

# Operating and Maintenance Manual

# Omega 8 Hydraulic Winch

# **English**

OM 914319-0625-C





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

Mailing Address: P.O. Box 58151 Tulsa, OK 74158 Phone: (918) 438-2760 Fax: (918) 438-6688

www.ramseyindustries.com

#### Congratulations!

You have purchased the finest winch available in its service class. It features a reliable single stage planetary gear set which transmits torque from a geroler type hydraulic motor. A safe positive clutch allows free spooling for quick cable deployment. An automatic load holding brake is designed to hold the full rated capacity of the winch. It was designed and manufactured to provide you with the utmost in utility. As with any device that combines power and movement in its use, there are dangers if improperly used. At the same time, there are easier and faster ways for getting the job done if certain precautions are taken first. Please read this manual carefully. It contains useful ideas in obtaining the most efficient operation from your Ramsey Winch and safety procedures you need to know before beginning use. When you follow our guidelines for operation, your Ramsey Winch will give you many years of satisfying service. Thank you for choosing Ramsey. You will be glad you have one working for you.

# **Table of Contents**

SEC	CTION	PAGE
1	Introduction	2
2	Specifications	3
3	Hydraulic System General Layout and Winch Installation	4
4	Bolt Length Warning	5
5	Cable Installation - Set Screw	6
6	Hydraulic Winch Operation	7
7	Hydraulic Winch Maintenance	8
8	Troubleshooting Guide	9
9	Dimensional Drawing	10
10	Kits and Maintenance Parts	

#### 1 Introduction

Please read this manual carefully. This manual contains information to obtain the most efficient operation from your Ramsey Winch and safety procedures you need to know before operating a Ramsey Winch. Do not operate this winch until you have carefully read and understand the entire manual.

Ramsey Winches are designed and built to exacting specifications. Great care and skill go into every winch we make. Refer to the last page for information on the Ramsey Winch limited warranty.

At the time of publishing, this manual is accurate to the best of our knowledge. Ramsey Winch reserves the right to change any or all items, components and parts, necessary for any reason. This right does not obligate Ramsey Winch to immediately update the manual. If in doubt, please call your local Ramsey Winch distributor for the most up-to-date information.

#### **Warnings**

**MARNING** 

Ensure that the clutch is fully engaged before starting the winching operation.

**⚠** WARNING

Do not start the winch motor before engaging the clutch.

**⚠** WARNING

Do not disengage the clutch under load.

**MARNING** 

Do not allow personnel under or near the raised load.

**⚠** WARNING

Do not try to guide the cable during a pull. Stand clear of the cable.

**MARNING** 

Do not exceed the maximum line pull ratings shown in specifications.

**MARNING** 

Do not use the winch to lift, support, or otherwise transport people.

**MARNING** 

Always maintain a minimum of five wraps of cable around the drum. This is necessary to hold the load. The cable anchor is not designed to hold the load.



In car carrier applications, after pulling the vehicle onto the carrier, secure the vehicle to the carrier bed. Do not maintain load on winch cable while transporting the vehicle. Do not use the 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.



Do not allow the load to shift or jerk.

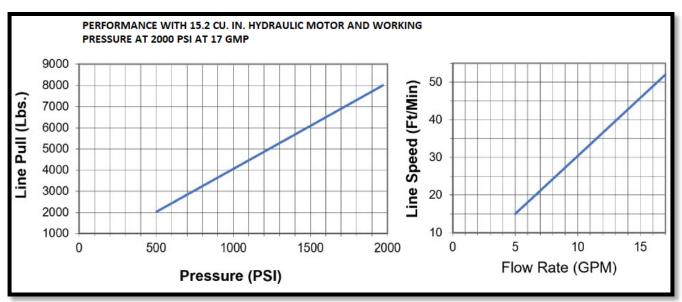
## 2 Specifications

#### Performance Table (Omega 8,000)

Rated Line Pull (lbs.)       8,6         (Kgs.)       3,6         Gear Reduction       5.         Weight (without cable)       126 lb. (57.15 Kg)										
LAYER OF CABLE	j	1	2	3	4					
*Rated line pull	Lbs.	8,000	6,815	5,936	5,258					
per layer	Kg.	3,629	3,091	2,693	2,385					
*Cable capacity	Ft.	26	57	93	133					
	M.	8.1	17.5	28.4	40.6					
*Line speed	FPM	52	60	68	76					
(at 17 GPM)	MPM	15.7	18.2	20.6	23.1					

<sup>\*</sup> These specifications are based on recommended 3/8" (10mm) EIPS wire rope & 15.2 cu.in/Rev. motor at 2000 psi working pressure.

#### Performance Charts (Omega 8,000)

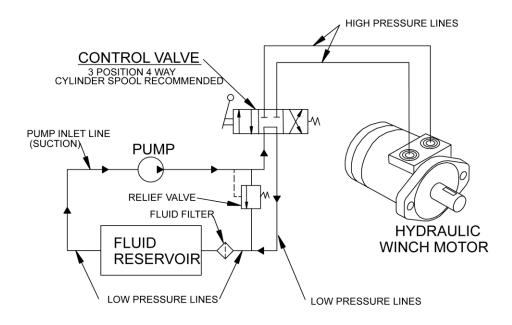


<sup>\*</sup> Directional control valve: 3-position, 4 way cylinder spool.

<sup>\*</sup> Winch meets SAE J706.

## 3 Hydraulic System Layout and Winch Installation

#### **Hydraulic System General Layout**



#### Mounting

It is important to mount the winch securely so the three major sections (the motor end, the cable drum, and the gear housing end) are properly aligned. Excessive bushing wear and difficulty freespooling are usually symptoms of misalignment.

If the winch is mid-mounted, attach at least one tie-plate to the mounting feet at the bottom of the winch to maintain alignment. If the winch is foot mounted, attach at least one tie-plate at the midpoint to maintain alignment. It is always preferred to use both tie-plates in the final installed configuration.

Contact your local RAMSEY WINCH distributor or RAMSEY WINCH customer service for the recommended mounting kit. The mounting kit will allow the winch to be mounted in upright or midmount applications and meets the criteria of serving as a solid and true mounting surface.

If not using the RAMSEY WINCH mounting kit, or a RAMSEY WINCH mounting kit is not available, use the mounting hole patterns described in the Dimensional drawings. The mounting surface must be flat within 0.015 in. and sufficiently stiff to resist flexing.

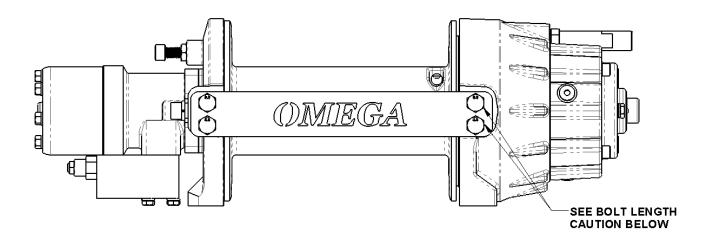


If angles or a steel plate are used in mounting the winch, attach the provided tie plates to the remaining mounting pads to either the side or foot.

#### **Hydraulic Connection**

Prior to attaching hydraulic lines to Control Valve, ensure that the shipping O-rings have been removed from the Control Valve hydraulic ports.

## 4 Bolt Length Warning



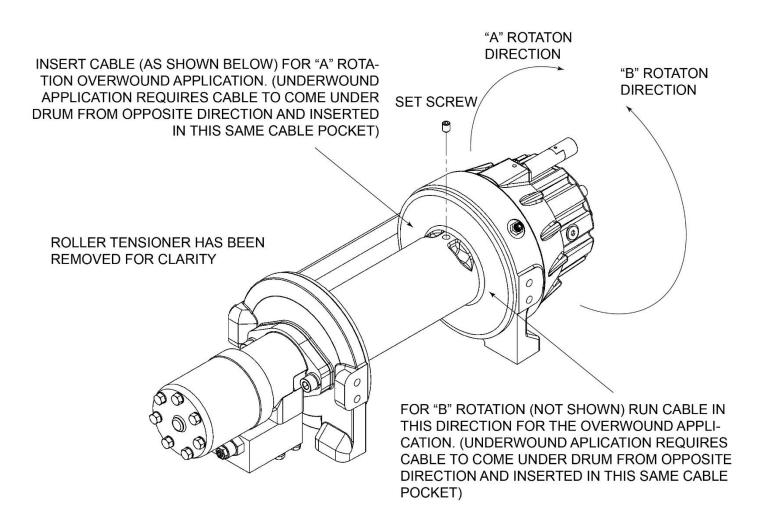
#### **Caution:**

If longer bolts (minimum grade 8.8) are substituted to mount winch or to mount a roller guide at side mount pads, bolt length must be such as to allow a maximum of 0.5 inch thread length engagement in the tapped holes in sides of each end bearing. Use of longer bolts will damage the winch and prevent free spool of the drum.

#### 5 Cable Installation – Set Screw

An "A" or "B" decal on the motor end bearing indicates the spooling direction of the cable. If the decal is damaged or unreadable, contact Customer Service for addition information.

- 1. Unwind the cable by rolling it out along the ground to prevent kinking. Securely wrap the end of the cable opposite of the hook with plastic or similar tape to prevent fraying.
- 2. Place the taped end of the cable into the hole in cable drum. Use the 3/8-16 NC x 1/2'' long hex socket drive setscrew to secure the cable to the drum. The setscrew is included with the drum assembly.
- 3. Carefully run the winch in the "reel-in" direction. Keeping tension on the end of the cable, spool all the cable onto the cable drum, taking care to form neatly wrapped layers.
- 4. With the cable installed, check the freespool operation. Disengage the clutch and pull on the cable at a walking speed. If the cable "birdnests," loosen the jam nut and turn the capscrew clockwise to increase drag on the drum. If the cable pull is excessive, loosen the capscrew by turning counterclockwise. Tighten the jam nut when the proper setting is obtained.



## **6 Hydraulic Winch Operation**

Familiarize yourself with winch by making test runs before the first pull. Plan your test in advance. You hear your winch as well as see it operate; learn to recognize the sounds of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Gain confidence in operating your winch and its use will become second nature with you.

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



Do not disengage clutch under load.

Clutch must be fully engaged before operating under load.

#### **Manual Clutch Operation**

To disengage the clutch:

- 1. Run the winch in the "cable out" direction until the load is off the cable.
- 2. Pull the handle out and rotate 90°.
- 3. With the handle in the "DISENGAGED" position the cable can now be free-spooled from the drum.

To engage the clutch:

- 1. Pull the handle out and rotate 90° and release the handle.
- 2. Run the winch in reverse until the clutch handle snaps fully into the "ENGAGED" position and the drum begins to rotate.
- 3. Do not attempt to pull a load unless the handle is fully at the "ENGAGED" position.
- 4. Do not force the handle or hammer the handle to engage.

#### **Air Clutch Operation**

To disengage the clutch:

- 1. Run the winch in the reverse (reel out) direction until the load is off the cable.
- 2. Apply air pressure to the 0.125-27 NPT port. 80 PSI (min.) 150 PSI (max.). Pressure must not exceed 150 PSI.

To engage the clutch:

- 1. Remove air pressure from the cylinder (a return spring engages the plunger).
- 2. Run the winch in reverse until the clutch engages and the drum begins to rotate. Do not attempt to pull a load with the clutch not engaged.

## 7 Hydraulic Winch Maintenance

#### **Maintenance**

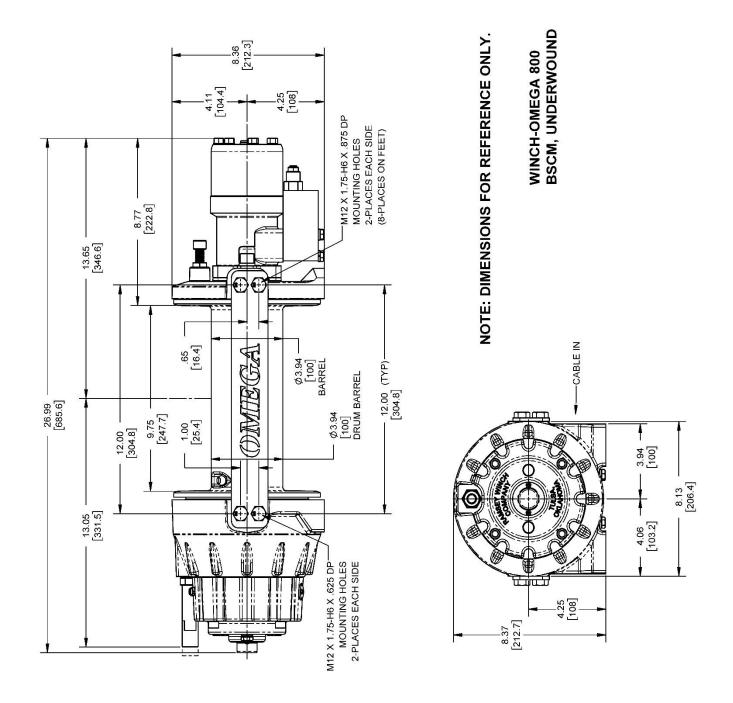
- 1. Inspect the cable for damage and lubricate frequently. If the cable becomes frayed with broken strands, replace immediately.
- 2. When respooling cable, avoid letting cable pile up to one side in order to avoid possible damage to tensioner.
- 3. Check that the clutch is fully engaging. See OPERATION instructions for the appropriate clutch shifter.

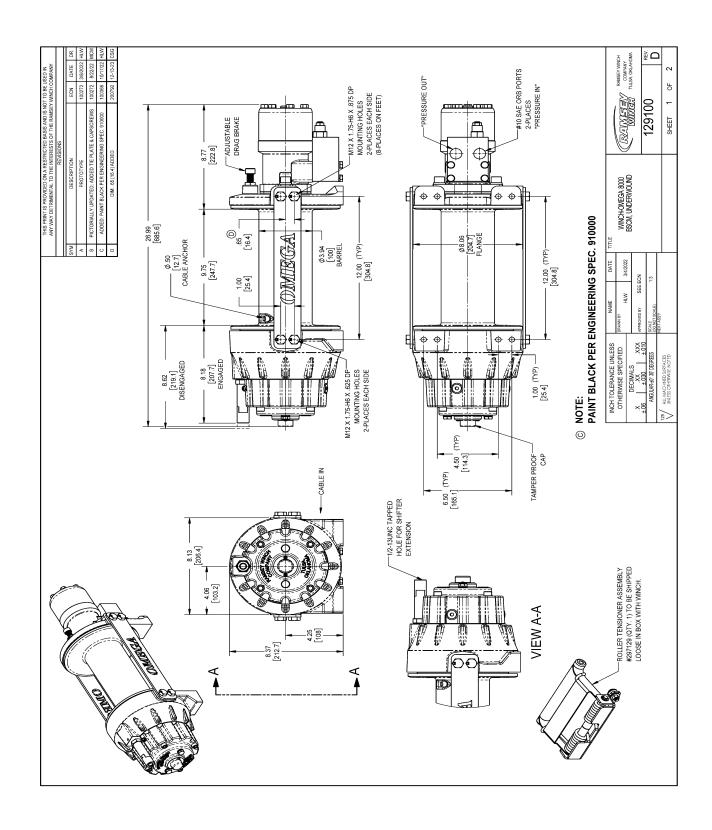
FOR MANUAL CLUTCH ONLY: Monthly, disengage clutch, put several drops of oil on the clutch handle shaft and work clutch handle IN and OUT several times to lubricate inside the shifter assembly.

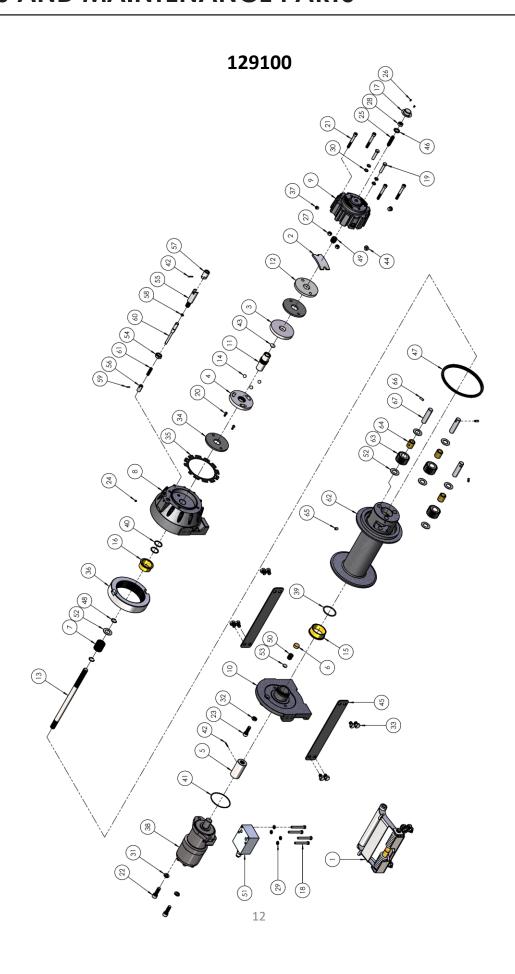
4. Check to see that the drum cable does not overrun ("birdnest") when freespooling. Contact Ramsey Winch for detailed instructions regarding how to adjust the drag brake.

# 8 Troubleshooting Guide

CONDITIONS	POSSIBLE CAUSE	CORRECTION
Drum Will Not Rotate With No Load	Winch not mounted squarely causing end bearings to bind the drum.     Brake damaged.     Gears damaged.	Check the mounting. Verify it's square.     Inspect and replace brake.     Inspect and replace damaged gears.
Drum Will Not Rotate Under Load	<ol> <li>Load greater than rated capacity of the winch.</li> <li>Low hydraulic system pressure.</li> <li>Winch not mounted squarely causing end bearings to bind the drum.</li> </ol>	Reduce load to less than the rated capacity of the winch.     Check pressure.     Check the mounting. Verify it's square.
Winch Runs Too Slow	Low flow rate.     Hydraulic motor worn out.	Check flow rate.     Replace motor.
Drum Will Not Freespool	Clutch not disengaged.     Winch not mounted squarely causing end bearings to bind the drum.	Disengage clutch.     Check the mounting. Verify it's square.
Brake Will Not Hold	1. Brake damaged.	1. Inspect and replace brake.
Load Drifts	1. Worn brake.	Overhaul the brake assembly.
Cable Birdnests When The Clutch is Disengaged	Drag screw improperly adjusted.	1. Adjust drag screw.
Excessive Noise	Hydraulic system flow too high.     Drum in bind, winch not mounted squarely.	Check flow rate.     Check the mounting. Verify it's square.
Drum Chatters in "Reel In" Direction	Low hydraulic system flow.     Low hydraulic system relief pressure setting.	Check flow rate.     Check relief valve setting.
Clutch Difficult to Engage	Detent screw damaged or improperly adjusted.	Replace or readjust detent screw.
Oil Leakage	Damaged brake housing gasket or breather.     Damaged brake hub seal.	Replace gasket and check for plugged breather.     Replace the seal.
Load Drifts	Brake needs adjustment.	Contact factory for detailed brake adjustment instructions.

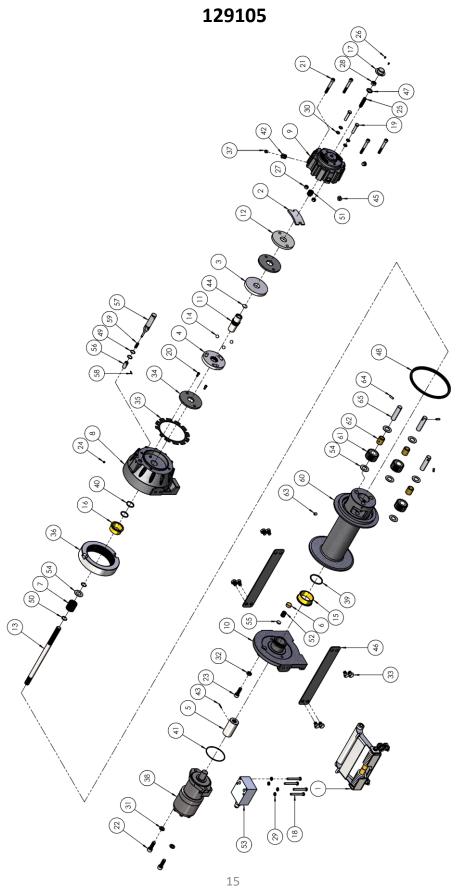






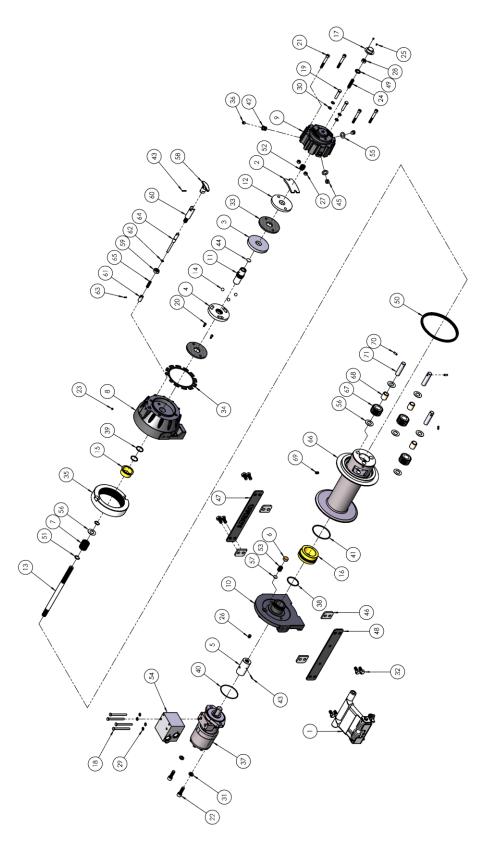
							KITS			
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222070	246074	248052	283083	293033
1	1	297129	ASSEMBLY-SPRING ROLLER TENSIONER							
2	1	306035	SPRING-FLT	Х						
3	1	314018	CAM PLATE							
4	1	314019	HUB PLATE		Х					
5	1	324296	COUPLING						Х	
6	1	330010	SHOE-DRAG							
7	1	334174	GEAR-OUTPUT,SUN							
8	1	338488	END BEARING-GEAR HOUSING							
9	1	338489	BRAKE HOUSING							
10	1	338501	END BEARING-MOTOR END							
11	1	340077	SHAFT-BRAKE		Х					
12	1	352021	RETAINER PLATE	Х						
13	1	357495	SHAFT-INPUT							
14	3	400007	BALL-1/2 DIA	Х						
15	1	412084	BUSHING-DRUM,MOTOR END					Х		
16	1	412085	BUSHING-DRUM,GEAR END					Χ		
17	1	413148	COVER-TAMPER PROOF							
18	4	414159	CS-5/16-18UNCX2.50,HXHD,GR5							
19	2	414273	BOLT-3/8-16NCX1 3/4,HXHD,GR5							
20	2	414836	CAPSCREW-1/4-20NCX1/2,HXSOCHD							
21	4	414934	CAPSCREW-3/8-16NCX2 3/4,HXSOCHD							
22	2	414952	CAPSCREW-1/2-13NCX1 1/2LG,SOCHD							
23	1	415410	CAPSCREW-M12 X 1.75 X 35mm, SOCKET HEAD							
24	1	416016	SETSCREW1/4-20NCX1/4 HX SOCK HD CUP			Х				
25	1	416304	SETSCREW-1/2-13UNC X 2 LG							
26	2	416305	CAPSCREW-BUTTON HEAD,#6-32UNC X .25L							
27	2	418035	NUT-3/8-16NC HEX REG							
28	1	418061	NUT-1/2-13NC,HEX							
29	4	418163	LOCKWASHER-5/16							
30	4	418184	WASHER-3/8ID X5/8 ODX1/16							
31	2	418218	LOCKWASHER-1/2 ID							
32	1	418546	NUT-JAM, M12 X 1.75							
33	8	420050	CAPSCREW-M12 X 1.75 X 16MM LG, HXHD, GR 8.8							
34	2	438066	DISC-BRAKE	Х						
35	1	442241	GASKET-BRAKE HOUSING				Х			
36	1	444140	GEAR-RING							
37	1	456008	RELIEF FIT-1/8-27PFT							
38	1	458074	MOTOR-HYD							
39	1	462046	O-RING 1/8X2 1/4 OD X 2				Х			
40	2	462047	QUAD-RING,1.174 ID				Х			

				KITS						
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222070	246074	248052	283083	293033
41	1	462048	O-RING				Х		Х	
42	2	470033	SPIROL PIN-1/8X7/8			Х			Х	
43	1	472051	PLUG-FREEZE		Х					
44	2	472052	PLUG-SAE O-RING,.562-18NF							
45	2	474282	TIE PLATE							
46	1	486076	SEAL-1/2				Х			
47	1	486080	SEAL-GH				Х			
48	2	490003	SNAP RING							
49	1	494010	SPRING-14 GAX7/8 ODX3/4LG	Х						
50	1	494154	SPRING							
51	1	516009	VALVE-MTR							
52	7	518047	WASHER-THRUST,.063 THK.X1.50 OD					Х		Χ
53	1	518099	DISC-THRUST							
54	1	418088	NUT-JAM 5/8-18NF HEX HD			Х				
55	1	426041	CYLINDER			Х				
56	1	426042	PLUNGER			Х				
57	1	431082	COUPLING-SHIFTER			Х				
58	1	462045	O-RING-1/16X1/2OD X3/8ID			Х	Х			
59	1	470088	PIN-SPRING			Х				
60	1	489015	SHAFT-SHIFTER			Х				
61	1	494104	SPRING-SHIFTER			Х				
62	1	332302	DRUM							Х
63	3	334173	GEAR-OUTPUT,PLANET							Х
64	3	412089	BUSHING-PLANET,OUTPUT							Х
65	1	416059	SETSCREW3/8-16NCX1/2 HX SOCK HD CUP							
66	3	470086	ROLL PIN-1/4 X 11/16LG							Х
67	3	470090	PIN-PLANET							Х



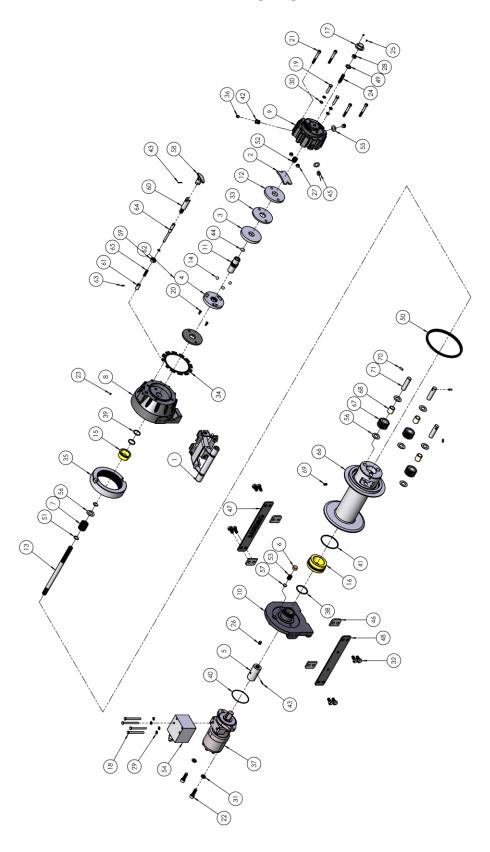
							KITS			
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222071	246074	248052	283083	293033
1	1	297129	ASSEMBLY-SPRING ROLLER TENSIONER							
2	1	306035	SPRING-FLT	Х						
3	1	314018	CAM PLATE							
4	1	314019	HUB PLATE		Х					
5	1	324296	COUPLING						Х	
6	1	330010	SHOE-DRAG							
7	1	334174	GEAR-OUTPUT,SUN							
8	1	338488	END BEARING-GEAR HOUSING							
9	1	338489	BRAKE HOUSING							
10	1	338501	END BEARING-MOTOR END							
11	1	340077	SHAFT-BRAKE		Х					
12	1	352021	RETAINER PLATE	Х						
13	1	357495	SHAFT-INPUT							
14	3	400007	BALL-1/2 DIA	Х						
15	1	412084	BUSHING-DRUM,MOTOR END					Х		
16	1	412085	BUSHING-DRUM,GEAR END					Х		
17	1	413148	COVER-TAMPER PROOF							
18	4	414159	CS-5/16-18UNCX2.50,HXHD,GR5							
19	2	414273	BOLT-3/8-16NCX1 3/4,HXHD,GR5							
20	2	414836	CAPSCREW-1/4-20NCX1/2,HXSOCHD							
21	4	414934	CAPSCREW-3/8-16NCX2 3/4,HXSOCHD							
22	2	414952	CAPSCREW-1/2-13NCX1 1/2LG,SOCHD							
23	1	415410	CAPSCREW-M12 X 1.75 X 35mm, SOCKET HEAD							
24	1	416016	SETSCREW1/4-20NCX1/4 HX SOCK HD CUP			Х				
25	1	416304	SETSCREW-1/2-13UNC X 2 LG							
26	2	416305	CAPSCREW-BUTTON HEAD,#6-32UNC X .25L							
27	2	418035	NUT-3/8-16NC HEX REG							
28	1	418061	NUT-1/2-13NC,HEX							
29	4	418163	LOCKWASHER-5/16							
30	4	418184	WASHER-3/8ID X5/8 ODX1/16							
31	2	418218	LOCKWASHER-1/2 ID							
32	1	418546	NUT-JAM, M12 X 1.75							
33	8	420050	CAPSCREW-M12 X 1.75 X 16MM LG, HXHD, GR 8.8							
34	2	438066	DISC-BRAKE	Х						
35	1	442241	GASKET-BRAKE HOUSING				Х			
36	1	444140	GEAR-RING							
37	1	456008	RELIEF FIT-1/8-27PFT							
38	1	458074	MOTOR-HYD							
39	1	462046	O-RING 1/8X2 1/4 OD X 2				Х			
40	2	462047	QUAD-RING,1.174 ID				Х			

				KITS						
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222071	246074	248052	283083	293033
41	1	462048	O-RING				Х		Х	
42	1	468002	RED-3/8-1/8NPTF							
43	1	470033	SPIROL PIN-1/8X7/8						Х	
44	1	472051	PLUG-FREEZE		Х					
45	2	472052	PLUG-SAE O-RING,.562-18NF							
46	2	474282	TIE PLATE							
47	1	486076	SEAL-1/2				Х			
48	1	486080	SEAL-GH				Х			
49	3	488007	SHIM-AIR CYLINDER							
50	2	490003	SNAP RING							
51	1	494010	SPRING-14 GAX7/8 ODX3/4LG	Х						
52	1	494154	SPRING							
53	1	516009	VALVE-MTR							
54	7	518047	WASHER-THRUST,.063 THK.X1.50 OD					Х		Х
55	1	518099	DISC-THRUST							
56	1	426042	PLUNGER			Х				
57	1	433027	AIR CYLINDER			Х				
58	1	470088	PIN-SPRING			Х				
59	1	494103	SPRING-SHIFTER			Х				
60	1	332302	DRUM							Х
61	3	334173	GEAR-OUTPUT,PLANET							Х
62	3	412089	BUSHING-PLANET,OUTPUT							Х
63	1	416059	SETSCREW3/8-16NCX1/2 HX SOCK HD CUP							
64	3	470086	ROLL PIN-1/4 X 11/16LG							Χ
65	3	470090	PIN-PLANET							Х



							KITS			
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222069	246073	248053	283083	293032
1	1	299813	ASSEMBLY-SPRING ROLLER TENSIONER							
2	1	306035	SPRING-FLT	Х						
3	1	314017	CAM PLATE							
4	1	314019	HUB PLATE		Х					
5	1	324296	COUPLING						Х	
6	1	330010	SHOE-DRAG							
7	1	334174	GEAR-OUTPUT,SUN							
8	1	338488	END BEARING-GEAR HOUSING							
9	1	338489	BRAKE HOUSING							
10	1	338501	END BEARING-MOTOR END							
11	1	340077	SHAFT-BRAKE		Х					
12	1	352021	RETAINER PLATE	Х						
13	1	357599	SHAFT-INPUT							
14	3	400007	BALL-1/2 DIA	X						
15	1	412085	BUSHING-DRUM, GEAR END					Х		
16	1	412202	BUSHING-DRUM					Х		
17	1	413148	COVER-TAMPER PROOF							
18	4	414147	CAPSCREW-5/16-18NCX3-1/2 HXHD G5							
19	2	414273	BOLT-3/8-16NCX1 3/4,HXHD,GR5							
20	2	414836	CAPSCREW-1/4-20NCX1/2,HXSOCHD							
21	4	414934	CAPSCREW-3/8-16NCX2 3/4,HXSOCHD							
22	2	414952	CAPSCREW-1/2-13NCX1 1/2LG,SOCHD							
23	1	416016	SETSCREW1/4-20NCX1/4 HX SOCK HD			Х				
24	1	416304	SETSCREW-1/2-13UNC X 2 LG							
25	2	416305	CAPSCREW-BUTTON HEAD #6-32UNC X .25L							
26	1	416307	SETSCREW-12M X 1.75 X 14MM LONG							
27	2	418035	NUT-3/8-16NC HEX REG							
28	1	418061	NUT-1/2-13NC,HEX							
29	4	418163	LOCKWASHER-5/16							
30	4	418184	WASHER-3/8ID X5/8 ODX1/16							
31	2	418218	LOCKWASHER-1/2 ID							
32	8	420029	CAPSCREW-M12 X 1.75 X 25MM LG, HXHD, GR 8.8							
33	2	438066	DISC-BRAKE	Х						
34	1	442241	GASKET-BRAKE HOUSING				Х			
35	1	444140	GEAR-RING							
36	1	456008	RELIEF FIT-1/8-27PFT							
37	1	458074	MOTOR-HYD							
38	1	462046	O-RING 1/8X2 1/4 OD X 2				Х			
39	2	462047	QUAD-RING,1.174 ID				Х			
40	1	462048	O-RING				Х		Х	

							KITS			
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222069	246073	248053	283083	293032
41	1	462073	O-RING-3.234 ID X .139 THK				Х			
42	1	468002	RED-3/8-1/8NPTF							
43	2	470033	SPIROL PIN-1/8X7/8			Х			Х	
44	1	472051	PLUG-FREEZE		Х					
45	2	472052	PLUG-SAE O-RING,.562-18NF							
46	4	474274	SPACER-TIE PLATE							
47	1	474278	TIE PLATE							
48	1	474279	TIE PLATE							
49	1	486076	SEAL-1/2				Х			
50	1	486080	SEAL-GH				Х			
51	2	490003	SNAP RING							
52	1	494010	SPRING-14 GAX7/8 ODX3/4LG,1/4 PITCH	Х						
53	1	494154	SPRING-DRAG BRAKE							
54	1	516029	VALVE-MTR CONT							
55	2	518037	THRUST WASHER							
56	7	518047	WASHER-THRUST,.063 THK.X1.50 OD					Х		Х
57	1	518099	DISC-THRUST							
58	1	336026	HANDLE-SHIFTER			Х				
59	1	418088	NUT-JAM 5/8-18NF HEX HD			Х				
60	1	426041	CYLINDER-CLUTCH			Х				
61	1	426042	PLUNGER-CLUTCH			Х				
62	1	462045	O-RING-1/16X1/2OD X3/8ID			Х	Х			
63	1	470088	PIN-SPRING			Х				
64	1	489015	SHAFT-SHIFTER			Х				
65	1	494104	SPRING-SHIFTER			Х				
66	1	332301	DRUM							Х
67	3	334173	GEAR-OUTPUT,PLANET							Х
68	3	412083	BUSHING-PLANET,OUTPUT							Х
69	1	416294	SETSCREW3/8-16NCX5/8 HX SOCK HD CUP							
70	3	470086	ROLL PIN-1/4 X 11/16LG							Х
71	3	470090	PIN-PLANET							Х



							KITS			
ltem#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222069	246073	248053	283083	293032
1	1	299813	ASSEMBLY-SPRING ROLLER TENSIONER							
2	1	306035	SPRING-FLT	Х						
3	1	314018	CAM PLATE							
4	1	314019	HUB PLATE		Х					
5	1	324296	COUPLING						Х	
6	1	330010	SHOE-DRAG							
7	1	334174	GEAR-OUTPUT,SUN							
8	1	338488	END BEARING-GEAR HOUSING							
9	1	338489	BRAKE HOUSING							
10	1	338501	END BEARING-MOTOR END							
11	1	340077	SHAFT-BRAKE		Х					
12	1	352021	RETAINER PLATE	Х						
13	1	357599	SHAFT-INPUT							
14	3	400007	BALL-1/2 DIA	Х						
15	1	412085	BUSHING-DRUM,GEAR END					Х		
16	1	412202	BUSHING-DRUM					Х		
17	1	413148	COVER-TAMPER PROOF							
18	4	414147	CAPSCREW-5/16-18NCX3-1/2 HXHD G5							
19	2	414273	BOLT-3/8-16NCX1 3/4,HXHD,GR5							
20	2	414836	CAPSCREW-1/4-20NCX1/2,HXSOCHD							
21	4	414934	CAPSCREW-3/8-16NCX2 3/4,HXSOCHD							
22	2	414952	CAPSCREW-1/2-13NCX1 1/2LG,SOCHD							
23	1	416016	SETSCREW1/4-20NCX1/4 HX SOCK HD			Х				
24	1	416304	SETSCREW-1/2-13UNC X 2 LG							
25	2	416305	CAPSCREW-BUTTON HEAD #6-32UNC X .25L							
26	1	416307	SETSCREW-12M X 1.75 X 14MM LONG							
27	2	418035	NUT-3/8-16NC HEX REG							
28	1	418061	NUT-1/2-13NC,HEX							
29	4	418163	LOCKWASHER-5/16							
30	4	418184	WASHER-3/8ID X5/8 ODX1/16							
31	2	418218	LOCKWASHER-1/2 ID							
32	8	420029	CAPSCREW-M12 X 1.75 X 25MM LG, HXHD, GR 8.8							
33	2	438066	DISC-BRAKE	Х						
34	1	442241	GASKET-BRAKE HOUSING				Х			
35	1	444140	GEAR-RING							
36	1	456008	RELIEF FIT-1/8-27PFT							
37	1	458074	MOTOR-HYD							
38	1	462046	O-RING 1/8X2 1/4 OD X 2				Х			
39	2	462047	QUAD-RING,1.174 ID				Х			
40	1	462048	O-RING				Х		Х	

							KITS			
Item#	QTY.	PART NUMBER	DESCRIPTION	207040	207057	222069	246073	248053	283083	293032
41	1	462073	O-RING-3.234 ID X .139 THK				Х			
42	1	468002	RED-3/8-1/8NPTF							
43	2	470033	SPIROL PIN-1/8X7/8			Х			Х	
44	1	472051	PLUG-FREEZE		Х					
45	2	472052	PLUG-SAE O-RING,.562-18NF							
46	4	474274	SPACER-TIE PLATE							
47	1	474278	TIE PLATE							
48	1	474279	TIE PLATE							
49	1	486076	SEAL-1/2				Х			
50	1	486080	SEAL-GH				Х			
51	2	490003	SNAP RING							
52	1	494010	SPRING-14 GAX7/8 ODX3/4LG,1/4 PITCH	Х						
53	1	494154	SPRING-DRAG BRAKE							
54	1	516030	VALVE-MOTOR CONTROL							
55	2	518037	THRUST WASHER							
56	7	518047	WASHER-THRUST,.063 THK.X1.50 OD					Х		Х
57	1	518099	DISC-THRUST							
58	1	336026	HANDLE-SHIFTER			Х				
59	1	418088	NUT-JAM 5/8-18NF HEX HD			Х				
60	1	426041	CYLINDER-CLUTCH			Х				
61	1	426042	PLUNGER-CLUTCH			Х				
62	1	462045	O-RING-1/16X1/2OD X3/8ID			Х	Х			
63	1	470088	PIN-SPRING			Х				
64	1	489015	SHAFT-SHIFTER			Х				
65	1	494104	SPRING-SHIFTER			Х				
66	1	332301	DRUM							Х
67	3	334173	GEAR-OUTPUT,PLANET							Х
68	3	412083	BUSHING-PLANET,OUTPUT							Х
69	1	416294	SETSCREW3/8-16NCX5/8 HX SOCK HD CUP							
70	3	470086	ROLL PIN-1/4 X 11/16LG							Х
71	3	470090	PIN-PLANET							Х

## **Limited Warranty**

**RAMSEY WINCH** warrants each new RAMSEY WINCH to be free from defects in material and workmanship for a period of two (2) years 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 on 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 on 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 prod-ucts through changes in design or materials as it may deem desirable without being obligated to incorpo-rate 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.



RAMSEY WINCH COMPANY
Post Office Box 581510 Tulsa, Oklahoma 74158-1510
Telephone: (918) 438-2760 FAX: (918) 438-6688