

# MODEL 23 2-SPEED SELF- TAILING WINCH

MANUFACTURED AFTER MAY 1, 1983

## MAINTENANCE & SERVICE INFORMATION

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*Quality Winches and Fine Yacht Gear*

# **BARIENT**

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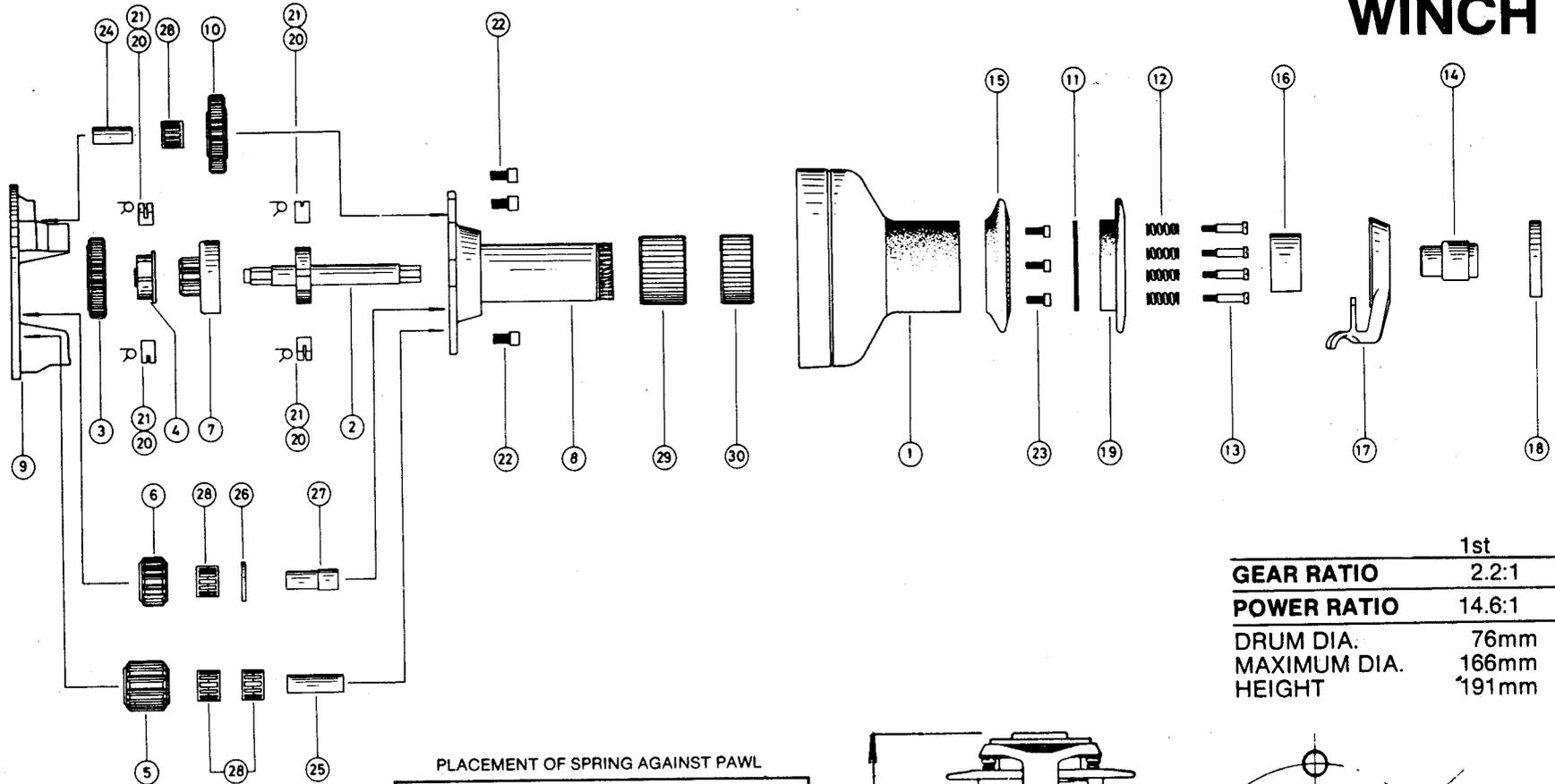
# MAINTENANCE & SERVICE INFORMATION

# MODEL 23 2-SPEED SELF- TAILING WINCH

Barient's patented spring loaded self tailing winches allow various size line to be used without adjustment to the self tailing device. We do, however, recommend using the following line sizes for best results:

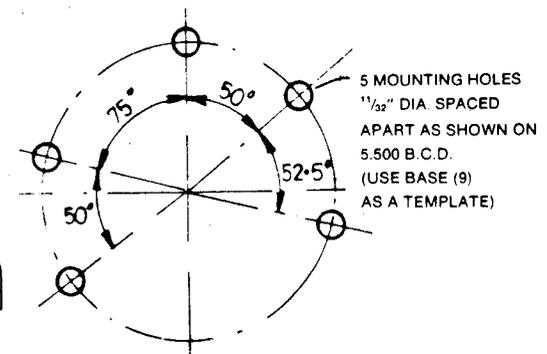
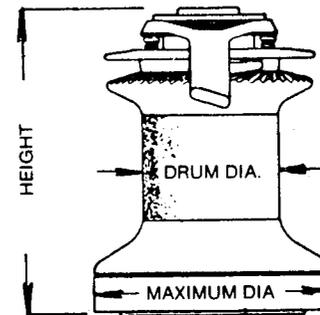
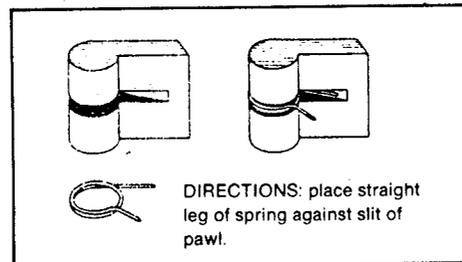
### RECOMMENDED LINE SIZES

Minimum dia.:  $\frac{3}{16}$ " 10mm  
Maximum dia.:  $\frac{1}{2}$ " 13mm.



	1st	2nd
<b>GEAR RATIO</b>	2.2:1	6.3:1
<b>POWER RATIO</b>	14.6:1	42:1
<b>DRUM DIA.</b>	76mm	3"
<b>MAXIMUM DIA.</b>	166mm	6 $\frac{9}{16}$ "
<b>HEIGHT</b>	191mm	7 $\frac{9}{16}$ "

### PLACEMENT OF SPRING AGAINST PAWL



## MOUNTING INSTRUCTIONS

- Using a Barient drum nut tool remove the retaining nut (18) in the line lifter (17).
- Lift the drum assy. and the line lifter together from the gearbox assy. (3).  
**CAUTION:** The drum bearings (29), (30) may come off with the drum — be careful not to let them fall out.
- Bolt the base (9) to a flat and smooth surface drilled to take five flat head bolts or screws  $\frac{5}{16}$ " (8mm) Dia. on  $5\frac{1}{2}$ " (140mm) bolt circle dia.  
**NOTE:** It is not necessary to remove the gearbox (8) from the base (9). Use the base (9) as a template.  
Apply only light coat of bedding (sealing) compound to seal the base to the deck.
- Install the drum assy. with the line lifter in suitable sheeting position over the gearbox assy. (see fig. 1).
- Replace the retaining nut (18) and tighten firmly.

## TO LUBRICATE & DISASSEMBLE:

### Note:

It is not necessary to remove the base (9) from the deck to lubricate this winch.

- Dismantle as step 1 and 2 above.
- Remove the line lifter (17), the spacer (16) and bearings (29), (30). Lift off the main shaft top (14) from top of the gearbox (8).

### Note:

If it is not necessary to disassemble the self-tailing mechanism — proceed to step 5.

- Remove the four shoulder screws (13) and clamping spring (12) from the clamp ring (19) using screwdriver.
- Remove the screw stop plate (11) and the clamp ring (19).
- Remove the three capscrews (22) holding the gearbox housing (8) to the base and carefully lift off the gearbox housing (8).
- Lift out the main shaft (2) together with the center gear (7) from high speed ratchet drive (4).
- Remove the center gear (7) from the main shaft (2) then remove the pawls and springs (20), (21) from the main shaft.
- Lift off the idler gear (10), the bearing (28) and the idler gear shaft (24) from the base (9).
- Remove the drum drive pinion (5), the bearings (28) and drum drive pinion shaft (25).
- Remove the small idler gear (6) together with its shaft (2), washer (26), bearing (28) and separate them.
- Lift the high speed ratchet gear (3) together with the high speed ratchet drive (4) from the base (9) and separate them. Remove the pawls (20) and the springs (21) from the high speed ratchet drive (4).
- Clean all parts in petroleum solvent. Replace any parts showing damage or excessive wear. During the assembly procedure all gears and bearings should be liberally greased with Barient — Barlube. The ratchet pawls should be lubricated with machine oil only. NEVER grease the pawls and springs.
- To assemble winch: Reverse dismantling procedure and steps 4 and 5 under "mounting instructions".

## TOOL REQUIRED:

$\frac{1}{8}$ " and  $\frac{1}{4}$ " Allen key, Barient drum nut tool or deck plate key; screwdriver.

**LUBRICANT:** Non detergent Machine Oil (SAE 30); Barient — Barlube.

## INSPECTION & LUBRICATION:

Quarterly lubrication is recommended. Inspect more frequently in a racing season. Monthly cleaning and lubrication of the aluminium drum winches is advisable.

Item	Part No.	Description	Qty
1	25-604C	Drum — Chrome	1
Alt.	25-604A	Drum — Aluminium	1
Alt.	25-604B	Drum — Bronze	1
2	25-306	Mainshaft Assy	1
3	25-117	High Speed Ratchet	1
4	25-115	High Speed Ratchet Drive	1
5	25-111	Drum Drive Pinion	1
6	25-108	Idler Gear	1
7	25-107	Center Gear	1
8	25-103	Gearbox	1
9	25-102	Base	1
10	25-008	Idler Gear	1
11	24024	Screw Stop Plate	1
12	24023	Clamping Spring	4
13	24022	Shoulder Screw	4
14	24-206	Mainshaft Top	1
15	17-434C	Drum Top — Chrome	1
Alt.	17-434A	Drum Top — Aluminium	1
Alt.	17-434B	Drum Top — Bronze	1
16	17-430	Tube Spacer	1
17	17-413	Line Lifter	1
18	17-409	Retaining Nut	1
19	14675/23	Clamp Ring	1
20	00330	Ratchet Pawl	4
21	00209	Pawl Spring	4
22	01-215	Capscrew $\frac{5}{16}$ " x $\frac{5}{8}$ " lg	3
23	01-213	Capscrew $\frac{3}{16}$ " x $\frac{1}{2}$ " lg	3
24	01-149	Pinion Spindle	1
25	01-148	Pinion Spindle	1
26	01-147	Gear Washer	1
27	01-146	Gear Shaft	1
28	01-010	Bearing — Bronze	4
29	00422	Bearing	1
30	00414	Bearing	1

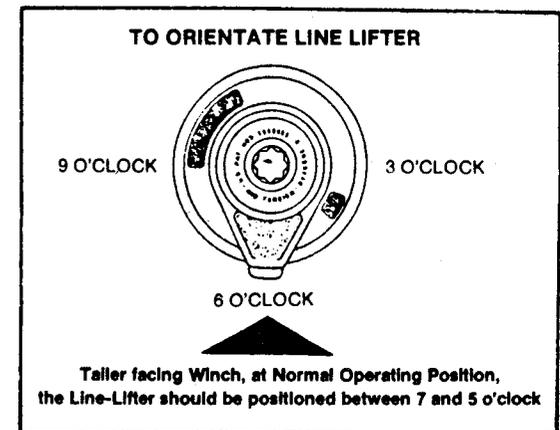


Fig. 1.