



OPERATING, SERVICE AND MAINTENANCE MANUAL

MODEL SCH 6000 PLANETARY WINCH



CAUTION: READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLATION AND OPERATION OF WINCH. SEE WARNINGS!

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LIMITED WARRANTYBACK COVER

PLEASE READ THIS MANUAL CAREFULLY

This manual contains useful ideas for obtaining the most efficient operation from your Ramsey Winch, and safety procedures one needs to know before operating a Ramsey Winch. Do not operate this winch until you have carefully read and understand the "WARNING" and "OPERATION" sections of this manual.

WARRANTY INFORMATION

Ramsey Winches are designed and built to exacting specifications. Great care and skill go into every winch we make. If the need should arise, warranty procedure is outlined on the back of your self-addressed postage paid warranty card. Please read and fill out the enclosed warranty card and send it to Ramsey Winch Company. If you have any problems with your winch, please follow instructions for prompt service on all warranty claims. Refer to back page for limited warranty.

SPECIFICATIONS*

SCH 6000					
Rated Line Pull	(lbs)	6,000			
	(kg)	2,720			
Gear Reduction		7.7:1			
Weight (without cable)		275 lbs. (125 kg)			
LAYER OF CABLE		1	2	3	4
Rated Line Pull per Layer	lbs	6000	5400	4900	4500
	kg	2720	2440	2220	2040
Line Speed at 8 GPM	fpm	54	58	63	68
	mpm	16.4	17.6	19.2	19.4
Cable Capacity	ft	25	55	85	120
	m	7	16	25	36

* These specifications are based on recommended 7/16 in. (11 mm) EIPS wire rope.

NOTE: The rated line pulls shown are for the winch only. Consult the wire rope manufacturer for wire rope ratings.

WARNINGS:

STAY OUT FROM UNDER AND AWAY FROM RAISED LOADS.

STAND CLEAR OF CABLE WHILE PULLING. DO NOT TRY TO GUIDE CABLE.

DO NOT EXCEED MAXIMUM LINE PULL RATINGS SHOWN IN TABLE.

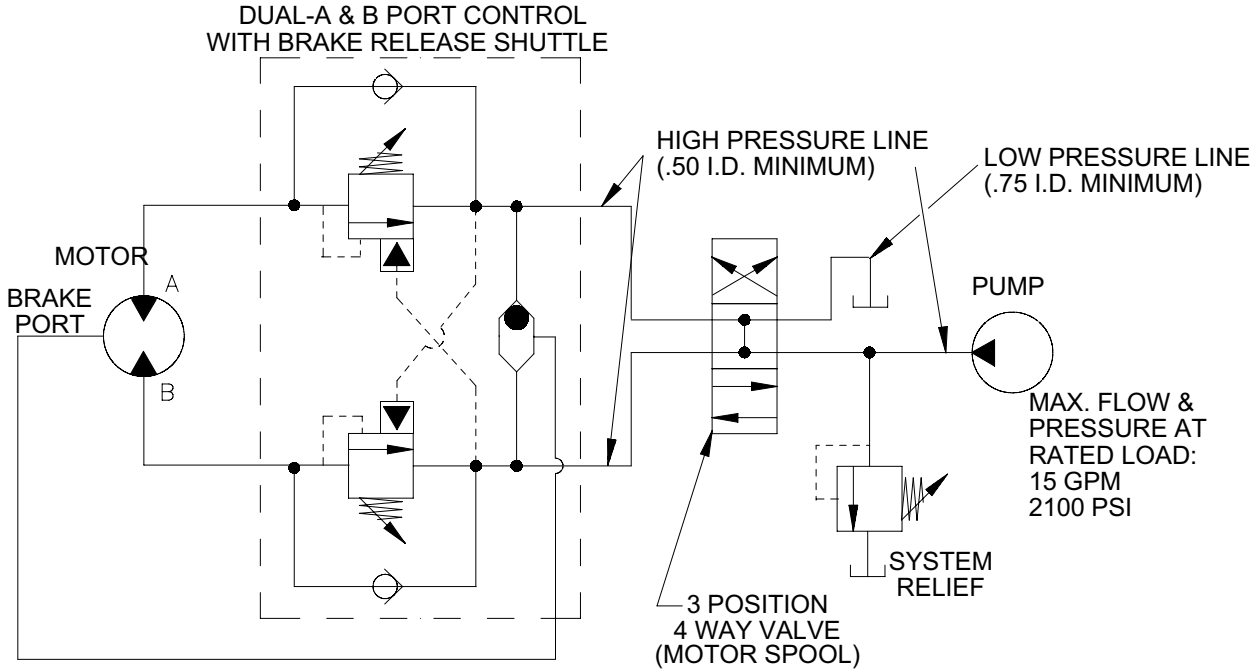
DO NOT USE WINCH TO LIFT, SUPPORT, OR OTHERWISE TRANSPORT PERSONNEL.

A MINIMUM OF 5 WRAPS OF WIRE ROPE AROUND DRUM BARREL IS REQUIRED TO HOLD THE LOAD.

HYDRAULIC SYSTEM REQUIREMENTS

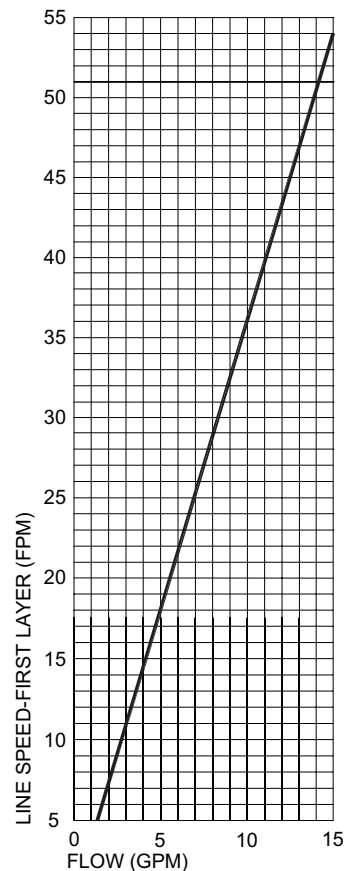
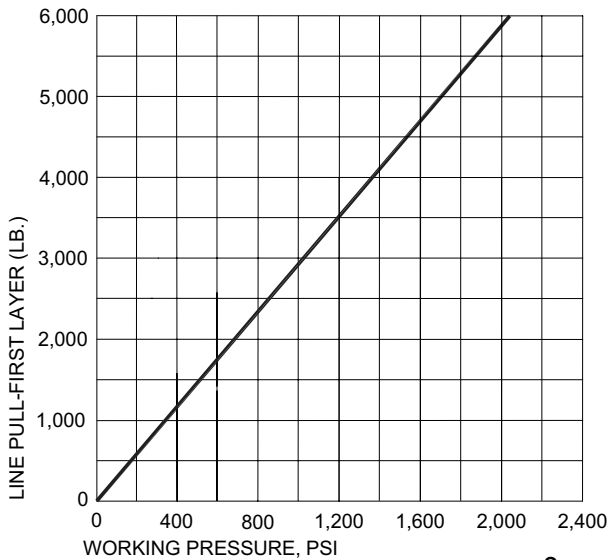
Refer to the performance charts below to properly match your hydraulic system to the winch performance. The charts consist of: (1) first layer line pull (LB) vs. working pressure (PSI) and (2) first layer line speed (FPM) vs. flow (GPM). A motor spool directional control valve is required.

TYPICAL LAYOUT



PERFORMANCE CHARTS

14.9 cu. in. motor



WINCH MOUNTING

NOTE: The winch must be mounted so that it reels in in the required direction as noted on page 5.

NOTE: Remove and discard the (4) 5/8" capscrews from the foot mounting holes in the end bearings. These capscrews hold on the foot mount spacers during shipping and should not be used for mounting.

It is most important that this winch be mounted securely so that the three major sections (the motor end, the cable drum, and the gear-housing end) are properly aligned. Excessive bushing wear is a symptom of misalignment.

When installed mid-mounted, at least one tie plate should be attached to the mounting feet at the bottom of the winch to maintain alignment. When installed foot-mounted, at least one tie plate should remain mounted at mid point of winch to maintain alignment. It is always preferable to use both tie plates in the installed configuration.

When mounting the winch, the mounting hole patterns described on page 5 should be used. The mounting surface must be flat within 0.015 inch and sufficiently stiff to resist flexing. If a steel plate is used for foot mounting it should be .750 inch thick. For this mounting application eight (8) 5/8-11NC x 2" Lg. Gr. 5 capscrews with lockwashers will be needed to mount winch. Note that the supplied foot-mount spacers (.50" thick) must be installed between the winch and the mounting plate. Capscrews should be torqued to 173 ft-lb. (235 Nm).

CAUTION: IF LONGER BOLTS ARE SUBSTITUTED TO MOUNT WINCH OR TO MOUNT A ROLLER GUIDE AT THE SIDE MOUNT PADS, GRADE 5 OR BETTER BOLTS SHOULD ALWAYS BE USED, AND BOLT LENGTH SHOULD BE SUCH THAT A MAXIMUM OF .56 INCH THREAD LENGTH ENGAGEMENT IS ACHIEVED IN THE TAPPED HOLES IN THE SIDES OF EACH END BEARING.

OPERATION

The best way to get acquainted with how your winch operates is to make test runs before you actually use it. Plan your test in advance. Remember, you hear your winch, as well as see it operate. Get to recognize the sounds of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Avoid conditions where load shifts or jerks occur, as they may indicate a dangerous situation.

The uneven spooling of cable, while pulling a load, is not a problem, unless there is a cable pileup on one end of drum. If this happens, reverse the winch to relieve the load and move your anchor point further to the center of the load. After the job is done you can unspool and rewind for a neat lay of the cable.

MAINTENANCE

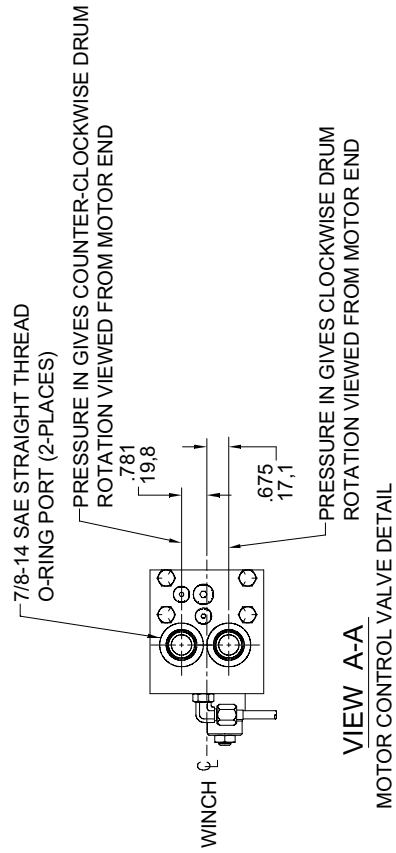
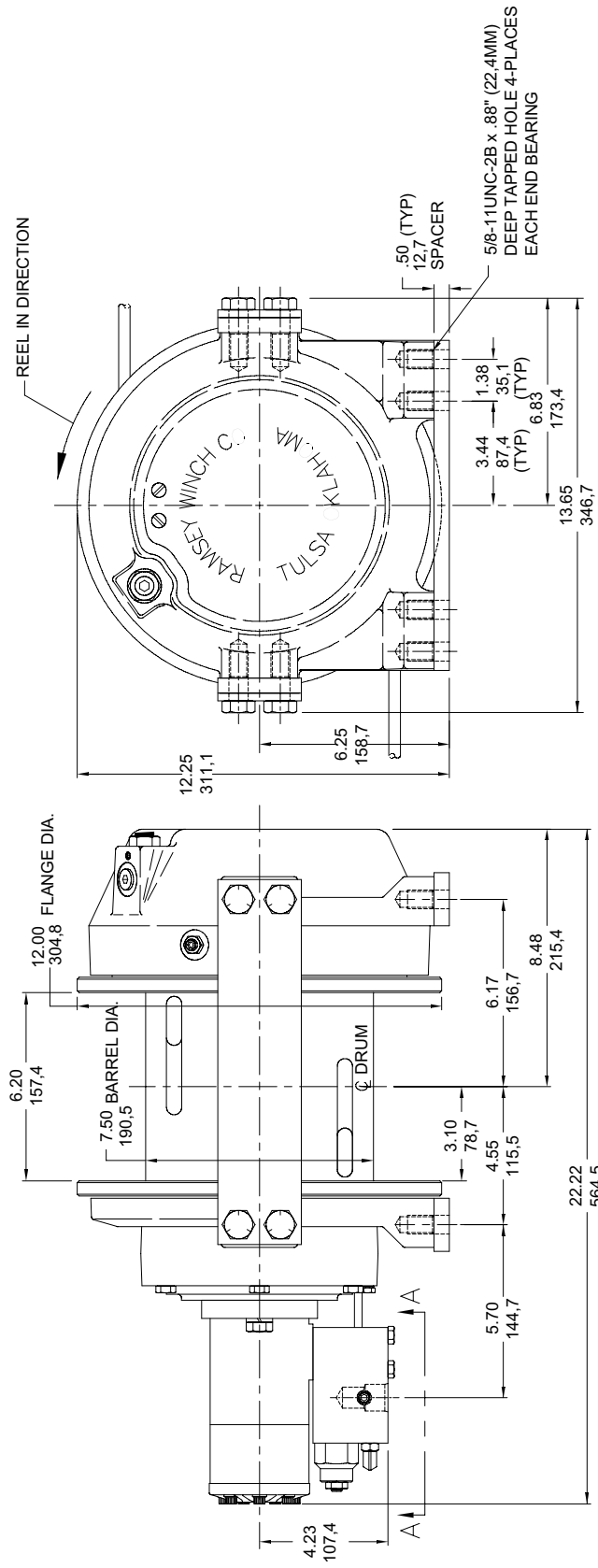
1. Inspect the cable for damage and lubricate frequently. If the cable becomes frayed with broken strands, replace immediately.
2. Replace drum bushings and seals when seals begin to seep grease. Add additional lubricant, Mobilith SHC 007, to gears if required.

CABLE INSTALLATION

1. Unwind cable by rolling it out along the ground to prevent kinking. Securely wrap end of cable, opposite hook, with plastic or similar tape to prevent fraying.
2. Place taped end of cable into narrow side of pocket on the cable drum. Wrap end of cable around cable anchor or puck and pull tight.
3. Carefully run winch in the "reel-in" direction. Keeping tension on end of cable, spool all the cable onto the cable drum, taking care to form neatly wrapped layers.

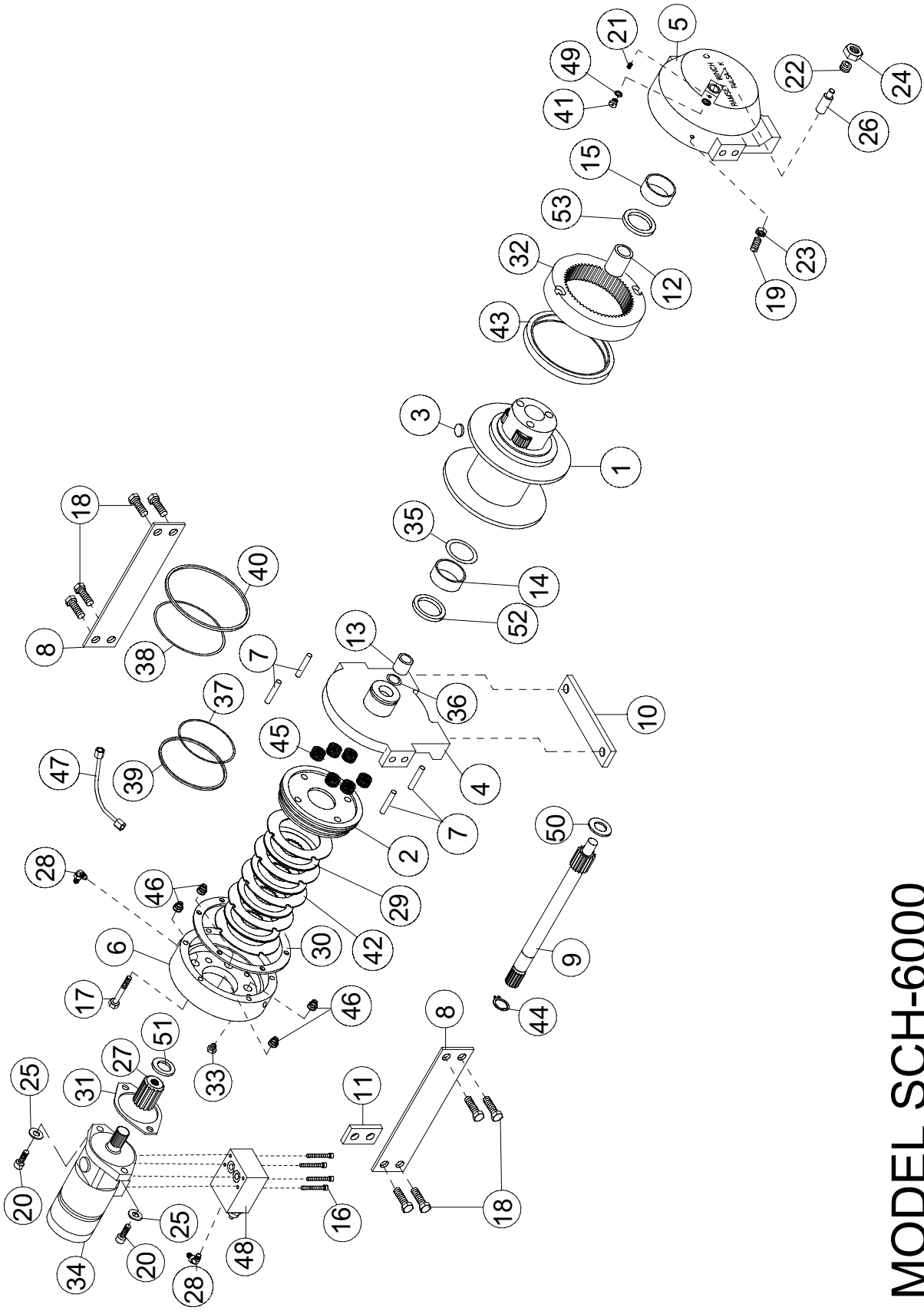
TROUBLESHOOTING GUIDE

CONDITIONS	POSSIBLE CAUSE	CORRECTION/ACTION
DRUM WILL NOT ROTATE AT NO LOAD	Brake damaged	Inspect and replace brake
	Gears damaged	Inspect and replace damaged gears
	Brake not releasing	Brake damaged; inspect and replace.
DRUM WILL NOT ROTATE UNDER LOAD	Load greater than rated capacity of winch	Refer to Specifications page 1 for line pull rating
	Low hydraulic system pressure	Check pressure. Refer to Hydraulic Systems performance charts page 2
WINCH RUNS TOO SLOW	Low hydraulic system flow rate	Check flow rate. Refer to Typical Layout page 2
	Motor worn out	Replace motor
BRAKE WILL NOT RELEASE	Brake damaged	Inspect and replace
EXCESSIVE NOISE	Hydraulic system flow too high	Check flow rate. Refer to Typical Layout page 2
DRUM CHATTERS IN "REEL IN" DIRECTION	Low hydraulic system flow rate	Check flow rate. Refer to Typical Layout page 2
	Low hydraulic system relief pressure setting	Check relief valve setting.
OIL SEEPAGE FROM BREATHER VENT OF BRAKE HOUSING	Brake piston not sealing properly	Replace o-ring and backup o-rings on brake piston



*WINCH MOUNTING CAPSCREWS MUST MEET OR EXCEED SAE GRADE 5 SPECIFICATION
NOTE: THESE HOLE LOCATIONS MUST BE HELD WITHIN $\pm 0.03"$ (0.8 MM) OF TRUE POSITION. RECOMMENDED MOUNTING HOLE DIAMETER IS $.53"$ (13.5 MM).

DIMENSIONS SHOWN ARE INCHES OVER MILLIMETERS



MODEL SCH-6000
WITH BLOCKED CLUTCH

PARTS LIST

Item	Quantity	Part No.	Description	Item	Quantity	Part No.	Description
1	1	234195	DRUM ASSEMBLY	27	1	431015	COUPLING-MOTOR
2	1	306042	PISTON-BRAKE	28	2	432018	FITTING
3	1	315004	ANCHOR- CABLE	29	4	438022	DISC-BRAKE
4	1	338345	END BEARING-MOTOR END	30	1	442220	GASKET-BRAKE HSG.
5	1	338297	END BEARING-GEAR END	31	1	442223	GASKET-MOTOR FLANGE
6	1	338302	HOUSING-BRAKE	32	1	334177	RING GEAR
7	4	346045	PIN-BRAKE	33	1	456038	FITTING-VENT, BREATHER
8	2	350704	TIE PLATE	34	1	458074	MOTOR-HYDRAULIC
9	1	357517	SHAFT- INPUT	35	1	462056	O-RING
10	2	362292	SPACER - FOOT MOUNTING	36	1	462057	O-RING
11	4	362288	SPACER - TIE PLATE	37	1	462058	O-RING
12	1	402120	BEARING	38	1	462059	O-RING-BACK-UP
13	1	402121	BEARING	39	1	462060	O-RING-BACK-UP
14	1	412095	BUSHING-DRUM, MOTOR END	40	1	462061	O-RING
15	1	412096	BUSHING-DRUM, GEAR END	41	1	472052	PLUG
16	4	414088	CAPSCREW 5/16-18NCX2.75 LG HX HD NYLON	42	5	474111	PLATE-SEPARATOR, BRAKE
17	6	414303	BOLT-3/8-16NC X2 1/2,HXHD,GR-5, ZINC	43	1	486081	SEAL
18	8	414658	CAPSCREW-5/8-11NCX1 1/2 LG HX HD ZINC GR5	44	1	490037	SNAP RING
19	1	414926	SETSCREW-3/8-16NC X1, SOCKET, NYLON	45	6	494110	SPRING-BRAKE
20	2	414952	CAPSCREW-1/2-13NCX1 1/2 LG SOC HD ZINC	46	4	494112	SPRING
21	1	416016	SETSCREW1/4-20NCX1/4 HX SOCK HD CUP	47	1	509123	TUBE ASSEMBLY
22	1	416080	SETSCREW-5/8-18NF X1 LG,HXSOCHD,CUP	48	1	516033	VALVE-MOTOR CONTROL
23	1	418036	NUT-3/8-16 NC,HEX JAM, ZINC	49	1	518037	THRUST WASHER
24	1	418088	NUT-JAM 5/8-18NF HEX HD, ZINC	50	1	518047	THRUST WASHER
25	2	418218	LOCKWASHER-1/2 ID MED SECT, ZINC PLT	51	1	518052	THRUST WASHER
26	1	426048	PLUNGER-CLUTCH, BLOCKED	52	1	518053	THRUST WASHER
				53	1	518054	THRUST WASHER

NOTES

NOTES

LIMITED WARRANTY

RAMSEY WINCH warrants each new RAMSEY Winch to be free from defects in material and workmanship for a period of one (1) year from date of purchase.

The obligation under this warranty, statutory or otherwise, is limited to the replacement or repair at the Manufacturer's factory, or at a point designated by the Manufacturer, of such part that shall appear to the Manufacturer, upon inspection of such part, to have been defective in material or workmanship.

This warranty does not obligate RAMSEY WINCH to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts, nor shall it apply to a product upon which repair or alterations have been made, unless authorized by Manufacturer, or for equipment misused, neglected or which has not been installed correctly.

RAMSEY WINCH shall in no event be liable for special or consequential damages. RAMSEY WINCH makes no warranty in respect to accessories such as being subject to the warranties of their respective manufacturers.

RAMSEY WINCH, whose policy is one of continuous improvement, reserves the right to improve its products through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products of prior manufacture.

If field service at the request of the Buyer is rendered and the fault is found not to be with RAMSEY WINCH's product, the Buyer shall pay the time and expense to the field representative. Bills for service, labor or other expenses that have been incurred by the Buyer without approval or authorization by RAMSEY WINCH will not be accepted.

See warranty card for details.



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