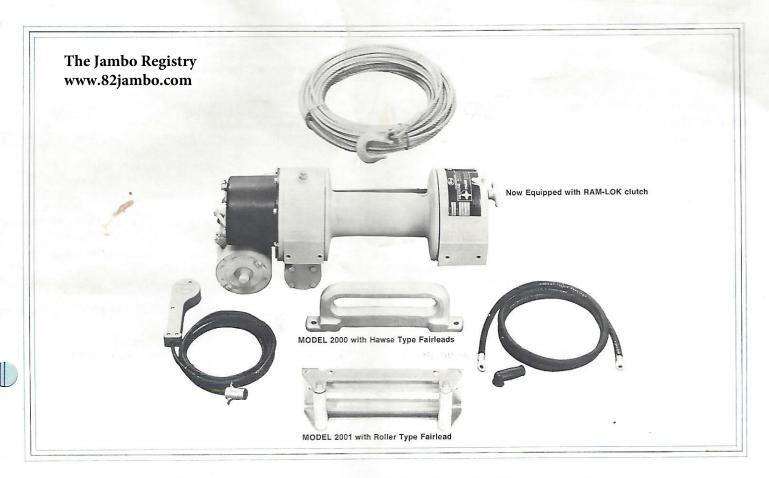


Ramsey Winch Company OWNERS MANUAL Front Mount Electric Winch

Model 2000 with Hawse Type Fairleads*
Model 2001 with Roller Type Fairleads*
Model 7901/7902 with Roller Type Fairlead*



Congratulations

You have purchased the finest winch available in its service class. It was designed and manufactured to provide you with the utmost in fun and utility. The new RAM-LOK clutch gives you easier free spooling and positive clutch engagement for greater convenience. 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 pulling for you.

Limited Warranty

Ramsey Winches are designed and built to exacting specifications. Great care and skill go into every winch we make. 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.

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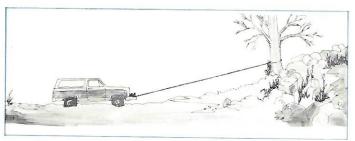
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*MODEL 2000/2001 12 Volt MODEL 7901/7902 12 Volt MODEL 2002/2003 24 Volt 24 Volt Available

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 sounds 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.

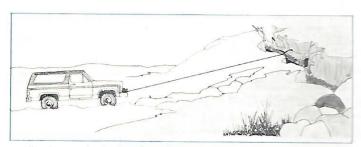
Your winch will not only pull you up or ease you down a steep grade, it will also pull another vehicle or a load while your vehicle is anchored in a stationary position. The following sketches show you a few techniques to start your imagination working.



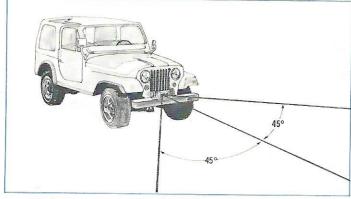
Anchor to a tree or a heavy rock.



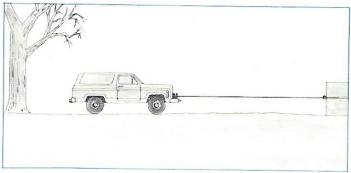
Stakes driven in solid earth and chained together make a good anchor point.



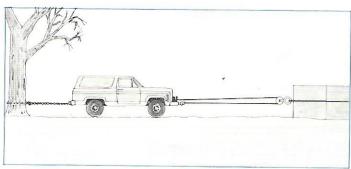
Anchor made by burying a log. Bury your spare tire horizontally with an adequate covering of earth or sand.



Winches equipped with cable guide rollers 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.



A direct pull of 2,000 lbs.



Double the pull, twice the time to pull it. For a 4,000 lb. pull, hitch truck to tree or other solid anchor.



Always carry a spare set of cable clamps and hook for use in case the cable breaks. Never install less than two cable clamps with not less than three inches separation.

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 area for anchoring possibilities as well as leverage situations, direction, and goal.

Operating Instructions

- 1. To spool winch cable on and off drum, operate thumbswitch in control switch handle.
- 2. The RAM-LOK semi-automatic clutch provides free spooling and clutch engagement with the 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 counter-clockwise 90° 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 jaws.) Warning: Do not attempt to disengage the cable drum when there is a load on the cable.

To engage the clutch, pull outward on the handle, rotate it clockwise 90° 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. The winch is now ready for winching in the cable.

- 3. Hidden winch kits utilize a remote cable control for shifting the Ram-Lok clutch. The above requirements for reverse rotation when engaging and disengaging must also be observed here. To disengage the clutch, pull outward on the control cable "T" handle and rotate it clockwise until tight. The clutch is now locked out. To engage, rotate the "T" handle counter-clockwise and allow it to be pulled inward. Make sure the clutch handle is all the way in before starting the winching operation.
- 4. Before putting winch into service, perform three or four winching operations under light loads to seat worm gear to wormshaft and break-in components.
- 5. Be sure load is directly in front of winch.

 Note: This is the best position for pulling and also for even-layering of the cable on the drum. Pulling against either side roller causes uneven layering and limits drum capacity.
- 6. Install heavy-duty battery in vehicle for heavy or long pulls. Add second battery to system for additional power if desired. Be sure batteries are connected in parallel; that is, positive post to positive and negative post to negative.
- 7. Warning: Goods are not intended for use in the lifting or moving of persons.

The winches described herein are neither designed for use application to equipment used in the lifting or moving of persons. Any such use shall be considered to be improper and the seller shall not be responsible for any claims arising therefrom.

This sale is made on the express understanding that there is no implied warranty that the goods shall be fit for the purpose of lifting or moving persons or other improper use and there is no implied warranty of merchantability for such purposes.

Performance*

Line Pull (Lbs.)	0	2,000	4,000	6,000	8,000
Line Speed (F.P.M.)	15	7.5	5.5	4	3

^{*}Based on the first layer of cable on drum.

Specifications

Rated Line Pull					8,0	00 lbs
Total Gear Reduct Weight (Winch onl	ion				36	0 to 1
Model 2000						73 lbs
Model 2001 Model 7901/790						73 lbs. 65 lbs.
Model 2000 Model 2001 Model 7901/790					1	14 lbs
Layer or Cable			3	-	3	U
Rated Line Pull Per Layer (Lbs).	8.000	6,900	6,000	5,400	4,800	4,400
Cable Capacity Per Layer (Ft.) Model 2000/2001	22	44	69	97	128	162
Model 7901/7902 Capacity	16	33	52	73	97	122

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.

Don't worry about even spooling while pulling a load unless there is a cable pile-up at one end. After the job is done you can respool for a neat lay of the cable.

When you're pulling a heavy load where there is even a remote chance for cable failure, place a blanket, jacket or tarpaulin over the cable about six yards behind the hook. It acts as a parachute... slows the snap-back of a broken cable and could save you from serious injury.

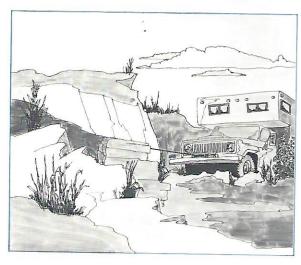
Don't leave your winch in gear. Circumstances can occur that could cause heavy damage to your vehicle, if by some rare accident the winch started operating, causing the hook to catch and pull against a part of the vehicle or winch.

Respect for your winch and vehicle as well as common sense in their operation will reward you with safe and dependable work from them. Don't take chances; make sure in every hook-up that you are in command.

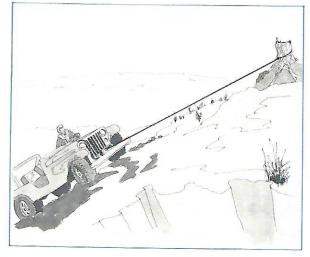
To guard against possible injury . . .

- **A.** Keep yourself and others a safe distance to the side of the cable when pulling.
- **B.** Don't step over a cable, or near a cable in tension.
- **C.** Don't move the vehicle to pull a load on the winch cable. This could result in cable breakage.
- **D.** Use a heavy rag or gloves to protect hands from burrs when handling winch line. Do not use hands to guide a winch line that is under tension.
- **E.** Apply blocks to wheels when vehicle is on an incline.
- **F.** Stay out of and safely away from a vehicle in a dangerous spot.
- **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.** Winches are not to be used to lift, support or otherwise transport personnel.
- **J.** A minimum of five wraps of cable around the drum barrel is necessary to hold the rated load.

Brief List of Uses

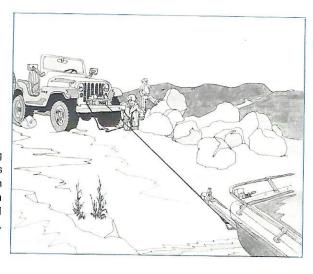


When the going gets tricky and you want to get there safely, the Ramsey winch is a fine companion to have on your journey.



A winch can provide more vacation fun as well as year-around utility.

Pull yourself out of a snowbank, mud hole, or up a steep hill. Sometimes the shortest route to your destination calls for the use of a reliable winch . . . a Ramsey.



Launching and loading marine equipment is easier and safer with a good winch when you're in the tall and uncut.

If your profession or sport takes you constantly into off-road territory, a winch should be part of your gear at all times.

uses of all kinds. and safely.

For mobile emergency A winch offers power to get you and others out of trouble quickly

Suggestions for Maintenance of Your Winch

Spool the cable properly on the drum when storing between each usage.

Check the oil level in the gear box every six months. At the same time, check electrical connections and mounting bolts — tighten if necessary.

Be sure the winch has plenty of battery power available. The minimum ampere-hour rating of the vehicle battery should be 70, and used with at least a 40 amp. alternator.

Replace oil annually or more often if winch is used frequently. We suggest all purpose EP-90 for worm gear box and SAE 20 for spur gear box. Apply cup grease to

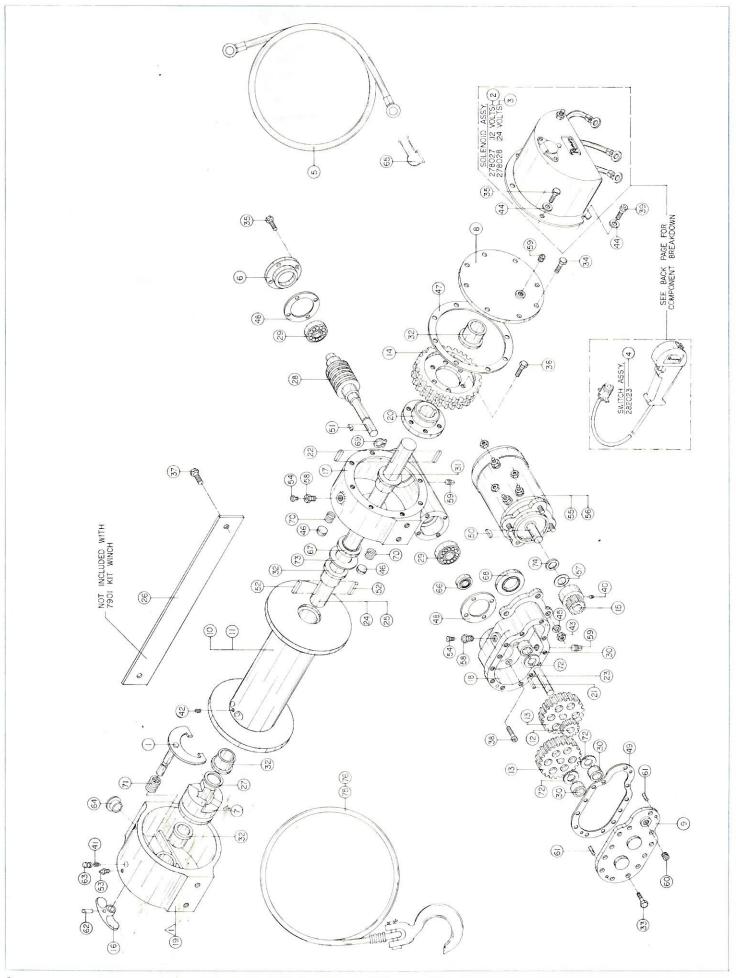
lube fitting at top of clutch housing. Check periodically to determine if clutch operates freely. If not, lubricate by removing lubrication hole plug in clutch housing and greasing clutch.

Should winch be submerged for a brief period, drain oil, flush and replace oil in gear boxes. Place oil in motor pots and all grease zerks. On hidden winches check periodically to determine that the clutch cable control operates freely. If not, lubricate by adding a few drops of oil into the four slots inside the "T" handle collar.

If winch is not to be used for an extended period, disconnect winch battery cable from the battery. For best results, use only factory certified replacement parts.

Ramsey Electric Winches Trouble Shooting Guide

CONDITION	POSSIBLE CAUSE	CORRECTION
MOTOR RUNS IN ONE DIRECTION ONLY	(1) Defective solenoid or stuck solenoid(2) Defective switch(3) Broken wire or bad connection	 Jar solenoid to free contacts. Check by applying 12 volts to coil terminal (it should make an audible click when energized). Disengage winch clutch or remove armature lead. Remove switch plug from hood. Raise connector cover on hood and with a screw driver, short the bottom two pins. Solenoid should click. Short the two left hand pins. The other solenoid should operate. If both solenoids operate check for a broken wire in switch cable. Check for loose connection on switch and switch connector
MOTOR RUNS EXTREMELY HOT MOTOR RUNS, BUT WITH INSUFFICIENT POWER, OR WITH LOW LINE SPEED	 (1) Long period of operation (2) Insufficient battery (3) Cable from battery to winch too small (4) Bad connection (5) Insufficient charging system 	 Cooling-off periods are essential to prevent over-heating. Check battery terminal voltage under load. If 10 volts or less, replace or parallel another battery to it. Check battery to ground (chassis) cable. Must be No. 2 or larger. Check battery cables for corrosion; clean and grease. Replace with larger capacity charging system.
MOTOR RUNS, BUT DRUM DOES NOT TURN	(1) Clutch not engaged (2) Sheared drum shaft key (3) Stripped bronze gear (4) Parted shaft	(1) If clutch engaged but symptom still exists, it will be necessary to disassemble winch to determine cause and repair.
MOTOR WILL NOT OPERATE	 (1) Defective solenoid or stuck solenoid (2) Defective switch (3) Defective motor (4) Loose connections 	 Jar solenoid to free contacts. Check by applying 12 volts to coil terminal (it should make an audible click when energized). Disengage winch clutch or remove armature lead. Remove switch plug from hood. Raise connector cover on hood and with a screw driver, short the bottom two pins. Solenoid should click. Short the two left pins. The other solenoid should operate. If both solenoids operate, check for a broken wire in switch cable. If solenoids operate, check for voltage at armature post; replace motor. Tighten connections on bottom side of hood and on motor.
MOTOR WATER DAMAGED	(1) Submerged in water or water from high pressure car wash	(1) Allow to drain and dry thoroughly, then run motor without load in short bursts to dry windings.
CLUTCH INOPERATIVE OR BINDS UP	(1) Dry or rusted shaft (2) Dog point setscrew too tight (3) Bent yoke (4) Keys pulled out of shape by over load	 (1) Clean and lubricate. (2) Remove rubber plug from clutch housing and rotate setscrew outward until clutch operates smoothly. Replace rubber plug. (3) Replace yoke or shifter assembly. (4) If drum shaft's keyways are rounded or damaged replace shaft and keys. If not, file off burrs and replace keys.
CLUTCH SPRING DOES NOT OPERATE	(1) Broken spring	(1) Replace.
CLUTCH DOES NOT LOCK AT DISENGAGED POSITION	(1) Set screw loose or worn	(1) Remove rubber plug from clutch housing, tighten set- screw or replace. Replace plug.
REMOTE CABLE CONTROLLED CLUTCH DOES NOT LOCK IN DISENGAGED POSITION	(1) Failure to properly secure remote cable	(1) See individual mounting kit instructions for proper adaptation of cable to clutch assembly. See paragraph (3) in Operating Instructions, Page 3 Owner's Manual.
OIL LEAKS FROM HOUSING	(1) New seal(2) Seal damaged or worn(3) Too much oil(4) Damaged gasket	 New seals sometimes leak until seated to shaft. Replace. Drain excess oil per lubrication instructions. Replace.



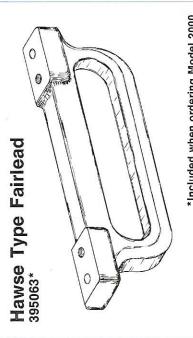
Winch Parts List

Description	Capscrew 14-20NC x 1	HX. Soc. Hd. C.P.	Setscrew	Setscrew 1/4-20NC x 3/8 Lq. Hx. Soc. Hd. Less	Setscrew %-16NC x %	Lg. Hx. Soc. Hd. Less	Nut %-24NF HX. Reg. C.P.	Washer 1/4 Flat Alum.	Lockwasher % Med. Sect.	Drag Brake	Gasket	Gasket	Gasket		Key — Woodruff	Key — Barth	Grease Fitting	Relief Fitting	1	Motor — 24V	O-Ring	Reducer	Pipe Plug	Pipe Plug	Dowell Pin	Spirol Pin	Flug	Flug	Grommet	Oil Seal	Oil Seal	Snap Ring	Spring	Spring	Thrust Washer	Thrust Washer	Fiber Washer	Cable & Hook (7901/7902	Cable & Hook (2000/2001)		
Part No.	414851	0	416029	416030	416057	0,000	418040	418154	418177	438001	442001	442002	442003	450001	450005	450006	456001	456008	458001	458005	462015	468002	468011	468018	470001	470033	472012	47.2013	482013	486009	400017	490003	494002	494053	518002	518014	518018	524116	524117		
Qty. Req'd.	7	,	-	Varie	-	C	ו מי	က (က	ο.	- (N T	- 1		(Ν,		Ν,	- 1	-	(5	თ .	- (Ν,		- T	- +		- +			2	-	က	_	-	-	-		
Item No.	39	Ş	40	41	42		54 ;	44	45	46	47	84 4	9 0	2 20	. c	25	53	ψ r	ဂ္ဂ ဂ	20	57	28	29	09	19	2 0	50	0 0 1 u	60	90	/0	69	70	71	72	73	74	75	92		
Description	Shifter Assembly	Solenoid Assembly (12V)	Solenoid Assembly (24V)	Switch Assembly	Bearing Can	Jaw Clutch	Cover — W.G.	Cover — S.G.		Cable Drum (7901/7902)	Idler Gear	Spur Gear	Gear — R.H. 46:1	Pinion Gear	Handle	Gear Housing	Spur Gear Housing	Clutch Housing	Gear Hub	Kev	Kev	Shaft	Drum Shaft (7901/7902)	Drum Shaft (2000/2001)	Strap	Spacer	Worm — R.H. 46:1	Bearing	Bushing	Bushing	Bushing	Gapscrew 14-20NC x 3/4	ON THE C.P. GI. 3	Capsorew /4-ZUNC x 3/4 Hx. Hd. © P	Capscrew 1/4-20NC x 1	TX. Hd. O.P. T.T.	Capscrew 5/16-18NC x 3/4	· Hx. Hd.	Capscrew 3/8-16NC x 1 Hx. Hd.	Capscrew 14-20NC x 11/4 Hx. Soc. Hd. C.P.	
Part No.	276028	278027	278028	282023	316083	324137	328105	328106	332002	332079	334001	334003	334137	334129	336010	338017	338203	338208	340001	342033	342075	356901	357405	357406	364029	366016	368162	402002	412038	412039	412040	414038	0707	4 1 4 0 4 9	414059		414110	No.	414234	414842	
Qty. Req'd.	-	_	-			-	,	,-	-	-	-	2	-	-	-	-	-	-	-		8		-		-	-	-	2	က	-	4	12	,	4	7		9		0	4	
Item No.	-	CI .	က	4 п	n (c	<u> </u>	ω	o	10	-	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	59	30	31	32	33	70	4	35		36	,	37	38	

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*Included with 2001
**Included with 7901/7902
Roller Guide Parts

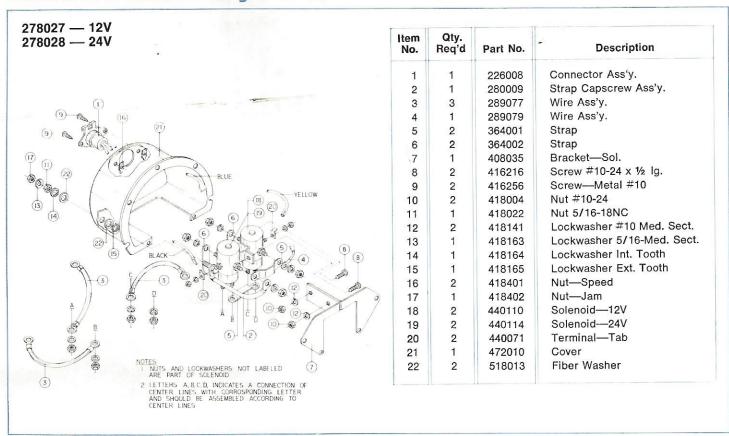
	Item Qty. No. Req'd	2001 Part No.	7901 Part No.	Description
	2	346038	346038	Pin—Short
	2	346039	346040	Pin—Long
4.0	2	354028	354033	Roller-Long
	7	354031	354031	Roller—Short
	ω	418404	418404	Push—Nut
	-	439001	439002	Roller Frame



*Included when ordering Model 2000

When ordering parts be sure they are Ramsey Certified Parts

Solenoid Assembly Parts



282023 Switch Assembly Parts

