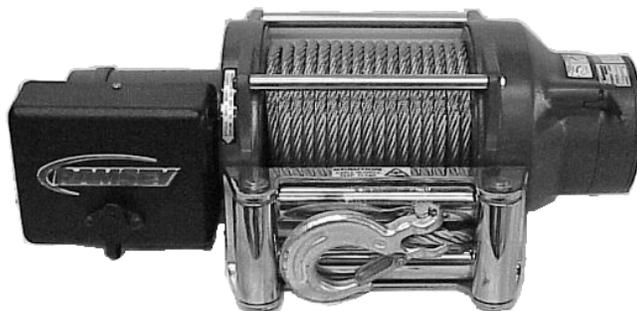




Ramsey Winch Company OWNERS MANUAL FRONT MOUNT ELECTRIC WINCH

**Model Patriot 15000 24V
With Motor Thermal Protection**



PATRIOT 15000					
LAYER OF CABLE		1	2	3	4
RATED LINE PULL	(LBS)	15,000	12,200	10,300	9,000
PER LAYER	(KGS)	6,800	5,530	4,670	4,080
CUMULATIVE CABLE	(FT)*	15	35	60	90
CAPACITY PER LAYER	(M)*	4.5	10.5	18	27

* DEPENDS ON 7/16" (11mm) DIA. CABLE BEING UNIFORMLY WOUND ONTO DRUM

LINE PULL FIRST LAYER	(LBS) (KGS)	NO LOAD	2,000	4,000	6,000	8,000	10,000	12,000	15,000
			900	1,810	2,720	3,620	4,530	5,440	6,800
	MPM	7.6	4.6	3.3	2.7	2.2	1.8	1.6	1.2
LINE SPEED	FPM	23.7	16.2	11.6	9.9	8.2	7.1	6.1	4.4
FIRST LAYER (24V)	MPM	7.2	4.9	3.5	3	2.5	2.2	1.9	1.3
AMP DRAW	24V	40	70	100	120	145	170	195	250

Congratulations

You have purchased the finest winch available in its service class. It features a highly efficient 3 stage planetary gear set which transmits torque from a series wound D.C. 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.

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Please Note: Ramsey Patriot 15000™ winches are designed for front mount vehicle use. The winches are not designed for and should not be used in industrial applications (car haulers/carriers, wreckers, hoisting, etc.), and Ramsey does not warrant them to be suitable for such use. Ramsey makes a separate, complete line of winches for industrial/commercial use. Please contact the factory for further information.



CAUTION: Read and understand this manual before installation and operation of winch. See Safety Precautions.

Safety Precautions To Guard Against Possible Injury.....



A minimum of five wraps of cable around the drum barrel is necessary to hold the rated load. Cable clamp is not designed to hold the load.

- A. Keep yourself and others a safe distance to the side of the cable when pulling under load.
- B. Do not step over a cable, or near a cable under load.
- C. Use supplied hook strap when handling hook for spooling wire rope.
- D. Do not move the vehicle to pull a load on the winch cable. This could result in cable breakage and/or winch damage
- E. Use a heavy rag or gloves to protect hands from burrs when handling winch cable.
- F. Apply blocks to wheels when vehicle is on an incline.
- G. Winch clutch should be disengaged when winch is not in use and fully engaged when in use.
- H. Modification, alteration, or deviation to the winch should only be made by Ramsey Winch Company.
- I. Keep the duration of your pulls as short as possible. If the motor becomes uncomfortably hot to the touch, stop and let it cool for a few minutes. Do not pull more than one minute at or near the rated load. Do not maintain power to the winch if the motor stalls. Electric winches are for intermittent usage and should not be used in constant duty applications.
- J. Disconnect the remote control switch from the winch when not in use. A Ramsey Part No. 282053 safety on-off switch in your vehicle is recommended.
- K. Do Not use winch in hoisting applications due to required hoist safety factors and features.
- L. Do not exceed maximum line pull ratings shown in tables. Shock loads must not exceed these ratings.
- M. To respool correctly, it is necessary to keep a slight load on the cable. This is accomplished by (wearing gloves) holding the cable with one hand and the remote control with the other, starting as far back and in the center as you can, walking up keeping load on the cable as the winch is powered in. Do not allow the cable to slip through your hand and do not approach the winch too closely. Turn off the winch and repeat the procedure until all the cable except a few feet is in. Disconnect the remote control switch and finish spooling in cable by rotating the drum by hand with clutch disengaged. On hidden winches, spool in cable under power using supplied hook strap.

Tips for Safe Operation

Don't underestimate the potential danger in winching operations. Neither should you fear them. Do learn the basic dangers and avoid them.

Observe spooling of cable onto drum. Side pulls can cause cable to pileup at one end of the drum. To correct uneven stacking, spool out that section of the cable and move it to the other end of the drum and continue winching. Uneven spooling which causes cable pileup can interfere with the tie bars causing damage to the winch.

Store the remote control switch inside your vehicle where it will not become damaged. Inspect it before you plug it in.

When ready to begin spooling in, plug in remote control switch with clutch disengaged. Do not engage clutch with motor running.

Never connect the hook back to the cable. This causes cable damage. Always use a sling or chain of suitable strength, as shown in the illustration.

Observe your winch while winching, if possible, while standing at a safe distance. If you use vehicle drive to assist, stop and get out every few feet to assure the cable is not piling up in one corner. Jamming cable can break your winch.

Do not attach tow hooks to winch mounting apparatus. They must attach to vehicle frame.

When double lining during stationary winching, the winch hook should be attached to the chassis of the vehicle.

Since the greatest pulling power is achieved on the innermost layer of your winch, it is desirable to pull off as much line as you can for heavy pulls. If this is not practical, use a snatch block and double line arrangement (see illustration). Remember, a minimum of 5 wraps of cable around the drum barrel is necessary to hold the rated load.

Neat, tight spooling avoids cable binding which is caused when a load is applied and the cable is pinched between two others. If this happens, alternately power the winch in and out a few inches. Do not attempt to work a bound cable under load, free by hand.

Techniques of Operation

The best way to get acquainted with how your winch operates is to make a few test runs before you actually need to use it. Plan your test in advance. Remember you hear your winch as well as see it operate. Get to recognize the sound of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. **The winch may make more noise when running in the 'out' direction under load. This noise should decrease with use and is not detrimental to the winch operation.** Soon you will gain confidence in operating your winch and its use will become second nature with you.

Your winch will not only pull your vehicle up or ease your vehicle down a steep grade, it will also pull another vehicle or a load while your vehicle is anchored in a stationary position. The sketches on this page show you a few techniques.



For basic self-recovery, anchor to a tree or heavy rock. When anchoring to a tree, always use a tree trunk protector.



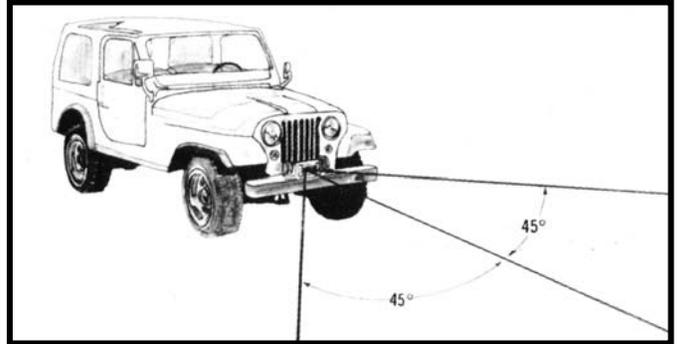
Stakes driven in solid earth and chained together make a good anchor point for self-recovery when no solid anchor point is available.



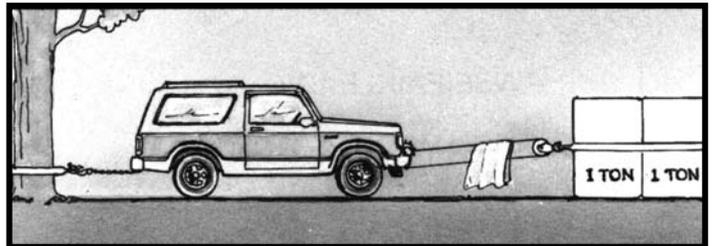
For a solid anchor, bury a log with earth or sand or place it in a deep ravine.

When pulling a heavy load, place a blanket, jacket or tarpaulin over the cable five or six feet from the hook. It will slow the snap back in the event of a broken cable. Also, open the vehicle hood for additional protection.

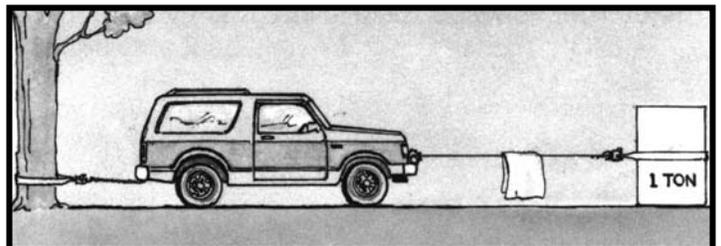
Use the vehicle wheel power to help the winch, but don't overtake the winch line. Plan your pull. You can't always hook up and pull out in one step. Examine all the areas for anchoring possibilities as well as leverage situations, direction, and goal.



Winches equipped with cable guide fairleads can pull from several directions. Pull from an angle only to straighten up the vehicle—otherwise you can damage structural members or other parts of your vehicle and cause excess cable buildup on one end of the winch drum.



For a direct pull of 2000 lbs., hitch truck to a tree or solid anchor, and take out of gear.



To double the pull, use 2-part line and tie off to chassis. Take out of gear.

Installation

The winch shown in this owners manual is solely and exclusively designed for vehicle mounted, non-industrial applications. All other applications will void warranty.

It is very important that the winch be mounted on a flat surface so that the three major sections (the motor end, the cable drum, and the gear housing end) are properly aligned. It is recommended that Ramsey kits be used to mount the winch. They are designed to align the winch and distribute up to the full rated load evenly, to avoid possible damage to the winch or vehicle.

NOTE: If recommended mounting is not used, a kit of equal design must be used.

Attach fairlead to channel using hardware furnished with winch.

NOTE: To ensure proper alignment of roller fairlead to winch, position larger (1/2") holes at top.

Attach winch to channel. Thread capscrews with lockwashers through mounting holes in channel and into winch feet (see FIGURE 1).

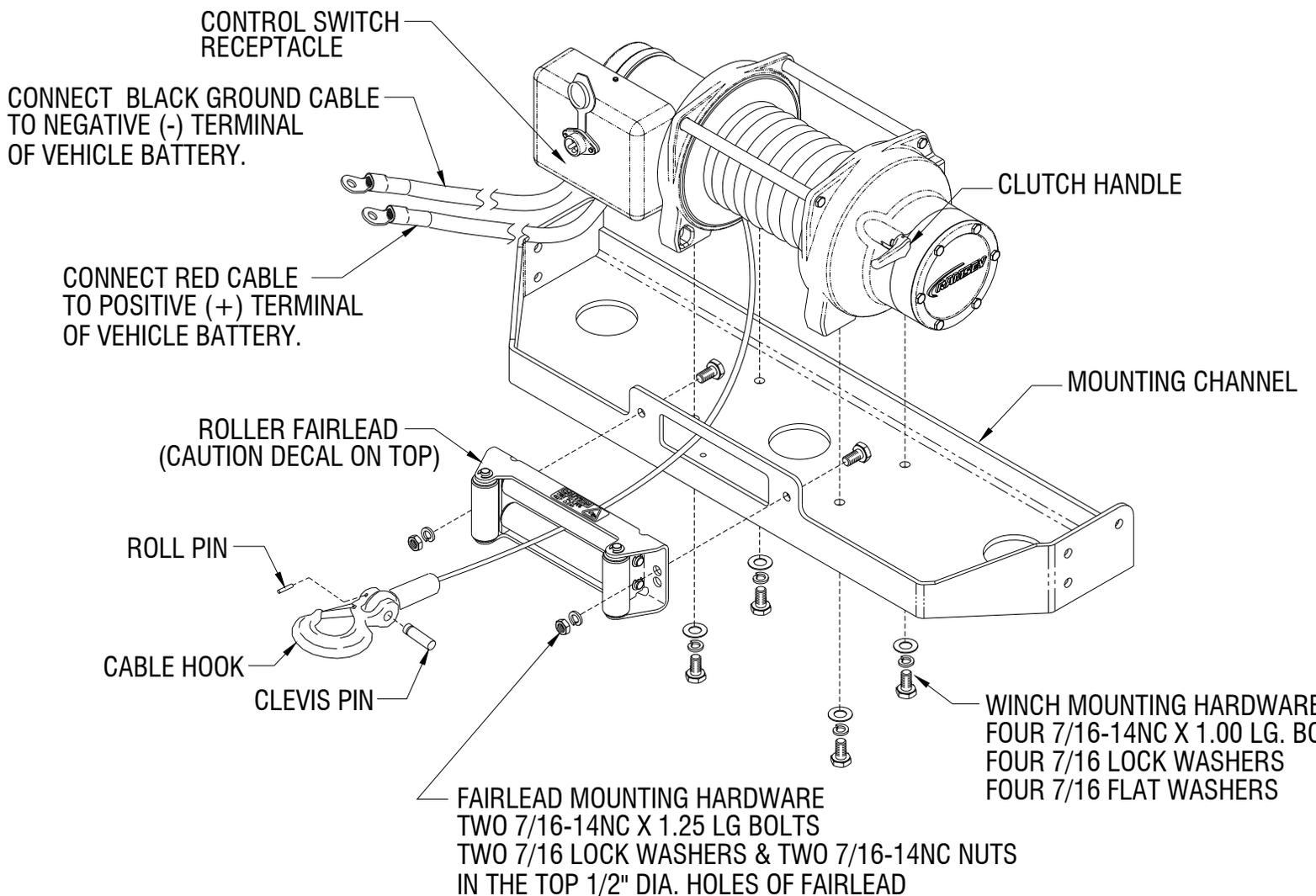


FIGURE 1

Substitution of attaching hardware items (bolts, nuts or washers) different from those supplied with your winch and mounting kit can lead to failure causing damage or serious injury (use SAE grade 5 bolts or better and torque to 44 ft.lbs.).

directions. Snap appropriate "IN" and "OUT" disc into proper thumb cavity. **Do not leave switch plugged in when winch is not in use.**

Operating Instructions

The clutch provides free spooling and clutch engagement with cable drum. With the clutch disengaged, the cable can be pulled off the drum by hand. For winching in the load, the clutch must be fully engaged with the drum.

To disengage the clutch, run the winch in the reverse (Reel Out) direction until the load is off the cable and the cable drum stops turning. Pull outward on the clutch handle, rotate it to the disengaged position and release. The clutch is now locked out and the cable may be pulled off by hand. (**Note:** If the clutch handle can not be pulled out, again run the winch momentarily in reverse to relieve pressure on the clutch.) **Warning: Do not attempt to disengage the clutch when there is a load on the cable.**

To engage the clutch, rotate the handle to the engaged position and release. Run the winch in reverse until the clutch handle snaps fully in or until the cable drum starts turning. At this point make sure the clutch handle is all the way in. After the clutch is fully engaged, the winch is ready for winching in the cable.

Electrical Connections and Operation

For normal self recovery work, your existing electrical system is adequate. Your battery should be kept in good condition. A fully charged battery and proper connections are essential. Run the vehicle engine during winching operations to keep the battery charged.

Route battery cables up to battery. **CAUTION: BE SURE BATTERY CABLES ARE NOT DRAWN TAUT ACROSS ANY SURFACES WHICH COULD POSSIBLY DAMAGE THEM.** Connect red cable to positive (+) battery terminal. Connect black ground cable to negative (-) battery terminal (See Figure 1).

Models Equipped with Push Button Remote Control Switch

The remote control switch is water proof. It has push buttons on either side. Make sure the motor has stopped fully before reversing. To actuate winch simply plug remote switch into receptacle in cover of winch. Run winch forward and reverse to check connection and to determine winch operating

Maintenance

Check monthly the action of the clutch, making sure it is fully engaging and disengaging. If clutch is not fully engaging, inspect clutch shifter assembly parts, check for damage or excessive wear and replace as necessary.

Corrosion on electrical connections will reduce performance or may cause a short. Clean all connections especially in the remote control switch and receptacle. In salty environments use a silicone sealer to protect from corrosion.

To minimize corrosion of the internal motor components that may occur due to condensation, power the winch in or out periodically. Energizing the motor will generate heat, which will help dissipate any moisture buildup in the motor. This should be performed at periodic intervals (such as with each oil change to your vehicle). **Note:** Refer to the Troubleshooting Guide if the motor has been submerged.

All moving parts in the winch are permanently lubricated with Mobilith SHC 007 synthetic grease at the time of assembly. Under normal conditions factory lubrication will suffice.

Lubricate cable periodically using light penetrating oil. Inspect for broken strands and replace if necessary. If the cable becomes worn or damaged, it must be replaced.

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. Insert the end of cable, opposite hook end, under drum and into the ½" diameter hole in drum barrel. Secure cable to drum barrel, using setscrew furnished with winch. **TIGHTEN SETSCREW SECURELY.**
3. Carefully run winch in the "reel-in" direction. Keeping tension on end of cable, spool all the cable onto drum, taking care to form neatly wrapped layers.

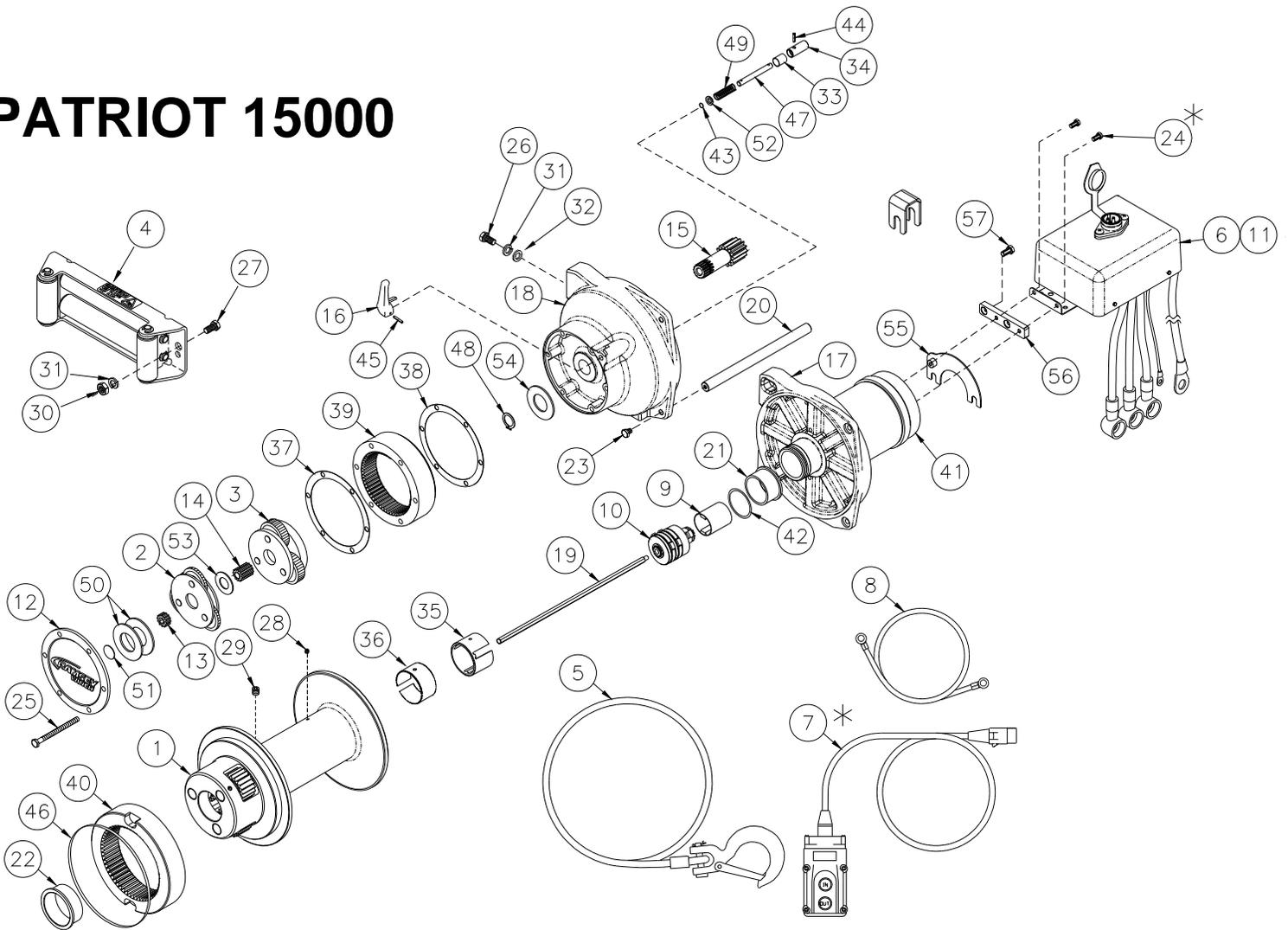
Inspect the cable frequently. If the cable becomes frayed with broken strands, replace immediately. Cable and hook assemblies may be purchased from a Ramsey distributor.

Ramsey Electric Winches Trouble Shooting Guide

Note: The winch may make more noise when running in the 'out' direction under load. This noise should decrease with use and is not detrimental to the winch operation.

CONDITIONS	POSSIBLE CAUSE	CORRECTION
MOTOR RUNS IN ONLY ONE DIRECTION	Defective solenoid or stuck solenoid. Defective remote control switch Motor overheating. Thermal cutoff prevents operation in the IN direction (motor runs in OUT direction).	Jar each solenoid to free contacts. Check each solenoid by applying 24 volts to coil terminal (it should make an audible click when energized). Disengage winch clutch, remove remote control switch plug from the socket and jump pins at 8 and 4 o'clock. Motor should run. Jump pins at 8 and 10 o'clock. Motor should run. Wait until motor cools before trying to operate winch.
MOTOR RUNS EXTREMELY HOT	Long period of operation Insufficient battery	Cooling-off periods are essential to prevent overheating. Check battery terminal voltage under load. If 20 volts or less, replace or parallel another battery to it.
MOTOR RUNS, BUT WITH INSUFFICIENT POWER OR WITH LOW LINE SPEED	Bad connection Insufficient charging system	Check battery cable for corrosion; clean and grease Replace with larger capacity charging system.
MOTOR RUNS, BUT DRUM DOES NOT TURN	Clutch not engaged	If clutch engaged but symptoms still exist, it will be necessary to disassemble winch to determine cause and repair.
MOTOR WILL NOT OPERATE	Thermal cutoff on motor has engaged. Motor will not run in the IN direction, but will run in the OUT direction. Defective solenoid or stuck solenoid Defective remote control switch Defective motor Loose connections.	Wait until motor cools before trying to operate winch. Jar solenoid to free contacts. Check solenoid by applying 24 volts to coil terminal (it should make an audible click when energized). Disengage winch clutch, remove remote control switch plug from the socket and jump pins at 8 and 4 o'clock. Motor should run. Jump pins at 8 and 10 o'clock. Motor should run. If solenoids operate, check for voltage at armature post; replace motor. Tighten connections on bottom side of hood and on motor.
MOTOR WATER DAMAGED	Submerged in water or water from high pressure car wash	Allow to drain and dry thoroughly, then run motor without a load in short bursts to dry windings.

PATRIOT 15000



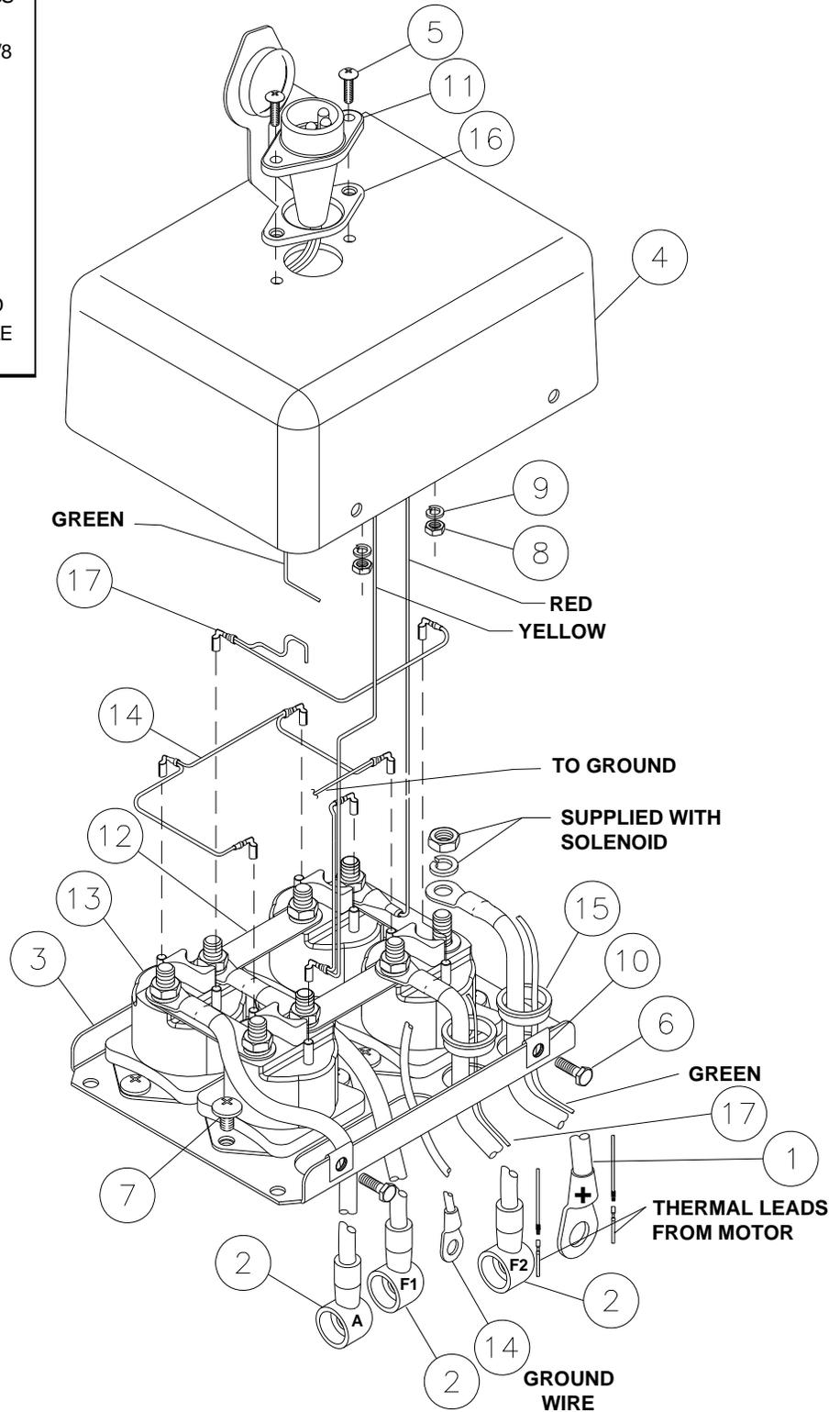
Winch Parts List Patriot 15000

Item	Qty.	P/N	Description	Item	Qty.	P/N	Description
1	1	234192	DRUM ASSEMBLY	31	6	418198	LOCKWASHER 7/16
2	1	247028	INPUT GEAR CARRIER ASSY	32	4	418204	FLAT WASHER 7/16
3	1	247035	INTERMEDIATE GEAR CARRIER ASSY	33	1	418458	SPACER - CLUTCH SHAFT
4	1	251183	ROLLER FAIRLEAD	34	1	426042	PLUNGER - CLUTCH, MANUAL
5	1	251230	CABLE ASSY-90X7/16" W/HOOK	35	1	438033	BRAKE SHELL
6	1	278190	SOLENOID ASSY 24V	36	1	438042	INSULATOR - BRAKE
7	1	282066	SWITCH ASSY-12FT LG. STD	37	1	442208	GASKET - GEAR HOUSING COVER
8	1	289225	WIRE ASSY, GROUND	38	1	442219	GASKET - RING GEAR
9	1	296600	COUPLING - MOTOR	39	1	444077	GEAR - RING INPUT & INTERMEDIATE
10	1	296601	BRAKE ASSY	40	1	444084	GEAR - RING OUTPUT
11	1	296618	SOLENOID COVER ASSY	41	1	458130	MOTOR - 24V
12	1	328138	COVER - GEAR HOUSING	42	1	462046	O-RING, 2-1/4 OD X 1/8
13	1	334153	INPUT SUN GEAR	43	1	462064	O-RING, 7/16 OD X 1/16
14	1	334184	INTERMEDIATE SUN GEAR	44	1	470088	PIN - SPRING 1/8 X 5/8
15	1	334193	OUTPUT SUN GEAR	45	1	470097	SPIROL PIN - 1/8 X 3/4
16	1	336029	CLUTCH LEVER	46	1	486080	SEAL - GEAR HOUSING
17	1	338346	END BEARING	47	1	489025	SHAFT - SHIFTER CLUTCH
18	1	338347	END BEARING - GEAR	48	1	490037	SNAP RING
19	1	357514	INPUT SHAFT	49	1	494104	SPRING - SHIFTER, CLUTCH
20	2	395419	TIE BAR	50	2	518020	THRUST WASHER - 1.39 ID
21	1	412084	BUSHING - DRUM, MOTOR END	51	1	518027	THRUST DISC - .035 X .922
22	1	412085	BUSHING - DRUM, GEAR END	52	1	518060	WASHER - CLUTCH LEVER
23	4	414038	CAPSCREW - 1/4-20UNC X 3/4 LG HX HD	53	1	518061	SPACER - INPUT & INTERMEDIATE GEAR
24	3	414812	CAPSCREW - 1/4-20UNC X 1/2 LG HX HD	54	1	518066	THRUST WASHER
25	6	414159	CAPSCREW - 5/16-14NC X 2.5 LG HX HD Z/P GR5	55	1	297046	ADAPTER PLATE ASSEMBLY
26	4	414462	CAPSCREW - 7/16-14NC X 1 LG HX HD Z/P GR5	56	1	408394	INTERFACE PLATE
27	2	414469	CAPSCREW - 7/16-14NC X 1 1/4 LG HX HD Z/P GR5	57	2	414811	CAPSCREW-1/4-20NC X 3/4L, FL SOC HD, Z/P
28	1	416030	SETSCREW - 1/4-20NC X 3/8 HALF DOG POINT	58	1	408410	BRACKET-SPACING
29	1	416059	SETSCREW - 3/8-16NC X 1/2 LG	59	1	418014	NUT-1/4-20NC REG HEX
30	2	418049	NUT - 7/16NC HEX REG Z/P				

Solenoid Assembly Parts List - Patriot 15000

278190 24V

Item no.	Qty.	P/N	Description
1	1	289015	WIRE - BATTERY CABLE
2	3	289164	WIRE - MOTOR LEAD
3	1	408342	BRACKET
4	1	413114	COVER-SOLENOID
5	2	416227	SCREW - #10-24NC X 3/4 TRUSS
6	3	416239	SCREW - #10-24NC X 3/8 LG
7	8	416281	SCREW - SELF TAP #14-20 X 3/8 LG HX HD
8	2	418004	NUT-HEX #10-24NC REG.
9	2	418141	LOCKWASHER-#10
10	3	418519	CLIP-NUT, #10-24
11	1	430026	CONNECTOR-FEMALE
12	4	440260	COPPER STRAP
13	4	440265	SOLENOID-24V
14	1	440276	WIRE - SOLENOID GROUND
15	2	472076	BUSHING-ELEC CABLE GUARD
16	1	482029	COVER - FEMALE RECEPTACLE
17	1	440292	WIRE ASSEMBLY - JUMPER



NOTES

NOTES

Warranty Information

Ramsey Winches are designed and built to exacting specifications. 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.

Ramsey Winch Company Consumer Off-Road Limited Lifetime Warranty

Ramsey Winch Company offers a limited lifetime warranty for each new Ramsey consumer/RV winch against manufacturing defects in workmanship and materials on all mechanical components.

Warranty registration cards for each winch must be submitted at the time of purchase or within 30 days. Warranty will only be valid for the original purchaser of the winch and installed on the vehicles with which they were originally registered. Warranty registration may also be submitted at www.ramsey.com.

All Ramsey mounting kits and other accessories carry a 1-year limited warranty against defects in materials and workmanship.

Electrical components consisting of motors, solenoids, wiring, wire connectors, and associated parts carry a 1-year limited warranty. Battery isolators carry a 90-day limited warranty.

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 Company 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 repairs or alterations have been made, unless authorized by the manufacturer, or for equipment misused, neglected or which has not been installed correctly. Ramsey Winch Company shall in no event be liable for special or consequential damages.

Important notice:

To the fullest extent permitted by applicable law, the following are hereby excluded and disclaimed:

1. All warranties of fitness for a particular purpose;
2. All warranties of merchantability;
3. All claims for consequential damages. There are no warranties that extend beyond the description that appears on the face thereof.

Some states do not allow the above exclusions or disclaimers in consumer transactions and as such this disclaimer/exclusion may not apply to your particular case.

To the extent such warranties of fitness for a particular purpose or merchantability are deemed to apply to this product, they exist for only so long as the express limited warranty elsewhere set forth is in existence.

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.

Ramsey Winch Company makes no warranty in respect to accessories, same being subject to the warranties of their respective manufacture.

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

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



Ramsey Winch Company

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