MODEL 21 2-SPEED SELF TAILING WINCH

MANUFACTURED AFTER MAY 1, 1985

MAINTENANCE & SERVICE INFORMATION

Quality Winches and Fine Yacht Gear

BARIENT

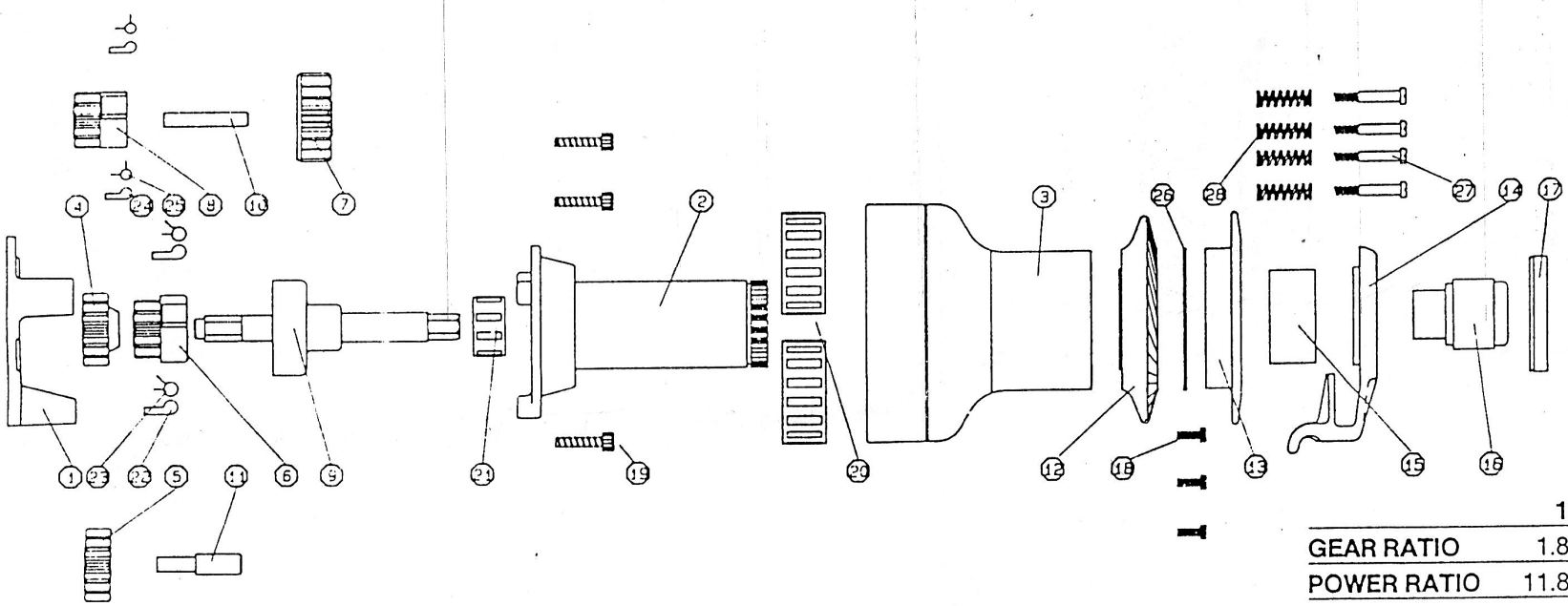
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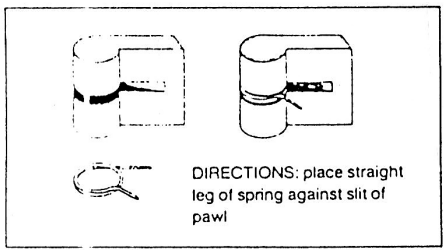
Barient's patented spring loaded self tailing winches allow various size line to be used without adjustment to the self tailing device. We do, however, recommend using the following line sizes for best results:

RECOMMENDED LINE SIZES Minimum dia.: 5/16" 8mm Maximum dia.: ½" 13mm.

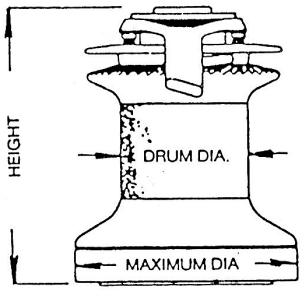


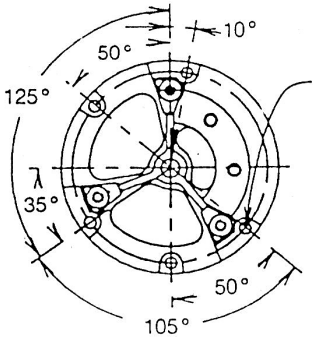
	1st	2nd
GEAR RATIO	1.8:1	4.5:1
POWER RATIO	11.8:1	30:1
DRUM DIA	76mm	3"
MAXIMUM DIA.	132mm	5.2"
HEIGHT	178mm	7"

PLACEMENT OF SPRING AGAINST PAWL



DIRECTIONS: place straight leg of spring against slit of pawl





5 MOUNTING HOLES, 9/32" DIA., SPACED AS SHOWN ON A 4⅜" P.C.D.

MOUNTING INSTRUCTIONS

1. Using a Barient drum nut tool remove the retaining nut (17) in the line lifter (14).
2. Lift the drum assy. and the line lifter together from the gear box assy. (2).
   CAUTION: The drum bearings (20) may come off with the drum — be careful not to let them fall out.
3. Bolt the base (1) to a flat and smooth surface drilled to take five flat head screws ¼" (6mm) dia. on 4⅜" (111mm) bolt circle dia. Use the base (1) as a template. Apply only light coat of bedding (sealing) compound to seal the base to the deck.
4. Install the drum assy. with the line lifter in suitable sheeting position over the gear box assy. (2) (see fig. 1).
5. Replace the retaining nut (17) and tighten firmly.

TO LUBRICATE & DISASSEMBLE:

NOTE:
It is not necessary to remove the base (1) from the deck to lubricate this winch.

1. Dismantle as step 1 and 2 above.
2. Remove the line lifter (14), in the spacer (15) and bearings (20). Lift off the main shaft top (16) from top of the gearbox (2).

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

3. Remove the four shoulder screws (27) and clamping springs (28) from the clamp ring (13) using screwdriver.
4. Remove the screw stop plate (26) and the clamp ring (13).
5. Remove the three capscrews (19) holding the gearbox housing (2) to the base and carefully lift off the gearbox housing (2).
6. Lift out the main shaft (9) together with the center gear (6), bearing (21), high speed center gear (4) and separate them. Remove the pawls (22) and the springs (23) from main shaft.
7. Remove the drum drive ratchet (7), driving pinion (8), driving pinion shaft (10), and separate them. Remove the pawls and springs (24)(25) from driving pinion (8).
8. Remove the idler gear (5) and the idler shaft (11) from the base (1).
9. 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.
10. To assemble winch: reverse dismantling procedure and steps, 7,8 under "mounting instructions".

TOOL REQUIRED:

⅛" and 3/16"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	23-502	BASE	1
2	23-503	GEAR BOX	1
3	23-507AM	DRUM, ALUMINIUM	1
alt	23-704B	DRUM, BRONZE	1
alt	23-704C	DRUM, CHROME	1
4	23-513	HIGH SPEED CENTER GEAR	1
5	23-508	IDLER GEAR	1
6	23-512	CENTER PINION	1
7	23-515	DRUM DRIVE GEAR	1
8	23-514	DRIVE PINION	1
9	23-511	MAINSHAFT ASSEMBLY	1
10	23-526	DRIVE SHAFT	1
11	23-525	IDLER SHAFT	1
12	17-434	S-T DRUM TOP	1
13	14675/21	CLAMPING RING	1
14	17-413	LINE LIFTER	1
15	17-430	TUBE SPACER	1
16	24-206C	MAINSHAFT TOP	1
17	17-409	RETAINING NUT	1
18	01-213	CAP SCREW, 10-24x ½	3
19	01-203	CAP SCREW, ¼-20x1	3
20	00422	BEARING, 2 ¼Φx1 ⅝	1
alt.	01-021	BEARING "DELRIN"	2
21	01-012	BEARING	1
22	01-400	RATCHET PAWL	2
23	01-300	TORSION SPRING	2
24	00331	RATCHET PAWL	2
25	00215	TORSION SPRING	2
26	24024	SCREW STOP PLATE	1
27	24022	SHOULDER SCREW	4
28	24023	CLAMPING SPRING	4

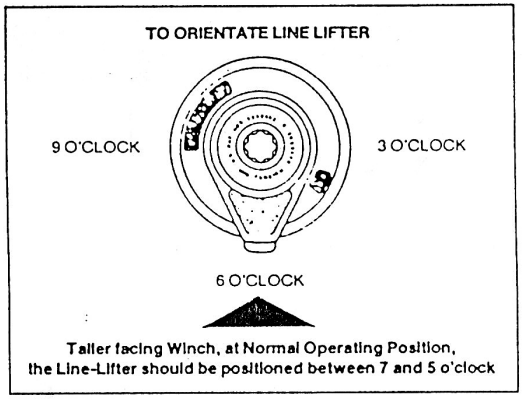


Fig. 1.