



## WINDLASS

### MODELS 602 AND 603

READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT DESCRIBED. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

#### Description

The model 602/603 anchor windlass retrieves any type of anchor. The uniquely designed rope windlass features a spur gear drive system for fast power-up and automatic free fall. This windlass is rated for a maximum working load of 500 lbs.

#### Unpacking

When unpacking this product, carefully inspect for any damage that may have occurred during transit.

#### General Safety Information

The following safety precautions must be followed at all times:

1. Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Only persons well acquainted with these rules of safe operation should be allowed to use the windlass.

#### **▲ WARNING ▲**

**ALWAYS UNPLUG THE WIRING HARNESS TO PREVENT ACCIDENTAL STARTING BEFORE ATTEMPTING TO INSTALL, SERVICE, RELOCATE OR PERFORM ANY MAINTENANCE.**

2. Never use the windlass to lift or move people or animals.
3. Stand away from the windlass when in use and keep children free from windlass area at all times.
4. Do not wear loose fitting clothing, scarves, or neck ties. Loose clothing may become caught in moving parts and result in serious personal injury.

#### General Safety (Continued)

#### **▲ WARNING ▲**

**ALWAYS STAND CLEAR OF THE AREA BETWEEN THE LOAD OR ANCHOR POINT AND THE WINDLASS. SERIOUS INJURY COULD OCCUR, IF THE ROPE BREAKS.**

5. Always wire the windlass with a circuit breaker. Failure to use the breaker could cause overheating thus creating a potential fire hazard or motor damage.

#### **▲ CAUTION**

**When the windlass is not in use, the anchor must be tied-off onto a cleat to relieve motor tension and prevent boat damage. Also, when trailering the boat the anchor must be tied-off. Failure to do so invalidates the warranty.**

6. Inspect the entire rope for weak or worn condition or kinking (short tight twist or curl) before each use.
7. When replacing the rope, **always** use Powerwinch rope or a rope that has been tested and certified by Powerwinch. The rope affects the performance of the wildcat.
8. Never substitute cable for rope. Possible injury could occur.
9. Do not attempt to pull a load greater than the rated load of the windlass.
10. Do not operate the windlass under the influence of drugs, alcohol, or medication.

#### Specifications

Model	Anchor Type (Max 42 lb)	No Load Line Line Speed (FPM)	Line Size	Voltage (Volt)	Circuit Breaker (Amps)	Unit Weight (lbs)	Gear Ratio
602	Any	50	1/2" Twisted nylon	12	40	42	169:1
603	Any	50	5/8" Twisted nylon	12	40	42	169:1

Unit Length	Unit Height	Unit Width	Approximate Boat Size	Maximum Working Load
12-1/2"	8"	11"	26' - 50'	500- lbs.

**Installation**

**MOUNTING**

To mount the windlass, refer to Figure 1 and follow the procedures outlined below.

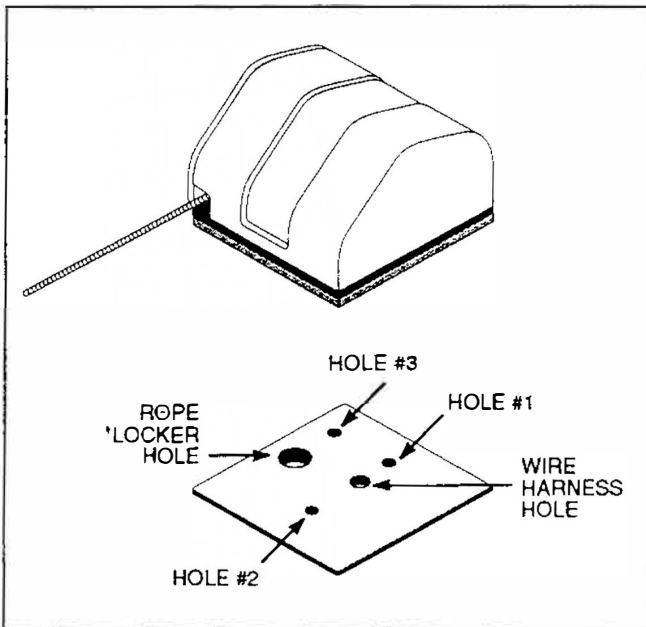
**Tools Required:**

- Electric drill and 7/16", 5/8" and 1-1/2" drill bits
- Terminal crimping tool
- Adjustable wrench
- Standard screwdriver

**Material Required (not included):**

- 3/8"-16 bolts (3 stainless steel) Bolt length depends upon deck thickness. Calculate the deck thickness and add an additional 1-1/4" length for the overall bolt length. Example:  
1-1/2" deck + 1-1/4" clearance = 2-3/4" bolt length.
  - 3/8" diameter flat and lock washers (3 stainless steel)
  - Marine plywood (optional) for underdeck support back plate
  - #8 wood screws (4) for the switch mounting plate (Bolt length depends upon mounting location)
  - Battery terminal (2)
  - #10 AWG gauge wire - red - battery to windlass
  - #10 AWG gauge wire - black - battery to windlass
  - #8 or #10 AWG butt connectors - match wire size
  - #8 or #10 AWG terminals - match wire size
  - 5/16"-18 x 1" Hex head screw (1)
  - 5/16" lock washer (1)
  - 5/16" nut (1)
- } Circuit breaker connections

Approx. Wire Length	Insulation Gauge	Class
<50 ft.	#10 AWG	80° C
>50 ft.	#8 AWG	80° C



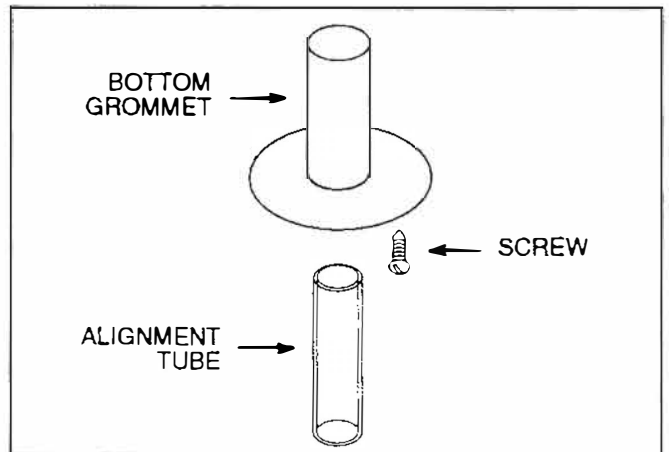
**Figure 1 Mounting And Wiring Hole Locations**

1. Place the **enclosed** template in the desired position on the deck and tape into position. Be sure the centerline of the template is on the centerline of the bow.

**IMPORTANT:** Be absolutely certain that the windlass is installed near the rope locker before drilling any mounting holes. The anchor line will feed into the rope locker through a 1-1/2" diameter hole in the boat deck. Using too much line for the dimension of the rope locker will cause jamming problems with the windlass. Minimum rope locker dimensions required for proper storage of anchor lines are listed below.

Line Dimensions	Locker Dimensions	
	L	D
(1/2") x 200"	15" x 17"	
(1/2") x 300"	15" x 24"	
(5/8") x 200"	15" x 24"	
(5/8") x 300"	16" x 32"	

2. Spot and drill the holes as shown on the template. There are three 7/16" mounting holes, one 5/8" hole for the wiring harness and one 1-1/2" hole for the rope hole to the locker (See Figure 1 and/or mounting template). If using the optional marine plywood base underneath, use the same mounting template for hole locations.
3. Place the windlass in position and pull the motor wires through the deck (5/8" wire harness hole) and bolt the windlass to the deck using the 3/8"-16 bolts, lockwashers and flatwashers in holes #1 and #2.
4. Remove the side plate on the windlass by removing the four screws that attach the plate to the windlass. Slide the 3/8-16 bolt through the #3 hole and fasten with the 3/8" nut below the deck. **Do not install the side plate until the rope is installed.**
5. Insert the alignment tube into the bottom grommet from the deck below (See Figure 2).
6. Push alignment tube into the bottom grommet. Fasten the bottom grommet using the supplied #10-3/4" (3) self tapping screws. After the bottom grommet is installed, remove and discard the alignment tube.



**Figure 2 Alignment Tube Installation**

**Installation (Continued)**

**SWITCH PLATE INSTALLATION AND WIRING**

To install the switch plate, follow the outlined procedures and refer to Figure 3.

1. Select the suitable location (bulkhead, console, etc.). Make sure there is enough room behind for the entire switch and wires.
2. Cut a hole 1-3/4" high and 1" wide.
3. Apply a thin bead of silicone sealer around the edge of the switch mounting plate and attach the plate using the four #8 round head wood screws.

**CAUTION**

Never attach the circuit breaker to the battery ground terminal (negative (-) post).

4. Attach the circuit breaker to the **positive (+)** side of the battery.
5. Measure and cut the required red and black wire lengths to connect the **battery** to the **switch**.
6. Crimp the small (3/16) ring terminal to one end of the red wire and a female disconnect to the other end.
7. Crimp the large (5/16) ring terminal to one end of the black wire and a female disconnect to the other end.
8. Attach the ring terminal on the **red** wire to the unused post on the circuit breaker using a nut.

**CAUTION**

Never attach the black wire to the battery hot terminal (positive (+) post).

10. Connect the ring terminal on the **black** wire to the **negative (-)** battery terminal post.
11. Connect the female disconnect on the **black** wire to Terminal "C" on the back of the switch.
12. Measure and cut the required red and black wire lengths to connect the **windlass** to the **switch**.
13. Crimp a female disconnect to one end of both red and black wires.
14. Connect the female disconnect on the **red** wire to Terminal "A" on the back of the switch.
15. Attach the **red** wire to the **red** motor lead on the windlass using a butt connector.
16. Connect the female disconnect on the **black** wire to Terminal "B" on the back of the switch.
17. Attach the **black** wire to the **black** motor lead on the windlass using a butt connect.

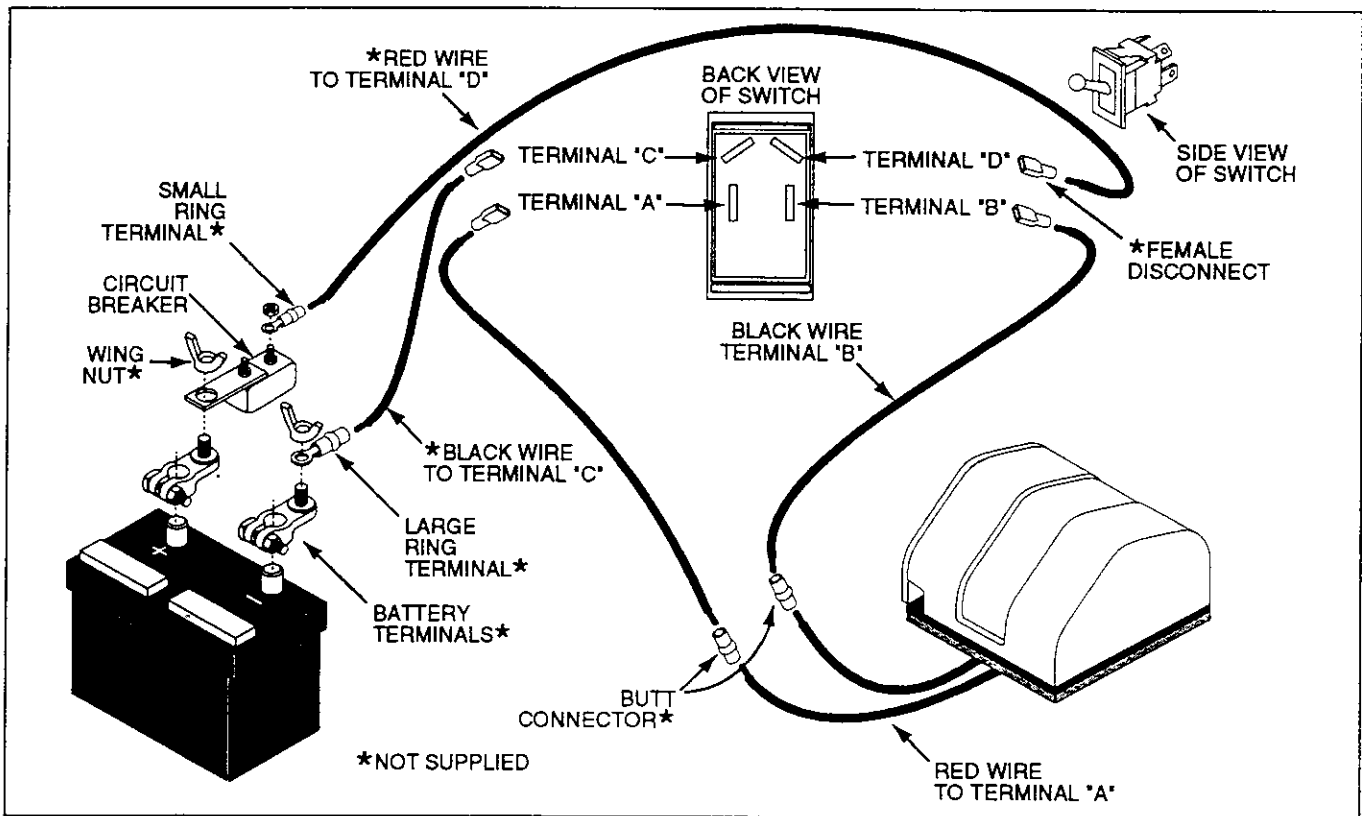


Figure 3 Wiring Diagram

## Installation (Continued)

### ANCHOR LINE INSTALLATION

1. To install anchor line, feed the rope through the hole on front of the windlass. At the same time have another individual push the remote switch to the "UP" position.
2. **IMPORTANT: IT MAY BE NECESSARY TO HELP FEED THE ROPE THROUGH THE DRIVE MECHANISM.** To do this, remove the side plate and feed the rope under the front pulley assembly.

### ANCHOR ATTACHMENT

The typical type of anchor used on this windlass is a danforth anchor. Refer to Figure 4 and attach the anchor to the thimble using a shackle (not supplied).

### CAUTION

**Never cut the thimble connected to the rope. This will reduce the anchoring capacity and/or result in possible anchor loss. Cutting the factory splice automatically invalidates the warranty.**

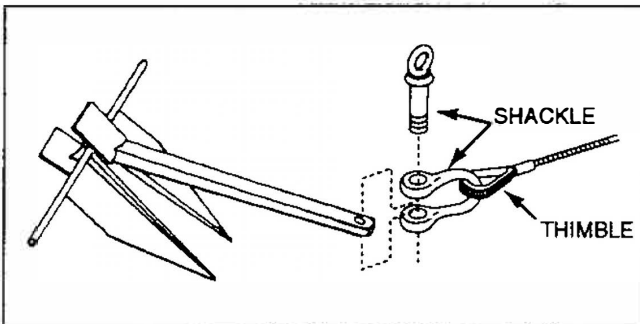


Figure 4 Anchor Attachment

### Operation

There are two operating methods for the windlass: automatic and free-fall. The following sections describe each mode. Always keep hands clear of rope drum.

### WARNING

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### CAUTION

**When the windlass is not in use, the anchor must be tied-off onto a cleat to relieve motor tension and prevent boat damage. Also, when trailering the boat the anchor must be tied-off. Failure to do so invalidates the warranty.**

### AUTOMATIC MODE

The windlass can be operated automatically using the switch. To lower the anchor, simply hold the switch in the "down" position until the anchor is free falling (approximately 5 sec.). To raise the anchor, hold the switch in the "up" position until the anchor is retrieved.

### CAUTION

**Never turn the remote control switch to the "UP" position while the anchor is falling or damage could occur.**

### CAUTION

**Never use the windlass to break the anchor free.**

### Maintenance

1. Once a year, remove the side plate and flush components with fresh water.
2. Check the electrical connections annually for corrosion. Replace any connection or wire which is damaged, corroded, frayed or worn.
3. The rope must also be checked periodically for abrasion or deep cuts. Never splice an old rope with a new rope. Replace the rope only with Powerwinch rope that is specifically designed for this windlass.

### Technical Service

For information regarding the operation or repair of this product, please call 1-800-793-4793 for assistance.

### Replacement Parts Information

For information regarding where to order replacement parts, call toll free 1-800-793-4793. Please provide the following information:

- Model number
- Serial number
- Part number and description

Address parts correspondence to:

Powerwinch  
2268 Fairview Blvd.  
Fairview, TN 37062

### Troubleshooting Chart

SYMPTOM	POSSIBLE CAUSE (S)	CORRECTIVE ACTION
Windlass will not operate	1. Disconnected or bad wiring or bad circuit breakers	1. Start checking the wiring at the battery. Bypass the circuit breakers and test the windlass by running a wire directly from the battery to the switch. If the windlass operates, the circuit breaker or some of the wiring between the battery and the switch is faulty. Double check the wiring and connections. If the problem continues, replace the circuit breakers.  <div style="text-align: center; background-color: black; color: white; padding: 5px;"><b>⚠ DANGER ⚠</b></div> <i>Bypass the circuit breaker to diagnose an electrical problem only. Always use a circuit breaker in normal operation.</i>
Line slipping when retrieving	1. Wrong rope size	1. Make sure the rope size is 1/2" or 5/8" Powerwinch rope or a rope certified by Powerwinch.
Anchor line will not free fall	1. Rope tangled in rope locker	1. Be sure the rope is not kinked or in knots before anchoring.

### **Limited Warranty**

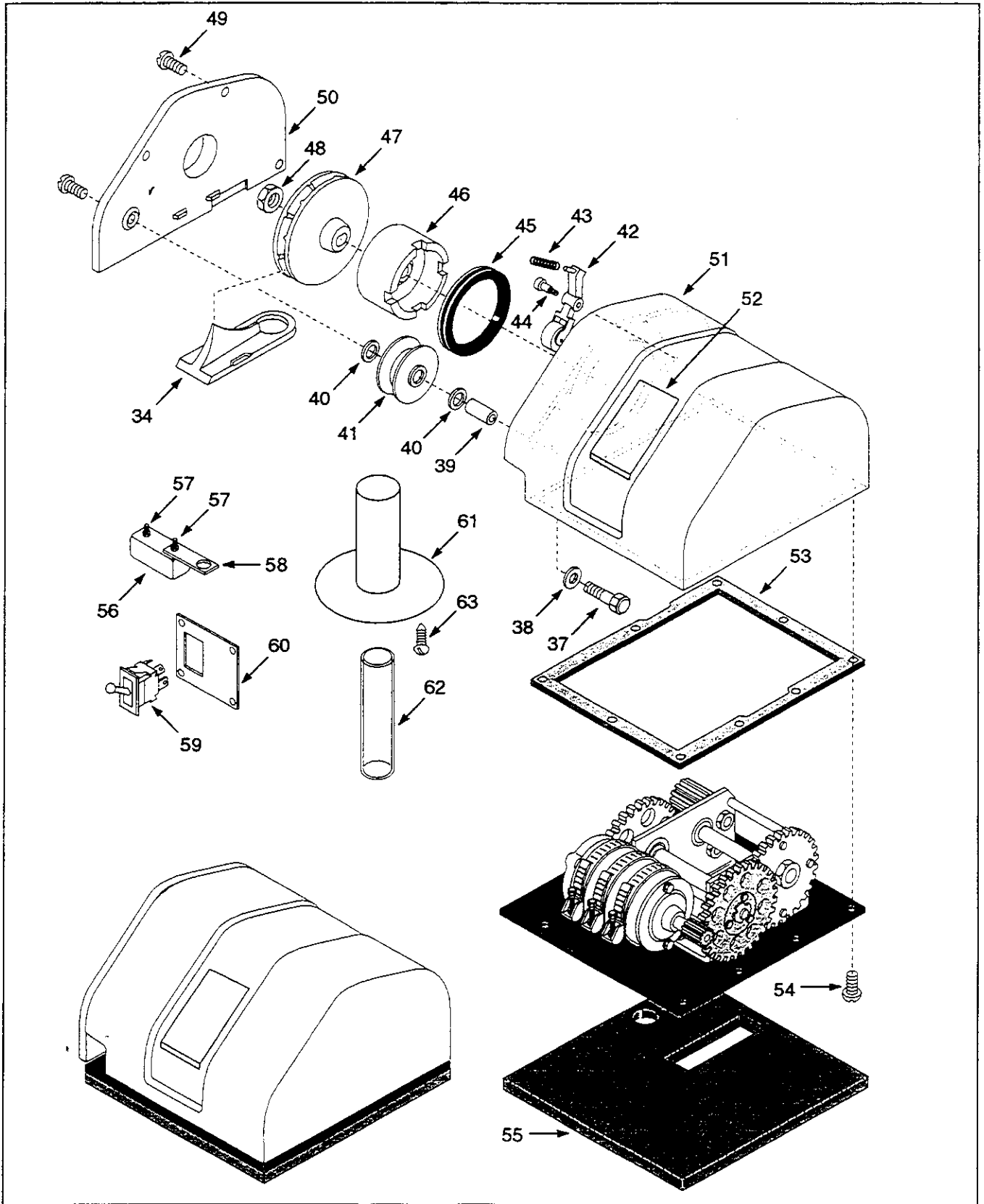
- A. This Limited Warranty is given by the Powerwinch Division of the Scott Fetzer Company (the "Company") to the original purchaser (the "Purchaser") of a Powerwinch Product (the "Product") specified in this manual. This Limited Warranty is not transferable to any other party.
- B. Responsibilities of the Company under this Limited Warranty:
1. Repair or replace (at the discretion of the Company) any part or parts of the Product found by the Company to be defective within a two (2) year period from the date of purchase.
  2. The Company will pay the transportation charge for shipment back to the Purchaser of any Product received for legitimate Warranty repair.
- C. Responsibilities of the Purchaser under this Limited Warranty:
1. Complete (fully and accurately) and return to the Company, the Warranty card included in the box. Otherwise, Purchaser will have to show dated proof of purchase to qualify for service under the provisions of the Limited Warranty.
  2. Promptly notify the Seller or the Company of any claim hereunder.
  3. At the Option of the Company, return the Product to the Company for inspection. Authorization must be given prior to any Product return. Call the Company at 1-800-793-4793 or write the Company at 2268 Fairview Blvd., Fairview, TN 37062, for authorization and complete instructions on how to return the Product directly to the Company.
  4. Use reasonable care in maintenance, operation, use and storage of the Product in accordance with the instructions contained in the Owner's Manual.
  5. Have Warranty work performed by a dealer or representative approved by the Company.
6. Except as noted in B.2., transportation charges are the responsibility of the Purchaser.
- D. This Limited Warranty covers:
1. Defects in workmanship or materials.
  2. Any part or parts of the Product sold or manufactured by the Company.
- E. This Limited Warranty does not cover:
1. Any failure that results from improper installation of the Product.
  2. Any failure that results from accident, Purchaser's abuse, neglect, modification, improper maintenance, or failure to operate and use the Product in accordance with the instructions provided in the Owner's Manual supplied with the Product.
  3. Any cable replacement other than a break. Cable is a wear item and will fray and twist during normal use.
- F. THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO TWO (2) YEARS FROM DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INCIDENTAL 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 exclusion or limitation of incidental or consequential damages, the above limitations may not apply to you.
- This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.*
- Powerwinch reserves the right to alter specifications on any product without notice.*

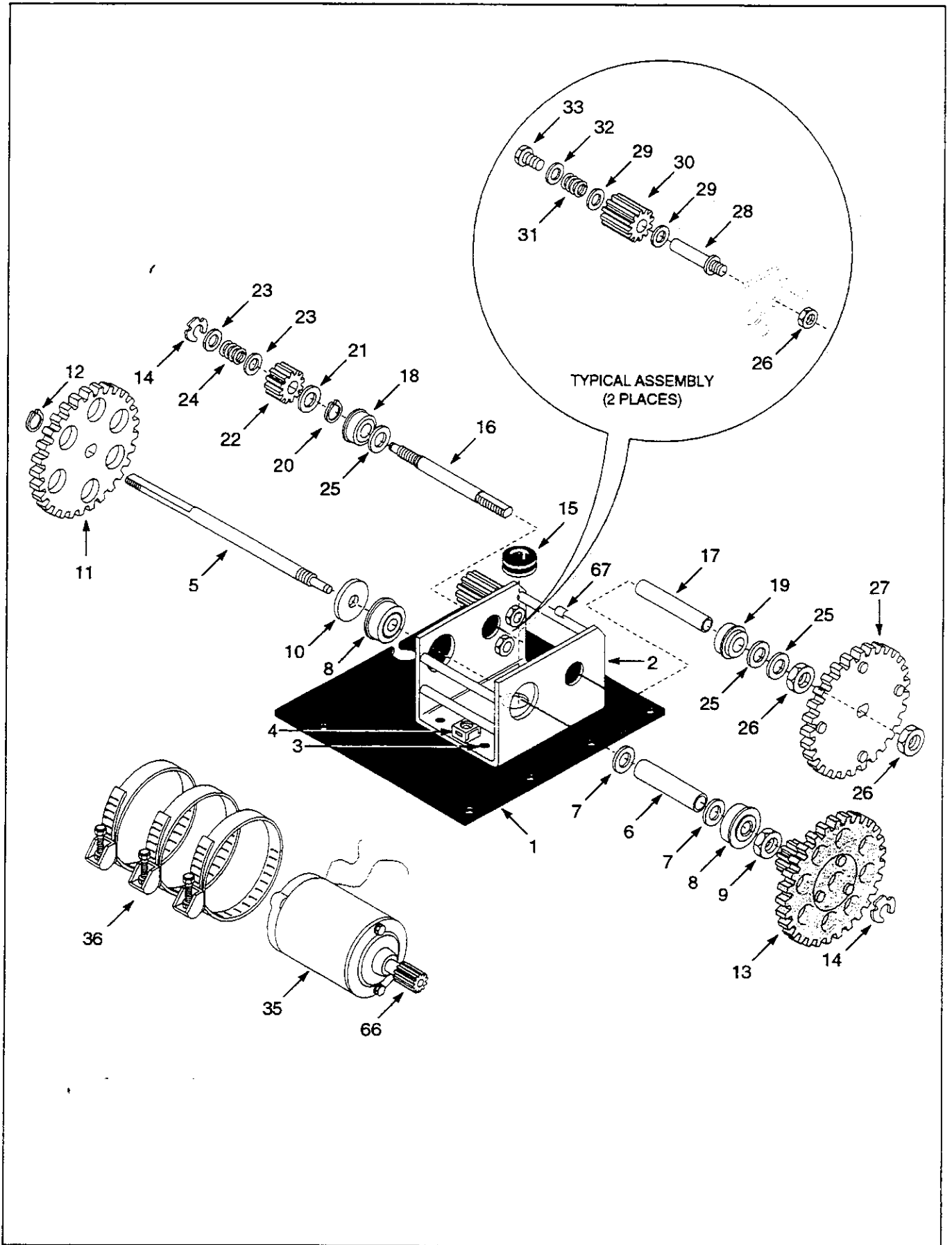


REPLACEMENT PARTS LIST

WINDLASS

MODELS 602 AND 603







**Replacement Parts List**

REF. NO.	DESCRIPTION	PART NO.	QTY
1	Base plate	P75305	1
2	Frame	P7104700AG	1
3	Blind rivet	P79922	4
4	Retaining nut	P79711	2
5	Main shaft	P71007	1
6	Tube spacer	P71827	1
7	Washer	P79966	2
8	Bearing	P71605	2
9	Jam nut	P79715	1
10	Washer	P71823	1
11	Drum gear	P71775	1
12	Retaining ring	ST070234AV	1
13	Compound gear	P71752	1
14	Retaining ring	ST070235AV	2
15	Grommet	P79924	1
16	Shaft spin off	P71512	1
17	Tube spacer	P71819	1
18	Bearing	P71608	1
19	Bearing	P71607	1
20	Retainer	ST070233AV	1
21	Washer	P79815	1
22	Gear spin off	P71781	1
23	Washer	P79816	2
24	Spring spin off	P71910	1
25	Washer	P71822	3
26	Locknut	P79713	4
27	Gear	P71779	1
28	Locking gear stud	P75609	2
29	Thrust race	P71612	4
30	Locking gear assembly	P71777	2
31	Spring	P71909	2
32	Washer	P79968	2
33	Machine screw	P79967	2
34	Rope guide	P79095	1
35	Motor assembly	P72006	1
36	Motor strap	ST161301AV	3
37	Hex head bolt	ST070687AV	1
38	Lockwasher	ST071017AV	1
39	Pulley shaft	P71008	1
40	Washer	P79526	2
41	Pulley assembly	P79071	1
42	Pressure bar	P79408	1
43	Spring	P71911	1
44	Shoulder bolt	P79605	1
45	Seal ring	P75918	1
46	Spacer	P71836	1
47	Rope drum - Model 602	P73728	1
	Rope drum - Model 603	P73727	1
48	Brass nut	P79969	1
49	Machine screw	ST074004AV	4
50	Side plate	P75306	1
51	Housing	P74014	1
52	Model decal - Model 602	P70553	1
	Model decal - Model 603	P70558	1

**Replacement Parts List (continued)**

REF. NO.	DESCRIPTION	PART NO.	QTY
53	Base gasket	P75916	1
54	Machine screw	ST074005AV	9
55	Deck gasket	P75917	1
56	Circuit breaker	P78106	1
57	Locknut	P79701	2
58	Busbar	P78121	1
59	Switch assembly	P78007	1
60	Switch plate	P78175	1
61	Bottom grommet	P71639	1
62	Alignment tube	P79096	1
63	Oval screw	P79533	3
64	Owner's manual	P7055700AV	1
65	Parts list	P7075000AV	1
66	Motor gear	P71769	1
67	Motor spacer	P71835	2

**Replacement Parts Information**

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Fairview, TN 37062