

POWERWINCH

WINDLASSES

models

212

410

412

415

416

Owners Manual

CAUTION

READ OWNERS MANUAL BEFORE USE. THIS UNIT IS NOT
DESIGNED FOR OVERHEAD LIFTING OR LIFTING HUMANS.

FOR SAFETY

WE RECOMMEND THE USE OF POWERWINCH ACCESSORIES
AND REPLACEMENT PARTS.

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POWERWINCH ACCESSORIES AND
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Lubricate once a year, preferably in spring before start of boating season.

- Remove case as follows:
 1. Pry loose capstan end seal with pointed instrument (Key #1).
 2. Remove nut under seal (Key #2). Pull capstan (Key #3).
 3. Loosen 9 screws (Key #10) fastening case to winch base (Key #11).
 4. Remove nut A-41 (Key #34) from toggle switch (Key #33). Push switch through to inside of case.
 5. Lift off case (Key #37).
- Grease all gears and all bearings with Molykote G, gear lubricant (Cat. #L-71).
- Replace end seal on capstan.
- Recaulk base to case to prevent moisture from entering.

NOTE: Order Molykote G and other replacement parts through local marine dealer or directly from POWERWINCH DIVISION, SCOTT FETZER CO., 2268 Fairview Blvd, Fairview, Tennessee 37602.

NOTE: This unit, as shipped from factory, is completely watertight. Whenever removing cover for greasing, etc., refer to "Upkeep" instructions

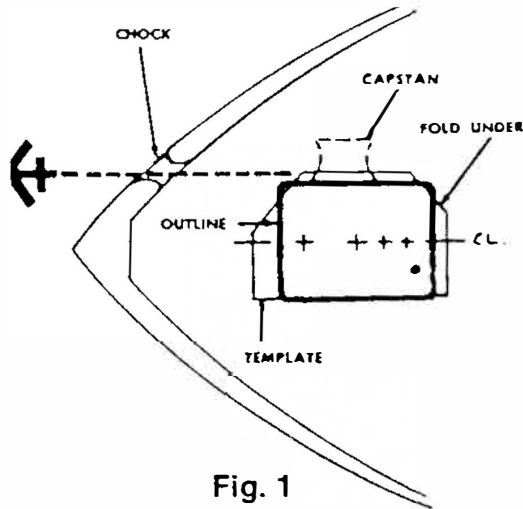
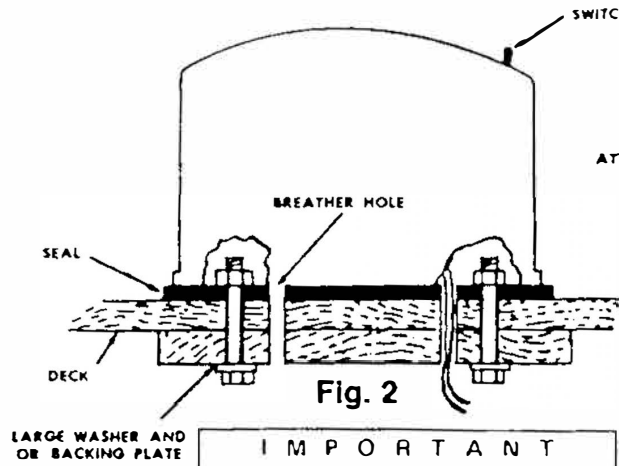


Fig. 1



IMPORTANT
Caulk on deck before mounting. Caulk
around base of winch after mounting.

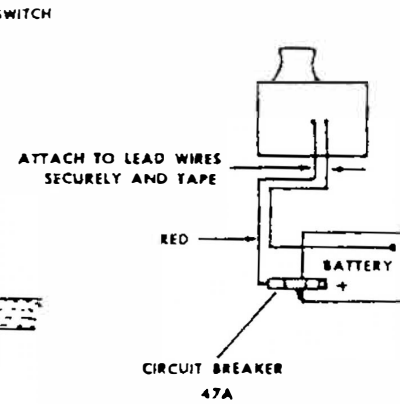


Fig. 3

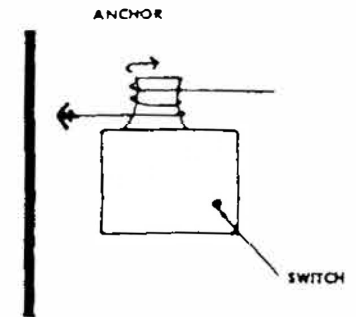


Fig. 4

TO SEPARATE TEMPLATE PAGE FROM REST OF MANUAL, TEAR ALONG DOTTED LINE.

CAPSTAN SIDE

INSTALLATION AND OPERATION OF ANCHOR WINDLASS

LOCATE POSITION OF ANCHOR WINDLASS

Place windlass on deck. Line up capstan with chock (as shown). Pencil outline base. Remove unit. Measure centerline Fig. 1.

USE THIS INSTRUCTION SHEET AS TEMPLATE

Place this sheet on deck outline, which you've drawn. Place top edge, capstan side, in position. This gives you centerline for holes. Fasten template in position temporarily, using cellophane tape.

Before drilling, use center punch in each hole location on template (2 bolt holes, 1 wiring hole and 1 breather hole, as marked). Drill four 1/2" holes through the deck.

SECURING ANCHOR WINDLASS TO DECK BACKING PLATE

Remove template from deck. Using a caulking compound, caulk around the deck outline. Then around each of the four deck holes. Place Anchorwindlass in position on outline. Be sure lead wire is entirely through wiring hole.

Attach Anchorwindlass to deck using 3/8-16 bolts. (See Note 1) To determine length of bolt to be used — add thickness of deck plus 1". (Bolts must be 1" longer than total thickness — including backing plate, if one is required.) Insert bolts from below having placed thick washer in position as shown (Fig. 2). Tighten securely into position. After tightening unit into position, caulk completely around base to assure a water-tight seal. For sharply curving decks, see Note 2.

NOTE 1. BACKING PLATE

To assure greatest strength, a backing plate is recommended especially where deck has no king plank. A suitable backing plate can be made from 3/8" marine plywood. Be sure to allow extra length in determining bolts.

NOTE 2. SHARPLY CURVING DECKS

If deck contour will not allow unit to sit flat, make a flat wood base with bottom side contoured to deck shape. Caulk around base and deck to assure water-tight seal.

WIRING

Short lead wire only is furnished with the Anchorwindlass. For 12 volt installations, use No. 6 wire. Length of wire needed will vary according to individual requirements—determined by distance between winch and battery. Connect wire securely to lead wires. Tape these connections securely. Run wires to terminals on battery. Connect one wire to circuit breaker (furnished) securely as shown. Then connect the buss bar end to the battery post. (See Fig. 3)

(For wiring the Model 410C refer to wiring diagram.)

OPERATING THE ANCHOR WINDLASS

Place anchor rope through bow chock and over top of capstan, close to case. Wrap tape around capstan counterclockwise (see Fig. 4). Three or four turns around capstan required depending on load.

Push switch "on." Maintain tension on rope. Take off excess as rope turns off the capstan. To stop pull, simply release tension on rope and allow it to slip around on rotating capstan. Push switch "off."

6 3/4" CENTER DIST.

BOLT HOLE



BREATHER HOLE



WIRING HOLE



BOLT HOLE



NOTE: FOR 110 WIRING, HOLE MUST BE 1"

FOLD UNDER HERE TO ALIGN WITH OUTLINE

FOLD UNDER HERE TO ALIGN WITH OUTLINE

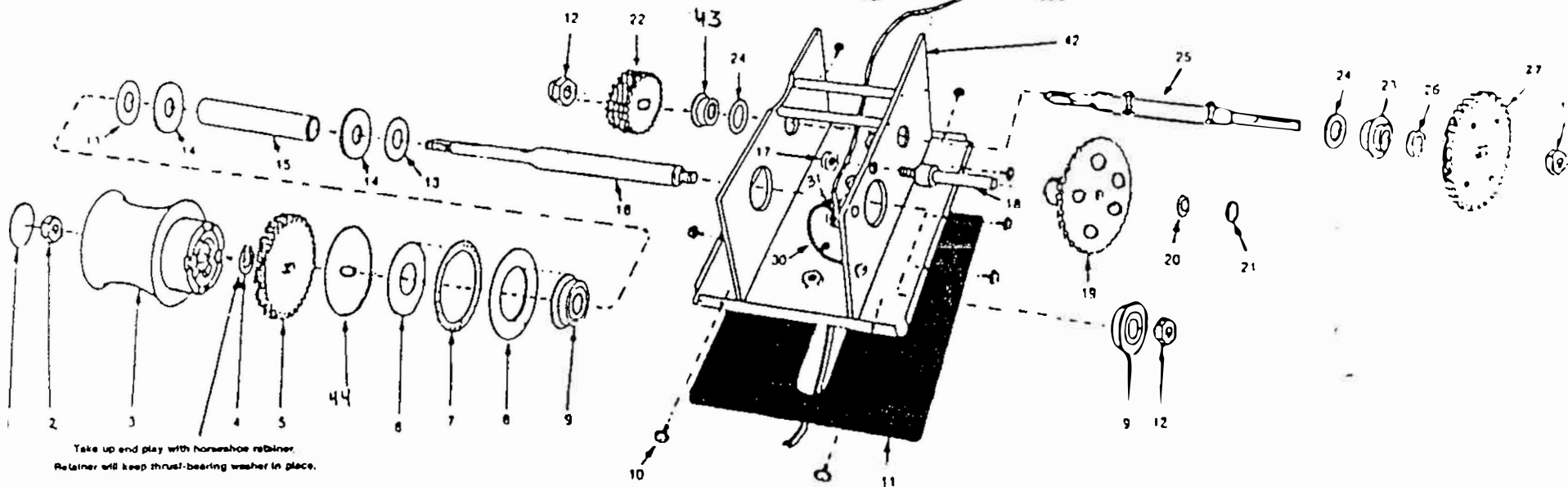
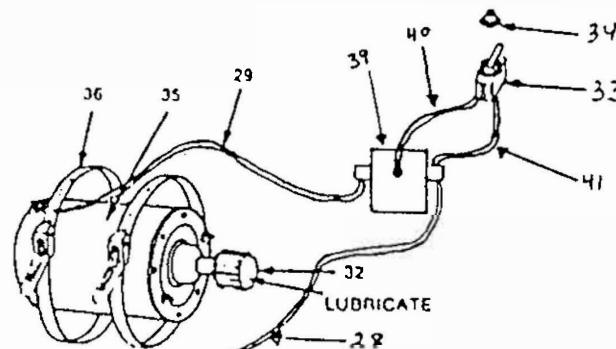
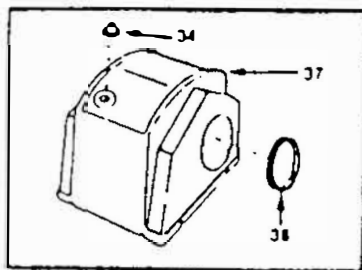
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**THIS IS A PERMANENT MAGNETIC MOTOR
AND IS POLARIZED FOR ROTATION.**

Make sure your wiring connections conform to instructions. Reversing may cause motor gear to back off the threaded shaft, and/or possible damage to motor or wiring.

**Model
212**

**TO MAINTAIN EFFICIENCY OF UNIT LUBRICATE
CABLE OCCASIONALLY WITH WHITMORE'S
WIRE ROPE SPRAY — LPS-3, OR SIMILAR
PRODUCT.**



Take up end play with horseshoe retainer.
Retainer will keep thrust-bearing washer in place.

REPAIR PARTS LIST 212

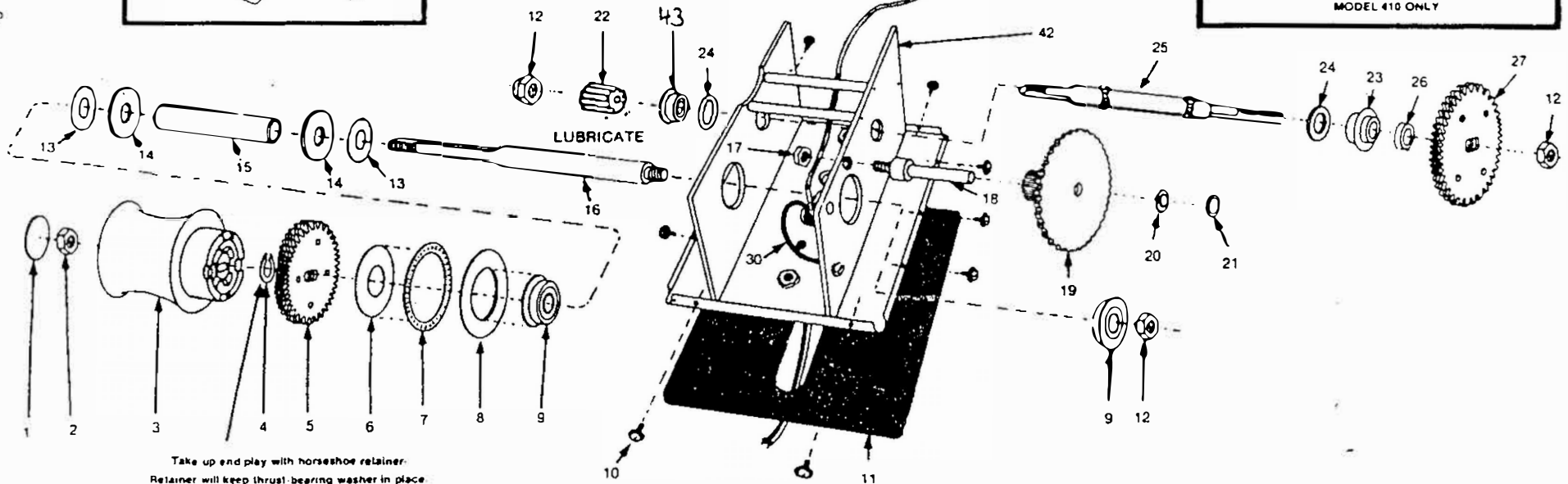
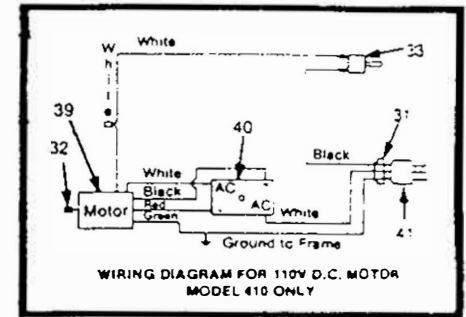
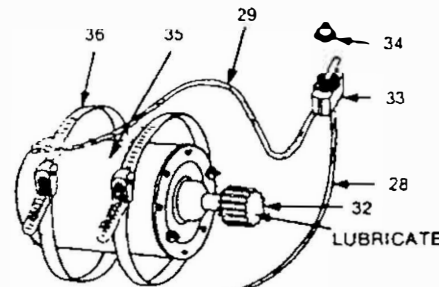
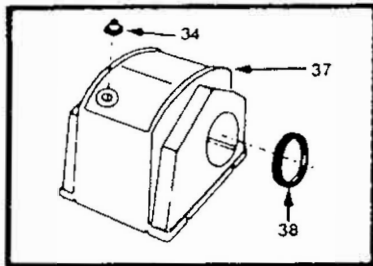
KEY NO.	ID NO.	DESCRIPTION	QTY. USED
1	75900	Capstan seal	1
2	79715	5/8-18 nut	1
3	73701	Capstan	1
4	79047	Retainer	1
5	71729	Gear, front shaft drive assy.	1
6	71615	Thrust bearing washer	1
7	71616	Thrust bearing	1
8	71614	Thrust bearing washer	1
9	71605	Bearing	2
10	79587	10-32 x 1/2 self-tapping ss screws	9
11	75902	Flat deck seal	1
12	79712	Nut, 1/2-20	3
13	71823	Spacing washer	2
14	71822	Spacing washer	2
15	71827	Spacer tube	1
16	71205	Main shaft	1
17	79713	Nut, 1/2-20 thin	1
18	71103	1st gear shaft	1
19	71758	Powder metal gear assy.	1
20	71613	Thrust race .060	1
21	79852	Ring retainer	1
22	71708	Idler gear	1
23	71607	Bearing	1
24	71820	Spacing washer	2
25	71306	Rear shaft	2
26	71837	Ring spacer	1
27	71703	Drive gear	1
28	78043	Wire, 10 ga red 20"	1
29	78044	Wire 10 ga red 5 1/2"	1
30	78045	Wire 10 ga black 20"	1
31	78114	Bushing	1
32	71725	Motor gear	1
33	78138	Toggle switch	1
34	79718	Sealed nut	1
35	72002	Motor 12 volts	1
36	72203	Motor strap	2
37	74004	Cover	1
38	75901	Capstan seal	1
39	78118	Solenoid	1
40	78003	Jumper wire	1
41	78016	Jumper wire	1
42	70136	Frame	1
43	71608	Bearing	1
44	71617	Washer	1

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Make sure your wiring connections conform to instructions. Reversing may cause motor gear to back off the threaded shaft, and/or possible damage to motor or wiring.

**Model
412
410**

**TO MAINTAIN EFFICIENCY OF UNIT LUBRICATE
CABLE OCCASIONALLY WITH WHITMORE'S
WIRE ROPE SPRAY — LPS-3, OR SIMILAR
PRODUCT.**



REPAIR PARTS LIST 412 & 410

KEY NO.	ID NO.	DESCRIPTION	QTY. USED
1	75900	Capstan seal	1
2	79715	5/8-18 nut	1
3	73701	Capstan	1
4	79047	Retainer	1
5	71760	Gear, front shaft drive assy.	1
6	71615	Thrust bearing washer	1
7	71616	Thrust bearing	1
8	71614	Thrust bearing washer	1
9	71605	Bearing	2
10	79587	10-32 x 1/2 self tapping ss screws	9
11	75902	Flat deck seal	1
12	79712	1/2-20 nut	3
13	71823	Spacing washer	2
14	71822	Spacing washer	2
15	71827	Front shaft spacer tube	1
16	71205	Main shaft	1
17	79713	1/2-20 thin nut	1
18	71103	1st gear shaft	1
19	71758	Powder metal gear assy.	1
20	71613	.060 thrust race	1
21	79852	Split ring retainer	1
22	71704	Pinion gear	1
23	71607	Bearing	1
24	71820	Spacing washer	2
25	71306	Rear shaft	2
26	71837	1/2 x 1/4 x 3/4 ring spacer	1
27	71703	Drive gear	1
28	78043	Wire, 10 ga red 20"	1
29	78044	Wire 10 ga red 5 1/2"	1
30	78045	Wire 10 ga black 20"	1
31	78114	Strain relief bushing	1
32	71728	16 T motor gear	1
33	78138	Toggle switch	1
34	79718	Sealed nut	1
35	72002	Motor 12 volts	1
36	72203	Motor strap	2
37	74004	Cover	1
38	75901	Capstan seal	1
39	72010	Motor (110 volts 410 only)	1
40	78115	Bridge rectifier (410 only)	1
41	78019	16 ga, 3 cond. wire w/plug (410 only)	1
42	70136	Frame	1
43	71608	Bearing	1
N.S.*	79543	10-32 x 1 screw	1
N.S.*	79009	10-32 nut	1
	70178	Base Pan NLA	

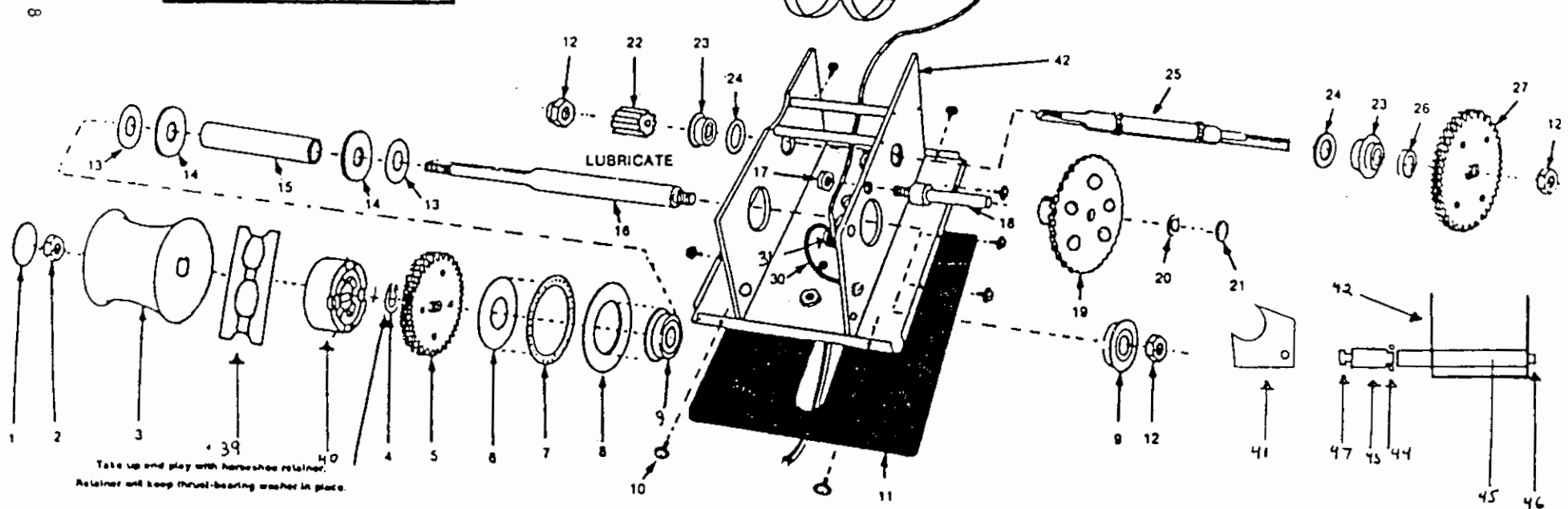
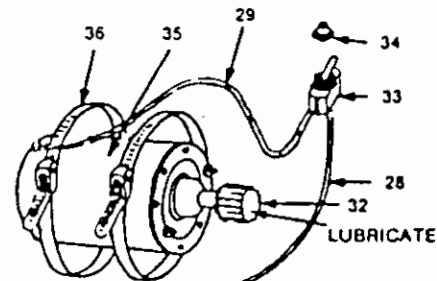
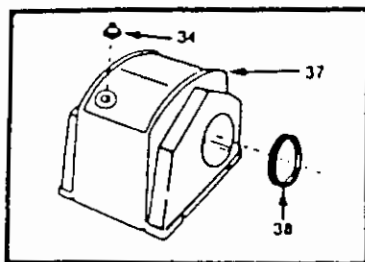
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TO MAINTAIN EFFICIENCY OF UNIT LUBRICATE CABLE OCCASIONALLY WITH WHITMORE'S WIRE ROPE SPRAY — LPS-3, OR SIMILAR PRODUCT.

Model 415

THIS IS A PERMANENT MAGNETIC MOTOR AND IS POLARIZED FOR ROTATION.

Make sure your wiring connections conform to instructions. Reversing may cause motor gear to back off the threaded shaft, and/or possible damage to motor or wiring.



REPAIR PARTS LIST 415

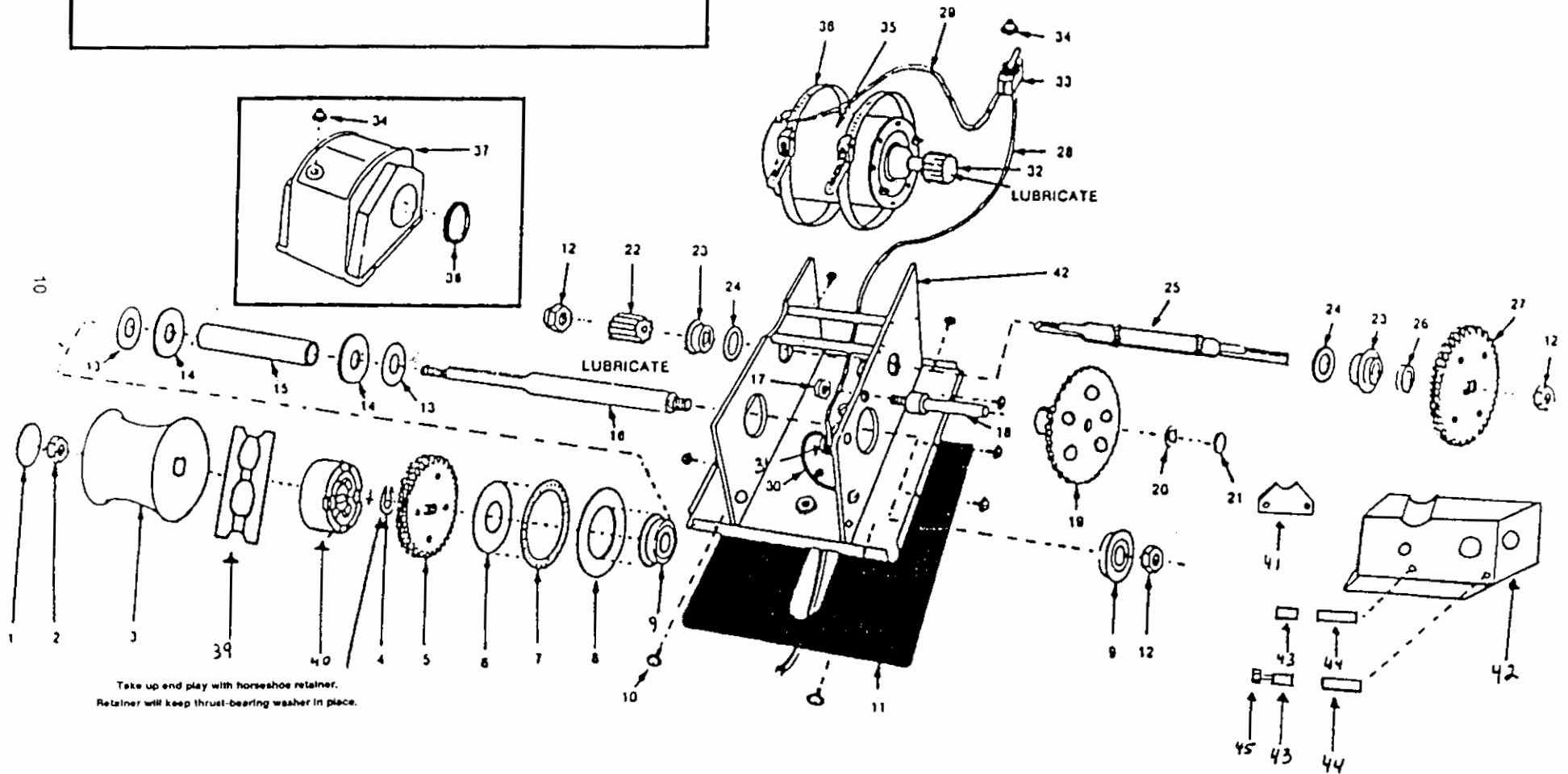
KEY NO.	ID NO.	DESCRIPTION	QTY. USED
1	75900	Capstan seal	1
2	79715	5/8-18 nut	1
3	73702	Capstan	1
4	79047	Retainer	1
5	71731	Gear, Front shaft drive assembly	4
6	71615	1- $\frac{1}{4}$ " ID x 3 OD thrust bearing washer	1
7	71616	Thrust bearing	1
8	71614	2" ID x 3 $\frac{3}{4}$ " OD thrust bearing washer	1
9	71605	Bearing	2
10	79587	10-32 x $\frac{1}{2}$ self tapping SS screws	9
11	75902	Flat deck seal	1
12	79712	$\frac{1}{2}$ -20 nut	3
13	71823	$\frac{1}{8}$ x .030 spacing washer	2
14	71822	.060 x .515 x .875 spacing washer	2
15	71827	Front shaft spacer tube	1
16	71305	Main shaft	1
17	79713	$\frac{1}{2}$ -20 thin nut	1
18	71103	1st gear shaft	1
19	71758	Powder metal gear assembly	1
20	71613	.060 thrust race	1
21	79852	Split ring retainer	1
22	71704	Pinion gear	1
23	71608	Bearing	1
24	71820	$\frac{1}{8}$ x .125 spacing washer	2
25	71306	Rear shaft	2
26	71837	$\frac{1}{2}$ x $\frac{1}{4}$ x $\frac{3}{4}$ ring spacer	1
27	71703	Drive gear	1
28	78043	Wire, 10 ga red 20"	1
29	78044	Wire 10 ga red 5 $\frac{1}{2}$ "	1
30	78045	Wire 10 ga black 20"	1
31	78114	Strain relief bushing	1
32	71725	20T 9/16 RH motor gear	1
33	78138	Toggle switch	1
34	79718	Sealed nut	1
35	72002	Motor 12 volts	1
36	72203	Motor strap	2
37	74004	Cover	1
38	75901	Capstan seal	1
39	73723	5/16 wildcat	1
40	73705	Spacer	1
41	73726	Chain stripper	1
42	70107	Frame	1
43	73725	Outside striper spacer	1
44	79516	"O" ring	1
45	73724	Ext. Bar stripper	1
46	79606	5/16-18- $\frac{3}{4}$ stainless screw	1
47	79515	5/16-18 x 2 stainless screw	1
48	71607	Bearing	1

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**Model
416**

**TO MAINTAIN EFFICIENCY OF UNIT LUBRICATE
CABLE OCCASIONALLY WITH WHITMORE'S
WIRE ROPE SPRAY — LPS-3, OR SIMILAR
PRODUCT.**

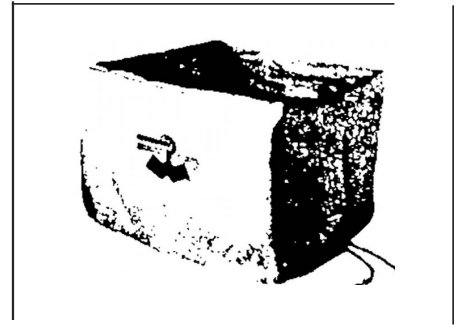


REPAIR PARTS LIST 416

KEY NO.	ID NO.	DESCRIPTION	QTY. USED
1	75900	Capstan seal	1
2	79715	5/8-18 nut	1
3	73702	Capstan	1
4	79047	Retainer	1
5	71731	Gear, front shaft drive assy.	1
6	71615	Thrust bearing washer	1
7	71616	Thrust bearing	1
8	71614	Thrust bearing washer	1
9	71605	Bearing	2
10	79587	10-32 screws	9
11	75902	Flat deck seal	1
12	79712	1/2-20 nut	3
13	71823	Spacing washer	2
14	71822	Spacing washer	2
15	71827	Front shaft spacer tube	1
16	71305	Main shaft	1
17	79713	1/2-20 thin nut	1
18	71103	1st gear shaft	1
19	71758	Powder metal gear assy.	1
20	71613	.060 race thrust	1
21	79852	Split ring retainer	1
22	71704	Pinion gear	1
23	71608	Bearing	1
24	71820	3/8 x .125 spacing washer	2
25	71306	Rear shaft	2
26	71837	1/2 x 1/4 x 3/4 ring spacer	1
27	71703	Drive gear	1
28	78043	Wire, 10 ga red 20"	1
29	78044	Wire 10 ga red 5 1/2"	1
30	78045	Wire 10 ga black 20"	1
31	78114	Strain relief bushing	1
32	71725	20T motor gear	1
33	78138	Toggle switch	1
34	79718	Sealed nut	1
35	72002	Motor 12 volts	1
36	72203	Motor strap	2
37	74015	Cover	1
38	75901	Capstan seal	1
39	73704	1/4 wildcat	1
40	73705	Spacer	1
41	75001	Chain stripper	1
42	70130	Frame	1
43	71831	Outside striper spacer	2
44	71830	Inside stripper spacer	2
45	79064	1/4-20 x 1 3/4 SS screw	2
46	71607	Bearing	1



Anchor Davit Model A-66 Aluminum unit designed for 412, 415, 416 and 612 windlasses. Handles and holds snug any size or weight fluke type anchor. 30" long, 4-1/2" wide.



Winch Cover 77001 Attractive, durable cover to keep unit clean and dry.



Circuit Breakers Part #78323 40 amp.



To prolong the life of your winch cable, use Whitmore's Wire Rope Spray cable lubricant.



For once a year lubrication of your winch gears, use Molykote G gearlubricant. 1/4 oz.

ALL PARTS MAY BE PURCHASED FROM YOUR LOCAL POWERWINCH DEALER, CATALOG HOUSE, OR PURCHASED DIRECT FROM OUR POWERWINCH PARTS DEPARTMENT.

Limited Warranty

For one (1) year from the date of purchase, Powerwinch Division will repair or replace for the original purchaser any part or parts found upon examination by any authorized service center, or by Powerwinch Division, to be defective in materials or workmanship or both. If warranty service is required please forward the claimed defective product or part to the nearest authorized service center or directly to Powerwinch Division. THERE IS NO OTHER EXPRESS WARRANTY, IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusions or limitations of incidental or consequential damages, so the above limitations might not apply to you.

This limited warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

Call 1-800-793-4793 and ask for our Service Department
We will give you the name of the nearest warranty repair center in your area.

NON-WARRANTY REPAIRS

If you are unable to service your winch yourself, call 1-800-793-4793 and ask for our Service Department. We will give you the name of the nearest repair center in your area.

When sending your unit to the nearest repair center, give your name, address, and any pertinent information on your winch problem. Please pack carefully so as to avoid damage in shipment.



POWERWINCH

[a ScottFellr company]

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Powerwinch.com

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