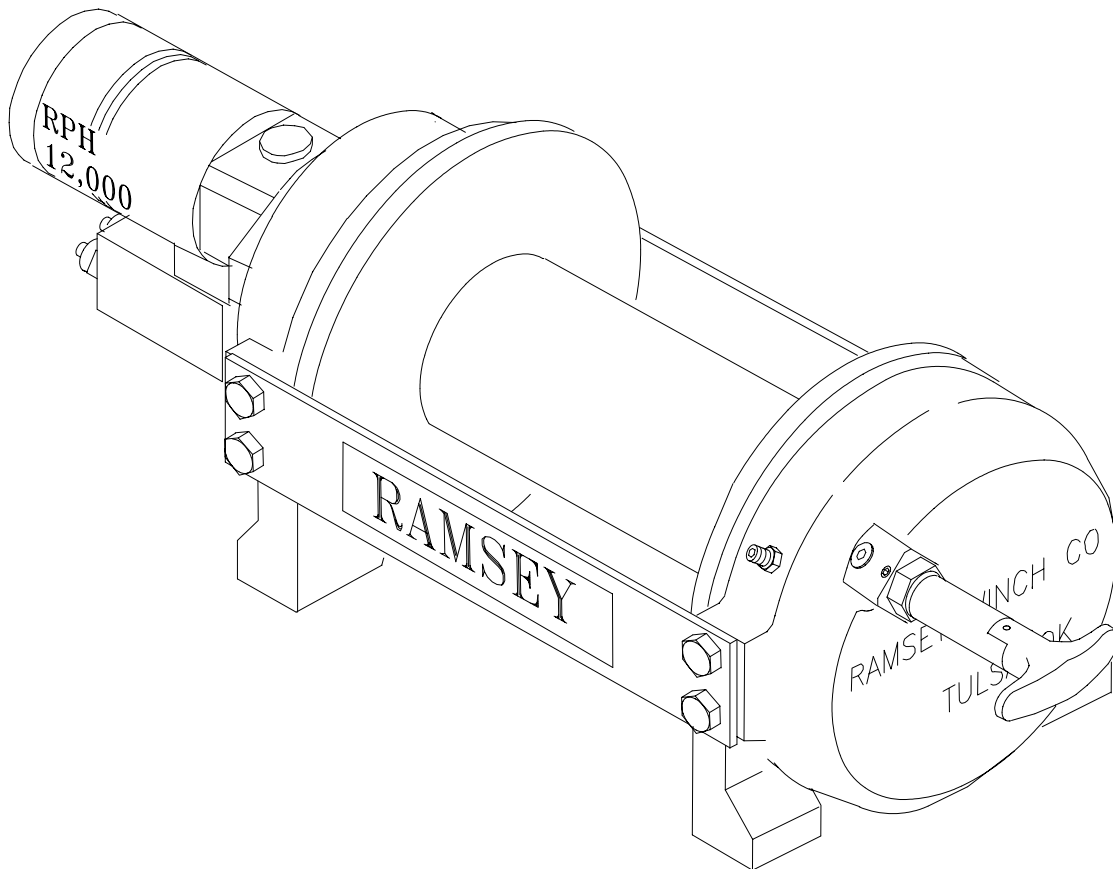




# OPERATING, SERVICE AND MAINTENANCE MANUAL



# MODEL RPH 12,000 PLANETARY WINCH



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

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# RAMSEY HYDRAULIC PLANETARY WINCH MODEL RPH 12,000

## 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\*

Rated Line Pull (lbs.).....		12,000				
(kgs.).....		5,440				
Gear Reduction.....		5.1:1				
Weight (without cable).....		110 lbs. (50 kgs.)				
LAYER OF CABLE		1	2	3	4	5
*Rated line pull per layer	Lbs.	12,000	10,000	8,500	7,500	6,600
	Kg.	5,440	4,530	3,850	3,400	2,990
Cable capacity	Ft.	20	50	80	115	160
	M.	6	15	24	35	48
Line speed (at 15 GPM)	FPM	32	38	44	51	57
	MPM	9.7	11.5	13.4	15.5	17.3
*These specifications are based on recommended 7/16" (11 mm) EIPS wire rope and a 24.0 Cu. In./Rev. motor.						

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

## **WARNINGS:**

**CLUTCH MUST BE FULLY ENGAGED BEFORE STARTING THE WINCH.**

**DO NOT DISENGAGE CLUTCH UNDER LOAD.**

**DO NOT LEAVE CLUTCH ENGAGED WHEN WINCH IS NOT IN USE.**

**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 CABLE AROUND THE DRUM BARREL IS NECESSARY TO HOLD THE LOAD. CABLE CLAMP (SETSCREW) IS NOT DESIGNED TO HOLD LOAD.**

**IN CAR CARRIER APPLICATIONS, AFTER PULLING VEHICLE ON CARRIER, BE SURE TO SECURE VEHICLE TO CARRIER BED. DO NOT MAINTAIN LOAD ON WINCH CABLE WHILE TRANSPORTING VEHICLE. DO NOT USE WINCH AS A TIE DOWN.**

**WHEN PULLING A HEAVY LOAD PLACE A BLANKET, JACKET, OR TARPAULIN OVER THE CABLE FIVE OR SIX FEET FROM THE HOOK.**

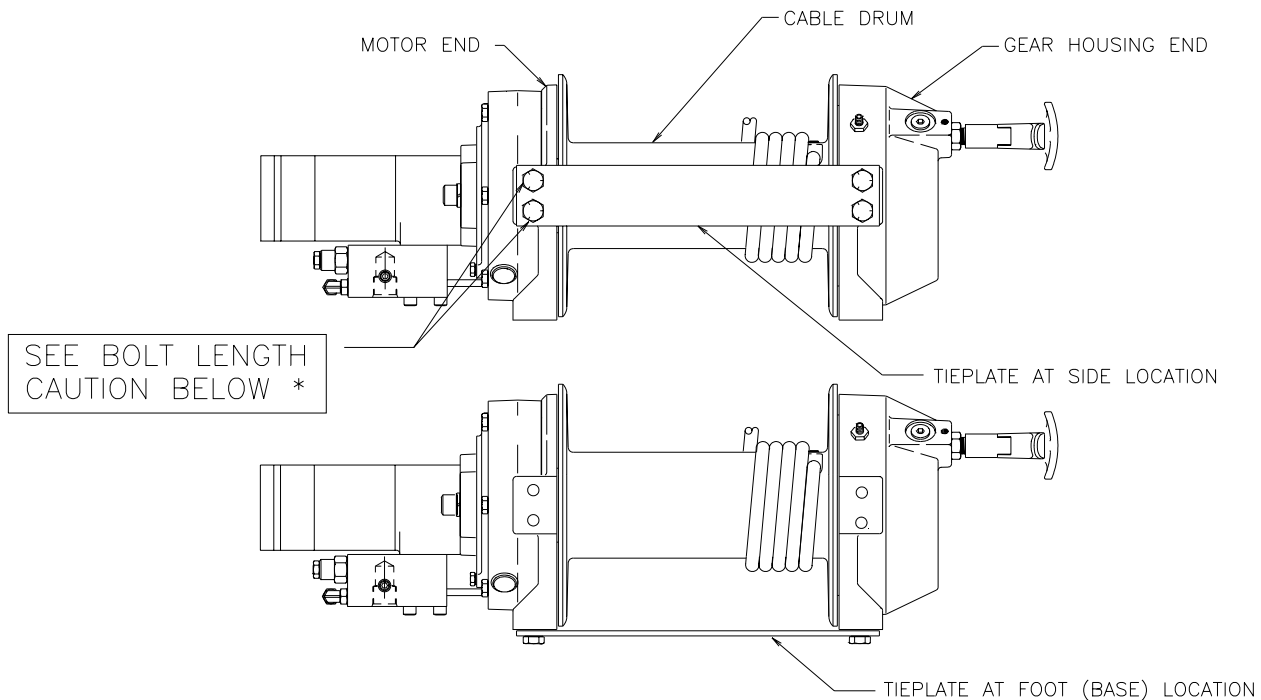
**AVOID CONDITIONS WHERE LOAD SHIFTS OR JERKS OCCUR, AS THEY MAY INDICATE A DANGEROUS SITUATION.**

## WINCH MOUNTING

### **ESSENTIAL MOUNTING INSTRUCTIONS TO MAINTAIN ALIGNMENT OF PLANETARY WINCH COMPONENTS**

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 and difficulty in freespooling are usually symptoms of misalignment.

In the as-installed condition, if the winch is mid mounted at least one tie plate must be attached to the mounting feet at the bottom of the winch to maintain alignment. **NOTE:** If the winch is foot mounted, at least one tie plate must remain mounted at mid point of winch to maintain alignment. It is always desirable to use both tie plates in the final installed configuration.



Angle Mounting Kit, #251006, is recommended for maximum ease in mounting the winch. The angle kit will allow the winch to be mounted in upright or midmount applications and will meet the criteria of serving as a solid and true mounting surface.

When mounting the winch with other than the recommended Ramsey Angle Kit, the mounting hole patterns described on page 14 must be used. The mounting surface must be flat within .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) 1/2-13NC x 1-1/2 Lg. Gr. 5 capscrews with lockwashers will be needed to mount winch. Capscrews should be torqued to 85 ft. lb. (115 Nm.).

**NOTE:** If angles or a steel plate are used in mounting winch, tie plates provided with winch are to be attached to the remaining mounting pads, whether they be side or foot.

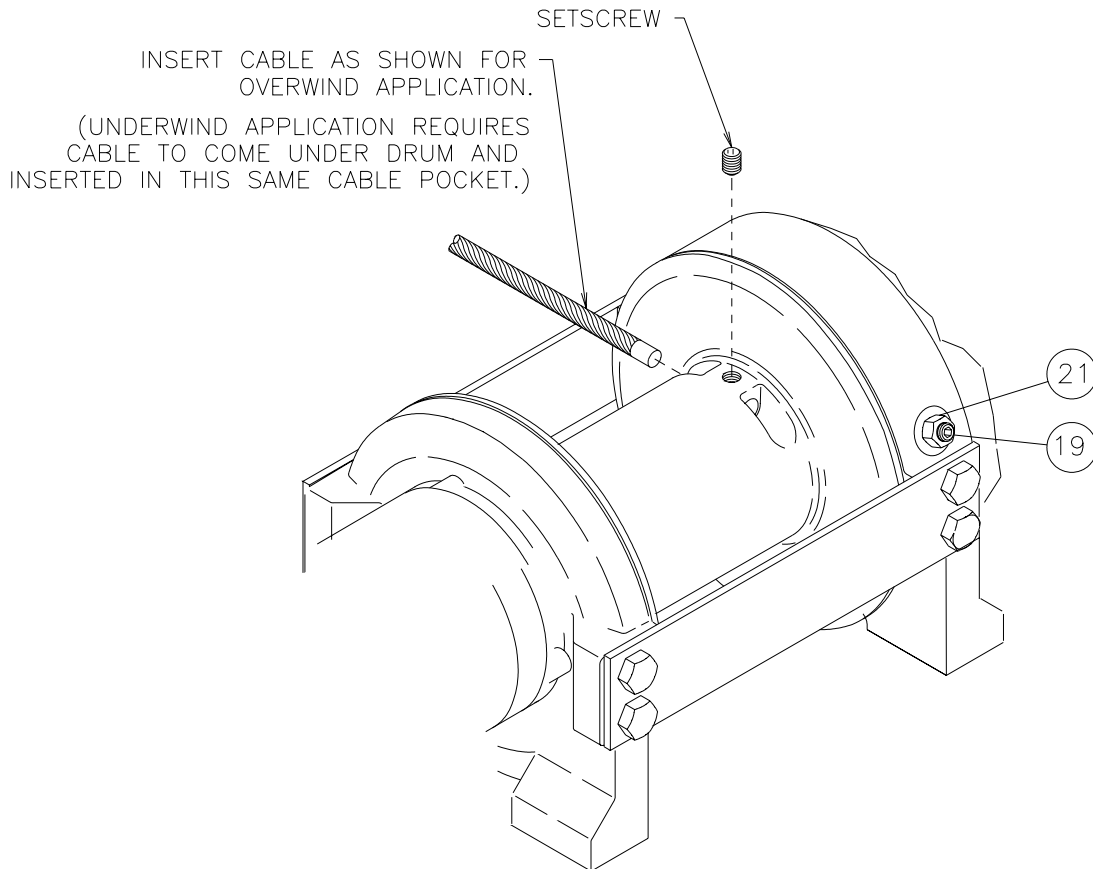
**\*CAUTION:** If longer bolts (minimum Grade 5) are substituted to mount winch or to mount a roller guide at the side mount pads, bolt length must be such as to allow a maximum of .56 inch thread length engagement in the tapped holes in sides of each end bearing. Refer to page 13. Use of excessive length bolts will not allow tie plate to tighten down properly. Torque bolts to 55 ft. lbs. (75 Nm).

## 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 hole in cable drum, as shown below. Use 3/8-16NC x 1/2 lg. Hx. Soc. drive setscrew (part of 234171 drum assembly) to secure cable to drum.
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.

After installing cable, check freespool operation. Disengage clutch and pull on cable at a walking speed. If cable "birdnests", loosen jam nut (item #21) and turn nylon screw (item #19) clockwise to increase drag on drum. If cable pull is excessive loosen nylon setscrew by turning counterclockwise. Tighten jam nut when proper setting is obtained.

**CAUTION: Over-tightening of jam nut may strip nylon setscrew.**



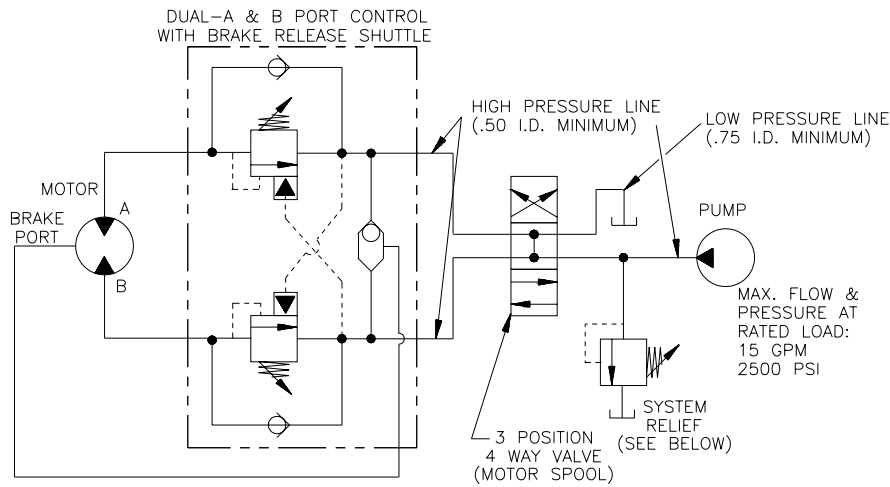
# HYDRAULIC SYSTEM REQUIREMENTS

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), (2) first layer line speed (FPM) vs. flow (GPM), and (3) relief valve setting (PSI) vs. flow (GPM). A motor spool directional control valve is required.

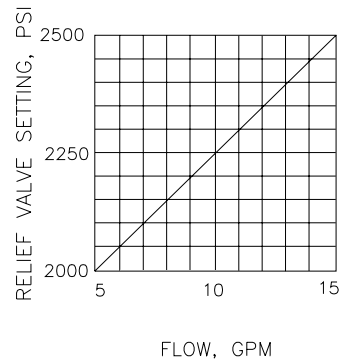
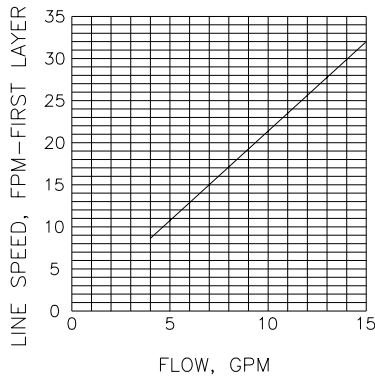
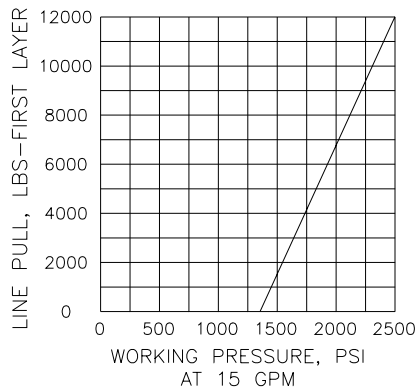
**SYSTEM REQUIREMENTS:**  
**2500 PSI RELIEF VALVE SETTING\***  
**15 GPM FLOW RATE\*\***  
**10 MICRON NOMINAL FILTRATION**

**\*CAUTION: DO NOT EXCEED 20 G.P.M. IF EXCEEDED, MOTOR AND WINCH MAY BE DAMAGED**

## TYPICAL LAYOUT



## PERFORMANCE CHARTS



## PERFORMANCE WITH 24.0 CU. IN. HYDRAULIC MOTOR

## **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 vehicle. After the job is done you can unspool and rewind for a neat lay of the cable.

When pulling a heavy load place a blanket, jacket or tarpaulin over the cable about five or six feet behind the hook. In the event of a broken cable, this will slow the snap back of the cable and could prevent serious injury.

The winch clutch allows rapid unspooling of the cable from the cable drum for hooking onto the load. The clutch is operated by the clutch shifter lever or air shifter.

**WARNING: DO NOT DISENGAGE CLUTCH UNDER LOAD.**

### **MANUAL CLUTCH SHIFTER** (Refer to page 13)

**TO DISENGAGE CLUTCH:** Run the winch in the reverse (reel out) direction until load is off the cable. Pull handle out and rotate 90°. With handle in the "DISENGAGED" position, cable may now be free-spoiled from drum.

**TO ENGAGE CLUTCH:** Pull handle out, rotate 90° and release handle. Run the winch in reverse until the clutch handle snaps fully into the "ENGAGED" position. **DO NOT** attempt to pull a load unless the handle is fully at the "ENGAGED" position.

### **AIR CYLINDER CLUTCH SHIFTER** (Refer to page 14)

**TO DISENGAGE CLUTCH:** Run the winch in the reverse (reel out) direction until load is off the cable. Apply air pressure to the .125-27 NPT port: 80 PSI (min.) 150 PSI (max.). **CAUTION: Pressure must not exceed 150 PSI.**

**TO ENGAGE CLUTCH:** Remove air pressure from the cylinder (a return spring engages the plunger). Run winch in reverse until the clutch engagement indicator light (green light) is lit. **DO NOT** attempt to pull a load unless the green light is lit. To connect light to the vehicle electrical system refer to the Electrical Schematic on page 14.

## **MAINTENANCE**

1. Inspect the cable for damage and lubricate frequently. If the cable becomes frayed with broken strands, replace immediately.
2. Check that the clutch is fully engaging. See OPERATION instructions, above, for the appropriate clutch shifter. **FOR MANUAL CLUTCH ONLY:** Monthly disengage clutch, put several drops of oil on the shaft and work clutch IN and OUT several times to lubricate inside of clutch cylinder.
3. Check to see that drum cable does not overrun (birdnest) when freespooling. Refer to page 3.
4. Replace drum bushings and seals when seals begin to seep grease. Refer to OVERHAUL INSTRUCTIONS, page 7. Add additional lubricant, Mobilith SHC 007, to gears if required.

## TROUBLE SHOOTING 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	See section below.
DRUM WILL NOT ROTATE UNDER LOAD	Load greater than rated capacity of winch.	Refer to Specifications pg.1 for line pull rating.
	Low hydraulic system pressure.	Check pressure. Refer to HYDRAULIC SYSTEMS performance charts pg. 4.
WINCH RUNS TOO SLOW	Low hydraulic system flow rate.	Check flow rate. Refer to HYDRAULIC SYSTEMS flow chart page 4.
	Motor worn out.	Replace motor.
DRUM WILL NOT FREESPOOL	Clutch not disengaged.	Check clutch shifter. Refer to page 5. Check ADJUSTMENT. Refer to page 10.
BRAKE WILL NOT RELEASE	Brake damaged.	Inspect and replace. Refer to page 8 & 11 for overhaul.
CABLE BIRDNESTS WHEN CLUTCH IS DISENGAGED	Drag screw improperly adjusted.	Adjust nylon drag screw. Refer to pg. 3.
EXCESSIVE NOISE	Hydraulic system flow too high	Check flow rate. Refer to HYDRAULIC SYSTEMS flow chart pg. 4.
DRUM CHATTERS, in "REEL IN" direction	Low hydraulic system flow.	Check flow rate. Refer to HYDRAULIC SYSTEMS flow chart pg. 4.
	Low hydraulic system relief pressure setting.	Check relief valve setting. Refer to HYDRAULIC SYSTEMS pg. 4.
OIL SEEPAGE FROM BREATHER VENT OF BRAKE HOUSING	Brake piston not sealing properly.	Replace o-ring and back up rings on brake piston. Refer to page 8 & 11.
GREASE SEEPAGE FROM JOINTS IN MOTOR	Grease applied to seals during assembly by the motor manufacturer.	NONE. Normal condition during the first few times the winch is operated.

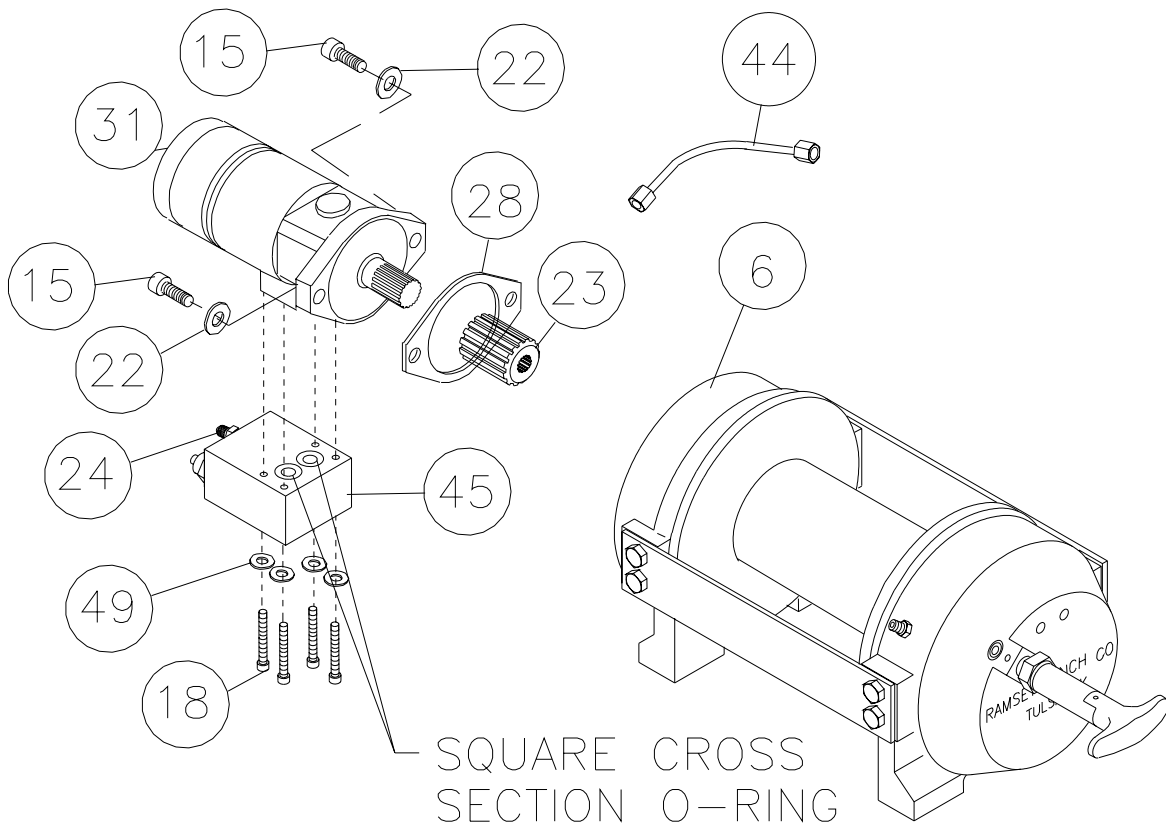
# INSTRUCTIONS FOR OVERHAUL OF RAMSEY WINCH

## MODEL RPH 12,000

### DISASSEMBLY

Take note of mounting configuration for proper mounting of parts during re-assembly. Disconnect tube (item #44) from elbows (item #24) on bottom of brake (item #6) and valve (item #45). Remove motor (item #31) from brake housing (item #6) by unscrewing capscrews (item #15). Tap motor lightly to disengage. Replace all gaskets, o-rings and seals with new ones during re-assembly.

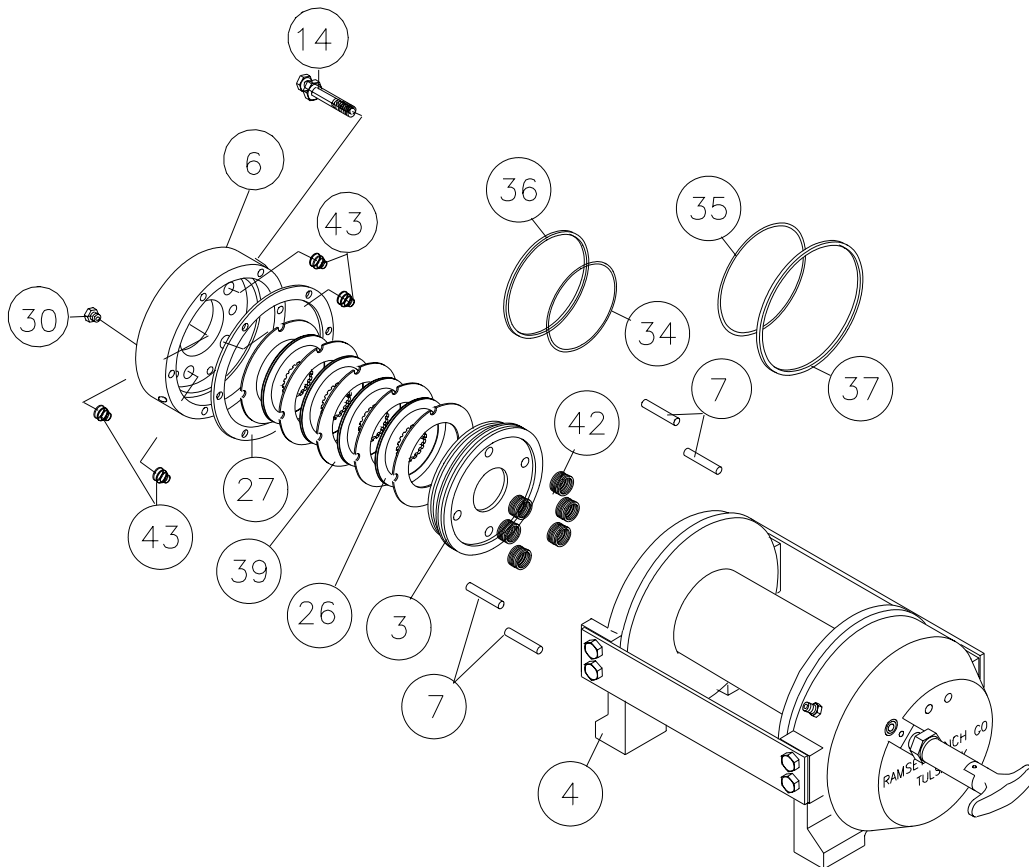
Remove coupling (item #23) from brake housing. Examine coupling for signs of wear, replace if necessary. If necessary, remove valve (item #45) from motor by removing capscrews (item #19) and lockwashers (item #49). If valve is removed make sure two square cross section o-rings remain seated in their counter bores in valve.



Remove brake housing (item #6) from end bearing (item #4) by unscrewing (6) capscrews (item #14) in a criss-cross pattern (2 turns each) until all capscrews are removed from brake housing. Remove brake parts from brake housing. Examine brake discs (item #26) for signs of wear, and replace if necessary. Examine o-rings (items #34 & #35) and backup rings (items #36 & #37) for signs of wear. Remove o-rings and backup rings from grooves in brake piston (item #3).

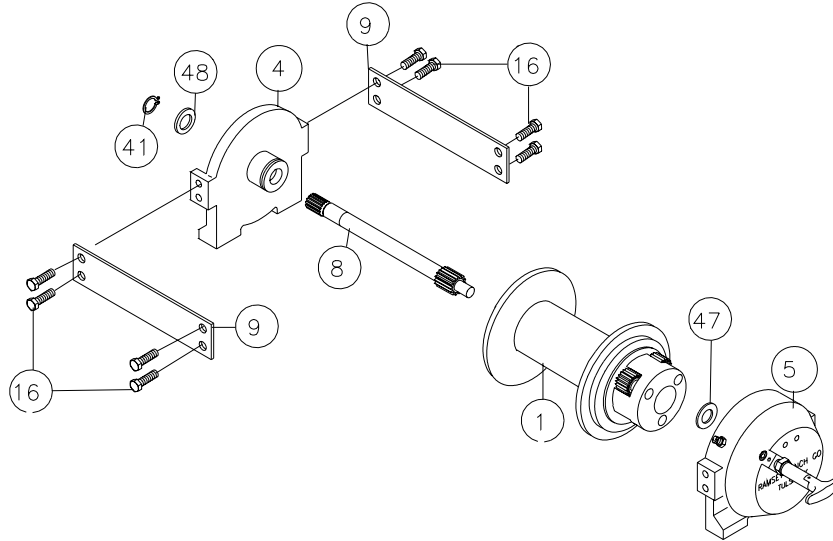
Remove and examine springs (items #42 & #43) for damage, replace if necessary.

Examine fitting (item #30) to assure that fittings are in proper working condition, replace if necessary.



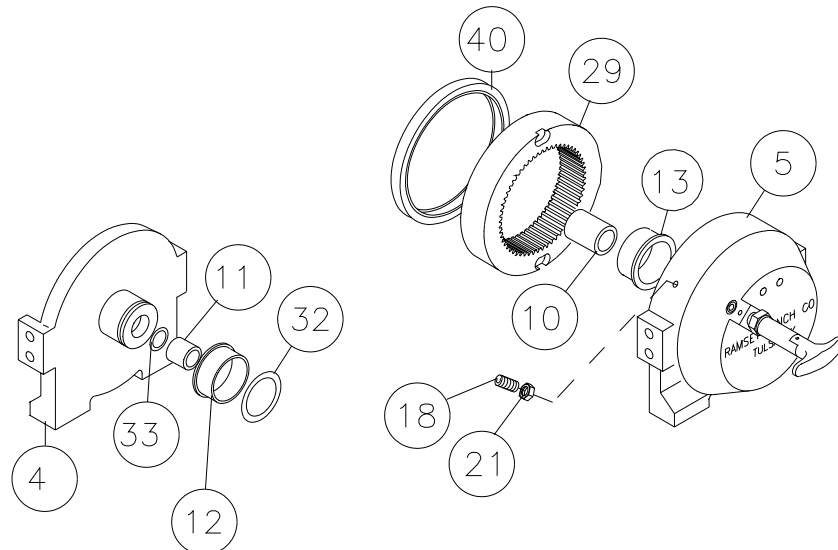
Remove tie plates (item #9) from end bearings (items #4 & #5) by unscrewing capscrews (item #16), as shown. Remove snap ring (item #41) and thrust washer (item #48) from shaft. Slide motor end bearing (item #4) from drum (item #1) and drum from gear housing end bearing (item #5).

Remove input shaft (item #8) and thrust washer (item #47) from end bearing. Inspect gear teeth and splined end of shaft for signs of wear. If damaged, it will be necessary to replace shaft.



Remove o-ring (item #32), bushing (item #12) from outside of motor end bearing (item #4), remove o-ring (item #33), bearing (item #11) from inside of motor end bearing (item #4). Place new, well oiled, o-ring (item #33) into groove inside of end bearing and press new bearing (item #11) into end bearing. Press bushing (item #12) onto end bearing and dip o-ring (item #32) in oil and seat into groove of end bearing.

Remove seal (item #40) from gear housing end bearing (item #5). Loosen nut (item #21) and remove nylon setscrew (item #18) and remove ring gear (item #29) from gear housing end bearing, if necessary. Remove bushing (item #13) and bearing (item #10) from gear housing end bearing (item #5). Press new bushing (item #13) and bearing (item #10) into place in end bearing. Install ring gear and nylon setscrew and nut. Ring gear must be fully seated in gear housing end bearing (item #5) and slot in ring gear must NOT be aligned with clutch shifter hole. Install new seal in gear housing end bearing, with sharp edge of seal outward.



Generously apply grease (MOBILITH SHC 007) to teeth of ring gear (item #28), teeth of planet gears in drum (item #1) and to bushing in gear housing end bearing (item #5). Apply a small amount of grease to base of bushing on motor end bearing (item #4). Apply grease to teeth of gear and short end of shaft (item #8). Place gear end of shaft through thrust washer (item #47) and into bearing in end bearing (item #5). Place drum over shaft and rotate drum to engage planet gears with output gear on shaft and with ring gear in end bearing.

Assemble end bearing (item #4) to drum assembly and use tie plates (item #9) and capscrews (item #16) to hold both end bearings together. Tighten capscrews to 55 Ft. Lbs. (75 Nm.). Slide thrust washer (item #48) over end of shaft and against end bearing (item #4). Place snap ring (item #41) into groove in splined end of shaft.

If necessary, remove and replace appropriate shifter assembly (item #2 or #3), as follows:

### MANUAL CLUTCH SHIFTER ASSEMBLY

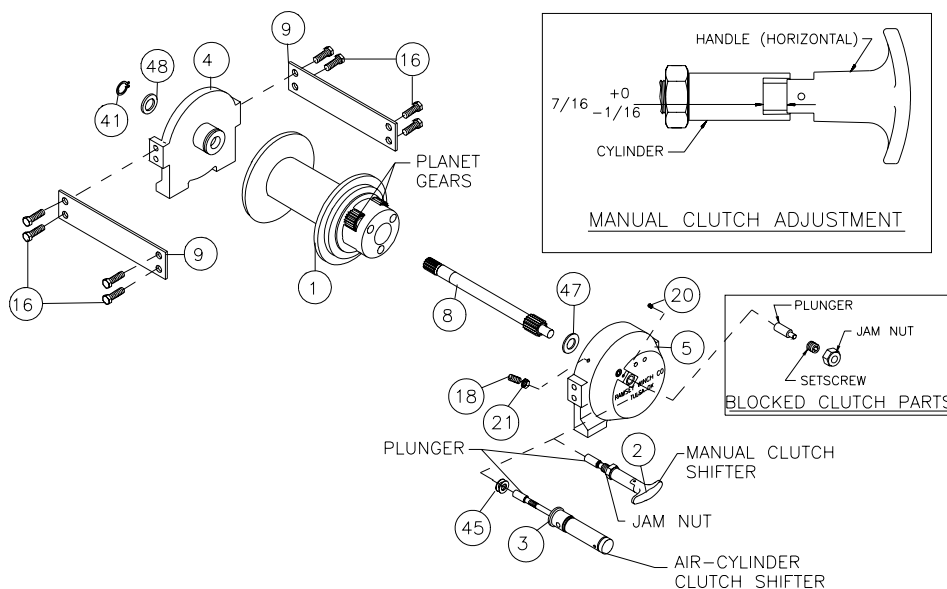
Remove by loosening setscrew (item #18), jam nut and unscrewing clutch shifter. Be sure slot in ring gear is not aligned with clutch shifter hole. Rotate drum, if necessary, to insure hole and slot are not aligned. Reinstall clutch shifter with plunger, jam nut and handle positioned in cylinder housing, as shown. Thread assembly (with handle engaged in cylinder slot) into the end bearing. Pull drum toward the brake housing end bearing to remove play. Hold drum in the position and continue threading the shifter assembly in until the gap between the end of the handle and cylinder is  $7/16^{+0} -1/16$  inch and handle is in the horizontal position, as shown below. NOTE: This gap will vary with drum endplay. With the drum pulled against the gear housing, the gap should be  $3/8$  inch. Lightly tighten jam nut. Rotate drum until handle snaps fully into the engaged position. Pull handle out and rotate  $90^{\circ}$ . Verify that drum can be rotated freely (at least one full revolution) with clutch shifter at DISENGAGED position. Securely tighten jam nut while holding the handle. Tighten setscrew securely. Re-check clutch operation as described on page 5.

### AIR CYLINDER SHIFTER ASSEMBLY

Remove by loosening setscrew (item #18), jam nut and unscrewing clutch shifter. To reinstall, thread air cylinder into housing. Install one or two shims (item #45) under cylinder head, if needed, to orient air cylinder port for pneumatic connections. Tighten setscrew. Refer to page 5 and check for proper operation of the clutch.

### BLOCKED CLUTCH

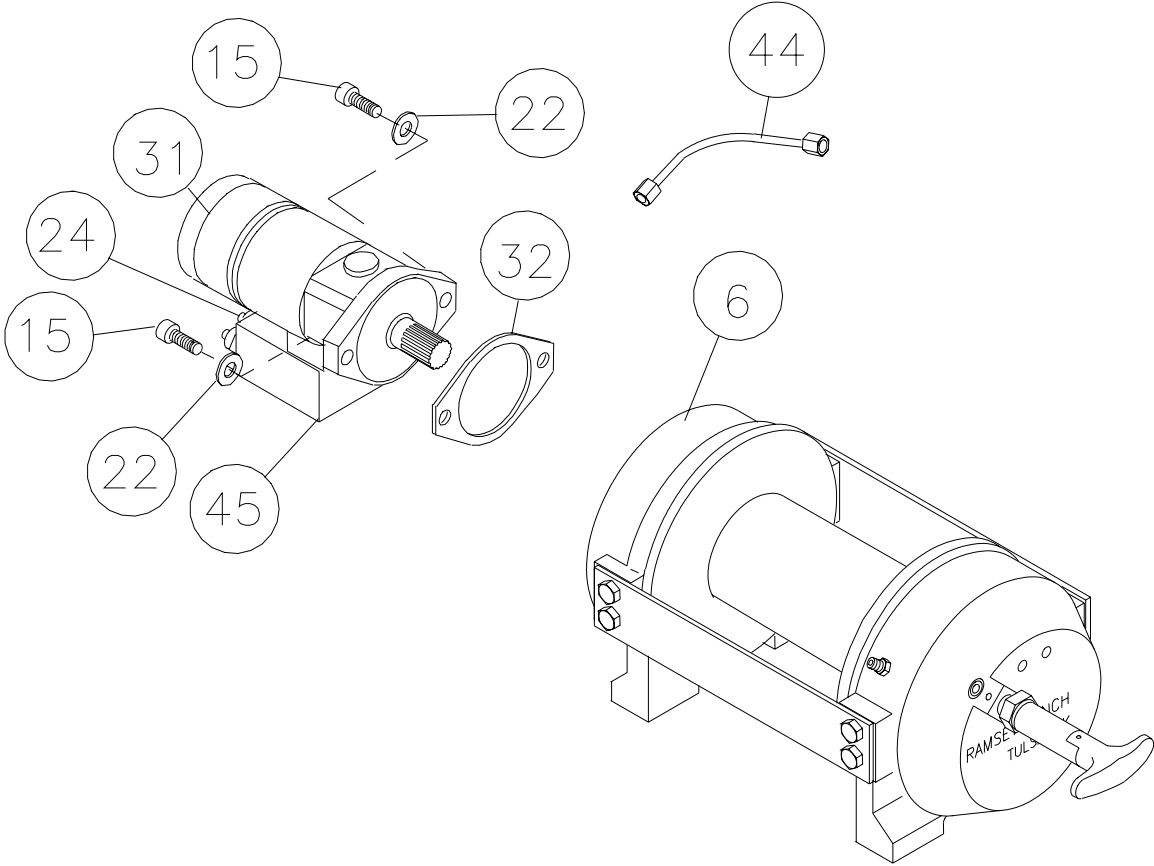
Insert plunger into gear housing bore so it engages into ring gear slot. Pull drum flange toward gear housing and thread setscrew into housing until it bottoms out and drum starts to move. Back setscrew out  $1/2$  turn and lock in place with jam nut.

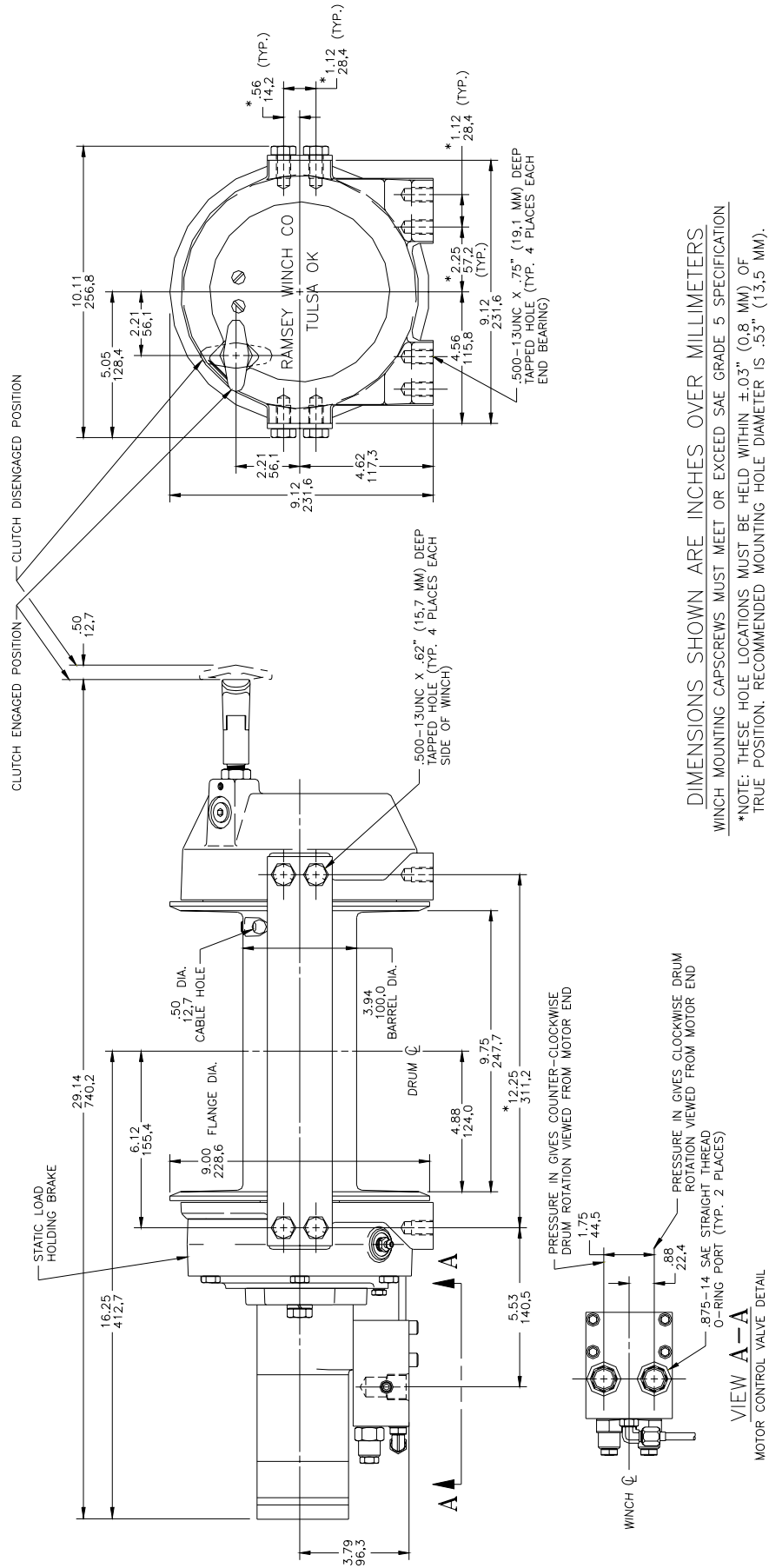




Place gasket (item #28) into position on mounting surface of motor (item #31). Slide motor shaft into coupling and attach motor to brake housing (item #6). Use (2) capscrews (item #15) with lockwashers (item #22) and torque to 87 ft. lbs. (118 Nm) each. Securely connect tube (item #44) to elbows (item #24) in valve (item #45) and in bottom of brake housing (item #6).

Apply at least 550 PSI hydraulic system pressure to release brake and verify that brake releases, by observing that the winch drum rotates.





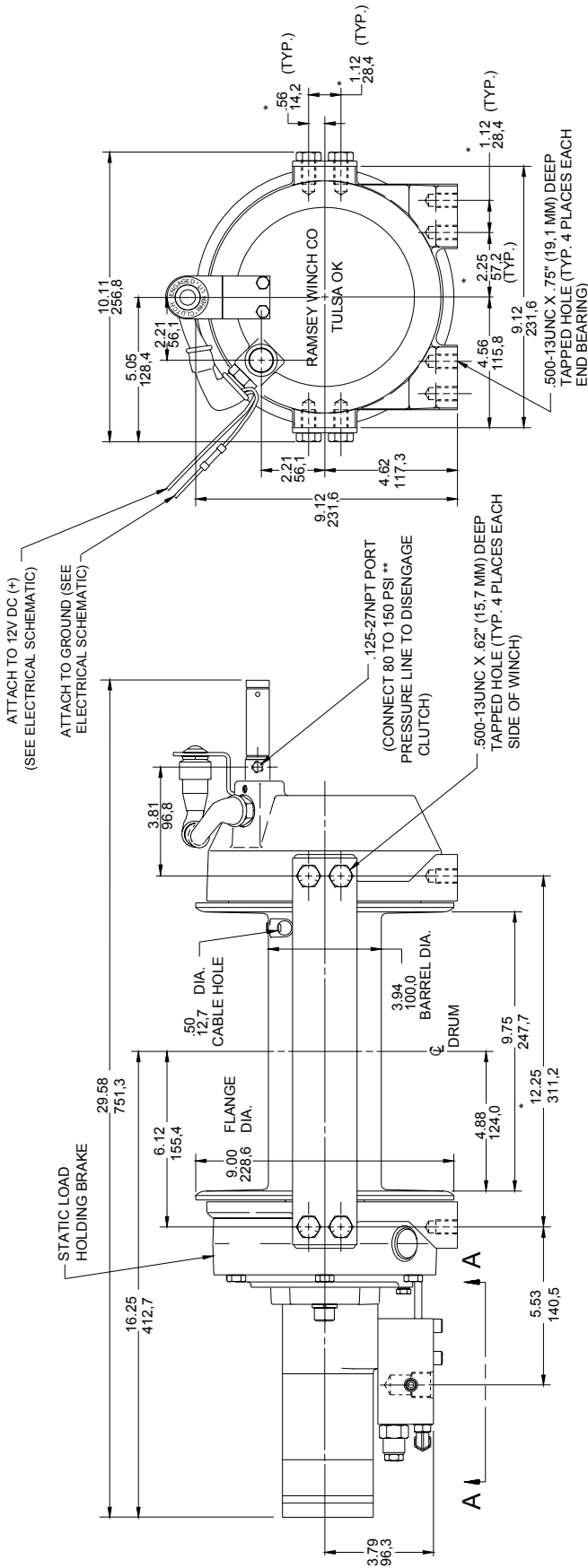
DIMENSIONS SHOWN ARE INCHES OVER MILLIMETERS

WINCH MOUNTING CAPSCREWS MUST MEET OR EXCEED SAE GRADE 5 SPECIFICATION

\*NOTE: THESE HOLE LOCATIONS MUST BE HELD WITHIN ±.03" (0.8 MM) OF TRUE POSITION. RECOMMENDED MOUNTING HOLE DIAMETER IS .53" (13.5 MM).

# MODEL RPH-12000

## WITH MANUAL CLUTCH SHIFTER

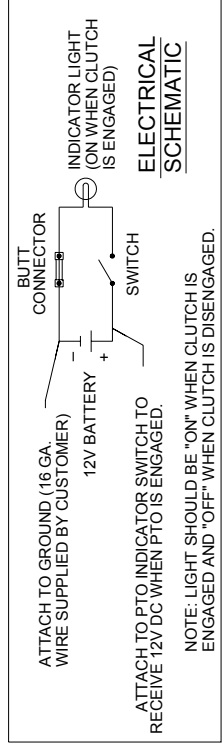


**DIMENSIONS SHOWN ARE INCHES OVER MILLIMETERS**

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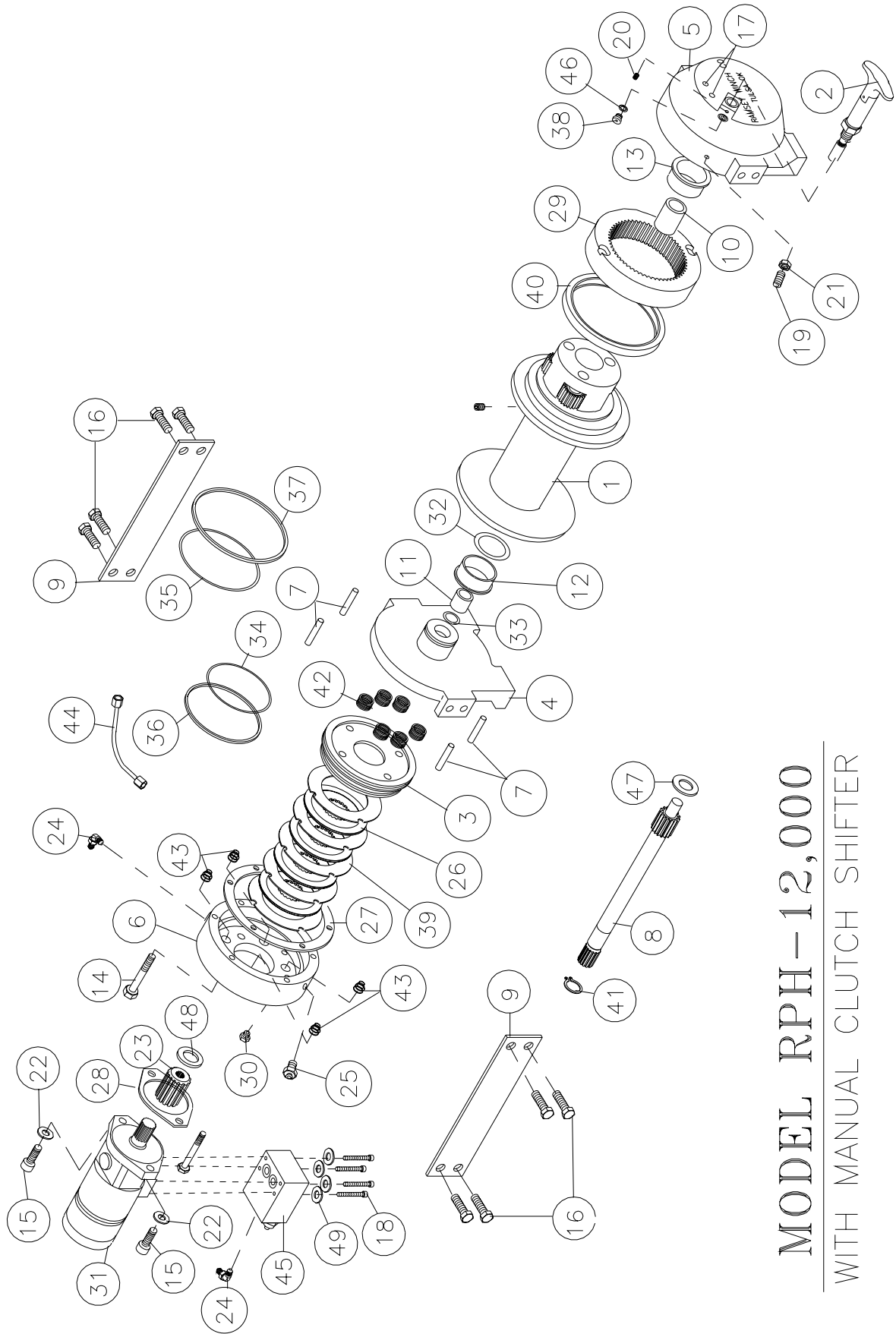
\*\* CAUTION: PRESSURE MUST NOT EXCEED 150 PSI.



# MODEL RPH-12,000

## WITH AIR CYLINDER CLUTCH SHIFTER

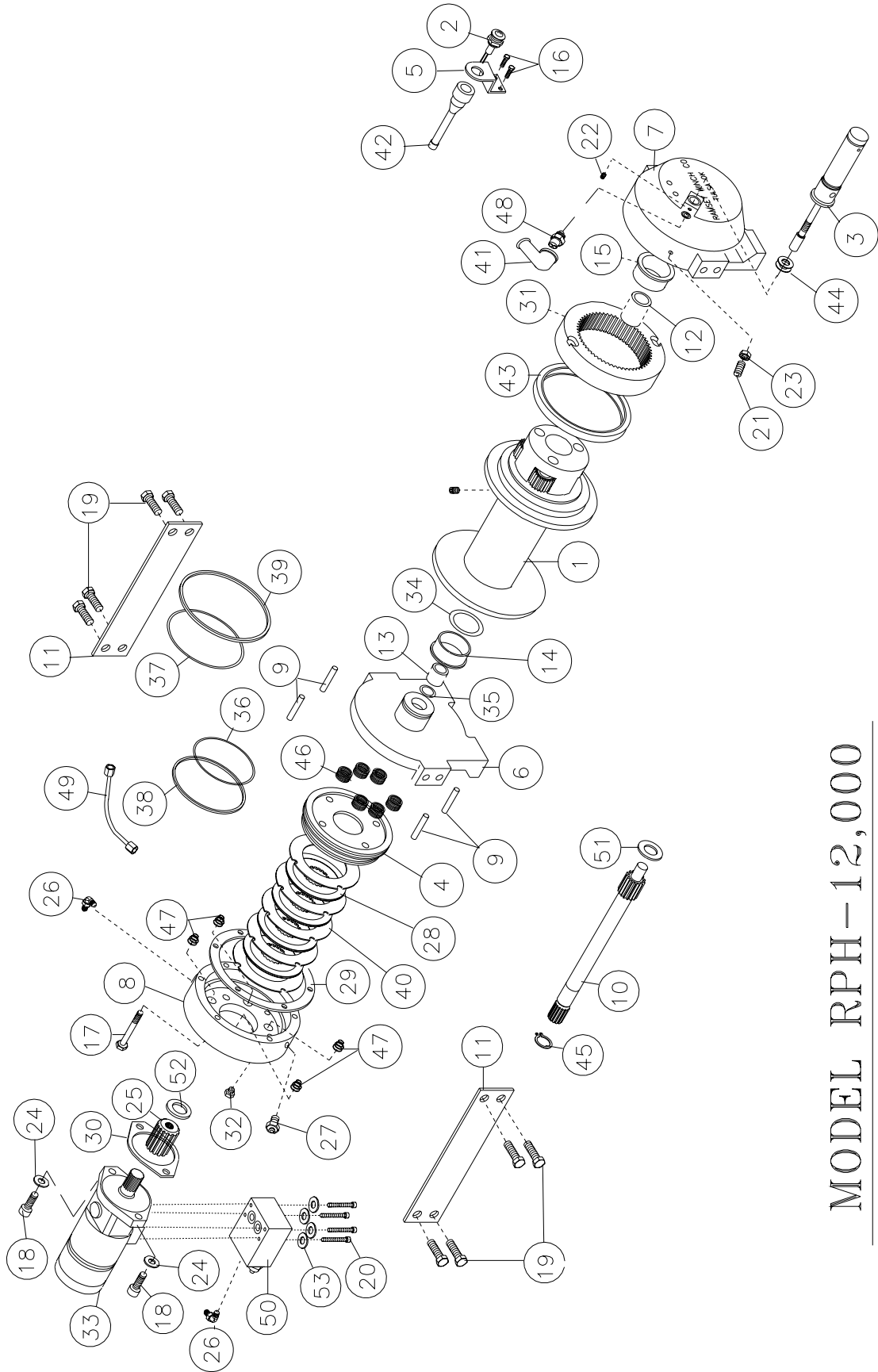
## **NOTES**



**MODEL RPH-12,000**  
 WITH MANUAL CLUTCH SHIFTER

**PARTS LIST RPH 12,000 WITH MANUAL CLUTCH SHIFTER**

<u>ITEM</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	234171	DRUM ASS'Y.
2	1	276052	SHIFTER ASS'Y.-MANUAL
3	1	306042	PISTON-BRAKE
4	1	338300	END BEARING-MOTOR
5	1	338301	END BEARING-GEAR HOUSING
6	1	338302	HOUSING-BRAKE
7	4	346045	PIN-BRAKE
8	1	357504	SHAFT-INPUT/SUN GEAR
9	2	395172	TIE PLATE
10	1	402120	BEARING-GEAR HSG.
11	1	402121	BEARING-MTR. END BEARING
12	1	412084	BUSHING-DRUM (MTR. END)
13	1	412085	BUSHING-DRUM (G.HSG. END)
14	6	414303	CAPSCREW-3/8-16NC X 2-1/2 LG. HX.HD., GR. 5 PLTD.
15	2	414948	CAPSCREW 1/2-13NC X 1-1/4 LG. SOC.HD.
16	8	414581	CAPSCREW 1/2-13NC X 3/4 LG. HX.HD. GR.5 PLTD.
17	2	414854	CAPSCREW 1/4-20NC X 1/2 LG. RD.HD. SLOT PLTD.
18	4	414159	CAPSCREW 5/16-18NC X 1-1/2 LG. HX HD. GR5 Z/P
19	1	414926	SETSCREW-3/8-16NC X 1 LG., SOCKET, NYLON
20	1	416016	SETSCREW-1/4-20NC X 1/4 LG., HX. SOC. HD.
21	1	418036	NUT 3/8-16NC HEX. JAM
22	2	418218	LOCKWASHER-1/2 ID MED. SECT.
23	1	431015	COUPLING-MOTOR
24	2	432018	FITTING-7/16 ELBOW
25			NOT USED
26	4	438022	DISC-BRAKE
27	1	442220	GASKET-BRAKE
28	1	442223	GASKET-MOTOR
29	1	444085	GEAR-RING
30	1	456038	FITTING-VENT
31	1	458090	MOTOR-HYDRAULIC
32	1	462046	O-RING (DRUM)
33	1	462056	O-RING
34	1	462057	O-RING
35	1	462058	O-RING
36	1	462059	O-RING BACKUP
37	1	462060	O-RING BACKUP
38	1	472052	PLUG
39	5	474111	PLATE-SEPARATOR
40	1	486080	SEAL-GEAR HSG.
41	1	490037	SNAP RING
42	6	494110	SPRING-BRAKE
43	4	494112	SPRING
44	1	509009	TUBE ASSEMBLY
45	1	516013	VALVE-MOTOR CONTROL
46	1	518037	THRUST WASHER
47	1	518047	THRUST WASHER
48	1	518052	THRUST WASHER
49	4	418163	LOCKWASHER - 5/16 MED SECT Z/P

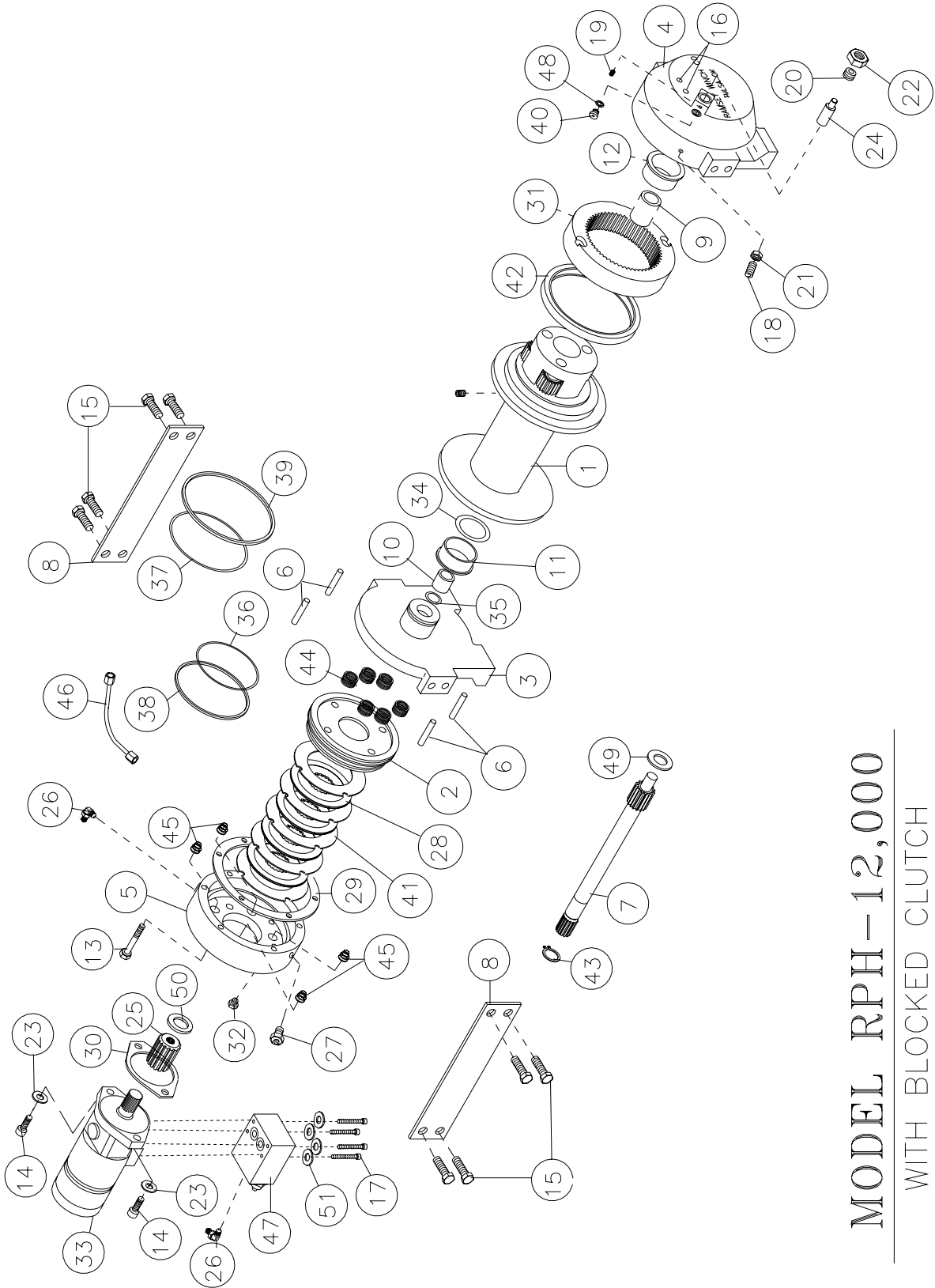


# MODEL RPH-12,000

WITH AIR CYLINDER CLUTCH SHIFTER

PARTS LIST RPH 12,000 WITH AIR-CYLINDER CLUTCH SHIFTER

<u>ITEM</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	234171	DRUM ASS'Y.
2	1	236020	LIGHT ASSEMBLY
3	1	276053	SHIFTER ASS'Y.-AIR CYLINDER
4	1	306042	PISTON-BRAKE
5	1	312529	BRACKET-LIGHT
6	1	338300	END BEARING-MOTOR
7	1	338301	END BEARING-GEAR HOUSING
8	1	338302	HOUSING-BRAKE
9	4	346045	PIN-BRAKE
10	1	357504	SHAFT-INPUT/SUN GEAR
11	2	395172	TIE PLATE
12	1	402120	BEARING-GEAR HSG.
13	1	402121	BEARING-MTR. END BEARING
14	1	412084	BUSHING-DRUM (MTR. END)
15	1	412085	BUSHING-DRUM (G.HSG. END)
16	2	414036	CAPSCREW 1/4-20NC X 1/2 LG.
17	6	414303	CAPSCREW 3/8-16NC X 2-1/2 LG. HX.HD., GR. 5 PLTD.
18	2	414948	CAPSCREW 1/2-13NC X 1-1/4 LG. SOC.HD.
19	8	414581	CAPSCREW 1/2-13NC X 3/4 LG. HX.HD. GR.5 PLTD.
20	4	414159	CAPSCREW 5/16-18NC X 1-1/2 LG. HX. HD. GR 5 Z/P
21	1	414926	SETSCREW-3/8-16NC X 1 LG., SOCKET, NYLON
22	1	416016	SETSCREW-1/4-20NC X 1/4 LG., HX. SOC. HD.
23	1	418036	NUT 3/8-16NC HEX. JAM
24	2	418218	LOCKWASHER-1/2 ID MED. SECT.
25	1	431015	COUPLING-MOTOR
26	2	432018	FITTING-7/16 ELBOW
27			NOT USED
28	4	438022	DISC-BRAKE
29	1	442220	GASKET-BRAKE
30	1	442223	GASKET-MOTOR
31	1	444085	GEAR-RING
32	1	456038	FITTING-VENT
33	1	458090	MOTOR-HYDRAULIC
34	1	462046	O-RING (DRUM)
35	1	462056	O-RING
36	1	462057	O-RING
37	1	462058	O-RING
38	1	462059	O-RING BACKUP
39	1	462060	O-RING BACKUP
40	5	474111	PLATE-SEPARATOR
41	1	482013	BOOT
42	1	482045	BOOT
43	1	486080	SEAL-GEAR HSG.
44	2	488007	SHIM
45	1	490037	SNAP RING
46	6	494110	SPRING-BRAKE
47	4	494112	SPRING
48	1	504021	SWITCH
49	1	509009	TUBE ASSEMBLY
50	1	516013	VALVE-MOTOR CONTROL
51	1	518047	THRUST WASHER
52	1	518052	THRUST WASHER
53	4	418163	LOCKWASHER - 5/16 MED SECT Z/P



# MODEL RPH-12,000

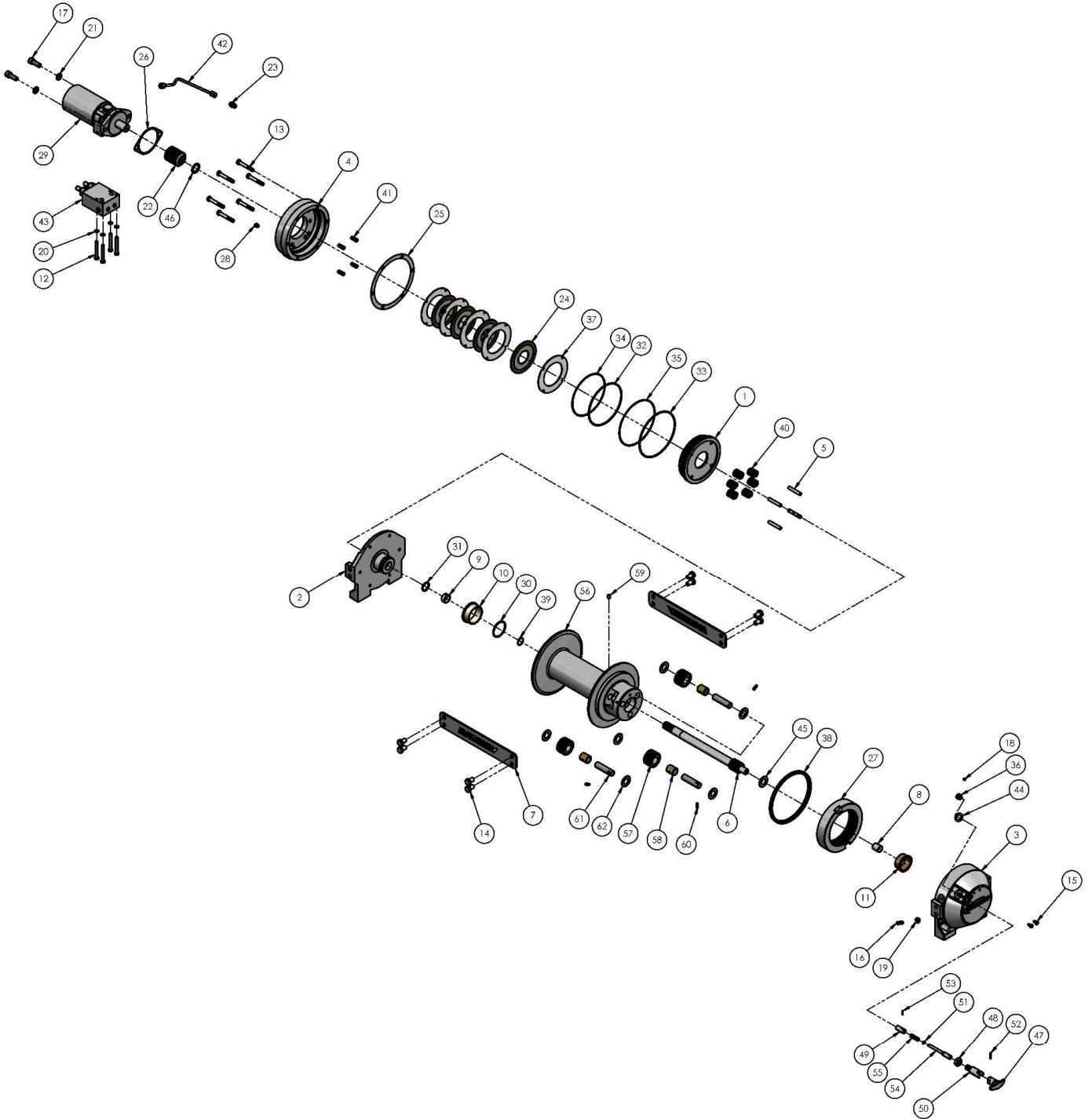
WITH BLOCKED CLUTCH

**PARTS LIST RPH 12,000 WITH BLOCKED CLUTCH**

<b>ITEM</b>	<b>QTY.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1	1	234171	DRUM ASS'Y.
2	1	306042	PISTON-BRAKE
3	1	338300	END BEARING-MOTOR
4	1	338301	END BEARING-GEAR HOUSING
5	1	338302	HOUSING-BRAKE
6	4	346045	PIN-BRAKE
7	1	357504	SHAFT-INPUT/SUN GEAR
8	2	395172	TIE PLATE
9	1	402120	BEARING-GEAR HSG.
10	1	402121	BEARING-MTR. END BEARING
11	1	412084	BUSHING-DRUM (MTR. END)
12	1	412085	BUSHING-DRUM (G.HSG. END)
13	6	414303	CAPSCREW-3/8-16NC X 2-1/2 LG. HX.HD., GR. 5 PLTD.
14	2	414948	CAPSCREW 1/2-13NC X 1-1/4 LG. SOC.HD.
15	8	414581	CAPSCREW 1/2-13NC X 3/4 LG. HX.HD. GR.5 PLTD.
16	2	414854	CAPSCREW 1/4-20NC X 1/2 RD.HD. SLOT PLTD.
17	4	414159	CAPSCREW 5/16-18NC X 1-1/2 LG. HX. HD. GR 5 Z/P
18	1	414926	SETSCREW-3/8-16NC X 1 LG., SOCKET, NYLON
19	1	416016	SETSCREW-1/4-20NC X 1/4 LG., HX. SOC. HD.
20	1	416030	SETSCREW 5/8-18NF X 1 LG. HX.SOC.HD.
21	1	418036	NUT 3/8-16NC HEX. JAM
22	1	418088	NUT 5/8-18NF
23	2	418218	LOCKWASHER-1/2 ID MED. SECT.
24	1	426048	PLUNGER
25	1	431015	COUPLING-MOTOR
26	2	432018	FITTING-7/16 ELBOW
27			NOT USED
28	4	438022	DISC-BRAKE
29	1	442220	GASKET-BRAKE
30	1	442223	GASKET-MOTOR
31	1	444085	GEAR-RING
32	1	456038	FITTING-VENT
33	1	458090	MOTOR-HYDRAULIC
34	1	462046	O-RING (DRUM)
35	1	462056	O-RING
36	1	462057	O-RING
37	1	462058	O-RING
38	1	462059	O-RING BACKUP
39	1	462060	O-RING BACKUP
40	1	472052	PLUG
41	5	474111	PLATE-SEPARATOR
42	1	486080	SEAL-GEAR HSG.
43	1	490037	SNAP RING
44	6	494110	SPRING-BRAKE
45	4	494112	SPRING
46	1	509009	TUBE ASSEMBLY
47	1	516013	VALVE-MOTOR CONTROL
48	1	518037	THRUST WASHER
49	1	518047	THRUST WASHER
50	1	518052	THRUST WASHER
51	4	418163	LOCKWASHER – 5/16 MED SECT Z/P

# KITS AND MAINTENANCE PARTS

123301



## KITS AND MAINTENANCE PARTS

123301

Item#	QTY.	PART NUMBER	DESCRIPTION	KITS						
				207021	207026	222072	246048	248052	283084	293022
1	1	306042	PISTON-BRAKE	X						
2	1	338300	END BRG-MOTOR END							
3	1	338301	END BRG-GEAR HSG							
4	1	338302	HSG-BRAKE							
5	4	346045	PIN-BRAKE,RPH12,.375 DIA.X2.125 LG	X						
6	1	357504	SHAFT-INPUT/SUN GEAR							
7	2	395427	PLATE-TIE							
8	1	402120	BEARING-GARLOK BRG					X		
9	1	402121	BEARING-RPH12,GARLOCK BRG					X		
10	1	412084	BUSHING-DRUM,MOTOR END					X		
11	1	412085	BUSHING-DRUM,GEAR END					X		
12	4	414159	CS-5/16-18UNCX2.50,HXHD,GR5							
13	6	414303	BOLT-3/8-16NC X2 1/2,HXHD,GR-5							
14	8	414581	CAPSCREW-1/2-13NCX3/4LG,HXHD							
15	2	414854	SCREW-1/4-20NCX1/2LG,RDHD,SLOT							
16	1	414926	SETSCREW-3/8-16NC X1,SOCKET							
17	2	414948	CAPSCREW-1/2-13NCX1 1/4LG,SOCKET HD							
18	1	416016	SETSCREW 1/4-20NCX1/4 HX SOCK HD CUP			X				
19	1	418036	NUT-3/8-16 NC,HEX JAM							
20	4	418163	LOCKWASHER-5/16 MED SECT							
21	2	418218	LOCKWASHER-1/2 ID MED SECT							
22	1	431015	COUPLING-MOTOR	X					X	
23	1	432018	FITTING , 7/16-20 90 degree							
24	4	438022	DISC-BRAKE		X					
25	1	442220	GASKET-BRAKE HSG		X		X			
26	1	442223	GASKET-MOTOR FLANGE		X		X		X	
27	1	444140	GEAR-RING							
28	1	456038	FITTING-VENT,BREATHER							
29	1	458090	MOTOR-HYD							
30	1	462046	O-RING 1/8X2 1/4 OD X 2				X			
31	1	462056	O-RING, DIA 1.26 OD				X			
32	1	462057	O-RING, DIA 3.145 OD		X		X			
33	1	462058	O-RING, DIA 3.395 OD		X		X			
34	1	462059	RING-BACK, DIA 5.98 OD		X		X			
35	1	462060	RING-BACK, DIA 6.48 OD		X		X			

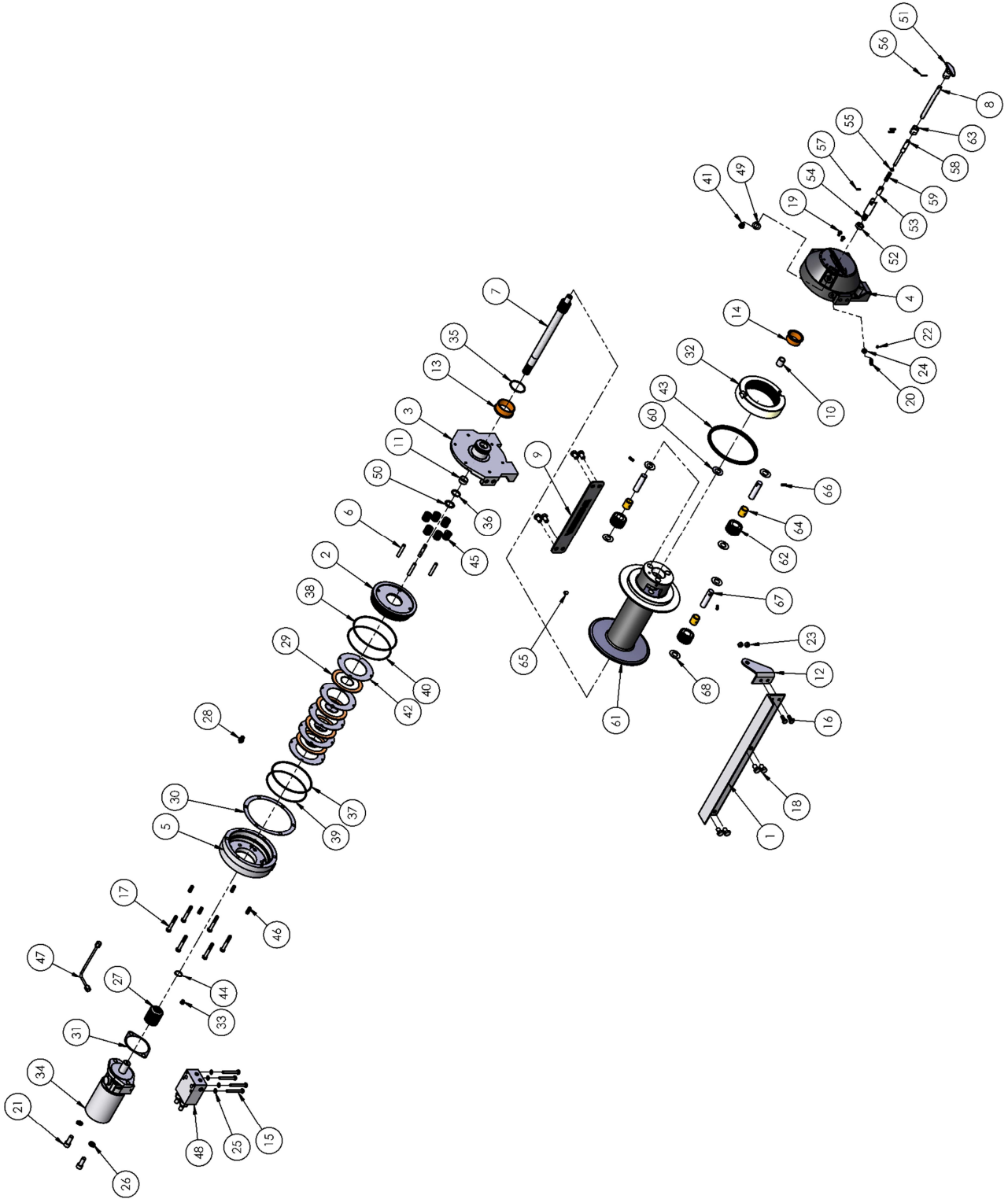
## KITS AND MAINTENANCE PARTS

123301

Item#	QTY.	PART NUMBER	DESCRIPTION	KITS						
				207021	207026	222072	246048	248052	283084	293022
36	1	472052	PLUG-SAE O-RING,.562-18NF							
37	5	474111	PLATE-SEPARATOR		X					
38	1	486080	SEAL-GH				X			
39	1	490037	SNAP RING							
40	6	494110	SPRING-BRAKE		X					
41	4	494112	SPRING-RPH12000		X					
42	1	509009	TUBE ASSY-1/4OD							
43	1	516013	VALVE-MTR CONTROL							
44	1	518037	THRUST WASHER, DIA 1.105 OD					X		
45	1	518047	WASHER-THRUST,.063 THK.X1.50 OD					X		
46	1	518052	WASHER-THRUST,1.37 O.D		X			X		
47	1	336026	HANDLE-SHIFTER			X				
48	1	418088	NUT-JAM 5/8-18NF HEX HD			X				
49	1	426046	PLUNGER-CLUTCH			X				
50	1	426050	CYLINDER-CLUTCH			X				
51	1	462045	O-RING-1/16X1/2OD X3/8ID			X	X			
52	1	470033	SPIROL PIN-1/8X7/8			X				
53	1	470088	PIN-SPRING			X				
54	1	489016	SHAFT-SHIFTER			X				
55	1	494104	SPRING-SHIFTER			X				
56	1	332168	DRUM-CABLE							X
57	3	334173	GEAR-OUTPUT,PLANET							X
58	3	412089	BUSHING-PLANET,OUTPUT							X
59	1	416059	SETSCREW3/8-16NCX1/2 HX SOCK HD CUP							
60	3	470086	ROLL PIN-1/4 X 11/16LG							X
61	3	470090	PIN-PLANET							X
62	6	518047	WASHER-THRUST,.063 THK.X1.50 OD							X

# KITS AND MAINTENANCE PARTS

123328



## KITS AND MAINTENANCE PARTS

123328

Item#	QTY.	PART NUMBER	DESCRIPTION	KITS						
				207021	207026	222068	246048	248052	283084	293022
1	1	303168	ANGLE							
2	1	306042	PISTON-BRAKE	X						
3	1	338300	END BRG-MOTOR END							
4	1	338301	END BRG-GEAR HSG							
5	1	338302	HSG-BRAKE							
6	4	346045	PIN-BRAKE,RPH12,.375 DIA.X2.125 LG.	X						
7	1	357504	SHAFT-INPUT/SUN GEAR							
8	1	357541	SHAFT EXTENSION			X				
9	2	395427	PLATE-TIE							
10	1	402120	BEARING-GARLOK BRG					X		
11	1	402121	BEARING-GARLOCK BRG					X		
12	1	408423	BRACKET-MOUNTING							
13	1	412084	BUSHING-DRUM,MOTOR END					X		
14	1	412085	BUSHING-DRUM,GEAR END					X		
15	4	414159	CS-5/16-18UNCX2.50,HXHD,GR5							
16	2	414294	CAPSCREW-3/8-16NC X 7/8 LG, HX HD							
17	6	414303	BOLT-3/8-16NC X2 1/2,HXHD,GR-5							
18	8	414581	CAPSCREW-1/2-13NCX3/4LG,HXHD,G5							
19	2	414854	SCREW-1/4-20NCX1/2LG							
20	1	414926	SETSCREW-3/8-16NC X1,SOCKET							
21	2	414948	CAPSCREW-1/2-13NCX1 1/4LG,SOCKET HD							
22	1	416016	SETSCREW 1/4-20NCX1/4 HX SOCK HD CUP							
23	2	418035	NUT-3/8-16NC HEX REG							
24	1	418036	NUT-3/8-16 NC,HEX JAM							
25	1	418163	LOCKWASHER-5/16 MED SECT							
26	4	418218	LOCKWASHER-1/2 ID MED SECT							
27	1	431015	COUPLING-MOTOR	X					X	
28	1	432018	FITTING C50X-S T-LOK, 7/16-20 90 degree							
29	4	438022	DISC-BRAKE		X					
30	1	442220	GASKET-BRAKE HSG		X		X			
31	1	442223	GASKET-MOTOR FLANGE		X		X		X	
32	1	444140	GEAR-RING							
33	1	456038	FITTING-VENT,BREATHER							
34	1	458090	MOTOR-HYDDYNAMC							
35	1	462046	O-RING 1/8X2 1/4 OD X 2				X			

## KITS AND MAINTENANCE PARTS

123328

Item#	QTY.	PART NUMBER	DESCRIPTION	KITS						
				207021	207026	222068	246048	248052	283084	293022
36	1	462056	O-RING, DIA 1.26 OD				X			
37	1	462057	O-RING, DIA 3.145 OD		X		X			
38	1	462058	O-RING, DIA 3.395 OD		X		X			
39	1	462059	RING-BACK, DIA 5.98 OD		X		X			
40	1	462060	RING-BACK, DIA 6.48 OD		X		X			
41	1	472052	PLUG-SAE O-RING,.562-18NF							
42	5	474111	PLATE-SEPARATOR,BRAKE		X					
43	1	486080	SEAL-GH				X			
44	1	490037	SNAP RING							
45	6	494110	SPRING-BRAKE		X					
46	4	494112	SPRING		X					
47	1	509009	TUBE ASSY-1/4OD,HYD.BRK							
48	1	516013	VALVE-MTR CONTROL							
49	1	518037	THRUST WASHER, DIA 1.105 OD					X		
50	1	518052	WASHER-THRUST,1.37 O.D		X			X		
51	1	336026	HANDLE-SHIFTER,CLUTCH			X				
52	1	418088	NUT-JAM 5/8- 18NF HEX HD			X				
53	1	426046	PLUNGER-CLUTCH			X				
54	1	426050	CYLINDER-CLUTCH			X				
55	1	462045	O-RING-1/16X1/2OD X3/8ID			X	X			
56	2	470033	SPIROL PIN-1/8X7/8			X				
57	1	470088	PIN-SPRING			X				
58	1	489016	SHAFT-SHIFTER			X				
59	1	494104	SPRING-SHIFTER			X				
60	1	518047	WASHER-THRUST,.063 THK.X1.50 OD					X		
61	1	332168	DRUM-CABLE							X
62	3	334173	GEAR-OUTPUT,PLANET							X
63	1	431038	COUPLING			X				
64	3	412089	BUSHING-PLANET,OUTPUT							X
65	1	416059	SETSCREW3/8-16NCX1/2 HX SOCK HD CUP							
66	3	470086	ROLL PIN-1/4 X 11/16LG							X
67	3	470090	PIN-PLANET							X
68	6	518047	WASHER-THRUST,.063 THK.X1.50 OD							X

**RAMSEY WINCH INDUSTRIAL WINCH  
LIMITED WARRANTY**

**1.1 Scope of Warranty Coverage.** Upon the terms and subject to the conditions set forth in this limited warranty:

- (a) RAMSEY WINCH (referred to herein as “**RAMSEY WINCH**” or the “**Manufacturer**”) warrants to each initial end user customer (a “**Purchaser**”) of a new industrial winch together with any accessories manufactured and sold directly from RAMSEY WINCH (the “**Product**”) that the Product shall be free from defects in material and workmanship, under normal working and service conditions, for a period of eighteen (18) months from the date the Product is shipped from RAMSEY WINCH. (the “**Warranty Term**”). A Purchaser shall be eligible for an additional eighteen (18) months of coverage in addition to the Warranty Term (also referred to as the “**Standard (+) PLUS benefit**”) only if the Purchaser (i) complies with Section 1.2(a) and (ii) registers the Product during the Warranty Term at [myproduct.ramseywinch.com](http://myproduct.ramseywinch.com).
- (b) Notwithstanding the foregoing, this warranty does not cover components damaged by accident, abuse, misuse, neglect, untrained operators, collision, overloading, modification, disassembly, rework, misapplication, improper installation, lack of lubrication or maintenance, or improper service. This warranty does not cover the paint or material finish, rope (wire or synthetic), removal or reinstallation of the winch, or normal wear and tear and loss of functionality due to aging of the Product (which may include but is not limited to bearings, bushings, seals, O-rings, gaskets, brake material, motor brushes, electrical cables and more).

**1.2 Eligibility of Warranty Coverage.**

- (a) A Purchaser shall be eligible for warranty coverage under this Limited Warranty during the Warranty Term only if:
  - (i) Prior to placing a Product in service, and throughout use of the Product during the Warranty Term, the Purchaser provides (or causes to be provided) proper storage such that foreign objects (e.g. rain or debris) cannot enter any Product through entry ports which are normally closed during operation.; and
  - (ii) The Purchaser maintains, or causes to be maintained, the Product according to commercially reasonable standards and utilizes the Product for the purposes for which it was created; and
  - (iii) No repairs or alterations have been made by any party other than RAMSEY WINCH, including Purchaser, unless otherwise authorized in writing by RAMSEY WINCH.

**1.3 Transferability of Warranty.**

- (a) This warranty is transferable only from the Purchaser to the first subsequent transferee (the “**Transferee**”) of the Product from Purchaser upon (i) written notification to RAMSEY WINCH and (ii) registration of the transfer, both within 30 days of such Product transfer.
- (b) Upon satisfaction of transfer requirements set forth in Section 1.3(a), the Transferee shall succeed to all the rights and obligations of the Purchaser set forth in this Limited Warranty.

**1.4 Certain Limitations on Scope of Warranty Service.**

- (a) Any obligation of RAMSEY WINCH under this warranty, statutory or otherwise, is limited to the repair of the Product, at its factory or Authorized Service Centers. Notwithstanding the foregoing, if field service or repair is performed by RAMSEY WINCH at the request of the Purchaser and no defect is found with material or workmanship of the Product, the Purchaser shall compensate RAMSEY WINCH for its time and expenses within thirty (30) days of delivery of an invoice relating to the same. If repair is determined by RAMSEY WINCH in its sole, absolute and uncontrolled discretion to be impossible or impractical, then RAMSEY WINCH may satisfy this warranty by replacing the Product. RAMSEY WINCH will not provide any cash payment or credits for defective materials or workmanship.

- (b) Purchaser shall be responsible for any and all freight charges for any Product receiving warranty service under this limited warranty. Any travel time, transportation charges, freight charges, or similar costs incurred by RAMSEY WINCH in connection with the replacement or repair of defective parts, shall, be the responsibility of the Purchaser. If applicable, RAMSEY WINCH shall invoice Purchaser for the total amount of such charges within sixty (60) days of fulfilling its duties under this warranty, payable within thirty (30) days of delivery of such invoice. In no event shall RAMSEY WINCH be liable for bills for service, labor or other expenses that have been incurred by the Purchaser without approval or prior authorization by RAMSEY WINCH for inspection, maintenance, or repair of the Product.
- (c) If a Product is found to be operable upon inspection, the Product, at Purchaser's election, may be either (1) returned to the Purchaser with a service charge from RAMSEY WINCH for inspection, cleaning, and routine replacement of all rubber components and any other parts that show wear; or (2) RAMSEY WINCH can dispose of the product safely.

1.5 **Limitations of Liability.** RAMSEY WINCH shall in no event be liable for punitive, special or consequential damages relating to the Product or this Warranty. RAMSEY WINCH makes no warranty in respect to third-party accessories, upgrades, or additions to the Product.

1.6 **Improving Product.** RAMSEY WINCH reserves the right to improve the Product through changes in design or materials as it may deem desirable or necessary without being obligated to incorporate, upgrade, or otherwise modify previously manufactured products.

1.7 **Limitations of Warranty.**

- (a) THE WARRANTY SET FORTH ABOVE IS THE ONLY EXPRESS WARRANTY. RAMSEY WINCH HEREBY DISCLAIMS AND EXCLUDES ANY OTHER EXPRESS, IMPLIED, OR STATUTORY WARRANTIES, ARISING BY OPERATION OF LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE, OF TRADE, OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY , FITNESS FOR A PARTICULAR PURPOSE, AND INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY.
- (b) ANY IMPLIED WARRANTY WHICH BY LAW MAY NOT BE EXCLUDED IS LIMITED IN DURATION TO ONE (1) YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE OF THE PRODUCT.
- (c) This warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.
- (d) This warranty is valid only in the U.S.A. and Canada. For warranty outside the U.S.A. and Canada contact your nearest Ramsey Winch Distributor.

1.8 **No Modifications to Warranty.** No RAMSEY WINCH dealer, distributor, agent or employee is authorized to make any modification, extension or addition to this warranty.

1.9 **How to Apply for Warranty Coverage.**

All claims are handled by contacting your nearest Ramsey Winch Distributor. For questions, please contact customer support: [rwcustomersupport@ramseyindustries.com](mailto:rwcustomersupport@ramseyindustries.com).

Visit [Dealer Locator - Ramsey Winch](#) for Ramsey Winch Distributor locations and contact information.

Additional warranty, service support, product information, and parts information can be found on [www.ramseywinch.com](http://www.ramseywinch.com).

