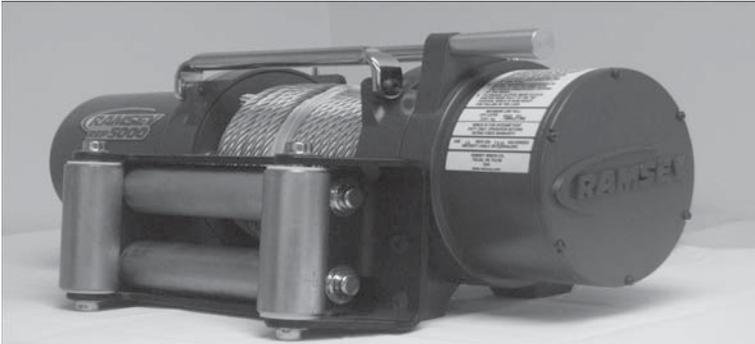




# Ramsey Winch Company OWNER'S MANUAL Front Mount Electric Winches

**Model REP 5000  
12 and 24 volt available**



| Layer of Cable  |       | 1     | 2     | 3     | 4     |
|---|-------|-------|-------|-------|-------|
| Rated Line Pull Per Layer                                 | (lbs) | 5,000 | 4,200 | 3,600 | 3,200 |
|   | (kg)  | 2,260 | 1,900 | 1,630 | 1,450 |
| Cumulative Cable Capacity Per Layer 1/4" (6mm) dia. Cable | (ft)* | 15    | 30    | 55    | 80    |
|   | (m)*  | 4     | 9     | 16    | 24    |

| First Layer Line Pull | (lbs)     | NO   | 1,000 | 3,000 | 5,000 |
|-----------------------|-----------|------|-------|-------|-------|
|                       | (kg)      | LOAD | 450   | 1,350 | 2,260 |
| Line Speed            | (FPM) 12V | 39   | 31    | 8     | 6     |
|                       | (MPM) 12V | 11.8 | 9.4   | 2.4   | 1.8   |
| First Layer           | (FPM) 24V | 47   | 26    | 21    | 12    |
|                       | (MPM) 24V | 14.3 | 7.9   | 6.4   | 3.6   |
| Amp Draw              | 12V       | 72   | 180   | 295   | 420   |
|                       | 24V       | 38   | 87    | 124   | 184   |

\* Depends on cable being uniformly wound onto drum. Ramsey performance data is compiled from actual winch testing.

## 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 magnet 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 REP 5000™ 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 anchor 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 use a 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 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. Unplug the remote control switch from the winch when not in use. A Ramsey Part No. 282053 Safety On/Off Switch is recommended to disconnect power to the winch when not in use.
- 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 on Front Cover. 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 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.

### 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.

The uneven spooling of cable, while pulling a load, is not a problem, unless there is 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 winch. After the job is done you can unspool and rewind for a neat lay of the cable.

Store the remote control switch 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 can cause cable damage. Always use a sling or chain of suitable strength. When double lining during stationary winching, do not attach hook to winch mounting plate.

Observe your winch while winching, if possible, while standing at a safe distance. Make sure cable does not jam.

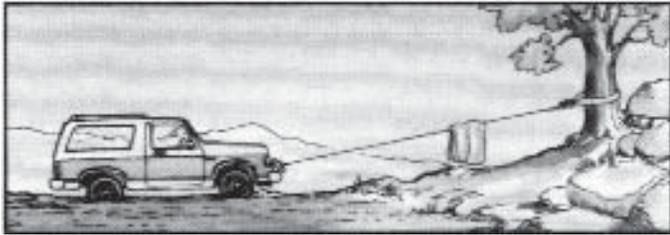
Since the greatest pulling power is achieved on the innermost layer of your winch, it is desirable to pull off as much line as you can for heavy pulls (remember, you must leave 5 wraps minimum on the drum). If this is not practical, use a snatch block and double line arrangement.

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 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.

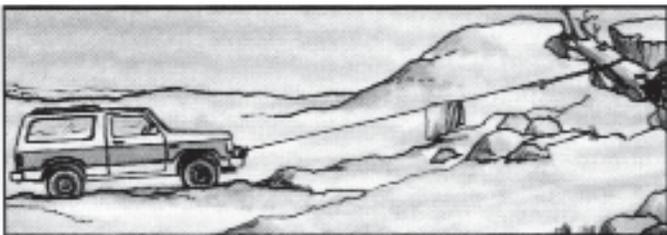
Your winch will not only pull your vehicle up or ease it down a steep grade, it will also pull another vehicle or a load while your vehicle is anchored in a stationary position. The following sketches show you a few techniques.



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



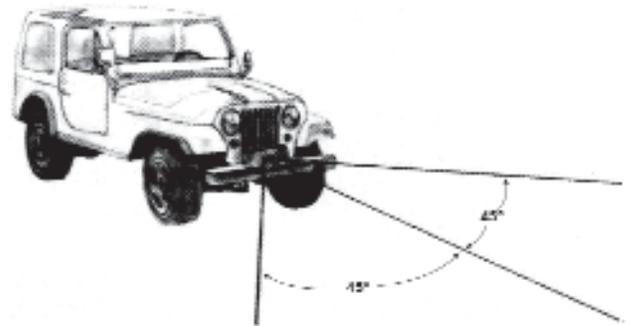
*Stakes driven in solid earth and chained together make a good anchor point for self-recovery when no solid anchor point is available.*



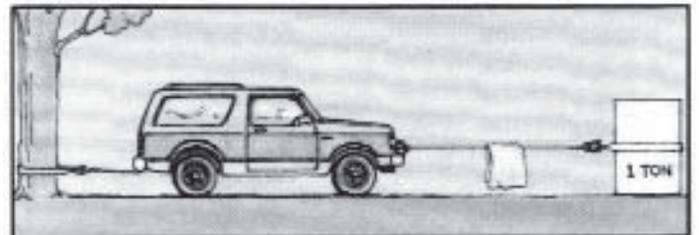
*For a solid anchor, bury a log with earth or sand or place it in a deep ravine.*

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.

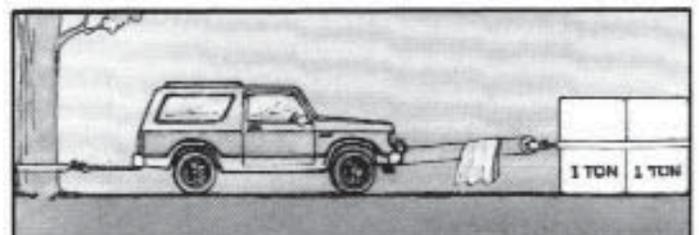
Use the vehicle wheel power to help the winch, but don't overtake the winch line. Plan your pull. You can't always hook up and pull out in one step. Examine all the areas for anchoring possibilities as well as leverage situations, direction, and goal.



*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 a recommended mounting kit is not used, a kit of equal design should be used.

The following winch mounting channels are available for mounting the REP 5000 winch:

- #408052 - Short (23.63") black
- #408120 - Medium (30.00") black
- #408101 - Long (36.00") black

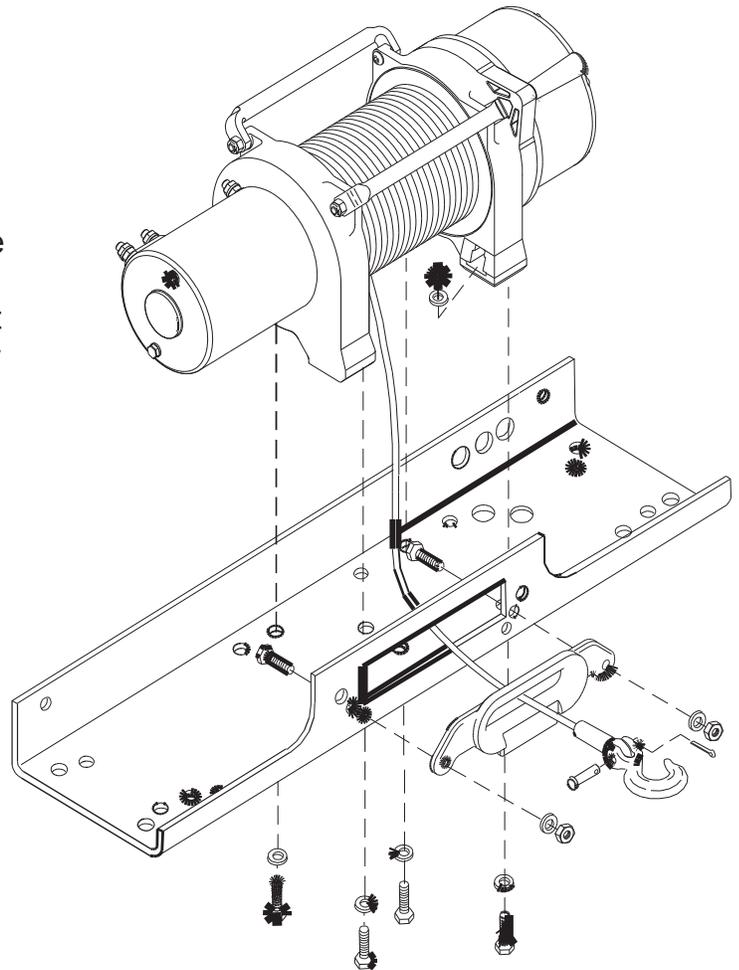
It is recommended that a Ramsey mounting channel be used with all non-Ramsey mounting kits.

Attach fairlead to channel using hardware furnished with winch.

Attach winch to channel. Place (4) flatwashers and nuts into pockets of winch mounting feet and thread capscrews with lockwashers through mounting holes in channel and into hardware in winch feet (see figure at right).

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 34 ft.lbs.).

Place end of wire rope through fairlead and attach cable hook. Use clevis pin and cotter pin (see figure at right).



## 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 tab located on the gear housing end of the winch as follows:

1. To DISENGAGE the clutch, move the clutch shifter tab to the "OUT" position. Wire rope may now be free-spooled off the drum.
2. To ENGAGE the clutch, move the clutch shifter tab into the "IN" position. The winch is now ready for pulling.

## Electrical Connections and Operations

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 the battery charged.

The solenoid assembly reverses the direction of cable drum rotation. Route red and black battery cable up to the 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 and black cable to negative (-) battery terminal.

The remote control switch is water proof. It has push button stations on either side. It is designed this way to prevent quick winch reversals which lead to solenoid failure. Make sure the motor has stopped fully before reversing direction of winch. To actuate winch simply plug remote control switch into receptacle in black solenoid cover of winch. Run winch forward and reverse to check connection and to determine winch operating directions. Snap appropriate "IN" and "OUT" disc into proper thumb cavity. The switch is also color coded to aid you in not having to guess at the direction your winch will run. **DO NOT LEAVE THE SWITCH PLUGGED IN WHEN WINCH IS NOT IN USE.**

## 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 the cable periodically using light penetrating oil. Inspect for broken strands and replace if necessary with Ramsey part number listed in Parts List. 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 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 regular intervals (such as with each oil change on your vehicle). **Note:** Refer to Troubleshooting Guide if the motor has been submerged.

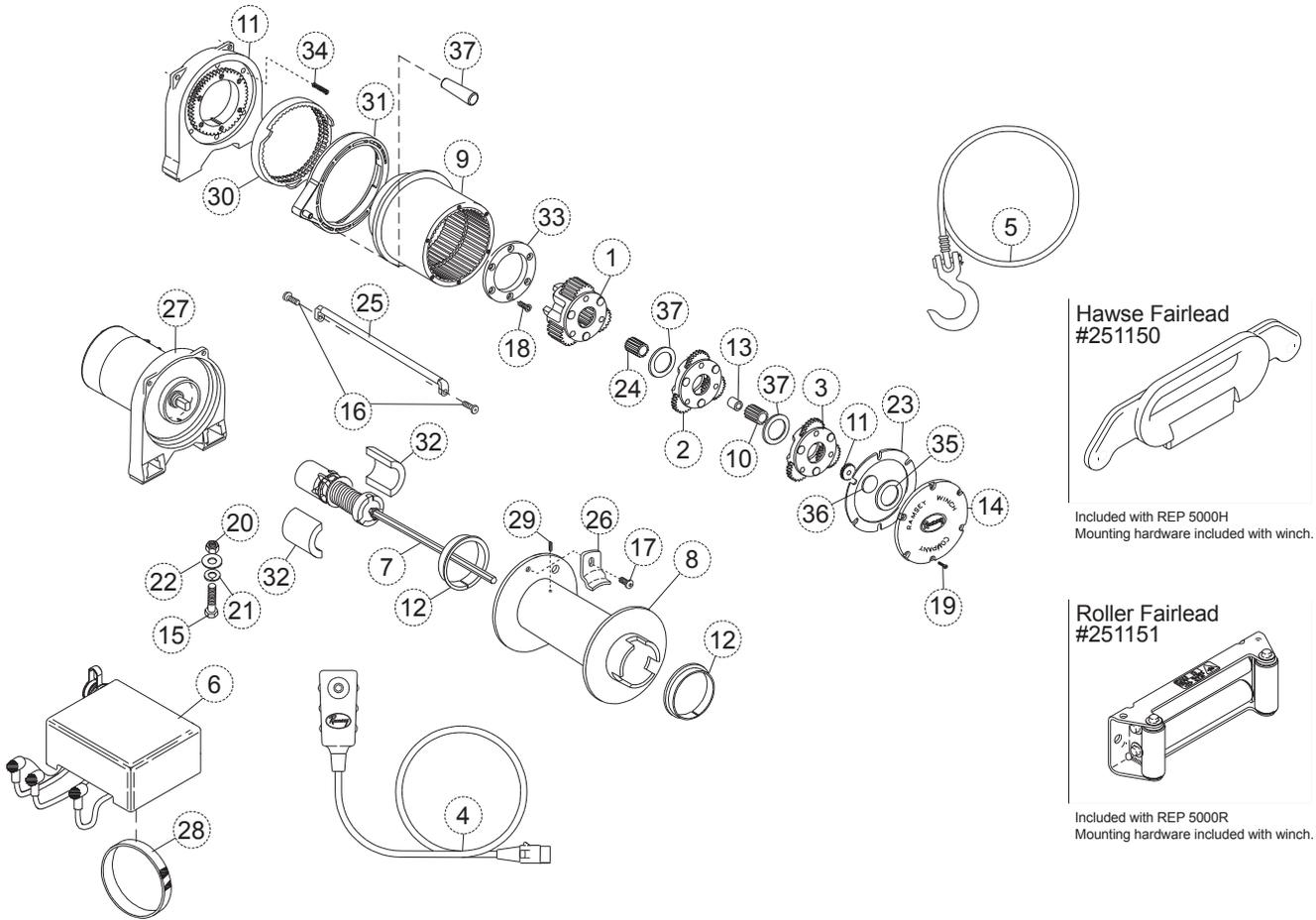
## Cable Installation

1. Unwind the new cable by rolling it out along the ground to prevent kinking. Remove old cable and observe the manner in which it is attached to the cable drum flange.
2. Before installing the new cable assembly, make sure the end of the cable is squarely cut and wrapped with tape to prevent fraying. Form a short 90° bend approximately 1/2" long on the end of the cable.
3. Position the cable drum so that the large 13/32" diameter hole in the motor end side of the drum flange is approximately on the top.
4. Insert the bent end of the cable into the 13/32" hole in the drum flange and carefully run the winch in the "reel in" direction approximately 3/4 revolution until the 1/4" diameter threaded hole in the drum flange is at the top.
5. Secure the cable to the drum flange using the cable anchor and capscrew shown in the parts drawing. Securely tighten the capscrew, but do not over-tighten.
6. Wind 5 wraps of cable onto the drum. Winch on the rest of the cable by pulling in a light load to keep ten sion 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 solenoid or stuck solenoid  | <p>Jar solenoid assembly to free contacts. Confirm defective solenoid by applying 12 or 24 volts as appropriate to coilterminal (it should make an audible click when energized).</p> <p>To confirm, disengage winch clutch, remove remote control switch 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.</p>  |
| MOTOR RUNS EXTREMELY HOT                                       | Long period of operation  | Cooling-off periods are essential to prevent overheating.   |
| MOTOR RUNS, BUT WITH INSUFFICIENT POWER OR WITH LOW LINE SPEED | Insufficient battery<br><br>Bad Connection<br><br>Insuff icient charging system   | <p>Check battery terminal voltage under load. If 10 volts or less for a 12 volt battery or 20 volts or less for a 24 volt battery, replace or parallel another battery to it. Check battery cable for corrosion; clean and grease.</p> <p>Replace with larger capacity charging system.</p>   |
| MOTOR RUNS, BUT DRUM DOES NOT TURN                             | Clutch not engaged  | If clutch engaged but symptom still exists, it will be necessary to disassemble winch to determine cause and repair.  |
| MOTOR WILL NOT OPERATE   | Defective solenoid or stuck solenoid<br><br>Defective remote control switch<br><br>Defective Motor<br><br>Loose connections   | <p>Jar solenoid assembly to free contacts. Confirm defective solenoid by applying 12 or 24 volts as appropriate to coilterminal (it should make an audible click when energized).</p> <p>To confirm, disengage winch clutch, remove remote control switch from the socket and jump pins at 8 and 4 o'clock. Motor should run.</p> <p>If solenoids operate, confirm defective motor by checking for voltage at armature post; replace motor.</p> <p>Tighten connections on bottom side of hood and on motor.</p> |
| 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.   |
| CABLE DRUM WILL NOT FREESPOOL OR IS DIFFICULT TO FREESPOOL     | Clutch not disengaged<br><br>Winch not mounted square-ly causing end bearing to bind drum<br><br>Some or all of the (6) 414861 f at capscrews attaching the 479007 ring gear retainer are too tight | <p>Check clutch operation according to nameplate. Make sure clutch shifter knob is fully at "OUT" position.</p> <p>Check mounting to see that the installation instructions on page 4 have been followed.</p> <p>Remove the gear housing cover, 413018, and all gears from inside the gear housing. Disengage the clutch and check to see that the ring gear will rotate by hand. If it will not, using a hex wrench, slightly loosen all six capscrews and then snugly retighten.</p>                          |

# REP 5000



Hawse Fairlead  
#251150

Included with REP 5000H  
Mounting hardware included with winch.

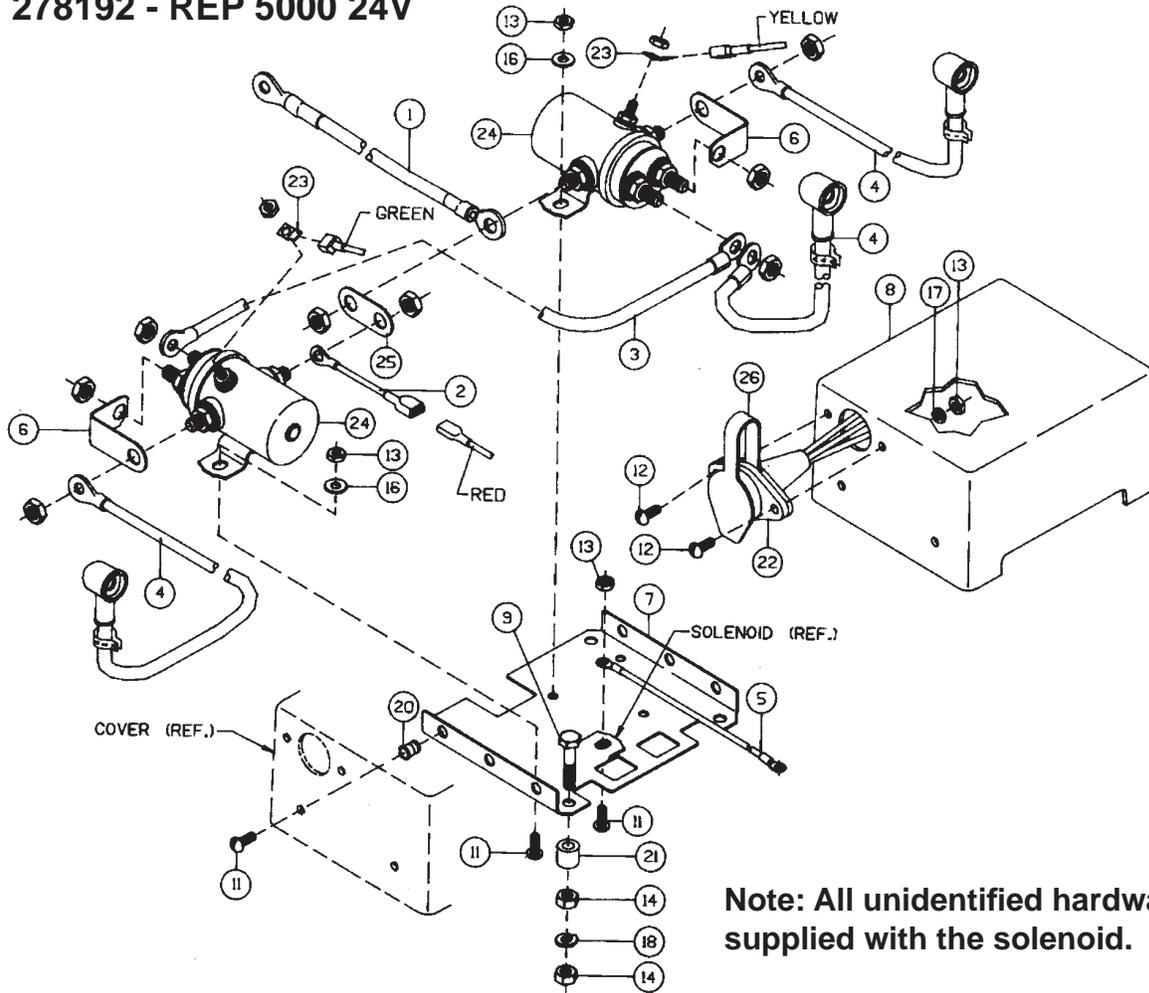
Roller Fairlead  
#251151

Included with REP 5000R  
Mounting hardware included with winch.

## REP 5000 Parts List (12v AND 24v)

| Item No. | Qty. | Part No. | Description                                 | Item No. | Qty. | Part No. | Description                      |
|----------|------|----------|---|----------|------|----------|----------------------------------|
| 1        | 1    | 247006   | Gear Carrier Assembly - Output              | 20       | 4    | 418035   | Nut - 3/8-16NC Hx reg Z/P        |
| 2        | 1    | 247007   | Gear Carrier Assembly - Intermediate 24v    | 21       | 4    | 418177   | Lockwasher - 3/8 Med Sect Z/P    |
| 3        | 1    | 247024   | Gear Carrier Assembly - Input               | 22       | 4    | 418181   | Washer - 3/8 ID SAE Flat Z/P     |
| 4        | 1    | 251110   | Switch Assembly - 12 ft                     | 23       | 1    | 442207   | Gasket - Gear Housing Cover      |
| 5        | 1    | 251169   | Cable Assembly - 80' x 1/4" (6mm) Dia.      | 24       | 1    | 444048   | Gear - Output Sun                |
| 6        | 1    | 278158   | Solenoid Assembly - 12v                     | 25       | 2    | 448061   | Tie Bar                          |
|          | 1    | 278192   | Solenoid Assembly - 24v                     | 26       | 1    | 448071   | Cable Anchor                     |
| 7        | 1    | 296285   | Brake Assembly                              | 27       | 1    | 296589   | Motor/End Bearing Assembly - 12v |
| 8        | 1    | 332143   | Drum - Cable                                |          | 1    | 296591   | Motor/End Bearing Assembly - 24v |
| 9        | 1    | 334143   | Gear - Ring                                 | 28       | 1    | 424023   | Clamp                            |
| 10       | 1    | 334147   | Gear - Intermediate Sun                     | 29       | 1    | 470053   | Roll Pin - 1/8 Dia x 3/8 Lg      |
| 11       | 1    | 338337   | End Bearing                                 | 30       | 1    | 477002   | Locking Ring                     |
| 12       | 2    | 412056   | Bushing - Drum                              | 31       | 1    | 477013   | Cam Ring                         |
| 13       | 1    | 412061   | Bushing - Shaft                             | 32       | 2    | 477004   | Ring - Half                      |
| 14       | 1    | 413018   | Cover - Gear Housing                        | 33       | 1    | 479007   | Retainer - Ring Gear             |
| 15       | 4    | 414316   | Capscrew - 3/8-16NC x 1-1/4 Hx Hd GR5 Z/P   | 34       | 6    | 494077   | Spring                           |
| 16       | 4    | 414823   | Capscrew - 1/4-20NC x 3/4 Soc Button Hd F/B | 35       | 3    | 518020   | Thrust Washer                    |
| 17       | 1    | 414830   | Capscrew - 1/4-20NC x 3/8 Button Hd         | 36       | 1    | 518027   | Thrust Disc                      |
| 18       | 6    | 414861   | Capscrew - 1/4-20NC x 3/4 Flat Soc Hd Nylok | 37       | 1    | 452005   | Shifter Lever                    |
| 19       | 6    | 416273   | Screw - #6-32NC x 3/8                       |          |      |          |                                  |

**Solenoid Assembly Parts List**  
**278158 - REP 5000 12V**  
**278192 - REP 5000 24V**



**Note: All unidentified hardware comes supplied with the solenoid.**

| Item No. | Qty. Req'd | Part No. | Description                                 |
|----------|------------|----------|---|
| 1        | 1          | 289015   | Wire Assembly—Battery Red 72"               |
| 2        | 1          | 289091   | Wire Assembly—Red 16 Ga. x 1-1/2" Lg        |
| 3        | 1          | 289092   | Wire Assembly—Black 6 Ga. x 3-1/2" Lg       |
| 4        | 3          | 289171   | Wire Assembly—Black 4 Ga. x 17" Lg. (12v)   |
|          | 3          | 289115   | Wire Assembly—Black 6 Ga. x 17" Lg. (24v)   |
| 5        | 1          | 289208   | Wire Assembly—Black 18 Ga. x 12.5" Lg (12v) |
|          | 1          | 289209   | Wire Assembly—Black 18 Ga. x 14.5" Lg (24v) |
| 6        | 2          | 364002   | Strap—Copper                                |
| 7        | 1          | 408102   | Bracket                                     |
| 8        | 1          | 413024   | Cover—Solenoid                              |
| 9        | 3          | 414053   | Capscrew 1/4—20NCx1-1/4Lg.Hx.Hd. Z/P        |
| 10       | 7          | 416216   | Screw #10—24NCX 1/2" Lg. Rd. Hd. Z/P        |
| 11       | 2          | 416227   | Screw #10—24NCX 3/4" Lg. Truss Hd. Black    |
| 12       | 6          | 418004   | Nut—Hx. Reg. #10—24NC Z/P                   |
| 13       | 6          | 418014   | Nut—Hx. Reg 1/4—20NC Z/P                    |
| 14       | 4          | 418140   | Washer #10 SAE Flat Z/P                     |
| 15       | 2          | 418141   | Lockwasher #10 Med. Sect. Z/P               |
| 16       | 3          | 418149   | Lockwasher 1/4 Med. Sect. Z/P               |
| 17       | 1          | 418165   | Washer 5/16 Shakeproof External Teeth       |
| 18       | 3          | 418411   | Nutsert #10—24NC                            |
| 19       | 3          | 418514   | Spacer                                      |
| 20       | 1          | 430013   | Connector Female—Molded                     |
| 21       | 2          | 440071   | Terminal Tab                                |
| 22       | 2          | 440110   | Solenoid—12V                                |
|          | 2          | 440114   | Solenoid—24V                                |
| 23       | 1          | 440111   | Strap—Copper                                |
| 24       | 1          | 482029   | Cover—Female Connector                      |

## 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.

## 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 purchaser 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 materials & workmanship.

Chrome finish warranted for one year against manufacturing defects. Cracking, scratching or corrosion caused by winching not covered by warranty.

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-yr. limited warranty. Battery isolators carry a 90-day limited warranty.

An optional extended 2-year limited warranty for all electrical components may be purchased.

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 as 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 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.**

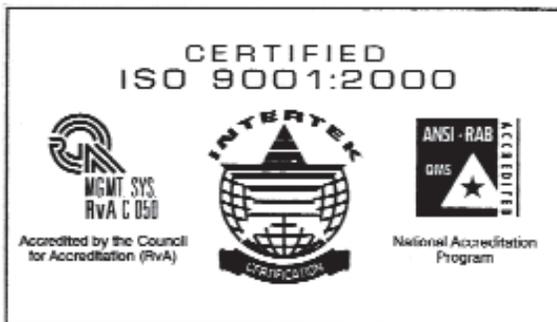
**To the extent such warranties of fitness for a particular purpose or merchantability are deemed to apply to this product, they exist for only so long as the express limited warranty elsewhere set forth is in existence.**

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 to improve any product through changes in design or 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.



## Ramsey Winch Company

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Visit us on the web at <http://www.ramsey.com>