Check that pawls and springs (9 & 10) in centre stem (7) are free and oil lightly.

L Replace idler gear (14) and retaining spindle (15). Lightly grease idler gear (14).

M Check that pawls and springs (9 & 10) in spindle (4) are free and oil lightly.

N Lightly grease spindle (4) and replace in centre stem (7) by turning in a clockwise direction.

O Insert key (8) into centre stem (7) ensuring that key is located in groove of spindle (4).

P Replace bearings (6) over centre stem (7) and lightly grease.

Q Replace washer (5) over centre stem (7).

R Lightly grease drum gear teeth. Refit drum (3) over centre stem (7) and replace washer (2) over centre stem (7).

S Screw top cap (1) to centre stem (7), tighten with a firm tap using a soft mallet or wooden block and hammer.

N.B. When stripping winch, note colour and position of washers (2 & 5) and replace in same order.

If ratchet gear (13) is damaged:

T Remove drum (3) from winch as described above (A) to (C).

U Remove winch from boat and strip as described above (D) to (H).

V Release ratchet gear (13) from winch base by removing circlip (11) and retaining plate (12).

W Replace ratchet gear (13), retaining plate (12) and circlip (11).

X Clean and reassemble as above (I) to (S).

Spare Parts Kit

Model No 16 ST

Part No 19716600

Contents

1 x Key Pt No 15008005

4 x Spring Pt No 1260/7

4 x Pawl Pt No 1260/8

1 x Washer Pt No 15008004

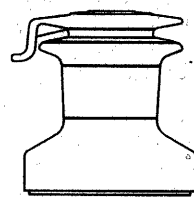
1 x Washer Pt No 15016010

Parts list

Item Number	Part Number	Description	No. Off
1	15016604	Stripper Nut/ Top Cap	1
2	15016010	Washer	1
3A	15016402	Drum (Bronze)	1
3B	15016502	Drum (Alum)	1
4	15016603	Spindle	1
5	15008004	Washer	1
6	15008007	Cage Assembly Bearing	2
7	15016601	Centre Stem	1
8	15008005	Key	1
9	1260/8	Pawl	4
10	1260/7	Pawl Spring	4
11	B2085	Spirolox Circlip	1
12	15016007	Retaining Plate	1
13	15016016	Ratchet Gear	1
14	15016005	Idler Gear	1
15	15016004	Idler Spindle	1

Lewmar Self-tailing winches

Model 30 ST



Maintenance No. 34 ST (Spring Loaded Jaw)

Routine Maintenance.

- A** Loosen stripper plate (2) by firmly tapping in an anti-clockwise direction with soft faced mallet.
- B** Unscrew 6 x 1/4" UNC socket head screws (23) lift off top plate (1) and stripper plate (2). Unscrew nut (3) and remove thrust washer (22).
- C** Lift off drum (18).
- D** Clean off excess grease and salt deposits from bearing surface of drum (18), centre stem (8) and roller bearings (9).
- E** Check free operation of pawls (7) in upper part of drum.
- F** Check free operation of ratchet gear assembly (12-16) by rotating large gear.
- G** Check free rotation of spindle (11) in centre stem (8).
- H** If satisfactory proceed with routine maintenance. If not continue with **Full Service Procedure**.
- I** Lightly grease the bore of the drum (18) and roller bearings (9).
- J** Lightly oil ratchet gear assembly (12-16) and centre spindle (11).
- K** Apply grease sparingly to gear teeth of ratchet assembly (12-16). Lightly oil pawls (7). Reassemble drum (18) to centre stem (8) by introducing drum over centre stem and engaging pawls in the ratchet track by rotating the drum in a clockwise direction.
- L** Rotate drum to check freedom of pawl movement and correct engagement.
- M** Reassemble nut (3) and washer (22) and screw home. Replace stripper plate (2) and top plate (1). Insert 6 x 1/4" UNC socket head screws and tighten firmly. With soft faced mallet tap stripper plate clockwise to tighten. **DO NOT USE FORCE.**
- N** Check free rotation of drum (18) and using handle, centre spindle (11).

Full Annual Service

Note.

- To service completely the winch must be removed from the deck by removal of the 5 x 1/4" UNC c'sk head bolts securing the centre stem.
- O** Remove the drum/stripper assembly as points A-C.
- P** Remove centre stem from deck.
- Q** Support the centre stem assembly (8) on its base on a firm structure. (Work bench etc.)

- Ensure the lower exit of bearing spindle (12) is not covered. Using a flat ended drift tap out the bearing spindle **Downwards**.
- R** Remove the ratchet gear assembly (14-16).
- S** Separate the upper and lower gears (14-16).
- T** Remove two pawls (15) and two springs (6) from pawl gear (16).
- U** Remove two bearings (9) and support washer (10) from centre stem (8).
- V** Carefully prise out retaining key (17) from centre stem (8).
- W** Withdraw centre spindle (11) from centre stem (8).
- X** Inspect three pawls (7) in upper portion of drum for freedom of movement. If pawls stick or are jammed the self tailing jaw mechanism must be removed to service (see later notes).
- Y** Carefully wash drum, centre stem, spindle, roller bearings gears, washers, pawls and pawl springs. Lightly grease drum bore, roller bearings, centre stem bearing area and spindle.
- Z** Insert centre spindle (11) into centre stem (8). Replace key (17). Replace two bearings (9) and washer (10) on centre stem (8).
- A1** Replace two pawls and two pawl springs in pawl gear (16). Assemble to ratchet gear (14) noting correct location of annular groove (see sketch). Put washer (13) in place.
- B1** Support the centre stem on the gear aperture shoulder and insert the ratchet gear assembly (13-16) into engagement with centre spindle (11).
- C1** Insert the gear spindle (12) and engage with the ratchet gear assembly (13-16). Ensure correct line up.
- D1** With drift tap the gear spindle into place.
- E1** Reassemble and check winch as points (I-N).
- F1** If winch fails to perform correctly recheck servicing technique or contact your nearest Lewmar Service point.

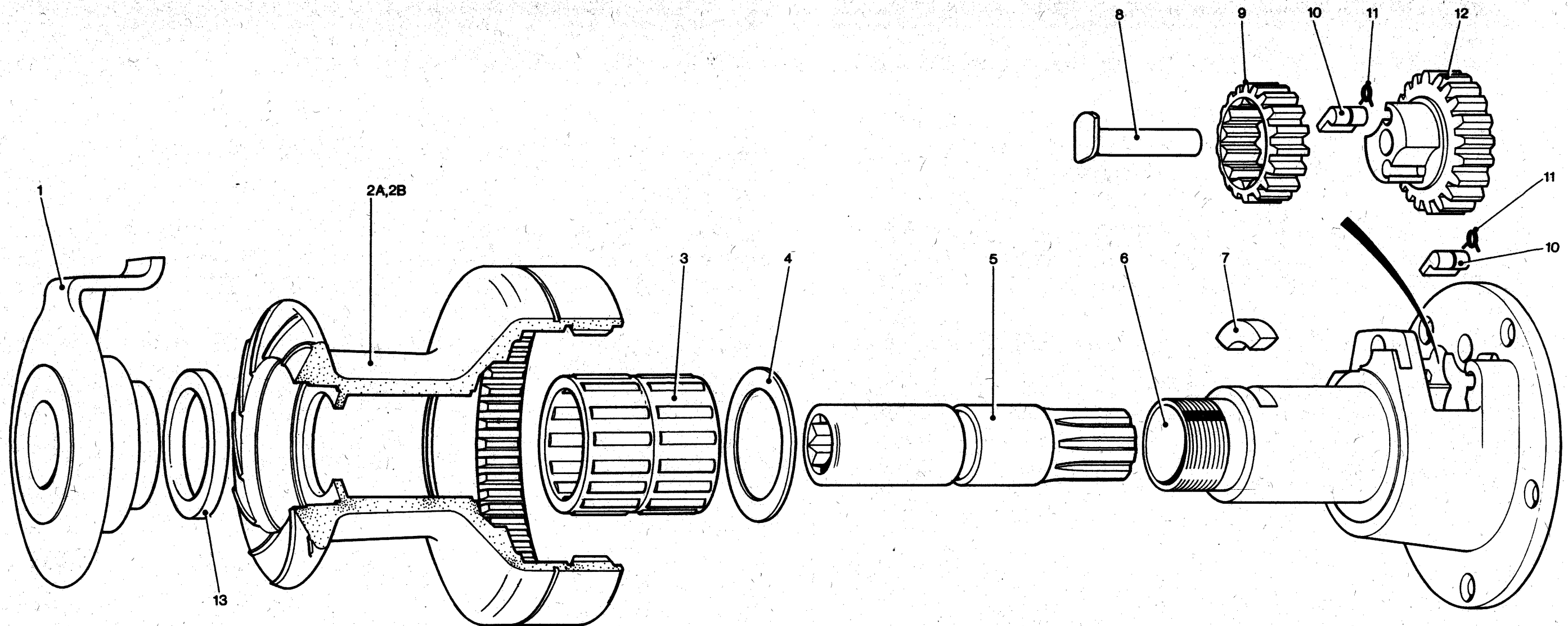
Spring Loaded Self Tailing Jaws Maintenance

The spring loaded jaws should require attention only infrequently. If it is necessary for any reason adopt the following procedure.

- G1** Remove drum/stripper assembly as points A-C.
- H1** Remove 3 x 1/4" UNC socket head screws 1 1/4" long (4) from retaining plate (21).

Note.

- When releasing screws, retaining plate must be restrained firmly against spring pressure. Use clamp or firm hand pressure.
- I1** Lift off retaining plate (21) and remove 3 spacers (5) and six springs (20). Remove upper crown plate (19).
- J1** Remove three pawls (7) and three pawl springs (6).
- K1** The self tailing jaw components can now be cleaned and reassembled. Only the pawls require lubrication.
- L1** Reassemble three pawls (7) and three pawl springs (6) to drum (18). Oil lightly.
- M1** Replace upper crown plate (19) into recess in drum (18). Locate slots over screw holes for access.
- N1** Replace six springs (20) over dimples in upper crown plate (19).
- O1** Replace three spacers (5) in recesses in retaining plate (21). Locate retaining plate (21) and spacers (5) over springs. Align spacers with screw holes in drum (18).
- P1** Insert 3 x 1/4" UNC socket screws 1 1/4" long (4) into retaining plate (21). Depress springs, engage screws and retighten firmly.
- Q1** Reassemble drum/stripper plate assembly as points (I-N).

**Maintenance No. 30 ST**

A Using a soft mallet or wooden block and hammer, loosen top cap (1) with a firm tap in an anti-clockwise direction.

B Unscrew and remove top cap (1) from centre stem (6).

C Lift drum (2) from centre stem (6).

D Remove washer (13) from drum (2).

E Remove bearings (3) and washer (4) from centre stem (6).

F Extract key (7) from centre stem (6).

G Remove spindle (5) from centre stem (6).

H Remove ratchet gear assembly (9 & 12) from centre stem (6) by turning and lifting retaining spindle (8).

I Remove ratchet gear (9) from pawl gear (12).

J Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.

K Check that pawls and springs (10 & 11) in centre stem (6) are free and oil lightly.

L Check that pawls and springs

(10 & 11) in pawl gear (12) are free and oil lightly.

M Replace ratchet gear (9) on pawl gear (12) ensuring that the recess on ratchet gear (9) fits over shoulder of pawl gear (12).

N Replace ratchet gear assembly (9 & 12) and retaining spindle (8). Turn and lock retaining spindle (8) in centre stem (6). Lightly grease output gear assembly (9 & 12).

O Lightly grease spindle (5) and replace in centre stem (6).

P Insert key (7) into centre stem (6) ensuring that key is located in groove of spindle (5).

Q Replace washer (4) and bearings (3) over centre stem (6) and lightly grease.

R Lightly grease drum gear teeth. Refit drum (2) over centre stem (6) and replace washer (13) over centre stem (6).

S Screw top cap (1) to centre stem (6). Tighten with a firm tap using a soft mallet or wooden block and hammer.

N.B. When stripping winch, note colour and position of washers

(13 & 4) and replace in same order.

Spare Parts Kit

Model No 30 ST

Part No 19730600

Contents

1 x Key Pt No 15008005

4 x Spring Pt No 1260/7

4 x Pawl Pt No 1260/8

1 x Washer Pt No 15030007

1 x Washer Pt No 15030607

Parts list

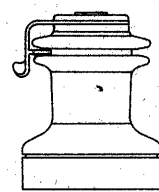
Item Number	Part Number	Description	No. Off
1	15030604	Stripper Nut/	
		Top Cap	1
	B2404	Helicoil	1
2A	15030402	Drum (Bronze)	1
2B	15030502	Drum (Aluminium)	1
3	15008007	Cage Assembly	
		Bearing	2
4	15030007	Washer	1
5	15030603	Spindle	1
6	15030601	Centre Stem	1
7	15008005	Key	1
8	15030004	Idler Spindle	1
9	15030005	Ratchet Gear	1
10	1260/8	Pawl	4
11	1260/7	Pawl Spring	4
12	15030006	Pawl Gear	1
13	15030607	Washer	1

* Fixed Assembly

Lewmar
Self-tailing winches

Model 34 ST

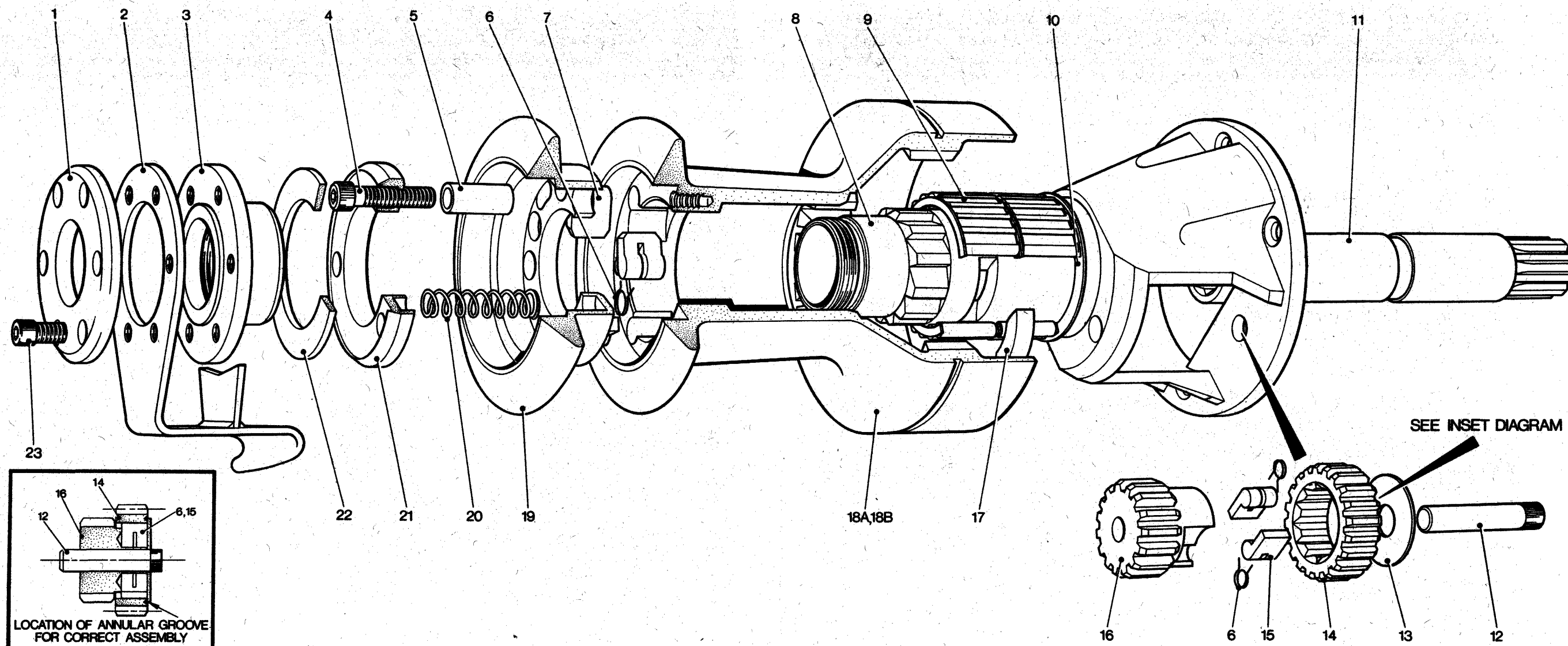
(Spring Loaded Jaw)



Lewmar

Self-Tailing Winches

No 34ST (Spring Loaded Jaw)



Parts list

Item Number	Part Number	Description	No. Off
1	15044611	Top Cap	1
2	15040610	Stripper Plate	1
3	15044607	Nut	1
4	B0724	Socket Head Cap Screw $\frac{1}{4}$ x 20 x $1\frac{1}{2}$ Long	3
5	15040612	Spacer	3
6	1260/7	Pawl Spring	5
7	1264/8	Pawl	3
8	15040801	Centre Stem	1
9	1260/SA2	Cage Assembly	2
10	1260/10	Thrust Washer	1
11	16034604	Spindle	1
12	1260/6	Intermediate Gear Spindle	1
13	1260/9	Intermediate Gear Washer	1
14	1260/5	Intermediate Gear Pawl Track	1
15	1260/8	Pawl	2
16	15034603	Intermediate Gear Pawl Holder	1
17	15040605	Key	1
18A	15034502	Drum (Alloy)	1

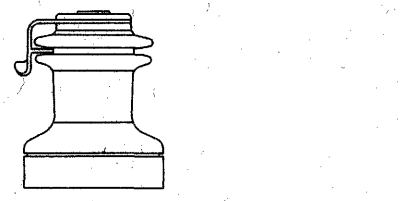
18B	15040602	Drum, Stainless Steel	1
19	15034605	Upper Crown Plate	1
20	15040613	Spring	6
21	15040609	Retaining Plate	1
22	B2454	Thrust Washer	1
23	B0723	Socket Head Cap Screw $\frac{1}{4}$ x 20 UNC x $\frac{1}{2}$ Long	6

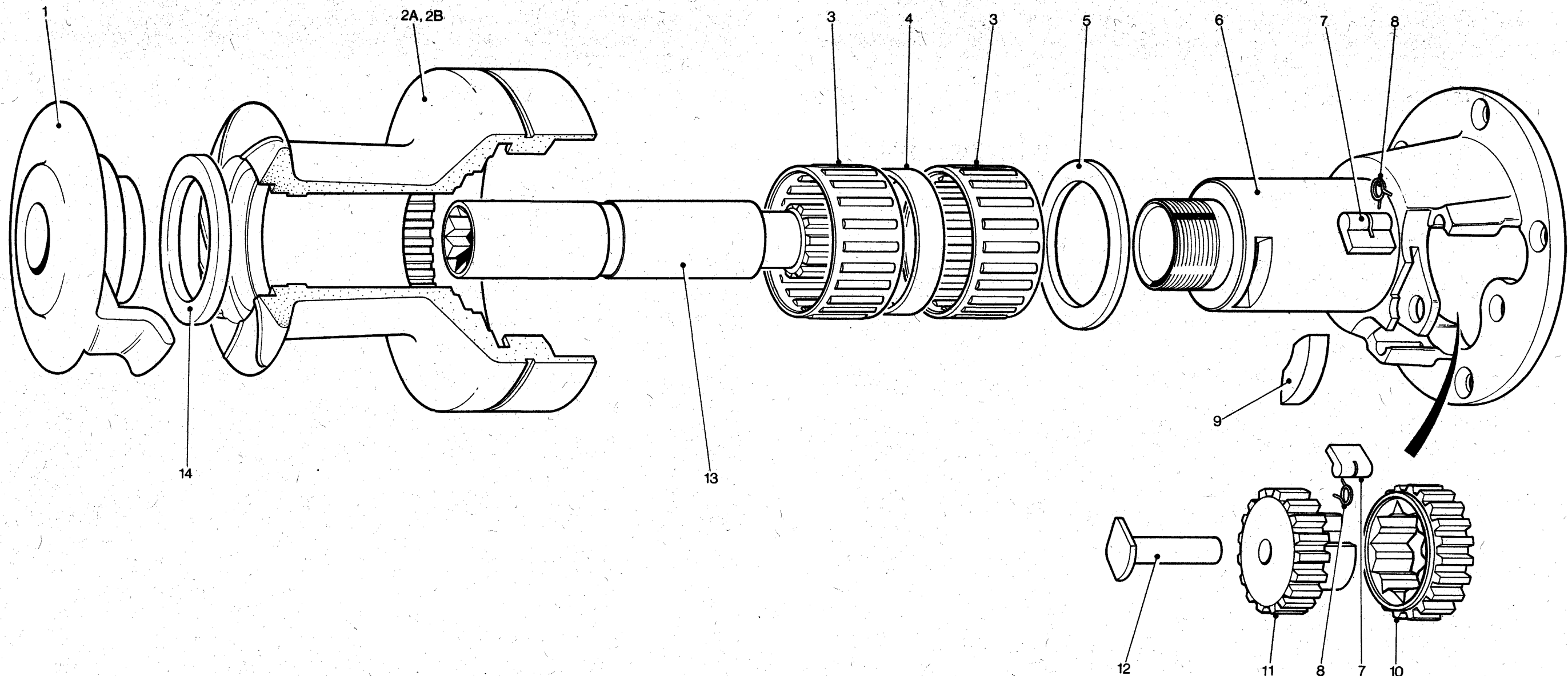
Spare Parts Kit. Model 34 ST Cat. No.19740700

Contents:—
 2 x Pawl Pt. No. 1260/8
 5 x Pawl Springs Pt. No. 1260/7
 3 x Pawl Pt. No. 1264/8
 1 x Washer Pt. No. 1260/9
 1 x Key Pt. No. 15040605
 1 x Washer Pt. No. B2454.

Lewmar
Self-tailing winches

Model 34 ST
(Fixed Top)





Maintenance No. 34 ST (Fixed top)
A Using a soft mallet or wooden block and hammer, loosen top cap (1) with a firm tap in an anti-clockwise direction.
B Unscrew and remove top cap (1) from centre stem (6).
C Lift drum (2) from centre stem (6).
D Remove washer (14) from drum (2).
E Remove bearings (3), spacer (4) and washer (5) from centre stem (6).
F Extract key (9) from centre stem (6).
G Remove spindle (13) from centre stem (6).
H Remove ratchet gear assembly (10 & 11) from centre stem (6) by turning and lifting retaining spindle (12).
I Remove ratchet gear (10) from pawl gear (11).
J Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
K Check that pawls and springs (7 & 8) in centre stem (6) are

free and oil lightly.
L Check that pawls and springs (7 & 8) in pawl gear (11) are free and oil lightly.
M Replace ratchet gear (10) on pawl gear (11) ensuring that the recess on ratchet gear (10) fits over shoulder of pawl gear (11).
N Replace ratchet gear assembly (10 & 11) and retaining spindle (12). Turn and lock retaining spindle (12) in centre stem (6). Lightly grease ratchet gear assembly (10 & 11).
O Lightly grease spindle (13) and replace in centre stem (6).
P Insert key (9) into centre stem (6) ensuring that key is located in groove of spindle (13).
Q Replace washer (5), bearings (3) and spacer (4) over centre stem (6) and lightly grease.
R Lightly grease drum gear teeth. Refit drum (2) over centre stem (6) and replace washer (14) over centre stem (6).
S Screw top cap (1) to centre stem (6). Tighten with a firm tap

using soft mallet or wooden block and hammer.

N.B. When stripping winch, note colour and position of washers (5 & 14) and replace in same order.

Parts list

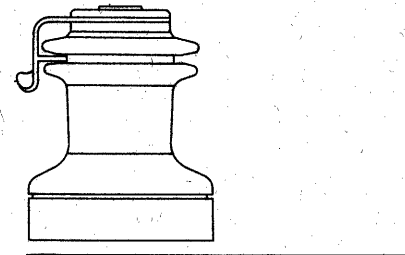
Item Number	Part Number	Description	No. Off
1	13034634	Stripper Nut/Top Cap	1
	B2404	Helicoil	1
2A	15034432	Drum (Bronze)	1
2B	15034532	Drum (Alum)	1
3	15010007	Cage Assembly Bearing	2
4	15010008	Spacer	1
5	15034637	Washer	1
6	15034631	Centre Stem	1
7	1260/8	Pawl	4
8	1260/7	Pawl Spring	4
9	15010005	Key	1
10	15034635	Ratchet Gear	1
11	15034636	Pawl Gear	1
12	15030004	Idler Spindle	1
13	15034633	Spindle	1
14	15034638	Washer	1

*Fixed Assembly

Spare Parts Kit
Model No 34 ST
Part No 19734600
Contents
1 x Key Pt No 1501005
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
1 x Washer Pt No 15034637
1 x Washer Pt No 15034638

Lewmar Self-tailing winches

Model 42 ST



Routine Maintenance No. 44 ST
A Release four allen screws (31) and remove top cap (1).
B Remove split collets (30).
C Lift off stripper arm (29).
D Remove flanged bush (28).
E Lift drum assembly (27) off centre stem assembly (8).
F Remove bearings (9), spacer (32) and washer (10).
G Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
H Replace washer (10) bearings (9) and spacer (32) and grease lightly. Grease lightly ratchet gear assemblies (25 & 17) (22 & 21).
I Lightly grease drum gear teeth. Replace drum assembly (27) on centre stem assembly (8).
J Replace flanged bush (28) in upper crown plate (3).
K Fit stripper arm (29) checking it is correctly located for rope lead and properly positioned on stripper ring (4).
L Refit split collets (30).
M Replace top cap (1). Fasten with four allen screws (31).

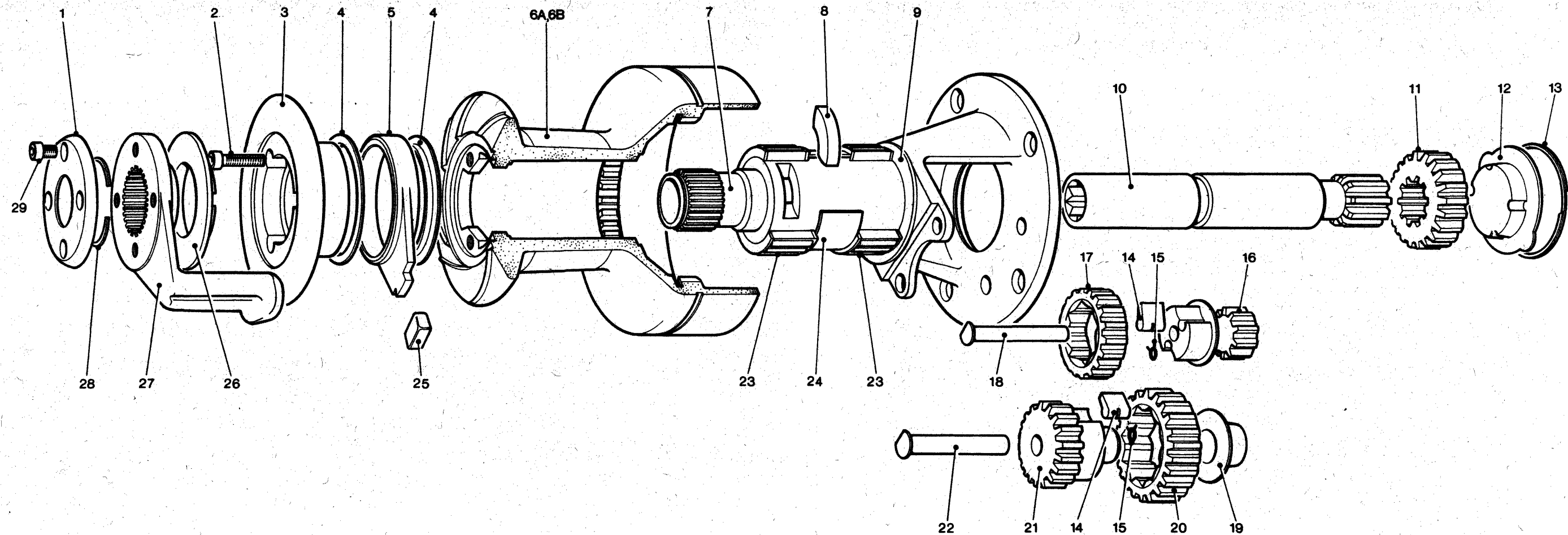
Full Annual Service

To service completely, the winch must be removed from the boat, releasing all six countersunk screws which secure the centre stem.

N Remove the drum/stripper assembly as in A — F above.
O Remove centre stem (8) from boat.
P Remove key retaining ring (7).
Q Remove keys (26) from centre stem (8).
R Withdraw spindle assembly (13) from centre stem (8), complete with washer (12).
S Release screw (19) and remove cap (18) from spindle (13).
T Lift off ratchet gear (17).
U Firmly support the centre stem assembly (8) upside down ensuring that the lower exits of the bearing spindles (20 & 24) are not covered.
V Using a flat-ended drift, tap out bearing spindles (20 & 24) DOWNWARDS.
W Remove ratchet gear assemblies and washers.
X Separate ratchet gear assembly (25 & 17).
Y Separate ratchet gear assembly (21 & 22).
Z Remove bearing (11) from centre stem (8).

A.1. Remove upper crown plate (3) by releasing three allen screws (2).
B.1. Lift off stripper ring assembly (4)

C.1. Release lower crown plate (6) by removing three allen screws (5).
D.1. Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
E.1. Replace lower crown plate (6) retaining it with three allen screws (5).
F.1. Replace stripper ring as assembly (4) in lower crown plate (6).
G.1. Replace upper crown plate (3) with three allen screws (2).
H.1. Replace bearing (11) in centre stem (8) and lightly grease.
I.1. Check that pawls and springs (14 & 16) in spindle (13) are free and oil lightly.
J.1. Lightly grease inner surface of ratchet gear (17) and fit to spindle (13) ensuring correct location of pawls (14) as per inset detailed diagram A.
K.1. Fit cap (18) with retaining screw (19) to spindle (13).
L.1. Fit washer (12) to spindle (13).
M.1. Lightly grease spindle (13) and replace it in centre stem (8).
N.1. Fit keys (26) in centre stem (8) ensuring that they are located in groove on spindle (13).
O.1. Replace key retaining ring (7) on centre stem (8).
P.1. Check that pawls and springs (14 & 16) in pawl gear (25) are free and oil lightly.
Q.1. Lightly grease inner surface of ratchet gear (17) and fit pawl gear (25).
R.1. Check that pawls and springs (14 & 16) in pawl gear (21) are free and oil lightly.
S.1. Lightly grease inner surface of ratchet gear (22) and fit pawl gear (21) ensuring correct assembly as per insert detailed diagram B.
T.1. Replace ratchet gear assembly (21 & 22) with washer (23) in centre stem (8) ensuring that ratchet gear (22) is at the top. Replace bearing spindle (20) driving home with flat-ended drift.
U.1. Replace ratchet gear assembly (17 & 25) with washer (23) in centre stem (8) ensuring that ratchet gear (17) is at the bottom. Replace bearing spindle (24) driving home with flat-ended drift.
V.1. Lightly grease both ratchet gear assemblies.
W.1. Refasten centre stem assembly (8) to boat.
X.1. Reassemble winch as in H — M above.



Maintenance No. 42 ST

- A Release four allen screws (29) and remove top cap (1).
B Remove split collets (28).
C Lift off stripper arm (27).
D Remove flanged bush (26).
E Lift drum assembly (6) off centre stem assembly (7).
F Remove bearings (23), spacer (24) and washer (9).
G Remove key (8) from centre stem (7).
H Withdraw spindle (10) from centre stem (7).
I Release ratchet gear assemblies (20 & 21) (16 & 17) from centre stem (7) by removing retaining spindles (22 & 18).
J Remove drive gear (11) from retaining plate (12).
K Separate ratchet gear assembly (20 & 21).
L Separate ratchet gear assembly (16 & 17).
M Remove upper crown plate (3) by releasing three allen screws (2).
N Lift off stripper ring assembly (4 & 5 & 25).
O Clean thoroughly all parts

- using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
P Replace stripper ring assembly (4 & 5 & 25) in drum (6).
Q Replace upper crown plate (3) with three allen screws (2).
R Check that pawls and springs (14 & 15) in pawl gear (21) are free and oil lightly.
S Lightly grease inner surface of ratchet gear (20) and fit pawl gear (21).
T Check that pawls and springs (14 & 15) in pawl gear (16) are free and oil lightly.
U Lightly grease inner surface of ratchet gear (17) and fit pawl gear (16).
V Lightly grease and replace drive gear (11) on retaining plate (12).
W Lightly grease and replace spindle (10) in centre stem (7).
X Fit key (8) in centre stem (7) ensuring it is located in groove on spindle (10).
Y Replace ratchet gear assembly (16 & 17) in centre stem (7) retaining it with spindle (18).

- Z Check bush (19) in centre stem (7) and replace ratchet gear assembly (20 & 21) retaining it with spindle (22).
A.1. Replace washer (9), bearings (23) and spacer (24) on centre stem (7).
B.1. Lightly grease bearings and ratchet gear assemblies.
C.1. Lightly grease drum gear teeth. Replace drum assembly (6) on centre stem assembly (7).
D.1. Replace flanged bush (26) in upper crown plate (3).
E.1. Fit stripper arm (27) checking it is correctly located for rope lead and properly positioned on stripper ring (5).
F.1. Refit split collets (28).
G.1. Replace top cap (1). Fasten with four allen screws (24).

NOTE If retaining plate (12) has to be replaced, remove winch from boat and release circlip (13).

Parts list

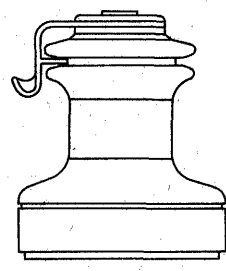
Item Number	Part Number	Description	No. Off
1	15042607	Top Cap	1
2	B0721	Socket Head Cap Screw 1/2" x 20 UNC x 1" long	3
3	15042604	Upper Crown Plate	1
4	15042641	Stripper Ring Insert	2
5	15042606	Stripper Ring	1
6A	15042402	Drum (Bronze)	1
6B	15042502	Drum (Alum)	1
7	15042601	Centre Stem	1
8	15010005	Key	1
9	15042010	Washer	1
10	15042603	Spindle	1
11	15042009	Gear	1
12	15016007	Retaining Plate	1
13	B2085	Circlip, Spirolox	1
14	1260/8	Pawl	4
15	1260/7	Pawl Spring	4
16	15042008	Pawl Gear	1
17	15030005	Ratchet Gear	1

18	15042005	Gear Spindle	1
19	15042011	Retaining Bush	1
20	15042006	Ratchet Gear	1
21	15042007	Pawl Gear	1
22	15042004	Gear Spindle	1
23	15010007	Cage Assembly Bearing	2
24	15042012	Spacer	1
25	15042610	Cap	1
26	15042609	Flanged Bush	1
27	15042605	Stripper Arm	1
28	15042608	Split Collet	2
29	B0733	Socket Head Cap Screw 1/2" - 20 UNC x 3/8" long	4

Spare Parts Kit
Model No 42 ST
Part No 19742100
Contents
1 x Key Part No 15010005
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
1 x Washer Pt No 15042010
1 x Circlip Pt No B2075

Lewmar Self-tailing winches

Model 44 ST



Routine Maintenance No. 48 ST

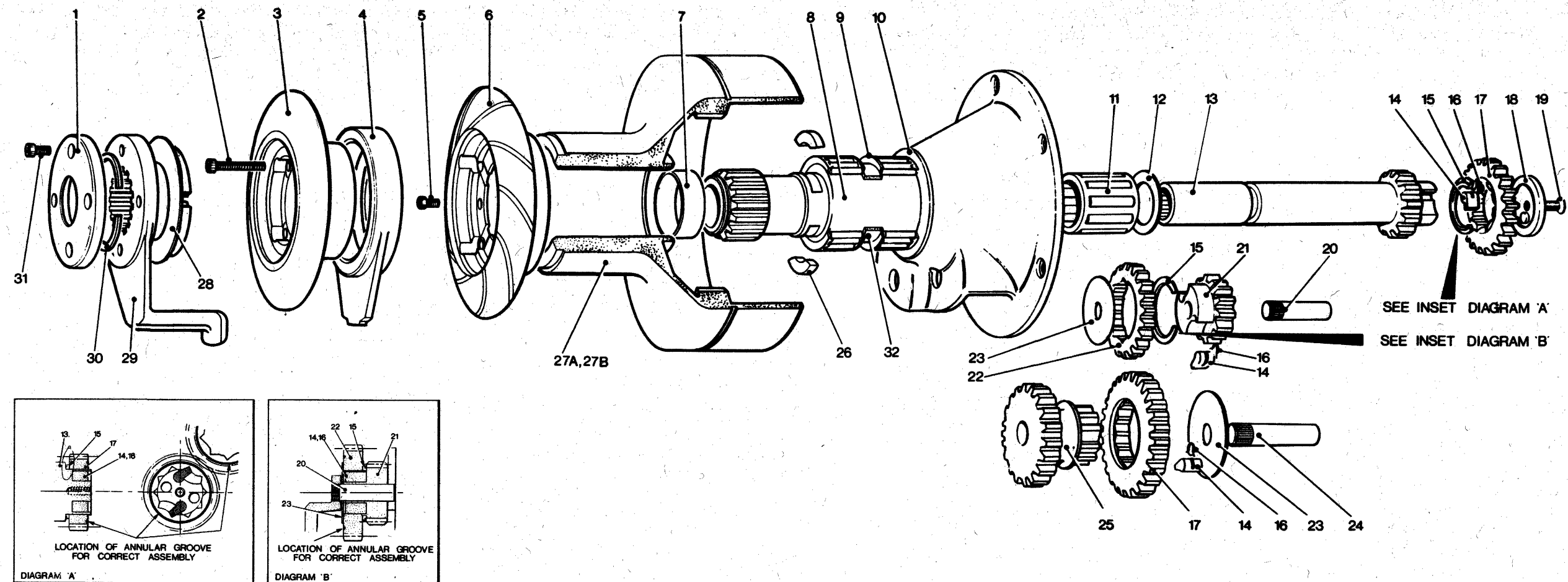
- A Release four allen screws (35) and remove top cap (1).
- B Remove split collets (34).
- C Lift off stripper arm (33).
- D Remove flanged bush (32).
- E Lift drum assembly (7) off centre stem assembly (11).
- F Remove bearings (10) and washer (12).
- G Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
- H Replace washer (12) and bearings (10) and grease lightly. Grease lightly ratchet gear assemblies (30 & 31) (25 & 27).
- I Lightly grease drum gear teeth. Replace drum assembly (7) on centre stem assembly (11).
- J Replace flanged bush (32) in upper crown plate (3).
- K Fit stripper arm (33) checking it is correctly located for rope lead and properly positioned on stripper ring (4).
- L Refit split collets (34).
- M Replace top cap (1). Fasten with four allen screws (35).

Full Annual Service

To service completely, the winch must be removed from the boat, releasing all six countersunk screws which secure the centre stem.

- N Remove the drum/stripper assembly as in A — F above.
- O Remove centre stem (11) from boat.
- P Remove key retaining ring (8).
- Q Remove keys (9) from centre stem (11).
- R Withdraw spindle assembly (15) from centre stem (11), complete with washer (14).
- S Release screw (20) removing cap (19) from spindle (15).
- T Lift off ratchet gear (18).
- U Firmly support the centre stem assembly (11) upside down ensuring that the lower exits of the bearing spindles (22 & 29) are not covered.
- V Using a flat-ended drift, tap out bearing spindles (22 & 29) DOWNWARDS.
- W Remove ratchet gear assemblies and washers.
- X Separate ratchet gear assembly (30 & 31) and remove bearings (24).
- Y Separate ratchet gear assembly (25 & 27) and remove bearing (24).
- Z Remove bearing (13) from centre stem (11).

- A1 Remove upper crown plate (3) by releasing three allen screws (2).
- B1 Lift off stripper ring assembly (4).
- C1 Release lower crown plate (6) by removing three allen screws (5).
- D1 Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
- E1 Replace lower crown plate (6) retaining it with three allen screws (5).
- F1 Replace stripper ring assembly (4) in lower crown plate (6).
- G1 Replace upper crown plate (3) with three allen screws (2).
- H1 Replace bearing (13) in centre stem (11) and lightly grease.
- I1 Check that pawls and springs (21 & 17) in spindle (15) are free and oil lightly.
- J1 Lightly grease inner surface of ratchet gear (18) and fit to spindle (15) ensuring correct location of pawls (21) as per inset detailed diagram.
- K1 Fit cap (19) with retaining screw (20) to spindle (15).
- L1 Fit washer (14) to spindle (15).
- M1 Lightly grease spindle (15) and replace it in centre stem (11).
- N1 Fit keys (9) in centre stem (11) ensuring that they are located in groove on spindle (15).
- O1 Replace key retaining ring (8) on centre stem (11).
- P1 Check that pawls and springs (26 & 17) in pawl gear (31) are free and oil lightly.
- Q1 Lightly grease inner surface of ratchet gear (30) and fit pawl gear (31). Lightly grease bearings (24) and replace in pawl gear (31).
- R1 Check that pawls and springs (26 & 17) in pawl gear (25) are free and oil lightly.
- S1 Lightly grease inner surface of ratchet gear (27) and fit pawl gear (25). Lightly grease bearing (24) and replace in pawl gear (25).
- T1 Replace ratchet gear assembly (25 & 27) with washers (28 & 23) in centre stem (11) ensuring that ratchet gear (27) is at the top. Replace bearing spindle (22), driving home with flat-ended drift.
- U1 Replace ratchet gear assembly (30 & 31) with washers (28 & 23) in centre stem (11) ensuring that ratchet gear (30) is at the bottom. Replace bearing spindle (29), driving home with flat-ended drift.
- V1 Lightly grease both ratchet gear assemblies.
- W1 Refasten centre stem assembly (11) to boat.
- X1 Reassemble winch as in H—M above.



Parts list

Item Number	Part Number	Description	No. Off
1	15044639	Top Cap	1
2	B0729	Socket Head Cap Screw $\frac{1}{4}$ " x 20 UNC x $1\frac{1}{2}$ " long	3
3	15044644	Upper Crown Plate	1
4	15044649	Stripper Ring	1
	15044641	Stripper Ring Insert	2
	15044642	Cap	1
5	B0723	Socket Head Cap Screw $\frac{1}{4}$ " x 20 UNC x $\frac{1}{2}$ " long	3
6	15044635	Lower Crown Plate	1
7	15044638	Collar	1
8	18044631	Centre Stem	1
9	15044121	Cage Assembly Bearing	2
10	15044116	Washer	1
11	1264/SA2	Cage Assembly Bearing	1
12	1300/21	Washer	1
13	15044633	Spindle	1

14	1260/8	Pawl	6
15	15025107	Spacer	2
16	1260/7	Pawl Spring	6
17	15016105	Ratchet Gear	2
18	15016107	Spindle End Cap	1
19	B0515	Countersunk Screw $\frac{1}{4}$ " x 20 UNC x $\frac{1}{2}$ " long	1
20	15044108	Spindle	1
21	15025105	Pawl Gear	1
22	15041105	Ratchet Gear	1
23	15025106	Washer	2
24	15044109	Spindle	1
25	15044107	Output Gear	1
26	15040605	Key	2
27A	15044602	Drum, Stainless Steel	1
27B	15044502	Drum, Alloy	1
28	15044627	Flanged Bush	1
29	15044648	Stripper Arm	1
30	15044637	Split Collar	2
31	B0733	Socket Head Cap Screw $\frac{1}{4}$ " x 20 UNC x $3/8$ " long	4
32	15065115	Spacer	1

Spare Parts Kit

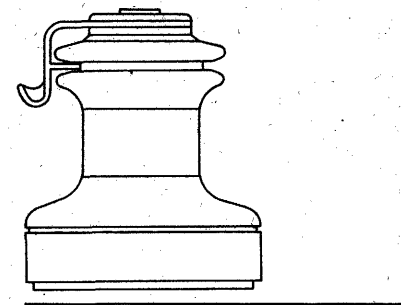
Model No 44 ST
Pt No 19744600

Contents

1 x Washer Pt No 15044116
2 x Washer Pt No 15025106
1 x Washer Pt No 1300/21
2 x Spacer Pt No 15025107
2 x Key Pt No 15040605
6 x Pawl Spring Pt No 1260/7
6 x Pawl Pt No 1260/8

Lewmar Self-tailing winches

Model 48 ST



Routine Maintenance No. 55 ST

- A Release four allen screws (47) and remove top cap (1).
- B Remove split collets (46).
- C Lift off stripper arm (45).
- D Remove flanged bush (44).
- E Lift drum assembly (43) off centre stem assembly (9).
- F Remove bearings (42), spacer (10) and washer (41).
- G Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
- H Replace washer (41), bearings (42) and spacer (10) on centre stem (9) and grease lightly. Grease lightly ratchet gear assemblies (38 & 39) (30 & 32).
- I Lightly grease drum gear teeth. Replace drum assembly (43) on centre stem assembly (9).
- J Replace flanged bush (44) in upper crown plate (3).
- K Fit stripper arm (45) checking it is correctly located for rope lead and properly positioned on stripper ring (4).
- L Refit split collets (46).
- M Replace top cap (1). Fasten with four allen screws (47).

Full Annual Service

- To service completely, the winch must be removed from the boat.
- N Remove the drum/stripper assembly as in A — F above.
 - O Remove centre stem (9) from base plate (20) by releasing three allen screws (11).
 - P Tap off bridge piece (24).
 - Q Remove key retaining ring (7).
 - R Remove keys (8) from centre stem (9).
 - S Withdraw spindle assembly (15) and ratchet gear assemblies (38 & 39) (30 & 32) from centre stem (9).
 - T Release screw (25) and remove cap (19) from spindle (15).
 - U Lift off ratchet gear (26).
 - V Remove bearing (13) and washer (14) from spindle (15) by removing circlip (12).
 - W Remove bearings (33) from ratchet gear assembly (30 & 32). Separate pawl gear (32) from ratchet gear (30) by removing circlip (31).
 - X Separate ratchet gear assembly (38 & 39). Remove bearing (37) from pawl gear (38).
 - Y Remove upper crown plate (3) by releasing three allen screws (2).
 - Z Lift off stripper ring assembly (4).

- A1 Release lower crown plate (6) by removing three allen screws (5).

- B1 Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
- C1 Replace lower crown plate (6) retaining it with three allen screws (5).
- D1 Replace stripper ring assembly (4) in lower crown plate (6).
- E1 Replace upper crown plate (3) with three allen screws (2).
- F1 Check that pawls and springs (16 & 18) in spindle (15) are free and oil lightly.

- G1 Lightly grease inner surface of ratchet gear (26) and fit to spindle (15) ensuring correct location of pawls (16) as per inset detailed diagram.

- H1 Fit cap (19) with retaining screw (25) to spindle (15).

- I1 Fit washer (14) and bearing (13) to spindle (15) retaining them with circlip (12).

- J1 Lightly grease spindle assembly.

- K1 Check that pawls and springs (29 & 18) in pawl gear (32) are free and oil lightly.

- L1 Lightly grease inner surface of ratchet gear (30) and fit pawl gear (32) retaining it with circlip (31). Lightly grease bearings (33) and replace in pawl gear (32).

- M1 Check that pawls and springs (29 & 18) in pawl gear (38) are free and oil lightly.

- N1 Lightly grease inner surface of ratchet gear (39) and fit pawl gear (38). Lightly grease bearing (37) and replace in pawl gear (38).

- O1 Replace washer (40) on spindle (35).

- P1 Replace washer (34) on spindle (27).

- Q1 Replace spindle assembly (15) in centre stem (9) at the same time positioning ratchet gear assemblies (30 & 32) (38 & 39) on spindles (27 & 35).

- R1 Replace washer (28) on spindle (27).

- S1 Replace washer (36) on spindle (35).

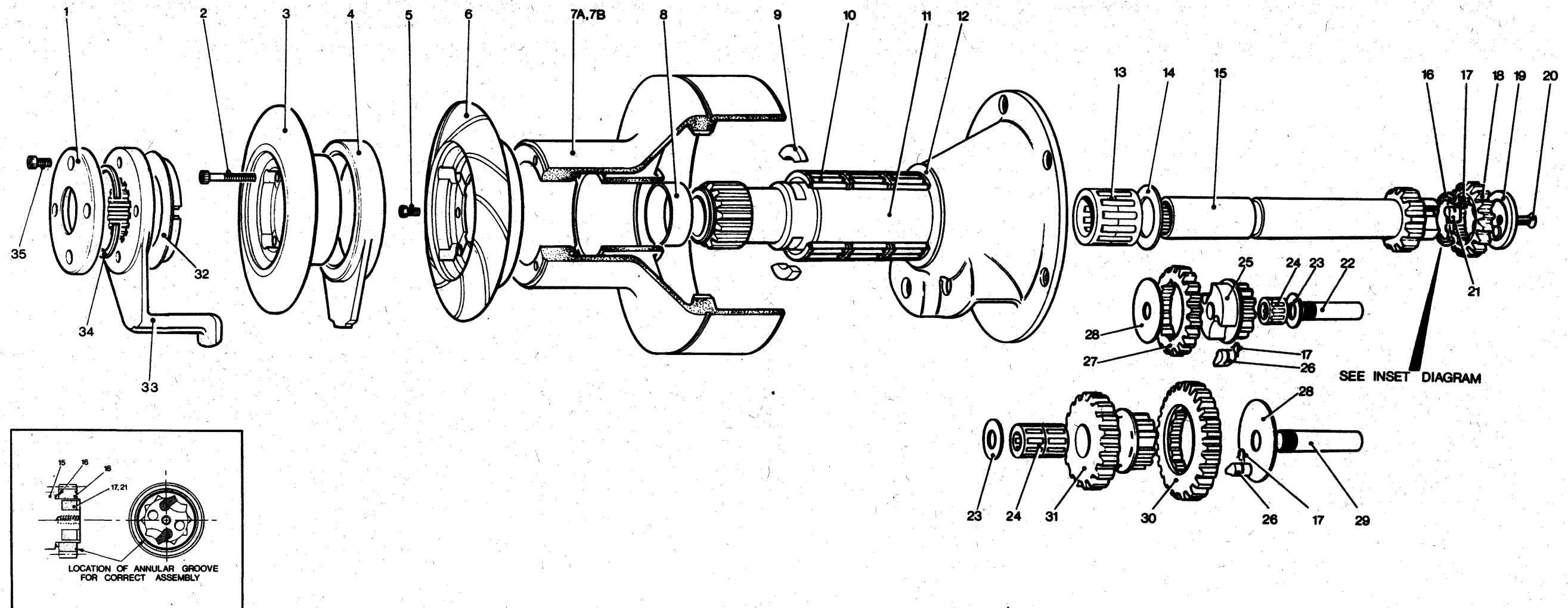
- T1 Replace bridge piece (24) tapping into place with soft mallet.

- U1 Fit keys (8) in centre stem (9) ensuring that they are located in groove on spindle (15).

- V1 Replace key retaining ring (4) on centre stem (9).

- W1 Lightly grease both ratchet gear assemblies.

- X1 Replace centre stem assembly (9) in base (20) ensuring that bridge piece (24) is placed on longest pair of locating bushes (22). Fasten with three allen screws (11).
- Y1 Reassemble winch as in H — M above.



Parts list

Item Number	Part Number	Description	No. Off.
1	15044639	Top Cap	1
2	B0729	Socket Head Cap Screw $\frac{1}{4}$ " x 20 UNC x $1\frac{1}{2}$ " long	3
3	15048644	Upper Crown Plate	1
4	15048649	Stripper Ring	1
	15048641	Stripper Ring Insert	2
	15044642	Cap	1
5	B0723	Skt. Hd. Cap Screw $\frac{1}{4}$ " - 20 UNC x $\frac{1}{2}$ " long	3
6	15048635	Lower Crown Plate	1
7A	15048602	Drum, Stainless Steel	1
7B	15048502	Drum, Alloy	1
8	15044638	Collar	1
9	15040605	Key	2
10	15044121	Cage Assembly Bearing	3
11	18048631	Centre Stem	1
12	15044116	Washer	1

13	1264/SA2	Cage Assembly Bearing	1
14	1300/21	Washer	1
15	15048633	Spindle	1
16	15025107	Spacer	1
17	1260/7	Pawl Spring	6
18	15048104	Ratchet Gear	1
19	15016107	Spindle End Cap	1
20	B0515	Countersunk Screw $\frac{1}{4}$ " x 20 UNC x $\frac{1}{2}$ " long	1
21	1260/8	Pawl	2
22	1300/10	Spindle	1
23	1300/22	Washer	2
24	1300/SA2	Cage Assembly Bearing	3
25	1300/8	Pawl Gear	1
26	1264/8	Pawl	4
27	1300/7	Ratchet Gear	1
28	1264/7	Washer	2
29	1300/9	Spindle	1
30	1300/5	Ratchet Gear	1
31	1300/6	Pawl Gear	1
32	15044627	Flanged Bush	1
33	15048648	Stripper Arm	1
34	15044637	Split Collet	2

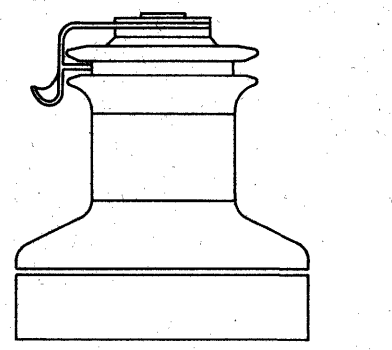
35	B0733	Socket Head Cap Screw $\frac{1}{4}$ " x 20 UNC x $3\frac{3}{8}$ " long	4
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Spare Parts Kit
Model No 48 ST
Pt No 19748600

Contents
 1 x Washer Pt No 15044116
 2 x Washer Pt No 1264/7
 1 x Washer Pt No 1300/21
 2 x Washer Pt No 1300/22
 2 x Key Pt No 15040605
 6 x Pawl Spring Pt No 1260/7
 2 x Pawl Pt No 1260/8
 4 x Pawl Pt No 1264/8

Lewmar Self-tailing winches

Model 55 ST

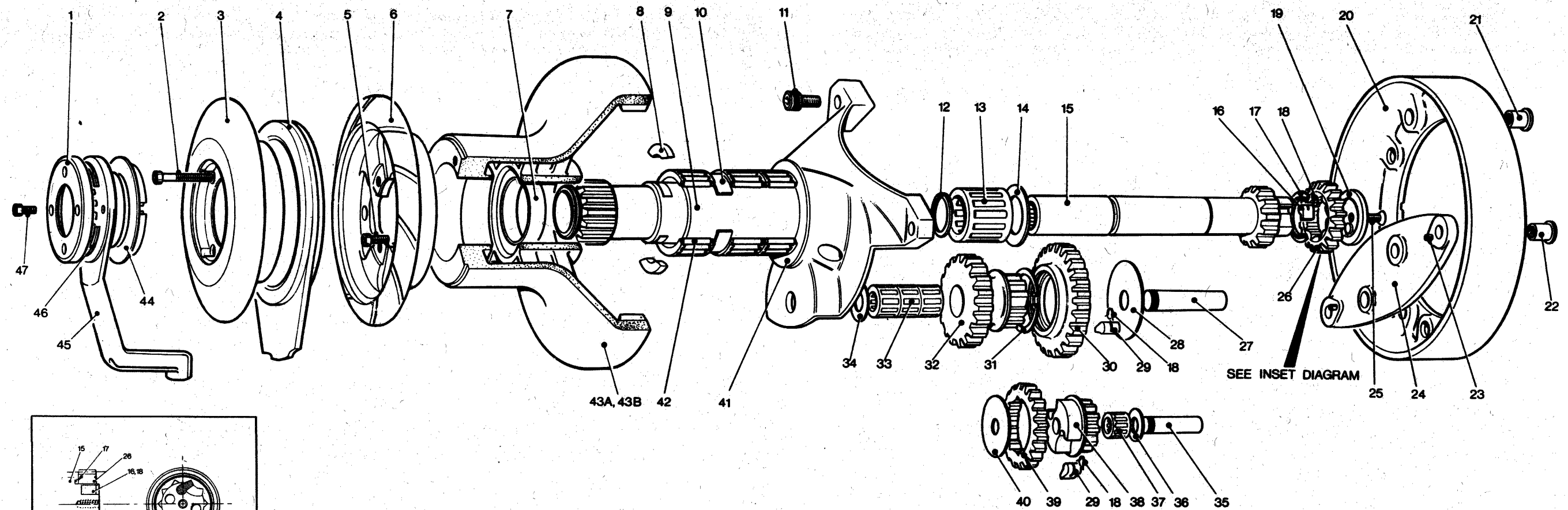


Routine Maintenance No. 65 ST
A Release four allen screws (46) and remove top cap (1).
B Remove split collets (45).
C Lift off stripper arm (44).
D Remove flanged bush (43).
E Lift drum assembly (7) off centre stem assembly (9).
F Remove bearings (10) and thrust bearing (41).
G Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
H Replace thrust bearing (41) and bearings (10) on centre stem (9) and grease lightly. Grease lightly ratchet gear assemblies (37 & 38) (29 & 31).
I Lightly grease drum gear teeth. Replace drum assembly (7) on centre stem assembly (9).
J Replace flanged bush (43) in upper crown plate (3).
K Fit stripper arm (44) checking it is correctly located for rope lead and properly positioned on stripper ring (4).
L Refit split collets (45).
M Replace top cap (1). Fasten with four allen screws (46).

Full Annual Service

To service completely, the winch must be removed from the boat.
N Remove the drum/stripper assembly as in A — F above.
O Remove centre stem (9) from base plate (24) by releasing six allen screws (11).
P Release three allen screws (12), spindle nut (25) and remove bridge piece (17).
Q Remove key retaining ring (8).
R Remove keys (42) from centre stem (9).
S Withdraw spindle assembly (15) with washer (14) and ratchet gear assemblies (37 & 38) (29 & 31) from centre stem (9).
T Release screw (22) and remove cap (21) from spindle (15).
U Lift off ratchet gear (20).
V Remove bearing (13) from centre stem (9).
W Remove bearings (36) from ratchet gear assembly (37 & 38). Separate pawl gear (37) from ratchet gear (38) by releasing screws (40) from retaining plate (39).
X Separate ratchet gear assembly (29 & 31). Remove bearings (32) from ratchet gear (31).
Y Remove upper crown plate (3) by releasing three allen screws (2).
Z Lift off stripper ring assembly (4).
A1 Release lower crown plate (6) by removing three allen screws (5).

B1 Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth.
C1 Replace lower crown plate (6) retaining it with three allen screws (5).
D1 Replace stripper ring assembly (4) in lower crown plate (6).
E1 Replace upper crown plate (3) with three allen screws (2).
F1 Check that pawls and springs (23 & 19) in spindle (15) are free and oil lightly.
G1 Lightly grease inner surface of ratchet gear (20) and fit to spindle (15) ensuring correct location of pawls (23) as per inset detailed diagram.
H1 Fit cap (21) with retaining screw (22) to spindle (15).
I1 Fit washer (14) to spindle (15) and lightly grease spindle assembly.
J1 Lightly grease bearing (13) and replace in centre stem (9).
K1 Check that pawls and springs (30 & 19) in pawl gear (29) are free and oil lightly.
L1 Lightly grease outer surface of ratchet gear (31) and fit pawl gear (29). Lightly grease bearings (32) and replace in ratchet gear (31).
M1 Check that pawls and springs (30 & 19) in pawl gear (37) are free and oil lightly.
N1 Lightly grease inner surface of ratchet gear (38), fit pawl gear (37) and fasten retaining plate (39) with two screws (40). Lightly grease bearings (36) and replace in pawl gear (37).
O1 Replace washer (28) on spindle (27).
P1 Replace washer (35) on spindle (34).
Q1 Replace ratchet gear assembly (37 & 38) on spindle (34).
R1 Replace ratchet gear assembly (29 & 31) on spindle (27).
S1 Replace spindle assembly (15) in centre stem (9).
T1 Replace washer (33) on spindle (27).
U1 Replace washer (35) on spindle (34).
V1 Replace bridge piece (17) retaining it with spindle nut and washer (25 & 26) and three allen screws (12).
W1 Fit keys (42) in centre stem (9) ensuring that they are located in groove on spindle (15).
X1 Replace key retaining ring (8) on centre stem (9).
Y1 Lightly grease both ratchet gear assemblies.
Z1 Replace centre stem assembly (9) in base (24). Fasten with six allen screws (11).
A2 Reassemble winch as in H — M above.



Parts list

Item Number	Part Number	Description	No. Off.
1	15044639	Top Cap	1
2	B0731	Socket Head Cap Screw 1/4" x 20 UNC x 1 1/2" long	3
3	15055644	Upper Crown Plate	1
4	15055649	Stripper Ring	1
	15055641	Stripper Ring Insert	2
	15044642	Cap	1
5	B0709	Skt. Hd. Cap Screw 1/4" - 20 UNC x 1/2" long.	3
6	15055645	Lower Crown Plate	1
7	15044638	Collar	1
8	15040605	Key	2
9	18055631	Centre Stem	1
10	15048105	Spacer	1
11	B0714	Socket Head Cap Screw 3/8" x 16 UNC x 3/4" long	3
12	B2079	Circlip, Spirolox	1
13	1264/SA2	Cage Assembly Bearing	1
14	1300/21	Washer	1

15	15055603	Spindle	1
16	1260/8	Pawl	2
17	15025107	Spacer	1
18	1260/7	Pawl Spring	6
19	15016107	Spindle End Cap	1
20	15055204	Base	1
21	1301/22	Dowel	1
22	1301/17	Dowel	2
23	B1506	Spirol Pin	2
24	15055105	Bridge Piece	1
25	B0515	Countersunk Screw 1/4" x 20 UNC x 1/2" long	1
26	15048104	Ratchet Gear	1
27	1301/10	Spindle	1
28	1301/11	Washer	1
29	1264/8	Pawl	4
30	1301/7	Pawl Gear	1
31	B2077	Circlip	1
32	1301/6	Ratchet Gear	1
33	1301/SA2	Cage Assembly Bearing	3
34	1301/19	Washer	1
35	1264/6	Spindle	1
36	1300/22	Washer	1
37	1300/SA2	Cage Assembly Bearing	1
38	1300/8	Pawl Gear	1
39	1300/7	Ratchet Gear	1

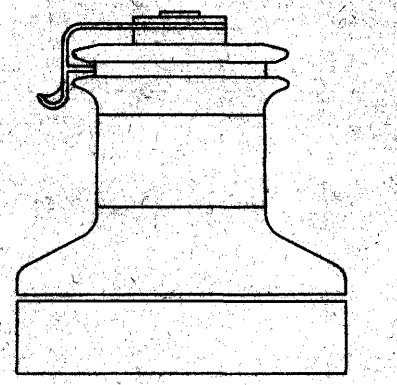
40	15055119	Washer	1
41	15044116	Washer	1
42	15044121	Cage Assembly Bearing	3
43A	15055602	Drum, Stainless Steel	1
43B	15055502	Drum, Alloy	1
44	15044627	Flanged Bush	1
45	15055648	Stripper Arm	1
46	15044637	Split Collet	2
47	B0733	Socket Head Cap Screw 1/4" x 20 UNC x 3/8" long	4

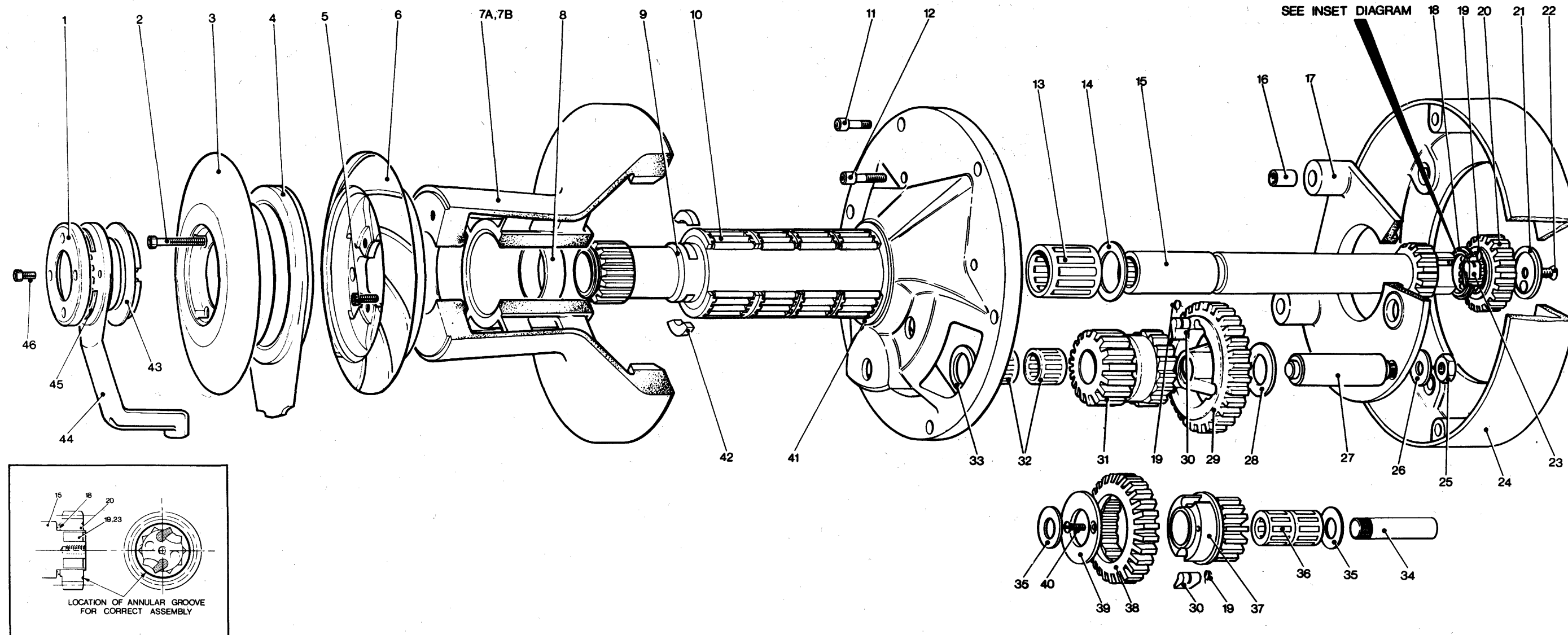
Spare Parts Kit
Model No 55 ST
Pt No 19755600
Contents

1 x Washer Pt No 15044116
 1 x Washer Pt No 15055119
 1 x Washer Pt No 1300/21
 1 x Washer Pt No 1300/22
 1 x Washer Pt No 1301/11
 1 x Washer Pt No 1301/19
 1 x Spacer Pt No 15025107
 2 x Key Pt No 15040605
 1 x Circlip Pt No B2077
 1 x Circlip Pt No B2079
 6 x Pawl Spring Pt No 1260/7
 2 x Pawl Pt No 1260/8
 4 x Pawl Pt No 1264/8

Lewmar
Self-tailing winches

Model 65 ST





Parts list

Item Number	Part Number	Description	No. Off
1	15044639	Top Cap	1
2	B0731	Socket Hd. Cap Screw 1/4" x 20 UNC x 1 1/4" long	3
3	15065644	Upper Crown Plate	1
4	15065649	Stripper Ring	1
	15065641	Stripper Ring Insert	2
	15044642	Cap	1
5	B0709	Socket Hd. Cap Screw 1/4" x 20 UNC x 1/2" long	3
6	15065645	Lower Crown Plate	1
7A	15065642	Drum, Stainless Steel	1
7B	15065542	Drum, Alloy	1
8	15044638	Collar	1
9	1806531	Centre Stem	1
10	15044121	Cage Assembly Bearing	4

11	B0714	Socket Hd. Cap Screw 3/8" x 16 UNC x 3/4" long.	6
12	B0698	Socket Hd. Cap Screw 5/16" x 18 UNC x 1 1/2" long	3
13	1264/SA2	Cage Assembly Bearing	1
14	1300/21	Washer	1
15	15063603	Spindle	1
16	15065111	Hollow Dowel	3
17	15065105	Bridge Piece	1
18	15025107	Spacer	1
19	1260/7	Pawl Spring	6
20	15065116	Ratchet Gear	1
21	15016107	Spindle End Cap	1
22	B0515	Countersunk Screw 1/4" x 20 UNC x 1/2" long.	1
23	1260/8	Pawl	2
24	15065204	Base, Alloy	1
25	B1009	Locknut	1
26	B1202	Washer	1
27	15080009	Spindle	1
28	B2451	Washer	1
29	15065107	Pawl Gear	1
30	1264/8	Pawl	4

31	15080007	Output Gear	1
32	1337/SA2	Cage Assembly Bearing	2
33	15080014	Washer	1
34	1302/13	Spindle	1
35	1301/19	Washer	2
36	1301/SA2	Cage Assembly Bearing	2
37	1302/8	Pawl Gear	1
38	1302/7	Ratchet Gear	1
39	1302/17	Retaining Plate	1
40	B0511	Countersunk Screw 2BA x 3/8" long	2
41	18080015	Thrust Bearing	1
42	15040605	Key	2
43	15044627	Flanged Bush	1
44	15065648	Stripper Arm	1
45	15044637	Split Collet	2
46	B0733	Socket Hd. Cap Screw 1/4" x 20 UNC x 3/8" long	4

Spare Parts Kit

Model No 65 ST

Pt No 19765600

Contents

1 x Washer Pt No 15080014
 1 x Washer Pt No 1300/21
 2 x Washer Pt No 1301/19
 1 x Washer Pt No B2451
 1 x Spacer Pt No 15025107
 2 x Key Pt No 15040605
 6 x Pawl Spring Pt No 1260/7
 2 x Pawl Pt No 1260/8
 4 x Pawl Pt No 1264/8

Lewmar

**Three speed
automatic grinders**

Maintenance No. 80

To ensure continuous trouble-free functioning, it is recommended that the winch be maintained as follows:

A Routine maintenance, at frequent intervals during constant use.

B Full service annually.

Routine Maintenance

A Using a small penknife or screwdriver, remove top circlip (1) from spindle (27).

B Lift off drum (14, 57), cleat (11) and top cap assembly.

C Wash off salt deposits and check that top cap mechanism and pawls (29) are functioning freely. If necessary, strip top cap by removing large circlip (10), disengaging two springs (9), depressing pawls and withdrawing closing ring (8), taking care not to lose plunger and compression spring assembly (4, 6). Clean, reassemble and lubricate with light oil.

D Lightly grease all remaining moving parts using Lewmar grease Part No 1385.

Reassemble.

NOTE: When re-fitting top cap assembly ensure that pawls are closed, i.e. push button (3) is in raised position, and align drive slots in top cap (5) with drive pin (27) in spindle and push on.

Full Annual Service

E Lift off drum and top cap assembly as instructed in routine maintenance.

F Slide out cross mounted drive pin (27) and remove clutch plate (12), taking care not to lose plungers and springs (16, 17).

G Slide off drum cage assemblies (19), spacer (18) and washer (22).

H Remove six socket head cap screws 3/8" U.N.C. (21) securing centre stem (23) to base (42) and lift off centre stem assembly complete.

I Remove 1/2" BSF locknut (40) and washer (41) from underside of bridge piece.

J Remove three socket head cap screws 5/16" U.N.C. (20) securing bridge end piece to centre stem and gently tap off.

K Slide off gear assemblies from their spindles (43, 50) including cage assembly (48, 52).

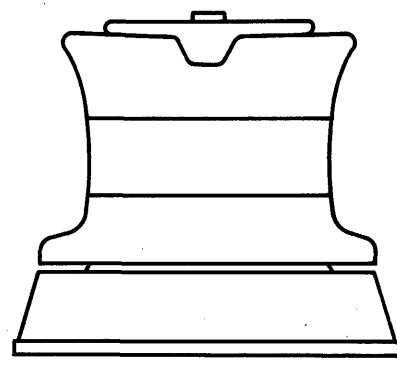
L Prise out two collets (13) from spindle recess and carefully withdraw spindle assembly, cage assembly (24) and washer (25), from centre stem. Remove ratchet gear (30) from spindle by unscrewing shoulder screw 1/4" U.N.C. (34) and pulling off dog plate.

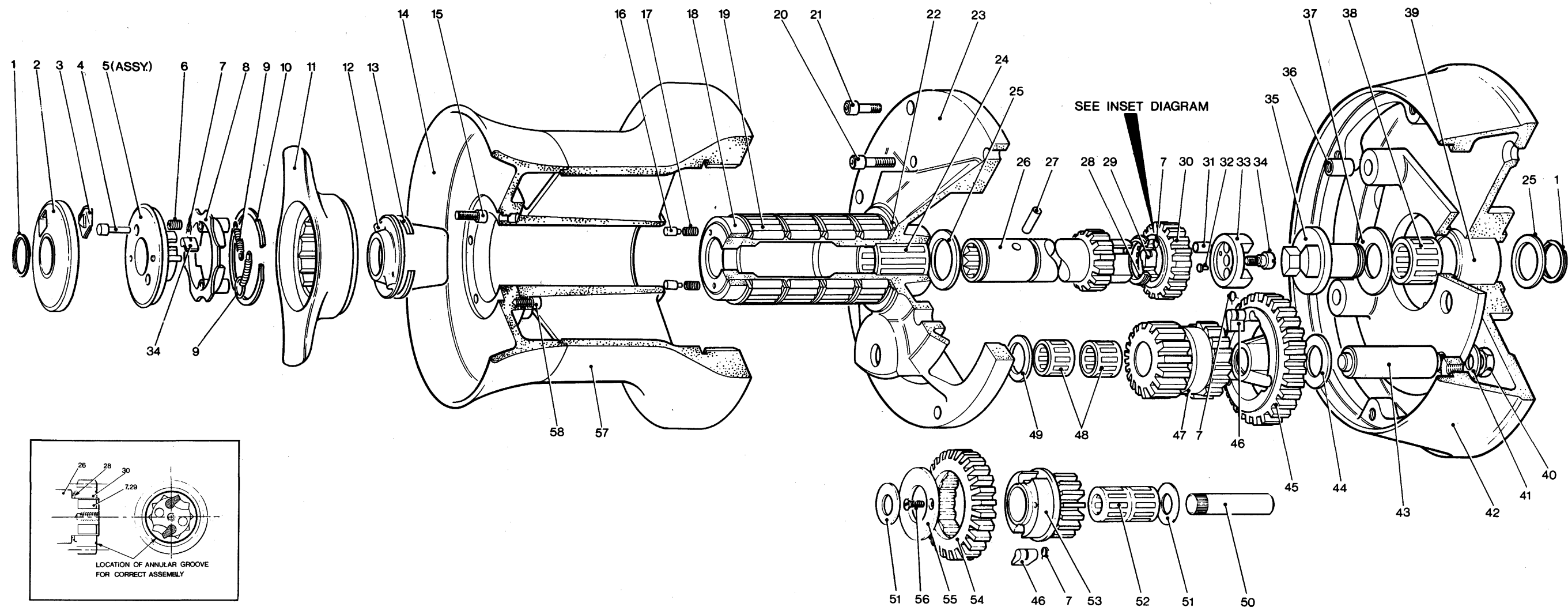
M Using a small penknife or screwdriver, remove circlip (1) and washer (25) from splined sleeve (35). Remove splined sleeve, washer (37) and cage assembly (38).

N Reassemble in the reverse sequence to above.

Lewmar
Three speed
automatic grinders

Model 80





Parts list

Item Number	Part Number	Description	No. Off
1	B0275	Circlip, Spirolox	1
2	15080106	Top Cap Cover	1
3	15044114	Push Button	1
4	15044111	Plunger	1
5	15044104	Top Cap Assembly	1
6	15044112	Spring	1
7	1260/7	Pawl Spring	9
8	15044106	Closing Ring	1
9	15044113	Spring	2
10	B2083	Circlip, Spirolox	1
11	15080001	Cleat	1
12	15044105	Clutch Plate	1
13	15044118	Collet	2
14	15080004	Drum Top	1
15	B0730	Socket Head Cap Screw $\frac{5}{16}$ " x 18 UNC x $\frac{5}{8}$ " long	4
16	1300/24	Plunger	2
17	1300/20	Spring	2
18	15080005	Spacer	1
19	1301/SA3	Cage Assembly	4
20	B0698	Socket Head Cap Screw $\frac{5}{16}$ " x 18 UNC x $1\frac{1}{2}$ " long	3
21	B0714	Socket Head Cap Screw $\frac{3}{8}$ " x 16 UNC x $\frac{3}{4}$ " long	6

22	15044116	Drum Washer	1
23	15065201	Centre Stem	1
24	1264/SA2	Cage Assembly	1
25	1300/21	Washer	2
26	15065103	Spindle	1
27	15044119	Drive Pin	1
28	15025107	Spacer	1
29	1260/8	Pawl	4
30	15065116	Ratchet Gear	1
31	15336002	Dowel	2
32	15336003	Button	2
33	15080010	Dog Plate	1
34	15080013	Shoulder Screw $\frac{1}{4}$ " x 20 UNC	1
35	15080011	Splined Sleeve	1
36	15065111	Hollow Dowel	3
37	B2450	Washer	1
38	1287/SA1	Cage Assembly	1
39	15080012	Sleeve (bonded to Item 42)	1
40	B1009	Locknut $\frac{1}{2}$ " BSF	1
41	B1202	Washer	1
42	15080003	Base	1
43	15080009	Spindle	1
44	B2451	Washer	1
45	15080008	Pawl Gear	1
46	1264/8	Pawl	5
47	15080007	Output Gear	1

48	1337/SA2	Cage Assembly	2
49	15080014	Washer	1
50	1302/13	Spindle	1
51	1301/19	Washer	2
52	1301/SA2	Cage Assembly	2
53	1302/8	Pawl Gear	1
54	1302/7	Ratchet Gear	1
55	1302/17	Retaining Plate	1
56	B0511	Countersunk Screw 2BA x $\frac{3}{8}$ " long	2
57	15080002	Drum	1
58	B0719	Socket Head Cap Screw $\frac{5}{16}$ " x 18 UNC x $\frac{3}{4}$ " long	4

Spare Parts Kits

Model 80

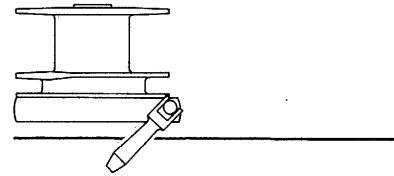
Cat No 19765400

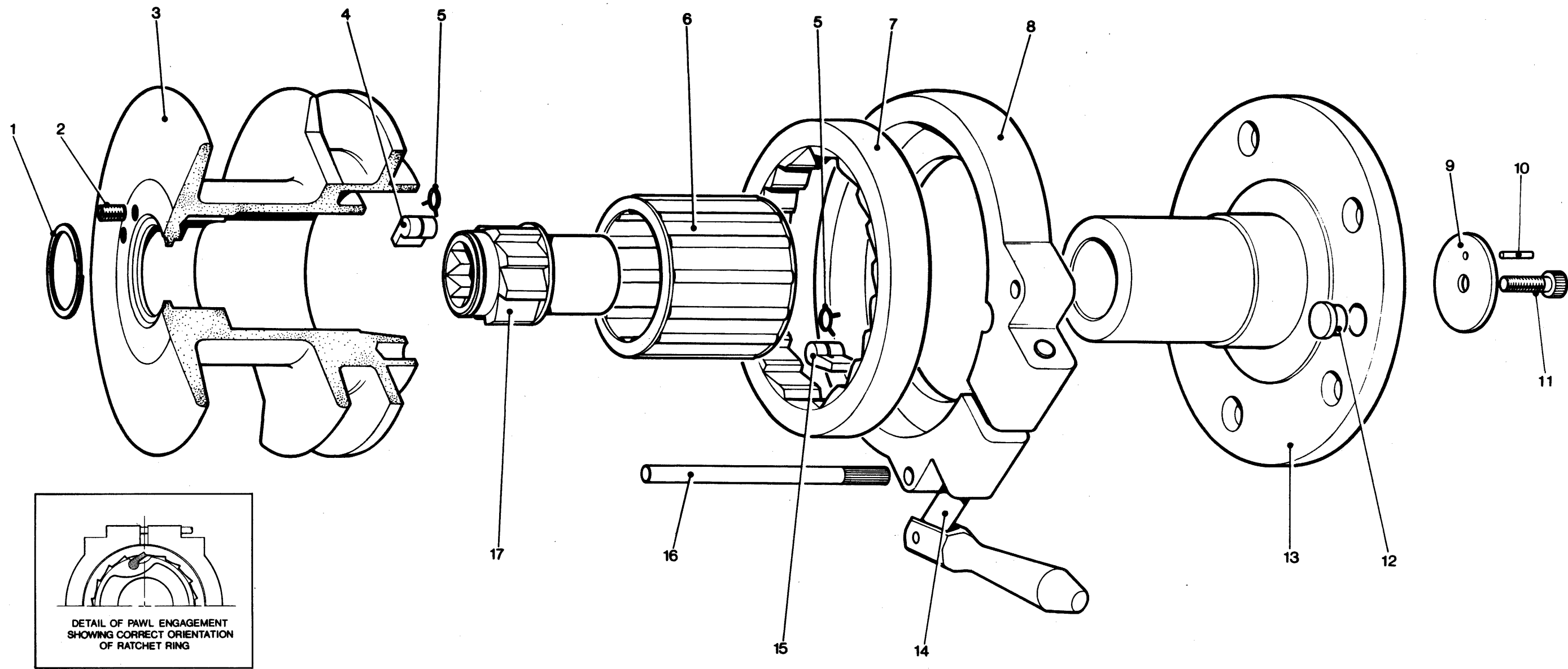
Contents

3 x Washer Pt No 1301/19
 1 x Washer Pt No 1301/11
 1 x Washer Pt No 15025107
 4 x Pawl Pt No 1260/8
 4 x Pawl Pt No 1264/8
 8 x Spring Pt No 1260/7
 2 x Plunger Pt No 15137203
 2 x Spring Pt No 15137204
 1 x Plunger Pt No 15044111
 1 x Spring Pt No 15044112
 1 x Pin Pt No 15044119
 1 x Circlip Pt No B2077
 1 x Circlip Pt No B2075
 1 x Circlip Pt No B2083
 2 x Spring Pt No 15044113

Lewmar
Halliard Reel winches

Model 1 Mk I





Maintenance No 1 – Mark I
A Remove halliard wire from drum (3) by releasing grub screws (2).
B Using a small screwdriver, remove circlip (1).
C Remove drum (3) from centre stem (13).
D Remove bearing (6) from centre stem (13).
E Remove brake strap (8) and ratchet ring (7) from centre stem (13).
F Unscrew locking arm (14) from brake strap (8) and check thread.
G Clean outer surface of ratchet ring (7) with a light abrasive.
H Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth. Ensure that the outer surface of ratchet ring (7) and the inner surface of brake strap (8) are free from grease.
I Replace locking arm (14) in brake strap.
J Replace brake strap (8) on

centre stem (13) ensuring that it is correctly placed on location pin (12).
K Check that pawls and springs (4 & 5) in top and (15 & 5) in bottom of drum (3) are free and oil lightly.
L Place ratchet ring (7) on drum (3) ensuring correct location of pawls (15) in ratchet ring (7). See inset detailed drawing.
M Replace bearing (6) on centre stem (13) and lightly grease.
N Replace drum (3) and ratchet ring (7) on centre stem (13).
O Refit circlip (1) to spindle (17).
To remove spindle (17)
P Strip winch as detailed above (A – E).
Q Remove winch from boat.
R Remove spindle (17) from centre stem (13) by releasing screw (11) and retaining plate (9).
S Clean and lightly grease spindle (17).
T Replace spindle (17) in centre stem (13) locking with retaining

plate (9) and screw (11).
U Refasten winch to boat.
V Reassemble as detailed above (G – O).

Parts list

Item Number	Part Number	Description	No. Off
1	B2080	Circlip, Spirolox	1
2	B0901	1/4" UNC Grub Screw x 3/8" long	2
3	15001002	Drum	1
4	1260/8	Pawl	2
5	1260/7	Pawl Spring	4
6	1266/SA1	Cage Assembly Bearing	1
7	15001004	Ratchet Ring	1
8	15001005	Brake Strap	1
9	15001007	Retaining Plate	1
10	B1502	Spirol Pin 3/32" dia x 7/16" long	1
11	B0776	1/4" x 20 UNC Socket Hd x 1/2" long	1
12	15001008	Locating Pin	1
13	15001001	Centre Stem	1

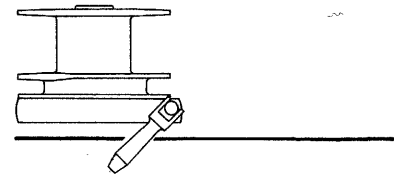
14	15001010	Brake Lever	*	1
	15001011	Brake Screw		
	15001009	Handle Rivet		
15	15001012	Pawl		2
16	15001006	Guard Rod		2
17	15001003	Spindle		1

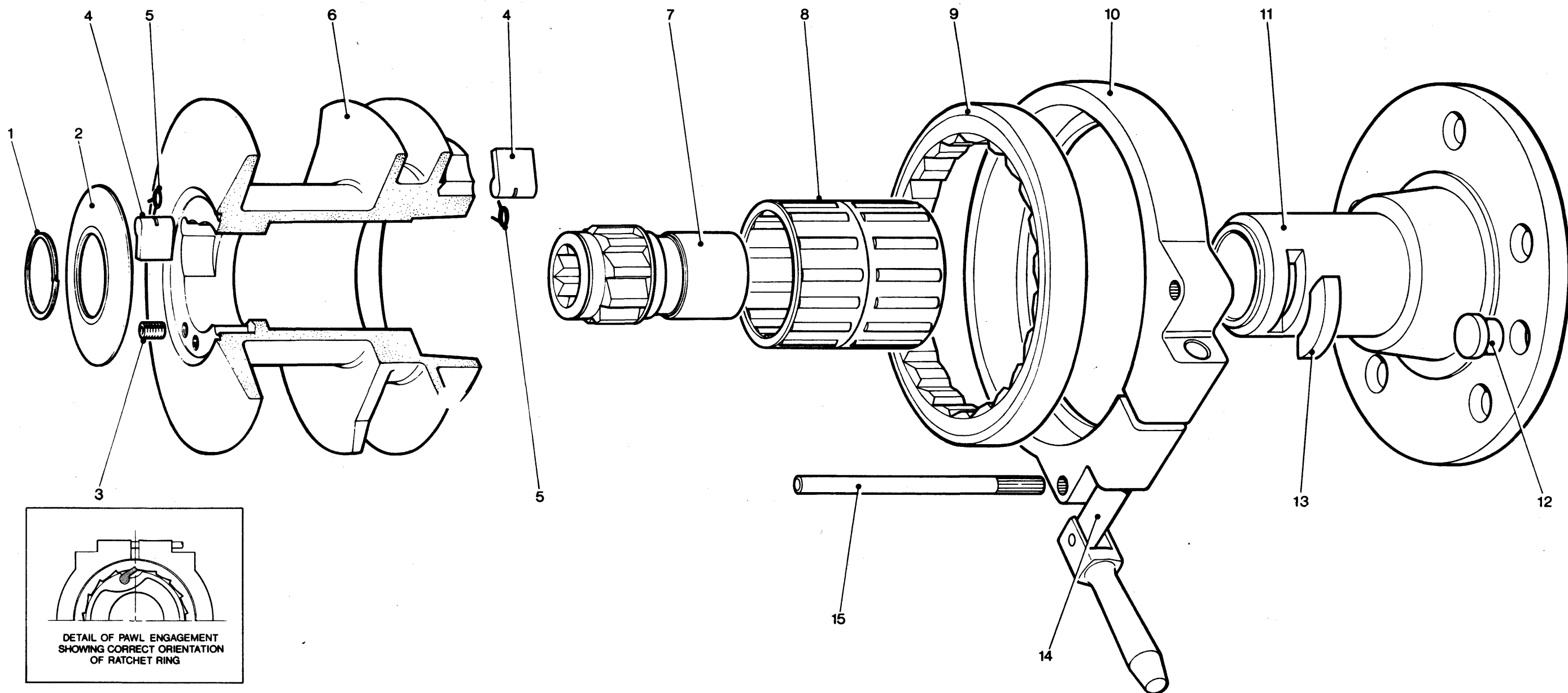
* Fixed Assembly

Spare Parts Kit
Halliard Reel No 1—Mark I
Cat No 19701400
Contents
2 x Pawl Pt No 15001012
1 x Tab Washer Pt No 1266/6
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
2 x Grub Screw Pt No B0901
1 x Circlip Pt No B2076
1 x Circlip Pt No B2080
1 x 1/4" 20 UNC Socket Head x 1/2" long Pt No B0776

Lewmar
Halliard Reel winches

Model 1 Mk II





Maintenance No 1 – Mark II
A Remove halliard wire from drum (6) by releasing grub screws (3).
B Using a small screwdriver, remove circlip (1).
C Remove drum (6) from centre stem (11).
D Remove top cap (2) from drum (6).
E Remove bearings (8) from centre stem (11).
F Remove brake strap (10) and ratchet ring (9) from centre stem (11).
G Unscrew locking arm (14) from brake strap (10) and check thread.
H Clean outer surface of ratchet ring (9) with a light abrasive.
I Extract key (13) from centre stem (11).
J Remove spindle (7) from centre stem (11).
K Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy

cloth. Ensure that the outer surface of ratchet ring (9) and the inner surface of brake strap (10) are free from grease.
L Lightly grease spindle (7) and replace in centre stem (11).
M Insert key (13) into centre stem (11) ensuring that the key (13) is located in groove of spindle (7).
N Replace locking arm (14) in brake strap (10).
O Replace brake strap (10) on centre stem (11) ensuring that it is correctly placed on location pin (12).
P Check that pawls and springs (4 & 5) in top and bottom of drum (6) are free and oil lightly.
Q Place ratchet ring (9) on drum (6) ensuring correct location of pawls (4) in ratchet ring (9). See inset detailed drawing.
R Replace bearings (8) on centre stem (11) and lightly grease.
S Replace drum (6) and ratchet

ring (9) on centre stem (11).
T Replace top cap (2) and refit circlip (1) to spindle (7).

Parts list

Item Number	Part Number	Description	No. Off
1	B2075	Circlip, Spirolox	1
2	15006006	Cap	1
3	B0901	Grub Screw 1/4" UNC x 3/8" long	2
4	1260/8	Pawl	4
5	1260/7	Pawl Spring	4
6	15001022	Drum	1
7	15008003	Spindle	1
8	15008007	Cage Assembly Bearing	2
9	15001024	Ratchet Ring	1
10	15001025	Brake Strap	1
11	15001021	Centre Stem	1
12	15001008	Locating Pin	1
13	15008005	Key	1

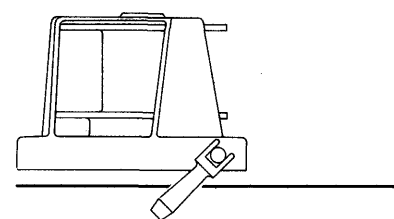
14	15001010	Brake Lever	* 1
	15001011	Brake Screw	
	15001009	Handle Rivet	
15	15001006	Guard Rod	2

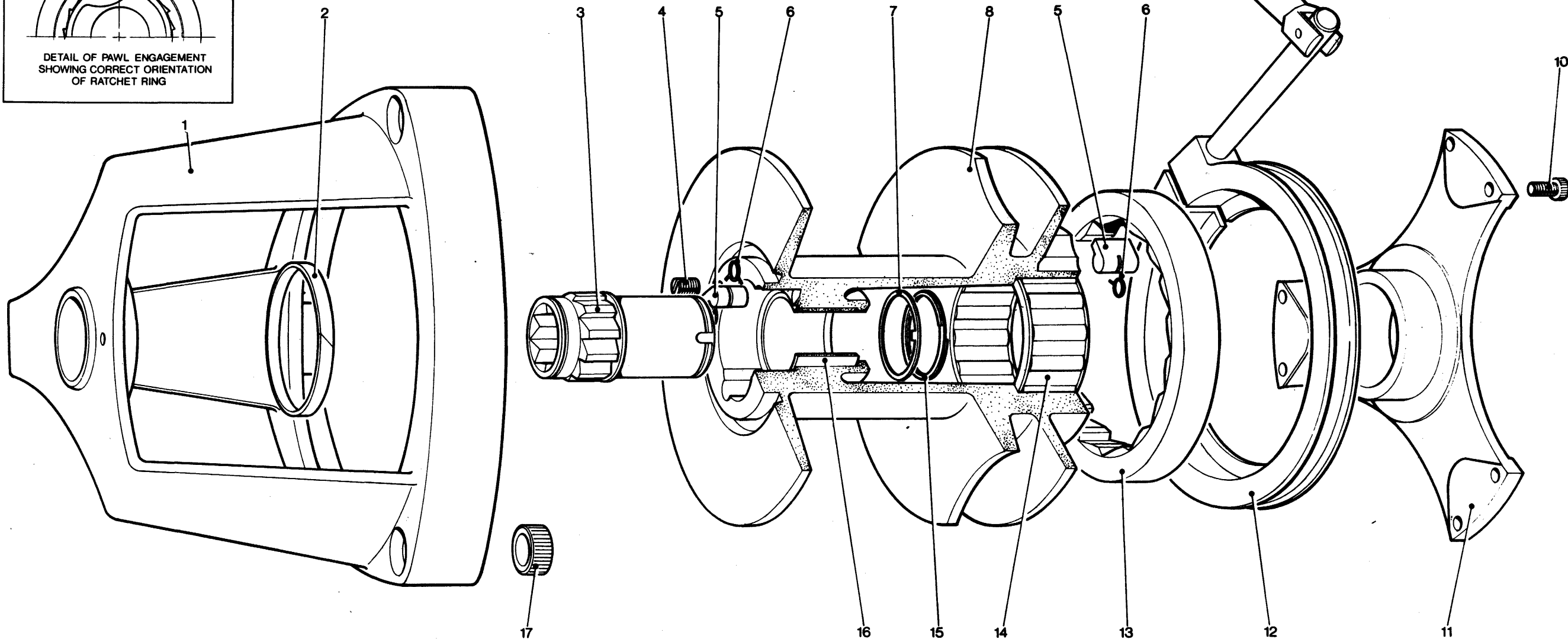
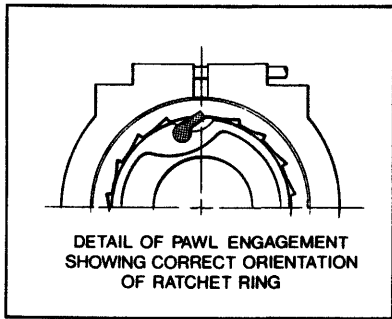
* Fixed Assembly

Spare Parts Kit
Halliard Reel No 1—Mark II
Contents
1 x Key Pt No 15008005
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
1 x Circlip Pt No B2075
2 x Grub Screw Pt No B0901

Lewmar
Halliard Reel winches

Model 2





Maintenance No. 2

A Remove halliard wire from drum (8) by releasing grub screws (4) and remove winch from boat.
B Remove base plate (11) by releasing six allen screws (10).
C Remove bearing (14) from recess in drum (8).
D Unscrew locking arm (9) releasing brake strap (12).
E Lift off brake strap (12) and remove ratchet ring (13).
F Remove drum (8) from drum casing (1).
G Remove spindle (3) from drum (8) by removing circlip (15) and tab washer (7) from bottom of spindle (3).
H Clean outer surface of ratchet ring (13) with light abrasive.
I Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth. Ensure that the outer surface of ratchet ring (13) and the inner surface of brake strap (12) are

free from grease.
J Check tape bearing (2) in drum casing (1).
K Check that pawls and springs (5 & 6) in top and bottom of drum (8) are free and oil lightly.
L Replace spindle (3) in drum (8) retaining it with tab washer (7) and circlip (15).
M Replace drum (8) in drum casing (1).
N Replace ratchet ring (13) on drum (8). Check that ratchet ring (13) is fitted correctly to ensure that pawls (5) are properly located in ratchet ring (13). See inset detailed drawing.
O Fit brake strap (12) over ratchet ring (13).
P Replace locking arm (9) in brake strap (12).
Q Replace bearing (14) in drum (8).
R Replace base plate (11) and fasten with six allen screws (10).
S Replace winch on boat.

Parts list

Item Number	Part Number	Description	No. Off
1	1282/1	Drum Casing	1
2	1282/8	Bush	1
3	1266/3	Main Spindle	1
4	B0901	1/4" UNC Grub Screw x 3/8" long	2
5	1260/8	Pawl	4
6	1260/7	Pawl Spring	4
7	1266/6	Tab Washer	1
8	1282/2	Drum	1
9	15001010	Brake Lever	* 1
	15001009	Handle Rivet	
	1282/7	Brake Screw	
10	B0705	2BA Cap Screw x 1/2" long	6
11	1282/5	Base Plate	1
12	1280/4	Brake Strap	1
13	15001004	Ratchet Ring	1
14	1260/SA2	Cage Assembly Bearing	1

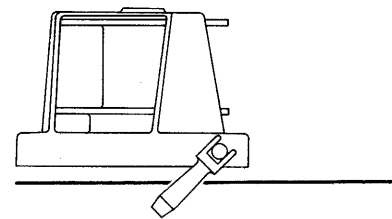
15	B2080	Circlip, Spirolox	1
16	1266/9	Nylon Bearing Strip	1
17	1283/13	Casing Insert	3

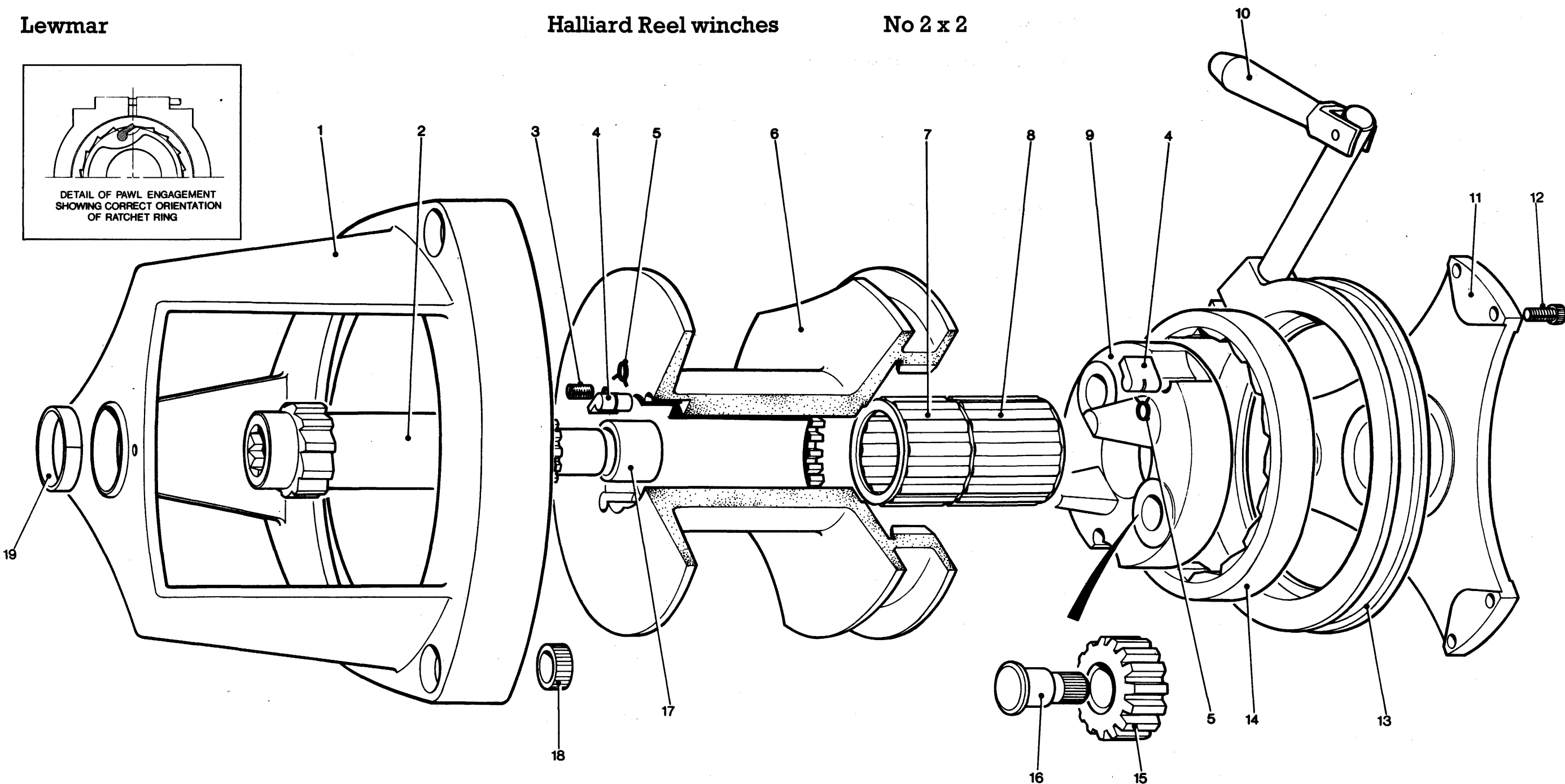
* Fixed Assembly

Spare Parts Kit
Halliard Reel No 2
Cat No 19702400
Contents
1 x Tab Washer Pt No 1266/6
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1260/8
2 x Grub Screw Pt No B0901
1 x Circlip Pt No B2076
1 x Circlip Pt No B2080

Lewmar
Halliard Reel winches

Model 2 x 2





Maintenance No. 2 x 2
A Remove halliard wire from drum (6) by releasing grub screws (3) and remove winch from boat.
B Remove base plate (11) by releasing six allen screws (12).
C Remove locking arm (1).
D Lift off brake strap (13).
E Remove ratchet ring (14).
F Before removing planet wheel assembly (9), mark clearly each idler gear (15) and opposing gear teeth on drum (6) so that it can be reassembled in the same mesh.
G Remove planet wheel assembly (9) from spindle (2).
H Remove spindle (2), complete with bearings (7 & 8) from drum (6).
I Remove bearings (7 & 8) from spindle (2).
J Remove drum (6) from drum casing (1).
K Clean outer surface of ratchet

ring (14) with light abrasive.
L Clean thorough all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth. Ensure that the outer surface of ratchet ring (14) and inner surface of brake strap (13) are free from grease.
M Check tape bearing (19) in drum casing (1).
N Check that pawls and springs (4 & 5) in drum (6) are free and oil lightly.
O Replace bearings (7 & 8) on spindle (2) and lightly grease.
P Insert spindle (2), complete with bearings (7 & 8) in drum (6).
Q Place drum (6) and spindle (2) in drum casing (1).
R Check that pawls and springs (4 & 5) on planet wheel assembly (9) are free and oil lightly.
S Lightly grease idler gears (15).
T Replace planet wheel assembly (9) on spindle (17) ensuring that gears are meshed as marked in F

above.
U Replace ratchet ring (14) on planet wheel assembly (9). Check that ratchet ring (14) is fitted correctly to ensure that pawls (4) are properly located in ratchet ring (14). See inset detailed drawing.
V Fit brake strap (13) over ratchet ring (14).
W Replace locking arm (10) in brake strap (13).
X Replace base plate (11) and fasten with six allen screws (12).
Y Replace winch on boat.

Parts list

Item Number	Part Number	Description	No. Off
1	1280/1	Drum Casing	1
2	1280/3	Spindle	1
3	B0705	1/4" UNC Socket Grub Screw x 3/8" long	2
4	1260/8	Pawl	4
5	1260/7	Pawl Spring	4
6	1280/2	Drum	1
7	1287/SA1	Cage Assembly Bearing	1
8	1264/SA2	Cage Assembly Bearing	1
9	1280/6	Planet Carriage	1
10	15001010	Brake Lever	1
	15001009	Handle Rivet	* 1
	1282/7	Brake Screw	1
11	1280/5	Base Plate	1

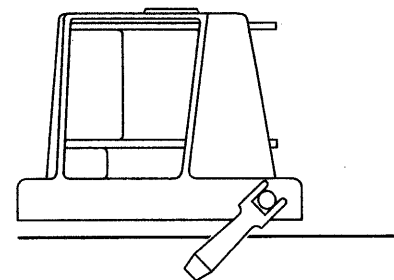
12	B0705	2BA Socket Head Cap Screw 1/2" long.	6
13	1280/4	Brake Strap	1
14	1280/7	Ratchet Ring	1
15	1280/8	Idler Gear	2
16	1280/9	Idler Spindle	2
17	B1630	Bush	1
18	1283/13	Insert	3
19	1280/10	Strip Bearing	1

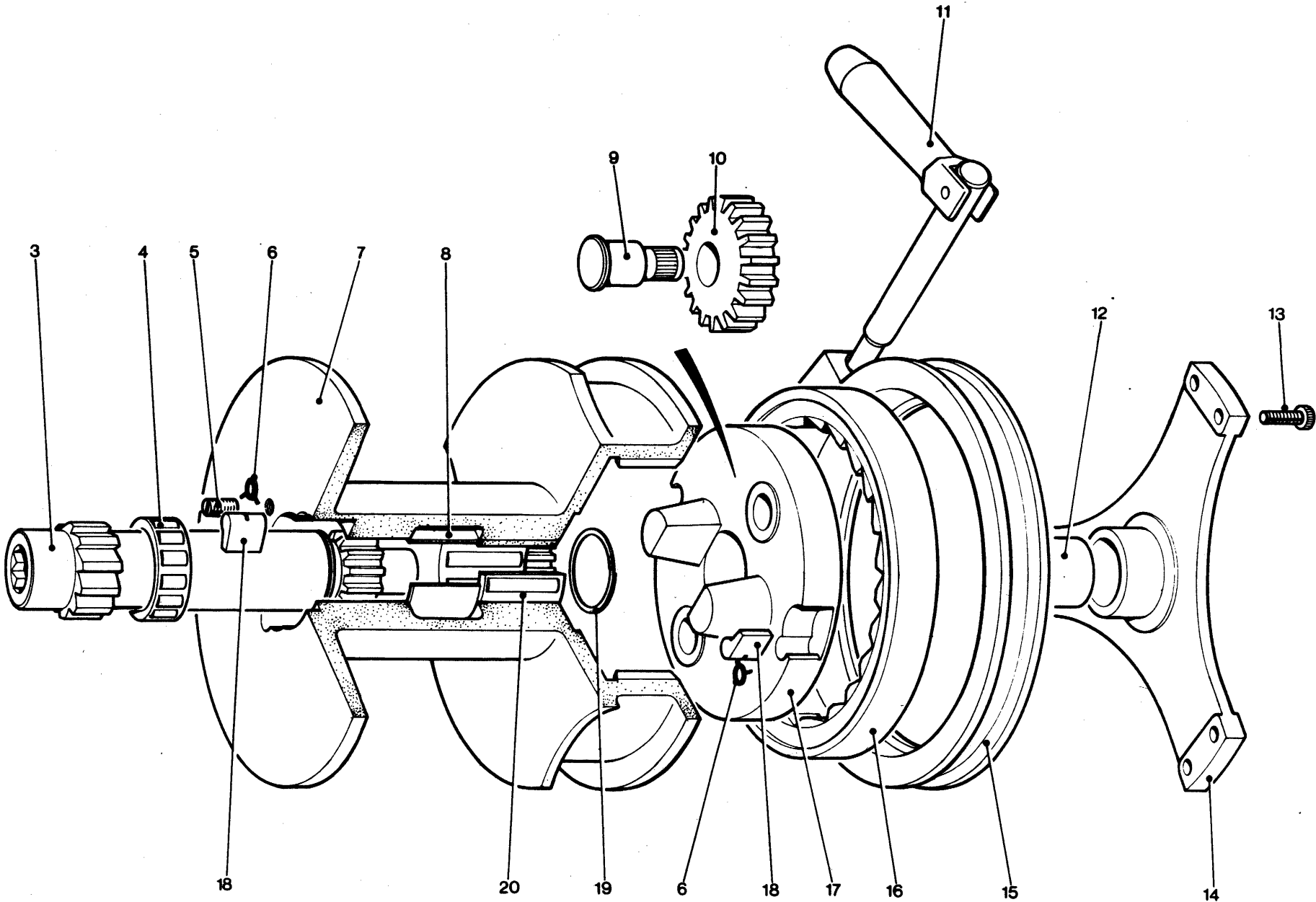
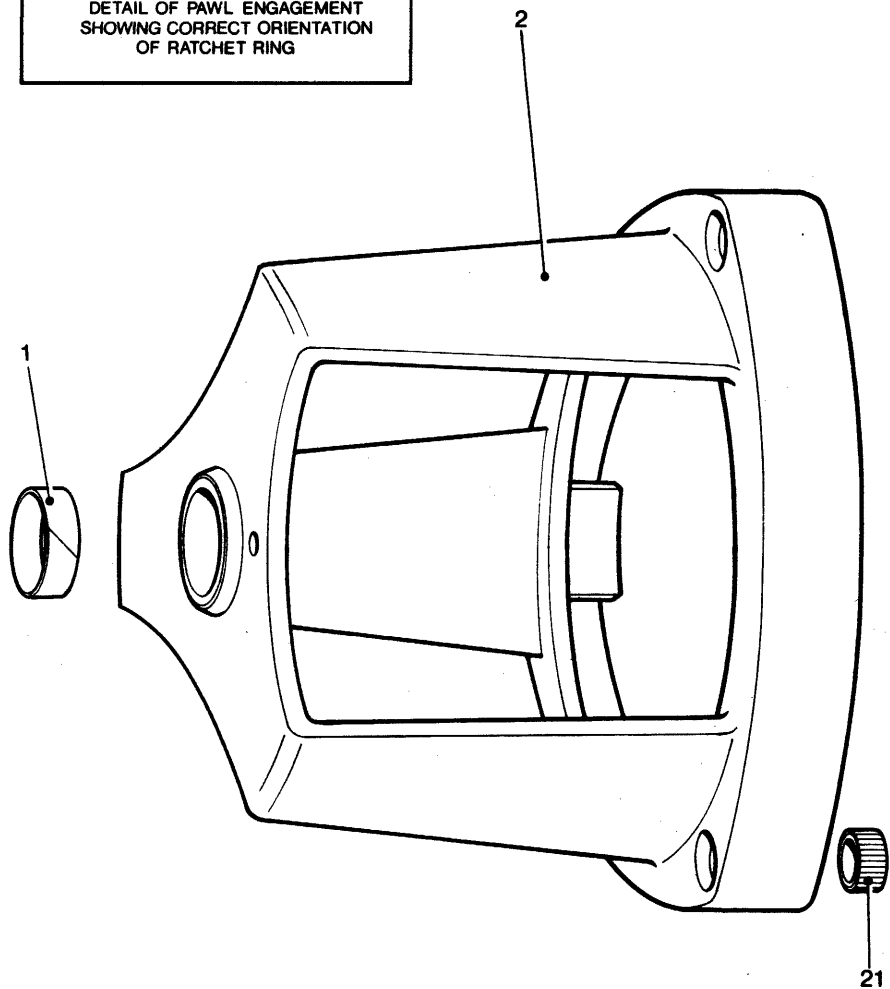
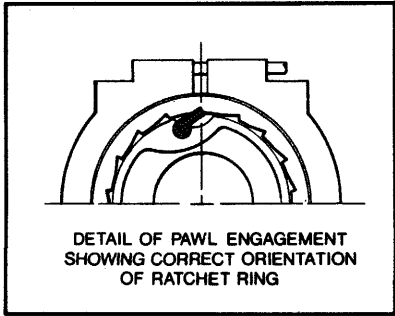
* Fixed Assembly

Spare Parts Kit
Halliard Reel No 2 x 2
Cat No 19703400
Contents
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1264/8
2 x Grub Screw Pt No B0904
2 x Grub Screw Pt No B0901

Lewmar
Halliard Reel winches

Model 3





Maintenance No.3

- A Remove halliard wire from drum (7) by releasing grub screws (5) and remove winch from boat.
B Remove base plate (14) by releasing six allen screws (13).
C Remove locking arm (11).
D Lift off brake strap (15).
E Remove ratchet ring (16).
F Before removing planet wheel assembly (17), mark clearly each idler gear (10) and opposing gear teeth on drum (7) so that it can be reassembled in the same mesh.
G Remove planet wheel assembly (17) from spindle (3).
H Remove spindle (3), complete with bearings (4 & 20) and spacer (8) from drum (7).
I Remove bearings (4 & 20) and spacer (8) from spindle (3) by removing circlip (19).
J Remove drum (7) from drum casing (2).
K Clean outer surface of ratchet

- ring (16) with light abrasive.
L Clean thoroughly all parts using kerosene (paraffin) or white spirit. Dry with a non-fluffy cloth. Ensure that the outer surface of ratchet ring (16) and inner surface of brake strap (15) are free from grease.
M Check tape bearing (1) in drum casing (2).
N Check that pawls and springs (18 & 6) in drum (7) are free and oil lightly.
O Replace bearings (4 & 20) and spacer (8) on spindle (3) retaining them with circlip (19) and lightly grease.
P Insert spindle assembly (3) in drum (7).
Q Place drum (7) and spindle (3) in drum casing (2).
R Check that pawls and springs (18 & 6) on planet wheel assembly (17) are free and oil lightly.
S Lightly grease idler gears (10).
T Replace planet wheel assembly (17) on spindle (3) ensuring that

- gears are meshed as marked in F above.
U Replace ratchet ring (16) on planet wheel assembly (17). Check that ratchet ring (16) is fitted correctly to ensure that pawls (18) are properly located in ratchet ring (16). See inset detailed drawing.
V Fit brake strap (15) over ratchet ring (16).
W Replace locking arm (11) in brake strap (15).
X Replace base plate (14) and fasten with six allen screws (13).
Y Replace winch on boat.

Parts list

Item Number	Part Number	Description	No. Off
1	1283/12	Tape Bearing	1
2	1283/1	Drum Casing	1
3	1283/7	Main Spindle	1
4	1287/SA1	Cage Assembly Bearing	1
5	B0901	1/4" x 20 UNC Grub Screw x 3/8" long	2
6	1260/7	Pawl Spring	4
7	1283/2	Drum	1
8	1283/15	Tube Spacer	1
9	1283/9	Idler Gear Spindle	2
10	1283/8	Idler Gear	2
11	15001009	Handle Rivet	1
	1283/20	End Piece	
	1283/19	Brake Lever	
	1283/10	Brake Screw	
12	B1630	Bush	1

13	B0705	2BA Cap Hd Socket Screw 1/2" long	6
14	1283/5	Base Plate	1
15	1283/4	Brake Strap	1
16	1283/3	Ratchet Ring	1
17	1283/6	Planet Carriage	1
18	1264/8	Pawl	4
19	B2075	Spirolox Circlip	1
20	1264/SA2	Cage Assembly Bearing	1
21	1283/13	Casing Insert	3

* Fixed Assembly

Spare Parts Kit
Halliard Reel No 3
Cat No 19703400
Contents
4 x Spring Pt No 1260/7
4 x Pawl Pt No 1264/8
2 x Grub Screw Pt No B0904
2 x Grub Screw Pt No B0901

Lewmar Worldwide Service and Spares

Lewmar products can be obtained from most leading retail outlets but, in case of difficulty, contact your nearest distributor who will be able to provide you with relevant details.

United Kingdom

Head Office Lewmar Marine Limited
Southmoor Lane, Havant, Hants. PO9 1JJ
tel: Havant (0705) 471841-7 tlx: 86342

Montague Smith Limited

8 St. Michael's Square, Southampton,
Hants. SO9 4UY
tel: Southampton (0703) 24667

Yacht Tests Limited

22 High Street, Burnham on Crouch, Essex
tel: Maldon (0621) 782236 tlx: 995494

Marinac Yacht Fittings Limited

20 Carlyle Avenue, Hillington Industrial
Estate, Glasgow G52 4XR
tel: 041 810 4848 tlx: 777246

Sweden

Lewmar Marin AB

Box 60, Kirunaplan 5, 16211 Vallingby
tel: (08) 874210 tlx: 11310

Denmark

Danish Boat Charter A/S

Strandvejen 327, 2930 Klampenborg
tel: (01) 63 08 00 tlx: 27415

Finland

Oy Vestek AB

Tapiontori, 02100 Espoo 10.
tel: (90) 460 344 tlx: 121269

Norway

Batutstyr A/S

Thunes vei 1, Oslo 2
tel: (02) 556680

Germany

Martin Hohorst

2820 Bremen-Burg, Steindamm 54
tel: (0421) 631211 tlx: 245924

Holland/Belgium/Luxembourg

Marquip B.V.

Flevoweg 1B, Vollenhove, Netherlands
tel: 05274 1766 tlx: 42408

France

Societe Soferac

Zone Industrielle de Perigny
17000 La Rochelle
tel: (46) 53 16 65 tlx: 790729

Italy

Deck Marine

Via Gallarate 58, 20151 Milano
tel: (02) 30 86 416 tlx: 36569

Spain

Accesorios Nauticos da Costa

Rda. Gral. Mitre, 7, 11º, Barcelona 17
Tel: 2035242

Switzerland

Bucher & Walt

Avenue de la Gare 41, 2002 Neuchatel 2
tel: (038) 24 21 15 tlx: 35618

Austria

Horst Welebny

Brunnenfeldstrasse 15, A 4020 Linz
tel: (07222) 42666 tlx: 22276

Japan

Nakamura Sengu Kogyo Co. Ltd.

No. 104, Aioi Cho 6 - Chome, Naka-ku
Yokohama 231
tel: 681 0941 tlx: J47804

U.S.A.

Lewmar Marine Inc.

203 Front Street, Greenport
Long Island NY 11944
tel: (516) 477 0966 tlx: 2555102206316

R. B. Grove Inc.

261 Southwest 6th Street, Miami
Florida 33130
tel: (305) 854 5420 tlx: 230515615

Lewmar Marine Inc.

892 West 18th Street, Costa Mesa
California 92627
tel: (714) 642 2655 tlx: 230678436

South Africa

Central Boating (Pty) Ltd.

81 Bree Street, Cape Town 8001
tel: 43 6546 tlx: 576712



**By Appointment to
Her Majesty Queen Elizabeth II
suppliers of yacht fittings and blocks.
Lewmar Marine Limited.**

The Royal Arms of
The United Kingdom



1972



1975

Queens Award to Industry.

These coveted awards of which less than 100 are made each year, were received by Lewmar in recognition of "outstanding achievements in industry, either in increasing exports or in technological innovation."



Lloyd's Certificate

Obtaining a certificate for our winches from Lloyds Register of Shipping involved a detailed examination of every aspect of materials, design and construction. Lewmars standards proved to be higher than those required by Lloyds and were approved without alteration.



Lewmar Service Manual