

Layer of Cable		1	2	3	4	5			
Rated Line Pull	(lbs)	12,000	10,000	8,600	7,500	6,700			
per Layer	(Kg)	5,430	4,530	3,900	3,390	3,030			
<b>Cumulative Cable</b>	(ft)*	15	40	65	100	125			
Capacity per Layer	(m)*	4	12	19	30	38			
* Depends on 3/8	* Depends on 3/8" (9.5 mm) Dia. cable being uniformly wound onto drum.								
Line Pull	(lbs)	NO	2,000	4,000	6,000	8,000	10,000	12,000	
First Layer	(Kg)	LOAD	900	1,810	2,710	3,620	4,530	5,430	
Line Speed	(FPM)	29	15	11	9	7	6	5	
First Layer	(MPM)	8.8	4.6	3.3	2.7	2.1	1.8	1.5	
Amp Draw	12V	98	175	245	300	360	410	465	

### **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 DC motor. A safe positive clutch allows free spooling for quick cable deployment. An automatic load holding brake is designed to hold the fully 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 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

Please note: Ramsey Patriot™ Profile series 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.

Performance Specifications					
Safety Precautions					
Tips for Safe Operation					
Techniques of Operation					

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## **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.
- 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 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. **NOTE**: 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 can be accomplished by (wearing gloves) holding the cable with one hand and the remote control switch 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 your fear them. Do learn the basic dangers and avoid them.

Observe the 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 the arrangement (see illustration).

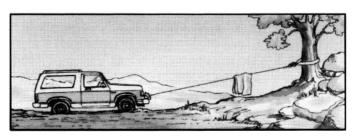
Remember, a minimum of 5 wraps of cable around the drum barrel is necessary to hold the rated load.

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. Soon you will gain confidence in operating your winch and its use will become second nature with you.

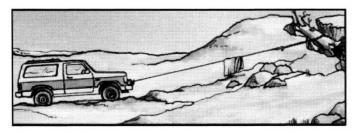
Your winch will not only pull your vehicle up or ease your vehicle down a steep grade, it will also pull another vehicle or a load while your vehicle is anchored in a stationary position. The sketches on this page show you a few techniques.



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



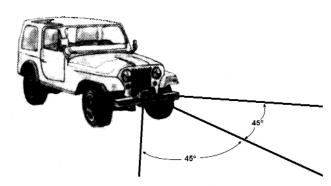
Stakes driven in solid earth and chained together make a good anchor point for self-recovery when no solid anchor point is available.



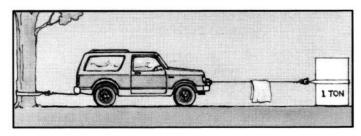
For a solid anchor, bury a log with earth or sand or place it in a deep ravine.

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.

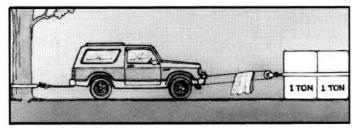
Use the vehicle wheel power to help the winch, but don't overtake the winch line. Plan your pull. You can't always hook up and pull out in one step. Examine all the areas for anchoring possibilities as well as leverage situations, direction, and goal.



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 owner's manual is solely and exclusively designed for vehicle-mounted, non-industrial applications. Any other applications will void warranty.

It is very important that the winch be mounted on a flat surface so that the three major divisions (the motor end, the cable drum, and the gear housing end) are properly aligned. It is recommended that Ramsey mounting kits be used to mount the winch. They are designed to align the winch and distribute 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.

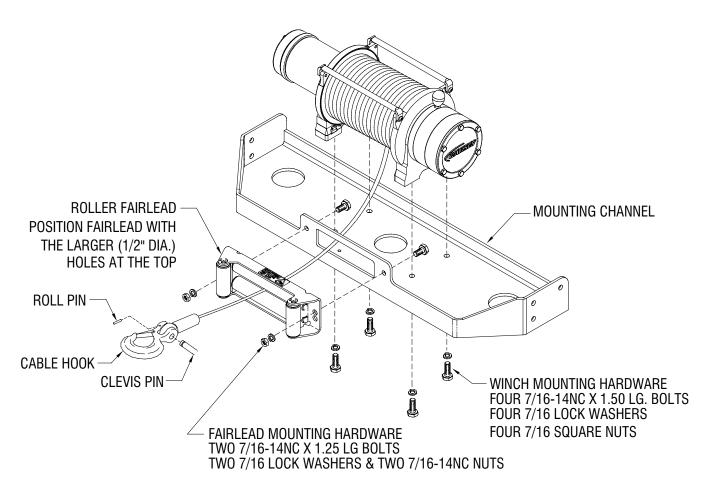
To mount the winch with a standard Ramsey mounting kit, use the mounting hardware provided with the winch. Mount as shown below.

Install fairlead to channel using hardware furnished with winch **before** installing winch. Once fairlead is installed, install winch. Tighten all bolts to 44 ft-lbs. torque.

Substitution of mounting hardware (bolts, nuts, or washers) different than those supplied with your winch and mounting kit can lead to failure causing damage or serious injury. Always use SAE Grade 5 or better bolts.

Place end of wire rope through fairlead and attach cable hook. Use clevis pin and cotter pin.

The solenoid assembly can be mounted remote from the winch or using the included Solenoid Mounting Bracket. To mount solenoid assembly using the included Solenoid Mounting Bracket, attach bracket to tie bar using (1) 1/4-20NC x 1" capscrew in place of the 3/4" tie bar capscrew. Install bracket to bottom of solenoid using included hardware. Refer to figure on opposite page.



## **Electrical Connections and Operations**

When installing winch, connect labeled motor leads coming from solenoid assembly to appropriately marked motor terminals as shown at right. Tighten nuts on motor terminals securely then slip boots over connections.

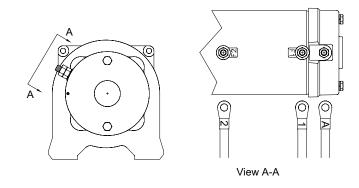
Attach solenoid ground wire to ground bolt located on bottom of motor (Winch ground wire is already installed to ground bolt on motor). Refer to figure lower right.

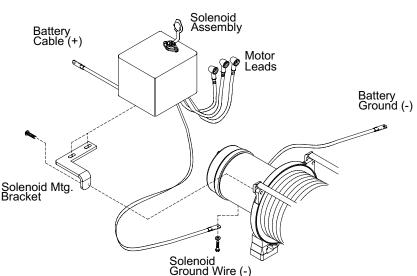
Route battery cables up to battery.

Connect red cable to positive (+) battery terminal. Connect black ground cable to negative (-) terminal of battery.

CAUTION: BE SURE BATTERY CABLES ARE NOT DRAWN TAUT ACROSS ANY SURFACES WHICH COULD POSSIBLY DAMAGE THEM.

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





# 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 control switch into receptacle in cover of solenoid. Run winch forward and reverse to check directions. Snap appropriate "IN" and "OUT" disc into proper thumb cavity. **Do not leave switch plugged in when winch is not in use.** 

### **Models Equipped with Wireless Remote Control**

See Installation and Operating Instructions for Ramsey Universal Remote Control (OM-914057) included with the wireless remote.

### **Operating Instructions**

The winch clutch allows rapid unspooling of the wire rope for hooking onto the load or anchor point. The clutch is operated by the shifter knob located on the gear housing end of the winch as follows:

- 1. To disengage the clutch, move the clutch shifter knob to the "OUT" position. Wire rope may now be freespooled off the drum.
- To engage the clutch, move the clutch shifter knob into the "IN" position. The winch is now ready for pulling.

#### **Maintenance**

All moving parts in the winch are permanently lubricated with high temperature lithium grease at the time of assembly. Under normal conditions factory lubrication will suffice.

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

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.

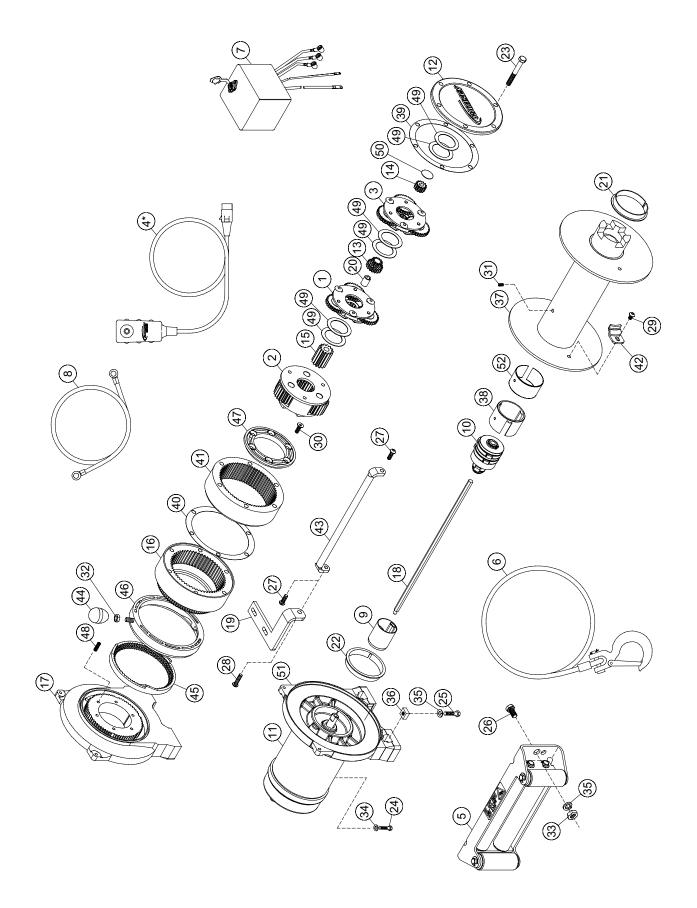
To minimize corrosion of the internal motor components that may occur due to condensation, power the winch in or out periodically. Energizing the motor will generate heat, which will help dissipate any moisture buildup in the motor. This should be performed at periodic intervals (such as with each oil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

#### **Cable Installation**

- Unwind the new cable by rolling it out along the ground to prevent kinking.
- 2. Remove old cable and observe the manner in which it is attached to the cable drum flange.
- Before installing the new cable assembly, securely wrap the end of the cable with plastic tape or similar tape to prevent fraying.
- 4. Position the cable drum so that the 1/4" diameter threaded hole in the motor end drum flange is approximately on the top.
- 5. Secure the cable to the drum flange using cable anchor and capscrew shown in the parts drawing on page 9 (Item nos. 29 and 42). Securely tighten the capscrew, but do not over-tighten.
- 6. Wind 5 wraps of cable onto the drum. Wind on the rest of the cable by pulling in a light load to keep the tension constant. Allow the cable to swivel by using a length of chain or a swivel block between the cable hook and the load.

## **Troubleshooting Guide**

Condition	Possible Cause	Correction				
MOTOR RUNS IN ONLY ONE DIRECTION	Defective or stuck solenoid	Jar solenoid to free contacts. Check each solenoid by applying 12 volts to coil terminal (it should make an audible click when energized).				
	Defective remote control switch	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.				
MOTOR RUNS EXTREMELY HOT	Long period of operation	Cooling off periods are essential to prevent overheating.				
	Insufficient Battery	Check battery terminal voltage under load. If 10 volts or less, replace or parallel another battery to it.				
MOTOR RUNS, BUT WITH INSUFFICIENT POWER, OR WITH LOW LINE SPEED	Bad connection	Check battery cable for corrosion; clean and grease.				
WITH LOW LINE SPEED	Insufficient charging system	Replace with larger capacity charging system.				
MOTOR RUNS, BUT DRUM DOES NOT TURN	Clutch not engaged	If clutch is engaged but problem still exists, it will be necessary to disassemble winch to determine cause and repair.				
MOTOR WILL NOT OPER- ATE	Loose connections or low battery.	Tighten connections on bottom side of hood and motor. Confirm that voltage at battery terminal is 12 volts.				
	Defective or stuck solenoid	Jar each solenoid to free contacts. Check each solenoid by applying 12 volts to coil terminal (it should make an audible click when energized).				
	Defective remote control switch	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.				
	Defective motor	If switch and solenoids operate, check voltage at motor terminals; if there is power to terminals, replace motor. if there is no power to terminals, check connections and battery.				
MOTOR WATER DAMAGED	Submerged in water or water from high pressure car wash	Allow to drain and dry thoroughly, then run motor without load in short bursts to dry windings.				



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## Patriot Profile 12000 Parts List

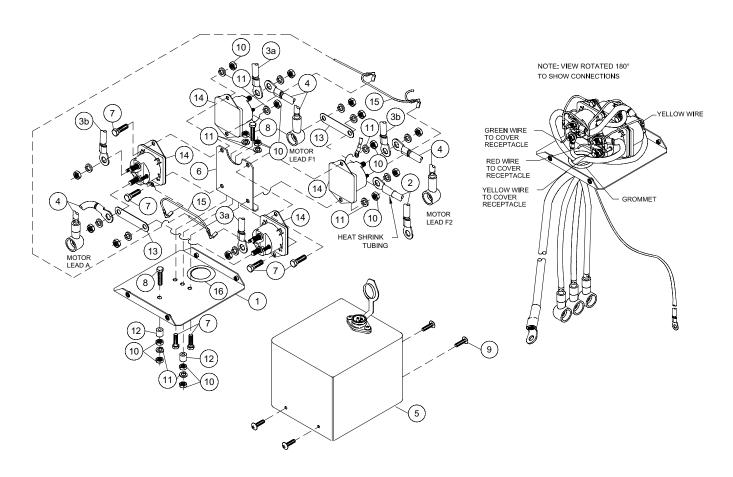
Item				Item			
No.	Qty	Part No.	Description	No. 27	Qty	Part No.	Description
1	1	247022	GEAR CARRIER ASSY - INTERMEDIATE		4	414823	CAPSCREW-1/4-20NCX3/4LG,HXSOCBUTTHD,F/B
2	1	247033	GEAR CARRIER ASSY - OUTPUT		1	414829	CAPSCREW-1/4X20NCX1,FLAT SOCHD,NY-LOK
3	1	247034	GEAR CARRIER ASSY - INPUT		1	414830	CAPSCREW-1/4-20NCX3/8,SOC BUTTON HD
4	1	251110	SWITCH ASSY-12FT LG	30	6	414861	CAPSCREW-1/4X20NCX3/4,FLAT SOCHD,NY-LOK
5	1	251183	ROLLER FAIRLEAD ASSY	31	1	416030	SETSCREW-1/4-20NCX3/8,HXSOC,F.DOG,NYL,Z/P
6	1	251265	CABLE ASSEMBLY 125' X 3/8	32	1	418029	NUT-5/16-24NF HEX JAM ZINC PLT
7	1	278189	SOLENOID ASSY	33	2	418049	NUT-7/16-14NC HEX REG ZINC PLT
8	1	289141	WIRE ASSY-GROUND	34	1	418177	LOCKWASHER-3/8 MED SECT,ZINC PLT
9	1	296600	ASSEMBLY-MOTOR COUPLING	35	6	418198	LOCKWASHER-7/16 MED SECT,ZINC PLT
10	1	296601	ASSEMBLY-BRAKE	36	4	418463	NUT-SQUARE, 7/16-14NC
11	1	458139	MOTOR	37	1	436045	DRUM ASSEMBLY
12	1	328138	COVER-GEAR HSG	38	1	438033	SHELL-DISC BRAKE
13	1	334147	GEAR-INTERMEDIATE SUN	39	1	442208	GASKET-GEAR HOUSING COVER
14	1	334153	GEAR-INPUT SUN	40	1	442219	GASKET-RING GEAR
15	1	334170	GEAR-SUN OUTPUT	41	1	444077	GEAR-RING INPUT & INTERMEDIATE
16	1	334171	GEAR-RING	42	1	448046	CABLE ANCHOR
17	1	338350	END BEARING-GEAR SIDE	43	2	448049	TIE BAR
18	1	357520	SHAFT-INPUT	44	1	452001	KNOB
19	1	408315	BRACKET-SOLENOID MOUNTING	45	1	477002	LOCKING RING
20	1	412061	BUSHING-SHAFT INTERMEDIATE SUN	46	1	477011	CAM RING
21	1	412104	BUSHING-DRUM, 2.50" DIA	47	1	479007	RETAINER
22	1	412106	BUSHING-DRUM, 2.75" DIA	48	6	494077	SPRING
23	6	414159	CAPSCREW-5/16-18UNCX2.50, HXHD, Z/P, GR5	49	6	518020	THRUST WASHER
24	1	414370	CAPSCREW 3/8-24NFX1/2, HXHD, Z/P, GR5	50	1	518027	THRUST DISC
25	4	414468	CAPSCREW-7/16-14NCX1 1/2 HXHD, Z/P, GR5	51	1	296627	END BEARING-MOTOR SIDE
26	2	414469	CAPSCREW-7/16-14NCX1 1/4LG,Z/P,GR.5	52	1	438042	INSULATOR-BRAKE

## **Solenoid Assembly Parts List**

278189 12V

Item No.	Qty.	Part No.	Description						
1	1	204281	ASSEMBLY - SOLENOID BRACKET						
2	1	289015	ASSEMBLY - WIRE BATTERY CABLE 72" LG						
3	2	289077	ASSEMBLY - WIRE #6 GA X 4.5" BLACK						
4	3	289170	ASSEMBLY - WIRE #2 GA X 29" MTR LEAD						
5	1	296594	COVER ASSEMBLY						
6	1	408271	BRACKET - SOLENOID MOUNTING						
7	6	414042	CAPSCREW 1/4-20NC X 5/8" HX HD						
8	2	414062	CAPSCREW 1/4-20NC X 1-1/2" GR5 Z/P						

Item No.	Qty.	Part No.	Description
9	4	416216	SCREW - #10-24NC X 1/2 LG
10	10	418014	NUT - HX 1/4-20NC REG Z/P
11	8	418149	LOCKWASHER - 1/4 MED SECT Z/P
12	2	418514	SPACER - SOLENOID BRACKET
13	2	440260	STRAP - COPPER
14	4	440262	SOLENOID - 12V
15	1	440281	ASSEMBLY - WIRE GROUND
16	1	472069	GROMMET



### **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 problems with your winch, please follow instructions for proper service on all warranty claims.

#### **Limited Lifetime Warranty**

**Ramsey Winch** 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 purchase of the winch and installed on the vehicles with which they were originally registered.

New cable assemblies are warranted against defects in workmanship and materials. No warranty applies after initial use.

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

This warranty is void if winch is used in commercial/industrial applications other than front mount self-recovery.

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, 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 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 improperly installed.

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 or incidental damages. There are no warranties that extend beyond the description that appears on the face hereof.

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

Ramsey Winch Company, whose policy is one of continuous product improvement, reserves the right improve any product through changes in design and materials as it may deem desirable without being obligated to incorporate such changes in products of previous 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 expense cost of the field representative. Bills for service, labor, or other expenses which have been incurred by the buyer without express 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.

